TECHNICAL MEMORANDUM
SUMMARY OF PHASE 3 SOIL VAPOR SAMPLING IN AREA IV, SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY, CALIFORNIA

Prepared For:

THE DEPARTMENT OF ENERGY

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LIST OF ABBREVIATIONS AND ACRONYMS

%D	percent difference
%RSD	relative standard deviation
AOC	Administrative Order of Consent
bgs	below ground surface
cc	cubic centimeter
CDM	CDM Smith
COC	chain of custody
DOE	United States Department of Energy
DQO	data quality objective
DTSC	California Environmental Protection Agency Department of Toxic Substances Control
DUAR	Data Usability Assessment Report
EPA	United States Environmental Protection Agency
EST	Environmental Support Technologies
ft	feet
GC	gas chromatography
GPS	global positioning system
ICV	initial calibration verification
ID	identification
LCS	laboratory control sample
MDL	method detection limit
MFSP	Master Field Sampling Plan
mL/min	milliliters per minute
MRL	method reporting limit
MS	mass spectrometry
MWH	MWH Americas, Inc.
NELAP	National Environmental Laboratory Accreditation Program
PID	photoionization detector
ppmv	parts per million by volume

LIST OF ABBREVIATIONS AND ACRONYMS
(Continued)

QC	quality control
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SSFL	Santa Susana Field Laboratory
SDG	sample delivery group
SOP	standard operating procedure
TM	Technical Memorandum
USCS	Unified Soil Classification System
VOC	volatile organic compound

1.0 INTRODUCTION

This technical memorandum (TM) has been prepared to summarize activities associated with collection of soil vapor samples in Area IV of the Santa Susana Field Laboratory (SSFL) in accordance with Addendum 12 to the Master Field Sampling Plan (MFSP) for Chemical Data Gap Investigation, Phase 3 Soil Vapor Implementation for Area IV, Santa Susana Field Laboratory (Soil Vapor Implementation Plan) (MWH Americas, Inc. [MWH], 2014a) and the SSFL Standard Operating Procedure (SOP) 20 to Work Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV (MFSP SOP 20) (MWH, 2014b). These documents describe the sample rationale and procedures for soil vapor sampling and supplement the Work Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory (Phase 3 Work Plan) (CDM Smith [CDM], 2012). This TM was prepared for the United States Department of Energy (DOE) and is in compliance with the Administrative Order of Consent (AOC) for Remedial Action (AOC; Docket No. HSA-CO 10/11 - 037).

The purpose of this TM is to describe the completed field activities and present soil vapor analytical results and data quality associated with the sampling efforts performed under the Phase 3 Soil Vapor Implementation Plan. This TM does not include soil matrix analytical results for samples collected from the soil vapor investigation locations, or an evaluation/ interpretation of the soil and soil vapor analytical data. Analytical data from soil matrix samples will be presented in a separate TM prepared by CDM. The data evaluation and interpretation process will be a collective review process of all media and will be presented at a future date in a Final Data Summary Report.

1.1 SOIL VAPOR SAMPLING OBJECTIVES

The objective of the soil vapor sampling conducted within Area IV of the SSFL was to obtain volatile organic compound (VOC) data that will be used to evaluate whether the nature and extent of contamination at potential source areas are characterized sufficiently for remediation per the AOC. The sample locations were selected based on a targeted (or “biased”) approach that focused on known or suspected chemical use areas (such as tanks, buildings, and reactors). Soil vapor sampling was also performed in areas of groundwater VOC impacts where surface release sources could not be identified.

1.2 REPORT ORGANIZATION

The information in this TM is presented in sections organized as follows:

- **Section 1.0 – Introduction**

  This section presents the purpose and objective of this technical memorandum.

- **Section 2.0 –Field Sampling and Analytical Methods**

  This section describes field sampling procedures and laboratory analytical methods associated with the soil vapor sampling.

- **Section 3.0 –Sampling Results**

  This section summarizes analytical results for soil vapor samples.

- **Section 4.0 – Data Usability Assessment**

  This section summarizes the assessment of analytical results quality for soil vapor samples.

- **Section 5.0 – References**

  This section lists the references cited in this report.

2.0 FIELD SAMPLING AND ANALYTICAL METHODS

Field activities at the 153 planned soil vapor sample locations within Area IV were performed by MWH between May and June 2014. Specific rationale for targeting each soil vapor sample location and depth is provided in the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) -approved Soil Vapor Implementation Plan (MWH, 2014a). The soil vapor sample locations are shown on Figure 2-1. A total of 177 primary soil vapor samples were collected from probes installed at 106 locations. A total of 66 primary soil matrix samples were collected from 56 locations and analyzed for VOCs when soil vapor samples could not be collected due to shallow bedrock or refusal (less than 5.5 feet [ft] below ground surface [bgs]), or there was anticipated or measured high vacuum conditions from the soil vapor probe based on lithology. Neither soil vapor or soil matrix were collected at 11 locations, including 6 locations that were inaccessible due to active bird nesting and 5 locations where soil was less than 3 feet thick (see Section 2.5 for additional information). Table 2-1 provides a summary of collected soil vapor and quality control (QC) samples.

2.1 SOIL VAPOR PROBE INSTALLATION

Before soil probe installation, a lithologic boring log was prepared detailing descriptions of soil removed from the boring via continuous coring or hand auger in accordance with the Unified Soil Classification System (USCS) (American Standard for Testing and Materials [ASTM], 2009) and following the procedures outlined in SOP 9 of the Phase 3 Work Plan (CDM, 2012). Borings were logged to bedrock or refusal and geologic interpretation of soils were used to determine the final soil vapor probe construction. Single and multiple depth soil vapor probe construction detail forms were completed to document compliance with, deviation from, or additional details associated with the installation of the vapor probes. Soil boring logs and soil vapor probe construction details are included in Appendix A. All field work logging was performed and supervised by a California Professional Geologist.

The selection of depth intervals for soil vapor probe installation and sampling involved site-specific decisions and took into consideration the thickness of the unconsolidated alluvium and the depth to the weathered bedrock. Sample depths were adjusted as needed to target the coarsest-grained material, photoionization detector (PID) headspace detections, and to avoid fine-grained materials.

Temporary soil vapor probes were installed using hand auger and direct-push methods according to procedures outlined in SOP 20 of the Phase 3 Work Plan (MWH, 2014b). However, due to the potential for bridging and clogging of hydrated bentonite in the annular space associated with using a tremie pipe, the method used for filling the annular space with hydrated bentonite was by 6-inch lifts (see Section 2.5 for additional information). Each lift was hydrated at a rate of one ounce of water for every inch of bentonite seal within the borehole. The drilling and soil vapor probe installation activities were performed by Environmental Support Technologies (EST) of Irvine, California.

Global positioning system (GPS) coordinates and photos were collected at each completed soil vapor sample location.

2.2 SOIL VAPOR SAMPLE COLLECTION

Soil vapor samples were collected in accordance with procedures outlined in SOP 20 of the Phase 3 Work Plan (MWH, 2014b). Before sample collection, a minimum 48-hour equilibrium time passed to allow subsurface conditions to equilibrate and vapor concentrations to stabilize after probe installation. Soil vapor probes were purged to remove stagnant or ambient air from the sampling system and samples collected were representative of subsurface conditions. A helium leak test was performed at every active vapor monitoring point each time a soil vapor sample was collected. Due to schedule constraints and limited resources, two methods of sample collection were employed during field work. Samples were either collected in glass bulbs and analyzed on site by a mobile laboratory or collected in summa canisters for analysis by an offsite stationary laboratory. Samples collected in glass bulbs were analyzed by United States Environmental Protection Agency (EPA) Method 8260B and samples collected in summa canisters were analyzed by EPA Method TO-15. All active soil vapor samples were collected during dry weather to limit soil moisture variability.

Soil vapor sample containers were labeled with unique sample identification (ID) following CDM's nomenclature as defined in the Phase 3 Work Plan (CDM, 2012). Container IDs previously assigned to reusable sample containers by the laboratory (such as Bulb IDs for glass bulbs) were recorded on soil vapor sampling form. Once the soil vapor sample was collected and disconnected from the probe, the sample container was immediately labeled with the sample ID information and collection date. Documentation of soil vapor sampling was recorded on the soil vapor sampling form and this information was used to generate the COC.

Glass bulb soil vapor samples were immediately submitted under proper COC to the onsite mobile laboratory for analysis. The mobile laboratory added surrogates to soil vapor samples collected in glass bulbs within 15 minutes of collection. Glass bulb soil vapor samples were wrapped in aluminum foil and stored out of direct sunlight to prevent the degradation of light-sensitive compounds.

Summa soil vapor samples were shipped under proper COC to an offsite stationary laboratory for analysis. The offsite stationary laboratory added surrogates to soil vapor samples collected in summa canisters before analysis. The shipment of summa soil vapor samples to offsite stationary laboratories was performed following the procedures outlined in SOP 11 of the Phase 3 Work Plan (CDM, 2012).

EST collected the soil vapor samples using glass bulbs and analyzed the samples in a mobile laboratory for VOCs using EPA Method 8260B. EST also collected the soil vapor samples using summa canisters for analysis at an offsite stationary laboratory using EPA Method TO-15. Eurofins Lancaster Laboratories Environmental (Lancaster), located in Lancaster, Pennsylvania; Eurofins Calscience Environmental Laboratory (Calscience), located in Garden Grove, California; and TestAmerica Laboratories, Inc (TestAmerica), located in Arvada, Colorado analyzed samples for VOCs using EPA Method TO-15. All laboratories that performed analysis for the soil vapor study are National Environmental Laboratory Accreditation Program (NELAP)-accredited environmental testing laboratories.

2.3 FIELD QUALITY CONTROL ACTIVITIES

A leak test using helium was performed at every active vapor probe location each time a soil vapor sample was collected. Helium was used because it has not been identified as a potential contaminant in Area IV at the SSFL and allows for leak detection in real-time so that corrective action can be taken before sampling. If a helium reading of greater than 5 percent or 50,000 parts per million by volume (ppmv) was measured, then the probe leak check failed and corrective action was required. All leaks identified during this soil vapor study were found in the sample train and were immediately corrected. No replacement vapor probes were installed as a result of ambient air break through.

Each glass bulb container was observed for condensation before and after soil vapor sampling. No condensation was noted in any glass bulbs used for sampling. The vacuum on each summa canister was checked on the vacuum gauge to confirm the proper flow rate of 100 to

200 milliliters per minute (mL/min) was maintained while sampling. One summa canister was discarded due to the lack of vacuum.

A sample flow rate of 100 to 200 mL/min must be achieved when sampling soil vapor probes. When high vacuum was measured at a sample probe (greater than 100 inches of water), then a sample was not collected from that probe. In general, if a soil matrix sample had not been collected during probe installation in anticipation of high vacuum conditions based on lithology, a new probe was installed and attempted to be sampled and a soil matrix sample was collected and analyzed for VOCs (see Section 2.5 see Section 2.5 for additional information).

2.3.1 Duplicates and Split Samples

At least one field duplicate sample and one split sample were collected per day for the mobile laboratory and one per 20 samples for the primary offsite stationary laboratory. Duplicate and split samples were collected at the same time as the primary sample, in separate sample containers at the same location and depth as the primary sample. The analysis of the duplicate sample was performed by the same laboratory that performs the primary sample analysis and the analysis of the split sample was performed by an offsite stationary laboratory different than the primary laboratory.

2.3.2 Field Blank Samples

One field blank was collected daily for each primary laboratory to assess the possibility of contamination from ambient air.

2.3.3 Sample Container Decontamination

Sample containers, both summa and glass bulb, were certified as clean by the supplier or verified to be clean by laboratory analysis. Glass bulb sample containers were decontaminated after each use by the mobile laboratory. To verify the glass bulb decontamination procedures, the mobile laboratory used one glass bulb as an equipment blank daily.

2.4 ACTIVE SOIL VAPOR ANALTICAL LABORATORY METHODS

Soil vapor sample analyses were performed by an onsite mobile laboratory and an offsite stationary laboratory. All laboratories used to analyze the active vapor samples are certified by the State of California for the method of analysis.

2.4.1 Target Analytes, Analytical Methods and Method Detection Limits

Target analytes and the method reporting limits (MRLs) for EPA Method 8260B and EPA TO-15 are included in SOP 20 of the Phase 3 Work Plan (MWH, 2014b). For onsite soil vapor sample analysis, the required MRLs were achieved using an onsite mobile laboratory equipped with a gas chromatography/mass chromatography (GC/MS) instrument and a purge and trap apparatus modified to accept a 100 cubic centimeter (cc) sample aliquot.

2.4.2 Analytical Laboratory Quality Control Procedures

Instrument setup and calibration for the onsite mobile laboratory and offsite stationary laboratory resulted in the complete resolution of targeted compounds provided in Table 4-1 of SOP 20. For the mobile laboratory, the initial calibration was performed upon arrival at the site and whenever:

- The mobile laboratory changed location;
- The GC column was changed; and
- The daily mid-point calibration check did not meet requirements.

For offsite stationary laboratories, daily calibration checks were performed prior to each instrument analyzing the first sample and whenever:

- The GC column was changed; and
- The daily mid-point calibration check did not meet requirements.

At a minimum, at least five different concentration levels were used for the initial calibration. The relative standard deviation (%RSD) for the target compound average response factor limits are listed in Table 4-1 of the SOP 20. Each initial calibration was verified by an initial calibration verification or laboratory control sample (LCS). The onsite mobile laboratory also performed an additional MRL level initial calibration verification (ICV)/LCS daily, prior to the analysis of any samples.

Each day that samples were analyzed by the onsite mobile or offsite stationary laboratory, the calibration was checked. The daily calibration check standard contained the target compounds at concentrations at or near the mid-point of the calibration. The percent difference (%D) for each response factor limits are summarized in Table 4-1 of SOP 20.

2.4.3 Data Review Processes

As data were reported by laboratories, a data review process was implemented to ensure appropriate feedback and correction of errors. These steps included:

- As samples were submitted to the laboratory, the COC would be checked against the laboratory acknowledgement of sample receipt form. Any sample log-in errors were identified and corrected at that time.
- A sample tracking spreadsheet was updated to track the samples collected, sample dates, lab receipts, laboratory sample delivery group (SDG) numbers, field QC sample information, sample location coordinates, and laboratory deliverables required including reports, electronic data deliverable, raw data, and the status of validation.
- When the laboratory report was received by e-mail, a preliminary review of the data was performed for accuracy.
- A check of the requested analysis on the COC against the reported data in the laboratory report was performed.
- A complete review of the laboratory case narratives was conducted.

2.5 DEVIATIONS FROM THE SOIL VAPOR IMPLEMENTATION PLAN

Deviations during field work and sample collection from the proposed sample rationale in the Soil Vapor Implementation Plan and SOPs in the Phase 3 Work Plan are discussed in the sections below. Deviations did not impact achieving the data quality objectives (DQOs) of this sampling event.

2.5.1 Soil Vapor

Soil vapor investigation locations were adjusted as necessary based on field conditions (e.g., infrastructure, sensitive animal and plant species, or archaeological artifacts). The modified locations did not impact achieving the DQOs of this sampling event. During probe installation, the preferred method for filling the annular space with hydrated bentonite was by addition of 6-inch lifts to avoid bridging and clogging of hydrated bentonite in the annular space associated with using a tremie pipe. Each lift was hydrated at a rate of one ounce of water for every inch of bentonite seal within the borehole. The method of hydrating the bentonite using six inch lifts is a standard practice at the SSFL and was discussed as an alternate approach in the procedures outlined in SOP 20. Therefore, this method of soil vapor probe construction was not a deviation, but is discussed in this section to clarify what was implemented.

As stated in Section 2.3, a sample flow rate of 100 to 200 mL/min must be achieved when sampling soil vapor probes. When high vacuum was measured at a sample probe (greater than

100 inches of water), a sample was not collected. Six soil vapor probes measured high vacuum, including 5BSV_DG-562 (10.5 to 11.5 ft bgs), 5BSV_DG-563 (4.5 to 5.5 ft bgs), 5CSV_DG-549 (7.0 to 8.0 ft bgs), 5CSV_DG-561 (11.5 to 12.5 ft bgs), 5DSV_DG-556 (10.0 to 11.0 ft bgs), and 6SV_DG-509 (20.0 to 21.0 ft bgs). A new probe was subsequently installed and successfully sampled at 5BSV_DG-549 and 5CSV_DG-562. A new probe was installed at 5BSV_DG-561 but high vacuum was still measured; therefore, a soil sample was collected and analyzed for VOCs. New probes were not installed at 5BSV_DG-563, 5DSV_DG-556, and 6SV_DG-509 either due to shallow soils, because a soil sample had been collected and analyzed for VOCs, or it was determined that data from nearby soil vapor probes provide sufficient data for remedial planning.

Prior to and during sampling, biological, archaeological, and Native American cultural monitors inspected proposed sampling locations for signs of sensitive species and archaeological artifacts. If sensitive species or artifacts were observed, the sampling area was protected and sampling postponed until the sensitive species was no longer present, or in the case of plant species and cultural artifacts, deferred indefinitely. During sampling activities, six soil vapor sampling locations in Subarea 5A (i.e., 5ASV_DG-549, -573, -589, -590, -602, -606) were identified within an active bird nesting area and could not be sampled. DOE communicated the decision to defer sampling to the remedial planning phase along with rationale for each location in a letter to DTSC dated July 31, 2014 (DOE, 2014c). If VOC data at these locations is deemed necessary during the remedial planning phase, samples will be collected.

There were no deviations from the analytical suites proposed in the Soil Vapor Implementation Plan.

2.5.2 Soil Sampling

- As discussed in the DTSC Soil Gas Advisory (DTSC, et all, 2012) and SOP 20, soil samples are to be collected in lieu of soil vapor samples and analyzed using EPA Method 8260B when soils were less than 5.5 ft bgs. In general, soil samples being analyzed for VOC are only collected if soils are at least 3 feet thick, except in cases where asphalt or concrete are present above the soil. However, to be consistent with CDM's soil sampling procedures, soil samples were collected for VOC analysis as shallow as 1.5 feet bgs, even when asphalt or concrete were not present above the soil. Soil samples were not collected from 4 locations due to thin soils and no asphalt or concrete present, including 5ASV_DG-623, 5BSV_DG-527, 5BSV_DG-582, and 5BSV_DG-597).

3.0 SAMPLING RESULTS

3.1 SOIL VAPOR SAMPLING RESULTS

Sampling activities were completed in accordance with the Phase 3 Work Plan (CDM, 2012) and the SOP 20 of the Phase 3 Work Plan (MWH, 2014b). A total of 177 primary soil vapor samples, 19 soil vapor field duplicate samples, 19 soil vapor split samples, 16 field/equipment blanks, and 23 ambient air blanks were collected from 106 locations. Table 2-1 provides a summary of the primary, duplicate, and split samples collected including sample name, sample types (e.g., primary, split), sample depth, matrix, and analysis. Table 3-1 is a summary of soil vapor data by analyte and includes the detection frequency, the minimum and maximum detected concentrations, the range of (method detection limit) MDL and MRLs, and the object name and depth of the maximum detected concentration. Appendix B is a complete set of all validated primary, duplicate, and split sample data organized by sample location in tabular format. The laboratory analytical reports for data collected during the soil vapor implementation are included as Appendix C.

3.2 SOIL SAMPLING RESULTS

Soil sample were collected for VOC analysis when soil vapor samples could not be collected due to shallow bedrock or refusal (less than 5.5 ft bgs), or there was anticipated or measured high vacuum conditions from the soil vapor probe based on lithology. A total of 66 primary soil samples, 2 soil duplicate samples, and 1 soil split samples were collected from 56 locations. Soil matrix sample analytical results will be presented by CDM in a separate technical memorandum.

4.0 DATA VALIDATION AND USABILITY ASSESSMENT

The purpose of the data usability assessment provided in Appendix D and discussed here is to: 1) summarize the data validation performed on the data sets, and 2) determine whether the sample results meet the DQOs outlined in the Phase 3 Work Plan (CDM, 2012).

4.1 DATA VALIDATION

The laboratories provided data reporting packages to MWH and an independent validation firm, MECx. A MECx chemist performed a Level V data validation of 100% of the data in accordance with the EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2008) and individual method requirements and guidelines from the SSFL Quality Assurance Project Plan (QAPP) (MECx, 2013). This encompassed an evaluation of sample collection procedures, holding times, instrument calibration summary information (to assess system performance), blanks (to assess contamination), sample duplicates (to assess precision), laboratory control samples (to assess accuracy), and matrix spike and surrogate spike recoveries (to assess accuracy and matrix effects). Upon completion of the data review process MECx provided a comprehensive data validation report for each data package and a Data Usability Assessment Report (DUAR) summarizing the review process and results in terms of precision, accuracy, representativeness, completeness, comparability, and sensitivity. The data validation reports and DUAR are included in Appendix D.

4.2 DATA QUALITY ASSESSMENT

Analytical data generated during the Phase 3 Soil Vapor Sampling in Area IV were validated according to the QAPP. No data were flagged as rejected, and all results are usable as qualified. A summary of data qualified as a result of the verification process is presented in Table 4-1. MWH reviewed the data validation reports and the DUAR, and assessed the qualified data against the DQOs for the project. MWH concluded that all DQOs specified in Final Phase 3 Work Plan were achieved.

5.0 REFERENCES

ASTM, 2009, Standard Method for Description and Identification of Soils) Visual-Manuel Method) D2488-09A.

CDM Smith. 2012. Work Plan for Chemical Data Gap Investigation Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California. April.

Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board – Los Angeles and San Francisco Regional Water Quality Control Board, 2012. Advisory – Active Soil Gas Investigations. April.

United States Environmental Protection Agency (USEPA), 2008. Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, Office of Soil Waste and Emergency response (OSWER) 9240.1-46, USEPA-540-R-08-01, June.

MECx, 2013. Quality Assurance Project Plan, SSFL Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Surficial Media Operable Unit, Revision 5. March.

MWH, 2014a. Addendum 12 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Vapor Implementation Plan for Area VI, Santa Susana Field Laboratory, and Ventura County, California. May.

MWH, 2014b. SSFL Standard Operating Procedures (SOP) 20 to Work Plan for Chemical Data Gap Investigation Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California – Final Soil Vapor SOP for DOE Sites. March.

MWH, 2014c. Remaining Sampling Locations Within Bird Nesting Areas, Final Phase 3 Data Gap Analysis, Santa Susana Field Laboratory, Ventura County, California. July.

TABLES

TABLE 2-1
PHASE 3 SOIL VAPOR
SAMPLING AND ANALYTICAL SUMMARY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Sampling Depth (ft bgs)	Collection Date	Matrix Type	Analysis	Validated	Remediation Status
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/10/2014 8:24	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	11.0	6/10/2014 8:51	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	16.0	6/10/2014 9:12	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	21.0	6/10/2014 9:54	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	26.0	6/10/2014 10:56	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/10/2014 11:30	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	11.0	6/10/2014 12:04	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	16.0	6/10/2014 12:39	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	21.0	6/10/2014 13:03	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	26.0	6/10/2014 14:19	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	26.0	6/10/2014 14:19	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6.5	6/11/2014 7:54	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/11/2014 8:24	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	11.0	6/11/2014 8:50	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	8.5	6/11/2014 10:50	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/11/2014 9:31	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	10.0	6/11/2014 10:02	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	5.5	6/10/2014 10:23	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	5.5	6/10/2014 10:57	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	9.5	6/10/2014 11:24	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/10/2014 12:26	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	7.0	6/10/2014 12:57	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	7.0	6/10/2014 13:42	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/11/2014 11:26	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	11.5	6/11/2014 11:54	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/11/2014 13:35	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6.0	6/11/2014 13:43	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	13.0	6/11/2014 14:10	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	7.0	6/11/2014 11:24	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	8.0	6/11/2014 12:34	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/11/2014 13:03	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/11/2014 13:43	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/12/2014 9:16	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	8.0	6/12/2014 13:20	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	8.0	6/12/2014 13:20	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	7.5	6/12/2014 10:03	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6.0	6/12/2014 11:01	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	5.5	6/12/2014 10:33	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	7.0	6/12/2014 11:25	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6.5	6/12/2014 7:48	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6.5	6/12/2014 7:48	Soil Vapor	VOCs	Yes	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	8.0	6/12/2014 12:01	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	8.0	5/21/2014 15:50	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	7.8	5/21/2014 11:11	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	7.0	5/21/2014 12:23	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	13.5	5/21/2014 12:47	Soil Vapor	VOCs	Yes	In Place

TABLE 2-1
PHASE 3 SOIL VAPOR
SAMPLING AND ANALYTICAL SUMMARY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Sampling Depth (ft bgs)	Collection Date	Matrix Type	Analysis	Validated	Remediation Status
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	13.5	5/21/2014 12:55	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	9.0	6/13/2014 8:35	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	9.0	6/13/2014 8:35	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	14.0	6/13/2014 8:59	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	14.0	6/13/2014 9:05	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	6.0	5/21/2014 9:15	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	13.5	5/21/2014 9:57	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	7.75	5/21/2014 14:31	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6.0	6/4/2014 11:40	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	11.0	6/4/2014 12:53	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	17.75	6/4/2014 13:20	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6.3	6/5/2014 11:53	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6.3	6/5/2014 12:00	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	8.2	6/5/2014 13:02	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	5.5	6/11/2014 8:08	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	5.5	6/11/2014 8:08	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	8.0	5/22/2014 14:30	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	8.0	5/22/2014 14:38	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	10.0	6/13/2014 9:35	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	6.0	5/22/2014 12:09	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	9.0	6/13/2014 10:05	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	5.5	6/11/2014 8:56	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	5.5	6/11/2014 9:01	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6.2	6/11/2014 10:56	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	9.0	6/6/2014 12:30	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	7.5	6/11/2014 9:36	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	8.0	6/18/2014 8:09	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	8.0	6/18/2014 8:09	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6.0	6/9/2014 11:03	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	11.0	6/9/2014 11:31	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	16.0	6/9/2014 12:25	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	21.0	6/9/2014 12:49	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	7.0	6/6/2014 9:27	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6.0	6/11/2014 10:21	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6.0	6/6/2014 10:18	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	9.0	6/18/2014 9:10	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	9.0	6/18/2014 9:18	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6.5	6/6/2014 10:45	Soil Vapor	VOCs	Yes	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	5.5	6/6/2014 11:19	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/2/2014 10:52	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	11.0	6/2/2014 11:24	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	11.0	6/2/2014 11:24	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	16.0	6/2/2014 11:59	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	16.0	6/2/2014 12:08	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/3/2014 9:15	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6.0	6/3/2014 9:15	Soil Vapor	VOCs	Yes	In Place

TABLE 2-1
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SAMPLING AND ANALYTICAL SUMMARY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Sampling Depth (ft bgs)	Collection Date	Matrix Type	Analysis	Validated	Remediation Status
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	11.5	6/3/2014 9:41	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	9.25	6/3/2014 10:14	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	8.0	6/18/2014 11:08	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	14.0	6/18/2014 11:53	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/18/2014 10:20	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/10/2014 8:28	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6.0	6/10/2014 8:28	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	13.5	6/10/2014 9:10	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	13.5	6/10/2014 9:16	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/5/2014 10:43	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	12.0	6/5/2014 11:08	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	19.0	6/6/2014 12:02	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/5/2014 8:41	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	11.5	6/5/2014 9:06	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/5/2014 13:41	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	11.0	6/6/2014 7:46	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	11.0	6/6/2014 7:56	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	16.0	6/6/2014 8:22	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	21.0	6/6/2014 8:49	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	21.0	6/6/2014 8:49	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6.5	6/5/2014 10:02	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6.5	6/5/2014 10:02	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	7.5	5/29/2014 8:42	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	7.5	5/29/2014 8:49	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/3/2014 10:59	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	11.0	6/3/2014 11:22	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	16.0	6/3/2014 11:50	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	16.0	6/3/2014 11:56	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/3/2014 12:56	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	12.0	6/3/2014 13:15	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	19.0	6/4/2014 7:28	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	7.0	6/13/2014 10:34	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/5/2014 7:39	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	14.0	6/5/2014 7:58	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6.0	6/10/2014 9:44	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6.0	6/4/2014 8:32	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6.0	6/4/2014 8:32	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	11.0	6/4/2014 8:51	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	16.0	6/4/2014 9:09	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	21.0	6/4/2014 9:29	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	31.0	6/4/2014 9:49	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	41.0	6/4/2014 10:10	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	41.0	6/4/2014 10:16	Soil Vapor	VOCs	Yes	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	7.8	5/29/2014 13:39	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/27/2014 8:32	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	6.0	5/27/2014 8:32	Soil Vapor	VOCs	Yes	In Place

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SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Sampling Depth (ft bgs)	Collection Date	Matrix Type	Analysis	Validated	Remediation Status
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	14.0	5/27/2014 9:09	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	19.0	5/27/2014 9:42	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	8.5	5/28/2014 12:50	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5.5	5/28/2014 9:46	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	10.5	5/28/2014 10:19	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/27/2014 12:32	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	12.0	5/27/2014 13:03	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	17.75	5/27/2014 13:34	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/27/2014 10:15	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	11.0	5/27/2014 10:45	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	16.5	5/27/2014 11:22	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/28/2014 8:16	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	6.0	5/28/2014 8:16	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	13.8	5/28/2014 8:57	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	13.8	5/28/2014 9:05	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	6.0	5/28/2014 10:55	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	15.0	5/28/2014 11:26	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	9.5	5/29/2014 9:30	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	8.5	5/29/2014 10:12	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/29/2014 10:46	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/29/2014 11:20	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5.5	5/29/2014 12:29	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	9.5	5/29/2014 13:00	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5.0	5/28/2014 13:25	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	11.0	5/29/2014 7:50	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	11.0	5/29/2014 7:50	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/30/2014 7:46	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	6.0	5/30/2014 7:46	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	11.0	5/30/2014 8:19	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-546	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	11.0	5/30/2014 8:25	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	17.0	5/30/2014 11:21	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	6.0	5/30/2014 9:39	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	12.0	5/30/2014 10:07	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	18.0	5/30/2014 10:42	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	5.5	6/9/2014 8:28	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	5.5	6/9/2014 8:28	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	10.0	6/9/2014 9:08	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	10.0	6/9/2014 9:14	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	15.0	6/9/2014 9:50	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	20.0	6/9/2014 10:27	Soil Vapor	VOCs	Yes	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	5.5	6/9/2014 13:40	Soil Vapor	VOCs	Yes	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6.0	6/12/2014 10:04	Soil Vapor	VOCs	Yes	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	11.0	6/12/2014 10:36	Soil Vapor	VOCs	Yes	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	16.0	6/12/2014 11:07	Soil Vapor	VOCs	Yes	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	8.9	6/12/2014 9:28	Soil Vapor	VOCs	Yes	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6.5	6/12/2014 8:38	Soil Vapor	VOCs	Yes	In Place

TABLE 2-1
PHASE 3 SOIL VAPOR
SAMPLING AND ANALYTICAL SUMMARY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Sampling Depth (ft bgs)	Collection Date	Matrix Type	Analysis	Validated	Remediation Status
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6.5	6/12/2014 8:48	Soil Vapor	VOCs	Yes	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	8.5	6/19/2014 11:35	Soil Vapor	VOCs	Yes	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6.0	6/13/2014 10:56	Soil Vapor	VOCs	Yes	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	11.0	6/13/2014 11:22	Soil Vapor	VOCs	Yes	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	11.0	6/13/2014 11:22	Soil Vapor	VOCs	Yes	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	5.5	6/13/2014 10:16	Soil Vapor	VOCs	Yes	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	8.0	6/13/2014 8:53	Soil Vapor	VOCs	Yes	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	13.0	6/13/2014 9:24	Soil Vapor	VOCs	Yes	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	5.45	6/19/2014 11:09	Soil Vapor	VOCs	Yes	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	5.5	6/3/2014 7:55	Soil Vapor	VOCs	Yes	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	8.0	5/22/2014 10:05	Soil Vapor	VOCs	Yes	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	9.0	5/23/2014 9:34	Soil Vapor	VOCs	Yes	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	9.0	5/23/2014 8:44	Soil Vapor	VOCs	Yes	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	7.0	5/22/2014 10:50	Soil Vapor	VOCs	Yes	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	6.0	5/23/2014 8:23	Soil Vapor	VOCs	Yes	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	11.0	5/23/2014 8:44	Soil Vapor	VOCs	Yes	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	16.5	5/23/2014 9:02	Soil Vapor	VOCs	Yes	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	8.0	5/22/2014 8:49	Soil Vapor	VOCs	Yes	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5.5	5/23/2014 10:36	Soil Vapor	VOCs	Yes	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	11.5	5/23/2014 10:59	Soil Vapor	VOCs	Yes	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6.0	6/2/2014 9:08	Soil Vapor	VOCs	Yes	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	12.0	6/2/2014 9:35	Soil Vapor	VOCs	Yes	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	19.5	6/2/2014 9:58	Soil Vapor	VOCs	Yes	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	5.5	6/18/2014 12:57	Soil Vapor	VOCs	Yes	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	9.5	6/18/2014 13:34	Soil Vapor	VOCs	Yes	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	5.5	6/19/2014 9:28	Soil Vapor	VOCs	Yes	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	5.5	6/19/2014 9:34	Soil Vapor	VOCs	Yes	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	7.0	6/3/2014 8:34	Soil Vapor	VOCs	Yes	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	7.25	6/19/2014 8:34	Soil Vapor	VOCs	Yes	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	7.25	6/19/2014 8:34	Soil Vapor	VOCs	Yes	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	7.25	6/19/2014 10:37	Soil Vapor	VOCs	Yes	In Place
	Total Number of Primary Soil Vapor Samples	**Total QC Samples(1)**						**Total Validated Samples**	
	177	38						215	

Acronyms:
"--" - not applicable
ft bgs - feet below ground surface
QC - quality control
VOCs - volatile organic compounds by Environmental Protection Agency Method 8260B or TO-15

Notes:
1. QC samples include co-located duplicates and laboratory split samples.

Table 3-1
PHASE 3 SOIL VAPOR
DATA FREQUENCY SUMMARY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA
(Page 1 of 1)

Analyte	CAS Number	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Practical Quantitation Limit	Result Value Units	Object Name	Depth of Maximum Concentration (ft bgs)
1,1,1-Trichloroethane	71556	16 / 215	0.001	0.11	0.00043 - 0.11	0.0027 - 0.4	µg/L	8SV_DG-503	4.5 - 5.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	25 / 215	0.00086	86	0.00054 - 0.24	0.011 - 0.4	µg/L	5DSV_DG-513	10 - 11
1,1,2-Trichloroethane	79005	2 / 215	0.0015	0.0029	0.001 - 0.13	0.0027 - 0.4	µg/L	5CSV_DG-570	40 - 41
1,1-Dichloroethane	75343	8 / 215	0.0011	0.0096	0.00026 - 0.12	0.002 - 0.4	µg/L	8SV_DG-512	8 - 9
1,1-Dichloroethene	75354	6 / 215	0.0014	0.16	0.00079 - 0.14	0.002 - 0.4	µg/L	8SV_DG-503	4.5 - 5.5
1,2-Dichloroethane	107062	5 / 215	0.00084	0.0037	0.00028 - 0.21	0.002 - 0.4	µg/L	5ASV_DG-509	5 - 6
Benzene	71432	52 / 215	0.00066	0.061	0.00027 - 0.081	0.0016 - 0.4	µg/L	8SV_DG-524	4.5 - 5.5
Carbon Tetrachloride	56235	5 / 215	0.0011	0.072	0.00039 - 0.23	0.0031 - 0.4	µg/L	8SV_DG-512	8 - 9
Chloroethane	75003	4 / 215	0.021	0.054	0.00053 - 0.32	0.0013 - 0.4	µg/L	5DSV_DG-502	18 - 19
Chloroform	67663	20 / 215	0.00098	0.28	0.00034 - 0.12	0.0024 - 0.4	µg/L	8SV_DG-512	8 - 9
cis-1,2-Dichloroethene	156592	8 / 215	0.00048	0.026	0.00035 - 0.19	0.002 - 0.4	µg/L	5CSV_DG-530	6.5 - 7.5
Dichlorodifluoromethane	75718	16 / 215	0.0026	0.11	0.00029 - 0.22	0.0025 - 0.4	µg/L	5ASV_DG-509	10 - 11
Ethylbenzene	100414	61 / 215	0.00097	0.1	0.00063 - 0.06	0.0022 - 0.4	µg/L	6SV_DG-509	15 - 16
Methylene chloride	75092	4 / 215	0.00082	0.081	0.00069 - 0.21	0.0035 - 0.4	µg/L	5ASV_DG-622	6 - 7
m-Xylene & p-Xylene	179601231	67 / 215	0.00218	0.29	0.00087 - 0.16	0.0043 - 0.4	µg/L	5CSV_DG-525	10 - 11
o-Xylene	95476	55 / 215	0.0011	0.14	0.00068 - 0.18	0.0022 - 0.4	µg/L	5BSV_DG-526	12.5 - 13.5
Tetrachloroethene	127184	47 / 215	0.00051	0.16	0.00046 - 0.11	0.0034 - 0.4	µg/L	5ASV_DG-565	5 - 6
Toluene	108883	82 / 215	0.00082	0.32	0.00051 - 0.085	0.0019 - 0.4	µg/L	5BSV_DG-526	12.5 - 13.5
trans-1,2-Dichloroethene	156605	2 / 215	0.00075	0.088	0.0005 - 0.078	0.002 - 0.4	µg/L	5ASV_DG-622	6 - 7
Trichloroethene	79016	25 / 215	0.00075	1.6	0.00037 - 0.23	0.0027 - 0.4	µg/L	8SV_DG-512	8 - 9
Trichlorofluoromethane	75694	26 / 215	0.0016	10	0.00096 - 0.22	0.0056 - 4.5	µg/L	5BSV_DG-531	16.75 - 17.75
Vinyl chloride	75014	2 / 215	0.00074	0.0009	0.00051 - 0.2	0.0013 - 0.4	µg/L	5CSV_DG-570	40 - 41

Acronyms:
CAS - chemical abstract service
µg/L - micrograms per litter
ft bgs - feet below ground surface

Notes:
Samples were analyized for volatile organic compounds (VOCs) by Environmental Protection Agency Method 8260B or TO-15
Soil samples collected for VOCs are not summarized in this report.

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA
(Page 1 of 10)

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	--	7498162	6/10/2014 8:51	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.013	UJ	Non-Detect Estimated Value	Lancaster	V	C	1481734
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	--	7498162	6/10/2014 8:51	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0099	U	Non-Detect	Lancaster	V	F, result changed from 0.0072	1481734
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	--	7498162	6/10/2014 8:51	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0087	U	Non-Detect	Lancaster	V	F, result changed from 0.0062	1481734
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	--	7498162	6/10/2014 8:51	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.019	U	Non-Detect	Lancaster	V	F, RL changed from 0.0087	1481734
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	--	7498162	6/10/2014 8:51	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.011	U	Non-Detect	Lancaster	V	F, RL changed from 0.0087	1481734
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	--	7498162	6/10/2014 8:51	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0075	U	Non-Detect	Lancaster	V	F, result changed from 0.0073	1481734
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	--	7498163	6/10/2014 9:12	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.013	UJ	Non-Detect Estimated Value	Lancaster	V	C	1481734
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	--	7498163	6/10/2014 9:12	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0099	U	Non-Detect	Lancaster	V	F, result changed from 0.0077	1481734
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	--	7498163	6/10/2014 9:12	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0087	U	Non-Detect	Lancaster	V	F, result changed from 0.0069	1481734
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	--	7498163	6/10/2014 9:12	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.023	U	Non-Detect	Lancaster	V	F, RL changed from 0.0087	1481734
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	--	7498163	6/10/2014 9:12	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.011	U	Non-Detect	Lancaster	V	F, RL changed from 0.0087	1481734
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	--	7498163	6/10/2014 9:12	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.011	U	Non-Detect	Lancaster	V	F, result changed from 0.0025	1481734
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	--	7498164	6/10/2014 9:54	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.013	UJ	Non-Detect Estimated Value	Lancaster	V	C	1481734
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	--	7498164	6/10/2014 9:54	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0087	U	Non-Detect	Lancaster	V	F, result changed from 0.0056	1481734
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	--	7498164	6/10/2014 9:54	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.015	U	Non-Detect	Lancaster	V	F, RL changed from 0.0087	1481734
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	--	7498164	6/10/2014 9:54	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0087	U	Non-Detect	Lancaster	V	F, result changed from 0.0082	1481734
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	--	7498165	6/10/2014 10:56	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.063	UJ	Non-Detect Estimated Value	Lancaster	V	C	1481734
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	--	7498165	6/10/2014 10:56	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.043	U	Non-Detect	Lancaster	V	F, result changed from 0.018	1481734
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	--	7498166	6/10/2014 8:24	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.013	UJ	Non-Detect Estimated Value	Lancaster	V	C	1481734
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	--	7498166	6/10/2014 8:24	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0099	U	Non-Detect	Lancaster	V	F, result changed from 0.0077	1481734
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	--	7498166	6/10/2014 8:24	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.011	U	Non-Detect	Lancaster	V	F, RL changed from 0.0087	1481734
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	--	7498166	6/10/2014 8:24	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.016	U	Non-Detect	Lancaster	V	F, RL changed from 0.0087	1481734
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	--	7498166	6/10/2014 8:24	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.011	U	Non-Detect	Lancaster	V	F, result changed from 0.0054	1481734
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	--	7498168	6/10/2014 12:39	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.00088	1481734
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	--	7498168	6/10/2014 12:39	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0055	1481734
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	--	7498169	6/10/2014 13:03	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.002	1481734
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	--	7498170	6/10/2014 14:19	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0044	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1481734
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	--	7498170	6/10/2014 14:19	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.012	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1481734
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	--	7498170	6/10/2014 14:19	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0073	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1481734
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	--	7498170	6/10/2014 14:19	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0038	U	Non-Detect	Lancaster	V	F, result changed from 0.0022	1481734
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	--	7498170	6/10/2014 14:19	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1481734
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	--	7498171	6/10/2014 11:30	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0085	U	Non-Detect	Lancaster	V	F, RL changed from 0.0049	1481734
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	--	7498171	6/10/2014 11:30	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0011	1481734
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	--	7498171	6/10/2014 11:30	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0055	U	Non-Detect	Lancaster	V	F, RL changed from 0.0038	1481734
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	--	7498171	6/10/2014 11:30	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0035	1481734
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	SVL-509-SA5A-SV-25.0-26.0	280-56665-2	6/10/2014 14:19	Soil Vapor	Split Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56665-1
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	--	7498173	6/11/2014 7:54	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0019	1481735
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	--	7498174	6/11/2014 8:50	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.0017	1481735
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	--	7498174	6/11/2014 8:50	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0033	1481735
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	--	7498174	6/11/2014 8:50	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0016	1481735
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	--	7498175	6/11/2014 8:24	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0032	1481735
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	--	7498175	6/11/2014 8:24	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0017	1481735
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	--	7498176	6/11/2014 10:50	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0018	1481735
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	--	7498178	6/11/2014 10:02	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.0011	1481735
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	--	7498178	6/11/2014 10:02	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1481735
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	--	3F41001-06	6/10/2014 10:23	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	--	3F41001-06	6/10/2014 10:23	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	--	3F41001-07	6/10/2014 10:57	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	--	3F41001-07	6/10/2014 10:57	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	--	3F41001-08	6/10/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	--	3F41001-08	6/10/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0058	J	Estimated Value	EST	V	C	3F41001
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	--	3F41001-09	6/10/2014 12:26	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	--	3F41001-09	6/10/2014 12:26	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0062	J	Estimated Value	EST	V	C	3F41001
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	--	3F41001-10	6/10/2014 12:57	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	--	3F41001-10	6/10/2014 12:57	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	--	3F41001-11	6/10/2014 13:42	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	--	3F41001-11	6/10/2014 13:42	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	--	7498179	6/11/2014 11:54	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0029	1481735
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	--	7498179	6/11/2014 11:54	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0014	1481735
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	--	7498180	6/11/2014 11:26	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0025	1481735
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	--	7498180	6/11/2014 11:26	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0044	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1481735
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	--	7498180	6/11/2014 11:26	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1481735
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	--	7498181	6/11/2014 14:10	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.003	1481735
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	--	7498181	6/11/2014 14:10	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0035	1481735
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	--	7498181	6/11/2014 14:10	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1481735
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	--	7498182	6/11/2014 13:35	Soil Vapor	Primary Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.011	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	--	7498182	6/11/2014 13:35	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.041	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	--	7498182	6/11/2014 13:35	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.11	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	--	7498182	6/11/2014 13:35	Soil Vapor	Primary Sample	Primary Result	TO-15	Tetrachloroethene	127184	0.16	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	--	7498182	6/11/2014 13:35	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0052	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	--	7498182	6/11/2014 13:35	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichloroethene	79016	0.018	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	--	7498182	6/11/2014 13:35	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0016	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	1,1-Dichloroethene	75354	0.004	UJ	Non-Detect Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0029	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	Ethylbenzene	100414	0.0015	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	o-Xylene	95476	0.0033	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	Tetrachloroethene	127184	0.0068	UJ	Non-Detect Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	Toluene	108883	0.0017	J	Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	Trichloroethene	79016	0.0054	UJ	Non-Detect Estimated Value	Lancaster	V	*III	1481735
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	SVL-565-SA5A-SV-5.0-6.0	7498183	6/11/2014 13:43	Soil Vapor	Field Duplicate	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1481735
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	--	3F41101-08	6/11/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	--	3F41101-08	6/11/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	--	3F41101-08	6/11/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	--	3F41101-09	6/11/2014 12:34	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	--	3F41101-09	6/11/2014 12:34	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	--	3F41101-09	6/11/2014 12:34	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	--	3F41101-10	6/11/2014 13:03	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	--	3F41101-10	6/11/2014 13:03	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	--	3F41101-10	6/11/2014 13:03	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	--	3F41101-11	6/11/2014 13:43	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	--	3F41101-11	6/11/2014 13:43	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	--	3F41101-11	6/11/2014 13:43	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.0063	UJ	Non-Detect Estimated Value	Lancaster	V	C	1482106
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0025	1482106
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0012	1482106
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0049	U	Non-Detect	Lancaster	V	F, RL changed from 0.0035	1482106
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0029	1482106
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1482106
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0038	U	Non-Detect	Lancaster	V	F, result changed from 0.0035	1482106
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	--	7500235	6/12/2014 9:16	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1482106
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	SVL-609-SA5A-SV-7.0-8.0	280-56665-1	6/12/2014 13:20	Soil Vapor	Split Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56665-1
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	--	7500236	6/12/2014 13:20	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.0063	UJ	Non-Detect Estimated Value	Lancaster	V	C	1482106
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	--	7500236	6/12/2014 13:20	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0012	1482106
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	--	7500236	6/12/2014 13:20	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.0008	1482106
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	--	7500236	6/12/2014 13:20	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0032	1482106
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	--	7500236	6/12/2014 13:20	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0016	1482106
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	--	7500236	6/12/2014 13:20	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0038	U	Non-Detect	Lancaster	V	F, result changed from 0.001	1482106
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	--	7500236	6/12/2014 13:20	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1482106
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	--	7500237	6/12/2014 10:03	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.0063	UJ	Non-Detect Estimated Value	Lancaster	V	C	1482106
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	--	7500237	6/12/2014 10:03	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0023	1482106
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	--	7500237	6/12/2014 10:03	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0016	1482106
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	--	7500237	6/12/2014 10:03	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.004	1482106
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	--	7500237	6/12/2014 10:03	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0023	1482106
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	--	7500237	6/12/2014 10:03	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0038	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1482106
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	--	7500237	6/12/2014 10:03	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0011	1482106
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	--	7500238	6/12/2014 11:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.0063	UJ	Non-Detect Estimated Value	Lancaster	V	C	1482106
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	--	7500238	6/12/2014 11:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.00097	1482106
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	--	7500238	6/12/2014 11:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.00074	1482106
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	--	7500238	6/12/2014 11:01	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0022	1482106
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	--	7500238	6/12/2014 11:01	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0012	1482106
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	--	7500238	6/12/2014 11:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0038	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1482106
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	--	7500238	6/12/2014 11:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0014	1482106
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	--	7500239	6/12/2014 10:33	Soil Vapor	Primary Sample	Primary Result	TO-15	Carbon Tetrachloride	56235	0.0063	UJ	Non-Detect Estimated Value	Lancaster	V	C	1482106
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	--	7500239	6/12/2014 10:33	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0022	1482106
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	--	7500239	6/12/2014 10:33	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.002	1482106
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	--	7500239	6/12/2014 10:33	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0047	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1482106
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	--	7500239	6/12/2014 10:33	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0028	1482106
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	--	7500239	6/12/2014 10:33	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0038	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1482106
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	--	7500239	6/12/2014 10:33	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0012	1482106
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	--	7500240	6/12/2014 11:25	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0029	1482106
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	--	7500240	6/12/2014 11:25	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0017	1482106
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	--	3F41201-02	6/12/2014 7:48	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41201
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	--	3F41201-02	6/12/2014 7:48	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	--	3F41201-02	6/12/2014 7:48	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	SVL-626-SA5A-SV-5.5-6.5	3F41201-03	6/12/2014 7:48	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41201
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	SVL-626-SA5A-SV-5.5-6.5	3F41201-03	6/12/2014 7:48	Soil Vapor	Field Duplicate	Primary Result	8260B	Dichlorodifluoromethane	75718	0.011	J	Estimated Value	EST	V	C	3F41201
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	SVL-626-SA5A-SV-5.5-6.5	3F41201-03	6/12/2014 7:48	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	--	7500241	6/12/2014 12:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0029	1482106
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	--	7500241	6/12/2014 12:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1482106
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	--	7500241	6/12/2014 12:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.00076	1482106
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	--	7500241	6/12/2014 12:01	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0059	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1482106
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	--	7500241	6/12/2014 12:01	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0034	1482106
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	--	7500241	6/12/2014 12:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0038	U	Non-Detect	Lancaster	V	F, result changed from 0.0029	1482106
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	--	7500241	6/12/2014 12:01	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1482106
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	--	7476664	5/21/2014 15:50	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.28	J	Estimated Value	Lancaster	V	*III	1476964
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	--	7476665	5/21/2014 11:11	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.0041	1476964
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	--	7476665	5/21/2014 11:11	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.012	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1476964
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	--	7476665	5/21/2014 11:11	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.008	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1476964
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	--	7476666	5/21/2014 12:47	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1476964
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	--	7476667	5/21/2014 12:23	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0019	1476964
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	--	7476667	5/21/2014 12:23	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.00089	1476964
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	--	7476667	5/21/2014 12:23	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0067	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1476964
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	--	7476667	5/21/2014 12:23	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.004	1476964
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	SVL-516-SA5B-SV-12.5-13.5	14051846-1	5/21/2014 12:55	Soil Vapor	Split Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0038	U	Non-Detect	Calscience	V	F, RL changed from 0.0024	14-05-1846
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	SVL-516-SA5B-SV-12.5-13.5	14051846-1	5/21/2014 12:55	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.019	U	Non-Detect	Calscience	V	B, result changed from 0.002	14-05-1846
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	SVL-516-SA5B-SV-12.5-13.5	14051846-1	5/21/2014 12:55	Soil Vapor	Split Sample	Primary Result	TO-15	o-Xylene	95476	0.0076	U	Non-Detect	Calscience	V	F, RL changed from 0.0024	14-05-1846
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	--	3F41301-04	6/13/2014 8:59	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41301
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	--	3F41301-04	6/13/2014 8:59	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	--	3F41301-04	6/13/2014 8:59	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	--	3F41301-02	6/13/2014 8:35	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41301
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	--	3F41301-02	6/13/2014 8:35	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.014	J	Estimated Value	EST	V	C, *III	3F41301
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	--	3F41301-02	6/13/2014 8:35	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	SVL-525-SA5B-SV-8.0-9.0	3F41301-03	6/13/2014 8:35	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41301
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	SVL-525-SA5B-SV-8.0-9.0	3F41301-03	6/13/2014 8:35	Soil Vapor	Field Duplicate	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	SVL-525-SA5B-SV-8.0-9.0	3F41301-03	6/13/2014 8:35	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	SVL-525-SA5B-SV-13.0-14.0	14061132-2	6/13/2014 9:05	Soil Vapor	Split Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0074	U	Non-Detect	Calscience	V	F, RL changed from 0.0027	14-06-1132
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	SVL-525-SA5B-SV-13.0-14.0	14061132-2	6/13/2014 9:05	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.019	U	Non-Detect	Calscience	V	B, result changed from 0.0022	14-06-1132
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	SVL-525-SA5B-SV-13.0-14.0	14061132-2	6/13/2014 9:05	Soil Vapor	Split Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0094	U	Non-Detect	Calscience	V	F, result changed from 0.0032	14-06-1132
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	SVL-525-SA5B-SV-13.0-14.0	14061132-2	6/13/2014 9:05	Soil Vapor	Split Sample	Primary Result	TO-15	Toluene	108883	0.002	U	Non-Detect	Calscience	V	F, result changed from 0.0018	14-06-1132
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	--	7476668	5/21/2014 9:57	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.012	U	Non-Detect	Lancaster	V	F, RL changed from 0.0049	1476964
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	--	7476669	5/21/2014 9:15	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0035	1476964
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	--	7476670	5/21/2014 14:31	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0025	1476964
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	--	3F40401-11	6/4/2014 12:53	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	--	3F40401-11	6/4/2014 12:53	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	--	3F40401-11	6/4/2014 12:53	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	--	3F40401-12	6/4/2014 13:20	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.2	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	--	3F40401-12	6/4/2014 13:20	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.2	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	--	3F40401-12	6/4/2014 13:20	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.2	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	--	3F40401-10	6/4/2014 11:40	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	--	3F40401-10	6/4/2014 11:40	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	--	3F40401-10	6/4/2014 11:40	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40401
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	--	3F40501-10	6/5/2014 11:53	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	--	3F40501-10	6/5/2014 11:53	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40501
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	SVL-552-SA5B-SV-5.3-6.3	14060556-4	6/5/2014 12:00	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.017	U	Non-Detect	Calscience	V	B, result changed from 0.0017	14-06-0556
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	--	3F40501-11	6/5/2014 13:02	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	--	3F40501-11	6/5/2014 13:02	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40501
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	--	3F41101-02	6/11/2014 8:08	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	--	3F41101-02	6/11/2014 8:08	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroethane	75003	0.048	J	Estimated Value	EST	V	*III	3F41101
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	--	3F41101-02	6/11/2014 8:08	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	--	3F41101-02	6/11/2014 8:08	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	SVL-557-SA5B-SV-4.5-5.5	3F41101-03	6/11/2014 8:08	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	SVL-557-SA5B-SV-4.5-5.5	3F41101-03	6/11/2014 8:08	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	SVL-557-SA5B-SV-4.5-5.5	3F41101-03	6/11/2014 8:08	Soil Vapor	Field Duplicate	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	--	7476675	5/22/2014 14:30	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.002	1476965
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	--	7476675	5/22/2014 14:30	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.019	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1476965
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	--	7476675	5/22/2014 14:30	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0047	U	Non-Detect	Lancaster	V	F, RL changed from 0.0038	1476965
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	--	7476675	5/22/2014 14:30	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0023	1476965
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	SVL-560-SA5B-SV-7.0-8.0	14051846-2	5/22/2014 14:38	Soil Vapor	Split Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.004	U	Non-Detect	Calscience	V	F, RL changed from 0.0025	14-05-1846
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	SVL-560-SA5B-SV-7.0-8.0	14051846-2	5/22/2014 14:38	Soil Vapor	Split Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0059	U	Non-Detect	Calscience	V	F, RL changed from 0.0022	14-05-1846
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	SVL-560-SA5B-SV-7.0-8.0	14051846-2	5/22/2014 14:38	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.018	U	Non-Detect	Calscience	V	B, result changed from 0.0024	14-05-1846
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	SVL-560-SA5B-SV-7.0-8.0	14051846-2	5/22/2014 14:38	Soil Vapor	Split Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.02	U	Non-Detect	Calscience	V	F, RL changed from 0.0088	14-05-1846
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	SVL-560-SA5B-SV-7.0-8.0	14051846-2	5/22/2014 14:38	Soil Vapor	Split Sample	Primary Result	TO-15	o-Xylene	95476	0.011	U	Non-Detect	Calscience	V	F, RL changed from 0.0022	14-05-1846
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	SVL-560-SA5B-SV-7.0-8.0	14051846-2	5/22/2014 14:38	Soil Vapor	Split Sample	Primary Result	TO-15	Toluene	108883	0.006	U	Non-Detect	Calscience	V	F, RL changed from 0.0019	14-05-1846
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	SVL-560-SA5B-SV-7.0-8.0	14051846-2	5/22/2014 14:38	Soil Vapor	Split Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0057	U	Non-Detect	Calscience	V	F, result changed from 0.0046	14-05-1846
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	--	3F41301-05	6/13/2014 9:35	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41301
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	--	3F41301-05	6/13/2014 9:35	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	--	3F41301-05	6/13/2014 9:35	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	--	7476676	5/22/2014 12:09	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1476965
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	--	7476676	5/22/2014 12:09	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.022	U	Non-Detect	Lancaster	V	F, RL changed from 0.0038	1476965
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	--	7476676	5/22/2014 12:09	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1476965
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	--	3F41301-06	6/13/2014 10:05	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41301
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	--	3F41301-06	6/13/2014 10:05	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	--	3F41301-06	6/13/2014 10:05	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0064	J	Estimated Value	EST	V	C	3F41301
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	--	3F41101-04	6/11/2014 8:56	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	--	3F41101-04	6/11/2014 8:56	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	--	3F41101-04	6/11/2014 8:56	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	SVL-567-SA5B-SV-4.5-5.5	280-56666-2	6/11/2014 9:01	Soil Vapor	Split Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56666-1
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	--	3F41101-07	6/11/2014 10:56	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	--	3F41101-07	6/11/2014 10:56	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	--	3F41101-07	6/11/2014 10:56	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	--	3F40601-11	6/6/2014 12:30	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	--	3F40601-11	6/6/2014 12:30	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	--	3F40601-11	6/6/2014 12:30	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C, F, result changed from 0.016	3F40601
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	--	3F41101-05	6/11/2014 9:36	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	--	3F41101-05	6/11/2014 9:36	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	--	3F41101-05	6/11/2014 9:36	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	--	3F41801-02	6/18/2014 8:09	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	--	3F41801-02	6/18/2014 8:09	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	SVL-580-SA5B-SV-7.0-8.0	3F41801-03	6/18/2014 8:09	Soil Vapor	Field Duplicate	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	SVL-580-SA5B-SV-7.0-8.0	3F41801-03	6/18/2014 8:09	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	--	3F40901-08	6/9/2014 11:31	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	--	3F40901-08	6/9/2014 11:31	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	--	3F40901-08	6/9/2014 11:31	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	--	3F40901-09	6/9/2014 12:25	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	--	3F40901-09	6/9/2014 12:25	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	--	3F40901-09	6/9/2014 12:25	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	--	3F40901-10	6/9/2014 12:49	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	--	3F40901-10	6/9/2014 12:49	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	--	3F40901-10	6/9/2014 12:49	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	--	3F40901-07	6/9/2014 11:03	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	--	3F40901-07	6/9/2014 11:03	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	--	3F40901-07	6/9/2014 11:03	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	--	3F40601-06	6/6/2014 9:27	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	--	3F40601-06	6/6/2014 9:27	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	--	3F40601-06	6/6/2014 9:27	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40601
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	--	3F41101-06	6/11/2014 10:21	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	--	3F41101-06	6/11/2014 10:21	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41101
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	--	3F41101-06	6/11/2014 10:21	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41101
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	--	3F40601-07	6/6/2014 10:18	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	--	3F40601-07	6/6/2014 10:18	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	--	3F40601-07	6/6/2014 10:18	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40601
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	--	3F41801-04	6/18/2014 9:10	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	--	3F41801-04	6/18/2014 9:10	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	SVL-599-SA5B-SV-8.0-9.0	280-56908-2	6/18/2014 9:18	Soil Vapor	Split Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56908-1
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	--	3F40601-08	6/6/2014 10:45	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	--	3F40601-08	6/6/2014 10:45	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	--	3F40601-08	6/6/2014 10:45	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C, F, result changed from 0.005	3F40601
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	--	3F40601-09	6/6/2014 11:19	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	--	3F40601-09	6/6/2014 11:19	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	--	3F40601-09	6/6/2014 11:19	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40601
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	--	3F40201-06	6/2/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	--	3F40201-06	6/2/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	--	3F40201-06	6/2/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	--	3F40201-06	6/2/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.017	J	Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	--	3F40201-06	6/2/2014 11:24	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	--	3F40201-08	6/2/2014 11:59	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	--	3F40201-08	6/2/2014 11:59	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	--	3F40201-08	6/2/2014 11:59	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	--	3F40201-08	6/2/2014 11:59	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0054	J	Estimated Value	Lancaster	V	C, L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	--	3F40201-05	6/2/2014 10:52	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	--	3F40201-05	6/2/2014 10:52	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	--	3F40201-05	6/2/2014 10:52	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	--	3F40201-05	6/2/2014 10:52	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.009	J	Estimated Value	Lancaster	V	C, L	3F40201
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	SVL-505-SA5C-SV-10.0-11.0	3F40201-07	6/2/2014 11:24	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	SVL-505-SA5C-SV-10.0-11.0	3F40201-07	6/2/2014 11:24	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	SVL-505-SA5C-SV-10.0-11.0	3F40201-07	6/2/2014 11:24	Soil Vapor	Field Duplicate	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	SVL-505-SA5C-SV-10.0-11.0	3F40201-07	6/2/2014 11:24	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.0076	J	Estimated Value	Lancaster	V	C, L	3F40201
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	SVL-505-SA5C-SV-15.0-16.0	14060556-1	6/2/2014 12:08	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.019	U	Non-Detect	Calscience	V	B, result changed from 0.002	14-06-0556
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	--	3F40301-06	6/3/2014 9:41	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0052	J	Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	--	3F40301-05	6/3/2014 9:15	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	SVL-507-SA5C-SV-5.0-6.0	3F40301-04	6/3/2014 9:15	Soil Vapor	Field Duplicate	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.011	J	Estimated Value	EST	V	C	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	--	3F40301-07	6/3/2014 10:14	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	--	3F41801-07	6/18/2014 11:53	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	--	3F41801-07	6/18/2014 11:53	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	--	3F41801-06	6/18/2014 11:08	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	--	3F41801-06	6/18/2014 11:08	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	--	3F41801-05	6/18/2014 10:20	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	--	3F41801-05	6/18/2014 10:20	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	--	3F41001-04	6/10/2014 9:10	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	--	3F41001-04	6/10/2014 9:10	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	--	3F41001-02	6/10/2014 8:28	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	--	3F41001-02	6/10/2014 8:28	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	SVL-515-SA5C-SV-5.0-6.0	3F41001-03	6/10/2014 8:28	Soil Vapor	Field Duplicate	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	SVL-515-SA5C-SV-5.0-6.0	3F41001-03	6/10/2014 8:28	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	SVL-515-SA5C-SV-12.5-13.5	14061132-1	6/10/2014 9:16	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.018	U	Non-Detect	Calscience	V	B, result changed from 0.0016	14-06-1132
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	SVL-515-SA5C-SV-12.5-13.5	14061132-1	6/10/2014 9:16	Soil Vapor	Split Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0091	U	Non-Detect	Calscience	V	F, result changed from 0.0022	14-06-1132

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	SVL-515-SA5C-SV-12.5-13.5	14061132-1	6/10/2014 9:16	Soil Vapor	Split Sample	Primary Result	TO-15	o-Xylene	95476	0.0023	U	Non-Detect	Calscience	V	F, result changed from 0.0012	14-06-1132
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	SVL-515-SA5C-SV-12.5-13.5	14061132-1	6/10/2014 9:16	Soil Vapor	Split Sample	Primary Result	TO-15	Toluene	108883	0.002	U	Non-Detect	Calscience	V	F, result changed from 0.0015	14-06-1132
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	SVL-515-SA5C-SV-12.5-13.5	14061132-1	6/10/2014 9:16	Soil Vapor	Split Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0059	U	Non-Detect	Calscience	V	F, result changed from 0.0019	14-06-1132
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	--	3F40501-09	6/5/2014 11:08	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	--	3F40501-09	6/5/2014 11:08	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	--	3F40601-10	6/6/2014 12:02	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	--	3F40601-10	6/6/2014 12:02	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	--	3F40601-10	6/6/2014 12:02	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C, F, result changed from 0.0046	3F40601
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	--	3F40501-08	6/5/2014 10:43	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	--	3F40501-08	6/5/2014 10:43	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	--	3F40501-05	6/5/2014 9:06	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	--	3F40501-05	6/5/2014 9:06	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.008	J	Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	--	3F40501-04	6/5/2014 8:41	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	--	3F40501-04	6/5/2014 8:41	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.012	J	Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	--	3F40601-02	6/6/2014 7:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	--	3F40601-02	6/6/2014 7:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	--	3F40601-02	6/6/2014 7:46	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.099	J	Estimated Value	EST	V	C	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	--	3F40601-03	6/6/2014 8:22	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	--	3F40601-03	6/6/2014 8:22	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	--	3F40601-03	6/6/2014 8:22	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.026	UJ	Non-Detect Estimated Value	EST	V	C, F, RL changed from 0.02	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	--	3F40601-04	6/6/2014 8:49	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	--	3F40601-04	6/6/2014 8:49	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	--	3F40601-04	6/6/2014 8:49	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40601
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	--	3F40501-12	6/5/2014 13:41	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	--	3F40501-12	6/5/2014 13:41	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.04	J	Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	SVL-525-SA5C-SV-20.0-21.0	3F40601-05	6/6/2014 8:49	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	SVL-525-SA5C-SV-20.0-21.0	3F40601-05	6/6/2014 8:49	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2-Trichloroethane	79005	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40601
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	SVL-525-SA5C-SV-20.0-21.0	3F40601-05	6/6/2014 8:49	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40601
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	--	3F40501-06	6/5/2014 10:02	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	--	3F40501-06	6/5/2014 10:02	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.005	J	Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	SVL-528-SA5C-SV-5.5-6.5	3F40501-07	6/5/2014 10:02	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	SVL-528-SA5C-SV-5.5-6.5	3F40501-07	6/5/2014 10:02	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.005	J	Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	--	3E42901-04	5/29/2014 8:42	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	--	3E42901-04	5/29/2014 8:42	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	--	3E42901-04	5/29/2014 8:42	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	--	3E42901-04	5/29/2014 8:42	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42901
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	SVL-530-SA5C-SV-6.5-7.5	14060002-2	5/29/2014 8:49	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.022	U	Non-Detect	Calscience	V	B, result changed from 0.0027	14-06-0002
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0056	J	Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	--	3F40301-09	6/3/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.007	J	Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	--	3F40301-10	6/3/2014 11:50	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.011	J	Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	--	3F40301-08	6/3/2014 10:59	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	SVL-535-SA5C-SV-15.0-16.0	14060556-3	6/3/2014 11:56	Soil Vapor	Split Sample	Primary Result	TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	U	Non-Detect	Calscience	V	F, RL changed from 0.015	14-06-0556
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	SVL-535-SA5C-SV-15.0-16.0	14060556-3	6/3/2014 11:56	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.022	U	Non-Detect	Calscience	V	B, result changed from 0.0035	14-06-0556
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.01	J	Estimated Value	EST	V	C	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	--	3F40301-12	6/3/2014 13:15	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	--	3F40401-02	6/4/2014 7:28	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	--	3F40401-02	6/4/2014 7:28	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	--	3F40401-02	6/4/2014 7:28	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C, F, result changed from 0.016	3F40401
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0096	J	Estimated Value	EST	V	C	3F40301
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	--	3F40301-11	6/3/2014 12:56	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	--	3F41301-07	6/13/2014 10:34	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41301
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	--	3F41301-07	6/13/2014 10:34	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41301
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	--	3F41301-07	6/13/2014 10:34	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.014	J	Estimated Value	EST	V	C	3F41301
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	--	3F40501-03	6/5/2014 7:58	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	--	3F40501-03	6/5/2014 7:58	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	--	3F40501-02	6/5/2014 7:39	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40501
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	--	3F40501-02	6/5/2014 7:39	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40501
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	--	3F41001-05	6/10/2014 9:44	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41001
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	--	3F41001-05	6/10/2014 9:44	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41001
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	--	3F40401-05	6/4/2014 8:51	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	--	3F40401-05	6/4/2014 8:51	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	--	3F40401-05	6/4/2014 8:51	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C, F, result changed from 0.0054	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	--	3F40401-06	6/4/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	--	3F40401-06	6/4/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	--	3F40401-06	6/4/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C, F, result changed from 0.0052	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	--	3F40401-07	6/4/2014 9:29	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	--	3F40401-07	6/4/2014 9:29	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	--	3F40401-07	6/4/2014 9:29	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C, F, result changed from 0.0066	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	--	3F40401-08	6/4/2014 9:49	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	--	3F40401-08	6/4/2014 9:49	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	--	3F40401-08	6/4/2014 9:49	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C, F, result changed from 0.0084	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	--	3F40401-09	6/4/2014 10:10	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	--	3F40401-09	6/4/2014 10:10	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	--	3F40401-09	6/4/2014 10:10	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C, F, result changed from 0.0078	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	--	3F40401-03	6/4/2014 8:32	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	--	3F40401-03	6/4/2014 8:32	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	--	3F40401-03	6/4/2014 8:32	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40401
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	SVL-570-SA5C-SV-5.0-6.0	3F40401-04	6/4/2014 8:32	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	SVL-570-SA5C-SV-5.0-6.0	3F40401-04	6/4/2014 8:32	Soil Vapor	Field Duplicate	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3F40401
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	SVL-570-SA5C-SV-5.0-6.0	3F40401-04	6/4/2014 8:32	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40401
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	SVL-570-SA5C-SV-40.0-41.0	14060556-5	6/4/2014 10:16	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.021	U	Non-Detect	Calscience	V	B, result changed from 0.0032	14-06-0556
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	SVL-570-SA5C-SV-40.0-41.0	14060556-5	6/4/2014 10:16	Soil Vapor	Split Sample	Primary Result	TO-15	Toluene	108883	0.011	U	Non-Detect	Calscience	V	F, RL changed from 0.0023	14-06-0556
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	--	3E42901-11	5/29/2014 13:39	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	--	3E42901-11	5/29/2014 13:39	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	--	3E42901-11	5/29/2014 13:39	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	--	3E42901-11	5/29/2014 13:39	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.011	3E42901
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	--	3E42701-04	5/27/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	--	3E42701-04	5/27/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	--	3E42701-04	5/27/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	U	Non-Detect	Lancaster	V	B, result changed from 0.011	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	--	3E42701-04	5/27/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	--	3E42701-04	5/27/2014 9:09	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.011	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	--	3E42701-05	5/27/2014 9:42	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	--	3E42701-05	5/27/2014 9:42	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	--	3E42701-05	5/27/2014 9:42	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	U	Non-Detect	Lancaster	V	B, result changed from 0.012	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	--	3E42701-05	5/27/2014 9:42	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	--	3E42701-05	5/27/2014 9:42	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.007	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	--	3E42701-02	5/27/2014 8:32	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	--	3E42701-02	5/27/2014 8:32	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	--	3E42701-02	5/27/2014 8:32	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	--	3E42701-02	5/27/2014 8:32	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.12	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	SVL-502-SA5D-SV-5.0-6.0	3E42701-03	5/27/2014 8:32	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	SVL-502-SA5D-SV-5.0-6.0	3E42701-03	5/27/2014 8:32	Soil Vapor	Field Duplicate	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	SVL-502-SA5D-SV-5.0-6.0	3E42701-03	5/27/2014 8:32	Soil Vapor	Field Duplicate	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	SVL-502-SA5D-SV-5.0-6.0	3E42701-03	5/27/2014 8:32	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.1	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	SVL-546-SA5D-SV-10.0-11.0	14060002-3	5/30/2014 8:25	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.017	U	Non-Detect	Calscience	V	B, result changed from 0.0048	14-06-0002
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	--	3E42801-09	5/28/2014 12:50	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	--	3E42801-09	5/28/2014 12:50	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.024	U	Non-Detect	Lancaster	V	F, RL changed from 0.02	3E42801
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	--	3E42801-09	5/28/2014 12:50	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.0088	3E42801
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	--	3E42801-05	5/28/2014 9:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	--	3E42801-05	5/28/2014 9:46	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42801
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	--	3E42801-06	5/28/2014 10:19	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	--	3E42801-06	5/28/2014 10:19	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42801
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	--	3E42701-10	5/27/2014 13:03	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	--	3E42701-10	5/27/2014 13:03	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	--	3E42701-10	5/27/2014 13:03	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	--	3E42701-10	5/27/2014 13:03	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.16	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	--	3E42701-11	5/27/2014 13:34	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	--	3E42701-11	5/27/2014 13:34	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	--	3E42701-11	5/27/2014 13:34	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	--	3E42701-11	5/27/2014 13:34	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.015	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	--	3E42701-09	5/27/2014 12:32	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	--	3E42701-09	5/27/2014 12:32	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	--	3E42701-09	5/27/2014 12:32	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	--	3E42701-09	5/27/2014 12:32	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.035	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	--	3E42701-07	5/27/2014 10:45	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.4	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	--	3E42701-07	5/27/2014 10:45	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.4	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	--	3E42701-07	5/27/2014 10:45	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.12	J	Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	--	3E42701-07	5/27/2014 10:45	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.088	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	--	3E42701-08	5/27/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	--	3E42701-08	5/27/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	--	3E42701-08	5/27/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	U	Non-Detect	Lancaster	V	B, RL=result	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	--	3E42701-08	5/27/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	--	3E42701-08	5/27/2014 11:22	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.024	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	--	3E42701-06	5/27/2014 10:15	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	--	3E42701-06	5/27/2014 10:15	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	--	3E42701-06	5/27/2014 10:15	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.023	U	Non-Detect	Lancaster	V	B, RL changed from 0.02	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	--	3E42701-06	5/27/2014 10:15	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	127184	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42701
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	--	3E42701-06	5/27/2014 10:15	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.016	J	Estimated Value	Lancaster	V	C	3E42701
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	--	3E42801-04	5/28/2014 8:57	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	--	3E42801-04	5/28/2014 8:57	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.055	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, RL changed from 0.02	3E42801
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	--	3E42801-02	5/28/2014 8:16	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	--	3E42801-02	5/28/2014 8:16	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.0052	3E42801
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	SVL-515-SA5D-SV-5.0-6.0	3E42801-03	5/28/2014 8:16	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	SVL-515-SA5D-SV-5.0-6.0	3E42801-03	5/28/2014 8:16	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.0074	3E42801
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	SVL-515-SA5D-SV-12.5-13.8	14060002-1	5/28/2014 9:05	Soil Vapor	Split Sample	Primary Result	TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.011	U	Non-Detect	Calscience	V	F, result changed from 0.0044	14-06-0002
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	SVL-515-SA5D-SV-12.5-13.8	14060002-1	5/28/2014 9:05	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.017	U	Non-Detect	Calscience	V	B, result changed from 0.0013	14-06-0002
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	--	3E42801-08	5/28/2014 11:26	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	--	3E42801-08	5/28/2014 11:26	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.024	U	Non-Detect	Lancaster	V	F, RL changed from 0.02	3E42801
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	--	3E42801-08	5/28/2014 11:26	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.0046	3E42801
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	--	3E42801-07	5/28/2014 10:55	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	--	3E42801-07	5/28/2014 10:55	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42801
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	--	3E42901-05	5/29/2014 9:30	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	--	3E42901-05	5/29/2014 9:30	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	--	3E42901-05	5/29/2014 9:30	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	--	3E42901-05	5/29/2014 9:30	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.03	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, RL changed from 0.02	3E42901
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	--	3E42901-06	5/29/2014 10:12	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	--	3E42901-06	5/29/2014 10:12	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	--	3E42901-06	5/29/2014 10:12	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	--	3E42901-06	5/29/2014 10:12	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.044	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, RL changed from 0.02	3E42901
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	--	3E42901-07	5/29/2014 10:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	--	3E42901-07	5/29/2014 10:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	--	3E42901-07	5/29/2014 10:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	--	3E42901-07	5/29/2014 10:46	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42901
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	--	3E42901-08	5/29/2014 11:20	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	--	3E42901-08	5/29/2014 11:20	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	--	3E42901-08	5/29/2014 11:20	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	--	3E42901-08	5/29/2014 11:20	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	--	3E42901-09	5/29/2014 12:29	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	--	3E42901-09	5/29/2014 12:29	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	--	3E42901-09	5/29/2014 12:29	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	--	3E42901-09	5/29/2014 12:29	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.0048	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	--	3E42901-10	5/29/2014 13:00	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	--	3E42901-10	5/29/2014 13:00	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	--	3E42901-10	5/29/2014 13:00	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	--	3E42901-10	5/29/2014 13:00	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.0072	3E42901
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	--	3E42901-02	5/29/2014 7:50	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	--	3E42901-02	5/29/2014 7:50	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	--	3E42901-02	5/29/2014 7:50	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	--	3E42901-02	5/29/2014 7:50	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.039	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, RL changed from 0.02	3E42901
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	--	3E42801-10	5/28/2014 13:25	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42801
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	--	3E42801-10	5/28/2014 13:25	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.07	J	Estimated Value	Lancaster	V	C	3E42801
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	SVL-544-SA5D-SV-10.0-11.0	3E42901-03	5/29/2014 7:50	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	SVL-544-SA5D-SV-10.0-11.0	3E42901-03	5/29/2014 7:50	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	SVL-544-SA5D-SV-10.0-11.0	3E42901-03	5/29/2014 7:50	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1-Dichloroethene	75354	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E42901
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	SVL-544-SA5D-SV-10.0-11.0	3E42901-03	5/29/2014 7:50	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.034	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, RL changed from 0.02	3E42901
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	--	3E43001-04	5/30/2014 8:19	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	--	3E43001-02	5/30/2014 7:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	--	3E43001-02	5/30/2014 7:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E43001

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PHASE 3 SOIL VAPOR
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SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	--	3E43001-02	5/30/2014 7:46	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	--	3E43001-02	5/30/2014 7:46	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.013	3E43001
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	SVL-546-SA5D-SV-5.0-6.0	3E43001-03	5/30/2014 7:46	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	SVL-546-SA5D-SV-5.0-6.0	3E43001-03	5/30/2014 7:46	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E43001
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	SVL-546-SA5D-SV-5.0-6.0	3E43001-03	5/30/2014 7:46	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	SVL-546-SA5D-SV-5.0-6.0	3E43001-03	5/30/2014 7:46	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.013	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	--	3E43001-04	5/30/2014 8:19	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	--	3E43001-04	5/30/2014 8:19	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	--	3E43001-04	5/30/2014 8:19	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.01	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	--	3E43001-05	5/30/2014 11:21	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	--	3E43001-05	5/30/2014 11:21	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	--	3E43001-05	5/30/2014 11:21	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	--	3E43001-05	5/30/2014 11:21	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.0044	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	--	3E43001-07	5/30/2014 10:07	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	--	3E43001-07	5/30/2014 10:07	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	--	3E43001-07	5/30/2014 10:07	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	--	3E43001-07	5/30/2014 10:07	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.028	J	Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	--	3E43001-08	5/30/2014 10:42	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	--	3E43001-08	5/30/2014 10:42	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	--	3E43001-08	5/30/2014 10:42	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	--	3E43001-08	5/30/2014 10:42	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	B, C, result changed from 0.011	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	--	3E43001-06	5/30/2014 9:39	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	--	3E43001-06	5/30/2014 9:39	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	*III	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	--	3E43001-06	5/30/2014 9:39	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	--	3E43001-06	5/30/2014 9:39	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3E43001
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	--	3F40901-02	6/9/2014 8:28	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	--	3F40901-02	6/9/2014 8:28	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	--	3F40901-02	6/9/2014 8:28	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	SVL-553-SA5D-SV-4.5-5.5	3F40901-03	6/9/2014 8:28	Soil Vapor	Field Duplicate	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	SVL-553-SA5D-SV-4.5-5.5	3F40901-03	6/9/2014 8:28	Soil Vapor	Field Duplicate	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	SVL-553-SA5D-SV-4.5-5.5	3F40901-03	6/9/2014 8:28	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	--	3F40901-04	6/9/2014 9:08	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	--	3F40901-04	6/9/2014 9:08	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	--	3F40901-04	6/9/2014 9:08	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.011	J	Estimated Value	EST	V	C	3F40901
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	SVL-553-SA5D-SV-9.0-10.0	14061132-3	6/9/2014 9:14	Soil Vapor	Split Sample	Primary Result	TO-15	Methylene chloride	75092	0.018	U	Non-Detect	Calscience	V	B, result changed from 0.0022	14-06-1132
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	--	3F40901-05	6/9/2014 9:50	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	--	3F40901-05	6/9/2014 9:50	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	--	3F40901-05	6/9/2014 9:50	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	--	3F40901-06	6/9/2014 10:27	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	--	3F40901-06	6/9/2014 10:27	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	--	3F40901-06	6/9/2014 10:27	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40901
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	--	3F40901-11	6/9/2014 13:40	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	67663	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	--	3F40901-11	6/9/2014 13:40	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40901
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	--	3F40901-11	6/9/2014 13:40	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0076	J	Estimated Value	EST	V	C	3F40901
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	--	3F41201-06	6/12/2014 10:04	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41201
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	--	3F41201-06	6/12/2014 10:04	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	--	3F41201-06	6/12/2014 10:04	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	--	3F41201-06	6/12/2014 10:04	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	1.1	UJ	Non-Detect Estimated Value	EST	V	C, RL changed from 0.02	3F41201
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	--	3F41201-07	6/12/2014 10:36	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41201
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	--	3F41201-07	6/12/2014 10:36	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	--	3F41201-07	6/12/2014 10:36	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.0066	J	Estimated Value	EST	V	C	3F41201
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	--	3F41201-07	6/12/2014 10:36	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	2.9	UJ	Non-Detect Estimated Value	EST	V	C, RL changed from 0.02	3F41201
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	--	3F41201-08	6/12/2014 11:07	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.1	UJ	Non-Detect Estimated Value	EST	V	*III	3F41201
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	--	3F41201-08	6/12/2014 11:07	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.1	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	--	3F41201-08	6/12/2014 11:07	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.1	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	--	3F41201-08	6/12/2014 11:07	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	4.5	UJ	Non-Detect Estimated Value	EST	V	C, RL changed from 0.1	3F41201
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	--	3F41201-05	6/12/2014 9:28	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41201
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	--	3F41201-05	6/12/2014 9:28	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	--	3F41201-05	6/12/2014 9:28	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	--	3F41201-04	6/12/2014 8:38	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41201
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	--	3F41201-04	6/12/2014 8:38	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	75718	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	--	3F41201-04	6/12/2014 8:38	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41201
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	SVL-528-SA6-SV-5.5-6.5	280-56666-1	6/12/2014 8:48	Soil Vapor	Split Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56666-1
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	--	3F41901-07	6/19/2014 11:35	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41901
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	--	3F41901-07	6/19/2014 11:35	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	--	3F41901-07	6/19/2014 11:35	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	--	280-56667-4	6/13/2014 10:56	Soil Vapor	Primary Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56667-1
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	--	280-56667-3	6/13/2014 11:22	Soil Vapor	Primary Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56667-1
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	SVL-544-SA6-SV-10.0-11.0	280-56667-6	6/13/2014 11:22	Soil Vapor	Field Duplicate	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56667-1
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	--	280-56667-5	6/13/2014 10:16	Soil Vapor	Primary Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56667-1
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	--	280-56667-2	6/13/2014 8:53	Soil Vapor	Primary Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56667-1
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	--	280-56667-1	6/13/2014 9:24	Soil Vapor	Primary Sample	Primary Result	TO-15	1,1-Dichloroethene	75354	0.0159	UJ	Non-Detect Estimated Value	TestAmerica - Denver	V	C	280-56667-1
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	--	3F41901-06	6/19/2014 11:09	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41901
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	--	3F41901-06	6/19/2014 11:09	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	--	3F41901-06	6/19/2014 11:09	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.11	J	Estimated Value	EST	V	*III	3F40301
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	--	3F40301-02	6/3/2014 7:55	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.079	J	Estimated Value	EST	V	*III	3F40301
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	--	7476672	5/22/2014 10:05	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0019	1476965
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	--	7476672	5/22/2014 10:05	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0045	U	Non-Detect	Lancaster	V	F, RL changed from 0.0038	1476965
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	--	7476672	5/22/2014 10:05	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1476965
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	--	7476678	5/23/2014 9:34	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0022	1476966
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	--	7476678	5/23/2014 9:34	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.00085	1476966
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	--	7476678	5/23/2014 9:34	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0016	1476966
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	SVL-512-SA8-SV-8.0-9.0	7476684	5/23/2014 8:44	Soil Vapor	Field Duplicate	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0022	1476966
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	SVL-512-SA8-SV-8.0-9.0	7476684	5/23/2014 8:44	Soil Vapor	Field Duplicate	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.0012	1476966
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	SVL-512-SA8-SV-8.0-9.0	7476684	5/23/2014 8:44	Soil Vapor	Field Duplicate	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1476966
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	--	7476673	5/22/2014 10:50	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1476965
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	--	7476681	5/23/2014 8:23	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0022	1476966
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	--	7476681	5/23/2014 8:23	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.0014	1476966
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	--	7476681	5/23/2014 8:23	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1476966
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	--	7476679	5/23/2014 8:44	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1476966
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	--	7476679	5/23/2014 8:44	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1476966
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	--	7476680	5/23/2014 9:02	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0021	1476966
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	--	7476680	5/23/2014 9:02	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.0068	U	Non-Detect	Lancaster	V	F, RL changed from 0.0038	1476966
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	--	7476680	5/23/2014 9:02	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0012	1476966
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	--	7476674	5/22/2014 8:49	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.002	1476965
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	--	7476674	5/22/2014 8:49	Soil Vapor	Primary Sample	Primary Result	TO-15	Ethylbenzene	100414	0.0059	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1476965
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	--	7476674	5/22/2014 8:49	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.025	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1476965
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	--	7476674	5/22/2014 8:49	Soil Vapor	Primary Sample	Primary Result	TO-15	o-Xylene	95476	0.013	U	Non-Detect	Lancaster	V	F, RL changed from 0.0043	1476965
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	--	7476674	5/22/2014 8:49	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.015	U	Non-Detect	Lancaster	V	F, RL changed from 0.0038	1476965
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	--	7476683	5/23/2014 10:36	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.0025	1476966
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	--	7476683	5/23/2014 10:36	Soil Vapor	Primary Sample	Primary Result	TO-15	Methylene chloride	75092	0.0035	U	Non-Detect	Lancaster	V	F, result changed from 0.0013	1476966
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	--	7476683	5/23/2014 10:36	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0015	1476966
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	--	7476682	5/23/2014 10:59	Soil Vapor	Primary Sample	Primary Result	TO-15	Dichlorodifluoromethane	75718	0.0049	U	Non-Detect	Lancaster	V	F, result changed from 0.002	1476966
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	--	7476682	5/23/2014 10:59	Soil Vapor	Primary Sample	Primary Result	TO-15	m-Xylene & p-Xylene	179601231	0.0043	U	Non-Detect	Lancaster	V	F, result changed from 0.001	1476966
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	--	7476682	5/23/2014 10:59	Soil Vapor	Primary Sample	Primary Result	TO-15	Toluene	108883	0.005	U	Non-Detect	Lancaster	V	F, RL changed from 0.0038	1476966
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	--	7476682	5/23/2014 10:59	Soil Vapor	Primary Sample	Primary Result	TO-15	Trichlorofluoromethane	75694	0.0056	U	Non-Detect	Lancaster	V	F, result changed from 0.0012	1476966
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	--	3F40201-02	6/2/2014 9:08	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	--	3F40201-02	6/2/2014 9:08	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	--	3F40201-02	6/2/2014 9:08	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	--	3F40201-02	6/2/2014 9:08	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	--	3F40201-03	6/2/2014 9:35	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	--	3F40201-03	6/2/2014 9:35	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	--	3F40201-03	6/2/2014 9:35	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	--	3F40201-03	6/2/2014 9:35	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	--	3F40201-04	6/2/2014 9:58	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	--	3F40201-04	6/2/2014 9:58	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	75343	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	L	3F40201
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	--	3F40201-04	6/2/2014 9:58	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	--	3F40201-04	6/2/2014 9:58	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	Lancaster	V	C	3F40201
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	--	3F41801-08	6/18/2014 12:57	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	--	3F41801-08	6/18/2014 12:57	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	--	3F41801-09	6/18/2014 13:34	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	L	3F41801
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	--	3F41801-09	6/18/2014 13:34	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41801
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	--	3F41901-04	6/19/2014 9:28	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41901
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	--	3F41901-04	6/19/2014 9:28	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	--	3F41901-04	6/19/2014 9:28	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	71556	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	56235	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	156592	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	75092	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	156605	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F40301
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	--	3F40301-03	6/3/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	75694	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F40301
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	--	3F41901-02	6/19/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41901
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	--	3F41901-02	6/19/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	--	3F41901-02	6/19/2014 8:34	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	SVL-543-SA8-SV-6.25-7.25	3F41901-03	6/19/2014 8:34	Soil Vapor	Field Duplicate	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41901
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	SVL-543-SA8-SV-6.25-7.25	3F41901-03	6/19/2014 8:34	Soil Vapor	Field Duplicate	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	SVL-543-SA8-SV-6.25-7.25	3F41901-03	6/19/2014 8:34	Soil Vapor	Field Duplicate	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	--	3F41901-05	6/19/2014 10:37	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	79345	0.02	UJ	Non-Detect Estimated Value	EST	V	*III	3F41901
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	--	3F41901-05	6/19/2014 10:37	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	179601231	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	--	3F41901-05	6/19/2014 10:37	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	108883	0.02	UJ	Non-Detect Estimated Value	EST	V	C	3F41901

TABLE 4-1
PHASE 3 SOIL VAPOR
SUMMARY OF QUALIFIED DATA
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Parent Sample Name	Lab Sample Name	Collection Date	Matrix Type	Sample Type	Result Type	Analysis Method	Analyte	CAS Number	Result Value (µg/L)	Validator Qualifier Code	Validator Qualifier Description	Lab Name	Validation Level	Validation Notes	Validation Report Identifier

Acronyms
µg/L - micrograms per liter
CAS - chemical abstract service
EST - Environmental Support Technologies
RL - reporting limit

Validation Notes:
B - Presumed contamination as indicated by the preparation (method) blank results.
C - Calibration percent standard deviation or percent difference was non-compliant.
F - Presumed contamination as indicated by the field blank or equipment rinse blank results.
*III - Laboratory control spike/laboratory control spike duplicate relative percent difference exceeded the control limit.
L - Laboratory blank spike/blank spike duplicate percent recovery was not within control limits.

Validation Qualifiers:
J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
UJ - The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

FIGURES

Subarea 3

Subarea 6

Subarea 7

Northwest Buffer Zone

Subarea 5A

Subarea 5B

Subarea 5C

Subarea 8 North

Subarea 8 South

Subarea 5D North

Subarea 5D South

Please Note: The original version of this figure includes colorize features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information

Basemap Legend

- Administrative Boundaries
- Area IV Subareas
- Existing Structure
- Removed Structure

- Active Soil Vapor Sample Location
- Deferred Active Soil Vapor Sample Location
- Soil Sample Location (Soil vapor probe not installed due to less than 5.5 feet of soil)
- Location Drilled but no Samples Collected due to Thin Soils

Phase 3 Soil Vapor Sample Locations

SANTA SUSANA FIELD LABORATORY

Document: C:\Rocketdyne_MXDs\GoBacks_SV.mxd

Date: 09/18/2014

0 230 460 Feet

FIGURE 1-1

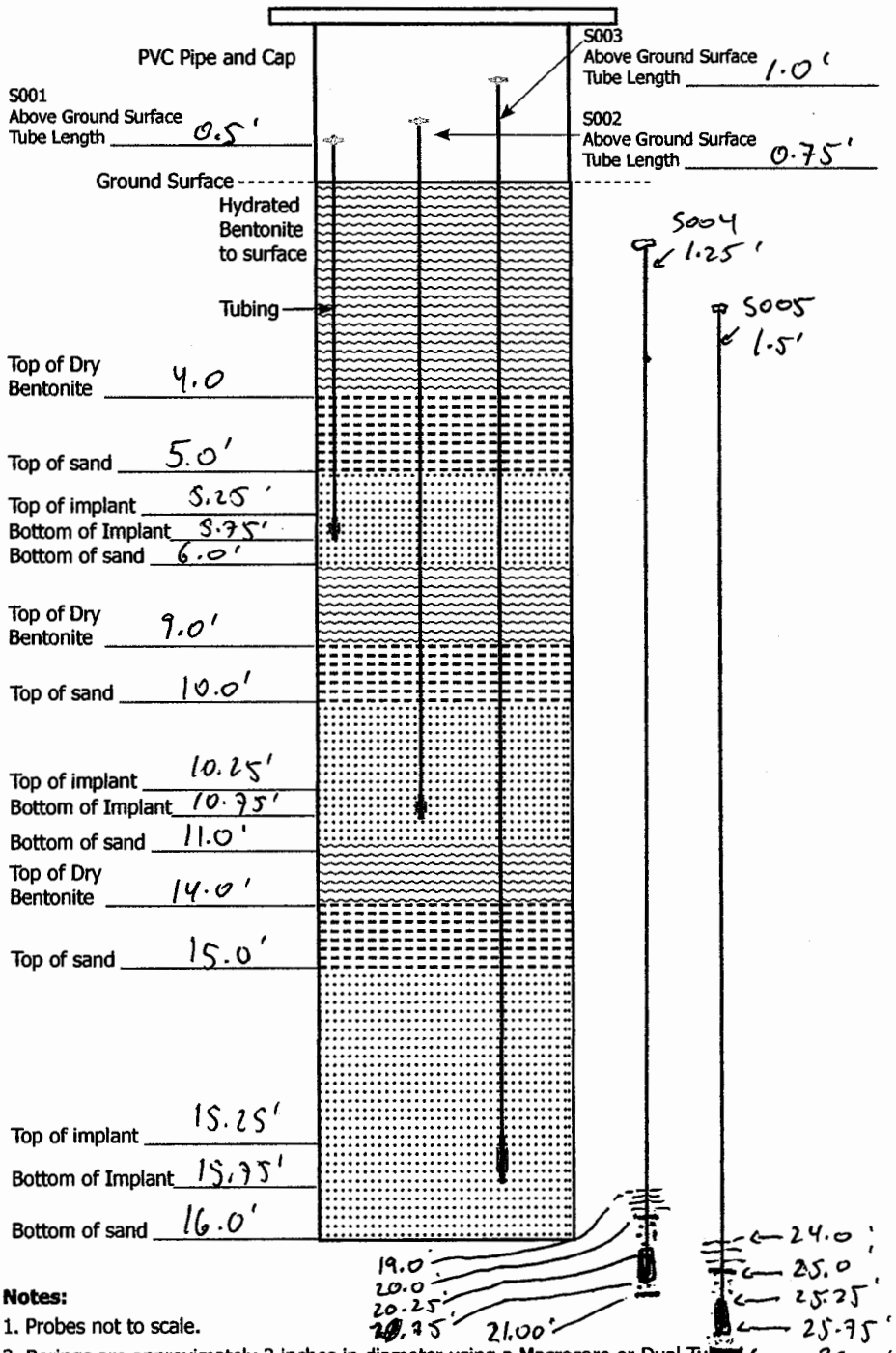
APPENDIX A

SOIL BORING LOGS AND
SOIL VAPOR PROBE CONSTRUCTION DETAILS

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-504
Project: Phase 3 DOE Data Gap Sampling 2014
Job #: 10503982.3050105/10503982.3060105
Site: SA
Logged by: RUB ELLIS
Reviewed by:
Drilling Contractor: EST
Driller: MATT KILHULLEN
Rig Type/Method: Geoprobe 5400
Borehole TD: 30.0' bgs
Borehole Diameter: 2.25"
Probe Completion Date/Time: 05 JUN 14 11:30



Vapor Implant Specs

Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite

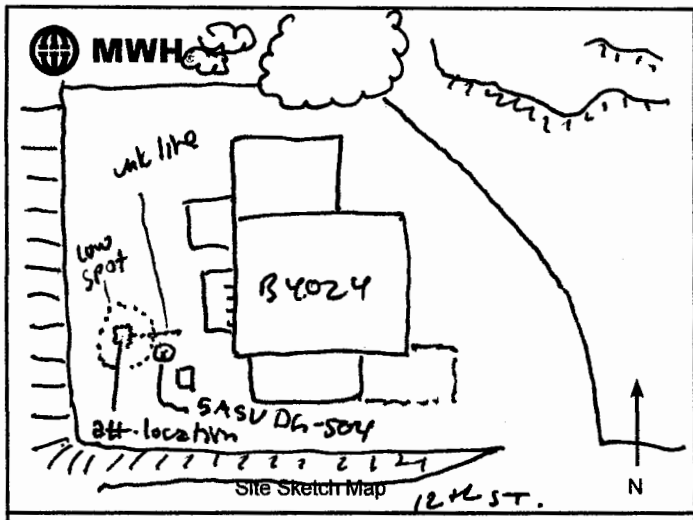
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH



Site Sketch Map

Boring ID: SASV DG-504	Sheet 1 of 2
Project: Phase 3 DOE SVDG 2014	
Job #: 10503892.305016	Site: SA B4024 (W)
Logged By: RWBeeus	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kilhullen
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 30.0
Drill Bit Type: Macro core	
Drill Start Time/Date: 08:43 05 JUN 14	Drill Finish Time/Date: 09:50 05 JUN 14
Soil Vapor ID: SASV DG-504	Soil Boring Backfill Time/Date: N/A
Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 05 JUN 14, 11:06 -	Observations: ☐ Debris ☐ Staining ☐ Odors ☒ ~~Groundwater~~ perched water ☐ None
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, 15.0-16.0, 20.0-21.0	Surface Completion: SV probe
Soil Vapor Well Detail Completed (yes/no) attached 25.0-26.0	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		45"				0		4" asphalt 0.0-0.35'					
						1		0.35-17.3					
								poorly sorted sand with silt	TR	10	15	55	20
						2		(SP-SM). dark yellowish brown					
								(10YR 4/6), moist, loose, Predominant					
						3	SP	fine sand (55), little silt (20),					
							SM	little med sand (15), few coarse					
0.0 ppm		46"				4		(10) w/ trace gravels. Coarse					
								fraction consists mostly of sand					
						5		stone grains w/ oxidation					
								rinds. Several sandstone clasts					
						6		up to 2" throughout, angular					
								to sub angular and weathered.					
						7		Occassional small (~1") lens					
								of SM (silty sand). No stain					
						8		or odor. Fill material.					
0.0 ppm		46"											
						9							

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Boring ID: SASV DG-504 Project: Phase 3 DOE SVDG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10		17.3 - ~~30~~ 24.5					
								Silty sand (SM), Brown (10YR 4/3)	–	–	TR	65	35
						11		Mostly fine sand (65), some					
								silt (35), moist, loose,					
0.0		42"				12	SP-SM	mottled throughout but sporadic					
ppm								oxidation around small coarse					
						13		sand-gravel sized sandstone					
								fragments. Occasional larger					
						14		clast up to 1.5" of sandstone.					
								No stain, no odor. Fill material					
						15							
								24.5 - 30.0					
						16					15		
0.0		48"						Poorly sorted sand w/ silt (SP-SM)	–	TR	~~TR~~	60	25
ppm						17		Dark yellow brown (10YR 4/6).					
								Mostly fine sand (60), little					
						18		silt (25), and little medium (15)					
								trace coarse grains, No fill material					
						19		stain, no odor. ~~Possible fill material~~					
								~~soil~~. Wood fragments @ ~~28.8'~~					
						20		bgs, water logged. 27.8'					
0.0		42"						Interval is moist until					
ppm						21		28.0' where it becomes					
								saturated/wet. Possible					
						22	SM	perched water from former					
								basement feature of B4024.					
						23							
								TD = 30.0' bgs with refusal on					
						24		sandstone; dark bluish gray					
0.0		27"						(GLEY2 4/5B).					
ppm						25							
								* Boring caved in to 27.1' bgs.					
						26		+ 6" of water. First probe set					
							SP-SM	to 25.5' center after #8 chips					
						27		to 26.0' bgs.					
						28		· Borehole moved to alternate, ~~N/A~~'					
0.0		24"						WNW of primary location to target					
ppm						29		low spot and geophysical anomaly					
								in paved yard, cut/patched asphalt.					

TD = 30

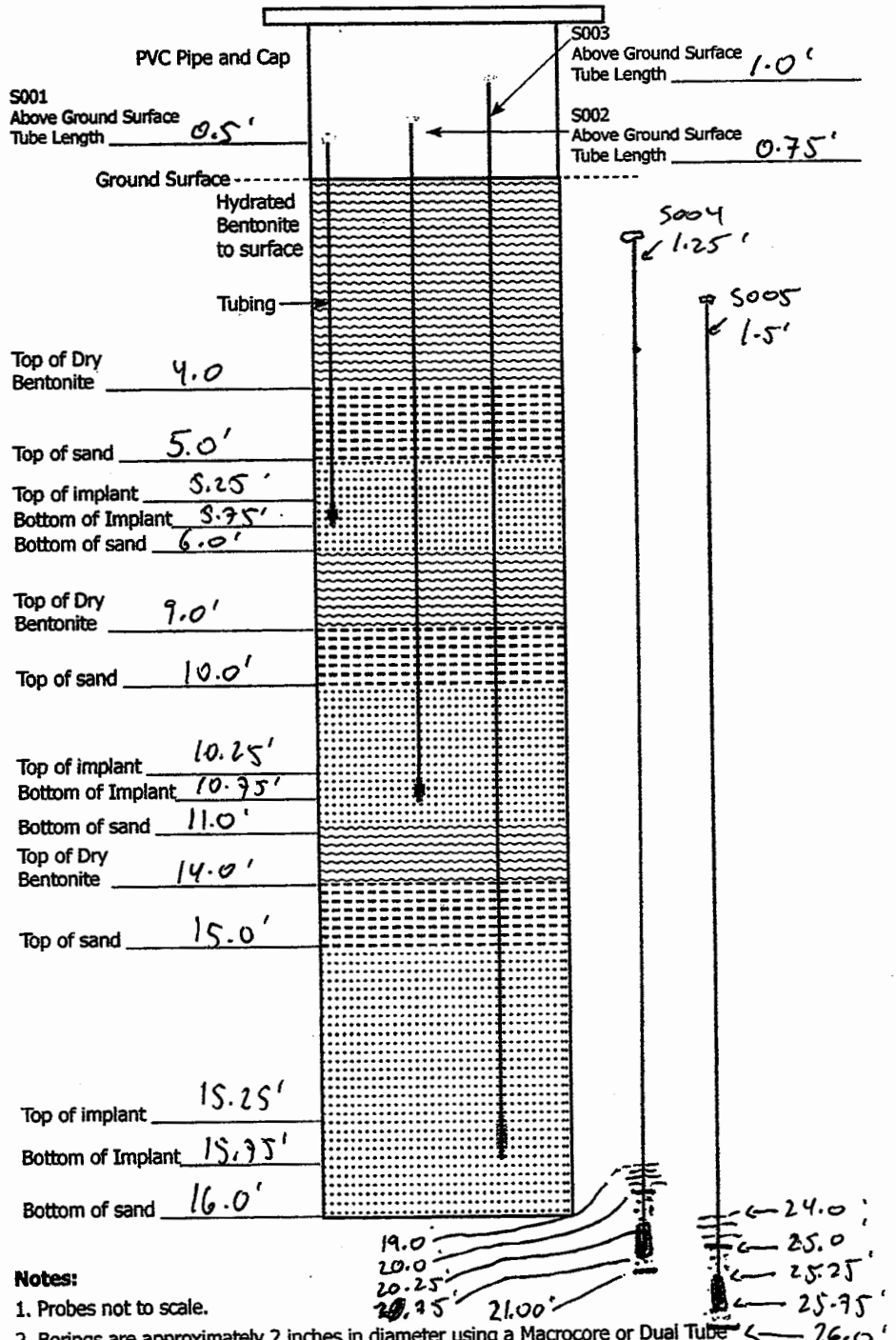
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-S09
Site: SA
Drilling Contractor: EST
Borehole TD: 32.0' bgs

Project: Phase 3 DOE Data Gap Sampling 2014
Logged by: RBELLIS
Driller: MARTY KILHULLEN
Borehole Diameter: 2.25"

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: Geoprobe 540
Probe Completion Date/Time: 05 Jun 15:00



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

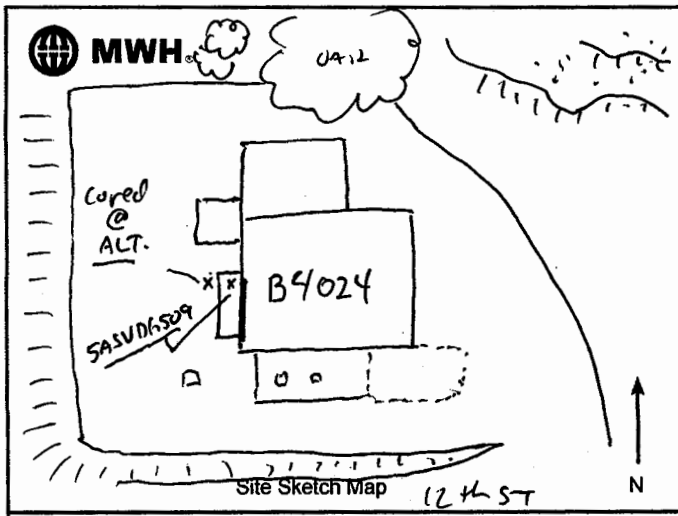
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH



Site Sketch Map

Boring ID: 5A SV DG-509	Sheet 1 of 2
Project: Phase 3 DOE SVDG 2014	
Job #: 10103892.3050106	Site: 5A B4024 (W)
Logged By: RMB Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty McMillen
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 32.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 11:50 05JUN14	Drill Finish Time/Date: 12:50 05JUN14
Soil Vapor ID: 5ASV DG-509	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 05 JUN14 ; 13:50	Observations: ☐ Debris ☒ Staining (oxide) ☐ Odors ☐ Groundwater (perched water) ☐ None
Soil Vapor Probe Depths (ft.bgs): 5-6, 10-11, 15-16, 20-21, 25-26	Surface Completion: SV probe in asphalt
Soil Vapor Well Detail Completed (yes/no) attached	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand Coarse	Medium	Fine	Silt/clay
								Surface Description: concrete/asphalt, interface @ base of ramp					
0.3 ppm		40"				0		4" asphalt 0.0-0.35'					
						1		0.35' - 26.8					
								Poorly sorted sand with silt	—	5	10	60	25
						2		(SP-SM), dark yellowish brown					
								(10YR 4/6), moist, loose. Mostly					
						3		fine sand (60), little silt (25),					
								few medium (10) and coarse (5)					
						4		sand. Some asphalt gravels at					
0.0 ppm		29"						the top few inches, and a small					
						5	SP	1.5" layer of pea gravel @ 2.5' bgs					
							SM	Rest of coarse fraction is sandstone					
						6		clasts ½" to 1", sporadic,					
								semi uniform through section,					
						7		oxide roads and proximal to					
								clasts. No stain, no odor					
								fill material.					
						8							
0.0 ppm		30"											
						9		Rusted nail @ 23.0' bgs w/ staining					
								(rust) around it. Base gravel					
								up to 1.0" at fill / native contact					

Boring ID: SASV DH-509 Project: Phase 3 DOE SVDH 2014 Sheet 2 of 2

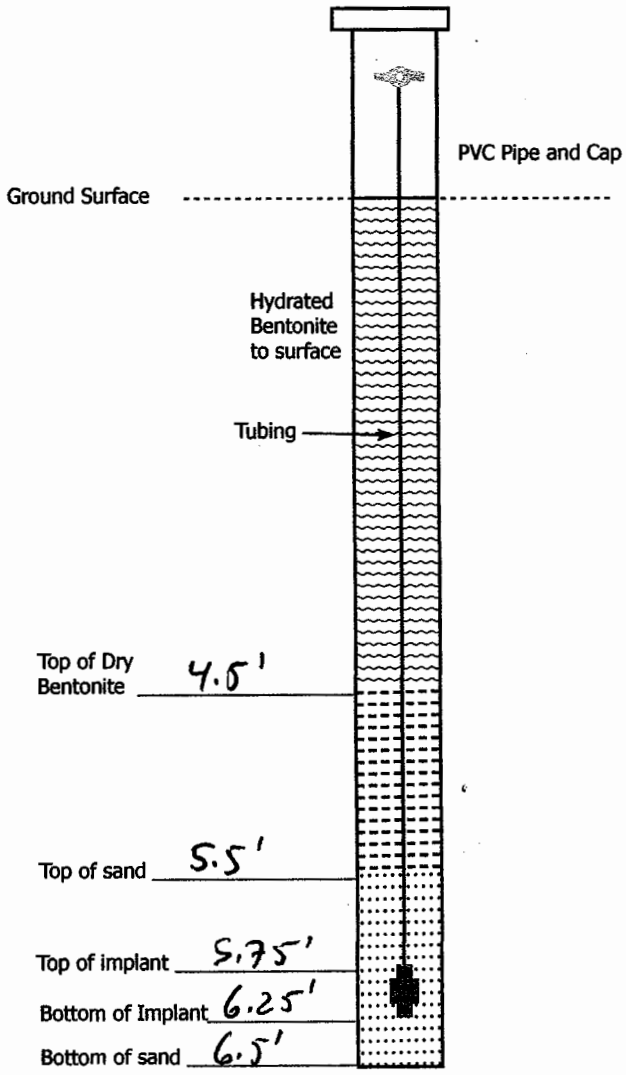
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10		26.8 - 32.0 Poorly sorted sand (sp) ~~with silt (ML)~~ Dark yellowish brown (10YR 4/6), mostly fine sand (75), little silt (15) and few coarse sand (10). No stain, no odor. Possible native soil.	–	–	10	75	15
0.5 ppm		41"				11							
						12							
						13							
						14		Interval is moist, loose, but becomes more wet at 27.5' bgs., Possible perched water from former basement feature of B4024.					
						15							
0.0 ppm		38"				16							
						17	SP	TD = 32.0' with refusal on hard sandstone. Sandstone is dark bluish gray (GLEY 2 4/5B)					
						18	SM						
						19		• Boring cleared to 31.0', water in hole to 27' bgs. First probe set to 25.5' center after #8 chips backfilled to 26.0' bgs. Dry after 20 minutes.					
0.0 ppm		29"				20							
						21							
						22		• Bore hole moved ~6.0' to the (W) to avoid concrete ramp. Borehole is in asphalt at interface of concrete and asphalt.					
						23							
0.3 ppm		27"				24							
						25							
						26							
						26.8							
						27							
						28							
0.1 ppm		39"					SP						
						29							
						30							
						31.0							
						32.0 = TD							

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-512
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: 5A
Reviewed by:
Logged by: Rob Ellis
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: Mark Mullen
Borehole TD: 6.5' bgs
Probe Completion Date/Time: 05 JUN 14 08:00
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

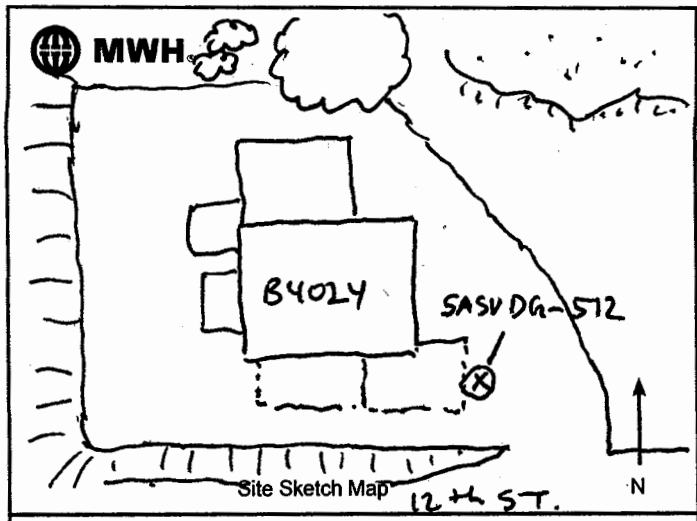
Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1



Site Sketch Map

Boring ID: SASV DG-512	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.3050106	Site: SA B4024
Logged By: RMBrues	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTY KILHULLEN
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs): 6.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 07:41 05 JUN 14	Drill Finish Time/Date: 07:48 05 JUN 14
Soil Vapor ID: SASV DG-512	Soil Boring Backfill Time/Date: N/A
Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 05 JUN 14; 08:00	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.5-6.5'	Surface Completion: SV probe
Soil Vapor Well Detail Completed (yes/no) attached	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: asphalt
1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations
Surface Description: flat

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		39"				0		4" asphalt 0.0-0.35					
						1		~~0.0-0.5~~ 0.35-0.9				15	
								Clay (CL), dark yellowish brown (10YR 3/4). Slightly moist, hard, no dilatency, high dry strength, med. toughness, Mostly clay (80), little fine sand (15), few coarse sand (5), TR gravel throughout (asphalt). No stain no odor, Fill material.	TR	5	–		80
						2							
						3							
						4							
0.0 ppm		30"				5		0.9 - 6.5					
						6		Poorly graded sand (SP), dark yellowish brown (10YR 4/4). moist, loose. Mostly fine sand (70), few silt, med, coarse sand (10% each), TR gravels throughout up to ~~1/2"~~ 1/2". Several clasts of sandstone all through out up to 2". No stain no odor. Fill material.	TR	10	10	70	10
						TD: 6.5							
						7							
						8			1/2"				
						9							

TD = 6.5' bgs w/ refusal on sandstone bedrock.

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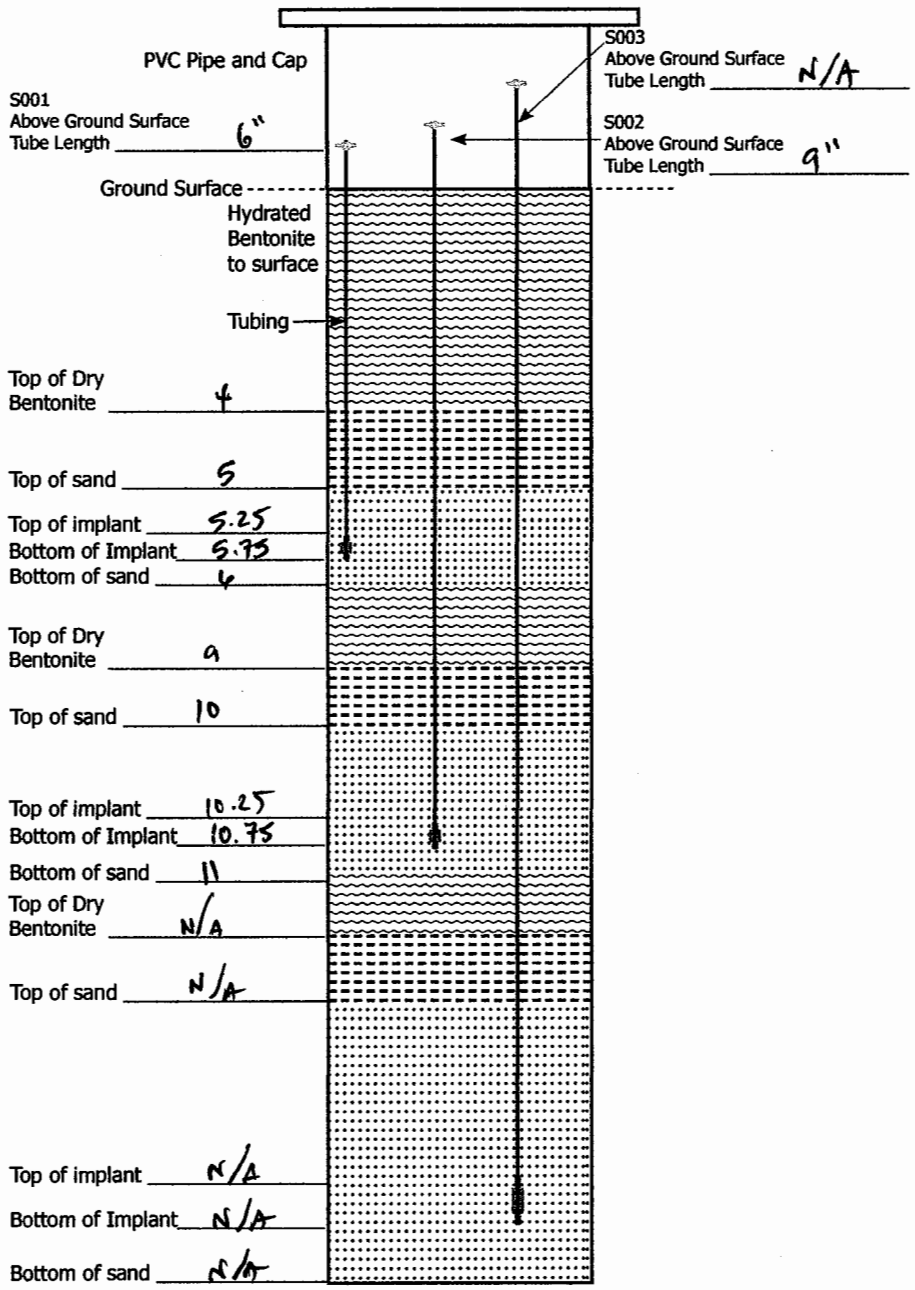
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-521
Site: SA
Drilling Contractor: EST
Borehole TD: 11'

Project: Phase 3 DOE Data Gap Sampling 2014
Logged by: ANDREW PAINE
Driller: MARTIN KILHVIKEN
Borehole Diameter: 2.25"

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: GEOPROBE 5400 / DP
Probe Completion Date/Time: 6/6/14 1000



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

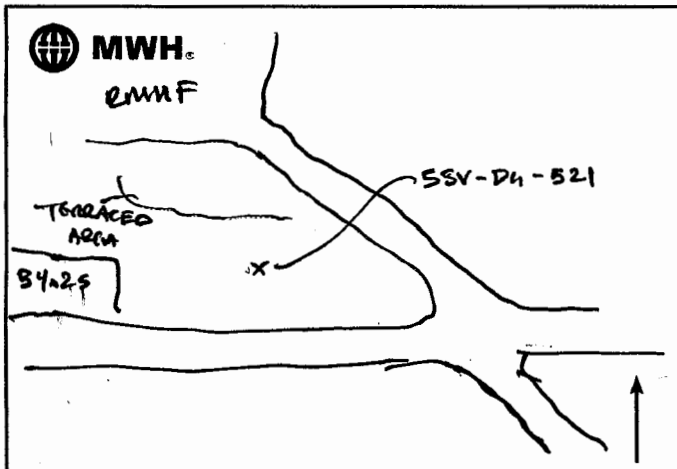
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: SSV-D4-S21	Sheet 1 of 2
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA
Logged By: ANDREW RAYNO	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILLMULLEN
Drill Rig Type/Method: GEOPROBE 5400 / DP	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs): 11'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 0925 6/6/14	Drill Finish Time/Date: 1000 6/6/14
Soil Vapor ID: SSV-D4-S21	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 6/6/14 1000	Observations: OXIDATION ☐ Debris ☑ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5-6, 10-11	Surface Completion: SOIL VAPOR PROBE
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: WEATHERED SS ☒ Bedrock ☐ Debris ☐ Gravel ☒ Unknown ☐ None

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: GRASSES, MUSTARD, SHRUBS (SPARSE)

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		SILTY SAND (SM) DRY, (BROWN - 10YR 4/3), LOOSE	—	—	5	75	20
						1		TO MEDIUM DENSE, FINE SAND, TRACE MED. SAND					
								ROOTS, FILL MATERIAL					
						2							
0.0		48"	—	N/A NONE	—								
						3	SP (SP-SM)	SAND W/ GRAVEL @ 3.5-4.0, DRY, LOOSE, GRAY/BROWN (10YR 5/2), FINE TO CS SAND, ~15% GRAVEL, SAND AND GRAVEL IS	15	10	30	30	5
						4	SM	ANG TO SR; FILL; TRACE FINES.	—	—	15	55	30
						5	SM	SILTY SAND (SM), MOIST, BROWN (10YR 4/3) TO ~~LIGHT BROWN~~ (10YR 6/3); MEDIUM DENSE,					
0.0		48"	—	N/A NONE	—	6		FINE TO MEDIUM SAND, SA TO SR, ~25-30% FINES					
								BROWN PRN (7.5YR 4/6) MOTTLING/OXIDATION, MICA,					
						7		MATERIAL? (BLACK PELLETS 10YR 2/1); NO ODOR					
								NATIVE/ALLUVIUM.					
						8	SP-SM	SAND W/ SILT (SP-SM), DRY TO MOIST, VERY PALE BROWN (10YR 7/4) W/ STRONG BROWN (7.5YR 4/6) OXIDATION (@ 8-8.25), FINE TO MEDIUM SAND, ~15%	—	—	15	70	15
0.0		36"	—	N/A NONE	—	9		FINES; NATIVE ALLUVIUM; SA TO SR SAND.					
						10							

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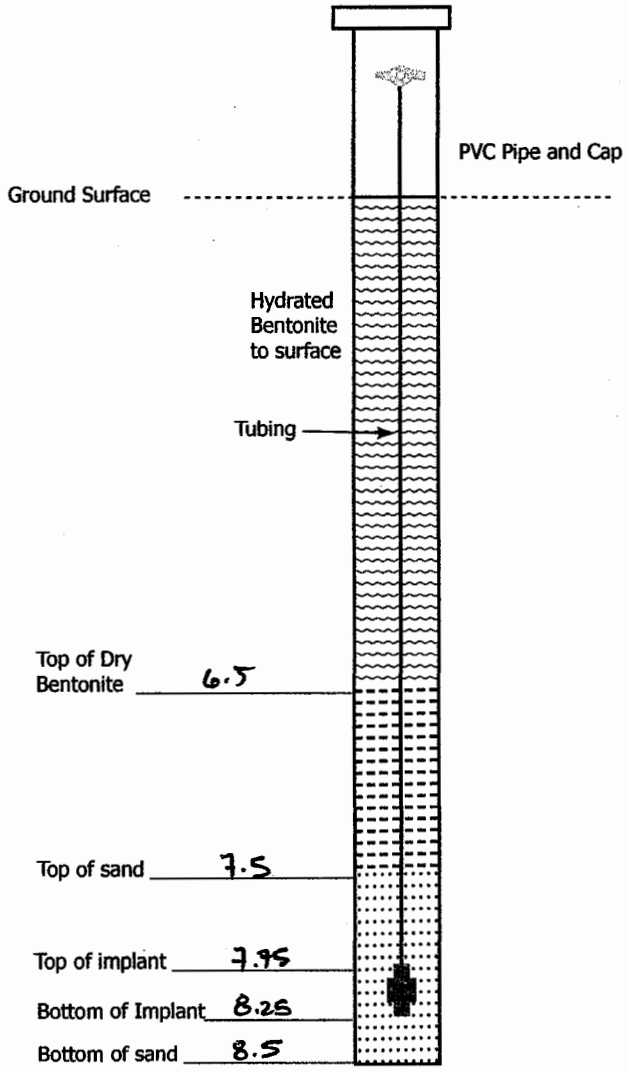
Boring ID: SSV-DA-S21 Project: SV INSTALLATION Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0	X	36"	—	N/A (NONE)	—	10	SP	SAND (SP), DRY, LOOSE, VERY PALE BROWN (10YR 7/3), FINE TO MED SAND, TRACE FINES; SPARK TO SUBROUNDED, NATIVE ALLUVIUM. INGATHERED SS PIECES ~ 1/4-1/8" DIA.					S
						11							
						2							
						3							
						4		TD = 11' INGRAINT REFUSAL / BEDROCK DUAL NEST SV PROBE S-6', 10-11'					
						5							
						6							
						7							
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV - DG - 522
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA 5
Reviewed by:
Logged by: Robert Gaynes
Drilling Contractor: EST
Rig Type/Method: ~~MARTIN~~ GEOPROBE 5400 / DP
Driller: MARTIN KILHULLEN
Borehole TD: 8.5'
Probe Completion Date/Time: 6/6/14 0845
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

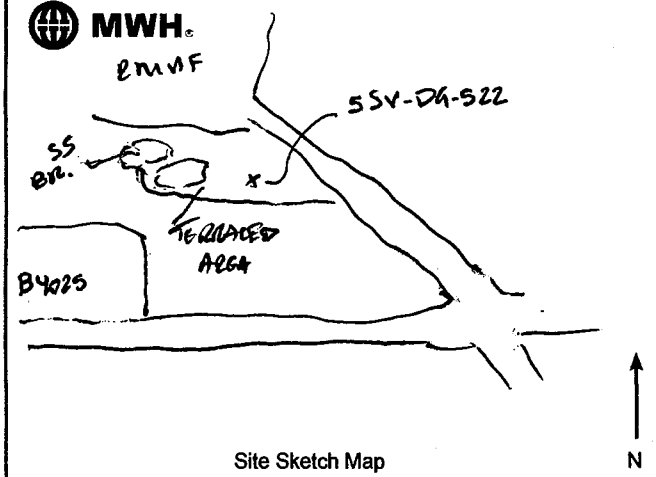
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SSV-DG-522	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 5
Logged By: Andrew Rowe	Reviewed By:
Drilling Contractor: EST	Drillers Name: Martin Ullmullen
Drill Rig Type/Method: Geoprobe 5400/DP	
Sampler Type: Macro core	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 8.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0815 6/6/14	Drill Finish Time/Date: 0830 6/6/14
Soil Vapor ID: SSV-DG-522	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 6/6/14 0845	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 7.5 - 8.5'	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☒ Unknown ☐ None

Soil Description: 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: Grass and Pavement

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	SILTY SAND (SM), DRY, BROWN (10YR 4/3), FINE SAND, ~65% FINE, ~15% MEDIUM SAND, ~20% FINES,	—	—	15	65	20
						1		LOOSE; ROOTS; FILL MATERIAL; SAND IS SA TO SR.					
0.0		40"	—	NONE	—	2		@ 1.5-2.0 INTERVAL OF LIGHT YELLOWISH BROWN (10YR 6/4) W/ PIECES OF SS (FROM A SMALL ROCK)					
						3							
						4							
						5	SM	SILTY SAND (SM) DRY, LOOSE, DARK YELLOWISH BROWN (10YR 4/4), ~65% FINE SAND, 10% MEDIUM, 25% FINES	—	—	10	65	25
0.0		48"	—	NONE	—	6		FILL MATERIAL; SAND IS SA TO SR					
						7		@ 7.5 - 8.0 - MEDIUM DENSE					
0.0	X	6"	—	NONE	—	8	SP	SAND (SP) YELLOWISH BROWN, DRY, FINE TO MEDIUM LOOSE SAND, SAND IS ANG TO SUB	—	—	80	15	5
						9		ROUNDED,					
								TD = 8.5'; ~~UNKNOWN~~ REFUSAL; SV PROBE @ 7.5-8.5' LOCATED SUBGRADE					

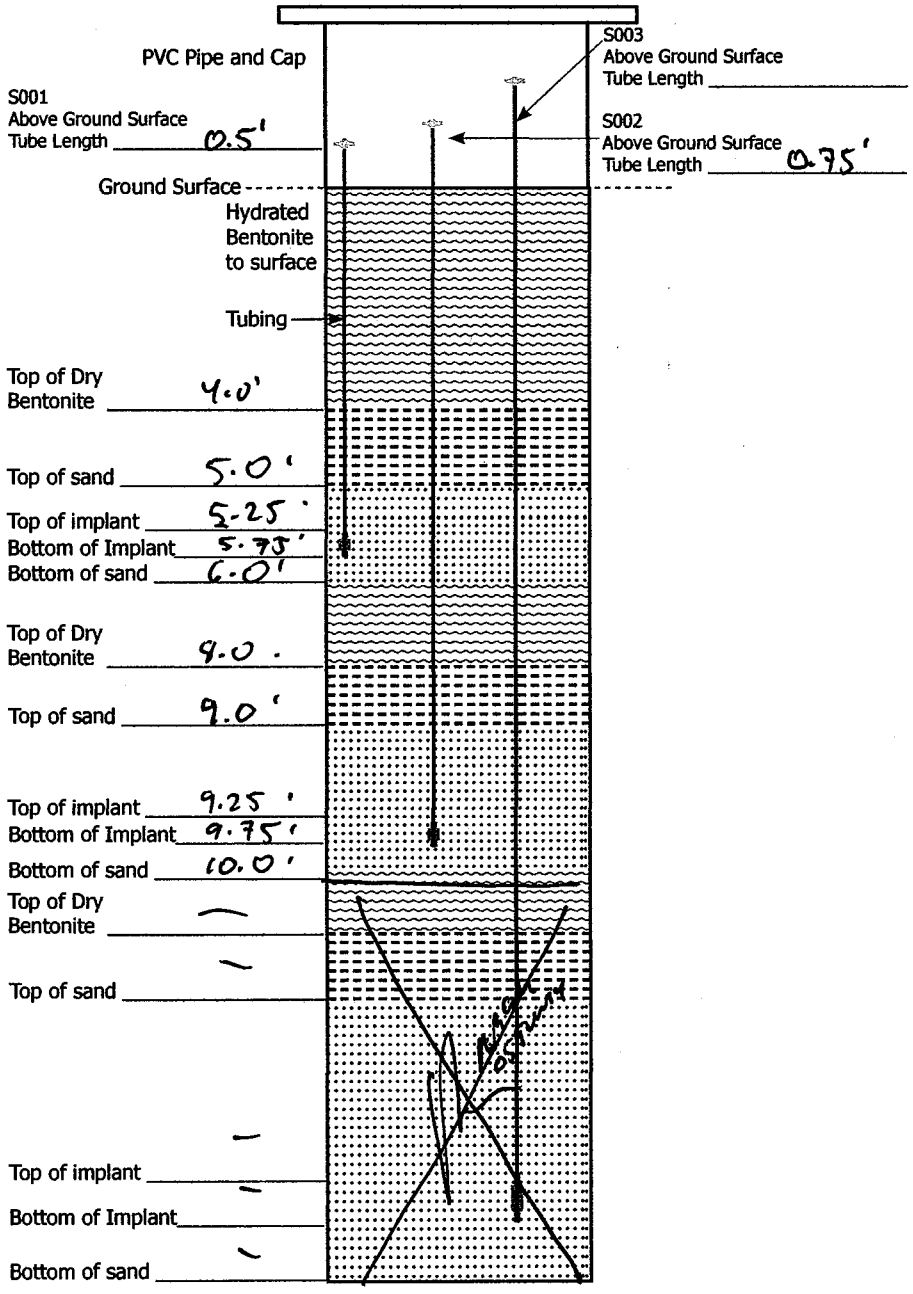
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-528
Site: SA
Drilling Contractor: EST
Borehole TD: 10.0' bgs

Project: Phase 3 DOE Data Gap Sampling 2014
Logged by: RABELLIS
Driller: MARTY KILHULLEN
Borehole Diameter: 2.25"

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: Geoprobe 5400
Probe Completion Date/Time: 05 JUN 14. 15:00



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3 Sand
Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles
Manufacturer: Cetco

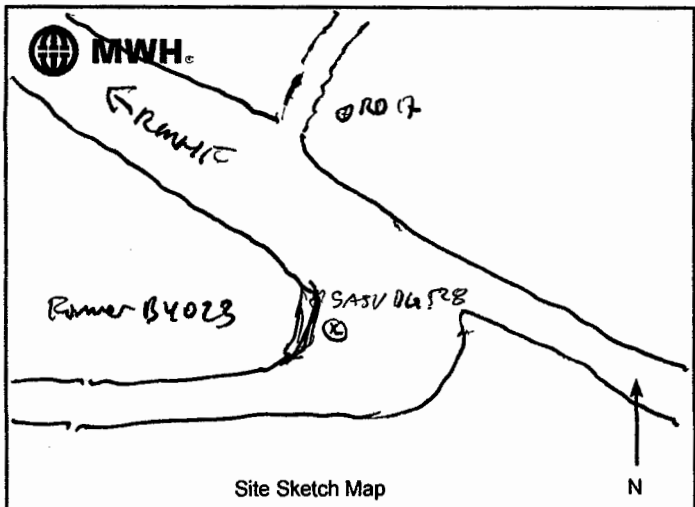
Hydrated Bentonite

Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2



Site Sketch Map

Boring ID: SASV DG-528	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503892.305010 Site: SA	
Logged By: MBERNIS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARK KILHULLEN
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore.	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 10.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 14:25 05 JUN 14	Drill Finish Time/Date: 14:40 05 JUN 14
Soil Vapor ID: SASV DG-528	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 05 JUN 14; 15:00	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0'; 9.0-10.0'	Surface Completion: SV probe on asphalt
Soil Vapor Well Detail Completed (yes/no) attached.	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: asphalt, slight grade SE					
0.0		44"				0		0.0-0.35 4" asphalt					
BM						1	SP GP	0.35-1.7 graded poorly sorted sand w/ gravel. (SP-GP), gray (10YR6/1). Mostly fine sand (45), little gravel (20), little med sand (15), few silt (10) coarse sand (10). med dense-dense, dry. No stain, no odor. Fill	20	10	15	45	10
						2							
						3	SP						
						4							
		48"						Some base gravel at 1.7' bgs. 1.7-4.0					
						5	SP SM	Poorly graded sand (SP). yellowish brown (10YR 5/4) loose, dry. Mostly fine sand (85), few silt (10) and few med sand (5). No stain, no odor. Fill. 4.0-8.5	-	-	5	85	10
			TD=10.0' w/ refusal on sandstone bedrock			6							
						7							
		24"				8		Poorly sorted sand with silt (SP-SM) dark brown (10YR 3/2) grades to dk yellow brown (10YR 3/6). dry loose. Mostly fine sand (75), little silt (25), trace med sand. No stain, no odor. Fill.	-	-	TR	75	25
						9	SM						
						10.0							

8.5-10.0 silty sand (SM). Dark yellow brown (10YR 4/6). transitions to dry loose, yellow brown (10YR 5/6

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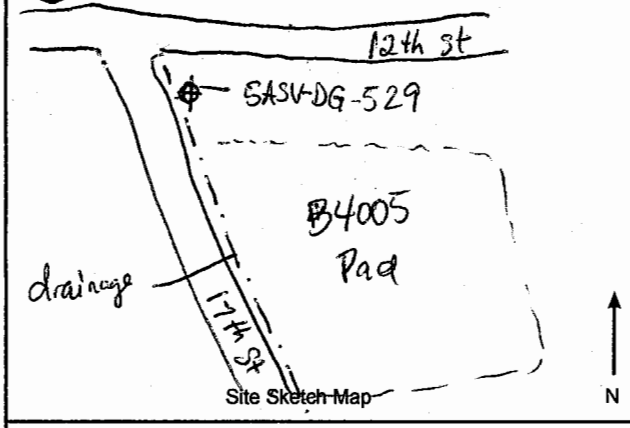
MWH.



Site Sketch Map

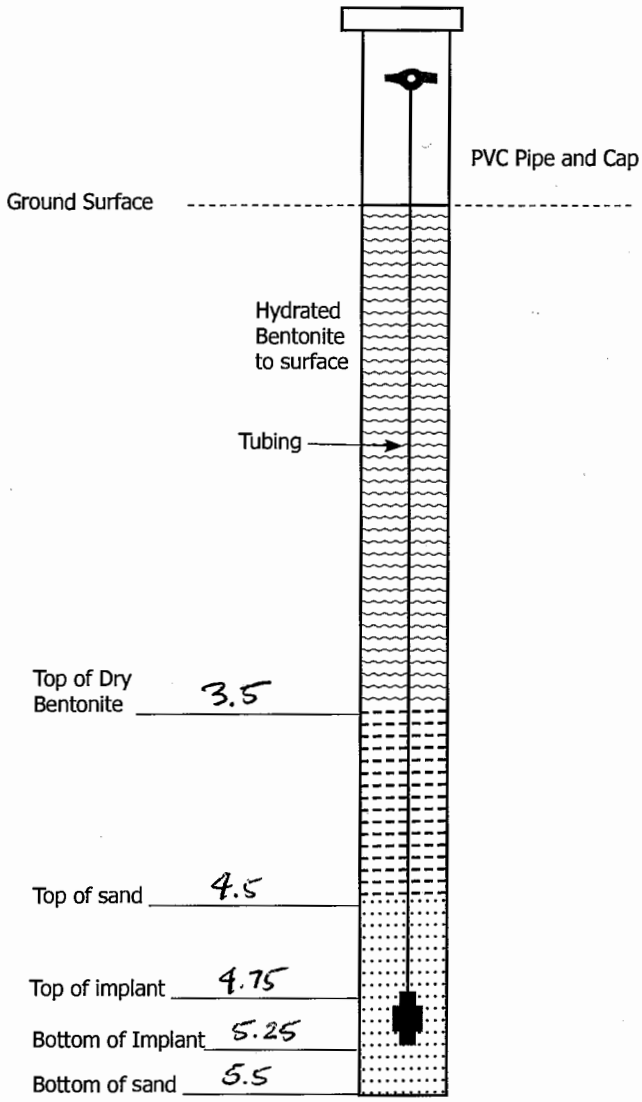
Boring ID: SASV-DG-529	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400/DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 4.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1430/6-5-2014	Drill Finish Time/Date: 1445/6-5-2014
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1507/6-5-14 Backfill Material: Soil cuttings.
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: E. side of asphalt swale	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SW-GW	Asphalt 2" (v.v)	15	10	25	50	TR/
		48"				1	SM	Well Graded Sand w/ Gravel & brownish yellow (10YR 6/6) with black (10YR 2/1) ~~asphalt~~ (v.v) asphalt/tar staining, fill 0.75' - 1.0', Asphalt - black (10YR 2/1) fine to coarse sand, fine gravel	-	-	25	50	25
						2							
						3		Silty Sand (SM), brownish yellow (10YR 6/8), loose, dry, fine to					
		6"			15:04	4	SP	medium sand, non-plastic silt, no odors, slight asphalt stains (very dark grayish brown (10YR 3/2)), fill	-	-	15	85	-
SVL-529-SA5A-SB-4.0-4.5						5							
						6		Poorly Graded Sand (SP), brownish yellow (10YR 6/8), loose, dry, fine sand and medium sand, weak oxidation (reddish yellow (5YR 6/8)), native soil					
						7	Br						
						8		Sandstone, weathered					
						9		TD=4.5, refusal on bedrock, Collected encores for VOC analyses					

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV-DG-537
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SA 5A
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 5.5
Probe Completion Date/Time: 1420/6-5-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: # 3
Manufacturer: Cemex

Dry Bentonite

Type: # 8
Manufacturer: Cetco

Hydrated Bentonite

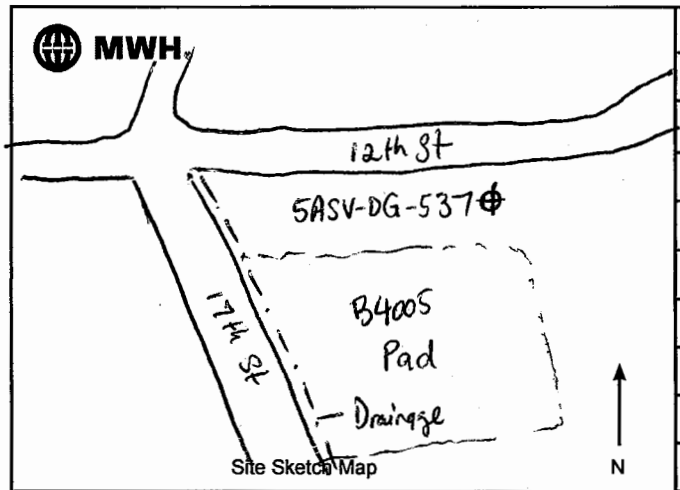
Type: # 8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH



Site Sketch Map

Boring ID: 5ASV-DG-537	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 5.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1345 / 6-5-2014	Drill Finish Time/Date: 1407 / 6-5-2014
Soil Vapor ID: 5ASV-DG-537	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1420 / 6-5-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5 - 5.5	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Just off asphalt, Road base					
	X					0	SM	Silty Sand w/ Gravel (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand to coarse sand, fine angular gravel (road base), fill	15	10	30	25	20/
	X					1							
	X					2		@ 2' grades w/o gravel, color changes to yellowish brown (10YR 5/8), fine to med. sand, fill	–	–	10	70	20/
	X					3							
	X					4	SP	Poorly Graded Sand (SP), yellowish brown (10YR 5/6), loose, dry, fine sand and ~~silt~~ trace silt, no stains or ~~odors~~ (V.O.), native soil	–	–	–	100	TR
	X					5							
						6	Br	@ 5.5' Sandstone, weathered.					
						7		TD = 5.5, refusal on bedrock, install vapor probe at 4.5-5.5					
						8							
						9							

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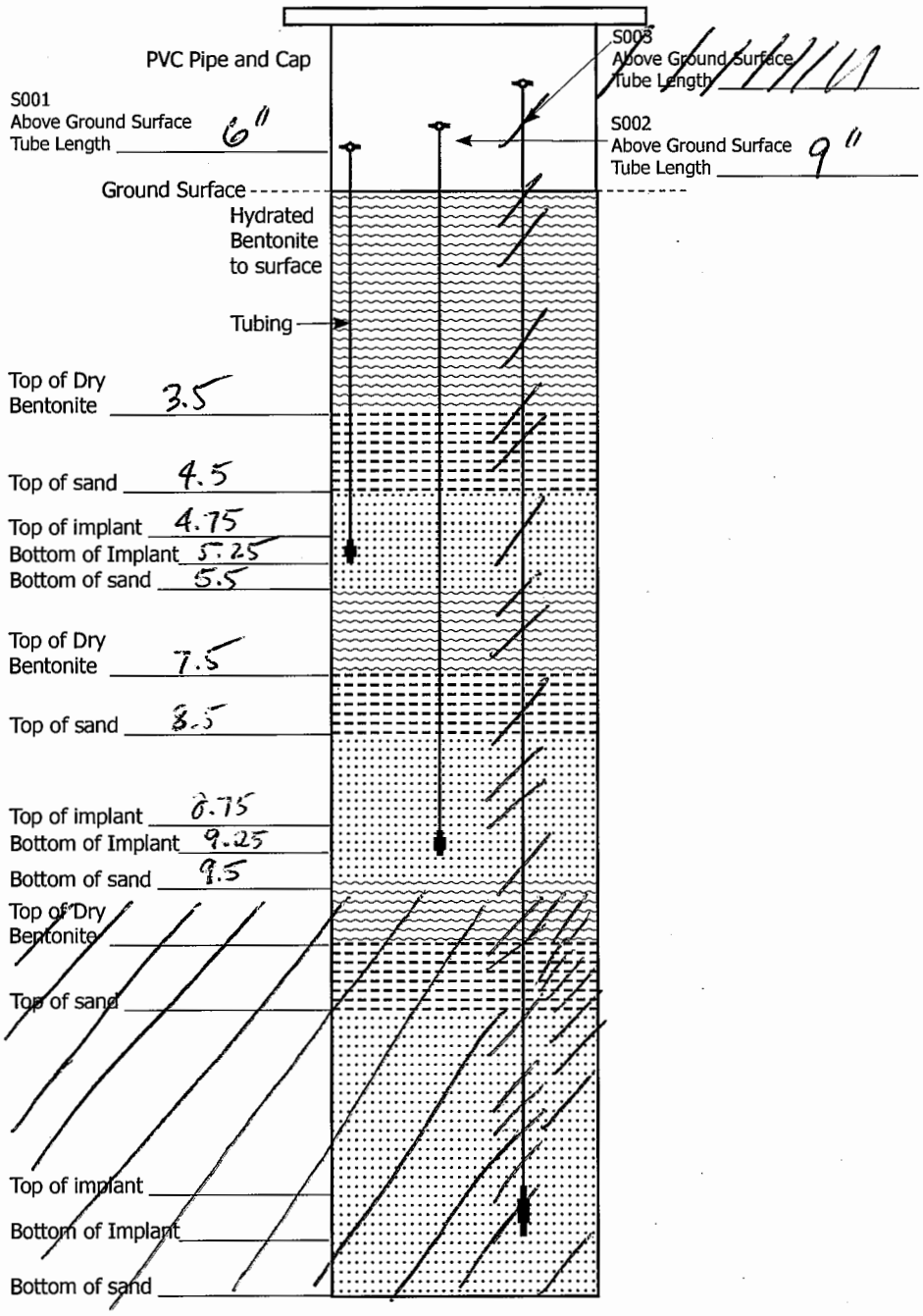
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-540
Site: 3A 5A
Drilling Contractor: EST
Borehole TD: 9.5'

Project: Phase 3 DOE SV DG
Logged by: V. Vathavasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 1050982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 0945 / 6-5-10



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

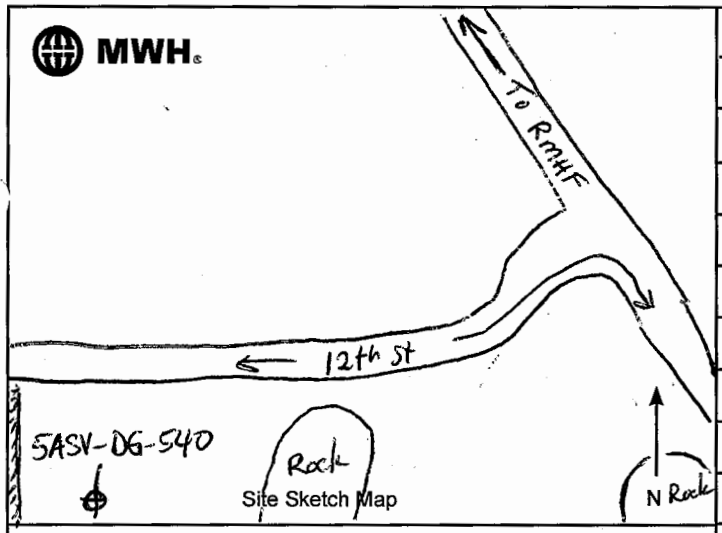
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5ASV-DG-540	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 9.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0905/6-5-14	Drill Finish Time/Date: 0930/6-5-14
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A
Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None	
Surface Completion: Soil Vapor probes.	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	
Soil Vapor ID: 5ASV-DG-540	
Soil Vapor Well Completion Time/Date: 0945 / 6-5-14	
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5, 8.5-9.5	
Soil Vapor Well Detail Completed (yes/no)	

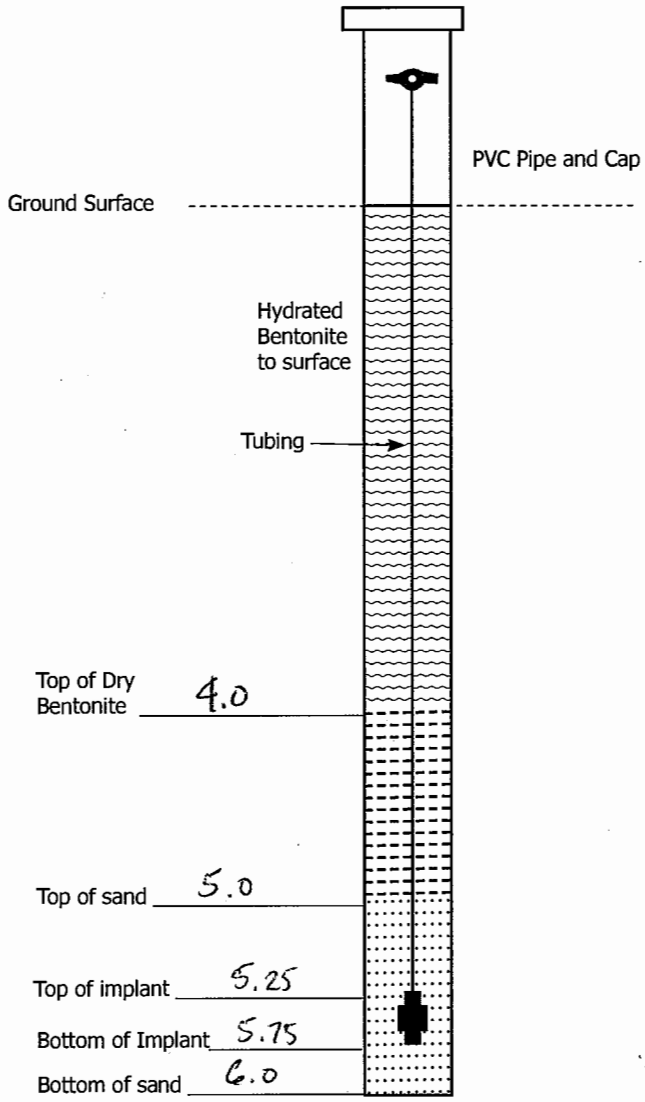
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SP-SM	Poorly Graded Sand with Silt (SP-SM), very pale brown (10YR 7/4), loose, dry, predominantly fine sand, medium sand, non-plastic silt, no odors or stains, fill	–	–	20	70	10/
		48"	NONE			1							
						2		@2' Color changes to brownish yellow (10YR 6/6), mica grains					
						3							
						4							
						5	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand, non-plastic silt, no stains or odors, fill	–	–	–	60	40/
		48"	NONE			6							
						7							
						8	ML	Silt (ML), dark yellowish brown (10YR 4/6), stiff, well compacted, dry, poss. native	–	–	–	–	100/
		18"	NONE			9	SM	Silty Sand (SM), brownish yellow (10YR 6/8), slight oxidation, med. dense, dry, fine sand and silt, native soil	–	–	–	70	30/
							Br						

@9.5 Sandstone - weathered TD= 9.5', ref. on bedrock; install

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-543
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SA 5A
Reviewed by:
Logged by: Van Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 6.0
Probe Completion Date/Time: 1036/6-5-2014
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: ~~Cemex~~ V.V. Cemex

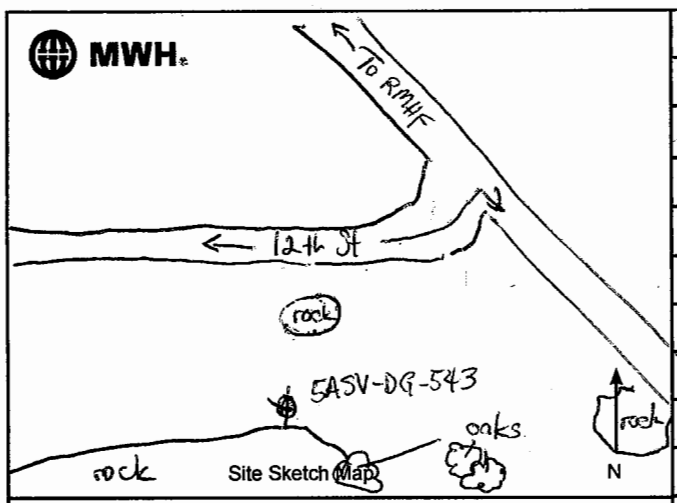
Dry Bentonite
Type: #8
Manufacturer: Cetco

Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

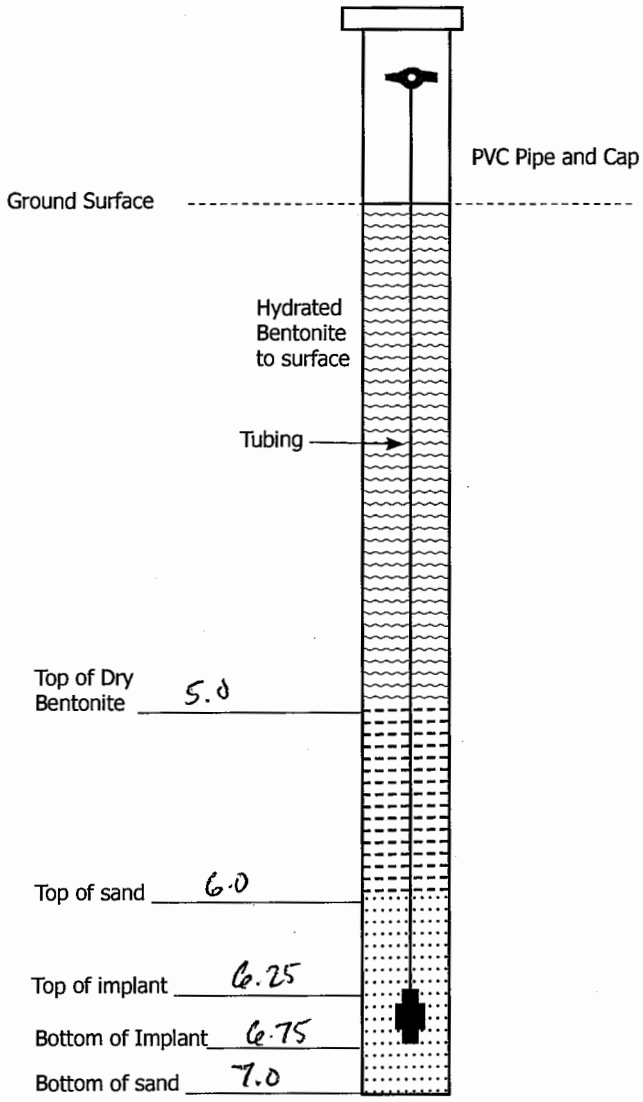
Boring ID: 5ASV-DG-543	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanavin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 6.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1000 / 6-5-2014	Drill Finish Time/Date: 1014 / 6-5-2014
Soil Vapor ID: 5ASV-DG-543	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1036 / 6-5-2014	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☑ None
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0	Surface Completion: Install vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Graded yellowish (V.) Silty Sand (SM), brown (10YR 5/4), loose, dry, fine sand, silt, non-cemented, few roots to 2" bgs, no odors or stains, fill.	–	–	–	60	40/
			NONE			1							
0.0		40"				2		@2. darkens to 10YR 5/6, slightly ~~"siltier"~~ (V.) more plastic fines, platy structures, fill	–	–	–	60	40/
						3							
						4		@4' brownish yellow (10YR 6/6), native soil, low plasticity clay	–	–	–	60	30 40/10
		24"	NONE			5							
0.0						6	Br	Sandstone, weathered.					
						7		TD = 6.0, refusal on bedrock. Install vapor probes at 5.0-6.0'					
						8							
						9							

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-546
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: 5A
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 7.0
Probe Completion Date/Time: 0814 / 6-5-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: # 3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

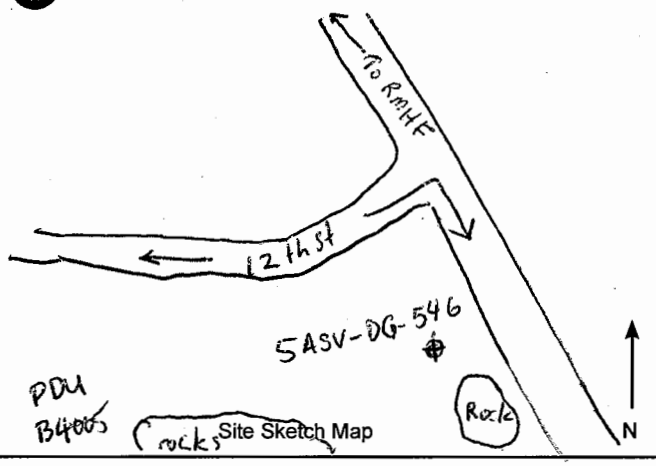
Hydrated Bentonite
Type: # 8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5ASV-DG-546	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 7.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0734 / 6-5-14	Drill Finish Time/Date: 0745 / 6-5-14		
Soil Vapor ID: 5ASV-DG-546	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 814 / 6-5-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 6.0-7.0	Surface Completion: Soil vapor probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brownish yellow (10YR 6/6), loose, dry, fine sand, non-plastic silt, no odors or stains, fill	--	-	-	65	35/
		45"	NONE			1							
						2							
						3							
						4		@4' grades with light gray mottling (10YR 7/2), fill, matrix lightens to light yellowish brown (10YR 6/4), fill					
		46"	NONE			5							
						6							
0.0						7	Br	Weathered bedrock, Sandstone. TD=7.0, refusal on bedrock, install probe at 6.0-7.0 ft					
						8							
						9							

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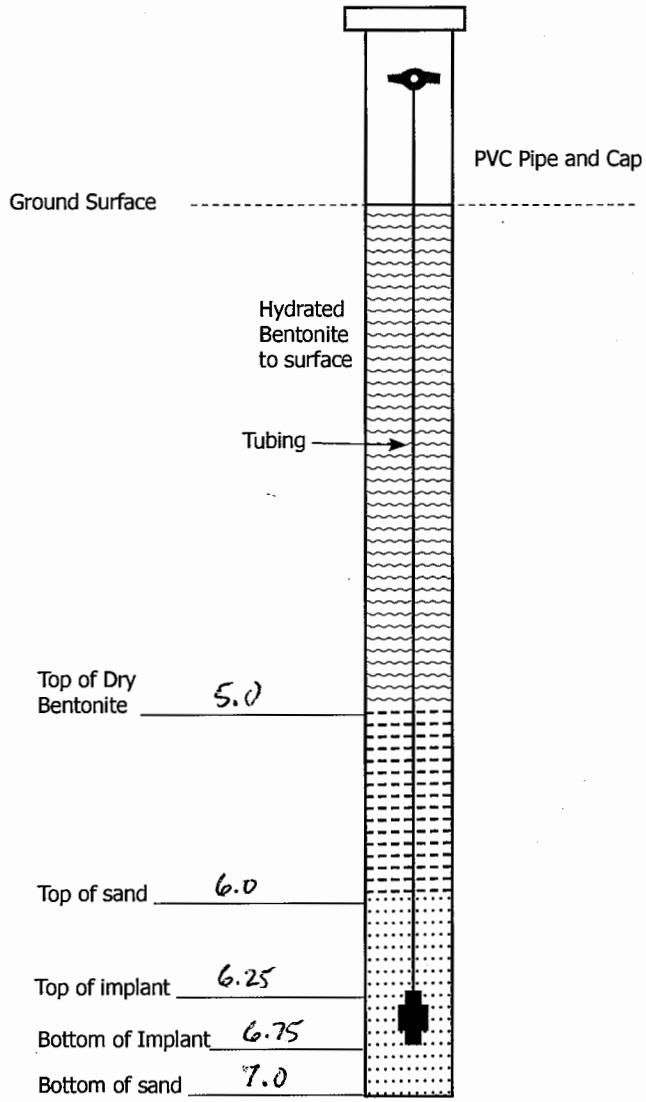
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-547
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20

Site: 5A
Reviewed by:
Logged by: V. Vathanasi

Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes

Borehole TD: 7.0
Probe Completion Date/Time: 0857/6-5-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

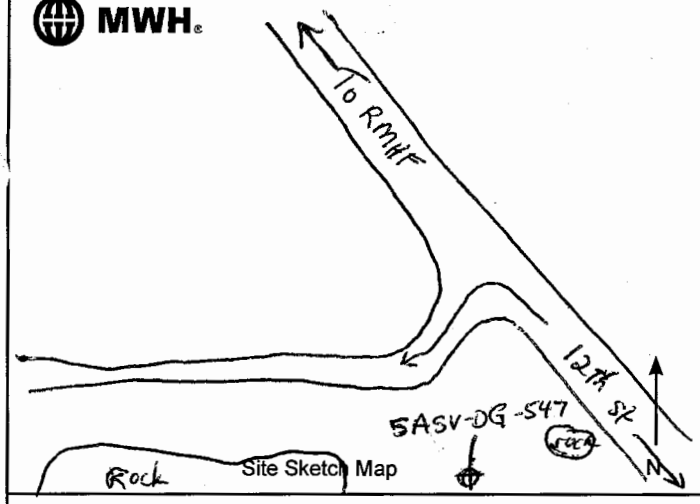
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5ASV-DG-547	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 7.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0824 / 6-5-14	Drill Finish Time/Date: 0850 / 6-5-14
Soil Vapor ID: 5ASV-DG-547	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0857 / 6-5-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 6.0-7.0	Surface Completion: Soil vapor ~~probe~~ (V.V.) probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Graded fill area; mustard	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), med. dense, dry, fine sand, silt, non plastic, well compacted but not cemented, no odors or stains, fill	–	–	–	75	25/
		48"	NONE			1							
						2		@2' grades to loose and color changes to dark yellowish brown (10YR 4/4), friable, fill					
						3							
						4							
		36"	NONE			5		@5' Color changes to yellowish brown (10YR 5/4), increasing silt	–	–	–	65	35/
0.2						6							
						7	Br	Sandstone, weathered. TD = 7.0, refusal on bedrock. Install vapor probe at 6.0-7.0					
						8							
						9							

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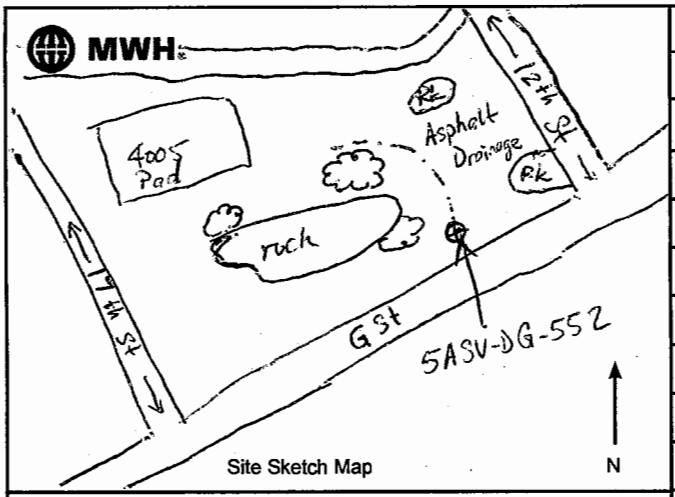

Site Sketch Map

Boring ID: 5ASV-DG-552	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.75
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1109 / 6-5-2014	Drill Finish Time/Date: 1130 / 6-5-2014
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1145 / 6-5-14 Backfill Material: Soil Cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: @ End on drainage, graded	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (Sm), yellowish brown (10YR 5/6), loose, dry, fine sand, silt, non-cohesive, fill, no stains, no odors.	–	–	–	60	40/
		48"	X		11:38	1							
						2							
		SVL-552-SA5A-SB-1.5-2.0				3	CL	Silty Clay (CL), yellowish brown (10YR 5/6), soft, dry, low to med. plasticity clay, possible weathered bedrock.	–	–	–	–	90/10
						4							
		24"				5	WBr	color changes to brownish yellow (10YR 6/6). ~~w/~~ (V.V.) weathered shale.	–	–	–	–	90/10
						6							
		24"				7							
						8							
		18"				9	Br	TD= 8.75, drilled into weathered bedrock. Collect soil samples above weathered bedrock @ 1.5-2.0.					

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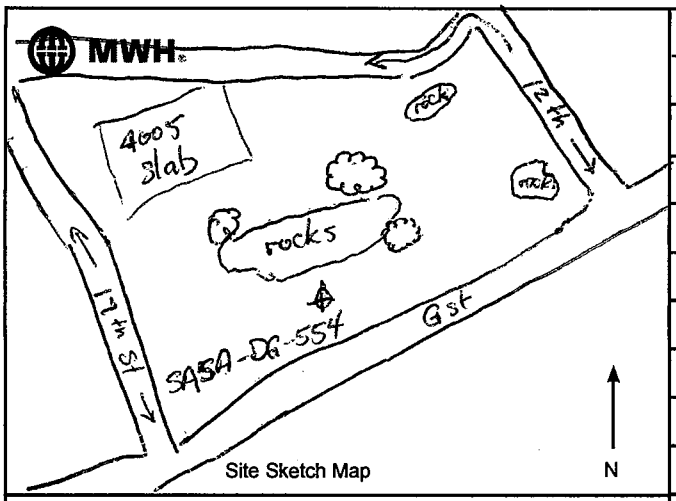


Site Sketch Map

Boring ID: 5ASV-DG-554	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 2.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1210/6-5-2014	Drill Finish Time/Date: 1225/6-5-2014
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1245/6-5-14 Backfill Material: Native soil
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: Mustard and grass.					
	X	24"				1	Sm	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, silt, non-plastic, roots, fill	-	-	-	60	40
0.0	X		X		12:46	2		@ 0.5' color changes to brownish yellow (10YR 6/6) fill.					
SVL-554-SA5A-SB-1.5-2.0						3	Br	@ 2.0 Weathered Sandstone, fine grained matrix.					
						4		TD = 2.0. Refusal on bedrock. Drilled 2 add'l borings to confirm shallow refusal w/ similar results. Collect soil sample @ 1.5-2.0 for VOCs analyses. No vapor probes installed.					
						5							
						6							
						7							
						8							
						9							

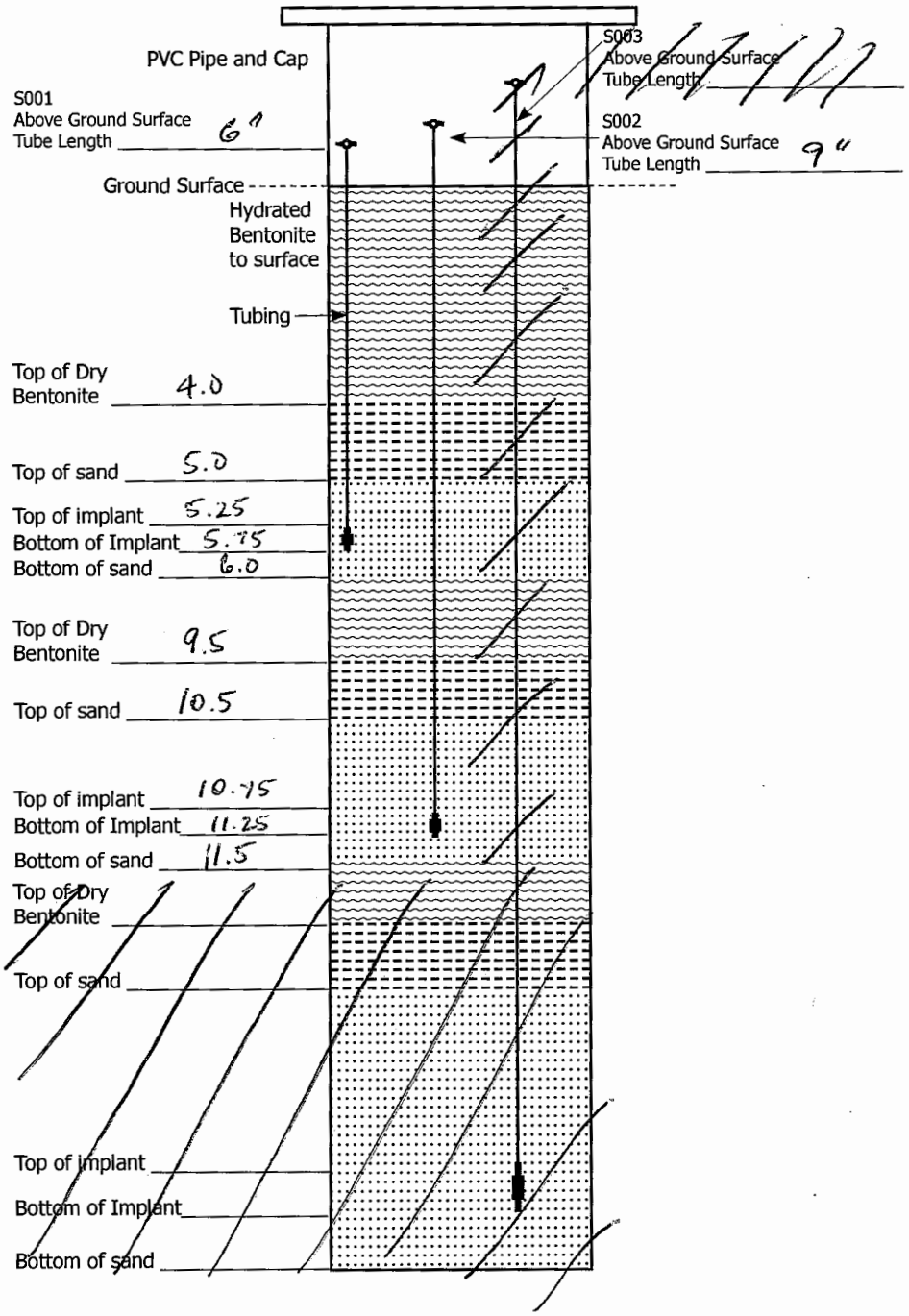
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-560
Site: SA SA
Drilling Contractor: EST
Borehole TD: 11.5

Project: Phase 3 DOE SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 1515 / 6-4-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

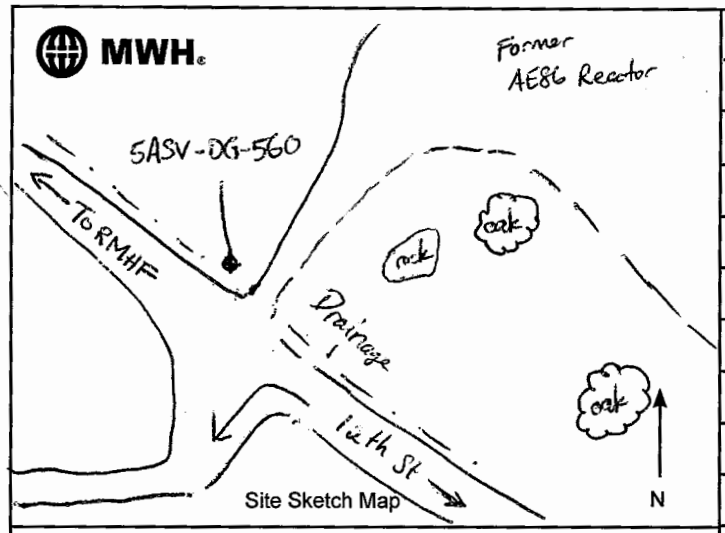
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5ASV-DG-560	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathorasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 11.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1420 / 6-4-14	Drill Finish Time/Date: 1500 / 6-4-14
Soil Vapor ID: 5ASV-DG-560	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1515 / 6-4-2014	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0, 10.5 - 11.5	Surface Completion: Install vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description
1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: In non-paved drainage 11 to 12th St

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, silt, no odors, no stains, fill	-	-	-	60	40/
		45"				1		@1.6 color changes to yellowish brown (10YR 5/6)					
						2							
						3		grades to → w/ platy texture. fill	-	-	10	65	25/
0.0						4							
						5							
		48"				6							
0.0						7		grades to med. dense.					
						8							
						9	SP-SM	Poorly Graded Sand w/ Silt (SP-SM), light yellowish brown (10YR 6/4) with yellow (10YR 7/8) mottling. loose, dry	-	-	-	90	10/

con't next page

Boring ID: 5ASV-DG-560 Project: Phase 3 DOE SVDG Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					10	SP-SM	fine sand, non-plastic silt, moderate dilatency, non-cohesive, native soil					
0.0						11							
						12	Br	Sandstone, weathered					
						13							
						14		TD = 11.5. Refusal on bedrock, Install probes at 5.0-6.0, and 10.5-11.5					
						15							
						6							
						7							
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

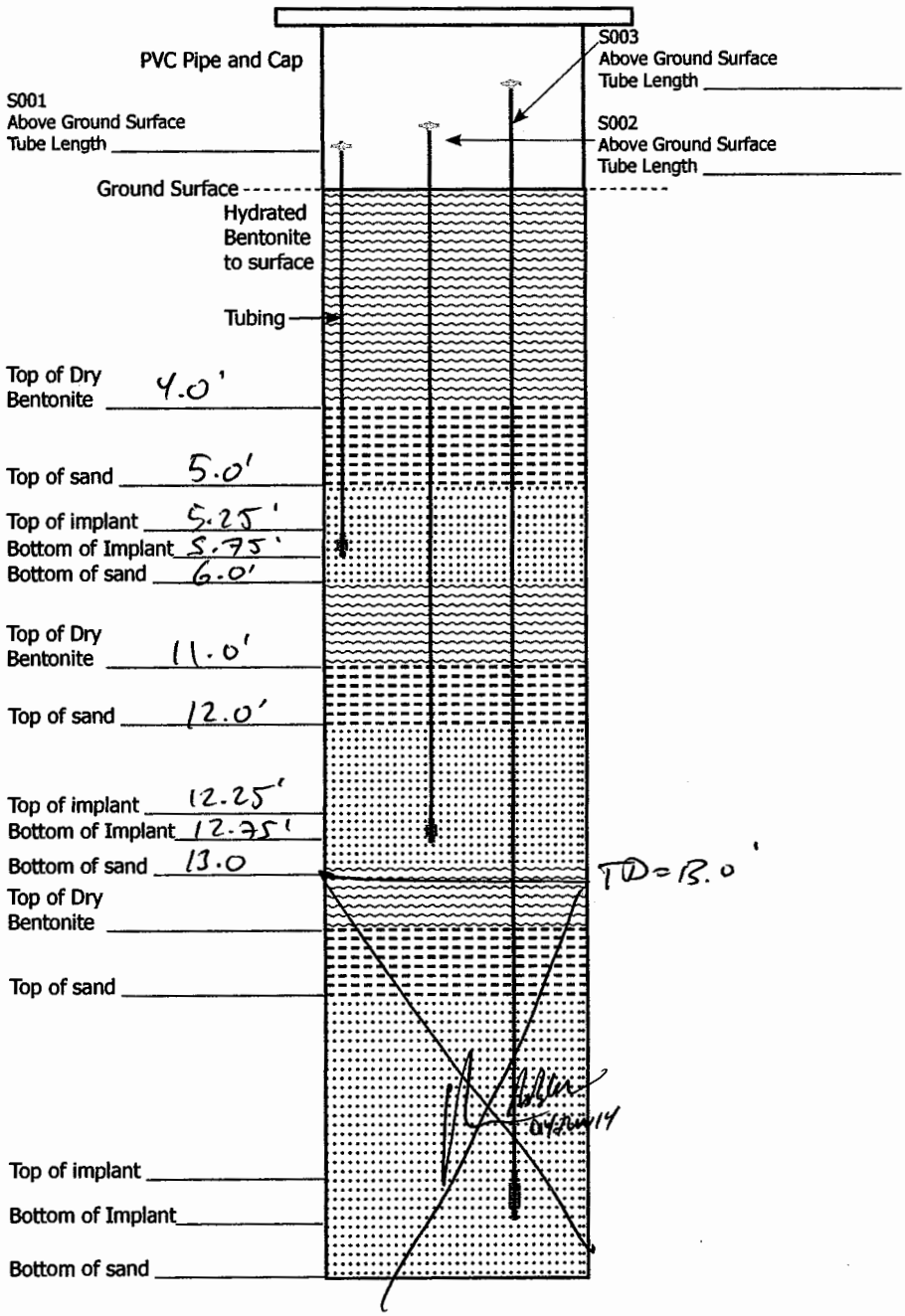
Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-565
Site: SA
Drilling Contractor: EST
Borehole TD: 13.0' bgs

Project: Phase 3 DOE Data Gap Sampling 2014
Logged by: RWB ELLIS
Driller: MARTY KILHULLEN
Borehole Diameter: 2.25"

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: Geoprobe 5400
Probe Completion Date/Time: 04JUN14

5.0-6.0 @ 14:50
12.0-13.0 @ 14:48



Vapor Implant Specs
Material: Stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

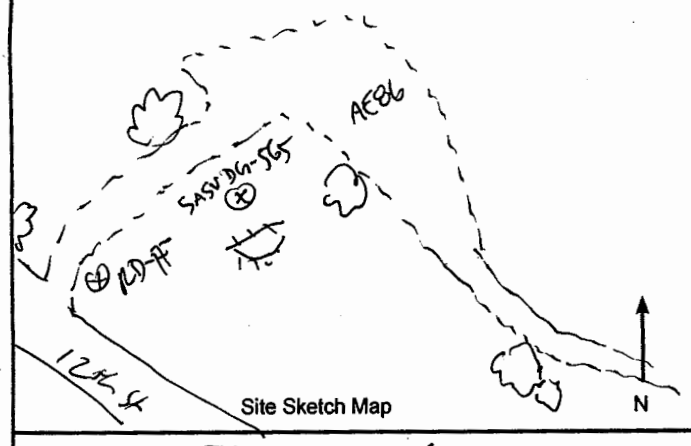
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: SASV DG-565	Sheet 1 of 2
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.3060106	Site: 5A
Logged By: Rob Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kilhullen
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 13.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 14:00 04 JUN 14	Drill Finish Time/Date: 14:35 04 JUN 14
Soil Vapor ID: SASV DG-565	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 04 JUN 14 14:50, 14:48 (shallow, deep)	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 5.0'-6.0' ; 12.0'-13.0'	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☑ None
Soil Vapor Well Detail Completed (yes/no): attached	Surface Completion: SV. Probe
	Type of Refusal: ☑ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		48"				0		0.0-5.0					
						1		Silty sand (SM), brown (10YR 4/3)	–	TR	15	55	30
								very loose to loose, dry. Mostly fine					
						2	SM	sand (55), some silt (30), little medium					
								sand (15), trace coarse sand.					
						3		Sand lense (1") @ ~1.0' bgs.					
								No stain, no odor. Fill material					
								5.0-9.0					
0.0 ppm		~~36"~~ h	48"			4		~~Sit~~ poorly graded sand w/ silt	–	–	10	70	20
						5		(SP-SM). yellowish brown (10YR 5/6)					
								loose, dry. Mostly fine sand (70),					
						6		little silt (20), ~~fit~~ few med sand (10),					
								mottled throughout; oxide stain,					
						7	SP-SM	yellowish brown (10YR 5/8). No stain					
								no odor. Fill.					
								9.0-13.0					
0.0 ppm		48"				8		Same as above, gradational	–	–	–	80	20
						9		lightening to (10YR 7/4) very					
								pale brown. No stain, no					
							SP-SM	odor. Most likely native					

Boring ID: SASV DG-565 Project: Phase 3 DOE SVDG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10							
							SP SM	TD = 13.0' bgs refusal on sandstone bedrock					
						11							
						12							
0.0 ppm		12"						2 probes set					
						13							
						14							
						15							
						16							
						17							
						18							
						19							
						20							
						21							
						22							
						23							
						24							
						25							
						26							
						27							
						28							
						29							

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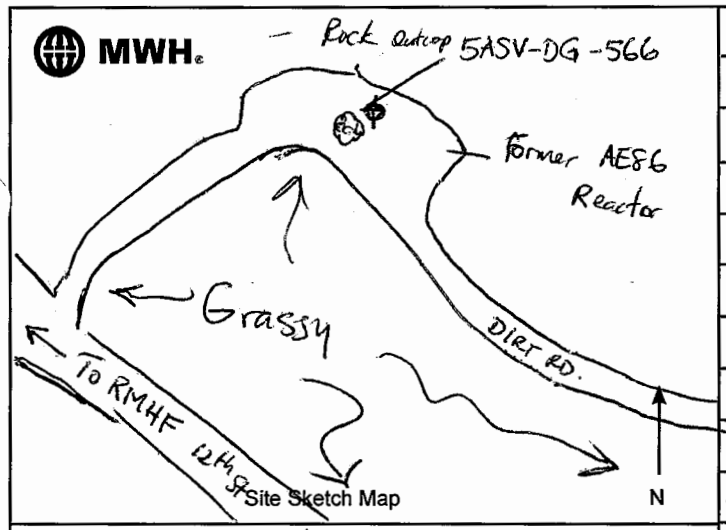


Site Sketch Map

Boring ID: 5ASV-DG-566	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macro core	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 3.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1245 / 6-4-14	Drill Finish Time/Date: 1300 / 6-4-14
Soil Boring Backfill Time/Date: 1325 / 6-4-14	Backfill Material: Soil cuttings
Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None	
Surface Completion: None	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

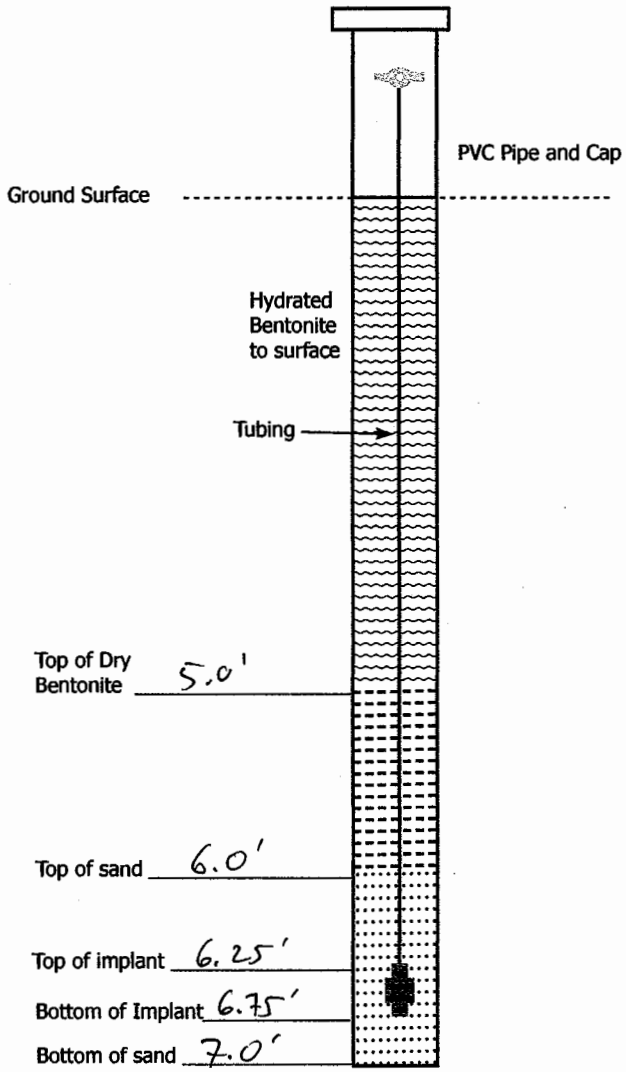
Soil Vapor ID:	N/A
Soil Vapor Well Completion Time/Date:	N/A
Soil Vapor Probe Depths (ft.bgs):	N/A
Soil Vapor Well Detail Completed (yes/no)	(no)

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: Removed					
	X						SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, med. sand, non-plastic silt, fill, no stains or odors.	–	–	20	45	35/
						1	SW-GW	Well Graded Sand with Gravel (SW-GW), mottled brown (10YR 4/3) and gray (10YR 6/1), loose, dry, fine to coarse sand, angular fine rock fragment gravel.	20	10	30	40	TR
	X	42"				2							
						3	SP		–	–	–	100	–
0.0			X		13:15								
SVL-566-5A5A-SB-3.0-3.5							Br	fill, dark brown (10YR 3/3) stains. Poorly Graded Sand (SP), brownish yellow (10YR 6/8), loose, dry, fine sand, very dark grayish brown (10YR 3/2) streaks, native soil, no odors.					
						4							
						5							
						6							
						7		TD = 3.5, refusal on bedrock, no probes installed. Collect encore at 3.0-3.5.					
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASVDG-568
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA
Reviewed by:
Logged by: [illegible]
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: [illegible] KILHULLEN
Borehole TD: 7.0' bgs
Probe Completion Date/Time: 04JUN14, 13:15
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

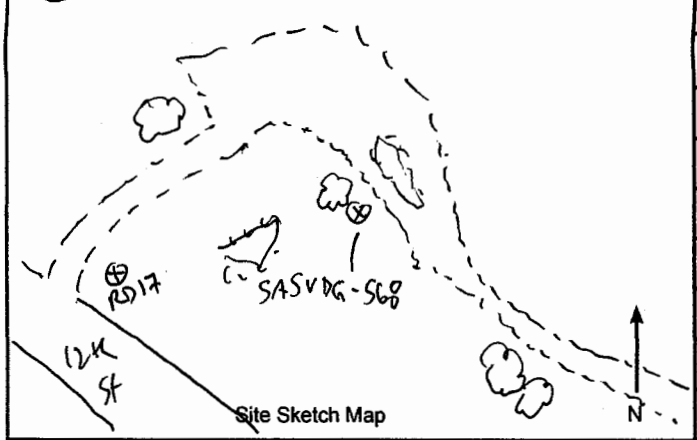
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SASV DG-568	Sheet 1 of
Project: Phase 3 DOE SVDG 2014	
Job #: 10503892.3060106	Site: SA
Logged By: Ross Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Mark McHullen
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 7.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 12:44 04 JUN 14	Drill Finish Time/Date: 13:01 04 JUN 14
Soil Vapor ID: SASV DG-568	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 04 JUN 14 ; 13:15	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 6.0' – 7.0'	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Well Detail Completed (yes/no) attached	Surface Completion: SV. probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: Hardwood/mulched, flat	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		48"				0		0.0 – 1.7					
						1	SM	Silty sand (SM). Brown (10YR 4/3)	–	–	15	55	30
								very loose, dry. Mostly fine sand (55)					
						2		some silt (30) little med sand (15).					
								No stain, no odor, fill.					
							SM	1.7 – 4.4					
						3		Silty sand (SM) light yellow	–	TR	10	55	35
								brown (10YR 6/4), loose,					
0.0 ppm		36"				4		dry. Mostly fine sand (55),					
								some silt (35), few coarse (10).					
						5	SP	No stain, no odor, fill.					
								4.4 – 6.5					
						6		Poorly graded sand (SP). Yellow	–	TR	15	75	10
								brown (10YR 5/4). Mostly fine sand					
						TD		(75) little medium sand (15), few					
set probe on 3rd step-out (W) of location.								silt (10), * upper section 4.4 – 5.0					
						8		has 25% coarse sand/small gravel.					
TD = 7.0' w/ refusal on sandstone bedrock								6.5 – 7.0					10
						9		Poorly graded sand (SP). Yellowish	–	–	15	75	10
								brown (10YR 5/6) / very dark brown	(*)	–	–	40	60
								(10YR 2/2). Sample is split core. No stain, no odor fill					

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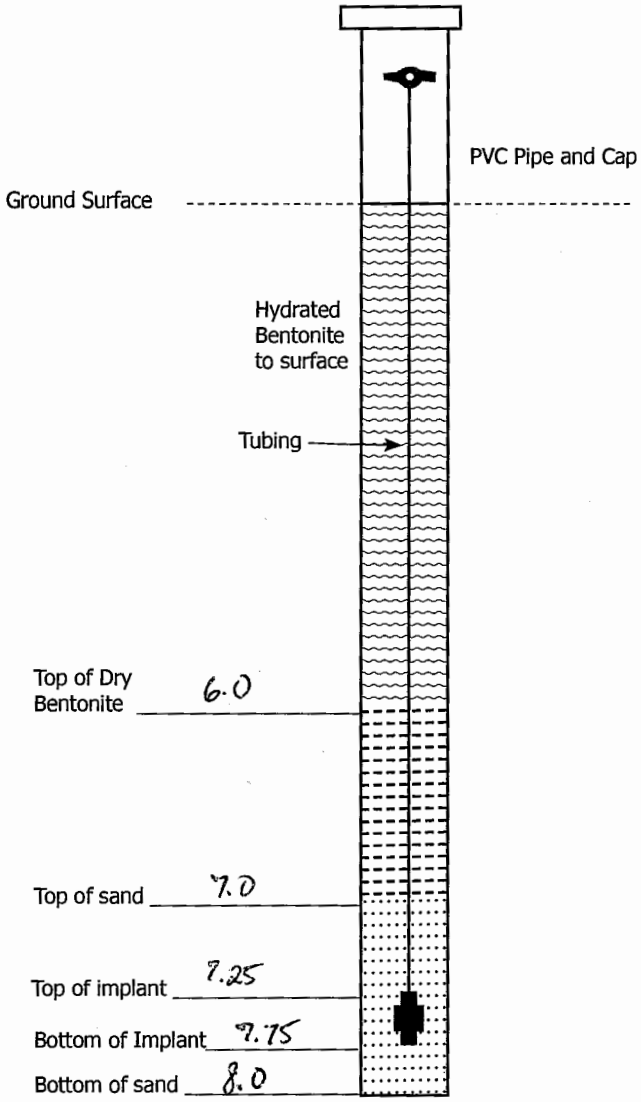
MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV-DG-570
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SA 5A
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: ~~2.25"~~ 8.0
Probe Completion Date/Time: ~~1430~~ 1410 / 6-4-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

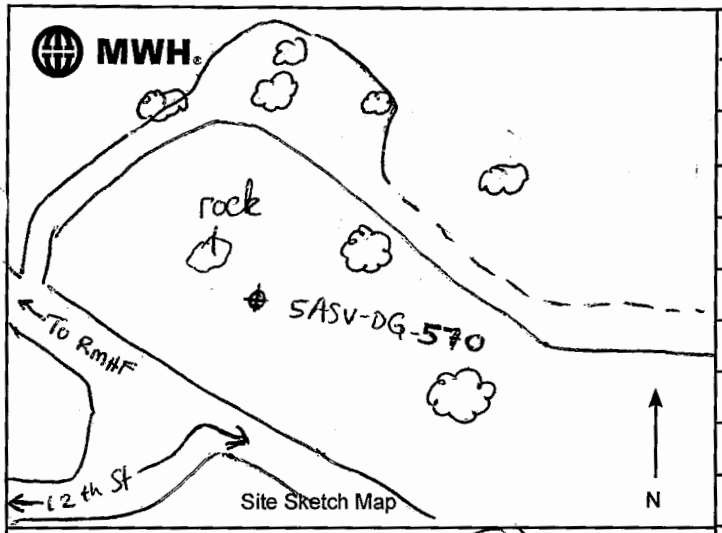
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.

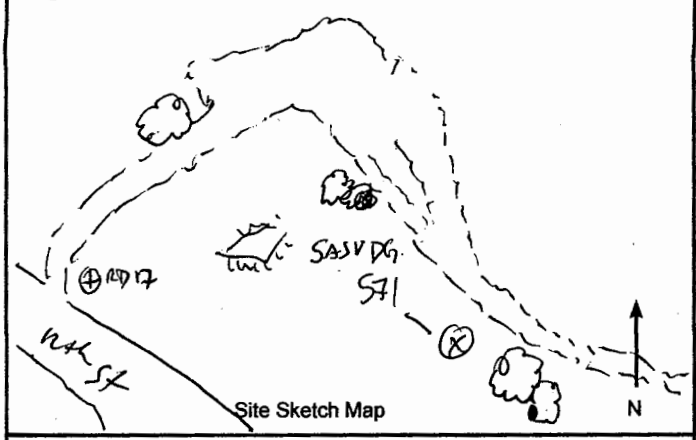


Site Sketch Map

Boring ID: 5ASV-DG-570	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1345/6-4-14	Drill Finish Time/Date: 1405/6-4-14
Soil Vapor ID: 5A SV-DG-570 (V.V.)	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: ~~1430~~ 1410 / 6-4-14	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Well Detail Completed (yes/no)	Surface Completion: Soil vapor probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: * Backfill Slope * Moved location 3' NE. Geoprobe could not be set up on "hummock"	--	—	—	55	45/
		36"	NONE			1		Silty Sand (SM), dark yellowish brown (10YR 3/4), loose, dry, fine sand, non plastic silt, roots upper 6", no odors, fill					
						2							
						3		@1.5, color lightens to dark (10YR 4/4) yellowish brown					
		24"	NONE			4							
						5							
						6		@6' becomes very slightly cemented, fill					
		24"	NONE			7							
						8	SP	Poorly Graded Sand (SP), yellowish	--	—	—	100	—
							Br	brown (10YR 5/6), loose, dry, fine sand, friable, no odors or stains, native soil.					
						9		@8.0 Sandstone, weathered					

MWH.



Site Sketch Map

Boring ID: SASV DG-571	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503992.3660106	Site: SA
Logged By: RMB Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kilhullen
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs): 3.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 11:14 04 JUN 2014	Drill Finish Time/Date: 11:20 04 JUN 2014
Soil Boring Backfill Time/Date: 12:35 04 JUN 2014	Backfill Material: soil cuttings, hydrated bent.
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None	
Surface Completion: Backfilled hole / bent	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID:	N/A
Soil Vapor Well Completion Time/Date:	N/A
Soil Vapor Probe Depths (ft.bgs):	N/A
Soil Vapor Well Detail Completed (yes/no)	N/A

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: mulch (mustard, flax)					
0.0 ppm		36"				0		0-2.2					
						1	Sm	Silty sand (sm), Brown (10YR 4/2) very loose for first foot, then loose, dry. mostly fine sand (60), some silt (35), few medium sand (5). No stain, no odor.	-	-	5	60	35
						2							
							Sm						
						3		Fill material, some fine roots in first 18".					
	SVL-571-SASA-SB-2.5-3.0 @ 11:26					4		2.2-3.0					
0.0 ppm	13 μRem, 42 cpm							Silty sand (sm), light yellow brown (10YR 6/4). loose, dry mostly fine sand (60), some silt (30), few medium sand (10). No stain, no odor, Native.	-	-	10	60	30
						5							
						6							
						7							
						8		• TD = 3.0' bgs and refusal on sandstone bedrock.					
						9		• Backfilled w/ soil cuttings @ 12:35					

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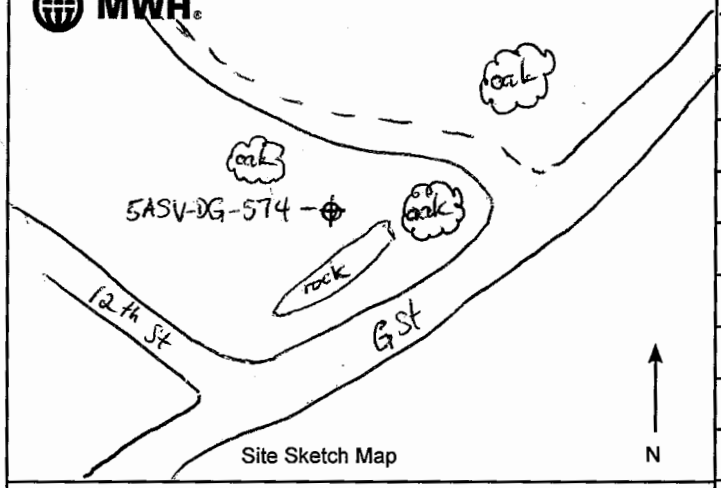
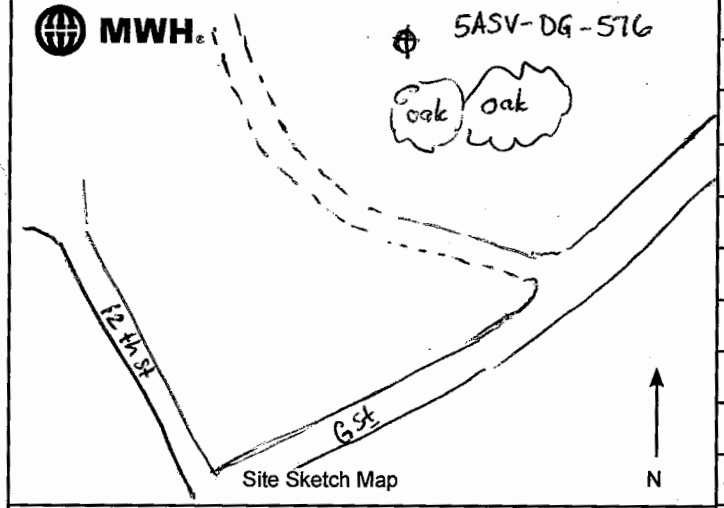


Site Sketch Map

Boring ID: 5ASV-DG-574	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400/DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 2.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1055/6-4-14	Drill Finish Time/Date: 1105/6-4-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1118/6-4-14 Backfill Material: Soil cuttings.
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Filled in between rock outcrops	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand, non-plastic silt, roots, no odors and no stains, fill.	–	–	–	75	25
0.0	X	18"	X		11:10	1 2							
SVL-574-SA				5A-5B	1.5-2.0		Br	Sandstone, weathered.					
						3							
						4		TD = 2.0 ft, refusal on bedrock, no probes installed; collect soil samples for VOC analyses at 1.5-2.0					
						5							
						6							
						7							
						8							
						9							

MWH.



Site Sketch Map

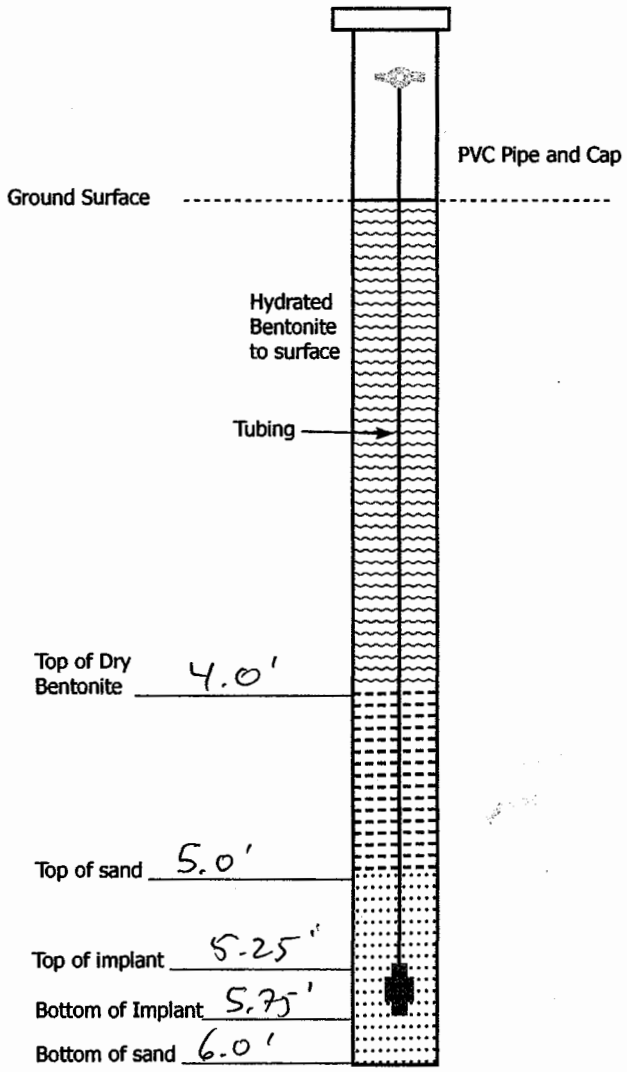
Boring ID: 5ASV-DG-576	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanaan	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 3.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1005 / 6-4-2014	Drill Finish Time/Date: 1020 / 6-4-2014
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1035 / 6-4-14 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	SM	Silty Sand (SM), brownish yellow (10YR 6/6), loose, dry, fine sand, non-plastic silt, no odors or stains, fill.	–	–	–	70	30/
	X	36"				1							
						2							
0.0			X		10:15	3							
SVL-576-SA5A-SB-2.5-3.0							Br	Sandstone, weathered.					
						4		TD = 30 ft, refusal on bedrock; collect Encores at 2.5-3.0. No vapor probes installed.					
						5							
						6		Drilled 2 extra borings to confirm shallow refusal w/ similar results					
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-582
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA
Reviewed by:
Logged by: RGB SCEC
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: MARTY KILHOLLEN
Borehole TD: 6.0' bgs
Probe Completion Date/Time: 04JUN14, 10:30
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

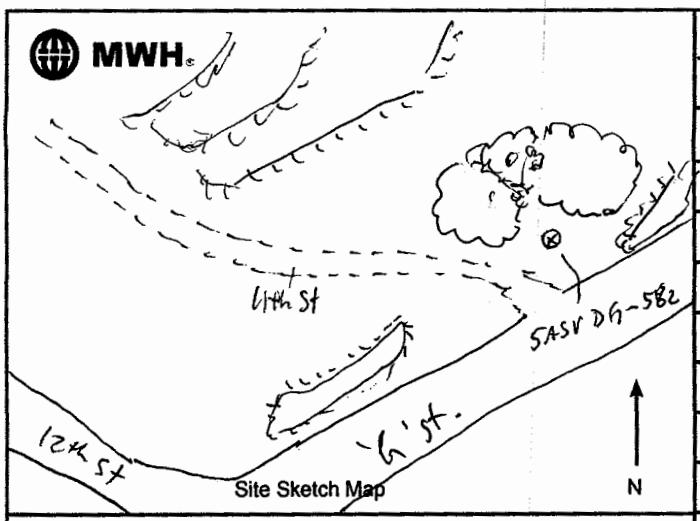
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SASV DG-582	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503482.3060106	Site: SA
Logged By: RBSeeis	Reviewed By:
Drilling Contractor: EST	Drillers Name: MATT & KILHULLEY
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs): 6.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 10:13 04 JUN 14	Drill Finish Time/Date: 10:16 04 JUN 14
Soil Vapor ID: SA SV DG-582	Soil Boring Backfill Time/Date: N/A
Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 04 JUN 14, 10:30	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0'	Surface Completion: SV Probe
Soil Vapor Well Detail Completed (yes/no) attached	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
00 ppm		48"				0	Sm	0-4.5 Silty sand (sm), brown (10YR 4/3) very loose and dry from 0-1.5' with color change 1.5-4.5 dark yellowish brown (10YR 4/4) and loose, still dry. Mostly fine sand (60), some silt (35), few medium sand (5). No stain, no odor. Fill material. Roots	-	-	5	60	35
00 ppm		24"				5	Sm	4.5-6.0 Silty sand (sm), dark yellowish brown (10YR 4/4). Loose, dry. Mostly fine sand (60), some silt (30), few medium sand (10). No stain, no odor. Fill material. Roots throughout; minor oxidation mottles.			10	60	30
					TD =	6							
• Conform bedrock refusal 3' (SW)						7							
						8							
						9		TD=6.0' on sandstone bedrock. Hard; little left in shoe.					

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Surficial media boring log rev 2-25-2014

MWH

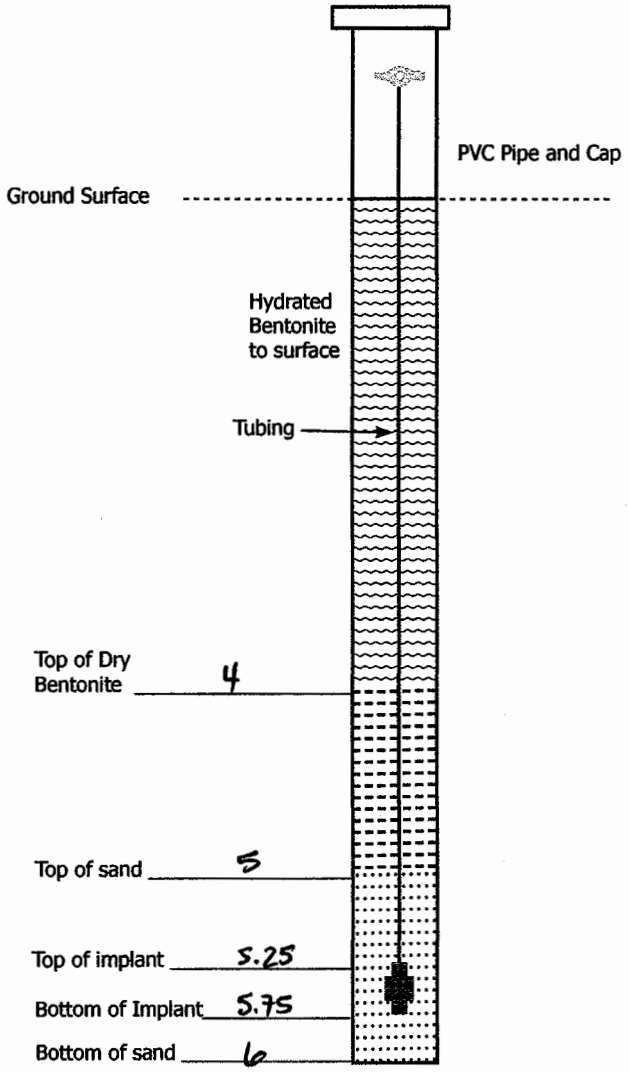
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV - DA - 592
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014

Site: 3A
Reviewed by:
Logged by: ANDREW PAYNE

Drilling Contractor: EST
Rig Type/Method: GEOPROBE 5400/DP
Driller: MARTIN ~~[illegible]~~ KILMULLEN

Borehole TD: 6'
Probe Completion Date/Time: 6/6/14 1145
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

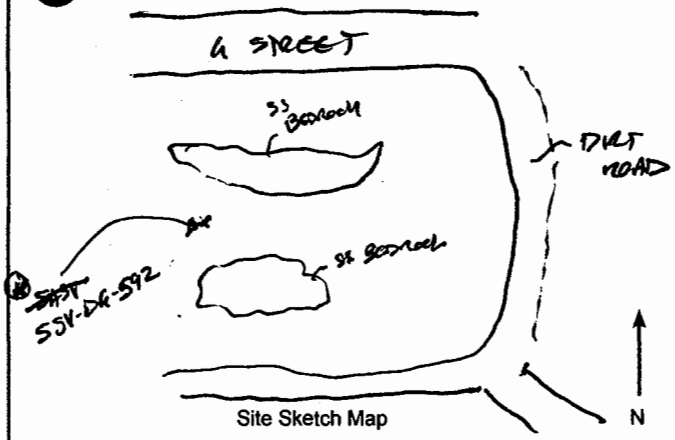
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SSV-DG-592	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA
Logged By: Andrew Bryant	Reviewed By:
Drilling Contractor:	Drillers Name: Martin Kilmman
Drill Rig Type/Method: Geoprobe 5400/DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25	Total Depth (ft.bgs):
Drill Bit Type: Macrocore	
Drill Start Time/Date: 6/6/14 1130	Drill Finish Time/Date: 6/6/14 1140
Soil Vapor ID: SSV-DG-592	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 6/4/14 1145	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5-6	Surface Completion: Soil Vapor Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: Weathered SS. ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description
1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: Grasses, can scars & trees near loc.; bedrock n/s.

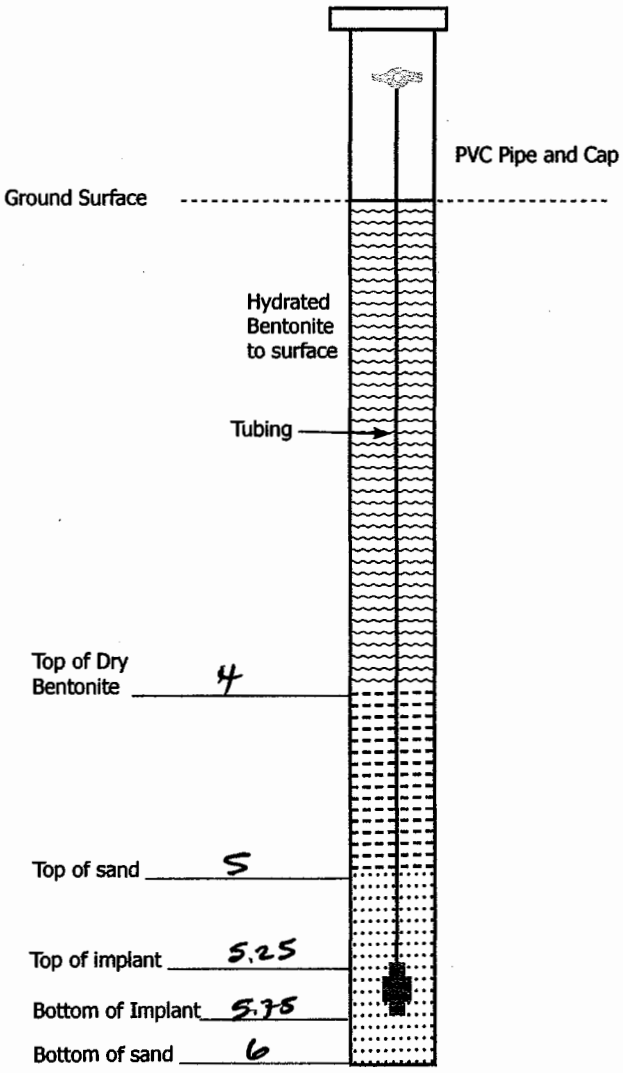
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty sand (SM), dry, loose, brown (10YR 4/3)	—	—	10	65	25
						1		Fine to medium sand, medium dense from 1'-4' bgs; becomes dk yellowish brown (10YR 4/6) between 2-4' bgs; roots @ 1';					
0.0		40"	—	N/A	—	2			—	—	15	65	20
				None				Fill material					
						3							
						4	SP-SM	Sand w/ silt (SP-SM), dry, light yellowish (10YR 6/4), loose, poor. fine sand w/ medium sand, ~15% fines, native/alluvium			25	60	15
						5	SP	Sand (SP), dry, light yellowish brown (10YR 6/4), loose, fine to medium sand, trace pieces of weathered SS; native alluvium			15	80	5
0.0		36"	—	N/A	—	6							
				None									
						7		TD = 6'; refusal on weathered SS bedrock; SV probe @ 5-6'					
						8							
						9							

QA/QC
Surficial media boring log rev 2-25-2014

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV - DA - 515
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: 5A
Reviewed by:
Logged by: ANDREW RAYNE
Drilling Contractor: EST
Rig Type/Method: HANDAUGER
Driller: MARTIN KILHULEN
Borehole TD: 6'
Probe Completion Date/Time: 6/6/14 1315
Borehole Diameter: 3.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: # 3
Manufacturer: CEMEX

Dry Bentonite

Type: # 8
Manufacturer: CETCO

Hydrated Bentonite

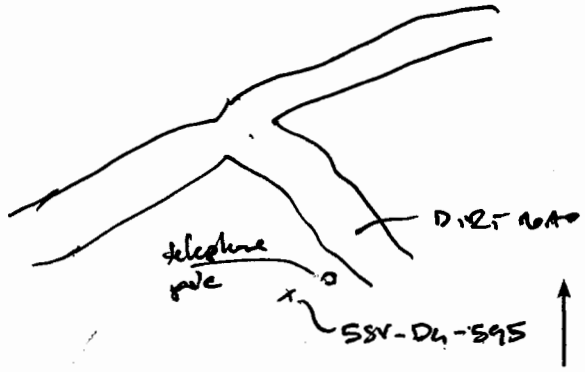
Type: # 8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SSV-DG-595	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: 5A
Logged By: AARON DAYNE	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILHULLEN
Drill Rig Type/Method: HAND AUGER	
Sampler Type: HAND AUGER	
Borehole Diam (inch): 3.25"	Total Depth (ft.bgs): 6'
Drill Bit Type: HAND AUGER	
Drill Start Time/Date: 6/6/14 1255	Drill Finish Time/Date: 6/6/14 1310
Soil Vapor ID: SSV-DG-595	Soil Boring Backfill Time/Date:
Soil Vapor Well Completion Time/Date: 6/6/14 1315	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 5-6	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Well Detail Completed (yes/no)	Surface Completion: SOIL VAPOR PROBE
	Type of Refusal: WEATHERED SS BR. ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

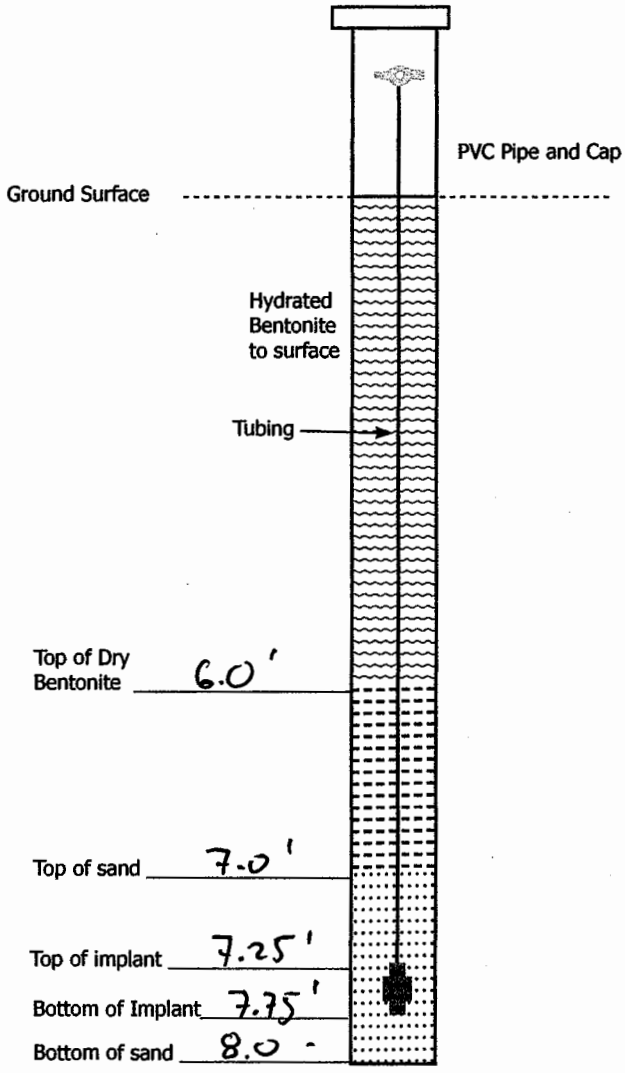
Soil Description: 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	SILTY SAND (SM), DRY, LOOSE, BROWN (10YR 4/3) TO YELLOWISH BROWN (10YR 5/4), FINE TO MEDIUM SAND, TRACE LF SAND, SUBANG TO SUBROUNDED, TRACE GRAVEL w. 1/2" DIA (SHALE); FILL MATERIAL	TRACE	5	15	55	25
						1							
0.0						2							
						3							
						4		TD = 6' REFUSAL ON SS BEDROCK/WEATHERED SV PROBE INSTALLED 5-6'					
0.0						5		0.0 PPM ON PID					
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-609
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SASV
Reviewed by:
Logged by: Russell
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: Morgan Hughes
Borehole TD: 8.0' bgs
Probe Completion Date/Time: 09 Jul 14, 08:50
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Comox

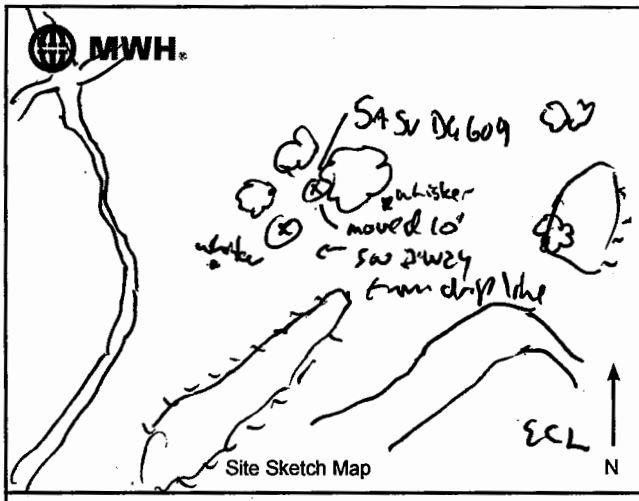
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SASV DG-609	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA
Logged By: MMBSMS	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 8.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 08:20 09 JUN 14	Drill Finish Time/Date: 08:34 09 JUN 14
Soil Vapor ID: SASV_DG-609	Soil Boring Backfill Time/Date: NA / Backfill Material: NA
Soil Vapor Well Completion Time/Date: 09 JUN 14; 08:50	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0'	Surface Completion: SV Probe
Soil Vapor Well Detail Completed (yes/no) attached	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations; Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 PM		46"				0	SM	0.0 - 1.5' Silty sand (SM), brown (10YR 4/3) loose, dry. Mostly fine sand (55), some silt (35), few med sand (10). No stain, no odor. Fill material - Fine roots throughout. up to occasional root ~1cm.			10	55	35
						1							
						2							
						3	SP						
						4		1.5 - 4.1 Poorly sorted sand (SP). Dark yellow brown (10YR 4/4). loose, dry. Mostly fine sand (80%), few silt, med sand (10% each), trace coarse sand. No stain, no odor. Fill material	-	TR	10	80	10
00 PM		48"				5							
						6							
						7		4.1 - 8.0 Silty Sand (SM) yellow brown (10YR 5/4). loose, dry. Mostly fine sand (60), some silt (30), med sand (10). No stain, no odor. Native. Color changes to light yellow brown (10YR 6/4).	-	-	10	60	30
						8							
TD = 8.0' bgs w/ refusal on sandstone bedrock						9							

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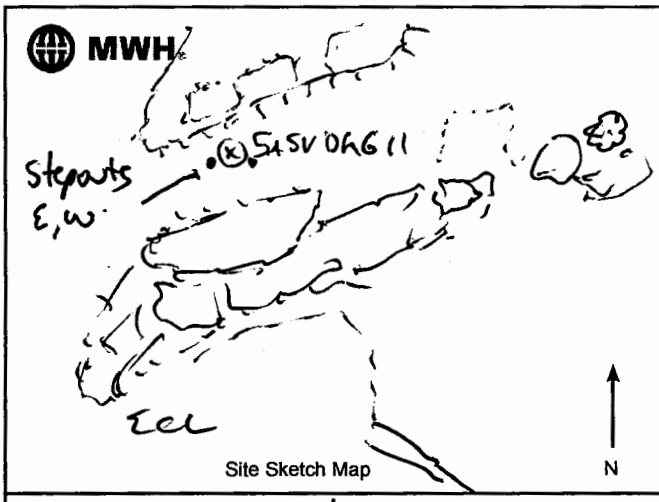
Surficial media boring log rev 2-25-2014

MWH



Site Sketch Map

Boring ID: SASV DH-611	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA
Logged By: Mark Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs)
Drill Bit Type: Macro core	
Drill Start Time/Date: 09 JUN 14 10:36	Drill Finish Time/Date: 09 JUN 14 10:38
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 09 JUN 14 11:02 Backfill Material:
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no) N/A	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: foxtail, cryptobush, oat.
1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size% 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: Flat, on road side

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	22"				0	SM SP SM	0.0-0.5 Silty sand (SM) Brown (10YR 4/3) loose, dry. Mostly fine sand (60), some silt (30), and few medium sand (10). No stain, no odor. Fill material.	-	-	10	60	30
	X		☒		TD= 1.85'	1							
Sample 1.35-1.85' SVL-611-SASA-SB-1.35-1.85 @ 10:39 0.0 ppm, Brown, 4YR 4/3						2		0.5-1.85' Poorly graded sand w/ silt (SP-SM). Yellowish brown (10YR 5/6). loose, dry. Mostly fine sand (70), little silt (20), few medium sand (10), trace coarse sand. No stain, no odor. Native.	-	TR	10	70	20
						3							
						4							
						5							
						6							
						7							
						8		TD = 1.85' bgs. Backfilled w/ soil cuttings 09 JUN 14, 11:02					
						9							

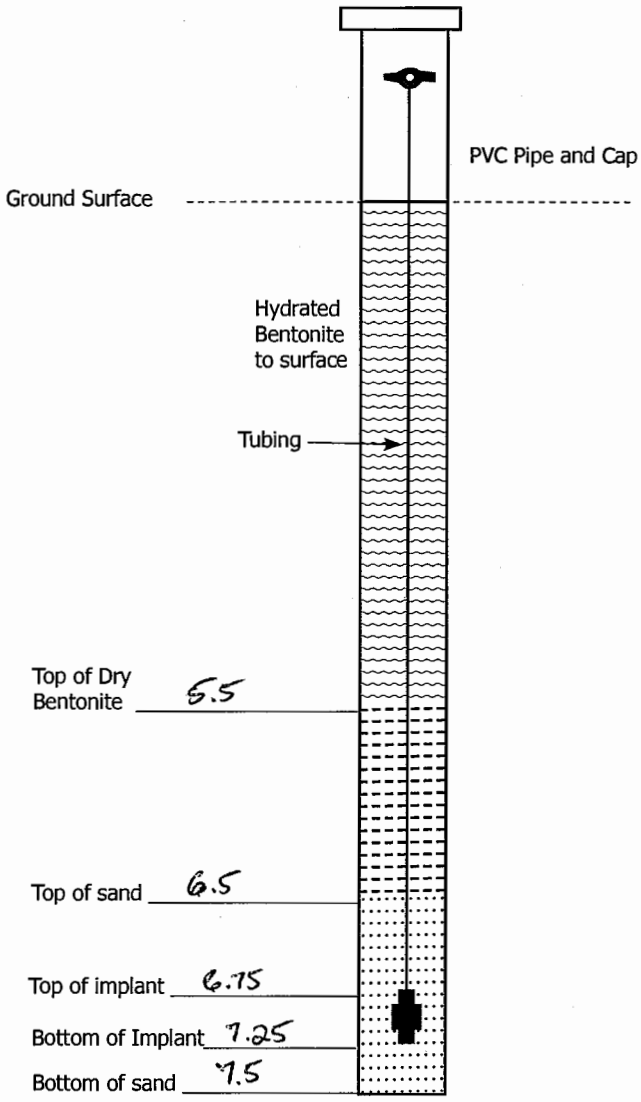
TD = 1.85' bgs w/ refusal on sandstone bedrock

Stepped out to east and west to confirm shallow refusal

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV-DG-616
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SASA
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 7.5
Probe Completion Date/Time: 1255/6-6-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

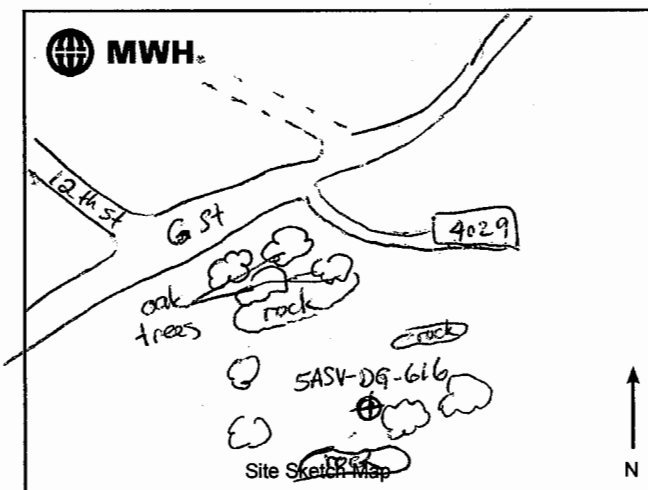
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

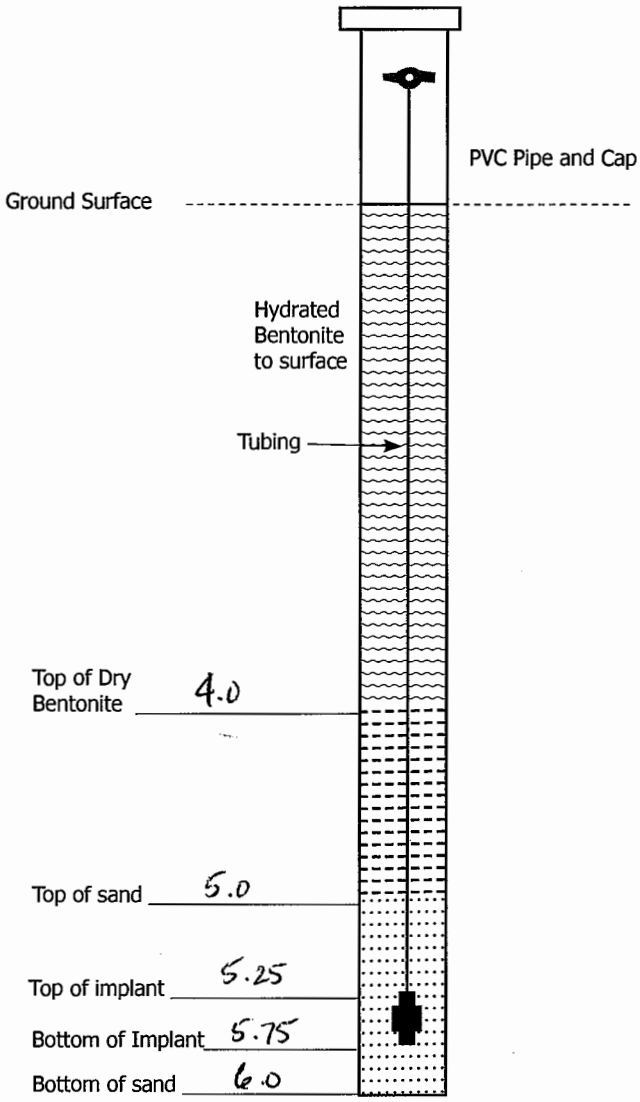
Boring ID: 5ASV-DG-616	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA
Logged By: V. Vatharasri	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 7.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1229 / 6-6-14	Drill Finish Time/Date: 1236 / 6-6-14
Soil Vapor ID: 5ASV-DG-616	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A (N.V.)
Soil Vapor Well Completion Time/Date: 1255 / 6-6-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 6.5-7.5	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Grassy meadow in between oaks	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	45"	NONE			0–2	SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non-plastic silt, slightly compacted, fill	–	–	–	65	35
	X					2–3		@2.5 grades to → med. stiff.	–	–	15	55	30
	X	42"				5–7	SP-SM	Poorly Graded Sand w/ Silt (SP-SM) yellowish brown (10YR 5/6), loose, dry, fine sand, silt, native soil @6' color changes to brownish yellow, minor reddish yellow (7.5YR 7/6) (N.V.) iron stains	–	–	–	70	30
	X					7–8	Br	Sandstone, weathered.					

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV-DG-618
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SASA
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 7.0
Probe Completion Date/Time: 1031 / 6-6-14
Borehole Diameter: 2.25



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

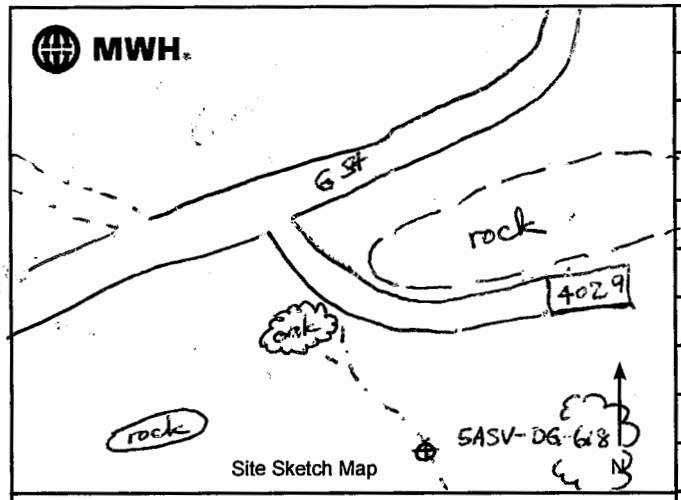
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

* Drilled into weathered bedrock. Backfill w/ hydrated bentonite chips to 6.0 ft (i.e, 6.0-7.0)

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

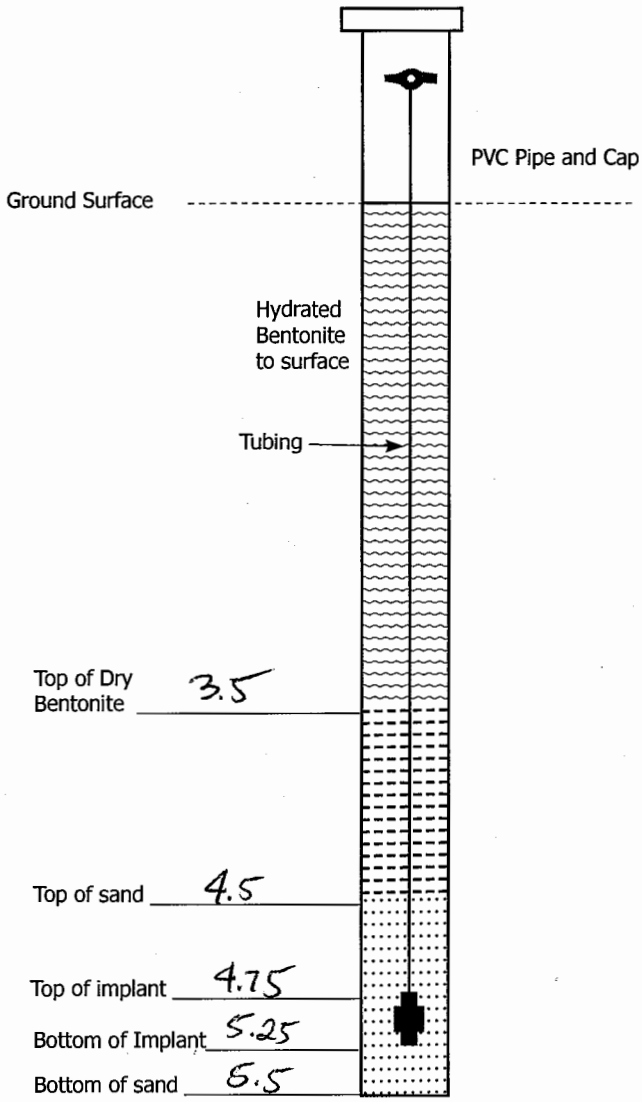
Boring ID: 5ASV-DG-618	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vethanesin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Macrocore / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 7.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0945 / 6-6-14	Drill Finish Time/Date: 1010 / 6-6-14
Soil Vapor ID: 5ASV-DG-618	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 1031 / 6-6-14	Backfill Material:
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Well Detail Completed (yes/no)	Surface Completion: Soil Vapor probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: In drainage, grassy					
Gas utility nearby						1		Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non-plastic silt, no stains or odors, alluvium (native soil) recently deposited.	-	-	-	60	40/
Hand Auger to 5.0 ft						2		@ 1' backfill - possibly from gas-pipe installation.					
						3							
						4							
		30"				5	SP	Poorly Graded Sand (SP), brownish yellow (10YR 6/6), loose, dry, fine sand, trace silt, weak, roots, fill.	-	-	-	100	TR/
			NONE			6	WB						
						7		5.5-6.0 - Clump of silty sand w/ roots					
						8		Weathered bedrock - Shale & med. to high plasticity clay, fissile.					
						9		TD=7.0, refusal on shale bedrock, backfill w hydrated chips to 6.0 ft and install vapor probe 5.0-6.0 ft					

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-619
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5A
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 6.0
Probe Completion Date/Time: 1216/6-6-2014
Borehole Diameter: 2.25"



* Backfill 5.5-6.0 w/ med. bentonite chips to avoid clay/weathered shale.

Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

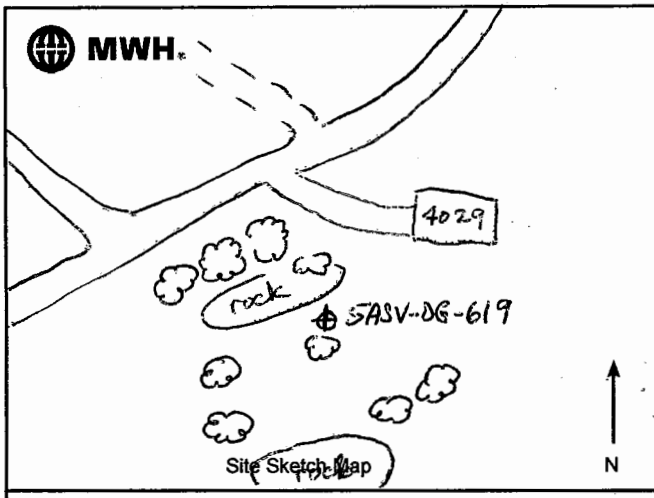
Dry Bentonite
Type: #8
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 Cetco
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SASV-DG-619	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method:	
Sampler Type: Macro core	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 6.0
Drill Bit Type: Macro Core	
Drill Start Time/Date: 1155 / 6-6-14	Drill Finish Time/Date: 1203 / 6-6-14
Soil Vapor ID: SASV-DG-619	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1216 / 6-6-2014	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5 – 5.5	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	SM	Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, non-plastic silt, non-cemented, few roots and leaves down to 3", native soil	–	–	–	60	40
	X	45"				1							
	X		NONE			2							
0.0	X					3	SP-SM	Poorly Graded Sand with silt (SP-SM), brownish yellow (10YR 6/6), loose, dry. fine sand and silt, native soil	–	–	–	85	15
	X					4							
	X	30"	NONE			5	CL	Sandy Clay (CL), very pale brown (10YR 7/4), med stiff matrix with stiff dry blocks of clay, low liquid limit / high dry strength, fine sand, possibly weathered shale. Shale, weathered.	–	–	–	20	80
0.0	X					6	Br						
						7							
						8		TD = 6.0, refusal on bedrock - Install probe at 4.5-5.5 ft. Backfill w/ med. bent chips to 5.5 ft to avoid shale/clay					
						9							

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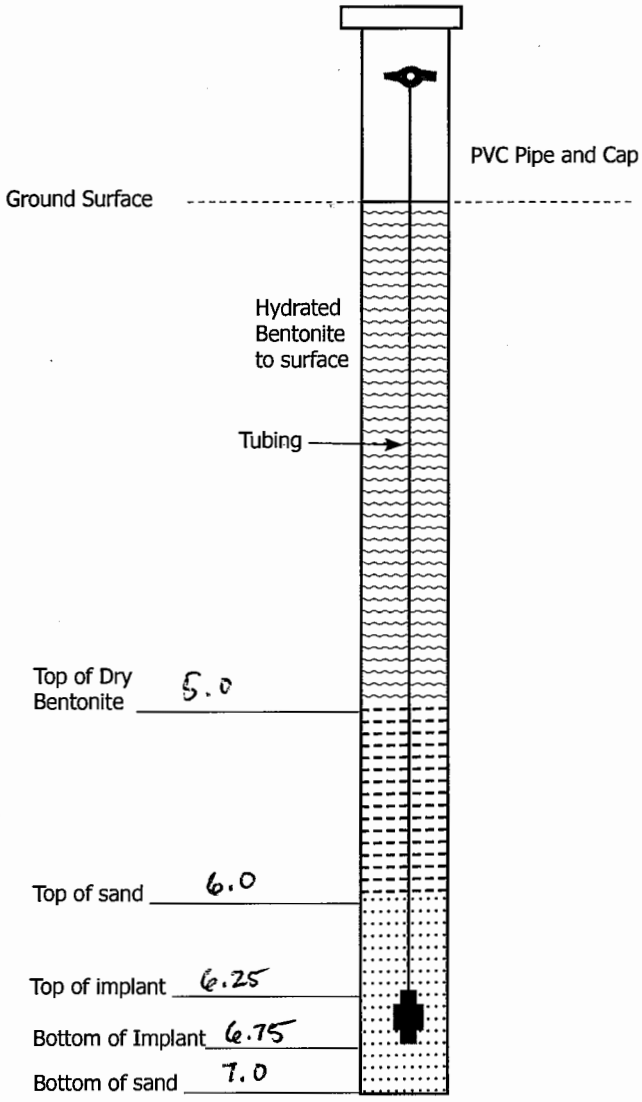
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-622
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SA 5A
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 7.0
Probe Completion Date/Time: 1110 / 6-6-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

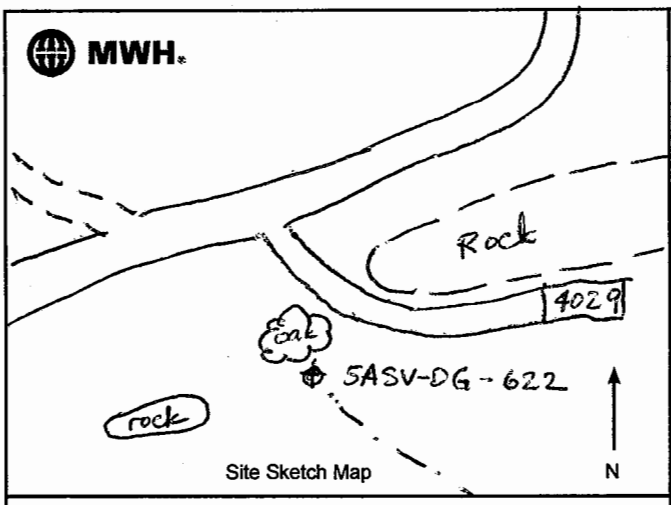
Dry Bentonite
Type: #8
Manufacturer: Cetco

Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.

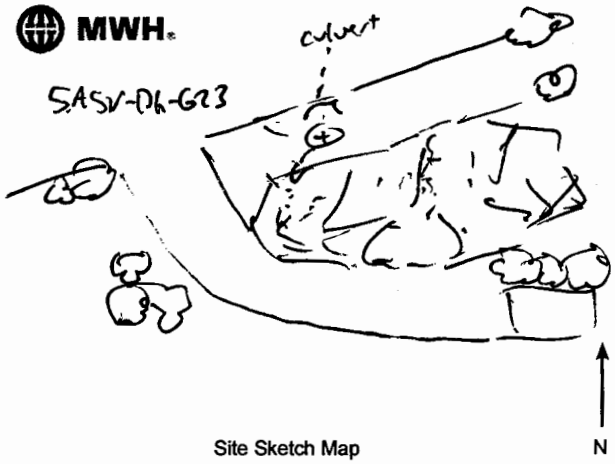


Site Sketch Map

Boring ID: 5ASV-DG-622	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vatharasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 7.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1042/6-6-14	Drill Finish Time/Date: 1053 /6-6-14
Soil Vapor ID: 5ASV-DG-622	Soil Boring Backfill Time/Date: N/A
Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1110 / 6-6-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 6.0 - 7.0	Surface Completion:
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☐ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: ~10' from culvert, asphalt chunks	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand and silt, roots, leaves down to 1-inch depth, fill	–	–	–	60	40/
						1							
		42"	NONE			2		@2' color changes to yellowish brown (10YR 5/4), grades w/ med. sand, fill	–	–	15	50	35/
						3							
0.0						4		@4 grades w/ ~~<1~~ < 1mm very pale brown (10YR 8/3) nodules.					
		36"	NONE			5							
						6	SP	Poorly Sorted Sand (SP), brownish yellow (10YR 6/6), loose, dry, fine sand, slight yellowish brown (10YR 5/8) oxidation					
0.0						7	Sr						
						8		Sandstone, weathered. TD = 7.0, refusal on bedrock, install probe at 6.0 - 7.0.					
						9							

MWH.



Site Sketch Map

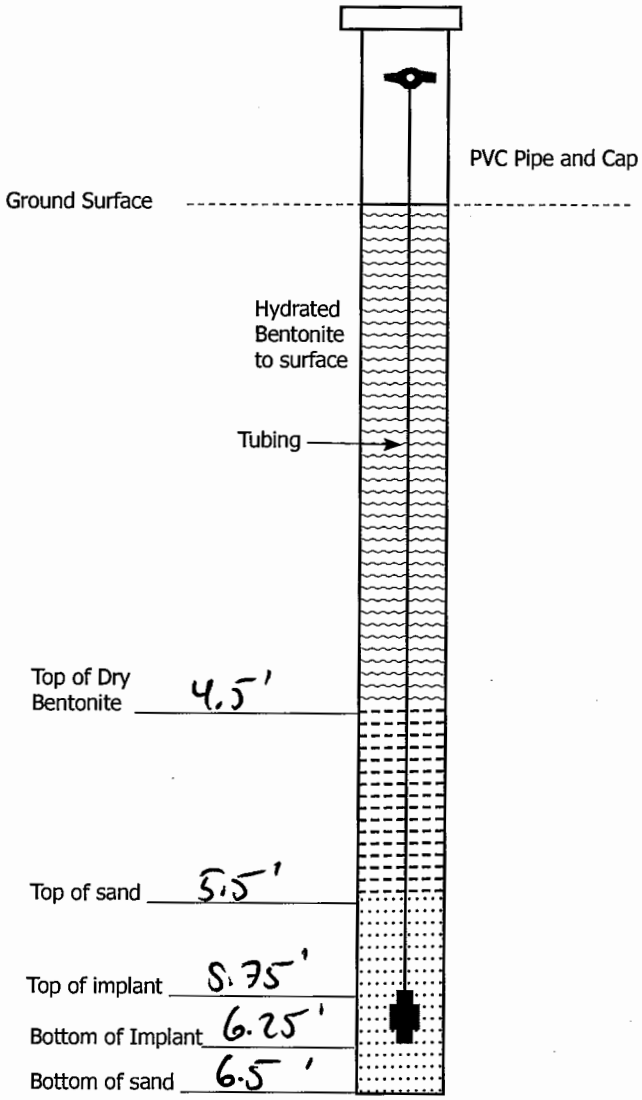
Boring ID: SA SV DA-623	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA
Logged By: JGM ELLIS	Reviewed By:
Drilling Contractor: EJT	Drillers Name: MOLGAN HUNTER
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Bucket Auger 1 qrab	
Borehole Diam (inch): 3.5"	Total Depth (ft.bgs): 1.5'
Drill Bit Type: Bucket auger	
Drill Start Time/Date: 09 JUN 14 13:05	Drill Finish Time/Date: 09 JUN 14 13:25
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 09 JUN 14 13:26 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: none
Soil Vapor Well Detail Completed (yes/no) N/A	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: drainage; elf of culvert	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0	X	16"				0	SP	0.0-1.5' (16") Poorly graded sand (SP). Dark yellowish brown (10YR 4/6). Loose-med dense; dry. Mostly fine sand (95), little silt (5) trace medium sand coarse sand - No stain, no odor. Possible native.		TR	TR	85	15
plm	X					1							
					TD 1.5'	2							
						3							
						4		TD = 1.5' bgs w/ refusal on Sandstone bedrock					
						5							
						6		Backfilled at 13:26 w/ Soil cuttings.					
						7		Stepped out to (S) and (E) to confirm, refusal at 12"					
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SASV DG-636
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SA
Reviewed by:
Logged by: RWS ELLIS
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: MORGAN HUGHES
Borehole TD: 6.5' bgs
Probe Completion Date/Time: 09JUN14; 11:55
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite
Type: #8 bent crumbles
Manufacturer: Cetco

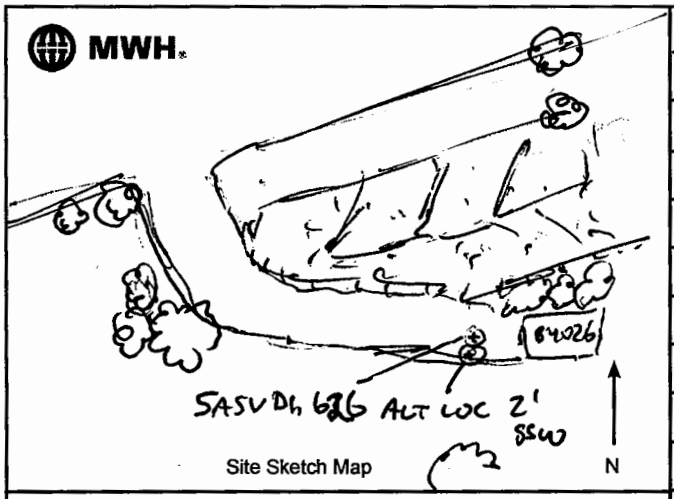
Hydrated Bentonite
Type: #8 bent crumbles
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SASV DG-626	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA
Logged By: [illegible]	Reviewed By:
Drilling Contractor: EST	Drillers Name: [illegible]
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 6.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 09JUN14 11:35	Drill Finish Time/Date: 09JUN14 11:41
Soil Vapor ID: SASV DG-626	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 09JUN14, 11:55	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 5.5-6.5	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Well Detail Completed (yes/no): attached	Surface Completion: SV probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description used alt loc w cracks.

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: Asphalt

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		40"				0		0.0 - 0.35 4" asphalt					
							SM-GP	0.35 - 0.9					
						1		Silty sand with gravel (SM-GP)	20	10	-	40	30
							SM	Brown (10YR 5/3), loose, dry.					
						2		Mostly fine sand (40), some silt					
								(30), gravel (20), pea gravel					
						3		as base., few coarse sand (10).					
								No stain, no odor. Fill.					
		28"				4	SM	0.9 - 2.3					
								Silty sand (SM), Dark yellowish	-	-	TR	65	35
						5		brown (10YR 4/4). Loose, dry					
								Mostly fine sand (65), some					
						6		silt (35), trace medium sand.					
						TD = 6.5'		No stain, no odor. Fill.					
TD = 6.5' bgs								2.3 - 6.5					
w/ refusal on								Silty sand (SM). light yellowish	-	-	-	60	40
sandstone						8		brown (10YR 6/4). Loose, dry.					
bedrock								Mostly fine sand (60), some silt					
						9		(40). No stain, no odor; fill					
								1" shale interbed @ 6.0' bgs.					

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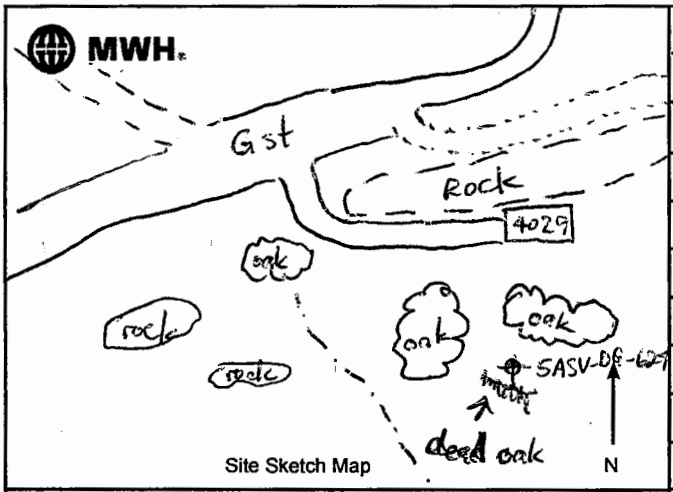

Site Sketch Map

Boring ID: 5ASV-DG-627	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25	Total Depth (ft.bgs): 3.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0859 / 6-6-14	Drill Finish Time/Date: 0910 / 6-6-14		
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 0930 / 6-6-14	Backfill Material: Soil cutting	
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: Next to dead oak, grassy	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		40"				0	SM	Silty Sand (SM), dark yellowish brown (10YR 5/4), loose, dry, fine sand and non-plastic silt, no odors or stains, native soil (alluvium), no odors or stains, roots down to 12", non-cohesive	–	–	–	65	35/
0.0			☒		09:13	3	Br	@ 3' color change to yellowish brown (10YR 5/6) Sandstone, weathered.	–	–	25	55	20/
						5		TD = 3.5, refusal on bedrock, no vapor probes installed. Collect soil 3.0 - 3.5 and submit for VOC analyses.					

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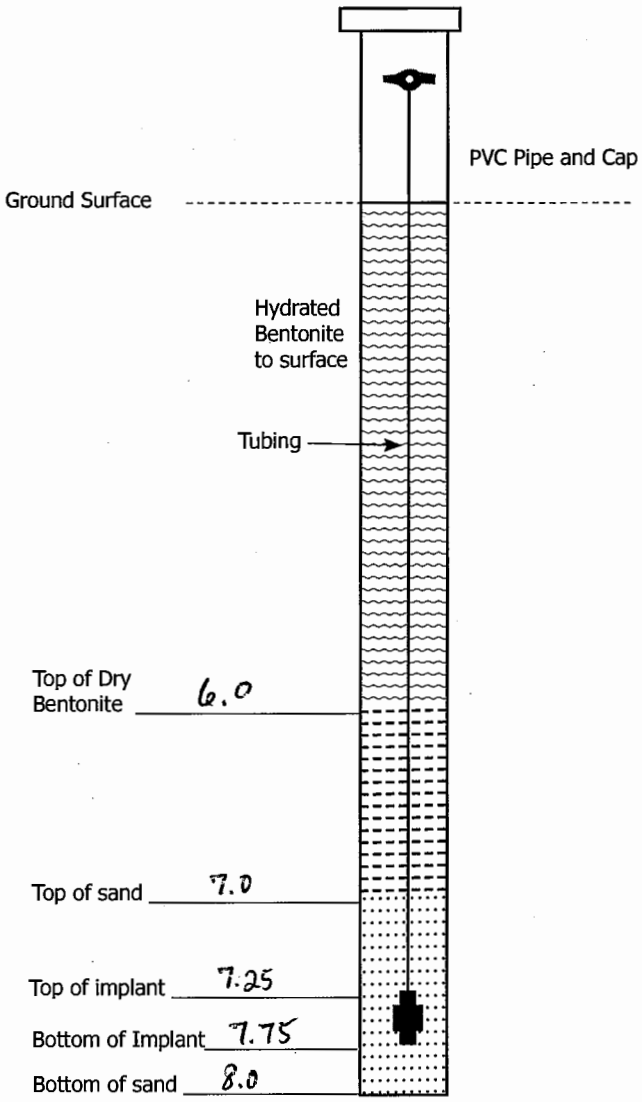
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5ASV-DG-629
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5A
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 8.0
Probe Completion Date/Time: 0830 / 6-6-2014
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: CETCO

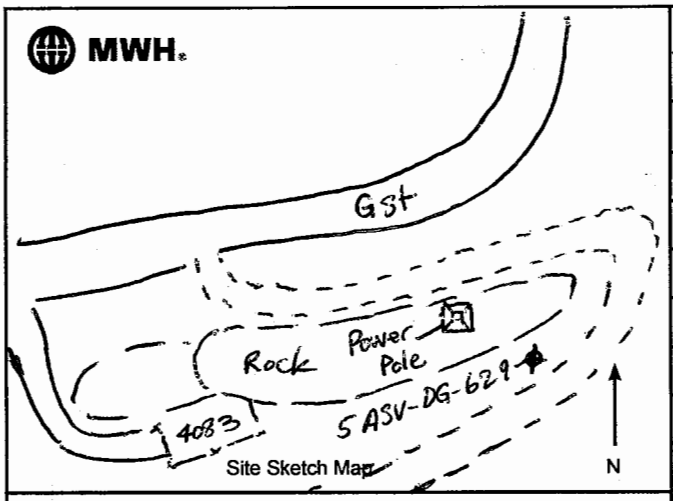
Hydrated Bentonite
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5ASV-DG-629	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0808 / 6-6-14	Drill Finish Time/Date: 0817 / 6-6-14
Soil Vapor ID: 5ASV-DG-629	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0830 / 6-6-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: Veg. cleared, @ base of rock outcrop

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non-plastic sand, no odors or staining, fill	–	–	–	65	35/
		48"	NONE			2		@2 color changes to brownish yellow (10YR 6/6), slightly more silty, native soil.				60	40/
		48"	NONE			6	SP-SM	Poorly Graded Sand w/ Silt (SP-SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, non-plastic silt, friable. native soil.					
						8	Br	Bedrock, sandstone, weathered T.D = 8.0, refusal on bedrock, install probe 7.0-8.0					

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SASV DG-630

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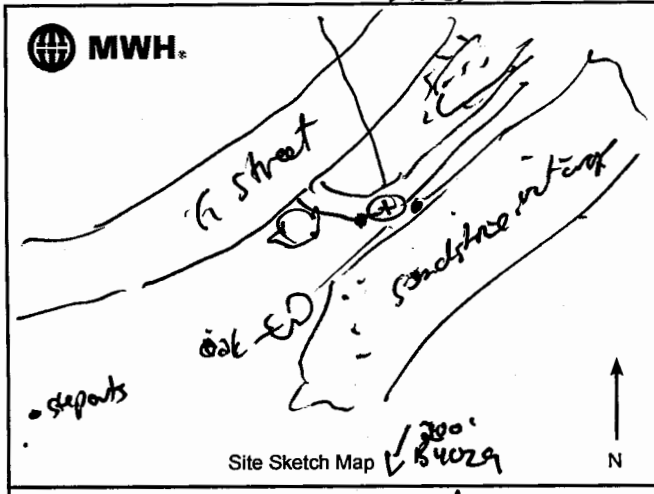

Site Sketch Map

Boring ID: SASV_DG-630	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5A
Logged By: RBSELLS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MORGAN HUGHES
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macro Core	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 2.0'
Drill Bit Type: Macro core	
Drill Start Time/Date: 13:40 09 JUN 14	Drill Finish Time/Date: 13:49 09 JUN 14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 09 JUN 14 14:02 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: NONE
Soil Vapor Well Detail Completed (yes/no) N/A	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	24"				0	SM	0.0 – 0.5	-	-	10	60	30
	X					1	SP	Silty sand (SM) dark yellow brown (10YR 4/4) loose, dry Mostly fine sand (60) some					
	X		X		TD = 2			Silt (30), and few med sand (10) No stain, no odor, Fill.					
SVL-630-SASA-33-1.5-2.0 @ 13:54						3		0.5 – 2.0					
1 ppm, 26 cpm 0.0 ppm.						4		Poorly graded Sand (SP). ~~dark~~ dark yellow brown (10YR 4/4) transitions to light yellow brown @ 1.5' bgs to (10YR 6/4). Mostly fine sand (70), little silt (15), little medium sand (15). loose, dry. No stain, no odor. Native	-	—	15	70	15
						5							
						6							
TD = 2.0' bgs w/ refusal on sandstone bedrock.						7							
						8							
						9		Stepped out to (E) + (W) for refusal confirmation					

Backfilled w/ soil cuttings @ 14:02

QA/QC

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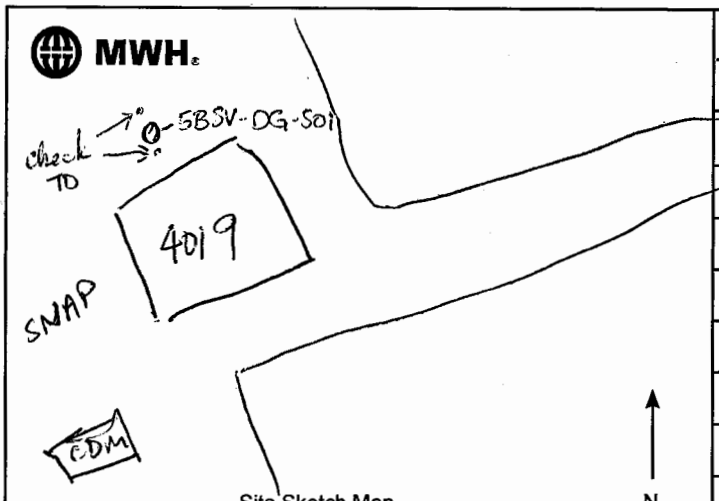


Site Sketch Map

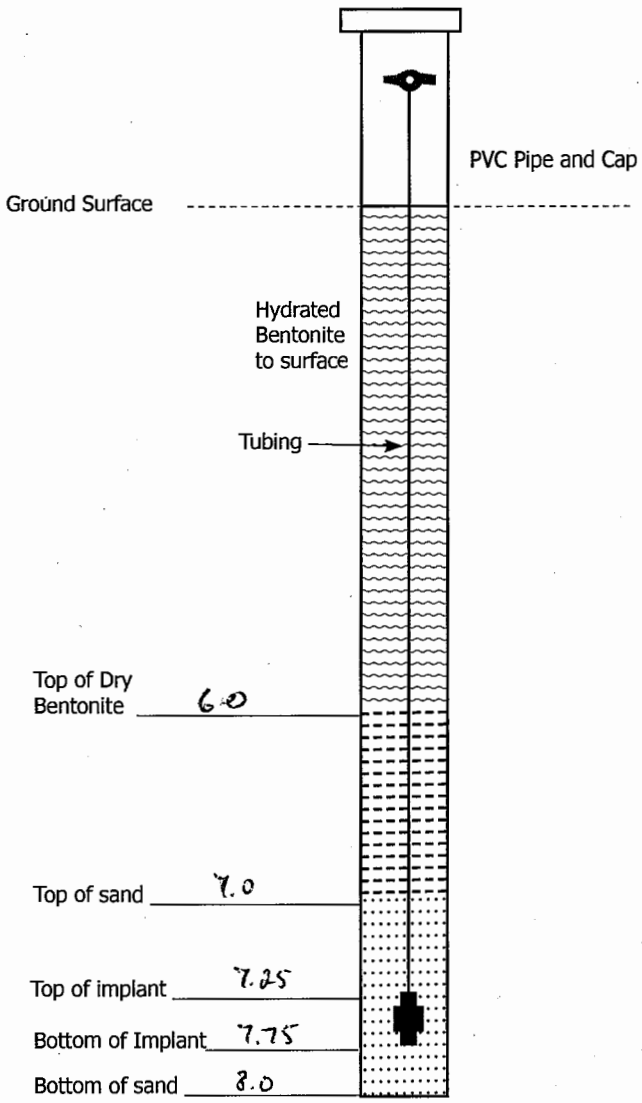
Boring ID: 5BSV-DG-501	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 1.25		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1445 / 5-12-14	Drill Finish Time/Date: 1505 / 5-12-14		
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1510 (N/A)	Backfill Material: ~~Native~~ Soil cuttings (N/A)	
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: Cold asphalt patch		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: Asphalt					
0.0	X	15"	X	0.75-1.25	1450	1	SM	4" asphalt/concrete			10	70	20
								Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine and medium sand, non plastic silt.					
						2		@1.25' Bedrock - light yellowish brown (10YR 6/4).					
						3							
						4		TD = 1.25' Refusal on bedrock. No Vapor probes installed. Collected shallow encores due to intact slab at surface.					
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV-DG-503
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5B
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 8'
Probe Completion Date/Time: 5-12-14 / 1425
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex Lapis Lustre

Dry Bentonite

Type: CETCO #8
Manufacturer: CETCO

Hydrated Bentonite

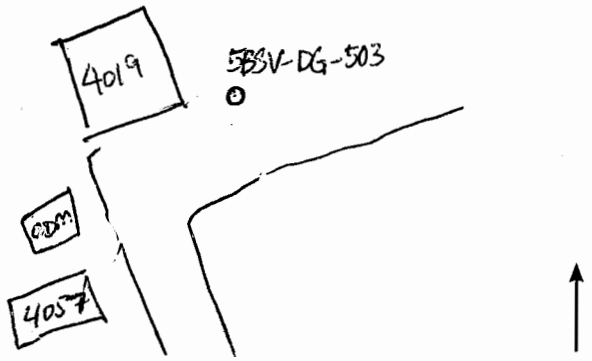
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-503	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 13:30 / 5-12-14	Drill Finish Time/Date: 13:55 / 5-12-14
Soil Vapor ID: 5BSV-DG-503	Soil Boring Backfill Time/Date: / Backfill Material:
Soil Vapor Well Completion Time/Date: 5-12-14 / 14:25	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0'	Surface Completion:
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

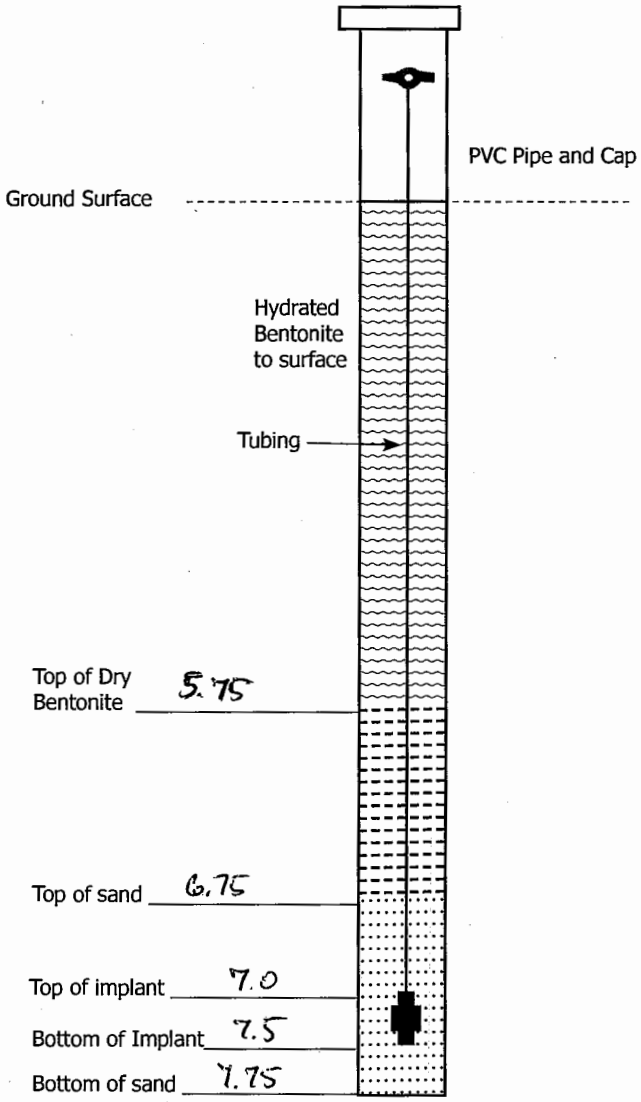
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Unpaved Road.					
0.0	X	48"	NONE			0	SP SW	Well Graded Sand with Silt and Gravel, (SW) dark gray (10YR 4/1), loose, dry, fine to coarse sand, fine gravel, non-cemented, non-plastic fines, few dark stains (Dark brown (10YR 3/3), no odors, fill	10	15	35	30	10
						1							
						2							
						3		@3' color changes to greenish gray (5BG 5/1). Silty sand (SM), color = ↑, loose, moist, fine to med sand, trace fine gravel, non-plastic silt, fill	TR	–	10	55	35
						4							
						5			–	–	–	60	40
						6	SM	@5.5' Silty Sand, grades w/o gravel and color changes to brown (10YR 5/3), moist fine sand and silt.					
						7							
						8	SW	@7.8' Color changes to very pale brown (10YR 7/4), dense w/ med and coarse sand [Well Graded Sand w/ Silt (SW)]	–	10	40	50	10
						9		@8' Bedrock					
								TD = 8' bgs; refusal on bedrock.					

Install probe 7.0' - 8.0'

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-512
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5B
Reviewed by:
Logged by: V. Vathonasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 8.0
Probe Completion Date/Time: 5-13-14 /
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: CETCO

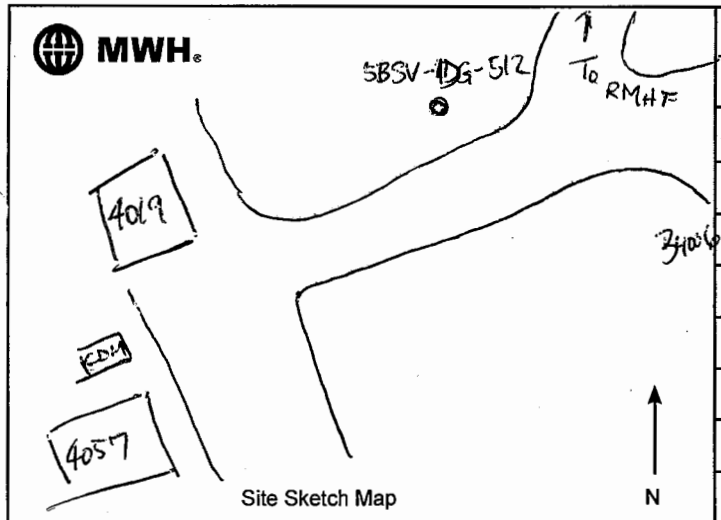
Hydrated Bentonite
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-512	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0905 / 5-12-14	Drill Finish Time/Date: 0930 / 5-12-14
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None	
Surface Completion: Soil vapor probe	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID: 5BSV-DG-512-6.75-7.75
Soil Vapor Well Completion Time/Date: 5-13-14
Soil Vapor Probe Depths (ft.bgs): 6.75-7.75
Soil Vapor Well Detail Completed (yes/no) yes

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: ~~Graded~~ Graded, mustard (V.V.)					
0.0						0	SM	Silty Sand with Gravel (SM), very pale brown (10YR 7/4), soft, dry, fine to medium sand, fine angular gravel (fill), very weak silt cement (easily friable), non-plastic fines, fill, no odors or staining	15	–	15	30	40
		42"	NONE			1			–	–	10	50	40
						2	SM						
						3		Grades to Silty Sand (SM), [No gravel @ 3.5' Minor iron staining					
0.0						4		@ 4.0' trace fine gravel	TR	10	15	40	35
						5		@ 4.5' Color changes to yellowish brown (10YR 5/4), coarse sand fragment, fill	–	10	15	40	35
		48"	NONE			6		@ 5.5' Color changes to very pale brown (10YR 7/4), dry, predominantly fine sand, soft, non-cemented, iron staining - brownish yellow (10YR 6/8), native soil.					
						7							
						8	Br	@ 8' Shale					
						9		TD = 8 ft, refusal on shale bedrock. Hole collapsed to 7.75 ft bgs. set probe @ 6.75-7.75 ft bgs (V.V.)					

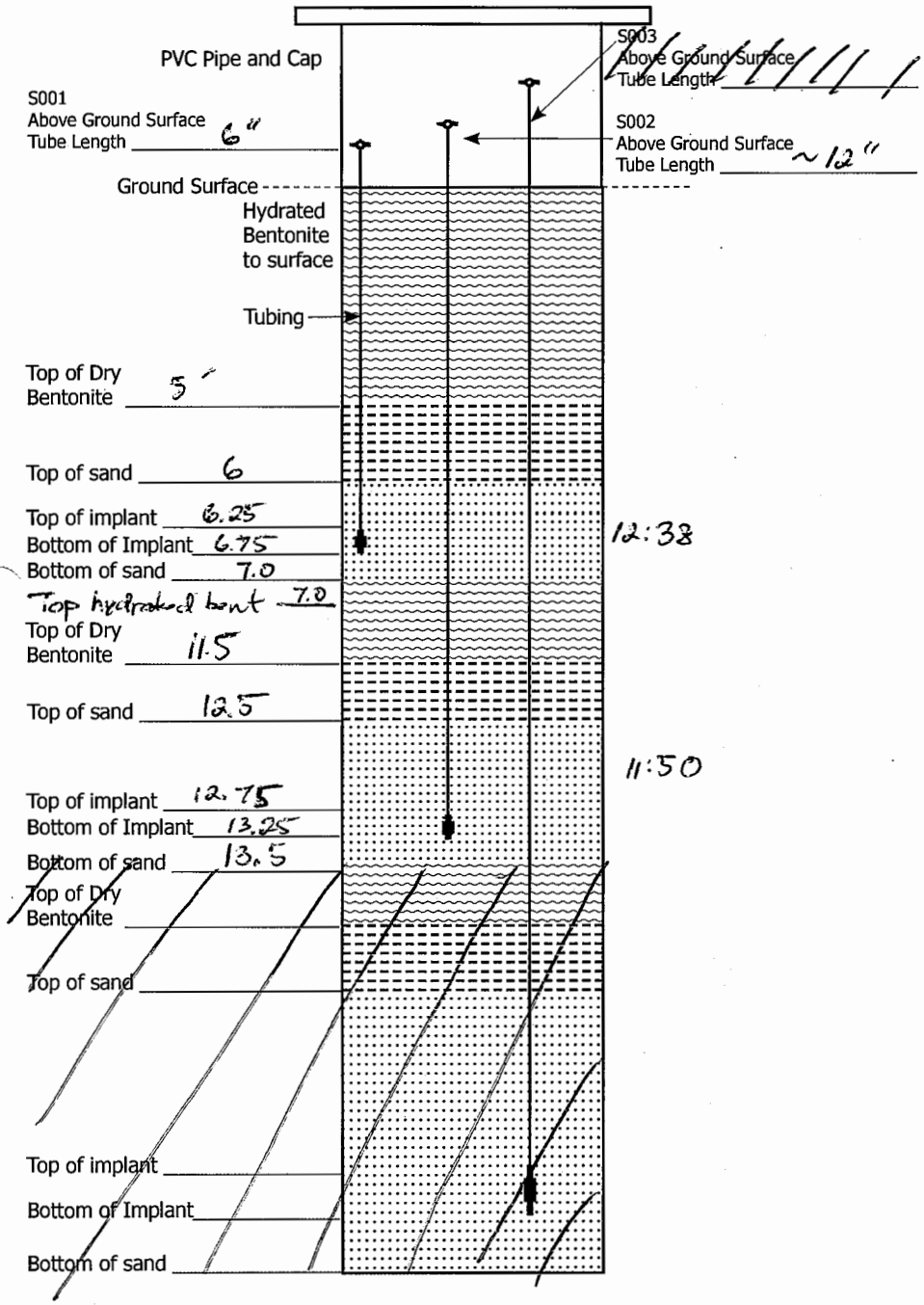
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5B3V-DG-516
Site: 5B
Drilling Contractor: EST
Borehole TD: 13.5'

Project: Phase 3 DoE Data Gap
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP/Macro
Probe Completion Date/Time: 1251 / 6-12-2014



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex Lapis Lustre

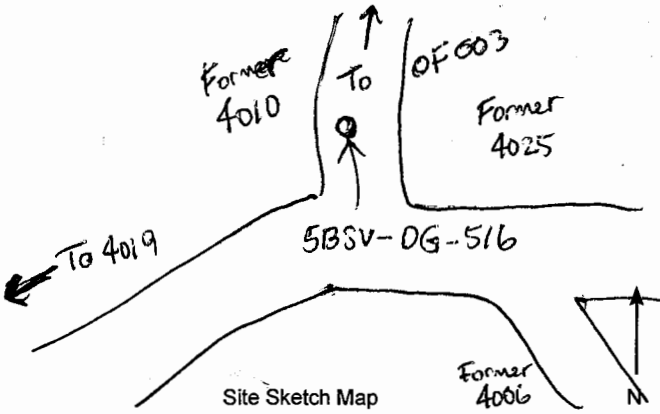
Dry Bentonite
Type: #8 (Crumbles/Granular)
Manufacturer: CETCO

Hydrated Bentonite
Type: Quick Grout (Gel)
Manufacturer: Baroid

Notes:
1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-516	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanavin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 DT	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 13.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1015 / 5-12-2014	Drill Finish Time/Date: 1045 / 5-12-2014
Soil Vapor ID: 5BSV-DG-516	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1251 / 5-12-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 6.0-7.0, 12.5-13.5	Surface Completion: Soil Vapor Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description
1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: Gravel road

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand w/ Gravel (SM), yellowish brown (10YR 5/4), med. dense, dry, mostly fine sand, fine sand, fine gravel, non-plastic silt, compacted road base, fill	10	–	10	50	30
0.0		*	Hand auger to 5' due to utilities			1							
						2	SP	soil becomes loose, grades w/o gravel	–	30	70	–	–
						3	SW	@ 2' Poorly Graded Sand (SP), light yellowish brown (10YR 6/4), loose, dry, medium and coarse sand, friable, fill	–	20	50	30	–
0.0						4		@ 3' Well Graded Sand (SW), light yellowish brown (10YR 6/4), loose, dry, fine to coarse sand, friable, fill, low recovery	–	–	–	60	40
		36"				5	SM						
						6							
						7		@ 4.5' Color Changes to (1) very pale brown (10YR 7/4)... Silty Sand (SM), dark brown (10YR 3/3), loose, dry, fine sand, non-plastic silt, non-cemented, fill, minor dark staining no odors	–	–	–	60	10/30
3.0						8							
						9		@ 6' color change to pale brown (10YR 7/3) @ 9.25'	–	–	–	60	40

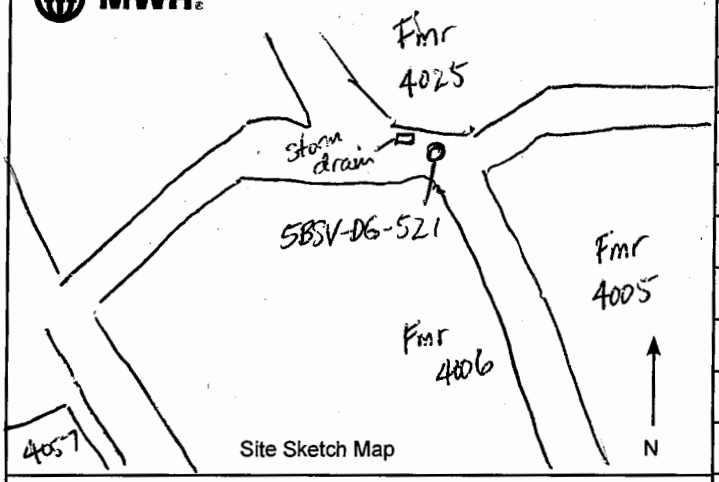
Continued page 2.

Boring ID: SBSV-DG-516 Project: Phase 3 DOE Data Gap Sampling Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	48"				10		@ ~~10~~ 9.25' - Thin Silty Sand w/ Clay layer, low plasticity clay (brittle)					
						11							
						12	GP	@11.5' Road Base (Gravel with Sand) (GP), ~~Clay~~ (Fr) light greenish gray (10GY 7/1) to very dark gray (N/3), dry, loose, fine angular gravel, coarse to fine sand, fill	55	30	10	5	—
						13	SP-SM						
						14		@12.5 Poorly Graded Sand w/ Silt (SP-SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, non-plastic silt, native soil					
						15							
						16		@13.5' Bedrock - Sandstone (Chatsworth)					
						17							
						18		TD = 13.5', Refusal on bedrock, Install vapor probes @ 12.5-13.5', and 6.0'-7.0'					
						19							
						20							
						21							
						22							
						23							
						24							
						25							
						26							
						27							
						28							
						29							

5BSV-DG-521

MWH.



Site Sketch Map

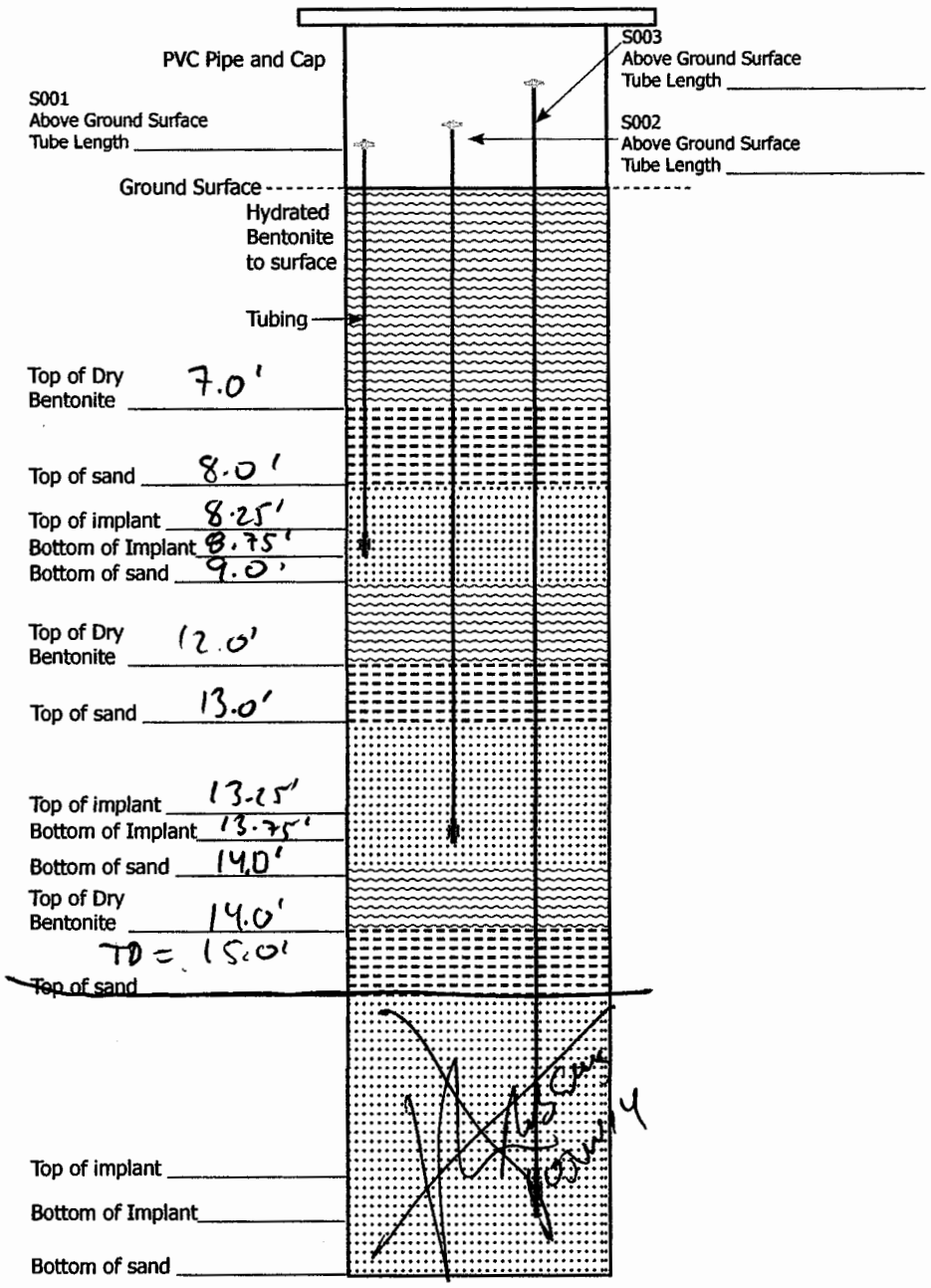
Boring ID: 5BSV-DG	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 3.8'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0906 / 5-14-14	Drill Finish Time/Date: 0920 / 5-14-14
Soil Vapor ID: NONE	Soil Boring Backfill Time/Date: 0930 / 5-14-14 — Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date:	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs):	Surface Completion: ~~Soil~~ Asphalt patch
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Asphalt	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Asphalt 4"					
0.0	X					1	SM	Silty Sand with gravel (SM), brown (10YR 5/3),	10	–	20	40	30
	X	46"				2	SW	loose, dry, fine to medium sand, fine angular gravel, non-plastic silt, non-cemented, dark asphalt stains, no odors, road base/fill	–	20	30	50	TR
	X		X		09:20	3		@1' Well Graded Sand (SW), pale brown (10YR 7/3), loose, dry, fine to coarse sand, trace silt, fill	–	–	10	50	40
	X			SVL-521-395B-SB		3.0-3.5 4	SM						
						5		Silty Sand (SM), yellowish brown (10YR 6/6), loose, dry, predominantly fine sand, medium sand, silt, fill					
						6							
						7		@3.8' Sandstone, weathered.					
						8		TD = 3.8', refusal on bedrock, encores collected 3.0-3.5' bgs. No vapor probes installed.					
						9							

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5B SV_04-S25
Project: Phase 3 DOE Data Gap Sampling 2014
Job #: 10503982.3050106/10503982.3060106
Site: 5B
Logged by: Rosenis
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400
Borehole TD: 15.0' bgs
Borehole Diameter: 2.25"
Probe Completion Date/Time: 10 JUN 14 12:20



Vapor Implant Specs

Material: Stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3 sand
Manufacturer: Lonex

Dry Bentonite

Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite

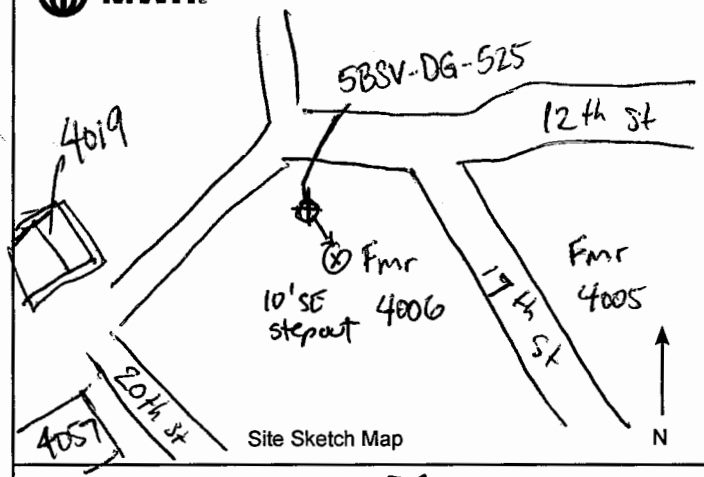
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-525	Sheet 1 of ~~1~~ 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	15'
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): ~~1.25'~~
Drill Bit Type: Macrocore 10 JUN 14 10:50	11:40 10 JUN 14
Drill Start Time/Date: 0830 / 5-14-14	Drill Finish Time/Date: 0844 / 5-14-14
Soil Vapor ID: NON 5BSV-DG-525	Soil Boring Backfill Time/Date: ~~5-14-14~~ 0850 5-14-14 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: ~~N/A~~ 10 JUN 14;	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): ~~N/A~~ 8.0-9.0, 13.0-14.0	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no) attached	Type of Refusal: ☐ Bedrock ☒ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Graded fill, old road to B4006	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0		~~48"~~ 45"	NONE			0	SM	Silty Sand (SM), brownish yellow (10YR 6/6), loose, dry, fine to medium sand, ~~fine~~ V.V. trace fine gravel, fill. (@ 1.25' Concrete - refusal) before stepout Layer of base gravel 5.0-5.3' bgs ~~TD=1.25', Refusal on concrete.~~ ~~2nd attempt also encountered concrete~~ 5.0-14.0'	TR	-	20	55	25
0.0 ppm		48"				4		Poorly graded sand (SP), yellowish brown (10YR 5/6). loose, slightly moist. Mostly fine sand (80), little silt (15), few medium sand (5) Base gravel throughout, some occasional cobble clasts, weathered w/ oxide rinds. Base pea gravel layer (6" at 11.5' bgs). Base gravel fraction increases from 12'-13' bgs to poorly graded gravel (GP).					
0.2 ppm		5.5' bgs	PID			5			—	—	5	80	15
0.0 ppm		36"				8	SP						

QA/QC
Surficial media boring log rev 2-25-2014

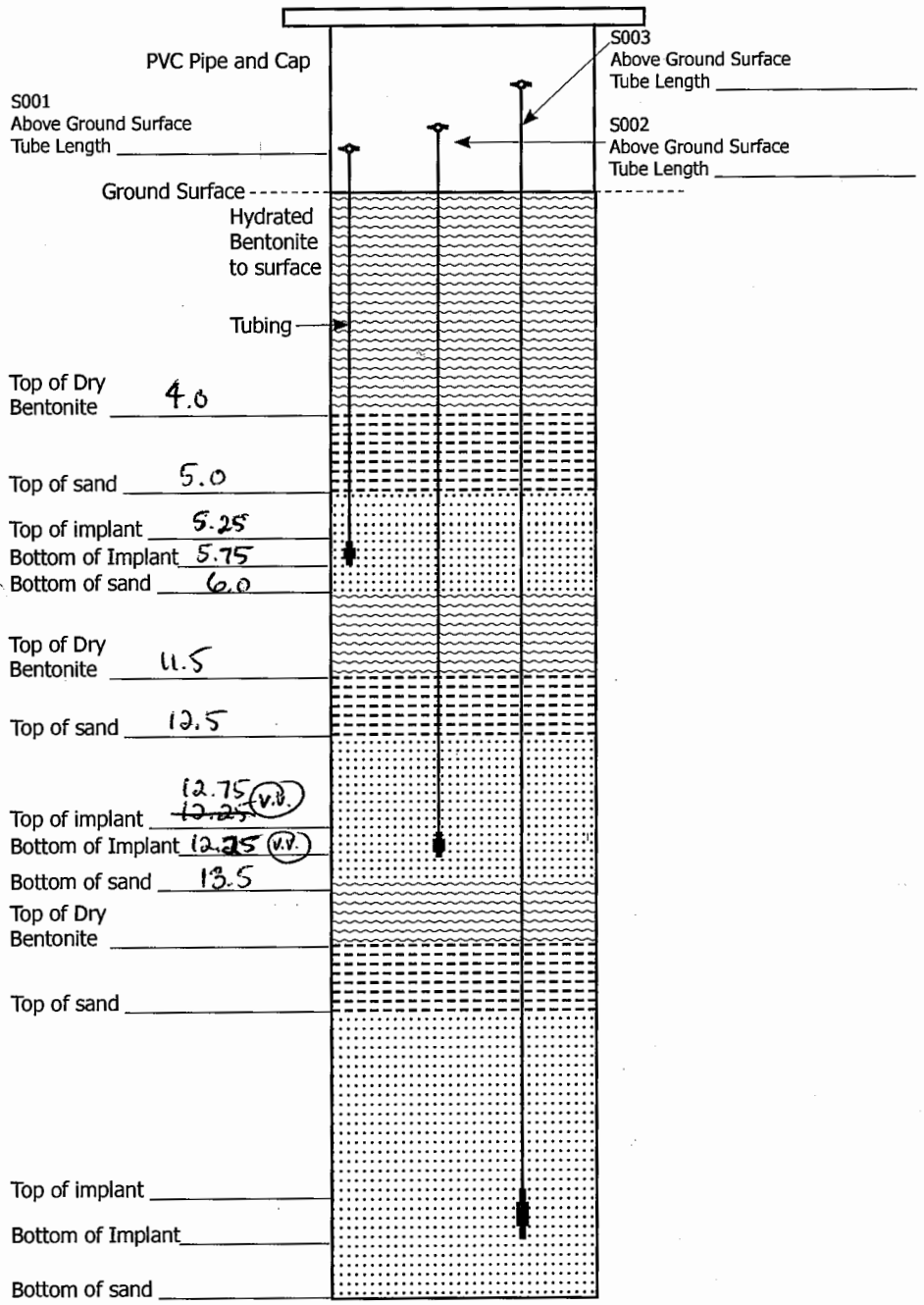
Boring ID: SBSVDG525 Project: Phase 3 DOE SVDG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10							
						11	SP	14.0-15.0 Poorly graded sand. (SP) yellowish brown (10YR5/8), loose, slightly moist, mostly fine sand (65), little medium sand (20), little silt (15), no stain, no odor, Native weathered bedrock last foraminifera in shale.					
0.0 ppm		36"				12			30	10	20	30	10
						13							
						14	SP		-	-	20	65	15
					TD=	15							
						6		- Backfill hole to 14' bgs. w/ bentonite to avoid shale, and weathered bedrock. Will set two probes in fill.					
						7							
						8							
						9		TD = 15.0' w/ refusal on shale + weathered sandstone bedrock (mid-interbed).					
						0							
						1							
						2		- Piece of elec PVC at ~ 3.0' bgs.					
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-526
Project: Phase 3 DOE SV DG
Job #: 10503050105
Site: 5B
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 13.5'
Borehole Diameter: 2.25"
Probe Completion Date/Time: 5-13-14/1530



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

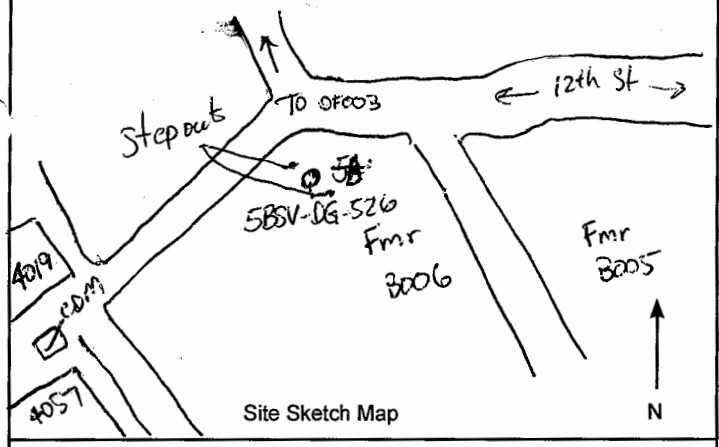
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-526	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 13.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1450 / 5-13-14	Drill Finish Time/Date: 0830 / 5-14-14		
Soil Vapor ID: 5BSV-DG-526	Soil Boring Backfill Time/Date: 0845 / 5-14-14	Backfill Material: Med Chips / Soil cuttings.	
Soil Vapor Well Completion Time/Date: 1530 / 5-13-14	Observations: ☒ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 12.5-13.5, 5.0-6.0	Surface Completion: None / Soil vapor probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☐ Bedrock ☒ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Gravel road to Fmr B4006					
								Silty Sand (SM), very pale brown (10YR 7/4), loose, dry, fine sand, non-plastic silt, no odor, no stains, fill	–	–	–	65	35
		48"				1							
						2							
						3		@3' Color changes to yellowish brown (10YR 5/4)					
						4		VV. @3.5' Piece of concrete and steel nail @4' Grades w/ gravel	10	–	–	60	30
		48"				5							
						6							
						7		Silty sand (SM), yellowish brown (10YR 5/4), no gravel	–	–	–	65	35
						8							
						9							

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Boring ID: SBSV-DG-526 Project: Phase 3 DOE Soil Vapor Data Gap Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	36"				10							
0.0	X					11	ML	@11' Silt (ML), yellow (10YR 7/6), dense, dry, very low plasticity silt, no odors or stains, ~~native soil~~ fill	-	-	-	-	100/
	X	30"	NONE			12	SP SM	@12' Poorly Graded Sand w/ silt (SP-SM), brown (10YR 5/3), loose, dry, fine and med. sand, silt, fill	-	-	10	80	10/
						13		@13' Concrete w/ nail					
						14		*Note: Refused to (V.P.) on concrete or rebar at 13.5. Set probes at 12.5-13.5 and 5.0-6.0 in primary boring. Drill stepout on 5-14-14					
						15		5-14-14 - con't drilling - try to get past concrete.					
						16		0820 - Drilled 2 add'l holes 6 ft E and W with refusal at 13' and 12.75, respectively. Will re-drill after re-visiting facility diagram using a new ID					
						17							
						18							
						19							
						20							
						1		TD = 13.5, refusal on concrete. Vapor Probes installed at 5.0-6.0, 12.5-13.5'					
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

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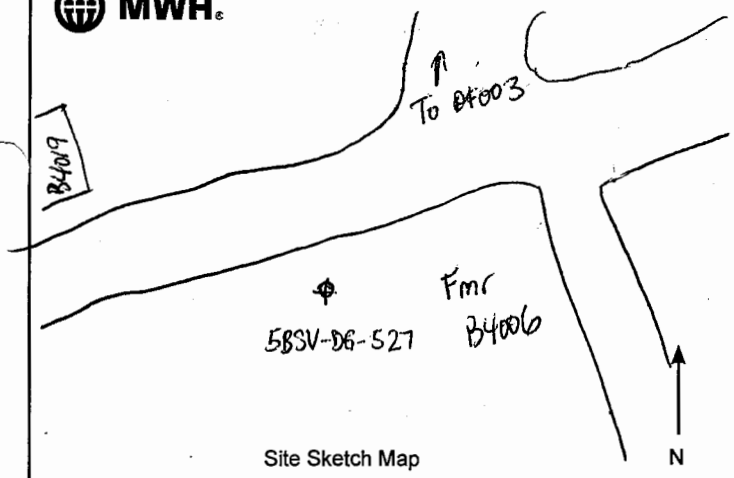


Site Sketch Map

Boring ID: 5BSV-DG-527	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes.
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 2'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1105 / 5-13-14	Drill Finish Time/Date: 1123 / 5-13-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1124 / 5-13-14 Backfill Material: Soil Cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X				NONE	0	SM	Surface Description: Graded surface, mustard Silty Sand (SM), very pale brown (10YR 7/4), loose, dry, fine sand, non-plastic silt, no odors, no stains, fill.	—	—	—	70	30
0.0	X	24"	NONE	NONE		1		@1' color changes to light yellowish brown (10YR 6/4); slight iron staining (brownish yellow 10YR 6/6).					
						2		@2' Weathered Sandstone, Chatsworth Fm					
						3							
						4		TD=2.0', refusal on bedrock, no vapor probe installed, no samples collected.					
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-530

Site: 5B

Drilling Contractor: EST

Borehole TD: 8.0'

Job #: 10503982.3050105/10503982.3060105

Reviewed by:

Rig Type/Method: Geoprobe 5400 / DP

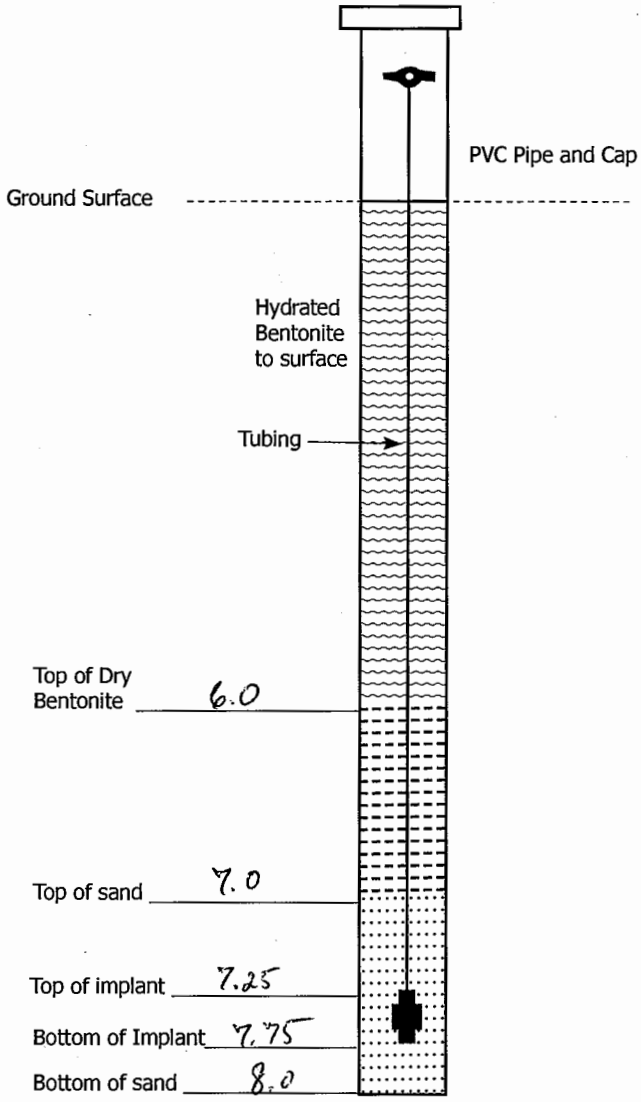
Probe Completion Date/Time: 1015 / 5-13-14

Project: Phase 3 DOE Data Gap Sampling 201

Logged by: V. Vathanasin

Driller: Morgan Hughes

Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel

Length: 6"

Diameter: 3/8"

Tubing Specs

Material: Teflon

Diameter: 1/4"

Color: clear

Sand Pack Specs

Grain Size: #3

Manufacturer: Cemex

Dry Bentonite

Type: CETCO #8

Manufacturer: CETCO

Hydrated Bentonite

Type: #8

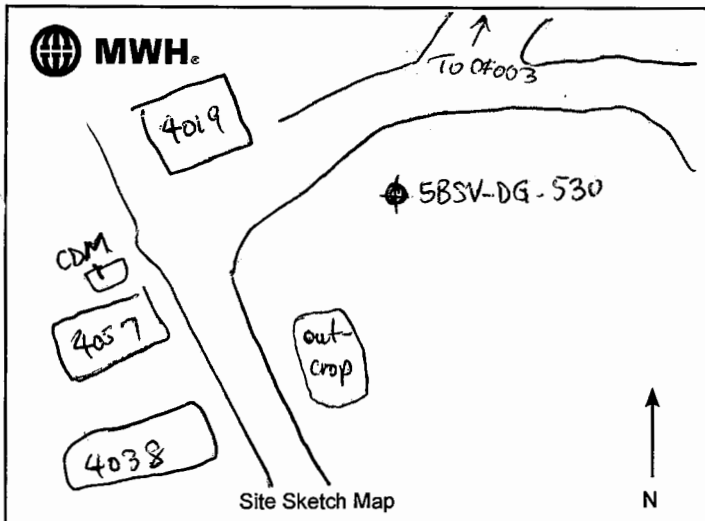
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-530	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vatharaain	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.0
Drill Bit Type: Macro core	
Drill Start Time/Date: 0915 / 5-13-14	Drill Finish Time/Date: 0935 / 5-13-14
Soil Vapor ID: 5BSV-DG-530-7.0-8.0	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 10:15 / 5-13-2014	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0	Surface Completion: Soil Vapor Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Graded fill, weeds					
0.0						0	SP-SM	Poorly Graded Sand w/ Silt (SP-SM), light yellowish brown (10 YR 6/4), loose, dry, fine sand, non-plastic silt, friable, fill	–	–	–	80	20
		48"	NONE	NONE	NONE	1							
						2		@2' grades with medium sand	–	–	30	50	20
						3	ML	@2.5, Silt w/ Sand (ML), very pale brown (10YR 7/4), med. dense, dry, non-plastic silt, fine sand, weak cementation, fill, no odors or stains.	–	–	–	40	60
						4							
0.0						5	SM	V.V. @4.5' Silty Sand (SM), very pale brown (10YR 7/4), loose, dry, fine to med. sand, non-plastic fines, non cemented V.V. @5 grades ~~to~~ w/ increasing medium sand	–	–	10	65	25
		48"	NONE	NONE	NONE	6			–	–	20	55	25
						7							
0.2						8	Br	Sandstone, weathered Chatsworth Fm.					
						9		TD= 8.0 ft, refusal on sandstone; install vapor probe @ 7.0-8.0 ft					

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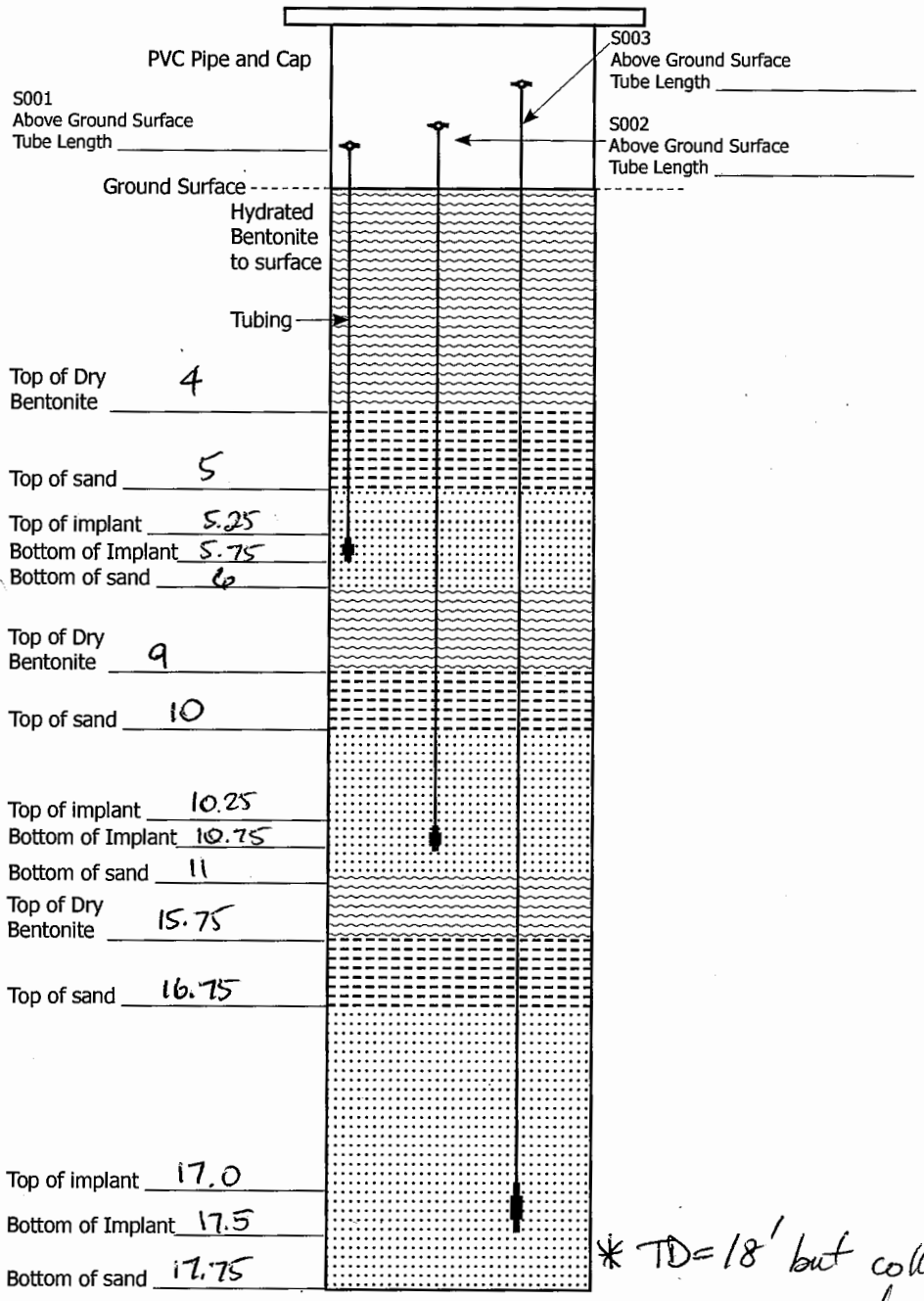
Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-531
Site: 5B
Drilling Contractor: EST
Borehole TD: 18, collapse to 17.75

Project: Phase 3 DOE SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982 (N.D.)
Reviewed by:
Rig Type/Method: Geoprobe 5400/DP
Probe Completion Date/Time: /5-13-14



* TD=18' but collapsed to 17.75 after tripping out.

Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: CEMEX

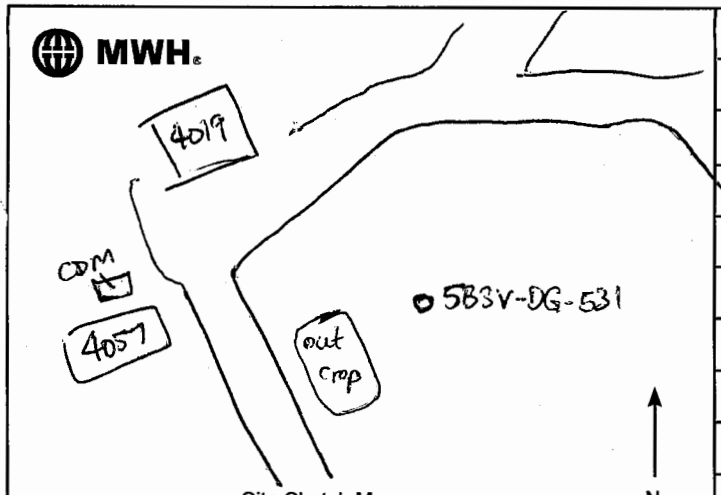
Dry Bentonite
Type: #8
Manufacturer: CETCO

Hydrated Bentonite
Type: #8
Manufacturer: CETCO

Notes:
1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-531	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B		
Logged By: V. Vathanesin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 18'		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 12:20 / 5-13-14	Drill Finish Time/Date: 1400 / 5-13-14		
Soil Vapor ID: 5BSV-DG-531	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: / 5-13-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, 16.75-17.75	Surface Completion: Soil Vapor Probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: Graded fill, scrub + mustard

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0					NONE	0	SM	Silty Sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, non-plastic silt, fill, no odors, no stains, slightly layered appearance.	–	–	–	65	35
		48"	NONE	NONE		1							
						2							
						3	CDO	Grades with less silt	–	–	–	80	20
						4	SP	Poorly Graded Sand (SP), pale brown (10YR 6/3), loose, dry, fine sand, trace silt, fill, no odors or stains.	–	–	–	100	TR
0.0						5			–	–	30	70	TR
		48"	NONE	NONE	NONE	6		@5' grades with medium sand	10	–	25	65	TR
						7		@6' Poorly graded Sand w/ Gravel (SP), pale brown (10YR 6/3), med. dense, dry, fine to medium sand, fine angular gravel, trace silt, no odor or stain, fill	–	–	–	65	35
0.0						8							
						9		@6.5' Silty Sand (SM), yellowish brown (10YR 5/4), med. dense, dry, fine sand, ~~non-pla~~ very low plasticity silt, no odors, no stains, fill					

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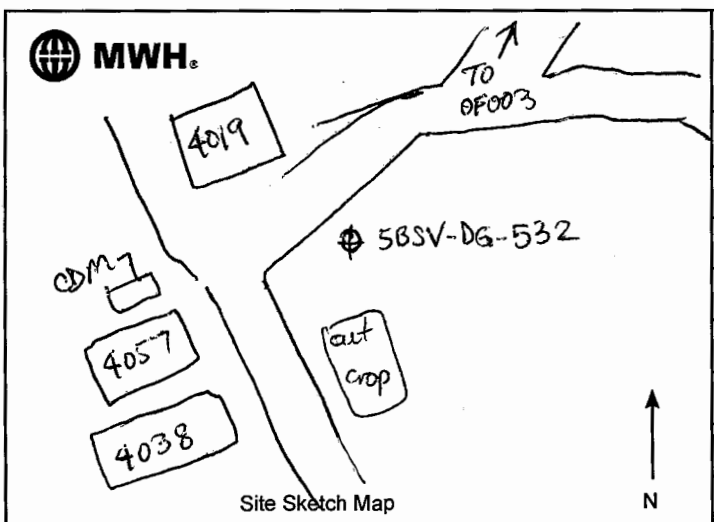
Boring ID: 5BSV-DG-531 Project: Phase 3 DOE SV Data Gap Sampling Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		48"	None			10	SM	Grades w/ a few clasts ~~of~~ (w/) of fine gravel (trace amounts)	TR	–	–	65	35
						11							
						12		* Acetate sleeve jammed inside Macrocore at 16' bgs. (30 mins to remove)					
0.0													
						13							
		48"	None			14							
						15	SP-SM	Grades w/o clasts	–	–	10	80	10
						16		@15' Poorly Graded Sand w/ Silt (SP-SM), light yellowish brown (10YR 6/4), dense, dry, fine sand, medium sand, silt, non-cemented, native soil, no stains or odors,					
		24"	None			17							
						18	Br	Sandstone, weathered Chatsworth Fm					
						19		TD = 18', refusal on bedrock. ~~Installed~~ (w/) Install probes at 17.0-18.0, 10-11', 5'-6'.					
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

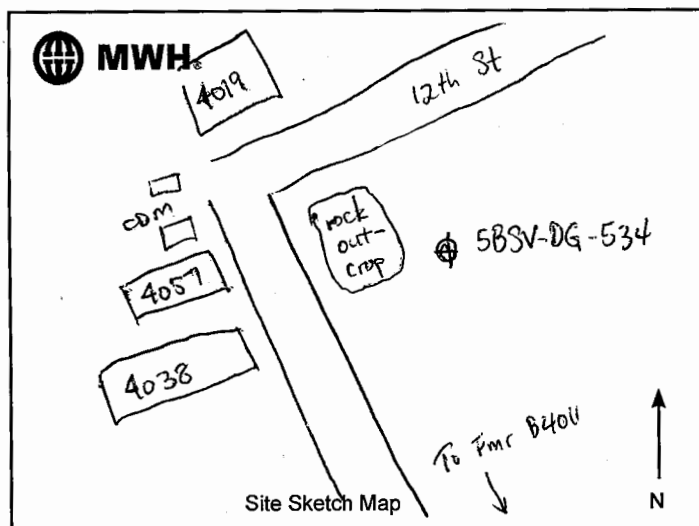
MWH.



Site Sketch Map

Boring ID: 5BSV-DG-532	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0820 / 5-13-14	Drill Finish Time/Date: 0845 / 5-13-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 0900 / 5-13-14 Backfill Material: Soil Cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Graded ~~backfill~~ fill, mustard					
0.0	X					0	SP-SM	Poorly Graded Sand w/ Silt (SP-SM), very pale brown (10YR 7/3), loose, dry, fine sand, non-plastic silt, non-cemented, fill	-	-	-	70	30
	X	48"				1							
						2	SM		10	-	5	50	35
						3		@2' Silty Sand w/ Gravel (SM), brown (10YR 5/3), med. dense, faint moisture, fine sand, medium sand, non-plastic silt, fine gravel (angular), no odors or stains, fill.	-	-	5	60	35
0.0	X	12"	X	532-MS 832-MSD	4.0-5.0 4.0-5.0	4							
					08:40	5	Br	@3' grades w/o gravel, iron stains					
						6		@5' Sandstone, weathered Chatsworth Fm.					
						7		TD=5', refusal on bedrock, no vapor probes installed. Collect soil sample @ 4.0-5.0 ft. (MS/MSD, dup)					
						8							
						9							



Site Sketch Map

Boring ID: SBSV-DG-534	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 513
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 3.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0750 / 5-15-14	Drill Finish Time/Date: 0810 / 5-15-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 0815 / 5-15-14 Backfill Material: Soil Cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

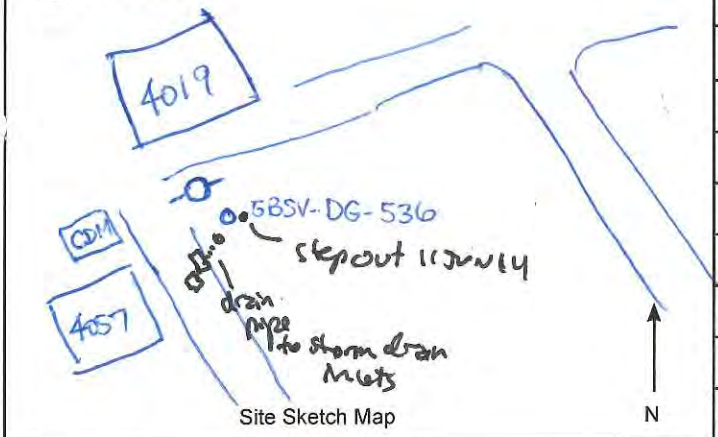
Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: Graded backfill, mustard.

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	42"				0–2	SM	Silty sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, med. sand, low-plasticity silt, no stains, no odors, fill. @2' color changes to pale brown (10YR 6/3)	—	—	20	40	40
0.3			X		08:10	3	SP-SM	Poorly Graded sand w/ silt (SP-SM), yellowish brown (10YR 5/6), loose, dry, fine sand, non-plastic silt, possibly weathered bedrock, native.					
SVL-534-SASB-SB-						3.0-3.5	Br	@3.5 Sandstone, weathered, Chatsworth Formation.					
						5–9		TD = 3.5', refusal on bedrock, no vapor probes installed, collect 3 encores and 4 oz jar. Stepped out 2ft E and W to confirm shallow refusal with similar results.					

MWH.

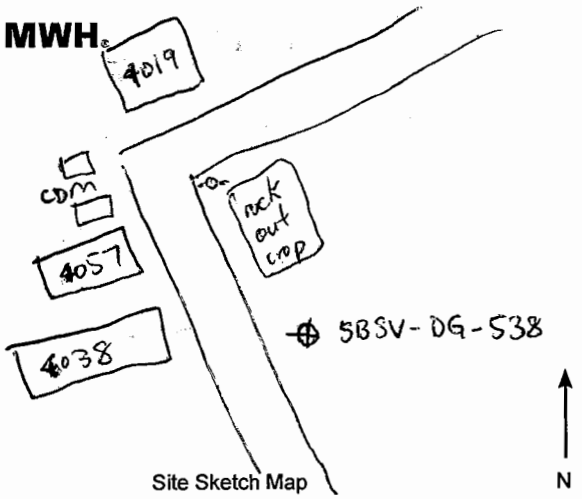


Site Sketch Map

Boring ID: 5BSV-DG-536	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 1.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0730 / 5-13-14	Drill Finish Time/Date: 0745 / 5-13-14
Soil Vapor ID: NONE	Soil Boring Backfill Time/Date: 0755 / 5-13-14 Backfill Material: Soil Cuttings
Soil Vapor Well Completion Time/Date: NONE	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): NONE	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no) NONE	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Graded surface, grass					
0.0	X	18"	NONE	NONE	NONE	0	SW-SM	Well Graded Sand w/ Silt (@ SW-SM), brownish yellow (10YR 6/6), loose, dry, fine to coarse sand, non-plastic silt, non cemented, fill, no odors or staining;	–	10	30	50	10
	X	11 JUN 14				1	Br	Bedrock - Chatsworth Sandstone					
						2		TD = 2.0' of 11 JUN 14					
						3		TD = 1.5', refusal on bedrock; No vapor probes installed and no soil samples collected.					
						4						Begin 09:41	
						5		• Sample collected at 1.5-2.0' bgs in fill @ 10:02 6/11/14				End 09:58	
						6		• SVL-536-SASB-5B-1.5-2.0					
						7		10 µRem, 18 cpm, 0.0 ppm					
						8		Stepped out 18" ENE of previous location to extract sample @ expected shallow refusal on siltstone bedrock					
						9							

MWH

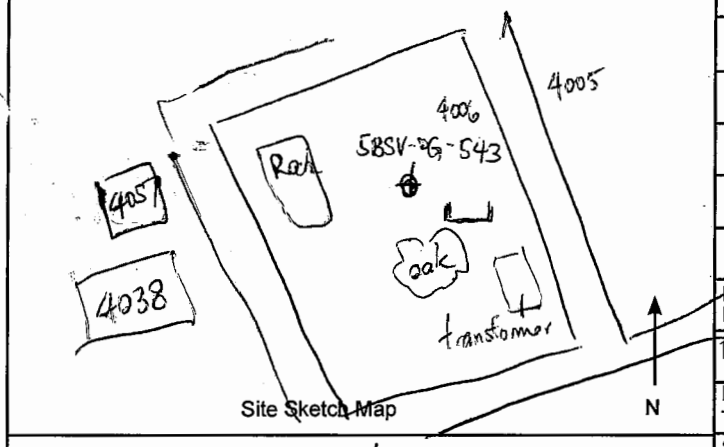


Site Sketch Map

Boring ID: 5BSV-DG-538	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400/DP	
Sampler Type: Macro core	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 20
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0830/5-15-14	Drill Finish Time/Date: 0850/5-15-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 0850/5-15-14 Backfill Material: Soil Cuttings.
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Graded backfill	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	24"				0	SM	Silty Sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, non plastic silt, fill, roots, dried grass	–	–	–	70	30
0.0	X		X	1	08:45	1	SP-SM	@1.5' yellow (10YR 7/8) iron staining	–	–	–	90	10
SVL-538-SA			5B-SB-		~~2.0-2.50~~ 1.5-2.0	3		Poorly graded sand w/silt brownish yellow (10YR 6/6), loose, dry, fine sand, silt, weathered bedrock, native soil. @2' Bedrock, sandstone					
						4							
						5		TD=2.0, refusal on bedrock, no probes installed, collect 3 encores 1.5-2.0 ft.					
						6		* Drilled 2 add'l borings E+W to confirm refusal w/ similar results					
						7							
						8							
						9							

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-543	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 2.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1335/5-14-14	Drill Finish Time/Date: 1345/5-14-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1355/5-14-14 Backfill Material: Soil Cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: weeds, mud cracks.

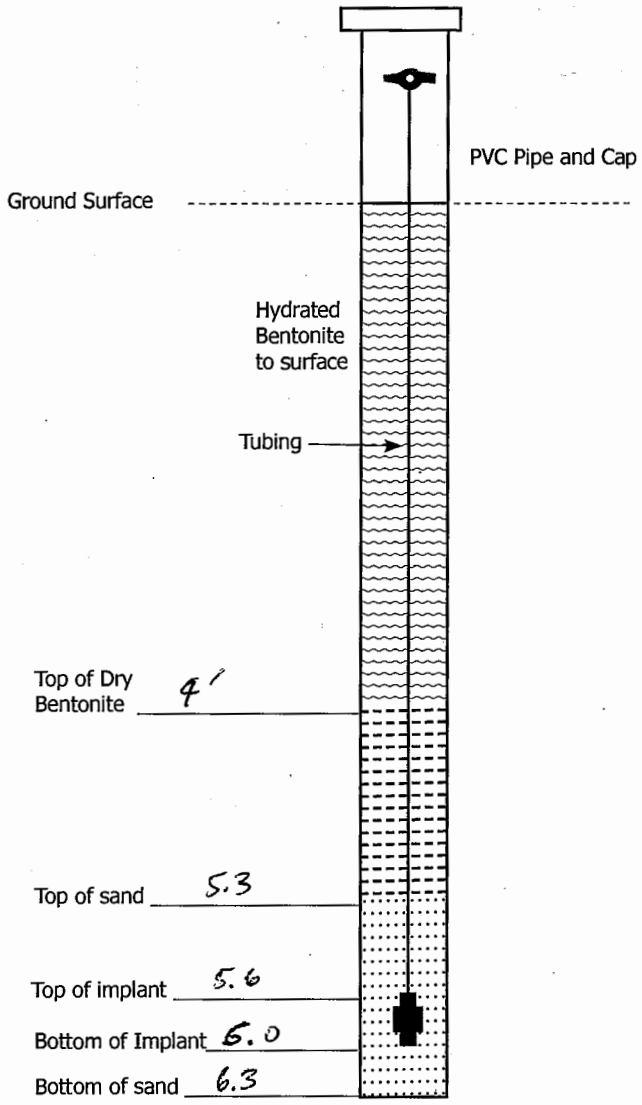
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0	X	30"	X			0–2.5	SM	Silty Sand (SM), very pale brown (10YR 7/4), loose, dry, fine to medium sand, no odors or stains, fill. @1' color changes to brownish yellow (10YR 6/6)	-	-	20	55	25
						2.5–3	Br	Bedrock, Sandstone, weathered (Chatsworth Fm)					

TD = 2.5', refusal on sandstone bedrock, no probes installed. Collect 3 encores and 4 oz jar.

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-552
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: 5B
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 6.5'
Probe Completion Date/Time: 1130/5-14-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: CEMEX

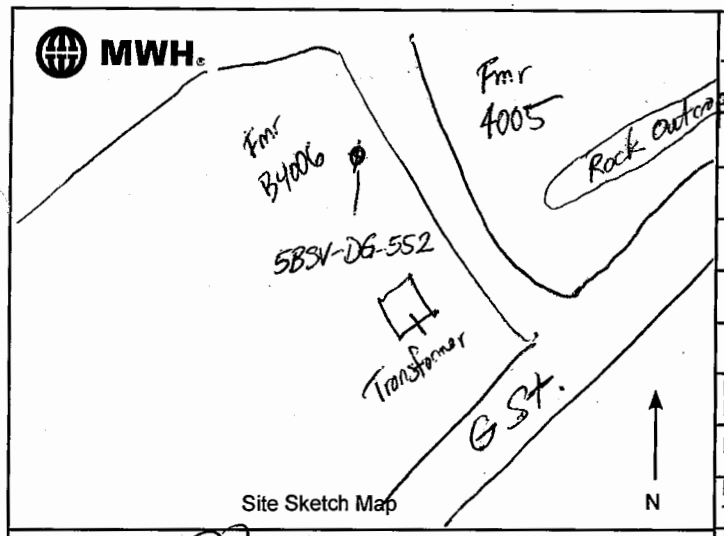
Dry Bentonite
Type: #8
Manufacturer: CETCO

Hydrated Bentonite
Type: #8
Manufacturer: CETCO

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-552	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 6.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1030 / (V.V.) 5-14-14	Drill Finish Time/Date: 1050 / 5-14-14
Soil Vapor ID: (V.V.) ~~N/A~~ 5BSV-DG-552	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: (V.V.) ~~N/A~~ 1130 / 5-14-14	Backfill Material: ~~Soil cuttings~~ N/A
Soil Vapor Probe Depths (ft.bgs): (V.V.) ~~N/A~~ 5.3-6.3	Observations: ☒ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Well Detail Completed (yes/no) (V.V.)	Surface Completion: (V.V.) ~~None~~ Soil vapor probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

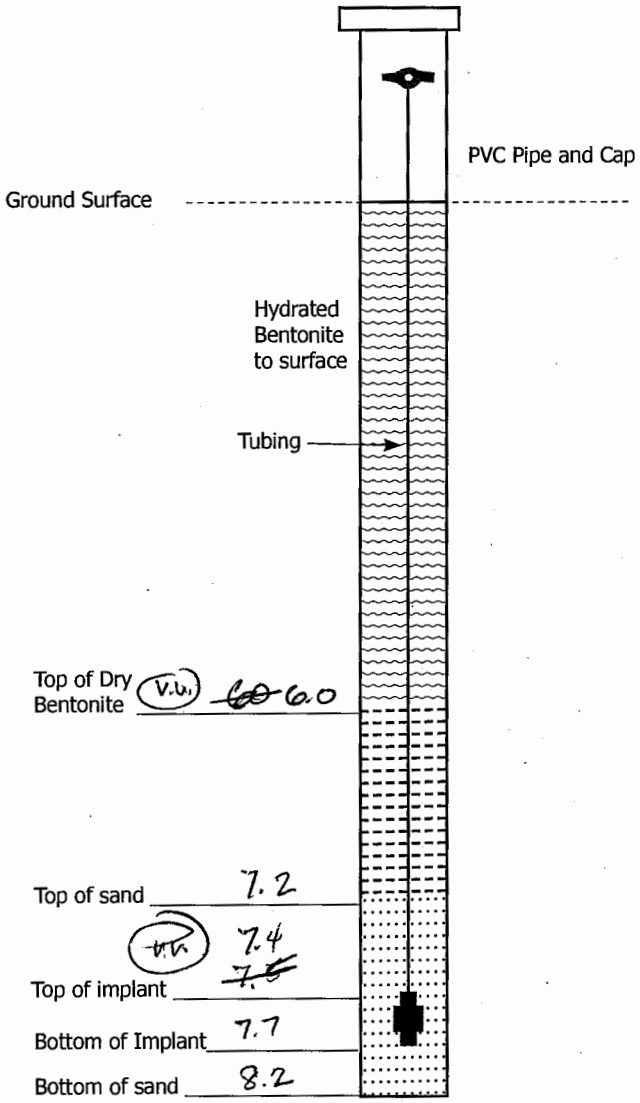
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (Surface Description: Graded, Fmr B4006)	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0						0	~~Fill~~ ML	Silt (ML), dark brown (10YR 3/3), med. dense, dry, low-plasticity silt, fine sand, no odors or stains, fill.	-	-	-	30	70
		48"	~~NONE~~			1	SM	Silty Sand (SM), yellowish brown (10YR 5/4) loose, dry, fine to medium sand, low-plasticity silt, fill. ~~Slightly~~ Slightly clayey	-	-	10	45 ~~45~~ (V.V.)	35/10
						2							
						3		@3' minor ~~iron~~ iron staining (yellowish brown 10YR 5/6), (V.V.)					
		~~12"~~ 14"	(V.V.) ~~45~~		~~5.3~~ ~~10:55~~	4		@4' color changes to dark brown (10YR 3/3					
						5	Br	@5' grades w/ red brick fragments (fill)					
						6		@5.2' weathered bedrock, sandstone					
						7							
						8		TD= ~~5.2'~~ 6.5', refusal on bedrock, ~~no~~ probes installed. ~~Collect soil samples at 4.5-5.0, @10:55~~					
						9		Install probe @ 5.3 ~~6.5~~ (V.V.) 6.3 ft (caved-in)					

QA/QC
Surficial media boring log rev 2-25-2014

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-555
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: 5B
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 8.25
Probe Completion Date/Time: 1325/5-14-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

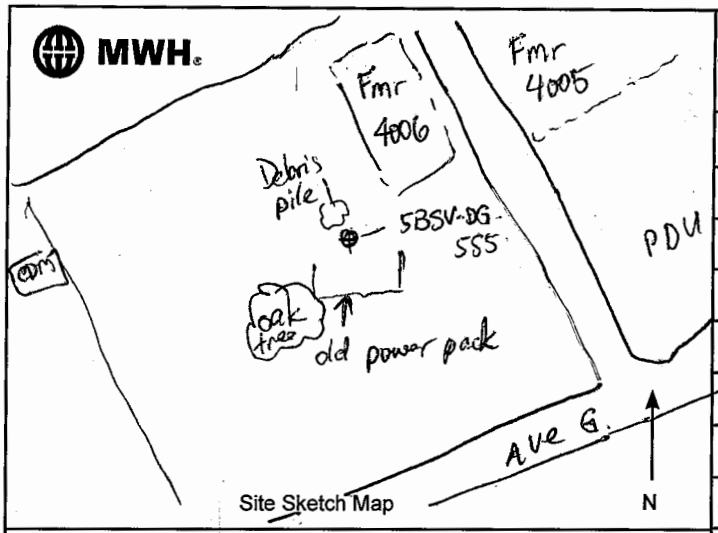
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-555	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.25'		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1240 / 5-14-14	Drill Finish Time/Date: 1315 / 5-14-14		
Soil Vapor ID: 5BSV-DG-555	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1325 / 5-14-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 7.2'-8.2'	Surface Completion: Soil vapor probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Unpaved Road.					
0.0						0	SM	Silty Sand with Gravel (SM), pale brown (10YR 6/3), loose, dry, fine to coarse sand, fine angular to sub angular gravel (road base), non-plastic fines, no stains or odor, fill	10	5	20	30	35
		36"				1							
						2	SM	@2' grades w/o gravel	–	5	25	35	35
							SM	@2.5 no coarse or medium sand	–	–	–	60	40
						3							
								@ 3.75' ~~weak~~ brown stains (10YR 5/3)					
0.0						4							
						5		@5' grades to →	–	–	10	70	20
		48"				6							
						7		@7' - brownish yellow (10YR 6/6) iron staining					
		3"				8		@ 8.25' Sandstone, weathered.					
						9		TD = 8.25' ft bgs; refusal on sandstone bedrock. Install vapor probe at 7.2'-8.2' bgs					

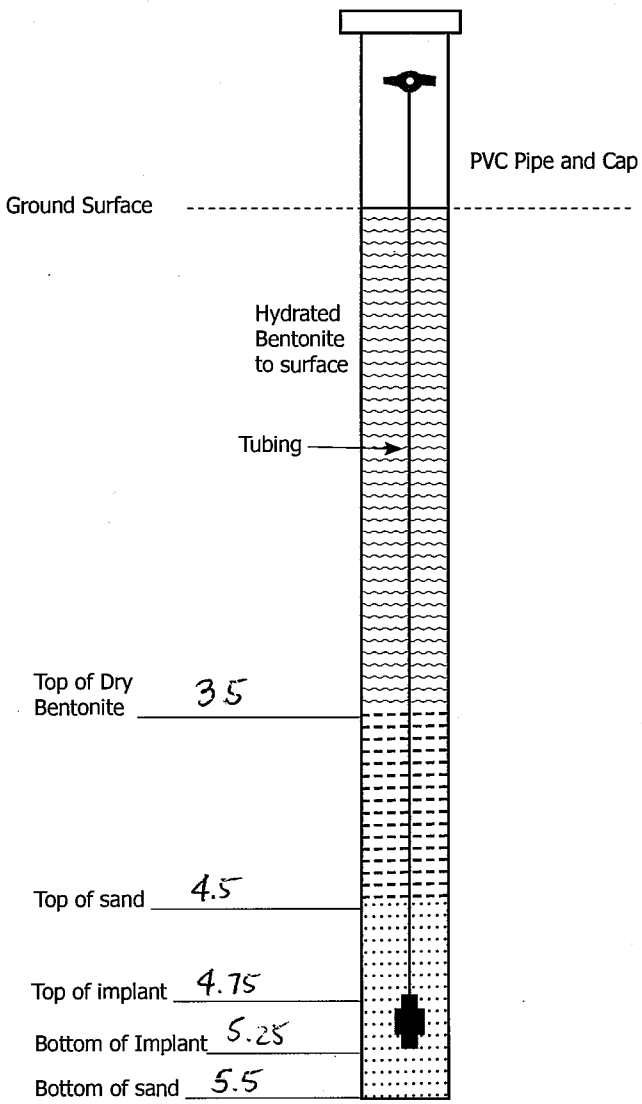
MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV-DG-557
Site: SA5B
Drilling Contractor: EST
Borehole TD: 9.0'

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 1445 / 6-2-14

Project: Phase 3 DOE Data Gap Sampling 20
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

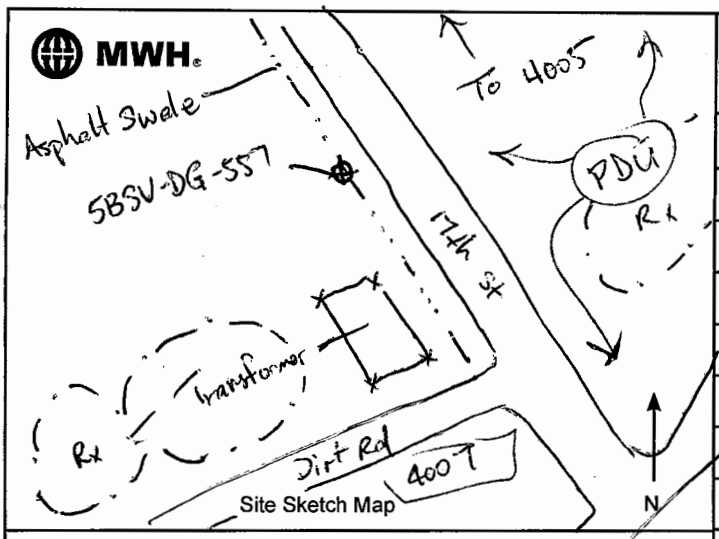
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

* Drilled into weathered bedrock (shale). Backfilled to bedrock / alluvium (fill) contact w/ medium chips.
hydrated (V.S.)

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-557	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 9.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1410 / 6-2-14	Drill Finish Time/Date: 1430 / 6-2-14
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A
Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None	
Surface Completion: Soil vapor probe	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID:	5BSV-DG-557
Soil Vapor Well Completion Time/Date:	1440 / 6-2-14
Soil Vapor Probe Depths (ft.bgs):	4.5-5.5
Soil Vapor Well Detail Completed (yes/no)	yes

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	AF	Surface Description: In asphalt drainage swale (V.V.)					
							SM	Asphalt 2"	--	--	--	60	40/
						1		Silty Sand (SM), dark brown (10YR 3/3),					
		42"	NONE					med. dense, dry, fine sand, non-plastic					
						2		silt, moderate silt cement, dark asphalt					
								staining, no odors, fill					
						3							
							SP-SM	@3.4 Poorly Graded Sand with Silt (SP-	--	--	--	80	20/
						4		SM), dark yellowish brown (10YR 4/6),					
								med. dense, dry, fine sand, non-					
								plastic silt, possibly native soil, no odors					
		30"	NONE			5		~~no stains~~ (V.V.) reddish yellow iron stain (5YR 7/8)					
							Br	@5.5 Weathered Shale.					
						6							
						7							
		24"	NONE										
						8							
						9		@9.0 Refusal in shale.					
								TD = 9.0, ~~refu~~ refusal in bedrock.					
								Set probe above bedrock at 4.5-5.5. Backfill w/ med. chips					

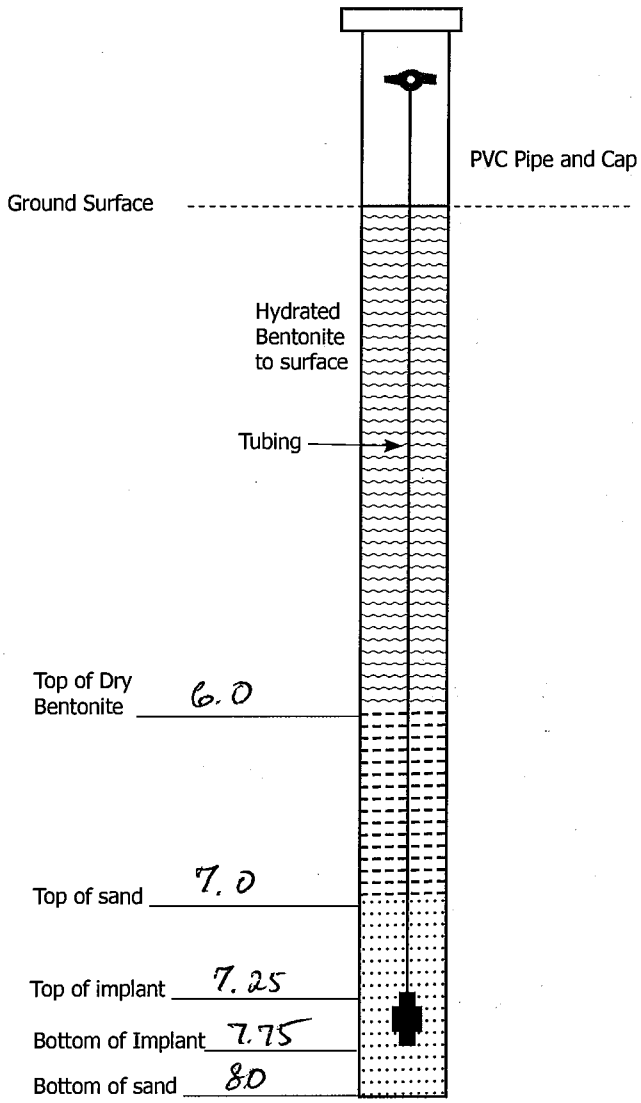
QA/QC
Surficial media boring log rev 2-25-2014

4.5 - 5.5.

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV-DG-560
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SB
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 8.0
Probe Completion Date/Time: 5-14-14/ 15:10
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: CETCO

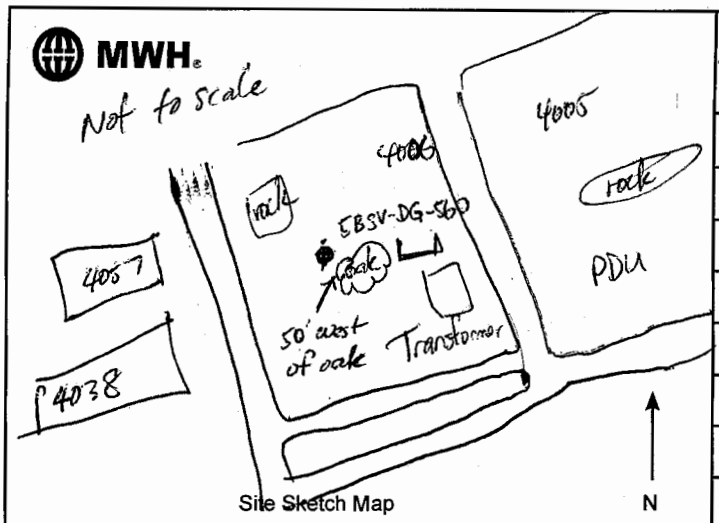
Hydrated Bentonite
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

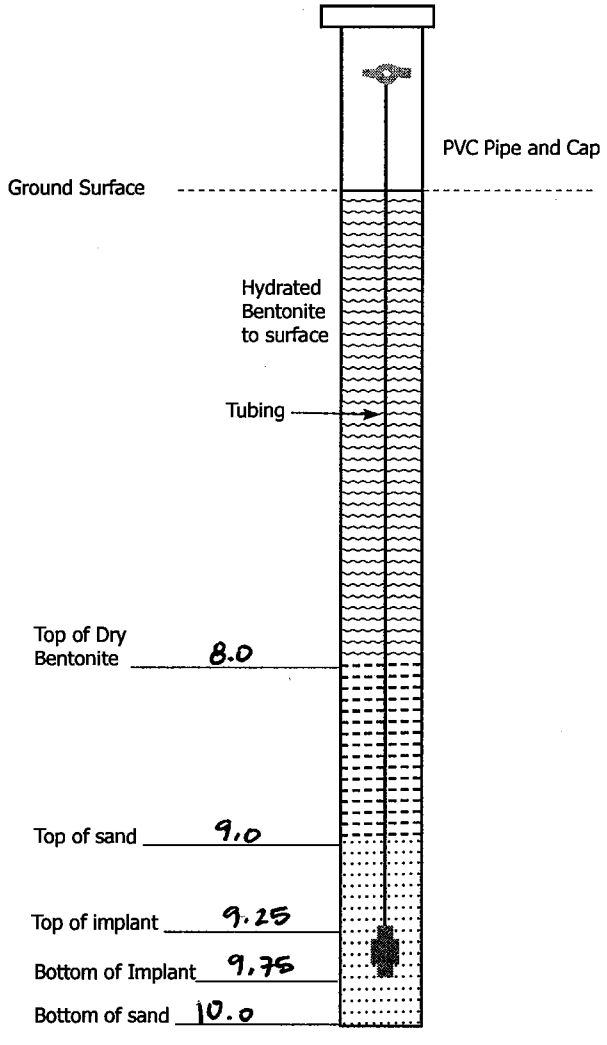
Boring ID: SBSV-DG-560	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1425 / 5-14-14	Drill Finish Time/Date: 1447 / 5-14-14
Soil Vapor ID: SBSV-DG-560-7.0-8.0	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 15:10 / 5-14-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Backfill, shrubs	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non-plastic silt, roots, fill	–	–	–	65	35/
		48"	NONE			1							
						2							
						3	SM-SC	Silty Clayey Sand (SM-SC), brown (10YR 5/3), medium dense, dry, fine sand, low plasticity silt/clay, no odors (V.V.) or stains, fill	–	–	–	60	30/10
0.0						4		@ 4' color changes to light yellowish brown (10YR 6/4)					
						5	SM		–	–	–	70	30
		48"	NONE			6	@5'	Silty Sand (SM), brownish yellow (10YR 6/6), loose, dry, fine sand, non-plastic silt, non cemented, fill, no odors (V.V.) ~~or stains~~, reddish yellow (5YR 6/8) iron staining.					
0.0						7							
						8	Br	Sandstone, weathered, Chatsworth Fm					
						9		TD= 8.0 ft, refusal on bedrock, install vapor probe at 7.0-8.0 ft					

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV-DG-S61
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA SB
Reviewed by:
Logged by: ANDREW PAYNE
Drilling Contractor: EST
Rig Type/Method: GEOPROBE 5400/D.P.
Driller: MARTIN KILHULLEN
Borehole TD: 10.0
Probe Completion Date/Time: 6/10/14 1400
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH

Site Sketch Map

Boring ID: 5BSV-DG-561	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 10.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1225 / 5-15-14	Drill Finish Time/Date: 1538 / 5-15-14
Soil Boring Backfill Time/Date: 1540 / 5-15-14	Backfill Material: Soil Cuttings
Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None	
Surface Completion: None	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID: NONE
Soil Vapor Well Completion Time/Date: N/A
Soil Vapor Probe Depths (ft.bgs): N/A
Soil Vapor Well Detail Completed (yes/no) N/A

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Backfill, old leach field					
		48"	NONE			0–1	SM	Silty Sand ~~w/clay~~ (SM), very pale brown (10YR 7/4), loose, dry, fine sand, non-plastic silt, roots, fill, ~~stiff clay~~ V.V.	–	–	–	~~60~~ 70	~~70/30~~ 30 V.V.
						2		grades w/ clay, stiff - low plasticity, no roots, no odors	–	–	–	70	20/10
						3–4	GW @ 3.5'	Gravel (GW), light gray (10YR 7/1), fine to coarse, angular to subangular gravel, leach field.					
		54"	NONE			6		TD = 10.5' bgs, refusal on shale bedrock. Stepped out 3 times to east and encountered refusal between 1.5 - 2.0 ft in Sandstone (i.e. not in leach field)					
		12"	NONE			9–10	SM	~~Clayey~~ Silty Sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine to med. coarse (HP) sand, non-plastic silt	–	–	–	65	35

Br @10.5 Shale bedrock ; ~ 3" WEATHERED SANDSTONE (HP)

6/10/14 @ SREPOUT SV PROBE INSTALL GRAVEL @ 5-6' (HP) @ 1330

QA/QC
Surficial media boring log rev 2-25-2014

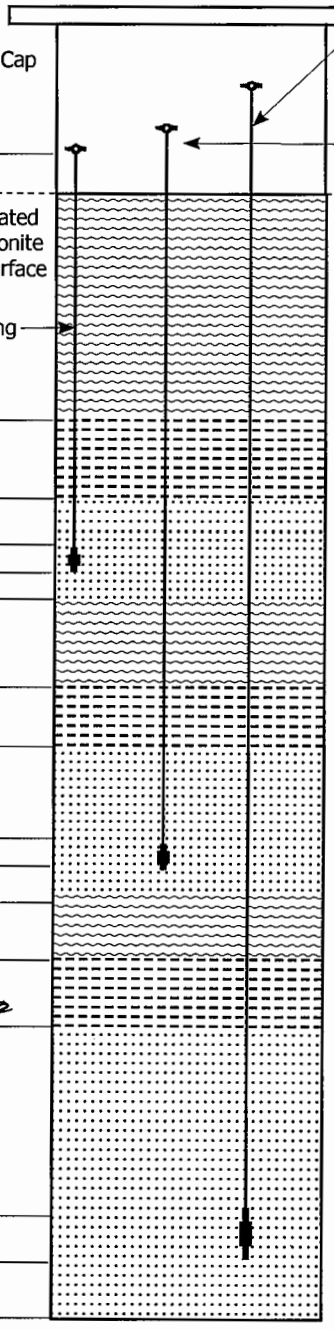
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-562
Site: 5B
Drilling Contractor: EST
Borehole TD: 125

Project: Phase 3 DOE SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 5-15-14/10:50



PVC Pipe and Cap

S001 Above Ground Surface Tube Length: 8"

S003 Above Ground Surface Tube Length: N/A

S002 Above Ground Surface Tube Length: 1.25"

Ground Surface

Hydrated Bentonite to surface

Tubing

Top of Dry Bentonite: 4

Top of sand: 5

Top of implant: 5.25

Bottom of Implant: 5.75

Bottom of sand: 6

Top of Dry Bentonite: 9.5

Top of sand: 10.5

Top of implant: 10.75

Bottom of Implant: 11.25

Bottom of sand: 11.5

Top of Dry Bentonite: 11.5

Top of sand: V.V. ~~10~~ ~~11.5~~

Top of implant: —

Bottom of Implant: —

Bottom of sand: V.V. 12.5

* Backfill up to 11.5'

Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.

Single Soil Vapor Probe Construction Diagram

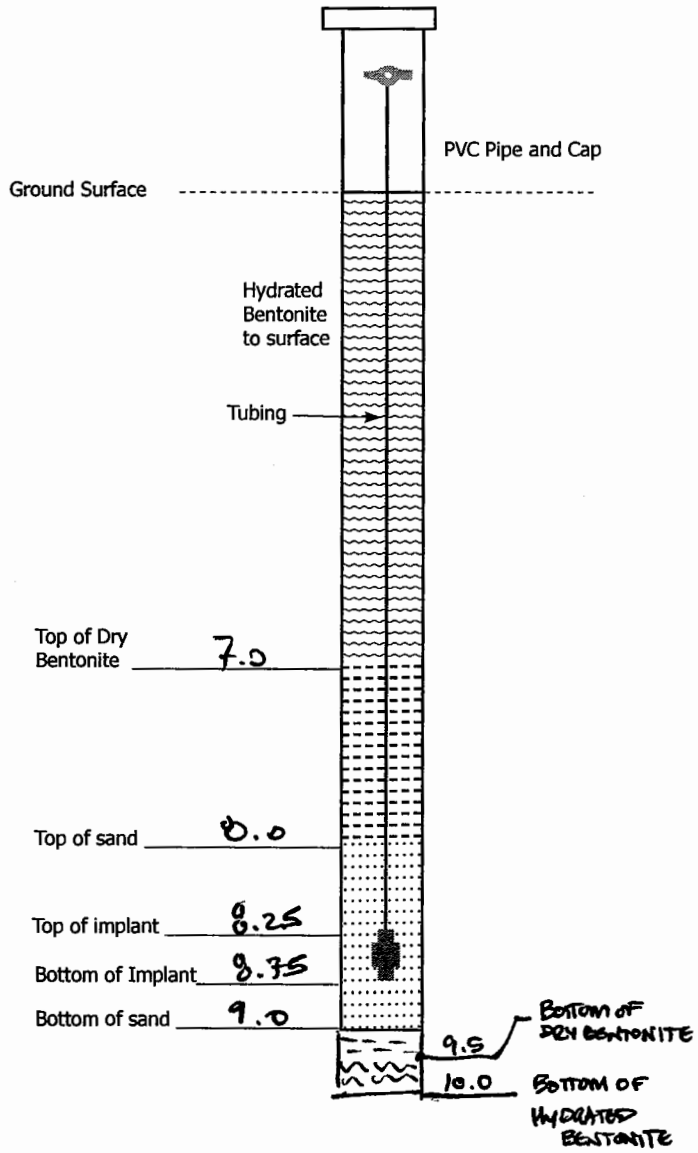
Probe ID/Soil ID: SB SV - DG - 562
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 2014

Site: S4 SB
Reviewed by:
Logged by: ANDREW DAYNE

Drilling Contractor: EST
Rig Type/Method: GEOPROBE 6400 / D.P.
Driller: MARTIN HAMILTON

Borehole TD: 10'
Probe Completion Date/Time: 6/10/14 1450
Borehole Diameter: 2.25"

(RE-INSTALL - 6/10/14)



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

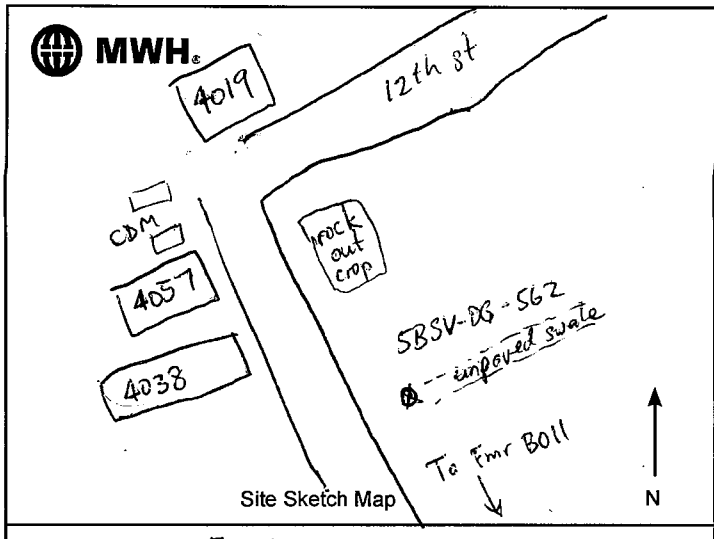
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SBSV-DG-562	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macro core			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs)	12.5	
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0925 / 5-15-14	Drill Finish Time/Date: 1030 / 5-15-14		
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A		
Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None			
Surface Completion: Soil Vapor Probe			
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None			

Soil Vapor ID:	SBSV-DG-562
Soil Vapor Well Completion Time/Date:	10:50 / 5-15-14
Soil Vapor Probe Depths (ft.bgs):	5.0-6.0, 10.5-11.5
Soil Vapor Well Detail Completed (yes/no)	yes

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Unpaved Swale, weeds. Silty Sand (SM), pale brown (10YR 6/3), med. dense, dry, fine to medium sand, low-plasticity silt, layered appearance, plastic shreds from ~~geosynthetic liner (?)~~, fill	-	-	10	55	35/
		48"	NONE			1							
						2		buried sandbags.					
						3	SM	Silty Sand w/ clay, brownish yellow (10YR 6/8), med. dense, dry, fine sand, low-plasticity fines, no more plastic scraps, fill, no odors or stains	-	-	-	60	30/10
0.0						4							
						5							
		40"	NONE			6							
						7	SP-SM	Poorly graded Sand w/ silt (SP-SM), yellowish brown (10YR 5/8), loose, dry, fine sand,	-	-	-	90	10
0.0						8	CL	very low plasticity silt, no odors or stains, native soil	-	-	10	80	10 /100
						9	SP-SM	Clay (CL), light brown (7.5YR 6/3), stiff, moist, med-plasticity clay, native					

con't page 2

Boring ID: SBSV-DG-562 Project: DOE Phase 3 Soil Vapor DG Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					10	SP-SM	@ 8.5' Poorly Graded Sand w/ Silt (SP-SM), light yellowish brown (10YR 6/4) with	-	-	-	65	10/25 ← @9.5
	X	12"	NONE			11	SP	brownish yellow (10YR 6/8) streaks (iron stain), fine sand, medium sand, non-plastic silt, f.u.	-	-	-	100	TR ← @10'
	X					12	Br	@ 9.0 dark brown (10YR 3/3) stain					
						13		@ ~~10.5~~ 9.5 (W) Clayey Sand (SC), very pale brown (10YR 7/4), med. dense, dry, fine sand, low plasticity fines, slightly layered, f.u.					
						14		@ ~~11~~ 10 (W) Poorly Graded Sand (SP), brownish yellow (10YR 6/6), loose, dry, fine sand, trace silt, f.u.					
						15							
						16		@12' Weathered Shale bedrock.					
						17		TD = 12.5' on weathered shale bedrock, install vapor probes at 5.0-6.0 and 10.5-11.5' bgs. Adjusted depths to (W) avoid clay layers.					
						18							
						19							
						20		6/10/14					
						1		- STEPOUT ~2' NE OF ORIGINAL INSTALL; SV PROBE INSTALLED @ 8.0-9.0'.					
						2		- SAMPLE COLLECTED @ 8.0-9.0' SVL-562-SAEB-SB-8.0-9.0 @ 1445					
						3		TD ON STEP @ REFUSAL OF 10'					
						4		- WEATHERED SHALE & CLAY @ 9-9.5' AND WEATHERED BR/SHALE @ 9.5-10'. LOG FROM PREVIOUS INSTALL SAME FROM 0-8'; SP @ 8-9'.					
						5							
						6							
						7							
						8							
						9							

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-~~63~~ 563 (V.V)

Job #: 10503982.3050105/10503982.3060105

Project: Phase 3 DOE Data Gap Sampling 201

Site: 5B

Reviewed by:

Logged by: V. Vathanasin

Drilling Contractor: EST

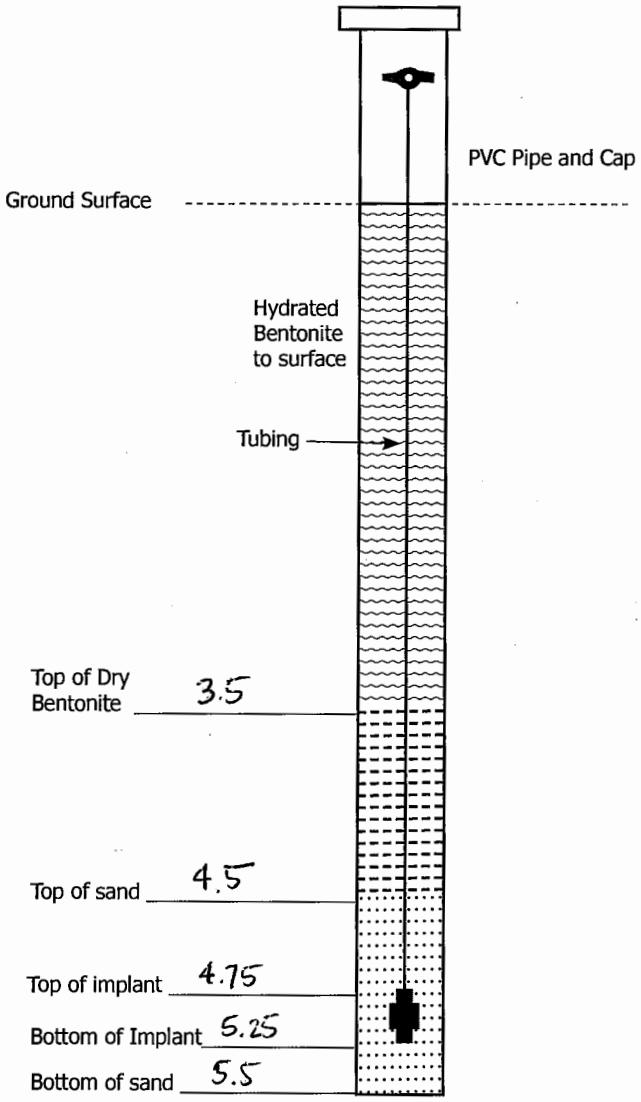
Rig Type/Method: Geoprobe 5400 / DP

Driller: Morgan Hughes

Borehole TD: 5.5

Probe Completion Date/Time: 5-15-14 / 12:25

Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel

Length: 6"

Diameter: 3/8"

Tubing Specs

Material: Teflon

Diameter: 1/4"

Color: clear

Sand Pack Specs

Grain Size: #3

Manufacturer: Cemex

Dry Bentonite

Type: #8

Manufacturer: CETCO

Hydrated Bentonite

Type: #8

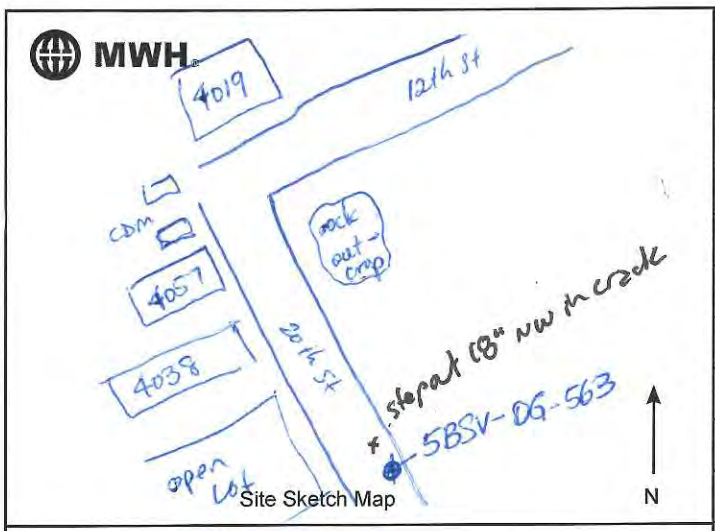
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH



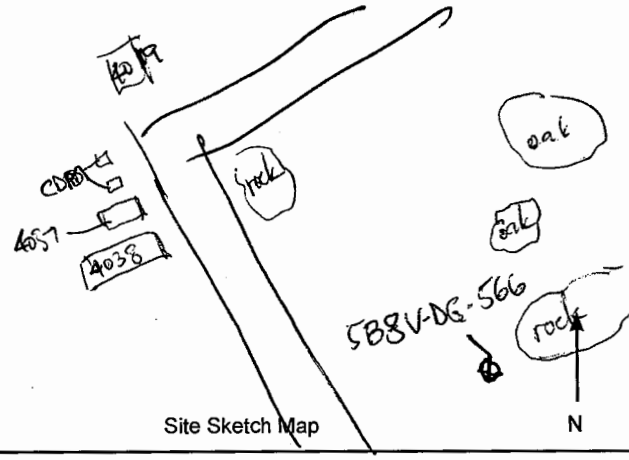
Site Sketch Map

Boring ID: 5BSV-DG-563	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 5.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1139 / 5-15-14	Drill Finish Time/Date: 1200 / 5-15-14		
Soil Vapor ID: 5BSV-DG-563	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 12:25 / 5-15-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5	Surface Completion: Soil Vapor Probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Asphalt swale	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	AF	0.3'(4") Asphalt	60	20 ~~30~~ (V.D)	20	10	TR
						1	GW-SW	Gravel w/ Sand (GW-SW), greenish gray (5GY 5/1), med. dense, moist, fine angular gravel, coarse to fine sand, trace silt, Road base, slight asphalt staining, no odors. w/silt SP-SM 4.0-5.2	–	–	–	80	20
		48"	NONE			2	SM				20	60	20
						3							
0.0						4		@0.6' Silty Sand (SM), brownish yellow (10 YR 6/6), (V.D) ~~soft~~ loose, dry, fine sand, non-plastic silt, no stains or odors, fill.					
		18"	NONE						Bedrock @ 5.0-8.0.				
0.0						5	@5 Br	Grades w/ yellow (10YR 7/8) iron staining	no shale interbed				
						6		@5.5 Sandstone, weathered.	@ 5.2' bgs; relict 45° bedding in weathered sandstone				
						7		TD = 5.5ft, refusal on sandstone. Install vapor probe at 4.5-5.5 ft	Begin boring 07:52				
11 JUN 14						8		@ 6/11/14 collected 0834 Sample SVC-563-SASA-SB-4.5-5.0	End boring 08:22				
						9		12 ppm, 84 cpm, 0.0 ppm					
								No probe set. TD ~ 8.0' bgs in weathered bedrock					

QA/QC
Surficial media boring log rev 2-25-2014

MWH.



Site Sketch Map

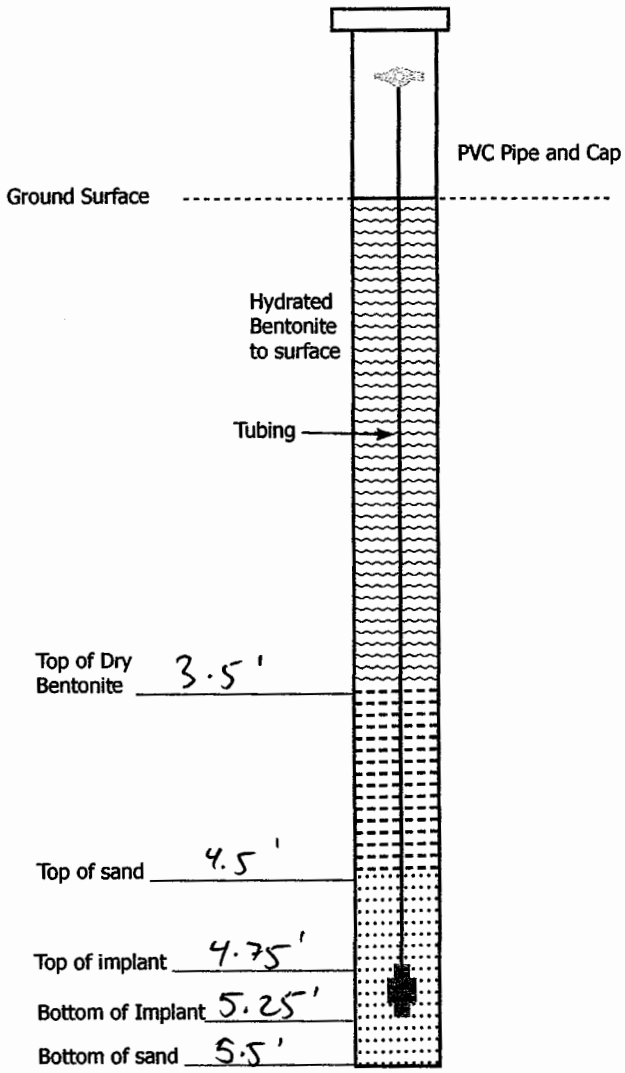
Boring ID: 5BSV-DG-566	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 2.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1440 / 5-15-14	Drill Finish Time/Date: 1458 / 5-15-14
Soil Vapor ID: None	Soil Boring Backfill Time/Date: 1500 / 5-15-14 Backfill Material: Soil Cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no) N/A	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Gravel, dried grass.					
	X					0		Silty Sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, non-plastic silt	–	–	–	70	30
	X	30"	(V.V.) ~~NO~~			1							
	X		X		14:58	2							
						2.5	SM	@25' Sandstone, weathered, Chatsworth formation					
	SVL-566		SASB-5B-20-25			3							
						4		TD = 2.5, refusal on sandstone bedrock. collected encores for lab analysis.					
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV DG-567
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SB
Reviewed by:
Logged by: RobEllis
Drilling Contractor: EST
Rig Type/Method: GEOPROBE 5400
Driller: MATT KILHULLEN
Borehole TD: 5.5' bgs
Probe Completion Date/Time: 02JUN14, 15:20
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

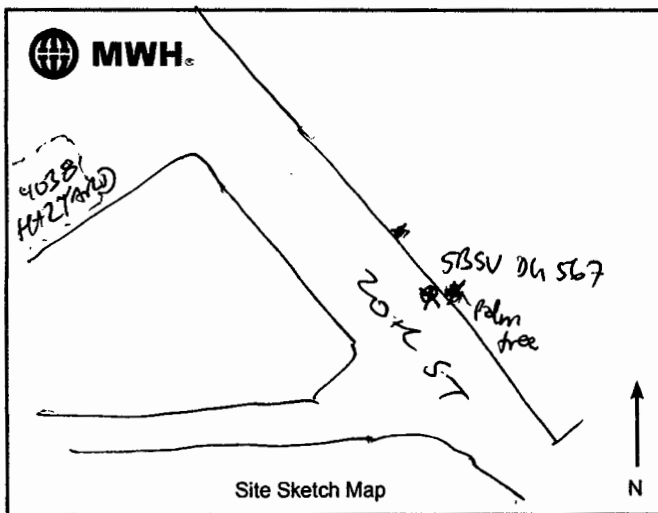
Dry Bentonite
Type: #8 crumble
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumble
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SBSV DG-567	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.3050106	Site: SB
Logged By: RWB EWS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTY KIGHMIER
Drill Rig Type/Method: GEOPROBE 5400	
Sampler Type: MACRO CORE	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 5.5'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 15:00 02JUN14	Drill Finish Time/Date: 15:16 02JUN14
Soil Vapor ID: SBSV DG-567	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 02JUN14, 15:26	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5 - 5.5	Surface Completion: Asphalt / SV. Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

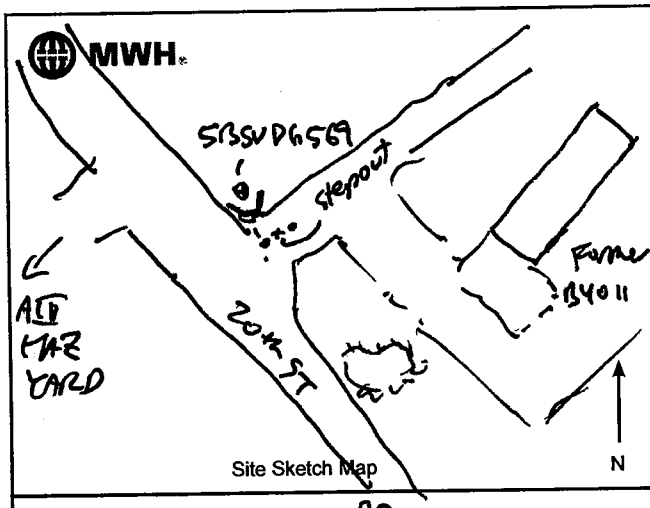
Soil Description
1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: Asphalt swale

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		48"				0		4" Asphalt					
						1		0.0 - 0.5					
								Silty sand (sm); brown (10YR 4/3), very loose, dry, Predominant fine sand (65), little silt (25), few med. sand (10), No stain, no odor, fill, There are gravels that are asphalt.	—	—	10	65	25
						2	SM						
						3							
								0.5 - 4.0					
		18"				4	SM / SP	Silty sand (sm), very dark gray (10YR 3/1), med. dense, dry, low plastic. Predominant fine sand (60), some silt (40), TR coarse & med grain sand, No stain no odor, fill	—	TR	TR	60	40
						5							
						TD							
						6		4.0 - 5.0					
	TD = 5.5' bgs					7		Silty sand (sm), dark yellowbrown (10YR 4/6) similar to above w/ gradational color change and less silt., roots.	—	10	60	30	
	Refusal on sandstone bedrock					8							
								5.0 - 5.5					
						9		poorly graded sand (SP), yellowish brown (10YR 5/4), loose, moist, Predominant fine sand (80), few med sand (10), few silt (10). No stain, no odor. Native.	—	—	10	80	10

QA/QC

MWH.



Site Sketch Map

Boring ID: SBSVDG569	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SB
Logged By: RWB Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Gilbert Dickason
Drill Rig Type/Method: Geoprobe / Manual Auger	
Sampler Type: Bucket auger / grab	
Borehole Diam (inch): 3-5"	Total Depth (ft.bgs): 3.1' bgs
Drill Bit Type: Bucket auger	
Drill Start Time/Date: 09:01 11 JUN 14	Drill Finish Time/Date: 09:19 11 JUN 14
Soil Boring Backfill Time/Date: 09:24 11 JUN 14	Backfill Material: Soil cuttings
Soil Vapor ID: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Well Completion Time/Date: N/A	Surface Completion: none
Soil Vapor Probe Depths (ft.bgs): N/A	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None
Soil Vapor Well Detail Completed (yes/no) N/A	

Soil Description
1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

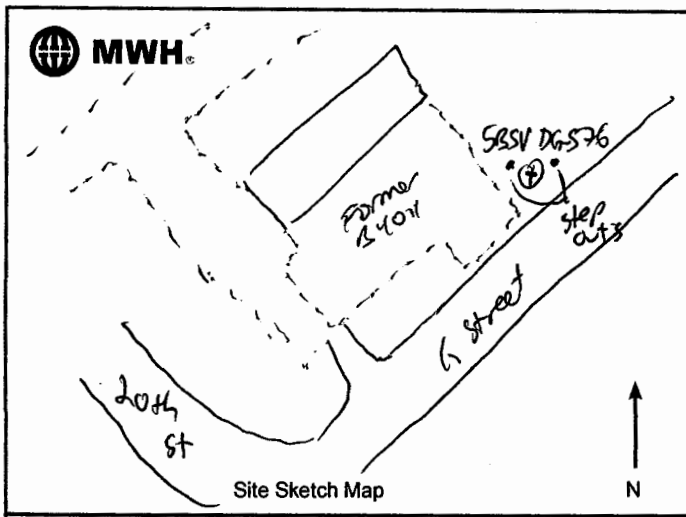
Surface Description: concrete in swale

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		38"				0		8" of concrete.					
						1		Bedrock @ 10" bgs.					
								shale, (2.5Y 4/4) olive brown					
						2		heel ~ 2" into weathered					
								bedrock, sandstone,					
						3		yellowish brown (10YR 5/6).					
								Refusal and TD @ 3.1'					
								bgs.					
Begin 10:47, End 10:52						4		Confirmed w/ second buried.					
Stepout to SE, ~5.0'								Concrete hole, ~1' ⌀.					
Fill to 3.0' bgs						5							
Sample at 2.5-3.0'													
bgs								* weathered sandstone is fine-	~	10	20	60	10
SLV-569-SASS-SB-2.5-3.0						6		medium grained, decomposed (W5)					
@ 10:54								very weak (R1), soft (H6), w/					
						7		oxide staining					
0.0 ppm						8		• No sample taken					
Refusal @ 3.5' bgs								• No probes installed					
on weathered sandstone						9				Stepout			
Fill is 10YR 4/6								TD = 3.1' bgs; in bedrock	—	—	15	65	20
yellowish brown								Bedrock @ concrete interface					
poorly sorted sand w/ silt													
(SP-SM)													

TD = 3.5' bgs

QA/QC
Surficial media boring log rev 2-25-2014

MWH



Site Sketch Map

Boring ID: SBSVDG-576	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.3050106	Site: SB
Logged By: Rob Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTY KILHULLEN
Drill Rig Type/Method: GEOPROBE 5400	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 4.3'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 11:50 02 JUN 14	Drill Finish Time/Date: 12:26 02 JUN 14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 02 JUN 14 13:30 Backfill Material: soil cuttings
Soil Vapor Well Completion Time/Date: NA	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: soil cuttings / bentonite seal
Soil Vapor Well Detail Completed (yes/no) N/A	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description SOIL,

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: SOIL, MUSTARD, HYDRATED

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		48"				0	SM	0.0 - 1.0					
						1		Silty sand (SM) dark yellowish brown (10YR 4/4), loose, dry, Predominant fine sand (65),	-	-	5	65	30
						2	SM	some silt (30), few medium sand (5) No stain, no odor, Fill material.					
						3		1.0 - 4.0					
		4"			TD	4.3	SP	Silty sand (SM) dark yellowish brown (10YR 4/6), loose, dry Predominant fine sand (60), some silt (40) and trace medium sand. No stain, no odor. Fill. Transitions to silty sand with 55% fine sand 35% silt and 10% medium sand at 2.5' bgs, same color 4.0 - 4.3	-	-	10	55	35
0.0 ppm	SV1-576-SB-SB-40					4.3							
13 mRem, 54 cpm						5							
	TD = 4.3 bgs on sandstone bedrock					6							
						7							
	• Backfill w/ soil cuttings @ 13:30					8							
						9		Poorly sorted sand (SP) lite yellow brown. Loose, dry Predominant fine sand (45), some coarse sand (40), few coarse sand and silt (5). No stain, no odor. Native	-	10	40	45	5

Stepouts to NE/NW to confirm TD

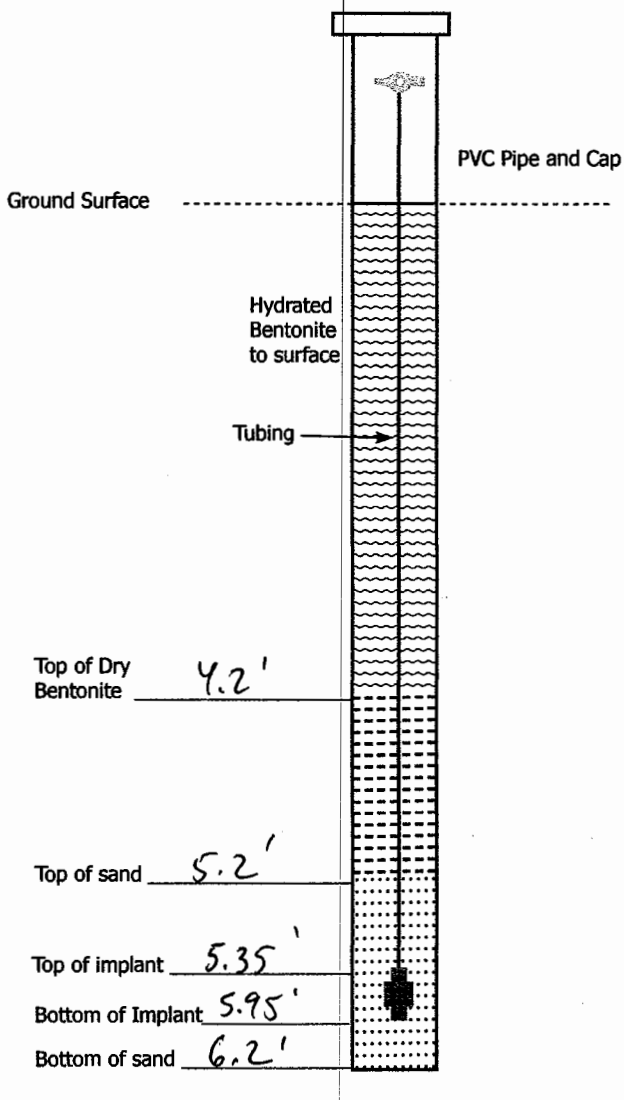
QA/QC

Surficial media boring log rev 2-25-2014

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV DG-577
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SB
Reviewed by:
Logged by: RAB Eccis
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/ Hand Auger
Driller: MARTY KILHULLEN
Borehole TD: 6.2' bgs
Probe Completion Date/Time: 04JUN14, 08:50
Borehole Diameter: 3.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

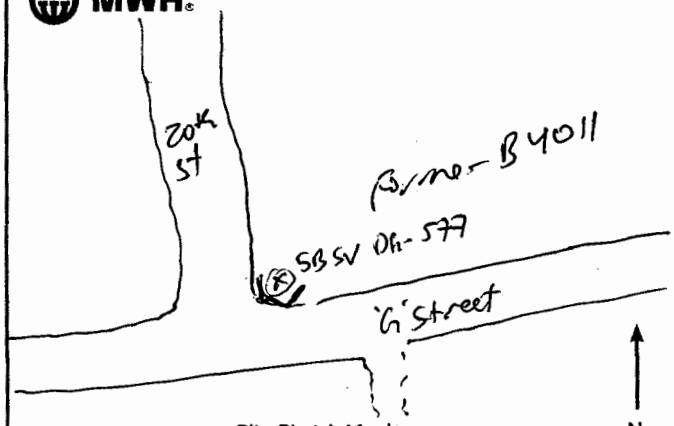
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SBSV DG-577	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10573982.3060706	Site: SB
Logged By: Rob Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kilholder
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Hand Auger	
Borehole Diam (inch): 3.25"	Total Depth (ft bgs): 6.2'
Drill Bit Type: Bucket	
Drill Start Time/Date: 04JUN14	Drill Finish Time/Date: 04JUN14
Soil Vapor ID: SBSV DG-577	Soil Boring Backfill Time/Date: NA / Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 04JUN14, 08:50	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.2' - 6.2'	Surface Completion: SV probe
Soil Vapor Well Detail Completed (yes/no): attached	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: culvert / concrete					
0.0 ppm						0		0-0.8' bgs = concrete					
						1	ML CL	0.8-2.5 silt/silt sand, clay/clay sand (ml-cl) Brown (10YR 4/3). moist, stiff. slow ~~rapid~~ dil, v. high dry, med tough med. plastic. Mostly fines (60%), fine sand (40). No stain, no odor fill material. Some base gravels (1-3 piece).	-	-	-	40	60
						2							
0.0 ppm						3	ML CL						
						4		2.5-4.5 silt/silt sand, clay/clay sand (ml-cl). dark yellowish brown (10YR 4/4). moist stiff, rapid dil, high dry, med tough med plastic. Mostly fines (55), some fine sand (45) No stain, no odor, Fill.	-	-	-	45	55
			5.3 - 5.8			5	SM						
						6	SP						
Sample SVL-577-SA58-5.3-5.8 @ 08:40					6.2	7		4.5-6.0 Silty sand (SM) light olive brown (2.5Y 5/4), moist, med dense, mostly fine sand (60) some silt (35) few med sand (5). No stain no odor. Stable fragments + $CaCO_3$ (caliche). Violent effervescent. Native	-	-	5	60	35
0.0 ppm	12 µRem, 42 cpm					8							
• TD = 6.2' bgs on solid stone bedrock						9			-	-	20	70	10

6.0 - 6.1 poorly sorted sand (SP) - light yellow brown to yellow brown (10YR 4/4 - 4/6) mostly fine sand (70) little medium sand (20) few silt (10) - No stain, no odor.

QA/QC

Surficial media boring log rev 2-25-2014

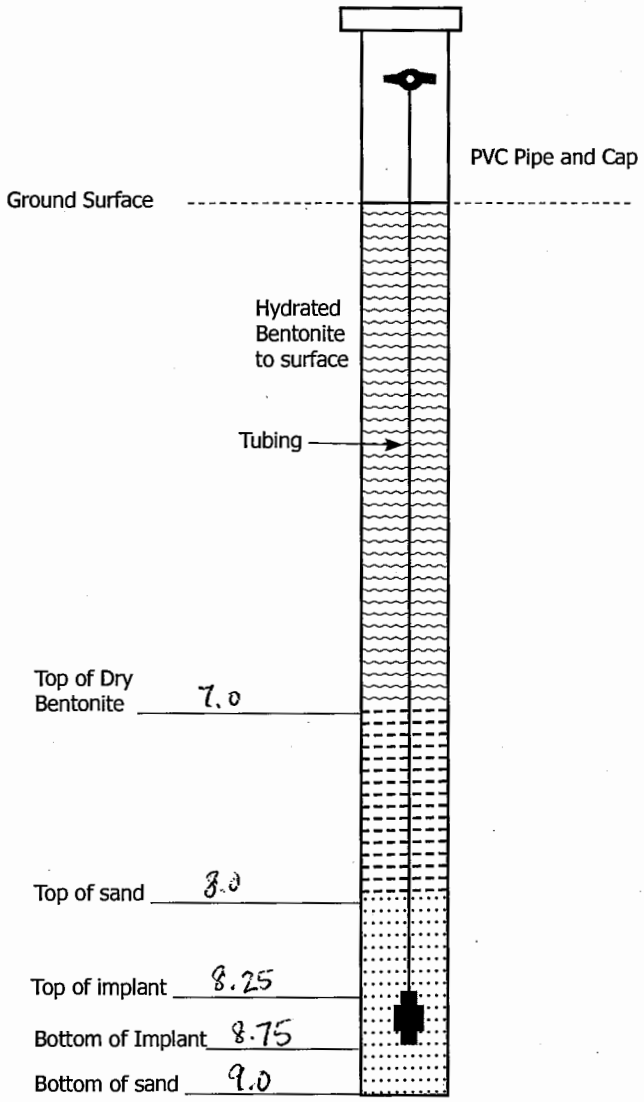
MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-578
Site: 5B
Drilling Contractor: EST
Borehole TD: 9.0

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: Geoprobe 5400/DP
Probe Completion Date/Time: 825/6-3-14

Project: Phase 3 DOE Data Gap Sampling 201
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

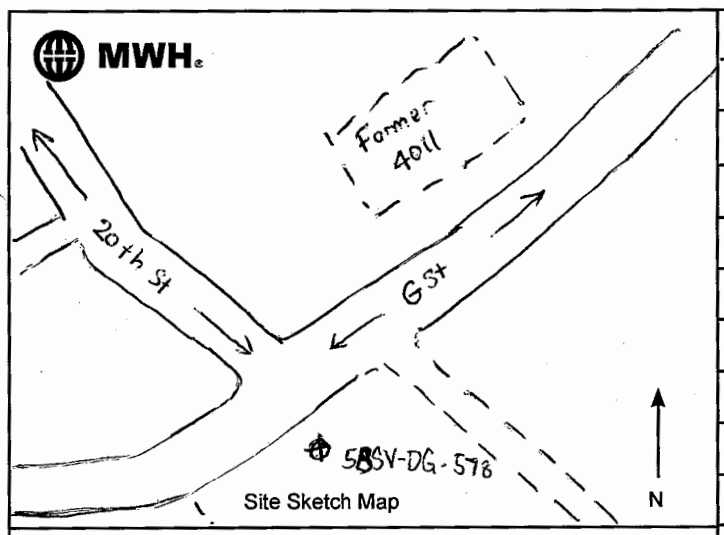
Dry Bentonite
Type: #8
Manufacturer: Cetco

Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

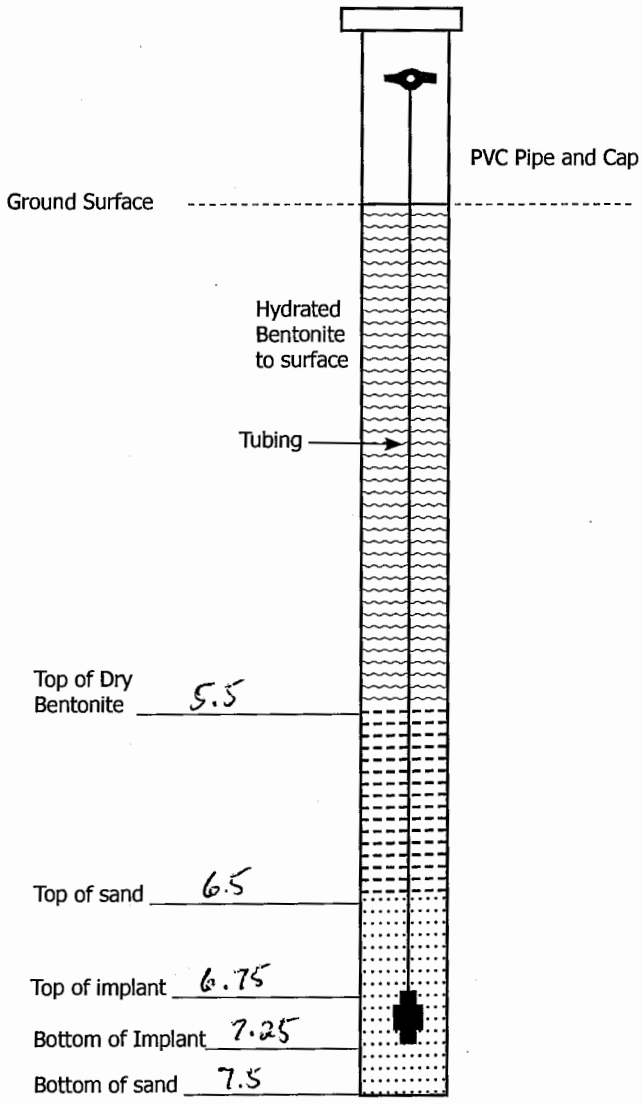
Boring ID: 5B3V-DG-578	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 9.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0745 / 6-3-14	Drill Finish Time/Date: 0805 / 6-3-14
Soil Vapor ID: 5BSV-DG-578	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0825 / 6-3-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 8.0-9.0	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Hummocky Area	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM-GW	Silty Sand w/ Gravel (SM-GW), yellowish brown (10YR 5/6), loose, dry, fine to coarse sand, fine angular gravel, grass roots at surface, fill	10	10	25	35	20/
		45"	NONE			1							
						2	SM	@1.7 Silty sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand, non-plastic silt, no odors or stains, fill.	-	-	-	65	35/
0.0						3							
						4		*** TD=9.0, refusal on bedrock. Install probe 8.0-9.0					
						5							
		46"	NONE			6							
						7		grades with trace clay, fill					
		12"	NONE			8	SP	Poorly Graded Sand (SP), brownish yellow (10YR 6/6), loose, dry, fine sand, trace silt, no odors, no stains, native soil	-	-	-	100	TR/
0.0						9	Br	@9' Sandstone, weathered.					

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV-DG-579
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SB
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 7.5'
Probe Completion Date/Time: 0900/6-3-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

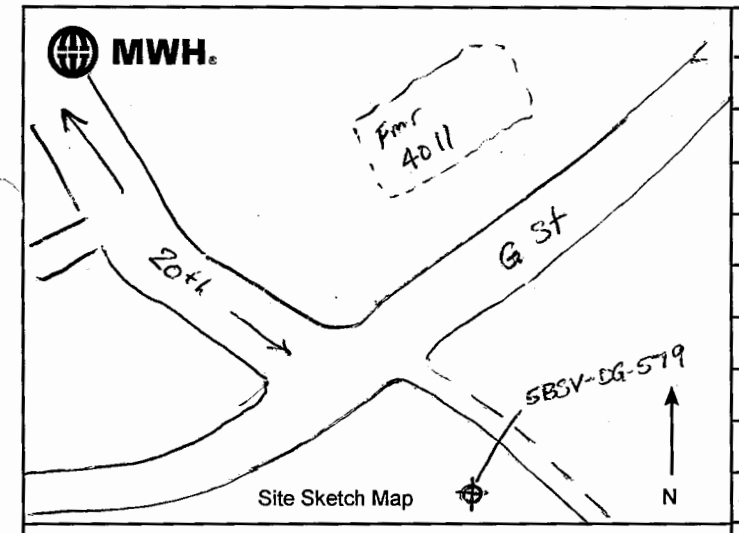
Dry Bentonite
Type: #8
Manufacturer: Cetco

Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

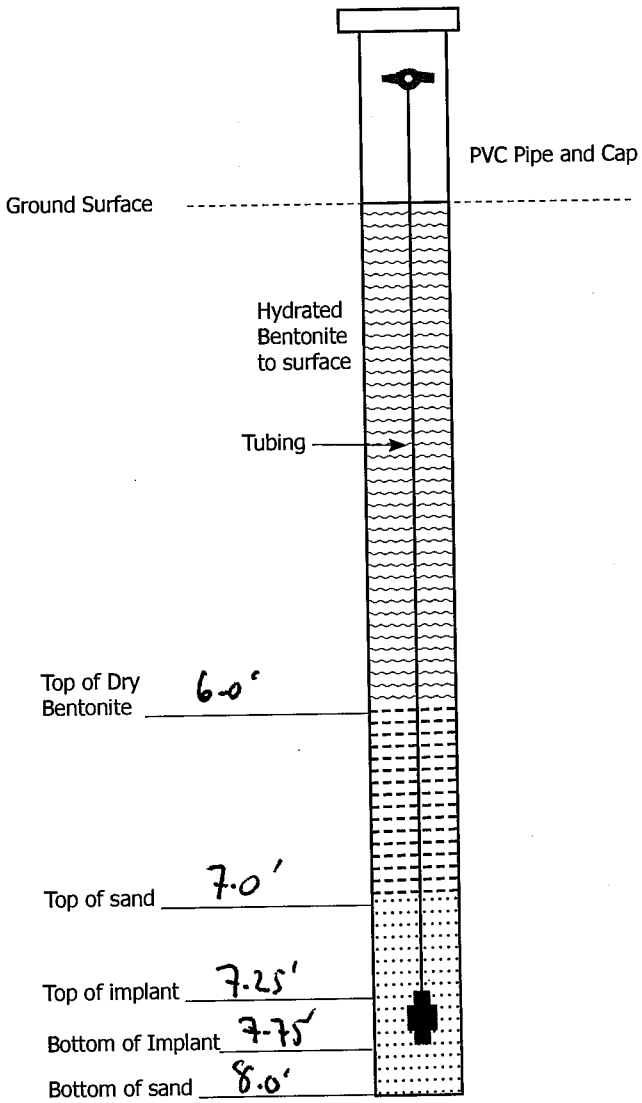
Boring ID: 5BSV-DG-579	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vatharasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25	Total Depth (ft.bgs) 7.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0835 / 6-3-14	Drill Finish Time/Date: 0845 / 6-3-14
Soil Vapor ID: 5BSV-DG-579	Soil Boring Backfill Time/Date: N/A Backfill Material:
Soil Vapor Well Completion Time/Date: 0900 / 6-3-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 6.5-7.5	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Small man made ridge	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand, silt, friable, no staining, no odors, few roots	–	–	–	65	35
		40"	NONE			1							
						2							
						3							
0.0						4							
						5	SM	Changes to yellowish brown (10YR 5/4), mostly fine sand, less silt, possibly native soil (little change to refusal) (V.U)	–	–	–	80	20
		36"	NONE			6							
						7	SP-SM	Poorly Graded Sand w/silt – native	–	–	–	90	10
0.0						8	Br	Sandstone, weathered					
						9		TD = 7.5, refusal on bedrock; install probe at 6.5-7.5					

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV_DG-580
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SB
Reviewed by:
Logged by: Rob Ellis
Drilling Contractor: EST
Rig Type/Method: Hand Auger
Driller: Morgan Hughes
Borehole TD: 8.3' bgs
Probe Completion Date/Time: 11 JUN 14, 1418
Borehole Diameter: 3.5"



Vapor Implant Specs

Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: clear.

Sand Pack Specs

Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite

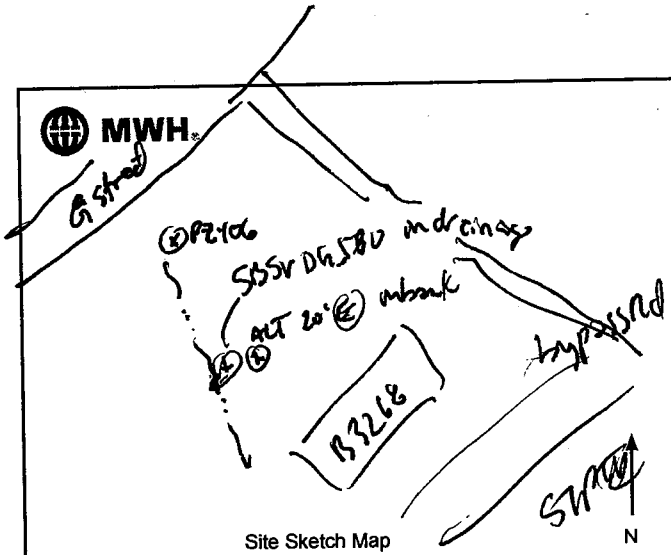
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH



Site Sketch Map

Boring ID: SBSV_DG-580	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SB
Logged By: AJB ELLIS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MORGAN HUGHES
Drill Rig Type/Method: HAND AUGER	
Sampler Type: BUCKET AUGER GRAB	
Borehole Diam (inch): 3.5"	Total Depth (ft.bgs): 8.3'
Drill Bit Type: BUCKET AUGER	
Drill Start Time/Date: 13:31 11 JUN 14	Drill Finish Time/Date: 14:08 11 JUN 14
Soil Vapor ID: SBSV_DG-580	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 11 JUN 14; 14:18	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 7.0'-8.0'	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Well Detail Completed (yes/no) attached	Surface Completion: SV probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: metal debris / concrete mud / plaster

1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: grassy roots.

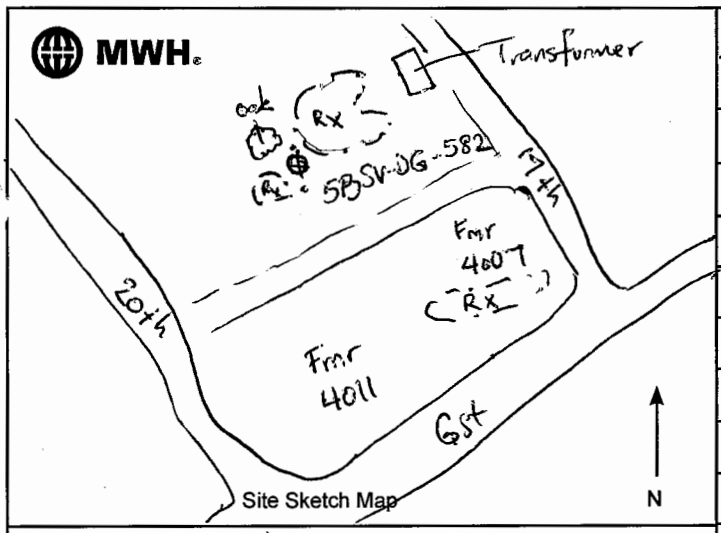
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm						0		0.0 – 0.9					
						1		Silty sand (SM) brown (10YR 4/3), very loose, dry. Mostly fine sand (55), some silt (35), few med sand (10). Some root material. No stain, no odor. FILL	-	-	10	55	35
						2		0.9 – 3.5					
	to 8.3' bgs					3		Silty sand (SM), brown (10YR 4/3), loose, slightly moist. Mostly fine sand (60), some silt (35), and few medium sand (5). No stain, no odor. Fill	-	-	5	60	35
						4							
						5		3.5 – 8.0					
TD = 8.3' w/ refusal on sandstone bedrock						6		Silty sand (SM). yellowish brown (10YR 5/4). Mostly fine sand (60), little silt (30), few med sand (10). loose, slightly moist, no stain, no odor. FILL / possible bedrock	-	-	10	60	30
Used ALT location outside of drainage; ≈ 20' (E) on fill terrace						7							
						8		8.0 – 8.3					
					TD = 8.3	9		weathered sandstone; brownish yellow (10YR 6/8). Decomposed (us) very weak (m) soft (1/6). silt fraction: ~ 25-30%					

QA/QC

Surficial media boring log rev 2-25-2014

582 (V.V.)

MWH.



Site Sketch Map

Boring ID: 5BSV-DG-~~584~~	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 1.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1340 / 6-2-14	Drill Finish Time/Date: 1353 / 6-2-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1400 / 6-2-14 Backfill Material: soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: In a bowl surrounded by rock.					
0.0	X	12"	NONE			1	SM	Silty Sand (SM), yellowish brown (10YR 5/6), loose, dry, fine to medium sand, non-plastic silt, fine gravel at the surface (Road Base), no odors or stains, backfill (re-worked native soil).	--	-	20	55	25
						2							
						3							
						4		TD = 1.0 ft. Refusal on bedrock. Drill 2-step out borings with similar results. No samples were collected - TD < 1.5' (too shallow per SOP)					
						5							
						6							
						7							
						8							
						9							

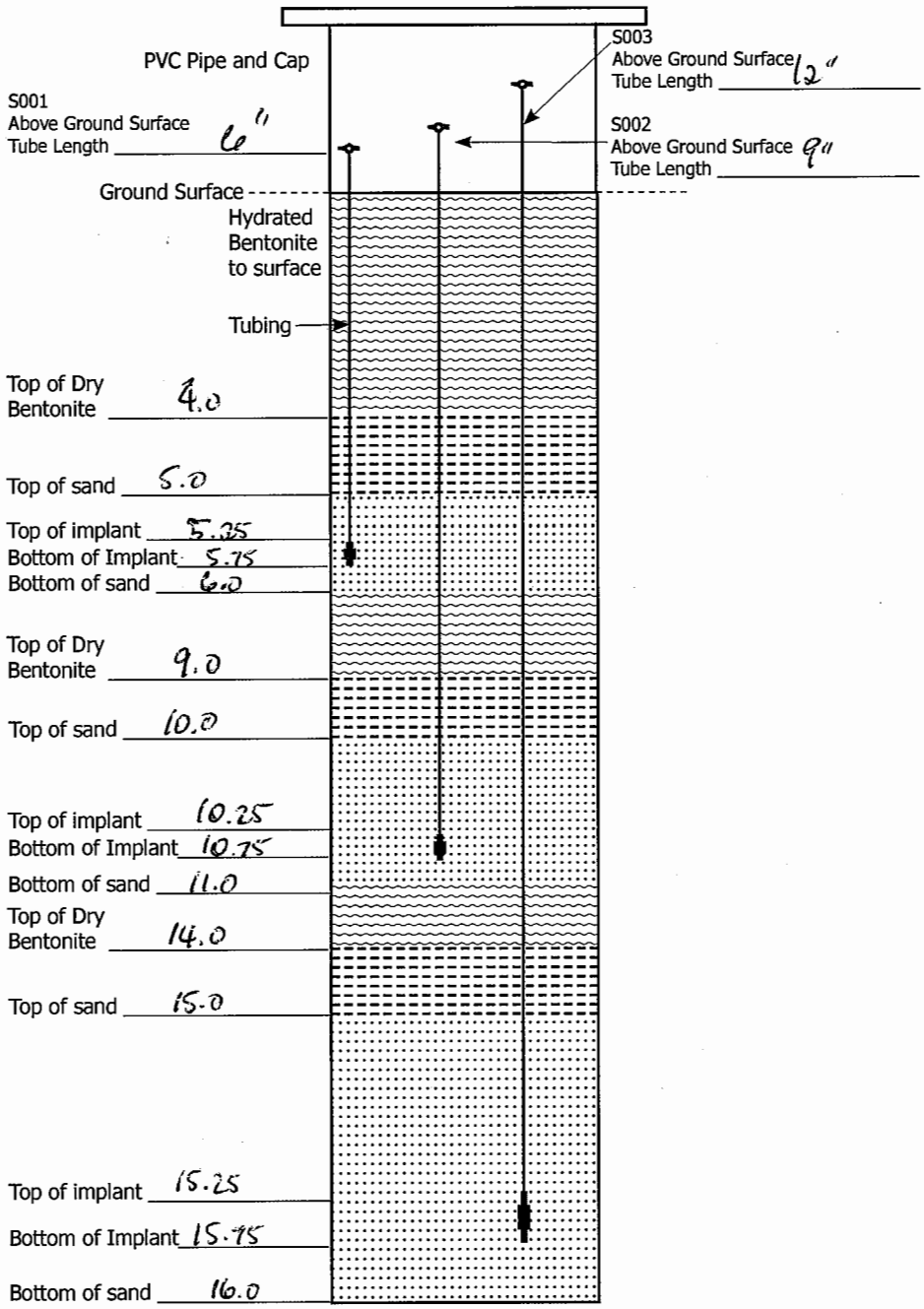
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV-DG-534
Site: SA 5B
Drilling Contractor: EST
Borehole TD: 21.0

Project: DOE SV DG 2014
Logged by: V. Vathanasen
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 1300 / 6-2-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

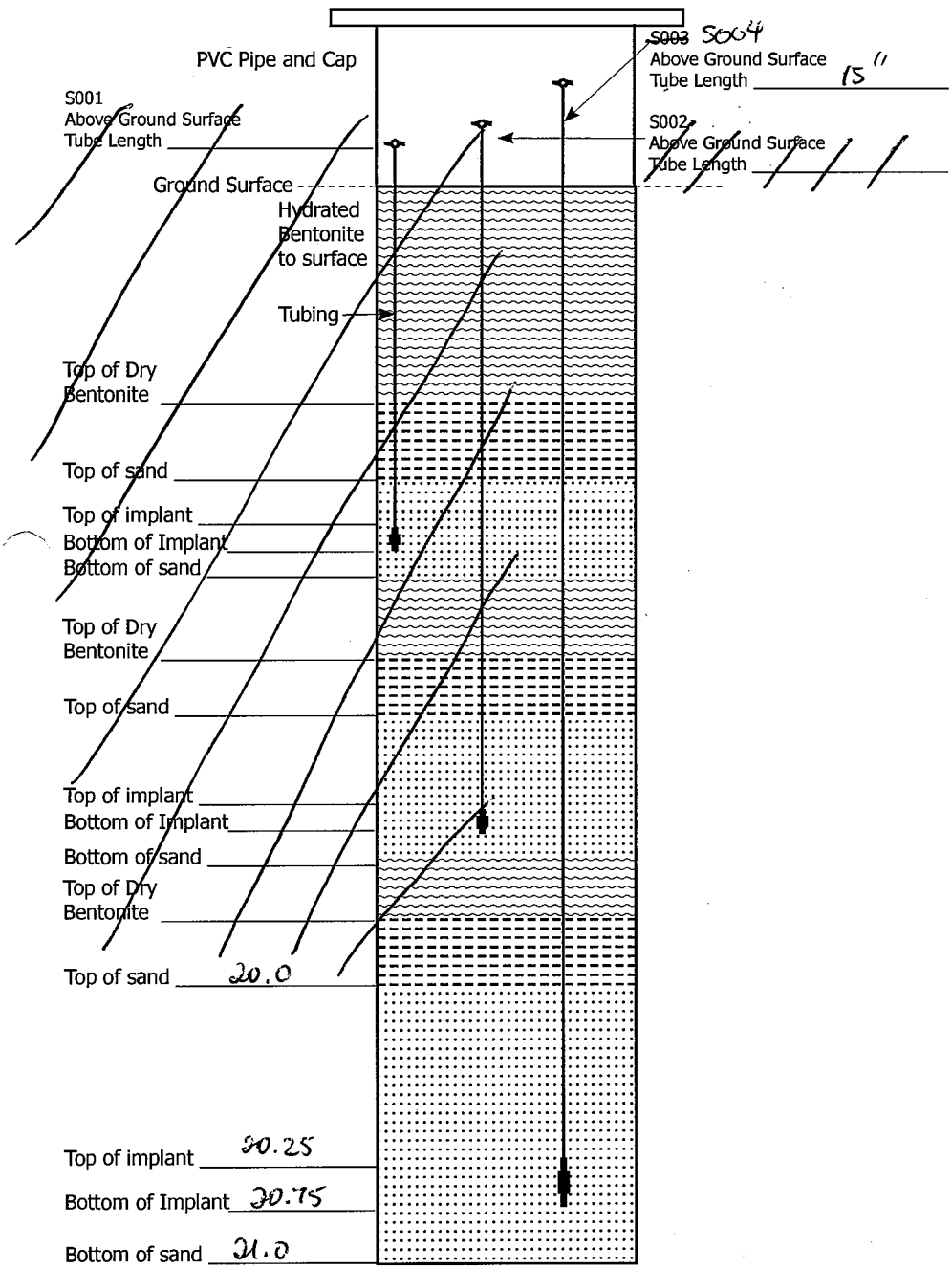
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV-DG-584
Site: SA 5B
Drilling Contractor: EST
Borehole TD: 21.0

Project: Phase 3 DoE SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 1300 / 6-2-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: # 3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

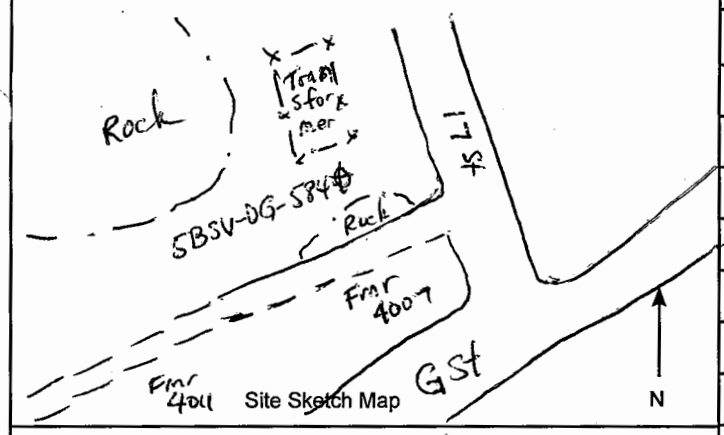
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: SBSV-DG-584	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SA5B		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macro core			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 21.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1125 / 6-2-14	Drill Finish Time/Date: 1230 / 6-2-14		
Soil Vapor ID: SBSV-DG-584	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1300 / 6-2-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, 15.0-16.0, 20.0-21.0	Surface Completion: Soil vapor probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Heavy veg - mustard. Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, non-plastic silt, roots, asphalt debris, fill, no odor, no stain,	-	-	-	70	30/
		45"				1							
						2							
						3		@3' Color changes to dark brown (10YR 3/3).					
						4							
						5		@5' color changes to dark yellowish brown (10YR 4/4, grades with clayey nodules, fill	-	-	-	60	30/10
		48"				6		@6' color changes to yellowish brown (10YR 5/6).					
						7							
						8		Poorly Graded Sand w/ Gravel (SP-GW), yellowish brown (10YR 5/8), loose, dry,	5	-	20	75	TR
		48"				9	SP-GW	fine to medium sand, fine gravel, trace fines, fill, friable					

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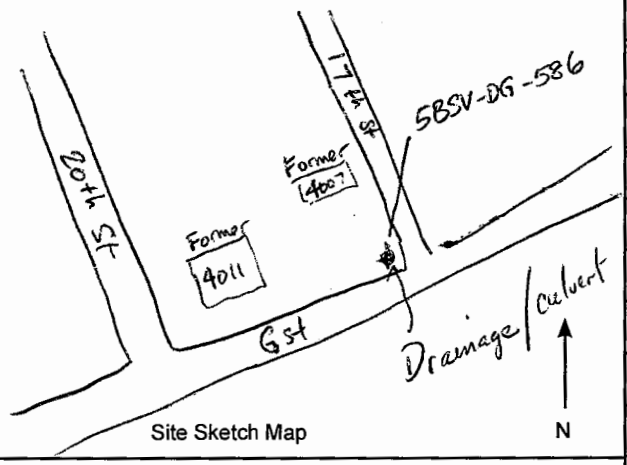
Boring ID: SBSV-DG-584 Project: Phase 3 DOE Soil Vapor Data Gap 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10	SP						
						11							
		NONE											
						12							
						13							
		48"											
			NONE			14							
						15							
							SM	Silty Sand (SM), yellowish brown (10YR 5/6)					
						16		with pale brown (10YR 6/3) of weathered					
		45"						zones, ~~fine sand~~, loose, slightly					
						17		moist, fine sand, non-plastic silt,					
								fill, no odors or stains.					
			NONE			18							
						19							
								w/ gravel and silt (V.V.)					
		8"				20	SW	Well Graded Sand (SW), dark yellowish					
			NONE					brown (10YR 4/6), loose, dry, fine to					
						21	WB	coarse sand, fine gravel, non-plastic					
						22		silt, fill - very different from upper					
								sections.					
						23		@ 21' Sandstone, weathered.					
						24		TD = 21.0 ft, refusal on sandstone bedrock,					
						5		backfill on top of bedrock. Install vapor					
								probes at 5.0-6.0, 10.0-11.0, 15.0-16.0,					
						6		and 20.0-21.0					
						7							
						8							
						9							

MWH.



Site Sketch Map

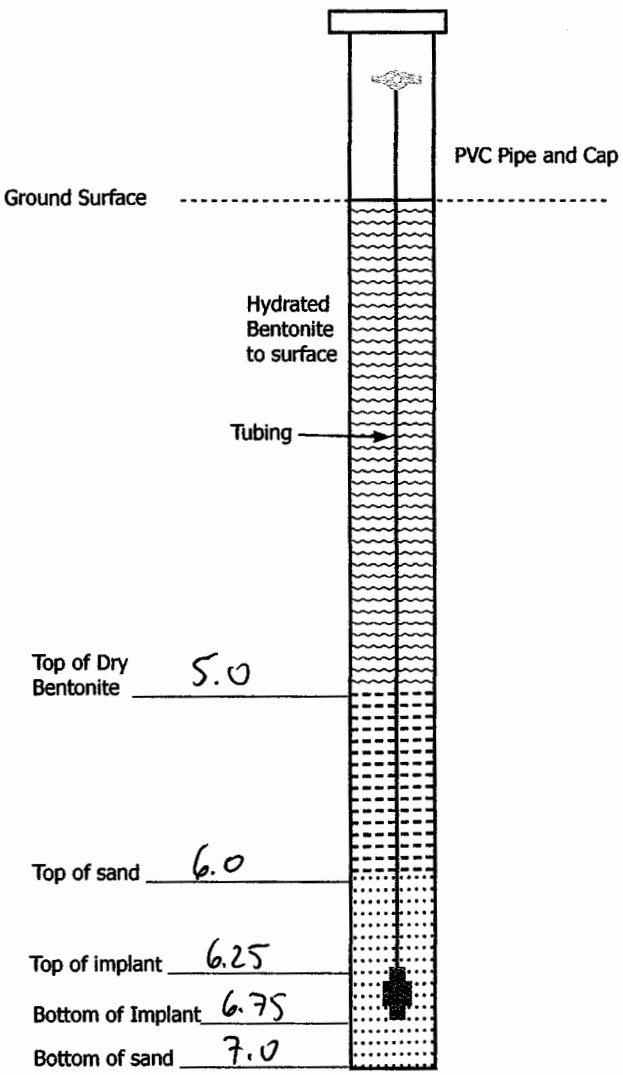
Boring ID: 5BSV-DG-586	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: ~~Macrocore Geoprobe 5400 / DP~~ Hand Auger			
Sampler Type: ~~Macrocore~~ Hand Auger			
Borehole Diam (inch) 3.25	Total Depth (ft.bgs) 4.25		
Drill Bit Type: Hand Auger Bucket			
Drill Start Time/Date: 0809 / 6-4-14	Drill Finish Time/Date: 0847 / 6-4-14		
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 0925 / 6-4-14	Backfill Material: Soil cuttings.	
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: Concrete		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: in culvert 17th / G St	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	AF	12" concrete					
						1	GW	1" Gravel base					
							SP	Poorly Graded Sand (SP), yellowish brown (10YR 5/6), loose, dry, fine sand, very "clean", fill, no stains, no odors	-	-	-	100	-
						2							
						3							
0.0		☒	☒			4		color changes to brownish yellow (10YR 6/6)					
							Br	@4.25' Sandstone, weathered.					
						5		TD = 4.25', refusal on bedrock. Collect soil samples at 3.75-4.25:					
						6		SVL-586-SA5B-SB-3.75-4.25 MS @ 0900					
						7		SVL-~~586~~ 986-SA5B-SB-3.75-4.25 @ 09:05					
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SB SV D1-590
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SB
Reviewed by:
Logged by: Ross Ellis
Drilling Contractor: E&S
Rig Type/Method: Geoprobe 5400
Driller: Marty Kirkhullen
Borehole TD: 7.0' bgs
Probe Completion Date/Time: 02JUN14, 1412
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

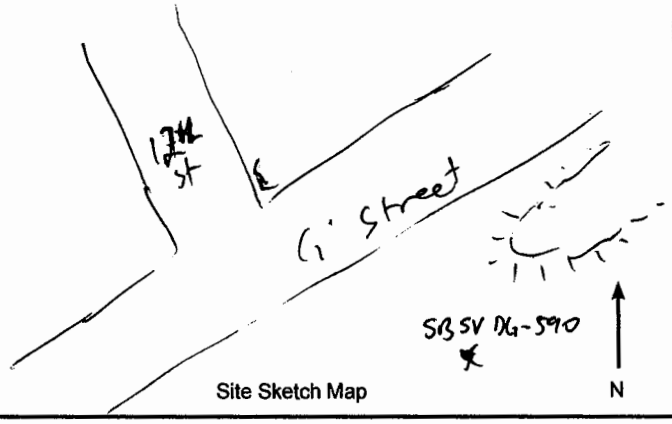
Dry Bentonite
Type: #8 crumble
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumble
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SBSV DG-590	Sheet 1 of 1		
Project: Phase 3 DOE SVDG 2014			
Job #: 1050 [illegible] 30510	Site: SB		
Logged By: [illegible]	Reviewed By:		
Drilling Contractor: EST	Drillers Name: [illegible]		
Drill Rig Type/Method: GEOPROBE 5400			
Sampler Type: MACROCORE			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 7.0'		
Drill Bit Type: MACROCORE			
Drill Start Time/Date: 02JUN14, 14:00	Drill Finish Time/Date: 02JUN14, 14:05		
Soil Vapor ID: SBSV DG-590	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 02JUN14; 14:12	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 6.0 - 7.0' bgs	Surface Completion: soil vapor probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Soil, mustard, grass					
		48"				0	fill	0.0-1.0					
						1	SM	Silty sand (SM), brown (10YR 5/3) dry, very loose, predominant fine sand (70), some silt (25), few medium sand (5). No stain, no odor, fill.	-	-	5	70	25
						2	SM						
						3		1.0 - 2.5					
		36"				4	SP	Silty sand (SM), yellowish brown (10YR 5/4), medium dense, dry, non plastic, predominant fine sand (65), some silt (25), and trace medium sand. No stain, no odor, fill	-	-	TR	65	35
						5							
						6							
					TD	7		2.5 - 7.0 graded					
						8		Poorly ~~graded~~ sand (SP) yellowish brown (10YR 5/6) medium dense, moist. Predominant fine sand (50), some medium sand (25), few silt (10), few coarse sand (5). No stain, no odor, Native.	-	5	25	70	10
*	Refusal on sandstone bedrock												
*	TD ~ 7.0' bgs					9							

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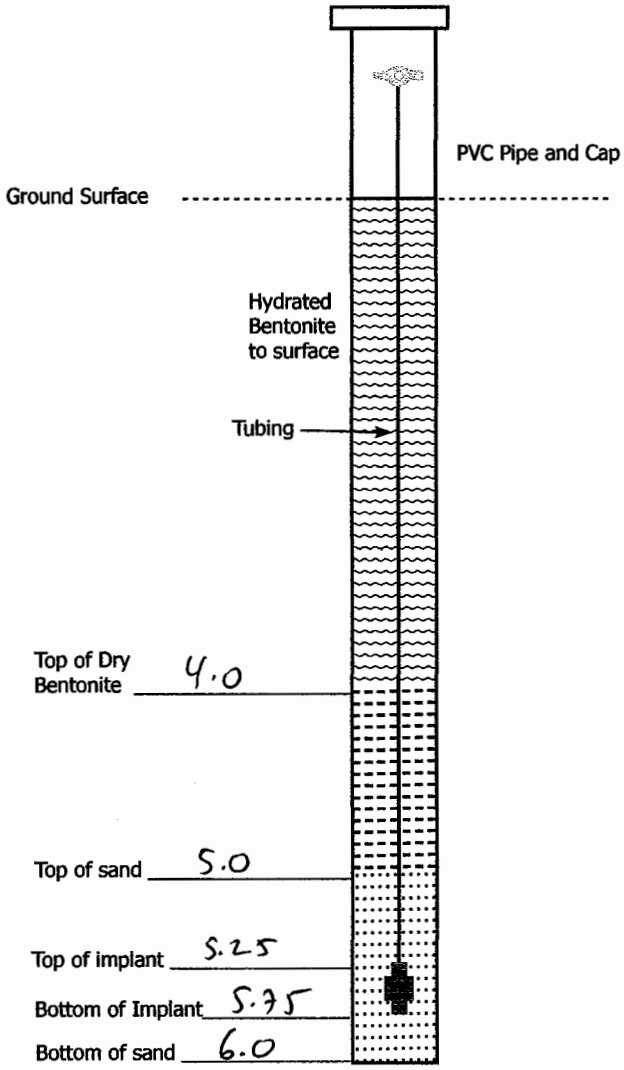
MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5BSV DG-593
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: 5B
Reviewed by:
Logged by: Robert
Drilling Contractor: EST
Rig Type/Method: Keoprobe 5400
Driller: Marty Kilhullen
Borehole TD: 6.0' bgs
Probe Completion Date/Time: 03JUN14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Comox

Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

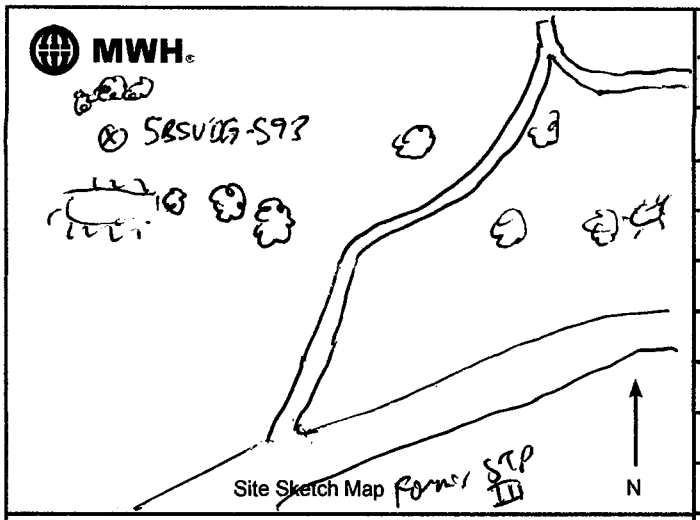
Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map former SRP III

Boring ID: SBSV DG-593	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 1050 3982.30T0106	Site: 5B
Logged By: Rob Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kalhulsen
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs): 6.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 03 JUN 14 10:50	Drill Finish Time/Date: 03 JUN 14 11:03
Soil Vapor ID: SBSV DG-593	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 03JUN14, 11:18	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 5.0'-6.0' bgs	Observations: burned debris @ surface; ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None (throughout)
Soil Vapor Well Detail Completed (yes/no)	Surface Completion: SV Probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: flat, mowed

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		24"				0	fill SM fill	0.0-1.0 Silty sand (SM), dark brown (10YR 3/3), very loose, dry, predominant fine sand (60), some silt (30), few medium sand (10). No stain, no odor, but fragments of burned material (wood), lot of root/veg debris. Fill.	-	-	10	60	30
						1							
						2	SP						
						3							
						4							
0.0 ppm		24"					fill SM fill	1.0-4.3					
						5							
						sharp →	SP	poorly sorted sand (SP), dark yellowbrown (10YR 4/6), loose, dry, predominant fine sand (70), little silt (15), few med sand (10), Trace coarse sand. No stain, no odor, fill.	- -	TR	10	75	15
						6							
	TD = 6.0' bgs on sandstone bedrock.					7							
	Location moved 6' to the south from proposed location.					8		4.3-5.1 Silty sand (SM), dark brown (10YR 3/3), dense, dry, non plastic, mostly fine sand (60) some silt (40). No stain no odor, fill.	-	-	-	60	40
						9				-	15	75	10

5.1-6.0 poorly graded sand (SP) dark yellow (2.5Y 6/6). Mostly fine sand (75) little medium sand, few silt (10) no stain, no odor native.

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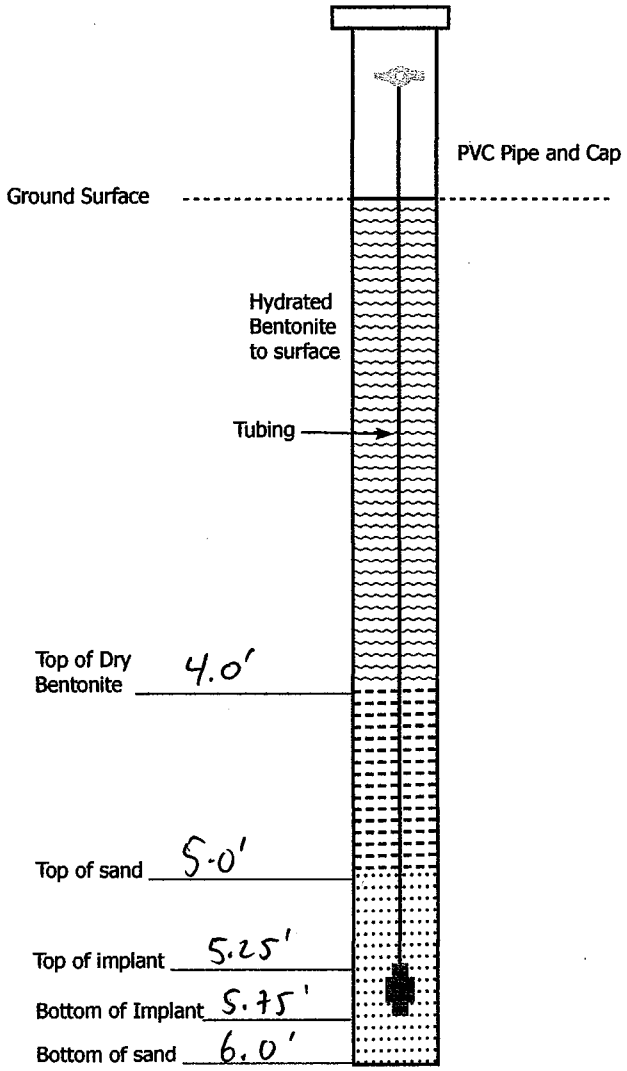
MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV DG-594
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SB
Reviewed by:
Logged by: Rob Ellis
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: Marty Kilhullen
Borehole TD: 6.0' bgs
Probe Completion Date/Time: 03JUN14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

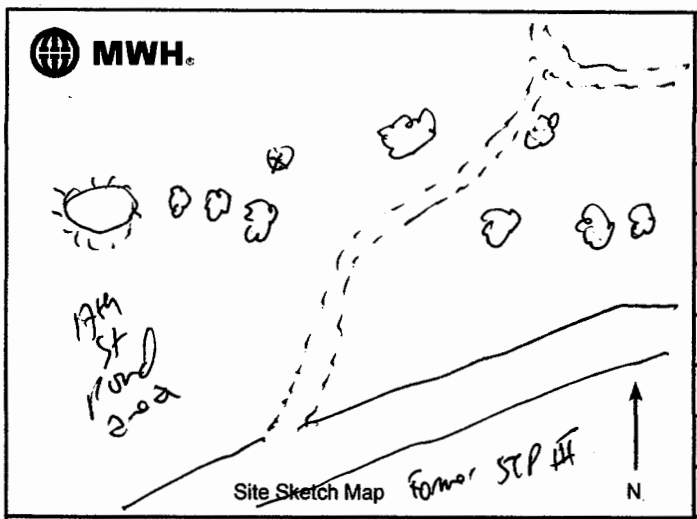
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

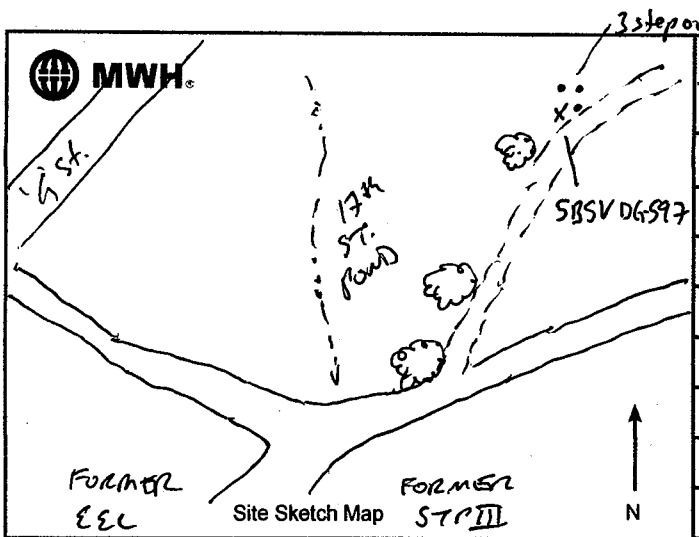
MWH.



Boring ID: SBSVDG-594	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.3050106	Site: 513
Logged By: RB Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kilmulley
Drill Rig Type/Method: Macrocore Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 6.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 12:03 03 JUN 14	Drill Finish Time/Date: 12:08 03 JUN 14
Soil Vapor ID: SBSVDG-594	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 03 JUN 14, 12:10	Backfill Material:
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0' bgs	Observations: some pipe/brick, burned wood ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Well Detail Completed (yes/no)	Surface Completion: SV Probe
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description / Surface Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		42"				0		0.0-4.0					
						1	SM	Silty sand (sm), brown (10YR 4/2) very loose, dry transitions to	-	5	10	55	30
						2		dense, dry at ~2.0' with some mottled nodules/lack like decomposed sandstone fragments					
						3		Predominant fine sand (55), some silt (30), few medium sand (10)					
0.0 ppm		24"				4	SP	and few coarse grains (5). Some fragments of debris, burned					
						5		wood, clay pipe (?) up to 2mm. Mile from oxidation, no odor, no					
					TD	6		stain, fill material.					
• TD = 6.0' bgs. Refusal on sandstone bedrock						7		4.0-6.0 Poorly sorted sand (SP), dark yellow brown (10YR 4/4), loose, dry. Mostly	-	TR	10	80	10
						8		fine sand (80), few medium sand and silt (10% each), Trace coarse sand. No					
						9		stain, no odor. Fill material. Bedrock @ 6.0' bgs, weathered 10YR 6/3 pale brown, M shale.					

QA/QC
Surficial media boring log rev 2-25-2014



Site Sketch Map

Boring ID: SBSV DG-597	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.B050106	Site: SB
Logged By: RM ELLIS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTY KILHULLEN
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 1.0'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0743 03 JUN 2014	Drill Finish Time/Date: 08:15 03 JUN 2014
Soil Boring Backfill Time/Date: 08:32 03 JUN 2014	Backfill Material: soil cuttings 03 JUN 2014
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None	
Surface Completion: None	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

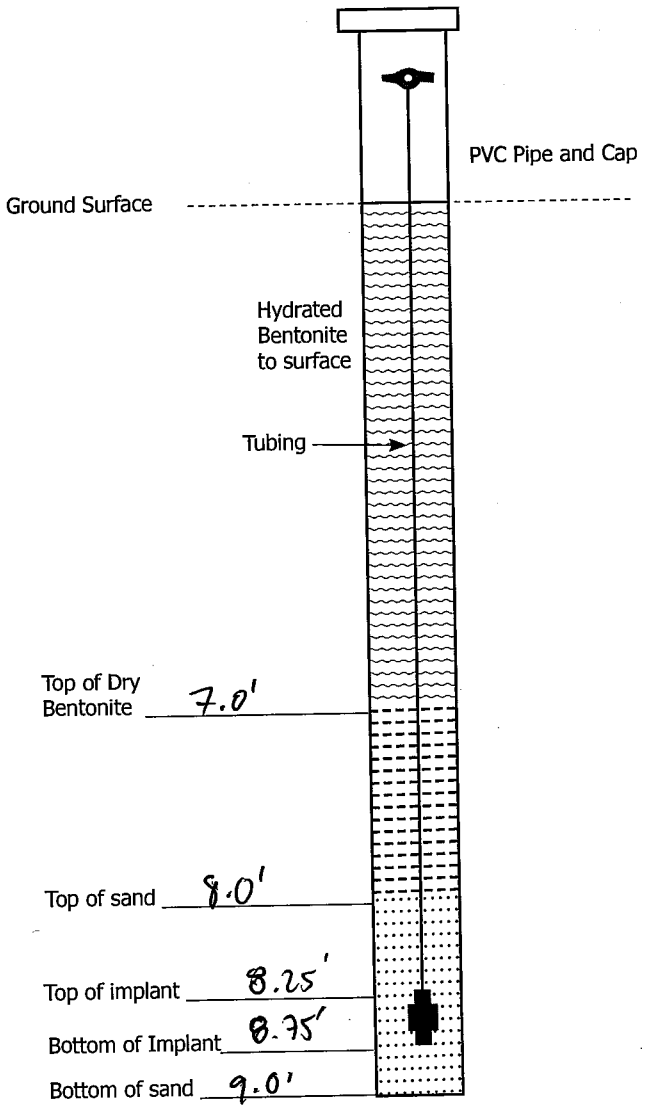
Soil Vapor ID:	N/A
Soil Vapor Well Completion Time/Date:	N/A
Soil Vapor Probe Depths (ft.bgs):	N/A
Soil Vapor Well Detail Completed (yes/no)	N/A

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand Coarse	Medium	Fine	Silt/clay
								Surface Description: Grasses + Erodium					
	X	12"	~~X~~			0	SM SP	0.0 - 0.5					
								Silty sand (SM), brown (10YR 5/3)	-	-	10	55	35
						1		very loose, dry, predominant fine sand (55), some silt (35), few medium					
0.0 ppm	~~SB-597 SA5B-SB-0.5-1.0~~ 10 µRem, 54 cpm					2		~~TD = 1.0' bgs~~ sand (10). No stain, no odor. Native					
						3		0.5 - 1.0					
						4		Poorly graded sand (SP) pale	-	15	20	55	10
								brown (10YR 6/3). loose, dry					
						5		Predominant fine sand (55), little					
								medium sand (20), little coarse					
						6		sand (15), few silt (10) no					
								stain, no odor, Native.					
						7							
								• TD = 1.0' bgs on sandstone					
						8		bedrock (refusal).					
								• Backfilled w/ soil cuttings					
						9		@ 08:32					
								• stepped out to N, NE, E ~					
								18" to confirm refusal					

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV-DG-599
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SB
Reviewed by:
Logged by: RWXWIS
Drilling Contractor: EST
Rig Type/Method: HAND AUGER
Driller: MORGAN HUGHES
Borehole TD: 9.0' bgs
Probe Completion Date/Time: 11 JUN 14, 12:43
Borehole Diameter: 2½" ~~[illegible]~~



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

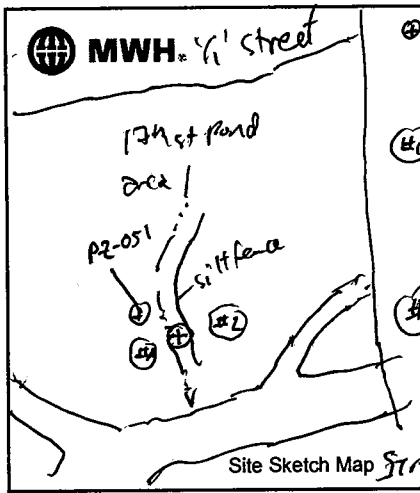
Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH. Y1 street



Site Sketch Map Sr III

⊕ SBSVDG599 primary - refusal at 0.5' bgs.
(#1) stepout 15' (W) into bank terrace w/ refusal 2.0' bgs
(#2) stepout 20' (E) into hummocky area.
N

Boring ID: SBSV_DG-599	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SB		
Logged By: RBELLIS	Reviewed By:		
Drilling Contractor: EST	Drillers Name: MORGAN HUGHES		
Drill Rig Type/Method: HAND AUGER			
Sampler Type: BUCKET AUGER GRAB			
Borehole Diam (inch): 3.5"	Total Depth (ft.bgs): 9.0'		
Drill Bit Type: BUCKET AUGER			
Drill Start Time/Date: 12:07 11JUN14	Drill Finish Time/Date: 12:32 11JUN14		
Soil Vapor ID: SBSV_DG-599	Soil Boring Backfill Time/Date: N/A	Backfill Material:	
Soil Vapor Well Completion Time/Date: 11JUN14 ; 12:43	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 8.0 - 9.0' bgs	Surface Completion: SV Probe		
Soil Vapor Well Detail Completed (yes/no) yes	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

Soil Description wild oats.

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: hummocky, berms.

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		100%				0	SM	0.0 - 1.0					
						1		Silty sand (SM), grayish brown (10YR 5/2). very loose, dry, pervasive roots, more like A horizon. Mostly fine sand (60), some silt (30), few medium sand (10). No stain, no odor. Fill material	–	–	10	60	30
						2							
						3							
						4	SM	1.0 - 9.0					
						5		Silty sand (SM) dark yellowish brown (10YR 4/4). loose, slightly moist. Mostly fine sand (55), some silt (35) and few medium sand. Silt fraction increases to ~40% at ~7.0' bgs., medium sand decreases.	–	–	10	55	35
						6							
						7			–	–	5	55	40
						8		TD = 9.0' bgs with refusal on sandstone bedrock					
						9		This is boring stepout location #2. (see map).					

QA/QC
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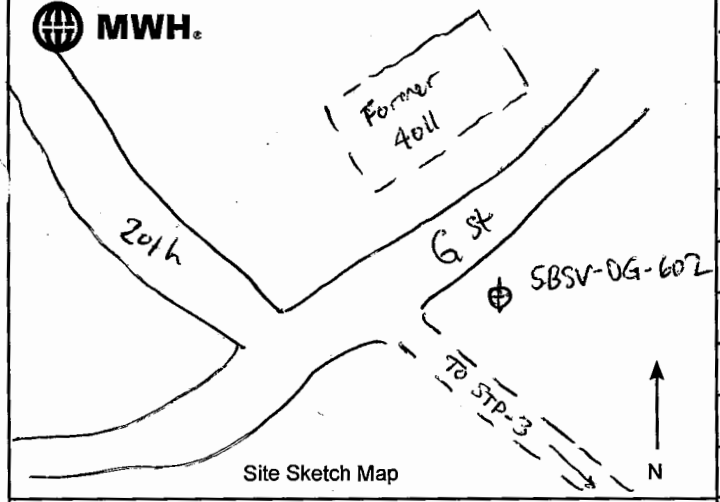
MWH.



Site Sketch Map

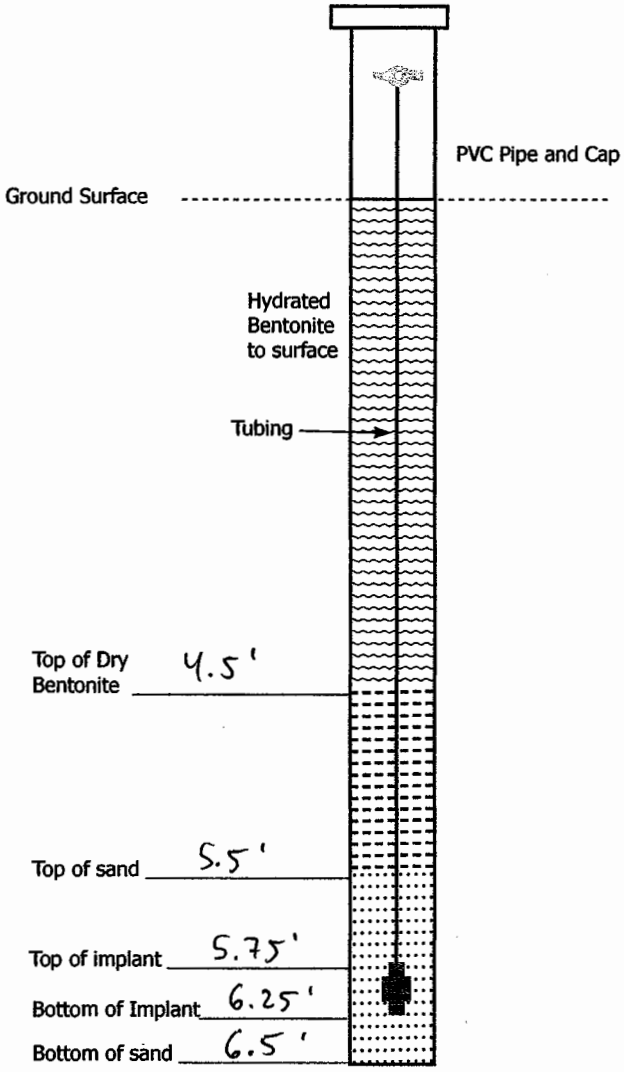
Boring ID: 5BSV-DG-602	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5B
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes.
Drill Rig Type/Method: Geoprobe / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 5.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0923 / 6-3-14	Drill Finish Time/Date: 0940 / 6-3-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: ~~N/A~~ 0945 / 6-3-14 Backfill Material: Soil cuttings.
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None.
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: Graded, veg cleared.	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, non-plastic silt, no stains or odors, fill	-	-	-	70	30
		30"	NONE			1							
						2	ML	Silt w/ sand (ML), yellowish brown (10YR 5/8), med. stiff, dry, silt, fine sand, low to medium plasticity, small white nodules, fill				15	80/5
						3							
						4		Color changes to brownish yellow (10YR 6/8),					
		12"	NONE										
0.0					09:50	5	SP	Poorly Graded Sand (SP), brownish yellow (10YR 6/8), loose, dry, non-cemented, native soil, no stains or odors.	-	-	-	100	-
3VL-602-SA5B-SB-4.5-5.0							BR	Sandstone, weathered.					
						6							
						7		TD= 5.0, Refusal on bedrock, collect soil samples for voc analyses 4.5-5.0 ft					
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SB SV DG-606
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: 5B
Reviewed by:
Logged by: RMB Ellis
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: MARTY KILHULLEN
Borehole TD: 6.5' bgs
Probe Completion Date/Time: 03 JUN 2014 08:40
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

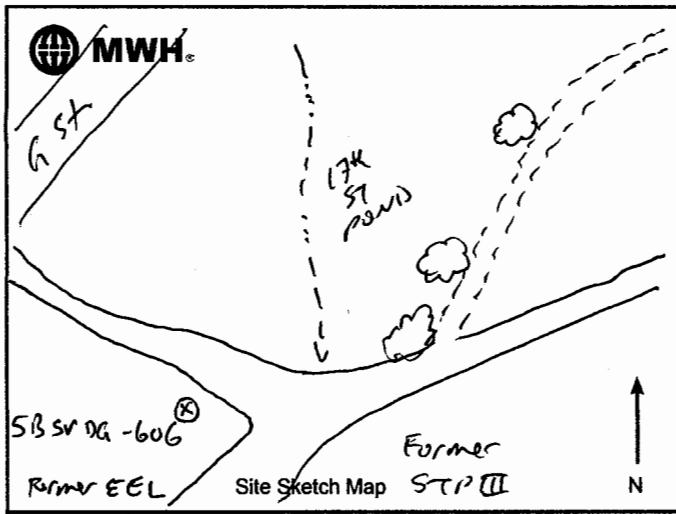
Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH



Site Sketch Map

Boring ID: SB SV DG-606	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.3050106	Site: SB
Logged By: RWBellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTY KILHULLEN
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macro core	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 6.5'
Drill Bit Type: Macro core	
Drill Start Time/Date: 08:34 03 JUN 2014	Drill Finish Time/Date: 08:36 03 JUN 2014
Soil Vapor ID: SB SV DG-606	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 03 JUN 14; 08:40	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.5'-6.5'	Surface Completion: SV probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: grasses, mustard					
0.0 ppm		48"				0	SM	0.0-2.5 Silty sand (SM), dark yellowish brown (10YR 4/4), very loose, dry. Predominant fine sand (65), some silt (30), few medium sand (5), No stain, no odor. Fill.	-	-	5	65	30
						1							
						2							
						3	SP	2.5-4.0 Poorly sorted sand (SP), dark yellowish brown (10YR 4/4), med. dense, dry. Predominant fine sand (70), silt (15), few medium sand (10), few coarse sand (5). Transitions to dark yellowish brown (10YR 4/6) at 3.0' bgs. No stain, no odor. Fill	-	5	10	70	15
						4							
0.0 ppm		30"				5	SP						
						6							
						7							
TD = 6.5' bgs refusal on sandstone bedrock						8		4.0-6.5' Poorly sorted sand (SP), light olive brown (2.5Y 5/6). Predominant fine sand (65), little med sand / silt (15% each), few coarse sand.	-	5	15	65	15
						9							

Some fragments of white (calcite?). effervesces. No stain, no odor - Native

QA/QC

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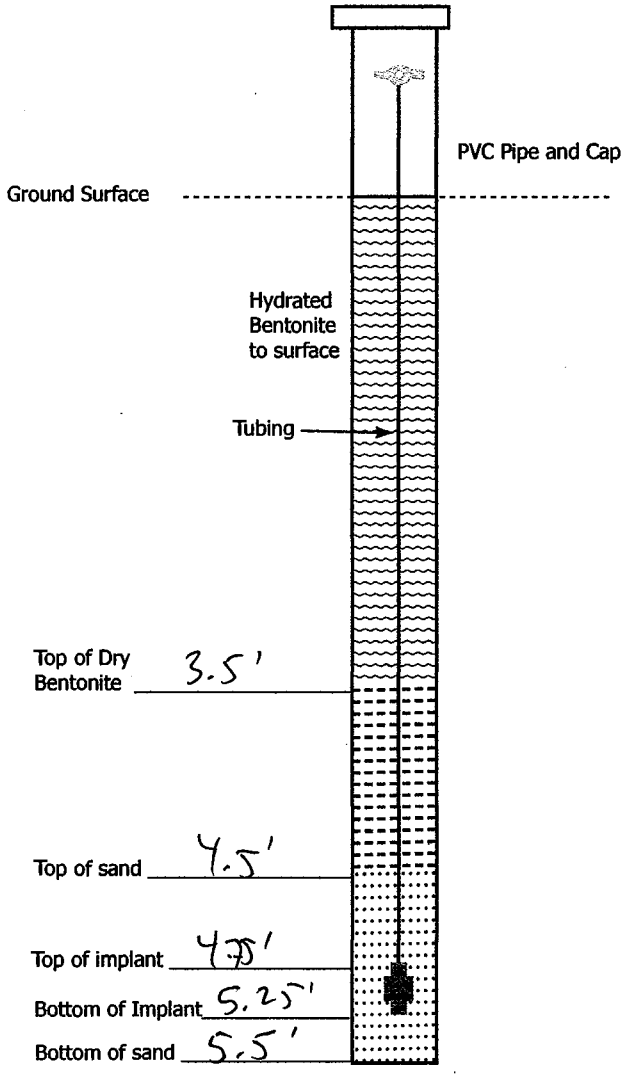
MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SBSV DG-612
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SB
Reviewed by:
Logged by: Rob Ewis
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: MARTY KILHULLEN
Borehole TD: 5.5' bgs
Probe Completion Date/Time: 03 Jun 14, 14:20
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Colorex

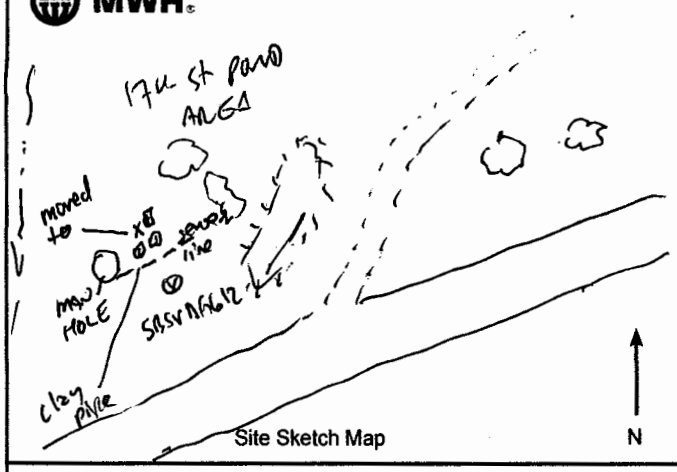
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SBSV DG-612	Sheet 1 of 1
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.305010	Site: SB
Logged By: Rob Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Mark Rollins
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 5.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 13:52 03 JUN 14	Drill Finish Time/Date: 14:02 03 JUN 14
Soil Vapor ID: SB SV DG-612	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 03 JUN 14, 14:20	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5 – 5.5'	Surface Completion: SV probe
Soil Vapor Well Detail Completed (yes/no): attached	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description
1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

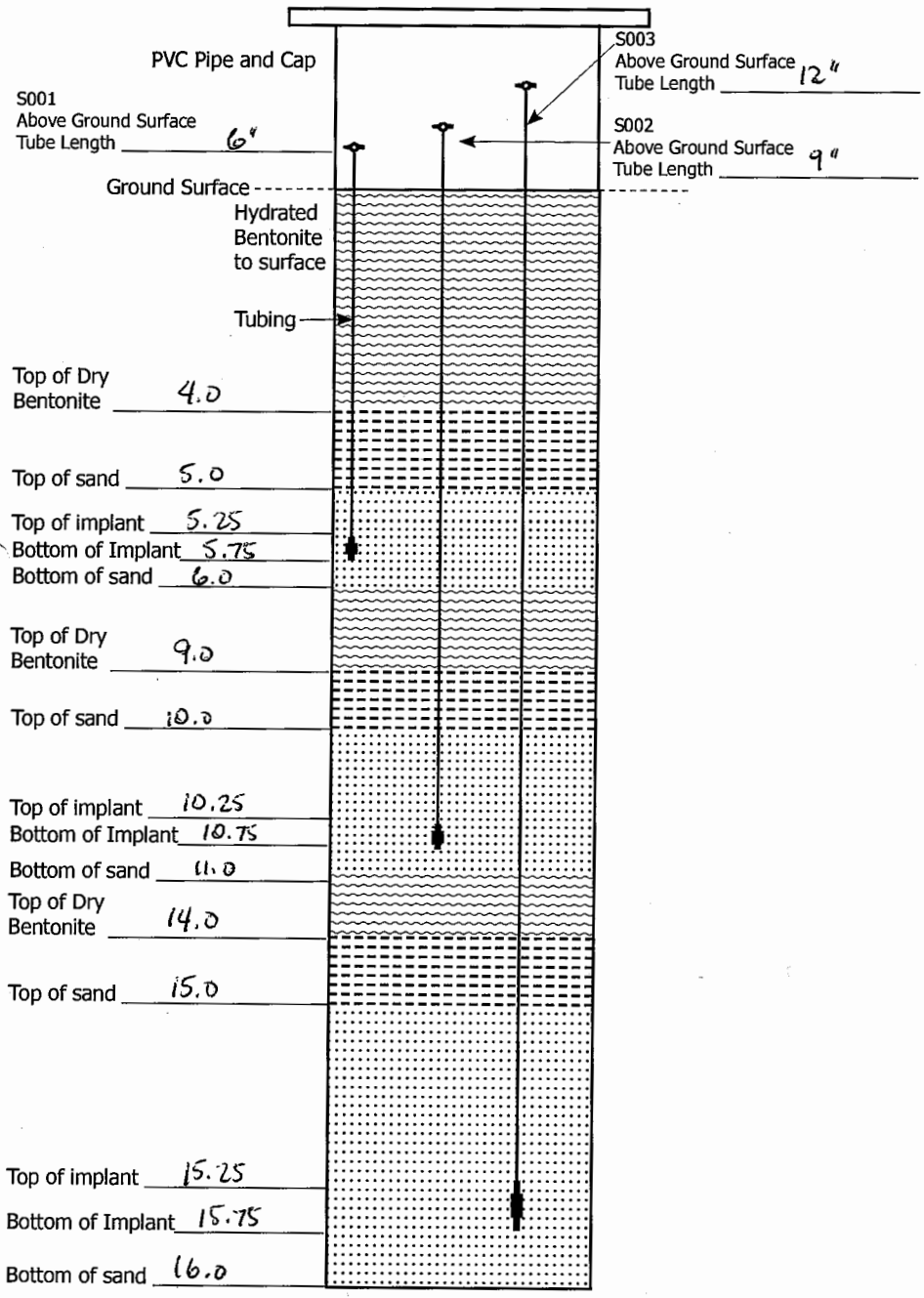
Surface Description: clay pipe debris, sewer.

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		42"				0		0.0 – 5.5'					
						1		Silty sand (SM) brown (10YR 4/3)	5	5	10	50	30
								very loose, dry for the first					
						2		few inches transitioning to					
							SM	loose / med dense to 5.5'.					
						3		Mostly fine sand (50), some silt					
								(30), few medium sand (10),					
						4		and few coarse sand / gravels					
0.0 ppm		18"						(5% each). Gravels consist of					
						5		sandstone fragments and					
						TD		1-2 base gravels at 3.5' bgs.					
						6		Color change at 1.0' bgs to					
	Moved location							dark yellowish brown (10YR 4/4),					
	10' to the (N)					7		to TD. 3" lite yellowish brown (2.5					
								Y 6/3) sand lens at 3.2' bgs.					
						8		No stain, no odor. Fill					
								material.					
						9		TD = 5.5' bgs, refusal on					
								sandstone bedrock.					

MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-505
Project: Phase 3 DoE SVDG
Job #: 10503982
Site: SA 5C
Logged by: U. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 16.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1505/5-27-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

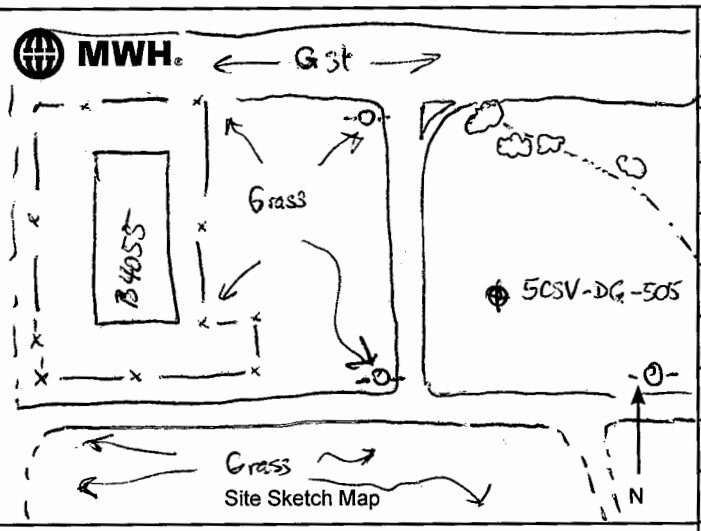
Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2



Site Sketch Map

Boring ID: 5CSV-DG-505	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 5C
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 16.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1345 / 5-27-14	Drill Finish Time/Date: 1420 / 5-27-14
Soil Vapor ID: 5CSV-DG-505	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1505 / 5-27-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, 15.0-16.0	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Gravel base and weeds.	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, non-plastic silt, no odors or stains, fill	-	-	-	60	40/
			NONE			1	ML		-	-	-	TR	90/10
						2		Silt w/clay (ML), dark yellowish brown (10YR 4/4), stiff, dry, non-plastic silt, clay, trace fine sand, white <1mm nodules, med. cementation, no odors, fill					
0.0						3							
						4							
						5	ML	~~Silt with Sand~~ Sandy Silt (ML), mottled light yellowish brown (10YR 6/4) and very pale brown (10YR 8/2), low plasticity silt, coarse to fine sand ~~(strong)~~, strong weathering, fill.	-	10	10	15	65/
			NONE			6							
						7		@7' 9mm wide band of weathered material very pale brown (10YR 8/2)					
			NONE			8	SM	Silty Sand w/ clay (10YR 5/4), yellowish brown, dense, dry, fine sand, non-plastic fines, white (10YR 8/1) streaks,	-	-	-	70	20/10
						9							

con't next page

Boring ID: 5CSV-DG-505 Project: Phase 3 DOE SV DG Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0		42"	NONE			10							
						11	ML	Silt w/ Sand (ML), very dark yellowish brown (10YR 4/4), very stiff, dry, f. (V.V.)	-	-	-	20	80
		42"	NONE			12	SP-SM	low-plasticity silt, fine sand, no odors or stains, native soil, moderate silt cement SP-SM (V.V.)	-	-	-	90	10
						13							
						14		Poorly Graded Sand, (~~SP~~), pale brown (10YR 6/3), fine sand, non-plastic silt, friable, no odors or stains; native soil					
0.0		12"	NONE			15	SP	@ 14' grades w/ low plasticity fines.					
						16	SP	@15' grades w/o fines (Poorly Graded Sand)	-	-	-	100	-
						17		@ 16' Sandstone, weathered.					
						18							
						19							
						20		(V.V.) TD = 16.0; refusal on bedrock, install probes at 5.0-6.0, 10.0-11.0, 15.0-16.0					
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5-6 15-16
10-11

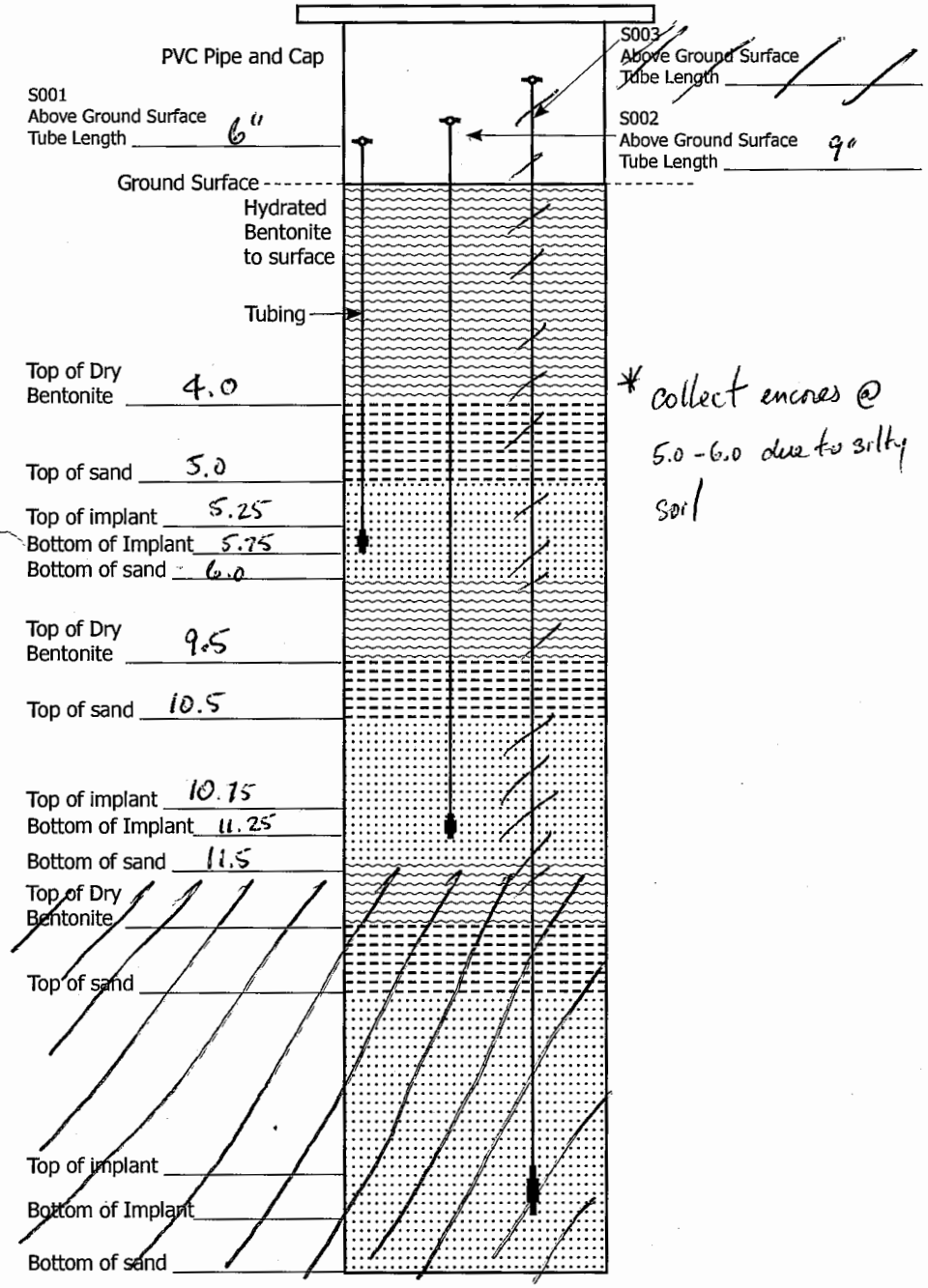
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SCSV-DG-~~505~~ 507 (V.V.)
Site: SA 5C
Drilling Contractor: EST
Borehole TD: 11.5

Project: Phase 3 DoE SV DG 2014
Logged by: V. Vathanavin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400/DP
Probe Completion Date/Time: 0939 / 5-28-14



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

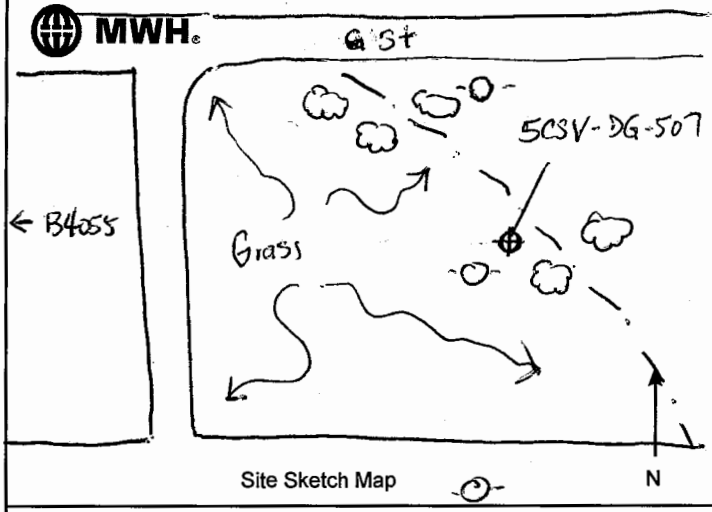
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:
1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

-DG-

MWH.



Site Sketch Map

Boring ID: 5CSV-507	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 5C
Logged By: V. Vathanosin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 11.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0904 / 5-28-14	Drill Finish Time/Date: 0925 / 5-28-14
Soil Vapor ID: 5CSV-DG-507	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0939 / 5-28-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 10.5-11.5, 5.0-6.0	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Veg. cleared area.	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, silt, roots, traces of decomposed granitic gravel, fill	TR	-	-	65	35/
0.5		33"				1							
						2		@1.5' color changes to dark brown (10YR 3/3), dark organic layer					
						3		@3' grades (Vir.) w/ med. plasticity clay w/clay (Vir.)	-	-	-	65	25/10
						4	ML	@4' Silt (ML), brown (10YR 5/3), stiff, dry, low-plasticity silt, medium plasticity clay, fill, no odors or stains.					85/15
			X		0940	5							
		48"				6							
4.7								5CSV-507-SA5C-SD-5.0-6.0					
		SVL				7	SM	Silty Sand w/clay (SM), yellowish brown (10YR 5/6), loose, dry, fine sand, ~~low~~ low plasticity fines, no odors or stains, native soil	-	-	-	60	40
						8		@8.0 grades w/o clay	-	-	-	60	40
						9							

QA/QC
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5-6
11.5

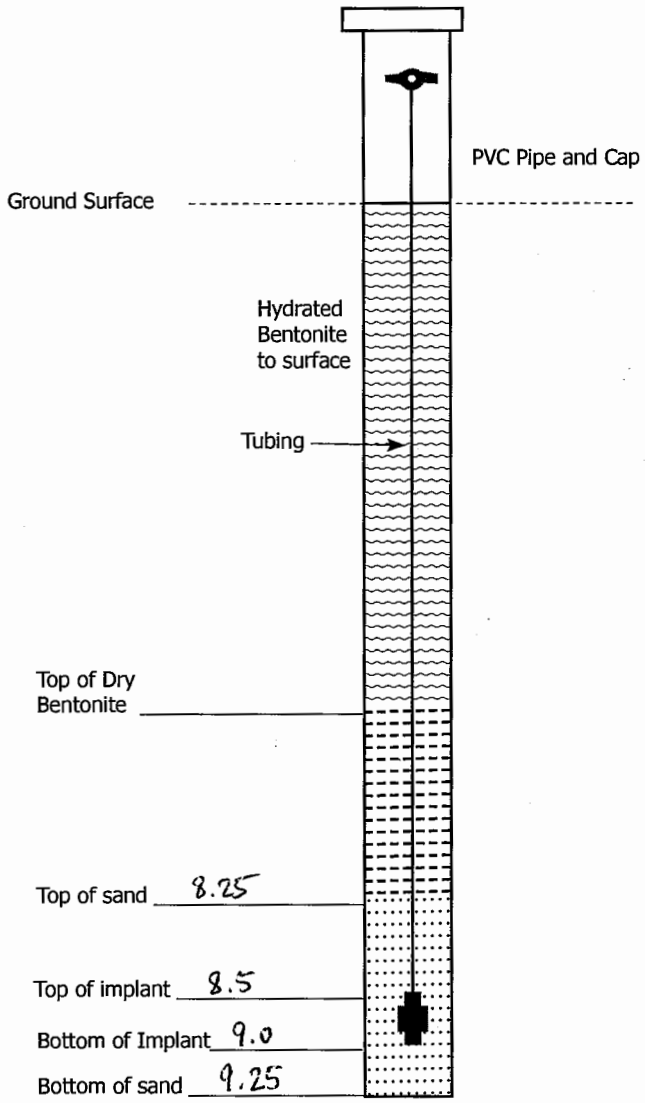
Boring ID: 5CSV-DG-507 Project: Phase 3 DOE SV DG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10	SM						
7.1						11							
						12	Br	Sandstone, weathered.					
						13		TD = 11.5, refusal on bedrock. Install vapor probes at 5.0-6.0, 10.5-11.5. Collect Encores at 5.0-6.0 due to silt and potential for low flow conditions.					
						14							
						15							
						6							
						7							
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-508
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SA5C
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 9.25
Probe Completion Date/Time:
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

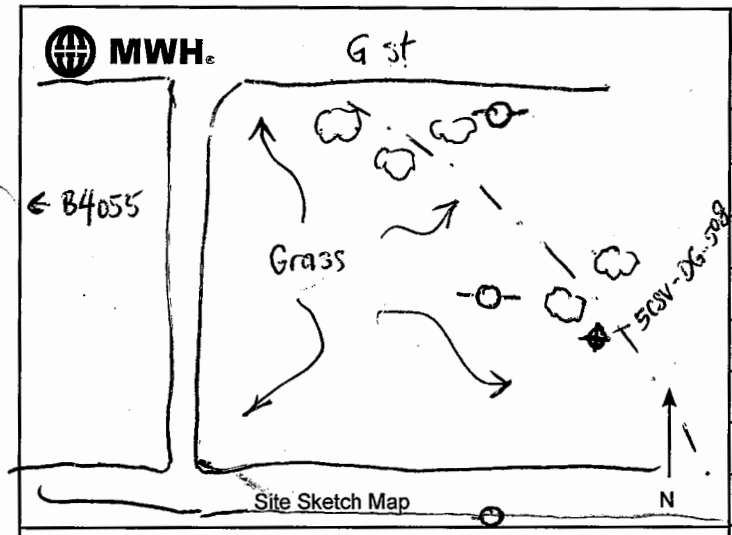
Dry Bentonite
Type: #8
Manufacturer: Cetco

Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-508	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA5C
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP (V.V.)	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 9.25
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0754 / 5-28-14	Drill Finish Time/Date: 0820 / 5-28-14
Soil Vapor ID: 5CSV-DG-508	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0840 / 5-28-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 8.25 - 9.25	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Hummocky area, grass	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, non-plastic silt, roots down to 3", fine angular gravel, no odors or stains, fill	<5	-	-	65	30
28.4		41"	NONE			1							
						2							
						3		@1.9' color changes to yellowish brown (10YR 5/4), no roots or gravel	-	-	-	65	35
						4	ML	Silt (ML), yellowish brown (10YR 5/6), stiff, dry, non-plastic silt, slightly layered, fill, no odors or staining.	-	-	-	-	100/
		48"	NONE			5							
						6	SM	Silty Sand (SM), yellowish brown (10YR 5/4), med. dense, dry, fine sand, non-plastic silt, ~~few~~ medium grained, sub angular sand, slight yellowish brown oxidation (10YR 5/8) (V.V.)	-	-	10	60	30/
						7							
		15"	NONE			8							
15.1						9							
							Br	@9.25 Sandstone, weathered. TD = 9.25', refusal on bedrock. Install probe at 8.25-9.25					

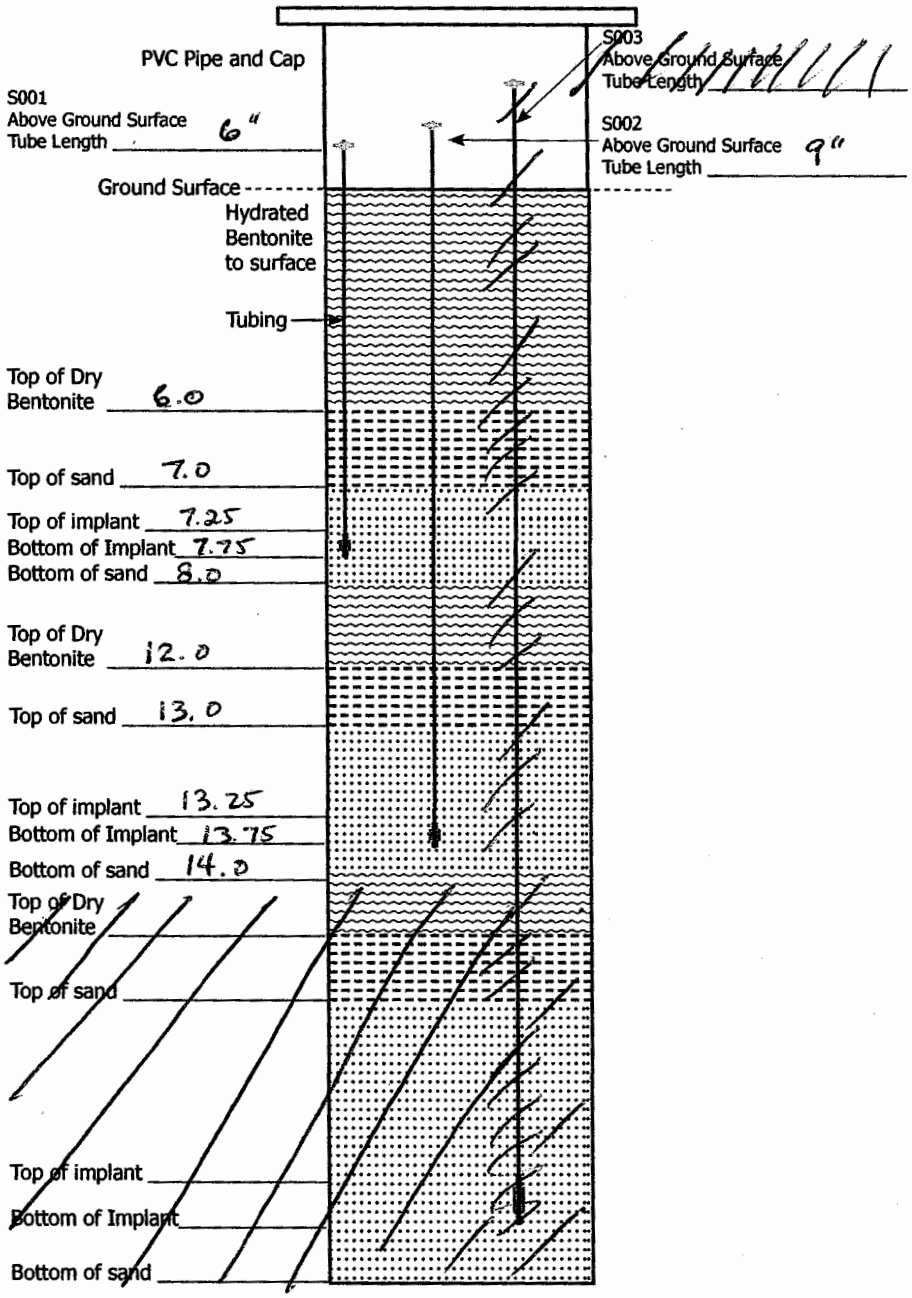
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-511
Site: 5C
Drilling Contractor: EST
Borehole TD: 14.0

Project: Phase 3 DOE Data Gap Sampling 2014
Logged by: V. Vathanasin
Driller: Marty D'Kilmullen
Borehole Diameter: 3.25"

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: Hand auger
Probe Completion Date/Time: 0905 / 6-12-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

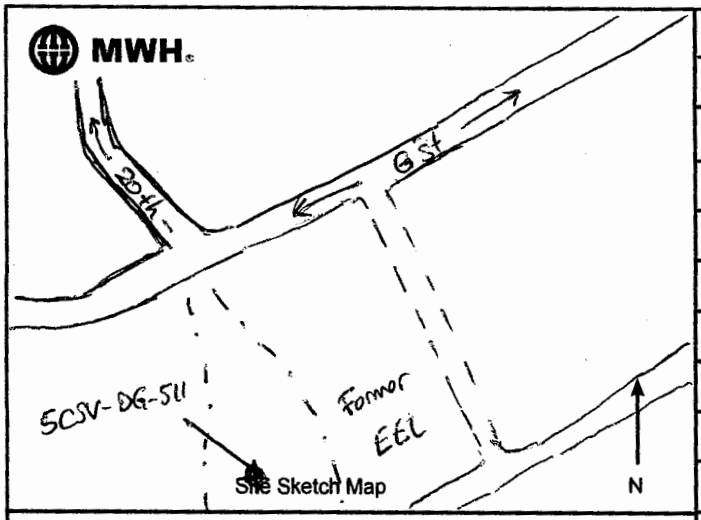
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-511	Sheet 1 of 2
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 5C
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kilhullen
Drill Rig Type/Method: Hand auger	
Sampler Type: Grab	
Borehole Diam (inch) 3.25	Total Depth (ft bgs) 14.0
Drill Bit Type: Std. Hand auger bucket	
Drill Start Time/Date: 0740 / 6-12-14	Drill Finish Time/Date: 0845 / 6-12-14
Soil Vapor ID: 5CSV-DG-511	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0905 / 6-12-14	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0, 13.0-14.0	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Mound of fill in bet. drainage	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, moist, fine sand, non-plastic silt, trace medium sand, fill, gravel debris (qtz)	-	-	TR	60	40/
						1							
						2	CL	Silty Clay (CL), dark yellowish brown (10YR 4/4), med. stiff to soft, slightly moist, low to med. plasticity clay, no stains or odors, possibly native soil	-	-	-	-	20/80
						3							
						4							
						5							
						6							
						7		@7' color changes to yellowish brown (~~10~~ 10YR 5/4)					
						8							
						9	SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, ~~slow~~ plastic silt, no odors, light iron staining (brownish yellow 10YR 6/8), native	-	-	-	65	35/

V.V.

Boring ID: SCSV-DG-511 Project: Phase 3 DOE SVDG Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10							
						11							
						12							
						13	SP-SM	(v.v.) Graded Poorly ~~Graded~~ Sand w/ silt (SP-SM) light yellowish brown (10YR 6/4), loose, dry, fine sand, silt, no odors	–	–	–	90	10/
						14	Br	stains, native soil					
						15							
						16		Sandstone, weathered					
						17							
						18		TD=14.0, refusal on bedrock, install vapor probes at 7.0-8.0 and 13.0-14.0. No soil samples collected.					
						19							
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

7-8, 13-14

MWH.

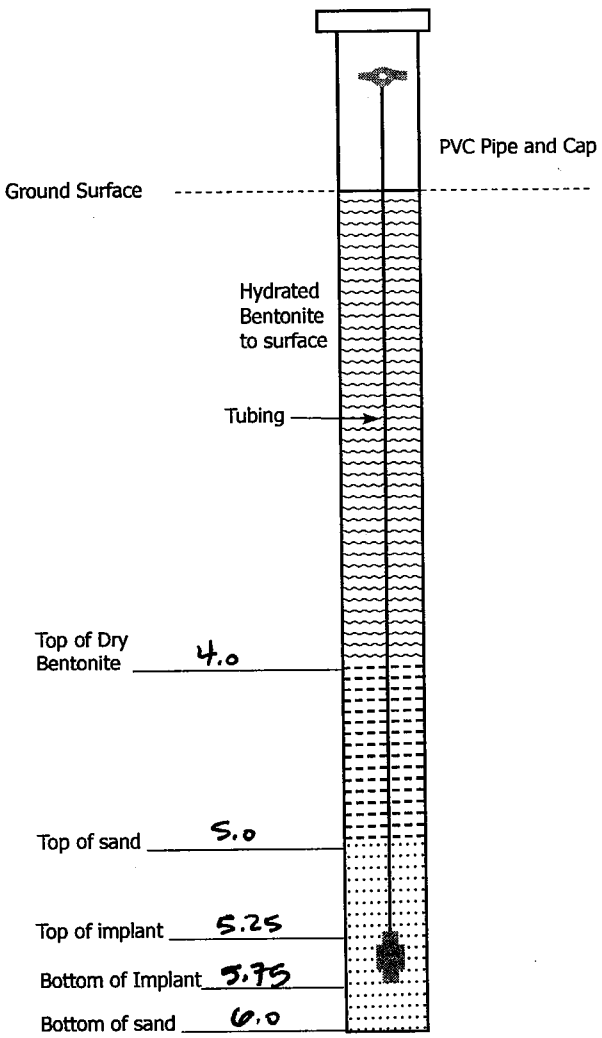
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SCSV - DG - ~~515~~ 513 (RP)
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 2014

Site: SA SC
Reviewed by:
Logged by: ANDREW PAYNE

Drilling Contractor: EST
Rig Type/Method: HANDAUGER / GRAB
Driller: NIJOJN KILLIVLGN

Borehole TD: 6'
Probe Completion Date/Time: 6/11/14 1330
Borehole Diameter: 3.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

Type: #8
Manufacturer: CETCO

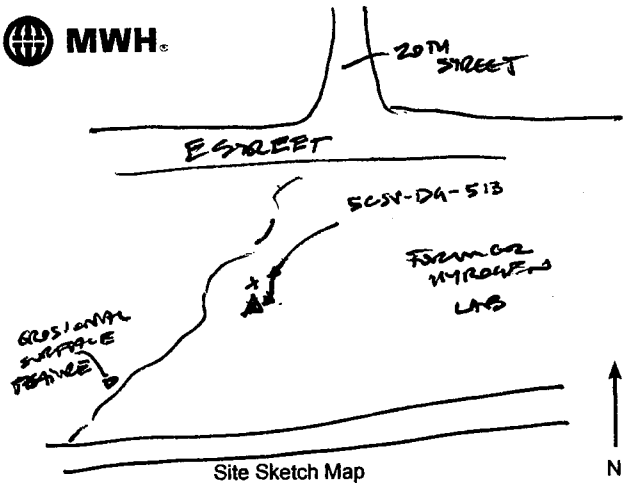
~~SC-SV~~ (RP)

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SCSV-DG-513	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 5C
Logged By: ANDREW OSTRE	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILHULLEN
Drill Rig Type/Method: HANDAUGER	
Sampler Type: HANDAUGER / GRAB	
Borehole Diam (inch): 3.25"	Total Depth (ft.bgs): 6'
Drill Bit Type: HANDAUGER BUCKET	
Drill Start Time/Date: 1253 6/11/14	Drill Finish Time/Date: 1320 6/11/14
Soil Vapor ID: SCSV-DG-513	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 6/11/14 1330	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0'	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Well Detail Completed (yes/no)	Surface Completion: SOIL VAPOR PROBE
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: GRASSES, BRAMBLES MUSTARD

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		SM/SILTY SAND, DRY, BROWN (10YR 4/3), LOOSE, FINE TO MED SAND, SUBANGULAR TO SUBROUNDED, TRACE COARSE SAND, TRACE CLAY PIPE PIECES. FILL.	—	5	15	60	20
0.0						1							
						2		LOOSE TO MED DENSE @ 2.5 TO 4.75' BGS					
0.0						3							
						4							
0.0						5	SP-SM	SAND W/ SILT (SP-SM), DRY, LOOSE. PALE BROWN (10YR 6/3) TO BROWN (10YR 5/3), FINE TO MEDIUM SAND, ANGULAR TO SUBROUNDED. TRACE COARSE SAND	—	5	25	55	15
						6	SS	TD = 6'; REFUSAL ON WEATHERED SS BEDROCK, WEAK, FRIABLE. SGT VAPOR PROBE @ 5-6' @ 1330 - 1ST HOLE REFUSAL @ 6" - 2ND HOLE REFUSAL @ 6' (SW PROBE LO 1' SOUTH					
						7							
						8							
						9							

QA/QC
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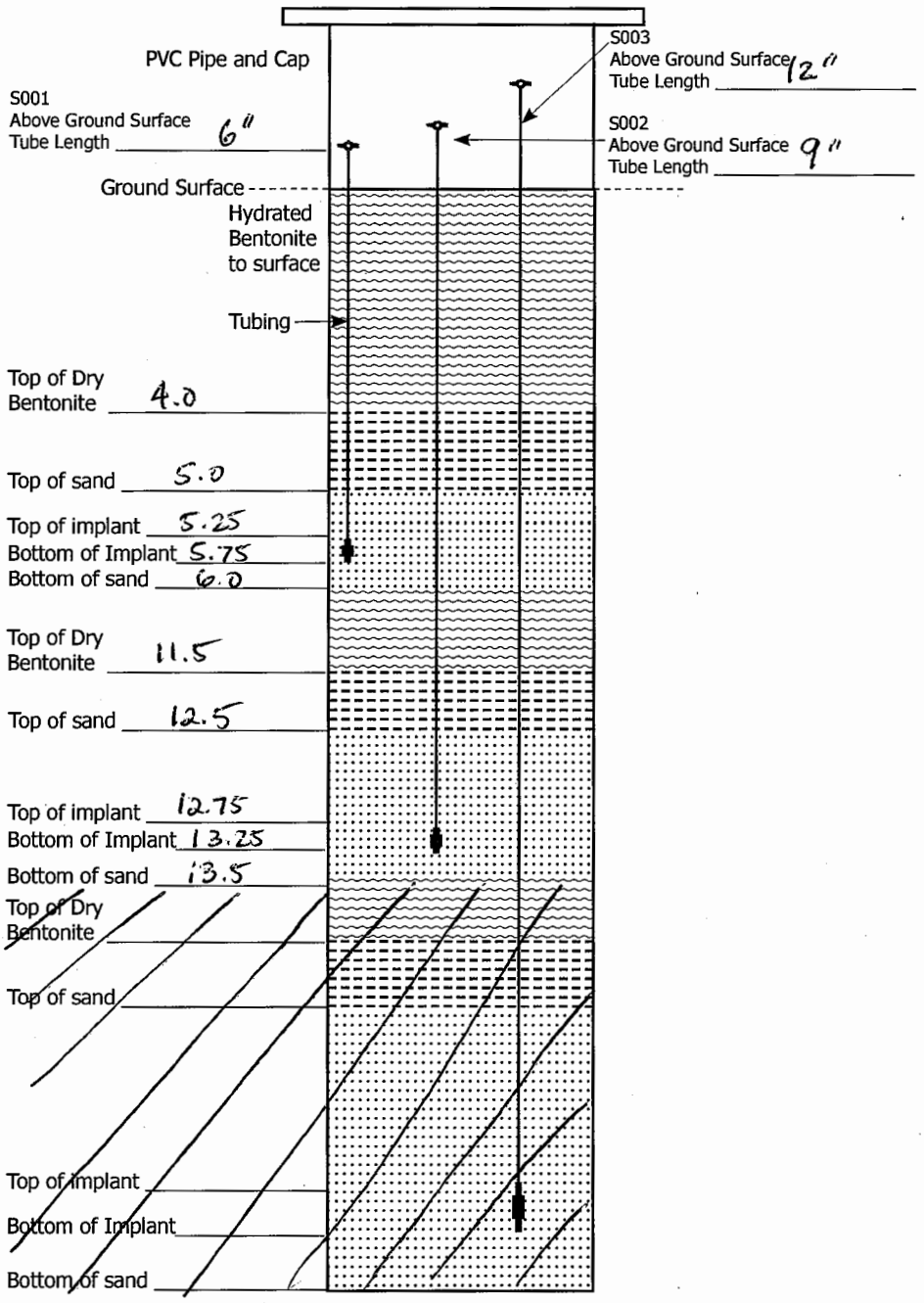
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SCSV-DG-515
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SA SC
Logged by: Van Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 13.5
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1030 / 6-2-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

Type: #8
Manufacturer: Cetco

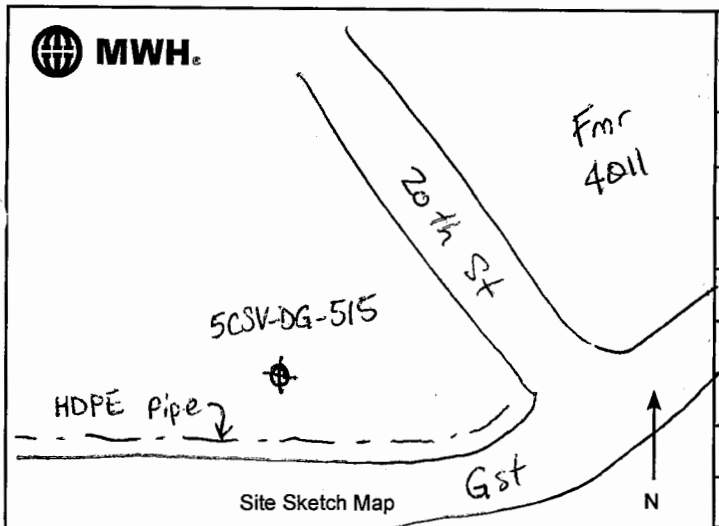
Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

515

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-~~561~~	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site:		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 13.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0942 / 6-2-14	Drill Finish Time/Date: 1007 / 6-2-14		
Soil Vapor ID: 5CSV-DG-515	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1030 / 6-2-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 12.5-13.5	Surface Completion: Soil Vapor Probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Soil and weeds, graded					
		48"	NONE			0	SM	Silty Sand (SM), yellowish brown (10YR 5/6), loose, dry, medium to fine sand, non-plastic silt, fill, no odors or stains	–	–	20	50	30/
						1							
						2							
						3		@ 3' color changes to dark yellowish brn (10YR 4/6)					
						4							
						5							
53.6		43"	NONE			6		Silty Sand w/ clay (SM), yellowish brown (10YR 5/4), med. dense, fine sand, low plasticity fines, light gray (10YR 7/2) weathering and yellow staining (10YR 7/8), fill	–	–	–	65	30/5
						7							
						8	SP-SM	Poorly Graded Sand w/ silt (SP-SM), yellowish brown (10YR 5/6), loose, dry, fine to med. sand, fill, no stains or odors, {non-plastic silt}			10	80	10/
0.0			NONE			9							

QA/QC
Surficial media boring log rev 2-25-2014

Boring ID: 5CSV-DG-515 Project: Phase 3 DOE SV DG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	NONE				0		~~Silt~~ Silt + Clay increases, med. stiff. (v.v.)	–	–	5	80	10/5
	X					1	SP	~~Silt~~ Poorly Graded Sand (SP), yellowish brown (10YR 5/4), loose, dry, fine sand, trace silt, brownish yellow (10YR 6/6) stains (oxidation), native soil.	–	–	-	100	TR
0.0	X	NONE				2							
	X					3							
						4	Br	Sandstone, weathered					
						5							
						6		TD=13.5, refusal on bedrock. Install vapor probes at 5.0-6.0 & 12.5-13.5. PID ~~read~~ ~~at~~ @ 53.6 ppm @ 5' bgs.					
						7							
						8							
						9							
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

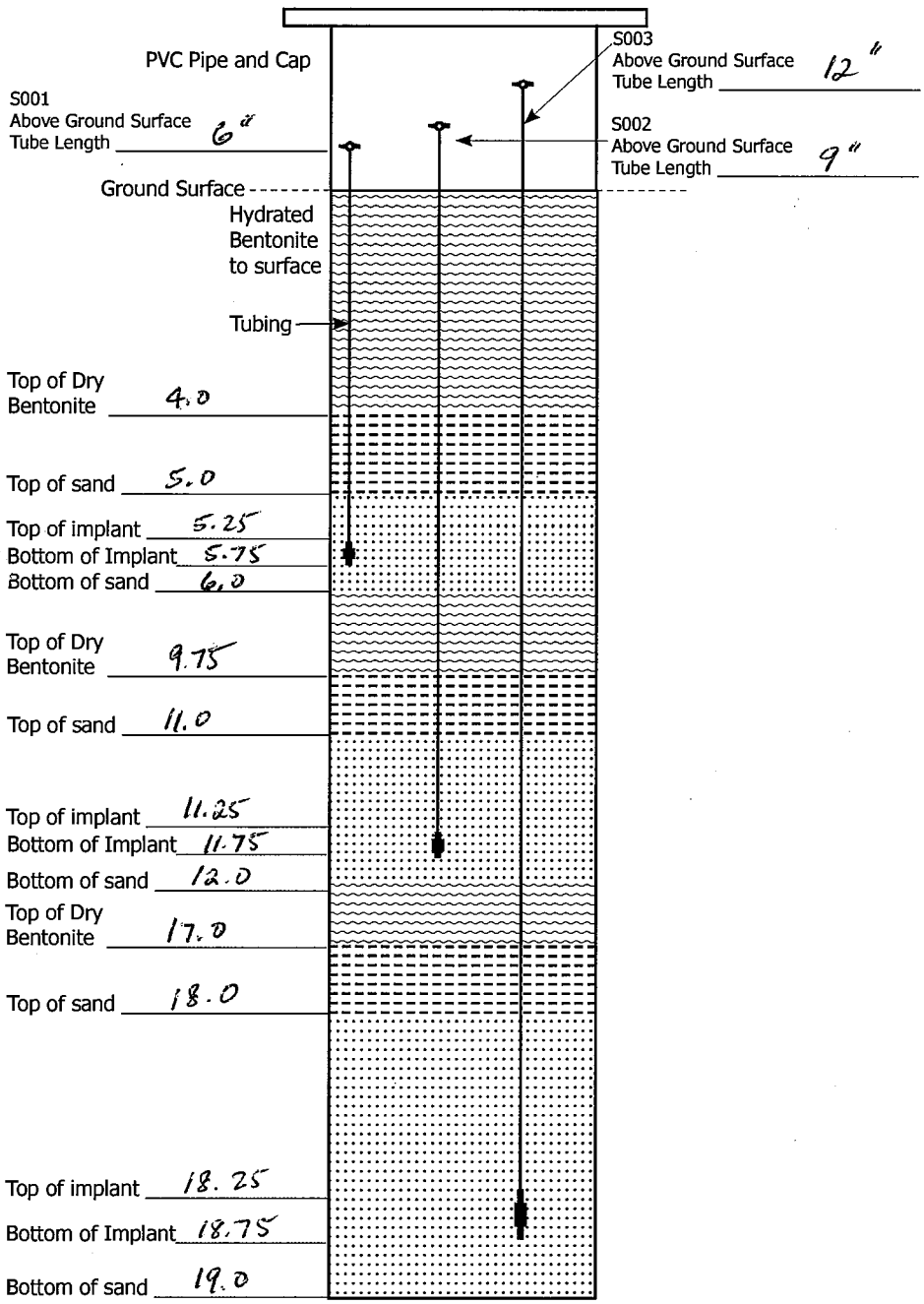
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-516
Site: 5C
Drilling Contractor: EST
Borehole TD: 19.0

Project: Phase 3 DOE SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 0935 / 5-30-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

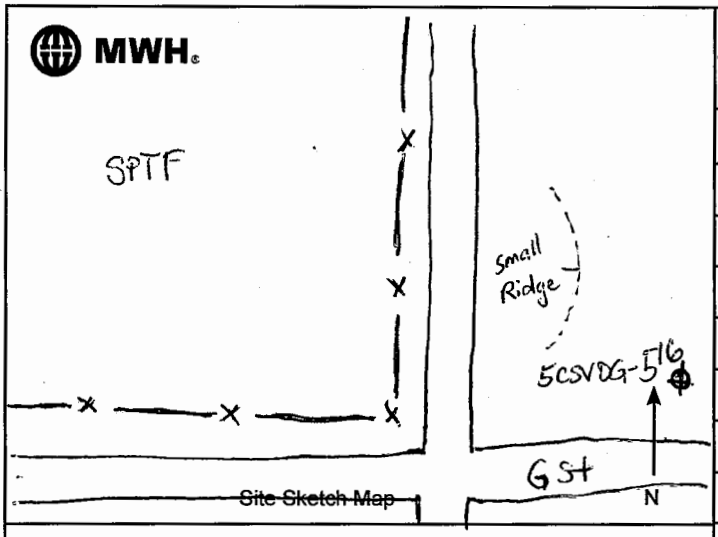
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-516	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 19.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0750 / 5-30-14	Drill Finish Time/Date: 0905 / 5-30-14		
Soil Vapor ID: 5CSV-DG-516	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 0935 / 5-30-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 11.0-12.0, 18.0-19.0	Surface Completion: Soil Vapor probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Graded area w/ road base					
								Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand, silt, fine angular gravel, non-cemented, grass roots, asphalt debris, fill	TR	–	–	65	35/
		46"	NONE			1							
						2		@0.5' grades w/o roots ~~& gravel~~ (V.V.)					
						3		@1.0' increasing fine gravel - Silty Sand w/ Gravel					
						4							
0.0						5		slightly clayey → decomposed feldspars, fill	10	5	10	40	25/10
		36"	NONE			6							
						7							
						8							
		36"	NONE			9							

Cont next page

Boring ID: SCSV-DG-516 Project: Phase 3 SV DG Sampling 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Estimated % of Sand: Gravel	Coarse	Medium	Fine	Silt/clay
						10							
							SC	Clayey Sand (SC), yellowish brown (10YR	—	—	—	75	25
		18"				11		5/4), med. dense, fine sand, low plas-	TR	—	—	100	—
0.2			NONE				SM	ticity clay, no odors or stains, possibly fill					
						12	SP	~~Silty Sand (SM)~~ Poorly Graded Sand (SP),					
		30"						brown (10YR 5/3), loose, dry; fine					
						13		sand, trace fine gravel, fill					
			NONE										
						14							
						15							
0.7		12"					SM	Silty Sand (SM), brown (10YR 5/3), loose,	—	—	—	75	25
								dry, fine sand, low-plasticity silt; fill					
						16							
			NONE				VJ		—	—	—	100	—
		0"					SP	Poorly Graded Sand, brownish yellow (10YR					
						17		6/6), loose, dry, fine sand; native soil					
						18							
			NONE										
2.3		12"				19	Br	Sandstone, weathered					
						20							
						1		TD = 19.0, refusal on bedrock,					
								install vapor probes at 5.0-6.0, 11-12,					
						2		18.0-19.0					
						3							
						4							
						5							
						6							
						7							
						8							
						9							

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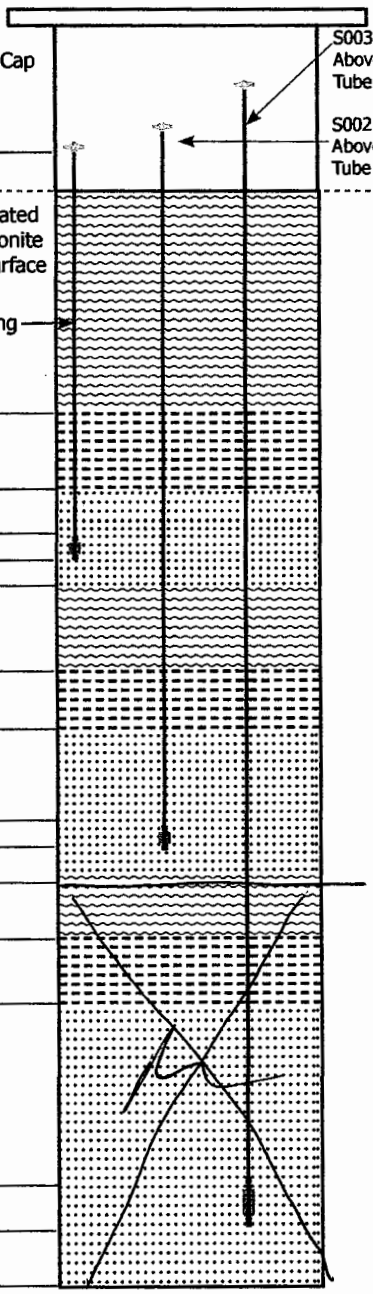
5-6, 11-12, 18-19

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SC SV DG1-518
Project: Phase 3 DOE Data Gap Sampling 2014
Job #: 10503982.3050105/10503982.3060105
Site: SC
Logged by: Rob Sellers
Reviewed by:
Drilling Contractor: EST
Driller: EST
Rig Type/Method: Geoprobe 5400
Borehole TD: 11.5'
Borehole Diameter: 2.25"
Probe Completion Date/Time: 02 JUN 14/1100



PVC Pipe and Cap

S001 Above Ground Surface Tube Length: 0.5'

S002 Above Ground Surface Tube Length: 0.75'

S003 Above Ground Surface Tube Length: N/A

Ground Surface

Hydrated Bentonite to surface

Tubing

Top of Dry Bentonite: 4.0

Top of sand: 5.0

Top of implant: 5.25

Bottom of Implant: 5.75

Bottom of sand: 6.0

Top of Dry Bentonite: 9.5

Top of sand: 10.5

Top of implant: 10.75

Bottom of Implant: 11.25

Bottom of sand: 11.5

Top of Dry Bentonite: —

Top of sand: —

Top of implant: —

Bottom of Implant: —

Bottom of sand: —

Vapor Implant Specs

Material: stainless steel

Length: 6"

Diameter: 3/8"

Tubing Specs

Material: teflon

Diameter: 1/4"

Color: clear

Sand Pack Specs

Grain Size: #3

Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles

Manufacturer: Cetco

Hydrated Bentonite

Type: #8 crumbles

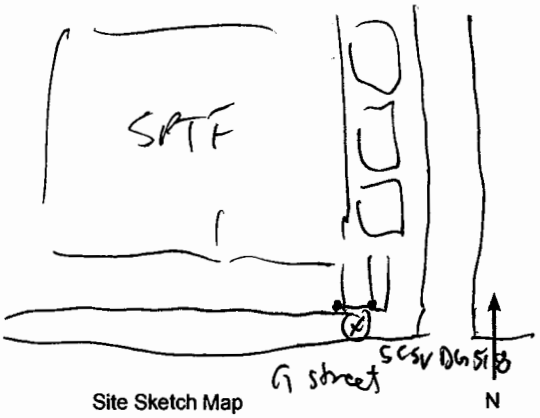
Manufacturer: Cetco.

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: SCSV DG-518	Sheet 1 of 2
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.3050106	Site: SC
Logged By: RWB ELLIS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTY KILLINGER
Drill Rig Type/Method: GEOPROBE 5400	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs): 11.5'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 02JUN14, 09:35	Drill Finish Time/Date: 02JUN14, 10:45
Soil Vapor ID: SCSV DG-518	Soil Boring Backfill Time/Date: N/A — Backfill Material: NA
Soil Vapor Well Completion Time/Date: 02JUN14 / 11:00	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0', 10.5-11.5'	Surface Completion: SOIL VAPOR PROBE
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: ASPHALT	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		48"				0		4" asphalt					
						1	SP	0.4 - 0.8 graded		45			
								Poorly graded sand (SP) very	–	15	45	35	5
						2	CH	dark grey (10YR 3/1) mixed,					
								transition to light brown grey					
						3		(10YR 6/2), predominant medium					
								sand (45), some fine sand (35)					
						4		little coarse sand (15), few silt					
		48						(5), loose, dry, no stain,					
						5	SP	no odor, fill.					
								0.8 - 4.5	–	–	–	20	80
			☒				CL						
		SVL-518	SASC-518	5.5-6.0		6		Clay (CH), very dark brown					
		@ 10:40						(10YR 2/2), hard, very dense,					
0.0		10 min/ 18 gpm				7		very high dry strength, slow					
								dilatency, high toughness,					
						8		no stain, no odor, fill					
		36"						4.5-5.0					
						9		Transition lens of poorly					
								graded sand (SP), gray (10YR 6/1)	–	30	50	25	5
								30 Moderate medium sand (50)					

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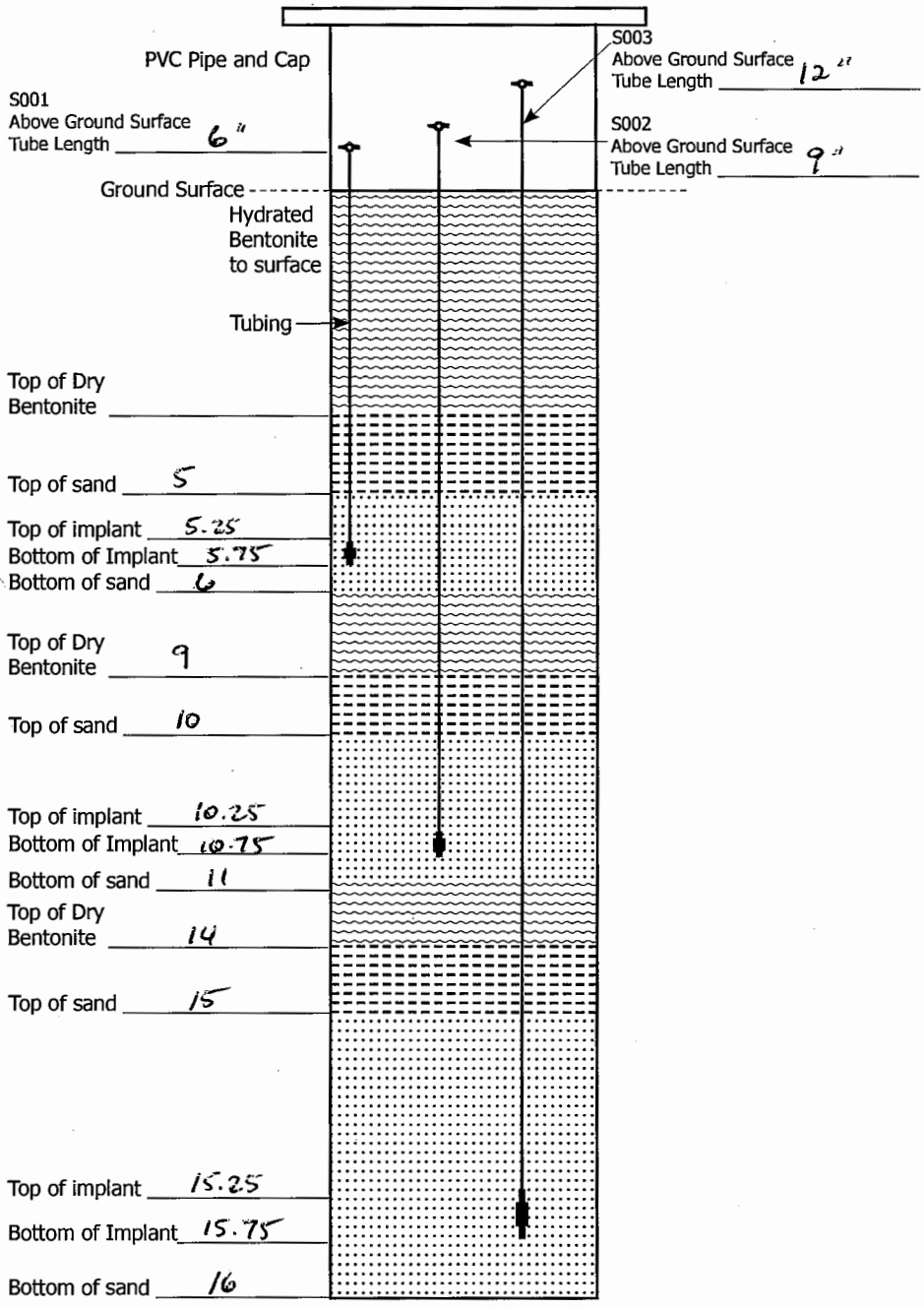
Boring ID: SCSV D6-5'8 Project: Phase 3 DOE SVD6 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10	CC	Some coarse sand (30), little fine sand (25) and few silt (5)					
						11	SM	No stain, no odor, fill.					
	SVL-5'8-SASC-SB-11.0-11.5				TD			5.0-11.0					
	@ 10:45					2		Clay (CL) yellowish brown (10YR 5/4) rapid dilatancy, medium dry strength medium tough, no stain, no odor, fill.	-	-	-	35	65
0.0	Nylon, 31 gpm					3							
						4		11.0-11.5					
						5		Silty sand (SM) yellowish brown (10YR 5/6), loose, moist. Predominant medium sand (40%), some fine sand (30), little silt (25), few coarse (5) No stain, no odor native	-	5	40	30	25
						6							
						7							
						8		T.D. @ 11.5' bgs					
						9		refusal on sandstone bedrock					
						0		Samples taken @					
								10:40 5.5' SVL-SIB-SASC-SB-5.5					
						1		10:45 11.0' SVL-SIB-SASC-SB-11.0					
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-525
Project: DOE Phase 3 SV DG
Job #: 10509382 (V.V.)
Site: 5C
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 21.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1245 / 5-30-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: # 3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

Type: # 3
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

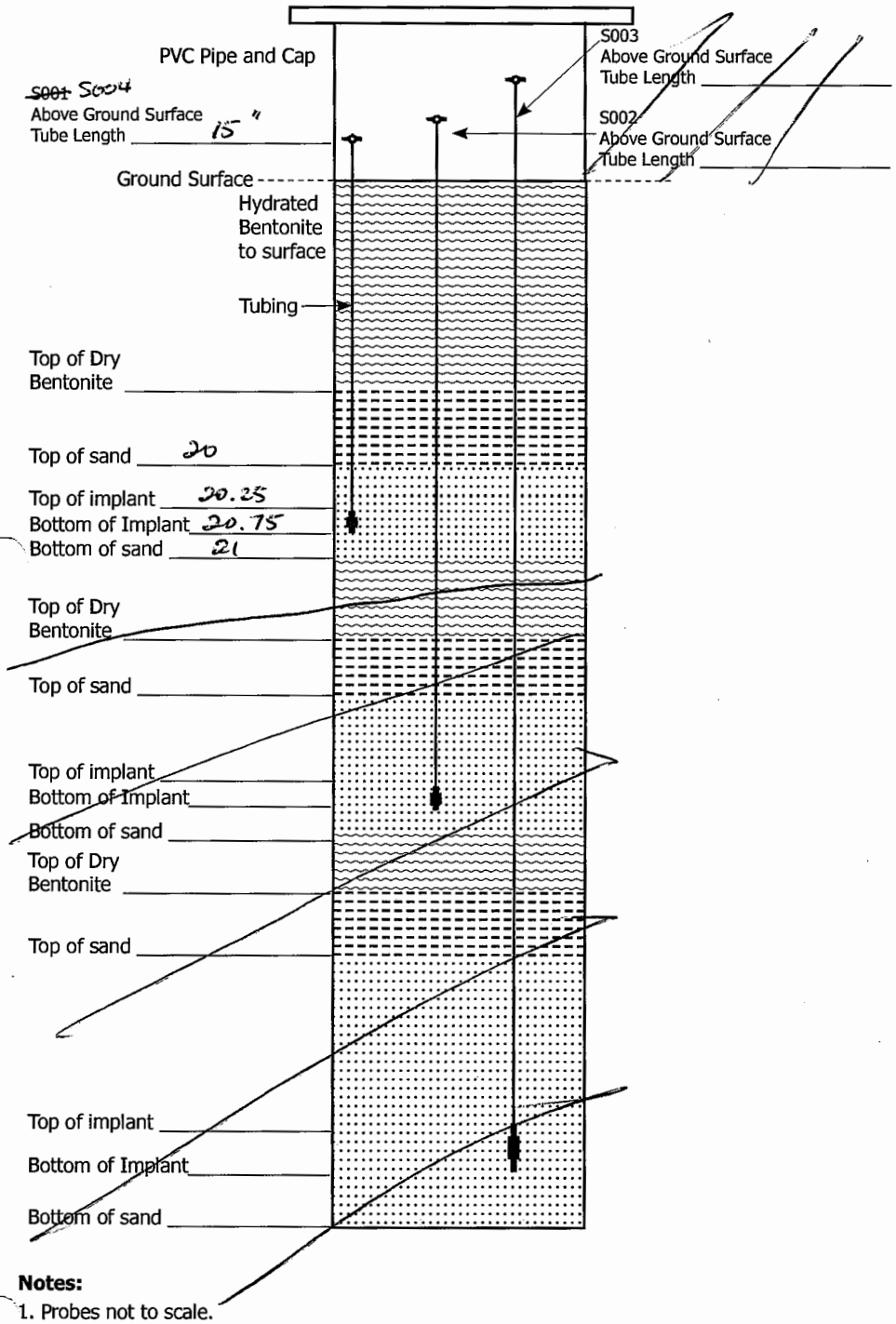
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-525
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: 5C
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 21.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 12:15/5-20-14

Continued from P. 1 of 2.

Deepest probe



Vapor Implant Specs

Material:

Length:

Diameter:

Tubing Specs

Material:

Diameter:

Color:

Sand Pack Specs

Grain Size:

Manufacturer:

Dry Bentonite

Type:

Manufacturer:

Hydrated Bentonite

Type:

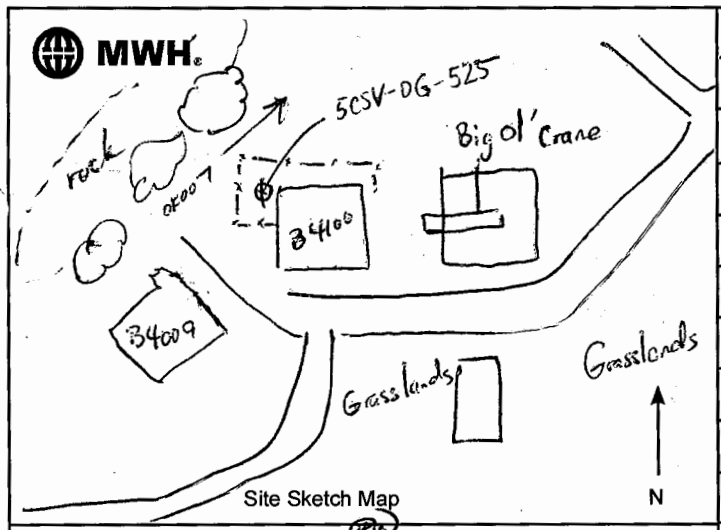
Manufacturer:

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-525	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 21.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1025 / 5-20-14	Drill Finish Time/Date: 11:30 / 5-20-14
Soil Vapor ID: 5CSV-~~525~~ DG-525 (V.V.)	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 12:15 / 5-20-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, 15.0-16.0, 20.0-21.0	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☒ None (V.V.)

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: Concrete					
								7" Concrete					
						1	SW-SM	Well Graded Sand w/ Silt (SW-SM), brownish yellow (10YR 6/6), med. dense, moist, fine to coarse sand, weathered mica, low plasticity silt, no odors or stains, fill	–	10	30	50	10/
		48"				2	ML		–	–	–	15	85/
						3		@ 1' Silt w/ Sand (ML), brown (10YR 5/3), med. stiff, moist, low plasticity silt, fine sand, fill					
Adjust intervals down 7"						4	CL	@ 2' color changes to dark brown (10YR 3/3).	–	–	–	–	/100
					11:44	5	ML	@ 4'-4.25' Clay (CL), very dark brown (10YR 2/2), med. stiff, moist, med- to high plasticity clay, native soil					
		48"	X			6							
				SVL-525-SA5C-SB-5.0-6.0		7		@ 4.25 Silt w/ Sand (~~SM~~ ML), very dark grayish brown (10YR 3/2), med. stiff, dry, low plasticity silt, fine sand, native.	–	–	–	–	/100
						8	CL						
						9							
		48"						Fat Clay (CL), very dark gray (10YR 3/1), med. stiff, moist, medium plasticity clay.					

cont next page

Boring ID: SCSV-DG-525 Project: Phase 3 DOE SV DG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		48"			11:49	10		@ 10' Color changes to brown (10 YR 5/3)	-				
				SVL-525-SASC-SB	10.0-11.0	11							
						12							
		24"				13	SC	Sandy Clay (SC), yellowish brown (10YR 5/4), stiff, moist, med. plasticy clay, fine sand	-	-	-	20	80
						14							
		24"				15	SC	Grades to clayey sand (SC) →	-	-	-	60	40
					11:54	16							
		SVL-525-SASC-SB			15.0-16.0	17	SM	Silty Sand (SM), yellowish brown (10YR 5/8), med. dense, dry, fine sand, non-plastic silt, no odors, no stains.	-	-	-	60	40
		45"				18	SP	Poorly Graded Sand (SP), brownish yellow (10YR 6/6), w/ mottled light gray (10YR 7/2), med. dense, dry, fine sand, friable, native, close to weathered bedrock.	-	-	-	100	-
						19							
						20							
		6"				21	B	@ 21' Sandstone, weathered.					
						22		TD = 21.0' from ~~grad~~ ground surface (i.e. top of concrete) Refusal on bedrock. Install vapor probes at 5.0-6.0, 10.0-11.0, 15.0-16.0, 20.0-21.0. Collect encores and place on hold at 5.0-6.0, 10.0-11.0, and 15.0-16.0 due to possible low-flow conditions.					
						23							
						24							
						25							
						26							
						27							
						28							
						29							

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1149
~~1150~~
1150

MWH.

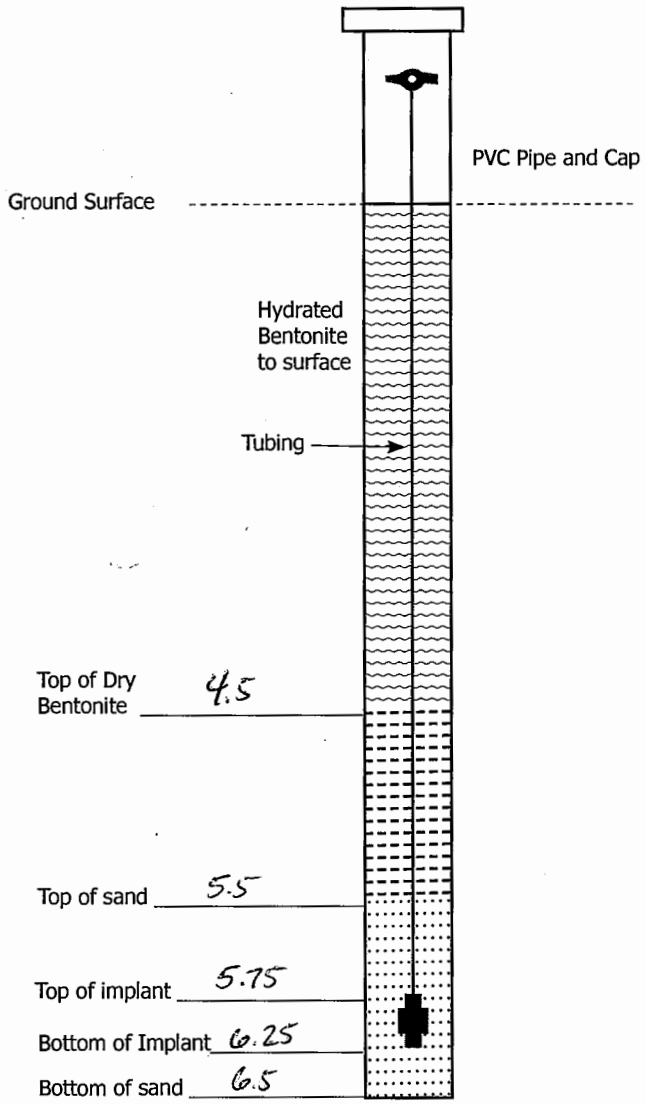
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-528
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20

Site: SA 5C
Reviewed by:
Logged by: V. Vathanasin

Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes.

Borehole TD: 6.5
Probe Completion Date/Time: 1334 / 5-28-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: (V.V.) ~~Cetco~~ Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

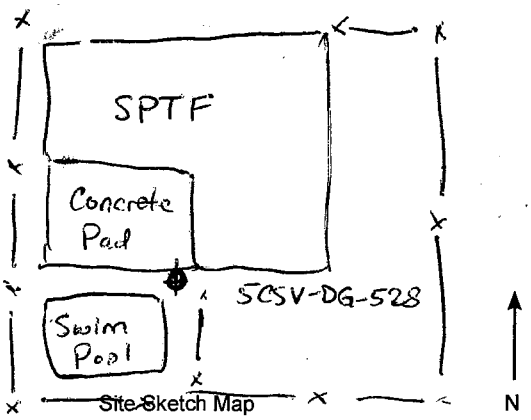
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-528	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 6.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1300 / 5-28-14	Drill Finish Time/Date: 1309 / 5-28-14		
Soil Vapor ID: 5CSV-DG-528	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1334 / 5-28-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.5-6.5	Surface Completion: Install vapor probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: Asphalt					
								3" Asphalt	50	10	15	20	5/
						1	GW ~~SW~~	Sandy Gravel (GW), brown (10YR 4/3) with pale brown (10YR 6/3) gravel, loose, dry, fine gravel, fine to coarse sand, fill, road base, dark stains (very dark brown (10YR 2/2))					
		40"				2	SM		–	–	–	70	30/
									10	–	–	60	30/
						3			–	–	–	65	35/
								@ 1.3' Silty Sand (SM), dark grayish brown (10YR 4/2), med. dense, moist, fine sand, dark yellowish brown (10YR 4/6) oxidation, fill					
						4							
		30"				5		@2' grades with weathered gravel					
						6		@2.5' color changes to yellowish brown (10YR 5/4), no gravel, fill					
						7	Br						
						8		@6.5 Strong oxidation and highly weathered					
						9		Sandstone, weathered					
								TD = 6.5, refusal on bedrock, install probe at 5.5-6.5					

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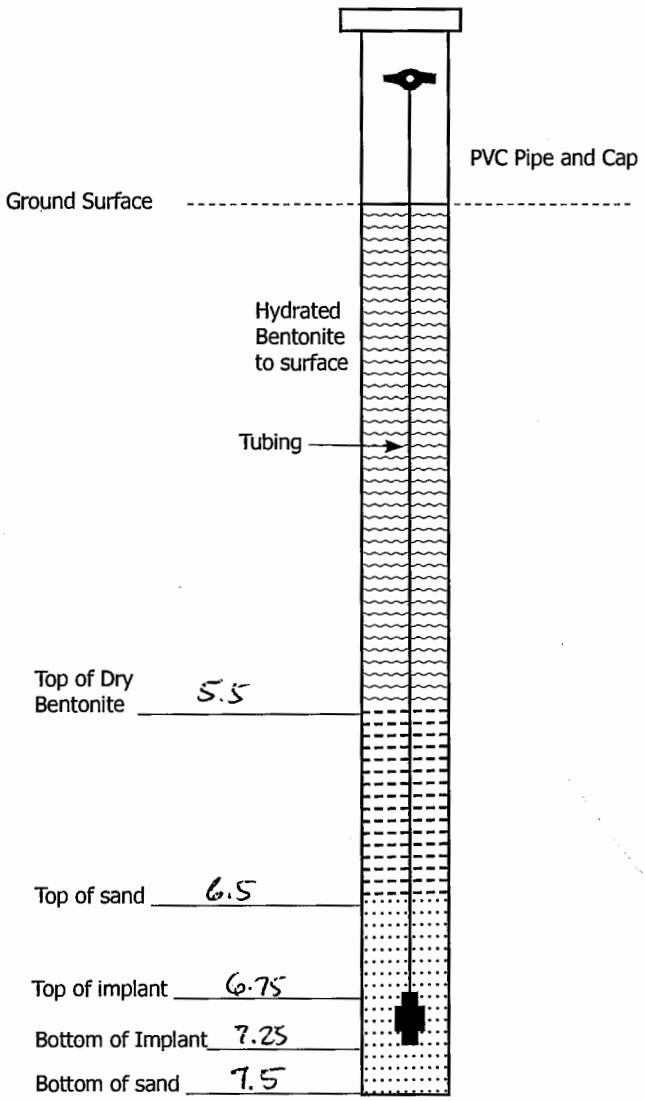
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-530
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5C
Reviewed by:
Logged by: V. Vatharasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 7.5
Probe Completion Date/Time: 1504/5-20-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

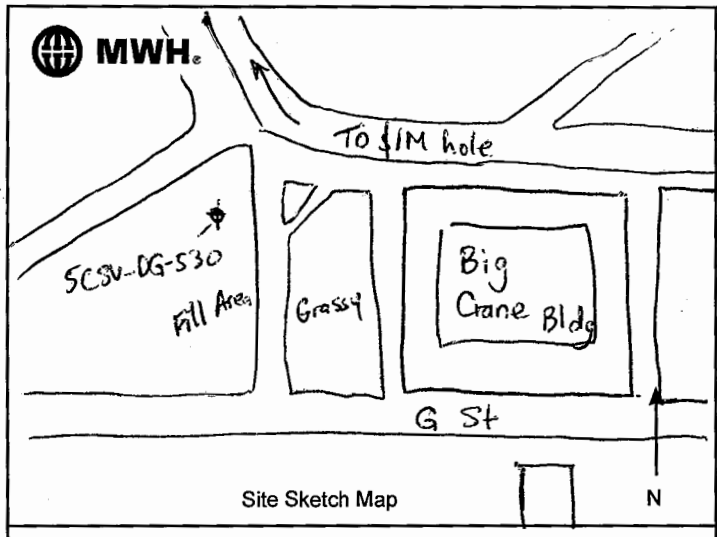
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SCSV-DG-530	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 5C
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 7.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1430 / 5-20-14	Drill Finish Time/Date: 1445 / 5-20-14
Soil Vapor ID: SCSV-DG-530	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1504 / 5-20-2014	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 6.5'-7.5'	Surface Completion: Soil Vapor Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Gentle Slope, gravel, grass	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non-plastic silt, non-cemented, no odors or stains, fill	–	–	–	60	40
		42"	NONE			1		@1' asphalt staining, very dark gray (10YR 3/1).					
						2	ML	@2' staining disappears. Silt w/ Sand (ML), light yellowish brown (10YR 6/4), med. stiff, dry, non-plastic silt, fine sand, fill, layer apperance -	–	–	–	10	~~90~~ V.B
						3							
						4							
						5							
		36"	NONE			6	SP	~~SP~~ V.B Poorly Graded Sand (SP), very pale brown (10YR 7/4), loose, dry, fine sand, fill.	–	–	–	100	–
						7		color changes to brownish yellow (10YR 6/6), native.					
						8		@ 7.5 Sandstone.					
						9		TD = 7.5', refusal on bedrock, install vapor probe 6.5'-7.5' bgs.					

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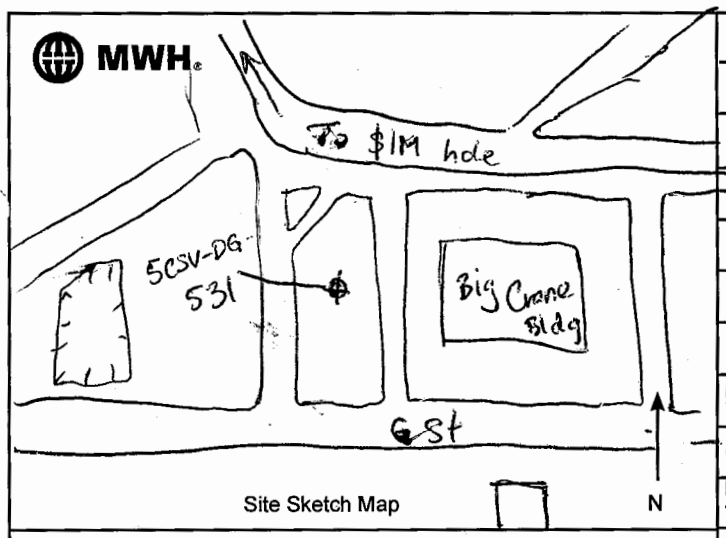

Site Sketch Map

Boring ID: 5CSV-DG-531	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 2.9
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1340 / 5-30-14	Drill Finish Time/Date: 1401 / 5-30-14
Soil Boring Backfill Time/Date: ~~30~~ (V.V.)	Backfill Material: Soil cuttings.
Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None	
Surface Completion: Soil vapor probe	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID:	N/A
Soil Vapor Well Completion Time/Date:	N/A
Soil Vapor Probe Depths (ft.bgs):	N/A
Soil Vapor Well Detail Completed (yes/no)	

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	SM	Surface Description: Grass. Silty Sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, silt, roots.	–	–	–	60	40
	X	30"				1							
0.0	X		X		1405	2		grades with slightly coarser ~~fragm~~ grains (still fine sand)	–	–	–	70	30
SVL-531-SA5C-SB-2.5-2.9						3	Br	~~Sandstone~~ Shale, weathered. (V.V.)					
						4		TD = 2.9 ft bgs., refusal on bedrock. Collect encored at 2.5-2.9 ft for voc analyses. Stepped out twice to confirm refusal w/ similar results.					
						5							
						6							
						7							
						8							
						9							

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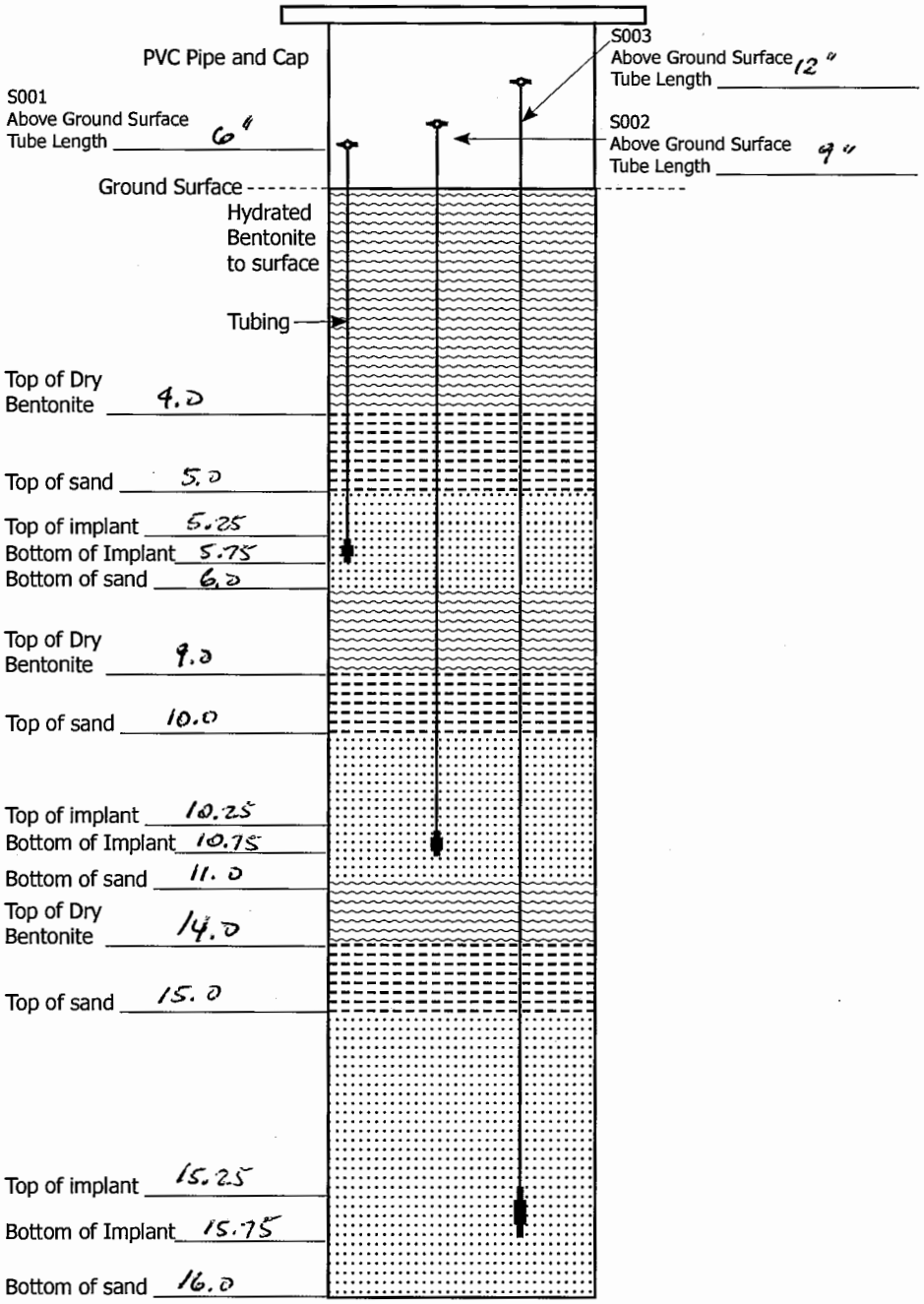
Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SCSV-DG-535
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SA 5C
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 16.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1145/5-28-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

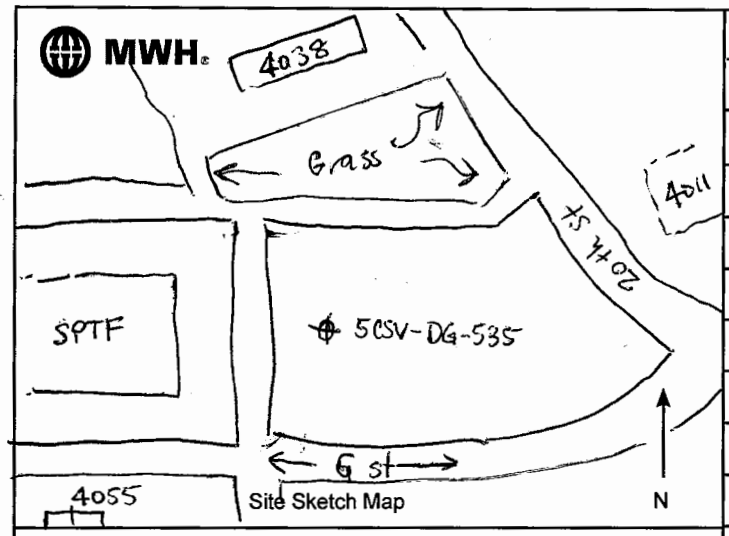
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-535	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vathanaom	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 16.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1035/5-28-14	Drill Finish Time/Date: 1120/5-28-14		
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A		
Soil Vapor ID: 5CSV-DG-535	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Well Completion Time/Date: 1145 / 5-28-14			
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, 15.0-16.0	Surface Completion: Soil vapor probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Dry grass, E of SPTF	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), med. dense, dry, fine sand, non-plastic silt, no stains or odors, well compacted, non-cemented, fill	-	-	-	55	45/
		48"	NONE			1			-	-	-	55	35/10
						2		@1.5' grades w/ pale yellow (2.5Y 8/4) weathered sand nodules, ~~very~~ low to med plasticity clay, fill					
0.0			NONE			3							
						4							
		24"				5		@5'-3.5' grades to very dense. @5.0 grades w/o clay, color changes to brownish yellow (10YR 6/6), fill	-	-	-	60	40/
			NONE			6							
		24"				7							
0.0						8							
		24"	NONE			9							

QA/QC
Sur icial media boring log rev 2-25-2014

Boring ID: 50SV-DG-535 Project: Phase 3 DOE SV DG Sheet 2 of 2

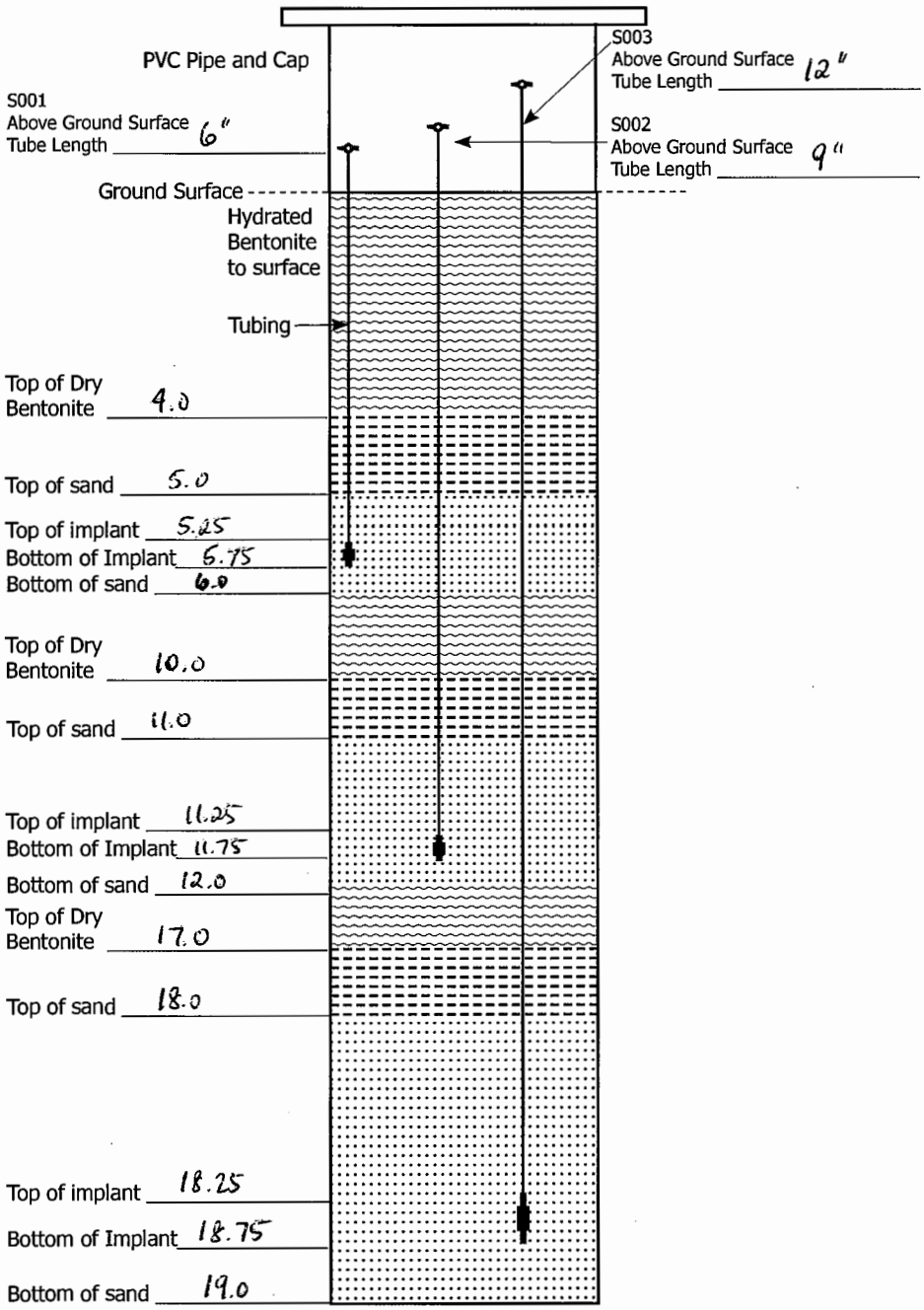
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		24"				10	SM	Same as above - chomogenous fill material.					
1.4						11							
						12							
		36"				13		Grades w/ fine angular gravel and low plasticity clay	10	5	5	35	35/10
			None			14		@14' grades w/o gravel (Silty Sand w/ clay)	—	-	—	50	30/20
1.8		12"				15	SP	Poorly Graded Sand w/ Silt (SP-SM), very pale brown (10YR 7/4), loose, dry fine	-	-	-	90	10/
						16	Br	sand, silt, moderate, brownish yellow (10YR 6/8) oxidation, native soil					
						17							
						18		Sandstone, weathered					
						19		TD = 16.0 ft; refusal on bedrock - installed vapor probes at 5.0-6.0, 10.0-11.0					
						20		and 15.0-16.0					
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5-6
10-11

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-543
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SA 5C
Logged by: V. Vathanesin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 19.0 ft
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1230 / 5-30-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: # 3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

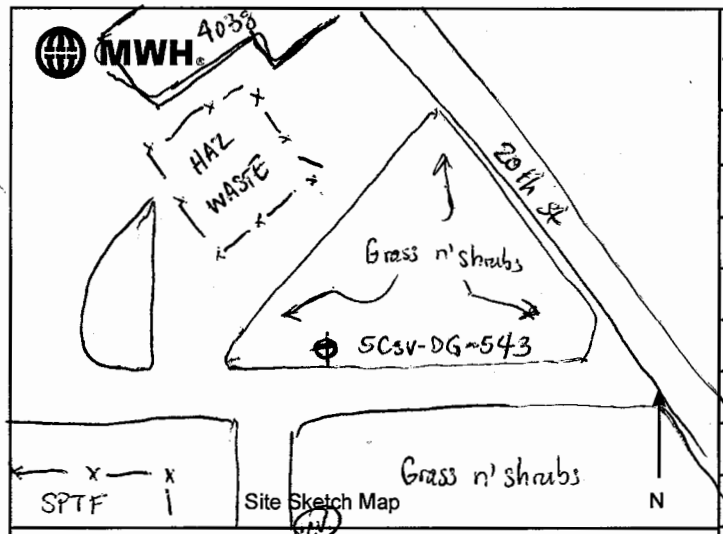
Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2



Site Sketch Map

Boring ID: SCSV-DG-543	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 5C		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / OP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 19.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1010 / 5-30-14	Drill Finish Time/Date: 1100 / 5-30-14		
Soil Vapor ID: SCSV-~~DG~~ DG-543	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1230 / 5-30-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 11.0-12.0, 18.0-19.0	Surface Completion: Soil Vapor probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

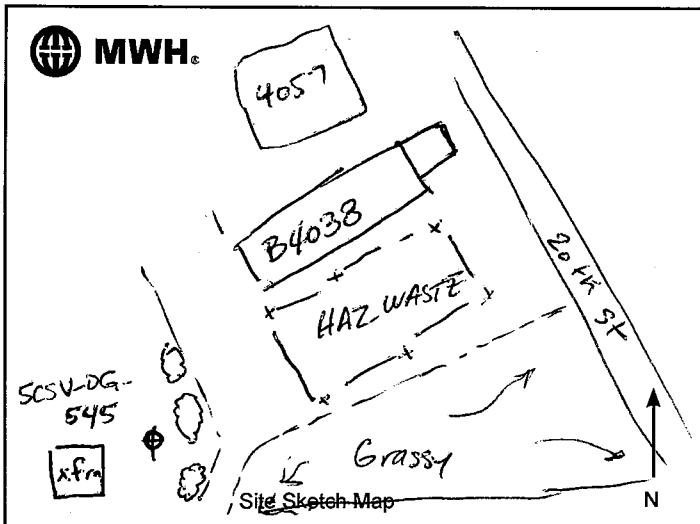
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Graded backfill					
								Silty Sand (SM), dark yellowish brown (10YR 4/6), loose, dry, fine sand, non plastic silt, no odors or stains, fill.	—	—	—	60	40/
						1							
								@1.4' becomes slightly stratified with very pale brown (10YR 8/3) nodules (weathered sand?).					
		46"				2							
						3							
						4							
						5							
0.0		48"				6							
						7		grades to medium dense, less silt content faint oxidation (brownish yellow (10YR 6/6)), no longer stratified.	—	—	—	70	30/
						8							
						9							

Boring ID: 5CSV-DG-543 Project: Phase 3 DOE SV DG Sampling 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
V.V. 0						10	SP	Poorly Graded sand (SP), light yellowish brown (10YR 6/4), loose, dry, fine sand, no odors	–	–	–	100	–
0.0						11	V.V.	~~no stains~~, yellowish brown (10YR 5/6) oxidation, fill					
		36"				12	SW SM	11.75 - 12.1 = well Graded Sand (SW) medium to fine sand,					
						13		@13' very dark grayish brown (10YR 3/2) staining, ~~light yellowish brown~~ (V.V.) Silty Sand (SM)	–	–	30	45	25
		30"				14		dark yellowish brown (10YR 4/6), ~~loose~~ med. dense, dry,	V.V.				
						15	SP	fine sand, non-plastic silt, few dark stains, no odors,	–	–	–	100	–
									–	–	–	80	20
						16	SM	@14.5' - 15.1 Poorly Graded Sand (SP) yellowish brown (10YR 5/6), loose, dry,	–	–	–	100	– V.V.
		30"				17		fine sand, native (?), no stains or odors.					
						18		Silty Sand (SM), yellowish brown (10YR 5/4), loose, slightly moist, fine sand, non-plastic silt, very weak silt cement, native soil					
0.0						19	BS						
						20		@18.5 color changes to yellowish brown (10YR 5/8					
						1		@19 Sandstone, weathered.					
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5-6 11-12 18-19

MWH.



Site Sketch Map

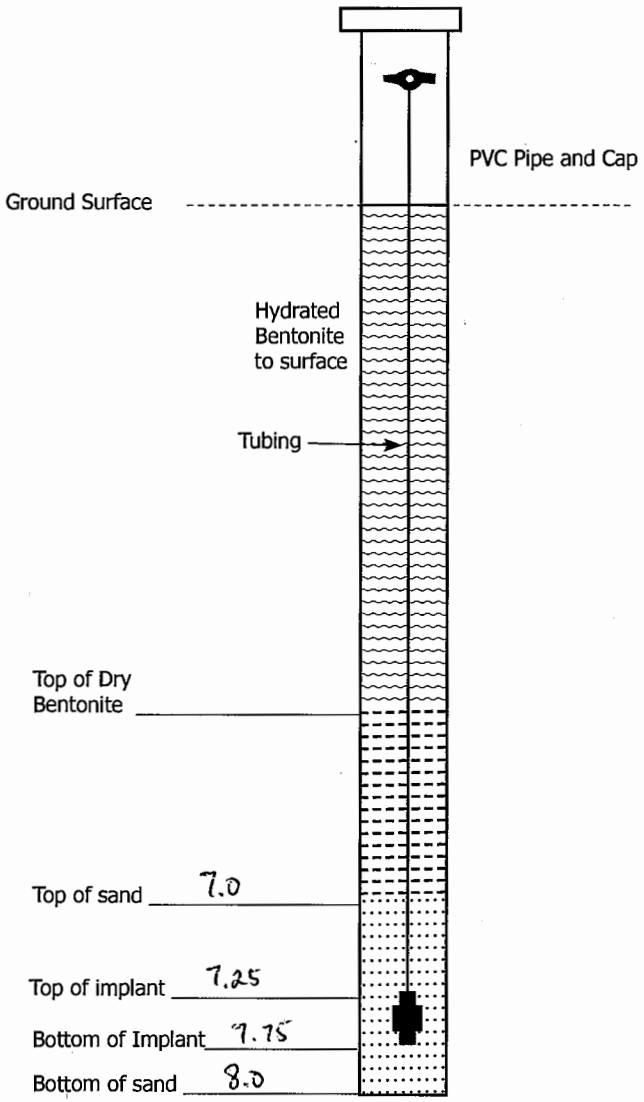
Boring ID: SCSV-DG-545	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SASC
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 3.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1352 / 5-28-14	Drill Finish Time/Date: 1403 / 5-28-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1410 / 5-28-14 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: Graded, grass and shrubs					
	X						SM	Silty Sand (SM), light yellowish brown	-	-	-	60	40
0.0						1		(10YR 6/4), med. dense, dry, no stains					
								or odors, fill, roots					
		40"						@ 1.6' color changes to brownish yellow					
						2		(10YR 6/6) - native soil					
								@ 2.9 ft - large root from shrub - root					
						3							
0.0			X		1410			was moist and possibly alive.					
SVL-545-SASC-SB-3.0-3.5							Br	Sandstone, weathered					
						4							
								TD = 3.5 ft; collect encores for VOC					
						5		analyses. No probes installed.					
						6							
						7							
						8							
						9							

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-549
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5C
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 8.0
Probe Completion Date/Time: 1335/5-30-14
Borehole Diameter: 2.25



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

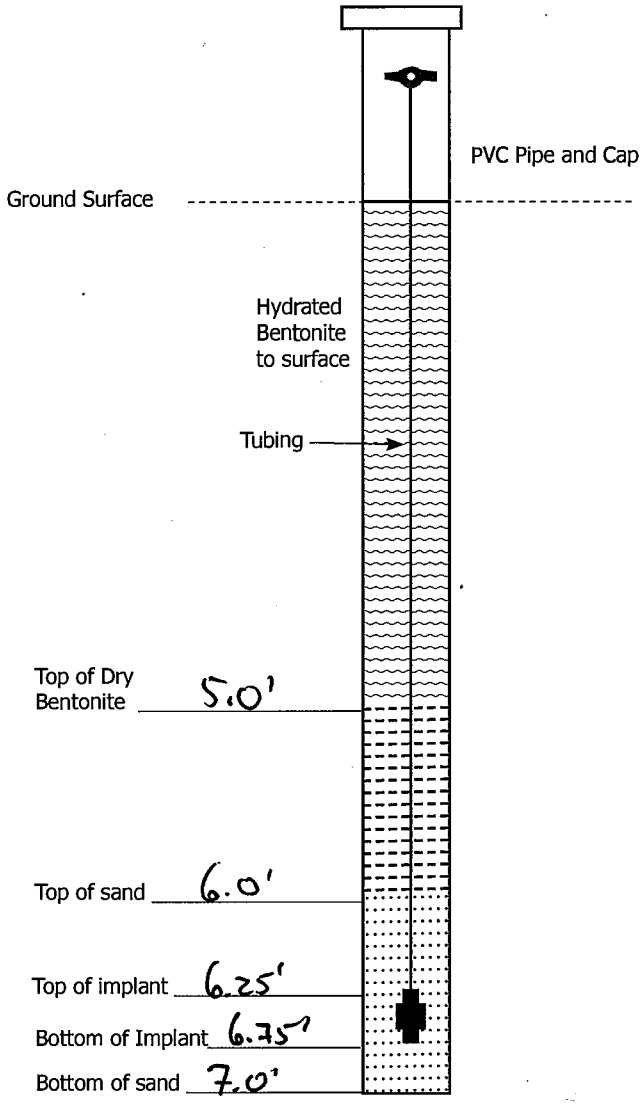
1. Probes not drawn to scale.

FIGURE 4-1

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SC SV_DG-549
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SC
Reviewed by:
Logged by: Mark Sues
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: Morgan Hughes
Borehole TD: 8.85' bgs
Probe Completion Date/Time: 10 JUN 14, 1450
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Comex

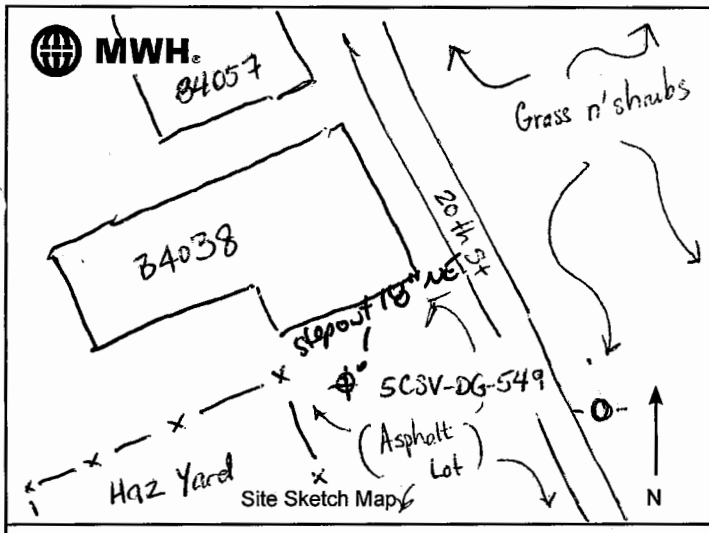
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH



Site Sketch Map

Boring ID: SCSV-DG-549	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SASC
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 8.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1257 / 5-30-14	Drill Finish Time/Date: 1314 / 5-30-14
Soil Vapor ID: SCSV-DG-549	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1335 / 5-30-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

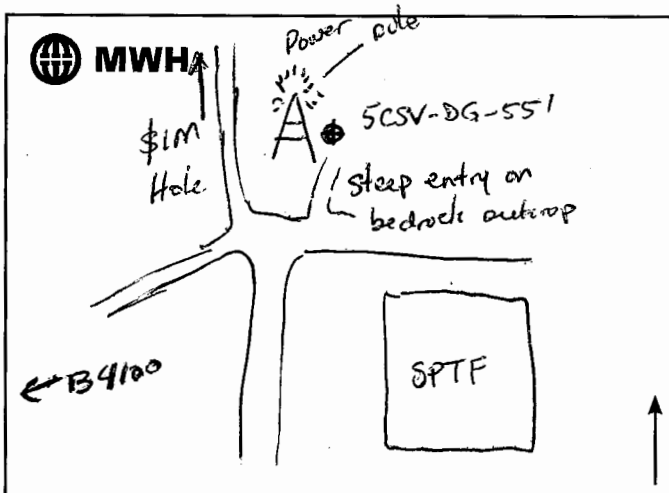
Soil Description
1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: Asphalt lot S. of 4038

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	AF	3" Asphalt	–	–	–	75	25
						1	SM	Silty Sand w/ gravel (SM), dark yellowish brown (10YR 3/4), loose, moist, fine sand, non-plastic silt, dark asphalt stains, road base (gravel) at the surface, no odors. fill					
		40"	NONE			2							
						3	ML	Silt (ML), dark yellowish brown (10YR 4/6), med. stiff, moist, low-plasticity silt, no odors or stains, weak silt cement, fill	–	–	–	–	100
						4					5	20	75
						5		• stepout 18" NE of previous					
		36"	NONE					• Sample SVL-549-SASC-SB-6.3-6.8 6.3-6.8' bgs @ 14:23	Begin Hole 14:02				
						6		• Set probe 6.0-7.0' bgs; 14:50 TD = 8.85' bgs	End Hole 14:22				
		18"	NONE			7		@7' Asphalt debris					
						8	SM	10 µRem, 42 cpm, 0.0 ppm					
*TD = 8.0'; refusal on bedrock						9	Br	Silty Sand (SM), yellowish brown (10YR 5/6), dense, dry, fine sand, non-plastic silt, moderate silt cement, no odors or stains, native soil					

@ 8.0 Weathered Bedrock

MWH



Site Sketch Map

Boring ID: 5CSV-DG-551	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 2.8'		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1500 / 5-28-14	Drill Finish Time/Date: 1509 / 5-28-14		
Soil Boring Backfill Time/Date: 1520 / 5-28-14	Backfill Material: Soil cuttings.		
Soil Vapor ID: N/A	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Well Completion Time/Date: N/A			
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: @ Base of power pole, bedrock nearby	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand,	-	-	-	65	35
	X	24"				1	SP-SM	non-plastic silt, roots, fill, minor dark stains (dark yellowish brown (10YR 4/4))	-	-	-	65	35
0.0	X		X		1515	2		Poorly Graded Sand with silt (SP-SM), very pale brown (10YR 7/4), loose, dry,					
SVL-551-SA5C-SB-2.0-2.8						3		predominantly fine sand, non-plastic silt, fill (native soil that has been disturbed), no odors or stains					
						4							
						5							
						6		TD= 2.8 ft; refusal on bedrock. Collect encores 2.0-2.8 ft. No vapor probe installed.					
						7							
						8							
						9							

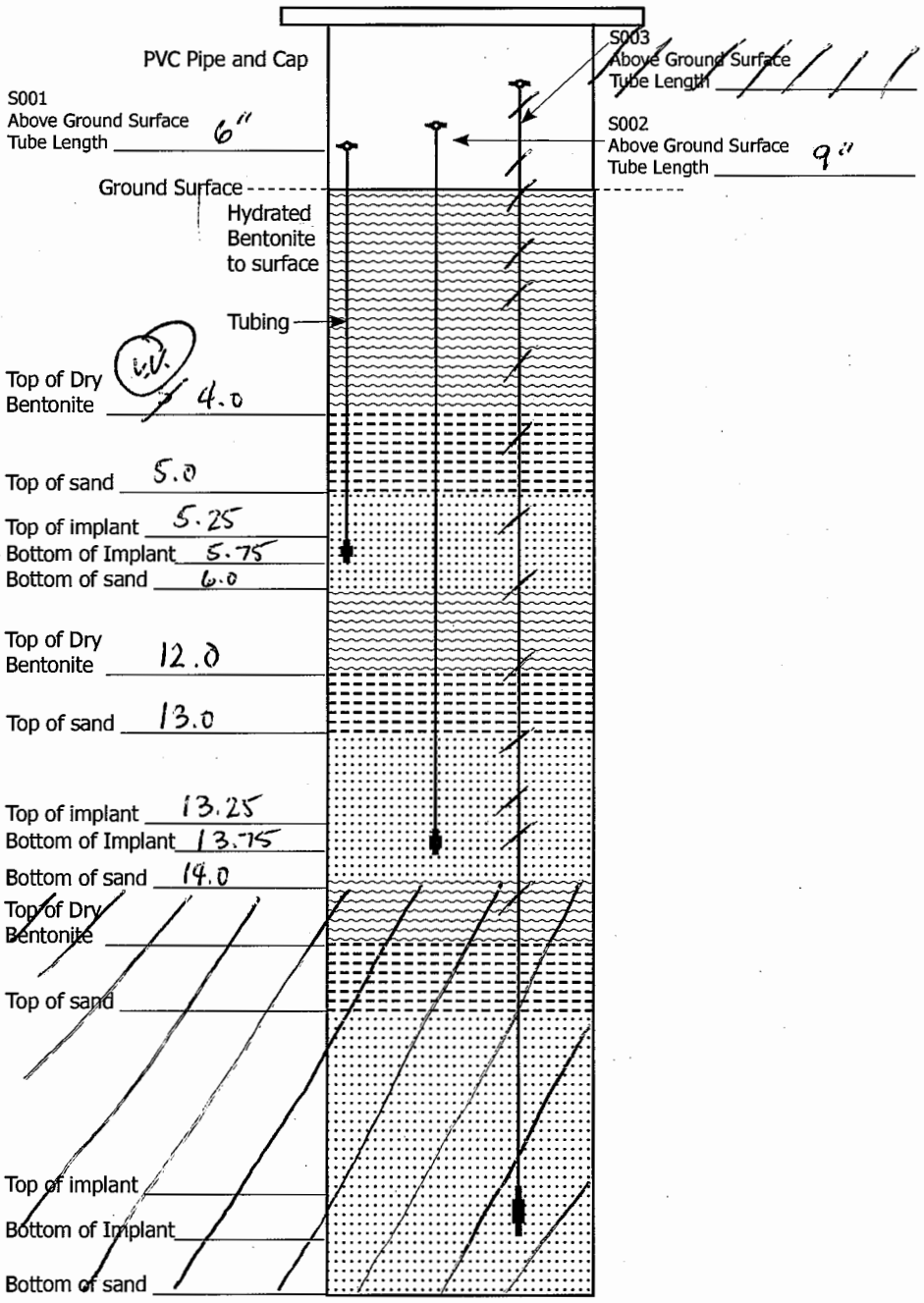
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-554
Site: 3A 5C
Drilling Contractor: EST
Borehole TD: 14.0

Project: Phase 3 DOE SVDG
Logged by: V. Vathanazin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 0905 / 5-29-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: # 3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

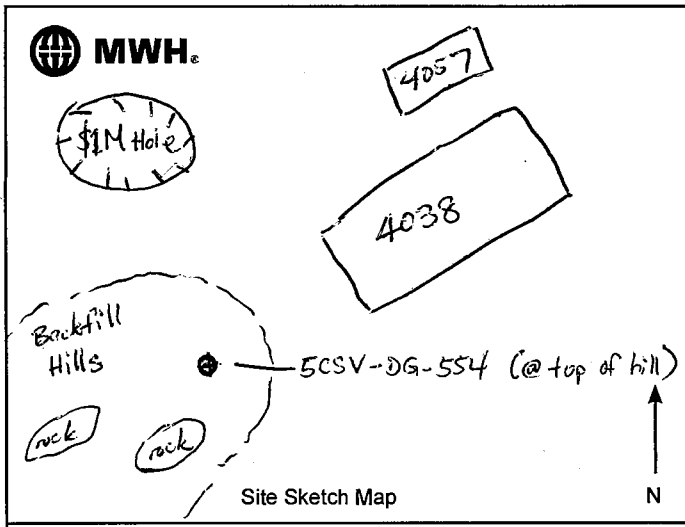
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-554	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vatharasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 14.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0745 / 5-29-14	Drill Finish Time/Date: 0830 / 5-29-14		
Soil Vapor ID: 5CSV-DG-554	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 0905 5-29-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0 ; 13.0 - 14.0	Surface Completion: Soil vapor probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

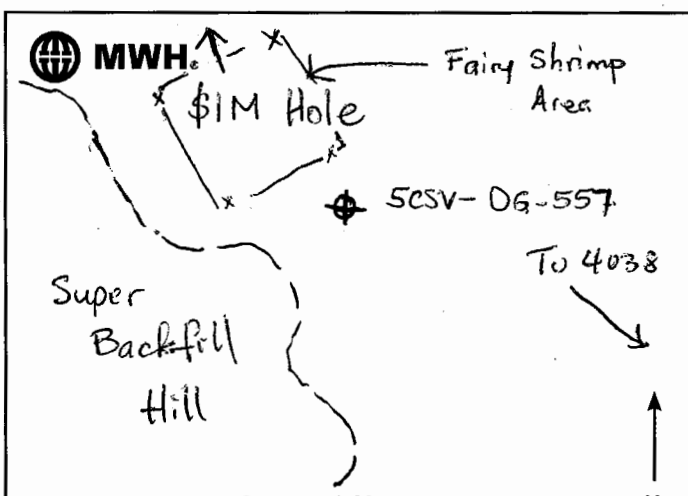
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, non-plastic silt, grass roots, sandstone cobbles (sheared by Macrocore), non compacted, fill, no staining or odors.	TR	-	-	70	30/
		NONE				1							
						2							
						3							
0.0						4		Grades w/o cobbles, color changes to brownish yellow (10YR 6/6)					
		NONE				5							
						6							
						7	ML	Silt (ML), dark yellowish brown (10YR 4/6), med. stiff, dry, non-plastic silt, fill	-	-	-	-	100/
0.0						8	SM	Silty Sand (SM) brownish yellow (10YR 6/6), loose, dry, backfill, no stains or odors, backfill.					
		NONE				9							

Cont page 2

5-6 12-14

Boring ID: 5CSV-DG-554 Project: DOE SV DG Phase III 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		NONE				10	SM	Same as above					
						11							
						12		@12' few chunks of asphalt					
		NONE				13							
0.0						14							
							BS	Weathered Sandstone.					
						15							
						6							
								TD = 14.0, refusal on weathered bedrock.					
						7		install probes at 5.0-6.0, 13.0-14.0					
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							



Site Sketch Map

Boring ID: 5CSV-DG-557	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 3.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0940 / 5-29-14	Drill Finish Time/Date: 0949 / 5-29-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1005 / 5-29-14 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: NONE
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	SM	Surface Description: Silty Sand (SM) w/ Gravel (V-V), brownish yellow (10YR 6/6), loose to med. dense, fine sand and low plasticity silt, dry, back fill, no odors or stains. fine gravel	5	–	–	60	25/10
	X	38"				1							
	X					2							
	X		X		10:00	3							
SVL-557-SA5C-SB-3.0-3.5						4	Br	Weathered Bedrock - thin Sandstone over shale					
						5		TD = 3.5', refusal on bedrock. Stepped out twice to confirm refusal; 2nd attempt 2.5', 3rd attempt 2.0					
						6							
						7		Collect encores for VOC analyses at 3.0 - 3.5'					
						8							
						9							

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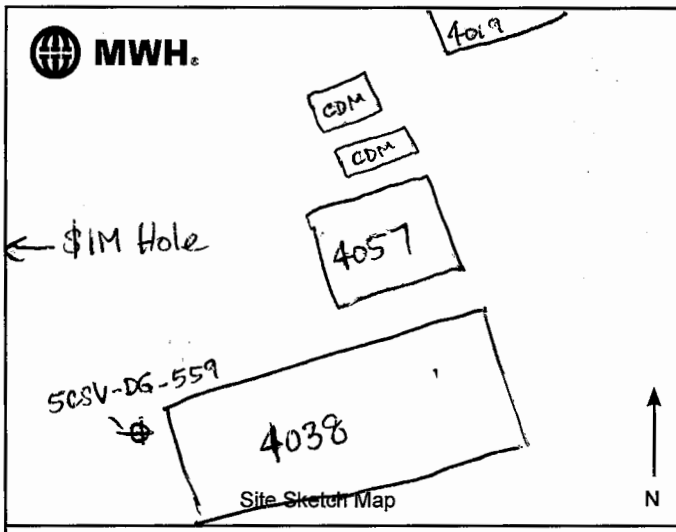


Site Sketch Map

Boring ID: 5CSV-DG-559	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 3.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1015 / 5-29-14	Drill Finish Time/Date: 1025 / 5-29-14		
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1038 5-29-14	Backfill Material: Soil cuttings.	
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion:		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☐ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Asphalt					
	X			3" asphalt		0	SM	Silty Sand (SM), dark yellowish brown (10 YR 4/6), loose, moist, fine sand, non-plastic silt, asphalt stains, fill *1" layer of road base ~~at~~ beneath asphalt, @2' mild oxidation, yellowish brown (10 YR 6/8)	-	-	-	75	25
	X	36"				1							
	X					2							
	X		X		10:35	3							
SVL-559-SASC-SB-2.5-3.0							Br	Sandstone, weathered.					
						4							
						5		TD = 3.0 ft, refusal on bedrock. Collect encores at 2.5-3.0 for VOC analyses. ~~yellowish brown (10YR 6/8)~~					
						6							
						7							
						8							
						9							

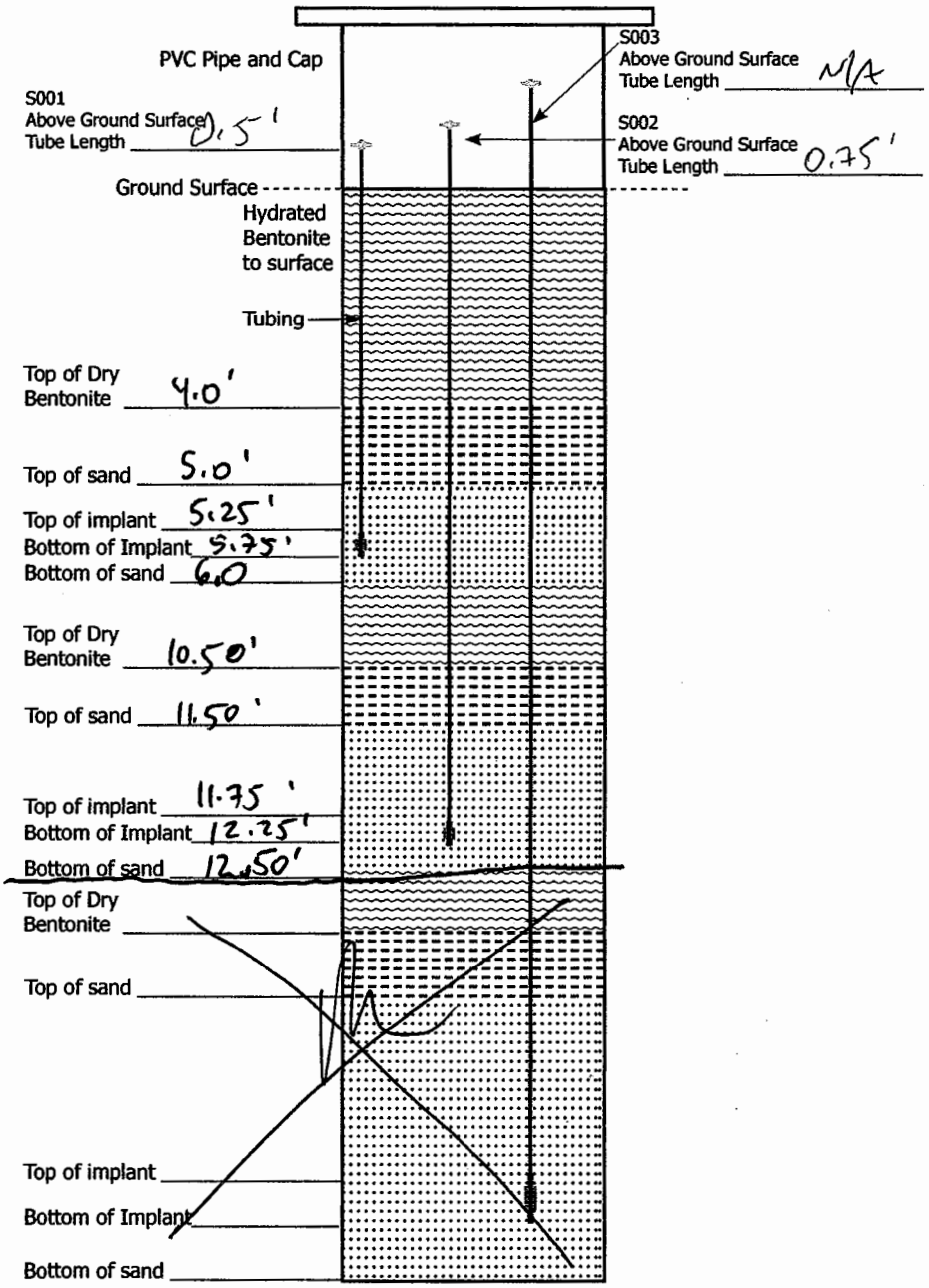
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SC SV DG-561
Site: SC
Drilling Contractor: EST
Borehole TD: 12.5'

Project: Phase 3 DOE Data Gap Sampling 2014
Logged by: RWBELLS
Driller: EST
Borehole Diameter: 2.25"

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: Geoprobe 5400
Probe Completion Date/Time: 02JUN14/ 08:45



Vapor Implant Specs

Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles
Manufacturer: cetco

Hydrated Bentonite

Type: #8 crumbles
Manufacturer: cetco

Notes:

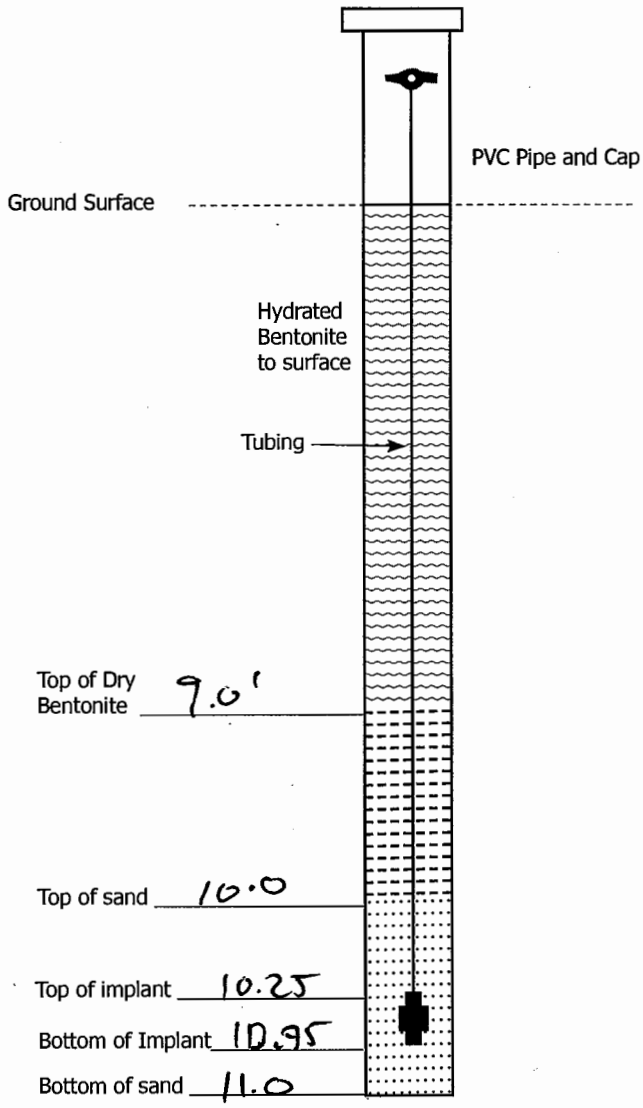
1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SCSV_DG-561
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SC
Reviewed by:
Logged by: Russ Ellis
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: Morgan Hughes
Borehole TD: 11'0' bgs
Probe Completion Date/Time: 10 Jan 14, 13:24
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite

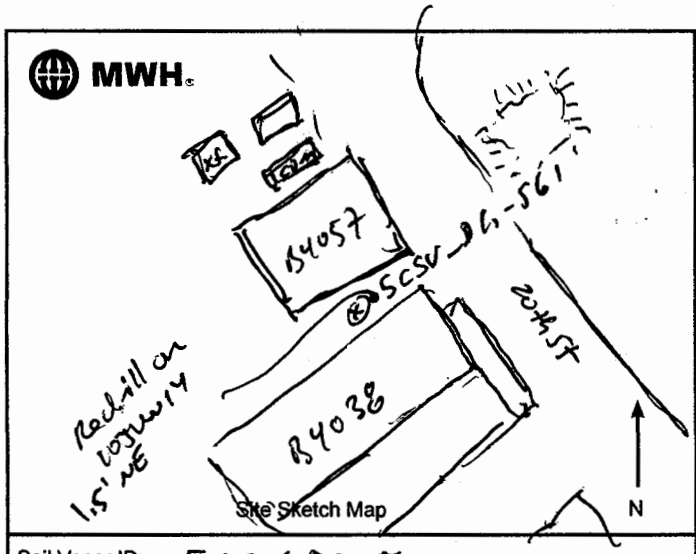
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SCSV DG-561	Sheet 1 of 2
Project: Phase 3 DOE SVDG 2014	
Job #: 10503982.30501106	Site: SC
Logged By: RUSSELLS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTY KILHULLEN
Drill Rig Type/Method: GEOPROBE 5400	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25 OD	Total Depth (ft.bgs): 12.5'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 02JUN14, 07:49	Drill Finish Time/Date: 02JUN14, 0845
Soil Vapor ID: SCSV DG-561	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 02JUN 2014	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☑ None
Soil Vapor Probe Depths (ft.bgs): 5.0-5.5 ; 6.0, 11.5-12.0-12.5	Surface Completion: SV Probe
Soil Vapor Well Detail Completed (yes/no): sth sealed	Type of Refusal: ☑ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		Surface Description: ASPHALT DRIVEWAY					
		26"						4" asphalt		4			
0.0						1	SM	Silty sand (SM) black (10YR 2/1) slightly moist, medium dense, Predominant fine sand (55%), some silt (30%), and little medium sand (15). No odor, no stain. Fill material	-	0 15	15	55	30
						2							
						3							
								4.0-5.5					
0.0		40"				4	SP	Poorly graded sand (SP), dark yellowish brown (10YR 3/4) dry, loose. Predominant medium sand (45), some fine sand (30), little coarse (15) with few silt (10). No odor, no stain. Fill material.	-	15	45	30	10
						5							
						6	SM						
						7		5.5-12.0	-	-	60	40	-
0.0		40"				8		Silty sand (SM), very dark grayish brown (10YR 3/2), moist, dense Predominant fine sand (60%), with some (40%) silt. medium stiff. non plastic, no odor, no			-	60	40
						9	CH						
						CH							

QA/QC
Surficial media boring log rev 2-25-2014

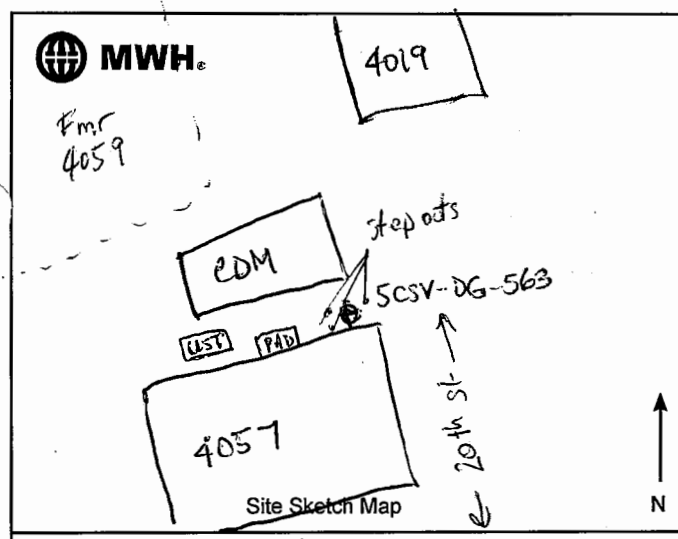
Boring ID: SCSV DG-561 Project: Phase 3 DOE SVPA 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					10		Surface, Fill material					
	X					11		- color change at 7.0' bgs to black (10YR 2/1) - with silt fraction increasing to 40 to 60%			(✓)		
	X	6"				12	SM	- color change at 8.0 to very dark grayish brown (10YR 3/2) 12.0-12.5	-	-	-	40	60
0.0						3		Silty sand (SM) light olive brown (2.5Y 5/4) dry loose, Predominant medium sand (75), with little silt (25%) and traces medium sand. No stain, no odor, native soil.	-	-	M	75	25
						4							
						5							
						6							
						7							
						8		• Refusal on sandstone at 12.5' bgs bedrock					
						9		• Soil vapor probes installed at 5.0 - 6.0 and 11.5 - 12.5 bgs					
						0							
						1		• TD = 12.5' bgs					
						2		• moved sample location ~2.0' feet SW to avoid water line.					
						3							
—		10 JUN 14											
						4		(✓) 9.0-11.0 on boring 10 JUN 14 Clay (CH) no dilatancy, v high dry strength, high toughness					
						5						Begin hole 12:57	
						6		• Took Sample at 10.5-11.0' interval				End hole 13:09	
						7		• SVL-561-SASC-SB-10.5-11.0 @ 13:24h. 13 mRem, 32 cpm, 0.0 ppm					
						8		Set probe SCSV-DG-561 @ 10.0 - 11.0' bgs 10 JUN 14 13:2					
						9							

Moved location to 1.5' NE of previous.

QA/QC Surficial media boring log rev 2-25-2014

MWH.



Site Sketch Map

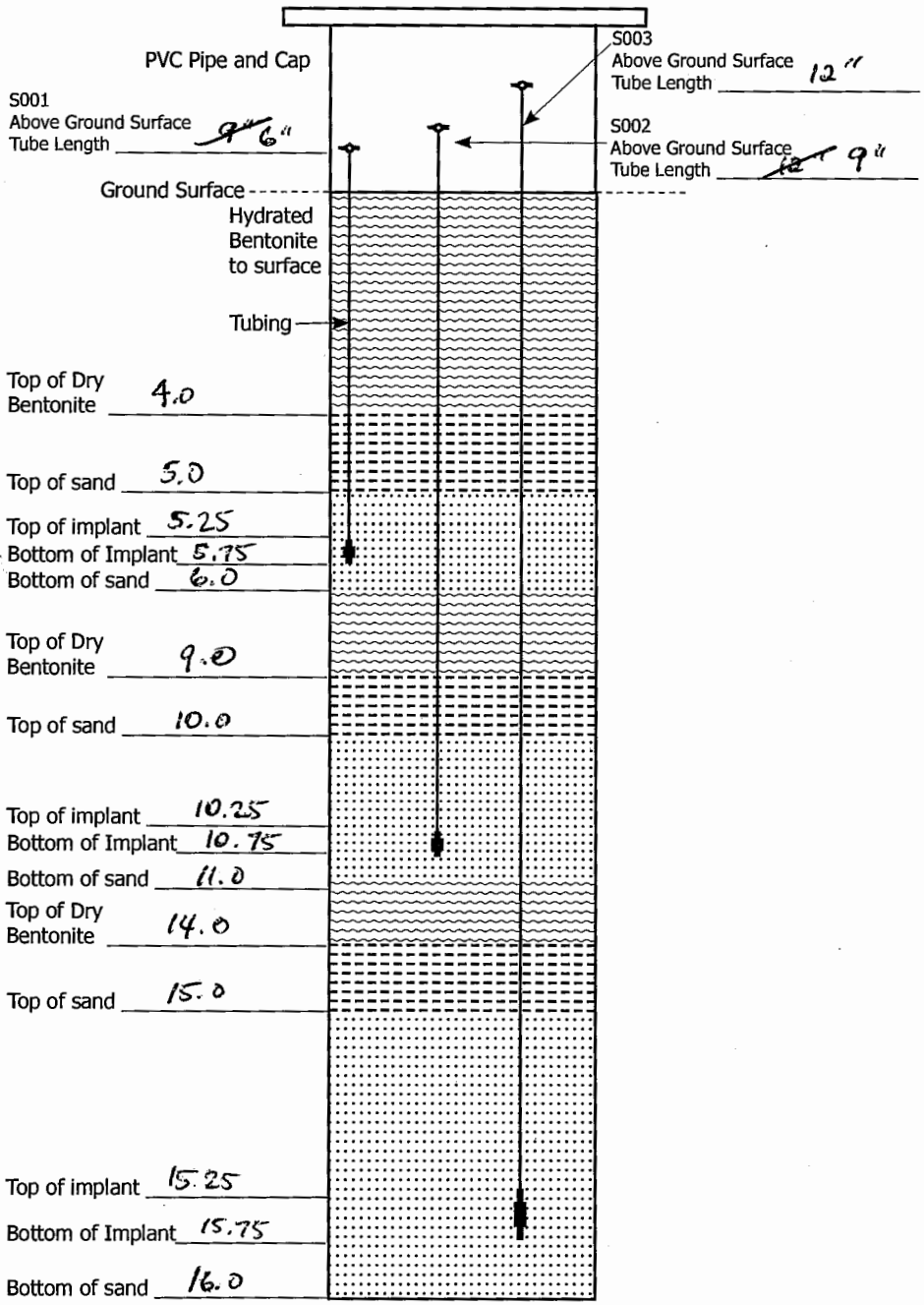
Boring ID: 5CSV-DG-563	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C
Logged By: V. Vatherasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 1.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0750 / 6-2-14	Drill Finish Time/Date: 0830 / 6-2-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 0845 / 6-2-14 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None; backfill with cutting and asphalt patch
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand Coarse	Medium	Fine	Silt/clay
						0		Surface Description: Asphalt 3"					
	X						SM	Silty Sand (SM), brown (10YR 4/3), loose,	TR	–	–	70	30/
						1		dry, fine sand, non-plastic silt,					
0.0			X		0840			trace angular gravel (road base?),					
SVL-563-SA5				C-SB-1.0-1.5			Br	non-cohesive, ~~asphalt~~ asphalt stains,					
						2		Sandstone, weathered.					
						3							
						4		TD = 1.5', refusal on bedrock. Drilled					
								3 borings to confirm shallow refusal.					
								1st 2 borings were 15". Final boring					
						5		1.5'. Collect ~~a~~ cores from final boring.					
						6		Returned @ 1521 hrs to drill 4th stepout					
								approx. 5' NE of original location –					
						7		refusal at 1.0 ft.					
						8							
						9							

MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5CSV-DG-570
Project: Phase 3 DoE Sv DG
Job #: 10503982
Site: SASC
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 45.0
Borehole Diameter: 2.25
Probe Completion Date/Time: 1630/5-29-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

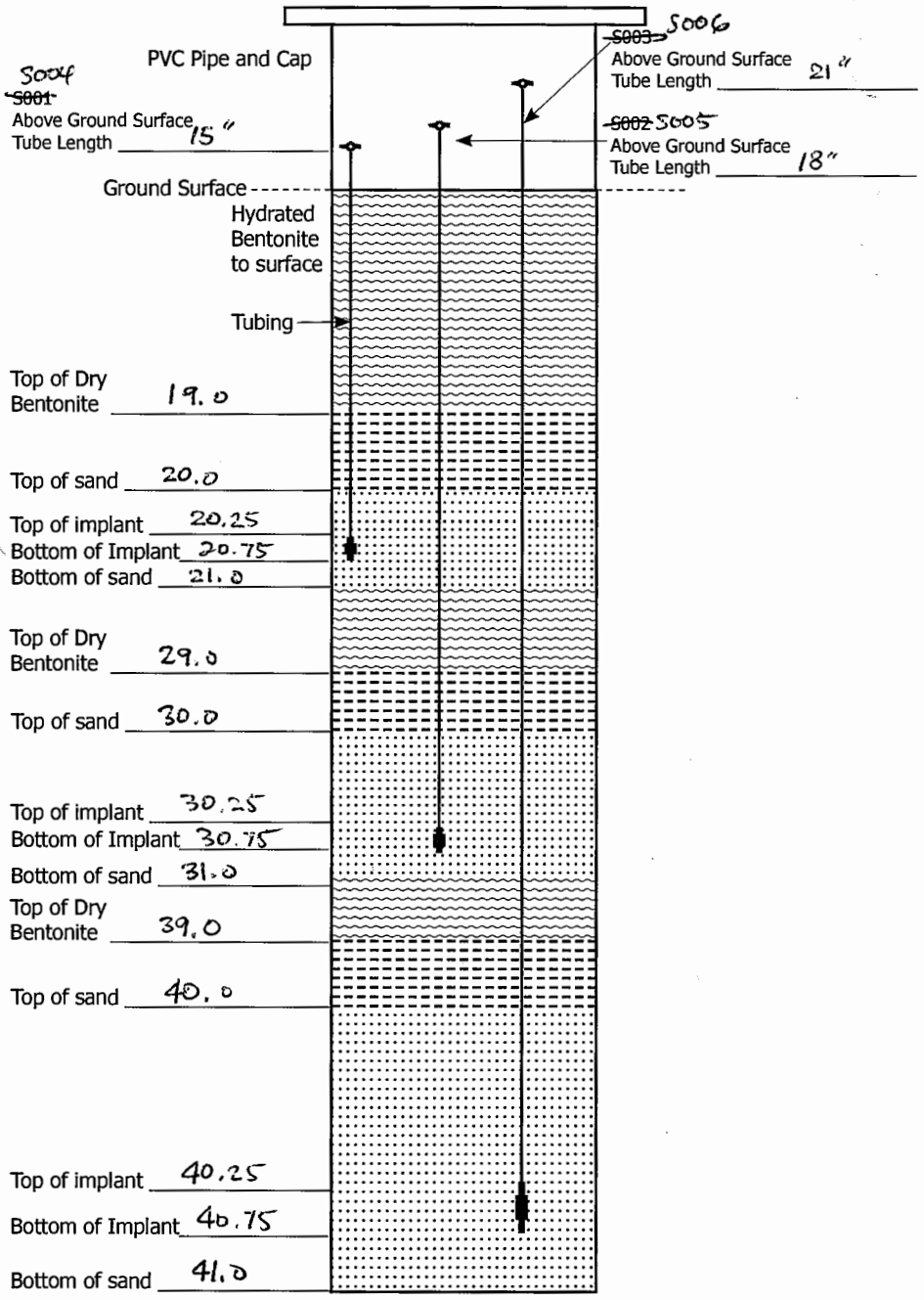
1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SCSV-DG-570
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SASC
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe
Borehole TD: 45.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1630/5-29-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: ~~6"~~ (v.v.) 1/4"
Color: ~~3/8~~ (v.v.) clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

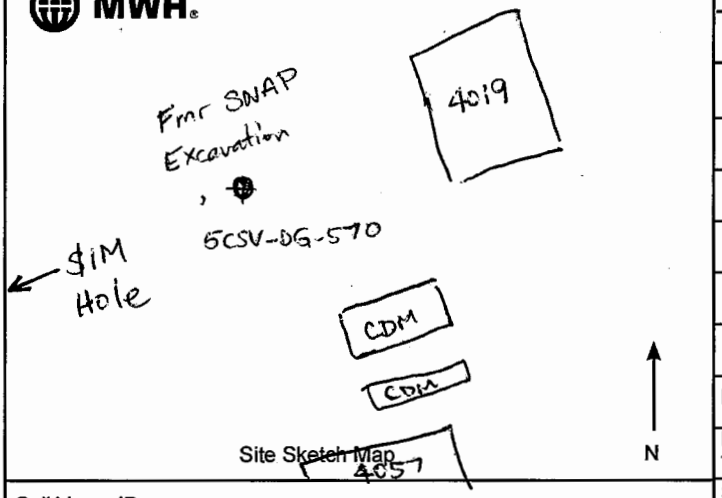
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-570	Sheet 1 of 3		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 45.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1115/5-29-14	Drill Finish Time/Date: 1500 / 5-29-14		
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A		
Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None			
Surface Completion: Soil vapor probes.			
Type of Refusal: ☐ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☒ None			

Soil Vapor ID:	5CSV-DG-570
Soil Vapor Well Completion Time/Date:	1630 / 5-29-14
Soil Vapor Probe Depths (ft.bgs):	5.0-6.0, 10.0-11.0, 15.0-16.0, 20.0-21.0, 30.0-31.0, 40.0-41.0
Soil Vapor Well Detail Completed (yes/no)	yes

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non-plastic silt, slightly layered, no stains or odors, fill	–	–	–	55	45/
		43"	NONE			1	ML	@ 1.7' Silt (ML), dark yellowish brown (10YR 4/4), stiff dry, low plasticity silt, moderate cementation, no stains or odors, fill	–	–	–	–	100/
						2							
						3	SM	Silty Sand (SM), brownish yellow (10YR 6/6), loose, dry, fine sand, silt, fill	–	–	–	80	20/
						4							
0.0		48"	NONE			5							
						6		Grades to → Color changes to yellowish brown (10YR 5/4), Trace subrounded quartz gravel	TR	10	5	55	30/
						7							
			NONE			8							
		36"				9							

Con't next page

Boring ID: 5CSV-DG-570 Project: Phase 3 DOE Soil Vapor Data Gaps Sheet 2 of 3

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0						10	SM	color changes to dark yellowish brown (10YR 4/4)					
						11							
						12		@12.3 - 12.8 dark brown (10YR 3/3).					
		40"	NONE					@12.8 - 13.1 brownish yellow (10YR 6/8)					
						13		@13.1 dark brown (10YR 3/3), grades to Silty Sand w Clay	TR	-	10	55	25/10
						14							
0.0						15		@15 light brownish gray (10YR 6/2) staining					
		36"	NONE			16							
						17		@16.5 - large block of coarse gravel (10YR 6/2) ~~staining~~ (V.O.)					
						18		@18' 20 mm granitic gravel					
		24"	NONE			19		18.8'-19' = thin band of yellow (10YR 7/6) Silty Sand.					
0.0						20		@19' ~~cool~~ (V.O.) color changes back to dark yellowish ~~brown~~ (V.O.) brown (10YR 4/4)					
		36"	NONE			21							
						22							
						23							
		36"	NONE			24							
						25		@24.5 fine angular gravel (road base ??)					
0.0						26							
		36"	NONE			27	SP	Poorly Graded Sand (SP), very pale brown	-	-	20	80	-
						28	SM	(10YR 8/4), loose, dry, fine sand, medium sand, no stains or odors, fill	TR	-	-	70	30/
						29	(V.O.)	@28.5 Silty Sand (SM), brown (10YR 5/3), loose, dry, fine sand, silt, fill trace fine gravel					
						30							

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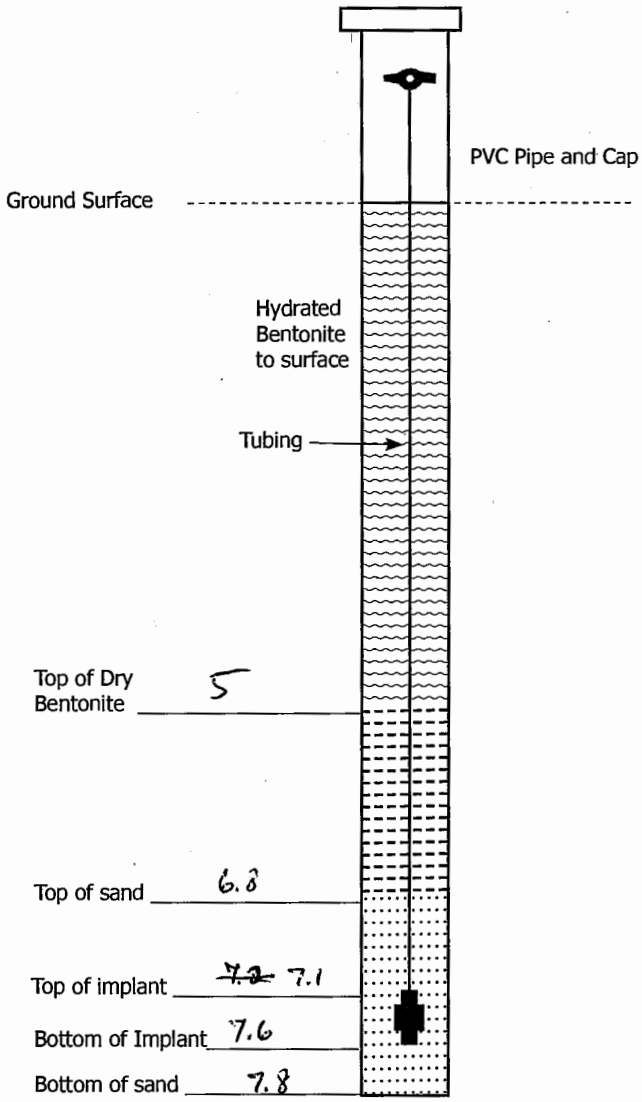
Boring ID: SCSV-DG-57D Project: Phase 3 DOE Soil Vapor DG Sheet 3 of 3

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Estimated % of Sand: Gravel	Coarse	Medium	Fine	Silt/clay
0.0		36"	NONE			30		@30' yellow (10YR 7/6) oxidation					
						31							
						32							
						33							
		36"	NONE					Grades to Silty Sand w/gravel →	10	–	10	70 (60)	20/
						34							
						35							
						36							
		36"	NONE			37							
						38	SP SM	Poorly graded sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, fill	– –	– –	– –	100 75	– 25/
						39		@38' Silty Sand (SM), brown (10YR 5/3), med. dense, dry, fine sand, non-plastic silt, no odors, yellow stains (5Y 7/8), fill					
		36"	NONE			40							
						41							
						42							
		36"	NONE			43							
						44							
						45		No refusal! Drilling halted due to lack of drilling rods and time of day					
						6		TD= 45.0 ; borehole collapsed to ~~44.5~~ 44.0 during trip out. Install vapor probes at 5.0-6.0, 10.0-11.0, 15.0-16.0, 20.0-21.0, 30.0-31.0, 40-41.0. Backfill 41.0 to 44.0 w/ med. chips					
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5C8V-DG-572
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5C
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 7.8
Probe Completion Date/Time: 1326/5-20-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Comery

Dry Bentonite
Type: #8
Manufacturer: Cetco

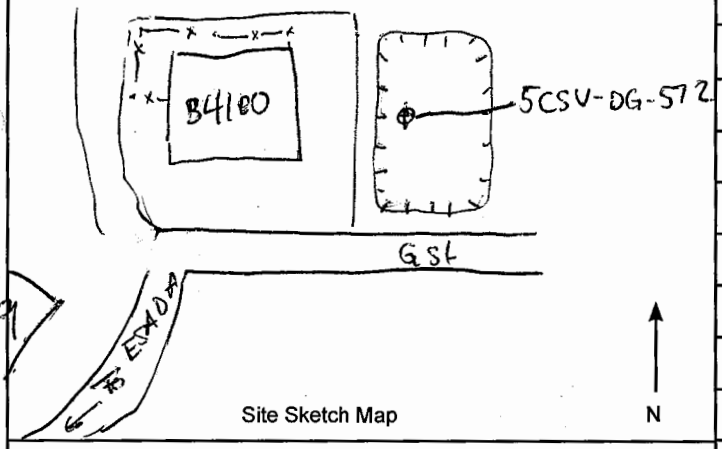
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5CSV-DG-572	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5C		
Logged By: V. Vathanaya	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400/ DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 7.8'		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1255 / 5-20-14	Drill Finish Time/Date: 1315 / 5-20-14		
Soil Vapor ID: 5CSV-DG-572	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1326 / 5-20-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 6.8-7.8	Surface Completion: Soil vapor probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Grass, in a depression E of B100. Silty Sand (SM), brown (10YR 5/3), loose, dry, fine sand, non-plastic silt, friable, fill, few roots	-	-	-	60	40/
		48"	NONE			1							
						2	ML	Silt (ML), brown (10YR 5/3), med. stiff, dry, low plasticity silt, fine sand	-	-	-	-	100
0.0						3							
						4		grades with clay (low plasticity)	-	-	-	-	80/20
						5							
		36"	NONE			6	SM	@5.5 Silty Sand (SM) very pale brown (10YR 7/4) with yellow (10YR 7/8) iron staining.					
						7							
0.0						8		@7.8' Sandstone, weathered. TD= 7.8', refusal on bedrock. Install vapor probe at 6.8-7.8 ft bgs.					
						9							

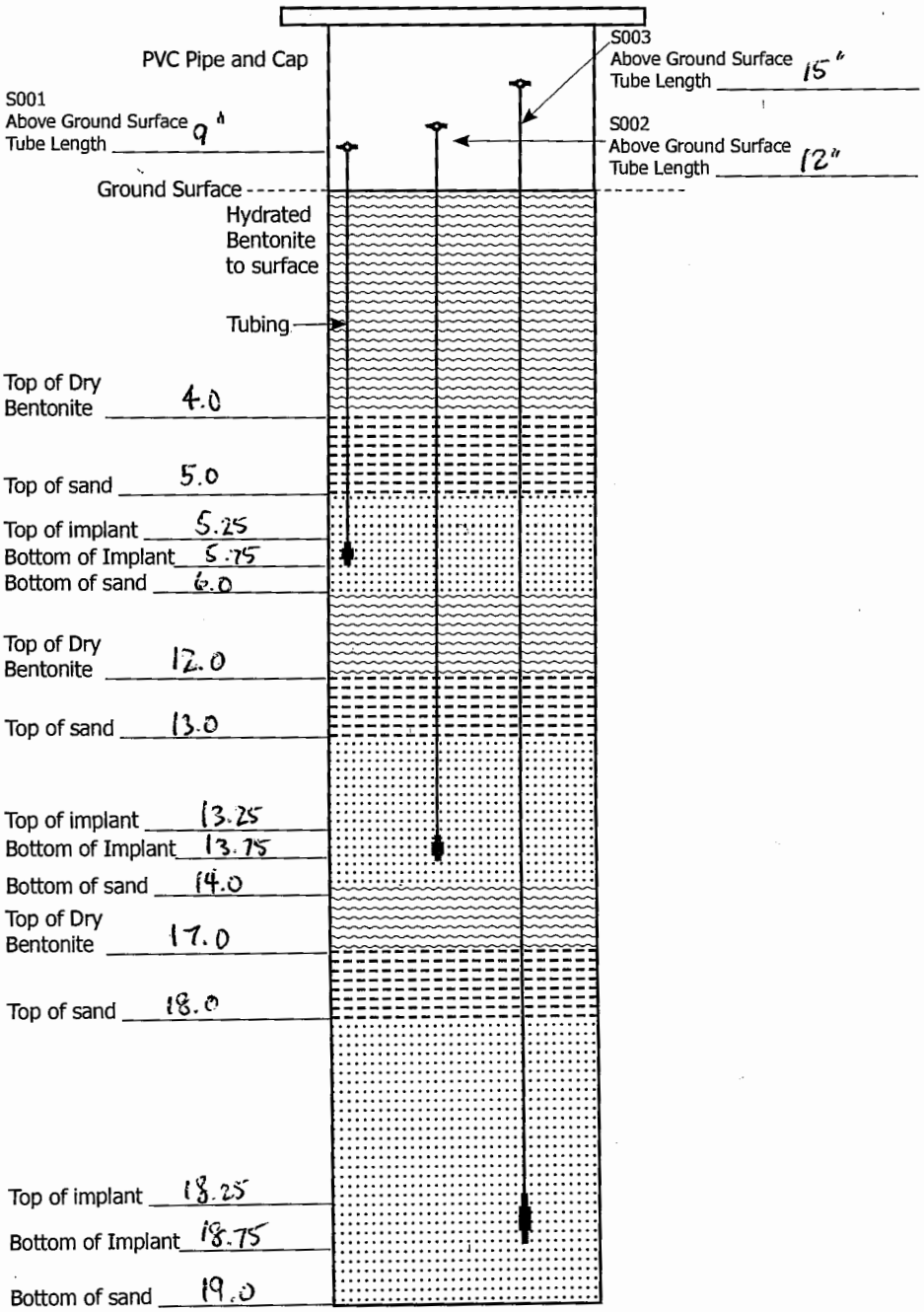
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SDSV-DG-502
Site: SA 5D
Drilling Contractor: EST
Borehole TD: 19.0

Project: Phase 3 DOE SVDG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10509382 (V.V.) 3982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 0935 / 5-21-14



Vapor Implant Specs (V.V.)

Material: Stainless ~~Steel~~ Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

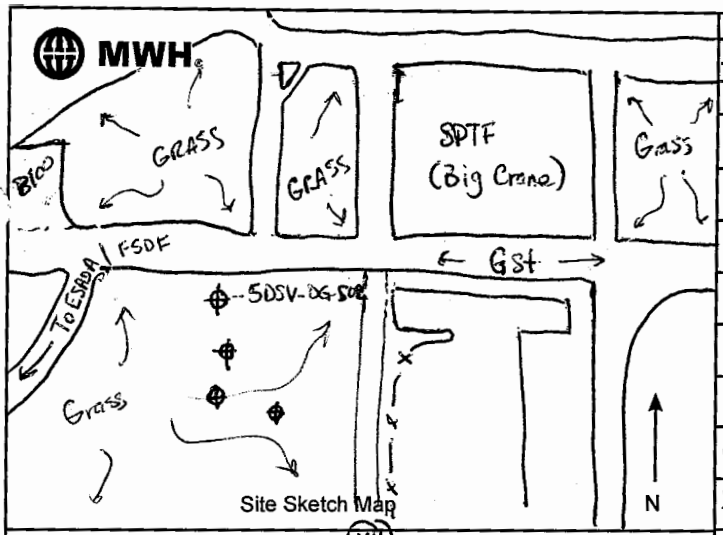
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH



Site Sketch Map

Boring ID: 5DSV-DG-502	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D		
Logged By: V. Vatharasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 19		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0750 / 5-21-14	Drill Finish Time/Date: 0845 / 5-21-14		
Soil Vapor ID: 5DSV-DG-~~503~~ 502	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 0935 / 5-21-14	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 13.0-14.0, 18.0-19.0	Surface Completion: Soil vapor probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Grass, gravel debris					
						0	GW	Gravel (Road Base) (GW), light gray	100	—	—	—	—
						1	ML	(10YR 7/2), loose, dry, fine to coarse	—	—	—	10	90/
								gravel, fill, no stain or odors,					
		42"	NONE			2		at 2" Silt w/ sand (ML), brown (10YR					
								5/3), very stiff, dry, non-plastic					
						3		silt, fine sand, moderate cementation,					
0.1						4							
						5		Sandy Silt (ML), pale brown (10YR 6/3),	—	—	—	25	75/
		24"	NONE					stiff, dry, non-plastic silt, fine sand,					
						6							
						7							
						8		color changes to brownish yellow (10YR					
						9	SM	6/6),	—	—	—	70	30
								Silty Sand (SM), brownish yellow (10YR 6/6					
								to very pale brown (10YR 7/4), loose, dry					

cont next page

cont next page

5-6
13-14
18-19

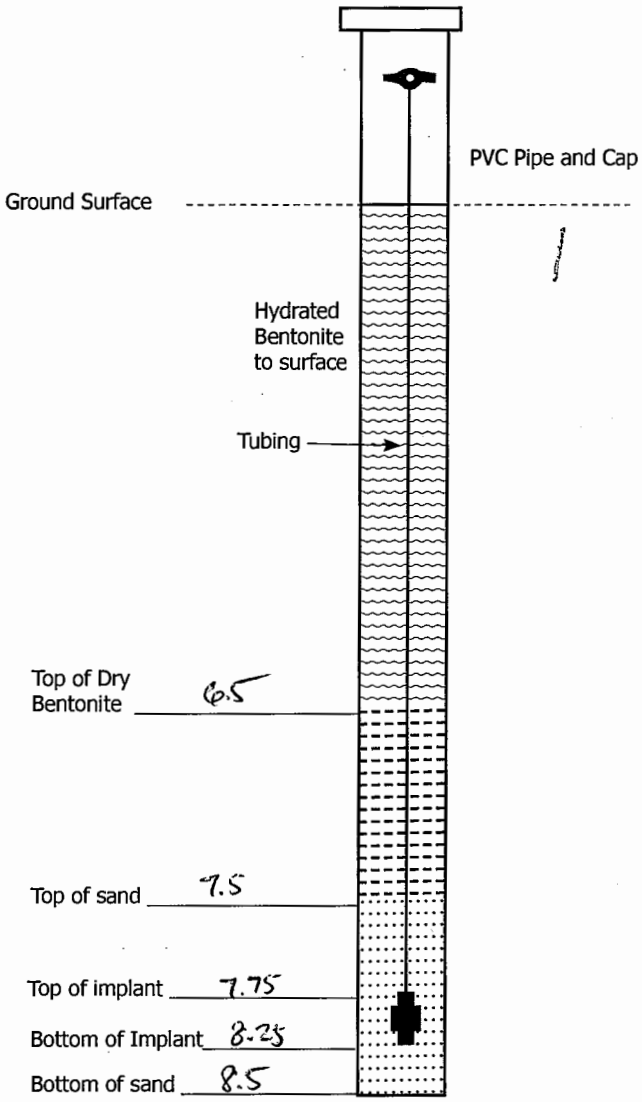
Boring ID: 5DSV-DG-502 Project: Phase 3 DOE SV DG Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		30"	NONE			10		fine sand, non-plastic silt, interlayered color changes, native soil					
0.0						11							
						12							
						13							
		36"	NONE			14							
0.0						15		Grades w/ clay fraction, low plasticity	-	-	-	70	20/10
						16		Grades w/o clay	-	-	-	70	30
		34"	NONE			17		Grades w/ clay	-	-	-	70	20/10
0.3						18							
						19		Sandstone, heavy weathering					
						20		TD=19. Refusal on bedrock, install vapor probes at 5.0-6.0, 13.0-14.0, and 18.0-19.0					
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-510
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SASD
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 8.5
Probe Completion Date/Time: 1059/5-22-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

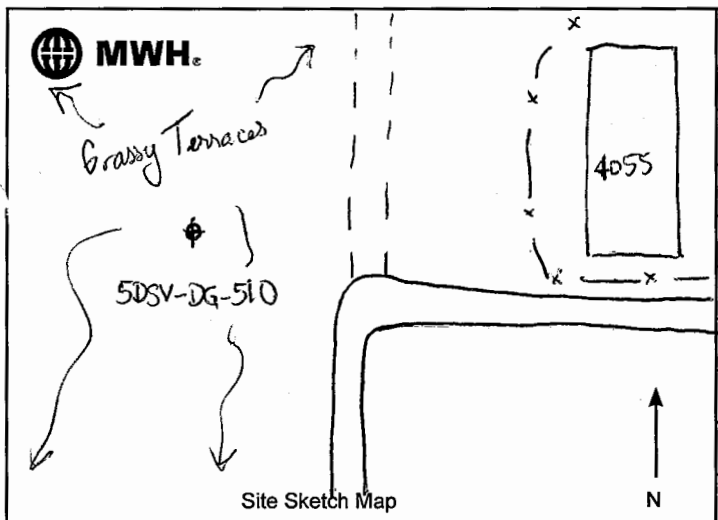
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5DSV-DG-510	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 3A 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1030 / 5-22-14	Drill Finish Time/Date: 1050 / 5-22-14
Soil Vapor ID: 5DSV-DG-510	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1059 / 5-22-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 7.5-8.5	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

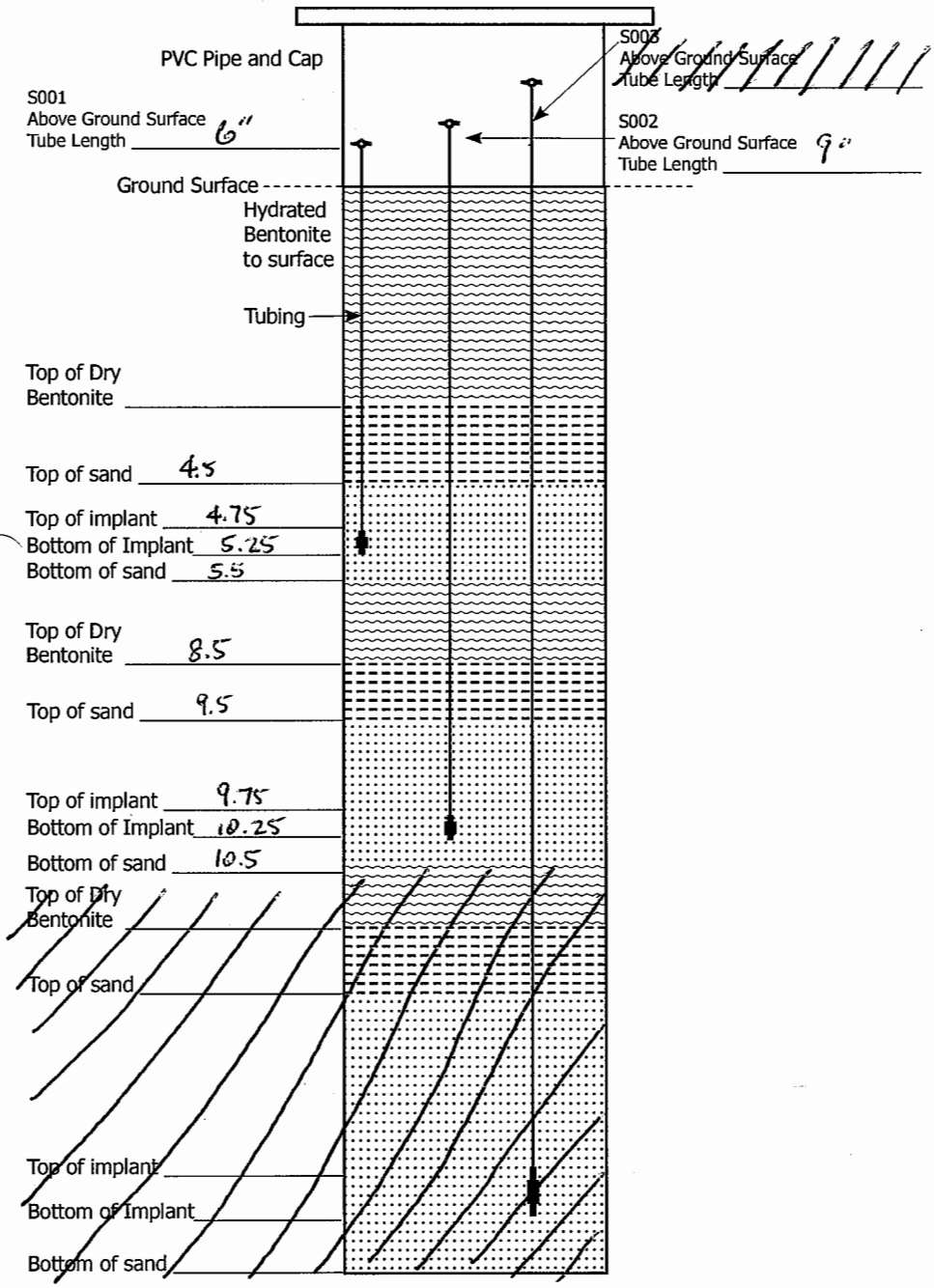
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: In depression, grassy	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), pale brown (10YR 6/3), loose, dry, fine to coarse sand, non-plastic silt, no stains or odors, fill	—	20	30	20	30
		30"				1		@ 1.5' grades w fine angular gravel	10	10	30	20	30
						2	CL	Clay (CL), brown (10YR 5/3), stiff, moist, medium plasticity clay (lean), weathered qtz and clay grains, no stains or odors, fill	—	-	10	-	90
0.0						3							
						4		@ 4.5' Silt w/ clay (ML), brownish yellow (10YR 5/6), stiff, ~~dry~~ (M) to very slightly moist, low to no plastic fines, white (10YR 8/1) streaks (weathered qtz), fill					
		48"				5							
						6							
						7	SM	Silty Sand (SM), very pale brown (10YR 7/4), loose, dry, fine sand, non-plastic silt and clay, weak clay cement, no odors or stains, native soil					
0.2		6"				8							
						9		@ 8.5 Sandstone. TD = 8.5'. Refusal on bedrock. Install vapor probe at 7.5-8.5'					

PID 7.5-8.5

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SDSV-DG-511
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SASD
Logged by: V. Vathanaain
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 10.5
Borehole Diameter: 2.25"
Probe Completion Date/Time: 0830 / 5-22-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

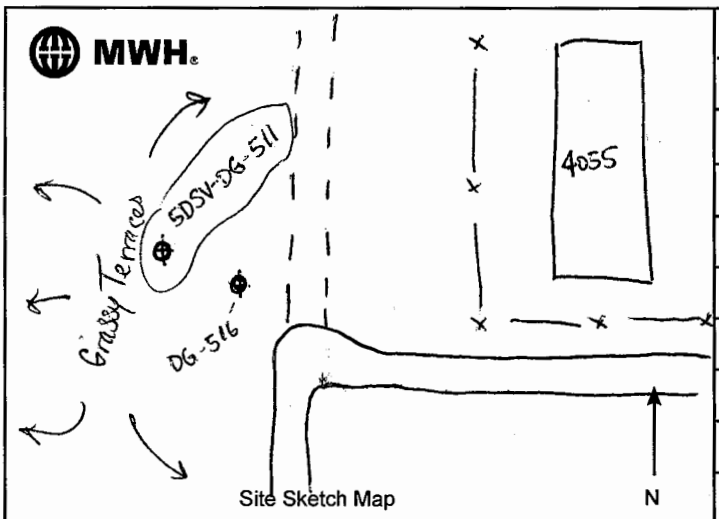
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5DSV-DG-511	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 5D
Logged By: V. Vathanavin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 10.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0740 / 5-22-14	Drill Finish Time/Date: 0800 / 5-22-14
Soil Vapor ID: 5DSV-DG-511	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0830 / 5-22-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5, 9.5-10.5	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Surface Description: Grassy, branches and limbs. Silt (ML), dark yellowish brown (10YR 4/4), med. stiff, slightly moist, non-plastic silt, trace sand, grass roots, wood fragments, fill	-	-	-	TR	100/
		38"	NONE			1			-	5	-	TR	95/
						2		@1' graded w/ coarse sand ~~fragments~~					
						3	CL	(V.O.) ~~4~~ Silty clay (CL), brownish yellow (10YR 5/6), stiff, dry, non-plastic clay and silt, weathered qtz(?) or plag (?) grains, fill, no odors or staining.	-	-	TR	-	(V.O.) 20/80
						4							
0.1			X			5		@ 4½-2" gravel					
		48"		SVL-511-SA5D-SS 4.5-5.5 MS 4.5-5.5		6		color changes to light yellowish brown (10YR 6/4).					
				SVL-311-SA5D-SS		7							
		24"	NONE			8	ML	Silt (ML), yellowish brown (10YR 5/4), stiff, dry, non-plastic silt, fill	-	-	-	-	100/
						9	SM	Silty Sand (SM), yellow (10YR 7/6), loose, dry, fine sand, non cemented, native soil	-	-	-	70	30/
						10							

0.3

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(V.V.)

Boring ID: 5DSV-~~01~~ DG-511 Project: Phase 3 DOE SV DG Sheet 2 of 2

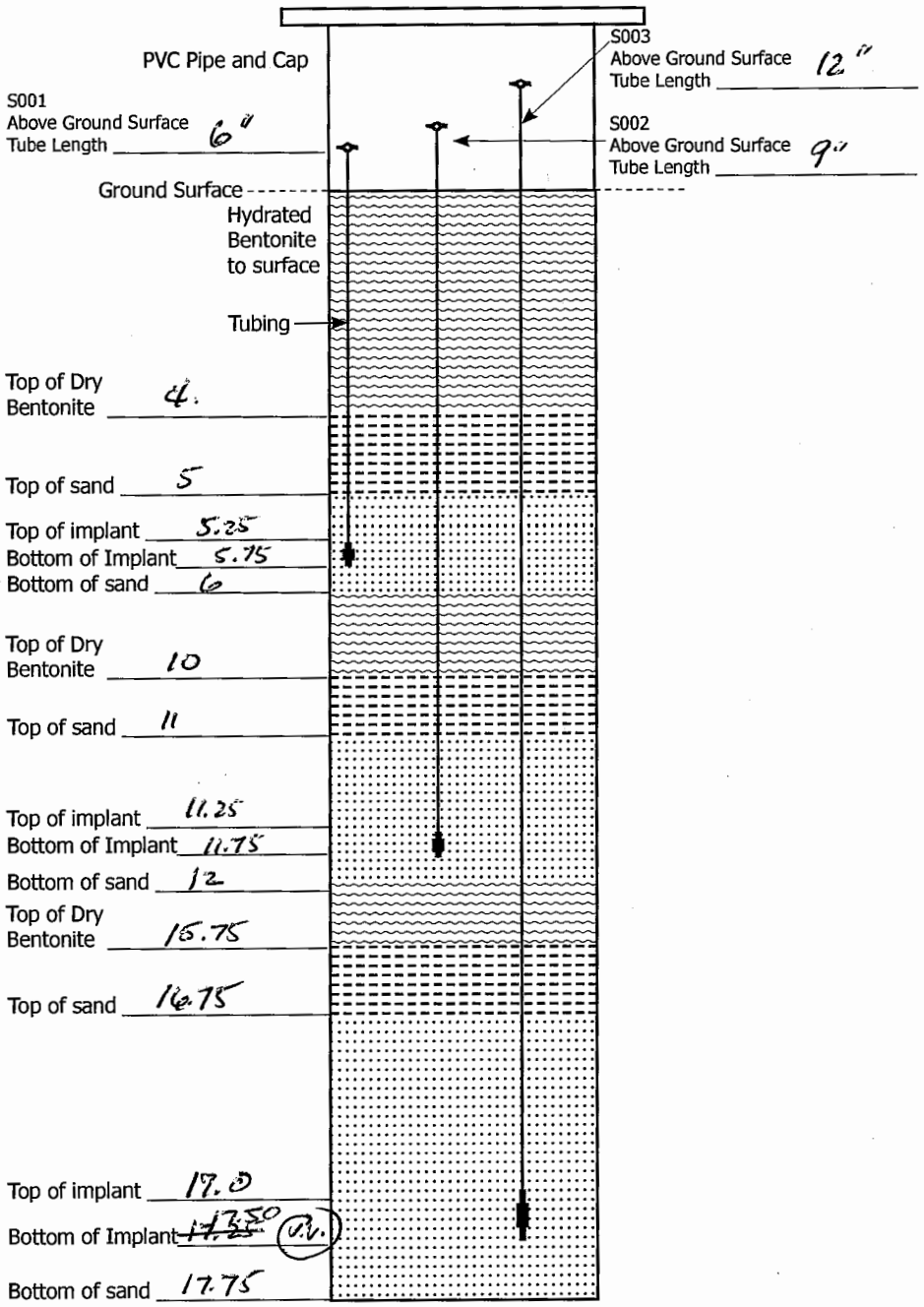
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10		@10.5' Sandstone, weathered.					
						11		TD=10.5', refusal on bedrock. Install vapor probes at 4.5-5.5' and 9.5-10.5'.					
						12		Collect encores at 4.5'-5.5' for potential no-flow conditions.					
						13							
						14							
						15							
						6							
						7							
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 508V-DG-512
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SA 5D
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 17.75
Borehole Diameter: 2.25
Probe Completion Date/Time: 1356/5-21-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

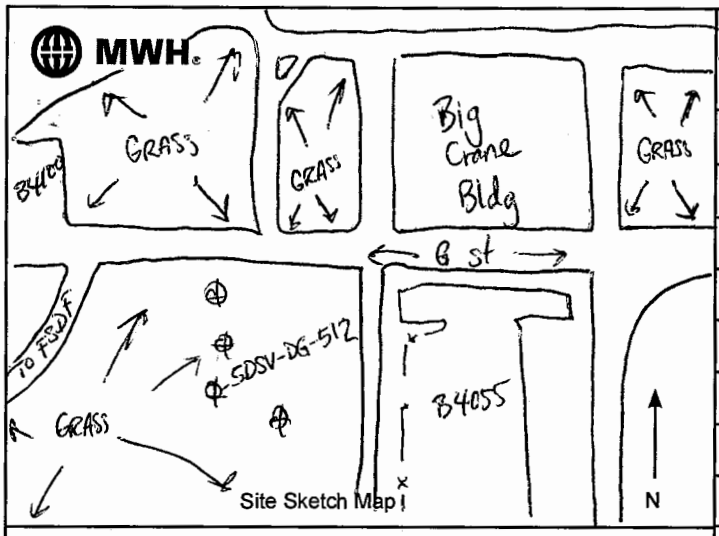
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5DSV-DG-512	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 17.75		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1231 / 5-21-14	Drill Finish Time/Date: 1330 / 5-21-14		
Soil Vapor ID: 5DSV-DG-512	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1356 / 5-21-14	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 11.0-12.0, 16.75-17.75	Surface Completion: Soil vapor probes.		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	~~Silt~~ Sandy Silt (ML), brown (10YR 5/3),	TR	–	–	20	80/
						1		med. stiff, dry, non-plastic silt, fine sand,	–	–	–	20	60/80
		36"						roots, trace fine gravel, fill, no odors					
						2		or stains.					
								@1' ~~1.5~~ grades with clay, low plasticity,					
						3		~~slight~~ very dark grayish brown staining					
								(10YR 3/2) at 1.5-2.0', plastic debris					
						4	CL	Silty Clay (CL), dark yellowish brown (10YR	–	TR	–	TR	35/65
								4/4), stiff, moist, medium plasticity					
					13:40	5		clay, silt, trace coarse and fine sand, areas w/					
		48"	X					white weathering ~~areas~~					
						6							
		SVL-512-EA5D-SB				5.0-6.0							
						7							
								color lightens to (10YR 4/6)					
						8							
						9							
		48"						grades w/ angular gravel (weathered)	10	–	–	TR	40/50

cont next page

Boring ID: 5DSV-DG-512 Project: Phase 3 DOE SV DG Sheet 2 of 2

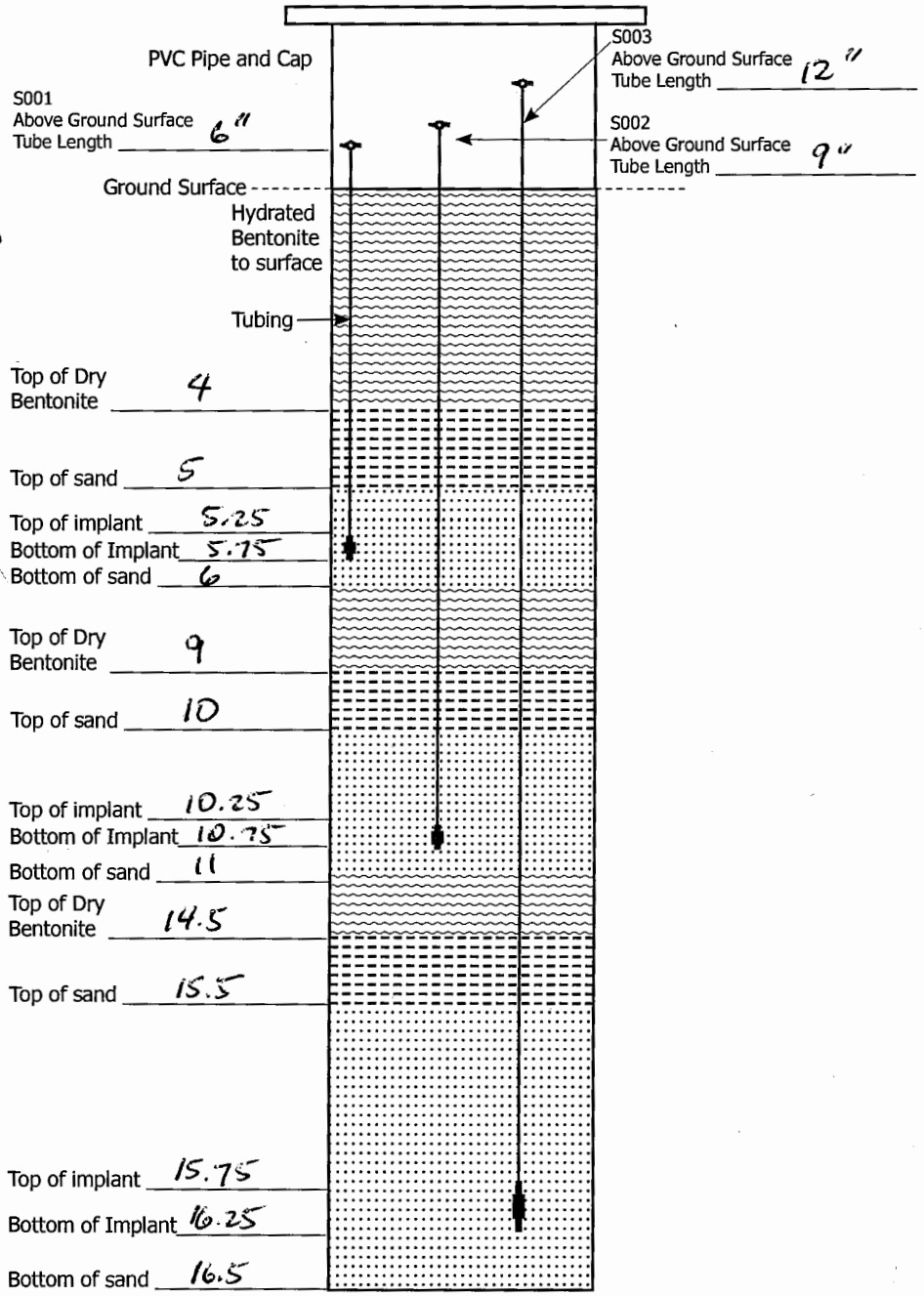
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10	se CL	V.V.					
						11	SC	clayey Sand (SC), yellowish brown (10YR 5/6) with very pale brown streaks (10YR 7/3), med. dense, dry, fine sand, low plasticity clay, clay cement, possibly native, no odors, some brownish yellow (10YR 6/8) iron staining	-	-	-	65	35
0.0		24"	NONE			12							
						13							
						14	CL	@13.5 Sandy clay (CL), brownish yellow (10YR 6/6), med. stiff, moist, low plasticity clay, fine sand, no odors or stains	-	-	-	35	65
		24"	NONE			15			-	-	-	70	30
0.0						16		@14.5 Silty Sand (SM), brownish yellow (10YR 6/8), loose, dry, fine sand, non-plastic silt, no odors or stains					
		20"	NONE			17			-	-	-	100	TR
0.0						18		@17.25 Poorly Graded Sand (SP), brownish yellow (10YR 6/8), loose, dry, fine sand, trace silt, weak ~~clay~~ silt cement V.V.					
						19							
						20		@17.75 Sandstone, weathered.					
						1							
						2		TD = 17.75', refusal on sandstone bedrock, install vapor-probe at 5.0-6.0, 11.0-12.0, and ~~17.75~~ 16.75-17.75 V.V. Collect encores at 5.0-6.0 due to potential low-flow conditions.					
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5-6
11-12
16.75-17.75

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5D3V-DG-513
Project: Phase 3 DOE DG SV
Job #: 10503982
Site: 5D
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 16.5
Borehole Diameter: 2.25"
Probe Completion Date/Time:



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

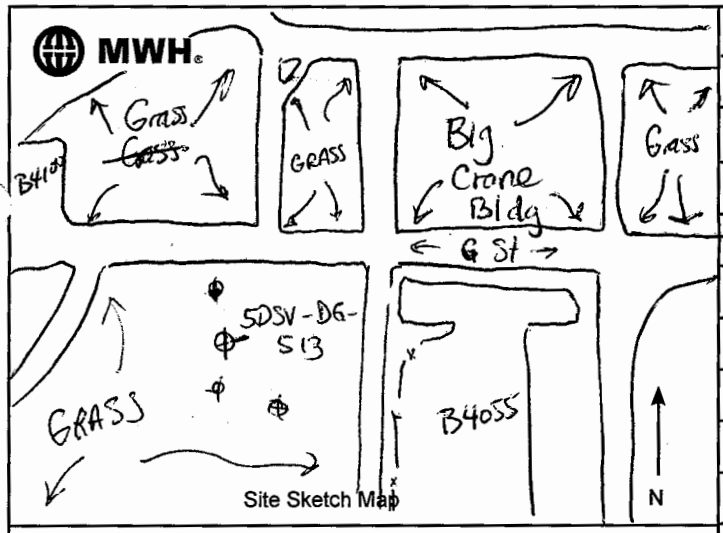
Hydrated Bentonite

Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2



Site Sketch Map

Boring ID: 5DSV-DG-513	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 16.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1003 / 5-21-2014	Drill Finish Time/Date: 1100 / 5-21-2014		
Soil Vapor ID: 5DSV-DG-513	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1150 / 5-21-14	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0, 10.0-11.0, 15.5-16.5	Surface Completion: Soil Vapor probes.		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: Cleared veg.	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Silt w/ Sand (ML), yellowish brown (10YR 5/4), loose to med. dense, dry, non-plastic silt, fine sand, no odors or stains, fill	—	—	—	15	85/ (V.V.)
		36"	NONE			1							
						2	V.V. ~~Clay~~ Lean CL	Clay (CL), yellowish brown (10YR 5/6), stiff, dry, low plasticity, fill	—	—	—	—	/100
0.0						3							
						4							
		30"	NONE			5	ML	Silt w/ gravel and sand (ML), light yellowish brown (10YR 6/4), loose/soft, dry, non-plastic silt, fine angular gravel, fine sand, coarse sand, fill	10	5	—	25	60
						6							
0.0						7		grades w/o gravel	—	—	—	20	80/
						8		@8' grades w/ clay, med plasticity, stiff	—	—	—	10	90/20
			NONE			9							

cont next page

Boring ID: SDSV-DG-513 Project: Phase 3 DOE SV DG Sheet 2 of 2

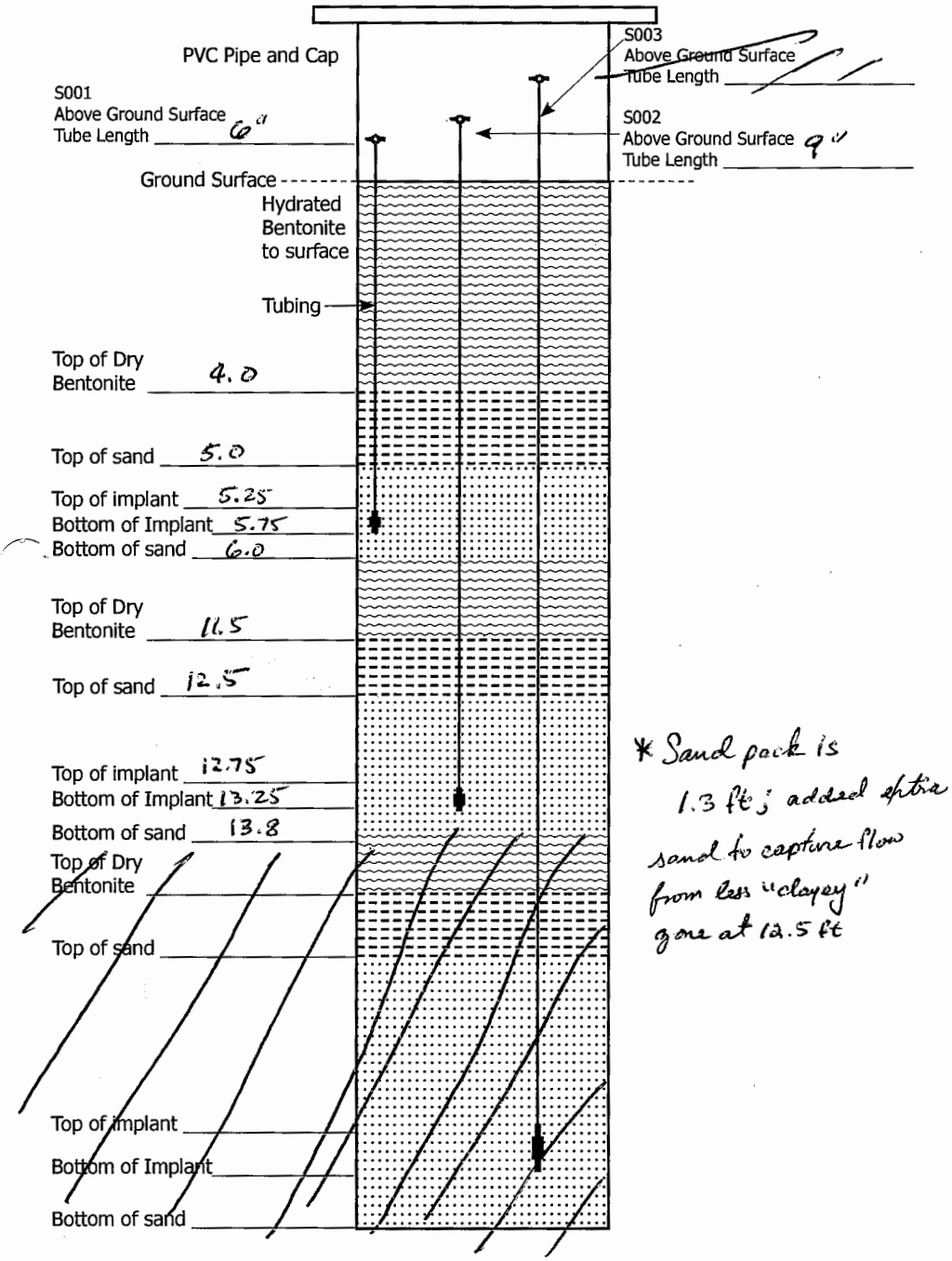
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0		32"	NONE			10		@9' grades w/o clay, PVC cable jacket in core sample, soft to med stiff.	-	-	-	15	85/
						11							
0.2						12							
		24"	NONE			13	SM	Silty Sand (SM), brownish yellow (10YR 6/6), med. dense, dry, fine sand, non-plastic	-	-	-	70	30/
		24"	NONE			14	ML	~~silt~~ and sand 7/4 Silt w/ clay (ML), very pale brown (10YR ~~6/4~~), soft, dry, low to medium plasticity fines, fine sand, no odors (V.V.) no staining, native soil, no debris (V.V.)	-	-	-	15	65 ~~80~~/20 (V.V.)
0.0		6"				15							
						16							
						17	Br	Shale, weathered, fissile					
						18		TD = 16.5', refusal on bedrock, install vapor probes at 5.0-6.0, 10.0-11.0, 15.5-16.5					
						19							
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5-6
10-11

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SDSV-DG - 515
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SA SD
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 13.8'
Borehole Diameter: 2.25"
Probe Completion Date/Time: 15:23 / 5-21-14



* Sand pack is 1.3 ft; added extra sand to capture flow from less "clayey" zone at 12.5 ft

Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

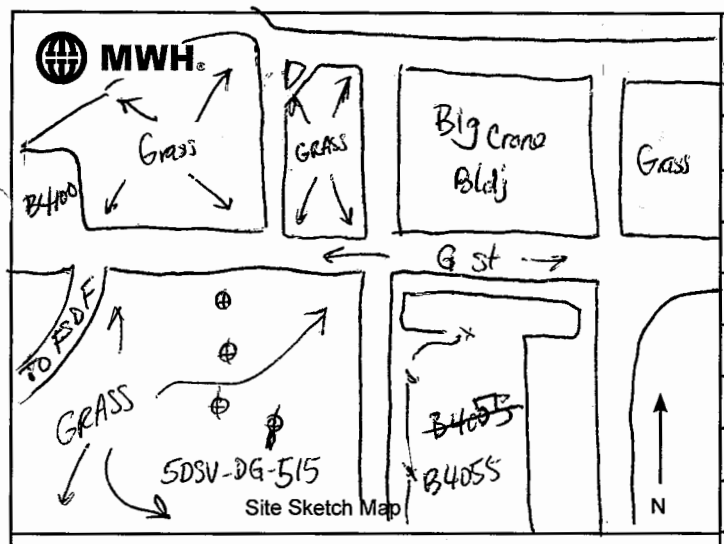
Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2



Site Sketch Map

Boring ID: 5DSV-DG-515	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 13.8
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1420 / 5-21-14	Drill Finish Time/Date: 1510 / 5-21-14
Soil Vapor ID: 5DSV-DG-515	Soil Boring Backfill Time/Date: N/A (V.V.) Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 15:23 / 5-21-14	Observations: ☒ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 12.5-13.8	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand Coarse	Medium	Fine	Silt/clay
								Surface Description: Veg. cleared, grassy.					
						0	ML	Silt (ML), yellowish brown (10YR 5/4) (V.V.), soft, dry, non-plastic silt, 2" gravel (subrounded) at 1 ft bgs, compacted fill, roots, organic detritus.	TR	–	–	–	100
		33"	NONE			1							
						2	CL	@ 1.3' 2nd chunk of 2" subrounded gravel	TR	–	–	–	100
						3							
						4		@ 2.3' Lean clay (CL), brown (10YR 4/3), stiff, faint moisture, med. plasticity clay, moderately cemented (clay), no odor or stains, ≤ 1mm ~~white~~ (V.V.) very pale brown nodules (10YR 8/2), fill					
		48"	X		15:10	5							
		SVL-515-SASD-58-5.0-6.0				6		@ 6.8' 2" subrounded gravel.					
						7							
						8							
						9							

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(V.V.)

Boring ID: 5DSV-DG-~~512~~ 515 Project: Phase 3 DOE SV DG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		48"	NONE			10	SW (VV)	~~Poorly~~ Well Graded Sand (SP SW), brownish yellow (10YR 6/6), loose, dry, fine to coarse sand, friable, native soil.	–	10	30	60	–
			NONE			11							
						12	CL	~~clay~~ Fat Clay (CL), dark grayish brown (10YR 4/2), med stiff, moist, high plasticity clay	–	–	–	–	100
						13	SC	@12.5 Clayey Sand (SC), brownish yellow (10YR 6/6), loose, dry, fine sand, high plasticity clay, weak clay cement, no odors, ~~no stains~~, dark streaks native soil	–	–	–	65	35
						14	SP		–	–	–	100	–
						15		@13.5 Poorly Graded Sand (SP), brownish yellow (10YR 6/8), loose, dry, fine sand, possibly weathered bedrock					
						16							
						17		@13.8 Sandstone, weathered.					
						18		TD=13.8', refusal on bedrock. Install vapor probes at 5.0-6.0, 12.5-13.8. Collect encores at 5.0-6.0 in case low-flow is encountered.					
						19							
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5.0-6.0
12.5-13.8

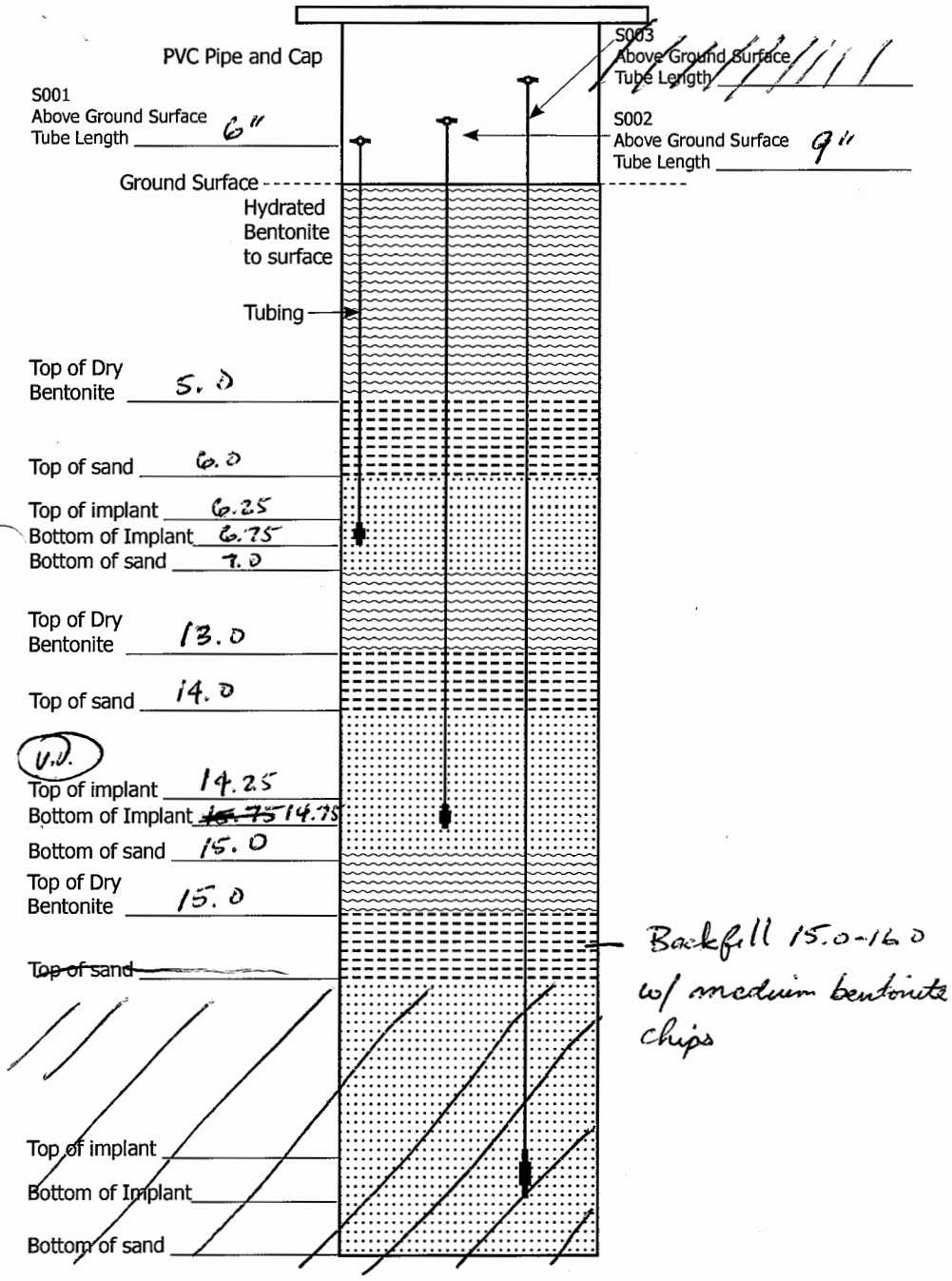
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SDSV-DG-516
Site: 3A SD
Drilling Contractor: EST
Borehole TD: 16

Project: DOE Phase 3 SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 1019 / 5-22-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

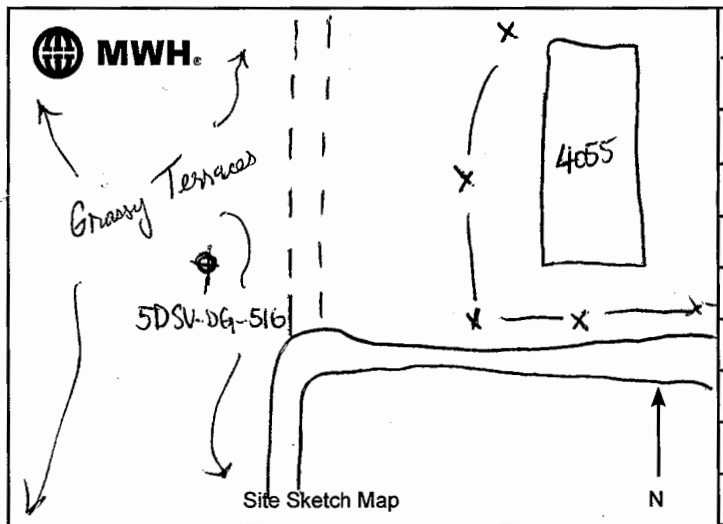
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5DSV-DG-516	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SASD
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 16.0
Drill Bit Type: Macrocore	(V.V.)
Drill Start Time/Date: 0903 / 5-22-14	Drill Finish Time/Date: 0955 / 5-~~24~~ 22-14
Soil Vapor ID: 5DSV-DG-516	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 10:19 / 5-22-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 6.0-7.0, 14.0-15.0	Surface Completion: Soil Vapor Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Grass	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Silt (ML), light yellowish brown (10YR 6/4), stiff, dry, non-plastic silt, trace granitic gravel (fine), grass roots, no stains or odors, fill	TR	–	–	–	100/
		36"				1							
						2							
						3							
						4	CH	(V.V.) ~~Clay~~ Fat Clay (CH), brown (10YR 4/3), stiff, moist, medium to high plasticity clay, @ trace ~~interbedded~~ (V.V.) fine granitic gravel, fill	TR				
		40"				5							
						6	CL ~~SW-SC~~	@6'-6.25 Well Graded Sand w/ clay (SW-SC), brownish yellow (10YR 6/6), loose, dry, fine to coarse sand, med plasticity clay, weak clay cement, fill					
0.1						7	(V.V.) CH	@6.25 - Same as 4 ft.					
						8		@ 8' 1.5-inch granodiorite (?) gravel					
		30"				9							

QA/QC
Sur icial media boring log rev 2-25-2014

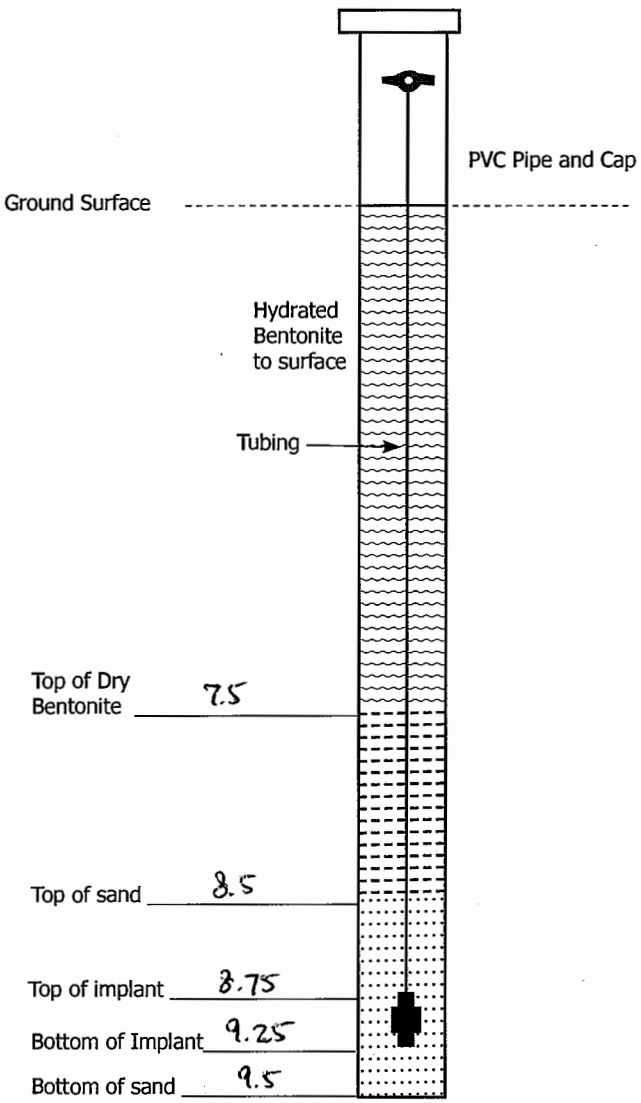
Boring ID: 5DSV-DG-516 Project: Phase 3 SV DG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10							
						11	CL	Silty Clay (CL), dark yellowish brown (10YR 4/6), stiff, dry, medium plastic, clay and silt, native soil.	--	--	-	-	30/70
		36"	NONE			12							
						13							
0.0		24"	NONE			14	SM	Silty Sand (SM), light yellowish brown (10YR 6/4), loose, dry, fine sand, non-plastic silt, non-cemented, native soil	-	-	-	60	40
						15							
						16	BR	Weathered Shale - bedrock					
						17							
						18		TD=16.0 ft, refusal on bedrock. Install probes at 6.0-7.0 and 14.0-15.0. Backfill w/ medium chips to 15.0-16.0.					
						19							
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-519
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5D
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 9.5
Probe Completion Date/Time: 1300/5-22-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 3/8"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

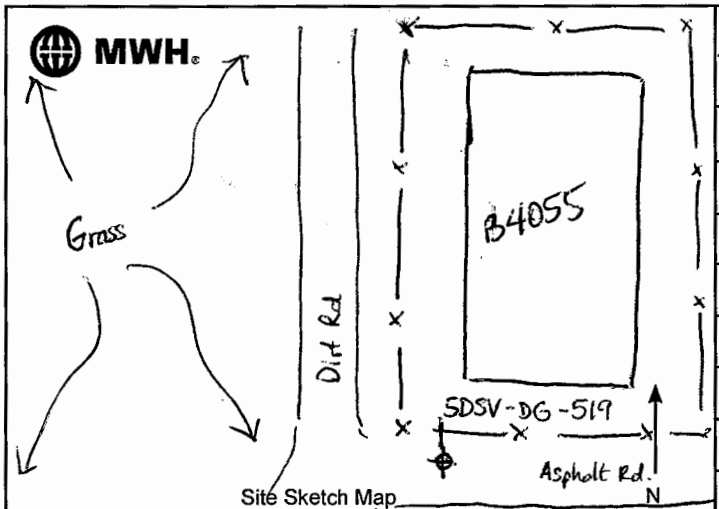
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SDSV-DG-519	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25	Total Depth (ft.bgs) 9.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1211 / 5-22-14	Drill Finish Time/Date: 1225 / 5-22-14
Soil Vapor ID: SDSV-DG-519	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1300 / 5-22-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 8.5-9.5	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: Asphalt

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		9" Asphalt					
						1	CL	Clay (CL), very dark gray (10YR 3/1), med. stiff, moist, medium plasticity clay, asphalt staining, faint asphalt odors, fill	-	-	-	-	/100
		48"	NONE			2							
						3		color changes to yellowish brown (10YR 5/4)					
0.0						4							
						5		trace gravel	TR	-	-	-	/100
		45"	NONE			6		color lightens to brownish yellow (10YR 6/6)					
						7	CL	Sandy Clay (CL), yellowish brown (10YR 5/4), med. stiff, dry, low plasticity clay & fine sand, white streaks (10YR 8/1), @8.5 Very dark gray (10YR 3/1) stains, no odor					
0.0						8							
						9			-	-	-	65	35
							Br	@9.0 ft Silty Sand (SM), v. pale brown (10YR 7/3), loose, dry, fine sand, silt, native					

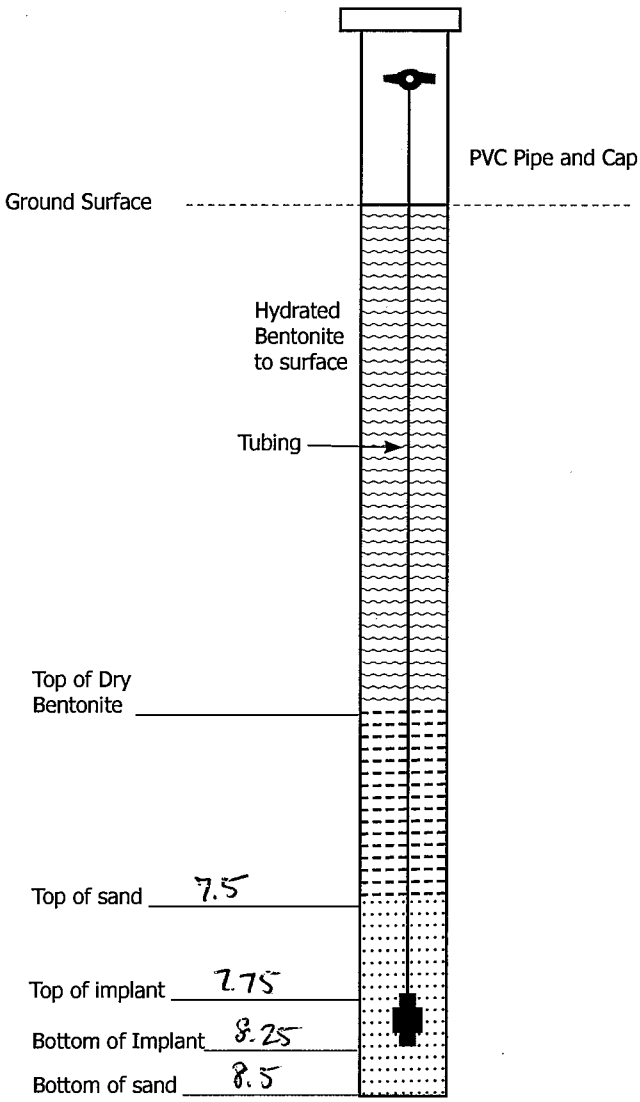
*TD = 9.5 ft. Refusal on bedrock. Install probe 8.5-9.5'

@9.5 Sandstone

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-526
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 3A 5D
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 8.5
Probe Completion Date/Time: 0845/5-23-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

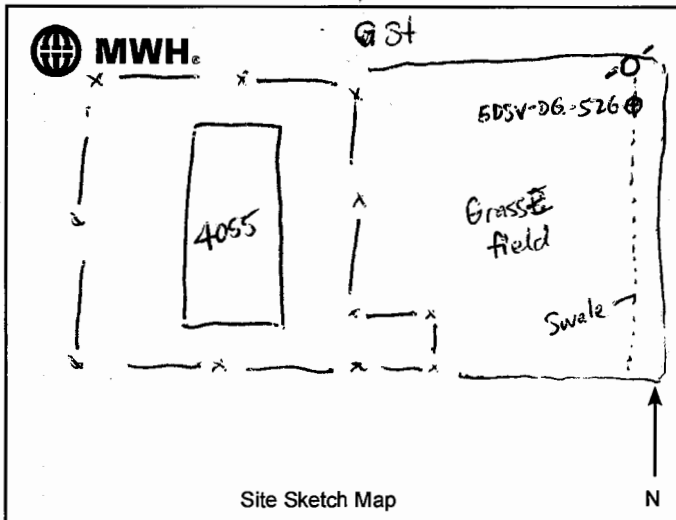
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 5DSV-DG-526	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: ~~A~~ UV Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 8.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0800 / 5-23-14	Drill Finish Time/Date: 0820 / 5-23-14		
Soil Vapor ID: 5DSV-DG-526	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 0845 / 5-23-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 7.5 - 8.5	Surface Completion: Vapor Probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

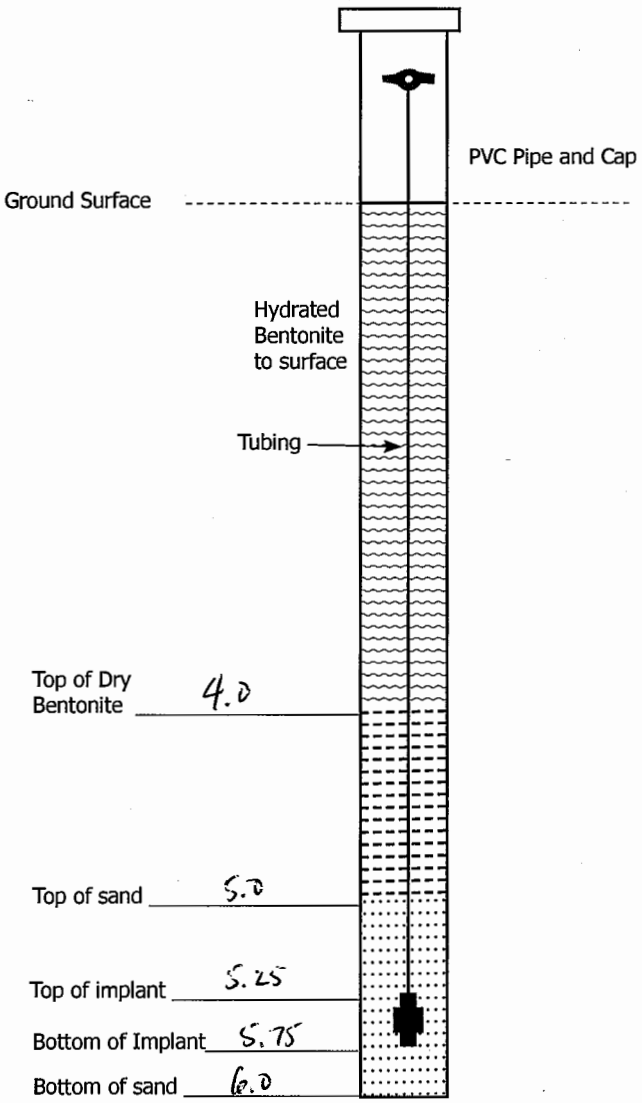
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Surface Description: N. flowing drainage swale Silt (ML), brownish yellow (10YR 6/6), stiff, dry, low plasticity (UV) silt, trace sand (disappears @ 0.5'), gravel deposits at the surface, roots, fill	TR	-	-	-	100/-
		36"	NONE			1							
						2							
						3		Grades w/ sand, color changes to yellowish brown (10YR 5/6)	-	-	-	15	85/
0.0						4							
						5							
		48"	NONE			6	CL	Silty Clay (CL), brown (10YR 5/3), stiff, slightly moist, low to med. plasticity clay, silt, white nodules of decomposing quartz or felspar, fill.	-	-	-	-	25/75
						7							
						8	SM	Silty Sand (SM), very pale brown (10YR 7/4) with brownish yellow staining (10YR 6/6), med stiff, dry, fine sand, non-plastic silt, native soil	-	-	-		
0.1		6"				9	Br						
		TD = 8.5', refusal on bedrock. Install probe 7.5 - 8.5											

@ 8.5' Sandstone

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-530
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SD
Reviewed by:
Logged by: V. Vatharasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 6.0
Probe Completion Date/Time: 1003 / 5-23-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

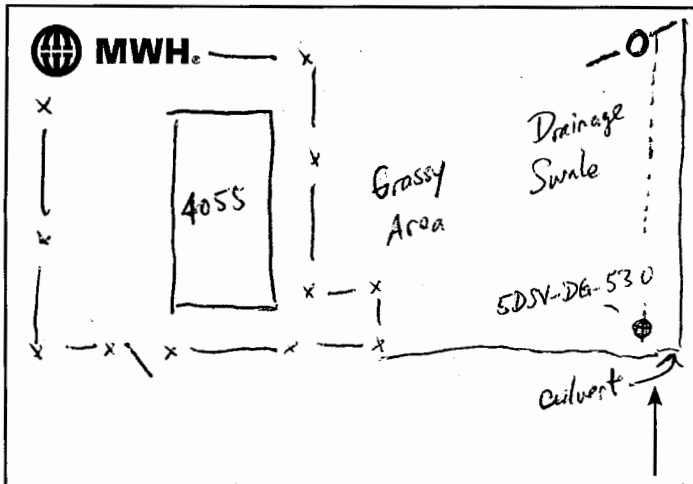
Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1



Site Sketch Map

Boring ID: 5DSV-DG-530	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 6.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0942 / 5-23-14	Drill Finish Time/Date: 0955 / 5-23-14
Soil Vapor ID: 5DSV-DG-530	Soil Boring Backfill Time/Date: N/A
Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1003 / 5-23-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Near culvert	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), brown (10YR 4/3), med. dense, dry, non-plastic silt, fine sand, grass roots, fill, no odors or stains	-	-	-	60	40/
		38"	NONE ✓			1		color changes to brownish yellow (10YR 6/6), loose					
0.0						2							
						3							
						4		w/ Sand					
		18"	NONE ✓			5	ML	Silt (ML), brownish yellow (10YR 6/6), soft, dry, non-plastic silt, fine sand, no odors or stains, fill.	-	-	-	30	70/
0.0						6	SM	Silty Sand (SM), yellowish brown (10YR 5/6), loose, dry, fine sand, non-plastic silt, native soil.	-	-	-	60	40
						7	Br	@6' Sandstone, weathered					
						8		TD = 6.0 ft, refusal on bedrock, install probe at 5.0-6.0					
						9							

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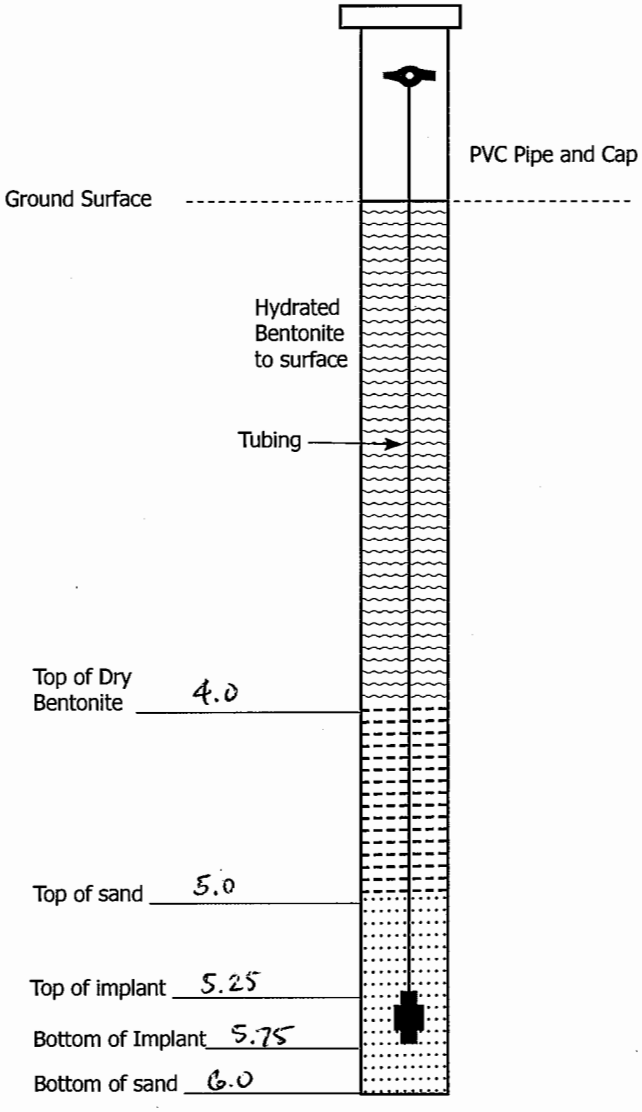
Surficial media boring log rev 2-25-2014

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-531
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: 5D
Reviewed by:
Logged by: V. Vathanson
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 6.0
Probe Completion Date/Time: 0922 / 5-23-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: ~~1/4"~~ Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

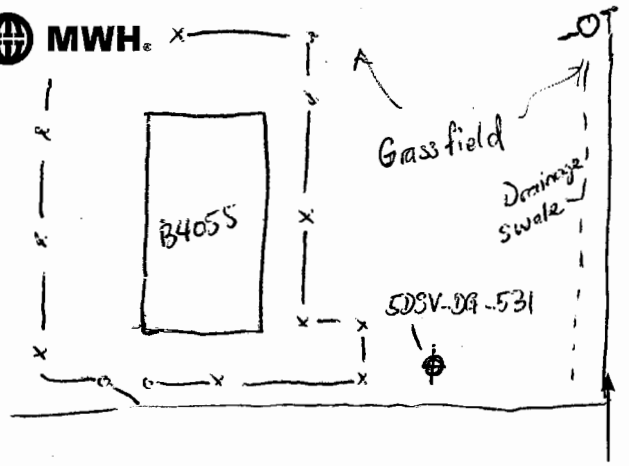
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.

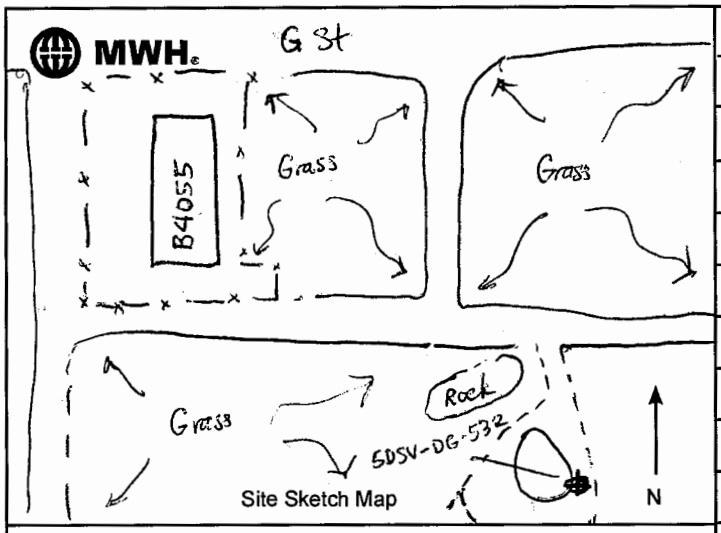


Site Sketch Map

Boring ID: 5DSV-DG-531	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanesin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 6.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0855 / 5-23-14	Drill Finish Time/Date: 0911 / 5-23-14
Soil Vapor ID: 5DSV-DG-531	Soil Boring Backfill Time/Date: N/A
Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 0922 / 5-23-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5.0 - 6.0	Surface Completion: Soil Vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Grassy area E. of 4055 Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non-plastic	–	–	–	60	40/
		33"				1	ML	silt, no odors or stains, fill. @ 1.1' Silt (ML) with Sand, dark	–	–	–	15	85/
0.0						2		yellowish brown (10YR 4/4), stiff, dry, non-plastic silt, fine sand, no stains or odors, fill					
						3							
		24"				4		Grades to Sandy Silt, light yellowish brown (10YR 6/4), fill	–	–	–	30	70/
0.0						5	SM	Silty Sand (SM), brownish yellow (10YR 6/6),	–	–	–	60	40/
						6	Br	loose, dry, fine sand, non-plastic silt, native soil					
						7		@ 6' Sandstone, ~~refusal~~ weathered					
						8		TD = 6.0, refusal on ~~sandstone~~ bedrock, install probe @ 5.0 - 6.0					
						9							

MWH.



Site Sketch Map

Boring ID: SDSV-DG-532	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SASD
Logged By: V. Vatheraam	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 4.5'
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1255/5-27-14	Drill Finish Time/Date: 1320/5-27-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1331/5-27-14 Backfill Material: Soil cuttings.
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: Gravel ~~access~~ access road.					
	X					0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand, non-plastic silt, no odors or stains, backfill,	-	-	-	65	35
		45"				1							
						2		@1.25' laminated appearance					
						3							
0.6						4		W.					
	X	6"	X		13:15			~~grades~~ grades to → color changes to (10YR 5/3) yellowish brown,	-	-	-	70	30
SVL-532-SASD-SB-4.0-4.5						5							
						6		TD= 4.5 ft bgs. Refusal on bedrock, no probes installed; collect soil sample ~~4.5-5~~ 4.0-4.5 ft bgs.					
						7							
						8							
						9							

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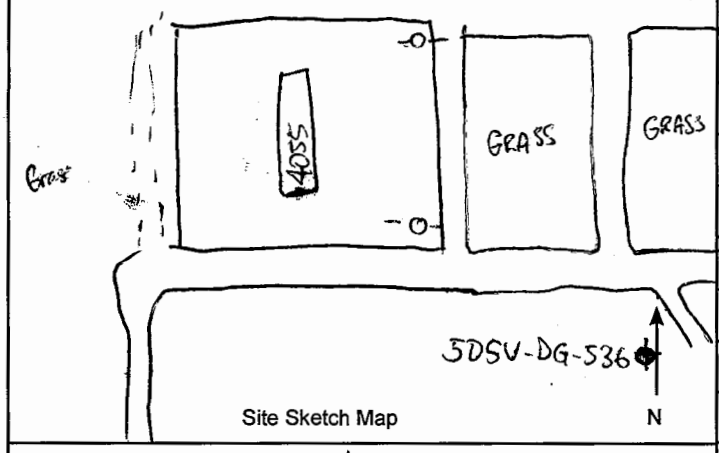
MWH.



Site Sketch Map

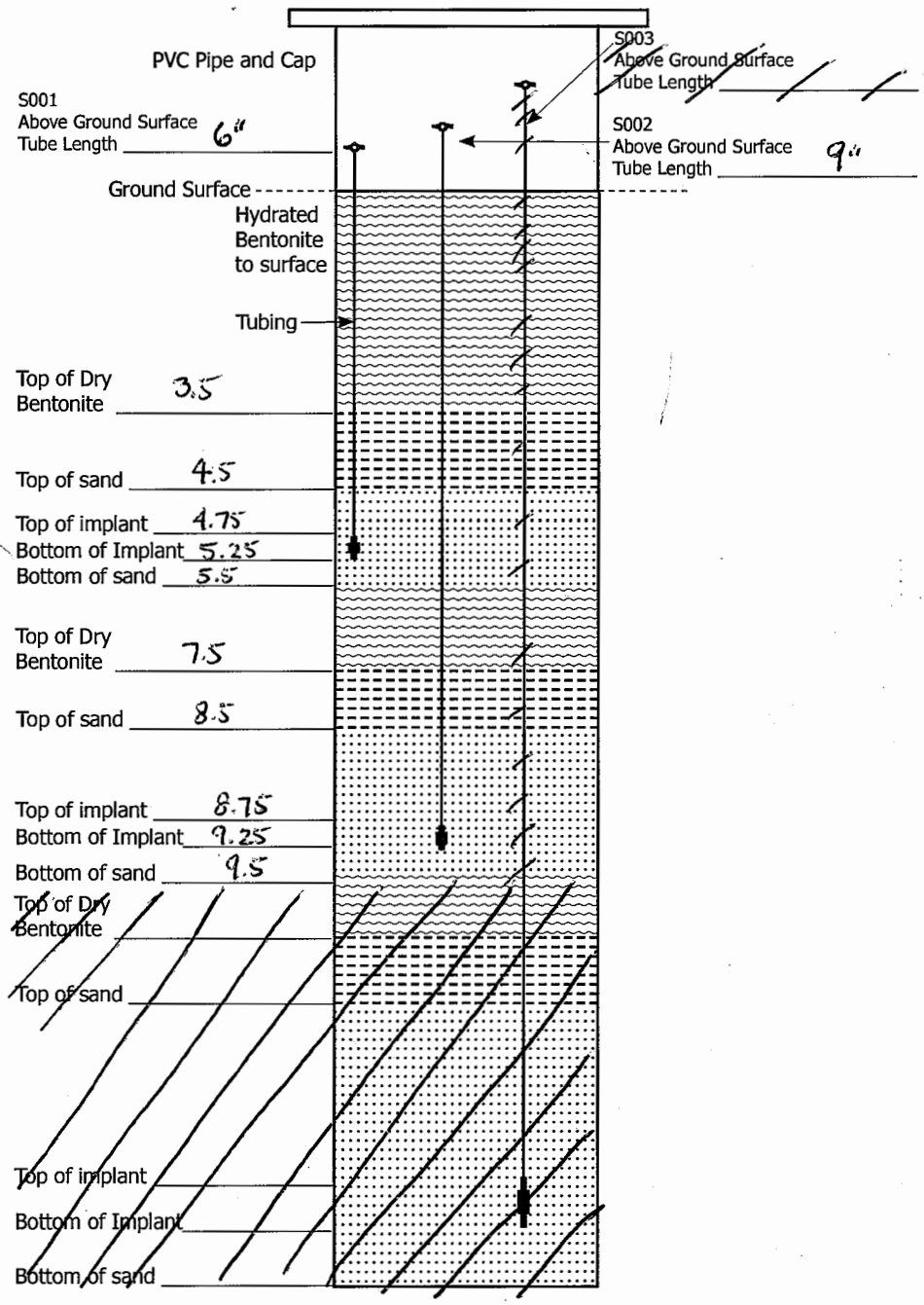
Boring ID: 5DSV-DG-536	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vatharasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 2.3
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1041 / 5-23-14	Drill Finish Time/Date: 1050 / 5-23-14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1105 / 5-23-14
	Backfill Material: Soil cutting
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: Backfilled w/ soil
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	SM	Surface Description: Grass covered hummocky area.					
		27"				1		Silty Sand (SM), yellowish brown (10YR 5/4), loose, dry, fine sand, non plastic silt, animal burrows, grass, fill.	–	–	–	60	40
0.0			☒		10:54	2		@ 1.1 ft, color changes to yellow (10YR 7/6), native soil.					
SV2-536-SA5D-SB-1.8-2.3						3		@ 2.3 ft Shale.					
						4		TD = 2.3 ft, refusal on bedrock. Collect encores at 1.8-2.5 ft.					
						5							
						6							
						7							
						8							
						9							

MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-539
Project: Phase 3 DoE SVDG
Job #: 10503982
Site: SASD
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 9.5
Borehole Diameter: 8.25"
Probe Completion Date/Time: 1201/5-23-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Comex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

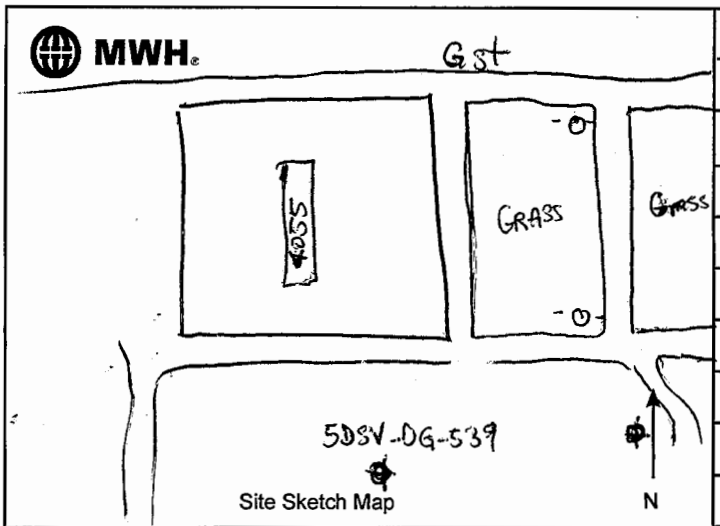
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5DSV-DG-539	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 9.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1125 / 5-23-2014	Drill Finish Time/Date: 1145 / 5-23-2014
Soil Vapor ID: 5DSV-DG-539	Soil Boring Backfill Time/Date: N/A
Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1201 / 5-23-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5, 8.5-9.5	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description:	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM-GW	Silty Sand w/ Gravel (SM-GW), dark yellowish brown (10YR 4/4), loose, dry, fine sand, non plastic silt, fine angular gravel, fill	5	–	–	55	40
		34"	NONE			1–2	ML		5	–	–	30	65
		~~48"~~	V.V			2–3		Silt w/ sand and gravel (ML), dark yellowish brown (10YR 4/4), med stiff, dry, silt and fine sand, fine gravel, fill 5.5-6.0 (V.V.)	–				
						4–5	GW	~~@5-6.0~~ Well Graded Gravel (GW), light gray (10YR 7/1) to grayish brown (10YR 5/2), friable, dry, fine to coarse gravel with sandy matrix, fill	70 ~~GW~~	20	10	5	
		48"	NONE			5–6							
						6–7	SM	Silty Sand (SM), yellowish brown (10YR 5/6), loose, dry, fine sand, low-plasticity silt, possibly native soil, light gray weathering (10YR 7/2) streaks.	–	–	–	60	40
		18"	NONE			8–9							
@3						9		TD = 9.5, Refusal on bedrock, set probes at 4.5-5.5 and 8.5-9.5					
							Br	@ 9.5 -- Sandstone, weathered					

4.5-5.5

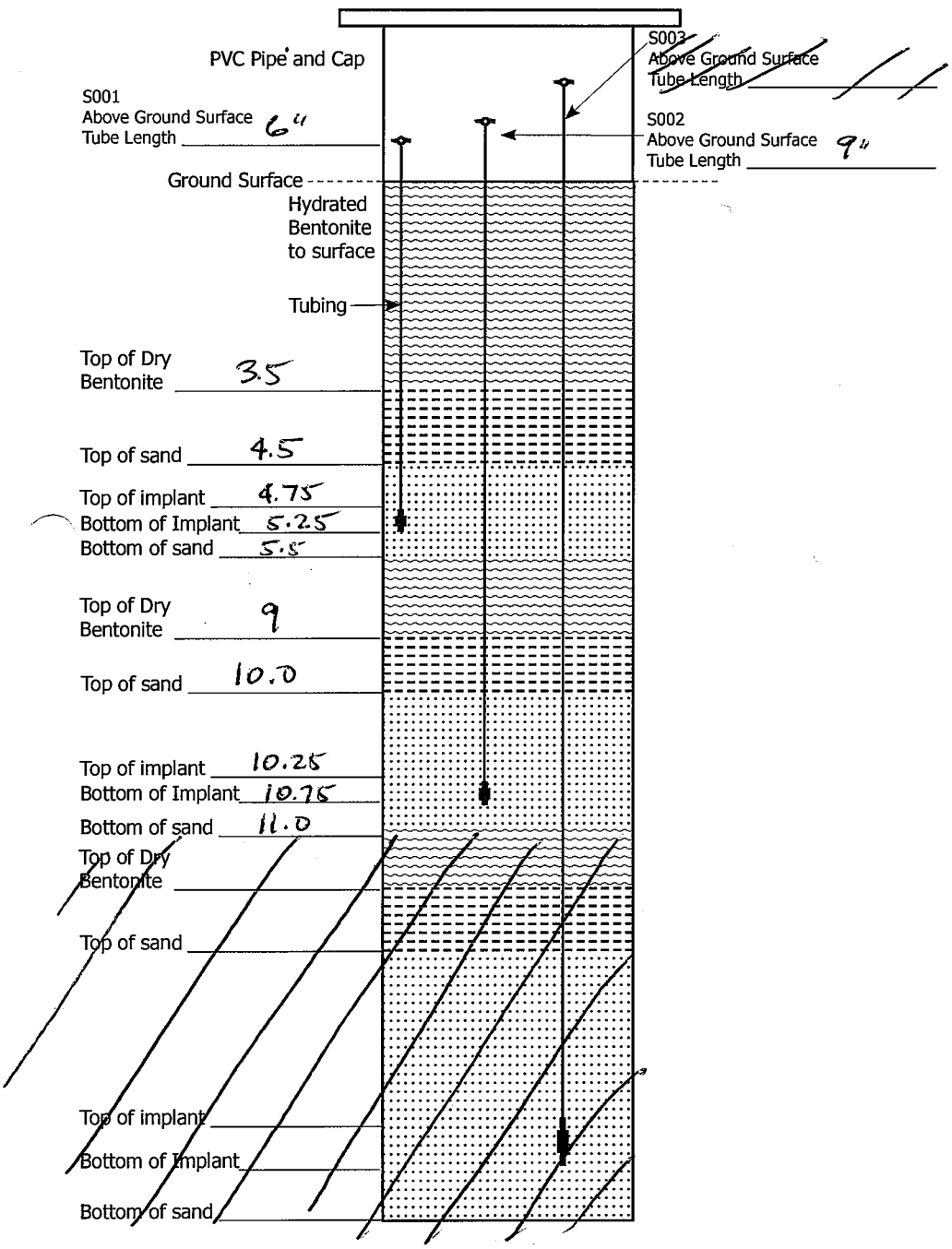
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5D3V-DG-544
Site: ~~3A5D~~ (V) 5D
Drilling Contractor: EST
Borehole TD: 11.0

Project: Phase 3 DOI SVDG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400/DP
Probe Completion Date/Time: 1205/5-22-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

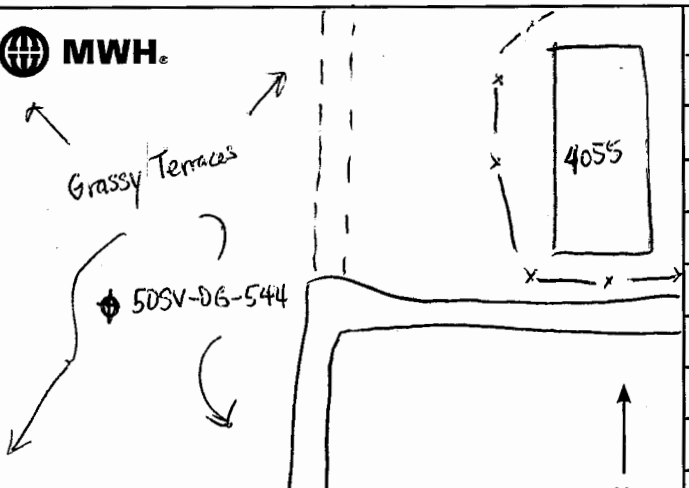
Type: #8 ~~Cet~~
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 5DSV-DG-544	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 5D
Logged By: V. Vathanam	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 11.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1130 / 5-22-14	Drill Finish Time/Date: 1150 / 5-22-14
Soil Vapor ID: ~~8~~ 5DSV-DG-544	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1205 / 5-22-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5, 10-11.0	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Graded backfill	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Silt (~~SM~~ ML), yellowish brown (10YR 5/4), stiff, dry, non-plastic silt, some grass roots, no stains or odors, fill	–	–	–	–	100/
		45"	NONE			1							
						2	CL	Silty Clay (CL), pale brown (10YR 6/3), stiff, moist, low to medium plasticity clay, silt, no odors or stains, fill	–	–	–	–	40/60
						3	ML	Silt w/ Sand (ML), light yellowish brown (10YR 6/4), stiff, dry, non-plastic silt, fine sand, fill	–	–	–	15	85/
						4							
						5	CL	Clay (CL), brown (10YR 4/3), stiff, moist, medium plasticity clay, no stains or odors, fill					
		46"	NONE			6							
						7	ML	Sandy Silt (ML), yellowish brown (10YR 5/4), med. stiff, dry, low plasticity silt, fine to medium sand, no odors or stains, fill	–	–	10	25	65/
						8							
						9	SM	Silty Sand (SM), brownish yellow (10YR 6/6), loose, dry, fine sand, non-plastic	–	–	–	70	30/
		36"	NONE										

Con't next page →

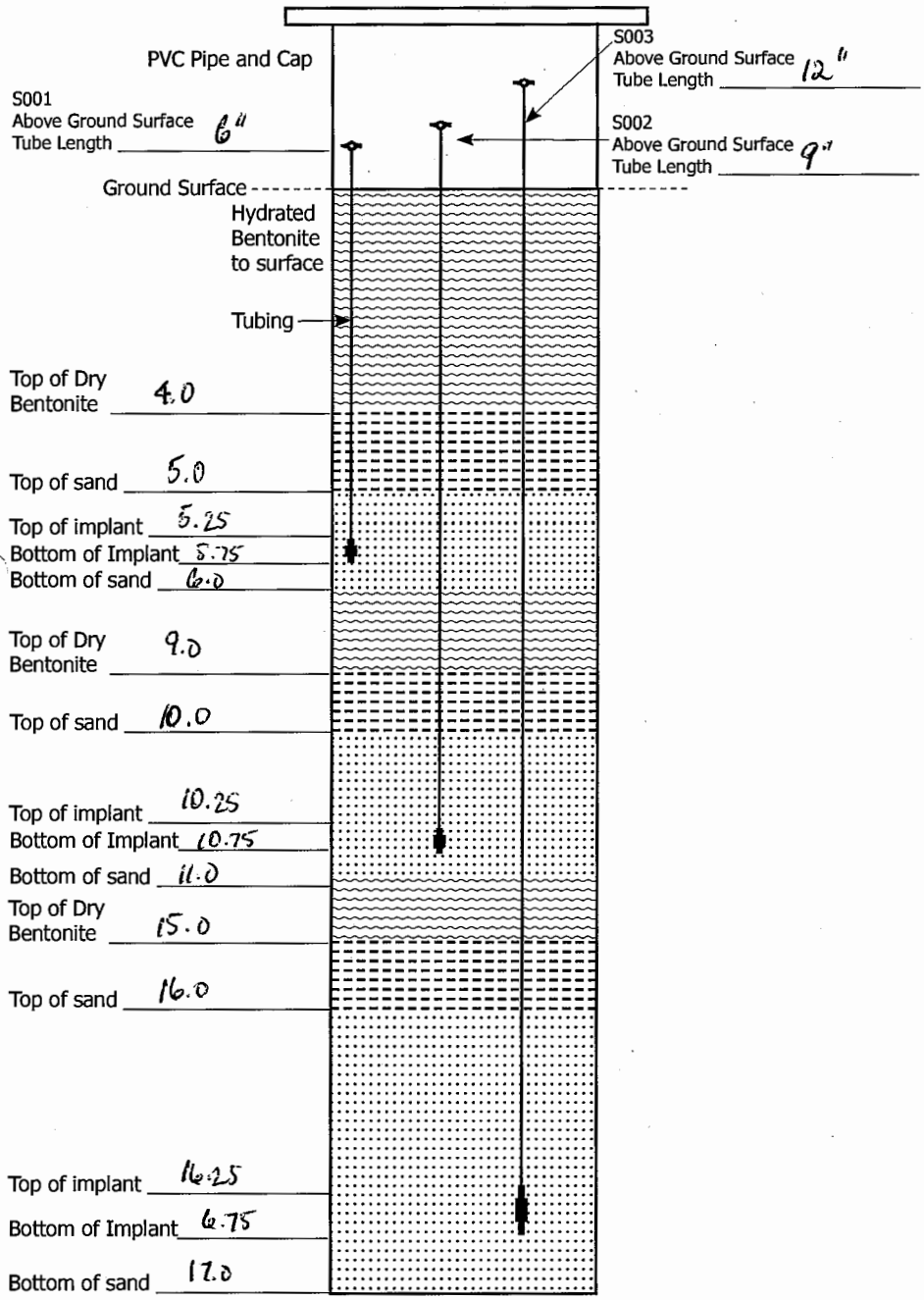
Boring ID: 5DSV-DG-544 Project: DOE Phase 3 DG SV 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10		→ silt, ~~[illegible]~~ yellowish brown (10YR 5/8)					
								iron staining, native soil					
						11	Br	Sandstone					
						12		TD = 11.0 ft. refusal on bedrock;					
								install vapor probes at 4.5-5.5					
						3		and ~~10.0~~ 10.0-11.0					
						4							
						5							
						6							
						7							
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SDSV-DG-546
Project: DOE Phase 3 SV DG
Job #: 10503982
Site: SA 5D
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 17.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1145/5-27-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

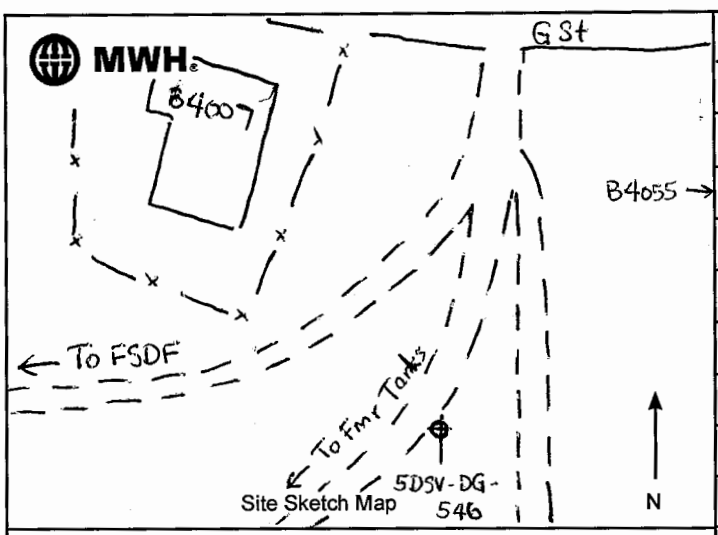
Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2



Site Sketch Map

Boring ID: 5DSV-DG-546	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 7 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 17.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0955 / 5-27-14	Drill Finish Time/Date: 1121 / 5-27-14
Soil Vapor ID: 5DSV-DG-546	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1145 / 5-27-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, 16.0-17.0	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Adjacent to Gas ~~Pipe~~ Pipeline Rd	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Silt (ML), brown (10YR4/3), stiff, dry, non-plastic silt, few roots, white nodules, fill (reworked native soil), no odors or stains,	-	-	-	-	100/
		36"				1							
						2							
						3							
						4							
					11:03	5	CL	Clay (CL), very dark grayish brown (10YR 3/2), stiff, moist, medium plasticity clay,	-	-	-	-	/100
		48"	X		5.0-6.0	6							
		SVL	5460	SA5D	dashed line		CL	no dilatency, high strength & toughness, fill grades to Sandy Clay, fill - color changes to yellowish brown (10YR 5/6)	-	-	-	25	/100
						7							
						8		@8.5 grades with fine to coarse sand, ~~slightly~~ v.u. highly weathered sand fragments, fill {(light gray 10YR 7/2)}	-	10	10	15	/65
						9							

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Surficial media boring log rev 2-25-2014

Boring ID: 5DSV-DG-546 Project: Phase 3 DOE SV DG 2014 Sheet 2 of 2

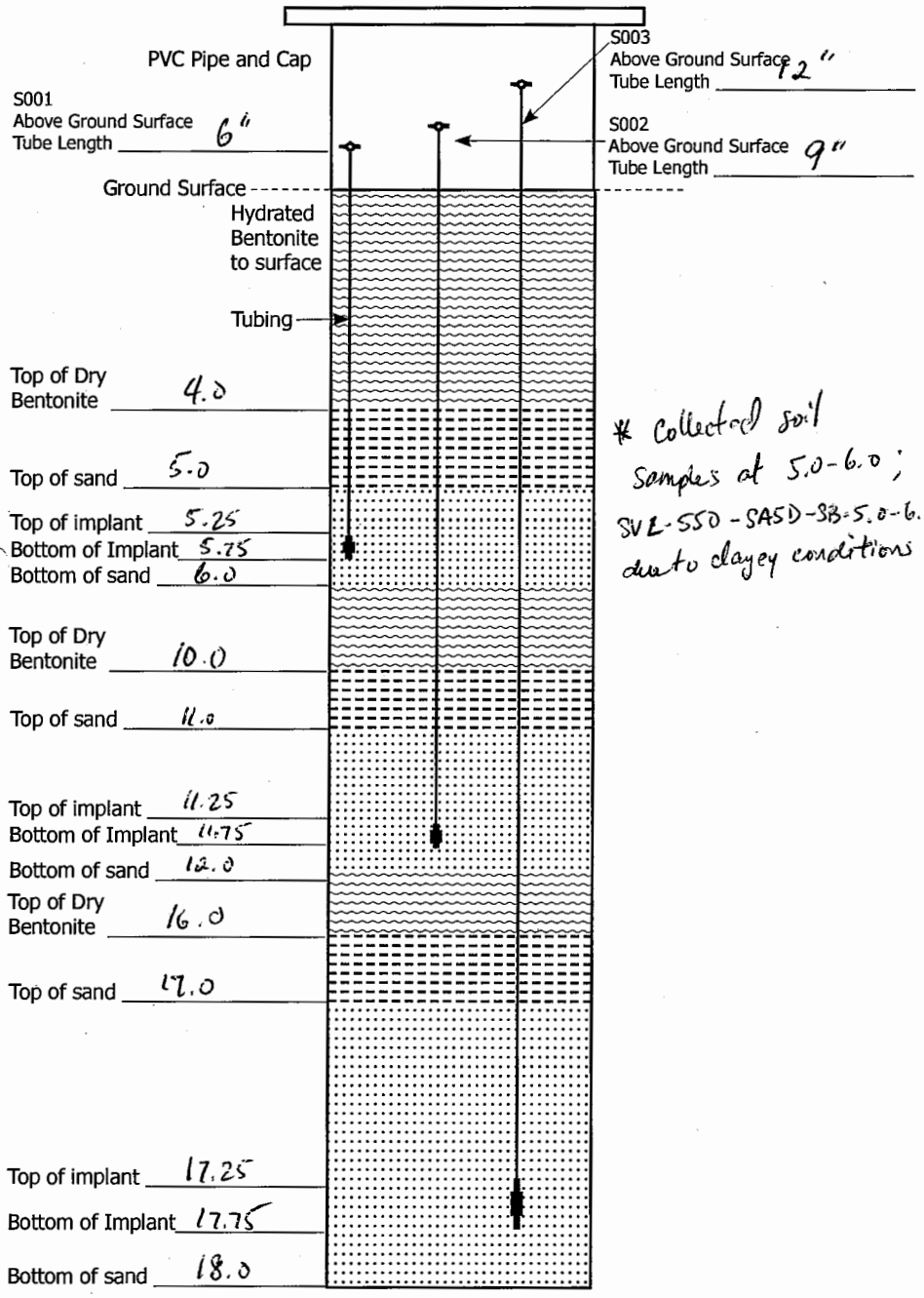
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Estimated % of Sand: Gravel	Coarse	Medium	Fine	Silt/clay
		48"				10							
						11		grades with fine gravel, angular, ~~mottled~~ of (V.V.) mottled (sp?) yellowish brown (10YR 5/4)					
						12		and very pale brown (10YR 8/3); fill					
		40"				13							
						14							
						15							
		18"				16	SM	Silty Sand w/ Clay (SM), light yellowish	-	-	-	65	20/15
						17	Br	brown (10YR 6/4), med. dense, dry, fine sand, silt, low plasticity clay, native soil					
						18		@ 17.0 Weathered Sandstone					
						19							
						20		TD = 17.0' Refusal on bedrock, install probes					
						1		at 5.0-6.0, 10-11.0, 16.0-17.0. Collect					
								excess at 5.0-6.0 due to clay-rich soil.					
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5-6 16-17
10-11

MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-550
Project: Phase3 DOE SVDG 2014
Job #: 10503982
Site: 3A 5D
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 18.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 09:30/5-27-14



* Collected soil samples at 5.0-6.0; SVL-550-SA5D-SB-5.0-6.0 due to clayey conditions

Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

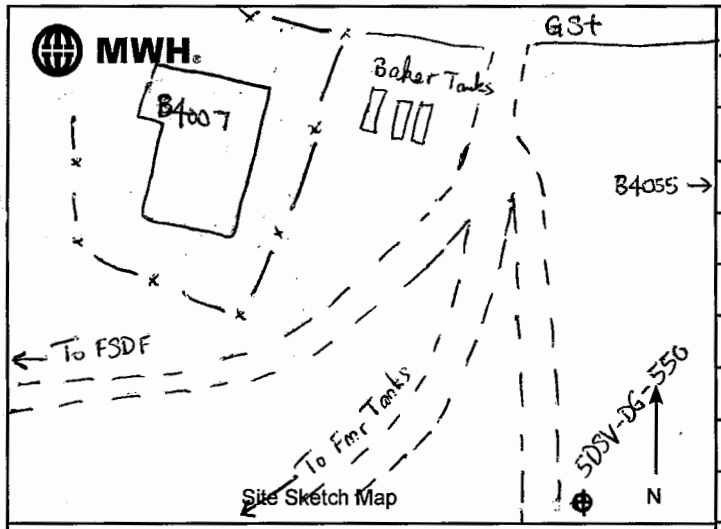
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

5DSV-DG-550



Site Sketch Map

Boring ID: ~~SVDG~~	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes.		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25	Total Depth (ft.bgs) 18.0'		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0803/5-27-14	Drill Finish Time/Date: 0851/5-27-14		
Soil Vapor ID: 5DSV-DG-550	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date:	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 11.0-12.0, 17.0-18.0 (V.V)	Surface Completion: Soil vapor probes.		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), med. dense, dry, fine sand, non-plastic silt, roots, no staining, no odors, fill.	-	-	-	60	40/
		31"				1	ML	Silt (ML), yellowish brown (10YR 5/4), med. stiff, dry, low-plasticity silt, white weathering fractures, no odors, fill	-	-	-	-	100/
						2							
						3							
0.0						4	CL	Clay w/Silt (CL), dark yellowish brown (10YR 4/4), stiff, slightly moist, low to medium plasticity clay, silt, possibly native soil, ~~no stains~~ (V.V.) no odors, white chemical weathering stains,					
		48"			0802	5							
						6							
		SVL-550-SA5D-SB-5.0-6.0				7							
0.0						8	CL	~~Clay~~ Sandy Clay (CL), dark yellowish brown (10YR 4/6), soft, dry, low plasticity clay, fine sand, slight oxidation (yellowish brown (10YR 5/8), native soil, no odors.					
						9							
						10							

cont page 2.

Boring ID: 5DSV-DG-550 Project: Phase 3 DOE SV DG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		48"				10							
						11							
						12							
		48"				13							
						14							
0.0						15							
						16	SC	Clayey Sand (SC), yellowish brown (10YR 5/6), loose, dry, fine to med sand, medium plasticity clay, weak clay cement, native soil.	-	-	15	50 ~~65~~	35
		24"				17							
0.0						18	Br	Bedrock - Sandstone, weathered.					
						19							
						20		TD = 18'. Refusal on sandstone bedrock, install probes at 5.0-6.0, 11.0-12.0, and 17.0-18.0. Collect encores at 5.0-6.0 for potential low flow conditions.					
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

5-6 17-18

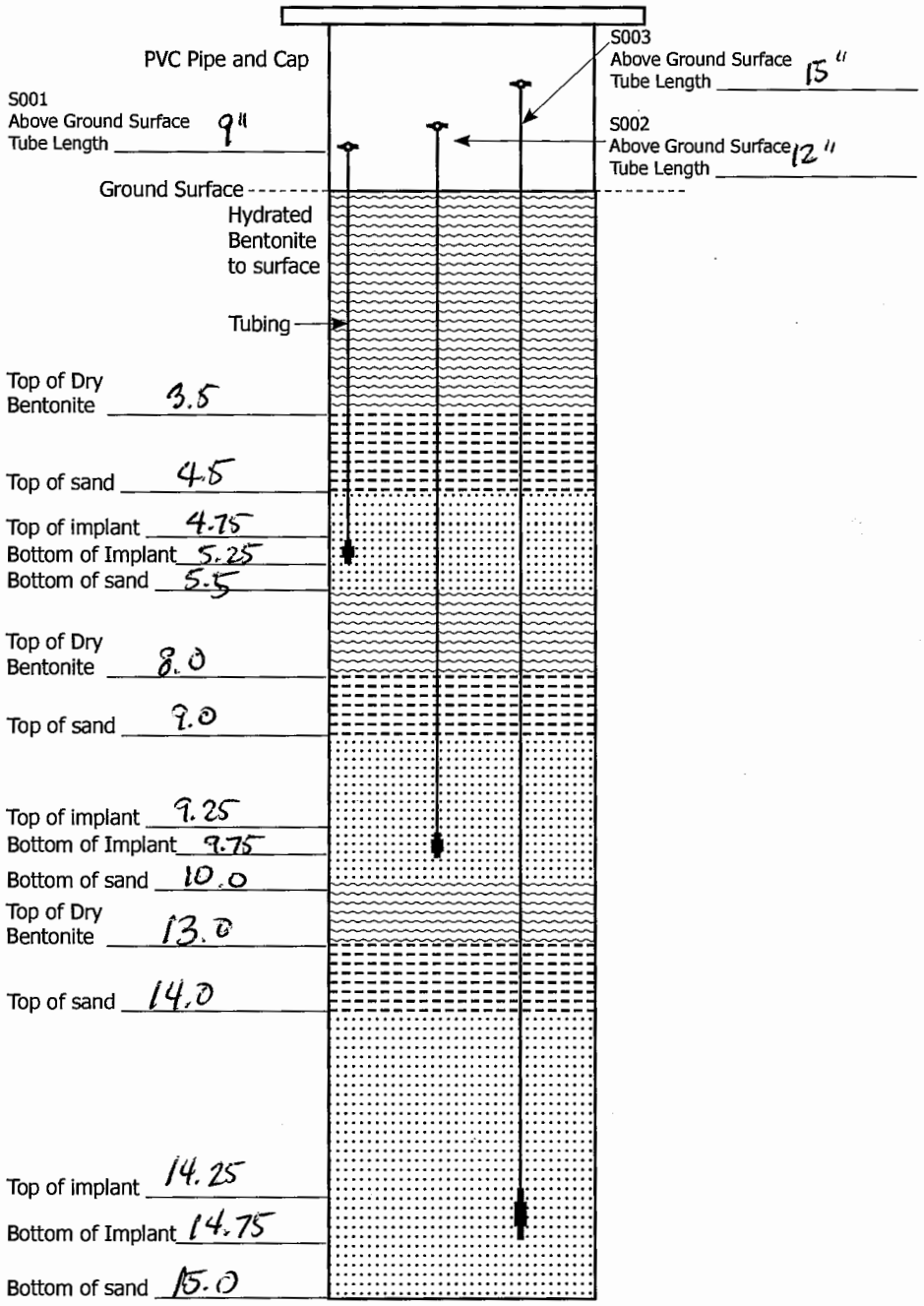
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SDSV-DG-553
Site: SD
Drilling Contractor: EST
Borehole TD: 20.0

Project: Phase 3 DOE SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400/DP
Probe Completion Date/Time: 1300/6-3-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

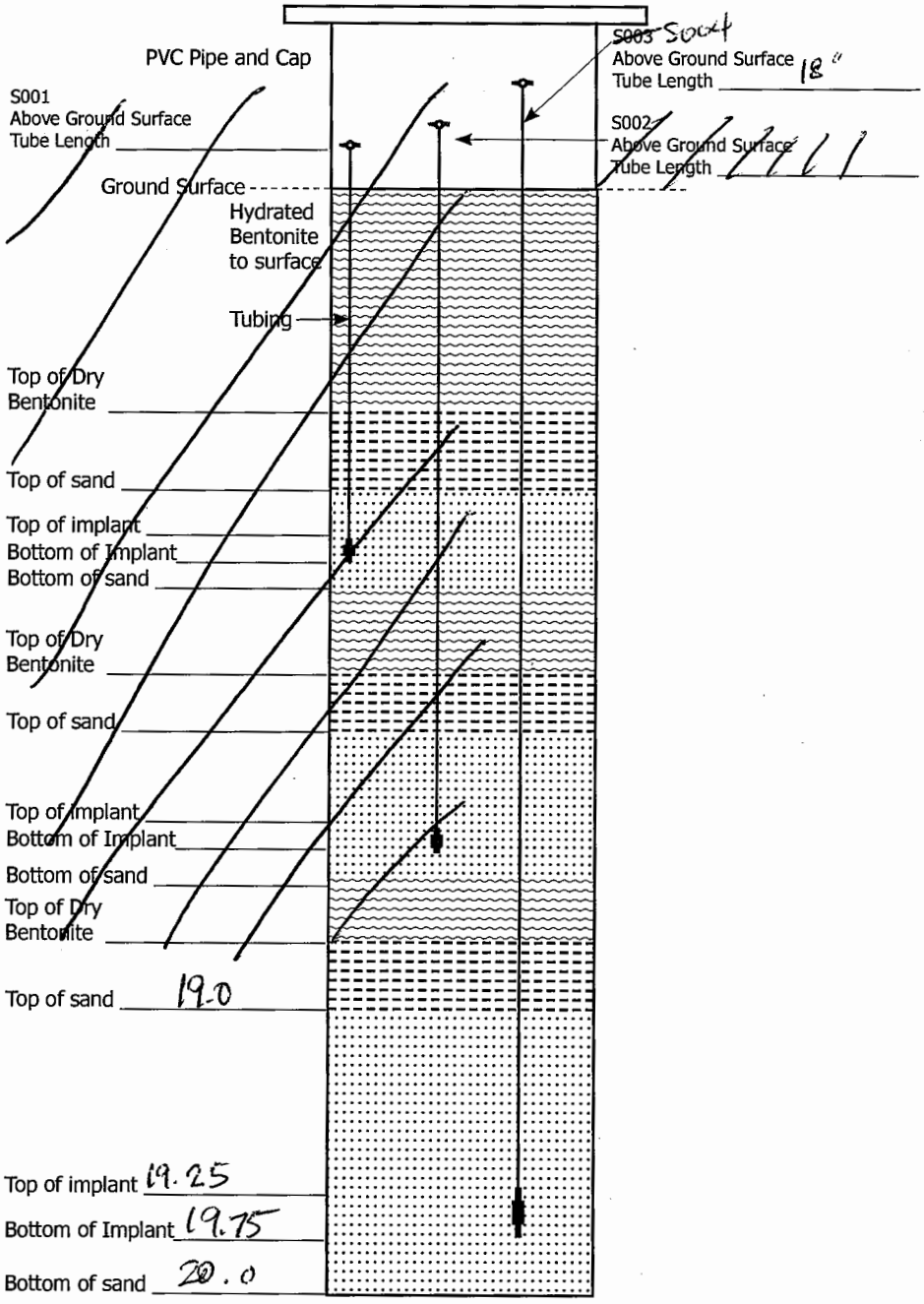
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-553
Site: 5D
Drilling Contractor: EST
Borehole TD: 20.0

Project: Phase 3 DOE SV DG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 1300 / 6-3-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

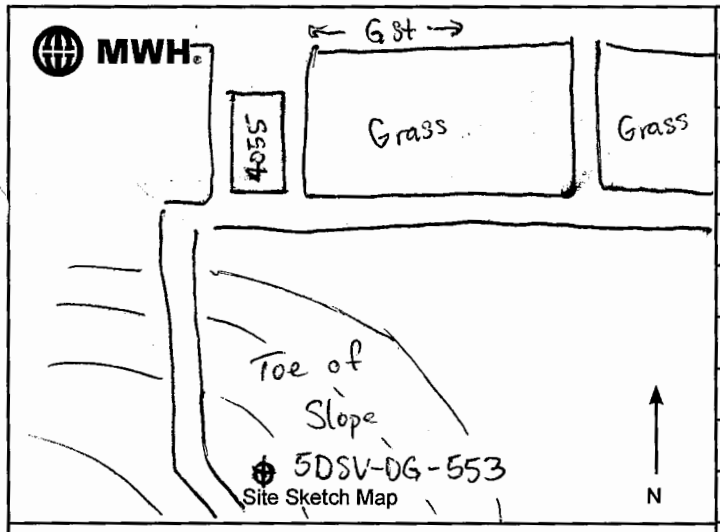
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH



Site Sketch Map

Boring ID: 5DSV-DG-553	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5460 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 20.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1053 / 6-3-14	Drill Finish Time/Date: 1140 / 6-3-14
Soil Vapor ID: 5DSV-DG-553	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1300 / 6-3-14	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5, 9.0-10.0, 14.0-15.0, 19.0-20.0	Surface Completion: Soil vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: NE facing Slope, Grassy	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), loose, dry, fine sand, non-plastic silt, roots, fill	-	-	-	60	40
		36"				1							
						2	ML	Silt w/ Sand (ML), brown (10YR 4/3), medium stiff, dry, low-plasticity silt, fine sand, fill	-	-	-	15	85
0.0						3							
						4							
			☒		12:03	5	CL	Clay (CL), dark yellowish brown (10YR 4/4), med. stiff, moist, med. plasticity clay, no odors, few white nodules (decomposed feldspar), native soil	-	-	-	-	100
		48"				6							
						7							
						8							
		48"	☒			9							
0.0					12:10								

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Boring ID: 5DSV-DG-553 Project: Phase 3 DOE Soil Vapor Data Gap Sheet 2 of 2

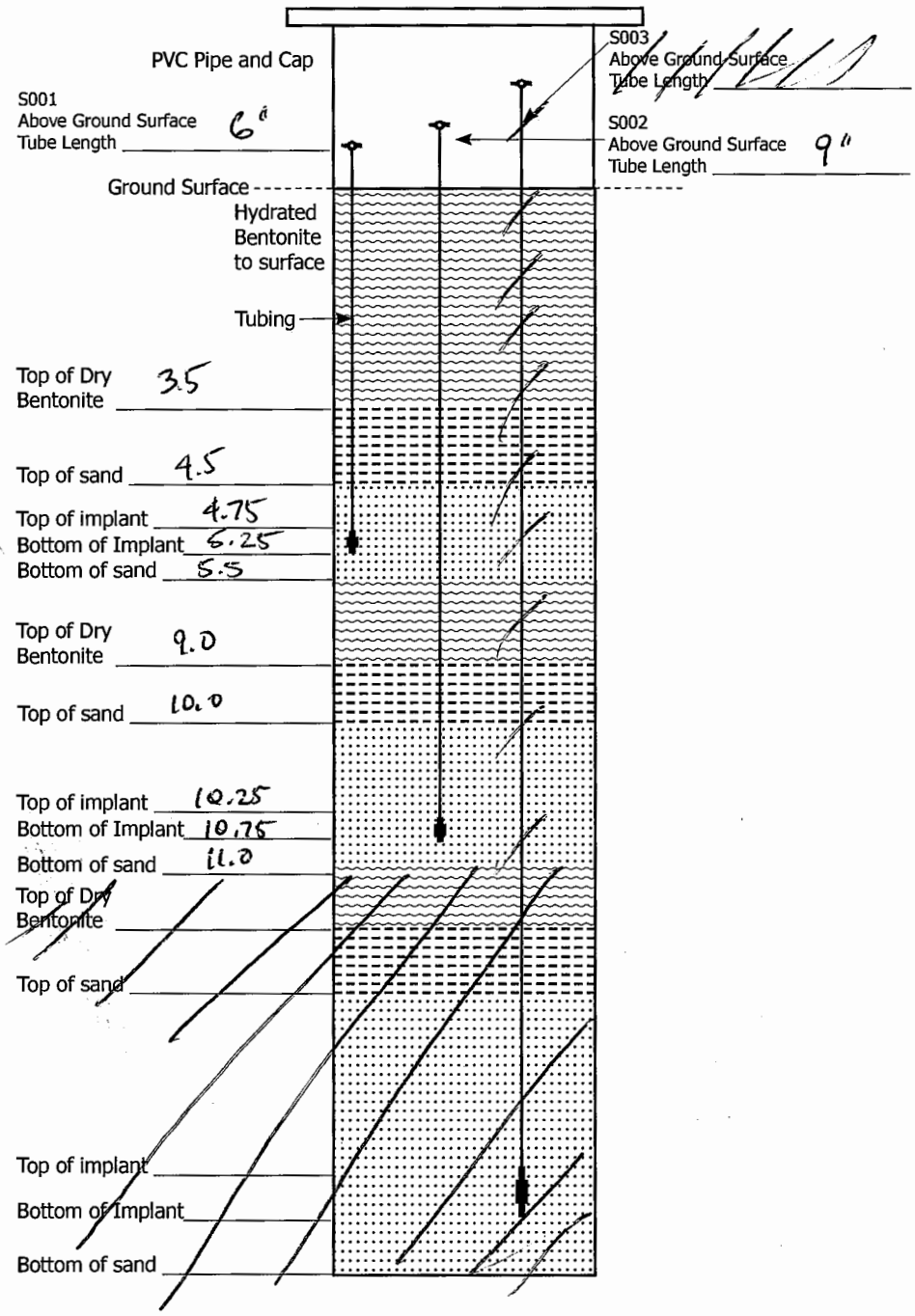
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10	CL						
						11							
						12							
						13							
0.0		45"				14							
					12:15	15		@15' dark yellowish brown (10YR 4/4) staining (streaks), no odors.					
						16		Grades with sand.	–	–	–	15	85
						17							
		48"				18							
						19							
0.0					12:22	20	Br	Weathered bedrock, sandstone					
						21							
						22		TD = 20.0; refusal on bedrock, install vapor probes at 4.5-5.5, 9.0-10.0, 14.5-15.5, and 19.0-20.0					
						23							
						24		Collected encores at 4.5-5.5, 9.0-10.0, 14.0-15.0, and 19.0-20.0 due to potential low-flow conditions					
						25							
						6		Note: Moved location ~3 ft east to "safer" conditions. Proposed location is too steep for rig.					
						7							
						8							
						9							

4.5-5.5, 9-10, 14-15, 19-20

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 5DSV-DG-556
Project: Phase 3 DOE SVDG
Job #: 10503982
Site: SA SD
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400/DP
Borehole TD: 12.0
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1420/5-3-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

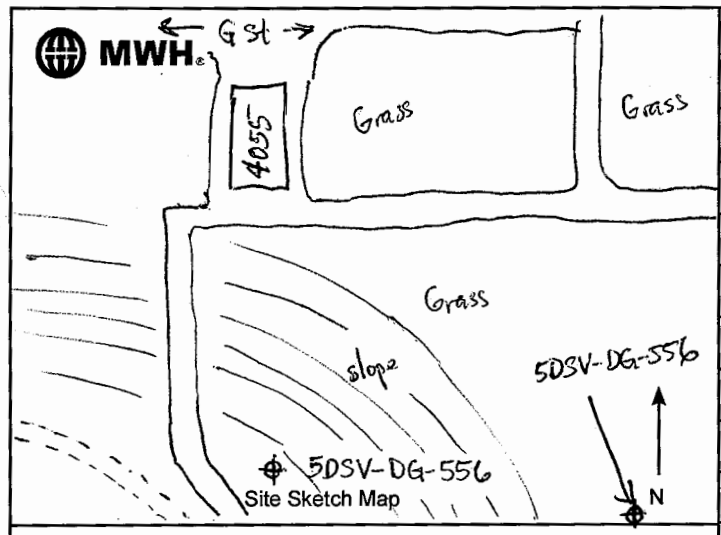
Hydrated Bentonite

Type: #8
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2



Site Sketch Map

Boring ID: 5DSV-DG-556	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 5D
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 12.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1325 / 6-3-14	Drill Finish Time/Date: 1355 / 6-3-14
Soil Vapor ID: 5DSV-DG-556	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1420 / 6-3-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5, 10.0-11.0	Surface Completion: Soil Vapor probes
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Veg Cleared, @ foothills	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	~~SM~~ SM	Silty Sand (SM), brown (10YR 4/3), loose, dry, fine sand, non-plastic silt, few grass roots, fill, no stains or odors.	-	-	-	60	40
		36"				1							
						2		grades to med. stiff; color changes to dark yellowish brown (10YR 4/4), fill					
						3							
0.0						4	ML	Silt (ML), dark yellowish brown (10YR 4/4) w/ yellow (10YR 7/6) weathering, med. dense, dry, non-plastic silt, native soil	-	-	-	-	100
					14:00	5							
		48"		SV-556-SA5D		4.5-5.5							
						6							
						7							
0.0						8							
						9							
		36"				10							

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Boring ID: SDSV-DG-556 Project: Phase 3 DOE SV DG Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X		X		14:08	10	CL	Clay (CL), light yellowish brown (10YR6/4), soft, dry, low to medium plasticity clay, native, likely weathered shale.					100
0.0	X	12"		SASD 556	10-11	11	Br						
	SVL-556					12	Br	Shale, weathered.					
						13							
						14		TD = 12.0, drilled into bedrock. Backfill to 11.0 ft and set probes at 4.5-5.5 and 10.0-11.0 ft. Also collected encores due to tight soil conditions (clayey/silty).					
						15							
						16							
						17							
						18		4.5-5.5: 13 uR, 0.0 ppm, 44 cpm 10.0-11.0: 14 uR, 0.0 ppm, 55 cpm					
						19							
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

4.5-5.5, 10-11

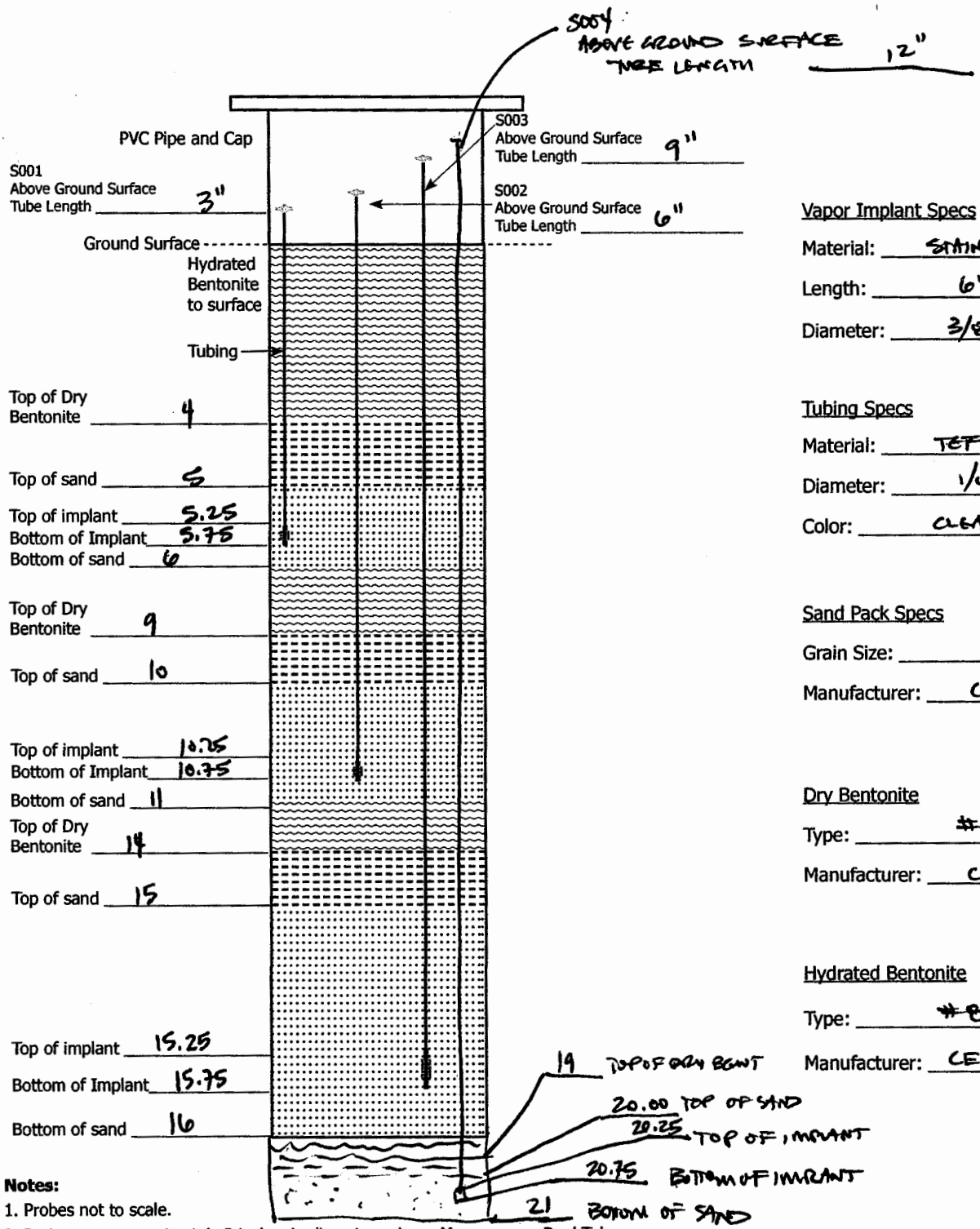
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: GSV-DG-509
Site: SA 6
Drilling Contractor: EST
Borehole TD: 21' BGS.

Project: Phase 3 DOE Data Gap Sampling 2014
Logged by: ADRON DAYNE
Driller: MARTIN KILHULLEN
Borehole Diameter: 2.25"

Job #: 10503982.3050105/10503982.3060105
Reviewed by:
Rig Type/Method: GEOPROBE 5400 / DP
Probe Completion Date/Time: 6/4/14 09:15



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

Type: #8
Manufacturer: CETCO

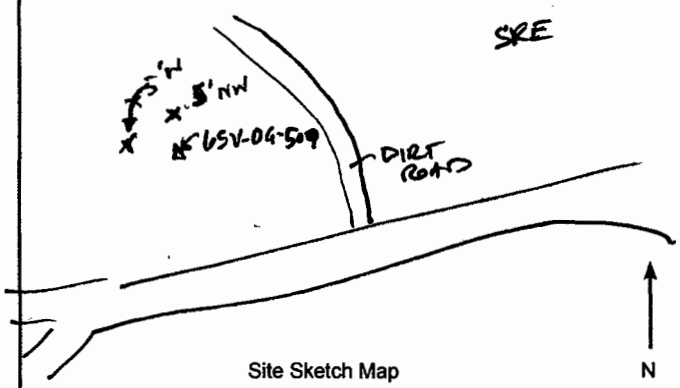
Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.

2-STEPOUTS:
- 5' NW
- 5' W



Site Sketch Map

Boring ID: GSV-DG-509	Sheet 1 of 2
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 6
Logged By: ANDREW RAYNE	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILMULLEN
Drill Rig Type/Method: GEOPROBE 5400 / DP	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs)
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 0755 6/9/14	Drill Finish Time/Date: 0910 6/9/14
Soil Vapor ID: GSV-DG-509	Soil Boring Backfill Time/Date: / Backfill Material:
Soil Vapor Well Completion Time/Date: ~~0915~~ 0915 6/9/14	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 5, 10, 15, 20 (5-6, 10-11, 15-16, 20-21)	Surface Completion: SOIL VAPOR PROBE
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: CONCRETE/WEATHERED BR? ☒ Bedrock ☒ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations; Surface Description:	Gravel/Pebbles	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		SILTY SAND (SM) DRY TO SLT. MOIST, YELLOWISH BROWN (10YR 5/4) TO DARK YELLOWISH BROWN; LOOSE FINE TO CS SAND, SA TO SR, DEBRIS, CONCRETE, ASPHALT, v. SM W/ GRAVEL/DEBRIS.	15	15	25	25	20
		48"	—	N/A NONE		1							
						2		FILL MATERIAL; SOME GREY (10YR 6/1) AND WHITE (10YR 8/1) CONCRETE, DARK GRAYISH BROWN SOIL NEAR ASPHALT (10YR 4/2). 0.0 PPM ON PID. v15% DEBRIS.					
						3							
						4		SAA (SM) - FILL	15	15	25	25	20
						5							
		48"	—	N/A NONE		6							
						7							
						8		SAA (SM); MOD DENSE TO LOOSE. -FILL; INCREASE CONCRETE/ASPHALT DEBRIS TO 20%.	20	10	25	25	20
						9							
		48"											

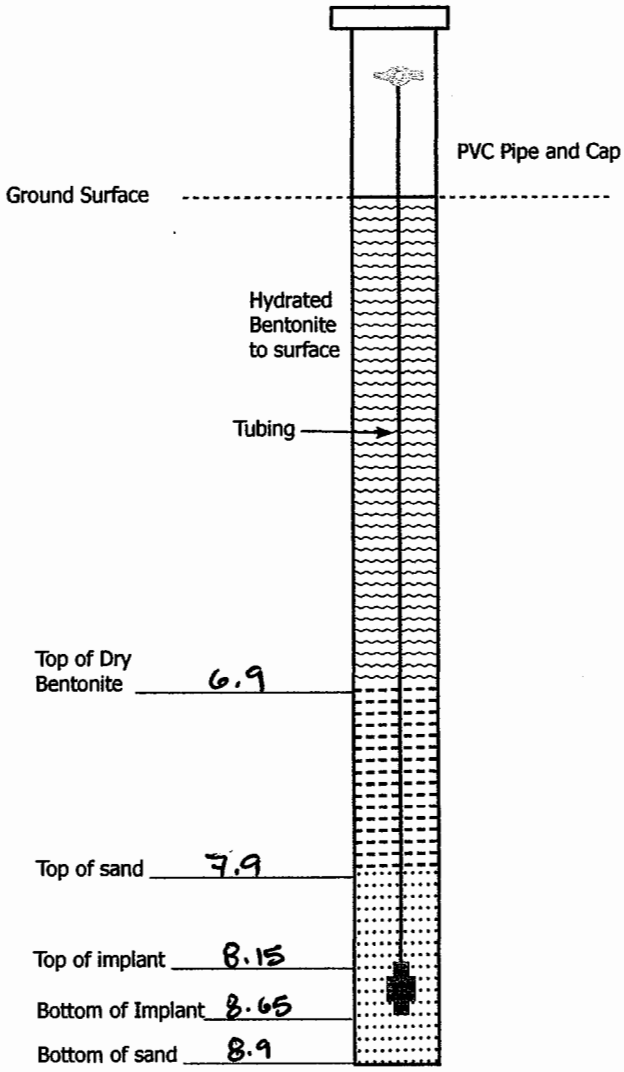
Boring ID: GSV-DG-509 Project: SOIL VAPOR PROBE INSTALLATION Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description FILL TO 21' (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel/Debris	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0		48"	—	N/A NONE	—	10		SAA (SM); INCREASE ASPHALT/CONCRETE TO 20%. -FILL	20	10	25	25	20
						11							
						12		SAA (SM); MED. DENSE TO LOOSE. -FILL	10	15	35	25	20
0.0		24"	—	N/A NONE	—	13							
						14							
0.0		24"	—	N/A NONE	—	15							
						16		SAA (SM); MED DENSE.	10	15	35	25	20
						17							
0.0		48"	—	N/A NONE	—	18							
						19							
						20							
0.0		12"	—	N/A NONE		21		SAA (SM); PIECES OF GRAVEL ~ 1/4"-1/2" DIA.; POTENTIAL LETHO BEDROCK @ 21' BGS COULD ALSO BE GRAVELLY PIECES BROKEN UP BY DP. RIG.	10	15	35	25	20
						22							
						23		TD = 21' REFUSAL @ 21' ON GRAVEL DEBRIS OR POTENTIAL BEDROCK/LITHOGRID.					
						24		-INSTALL NESTED PROBES 20-21, 15-16, 10-11, 5-6 @ 0915.					
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: GSV-DG-515
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA 6
Reviewed by:
Logged by: ANDREW PAYNE
Drilling Contractor: EST
Rig Type/Method: GEOPROBE 5400 / D.P.
Driller: MARTIN KILHULLEN
Borehole TD: 8.9'
Probe Completion Date/Time: 6/9/14 1130
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

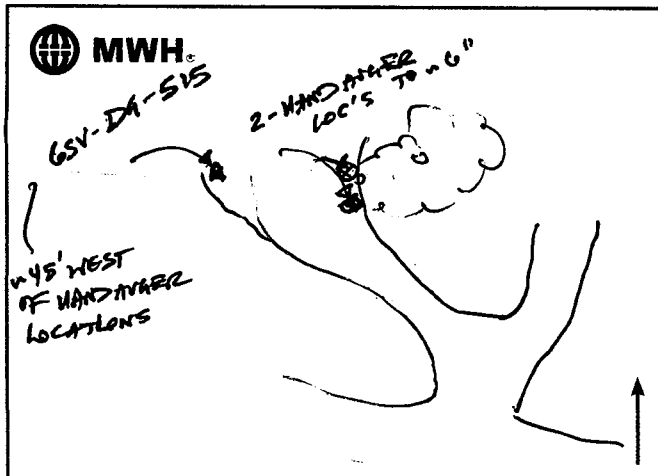
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: GSV-DG-515	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 6
Logged By: ~~A.HYNE~~	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILHAMLON
Drill Rig Type/Method: GEOPROBE 3400 / D.P.	
Sampler Type: NO SAMPLING / DUAL TUBE SYSTEM	
Borehole Diam (inch): 2.25"	Total Depth (ft bgs): 8.9'
Drill Bit Type: MARCORE	
Drill Start Time/Date: 1100 6/9/14	Drill Finish Time/Date: 1130 6/9/14
Soil Vapor ID: GSV-DG-515	Soil Boring Backfill Time/Date: N/A Backfill Material: ~~GRAVEL~~ AP
Soil Vapor Well Completion Time/Date: 1130 6/9/14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 7.9-8.9 ~~7'3/4" - 8'3/4"~~ AP	Surface Completion: SOIL VAPOR PROBE
Soil Vapor Well Detail Completed (yes/no) ~~7.75-8.75~~ AP	Type of Refusal: ☐ Bedrock ☐ Debris ☐ Gravel ☒ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
								Surface Description: 3/4" GRAVEL					
0.0	X	3	—	N/A NONE	—	0	AP	APPROX 3" OF 3/4" GRAVEL ON SURFACE TO 3" BGS.	100	—	—	—	—
						1	SM	SILTY SAND (SM) DRY, LOOSE, BROWN (10YR 4/3), FINE TO MOD SAND, RDED. FINE, APPROX 3" TO 8"; FILL MATERIAL; ~10% GRAVEL.	10		10	55	25
						2		- HAND AUGER ~5' WEST OF STAKED LOC.					
						3		- REFUSAL @ 8" → SRP TO NORTH ~3' - REFUSAL @ 6" w/ HAND AUGER.					
						4		- MOB. GEOPROBE TO AREA AND LOCATE SOIL VAPOR PROBE LOCATION ~45' WEST OF HAND AUGER LOCATIONS.					
						5		- ~~DIRECTI~~ AP GEOPROBE w/ 'DUAL CORE' SYSTEM TO INSTALL PROBE; DEPTH OF REFUSAL w/ 'DUAL CORE' => 8.9' ~~8'3/4"~~ AP BGS.					
						6		- INSTALL SVP PROBE ~~7'3/4" - 8'3/4"~~ AP ~~7.75' - 8.75'~~ AP					
						7		- NO SAMPLING 7.9'-8.9'					
						8							
						9							

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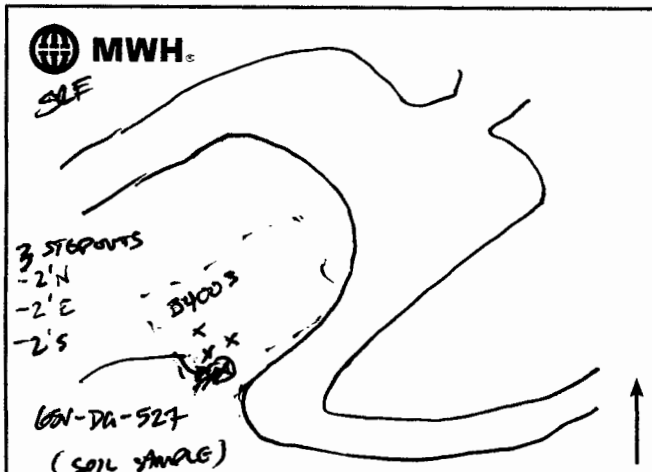

Site Sketch Map

SYL-527-SA6-2.0-3.0

Boring ID: GSN-DG-527	Sheet 1 of 1		
Project: Phase 3 DOE Data Gap Sampling 2014			
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 6		
Logged By: ANDREW RAYNE	Reviewed By:		
Drilling Contractor: EST	Drillers Name: MARTIN KILHULEN		
Drill Rig Type/Method: GEOPROBE 5400 / DP			
Sampler Type: MACROCORE			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 3.5'		
Drill Bit Type: MACROCORE			
Drill Start Time/Date: 1240 / 6/9/14	Drill Finish Time/Date: 1335 / 6/9/14		
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 1345 6/9/14	Backfill Material: SOIL WITH NAS	
Soil Vapor Well Completion Time/Date: N/A	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: N/A		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: WEATHERED BEDROCK ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand Coarse	Sand Medium	Sand Fine	Silt/clay
						0		Surface Description: PEA SIZE TO 1/2" GRAVEL, GRASSES & SHRUBS					
						1	SM	SILTY SAND (SM), DRY, LOOSE, FINE & MED SAND, YELLOWISH BROWN (10YR 5/4), FILL MATERIAL; SEAMS TO SUBROUTDOC	—	10	30	40	20
		40"				2	ML	SANDY SILT (ML), DRY, MEDIUM STIFF, YELLOWISH BROWN (10YR 5/4) NO PLASTICITY, PIECES OF CONCRETE AND CLAY PIPE, FINE TO MED SAND, ASPHALT. FILL MATERIAL; TRACE GRAVEL SIZE ASPHALT.	5	—	10	20	65
0.0			X		1325	3							
						4	SS	WEATHERED (SS) BEDROCK, PALE BROWN (10YR 6/3) DRY, FINE TO MEDIUM SAND, ANG TO SR, FRIABLE, WEAK.	—	—	10	20	70
						5							
						6		TD = 3.5'; REFUSAL @ 3.5'					
						7		- SOIL SAMPLE @ 2.0-3.0'					
								- SYL-527-SA6-2.0-3.0 @ 1325					
						8							
						9							

SYL-527-SA6-2.0-3.0

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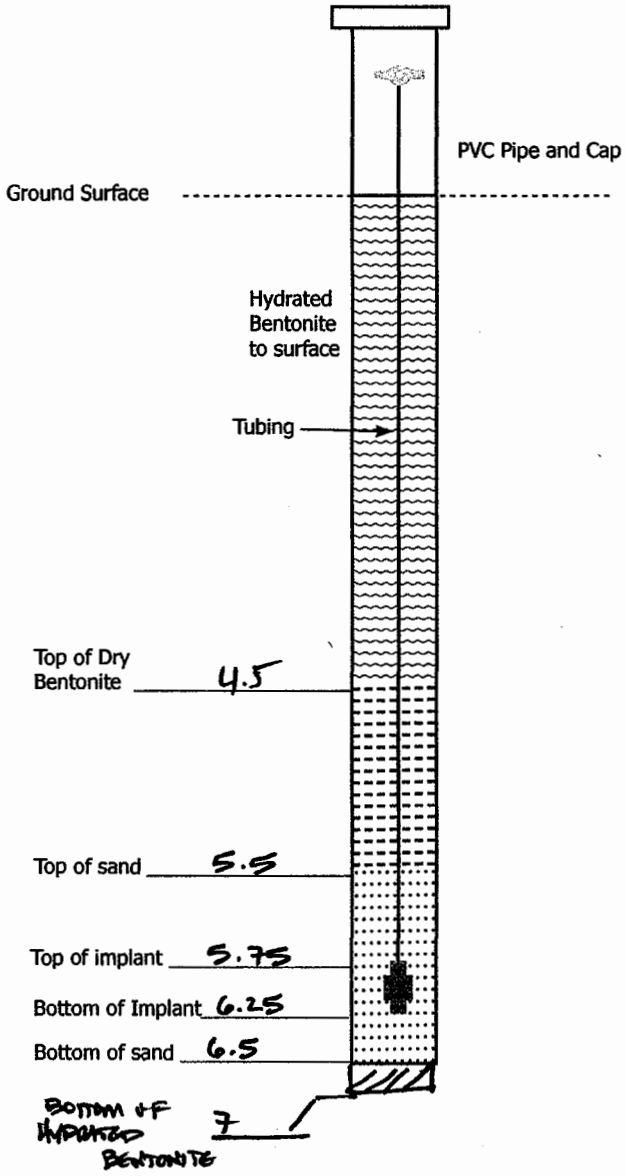
MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: GSV-DG-528
Job #: 10503982.3050106/10503982.3060106
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA 6
Reviewed by:
Logged by: ANDREW DAYNE
Drilling Contractor: EST
Rig Type/Method: GEOPROBE 5400 / D.P.
Driller: MARTIN KILMULLEN
Borehole TD: 7'
Probe Completion Date/Time: 6/9/14 1430
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

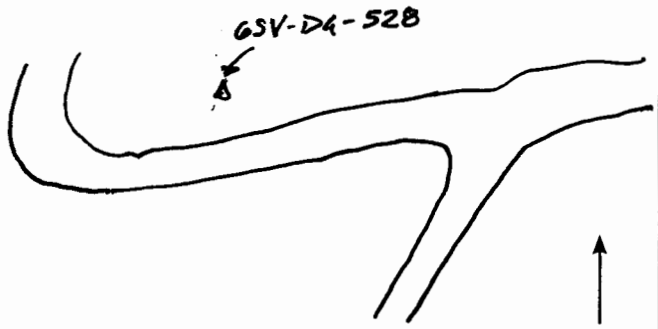
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: GSV-DG-528	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 6
Logged By: ANDREW PAYNE	Reviewed By:
Drilling Contractor:	Drillers Name: MARTIN KILHULEN
Drill Rig Type/Method: GEOPROBE 5400 / D.P.	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 7'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 1400/6/9/14	Drill Finish Time/Date: 1420/6/9/14
Soil Vapor ID: GSV-DG-528	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1430 6/9/14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 5.5-6.5'	Surface Completion: SOIL VAPOR PROBE
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: SS/SH ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: GRASSES, SHRUBS	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0		SILTY SAND (SM), DRY, BROWN (10YR 4/3), LOOSE, FINE TO MED SAND, SUBANGULAR TO SUBROUNDED, TRACE COARSE SAND; FILL MATERIAL; TRACE ROOTS.	—	5	25	45	25 ~~2~~
0.0		40"	—	N/A NONE	—	1, 2							
						3							
						4	SP-SM	SAND W/ SILT (SP-SM), DRY, YELLOWISH BROWN (10YR 5/4), FINE SAND, SUBANGULAR TO SUBROUNDED, NATIVE ALLUVIUM.	—	—	10	75	15
						5							
0.0		36"	—	N/A NONE	—	6		INTERBEDDED SS/SH; DRY, PALE BROWN (10YR 6/3) TO BROWN (10YR 5/3), FINE SAND, SA TO SR, WEAK FRIABLE.	—	—	—	60	40 ~~60~~ ~~40~~
						7	SS/SH						
						8		TD = 7'; REFUSAL @ 7' INSTALL SV PROBE @ 5.5-6.5 GSV-DG-528 @ 1430					
						9							

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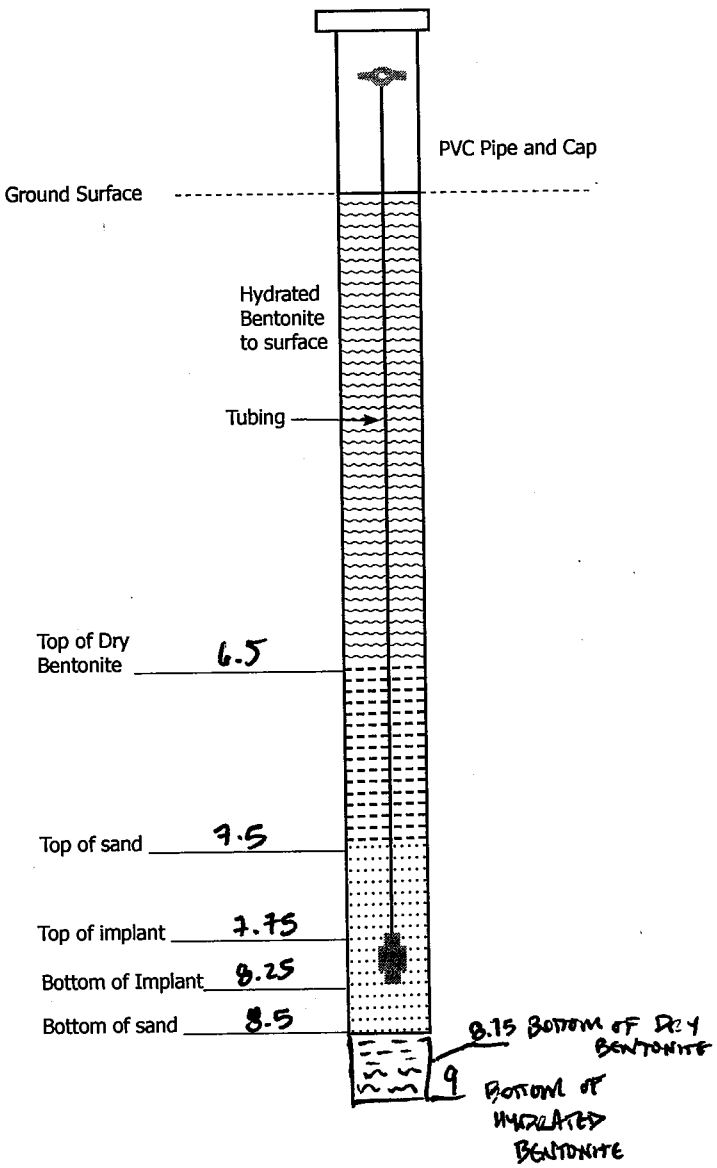
MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: GSV-DG-543
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA 6
Reviewed by:
Logged by: ANDREW PAYNE
Drilling Contractor: EST
Rig Type/Method: GEOPROBE 5400 / D.P.
Driller: EST - MARTIN KILHULLEN
Borehole TD: 9'
Probe Completion Date/Time: 6/11/14 0830
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: # 3
Manufacturer: CEMEX

Dry Bentonite

Type: # 8
Manufacturer: CETCO

Hydrated Bentonite

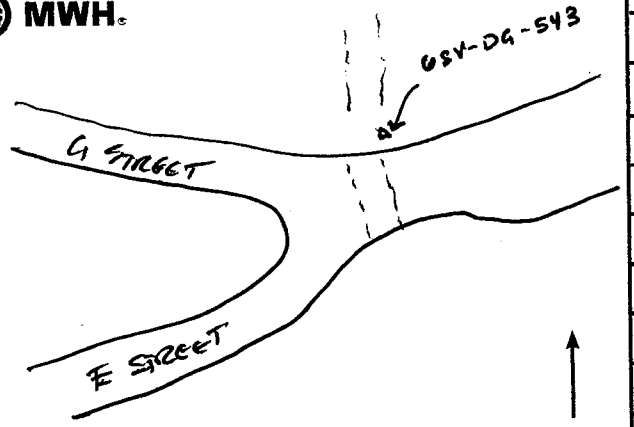
Type: # 8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: GSV-DG-543	Sheet 1 of 2
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 6
Logged By: ANDREW PAYNE	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILHULLEN
Drill Rig Type/Method: GEOPROBE 5400 / D.P.	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 9.0
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 0803 6/11/14	Drill Finish Time/Date: 0826 6/11/14
Soil Vapor ID: GSV-DG-543	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 6/11/14 0830	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 7.5-8.5'	Surface Completion: SV PROBE
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: ROADSIDE, GRASSES, SOME ROAD BASE GRAVEL ½" D.A

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	SILTY SAND (SM), DRY TO MOIST, BROWN (10YR 4/4) TO STRONG BROWN (7.5 4/6), FILL,	5	–	35	40	20
0.0		48"	–	N/A SMP	–	1		FINE TO MED. SAND, SA-TO SR, TRACE PEA SIZE ASPHALT. FILL MAT'L; NO ODOR.					
						2		LOOSE TO MED DENSE.					
						3							
						4		@ 4.5' INCREASE SILT/FINES TO 25%;					
						5	SM	(SM) SILTY SAND, MOIST, FINE TO MED. SA-TO SR,	–	–	35	40	25
6.0		48"	–	N/A NONE	–			NATIVE; BROWN TO YELLOWISH BROWN (10YR 5/4),					
						6		DARK BROWN OXIDATION (7.5YR 4/6); ALLUVIUM. LOOSE TO MED. DENSE.					
						7	SM	@ 6.5-7 INCREASE SILT/FINES TO CLAYEY FINES	–	–	30	40	30
								~30%; NATIVE ALLUVIUM. MED DENSE.					
						8	SR-SM	SANDY SILT (SR-SM), DRY TO MOIST, YELLOWISH BRN (10YR 5/4), OXIDATION; NATIVE ALLUVIUM					
0.0		12"	–	N/A NONE	–			FINE TO MED SAND; SA-TO SR. LOOSE.					
						9		WEATHERED SS/SH BEDROCK, DRY TO MOIST, YELLOWISH BRN (10YR 5/4), FINE TO MED. SAND TO SR, HARD, FRIABLE, BRN IS REDDISH BRN (10YR 5/4)	–	–	30	65	5

Boring ID: 6SN-DA-543 Project: SV PROBE INSTALL DA AREA IV Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X	12"				10		REFUSAL @ 9'					
								TD = 9'					
						11		- SV PROBE INSTALLED @ 7.5-8.5' @ 0830					
						12		- BENTONITE FROM 8.5-9' (AP)					
		REFUSAL @ 9' FROM 8-12' INTERVAL				3							
						4							
						5							
						6							
						7							
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

QA/QC
Surficial media boring log rev 2-25-2014

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: ~~GSV-544~~ GSV-DG-544

Job #: 10503982.3050105/10503982.3060105

Project: Phase 3 DOE Data Gap Sampling 2014

Site: SA 6

Reviewed by:

Logged by: ANDREW PAYNE

Drilling Contractor: EST

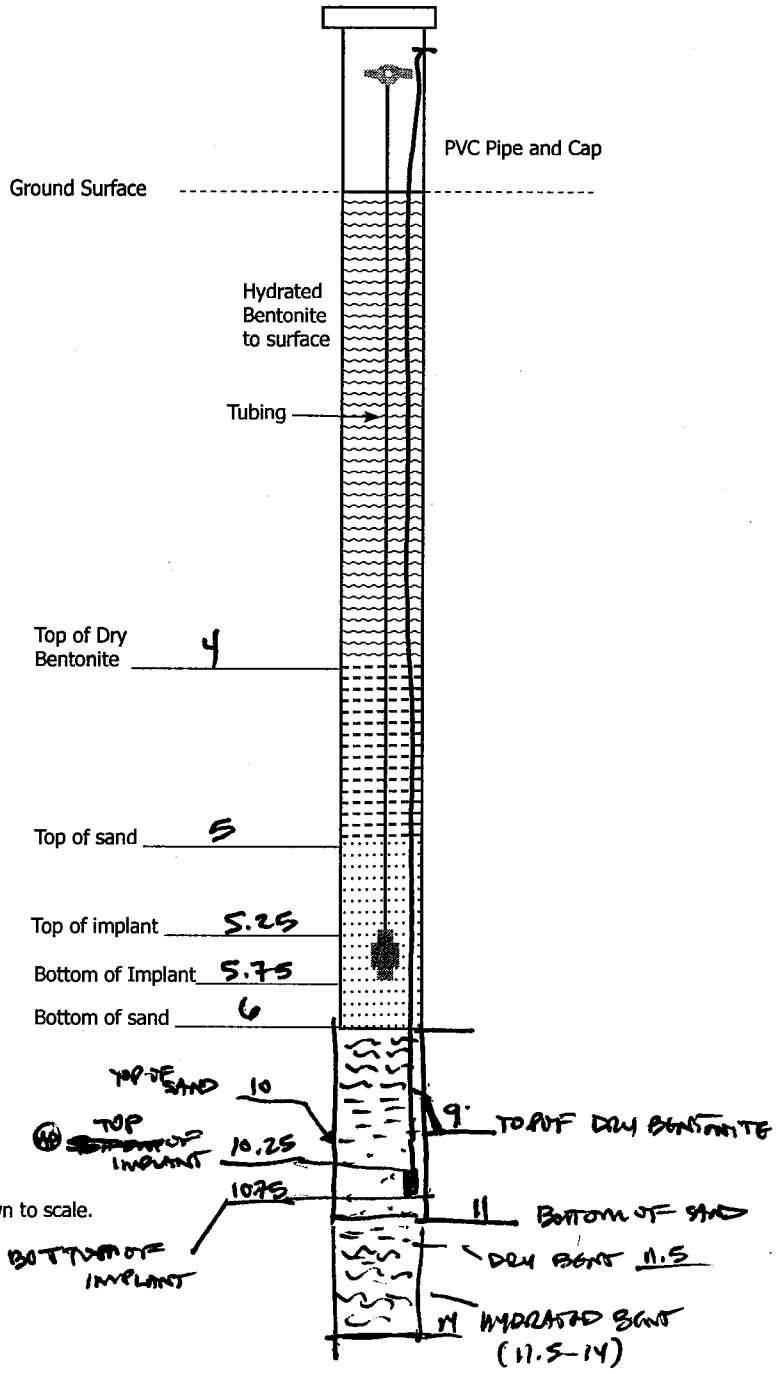
Rig Type/Method: GEOPROBE 5400 / D.P.

Driller: MARTIN KILHULLEN

Borehole TD: 14'

Probe Completion Date/Time: 6/10/14 0830

Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL

Length: 6"

Diameter: 3/8"

Tubing Specs

Material: TEFLON

Diameter: 1/4"

Color: CLEAR

Sand Pack Specs

Grain Size: #3

Manufacturer: CEMEX

Dry Bentonite

Type: #8

Manufacturer: CETCO

Hydrated Bentonite

Type: #8

Manufacturer: CETCO

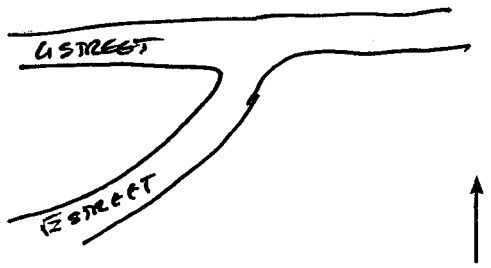
Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.

GSV-DA-544



Site Sketch Map

Boring ID: GSV-DA-544	Sheet 1 of 2
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 6
Logged By: ANDREW DAVING	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILHYMAN
Drill Rig Type/Method: 5400 GEOPROBE / D.P.	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 14'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 0735 6/10/14	Drill Finish Time/Date: 0820 6/10/14
Soil Vapor ID: GSV-DA-544	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 6/10/14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs):	Surface Completion: SOIL VAPOR PROBE
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: SS/WGATHARD ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: GRASSES, NEAR OAK TREES IN AREA.

1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description:

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	SILTY SAND (SM), DRY, LOOSE, BROWN (10YR 4/3) TO DARK YELLOWISH BROWN (10YR 4/4), FINE TO MED SAND, SUBANGULAR TO SUBROUNDED, TRACE COARSE SAND, ROOTS IN UPPER 2'; NATIVE SOIL/ALLUVIUM.	—	5	15	55	25
0.0		42"	—	N/A NONE	—	1							
						2							
						3							
						4							
						5	SP-SM	SAND W/ SILT (SP-SM), FINE TO MEDIUM SAND, YELLOWISH BROWN (10YR 5/4), DRY, LOOSE TO MED DENSE, SAND IS ANGULAR TO SUBROUNDED; SOME COARSE SAND.	—	10	25	50	15
0.0		48"	—	N/A NONE	—	6							
						7							
						8							
						9							
0.0		48	—	N/A NONE	—								

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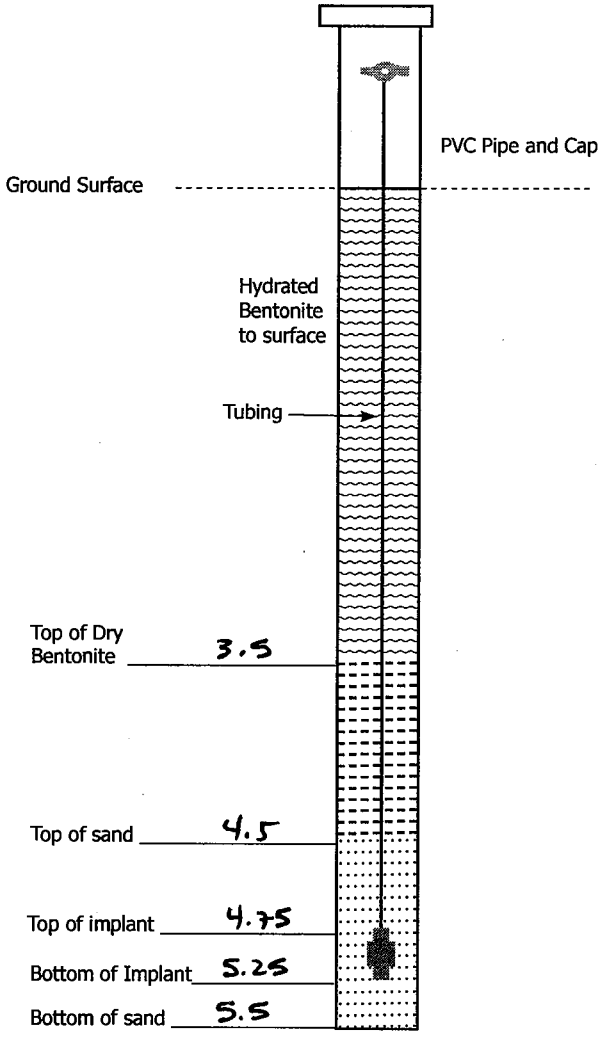
Boring ID: GSV-DG-544 Project: SV PROBE INSTALLATION Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0		48"	—	N/A NONE	—	10	SP-SM	CONT SP-SM TO 10.5' BGS					
						11	SS WEATHERED	(SS) WEATHERED SS BEDROCK, FINE TO MEDIUM SAND, DRY, PALE BROWN (10YR 6/3), SOME YELLOWISH BROWN OXIDATION (10YR 5/8); FRIABLE WEAK, DECOMPOSED WOOD FROM 10.5-12; FROM 12-14 SOME PIECES OF SS ~ 1/4" DIAM.; NATIVE WEATHERED SS.	—	—	25	70	5
0.0		24"	—	N/A NONE	—	12							
						13							
						14							
						15		TD = 14'; REFUSAL @ 14' SET SV PROBES @ 5-6, 10-11; @ 0830					
						16							
						7							
						8							
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: GSV-DG-SS1
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA 6
Reviewed by:
Logged by: ANDREW RAYNE
Drilling Contractor: EST
Rig Type/Method: GEOPROBE 8400 / D.P.
Driller: MARTIN KILHULGN
Borehole TD: 5.5'
Probe Completion Date/Time: 6/10/14 0950
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: STAINLESS STEEL
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: TEFLON
Diameter: 1/4"
Color: CLEAR

Sand Pack Specs

Grain Size: #3
Manufacturer: CEMEX

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

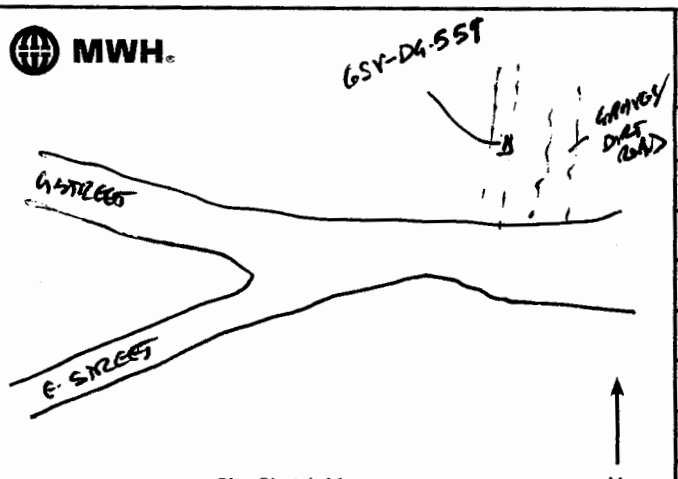
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: GSV-DG-551	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 6A
Logged By: ANDREW PAYNE	Reviewed By:
Drilling Contractor: EST	Drillers Name: MARTIN KILLIVULGH
Drill Rig Type/Method: GEOPROBE 5400 / D.P.	
Sampler Type: MACRO CORE	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 5.5'
Drill Bit Type: MACRO CORE	
Drill Start Time/Date: 0930 6/10/14	Drill Finish Time/Date: 0945 6/10/14
Soil Vapor ID: GSV-DG-551	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 6/10/14 0950	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Well Detail Completed (yes/no)	Surface Completion: SV PROBE
	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: GRASSES, MULE FAT, OAK SAPLING; ASPHALT SHALE

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Sand: Medium	Sand: Fine	Silt/clay
						0	CL	CLAY W/ SAND AND GRAVEL (CL) DRY TO SLT, MOIST, LT OLIVE GRAY (5Y 6/2) TO OLIVE GRAY (5Y 5/2); SOFT TO MED STIFF, LOW PLASTICITY,	10	10	5	—	75
0.0		49"	—	N/A NONE		1–2	ML	SOME MED TO CS SAND AND PEA SIZE GRAVEL (ROAD BASE); FILL MATERIAL; TRACE OXIDATION (9.5YR 4/6)	—	15	20	15	50
						2–3		SANDY SILT (ML), DRY TO SLT MOIST, BROWN (10YR 4/3) TO DARK BROWN (10YR 3/3); FINE TO CS SAND; ANGULAR TO SUBROUNDED, TRACE YELLOWISH BROWN (10YR 5/8) OXIDIZED GRAIN;					
0.0		18"	X X	SV-SA6-SB-4.0-5.0 @0945	0945	4–5		MED STIFF; NO PLASTICITY; ROOTS; FILL	—	—	20	65	15
						5–6	SP-SM	SAND W/ SILT (SP-SM) YELLOWISH BROWN (10YR 5/4), LOOSE, DRY, FINE TO MEDIUM SAND, SUBANGULAR TO SUBROUNDED, NATIVE ALLUVIUM;					
						6–7		TD = 5.5'; REFUSAL @ 5.5'					
								- COLLECT SOIL SAMPLE @ 4.0-5.0					
						8		SVL-551-SA6-SB-4.0-5.0 @0945					
								- COMPLETE/INSTALL SV PROBE FROM 4.5-5.5'.					
						9							

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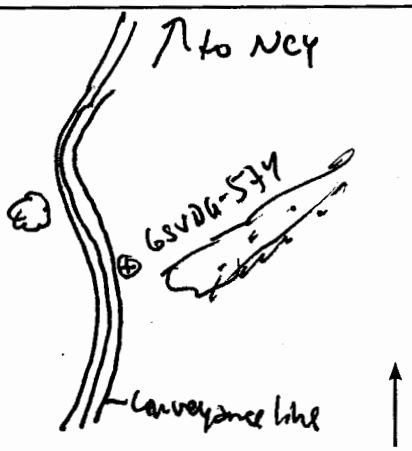

Site Sketch Map

Boring ID: 6SVD6-574	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 6
Logged By: RM Ellis	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Hand Auger	
Sampler Type: Bucket Auger / Grab	
Borehole Diam (inch): 3.5"	Total Depth (ft.bgs): 4.3'
Drill Bit Type: Bucket Auger	
Drill Start Time/Date: 14:30 09 JUN 14	Drill Finish Time/Date: 14:38 09 JUN 14
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 15:06 09 JUN 14 Backfill Material: Soil cuttings
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: None
Soil Vapor Well Detail Completed (yes/no) N/A	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: side slope next to road.	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		51"				0	SP-SM	Poorly graded sand with silt (SP-SM), Brown (10YR 4/3) transitions to dark yellowish brown (10YR 4/6). Loose dry, Mostly fine sand (70) ~~some~~ little silt (25) w/ few med. sand (5). No stain no odor. Fill to 3.8', then Native 3.8-4.3' bgs at color change.	—	—	5	70	25
			3.8 4.3	SVD-574-SA6-3.8-4.3	TD= 4.3' @ 14:48	1							
						2							
						3							
						4							
						5		Stepped out (N) + (S) w/ refusal at same.					
						6							
						7		TD = 4.3' bgs w/ refusal on sandstone bedrock.					
						8							
						9		Backfilled at 15:06 w/ soil cuttings					

10 Mem, 1.8 cpm
97 ppm.

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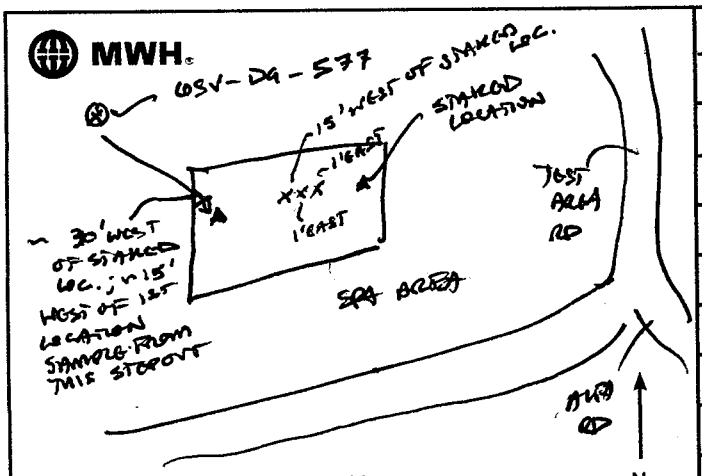


Site Sketch Map

Boring ID: GSV-DG-577	Sheet 1	of 1	
Project: Phase 3 DOE Data Gap Sampling 2014			
Job #: 10503982.3050106 / 10503982.3060106	Site: ~~SA~~ ~~SA~~ SA G		
Logged By: ANDREW DAVIS	Reviewed By:		
Drilling Contractor: EST	Drillers Name: MARTIN KILHVKEN		
Drill Rig Type/Method: GEOPROBE 5400 / DP			
Sampler Type: MACROCORE			
Borehole Diam (inch) 2.25"	Total Depth (ft bgs) 3'		
Drill Bit Type: MACROCORE			
Drill Start Time/Date: 1030 6/11/14	Drill Finish Time/Date: 1140 6/11/14		
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A		
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None			
Surface Completion: SOIL VAPOR PROBE			
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None			

Soil Vapor ID:	~~6~~ (AP) N/A
Soil Vapor Well Completion Time/Date:	N/A
Soil Vapor Probe Depths (ft.bgs):	N/A
Soil Vapor Well Detail Completed (yes/no)	

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: GRASSES, SHRUBS, SS BEDROCK NEARBY

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	SILTY SAND (SM), DRY, BROWN (10YR 4/4), LOOSE, FINE TO MED SAND, SA TO SR, ROOTS, FILL MATERIAL; TRACE COARSE SAND	—	5	30	45	20
0.0		36"	X		1145	1	SM	SILTY SAND (SM) SLT. MOIST, DARK YELLOWISH BROWN (10YR 3/4), FINE TO MED. SAND ANG TO SUBROUNDED, TRACE COARSE SAND, NATIVE ALLUVIUM, MICA	—	5	30	40 (AP)	25
						2	SS/SM	WEATHERED SS AND SHALE (SC/SM); LIGHT YELLOWISH BROWN (10YR 6/4) TO PALE BROWN (10YR 6/3), FINE SAND, ANG TO SR, WEAK, FRIABLE, SHALE IS GRAYISH BROWN (10YR 5/2); BEDROCK/WEATHERED	—	—	~~35~~ 25	65	10
						3		- 1ST LOCATION ~15 WEST OF STAKED LOCATION TD/REFUSAL @ 2'; 2 STOPOUTS ~1' EAST OF PRIMARY LOCATION ALSO REFUSED @ 2';					
SVL-577-SA6-SB-1.0-2.0	@ 1145					4		4TH LOCATION ~30' WEST OF STAKED LOCATION AND 15' FROM PRIMARY LOCATION TD/REFUSED @ 3', SOIL SAMPLE COLLECTED					
						5		@ 1-2.0' @ 1145; SVL-577-SA6-SB-1.0-2.0 (1-4oz JAR 2 EACORES)					
						6		14 MEGM, 40 CPM, 0.0 PPM					
						7							
						8							
						9							

QA/QC
Surficial media boring log rev 2-25-2014

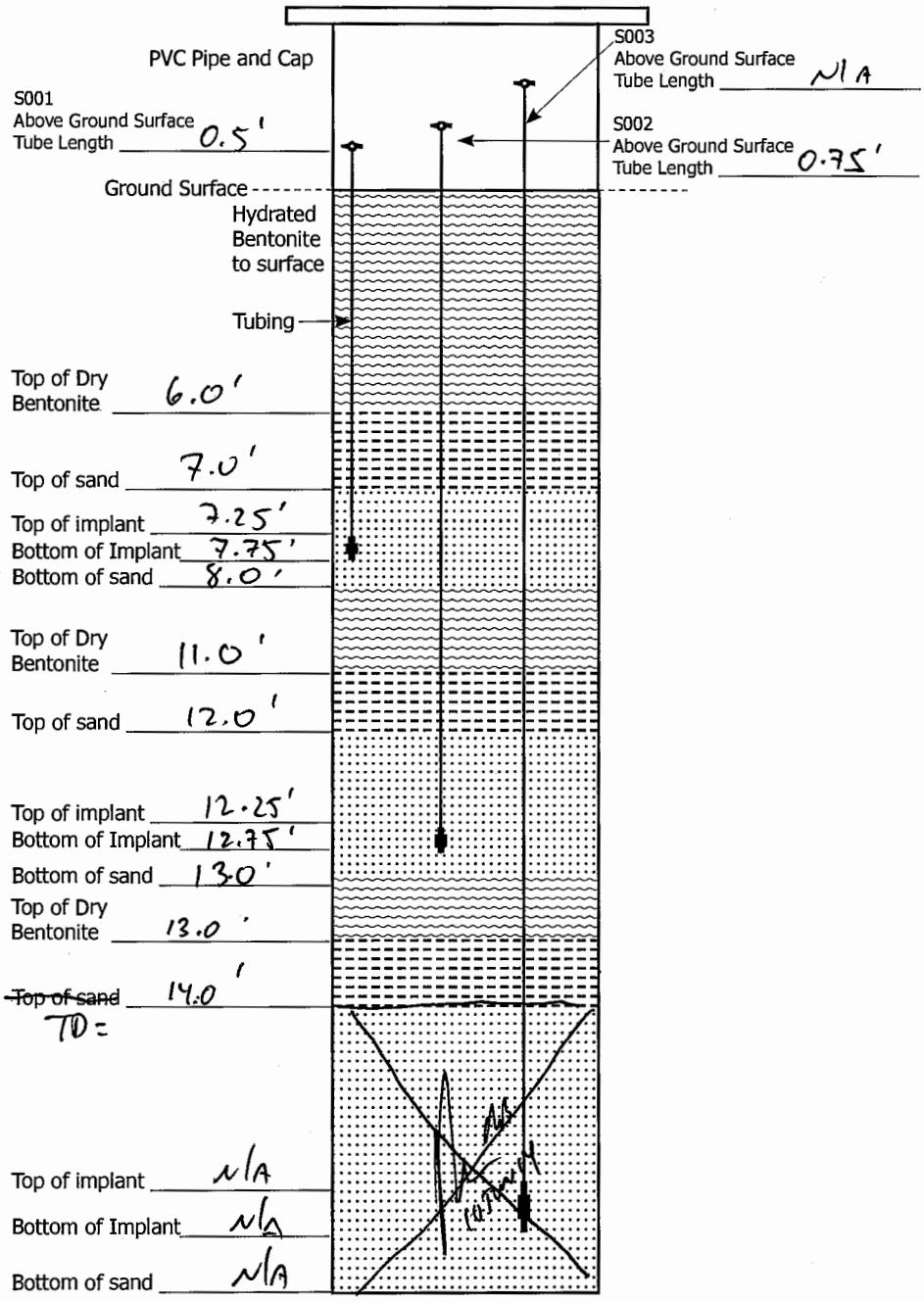
MWH.

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 7SV_DG-503
Site: 7
Drilling Contractor: EST
Borehole TD: 14.0' bgs

Project: Phase 3 DOE SVMA 2014
Logged by: RUSSELLIS
Driller: MORGAN
Borehole Diameter: 2.25"

Job #: 10503982.3050105
Reviewed by:
Rig Type/Method: Geoprobe 5400
Probe Completion Date/Time: 10JUN14. shallow 09:30, deep 09:35



Vapor Implant Specs

Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite

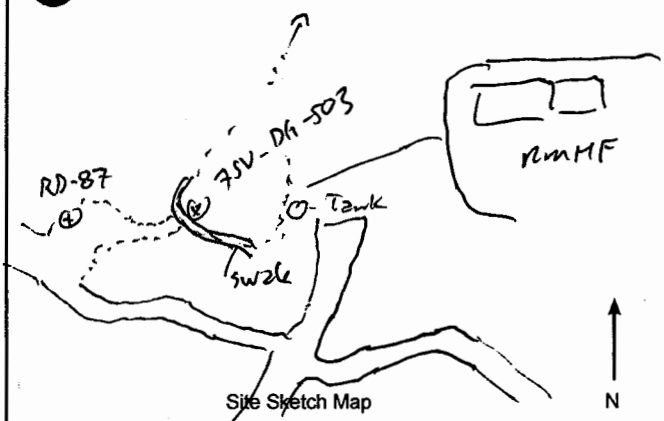
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 75V-DG-503	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 7
Logged By: ROBSELLIS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MORGAN HUGHES
Drill Rig Type/Method: Geoprobe 5400	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25'	Total Depth (ft.bgs): 14.0'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 08:20 10 JUN 14	Drill Finish Time/Date: 09:07 10 JUN 14
Soil Vapor ID: 75V_DG-503	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 10 JUN 14, 7.8 09:00, 12.13 09:35	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0', 12.0-13.0'	Surface Completion: SV probe
Soil Vapor Well Detail Completed (yes/no) attached.	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description verbs, sagebrush, coyotebush.

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: (E) edge of concrete swale

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		48"				0	GW	0.0-0.9 well graded gravel (GW), white (10YR 8/1). Loose, dry. Some coarse sand, little gravel, medium/fine sand (20% each). Few silt (10). No stain, no odor, fill. under concrete swale; + gravel bag remnant.	20	30	20	20	10
0.0 ppm		40"				4	SP-SM	0.9-9.5 Poorly sorted sand with silt (SP-SM) light yellowish brown (10YR 6/4). Loose, dry. Mostly fine sand (75), little silt (20), few medium sand (5), trace coarse sand. No stain, no odor. Disturbed native soil or fill.	-	TR	5	75	20
0.0 ppm		48"				8	SM	9.5-10.2 Silty sand (SM). dark yellowish brown (10YR 3/4). Very loose, dry. Mostly fine (60), little silt (30), few medium (10). No stain, no odor. Native soil.	-	-	10	60	30

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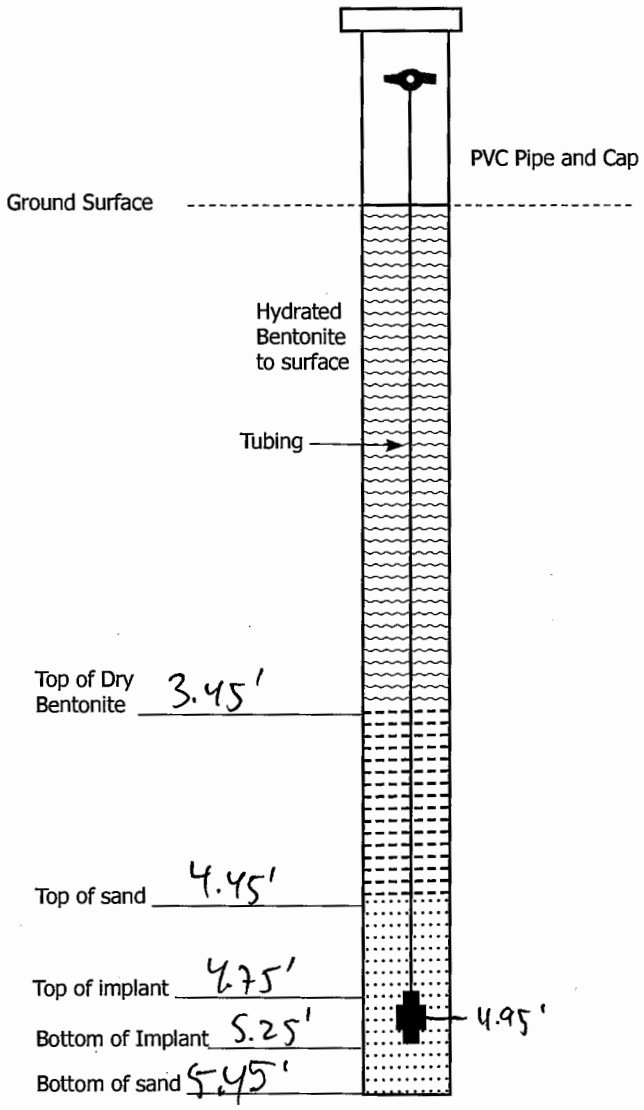
Boring ID: 7SV-DG-503 Project: Phase 3 DOE SVDG 2014 Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10	SM	10.2 – 14.0					
						11	SP	Poorly graded sand (SP) dark yellowish brown (10YR 4/4), loose, dry. Mostly fine sand (70), little medium (15), few silt (10), few coarse. No stain, no odor. Native	–	5	15	70	10
		24"				12							
						13		– Shale bed ≈ 2.5" thick at 13.2' bgs; weathered bedrock at 13.4' bgs to TD.					
					TD	14							
						5		TD = 14.0' w/ refusal on bedrock sandstone.					
						6							
						7		2 probes set.					
						8		Moved stake approximately 30–40' WNW of staked location, along swale on west side of basin.					
						9							
						0							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV_DG-502
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: 8
Reviewed by:
Logged by: Rob Eccles
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400
Driller: Morgan Hughes
Borehole TD: 5.45' bgs
Probe Completion Date/Time: 12JUN14, 1200
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 Sand
Manufacturer: Cemex

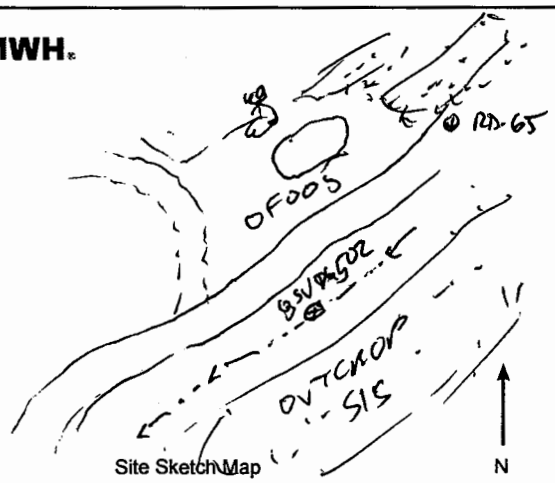
Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 8SV_DG-502	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 8
Logged By: RWSeeds	Reviewed By:
Drilling Contractor: EST	Drillers Name: MORGAN HUGHES
Drill Rig Type/Method: ~~Hand~~ MACROCORE Geoprobe 5400	
Sampler Type: MACROCORE	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 5.45'
Drill Bit Type: MACROCORE	
Drill Start Time/Date: 11:20 12 JUN 14	Drill Finish Time/Date: 11:25 12 JUN 14
Soil Vapor ID: 8SV_DG-502	Soil Boring Backfill Time/Date: N/A
Soil Vapor Well Completion Time/Date: 12 JUN 14; 12:00	Backfill Material: N/A
Soil Vapor Probe Depths (ft.bgs): 4.45' - 5.45'	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☑ None
Soil Vapor Well Detail Completed (yes/no): Attached	Surface Completion: SV Probe
	Type of Refusal: ☑ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

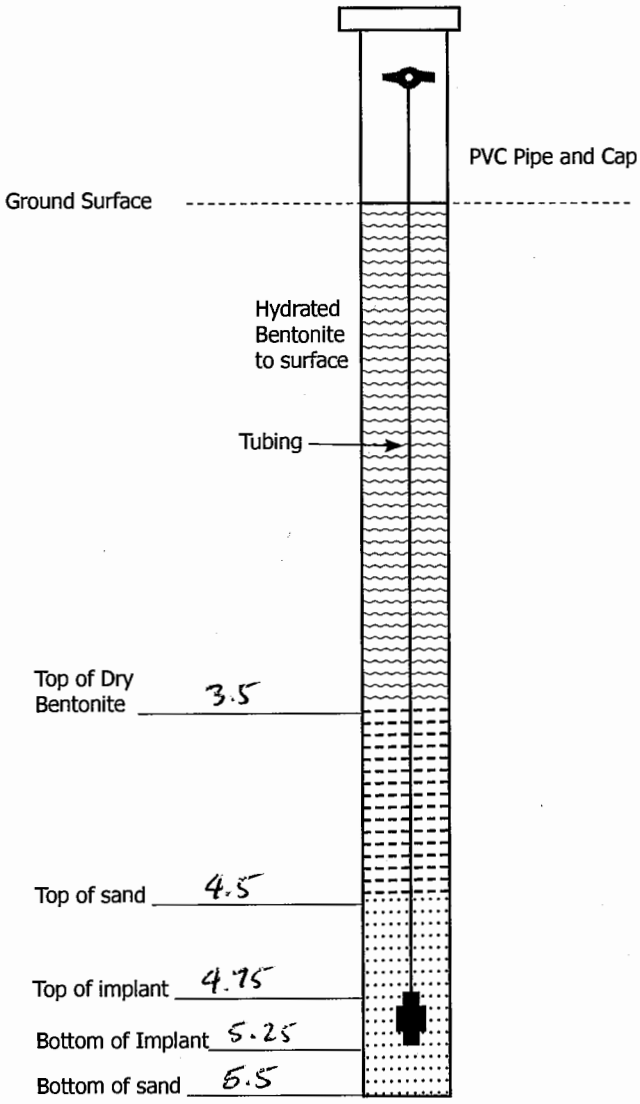
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description: mustard, wild oat 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations Surface Description: thalmes. clayey sand	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		32"				0	SM SC	Silty sand (SM) - Silty clay (SC). Yellowish brown (10YR 5/4) with yellowish brown oxide mottled stains (10YR 5/6). Mostly fine sand and clay (silt); moist, non plastic, low to high medium dry strength, slow dilatancy, No stain, no odor. Fill.	–	–	10	50/55	40-45
		23"				1							
						2							
						3							
						4							
						5		TD = 5.45' w/ refusal on sandstone bedrock					
						6							
						7							
						8							
						9							

QA/QC
Surficial media boring log rev 2-25-2014

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-503
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SA 8
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: ESD
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 5.5
Probe Completion Date/Time: 0841 / 5-20-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

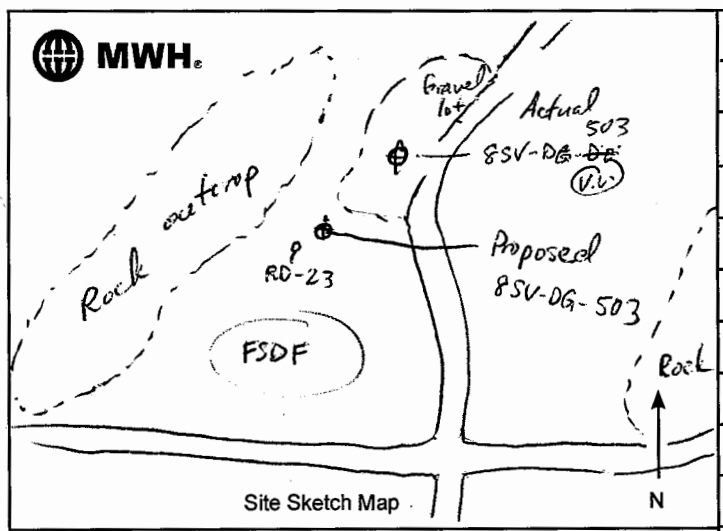
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



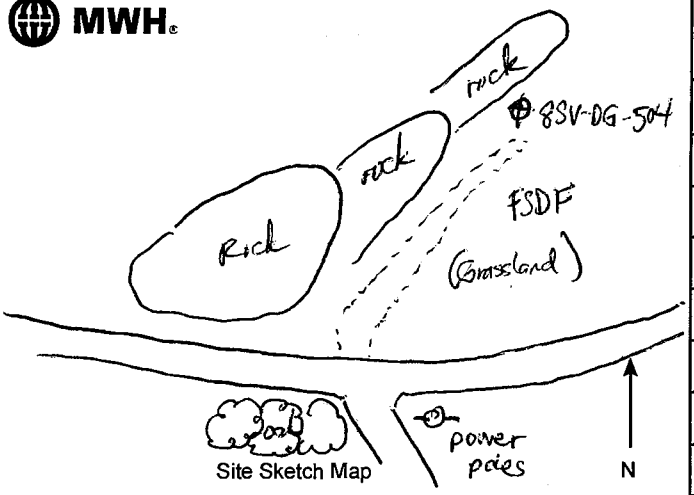
Site Sketch Map

Boring ID: SSV-DG-503	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8		
Logged By: V. Vathanosin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macro core			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 5.5		
Drill Bit Type: Macro core			
Drill Start Time/Date: 0748 / 5-20-14	Drill Finish Time/Date: 0815 / 5-20-14		
Soil Vapor ID: SSV-DG-503	Soil Boring Backfill Time/Date:	Backfill Material:	
Soil Vapor Well Completion Time/Date: 0841 / 5-20-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5	Surface Completion: Soil Vapor Probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☐ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☒ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: ~~Grass, near RD-23 well cluster~~ Gravel (V.V.)	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0						0	SM	* Location moved 60' NE Silty Sand (SM), very pale brown (10YR 7/4), loose, dry, fine sand, non-plastic silt, no stains, no odors, fill.	-	-	-	60	40
		48"	NONE			1			-	-	-	15	85
						2	ML	Silt w/ Sand (ML), dark yellowish brown (10YR 4/4), stiff, slightly moist, low plasticity silt, fine sand					
0.0						3							
		15"	NONE			4	SM	Silty Sand (SM), yellowish brown (10YR 5/4), fine sand, silt, med dense, hint of moisture, fill	-	-	-	65	35
0.1						5	SP		-	-	-	100	TR
						6	B1	Poorly Graded Sand (SP), light yellowish brown (10YR 6/4), loose, dry, fine sand, trace silt, native soil, no stains or odors.					
						7							
						8		@5.5' Sandstone, weathered.					
						9		TD = 5.5', refusal on bedrock. Installed vapor probe at 4.5-5.5'. Backfill original boring with cuttings					

(V.P.) 8SV

MWH.



Site Sketch Map

Boring ID: ~~8SV~~-DG-504	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 3.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0940/5-16-14	Drill Finish Time/Date: 10:00/5-16-14		
Soil Vapor ID: N/A	Soil Boring Backfill Time/Date: 10:00/5-16-14	Backfill Material: Soil cuttings.	
Soil Vapor Well Completion Time/Date: N/A	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): N/A	Surface Completion: Backfill w/ cuttings.		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X					0	ML	Surface Description: Grass. Silt w/ fine sand (ML), grayish brown (10YR 5/2), med. stiff, dry, low plasticity silt, fine sand, no stains or odors, fill.				10	90/
	X	30"				1							
	X		X		10:00	2							
	X					3	Br	@ Bedrock - Sandstone, weathered chatsworth fm					
SVL-504-SA8-SB-20-25													
						4		TD = 3.0 ft, refusal on bedrock, no vapor probe installed, collect encores + jar at 20-25					
						5							
						6							
						7							
						8							
						9							

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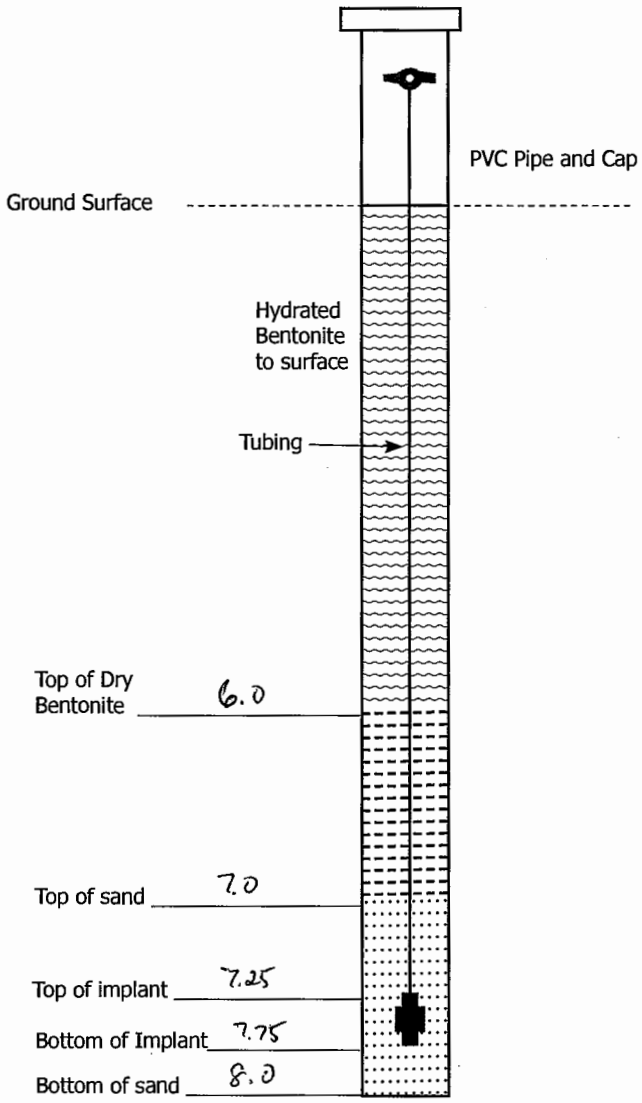
MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-506
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SA8
Reviewed by:
Logged by: Van Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 8.0
Probe Completion Date/Time: 0930/5-16-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

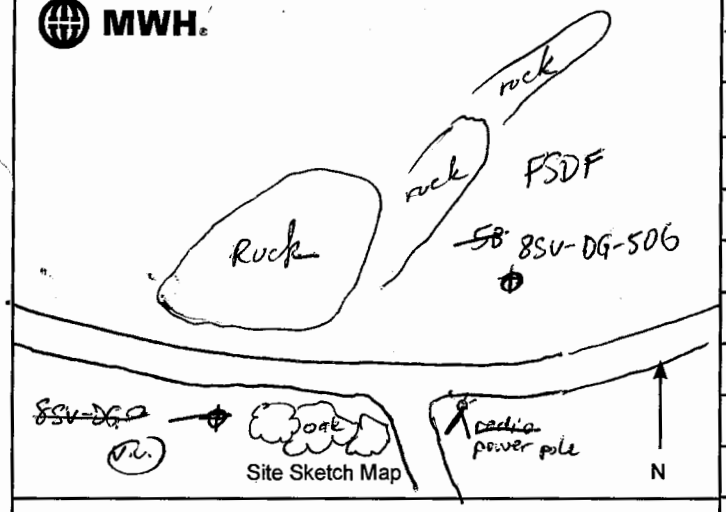
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SSV-DG ~~515~~ 506 (V.J.)	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: Subarea 8
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 8.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0845/5-16-14	Drill Finish Time/Date: 0916 /5-16-14
Soil Vapor ID: SSV-DG-506	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date:	Observations: ☐ Debris ☒ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 7.0-8.0	Surface Completion: Soil Vapor Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☒ None

Soil Description
1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

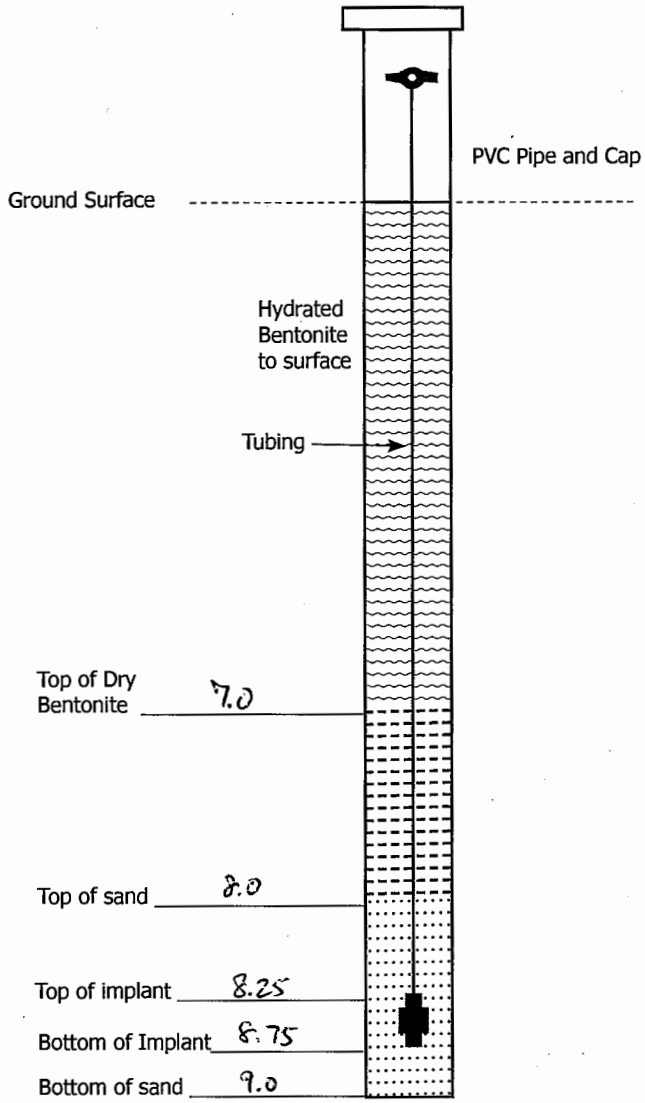
Surface Description: Veg Cleared, ~4' NW of EPA#58

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty sand (SM), light yellowish brown (10YR 6/4), med. dense, dry, fine sand, non-plastic silt, no stains or odors, fill	–	–	–	60	40
		48"	NONE			1	ML	Clayey Silt (ML), light yellowish brown (10YR 6/4), med. stiff, dry, low plasticity clay and silt, "platy" structure, slight brownish yellow staining (10YR 6/8), no odor, fill	–	–	–	–	65/35
0.0						2							
						3							
						4							
						5							
		48"	NONE			6							
						7							
0.0						8		@ grades to med-plasticity clay.					
							BR	Shale Bedrock, hard, fissile, inter-bedded sandstone and shale.					
						9		TD=8.0 ft. refusal on bedrock, install vapor probe at 7.0-8.0. May encounter low flow when collecting sample.					

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-S12
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SA 8
Reviewed by:
Logged by: Van Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 9.0
Probe Completion Date/Time: 1110/5-19-2014
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

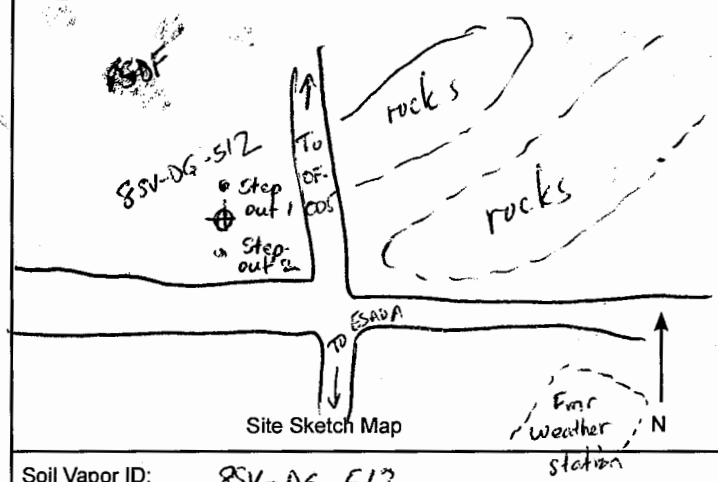
Dry Bentonite
Type: #8
Manufacturer: CETCO

Hydrated Bentonite
Type: #8
Manufacturer: CETCO

Notes:
1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SSV-DG 512	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 9.0		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 0940 / 5-19-14	Drill Finish Time/Date: 1045 / 5-19-14		
Soil Vapor ID: SSV-DG-512	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 1110 / 5-19-2014	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None		
Soil Vapor Probe Depths (ft.bgs): 8.0-9.0	Surface Completion: Soil vapor probe		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

Soil Description

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

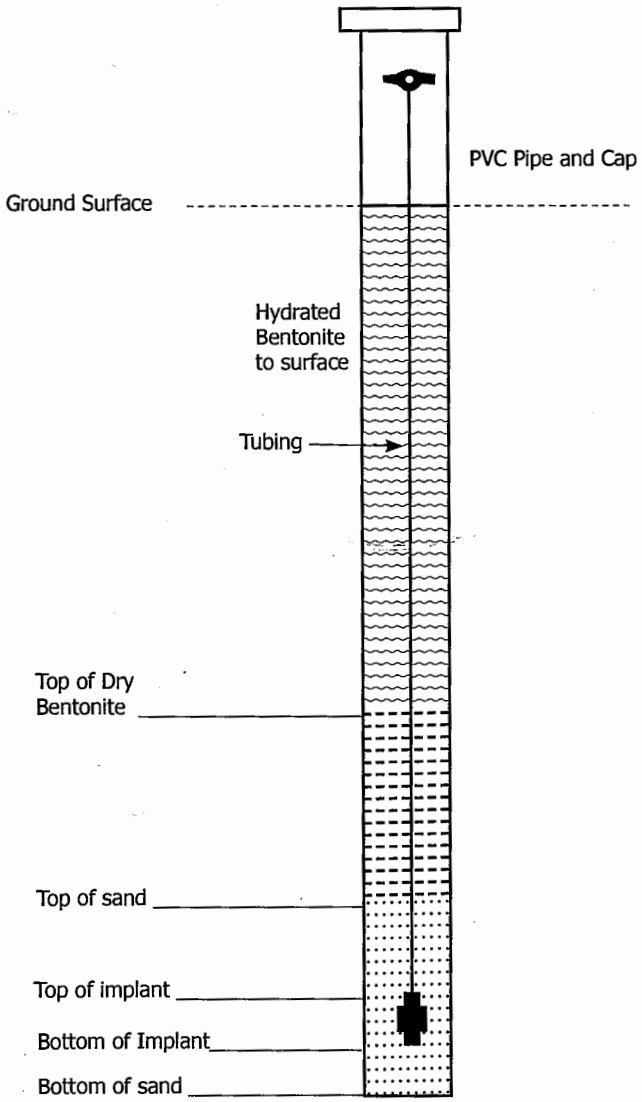
Surface Description: Mustard

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Estimated % of Sand: Medium	Estimated % of Sand: Fine	Silt/clay
						0	ML	Silt w/ sand (ML), brown (10YR 5/3), med. stiff, dry, non-plastic silt, fine sand, few roots, fill, no odors or stains.	–	–	–	15	85
		36"		NONE	–	1							
						2		color changes to light yellowish brown (10YR 6/4)					
						3							
0.4						4							
		48"		NONE	–	5		* Note: TD = 9.0 ft, refusal on sandstone (bedrock), install vapor probe at 8.0-9.0 bgs. Stepped out twice to avoid asphalt debris. Install probe in southernmost boring					
						6							
						7		@9' Sandstone, weathered.					
0.5						8							
		12"		NONE			SP	@8.2' Asphalt (Stepped out twice to avoid debris. No asphalt ~~8~~ 4' south)	–	–	–	85	15
				V.V.		9	Br	@8.5' Poorly graded Sand w/ Silt (SP-SM), yellow (10YR 7/6), loose, dry, fine sand, non-plastic ~~silt~~ silt.					

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-S15
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SA8
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 7.0
Probe Completion Date/Time: 0830 / 5-16-14
Borehole Diameter: 2.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: CETCO

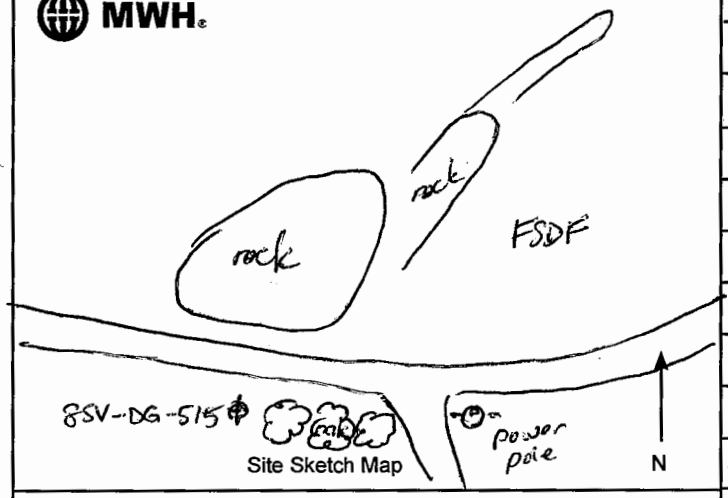
Hydrated Bentonite
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SSV-DG-515	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: Subarea 8
Logged By: V. Vathanaoun	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 7.0
Drill Bit Type: Macrocore	(V.V.)
Drill Start Time/Date: 5-16-14 / 0745	Drill Finish Time/Date: ~~88~~ 0812 / 5-16-14
Soil Vapor ID: SSV-DG-515	Soil Boring Backfill Time/Date: N/A; Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0830 / 5-16-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 6.0-7.0 ft	Surface Completion: Soil Vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Surface Description: Grass Silt w/ sand (ML), brownish yellow (10YR 6/6), loose, dry, non-plastic silt, no odors or stain, fill fine sand	-	-	-	~~2~~ 10 (V.V.)	~~100~~ 90
		48"	NONE			1							
						2							
0.0						3							
						4							
		16"				5		@4.5 - color changes to yellow (10YR 7/6), platy ~~tex~~ texture, some white (10YR 8/1) patches.					
		18"	NONE			6							
0.0						7	Br	Sandstone, weathered, Chatsworth Fm.					
						8		TD=7.0', Refusal on sandstone bedrock, install vapor probe 6.0-7.0 ft. bgs. Possible low flow due to silt content.					
						9							

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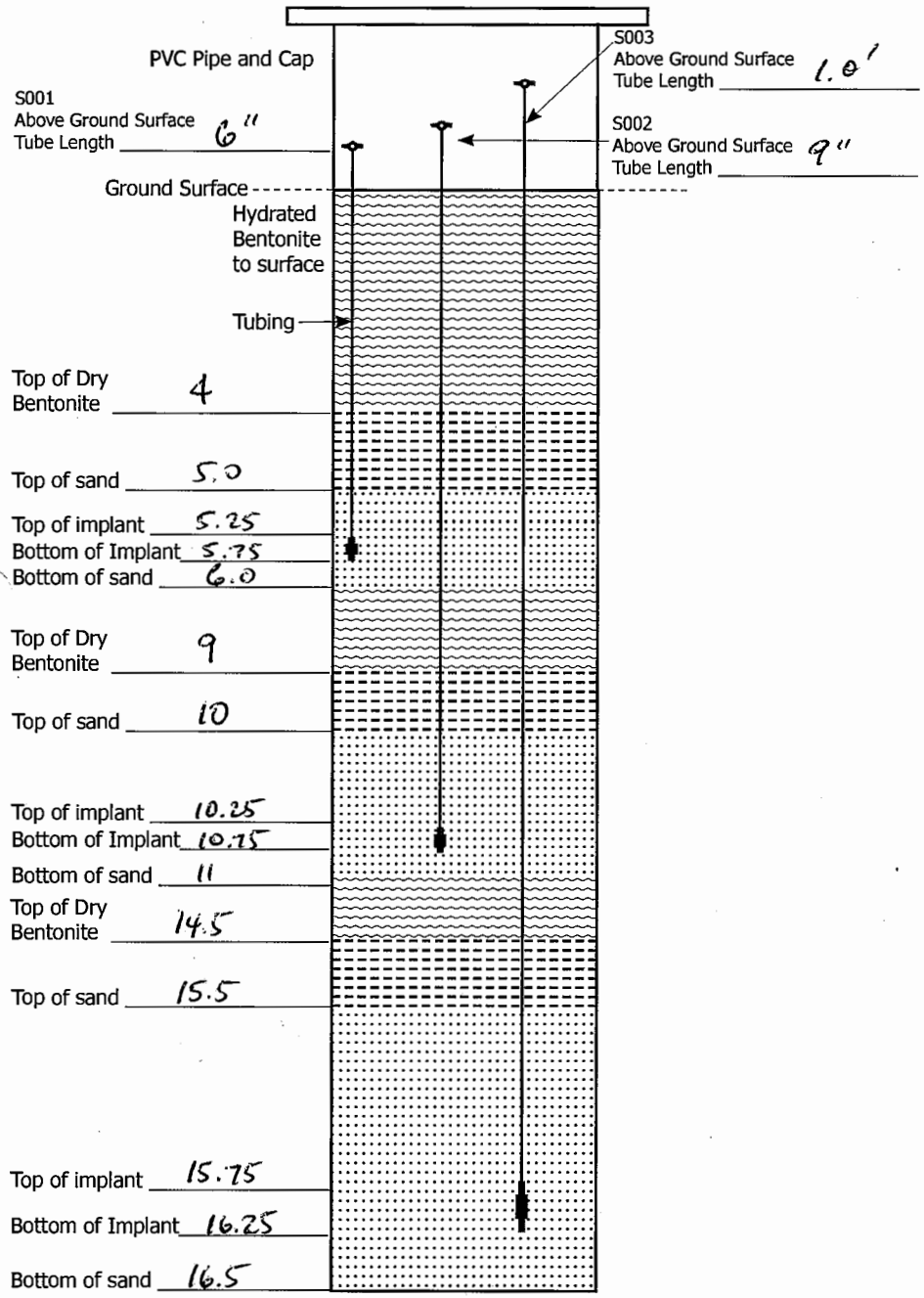
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: 8SV-DG-S17
Site: SA 8
Drilling Contractor: EST
Borehole TD: 16.5

Project: Phase 3 DOE SV
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25

Job #: 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 0925/5-19-2014



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

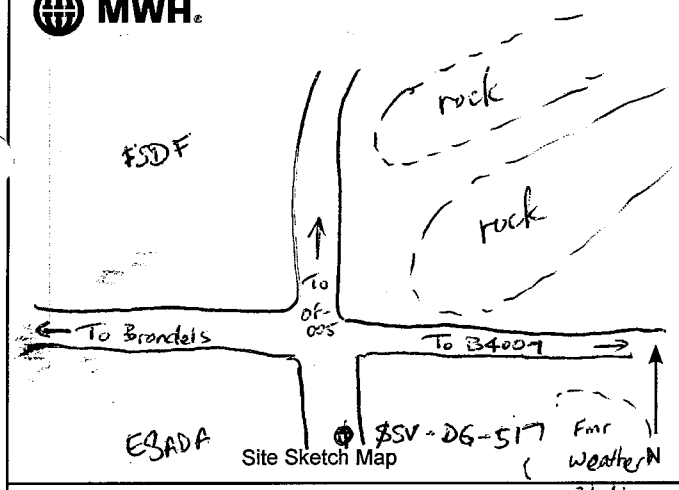
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: SSV-DG-517	Sheet 1 of 2
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8
Logged By: V. Vathanavin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 16.5
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0805 / 5-19-2014	Drill Finish Time/Date: 0840 / 5-19-2014
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None	
Surface Completion: Soil Vapor Probe	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID: SSV-DG-517	
Soil Vapor Well Completion Time/Date: 0925 / 5-19-2014	
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 10.0-11.0, ~~15.5~~ 15.5-16.5	
Soil Vapor Well Detail Completed (yes/no)	

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Surface Description: Vegetated road. Silt w/ Sand (ML), yellowish brown (10YR 5/4), med ~~dense~~ stiff (V.V.), dry, low plastic ~~silty~~ (10) silt, fine sand, grass roots, no staining, no odors, graded fill	-	-	-	10	90
		45"				1							
						2							
						3	CL	Silty Clay (CL), yellowish brown (10YR 5/4), stiff, dry, silt + clay, med. plasticity, native @4' color changes to brownish yellow (10YR 6/6)	-	-	-	-	100
0.1						4							
					0900	5							
		48"				6							
						7							
0.6						8							
						9							

5.0-6.0

SV2-517-SA8-SB

Cont next page

QA/QC
Surficial media boring log rev 2-25-2014

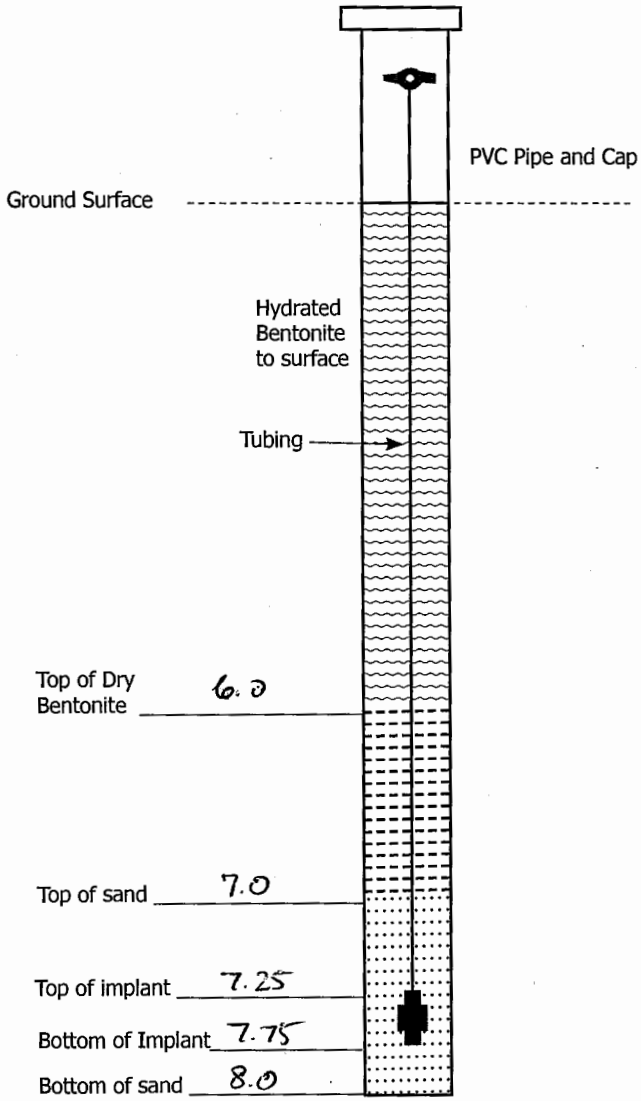
Boring ID: SSV-DG-517 Project: DOE Phase 3 SV DG Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
			X		0905	0							
						1							
0.1				SSV-517-SA8-SB-10-11									
		SV				2							
						3		@ grades to med. stiff, color changes to very pale brown (10YR 7/4); brownish yellow (10YR 6/8) iron staining.					
		48"				4							
						5							
			X		0910	6							
0.5	X	6"				16.5	Br	Weathered sandstone, looks like ~~silty~~ (SV) silty sand.	–	–	10	50	40
				SSV-517-SA8-SB-15.5-16.5		7							
						8							
						9		TD = 16.5', refusal on bedrock. Install vapor probes at 5.0'-6.0', 10'-11', 15.5'-16.5'; also collect encores at each respective depths due to possible low flow conditions.					
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-519
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: SA 8
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400 / DP
Driller: Morgan Hughes
Borehole TD: 8.0
Probe Completion Date/Time: 1157 / 5-16-14
Borehole Diameter: 2.25"



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: Cetco

Hydrated Bentonite

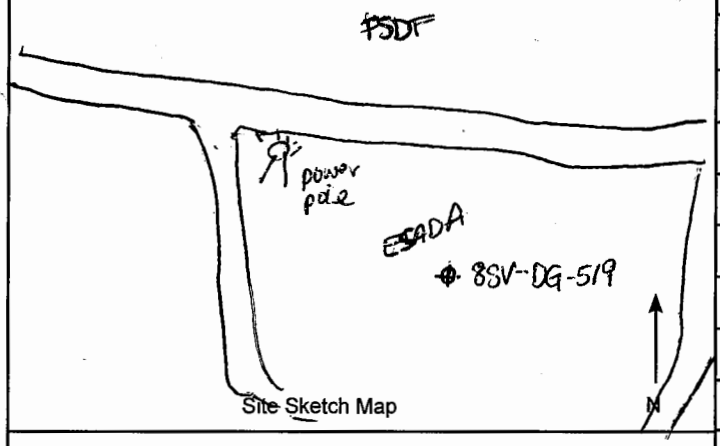
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: SSV-DG-519	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macrocore	
Borehole Diam (inch): 2.25"	Total Depth (ft.bgs): 8.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 1100 / 5-16-14	Drill Finish Time/Date: 1142 / 5-16-14
Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None	
Surface Completion: Soil vapor probe	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID:	SSV-DG-519
Soil Vapor Well Completion Time/Date:	1150 / 5-16-14
Soil Vapor Probe Depths (ft.bgs):	7.0-8.0
Soil Vapor Well Detail Completed (yes/no)	yes

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Grassland (ESADA)	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	CL	Silty Clay (CL), brown (10YR 4/3), stiff, dry, low to med. plasticity clay, few roots; native	–	–	–	–	25/75
		48"				1							
			NONE			2							
						3							
0.0						4							
						5	ML	Sandy Silt ~~(ML)~~ w/ clay (ML), dark yellowish brown (10YR 4/4), med. stiff, dry, medium plasticity clay and silt, fine sand native	–	–	–	20	65/15
		48"	NONE			6							
						7	SP	Poorly graded Sand (SP), yellowish brown (10YR 5/6), loose, dry, fine sand, trace med. and coarse sand, no odors or stains, native	–	TR	TR	100	–
0.0					11:40	8	Bo	@8.0 ft Sandstone - weathered.					
SVL-519-SA8-SB-7.5-8.0						9		TD = 8.0 ft, refusal on bedrock. Set vapor probes at 7.0-8.0 ft; collect encores and place on hold in case no flow conditions exist.					

MWH

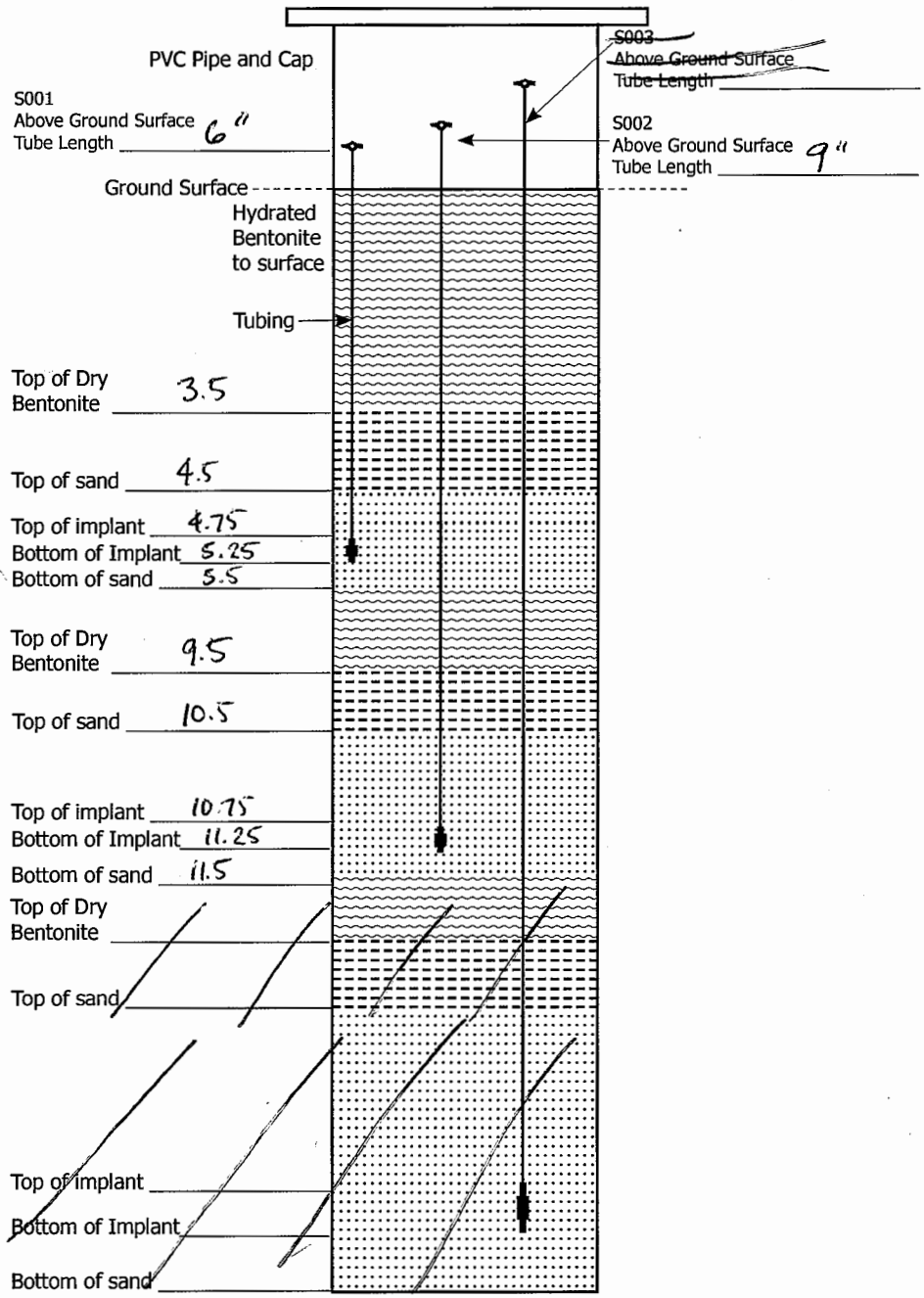
Multiple Soil Vapor Probe Construction Diagram

(V.V.)

Probe ID/Soil ID: SSV-DG-524
Site: SA8
Drilling Contractor: EST
Borehole TD: 11.5

Project: Phase 3 DOE SVDG
Logged by: V. Vathanasin
Driller: Morgan Hughes
Borehole Diameter: 2.25"

Job #: ~~10504~~ 10503982
Reviewed by:
Rig Type/Method: Geoprobe 5400 / DP
Probe Completion Date/Time: 12:38 / 5-19-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

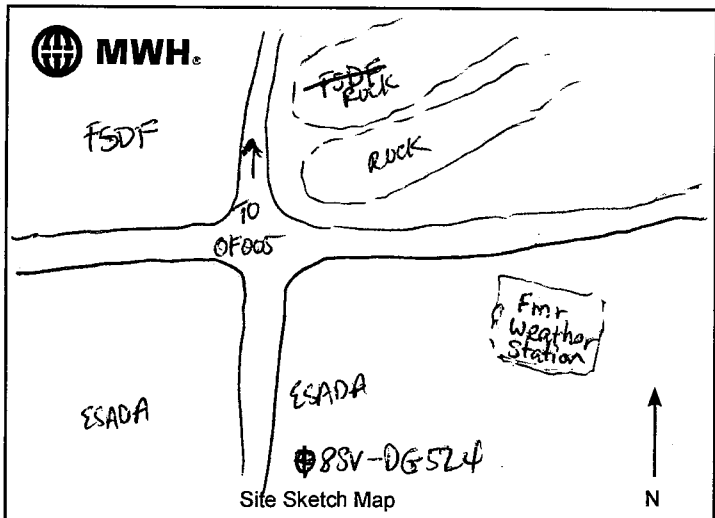
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: 8SV-DG-524	Sheet 1 of 1 2 (V.V.)		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name:		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macrocore			
Borehole Diam (inch) 2.25	Total Depth (ft.bgs) 11.5		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1124 / 5-19-14	Drill Finish Time/Date: 1210 / 5-19-14		
Soil Vapor ID: 8SV-DG-524	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 12:38 / 5-19-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5, 10.5-11.5	Surface Completion: Soil vapor probes.		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Surface Description: Hydromulch, mustard Clayey Silt (ML) brown (10YR 4/3), stiff, dry, low to medium plasticity (V.V.) fines, no odors or stains, graded fill (V.V.)	–	–	–	–	100
		48"	NONE			1							
						2		color changes to light yellowish brown (10YR 6/4), some white (10YR 8/1) leaching stains, grades to medium plasticity fines					
						3							
0.2						4							
					1220	5							
		40"				6		SV-524-SA8-SB-4.5-5.5					
						7							
0.3						8							
						9							
		24"											

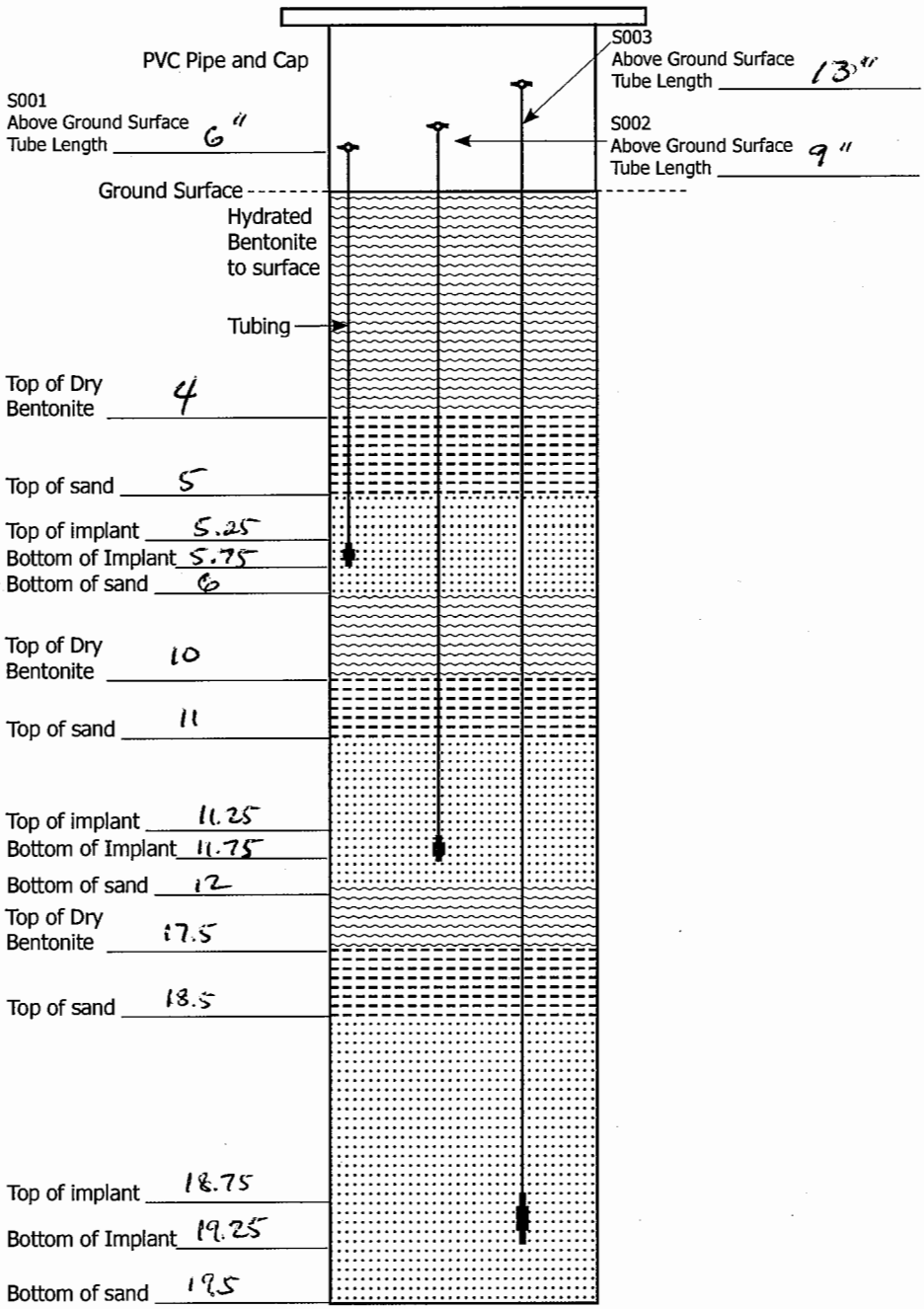
Boring ID: SSV-DG-524 Project: Phase 3 DOE SV DG Sampling Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
	X		NONE			10		Same as above					
						11	SP-SM	Poorly Graded Sand with Silt and Clay (SP-SM), yellowish brown (10YR 5/4), loose, dry, fine to medium sand, low plasticity clay and silt, weak cementation, no stains or odors, native soil.	–	–	10	75	15
						12							
						13							
						14		@11.5 Sandstone, weathered.					
						15		TD = 11.5', refusal on bedrock; install vapor probes at 4.5-5.5 and 10.5-11.5'					
						16		Submit encores for 4.5-5.5' due to possible no-flow conditions.					
						17							
						18							
						19							
						20							
						1							
						2							
						3							
						4							
						5							
						6							
						7							
						8							
						9							

MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-528
Project: Phase 3 DOE SV DG
Job #: 10503982
Site: SA 8
Logged by: V. Vathanasin
Reviewed by:
Drilling Contractor: EST
Driller: Morgan Hughes
Rig Type/Method: Geoprobe 5400 / DP
Borehole TD: 19.5
Borehole Diameter: 2.25"
Probe Completion Date/Time: 1514 / 5-19-14



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

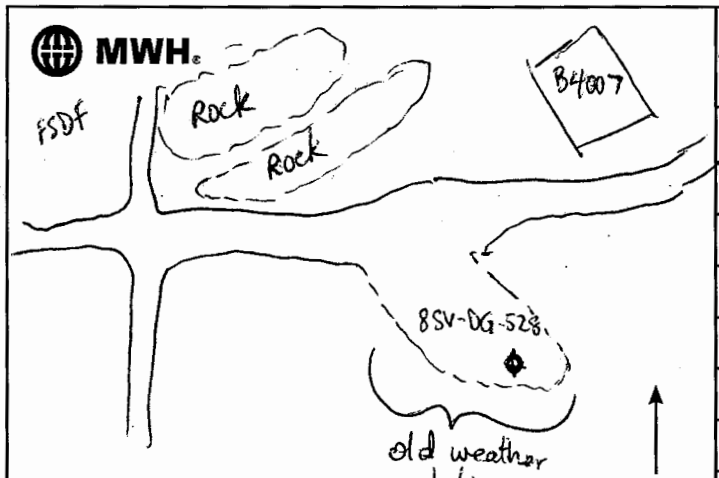
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: SSV-DG-528	Sheet 1 of 2		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8		
Logged By: V. Vathanasin	Reviewed By:		
Drilling Contractor: EST	Drillers Name: Morgan Hughes		
Drill Rig Type/Method: Geoprobe 5400 / DP			
Sampler Type: Macro core			
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 19.5'		
Drill Bit Type: Macrocore			
Drill Start Time/Date: 1325 / 5-19-14	Drill Finish Time/Date: 1430 / 5-19-14		
Soil Vapor ID: SSV-DG-528	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 15:14 / 5-19-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 5.0-6.0, 11.0-12.0, 18.5-19.5	Surface Completion: Soil Vapor Probes		
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☐ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☒ None		

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations Surface Description: Heavy Brush (cleared)	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	ML	Sandy Silt (ML), light yellowish brown (10 YR 6/4), med. stiff, dry, non-plastic fines, fine sand, weak clay cement, no odors or fines, roots, graded fill	–	–	–	15	85
		40"	NONE			1							
						2							
						3		color changes to brown (10YR 4/3),					
						4							
					1446	5		color changes to pale brown (10YR 6/3), stiff, increasing sand, native	–	–	–	25	75
		48"		SVE-528-SA8-SB-50-60		6							
						7	CL	Clay with Sand (CL), very pale brown (10YR 7/3), med stiff, moist, med plasticity clay, fine sand, heavy weathering [white [10YR 8/1]]					
						8							
						9		grades to dry.					

cont next page

Boring ID: SSV-DG-528 Project: Phase 3 DOE SV DG Sampling Sheet 2 of 2

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						10		Same as above					
		48"				11	ML	Silt w/ Clay (ML), light yellowish brown (10YR 6/4), stiff, moist, med. plasticity clay, silt	-	-	-	-	15/85
		SSL-528-SAB-SB-11.0-12.0			1450	12							
						13							
		48"				14							
						15							
						16	SM						
						17	SM	Silty sand (SM), brownish yellow (10YR 6/6), med. dense, dry, fine sand, non-plastic silt, no odors or staining,	-	-	-	80	20
						18	(V.V.) ML		-	-	-	10	90
									-	-	-	80	20
						19		@17.5 Silt w/ Sand (ML), yellowish brown (10YR 5/4), stiff, moist, lo plast. silt, sand					
						20		@18.0 Silty Sand (SM), brownish yellow (10YR 6/6), med. dense, dry, fine sand, non-plastic silt, ~~wa~~ (V.V.)					
						21							
						22		@19.5 Sandstone					
						23		TD= 19.5, refusal on bedrock, install probes at 5.0-6.0, 11.0-12.0, 18.5-19.5, Collect encrete at 5.0-6.0, 11.0-12.0 due to possible low-flow conditions and place on hold.					
						24							
						25							
						26							
						27							
						28							
						29							

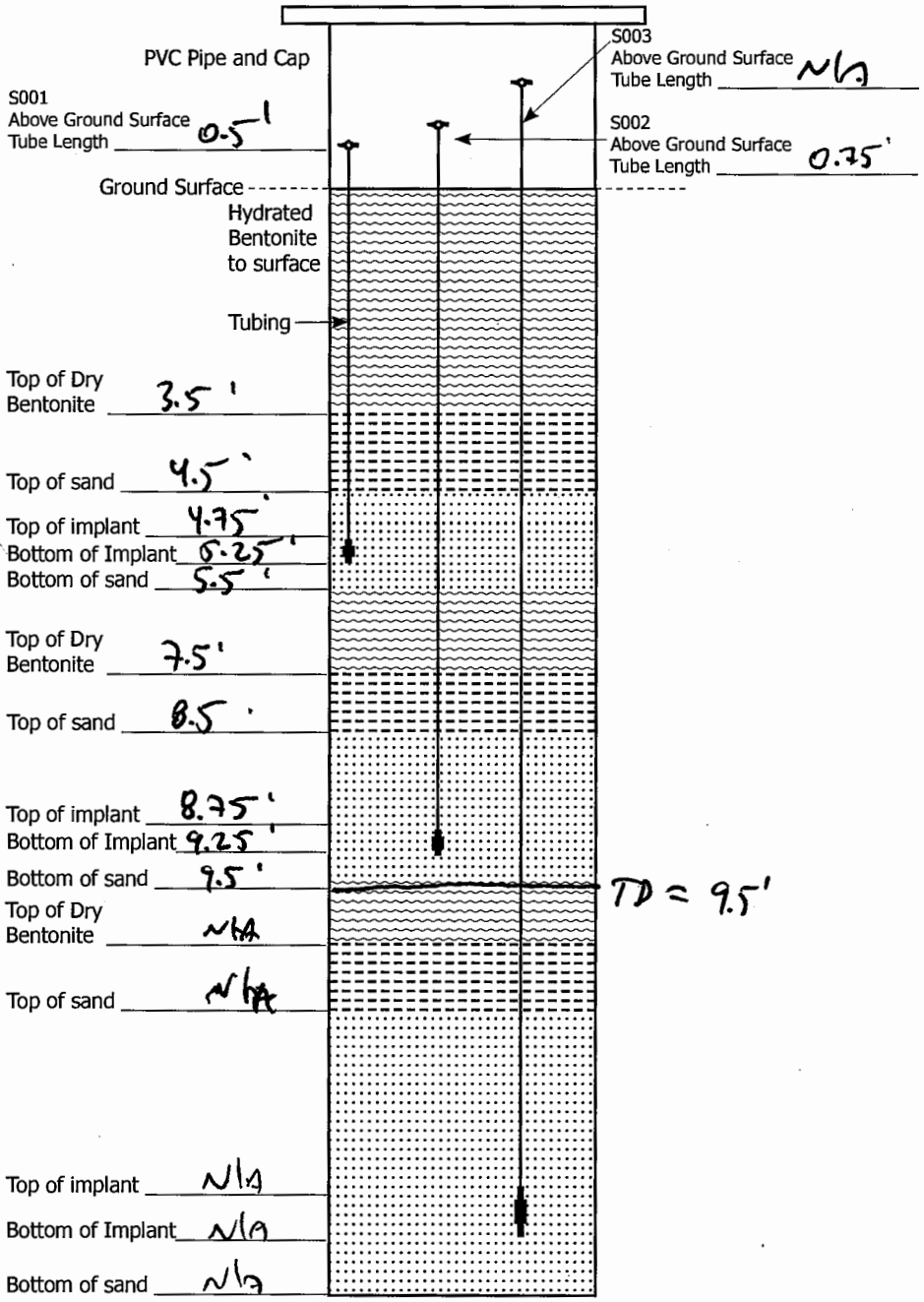
MWH

Multiple Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV_DG-529
Site: 8
Drilling Contractor: EST
Borehole TD: 9.5' bgs

Project: Phase 3 IDE SVDG 2014
Logged by: RABELLES
Driller: MORENO BROTHERS
Borehole Diameter: 3.5"

Job #: 10503982.30501105
Reviewed by:
Rig Type/Method: MANDAMER
Probe Completion Date/Time: 12 JUN 14; 14:00



Vapor Implant Specs

Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs

Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite

Type: #8 crumbles
Manufacturer: Cetco

Hydrated Bentonite

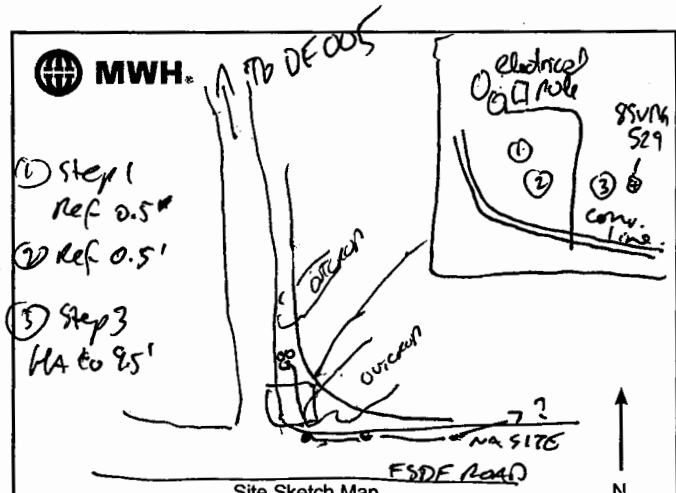
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not to scale.
2. Borings are approximately 2 inches in diameter using a Macrocore or Dual Tube sampler and can hold up to 5 soil vapor probes. If additional depths will require sampling at the same location, a second boring may need to be drilled.

FIGURE 4-2

MWH.



Site Sketch Map

Boring ID: SSV-DG-529	Sheet 1 of 1		
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014			
Job #: 10503982.3050105/ 10503982.3060105	Site: 8		
Logged By: Rob Ellis	Reviewed By:		
Drilling Contractor: EST	Drillers Name: MORGAN HUGHES		
Drill Rig Type/Method: HAND AUGER			
Sampler Type: BUCKET AUGER GRAB			
Borehole Diam (inch): 3.5"	Total Depth (ft.bgs): 9.5'		
Drill Bit Type: BUCKET AUGER			
Drill Start Time/Date: 12 JUN 14 13:20	Drill Finish Time/Date: 12 JUN 14 13:45		
Soil Vapor ID: SSV-DG-529	Soil Boring Backfill Time/Date: N/A	Backfill Material: N/A	
Soil Vapor Well Completion Time/Date: 12 JUN 14 ; 14:00	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None		
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5 ; 8.5-9.5	Surface Completion: SV probe		
Soil Vapor Well Detail Completed (yes/no): Sketched	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None		

Soil Description wildoat, grasses

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: generally flat between outcrops

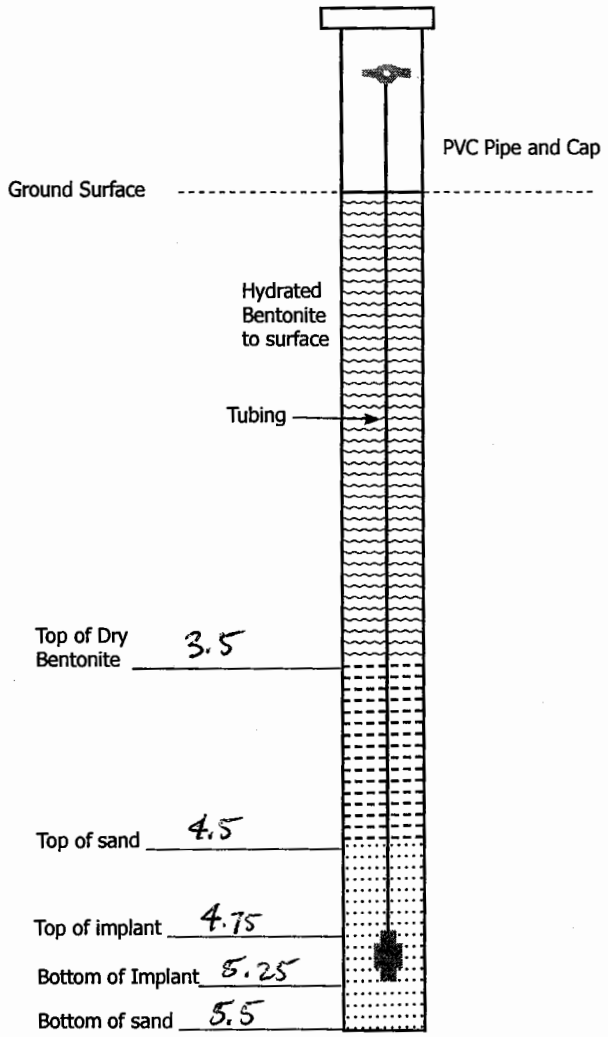
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0		9.5				0		0.0-2.5					
Mon						1	SM	Silty sand (SM) dark yellow brown (10YR 4/4), mostly fine sand (60), some silt (30), few medium sand (10) dry, loose. No stain, no odor. Fill.	–	–	10	60	30
						2							
						3		2.5-9.0					
						4		Silty sand (SM) dark yellow brown (10YR 4/6), dry, med-dense. Mostly fine sand (55), some silt (35), few medium sand (10). No stain, no odor, Fill.					
						5	SM						
						6		9.0-9.5					
						7		Poorly sorted sand (SP). Light yellowish brown (10YR 6/4). Slightly moist, loose, Mostly fine sand (80), few silt (med sand (10% est)). No stain, no odor, native soil some oxide stains	–	–	10	80	10
						8							
						9							
							SP						
							BR	TD = 9.5' bgs w/ refusal on weathered bedrock sandstone					

QA/QC
Surficial media boring log rev 2-25-2014

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-531
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA 8
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Hand Auger
Driller: Marty Kilvelen
Borehole TD: 5.5
Probe Completion Date/Time: 1130/6-12-14
Borehole Diameter: 3.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

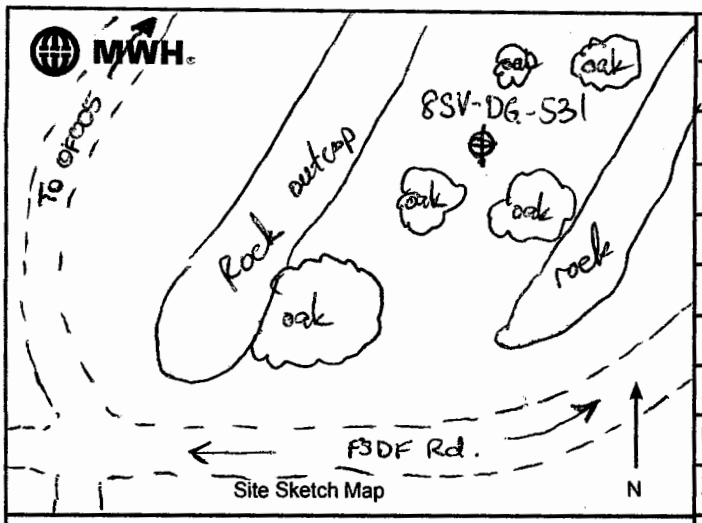
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.

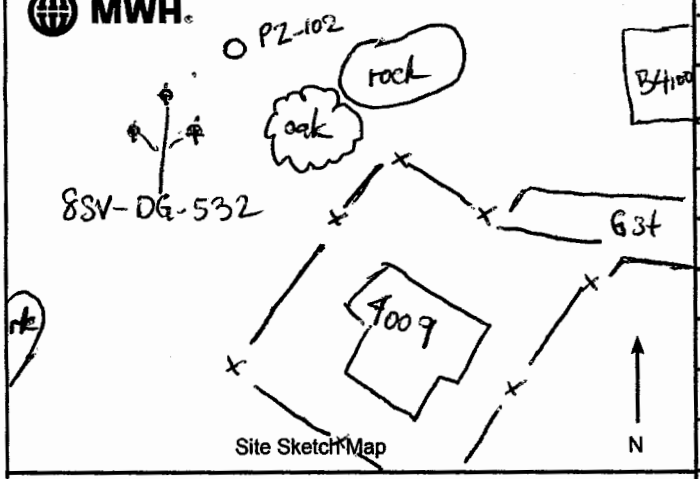


Site Sketch Map

Boring ID: 8SV-DG-531	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 8
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Killuhen
Drill Rig Type/Method: Hand Auger	
Sampler Type: Grab	
Borehole Diam (inch) 3.25"	Total Depth (ft bgs) 5.5'
Drill Bit Type: Standard auger bucket	
Drill Start Time/Date: 1042 / 6-12-14	Drill Finish Time/Date: 1112 / 6-12-14
Soil Vapor ID: 8SV-DG-531	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1130 / 6-12-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 4.5-5.5	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Small valley, grassy	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Silty Sand (SM), dark yellowish brown (10YR 4/4), med. dense, dry, fine sand, non-plastic silt, white calcite nodules (<1mm), no odor or staining, native	–	–	–	60	40/
						1							
						2							
						3							
						4		@4' color changes to yellowish brown (10YR 5/6), grades w/ clay, root fragment	–	–	–	60	30/10
						5							
						6	Br	Shale, weathered, brownish yellow ~~ox~~ oxidation (10YR 6/8), platy.					
						7		TD = 5.5', hand auger refusal on bedrock, install vapor probe 4.5-5.5'.					
						8							
						9							

MWH.



Site Sketch Map

Boring ID: SSV-DG-532	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: Subarea 8
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Marty Kilcher
Drill Rig Type/Method: Hand auger	
Sampler Type: Grab	
Borehole Diam (inch): 3.25"	Total Depth (ft bgs): 4.0
Drill Bit Type: Standard bucket auger	
Drill Start Time/Date: 1155 / 6-12-14	Drill Finish Time/Date: 1230 / 6-12-14
Soil Boring Backfill Time/Date: 1232 / 6-12-14	Backfill Material: (N.A.)
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None	
Surface Completion: Backfill w/ soil cuttings	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID:	N/A
Soil Vapor Well Completion Time/Date:	N/A
Soil Vapor Probe Depths (ft.bgs):	N/A
Soil Vapor Well Detail Completed (yes/no)	

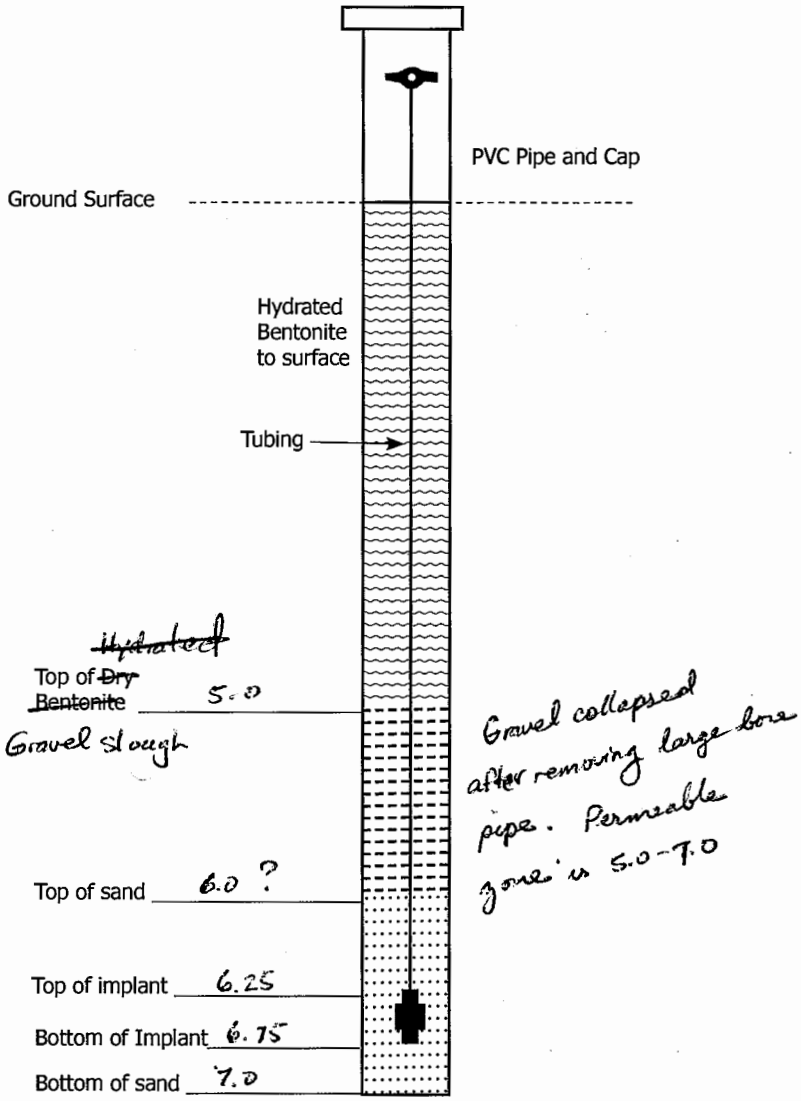
PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	SM	Surface Description: Grassy, ~20' SW from PZ-102. Silty Sand (SM), dark yellowish brown (10YR 4/6), med. dense, dry, fine sand, silt, roots, dry wood, fill		-	-	65	35
						1							
						2							
						3	CL	@3' CLAY (CL), dark yellowish brown (10YR 4/6), stiff, dry, white nodules (<1 mm), no stains or odors, ~~very~~ very difficult to auger through, native					
0.0			X		1230	4							
SVL-532-SA8-SB-3.5-4.0							BR	Sandstone(?), few fragments of weathered sandstone, poor recovery in auger bucket.					
						5							
						6							
						7		TD = 4.0 ft, refusal on bedrock; type of bedrock uncertain; need soil core to determine. Collect soil sample 3.5-4.0 and submit for VOC analyses.					
						8							
						9		Drilled 3 borings to confirm shallow refusal. 1st boring = 2.9', 2nd = 3.9', 3rd = 4.0'					

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-534
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 201
Site: SA 8
Reviewed by:
Logged by: V. Vathanasin
Drilling Contractor: EST
Rig Type/Method: Geoprobe 5400/DP
Driller: Morgan Hughes
Borehole TD: 7.0
Probe Completion Date/Time: 0950 / 5-20-14
Borehole Diameter: 1.5"

Install probe w/ large bore!



Vapor Implant Specs

Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs

Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs

Grain Size: #3
Manufacturer: Cemex

Dry Bentonite

Type: #8
Manufacturer: CETCO

Hydrated Bentonite

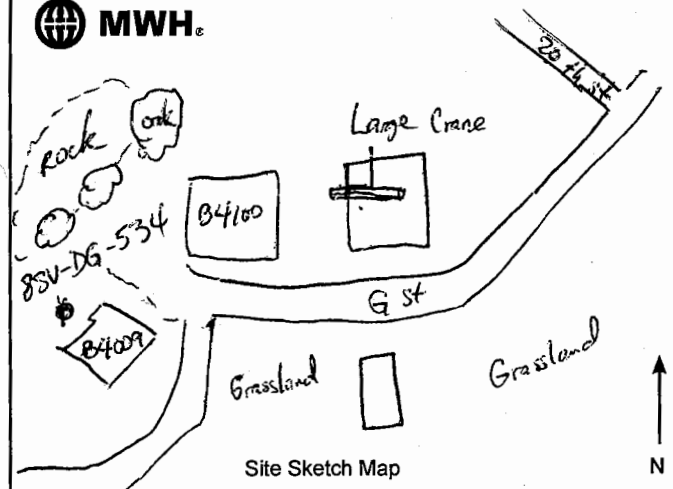
Type: #8
Manufacturer: CETCO

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

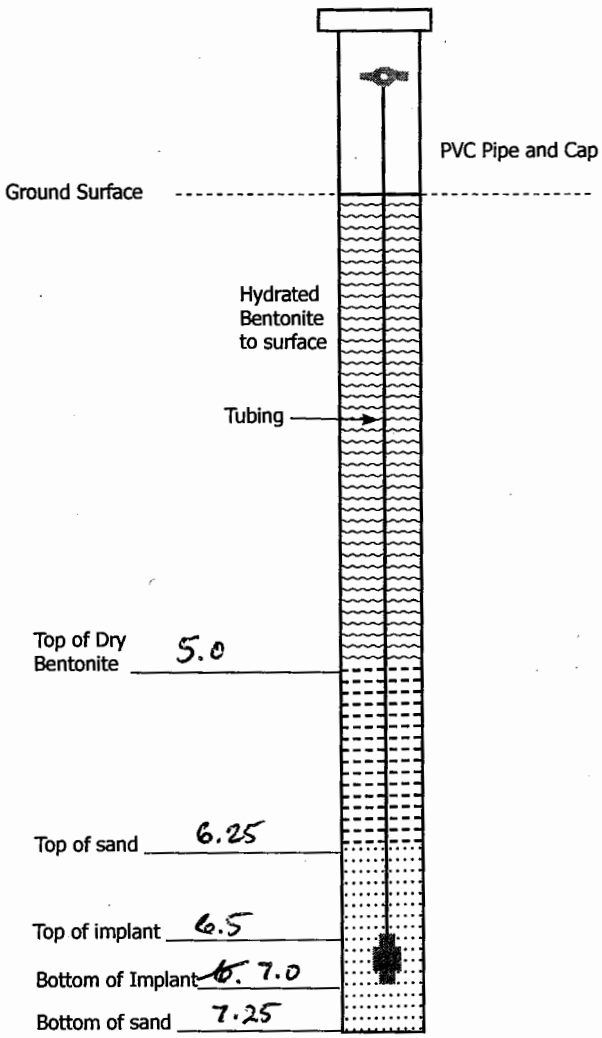
Boring ID: SSV-DG-534	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: SA 8
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Morgan Hughes
Drill Rig Type/Method: Geoprobe 5400 / DP	
Sampler Type: Macro core	
Borehole Diam (inch) 2.25"	Total Depth (ft.bgs) 7.0
Drill Bit Type: Macrocore	
Drill Start Time/Date: 0903 / 5-20-14	Drill Finish Time/Date: 0936 / 5-20-14
Soil Vapor ID: SSV-DG-534	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 0950 / 5-20-14	Observations: ☒ Debris ☐ Staining ☐ Odors ☐ Groundwater ☐ None
Soil Vapor Probe Depths (ft.bgs): 6.0 - 7.0'	Surface Completion: Vapor Probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description (1) Soil type (2) USCS Symbol (3) Munsell Color (4) Consistency/Density (5) Moisture (6) Grain Size % (7) Cementation (8) Plasticity (fines) (9) Geologic Unit (fill, alluvium, bedrock) (10) Misc. Observations — Surface Description: Asphalt	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
						0	AF	4" Asphalt	TR	-	-	65	35%
						1	SM	Silty Sand (SM), yellowish brown (10YR 5/6), med. dense, ~~dry~~ (V.) faint moisture, fine sand, low plasticity silt, trace fine angular gravel (base), no stains or odors, fill					
		26"	NONE			2							
						3		* Base gravel @ 4" to 7" caving into boring and preventing recovery					
0.0						4							
						5							
		3"				6							
						7	SP	Poorly graded Sand (SP) - Poor Recovery, observed residue					
							Br	Shale, partially weathered bedrock.					
						8		TD = 7.0', refusal on shale. Hole collapsed to 5.5 after tripping out and two ~~app~~ (V.) attempts to clear debris/gravel was unsuccessful. Drill large bore hole w/ disposable point 1-ft N. and install probe 6.0-7.0'; however, there may be gravel in the filter pack					
						9							

MWH.

Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV-DG-543
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 2014
Site: SA 8
Reviewed by:
Logged by: V. Vathanasri
Drilling Contractor: EST
Rig Type/Method: Hand auger
Driller: Pedro Garcia
Borehole TD: 7.25
Probe Completion Date/Time: 1010 / 6-12-14
Borehole Diameter: 3.25"



Vapor Implant Specs
Material: Stainless Steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: Teflon
Diameter: 1/4"
Color: Clear

Sand Pack Specs
Grain Size: #3
Manufacturer: Cemex

Dry Bentonite
Type: #8
Manufacturer: Cetco

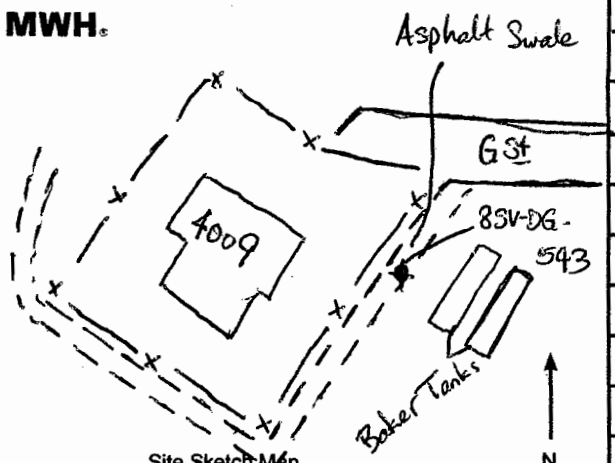
Hydrated Bentonite
Type: #8
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 8SV-DG-543	Sheet 1 of 1
Project: Phase 3 DOE Data Gap Sampling 2014	
Job #: 10503982.3050106 / 10503982.3060106	Site: SA 8 (V.V.)
Logged By: V. Vathanasin	Reviewed By:
Drilling Contractor: EST	Drillers Name: Pedro Garcia
Drill Rig Type/Method: Hand auger	
Sampler Type: Grab-	
Borehole Diam (inch): 3.25"	Total Depth (ft.bgs): 7.25
Drill Bit Type: Standard bucket auger	
Drill Start Time/Date: 0930/6-12-14	Drill Finish Time/Date: 1004/6-12-14
Soil Vapor ID: 8SV-DG-543	Soil Boring Backfill Time/Date: N/A — Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 1010/6-12-14	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 6.25'-7.25'	Surface Completion: Soil vapor probe
Soil Vapor Well Detail Completed (yes/no)	Type of Refusal: ☐ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations

Surface Description: In drainage E. of 4009, E. bank

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Sand: Medium	Sand: Fine	Silt/clay
						0	CL	2" Asphalt	-	-	-	25	/75
						1		Sandy Clay (CL), yellowish brown (10YR 5/4), med stiff, moist, med. plasticity clay, fine sand, no stains or odors, disturbed soil (fill).					
						2							
						3		@3' color changes to yellowish brown (10YR 5/8)					
						4							
0.0						5		Grades w/ calcite cement					
						6	SP-SM	Poorly Graded Sand w/ Silt (SP-SM), brownish yellow (10YR 6/6), loose, dry, fine sand, non-plastic silt, no stains or odors, native soil	-	-	-	90	10/
						7	Br						
						8							
0.0						9		Sandstone, weathered					
								TD= 7.25', refusal on bedrock. Install vapor probe @ 6.25'-7.25'. Probe set on E. bank of drainage. HDPE pipe in middle of drainage cannot be moved.					

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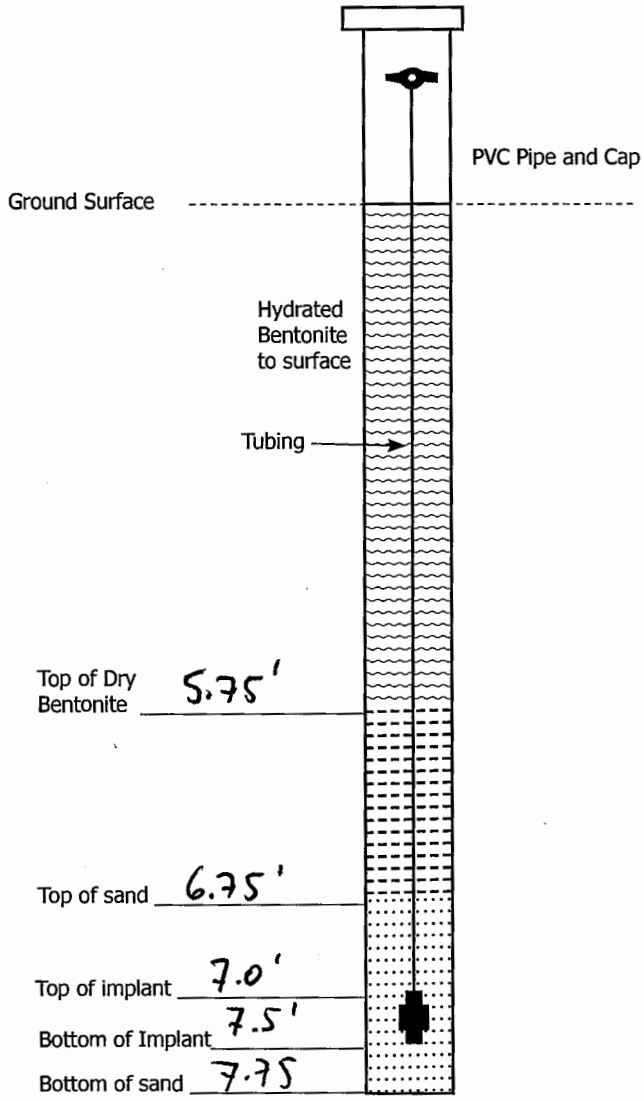
Single Soil Vapor Probe Construction Diagram

Probe ID/Soil ID: SSV_DG-545
Job #: 10503982.3050105/10503982.3060105
Project: Phase 3 DOE Data Gap Sampling 20
Site: 8
Reviewed by:
Logged by: ROB ELLIS
Drilling Contractor: EST
Rig Type/Method: HAND AUGER
Driller: MORGAN HUGHES
Borehole TD: 7.8' bgs
Probe Completion Date/Time: 12 JUN 13, 08:30
Borehole Diameter: 3.5"



Vapor Implant Specs
Material: stainless steel
Length: 6"
Diameter: 3/8"

Tubing Specs
Material: teflon
Diameter: 1/4"
Color: clear

Sand Pack Specs
Grain Size: #3 sand
Manufacturer: Cemex

Dry Bentonite
Type: #8 crumbles
Manufacturer: Cetco

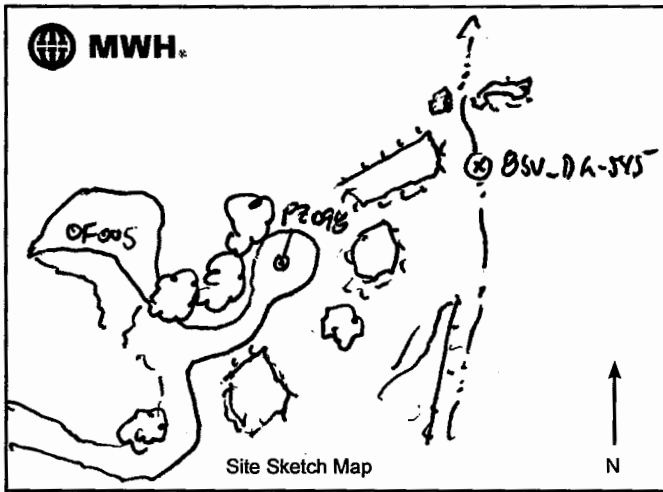
Hydrated Bentonite
Type: #8 crumbles
Manufacturer: Cetco

Notes:

1. Probes not drawn to scale.

FIGURE 4-1

MWH.



Site Sketch Map

Boring ID: 8SV_DG-545	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 8
Logged By: ROB ELLIS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MORGAN HUNTER
Drill Rig Type/Method: HAND AUGER	
Sampler Type: BUCKET AUGER GRAB	
Borehole Diam (inch): 3.5"	Total Depth (ft.bgs): 7.8'
Drill Bit Type: BUCKET AUGER	
Drill Start Time/Date: 12 JUN 14 ; 08:10	Drill Finish Time/Date: 12 JUN 14 ; 08:24
Soil Vapor ID: 8SV_DG-545	Soil Boring Backfill Time/Date: N/A Backfill Material: N/A
Soil Vapor Well Completion Time/Date: 12 JUN 14 ; 08:30	Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None
Soil Vapor Probe Depths (ft.bgs): 6.75' – 7.75'	Surface Completion: SV PROBE
Soil Vapor Well Detail Completed (yes/no) attached.	Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None

Soil Description: 1) Soil type 2) USCS Symbol 3) Munsell Color 4) Consistency/Density 5) Moisture 6) Grain Size % 7) Cementation 8) Plasticity (fines) 9) Geologic Unit (fill, alluvium, bedrock) 10) Misc. Observations — poison oak, yerba santa.

Surface Description: in thalweg; grassy

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
0.0 ppm		7.8'				0–1	SM	0.0 – 3.5 Silty sand (SM) dark yellowish brown (10YR 4/4). Slightly moist, loose. Mostly fine sand (55), some silt (35), few coarse + medium sand (5 each). No stain, odor. Native.	–	5	5	55	35
						3–4	SP-SM	3.5 – 7.75 Poorly sorted sand with silt (SP-SM), yellowish brown (10YR 5/6). Loose, slightly moist. Mostly fine sand (65), little silt (25), few med. sand (10). No stain, no odor. Native soil.	–	–	10	65	25
						7–8	SP	7.75 – 7.8 Weathered sandstone bedrock, fine, medium grained, highly weathered (W4); weak (R2), soft (H6) oxide staining. Brownish yellow overall (10YR 6/6).					

TD = 7.8' bgs w/ refusal on weathered sandstone

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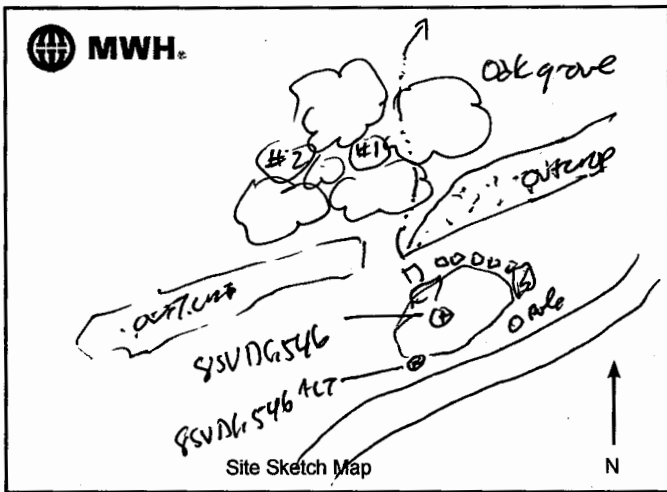

Site Sketch Map

Boring ID: SSV_DG-546	Sheet 1 of 1
Project: Phase 3 DOE Soil Vapor Data Gap Sampling 2014	
Job #: 10503982.3050105/ 10503982.3060105	Site: 8
Logged By: RWB ELLIS	Reviewed By:
Drilling Contractor: EST	Drillers Name: MORGAN HUGHES
Drill Rig Type/Method: HAND AUGER	
Sampler Type: BUCKET AUGER GRAB	
Borehole Diam (inch): 3.5"	Total Depth (ft.bgs): 4.9'
Drill Bit Type: BUCKET AUGER	
Drill Start Time/Date: 09:44 12JUN14	Drill Finish Time/Date: 10:26 12JUN14
Soil Boring Backfill Time/Date: 10:33 12JUN14	Backfill Material: SOIL CUTTINGS 12JUN14
Observations: ☐ Debris ☐ Staining ☐ Odors ☐ Groundwater ☒ None	
Surface Completion: NONE	
Type of Refusal: ☒ Bedrock ☐ Debris ☐ Gravel ☐ Unknown ☐ None	

Soil Vapor ID:	N/A
Soil Vapor Well Completion Time/Date:	N/A
Soil Vapor Probe Depths (ft.bgs):	N/A
Soil Vapor Well Detail Completed (yes/no)	N/A

Soil Description wild oat

1) Soil type
2) USCS Symbol
3) Munsell Color
4) Consistency/Density
5) Moisture
6) Grain Size %
7) Cementation
8) Plasticity (fines)
9) Geologic Unit (fill, alluvium, bedrock)
10) Misc. Observations

Surface Description: on bank next to drainage.

PID/OVA	Sample Interval	Recovered (in.)	Retained for Analysis	Sample Number	Sample Time	Depth (Feet)	USCS Soil Type	Soil Description	Gravel	Estimated % of Sand: Coarse	Medium	Fine	Silt/clay
		4.9'				0		0-4.9					
						1		Silty sand (SM); brown	–	–	10	60	30
								(10YR 4/3) transitioning to					
						2		(10YR 4/4) gradually. Loose,					
							SM	dry. Mostly fine sand (60),					
						3		some silt (30); few medium					
								sand (10). No stain, no					
						4		odor; probable native.					
			☒	4.4				Proximal oak trees, within					
				4.9		4.9'		20' feet; but fine oak roots					
Sample @ 10:25						5		throughout; one up to 3/4" for no root					
SVL-546-SA8-SB-4.4-4.9 MS						6		• Location moved downgradient					
+ Dup1 @ 10:30								and stepped 5.5' (W) from the dwg.					
SVL-546-SA8-SB-4.4-4.9						7		for #1; refusal @ 3.0',					
12 µRem 52 cpm								stepped additional 5.3' (W) to					
0.0 ppm @ 10:25h						8		location #2. TD = 4.9'					
9 encores + 1 8oz jar								w/ refusal on weathered					
						9		bedrock.					

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APPENDIX B

SOIL VAPOR ANALYTICAL RESULTS

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.031	U	0.031	0.0077	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0018	J	0.0064	0.0013	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.013	UJ	0.013	0.0025	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0053	U	0.0053	0.0011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.016		0.0098	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0099	U	0.0099	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0087	U	0.0087	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.019	U	0.019	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.011	U	0.011	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.031		0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0075	U	0.0075	0.0015	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.011	U	0.011	0.0021	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 8:51	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0051	U	0.0051	0.001	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.031	U	0.031	0.0077	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0056	J	0.0064	0.0013	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.013	UJ	0.013	0.0025	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0053	U	0.0053	0.0011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.058		0.0098	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0099	U	0.0099	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0087	U	0.0087	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.023	U	0.023	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.011	U	0.011	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.027		0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.015		0.0075	0.0015	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.011	U	0.011	0.0021	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 9:12	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0051	U	0.0051	0.001	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.031	U	0.031	0.0077	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0044	J	0.0064	0.0013	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.013	UJ	0.013	0.0025	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0053	U	0.0053	0.0011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.016		0.0098	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0099	U	0.0099	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0087	U	0.0087	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.015	U	0.015	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0087	U	0.0087	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.024		0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.008		0.0075	0.0015	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.011	U	0.011	0.0021	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 9:54	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0051	U	0.0051	0.001	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.069	U	0.069	0.014	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.055	U	0.055	0.011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.069	U	0.069	0.014	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.15	U	0.15	0.038	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.055	U	0.055	0.011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.04	U	0.04	0.0081	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.04	U	0.04	0.0079	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.04	U	0.04	0.0081	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.014	J	0.032	0.0064	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.063	UJ	0.063	0.013	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.026	U	0.026	0.0053	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.049	U	0.049	0.0098	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.04	U	0.04	0.0079	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.049	U	0.049	0.0099	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.043	U	0.043	0.0087	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.035	U	0.035	0.0069	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.043	U	0.043	0.0087	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.043	U	0.043	0.0087	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.068	U	0.068	0.014	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.019	J	0.038	0.0075	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.04	U	0.04	0.0079	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.054	U	0.054	0.011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.056	U	0.056	0.011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.026	U	0.026	0.0051	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.014	U	0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.031	U	0.031	0.0077	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0081	U	0.0081	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0068		0.0064	0.0013	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.013	UJ	0.013	0.0025	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0053	U	0.0053	0.0011	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.006	J	0.0098	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0099	U	0.0099	0.002	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.011	U	0.011	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.034		0.0087	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.016	U	0.016	0.0017	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.032		0.014	0.0027	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.019		0.0075	0.0015	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.0079	U	0.0079	0.0016	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.011	U	0.011	0.0021	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.011	U	0.011	0.0022	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-504	SVL-504-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0051	U	0.0051	0.001	1481734	Lancaster	Y	V	1481734	267581.39112	1785330.03449	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.019		0.0032	0.00064	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.11		0.0049	0.00099	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.02		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.062		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.028		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0037	J	0.0068	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.022		0.0038	0.00075	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.036		0.0054	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.027		0.0056	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-10.0-11.0	Primary Sample	--	6/10/2014 12:04	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.018		0.0032	0.00064	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.073		0.0049	0.00099	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.019		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.058		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.027		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0029	J	0.0068	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.022		0.0038	0.00075	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0011	J	0.0054	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-15.0-16.0	Primary Sample	--	6/10/2014 12:39	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0031	J	0.0032	0.00064	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.054		0.0049	0.00099	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.034		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.081		0.043	0.0087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.07		0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0043	J	0.0068	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0076		0.0038	0.00075	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-20.0-21.0	Primary Sample	--	6/10/2014 13:03	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00068	J	0.0032	0.00064	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.054		0.0049	0.00099	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0044	U	0.0044	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.012	U	0.012	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0073	U	0.0073	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0041	J	0.0068	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0038	U	0.0038	0.00075	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-25.0-26.0	Primary Sample	--	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0037	J	0.004	0.00081	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0032	U	0.0032	0.00064	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0014	J	0.0049	0.00098	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0085	U	0.0085	0.00099	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.012		0.0035	0.00069	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0055	U	0.0055	0.00075	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-509-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 11:30	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481734	Lancaster	Y	V	1481734	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.056		0.00989	0.00359	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.00371	J	0.0174	0.00217	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00195	J	0.00868	0.00117	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.00337	J	0.0136	0.00173	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00754	U	0.00754	0.000961	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-509	SVL-909-SA5A-SV-25.0-26.0	Split Sample	SVL-509-SA5A-SV-25.0-26.0	6/10/2014 14:19	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	267607.91344	1785374.66321	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0013	J	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0027	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0086		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0052		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.005	J	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0031	J	0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-512	SVL-512-SA5A-SV-5.5-6.5	Primary Sample	--	6/11/2014 7:54	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267568.79566	1785519.79318	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00066	J	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00097	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0016	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0014	J	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.005		0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-10.0-11.0	Primary Sample	--	6/11/2014 8:50	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.001	J	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0024	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0061		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0037	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.002	J	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0015	J	0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-521	SVL-521-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 8:24	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267551.02192	1785772.77804	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0067	J	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0032	U	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0021	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0079		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0047		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0043		0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-522	SVL-522-SA5A-SV-7.5-8.5	Primary Sample	--	6/11/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267688.12876	1785725.66263	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.034	U	0.034	0.0069	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.027	U	0.027	0.0055	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.034	U	0.034	0.0069	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.077	U	0.077	0.019	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.027	U	0.027	0.0055	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.02	U	0.02	0.004	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.02	U	0.02	0.004	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.02	U	0.02	0.004	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.019		0.016	0.0032	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.031	U	0.031	0.0063	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.013	U	0.013	0.0026	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.024	U	0.024	0.0049	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.02	U	0.02	0.004	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.025	U	0.025	0.0049	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0061	J	0.022	0.0043	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.017	U	0.017	0.0035	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.016	J	0.022	0.0043	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0075	J	0.022	0.0043	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.034	U	0.034	0.0068	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.03		0.019	0.0038	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.02	U	0.02	0.004	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.027	U	0.027	0.0054	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.028	U	0.028	0.0056	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 9:31	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.013	U	0.013	0.0026	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.049		0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0088		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.02		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.01		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0044	J	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.053		0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-528	SVL-528-SA5A-SV-9.0-10.0	Primary Sample	--	6/11/2014 10:02	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267538.77202	1786017.96499	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-537	SVL-537-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:23	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267443.15003	1785638.09580	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-4.5-5.5	Primary Sample	--	6/10/2014 10:57	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0058	J	0.02	0.0043	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-540	SVL-540-SA5A-SV-8.5-9.5	Primary Sample	--	6/10/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267399.98501	1785830.45506	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0062	J	0.02	0.0043	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place
5ASV_DG-543	SVL-543-SA5A-SV-5.0-6.0	Primary Sample	--	6/10/2014 12:26	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267341.61611	1785948.30912	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-546	SVL-546-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267444.16517	1786178.41882	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-547	SVL-547-SA5A-SV-6.0-7.0	Primary Sample	--	6/10/2014 13:42	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267368.80978	1786117.79543	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0012	J	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0011	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.002	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0014	J	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0013	J	0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-10.5-11.5	Primary Sample	--	6/11/2014 11:54	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00082	J	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0014	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0044	U	0.0044	0.00087	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0029	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.001	J	0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-560	SVL-560-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 11:26	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267666.51641	1785942.27651	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0032	U	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0012	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0022	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00093	J	0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-12.0-13.0	Primary Sample	--	6/11/2014 14:10	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0018	J	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.011	J	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00076	J	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.0034	J	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.041	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.064		0.043	0.0087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.11	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.16	J	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0052	J	0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.018	J	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-565-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:35	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	UJ	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0032	U	0.0032	0.00064	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0015	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0057		0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0033	J	0.0043	0.00087	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	UJ	0.0068	0.0014	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0017	J	0.0038	0.00075	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	UJ	0.0054	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-565	SVL-865-SA5A-SV-5.0-6.0	Field Duplicate	SVL-565-SA5A-SV-5.0-6.0	6/11/2014 13:43	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1481735	Lancaster	Y	V	1481735	267729.05578	1786095.49730	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-568	SVL-568-SA5A-SV-6.0-7.0	Primary Sample	--	6/11/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267724.62275	1786201.86155	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-570	SVL-570-SA5A-SV-7.0-8.0	Primary Sample	--	6/11/2014 12:34	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267633.78287	1786137.55122	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-582	SVL-582-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267625.76939	1786578.67756	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-592	SVL-592-SA5A-SV-5.0-6.0	Primary Sample	--	6/11/2014 13:43	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266933.99799	1786137.42180	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0032	U	0.0032	0.00064	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	UJ	0.0063	0.0013	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0049	U	0.0049	0.00069	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0038	U	0.0038	0.00075	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-595	SVL-595-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1482106	Lancaster	Y	V	1482106	266646.39243	1786320.65167	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0177		0.0153	0.00625	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.00218	J	0.0174	0.00217	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00868	U	0.00868	0.00117	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00131	J	0.00754	0.000961	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-1009-SA5A-SV-7.0-8.0	Split Sample	SVL-609-SA5A-SV-7.0-8.0	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56665-1	TestAmerica - Denver	Y	V	280-56665-1	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.019		0.015	0.0038	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0032	U	0.0032	0.00064	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	UJ	0.0063	0.0013	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0038	U	0.0038	0.00075	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-609	SVL-609-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 13:20	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1482106	Lancaster	Y	V	1482106	266852.42119	1786654.64425	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0019	J	0.0032	0.00064	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	UJ	0.0063	0.0013	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0038	U	0.0038	0.00075	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-616	SVL-616-SA5A-SV-6.5-7.5	Primary Sample	--	6/12/2014 10:03	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1482106	Lancaster	Y	V	1482106	267168.10430	1786684.50676	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0032	U	0.0032	0.00064	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	UJ	0.0063	0.0013	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0012	J	0.0049	0.00098	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0027	J	0.0068	0.0014	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0038	U	0.0038	0.00075	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-618	SVL-618-SA5A-SV-5.0-6.0	Primary Sample	--	6/12/2014 11:01	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1482106	Lancaster	Y	V	1482106	267387.66979	1786840.82390	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00085	J	0.0032	0.00064	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	UJ	0.0063	0.0013	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0047	U	0.0047	0.00087	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0038	U	0.0038	0.00075	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-619	SVL-619-SA5A-SV-4.5-5.5	Primary Sample	--	6/12/2014 10:33	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1482106	Lancaster	Y	V	1482106	267374.11212	1786666.31403	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0015	J	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0029	J	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.005		0.0032	0.00064	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.015		0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.081		0.0035	0.00069	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.024		0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.012		0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0031	J	0.0068	0.0014	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.17		0.038	0.0075	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.088		0.004	0.00079	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.024		0.0054	0.0011	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-622	SVL-622-SA5A-SV-6.0-7.0	Primary Sample	--	6/12/2014 11:25	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1482106	Lancaster	Y	V	1482106	267459.02198	1786788.11813	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-626-SA5A-SV-5.5-6.5	Primary Sample	--	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.011	J	0.02	0.011	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-626	SVL-926-SA5A-SV-5.5-6.5	Field Duplicate	SVL-626-SA5A-SV-5.5-6.5	6/12/2014 7:48	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	267486.27504	1786947.97265	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00067	J	0.0032	0.00064	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0059	U	0.0059	0.00087	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0038	U	0.0038	0.00075	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place
5ASV_DG-629	SVL-629-SA5A-SV-7.0-8.0	Primary Sample	--	6/12/2014 12:01	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1482106	Lancaster	Y	V	1482106	267542.67708	1787185.20208	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.055		0.0032	0.00064	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.05		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.17		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.058		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0027	J	0.0068	0.0014	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.28	J	0.0038	0.00075	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-503	SVL-503-SA5B-SV-7.0-8.0	Primary Sample	--	5/21/2014 15:50	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476964	Lancaster	Y	V	1476964	267351.26640	1784783.51700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.002	J	0.0032	0.00064	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.024		0.0049	0.00099	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.012	U	0.012	0.00087	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.008	U	0.008	0.00087	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0025	J	0.0038	0.00075	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.01		0.0056	0.0011	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-512	SVL-512-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 11:11	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476964	Lancaster	Y	V	1476964	267474.81890	1784961.44700	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00073	J	0.0032	0.00064	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0056		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00082	J	0.0035	0.00069	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.026		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.012		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.026		0.0068	0.0014	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0078		0.0038	0.00075	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0016	J	0.0056	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 12:47	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00089	J	0.0032	0.00064	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0067	U	0.0067	0.00087	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.014		0.0068	0.0014	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0026	J	0.0038	0.00075	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0016	J	0.0056	0.0011	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-516-SA5B-SV-6.0-7.0	Primary Sample	--	5/21/2014 12:23	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476964	Lancaster	Y	V	1476964	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0014	U	0.0075	0.0014	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00047	U	0.003	0.00047	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.001	U	0.0076	0.001	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0061	J	0.013	0.00059	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0011	U	0.003	0.0011	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00028	U	0.0022	0.00028	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00087	U	0.0022	0.00087	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00031	U	0.0022	0.00031	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0003	U	0.0018	0.0003	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00043	U	0.0035	0.00043	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0007	U	0.0015	0.0007	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00037	U	0.0027	0.00037	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00038	U	0.0022	0.00038	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00032	U	0.0027	0.00032	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0038	U	0.0038	0.00069	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.019	U	0.019	0.00095	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.017		0.0096	0.0016	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0076	U	0.0076	0.00075	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.025		0.0037	0.0005	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0068		0.0021	0.00056	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00055	U	0.0022	0.00055	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00041	U	0.003	0.00041	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0033	J	0.0062	0.0011	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-516	SVL-916-SA5B-SV-12.5-13.5	Split Sample	SVL-516-SA5B-SV-12.5-13.5	5/21/2014 12:55	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00062	U	0.0014	0.00062	14-05-1846	Calscience	Y	V	14-05-1846	267554.46750	1785034.40400	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.057		0.02	0.0054	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.03		0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	2.7		0.02	0.0053	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-13.0-14.0	Primary Sample	--	6/13/2014 8:59	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.071		0.02	0.0054	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.014	J	0.02	0.011	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	2.7		0.02	0.0053	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-525-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.053		0.02	0.0054	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	2.4		0.02	0.0053	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-825-SA5B-SV-8.0-9.0	Field Duplicate	SVL-525-SA5B-SV-8.0-9.0	6/13/2014 8:35	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0014	U	0.0074	0.0014	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.076		0.0029	0.00046	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.001	U	0.0074	0.001	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0046	J	0.012	0.00058	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0011	U	0.0029	0.0011	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0022		0.0022	0.00028	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00085	U	0.0021	0.00085	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0003	U	0.0022	0.0003	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0028		0.0017	0.00029	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00042	U	0.0034	0.00042	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00069	U	0.0014	0.00069	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00036	U	0.0026	0.00036	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00037	U	0.0021	0.00037	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0074	U	0.0074	0.00032	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0027		0.0023	0.00068	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.019	U	0.019	0.00093	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0094	U	0.0094	0.0016	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0011	J	0.0023	0.00073	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0067		0.0037	0.00049	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.002	U	0.002	0.00055	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00054	U	0.0021	0.00054	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.044		0.0029	0.0004	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Lab Repeat Analysis	EPA TO-15	Trichlorofluoromethane	1.2		0.025	0.0042	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-525	SVL-925-SA5B-SV-13.0-14.0	Split Sample	SVL-525-SA5B-SV-13.0-14.0	6/13/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00061	U	0.0014	0.00061	14-06-1132	Calscience	Y	V	14-06-1132	267391.48745	1785145.77292	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.041		0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.018		0.015	0.0038	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0048		0.004	0.00081	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0018	J	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0011	J	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.053		0.0032	0.00064	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.012	U	0.012	0.00099	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.1		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00087	J	0.0035	0.00069	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.22		0.043	0.0087	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.14		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0096		0.0068	0.0014	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.32		0.038	0.0075	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0021	J	0.0054	0.0011	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	3.5		0.14	0.028	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-12.5-13.5	Primary Sample	--	5/21/2014 9:57	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.036		0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0066	J	0.015	0.0038	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0012	J	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.022		0.0032	0.00064	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0011	J	0.0049	0.00098	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.087		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.23		0.043	0.0087	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.12		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0054	J	0.0068	0.0014	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.24		0.038	0.0075	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.96	J	1.1	0.22	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-526	SVL-526-SA5B-SV-5.0-6.0	Primary Sample	--	5/21/2014 9:15	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476964	Lancaster	Y	V	1476964	267403.40630	1785102.62200	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0035	J	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.11		0.015	0.0038	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0022	J	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.005		0.0032	0.00064	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0012	J	0.0049	0.00098	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.068		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.23		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.081		0.0043	0.00087	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0028	J	0.0068	0.0014	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.18		0.0038	0.00075	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.002	J	0.0054	0.0011	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	1.9		1.1	0.22	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-530	SVL-530-SA5B-SV-6.75-7.75	Primary Sample	--	5/21/2014 14:31	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476964	Lancaster	Y	V	1476964	267359.58200	1784982.72900	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2		0.02	0.012	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	1.1		0.02	0.0053	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-10.0-11.0	Primary Sample	--	6/4/2014 12:53	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.2	U	0.2	0.09	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.2	U	0.2	0.054	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.2	UJ	0.2	0.089	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	7.9		0.2	0.12	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.2	U	0.2	0.063	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.2	U	0.2	0.062	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.2	U	0.2	0.072	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.2	U	0.2	0.11	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.2	U	0.2	0.041	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.2	U	0.2	0.12	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.2	U	0.2	0.16	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.2	UJ	0.2	0.06	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.2	U	0.2	0.094	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.2	U	0.2	0.11	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.2	U	0.2	0.03	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.2	U	0.2	0.1	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.2	U	0.2	0.08	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.2	U	0.2	0.089	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.2	U	0.2	0.053	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.2	UJ	0.2	0.043	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.2	U	0.2	0.039	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.2	U	0.2	0.12	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	10		0.2	0.053	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-16.75-17.75	Primary Sample	--	6/4/2014 13:20	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.2	U	0.2	0.1	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.21		0.02	0.012	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	1.1		0.02	0.0053	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-531	SVL-531-SA5B-SV-5.0-6.0	Primary Sample	--	6/4/2014 11:40	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267288.16802	1785018.03170	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-552-SA5B-SV-5.3-6.3	Primary Sample	--	6/5/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0013	U	0.0069	0.0013	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00043	U	0.0027	0.00043	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.00095	U	0.0069	0.00095	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00054	U	0.011	0.00054	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.001	U	0.0027	0.001	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00026	U	0.002	0.00026	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00079	U	0.002	0.00079	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00028	U	0.002	0.00028	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00027	U	0.0016	0.00027	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00039	U	0.0031	0.00039	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00064	U	0.0013	0.00064	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0019	J	0.0024	0.00034	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00035	U	0.002	0.00035	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0026		0.0025	0.00029	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00063	U	0.0022	0.00063	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.017	U	0.017	0.00086	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0014	U	0.0087	0.0014	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00068	U	0.0022	0.00068	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0011	J	0.0034	0.00046	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00082	J	0.0019	0.00051	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.0005	U	0.002	0.0005	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00037	U	0.0027	0.00037	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.00096	U	0.0056	0.00096	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-552	SVL-952-SA5B-SV-5.3-6.3	Split Sample	SVL-552-SA5B-SV-5.3-6.3	6/5/2014 12:00	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00057	U	0.0013	0.00057	14-06-0556	Calscience	Y	V	14-06-0556	267296.81211	1785412.70839	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-555	SVL-555-SA5B-SV-7.2-8.2	Primary Sample	--	6/5/2014 13:02	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	267138.16526	1785281.41733	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.048	J	0.02	0.016	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-557-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-557	SVL-857-SA5B-SV-4.5-5.5	Field Duplicate	SVL-557-SA5B-SV-4.5-5.5	6/11/2014 8:08	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	267164.07344	1785536.96712	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00096	J	0.0032	0.00064	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00098	J	0.0049	0.00098	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0093		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.032		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.019	U	0.019	0.00087	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0064	J	0.0068	0.0014	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0047	U	0.0047	0.00075	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0023	J	0.0054	0.0011	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-560-SA5B-SV-7.0-8.0	Primary Sample	--	5/22/2014 14:30	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476965	Lancaster	Y	V	1476965	267089.42790	1785110.48700	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0013	U	0.0069	0.0013	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00043	U	0.0028	0.00043	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.00095	U	0.0069	0.00095	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0044	J	0.012	0.00054	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.001	U	0.0028	0.001	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00026	U	0.002	0.00026	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0008	U	0.002	0.0008	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00028	U	0.002	0.00028	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0019		0.0016	0.00027	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00039	U	0.0032	0.00039	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00064	U	0.0013	0.00064	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00034	U	0.0025	0.00034	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00035	U	0.002	0.00035	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.004	U	0.004	0.0003	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0059	U	0.0059	0.00064	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.018	U	0.018	0.00087	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.02	U	0.02	0.0015	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.011	U	0.011	0.00069	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0062		0.0034	0.00046	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.006	U	0.006	0.00051	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00051	U	0.002	0.00051	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0043		0.0027	0.00038	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0057	U	0.0057	0.00097	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-560	SVL-960-SA5B-SV-7.0-8.0	Split Sample	SVL-560-SA5B-SV-7.0-8.0	5/22/2014 14:38	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00057	U	0.0013	0.00057	14-05-1846	Calscience	Y	V	14-05-1846	267089.42790	1785110.48700	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.023		0.02	0.0053	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-561	SVL-561-SA5B-SV-9.0-10.0	Primary Sample	--	6/13/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267013.99262	1785061.15058	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0014	J	0.0032	0.00064	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.024		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.077		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.036		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0038	J	0.0068	0.0014	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.022	U	0.022	0.00075	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-5.0-6.0	Primary Sample	--	5/22/2014 12:09	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476965	Lancaster	Y	V	1476965	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.021		0.02	0.016	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0064	J	0.02	0.0043	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-562	SVL-562-SA5B-SV-8.0-9.0	Primary Sample	--	6/13/2014 10:05	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	267002.42770	1784996.21600	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.015	J	0.02	0.0054	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-567-SA5B-SV-4.5-5.5	Primary Sample	--	6/11/2014 8:56	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0104		0.00818	0.00177	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.00229	J	0.0174	0.00217	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00129	J	0.00868	0.00117	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00189	J	0.00754	0.000961	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-567	SVL-967-SA5B-SV-4.5-5.5	Split Sample	SVL-567-SA5B-SV-4.5-5.5	6/11/2014 9:01	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	266786.09649	1785104.52993	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-577	SVL-577-SA5B-SV-5.2-6.2	Primary Sample	--	6/11/2014 10:56	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266475.59593	1785400.60182	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-578	SVL-578-SA5B-SV-8.0-9.0	Primary Sample	--	6/6/2014 12:30	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266450.65285	1785486.62767	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-579	SVL-579-SA5B-SV-6.5-7.5	Primary Sample	--	6/11/2014 9:36	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266425.18846	1785570.62549	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-580-SA5B-SV-7.0-8.0	Primary Sample	--	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-580	SVL-880-SA5B-SV-7.0-8.0	Field Duplicate	SVL-580-SA5B-SV-7.0-8.0	6/18/2014 8:09	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266354.73446	1785489.58952	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-10.0-11.0	Primary Sample	--	6/9/2014 11:31	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-15.0-16.0	Primary Sample	--	6/9/2014 12:25	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.0054	J	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-20.0-21.0	Primary Sample	--	6/9/2014 12:49	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-584	SVL-584-SA5B-SV-5.0-6.0	Primary Sample	--	6/9/2014 11:03	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	267040.52845	1785593.31552	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.0088	J	0.02	0.008	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-590	SVL-590-SA5B-SV-6.0-7.0	Primary Sample	--	6/6/2014 9:27	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266878.07014	1785876.09500	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-593	SVL-593-SA5B-SV-5.0-6.0	Primary Sample	--	6/11/2014 10:21	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41101	EST	Y	V	3F41101	266693.83656	1785846.65870	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-594	SVL-594-SA5B-SV-5.0-6.0	Primary Sample	--	6/6/2014 10:18	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266719.90594	1785996.14955	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-599-SA5B-SV-8.0-9.0	Primary Sample	--	6/18/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0174	U	0.0174	0.00217	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00868	U	0.00868	0.00117	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00754	U	0.00754	0.000961	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-599	SVL-999-SA5B-SV-8.0-9.0	Split Sample	SVL-599-SA5B-SV-8.0-9.0	6/18/2014 9:18	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266502.81244	1785887.02876	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place
5BSV_DG-606	SVL-606-SA5B-SV-5.5-6.5	Primary Sample	--	6/6/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266353.55699	1785763.18212	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5BSV_DG-612	SVL-612-SA5B-SV-4.5-5.5	Primary Sample	--	6/6/2014 11:19	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266599.05617	1785879.09543	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	UJ	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.017	J	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-10.0-11.0	Primary Sample	--	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	UJ	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0054	J	0.02	0.0043	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-15.0-16.0	Primary Sample	--	6/2/2014 11:59	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	UJ	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.009	J	0.02	0.0043	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-505-SA5C-SV-5.0-6.0	Primary Sample	--	6/2/2014 10:52	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	UJ	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0076	J	0.02	0.0043	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-805-SA5C-SV-10.0-11.0	Field Duplicate	SVL-505-SA5C-SV-10.0-11.0	6/2/2014 11:24	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0014	U	0.0076	0.0014	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00047	U	0.003	0.00047	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.001	U	0.0076	0.001	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00086	J	0.013	0.00059	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0011	U	0.003	0.0011	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00028	U	0.0022	0.00028	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00087	U	0.0022	0.00087	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00031	U	0.0022	0.00031	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0021		0.0018	0.0003	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00043	U	0.0035	0.00043	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0007	U	0.0015	0.0007	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00037	U	0.0027	0.00037	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00038	U	0.0022	0.00038	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0026	J	0.0027	0.00032	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0031		0.0024	0.00069	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.019	U	0.019	0.00095	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.01		0.0096	0.0016	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0035		0.0024	0.00075	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.00051	J	0.0037	0.0005	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0069		0.0021	0.00056	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00055	U	0.0022	0.00055	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00075	J	0.003	0.00041	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0016	J	0.0062	0.0011	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-505	SVL-905-SA5C-SV-15.0-16.0	Split Sample	SVL-505-SA5C-SV-15.0-16.0	6/2/2014 12:08	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00062	U	0.0014	0.00062	14-06-0556	Calscience	Y	V	14-06-0556	266072.58827	1784889.86086	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-10.5-11.5	Primary Sample	--	6/3/2014 9:41	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0052	J	0.02	0.0043	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-507-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-507	SVL-807-SA5C-SV-5.0-6.0	Field Duplicate	SVL-507-SA5C-SV-5.0-6.0	6/3/2014 9:15	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266198.56533	1785013.22654	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.014	J	0.02	0.008	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.011	J	0.02	0.0043	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-508	SVL-508-SA5C-SV-8.25-9.25	Primary Sample	--	6/3/2014 10:14	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266137.85861	1785125.80727	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.0098	J	0.02	0.0053	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-13.0-14.0	Primary Sample	--	6/18/2014 11:53	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-511	SVL-511-SA5C-SV-7.0-8.0	Primary Sample	--	6/18/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266196.18098	1785436.76718	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-513	SVL-513-SA5C-SV-5.0-6.0	Primary Sample	--	6/18/2014 10:20	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266299.39837	1785425.35126	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-12.5-13.5	Primary Sample	--	6/10/2014 9:10	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-515-SA5C-SV-5.0-6.0	Primary Sample	--	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-815-SA5C-SV-5.0-6.0	Field Duplicate	SVL-515-SA5C-SV-5.0-6.0	6/10/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0014	U	0.0073	0.0014	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00045	U	0.0029	0.00045	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.00099	U	0.0072	0.00099	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.018		0.012	0.00057	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.001	U	0.0029	0.001	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00027	U	0.0021	0.00027	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00083	U	0.0021	0.00083	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00029	U	0.0021	0.00029	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00081	J	0.0017	0.00028	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00041	U	0.0033	0.00041	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00067	U	0.0014	0.00067	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00035	U	0.0026	0.00035	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00036	U	0.0021	0.00036	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00031	U	0.0026	0.00031	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00066	U	0.0023	0.00066	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.018	U	0.018	0.0009	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0091	U	0.0091	0.0015	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0023	U	0.0023	0.00071	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.012		0.0036	0.00048	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.002	U	0.002	0.00053	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00053	U	0.0021	0.00053	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00039	U	0.0028	0.00039	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0059	U	0.0059	0.001	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-515	SVL-915-SA5C-SV-12.5-13.5	Split Sample	SVL-515-SA5C-SV-12.5-13.5	6/10/2014 9:16	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0006	U	0.0013	0.0006	14-06-1132	Calscience	Y	V	14-06-1132	266431.03926	1785177.88601	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-11.0-12.0	Primary Sample	--	6/5/2014 11:08	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.021		0.02	0.0053	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.034		0.02	0.012	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-18.0-19.0	Primary Sample	--	6/6/2014 12:02	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-516	SVL-516-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 10:43	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266465.83647	1784990.30194	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0036	J	0.02	0.003	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.008	J	0.02	0.0043	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-10.5-11.5	Primary Sample	--	6/5/2014 9:06	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.014	J	0.02	0.008	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.012	J	0.02	0.0043	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-518	SVL-518-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 8:41	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266391.44518	1784705.51417	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.01	J	0.02	0.003	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.089		0.02	0.008	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.029		0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.099	J	0.02	0.0043	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-10.0-11.0	Primary Sample	--	6/6/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.035		0.02	0.008	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.014	J	0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.026	UJ	0.026	0.0043	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-15.0-16.0	Primary Sample	--	6/6/2014 8:22	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-20.0-21.0	Primary Sample	--	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.017	J	0.02	0.0094	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.068		0.02	0.008	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.025		0.02	0.0089	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.04	J	0.02	0.0043	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-525-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 13:41	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	UJ	0.02	0.0063	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-825-SA5C-SV-20.0-21.0	Field Duplicate	SVL-525-SA5C-SV-20.0-21.0	6/6/2014 8:49	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40601	EST	Y	V	3F40601	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0015	U	0.0078	0.0015	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00049	U	0.0031	0.00049	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0011	U	0.0078	0.0011	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	U	0.013	0.00061	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0011	U	0.0031	0.0011	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00029	U	0.0023	0.00029	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0009	U	0.0023	0.0009	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00032	U	0.0023	0.00032	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.041		0.0018	0.00031	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00044	U	0.0036	0.00044	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00073	U	0.0015	0.00073	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00039	U	0.0028	0.00039	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.0058		0.0023	0.00039	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00034	U	0.0028	0.00034	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.028		0.0025	0.00072	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00098	U	0.02	0.00098	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.29		0.0099	0.0017	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.1		0.0025	0.00077	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0031	J	0.0039	0.00052	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.32		0.0021	0.00058	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00058	U	0.0023	0.00058	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0027	J	0.0031	0.00043	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0011	U	0.0064	0.0011	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-525	SVL-925-SA5C-SV-10.0-11.0	Split Sample	SVL-525-SA5C-SV-10.0-11.0	6/6/2014 7:56	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00065	U	0.0015	0.00065	14-06-0556	Calscience	Y	V	14-06-0556	266514.44632	1783999.50102	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.005	J	0.02	0.0043	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-528-SA5C-SV-5.5-6.5	Primary Sample	--	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.008	J	0.02	0.008	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.005	J	0.02	0.0043	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-528	SVL-828-SA5C-SV-5.5-6.5	Field Duplicate	SVL-528-SA5C-SV-5.5-6.5	6/5/2014 10:02	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266463.28598	1784581.26771	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-530-SA5C-SV-6.5-7.5	Primary Sample	--	5/29/2014 8:42	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0016	U	0.0088	0.0016	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00055	U	0.0035	0.00055	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0012	U	0.0089	0.0012	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00069	U	0.015	0.00069	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0013	U	0.0035	0.0013	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00033	U	0.0026	0.00033	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.001	U	0.0026	0.001	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00036	U	0.0026	0.00036	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00085	J	0.0021	0.00035	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0005	U	0.0041	0.0005	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00082	U	0.0017	0.00082	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00044	U	0.0031	0.00044	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.026		0.0026	0.00045	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00038	U	0.0032	0.00038	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0037		0.0028	0.00081	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.022	U	0.022	0.0011	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0054	J	0.011	0.0019	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0024	J	0.0028	0.00088	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.017		0.0044	0.00059	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0037		0.0024	0.00065	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00065	U	0.0026	0.00065	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.084		0.0035	0.00048	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0012	U	0.0072	0.0012	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-530	SVL-930-SA5C-SV-6.5-7.5	Split Sample	SVL-530-SA5C-SV-6.5-7.5	5/29/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00073	U	0.0016	0.00073	14-06-0002	Calscience	Y	V	14-06-0002	266619.90409	1784296.88210	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0056	J	0.02	0.0043	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-10.0-11.0	Primary Sample	--	6/3/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.01	J	0.02	0.008	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.007	J	0.02	0.0043	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-15.0-16.0	Primary Sample	--	6/3/2014 11:50	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.011	J	0.02	0.0043	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-535-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 10:59	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0017	U	0.0089	0.0017	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.001	J	0.0035	0.00055	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0012	U	0.0089	0.0012	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.00069	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0013	U	0.0035	0.0013	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00033	U	0.0026	0.00033	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.001	U	0.0026	0.001	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00084	J	0.0026	0.00036	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.011		0.0021	0.00035	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0019	J	0.0041	0.0005	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00082	U	0.0017	0.00082	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0021	J	0.0031	0.00044	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00048	J	0.0026	0.00045	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0034		0.0032	0.00038	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0063		0.0028	0.00081	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.022	U	0.022	0.0011	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.02		0.011	0.0019	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0071		0.0028	0.00088	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0085		0.0044	0.00059	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.017		0.0024	0.00065	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00065	U	0.0026	0.00065	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0018	J	0.0035	0.00048	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0062	J	0.0072	0.0012	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-535	SVL-935-SA5C-SV-15.0-16.0	Split Sample	SVL-535-SA5C-SV-15.0-16.0	6/3/2014 11:56	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00074	J	0.0016	0.00073	14-06-0556	Calscience	Y	V	14-06-0556	266524.33341	1784867.73916	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0048	J	0.02	0.003	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.01	J	0.02	0.0043	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.035		0.02	0.012	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-11.0-12.0	Primary Sample	--	6/3/2014 13:15	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.009	J	0.02	0.008	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.19		0.02	0.012	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-18.0-19.0	Primary Sample	--	6/4/2014 7:28	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.006	J	0.02	0.003	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.0098	J	0.02	0.008	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0096	J	0.02	0.0043	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-543	SVL-543-SA5C-SV-5.0-6.0	Primary Sample	--	6/3/2014 12:56	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266718.86934	1784783.31433	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.014	J	0.02	0.0043	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.036		0.02	0.0053	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-549	SVL-549-SA5C-SV-6.0-7.0	Primary Sample	--	6/13/2014 10:34	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41301	EST	Y	V	3F41301	266899.56303	1784818.13454	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-13.0-14.0	Primary Sample	--	6/5/2014 7:58	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place
5CSV_DG-554	SVL-554-SA5C-SV-5.0-6.0	Primary Sample	--	6/5/2014 7:39	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40501	EST	Y	V	3F40501	266831.17272	1784495.70382	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.012	J	0.02	0.0053	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-561	SVL-561-SA5C-SV-5.5-6.0	Primary Sample	--	6/10/2014 9:44	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41001	EST	Y	V	3F41001	267054.69968	1784777.91981	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-10.0-11.0	Primary Sample	--	6/4/2014 8:51	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.017	J	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-15.0-16.0	Primary Sample	--	6/4/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-20.0-21.0	Primary Sample	--	6/4/2014 9:29	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-30.0-31.0	Primary Sample	--	6/4/2014 9:49	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-40.0-41.0	Primary Sample	--	6/4/2014 10:10	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-570-SA5C-SV-5.0-6.0	Primary Sample	--	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-870-SA5C-SV-5.0-6.0	Field Duplicate	SVL-570-SA5C-SV-5.0-6.0	6/4/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40401	EST	Y	V	3F40401	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0015	U	0.0082	0.0015	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0014	J	0.0033	0.00052	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0011	U	0.0082	0.0011	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0022	J	0.014	0.00065	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0029	J	0.0033	0.0012	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0011	J	0.0024	0.00031	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00095	U	0.0024	0.00095	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0011	J	0.0024	0.00033	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.011		0.0019	0.00032	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0017	J	0.0038	0.00047	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00076	U	0.0016	0.00076	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0018	J	0.0029	0.00041	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00093	J	0.0024	0.00042	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0036		0.003	0.00035	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0064		0.0026	0.00075	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.021	U	0.021	0.001	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.02		0.01	0.0017	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0085		0.0026	0.00081	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0027	J	0.0041	0.00055	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.011	U	0.011	0.00061	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00075	J	0.0024	0.00061	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0018	J	0.0032	0.00045	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0019	J	0.0067	0.0012	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-570	SVL-970-SA5C-SV-40.0-41.0	Split Sample	SVL-570-SA5C-SV-40.0-41.0	6/4/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0009	J	0.0015	0.00068	14-06-0556	Calscience	Y	V	14-06-0556	267276.74030	1784587.50243	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5CSV_DG-572	SVL-572-SA5C-SV-6.8-7.8	Primary Sample	--	5/29/2014 13:39	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266478.05186	1784162.79135	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0044	J	0.02	0.003	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.011	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-13.0-14.0	Primary Sample	--	5/27/2014 9:09	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.054		0.02	0.016	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.004	J	0.02	0.003	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.007	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-18.0-19.0	Primary Sample	--	5/27/2014 9:42	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.025		0.02	0.003	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.079		0.02	0.008	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.036		0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.12	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-502-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	J	0.02	0.003	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.057		0.02	0.008	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.024		0.02	0.0089	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.1	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-802-SA5D-SV-5.0-6.0	Field Duplicate	SVL-502-SA5D-SV-5.0-6.0	5/27/2014 8:32	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0013	U	0.0069	0.0013	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00043	U	0.0027	0.00043	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.00095	U	0.0069	0.00095	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0032	J	0.011	0.00054	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.001	U	0.0027	0.001	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00026	U	0.002	0.00026	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00079	U	0.002	0.00079	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00028	U	0.002	0.00028	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.018		0.0016	0.00027	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0011	J	0.0031	0.00039	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00064	U	0.0013	0.00064	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00034	U	0.0024	0.00034	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00035	U	0.002	0.00035	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0031		0.0025	0.00029	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0031		0.0022	0.00063	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.017	U	0.017	0.00086	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0075	J	0.0087	0.0014	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0033		0.0022	0.00068	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.00088	J	0.0034	0.00046	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.019		0.0019	0.00051	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.0005	U	0.002	0.0005	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00037	U	0.0027	0.00037	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0068		0.0056	0.00096	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-502	SVL-946-SA5D-SV-10.0-11.0	Split Sample	SVL-546-SA5D-SV-10.0-11.0	5/30/2014 8:25	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00057	U	0.0013	0.00057	14-06-0002	Calscience	Y	V	14-06-0002	266315.76910	1784284.74200	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.024	U	0.024	0.012	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-510	SVL-510-SA5D-SV-7.5-8.5	Primary Sample	--	5/28/2014 12:50	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	265988.08560	1784283.08700	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 9:46	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-511	SVL-511-SA5D-SV-9.5-10.5	Primary Sample	--	5/28/2014 10:19	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266061.46650	1784299.45400	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.099		0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	J	0.02	0.003	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.071		0.02	0.008	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.018	J	0.02	0.0089	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.16	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-11.0-12.0	Primary Sample	--	5/27/2014 13:03	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.026		0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.015	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-16.75-17.75	Primary Sample	--	5/27/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.11		0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.01	J	0.02	0.003	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.041		0.02	0.008	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.014	J	0.02	0.0089	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.035	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place
5DSV_DG-512	SVL-512-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 12:32	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266147.07860	1784304.56000	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.4	U	0.4	0.18	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.4	UJ	0.4	0.11	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.4	U	0.4	0.18	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	86		0.4	0.24	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.4	U	0.4	0.13	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.4	U	0.4	0.12	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.4	U	0.4	0.14	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.4	U	0.4	0.21	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.4	U	0.4	0.081	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.4	U	0.4	0.23	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.4	U	0.4	0.32	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.4	U	0.4	0.12	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.4	U	0.4	0.19	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.4	UJ	0.4	0.22	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.4	U	0.4	0.06	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.4	U	0.4	0.21	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.4	U	0.4	0.16	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.4	U	0.4	0.18	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.12	J	0.4	0.11	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.088	J	0.4	0.085	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.4	U	0.4	0.078	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.4	U	0.4	0.23	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.4	U	0.4	0.11	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-10.0-11.0	Primary Sample	--	5/27/2014 10:45	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.4	U	0.4	0.2	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.4		0.02	0.012	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.023		0.02	0.0072	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0078	J	0.02	0.003	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.01	J	0.02	0.0089	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.024	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-15.5-16.5	Primary Sample	--	5/27/2014 11:22	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0072	J	0.02	0.003	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.023	U	0.023	0.008	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.012	J	0.02	0.0089	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	UJ	0.02	0.0053	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.016	J	0.02	0.0043	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-513	SVL-513-SA5D-SV-5.0-6.0	Primary Sample	--	5/27/2014 10:15	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42701	EST	Y	V	3E42701	266207.41130	1784296.96800	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0086	J	0.02	0.003	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.028		0.02	0.008	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.055	UJ	0.055	0.0043	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-12.5-13.8	Primary Sample	--	5/28/2014 8:57	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-515-SA5D-SV-5.0-6.0	Primary Sample	--	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-815-SA5D-SV-5.0-6.0	Field Duplicate	SVL-515-SA5D-SV-5.0-6.0	5/28/2014 8:16	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0013	U	0.0069	0.0013	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00043	U	0.0027	0.00043	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.00095	U	0.0069	0.00095	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.011	U	0.011	0.00054	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.001	U	0.0027	0.001	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00026	U	0.002	0.00026	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.00079	U	0.002	0.00079	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00028	U	0.002	0.00028	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0027		0.0016	0.00027	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00039	U	0.0031	0.00039	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00064	U	0.0013	0.00064	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00034	U	0.0024	0.00034	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00035	U	0.002	0.00035	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0029		0.0025	0.00029	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.01		0.0022	0.00063	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.017	U	0.017	0.00086	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.035		0.0087	0.0014	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.01		0.0022	0.00068	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.00046	U	0.0034	0.00046	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.082		0.0019	0.00051	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.0005	U	0.002	0.0005	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00037	U	0.0027	0.00037	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0024	J	0.0056	0.00096	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-515	SVL-915-SA5D-SV-12.5-13.8	Split Sample	SVL-515-SA5D-SV-12.5-13.8	5/28/2014 9:05	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00057	U	0.0013	0.00057	14-06-0002	Calscience	Y	V	14-06-0002	266142.69810	1784363.26100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.024	U	0.024	0.012	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-14.0-15.0	Primary Sample	--	5/28/2014 11:26	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-516	SVL-516-SA5D-SV-6.0-7.0	Primary Sample	--	5/28/2014 10:55	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	266056.68450	1784367.71100	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	3		0.02	0.012	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.008	J	0.02	0.003	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.027		0.02	0.008	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.03	UJ	0.03	0.0043	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-519	SVL-519-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 9:30	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265994.57863	1784495.12779	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.011	J	0.02	0.003	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.031		0.02	0.008	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.01	J	0.02	0.0089	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.044	UJ	0.044	0.0043	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-526	SVL-526-SA5D-SV-7.5-8.5	Primary Sample	--	5/29/2014 10:12	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266230.48057	1784766.24950	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-530	SVL-530-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 10:46	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266017.20316	1784746.22938	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-531	SVL-531-SA5D-SV-5.0-6.0	Primary Sample	--	5/29/2014 11:20	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	266031.95400	1784667.62242	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-4.5-5.5	Primary Sample	--	5/29/2014 12:29	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0052	J	0.02	0.003	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.014	J	0.02	0.008	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-539	SVL-539-SA5D-SV-8.5-9.5	Primary Sample	--	5/29/2014 13:00	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265818.75438	1784624.21460	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.015	J	0.02	0.003	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.06		0.02	0.008	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.024		0.02	0.0089	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.039	UJ	0.039	0.0043	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-10.0-11.0	Primary Sample	--	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.019	J	0.02	0.003	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.052		0.02	0.008	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.029		0.02	0.0089	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.07	J	0.02	0.0043	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-544-SA5D-SV-4.5-5.5	Primary Sample	--	5/28/2014 13:25	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42801	EST	Y	V	3E42801	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	UJ	0.02	0.0072	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.013	J	0.02	0.003	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.047		0.02	0.008	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.013	J	0.02	0.0089	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.034	UJ	0.034	0.0043	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-544	SVL-844-SA5D-SV-10.0-11.0	Field Duplicate	SVL-544-SA5D-SV-10.0-11.0	5/29/2014 7:50	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E42901	EST	Y	V	3E42901	265918.23590	1784236.86600	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-10.0-11.0	Primary Sample	--	5/30/2014 8:19	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-16.0-17.0	Primary Sample	--	5/30/2014 11:21	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.011	J	0.02	0.008	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-546-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.0094	J	0.02	0.008	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-546	SVL-846-SA5D-SV-5.0-6.0	Field Duplicate	SVL-546-SA5D-SV-5.0-6.0	5/30/2014 7:46	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265891.09562	1783886.78422	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.0088	J	0.02	0.003	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.03		0.02	0.008	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.028	J	0.02	0.0043	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-11.0-12.0	Primary Sample	--	5/30/2014 10:07	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.006	J	0.02	0.003	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.023		0.02	0.008	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-17.0-18.0	Primary Sample	--	5/30/2014 10:42	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-550	SVL-550-SA5D-SV-5.0-6.0	Primary Sample	--	5/30/2014 9:39	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3E43001	EST	Y	V	3E43001	265762.35098	1784126.97494	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.037		0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-14.0-15.0	Primary Sample	--	6/9/2014 9:50	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-19.0-20.0	Primary Sample	--	6/9/2014 10:27	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.021		0.02	0.016	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.011	J	0.02	0.0043	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-553-SA5D-SV-9.0-10.0	Primary Sample	--	6/9/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-853-SA5D-SV-4.5-5.5	Field Duplicate	SVL-553-SA5D-SV-4.5-5.5	6/9/2014 8:28	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0013	U	0.0069	0.0013	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00043	U	0.0028	0.00043	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.00095	U	0.0069	0.00095	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00054	U	0.012	0.00054	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.001	U	0.0028	0.001	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00026	U	0.002	0.00026	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0008	U	0.002	0.0008	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.00028	U	0.002	0.00028	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.029		0.0016	0.00027	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.00039	U	0.0032	0.00039	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.00064	U	0.0013	0.00064	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.017		0.0025	0.00034	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00035	U	0.002	0.00035	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0029		0.0025	0.0003	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0045		0.0022	0.00064	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.018	U	0.018	0.00087	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.01		0.0088	0.0015	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0049		0.0022	0.00069	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0037		0.0034	0.00046	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.023		0.0019	0.00051	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00051	U	0.002	0.00051	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00038	U	0.0027	0.00038	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0019	J	0.0057	0.00097	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-553	SVL-953-SA5D-SV-9.0-10.0	Split Sample	SVL-553-SA5D-SV-9.0-10.0	6/9/2014 9:14	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00057	U	0.0013	0.00057	14-06-1132	Calscience	Y	V	14-06-1132	265448.55805	1784530.37320	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	UJ	0.02	0.006	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0076	J	0.02	0.0043	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
5DSV_DG-556	SVL-556-SA5D-SV-4.5-5.5	Primary Sample	--	6/9/2014 13:40	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40901	EST	Y	V	3F40901	265400.70002	1785051.17870	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.041		0.02	0.0054	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.0066	J	0.02	0.0043	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	2.9	UJ	2.9	0.0053	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-10.0-11.0	Primary Sample	--	6/12/2014 10:36	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.1	U	0.1	0.045	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.062	J	0.1	0.027	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.1	UJ	0.1	0.045	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.1	U	0.1	0.059	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.1	U	0.1	0.031	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.1	U	0.1	0.031	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.1	U	0.1	0.036	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.1	U	0.1	0.053	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.1	U	0.1	0.02	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.1	U	0.1	0.058	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.1	U	0.1	0.08	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.1	U	0.1	0.03	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.1	U	0.1	0.047	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.1	UJ	0.1	0.055	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.1	U	0.1	0.015	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.1	U	0.1	0.052	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.1	U	0.1	0.04	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.1	U	0.1	0.044	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.1	U	0.1	0.027	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.1	UJ	0.1	0.021	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.1	U	0.1	0.019	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.1	U	0.1	0.058	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	4.5	UJ	4.5	0.027	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-15.0-16.0	Primary Sample	--	6/12/2014 11:07	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.1	U	0.1	0.051	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.031		0.02	0.0054	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	1.1	UJ	1.1	0.0053	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-509	SVL-509-SA6-SV-5.0-6.0	Primary Sample	--	6/12/2014 10:04	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268332.96848	1786184.81938	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-515	SVL-515-SA6-SV-7.9-8.9	Primary Sample	--	6/12/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268456.87685	1786500.60384	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	UJ	0.02	0.011	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-528-SA6-SV-5.5-6.5	Primary Sample	--	6/12/2014 8:38	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41201	EST	Y	V	3F41201	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0111	J	0.0153	0.00625	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.00278	J	0.0174	0.00217	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00141	J	0.00868	0.00117	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00182	J	0.00754	0.000961	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-528	SVL-928-SA6-SV-5.5-6.5	Split Sample	SVL-528-SA6-SV-5.5-6.5	6/12/2014 8:48	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56666-1	TestAmerica - Denver	Y	V	280-56666-1	268148.70689	1786744.81426	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	UJ	0.02	0.008	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-543	SVL-543-SA6-SV-7.5-8.5	Primary Sample	--	6/19/2014 11:35	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	268232.19223	1787203.27029	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0174	U	0.0174	0.00217	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00868	U	0.00868	0.00117	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00754	U	0.00754	0.000961	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-10.0-11.0	Primary Sample	--	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0174	U	0.0174	0.00217	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00868	U	0.00868	0.00117	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00754	U	0.00754	0.000961	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-544-SA6-SV-5.0-6.0	Primary Sample	--	6/13/2014 10:56	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0174	U	0.0174	0.00217	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00868	U	0.00868	0.00117	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00754	U	0.00754	0.000961	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place
6SV_DG-544	SVL-844-SA6-SV-10.0-11.0	Field Duplicate	SVL-544-SA6-SV-10.0-11.0	6/13/2014 11:22	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268305.33872	1787022.83625	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00871		0.00639	0.00126	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00256	J	0.00868	0.00137	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0067	J	0.0174	0.00217	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00277	J	0.00868	0.00117	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0112		0.00754	0.000961	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
6SV_DG-551	SVL-551-SA6-SV-4.5-5.5	Primary Sample	--	6/13/2014 10:16	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	268387.43413	1787425.32424	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0174	U	0.0174	0.00217	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00868	U	0.00868	0.00117	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00145	J	0.00754	0.000961	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-12.0-13.0	Primary Sample	--	6/13/2014 9:24	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	UJ	0.0159	0.00143	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0174	U	0.0174	0.00217	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00868	U	0.00868	0.00117	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00754	U	0.00754	0.000961	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0107	U	0.0107	0.00282	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
7SV_DG-503	SVL-503-SA7-SV-7.0-8.0	Primary Sample	--	6/13/2014 8:53	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56667-1	TestAmerica - Denver	Y	V	280-56667-1	267351.26640	1784783.51700	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	UJ	0.02	0.008	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.032		0.02	0.012	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-502	SVL-502-SA8-SV-4.45-5.45	Primary Sample	--	6/19/2014 11:09	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266424.60305	1783272.93034	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.11	J	0.02	0.0054	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.54		0.02	0.012	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.16		0.02	0.0072	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.44		0.02	0.012	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.079	J	0.02	0.0053	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-503	SVL-503-SA8-SV-4.5-5.5	Primary Sample	--	6/3/2014 7:55	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266439.91591	1783156.74170	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.002	J	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0052	J	0.015	0.0038	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.014		0.004	0.00079	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0017	J	0.0032	0.00064	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.009		0.0049	0.00098	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0043	U	0.0043	0.00087	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0045	U	0.0045	0.00075	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.3		0.0054	0.0011	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-506	SVL-506-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 10:05	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476965	Lancaster	Y	V	1476965	266203.38700	1782986.22600	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0096		0.004	0.00081	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0056		0.0032	0.00064	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.072		0.0063	0.0013	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.28		0.049	0.0098	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.0033	J	0.004	0.00079	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.016		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.063		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.023		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.057		0.0068	0.0014	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.043		0.0038	0.00075	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	1.6		0.054	0.011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-512-SA8-SV-8.0-9.0	Primary Sample	--	5/23/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.0088		0.004	0.00081	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0063		0.0032	0.00064	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.06		0.0063	0.0013	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.19		0.049	0.0098	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.003	J	0.004	0.00079	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.011		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.047		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.017		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.053		0.0068	0.0014	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.035		0.0038	0.00075	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	1.3		0.054	0.011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-512	SVL-812-SA8-SV-8.0-9.0	Field Duplicate	SVL-512-SA8-SV-8.0-9.0	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476966	Lancaster	Y	V	1476966	266113.70240	1783127.83100	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0014	J	0.0032	0.00064	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.014		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.062		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.024		0.0043	0.00087	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.033		0.0038	0.00075	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-515	SVL-515-SA8-SV-6.0-7.0	Primary Sample	--	5/22/2014 10:50	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476965	Lancaster	Y	V	1476965	266133.90970	1782664.05200	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.05		0.0032	0.00064	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0031	J	0.0049	0.00098	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.045		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.16		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.065		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0029	J	0.0068	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.2		0.0038	0.00075	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-10.0-11.0	Primary Sample	--	5/23/2014 8:44	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0036		0.0032	0.00064	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	J	0.0049	0.00098	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0052		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.019		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.01		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.0068	U	0.0068	0.00075	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-15.5-16.5	Primary Sample	--	5/23/2014 9:02	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0056		0.0032	0.00064	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.018		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.076		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.031		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.056		0.0038	0.00075	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-517	SVL-517-SA8-SV-5.0-6.0	Primary Sample	--	5/23/2014 8:23	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476966	Lancaster	Y	V	1476966	265977.17490	1783212.00800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0014	J	0.004	0.00079	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0017	J	0.0032	0.00064	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0012	J	0.0049	0.00098	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.0059	U	0.0059	0.00087	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.025	U	0.025	0.00087	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.013	U	0.013	0.00087	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0068	U	0.0068	0.0014	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.015	U	0.015	0.00075	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-519	SVL-519-SA8-SV-7.0-8.0	Primary Sample	--	5/22/2014 8:49	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476965	Lancaster	Y	V	1476965	265970.00100	1783036.82800	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.0052		0.0032	0.00064	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0049	U	0.0049	0.00098	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.001	J	0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.0043	U	0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.0043	U	0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0035	J	0.0068	0.0014	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.005	U	0.005	0.00075	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0027	J	0.0054	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-10.5-11.5	Primary Sample	--	5/23/2014 10:59	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0069	U	0.0069	0.0014	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.015	U	0.015	0.0038	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0055	U	0.0055	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.004	U	0.004	0.00081	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.061		0.0032	0.00064	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0063	U	0.0063	0.0013	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0026	U	0.0026	0.00053	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.0016	J	0.0049	0.00098	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.0049	U	0.0049	0.00099	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.048		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.0035	U	0.0035	0.00069	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.1		0.043	0.0087	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.076		0.0043	0.00087	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0043	J	0.0068	0.0014	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.14		0.038	0.0075	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.004	U	0.004	0.00079	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.0054	U	0.0054	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0056	U	0.0056	0.0011	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-524	SVL-524-SA8-SV-4.5-5.5	Primary Sample	--	5/23/2014 10:36	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.0026	U	0.0026	0.00051	1476966	Lancaster	Y	V	1476966	265808.00970	1783230.34700	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	UJ	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.011	J	0.02	0.008	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-11.0-12.0	Primary Sample	--	6/2/2014 9:35	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	UJ	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-18.5-19.5	Primary Sample	--	6/2/2014 9:58	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	UJ	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	UJ	0.02	0.0062	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-528	SVL-528-SA8-SV-5.0-6.0	Primary Sample	--	6/2/2014 9:08	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40201	EST	Y	V	3F40201	265962.37932	1783562.33720	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-4.5-5.5	Primary Sample	--	6/18/2014 12:57	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-529	SVL-529-SA8-SV-8.5-9.5	Primary Sample	--	6/18/2014 13:34	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41801	EST	Y	V	3F41801	266120.54825	1783255.83172	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	UJ	0.02	0.008	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-531-SA8-SV-4.5-5.5	Primary Sample	--	6/19/2014 9:28	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266222.26179	1783461.53419	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,1,2-Tetrachloroethane	0.0137	U	0.0137	0.00103	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,1-Trichloroethane	0.00818	U	0.00818	0.00177	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,2,2-Tetrachloroethane	0.0137	U	0.0137	0.00237	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0153	U	0.0153	0.00625	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1,2-Trichloroethane	0.0109	U	0.0109	0.00183	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethane	0.00607	U	0.00607	0.00146	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,1-Dichloroethene	0.0159	U	0.0159	0.00143	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	1,2-Dichloroethane	0.0162	U	0.0162	0.00178	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Benzene	0.00639	U	0.00639	0.00126	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Carbon Tetrachloride	0.0252	U	0.0252	0.00201	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Chloroethane	0.0106	U	0.0106	0.00406	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Chloroform	0.00732	U	0.00732	0.00232	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	cis-1,2-Dichloroethene	0.00793	U	0.00793	0.00176	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Dichlorodifluoromethane	0.00989	U	0.00989	0.00359	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Ethylbenzene	0.00868	U	0.00868	0.00137	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Methylene chloride	0.00695	U	0.00695	0.00125	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	m-Xylene & p-Xylene	0.00333	J	0.0174	0.00217	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	o-Xylene	0.00189	J	0.00868	0.00117	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Tetrachloroethene	0.0136	U	0.0136	0.00173	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Toluene	0.00287	J	0.00754	0.000961	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	trans-1,2-Dichloroethene	0.00793	U	0.00793	0.00198	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Trichloroethene	0.00476	J	0.0107	0.00282	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Trichlorofluoromethane	0.0112	U	0.0112	0.00551	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-531	SVL-931-SA8-SV-4.5-5.5	Split Sample	SVL-531-SA8-SV-4.5-5.5	6/19/2014 9:34	Soil Vapor	Primary Result	EPA TO-15	Vinyl chloride	0.00511	U	0.00511	0.00153	280-56908-1	TestAmerica - Denver	Y	V	280-56908-1	266222.26179	1783461.53419	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	UJ	0.02	0.0054	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	UJ	0.02	0.012	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	UJ	0.02	0.0094	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	UJ	0.02	0.01	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	U	0.02	0.008	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	UJ	0.02	0.0039	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	UJ	0.02	0.0053	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-534	SVL-834-SA8-SV-6.0-7.0	Primary Sample	--	6/3/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F40301	EST	Y	V	3F40301	266353.92639	1783728.76231	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	UJ	0.02	0.008	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-543-SA8-SV-6.25-7.25	Primary Sample	--	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	UJ	0.02	0.008	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-543	SVL-843-SA8-SV-6.25-7.25	Field Duplicate	SVL-543-SA8-SV-6.25-7.25	6/19/2014 8:34	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266258.04798	1783941.37790	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,1,1,2-Tetrachloroethane	0.02	U	0.02	0.009	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,1,1-Trichloroethane	0.02	U	0.02	0.0054	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,1,2,2-Tetrachloroethane	0.02	UJ	0.02	0.0089	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,1,2-Trichloroethane	0.02	U	0.02	0.0063	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethane	0.02	U	0.02	0.0062	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,1-Dichloroethene	0.02	U	0.02	0.0072	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	1,2-Dichloroethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Benzene	0.02	U	0.02	0.0041	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Carbon Tetrachloride	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Chloroethane	0.02	U	0.02	0.016	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Chloroform	0.02	U	0.02	0.006	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	cis-1,2-Dichloroethene	0.02	U	0.02	0.0094	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Dichlorodifluoromethane	0.02	U	0.02	0.011	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Ethylbenzene	0.02	U	0.02	0.003	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Methylene chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	m-Xylene & p-Xylene	0.02	UJ	0.02	0.008	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	o-Xylene	0.02	U	0.02	0.0089	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Tetrachloroethene	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Toluene	0.02	UJ	0.02	0.0043	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	trans-1,2-Dichloroethene	0.02	U	0.02	0.0039	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Trichloroethene	0.02	U	0.02	0.012	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Trichlorofluoromethane	0.02	U	0.02	0.0053	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place
8SV_DG-545	SVL-545-SA8-SV-6.75-7.25	Primary Sample	--	6/19/2014 10:37	Soil Vapor	Primary Result	EPA 8260B	Vinyl chloride	0.02	U	0.02	0.01	3F41901	EST	Y	V	3F41901	266894.12792	1783657.12099	In Place

Acronyms:
"--" - not applicable
EPA - Environmental Protection Agency
MDL - method detection limit
µg/L - micrograms per liter

TABLE B-1
PHASE 3 SOIL VAPOR RESULTS
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name	Sample Name	Sample Type	Parent Sample Name	Collection Date	Matrix Type	Result Type	Analysis Method	Compound	Result Value (µg/L)	Project Qualifier Code	PQL (µg/L)	MDL (µg/L)	SDG	Lab Name	Validated	Validation Level	Validation Report Identifier	Northing	Easting	Remediation Status

PQL - practical quanititation limit

SDG - sample delivery group

Y - yes

Notes:

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not deemed above the reported sample quanitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

APPENDIX C

ANALYTICAL LABORATORY REPORTS

SOIL GAS SURVEY
SANTA SUSANA FIELD LABORATORY:
DEPARTMENT OF ENERGY
5800 WOOLSEY CANYON ROAD
CANOGA PARK, CA

LEVEL IV DATA PACKAGE

MWH AMERICAS
2121 NORTH CALIFORNIA BLVD.
SUITE 600
WALNUT CREEK, CA

EST2754
May 27, 2014

ENVIRONMENTAL SUPPORT TECHNOLOGIES

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9 Case Narrative

10 Raw Data for QC Samples and Initial Calibration, Duplicate Samples (DS)

11 Raw Data for QC Samples and Initial Calibration, Laboratory Control Samples (LCS)

12 Raw Data for QC Samples and Initial Calibration, Blank

13 Raw Data for Analyzed Samples Including Chromatograms, Quantitation Reports and Spectra

CHAIN-OF-CUSTODY

CHAIN-OF-CUSTODY RECORD

Environmental Support Technologies
16510 Aston St., Irvine, CA 92606 · Tel (949) 679-9500 · Fax (949) 679-9501

Client: MWH Americas
Address: 250 North Madison Avenue
Pasadena, Ca
Project Manager: Sarah Von Raesfield

Sampler Name: Ashley Flores
EST Project#: EST2754
Custody Seals:
Site Location: SSFL
Phone: ( )
Email:

Turnaround Time:
(Check one)

Normal:

Rush: X

Sample Receipt

Intact: Yes: X No:

On Ice: Yes: No: X N/A

Custody Seals: Yes: No: X

N/A (Received on Site):

Sample Name	Sample Matrix	Container Type	# of Container	Sampling Date	Sampling Time	Preservative Type	Purge Volume (ml)	Vacuum (inches of H_2O)	8260B VOC's 0.02 RL						Special Instructions
Equipment Blank	Air	Glass Bulb	1	5/27/2014	910	Surr			X						
SVL-502-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/27/2014	832	Surr			X						Bulb # 11
SVL-802-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/27/2014	832	Surr			X						Bulb # 7
SVL-502-SA5D-SV-13.0-14.0	Air	Glass Bulb	1	5/27/2014	909	Surr			X						Bulb # 5
SVL-502-SA5D-SV-18.0-19.0	Air	Glass Bulb	1	5/27/2014	942	Surr			X						Bulb # 6
SVL-513-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/27/2014	1015	Surr			X						Bulb # 1
SVL-513-SA5D-SV-10.0-11.0	Air	Glass Bulb	1	5/27/2014	1045	Surr			X						Bulb # 8
SVL-513-SA5D-SV-15.5-16.5	Air	Glass Bulb	1	5/27/2014	1122	Surr			X						Bulb # 9
SVL-512-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/27/2014	1232	Surr			X						Bulb # 3
SVL-512-SA5D-SV-11.0-12.0	Air	Glass Bulb	1	5/27/2014	1303	Surr			X						Bulb # 10
SVL-512-SA5D-SV-16.75-17.75	Air	Glass Bulb	1	5/27/2014	1334	Surr			X						Bulb # 13
FB-052714	Air	Glass Bulb	1	5/27/2014	1400	Surr			X						Bulb # 12

Relinquished by: (Signature) Date/Time: 05/27/14 Received by: Date/Time:

Relinquished by: (Signature) Date/Time: Received by: Date/Time:

SAMPLE RESULTS WITH ANALYSIS AND EXTRACTIONS PREPARATION DATES

June 03, 2014

Sarah Von Raesfield
MWH Americas, Inc.
250 No. Madison Avenue
Pasadena, CA 91107

RE: Santa Susana Field Laboratory, Canoga Park

Enclosed are the results of analyses for soil gas samples received by Environmental Support Technologies laboratory on 05/27/14 17:36. The analyses were performed according to the prescribed method as outlined by EPA 8260B. A shut in test was performed, leak test was performed, equipment blank was run, and selected purge volume was 3PV. If you have any questions concerning this report, please feel free to contact Project Manager.

Sincerely,

Ashley Flores

Ashley Flores
Project Manager

Environmental Support Technologies laboratories are certified by the California Department of Health Services (CDHS), Environmental Laboratory Accreditation Program (ELAP) No's. 2772, 2773, and 2767.

16510 Aston Street, Irvine, California 92606
Telephone: (949) 679-9500 Fax: (949) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Analyzed
Equipment Blank	3E42701-01	Air	27-May-14 09:10	27-May-14 09:29
SLV-502-SA5D-SV-5.0-6.0	3E42701-02	Air	27-May-14 08:32	27-May-14 09:58
SLV-802-SA5D-SV-5.0-6.0	3E42701-03	Air	27-May-14 08:32	27-May-14 10:57
SLV-502-SA5D-SV-13.0-14.0	3E42701-04	Air	27-May-14 09:09	27-May-14 11:32
SLV-502-SA5D-SV-18.0-19.0	3E42701-05	Air	27-May-14 09:42	27-May-14 12:03
SLV-513-SA5D-SV-5.0-6.0	3E42701-06	Air	27-May-14 08:32	27-May-14 12:33
SLV-513-SA5D-SV-10.0-11.0	3E42701-07	Air	27-May-14 10:45	27-May-14 13:31
SLV-513-SA5D-SV-15.5-16.5	3E42701-08	Air	27-May-14 11:22	27-May-14 14:34
SLV-512-SA5D-SV-5.0-6.0	3E42701-09	Air	27-May-14 12:32	27-May-14 15:05
SLV-512-SA5D-SV-11.0-12.0	3E42701-10	Air	27-May-14 13:03	27-May-14 15:35
SLV-512-SA5D-SV-16.75-17.75	3E42701-11	Air	27-May-14 13:34	27-May-14 16:04
FB-052714	3E42701-12	Air	27-May-14 14:00	27-May-14 17:01

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

16510 Aston Street, Irvine, California 92606
Telephone: (949) 679-9500 Fax: (949) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Equipment Blank (3E42701-01) Air Sampled: 05/27/14 09:10 Analyzed: 05/27/14 09:29									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*90.1 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*95.1 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*75-125*	"	"	"	"	
Surrogate: Benzene-d6		*97.9 %*		*70-140*	"	"	"	"	
Surrogate: Chloroform-d		*104 %*		*70-140*	"	"	"	"	
Surrogate: Methylene chloride-d2		*101 %*		*70-140*	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-502-SA5D-SV-5.0-6.0 (3E42701-02) Air Sampled: 05/27/14 08:32 Analyzed: 05/27/14 09:58									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.025**	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.036**	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.079**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.12**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*88.1 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*98.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*107 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*89.3 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*97.0 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*94.4 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-802-SA5D-SV-5.0-6.0 (3E42701-03) Air Sampled: 05/27/14 08:32 Analyzed: 05/27/14 10:57									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.020**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.024**	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.057**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.10**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*91.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*98.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*106 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*89.7 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*97.5 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*96.6 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-502-SA5D-SV-13.0-14.0 (3E42701-04) Air Sampled: 05/27/14 09:09 Analyzed: 05/27/14 11:32									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0044**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.011**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.011**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*89.4 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*97.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*104 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*82.9 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*89.3 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*88.2 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-502-SA5D-SV-18.0-19.0 (3E42701-05) Air Sampled: 05/27/14 09:42 Analyzed: 05/27/14 12:03									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	**0.054**	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0040**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.012**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0070**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*90.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*		*75-125*	"	"	"	"	
Surrogate: Benzene-d6		*90.6 %*		*70-140*	"	"	"	"	
Surrogate: Chloroform-d		*97.8 %*		*70-140*	"	"	"	"	
Surrogate: Methylene chloride-d2		*97.1 %*		*70-140*	"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-513-SA5D-SV-5.0-6.0 (3E42701-06) Air Sampled: 05/27/14 08:32 Analyzed: 05/27/14 12:33									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0072**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.012**	0.020	"	"	"	"	"	"	J
meta- and para-Xylenes	**0.023**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.016**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*87.5 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*101 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*106 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*80.6 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*85.7 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*82.6 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-513-SA5D-SV-10.0-11.0 (3E42701-07) Air Sampled: 05/27/14 10:45 Analyzed: 05/27/14 13:31									
1,1,1,2-Tetrachloroethane	ND	0.40	ug/l	20	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**86**	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.40	"	"	"	"	"	"	
Benzene	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.40	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.40	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
Methylene Chloride	ND	0.40	"	"	"	"	"	"	
ortho-Xylene	ND	0.40	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.12**	0.40	"	"	"	"	"	"	J
Toluene	**0.088**	0.40	"	"	"	"	"	"	J
Trichloroethene	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.40	"	"	"	"	"	"	
Vinyl Chloride	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*88.8 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*75-125*	"	"	"	"	
Surrogate: Benzene-d6		*82.2 %*		*70-140*	"	"	"	"	
Surrogate: Chloroform-d		*89.8 %*		*70-140*	"	"	"	"	
Surrogate: Methylene chloride-d2		*87.4 %*		*70-140*	"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-513-SA5D-SV-15.5-16.5 (3E42701-08) Air Sampled: 05/27/14 11:22 Analyzed: 05/27/14 14:34									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**0.40**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	**0.023**	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0078**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.010**	0.020	"	"	"	"	"	"	J
meta- and para-Xylenes	**0.020**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.024**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*91.2 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*99.5 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*107 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*85.1 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*93.4 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*91.7 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-512-SA5D-SV-5.0-6.0 (3E42701-09) Air Sampled: 05/27/14 12:32 Analyzed: 05/27/14 15:05									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**0.11**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.010**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.014**	0.020	"	"	"	"	"	"	J
meta- and para-Xylenes	**0.041**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.035**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*89.2 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*96.6 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*108 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*83.6 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*91.8 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*88.6 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-512-SA5D-SV-11.0-12.0 (3E42701-10) Air Sampled: 05/27/14 13:03 Analyzed: 05/27/14 15:35									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**0.099**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.020**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.018**	0.020	"	"	"	"	"	"	J
meta- and para-Xylenes	**0.071**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.16**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*90.6 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*97.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*106 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*92.8 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*103 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*96.6 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLV-512-SA5D-SV-16.75-17.75 (3E42701-11) Air	**Sampled: 05/27/14 13:34**		**Analyzed: 05/27/14 16:04**						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**0.026**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.015**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*89.8 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*96.4 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*109 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*89.1 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*98.0 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*94.0 %*	*70-140*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
FB-052714 (3E42701-12) Air Sampled: 05/27/14 14:00 Analyzed: 05/27/14 17:01									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34E2701	05/27/14	05/27/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*90.0 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*100 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*90.6 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*99.8 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*96.8 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
Blank (34E2701-BLK1)				Prepared & Analyzed: 05/27/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l							
1,1,1-Trichloroethane	ND	0.020	"							
1,1,2,2-Tetrachloroethane	ND	0.020	"							
1,1,2-Trichloro-trifluoroethane	ND	0.020	"							
1,1,2-Trichloroethane	ND	0.020	"							
1,1-Dichloroethane	ND	0.020	"							
1,1-Dichloroethene	ND	0.020	"							
1,2-Dichloroethane	ND	0.020	"							
Benzene	ND	0.020	"							
cis-1,2-Dichloroethene	ND	0.020	"							
Carbon tetrachloride	ND	0.020	"							
Chloroethane	ND	0.020	"							
Chloroform	ND	0.020	"							
Dichlorodifluoromethane	ND	0.020	"							
Ethylbenzene	ND	0.020	"							
Methylene Chloride	ND	0.020	"							
ortho-Xylene	ND	0.020	"							
meta- and para-Xylenes	0.00800	0.020	"							J
trans-1,2-Dichloroethene	ND	0.020	"							
Tetrachloroethene	ND	0.020	"							
Toluene	ND	0.020	"							
Trichloroethene	ND	0.020	"							
Trichlorofluoromethane	ND	0.020	"							
Vinyl Chloride	ND	0.020	"							
Surrogate: Dibromofluoromethane	*2.19*		*"*	*2.50*		*87.7*	*75-125*			
Surrogate: Toluene-d8	*2.51*		*"*	*2.50*		*100*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.55*		*"*	*2.50*		*102*	*75-125*			
Surrogate: Benzene-d6	*2.18*		*"*	*2.50*		*87.0*	*70-140*			
Surrogate: Chloroform-d	*2.35*		*"*	*2.50*		*93.9*	*70-140*			
Surrogate: Methylene chloride-d2	*2.22*		*"*	*2.50*		*89.0*	*70-140*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
LCS (34E2701-BS1)				Prepared & Analyzed: 05/27/14						
1,1,1,2-Tetrachloroethane	1.21	0.020	ug/l	1.25		96.8	75-136			
1,1,1-Trichloroethane	0.980	0.020	"	1.25		78.4	73-134			
1,1,2,2-Tetrachloroethane	1.39	0.020	"	1.25		111	56-149			
1,1,2-Trichloro-trifluoroethane	1.21	0.020	"	1.25		96.8	83-125			
1,1,2-Trichloroethane	1.40	0.020	"	1.25		112	67-137			
1,1-Dichloroethane	1.01	0.020	"	1.25		80.8	80-121			
1,1-Dichloroethene	1.12	0.020	"	1.25		89.6	73-137			
1,2-Dichloroethane	1.21	0.020	"	1.25		96.8	75-131			
Benzene	1.27	0.020	"	1.25		102	79-118			
cis-1,2-Dichloroethene	1.22	0.020	"	1.25		97.6	85-116			
Carbon tetrachloride	1.32	0.020	"	1.25		106	74-143			
Chloroethane	1.33	0.020	"	1.25		106	60-137			
Chloroform	1.19	0.020	"	1.25		95.2	82-140			
Dichlorodifluoromethane	0.680	0.020	"	1.25		54.4	47-129			
Ethylbenzene	1.34	0.020	"	1.25		107	83-125			
Methylene Chloride	1.33	0.020	"	1.25		106	81-126			
ortho-Xylene	1.30	0.020	"	1.25		104	85-115			
meta- and para-Xylenes	2.78	0.020	"	2.50		111	83-115			
trans-1,2-Dichloroethene	1.35	0.020	"	1.25		108	72-133			
Tetrachloroethene	1.17	0.020	"	1.25		93.6	60-144			
Toluene	1.32	0.020	"	1.25		106	70-115			
Trichloroethene	1.26	0.020	"	1.25		101	68-132			
Trichlorofluoromethane	1.34	0.020	"	1.25		107	62-144			
Vinyl Chloride	1.39	0.020	"	1.25		111	66-137			
Surrogate: Dibromofluoromethane	*11.4*		*"*	*12.5*		*91.1*	*75-125*			
Surrogate: Toluene-d8	*12.5*		*"*	*12.5*		*100*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*13.1*		*"*	*12.5*		*105*	*75-125*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
LCS Dup (34E2701-BSD1)				Prepared & Analyzed: 05/27/14						
1,1,1,2-Tetrachloroethane	1.19	0.020	ug/l	1.25		95.2	75-136	1.67	20	
1,1,1-Trichloroethane	1.07	0.020	"	1.25		85.6	73-134	8.78	20	
1,1,2,2-Tetrachloroethane	1.15	0.020	"	1.25		92.0	56-149	18.9	20	
1,1,2-Trichloro-trifluoroethane	1.23	0.020	"	1.25		98.4	83-125	1.64	20	
1,1,2-Trichloroethane	1.19	0.020	"	1.25		95.2	67-137	16.2	20	
1,1-Dichloroethane	1.16	0.020	"	1.25		92.8	80-121	13.8	20	
1,1-Dichloroethene	1.35	0.020	"	1.25		108	73-137	18.6	20	
1,2-Dichloroethane	1.10	0.020	"	1.25		88.0	75-131	9.52	20	
Benzene	1.26	0.020	"	1.25		101	79-118	0.791	20	
cis-1,2-Dichloroethene	1.16	0.020	"	1.25		92.8	85-116	5.04	20	
Carbon tetrachloride	1.31	0.020	"	1.25		105	74-143	0.760	20	
Chloroethane	1.42	0.020	"	1.25		114	60-137	6.55	20	
Chloroform	1.12	0.020	"	1.25		89.6	82-140	6.06	20	
Dichlorodifluoromethane	1.32	0.020	"	1.25		106	47-129	64.0	20	QR-04
Ethylbenzene	1.30	0.020	"	1.25		104	83-125	3.03	20	
Methylene Chloride	1.25	0.020	"	1.25		100	81-126	6.20	20	
ortho-Xylene	1.34	0.020	"	1.25		107	85-115	3.03	20	
meta- and para-Xylenes	2.60	0.020	"	2.50		104	83-115	6.69	20	
trans-1,2-Dichloroethene	1.30	0.020	"	1.25		104	72-133	3.77	20	
Tetrachloroethene	0.920	0.020	"	1.25		73.6	60-144	23.9	20	QR-04
Toluene	1.24	0.020	"	1.25		99.2	70-115	6.25	20	
Trichloroethene	1.24	0.020	"	1.25		99.2	68-132	1.60	20	
Trichlorofluoromethane	1.50	0.020	"	1.25		120	62-144	11.3	20	
Vinyl Chloride	1.29	0.020	"	1.25		103	66-137	7.46	20	
Surrogate: Dibromofluoromethane	*11.0*		*"*	*12.5*		*88.3*	*75-125*			
Surrogate: Toluene-d8	*12.9*		*"*	*12.5*		*104*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*12.7*		*"*	*12.5*		*102*	*75-125*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 03-Jun-14 14:48

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
Duplicate (34E2701-DUP1)		**Source: 3E42701-02**		Prepared & Analyzed: 05/27/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l		ND				50	
1,1,1-Trichloroethane	ND	0.020	"		ND				50	
1,1,2,2-Tetrachloroethane	ND	0.020	"		ND				50	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"		ND				50	
1,1,2-Trichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethene	ND	0.020	"		ND				50	
1,2-Dichloroethane	ND	0.020	"		ND				50	
Benzene	ND	0.020	"		ND				50	
cis-1,2-Dichloroethene	ND	0.020	"		ND				50	
Carbon tetrachloride	ND	0.020	"		ND				50	
Chloroethane	ND	0.020	"		ND				50	
Chloroform	ND	0.020	"		ND				50	
Dichlorodifluoromethane	ND	0.020	"		ND				50	
Ethylbenzene	0.0200	0.020	"		0.0254			23.8	50	
Methylene Chloride	ND	0.020	"		ND				50	
ortho-Xylene	0.0292	0.020	"		0.0358			20.3	50	
meta- and para-Xylenes	0.0654	0.020	"		0.0792			19.1	50	
trans-1,2-Dichloroethene	ND	0.020	"		ND				50	
Tetrachloroethene	ND	0.020	"		ND				50	
Toluene	0.105	0.020	"		0.125			17.2	50	
Trichloroethene	ND	0.020	"		ND				50	
Trichlorofluoromethane	ND	0.020	"		ND				50	
Vinyl Chloride	ND	0.020	"		ND				50	
Surrogate: Dibromofluoromethane	*2.23*		*"*	*2.50*		*89.1*	*75-125*			
Surrogate: Toluene-d8	*2.48*		*"*	*2.50*		*99.4*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.62*		*"*	*2.50*		*105*	*75-125*			
Surrogate: Benzene-d6	*2.17*		*"*	*2.50*		*86.7*	*70-140*			
Surrogate: Chloroform-d	*2.34*		*"*	*2.50*		*93.6*	*70-140*			
Surrogate: Methylene chloride-d2	*2.31*		*"*	*2.50*		*92.2*	*70-140*			

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Notes and Definitions

QR-04	The RPD result for this analyte in the sample exceeded the QC control limits; however, the RPD for other analytes were within the QC control limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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SUMMARY OF INITIAL CALIBRATION

Rerun sample @ 5ppb @ Most.

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:24:09 2013
Response via : Initial Calibration

Calibration Files
1 =K3IC00_1.D 2 =K3IC0_25.D 3 =K07LCS01.D
4 =K3IC1_25.D 5 =K3IC02_5.D 6 =K3IC12_5.D

		Compound	1	2	3	4	5	6	Avg	%RSD	
1)	I	Fluorobenzene (IS)	----------ISTD----------								
2)	S	Dibromofluoromethan	0.311	0.300	0.318	0.319	0.312	0.311	0.312	2.10	
3)	T	(F12) Dichlorodiflu	0.320	0.284	0.302	0.292	0.321	0.321	0.307	5.36	
4)	P	Chloromethane	0.422	0.302	0.293	0.219	0.221	0.212	0.278	29.02	Linear
5)	CM	Vinyl Chloride	0.276	0.224	0.211	0.207	0.207	0.199	0.221	12.88	
6)	T	Bromomethane	0.338	0.225	0.179	0.162	0.150	0.139	0.199	37.55	Linear
7)	T	Chloroethane	0.030	0.106	0.066	0.102	0.098	0.089	0.082	35.53	Quadratic
8)	T	(F11) Trichlorofluo	0.379	0.365	0.327	0.337	0.323	0.326	0.343	6.87	
9)	T	(F113) 1,1,2-Trichl	0.291	0.221	0.227	0.267	0.239	0.229	0.246	11.15	
10)	CM	1,1-Dichloroethene	0.277	0.287	0.322	0.307	0.291	0.286	0.295	5.61	
11)	T	Acetone	0.267	0.136	0.115	0.061	0.051	0.016	0.108	82.94	Quadratic
12)	M	(IPA) Leak Check Co	0.012	0.022	0.014	0.013	0.014	0.016	0.015	27.59	
13)	T	Carbon disulfide	1.178	1.037	1.080	1.042	0.958	0.941	1.039	8.28	
14)	T	Methylene Chloride	0.418	0.313	0.349	0.339	0.327	0.314	0.343	11.47	
15)		(TBA) tert-Butanol	0.022	0.019	0.027	0.022	0.018	0.020	0.021	16.39	
16)	TM	(MTBE) Methyl-t-but	0.789	0.678	0.760	0.729	0.655	0.638	0.708	8.56	
17)	T	trans-1,2-Dichloroe	0.331	0.360	0.342	0.357	0.310	0.318	0.336	6.07	
18)	PM	1,1-Dichloroethane	0.582	0.580	0.586	0.585	0.521	0.518	0.562	5.90	
19)	T	cis-1,2-Dichloroeth	0.442	0.415	0.416	0.387	0.339	0.345	0.390	10.66	
20)	T	2,2-Dichloropropane	0.561	0.489	0.520	0.497	0.440	0.435	0.490	9.80	
21)	T	(MEK) 2-Butanone	0.036	0.041	0.042	0.021	0.440	0.435	0.035	26.97	Not in use.
22)	T	(DIPE) Diisopropyl	1.055	1.006	1.006	1.025	0.901	0.867	0.977	7.64	
23)	T	Bromochloromethane	0.110	0.155	0.185	0.189	0.182	0.184	0.167	18.39	
24)	CM	Chloroform	0.723	0.654	0.684	0.676	0.594	0.598	0.655	7.70	
25)	T	(ETBE) 2-ethoxy 2-m	1.034	0.874	0.941	0.927	0.821	0.823	0.903	9.00	
26)	T	1,1,1-Trichloroetha	0.516	0.540	0.535	0.523	0.496	0.488	0.517	4.07	
27)	T	(TAME) tert-Amyl me	1.000	0.749	0.821	0.764	0.701	0.680	0.786	14.75	
28)	S	1,2-Dichloroethane-	0.309	0.278	0.303	0.299	0.296	0.293	0.296	3.50	
29)	T	1,1-Dichloropropene	0.547	0.492	0.502	0.489	0.439	0.427	0.482	9.13	
30)	T	Carbon Tetrachlorid	0.401	0.388	0.449	0.460	0.412	0.416	0.421	6.66	
31)	M	Benzene	1.374	1.155	1.267	1.217	1.042	1.008	1.177	11.75	
32)	M	1,2-Dichloroethane	0.501	0.382	0.445	0.419	0.385	0.365	0.416	12.20	
33)	M	Trichloroethene	0.480	0.355	0.386	0.399	0.336	0.324	0.380	14.87	
34)	C	1,2-Dichloropropane	0.298	0.297	0.277	0.290	0.264	0.258	0.281	6.17	
35)	T	Dibromomethane	0.207	0.209	0.227	0.244	0.215	0.216	0.220	6.33	
36)	T	Bromodichloromethan	0.459	0.407	0.479	0.446	0.428	0.433	0.442	5.69	
37)	T	cis-1,3-Dichloropro	0.508	0.451	0.526	0.493	0.447	0.467	0.482	6.63	
38)	I	Chlorobenzene-d5 (IS)	----------ISTD----------								
39)	S	Toluene-d8 (SU3)	1.209	1.139	1.193	1.149	1.157	1.149	1.166	2.42	
40)	T	(MIBK) 4-Methyl-2-P	0.545	0.324	0.388	0.078	0.072	0.088	0.249	79.95	Not in use.
41)	CM	Toluene	2.231	1.790	1.660	1.584	1.518	1.441	1.704	16.71	

42)	T	trans-1,3-Dichlorop	0.601	0.493	0.586	0.607	0.528	0.560	0.563	7.97	
43)	T	1,1,2-Trichloroetha	0.310	0.285	0.355	0.328	0.286	0.281	0.308	9.58	
44)	M	Tetrachloroethene	0.462	0.392	0.677	0.635	0.590	0.281	0.551	21.81	LINEAR
45)	T	1,3-Dichloropropane	0.710	0.578	0.592	0.569	0.532	0.529	0.585	11.33	
46)	T	2-Hexanone	0.333	0.186	0.340	0.266	0.333	0.182	0.273	27.20	
47)	T	Dibromochloromethan	0.426	0.363	0.496	0.458	0.432	0.459	0.439	10.18	
48)	T	1,2-Dibromoethane	0.412	0.355	0.430	0.402	0.394	0.396	0.398	6.27	
49)	PM	Chlorobenzene	1.366	1.154	1.110	1.134	1.086	1.043	1.149	9.84	
50)	T	1,1,1,2-Tetrachloro	0.449	0.384	0.437	0.407	0.388	0.387	0.409	6.91	
51)	CM	Ethylbenzene	2.333	2.080	1.968	1.851	1.736	1.654	1.937	12.77	
52)	TM	m,p-Xylenes	0.809	0.711	0.727	0.669	0.615	0.602	0.689	11.20	
53)	TM	o-Xylene	0.867	0.664	0.674	0.671	0.615	0.594	0.681	14.25	
54)	T	Styrene	1.563	1.015	1.078	1.049	0.973	0.934	1.102	21.01	LINEAR
55)	P	Bromoform	0.237	0.199	0.286	0.259	0.238	0.276	0.249	12.69	
56)	T	Isopropylbenzene	2.188	1.855	1.900	1.811	1.764	1.674	1.865	9.44	
57)	T	1,2,3-Trichloroprop	0.505	0.491	0.593	0.516	0.480	0.472	0.509	8.58	
58)	S	4-Bromofluorobenzen	0.518	0.507	0.527	0.511	0.510	0.495	0.511	2.08	
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------								
60)	P	1,1,2,2-Tetrachloro	1.020	0.822	1.013	0.870	0.774	0.905	0.901	11.13	
61)	T	Bromobenzene	1.079	1.003	1.043	0.946	0.914	0.907	0.982	7.20	
62)	T	n-Propylbenzene	6.721	5.112	5.219	4.601	4.392	4.279	5.054	17.82	
63)	T	2-Chlorotoluene	3.644	2.948	3.362	3.044	2.868	2.805	3.112	10.48	
64)	T	1,3,5-Trimethylbenz	3.612	3.208	3.247	3.017	2.832	2.775	3.115	9.93	
65)	T	4-Chlorotoluene	3.315	2.950	2.942	2.812	2.597	2.623	2.873	9.19	
66)	T	tert-Butylbenzene	2.817	2.666	3.007	2.633	2.430	2.371	2.654	8.96	
67)	T	1,2,4-Trimethylbenz	3.774	3.331	3.421	3.050	2.968	2.953	3.250	9.91	
68)	T	sec-Butylbenzene	4.837	3.956	4.522	4.187	3.865	3.852	4.203	9.54	
69)	T	p-Isopropyltoluene	3.974	3.475	3.582	3.347	3.061	3.060	3.417	10.13	
70)	T	1,3-Dichlorobenzene	2.120	1.740	1.888	1.871	1.734	1.744	1.850	8.06	
71)	T	1,4-Dichlorobenzene	2.120	1.740	1.974	1.864	1.658	1.729	1.847	9.43	
72)	T	n-Butylbenzene	4.391	3.645	3.644	3.397	3.264	3.192	3.589	12.14	
73)	T	1,2-Dichlorobenzene	1.716	1.534	1.764	1.657	1.614	1.583	1.645	5.20	
74)	T	1,2-Dibromo-3-chlor	0.082	0.104	0.111	0.148	0.133	0.146	0.121	21.61	LINEAR
75)	T	1,2,4-Trichlorobenz	1.184	1.091	1.244	1.074	1.050	1.044	1.115	7.28	
76)	T	Hexachlorobutadiene	0.297	0.477	0.596	0.481	0.499	0.507	0.476	20.56	LINEAR
77)	T	Naphthalene	2.690	2.294	3.052	2.312	2.176	2.294	2.470	13.55	
78)	T	Hexachloroethane	0.306	0.301	0.391	0.362	0.374	0.435	0.361	14.24	
79)	T	1,2,3-Trichlorobenz	1.346	0.926	1.173	0.993	0.940	0.968	1.058	15.82	

(#) = Out of Range

MW111313.M Wed Nov 13 19:25:18 2013

CONTINUING CALIBRATION VERIFICATION

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27CCV01.D Vial: 10
Acq On : 27 May 2014 6:52 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 7:33 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1684875m	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1172956m	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	612677	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.44	113	469211	11.16 ug/L	0.02
Spiked Amount 12.500 Range 75 - 125 Recovery = 89.28%					
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	467260	11.70 ug/L	0.01
Spiked Amount 12.500 Range 75 - 125 Recovery = 93.60%					
39) Toluene-d8 (SU3)	12.21	98	1425906	13.03 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 104.24%					
58) 4-Bromofluorobenzene (SU4)	15.22	95	641591	13.37 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 106.96%					

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	29185	0.71 ug/L	94
4) Chloromethane	4.46	50	40489	1.31 ug/L	41
5) Vinyl Chloride	4.60	62	41383	1.39 ug/L	68
6) Bromomethane	5.15	96	23518	1.09 ug/L	1
7) Chloroethane	5.30	64	18268	1.39 ug/L	52
8) (F11) Trichlorofluorometha	5.67	101	56717	1.23 ug/L	91
9) (F113) 1,1,2-Trichloro-tri	6.38	151	43519	1.31 ug/L	100
10) 1,1-Dichloroethene	6.45	96	53151	1.34 ug/L	94
11) Acetone	6.47	58	43858	-12.50 ug/L	97
12) (IPA) Leak Check Compound	6.54	45	77478	38.27 ug/L	99
13) Carbon disulfide	6.87	76	191441	1.37 ug/L	100
14) Methylene Chloride	7.12	84	60168	1.30 ug/L #	92
15) (TBA) tert-Butanol	7.10	59	2891	1.01 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	93656	0.98 ug/L	96
17) trans-1,2-Dichloroethene	7.49	96	61572	1.36 ug/L	95
18) 1,1-Dichloroethane	8.08	63	101687	1.34 ug/L	85
19) cis-1,2-Dichloroethene	8.84	96	63984	1.22 ug/L	93
20) 2,2-Dichloropropane	8.82	77	264	0.00 ug/L #	1
21) (MEK) 2-Butanone	8.80	72	7227	1.53 ug/L #	44
22) (DIPE) Diisopropyl Ether	8.01	45	182969	1.39 ug/L	97
23) Bromochloromethane	9.17	128	25557	1.13 ug/L #	83
24) Chloroform	9.22	83	104547	1.18 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27CCV01.D Vial: 10
Acq On : 27 May 2014 6:52 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 7:33 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.50	59	120604	0.99 ug/L #	96
26) 1,1,1-Trichloroethane	9.51	97	70108	1.01 ug/L	93
27) (TAME) tert-Amyl methyl et	10.01	73	111150	1.05 ug/L	94
29) 1,1-Dichloropropene	9.70	75	79628	1.22 ug/L	99
30) Carbon Tetrachloride	13.89	117	69552	1.23 ug/L	98
31) Benzene	9.99	78	197983	1.25 ug/L #	91
32) 1,2-Dichloroethane	10.00	62	70717	1.26 ug/L	95
33) Trichloroethene	10.75	130	67658	1.32 ug/L	99
34) 1,2-Dichloropropane	11.05	63	54079	1.43 ug/L	94
35) Dibromomethane	11.22	93	36471	1.23 ug/L	98
36) Bromodichloromethane	11.36	83	69830	1.17 ug/L	90
37) cis-1,3-Dichloropropene	11.87	75	63750	0.98 ug/L	93
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	11366	0.49 ug/L #	100
41) Toluene	12.29	91	227878	1.43 ug/L	96
42) trans-1,3-Dichloropropene	12.51	75	48409	0.92 ug/L #	82
43) 1,1,2-Trichloroethane	12.75	83	43143	1.50 ug/L	93
44) Tetrachloroethene	12.95	164	67051	1.19 ug/L	96
45) 1,3-Dichloropropane	12.97	76	72200	1.32 ug/L	98
46) 2-Hexanone	12.97	43	41158	1.60 ug/L	89
47) Dibromochloromethane	13.25	129	53763	1.30 ug/L #	99
48) 1,2-Dibromoethane	13.43	107	50323	1.35 ug/L	95
49) Chlorobenzene	13.95	112	147542	1.37 ug/L	94
50) 1,1,1,2-Tetrachloroethane	14.03	131	52394	1.37 ug/L	91
51) Ethylbenzene	14.03	91	257211	1.42 ug/L	99
52) m,p-Xylenes	14.15	106	183018	2.83 ug/L	99
53) o-Xylene	14.62	106	90645	1.42 ug/L	98
54) Styrene	14.63	104	142452	1.55 ug/L	96
55) Bromoform	14.92	173	30116	1.29 ug/L #	96
56) Isopropylbenzene	15.01	105	250853	1.43 ug/L	99
57) 1,2,3-Trichloropropane	15.42	75	64888	1.36 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	58447	1.32 ug/L	98
61) Bromobenzene	15.44	156	64235	1.33 ug/L	94
62) n-Propylbenzene	15.46	91	324473	1.31 ug/L	99
63) 2-Chlorotoluene	15.62	91	206902	1.36 ug/L	99
64) 1,3,5-Trimethylbenzene	15.62	105	196753	1.29 ug/L	100
65) 4-Chlorotoluene	15.73	91	196737	1.40 ug/L	99
66) tert-Butylbenzene	16.01	119	168621	1.30 ug/L	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27CCV01.D Vial: 10
Acq On : 27 May 2014 6:52 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 7:33 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

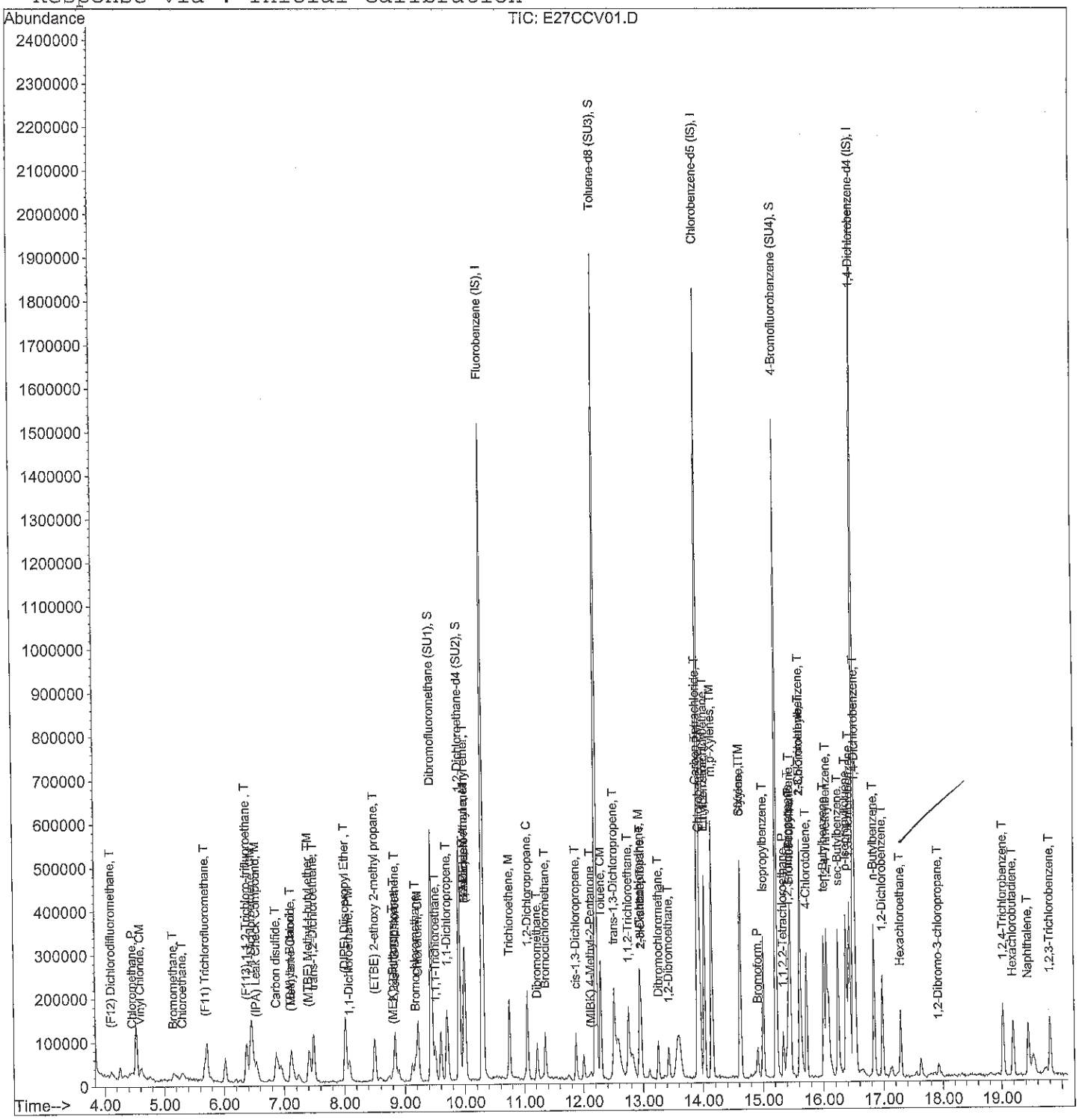
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67)	1,2,4-Trimethylbenzene	16.06	105	211876	1.33 ug/L	94
68)	sec-Butylbenzene	16.25	105	273394	1.33 ug/L	98
69)	p-Isopropyltoluene	16.38	119	216404	1.29 ug/L	96
70)	1,3-Dichlorobenzene	16.44	146	122769	1.35 ug/L	98
71)	1,4-Dichlorobenzene	16.54	146	119770	1.32 ug/L	99
72)	n-Butylbenzene	16.84	91	240111	1.36 ug/L	97
73)	1,2-Dichlorobenzene	16.98	146	112611	1.40 ug/L	97
74)	1,2-Dibromo-3-chloropropan	17.93	75	8720	1.30 ug/L #	81
75)	1,2,4-Trichlorobenzene	19.03	180	70111	1.28 ug/L	96
76)	Hexachlorobutadiene	19.20	225	32688	1.33 ug/L	99
77)	Naphthalene	19.45	128	145796	1.20 ug/L	100
78)	Hexachloroethane	17.29	201	21385	1.21 ug/L	92
79)	1,2,3-Trichlorobenzene	19.81	180	64273	1.24 ug/L	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27CCV01.D Vial: 10
Acq On : 27 May 2014 6:52 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 7:33 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27CCV01.D Vial: 10
Acq On : 27 May 2014 6:52 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene (IS)	12.500	12.500	0.0	127	0.00
2	S	Dibromofluoromethane (SU1)	12.500	11.165	10.7	111	0.02
3	T	(F12) Dichlorodifluorometha	1.250	0.706	43.5#	75	0.04
4	P	Chloromethane	1.250	1.312	-5.0	139	0.07
5	CM	Vinyl Chloride	1.250	1.391	-11.3	151	0.05
6	T	Bromomethane	1.250	1.091	12.7	110	0.05
7	T	Chloroethane	1.250	1.388	-11.0	135	0.06
8	T	(F11) Trichlorofluoromethan	1.250	1.227	1.8	127	0.06
9	T	(F113) 1,1,2-Trichloro-trif	1.250	1.314	-5.1	123	0.05
10	CM	1,1-Dichloroethene	1.250	1.337	-7.0	130	0.05
11	T	Acetone	1.250	-12.500	1100.0#	539	0.01
12	M	(IPA) Leak Check Compound	62.500	38.268	38.8#	84	0.00
13	T	Carbon disulfide	1.250	1.367	-9.4	138	0.05
14	T	Methylene Chloride	1.250	1.300	-4.0	134	0.04
15		(TBA) tert-Butanol	12.500	1.006	92.0#	10	-0.01
16	TM	(MTBE) Methyl-t-butyl ether	2.500	0.981	60.8#	48	0.01
17	T	trans-1,2-Dichloroethene	1.250	1.358	-8.6	130	0.03
18	PM	1,1-Dichloroethane	1.250	1.342	-7.4	131	0.03
19	T	cis-1,2-Dichloroethene	1.250	1.216	2.7	125	0.02
20	T	2,2-Dichloropropane	1.250	0.004	99.7#	0	-0.01
21	T	(MEK) 2-Butanone	1.250	1.526	-22.1	132	0.01
22	T	(DIPE) Diisopropyl Ether	1.250	1.390	-11.2	135	0.00
23	T	Bromochloromethane	1.250	1.133	9.4	102	0.02
24	CM	Chloroform	1.250	1.184	5.3	117	0.02
25	T	(ETBE) 2-ethoxy 2-methyl pr	1.250	0.991	20.7	98	0.00
26	T	1,1,1-Trichloroethane	1.250	1.007	19.4	101	0.02
27	T	(TAME) tert-Amyl methyl eth	1.250	1.049	16.1	110	0.00
28	S	1,2-Dichloroethane-d4 (SU2)	12.500	11.699	6.4	118	0.01
29	T	1,1-Dichloropropene	1.250	1.224	2.1	123	0.01
30	T	Carbon Tetrachloride	1.250	1.226	1.9	114	4.18#
31	M	Benzene	1.250	1.248	0.2	123	0.01
32	M	1,2-Dichloroethane	1.250	1.261	-0.9	127	0.01
33	M	Trichloroethene	1.250	1.322	-5.8	128	0.01
34	C	1,2-Dichloropropane	1.250	1.429	-14.3	141	0.00
35	T	Dibromomethane	1.250	1.232	1.4	113	0.00
36	T	Bromodichloromethane	1.250	1.172	6.2	118	0.01
37	T	cis-1,3-Dichloropropene	1.250	0.981	21.5	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27CCV01.D Vial: 10
Acq On : 27 May 2014 6:52 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
38	I	Chlorobenzene-d5 (IS)	12.500	12.500	0.0	113	0.00
39	S	Toluene-d8 (SU3)	12.500	13.034	-4.3	120	0.00
40	T	(MIBK) 4-Methyl-2-Pentanone	1.250	0.486	61.1#	140	0.00
41	CM	Toluene	1.250	1.425	-14.0	139	0.00
42	T	trans-1,3-Dichloropropene	1.250	0.917	26.6	77	0.00
43	T	1,1,2-Trichloroethane	1.250	1.495	-19.6	127	0.00
44	M	Tetrachloroethene	1.250	1.193	4.6	102	0.00
45	T	1,3-Dichloropropane	1.250	1.315	-5.2	123	0.00
46	T	2-Hexanone	1.250	1.604	-28.3	149	0.00
47	T	Dibromochloromethane	1.250	1.305	-4.4	114	0.00
48	T	1,2-Dibromoethane	1.250	1.347	-7.8	121	0.00
49	PM	Chlorobenzene	1.250	1.369	-9.5	126	0.00
50	T	1,1,1,2-Tetrachloroethane	1.250	1.366	-9.3	125	0.00
51	CM	Ethylbenzene	1.250	1.415	-13.2	134	0.00
52	TM	m,p-Xylenes	2.500	2.832	-13.3	132	0.00
53	TM	o-Xylene	1.250	1.419	-13.5	131	0.00
54	T	Styrene	1.250	1.546	-23.7	131	0.00
55	P	Bromoform	1.250	1.288	-3.0	112	0.00
56	T	Isopropylbenzene	1.250	1.433	-14.6	134	0.00
57	T	1,2,3-Trichloropropane	1.250	1.357	-8.6	122	0.00
58	S	4-Bromofluorobenzene (SU4)	12.500	13.374	-7.0	122	0.00
59	I	1,4-Dichlorobenzene-d4 (IS)	12.500	12.500	0.0	122	0.00
60	P	1,1,2,2-Tetrachloroethane	1.250	1.324	-5.9	134	0.00
61	T	Bromobenzene	1.250	1.335	-6.8	135	0.00
62	T	n-Propylbenzene	1.250	1.310	-4.8	140	0.00
63	T	2-Chlorotoluene	1.250	1.357	-8.6	135	0.00
64	T	1,3,5-Trimethylbenzene	1.250	1.289	-3.1	130	0.00
65	T	4-Chlorotoluene	1.250	1.397	-11.8	139	0.00
66	T	tert-Butylbenzene	1.250	1.296	-3.7	128	0.00
67	T	1,2,4-Trimethylbenzene	1.250	1.330	-6.4	138	0.00
68	T	sec-Butylbenzene	1.250	1.327	-6.2	130	0.00
69	T	p-Isopropyltoluene	1.250	1.292	-3.4	129	0.00
70	T	1,3-Dichlorobenzene	1.250	1.354	-8.3	131	0.00
71	T	1,4-Dichlorobenzene	1.250	1.323	-5.8	128	0.00
72	T	n-Butylbenzene	1.250	1.365	-9.2	141	0.00
73	T	1,2-Dichlorobenzene	1.250	1.397	-11.8	135	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27CCV01.D Vial: 10
Acq On : 27 May 2014 6:52 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
74	T	1,2-Dibromo-3-chloropropane	1.250	1.299	-3.9	117	0.00
75	T	1,2,4-Trichlorobenzene	1.250	1.283	-2.6	130	0.00
76	T	Hexachlorobutadiene	1.250	1.328	-6.2	135	0.00
77	T	Naphthalene	1.250	1.204	3.7	126	0.00
78	T	Hexachloroethane	1.250	1.207	3.4	118	-0.01
79	T	1,2,3-Trichlorobenzene	1.250	1.240	0.8	129	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SUMMARY OF INTERNAL STANDARDS

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\052714L3\E27BFB01.D
Tune Time : 27 May 14 6:07 am

Daily Calibration File : C:\HPCHEM\1\DATA\013014L3\A30CCV01.D

File	Sample	Surrogate Recovery %				Internal Standard Responses (PFB) 1590180	(CLBD 1163370	(1,4- 587649
E2700001.D	3E42701-	90	96	95	105	1669603	1275583	659835
E2700002.D	3E42701-	88	92	99	107	1799866	1320072	691378
E2700003.D	34E2701-	89	92	99	105	1808256	1342252	685345
E2700004.D	3E42701-	92	97	99	106	1745598	1321272	716932
E2700005.D	3E42701-	89	89	98	104	1913339	1437327	745284
E2700006.D	3E42701-	90	95	100	110	1697668	1272990	687505
E2700007.D	3E42701-	88	87	101	106	1848407	1360103	711592
E2700008.D	3E42701-	90	89	101	108	1858802	1370885	727236
E2700009.D	3E42701-	89	86	102	105	1755921	1286154	676173
E2700010.D	3E42701-	87	86	100	105	1745629	1286126	662328
E2700011.D	3E42701-	91	92	100	107	1694263	1301352	693994
E2700012.D	3E42701-	89	93	97	108	1679743	1298736	682899
E2700013.D	3E42701-	91	93	98	106	1519594	1165882	627293
E2700014.D	3E42701-	90	95	96	109	1558226	1225289	643267
E2700015.D	3E42701-	90	91	100	103	1656895	1256682	652135
E27BLK01.D	34E2701-	88	87	100	102	1865195	1375456	703693
E27LCS01.D	34E2701-	91	93	100	105	1771401	1269697	637939
E27LCS02.D	34E2701-	88	86	103	102	1665701	1168708	574407

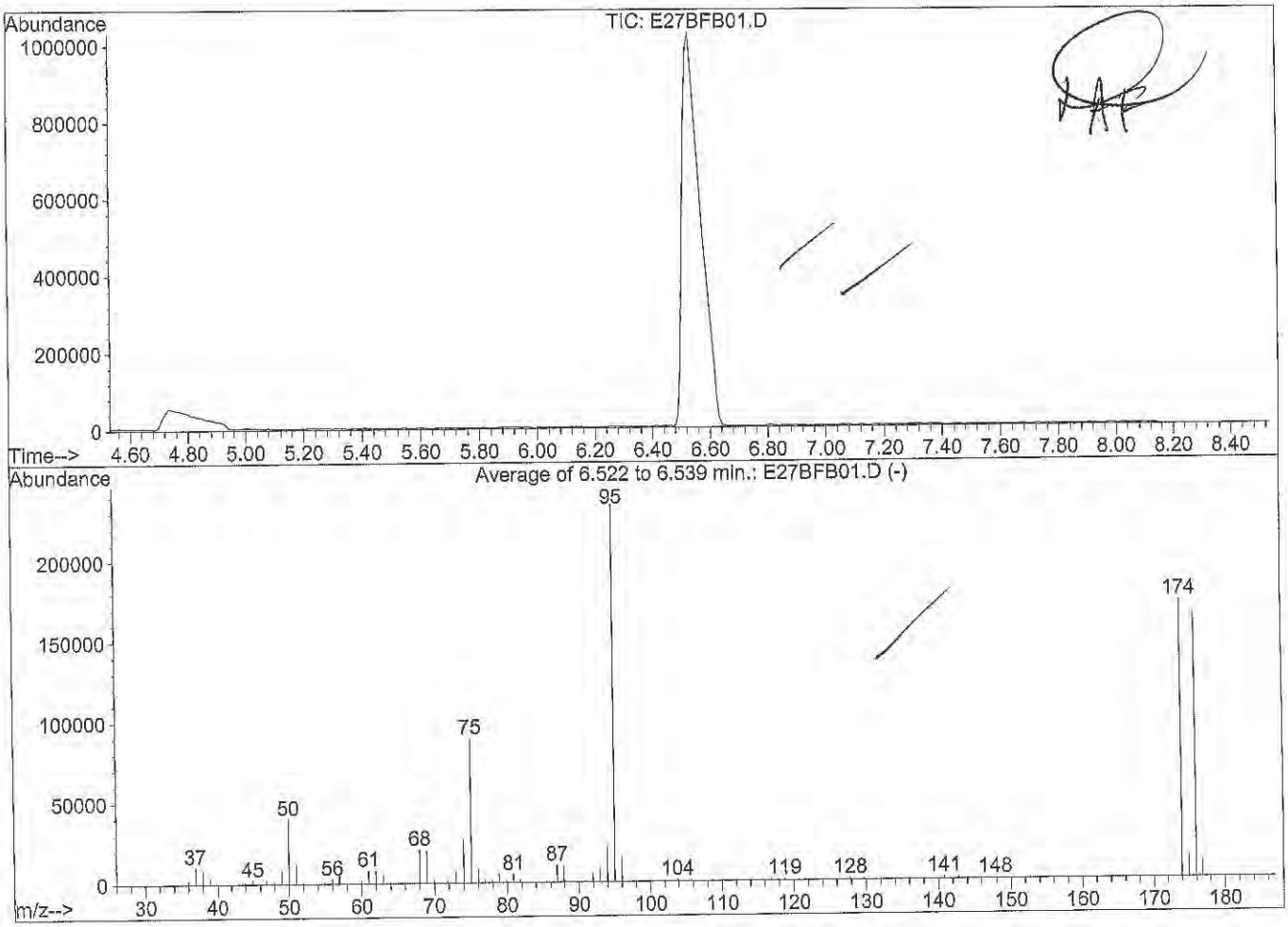
t - fails 12hr time check * - fails criteria

Created: Sun Jun 08 11:43:58 2014 GC
MS Ins

Summary of Instrument Tuning

BFB

Data File : C:\HPCHEM\1\DATA\052714L3\E27BFB01.D Vial: 1
Acq On : 27 May 2014 6:07 am Operator: DN
Sample : 50 ng BFB tune Inst : GC/MS Ins
Misc : 12HRS SYSTEM BFB TUNING Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN



AutoFind: Scans 319, 320, 321; Background Corrected with Scan 311

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	39963	PASS
75	95	30	60	38.2	89459	PASS
95	95	100	100	100.0	234475	PASS
96	95	5	9	6.6	15517	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.5	172416	PASS
175	174	5	9	7.5	12851	PASS
176	174	95	101	95.1	163947	PASS
177	176	5	9	6.2	10194	PASS

E27BFB01.D MW111313.M Tue May 27 07:35:37 2014

INJECTION LOG

Injection Log

Directory: c:\hpchem\1\data\052714l3

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	11	e2700001.d	10.	3E42701-01	100cc Equipment Blank	27 May 14 09:29
2	1	e2700002.d	10.	3E42701-02	100cc SVL-502-SA5D-SV-5.0-6.0	27 May 14 09:58
3	2	e2700003.d	10.	34E2701-DUP1	100cc SVL-502-SA5D-SV-5.0-6.0	27 May 14 10:27
4	3	e2700004.d	10.	3E42701-03	100cc SVL-802-SA5D-SV-5.0-6.0	27 May 14 10:57
5	4	e2700005.d	10.	3E42701-04	100cc SVL-502-SA5D-SV-13.0-14.0	27 May 14 11:32
6	5	e2700006.d	10.	3E42701-05	100cc SVL-502-SA5D-SV-18.0-19.0	27 May 14 12:03
7	6	e2700007.d	10.	3E42701-06	100cc SVL-513-SA5D-SV-5.0-6.0	27 May 14 12:33
8	7	e2700008.d	10.	3E42701-07	100cc SVL-513-SA5D-SV-10.0-11.0	27 May 14 13:02
9	8	e2700009.d	10.	3E42701-07	5cc SVL-513-SA5D-SV-10.0-11.0 20X DIL	27 May 14 13:31
10	8	e2700010.d	10.	3E42701-08	5cc SVL-513-SA5D-SV-15.5-16.5 20X DIL	27 May 14 14:01
11	2	e2700011.d	10.	3E42701-08	100cc SVL-513-SA5D-SV-15.5-16.5	27 May 14 14:34
12	3	e2700012.d	10.	3E42701-09	100cc SVL-512-SA5D-SV-5.0-6.0	27 May 14 15:05
13	4	e2700013.d	10.	3E42701-10	100cc SVL-512-SA5D-SV-11.0-12.0	27 May 14 15:35
14	5	e2700014.d	10.	3E42701-11	100cc SVL-512-SA5D-SV-16.75-17.75	27 May 14 16:04
15	6	e2700015.d	10.	3E42701-12	100cc FB-052714	27 May 14 17:01
16	1	e27bfb01.d	1.	50 ng BFB tune	12HRS SYSTEM BFB TUNING	27 May 14 06:07
17	11	e27blk01.d	10.	34E2701-BLK1	100cc AMBIENT AIR/H20	27 May 14 09:00
18	10	e27ccv01.d	1.	1.25/2.5/12.5 ug/L 8260B std	20mL 8260 CCV	27 May 14 06:52
19	10	e27lcs01.d	1.	34E2701-BS1	20cc 1.25/2.5/12.5 ug/L LCS	27 May 14 07:33
20	9	e27lcs02.d	1.	34E2701-BSD1	20cc 1.25/2.5/12.5 ug/L LCS	27 May 14 17:30

28 May 14 05:47

SAMPLE LOG SHEET

Environmental Support Technologies, Inc.
SOIL GAS - FIELD ANALYSIS
Sample Log Sheet

Date:_05/27/2014_____
Analyst:_____DN_____
Lab ID:_____# 3_____
Batch Number:_34E2701_____
Project Number:_EST2754___

EPA Method:_8260B CHHSLS 0.02 RL GILAN AIR5 PUMP
Initial Calibration:_MW111313.MTH FLOW RATE @ 200mL/min
Cal Std Lot No.:__4D14009_____
LCS Std Lot No.:_4D14008_____ Glass Bulb Bake @
IS/SS Lot No.:___4D14001_____ 130 degree for 30 min

MWH SSFL , CA

File No.	Port No.	Sample Lab No.	Sample ID	Amount	Dilution Factor	Bulb Surr added	Time Sample Loaded	Time Sample Analyzed	Glass Bulb #	PID READING
E427BFB1	1	50uL BFB1	12HRS TUNING	1uL	1x	PASS	@	607		
CCV1	9	1.25/2.5/12.5 CCV1	8260 STARDARD	20mL	1x	640	641	652		
BS1	9	34E2701-BS1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	715	716	733		
BLK1	1	34E2701-BLK1	METHOD BLANK	100cc	1x	845	846	900		
1	2	3E42701-01	EQUIPMENT BLANK	100cc	1x	910	911	929		0.0
2	1	3E42701-02	SVL-502-SA5D-SV-5.0-6.0	100cc	1x	832	833	958	11	0.0
3	2	34E2701-DUP1	SVL-502-SA5D-SV-5.0-6.0	100cc	1x	832	834	1027	11	0.0
4	3	3E42701-03	SVL-802-SA5D-SV-5.0-6.0	100cc	1x	832	835	1057	7	0.0
5	4	3E42701-04	SVL-502-SA5D-SV-13.0-14.0	100cc	1x	909	910	1132	5	0.0
6	5	3E42701-05	SVL-502-SA5D-SV-18.0-19.0	100cc	1x	942	943	1203	6	0.0
7	6	3E42701-06	SVL-513-SA5D-SV-5.0-6.0	100cc	1x	1015	1016	1233	1	0.0
RERUN 8	7	3E42701-07	SVL-513-SA5D-SV-10.0-11.0	100cc	1x	1045	1046	1302	8	0.0
9	8	3E42701-07	SVL-513-SA5D-SV-10.0-11.0	5cc	20x	1045	1315	1331	8	0.0
RERUN 10	1	3E42701-08	SVL-513-SA5D-SV-15.5-16.5	5cc	20x	1122	1123	1402	9	0.0
11	2	3E42701-08	SVL-513-SA5D-SV-15.5-16.5	100cc	1x	1122	1123	1434	9	0.0
12	3	3E42701-09	SVL-512-SA5D-SV-5.0-6.0	100cc	1x	1232	1233	1505	3	0.0
13	4	3E42701-10	SVL-512-SA5D-SV-11.0-12.0	100cc	1x	1303	1304	1535	10	0.0
14	5	3E42701-11	SVL-512-SA5D-SV-16.75-17.75	100cc	1x	1334	1335	1604	13	0.0
15	6	3E42701-12	FB-052714	100cc	1x	1400	1401	1701	12	0.0
BSD1	9	34E2701-BSD1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	1715	1716	1730		

CASE NARRATIVE

LABORATORY CASE NARRATIVE
(EPA 8260B)

SDG: 34E2701
DATE: May 27, 2014
PROJECT No.: EST2754

Twelve (12) Glass Bulb soil vapor samples were analyzed on May 27, 2014, by EPA Method Analysis performed using a gas chromatograph/mass spectrometer (GC/MS).

Sample Preservation and Holding Times

Samples were preserved according to the method recommendation, unless otherwise noted on the chain-of-custody (COC) and /or the sample log sheet. Holding times were met, unless otherwise noted in the report with data qualifiers.

QA/QC Criteria

All quality objective criteria were met, except as noted in the report with data qualifiers.

Samples Analysis

No anomalies were observes during analysis of the samples.

COMMENTS:

Results that fall between the MDL and RL are 'J' flagged.

Adjusted values corrected for significant figure correction (10X) and sample volume (5X).

RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION DUPLICATE SAMPLE

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700003.D Vial: 2
Acq On : 27 May 2014 10:27 am Operator: DN
Sample : 34E2701-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:52 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1808256	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1342252	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	685345	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	502458	11.14 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.12%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	490615	11.45 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.60%		
39) Toluene-d8 (SU3)	12.20	98	1554440	12.42 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 99.36%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	719373	13.10 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 104.80%		

Target Compounds					Qvalue
4) Chloromethane	4.41	50	2882	-0.27 ~~ug/L~~ #	62
6) Bromomethane	5.12	96	4565	0.52 ~~ug/L~~ #	61
7) Chloroethane	5.34	64	2763	2.52 ~~ug/L~~	96
11) Acetone	6.46	58	20993	30.21 ~~ug/L~~	98
12) (IPA) Leak Check Compound	6.49	45	70661	325.20 ~~ug/L~~ #	89
13) Carbon disulfide	6.86	76	68631	4.57 ~~ug/L~~ 0.0918	98
14) Methylene Chloride	7.08	84	6615	1.33 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.91	59	3628	11.76 ~~ug/L~~ #	77
21) (MEK) 2-Butanone	8.80	72	1109	2.18 ~~ug/L~~ #	1
24) Chloroform	9.21	83	2110	0.22 ~~ug/L~~ #	1
25) (ETBE) 2-ethoxy 2-methyl p	8.34	59	1076	0.08 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.93	75	914	0.13 ~~ug/L~~ #	1
31) Benzene	9.98	78	12818	0.75 ~~ug/L~~ #	68
32) 1,2-Dichloroethane	9.93	62	6604	1.10 ~~ug/L~~ #	1
35) Dibromomethane	11.01	93	354	0.11 ~~ug/L~~ #	5
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	7694	2.87 ~~ug/L~~ #	100
41) Toluene	12.29	91	96304	5.26 ug/L 0.1052	98
42) trans-1,3-Dichloropropene	12.29	75	291	0.05 ~~ug/L~~ #	1
46) 2-Hexanone	12.96	43	1860	0.63 ~~ug/L~~ #	63
51) Ethylbenzene	14.02	91	20829	1.00 ug/L 0.02	97
52) m,p-Xylenes	14.15	106	24163	3.27 ug/L 0.0654	100
53) o-Xylene	14.61	106	10708	1.46 ug/L 0.0292	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700003.D Vial: 2
Acq On : 27 May 2014 10:27 am Operator: DN
Sample : 34E2701-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:52 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

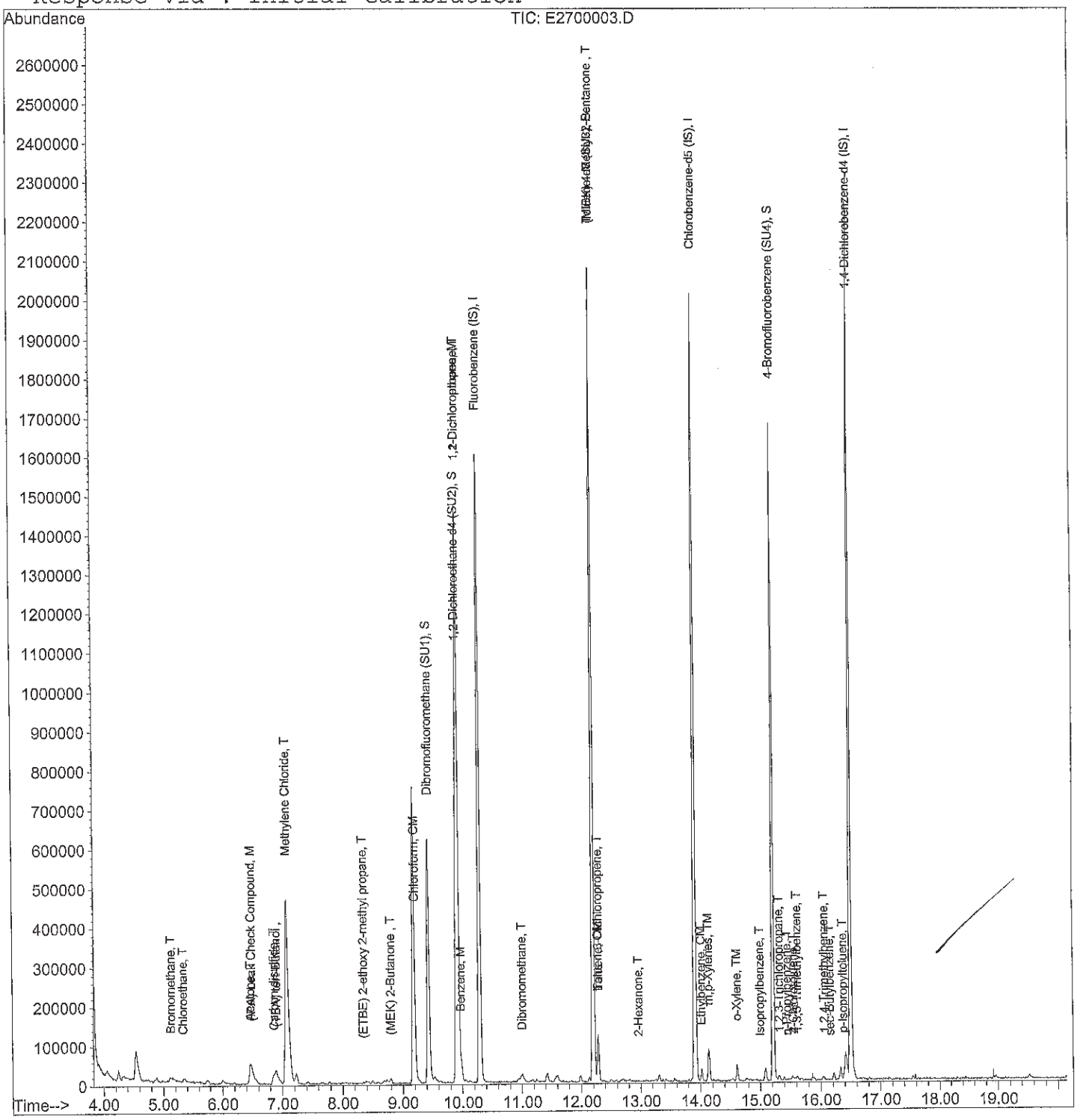
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) Styrene	14.61	104	1620	-0.72	~~ug/L #~~	1
56) Isopropylbenzene	15.00	105	303	0.02	~~ug/L~~ #	55
57) 1,2,3-Trichloropropane	15.33	75	311	0.06	~~ug/L~~ #	36
62) n-Propylbenzene	15.45	91	1810	0.07	~~ug/L~~ #	56
63) 2-Chlorotoluene	15.56	91	290	0.02	~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	1575	0.09	~~ug/L~~ #	31
65) 4-Chlorotoluene	15.56	91	290	0.02	~~ug/L~~ #	44
67) 1,2,4-Trimethylbenzene	16.06	105	4346	0.24	ug/L 0.0048	99
68) sec-Butylbenzene	16.15	105	314	0.01	~~ug/L~~ #	62
69) p-Isopropyltoluene	16.37	119	723	0.04	~~ug/L~~ #	52

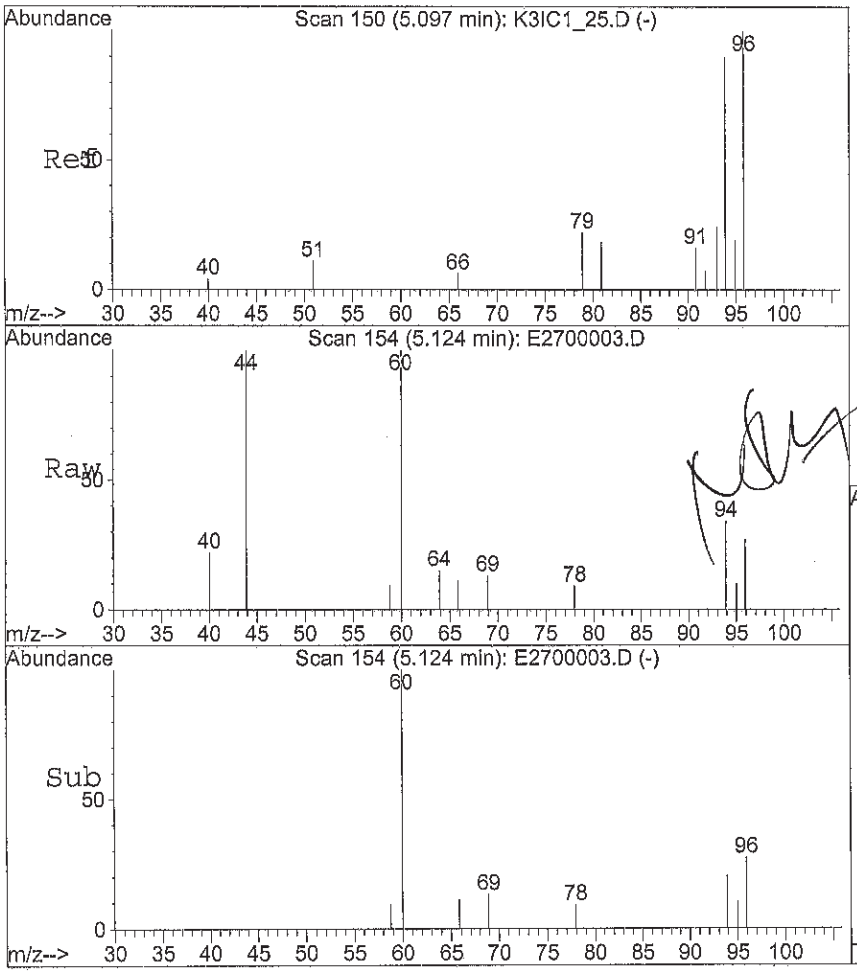
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700003.D Vial: 2
Acq On : 27 May 2014 10:27 am Operator: DN
Sample : 34E2701-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:52 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

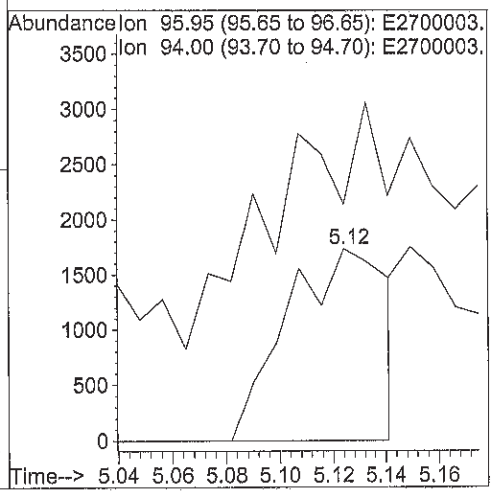


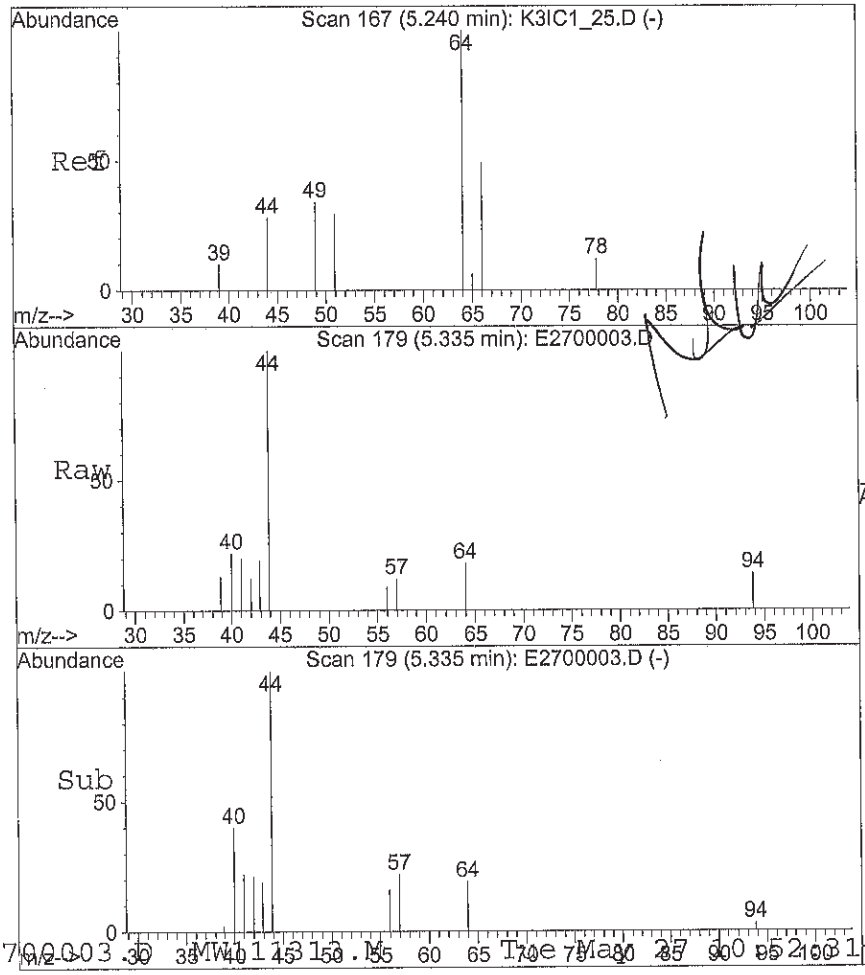


#6
Bromomethane
Concen: 0.52 ug/L
RT: 5.12 min Scan# 154
Delta R.T. 0.03 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 96 Resp: 4565

Ion	Ratio	Lower	Upper
96	100		
94	170.6	101.0	151.4#

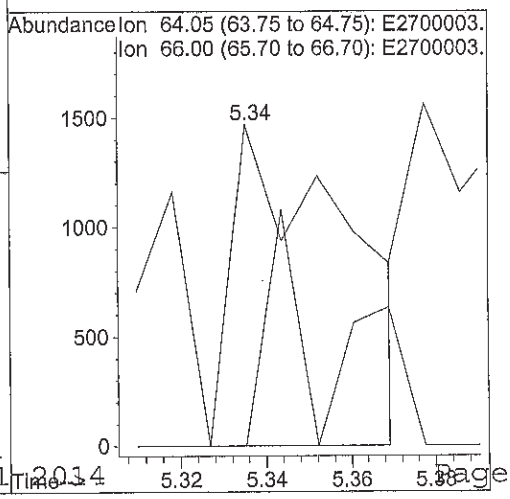


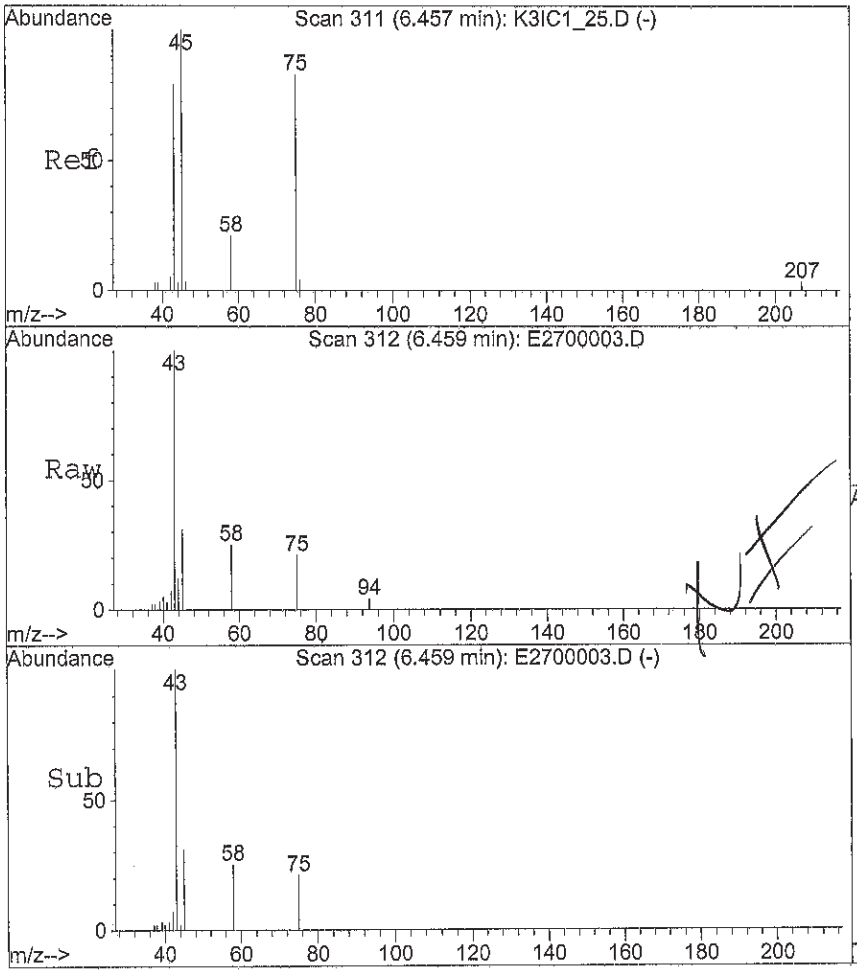


#7
Chloroethane
Concen: 2.52 ug/L
RT: 5.34 min Scan# 179
Delta R.T. 0.10 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 64 Resp: 2763

Ion	Ratio	Lower	Upper
64	100		
66	41.7	35.4	53.0

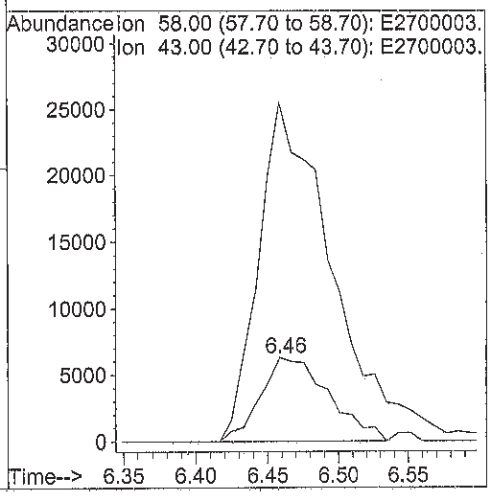


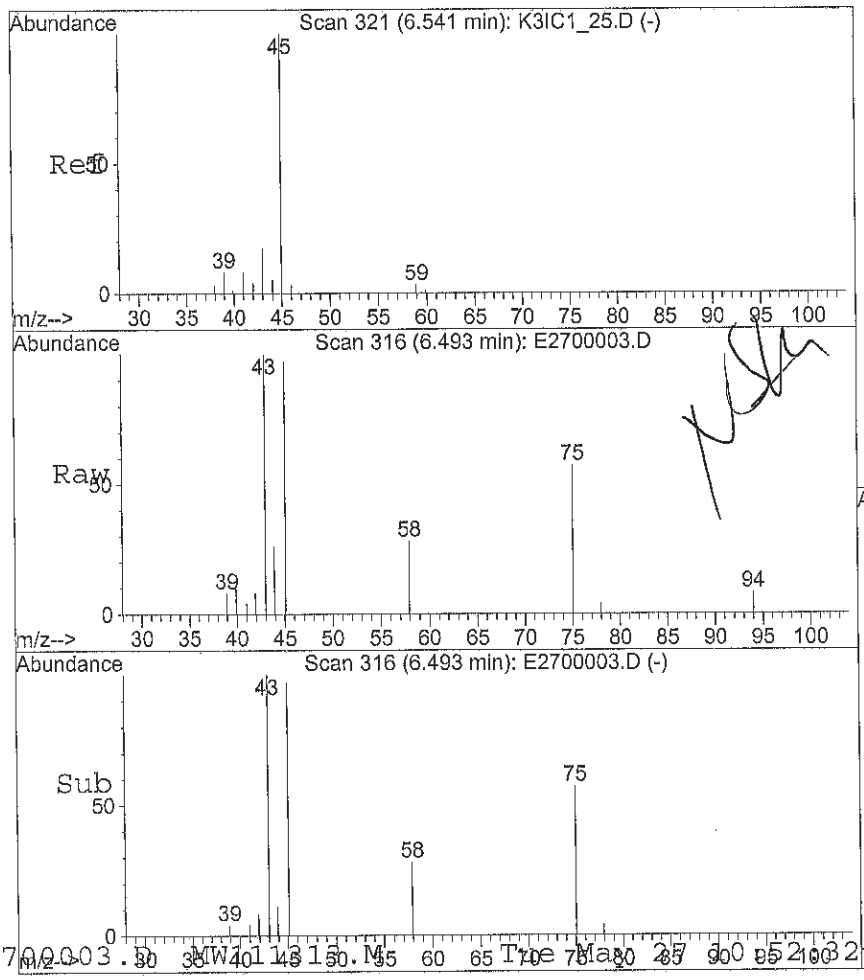


#11
Acetone
Concen: 30.21 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 58 Resp: 20993

Ion	Ratio	Lower	Upper
58	100		
43	445.8	360.9	541.3

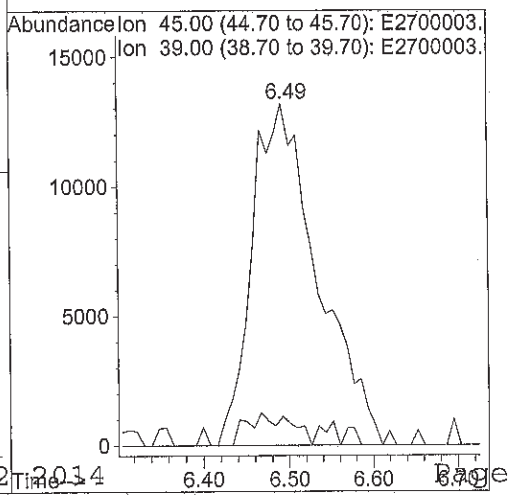


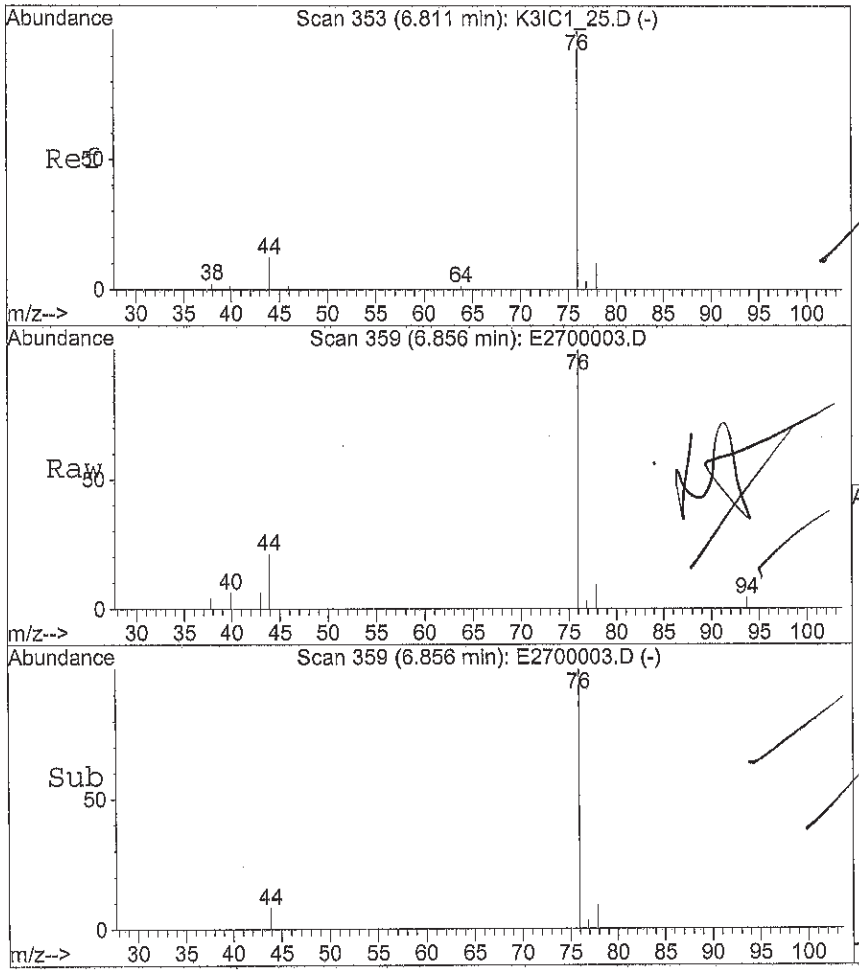


#12
(IPA) Leak Check Compound
Concen: 325.20 ug/L
RT: 6.49 min Scan# 316
Delta R.T. -0.05 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 45 Resp: 70661

Ion	Ratio	Lower	Upper
45	100		
39	2.4	4.9	7.3#

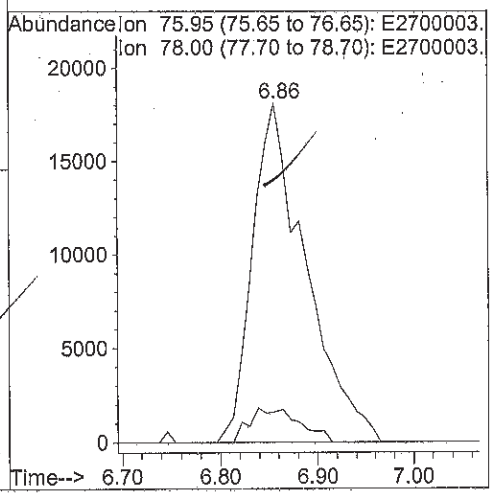


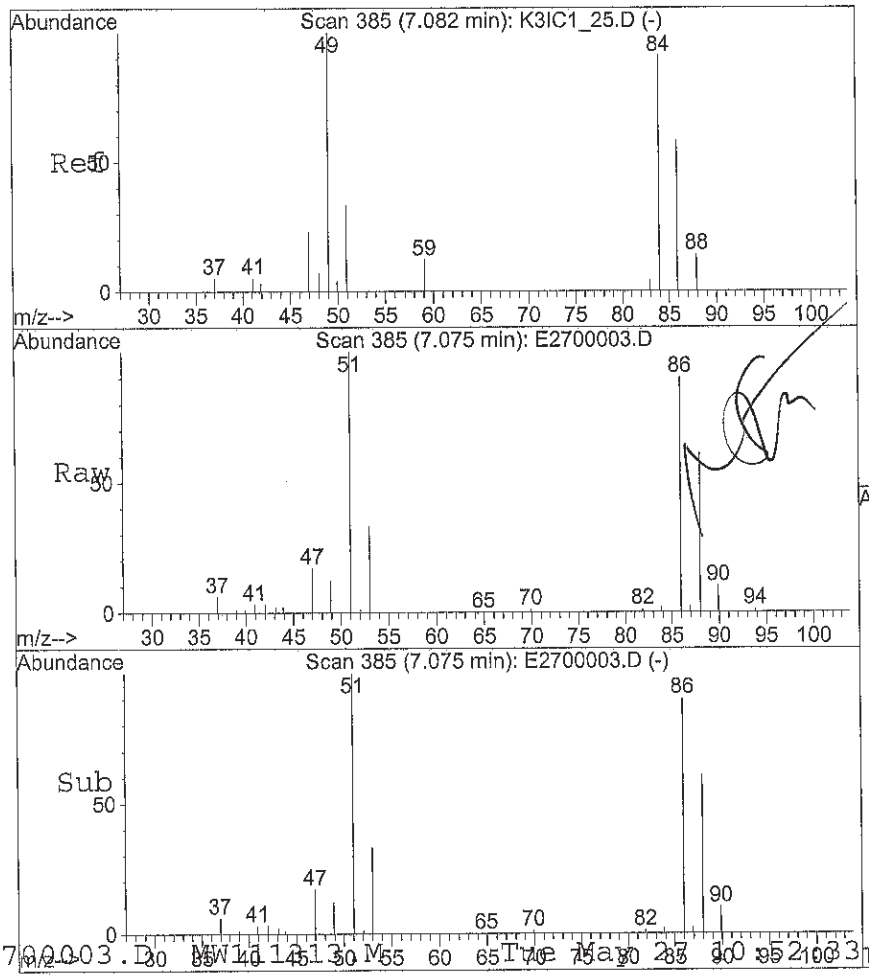


#13
Carbon disulfide
Concen: 4.57 ug/L
RT: 6.86 min Scan# 359
Delta R.T. 0.04 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 76 Resp: 68631

Ion	Ratio	Lower	Upper
76	100		
78	9.4	7.0	10.4

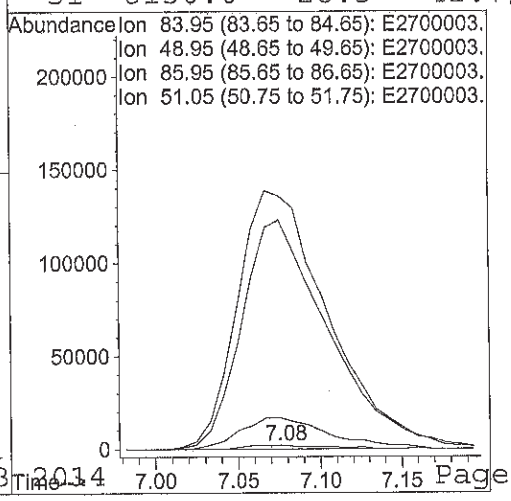


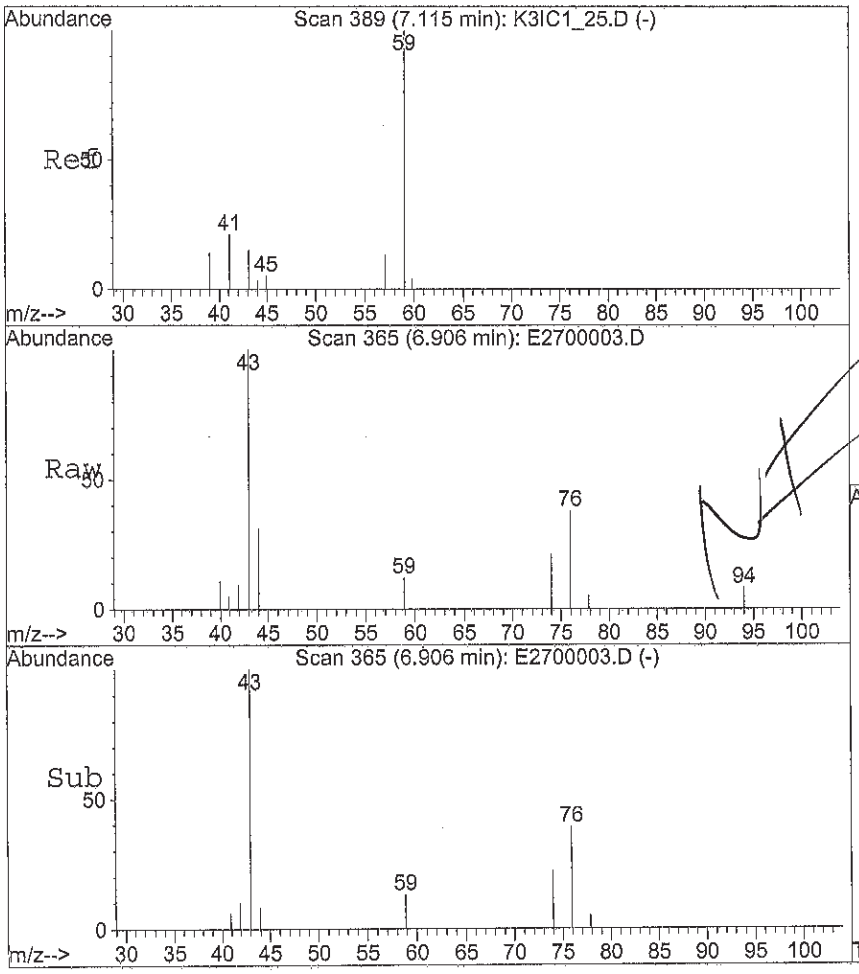


#14
Methylene Chloride
Concen: 1.33 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 84 Resp: 6615

Ion	Ratio	Lower	Upper
84	100		
49	958.5	89.8	134.6#
86	6874.0	51.1	76.7#
51	8130.0	28.5	42.7#

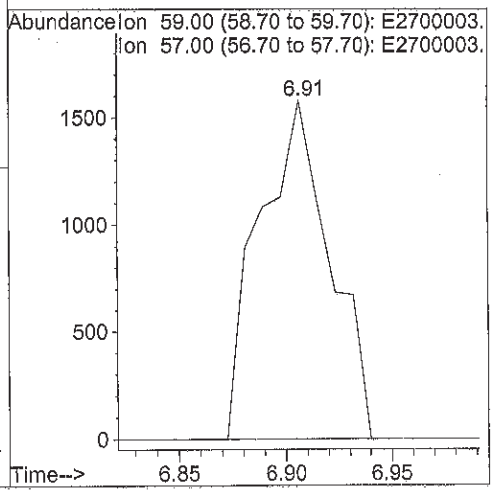


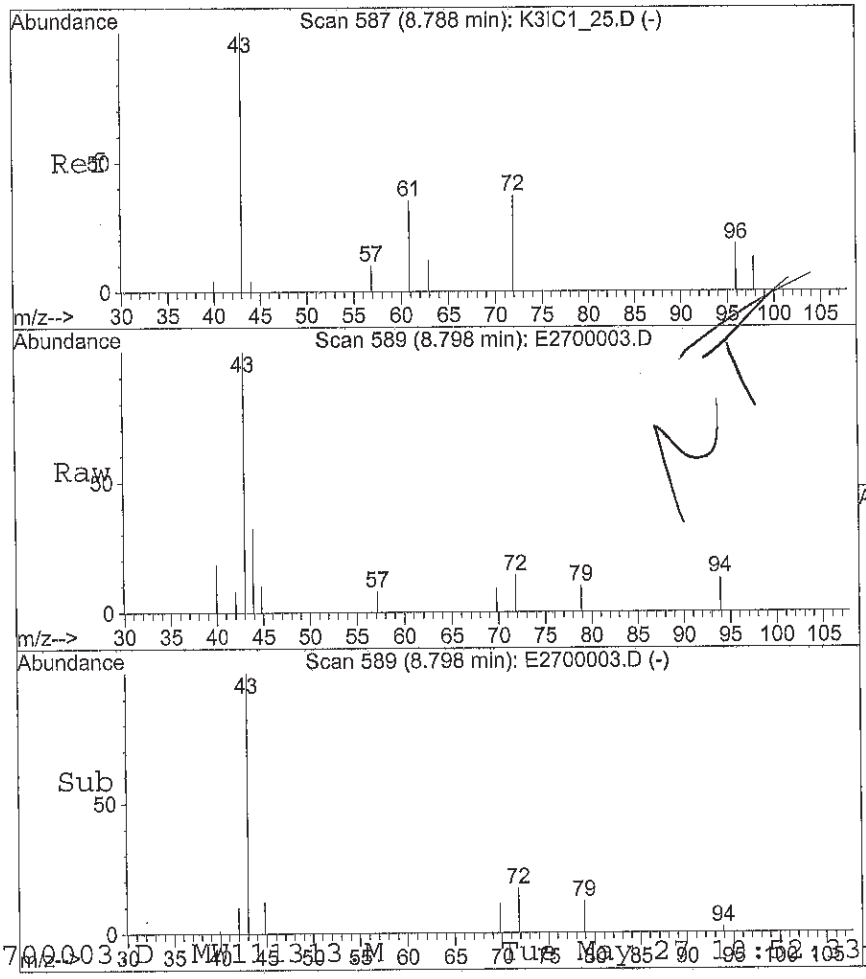


#15
(TBA) tert-Butanol
Concen: 11.76 ug/L
RT: 6.91 min Scan# 365
Delta R.T. -0.21 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 59 Resp: 3628

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

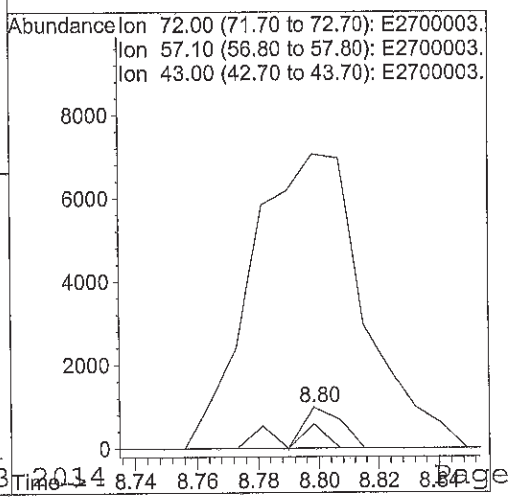


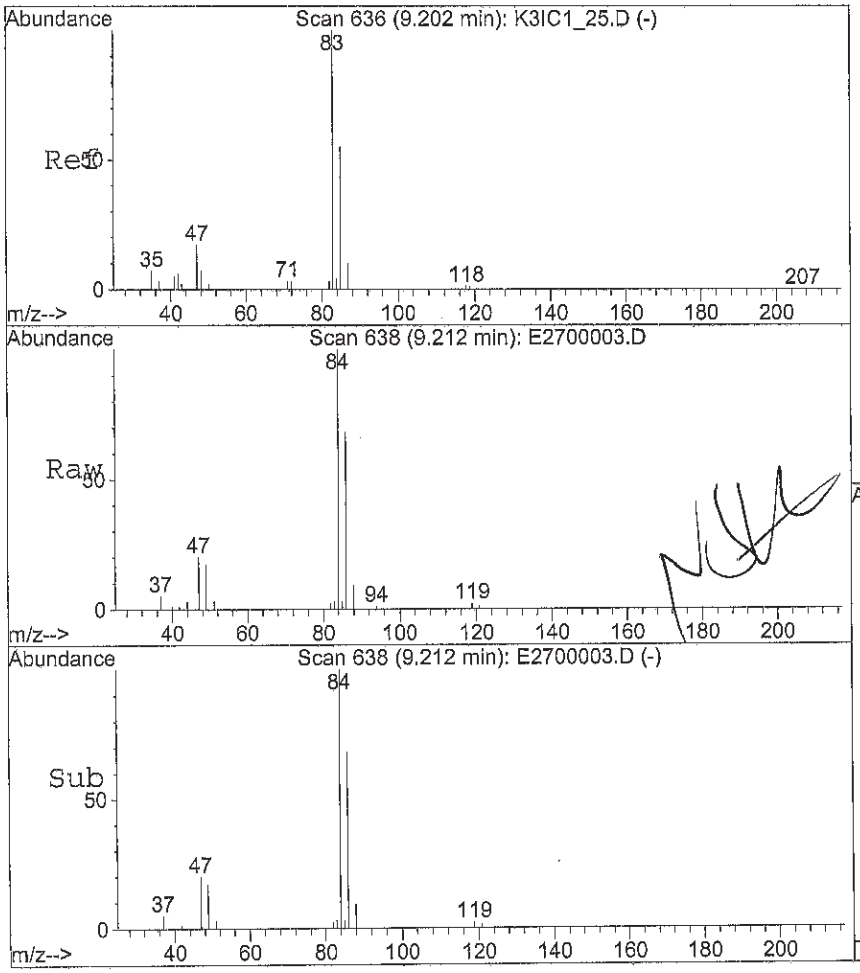


#21
(MEK) 2-Butanone
Concen: 2.18 ug/L
RT: 8.80 min Scan# 589
Delta R.T. 0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 72 Resp: 1109

Ion	Ratio	Lower	Upper
72	100		
57	26.1	17.5	26.3
43	1645.8	314.2	471.2#

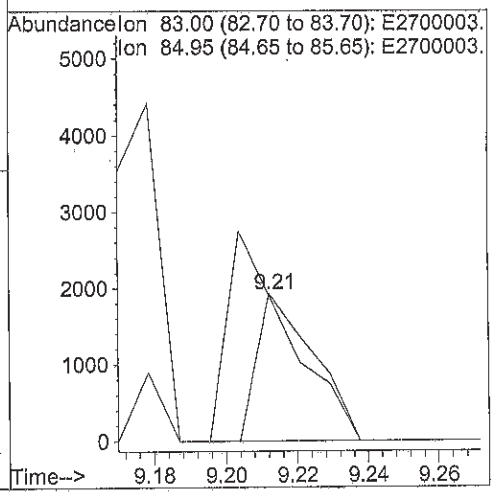


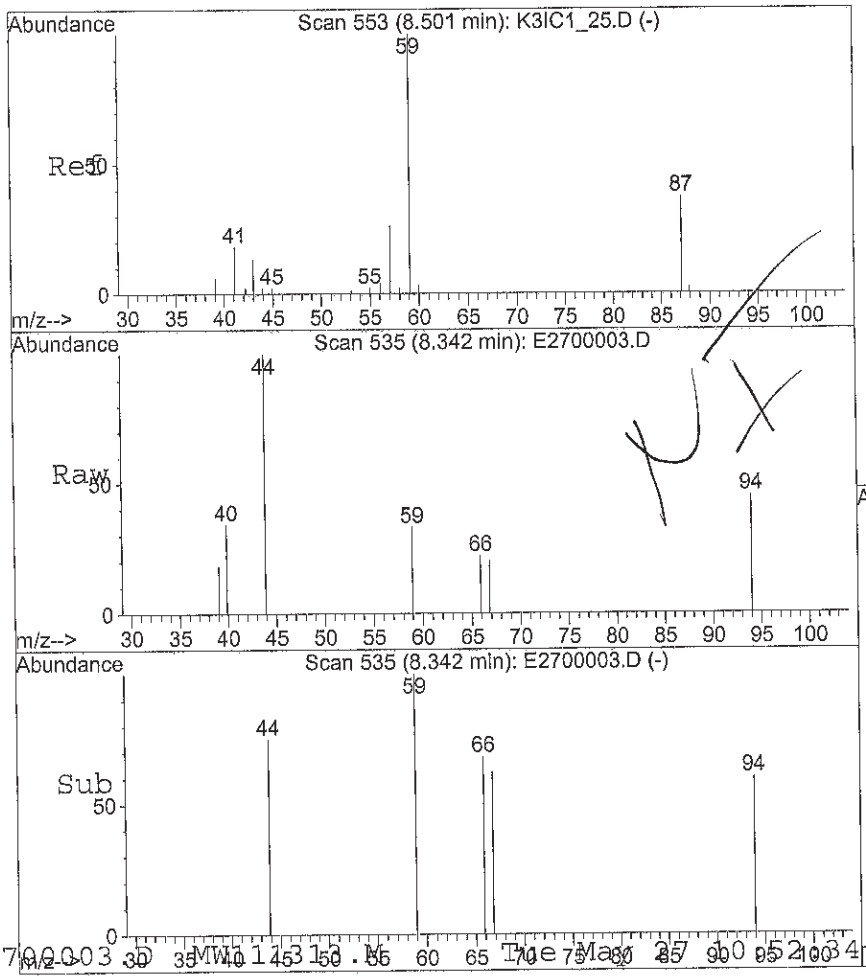


#24
Chloroform
Concen: 0.22 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 83 Resp: 2110

Ion	Ratio	Lower	Upper
83	100		
85	153.9	51.8	77.6#

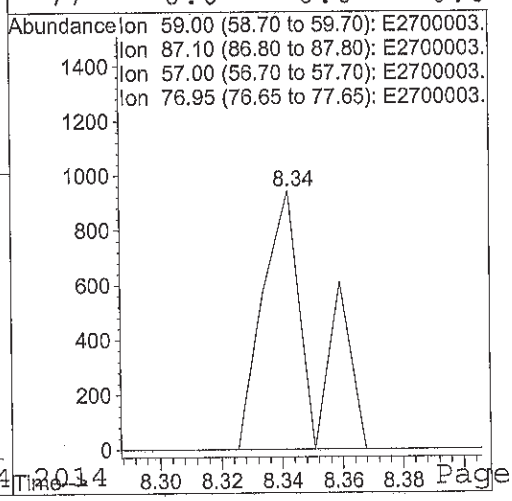


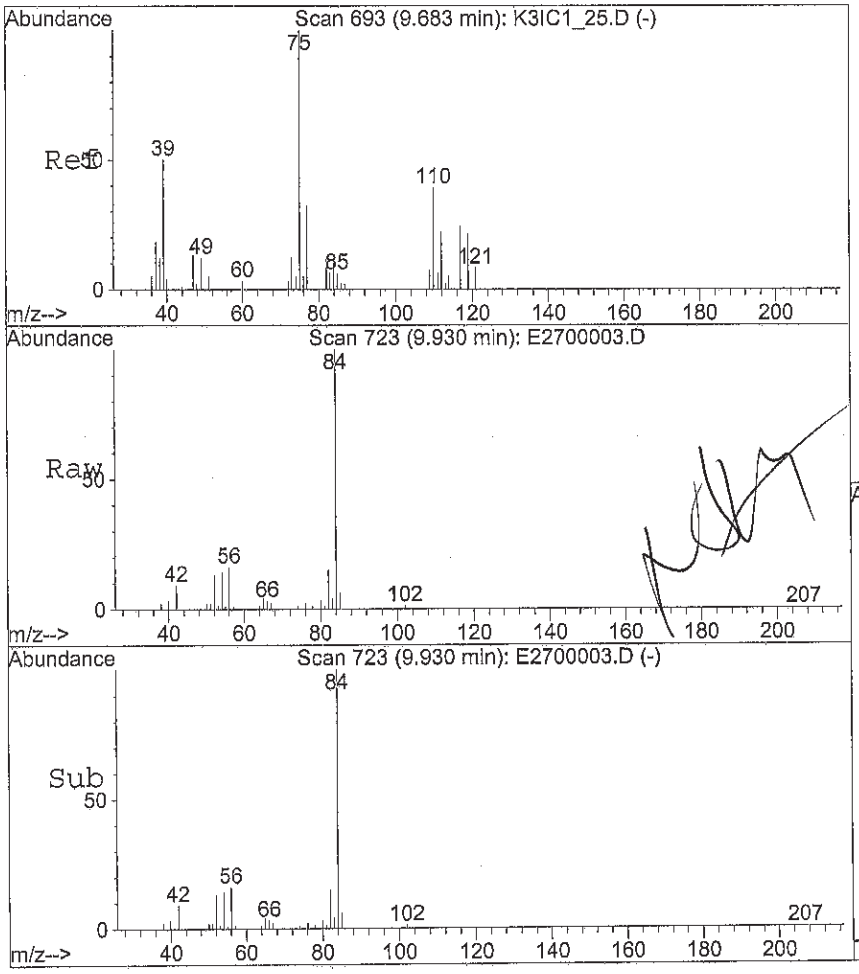


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.08 ug/L
RT: 8.34 min Scan# 535
Delta R.T. -0.16 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 59 Resp: 1076

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

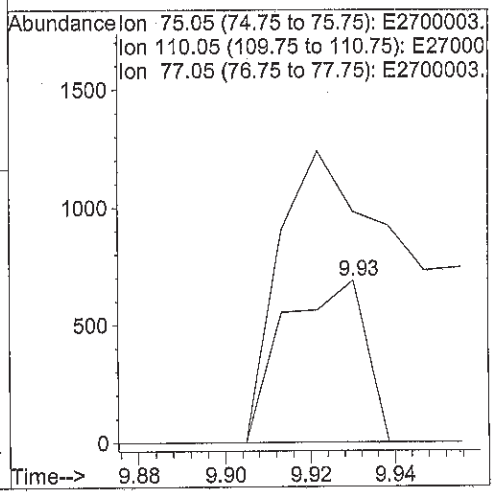


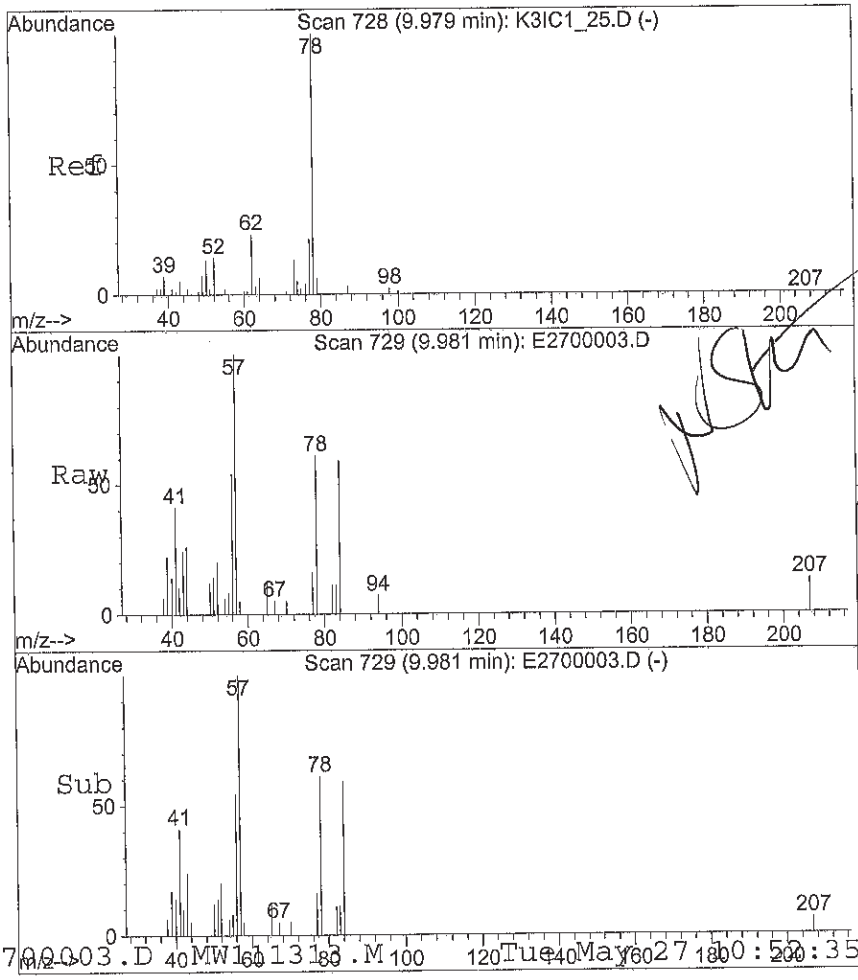


#29
1,1-Dichloropropene
Concen: 0.13 ug/L
RT: 9.93 min Scan# 723
Delta R.T. 0.25 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 75 Resp: 914

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	265.0	25.0	37.4#

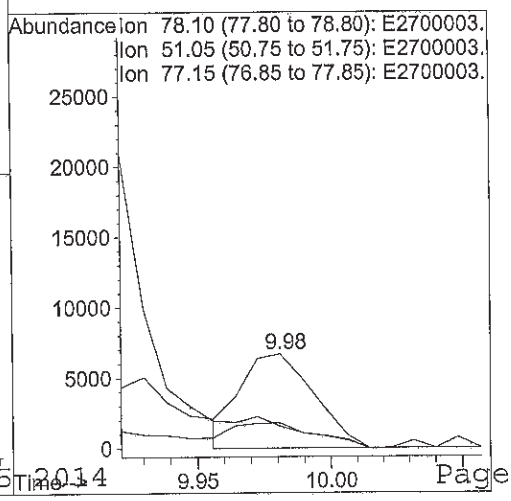


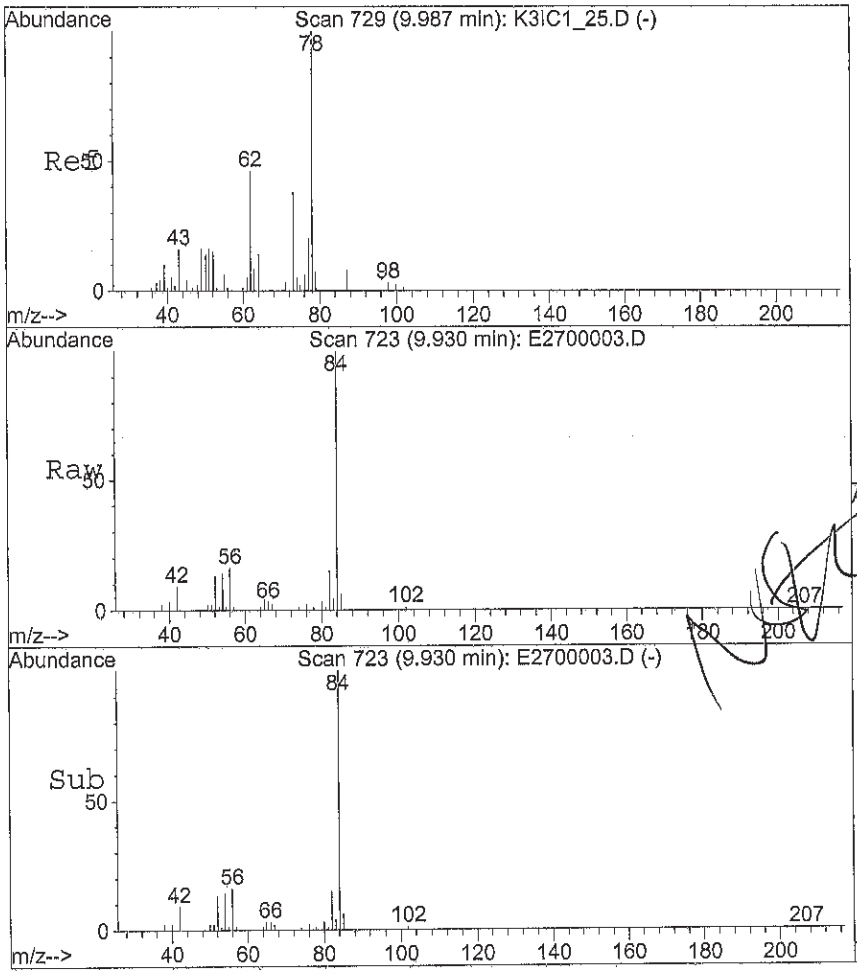


#31
Benzene
Concen: 0.75 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 78 Resp: 12818

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	32.7	16.6	24.8#

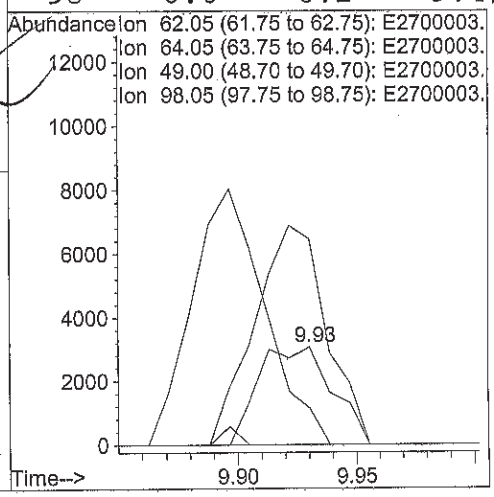


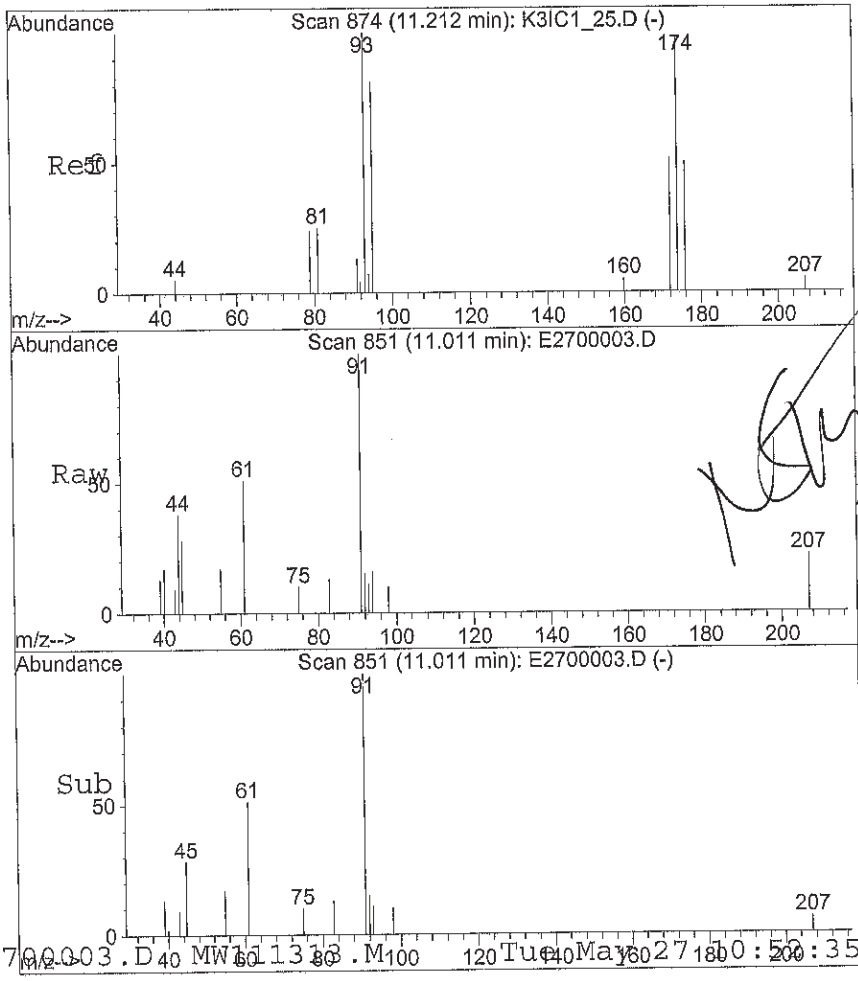


#32
1,2-Dichloroethane
Concen: 1.10 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 62 Resp: 6604

Ion	Ratio	Lower	Upper
62	100		
64	218.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

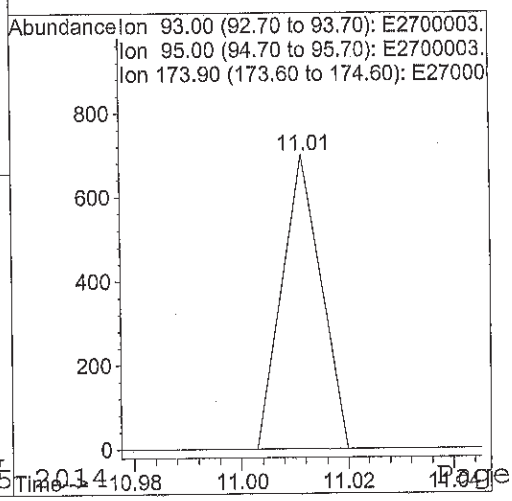


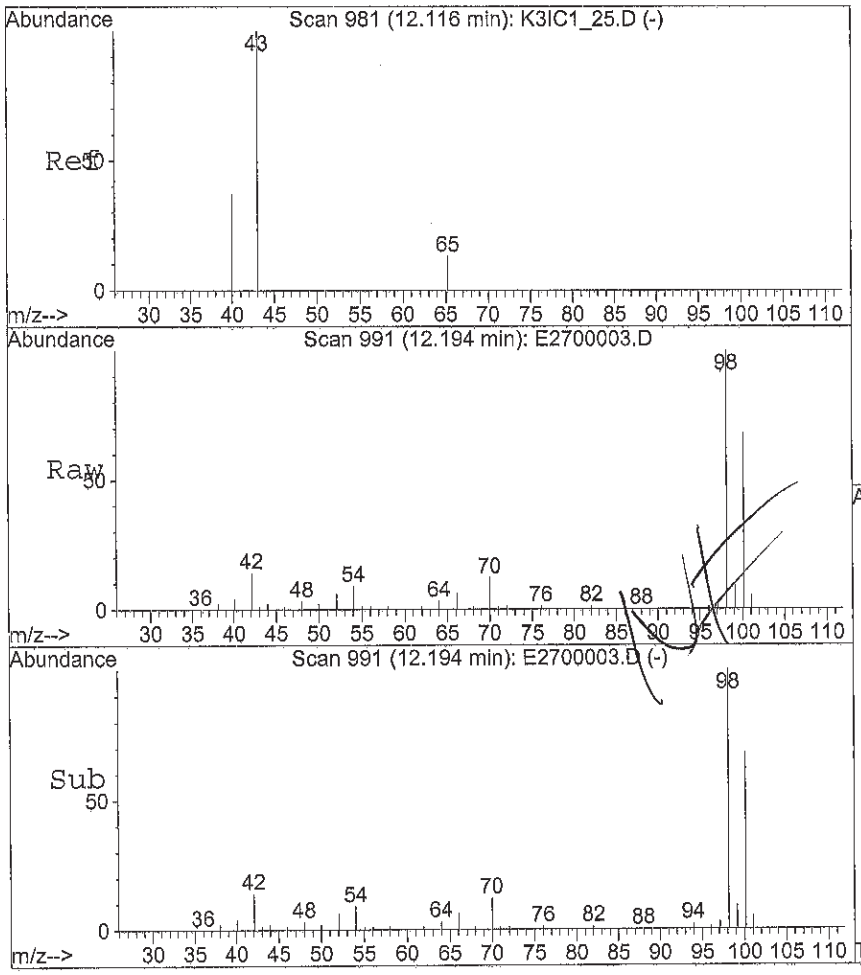


#35
Dibromomethane
Concen: 0.11 ug/L
RT: 11.01 min Scan# 851
Delta R.T. -0.20 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 93 Resp: 354

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

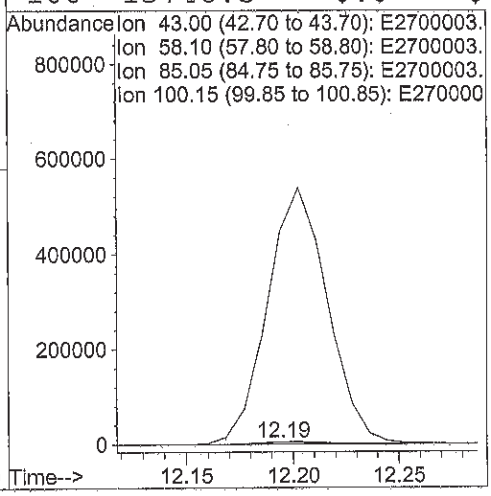


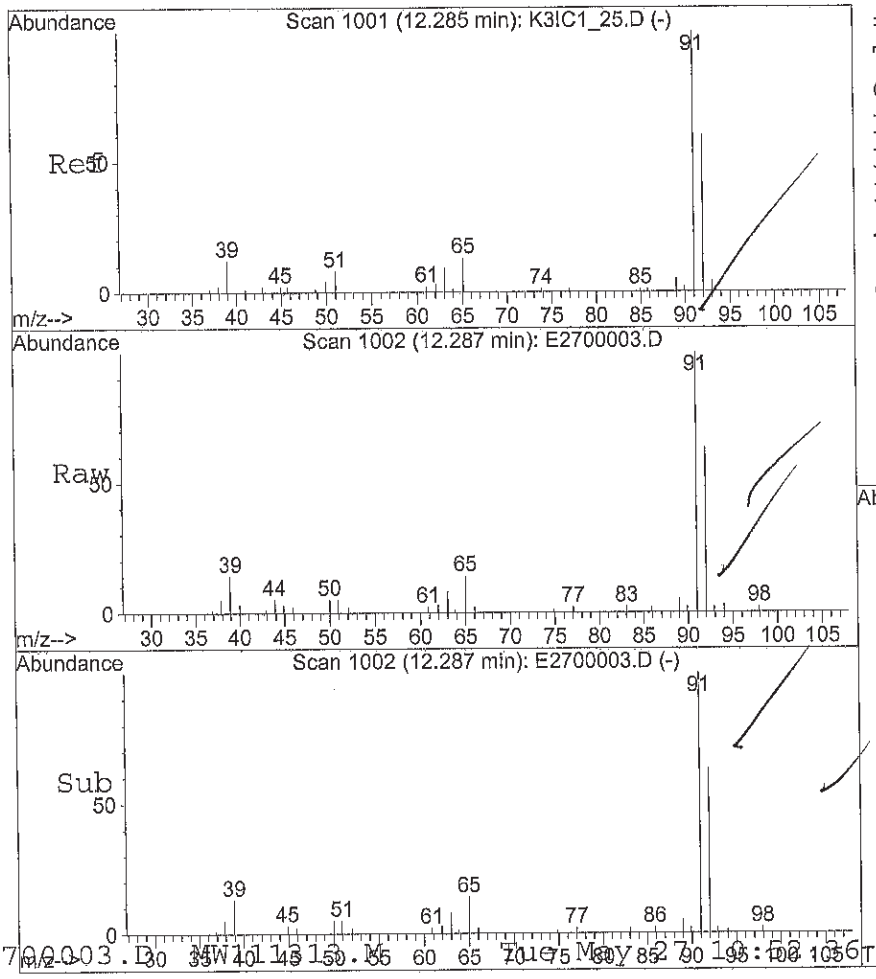


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.87 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 43 Resp: 7694

Ion	Ratio	Lower	Upper
43	100		
58	141.8	0.0	0.0#
85	0.0	0.0	0.0
100	13746.5	0.0	0.0#

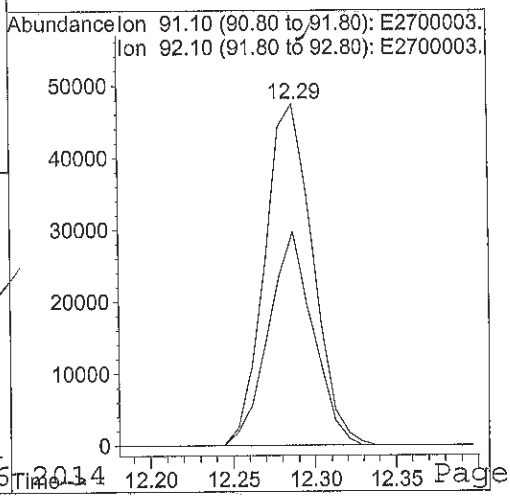


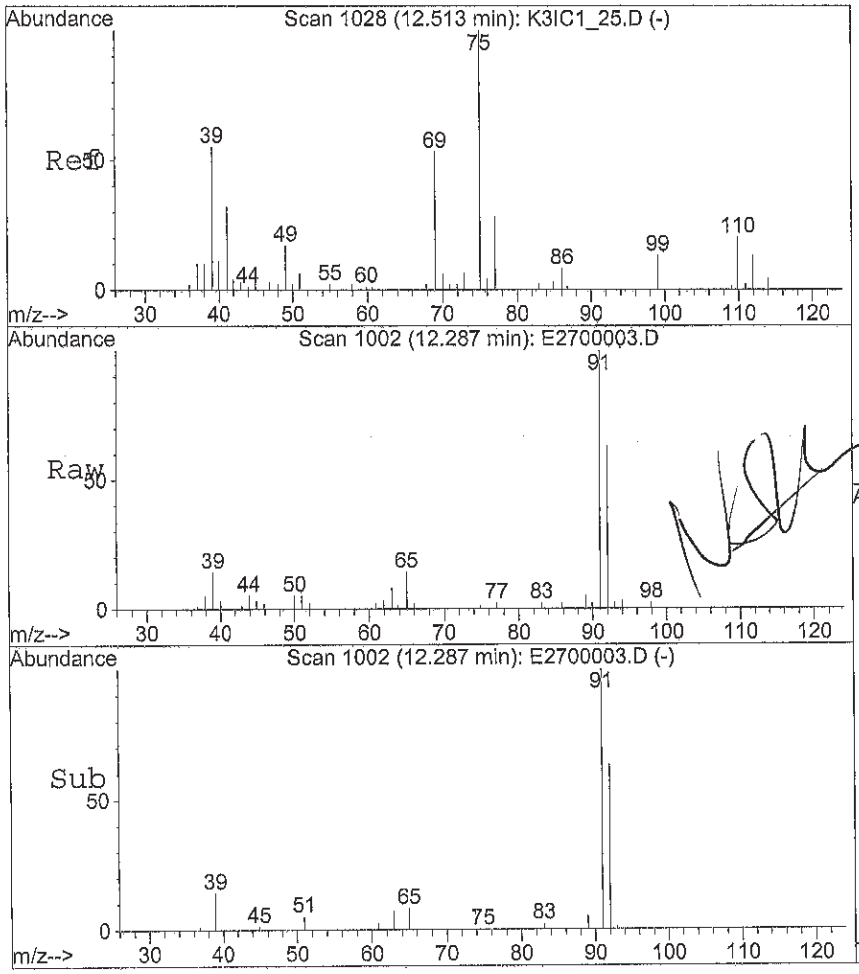


#41
Toluene
Concen: 5.26 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 91 Resp: 96304

Ion	Ratio	Lower	Upper
91	100		
92	58.1	47.4	71.0

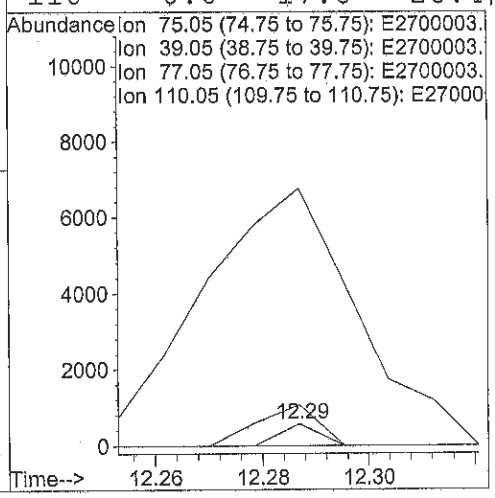


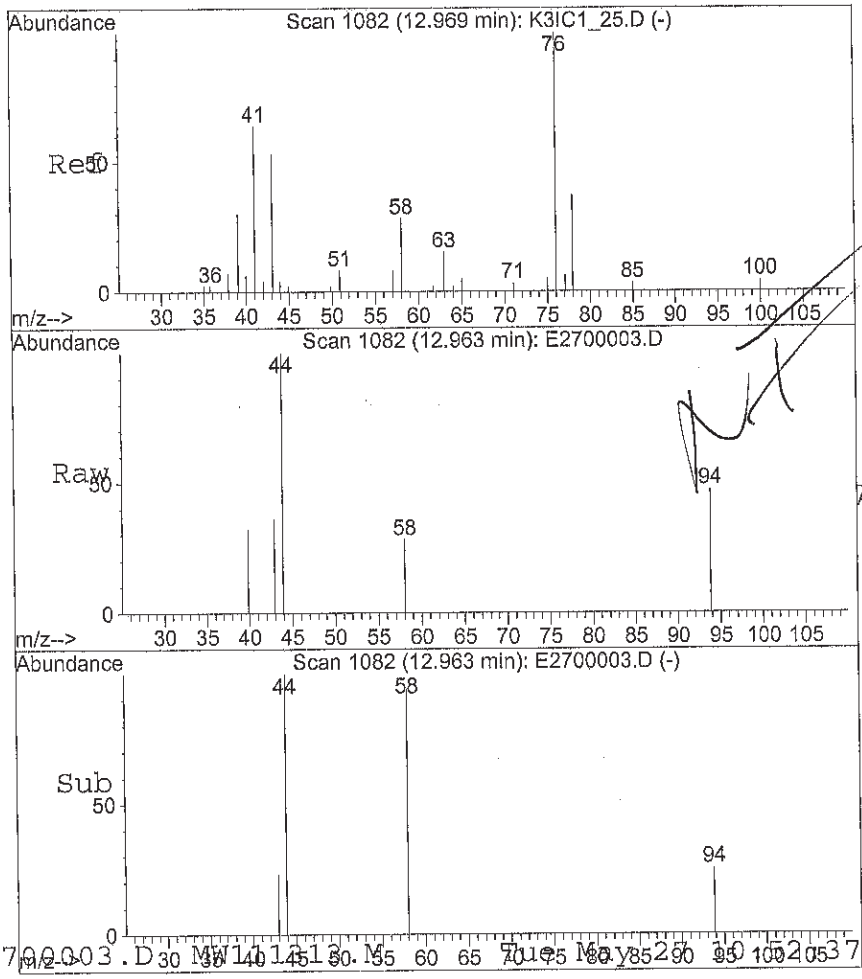


#42
trans-1,3-Dichloropropene
Concen: 0.05 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. -0.23 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 75 Resp: 291

Ion	Ratio	Lower	Upper
75	100		
39	4846.4	53.6	80.4#
77	288.0	25.4	38.2#
110	0.0	17.6	26.4#

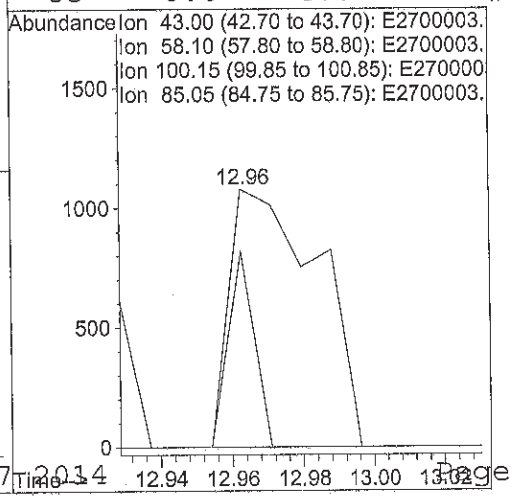


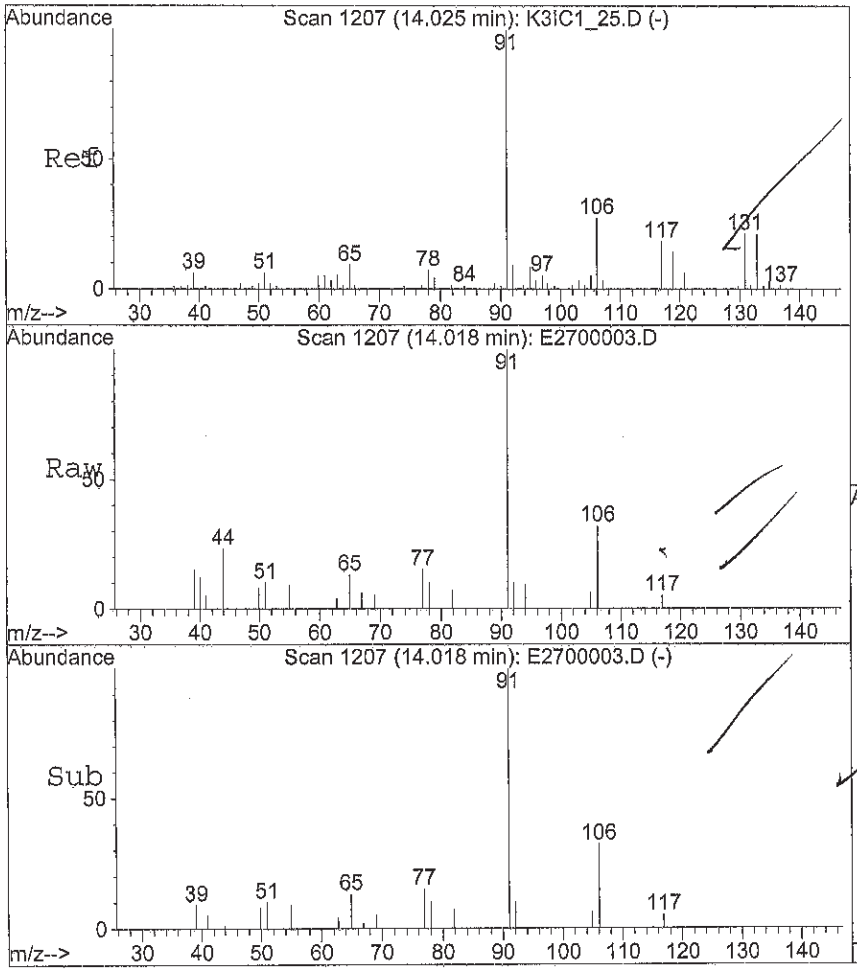


#46
2-Hexanone
Concen: 0.63 ug/L
RT: 12.96 min Scan# 1082
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 43 Resp: 1860

Ion	Ratio	Lower	Upper
43	100		
58	22.4	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

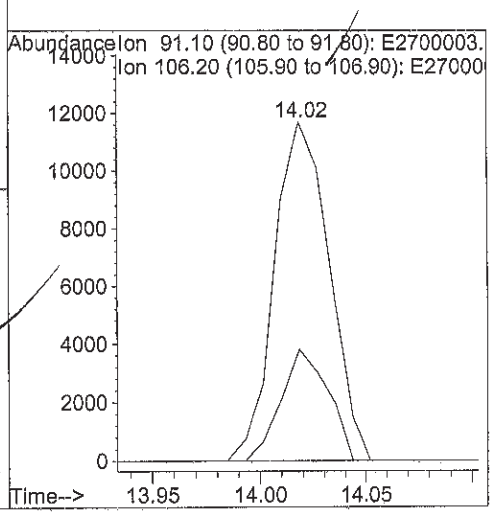


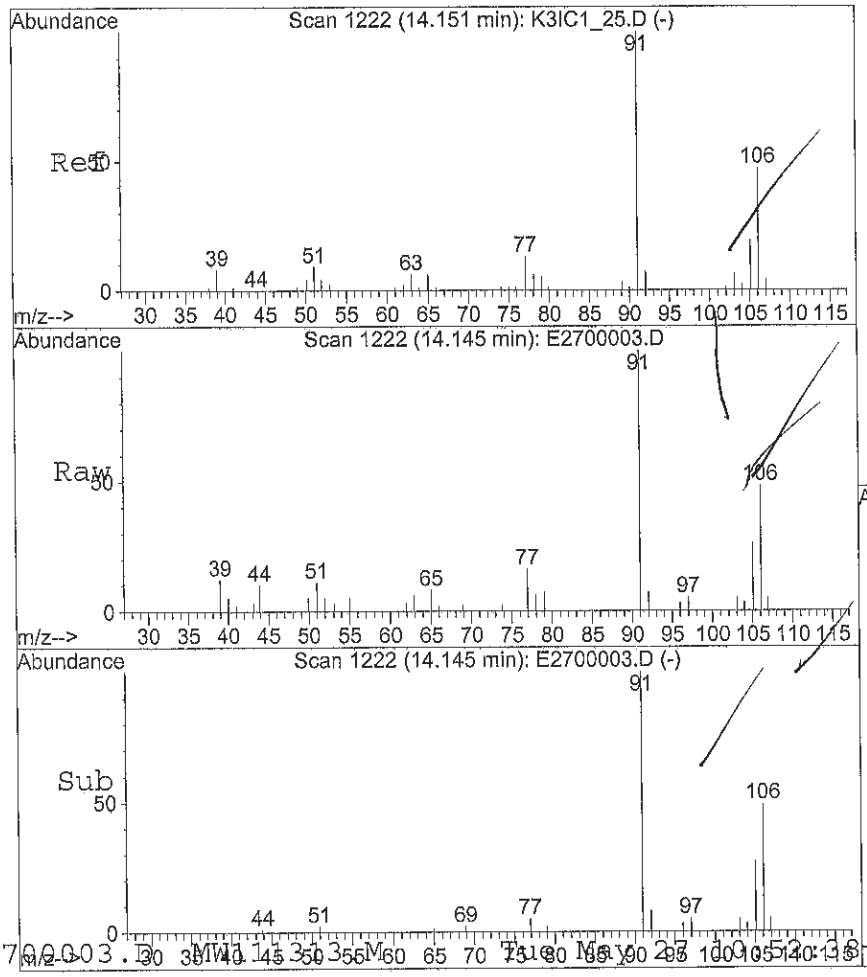


#51
Ethylbenzene
Concen: 1.00 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 91 Resp: 20829

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.5	35.3

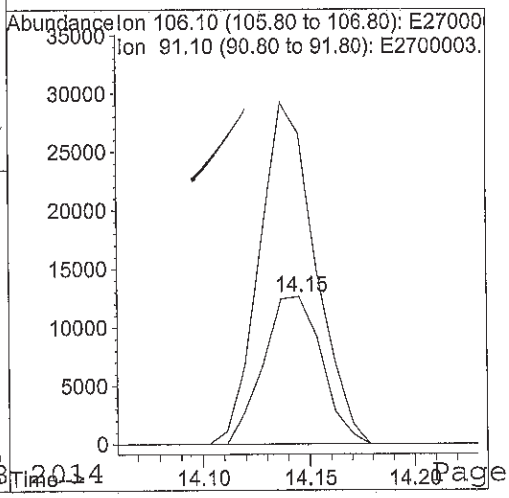


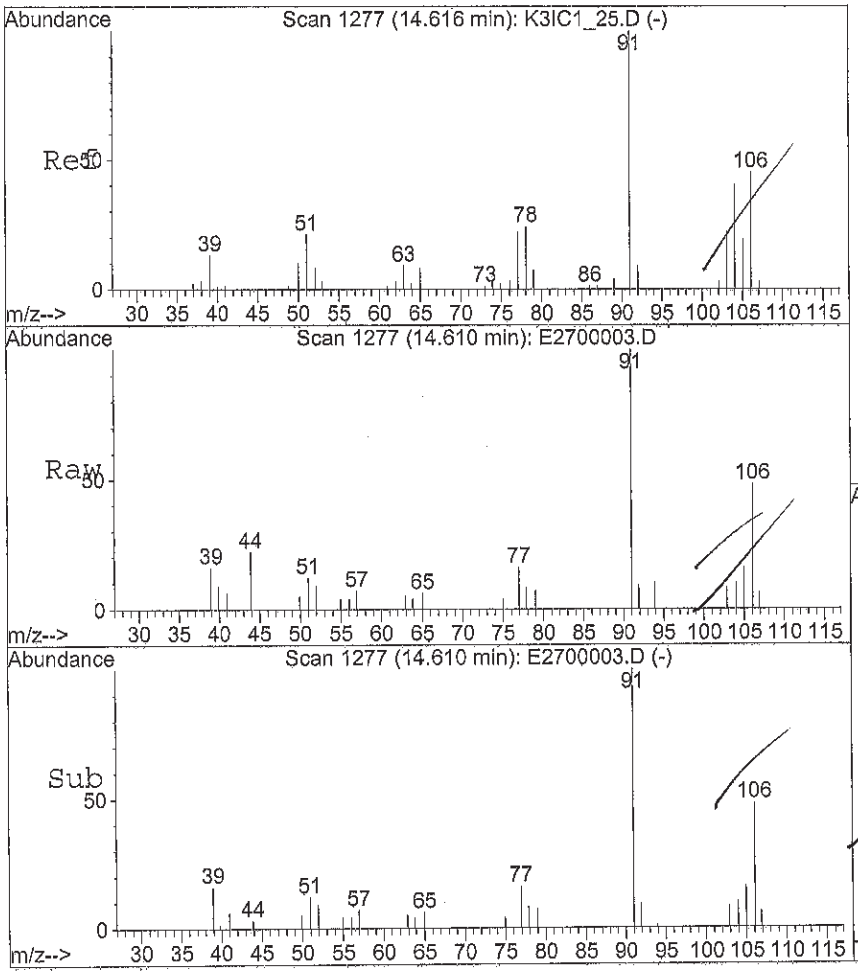


#52
m,p-Xylenes
Concen: 3.27 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion:106 Resp: 24163

Ion	Ratio	Lower	Upper
106	100		
91	221.3	177.1	265.7

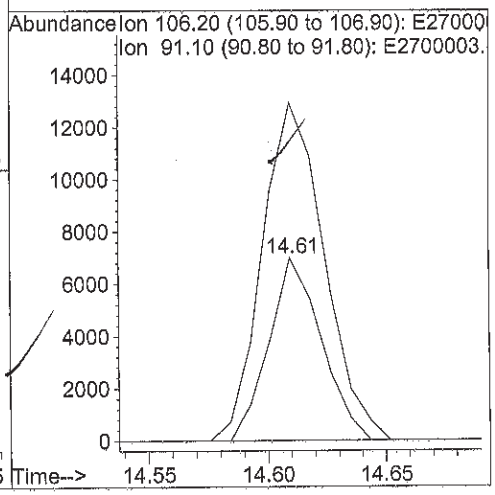


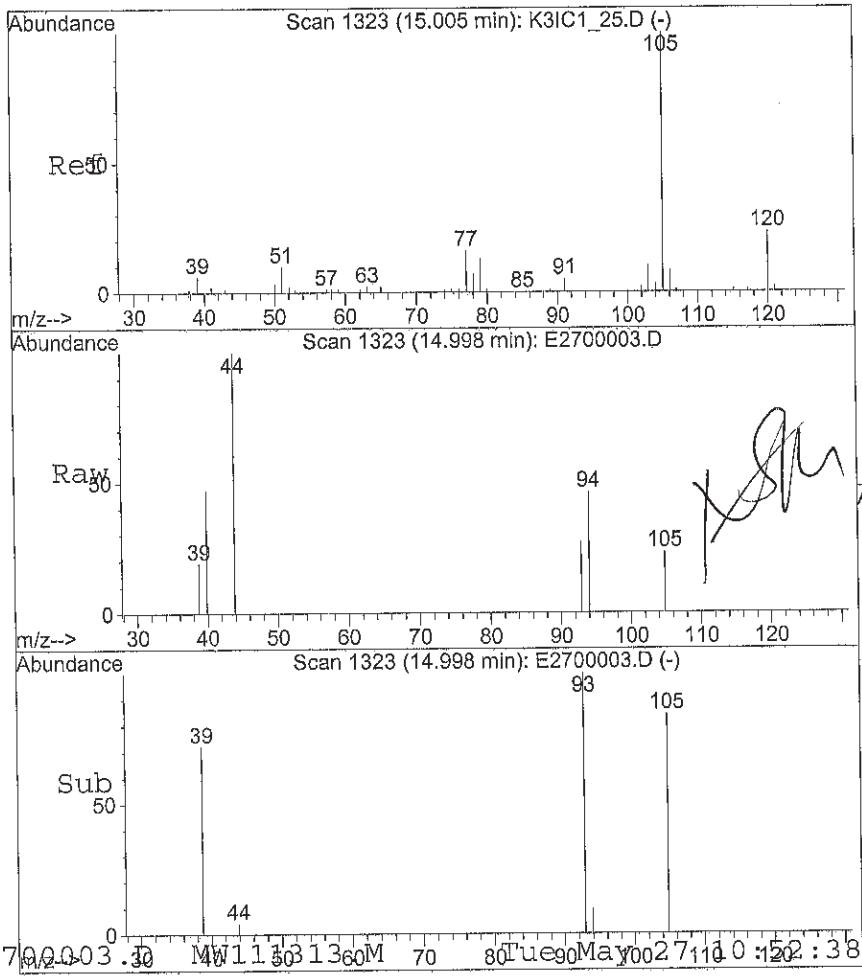


#53
o-Xylene
Concen: 1.46 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion:106 Resp: 10708

Ion	Ratio	Lower	Upper
106	100		
91	219.0	179.0	268.6

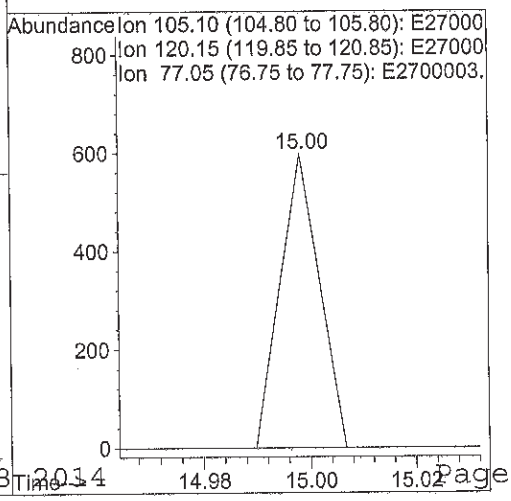


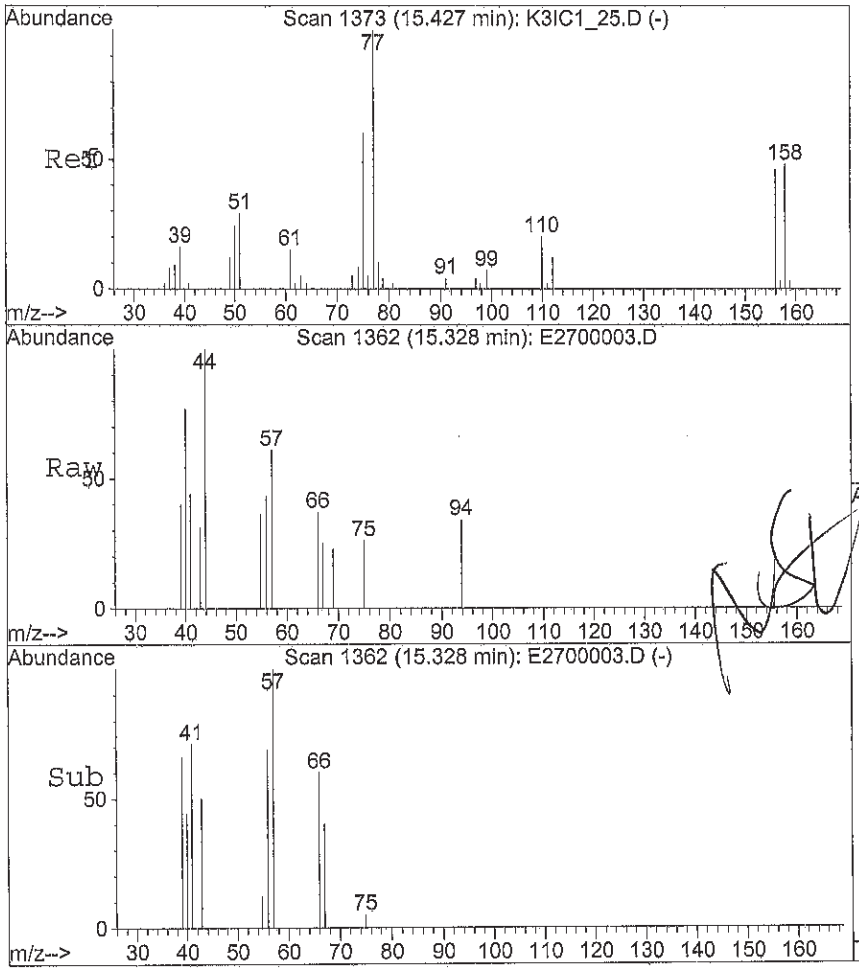


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion:105 Resp: 303

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

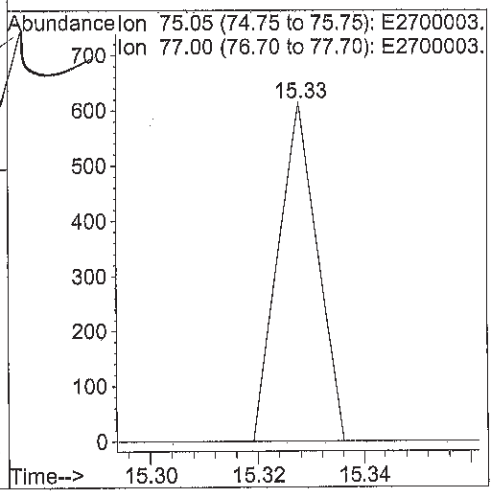


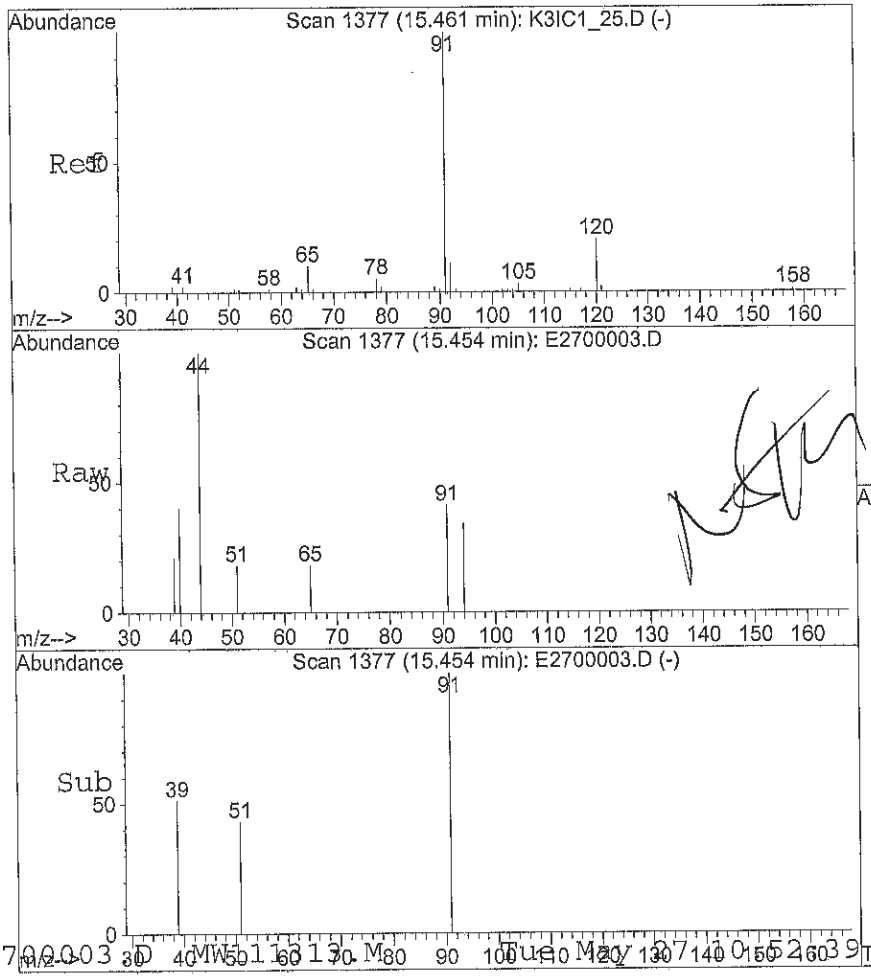


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.33 min Scan# 1362
Delta R.T. -0.10 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 75 Resp: 311

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

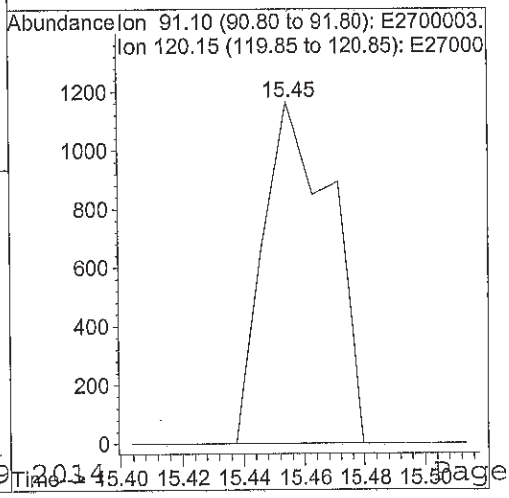


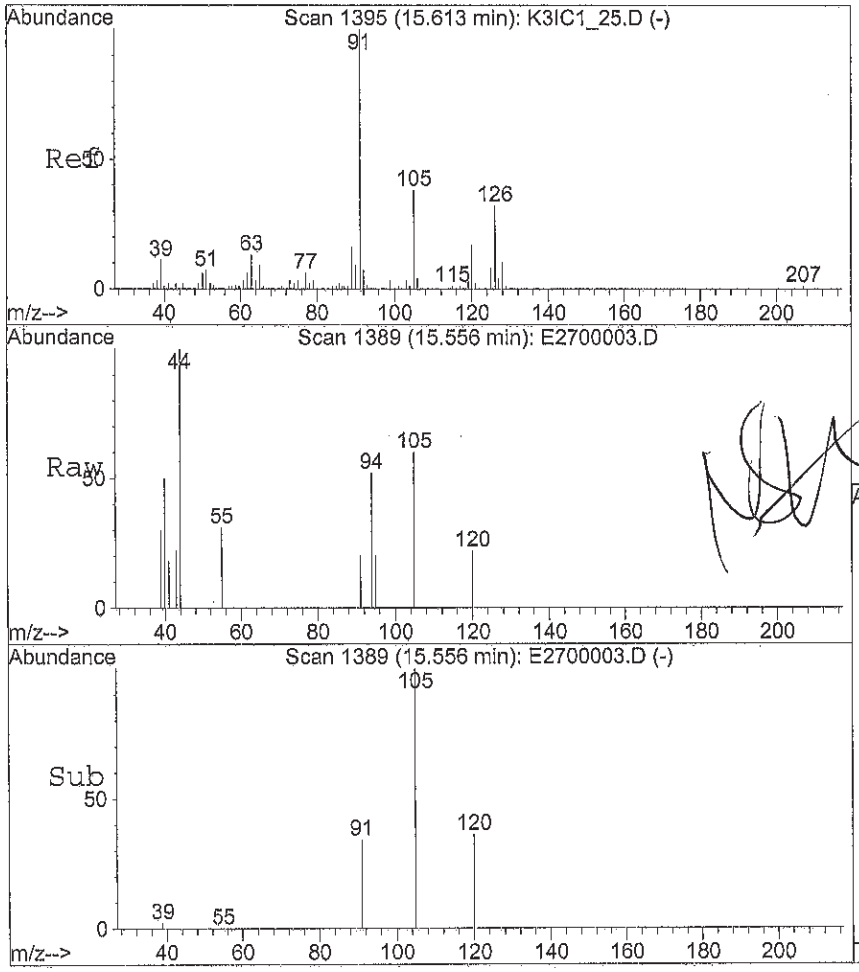


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 91 Resp: 1810

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

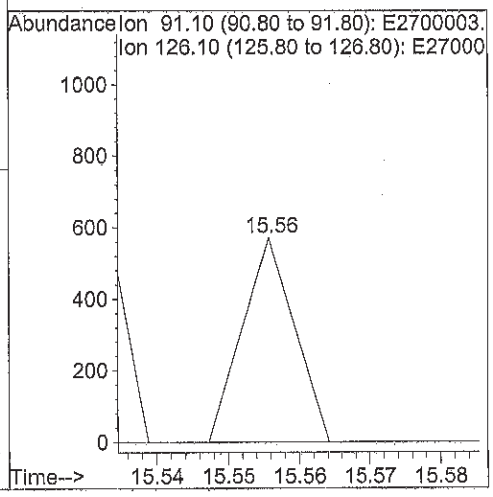


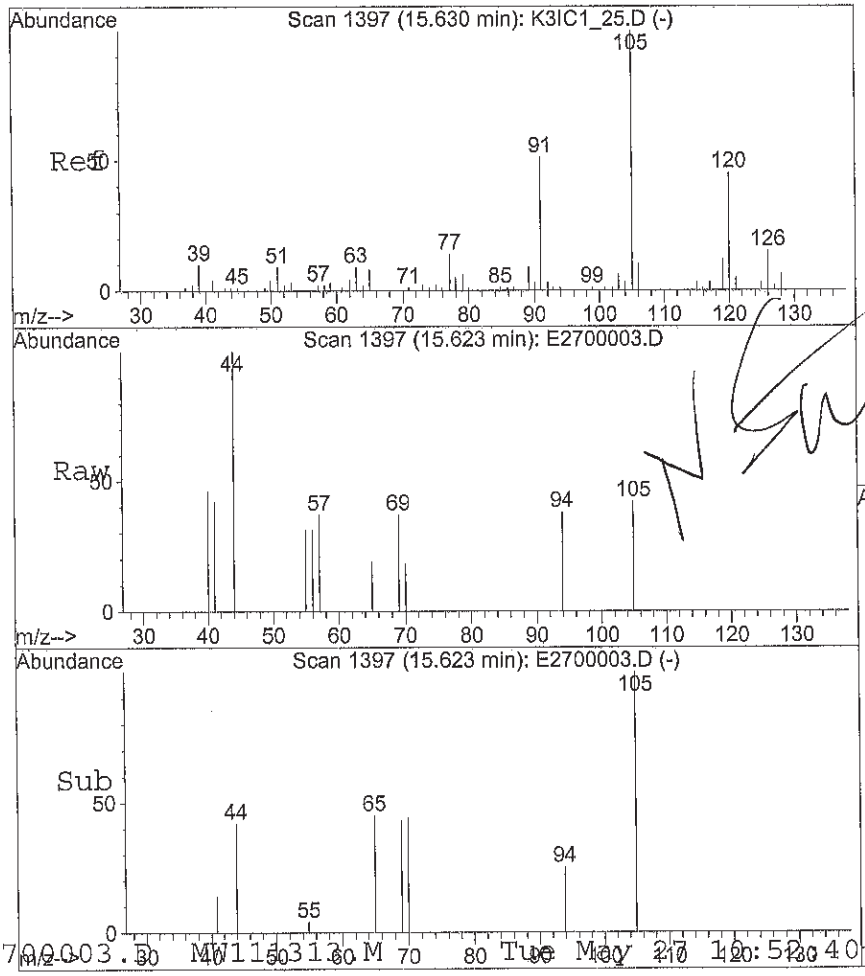


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.56 min Scan# 1389
Delta R.T. -0.06 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 91 Resp: 290

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

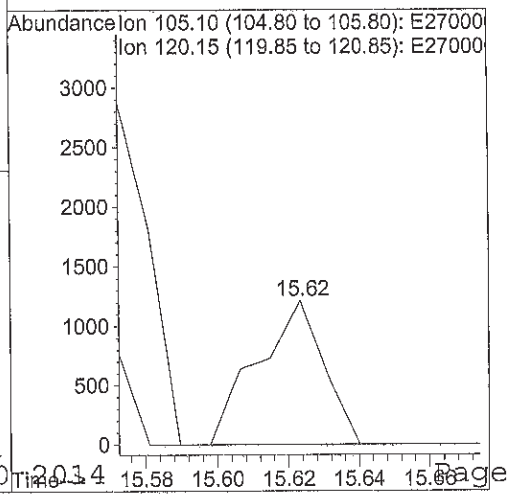


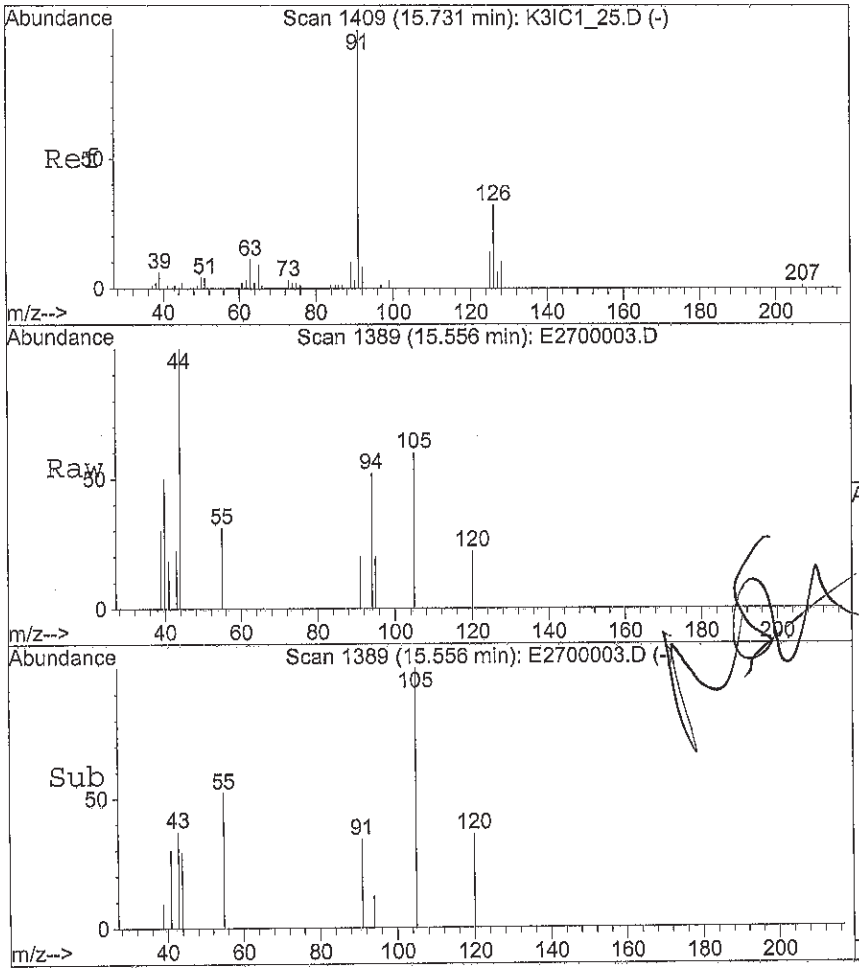


#64
1,3,5-Trimethylbenzene
Concen: 0.09 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion:105 Resp: 1575

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

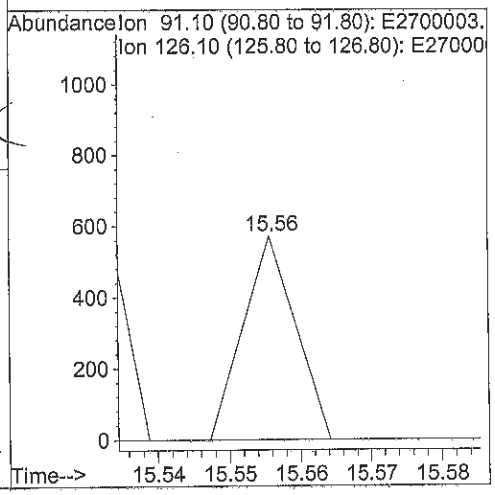


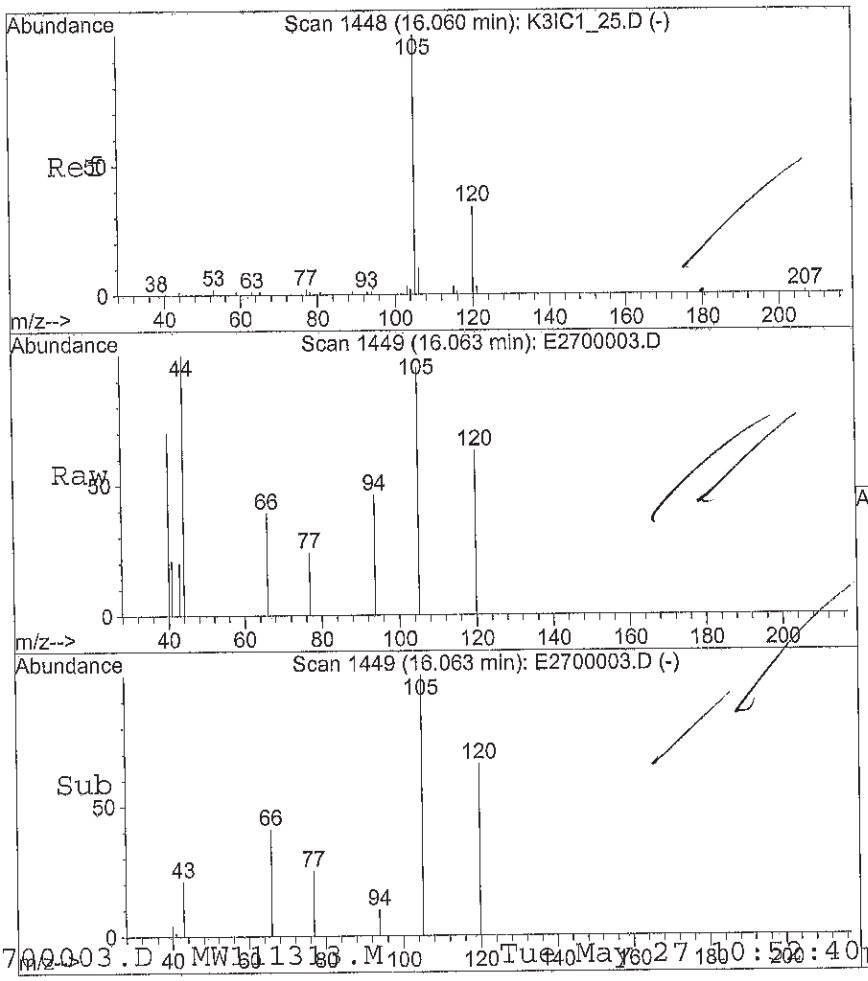


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.56 min Scan# 1389
Delta R.T. -0.18 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion: 91 Resp: 290

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

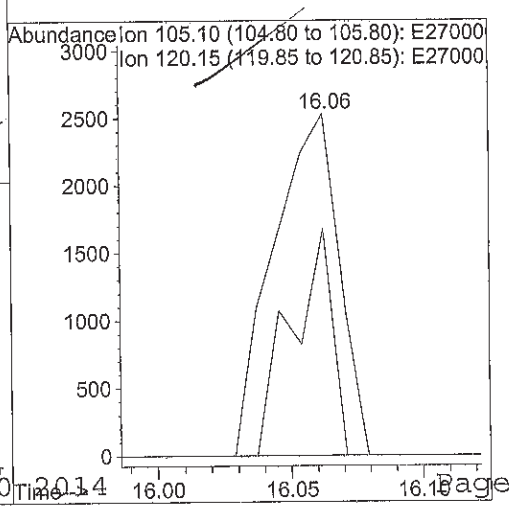


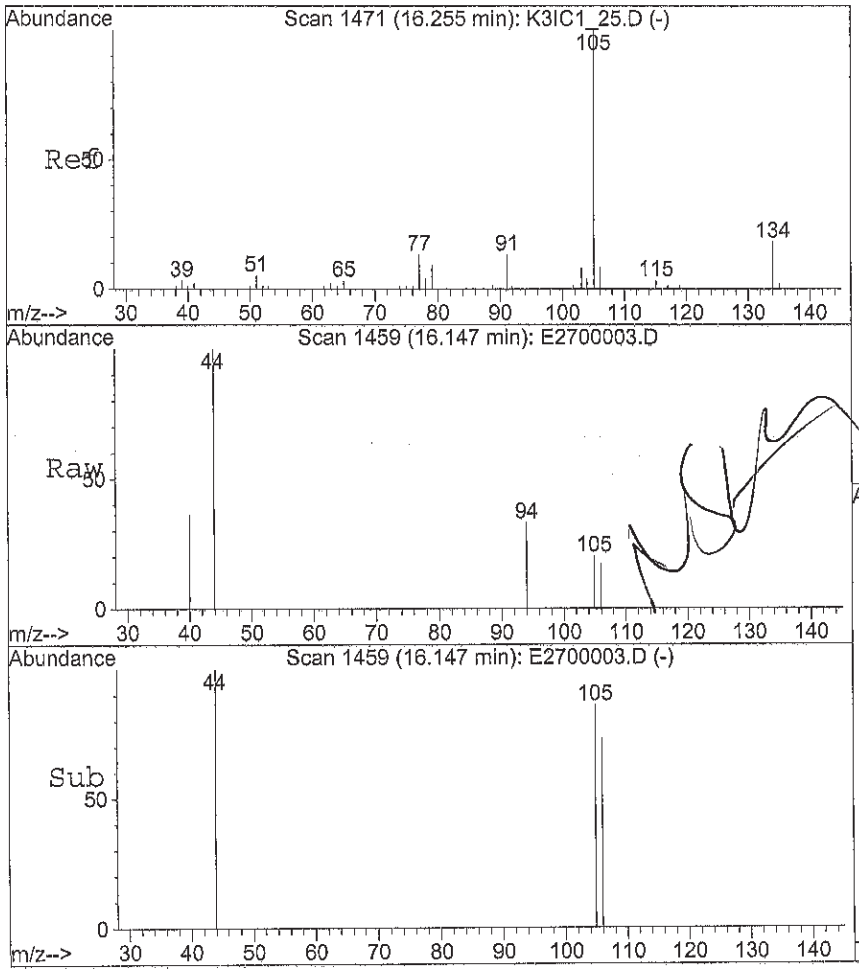


#67
1,2,4-Trimethylbenzene
Concen: 0.24 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion:105 Resp: 4346

Ion	Ratio	Lower	Upper
105	100		
120	41.6	33.8	50.8

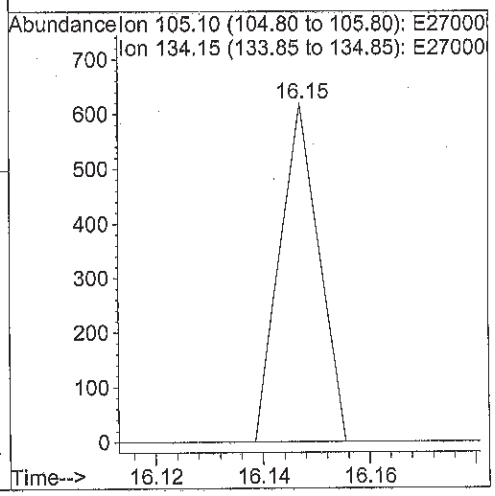


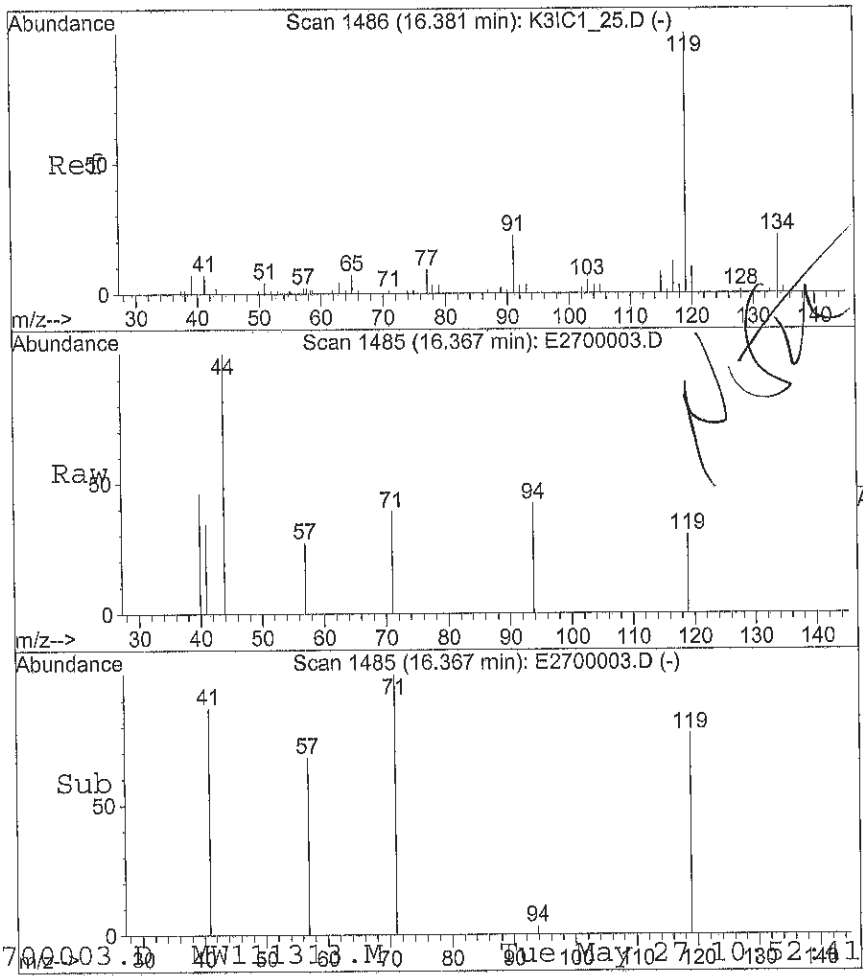


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.15 min Scan# 1459
Delta R.T. -0.11 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion:105 Resp: 314

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

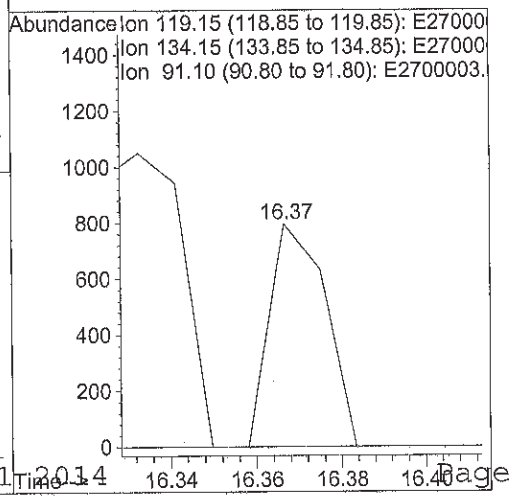




#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E2700003.D
Acq: 27 May 2014 10:27 am

Tgt Ion:119 Resp: 723

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700003.D Vial: 2
Acq On : 27 May 2014 10:27 am Operator: DN
Sample : 34E2701-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:53 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1808256	12.50	ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1341570	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	685345	12.50	ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	502458	10.68	ug/L	-0.01
Spiked Amount 12.500	Range	75 - 125	Recovery	=	85.44%	
3) Chloroform-d (SU6)	9.19	84	789526	11.70	ug/L	0.00
Spiked Amount 12.500	Range	70 - 140	Recovery	=	93.60%	
4) Methylene Chloride-d2 (SU5	7.08	86	454712	11.53	ug/L	0.00
Spiked Amount 12.500	Range	70 - 140	Recovery	=	92.24%	
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	490615	15.27	ug/L	0.00
Spiked Amount 12.500	Range	75 - 125	Recovery	=	122.16%	
6) Benzene-d6 (SU7)	9.92	84	1538661	10.84	ug/L	-0.03
Spiked Amount 12.500	Range	70 - 140	Recovery	=	86.72%	
8) Toluene-d8 (SU3)	12.20	98	1554440	12.21	ug/L	-0.02
Spiked Amount 12.500	Range	75 - 125	Recovery	=	97.68%	
9) 4-Bromofluorobenzene (SU4)	15.22	95	719373	13.69	ug/L	-0.01
Spiked Amount 12.500	Range	75 - 125	Recovery	=	109.52%	

Target Compounds Qvalue

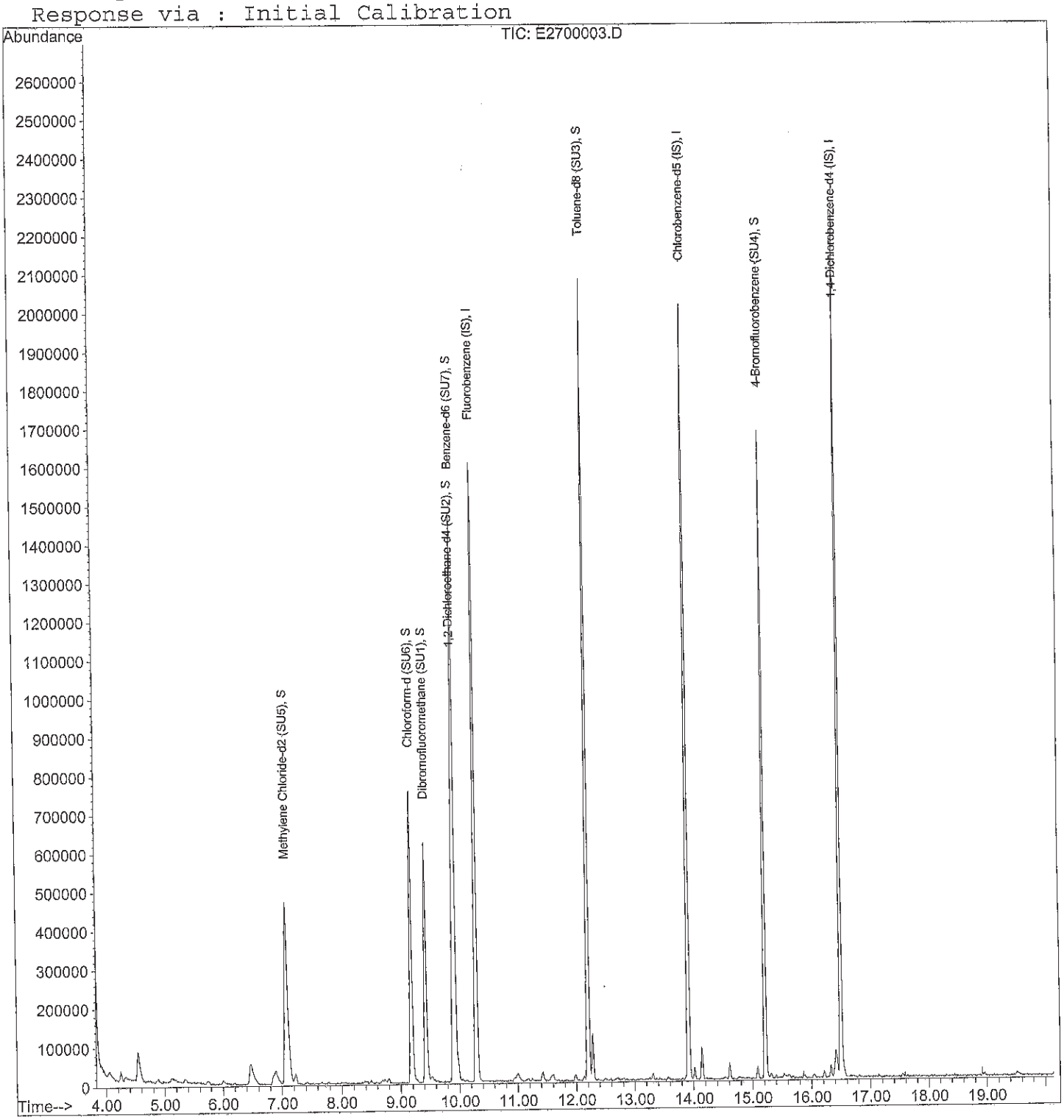
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700003.D
Acq On : 27 May 2014 10:27 am
Sample : 34E2701-DUP1
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 27 10:53 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION LABORATORY CONTROL SAMPLES

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS01.D Vial: 10
Acq On : 27 May 2014 7:33 am Operator: DN
Sample : 34E2701-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 8:03 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1771401	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1269697	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	637939	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	503189	11.39 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	91.12%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	488808	11.64 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	93.12%	
39) Toluene-d8 (SU3)	12.20	98	1479874	12.50 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	100.00%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	681037	13.11 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	104.88%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	29536	0.68 ug/L	100
4) Chloromethane	4.47	50	38639	1.18 ug/L	79
5) Vinyl Chloride	4.60	62	43500	1.39 ug/L	65
6) Bromomethane	5.16	96	29328	1.33 ug/L	1
7) Chloroethane	5.29	64	18328	1.33 ug/L	93
8) (F11) Trichlorofluorometha	5.67	101	65070	1.34 ug/L	96
9) (F113) 1,1,2-Trichloro-tri	6.37	151	42218	1.21 ug/L	95
10) 1,1-Dichloroethene	6.43	96	46849	1.12 ug/L	92
11) Acetone	6.46	58	53335	-12.50 ug/L	92
12) (IPA) Leak Check Compound	6.54	45	123373	57.96 ug/L #	89
13) Carbon disulfide	6.86	76	200613	1.36 ug/L	99
14) Methylene Chloride	7.11	84	64670	1.33 ug/L	94
15) (TBA) tert-Butanol	7.09	59	2724	0.90 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	105877	1.05 ug/L	97
17) trans-1,2-Dichloroethene	7.48	96	64128	1.35 ug/L	94
18) 1,1-Dichloroethane	8.07	63	80456	1.01 ug/L	93
19) cis-1,2-Dichloroethene	8.83	96	67769	1.22 ug/L	93
20) 2,2-Dichloropropane	8.84	77	342	0.00 ug/L #	1
21) (MEK) 2-Butanone	8.79	72	11107	2.23 ug/L #	69
22) (DIPE) Diisopropyl Ether	8.01	45	192374	1.39 ug/L	97
23) Bromochloromethane	9.17	128	25708	1.08 ug/L #	86
24) Chloroform	9.21	83	110254	1.19 ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS01.D Vial: 10
Acq On : 27 May 2014 7:33 am Operator: DN
Sample : 34E2701-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 8:03 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.49	59	126590	0.99 ug/L #	99
26) 1,1,1-Trichloroethane	9.50	97	71843	0.98 ug/L	93
27) (TAME) tert-Amyl methyl et	10.00	73	122275	1.10 ug/L #	96
29) 1,1-Dichloropropene	9.69	75	80786	1.18 ug/L	99
30) Carbon Tetrachloride	13.89	117	75683	1.27 ug/L	92
31) Benzene	9.98	78	212137	1.27 ug/L #	93
32) 1,2-Dichloroethane	9.99	62	71510	1.21 ug/L	96
33) Trichloroethene	10.74	130	67899	1.26 ug/L	99
34) 1,2-Dichloropropane	11.05	63	54930	1.38 ug/L	93
35) Dibromomethane	11.21	93	40202	1.29 ug/L	99
36) Bromodichloromethane	11.35	83	72653	1.16 ug/L	96
37) cis-1,3-Dichloropropene	11.87	75	68065	1.00 ug/L	94
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	14071	0.56 ug/L #	100
41) Toluene	12.29	91	228294	1.32 ug/L	96
42) trans-1,3-Dichloropropene	12.51	75	47433	0.83 ug/L #	74
43) 1,1,2-Trichloroethane	12.75	83	43739	1.40 ug/L	90
44) Tetrachloroethene	12.94	164	71041	1.17 ug/L	96
45) 1,3-Dichloropropane	12.96	76	78166	1.32 ug/L	96
46) 2-Hexanone	12.96	43	49657	1.79 ug/L	99
47) Dibromochloromethane	13.25	129	57668	1.29 ug/L #	96
48) 1,2-Dibromoethane	13.43	107	58294	1.44 ug/L	98
49) Chlorobenzene	13.95	112	154354	1.32 ug/L	95
50) 1,1,1,2-Tetrachloroethane	14.02	131	50284	1.21 ug/L	97
51) Ethylbenzene	14.02	91	264142	1.34 ug/L	100
52) m,p-Xylenes	14.15	106	194695	2.78 ug/L	93
53) o-Xylene	14.61	106	89953	1.30 ug/L	94
54) Styrene	14.63	104	150579	1.51 ug/L	97
55) Bromoform	14.91	173	34879	1.38 ug/L	96
56) Isopropylbenzene	15.00	105	258545	1.36 ug/L	99
57) 1,2,3-Trichloropropane	15.42	75	69213	1.34 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.33	83	63942	1.39 ug/L	98
61) Bromobenzene	15.43	156	66775	1.33 ug/L	95
62) n-Propylbenzene	15.45	91	327658	1.27 ug/L	99
63) 2-Chlorotoluene	15.61	91	204311	1.29 ug/L	98
64) 1,3,5-Trimethylbenzene	15.62	105	204021	1.28 ug/L	98
65) 4-Chlorotoluene	15.72	91	198638	1.35 ug/L	100
66) tert-Butylbenzene	16.01	119	169471	1.25 ug/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS01.D Vial: 10
Acq On : 27 May 2014 7:33 am Operator: DN
Sample : 34E2701-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 8:03 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

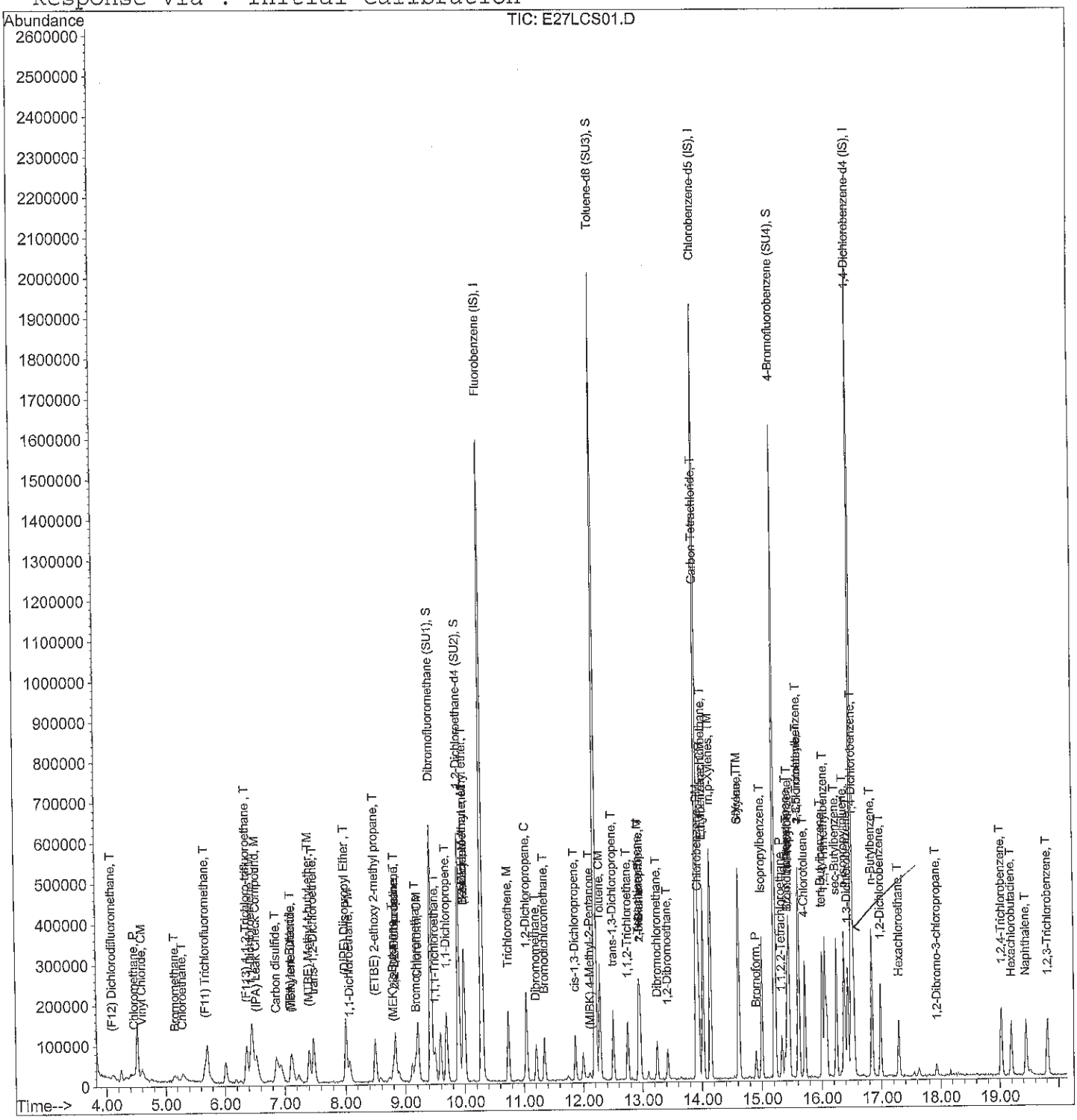
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67)	1,2,4-Trimethylbenzene	16.05	105	211499	1.28 ug/L	94
68)	sec-Butylbenzene	16.24	105	282869	1.32 ug/L	99
69)	p-Isopropyltoluene	16.38	119	213433	1.22 ug/L	95
70)	1,3-Dichlorobenzene	16.43	146	129408	1.37 ug/L	96
71)	1,4-Dichlorobenzene	16.54	146	125663	1.33 ug/L	97
72)	n-Butylbenzene	16.84	91	234736	1.28 ug/L	98
73)	1,2-Dichlorobenzene	16.98	146	113627	1.35 ug/L	98
74)	1,2-Dibromo-3-chloropropan	17.93	75	9221	1.32 ug/L #	73
75)	1,2,4-Trichlorobenzene	19.03	180	73053	1.28 ug/L	97
76)	Hexachlorobutadiene	19.20	225	35320	1.38 ug/L	95
77)	Naphthalene	19.44	128	160112	1.27 ug/L	100
78)	Hexachloroethane	17.29	201	20932	1.13 ug/L #	89
79)	1,2,3-Trichlorobenzene	19.81	180	64381	1.19 ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS01.D Vial: 10
Acq On : 27 May 2014 7:33 am Operator: DN
Sample : 34E2701-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 8:03 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION BLANK

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27BLK01.D Vial: 11
Acq On : 27 May 2014 9:00 am Operator: DN
Sample : 34E2701-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:21 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1865195	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1375456	12.50	ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	703693	12.50	ug/L	0.00
System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.42	113	509925	10.96	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 87.68%						
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	480809	10.87	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 86.96%						
39) Toluene-d8 (SU3)	12.20	98	1606996	12.53	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 100.24%						
58) 4-Bromofluorobenzene (SU4)	15.22	95	718155	12.77	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 102.16%						

Target Compounds						Qvalue
4) Chloromethane	4.41	50	3502	-0.10	~~ug/L~~ # NSM	41
6) Bromomethane	5.13	96	2338	-0.64	~~ug/L~~ #	1
7) Chloroethane	5.23	64	856	1.24	~~ug/L~~ #	32
11) Acetone	6.48	58	24602	36.82	~~ug/L~~ T	93
12) (IPA) Leak Check Compound	6.48	45	34072	152.02	~~ug/L~~ NSM	100
14) Methylene Chloride	7.07	84	7216	1.41	~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.91	59	2586	8.13	~~ug/L~~ #	77
21) (MEK) 2-Butanone	8.79	72	2669	5.09	~~ug/L~~ #	1
24) Chloroform	9.21	83	1638	0.17	~~ug/L~~ #	18
29) 1,1-Dichloropropene	9.91	75	582	0.08	~~ug/L~~ #	1
31) Benzene	9.92	78	11295	0.64	~~ug/L~~ #	80
32) 1,2-Dichloroethane	9.93	62	6988	1.13	~~ug/L~~ #	1
35) Dibromomethane	10.99	93	281	0.09	~~ug/L~~ #	5
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7959	2.90	~~ug/L~~ # T	100
41) Toluene	12.29	91	1725	0.09	~~ug/L~~ # NSM	50
46) 2-Hexanone	12.97	43	2459	0.82	~~ug/L~~ # T	80
51) Ethylbenzene	14.02	91	836	0.04	~~ug/L~~ # NSM	45
52) m,p-Xylenes	14.15	106	266	0.04	~~ug/L~~ # 0.0008	1
54) Styrene	14.63	104	1313	-0.75	~~ug/L~~ #	67
56) Isopropylbenzene	15.23	105	600	0.03	~~ug/L~~ #	1
62) n-Propylbenzene	15.21	91	1331	0.05	~~ug/L~~ #	56
67) 1,2,4-Trimethylbenzene	16.05	105	276	0.02	~~ug/L~~ #	33

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27BLK01.D Vial: 11
Acq On : 27 May 2014 9:00 am Operator: DN
Sample : 34E2701-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:21 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

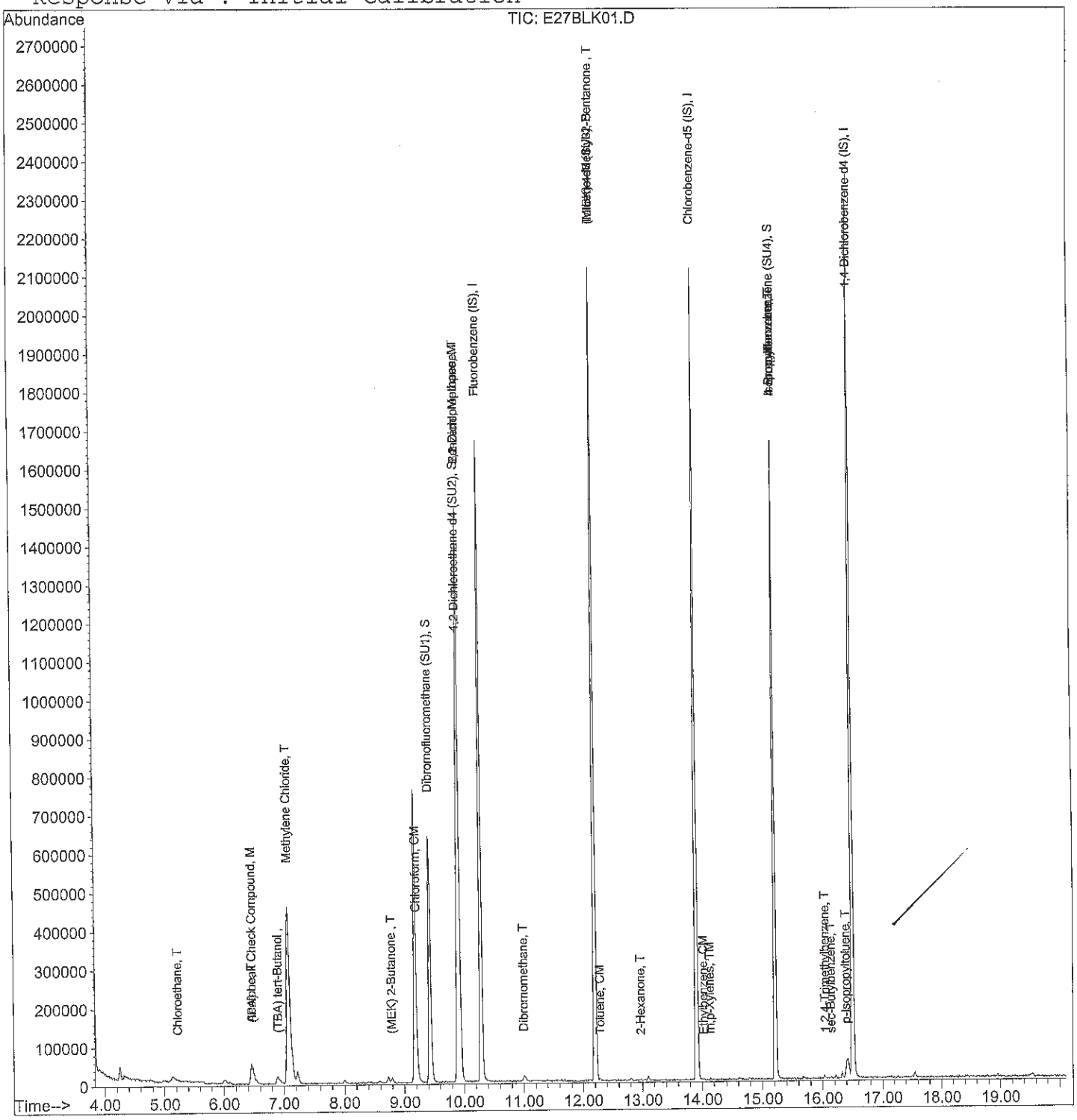
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) sec-Butylbenzene	16.15	105	608	0.03	~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	319	0.02	~~ug/L #~~	52

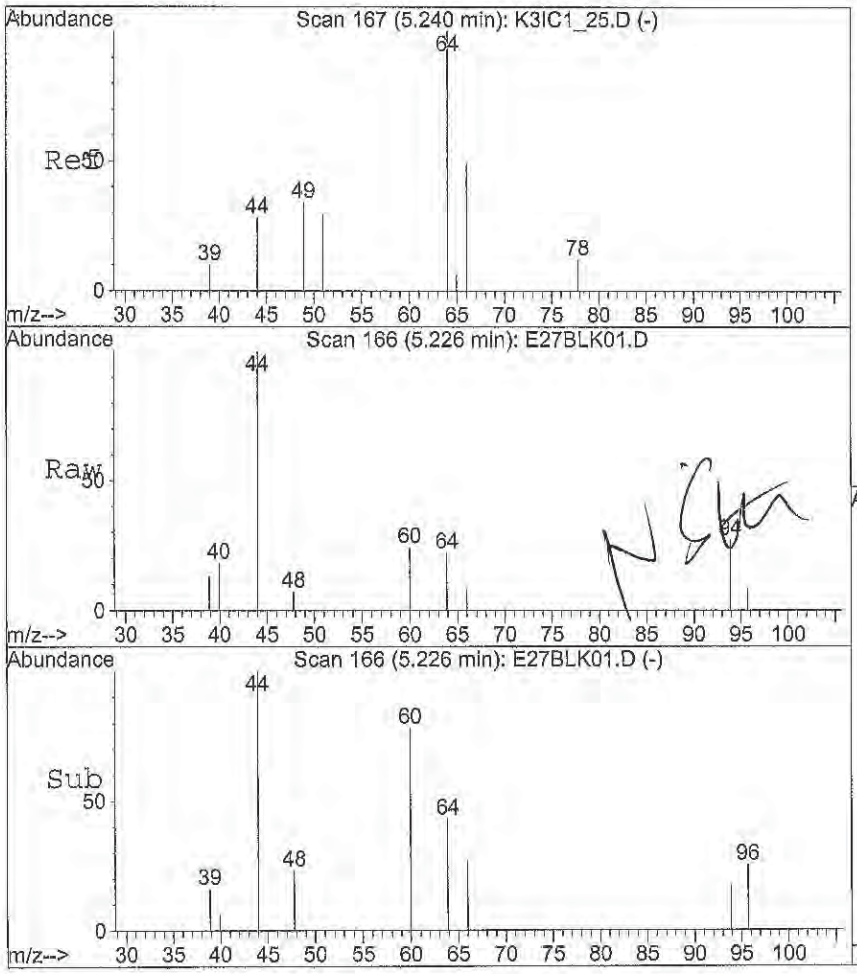
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27BLK01.D Vial: 11
Acq On : 27 May 2014 9:00 am Operator: DN
Sample : 34E2701-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:21 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

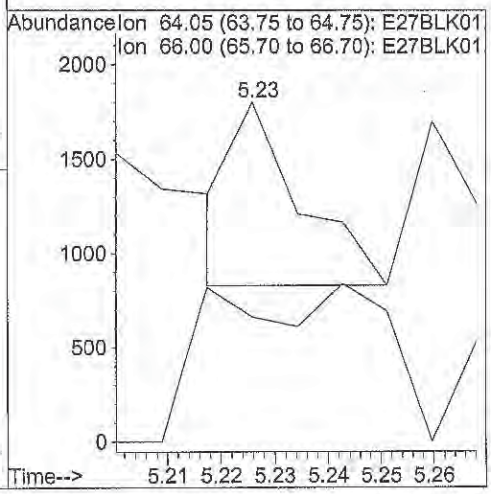


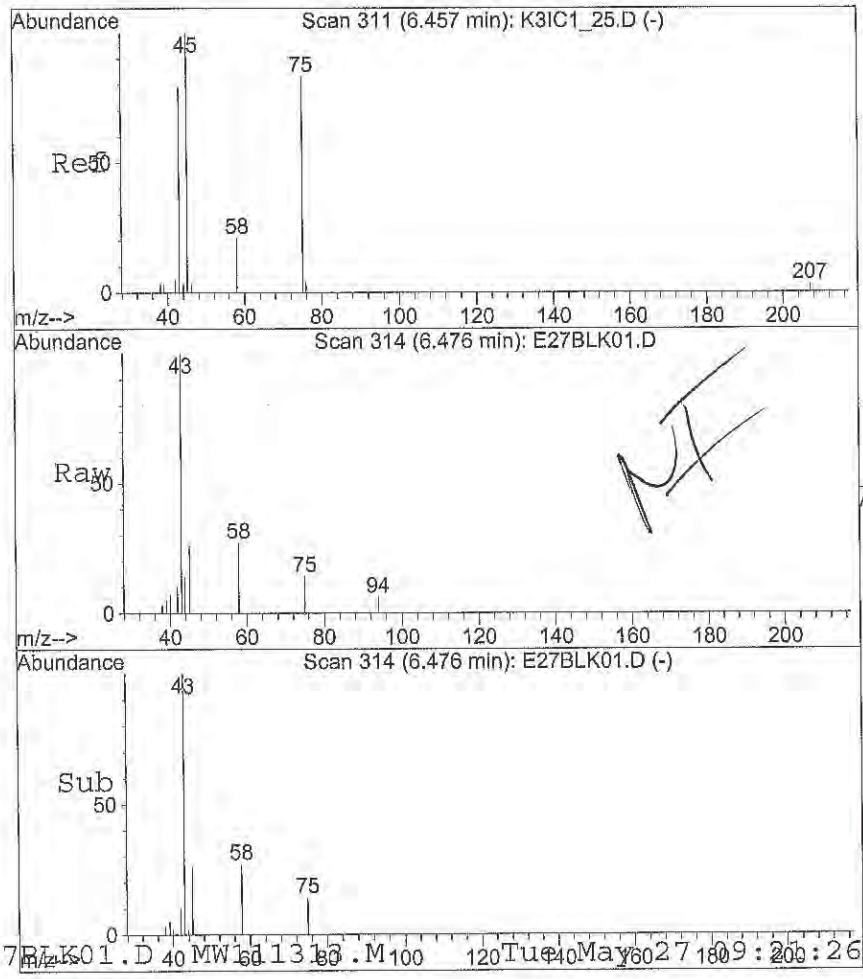


#7
Chloroethane
Concen: 1.24 ug/L
RT: 5.23 min Scan# 166
Delta R.T. -0.01 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 64 Resp: 856

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

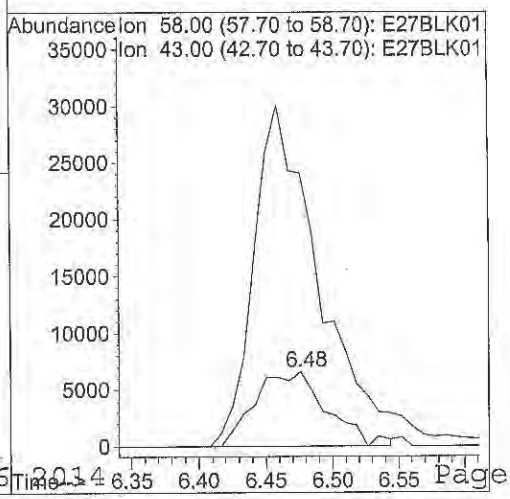


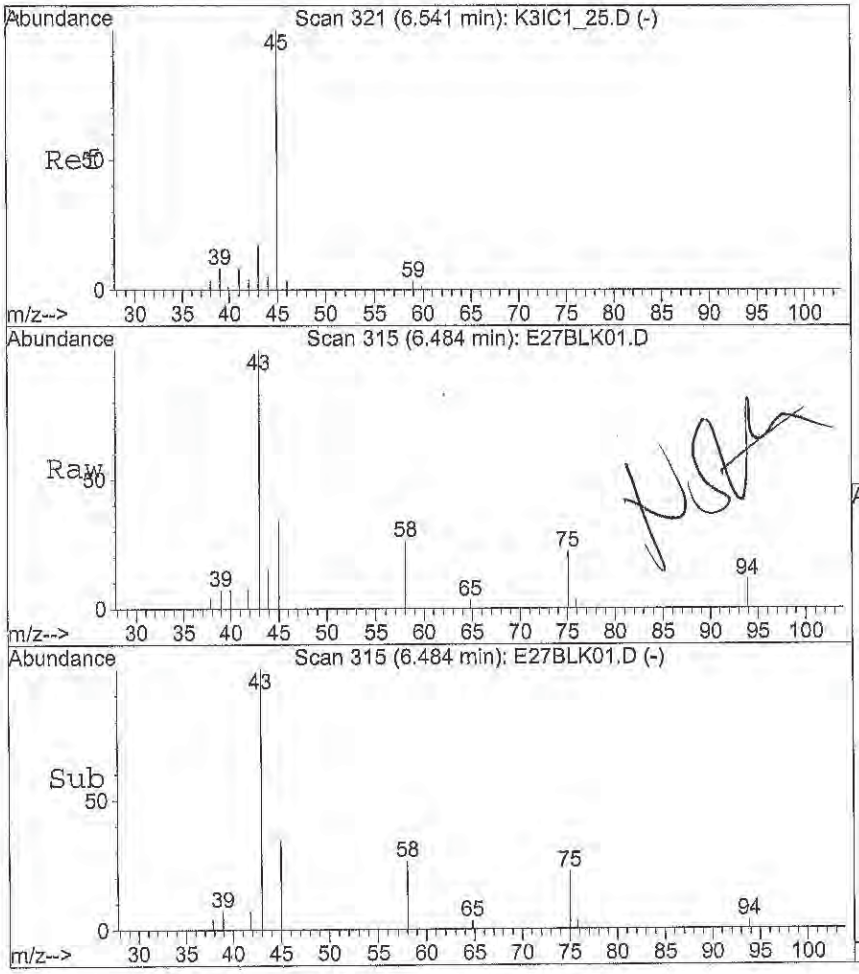


#11
Acetone
Concen: 36.82 ug/L
RT: 6.48 min Scan# 314
Delta R.T. 0.02 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 58 Resp: 24602

Ion	Ratio	Lower	Upper
58	100		
43	434.0	360.9	541.3

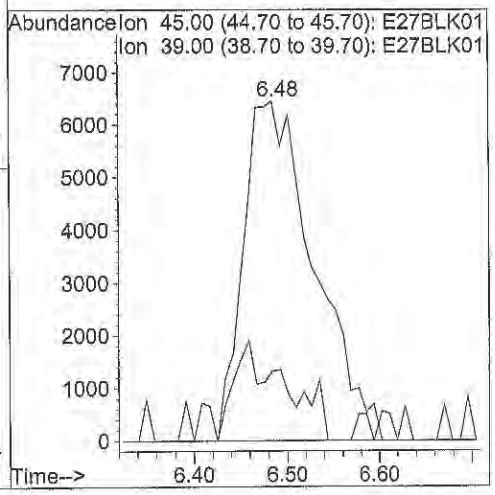


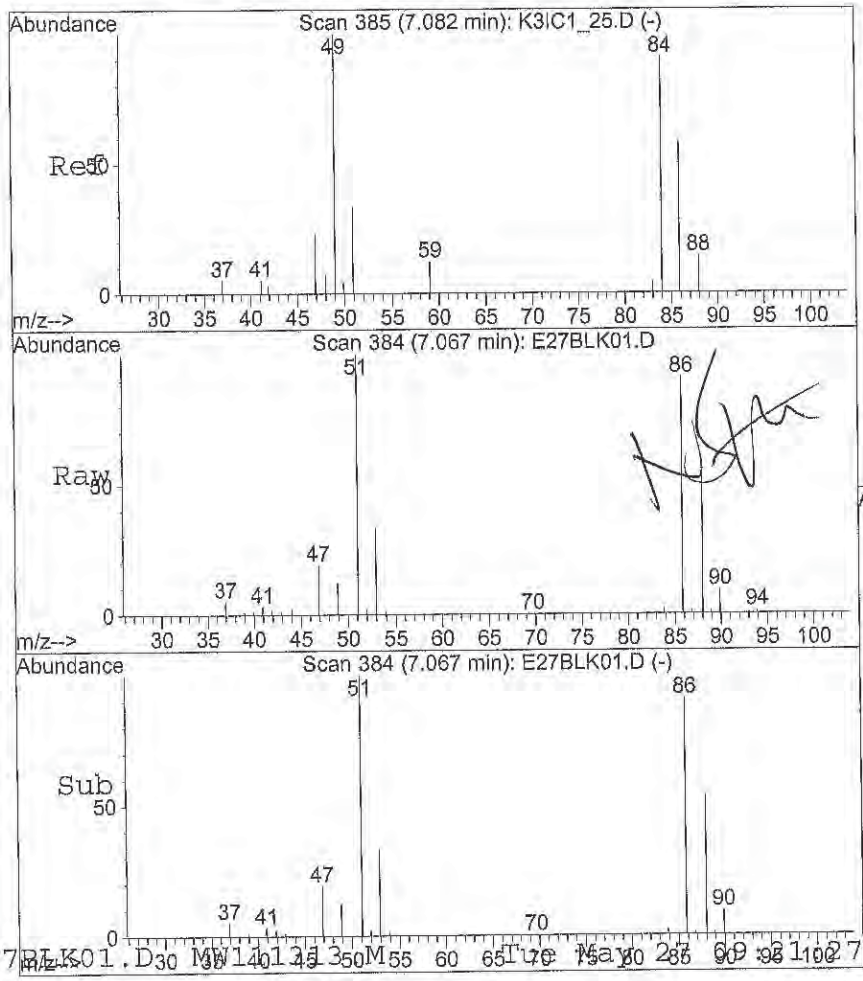


#12
(IPA) Leak Check Compound
Concen: 152.02 ug/L
RT: 6.48 min Scan# 315
Delta R.T. -0.06 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 45 Resp: 34072

Ion	Ratio	Lower	Upper
45	100		
39	6.2	4.9	7.3

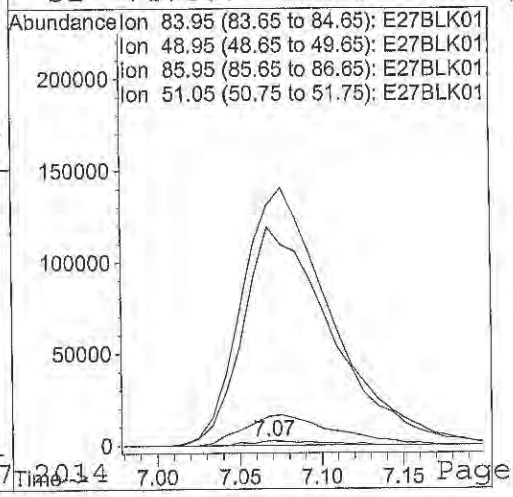


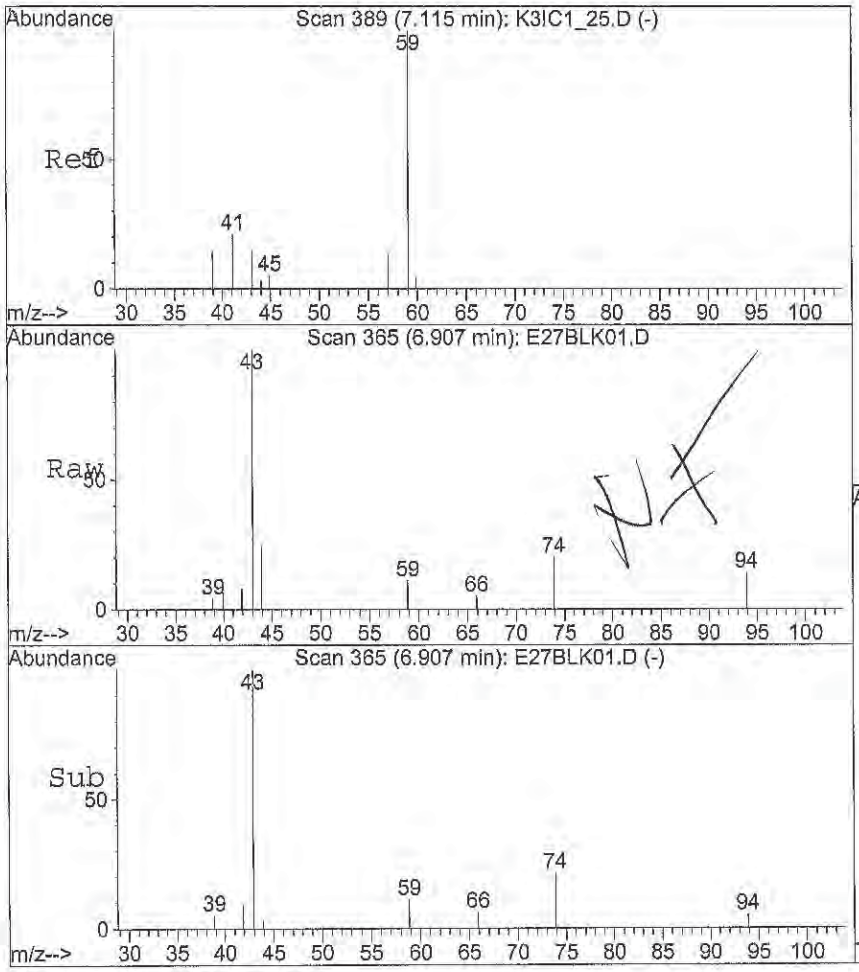


#14
Methylene Chloride
Concen: 1.41 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 84 Resp: 7216

Ion	Ratio	Lower	Upper
84	100		
49	864.4	89.8	134.6#
86	6269.0	51.1	76.7#
51	7474.7	28.5	42.7#

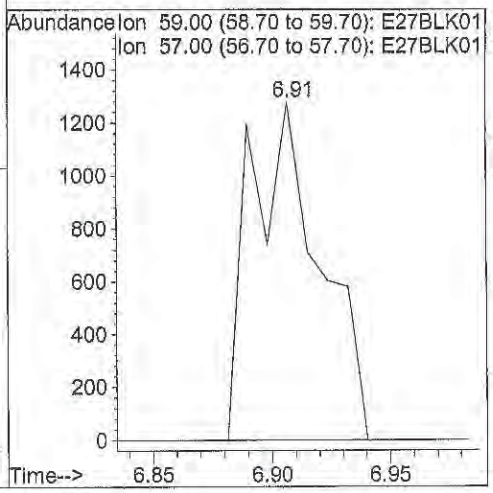


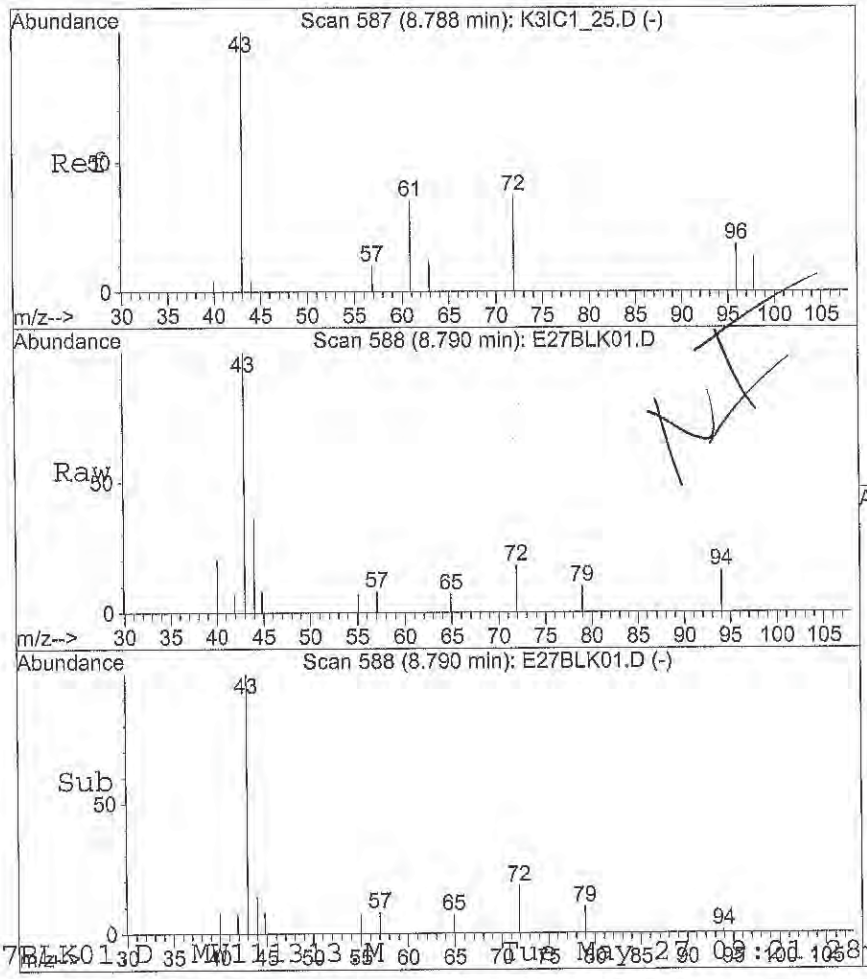


#15
(TBA) tert-Butanol
Concen: 8.13 ug/L
RT: 6.91 min Scan# 365
Delta R.T. -0.21 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 59 Resp: 2586

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

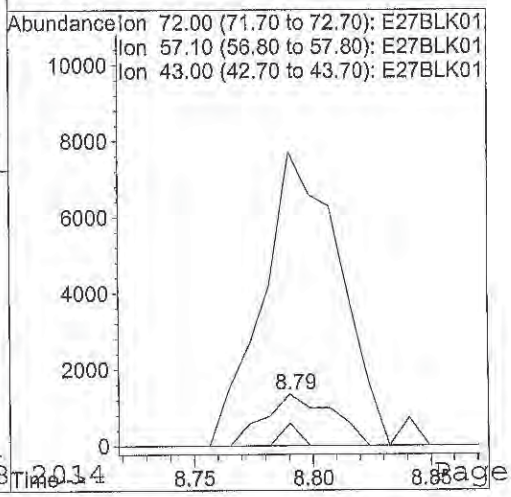


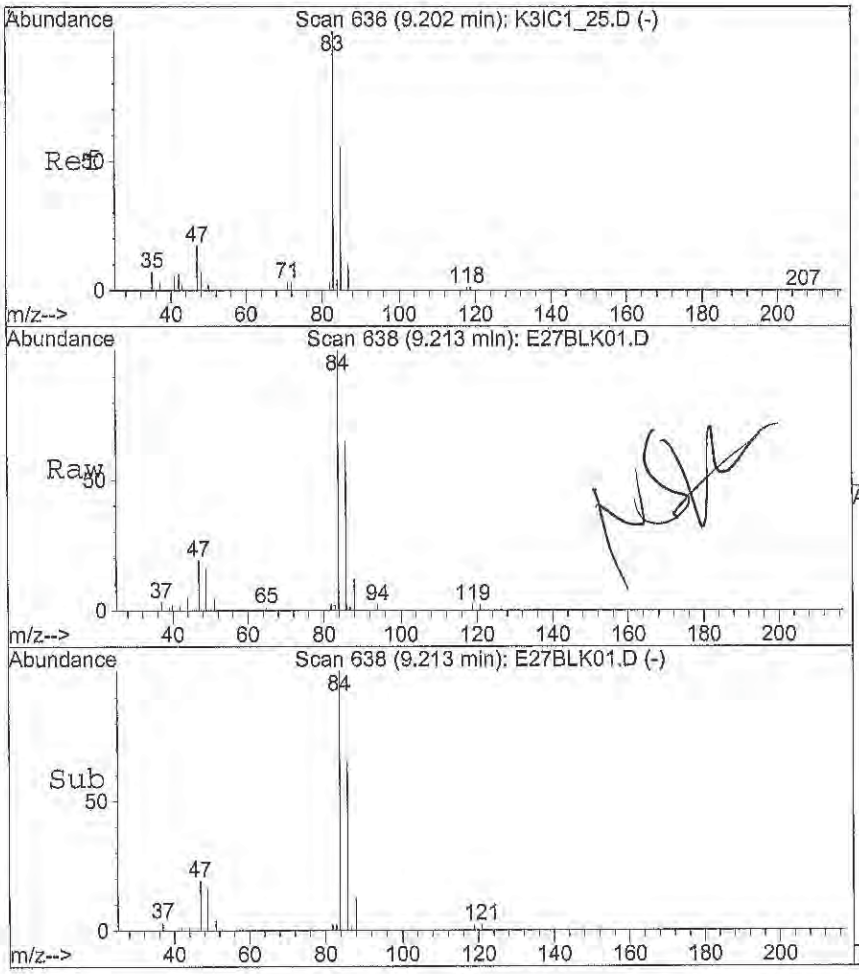


#21
(MEK) 2-Butanone
Concen: 5.09 ug/L
RT: 8.79 min Scan# 588
Delta R.T. 0.00 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 72 Resp: 2669

Ion	Ratio	Lower	Upper
72	100		
57	11.1	17.5	26.3#
43	667.2	314.2	471.2#

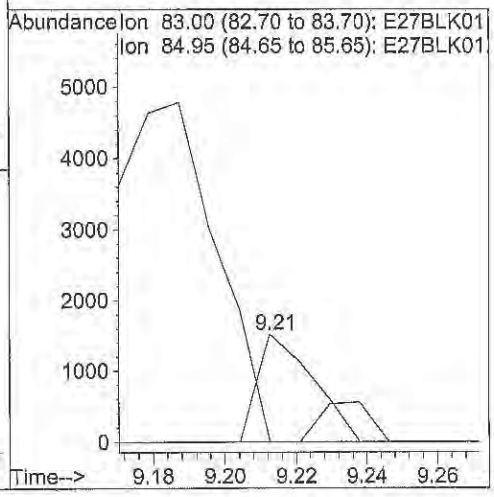


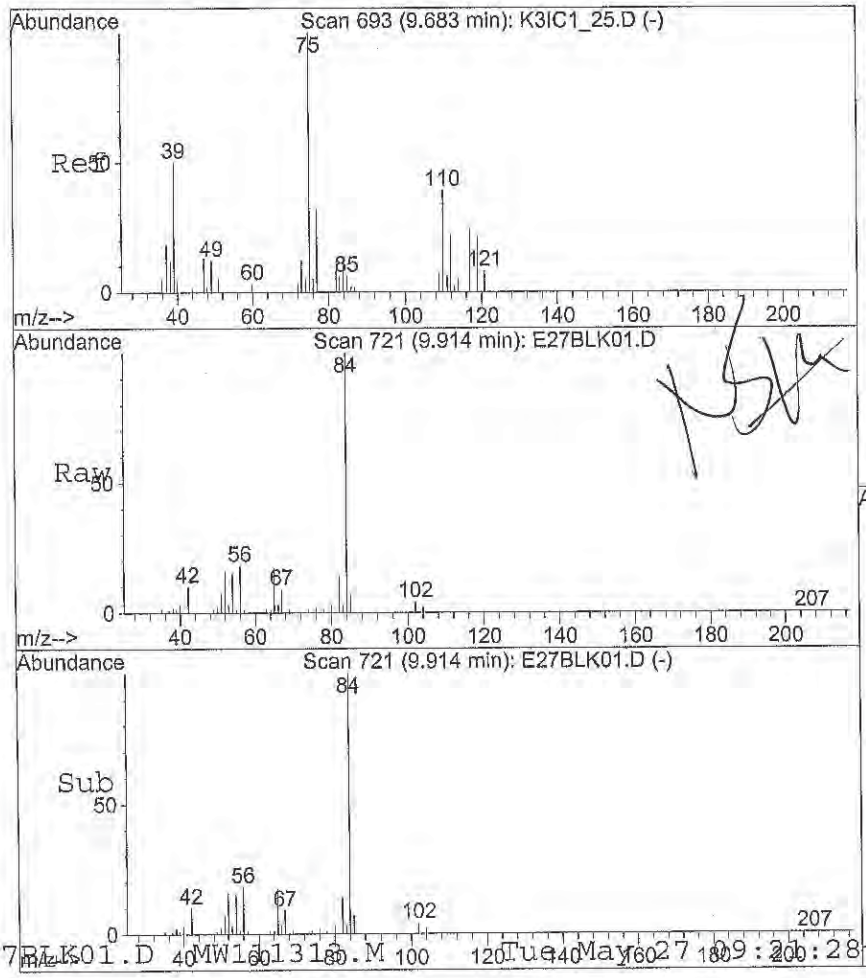


#24
Chloroform
Concen: 0.17 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 83 Resp: 1638

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

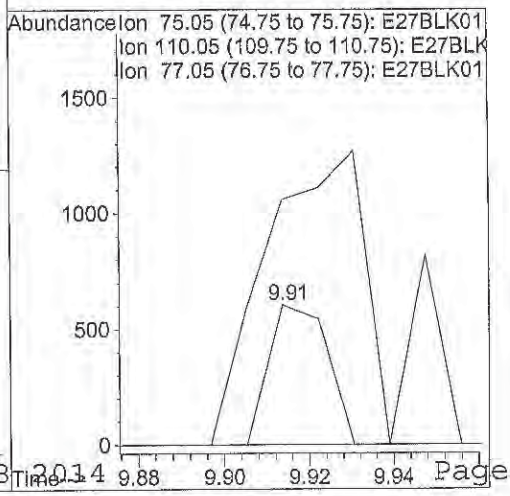


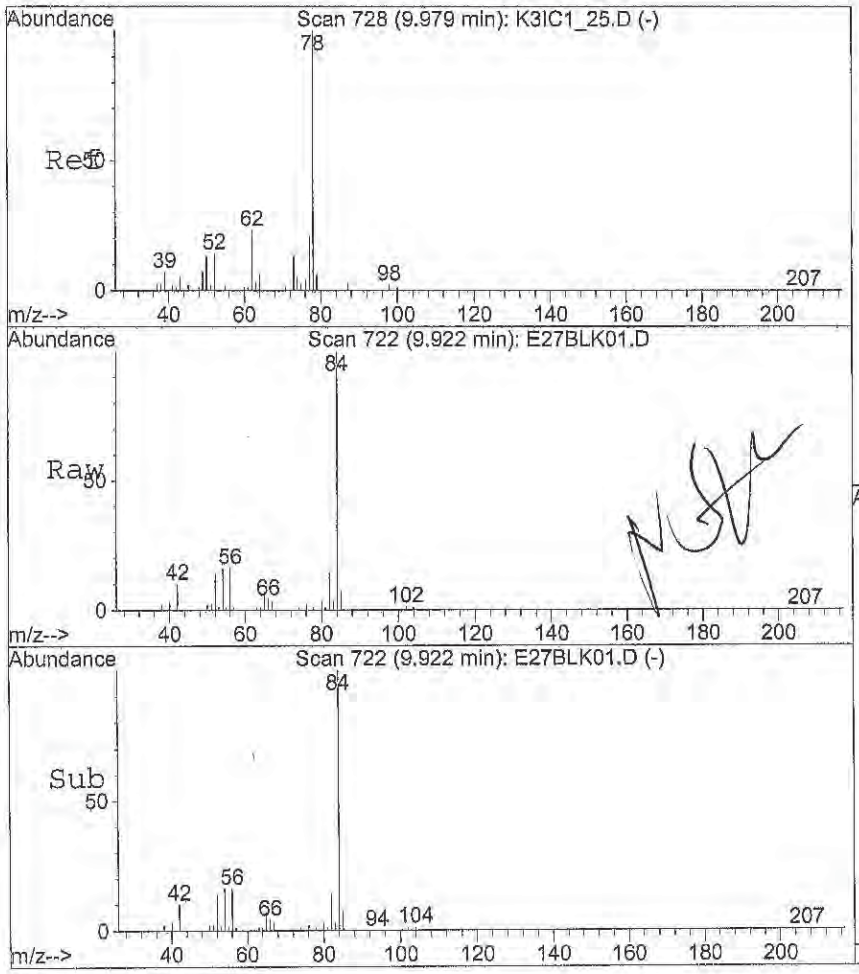


#29
1,1-Dichloropropene
Concen: 0.08 ug/L
RT: 9.91 min Scan# 721
Delta R.T. 0.23 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 75 Resp: 582

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	351.0	25.0	37.4#

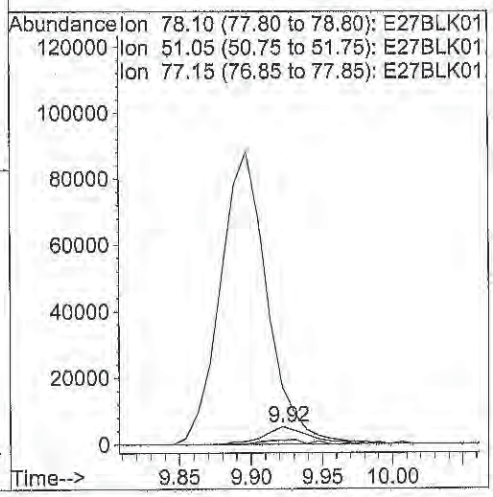


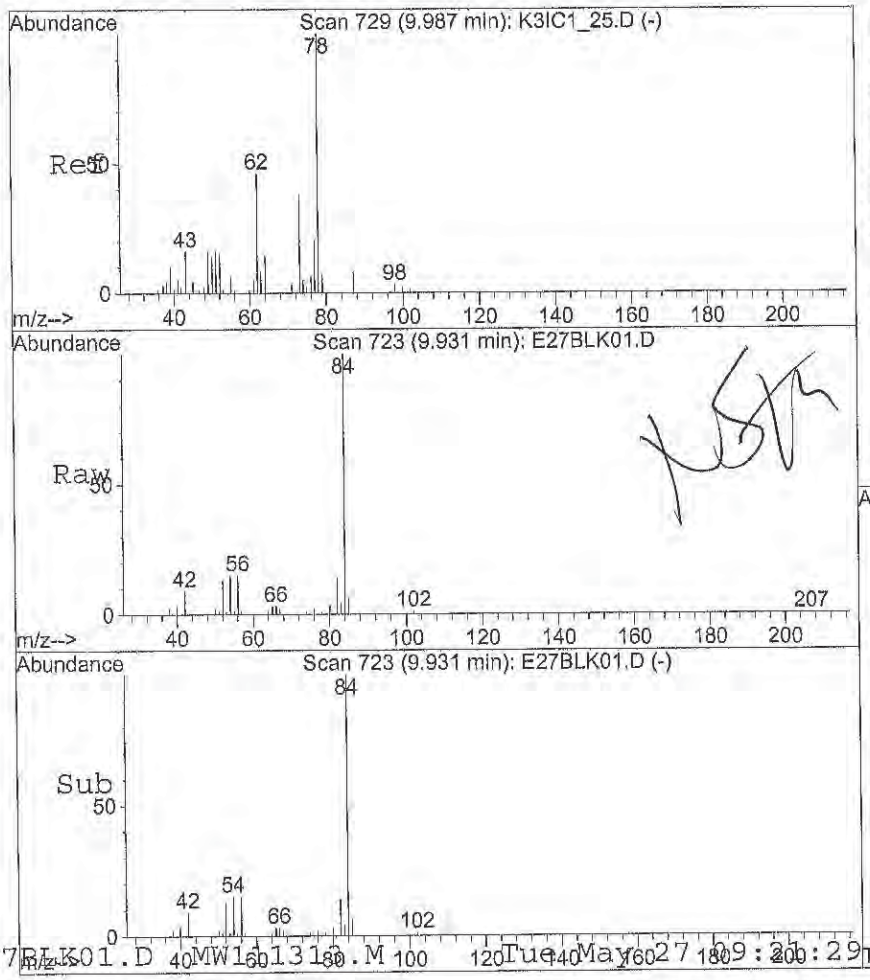


#31
Benzene
Concen: 0.64 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 78 Resp: 11295

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	21.8	16.6	24.8

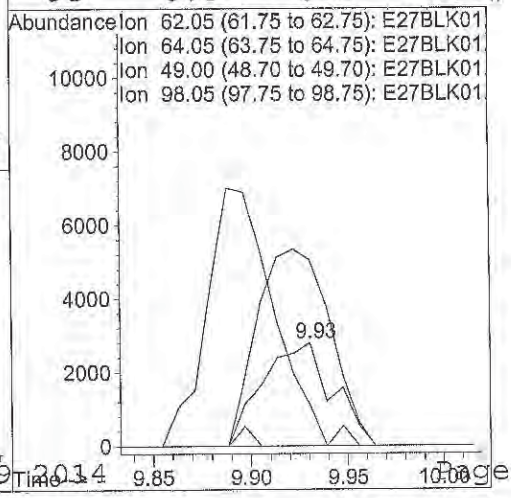


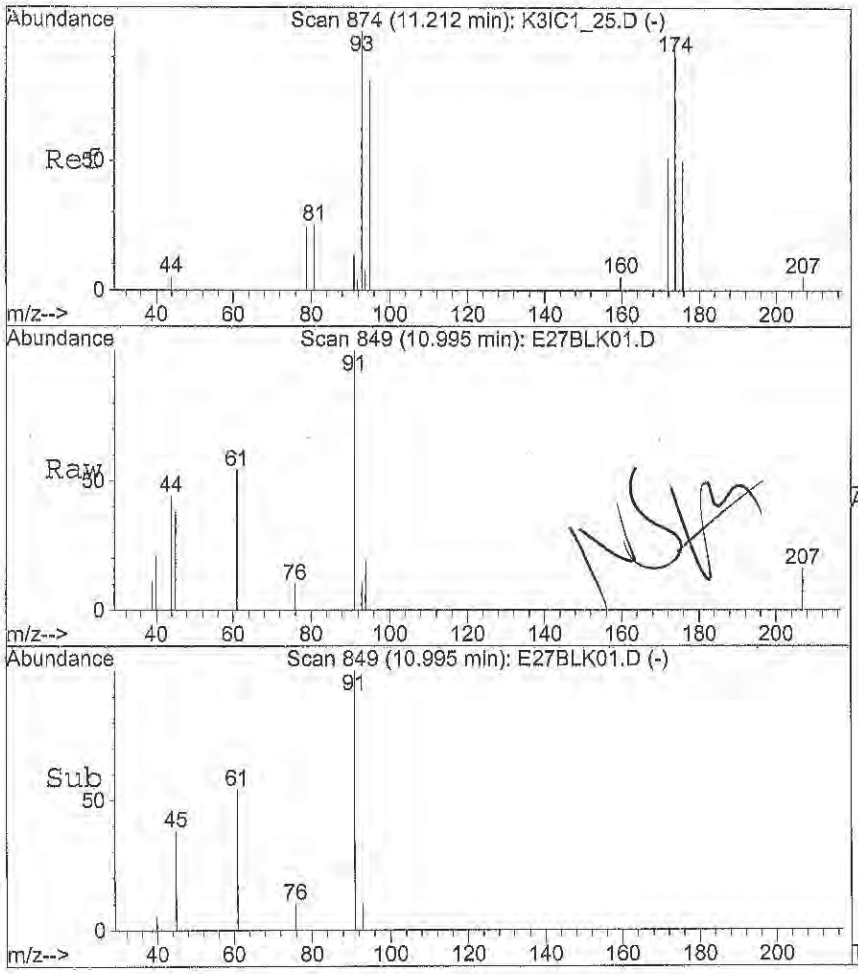


#32
1,2-Dichloroethane
Concen: 1.13 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 62 Resp: 6988

Ion	Ratio	Lower	Upper
62	100		
64	200.4	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

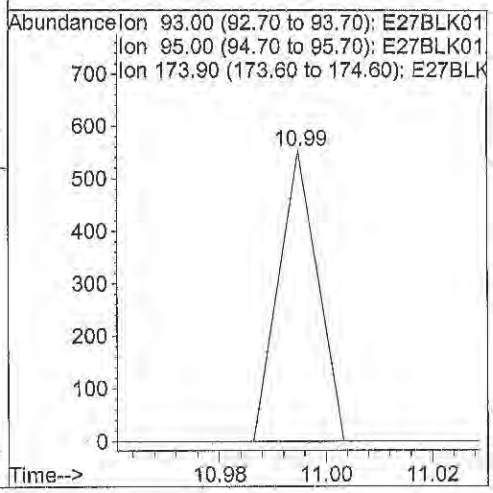


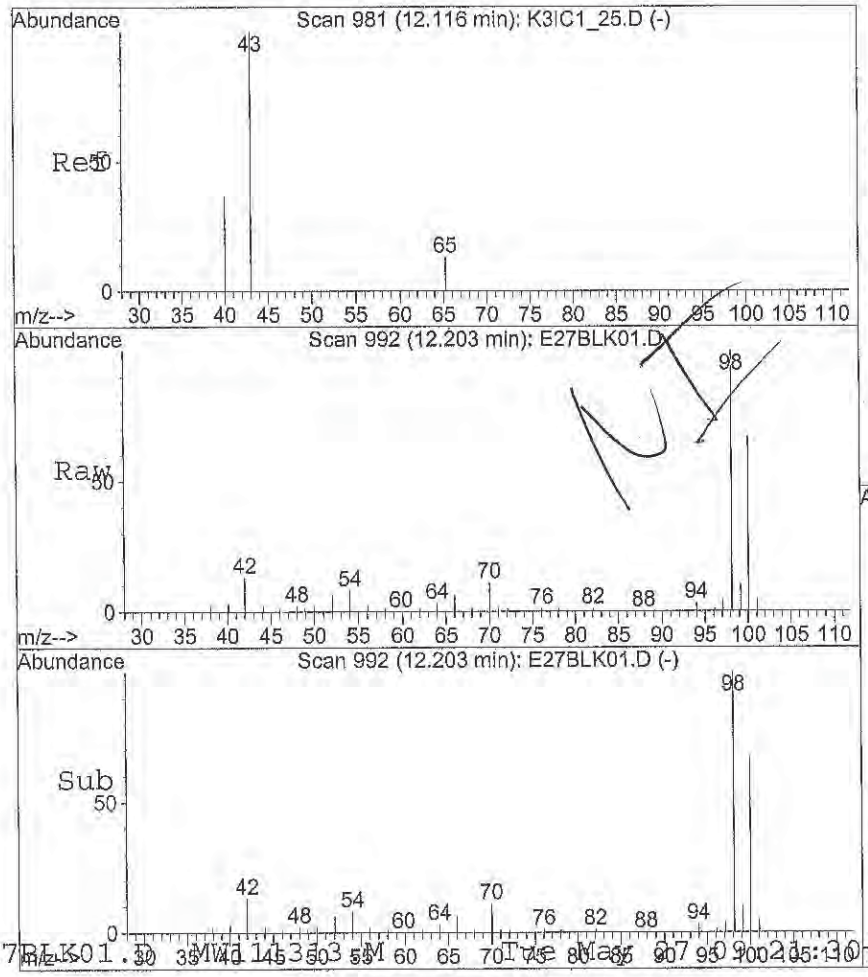


#35
Dibromomethane
Concen: 0.09 ug/L
RT: 10.99 min Scan# 849
Delta R.T. -0.22 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 93 Resp: 281

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

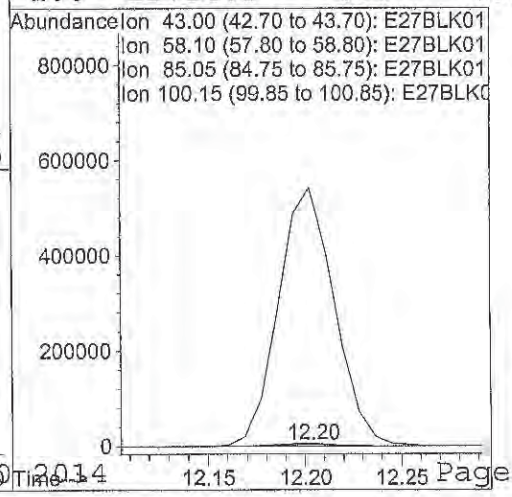


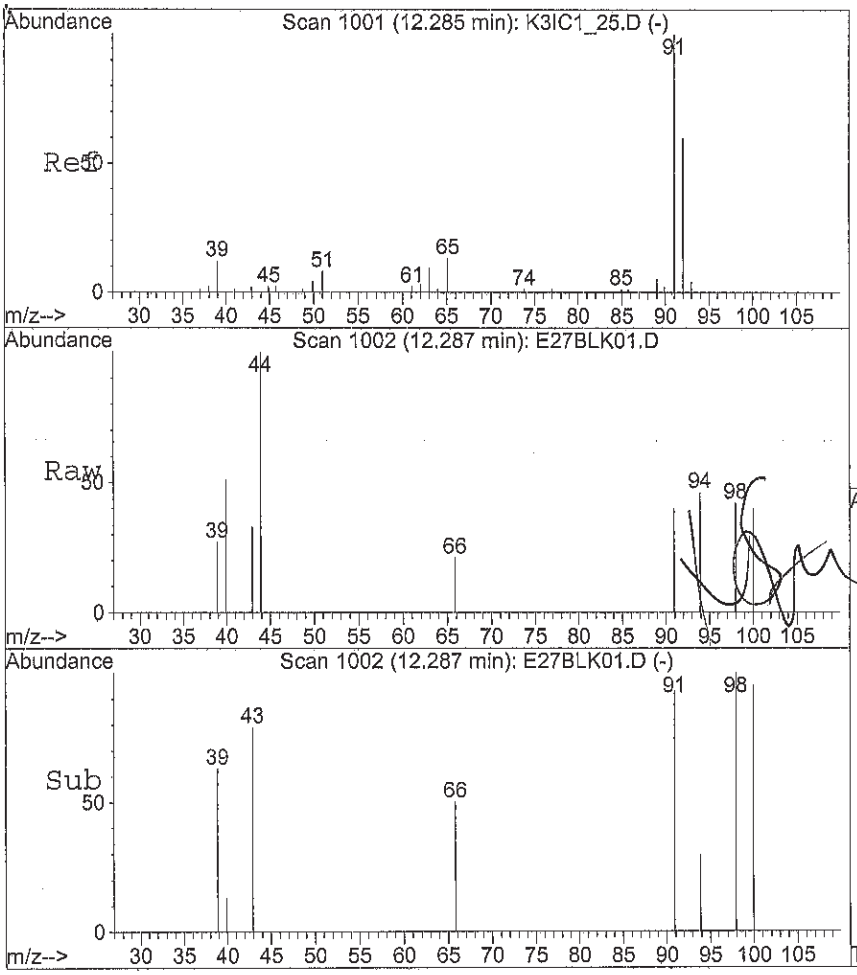


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.90 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 43 Resp: 7959

Ion	Ratio	Lower	Upper
43	100		
58	142.1	0.0	0.0#
85	0.0	0.0	0.0
100	13754.2	0.0	0.0#

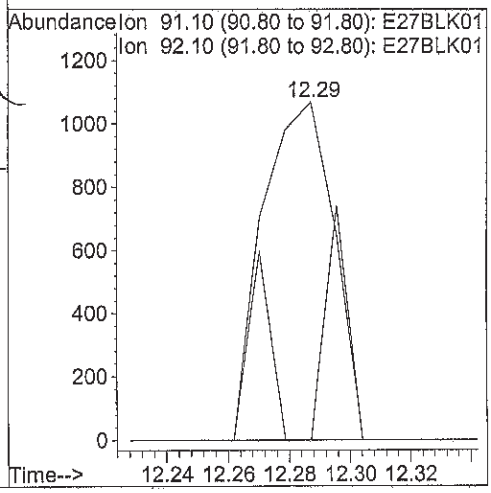


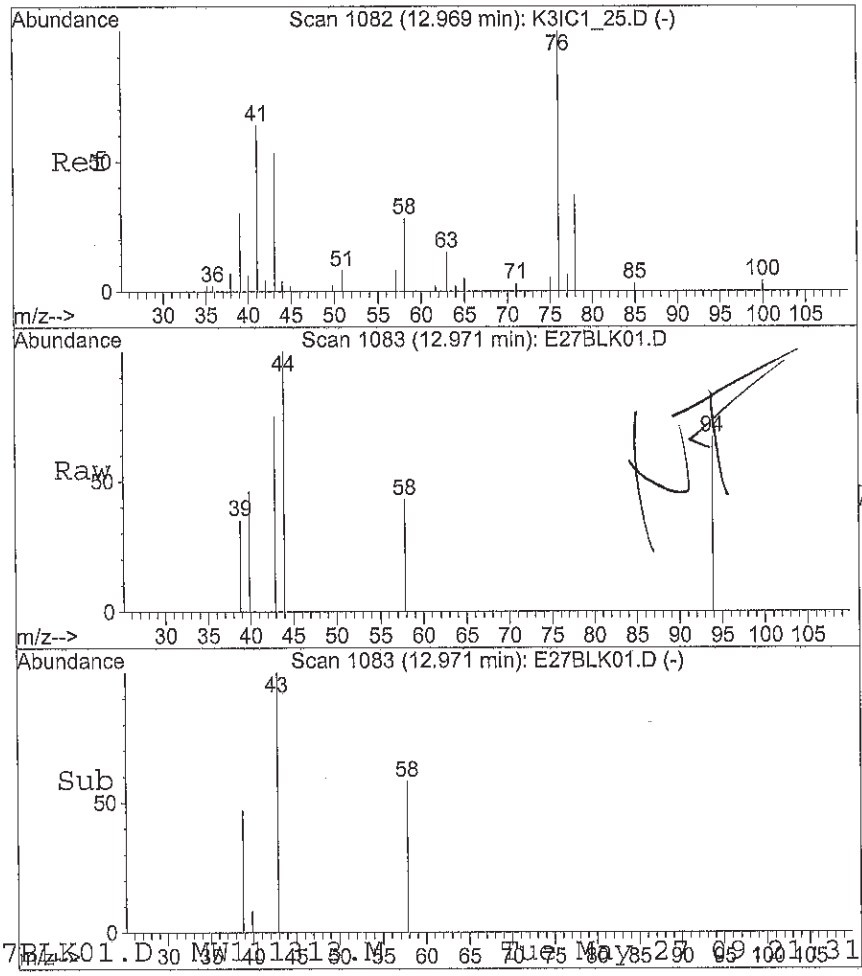


#41
Toluene
Concen: 0.09 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 91 Resp: 1725

Ion	Ratio	Lower	Upper
91	100		
92	21.7	47.4	71.0#

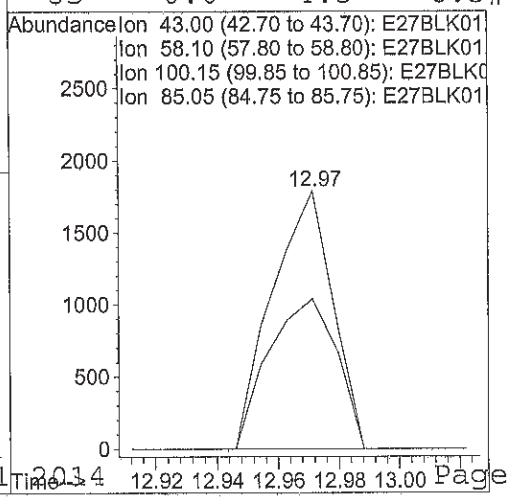


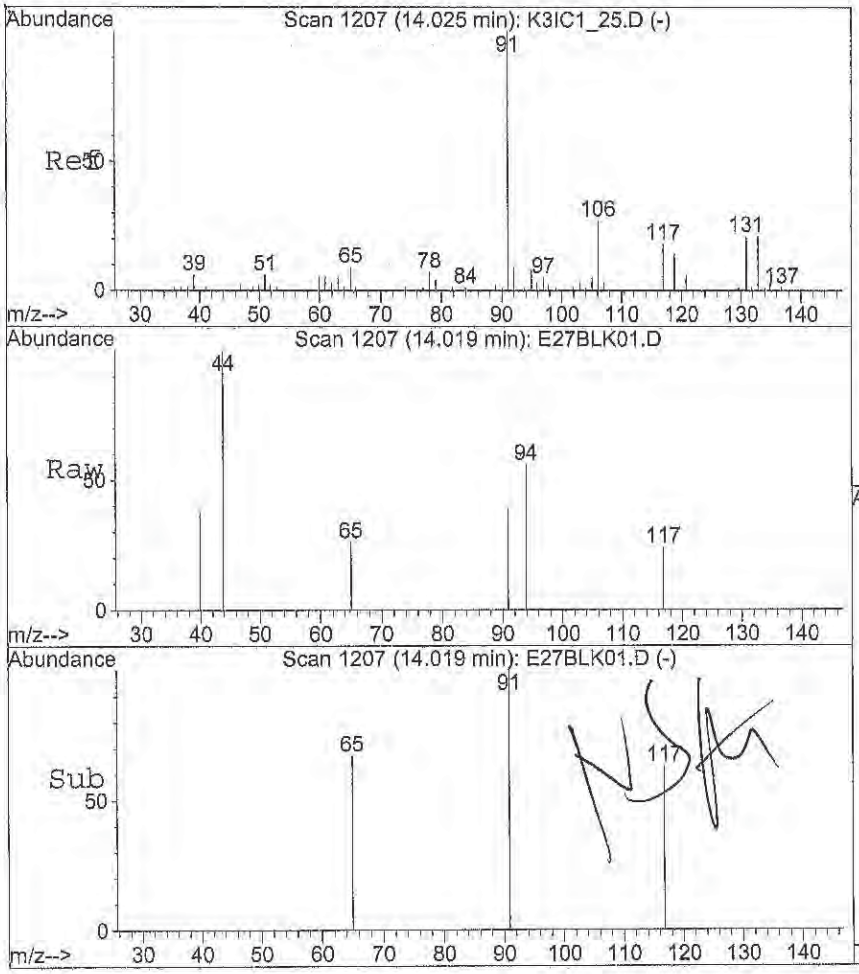


#46
2-Hexanone
Concen: 0.82 ug/L
RT: 12.97 min Scan# 1083
Delta R.T. 0.00 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 43 Resp: 2459

Ion	Ratio	Lower	Upper
43	100		
58	65.5	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

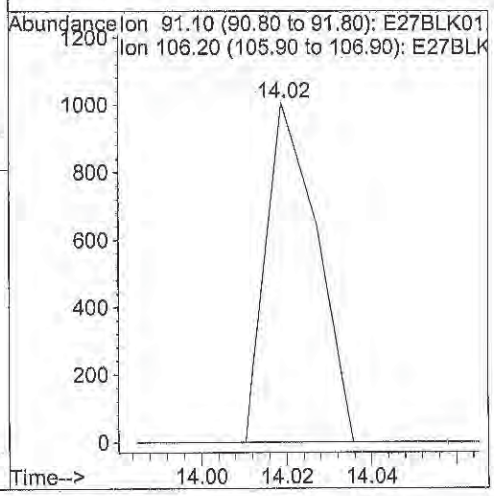


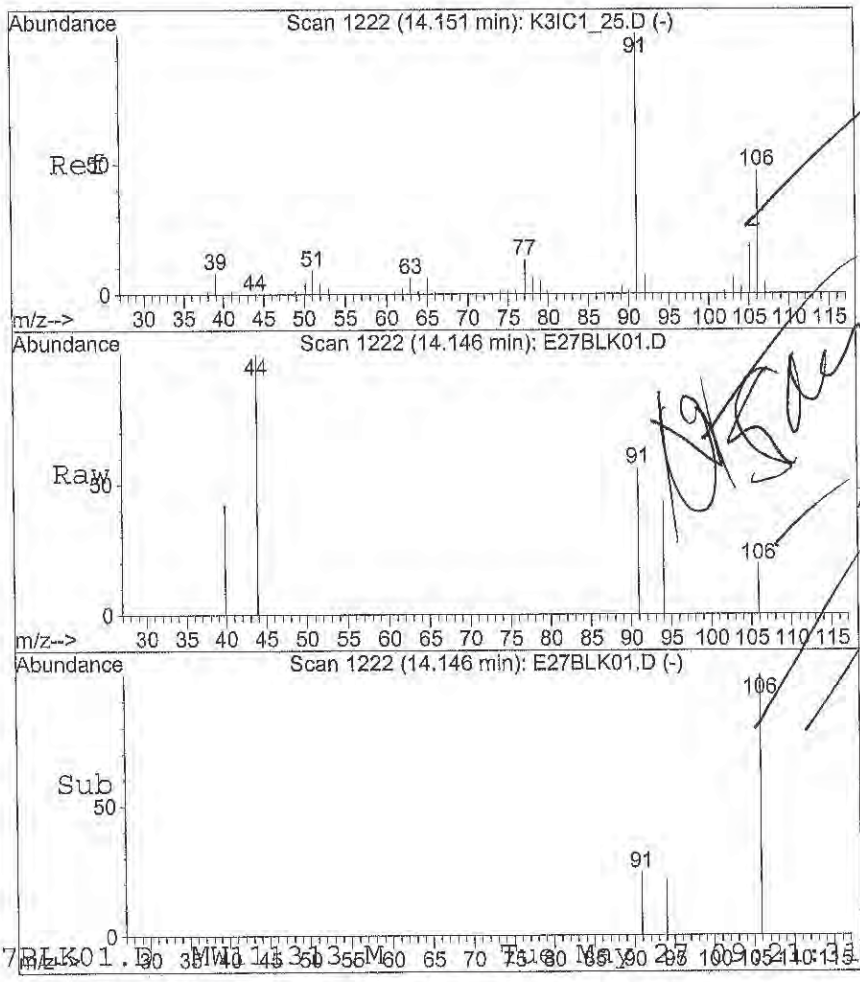


#51
Ethylbenzene
Concen: 0.04 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 91 Resp: 836

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

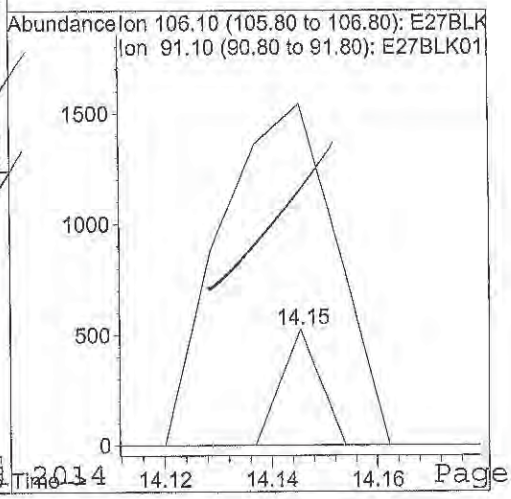


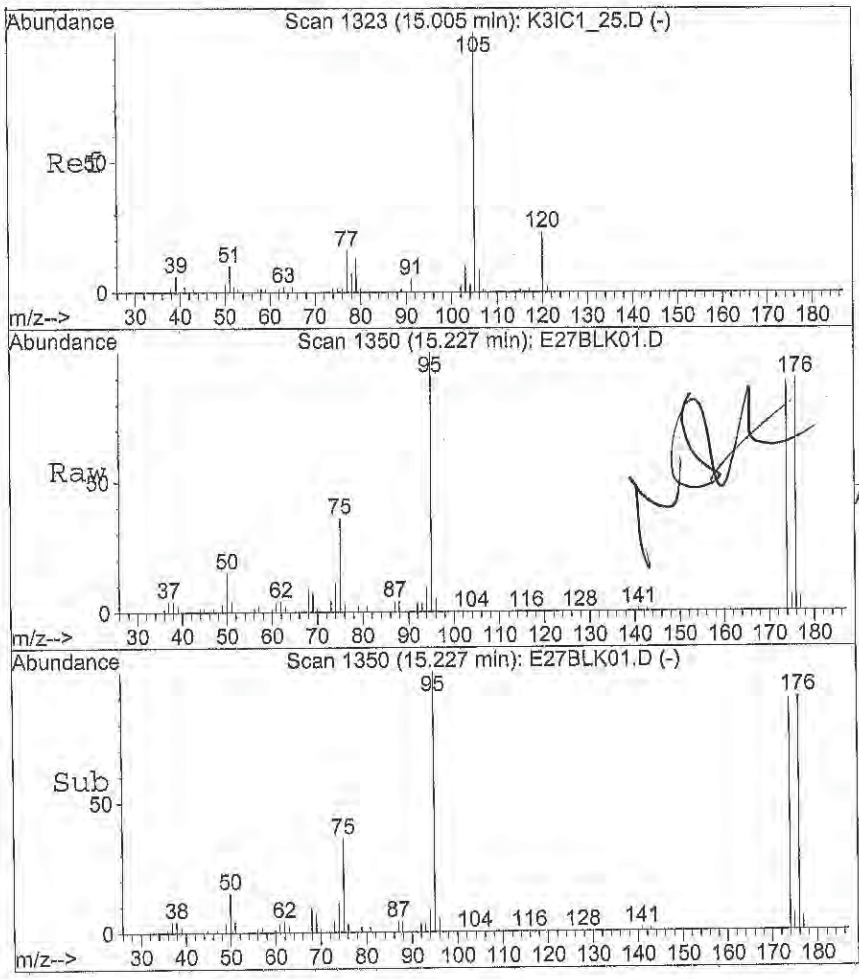


#52
m,p-Xylenes
Concen: 0.04 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion:106 Resp: 266

Ion	Ratio	Lower	Upper
106	100		
91	870.3	177.1	265.7#

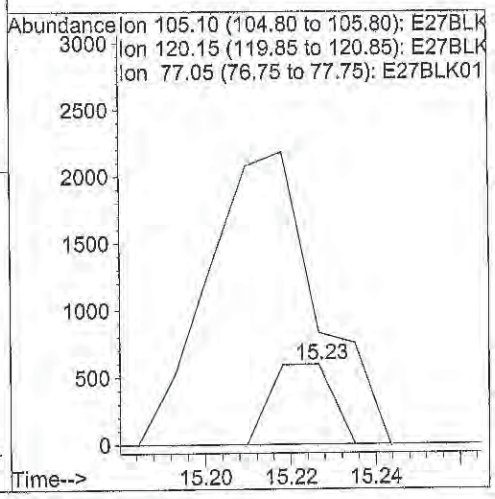


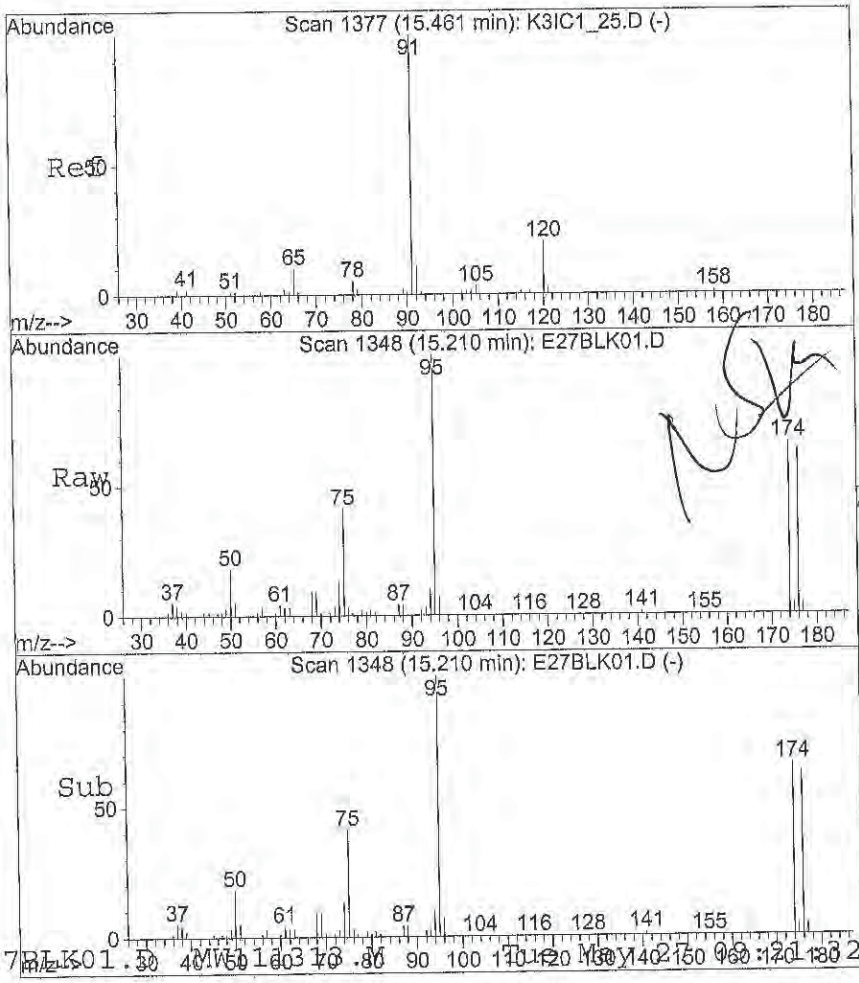


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.22 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion:105 Resp: 600

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	646.7	13.1	19.7#

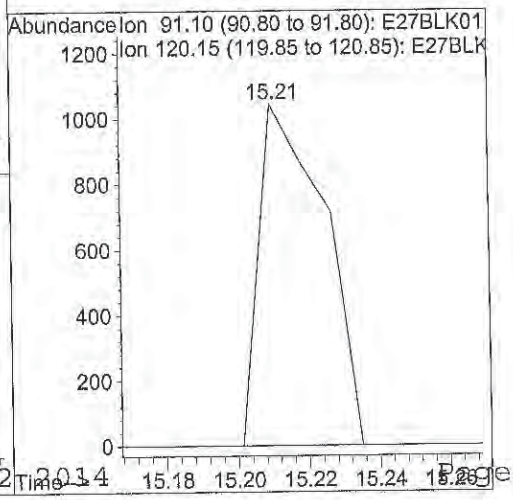


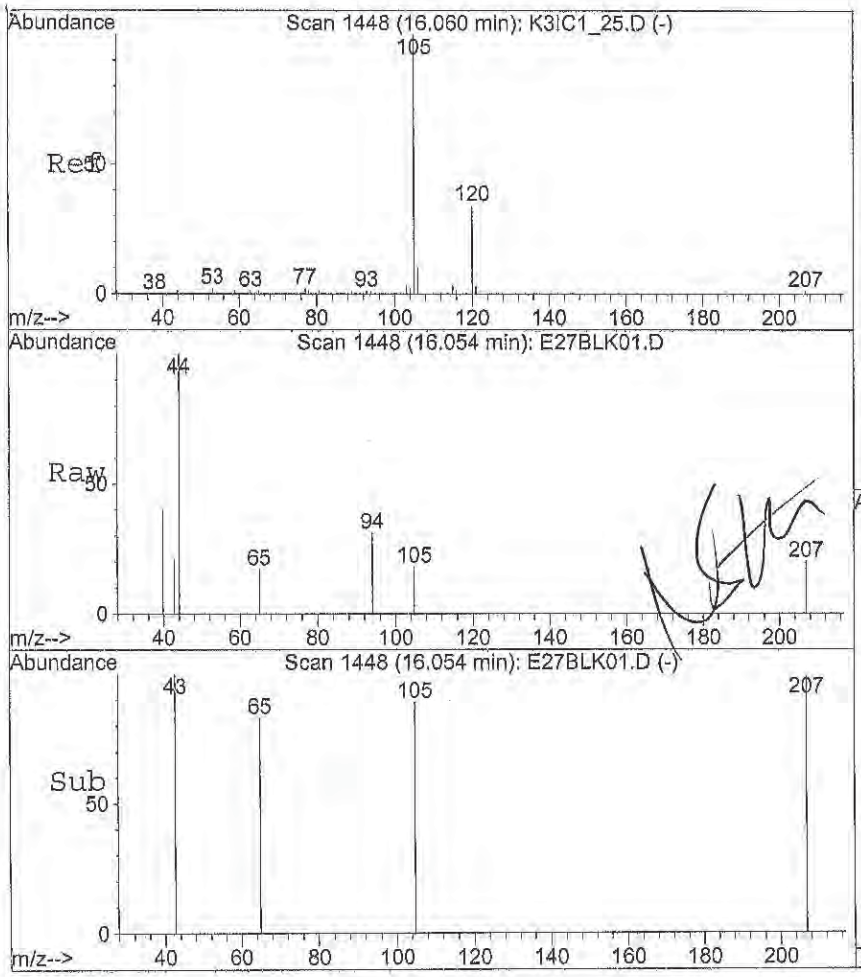


#62
n-Propylbenzene
Concen: 0.05 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. -0.25 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion: 91 Resp: 1331

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

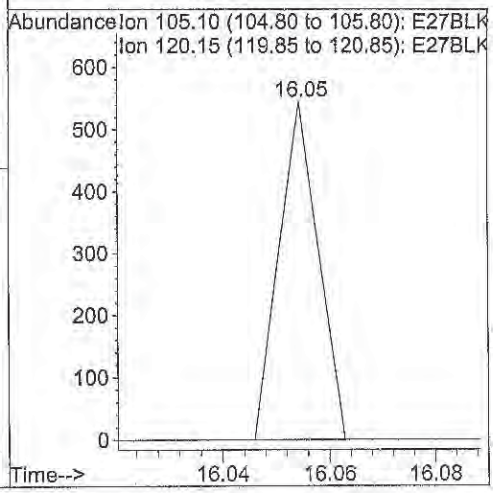


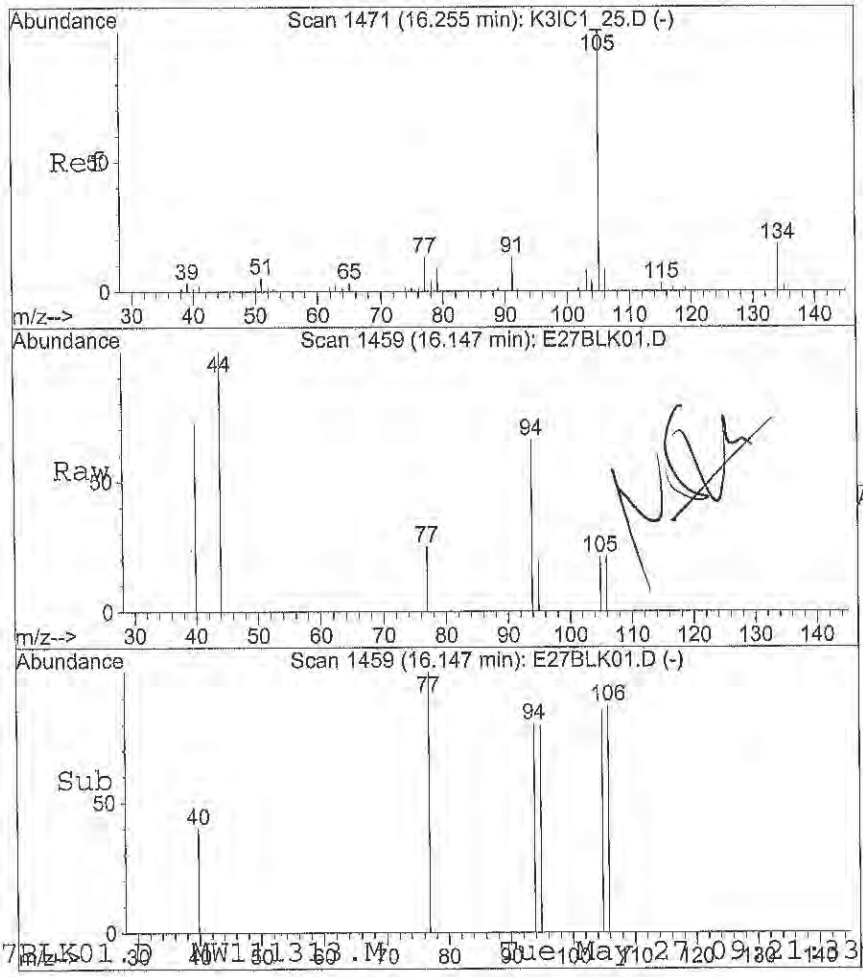


#67
1,2,4-Trimethylbenzene
Concen: 0.02 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion:105 Resp: 276

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

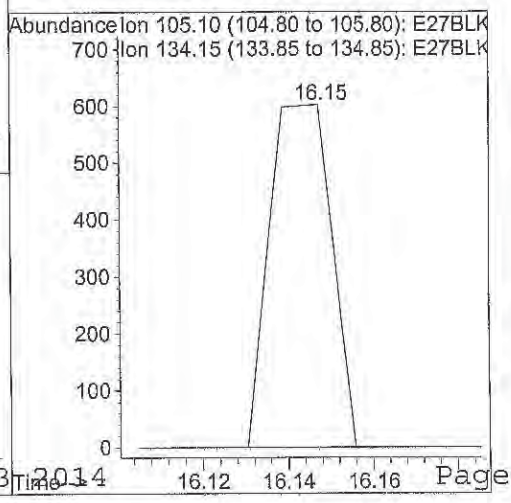


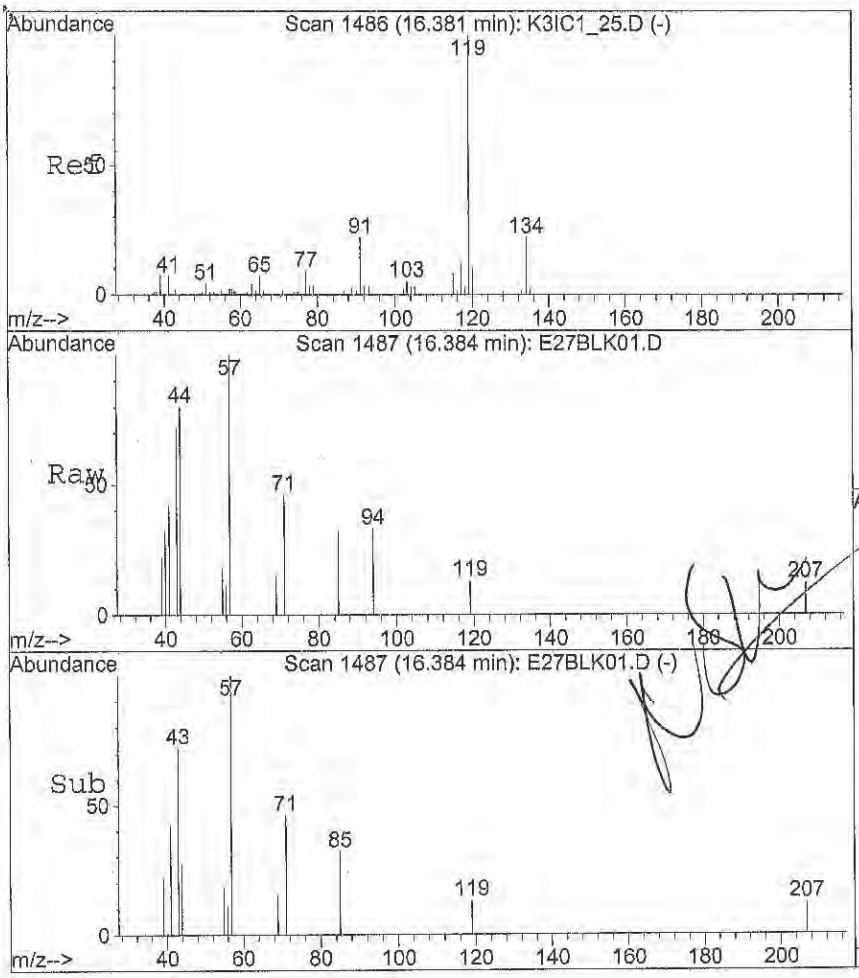


#68
sec-Butylbenzene
Concen: 0.03 ug/L
RT: 16.15 min Scan# 1459
Delta R.T. -0.11 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion:105 Resp: 608

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

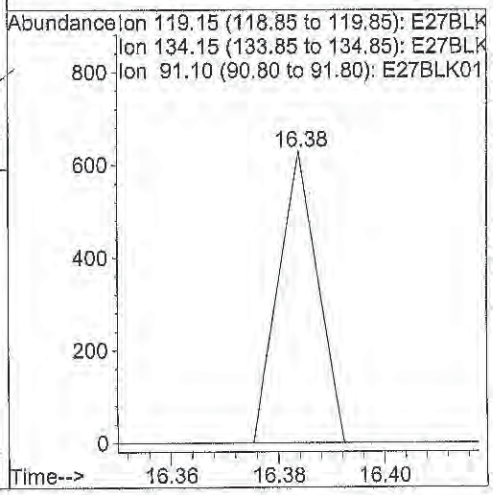




#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E27BLK01.D
Acq: 27 May 2014 9:00 am

Tgt Ion:119 Resp: 319

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27BLK01.D Vial: 11
Acq On : 27 May 2014 9:00 am Operator: DN
Sample : 34E2701-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:27 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1865195	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.91	117	1375580	12.50 ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	703693	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	509925	10.51 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 84.08%		
3) Chloroform-d (SU6)	9.18	84	816897	11.74 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.92%		
4) Methylene Chloride-d2 (SU5	7.07	86	452369	11.12 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.96%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	480809	14.50 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 116.00%		
6) Benzene-d6 (SU7)	9.92	84	1592976	10.88 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.04%		
8) Toluene-d8 (SU3)	12.20	98	1606996	12.31 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.48%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	718155	13.33 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.64%		

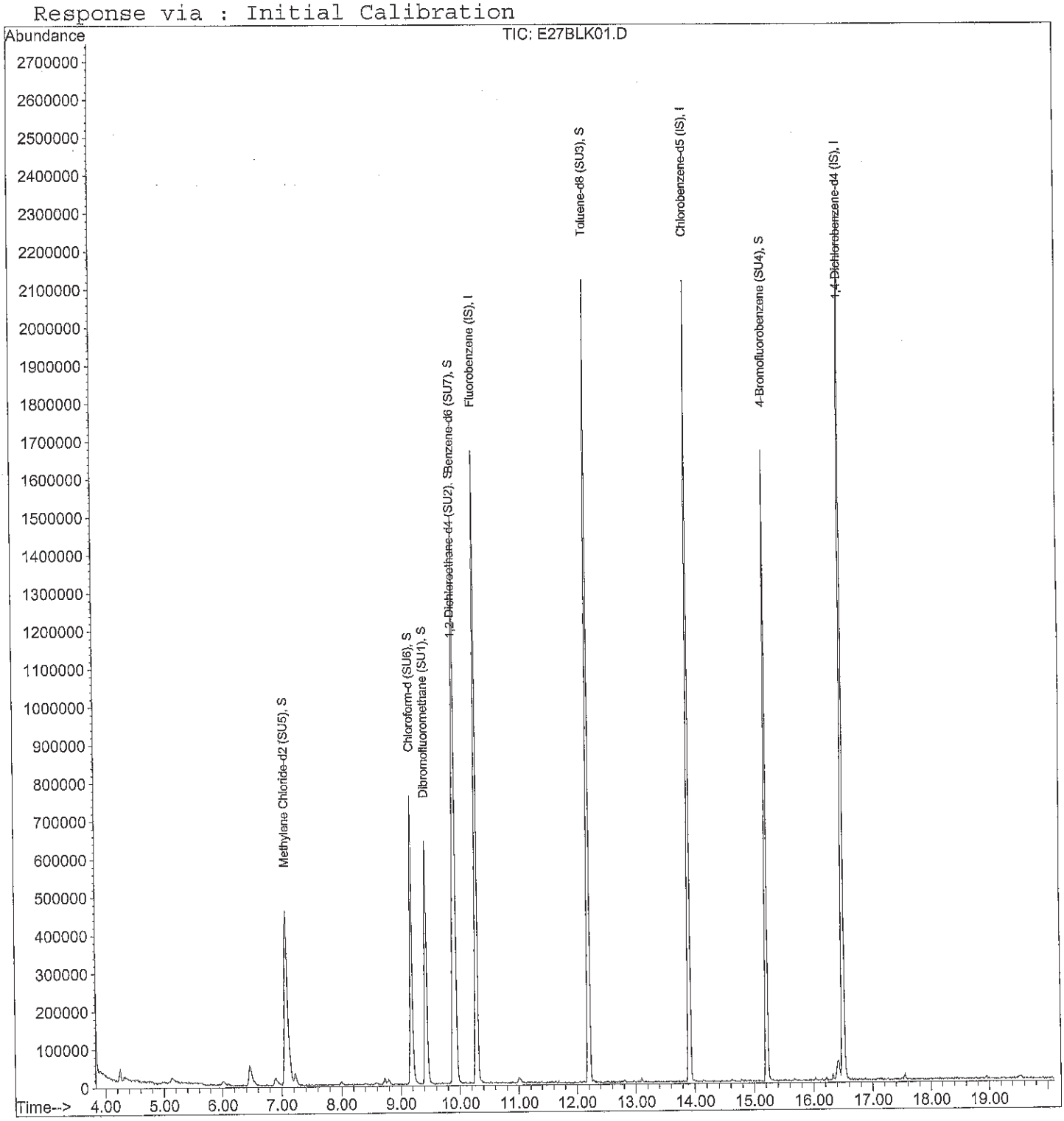
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27BLK01.D Vial: 11
Acq On : 27 May 2014 9:00 am Operator: DN
Sample : 34E2701-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:27 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR ANALYZED SAMPLES INCLUDING CHROMATOGRAMS, QUANTITATION REPORTS AND SPECTRA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700001.D Vial: 11
Acq On : 27 May 2014 9:29 am Operator: DN
Sample : 3E42701-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:55 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1669603	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1275583	12.50 ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	659835	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	469086	11.26 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.08%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	473095	11.95 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.60%		
39) Toluene-d8 (SU3)	12.21	98	1415096	11.89 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.12%		
58) 4-Bromofluorobenzene (SU4)	15.21	95	684561	13.12 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 104.96%		

Target Compounds					Qvalue
4) Chloromethane	4.40	50	4829	0.50 ~~ug/L~~	61
6) Bromomethane	5.14	96	3104	-0.09 ~~ug/L~~	98
7) Chloroethane	5.15	64	2088	2.19 ~~ug/L~~	99
11) Acetone	6.46	58	24206	42.99 ~~ug/L~~	82
12) (IPA) Leak Check Compound	6.50	45	49904	248.74 ~~ug/L~~	82
14) Methylene Chloride	7.08	84	7521	1.64 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.90	59	3155	11.08 ~~ug/L~~ #	77
20) 2,2-Dichloropropane	8.93	77	265	0.04 ~~ug/L~~ #	36
21) (MEK) 2-Butanone	8.79	72	1596	3.40 ~~ug/L~~ #	1
24) Chloroform	9.22	83	1182	0.14 ~~ug/L~~ #	18
31) Benzene	9.93	78	11816	0.75 ~~ug/L~~ #	74
32) 1,2-Dichloroethane	9.93	62	7140	1.28 ~~ug/L~~ #	1
34) 1,2-Dichloropropane	11.02	63	353	0.09 ~~ug/L~~ #	34
40) (MIBK) 4-Methyl-2-Pentanon	12.13	43	256	0.10 ~~ug/L~~ #	100
41) Toluene	12.29	91	1407	0.08 ~~ug/L~~ #	72
46) 2-Hexanone	12.97	43	2260	0.81 ~~ug/L~~ #	70
51) Ethylbenzene	14.03	91	517	0.03 ~~ug/L~~ #	45
54) Styrene	14.63	104	1203	-0.76 ~~ug/L~~ #	39
56) Isopropylbenzene	15.21	105	1284	0.07 ~~ug/L~~ #	1
62) n-Propylbenzene	15.21	91	2236	0.08 ~~ug/L~~ #	56
67) 1,2,4-Trimethylbenzene	16.15	105	383	0.02 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.15	105	383	0.02 ~~ug/L~~ #	62

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700001.D Vial: 11
Acq On : 27 May 2014 9:29 am Operator: DN
Sample : 3E42701-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:55 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

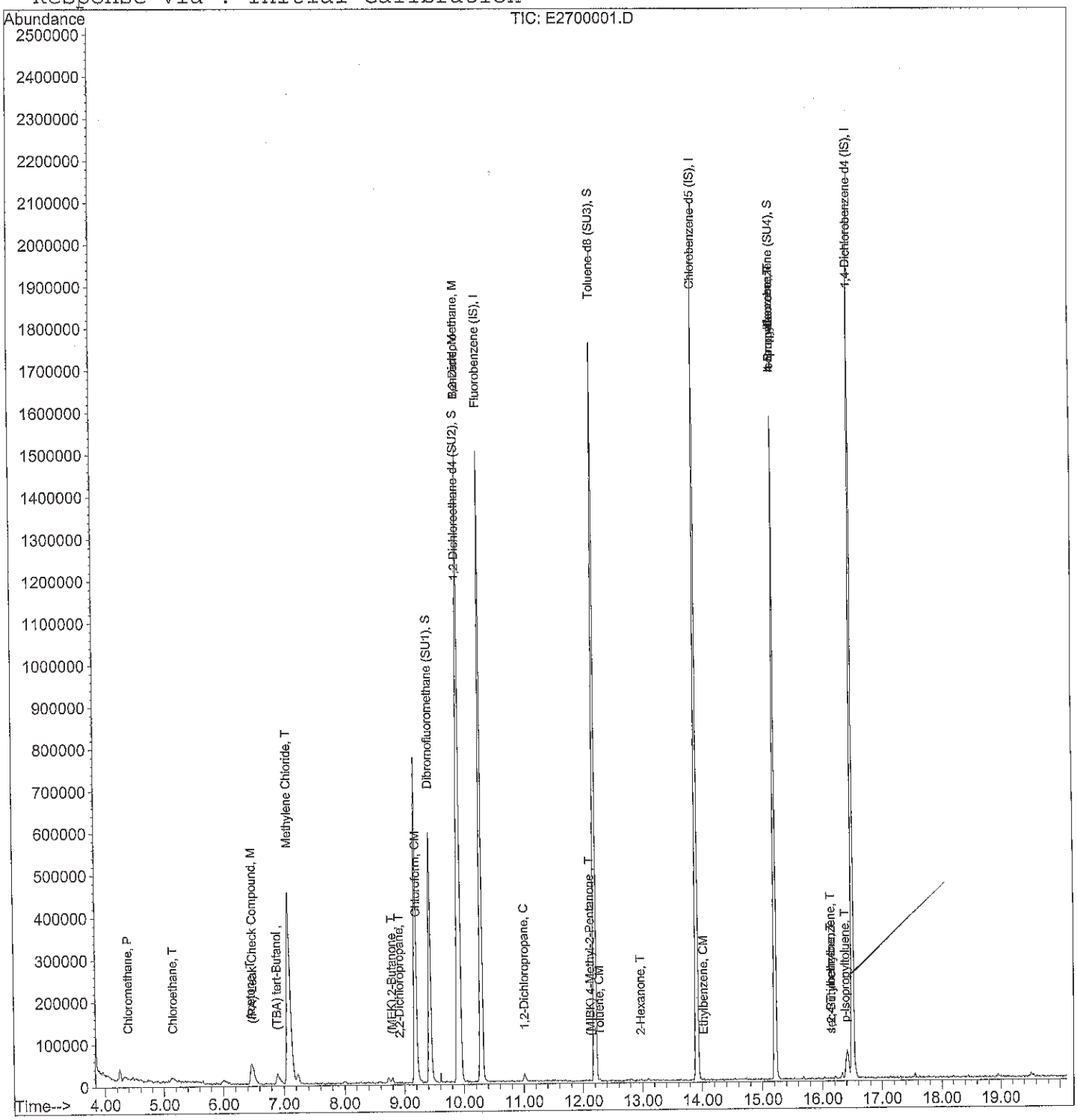
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) p-Isopropyltoluene	16.38	119	415	0.02 ~~ug/L~~	52

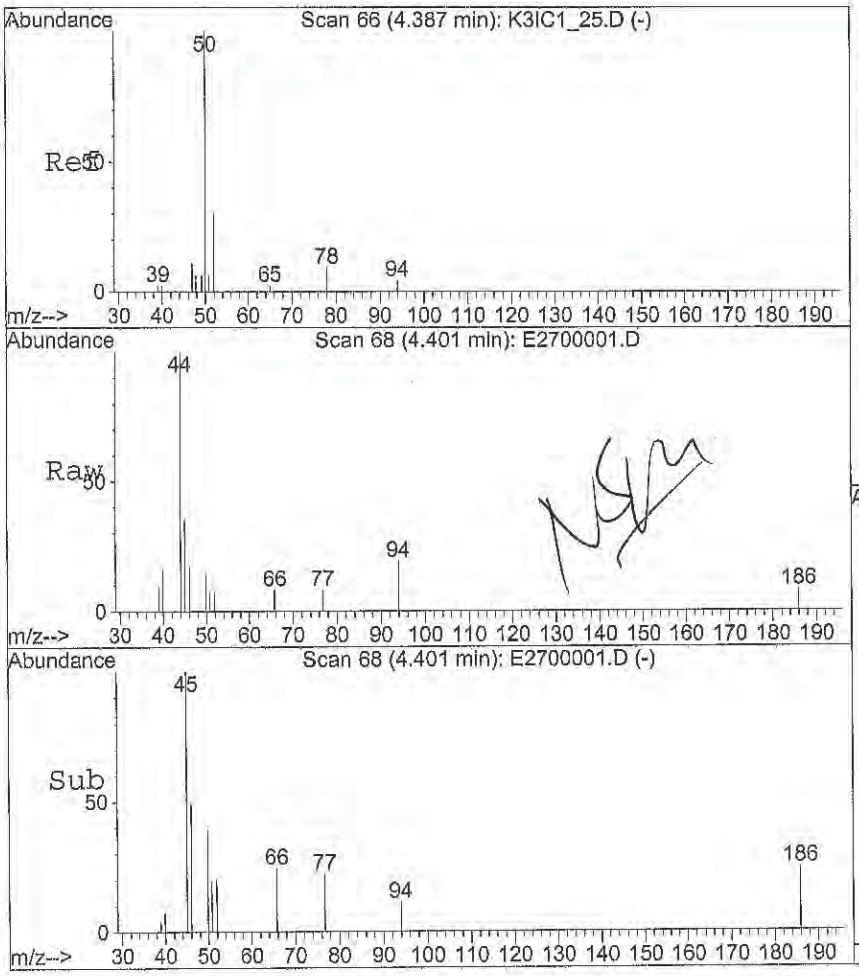
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700001.D Vial: 11
Acq On : 27 May 2014 9:29 am Operator: DN
Sample : 3E42701-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:55 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

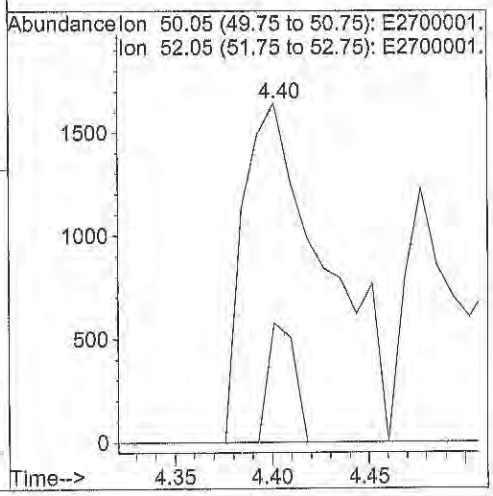


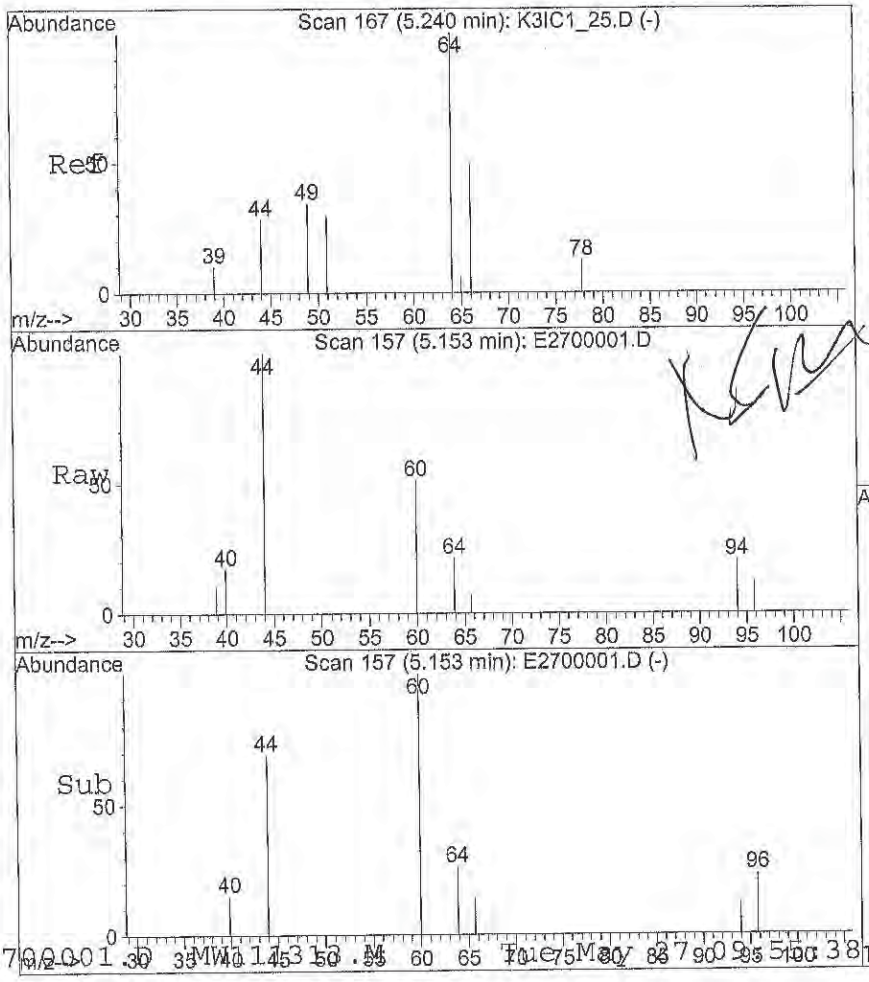


#4
Chloromethane
Concen: 0.50 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.01 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 50 Resp: 4829

Ion	Ratio	Lower	Upper
50	100		
52	11.3	26.9	40.3#

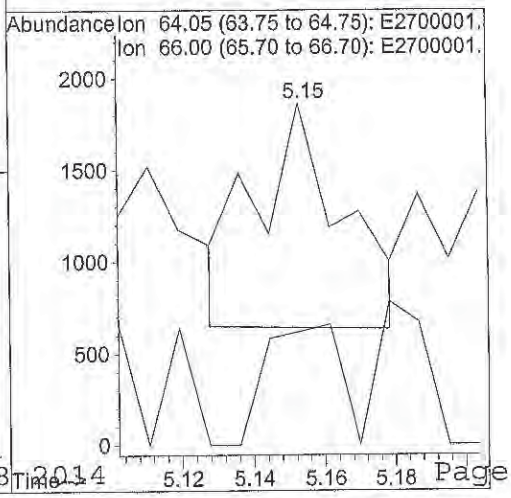


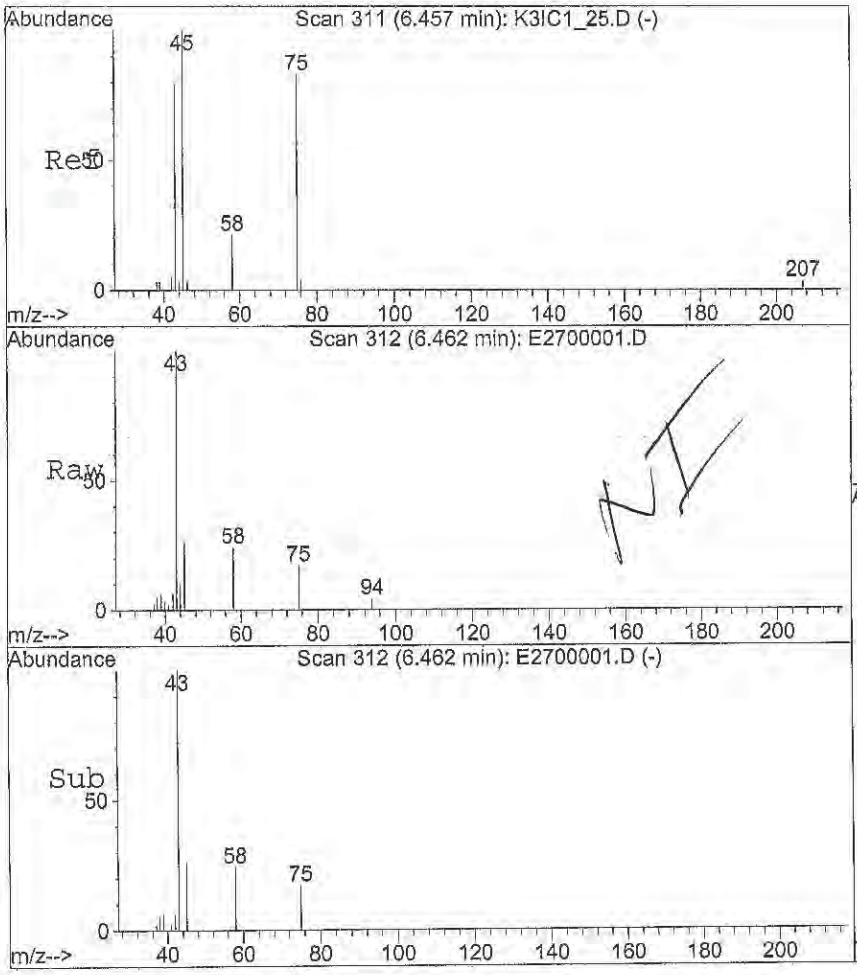


#7
Chloroethane
Concen: 2.19 ug/L
RT: 5.15 min Scan# 157
Delta R.T. -0.09 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 64 Resp: 2088

Ion	Ratio	Lower	Upper
64	100		
66	45.1	35.4	53.0

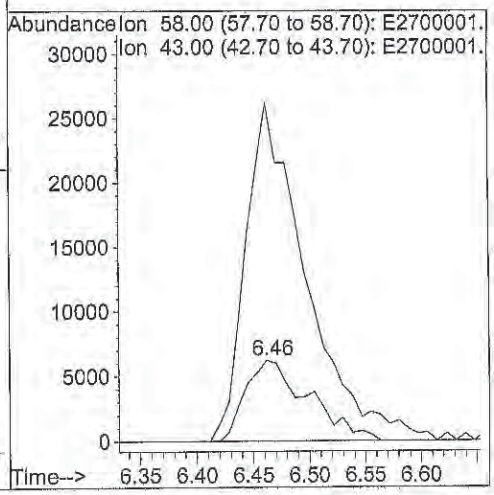


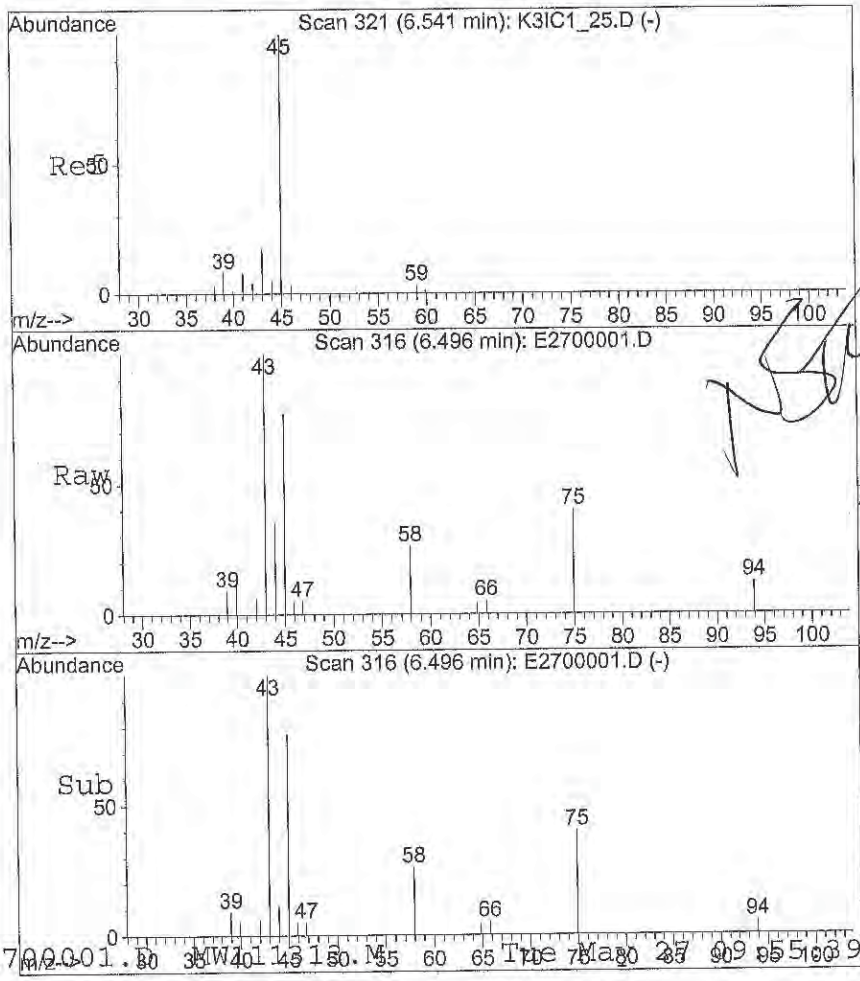


#11
Acetone
Concen: 42.99 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 58 Resp: 24206

Ion	Ratio	Lower	Upper
58	100		
43	404.5	360.9	541.3

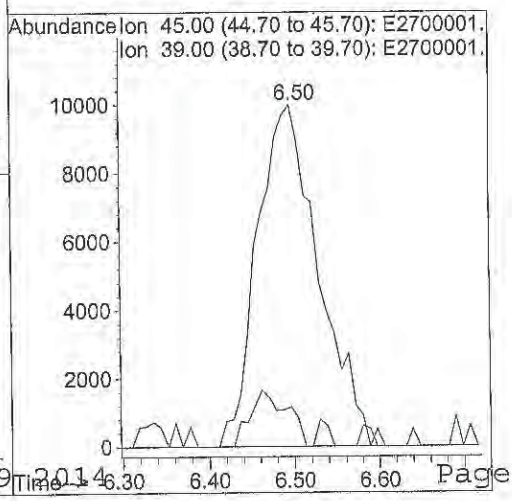


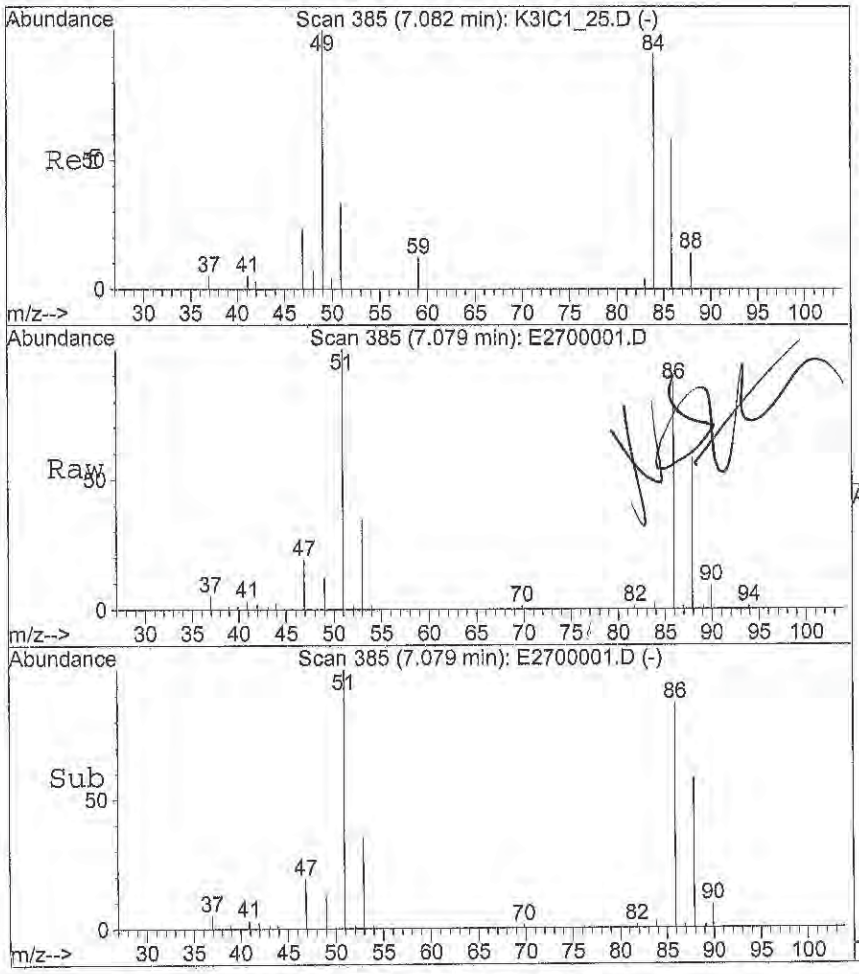


#12
(IPA) Leak Check Compound
Concen: 248.74 ug/L
RT: 6.50 min Scan# 316
Delta R.T. -0.04 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 45 Resp: 49904

Ion	Ratio	Lower	Upper
45	100		
39	0.0	4.9	7.3#

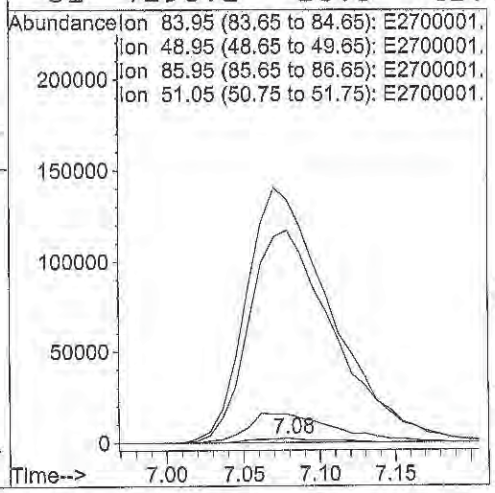


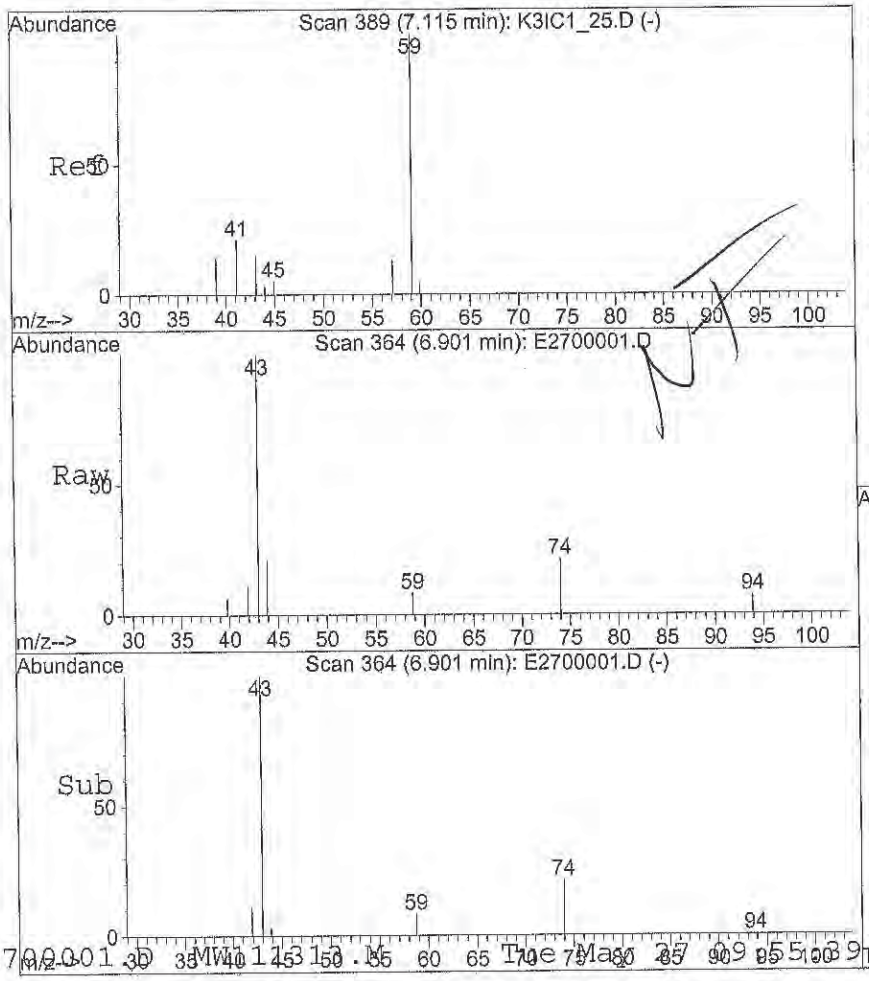


#14
Methylene Chloride
Concen: 1.64 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.00 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 84 Resp: 7521

Ion	Ratio	Lower	Upper
84	100		
49	839.0	89.8	134.6#
86	6110.1	51.1	76.7#
51	7296.1	28.5	42.7#

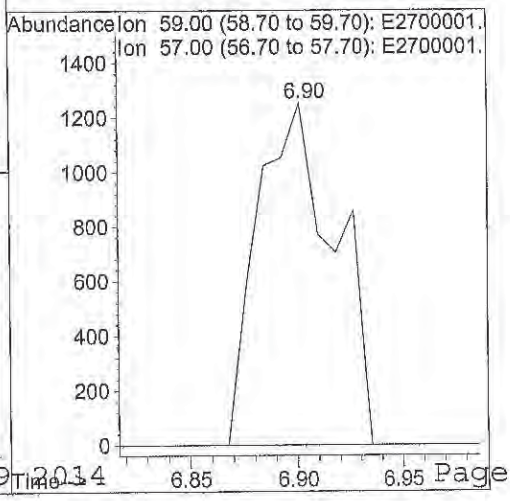


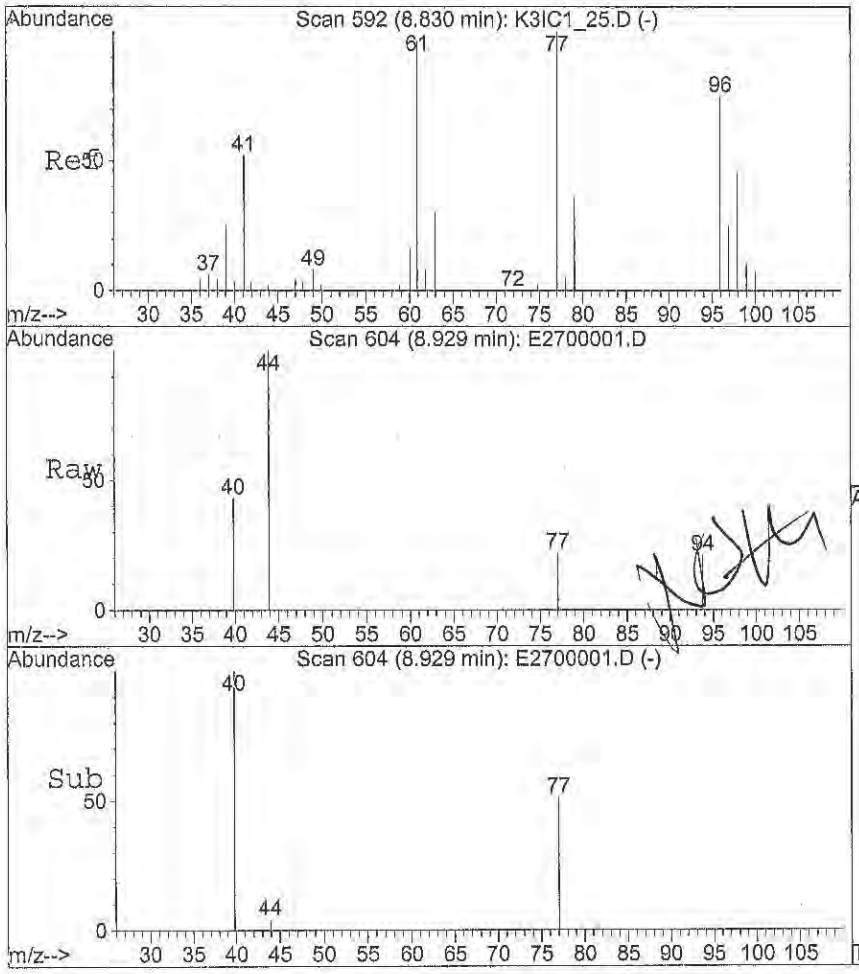


#15
(TBA) tert-Butanol
Concen: 11.08 ug/L
RT: 6.90 min Scan# 364
Delta R.T. -0.21 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 59 Resp: 3155

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

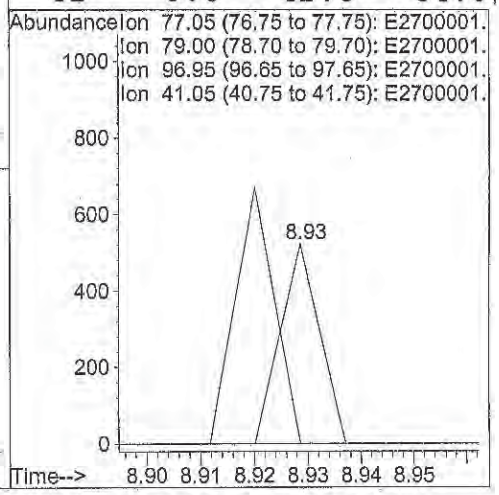


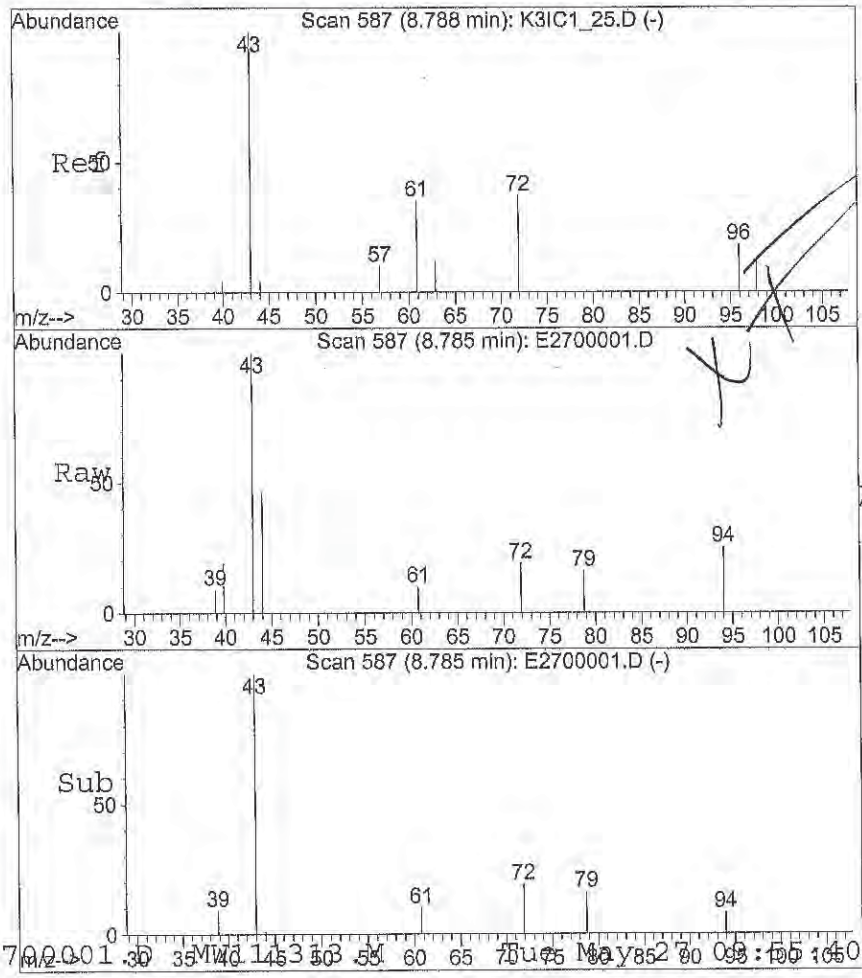


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.93 min Scan# 604
Delta R.T. 0.10 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 77 Resp: 265

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

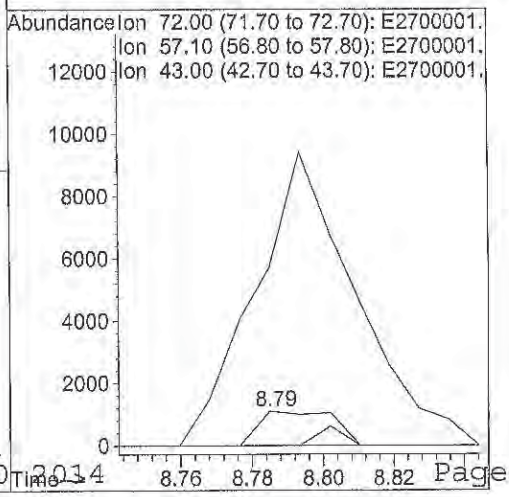


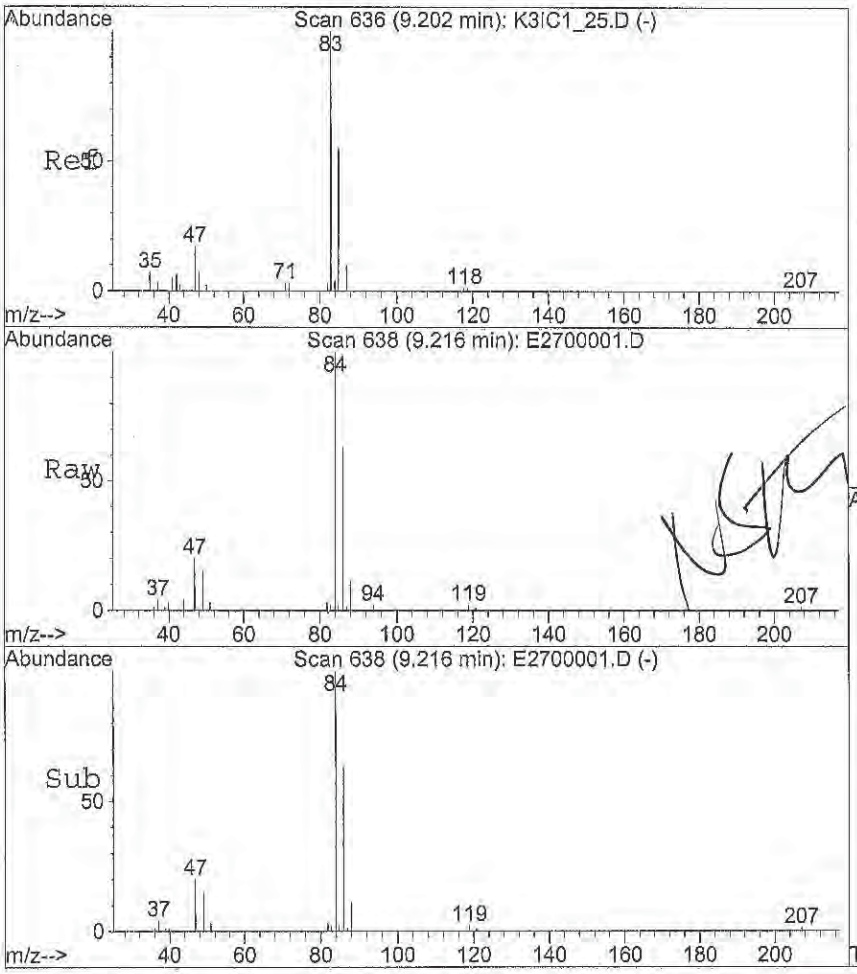


#21
(MEK) 2-Butanone
Concen: 3.40 ug/L
RT: 8.79 min Scan# 587
Delta R.T. -0.00 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 72 Resp: 1596

Ion	Ratio	Lower	Upper
72	100		
57	19.4	17.5	26.3
43	1165.0	314.2	471.2#

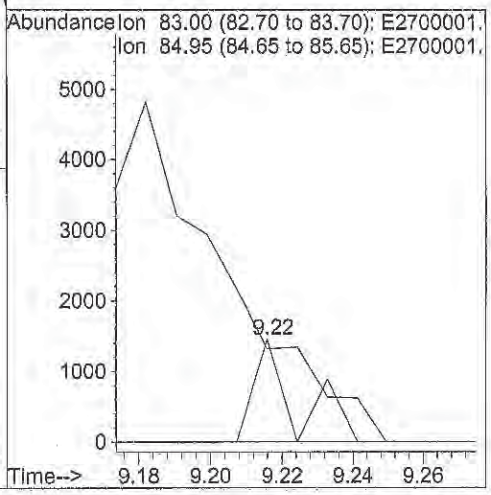


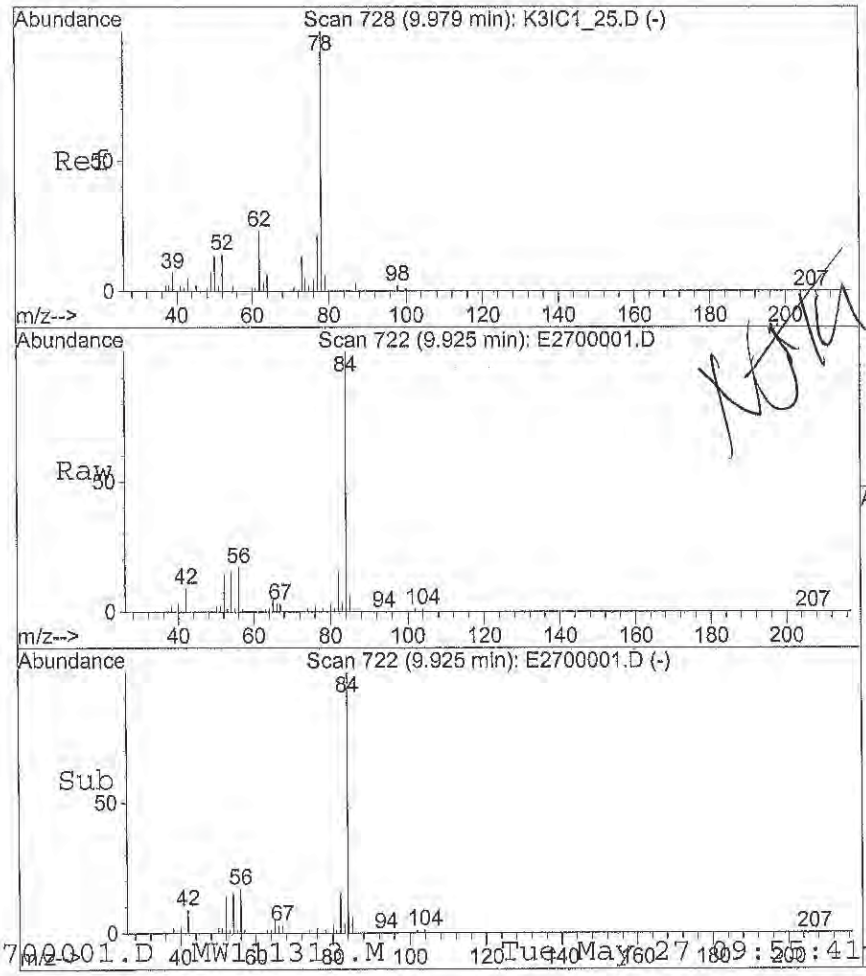


#24
Chloroform
Concen: 0.14 ug/L
RT: 9.22 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 83 Resp: 1182

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

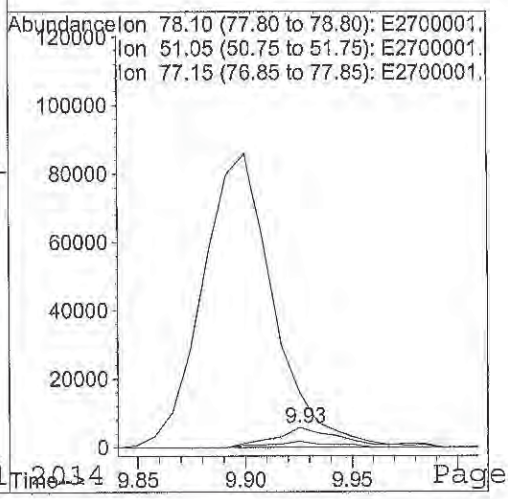


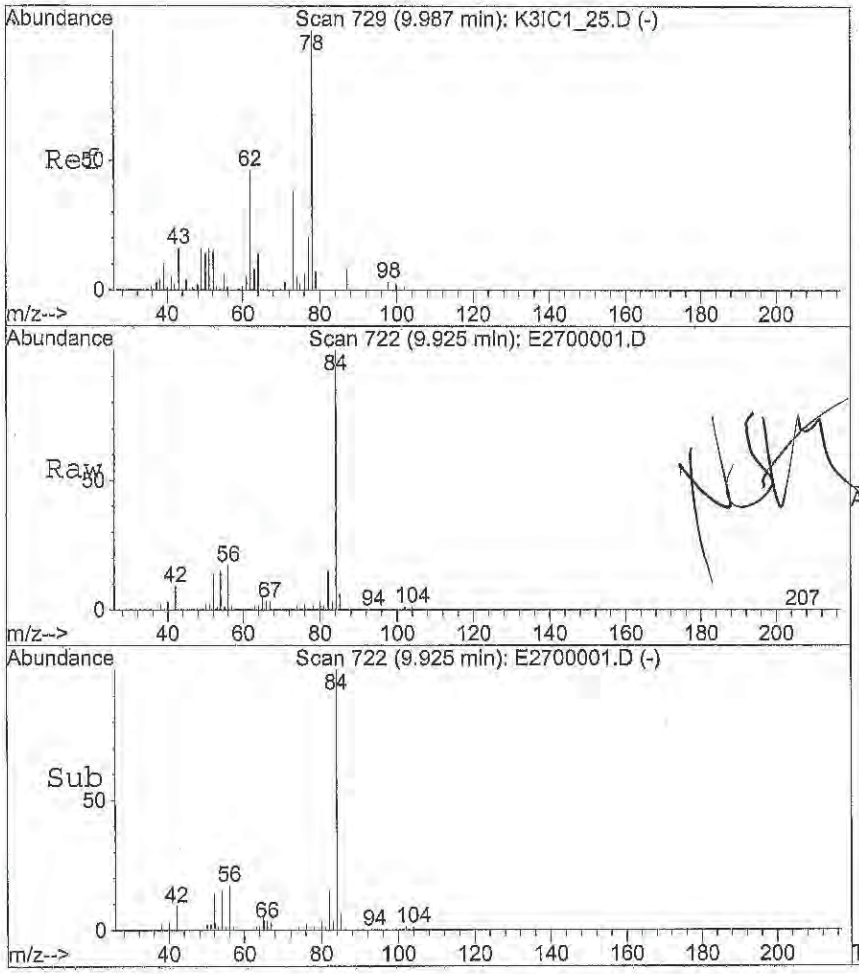


#31
Benzene
Concen: 0.75 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.05 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 78 Resp: 11816

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	26.9	16.6	24.8#

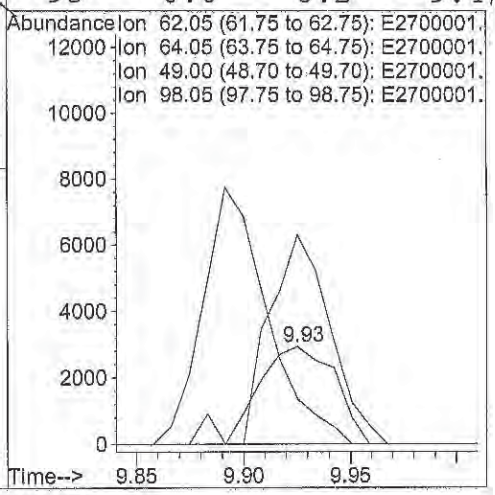


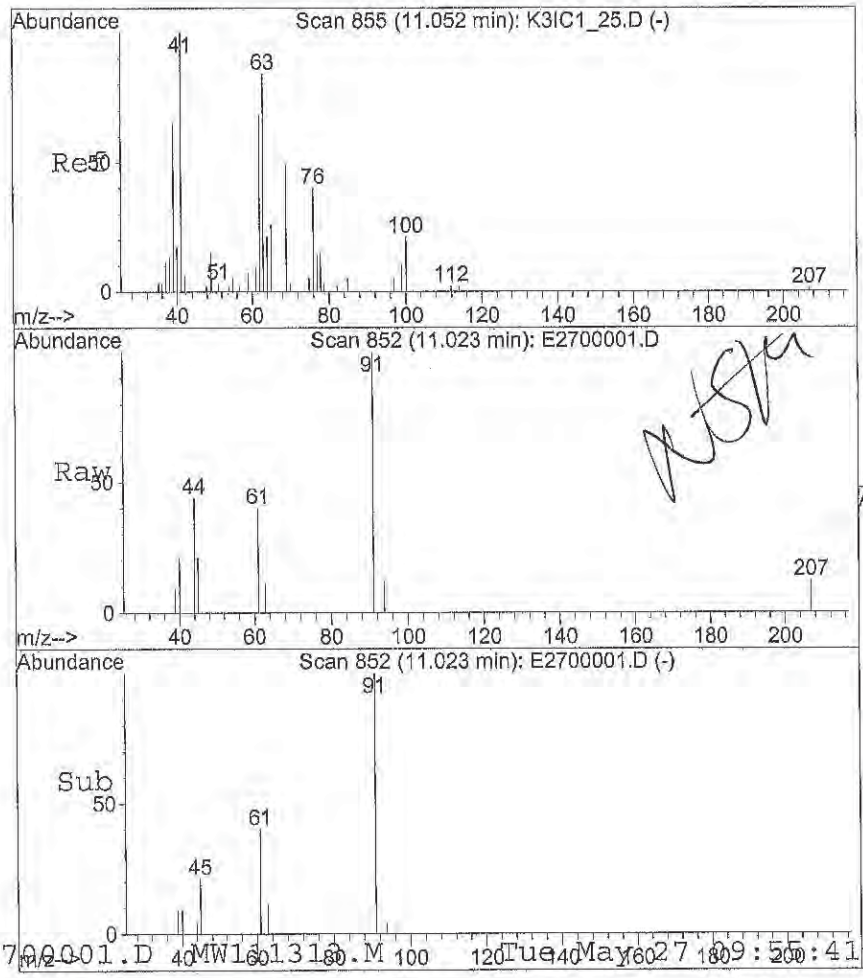


#32
1,2-Dichloroethane
Concen: 1.28 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 62 Resp: 7140

Ion	Ratio	Lower	Upper
62	100		
64	180.2	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

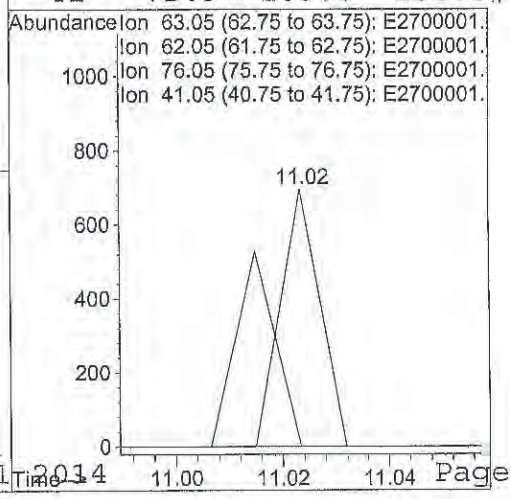


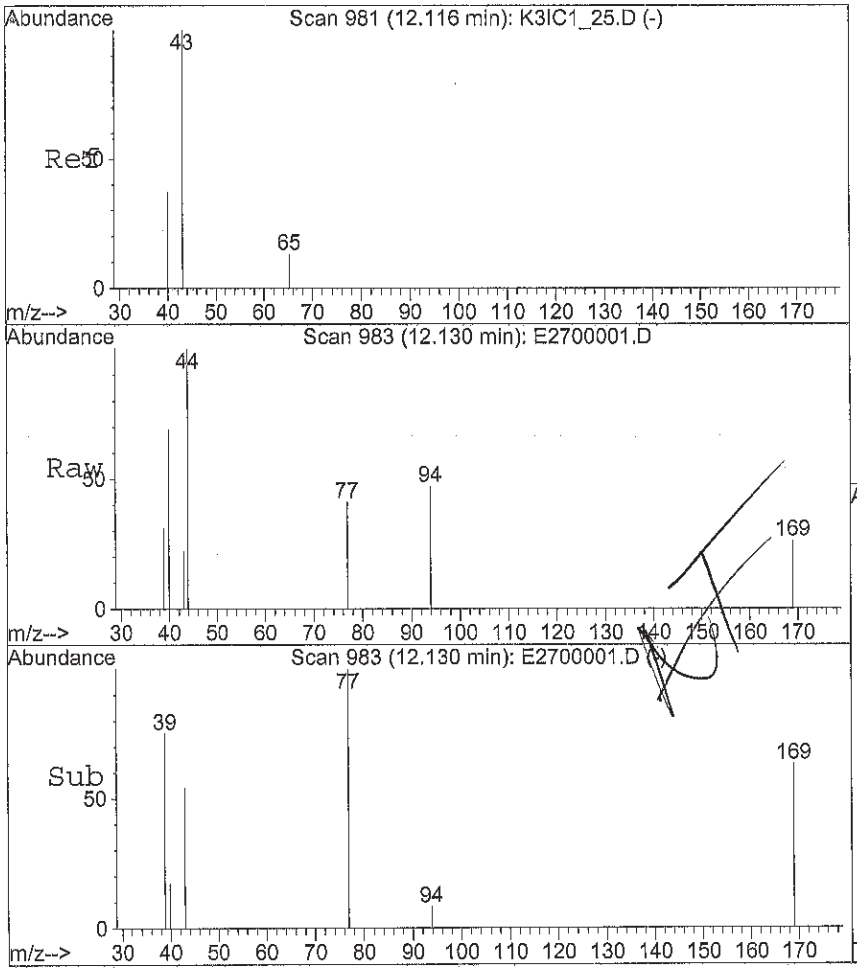


#34
1,2-Dichloropropane
Concen: 0.09 ug/L
RT: 11.02 min Scan# 852
Delta R.T. -0.03 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 63 Resp: 353

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	75.9	103.0	154.6#

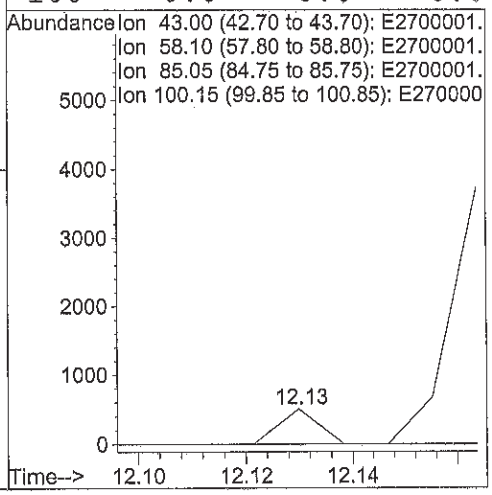


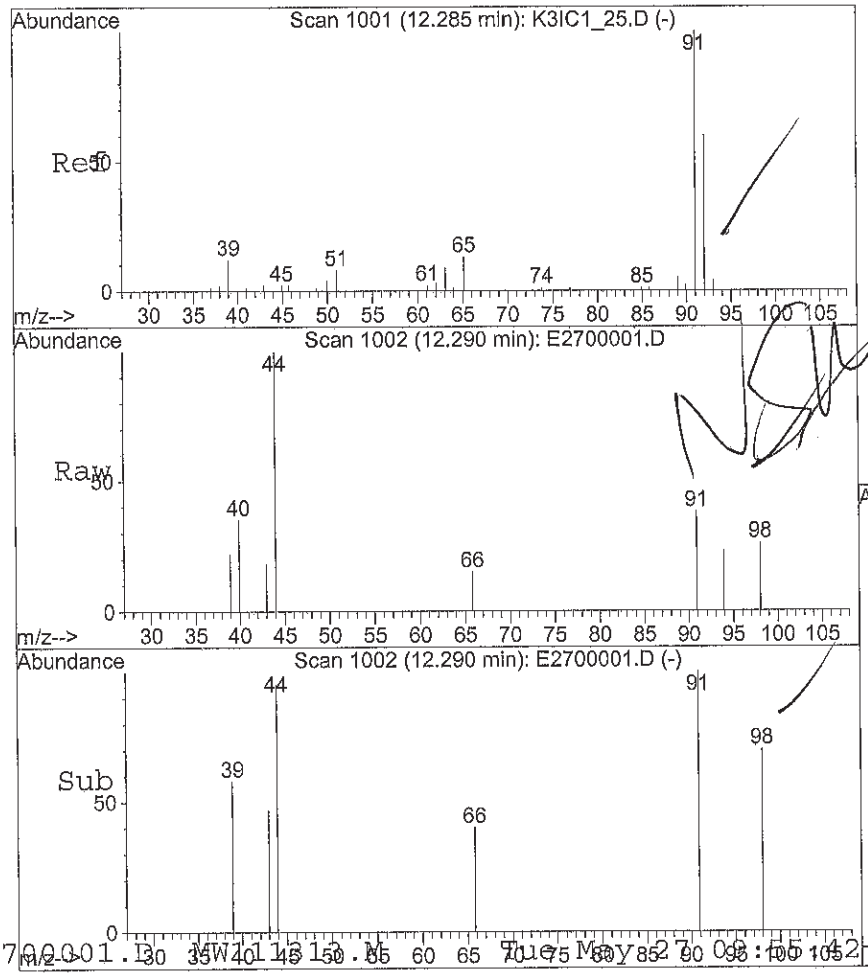


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.10 ug/L
RT: 12.13 min Scan# 983
Delta R.T. 0.01 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 43 Resp: 256

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

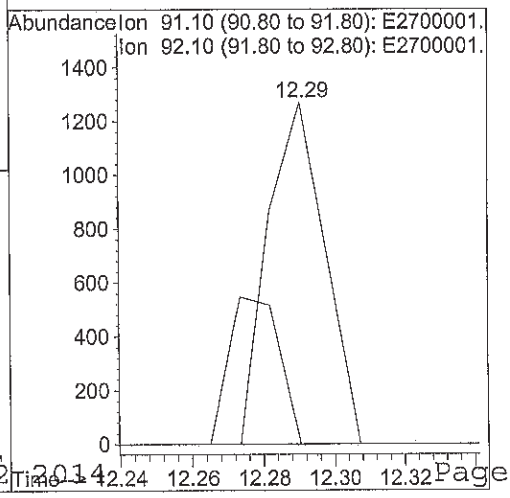


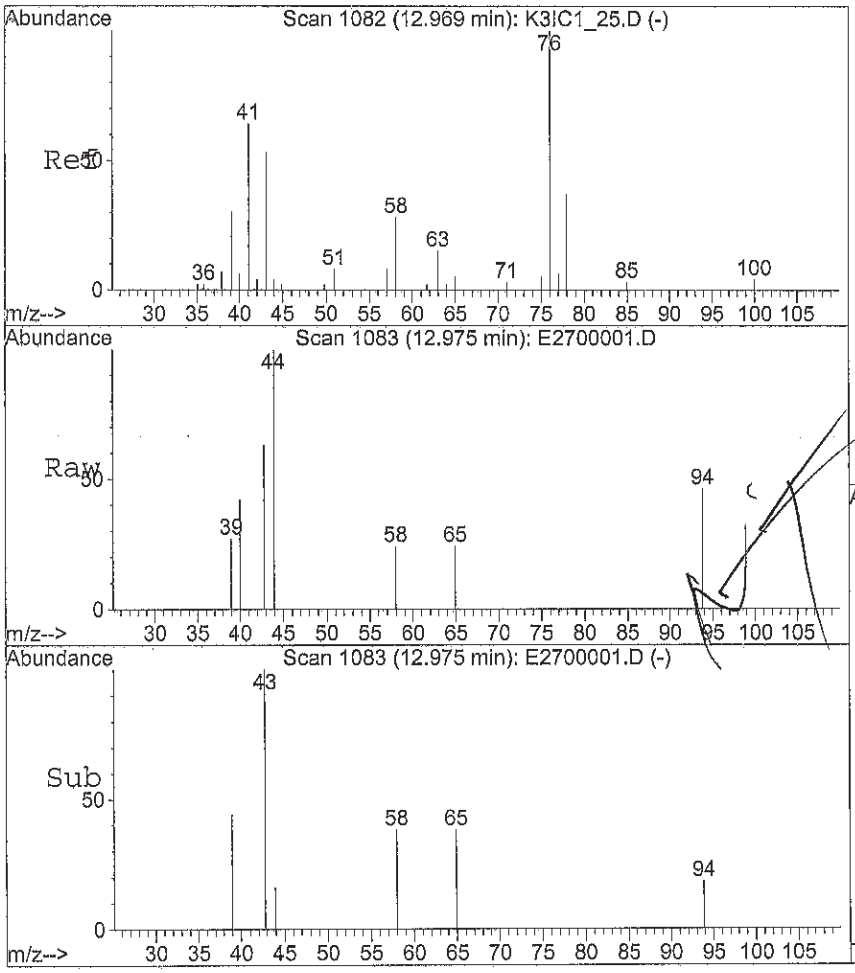


#41
Toluene
Concen: 0.08 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 91 Resp: 1407

Ion	Ratio	Lower	Upper
91	100		
92	38.3	47.4	71.0#

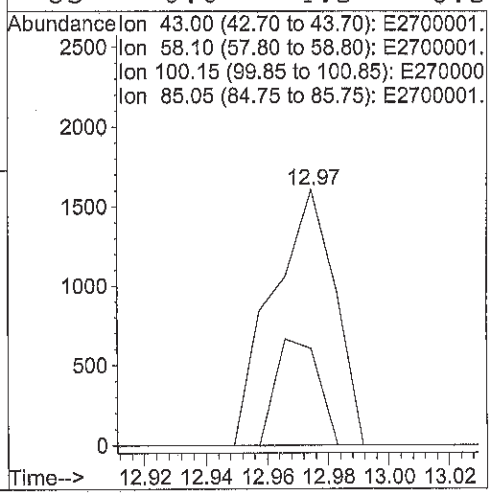


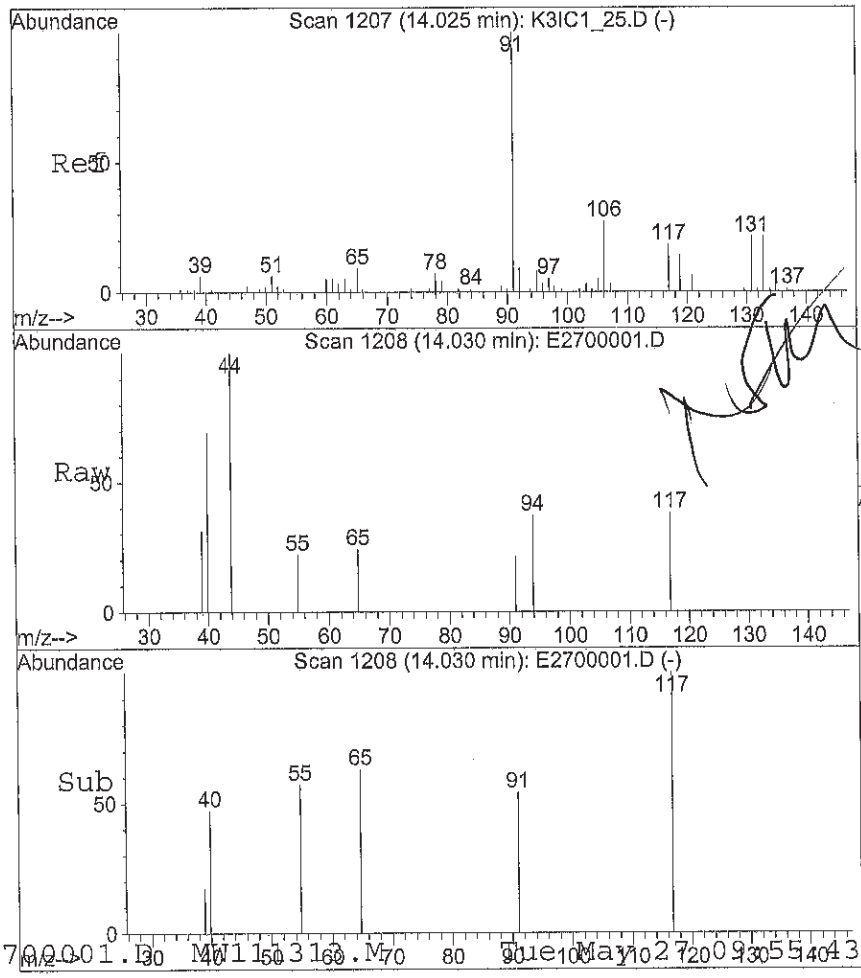


#46
2-Hexanone
Concen: 0.81 ug/L
RT: 12.97 min Scan# 1083
Delta R.T. 0.01 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 43 Resp: 2260

Ion	Ratio	Lower	Upper
43	100		
58	28.4	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

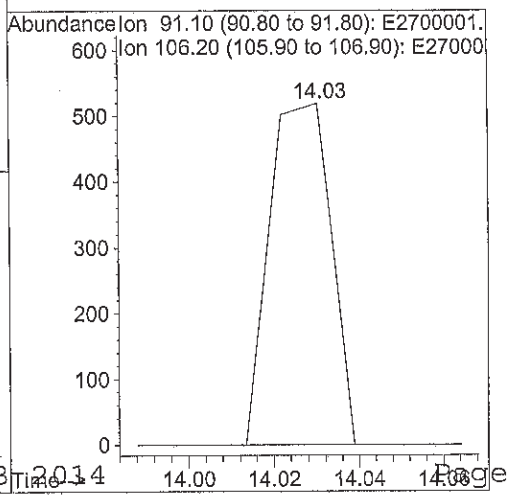


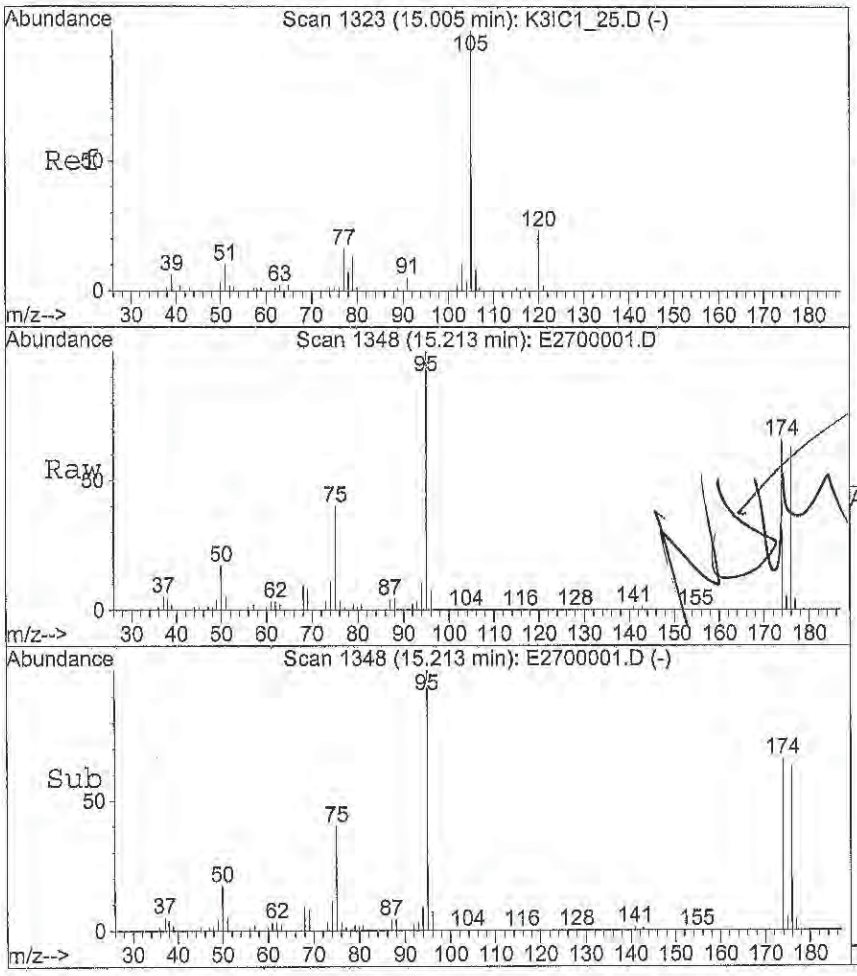


#51
Ethylbenzene
Concen: 0.03 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.01 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 91 Resp: 517

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

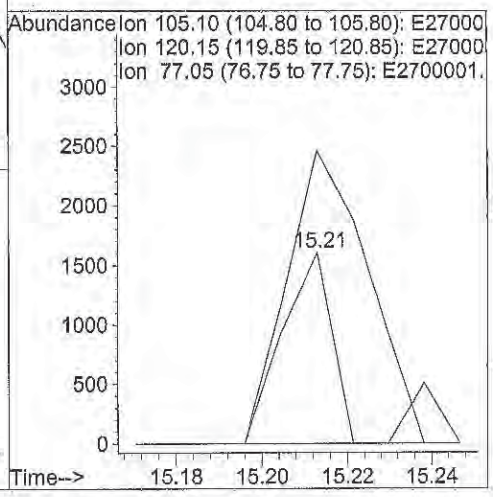


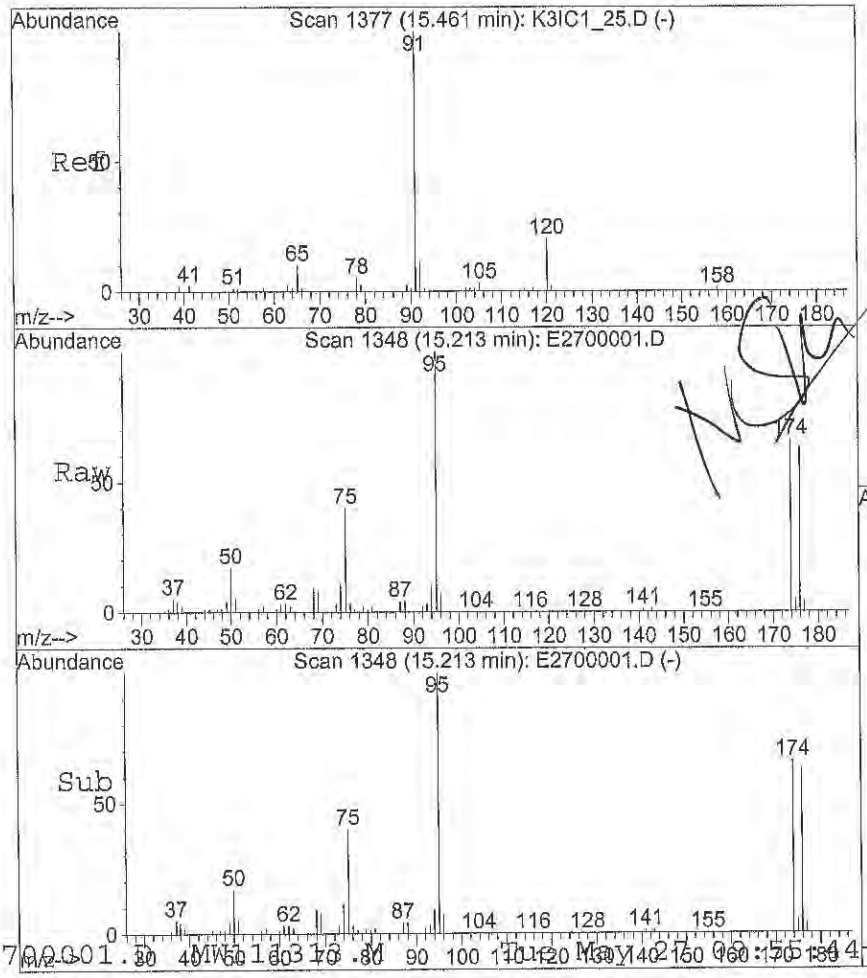


#56
Isopropylbenzene
Concen: 0.07 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. 0.21 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion:105 Resp: 1284

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	253.6	13.1	19.7#

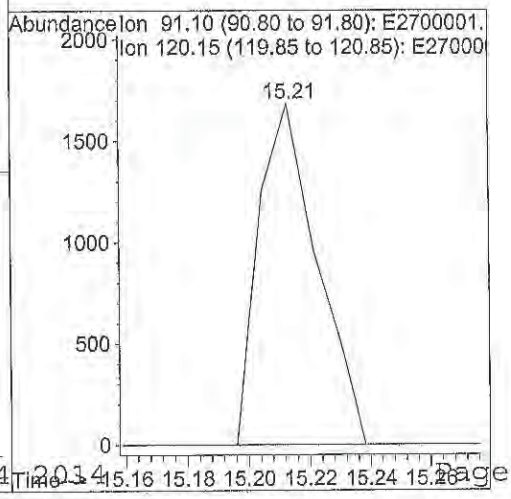


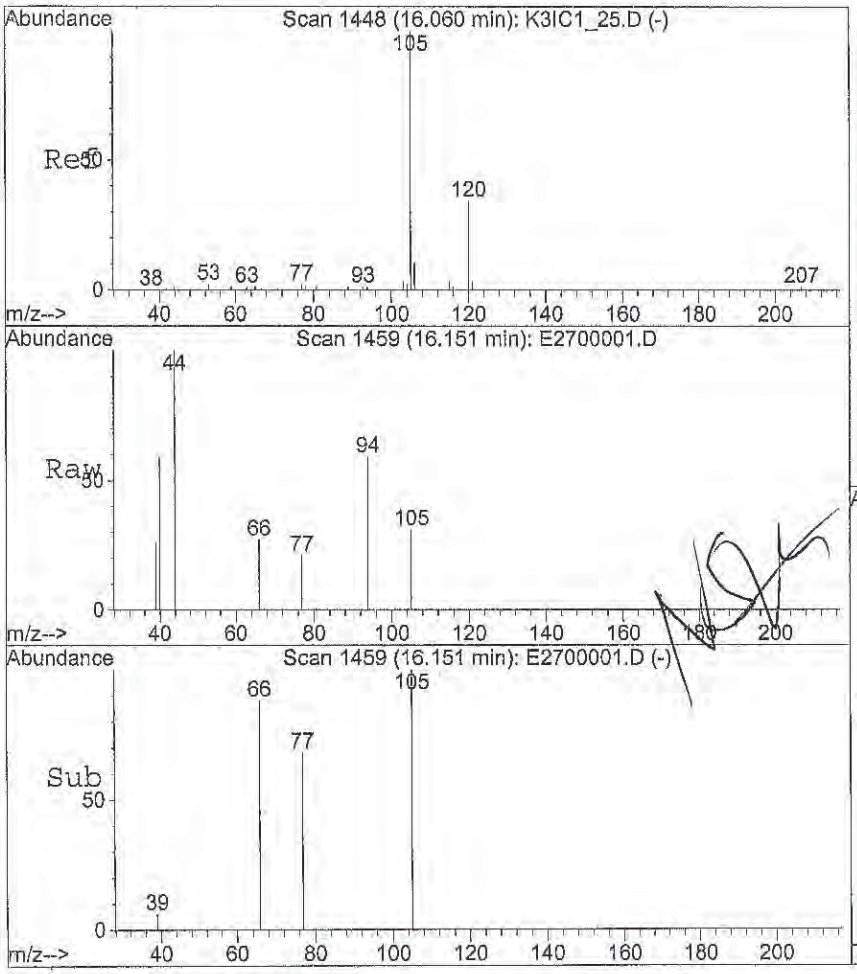


#62
n-Propylbenzene
Concen: 0.08 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. -0.25 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion: 91 Resp: 2236

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

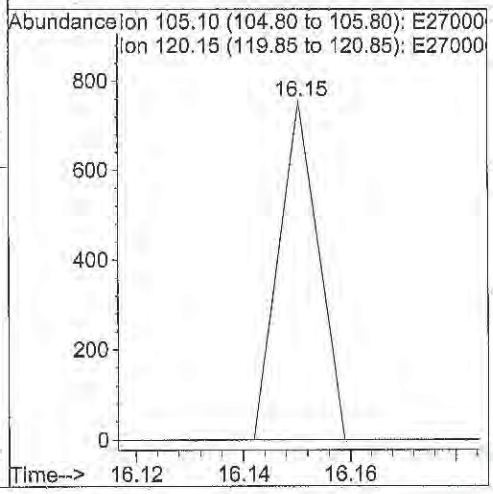


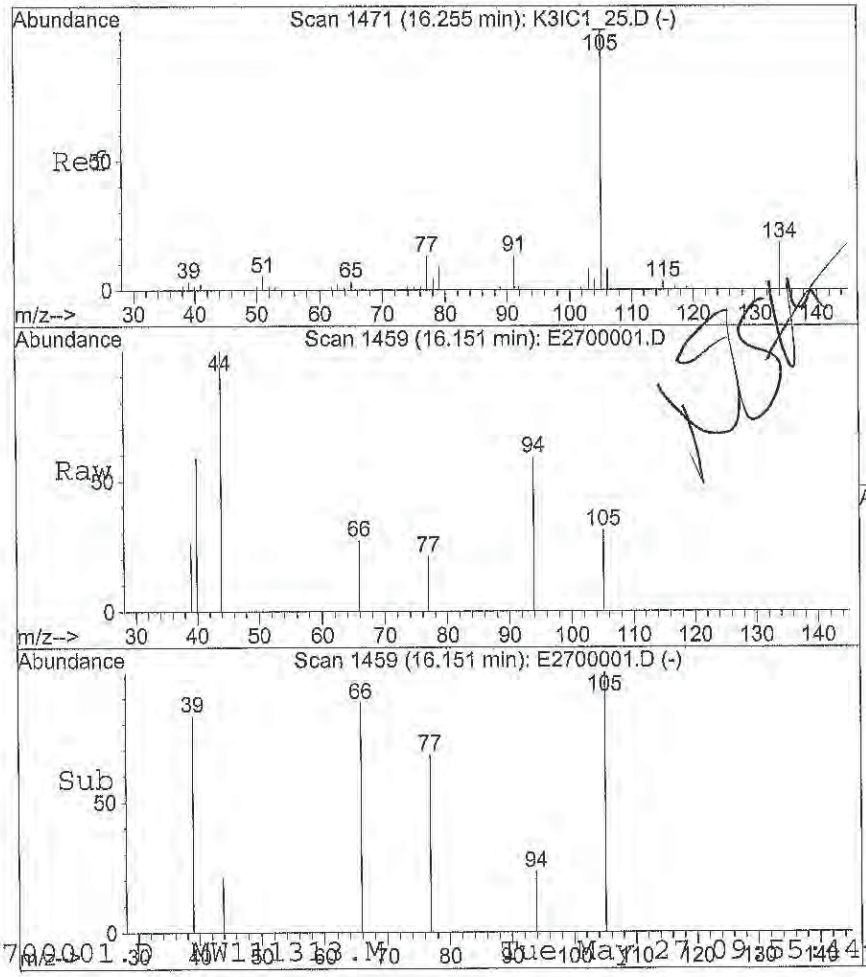


#67
1,2,4-Trimethylbenzene
Concen: 0.02 ug/L
RT: 16.15 min Scan# 1459
Delta R.T. 0.09 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion:105 Resp: 383

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

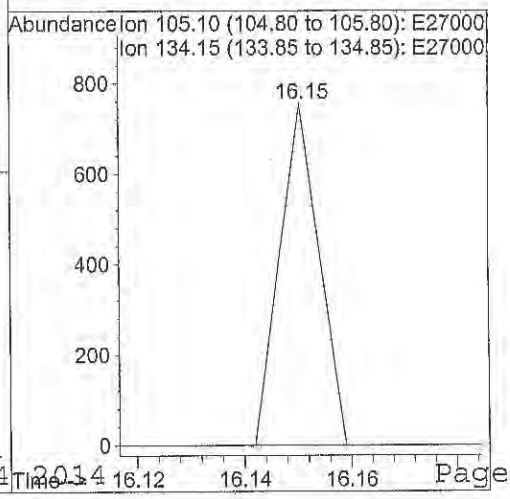


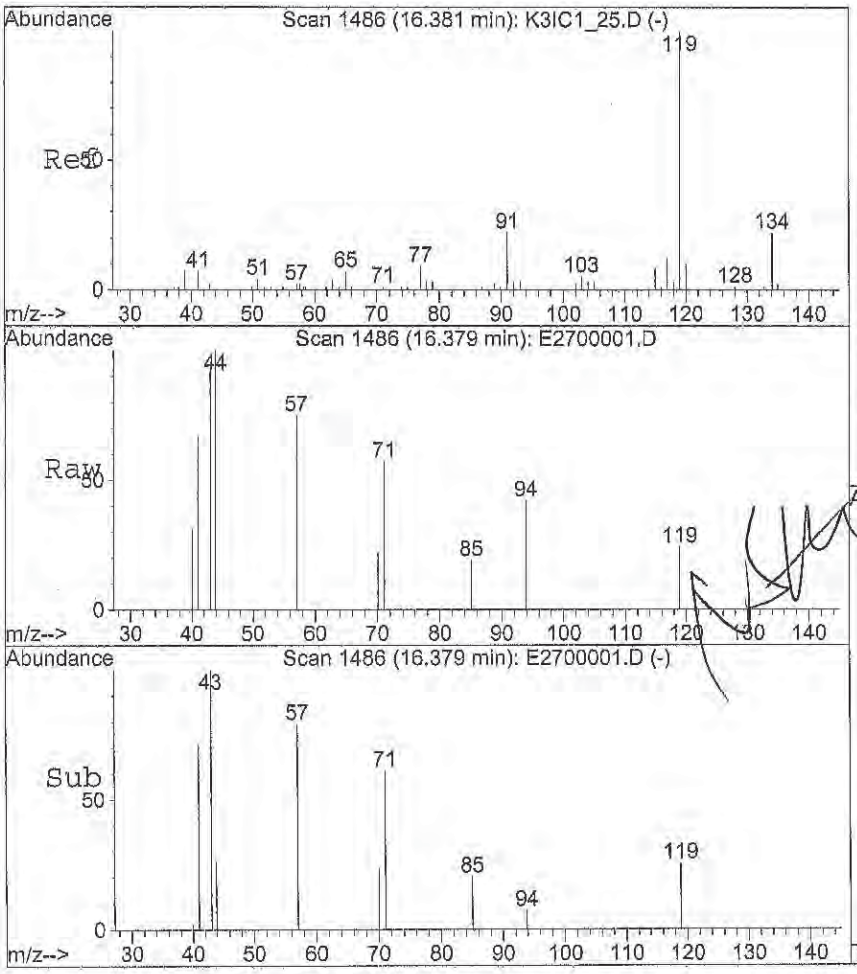


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.15 min Scan# 1459
Delta R.T. -0.10 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion:105 Resp: 383

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

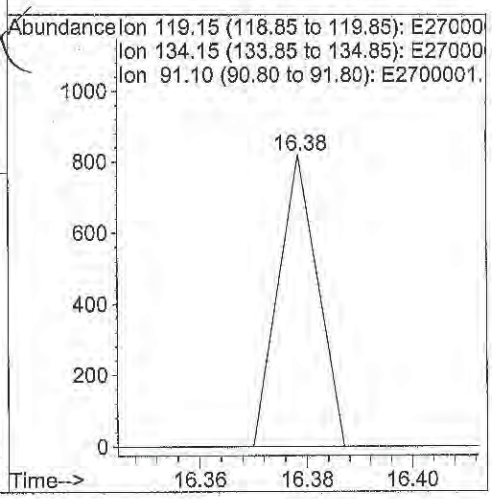




#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2700001.D
Acq: 27 May 2014 9:29 am

Tgt Ion:119 Resp: 415

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700001.D Vial: 11
Acq On : 27 May 2014 9:29 am Operator: DN
Sample : 3E42701-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:56 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1669603	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1275583	12.50 ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	659835	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	469086	10.80 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.40%		
3) Chloroform-d (SU6)	9.18	84	809186	12.99 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 103.92%		
4) Methylene Chloride-d2 (SU5	7.08	86	459542	12.62 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.96%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	473095	15.94 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 127.52%#		
6) Benzene-d6 (SU7)	9.93	84	1603887	12.24 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.92%		
8) Toluene-d8 (SU3)	12.21	98	1415096	11.69 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.52%		
9) 4-Bromofluorobenzene (SU4)	15.21	95	684561	13.70 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 109.60%		

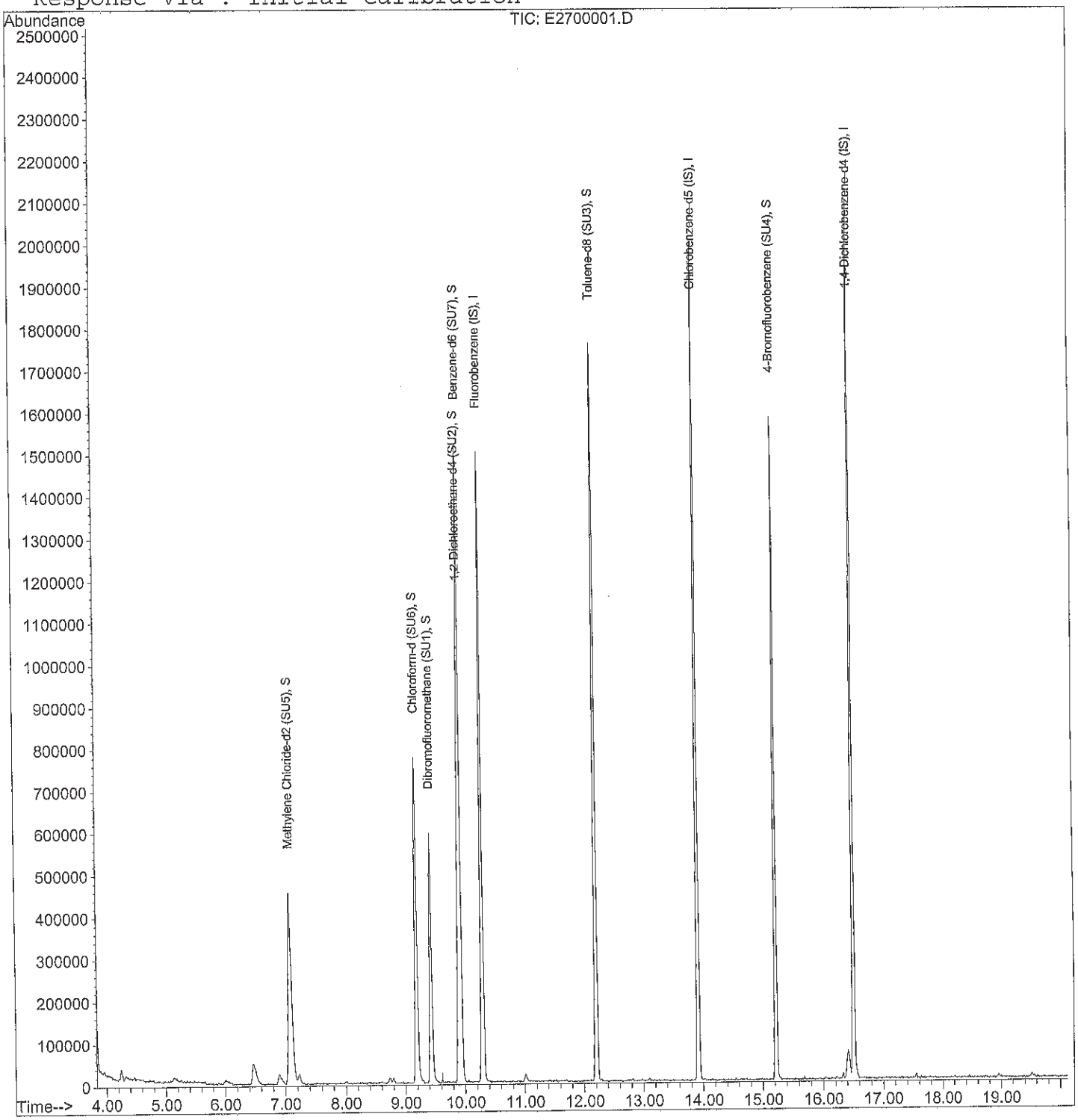
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700001.D Vial: 11
Acq On : 27 May 2014 9:29 am Operator: DN
Sample : 3E42701-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 9:56 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700002.D
Acq On : 27 May 2014 9:58 am
Sample : 3E42701-02
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 27 10:36 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1799866	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1320072	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	691378	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	494253	11.01 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 88.08%					
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	491526	11.52 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 92.16%					
39) Toluene-d8 (SU3)	12.20	98	1520313	12.35 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 98.80%					
58) 4-Bromofluorobenzene (SU4)	15.22	95	725194	13.43 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 107.44%					

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	322	0.07 ~~ug/L~~ #	44
4) Chloromethane	4.41	50	8885	1.72 ~~ug/L~~ #	59
6) Bromomethane	5.12	96	5749	1.13 ~~ug/L~~	98
7) Chloroethane	5.24	64	678	1.14 ~~ug/L~~ #	34
11) Acetone	6.46	58	23754	36.85 ~~ug/L~~	71
12) (IPA) Leak Check Compound	6.50	45	83822	387.56 ~~ug/L~~	89
13) Carbon disulfide	6.86	76	83750	5.60 ug/L	99
14) Methylene Chloride	7.08	84	5914	1.20 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.90	59	5738	18.69 ~~ug/L~~ #	77
20) 2,2-Dichloropropane	8.79	77	283	0.04 ~~ug/L~~ #	36
21) (MEK) 2-Butanone	8.80	72	1211	2.39 ~~ug/L~~ #	1
24) Chloroform	9.21	83	2280	0.24 ~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.40	59	279	0.02 ~~ug/L~~ #	44
31) Benzene	9.99	78	15447	0.91 ~~ug/L~~ #	69
32) 1,2-Dichloroethane	9.93	62	7811	1.30 ~~ug/L~~ #	1
34) 1,2-Dichloropropane	11.03	63	254	0.06 ~~ug/L~~ #	2
35) Dibromomethane	11.00	93	272	0.09 ~~ug/L~~ #	5
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	8455	3.21 ~~ug/L~~ #	100
41) Toluene	12.28	91	112464	6.25 ug/L 0.125	100
46) 2-Hexanone	12.97	43	2548	0.88 ~~ug/L~~ #	62
51) Ethylbenzene	14.02	91	26025	1.27 ug/L 0.025	94
52) m,p-Xylenes	14.14	106	28793	3.96 ug/L 0.0792	85

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700002.D Vial: 1
Acq On : 27 May 2014 9:58 am Operator: DN
Sample : 3E42701-02 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:36 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

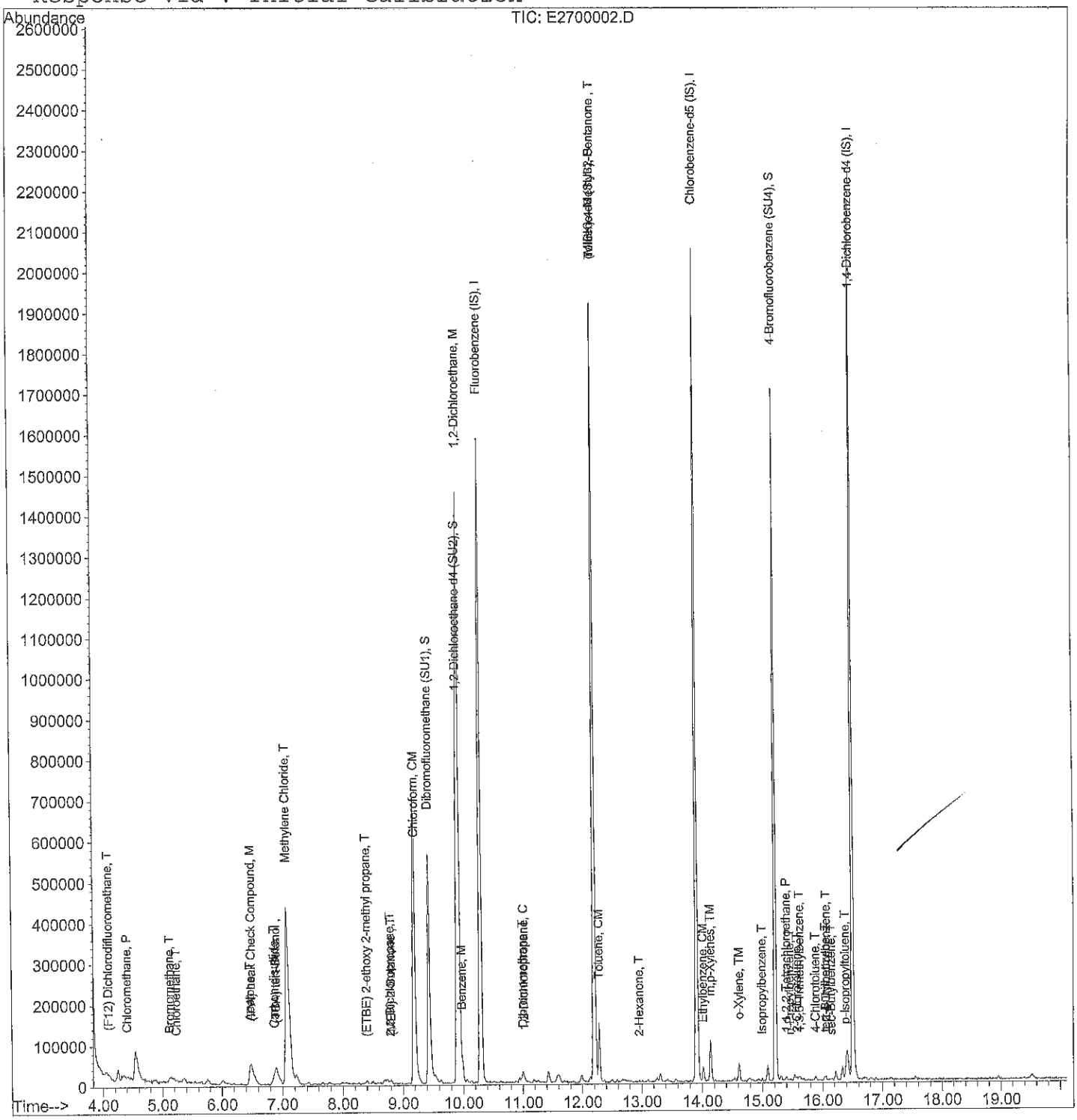
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) o-Xylene	14.62	106	12886	1.79 ug/L 0.0358	85
54) Styrene	14.62	104	2484	-0.63 ~~ug/L~~ # NM	9
56) Isopropylbenzene	15.00	105	835	0.04 ~~ug/L~~ #	55
60) 1,1,2,2-Tetrachloroethane	15.40	83	1132	0.23 ~~ug/L~~ #	18
62) n-Propylbenzene	15.46	91	2233	0.08 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.57	91	416	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.61	105	1666	0.10 ~~ug/L~~ # NM	66
65) 4-Chlorotoluene	15.88	91	272	0.02 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.04	119	637	0.04 ~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.06	105	4740	0.26 ~~ug/L~~ # 0.00572	74
68) sec-Butylbenzene	16.14	105	897	0.04 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.37	119	1234	0.07 ~~ug/L~~ #	52

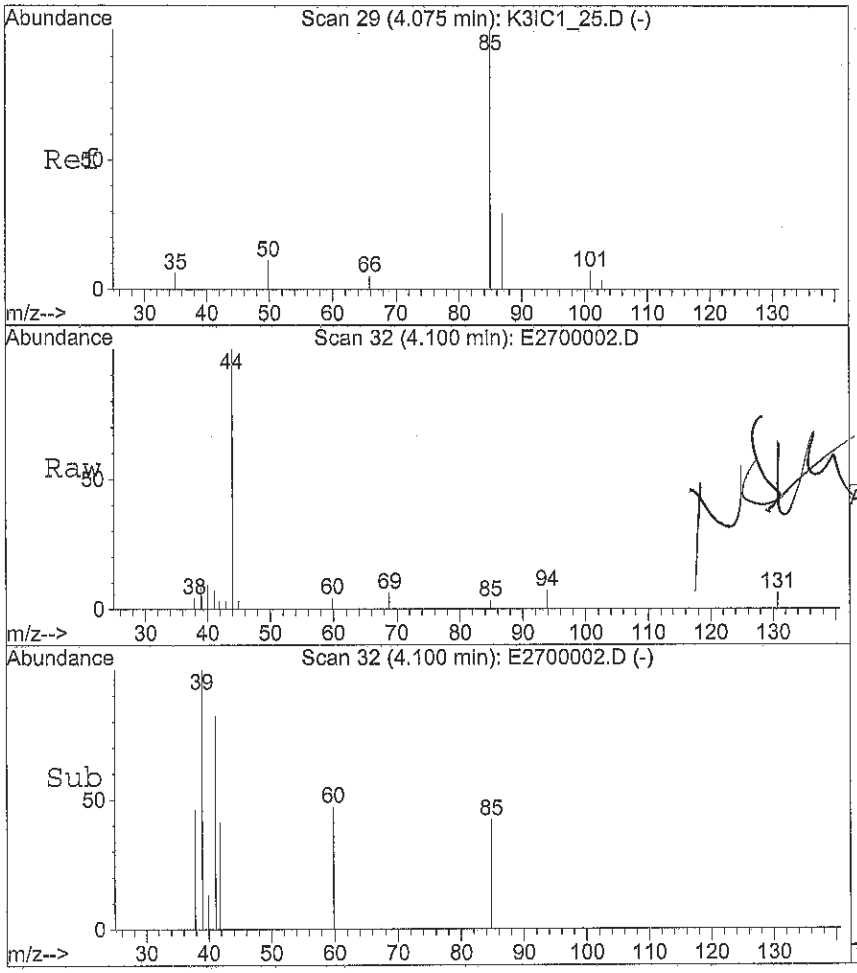
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700002.D Vial: 1
Acq On : 27 May 2014 9:58 am Operator: DN
Sample : 3E42701-02 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:36 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

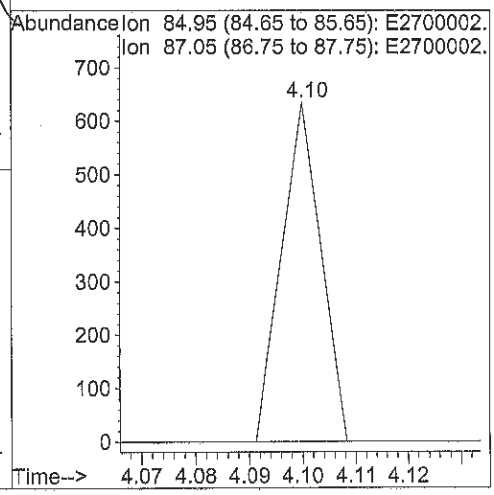


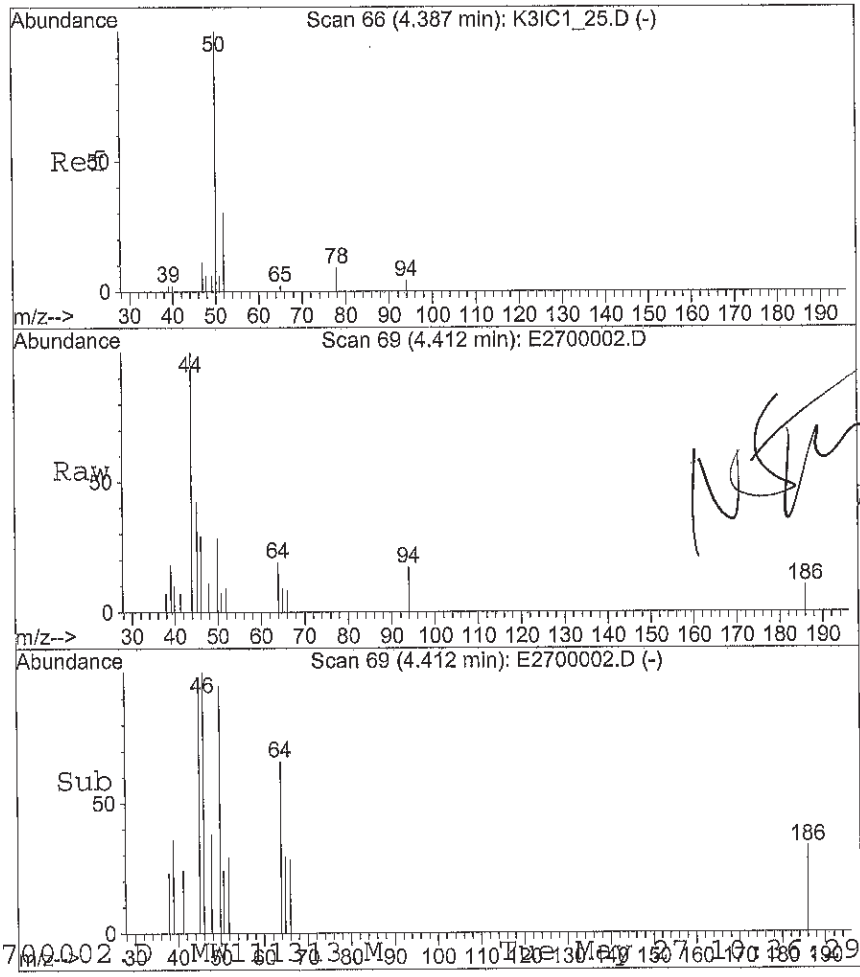


#3
(F12) Dichlorodifluoromethane
Concen: 0.07 ug/L
RT: 4.10 min Scan# 32
Delta R.T. 0.03 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 85 Resp: 322

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

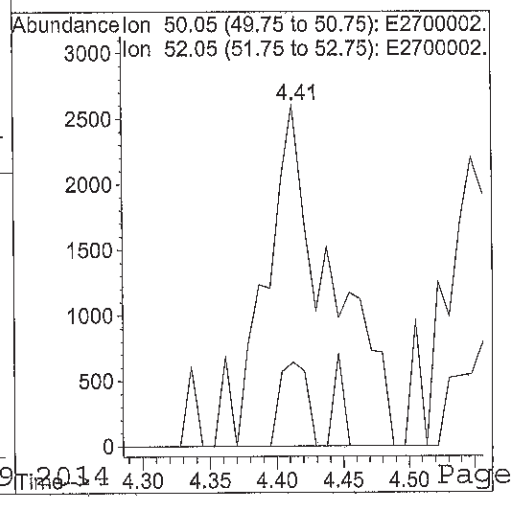


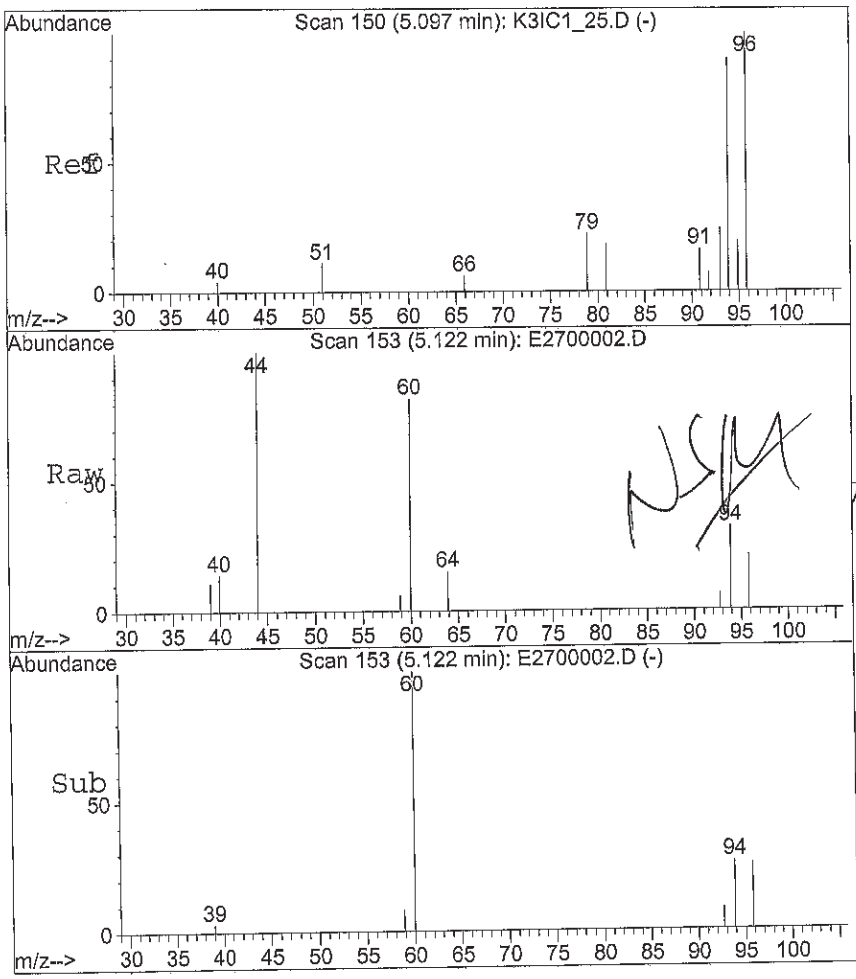


#4
Chloromethane
Concen: 1.72 ug/L
RT: 4.41 min Scan# 69
Delta R.T. 0.03 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 50 Resp: 8885

Ion	Ratio	Lower	Upper
50	100		
52	10.2	26.9	40.3#

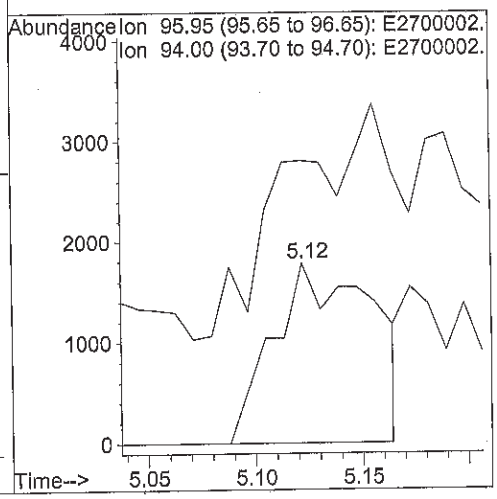


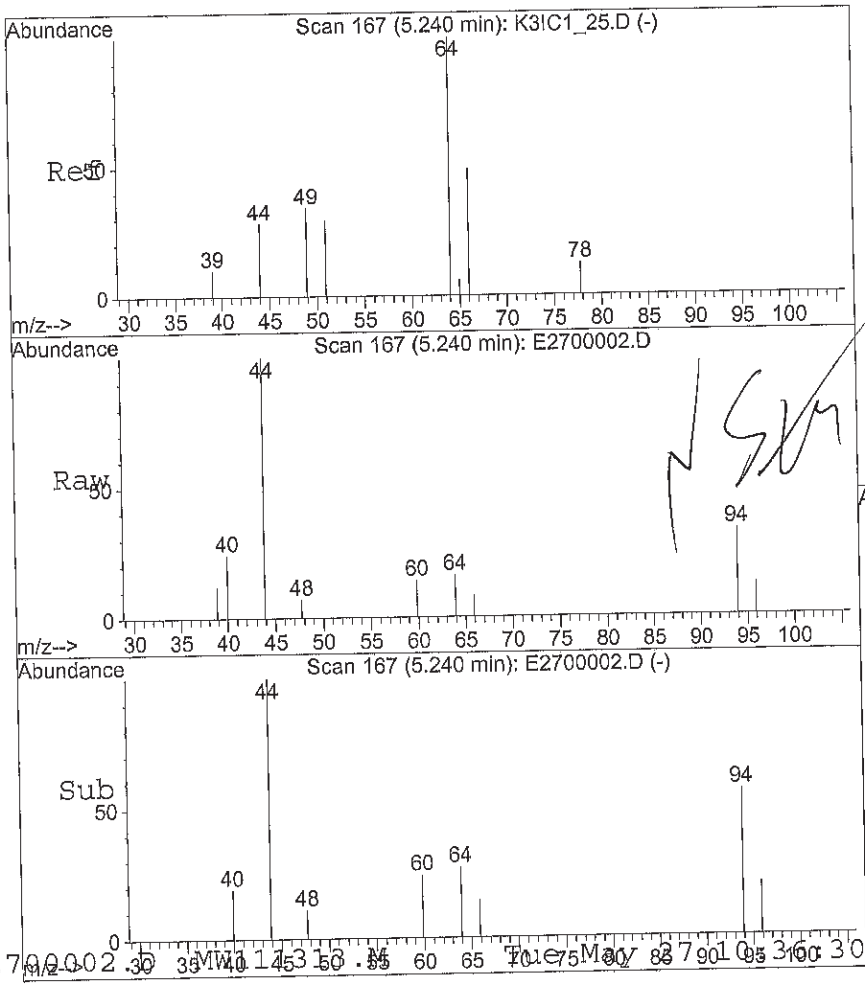


#6
Bromomethane
Concen: 1.13 ug/L
RT: 5.12 min Scan# 153
Delta R.T. 0.03 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 96 Resp: 5749

Ion	Ratio	Lower	Upper
96	100		
94	124.0	101.0	151.4

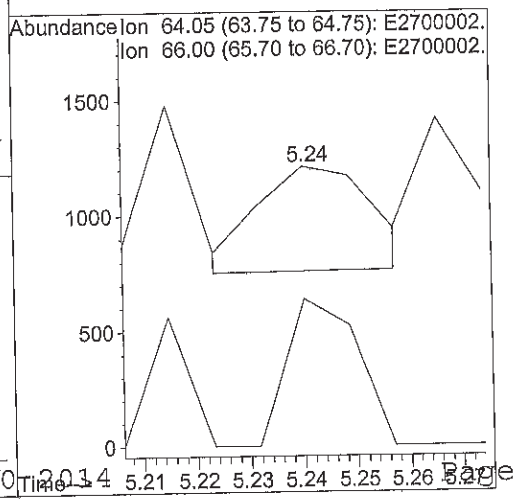


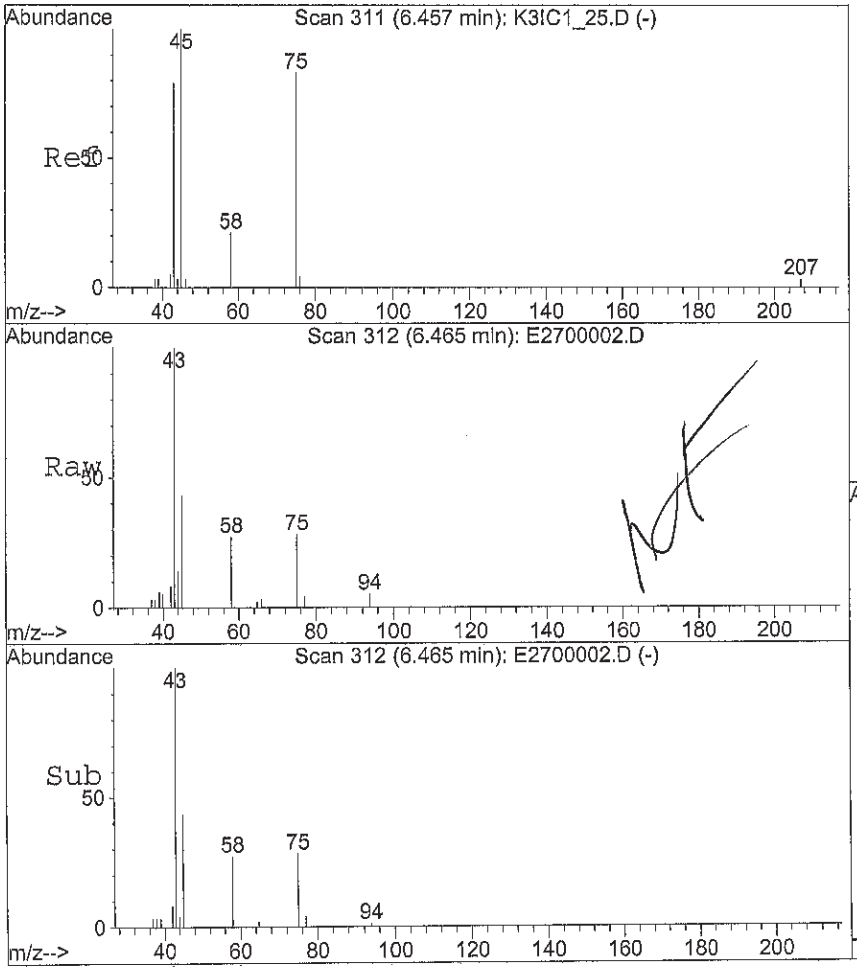


#7
Chloroethane
Concen: 1.14 ug/L
RT: 5.24 min Scan# 167
Delta R.T. 0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 64 Resp: 678

Ion	Ratio	Lower	Upper
64	100		
66	86.9	35.4	53.0#

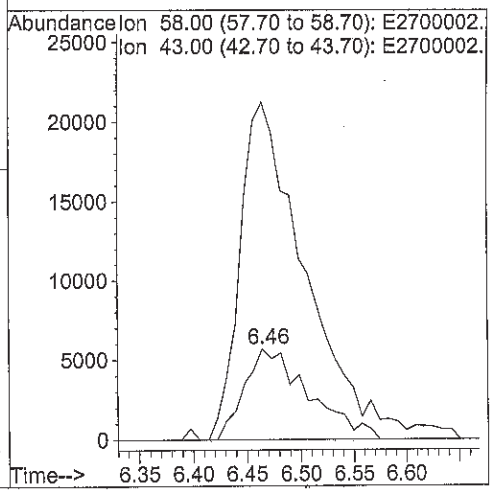


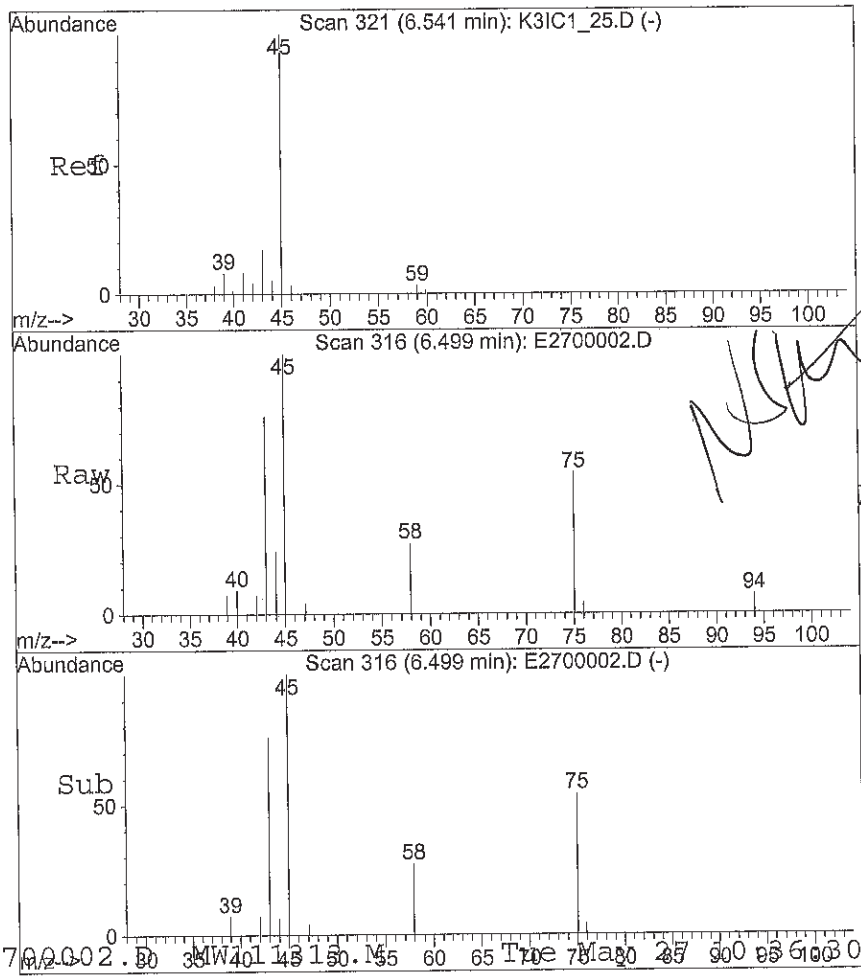


#11
Acetone
Concen: 36.85 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 58 Resp: 23754

Ion	Ratio	Lower	Upper
58	100		
43	376.0	360.9	541.3

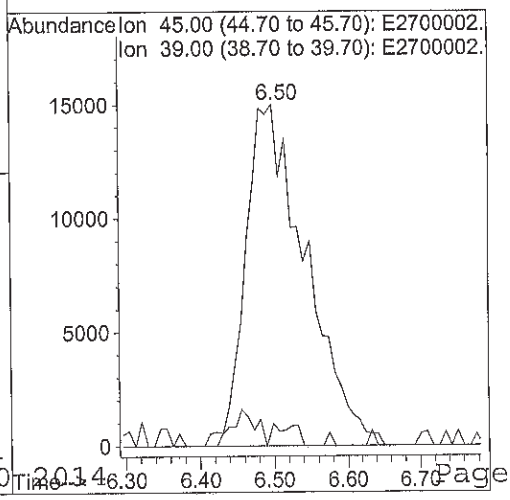


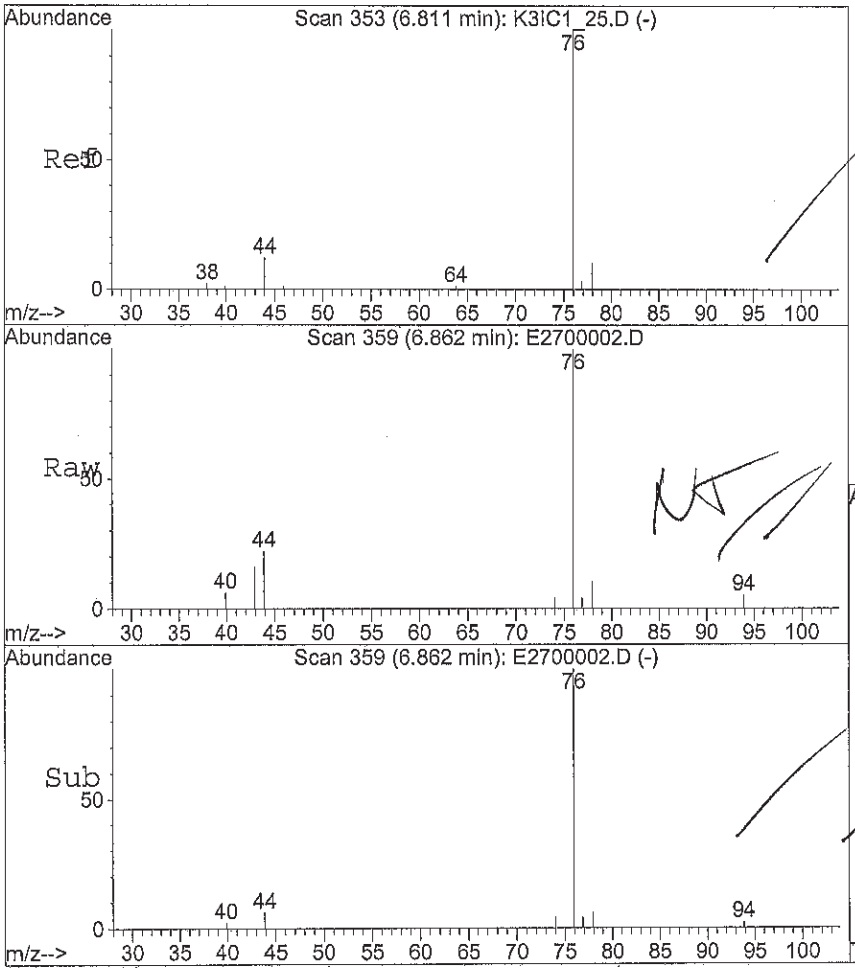


#12
(IPA) Leak Check Compound
Concen: 387.56 ug/L
RT: 6.50 min Scan# 316
Delta R.T. -0.04 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 45 Resp: 83822

Ion	Ratio	Lower	Upper
45	100		
39	2.5	4.9	7.3#

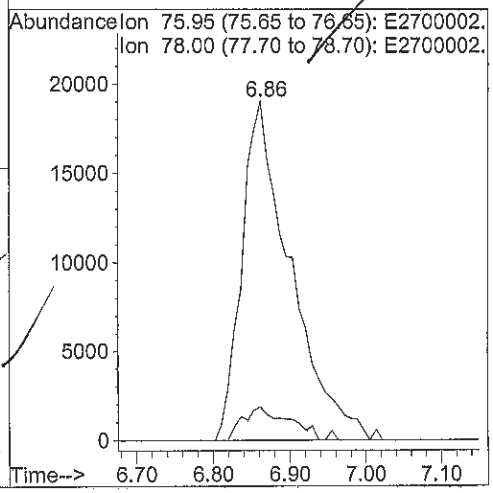


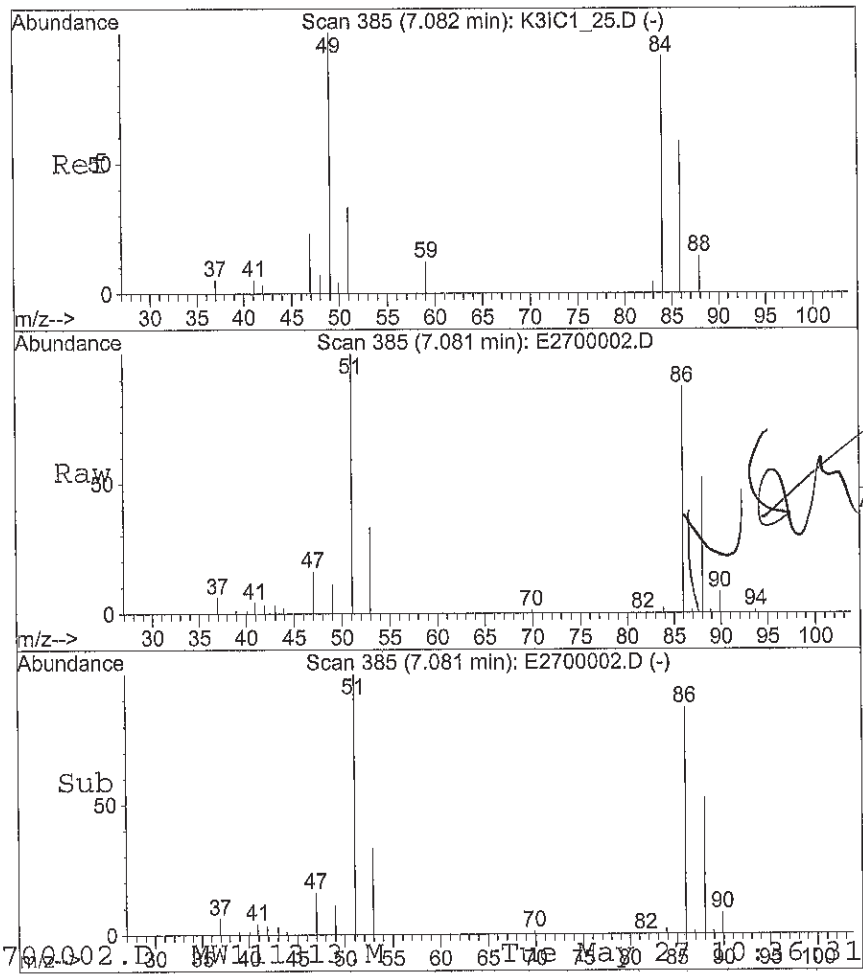


#13
Carbon disulfide
Concen: 5.60 ug/L
RT: 6.86 min Scan# 359
Delta R.T. 0.05 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 76 Resp: 83750

Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.0	10.4

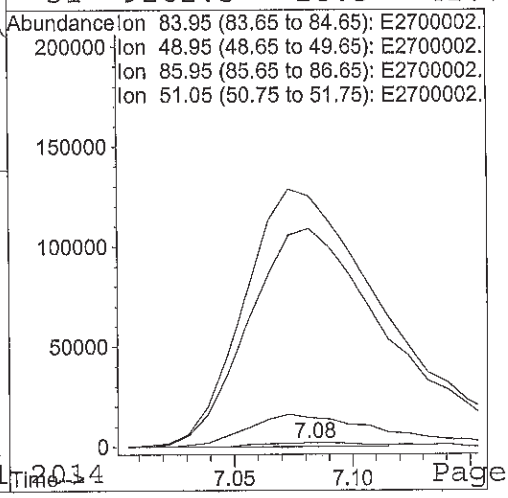


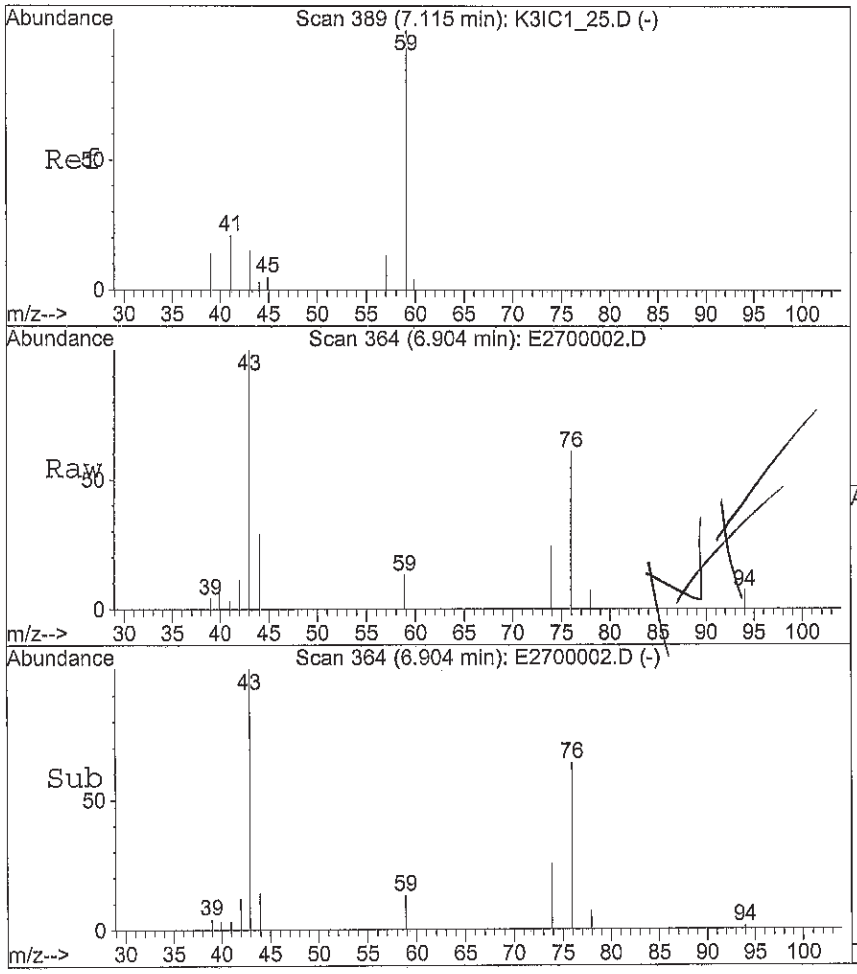


#14
Methylene Chloride
Concen: 1.20 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 84 Resp: 5914

Ion	Ratio	Lower	Upper
84	100		
49	1120.8	89.8	134.6#
86	7829.5	51.1	76.7#
51	9262.5	28.5	42.7#

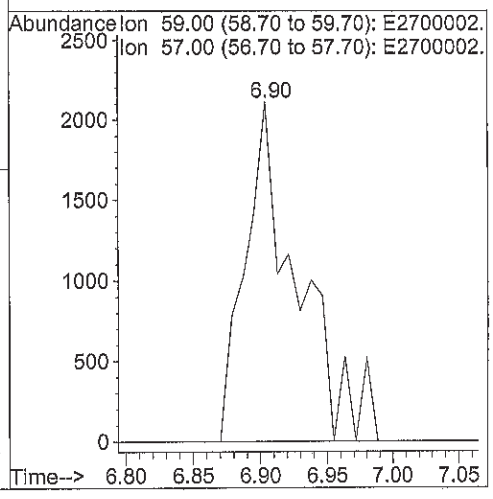


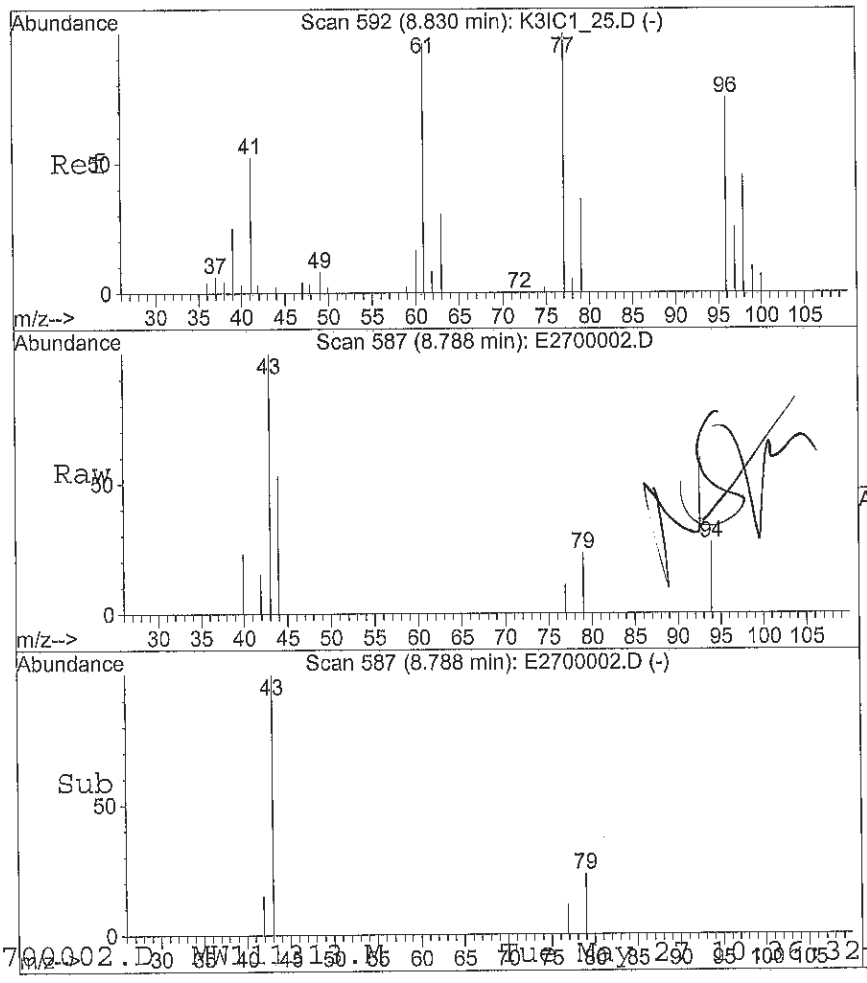


#15
(TBA) tert-Butanol
Concen: 18.69 ug/L
RT: 6.90 min Scan# 364
Delta R.T. -0.21 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 59 Resp: 5738

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

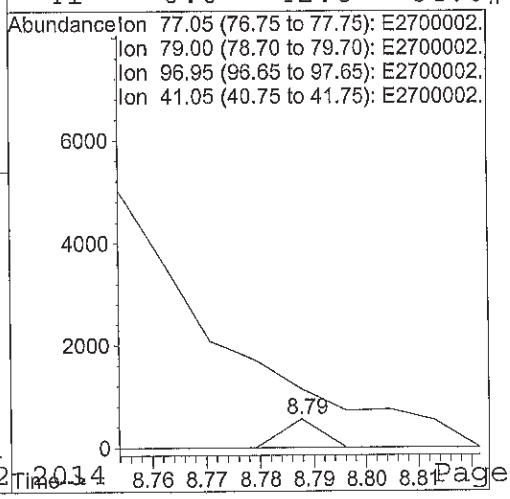


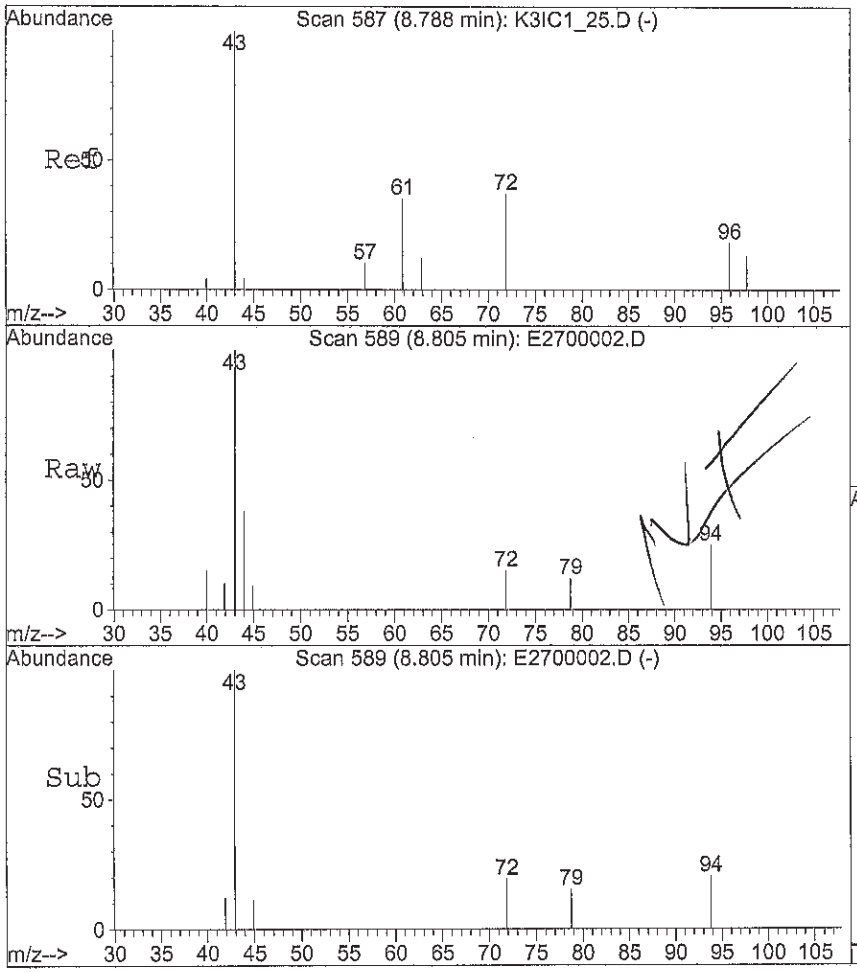


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.79 min Scan# 587
Delta R.T. -0.04 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 77 Resp: 283

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

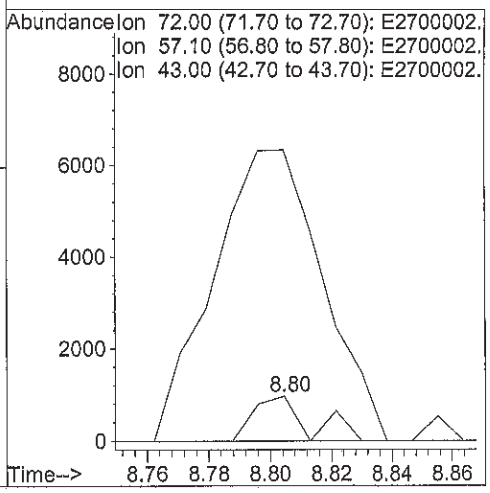


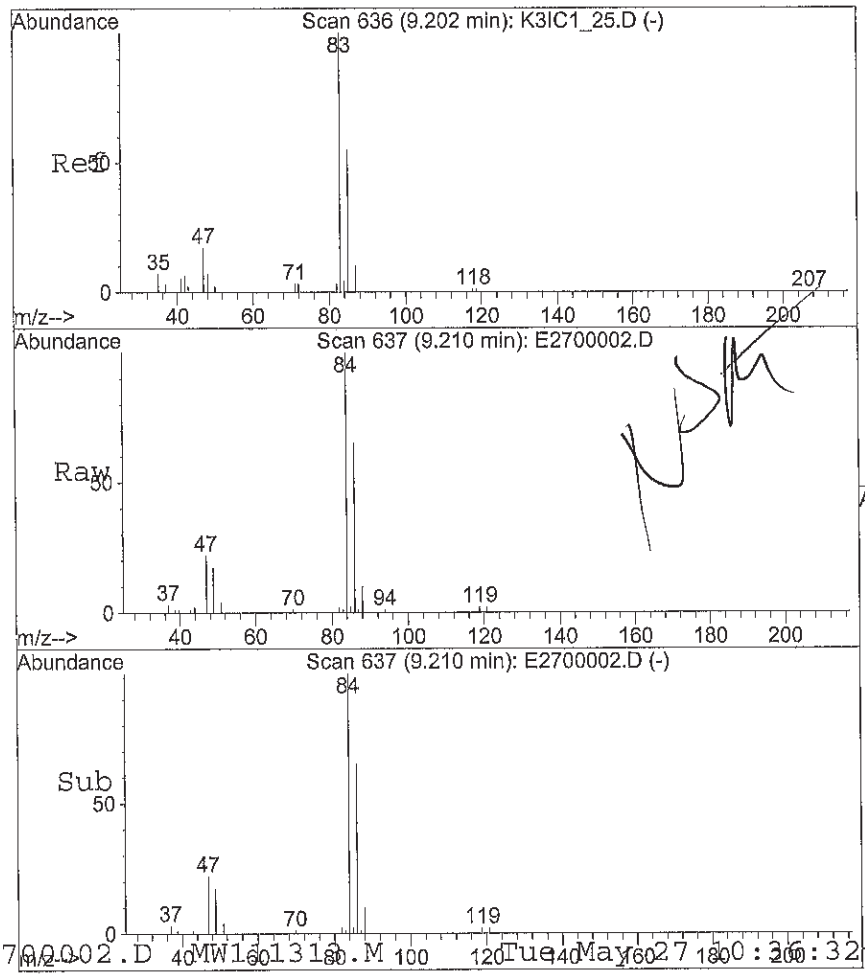


#21
(MEK) 2-Butanone
Concen: 2.39 ug/L
RT: 8.80 min Scan# 589
Delta R.T. 0.02 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 72 Resp: 1211

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	1293.8	314.2	471.2#

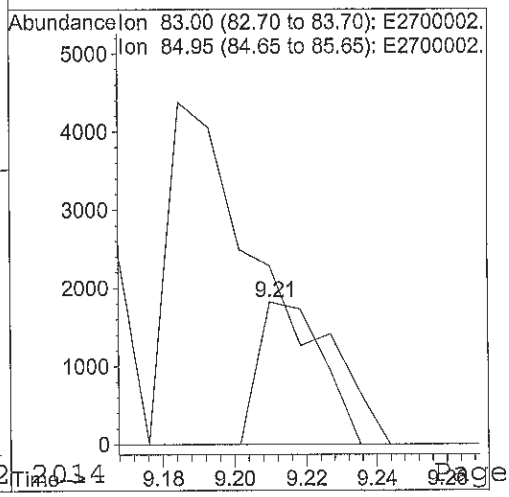


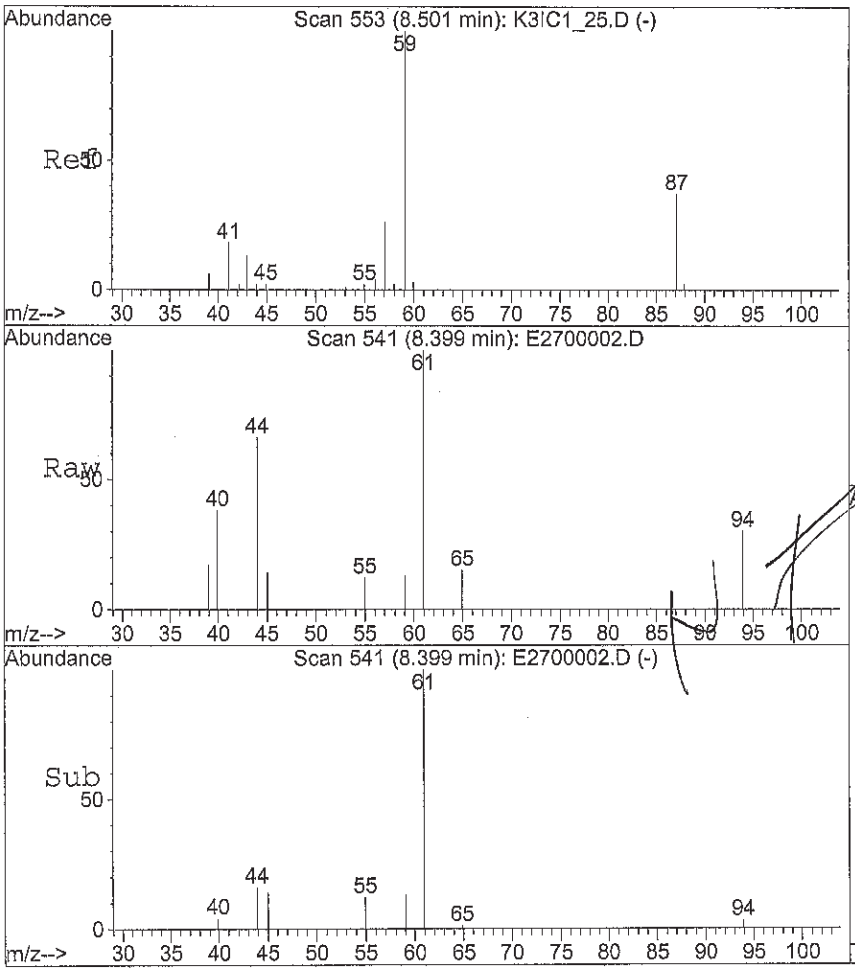


#24
Chloroform
Concen: 0.24 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 83 Resp: 2280

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

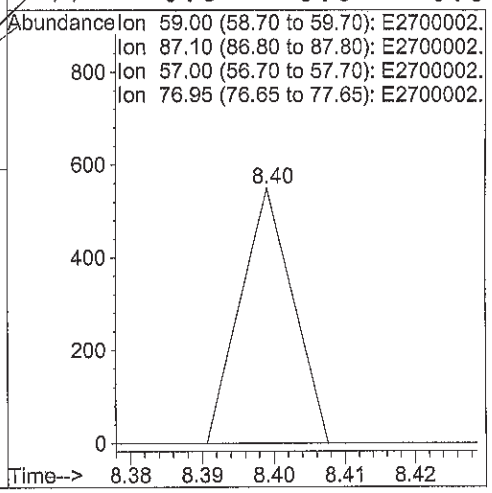


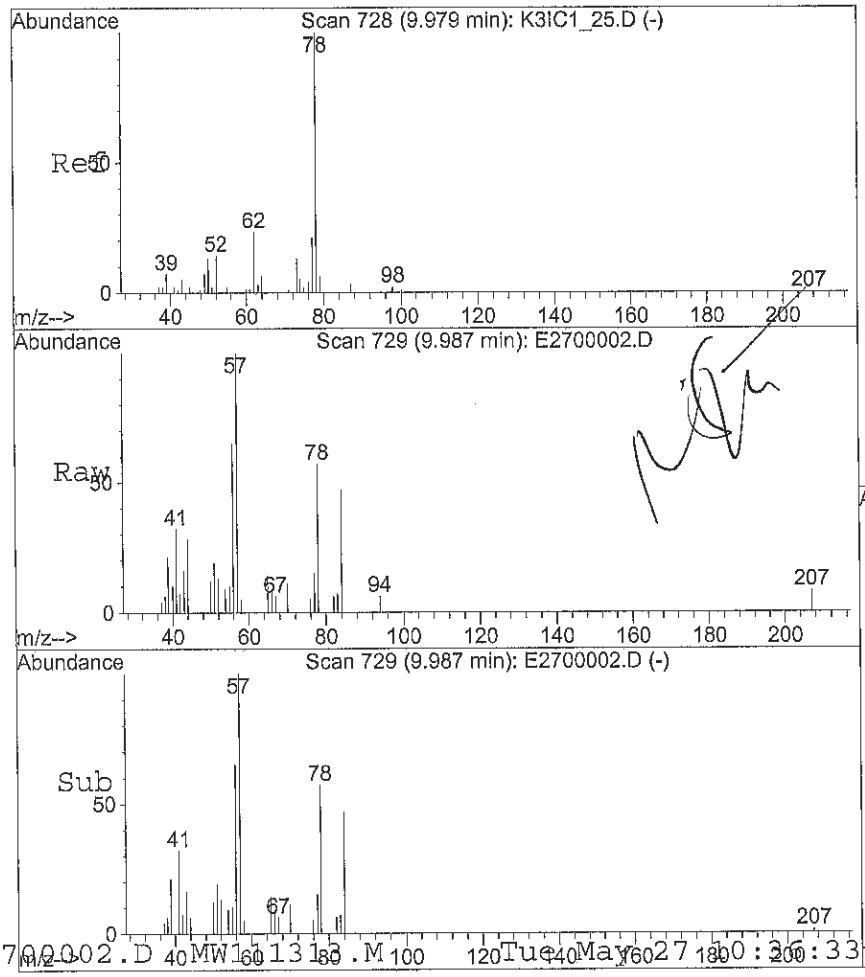


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.02 ug/L
RT: 8.40 min Scan# 541
Delta R.T. -0.10 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 59 Resp: 279

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

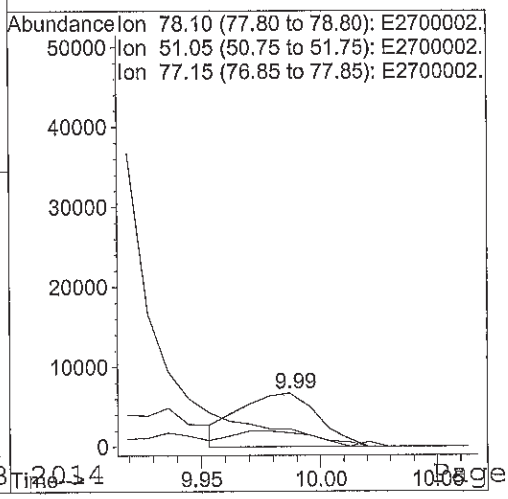


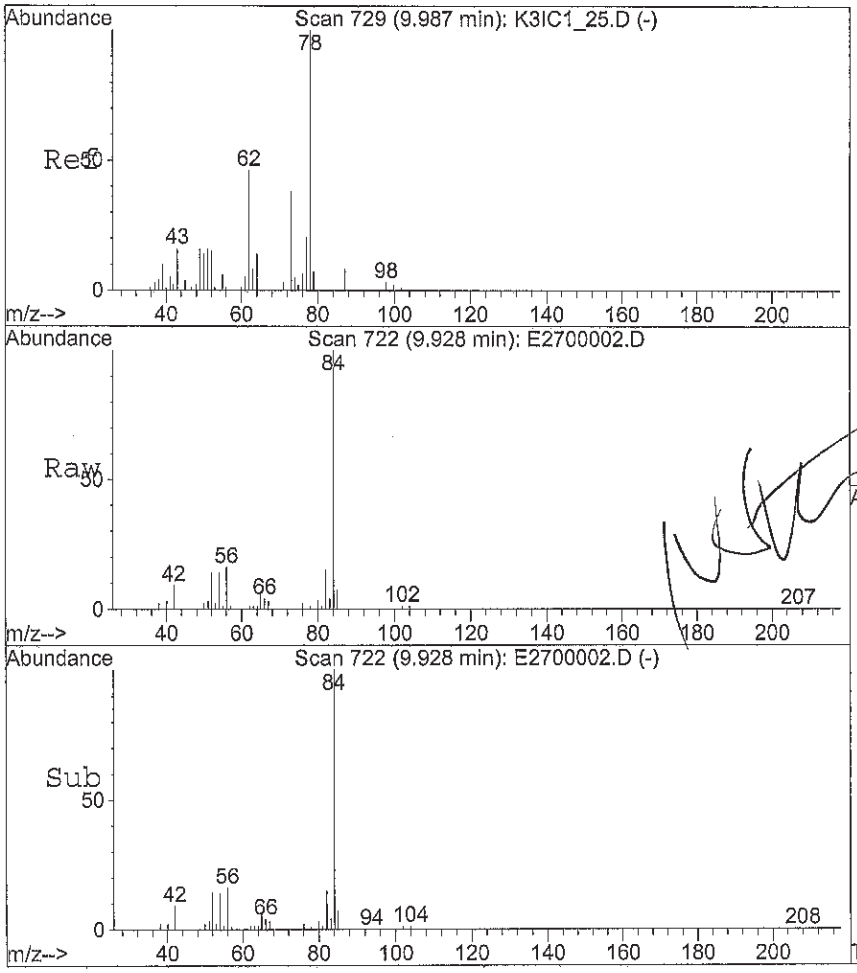


#31
Benzene
Concen: 0.91 ug/L
RT: 9.99 min Scan# 729
Delta R.T. 0.01 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 78 Resp: 15447

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	31.6	16.6	24.8#

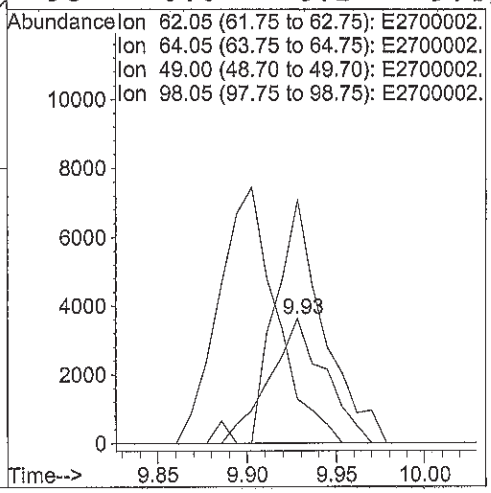


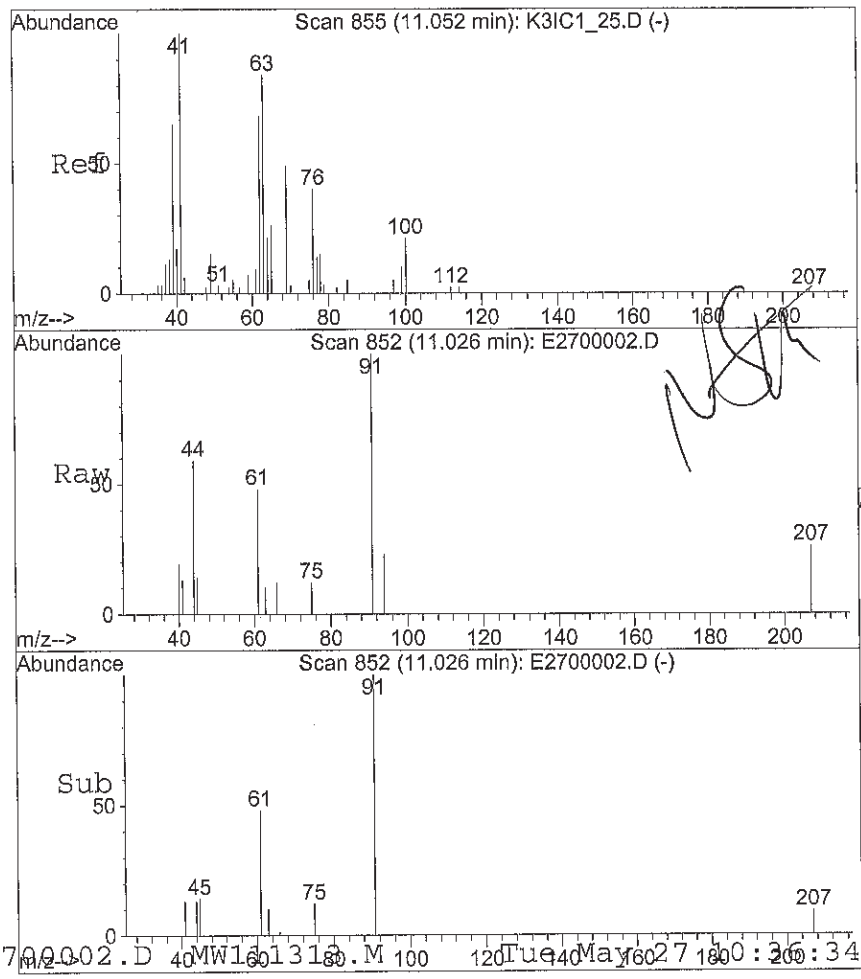


#32
1,2-Dichloroethane
Concen: 1.30 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 62 Resp: 7811

Ion	Ratio	Lower	Upper
62	100		
64	174.7	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

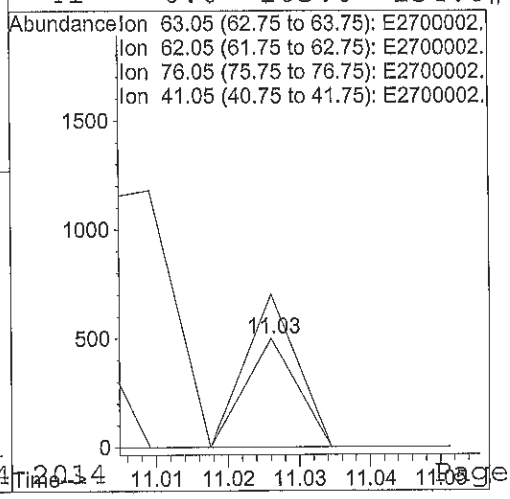


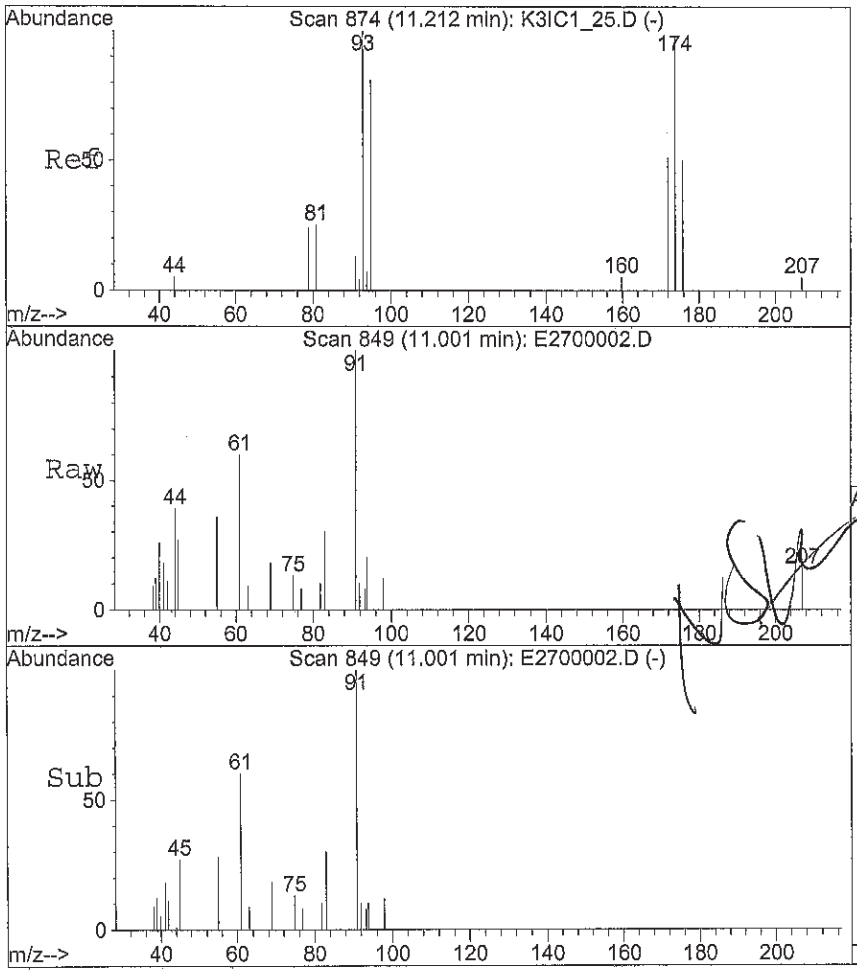


#34
1,2-Dichloropropane
Concen: 0.06 ug/L
RT: 11.03 min Scan# 852
Delta R.T. -0.03 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 63 Resp: 254

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

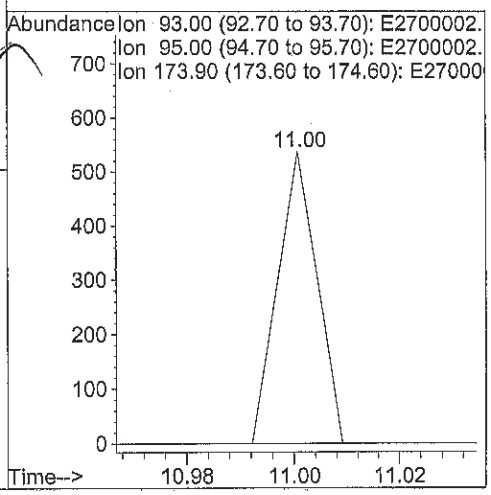


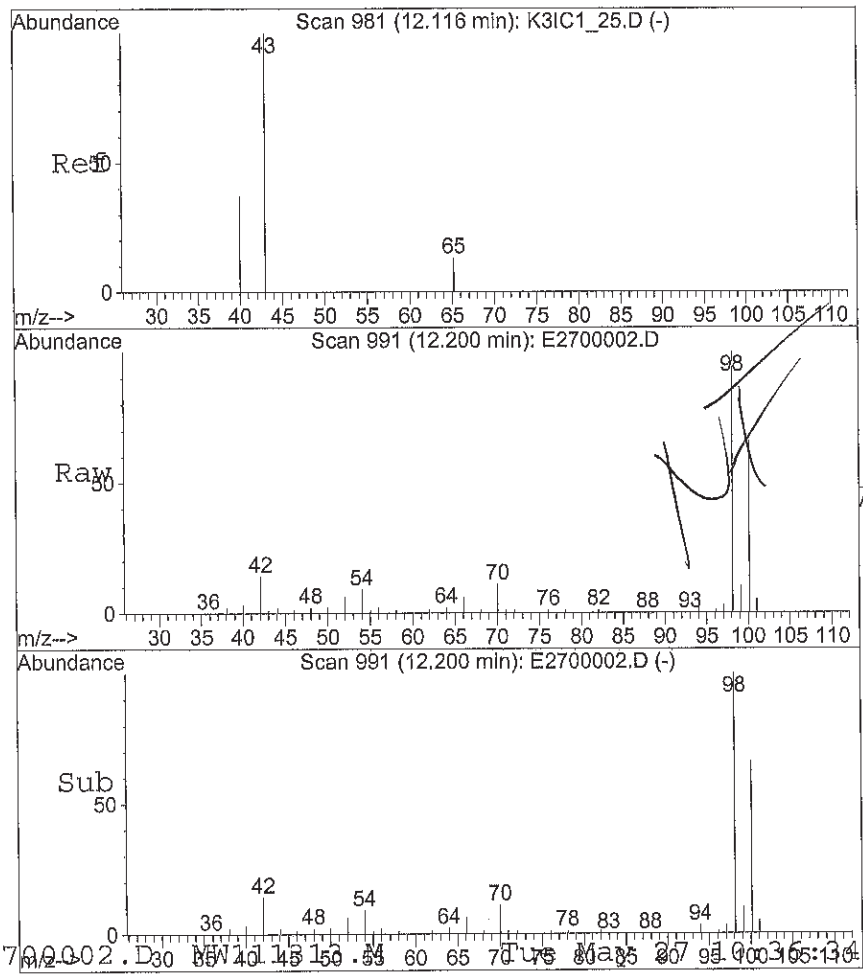


#35
Dibromomethane
Concen: 0.09 ug/L
RT: 11.00 min Scan# 849
Delta R.T. -0.21 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 93 Resp: 272

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

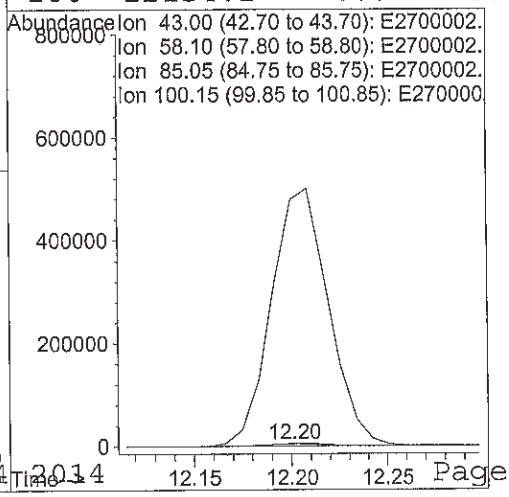


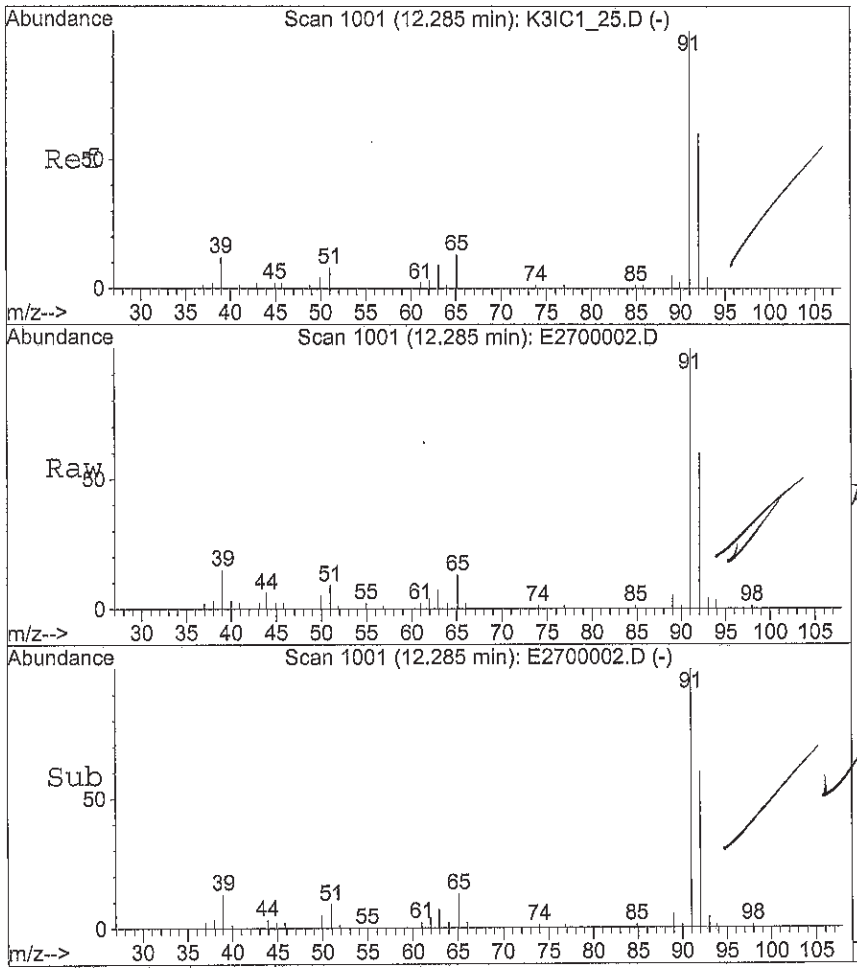


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.21 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 43 Resp: 8455

Ion	Ratio	Lower	Upper
43	100		
58	124.4	0.0	0.0#
85	0.0	0.0	0.0
100	12154.2	0.0	0.0#

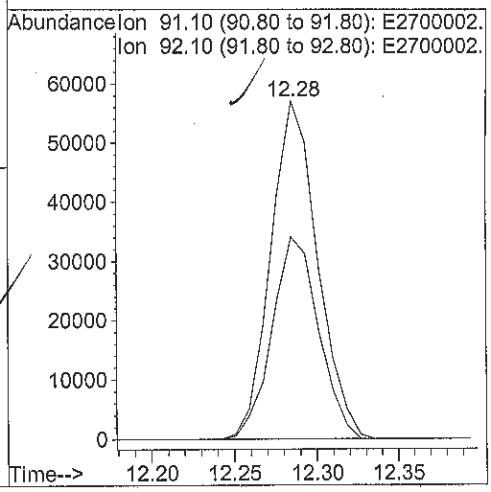


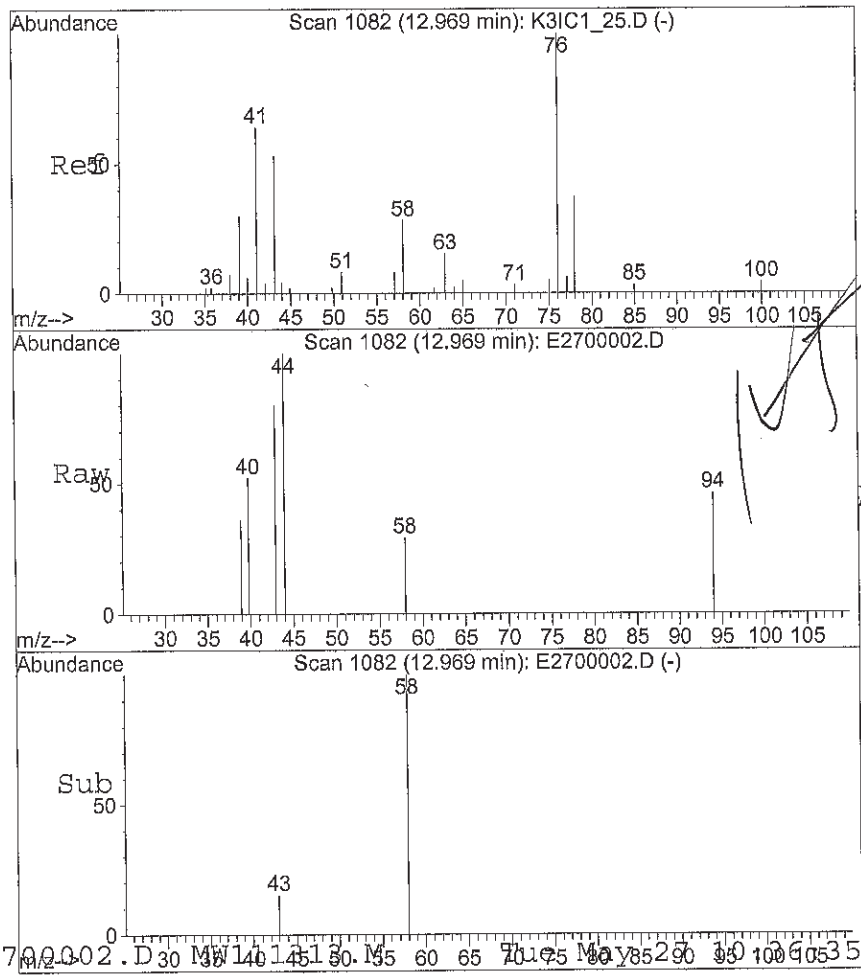


#41
Toluene
Concen: 6.25 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 91 Resp: 112464

Ion	Ratio	Lower	Upper
91	100		
92	59.5	47.4	71.0

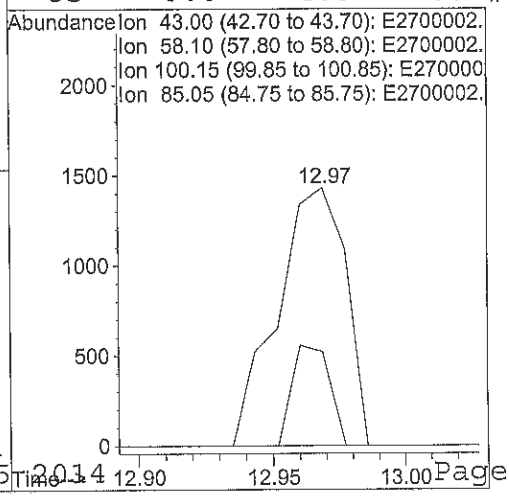


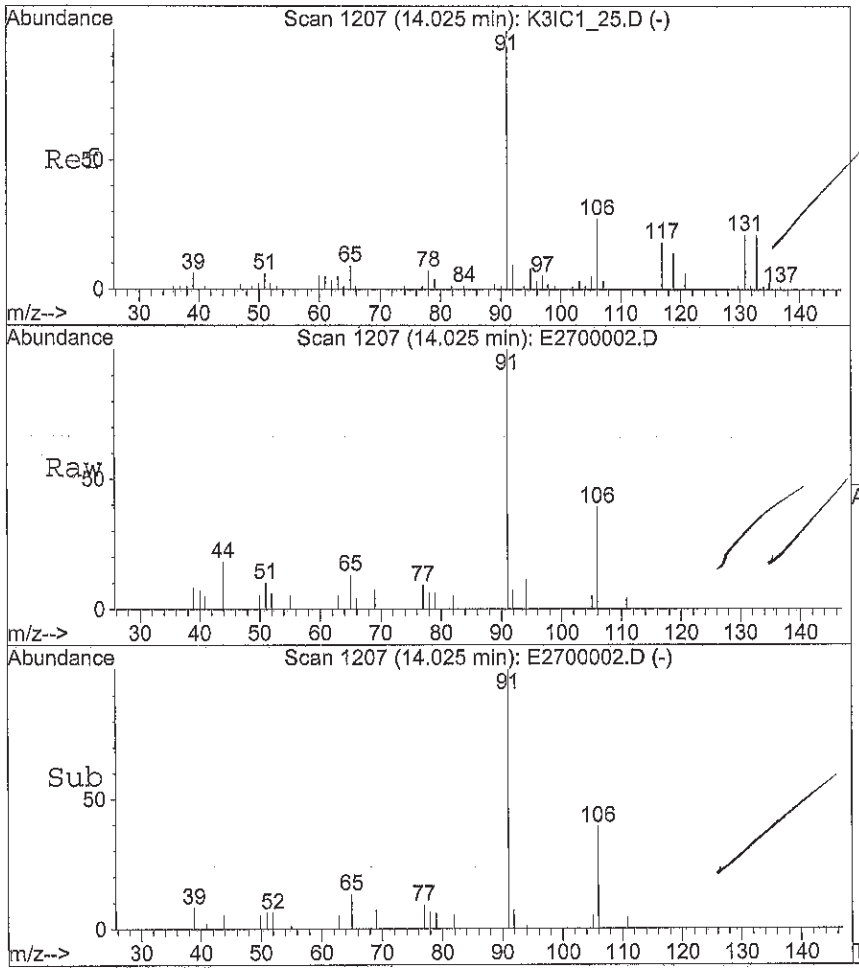


#46
2-Hexanone
Concen: 0.88 ug/L
RT: 12.97 min Scan# 1082
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 43 Resp: 2548

Ion	Ratio	Lower	Upper
43	100		
58	21.4	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

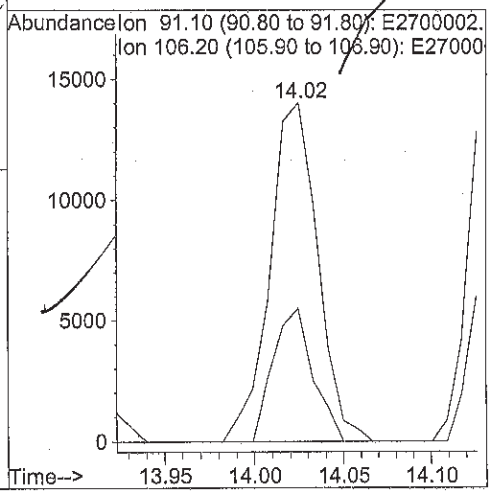


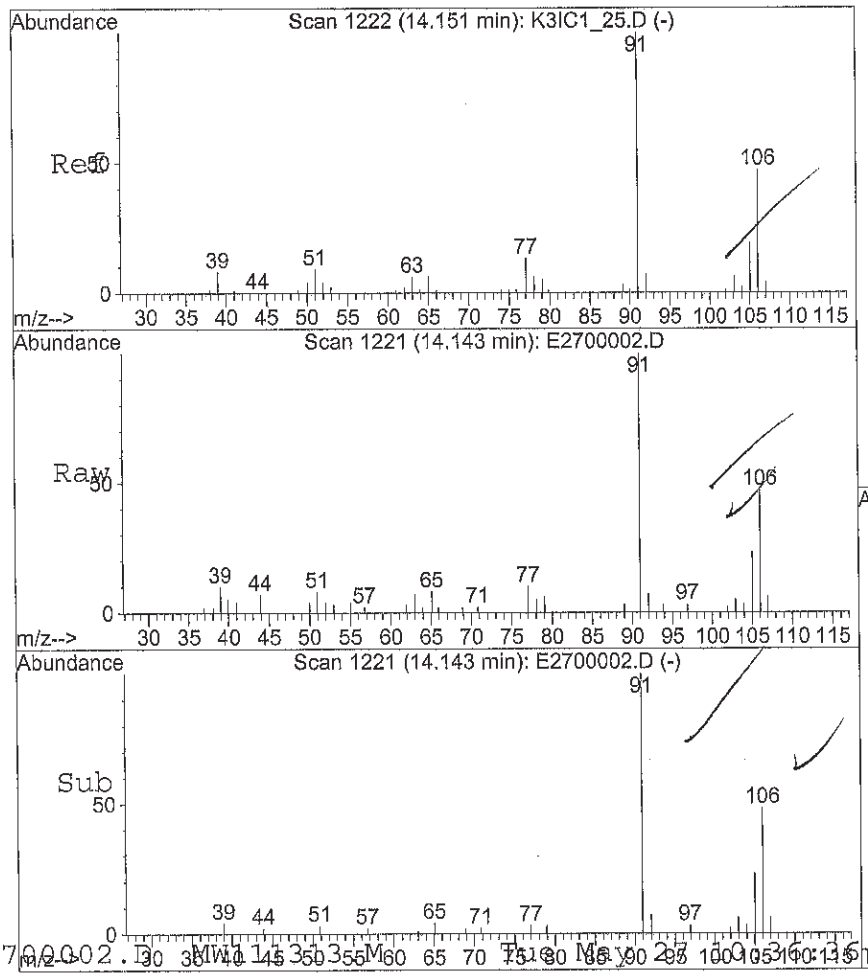


#51
Ethylbenzene
Concen: 1.27 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 91 Resp: 26025

Ion	Ratio	Lower	Upper
91	100		
106	32.6	23.5	35.3

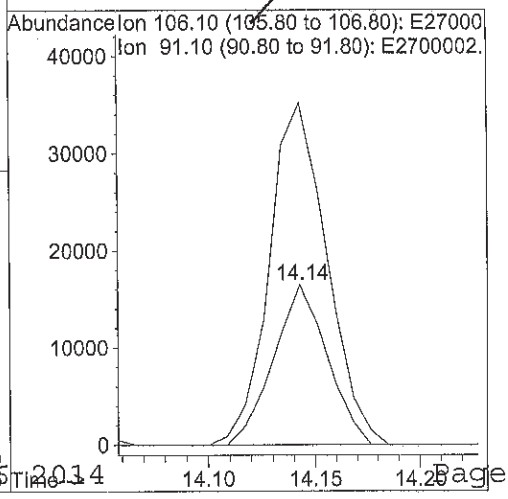


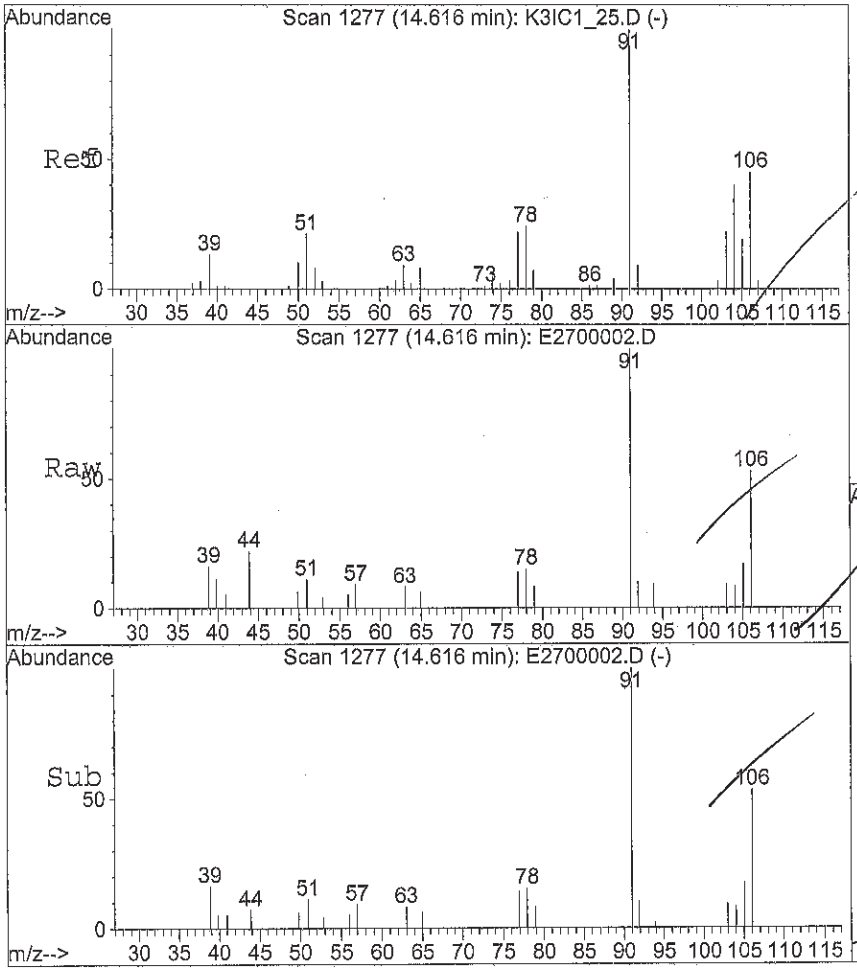


#52
m,p-Xylenes
Concen: 3.96 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:106 Resp: 28793

Ion	Ratio	Lower	Upper
106	100		
91	229.2	177.1	265.7

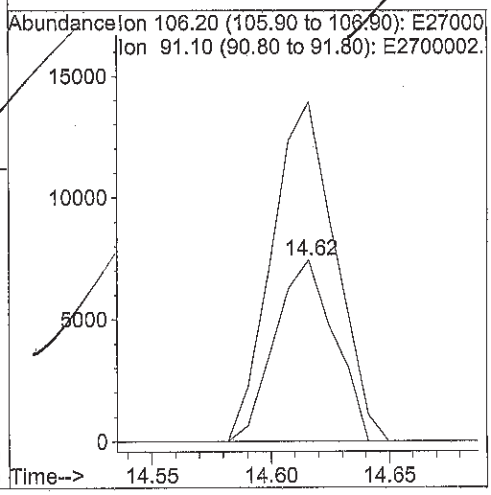


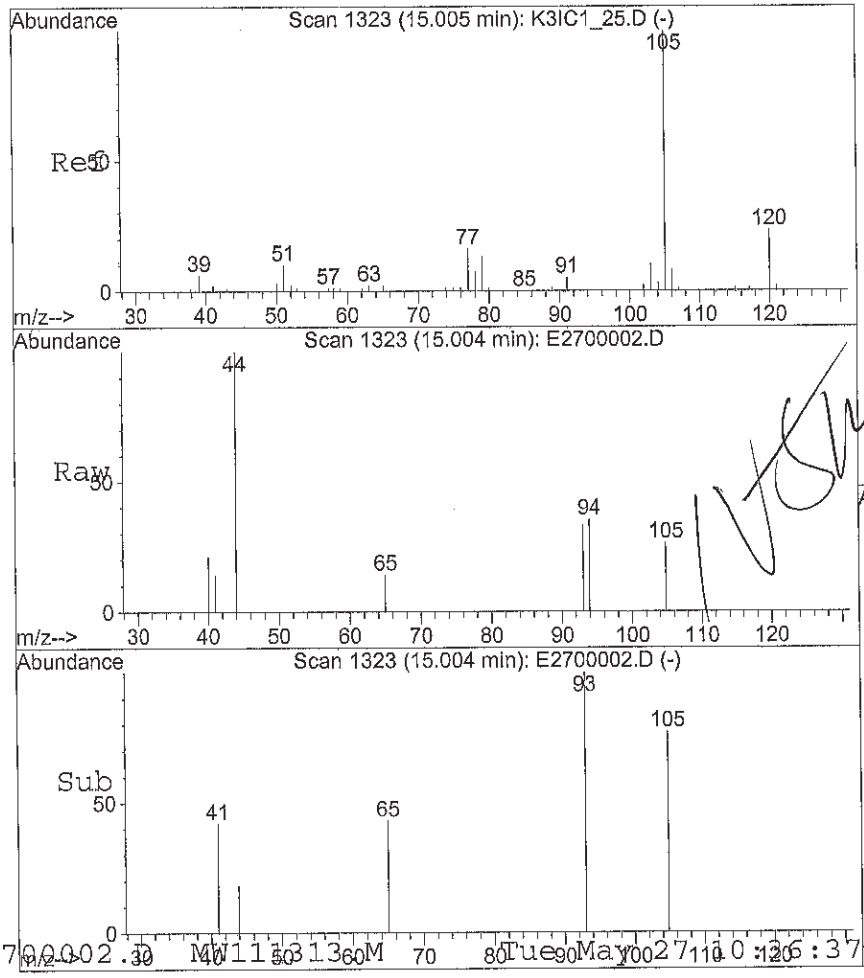


#53
o-Xylene
Concen: 1.79 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:106 Resp: 12886

Ion	Ratio	Lower	Upper
106	100		
91	199.8	179.0	268.6

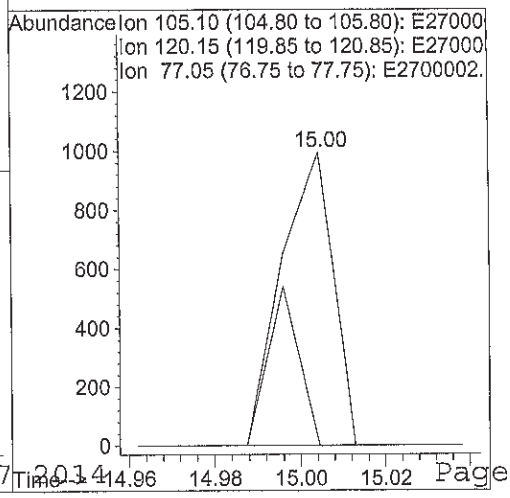


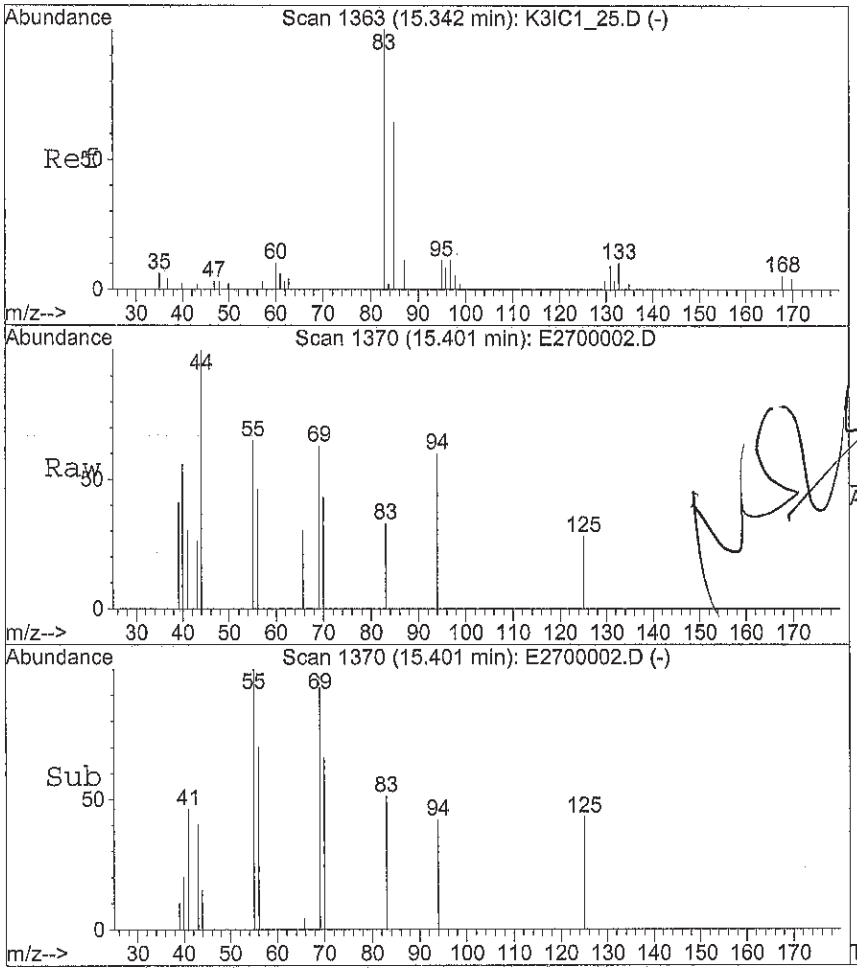


#56
Isopropylbenzene
Concen: 0.04 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:105 Resp: 835

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	32.8	13.1	19.7#

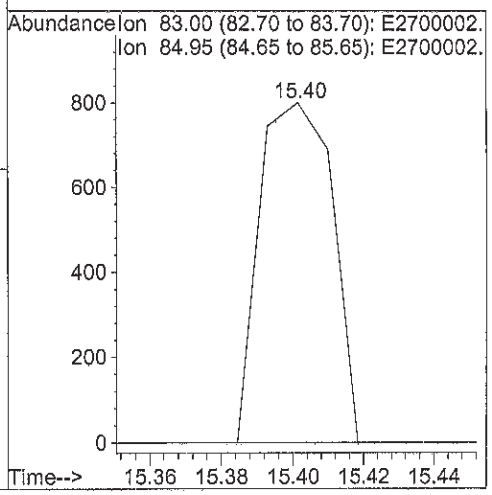


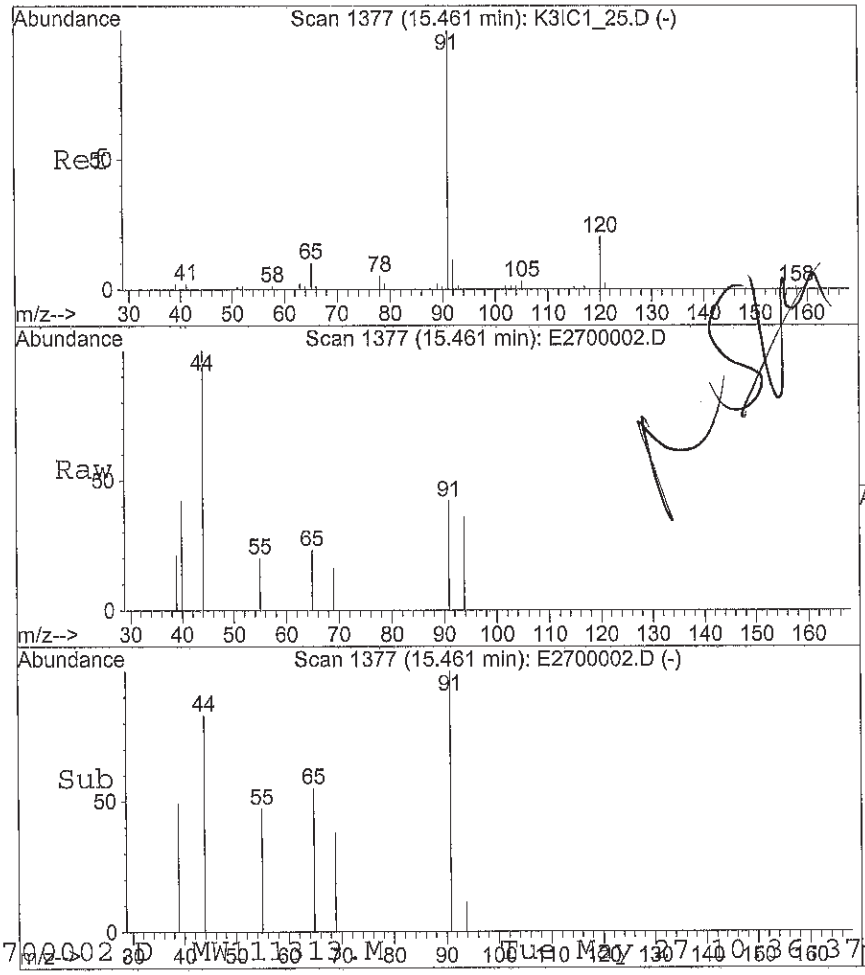


#60
1,1,2,2-Tetrachloroethane
Concen: 0.23 ug/L
RT: 15.40 min Scan# 1370
Delta R.T. 0.06 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 83 Resp: 1132

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

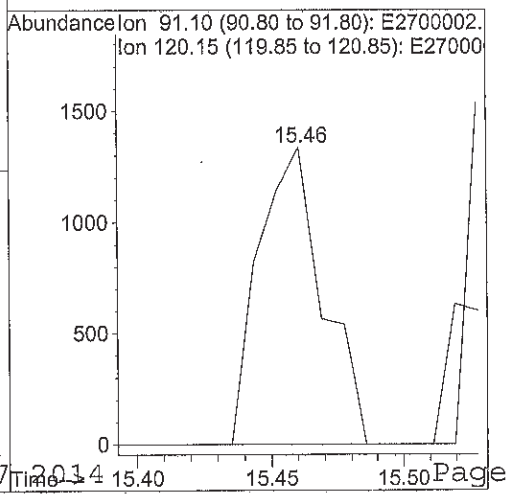


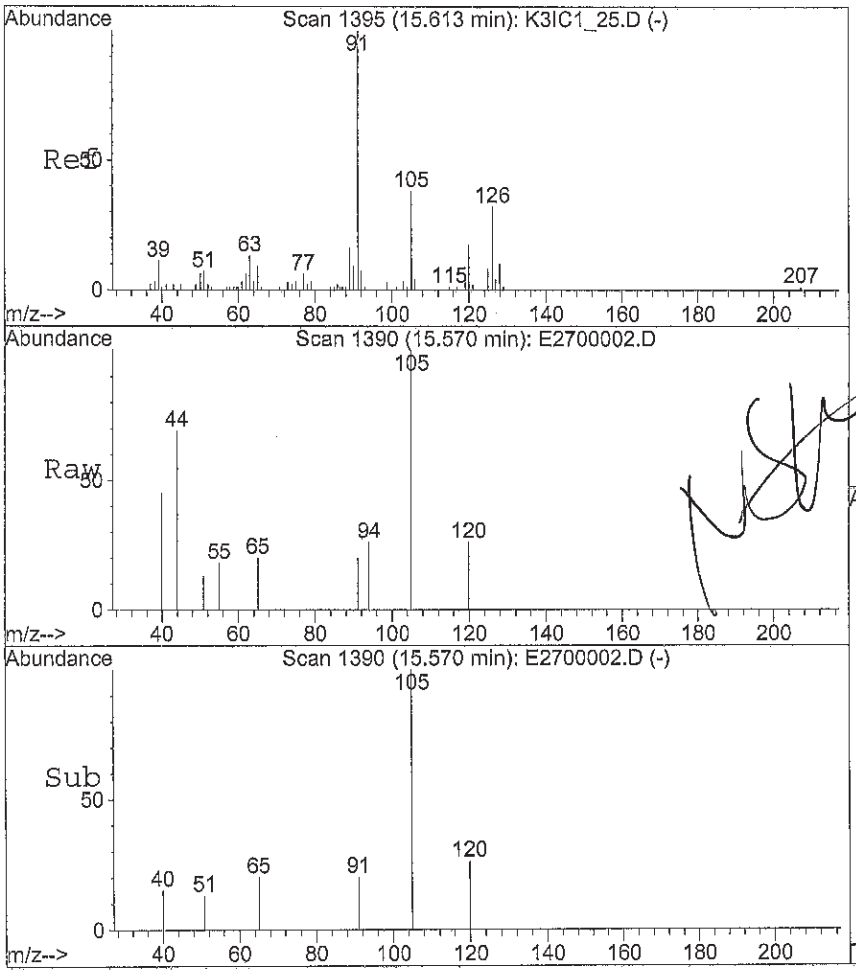


#62
n-Propylbenzene
Concen: 0.08 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 91 Resp: 2233

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

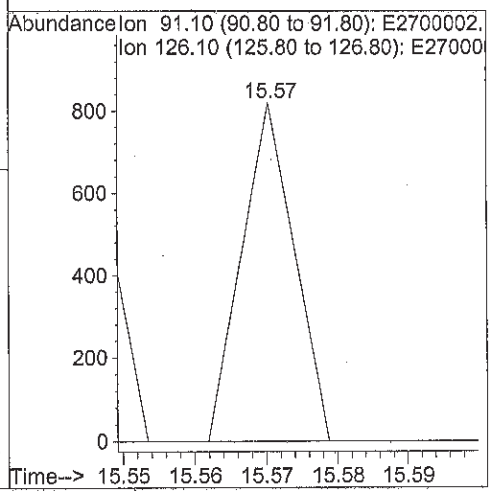


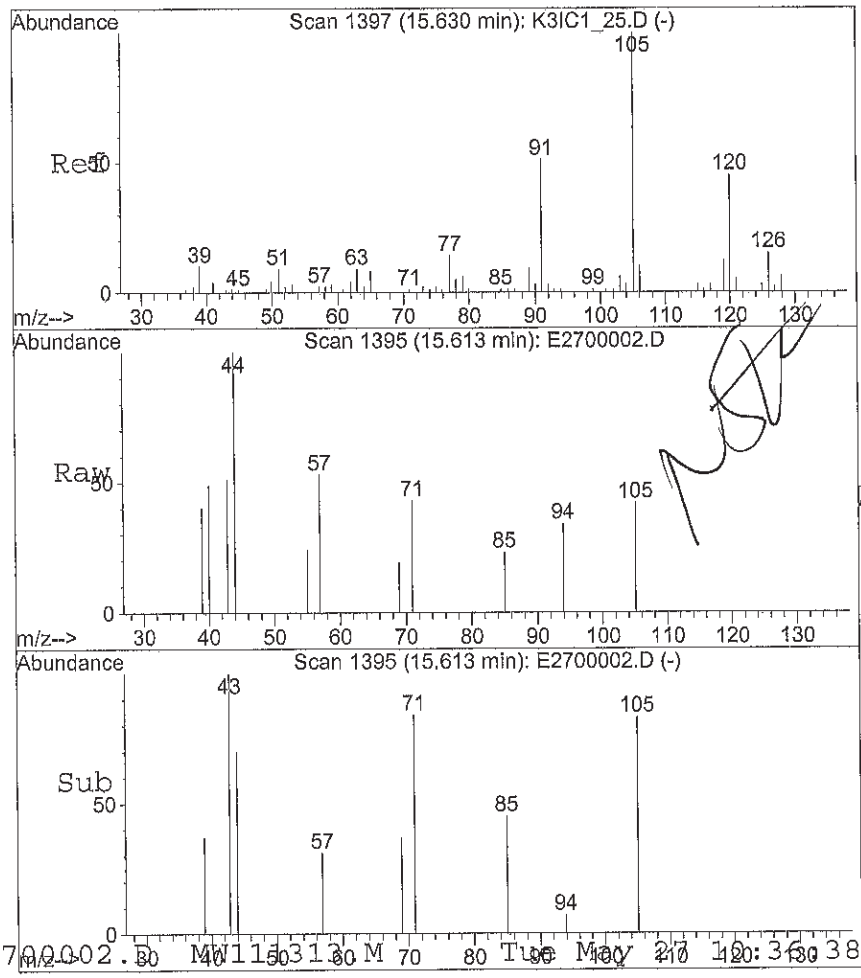


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.57 min Scan# 1390
Delta R.T. -0.04 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 91 Resp: 416

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

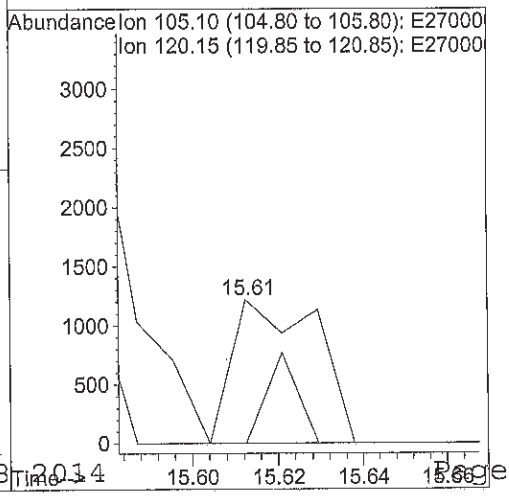


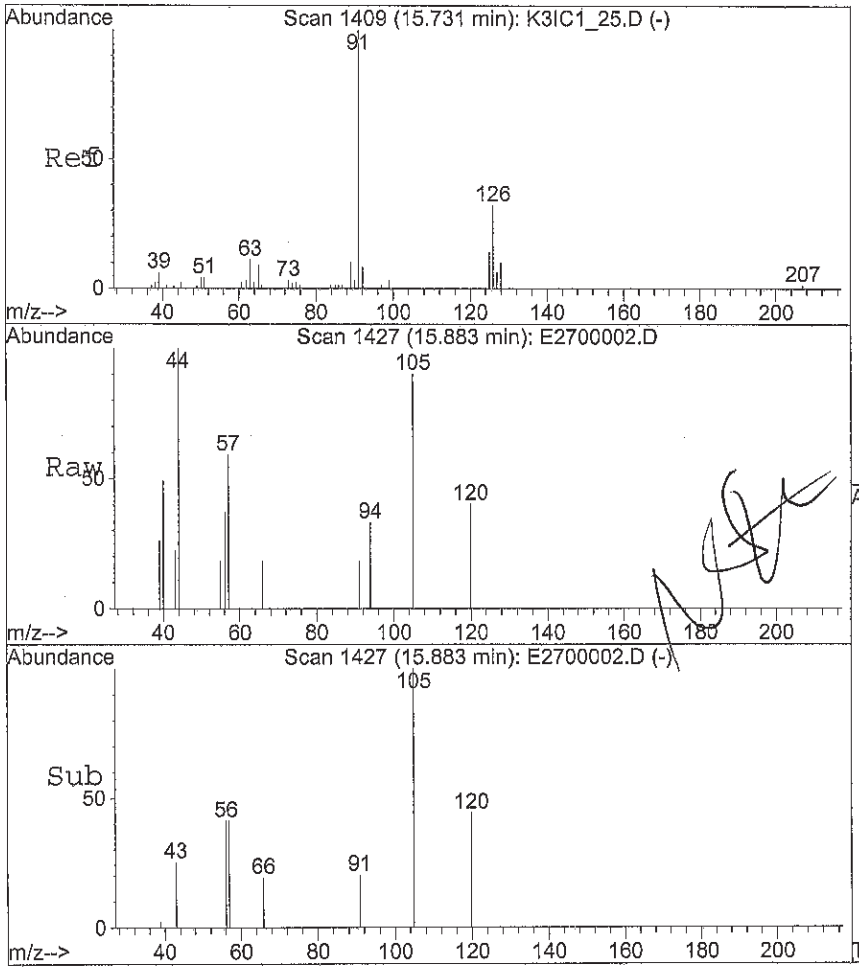


#64
1,3,5-Trimethylbenzene
Concen: 0.10 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.02 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:105 Resp: 1666

Ion	Ratio	Lower	Upper
105	100		
120	23.4	36.4	54.6#

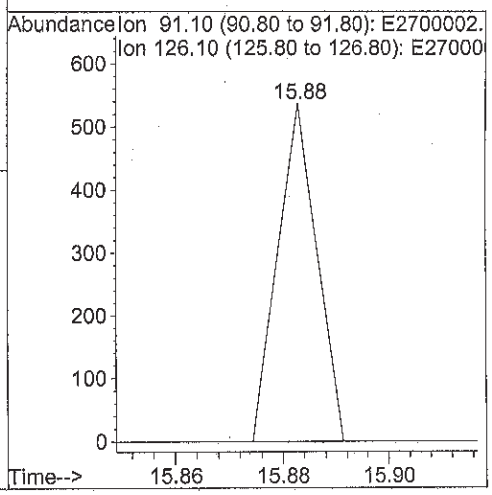


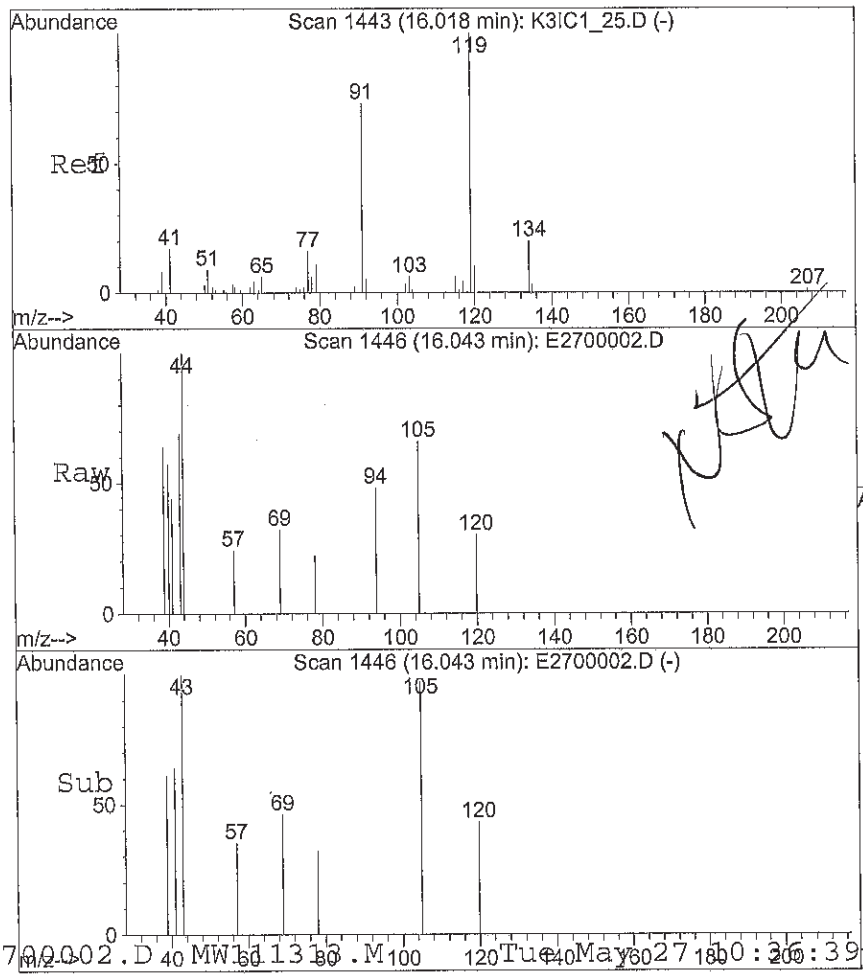


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.88 min Scan# 1427
Delta R.T. 0.15 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion: 91 Resp: 272

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

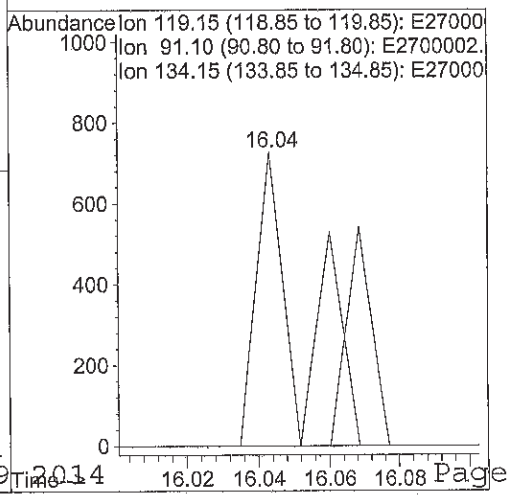


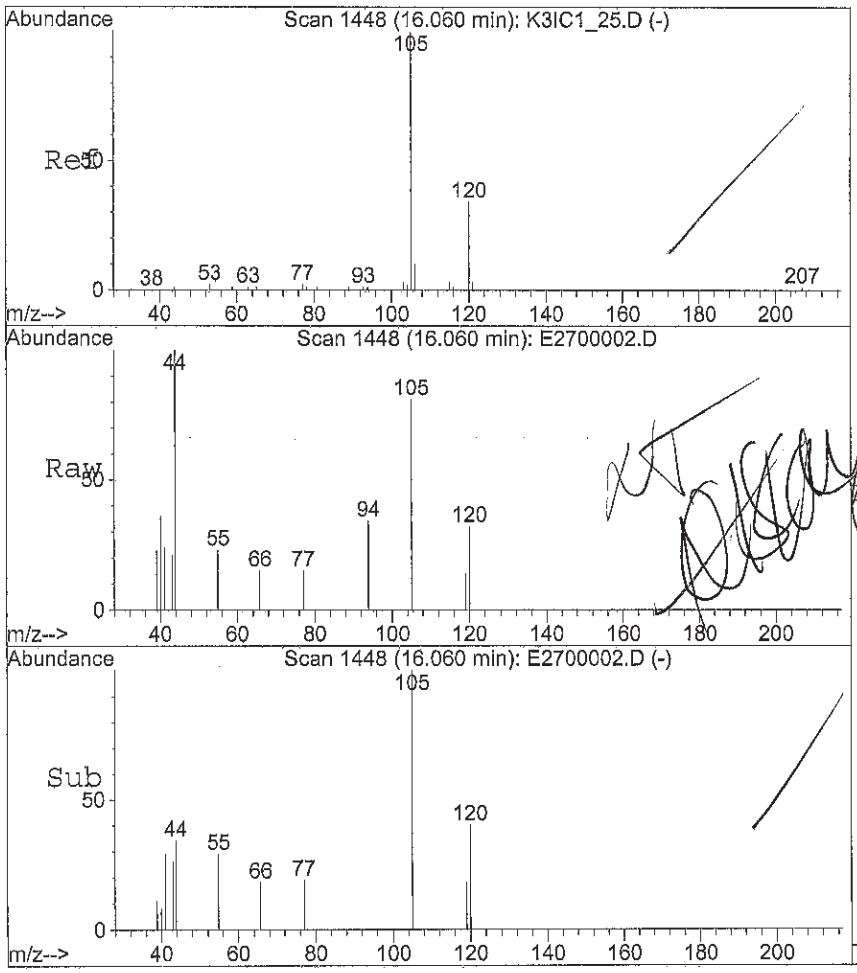


#66
tert-Butylbenzene
Concen: 0.04 ug/L
RT: 16.04 min Scan# 1446
Delta R.T. 0.03 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:119 Resp: 637

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

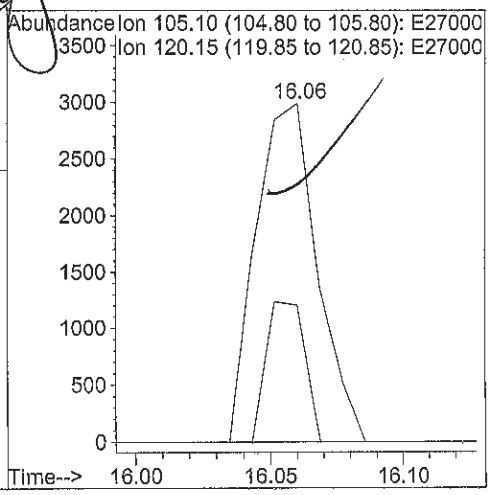


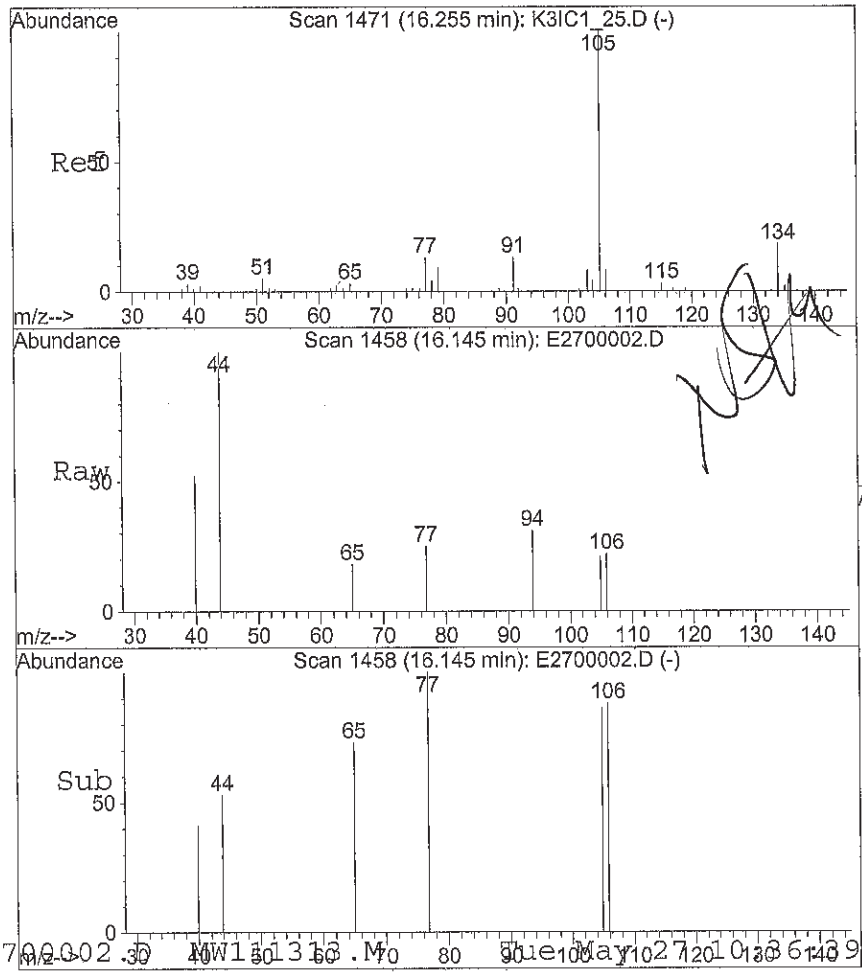


#67
1,2,4-Trimethylbenzene
Concen: 0.26 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:105 Resp: 4740

Ion	Ratio	Lower	Upper
105	100		
120	26.0	33.8	50.8#

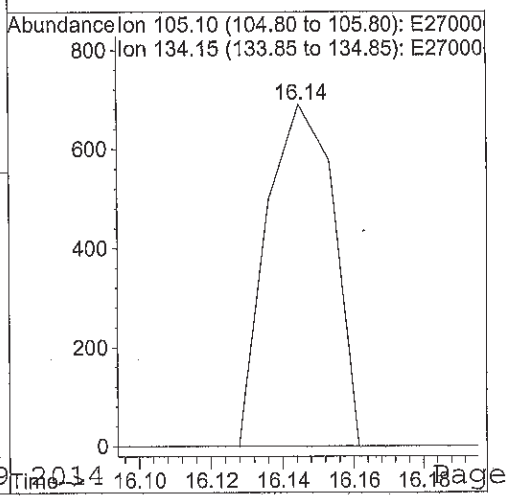


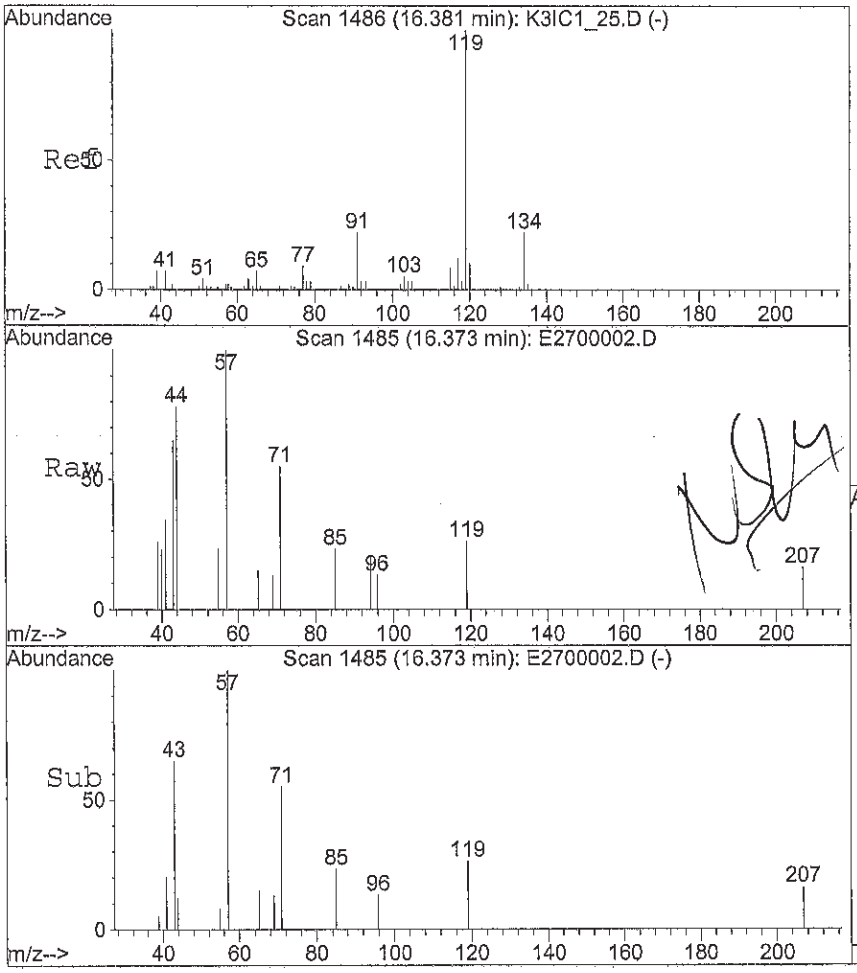


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.14 min Scan# 1458
Delta R.T. -0.11 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:105 Resp: 897

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

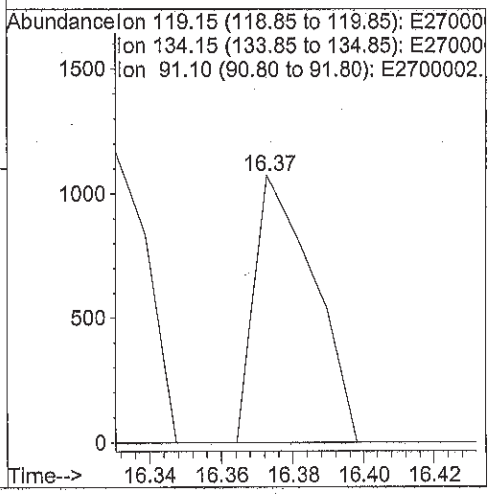




#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E2700002.D
Acq: 27 May 2014 9:58 am

Tgt Ion:119 Resp: 1234

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700002.D Vial: 1
Acq On : 27 May 2014 9:58 am Operator: DN
Sample : 3E42701-02 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:36 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1799866	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1320042	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	691378	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	494253	10.56	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 84.48%			
3) Chloroform-d (SU6)	9.18	84	813936	12.12	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.96%			
4) Methylene Chloride-d2 (SU5	7.08	86	463039	11.80	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.40%			
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	491526	15.37	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 122.96%			
6) Benzene-d6 (SU7)	9.93	84	1576905	11.16	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.28%			
8) Toluene-d8 (SU3)	12.20	98	1520313	12.14	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.12%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	725194	14.03	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 112.24%			

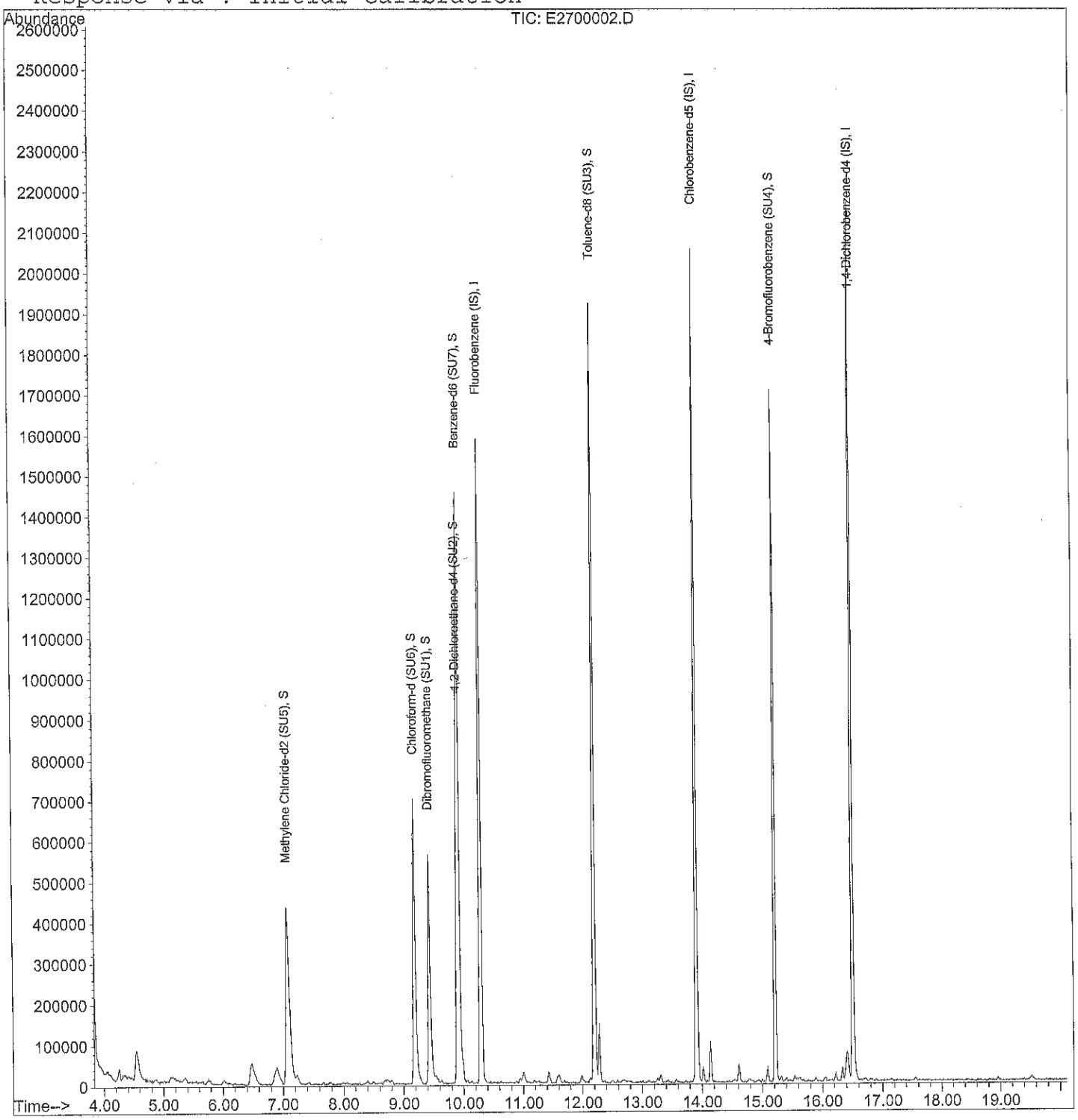
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700002.D Vial: 1
Acq On : 27 May 2014 9:58 am Operator: DN
Sample : 3E42701-02 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 10:36 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700004.D Vial: 3
Acq On : 27 May 2014 10:57 am Operator: DN
Sample : 3E42701-03 Inst : GC/MS Ins
Misc : 100cc SVL-802-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:30 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1745598	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1321272	12.50 ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	716932	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	499272	11.47 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.76%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	500264	12.09 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.72%		
39) Toluene-d8 (SU3)	12.20	98	1522306	12.35 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.80%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	713995	13.21 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 105.68%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.13	85	325	0.08 ~~ug/L~~ # NM	44
4) Chloromethane	4.42	50	6825	1.11 ~~ug/L~~ #	41
6) Bromomethane	5.12	96	11107	4.01 ~~ug/L~~ #	64
7) Chloroethane	5.23	64	573	1.08 ~~ug/L~~	93
11) Acetone	6.47	58	23213	37.30 ~~ug/L~~ NT	68
12) (IPA) Leak Check Compound	6.48	45	109759	523.26 ~~ug/L~~ # NM	85
13) Carbon disulfide	6.86	76	91217	6.29 ug/L 0.125	98
14) Methylene Chloride	7.07	84	6783	1.41 ~~ug/L~~ # NM	1
15) (TBA) tert-Butanol	6.92	59	2665	8.95 ~~ug/L~~ # NT	77
21) (MEK) 2-Butanone	8.79	72	1128	2.30 ~~ug/L~~ # NM	1
24) Chloroform	9.21	83	2633	0.29 ~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.41	59	449	0.04 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.92	75	284	0.04 ~~ug/L~~ #	1
31) Benzene	9.98	78	17478	1.06 ~~ug/L~~ # NM	81
32) 1,2-Dichloroethane	9.92	62	7790	1.34 ~~ug/L~~ #	1
34) 1,2-Dichloropropane	11.03	63	609	0.16 ~~ug/L~~ #	2
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	7890	2.99 ~~ug/L~~ # T	100
41) Toluene	12.28	91	91885	5.10 ug/L 0.107	96
46) 2-Hexanone	12.97	43	1334	0.46 ~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	20349	0.99 ug/L 0.0198	91
52) m,p-Xylenes	14.14	106	20727	2.85 ug/L 0.057	97
53) o-Xylene	14.61	106	8783	1.22 ug/L 0.0244	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700004.D Vial: 3
Acq On : 27 May 2014 10:57 am Operator: DN
Sample : 3E42701-03 Inst : GC/MS Ins
Misc : 100cc SVL-802-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:30 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

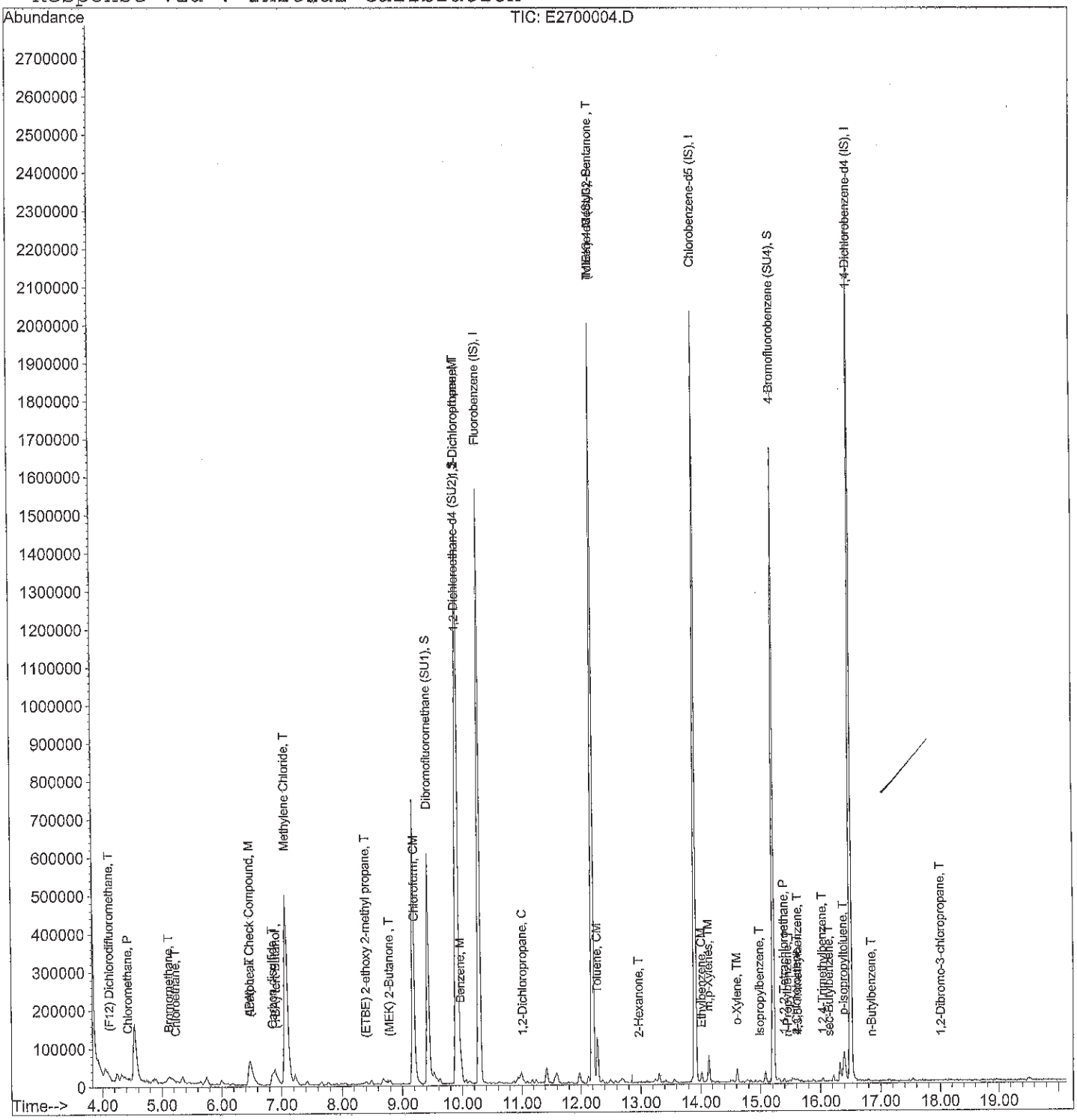
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
54)	Styrene	14.62	104	1905	-0.69 ~~ug/L~~	# NSV	1
56)	Isopropylbenzene	15.00	105	1060	0.05 ~~ug/L~~	#	55
60)	1,1,2,2-Tetrachloroethane	15.40	83	313	0.06 ~~ug/L~~	#	18
62)	n-Propylbenzene	15.45	91	1988	0.07 ~~ug/L~~	#	56
63)	2-Chlorotoluene	15.62	91	552	0.03 ~~ug/L~~	#	45
64)	1,3,5-Trimethylbenzene	15.62	105	710	0.04 ~~ug/L~~	# NSV	31
65)	4-Chlorotoluene	15.62	91	552	0.03 ~~ug/L~~	#	44
67)	1,2,4-Trimethylbenzene	16.05	105	3152	0.17 ~~ug/L~~	#	57
68)	sec-Butylbenzene	16.15	105	883	0.04 ~~ug/L~~	#	62
69)	p-Isopropyltoluene	16.38	119	1416	0.07 ~~ug/L~~	#	52
72)	n-Butylbenzene	16.85	91	272	0.01 ~~ug/L~~	#	30
74)	1,2-Dibromo-3-chloropropan	18.00	75	289	1.23 ~~ug/L~~	#	6

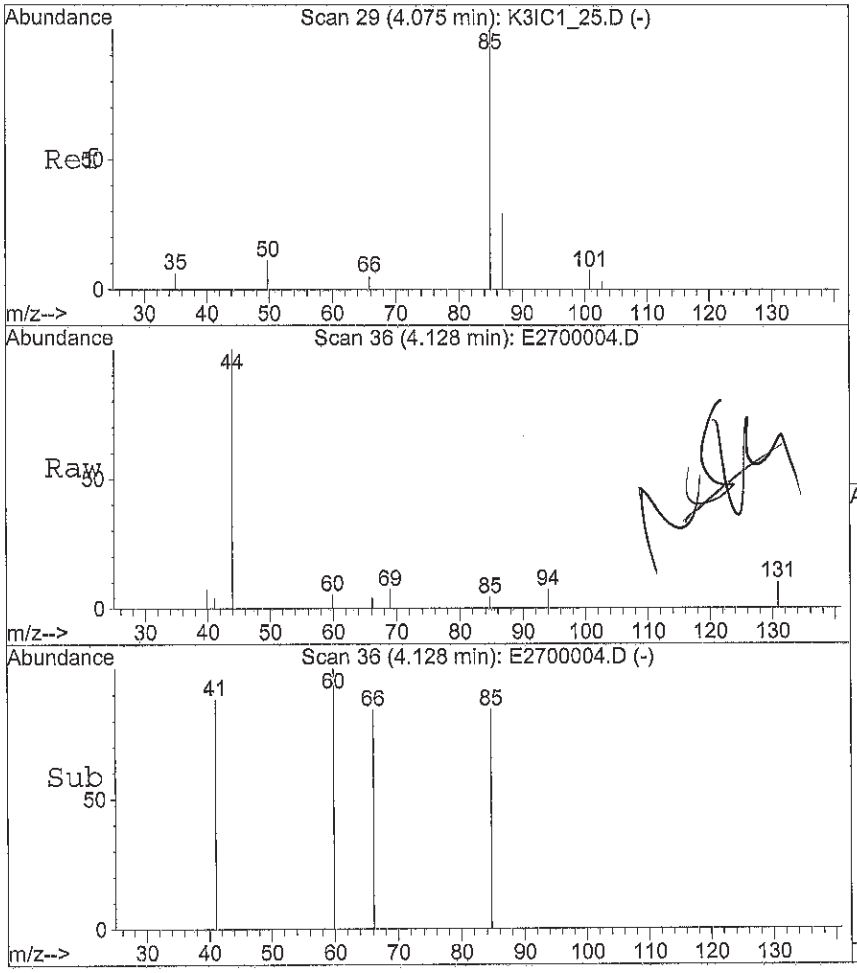
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700004.D Vial: 3
Acq On : 27 May 2014 10:57 am Operator: DN
Sample : 3E42701-03 Inst : GC/MS Ins
Misc : 100cc SVL-802-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:30 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

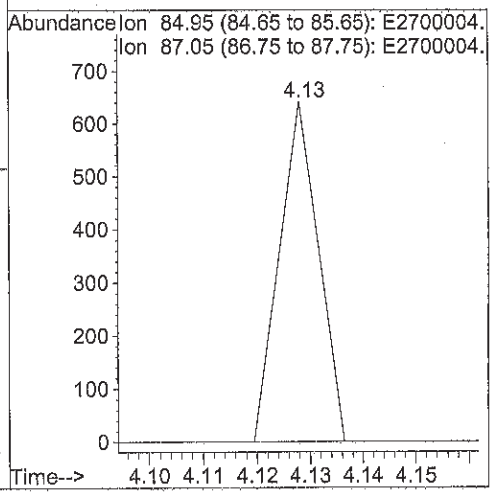


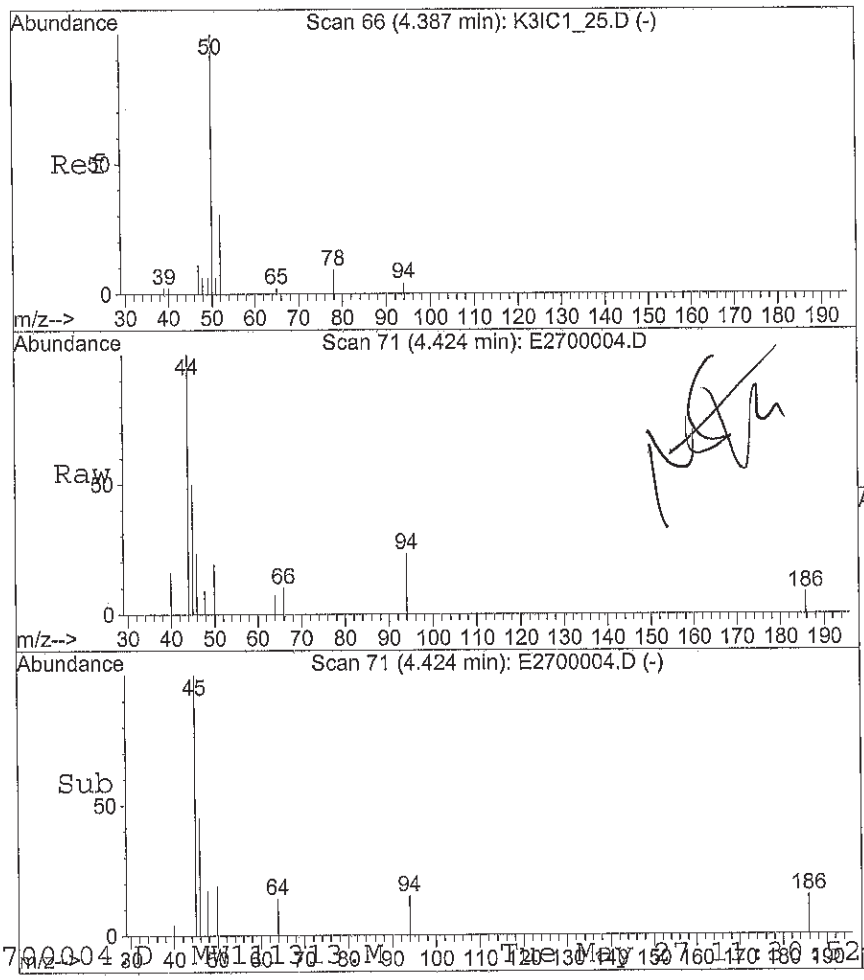


#3
(F12) Dichlorodifluoromethane
Concen: 0.08 ug/L
RT: 4.13 min Scan# 36
Delta R.T. 0.05 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 85 Resp: 325

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

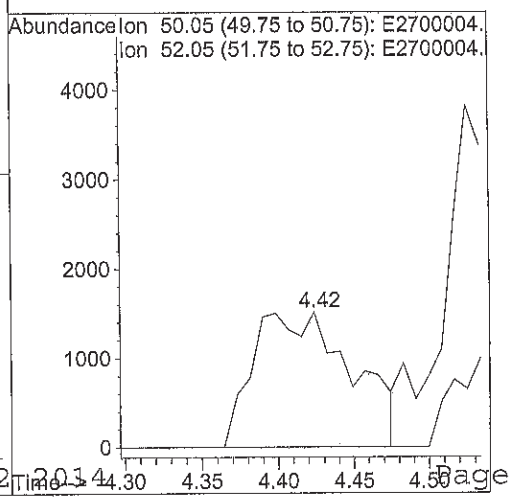


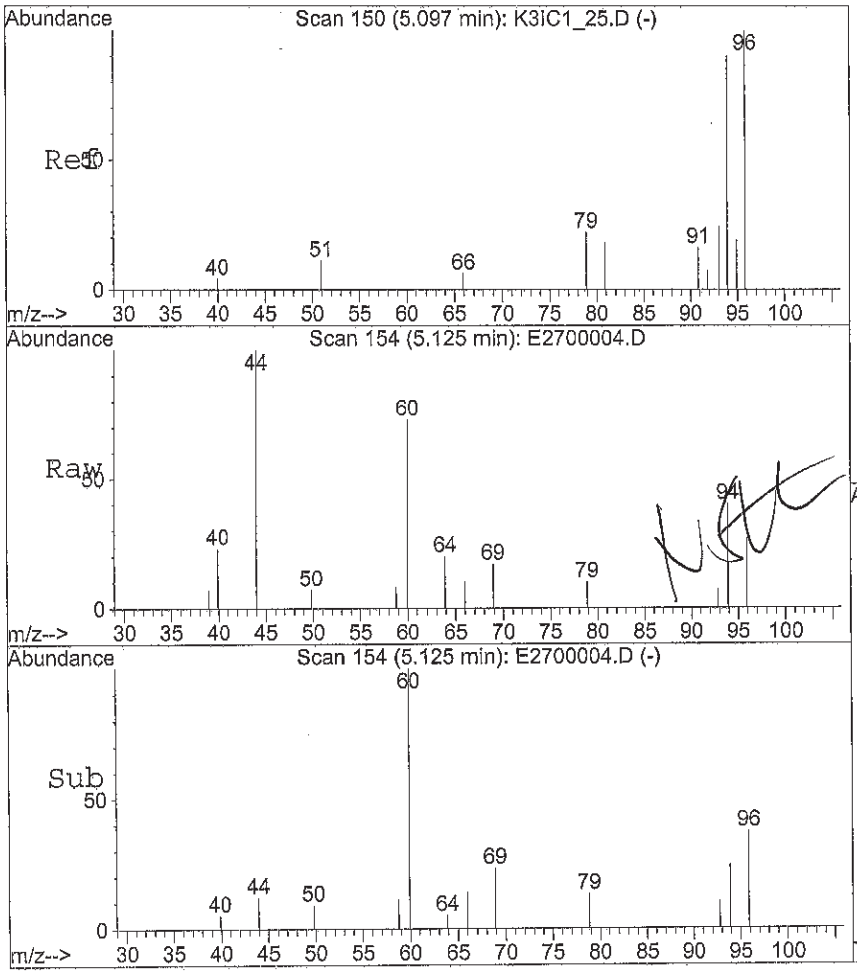


#4
Chloromethane
Concen: 1.11 ug/L
RT: 4.42 min Scan# 71
Delta R.T. 0.04 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 50 Resp: 6825

Ion	Ratio	Lower	Upper
50	100		
52	0.0	26.9	40.3#

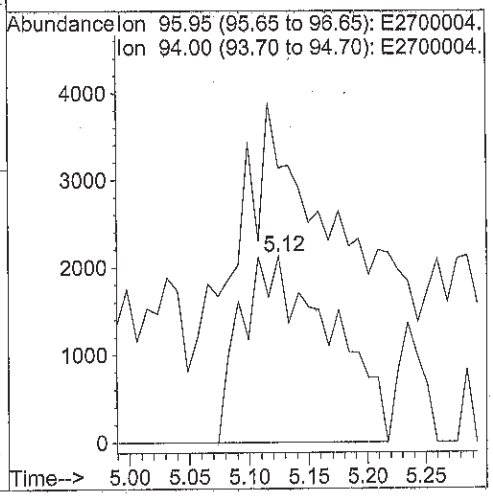


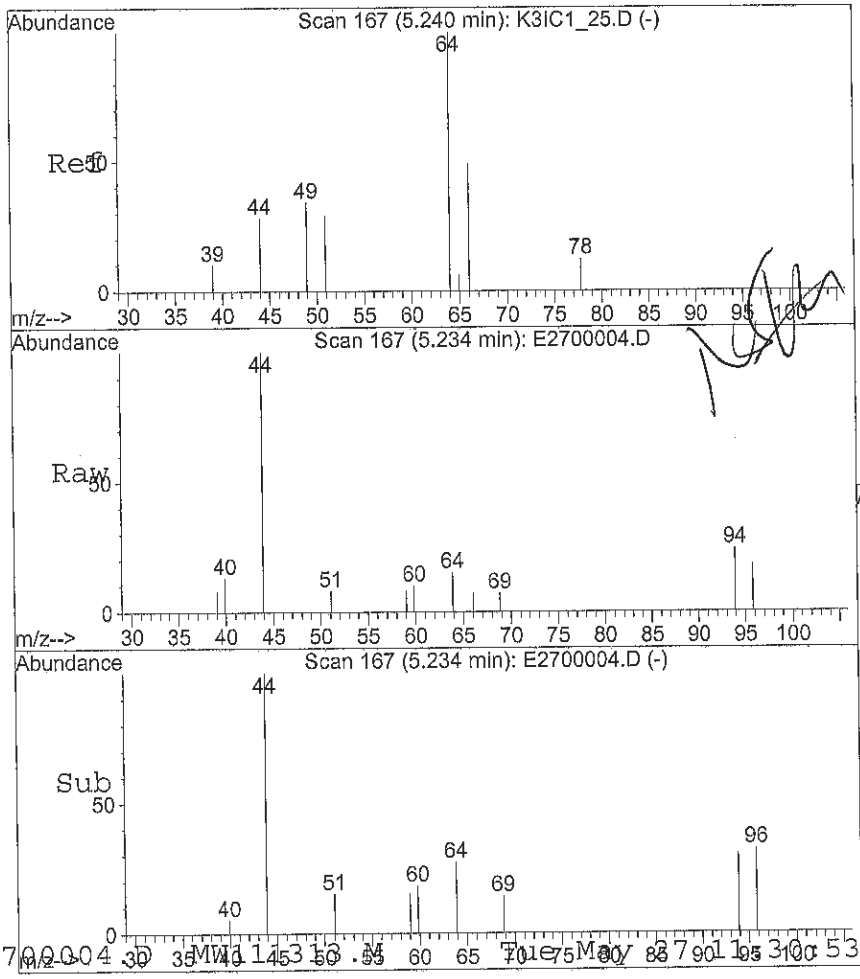


#6
Bromomethane
Concen: 4.01 ug/L
RT: 5.12 min Scan# 154
Delta R.T. 0.03 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 96 Resp: 11107

Ion	Ratio	Lower	Upper
96	100		
94	167.7	101.0	151.4#

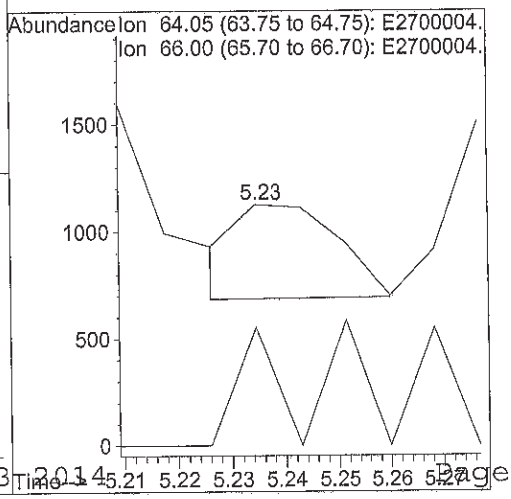


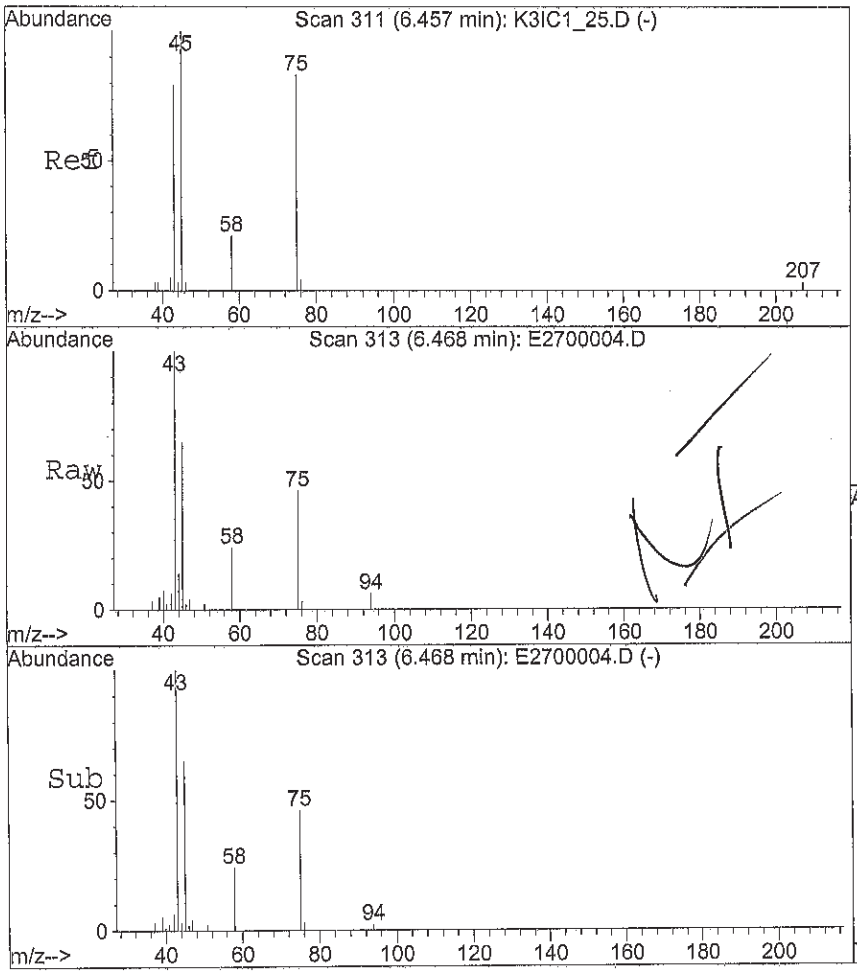


#7
Chloroethane
Concen: 1.08 ug/L
RT: 5.23 min Scan# 167
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 64 Resp: 573

Ion	Ratio	Lower	Upper
64	100		
66	49.0	35.4	53.0

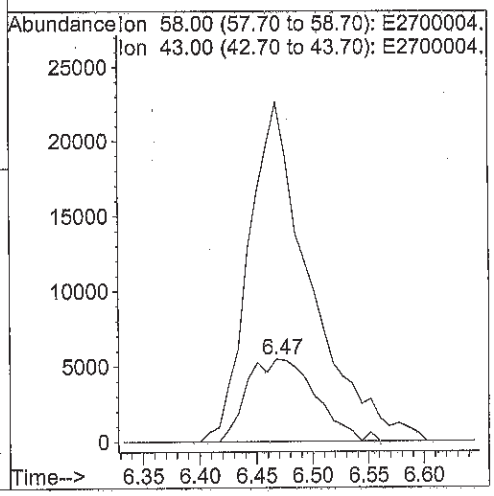


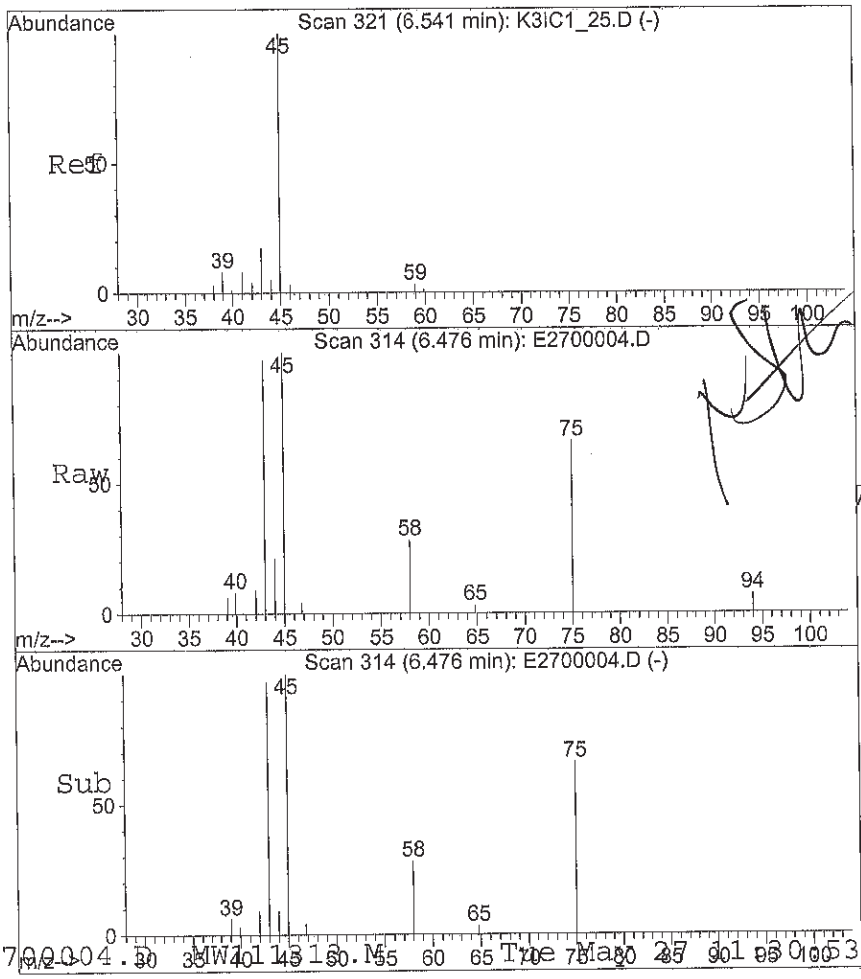


#11
Acetone
Concen: 37.30 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 58 Resp: 23213

Ion	Ratio	Lower	Upper
58	100		
43	369.2	360.9	541.3

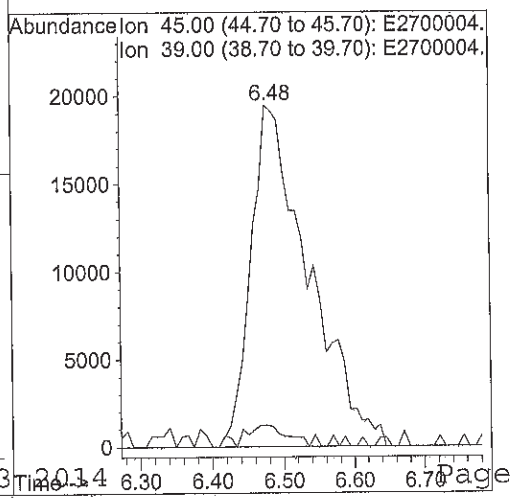


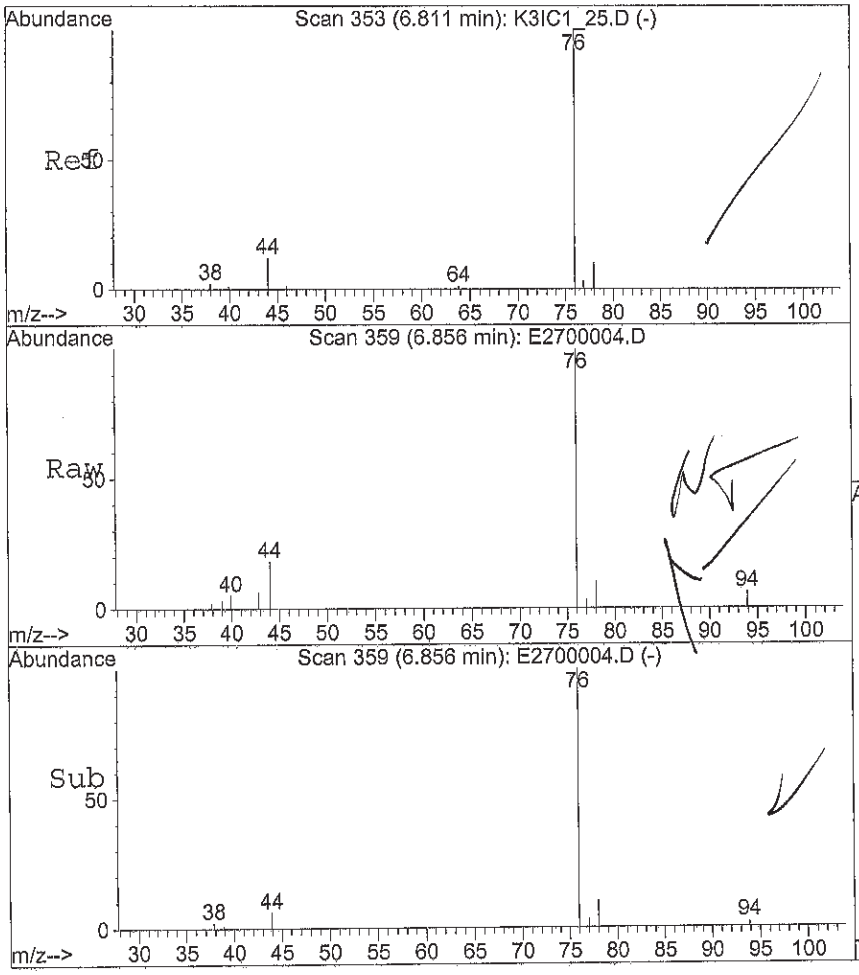


#12
(IPA) Leak Check Compound
Concen: 523.26 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.06 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 45 Resp: 109759

Ion	Ratio	Lower	Upper
45	100		
39	4.3	4.9	7.3#

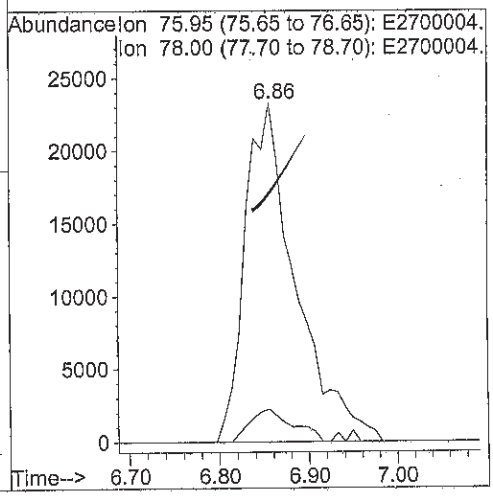


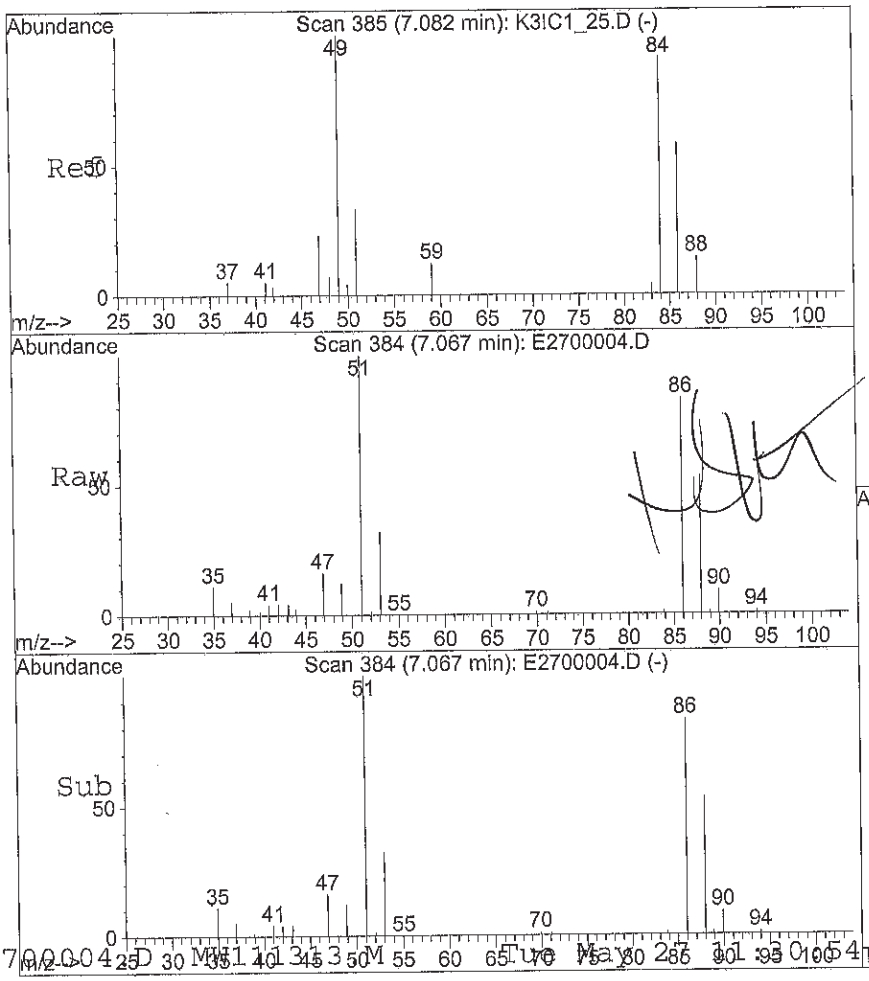


#13
Carbon disulfide
Concen: 6.29 ug/L
RT: 6.86 min Scan# 359
Delta R.T. 0.04 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 76 Resp: 91217

Ion	Ratio	Lower	Upper
76	100		
78	8.2	7.0	10.4

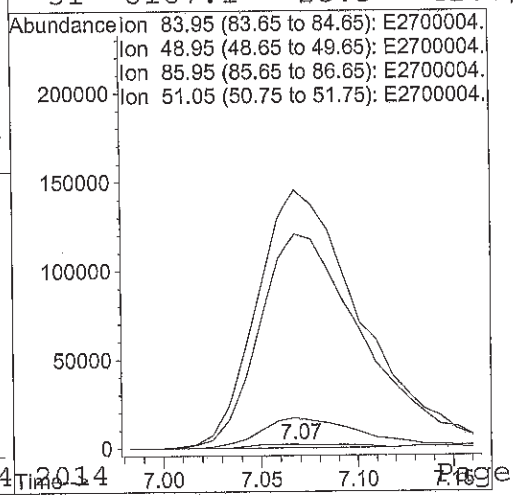


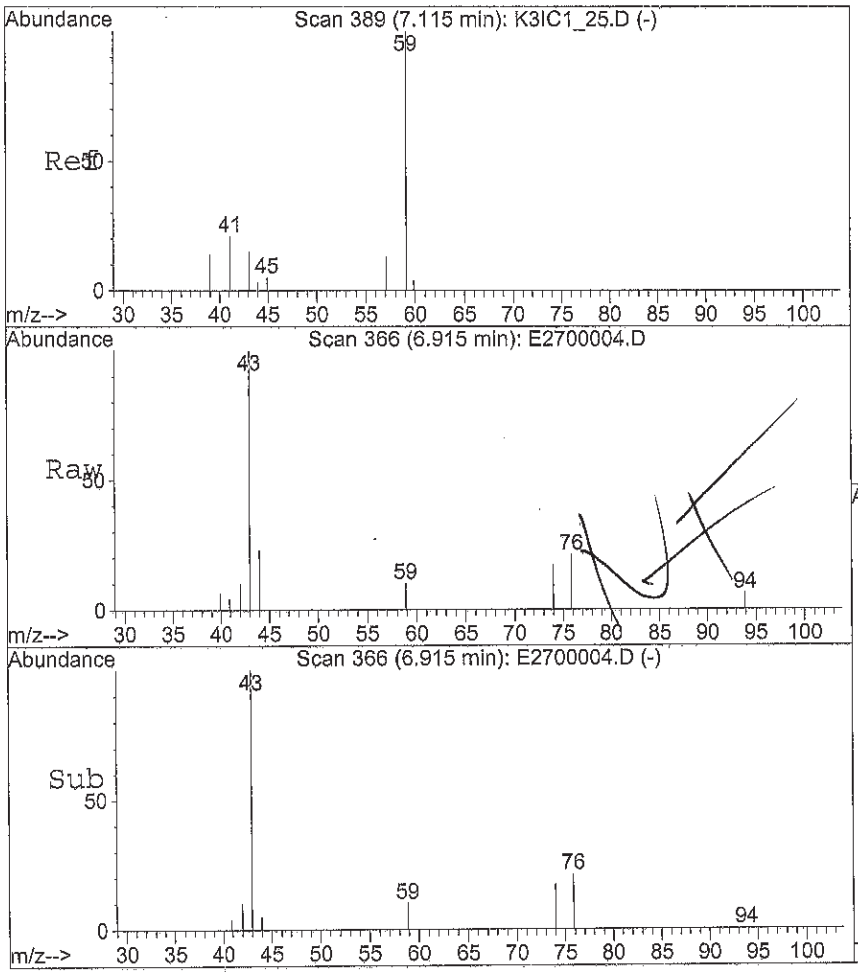


#14
Methylene Chloride
Concen: 1.41 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 84 Resp: 6783

Ion	Ratio	Lower	Upper
84	100		
49	910.6	89.8	134.6#
86	6782.9	51.1	76.7#
51	8167.1	28.5	42.7#

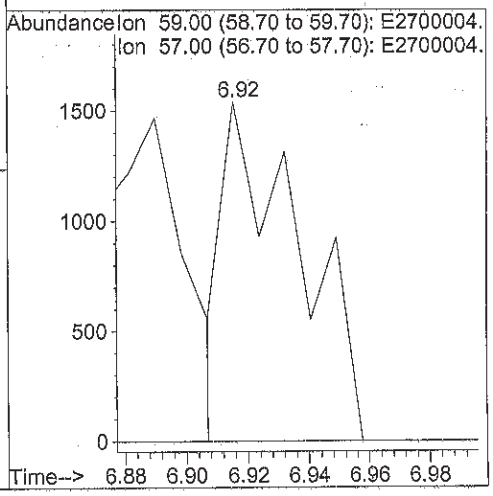


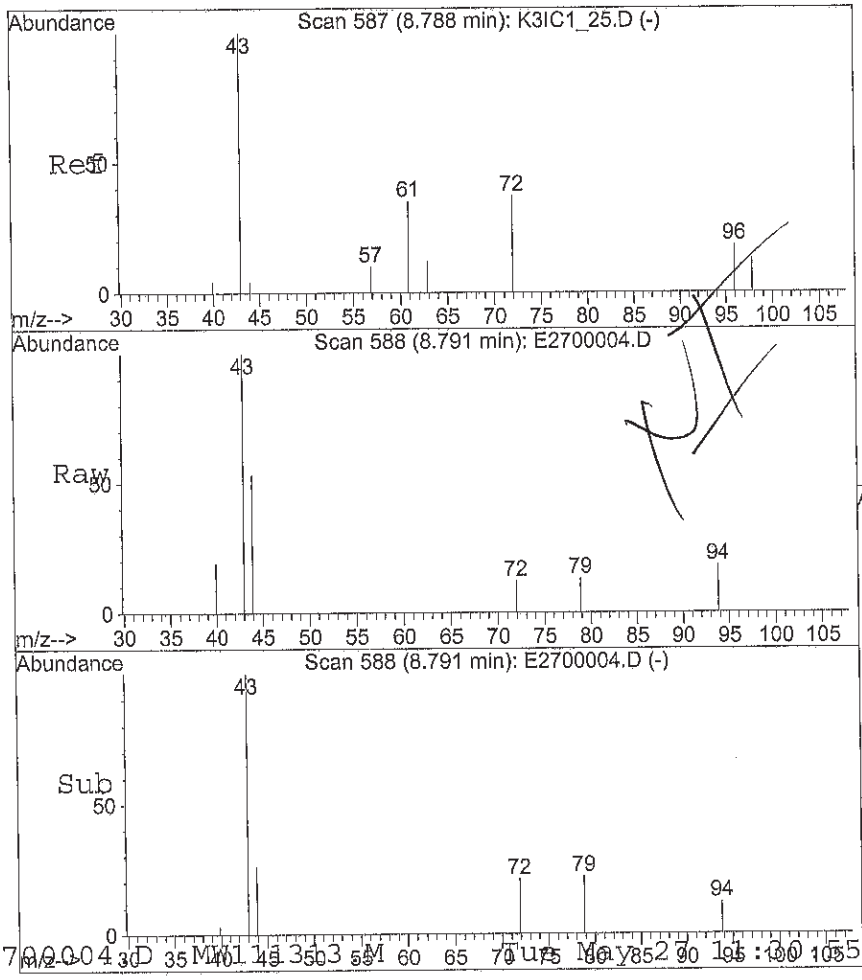


#15
(TBA) tert-Butanol
Concen: 8.95 ug/L
RT: 6.92 min Scan# 366
Delta R.T. -0.20 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 59 Resp: 2665

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

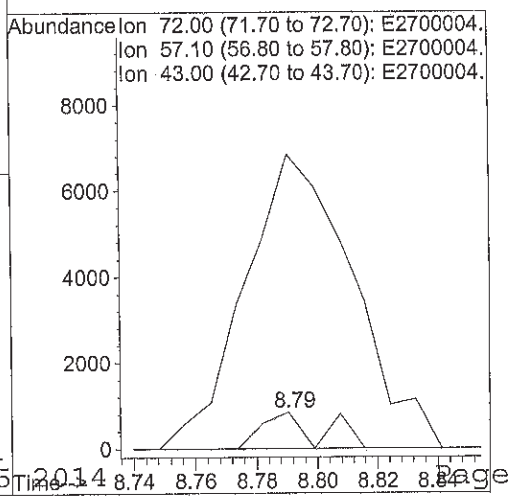


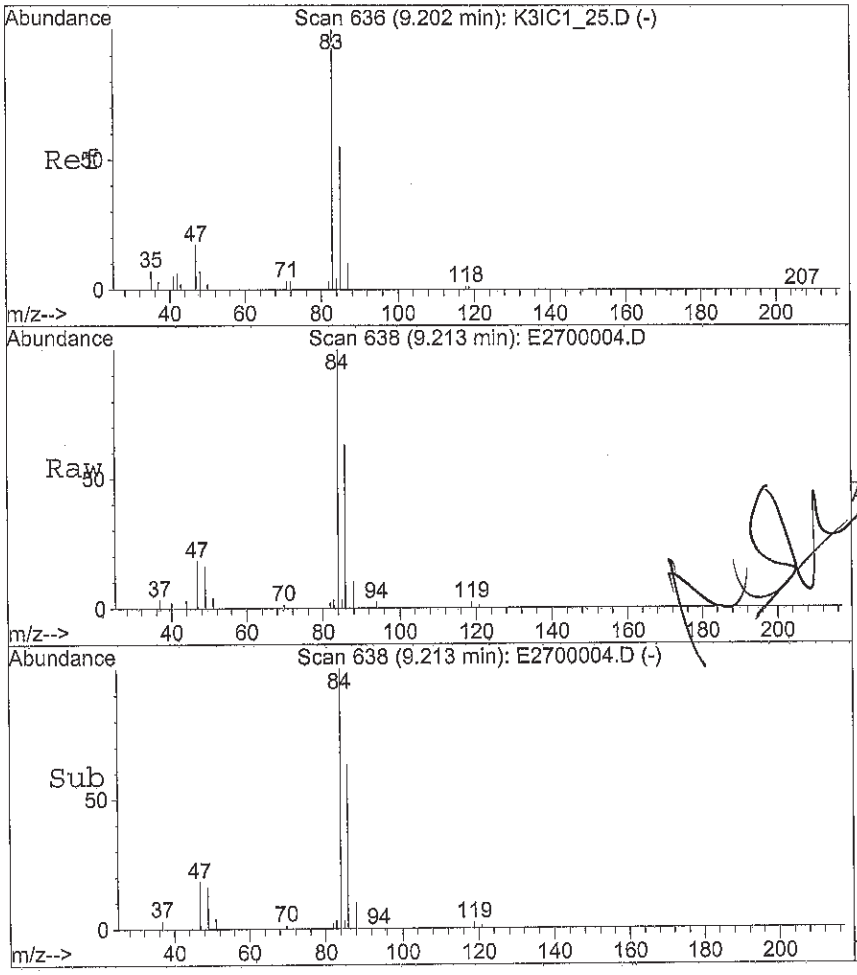


#21
(MEK) 2-Butanone
Concen: 2.30 ug/L
RT: 8.79 min Scan# 588
Delta R.T. 0.00 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 72 Resp: 1128

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	1499.6	314.2	471.2#

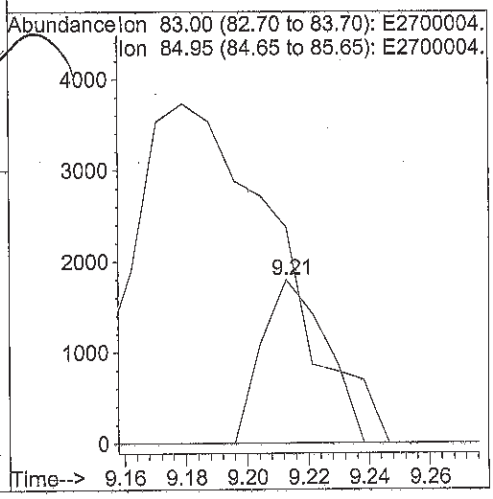


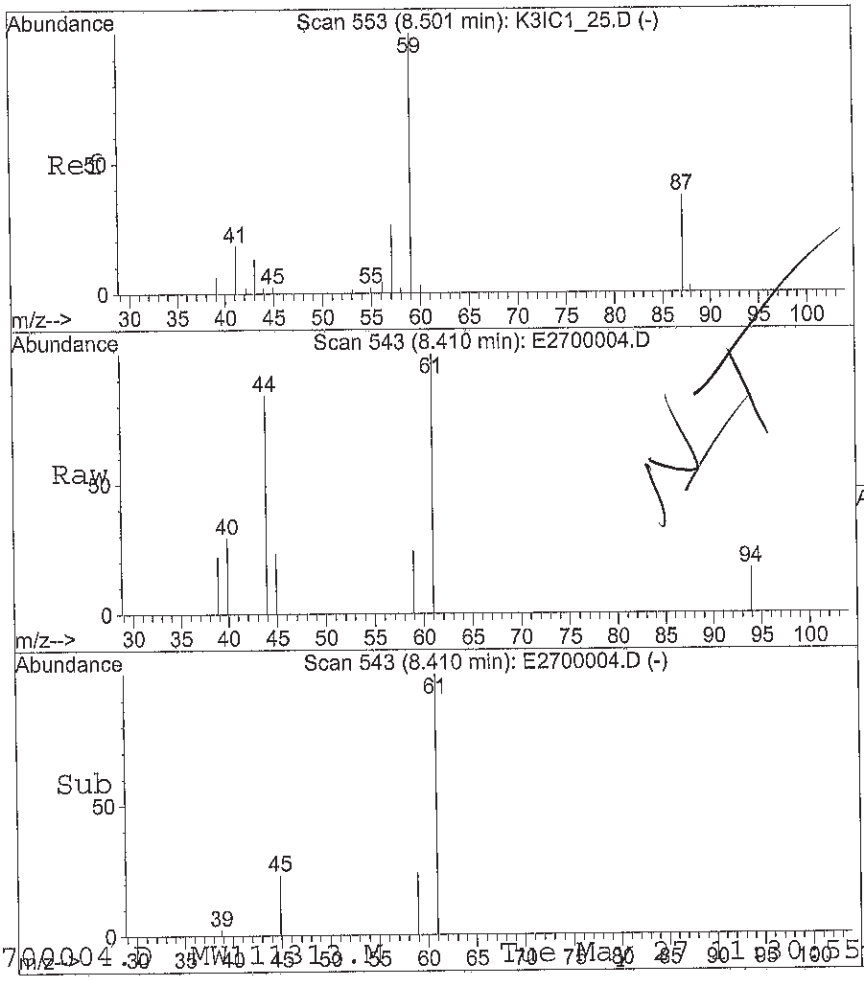


#24
Chloroform
Concen: 0.29 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 83 Resp: 2633

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

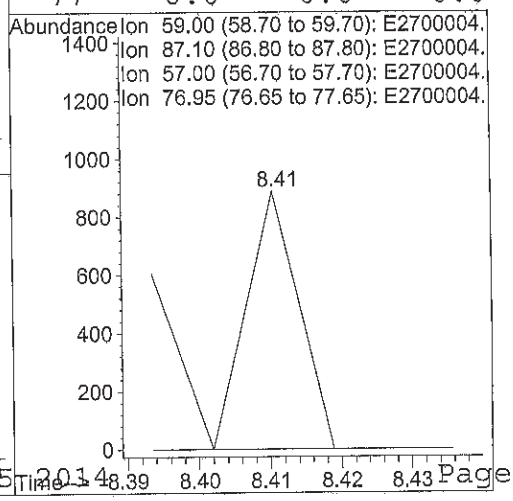


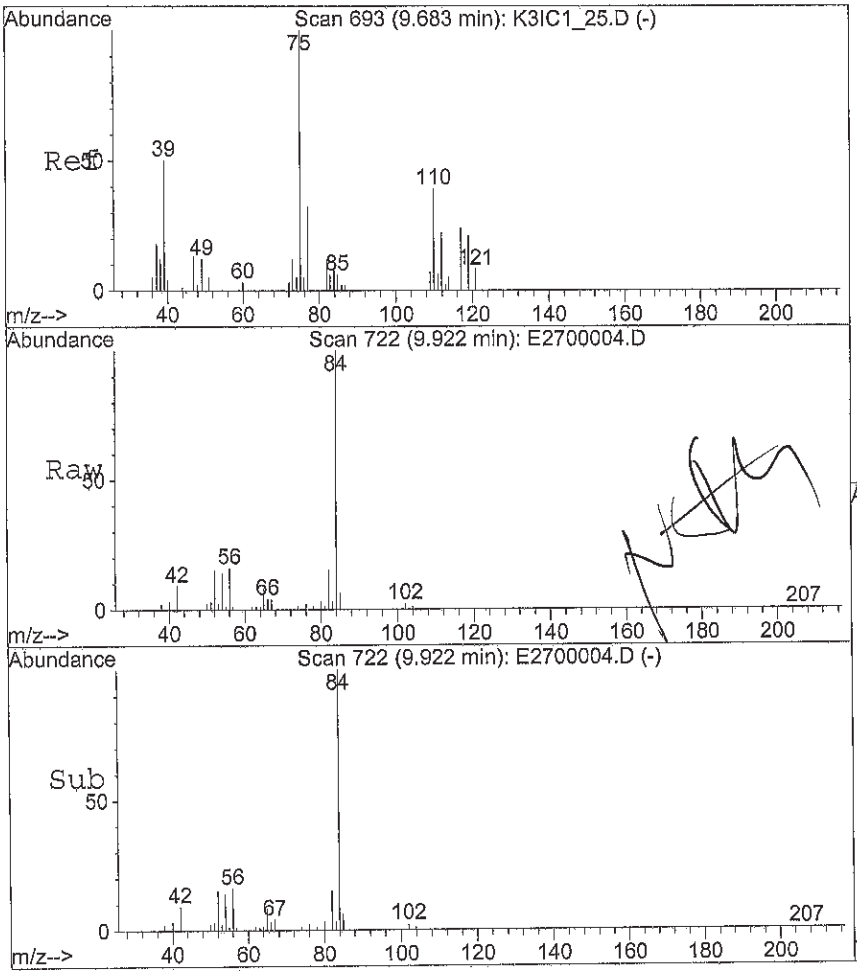


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.04 ug/L
RT: 8.41 min Scan# 543
Delta R.T. -0.09 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 59 Resp: 449

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

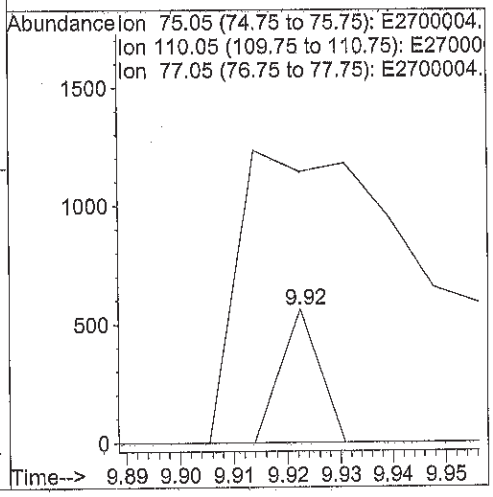


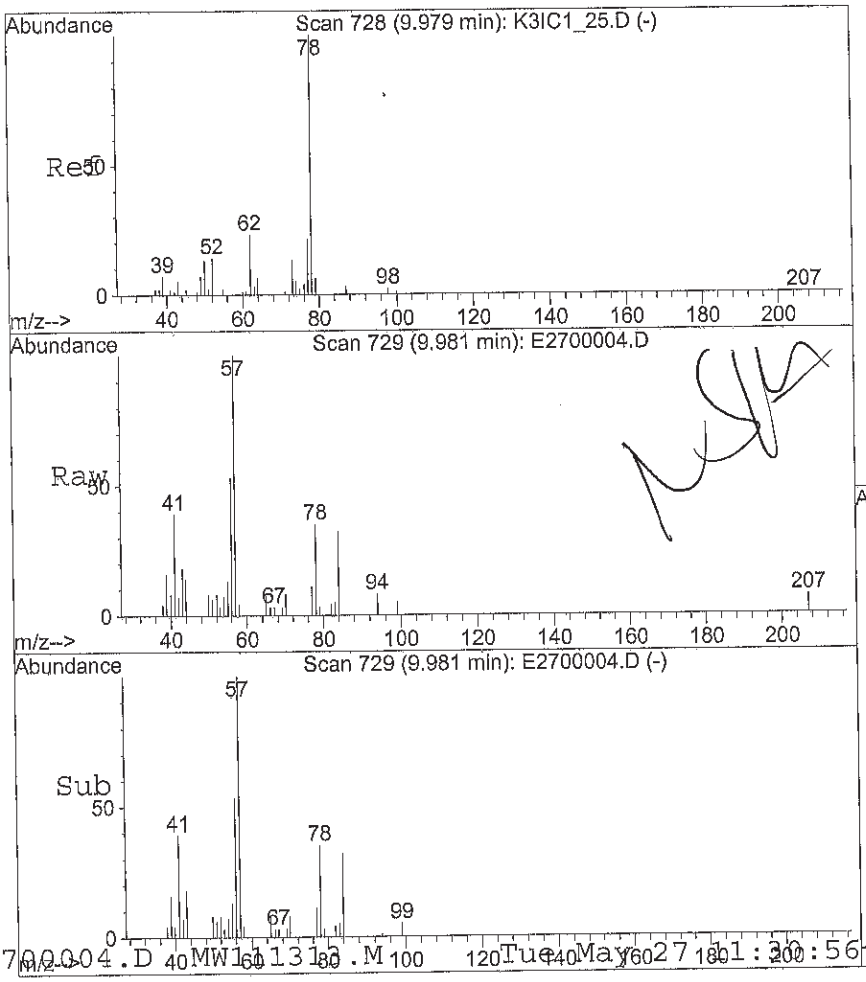


#29
1,1-Dichloropropene
Concen: 0.04 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 75 Resp: 284

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	919.7	25.0	37.4#

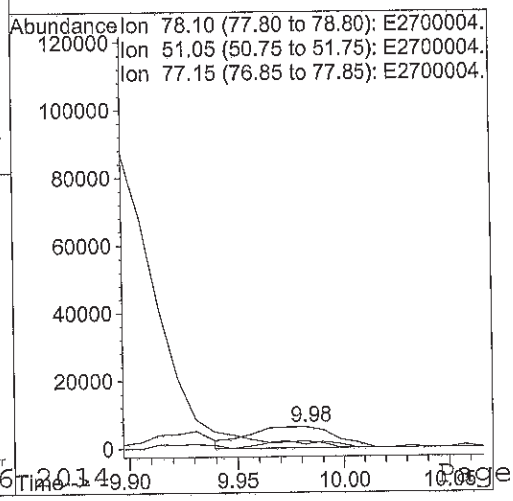


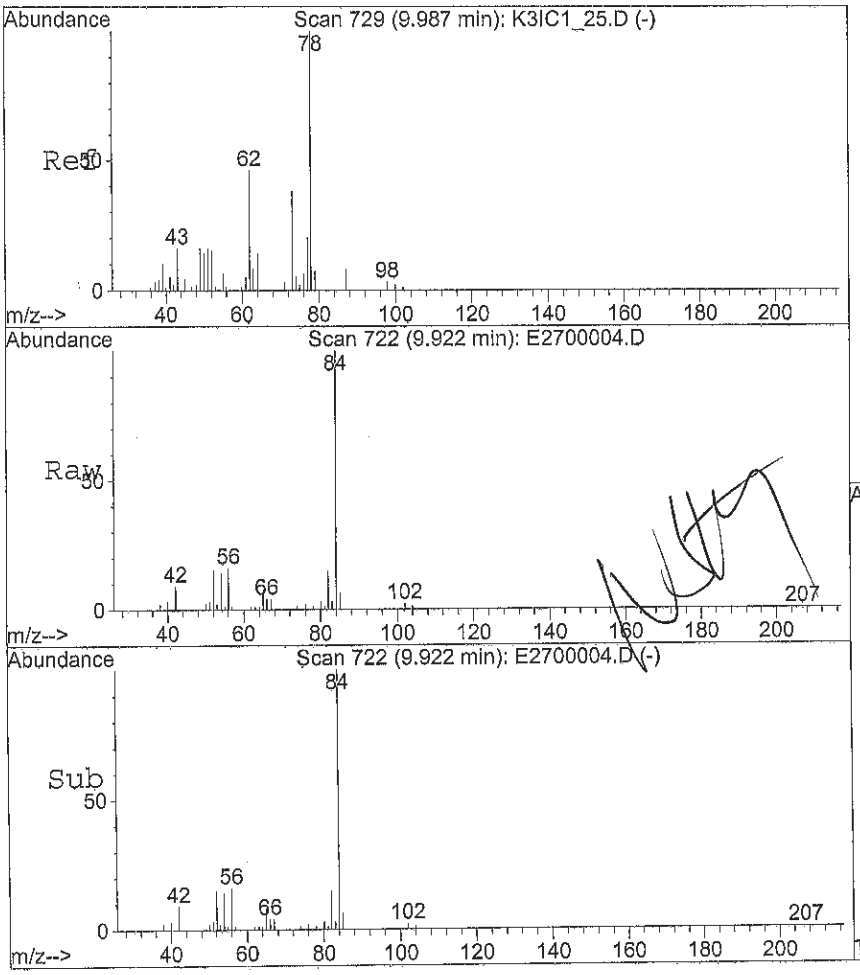


#31
Benzene
Concen: 1.06 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 78 Resp: 17478

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	20.5	16.6	24.8

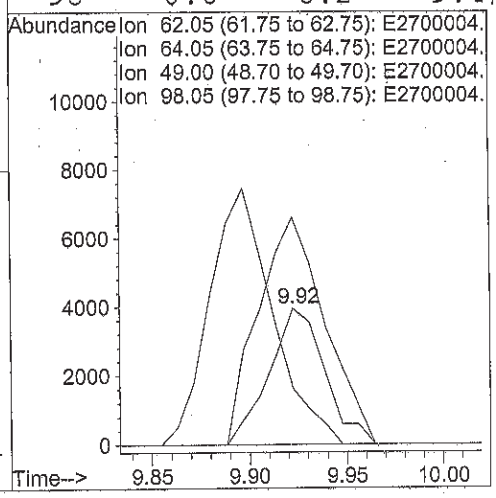


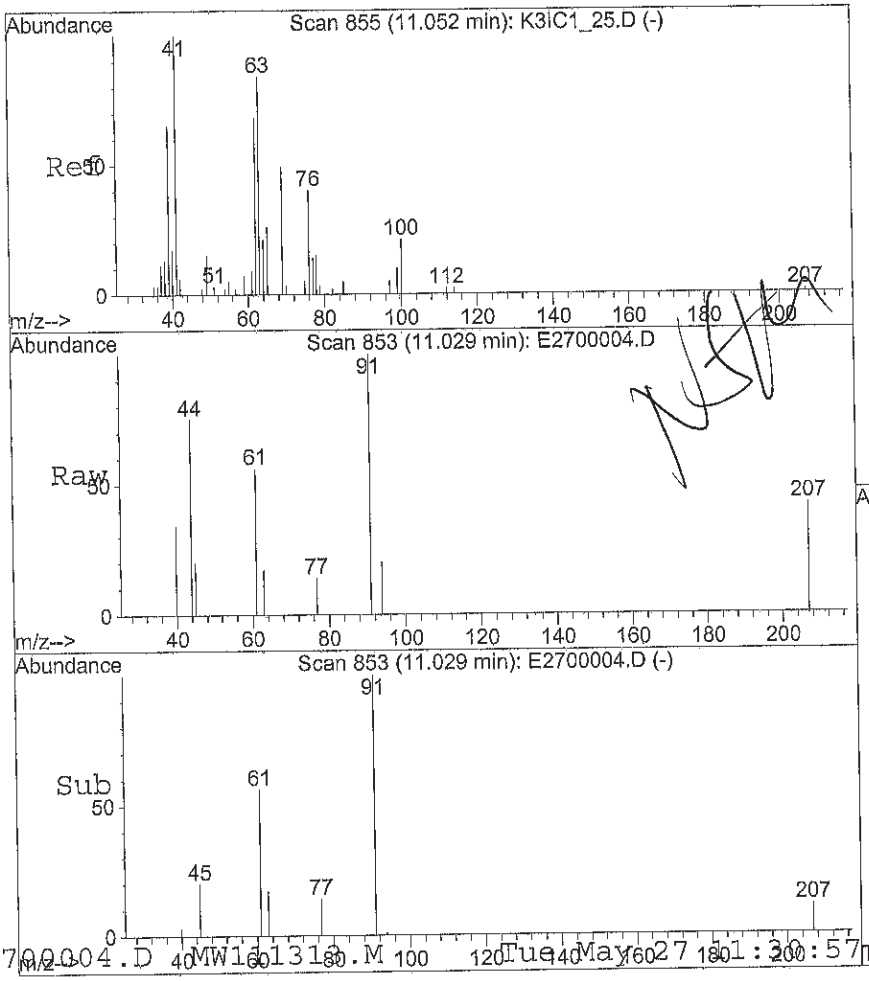


#32
1,2-Dichloroethane
Concen: 1.34 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 62 Resp: 7790

Ion	Ratio	Lower	Upper
62	100		
64	200.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

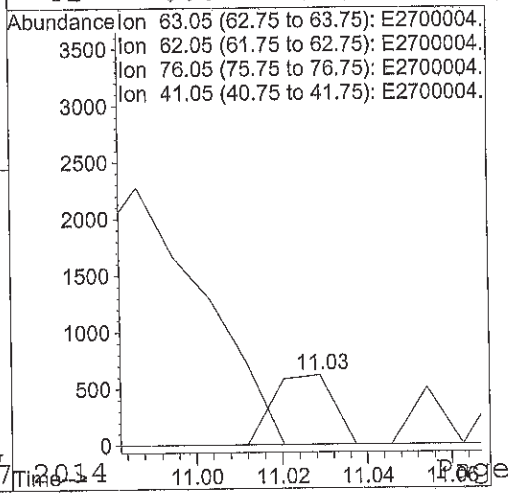


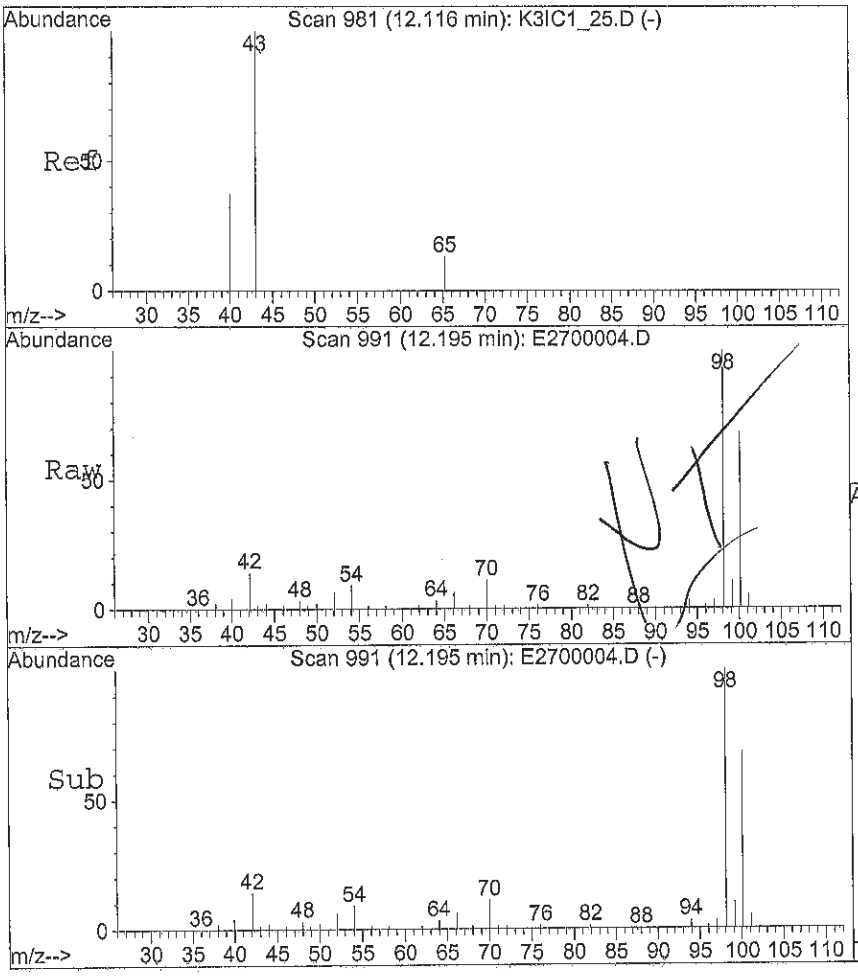


#34
1,2-Dichloropropane
Concen: 0.16 ug/L
RT: 11.03 min Scan# 853
Delta R.T. -0.02 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 63 Resp: 609

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

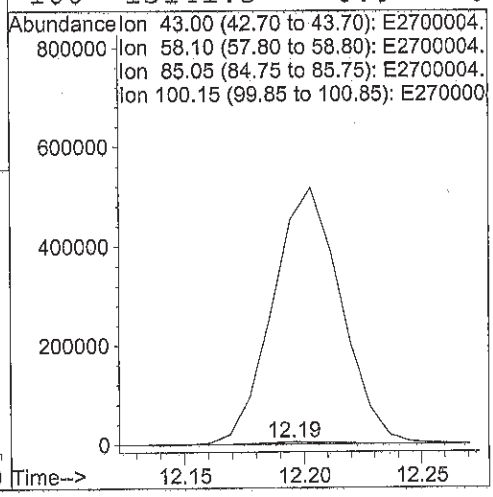


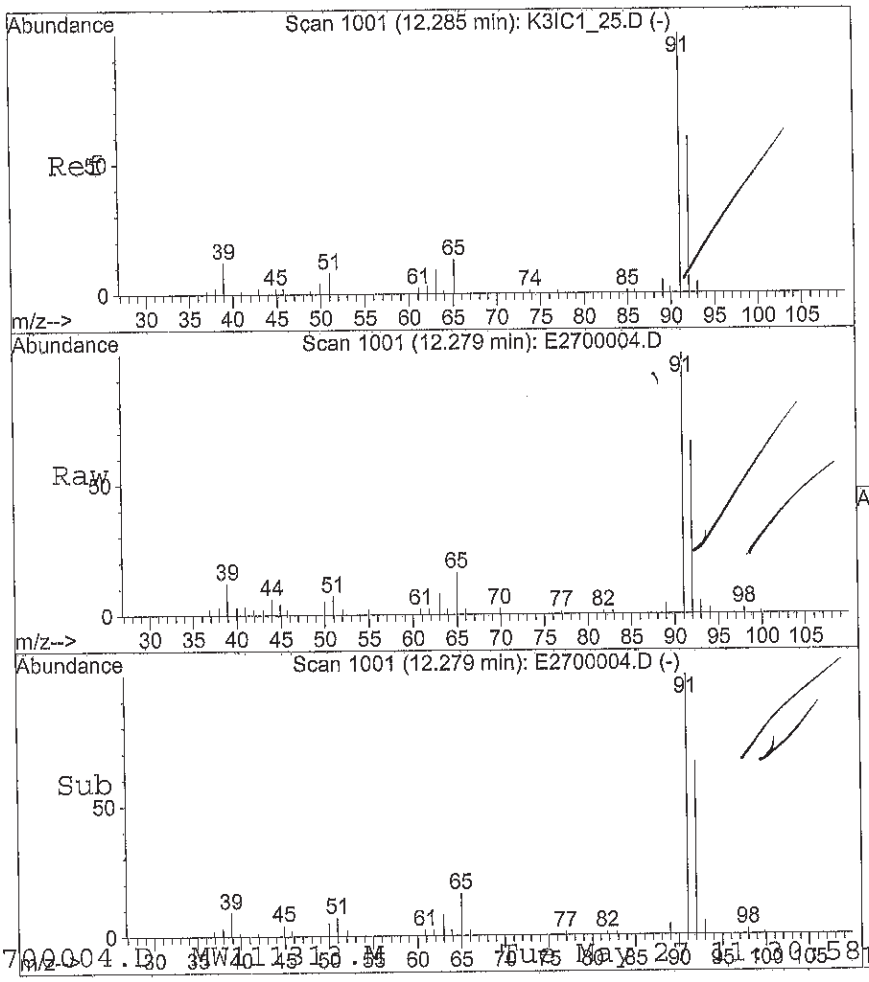


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.99 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 43 Resp: 7890

Ion	Ratio	Lower	Upper
43	100		
58	131.7	0.0	0.0#
85	0.0	0.0	0.0
100	13141.3	0.0	0.0#

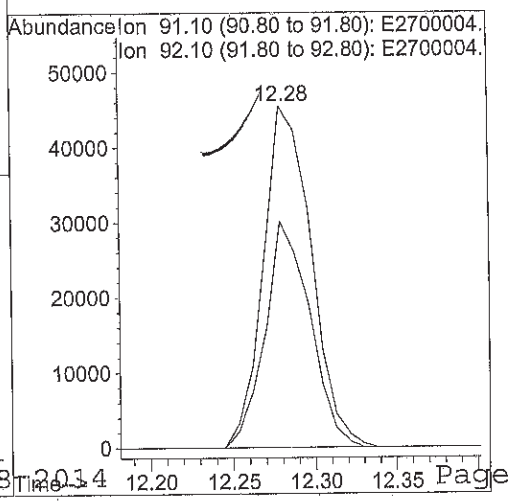


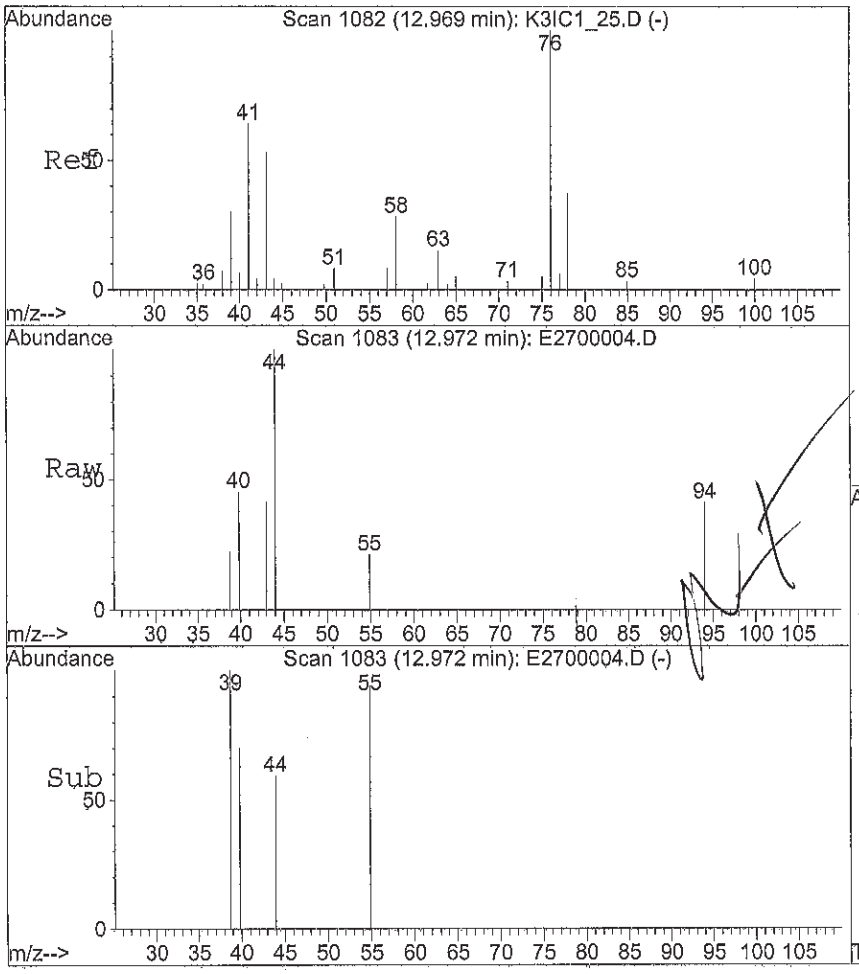


#41
Toluene
Concen: 5.10 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 91 Resp: 91885

Ion	Ratio	Lower	Upper
91	100		
92	62.2	47.4	71.0

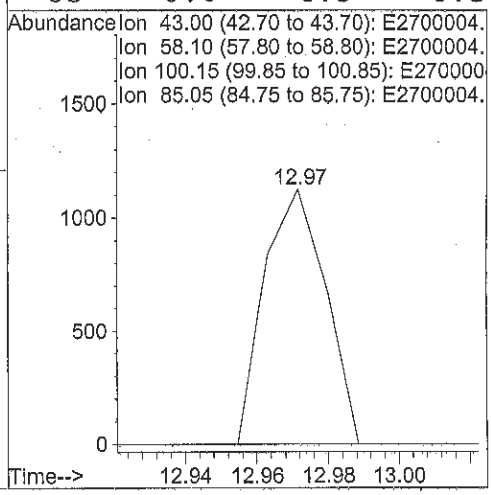


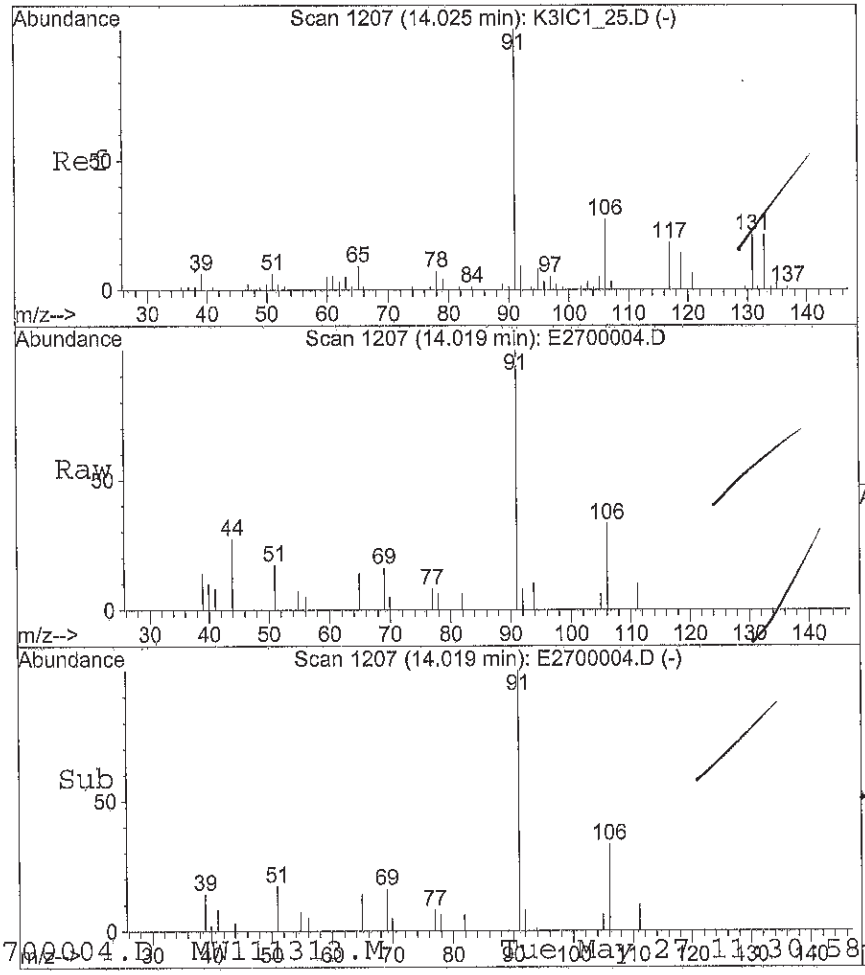


#46
2-Hexanone
Concen: 0.46 ug/L
RT: 12.97 min Scan# 1083
Delta R.T. 0.00 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 43 Resp: 1334

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

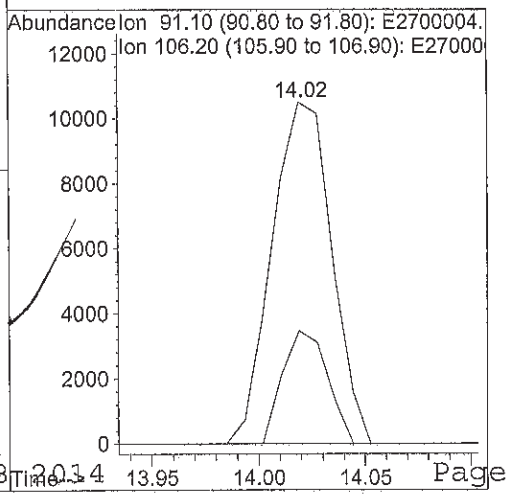


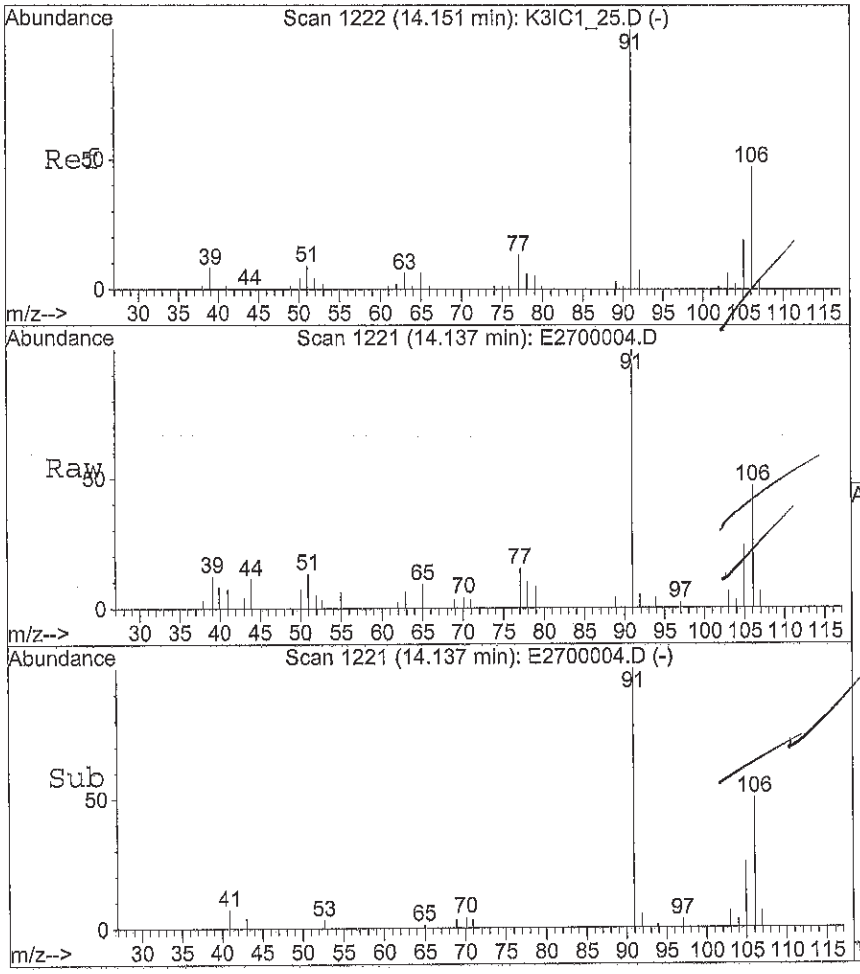


#51
Ethylbenzene
Concen: 0.99 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 91 Resp: 20349

Ion	Ratio	Lower	Upper
91	100		
106	24.7	23.5	35.3

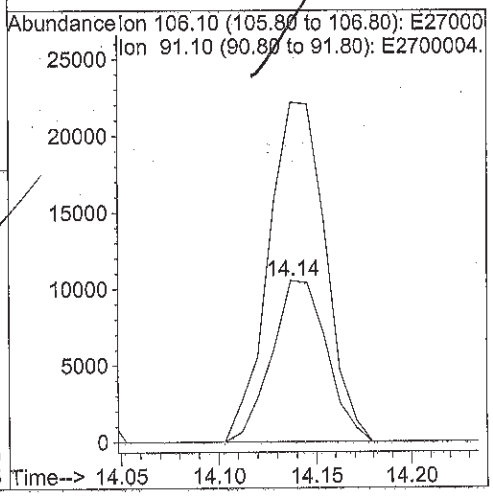


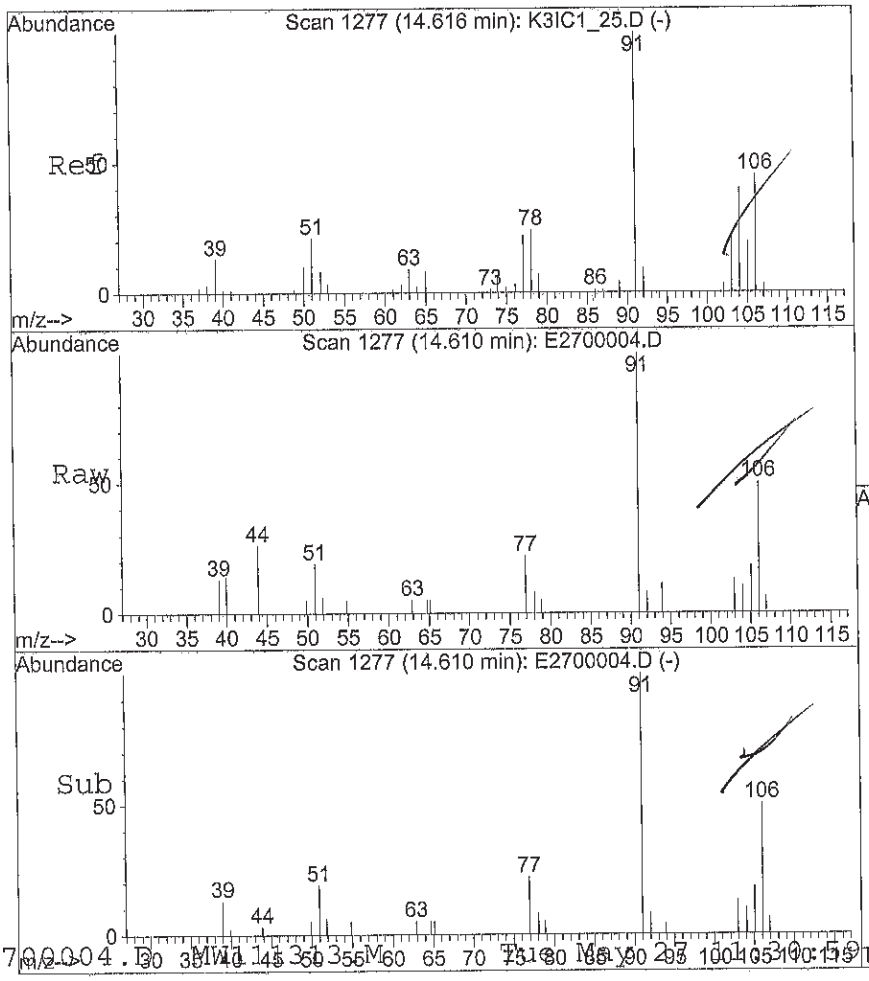


#52
m,p-Xylenes
Concen: 2.85 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion:106 Resp: 20727

Ion	Ratio	Lower	Upper
106	100		
91	216.6	177.1	265.7

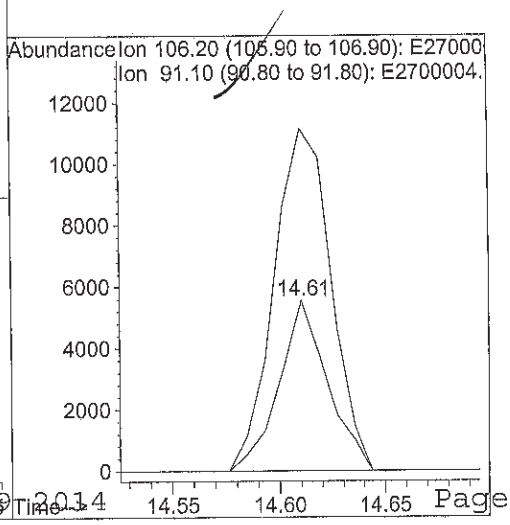


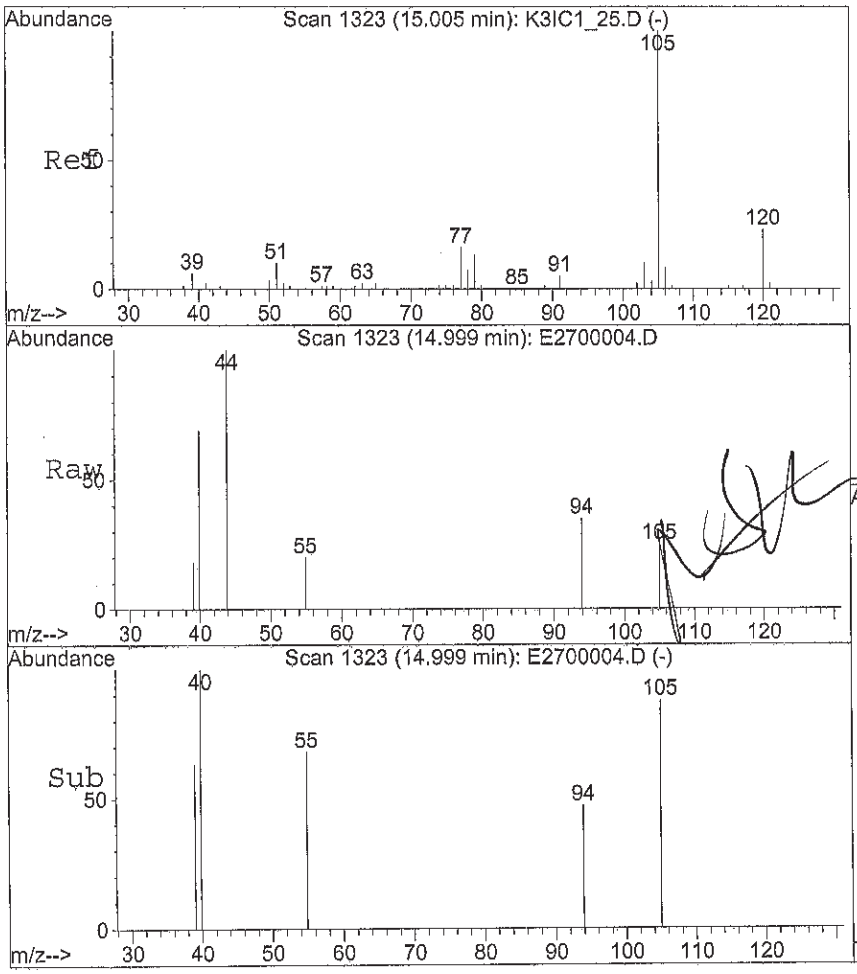


#53
o-Xylene
Concen: 1.22 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion:106 Resp: 8783

Ion	Ratio	Lower	Upper
106	100		
91	235.4	179.0	268.6

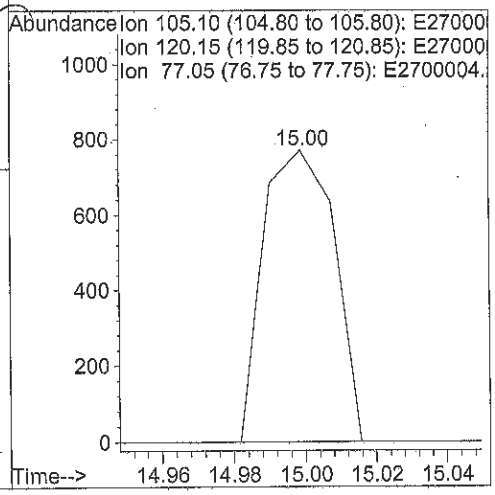


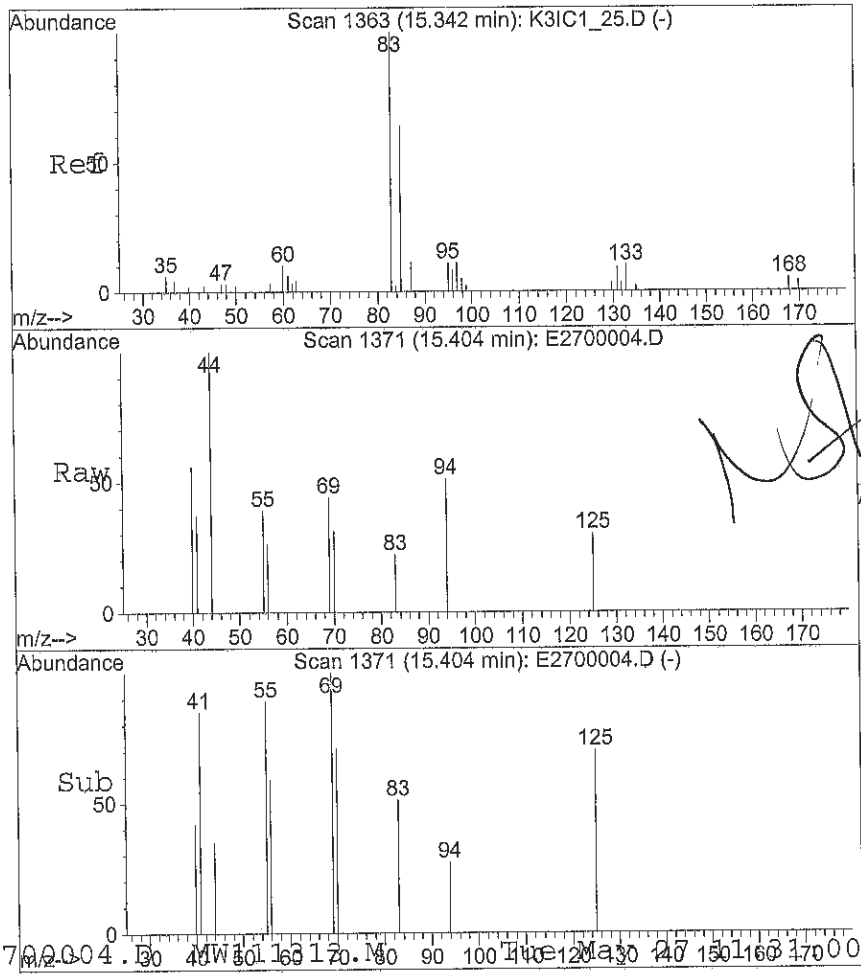


#56
Isopropylbenzene
Concen: 0.05 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion:105 Resp: 1060

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

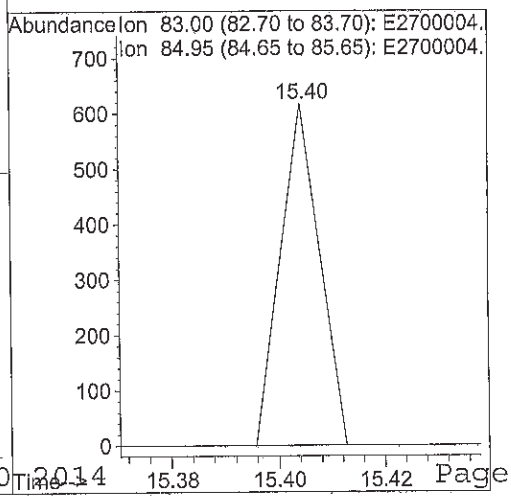


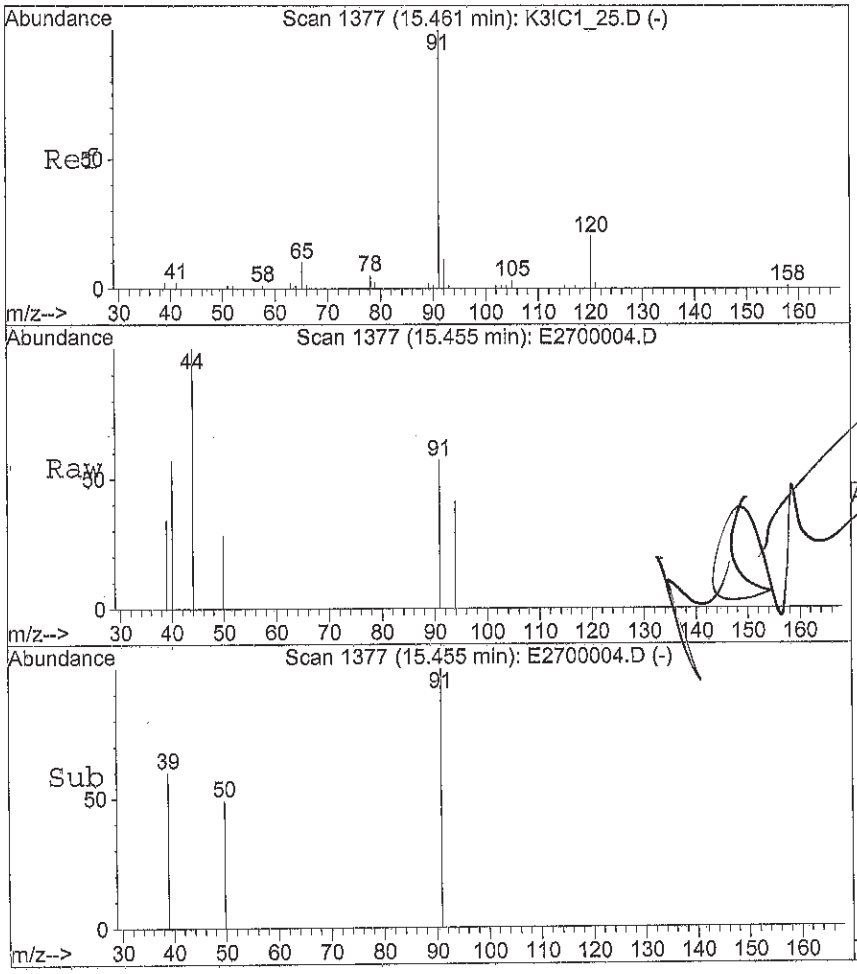


#60
1,1,2,2-Tetrachloroethane
Concen: 0.06 ug/L
RT: 15.40 min Scan# 1371
Delta R.T. 0.06 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 83 Resp: 313

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

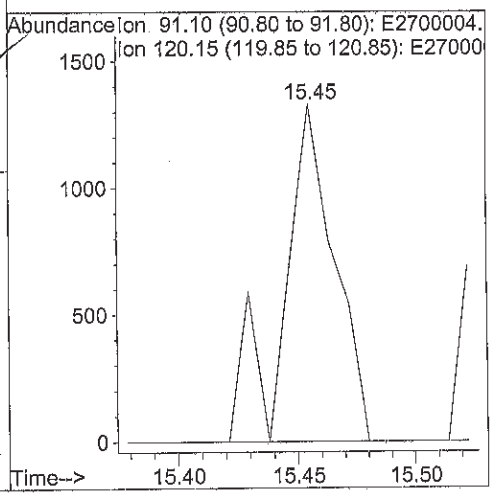


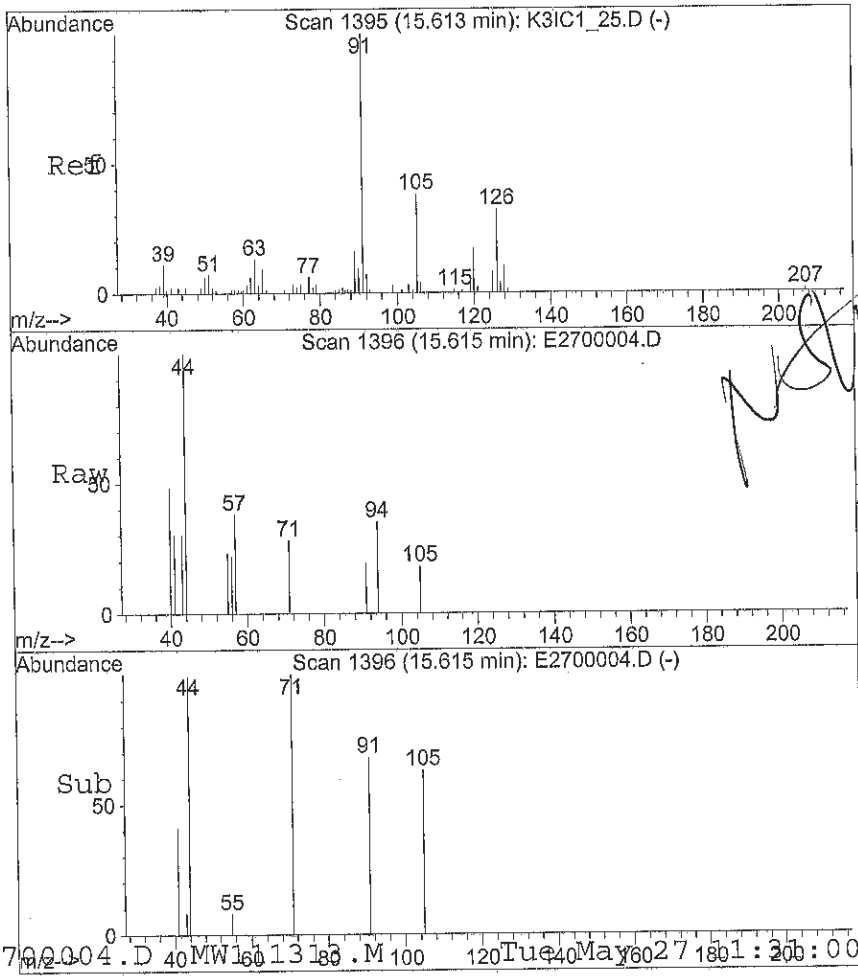


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 91 Resp: 1988

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

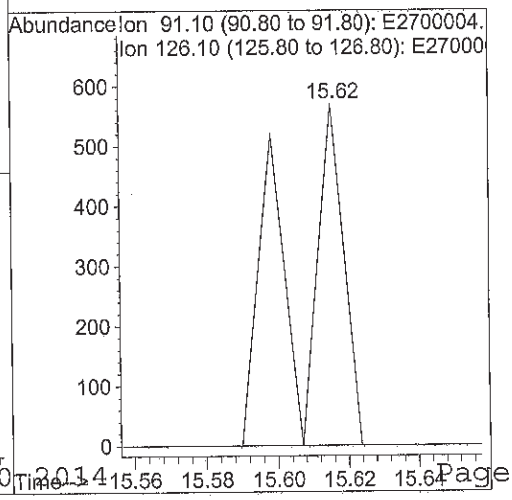


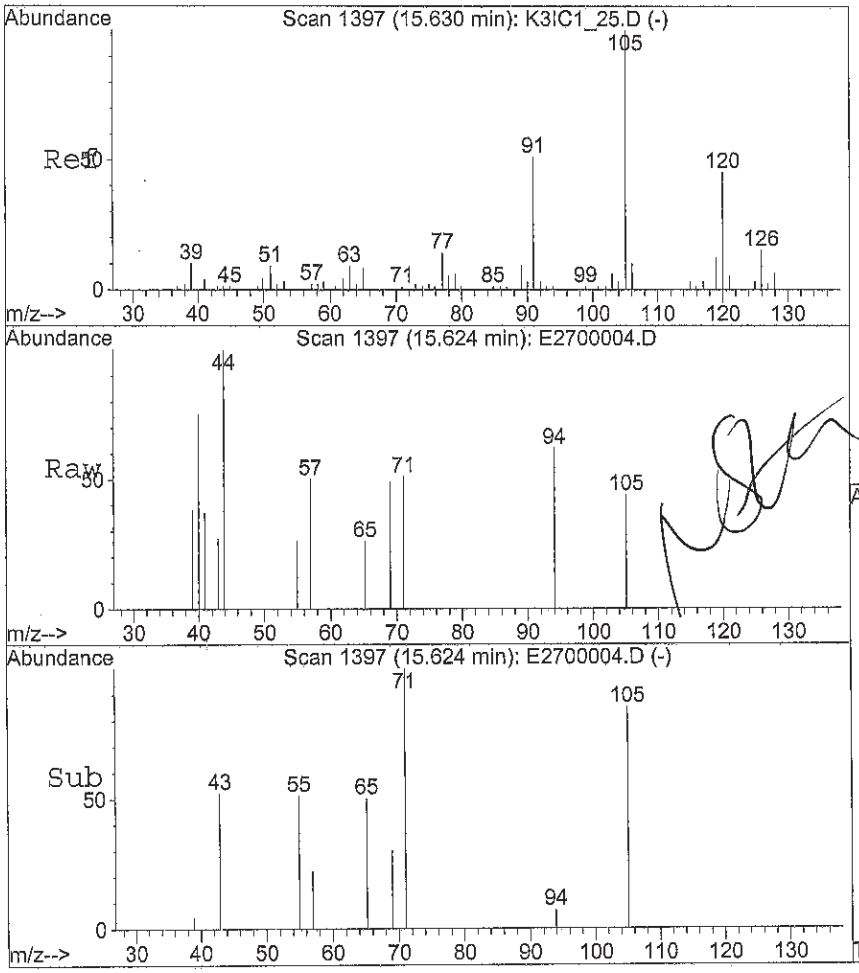


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. 0.00 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 91 Resp: 552

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

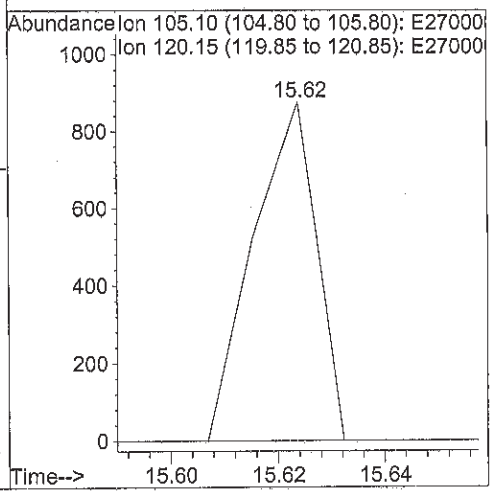


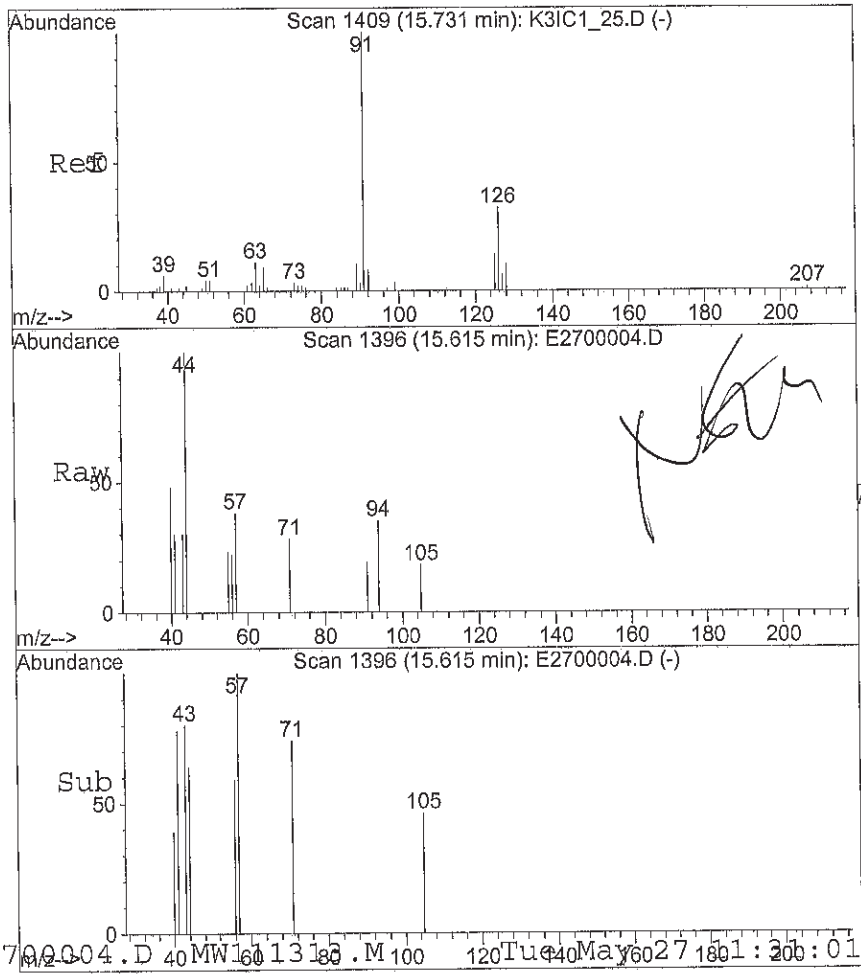


#64
1,3,5-Trimethylbenzene
Concen: 0.04 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion:105 Resp: 710

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

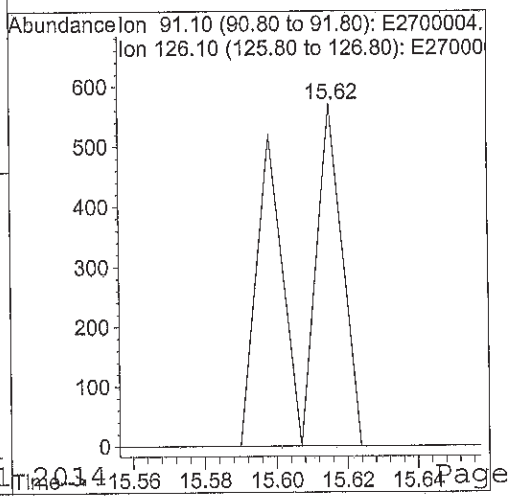


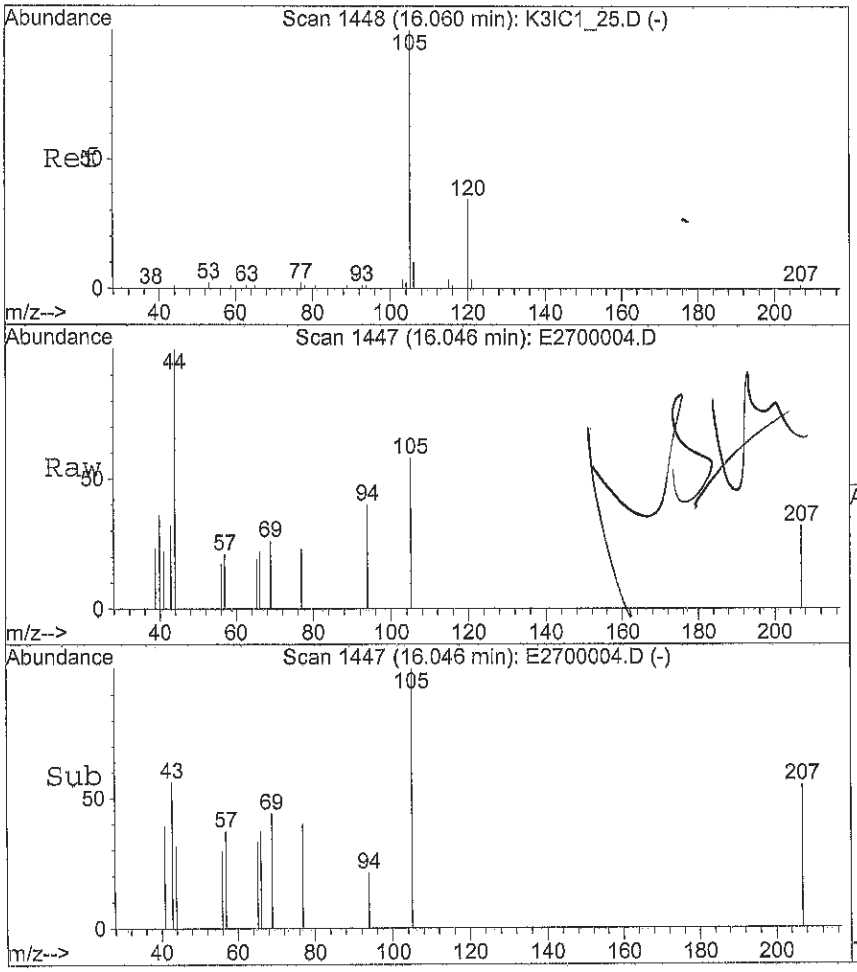


#65
4-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.12 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 91 Resp: 552

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

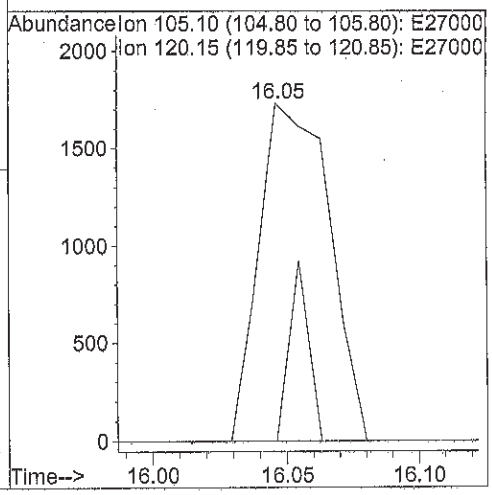


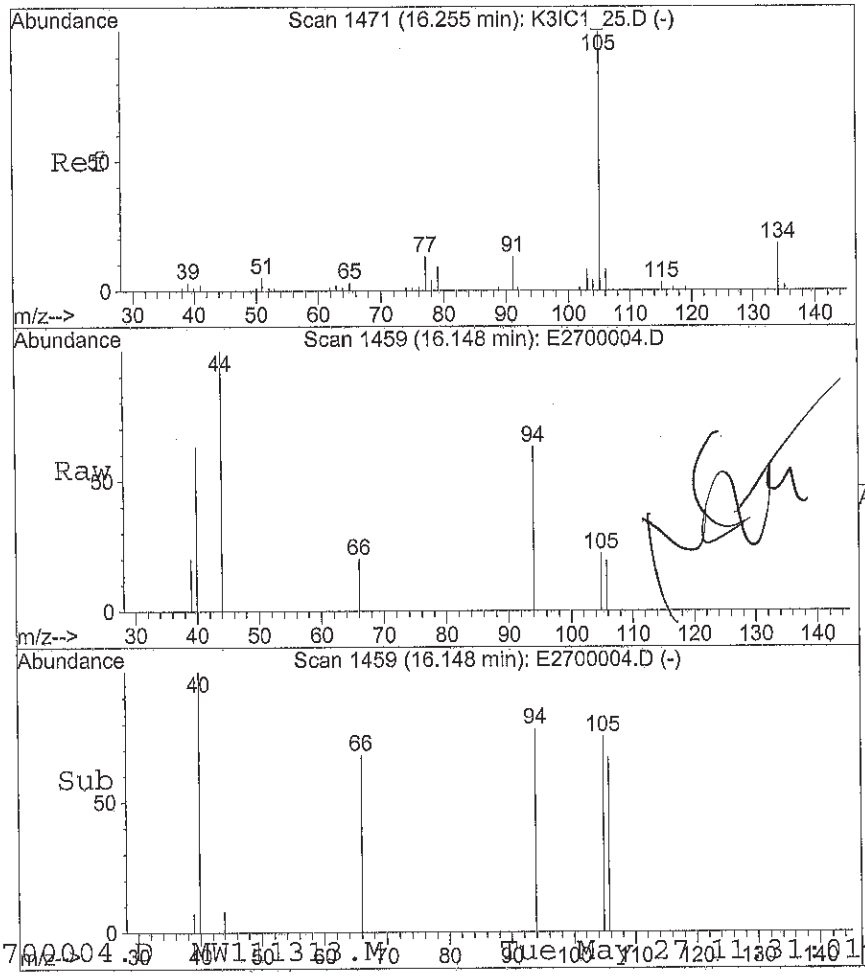


#67
1,2,4-Trimethylbenzene
Concen: 0.17 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion:105 Resp: 3152

Ion	Ratio	Lower	Upper
105	100		
120	14.8	33.8	50.8#

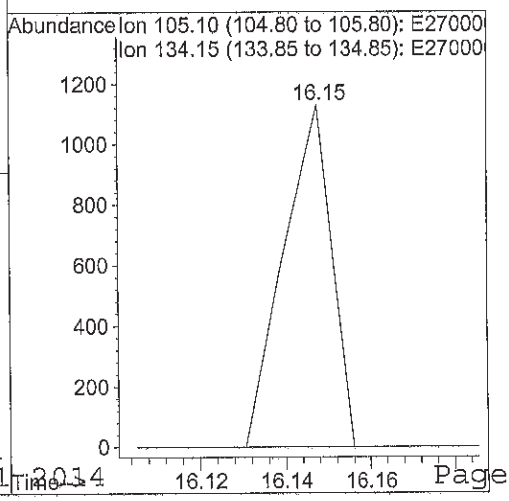


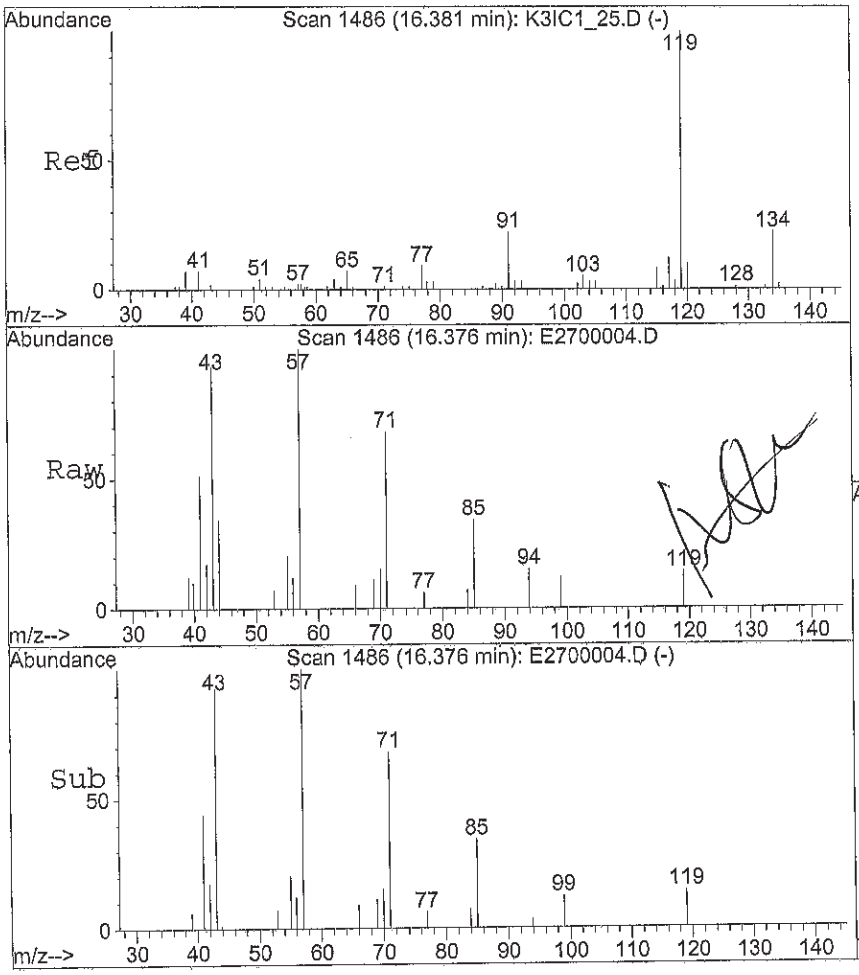


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.15 min Scan# 1459
Delta R.T. -0.11 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion:105 Resp: 883

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

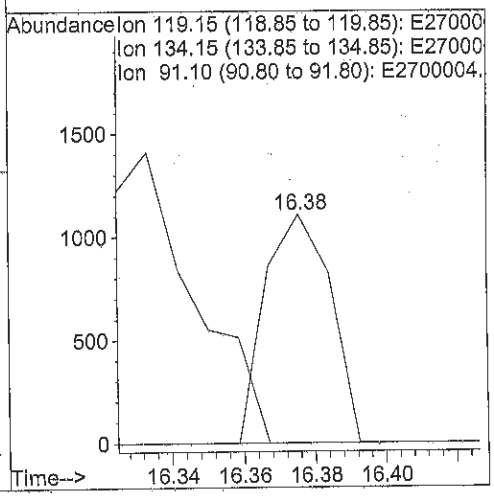


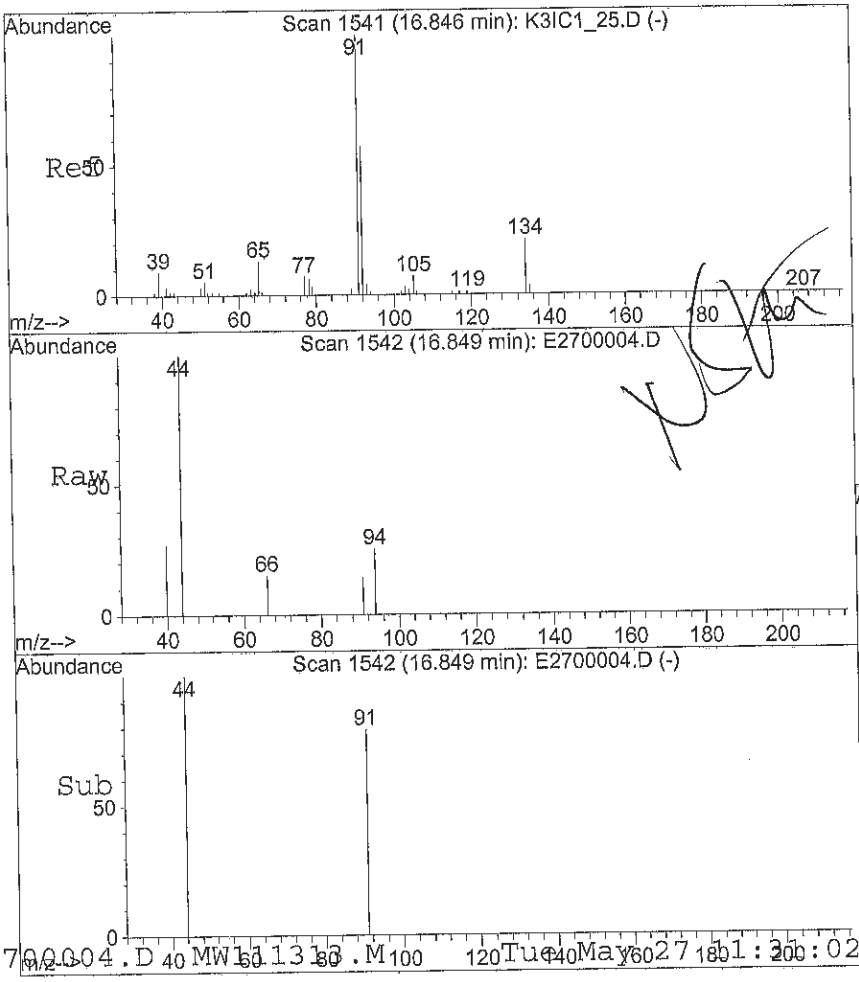


#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion:119 Resp: 1416

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

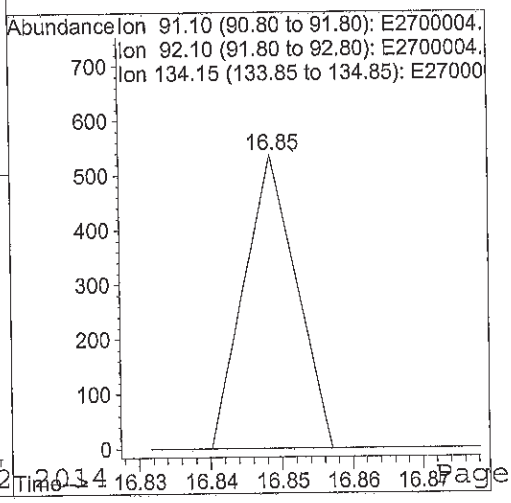


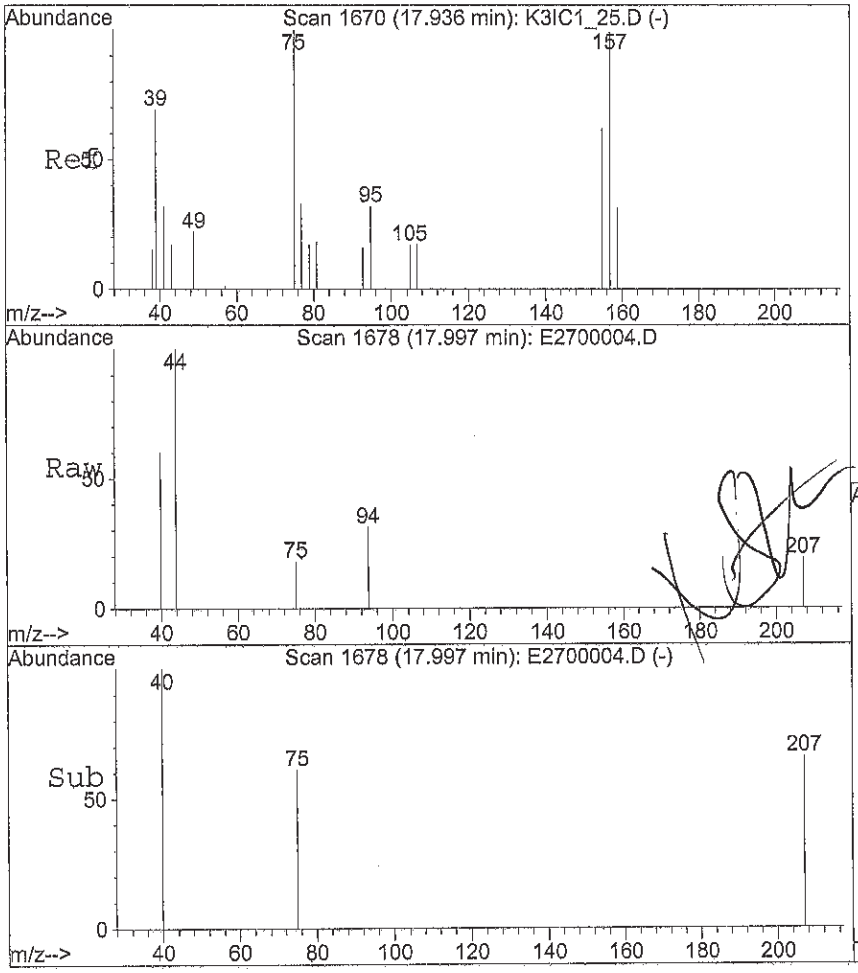


#72
n-Butylbenzene
Concen: 0.01 ug/L
RT: 16.85 min Scan# 1542
Delta R.T. 0.00 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 91 Resp: 272

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

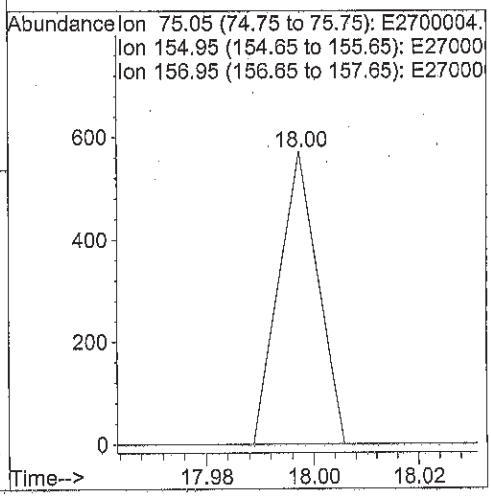




#74
1,2-Dibromo-3-chloropropane
Concen: 1.23 ug/L
RT: 18.00 min Scan# 1678
Delta R.T. 0.06 min
Lab File: E2700004.D
Acq: 27 May 2014 10:57 am

Tgt Ion: 75 Resp: 289

Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700004.D Vial: 3
Acq On : 27 May 2014 10:57 am Operator: DN
Sample : 3E42701-03 Inst : GC/MS Ins
Misc : 100cc SVL-802-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:30 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1745598	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.91	117	1321241	12.50 ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	716932	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	499272	11.00 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.00%		
3) Chloroform-d (SU6)	9.18	84	793910	12.19 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.52%		
4) Methylene Chloride-d2 (SU5	7.07	86	460082	12.08 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.64%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	500264	16.12 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 128.96%#		
6) Benzene-d6 (SU7)	9.92	84	1534938	11.21 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.68%		
8) Toluene-d8 (SU3)	12.20	98	1522306	12.14 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.12%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	713995	13.80 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.40%		

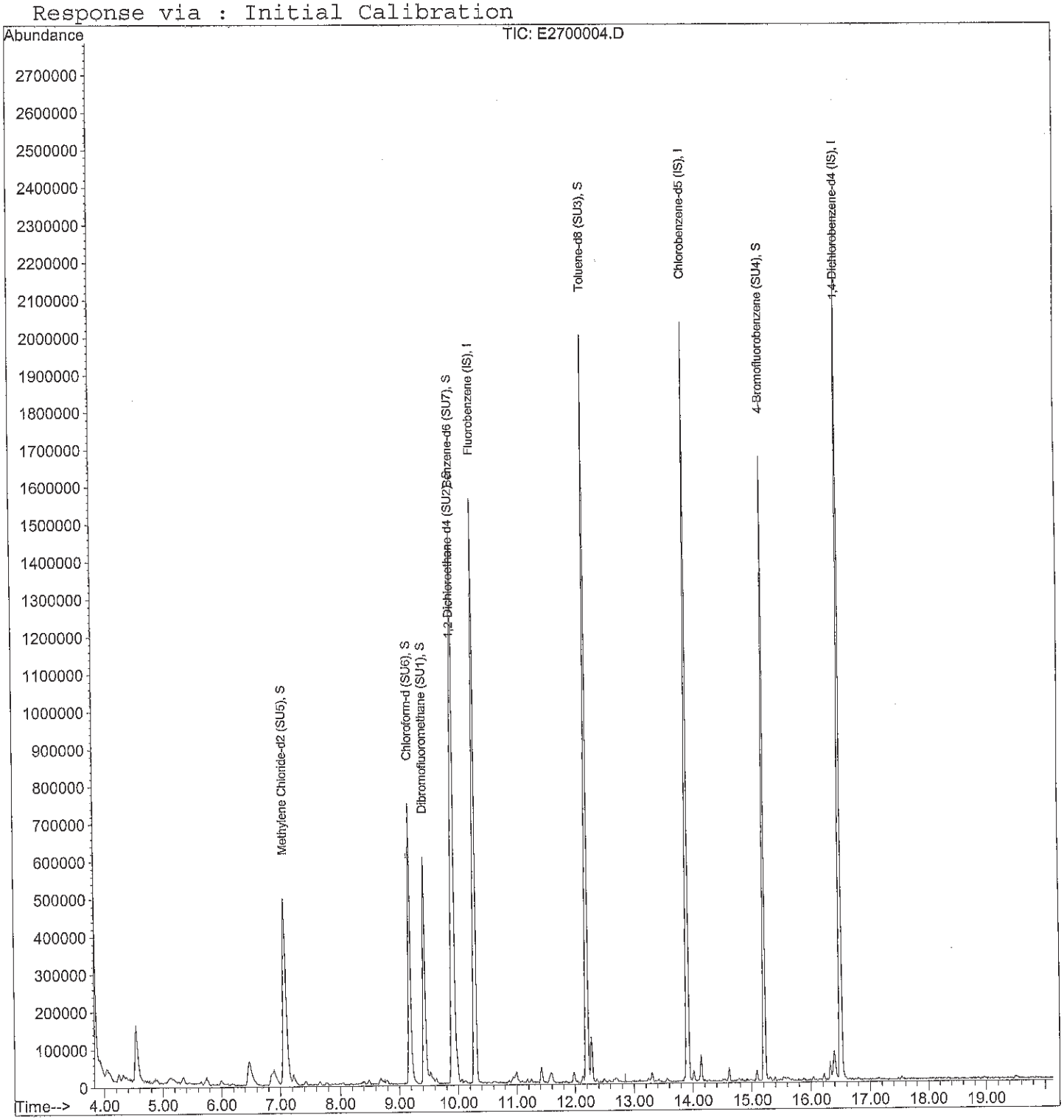
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700004.D Vial: 3
Acq On : 27 May 2014 10:57 am Operator: DN
Sample : 3E42701-03 Inst : GC/MS Ins
Misc : 100cc SVL-802-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:30 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700005.D Vial: 4
Acq On : 27 May 2014 11:32 am Operator: DN
Sample : 3E42701-04 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-13.0-14.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:54 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1913339	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1437327	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	745284	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	533258	11.17 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 89.36%					
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	505491	11.14 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 89.12%					
39) Toluene-d8 (SU3)	12.20	98	1639551	12.23 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 97.84%					
58) 4-Bromofluorobenzene (SU4)	15.22	95	764175	13.00 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 104.00%					

Target Compounds					Qvalue
4) Chloromethane	4.39	50	1519	-0.75 ~~ug/L~~ #SM	41
6) Bromomethane	5.11	96	4949	0.57 ~~ug/L~~	93
7) Chloroethane	5.15	64	1933	1.90 ~~ug/L~~	94
11) Acetone	6.45	58	19721	25.28 ~~ug/L~~	81
12) (IPA) Leak Check Compound	6.47	45	97295	423.18 ~~ug/L~~ #SM	94
13) Carbon disulfide	6.85	76	8578	0.54 ~~ug/L~~ #SM	76
14) Methylene Chloride	7.07	84	5435	1.03 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.93	59	935	2.87 ~~ug/L~~ #	77
21) (MEK) 2-Butanone	8.78	72	1310	2.44 ~~ug/L~~ #	1
24) Chloroform	9.22	83	673	0.07 ~~ug/L~~ #SM	18
31) Benzene	10.00	78	828	0.05 ~~ug/L~~ #	27
32) 1,2-Dichloroethane	9.92	62	6852	1.08 ~~ug/L~~ #	1
35) Dibromomethane	11.00	93	328	0.10 ~~ug/L~~ #	5
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	8397	2.93 ~~ug/L~~ #	100
41) Toluene	12.29	91	11160	0.57 ug/L 0.0114	99
46) 2-Hexanone	12.95	43	1151	0.37 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	5010	0.22 ug/L #0.0044	82
52) m,p-Xylenes	14.15	106	4256	0.54 ug/L 0.0108	85
53) o-Xylene	14.61	106	1809	0.23 ug/L #0.0046	29
54) Styrene	14.62	104	2629	-0.64 ~~ug/L~~ #SM	76
56) Isopropylbenzene	15.01	105	634	0.03 ~~ug/L~~ #	55
62) n-Propylbenzene	15.45	91	606	0.02 ~~ug/L~~ #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700005.D Vial: 4
Acq On : 27 May 2014 11:32 am Operator: DN
Sample : 3E42701-04 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-13.0-14.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:54 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

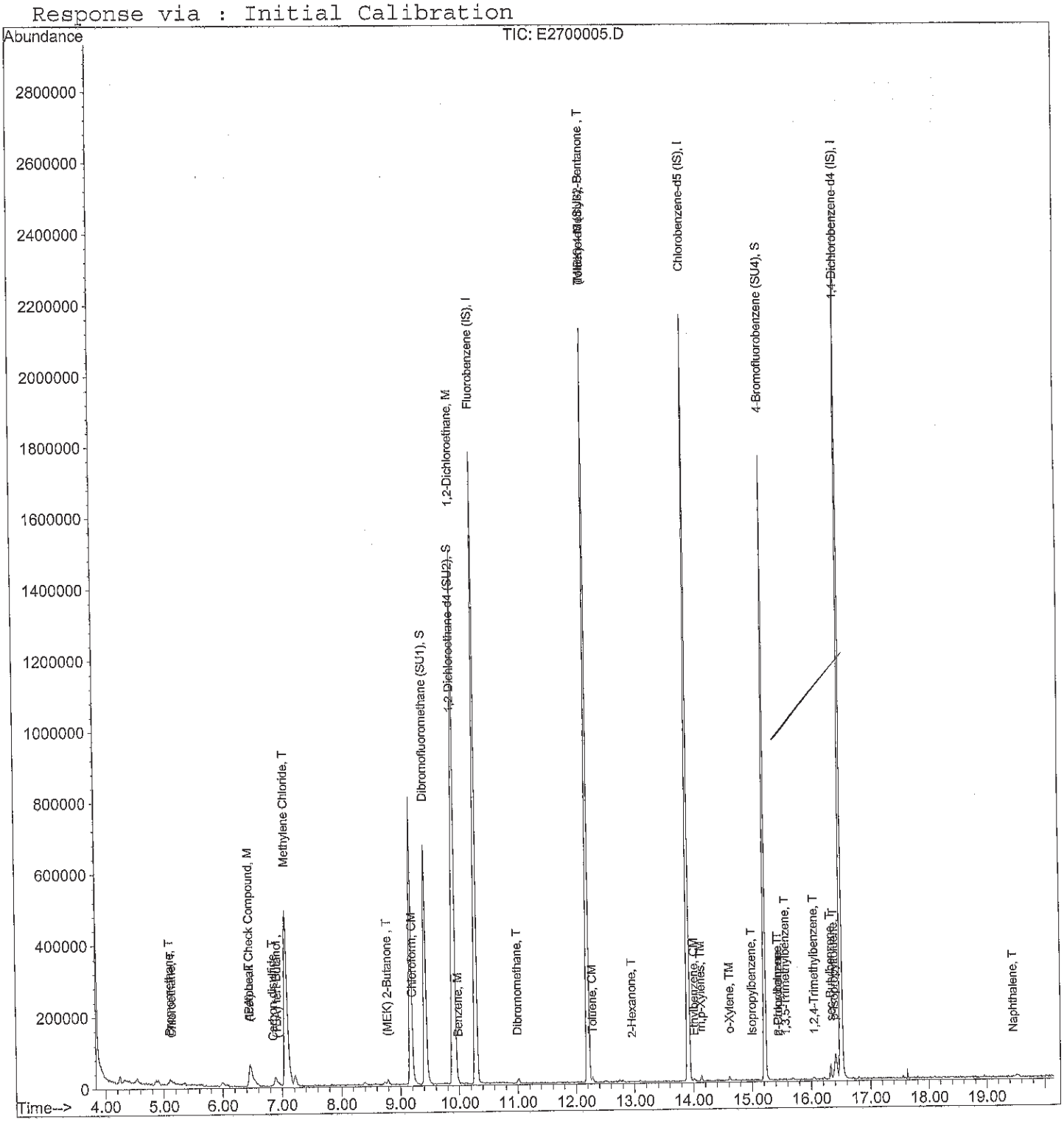
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
63) 2-Chlorotoluene	15.45	91	606	0.03	~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.56	105	940	0.05	~~ug/L~~ #	31
67) 1,2,4-Trimethylbenzene	16.05	105	2022	0.10	ug/L #	33
68) sec-Butylbenzene	16.33	105	298	0.01	ug/L #	62
69) p-Isopropyltoluene	16.38	119	345	0.02	~~ug/L~~ #	52
77) Naphthalene	19.46	128	509	0.03	~~ug/L~~	100

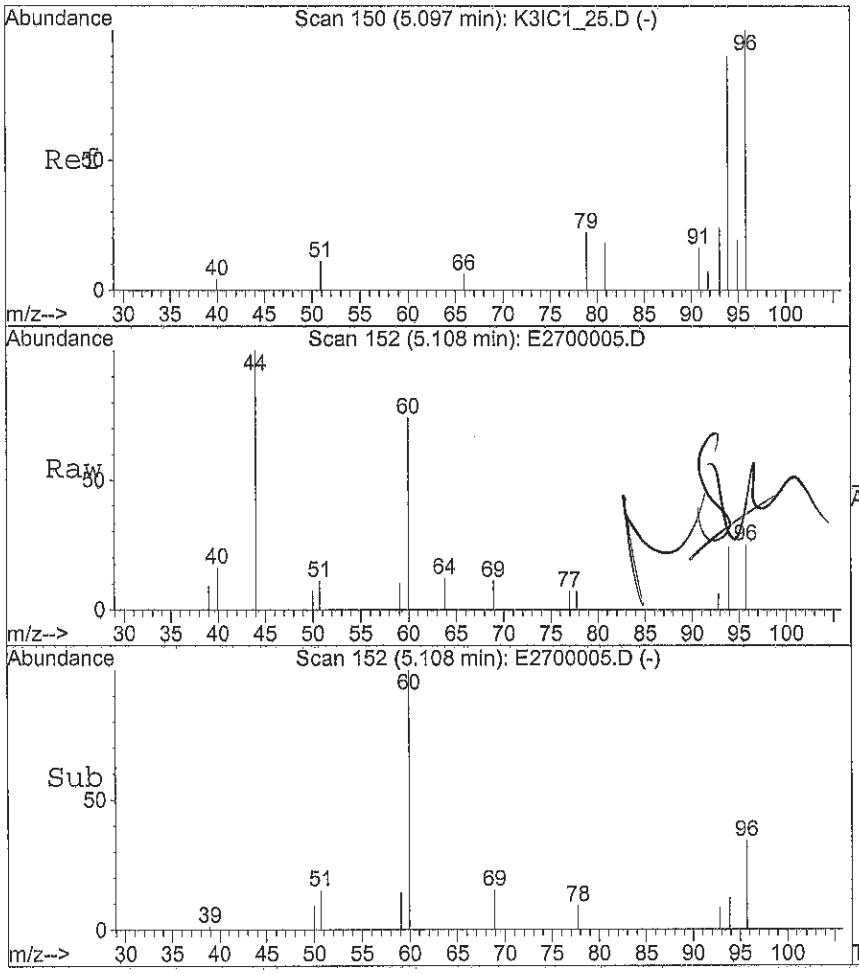
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700005.D Vial: 4
Acq On : 27 May 2014 11:32 am Operator: DN
Sample : 3E42701-04 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-13.0-14.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:54 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

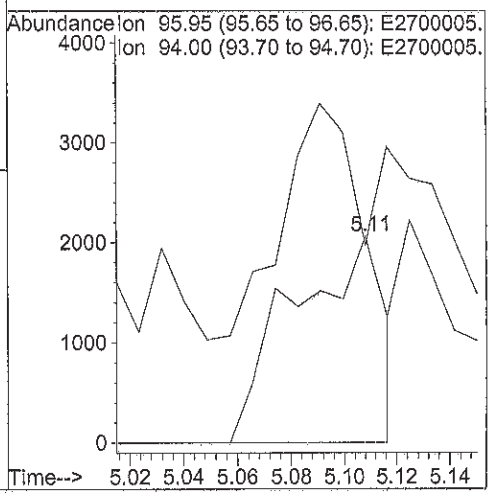


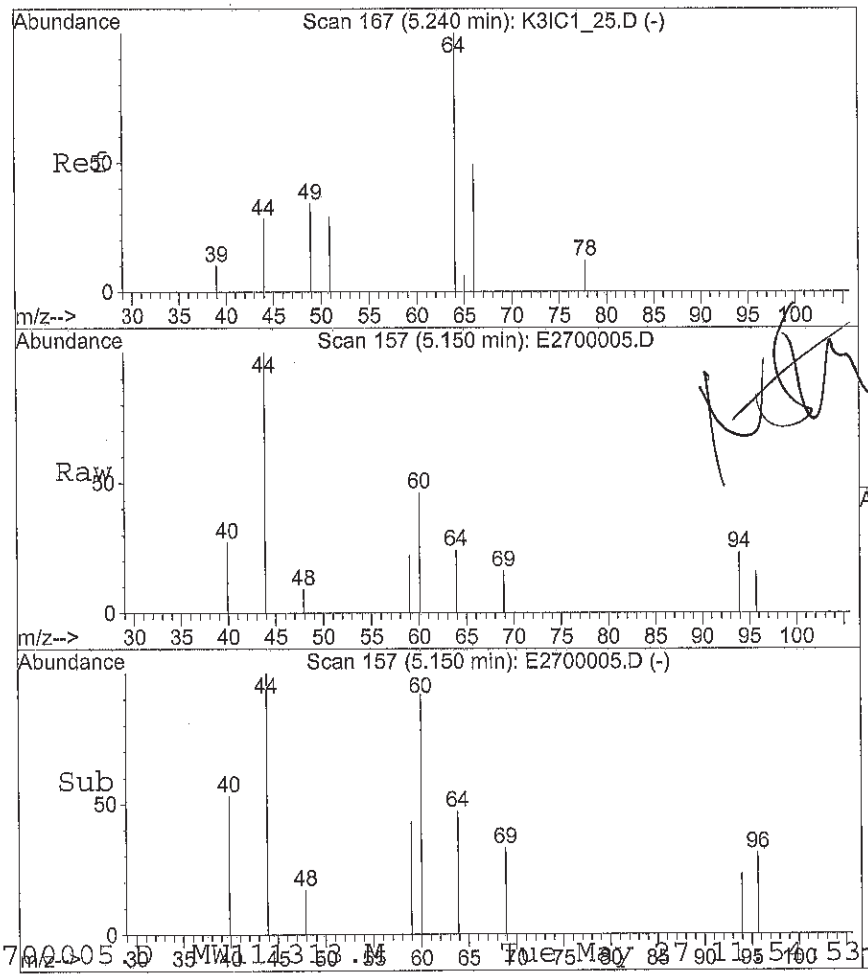


#6
Bromomethane
Concen: 0.57 ug/L
RT: 5.11 min Scan# 152
Delta R.T. 0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 96 Resp: 4949

Ion	Ratio	Lower	Upper
96	100		
94	134.6	101.0	151.4

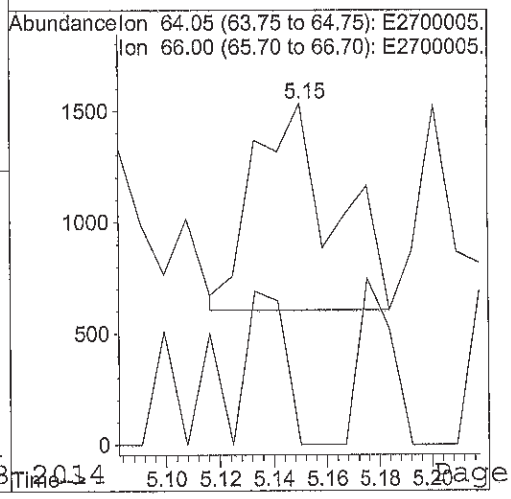


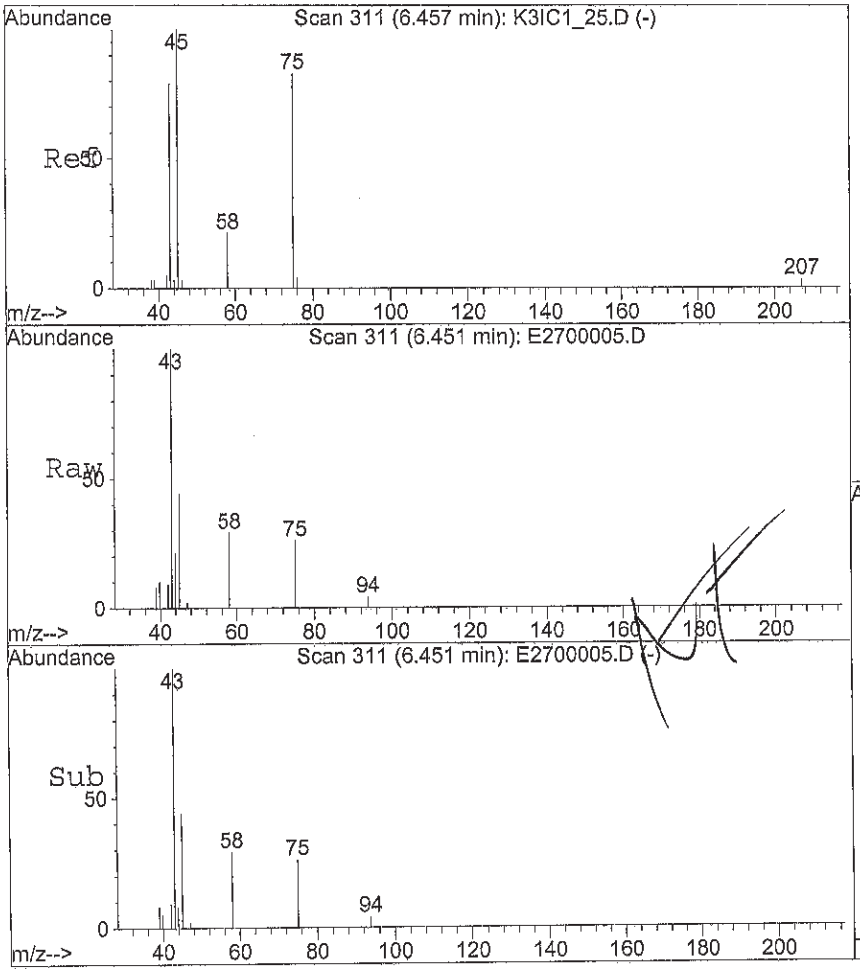


#7
Chloroethane
Concen: 1.90 ug/L
RT: 5.15 min Scan# 157
Delta R.T. -0.09 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 64 Resp: 1933

Ion	Ratio	Lower	Upper
64	100		
66	48.2	35.4	53.0

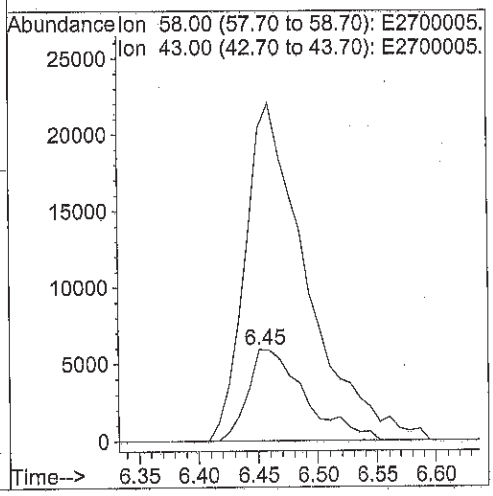


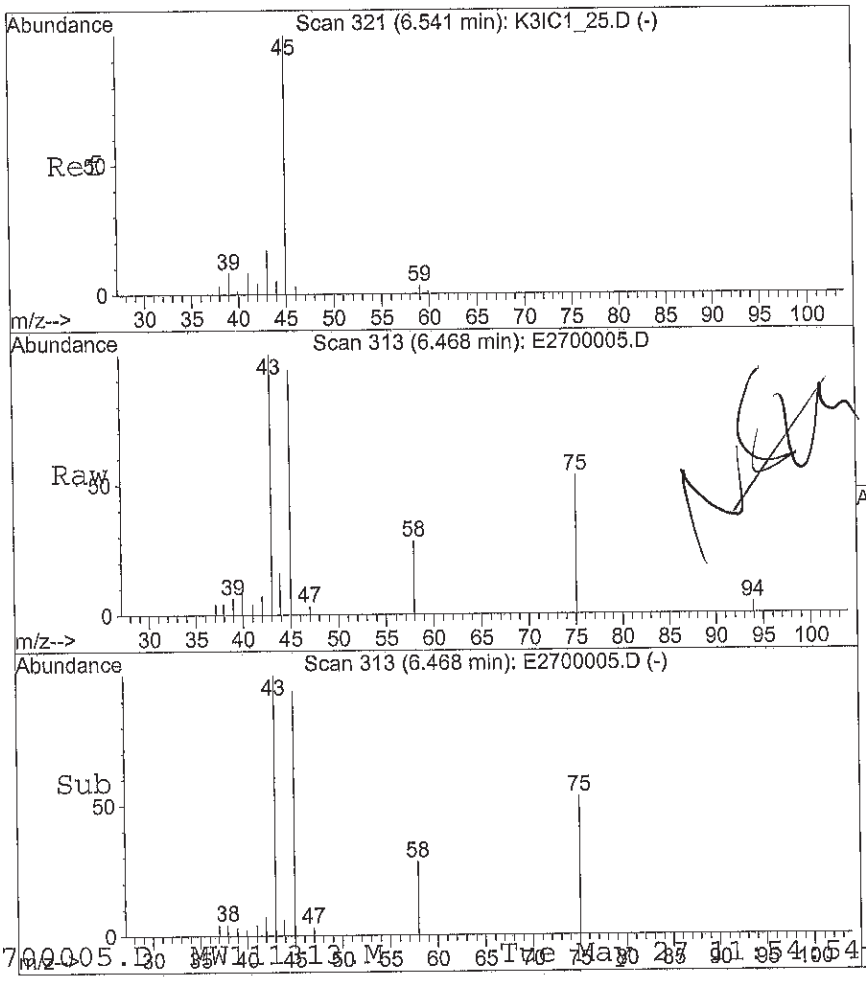


#11
Acetone
Concen: 25.28 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 58 Resp: 19721

Ion	Ratio	Lower	Upper
58	100		
43	402.6	360.9	541.3

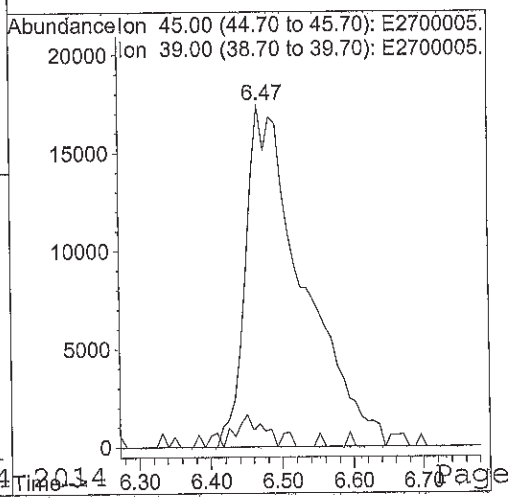


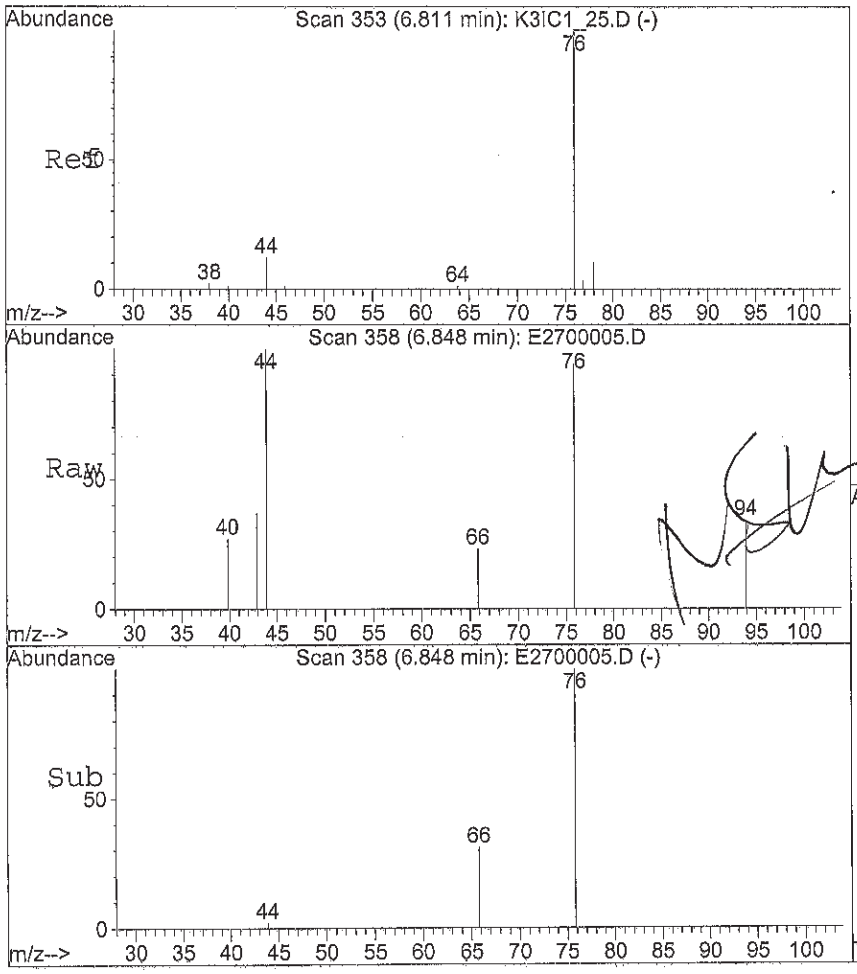


#12
(IPA) Leak Check Compound
Concen: 423.18 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 45 Resp: 97295

Ion	Ratio	Lower	Upper
45	100		
39	4.2	4.9	7.3#

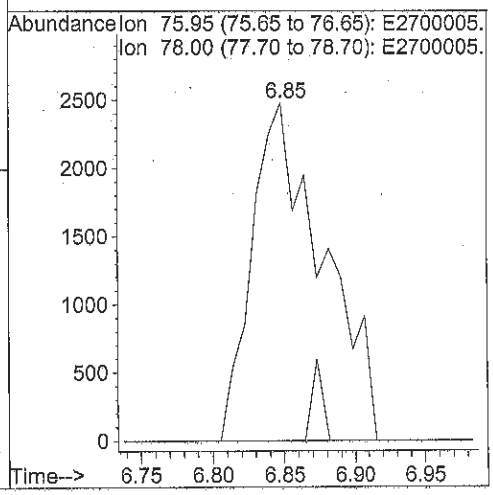


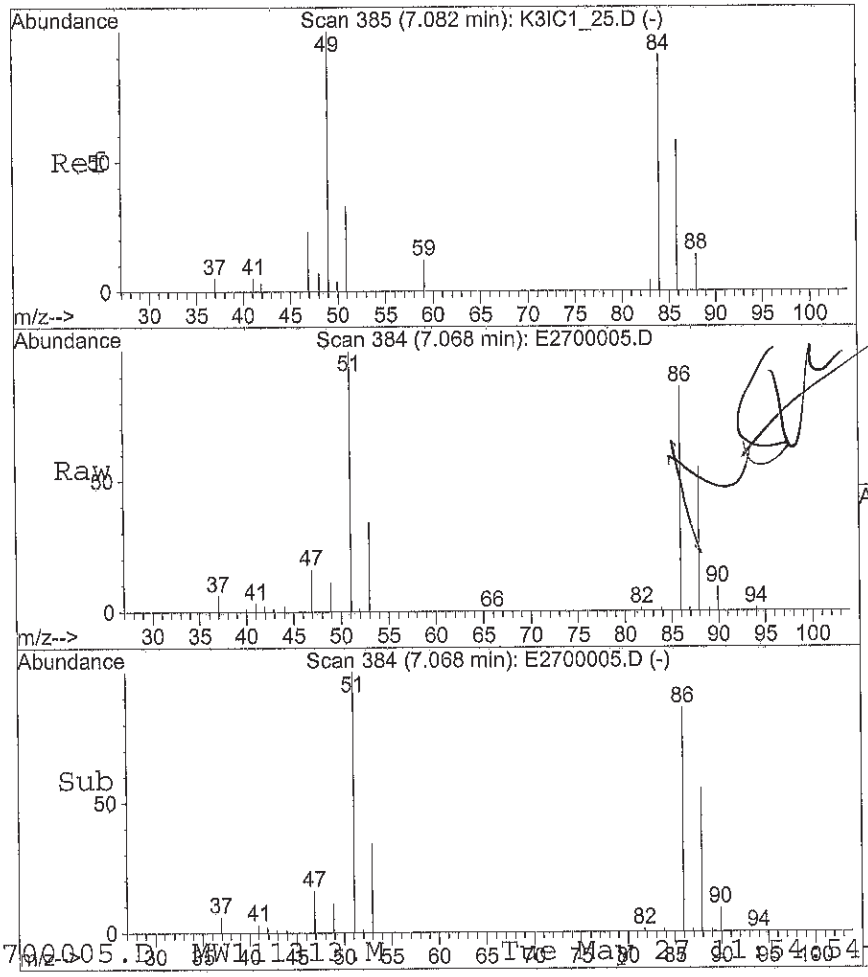


#13
Carbon disulfide
Concen: 0.54 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 76 Resp: 8578

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

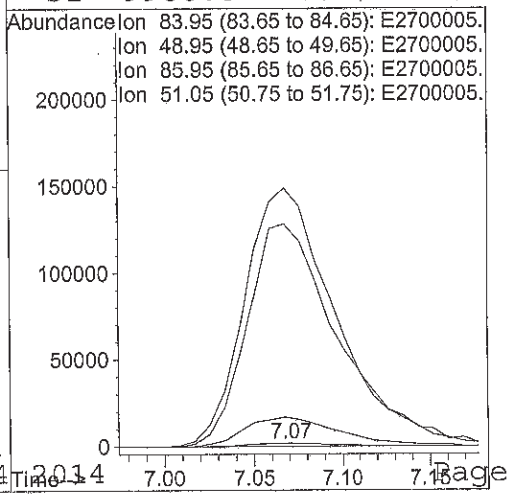


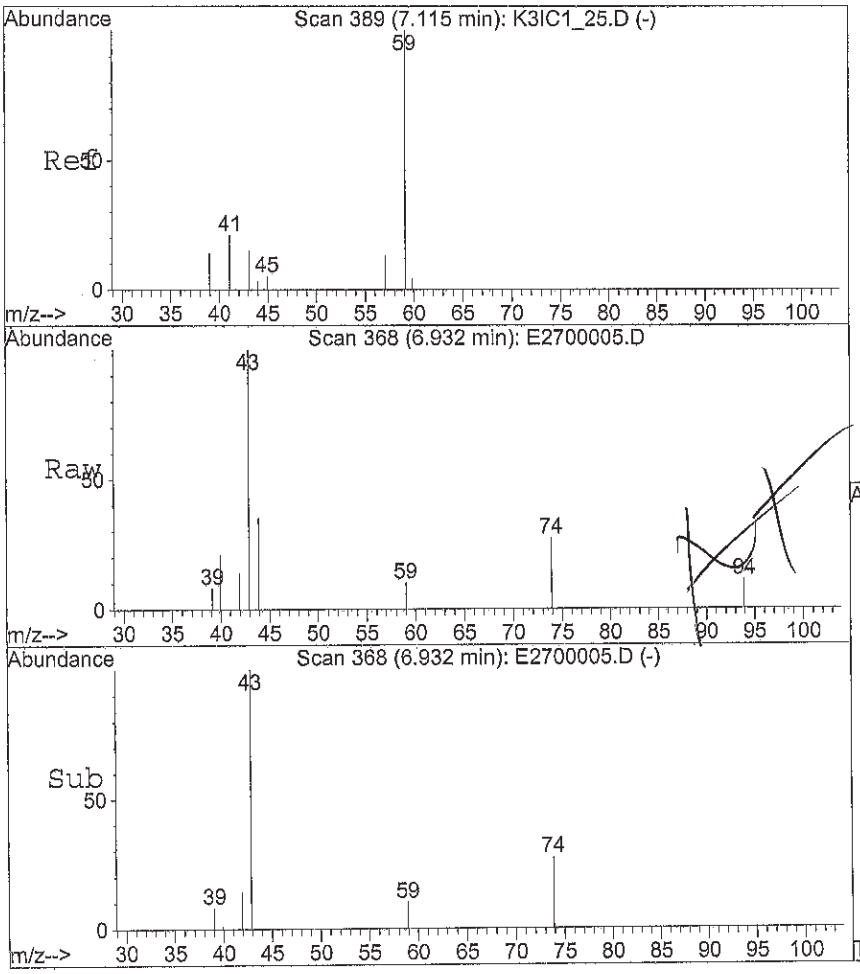


#14
Methylene Chloride
Concen: 1.03 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 84 Resp: 5435

Ion	Ratio	Lower	Upper
84	100		
49	1139.2	89.8	134.6#
86	8467.7	51.1	76.7#
51	9986.8	28.5	42.7#

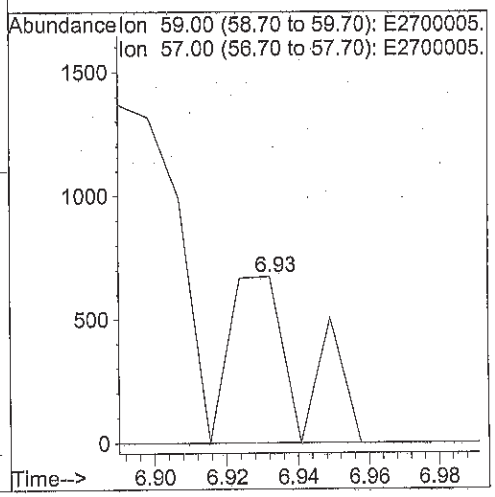


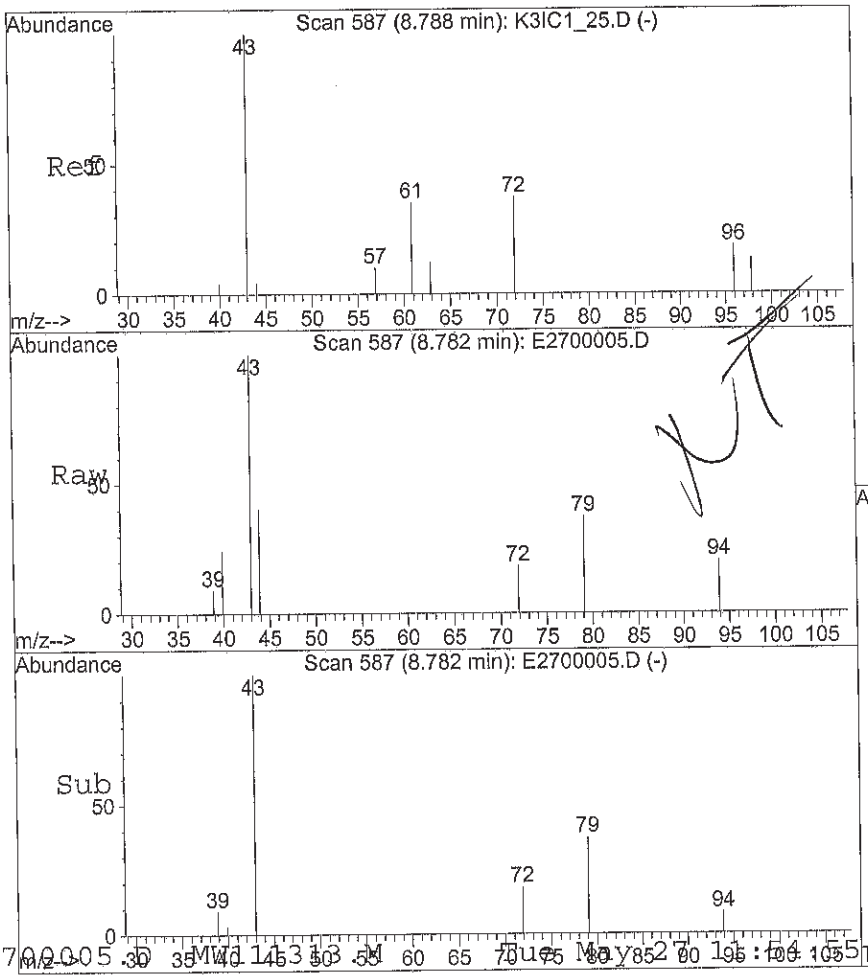


#15
(TBA) tert-Butanol
Concen: 2.87 ug/L
RT: 6.93 min Scan# 368
Delta R.T. -0.18 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 59 Resp: 935

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

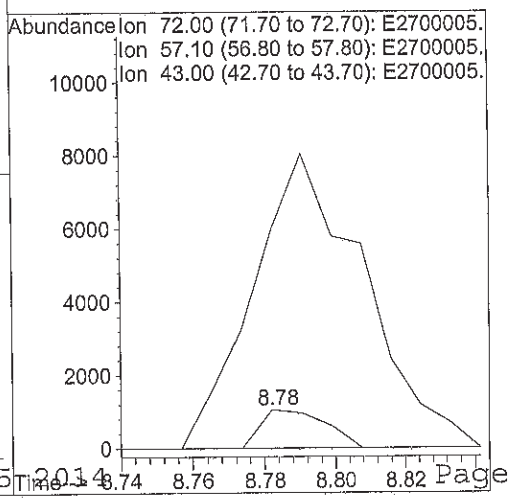


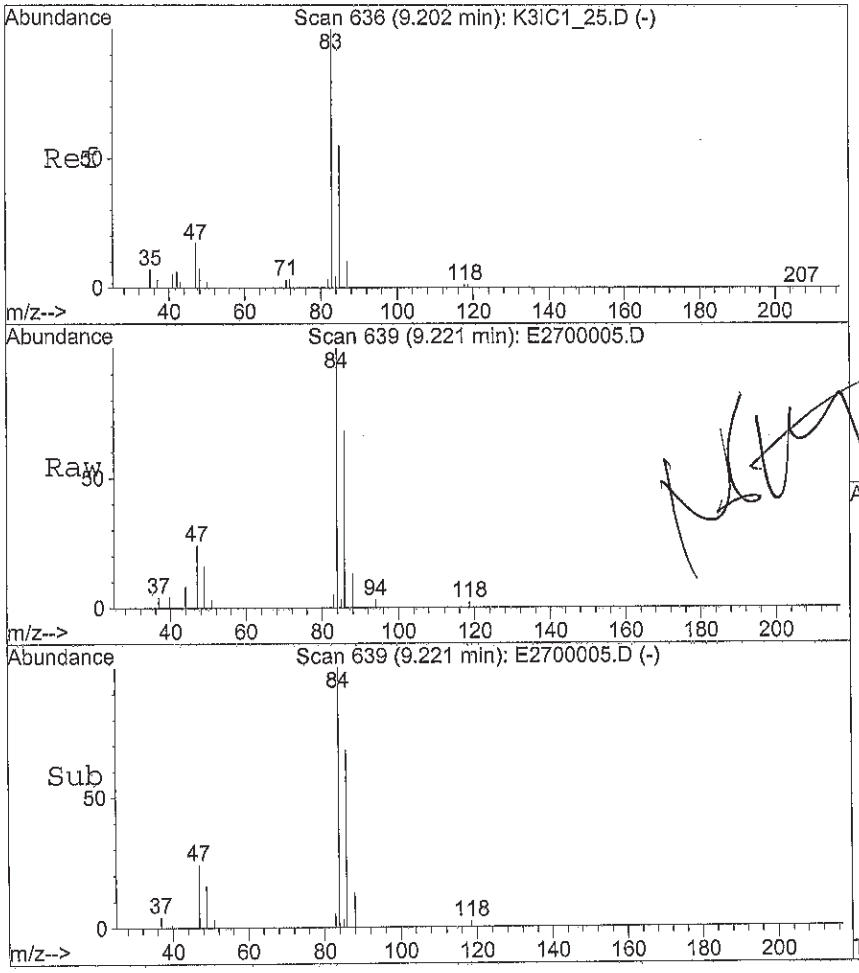


#21
(MEK) 2-Butanone
Concen: 2.44 ug/L
RT: 8.78 min Scan# 587
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 72 Resp: 1310

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	1335.3	314.2	471.2#

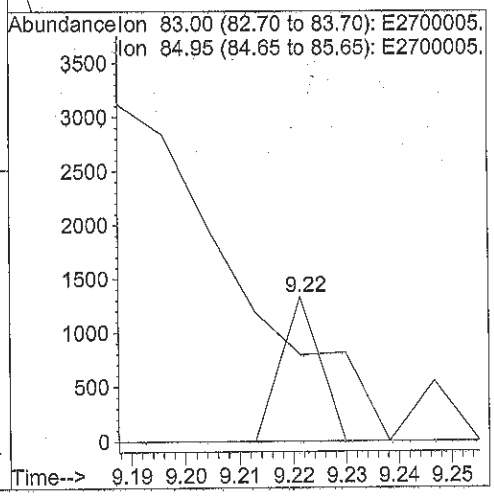


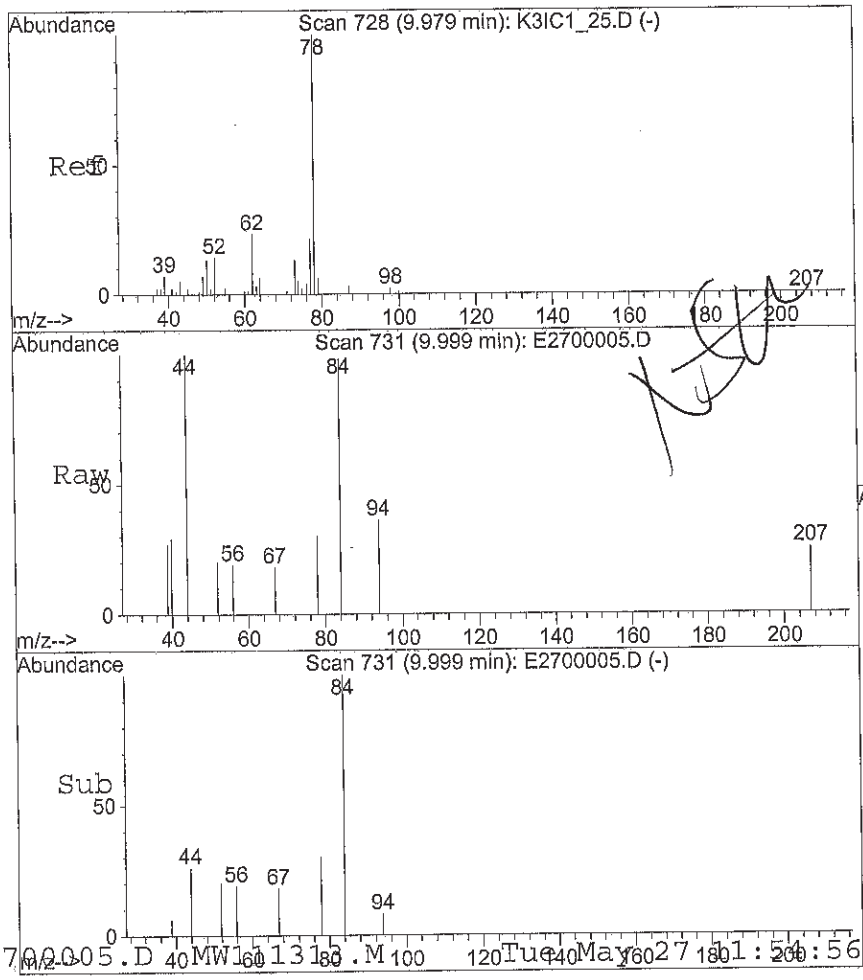


#24
Chloroform
Concen: 0.07 ug/L
RT: 9.22 min Scan# 639
Delta R.T. 0.02 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 83 Resp: 673

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

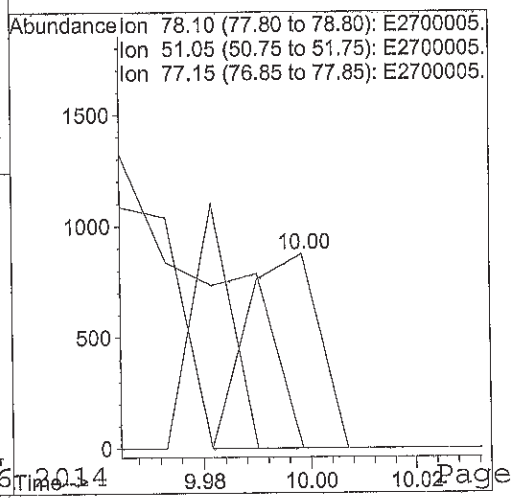


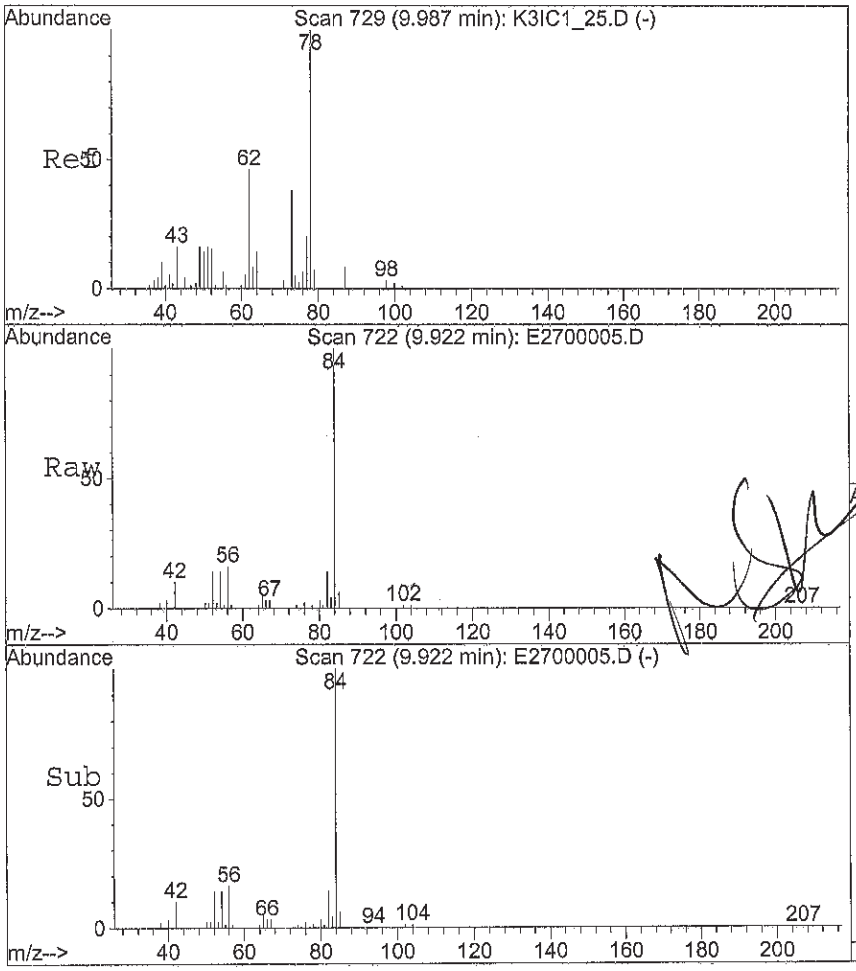


#31
Benzene
Concen: 0.05 ug/L
RT: 10.00 min Scan# 731
Delta R.T. 0.02 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 78 Resp: 828

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	67.4	16.6	24.8#

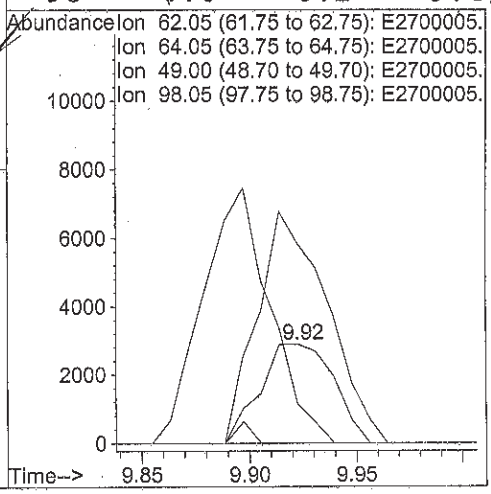


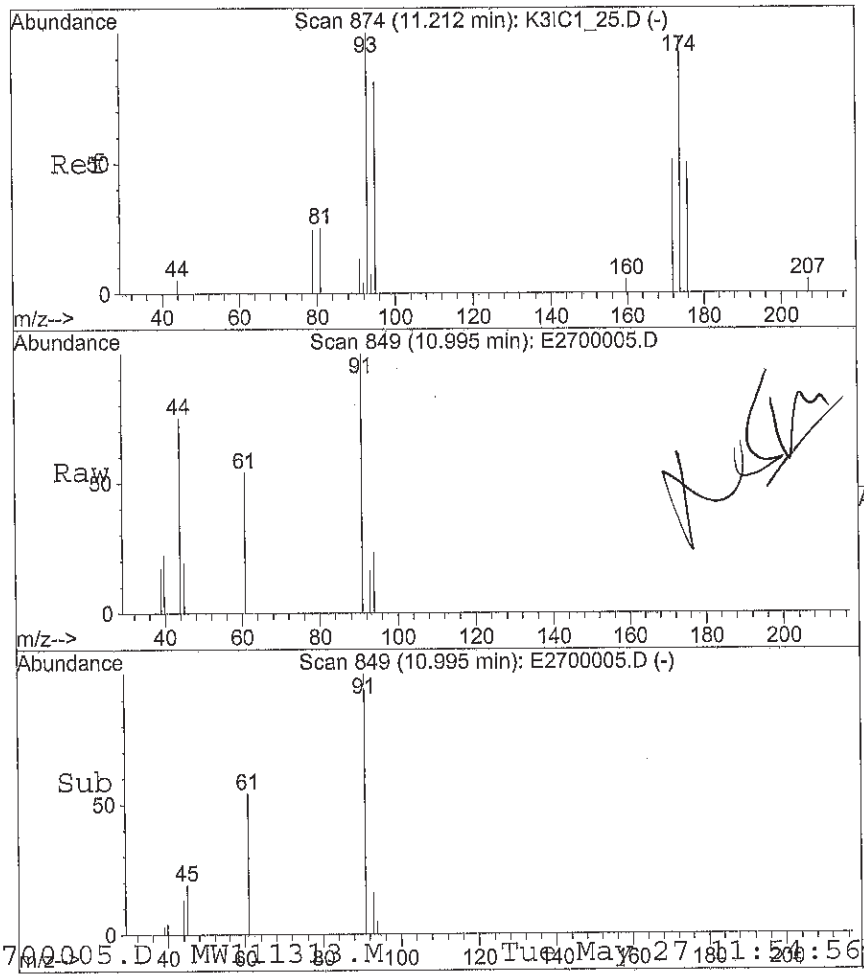


#32
1,2-Dichloroethane
Concen: 1.08 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 62 Resp: 6852

Ion	Ratio	Lower	Upper
62	100		
64	224.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

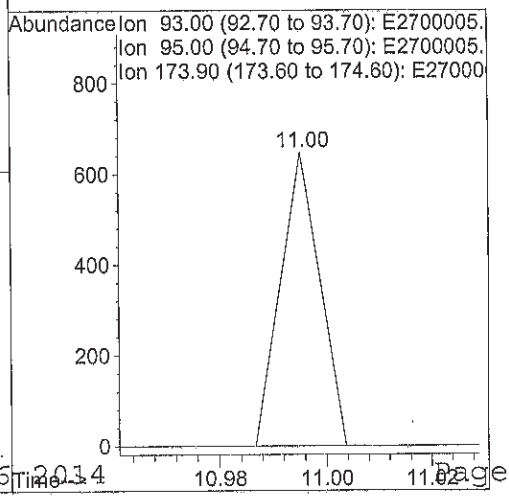


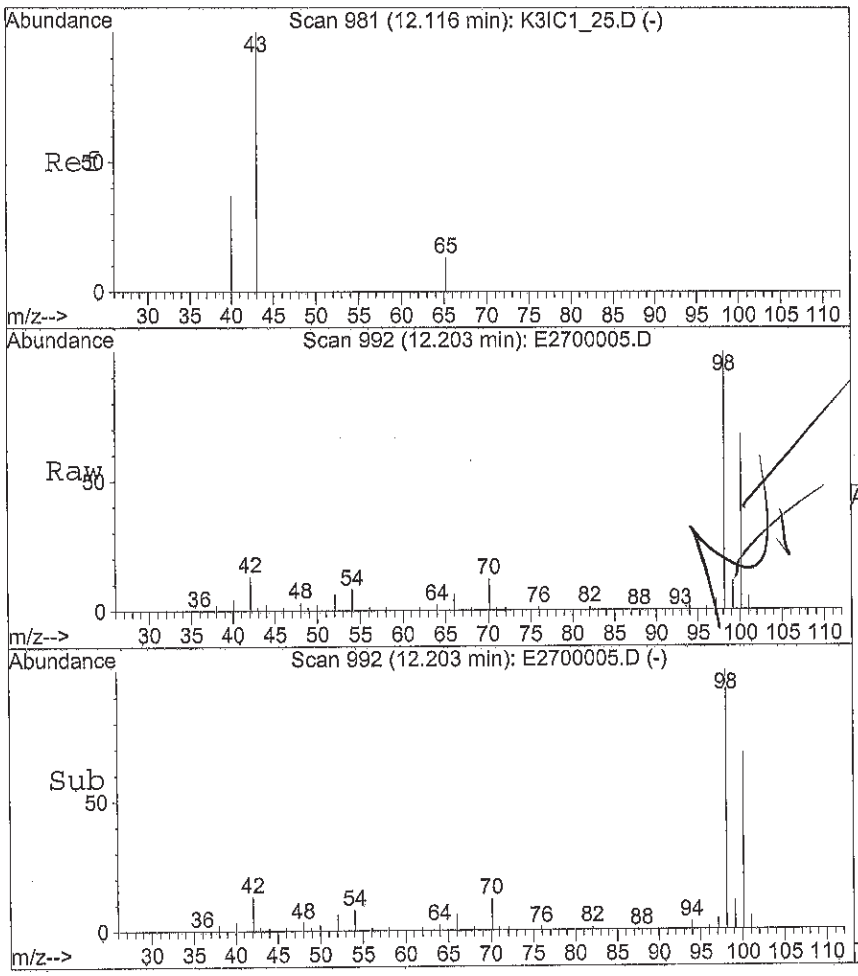


#35
Dibromomethane
Concen: 0.10 ug/L
RT: 11.00 min Scan# 849
Delta R.T. -0.22 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 93 Resp: 328

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

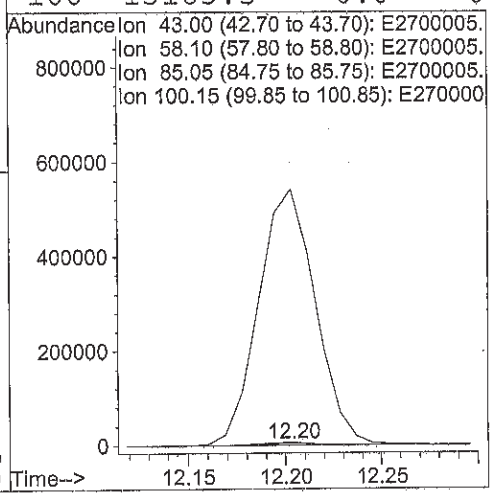


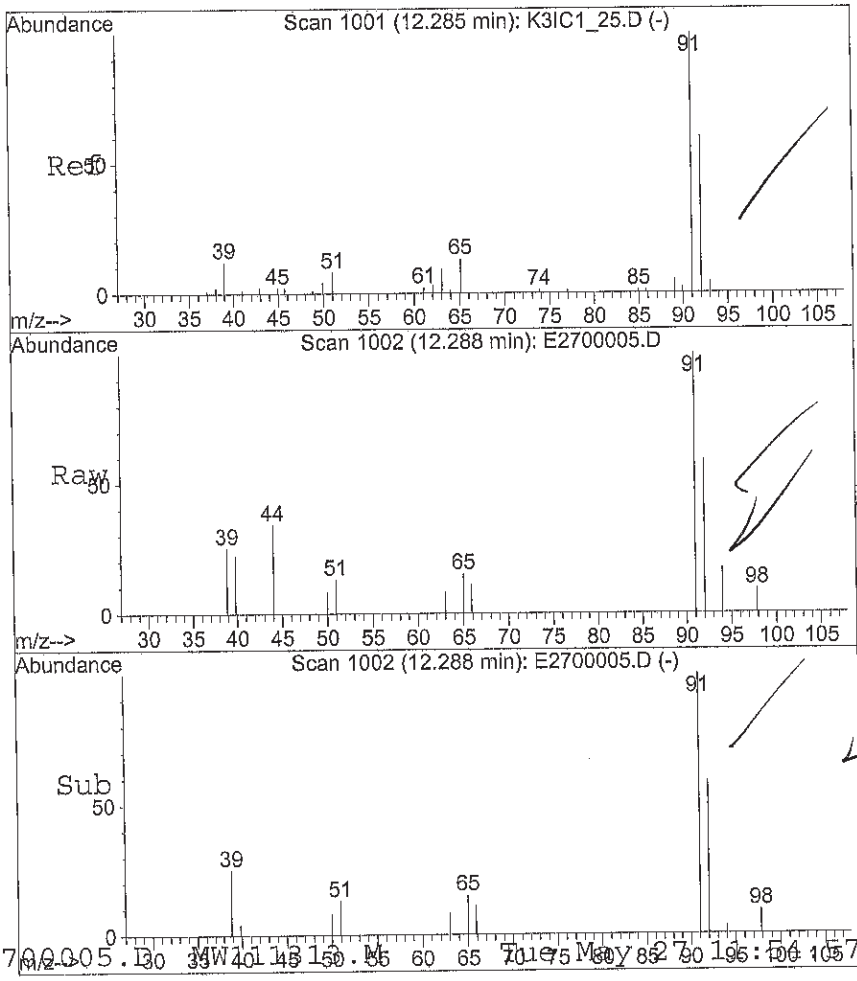


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.93 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 43 Resp: 8397

Ion	Ratio	Lower	Upper
43	100		
58	139.0	0.0	0.0#
85	0.0	0.0	0.0
100	13163.3	0.0	0.0#

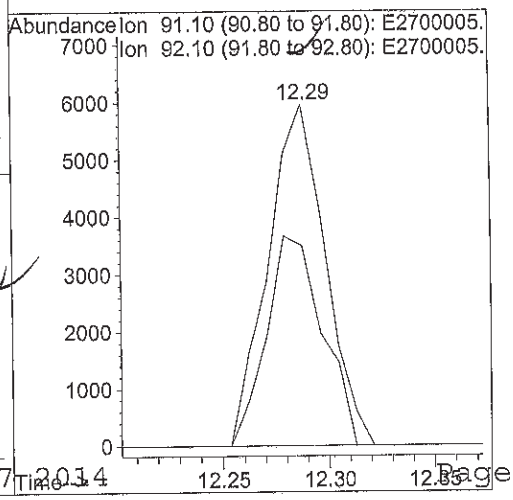


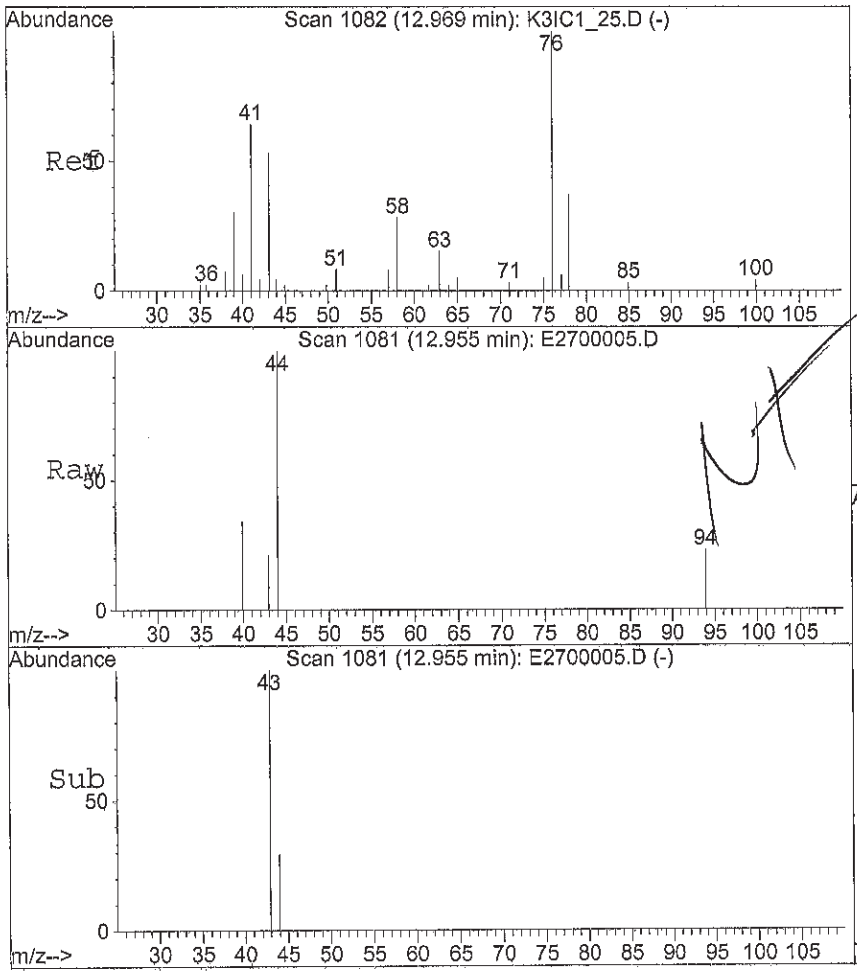


#41
Toluene
Concen: 0.57 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 91 Resp: 11160

Ion	Ratio	Lower	Upper
91	100		
92	60.3	47.4	71.0

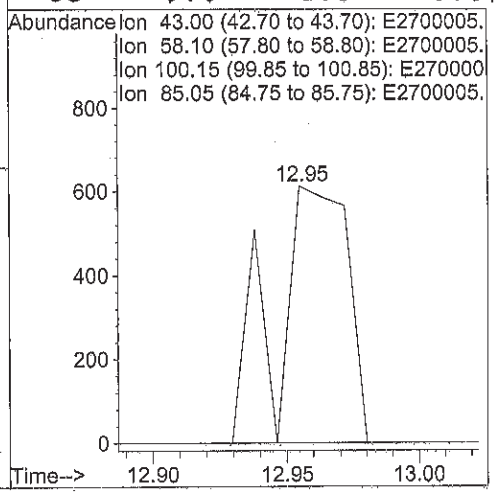


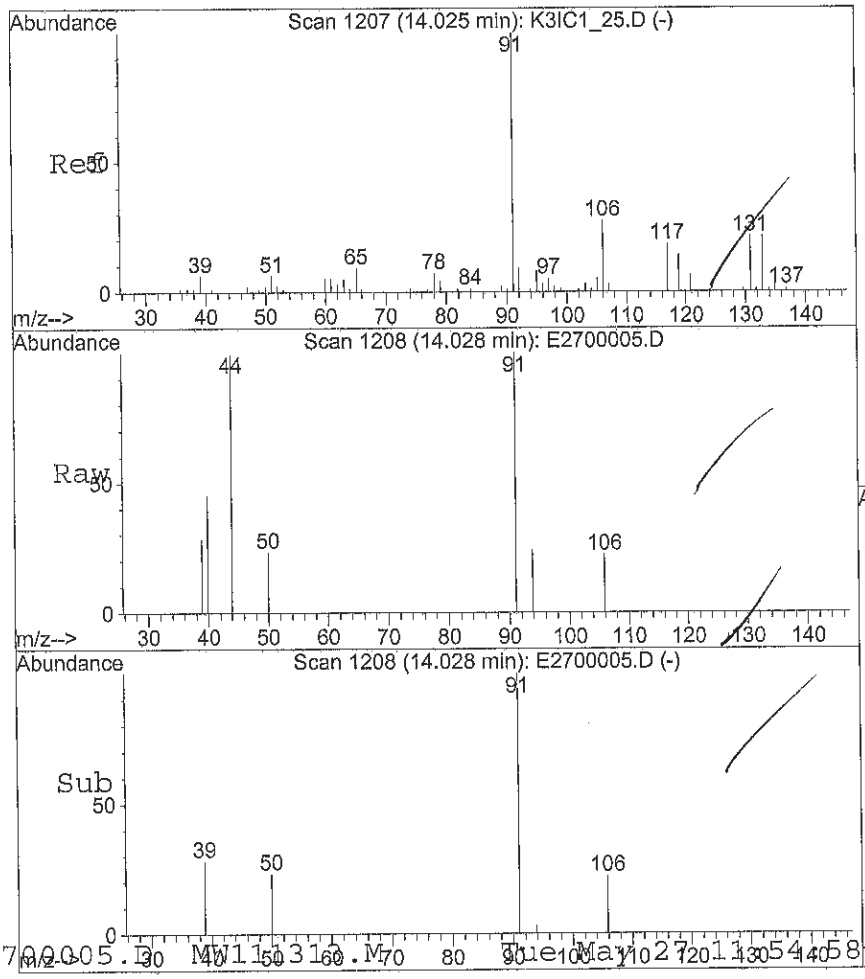


#46
2-Hexanone
Concen: 0.37 ug/L
RT: 12.95 min Scan# 1081
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 43 Resp: 1151

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

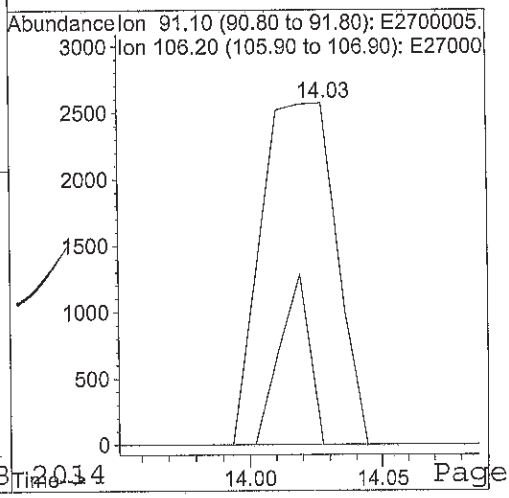


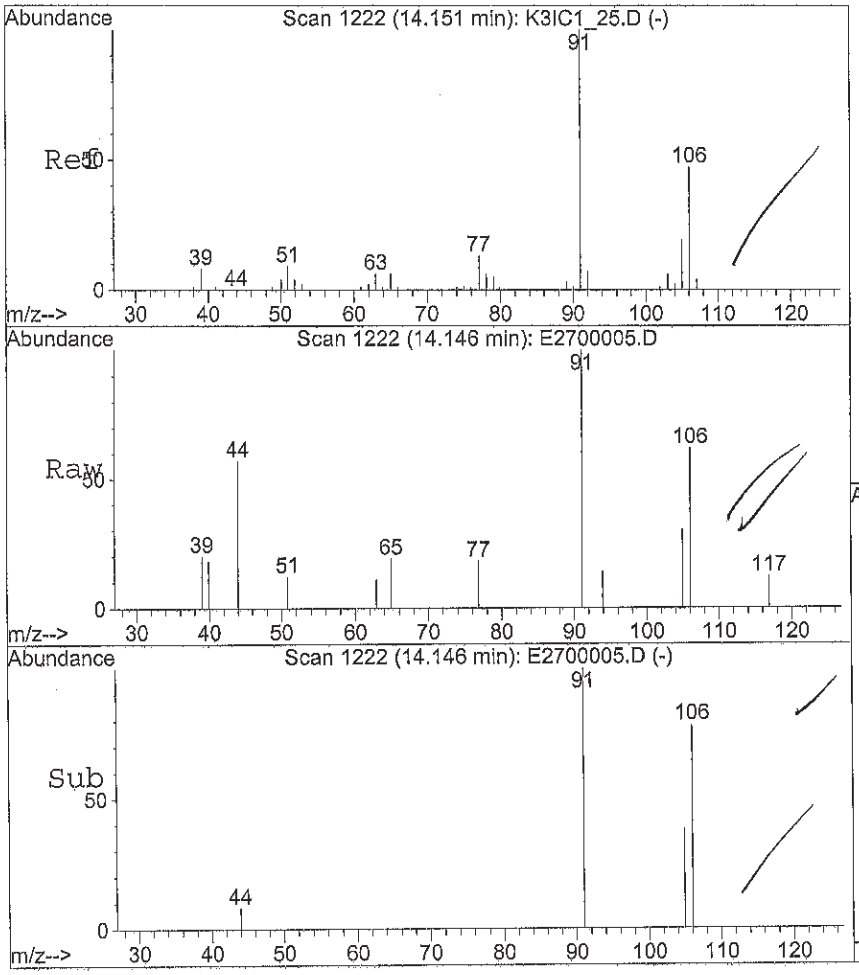


#51
Ethylbenzene
Concen: 0.22 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 91 Resp: 5010

Ion	Ratio	Lower	Upper
91	100		
106	19.9	23.5	35.3#

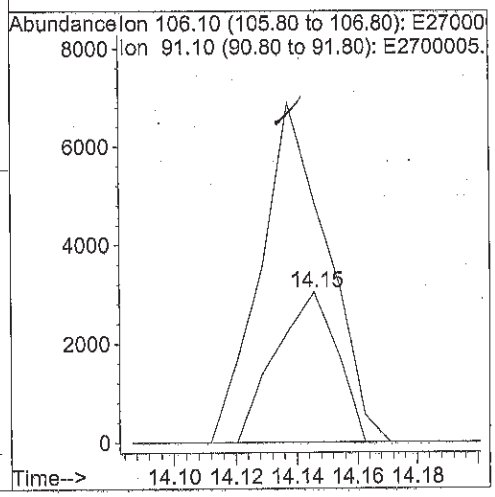


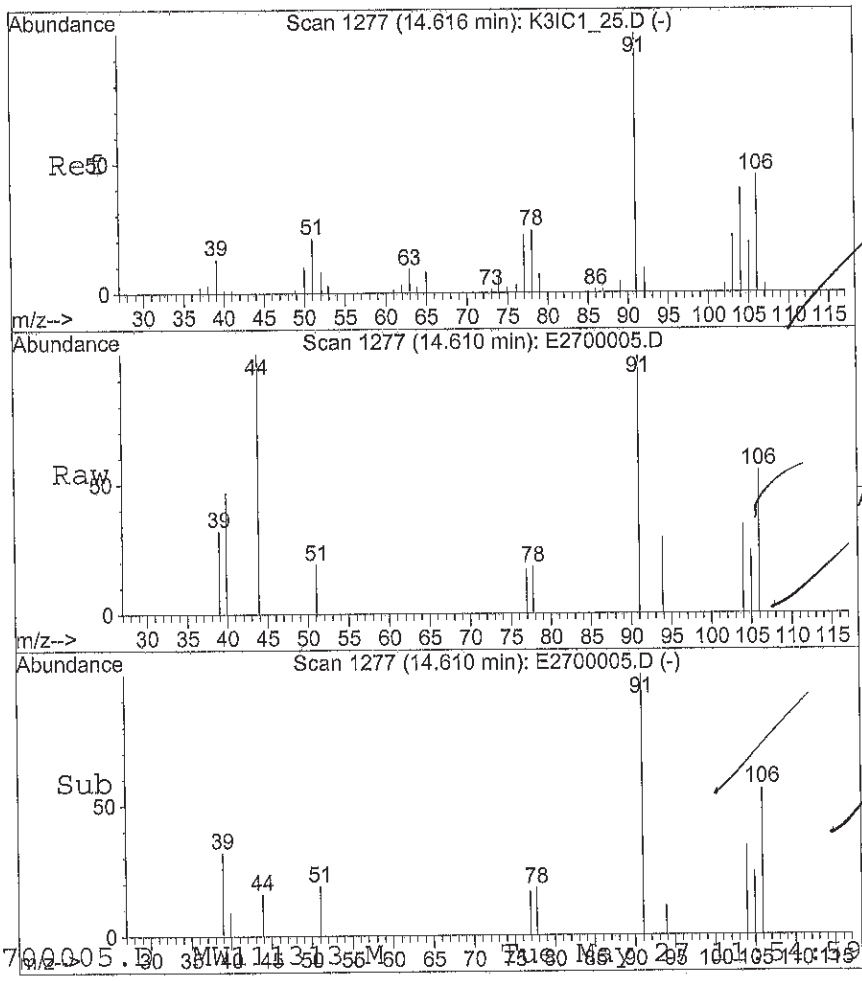


#52
m,p-Xylenes
Concen: 0.54 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:106 Resp: 4256

Ion	Ratio	Lower	Upper
106	100		
91	246.4	177.1	265.7

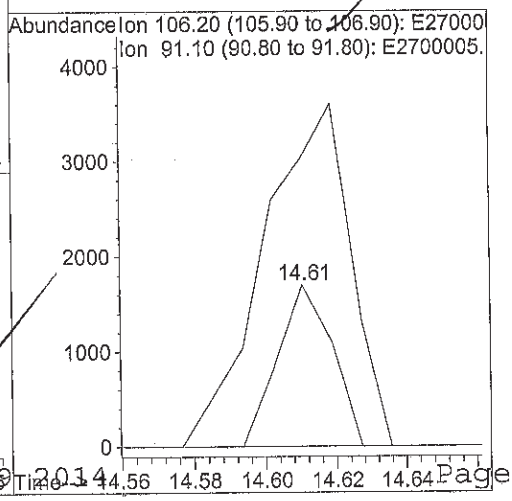


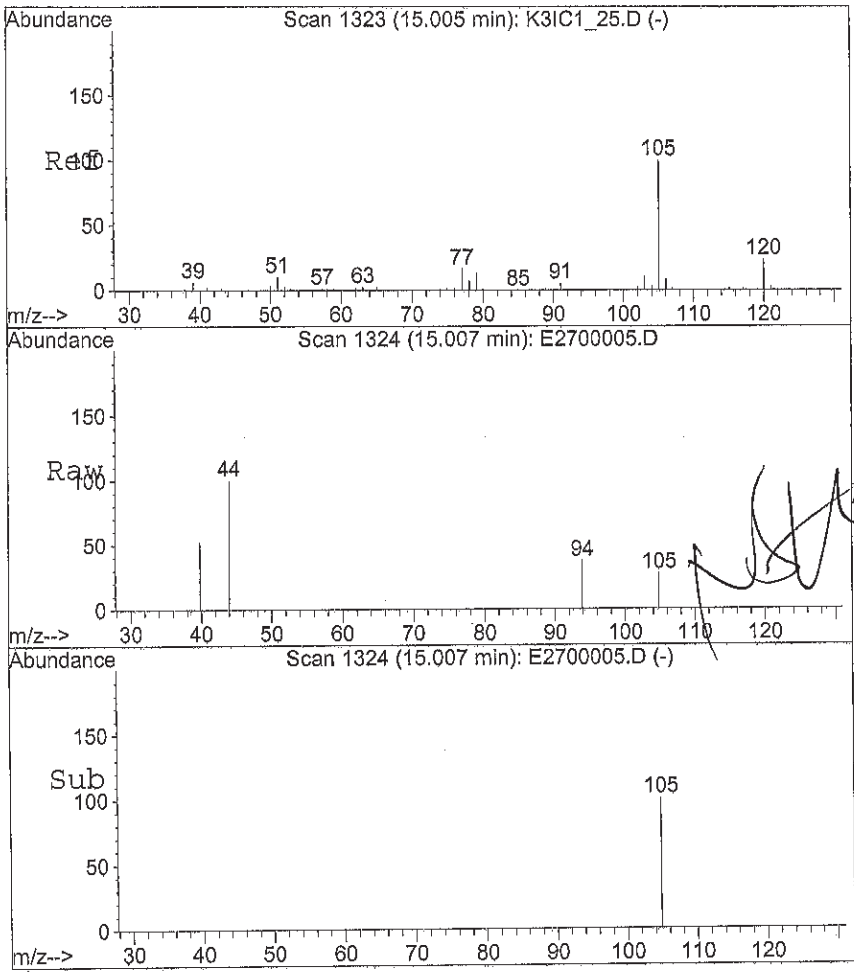


#53
o-Xylene
Concen: 0.23 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:106 Resp: 1809

Ion	Ratio	Lower	Upper
106	100		
91	339.0	179.0	268.6#

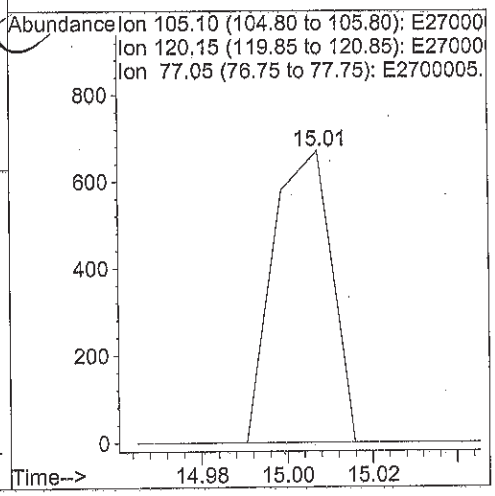


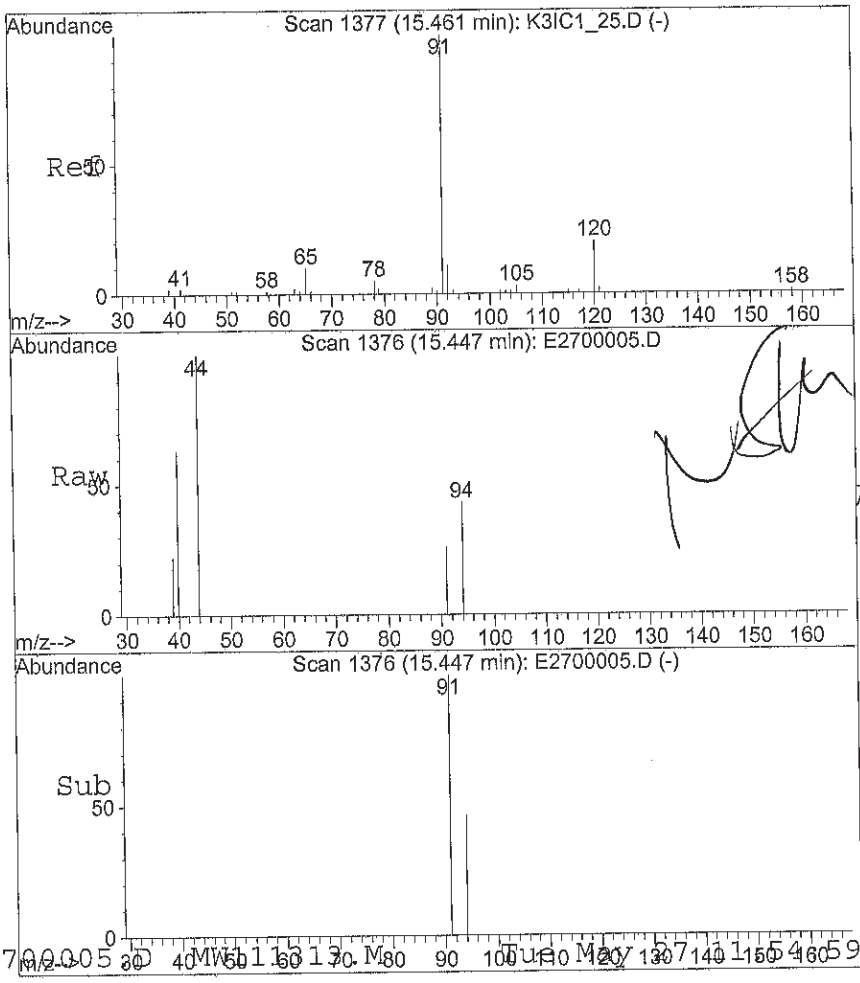


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.01 min Scan# 1324
Delta R.T. 0.00 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:105 Resp: 634

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

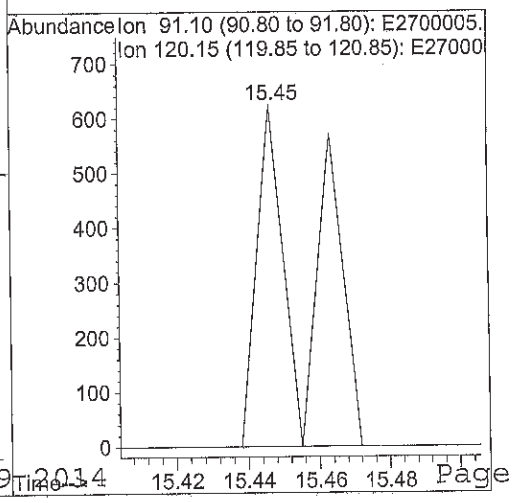


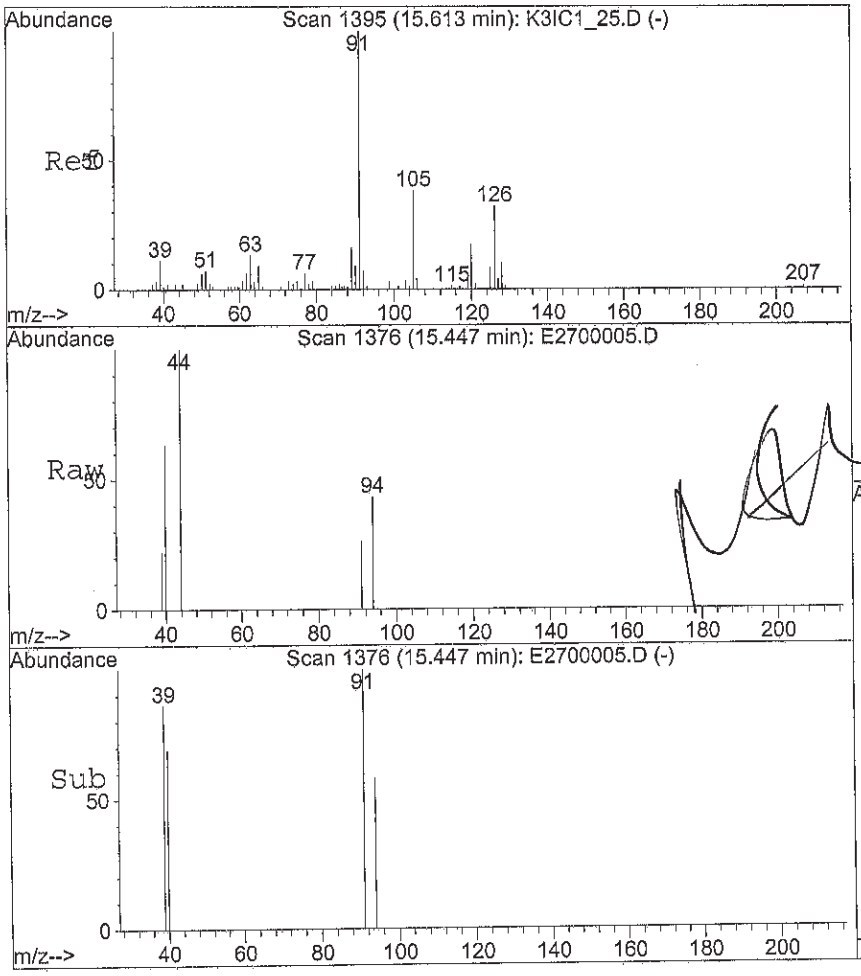


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 91 Resp: 606

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

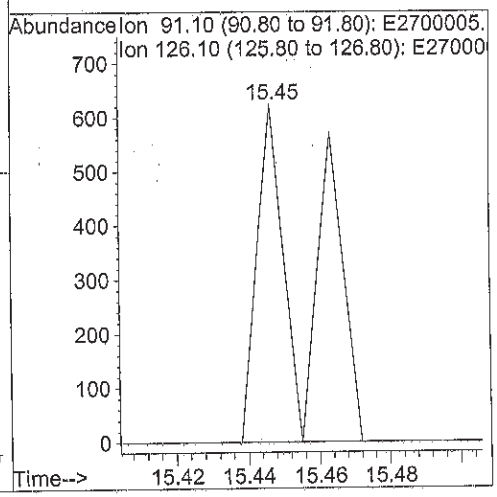


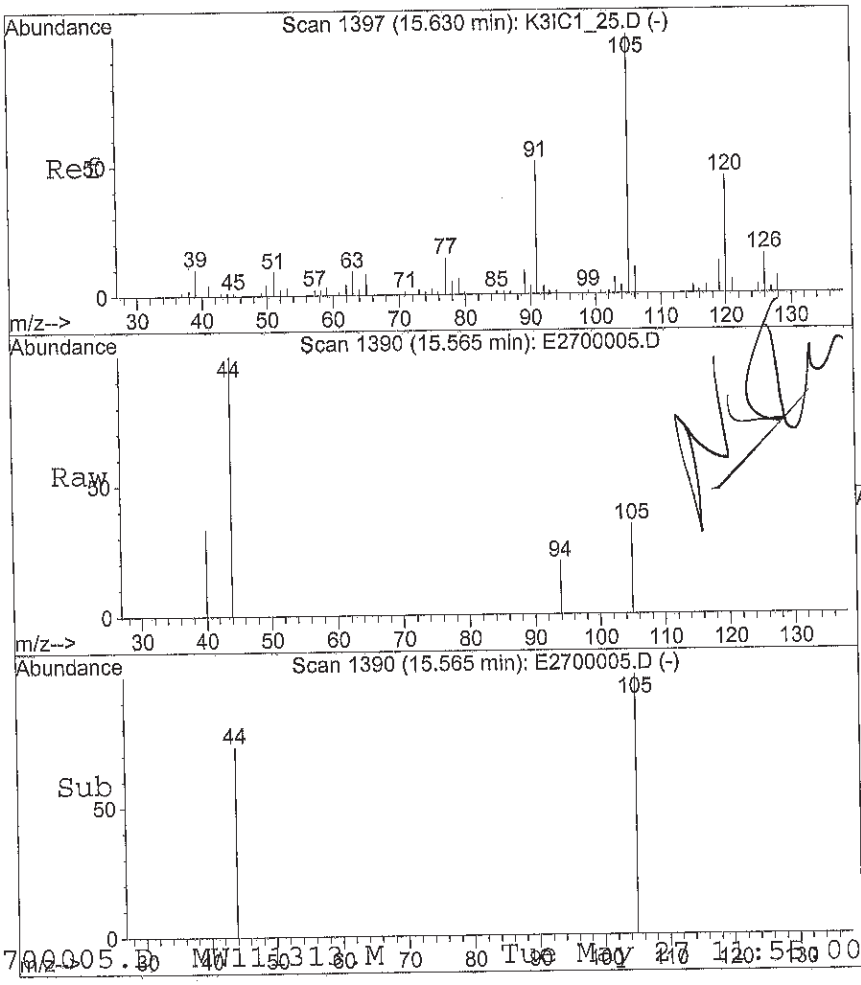


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.17 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion: 91 Resp: 606

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

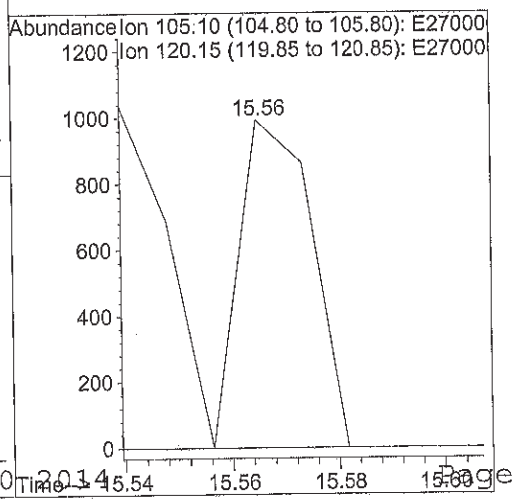


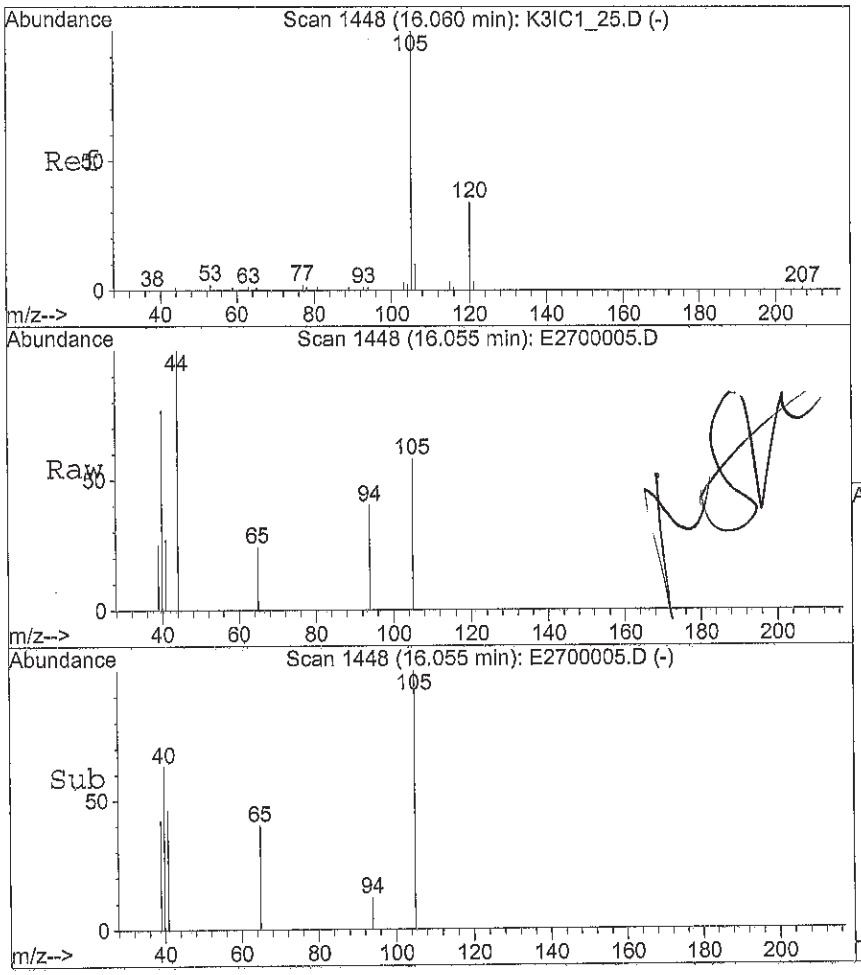


#64
1,3,5-Trimethylbenzene
Concen: 0.05 ug/L
RT: 15.56 min Scan# 1390
Delta R.T. -0.06 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:105 Resp: 940

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

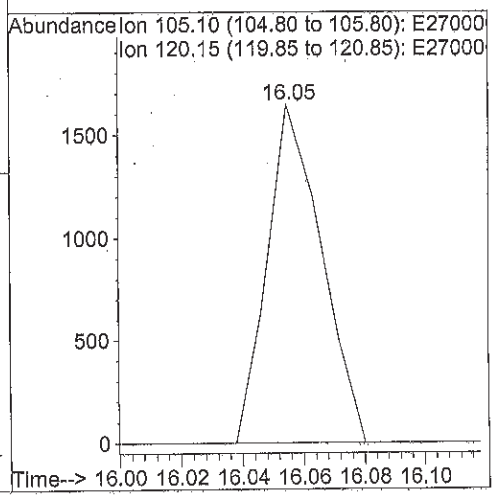


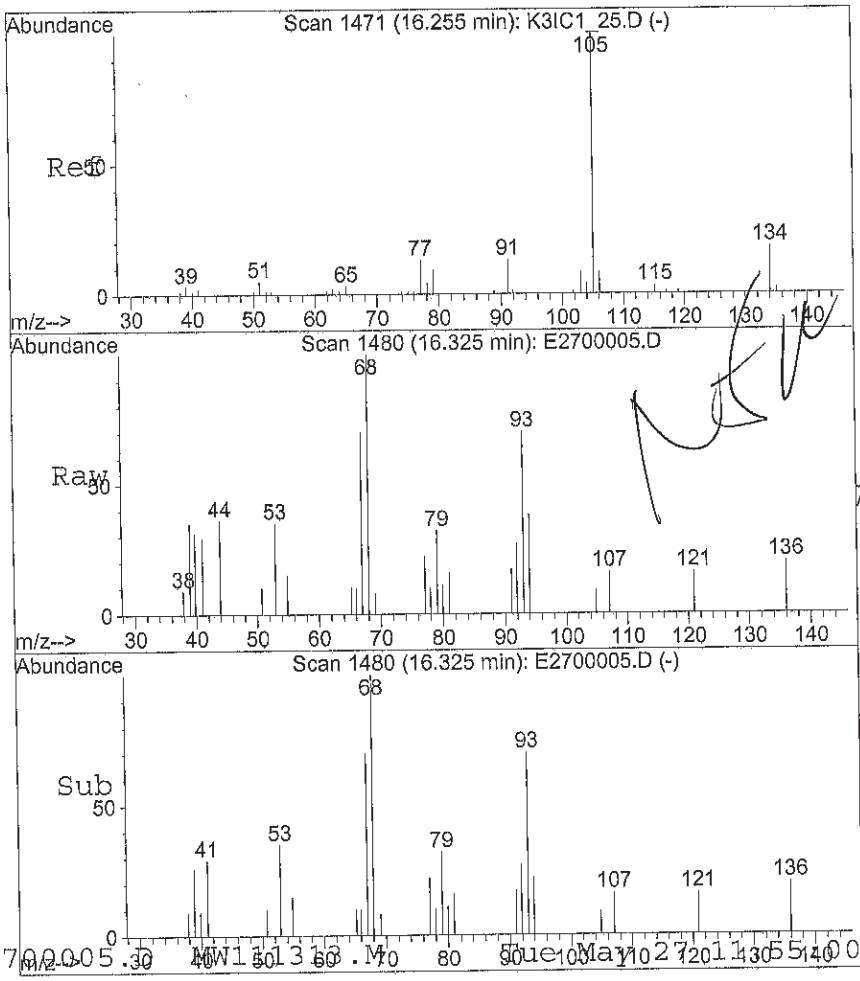


#67
1,2,4-Trimethylbenzene
Concen: 0.10 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:105 Resp: 2022

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

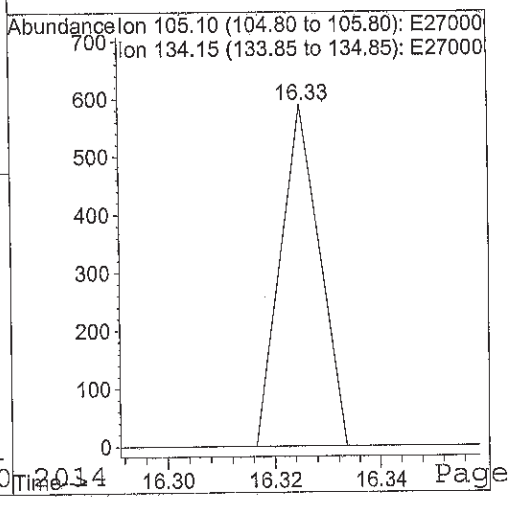


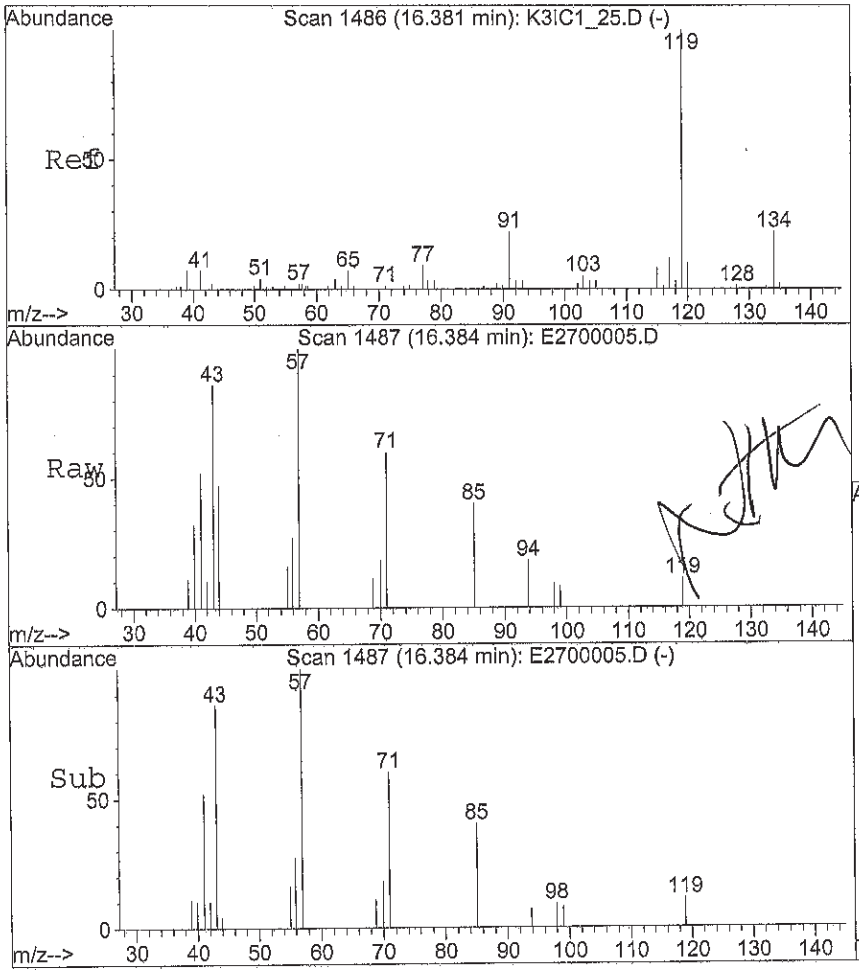


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.07 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:105 Resp: 298

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

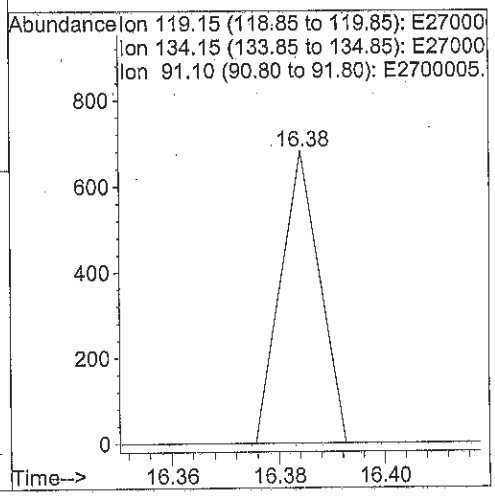


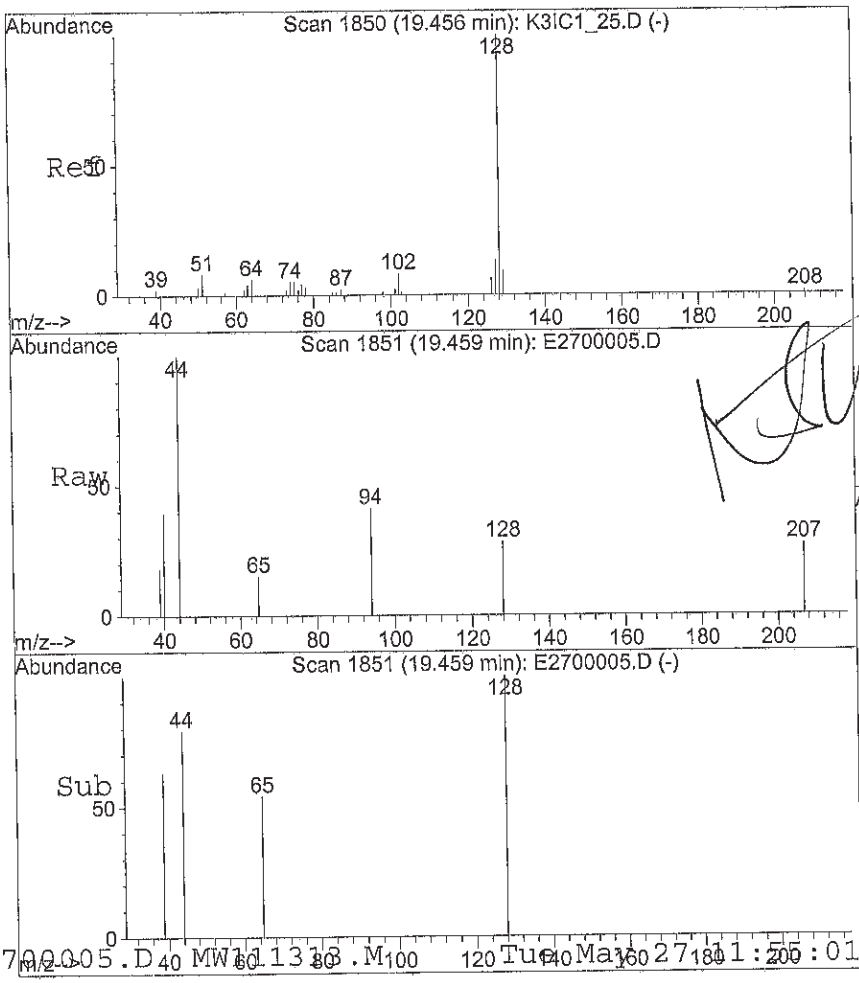


#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:119 Resp: 345

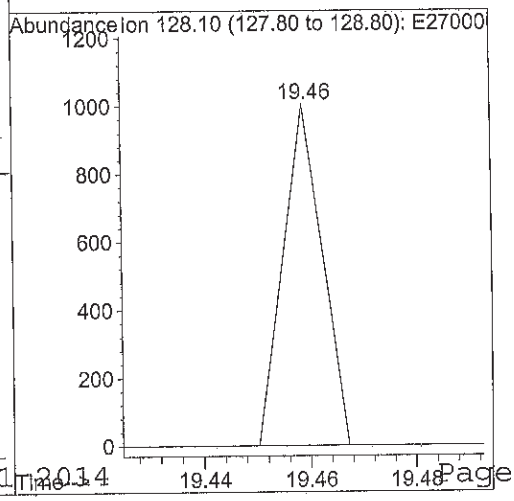
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#





#77
Naphthalene
Concen: 0.03 ug/L
RT: 19.46 min Scan# 1851
Delta R.T. 0.00 min
Lab File: E2700005.D
Acq: 27 May 2014 11:32 am

Tgt Ion:128 Resp: 509



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700005.D Vial: 4
Acq On : 27 May 2014 11:32 am Operator: DN
Sample : 3E42701-04 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-13.0-14.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:55 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1913339	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1436297	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	745284	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	533258	10.72 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 85.76%		
3) Chloroform-d (SU6)	9.18	84	797105	11.16 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.28%		
4) Methylene Chloride-d2 (SU5	7.07	86	460219	11.03 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.24%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	505491	14.86 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 118.88%		
6) Benzene-d6 (SU7)	9.92	84	1555063	10.36 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 82.88%		
8) Toluene-d8 (SU3)	12.20	98	1639551	12.03 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.24%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	764175	13.58 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 108.64%		

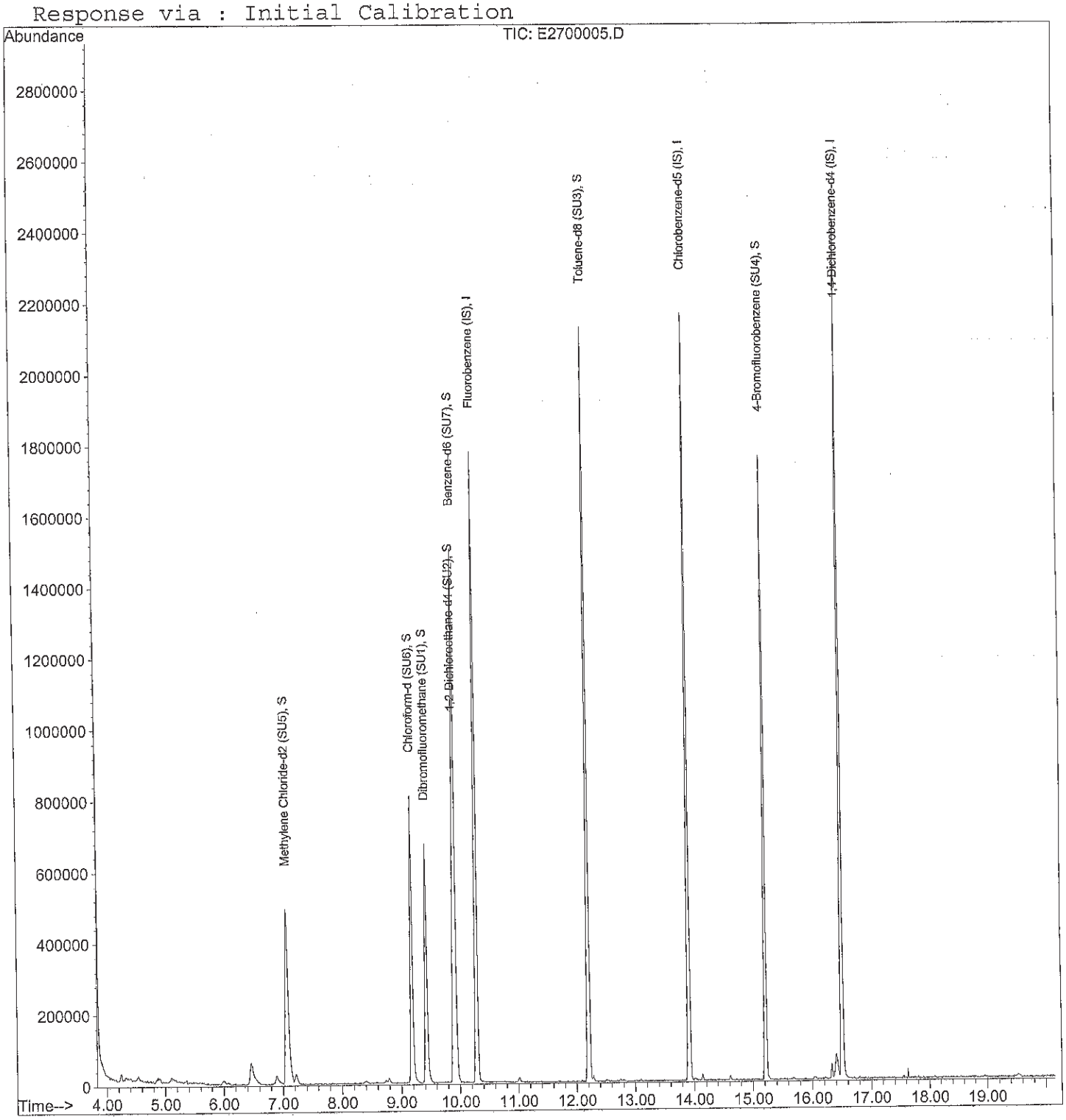
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700005.D Vial: 4
Acq On : 27 May 2014 11:32 am Operator: DN
Sample : 3E42701-04 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-13.0-14.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 11:55 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700006.D
Acq On : 27 May 2014 12:03 pm
Sample : 3E42701-05
Misc : 100cc SVL-502-SA5D-SV-18.0-19.0
MS Integration Params: rteint.p
Quant Time: May 27 12:35 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1697668	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1272990	12.50 ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	687505	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	477777	11.28 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.24%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	480401	11.94 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.52%		
39) Toluene-d8 (SU3)	12.20	98	1488174	12.53 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.24%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	713802	13.71 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 109.68%		

Target Compounds					Qvalue
4) Chloromethane	4.40	50	12801	3.28 ~~ug/L #~~ NT	78
6) Bromomethane	5.07	96	20579	9.24 ~~ug/L~~ NT	80
7) Chloroethane	5.20	64	2815	2.68 ug/L 0.0536	96
11) Acetone	6.46	58	18648	27.79 ~~ug/L~~ NT	88
12) (IPA) Leak Check Compound	6.48	45	167240	819.81 ~~ug/L #~~ NSM	87
13) Carbon disulfide	6.84	76	5168	0.37 ~~ug/L #~~	76
14) Methylene Chloride	7.07	84	5115	1.10 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.88	59	4938	17.05 ~~ug/L #~~ NT	77
21) (MEK) 2-Butanone	8.80	72	578	1.21 ~~ug/L #~~ NSM	1
24) Chloroform	9.22	83	2352	0.26 ~~ug/L #~~	18
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	2935	0.24 ~~ug/L #~~	44
29) 1,1-Dichloropropene	9.92	75	965	0.15 ~~ug/L #~~	1
31) Benzene	9.99	78	497	0.03 ~~ug/L #~~	57
32) 1,2-Dichloroethane	9.92	62	6166	1.09 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	8241	3.24 ~~ug/L #~~ NT	100
41) Toluene	12.29	91	6030	0.35 ug/L 0.007	93
46) 2-Hexanone	12.96	43	1149	0.41 ~~ug/L #~~	37
51) Ethylbenzene	14.03	91	3922	0.20 ug/L #0.0004	62
52) m,p-Xylenes	14.15	106	4083	0.58 ug/L 0.0116	80
53) o-Xylene	14.61	106	1001	0.14 ug/L #0.0028	1
54) Styrene	14.61	104	1217	-0.75 ~~ug/L #~~ NSM	10
56) Isopropylbenzene	15.21	105	1266	0.07 ~~ug/L #~~ NSM	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700006.D Vial: 5
Acq On : 27 May 2014 12:03 pm Operator: DN
Sample : 3E42701-05 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-18.0-19.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 12:35 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

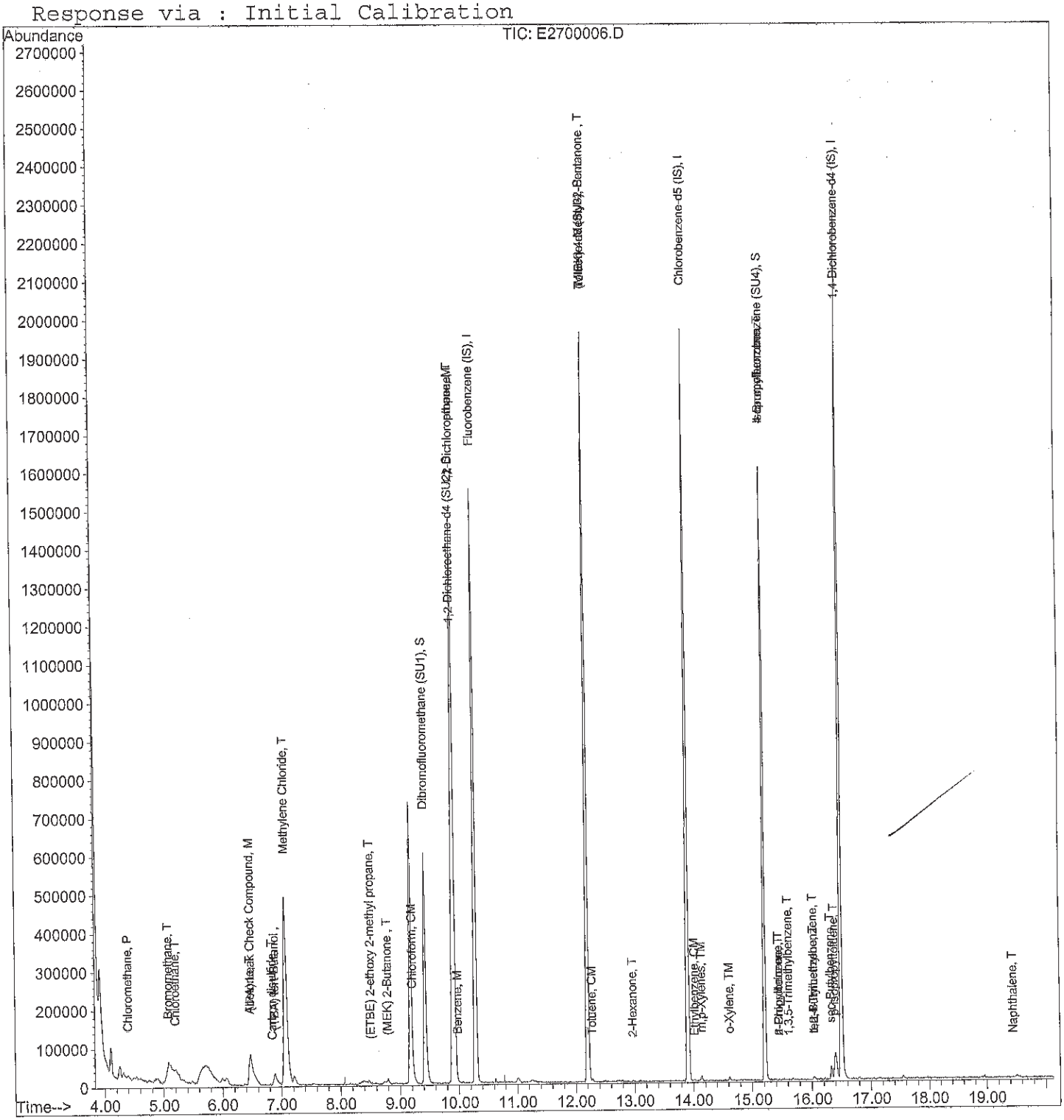
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
62) n-Propylbenzene	15.45	91	1050	0.04	~~ug/L #~~	56
63) 2-Chlorotoluene	15.45	91	1050	0.06	ug/L #	45
64) 1,3,5-Trimethylbenzene	15.62	105	277	0.02	~~ug/L #~~	31
66) tert-Butylbenzene	16.05	119	331	0.02	~~ug/L #~~	24
67) 1,2,4-Trimethylbenzene	16.05	105	2752	0.15	~~ug/L #~~	50 0.003
68) sec-Butylbenzene	16.33	105	314	0.01	ug/L #	62
69) p-Isopropyltoluene	16.38	119	365	0.02	ug/L #	52
77) Naphthalene	19.44	128	337	0.02	~~ug/L~~	100

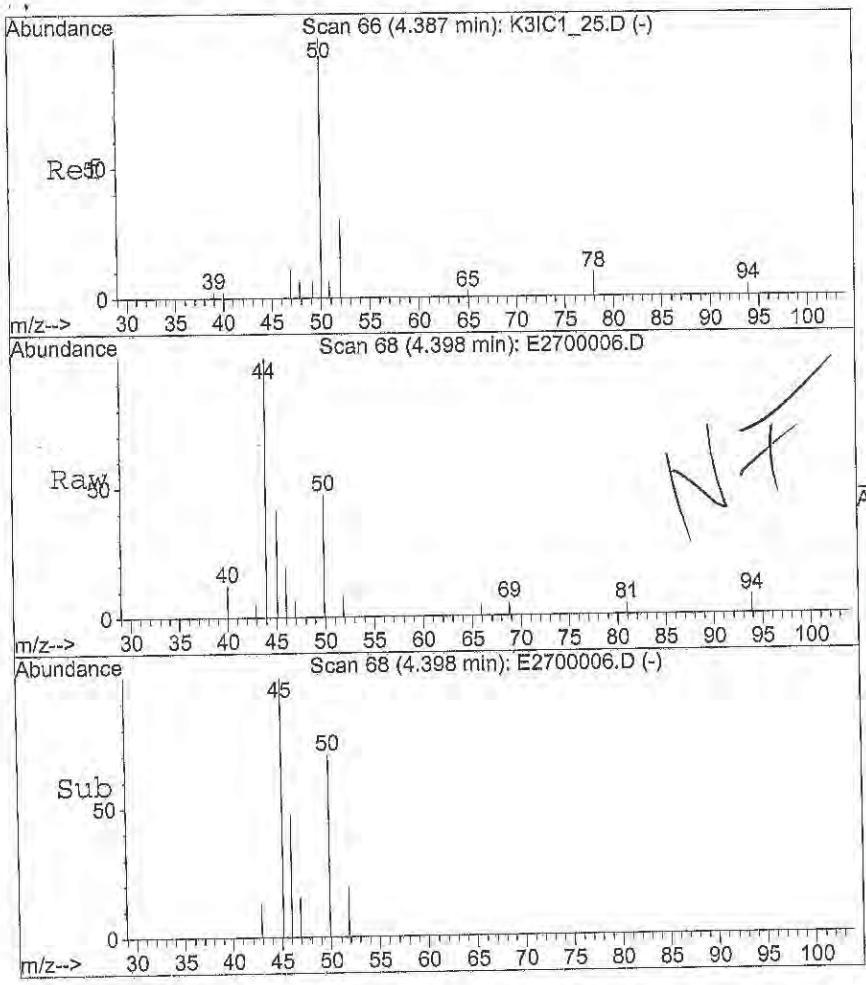
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700006.D Vial: 5
Acq On : 27 May 2014 12:03 pm Operator: DN
Sample : 3E42701-05 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-18.0-19.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 12:35 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

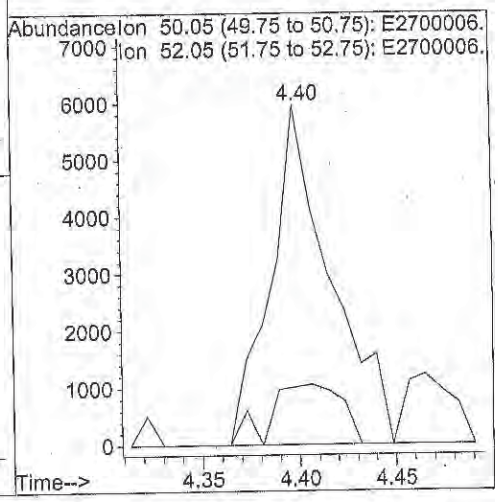


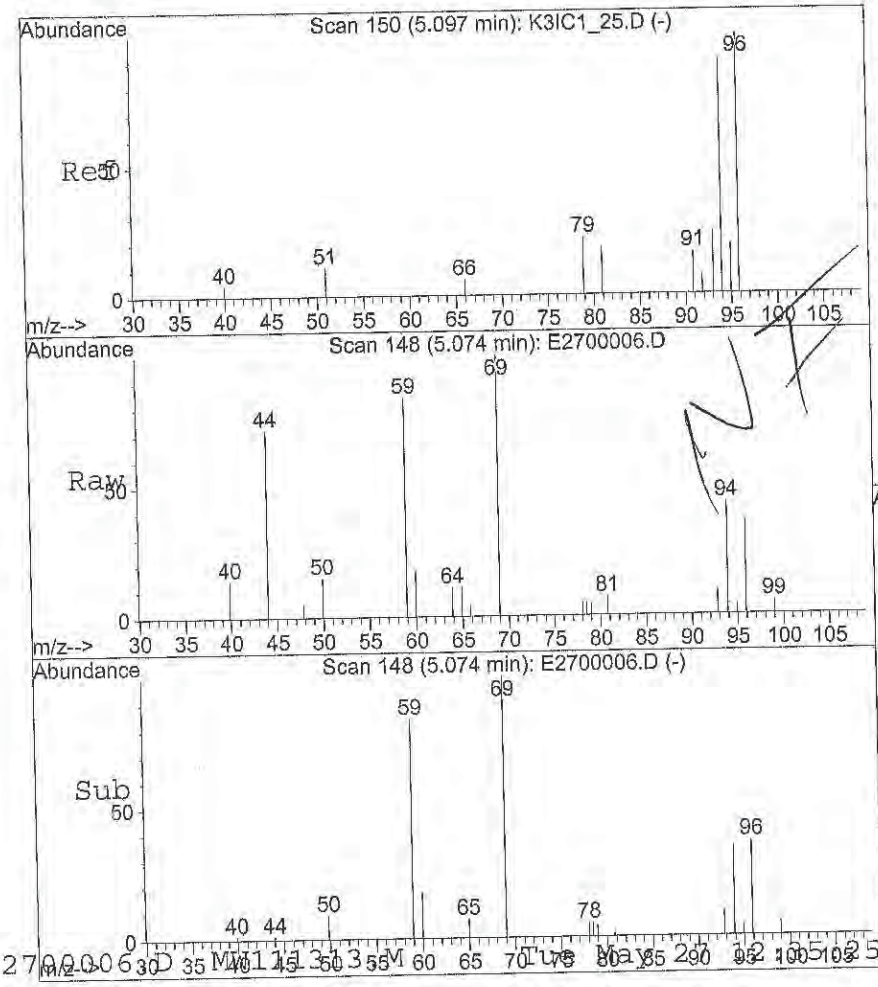


#4
Chloromethane
Concen: 3.28 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 50 Resp: 12801

Ion	Ratio	Lower	Upper
50	100		
52	21.0	26.9	40.3#

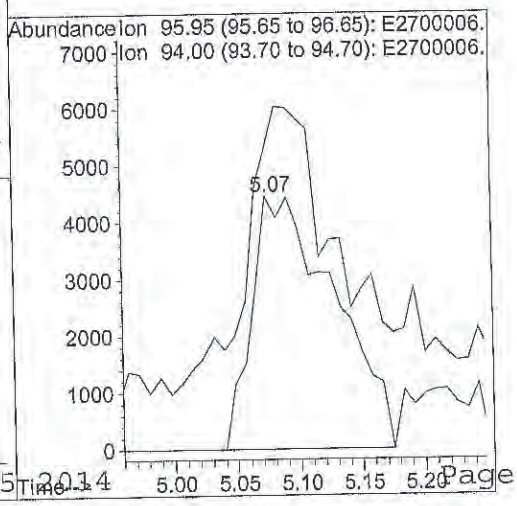


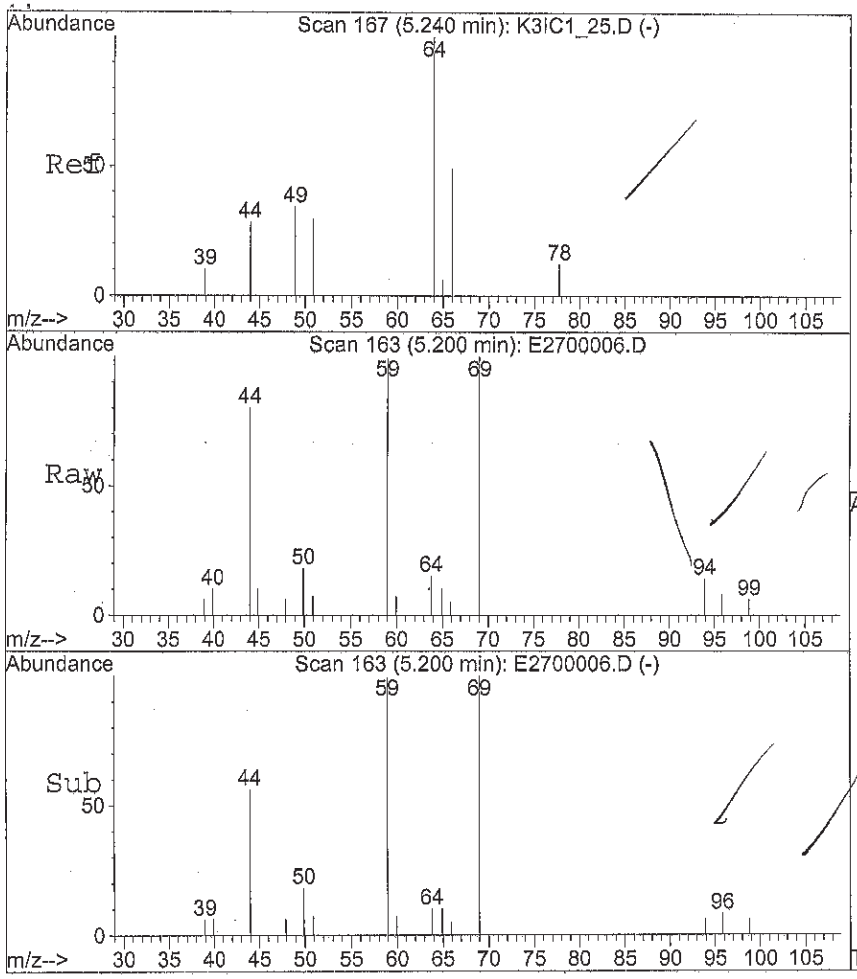


#6
Bromomethane
Concen: 9.24 ug/L
RT: 5.07 min Scan# 148
Delta R.T. -0.02 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 96 Resp: 20579

Ion	Ratio	Lower	Upper
96	100		
94	148.8	101.0	151.4

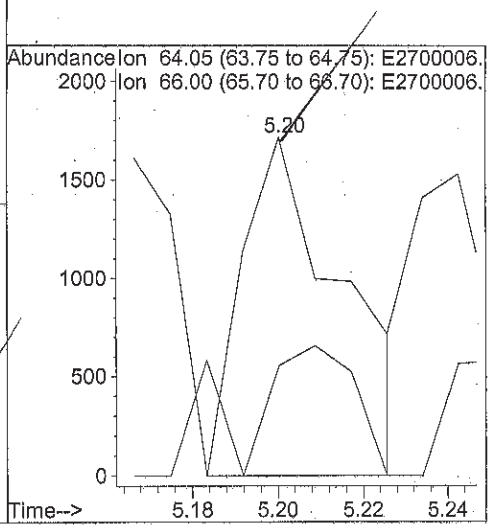


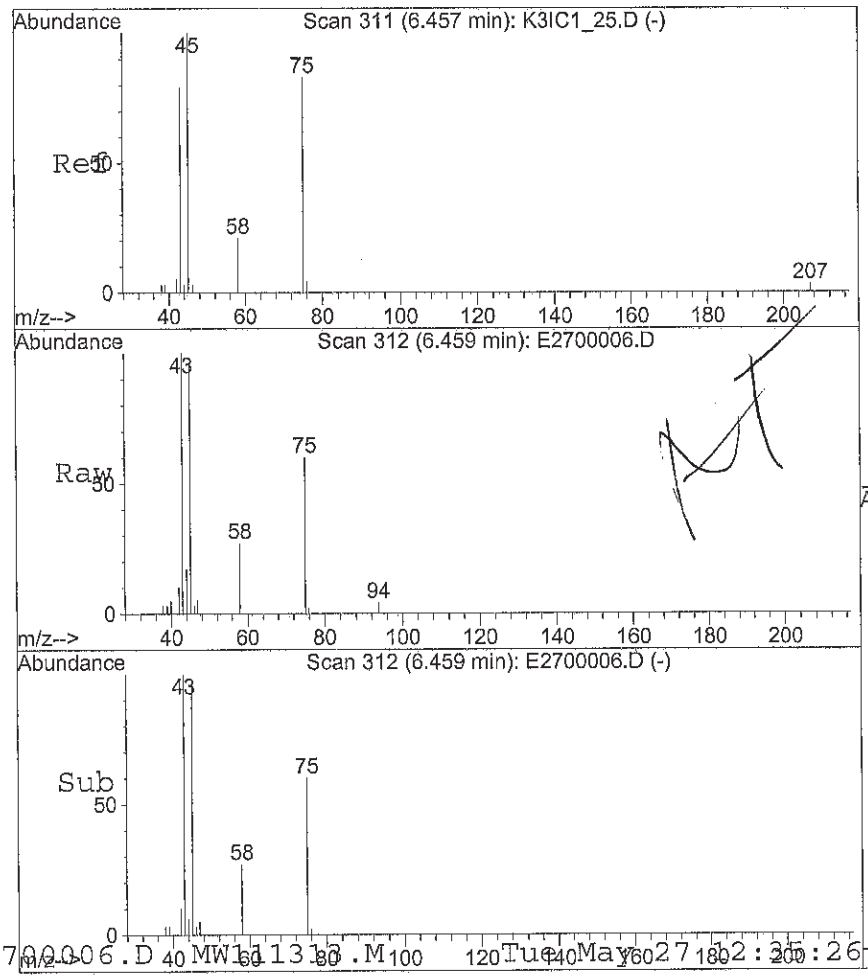


#7
Chloroethane
Concen: 2.68 ug/L
RT: 5.20 min Scan# 163
Delta R.T. -0.04 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 64 Resp: 2815

Ion	Ratio	Lower	Upper
64	100		
66	41.6	35.4	53.0

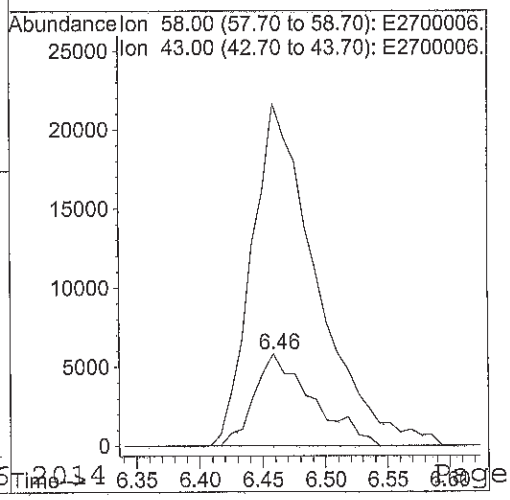


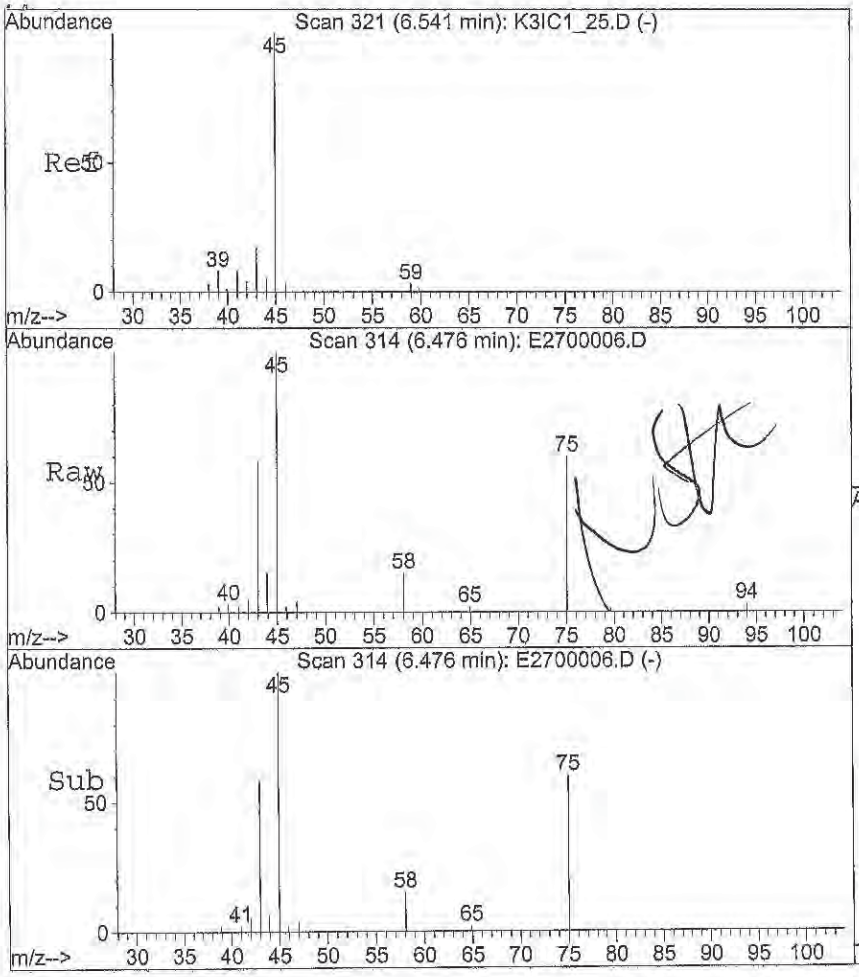


#11
Acetone
Concen: 27.79 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 58 Resp: 18648

Ion	Ratio	Lower	Upper
58	100		
43	419.1	360.9	541.3

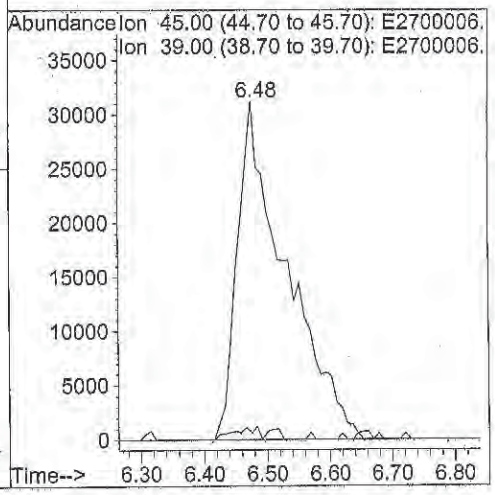


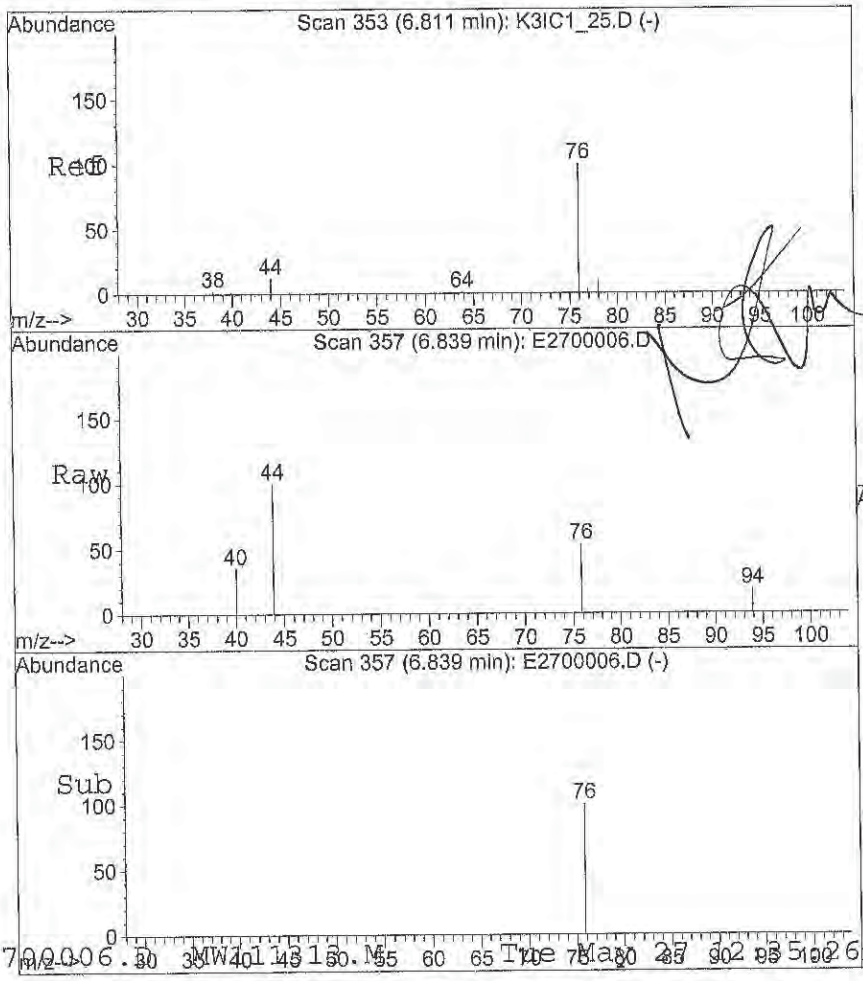


#12
(IPA) Leak Check Compound
Concen: 819.81 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.07 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 45 Resp: 167240

Ion	Ratio	Lower	Upper
45	100		
39	1.9	4.9	7.3#

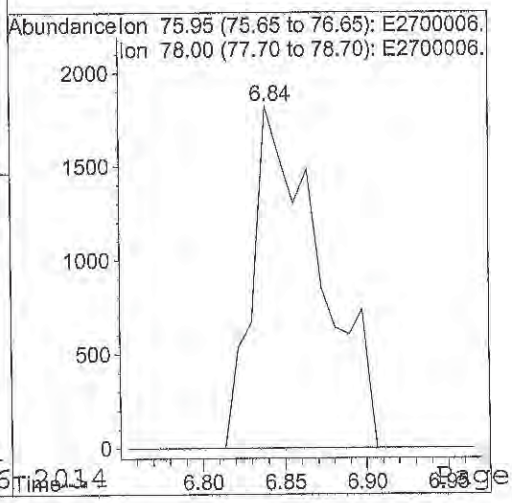


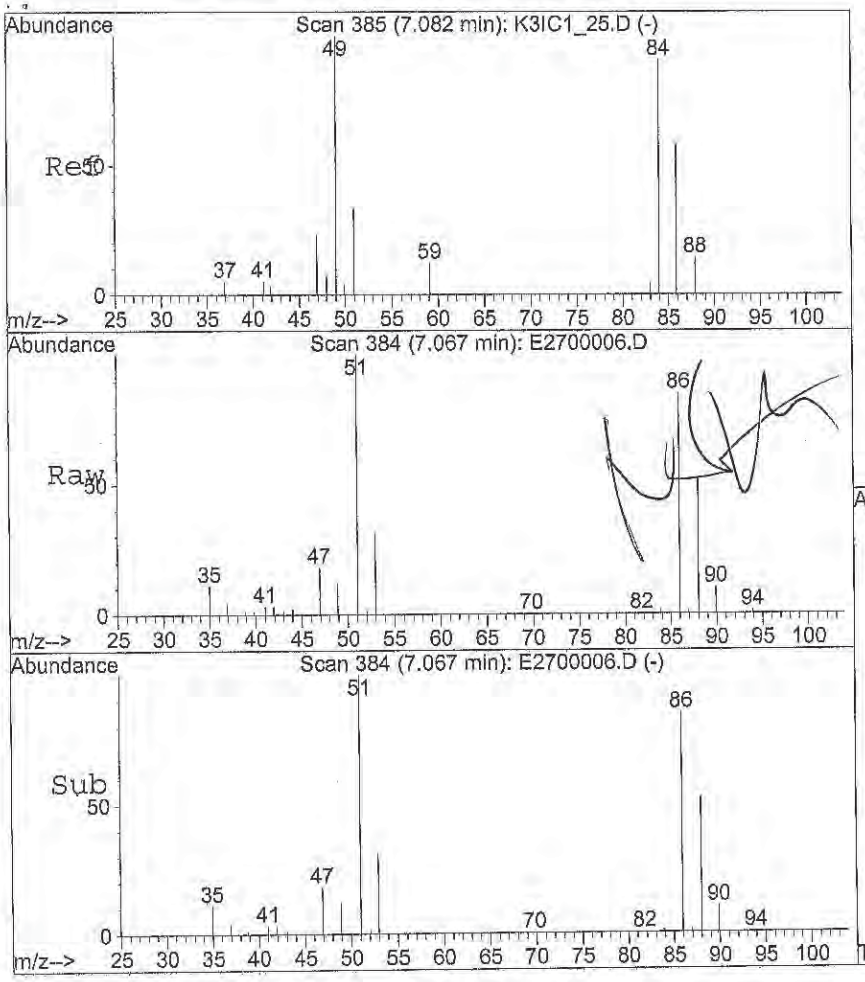


#13
Carbon disulfide
Concen: 0.37 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 76 Resp: 5168

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

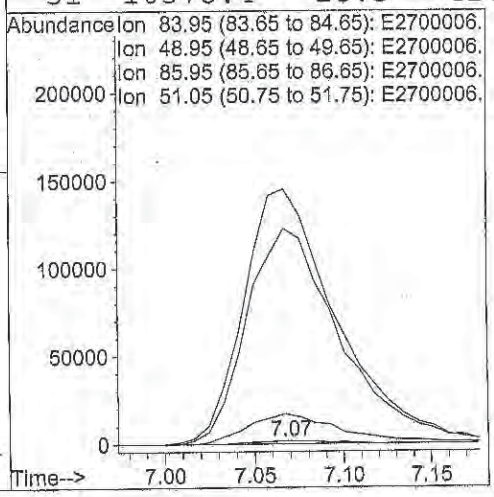


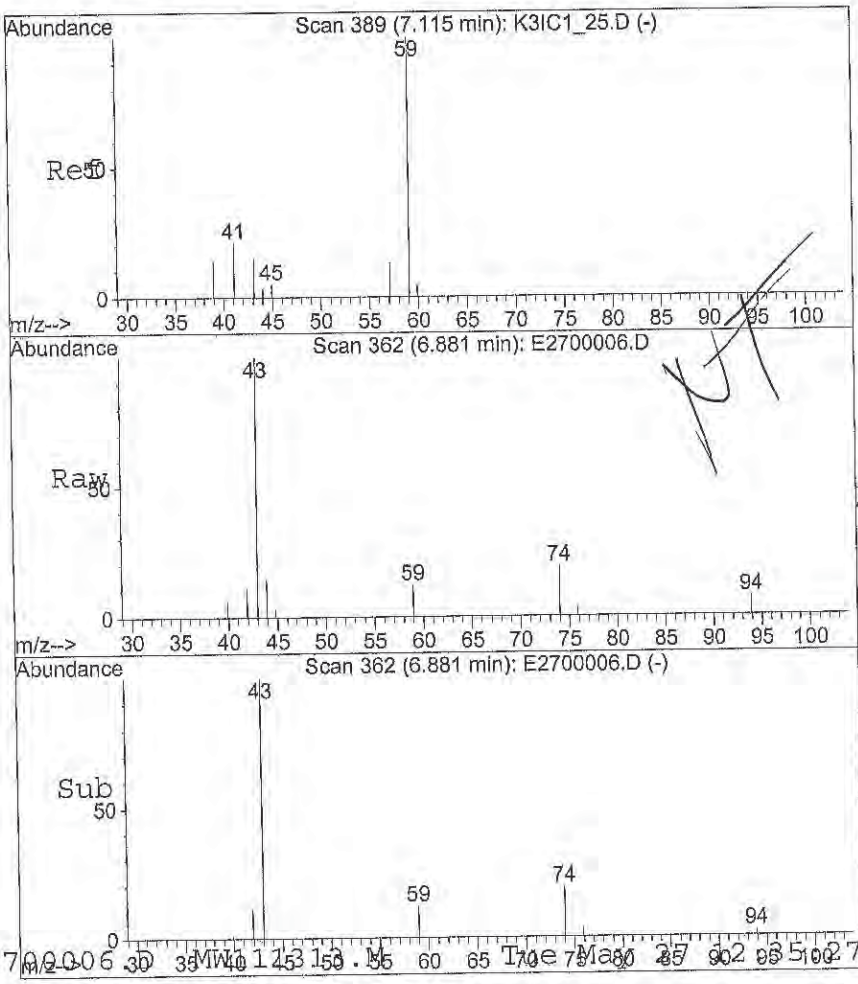


#14
Methylene Chloride
Concen: 1.10 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 84 Resp: 5115

Ion	Ratio	Lower	Upper
84	100		
49	1200.1	89.8	134.6#
86	8797.8	51.1	76.7#
51	10378.4	28.5	42.7#

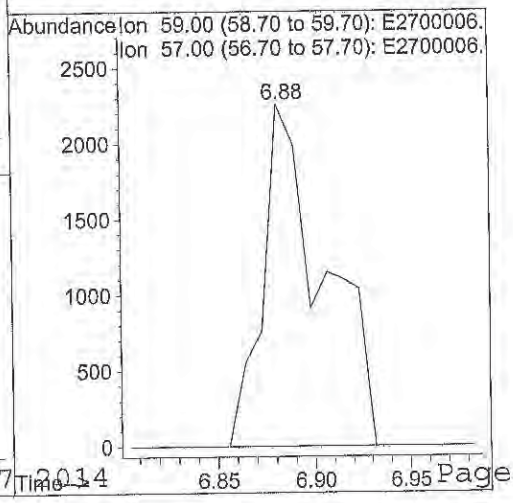


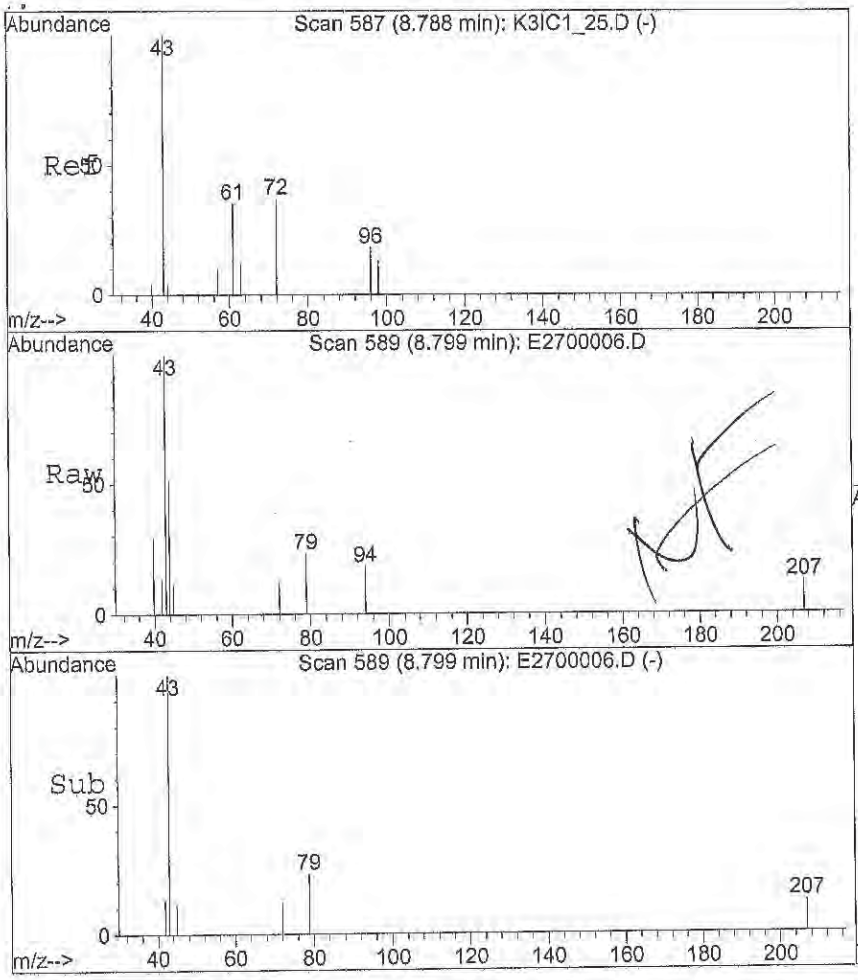


#15
(TBA) tert-Butanol
Concen: 17.05 ug/L
RT: 6.88 min Scan# 362
Delta R.T. -0.23 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 59 Resp: 4938

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

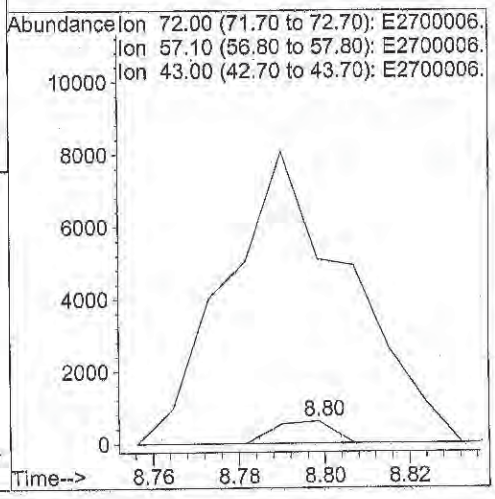


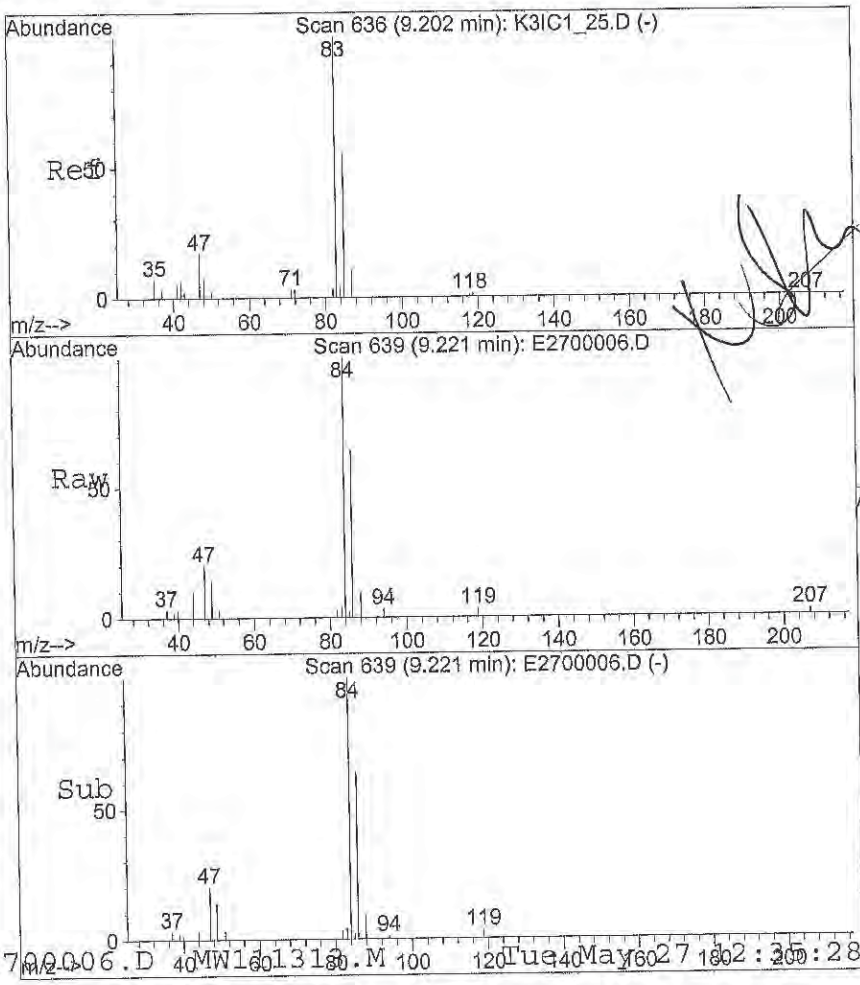


#21
(MEK) 2-Butanone
Concen: 1.21 ug/L
RT: 8.80 min Scan# 589
Delta R.T. 0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 72 Resp: 578

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	2841.0	314.2	471.2#

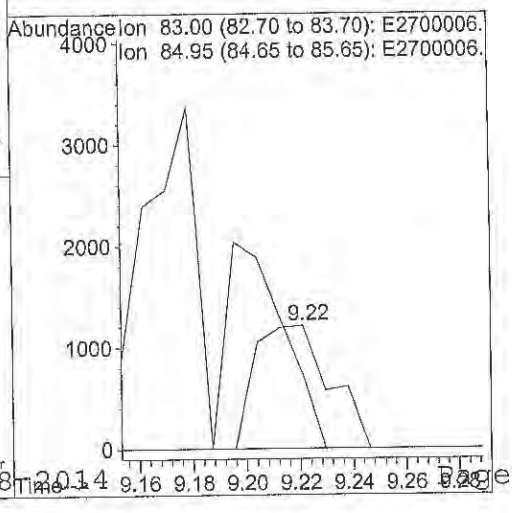


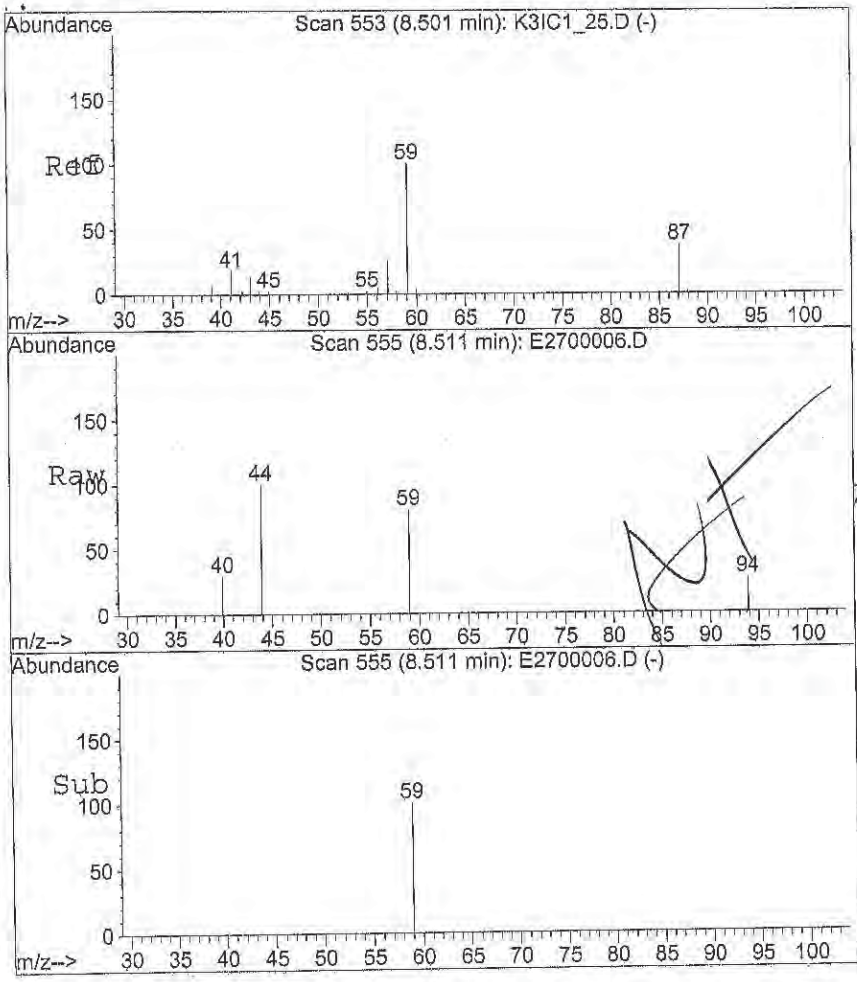


#24
Chloroform
Concen: 0.26 ug/L
RT: 9.22 min Scan# 639
Delta R.T. 0.02 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 83 Resp: 2352

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

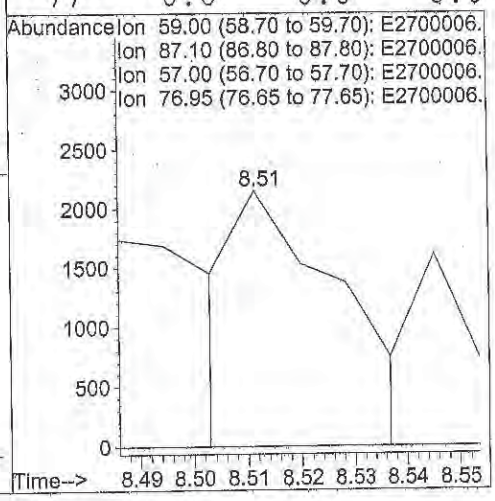


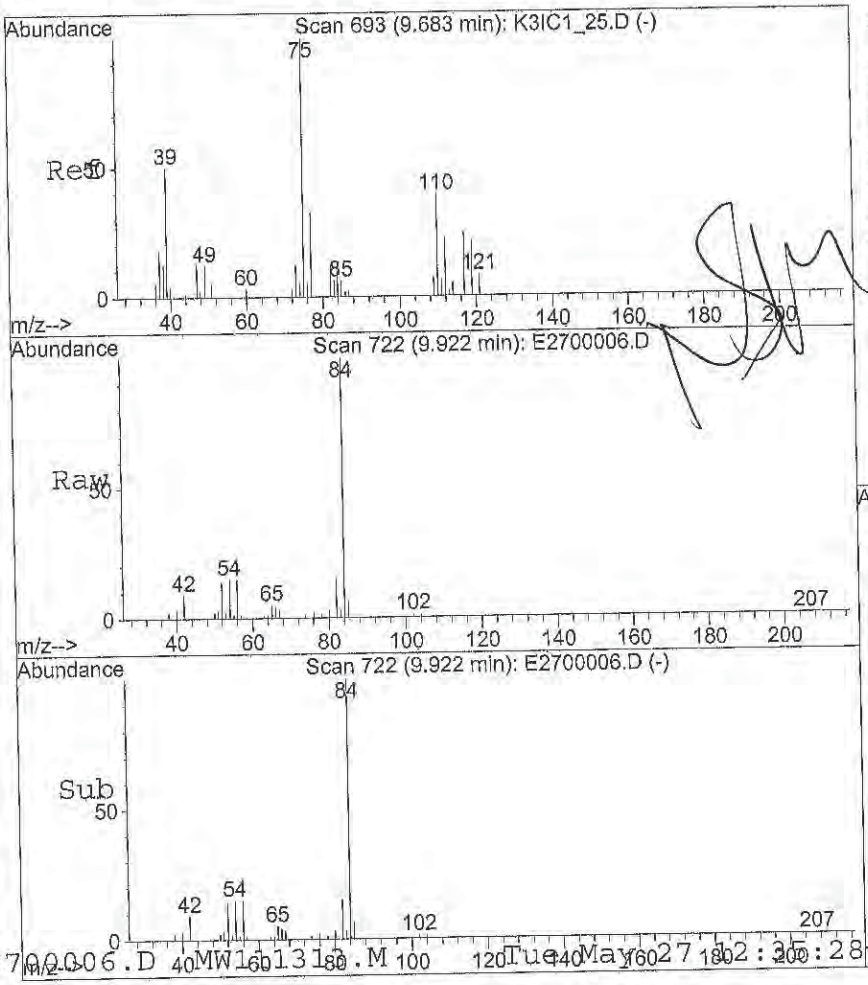


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.24 ug/L
RT: 8.51 min Scan# 555
Delta R.T. 0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 59 Resp: 2935

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

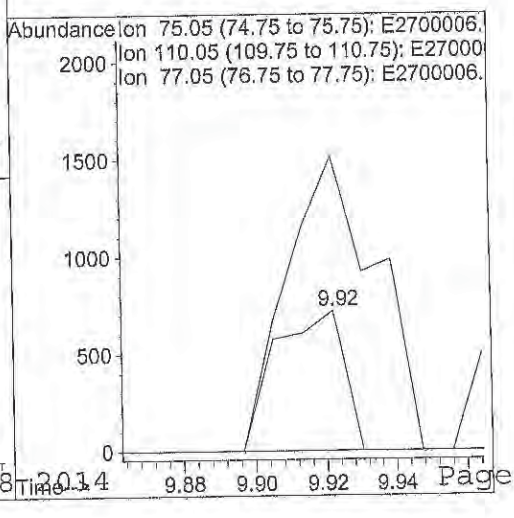


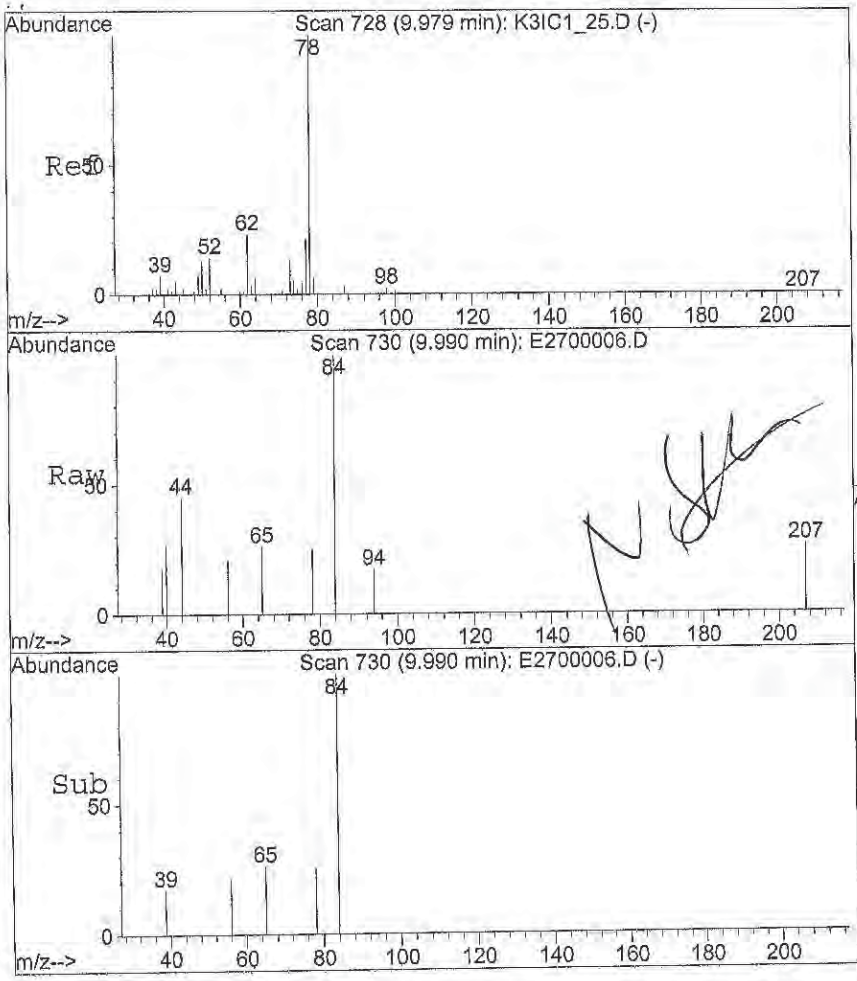


#29
1,1-Dichloropropene
Concen: 0.15 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 75 Resp: 965

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	275.6	25.0	37.4#

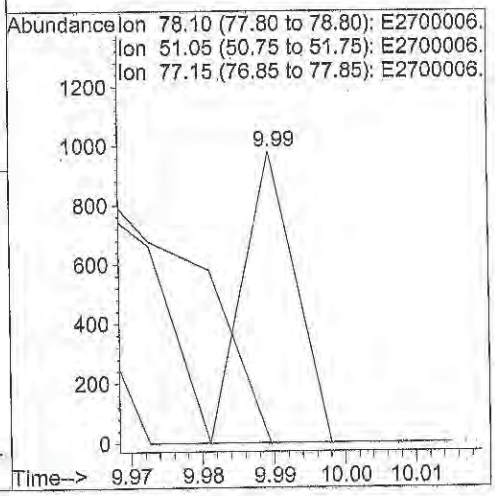


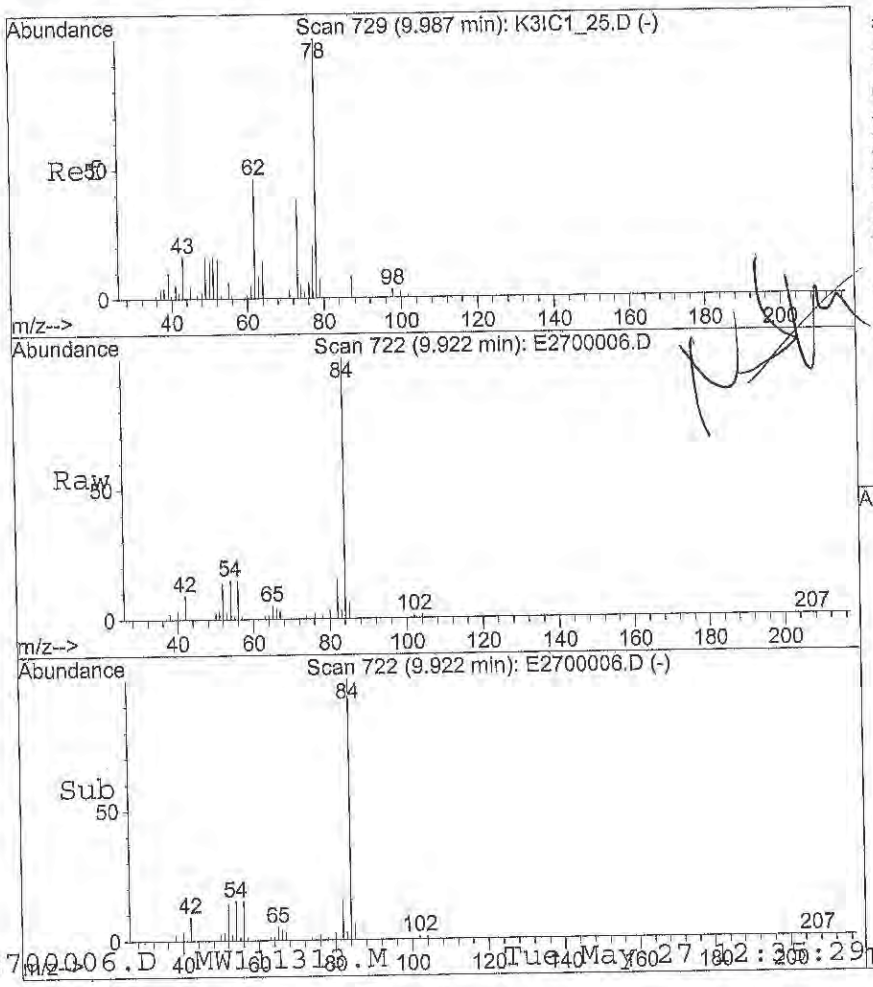


#31
Benzene
Concen: 0.03 ug/L
RT: 9.99 min Scan# 730
Delta R.T. 0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 78 Resp: 497

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

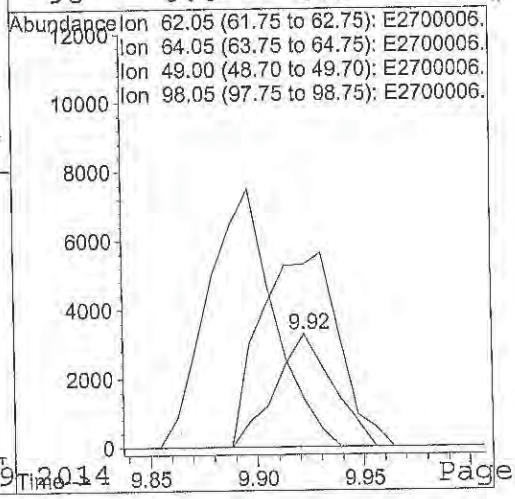


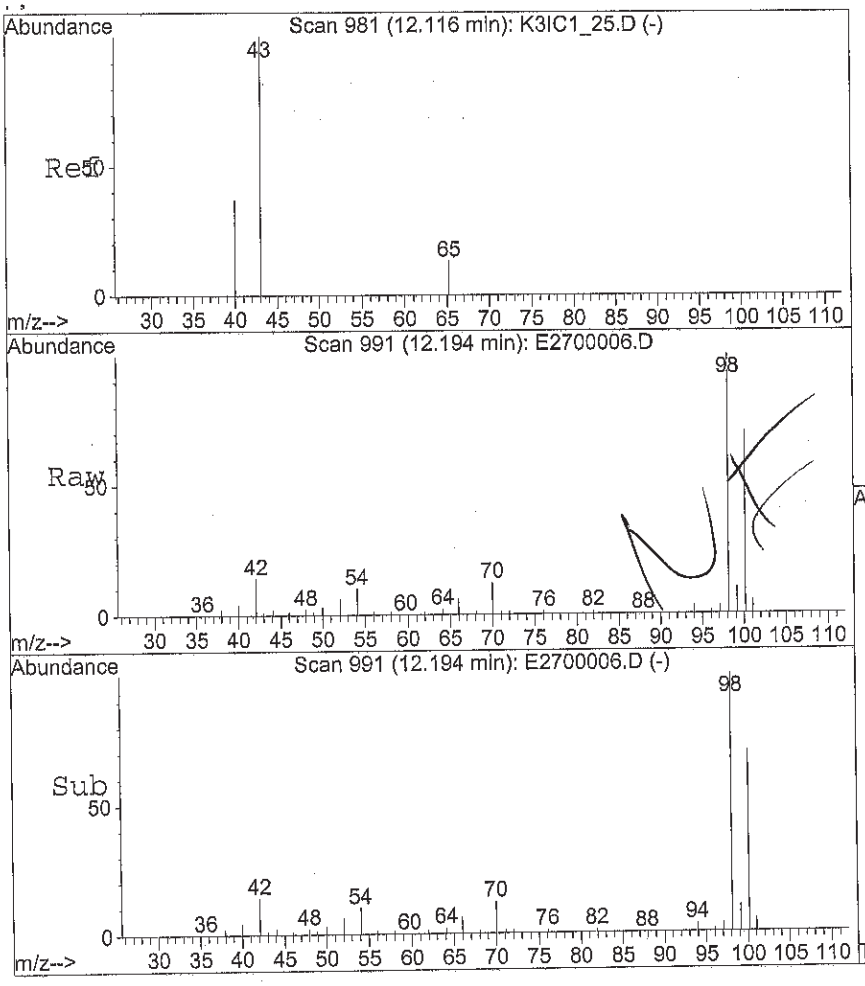


#32
1,2-Dichloroethane
Concen: 1.09 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.07 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 62 Resp: 6166

Ion	Ratio	Lower	Upper
62	100		
64	231.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

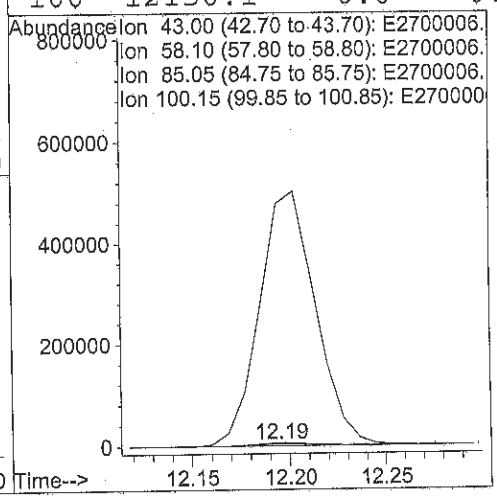


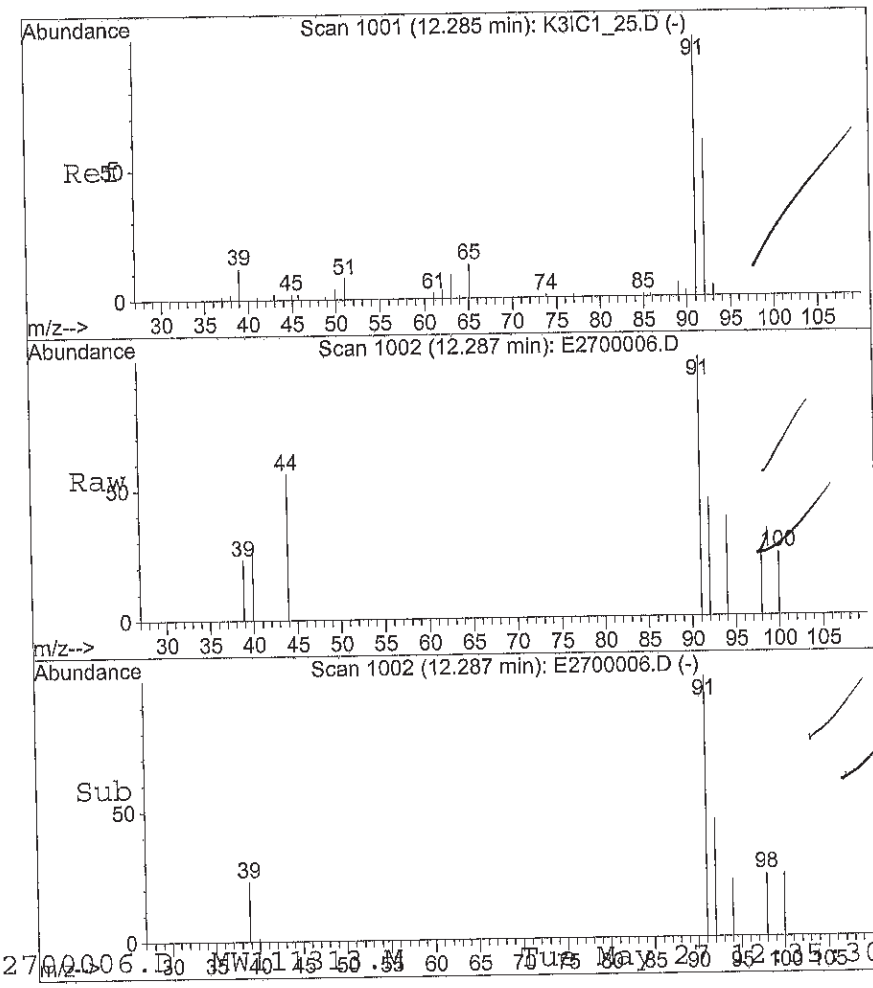


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.24 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 43 Resp: 8241

Ion	Ratio	Lower	Upper
43	100		
58	137.4	0.0	0.0#
85	0.0	0.0	0.0
100	12150.1	0.0	0.0#

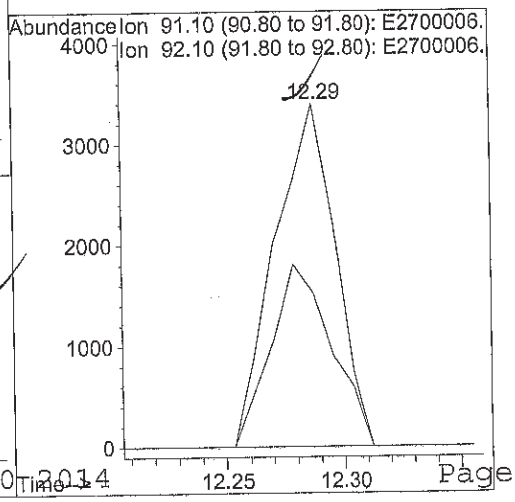


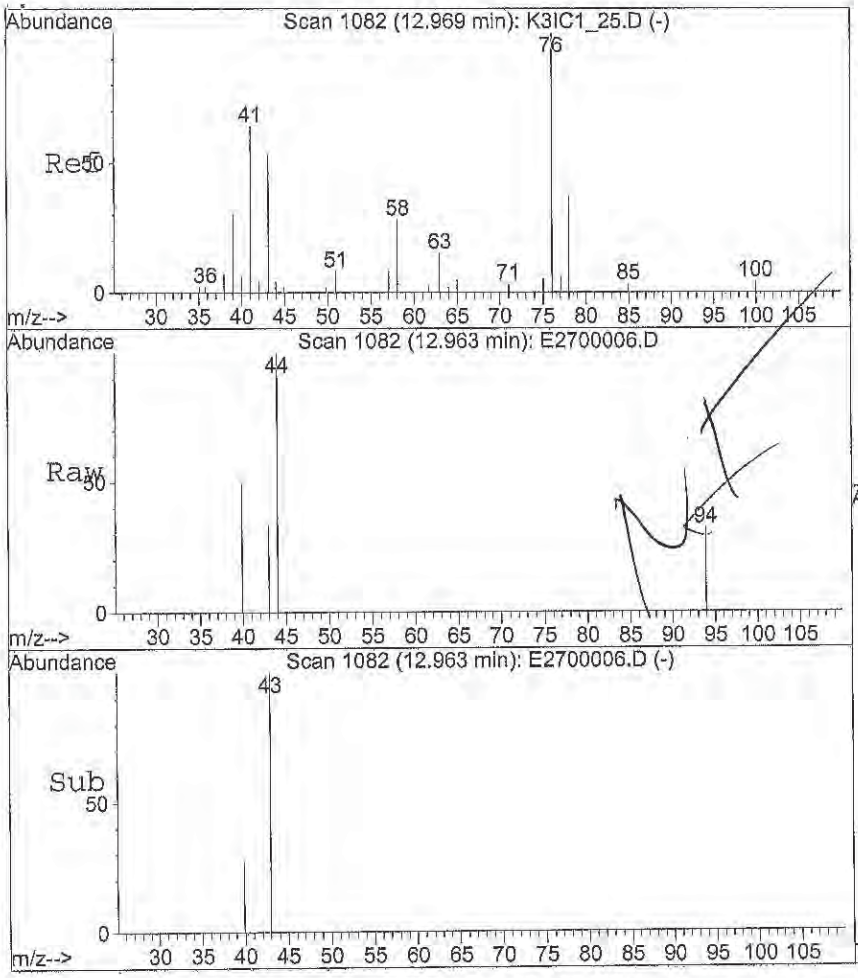


#41
Toluene
Concen: 0.35 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 91 Resp: 6030

Ion	Ratio	Lower	Upper
91	100		
92	53.6	47.4	71.0

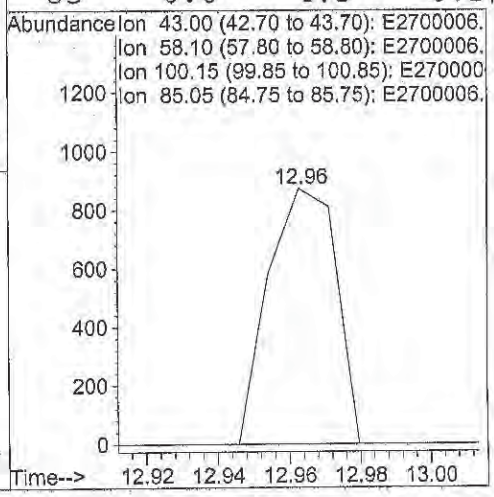


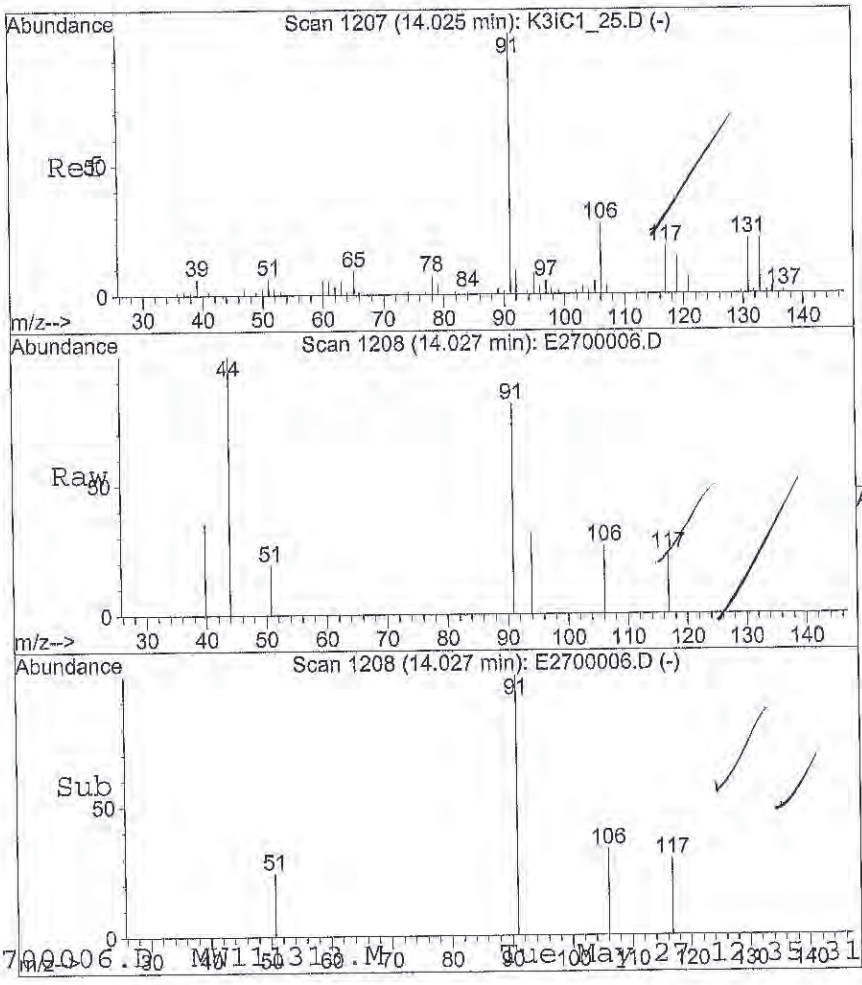


#46
2-Hexanone
Concen: 0.41 ug/L
RT: 12.96 min Scan# 1082
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 43 Resp: 1149

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

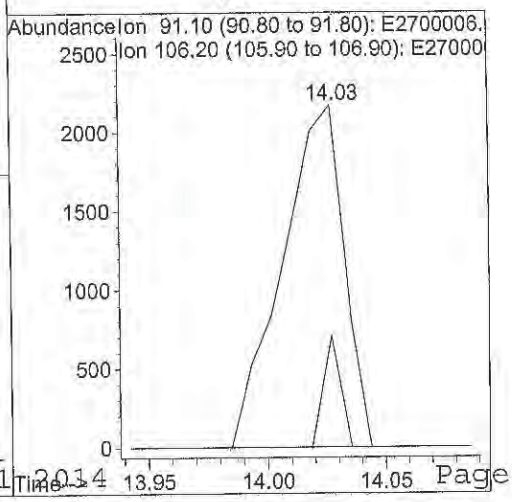


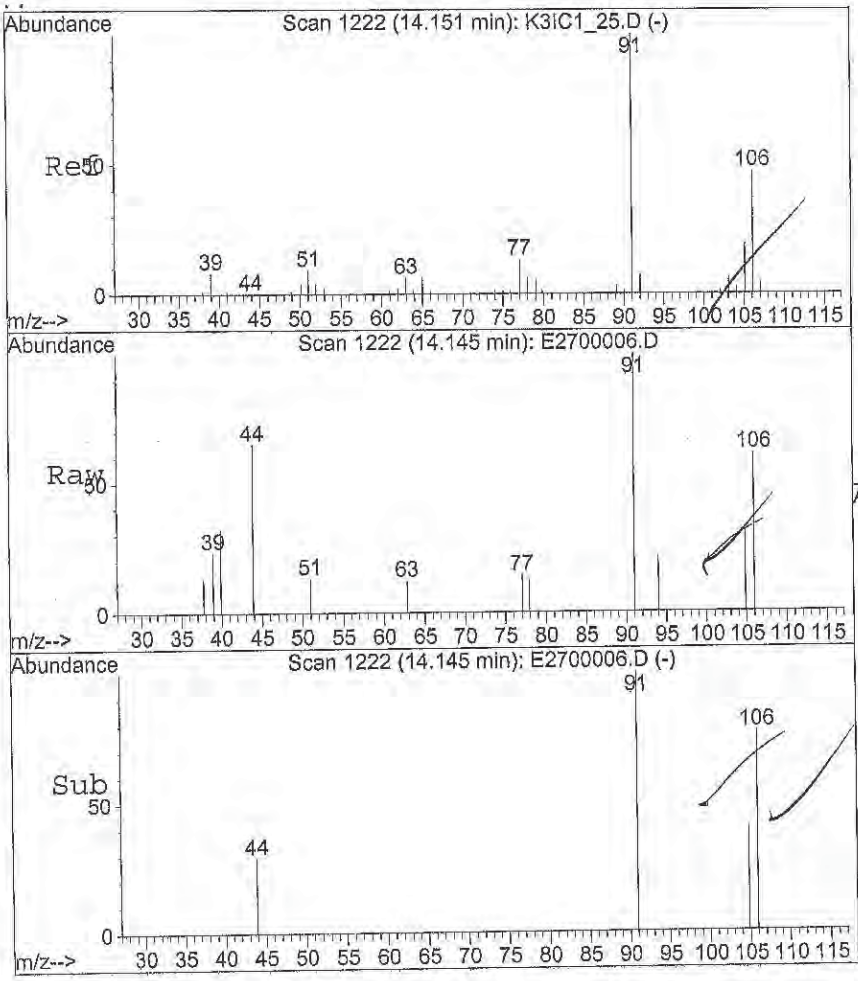


#51
Ethylbenzene
Concen: 0.20 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 91 Resp: 3922

Ion	Ratio	Lower	Upper
91	100		
106	9.1	23.5	35.3#

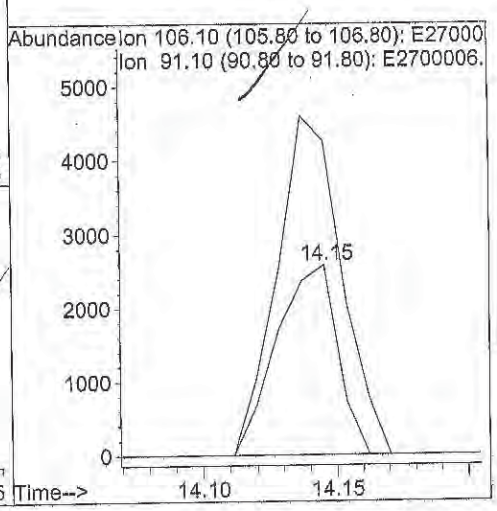


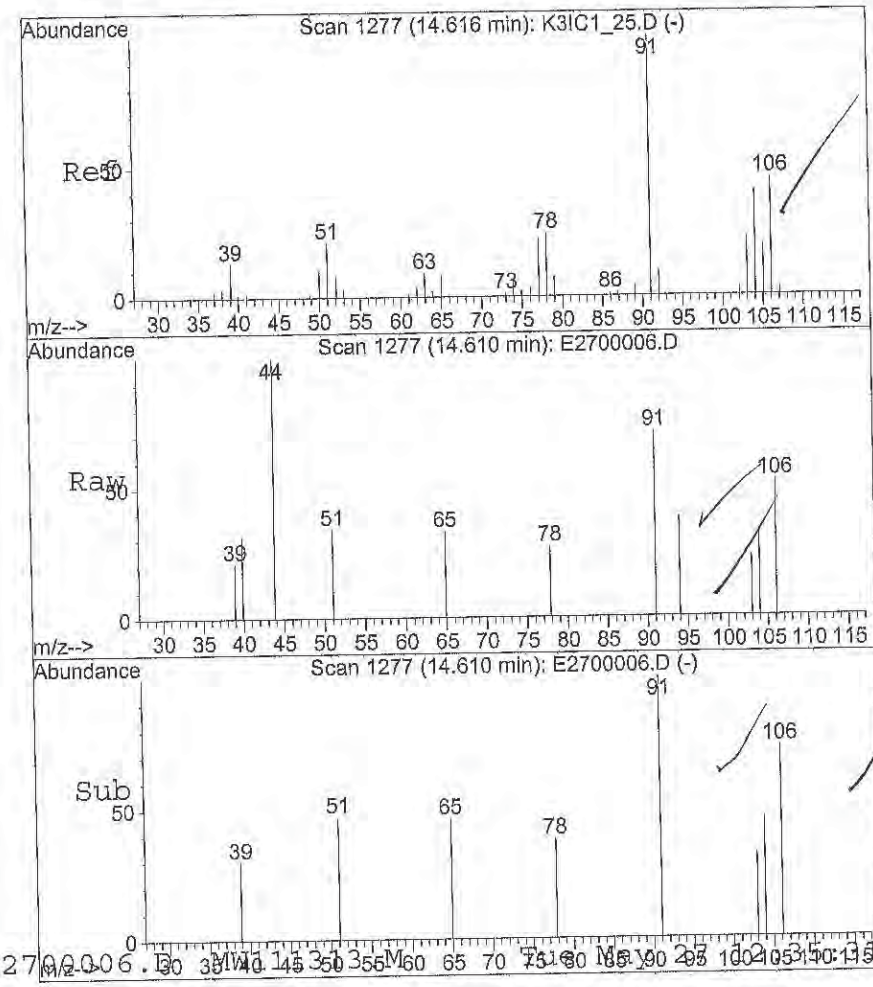


#52
m,p-Xylenes
Concen: 0.58 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:106 Resp: 4083

Ion	Ratio	Lower	Upper
106	100		
91	189.4	177.1	265.7

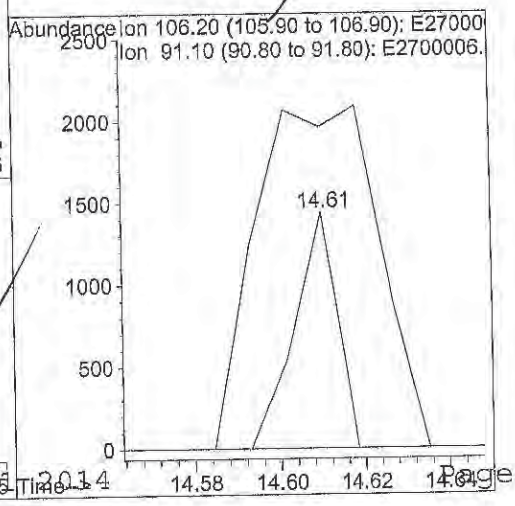


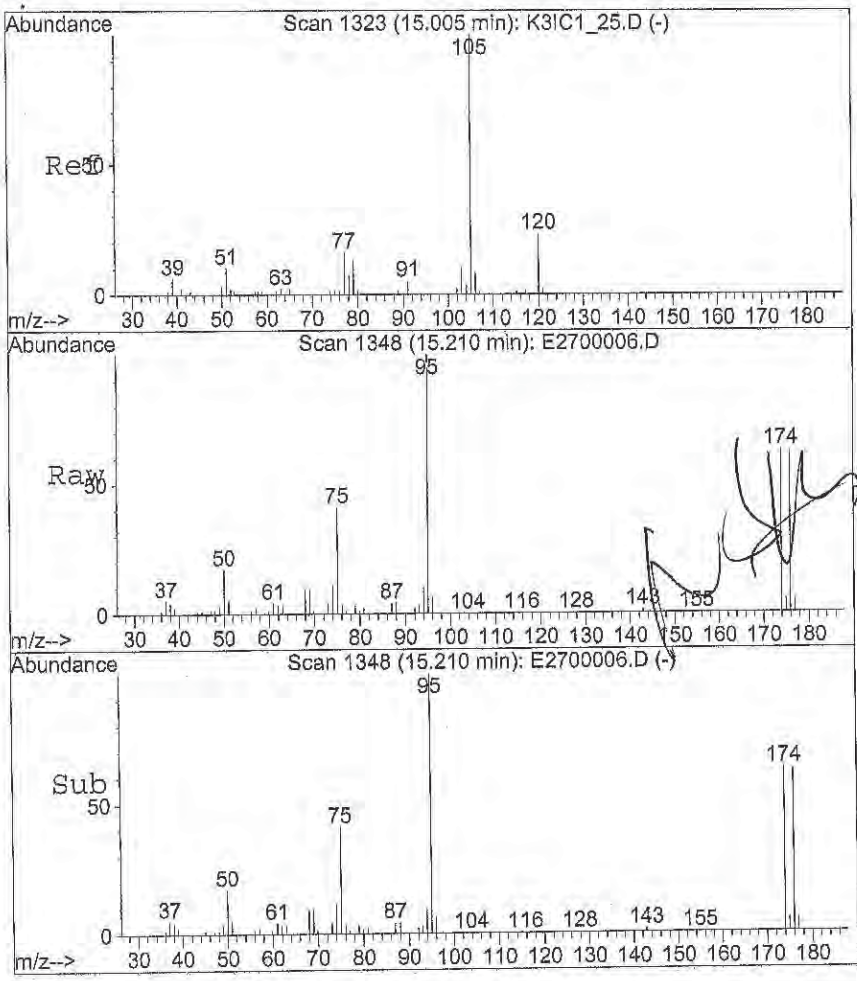


#53
o-Xylene
Concen: 0.14 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:106 Resp: 1001

Ion	Ratio	Lower	Upper
106	100		
91	417.8	179.0	268.6#

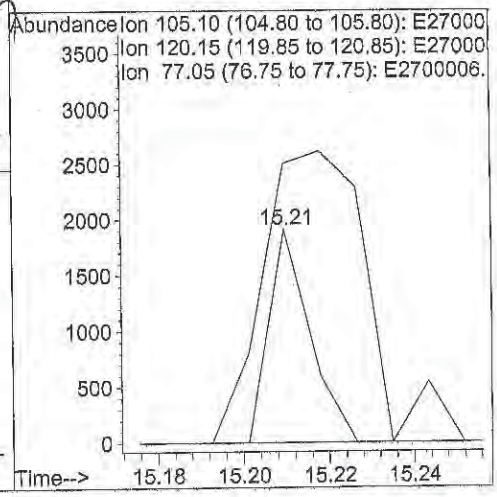


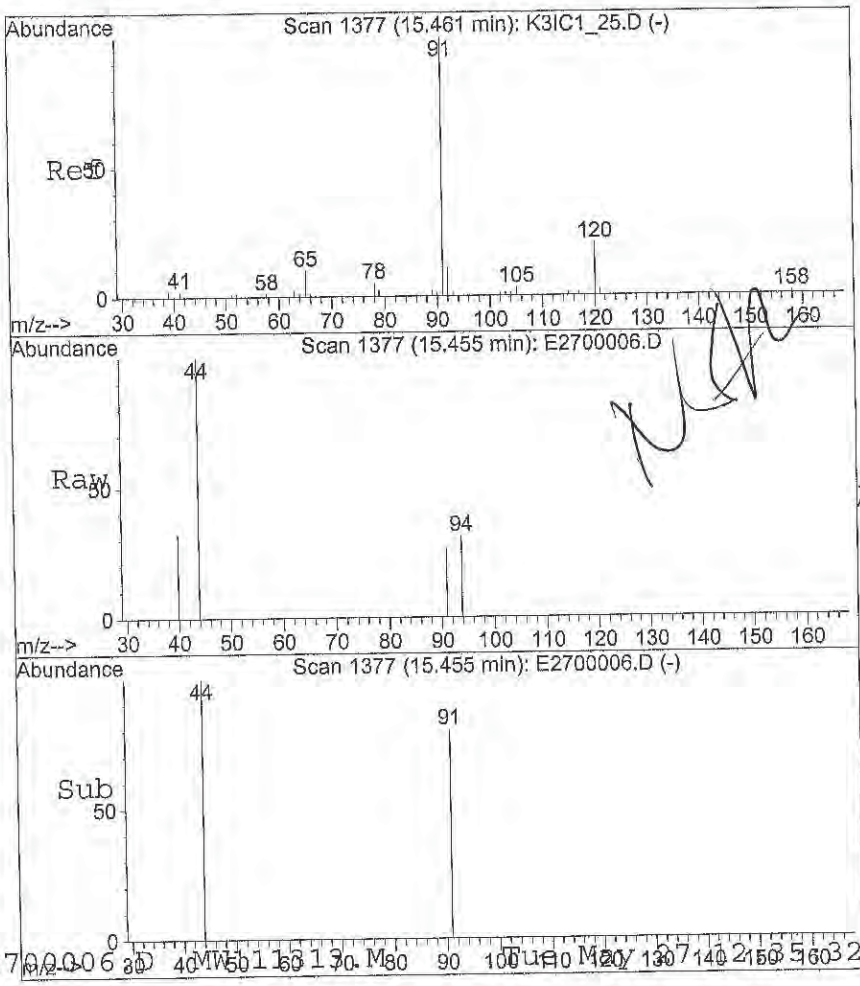


#56
Isopropylbenzene
Concen: 0.07 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. 0.21 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:105 Resp: 1266

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	349.6	13.1	19.7#

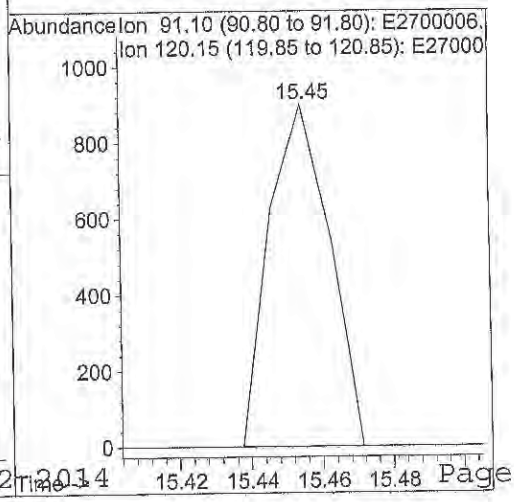


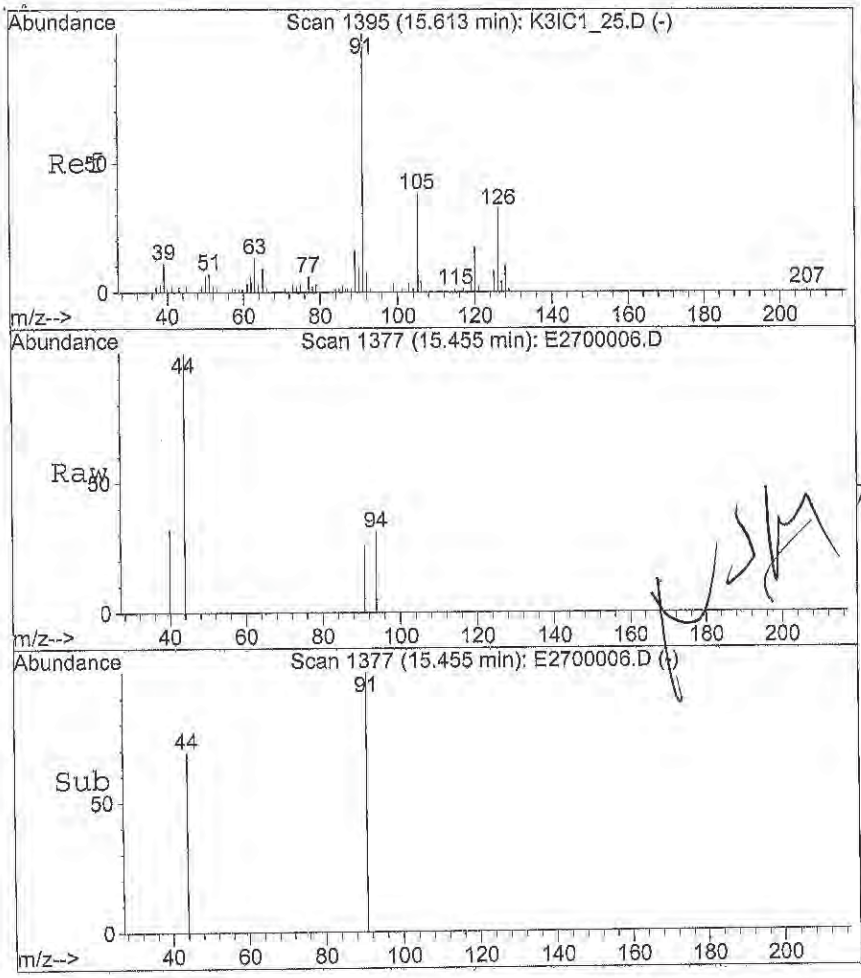


#62
n-Propylbenzene
Concen: 0.04 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 91 Resp: 1050

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

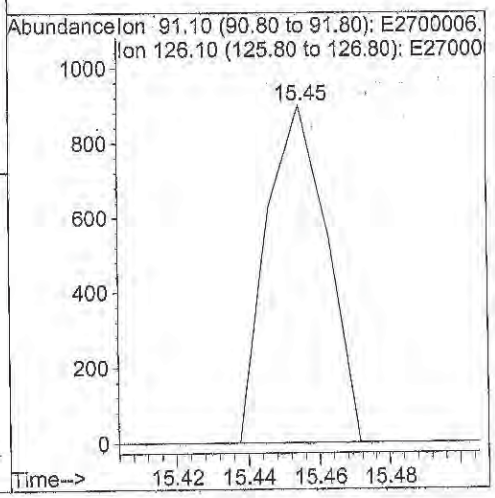


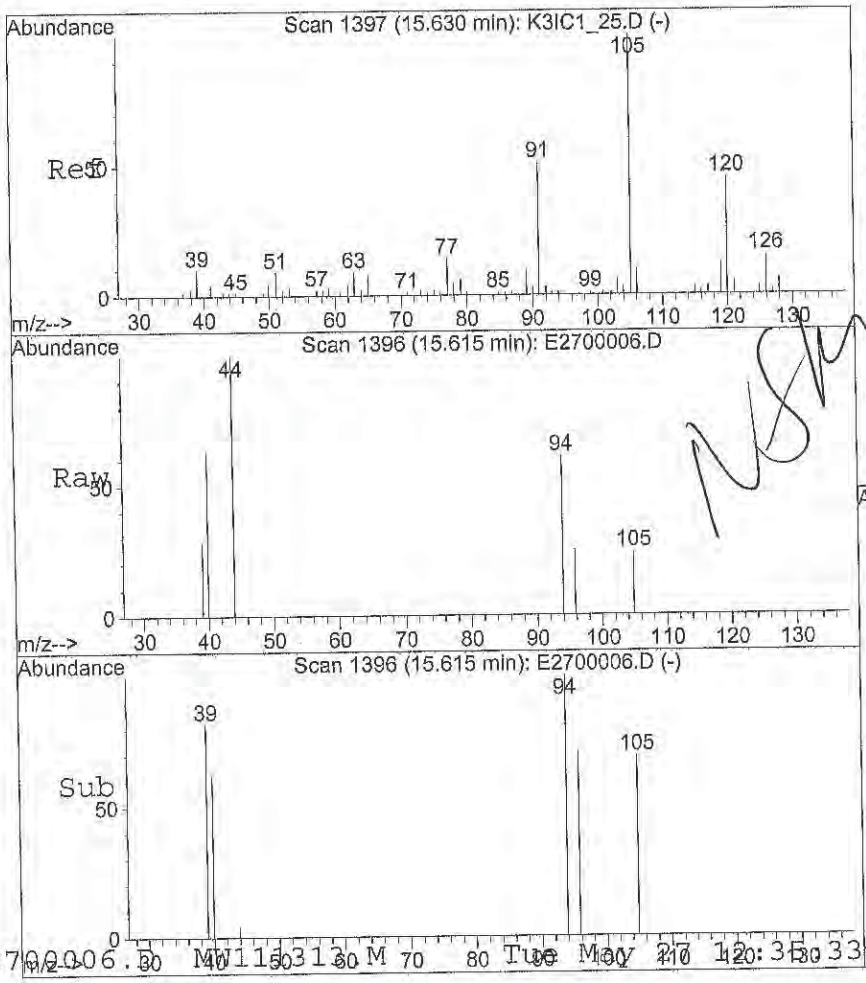


#63
2-Chlorotoluene
Concen: 0.06 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.16 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion: 91 Resp: 1050

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

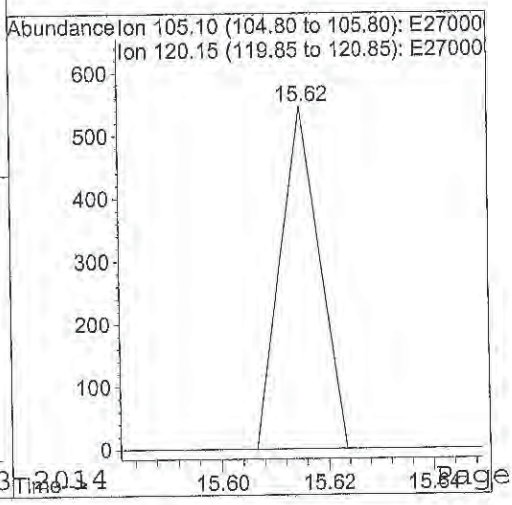


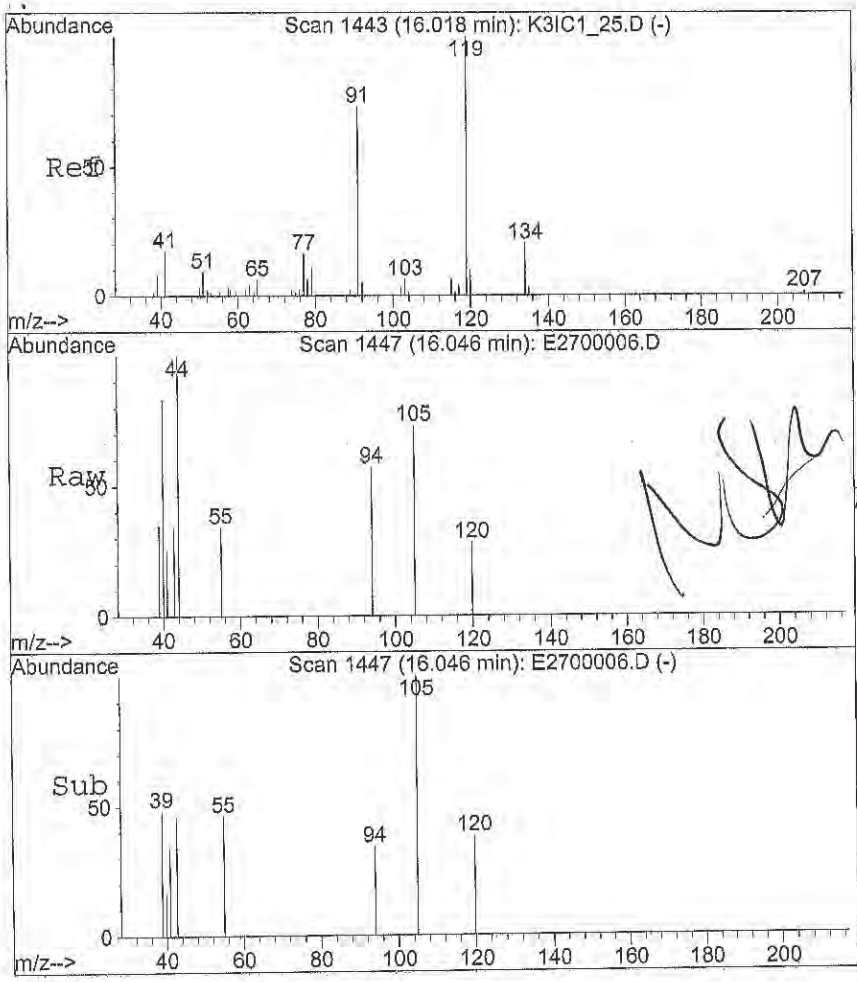


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:105 Resp: 277

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

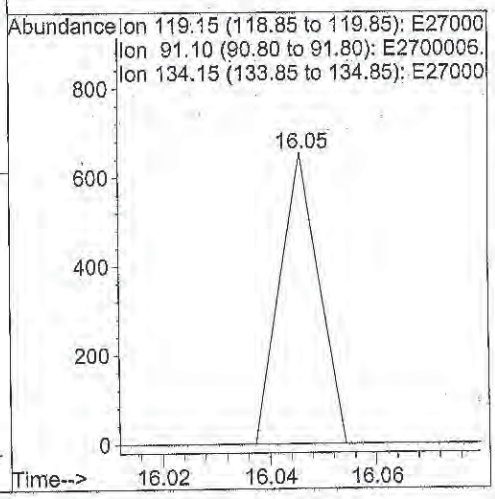


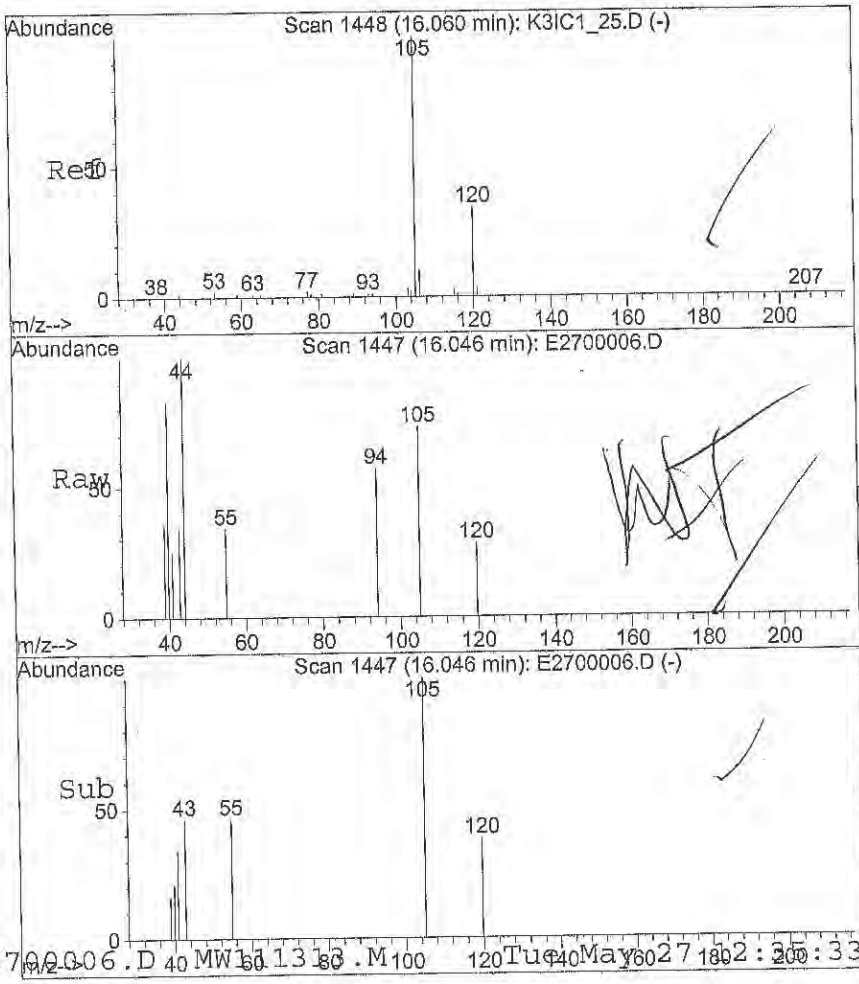


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. 0.03 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:119 Resp: 331

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

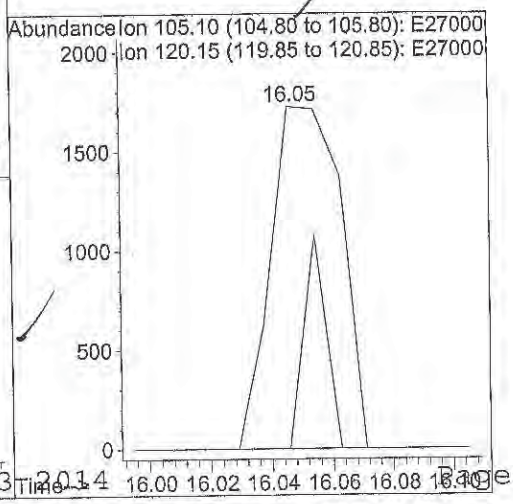


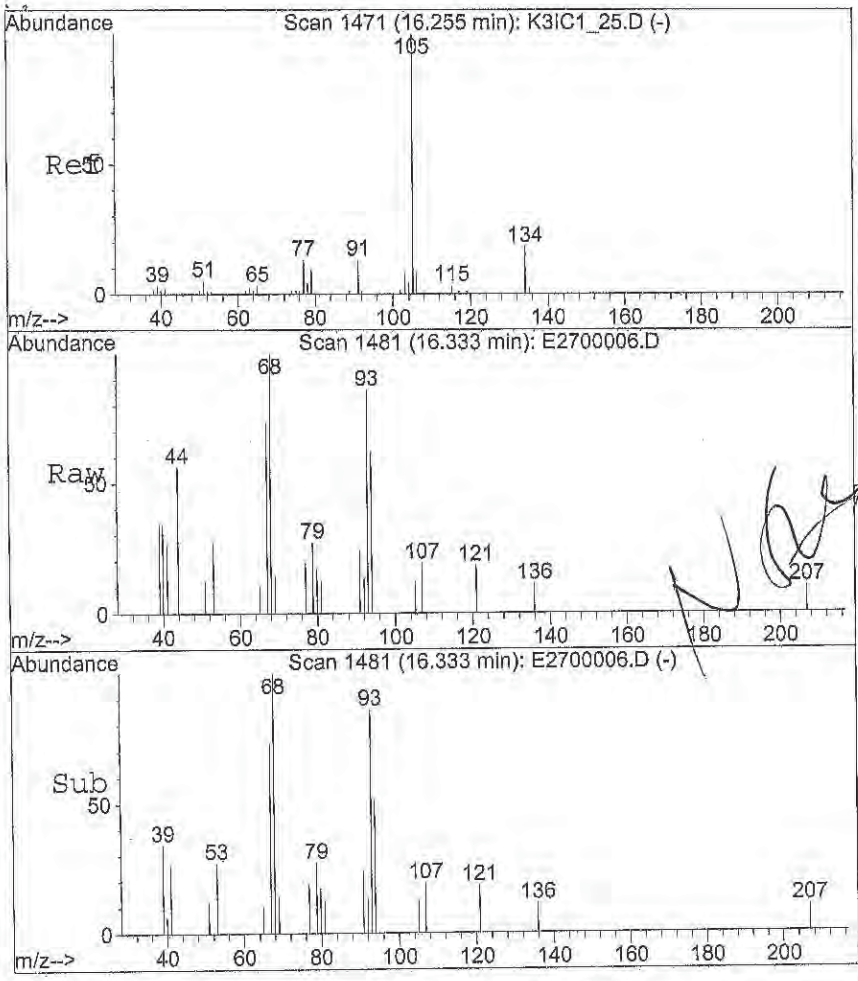


#67
1,2,4-Trimethylbenzene
Concen: 0.15 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:105 Resp: 2752

Ion	Ratio	Lower	Upper
105	100		
120	19.8	33.8	50.8#

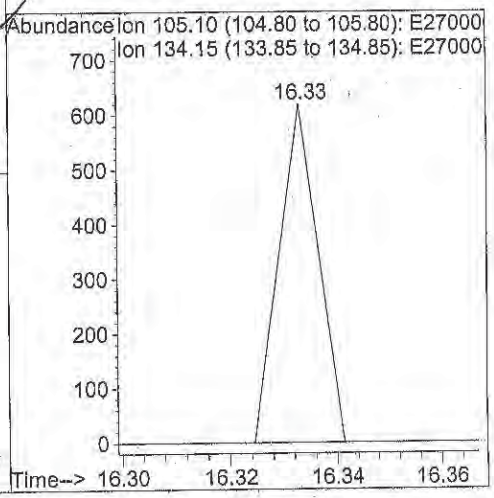


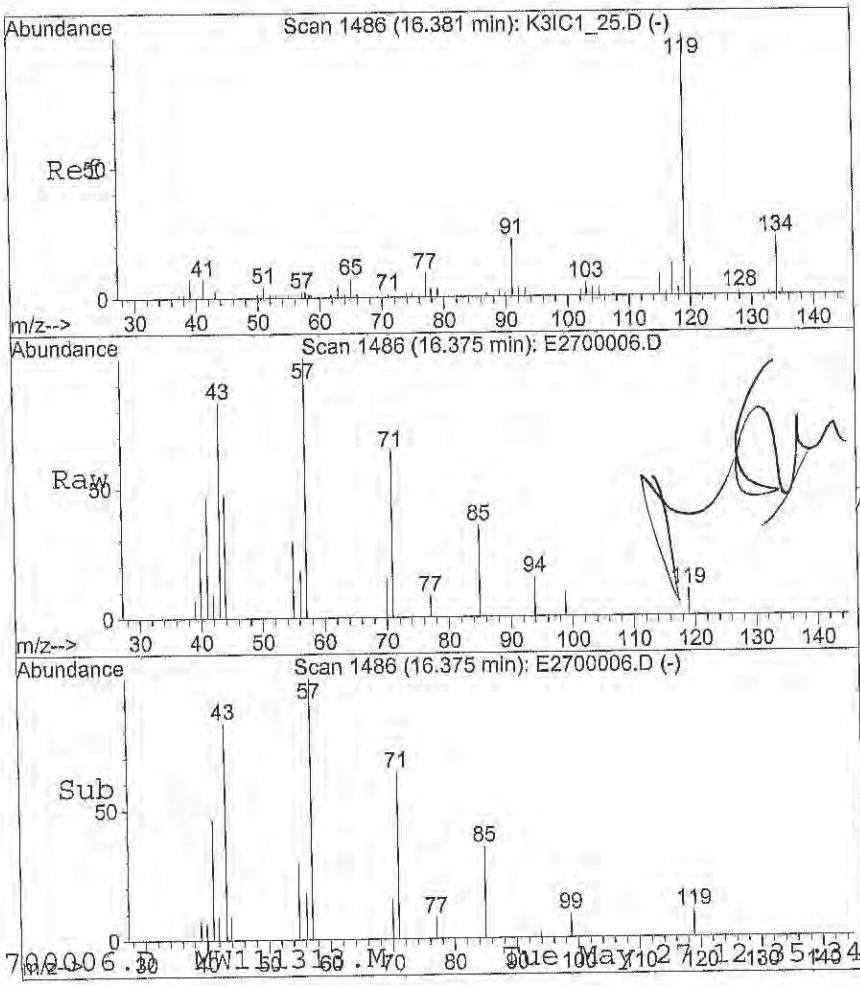


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:105 Resp: 314

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

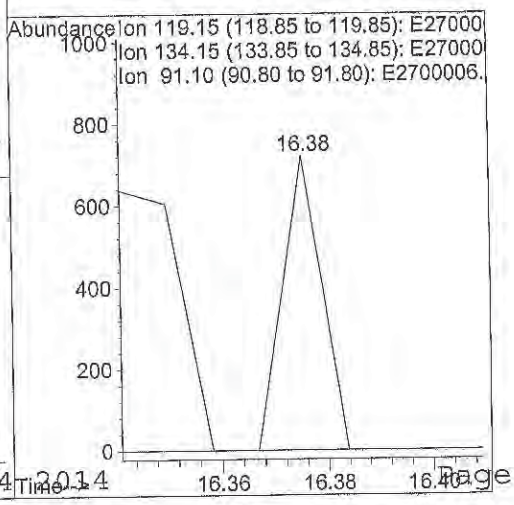


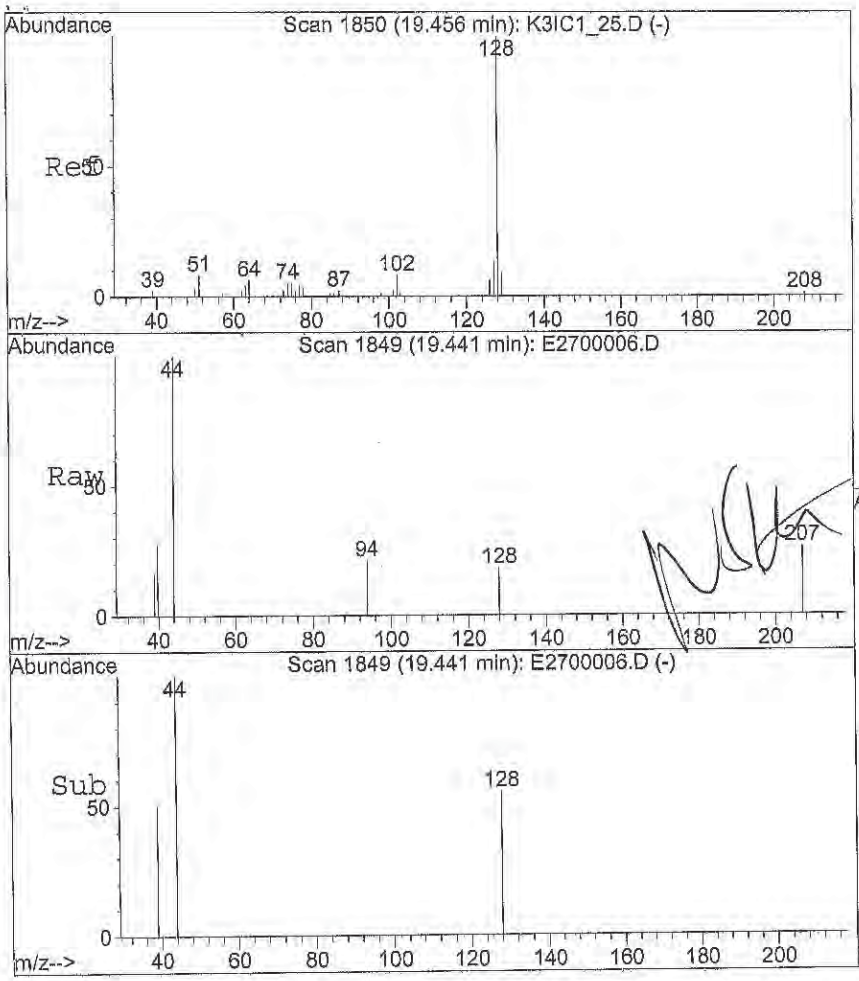


#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:119 Resp: 365

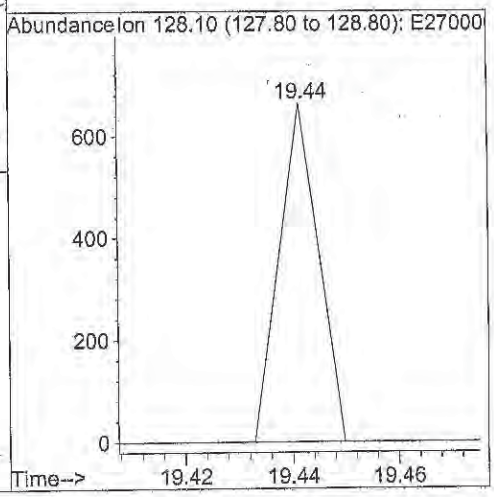
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.44 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2700006.D
Acq: 27 May 2014 12:03 pm

Tgt Ion:128 Resp: 337



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700006.D Vial: 5
Acq On : 27 May 2014 12:03 pm Operator: DN
Sample : 3E42701-05 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-18.0-19.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 12:34 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1697668	12.50	ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.91	117	1271700	12.50	ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	687505	12.50	ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	477777	10.82	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.56%			
3) Chloroform-d (SU6)	9.18	84	774734	12.23	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.84%			
4) Methylene Chloride-d2 (SU5	7.07	86	449679	12.14	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.12%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	480401	15.92	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 127.36%#			
6) Benzene-d6 (SU7)	9.92	84	1508415	11.32	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.56%			
8) Toluene-d8 (SU3)	12.20	98	1488174	12.33	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.64%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	713802	14.33	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 114.64%			

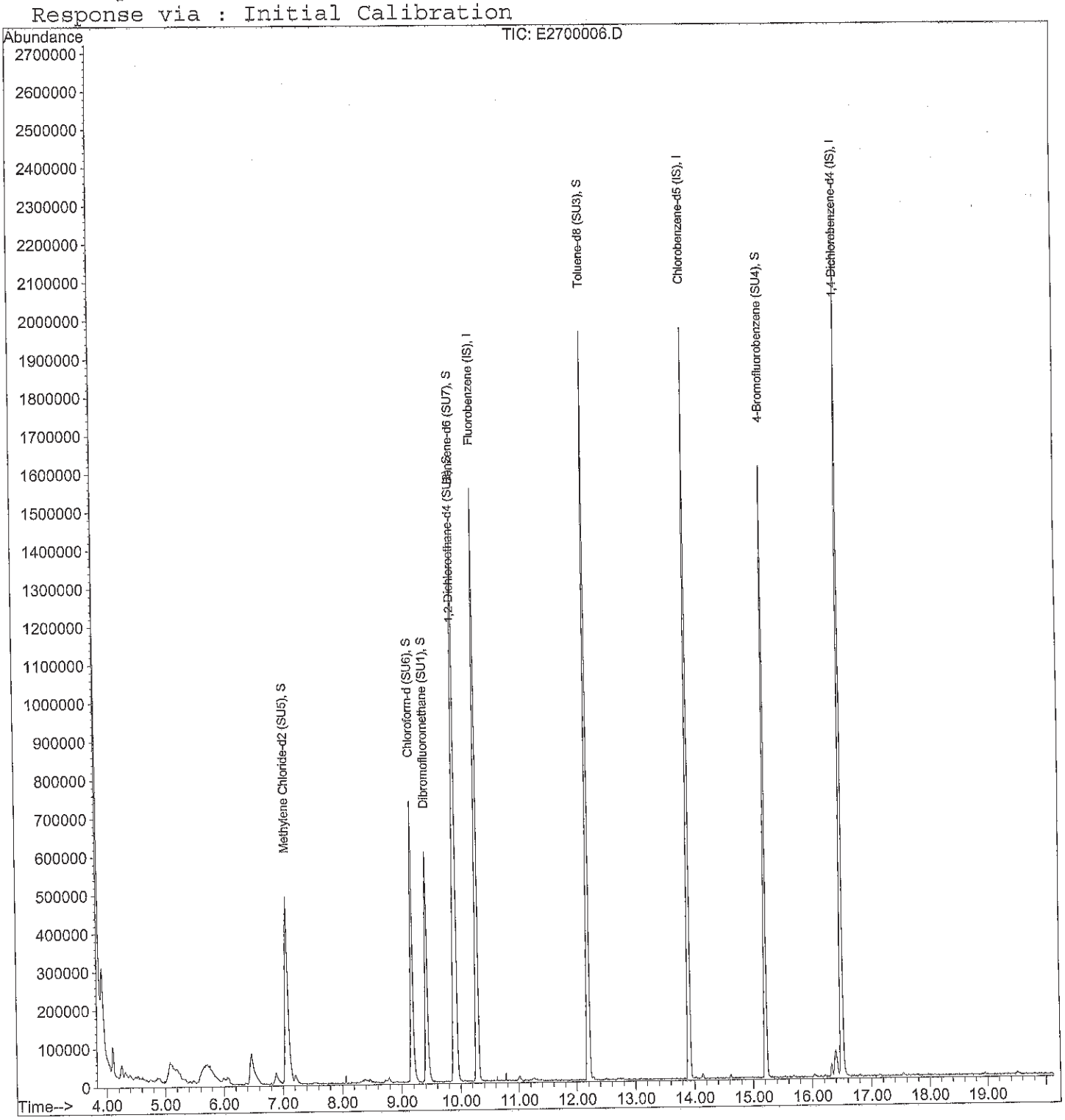
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700006.D Vial: 5
Acq On : 27 May 2014 12:03 pm Operator: DN
Sample : 3E42701-05 Inst : GC/MS Ins
Misc : 100cc SVL-502-SA5D-SV-18.0-19.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 12:34 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700007.D
Acq On : 27 May 2014 12:33 pm
Sample : 3E42701-06
Misc : 100cc SVL-513-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 27 12:54 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1848407	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1360103	12.50 ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	711592	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	504526	10.94 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 87.52%					
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	477785	10.90 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 87.20%					
39) Toluene-d8 (SU3)	12.20	98	1603606	12.64 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 101.12%					
58) 4-Bromofluorobenzene (SU4)	15.22	95	738691	13.28 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 106.24%					

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	341	0.08 ~~ug/L #~~	44
4) Chloromethane	4.39	50	4839	0.34 ~~ug/L #~~	52
6) Bromomethane	5.09	96	10632	3.45 ~~ug/L~~	98
7) Chloroethane	5.29	64	1363	1.57 ~~ug/L~~	95
11) Acetone	6.45	58	16223	19.93 ~~ug/L~~	81
12) (IPA) Leak Check Compound	6.47	45	164073	738.69 ~~ug/L #~~	87
13) Carbon disulfide	6.85	76	5807	0.38 ~~ug/L #~~	76
14) Methylene Chloride	7.06	84	5708	1.12 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.89	59	4140	13.13 ~~ug/L #~~	77
19) cis-1,2-Dichloroethene	9.04	96	257	0.04 ~~ug/L #~~	3
21) (MEK) 2-Butanone	8.81	72	371	0.71 ~~ug/L #~~	1
24) Chloroform	9.21	83	2172	0.22 ~~ug/L #~~	18
25) (ETBE) 2-ethoxy 2-methyl p	8.33	59	1027	0.08 ~~ug/L #~~	44
31) Benzene	9.92	78	9124	0.52 ~~ug/L #~~	77
32) 1,2-Dichloroethane	9.93	62	6455	1.05 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	6862	2.53 ~~ug/L #~~	100
41) Toluene	12.28	91	15225	0.82 ug/L 0.0168	95 0.0164
46) 2-Hexanone	12.96	43	769	0.26 ~~ug/L #~~	37
51) Ethylbenzene	14.02	91	7558	0.36 ug/L #0.0073	73
52) m,p-Xylenes	14.14	106	8652	1.15 ug/L 0.023	85
53) o-Xylene	14.61	106	4334	0.59 ug/L 0.0118	90
54) Styrene	14.62	104	2683	-0.62 ~~ug/L #~~	76

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700007.D
Acq On : 27 May 2014 12:33 pm
Sample : 3E42701-06
Misc : 100cc SVL-513-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 27 12:54 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

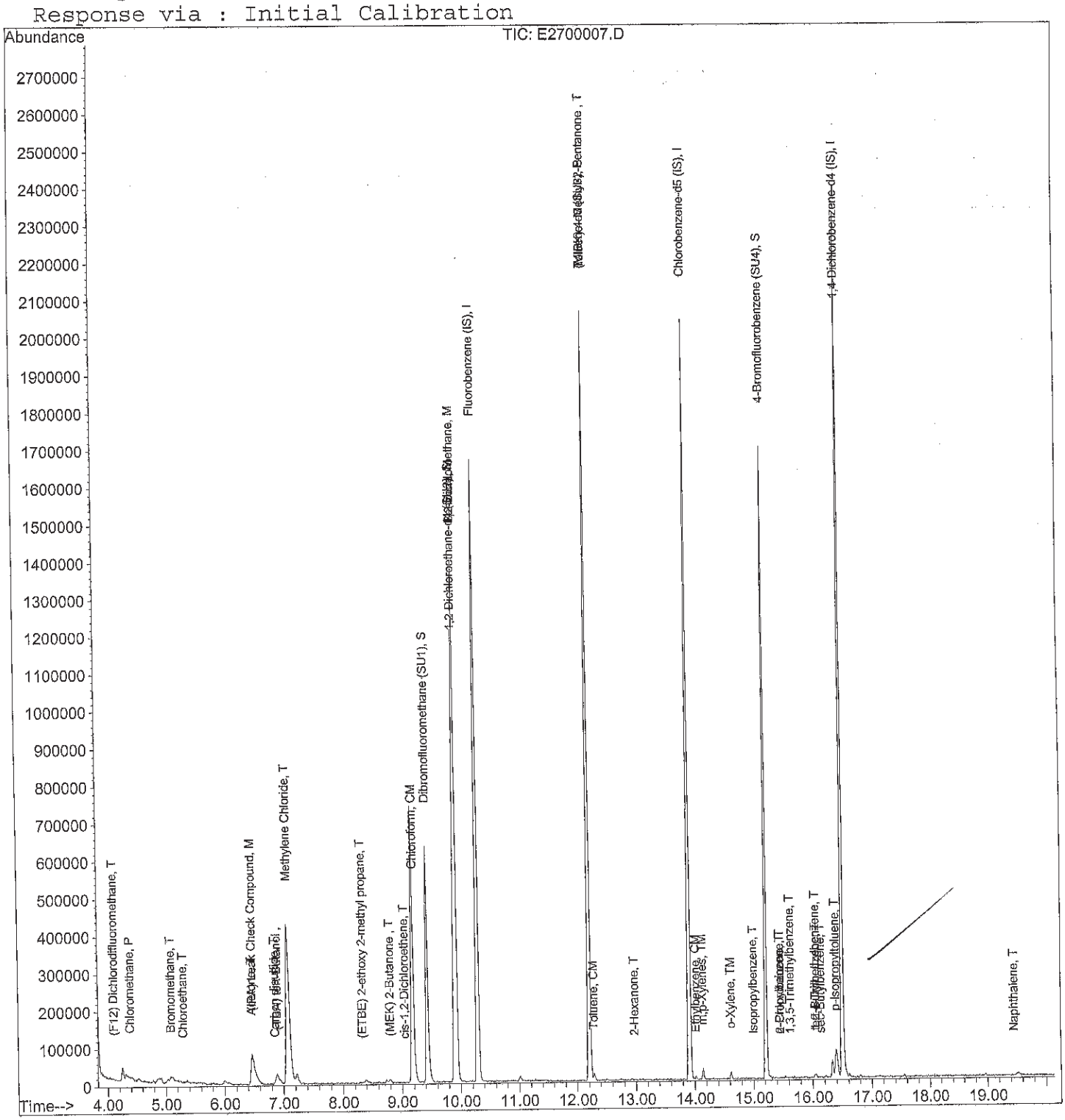
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
56) Isopropylbenzene	14.99	105	259	0.01 ~~ug/L~~ #	55
62) n-Propylbenzene	15.46	91	1476	0.05 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.46	91	1476	0.08 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	289	0.02 ~~ug/L~~ #	31
66) tert-Butylbenzene	16.06	119	584	0.04 ~~ug/L~~ #	71
67) 1,2,4-Trimethylbenzene	16.06	105	3490	0.19 ug/L # 0.038	88
68) sec-Butylbenzene	16.14	105	594	0.02 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	917	0.05 ~~ug/L~~ #	52
77) Naphthalene	19.44	128	262	0.02 ~~ug/L~~	100

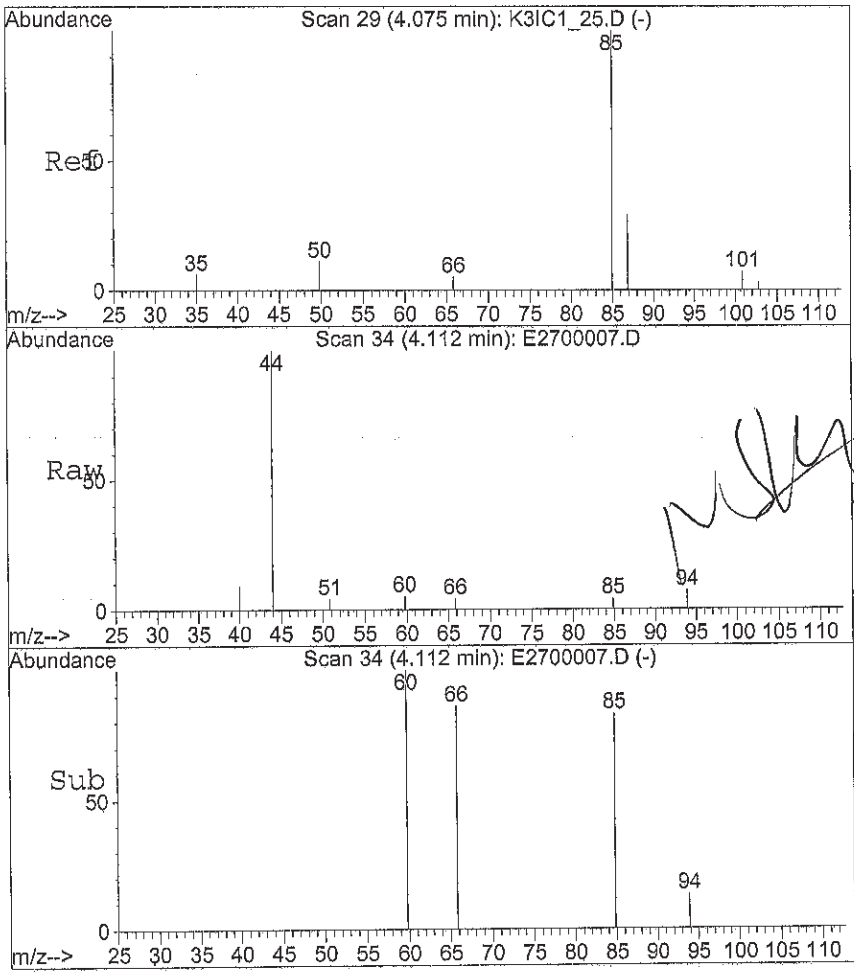
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700007.D Vial: 6
Acq On : 27 May 2014 12:33 pm Operator: DN
Sample : 3E42701-06 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 12:54 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

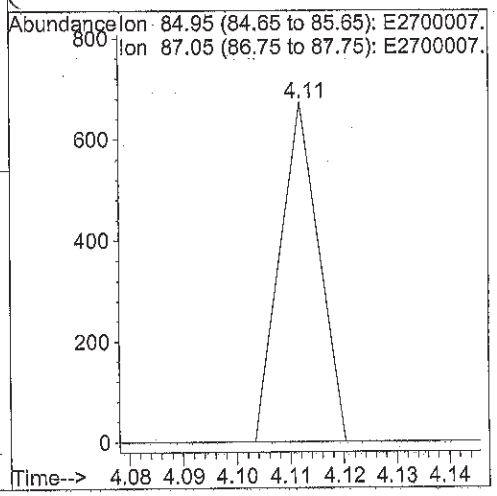


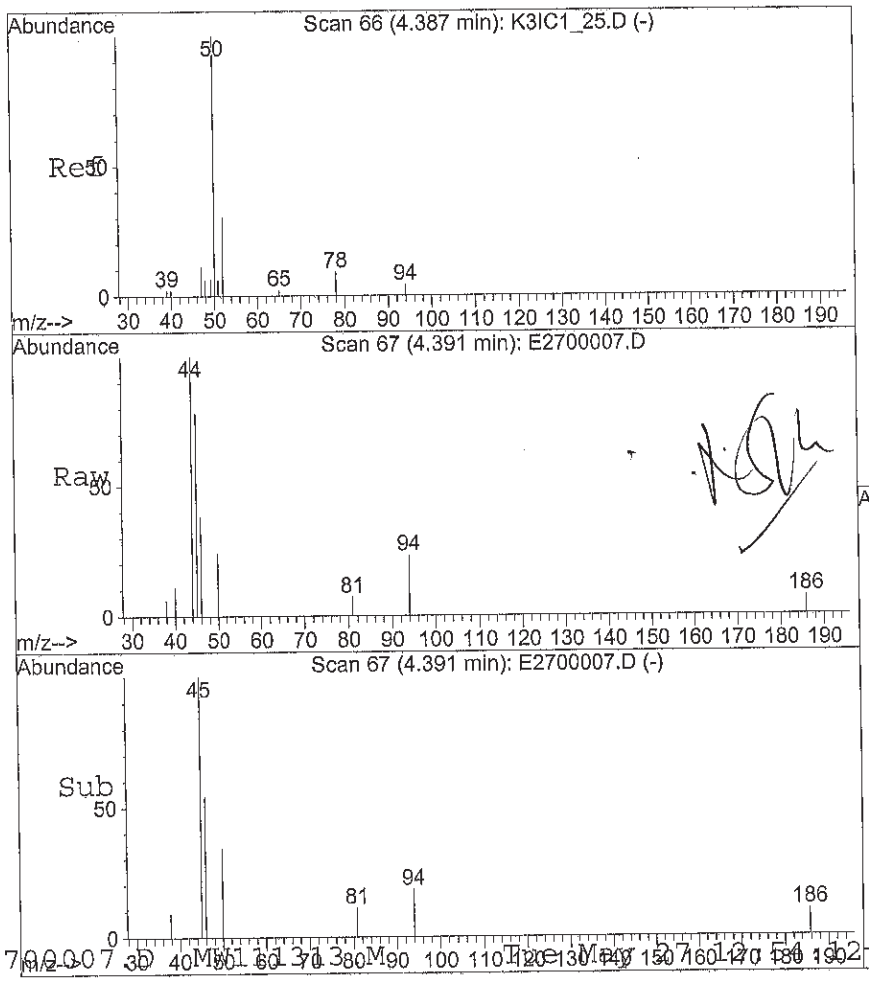


#3
(F12) Dichlorodifluoromethane
Concen: 0.08 ug/L
RT: 4.11 min Scan# 34
Delta R.T. 0.04 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 85 Resp: 341

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

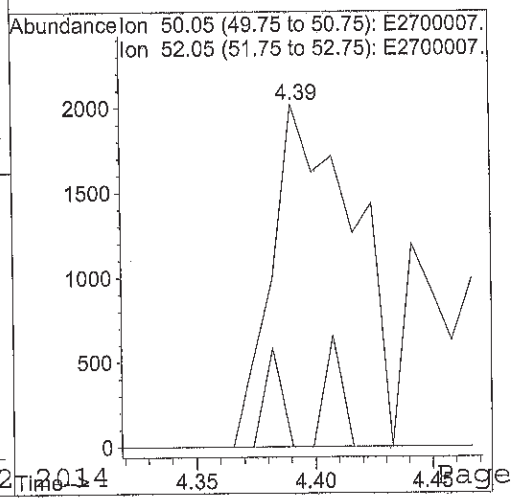


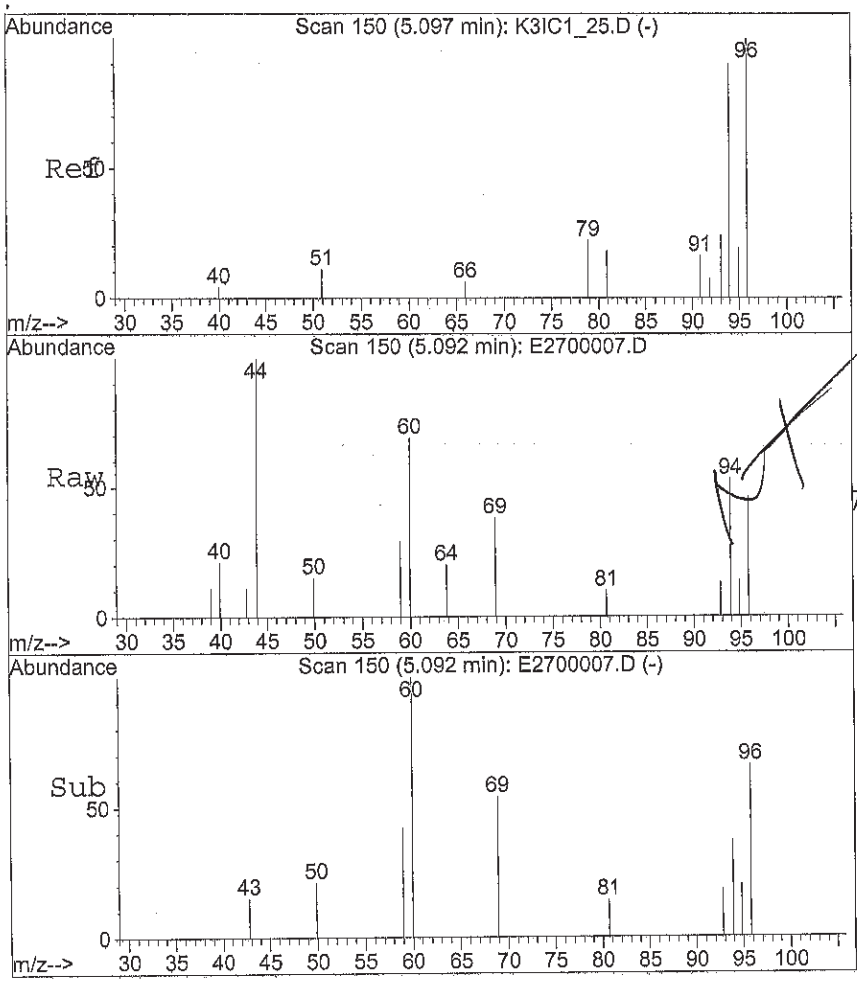


#4
Chloromethane
Concen: 0.34 ug/L
RT: 4.39 min Scan# 67
Delta R.T. 0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 50 Resp: 4839

Ion	Ratio	Lower	Upper
50	100		
52	6.1	26.9	40.3#

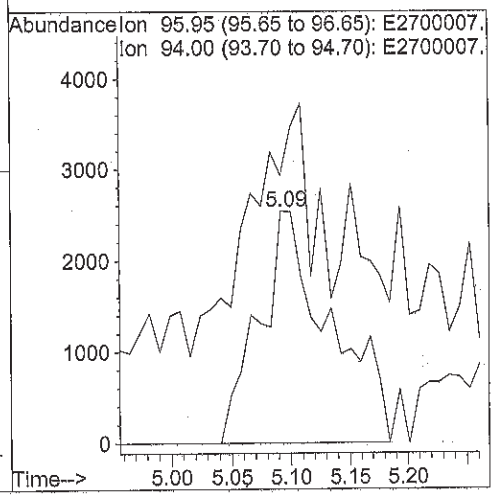


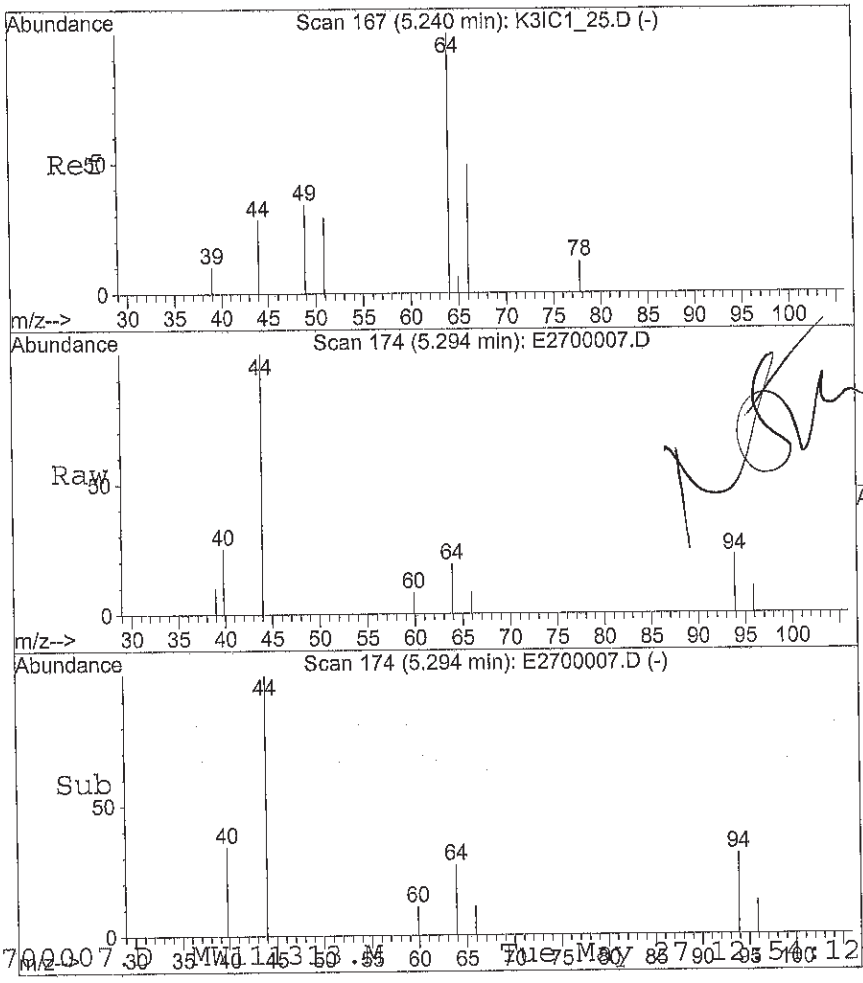


#6
Bromomethane
Concen: 3.45 ug/L
RT: 5.09 min Scan# 150
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 96 Resp: 10632

Ion	Ratio	Lower	Upper
96	100		
94	124.2	101.0	151.4

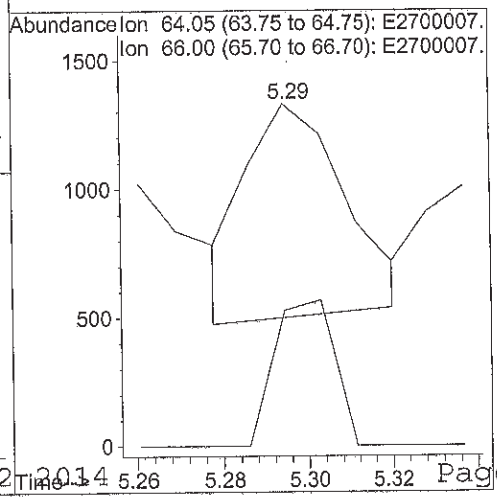


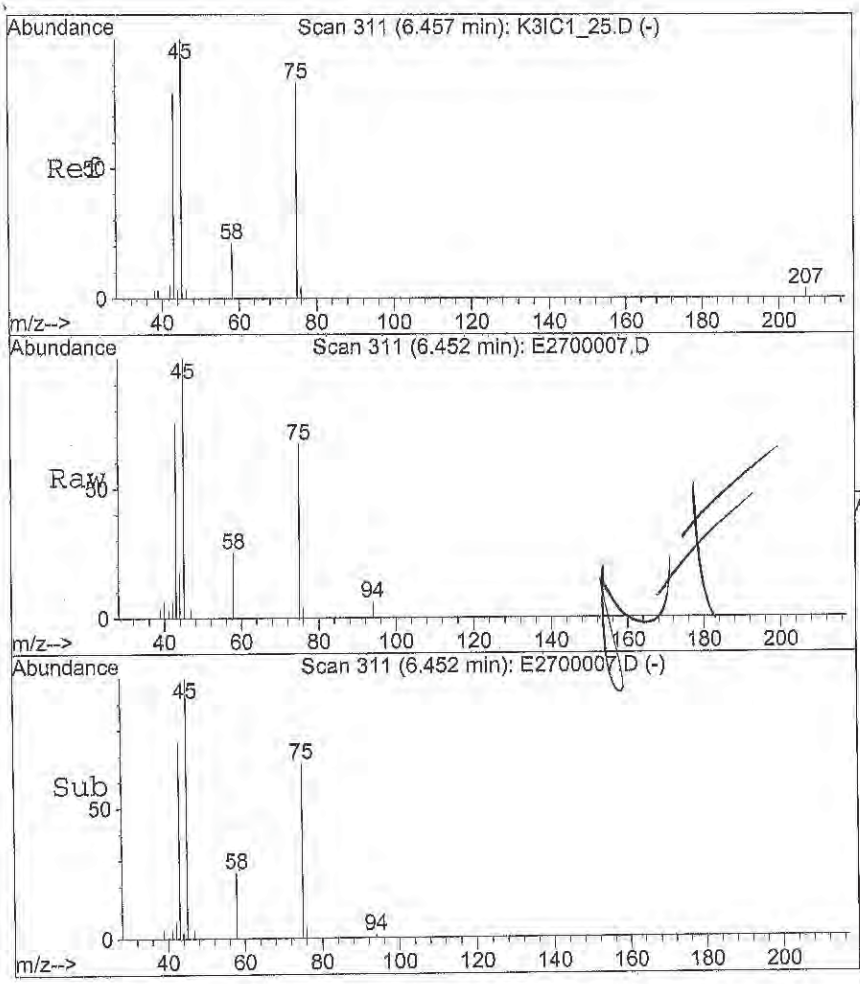


#7
Chloroethane
Concen: 1.57 ug/L
RT: 5.29 min Scan# 174
Delta R.T. 0.05 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 64 Resp: 1363

Ion	Ratio	Lower	Upper
64	100		
66	40.7	35.4	53.0

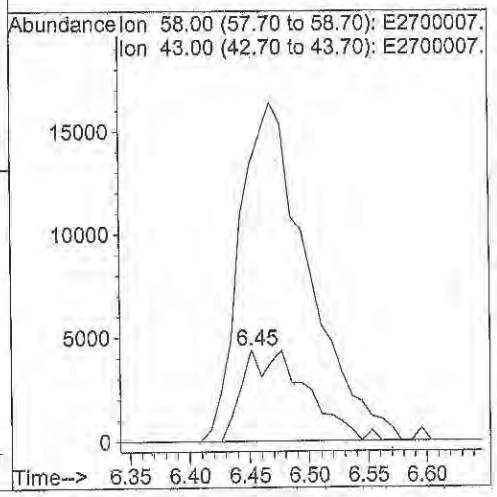


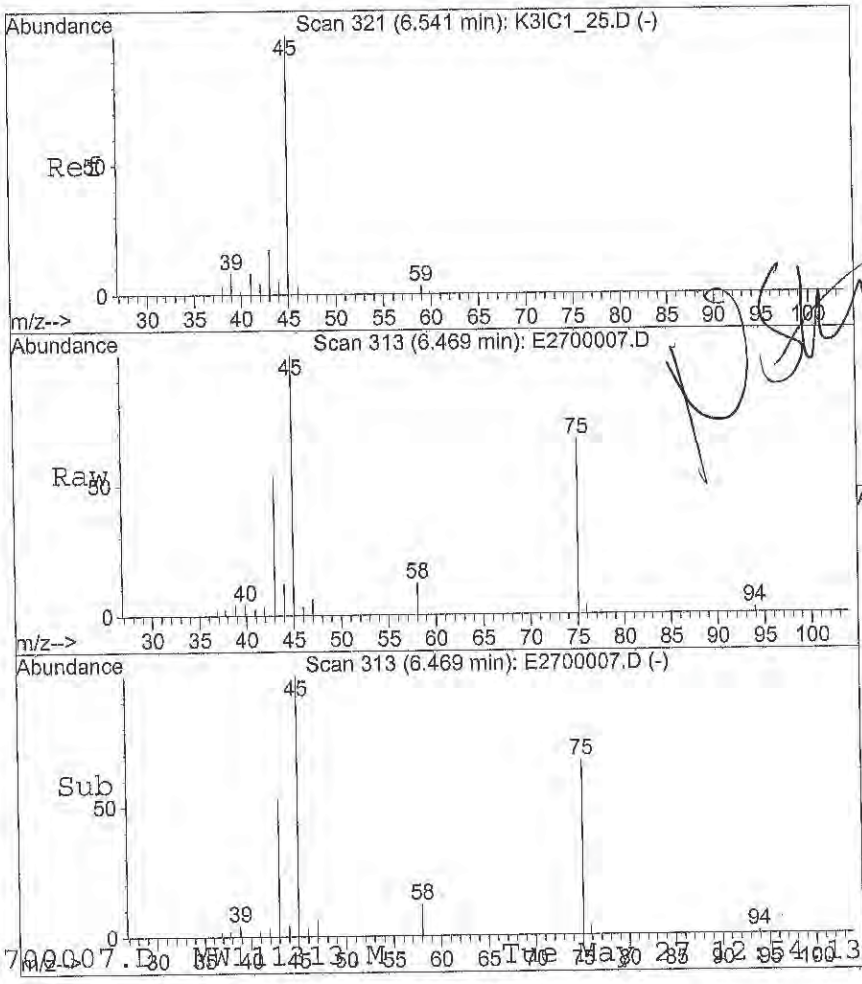


#11
Acetone
Concen: 19.93 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 58 Resp: 16223

Ion	Ratio	Lower	Upper
58	100		
43	401.3	360.9	541.3

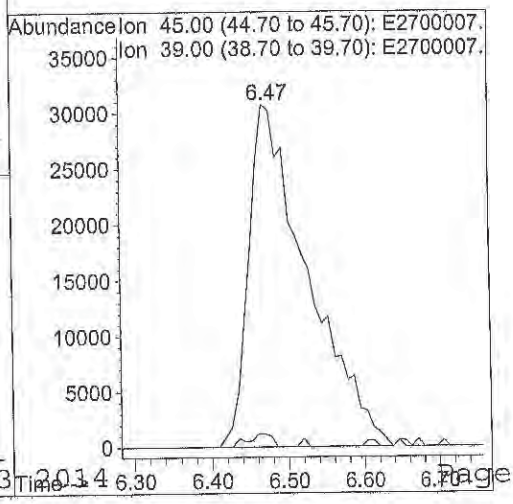


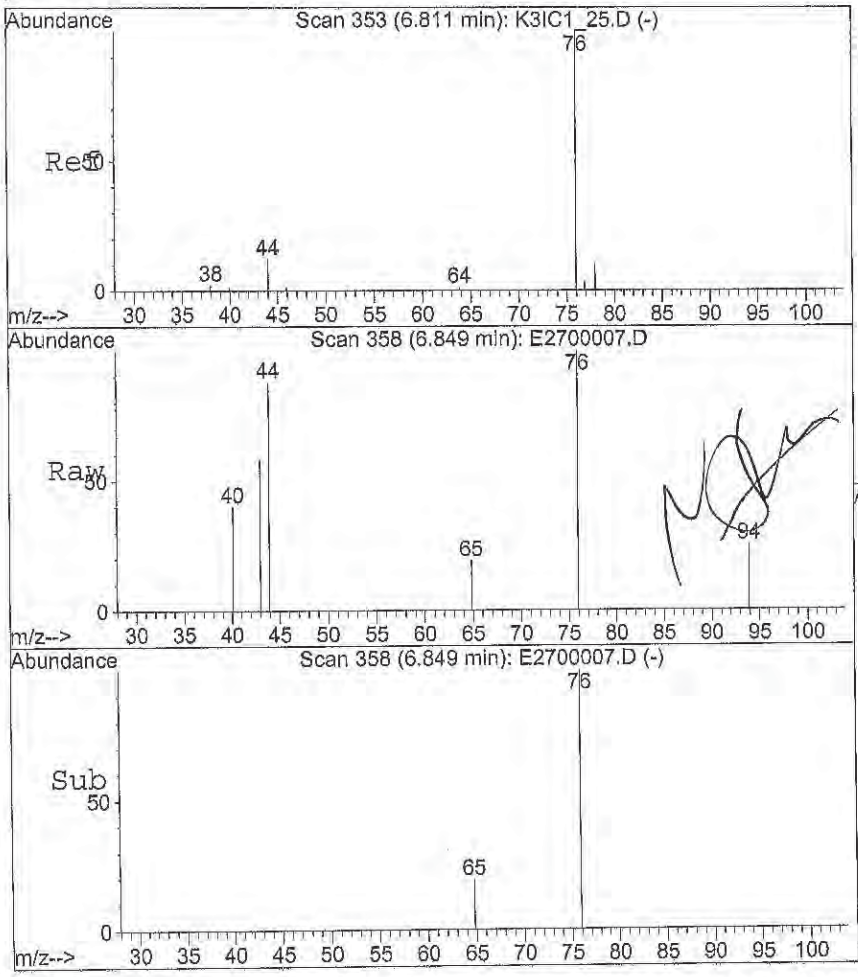


#12
(IPA) Leak Check Compound
Concen: 738.69 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 45 Resp: 164073

Ion	Ratio	Lower	Upper
45	100		
39	1.6	4.9	7.3#

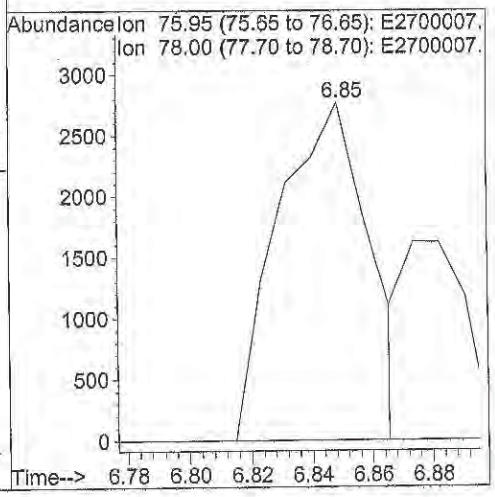


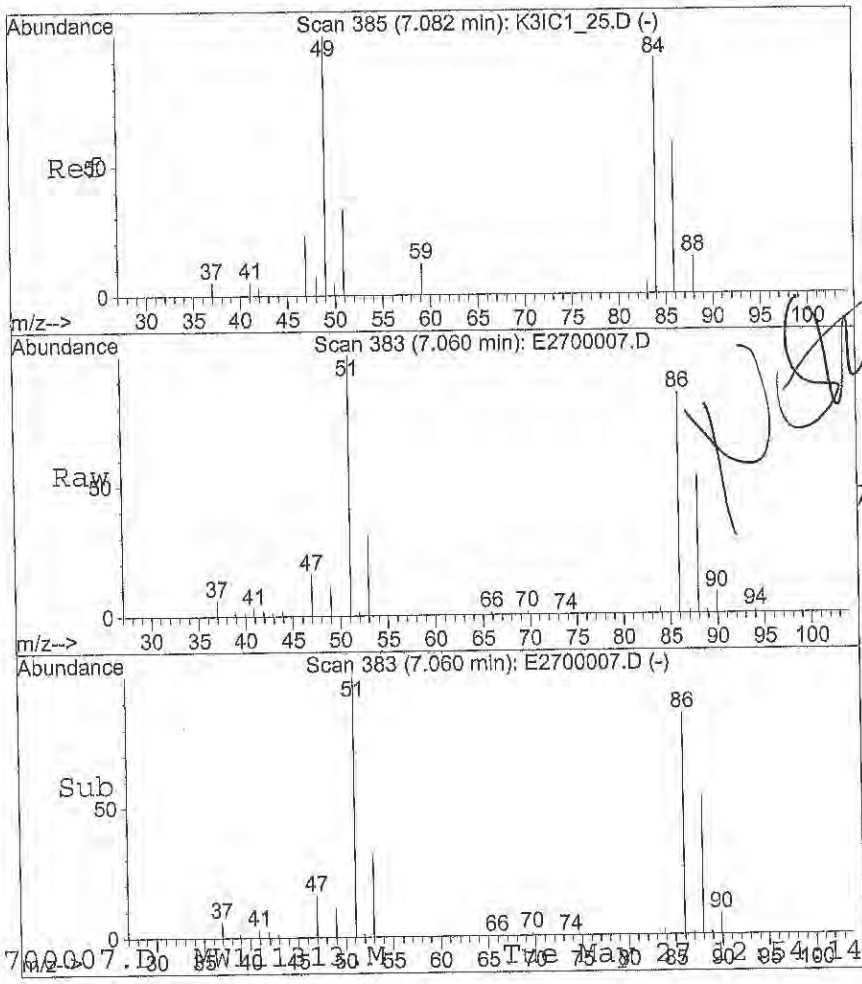


#13
Carbon disulfide
Concen: 0.38 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 76 Resp: 5807

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

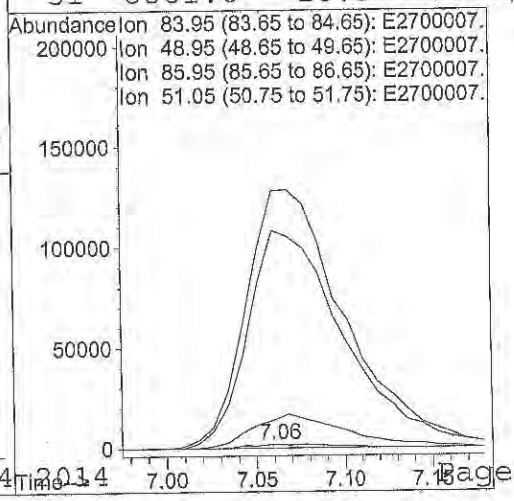


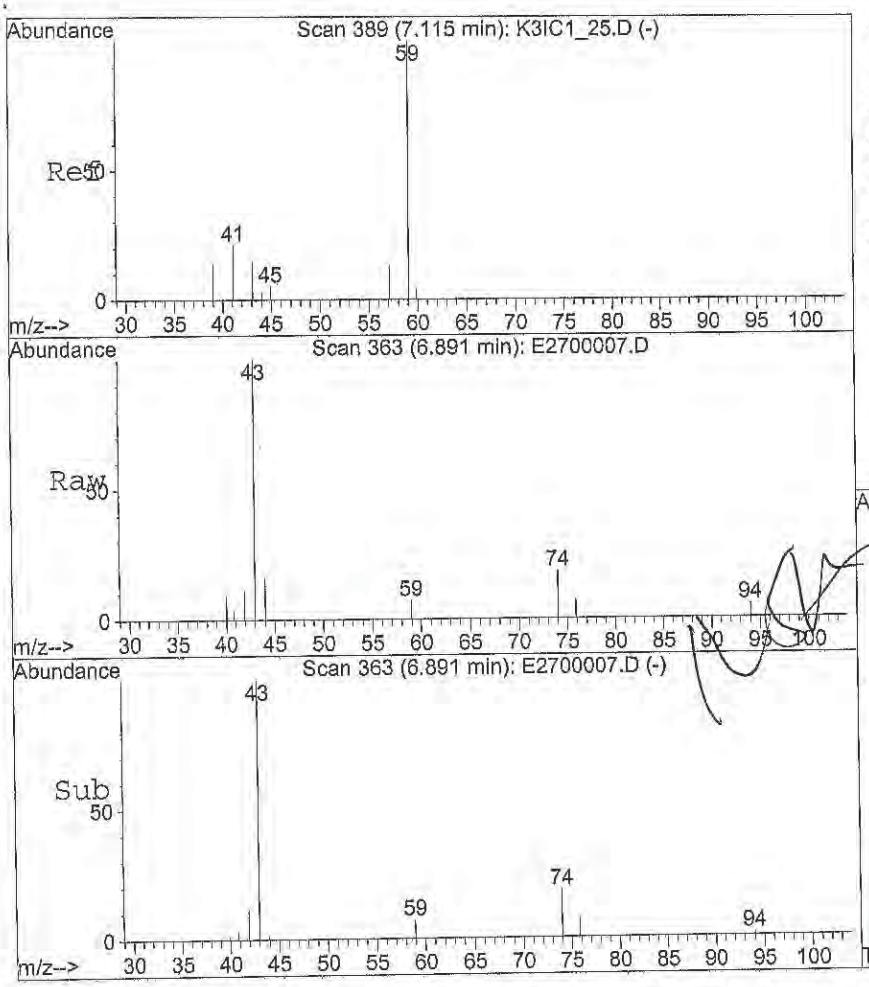


#14
Methylene Chloride
Concen: 1.12 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 84 Resp: 5708

Ion	Ratio	Lower	Upper
84	100		
49	1068.6	89.8	134.6#
86	7296.3	51.1	76.7#
51	8861.6	28.5	42.7#

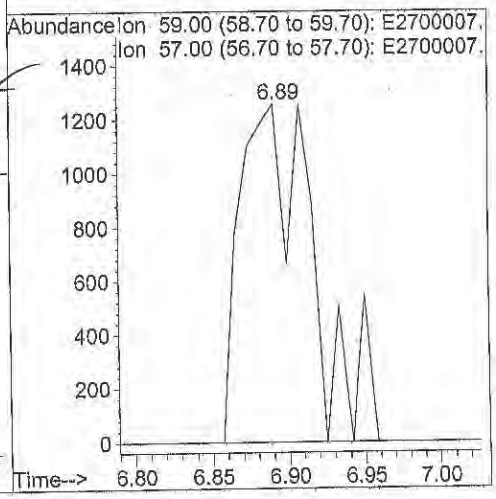


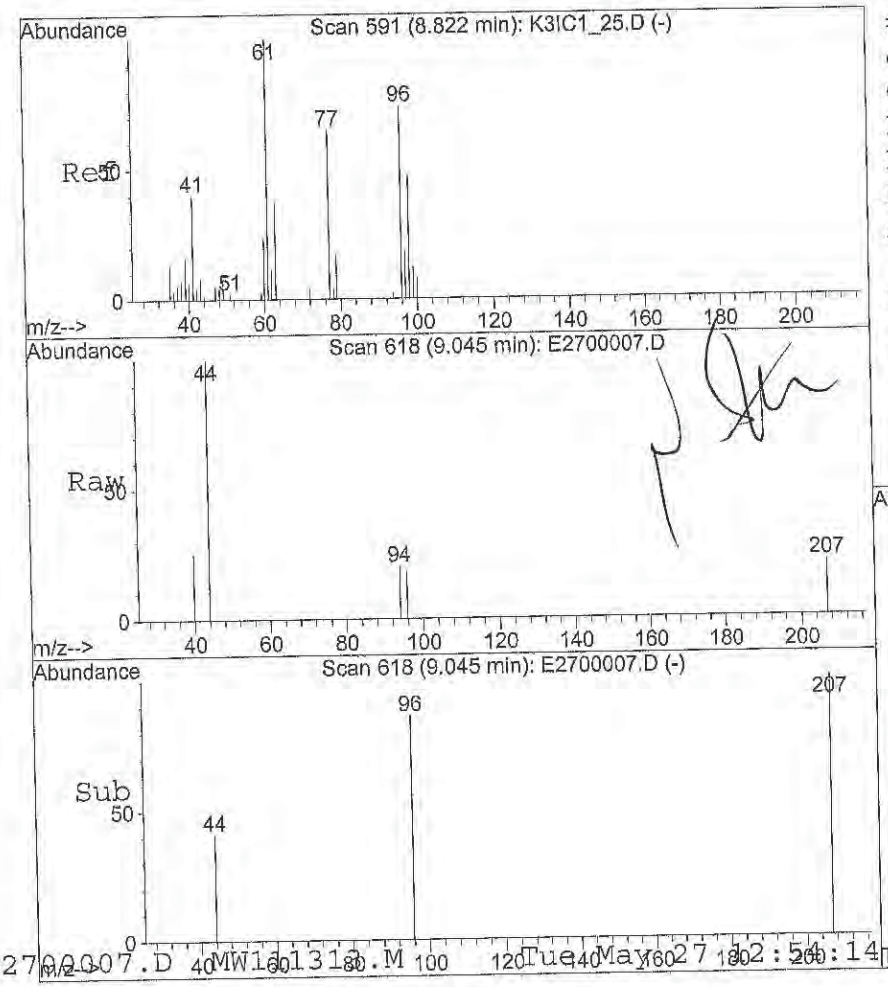


#15
(TBA) tert-Butanol
Concen: 13.13 ug/L
RT: 6.89 min Scan# 363
Delta R.T. -0.22 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 59 Resp: 4140

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

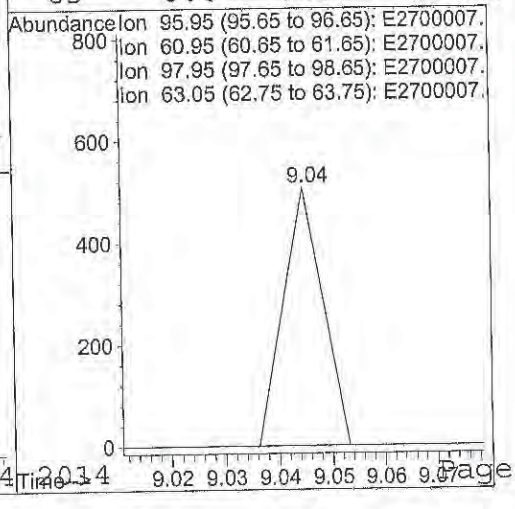


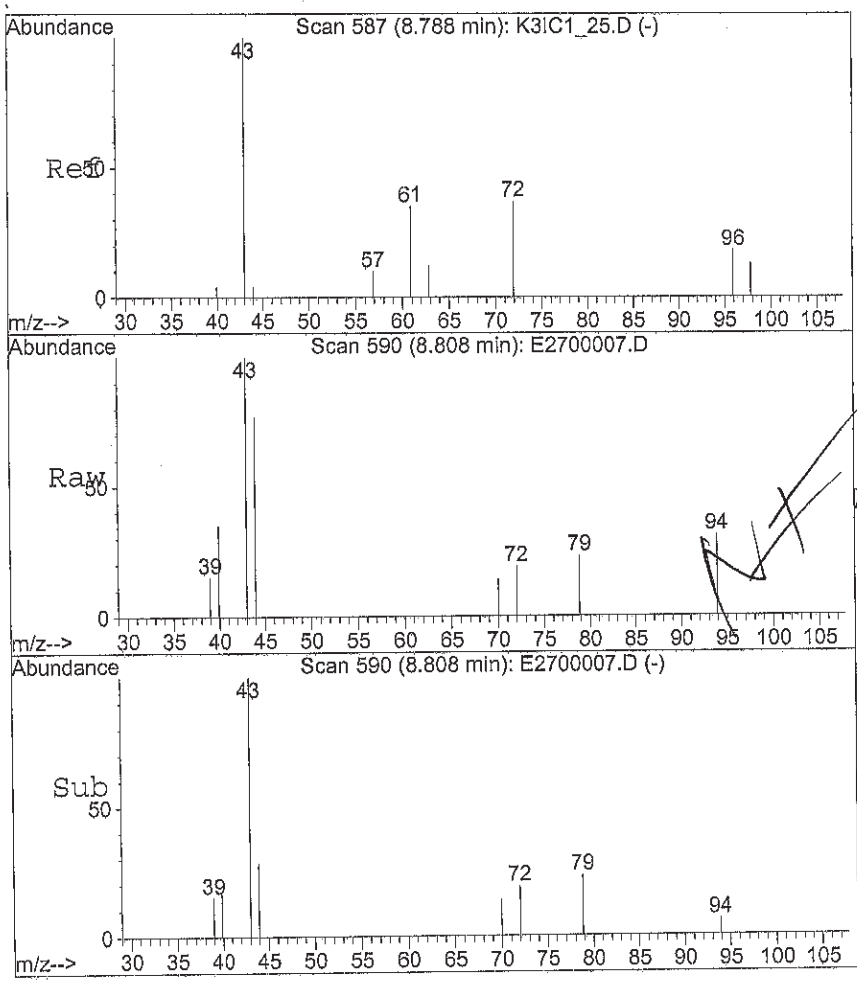


#19
cis-1,2-Dichloroethene
Concen: 0.04 ug/L
RT: 9.04 min Scan# 618
Delta R.T. 0.22 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 96 Resp: 257

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

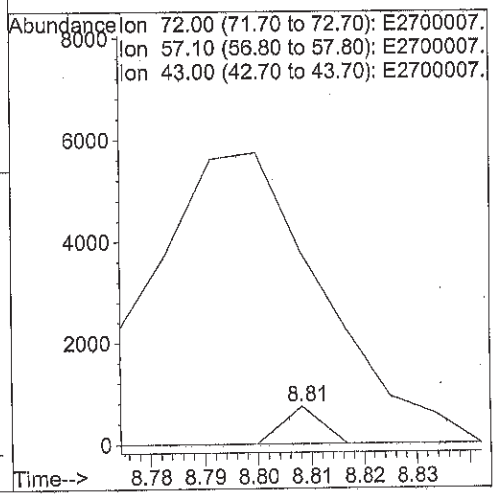


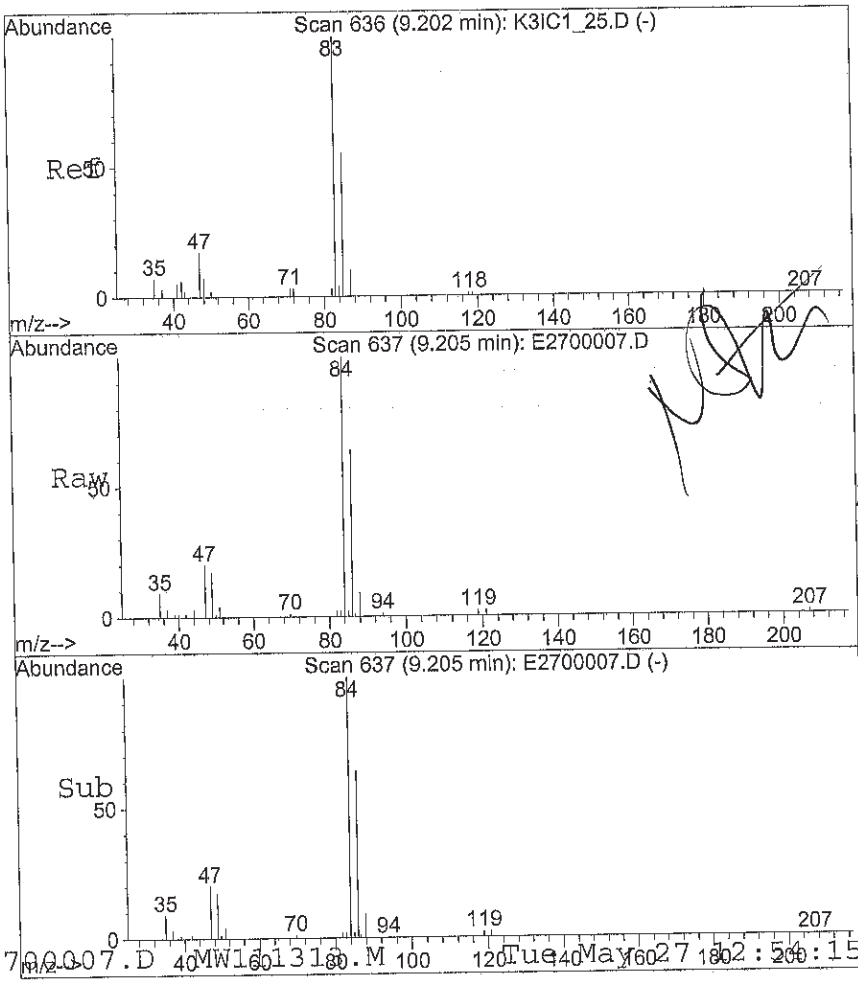


#21
(MEK) 2-Butanone
Concen: 0.71 ug/L
RT: 8.81 min Scan# 590
Delta R.T. 0.02 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 72 Resp: 371

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	3580.3	314.2	471.2#

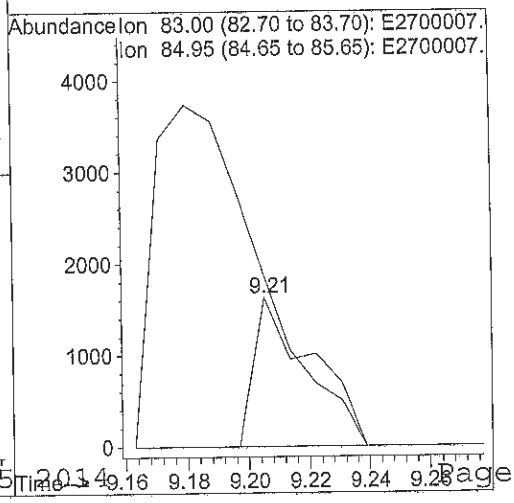


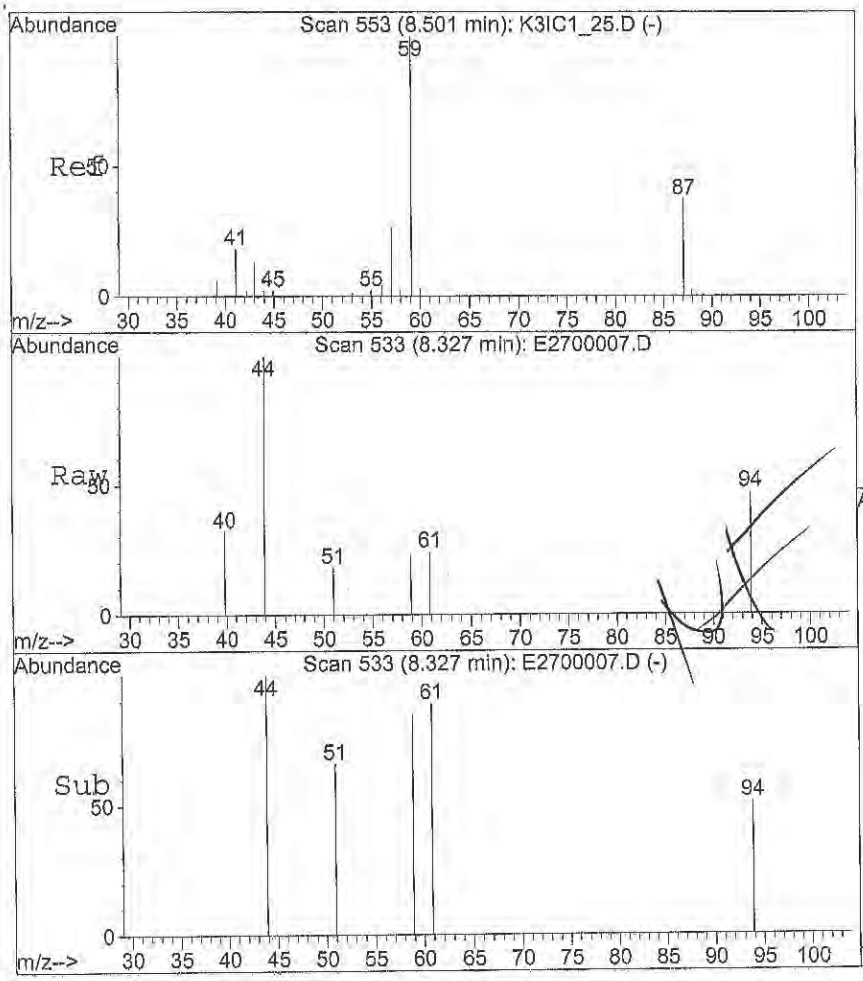


#24
Chloroform
Concen: 0.22 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 83 Resp: 2172

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

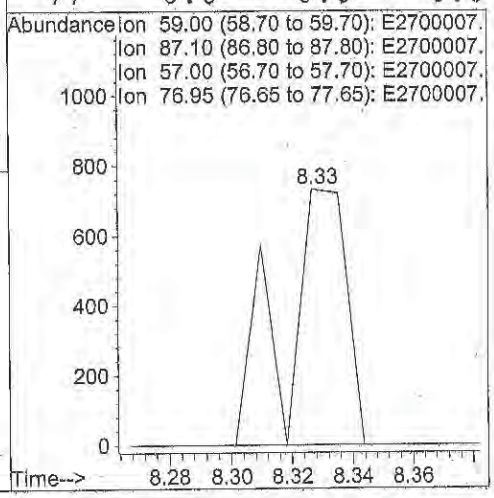


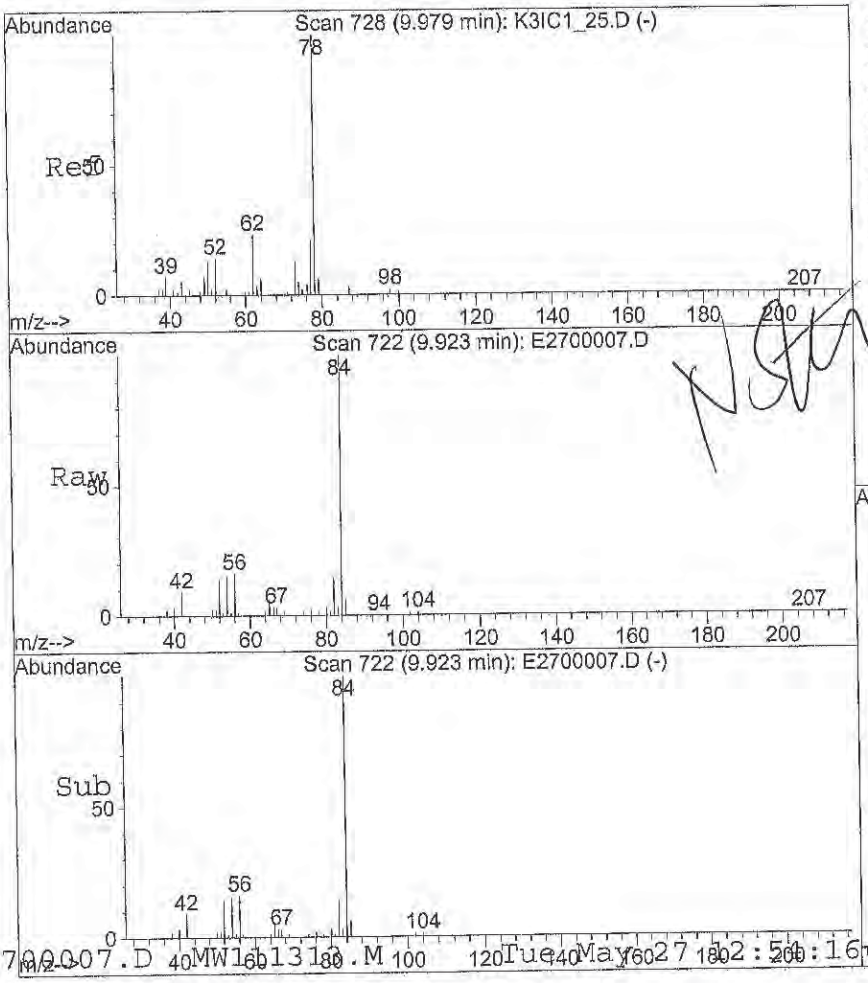


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.08 ug/L
RT: 8.33 min Scan# 533
Delta R.T. -0.17 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 59 Resp: 1027

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

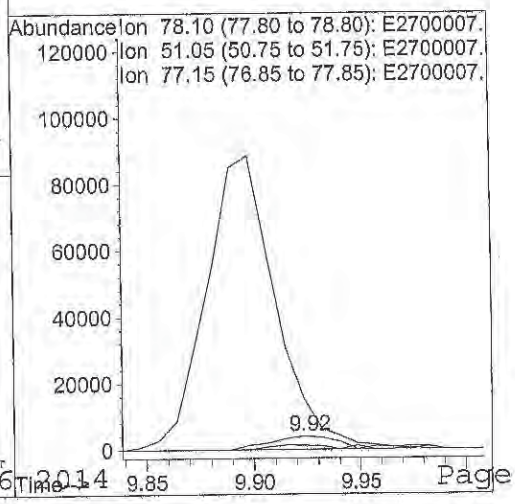


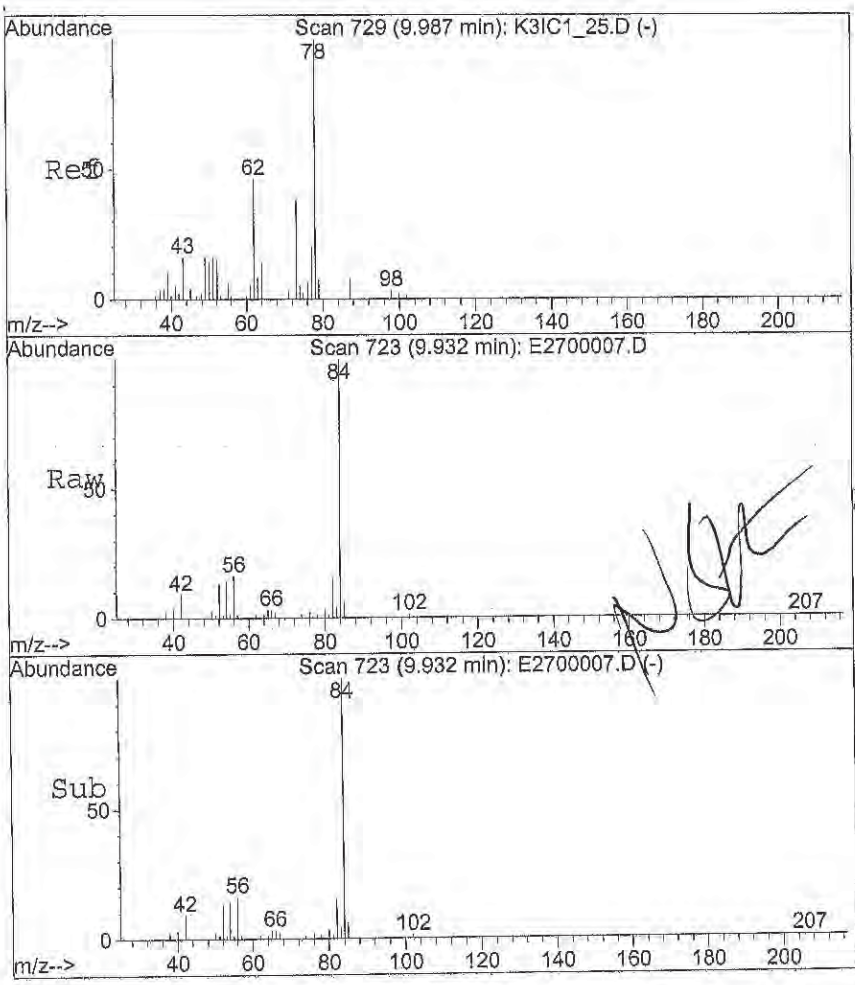


#31
Benzene
Concen: 0.52 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 78 Resp: 9124

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	24.2	16.6	24.8

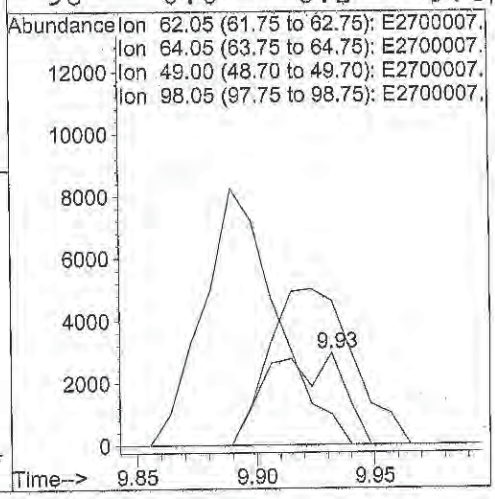


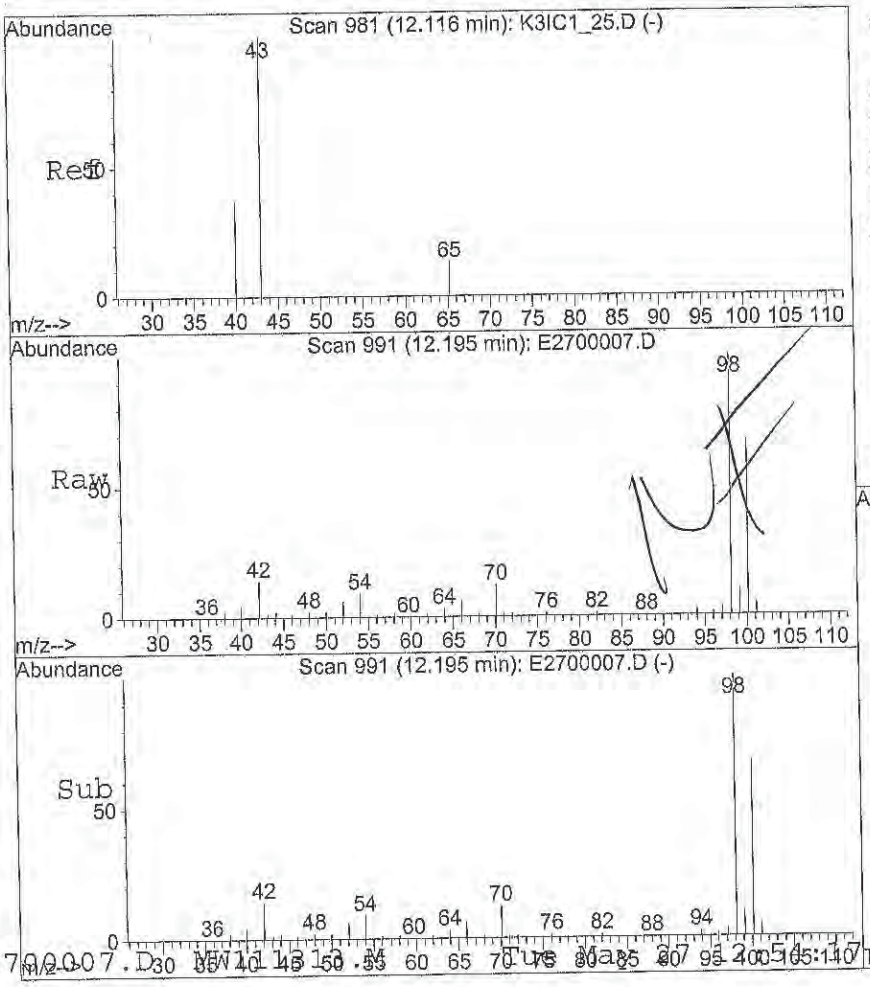


#32
1,2-Dichloroethane
Concen: 1.05 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 62 Resp: 6455

Ion	Ratio	Lower	Upper
62	100		
64	192.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

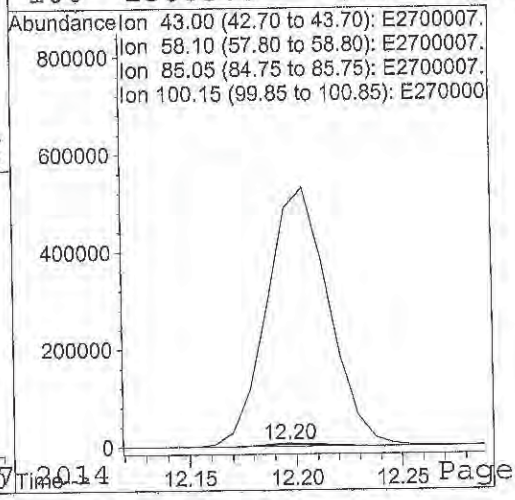


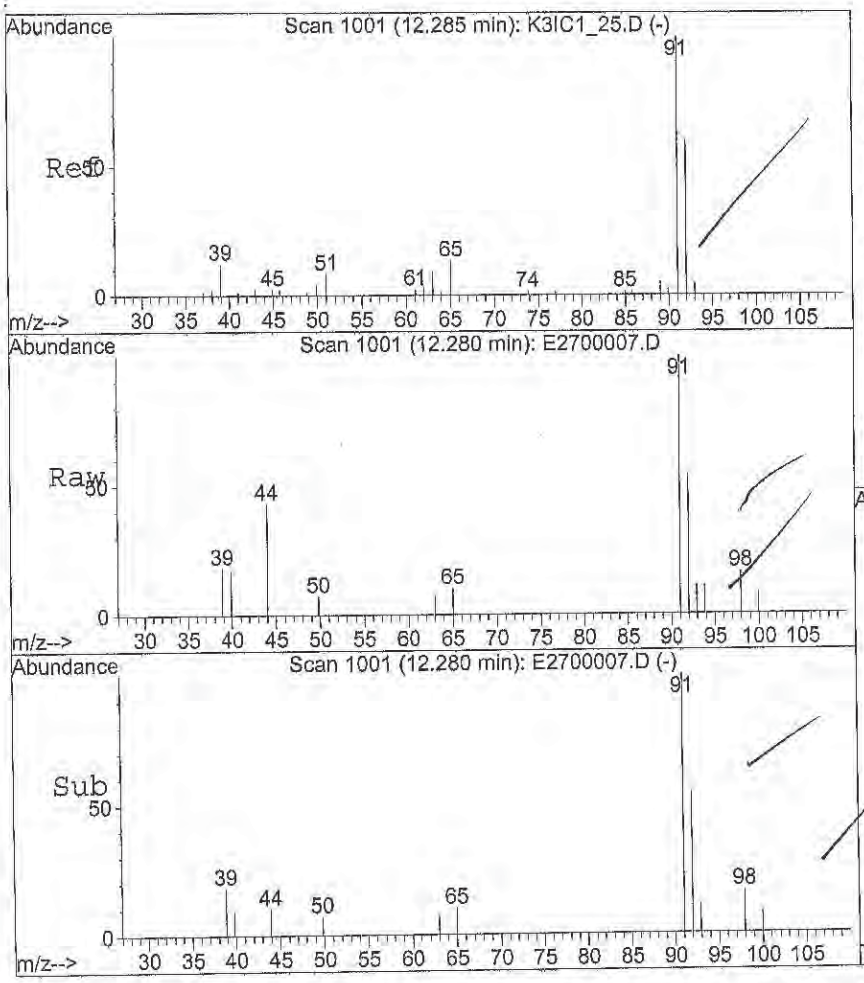


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.53 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 43 Resp: 6862

Ion	Ratio	Lower	Upper
43	100		
58	176.5	0.0	0.0#
85	0.0	0.0	0.0
100	15683.0	0.0	0.0#

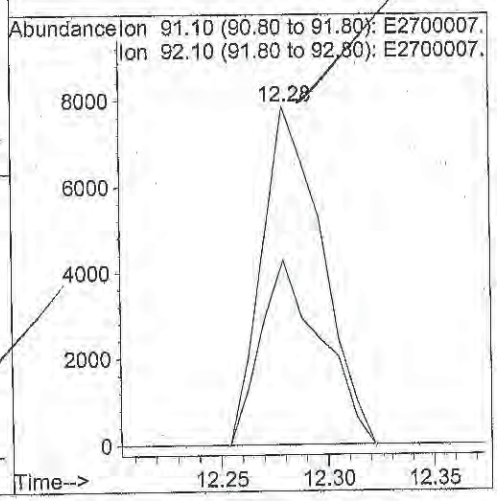


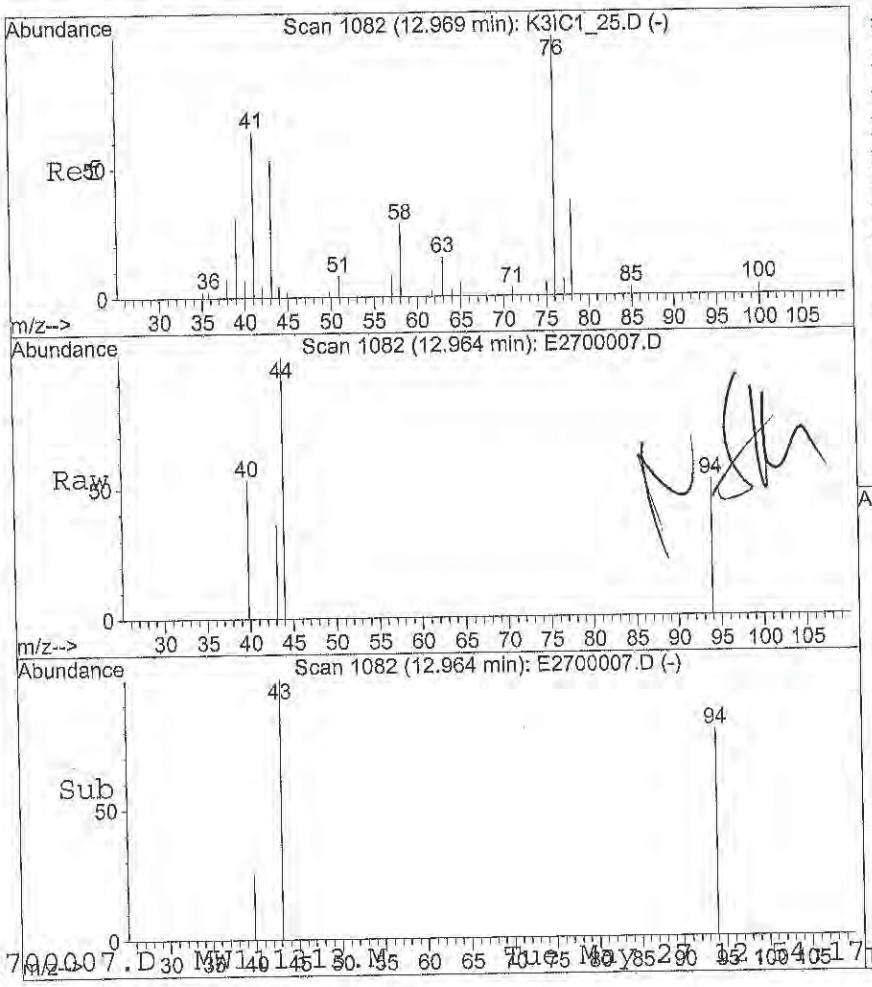


#41
Toluene
Concen: 0.82 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 91 Resp: 15225

Ion	Ratio	Lower	Upper
91	100		
92	55.1	47.4	71.0

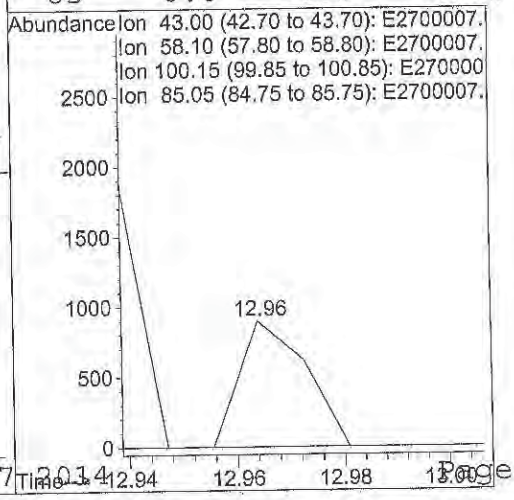


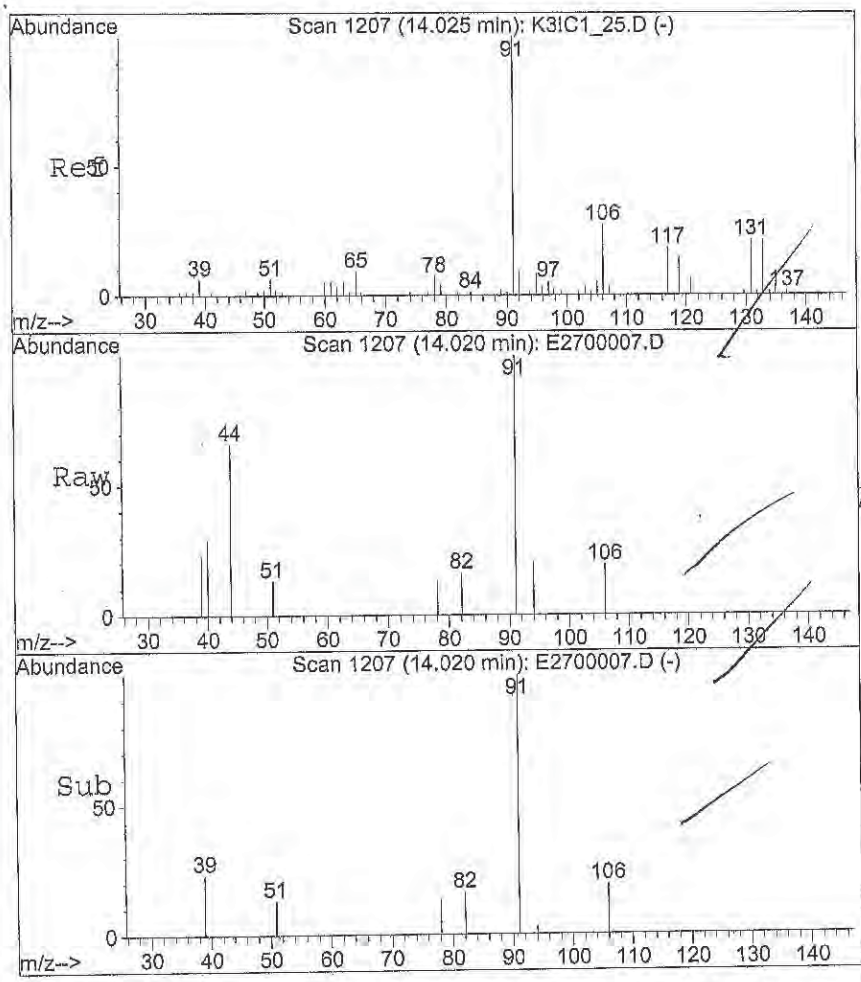


#46
2-Hexanone
Concen: 0.26 ug/L
RT: 12.96 min Scan# 1082
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 43 Resp: 769

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

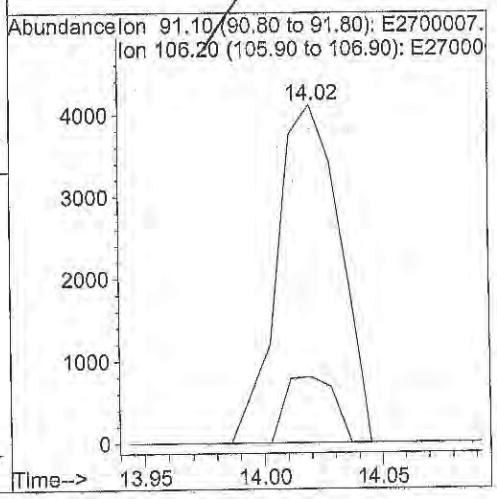


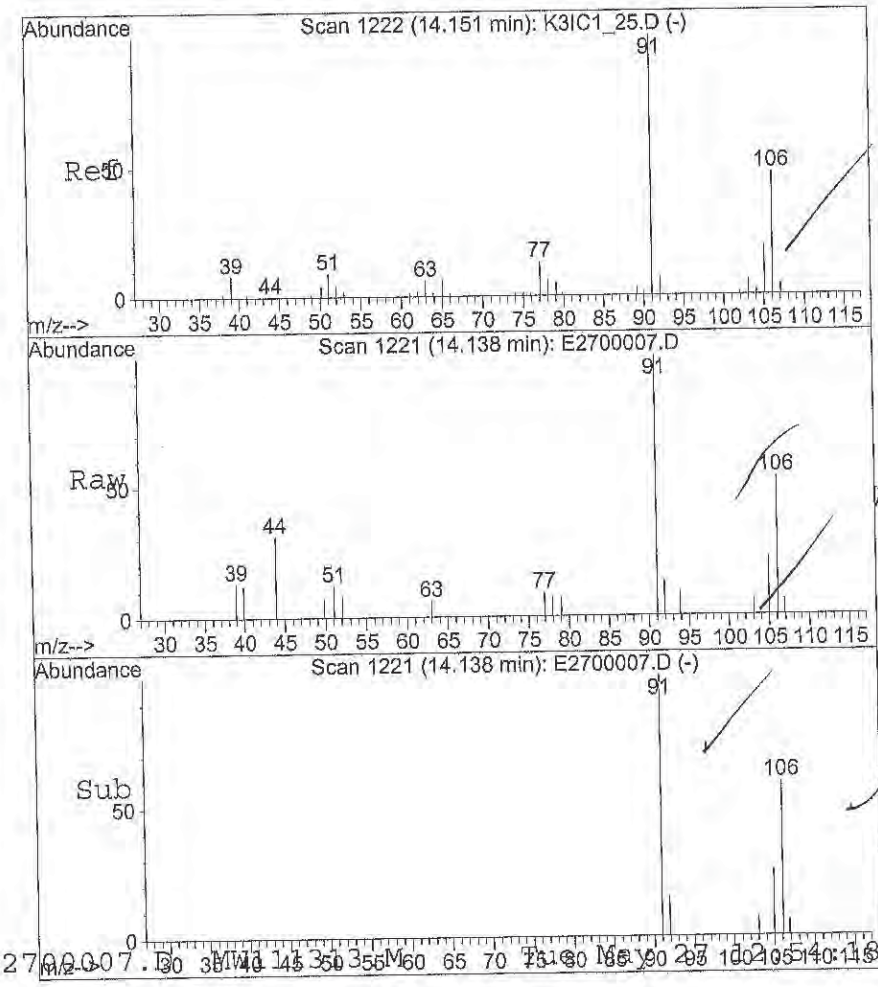


#51
Ethylbenzene
Concen: 0.36 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 91 Resp: 7558

Ion	Ratio	Lower	Upper
91	100		
106	15.1	23.5	35.3#

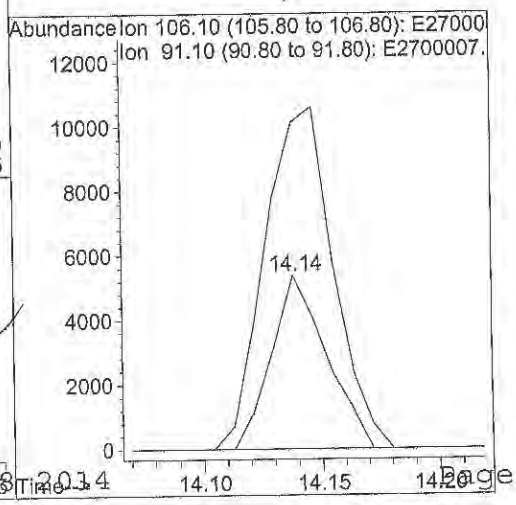


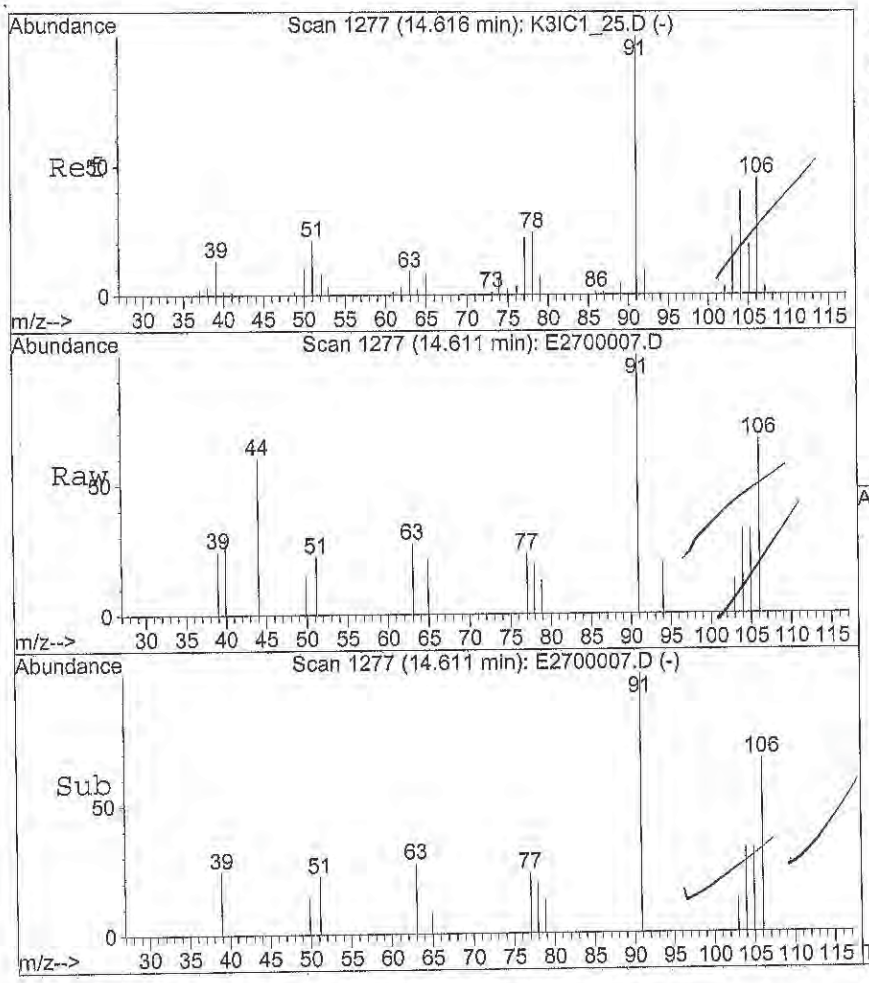


#52
m,p-Xylenes
Concen: 1.15 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:106 Resp: 8652

Ion	Ratio	Lower	Upper
106	100		
91	244.8	177.1	265.7

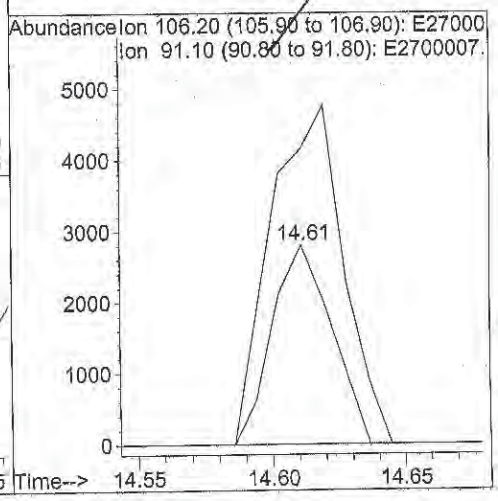


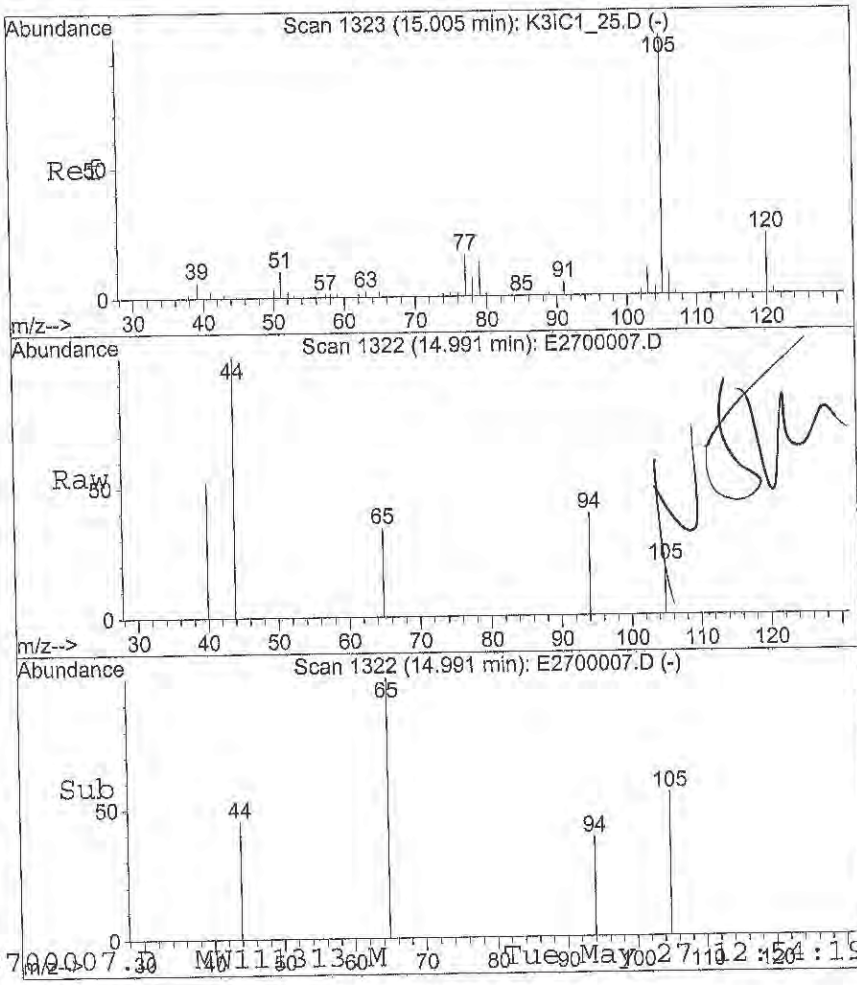


#53
o-Xylene
Concen: 0.59 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:106 Resp: 4334

Ion	Ratio	Lower	Upper
106	100		
91	207.3	179.0	268.6

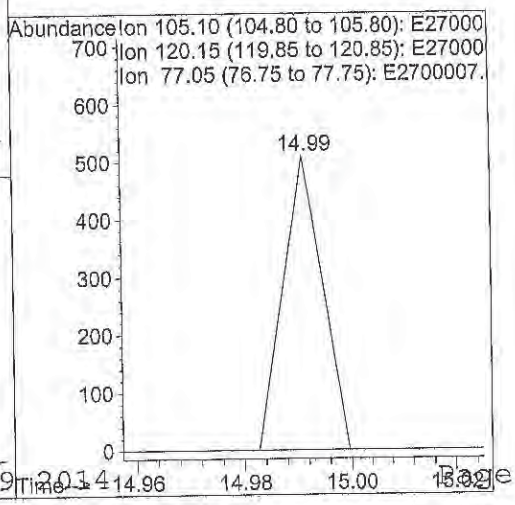


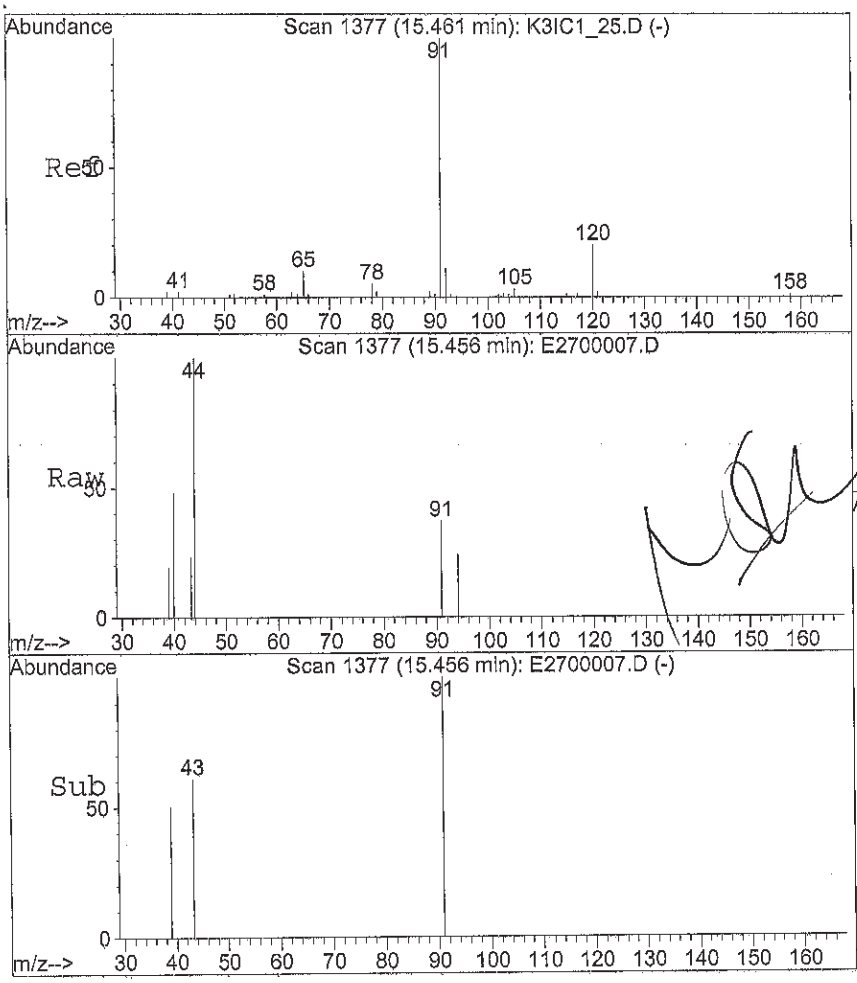


#56
Isopropylbenzene
Concen: 0.01 ug/L
RT: 14.99 min Scan# 1322
Delta R.T. -0.01 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:105 Resp: 259

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

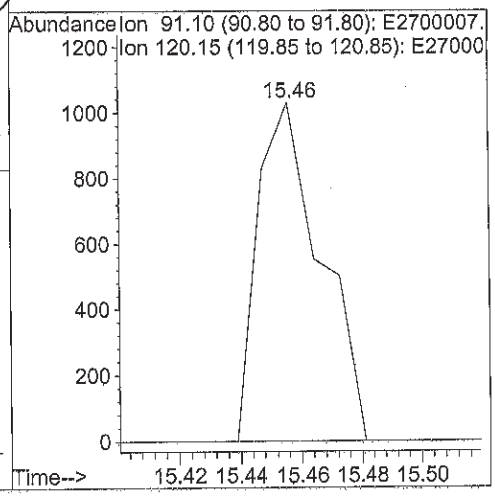


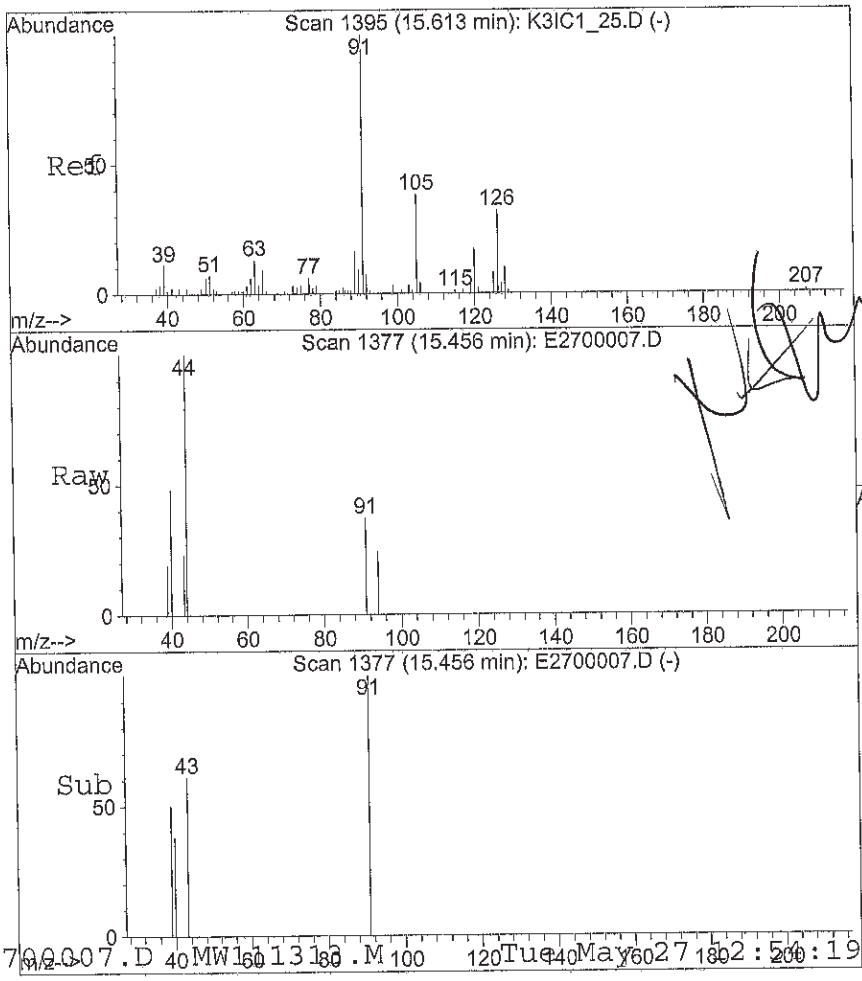


#62
n-Propylbenzene
Concen: 0.05 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 91 Resp: 1476

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

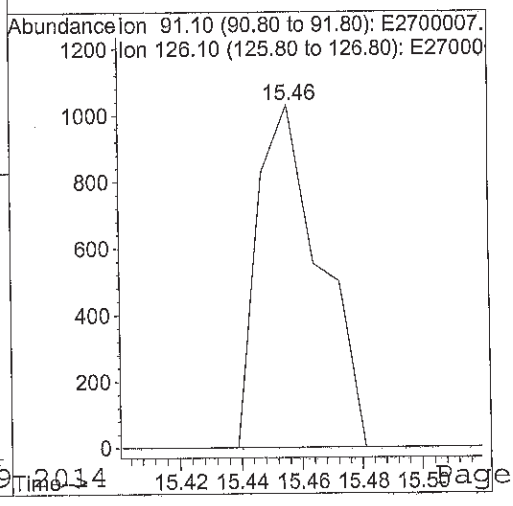


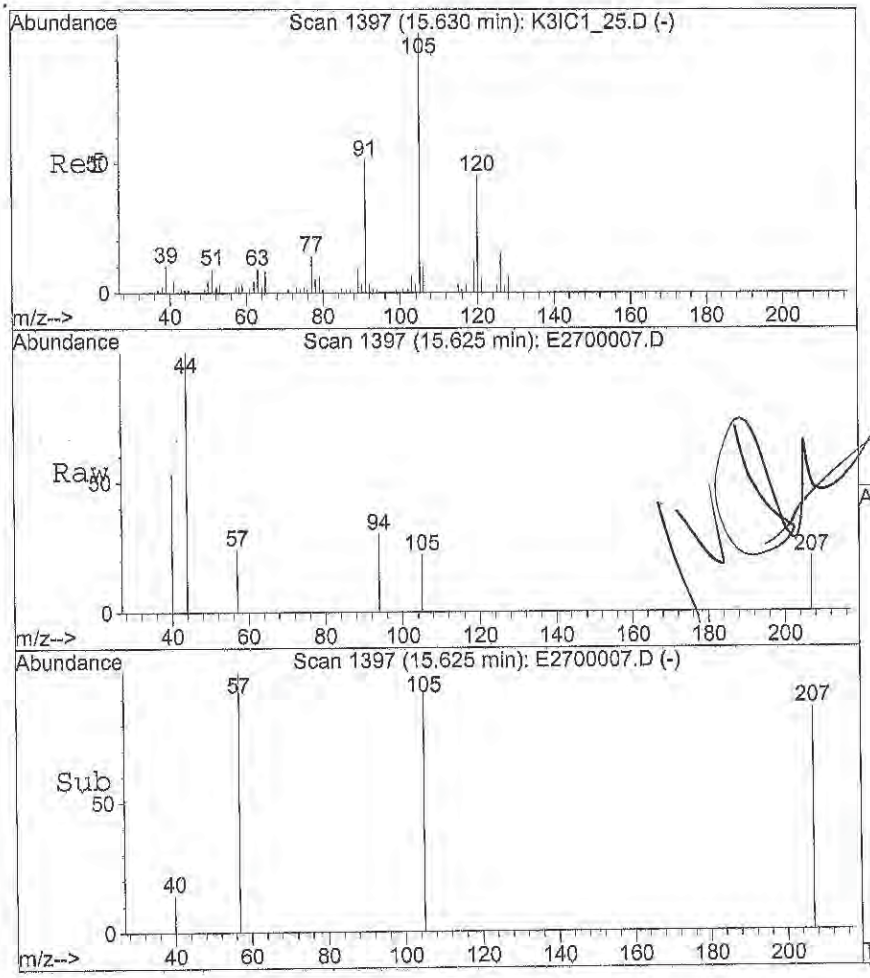


#63
2-Chlorotoluene
Concen: 0.08 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.16 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion: 91 Resp: 1476

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

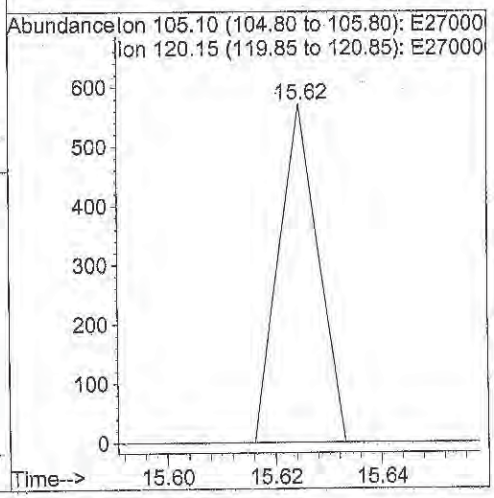


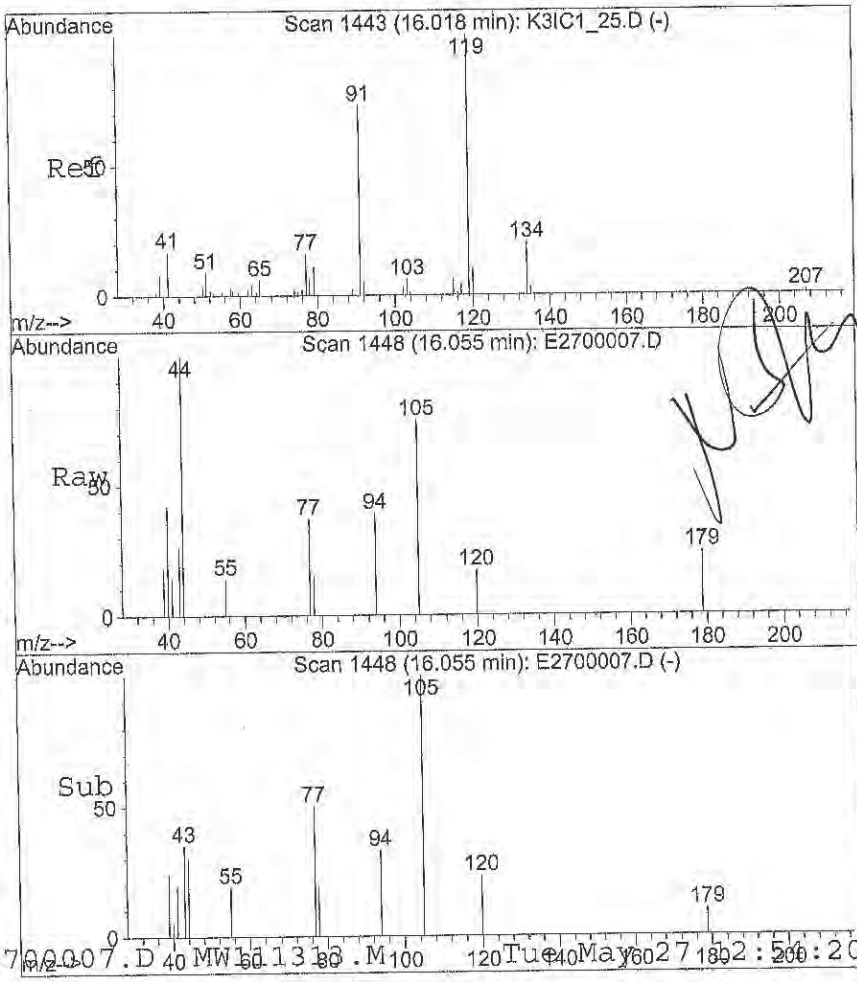


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:105 Resp: 289

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

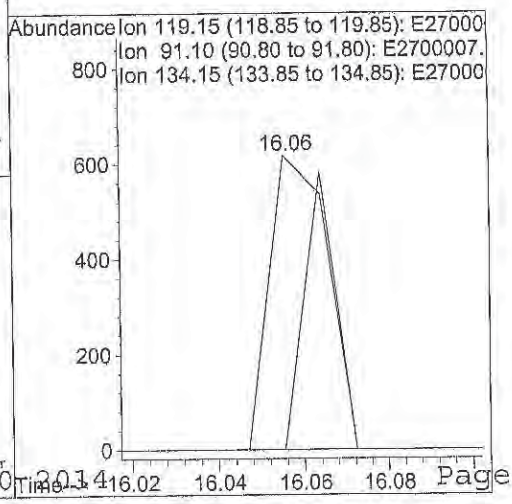


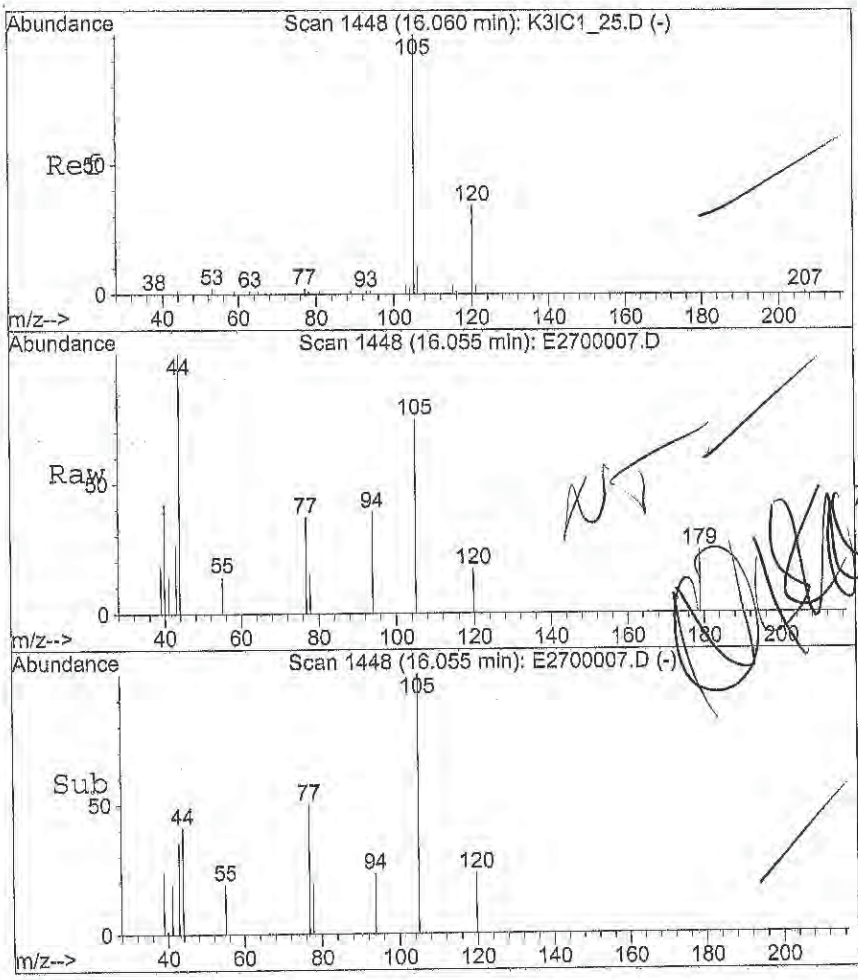


#66
tert-Butylbenzene
Concen: 0.04 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.04 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:119 Resp: 584

Ion	Ratio	Lower	Upper
119	100		
91	50.3	56.3	84.5#
134	0.0	16.1	24.1#

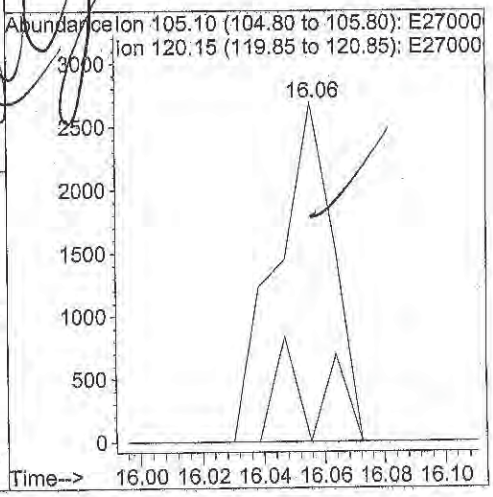


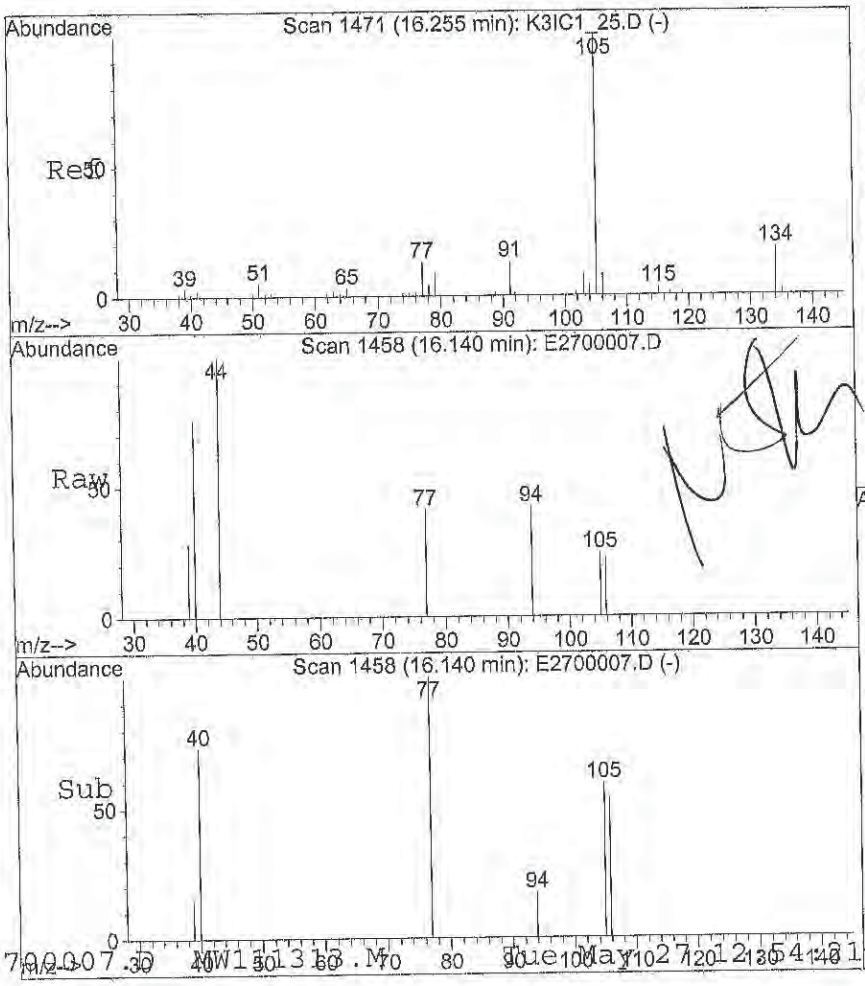


#67
1,2,4-Trimethylbenzene
Concen: 0.19 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:105 Resp: 3490

Ion	Ratio	Lower	Upper
105	100		
120	22.2	33.8	50.8#

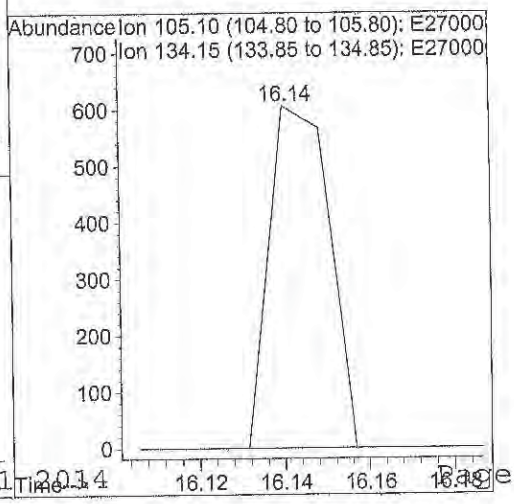


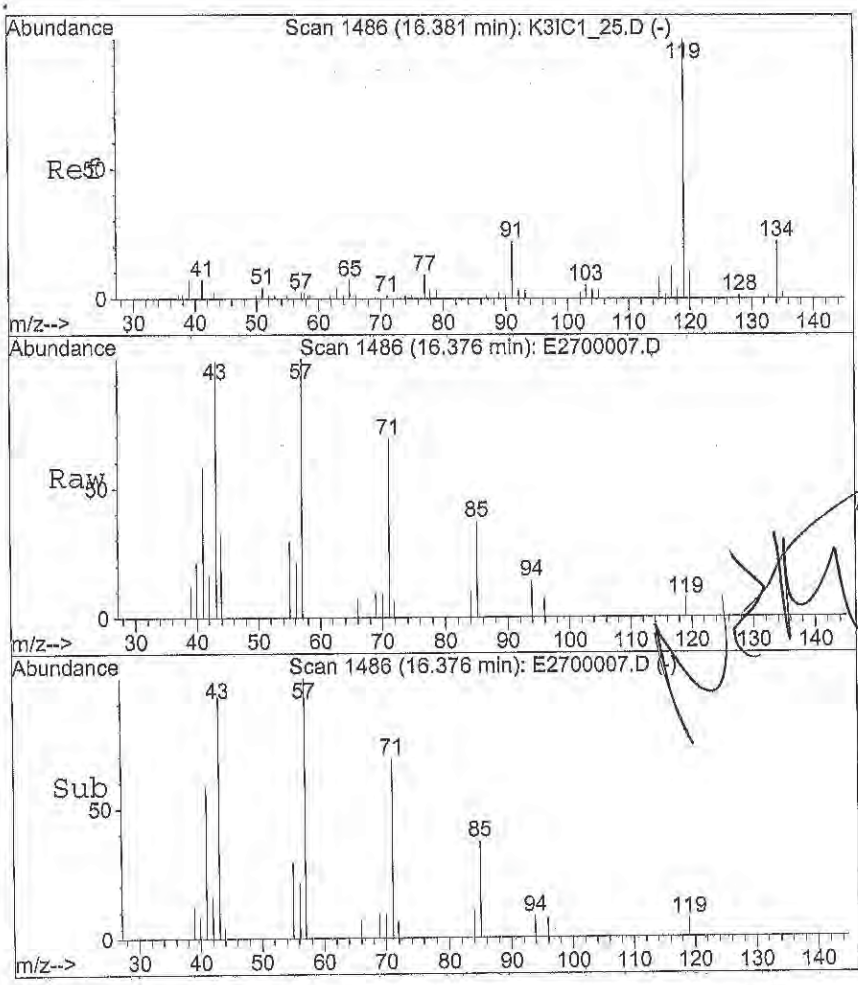


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.14 min Scan# 1458
Delta R.T. -0.11 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:105 Resp: 594

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

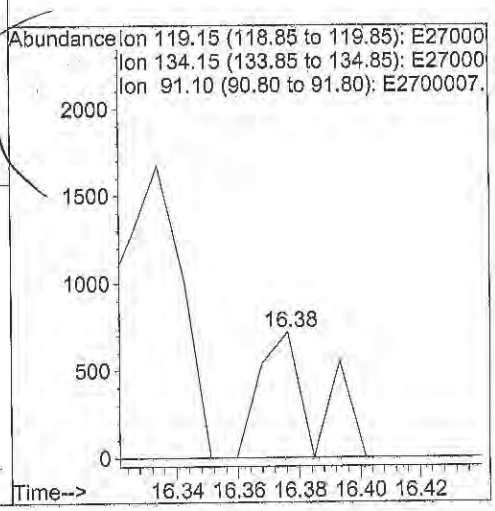


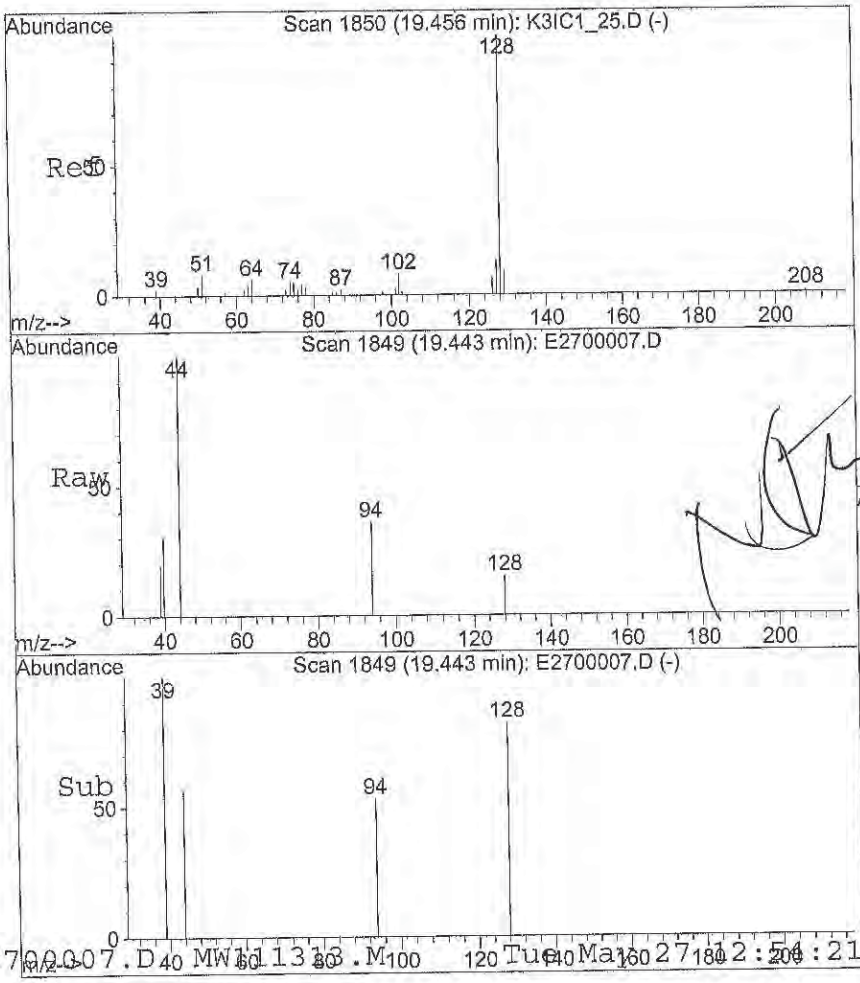


#69
p-Isopropyltoluene
Concen: 0.05 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:119 Resp: 917

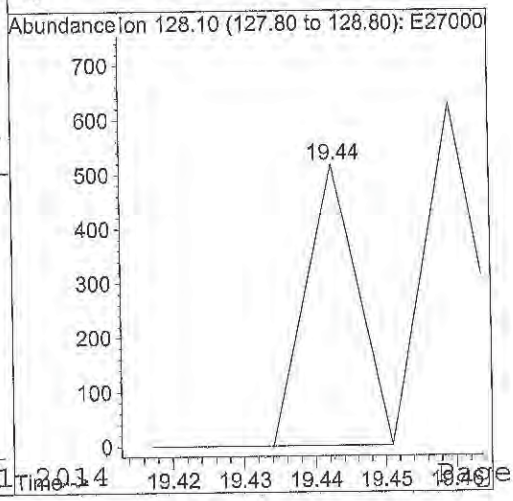
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.44 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2700007.D
Acq: 27 May 2014 12:33 pm

Tgt Ion:128 Resp: 262



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700007.D Vial: 6
Acq On : 27 May 2014 12:33 pm Operator: DN
Sample : 3E42701-06 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 12:55 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1848407	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.91	117	1360103	12.50 ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	711592	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	504526	10.50 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 84.00%		
3) Chloroform-d (SU6)	9.18	84	738968	10.71 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 85.68%		
4) Methylene Chloride-d2 (SU5	7.06	86	416474	10.33 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 82.64%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	477785	14.54 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 116.32%		
6) Benzene-d6 (SU7)	9.92	84	1461231	10.07 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 80.56%		
8) Toluene-d8 (SU3)	12.20	98	1603606	12.43 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 99.44%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	738691	13.87 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.96%		

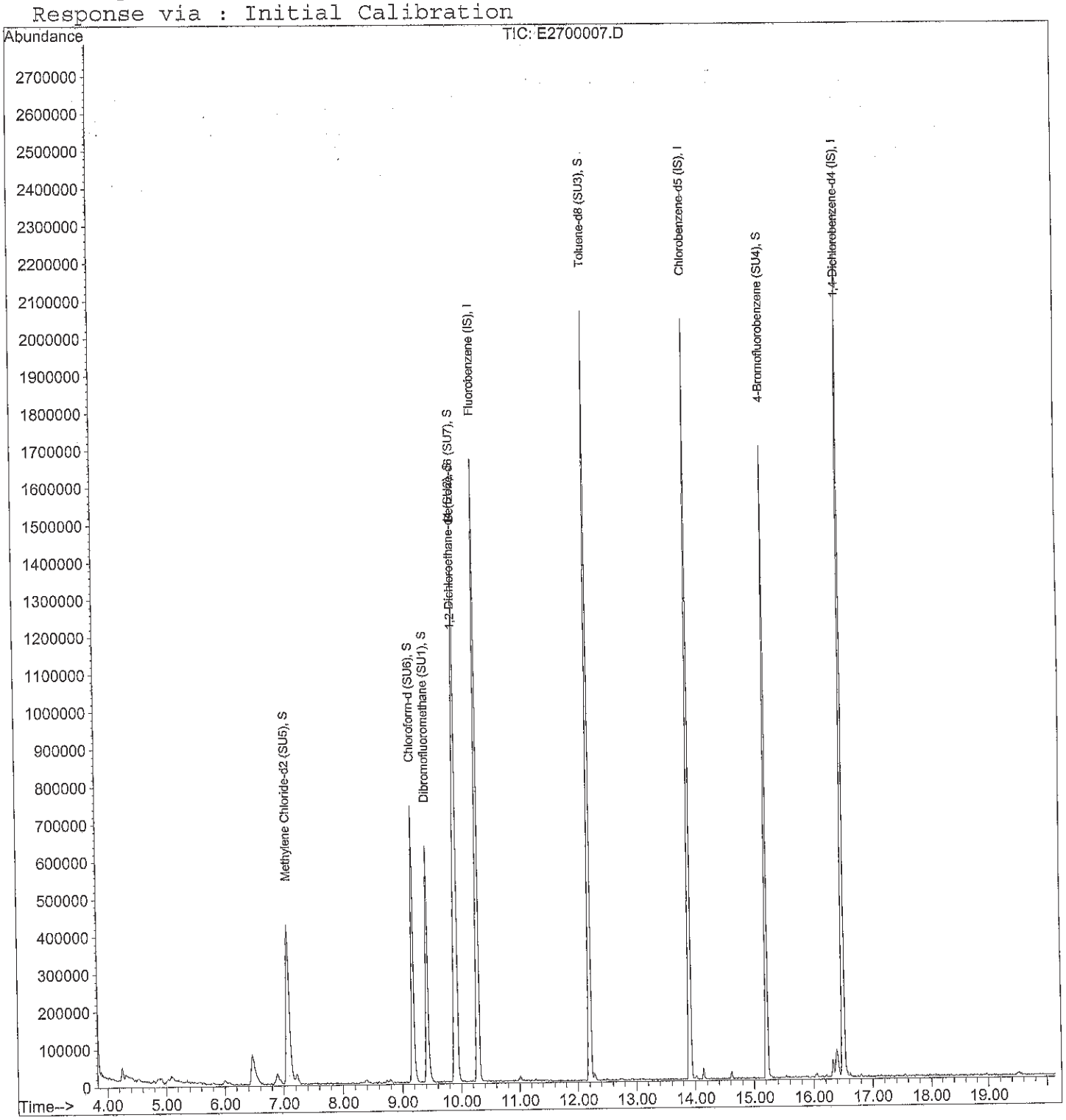
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700007.D Vial: 6
Acq On : 27 May 2014 12:33 pm Operator: DN
Sample : 3E42701-06 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 12:55 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700008.D Vial: 7
Acq On : 27 May 2014 1:02 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:40 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Rerun 20X

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1858802	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1370885	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	727236	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	524212	11.31 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.48%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	489084	11.10 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.80%		
39) Toluene-d8 (SU3)	12.20	98	1607666	12.57 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.56%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	755661	13.48 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.84%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	1038	0.23 ug/L #	44
4) Chloromethane	4.39	50	8274	1.43 ug/L	91
6) Bromomethane	5.29	96	729	-1.42 ug/L	79
7) Chloroethane	5.25	64	3186	2.75 ug/L #	49
9) (F113) 1,1,2-Trichloro-tri	6.36	151	12106953	3313.18 ug/L	96
10) 1,1-Dichloroethene	6.35	96	42895	9.78 ug/L #	48
11) Acetone	6.46	58	16563	20.38 ug/L	97
12) (IPA) Leak Check Compound	6.48	45	174260	780.17 ug/L #	87
13) Carbon disulfide	6.85	76	19800	1.28 ug/L #	89
14) Methylene Chloride	7.08	84	7382	1.45 ug/L #	1
15) (TBA) tert-Butanol	6.89	59	4760	15.01 ug/L #	77
20) 2,2-Dichloropropane	8.90	77	271	0.04 ug/L #	36
24) Chloroform	9.21	83	2987	0.31 ug/L	99
25) (ETBE) 2-ethoxy 2-methyl p	8.49	59	522	0.04 ug/L #	34
31) Benzene	9.96	78	5414	0.31 ug/L #	60
32) 1,2-Dichloroethane	9.92	62	7087	1.15 ug/L #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7779	2.84 ug/L #	100
41) Toluene	12.29	91	34735	1.86 ug/L	97
42) trans-1,3-Dichloropropene	12.50	75	334	0.05 ug/L #	30
45) 1,3-Dichloropropane	12.76	76	290	0.05 ug/L #	41
46) 2-Hexanone	12.92	43	1032	0.34 ug/L #	37
51) Ethylbenzene	14.02	91	8229	0.39 ug/L #	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700008.D Vial: 7
Acq On : 27 May 2014 1:02 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:40 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

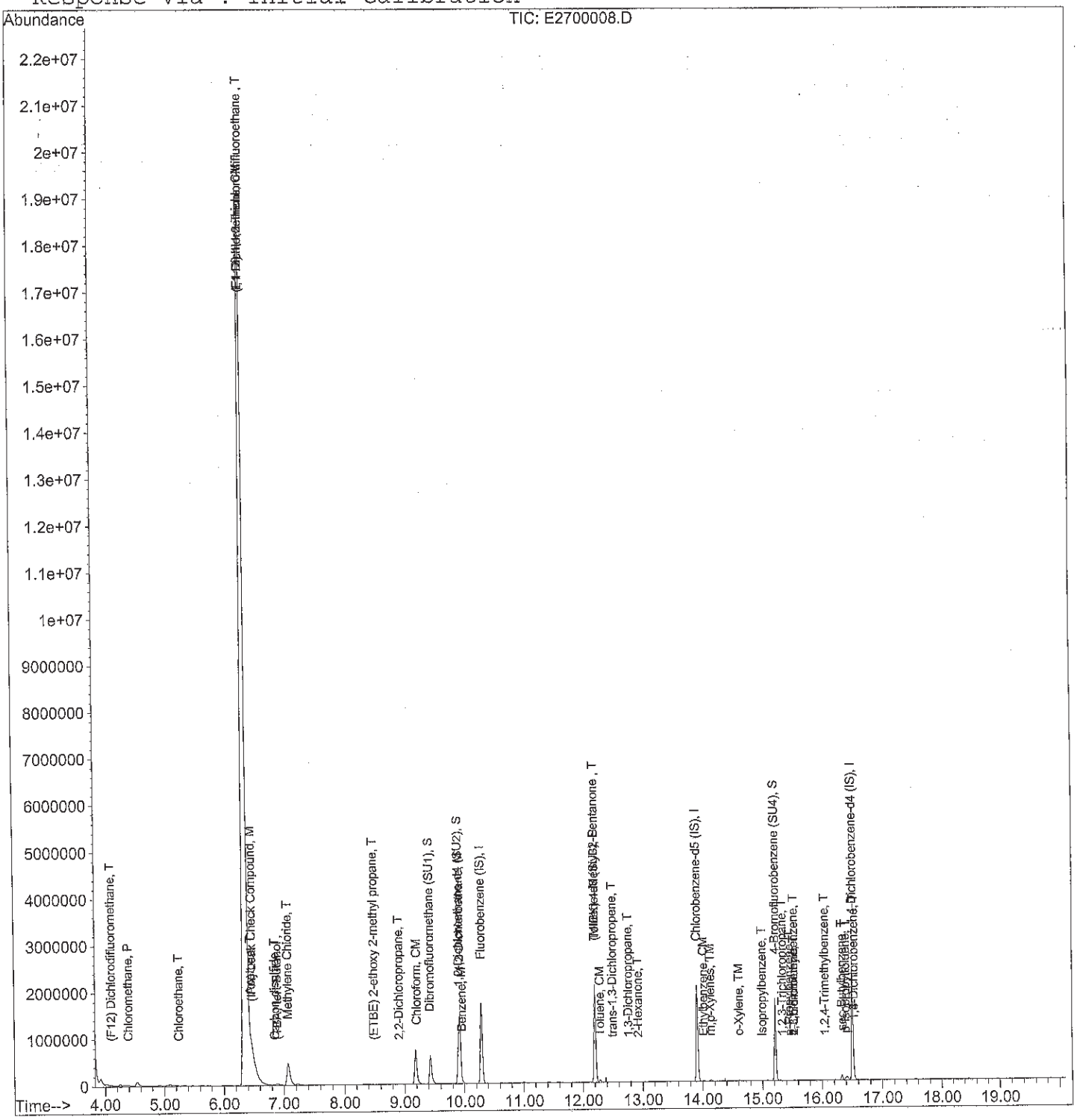
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
52) m,p-Xylenes	14.14	106	6808	0.90 ug/L	91
53) o-Xylene	14.61	106	2041	0.27 ug/L #	6
54) Styrene	14.62	104	2931	-0.60 ug/L	92
56) Isopropylbenzene	14.99	105	920	0.04 ug/L #	55
57) 1,2,3-Trichloropropane	15.34	75	283	0.05 ug/L #	36
62) n-Propylbenzene	15.46	91	1561	0.05 ug/L #	56
63) 2-Chlorotoluene	15.52	91	342	0.02 ug/L #	45
64) 1,3,5-Trimethylbenzene	15.53	105	3538	0.20 ug/L #	31
65) 4-Chlorotoluene	15.52	91	342	0.02 ug/L #	44
67) 1,2,4-Trimethylbenzene	16.05	105	1998	0.11 ug/L #	33
68) sec-Butylbenzene	16.33	105	985	0.04 ug/L #	62
69) p-Isopropyltoluene	16.38	119	693	0.03 ug/L #	52
70) 1,3-Dichlorobenzene	16.54	146	298	0.03 ug/L #	1
71) 1,4-Dichlorobenzene	16.54	146	298	0.03 ug/L #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700008.D Vial: 7
Acq On : 27 May 2014 1:02 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:40 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700009.D Vial: 8
Acq On : 27 May 2014 1:31 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-10.0-11.0 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:52 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1755921	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1286154	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	676173	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	486155	11.10 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	88.80%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	445620	10.71 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	85.68%	
39) Toluene-d8 (SU3)	12.20	98	1524962	12.71 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	101.68%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	693285	13.18 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	105.44%	

Target Compounds					Qvalue
4) Chloromethane	4.39	50	2907	-0.23 ug/L #	41
6) Bromomethane	5.10	96	7029	1.86 ug/L #	55
7) Chloroethane	5.22	64	743	1.20 ug/L	96
9) (F113) 1,1,2-Trichloro-tri	6.35	151	740254	214.45 ug/L 4.289 X20	97
10) 1,1-Dichloroethene	6.35	96	1007	0.24 ug/L #	37
11) Acetone	6.47	58	11885	13.48 ug/L	94
12) (IPA) Leak Check Compound	6.46	45	142971	677.59 ug/L #	86
14) Methylene Chloride	7.08	84	6514	1.35 ug/L #	1
15) (TBA) tert-Butanol	6.89	59	2881	9.62 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	346	0.03 ug/L #	55
21) (MEK) 2-Butanone	8.81	72	268	0.54 ug/L #	1
24) Chloroform	9.20	83	3122	0.34 ug/L #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.32	59	379	0.03 ug/L #	44
29) 1,1-Dichloropropene	9.93	75	684	0.10 ug/L #	1
31) Benzene	9.98	78	422	0.03 ug/L #	57
32) 1,2-Dichloroethane	9.92	62	6975	1.19 ug/L #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.09	43	275	0.11 ug/L #	100
41) Toluene	12.28	91	3933	0.22 ug/L # 0.0046	73
44) Tetrachloroethene	12.95	164	1538	0.29 ug/L # 0.0058	85
46) 2-Hexanone	12.97	43	294	0.10 ug/L #	37
51) Ethylbenzene	14.02	91	1666	0.08 ug/L #	45
52) m,p-Xylenes	14.14	106	1022	0.14 ug/L # 0.0028	36

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700009.D Vial: 8
Acq On : 27 May 2014 1:31 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-10.0-11.0 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:52 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

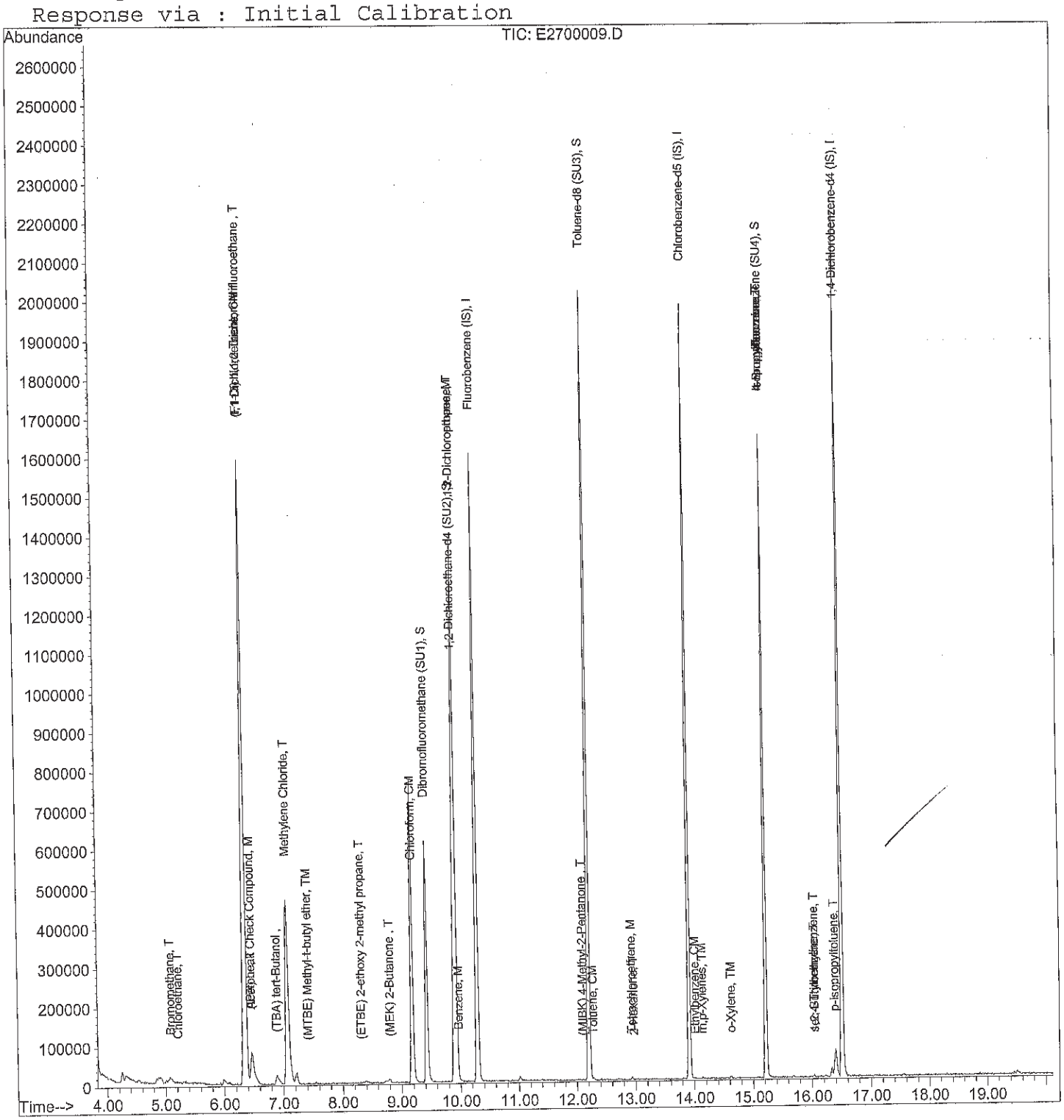
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) o-Xylene	14.62	106	383	0.05	~~ug/L~~ # 0.001	1
54) Styrene	14.63	104	1413	-0.74	~~ug/L~~ # NSV	59
56) Isopropylbenzene	15.22	105	1782	0.09	~~ug/L~~ #	1
62) n-Propylbenzene	15.22	91	2267	0.08	~~ug/L~~ #	56
67) 1,2,4-Trimethylbenzene	16.05	105	994	0.06	~~ug/L~~ #	33
68) sec-Butylbenzene	16.05	105	994	0.04	~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	316	0.02	~~ug/L~~ #	52

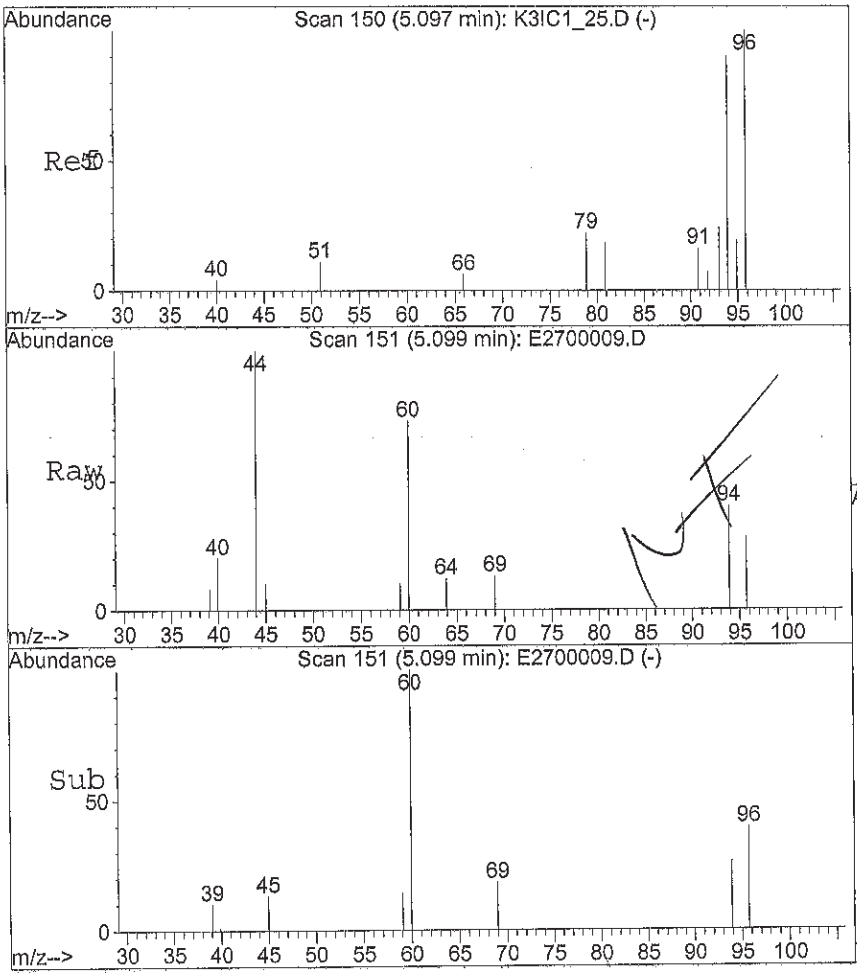
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700009.D Vial: 8
Acq On : 27 May 2014 1:31 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-10.0-11.0 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:52 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

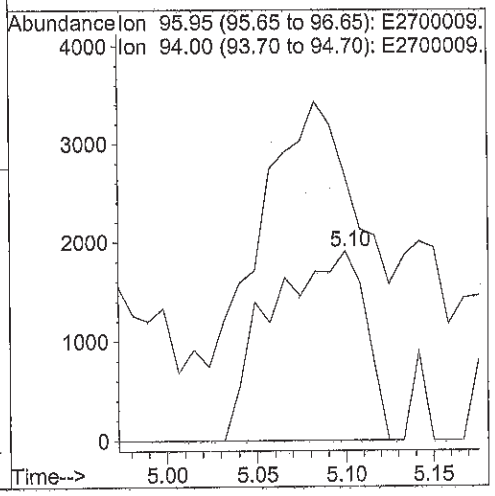


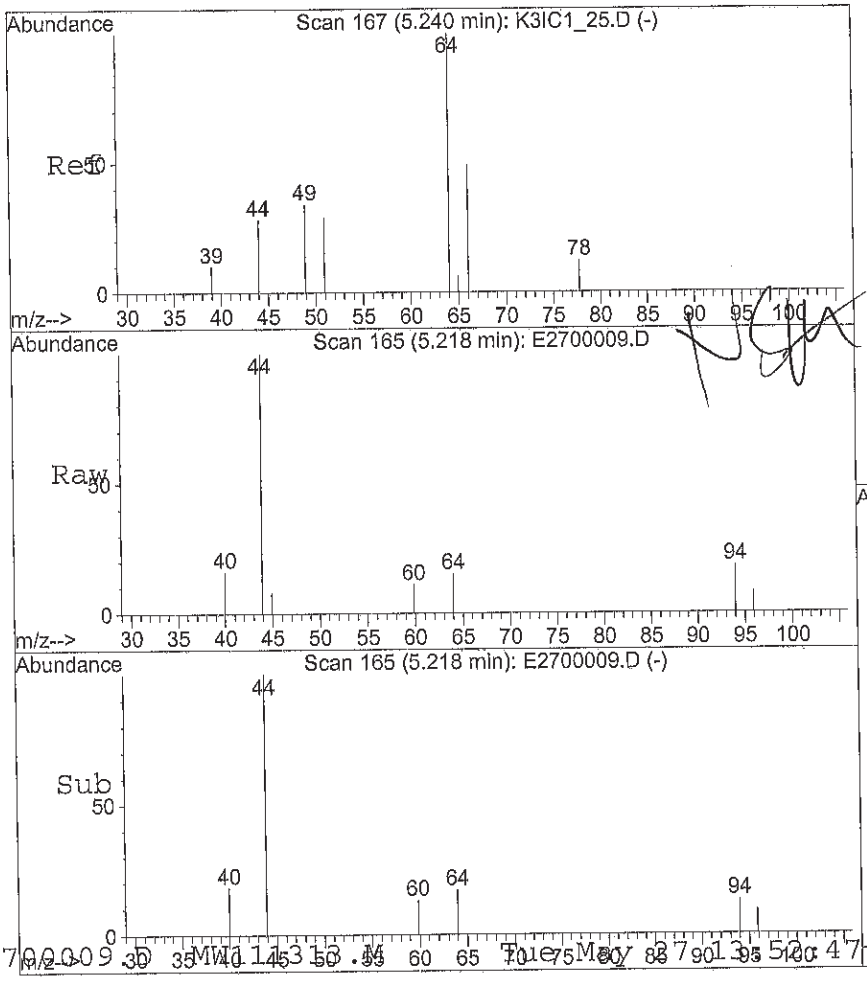


#6
Bromomethane
Concen: 1.86 ug/L
RT: 5.10 min Scan# 151
Delta R.T. 0.00 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 96 Resp: 7029

Ion	Ratio	Lower	Upper
96	100		
94	177.6	101.0	151.4#

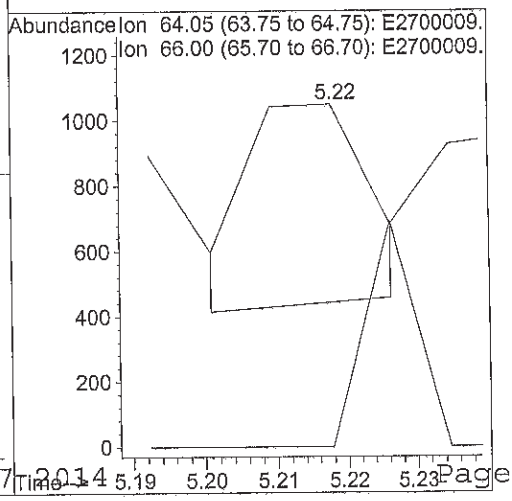


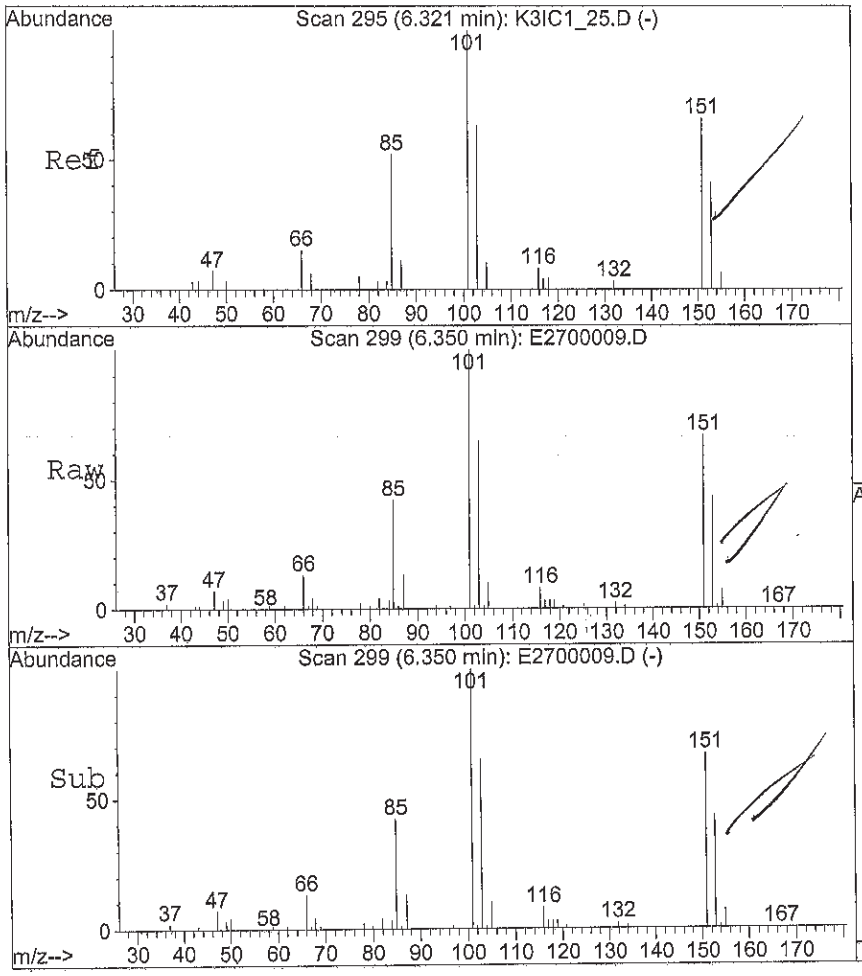


#7
Chloroethane
Concen: 1.20 ug/L
RT: 5.22 min Scan# 165
Delta R.T. -0.02 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 64 Resp: 743

Ion	Ratio	Lower	Upper
64	100		
66	47.1	35.4	53.0

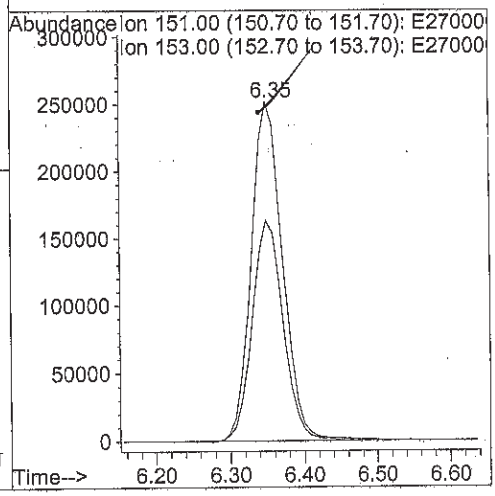


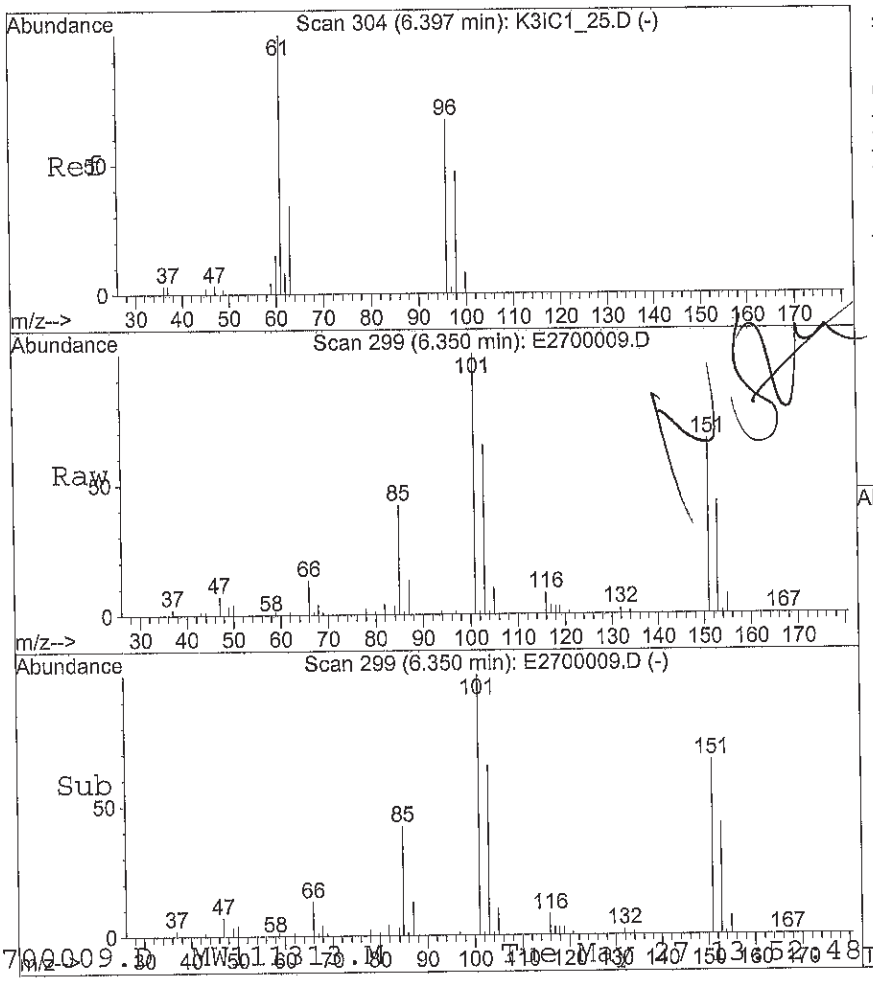


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 214.45 ug/L
RT: 6.35 min Scan# 299
Delta R.T. 0.03 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:151 Resp: 740254

Ion	Ratio	Lower	Upper
151	100		
153	64.2	49.6	74.4

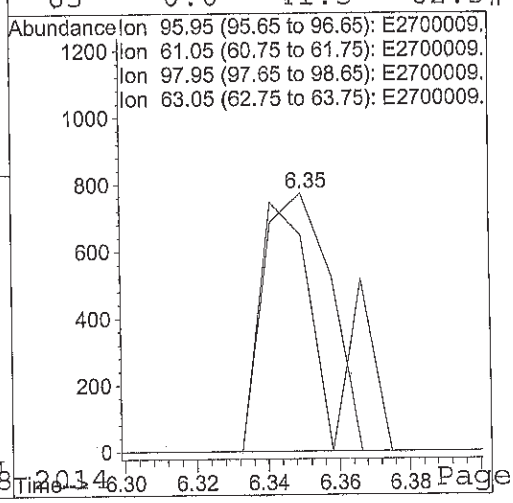


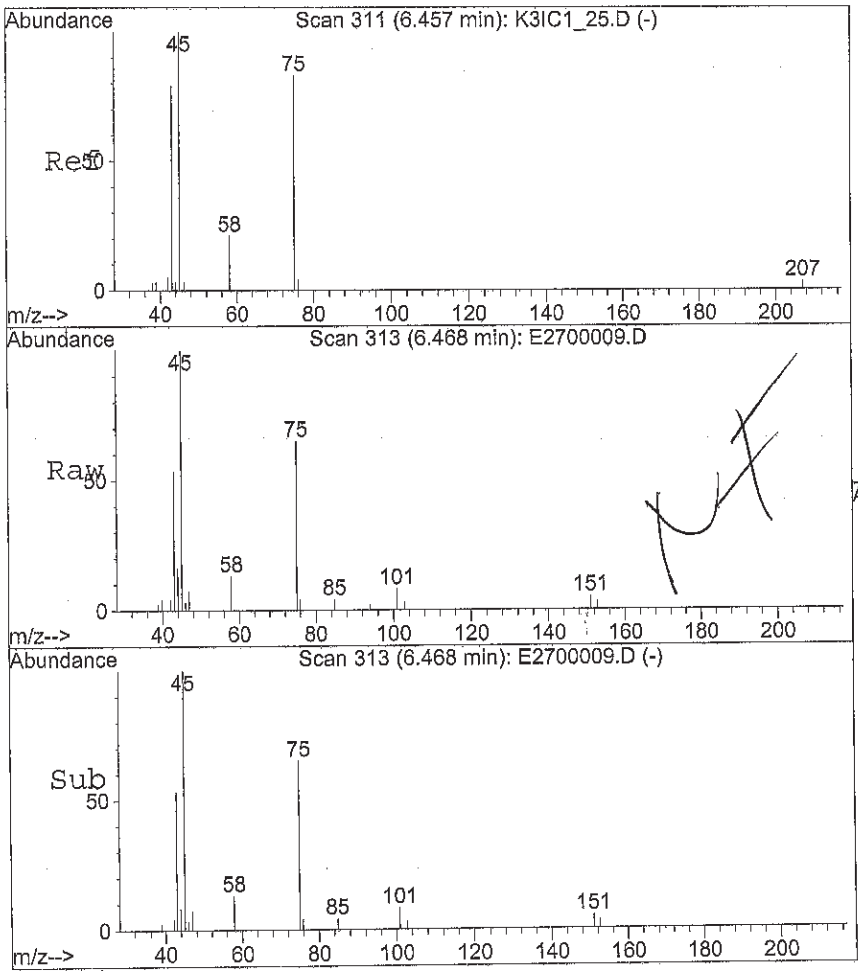


#10
1,1-Dichloroethene
Concen: 0.24 ug/L
RT: 6.35 min Scan# 299
Delta R.T. -0.05 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 96 Resp: 1007

Ion	Ratio	Lower	Upper
96	100		
61	96.0	130.0	195.0#
98	0.0	56.2	84.4#
63	0.0	41.5	62.3#

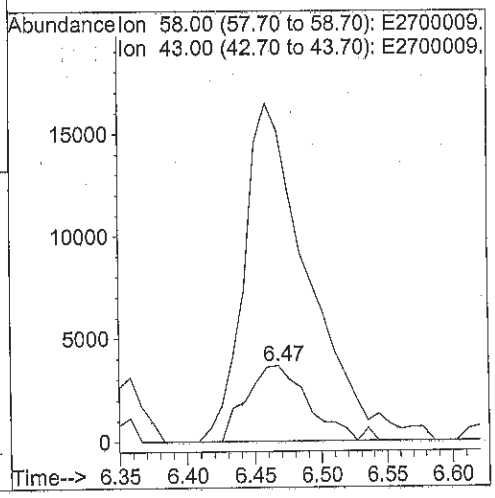


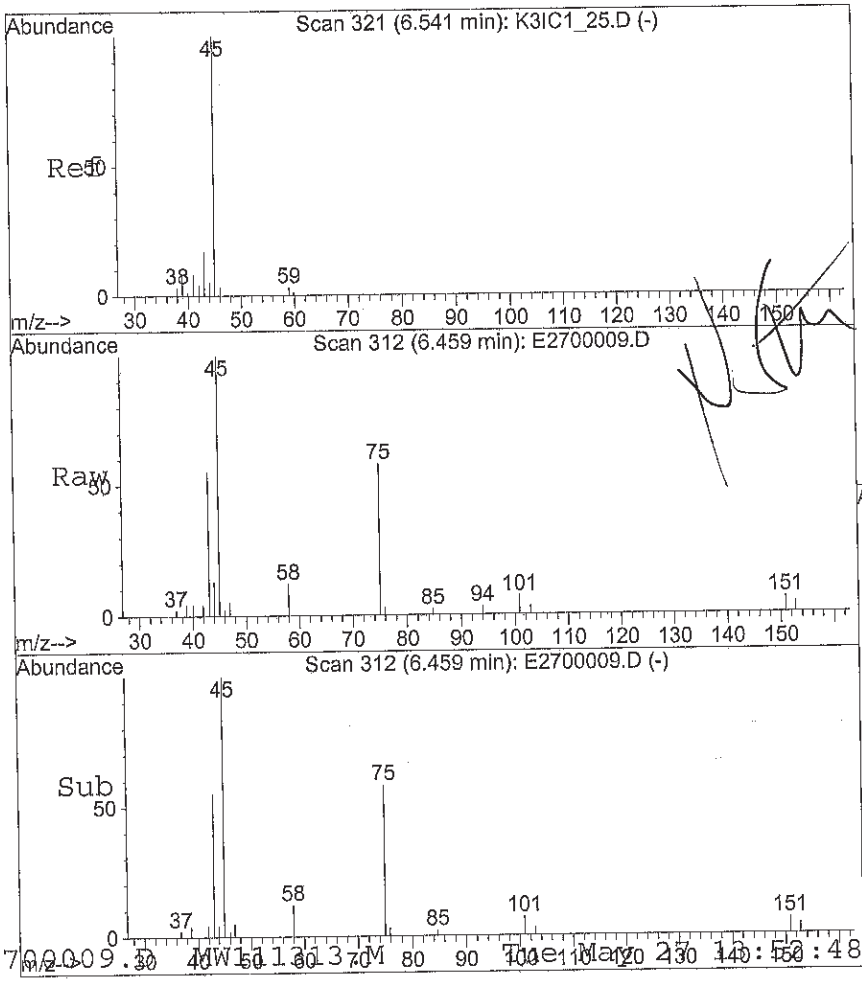


#11
Acetone
Concen: 13.48 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 58 Resp: 11885

Ion	Ratio	Lower	Upper
58	100		
43	466.2	360.9	541.3

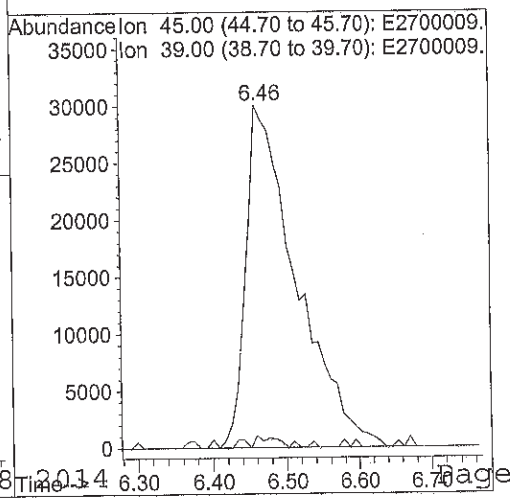


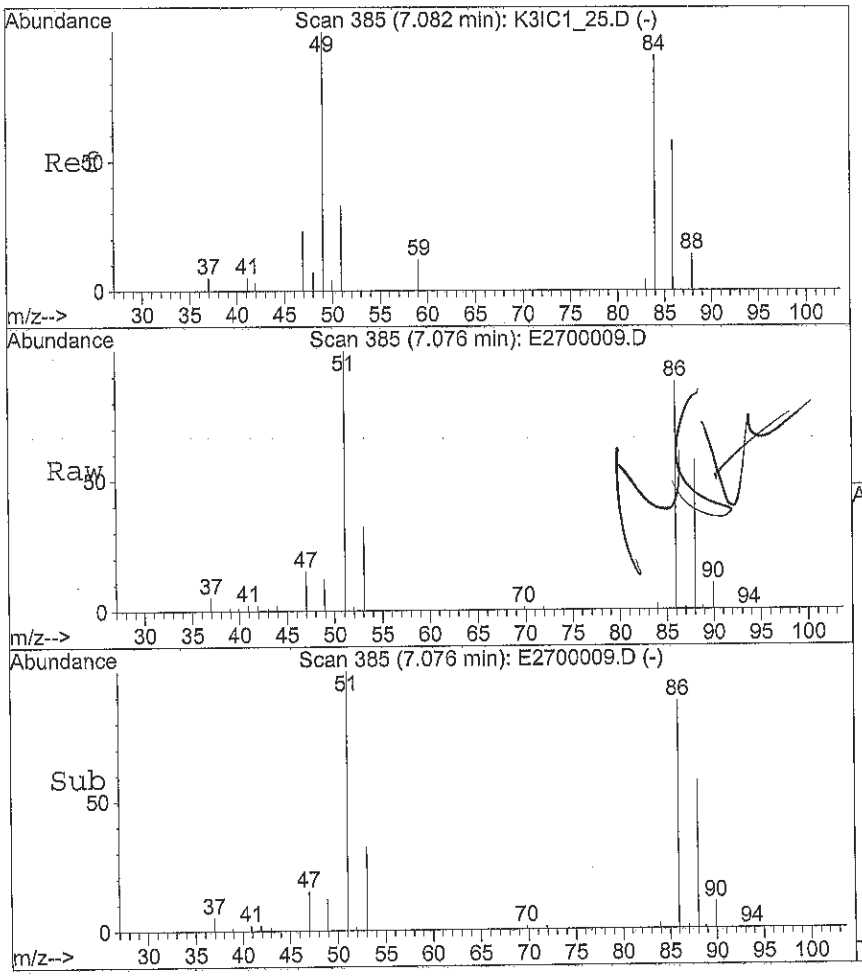


#12
(IPA) Leak Check Compound
Concen: 677.59 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 45 Resp: 142971

Ion	Ratio	Lower	Upper
45	100		
39	1.5	4.9	7.3#

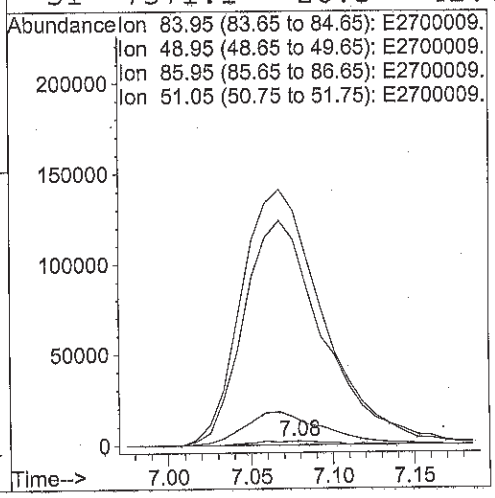


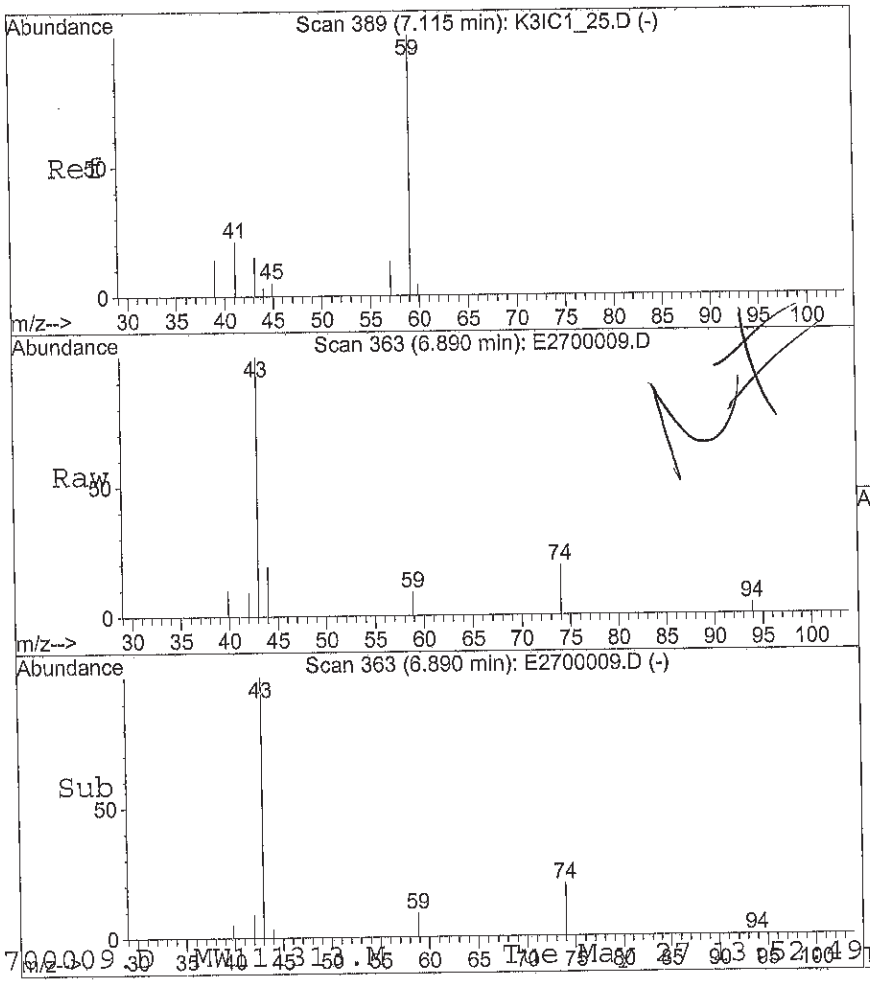


#14
Methylene Chloride
Concen: 1.35 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.01 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 84 Resp: 6514

Ion	Ratio	Lower	Upper
84	100		
49	927.9	89.8	134.6#
86	6419.1	51.1	76.7#
51	7571.1	28.5	42.7#

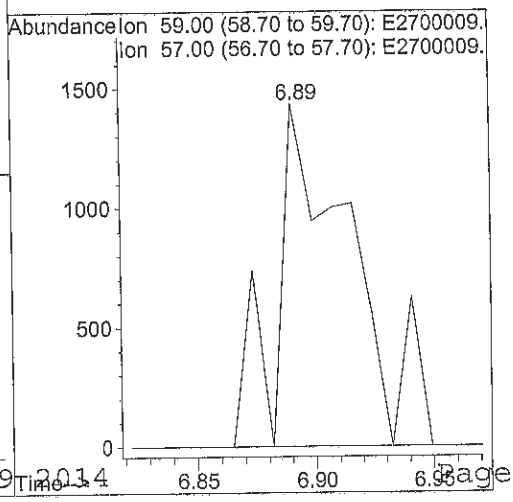


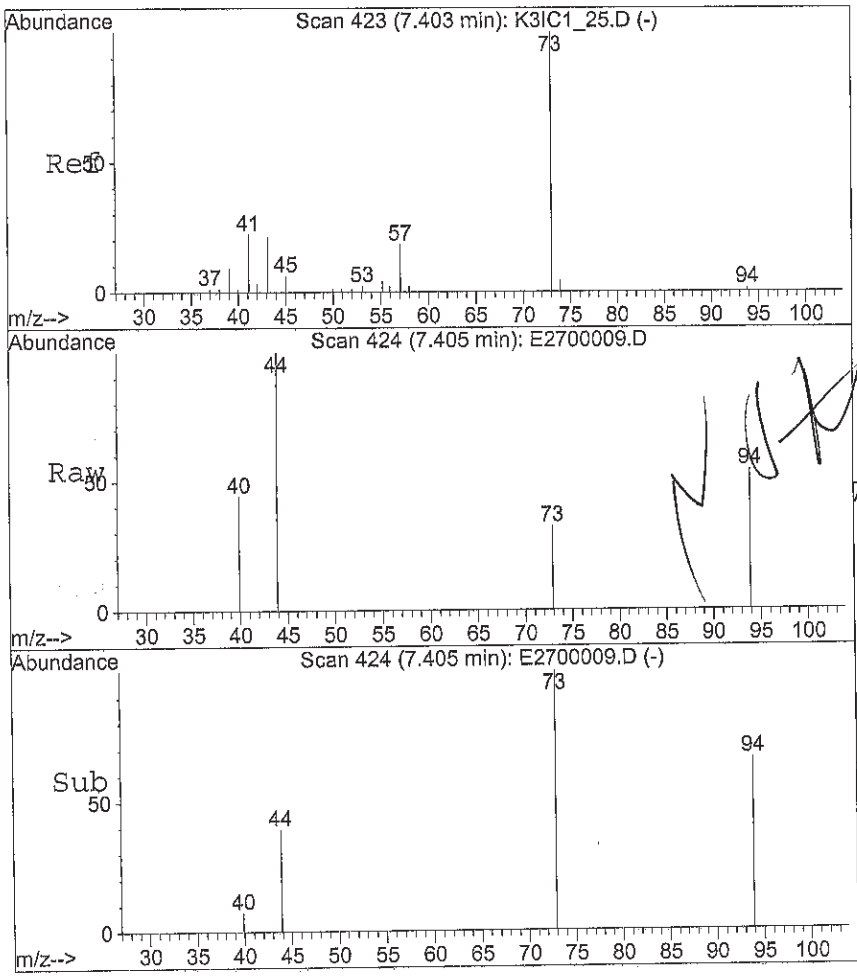


#15
(TBA) tert-Butanol
Concen: 9.62 ug/L
RT: 6.89 min Scan# 363
Delta R.T. -0.23 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 59 Resp: 2881

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

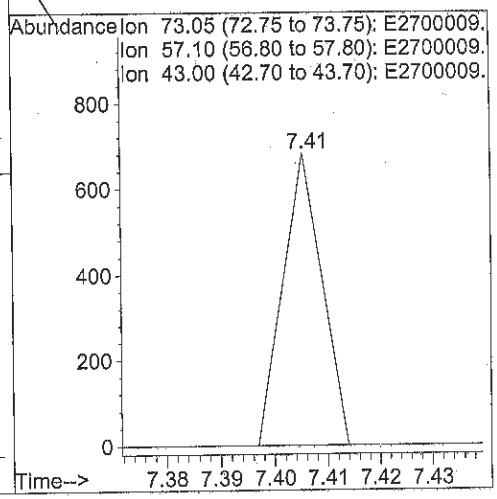


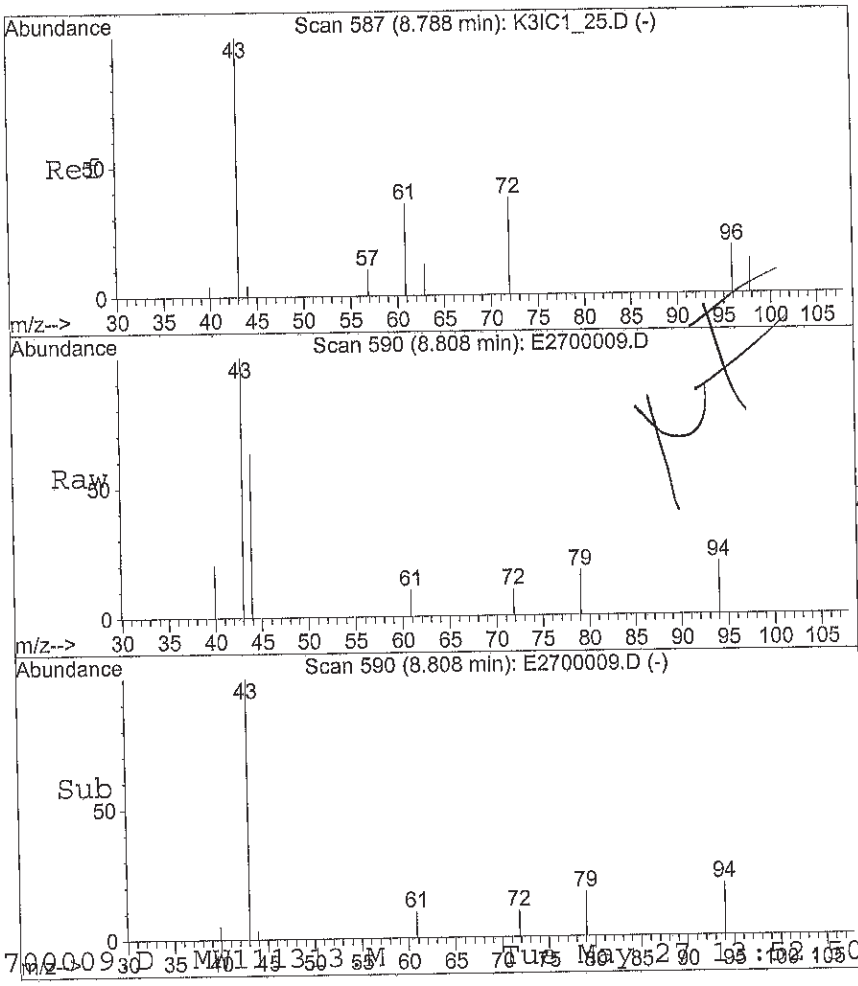


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.03 ug/L
RT: 7.41 min Scan# 424
Delta R.T. 0.00 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 73 Resp: 346

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	0.0	18.4	27.6#

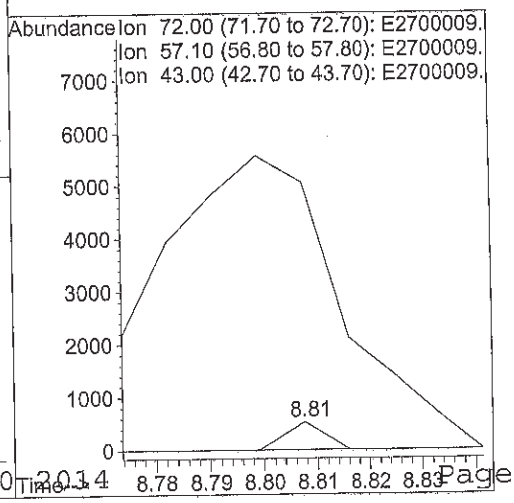


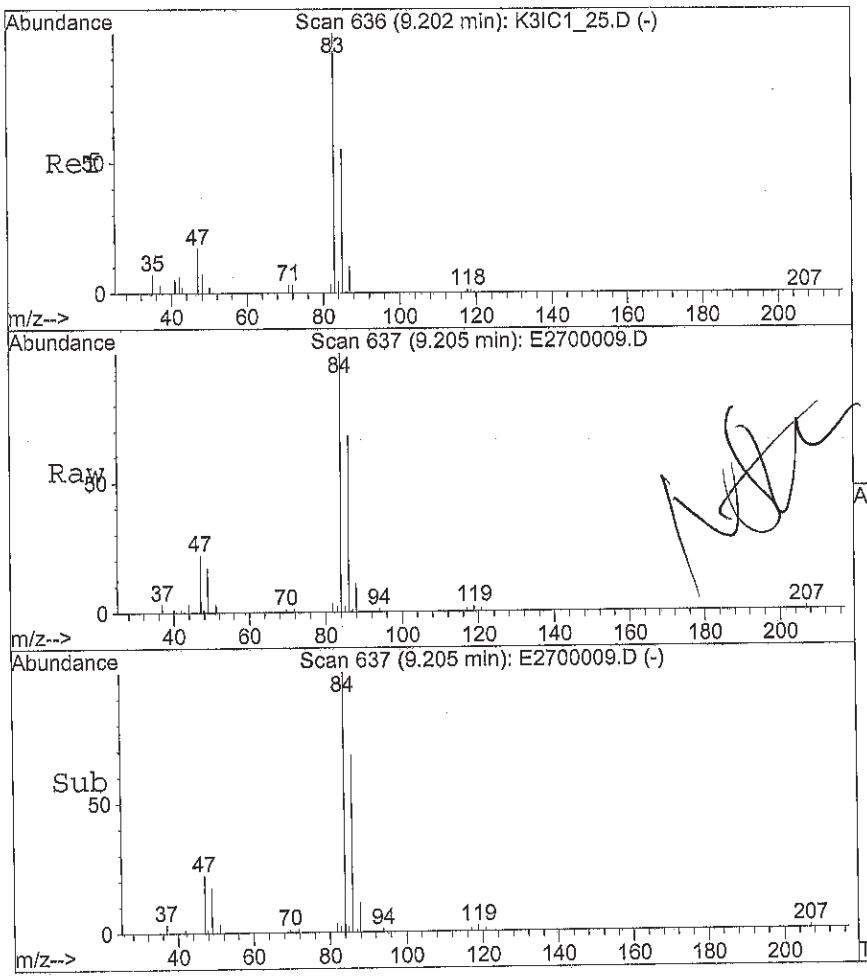


#21
(MEK) 2-Butanone
Concen: 0.54 ug/L
RT: 8.81 min Scan# 590
Delta R.T. 0.02 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 72 Resp: 268

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	5032.1	314.2	471.2#

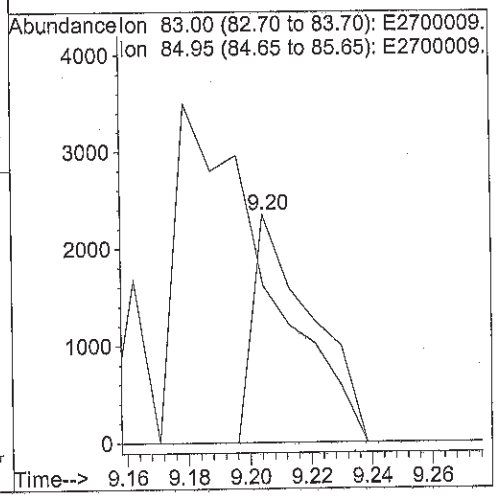


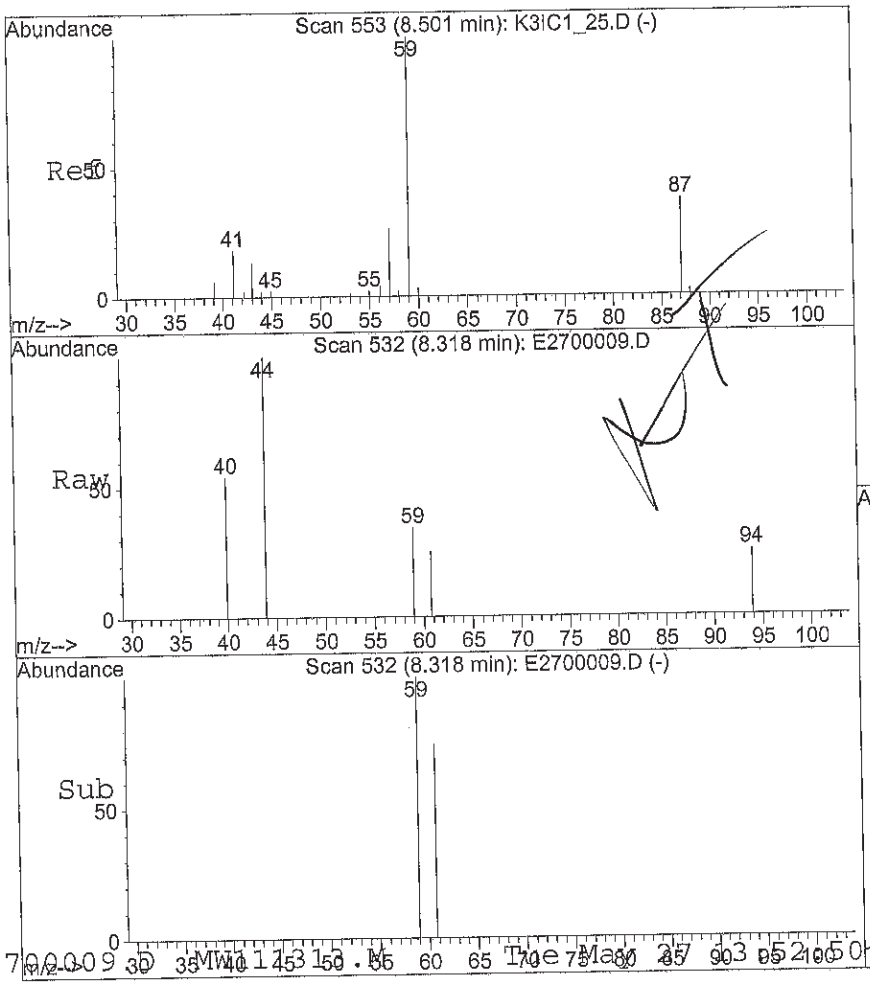


#24
Chloroform
Concen: 0.34 ug/L
RT: 9.20 min Scan# 637
Delta R.T. 0.00 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 83 Resp: 3122

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

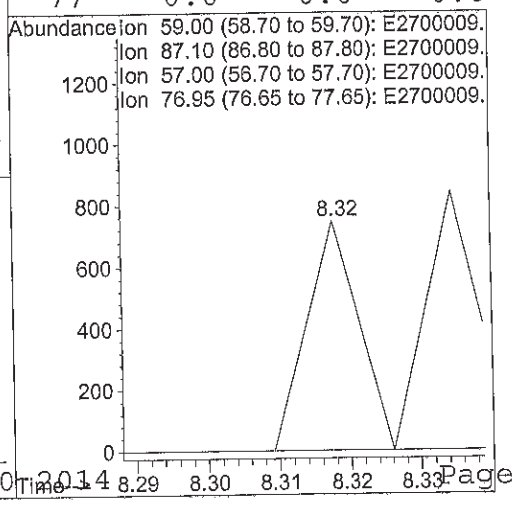


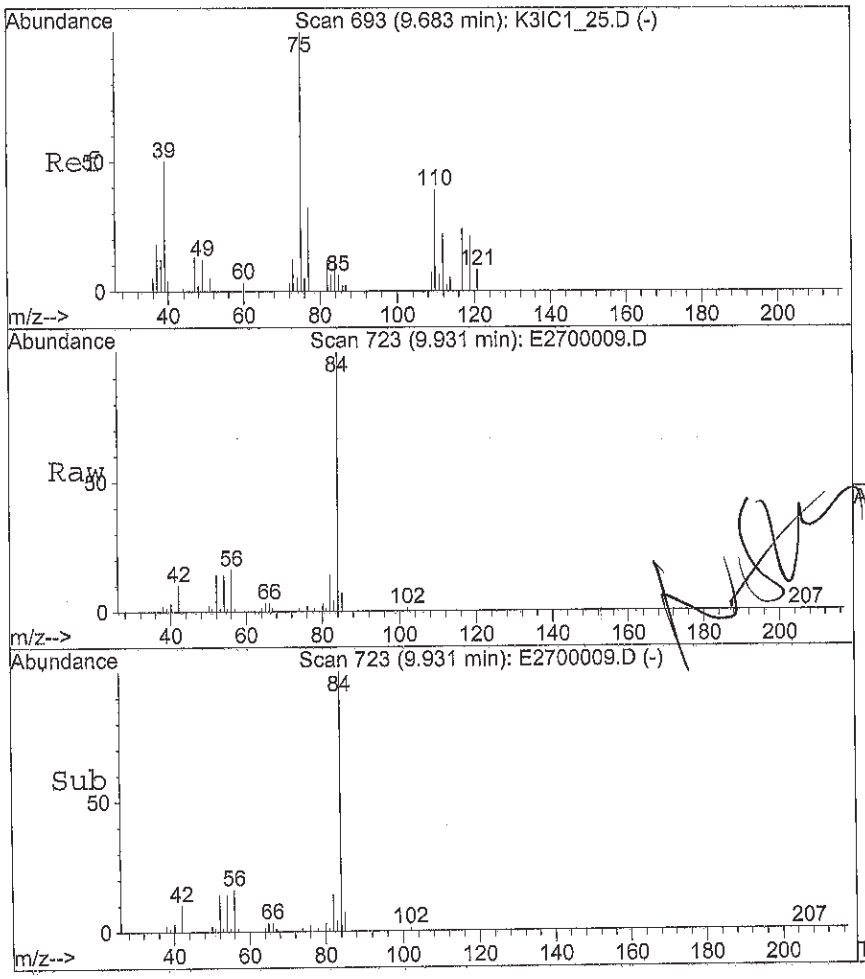


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.32 min Scan# 532
Delta R.T. -0.18 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 59 Resp: 379

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

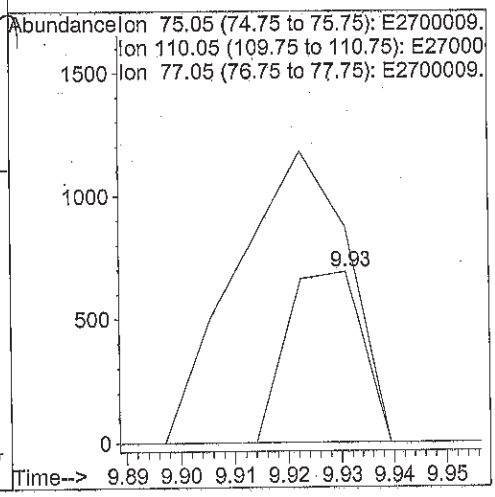


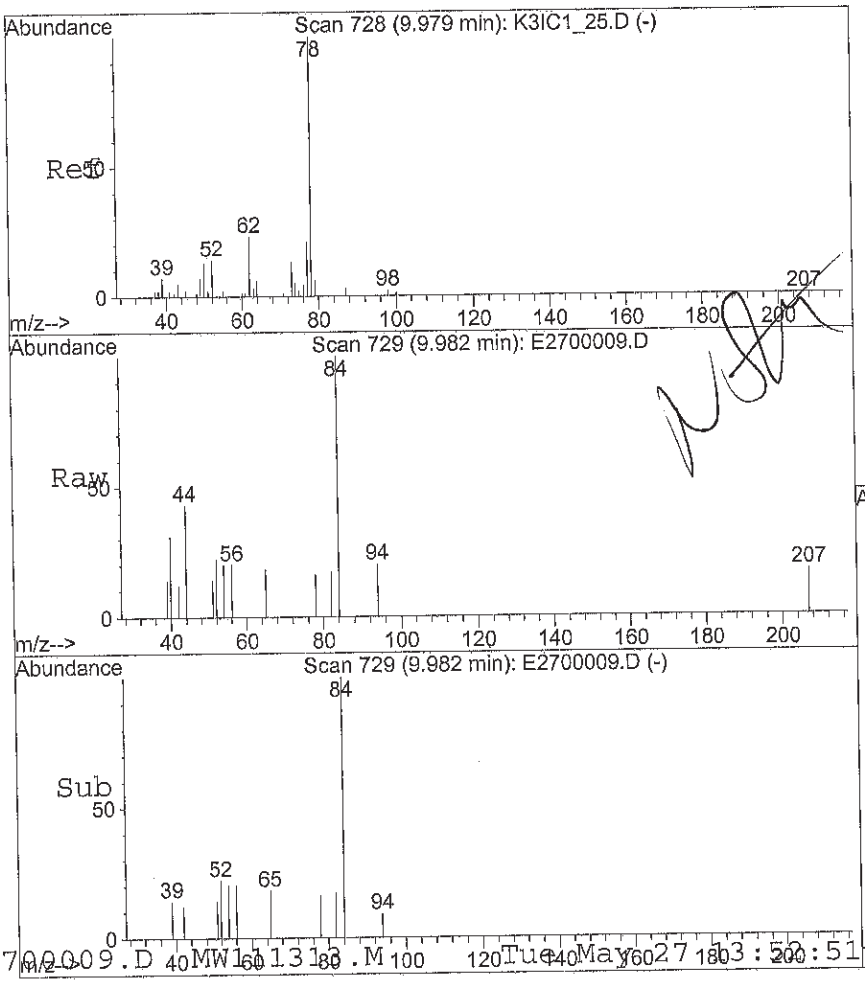


#29
1,1-Dichloropropene
Concen: 0.10 ug/L
RT: 9.93 min Scan# 723
Delta R.T. 0.25 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 75 Resp: 684

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	251.5	25.0	37.4#

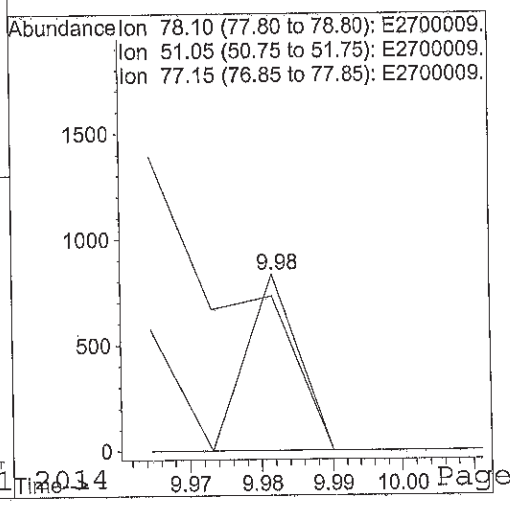


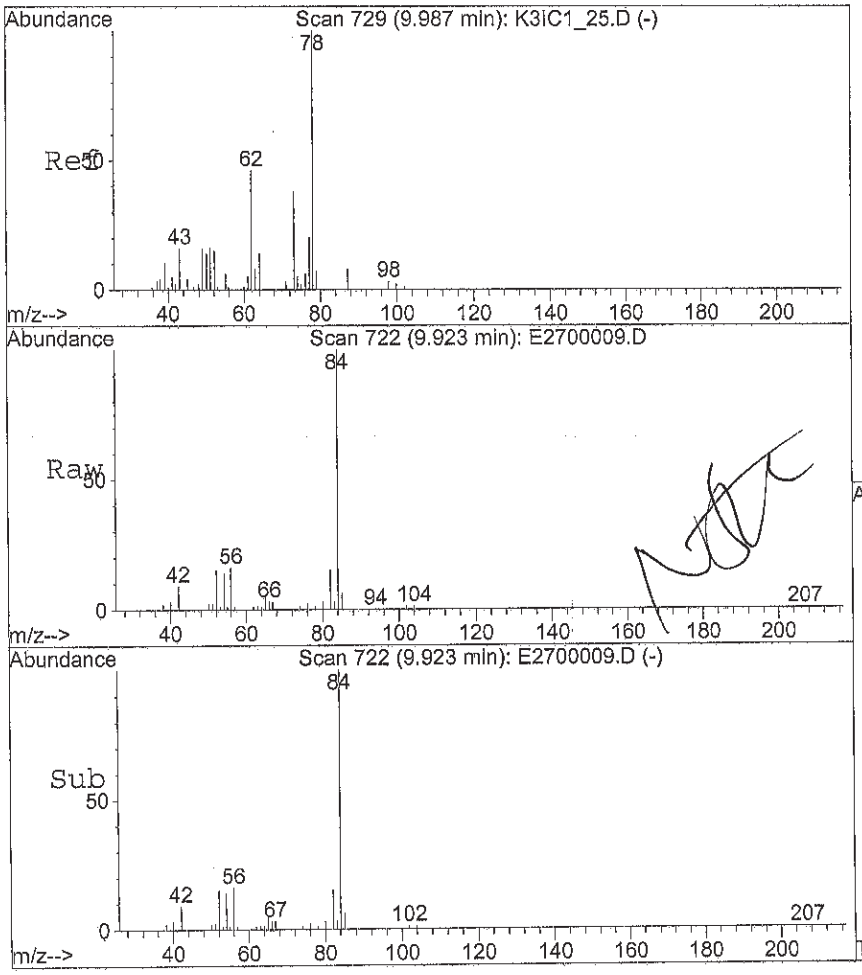


#31
Benzene
Concen: 0.03 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 78 Resp: 422

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

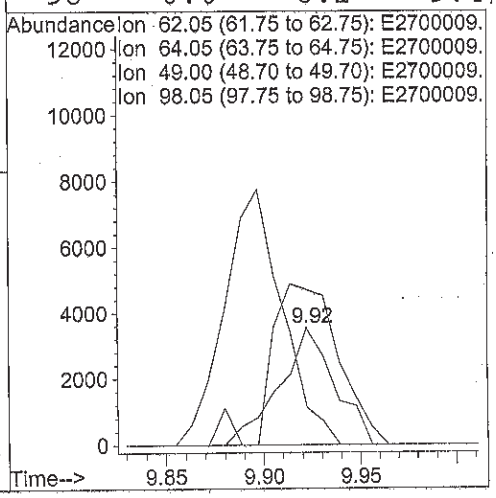


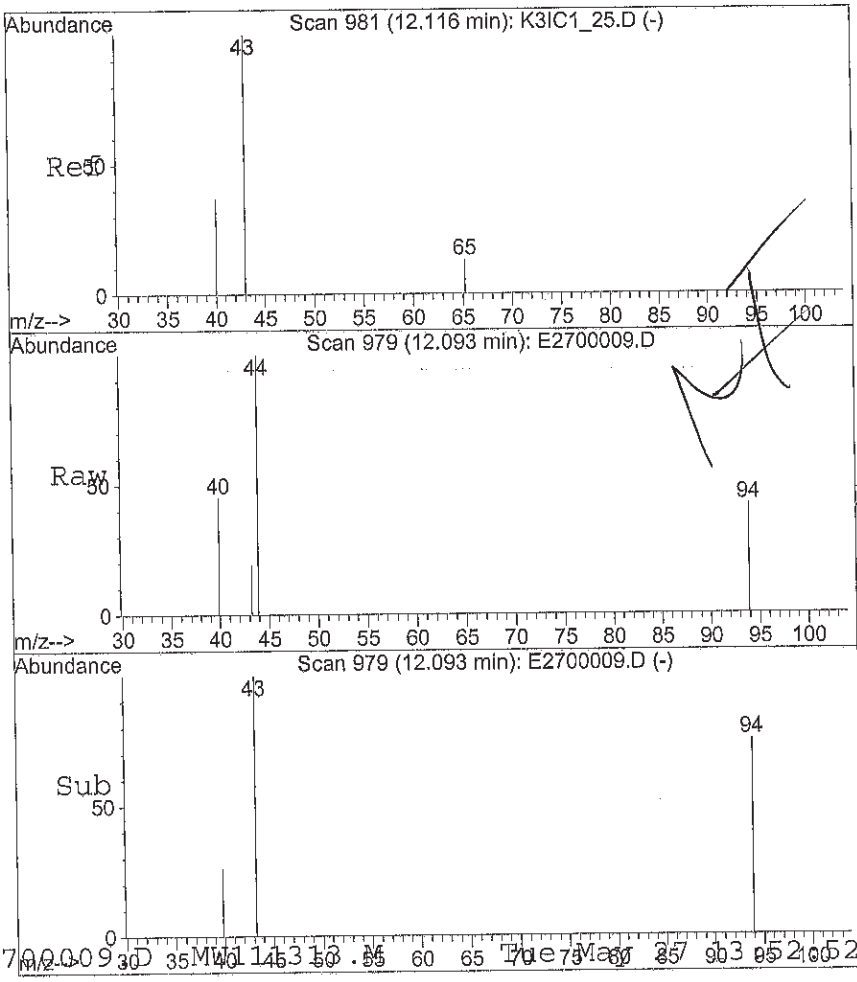


#32
1,2-Dichloroethane
Concen: 1.19 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 62 Resp: 6975

Ion	Ratio	Lower	Upper
62	100		
64	168.6	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

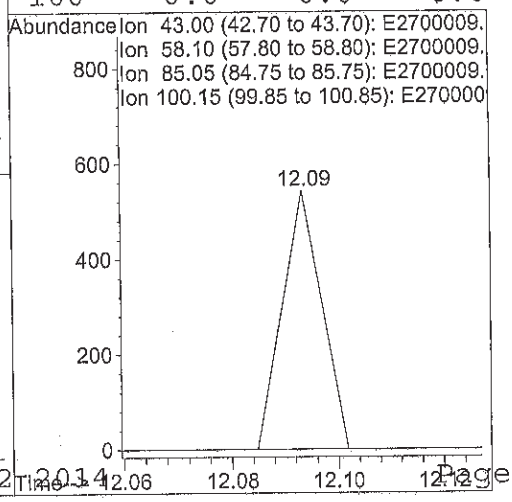


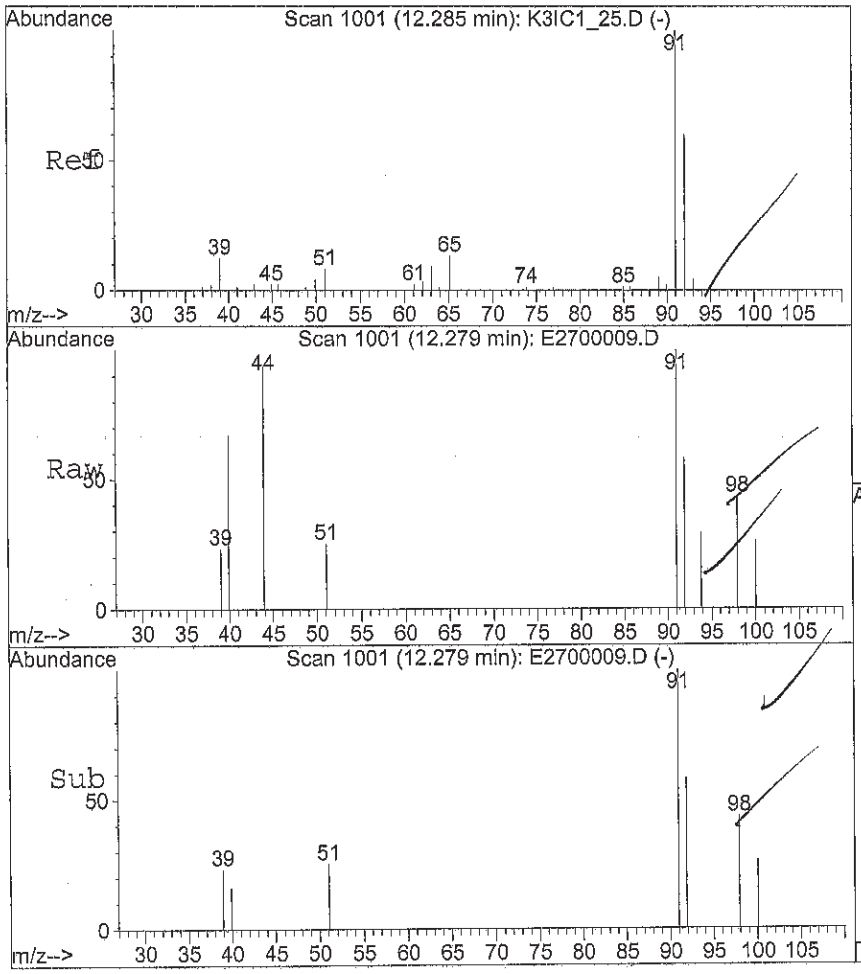


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.11 ug/L
RT: 12.09 min Scan# 979
Delta R.T. -0.02 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 43 Resp: 275

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

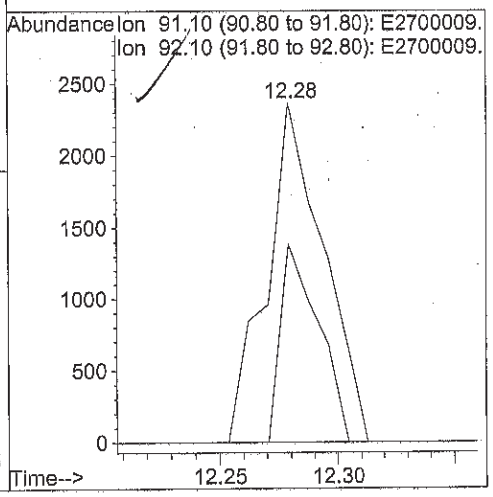


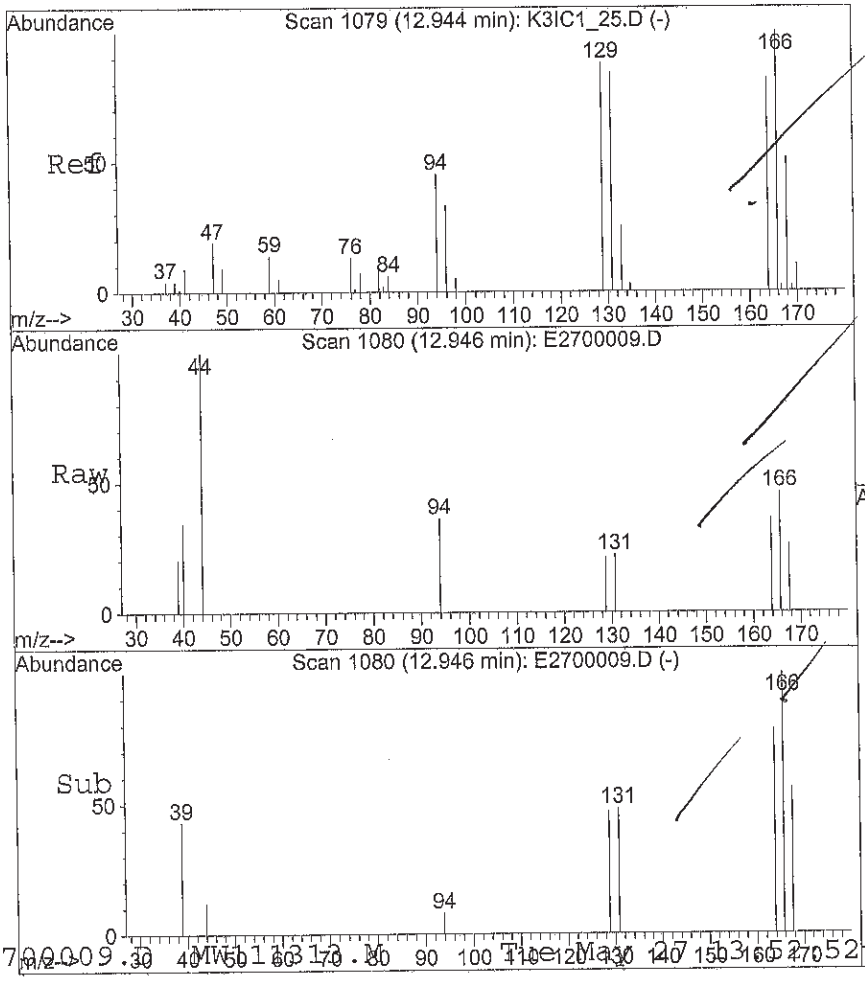


#41
Toluene
Concen: 0.22 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.01 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 91 Resp: 3933

Ion	Ratio	Lower	Upper
91	100		
92	39.1	47.4	71.0#

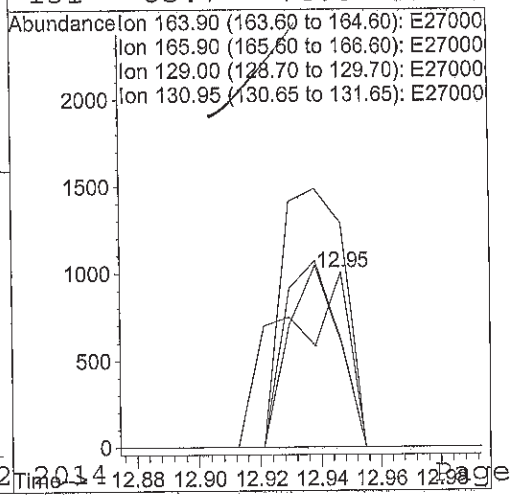


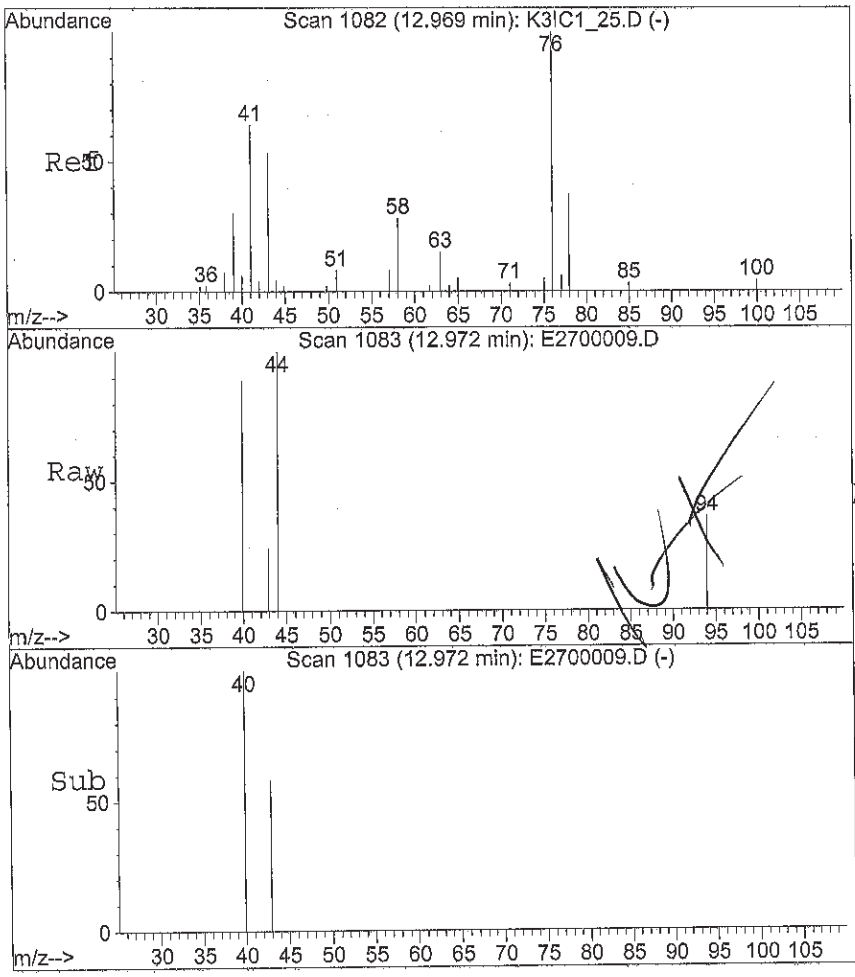


#44
Tetrachloroethene
Concen: 0.29 ug/L
RT: 12.95 min Scan# 1080
Delta R.T. 0.00 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:164 Resp: 1538

Ion	Ratio	Lower	Upper
164	100		
166	138.0	100.2	150.4
129	77.4	82.3	123.5#
131	85.7	74.8	112.2

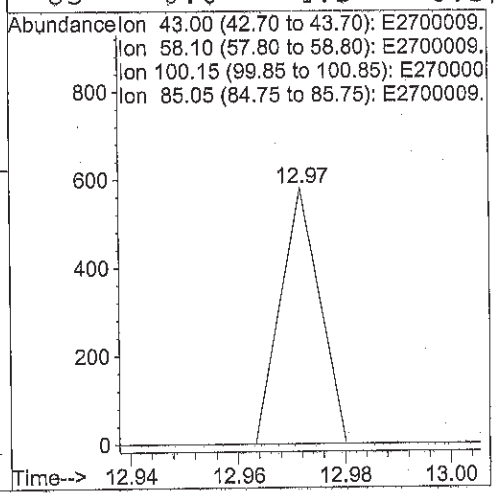


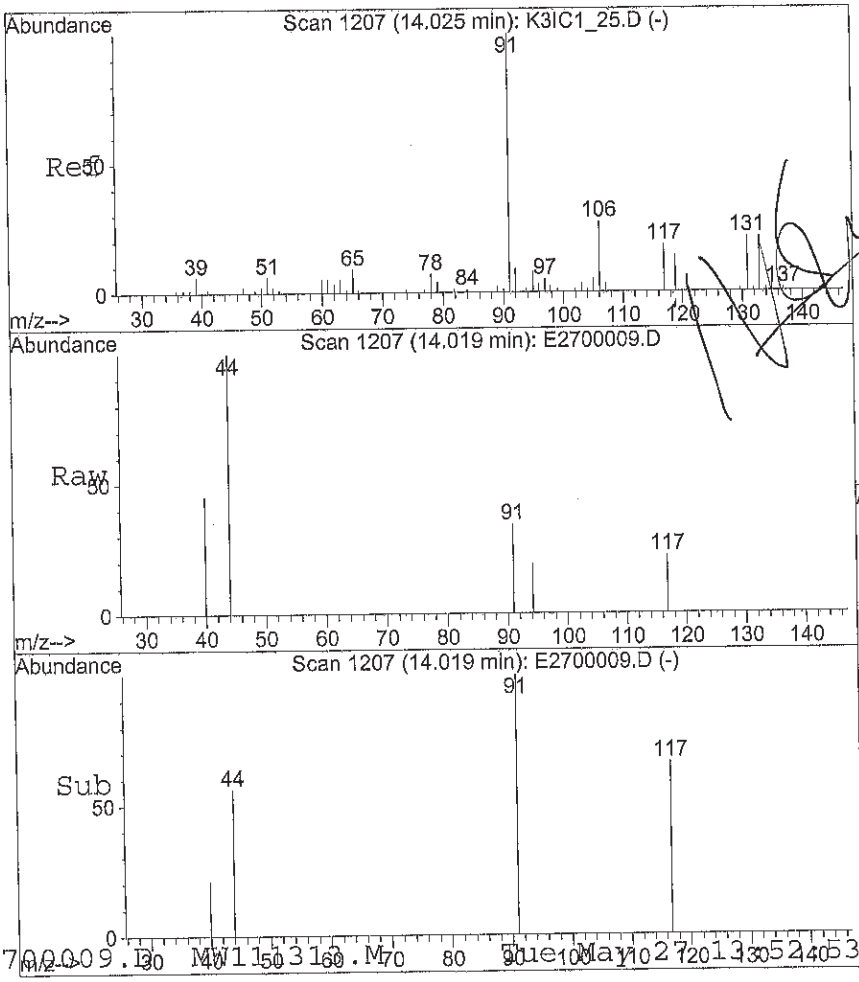


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 12.97 min Scan# 1083
Delta R.T. 0.00 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 43 Resp: 294

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

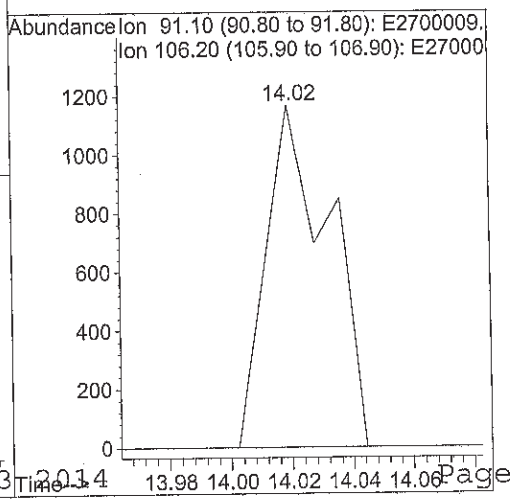


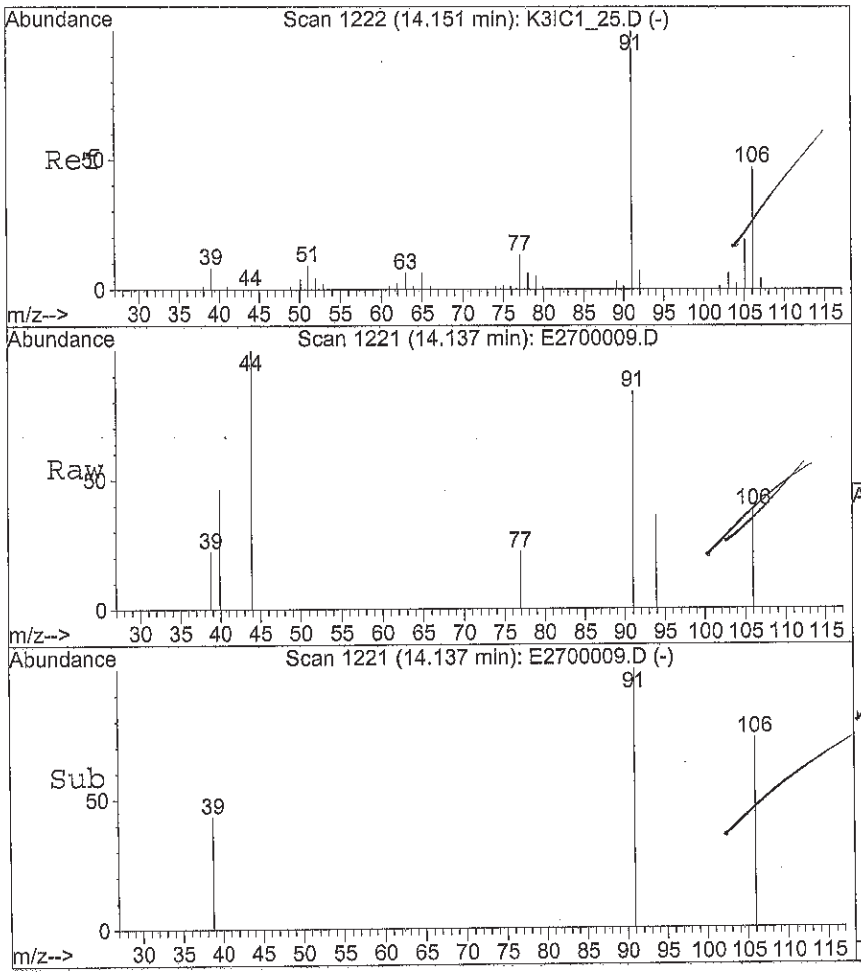


#51
Ethylbenzene
Concen: 0.08 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 91 Resp: 1666

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

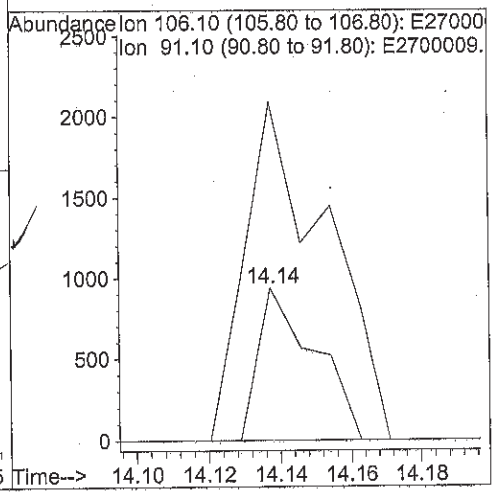


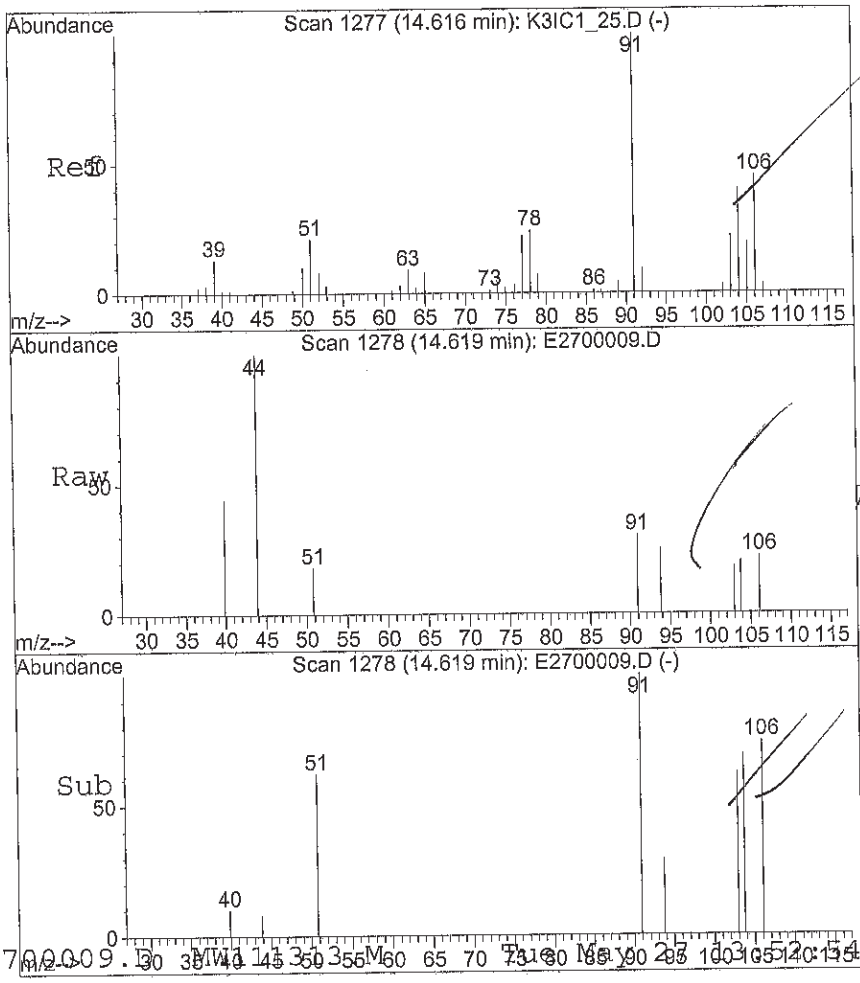


#52
m,p-Xylenes
Concen: 0.14 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:106 Resp: 1022

Ion	Ratio	Lower	Upper
106	100		
91	324.8	177.1	265.7#

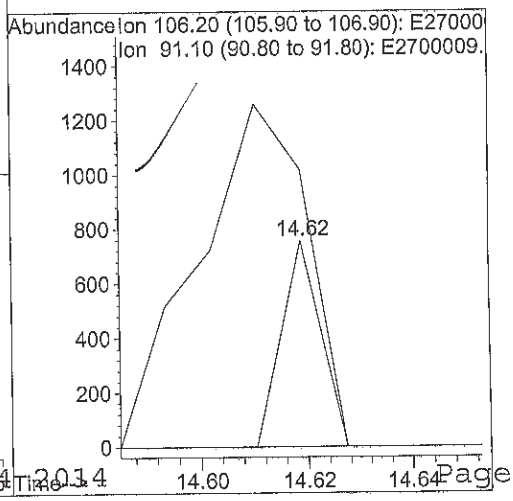


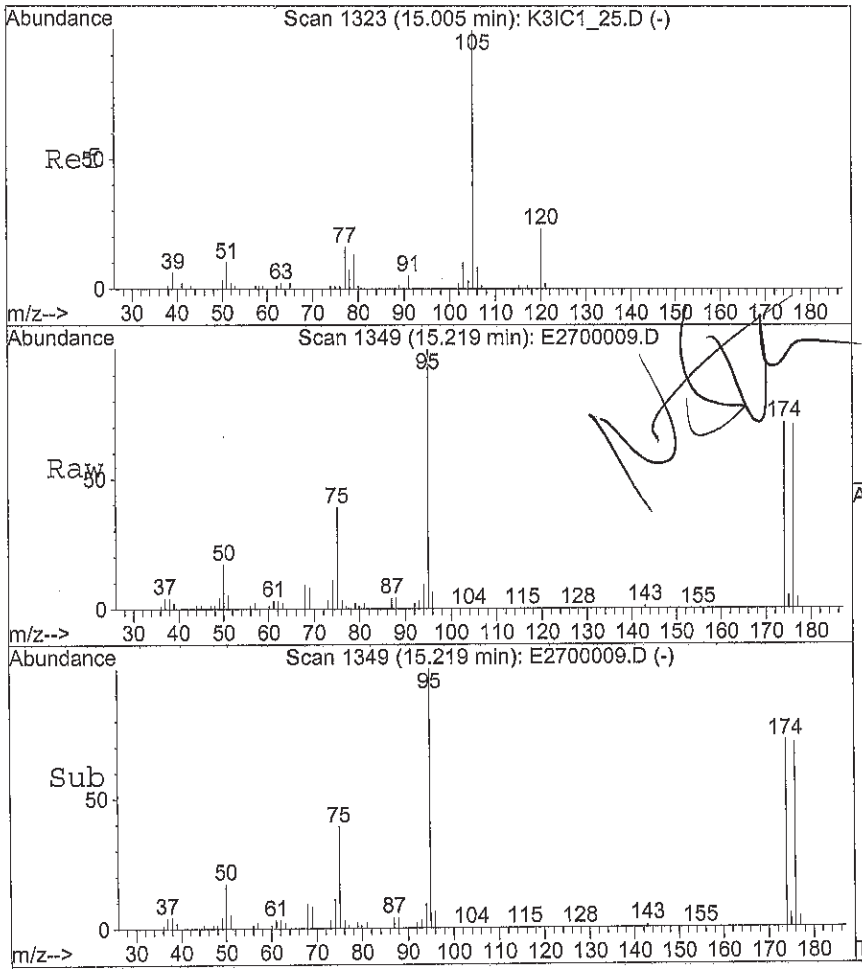


#53
o-Xylene
Concen: 0.05 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:106 Resp: 383

Ion	Ratio	Lower	Upper
106	100		
91	464.5	179.0	268.6#

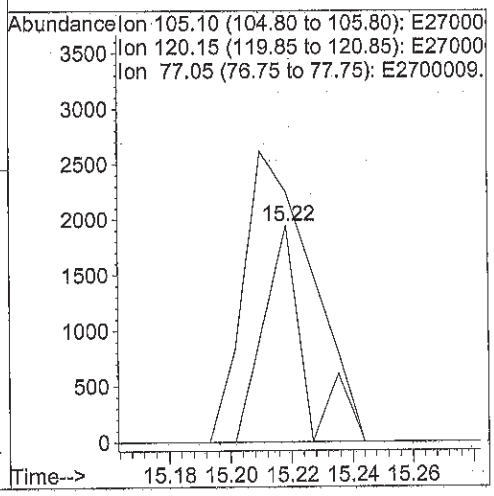


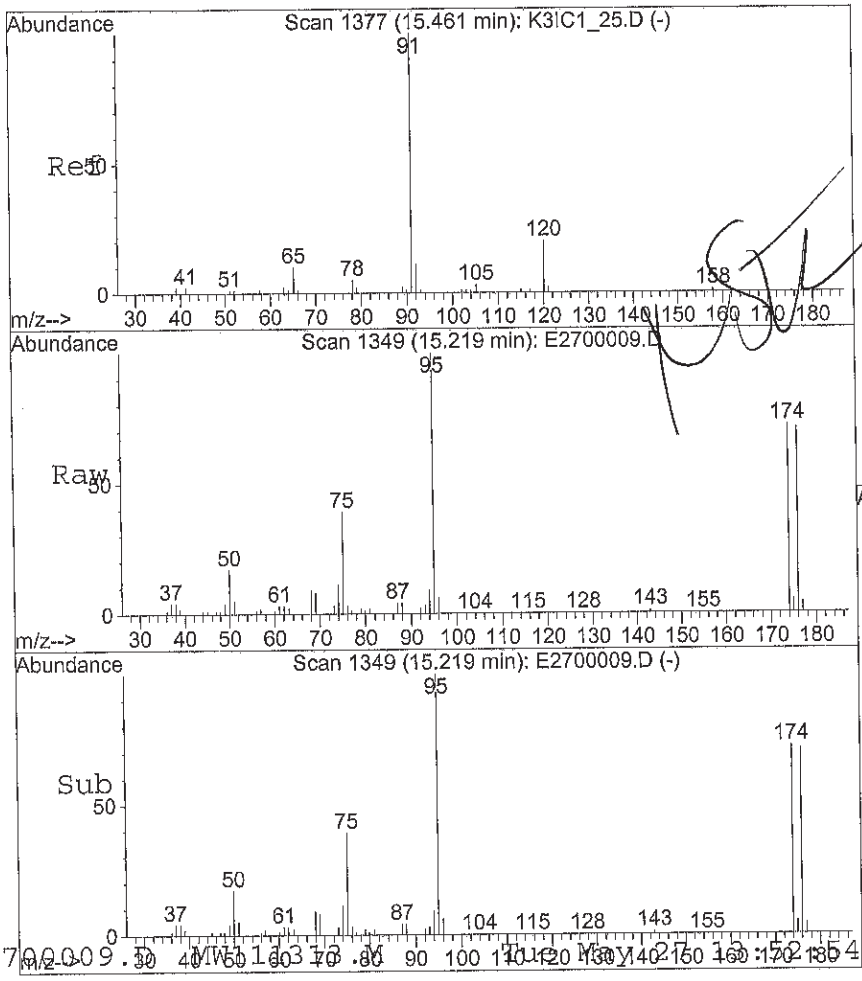


#56
Isopropylbenzene
Concen: 0.09 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:105 Resp: 1782

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	228.3	13.1	19.7#

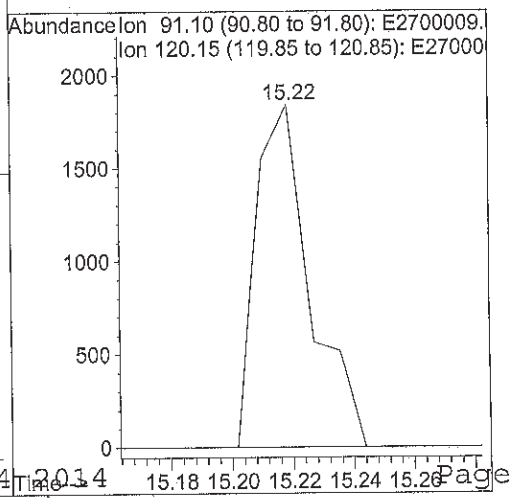


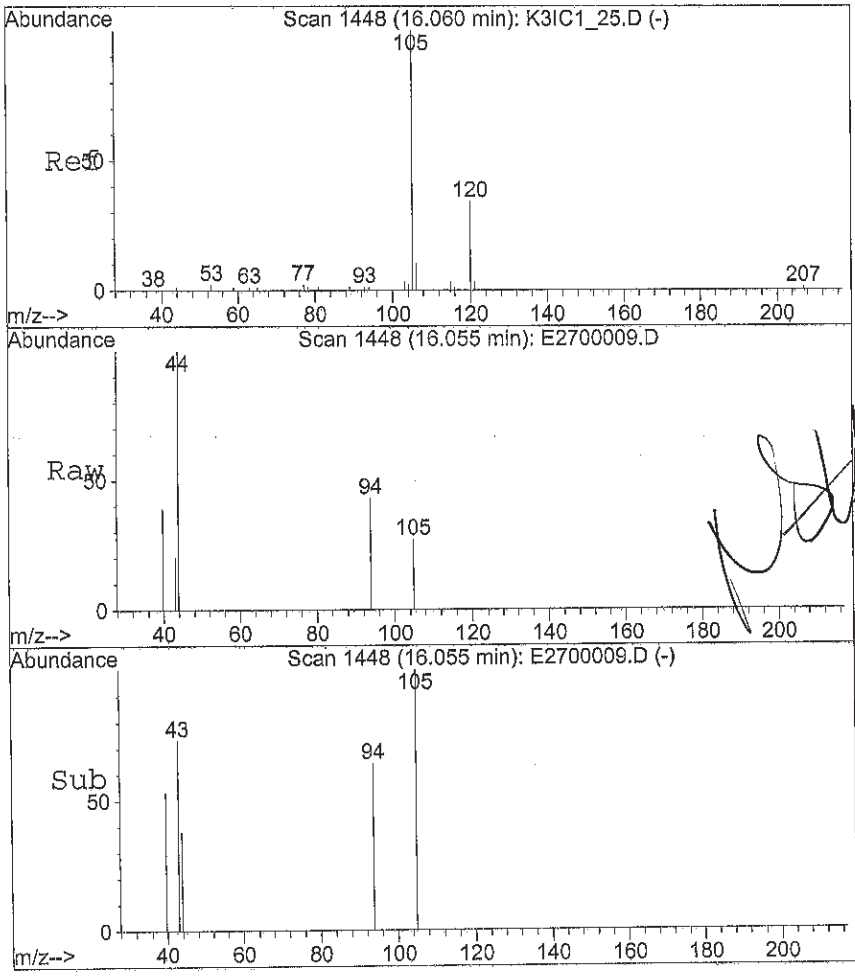


#62
n-Propylbenzene
Concen: 0.08 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. -0.24 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion: 91 Resp: 2267

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

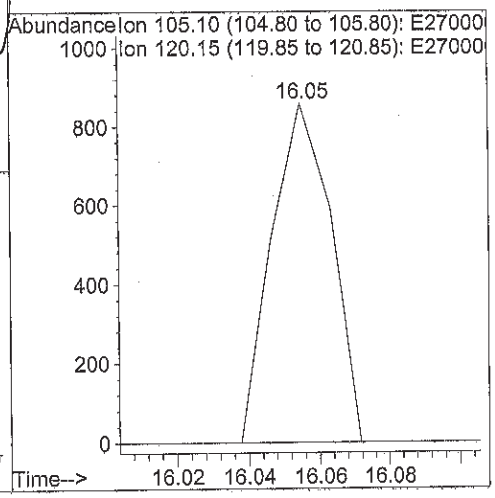


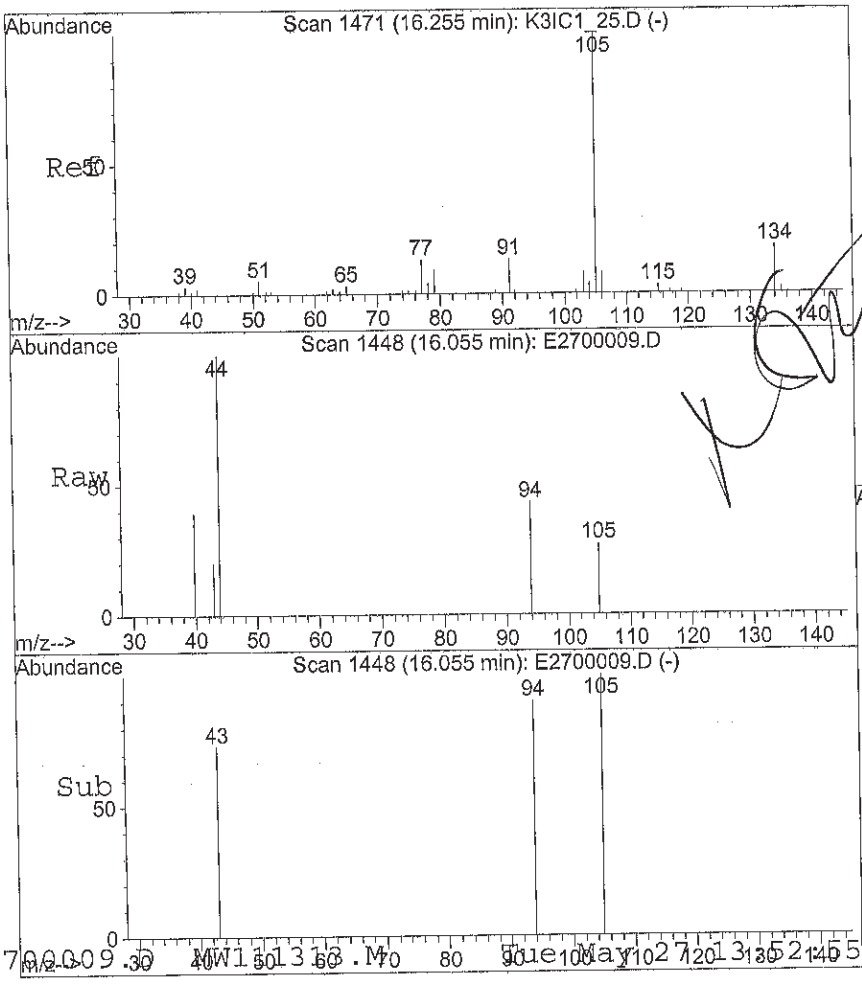


#67
1,2,4-Trimethylbenzene
Concen: 0.06 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:105 Resp: 994

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

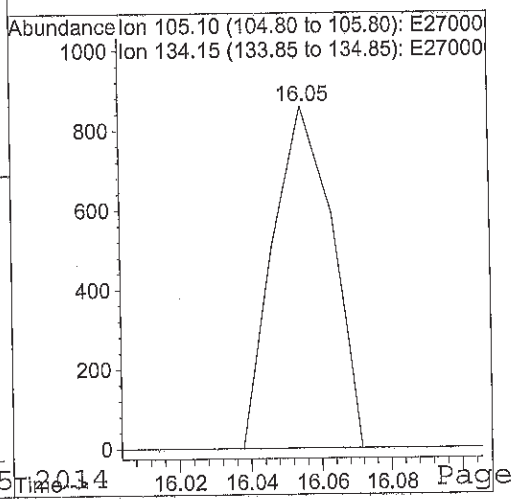


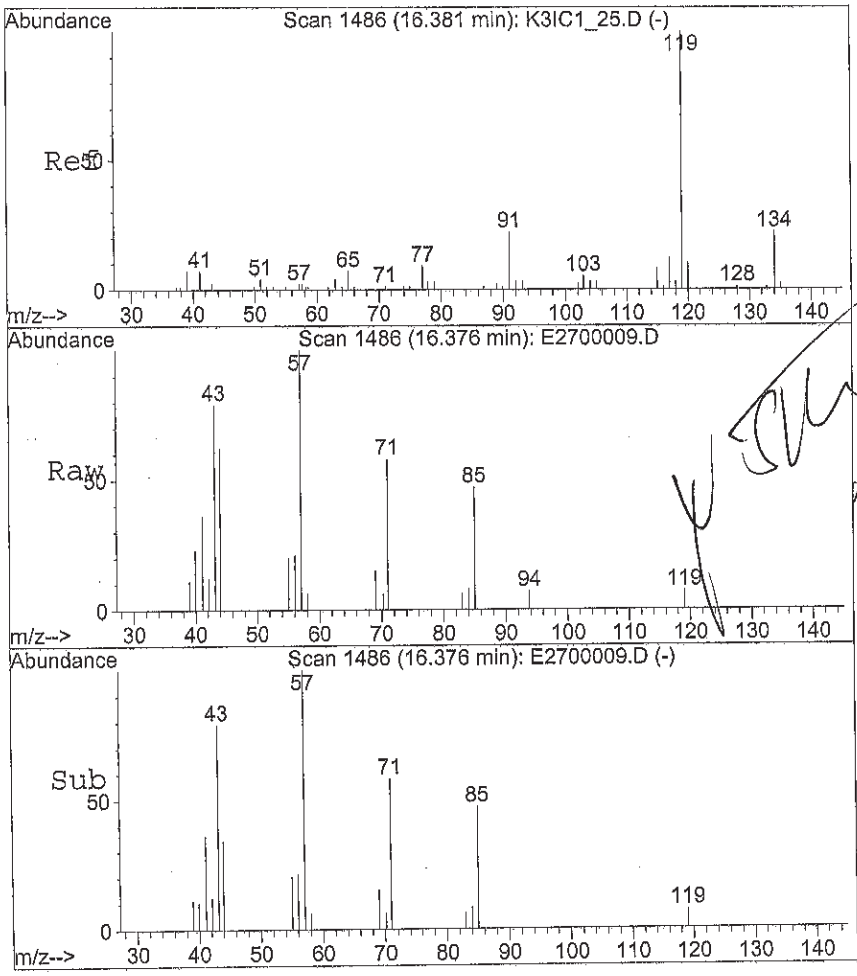


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.20 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:105 Resp: 994

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

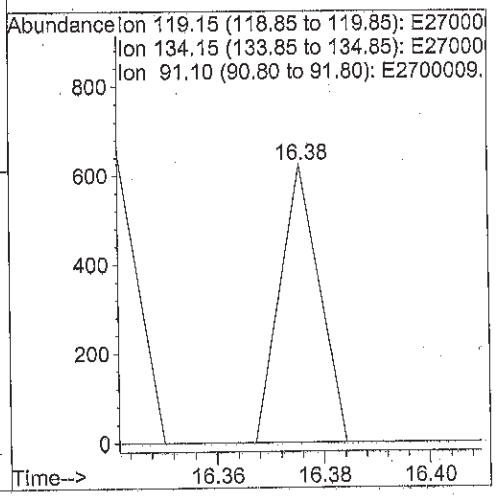




#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2700009.D
Acq: 27 May 2014 1:31 pm

Tgt Ion:119 Resp: 316

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700009.D Vial: 8
Acq On : 27 May 2014 1:31 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-10.0-11.0 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:54 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1755921	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1286154	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	676173	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	486155	10.65 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 85.20%		
3) Chloroform-d (SU6)	9.18	84	734956	11.22 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.76%		
4) Methylene Chloride-d2 (SU5	7.07	86	418137	10.92 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.36%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	445620	14.28 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 114.24%		
6) Benzene-d6 (SU7)	9.92	84	1416811	10.28 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 82.24%		
8) Toluene-d8 (SU3)	12.20	98	1524962	12.50 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.00%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	693285	13.76 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.08%		

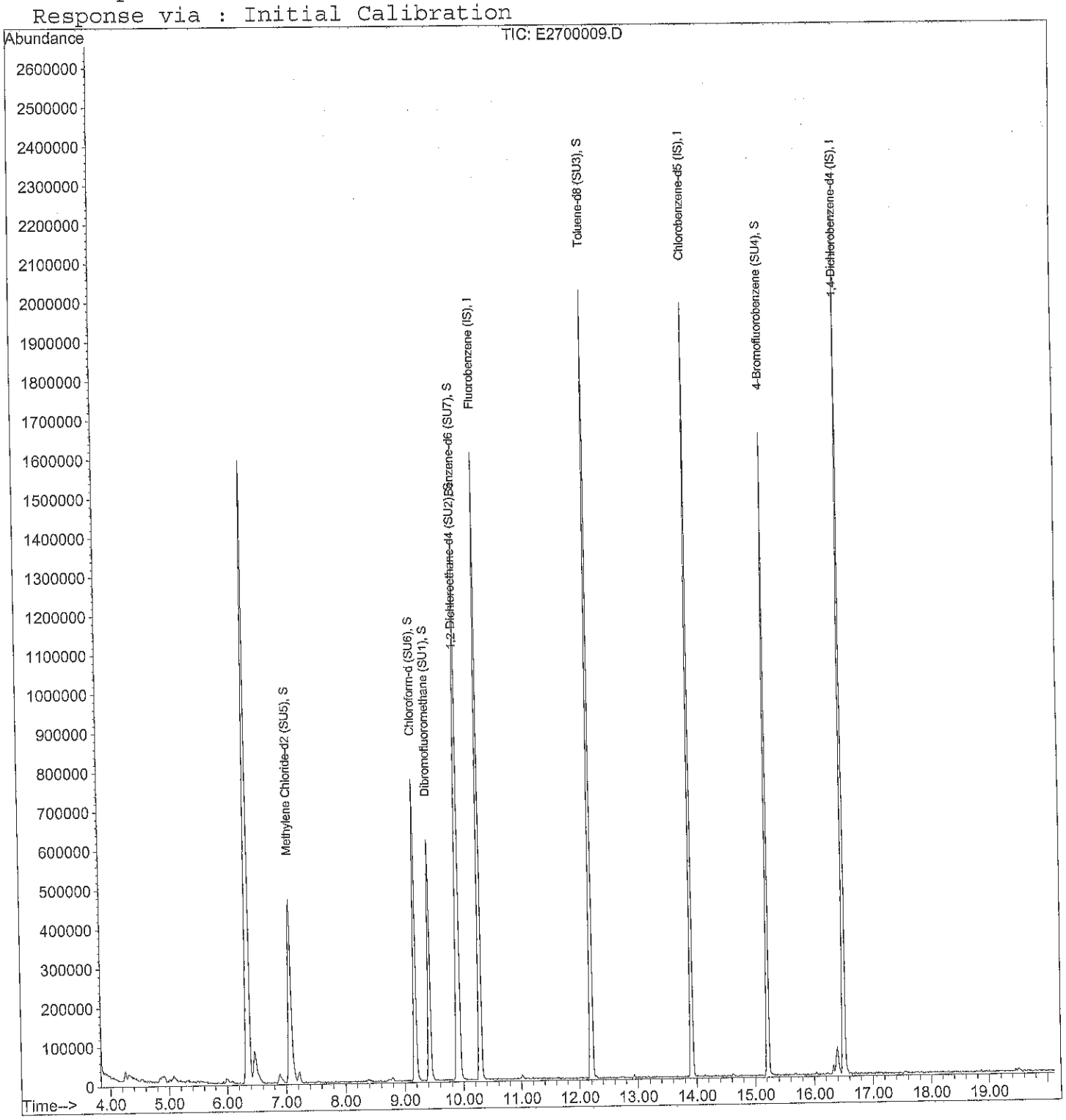
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700009.D Vial: 8
Acq On : 27 May 2014 1:31 pm Operator: DN
Sample : 3E42701-07 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-10.0-11.0 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 13:54 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700010.D Vial: 8
Acq On : 27 May 2014 2:01 pm Operator: DN
Sample : 3E42701-08 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-15.5-16.5 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 14:26 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Rerun 1X

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1745629	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1286126	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	662328	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	475929	10.93 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 87.44%					
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	445986	10.78 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 86.24%					
39) Toluene-d8 (SU3)	12.20	98	1503881	12.54 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 100.32%					
58) 4-Bromofluorobenzene (SU4)	15.22	95	692191	13.16 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 105.28%					

Target Compounds					Qvalue
4) Chloromethane	4.40	50	4276	0.24 ug/L #	54
6) Bromomethane	5.06	96	8247	2.52 ug/L #	58
7) Chloroethane	5.11	64	2633	2.50 ug/L	89
9) (F113) 1,1,2-Trichloro-tri	6.34	151	271	0.08 ug/L #	19
11) Acetone	6.47	58	12120	14.02 ug/L	92
12) (IPA) Leak Check Compound	6.47	45	161582	770.31 ug/L #	87
14) Methylene Chloride	7.06	84	4848	1.01 ug/L #	1
15) (TBA) tert-Butanol	6.95	59	598	2.01 ug/L #	77
20) 2,2-Dichloropropane	8.78	77	292	0.04 ug/L #	1
24) Chloroform	9.21	83	1729	0.19 ug/L #	18
29) 1,1-Dichloropropene	9.93	75	333	0.05 ug/L #	1
31) Benzene	9.99	78	449	0.03 ug/L #	57
32) 1,2-Dichloroethane	9.92	62	5912	1.02 ug/L #	1
34) 1,2-Dichloropropane	11.03	63	314	0.08 ug/L #	2
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	6930	2.70 ug/L #	100
41) Toluene	12.28	91	2910	0.17 ug/L #	83
46) 2-Hexanone	12.73	43	1540	0.55 ug/L #	37
51) Ethylbenzene	14.03	91	1784	0.09 ug/L #	75
52) m,p-Xylenes	14.13	106	1435	0.20 ug/L	73
54) Styrene	14.62	104	2490	-0.62 ug/L #	73
56) Isopropylbenzene	15.22	105	1752	0.09 ug/L #	1
57) 1,2,3-Trichloropropane	15.33	75	286	0.05 ug/L #	36

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700010.D Vial: 8
Acq On : 27 May 2014 2:01 pm Operator: DN
Sample : 3E42701-08 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-15.5-16.5 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 14:26 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

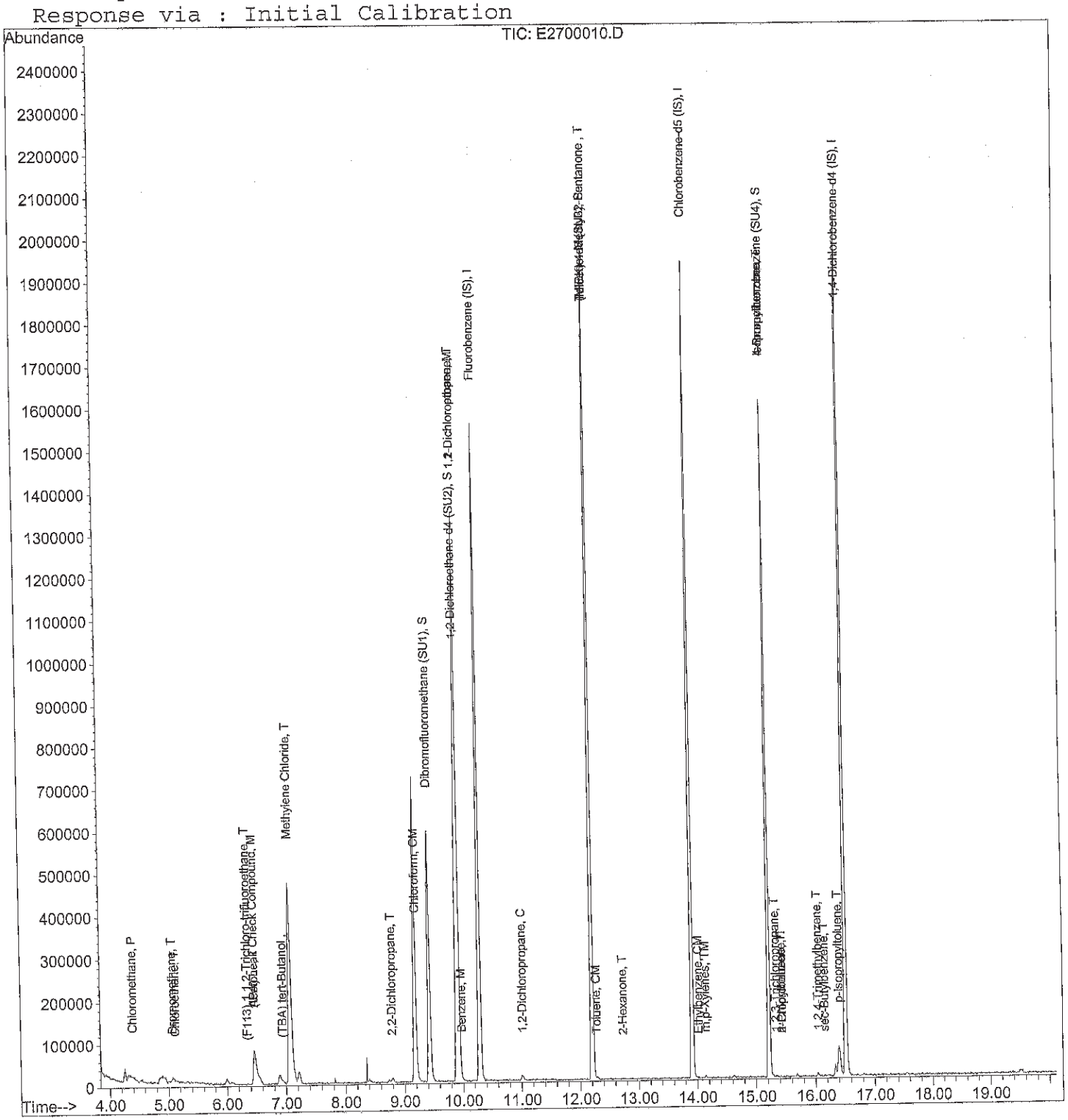
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62) n-Propylbenzene	15.44	91	599	0.02 ug/L #	56
63) 2-Chlorotoluene	15.44	91	599	0.04 ug/L #	45
67) 1,2,4-Trimethylbenzene	16.05	105	264	0.02 ug/L #	33
68) sec-Butylbenzene	16.15	105	293	0.01 ug/L #	62
69) p-Isopropyltoluene	16.38	119	869	0.05 ug/L #	52

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700010.D Vial: 8
Acq On : 27 May 2014 2:01 pm Operator: DN
Sample : 3E42701-08 Inst : GC/MS Ins
Misc : 5cc SVL-513-SA5D-SV-15.5-16.5 20X DIL Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 14:26 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700011.D
Acq On : 27 May 2014 2:34 pm
Sample : 3E42701-08
Misc : 100cc SVL-513-SA5D-SV-15.5-16.5
MS Integration Params: rteint.p
Quant Time: May 27 15:09 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

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Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1694263	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1301352	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	693994	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	481941	11.40 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	91.20%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	462116	11.51 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	92.08%	
39) Toluene-d8 (SU3)	12.20	98	1510269	12.44 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	99.52%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	709259	13.33 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	106.64%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	626	0.15 ~~ug/L #~~ NSM	44
4) Chloromethane	4.41	50	6597	1.10 ~~ug/L #~~ ↓	54
6) Bromomethane	5.04	96	8385	2.72 ~~ug/L~~ NT	95
7) Chloroethane	5.24	64	3198	2.96 ~~ug/L #~~	32
9) (F113) 1,1,2-Trichloro-tri	6.35	151	65999	19.82 ug/L 0.3964	99
10) 1,1-Dichloroethene	6.43	96	4608	1.15 ug/L # 0.023	85
11) Acetone	6.47	58	11841	14.16 ~~ug/L~~ NT	97
12) (IPA) Leak Check Compound	6.46	45	205852	1011.11 ~~ug/L~~ NM	88
13) Carbon disulfide	6.84	76	14009	0.99 ~~ug/L~~ NT	95
14) Methylene Chloride	7.07	84	6505	1.40 ~~ug/L #~~ NSM	1
15) (TBA) tert-Butanol	7.14	59	634	2.19 ~~ug/L #~~ NT	77
19) cis-1,2-Dichloroethene	8.72	96	268	0.05 ~~ug/L #~~ NSM	3
22) (DIPE) Diisopropyl Ether	8.18	45	255	0.02 ~~ug/L #~~	48
24) Chloroform	9.21	83	858	0.10 ~~ug/L #~~	1
25) (ETBE) 2-ethoxy 2-methyl p	8.37	59	257	0.02 ~~ug/L #~~	44
29) 1,1-Dichloropropene	9.91	75	620	0.09 ~~ug/L #~~	1
31) Benzene	9.98	78	2686	0.17 ~~ug/L #~~	73
32) 1,2-Dichloroethane	9.92	62	6374	1.13 ~~ug/L #~~	1
35) Dibromomethane	11.00	93	259	0.09 ~~ug/L #~~	5
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	8060	3.10 ~~ug/L #~~ NT	100
41) Toluene	12.29	91	21574	1.22 ug/L 0.0244	91
46) 2-Hexanone	12.94	43	908	0.32 ~~ug/L #~~	37

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700011.D Vial: 2
Acq On : 27 May 2014 2:34 pm Operator: DN
Sample : 3E42701-08 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-15.5-16.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 15:09 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

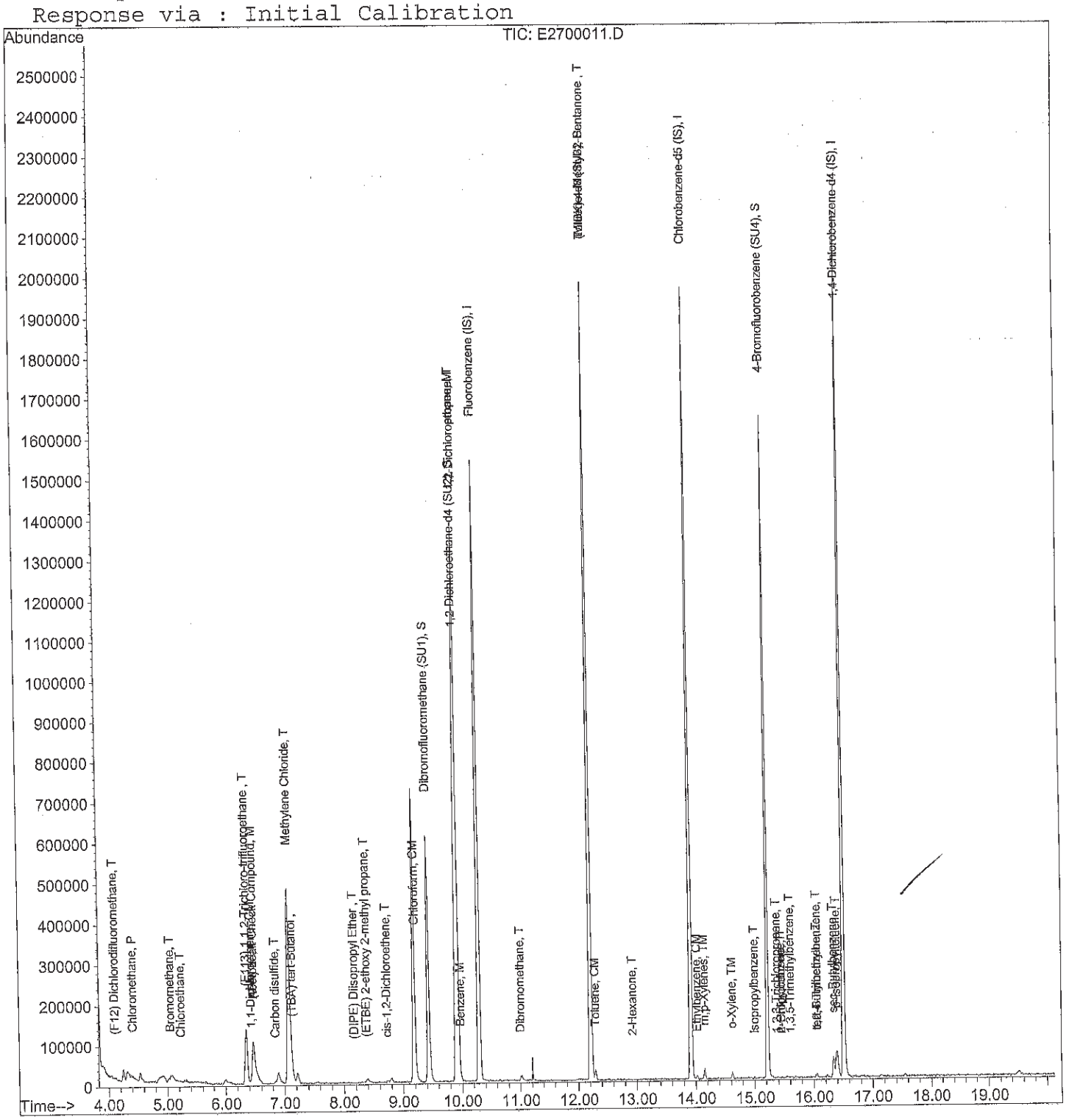
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
51) Ethylbenzene	14.03	91	7835	0.39 ~~ug/L~~ # 0.0078	61
52) m,p-Xylenes	14.15	106	7224	1.01 ~~ug/L~~ 0.0202	98
53) o-Xylene	14.62	106	3589	0.51 ~~ug/L~~ 0.0102	99
54) Styrene	14.62	104	2710	-0.60 ~~ug/L~~ #	43
56) Isopropylbenzene	15.00	105	254	0.01 ~~ug/L~~ #	55
57) 1,2,3-Trichloropropane	15.37	75	260	0.05 ~~ug/L~~ #	36
62) n-Propylbenzene	15.46	91	1192	0.04 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.46	91	1192	0.07 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	699	0.04 ~~ug/L~~ #	31
66) tert-Butylbenzene	16.06	119	438	0.03 ~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.06	105	3346	0.19 ~~ug/L~~ #	73
68) sec-Butylbenzene	16.33	105	254	0.01 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	950	0.05 ~~ug/L~~ #	52

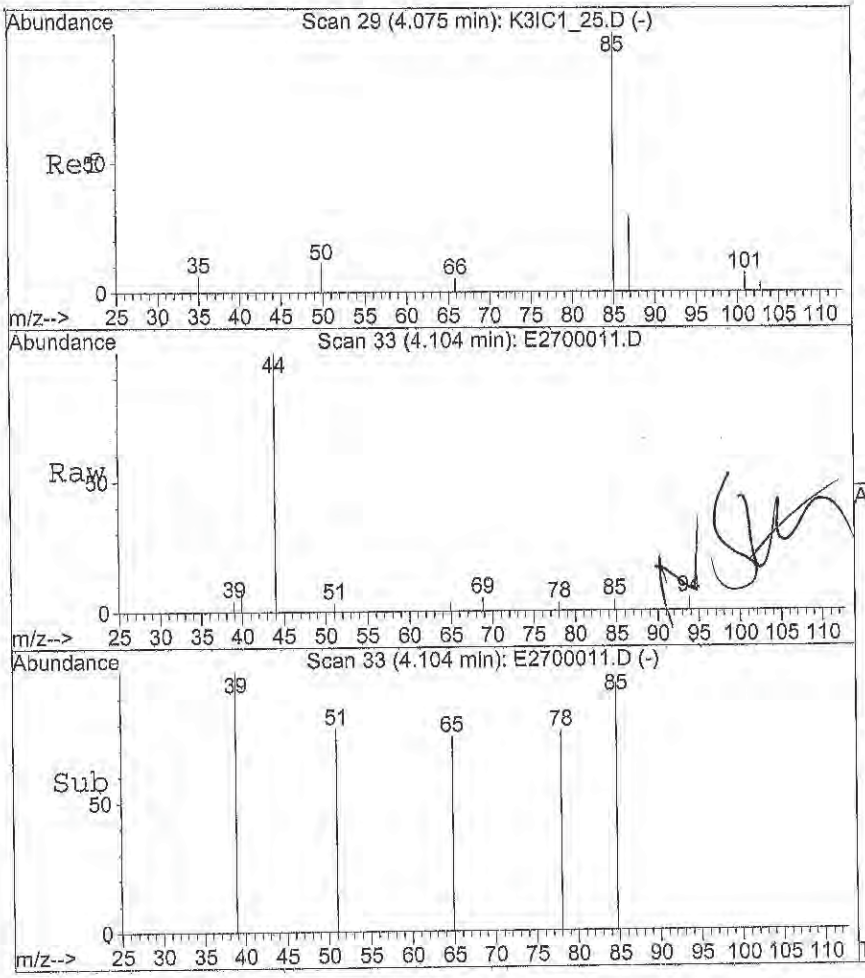
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700011.D Vial: 2
Acq On : 27 May 2014 2:34 pm Operator: DN
Sample : 3E42701-08 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-15.5-16.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 15:09 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

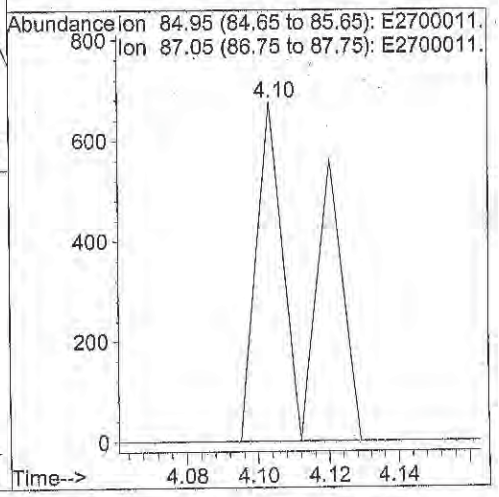


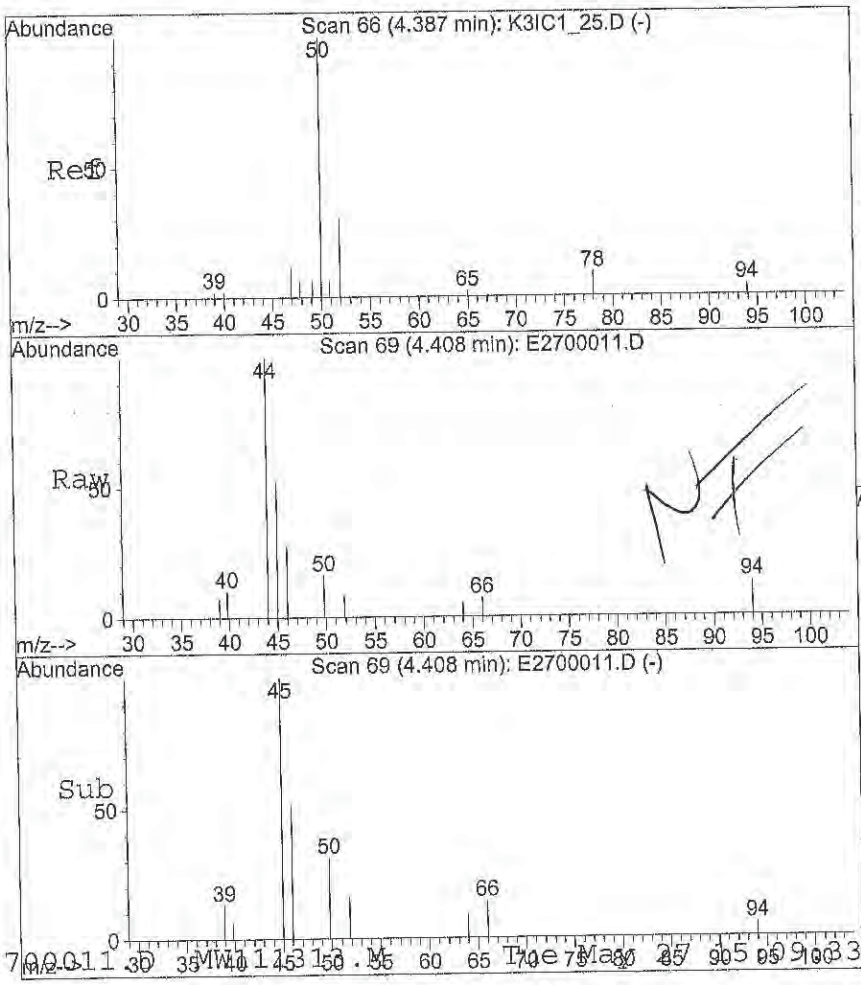


#3
(F12) Dichlorodifluoromethane
Concen: 0.15 ug/L
RT: 4.10 min Scan# 33
Delta R.T. 0.03 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 85 Resp: 626

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

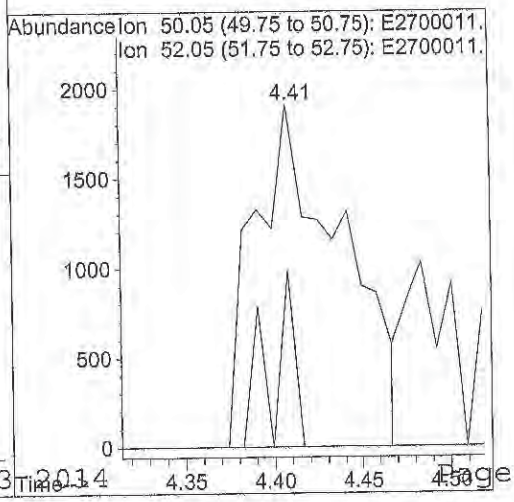


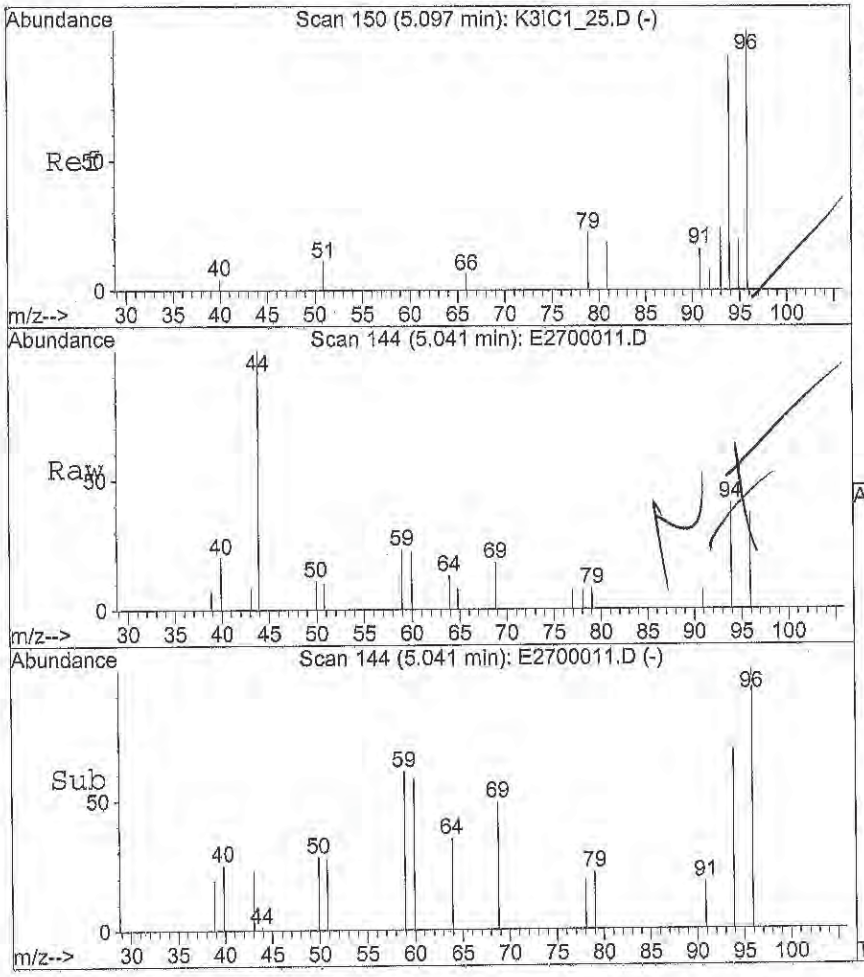


#4
Chloromethane
Concen: 1.10 ug/L
RT: 4.41 min Scan# 69
Delta R.T. 0.02 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 50 Resp: 6597

Ion	Ratio	Lower	Upper
50	100		
52	7.5	26.9	40.3#

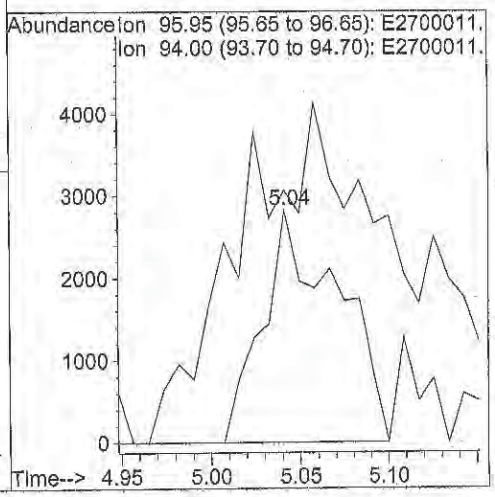


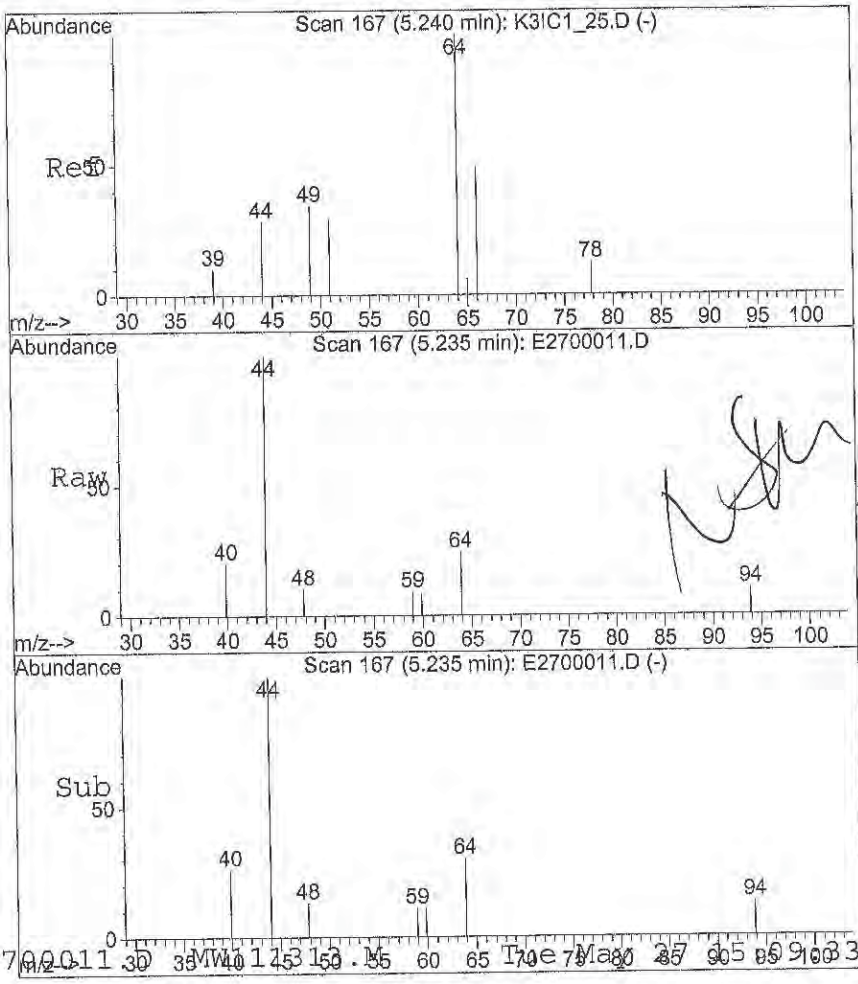


#6
Bromomethane
Concen: 2.72 ug/L
RT: 5.04 min Scan# 144
Delta R.T. -0.06 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 96 Resp: 8385

Ion	Ratio	Lower	Upper
96	100		
94	120.9	101.0	151.4

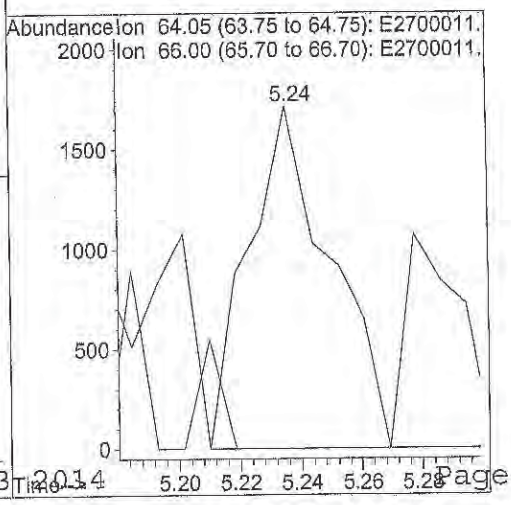


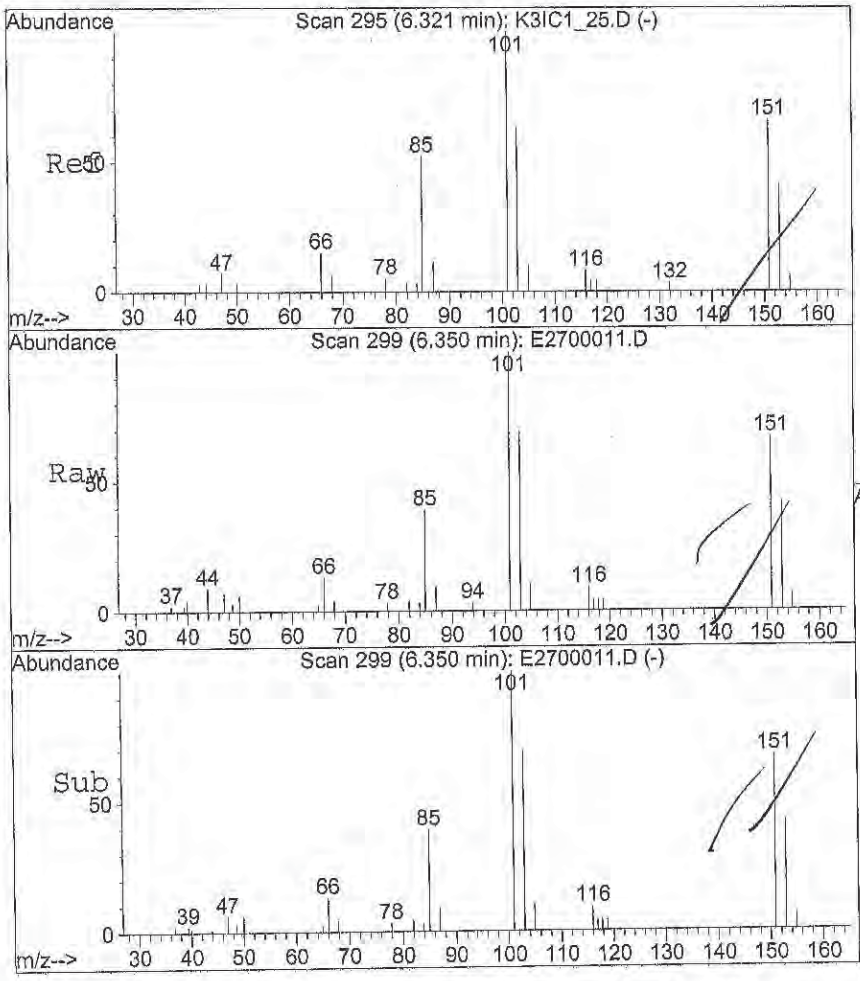


#7
Chloroethane
Concen: 2.96 ug/L
RT: 5.24 min Scan# 167
Delta R.T. -0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 64 Resp: 3198

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

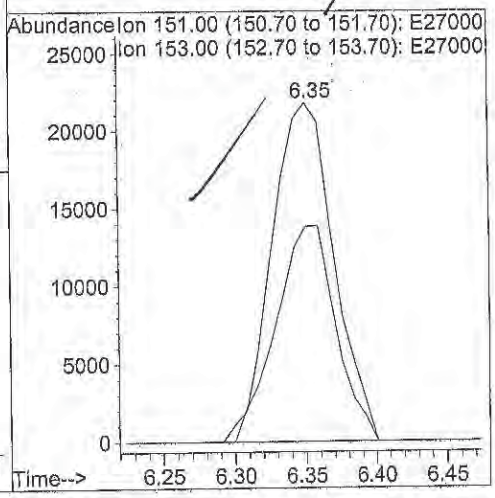


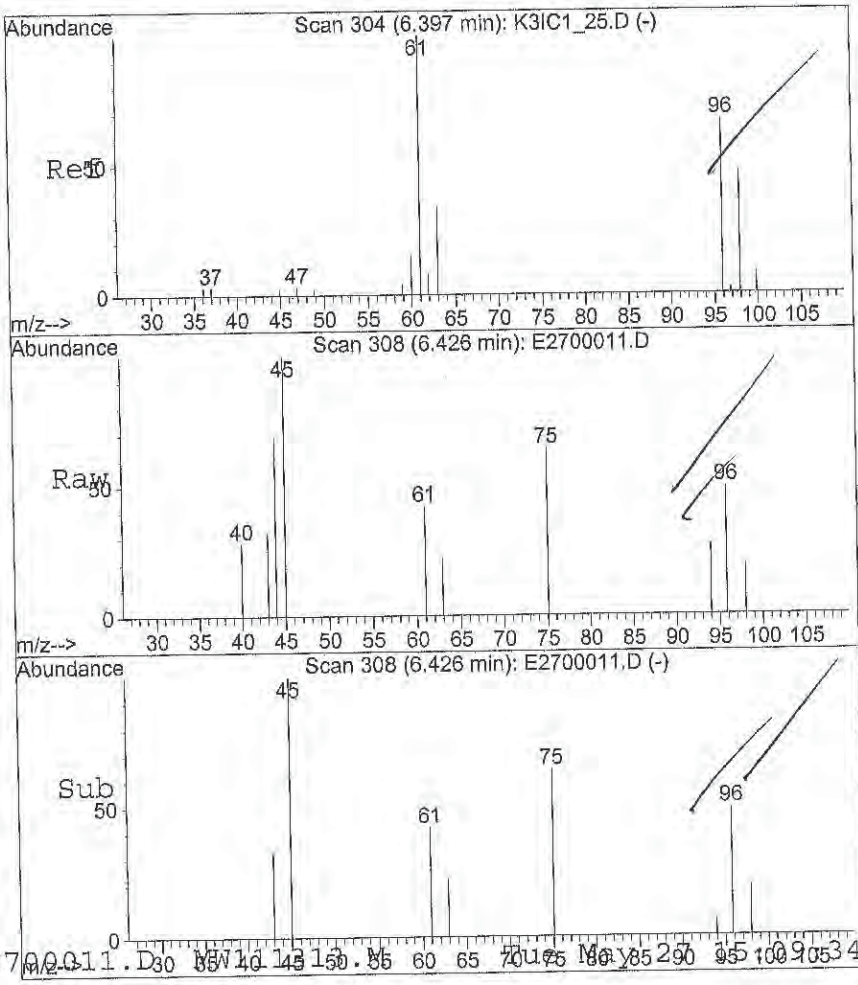


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 19.82 ug/L
RT: 6.35 min Scan# 299
Delta R.T. 0.03 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:151 Resp: 65999

Ion	Ratio	Lower	Upper
151	100		
153	61.3	49.6	74.4

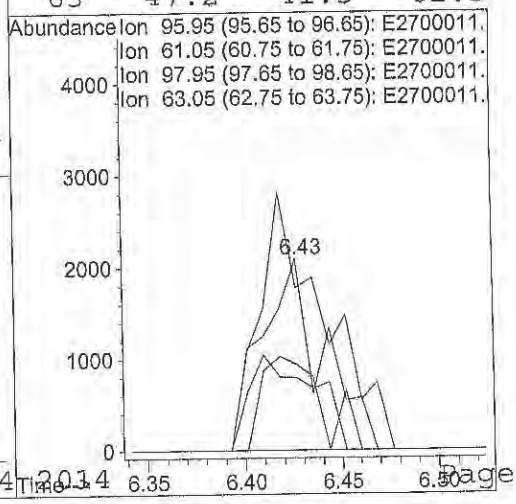


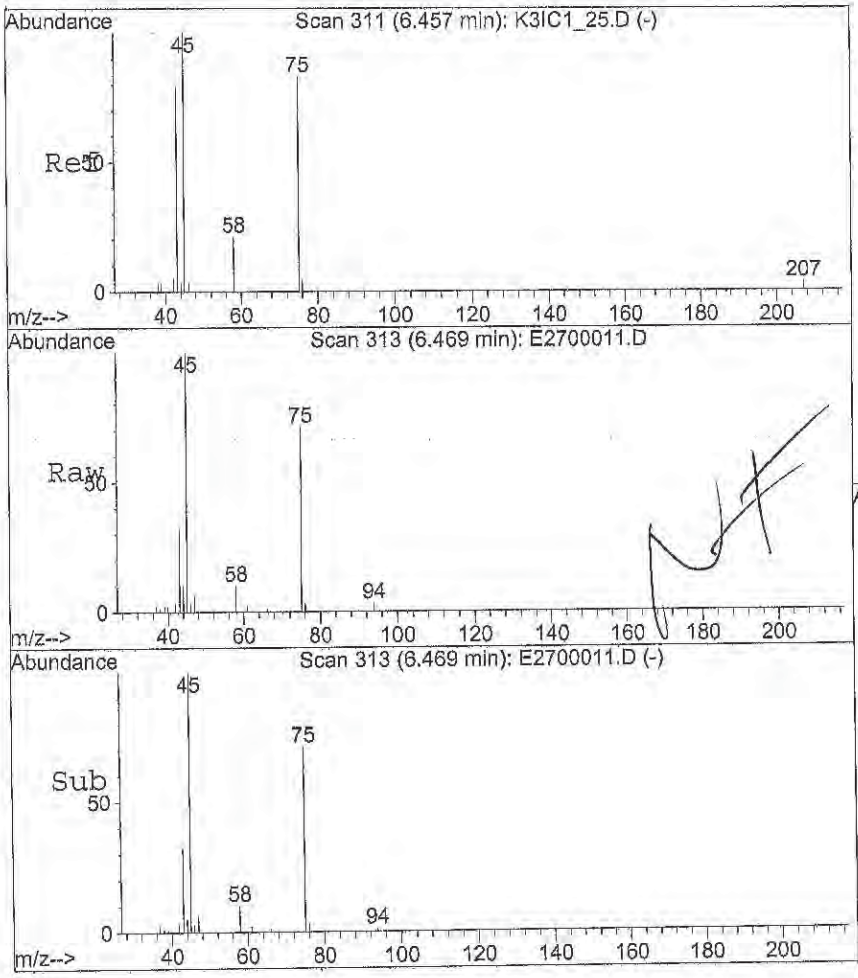


#10
1,1-Dichloroethene
Concen: 1.15 ug/L
RT: 6.43 min Scan# 308
Delta R.T. 0.03 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 96 Resp: 4608

Ion	Ratio	Lower	Upper
96	100		
61	143.3	130.0	195.0
98	51.5	56.2	84.4#
63	47.2	41.5	62.3

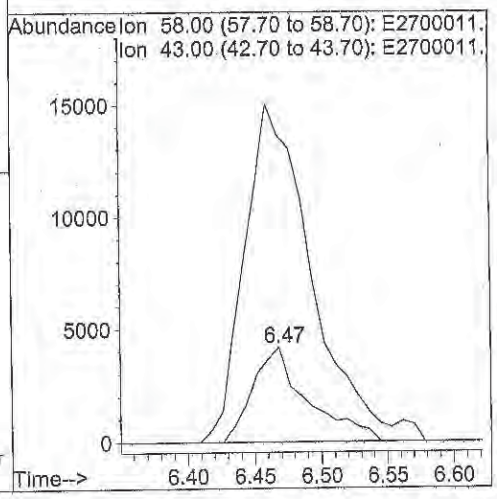


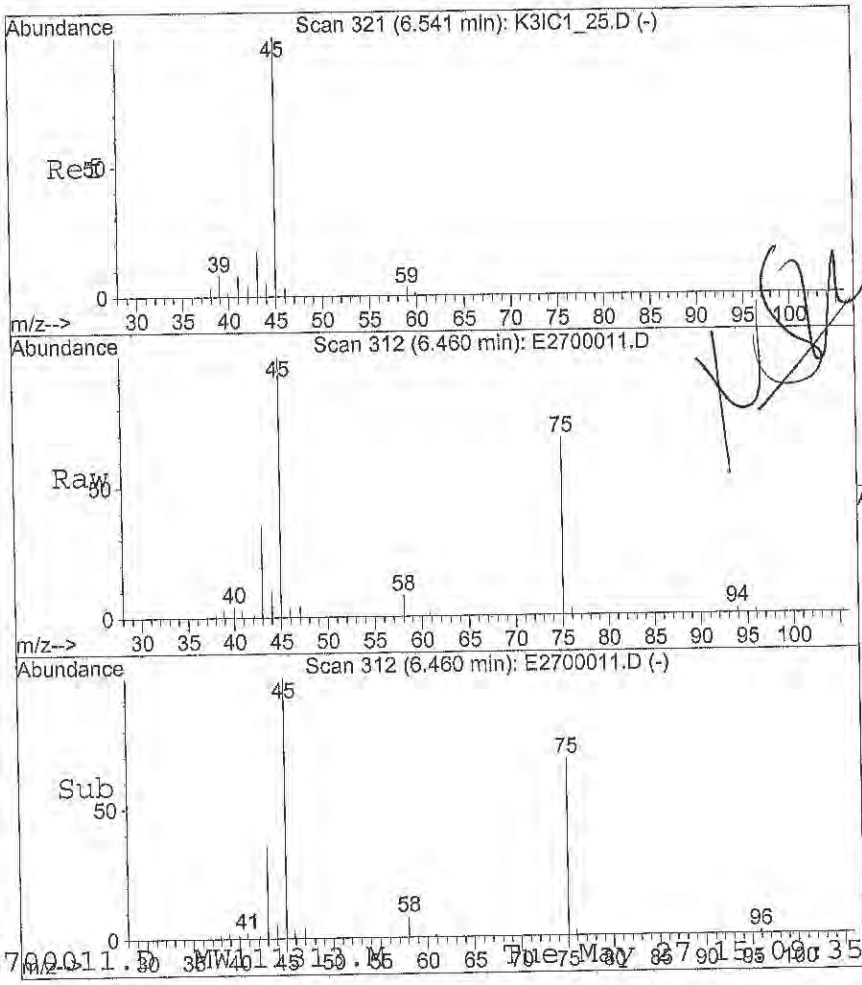


#11
Acetone
Concen: 14.16 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 58 Resp: 11841

Ion	Ratio	Lower	Upper
58	100		
43	443.6	360.9	541.3

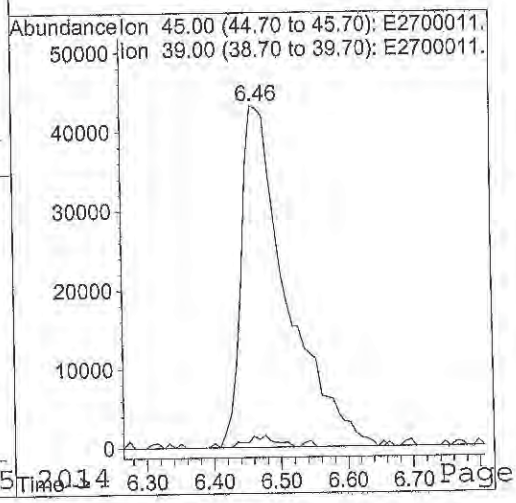


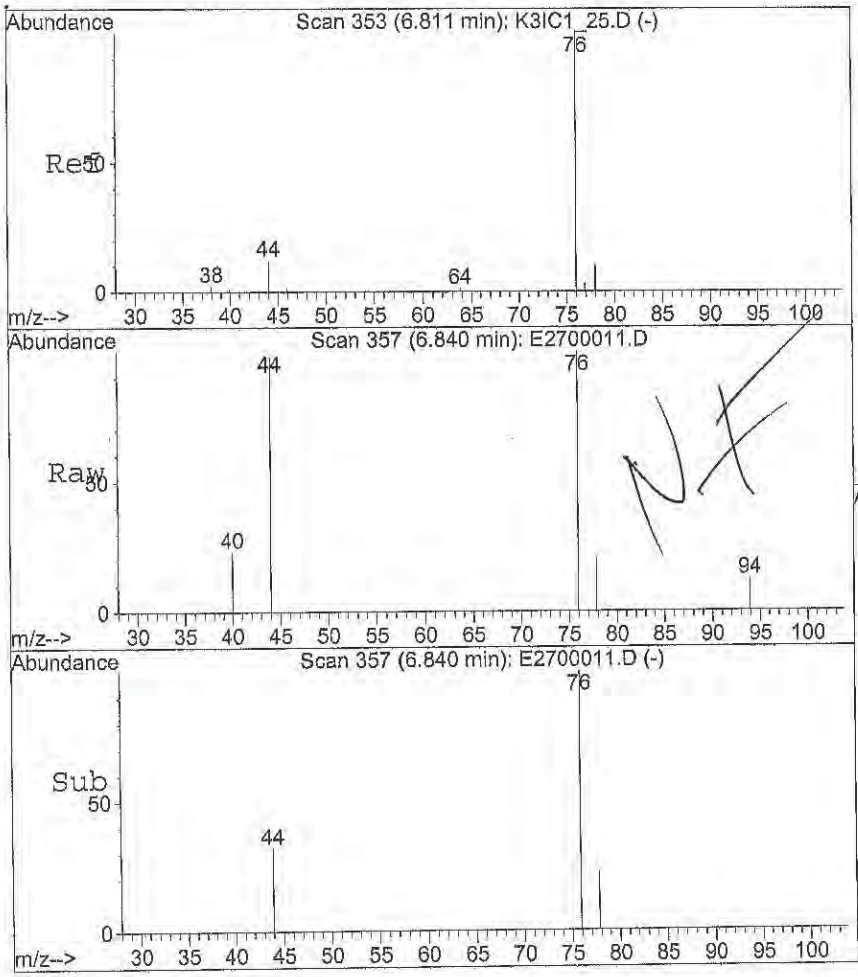


#12
(IPA) Leak Check Compound
Concen: 1011.11 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 45 Resp: 205852

Ion	Ratio	Lower	Upper
45	100		
39	2.1	4.9	7.3#

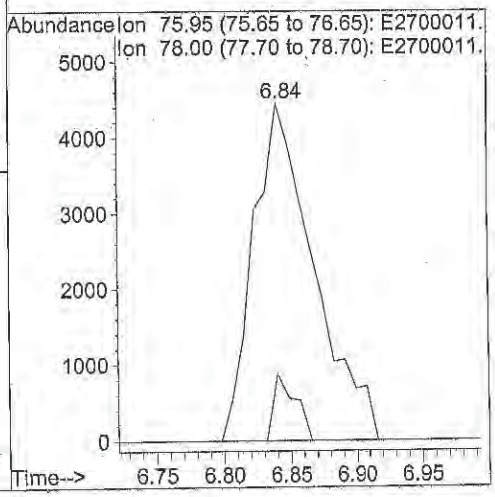


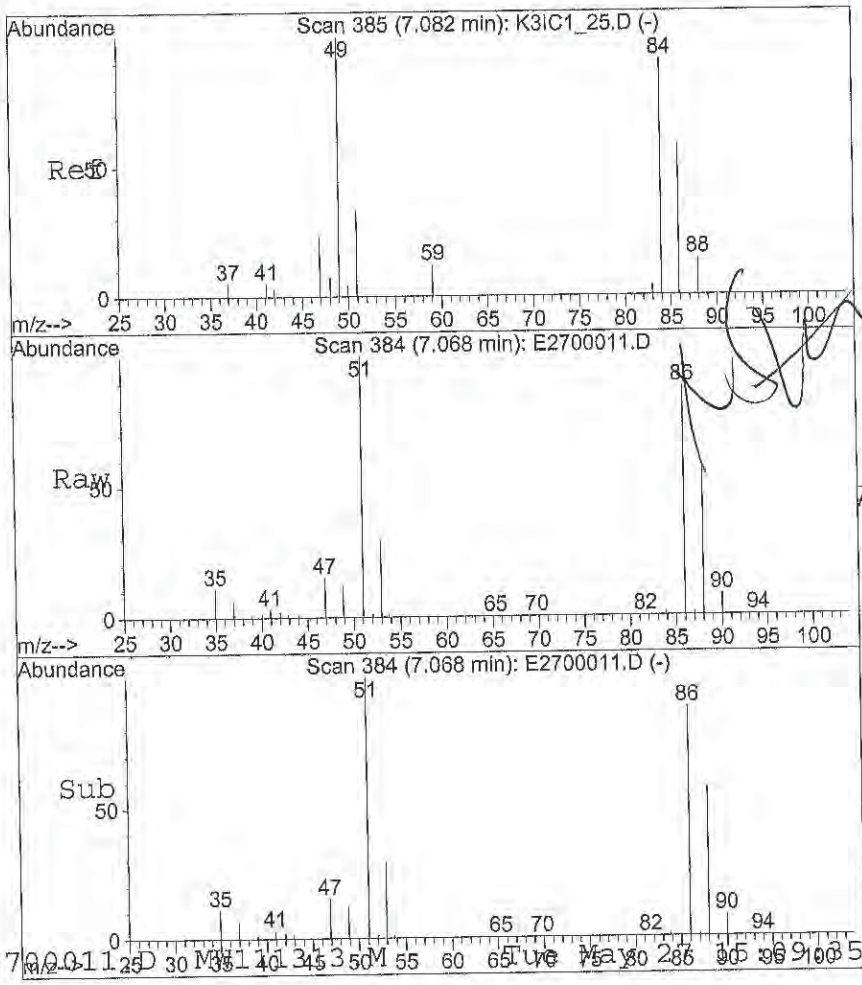


#13
Carbon disulfide
Concen: 0.99 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 76 Resp: 14009

Ion	Ratio	Lower	Upper
76	100		
78	7.1	7.0	10.4

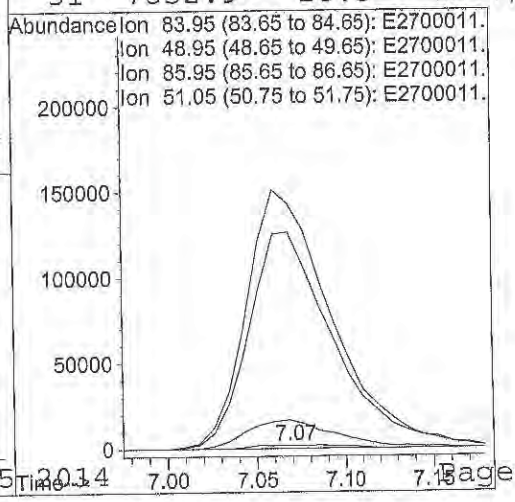


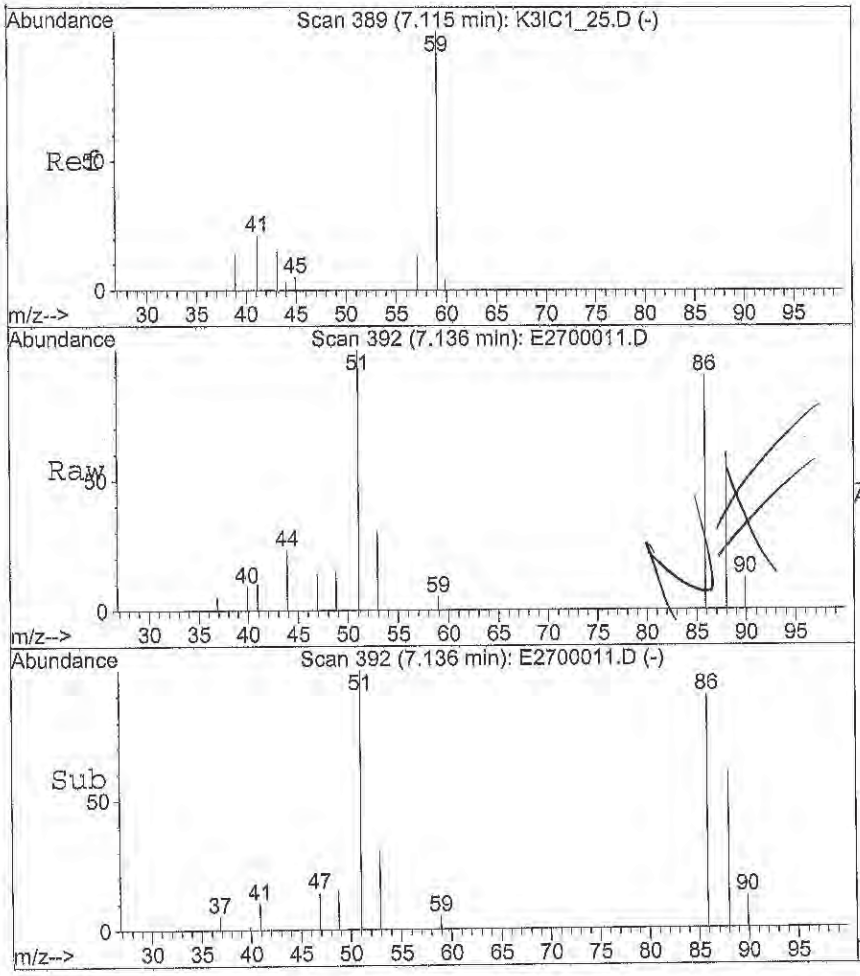


#14
Methylene Chloride
Concen: 1.40 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 84 Resp: 6505

Ion	Ratio	Lower	Upper
84	100		
49	887.1	89.8	134.6#
86	6516.1	51.1	76.7#
51	7852.9	28.5	42.7#

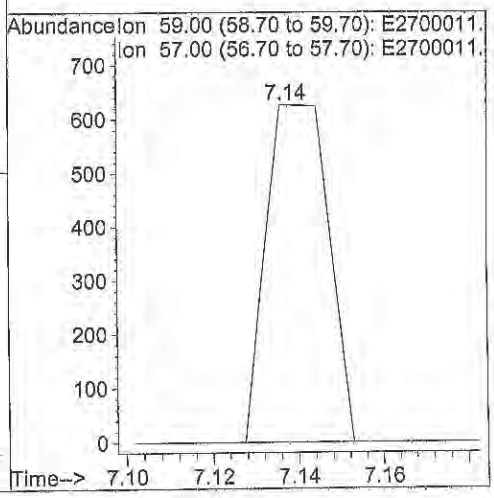


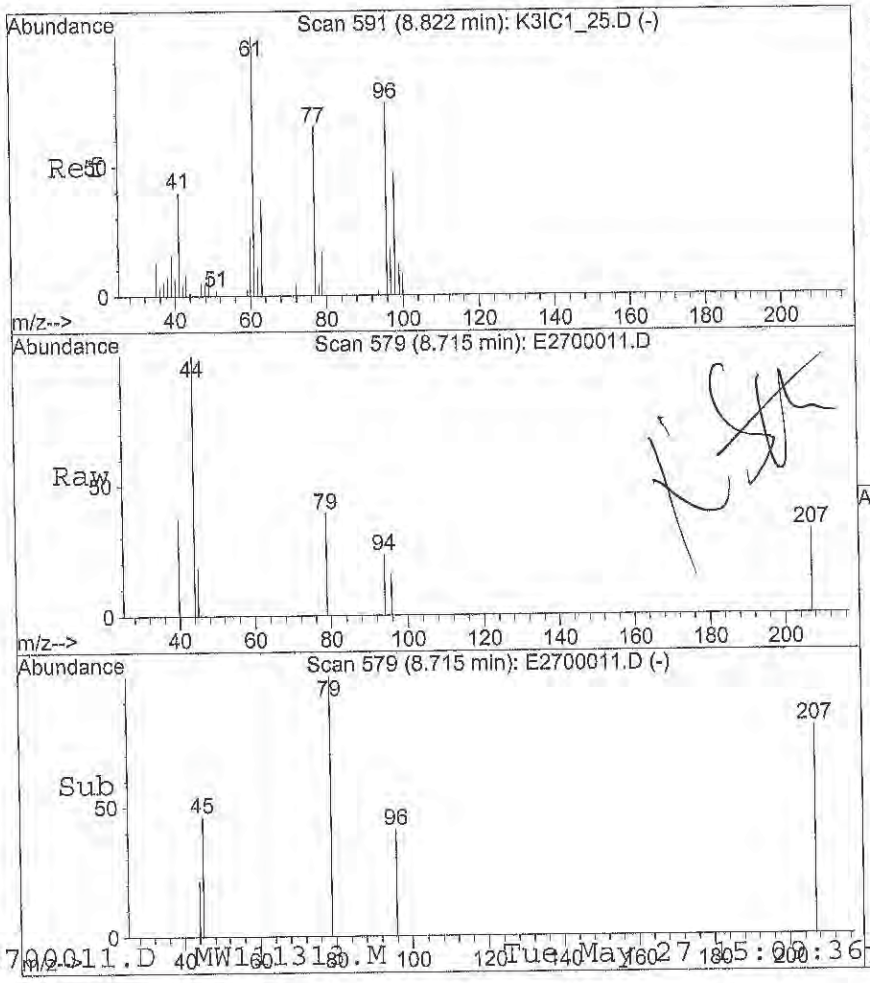


#15
(TBA) tert-Butanol
Concen: 2.19 ug/L
RT: 7.14 min Scan# 392
Delta R.T. 0.02 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 59 Resp: 634

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

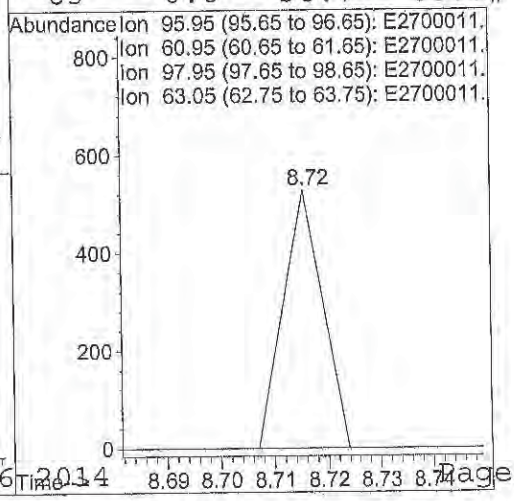


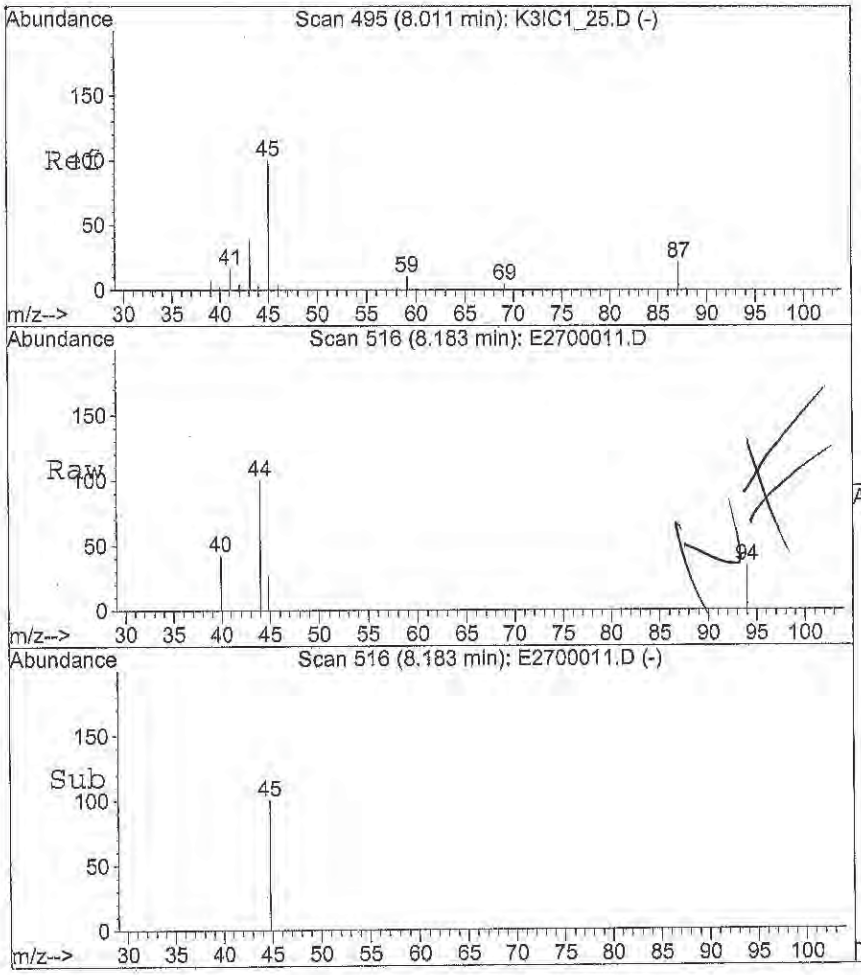


#19
cis-1,2-Dichloroethene
Concen: 0.05 ug/L
RT: 8.72 min Scan# 579
Delta R.T. -0.11 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 96 Resp: 268

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

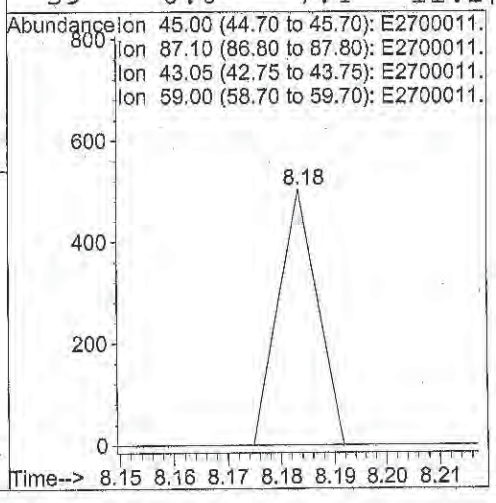


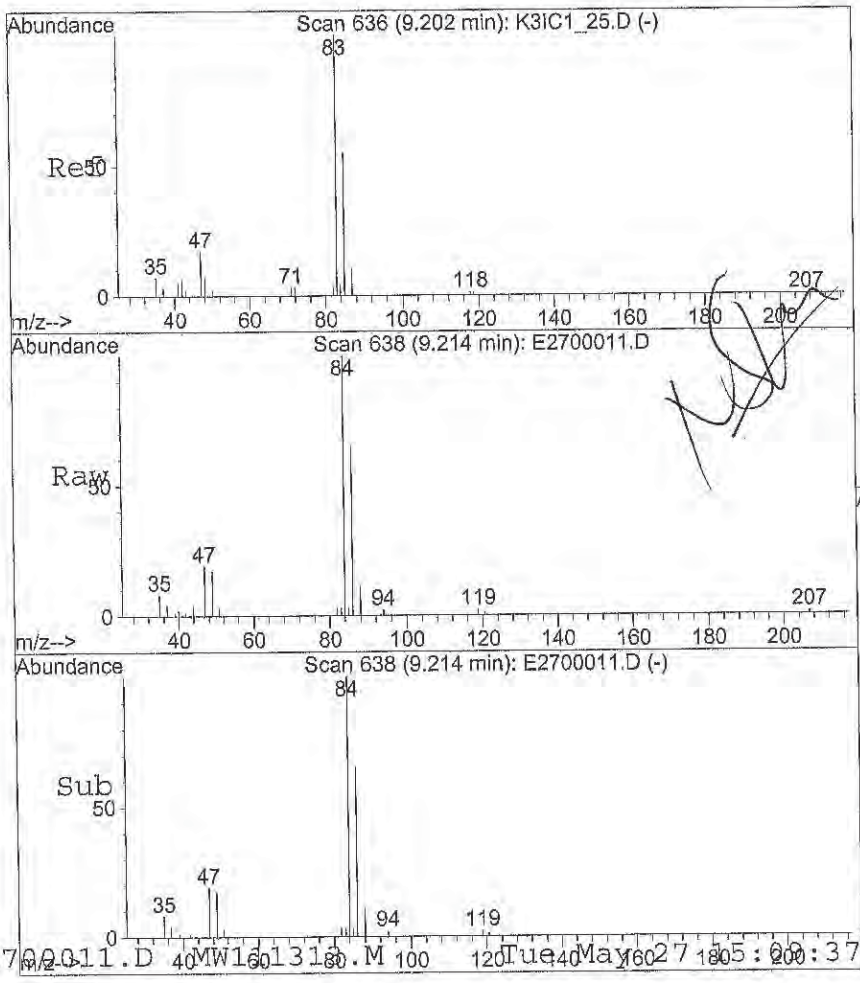


#22
(DIPE) Diisopropyl Ether
Concen: 0.02 ug/L
RT: 8.18 min Scan# 516
Delta R.T. 0.17 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 45 Resp: 255

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

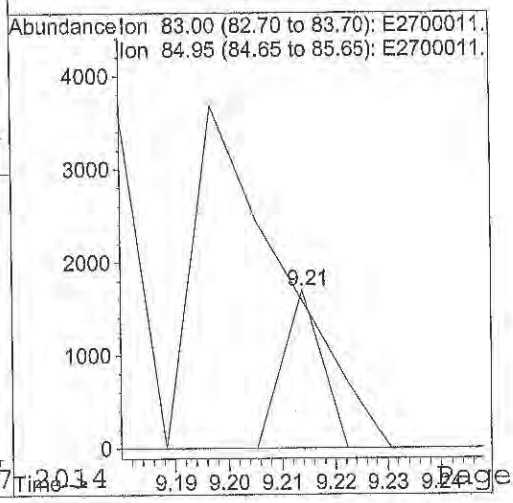


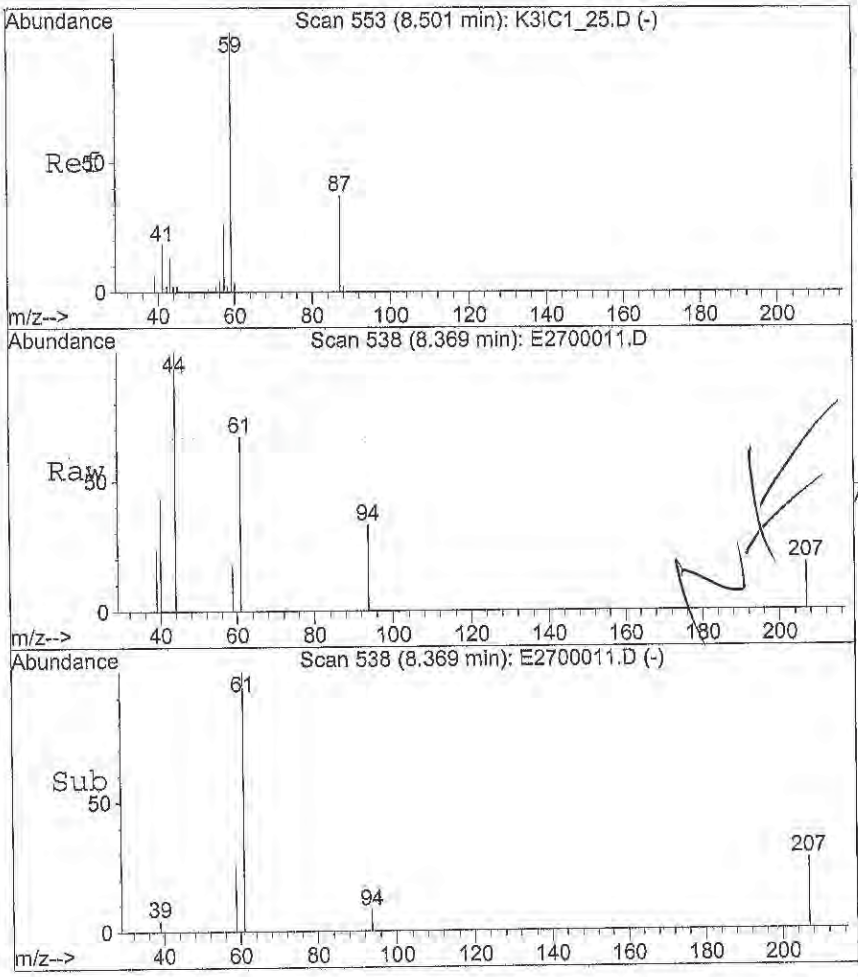


#24
Chloroform
Concen: 0.10 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 83 Resp: 858

Ion	Ratio	Lower	Upper
83	100		
85	496.6	51.8	77.6#

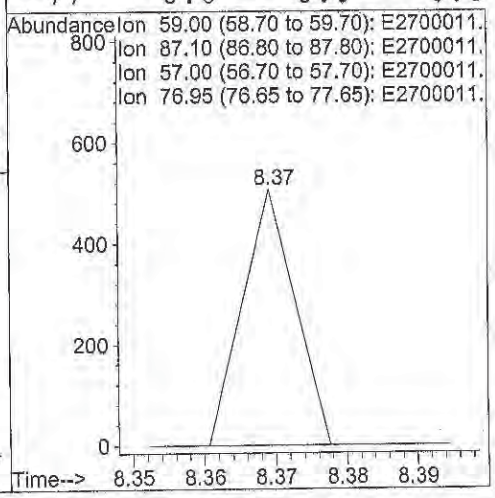


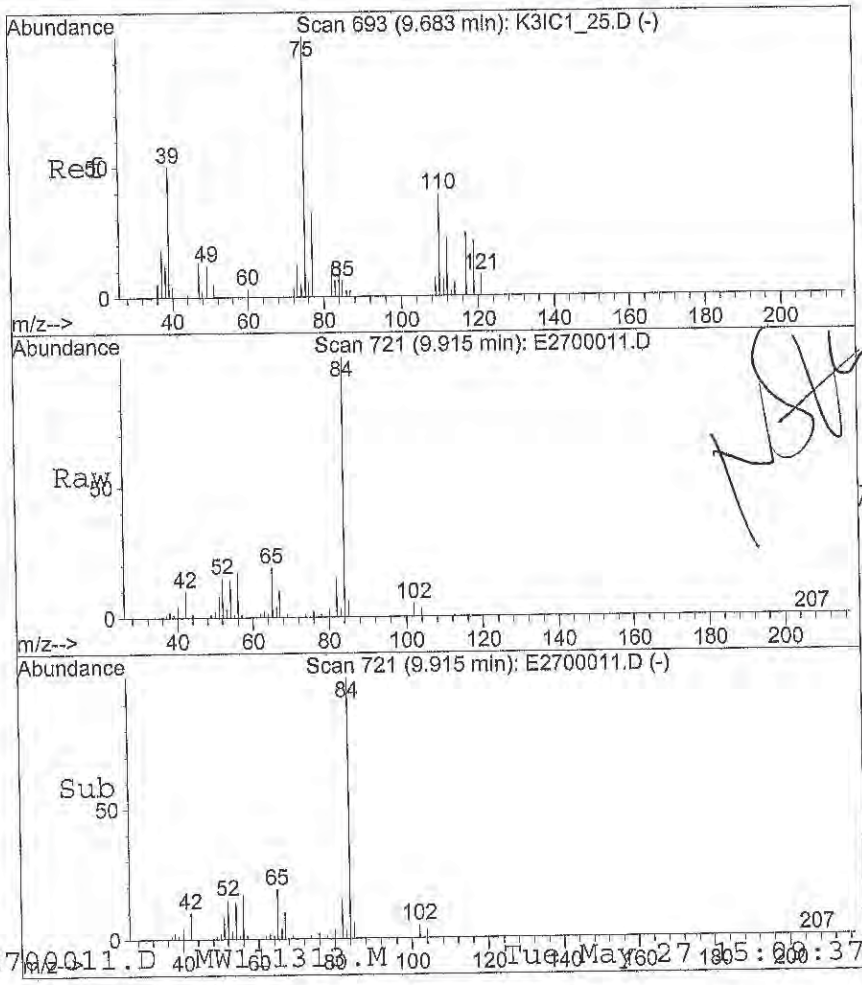


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.02 ug/L
RT: 8.37 min Scan# 538
Delta R.T. -0.13 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 59 Resp: 257

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

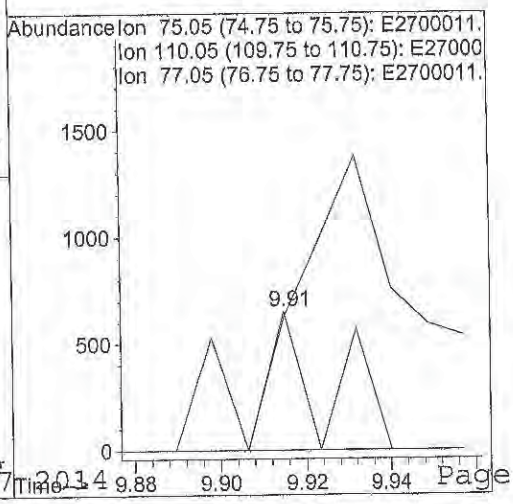


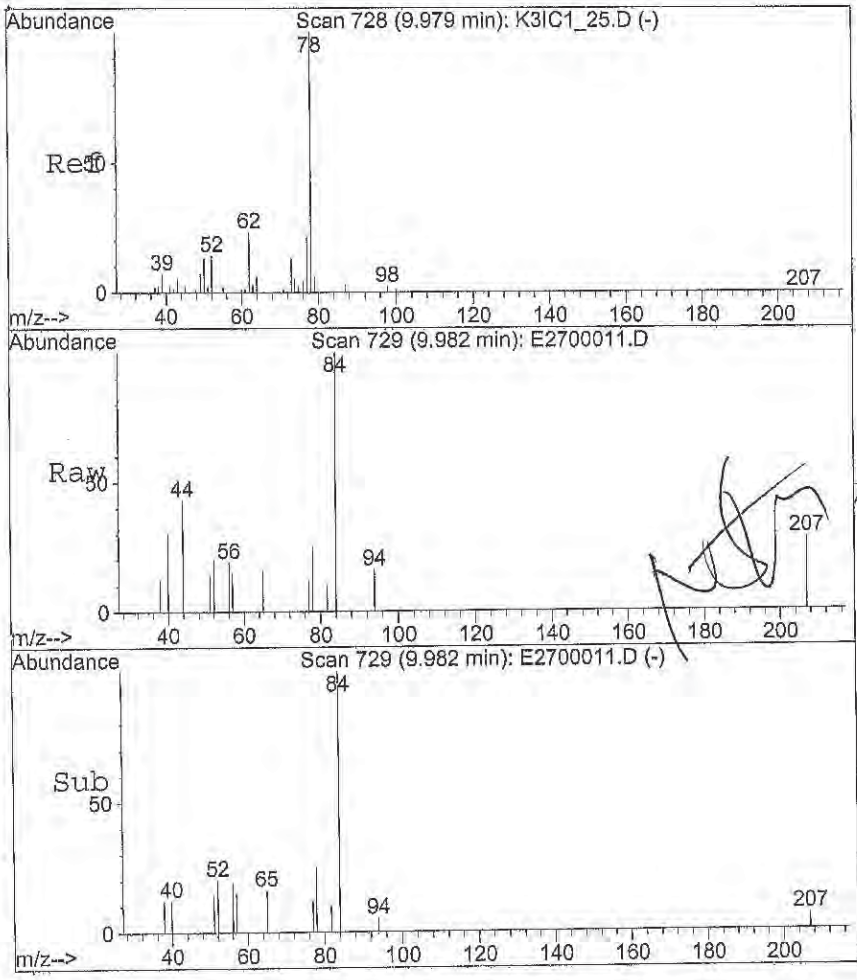


#29
1,1-Dichloropropene
Concen: 0.09 ug/L
RT: 9.91 min Scan# 721
Delta R.T. 0.23 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 75 Resp: 620

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	398.7	25.0	37.4#

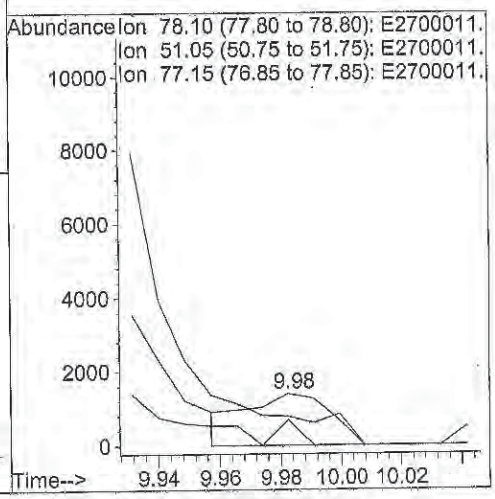


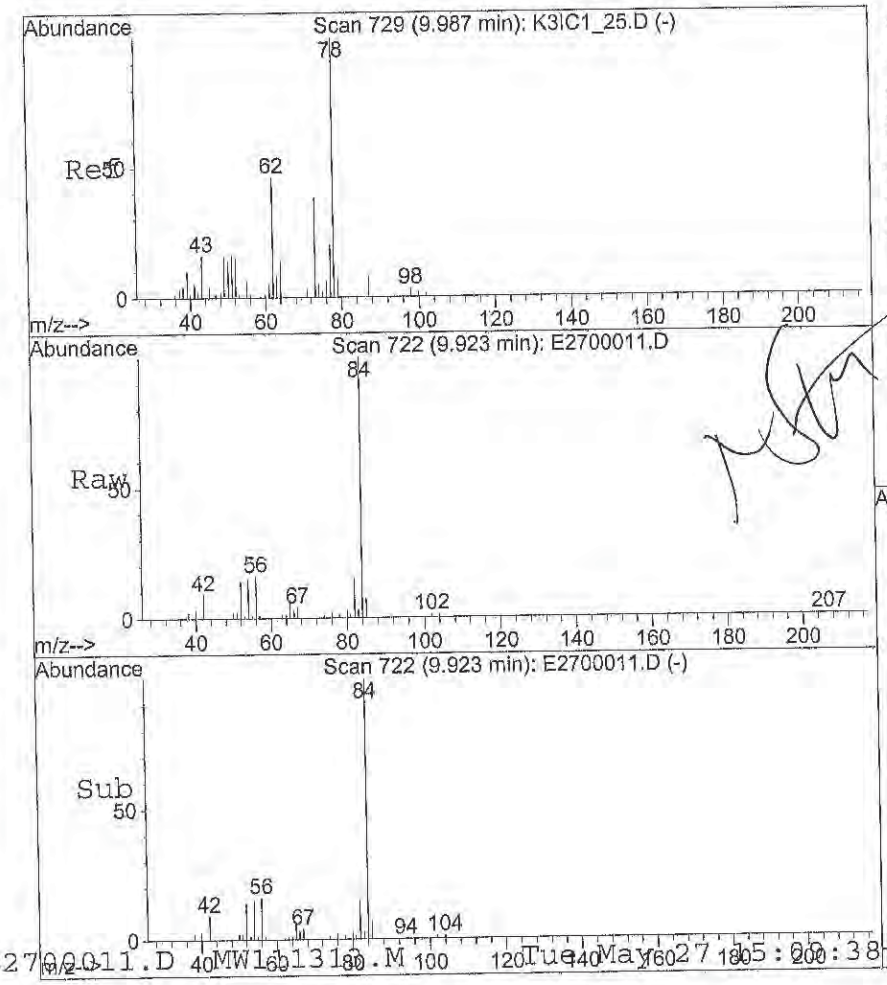


#31
Benzene
Concen: 0.17 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 78 Resp: 2686

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	13.0	16.6	24.8#

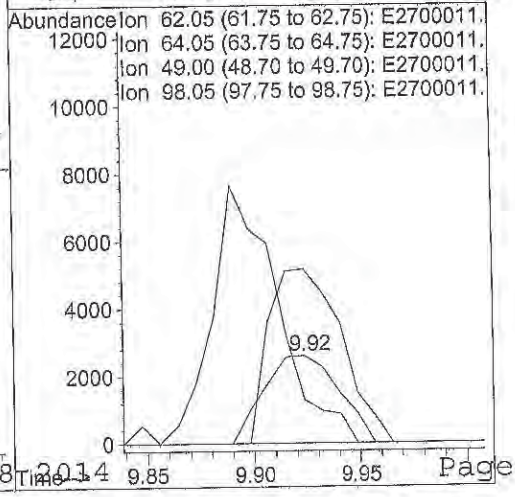


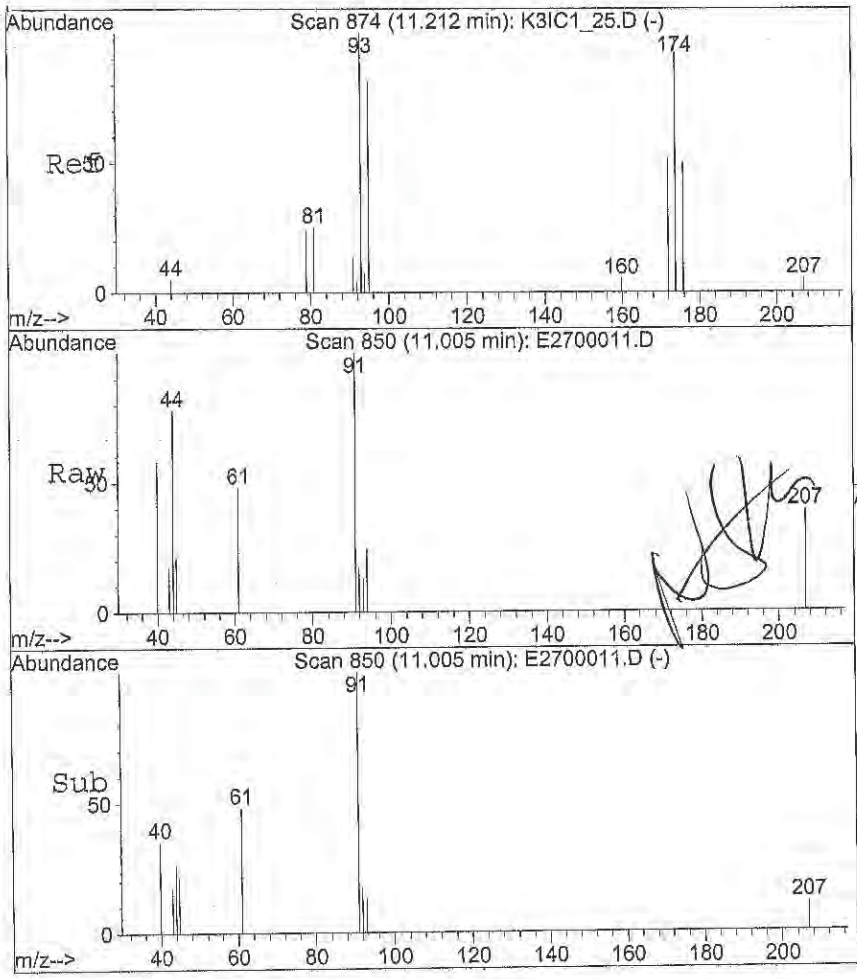


#32
1,2-Dichloroethane
Concen: 1.13 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 62 Resp: 6374

Ion	Ratio	Lower	Upper
62	100		
64	192.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

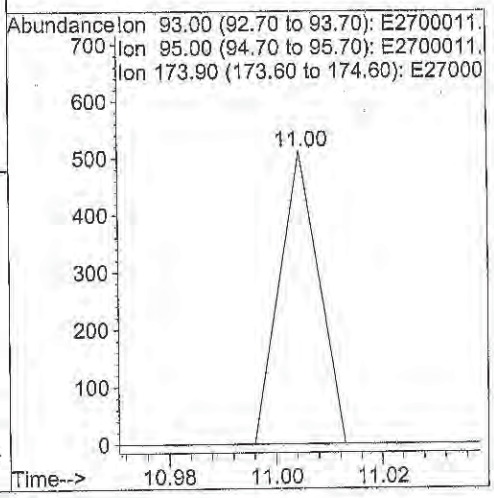


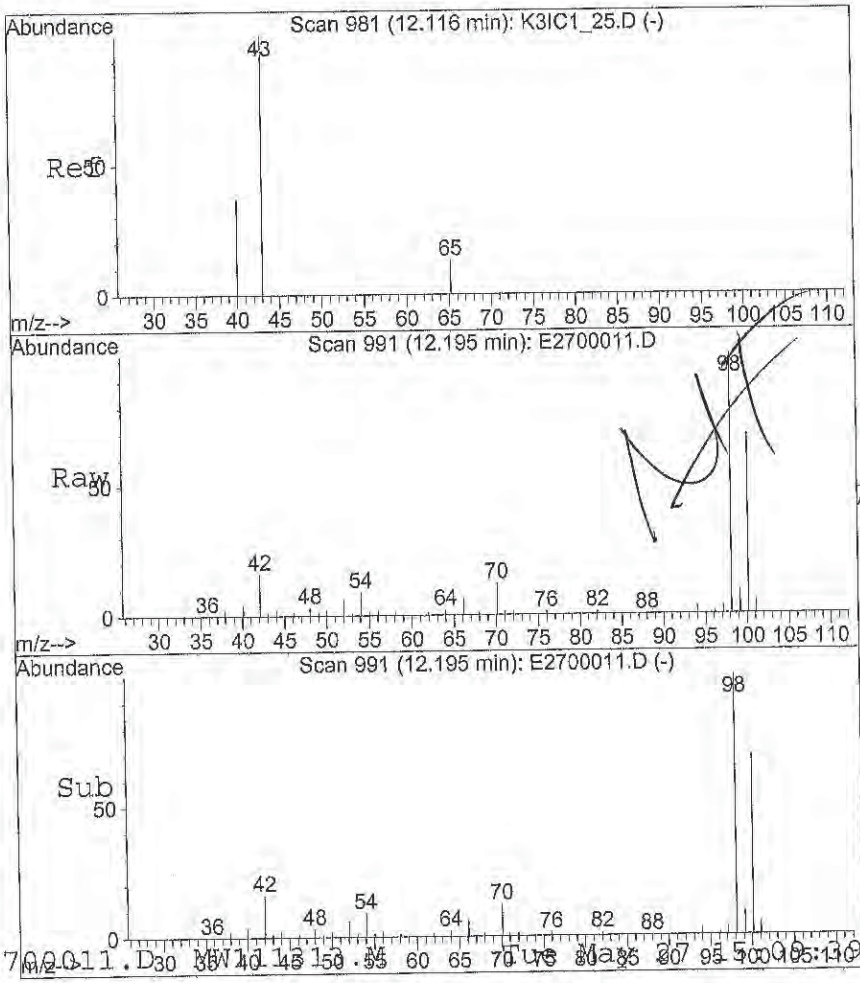


#35
Dibromomethane
Concen: 0.09 ug/L
RT: 11.00 min Scan# 850
Delta R.T. -0.21 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 93 Resp: 259

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

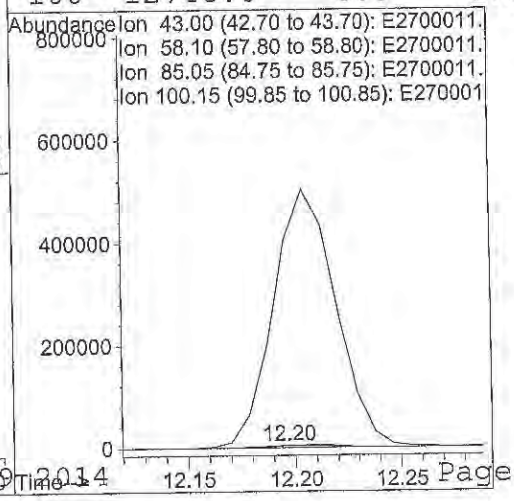


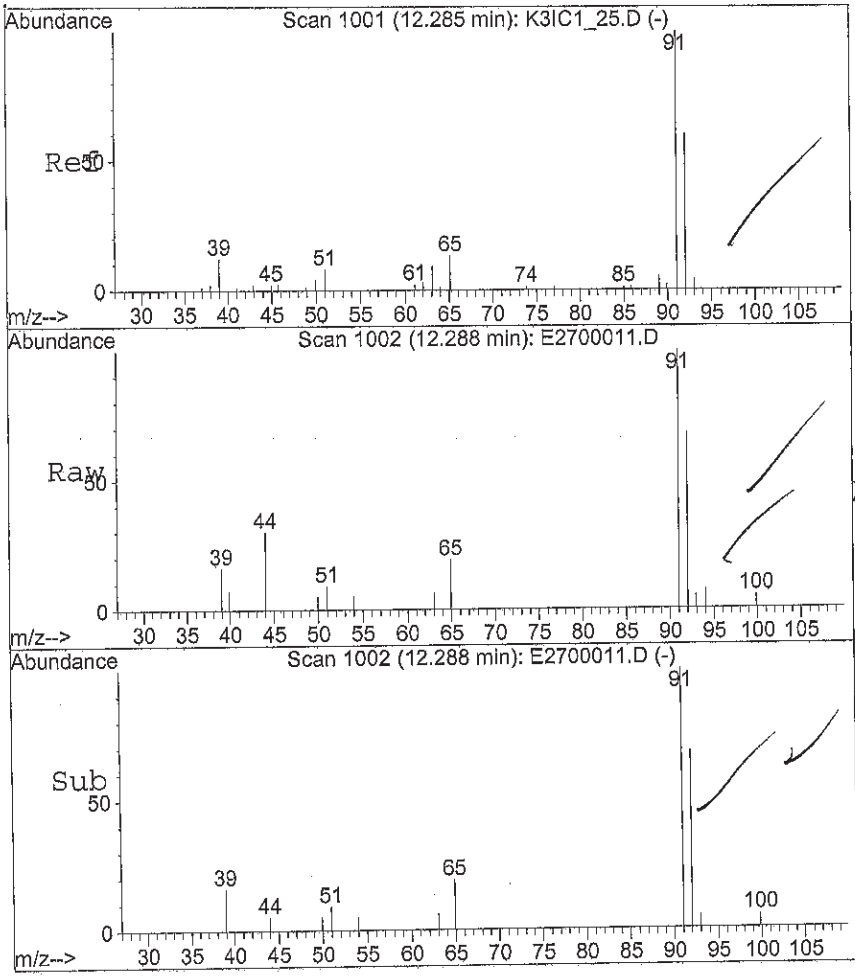


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.10 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 43 Resp: 8060

Ion	Ratio	Lower	Upper
43	100		
58	135.7	0.0	0.0#
85	0.0	0.0	0.0
100	12746.0	0.0	0.0#

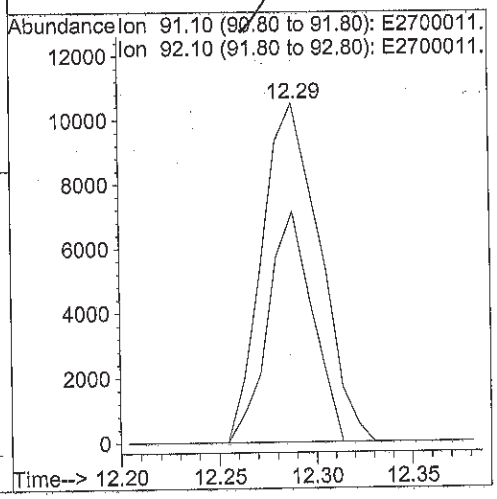


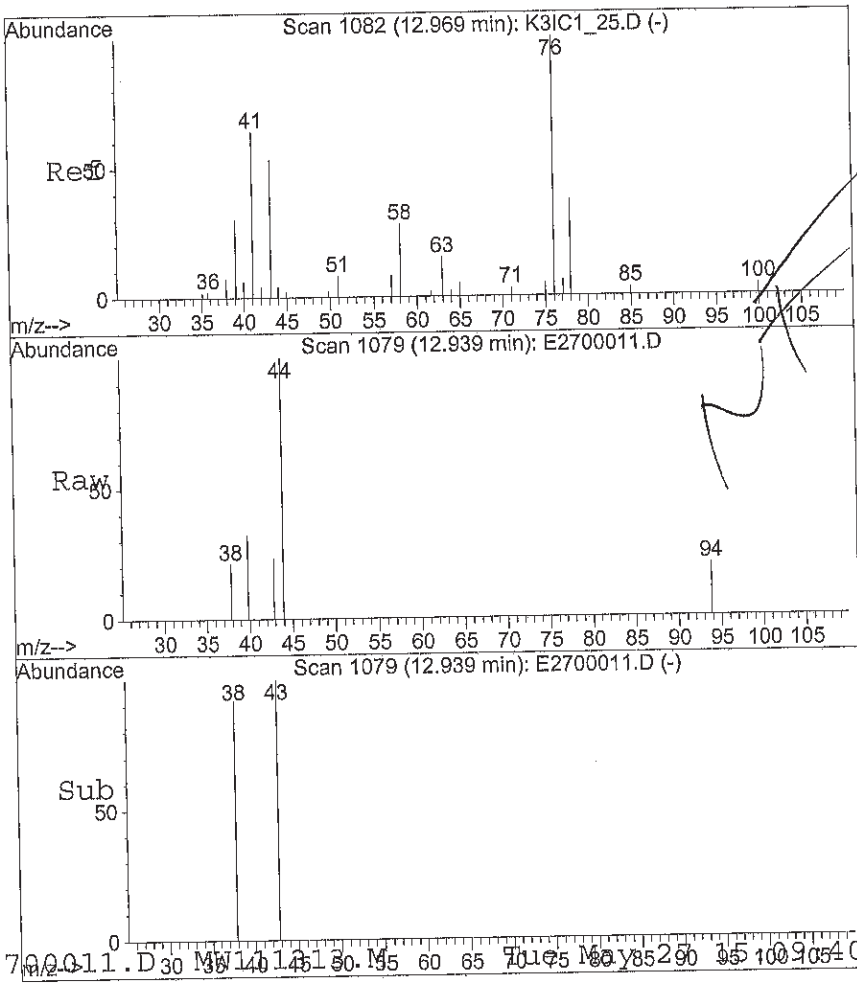


#41
Toluene
Concen: 1.22 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 91 Resp: 21574

Ion	Ratio	Lower	Upper
91	100		
92	52.5	47.4	71.0

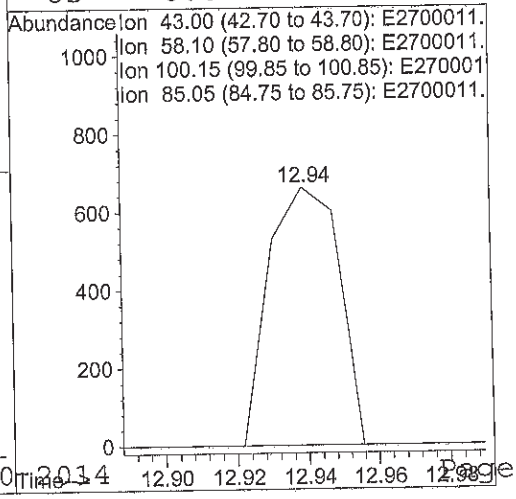


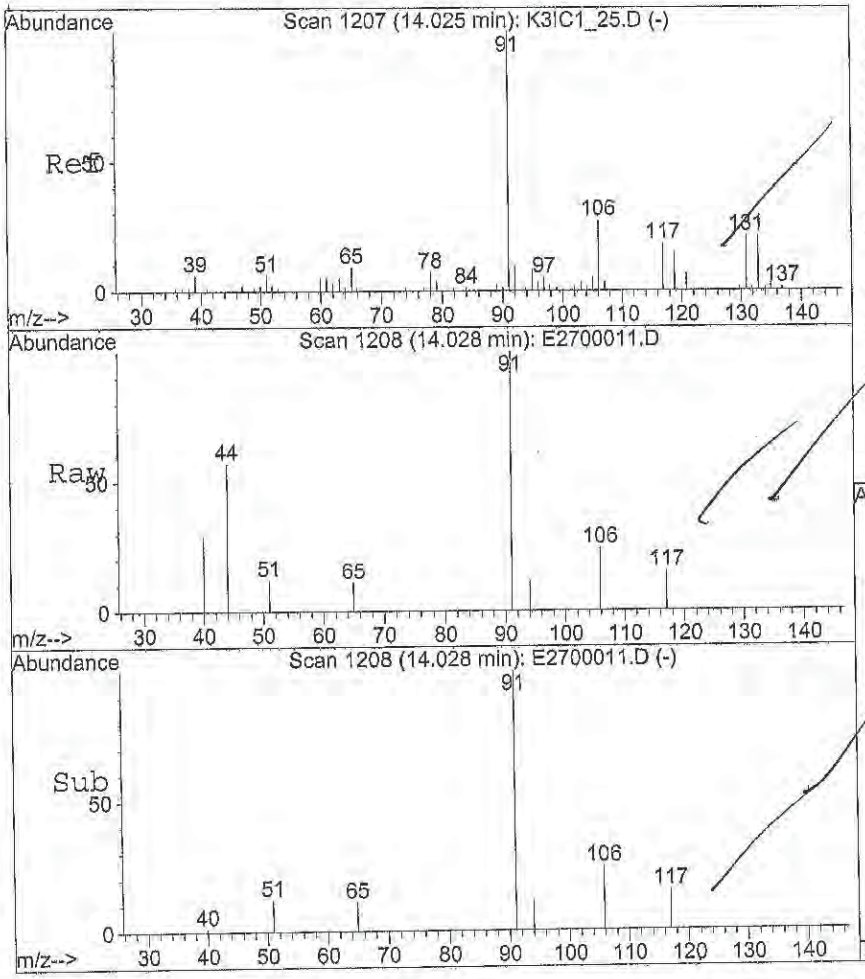


#46
2-Hexanone
Concen: 0.32 ug/L
RT: 12.94 min Scan# 1079
Delta R.T. -0.03 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 43 Resp: 908

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

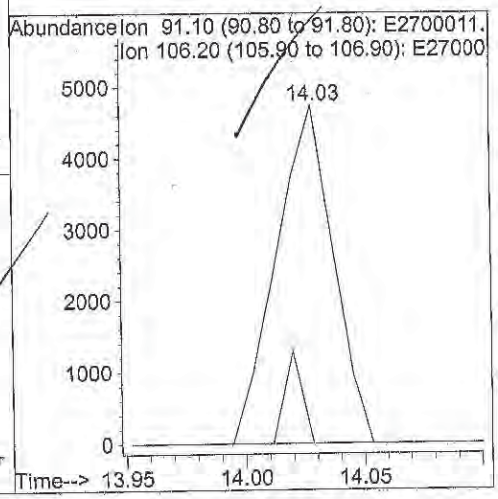


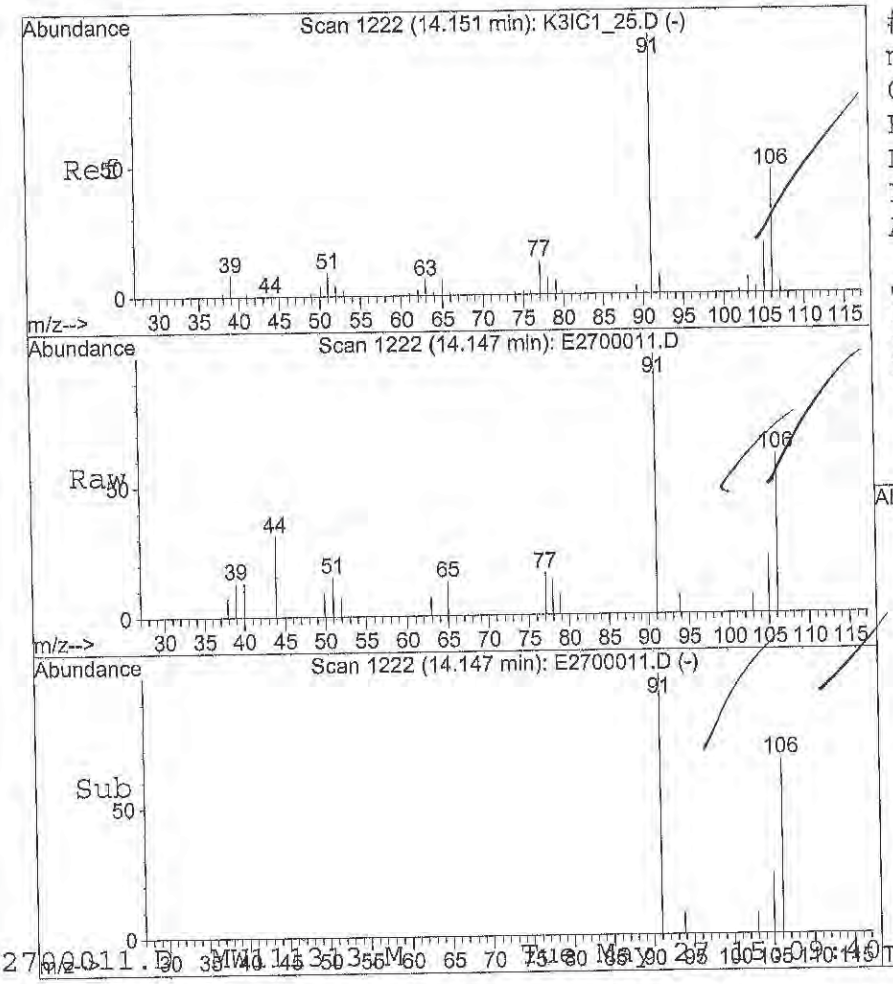


#51
Ethylbenzene
Concen: 0.39 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 91 Resp: 7835

Ion	Ratio	Lower	Upper
91	100		
106	8.3	23.5	35.3#

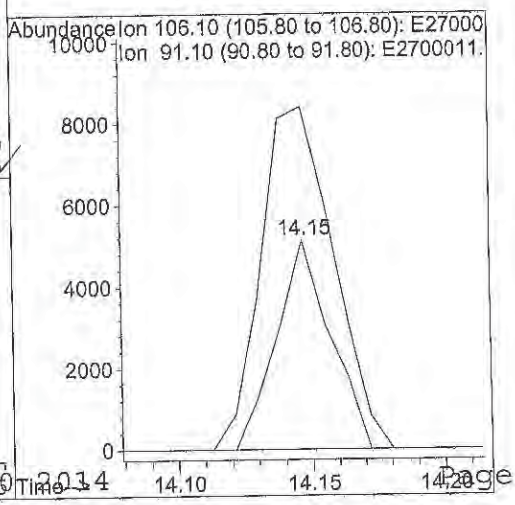


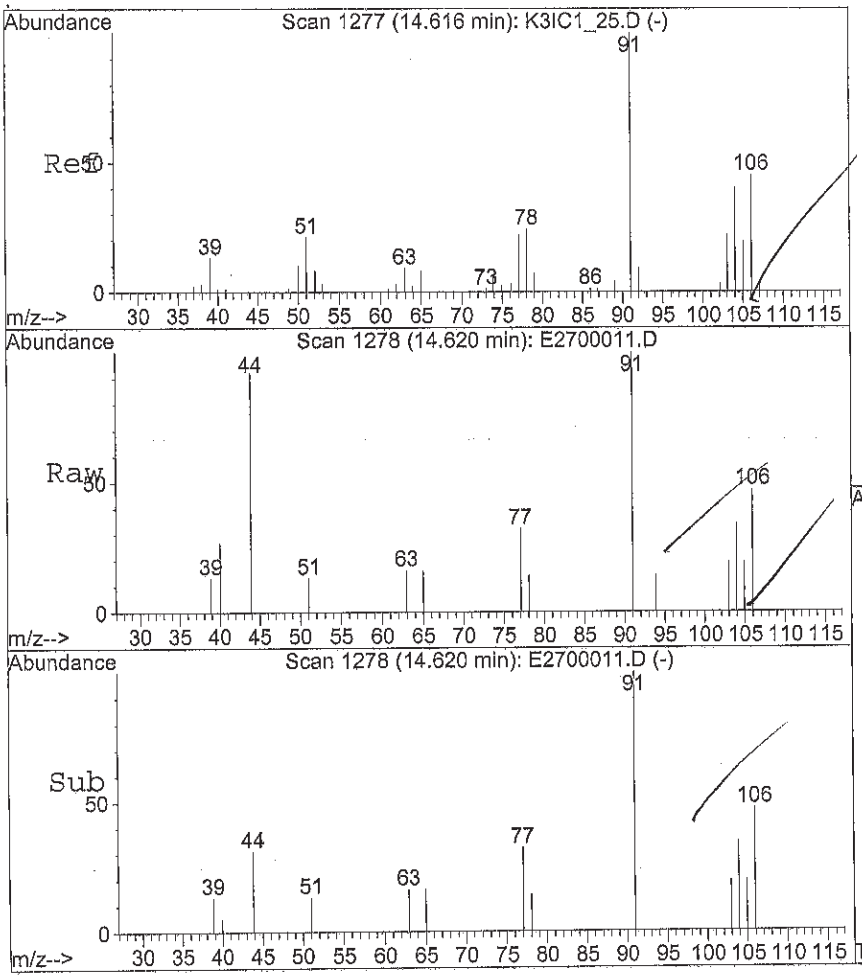


#52
m,p-Xylenes
Concen: 1.01 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:106 Resp: 7224

Ion	Ratio	Lower	Upper
106	100		
91	218.6	177.1	265.7

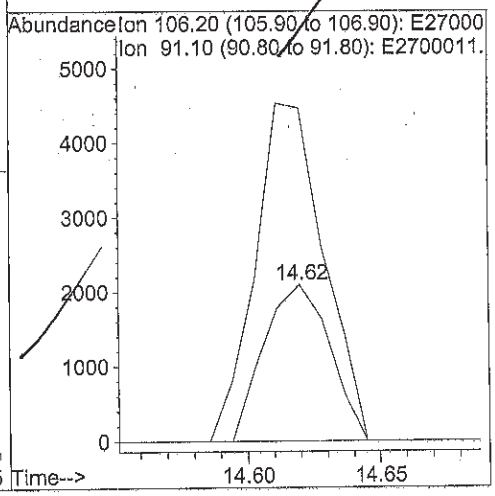


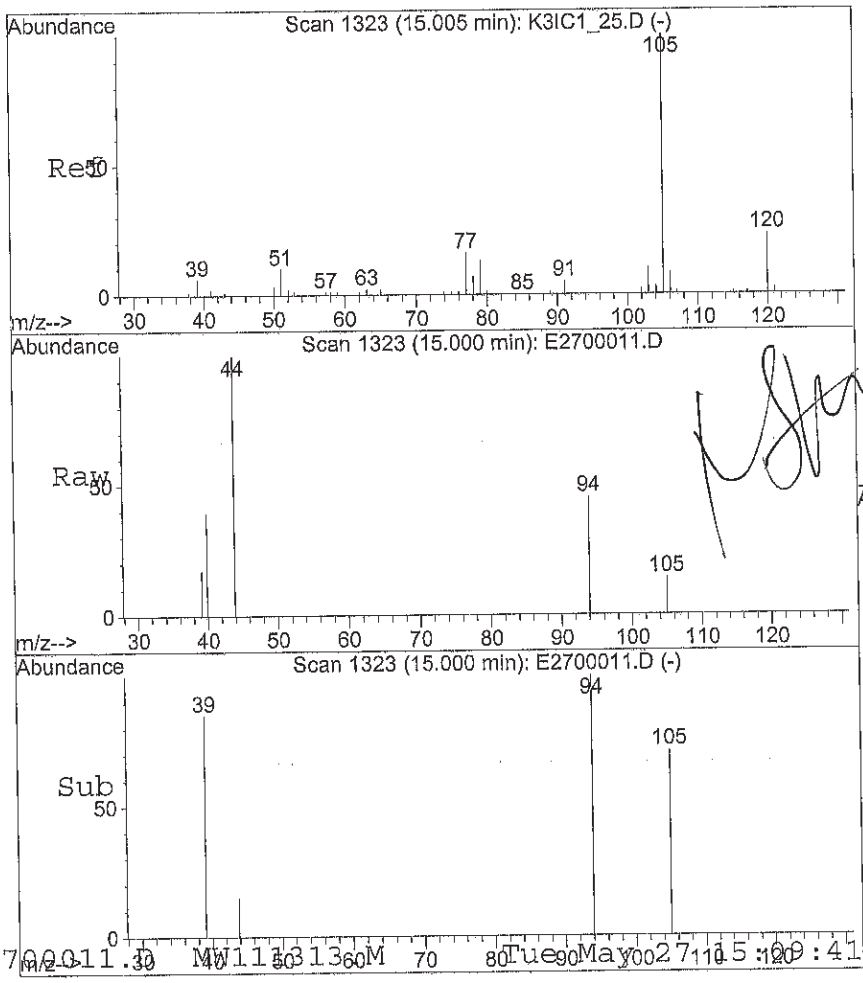


#53
o-Xylene
Concen: 0.51 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:106 Resp: 3589

Ion	Ratio	Lower	Upper
106	100		
91	225.8	179.0	268.6

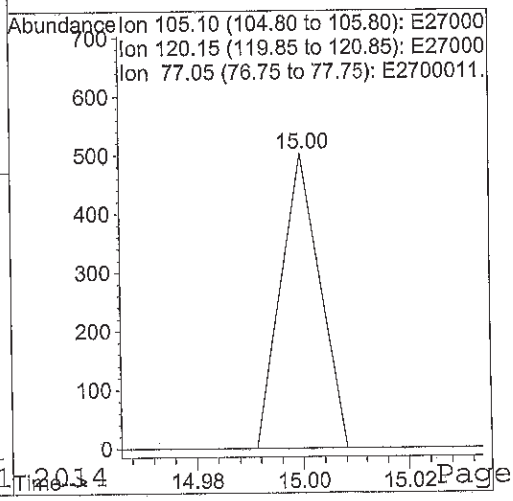


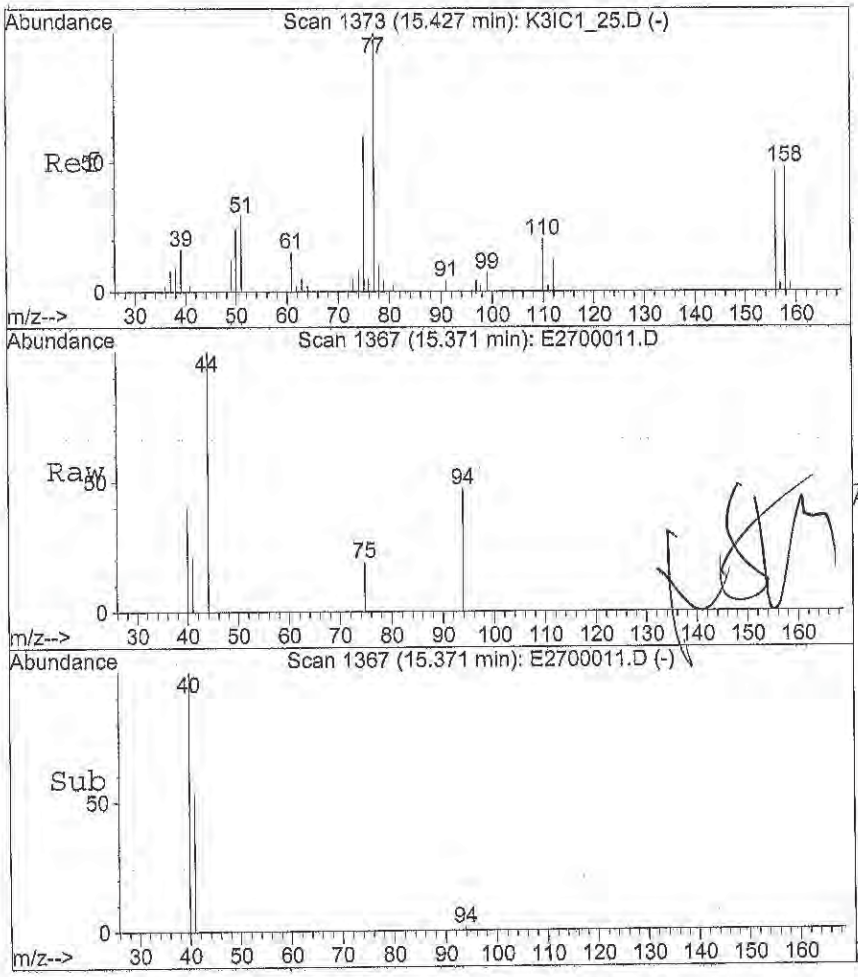


#56
Isopropylbenzene
Concen: 0.01 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:105 Resp: 254

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

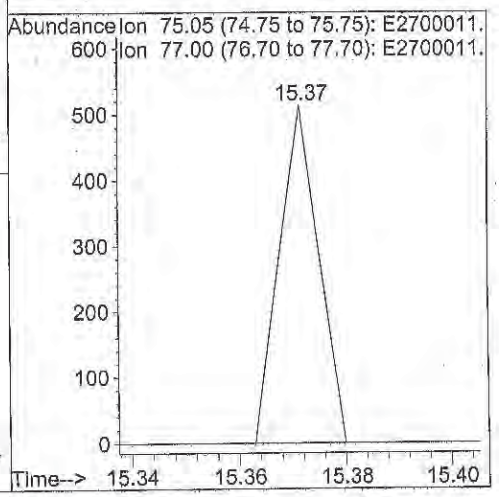


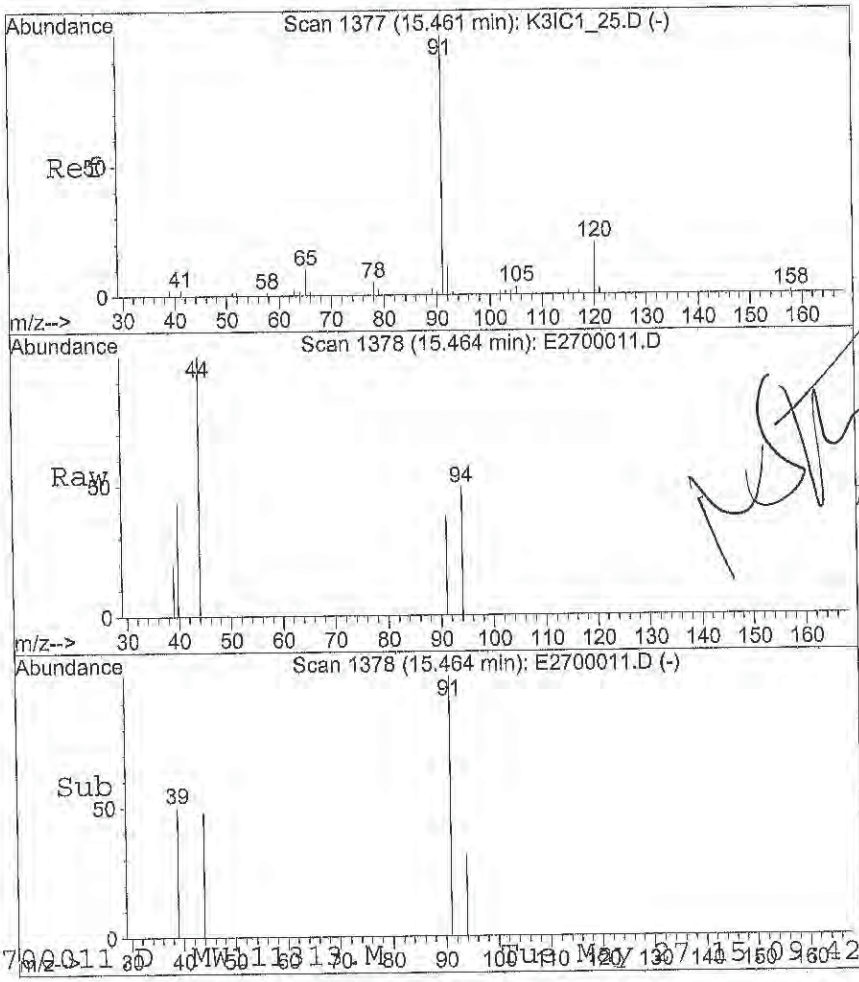


#57
1,2,3-Trichloropropane
Concen: 0.05 ug/L
RT: 15.37 min Scan# 1367
Delta R.T. -0.06 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 75 Resp: 260

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

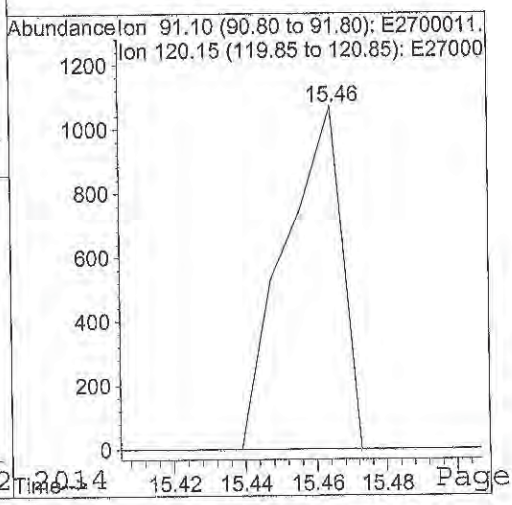


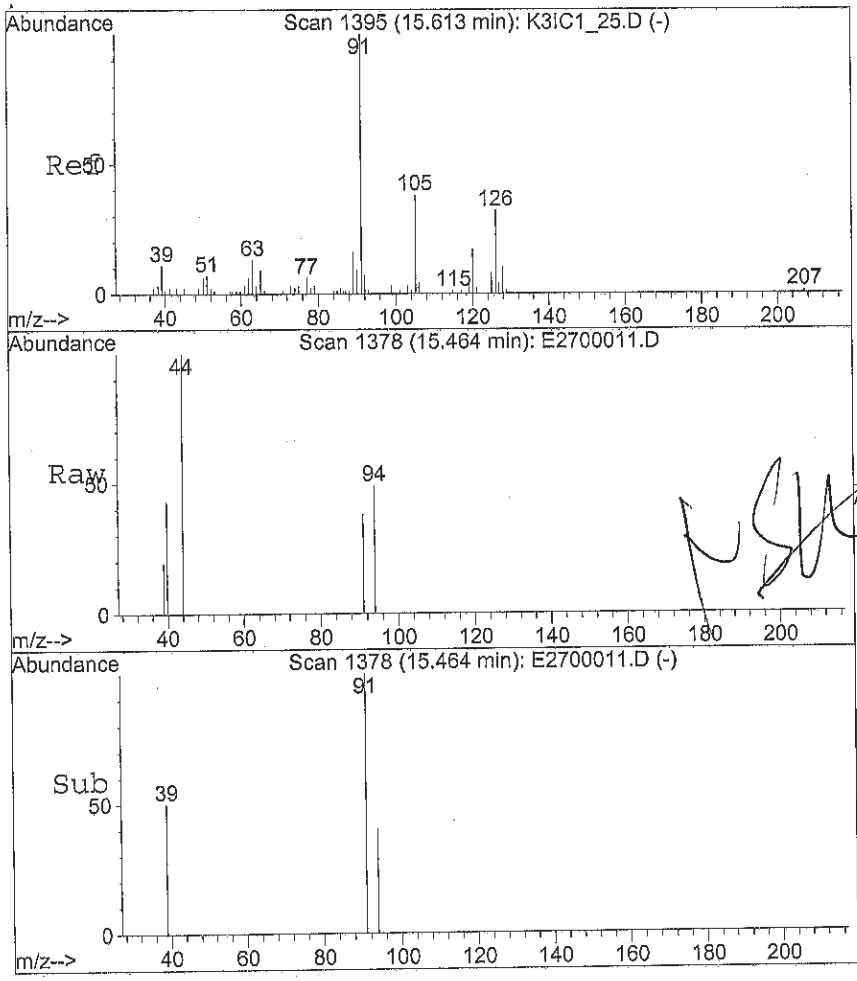


#62
n-Propylbenzene
Concen: 0.04 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 91 Resp: 1192

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

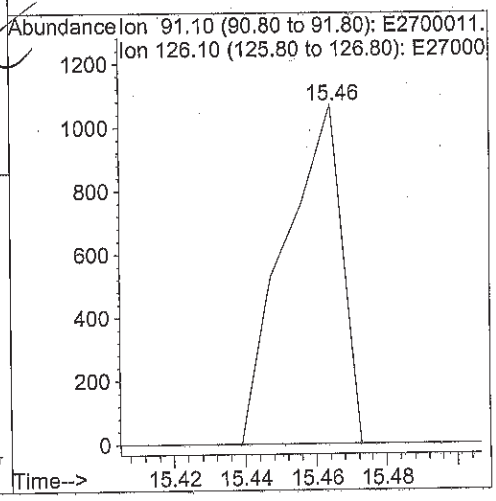


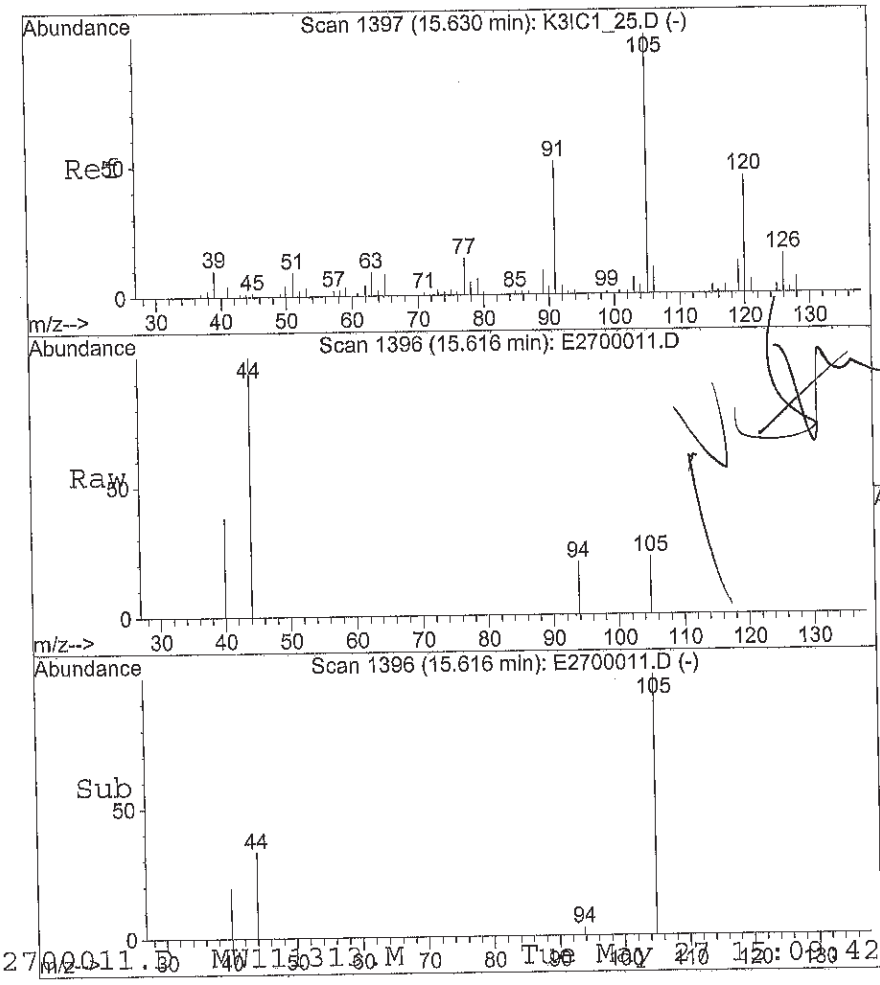


#63
2-Chlorotoluene
Concen: 0.07 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. -0.15 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion: 91 Resp: 1192

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

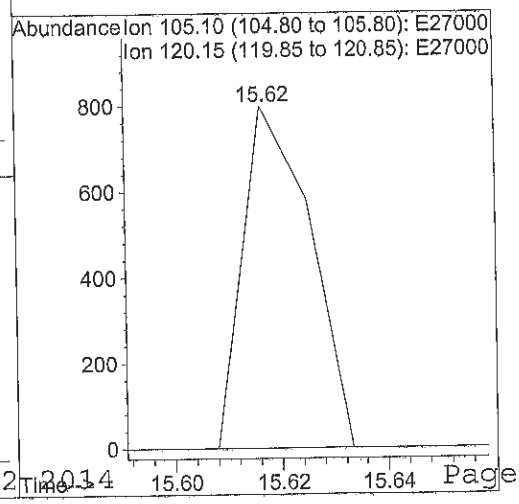


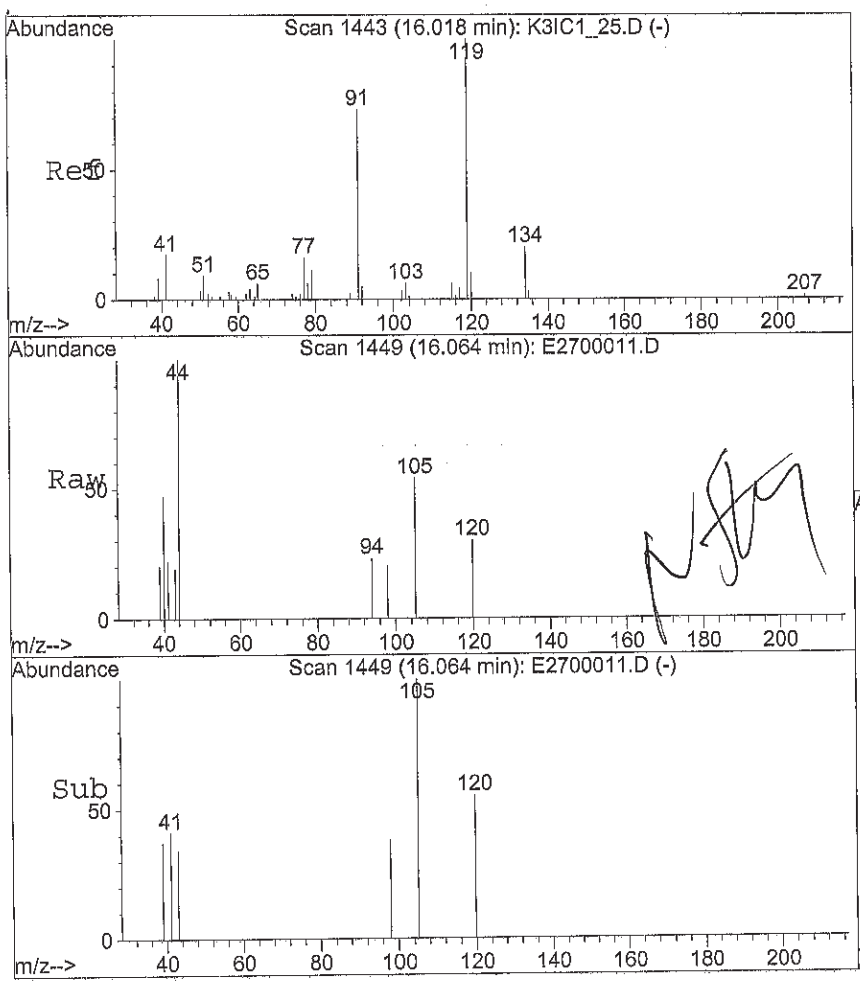


#64
1,3,5-Trimethylbenzene
Concen: 0.04 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:105 Resp: 699

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

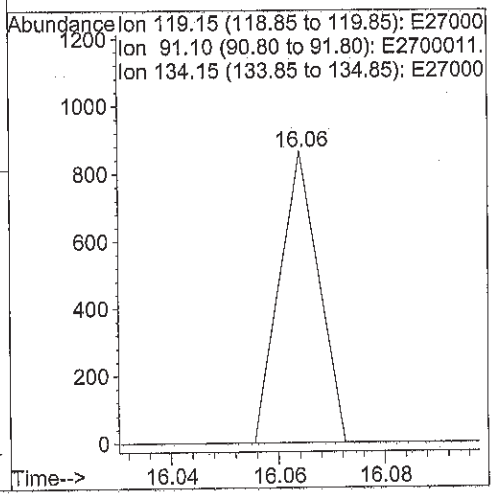


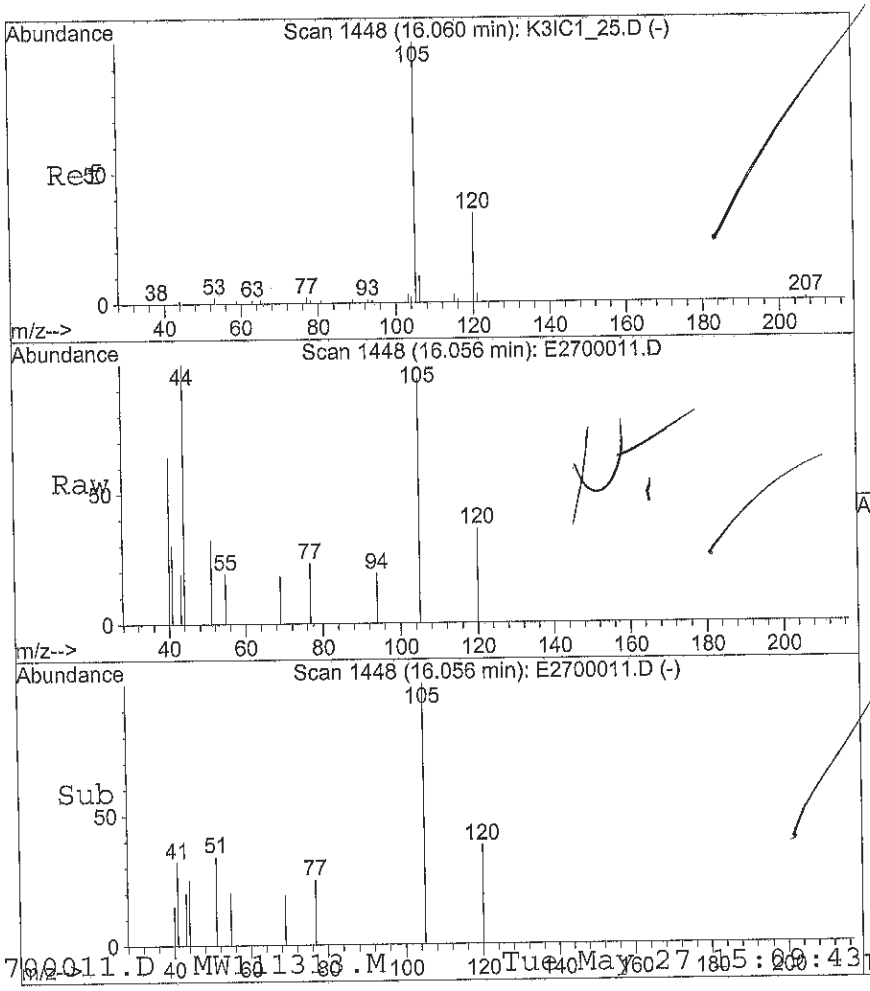


#66
tert-Butylbenzene
Concen: 0.03 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.05 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:119 Resp: 438

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

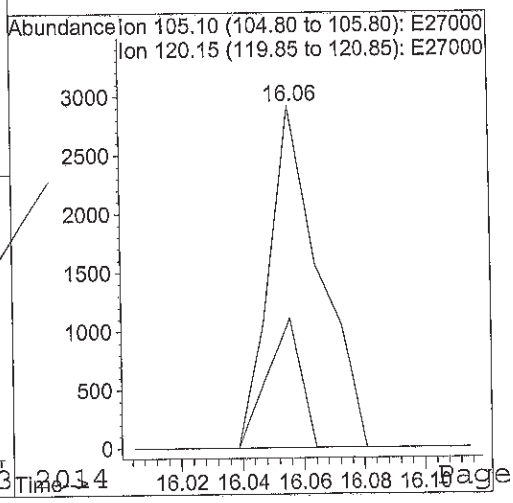


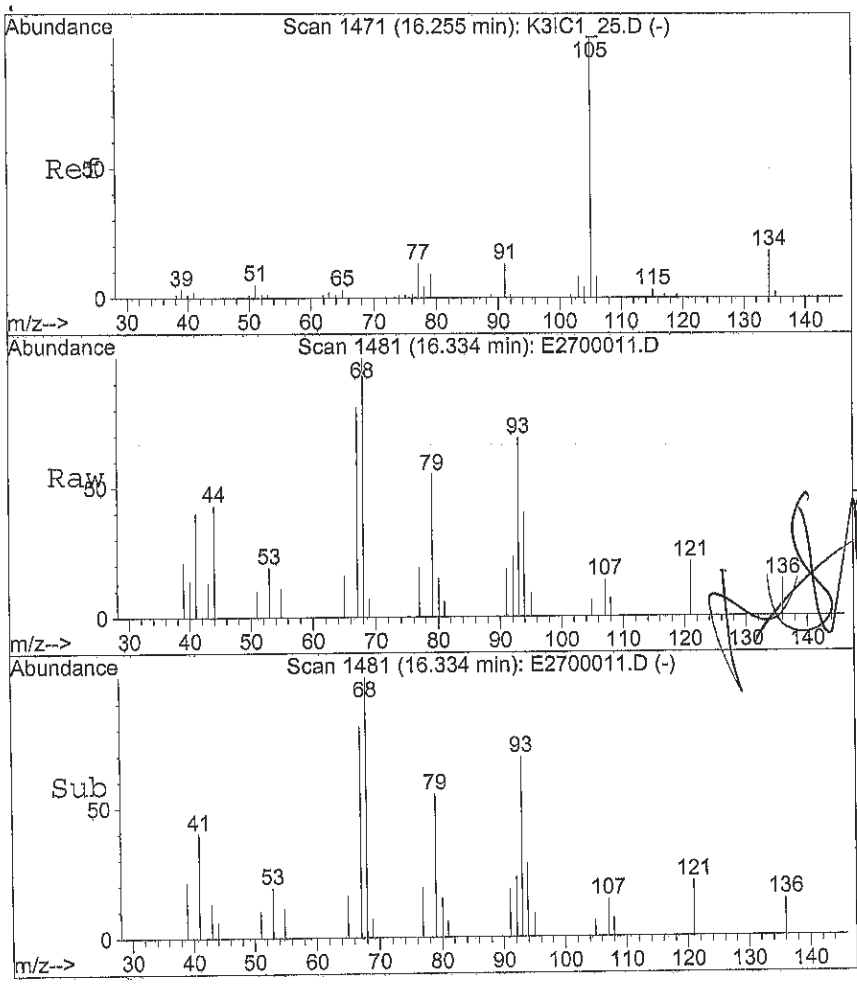


#67
1,2,4-Trimethylbenzene
Concen: 0.19 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:105 Resp: 3346

Ion	Ratio	Lower	Upper
105	100		
120	25.3	33.8	50.8#

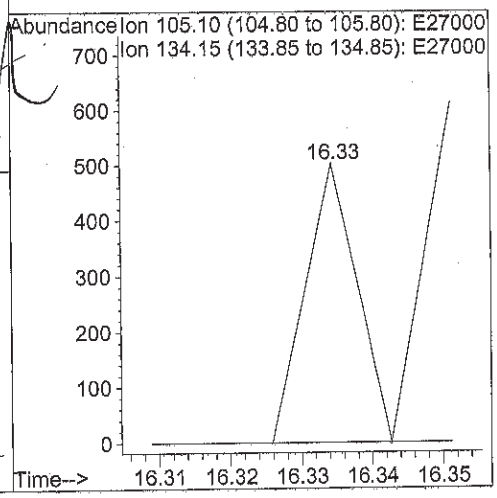


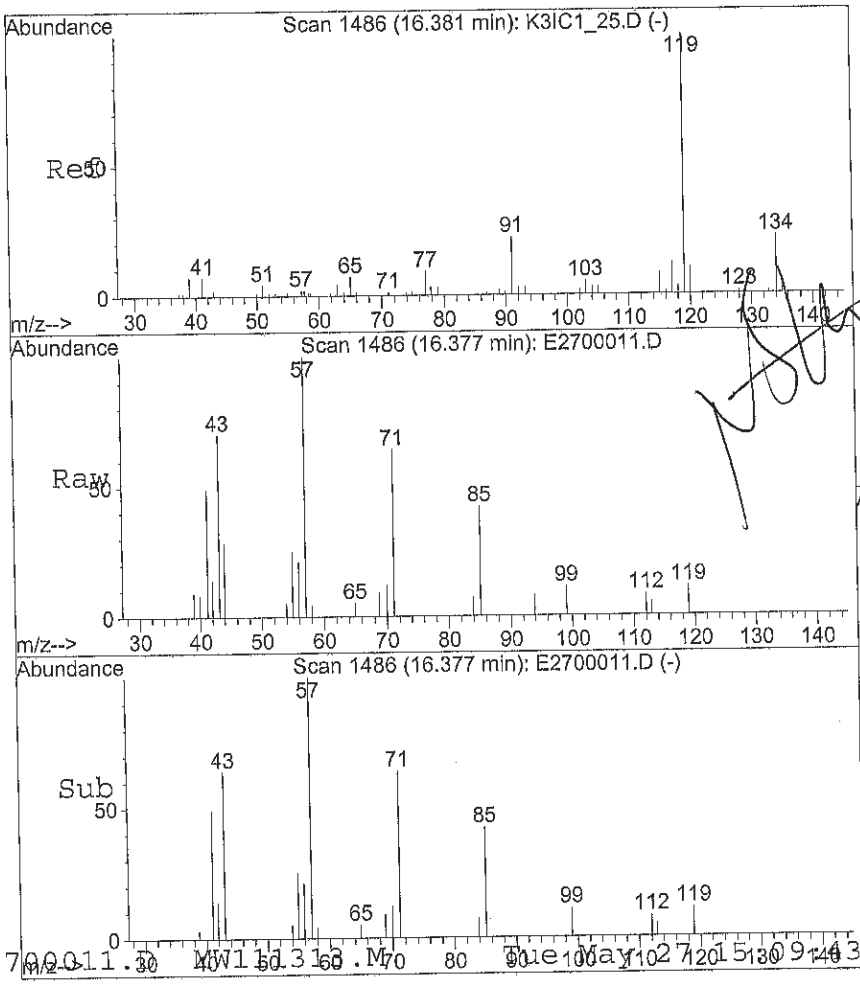


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:105 Resp: 254

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

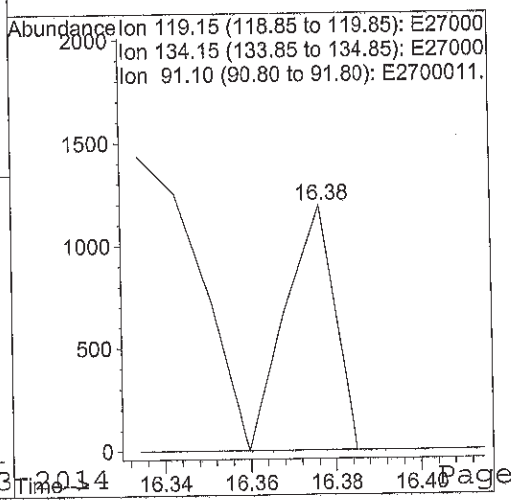




#69
p-Isopropyltoluene
Concen: 0.05 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2700011.D
Acq: 27 May 2014 2:34 pm

Tgt Ion:119 Resp: 950

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700011.D Vial: 2
Acq On : 27 May 2014 2:34 pm Operator: DN
Sample : 3E42701-08 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-15.5-16.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 15:11 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1694263	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1299834	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	693994	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	481941	10.94 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.52%		
3) Chloroform-d (SU6)	9.18	84	737747	11.67 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.36%		
4) Methylene Chloride-d2 (SU5	7.07	86	423594	11.46 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 91.68%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	462116	15.35 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 122.80%		
6) Benzene-d6 (SU7)	9.92	84	1415226	10.64 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 85.12%		
8) Toluene-d8 (SU3)	12.20	98	1510269	12.25 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.00%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	709259	13.93 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.44%		

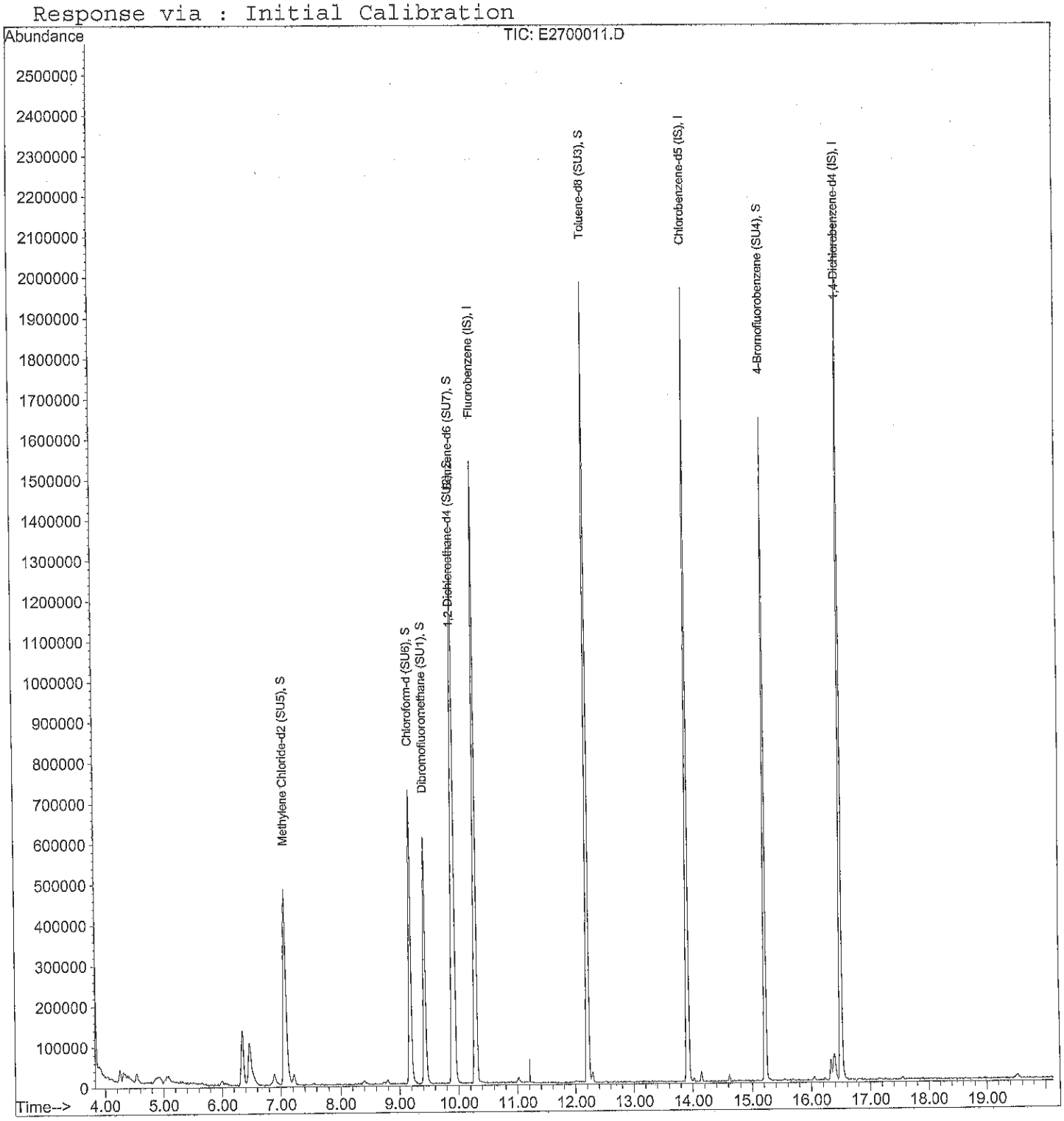
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700011.D Vial: 2
Acq On : 27 May 2014 2:34 pm Operator: DN
Sample : 3E42701-08 Inst : GC/MS Ins
Misc : 100cc SVL-513-SA5D-SV-15.5-16.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 15:11 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700012.D
Acq On : 27 May 2014 3:05 pm
Sample : 3E42701-09
Misc : 100cc SVL-512-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 27 15:29 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1679743	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1298736	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	682899	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	467074	11.15 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.20%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	464879	11.67 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.36%		
39) Toluene-d8 (SU3)	12.21	98	1463111	12.08 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.64%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	714057	13.44 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.52%		

Target Compounds					Qvalue
4) Chloromethane	4.41	50	4823	0.49 ~~ug/L #~~ NM	55
6) Bromomethane	5.12	96	262	-1.64 ~~ug/L #~~ NSL	1
7) Chloroethane	5.05	64	2826	2.71 ~~ug/L~~ NRT	95
9) (F113) 1,1,2-Trichloro-tri	6.35	151	17555	5.32 ug/L 0.1064	98
11) Acetone	6.48	58	10674	12.21 ~~ug/L~~ NT	92
12) (IPA) Leak Check Compound	6.46	45	231550	1147.17 ~~ug/L #~~ SM	86
13) Carbon disulfide	6.84	76	4995	0.36 ~~ug/L #~~ NT	92
14) Methylene Chloride	7.06	84	5984	1.30 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.14	59	328	1.14 ~~ug/L #~~	77
19) cis-1,2-Dichloroethene	8.99	96	271	0.05 ~~ug/L #~~	3
22) (DIPE) Diisopropyl Ether	8.15	45	260	0.02 ~~ug/L #~~	48
24) Chloroform	9.20	83	1793	0.20 ~~ug/L #~~	1
31) Benzene	9.92	78	11819	0.75 ~~ug/L #~~	81
32) 1,2-Dichloroethane	9.92	62	5561	0.99 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	262	0.10 ~~ug/L #~~	100
41) Toluene	12.28	91	30636	1.73 ug/L 0.0346	91
46) 2-Hexanone	12.95	43	262	0.09 ~~ug/L~~ NT	37
51) Ethylbenzene	14.02	91	10200	0.51 ug/L # 0.0102	80
52) m,p-Xylenes	14.14	106	14632	2.04 ug/L 0.0408	97
53) o-Xylene	14.62	106	4834	0.68 ug/L 0.0136	79
54) Styrene	14.62	104	1936	-0.68 ~~ug/L #~~	40
56) Isopropylbenzene	15.00	105	287	0.01 ~~ug/L #~~	55

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700012.D Vial: 3
Acq On : 27 May 2014 3:05 pm Operator: DN
Sample : 3E42701-09 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 15:29 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

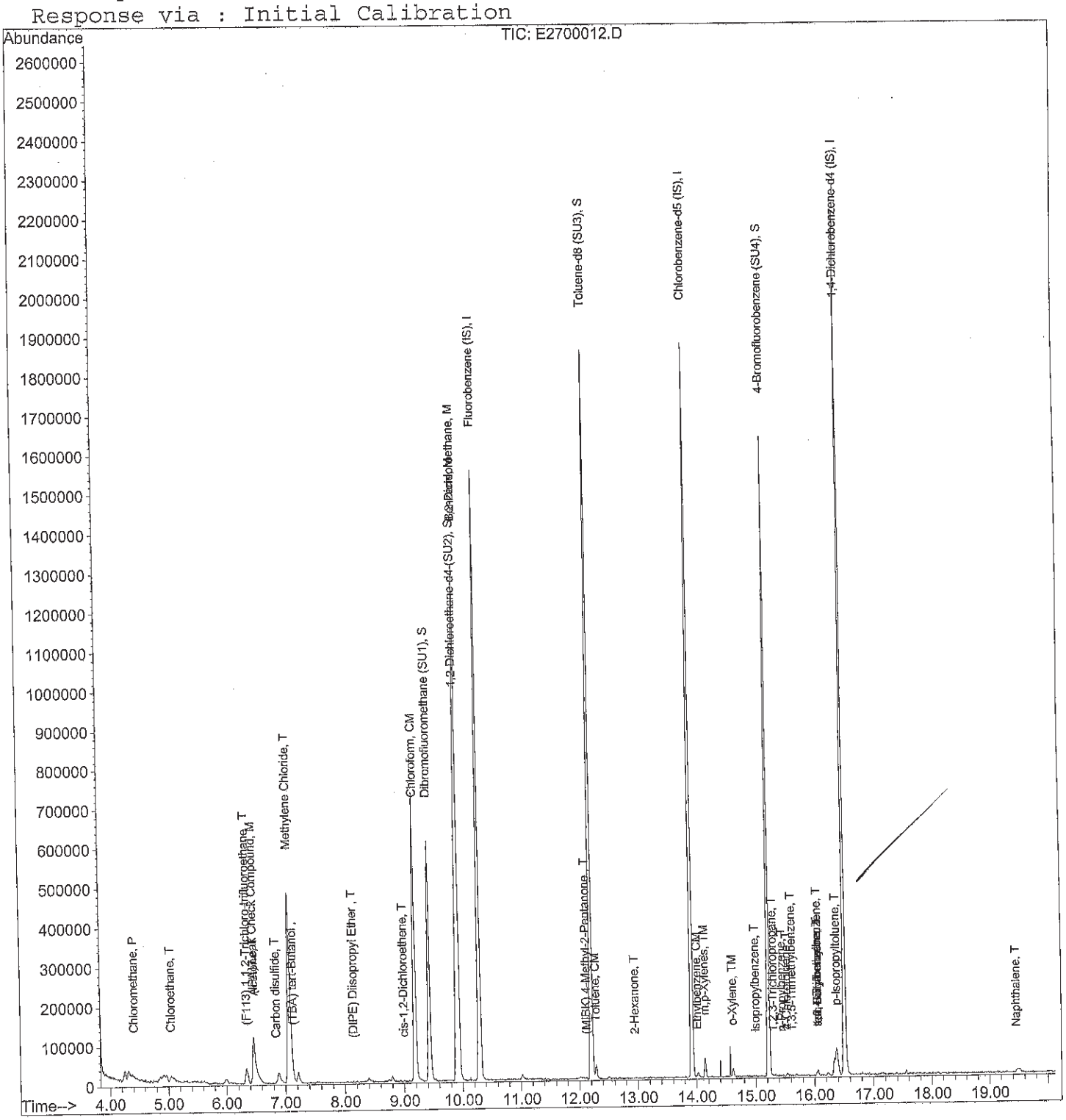
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
57) 1,2,3-Trichloropropane	15.31	75	307	0.06 ~~ug/L~~ #	36
62) n-Propylbenzene	15.45	91	2598	0.09 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.53	91	269	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	857	0.05 ~~ug/L~~	89
65) 4-Chlorotoluene	15.53	91	269	0.02 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.05	119	653	0.05 ~~ug/L~~ #	48
67) 1,2,4-Trimethylbenzene	16.06	105	6239	0.35 ug/L	97
68) sec-Butylbenzene	16.06	105	6239	0.27 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1253	0.07 ~~ug/L~~ #	56
77) Naphthalene	19.45	128	986	0.07 ~~ug/L~~	100

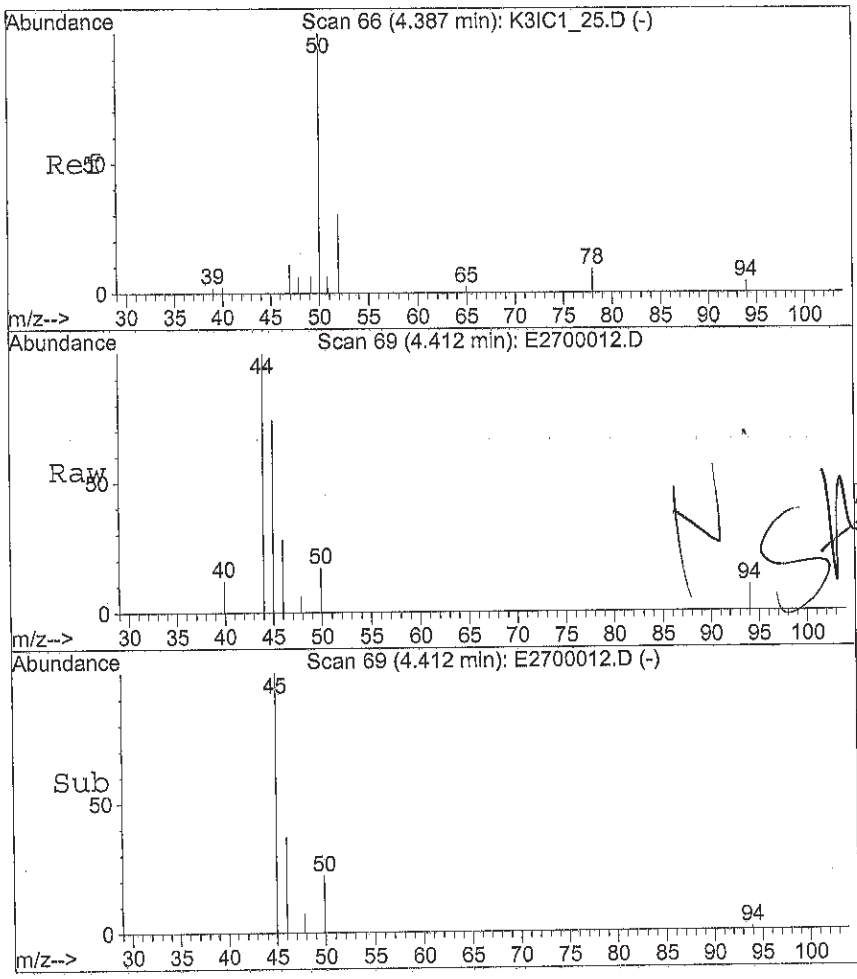
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700012.D Vial: 3
Acq On : 27 May 2014 3:05 pm Operator: DN
Sample : 3E42701-09 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 15:29 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

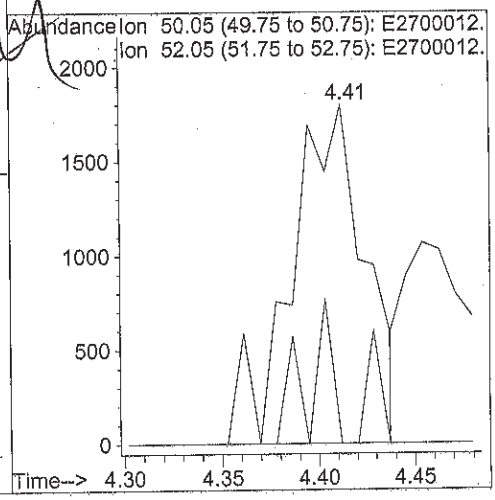


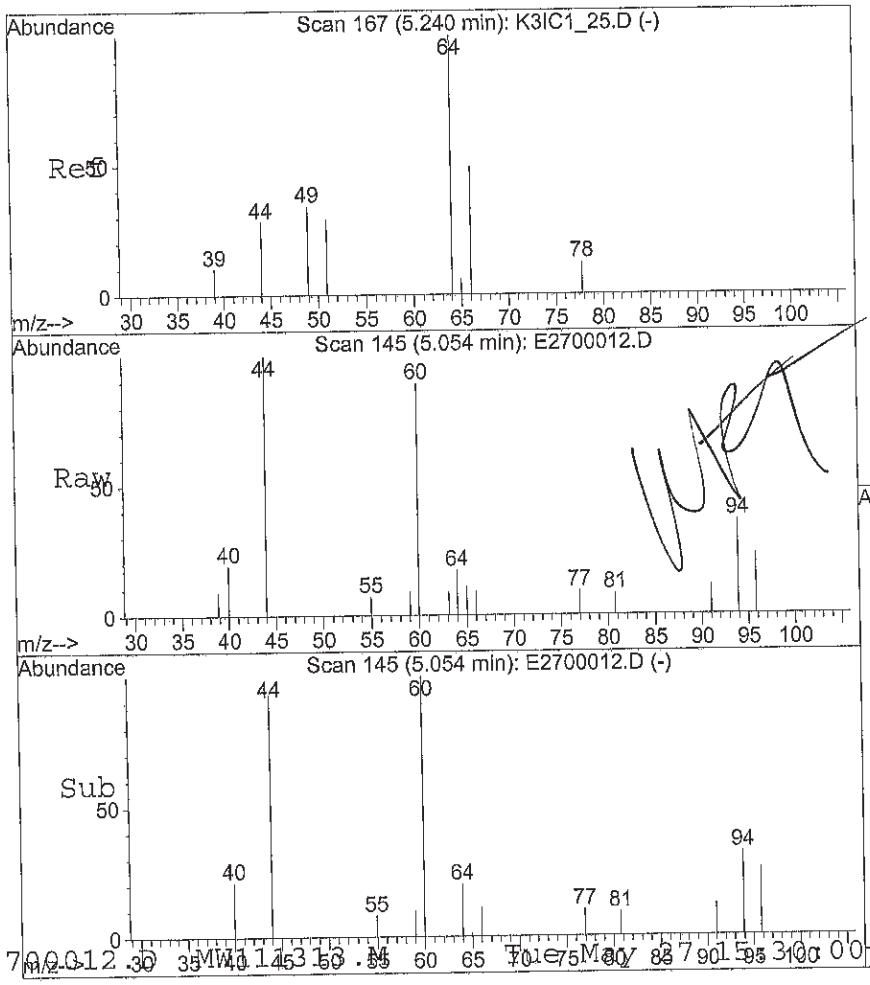


#4
Chloromethane
Concen: 0.49 ug/L
RT: 4.41 min Scan# 69
Delta R.T. 0.02 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 50 Resp: 4823

Ion	Ratio	Lower	Upper
50	100		
52	8.1	26.9	40.3#

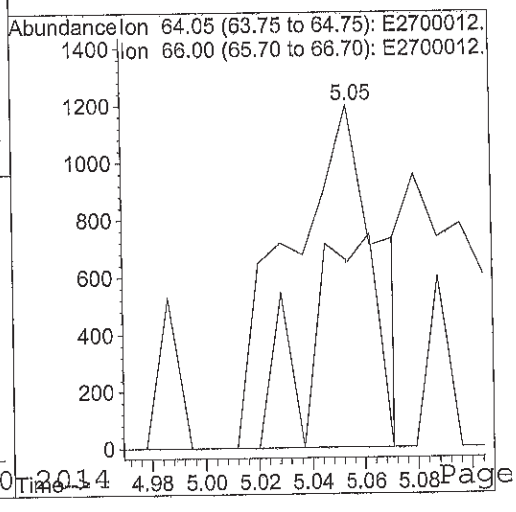


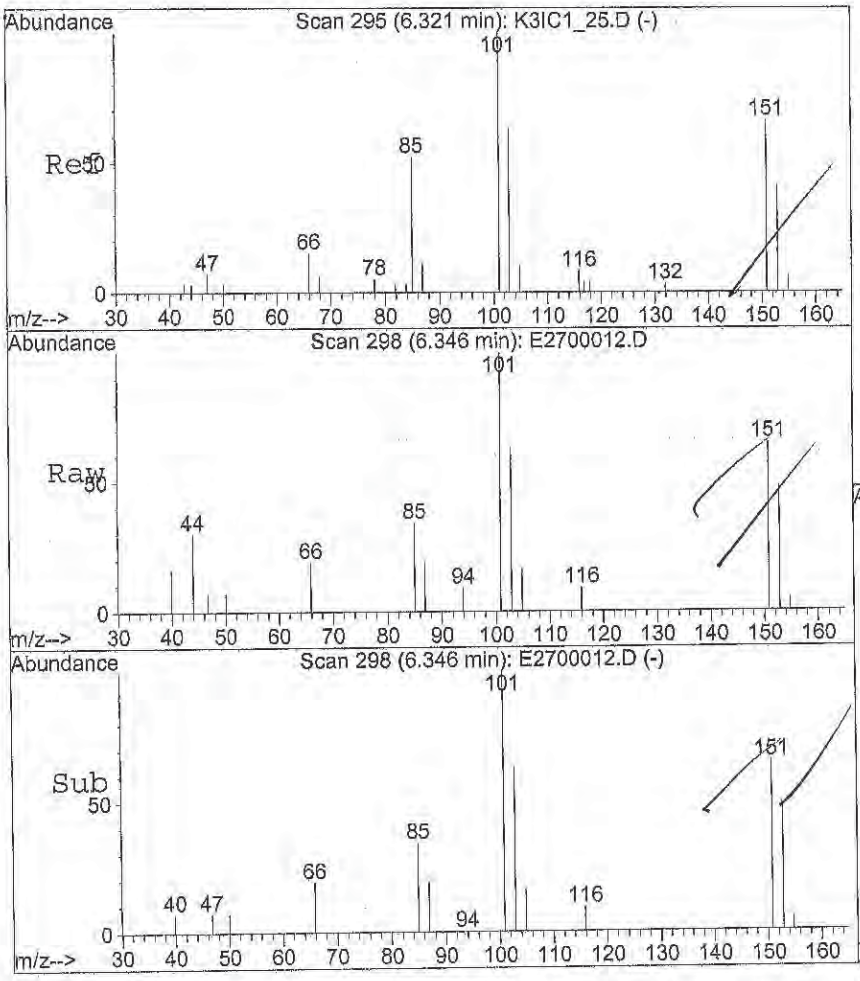


#7
Chloroethane
Concen: 2.71 ug/L
RT: 5.05 min Scan# 145
Delta R.T. -0.19 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 64 Resp: 2826

Ion	Ratio	Lower	Upper
64	100		
66	47.6	35.4	53.0

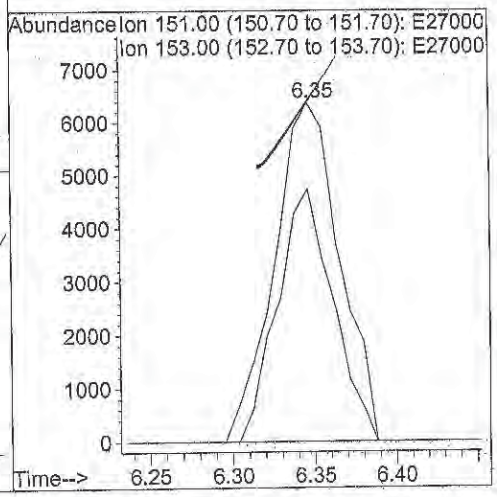


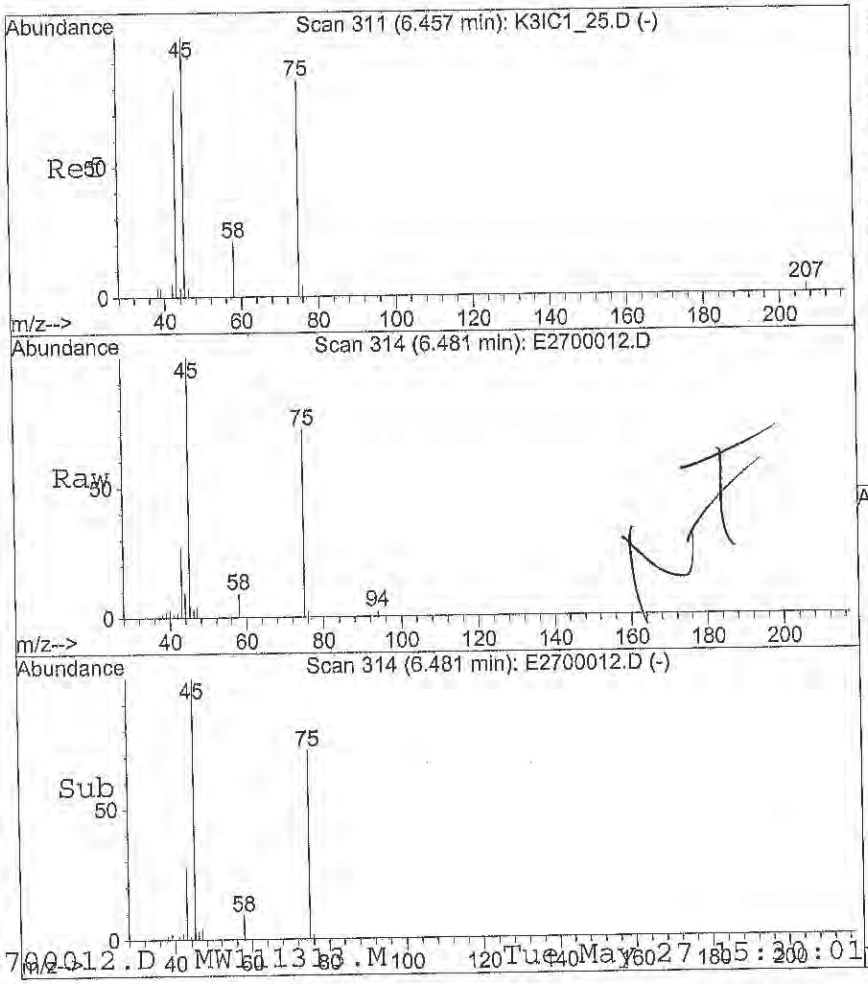


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 5.32 ug/L
RT: 6.35 min Scan# 298
Delta R.T. 0.03 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:151 Resp: 17555

Ion	Ratio	Lower	Upper
151	100		
153	63.3	49.6	74.4

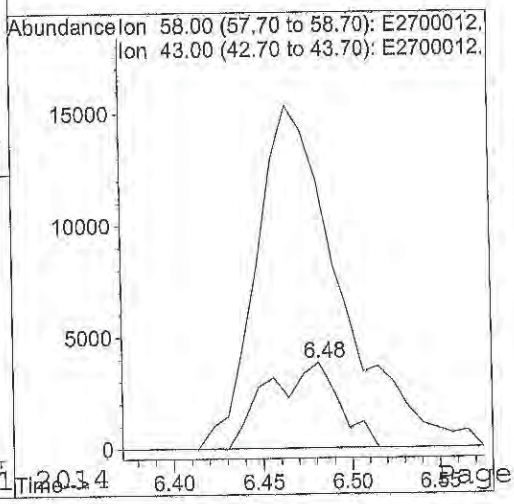


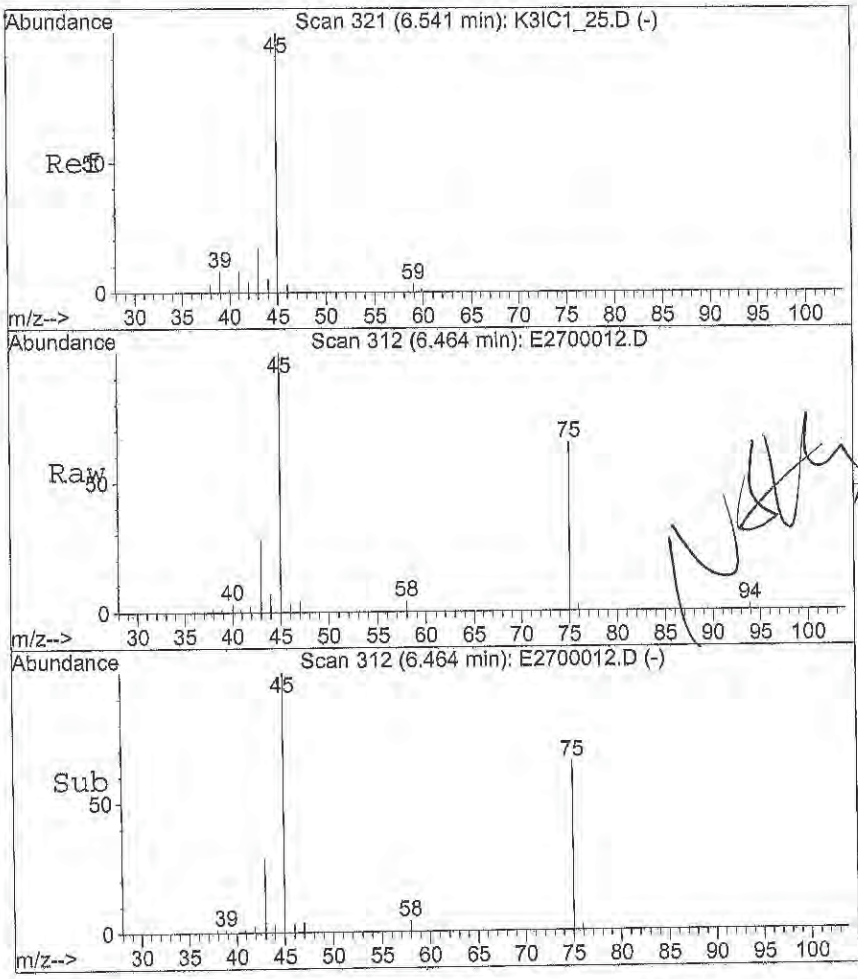


#11
Acetone
Concen: 12.21 ug/L
RT: 6.48 min Scan# 314
Delta R.T. 0.02 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 58 Resp: 10674

Ion	Ratio	Lower	Upper
58	100		
43	470.8	360.9	541.3

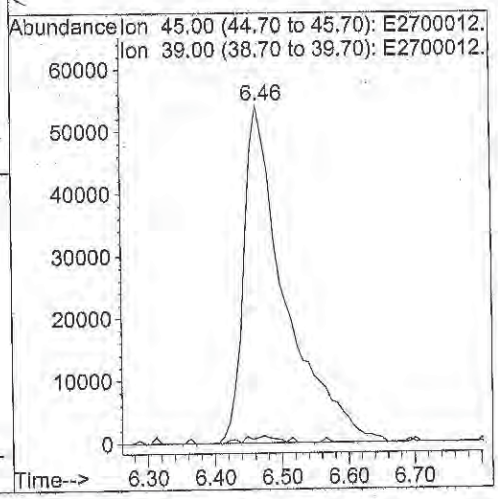


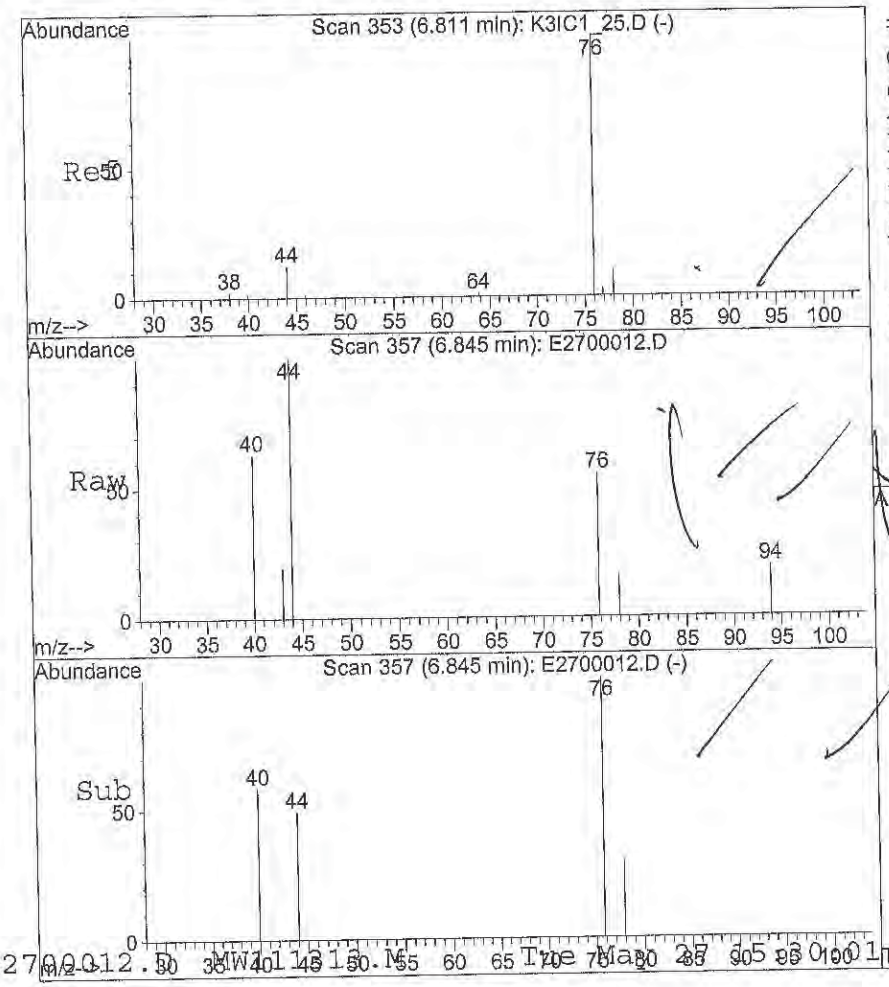


#12
(IPA) Leak Check Compound
Concen: 1147.17 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 45 Resp: 231550

Ion	Ratio	Lower	Upper
45	100		
39	1.5	4.9	7.3#

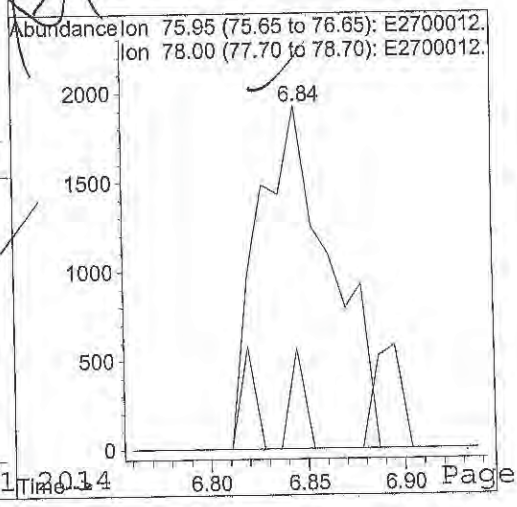


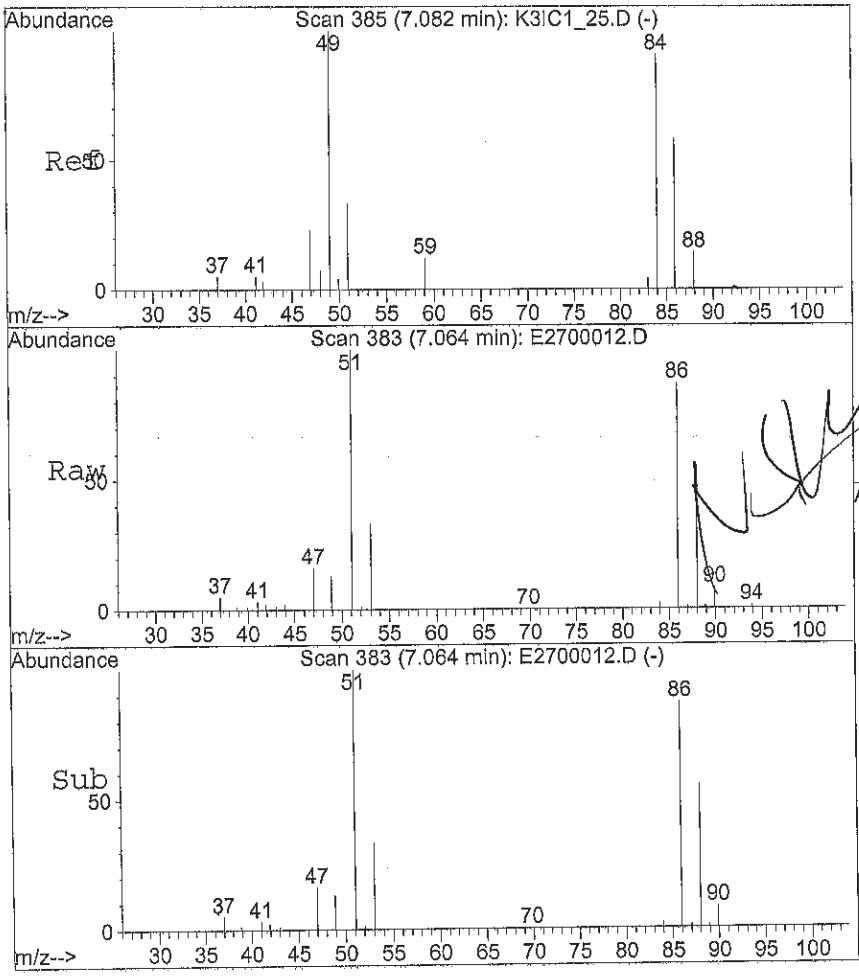


#13
Carbon disulfide
Concen: 0.36 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 76 Resp: 4995

Ion	Ratio	Lower	Upper
76	100		
78	5.7	7.0	10.4#

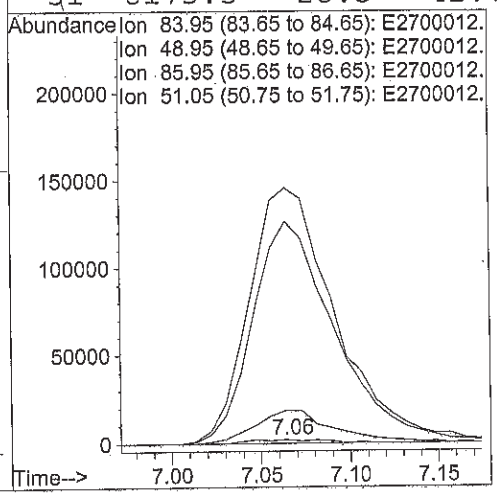


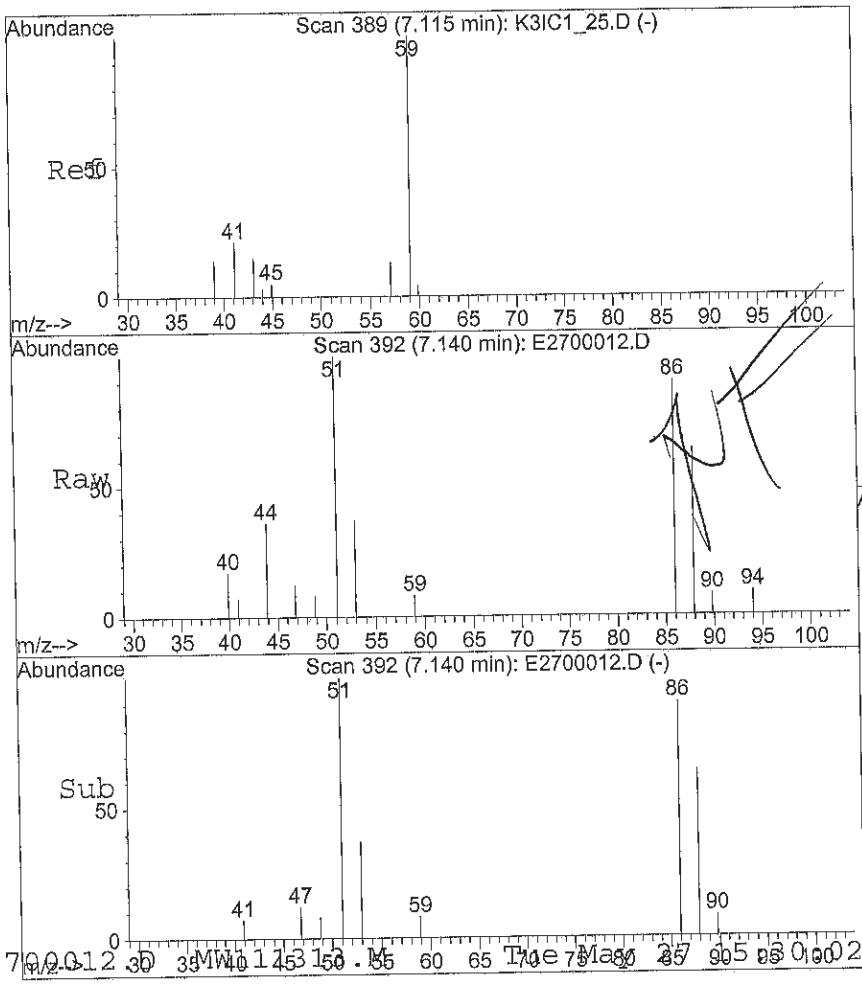


#14
Methylene Chloride
Concen: 1.30 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 84 Resp: 5984

Ion	Ratio	Lower	Upper
84	100		
49	941.9	89.8	134.6#
86	6785.8	51.1	76.7#
51	8173.5	28.5	42.7#

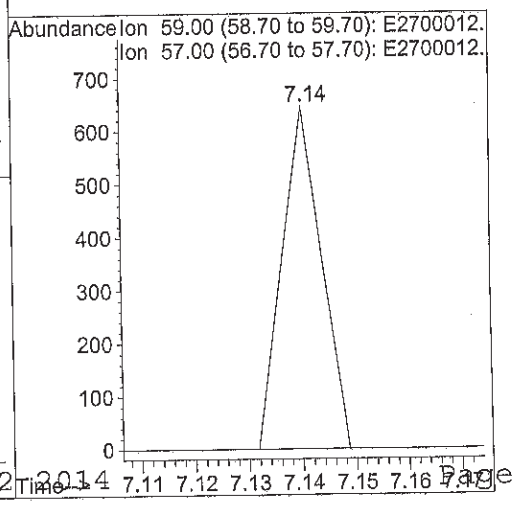


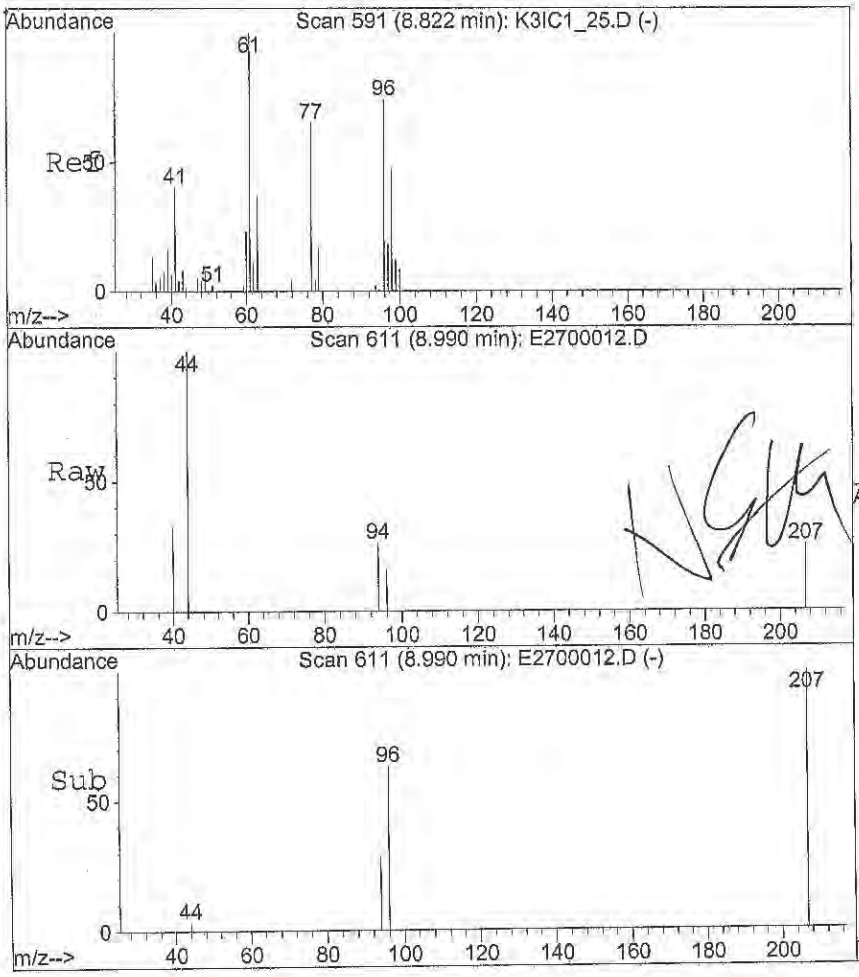


#15
(TBA) tert-Butanol
Concen: 1.14 ug/L
RT: 7.14 min Scan# 392
Delta R.T. 0.02 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 59 Resp: 328

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

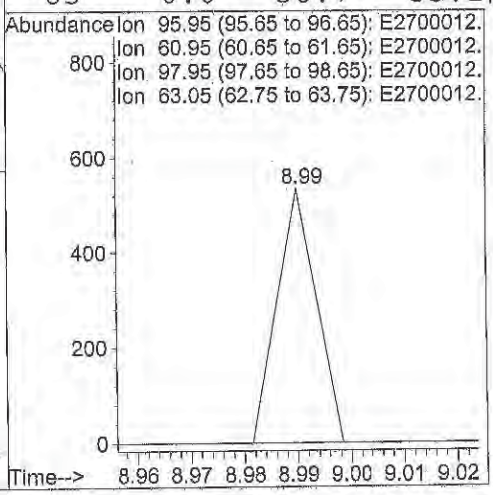


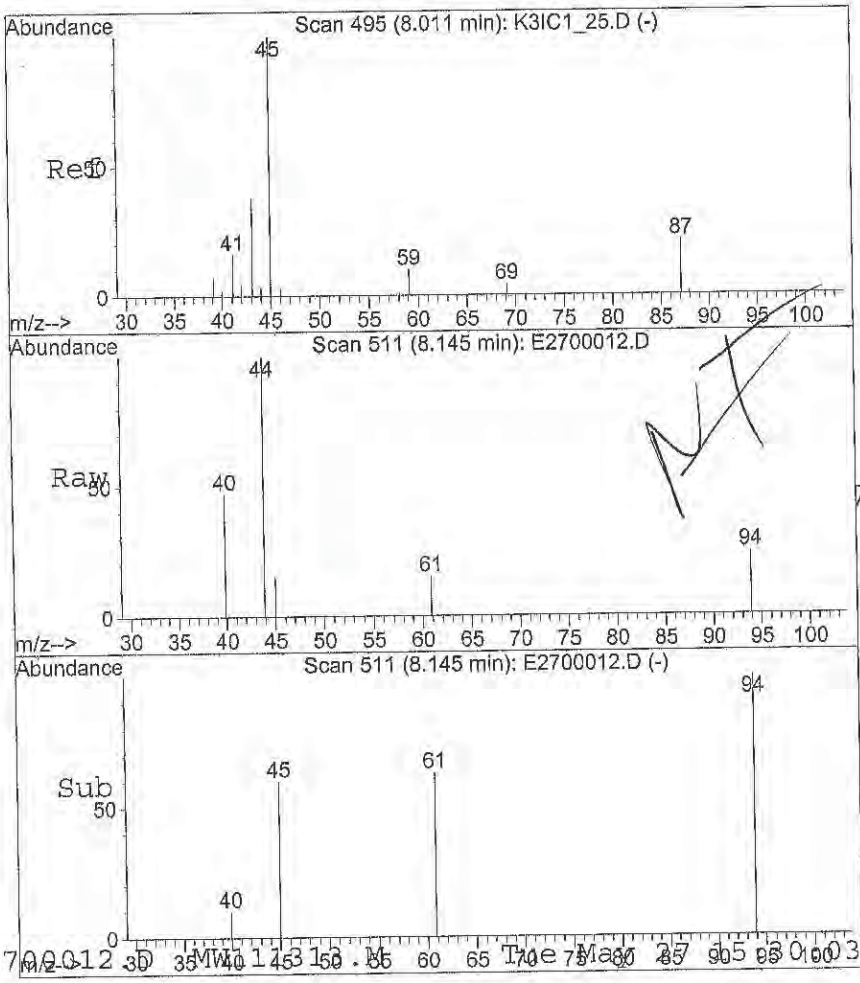


#19
cis-1,2-Dichloroethene
Concen: 0.05 ug/L
RT: 8.99 min Scan# 611
Delta R.T. 0.17 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 96 Resp: 271

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

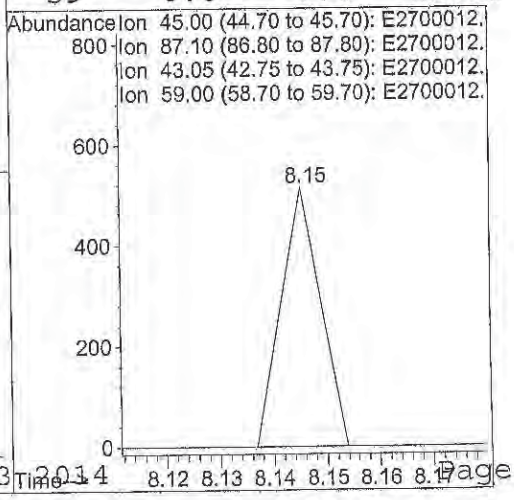


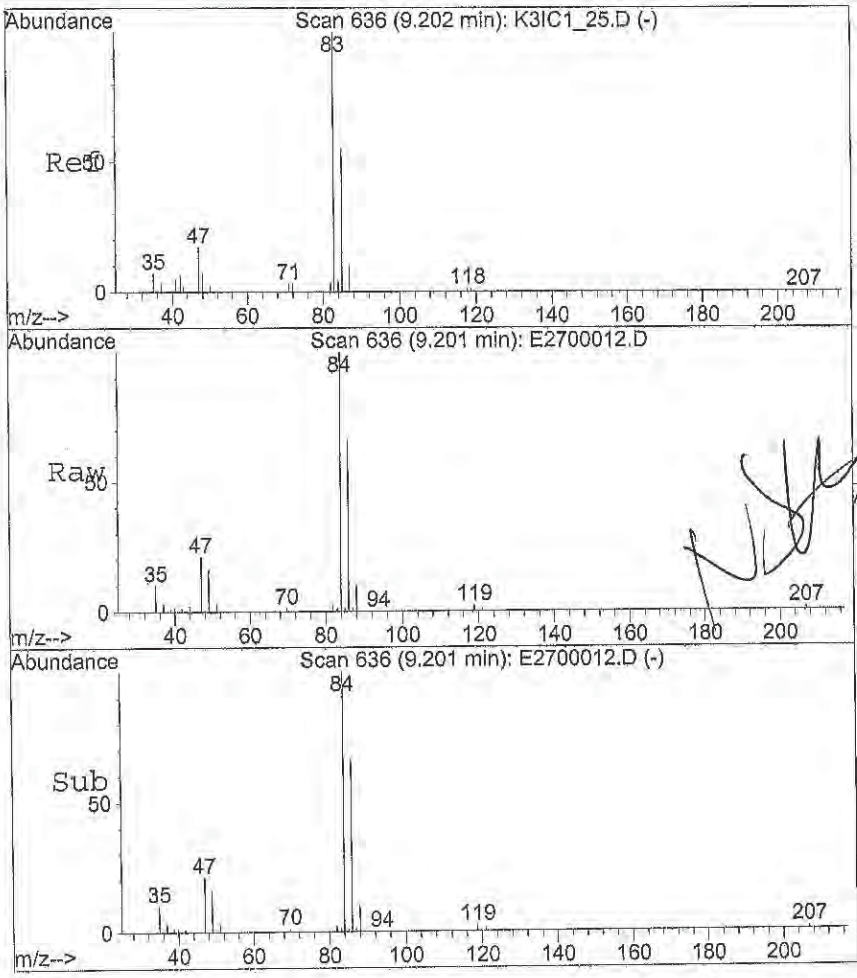


#22
(DIPE) Diisopropyl Ether
Concen: 0.02 ug/L
RT: 8.15 min Scan# 511
Delta R.T. 0.13 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 45 Resp: 260

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

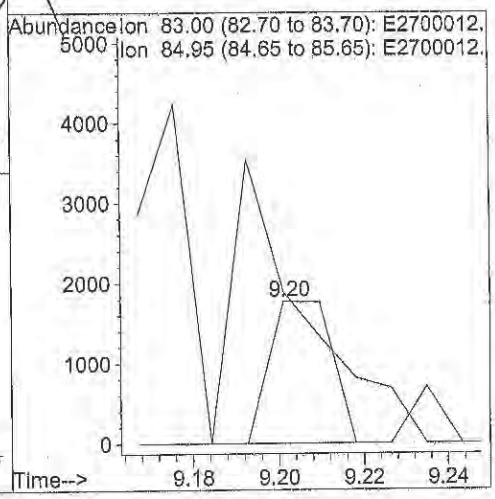


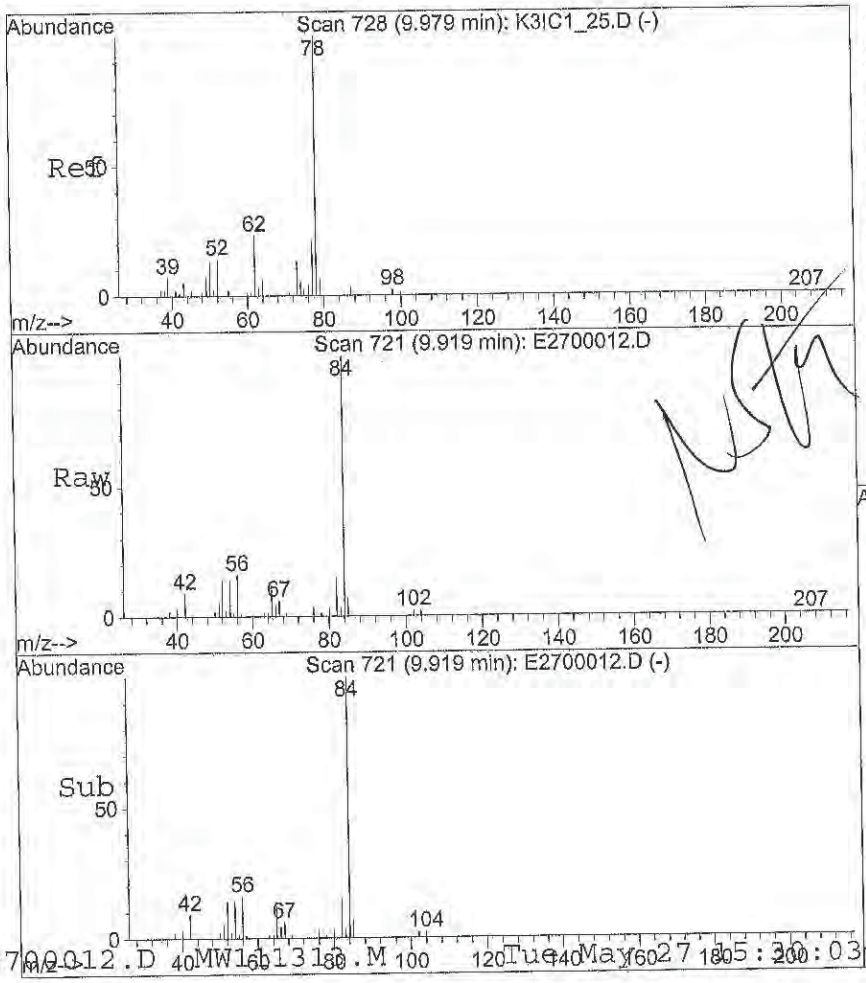


#24
Chloroform
Concen: 0.20 ug/L
RT: 9.20 min Scan# 636
Delta R.T. -0.00 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 83 Resp: 1793

Ion	Ratio	Lower	Upper
83	100		
85	233.4	51.8	77.6#

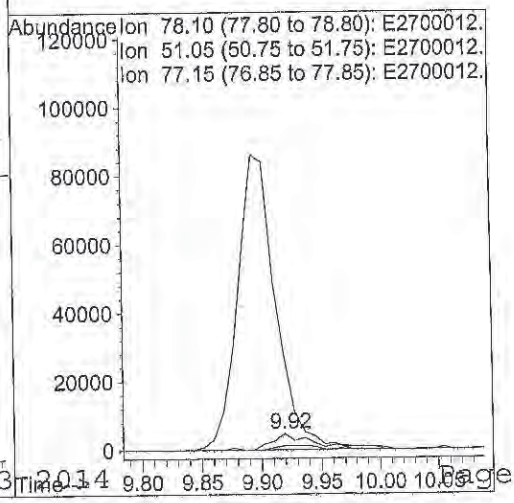


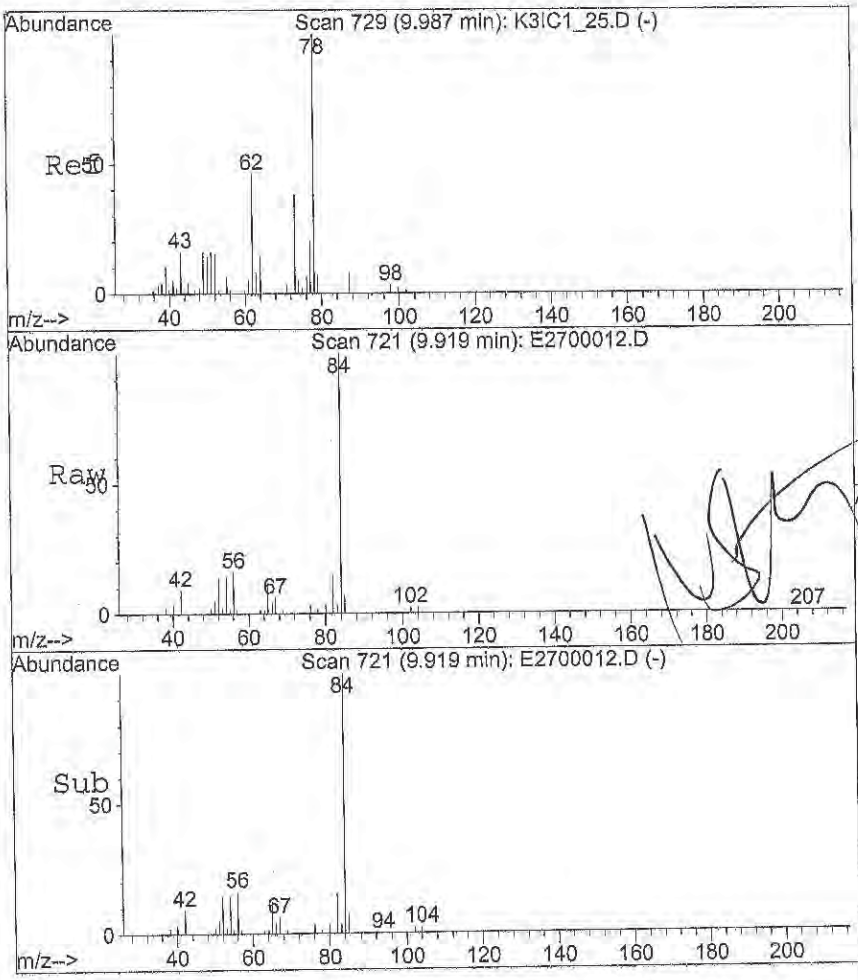


#31
Benzene
Concen: 0.75 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.06 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 78 Resp: 11819

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	20.9	16.6	24.8

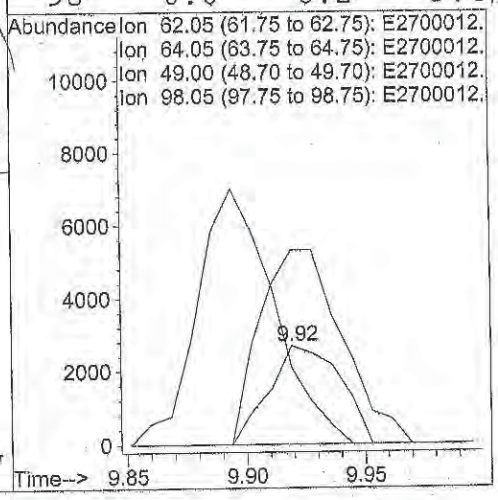


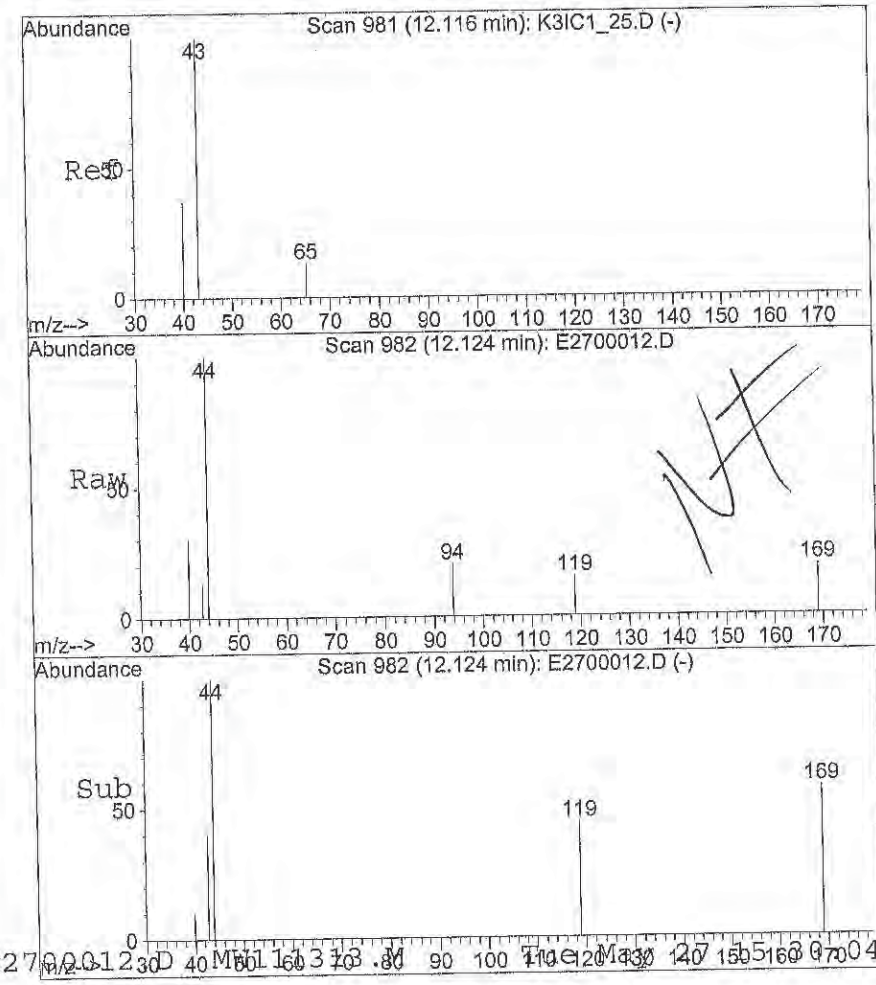


#32
1,2-Dichloroethane
Concen: 0.99 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 62 Resp: 5561

Ion	Ratio	Lower	Upper
62	100		
64	230.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

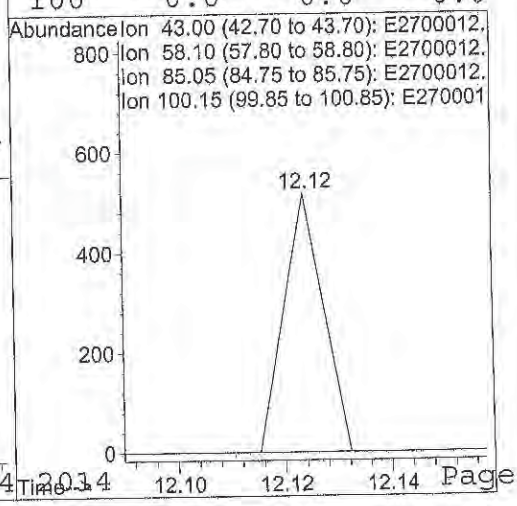


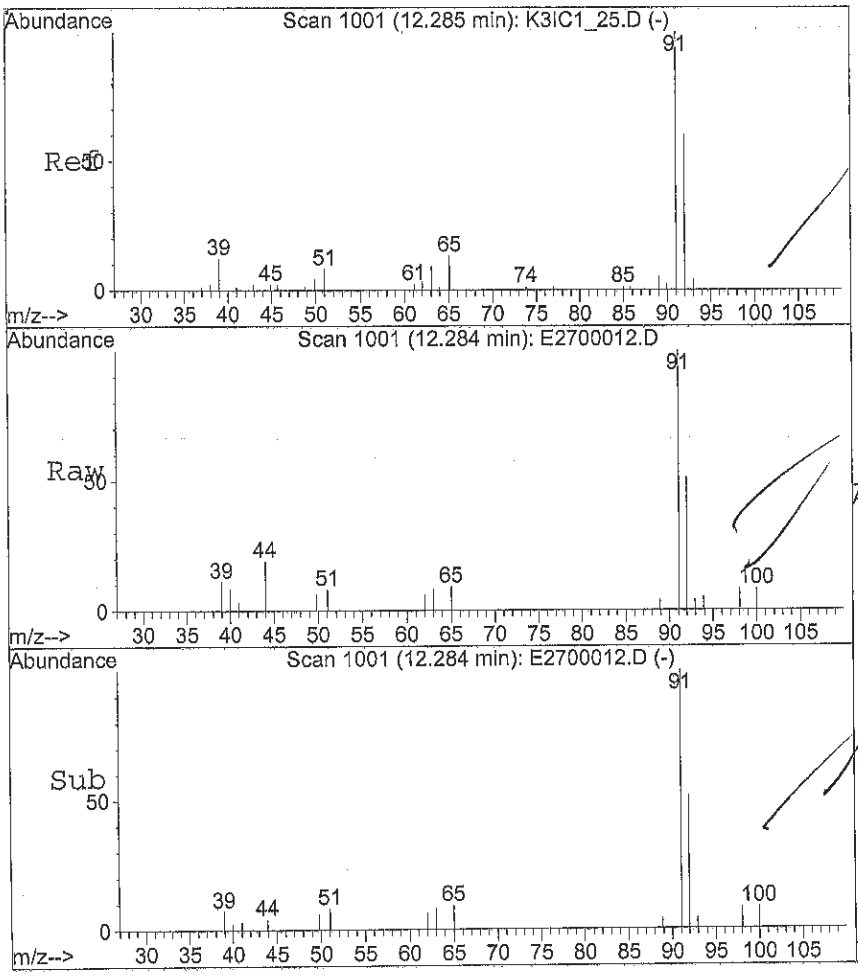


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.10 ug/L
RT: 12.12 min Scan# 982
Delta R.T. 0.01 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 43 Resp: 262

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

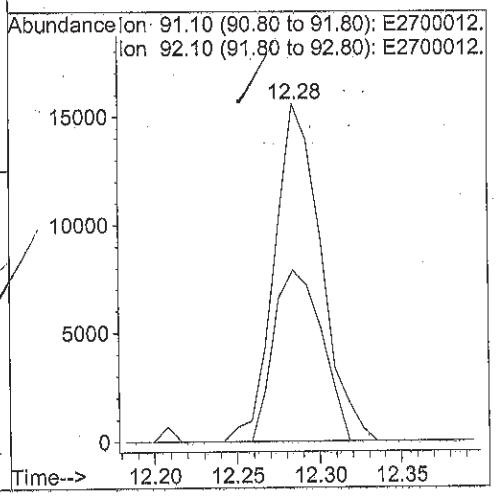


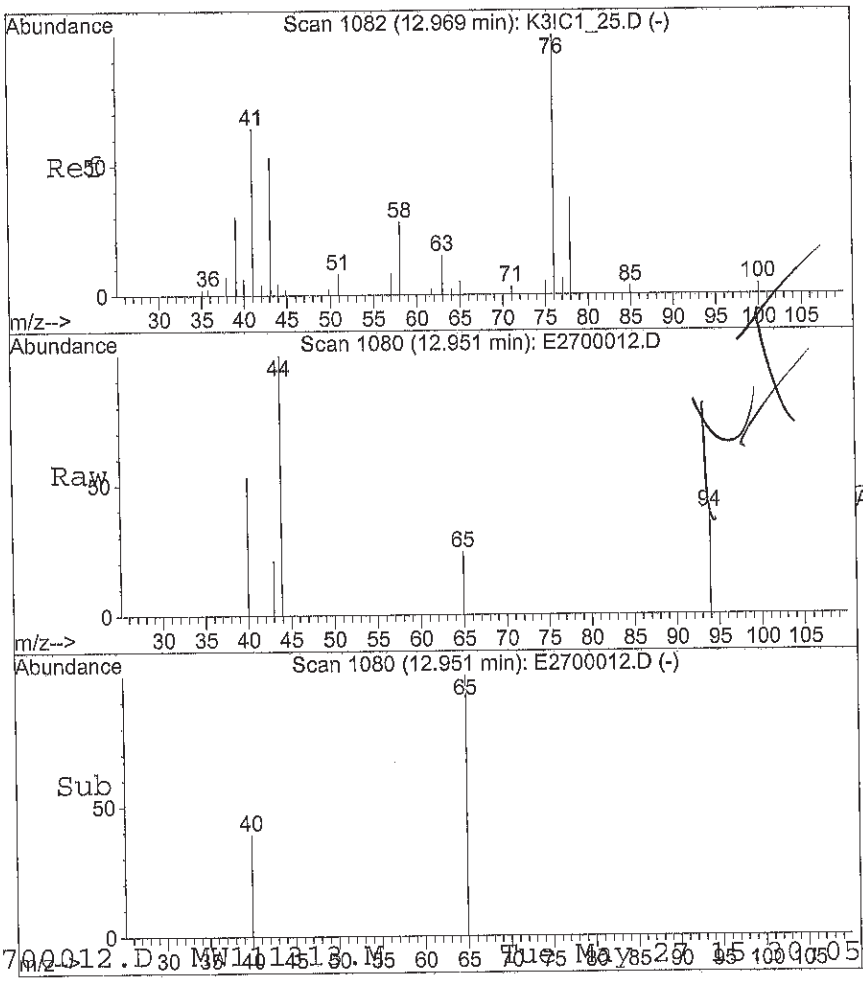


#41
Toluene
Concen: 1.73 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 91 Resp: 30636

Ion	Ratio	Lower	Upper
91	100		
92	52.3	47.4	71.0

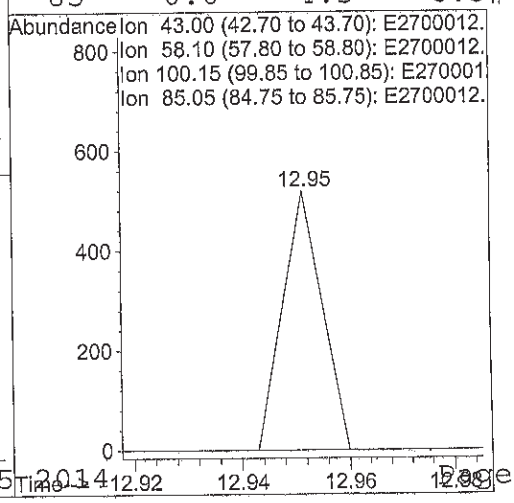


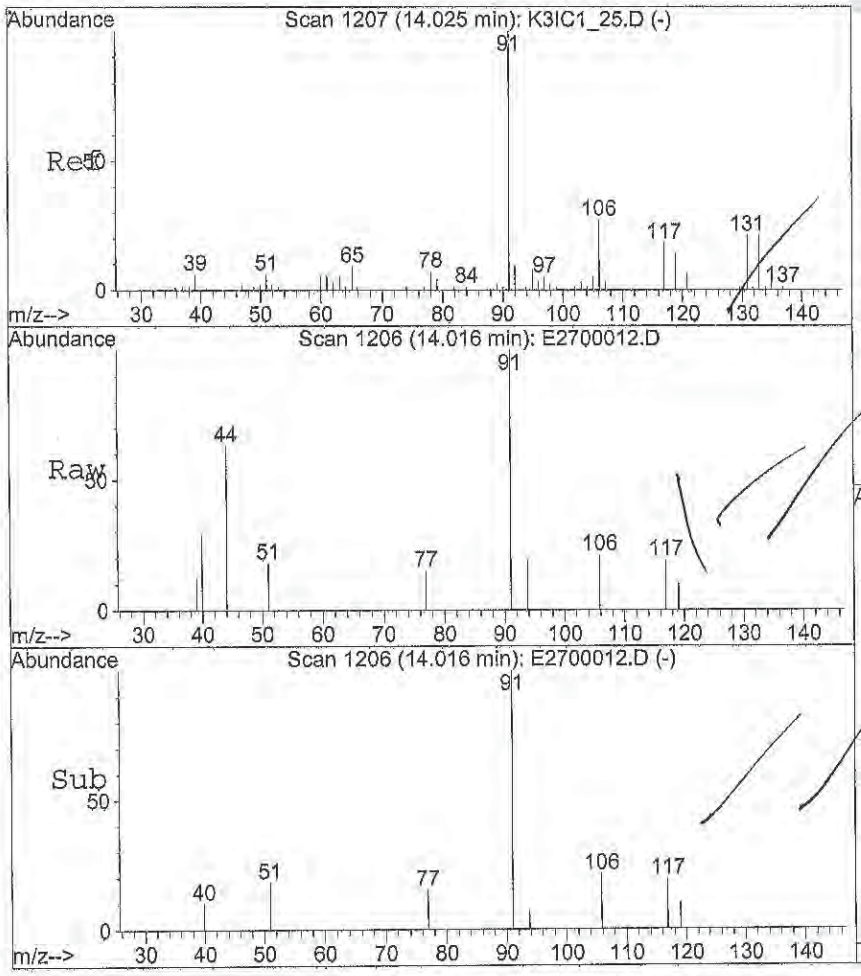


#46
2-Hexanone
Concen: 0.09 ug/L
RT: 12.95 min Scan# 1080
Delta R.T. -0.02 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 43 Resp: 262

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

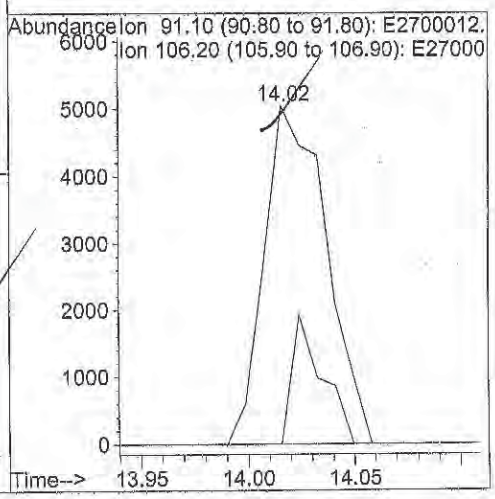


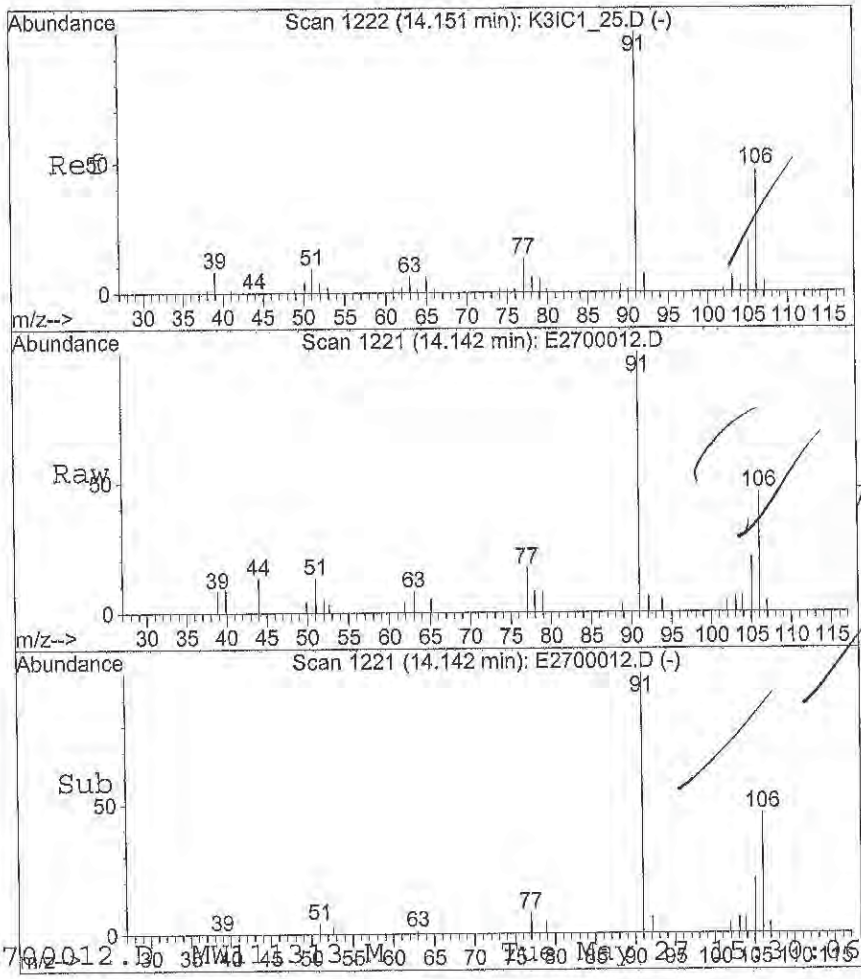


#51
Ethylbenzene
Concen: 0.51 ug/L
RT: 14.02 min Scan# 1206
Delta R.T. -0.01 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 91 Resp: 10200

Ion	Ratio	Lower	Upper
91	100		
106	18.7	23.5	35.3#

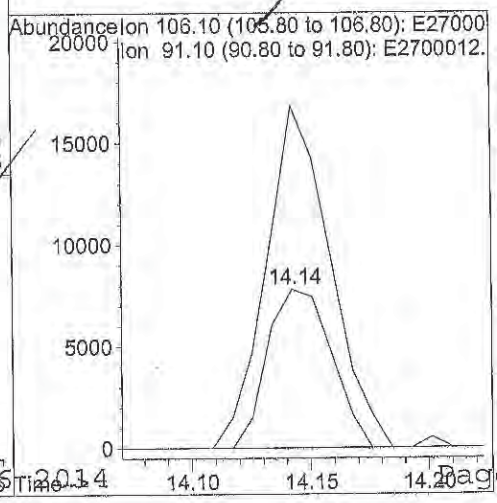


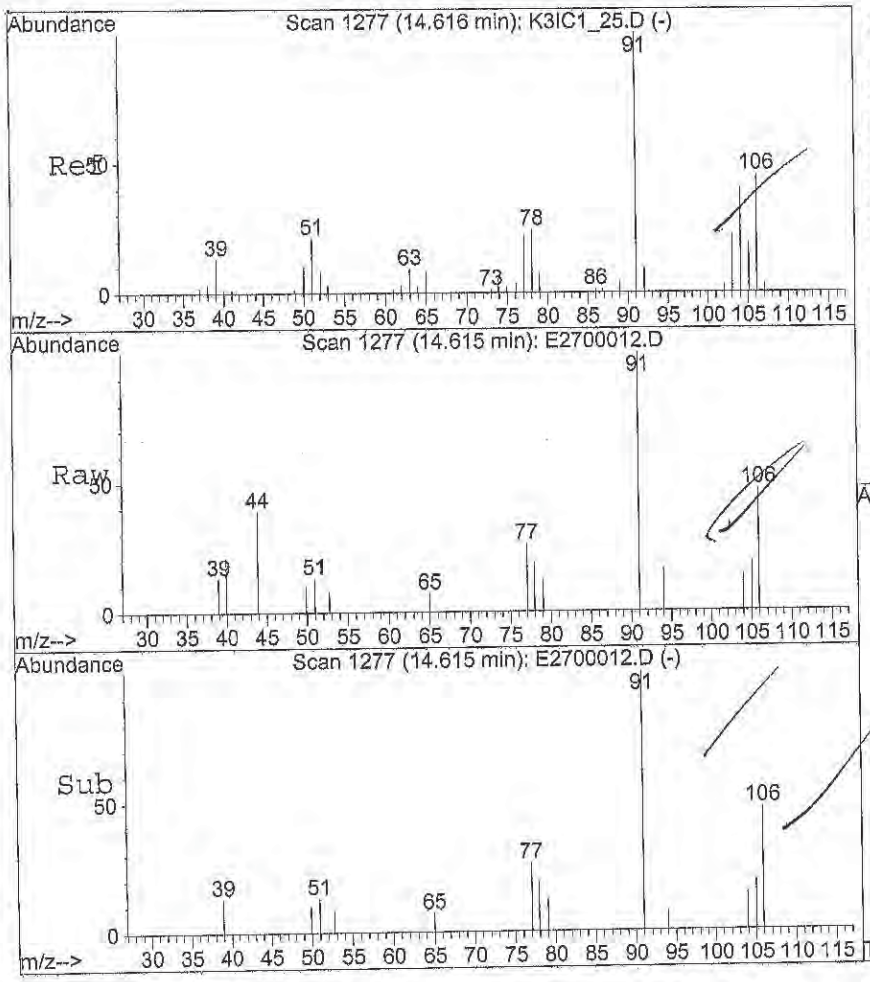


#52
m,p-Xylenes
Concen: 2.04 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:106 Resp: 14632

Ion	Ratio	Lower	Upper
106	100		
91	216.0	177.1	265.7

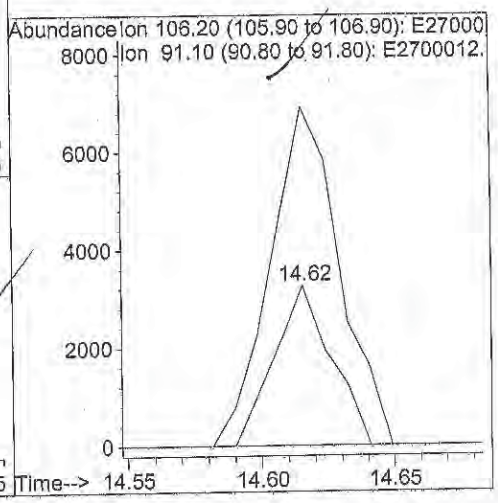


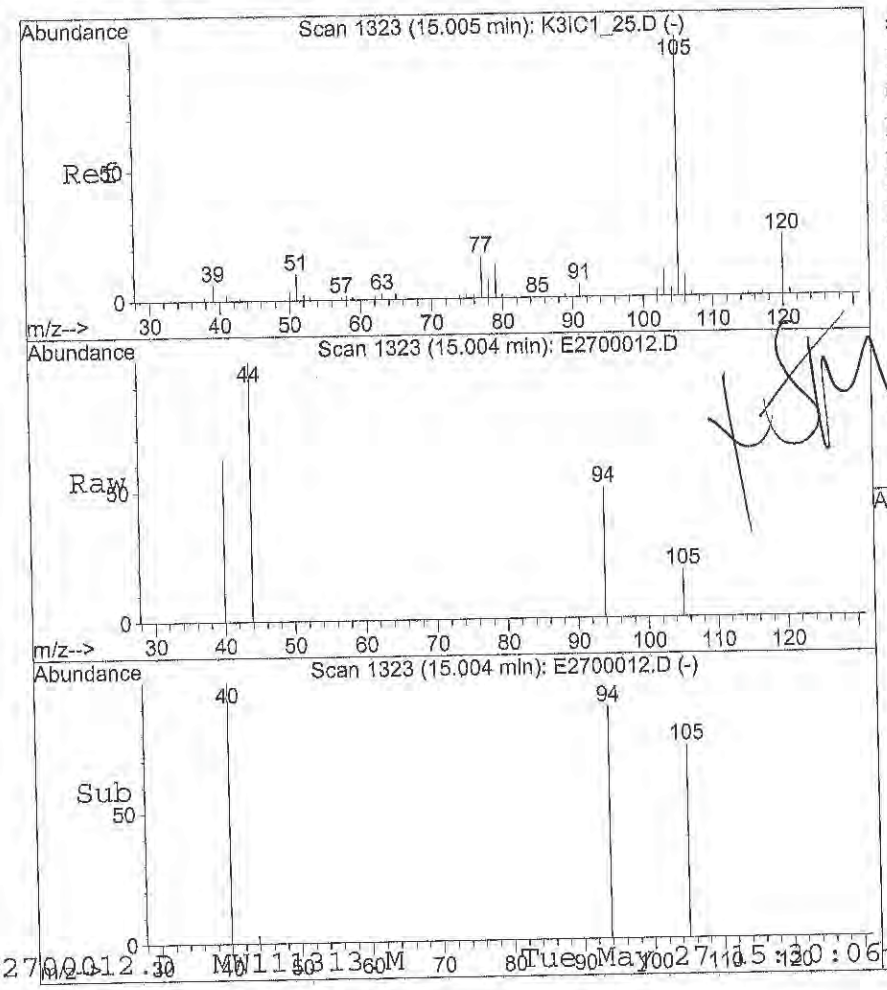


#53
o-Xylene
Concen: 0.68 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:106 Resp: 4834

Ion	Ratio	Lower	Upper
106	100		
91	257.2	179.0	268.6

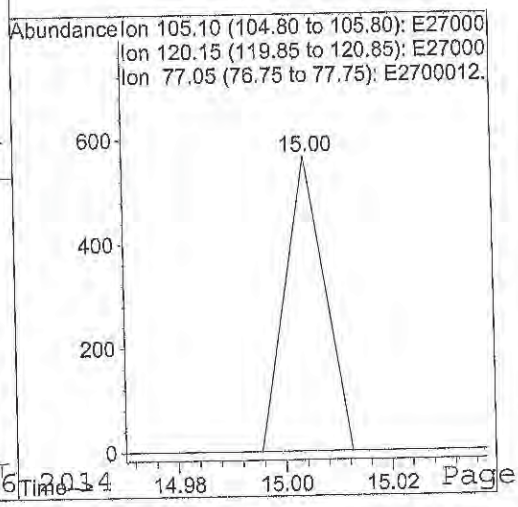


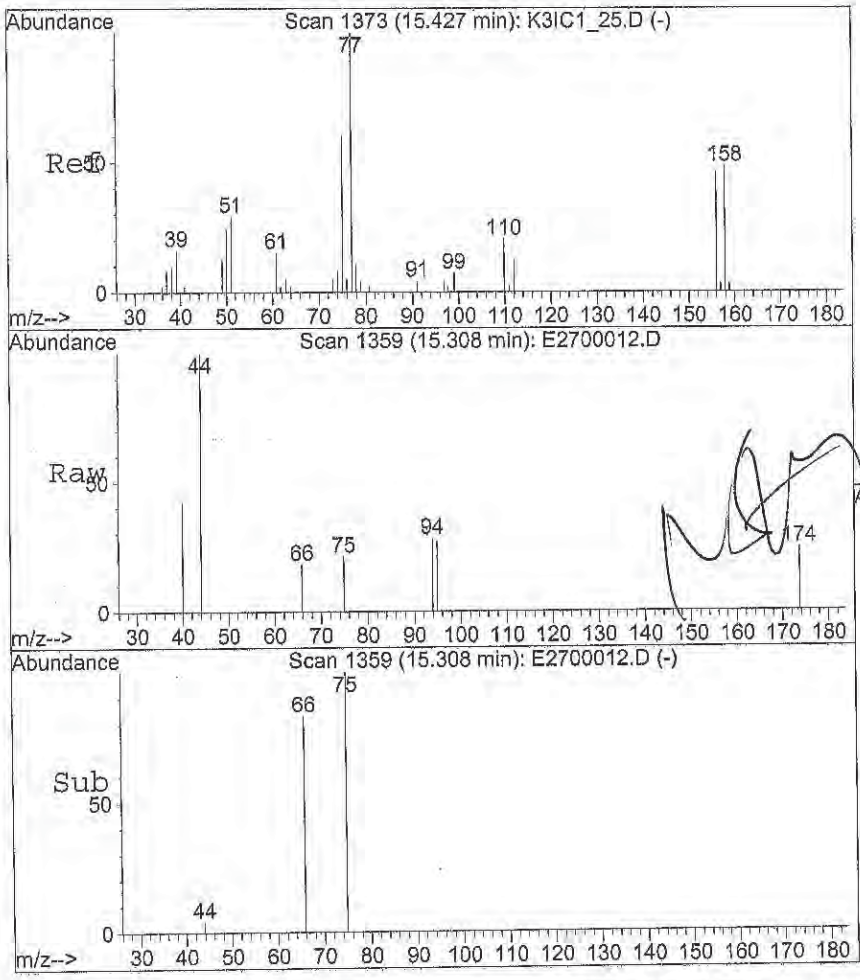


#56
Isopropylbenzene
Concen: 0.01 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.00 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:105 Resp: 287

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

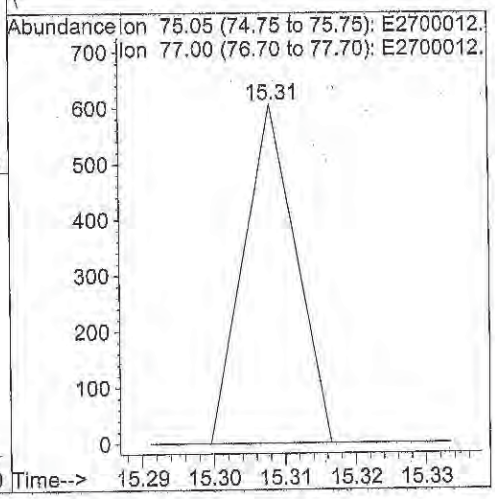


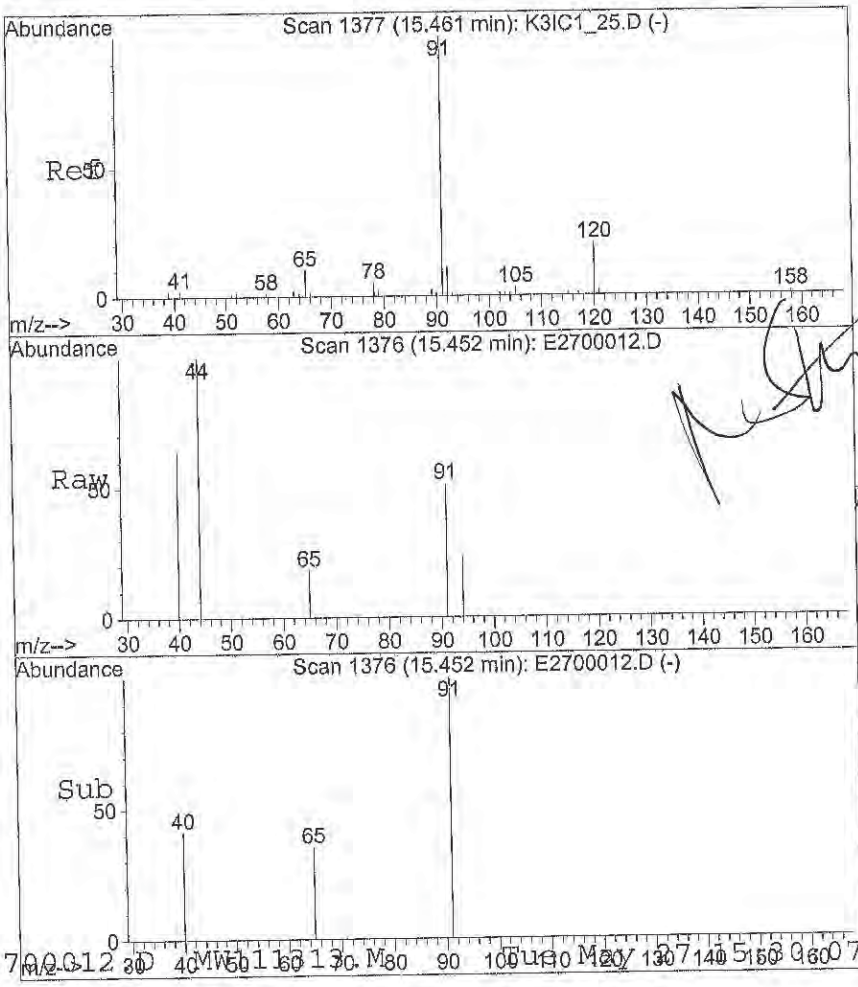


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.31 min Scan# 1359
Delta R.T. -0.12 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 75 Resp: 307

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

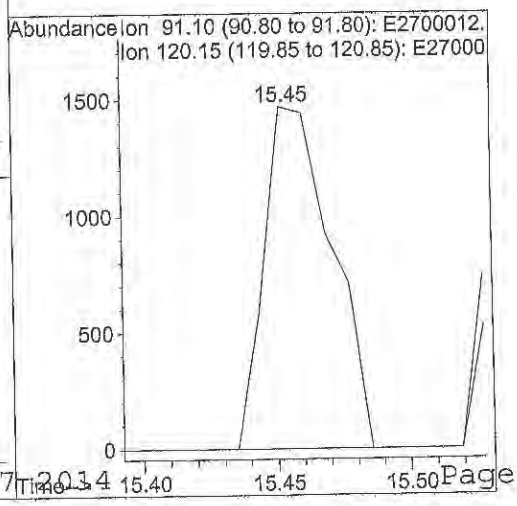


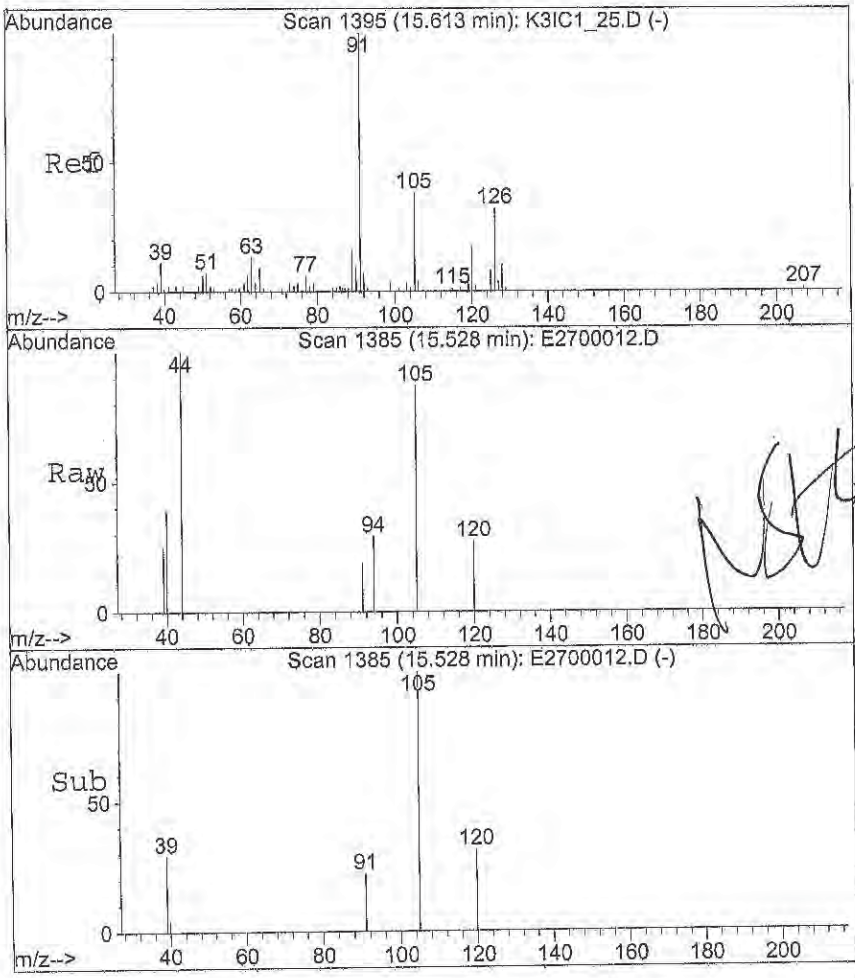


#62
n-Propylbenzene
Concen: 0.09 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 91 Resp: 2598

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

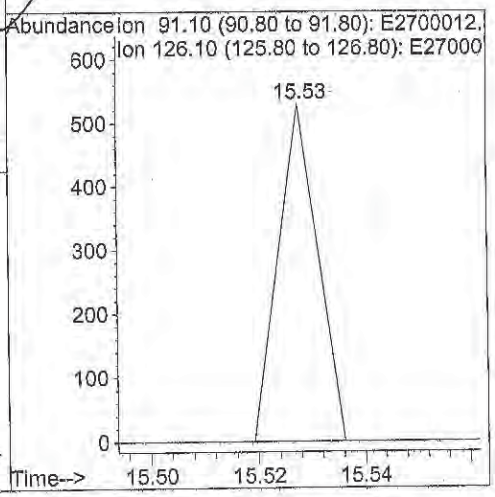


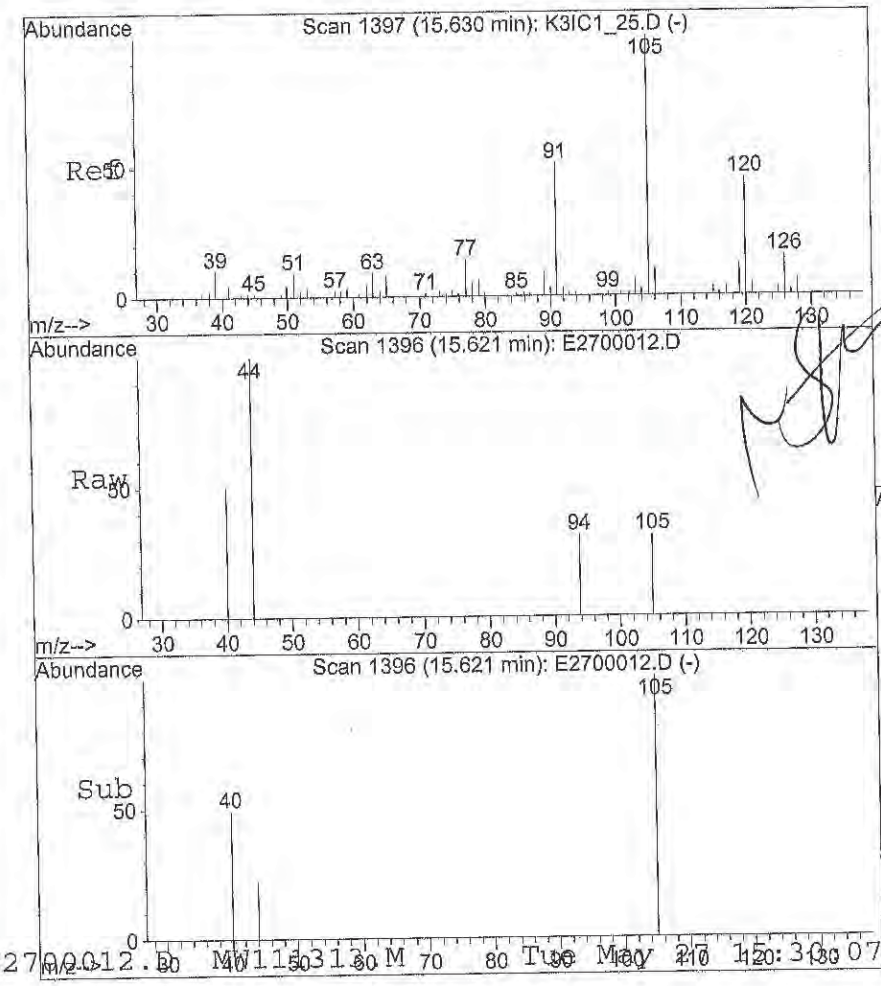


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.53 min Scan# 1385
Delta R.T. -0.09 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 91 Resp: 269

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

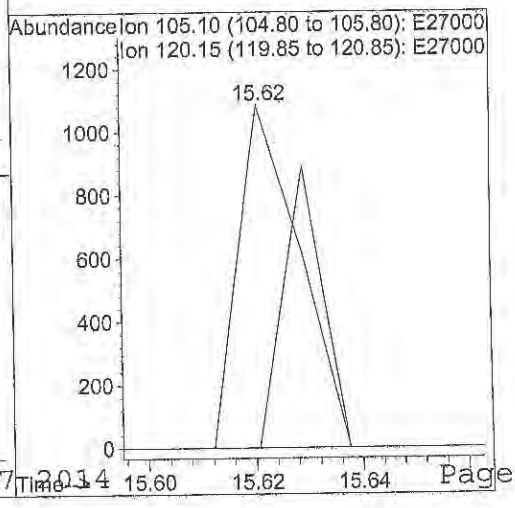


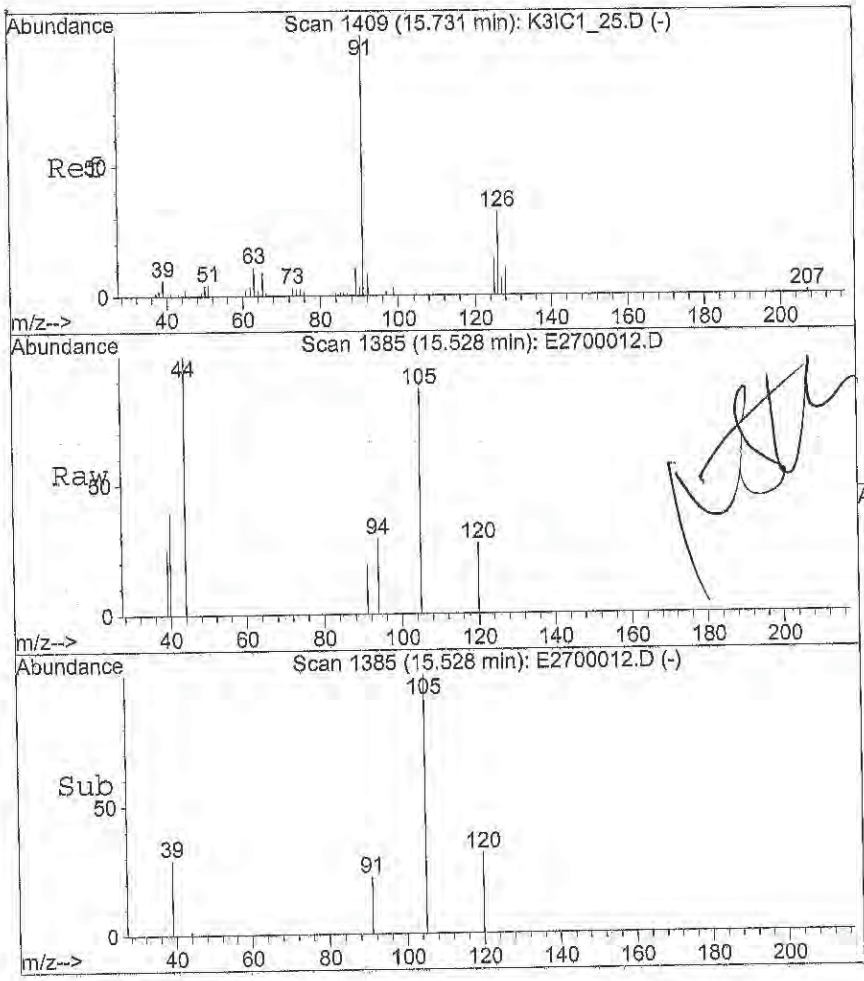


#64
1,3,5-Trimethylbenzene
Concen: 0.05 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:105 Resp: 857

Ion	Ratio	Lower	Upper
105	100		
120	52.6	36.4	54.6

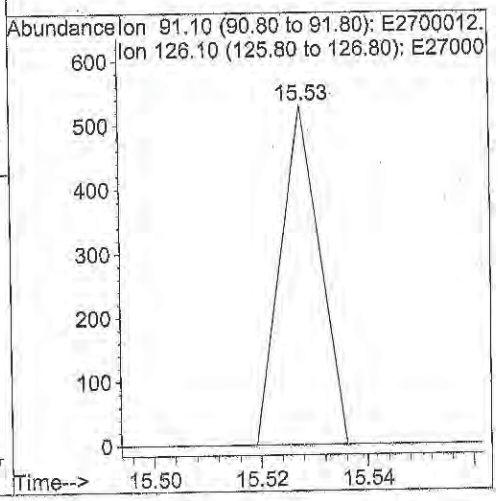


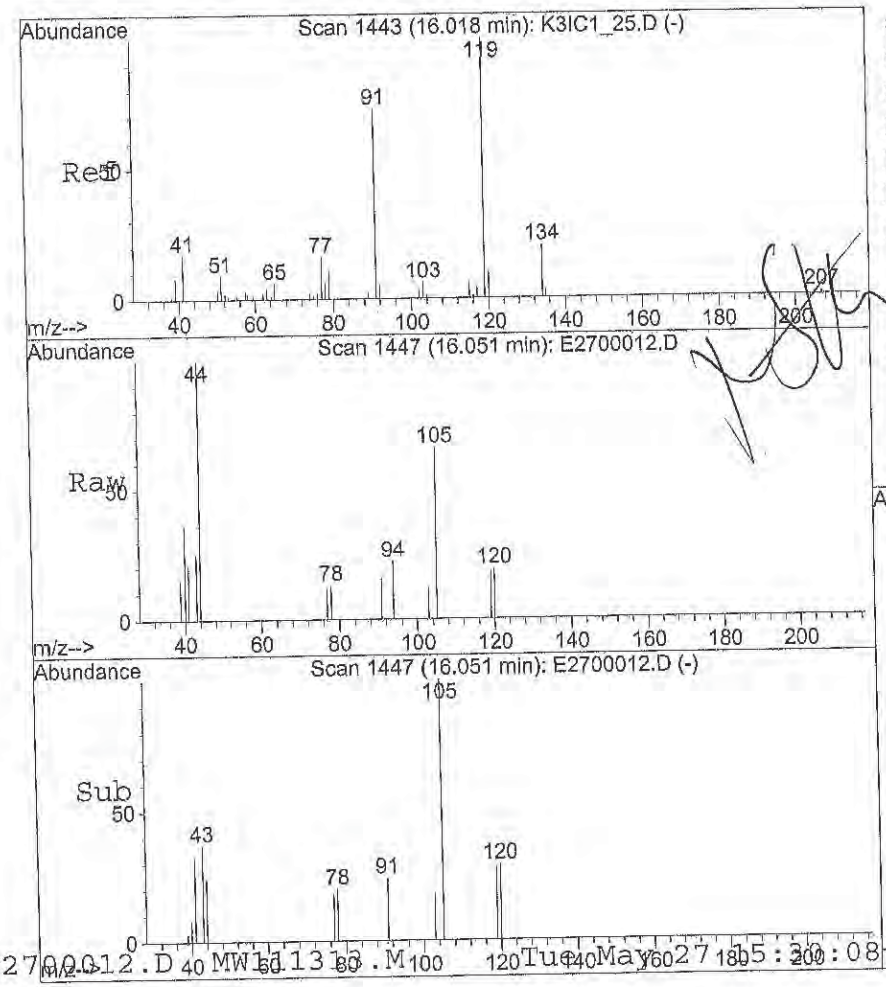


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.53 min Scan# 1385
Delta R.T. -0.20 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion: 91 Resp: 269

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

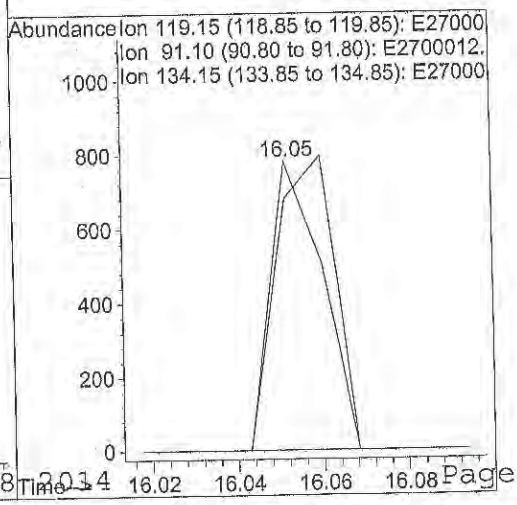


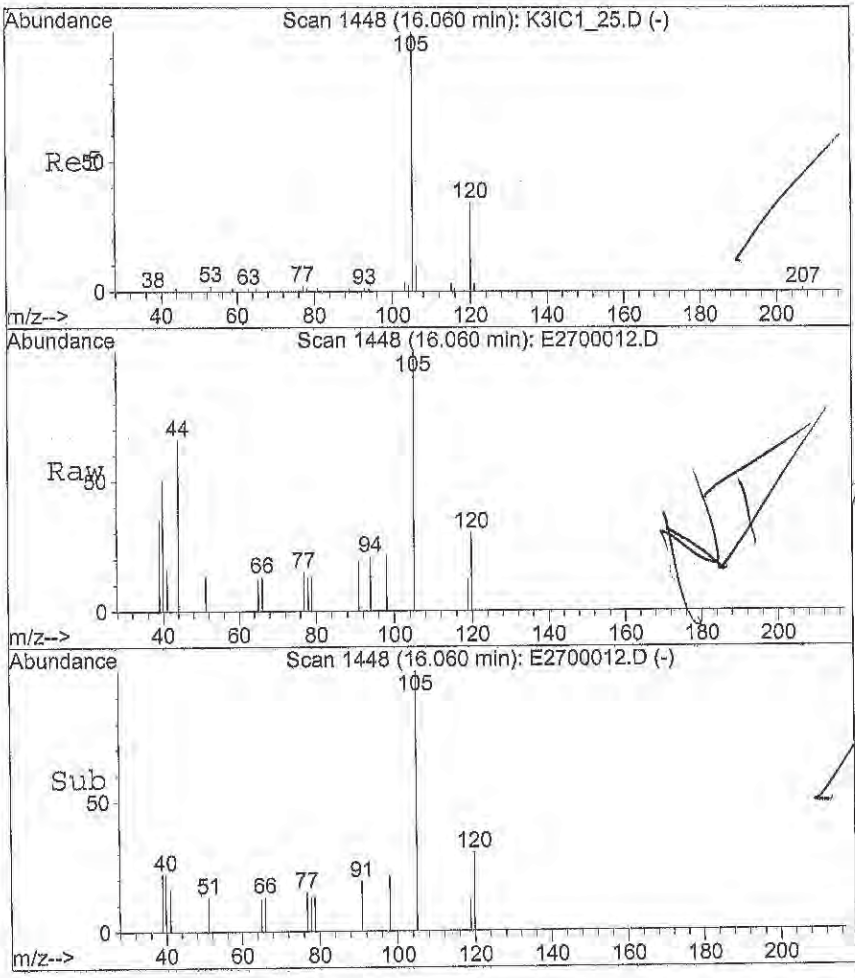


#66
tert-Butylbenzene
Concen: 0.05 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. 0.03 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:119 Resp: 653

Ion	Ratio	Lower	Upper
119	100		
91	114.7	56.3	84.5#
134	0.0	16.1	24.1#

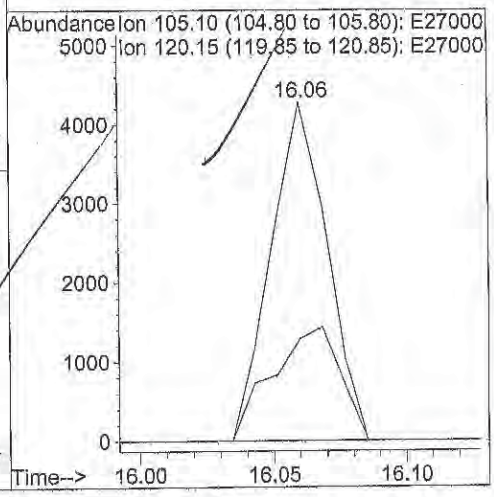


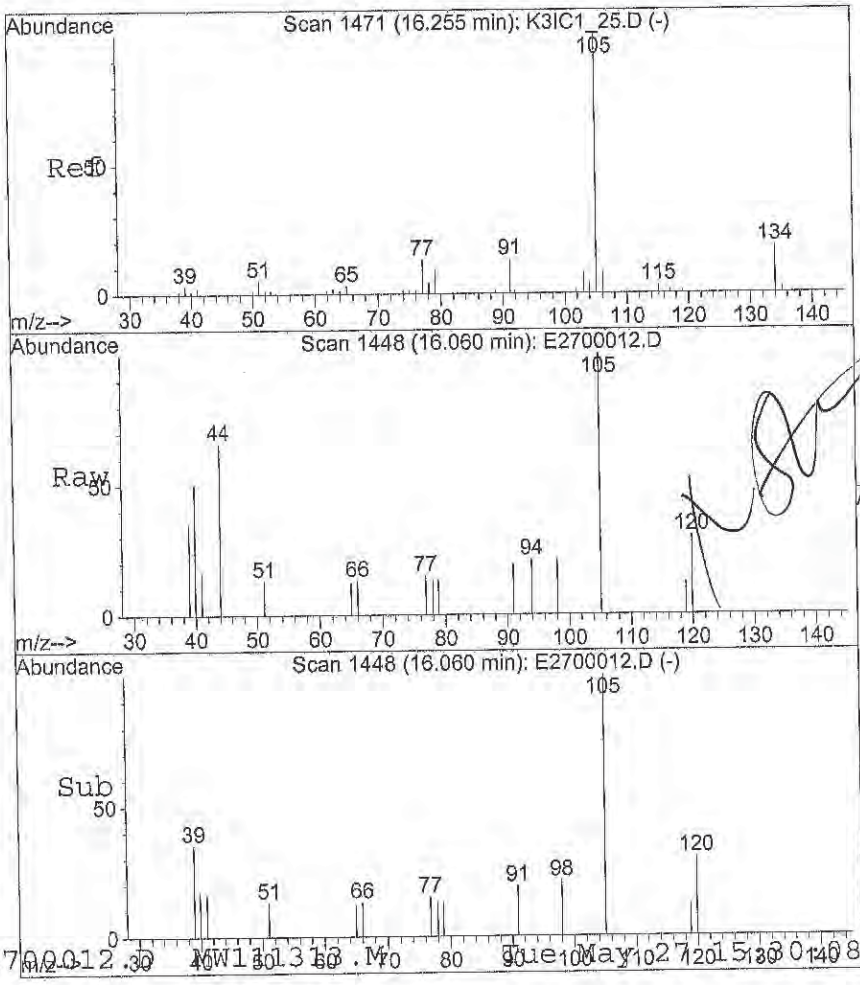


#67
1,2,4-Trimethylbenzene
Concen: 0.35 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:105 Resp: 6239

Ion	Ratio	Lower	Upper
105	100		
120	40.3	33.8	50.8

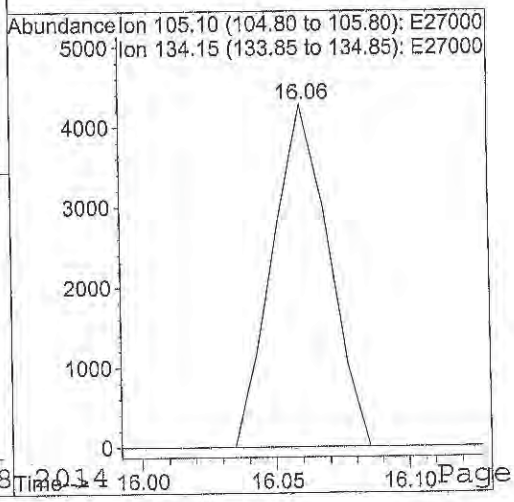


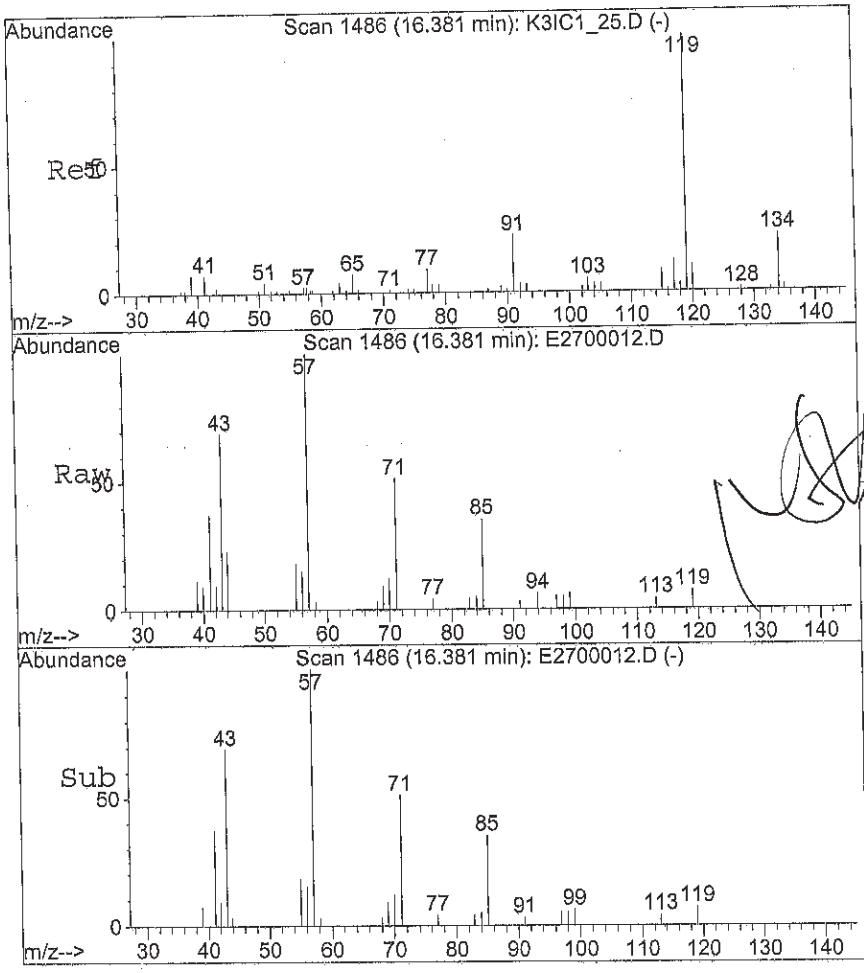


#68
sec-Butylbenzene
Concen: 0.27 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.19 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:105 Resp: 6239

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

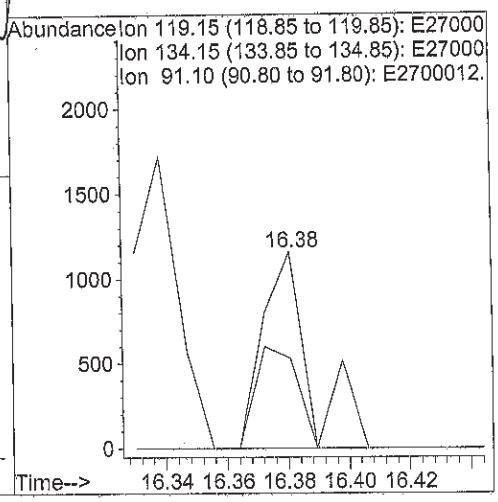


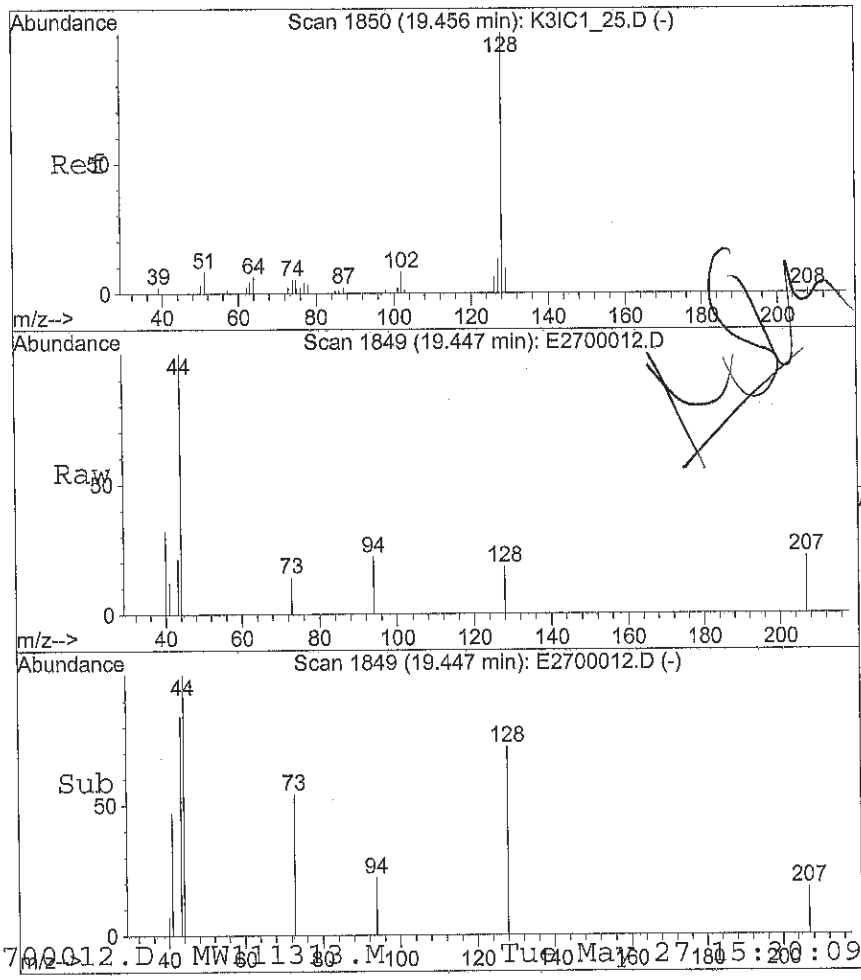


#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:119 Resp: 1253

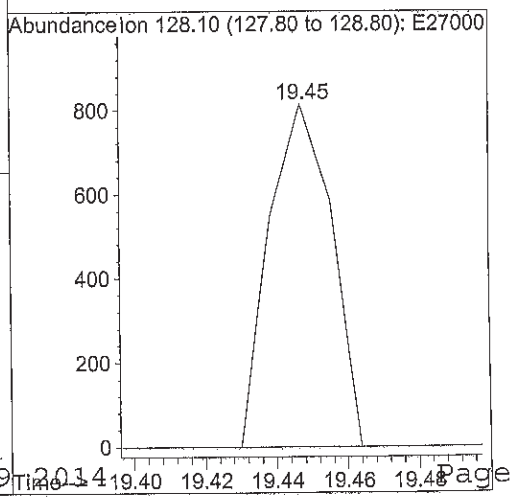
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	45.6	19.6	29.4#





#77
Naphthalene
Concen: 0.07 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2700012.D
Acq: 27 May 2014 3:05 pm

Tgt Ion:128 Resp: 986



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700012.D Vial: 3
Acq On : 27 May 2014 3:05 pm Operator: DN
Sample : 3E42701-09 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 15:29 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1679743	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1298849	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	682899	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	467074	10.69	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 85.52%			
3) Chloroform-d (SU6)	9.18	84	719371	11.48	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 91.84%			
4) Methylene Chloride-d2 (SU5	7.06	86	406063	11.08	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.64%			
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	464879	15.57	ug/L	-0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 124.56%			
6) Benzene-d6 (SU7)	9.93	84	1377983	10.45	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 83.60%			
8) Toluene-d8 (SU3)	12.21	98	1463111	11.87	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.96%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	714057	14.04	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 112.32%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

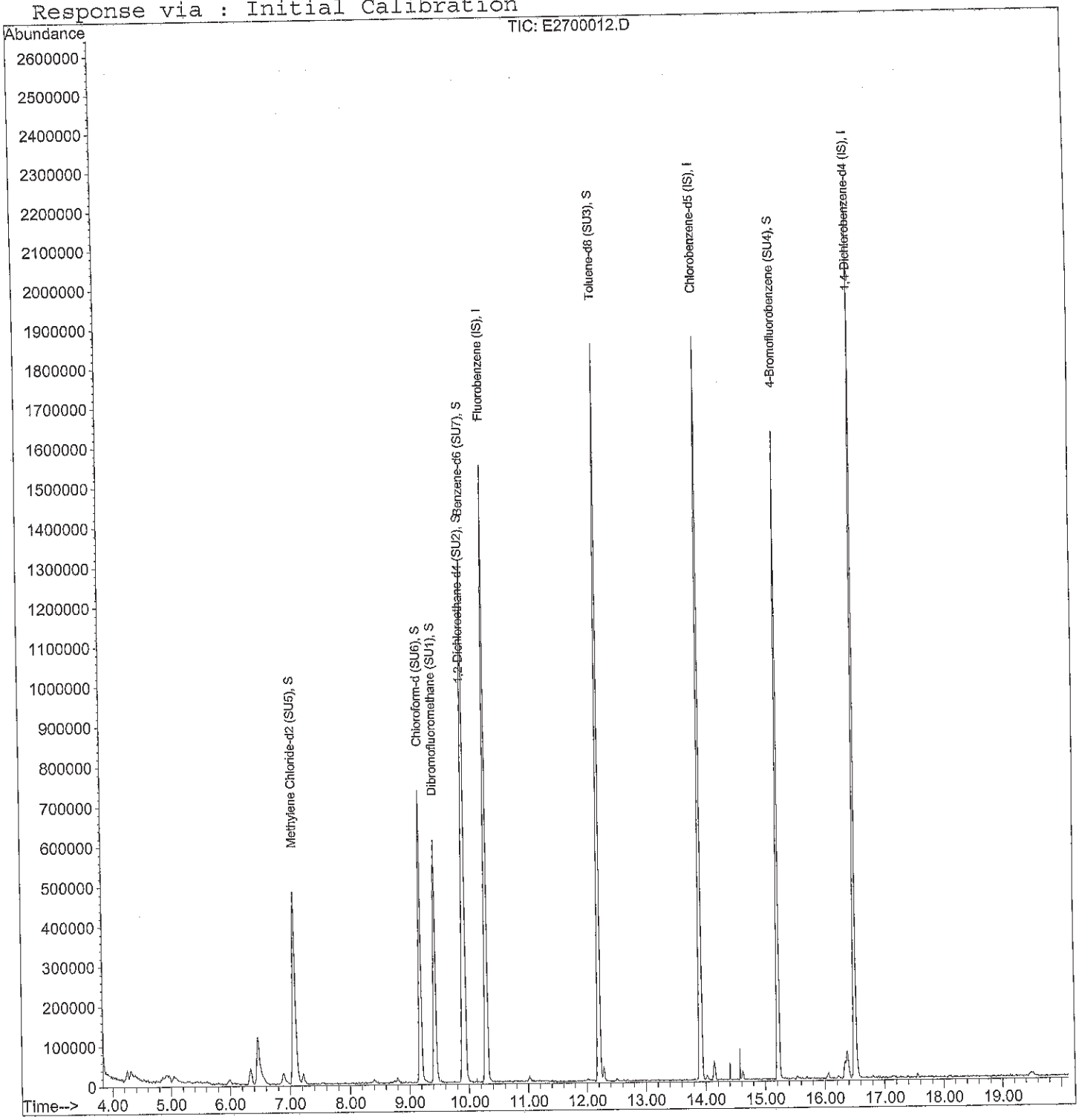
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700012.D
Acq On : 27 May 2014 3:05 pm
Sample : 3E42701-09
Misc : 100cc SVL-512-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 27 15:29 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700013.D
Acq On : 27 May 2014 3:35 pm
Sample : 3E42701-10
Misc : 100cc SVL-512-SA5D-SV-11.0-12.0
MS Integration Params: rteint.p
Quant Time: May 27 16:09 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1519594	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1165882	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	627293	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	429643	11.33 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.64%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	420567	11.67 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.36%		
39) Toluene-d8 (SU3)	12.21	98	1328718	12.22 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.76%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	632605	13.27 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.16%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	659	0.18 ~~ug/L #~~ NM	44
4) Chloromethane	4.40	50	5002	0.74 ~~ug/L #~~	54
6) Bromomethane	5.05	96	4745	1.06 ~~ug/L~~	96
7) Chloroethane	5.38	64	585	1.15 ~~ug/L~~	96
9) (F113) 1,1,2-Trichloro-tri	6.35	151	14858	4.97 ug/L 0.0994	96
11) Acetone	6.46	58	10313	13.53 ~~ug/L~~ NT	99
12) (IPA) Leak Check Compound	6.46	45	242083	1325.75 ~~ug/L #~~ NM	85
13) Carbon disulfide	6.84	76	40965	3.24 ~~ug/L~~ NT	100
14) Methylene Chloride	7.06	84	5752	1.38 ~~ug/L #~~ NM	1
15) (TBA) tert-Butanol	7.15	59	608	2.35 ~~ug/L #~~	77
22) (DIPE) Diisopropyl Ether	8.09	45	302	0.03 ~~ug/L #~~	48
24) Chloroform	9.22	83	1421	0.18 ~~ug/L #~~	1
25) (ETBE) 2-ethoxy 2-methyl p	8.37	59	556	0.05 ~~ug/L #~~ NM	44
31) Benzene	9.98	78	15569	1.09 ~~ug/L #~~	79
32) 1,2-Dichloroethane	9.93	62	5923	1.17 ~~ug/L #~~	1
34) 1,2-Dichloropropane	11.03	63	277	0.08 ~~ug/L #~~	44
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	293	0.13 ~~ug/L~~ NT	100
41) Toluene	12.28	91	127014	7.99 ug/L 0.1598	98
42) trans-1,3-Dichloropropene	12.28	75	353	0.07 ~~ug/L #~~ NM	1
46) 2-Hexanone	12.99	43	626	0.25 ~~ug/L #~~ NT	37
51) Ethylbenzene	14.02	91	17785	0.98 ug/L 0.0196	99
52) m,p-Xylenes	14.14	106	22792	3.55 ug/L 0.071	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700013.D Vial: 4
Acq On : 27 May 2014 3:35 pm Operator: DN
Sample : 3E42701-10 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 16:09 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

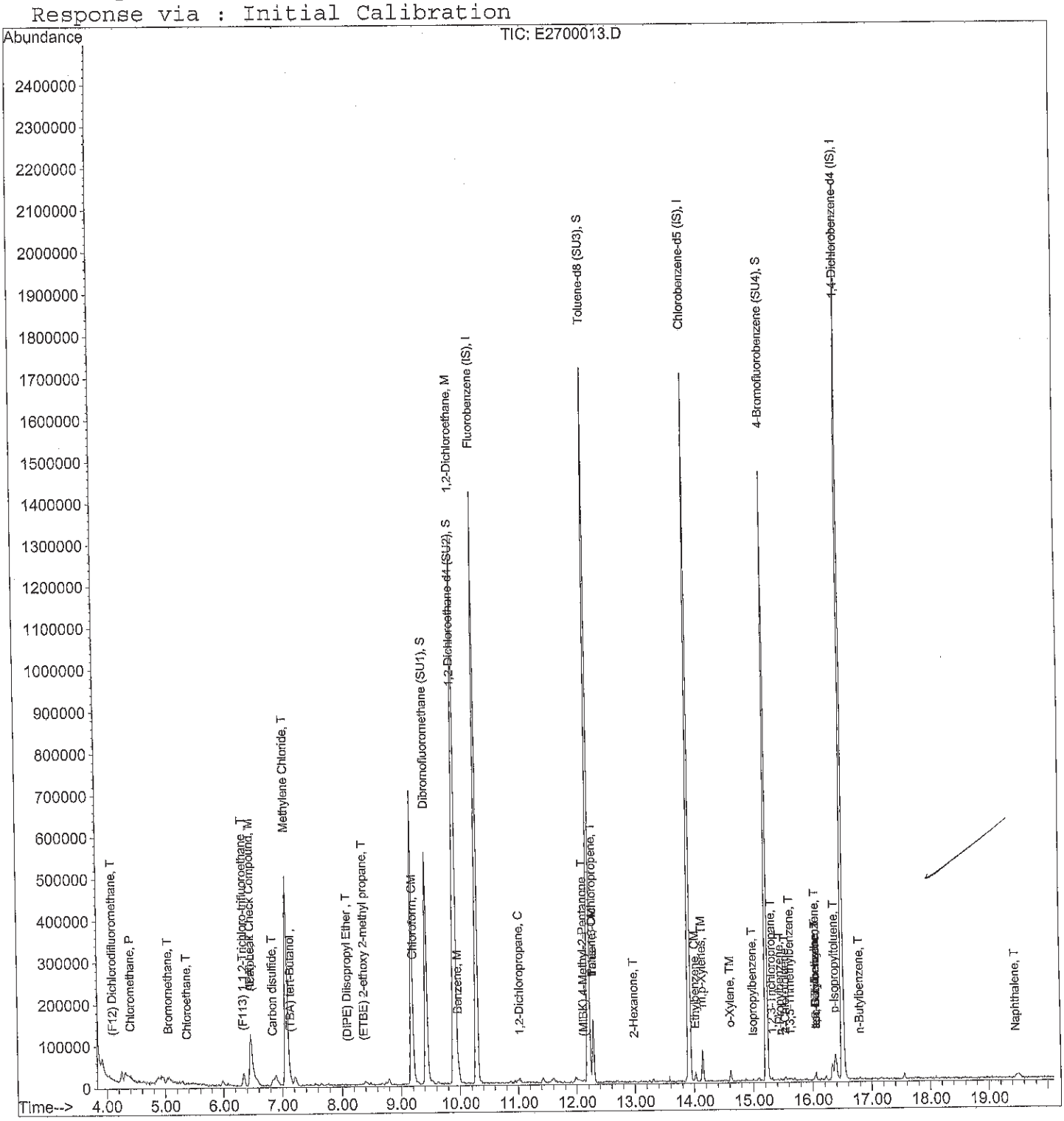
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) o-Xylene	14.62	106	5633	0.89 ug/L # 0.0178	64
54) Styrene	14.63	104	1824	-0.67 ug/L #	17
56) Isopropylbenzene	15.00	105	516	0.03 ug/L #	55
57) 1,2,3-Trichloropropane	15.32	75	276	0.06 ug/L #	36
62) n-Propylbenzene	15.45	91	3582	0.14 ug/L #	56
63) 2-Chlorotoluene	15.54	91	298	0.02 ug/L #	45
64) 1,3,5-Trimethylbenzene	15.62	105	1946	0.12 ug/L #	55
65) 4-Chlorotoluene	15.54	91	298	0.02 ug/L #	44
66) tert-Butylbenzene	16.05	119	430	0.03 ug/L #	86
67) 1,2,4-Trimethylbenzene	16.06	105	7134	0.44 ug/L 0.0088	87
68) sec-Butylbenzene	16.06	105	7134	0.34 ug/L #	62
69) p-Isopropyltoluene	16.37	119	1248	0.07 ug/L #	52
72) n-Butylbenzene	16.80	91	332	0.02 ug/L #	30
77) Naphthalene	19.46	128	359	0.03 ug/L	100

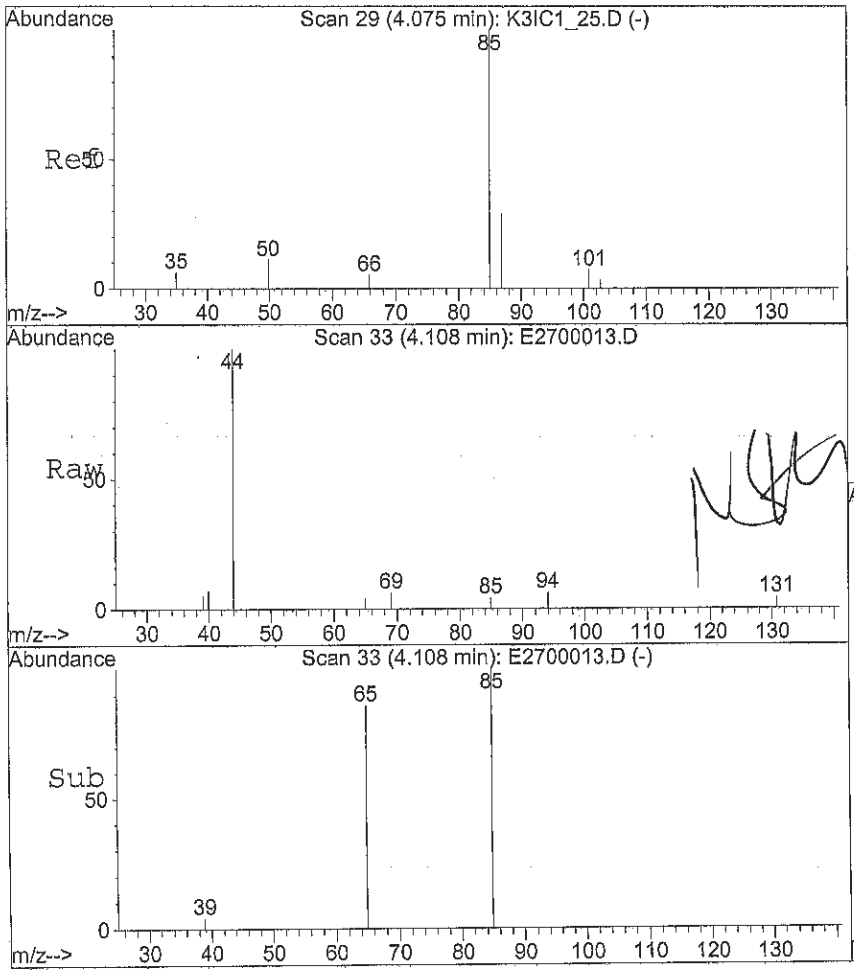
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700013.D Vial: 4
Acq On : 27 May 2014 3:35 pm Operator: DN
Sample : 3E42701-10 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 16:09 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

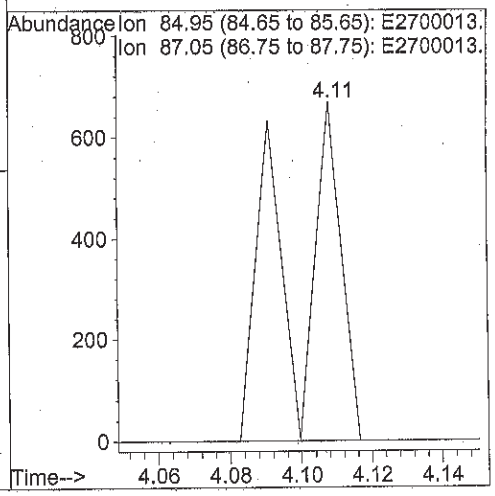


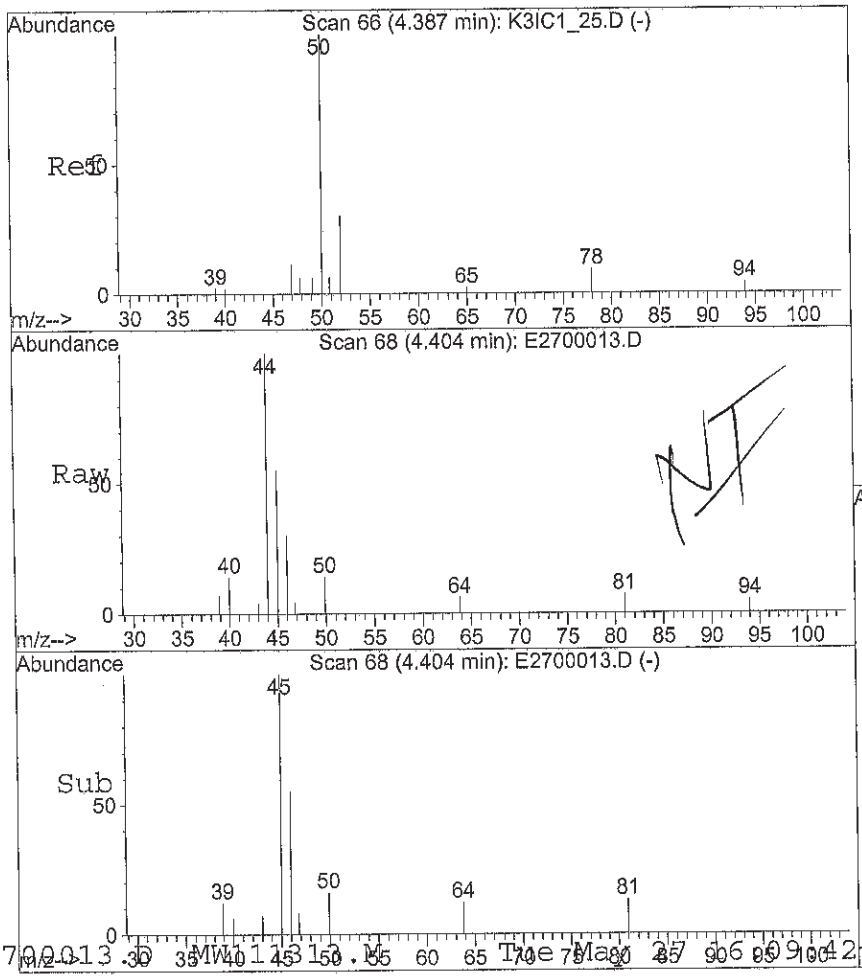


#3
(F12) Dichlorodifluoromethane
Concen: 0.18 ug/L
RT: 4.11 min Scan# 33
Delta R.T. 0.03 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 85 Resp: 659

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

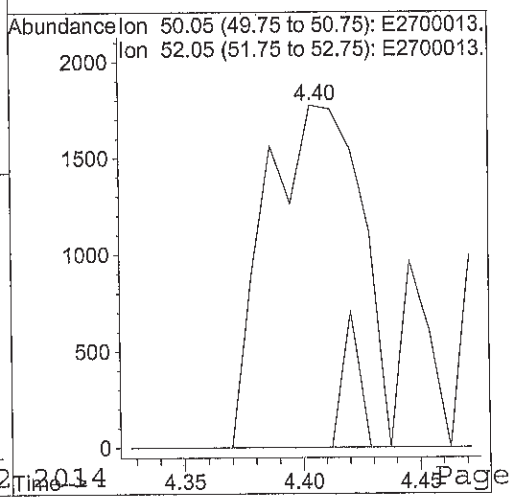


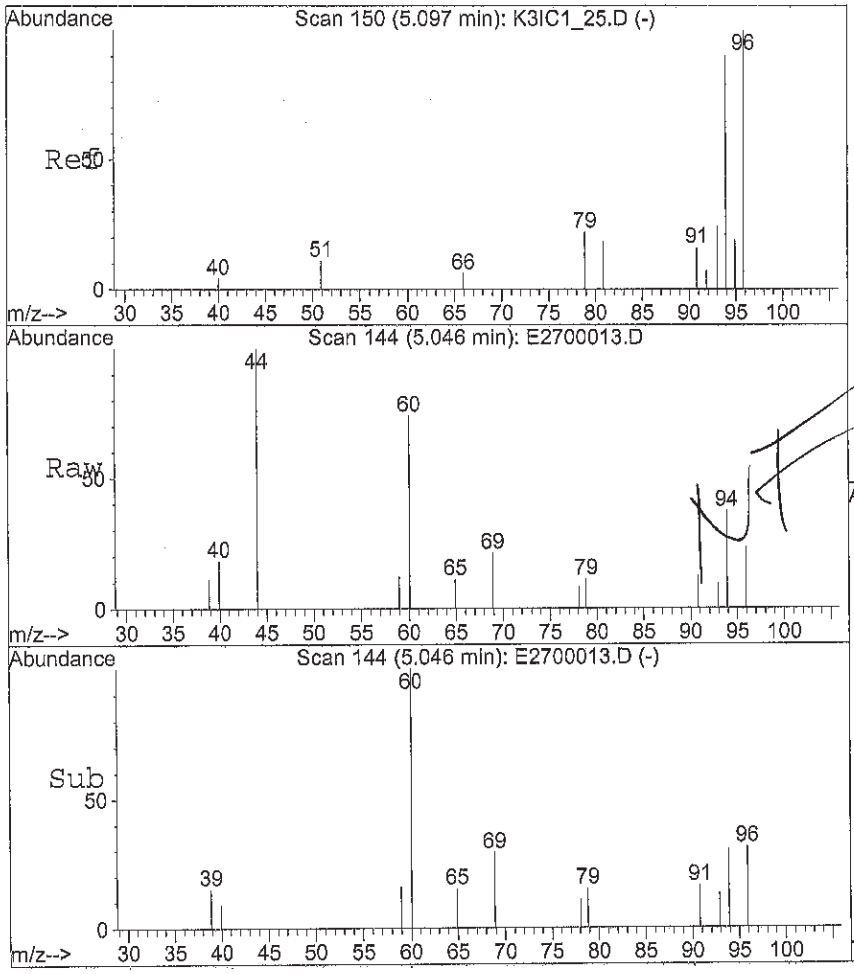


#4
Chloromethane
Concen: 0.74 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.02 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 50 Resp: 5002

Ion	Ratio	Lower	Upper
50	100		
52	7.2	26.9	40.3#

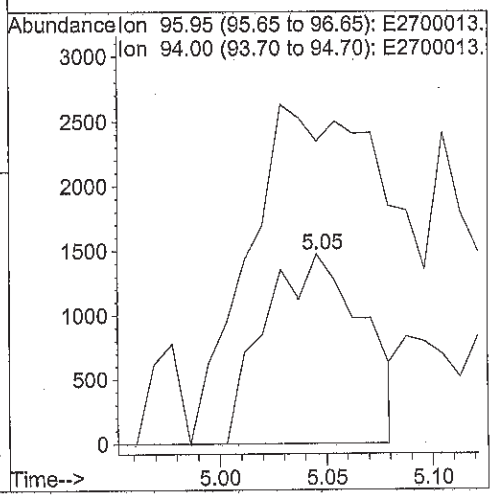


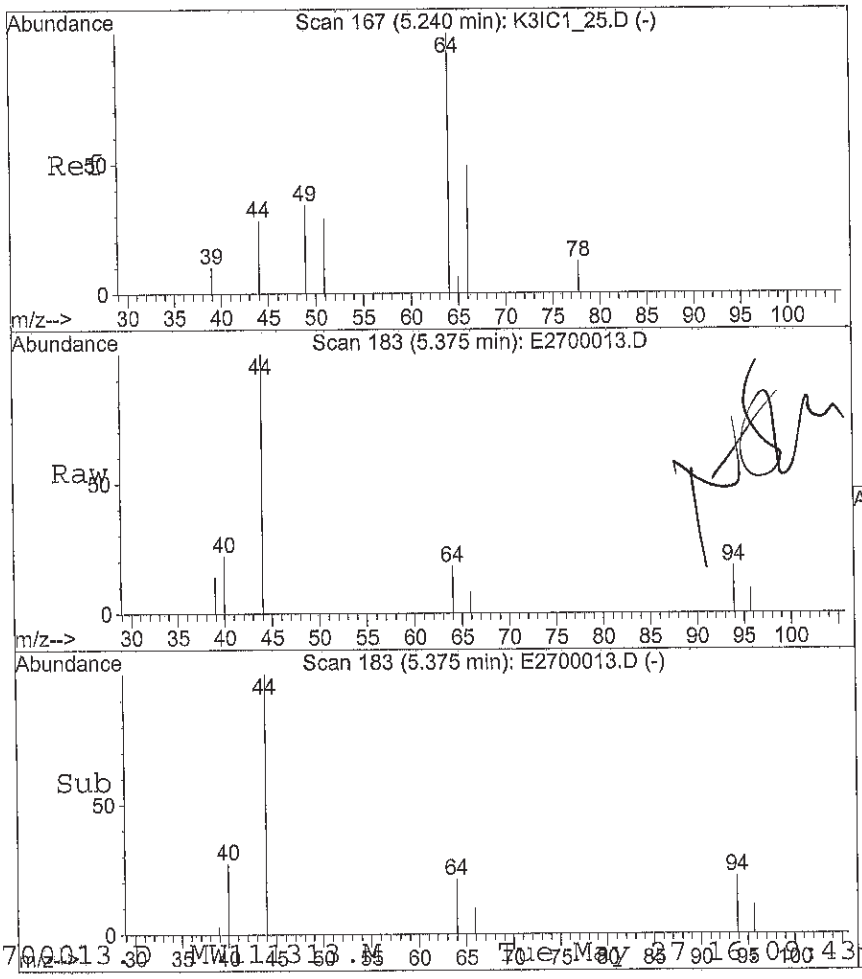


#6
Bromomethane
Concen: 1.06 ug/L
RT: 5.05 min Scan# 144
Delta R.T. -0.05 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 96 Resp: 4745

Ion	Ratio	Lower	Upper
96	100		
94	130.3	101.0	151.4

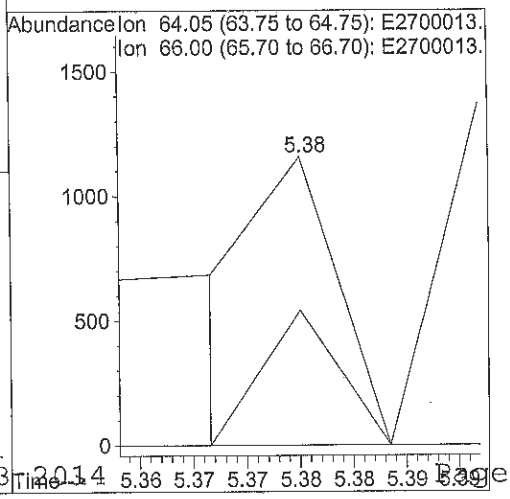


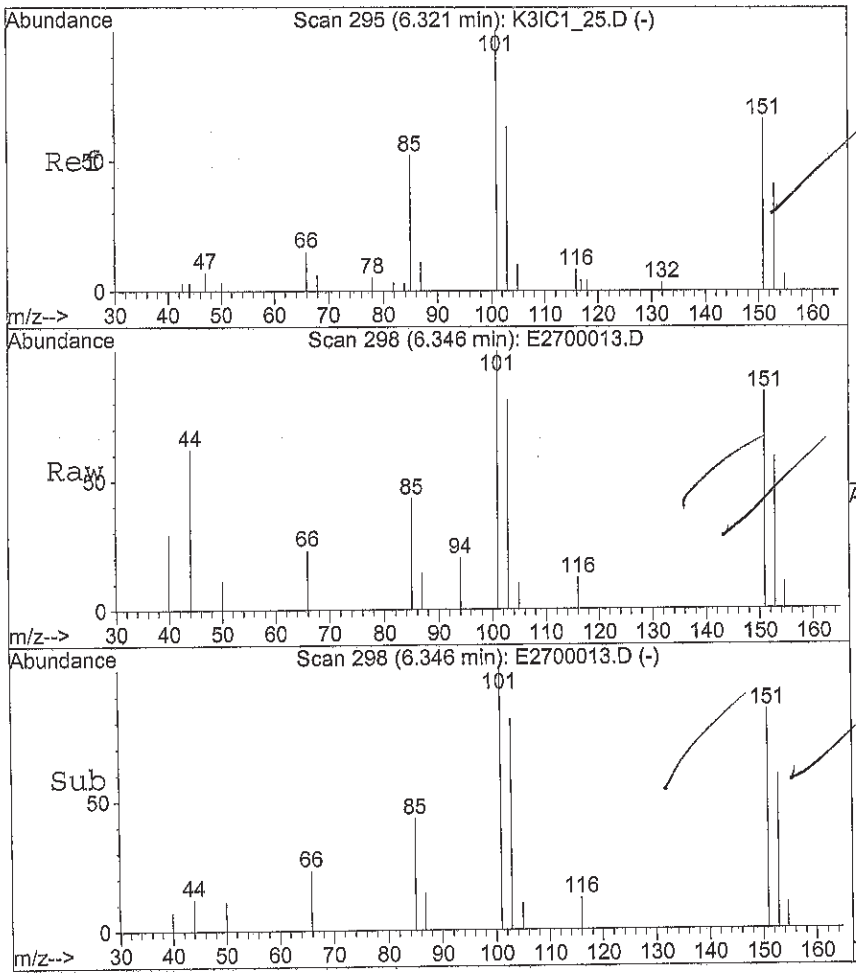


#7
Chloroethane
Concen: 1.15 ug/L
RT: 5.38 min Scan# 183
Delta R.T. 0.14 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 64 Resp: 585

Ion	Ratio	Lower	Upper
64	100		
66	46.8	35.4	53.0

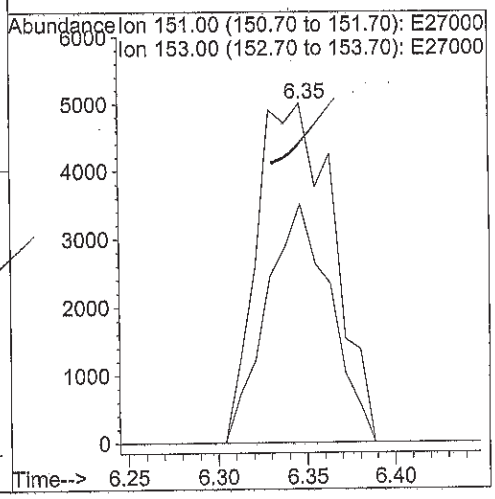


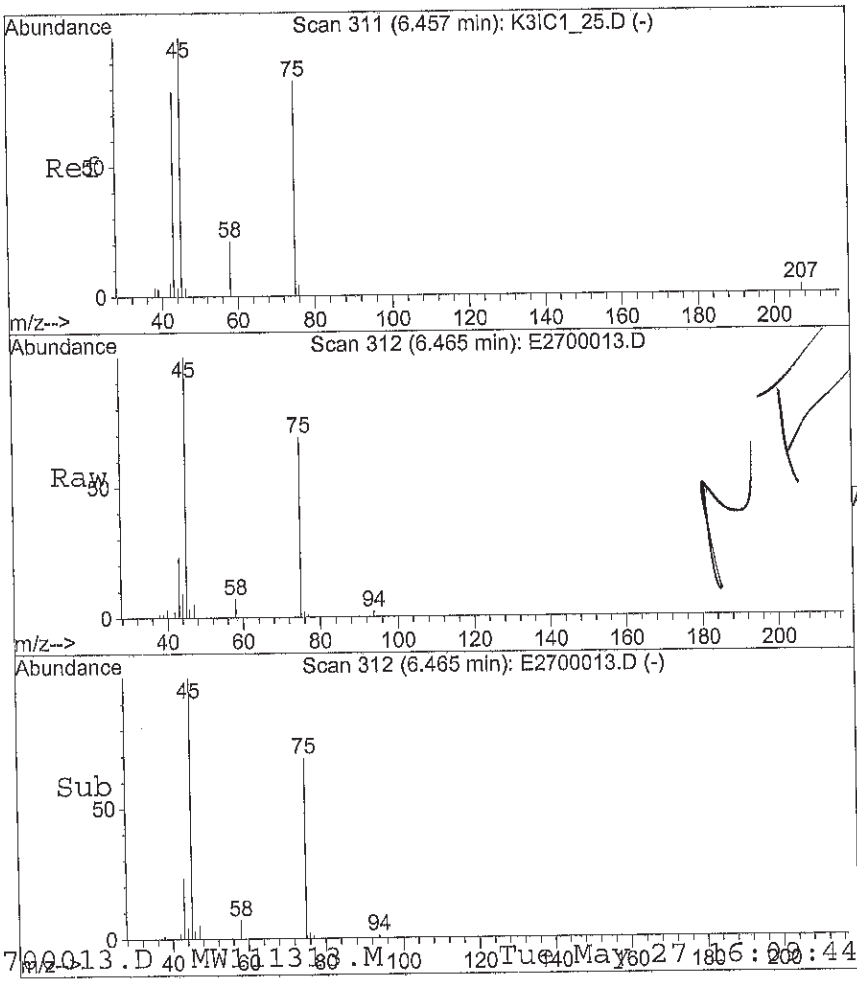


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 4.97 ug/L
RT: 6.35 min Scan# 298
Delta R.T. 0.03 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:151 Resp: 14858

Ion	Ratio	Lower	Upper
151	100		
153	59.0	49.6	74.4

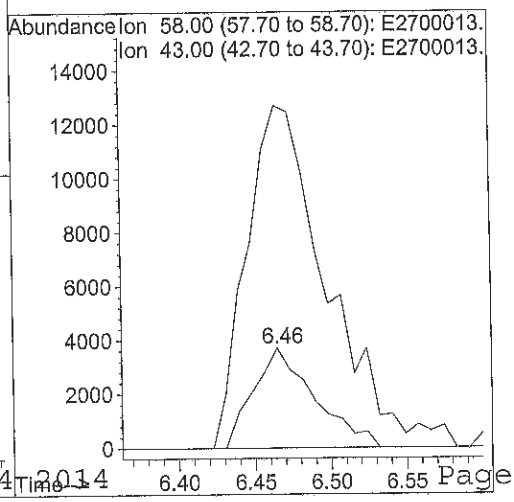


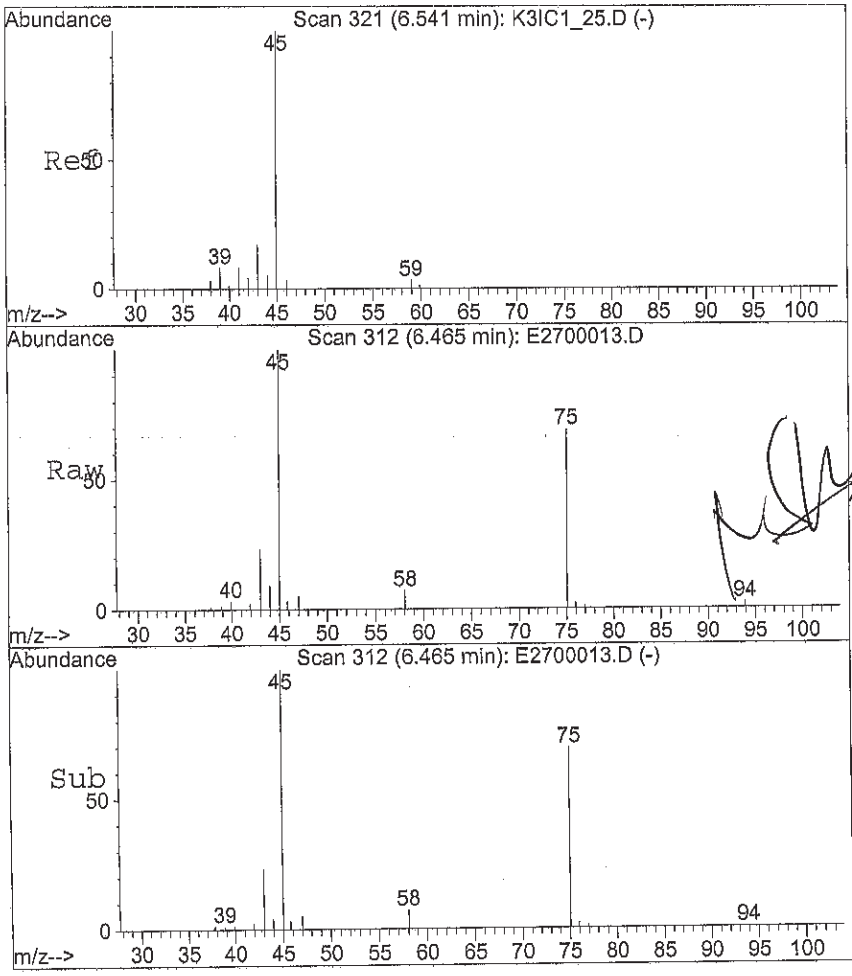


#11
Acetone
Concen: 13.53 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 58 Resp: 10313

Ion	Ratio	Lower	Upper
58	100		
43	452.6	360.9	541.3

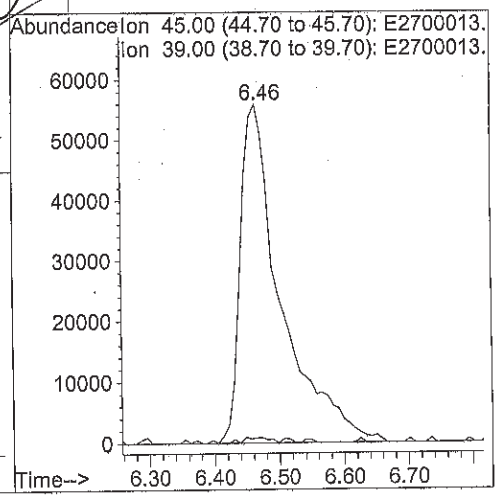


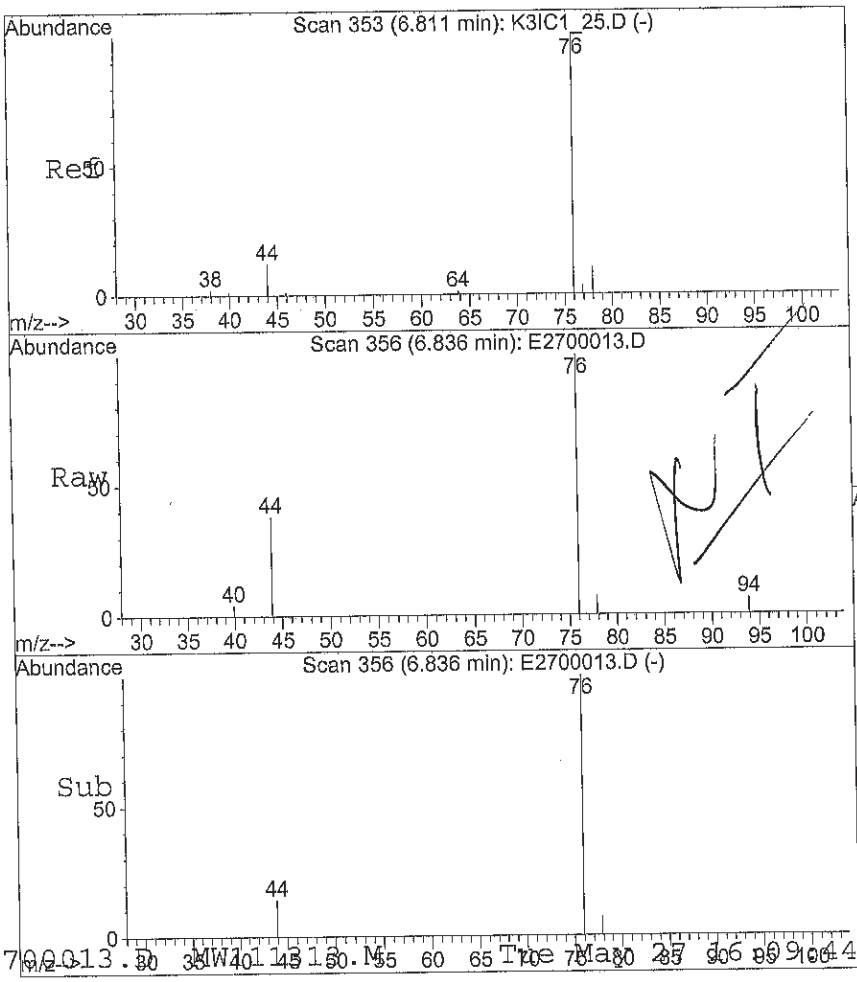


#12
(IPA) Leak Check Compound
Concen: 1325.75 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 45 Resp: 242083

Ion	Ratio	Lower	Upper
45	100		
39	1.1	4.9	7.3#

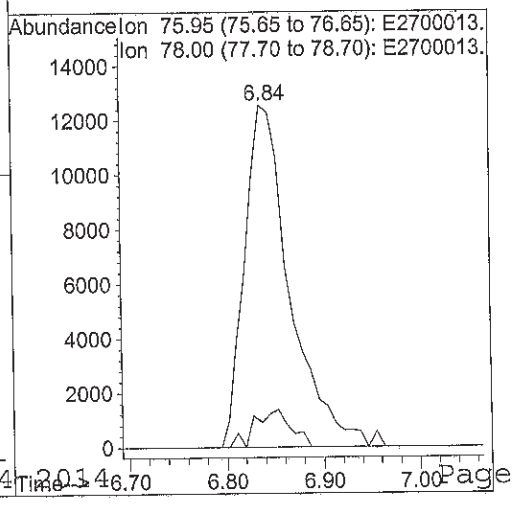


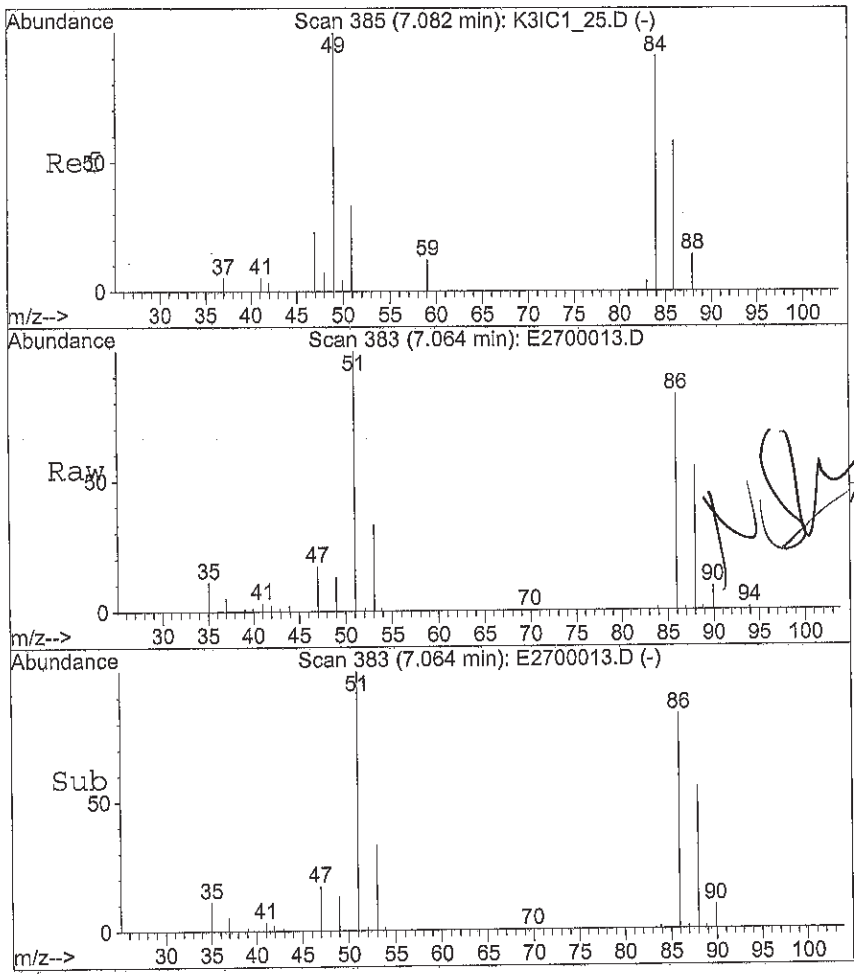


#13
Carbon disulfide
Concen: 3.24 ug/L
RT: 6.84 min Scan# 356
Delta R.T. 0.02 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 76 Resp: 40965

Ion	Ratio	Lower	Upper
76	100		
78	8.7	7.0	10.4

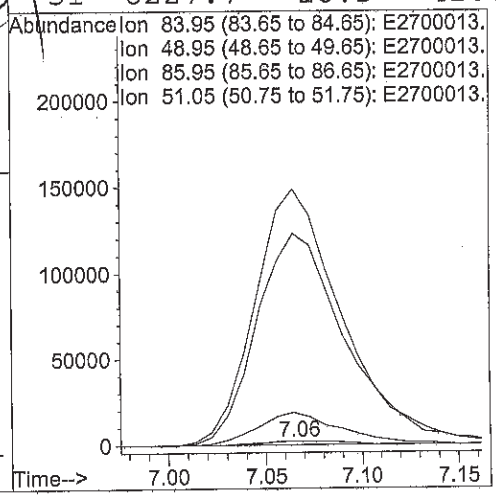


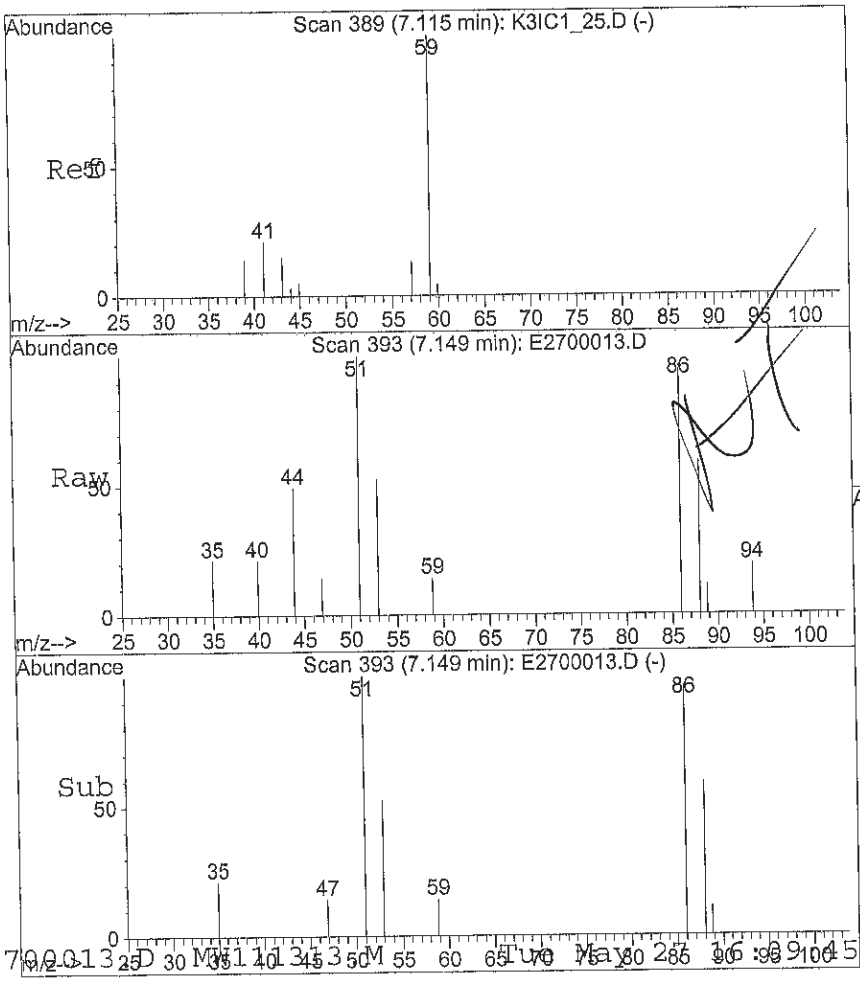


#14
Methylene Chloride
Concen: 1.38 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 84 Resp: 5752

Ion	Ratio	Lower	Upper
84	100		
49	956.8	89.8	134.6#
86	6953.1	51.1	76.7#
51	8227.7	28.5	42.7#

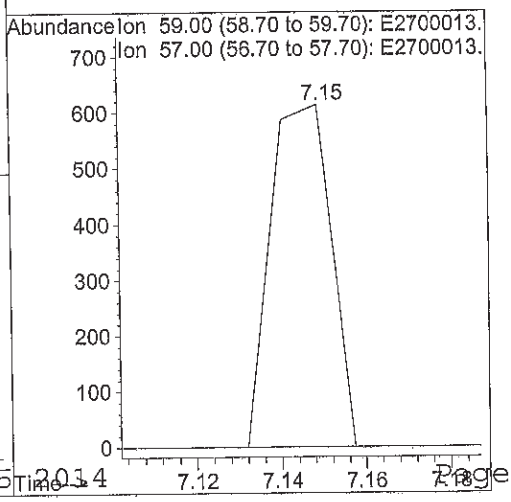


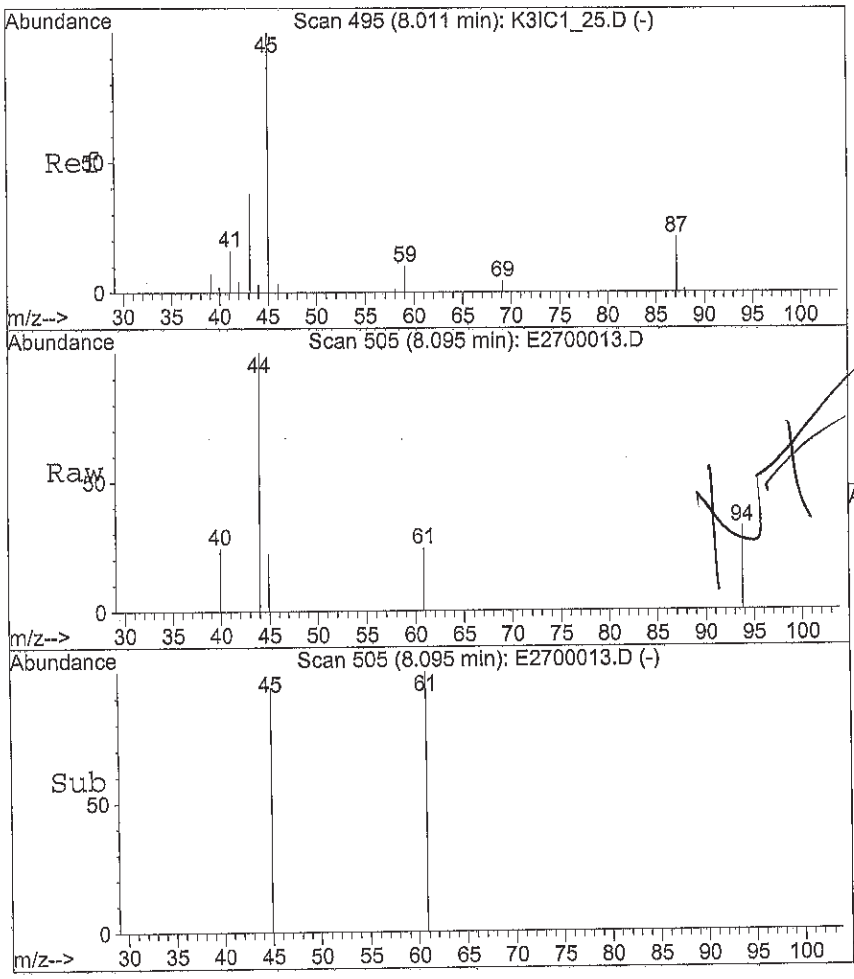


#15
(TBA) tert-Butanol
Concen: 2.35 ug/L
RT: 7.15 min Scan# 393
Delta R.T. 0.03 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 59 Resp: 608

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

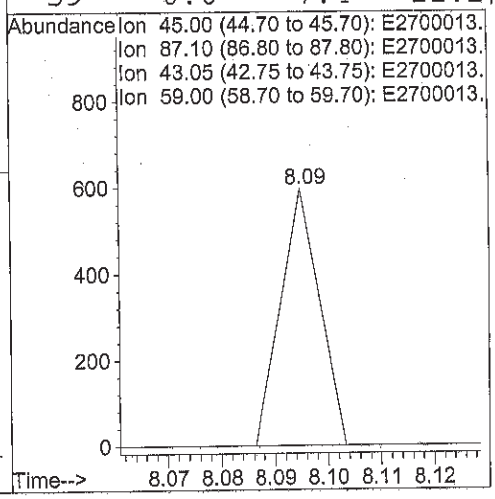


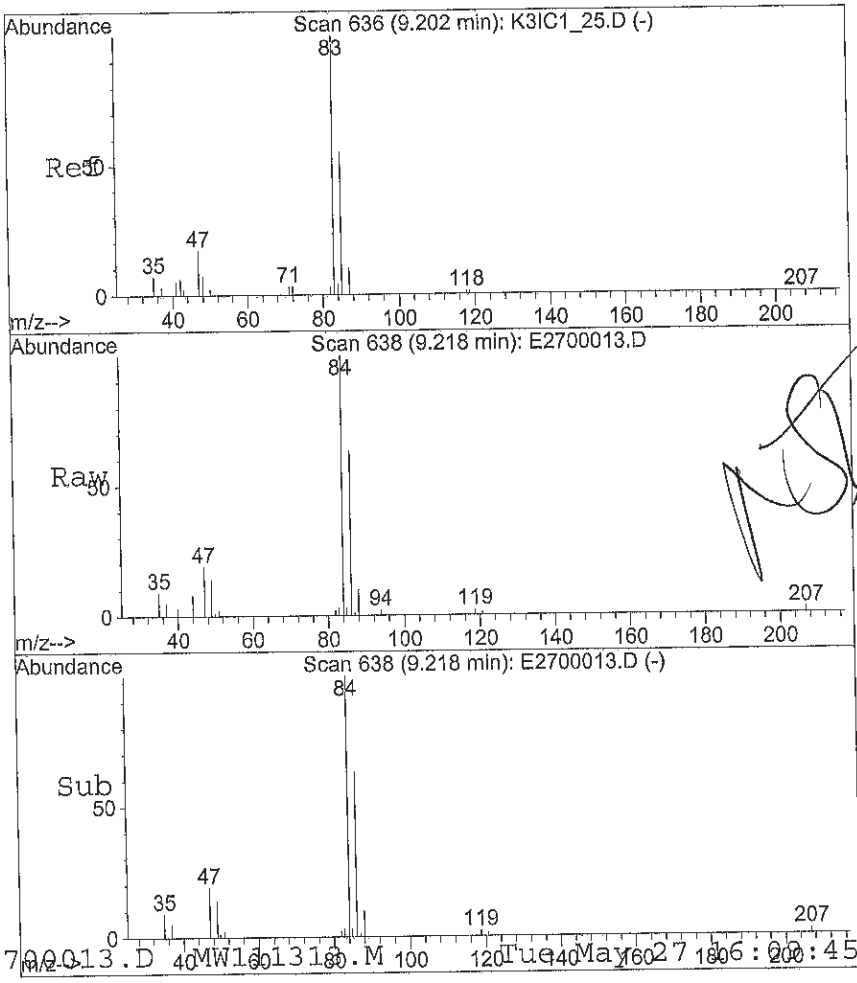


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 8.09 min Scan# 505
Delta R.T. 0.08 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 45 Resp: 302

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

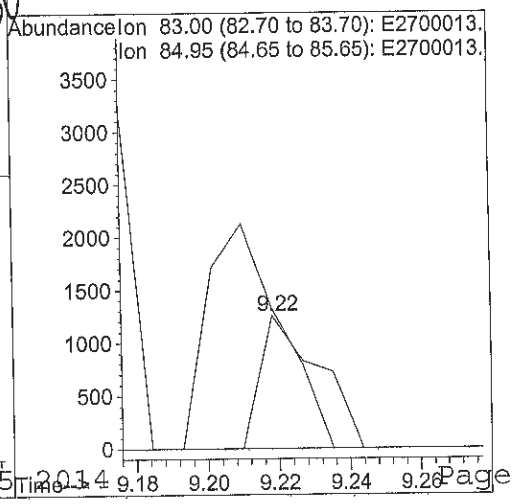


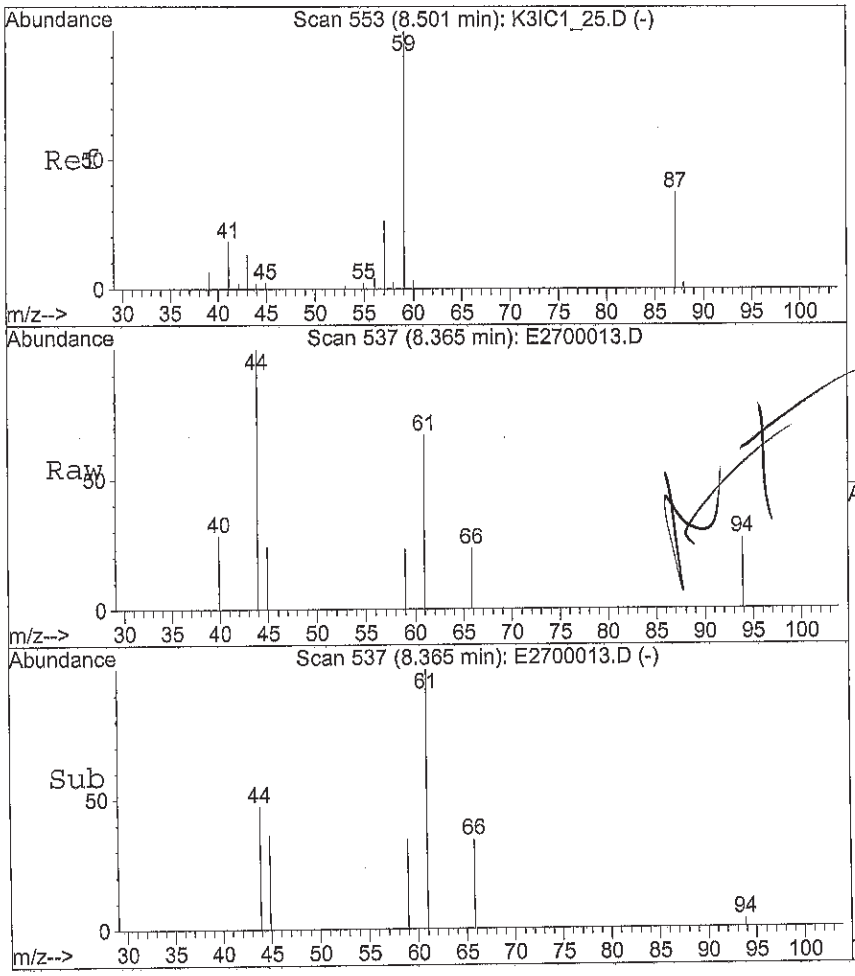


#24
Chloroform
Concen: 0.18 ug/L
RT: 9.22 min Scan# 638
Delta R.T. 0.02 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 83 Resp: 1421

Ion	Ratio	Lower	Upper
83	100		
85	212.0	51.8	77.6#

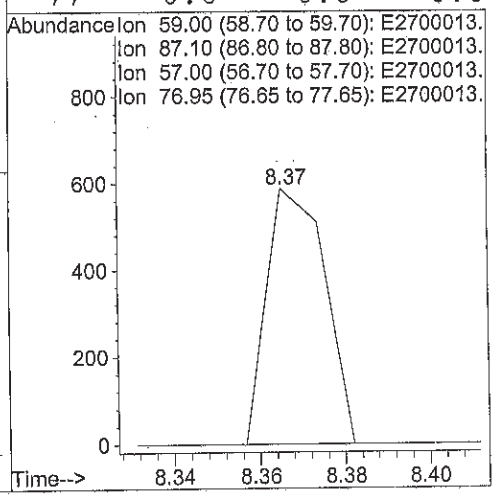


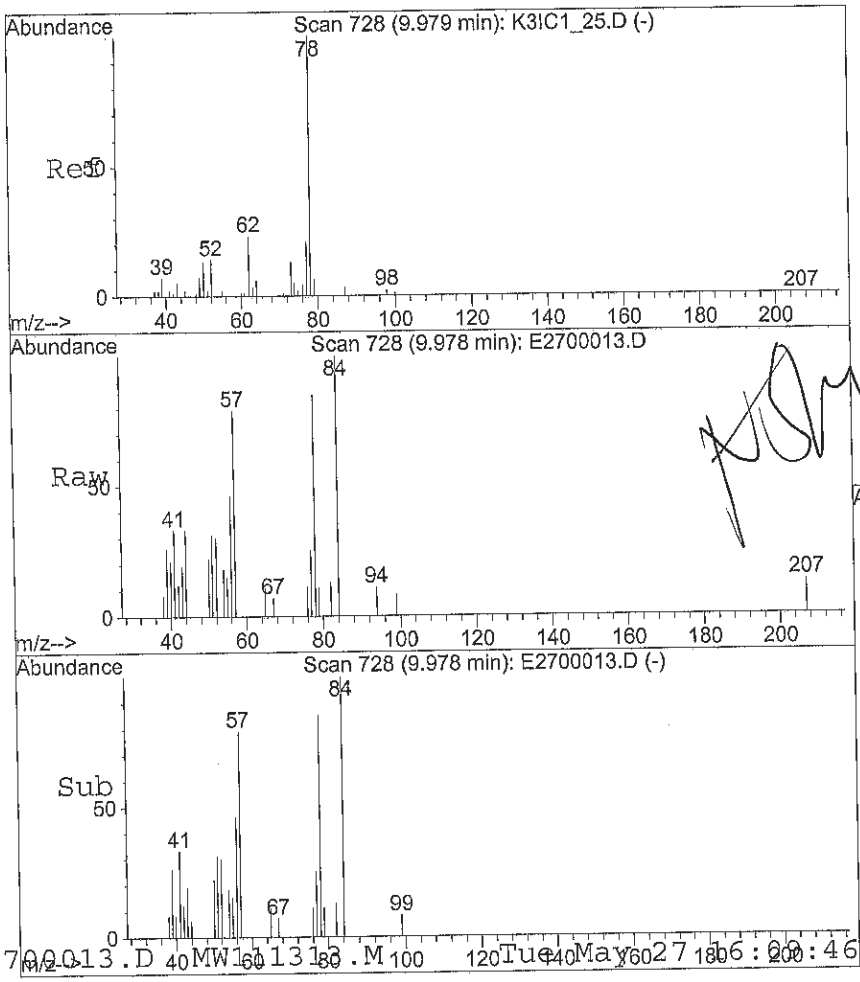


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.05 ug/L
RT: 8.37 min Scan# 537
Delta R.T. -0.14 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 59 Resp: 556

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

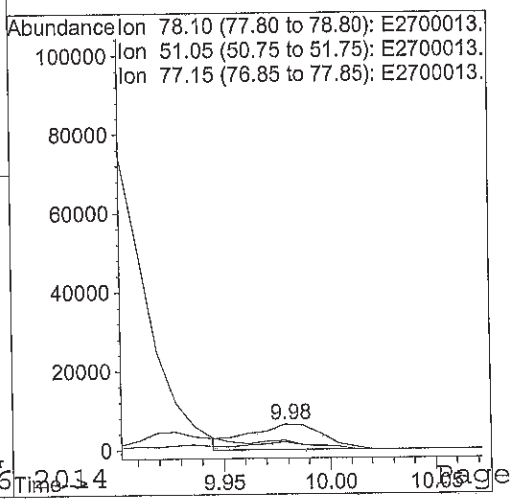


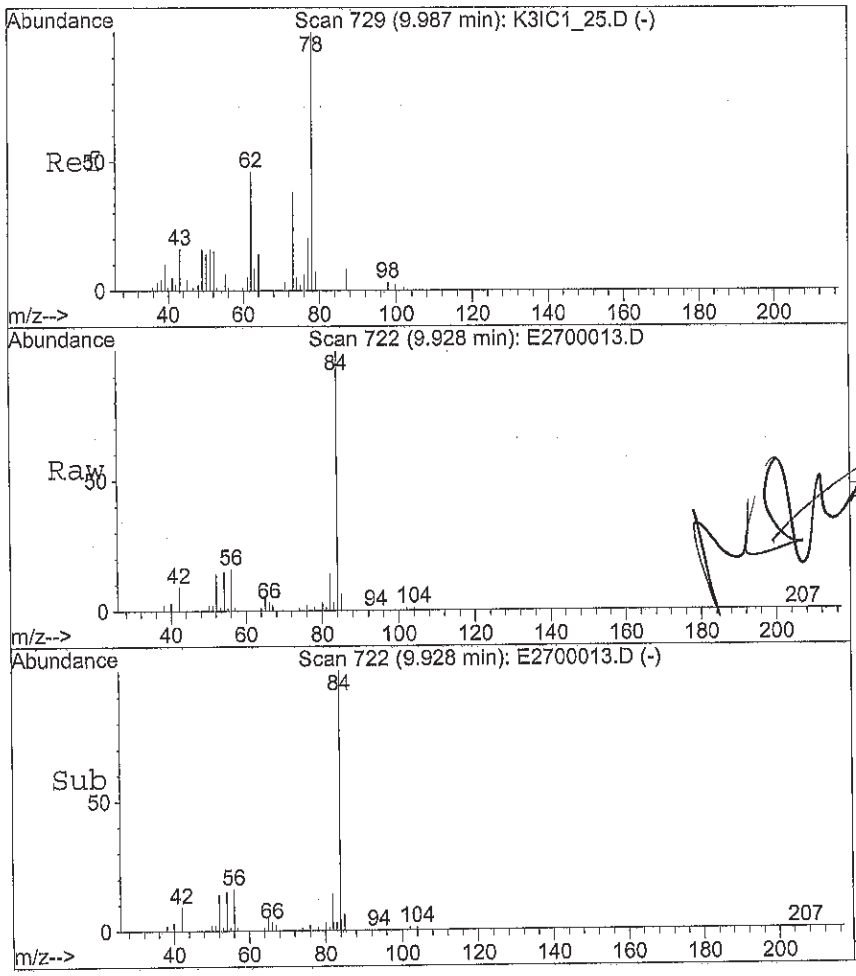


#31
Benzene
Concen: 1.09 ug/L
RT: 9.98 min Scan# 728
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 78 Resp: 15569

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	23.2	16.6	24.8

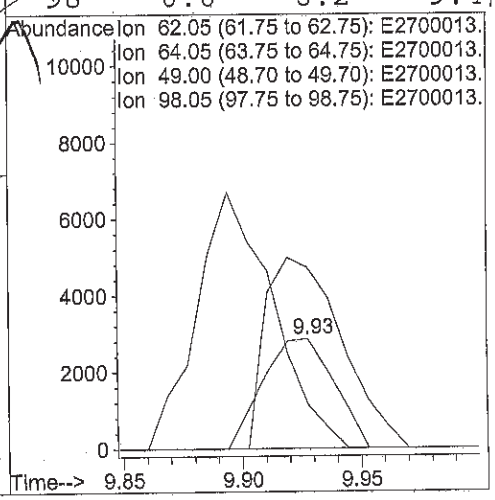


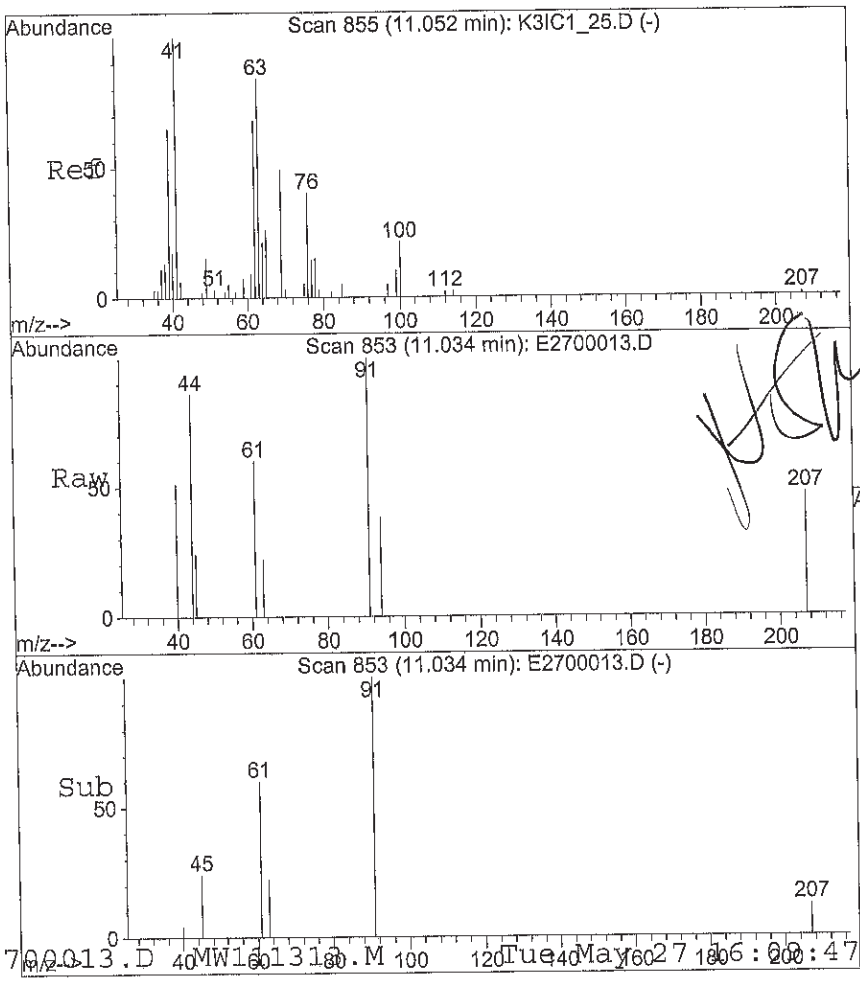


#32
1,2-Dichloroethane
Concen: 1.17 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 62 Resp: 5923

Ion	Ratio	Lower	Upper
62	100		
64	187.6	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

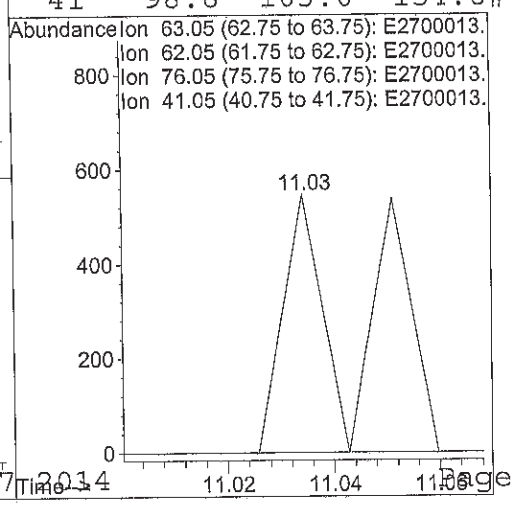


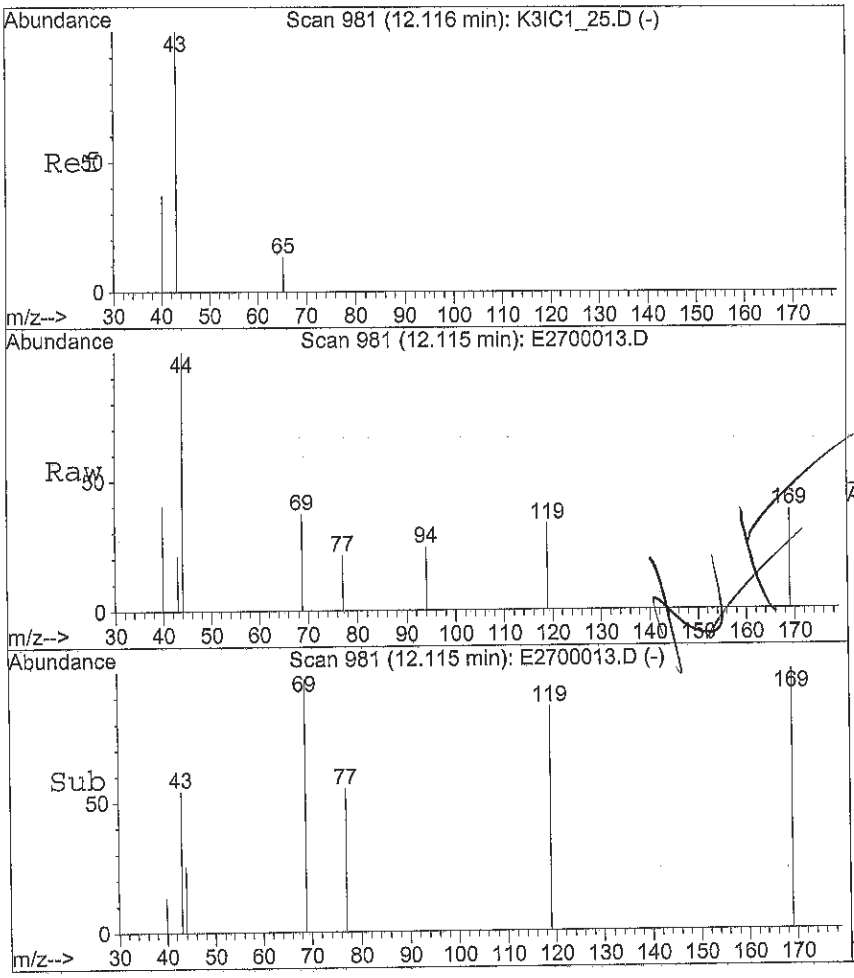


#34
1,2-Dichloropropane
Concen: 0.08 ug/L
RT: 11.03 min Scan# 853
Delta R.T. -0.02 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 63 Resp: 277

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	98.6	103.0	154.6#

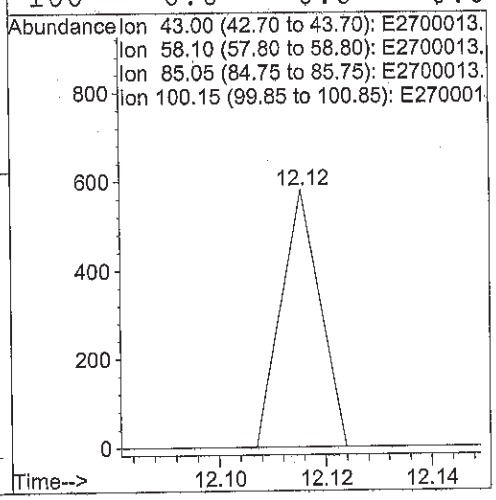


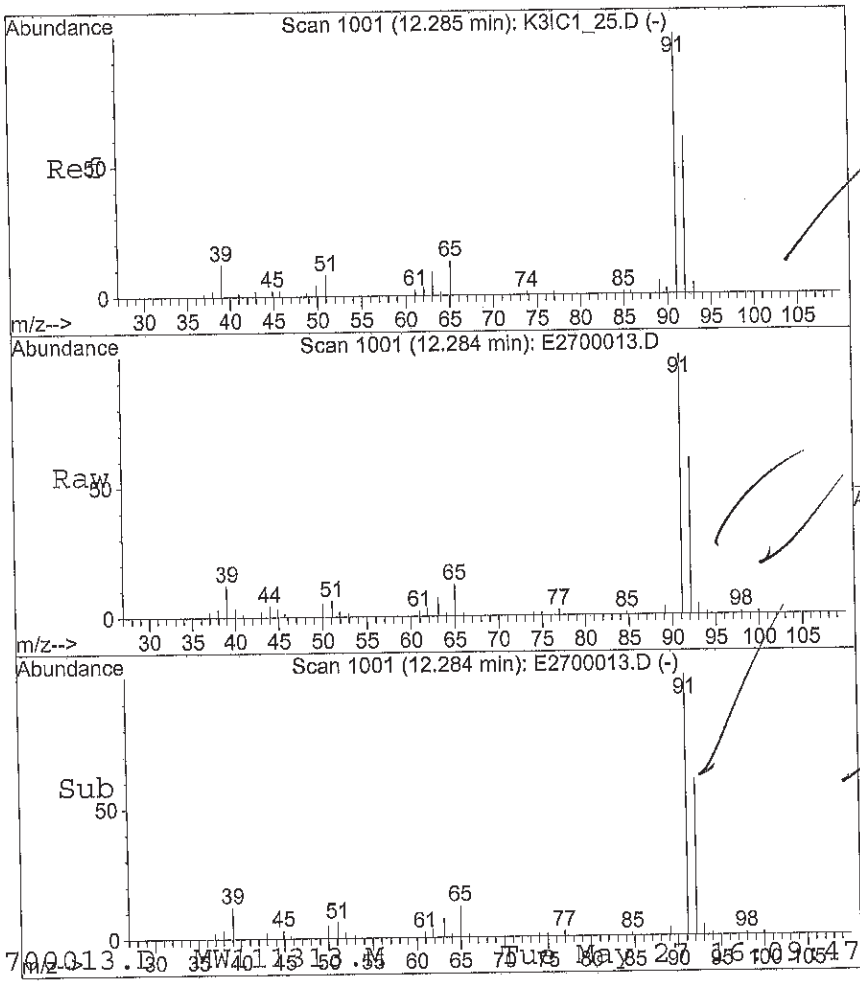


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.13 ug/L
RT: 12.12 min Scan# 981
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 43 Resp: 293

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

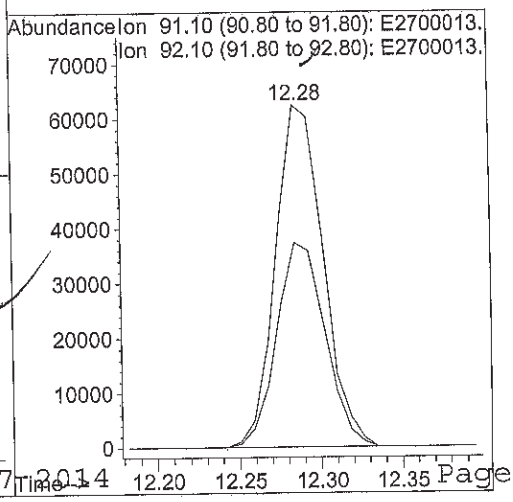


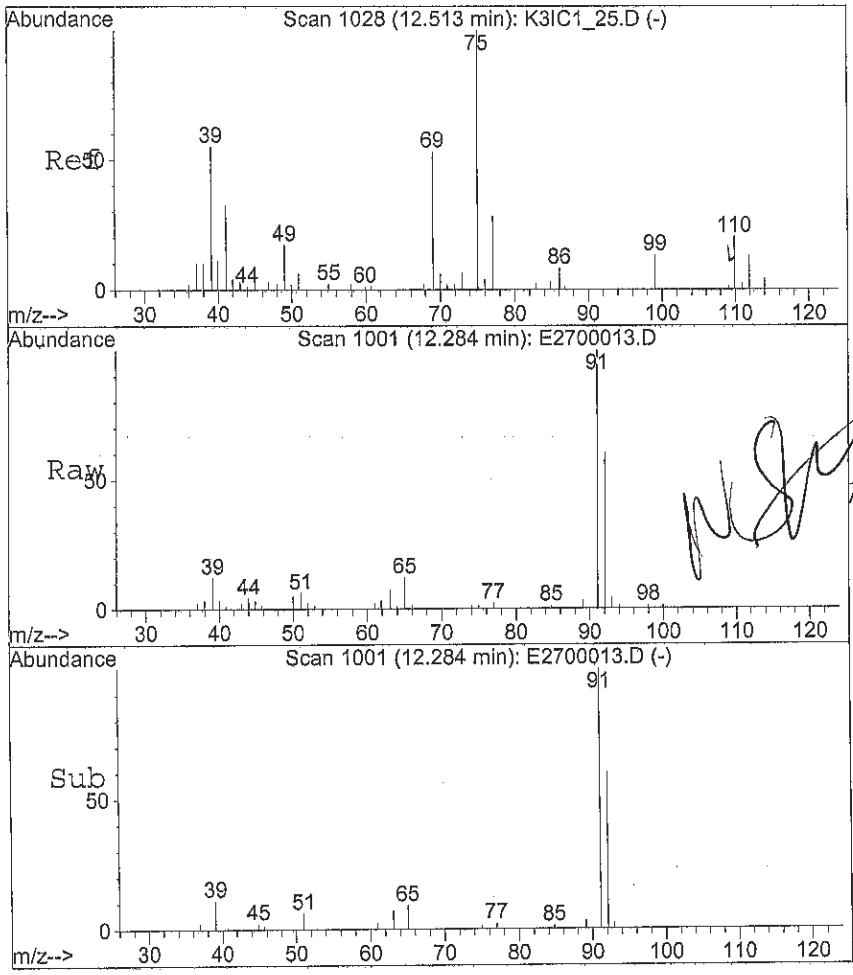


#41
Toluene
Concen: 7.99 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 91 Resp: 127014

Ion	Ratio	Lower	Upper
91	100		
92	60.9	47.4	71.0

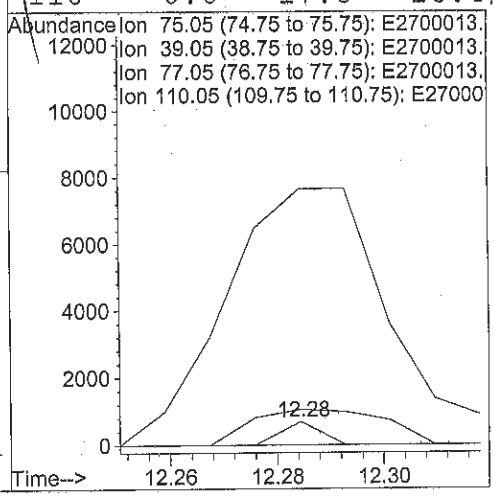


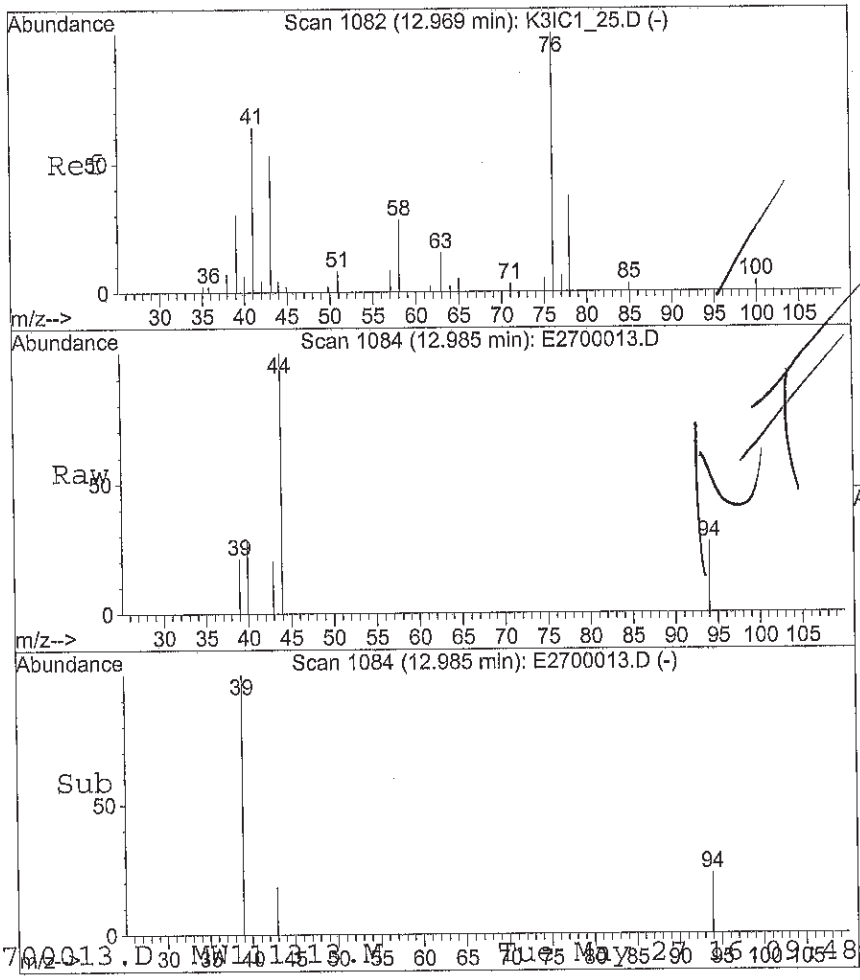


#42
trans-1,3-Dichloropropene
Concen: 0.07 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.23 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 75 Resp: 353

Ion	Ratio	Lower	Upper
75	100		
39	4655.5	53.6	80.4#
77	517.3	25.4	38.2#
110	0.0	17.6	26.4#

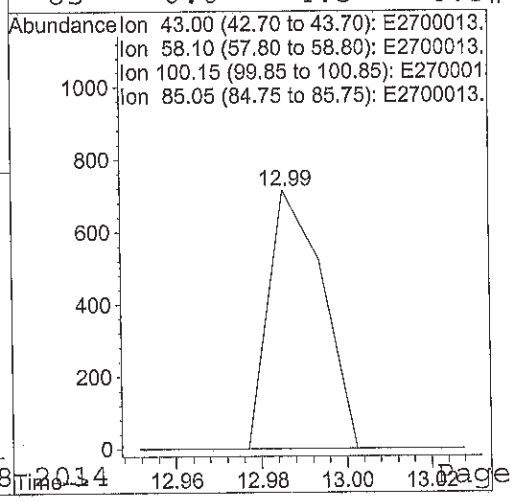


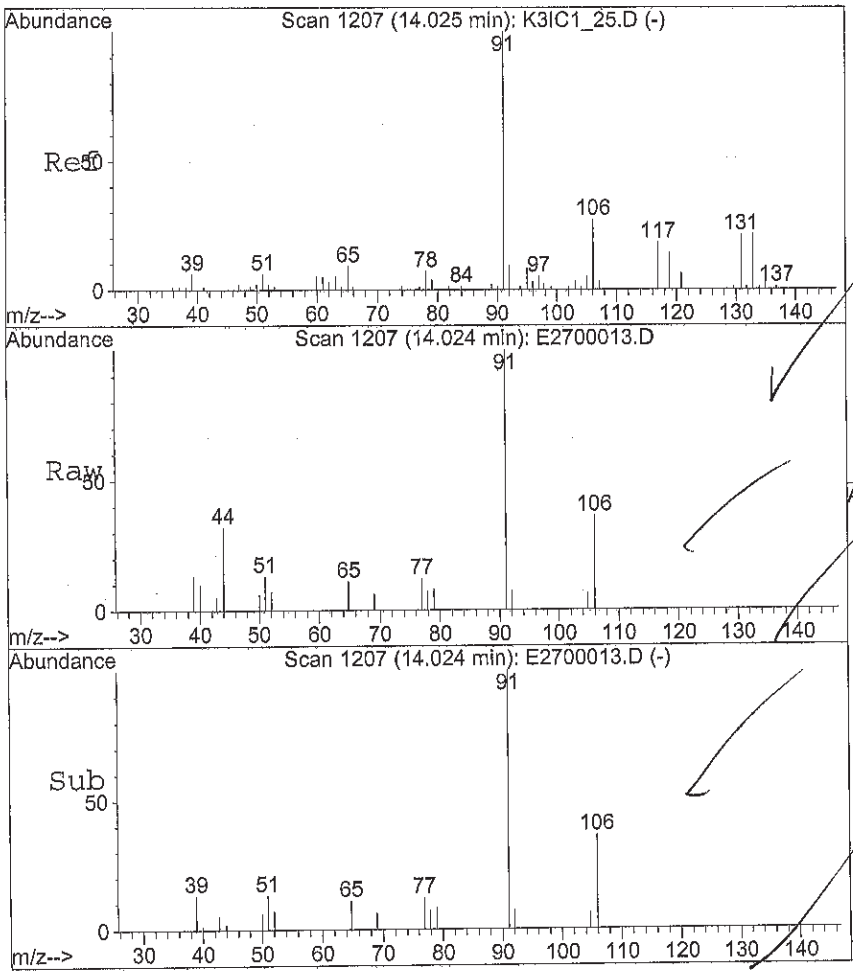


#46
2-Hexanone
Concen: 0.25 ug/L
RT: 12.99 min Scan# 1084
Delta R.T. 0.02 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 43 Resp: 626

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

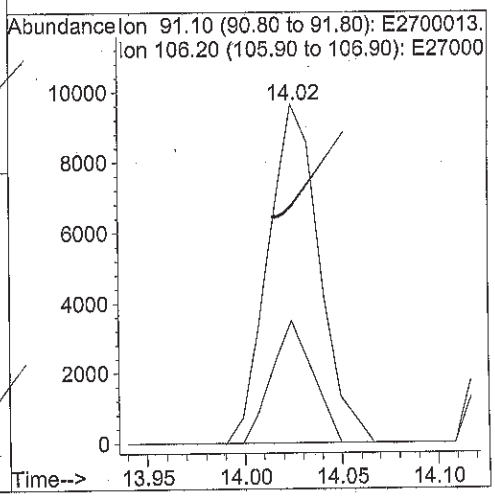


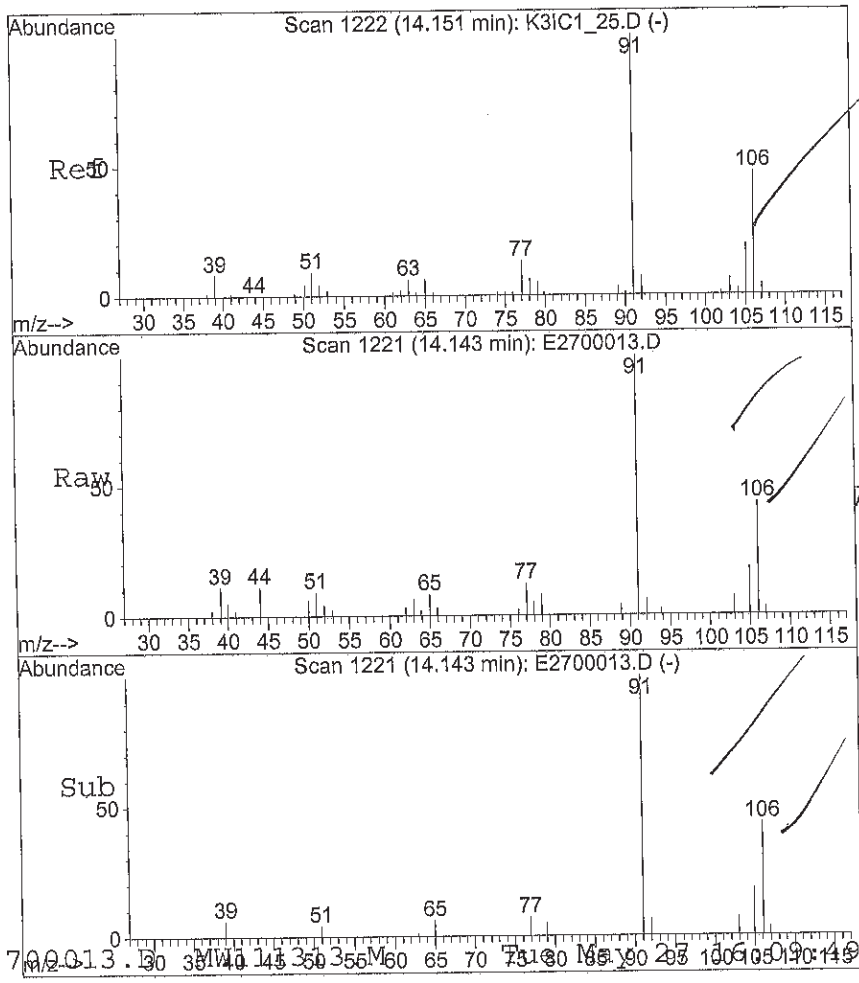


#51
Ethylbenzene
Concen: 0.98 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 91 Resp: 17785

Ion	Ratio	Lower	Upper
91	100		
106	28.9	23.5	35.3

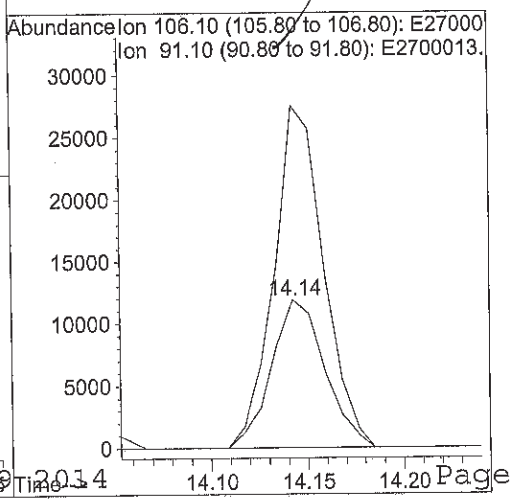


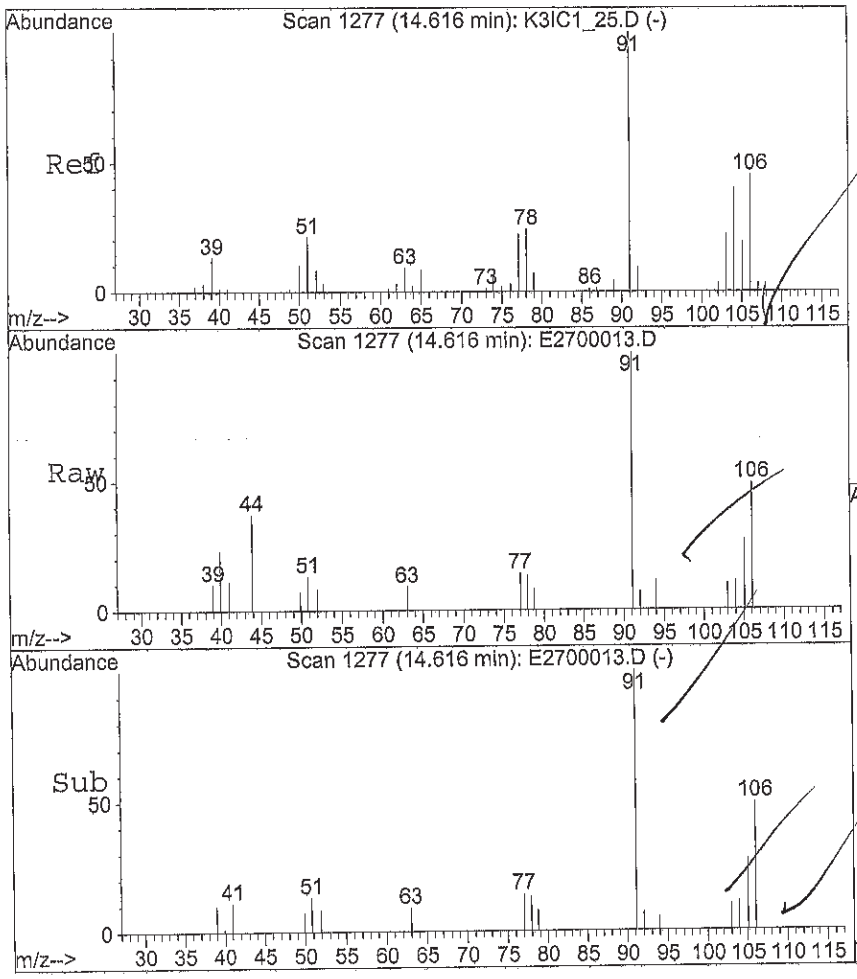


#52
m,p-Xylenes
Concen: 3.55 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:106 Resp: 22792

Ion	Ratio	Lower	Upper
106	100		
91	215.6	177.1	265.7

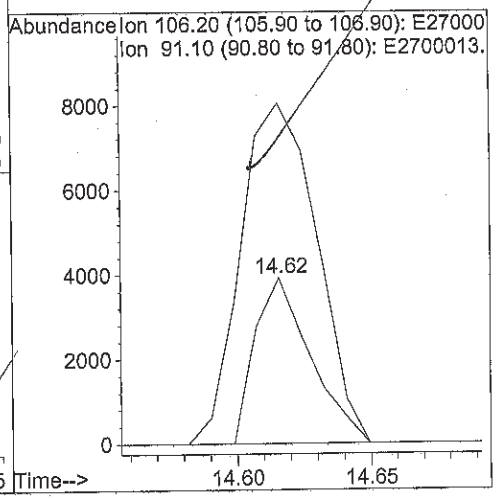


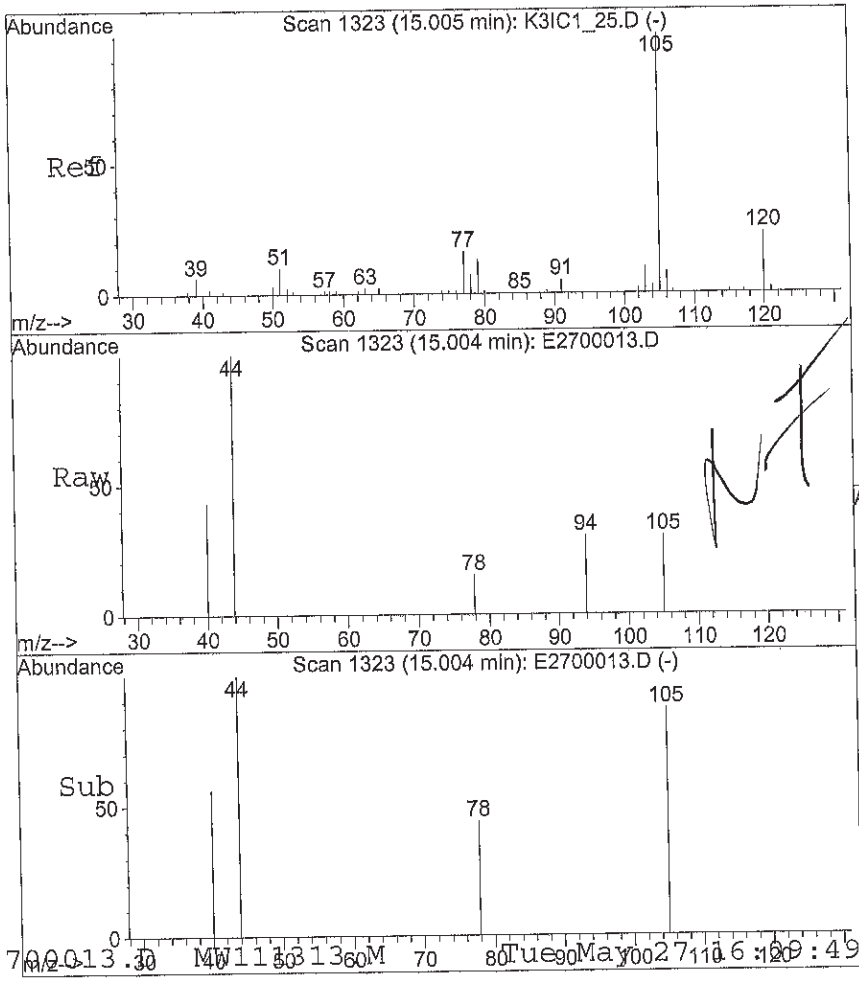


#53
o-Xylene
Concen: 0.89 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:106 Resp: 5633

Ion	Ratio	Lower	Upper
106	100		
91	281.9	179.0	268.6#

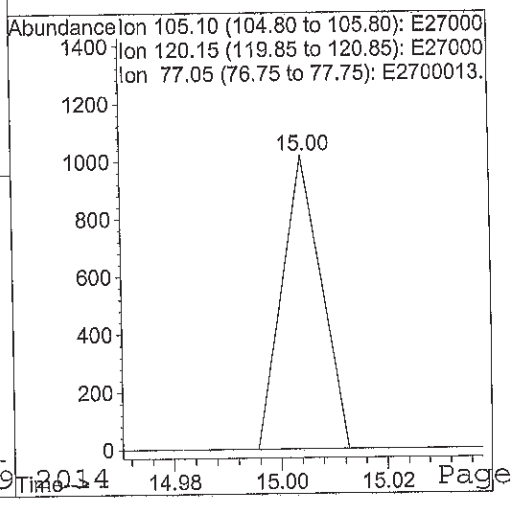


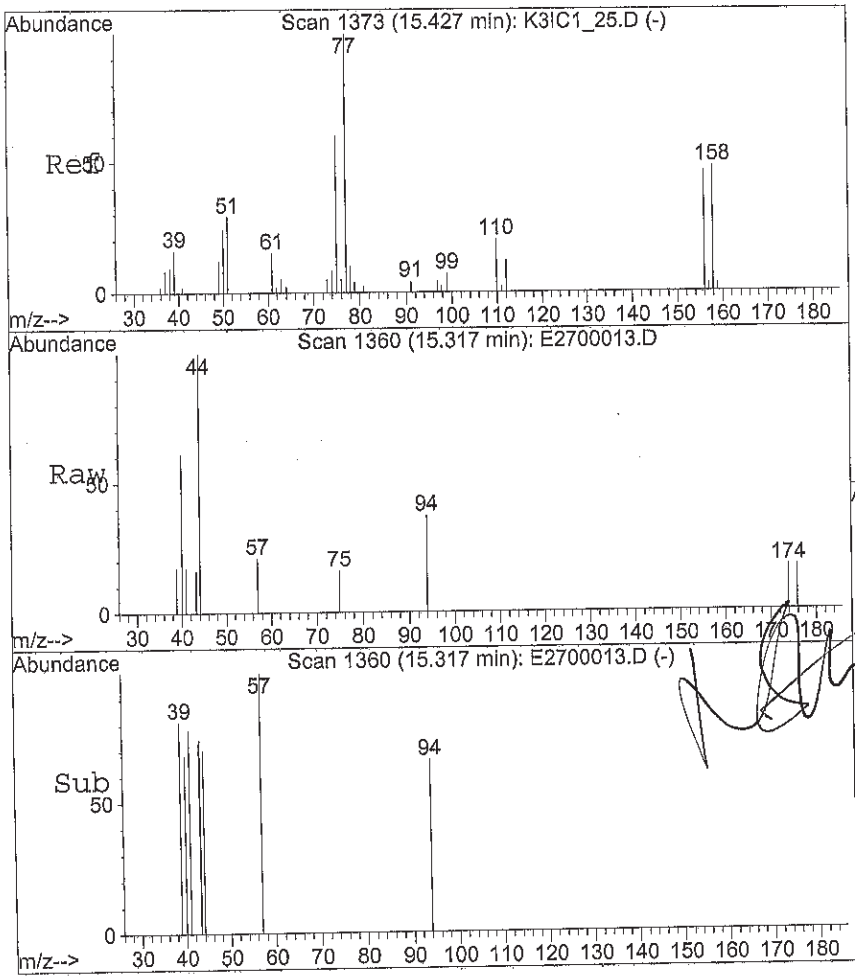


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:105 Resp: 516

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

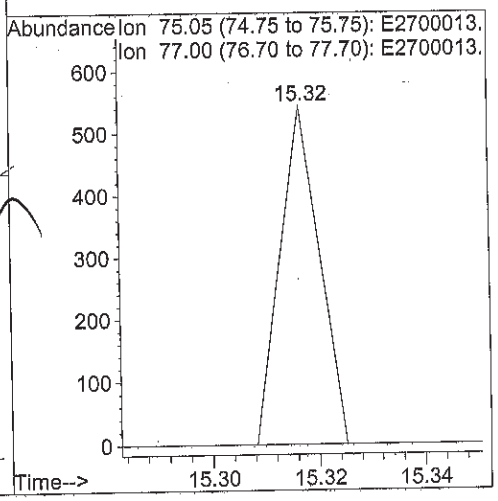


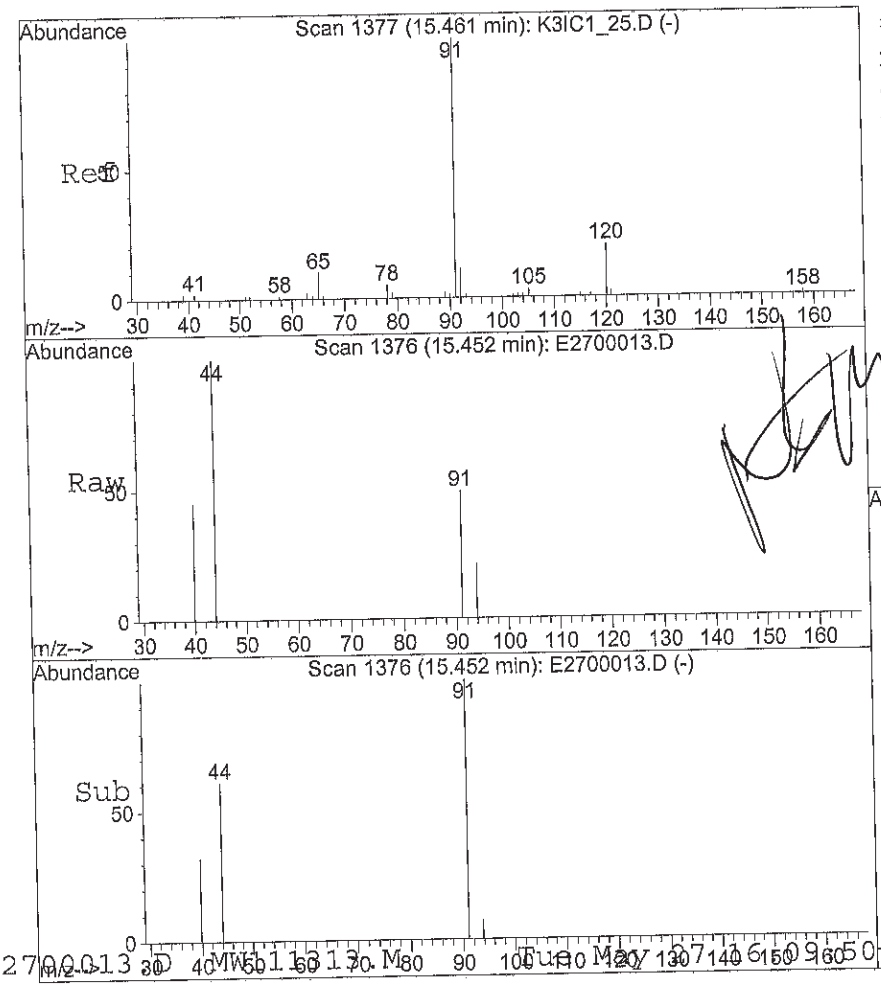


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.32 min Scan# 1360
Delta R.T. -0.11 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 75 Resp: 276

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

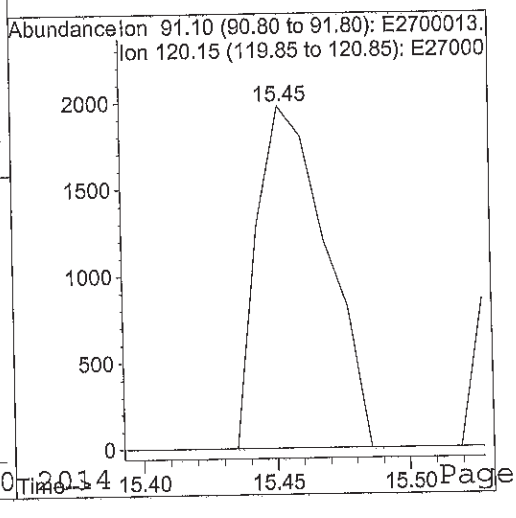


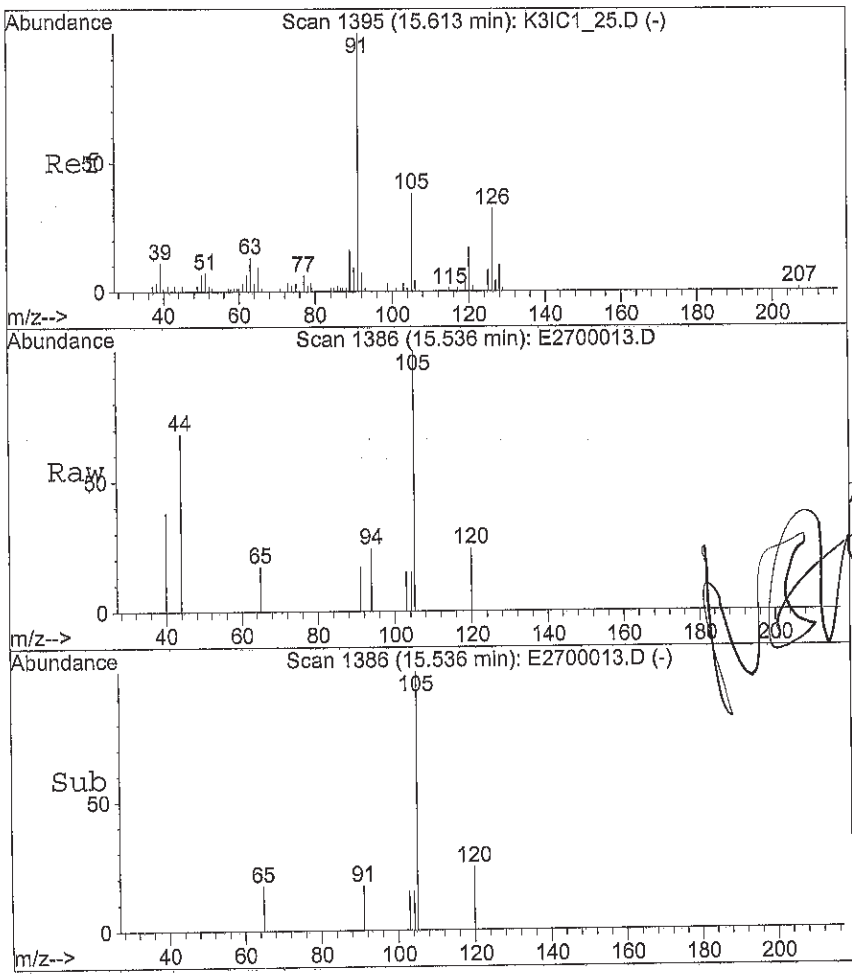


#62
n-Propylbenzene
Concen: 0.14 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 91 Resp: 3582

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

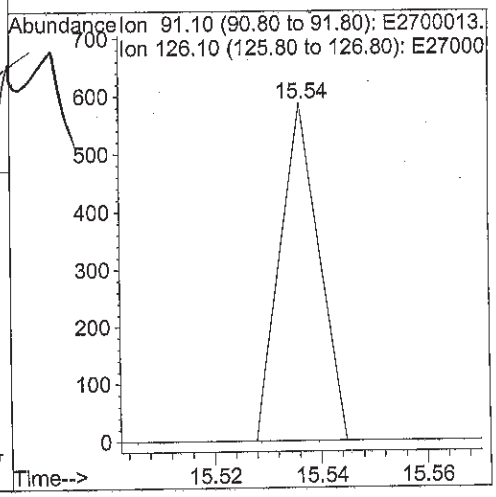


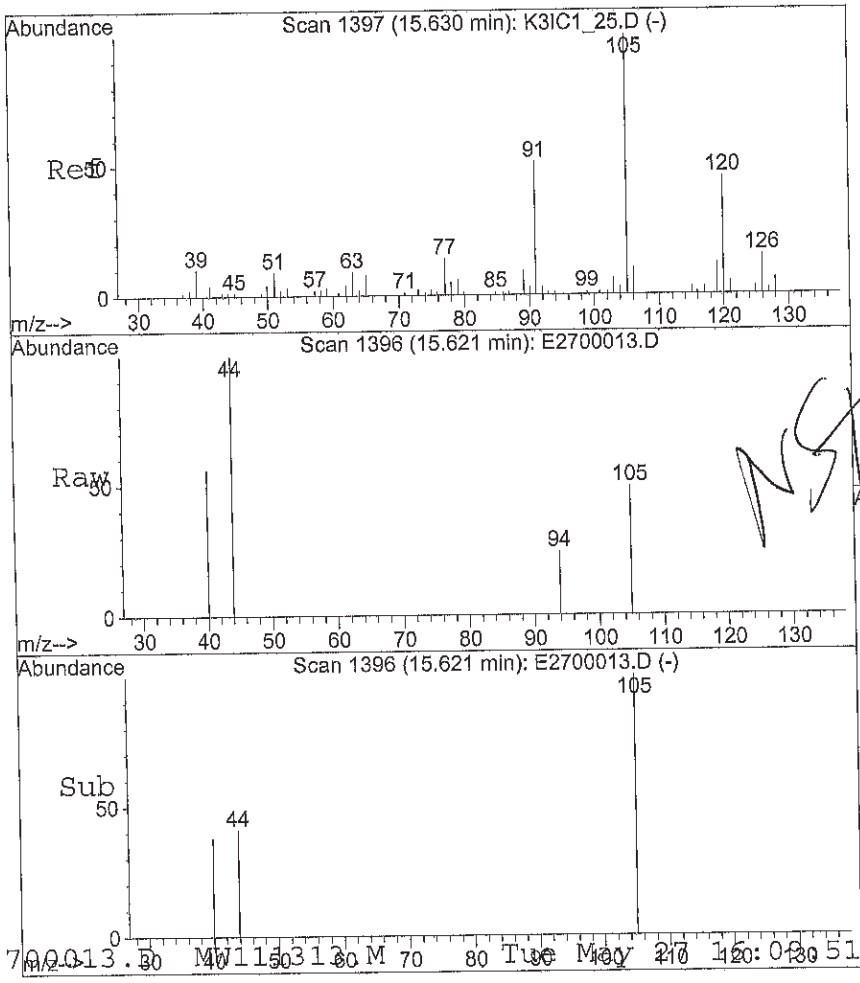


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.54 min Scan# 1386
Delta R.T. -0.08 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 91 Resp: 298

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

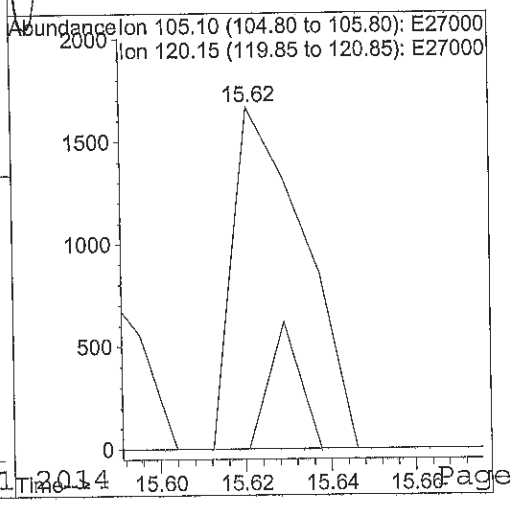


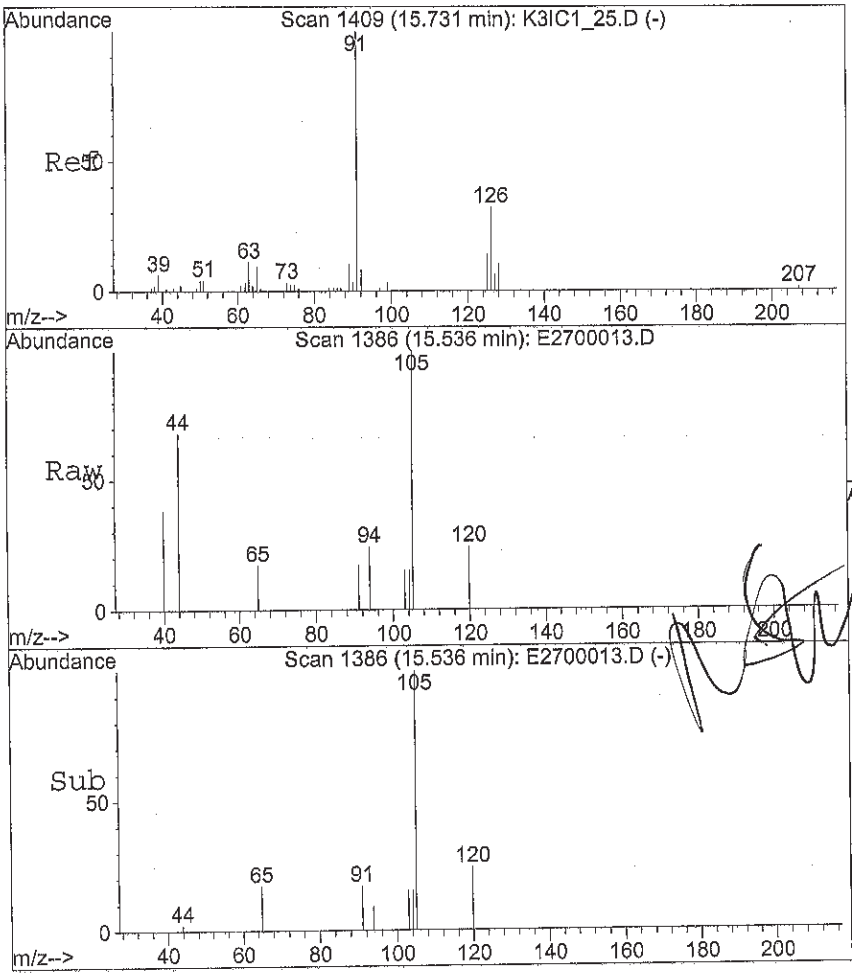


#64
1,3,5-Trimethylbenzene
Concen: 0.12 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:105 Resp: 1946

Ion	Ratio	Lower	Upper
105	100		
120	16.0	36.4	54.6#

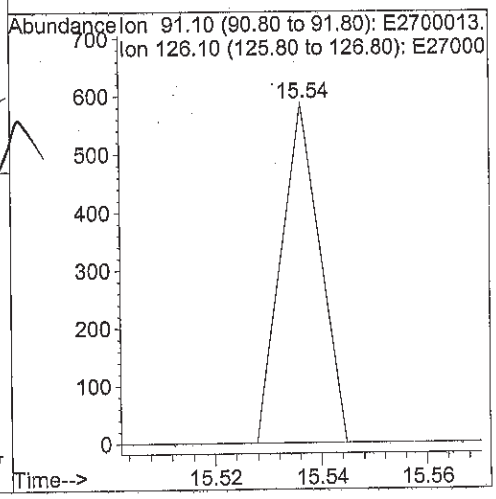


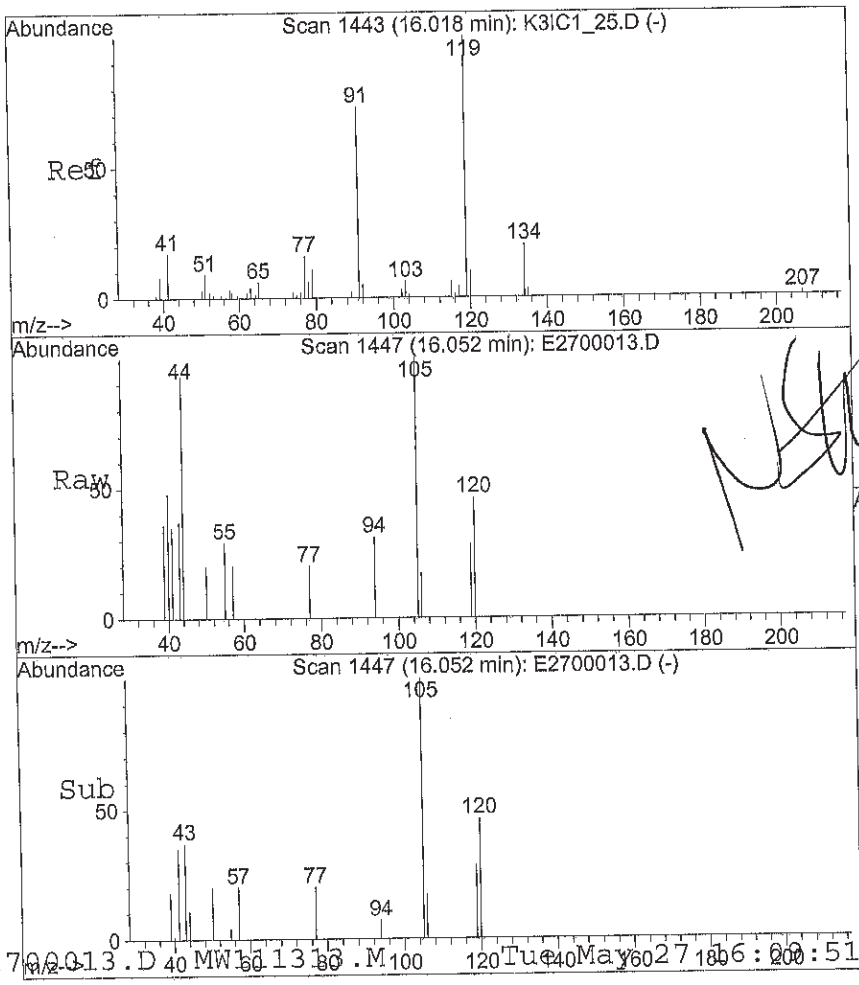


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.54 min Scan# 1386
Delta R.T. -0.19 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 91 Resp: 298

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

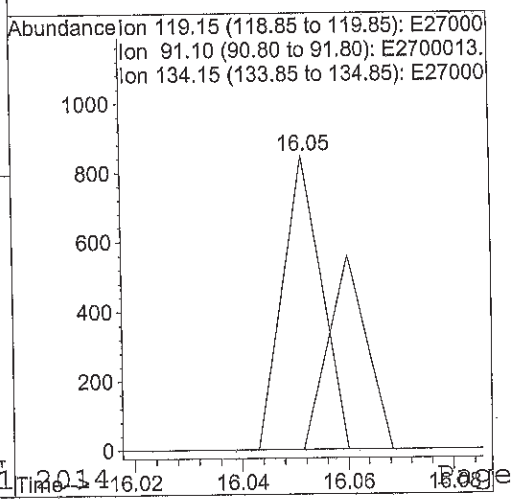


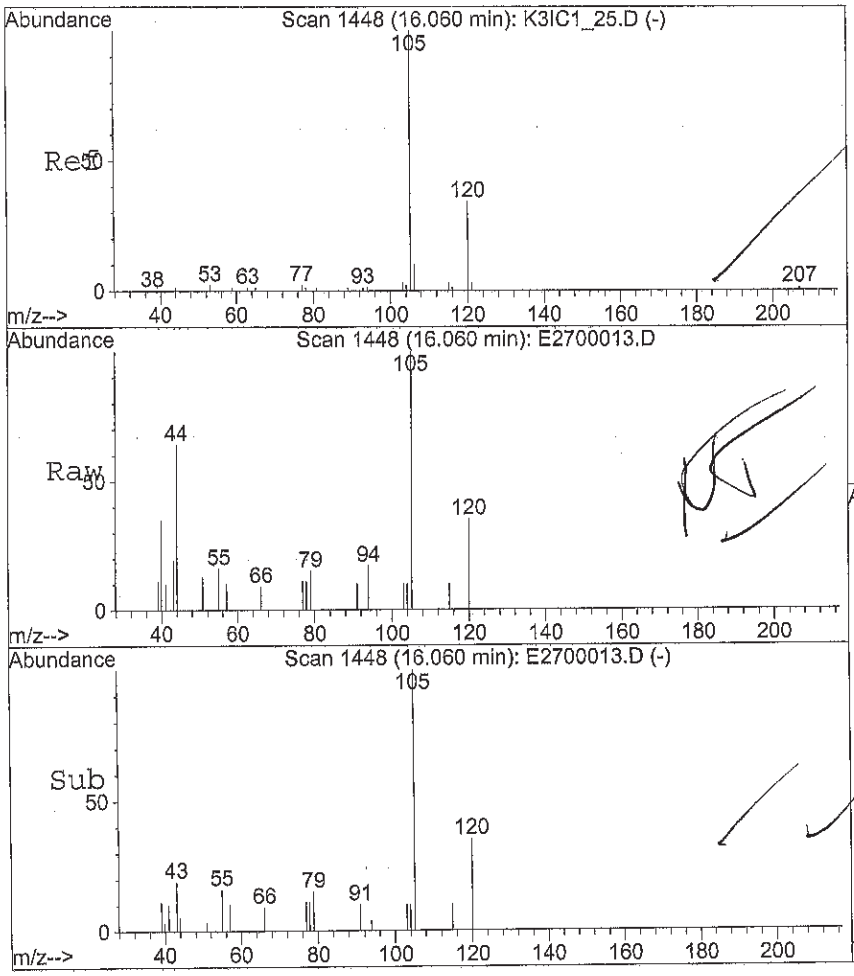


#66
tert-Butylbenzene
Concen: 0.03 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. 0.03 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:119 Resp: 430

Ion	Ratio	Lower	Upper
119	100		
91	65.8	56.3	84.5
134	0.0	16.1	24.1#

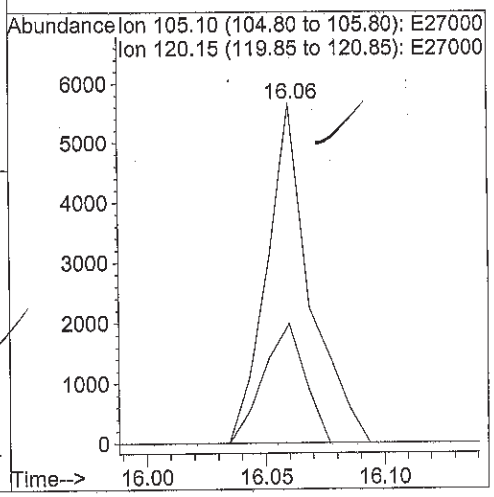


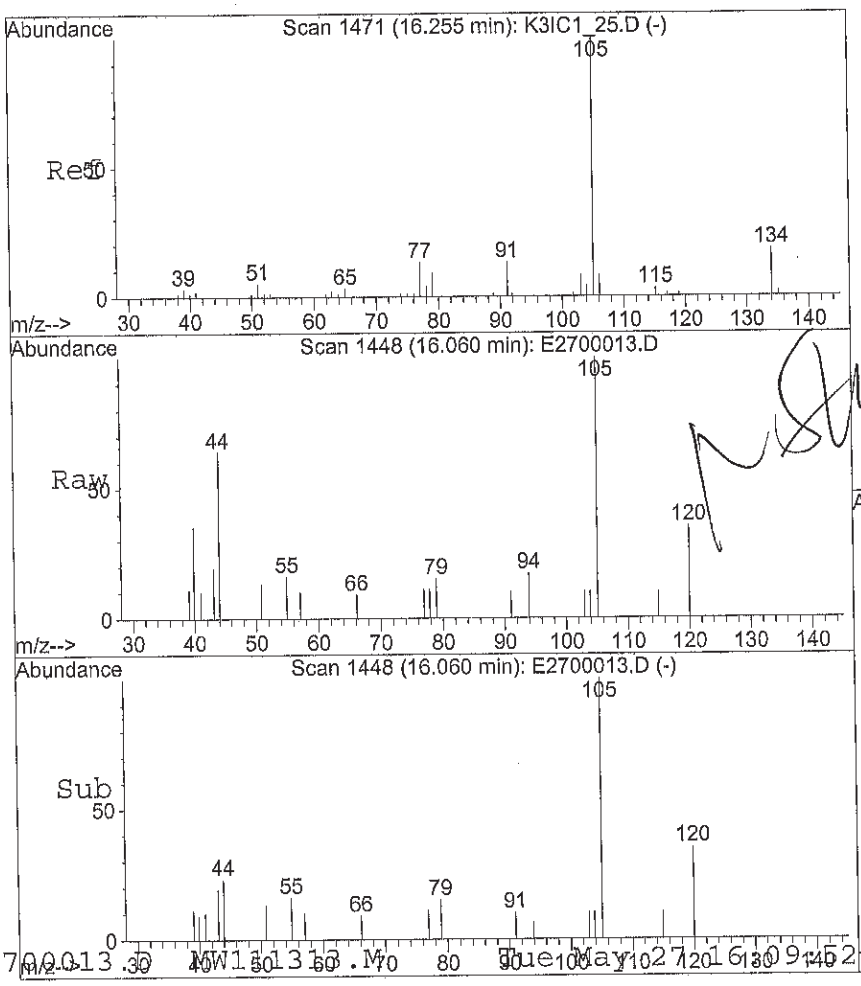


#67
1,2,4-Trimethylbenzene
Concen: 0.44 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:105 Resp: 7134

Ion	Ratio	Lower	Upper
105	100		
120	34.1	33.8	50.8

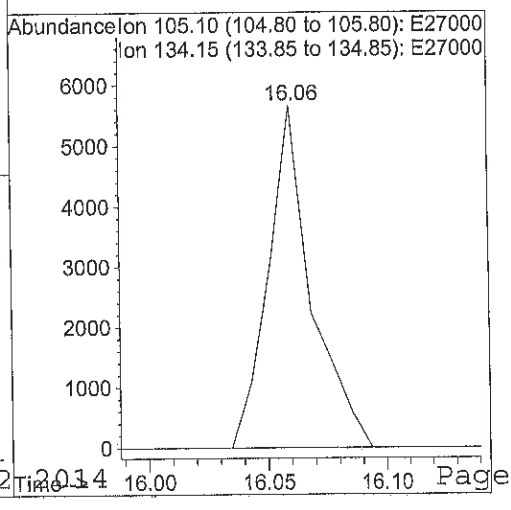


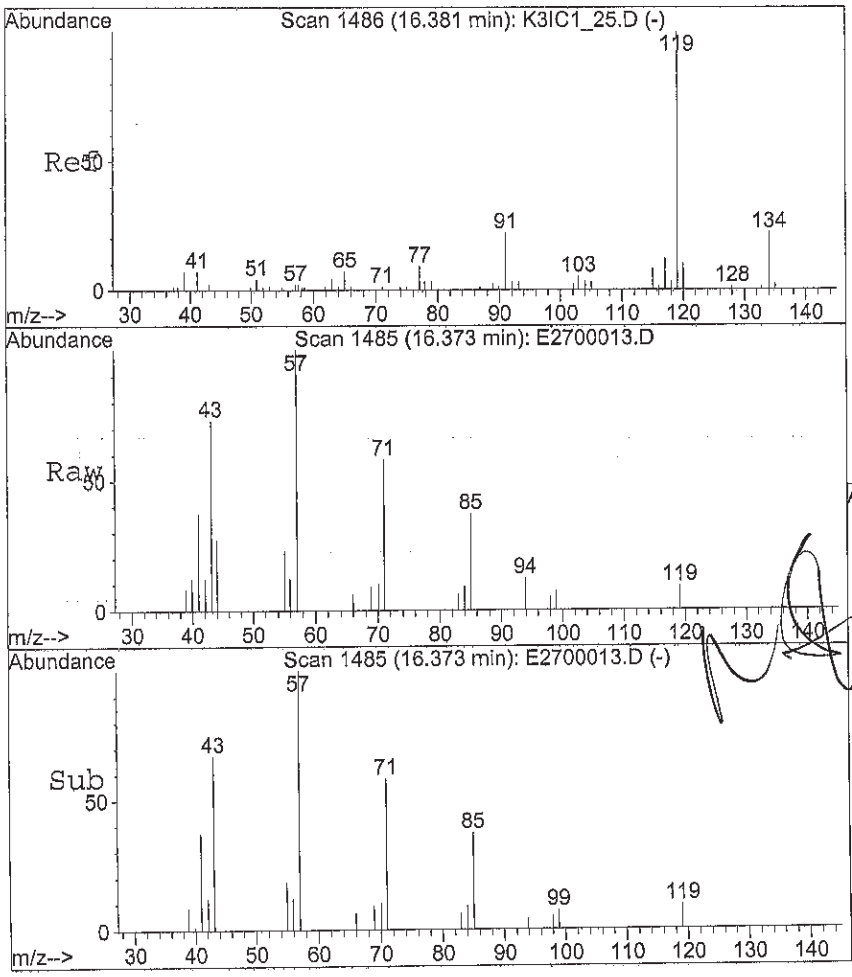


#68
sec-Butylbenzene
Concen: 0.34 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.19 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:105 Resp: 7134

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

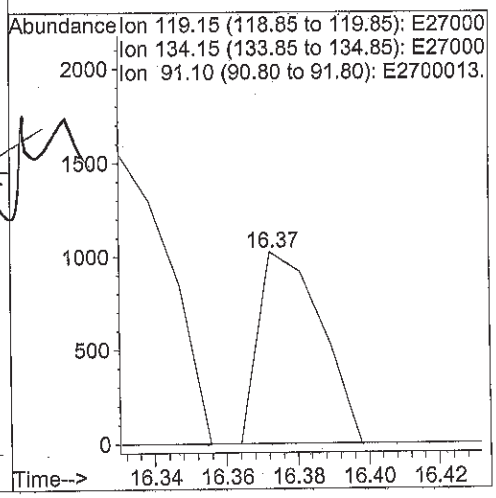


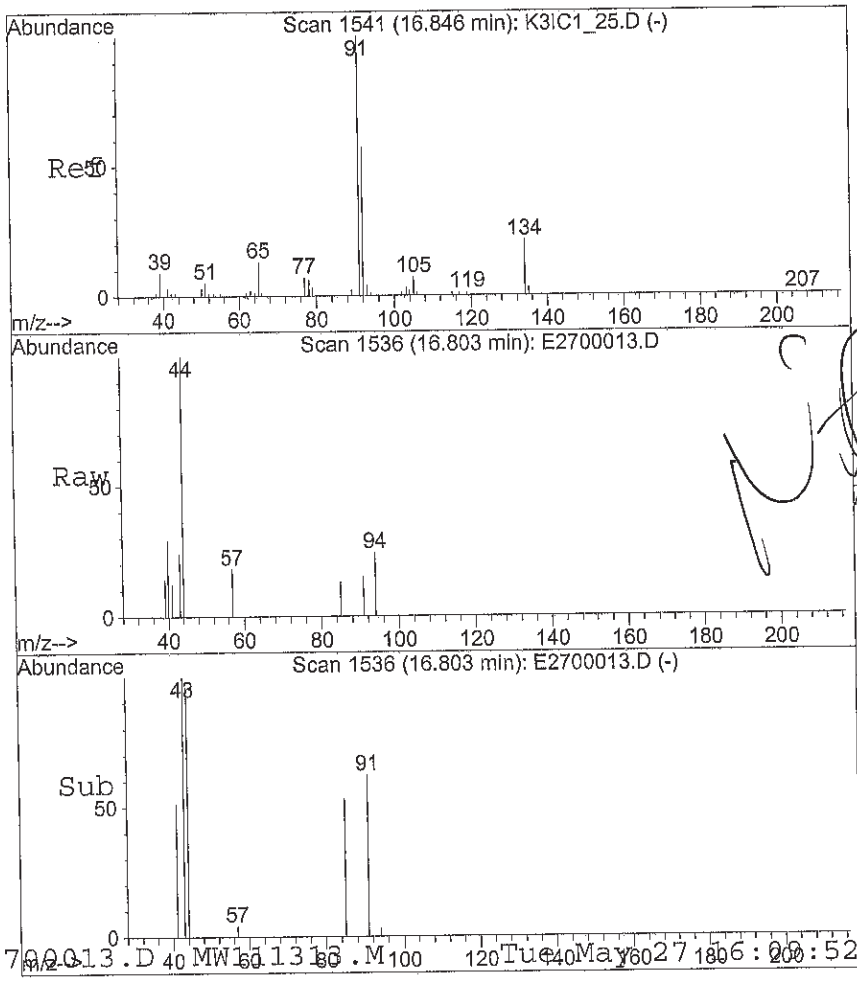


#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:119 Resp: 1248

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

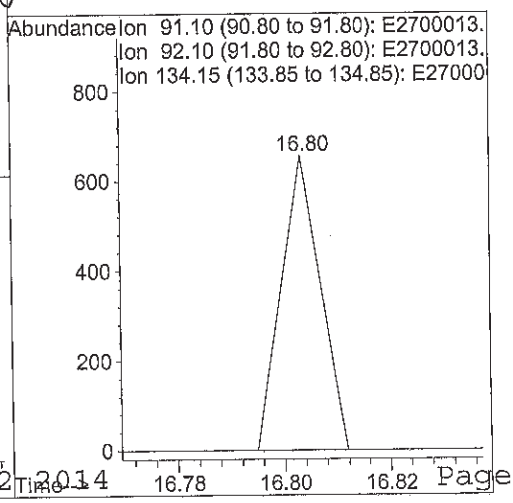


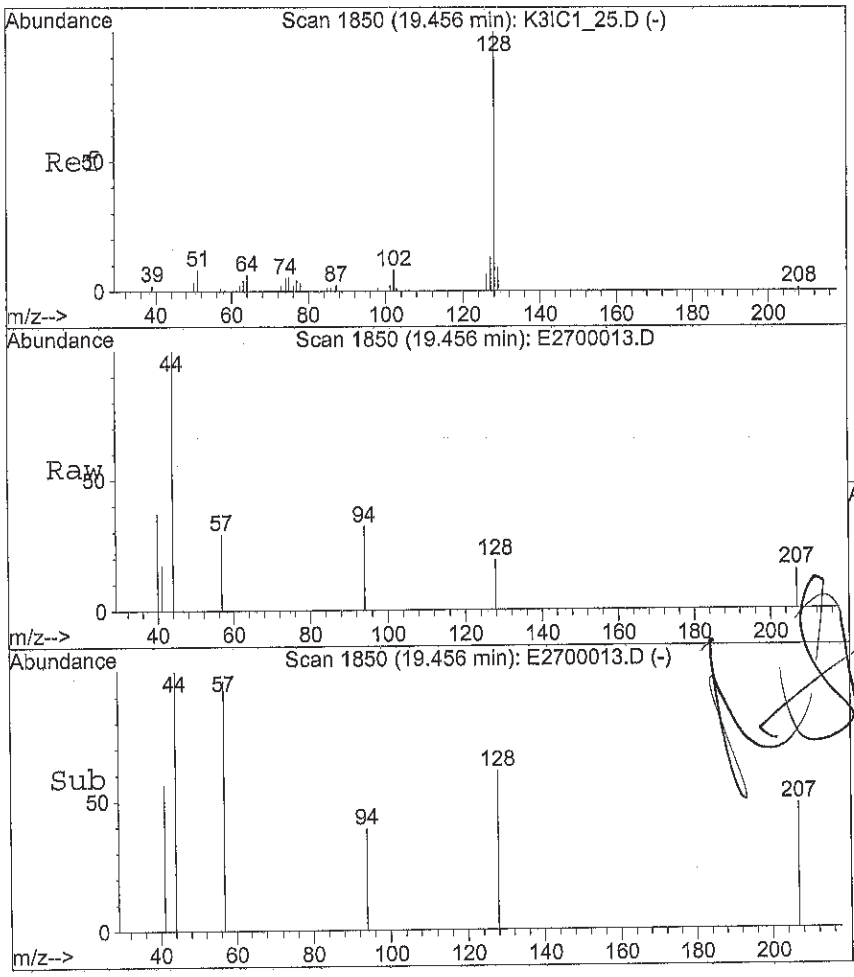


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.80 min Scan# 1536
Delta R.T. -0.04 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion: 91 Resp: 332

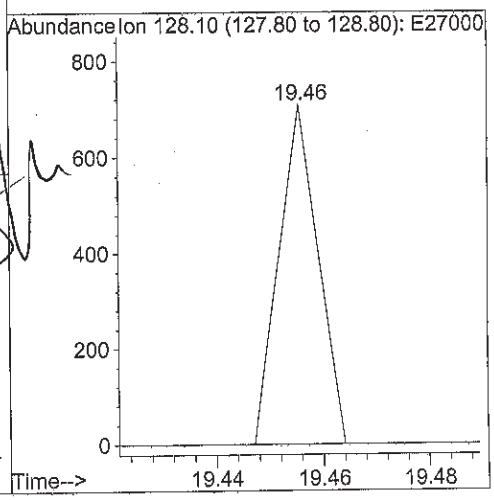
Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#





#77
Naphthalene
Concen: 0.03 ug/L
RT: 19.46 min Scan# 1850
Delta R.T. -0.00 min
Lab File: E2700013.D
Acq: 27 May 2014 3:35 pm

Tgt Ion:128 Resp: 359



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700013.D Vial: 4
Acq On : 27 May 2014 3:35 pm Operator: DN
Sample : 3E42701-10 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 16:10 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1519594	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1165855	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	627293	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	429643	10.87 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.96%		
3) Chloroform-d (SU6)	9.18	84	726756	12.82 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 102.56%		
4) Methylene Chloride-d2 (SU5	7.06	86	399943	12.07 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.56%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	420567	15.57 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 124.56%		
6) Benzene-d6 (SU7)	9.93	84	1383364	11.60 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.80%		
8) Toluene-d8 (SU3)	12.21	98	1328718	12.01 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.08%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	632605	13.85 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.80%		

Target Compounds Qvalue

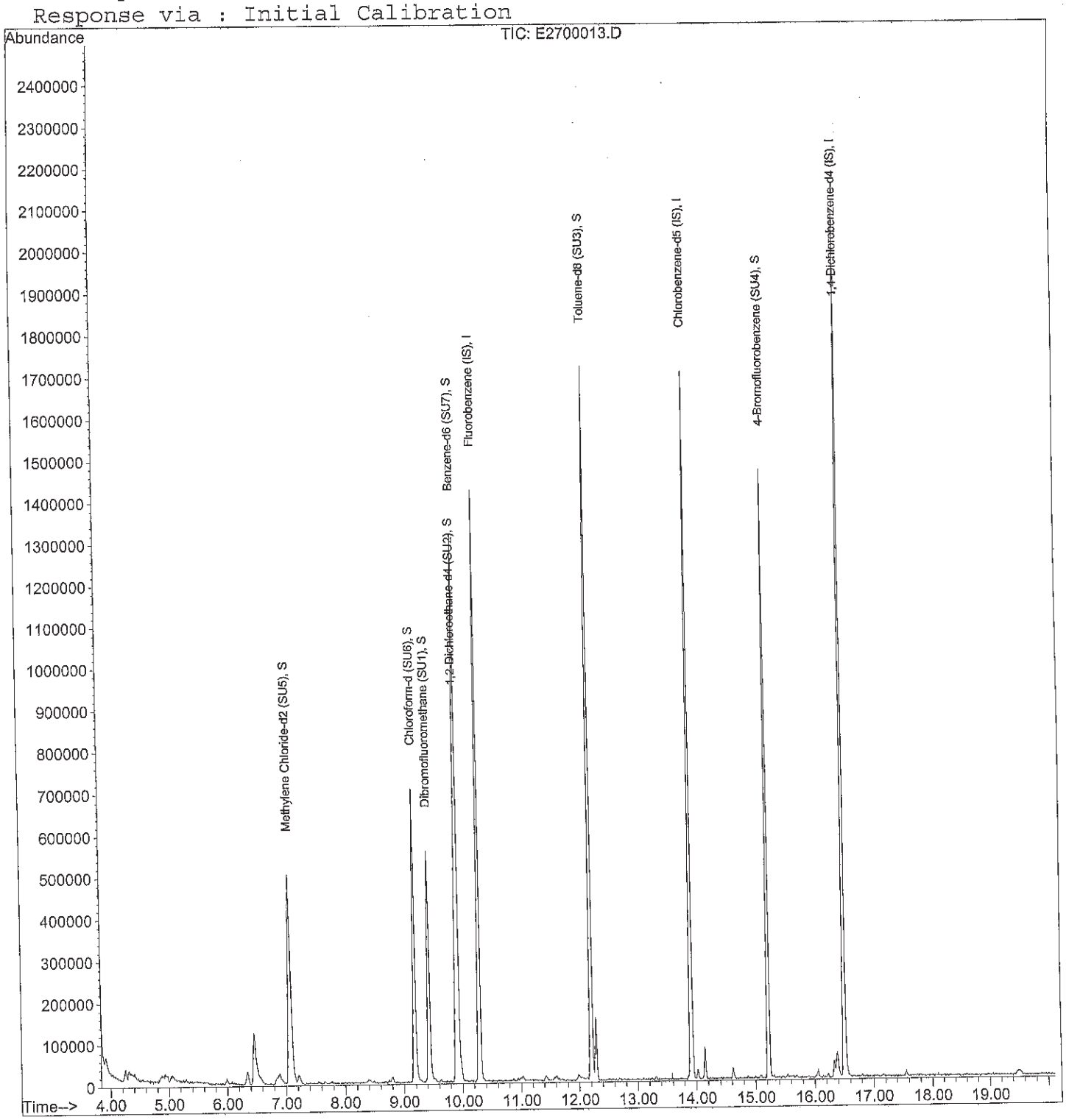
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700013.D
Acq On : 27 May 2014 3:35 pm
Sample : 3E42701-10
Misc : 100cc SVL-512-SA5D-SV-11.0-12.0
MS Integration Params: rteint.p
Quant Time: May 27 16:10 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700014.D
Acq On : 27 May 2014 4:04 pm
Sample : 3E42701-11
Misc : 100cc SVL-512-SA5D-SV-16.75-17.75
MS Integration Params: rteint.p
Quant Time: May 27 16:26 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1558226	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1225289	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	643267	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	436452	11.23 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.84%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	437553	11.85 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.80%		
39) Toluene-d8 (SU3)	12.21	98	1377020	12.05 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.40%		
58) 4-Bromofluorobenzene (SU4)	15.23	95	680731	13.58 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 108.64%		

Target Compounds					Qvalue
4) Chloromethane	4.40	50	6574	1.30 ~~ug/L~~ #	76
6) Bromomethane	5.13	96	1065	-1.16 ~~ug/L~~ #	1
7) Chloroethane	5.19	64	1636	1.95 ~~ug/L~~	94
9) (F113) 1,1,2-Trichloro-tri	6.35	151	3993	1.30 ug/L 0.026	86
11) Acetone	6.47	58	8998	10.48 ~~ug/L~~	96
12) (IPA) Leak Check Compound	6.47	45	285485	1524.67 ~~ug/L~~ #	85
13) Carbon disulfide	6.84	76	7222	0.56 ~~ug/L~~ #	76
14) Methylene Chloride	7.07	84	5710	1.33 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.90	59	4013	15.10 ~~ug/L~~ #	77
20) 2,2-Dichloropropane	8.98	77	278	0.05 ~~ug/L~~ #	36
24) Chloroform	9.21	83	1869	0.23 ~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.33	59	920	0.08 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.93	75	399	0.07 ~~ug/L~~ #	1
31) Benzene	9.98	78	2297	0.16 ~~ug/L~~ #	69
32) 1,2-Dichloroethane	9.93	62	6260	1.21 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	7320	2.99 ~~ug/L~~ #	100
41) Toluene	12.30	91	12428	0.74 ug/L 0.0148	93
46) 2-Hexanone	12.93	43	656	0.24 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	2908	0.15 ~~ug/L~~ #	45
52) m,p-Xylenes	14.15	106	1152	0.17 ug/L # 0.0034	21
53) o-Xylene	14.62	106	729	0.11 ug/L # 0.0022	1
54) Styrene	14.63	104	1947	-0.67 ~~ug/L~~ #	76

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700014.D Vial: 5
Acq On : 27 May 2014 4:04 pm Operator: DN
Sample : 3E42701-11 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-16.75-17.75 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 16:26 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

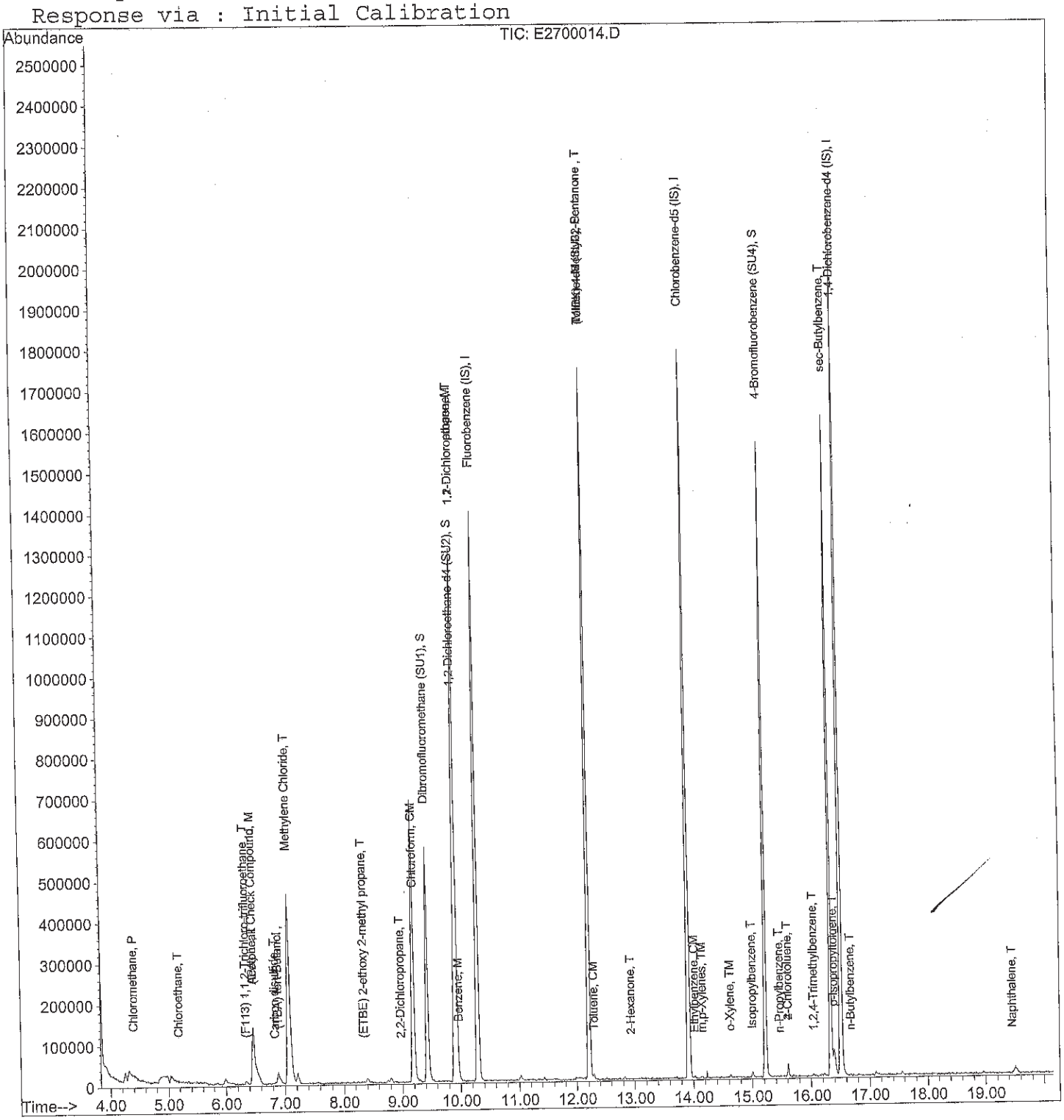
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
56) Isopropylbenzene	15.00	105	320	0.02 ~~ug/L~~ # NSM	1
62) n-Propylbenzene	15.46	91	274	0.01 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.61	91	2396	0.15 ~~ug/L~~ #	45
65) 4-Chlorotoluene	15.61	91	2396	0.16 ~~ug/L~~ #	44
67) 1,2,4-Trimethylbenzene	16.05	105	1059	0.06 ~~ug/L~~ # NSM	33
68) sec-Butylbenzene	16.33	105	24414	1.13 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	2197	0.12 ~~ug/L~~ #	52
72) n-Butylbenzene	16.68	91	316	0.02 ~~ug/L~~ #	30
77) Naphthalene	19.45	128	616	0.05 ~~ug/L~~	100

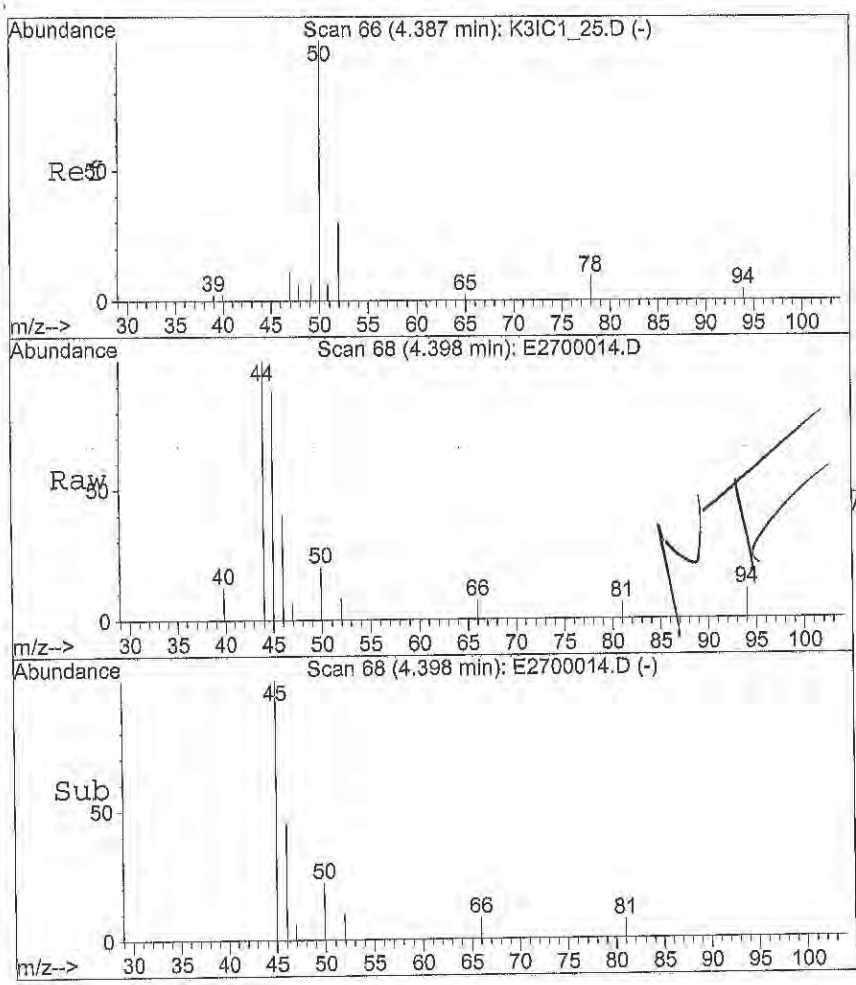
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700014.D Vial: 5
Acq On : 27 May 2014 4:04 pm Operator: DN
Sample : 3E42701-11 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-16.75-17.75 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 16:26 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

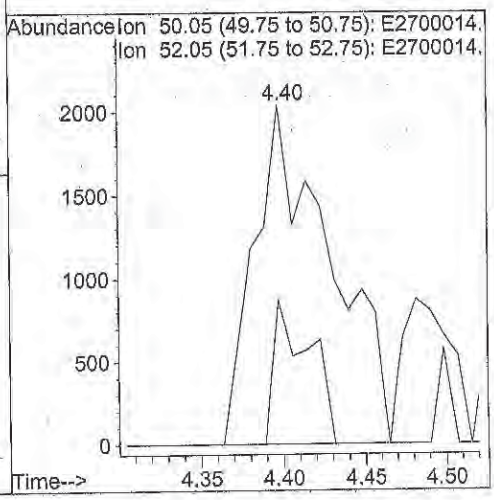


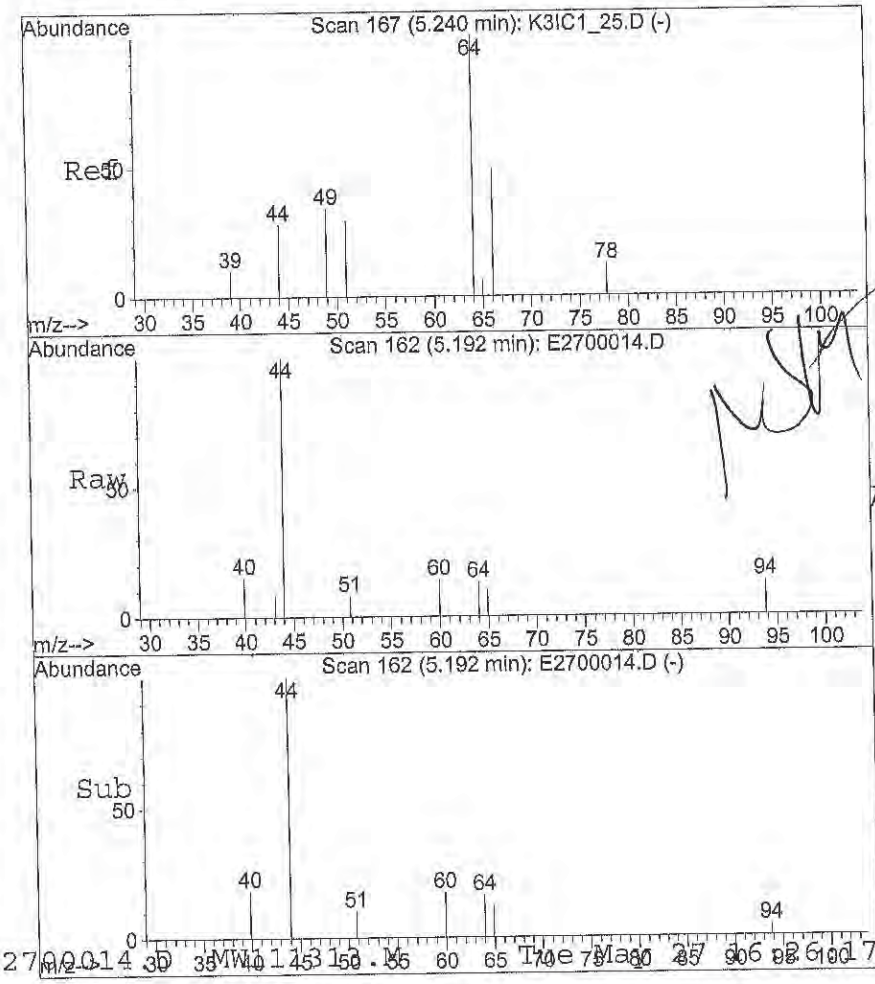


#4
Chloromethane
Concen: 1.30 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 50 Resp: 6574

Ion	Ratio	Lower	Upper
50	100		
52	20.0	26.9	40.3#

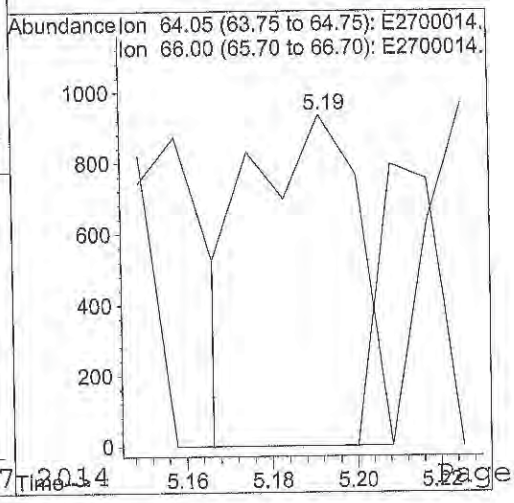


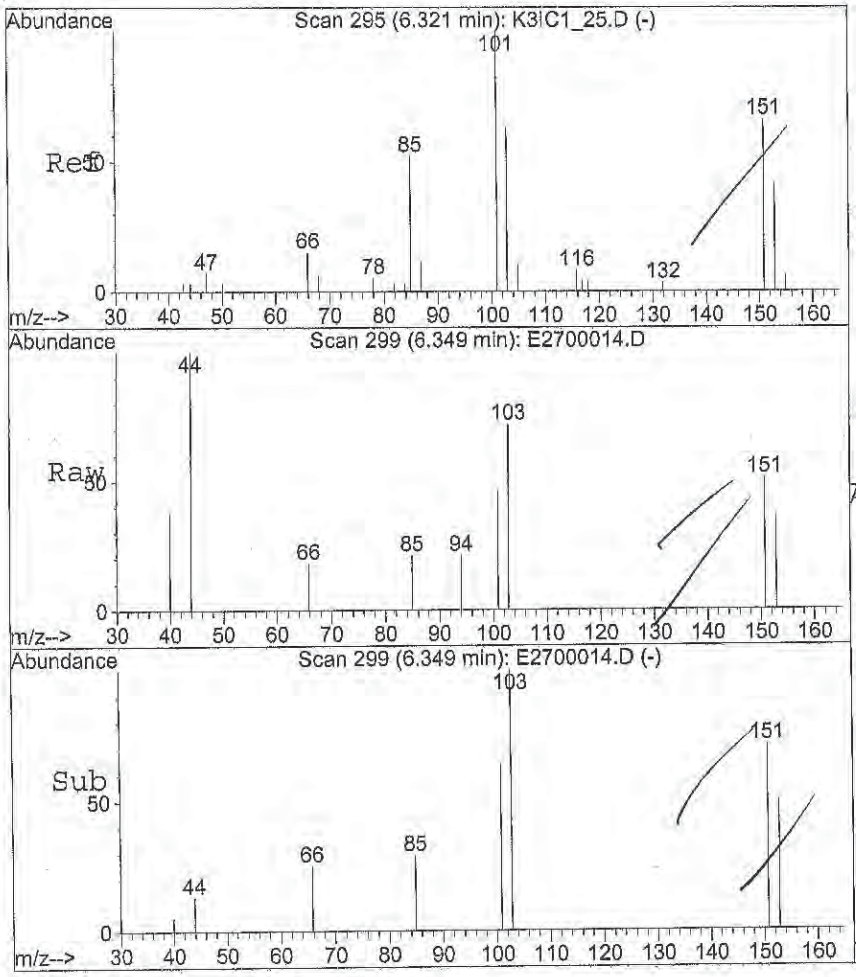


#7
Chloroethane
Concen: 1.95 ug/L
RT: 5.19 min Scan# 162
Delta R.T. -0.05 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 64 Resp: 1636

Ion	Ratio	Lower	Upper
64	100		
66	48.0	35.4	53.0

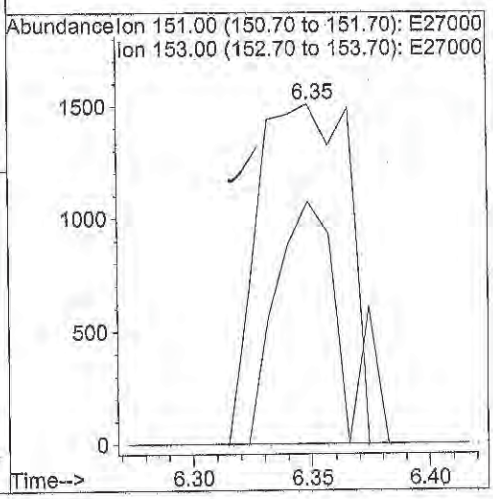


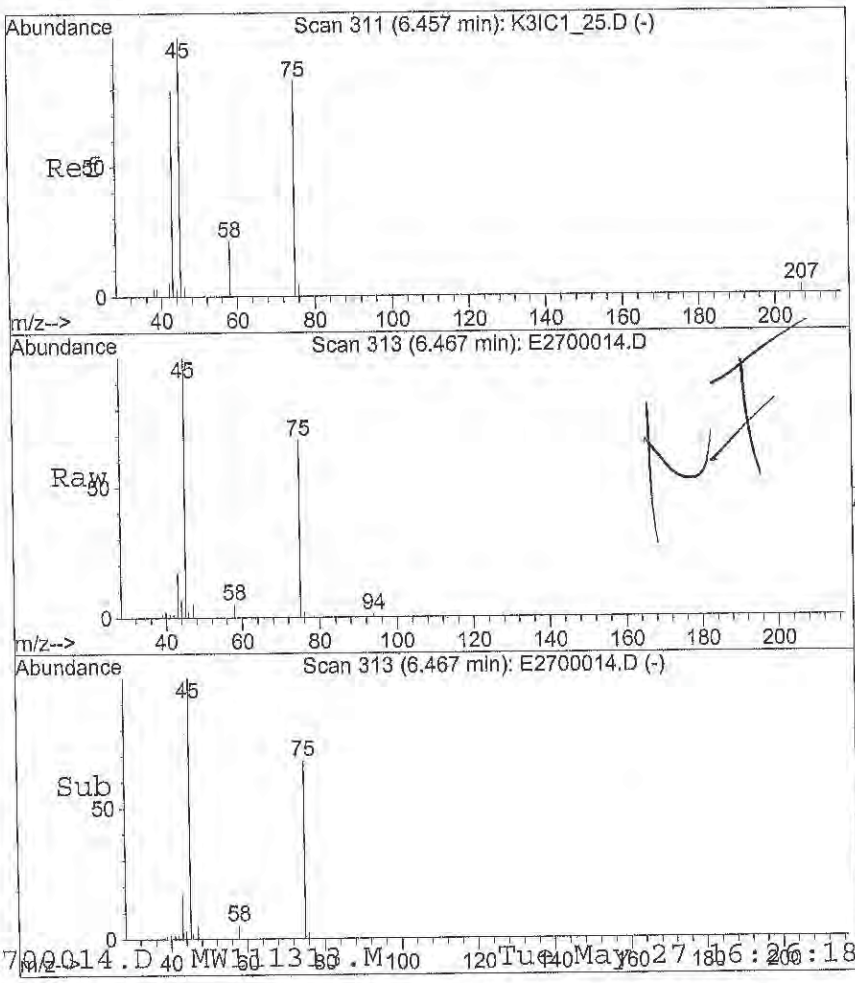


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 1.30 ug/L
RT: 6.35 min Scan# 299
Delta R.T. 0.03 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:151 Resp: 3993

Ion	Ratio	Lower	Upper
151	100		
153	51.5	49.6	74.4

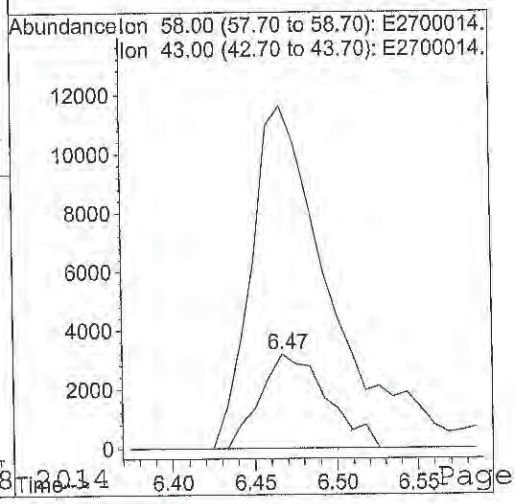


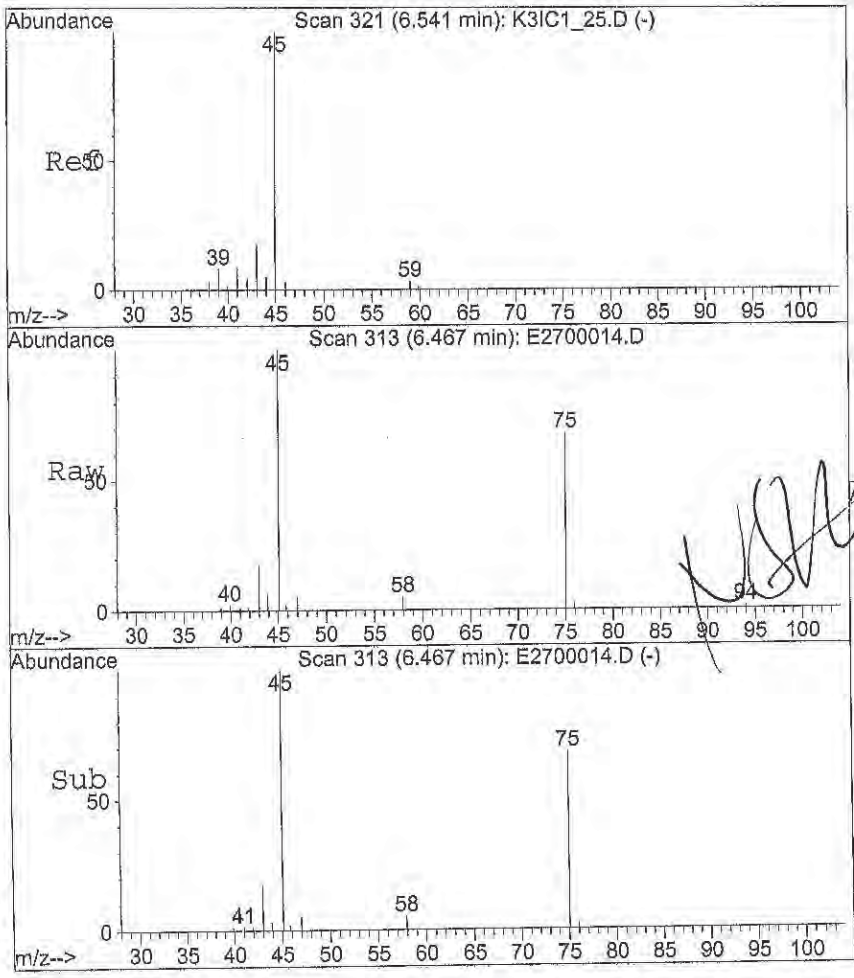


#11
Acetone
Concen: 10.48 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 58 Resp: 8998

Ion	Ratio	Lower	Upper
58	100		
43	440.5	360.9	541.3

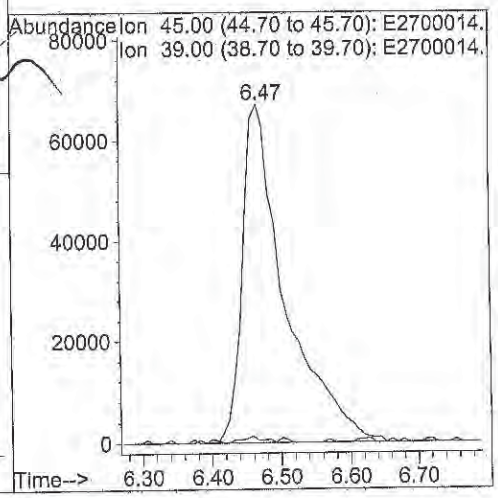


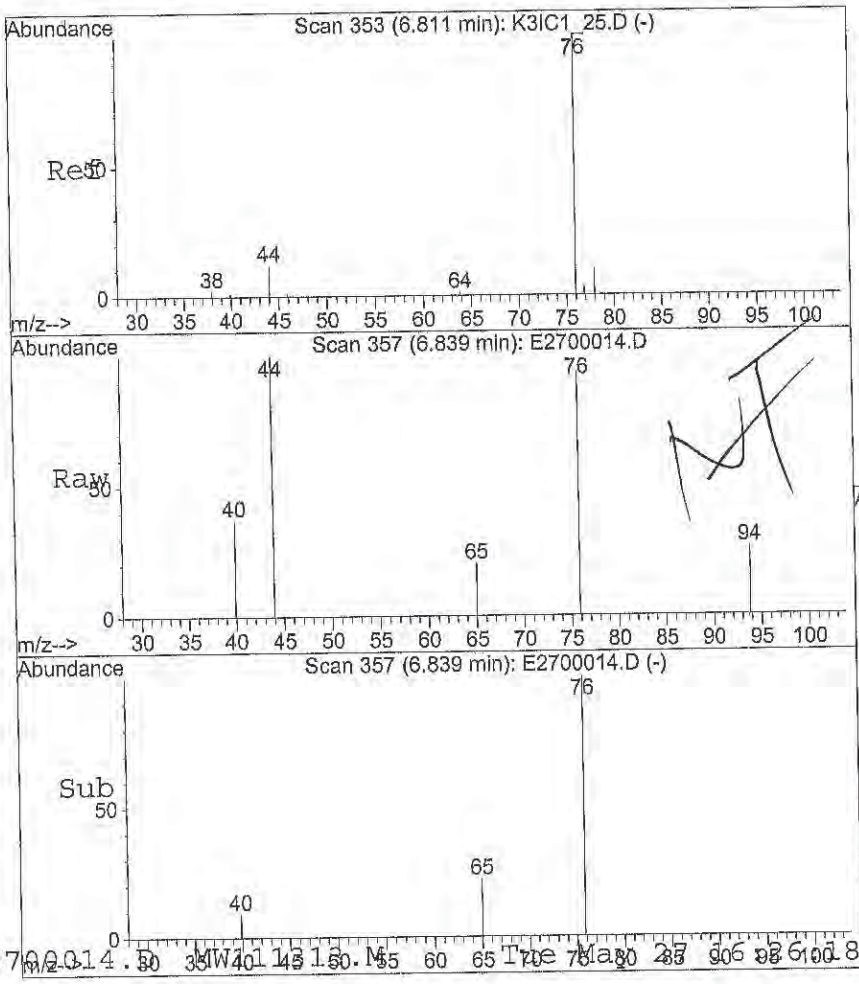


#12
(IPA) Leak Check Compound
Concen: 1524.67 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 45 Resp: 285485

Ion	Ratio	Lower	Upper
45	100		
39	0.9	4.9	7.3#

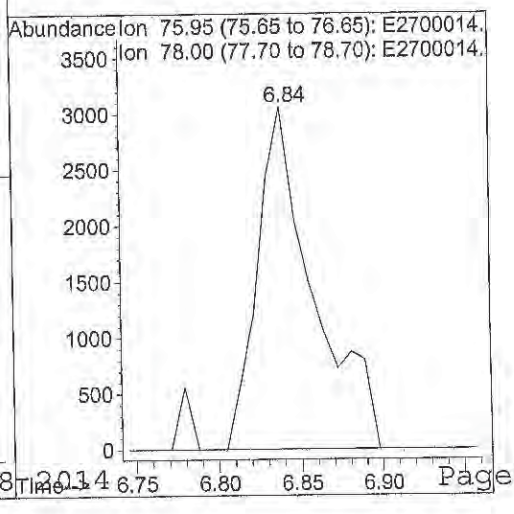


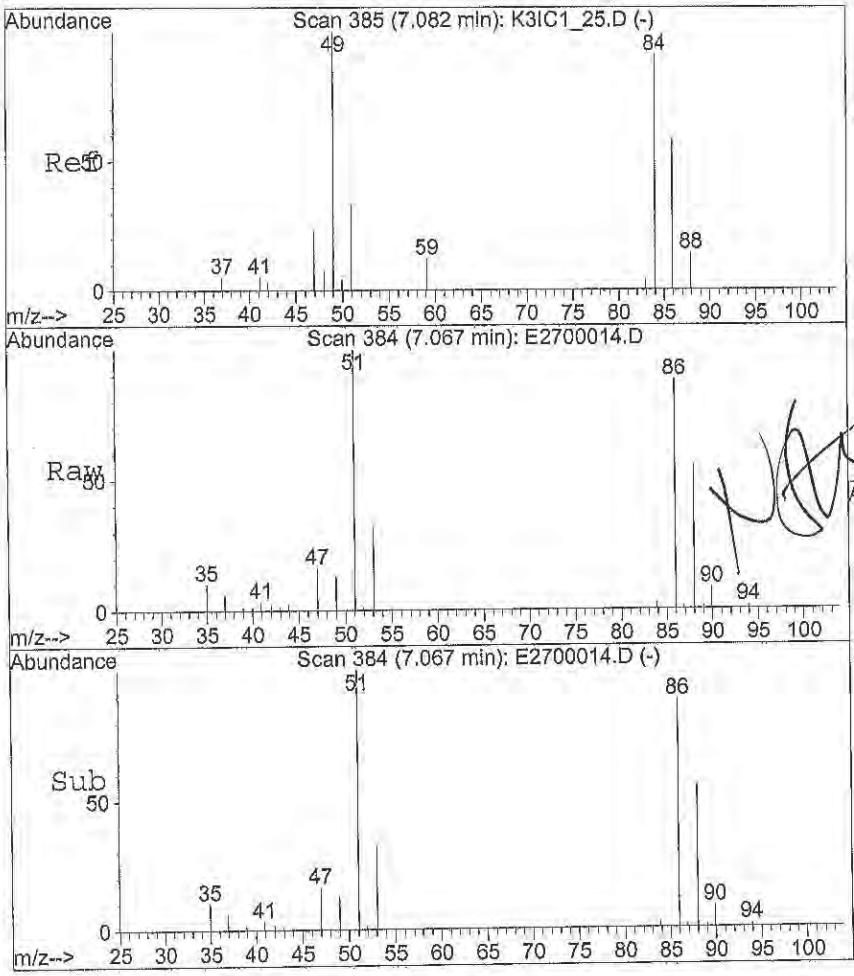


#13
Carbon disulfide
Concen: 0.56 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 76 Resp: 7222

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

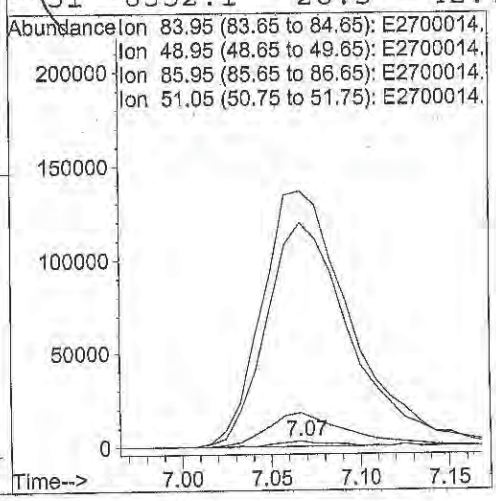


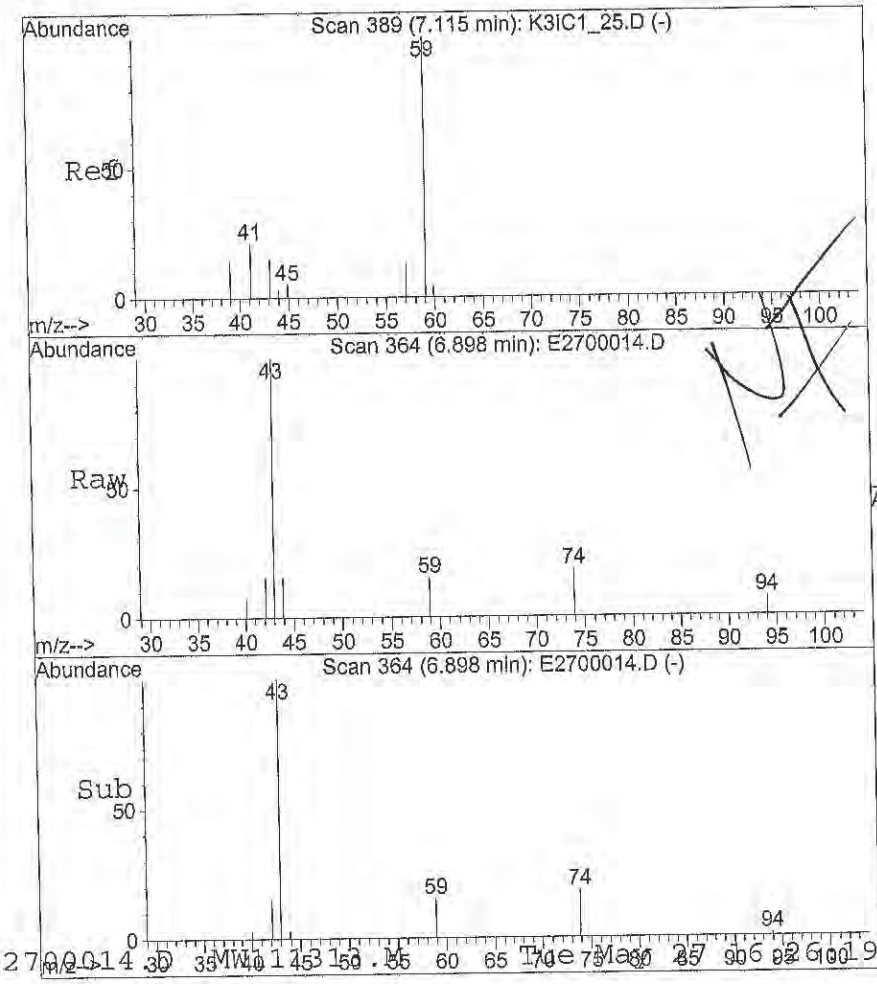


#14
Methylene Chloride
Concen: 1.33 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 84 Resp: 5710

Ion	Ratio	Lower	Upper
84	100		
49	959.1	89.8	134.6#
86	6992.2	51.1	76.7#
51	8352.1	28.5	42.7#

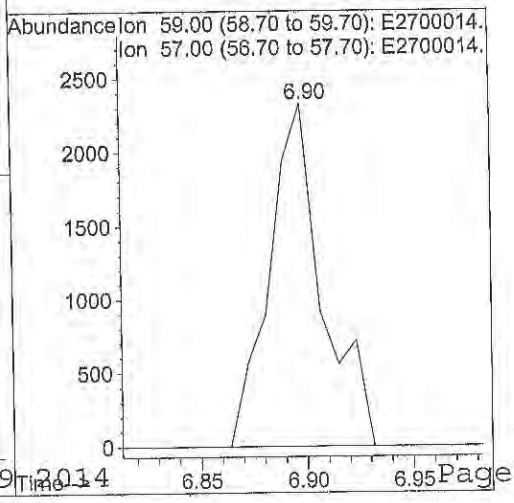


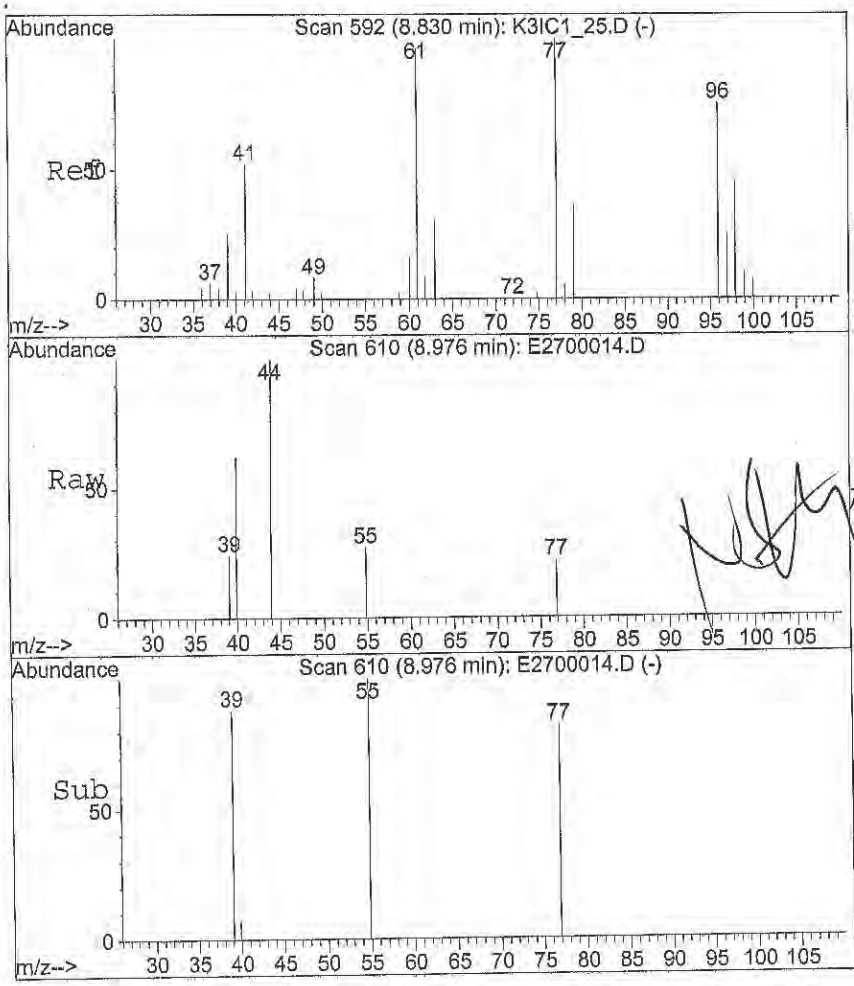


#15
(TBA) tert-Butanol
Concen: 15.10 ug/L
RT: 6.90 min Scan# 364
Delta R.T. -0.22 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 59 Resp: 4013

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

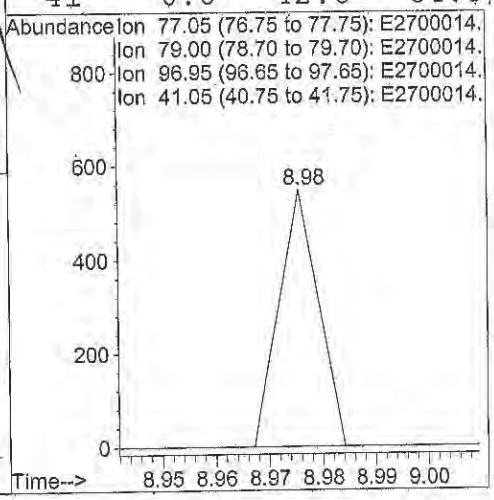


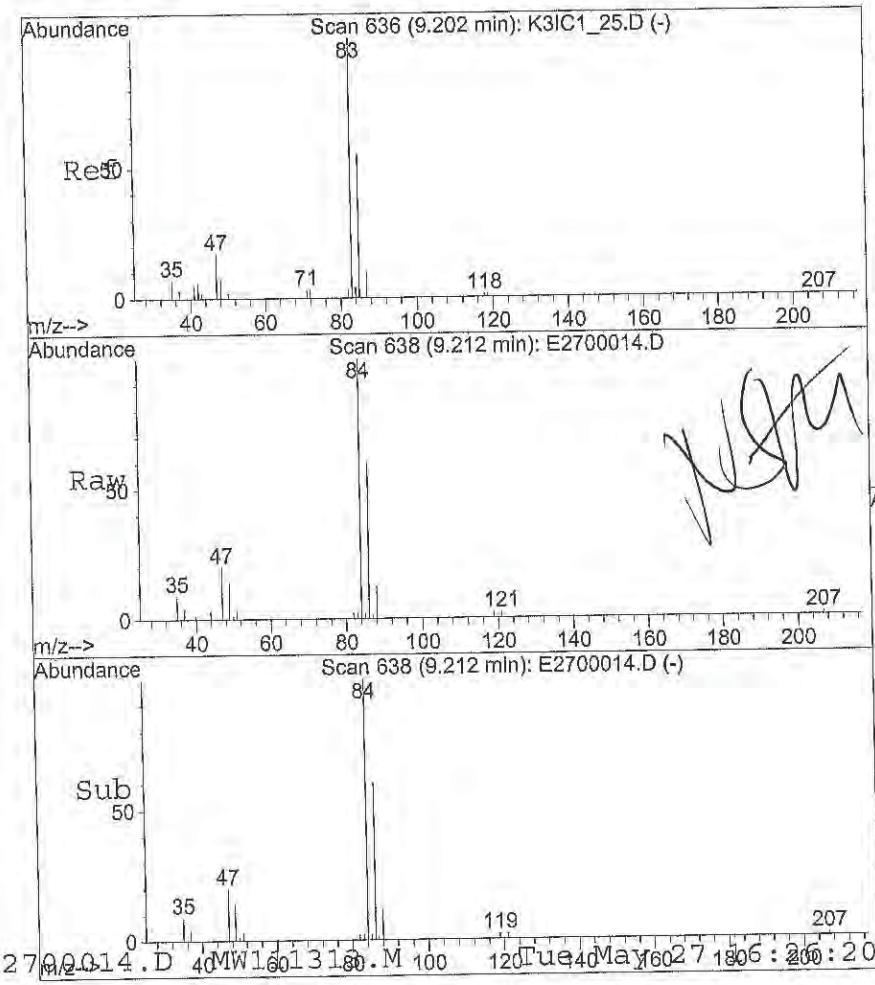


#20
2,2-Dichloropropane
Concen: 0.05 ug/L
RT: 8.98 min Scan# 610
Delta R.T. 0.15 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 77 Resp: 278

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

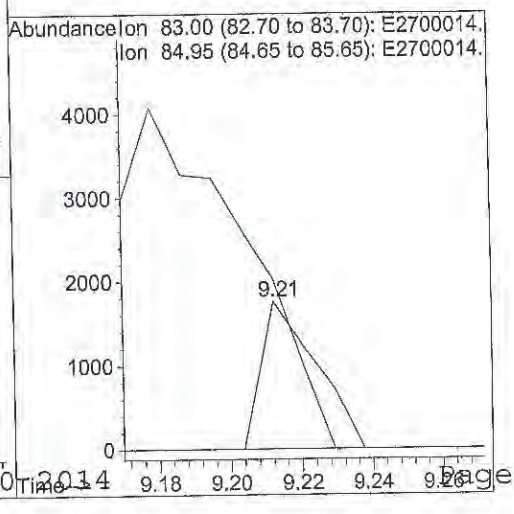


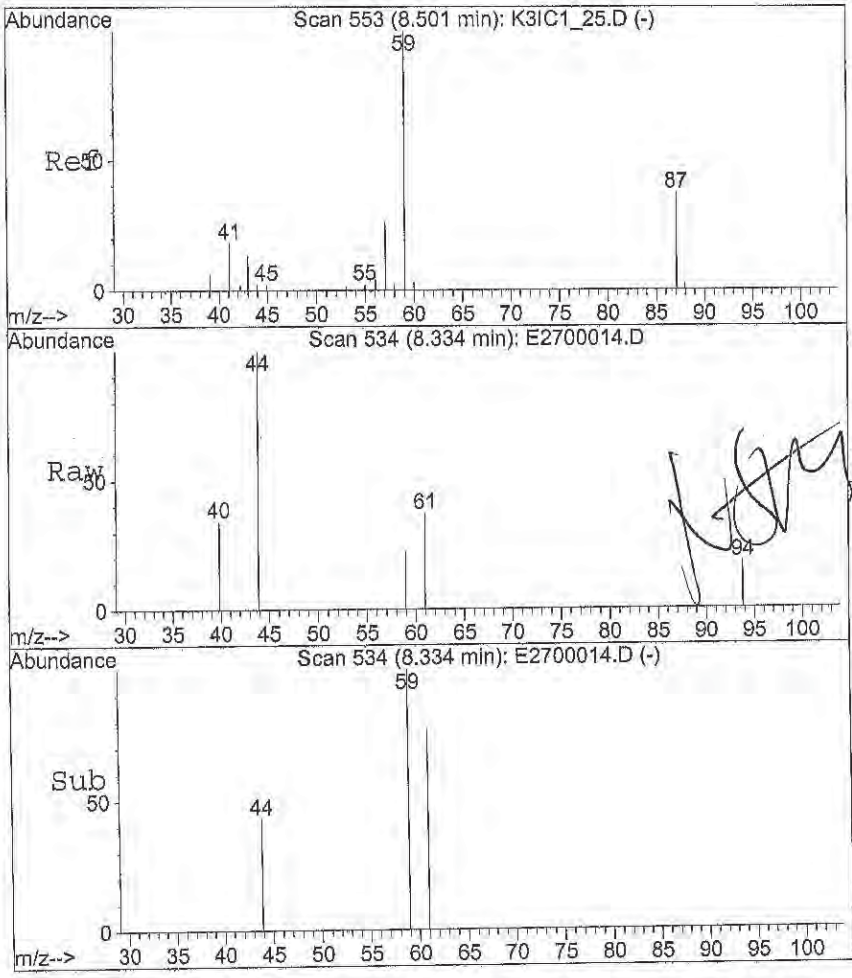


#24
Chloroform
Concen: 0.23 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 83 Resp: 1869

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

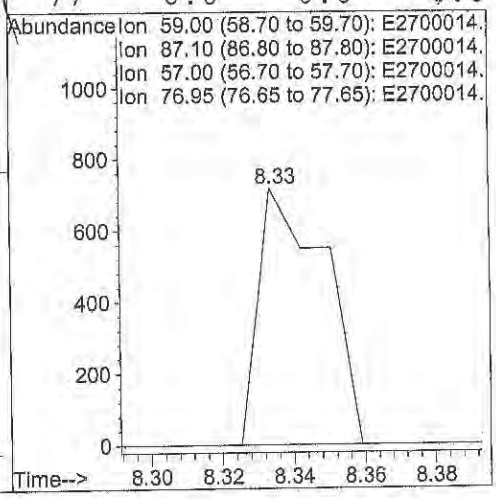


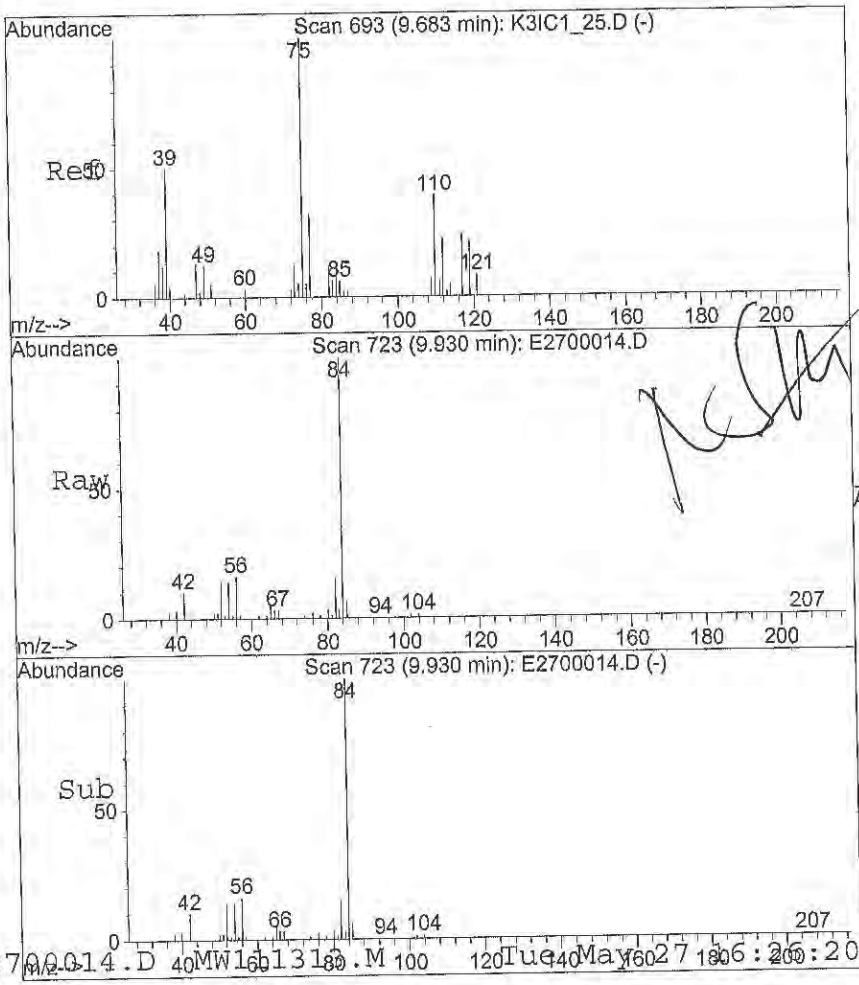


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.08 ug/L
RT: 8.33 min Scan# 534
Delta R.T. -0.17 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 59 Resp: 920

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

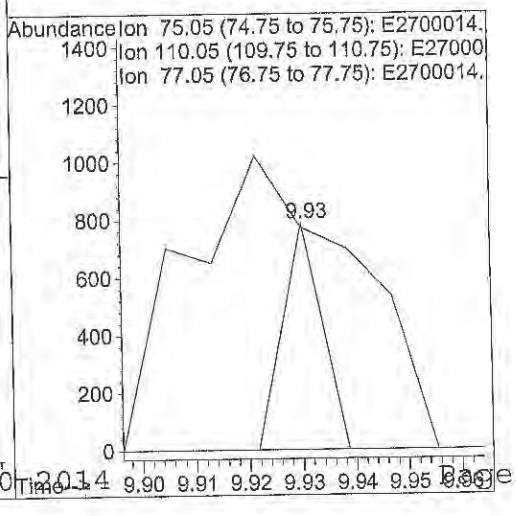


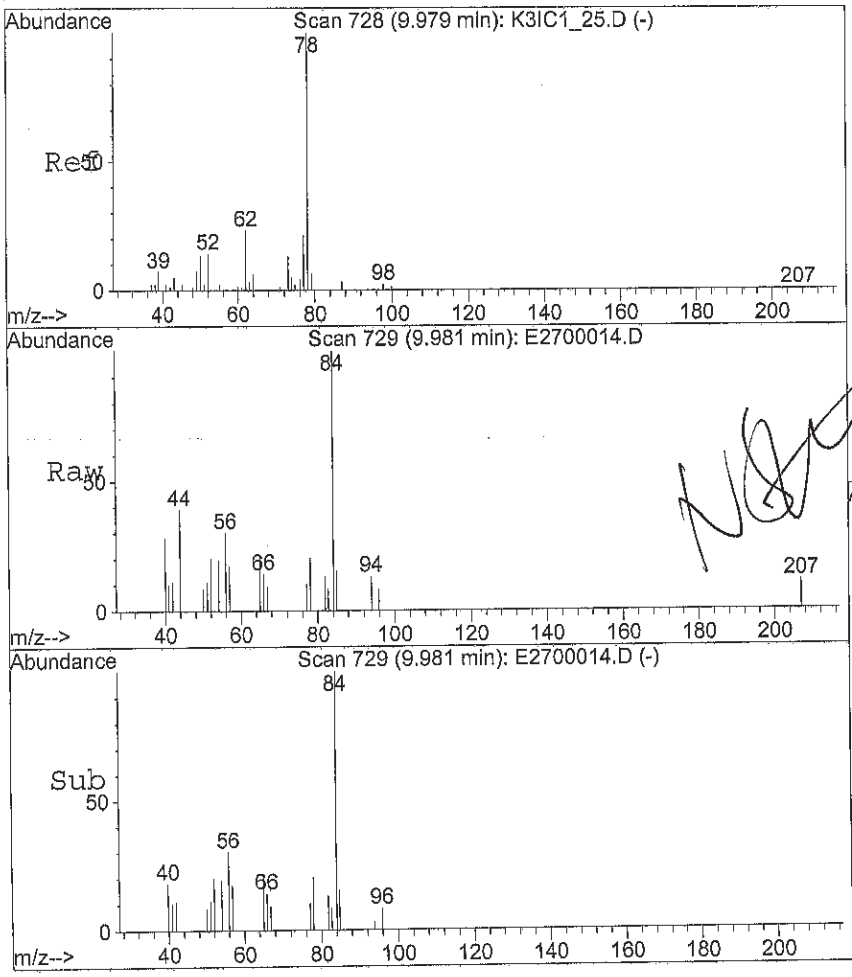


#29
1,1-Dichloropropene
Concen: 0.07 ug/L
RT: 9.93 min Scan# 723
Delta R.T. 0.25 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 75 Resp: 399

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	556.1	25.0	37.4#

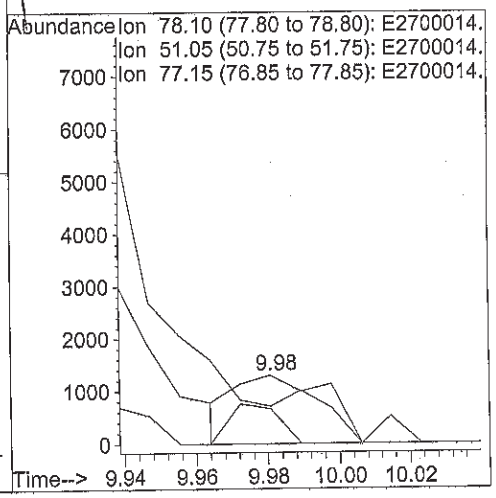


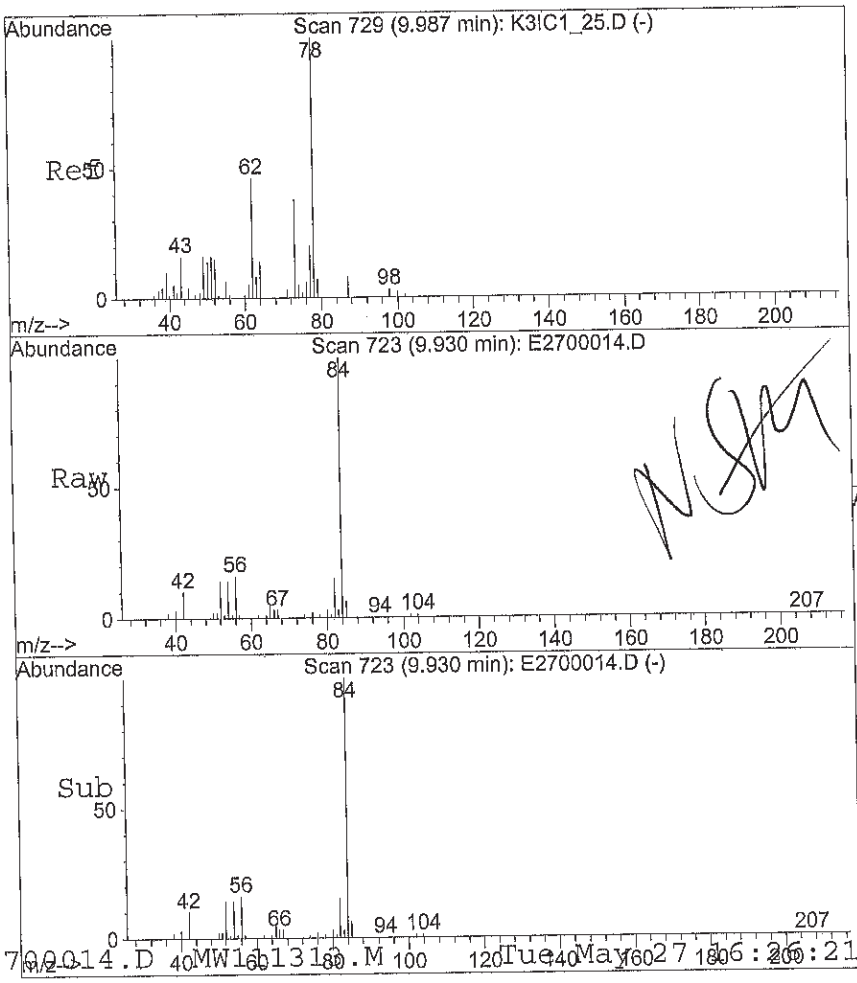


#31
Benzene
Concen: 0.16 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 78 Resp: 2297

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	31.0	16.6	24.8#

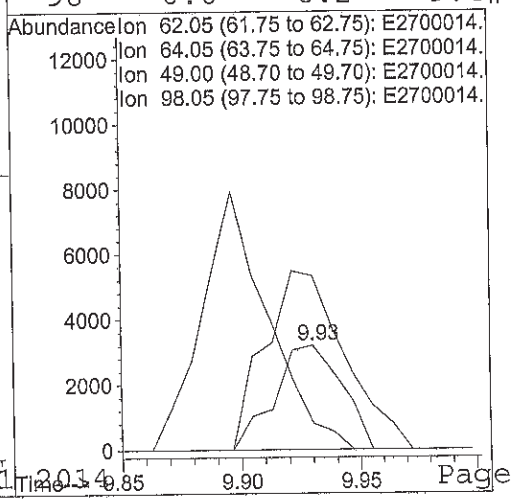


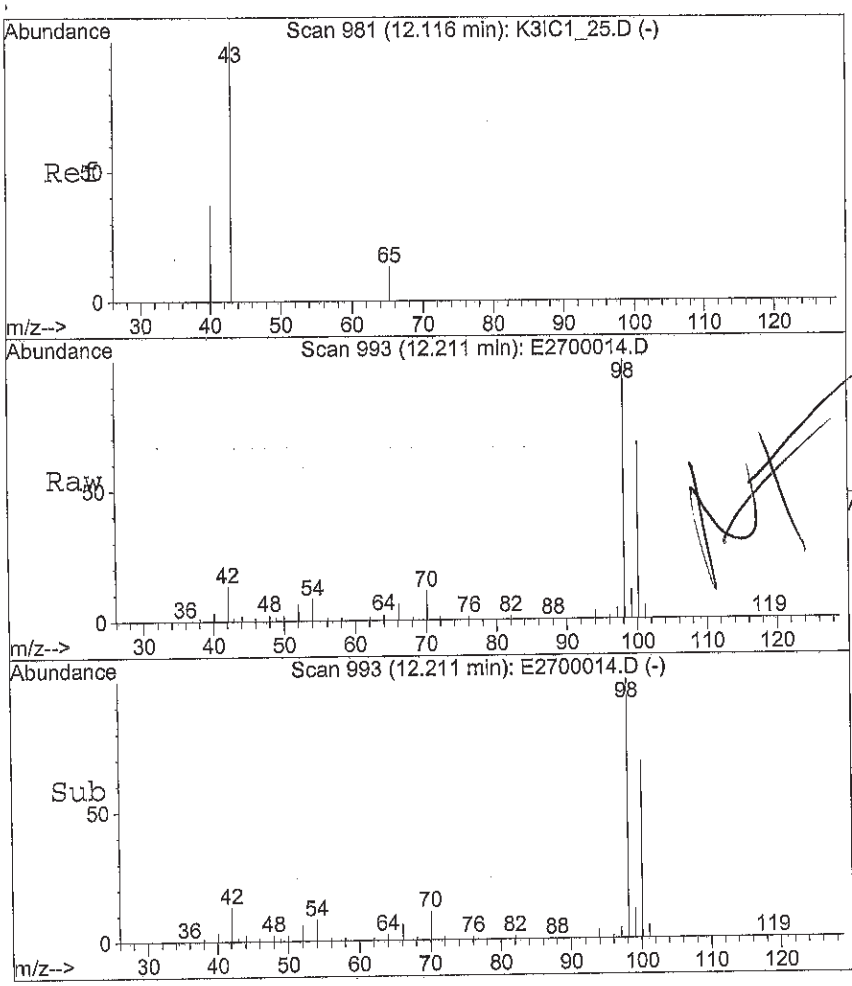


#32
1,2-Dichloroethane
Concen: 1.21 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 62 Resp: 6260

Ion	Ratio	Lower	Upper
62	100		
64	203.2	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

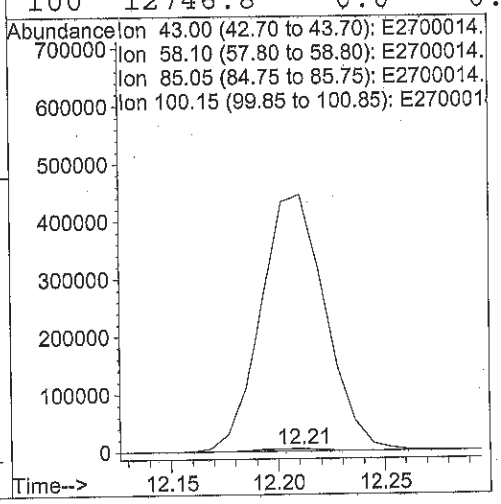


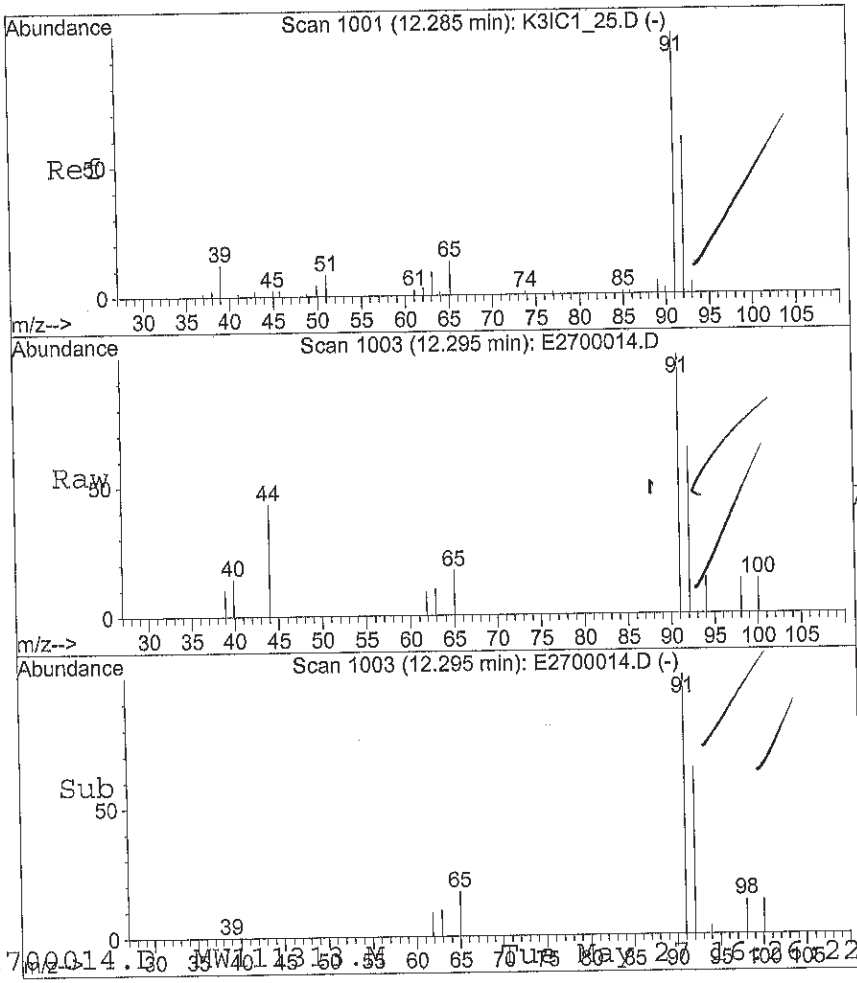


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.99 ug/L
RT: 12.21 min Scan# 993
Delta R.T. 0.09 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 43 Resp: 7320

Ion	Ratio	Lower	Upper
43	100		
58	122.9	0.0	0.0#
85	0.0	0.0	0.0
100	12746.8	0.0	0.0#

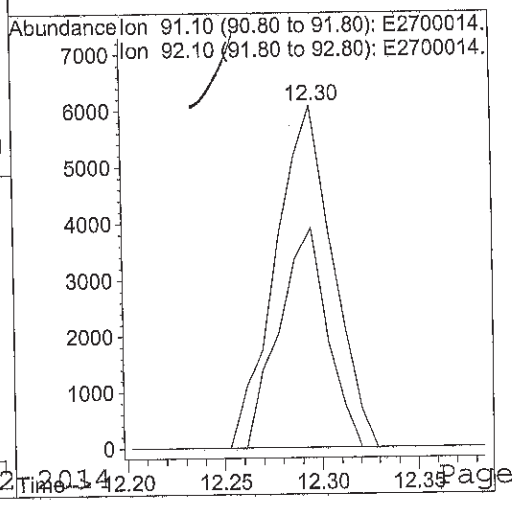


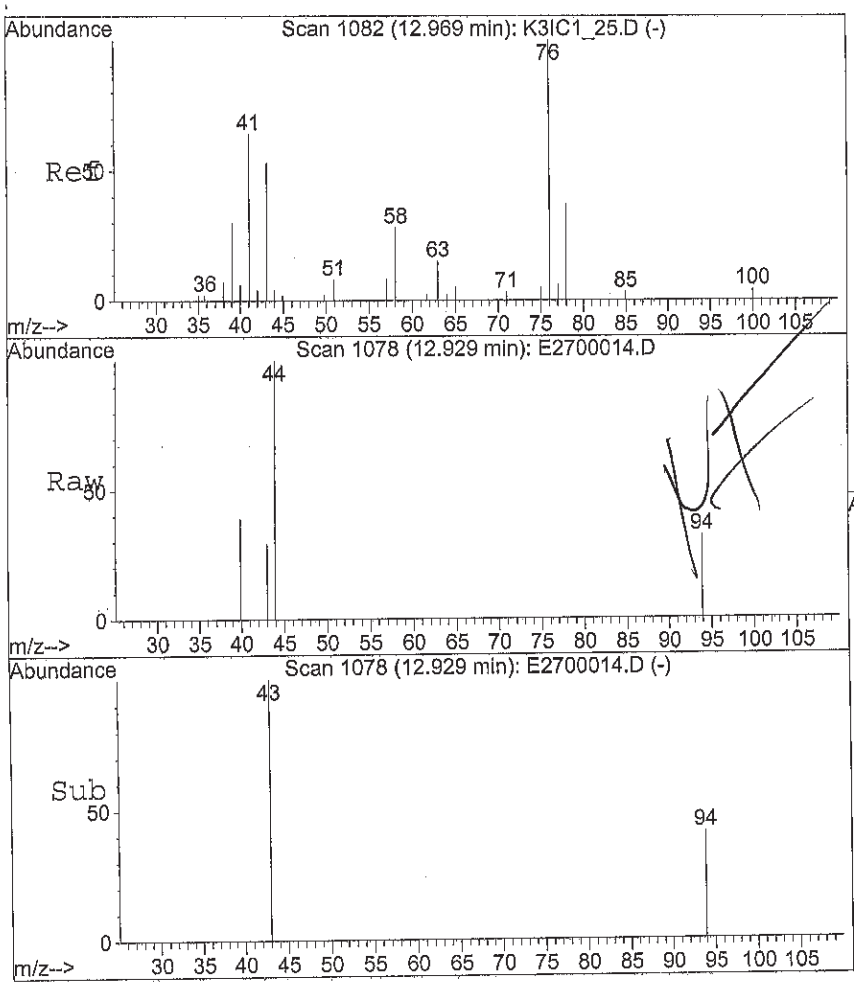


#41
Toluene
Concen: 0.74 ug/L
RT: 12.30 min Scan# 1003
Delta R.T. 0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 91 Resp: 12428

Ion	Ratio	Lower	Upper
91	100		
92	54.3	47.4	71.0

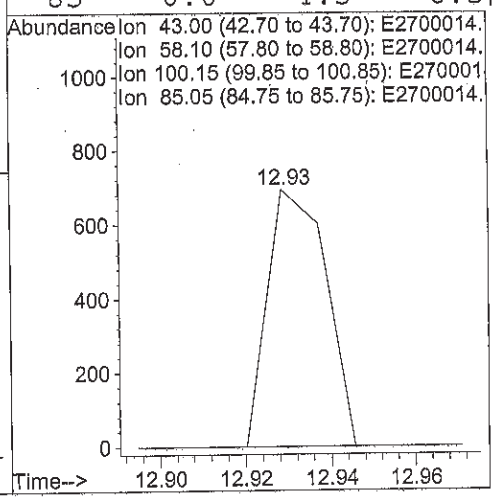


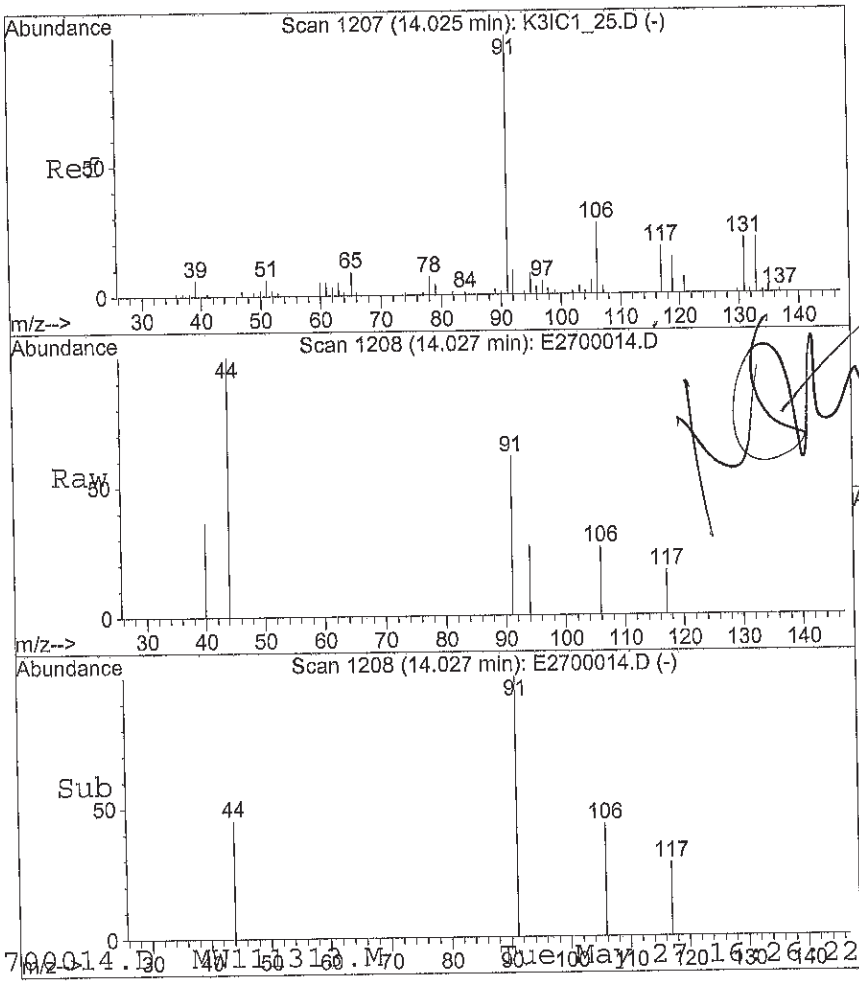


#46
2-Hexanone
Concen: 0.24 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.04 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 43 Resp: 656

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

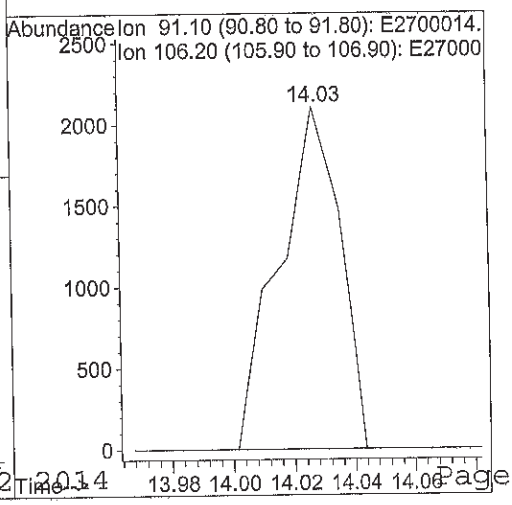


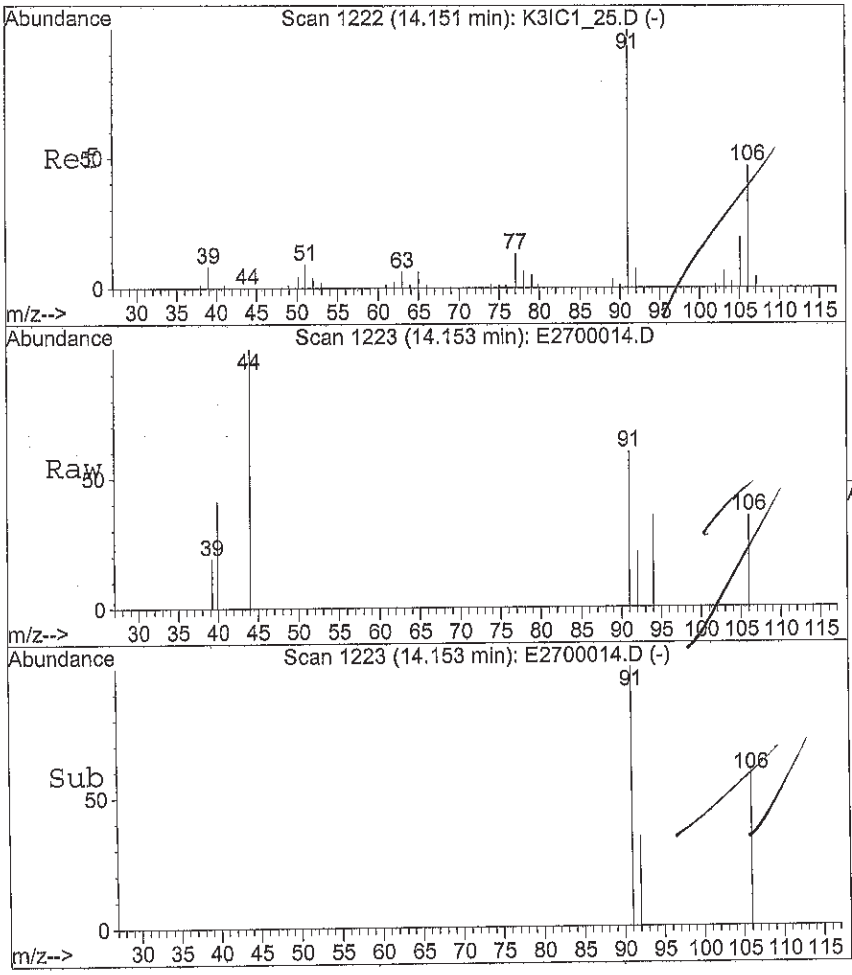


#51
Ethylbenzene
Concen: 0.15 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 91 Resp: 2908

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

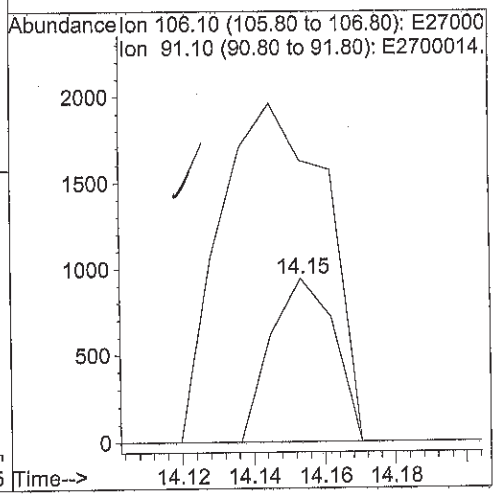


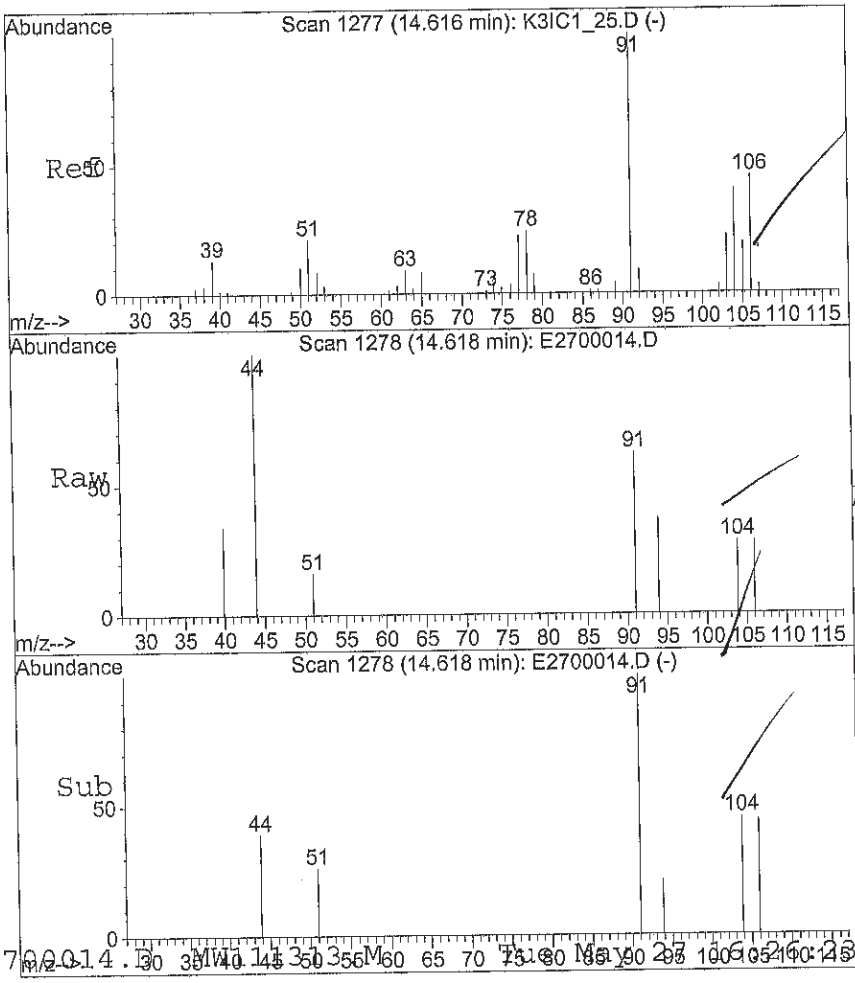


#52
m,p-Xylenes
Concen: 0.17 ug/L
RT: 14.15 min Scan# 1223
Delta R.T. 0.00 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:106 Resp: 1152

Ion	Ratio	Lower	Upper
106	100		
91	348.6	177.1	265.7#

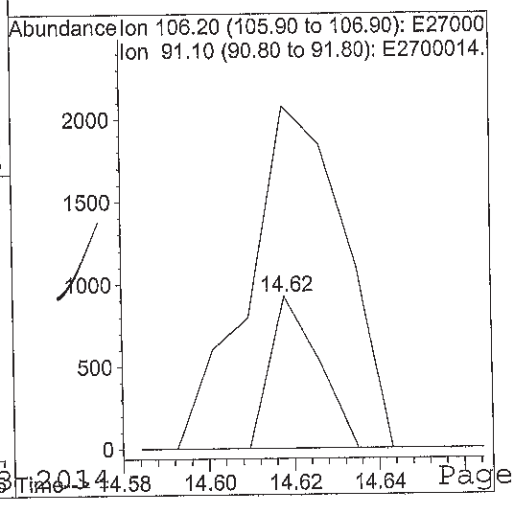


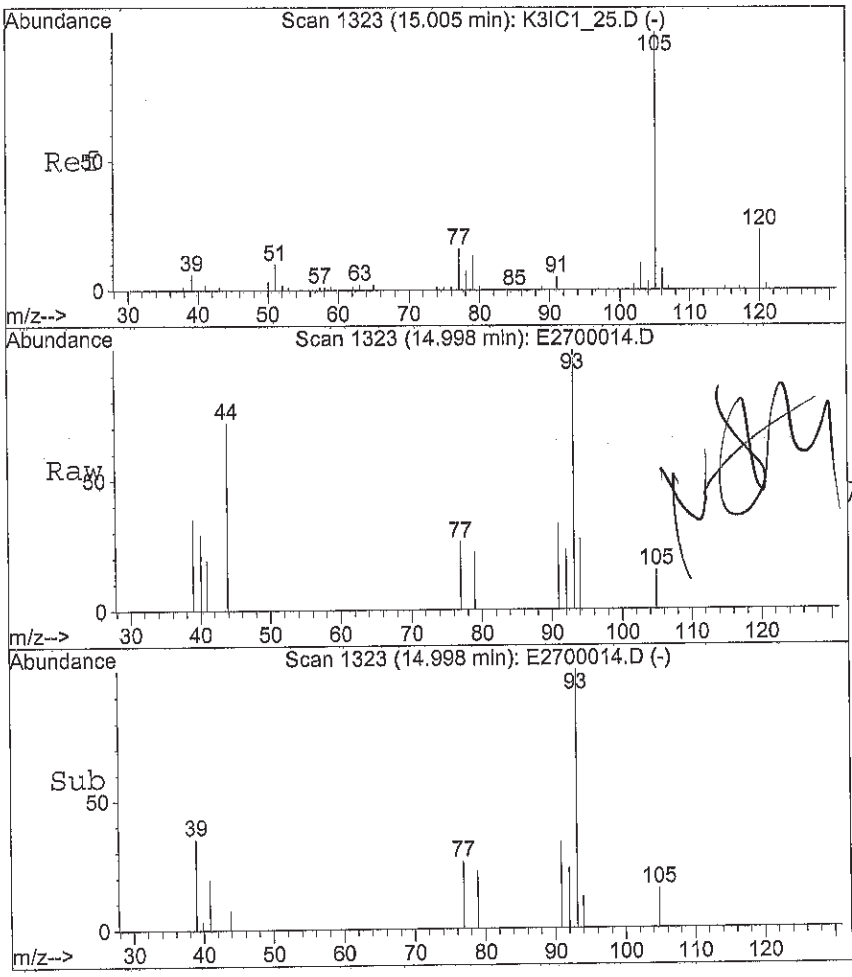


#53
o-Xylene
Concen: 0.11 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:106 Resp: 729

Ion	Ratio	Lower	Upper
106	100		
91	446.8	179.0	268.6#

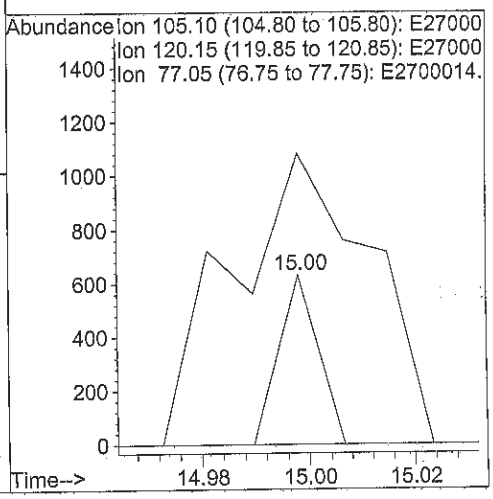


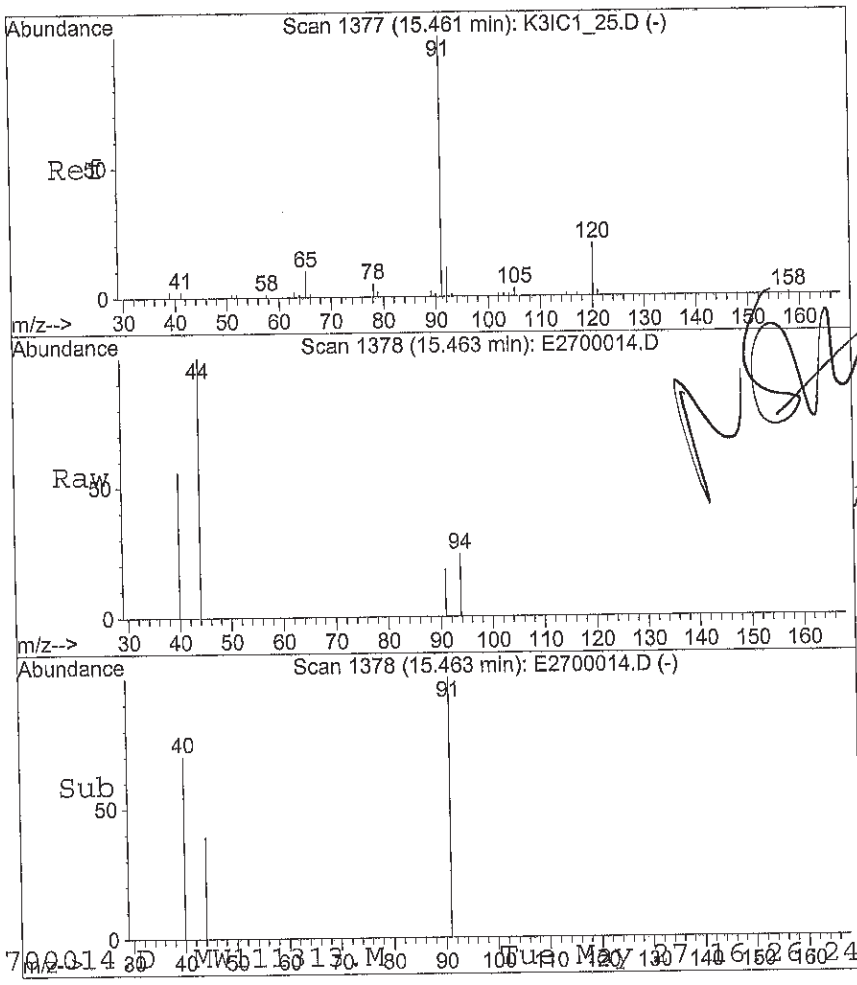


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:105 Resp: 320

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	607.8	13.1	19.7#

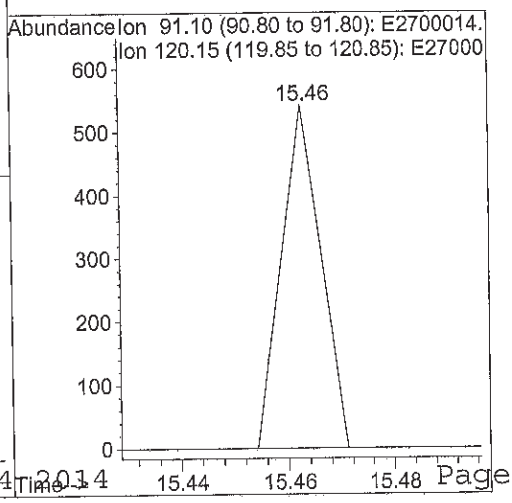


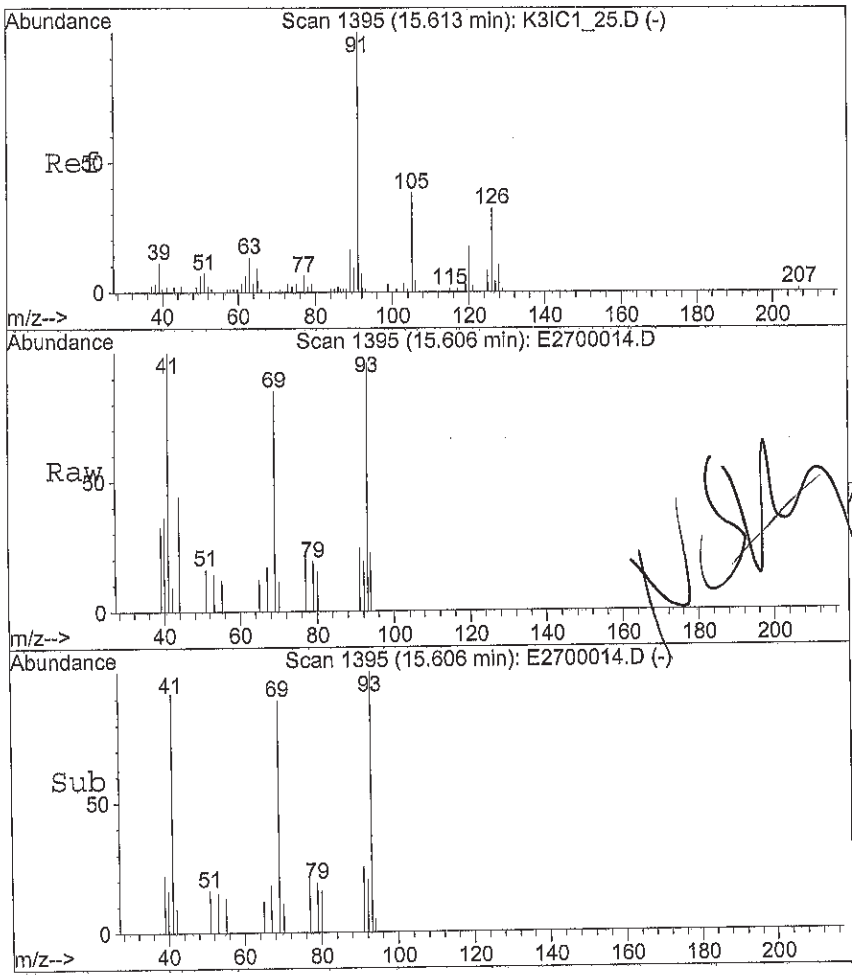


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 91 Resp: 274

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

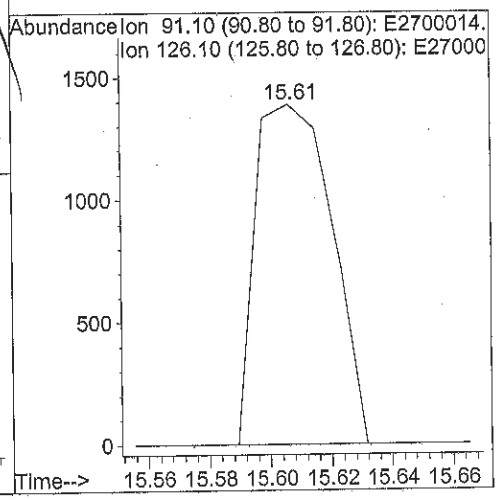


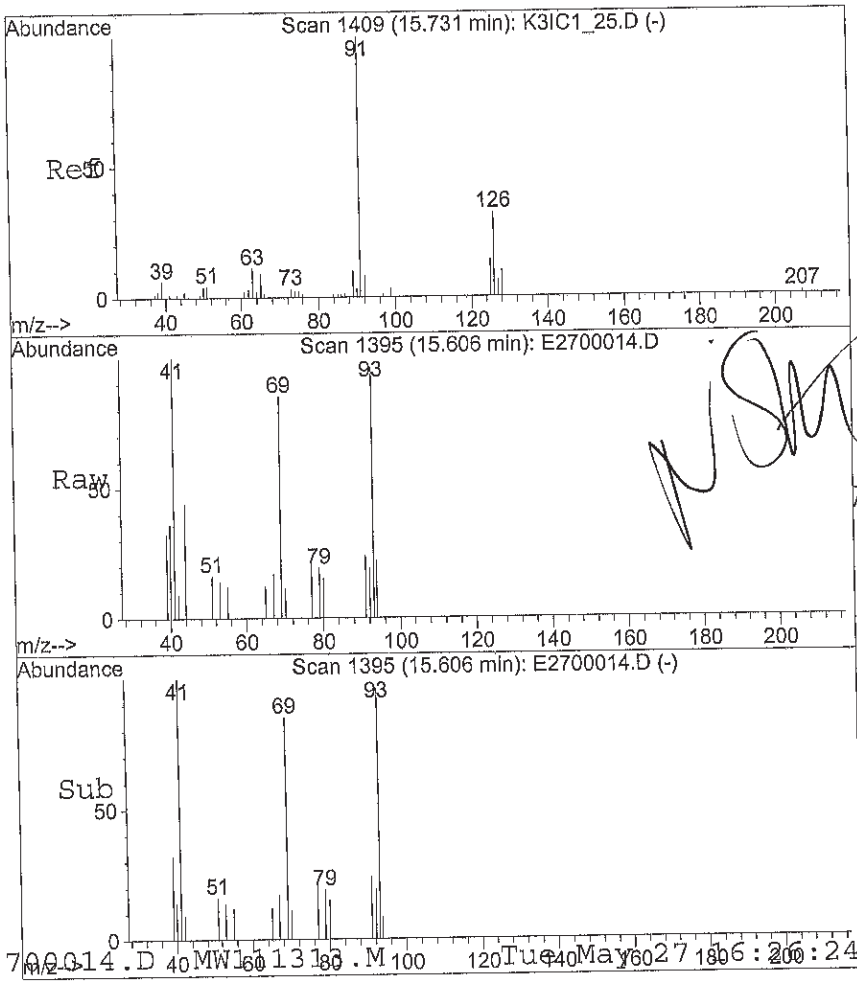


#63
2-Chlorotoluene
Concen: 0.15 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 91 Resp: 2396

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

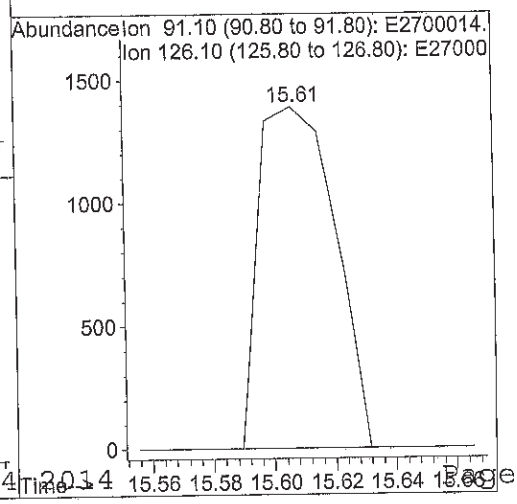


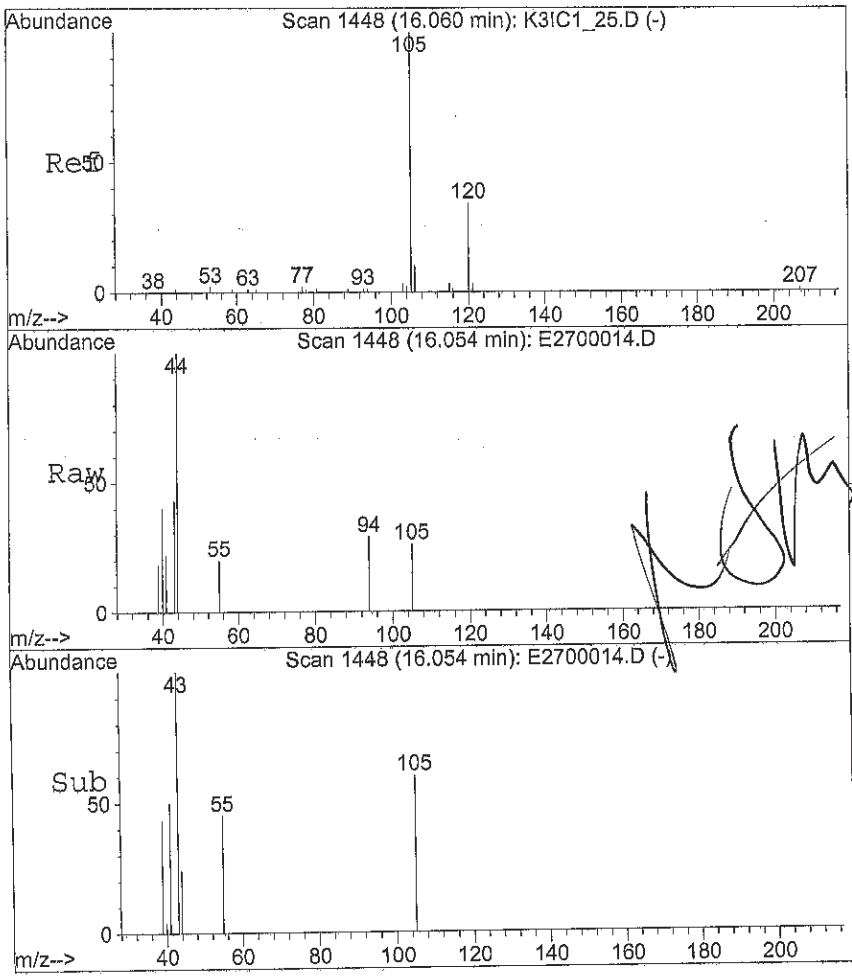


#65
4-Chlorotoluene
Concen: 0.16 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.12 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 91 Resp: 2396

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

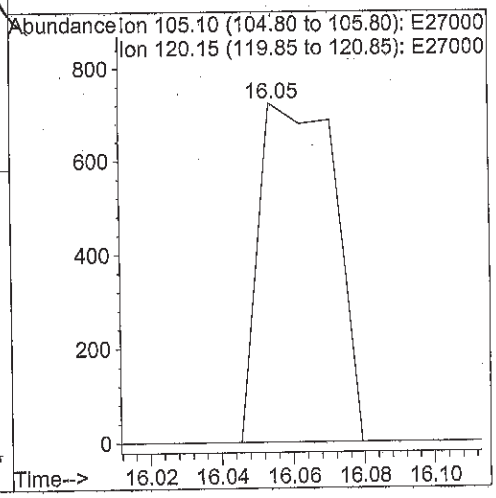


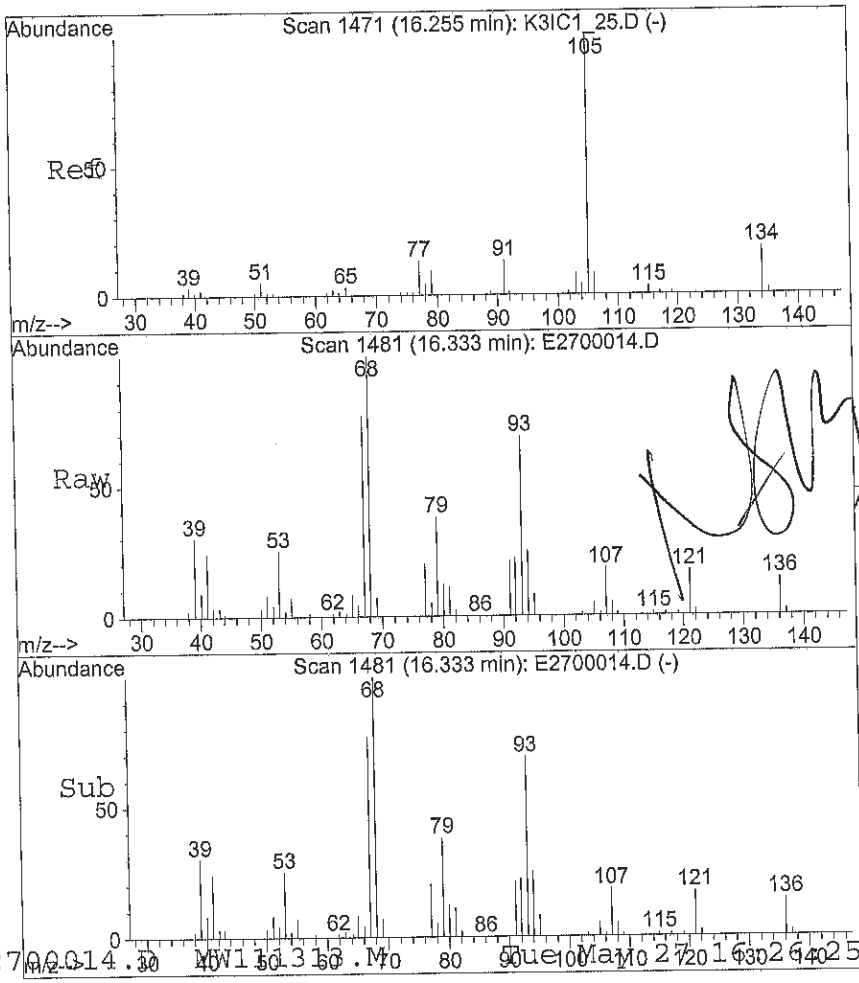


#67
1,2,4-Trimethylbenzene
Concen: 0.06 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:105 Resp: 1059

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

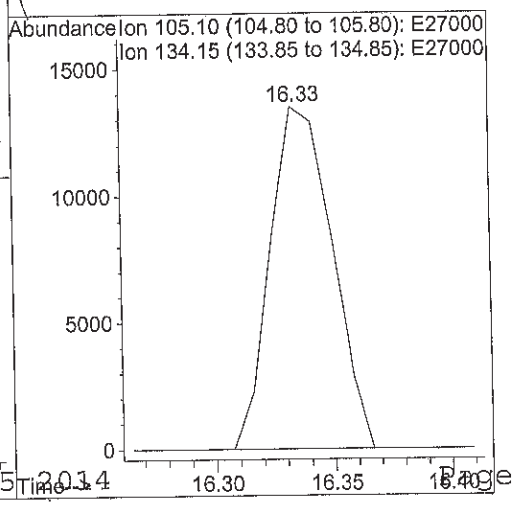


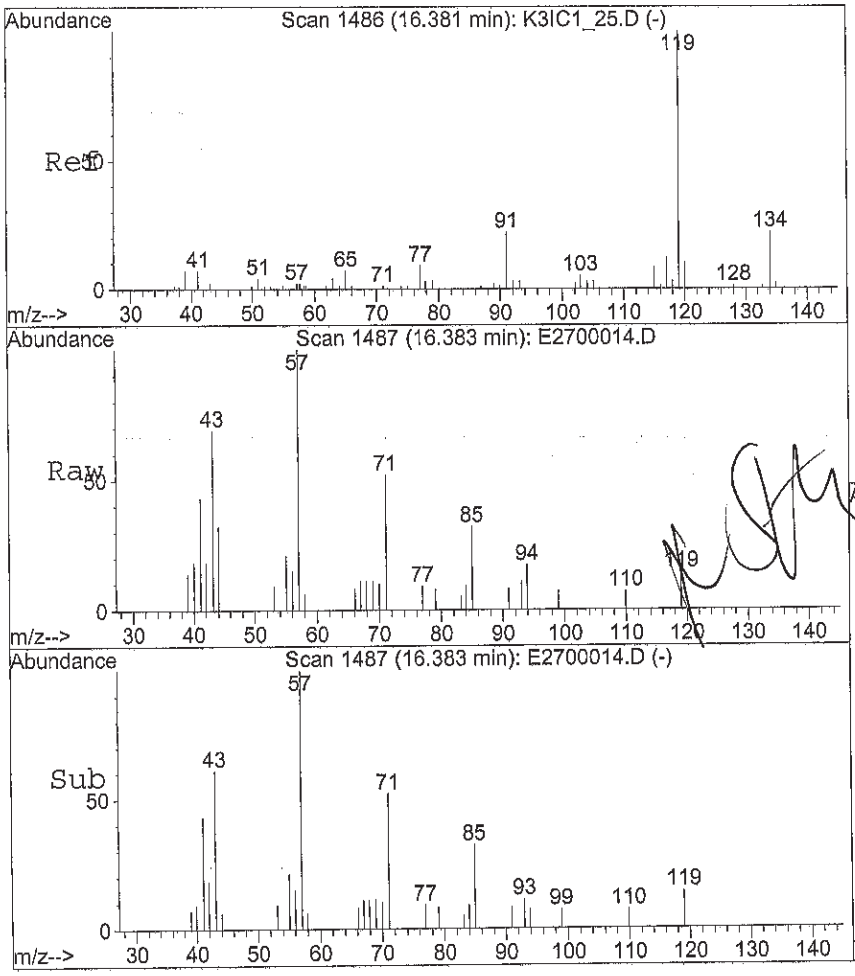


#68
sec-Butylbenzene
Concen: 1.13 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:105 Resp: 24414

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

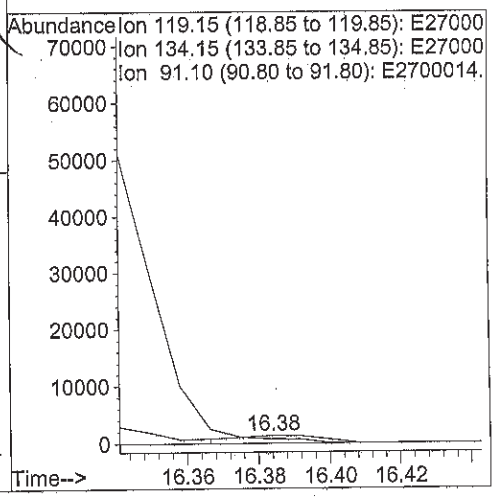


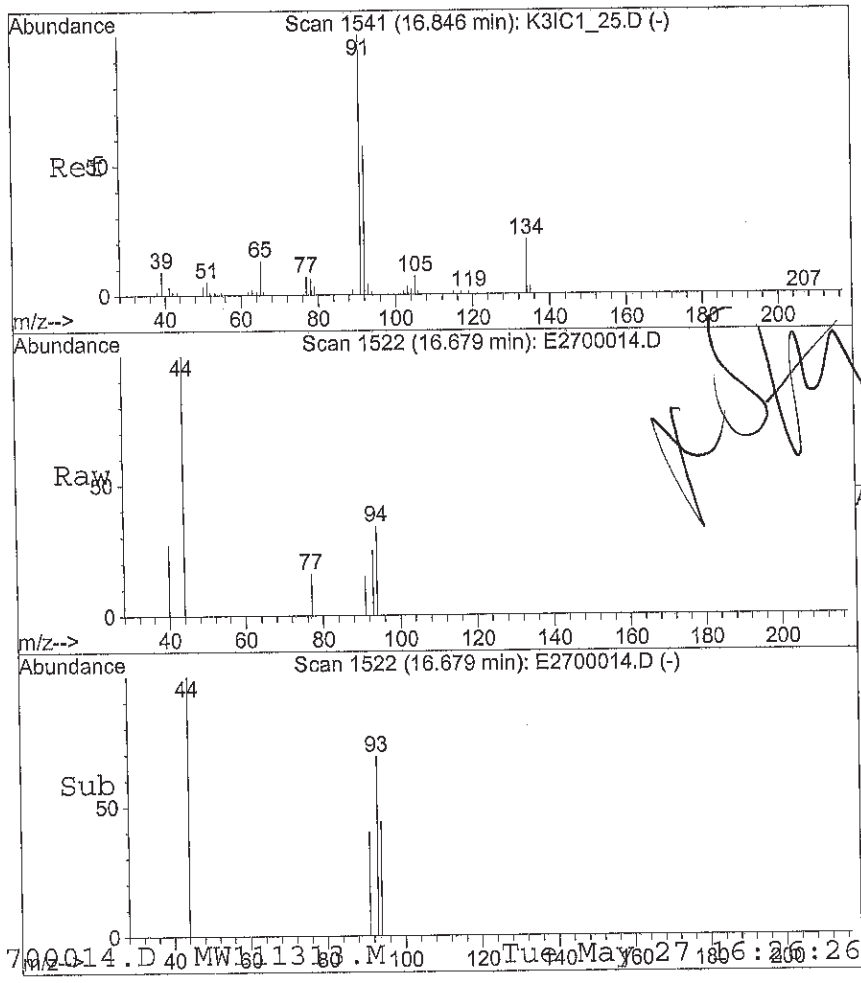


#69
p-Isopropyltoluene
Concen: 0.12 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:119 Resp: 2197

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

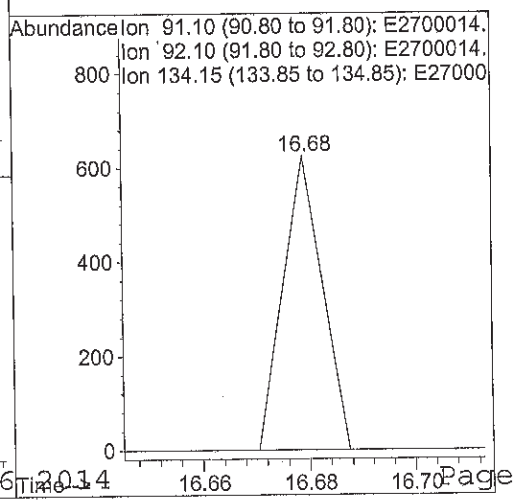


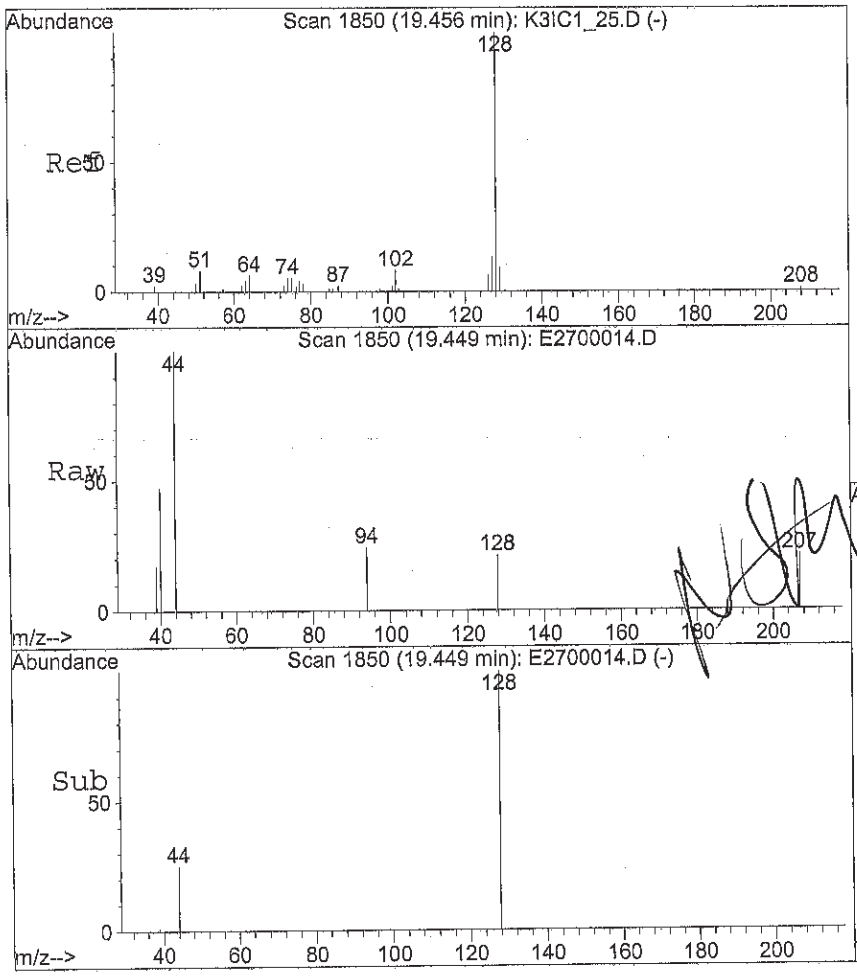


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.68 min Scan# 1522
Delta R.T. -0.17 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion: 91 Resp: 316

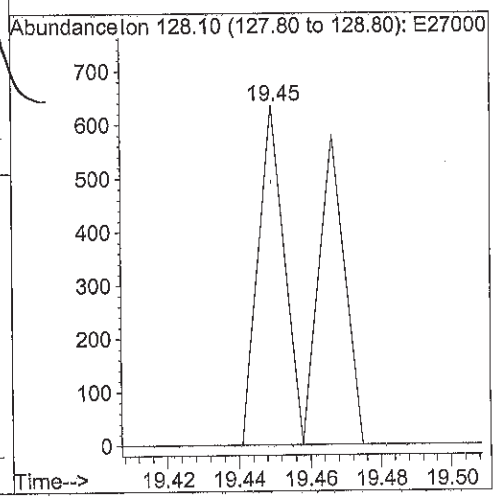
Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#





#77
Naphthalene
Concen: 0.05 ug/L
RT: 19.45 min Scan# 1850
Delta R.T. -0.01 min
Lab File: E2700014.D
Acq: 27 May 2014 4:04 pm

Tgt Ion:128 Resp: 616



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700014.D Vial: 5
Acq On : 27 May 2014 4:04 pm Operator: DN
Sample : 3E42701-11 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-16.75-17.75 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 16:25 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1558226	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1224504	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	643267	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	436452	10.77 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.16%		
3) Chloroform-d (SU6)	9.19	84	712297	12.25 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 98.00%		
4) Methylene Chloride-d2 (SU5	7.07	86	399253	11.75 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.00%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	437553	15.80 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 126.40%#		
6) Benzene-d6 (SU7)	9.93	84	1362590	11.14 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.12%		
8) Toluene-d8 (SU3)	12.21	98	1377020	11.85 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.80%		
9) 4-Bromofluorobenzene (SU4)	15.23	95	680731	14.19 ug/L	-0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 113.52%		

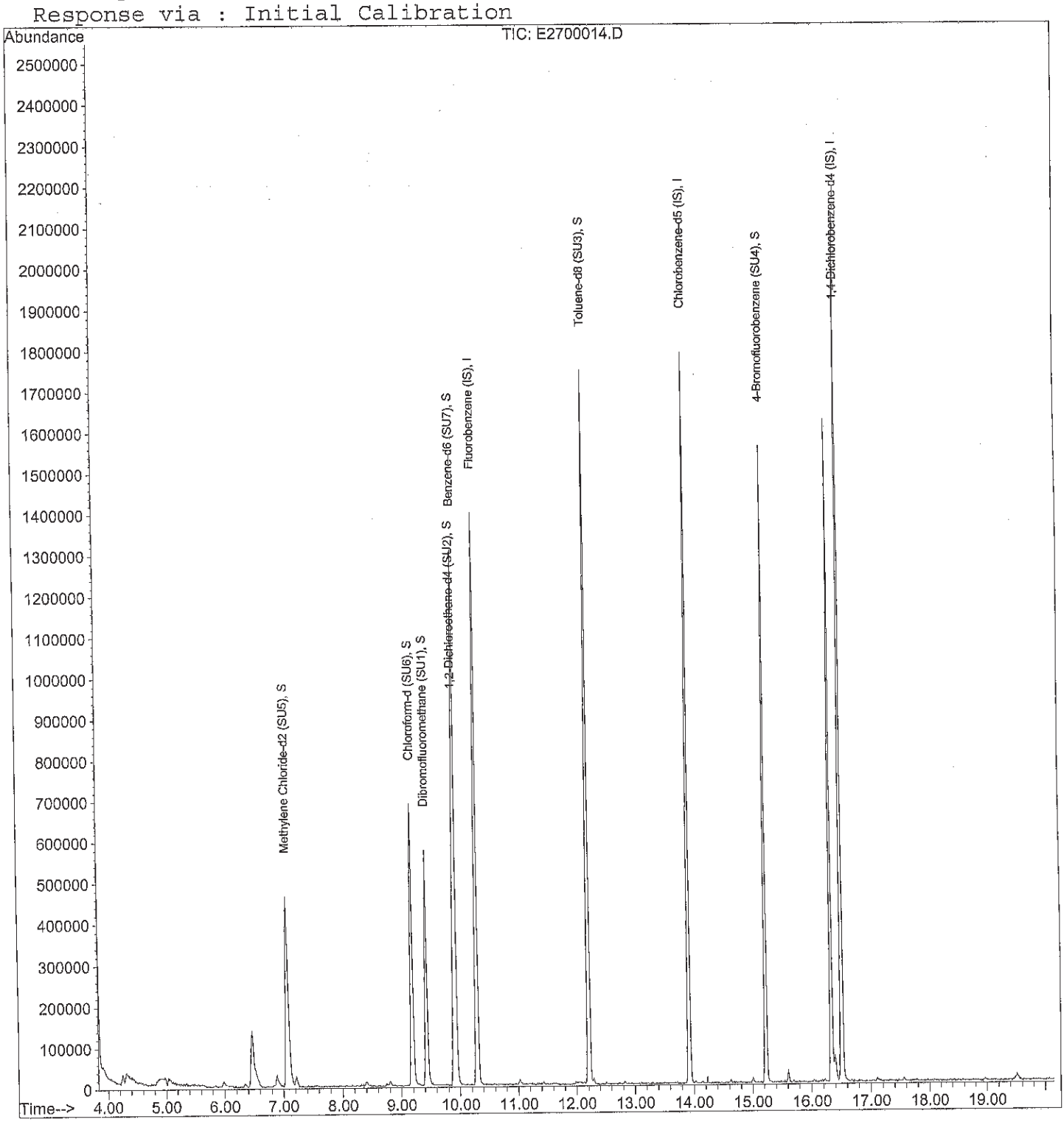
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700014.D Vial: 5
Acq On : 27 May 2014 4:04 pm Operator: DN
Sample : 3E42701-11 Inst : GC/MS Ins
Misc : 100cc SVL-512-SA5D-SV-16.75-17.75 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 16:25 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700015.D
Acq On : 27 May 2014 5:01 pm
Sample : 3E42701-12
Misc : 100cc FB-052714
MS Integration Params: rteint.p
Quant Time: May 27 17:22 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1656895	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1256682	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	652135	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	464949	11.25 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.00%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	447485	11.39 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	91.12%	
39) Toluene-d8 (SU3)	12.20	98	1465222	12.50 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	100.00%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	663833	12.92 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	103.36%	

Target Compounds					Qvalue
4) Chloromethane	4.42	50	1389	-0.72 ug/L #	41
6) Bromomethane	5.14	96	2221	-0.56 ug/L #	1
7) Chloroethane	5.24	64	2585	2.56 ug/L #	51
11) Acetone	6.46	58	6283	4.82 ug/L #	59
12) (IPA) Leak Check Compound	6.49	45	23780	119.44 ug/L #	99
14) Methylene Chloride	7.07	84	6481	1.42 ug/L #	1
15) (TBA) tert-Butanol	6.92	59	352	1.25 ug/L #	77
21) (MEK) 2-Butanone	8.79	72	259	0.56 ug/L #	1
24) Chloroform	9.21	83	2146	0.25 ug/L #	11
31) Benzene	9.93	78	10024	0.64 ug/L #	76
32) 1,2-Dichloroethane	9.92	62	5695	1.03 ug/L #	1
36) Bromodichloromethane	11.33	83	271	0.05 ug/L #	21
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7322	2.92 ug/L #	100
41) Toluene	12.29	91	1384	0.08 ug/L	91
46) 2-Hexanone	12.96	43	1130	0.41 ug/L #	37
51) Ethylbenzene	14.02	91	535	0.03 ug/L #	45
54) Styrene	14.63	104	1140	-0.76 ug/L #	81
56) Isopropylbenzene	15.10	105	1441	0.08 ug/L #	55
62) n-Propylbenzene	15.53	91	98841	3.75 ug/L #	57
63) 2-Chlorotoluene	15.53	91	98841	6.09 ug/L #	45
64) 1,3,5-Trimethylbenzene	15.52	105	25396	1.56 ug/L #	34
65) 4-Chlorotoluene	15.53	91	98841	6.59 ug/L #	44

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700015.D Vial: 6
Acq On : 27 May 2014 5:01 pm Operator: DN
Sample : 3E42701-12 Inst : GC/MS Ins
Misc : 100cc FB-052714 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 17:22 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
66) tert-Butylbenzene	16.21	119	287	0.02 ~~ug/L #~~ NSM	24
67) 1,2,4-Trimethylbenzene	16.06	105	750	0.04 ug/L #	33
68) sec-Butylbenzene	16.33	105	7681	0.35 ug/L #	62
69) p-Isopropyltoluene	16.38	119	2194	0.12 ug/L #	52
77) Naphthalene	19.44	128	320	0.02 ug/L	100

(#) = qualifier out of range (m) = manual integration

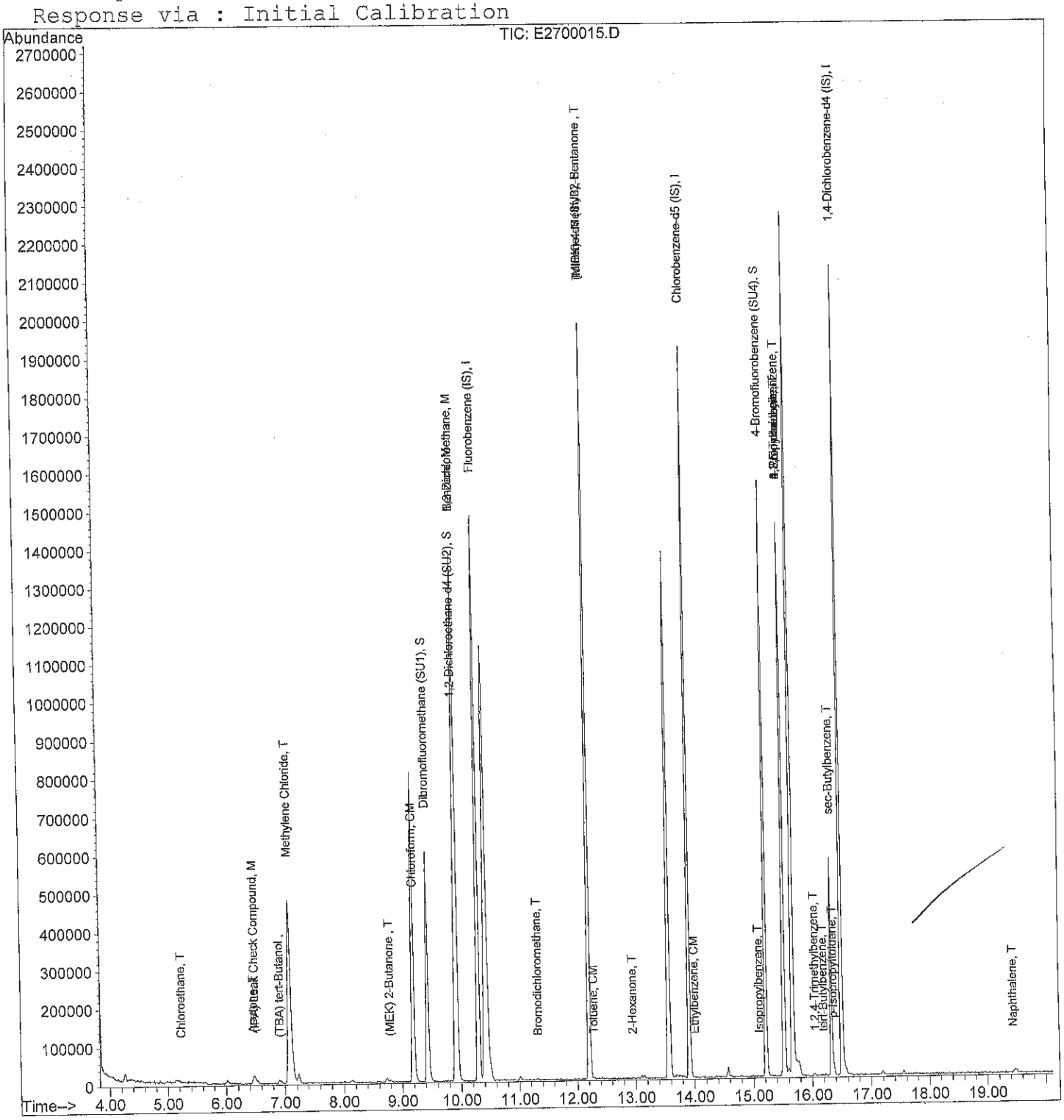
Quantitation Report

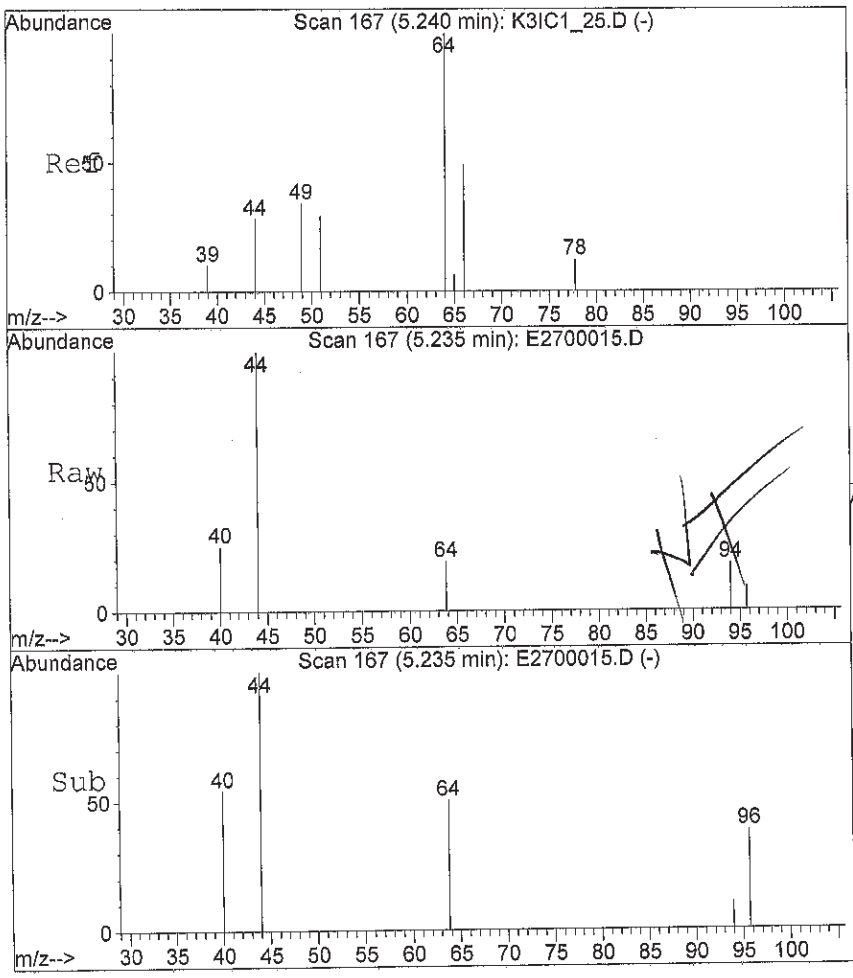
Data File : C:\HPCHEM\1\DATA\052714L3\E2700015.D
Acq On : 27 May 2014 5:01 pm
Sample : 3E42701-12
Misc : 100cc FB-052714
MS Integration Params: rteint.p
Quant Time: May 27 17:22 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

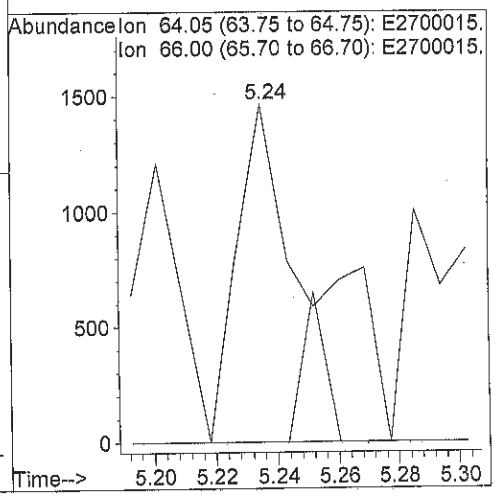


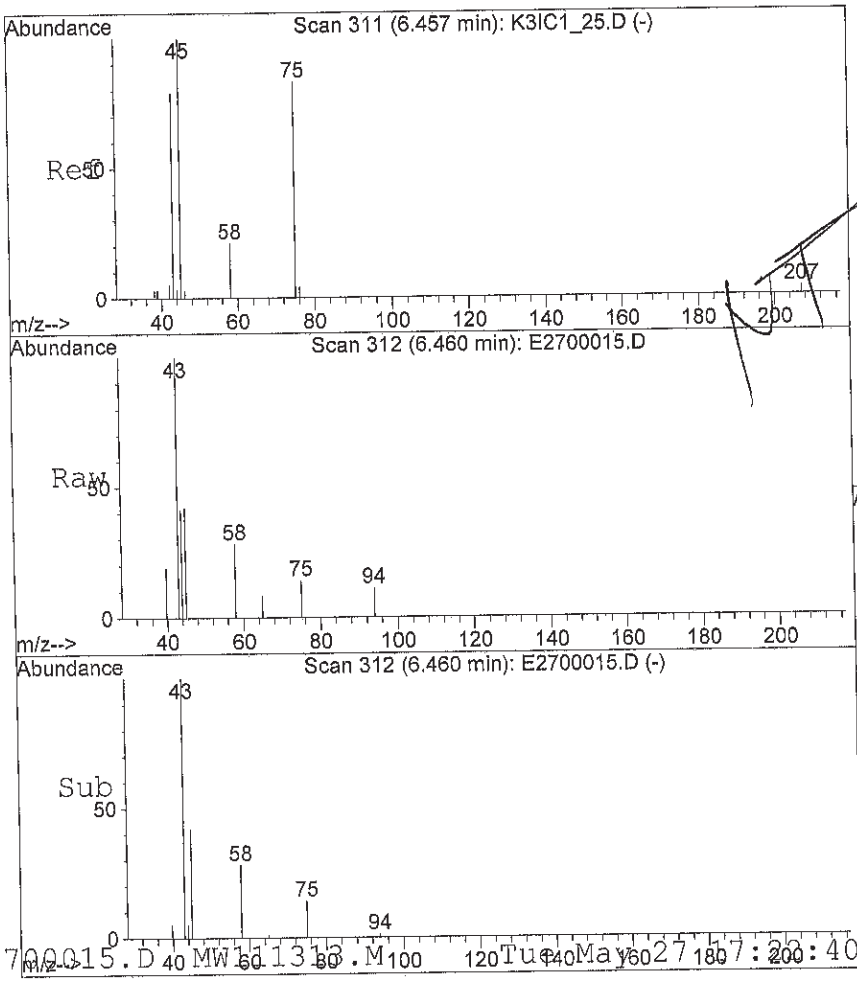


#7
Chloroethane
Concen: 2.56 ug/L
RT: 5.24 min Scan# 167
Delta R.T. -0.00 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 64 Resp: 2585

Ion	Ratio	Lower	Upper
64	100		
66	12.7	35.4	53.0#

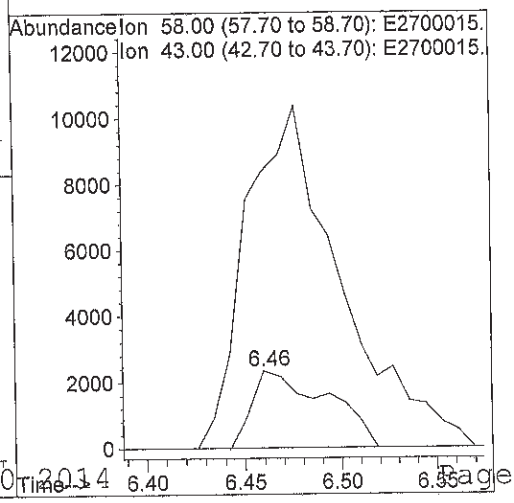


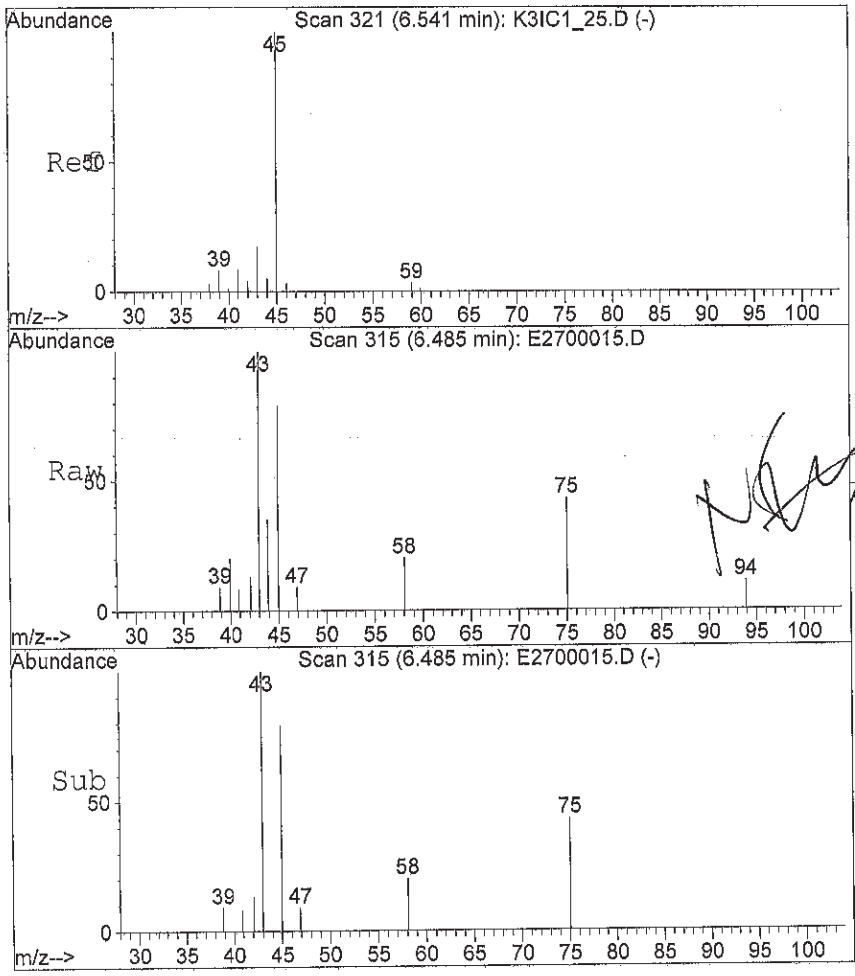


#11
Acetone
Concen: 4.82 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 58 Resp: 6283

Ion	Ratio	Lower	Upper
58	100		
43	557.7	360.9	541.3#

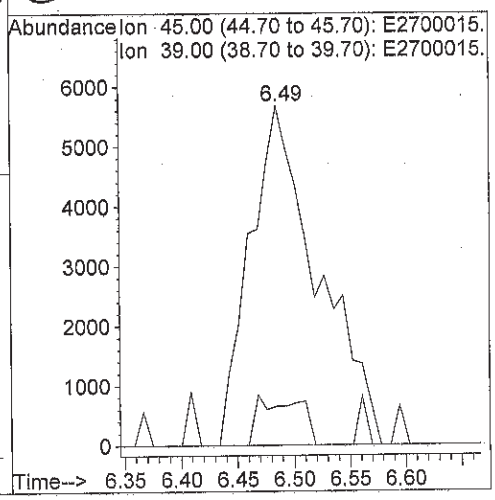


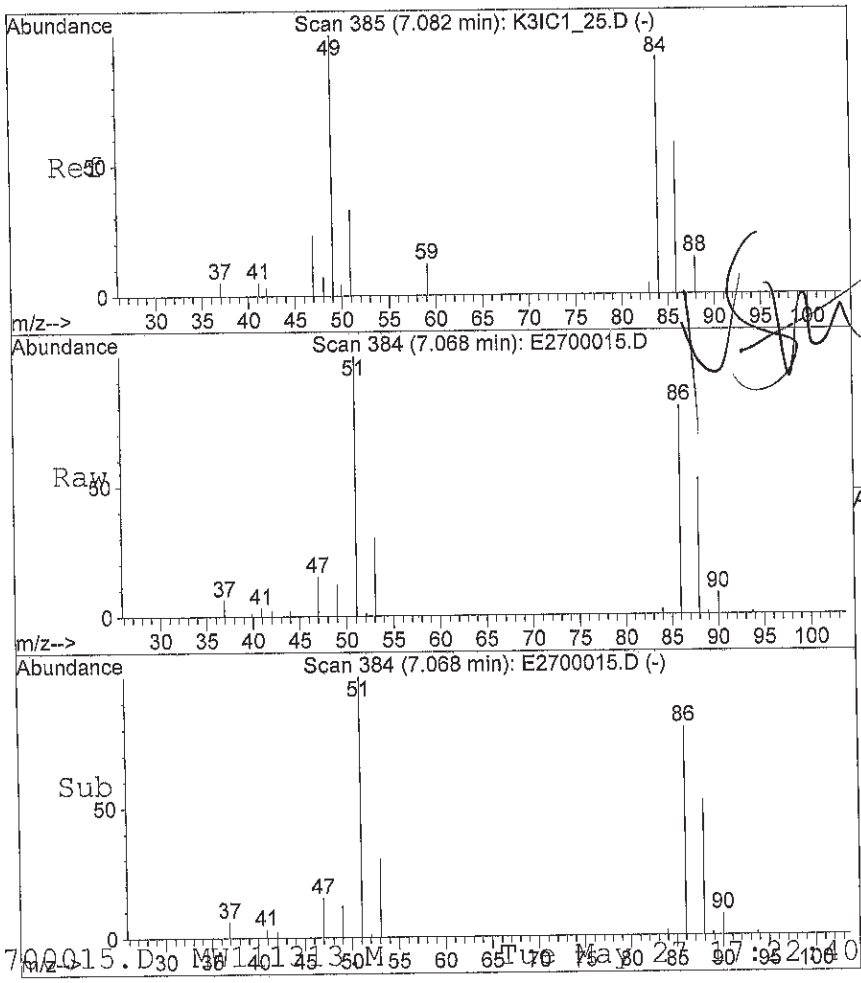


#12
(IPA) Leak Check Compound
Concen: 119.44 ug/L
RT: 6.49 min Scan# 315
Delta R.T. -0.06 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 45 Resp: 23780

Ion	Ratio	Lower	Upper
45	100		
39	5.8	4.9	7.3

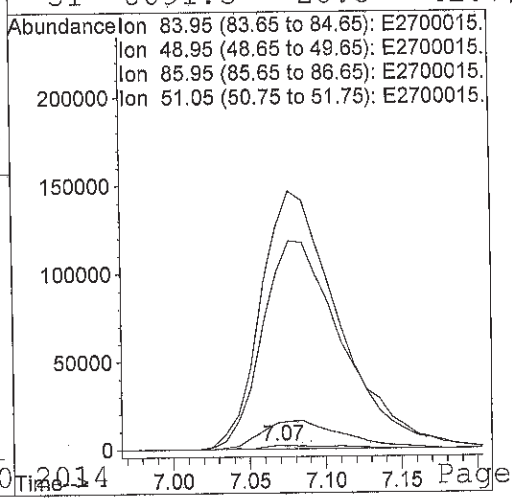


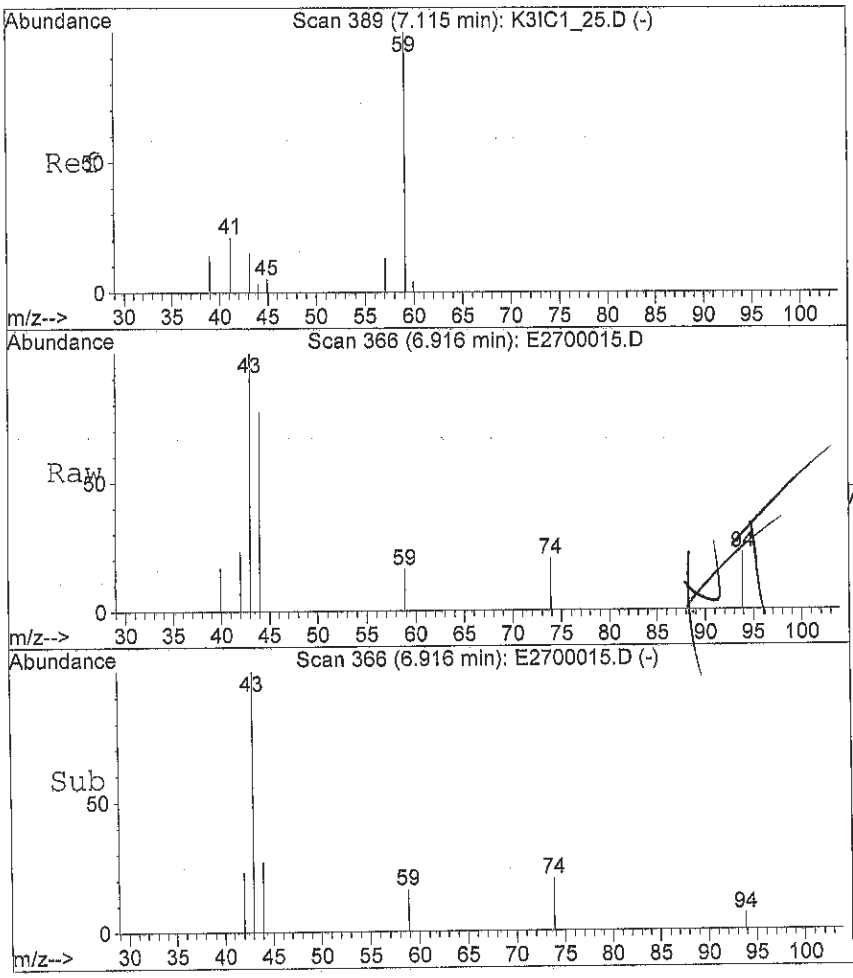


#14
Methylene Chloride
Concen: 1.42 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 84 Resp: 6481

Ion	Ratio	Lower	Upper
84	100		
49	912.9	89.8	134.6#
86	6745.1	51.1	76.7#
51	8091.5	28.5	42.7#

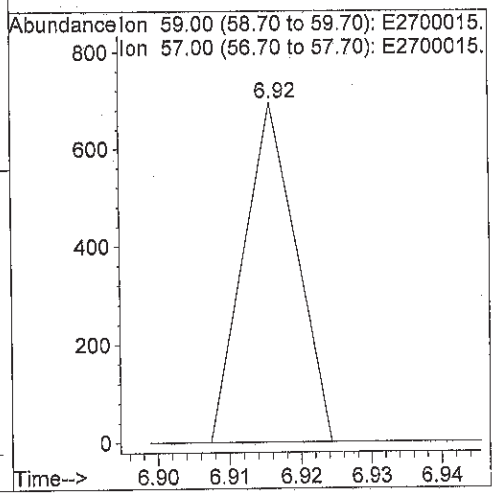


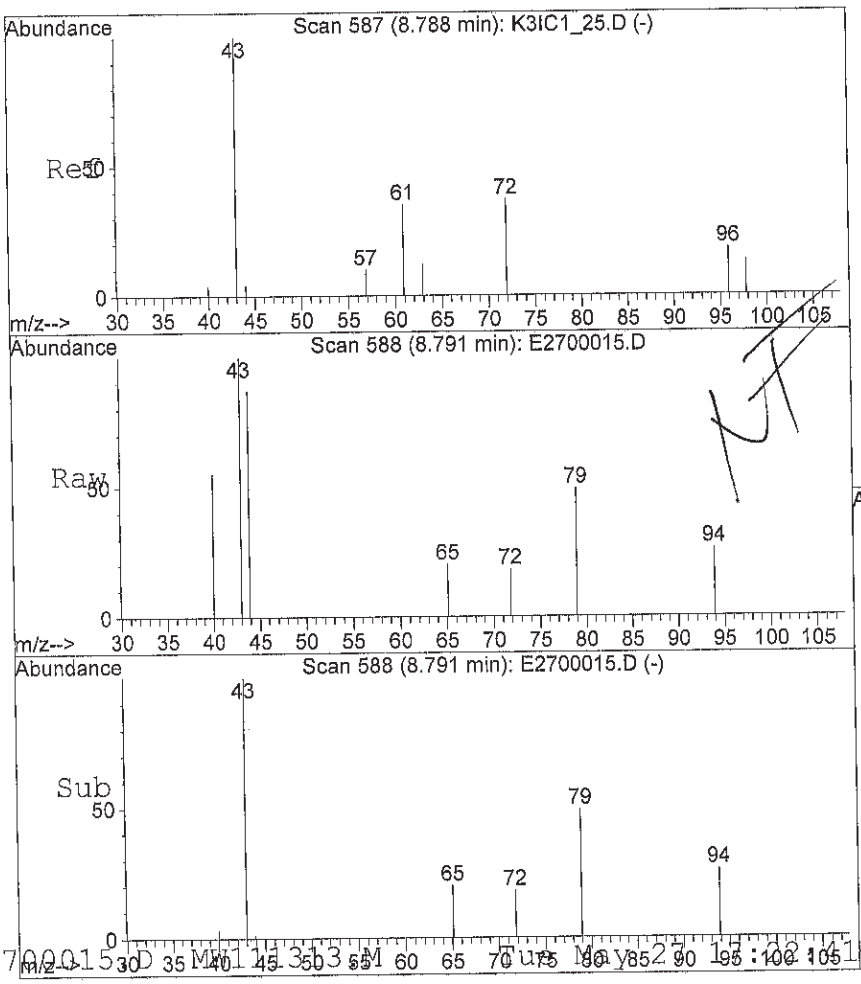


#15
(TBA) tert-Butanol
Concen: 1.25 ug/L
RT: 6.92 min Scan# 366
Delta R.T. -0.20 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 59 Resp: 352

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

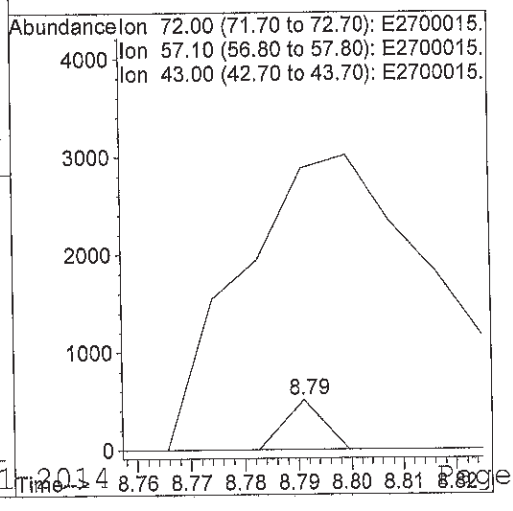


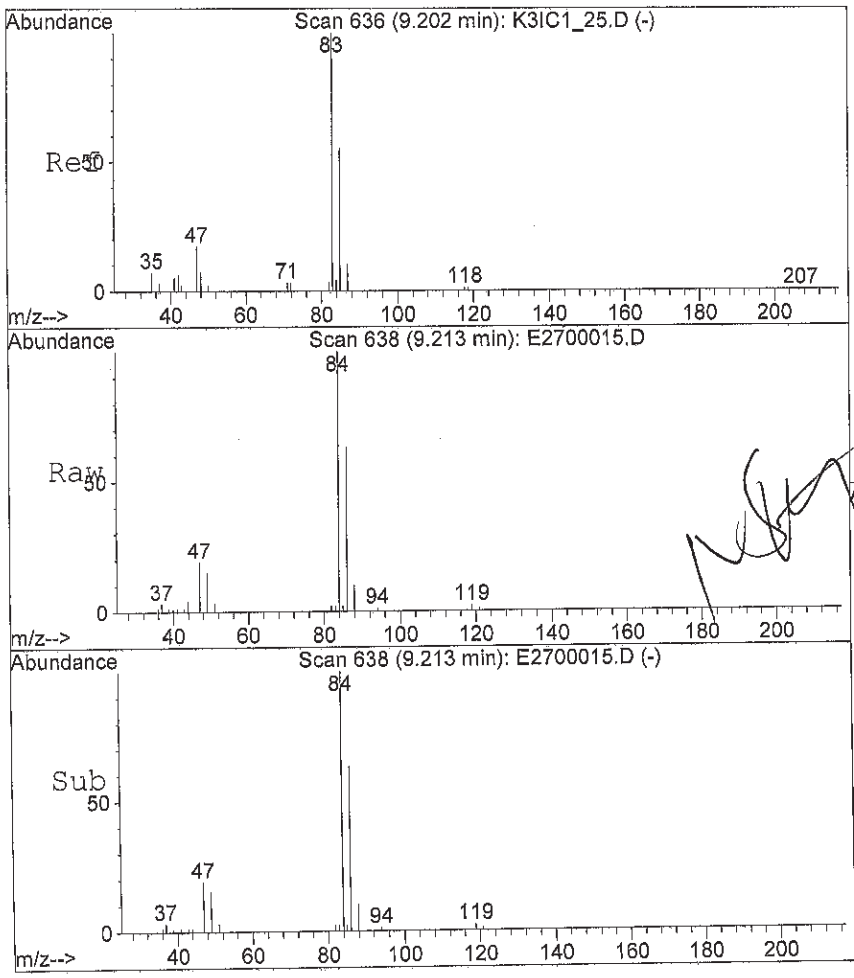


#21
(MEK) 2-Butanone
Concen: 0.56 ug/L
RT: 8.79 min Scan# 588
Delta R.T. 0.00 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 72 Resp: 259

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	2876.8	314.2	471.2#

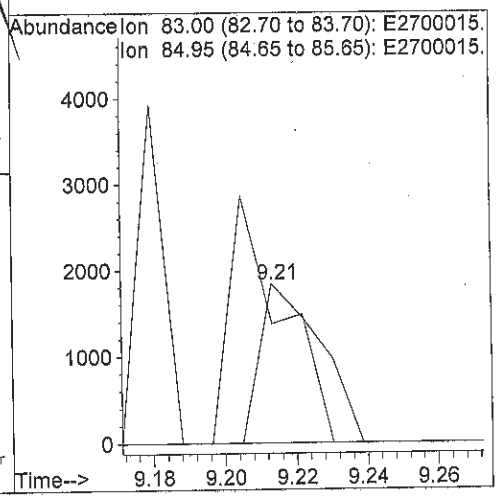


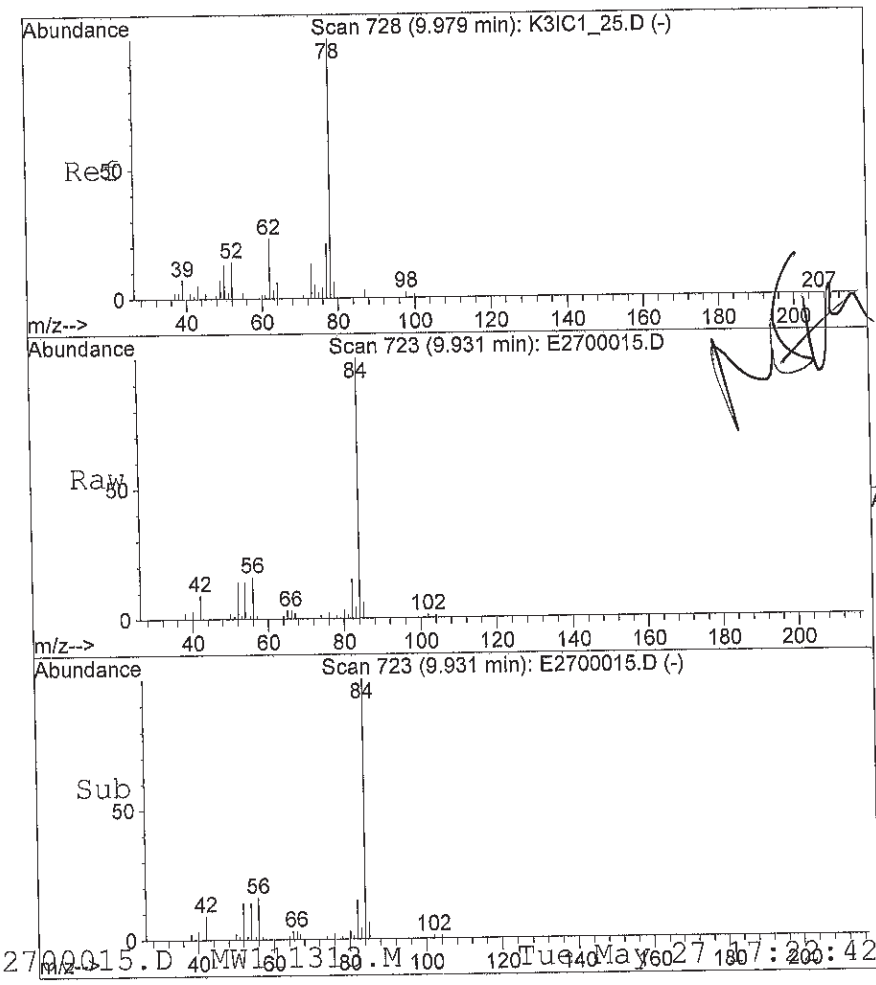


#24
Chloroform
Concen: 0.25 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 83 Resp: 2146

Ion	Ratio	Lower	Upper
83	100		
85	134.9	51.8	77.6#

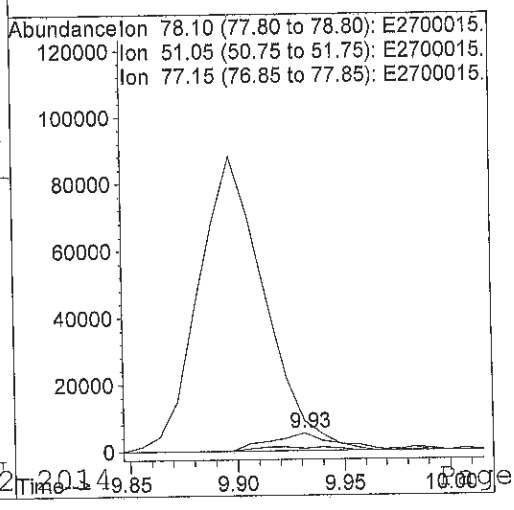


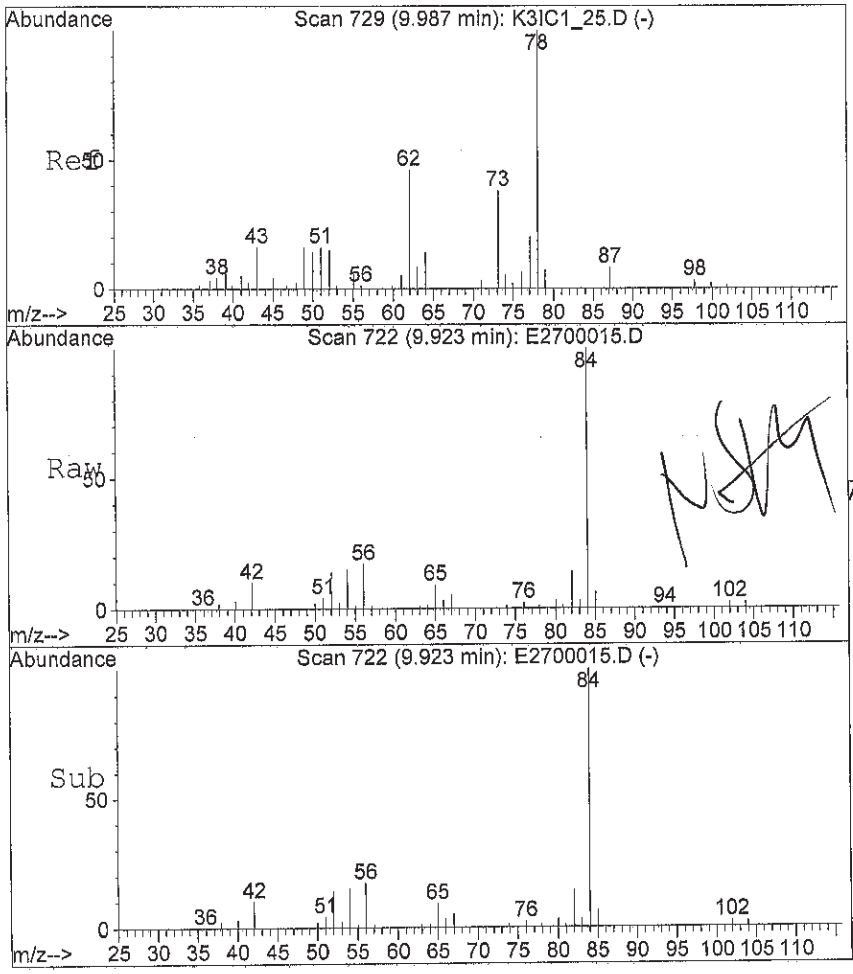


#31
Benzene
Concen: 0.64 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.05 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 78 Resp: 10024

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	25.6	16.6	24.8#

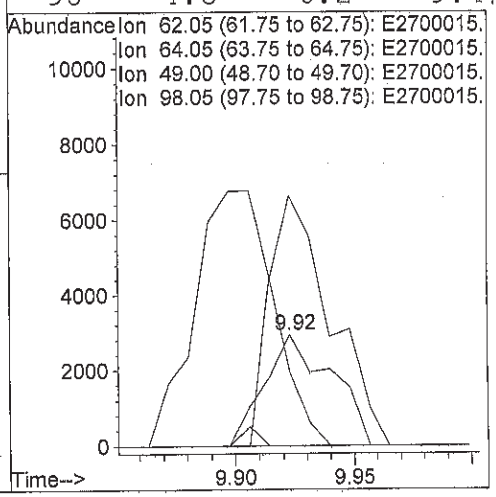


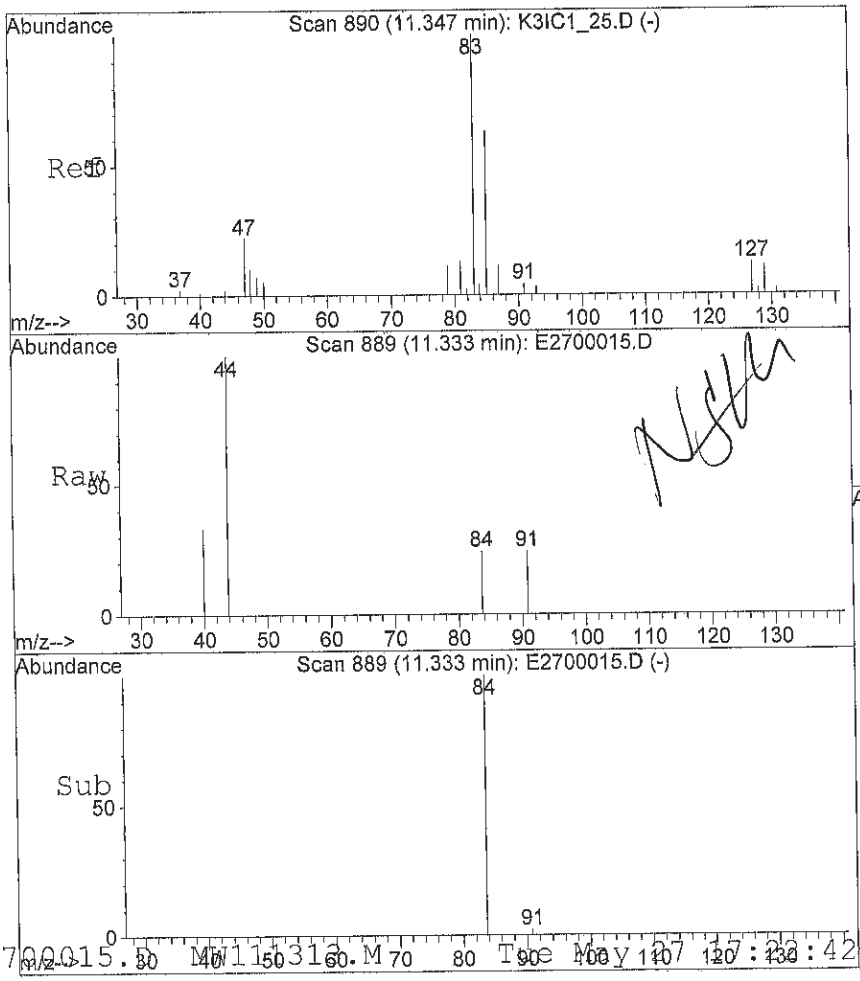


#32
1,2-Dichloroethane
Concen: 1.03 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 62 Resp: 5695

Ion	Ratio	Lower	Upper
62	100		
64	209.1	28.0	42.0#
49	271.5	28.5	42.7#
98	4.5	6.2	9.4#

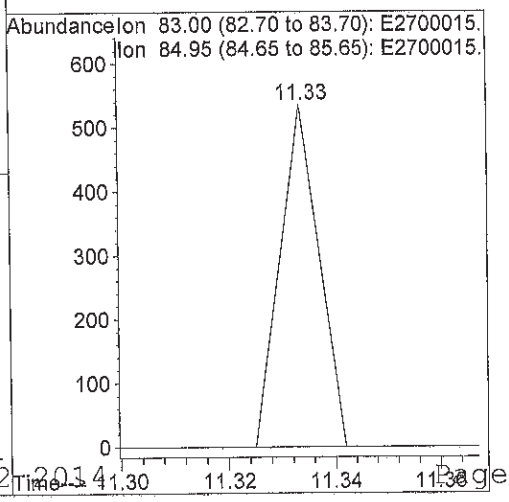


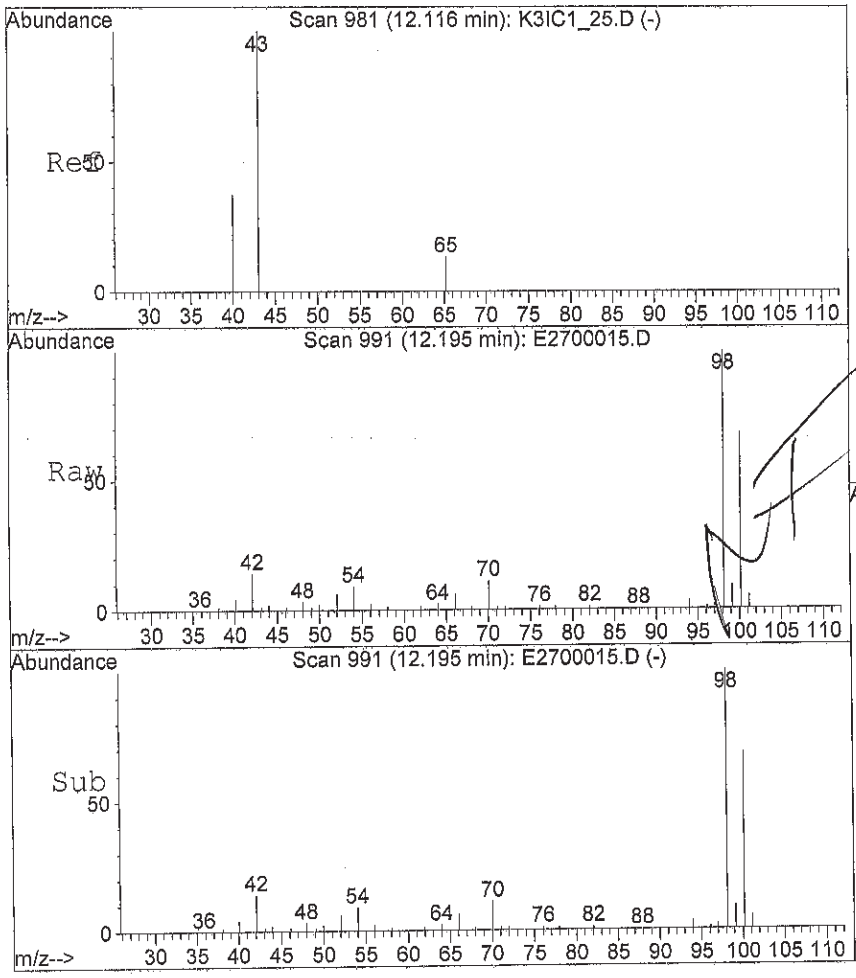


#36
Bromodichloromethane
Concen: 0.05 ug/L
RT: 11.33 min Scan# 889
Delta R.T. -0.01 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 83 Resp: 271

Ion	Ratio	Lower	Upper
83	100		
85	0.0	48.2	72.2#

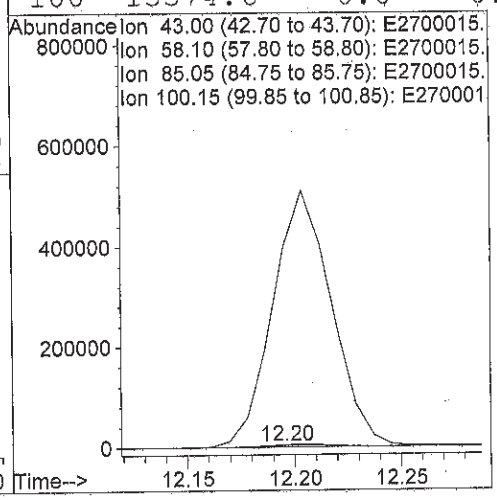


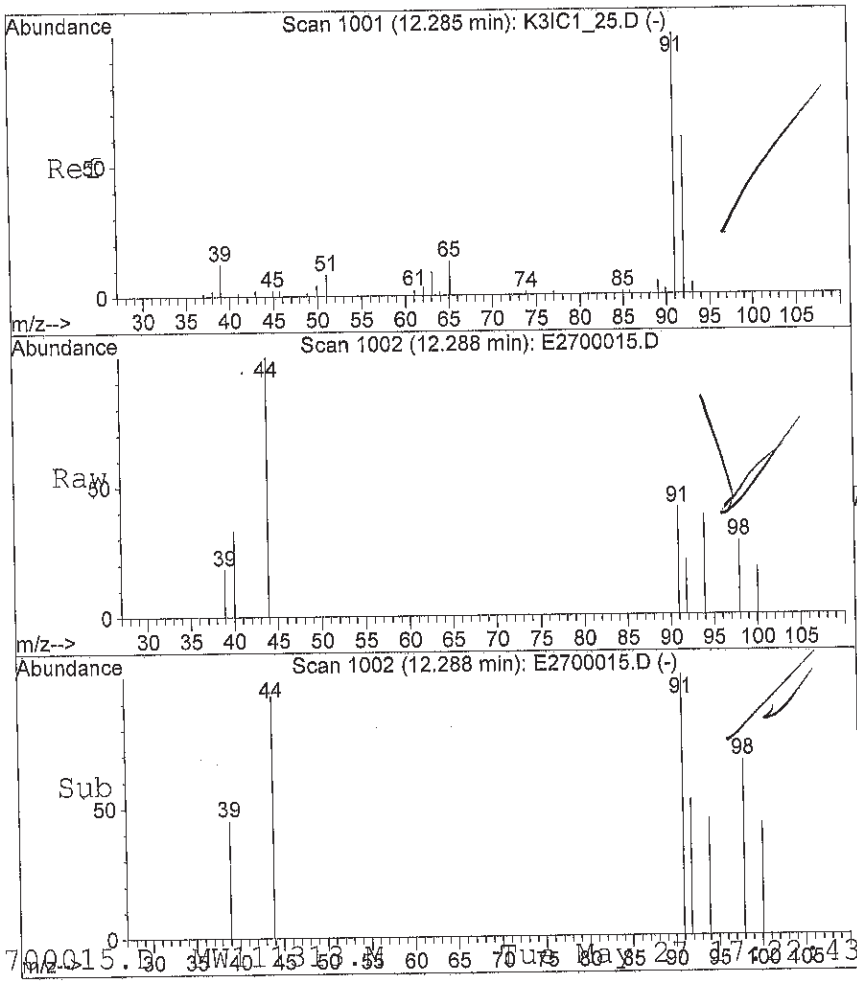


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.92 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 43 Resp: 7322

Ion	Ratio	Lower	Upper
43	100		
58	142.2	0.0	0.0#
85	0.0	0.0	0.0
100	13374.6	0.0	0.0#

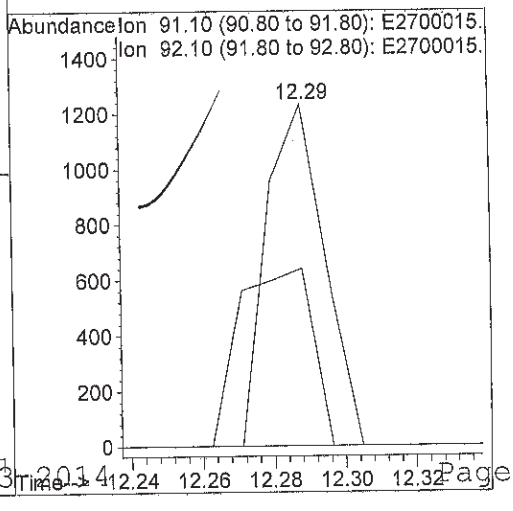


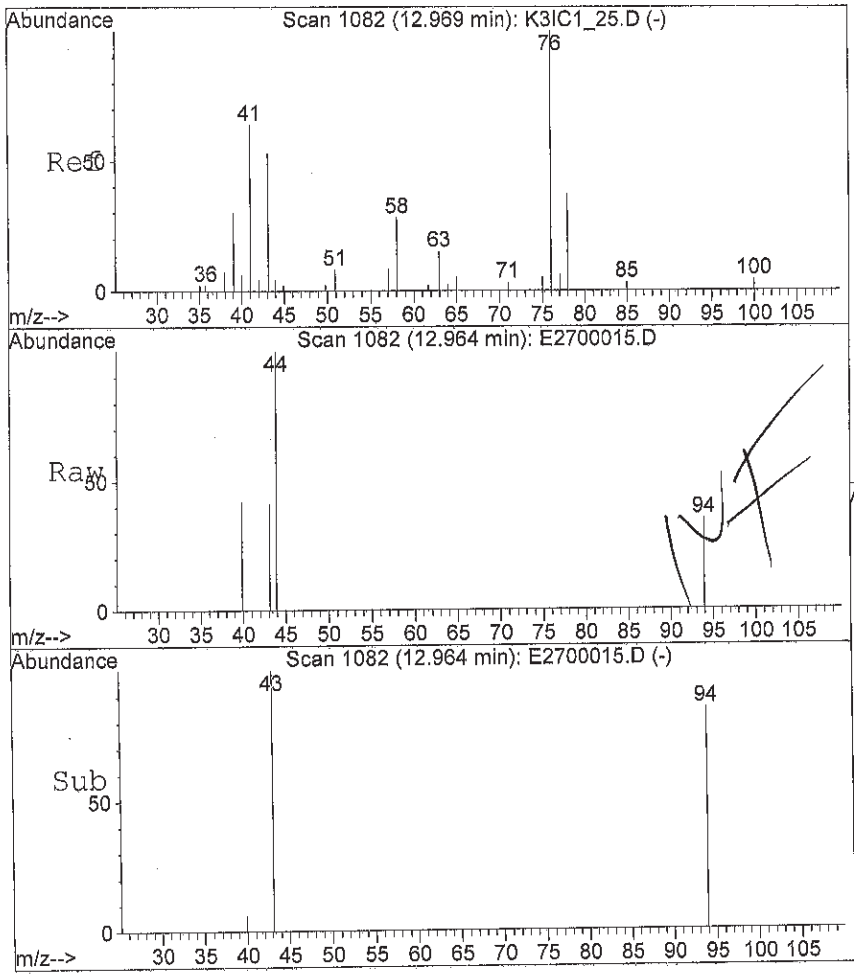


#41
Toluene
Concen: 0.08 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 91 Resp: 1384

Ion	Ratio	Lower	Upper
91	100		
92	65.8	47.4	71.0

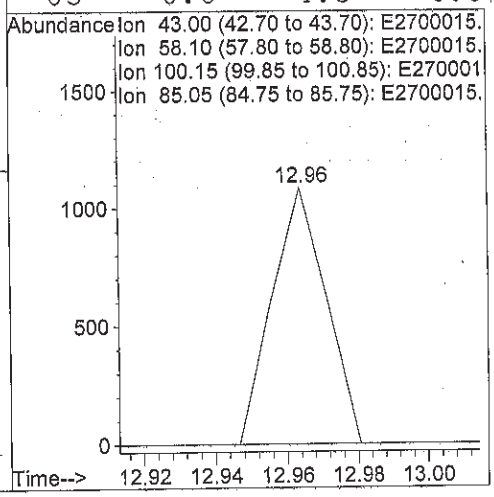


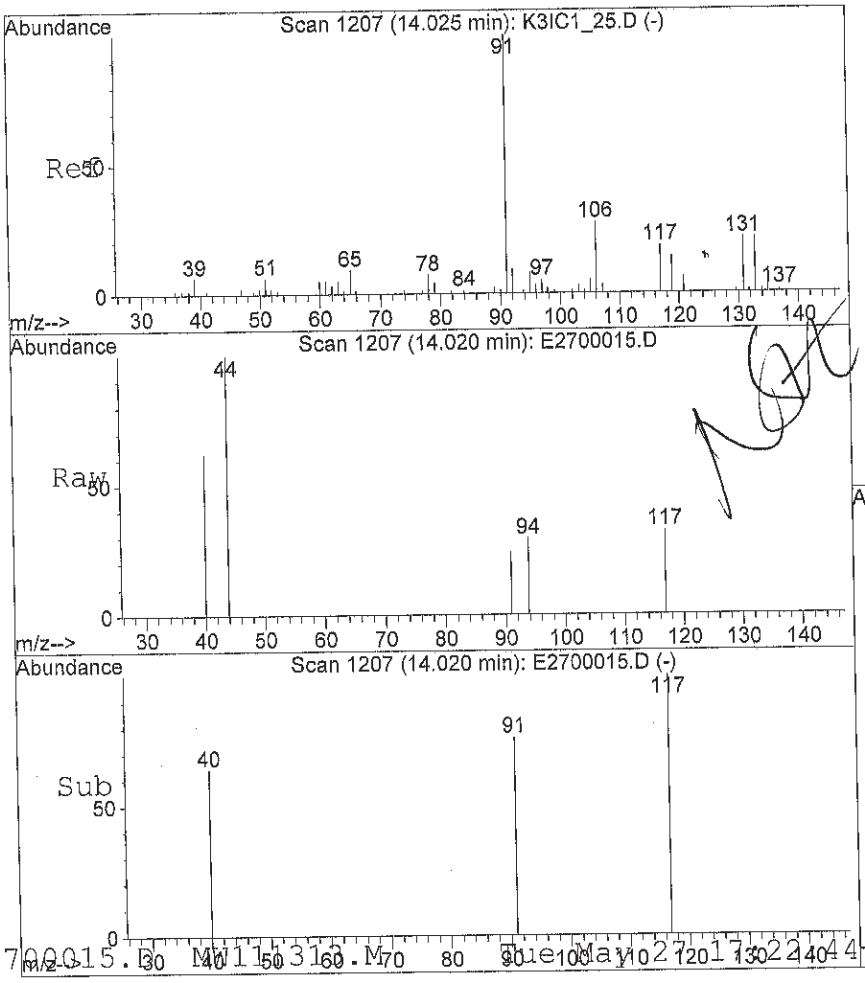


#46
2-Hexanone
Concen: 0.41 ug/L
RT: 12.96 min Scan# 1082
Delta R.T. -0.01 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 43 Resp: 1130

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

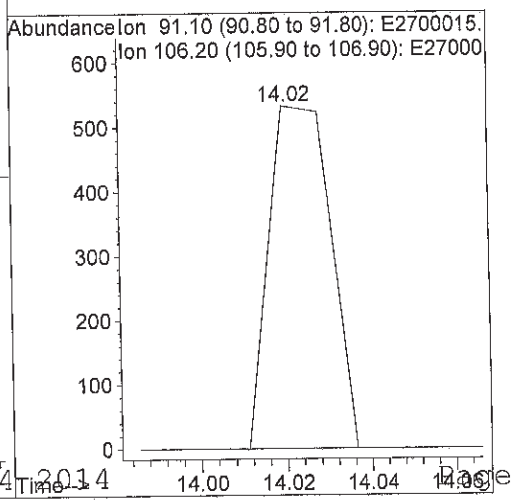


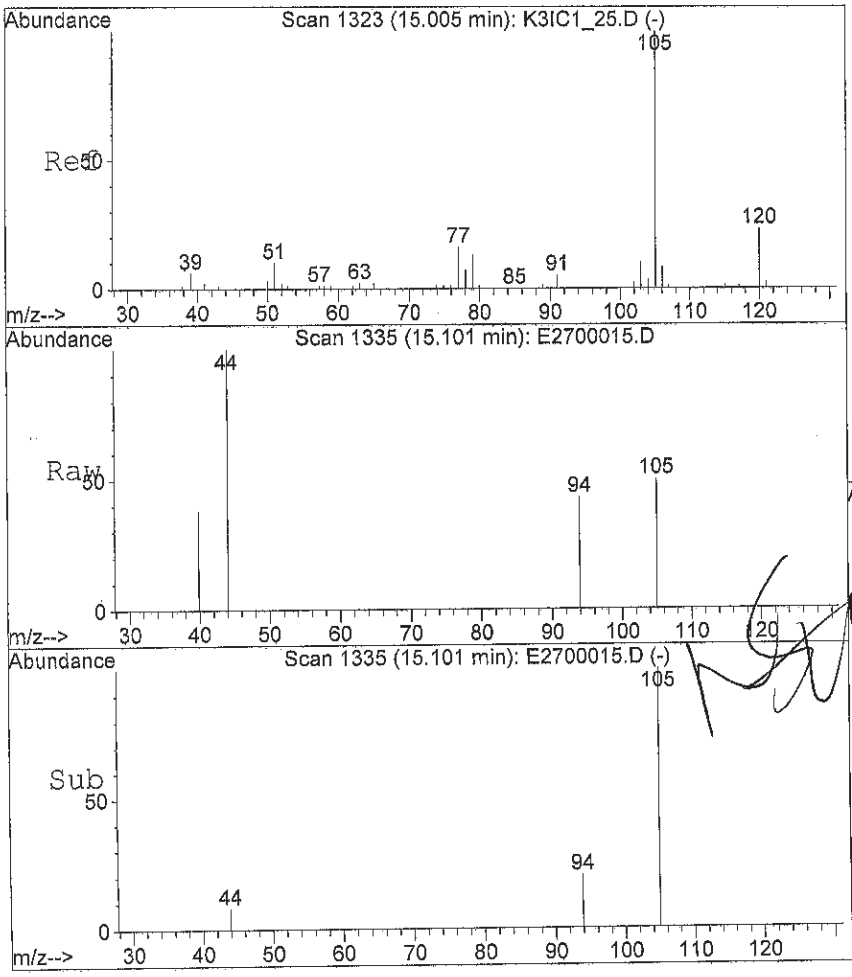


#51
Ethylbenzene
Concen: 0.03 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 91 Resp: 535

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

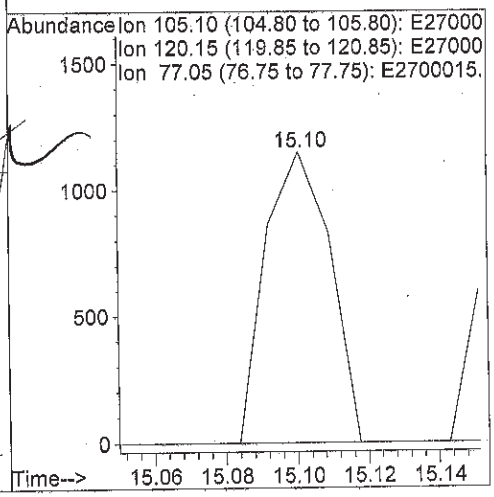


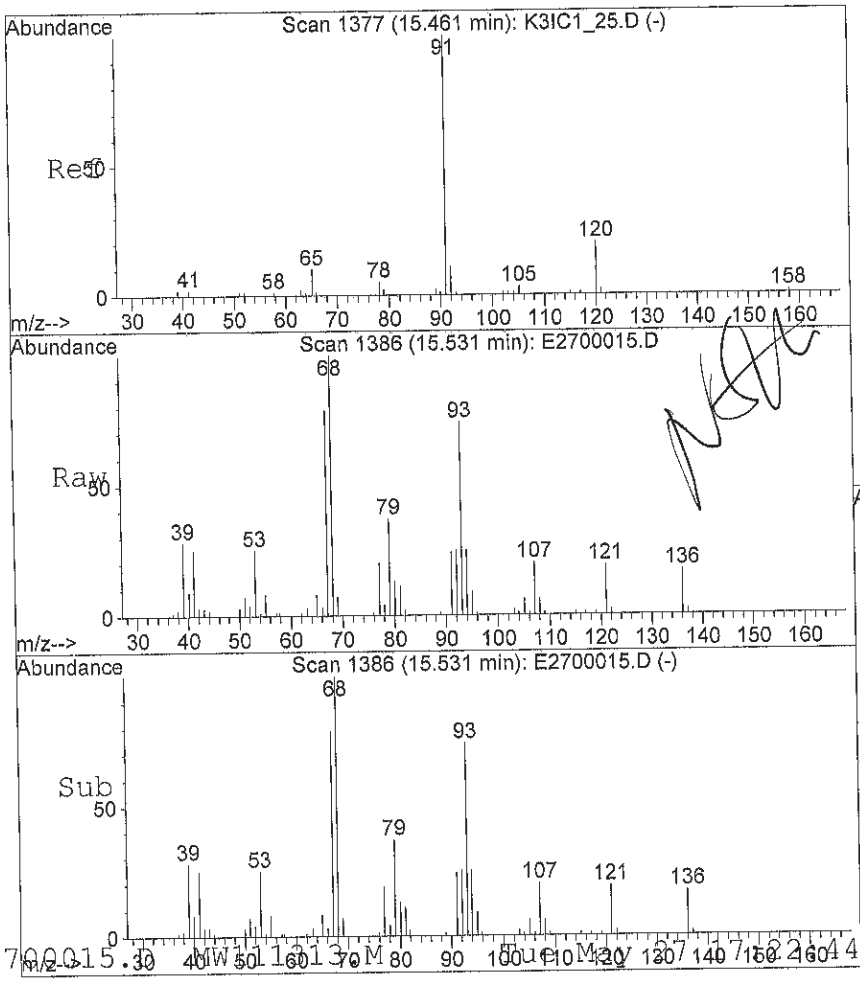


#56
Isopropylbenzene
Concen: 0.08 ug/L
RT: 15.10 min Scan# 1335
Delta R.T. 0.10 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion:105 Resp: 1441

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

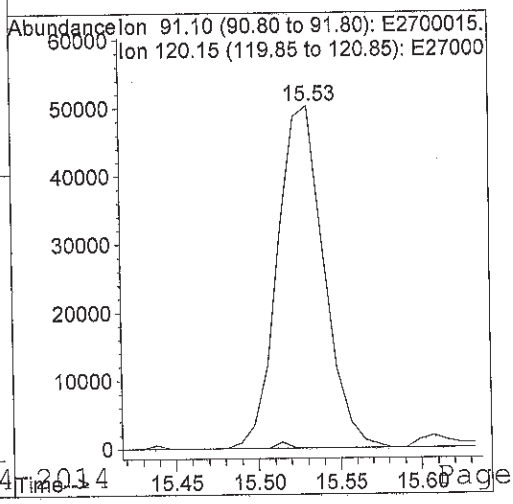


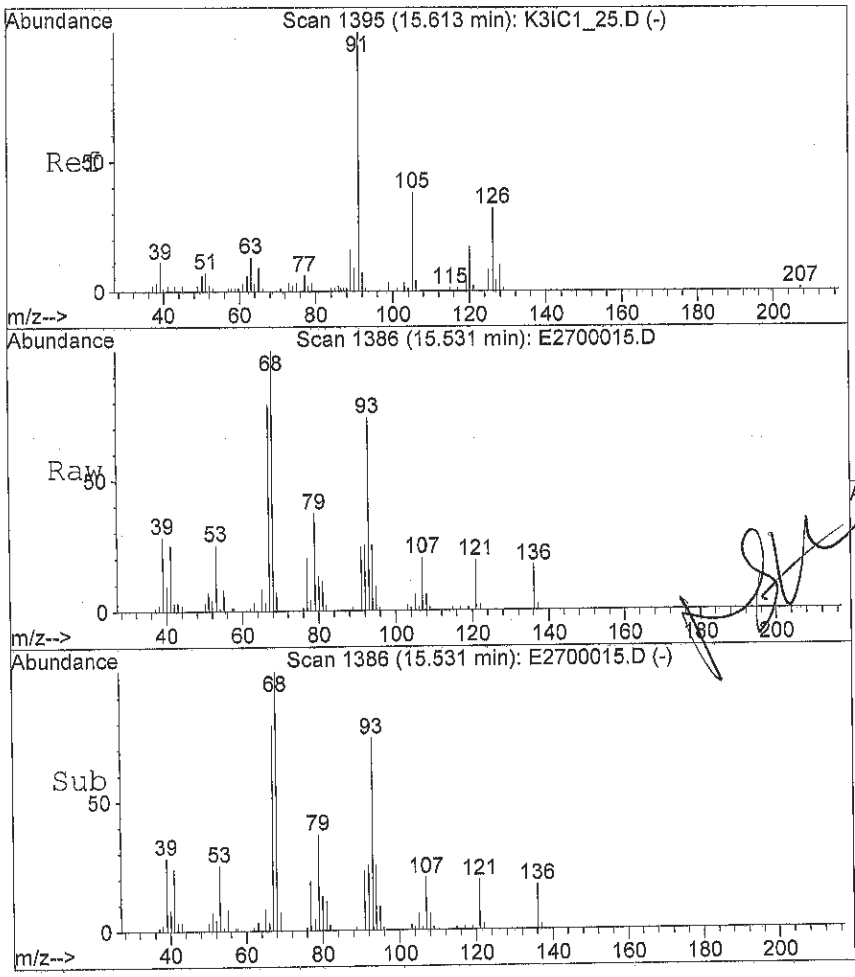


#62
n-Propylbenzene
Concen: 3.75 ug/L
RT: 15.53 min Scan# 1386
Delta R.T. 0.07 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 91 Resp: 98841

Ion	Ratio	Lower	Upper
91	100		
120	0.5	16.1	24.1#

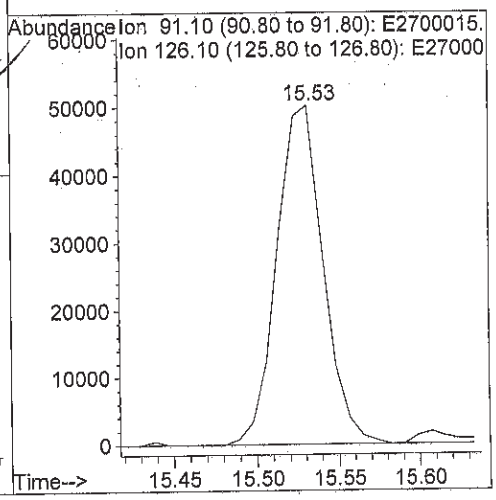


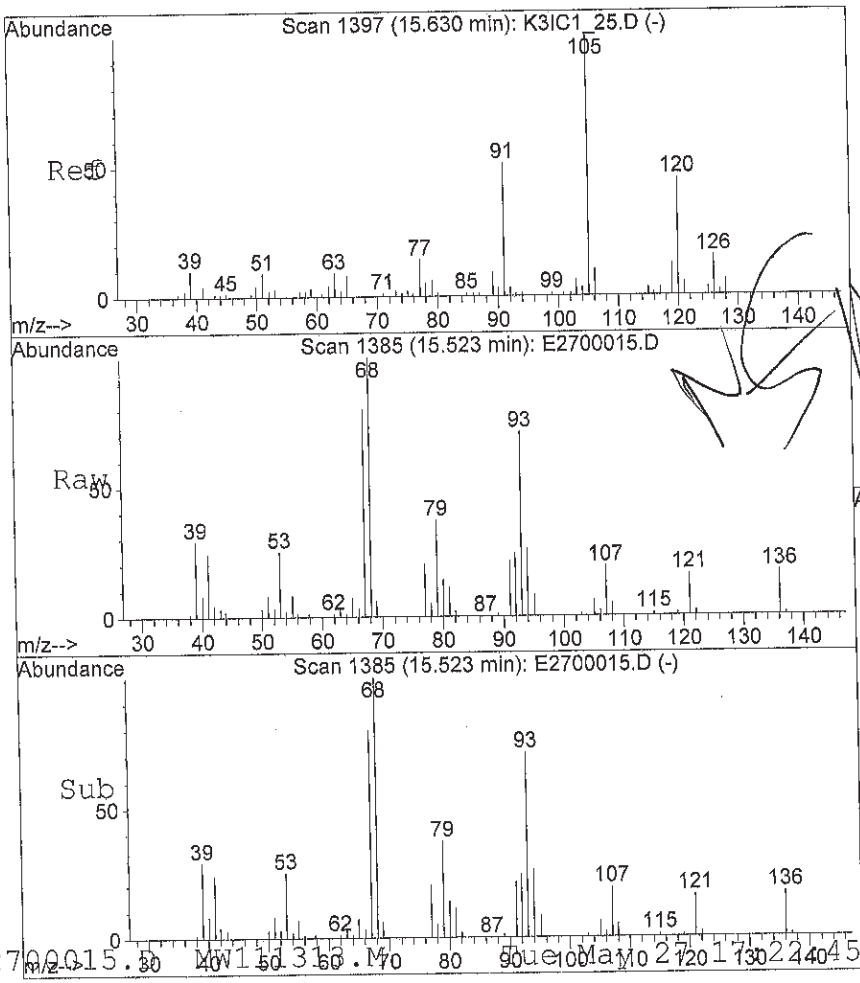


#63
2-Chlorotoluene
Concen: 6.09 ug/L
RT: 15.53 min Scan# 1386
Delta R.T. -0.08 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 91 Resp: 98841

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

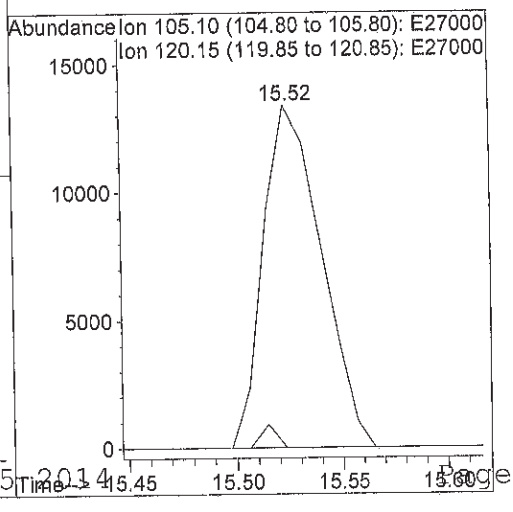


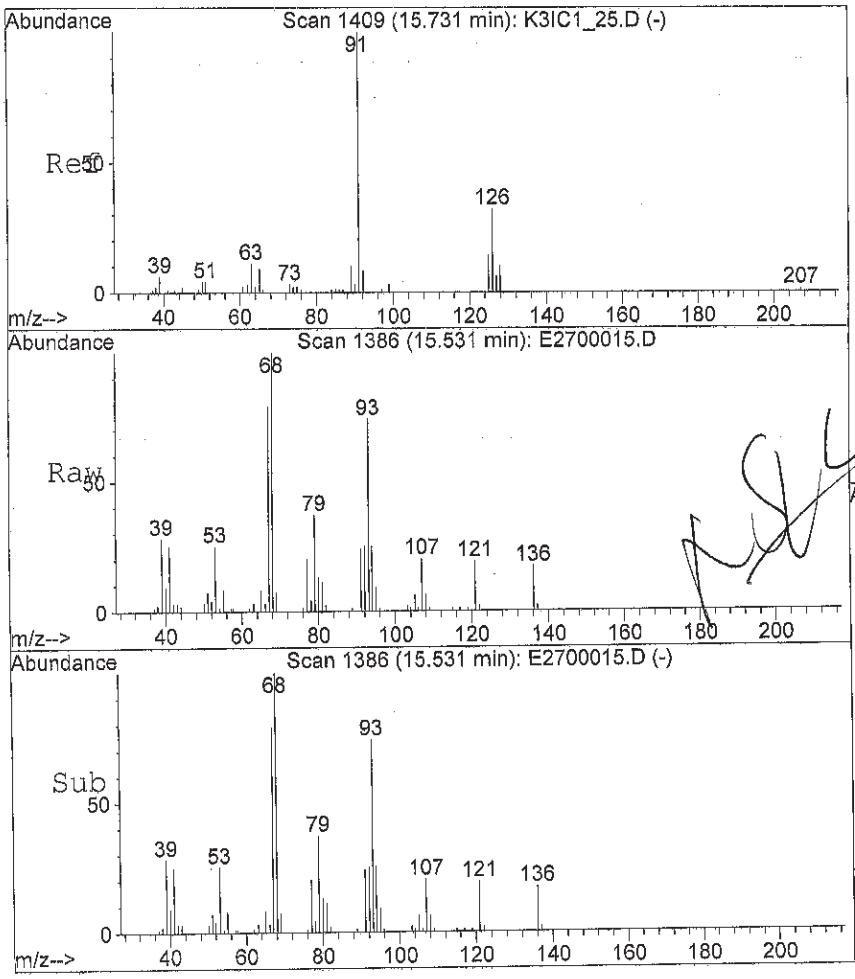


#64
1,3,5-Trimethylbenzene
Concen: 1.56 ug/L
RT: 15.52 min Scan# 1385
Delta R.T. -0.11 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion:105 Resp: 25396

Ion	Ratio	Lower	Upper
105	100		
120	1.8	36.4	54.6#

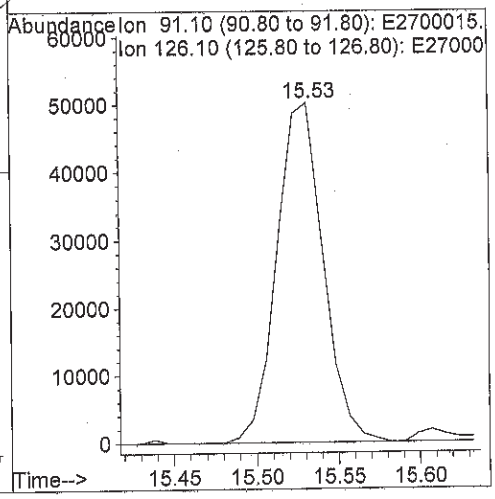


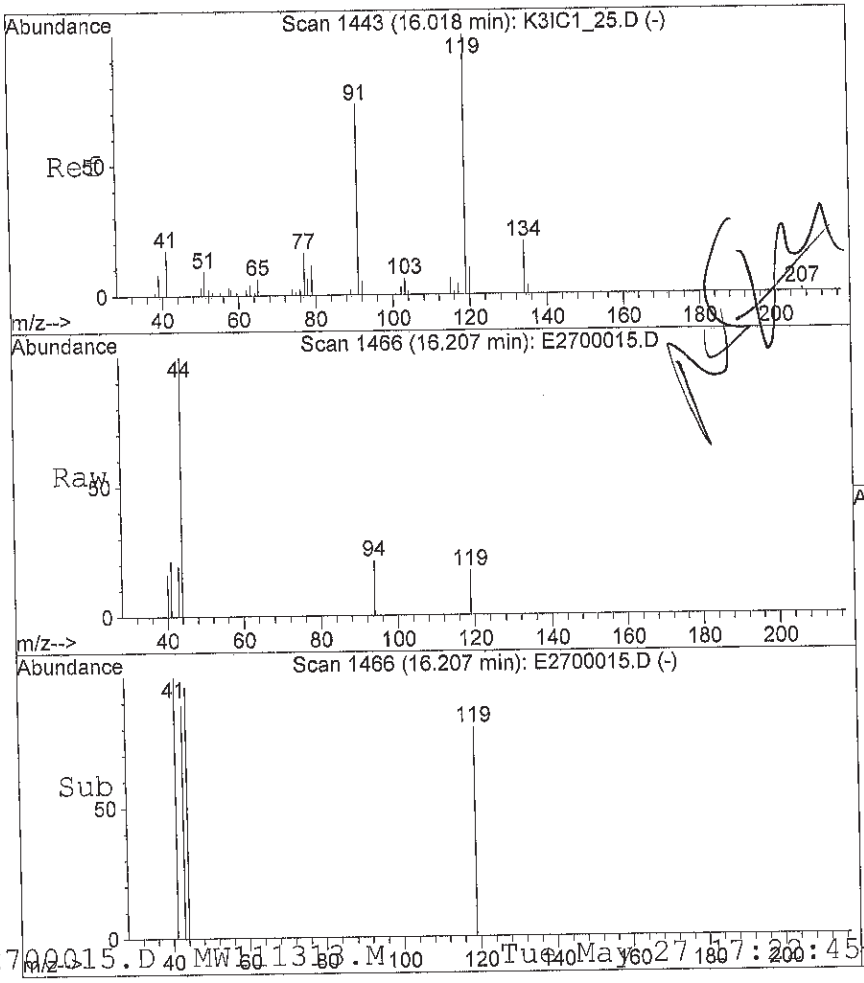


#65
4-Chlorotoluene
Concen: 6.59 ug/L
RT: 15.53 min Scan# 1386
Delta R.T. -0.20 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion: 91 Resp: 98841

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

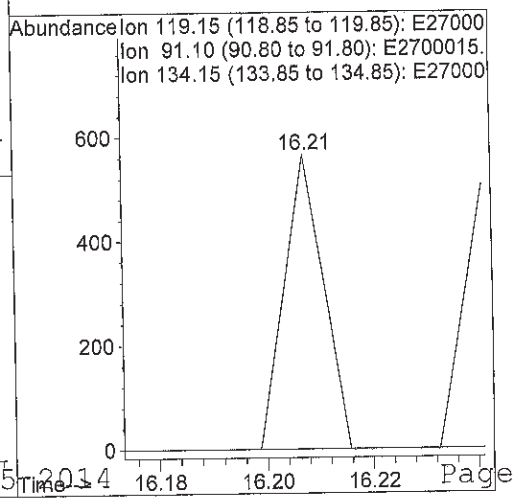


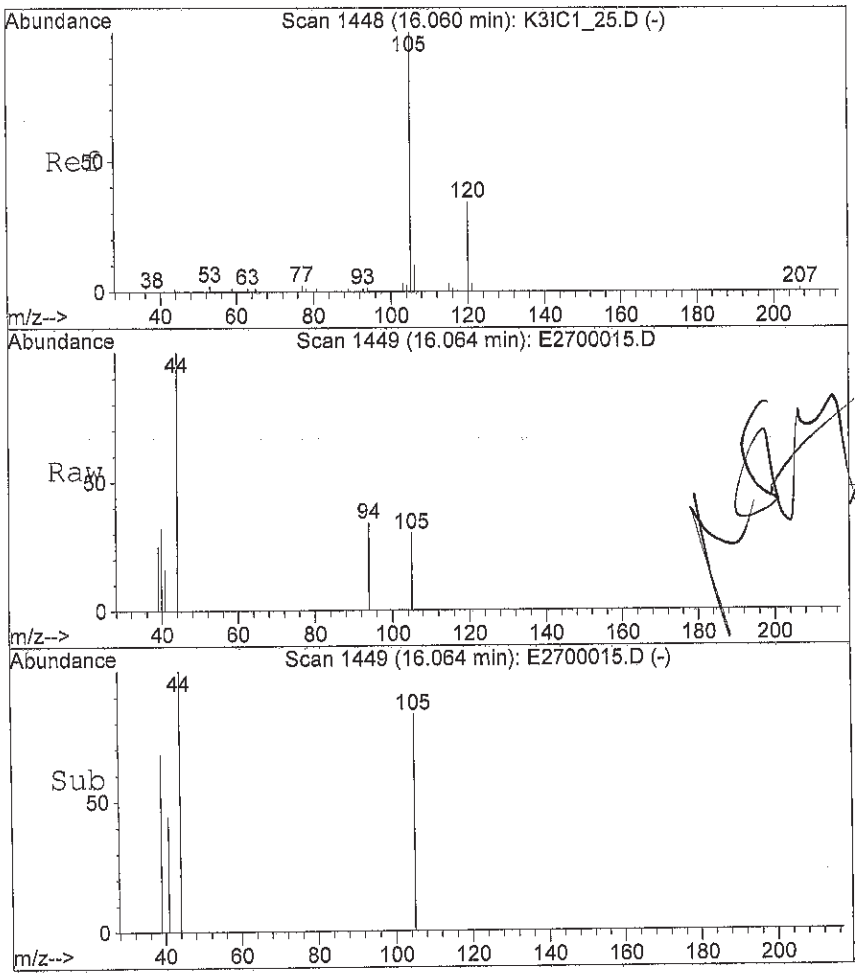


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.21 min Scan# 1466
Delta R.T. 0.19 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion:119 Resp: 287

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

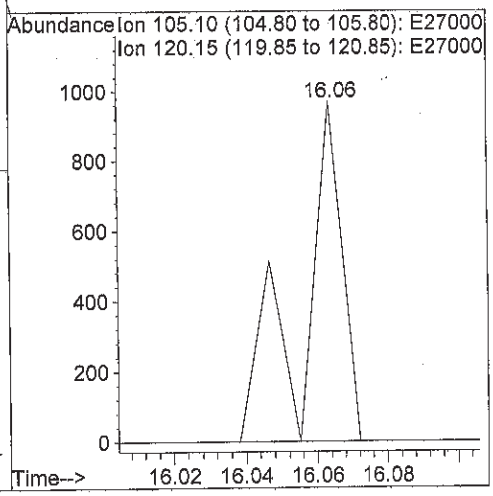


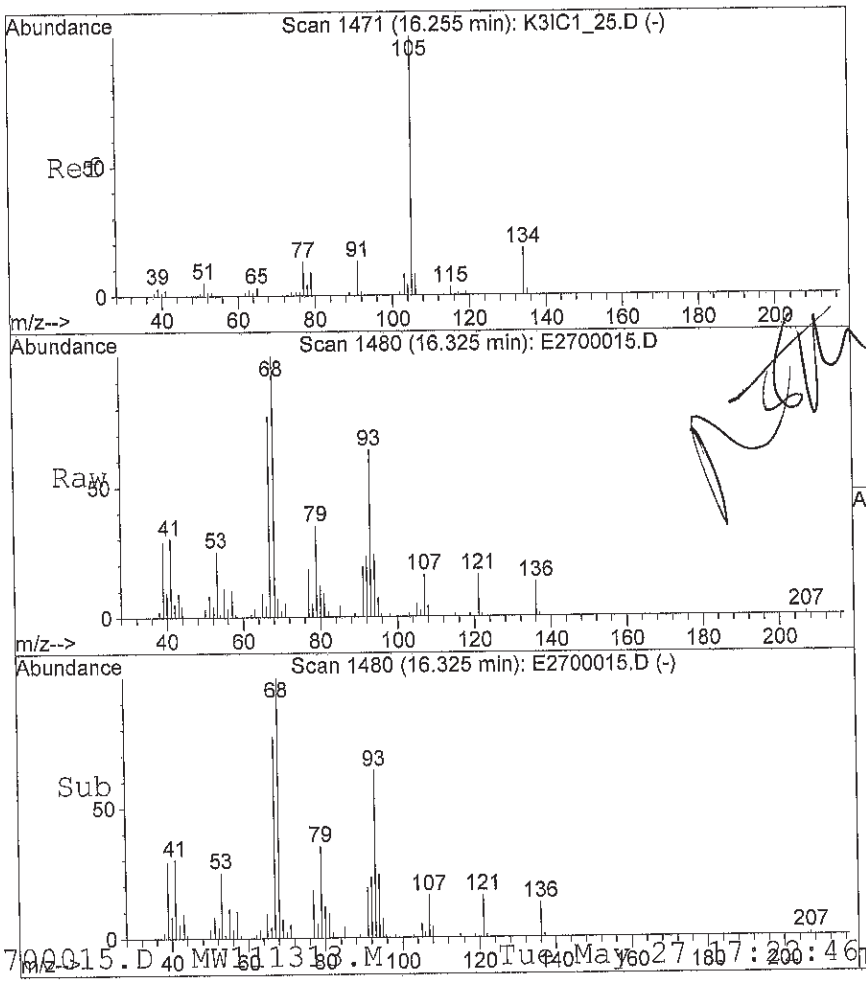


#67
1,2,4-Trimethylbenzene
Concen: 0.04 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion:105 Resp: 750

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

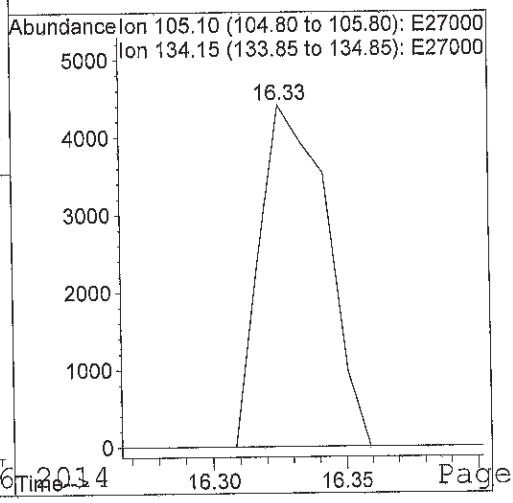


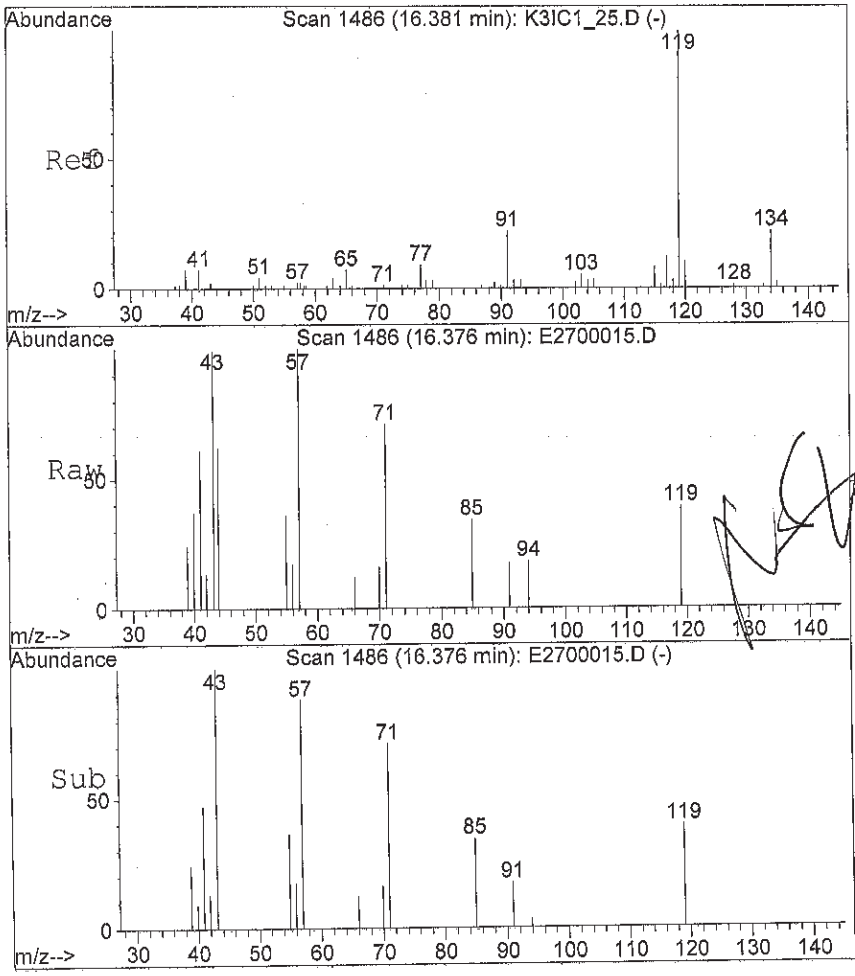


#68
sec-Butylbenzene
Concen: 0.35 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.07 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion:105 Resp: 7681

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

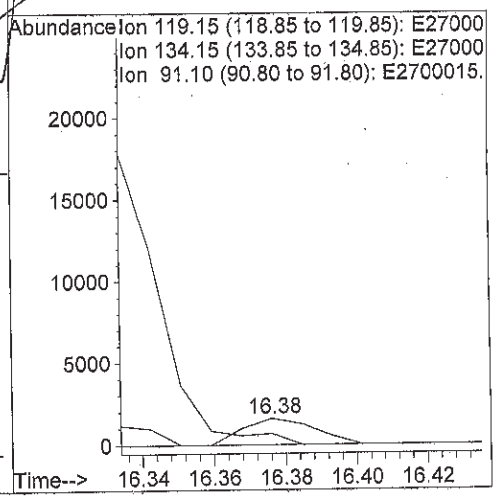


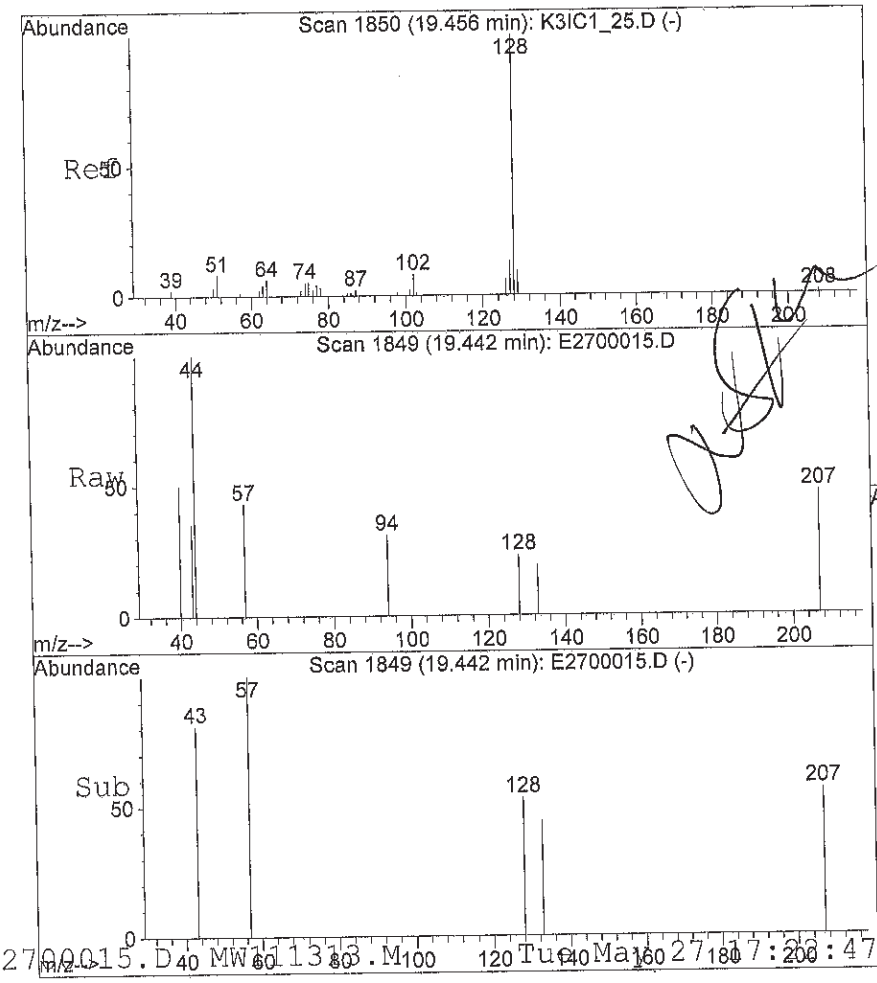


#69
p-Isopropyltoluene
Concen: 0.12 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion:119 Resp: 2194

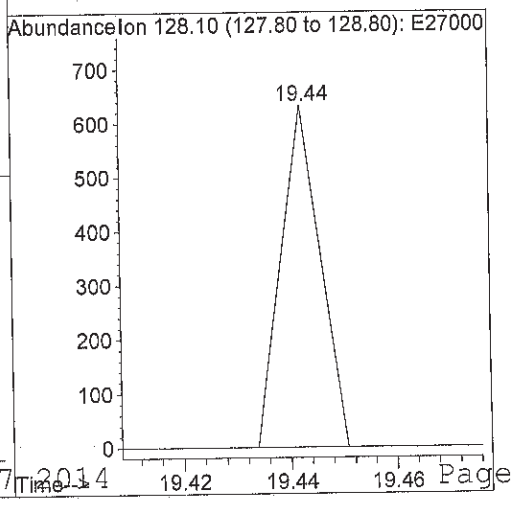
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.44 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2700015.D
Acq: 27 May 2014 5:01 pm

Tgt Ion:128 Resp: 320



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E2700015.D Vial: 6
Acq On : 27 May 2014 5:01 pm Operator: DN
Sample : 3E42701-12 Inst : GC/MS Ins
Misc : 100cc FB-052714 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 17:23 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1656895	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1256411	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	652135	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	464949	10.79 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.32%		
3) Chloroform-d (SU6)	9.19	84	770768	12.47 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 99.76%		
4) Methylene Chloride-d2 (SU5	7.08	86	437148	12.10 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.80%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	447485	15.20 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 121.60%		
6) Benzene-d6 (SU7)	9.93	84	1471764	11.32 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.56%		
8) Toluene-d8 (SU3)	12.20	98	1465222	12.29 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.32%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	663833	13.49 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.92%		

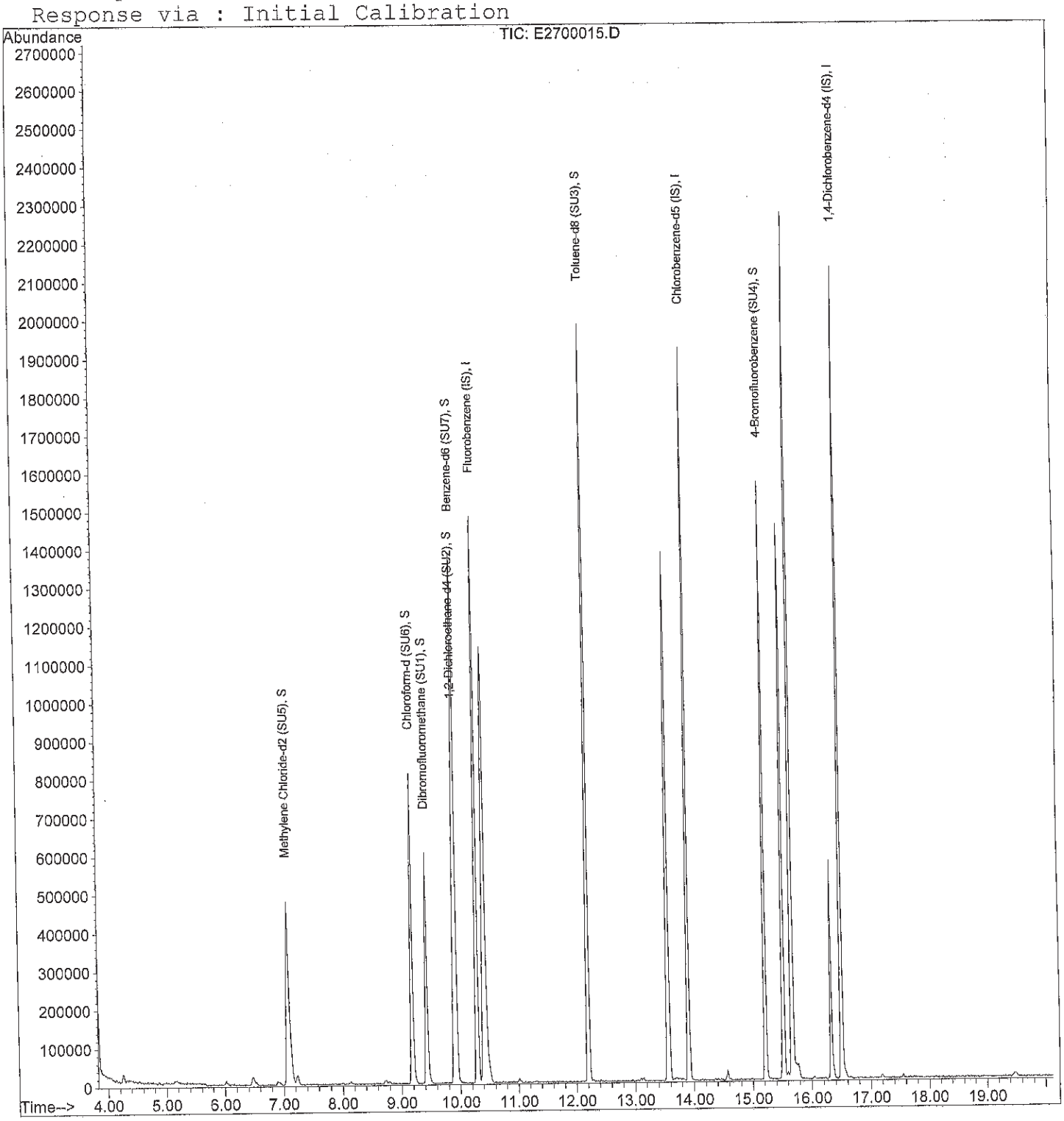
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E2700015.D Vial: 6
Acq On : 27 May 2014 5:01 pm Operator: DN
Sample : 3E42701-12 Inst : GC/MS Ins
Misc : 100cc FB-052714 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 27 17:23 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS02.D
Acq On : 27 May 2014 5:30 pm
Sample : 34E2701-BSD1
Misc : 20cc 1.25/2.5/12.5 ug/L LCS
MS Integration Params: rteint.p
Quant Time: May 28 5:51 19114

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1665701	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1168708	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	574407	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	458494	11.04 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.32%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	424783	10.76 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.08%		
39) Toluene-d8 (SU3)	12.20	98	1410221	12.94 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 103.52%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	606610	12.69 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 101.52%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	53781	1.32 ug/L	97
4) Chloromethane	4.47	50	38732	1.27 ug/L	98
5) Vinyl Chloride	4.60	62	37809	1.29 ug/L	68
6) Bromomethane	5.14	96	27612	1.33 ug/L	80
7) Chloroethane	5.29	64	18475	1.42 ug/L	89
8) (F11) Trichlorofluorometha	5.67	101	68573	1.50 ug/L	96
9) (F113) 1,1,2-Trichloro-tri	6.37	151	40377	1.23 ug/L	98
10) 1,1-Dichloroethene	6.44	96	53059	1.35 ug/L	93
11) Acetone	6.47	58	38951	-12.50 ug/L	88
12) (IPA) Leak Check Compound	6.54	45	120161	60.03 ug/L #	91
13) Carbon disulfide	6.86	76	186959	1.35 ug/L	98
14) Methylene Chloride	7.11	84	57273	1.25 ug/L	97
15) (TBA) tert-Butanol	7.10	59	2922	1.03 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	81779	0.87 ug/L	98
17) trans-1,2-Dichloroethene	7.48	96	58211	1.30 ug/L	98
18) 1,1-Dichloroethane	8.07	63	87135	1.16 ug/L	95
19) cis-1,2-Dichloroethene	8.84	96	60353	1.16 ug/L	92
21) (MEK) 2-Butanone	8.80	72	5349	1.14 ug/L #	46
22) (DIPE) Diisopropyl Ether	8.01	45	170804	1.31 ug/L	96
23) Bromochloromethane	9.18	128	21140	0.95 ug/L #	76
24) Chloroform	9.21	83	98150	1.12 ug/L	96
25) (ETBE) 2-ethoxy 2-methyl p	8.50	59	107454	0.89 ug/L #	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS02.D Vial: 9
Acq On : 27 May 2014 5:30 pm Operator: DN
Sample : 34E2701-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 5:51 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26) 1,1,1-Trichloroethane	10.28	97	73502	1.07 ug/L	97
27) (TAME) tert-Amyl methyl et	10.00	73	97840	0.93 ug/L	95
29) 1,1-Dichloropropene	9.69	75	72625	1.13 ug/L	98
30) Carbon Tetrachloride	13.89	117	73273	1.31 ug/L	100
31) Benzene	9.98	78	198081	1.26 ug/L	96
32) 1,2-Dichloroethane	10.00	62	60746	1.10 ug/L	94
33) Trichloroethene	10.74	130	62996	1.24 ug/L	95
34) 1,2-Dichloropropane	11.05	63	49457	1.32 ug/L	92
35) Dibromomethane	11.21	93	31824	1.09 ug/L	92
36) Bromodichloromethane	11.35	83	61712	1.05 ug/L	93
37) cis-1,3-Dichloropropene	11.87	75	54177	0.84 ug/L	95
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	7576	0.32 ug/L #	100
41) Toluene	12.29	91	197791	1.24 ug/L	98
42) trans-1,3-Dichloropropene	12.51	75	35878	0.68 ug/L #	80
43) 1,1,2-Trichloroethane	12.75	83	34086	1.19 ug/L #	84
44) Tetrachloroethene	12.94	164	51665	0.92 ug/L	96
45) 1,3-Dichloropropane	12.96	76	61499	1.12 ug/L	99
46) 2-Hexanone	12.97	43	25327	0.99 ug/L	93
47) Dibromochloromethane	13.25	129	47998	1.17 ug/L	97
48) 1,2-Dibromoethane	13.43	107	45468	1.22 ug/L	97
49) Chlorobenzene	13.95	112	138606	1.29 ug/L	97
50) 1,1,1,2-Tetrachloroethane	14.02	131	45416	1.19 ug/L	97
51) Ethylbenzene	14.03	91	235392	1.30 ug/L	99
52) m,p-Xylenes	14.15	106	167732	2.60 ug/L	96
53) o-Xylene	14.62	106	85291	1.34 ug/L	100
54) Styrene	14.63	104	131390	1.42 ug/L	98
55) Bromoform	14.91	173	25045	1.07 ug/L #	99
56) Isopropylbenzene	15.00	105	234772	1.35 ug/L	98
57) 1,2,3-Trichloropropane	15.42	75	52505	1.10 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	47604	1.15 ug/L	97
61) Bromobenzene	15.44	156	57360	1.27 ug/L	93
62) n-Propylbenzene	15.45	91	282870	1.22 ug/L	100
63) 2-Chlorotoluene	15.61	91	179539	1.26 ug/L	98
64) 1,3,5-Trimethylbenzene	15.62	105	182512	1.28 ug/L	98
65) 4-Chlorotoluene	15.73	91	177981	1.35 ug/L	99
66) tert-Butylbenzene	16.01	119	150674	1.24 ug/L	92
67) 1,2,4-Trimethylbenzene	16.05	105	184246	1.23 ug/L	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS02.D Vial: 9
Acq On : 27 May 2014 5:30 pm Operator: DN
Sample : 34E2701-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 5:51 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

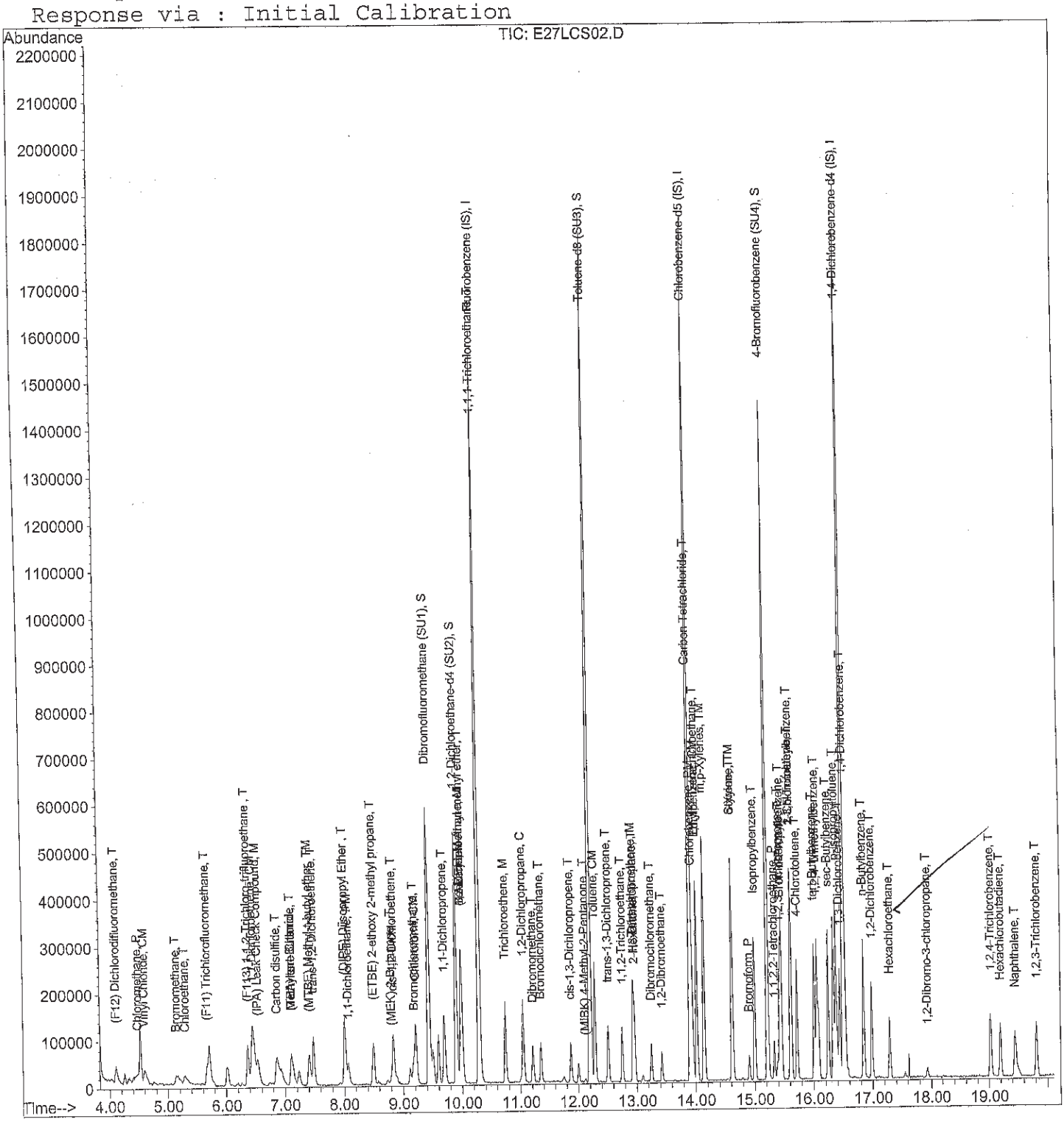
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) sec-Butylbenzene	16.25	105	252641	1.31 ug/L	99
69) p-Isopropyltoluene	16.38	119	201958	1.29 ug/L	98
70) 1,3-Dichlorobenzene	16.44	146	111245	1.31 ug/L	97
71) 1,4-Dichlorobenzene	16.54	146	110130	1.30 ug/L	99
72) n-Butylbenzene	16.84	91	204884	1.24 ug/L	99
73) 1,2-Dichlorobenzene	16.98	146	103269	1.37 ug/L	94
74) 1,2-Dibromo-3-chloropropan	17.93	75	6325	1.03 ug/L	90
75) 1,2,4-Trichlorobenzene	19.03	180	59856	1.17 ug/L	99
76) Hexachlorobutadiene	19.20	225	29021	1.26 ug/L	93
77) Naphthalene	19.45	128	110614	0.97 ug/L	100
78) Hexachloroethane	17.29	201	19275	1.16 ug/L	87
79) 1,2,3-Trichlorobenzene	19.81	180	53347	1.10 ug/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052714L3\E27LCS02.D Vial: 9
Acq On : 27 May 2014 5:30 pm Operator: DN
Sample : 34E2701-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 5:51 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



ENVIRONMENTAL SUPPORT TECHNOLOGIES

16510 Aston St. Irvine, CA 92606
Tel (949) 679-9500 Fax (949) 679-9501

www.est-inc.com

SOIL GAS SURVEY
SANTA SUSANA FIELD LABORATORY:
DEPARTMENT OF ENERGY
5800 WOOLSEY CANYON ROAD
CANOGA PARK, CA

LEVEL IV DATA PACKAGE

MWH AMERICAS
2121 NORTH CALIFORNIA BLVD.
SUITE 600
WALNUT CREEK, CA

EST2754
May 28, 2014

ENVIRONMENTAL SUPPORT TECHNOLOGIES

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11 Raw Data for QC Samples and Initial Calibration, Laboratory Control Samples (LCS)

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13 Raw Data for Analyzed Samples Including Chromatograms, Quantitation Reports and Spectra

CHAIN-OF-CUSTODY

CHAIN-OF-CUSTODY RECORD

Environmental Support Technologies
16510 Aston St., Irvine, CA 92606 · Tel (949) 679-9500 · Fax (949) 679-9501

Client: MWH Americas
Address: 250 North Madison Avenue
Pasadena, Ca
Project Manager: Sarah Von Raesfield

Sampler Name: Ashley Flores
EST Project#: EST2754
Site Location: SSFL
Phone: ( )

Page: 1 of 1
Custody Seals:
Email:

Turnaround Time:
(Check one)

Normal:

Rush: X

Sample Receipt

Intact: Yes: X No:

On Ice: Yes: No: X N/A

Custody Seals: Yes: No: X

N/A (Received on Site):

Sample Name	Sample Matrix	Container Type	# of Container	Sampling Date	Sampling Time	Preservative Type	Purge Volume (ml)	Vacuum (inches of H_2O)	8260B VOC's 0.02 RL						Special Instructions
Equipment Blank	Air	Glass Bulb	1	5/28/2014	800	Surr			X						Bulb # 8
SVL-515-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/28/2014	816	Surr			X						Bulb # 3
SVL-815-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/28/2014	816	Surr			X						Bulb # 10
SVL-515-SA5D-SV-12.5-13.8	Air	Glass Bulb	1	5/28/2014	857	Surr			X						Bulb # 13
SVL-511-SA5D-SV-4.5-5.5	Air	Glass Bulb	1	5/28/2014	946	Surr			X						Bulb # 11
SVL-511-SA5D-SV-9.5-10.5	Air	Glass Bulb	1	5/28/2014	1019	Surr			X						Bulb # 12
SVL-516-SA5D-SV-6.0-7.0	Air	Glass Bulb	1	5/28/2014	1055	Surr			X						Bulb # 5
SVL-516-SA5D-SV-14.0-15.0	Air	Glass Bulb	1	5/28/2014	1126	Surr			X						Bulb # 6
SVL-510-SA5D-SV-7.5-8.5	Air	Glass Bulb	1	5/28/2014	1250	Surr			X						Bulb # 9
SVL-544-SA5D-SV-4.5-5.5	Air	Glass Bulb	1	5/28/2014	1325	Surr			X						Bulb # 1
FB-052814	Air	Glass Bulb	1	5/28/2014	1356	Surr			X						Bulb # 7

Relinquished by: (Signature)	Date/Time: 05/28/14	Received by:	Date/Time:
Relinquished by: (Signature)	Date/Time:	Received by:	Date/Time:

SAMPLE RESULTS WITH ANALYSIS AND EXTRACTIONS PREPARATION DATES

June 0q, 2013

Sarah Von Raesfield
MWH Americas, Inc.
250 No. Madison Avenue
Pasadena, CA 91107

RE: Santa Susana Field Laboratory, Canoga Park

Enclosed are the results of analyses for soil gas samples received by Environmental Support Technologies laboratory on 05/24/13 13:31. The analyses 6 ere performed according to the prescribed method as outlined by EPA 42w08. A shut in test 6 as performed, leak test 6 as performed, eBuipment blank 6 as run, and selected purge volume 6 as qPV. If you have any Buestions concerning this report, please feel free to contact Project Manager.

Sincerely,

Ashley Flores

Ashley Flores
Project Manager

Environmental Support Technologies laboratories are certified by the California Department of Health Services (CDHS), Environmental Laboratory Accreditation Program (ELAP) No's. 2772, 277q, and 27w7.

1w510 Aston Street, Irvine, California 92w0w
Telephone: (939) w79-9500 Fax: (939) w79-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Analyzed
EBuipment 8 lank	qE32401-01	Air	24-May-13 04:00	24-May-13 04:1q
SVL-515-SA5D-SV-5.0-w.0	qE32401-02	Air	24-May-13 04:1w	24-May-13 04:37
SVL-415-SA5D-SV-5.0-w.0	qE32401-0q	Air	24-May-13 04:1w	24-May-13 09:39
SVL-515-SA5D-SV-12.5-1q.4	qE32401-03	Air	24-May-13 04:57	24-May-13 10:19
SVL-511-SA5D-SV-3.5-5.5	qE32401-05	Air	24-May-13 09:3w	24-May-13 10:37
SVL-511-SA5D-SV-9.5-10.5	qE32401-0w	Air	24-May-13 10:19	24-May-13 11:14
SVL-51w-SA5D-SV-w.0-7.0	qE32401-07	Air	24-May-13 10:55	24-May-13 11:37
SVL-51w-SA5D-SV-13.5-15.0	qE32401-04	Air	24-May-13 11:2w	24-May-13 12:1w
SVL-510-SA5D-SV-7.5-4.5	qE32401-09	Air	24-May-13 12:50	24-May-13 1q:13
SVL-533SA5D-SV-3.5-5.5	qE32401-10	Air	24-May-13 1q:25	24-May-13 1q:50
F8 -052413	qE32401-11	Air	24-May-13 1q:5w	24-May-13 13:19

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1w510 Aston Street, Irvine, California 92w0w
Telephone: (939) w79-9500 Fax: (939) w79-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
Equipment Blank (3E42701-01) Air Sampled: 05/27/14 07:00 Analyzed: 05/27/14 07:13									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*90.9 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*D9.8 1*	*0%75-%*		"	"	"	"	
2urroSateg 876romofluorobenzene		*54B 1*	*0%75-%*		"	"	"	"	
2urroSateg 6 enzene7dB		*9-.- 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*9D- 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*9B.4 1*	*047584*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-515-SA5D-SV-590-. 90 (3E42701-02) Air Sampled: 05/27/14 07:1. Analyzed: 05/27/14 07:46									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**090052**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*D8.- 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*D8.%1*	*0%75-%*		"	"	"	"	
2urroSateg 876romofluorobenzene		*540 1*	*0%75-%*		"	"	"	"	
2urroSateg 6 enzene7dB		*D5.B 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*548 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*544 1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-715-SA5D-SV-59 0-. 9 0 (3E42701-03) Air Sampled: 05/27/14 07:1. Analyzed: 05/27/14 08:48									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**09 0064**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*D8.8 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene 7d9		*D9.5 1*	*0%75-%*		"	"	"	"	
2urroSateg 876 romofluorobenzene		*554 1*	*0%75-%*		"	"	"	"	
2urroSateg 6 enzene 7dB		*9D8 1*	*047584*		"	"	"	"	
2urroSateg Chloroform 7d		*544 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride 7d-		*D%4 1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-515-SA5D-SV-1295-1397 (3E42701-04) Air Sampled: 05/27/14 07:56 Analyzed: 05/27/14 10:18									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**09007.**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**09027**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**09055**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*9D9 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*D0.3 1*	*0%75-%*		"	"	"	"	
2urroSateg876romofluorobenzene		*54D1*	*0%75-%*		"	"	"	"	
2urroSateg6enzene7dB		*90.4 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*D0.4 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*D8.%l*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-511-SA5D-SV-49-5-59 (3E42701-05) Air Sampled: 05/27/14 08:4. Analyzed: 05/27/14 10:46									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*D5.0 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*DB.4 1*	*0%75-%*		"	"	"	"	
2urroSateg 876romofluorobenzene		*54%1*	*0%75-%*		"	"	"	"	
2urroSateg 6 enzene7dB		*9B.3 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*D%4 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*D8.D1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-511-SA5D-SV-895-1095 (3E42701-0.) Air Sampled: 05/27/14 10:18 Analyzed: 05/27/14 11:17									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*D4.B 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*DB.0 1*	*0%75-%*		"	"	"	"	
2urroSateg 876romofluorobenzene		*54%1*	*0%75-%*		"	"	"	"	
2urroSateg 6 enzene7dB		*95.4 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*9B.0 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*9B.B 1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-51. -SA5D-SV-. 90-690 (3E42701-06) Air Sampled: 05/27/14 10:55 Analyzed: 05/27/14 11:46									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*9D0 1*	*0%75-%*		"	"	"	"	
2urroSategToluene7d9		*DB.5 1*	*0%75-%*		"	"	"	"	
2urroSateg876romofluorobenzene		*54%1*	*0%75-%*		"	"	"	"	
2urroSateg6enzene7dB		*93.5 1*	*047584*		"	"	"	"	
2urroSategChloroform7d		*9D5 1*	*047584*		"	"	"	"	
2urroSategMethylene chloride7d-		*9D8 1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-51. -SA5D-SV-1495-1590 (3E42701-07) Air Sampled: 05/27/14 11:2. Analyzed: 05/27/14 12:1.									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**09024**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**09004.**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*D-.B 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*D%D1*	*0%75-%*		"	"	"	"	
2urroSateg 876romofluorobenzene		*55- 1*	*0%75-%*		"	"	"	"	
2urroSateg 6 enzene7dB		*99.4 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*D-.3 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*D8.- 1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-510-SA5D-SV-695-795 (3E42701-08) Air Sampled: 05/27/14 12:50 Analyzed: 05/27/14 13:14									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**0.024**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0077**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*90.5 1*		*0%75-%*		*"*	*"*	*"*	
2urroSateg Toluene7d9		*D%- 1*		*0%75-%*		*"*	*"*	*"*	
2urroSateg876romofluorobenzene		*54B 1*		*0%75-%*		*"*	*"*	*"*	
2urroSateg6enzene7dB		*93.5 1*		*047584*		*"*	*"*	*"*	
2urroSateg Chloroform7d		*99.%1*		*047584*		*"*	*"*	*"*	
2urroSateg Methylene chloride7d-		*9B.8 1*		*047584*		*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-544SA5D-SV-49-59 (3E42701-10) Air Sampled: 05/27/14 13:25 Analyzed: 05/27/14 13:50									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.018**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.028**	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.052**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.060**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*D5.- 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*D%9 1*	*0%75-%*		"	"	"	"	
2urroSateg 876romofluorobenzene		*549 1*	*0%75-%*		"	"	"	"	
2urroSateg 6 enzene7dB		*9D9 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*DB.D1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*D%9 1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
FB-052714 (3E42701-11) Air Sampled: 05/27/14 13:5. Analyzed: 05/27/14 14:18									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q3E2401	05/24/13	05/24/13	EPA 42w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**09016**	0.020	"	"	"	"	"	"	J
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**090070**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*D-.0 1*	*0%75-%*		"	"	"	"	
2urroSateg Toluene7d9		*D0.%1*	*0%75-%*		"	"	"	"	
2urroSateg 876romofluorobenzene		*554 1*	*0%75-%*		"	"	"	"	
2urroSateg 6enzene7dB		*9D3 1*	*047584*		"	"	"	"	
2urroSateg Chloroform7d		*DB.- 1*	*047584*		"	"	"	"	
2urroSateg Methylene chloride7d-		*D%9 1*	*047584*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
Blank (34E2701-BLK1)				Prepared & Analyzed: 05/24/13						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l							
1,1,1-Trichloroethane	ND	0.020	"							
1,1,2,2-Tetrachloroethane	ND	0.020	"							
1,1,2-Trichloro-trifluoroethane	ND	0.020	"							
1,1,2-Trichloroethane	ND	0.020	"							
1,1-Dichloroethane	ND	0.020	"							
1,1-Dichloroethene	ND	0.020	"							
1,2-Dichloroethane	ND	0.020	"							
8 enzene	ND	0.020	"							
cis-1,2-Dichloroethene	ND	0.020	"							
Carbon tetrachloride	ND	0.020	"							
Chloroethane	ND	0.020	"							
Chloroform	ND	0.020	"							
Dichlorodifluoromethane	ND	0.020	"							
Ethylbenzene	ND	0.020	"							
Methylene Chloride	ND	0.020	"							
ortho-Xylene	ND	0.020	"							
meta- and para-Xylenes	ND	0.020	"							
trans-1,2-Dichloroethene	ND	0.020	"							
Tetrachloroethene	ND	0.020	"							
Toluene	0.01q0	0.020	"							J
Trichloroethene	ND	0.020	"							
Trichlorofluoromethane	ND	0.020	"							
Vinyl Chloride	ND	0.020	"							
2urroSateg: ibromofluoromethane	*-.-3*		*"*	*-.%4*		*9D.4*	*0%75-%*			
2urroSategToluene7d9	*-.88*		*"*	*-.%4*		*D0.0*	*0%75-%*			
2urroSateg876romofluorobenzene	*-.B9*		*"*	*-.%4*		*540*	*0%75-%*			
2urroSateg6enzene7dB	*-.4D*		*"*	*-.%4*		*93.B*	*047584*			
2urroSategChloroform7d	*-.-4*		*"*	*-.%4*		*99.5*	*047584*			
2urroSategMethylene chloride7d-	*-.59*		*"*	*-.%4*		*90.3*	*047584*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
LCS (34E2701-BS1)				Prepared & Analyzed: 05/24/13						
1,1,1,2-Tetrachloroethane	1.25	0.020	ug/l	1.25		100	75-1qw			
1,1,1-Trichloroethane	1.1w	0.020	"	1.25		92.4	7q-1q3			
1,1,2,2-Tetrachloroethane	1.75	0.020	"	1.25		130	5w-139			
1,1,2-Trichloro-trifluoroethane	1.24	0.020	"	1.25		102	4q-125			
1,1,2-Trichloroethane	1.q9	0.020	"	1.25		111	w7-1q7			
1,1-Dichloroethane	1.14	0.020	"	1.25		93.3	40-121			
1,1-Dichloroethene	1.31	0.020	"	1.25		11q	7q-1q7			
1,2-Dichloroethane	1.1w	0.020	"	1.25		92.4	75-1q1			
8 enzene	1.27	0.020	"	1.25		102	79-114			
cis-1,2-Dichloroethene	1.19	0.020	"	1.25		95.2	45-11w			
Carbon tetrachloride	1.q7	0.020	"	1.25		110	73-13q			
Chloroethane	1.3q	0.020	"	1.25		113	w0-1q7			
Chloroform	1.2q	0.020	"	1.25		94.3	42-130			
Dichlorodifluoromethane	1.q4	0.020	"	1.25		110	37-129			
Ethylbenzene	1.q2	0.020	"	1.25		10w	4q-125			
Methylene Chloride	1.q7	0.020	"	1.25		110	41-12w			
ortho-Xylene	1.q0	0.020	"	1.25		103	45-115			
meta- and para-Xylenes	2.71	0.020	"	2.50		104	4q-115			
trans-1,2-Dichloroethene	1.30	0.020	"	1.25		112	72-1qq			
Tetrachloroethene	1.1w	0.020	"	1.25		92.4	w0-133			
Toluene	1.q1	0.020	"	1.25		105	70-115			
Trichloroethene	1.27	0.020	"	1.25		102	w4-1q2			
Trichlorofluoromethane	1.32	0.020	"	1.25		113	w2-133			
Vinyl Chloride	1.32	0.020	"	1.25		113	ww-1q7			
2urroSateg: ibromofluoromethane	*55.3*		*"*	*5-.%*		*D4.5*	*0%75-%*			
2urroSateg Toluene7d9	*5-.D*		*"*	*5-.%*		*543*	*0%75-%*			
2urroSateg876romofluorobenzene	*5-.0*		*"*	*5-.%*		*545*	*0%75-%*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
LCS Dup (34E2701-BSD1)				Prepared & Analyzed: 05/24/13						
1,1,1,2-Tetrachloroethane	1.07	0.020	ug/l	1.25		45.w	75-1qw	15.5	20	
1,1,1-Trichloroethane	1.1w	0.020	"	1.25		92.4	7q-1q3	0.00	20	
1,1,2,2-Tetrachloroethane	1.1w	0.020	"	1.25		92.4	5w-139	30.5	20	QR-03
1,1,2-Trichloro-trifluoroethane	1.27	0.020	"	1.25		102	4q-125	0.743	20	
1,1,2-Trichloroethane	1.22	0.020	"	1.25		97.w	w7-1q7	1q.0	20	
1,1-Dichloroethane	1.22	0.020	"	1.25		97.w	40-121	q.qq	20	
1,1-Dichloroethene	1.2w	0.020	"	1.25		101	7q-1q7	11.2	20	
1,2-Dichloroethane	1.15	0.020	"	1.25		92.0	75-1q1	0.4ww	20	
8enzene	1.25	0.020	"	1.25		100	79-114	1.59	20	
cis-1,2-Dichloroethene	1.23	0.020	"	1.25		99.2	45-11w	3.12	20	
Carbon tetrachloride	1.39	0.020	"	1.25		119	73-13q	4.q9	20	
Chloroethane	1.q7	0.020	"	1.25		110	w0-1q7	3.29	20	
Chloroform	1.21	0.020	"	1.25		9w.4	42-130	1.w3	20	
Dichlorodifluoromethane	1.q5	0.020	"	1.25		104	37-129	2.20	20	
Ethylbenzene	1.2q	0.020	"	1.25		94.3	4q-125	7.0w	20	
Methylene Chloride	1.q0	0.020	"	1.25		103	41-12w	5.23	20	
ortho-Xylene	1.2q	0.020	"	1.25		94.3	45-115	5.5q	20	
meta- and para-Xylenes	2.w0	0.020	"	2.50		103	4q-115	3.13	20	
trans-1,2-Dichloroethene	1.qw	0.020	"	1.25		109	72-1qq	2.90	20	
Tetrachloroethene	1.11	0.020	"	1.25		44.4	w0-133	3.31	20	
Toluene	1.20	0.020	"	1.25		9w.0	70-115	4.7w	20	
Trichloroethene	1.2w	0.020	"	1.25		101	w4-1q2	0.791	20	
Trichlorofluoromethane	1.39	0.020	"	1.25		119	w2-133	3.41	20	
Vinyl Chloride	1.qq	0.020	"	1.25		10w	ww-1q7	w.55	20	
2urroSateg: ibromofluoromethane	*55.B*		*"*	*5-.%*		*D.0*	*0%75-%*			
2urroSateg Toluene7d9	*5-.8*		*"*	*5-.%*		*DD.8*	*0%75-%*			
2urroSateg876romofluorobenzene	*5-.%*		*"*	*5-.%*		*DD.D*	*0%75-%*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-13 13:5q

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
Duplicate (34E2701-DUP1)		**Source: 3E42701-02**		Prepared & Analyzed: 05/24/13						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l		ND				50	
1,1,1-Trichloroethane	ND	0.020	"		ND				50	
1,1,2,2-Tetrachloroethane	ND	0.020	"		ND				50	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"		ND				50	
1,1,2-Trichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethene	ND	0.020	"		ND				50	
1,2-Dichloroethane	ND	0.020	"		ND				50	
8 enzene	ND	0.020	"		ND				50	
cis-1,2-Dichloroethene	ND	0.020	"		ND				50	
Carbon tetrachloride	ND	0.020	"		ND				50	
Chloroethane	ND	0.020	"		ND				50	
Chloroform	ND	0.020	"		ND				50	
Dichlorodifluoromethane	ND	0.020	"		ND				50	
Ethylbenzene	0.00q20	0.020	"		ND				50	J
Methylene Chloride	ND	0.020	"		ND				50	
ortho-Xylene	ND	0.020	"		ND				50	
meta- and para-Xylenes	ND	0.020	"		ND				50	
trans-1,2-Dichloroethene	ND	0.020	"		ND				50	
Tetrachloroethene	ND	0.020	"		ND				50	
Toluene	0.00500	0.020	"		0.00520			q.92	50	J
Trichloroethene	ND	0.020	"		ND				50	
Trichlorofluoromethane	ND	0.020	"		ND				50	
Vinyl Chloride	ND	0.020	"		ND				50	
2urroSateg: ibromofluoromethane	*-.-0*		*"*	*-.%4*		*D5.4*	*0%75-%*			
2urroSateg Toluene7d9	*-.85*		*"*	*-.%4*		*DB.8*	*0%75-%*			
2urroSateg 876romofluorobenzene	*-.05*		*"*	*-.%4*		*54D*	*0%75-%*			
2urroSateg 6 enzene7dB	*-.-9*		*"*	*-.%4*		*D5.8*	*047584*			
2urroSateg Chloroform7d	*-.%5*		*"*	*-.%4*		*544*	*047584*			
2urroSateg Methylene chloride7d-	*-.80*		*"*	*-.%4*		*D9.D*	*047584*			

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Notes and Definitions

QR-03	The RPD result for this analyte in the sample exceeded the QC control limits; ho6 ever, the RPD for other analytes 6 ere 6 ithin the QC control limits.
J	Detected but belo6 the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry 6 eight basis
RPD	Relative Percent Difference

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SUMMARY OF INITIAL CALIBRATION

Rerun sample @ 5ppb @ Most.

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:24:09 2013
Response via : Initial Calibration

Calibration Files
1 =K3IC00_1.D 2 =K3IC0_25.D 3 =K07LCS01.D
4 =K3IC1_25.D 5 =K3IC02_5.D 6 =K3IC12_5.D

		Compound	1	2	3	4	5	6	Avg	%RSD	
1)	I	Fluorobenzene (IS)	----------ISTD----------								
2)	S	Dibromofluoromethan	0.311	0.300	0.318	0.319	0.312	0.311	0.312	2.10	
3)	T	(F12) Dichlorodiflu	0.320	0.284	0.302	0.292	0.321	0.321	0.307	5.36	
4)	P	Chloromethane	0.422	0.302	0.293	0.219	0.221	0.212	0.278	29.02	Linear
5)	CM	Vinyl Chloride	0.276	0.224	0.211	0.207	0.207	0.199	0.221	12.88	
6)	T	Bromomethane	0.338	0.225	0.179	0.162	0.150	0.139	0.199	37.55	Linear
7)	T	Chloroethane	0.030	0.106	0.066	0.102	0.098	0.089	0.082	35.53	Quadratic
8)	T	(F11) Trichlorofluo	0.379	0.365	0.327	0.337	0.323	0.326	0.343	6.87	
9)	T	(F113) 1,1,2-Trichl	0.291	0.221	0.227	0.267	0.239	0.229	0.246	11.15	
10)	CM	1,1-Dichloroethene	0.277	0.287	0.322	0.307	0.291	0.286	0.295	5.61	
11)	T	Acetone	0.267	0.136	0.115	0.061	0.051	0.016	0.108	82.94	Quadratic
12)	M	(IPA) Leak Check Co	0.012	0.022	0.014	0.013	0.014	0.016	0.015	27.59	
13)	T	Carbon disulfide	1.178	1.037	1.080	1.042	0.958	0.941	1.039	8.28	
14)	T	Methylene Chloride	0.418	0.313	0.349	0.339	0.327	0.314	0.343	11.47	
15)		(TBA) tert-Butanol	0.022	0.019	0.027	0.022	0.018	0.020	0.021	16.39	
16)	TM	(MTBE) Methyl-t-but	0.789	0.678	0.760	0.729	0.655	0.638	0.708	8.56	
17)	T	trans-1,2-Dichloroe	0.331	0.360	0.342	0.357	0.310	0.318	0.336	6.07	
18)	PM	1,1-Dichloroethane	0.582	0.580	0.586	0.585	0.521	0.518	0.562	5.90	
19)	T	cis-1,2-Dichloroeth	0.442	0.415	0.416	0.387	0.339	0.345	0.390	10.66	
20)	T	2,2-Dichloropropane	0.561	0.489	0.520	0.497	0.440	0.435	0.490	9.80	
21)	T	(MEK) 2-Butanone	0.036	0.041	0.042	0.021	0.440	0.435	0.035	26.97	Not in use.
22)	T	(DIPE) Diisopropyl	1.055	1.006	1.006	1.025	0.901	0.867	0.977	7.64	
23)	T	Bromochloromethane	0.110	0.155	0.185	0.189	0.182	0.184	0.167	18.39	
24)	CM	Chloroform	0.723	0.654	0.684	0.676	0.594	0.598	0.655	7.70	
25)	T	(ETBE) 2-ethoxy 2-m	1.034	0.874	0.941	0.927	0.821	0.823	0.903	9.00	
26)	T	1,1,1-Trichloroetha	0.516	0.540	0.535	0.523	0.496	0.488	0.517	4.07	
27)	T	(TAME) tert-Amyl me	1.000	0.749	0.821	0.764	0.701	0.680	0.786	14.75	
28)	S	1,2-Dichloroethane-	0.309	0.278	0.303	0.299	0.296	0.293	0.296	3.50	
29)	T	1,1-Dichloropropene	0.547	0.492	0.502	0.489	0.439	0.427	0.482	9.13	
30)	T	Carbon Tetrachlorid	0.401	0.388	0.449	0.460	0.412	0.416	0.421	6.66	
31)	M	Benzene	1.374	1.155	1.267	1.217	1.042	1.008	1.177	11.75	
32)	M	1,2-Dichloroethane	0.501	0.382	0.445	0.419	0.385	0.365	0.416	12.20	
33)	M	Trichloroethene	0.480	0.355	0.386	0.399	0.336	0.324	0.380	14.87	
34)	C	1,2-Dichloropropane	0.298	0.297	0.277	0.290	0.264	0.258	0.281	6.17	
35)	T	Dibromomethane	0.207	0.209	0.227	0.244	0.215	0.216	0.220	6.33	
36)	T	Bromodichloromethan	0.459	0.407	0.479	0.446	0.428	0.433	0.442	5.69	
37)	T	cis-1,3-Dichloropro	0.508	0.451	0.526	0.493	0.447	0.467	0.482	6.63	
38)	I	Chlorobenzene-d5 (IS)	----------ISTD----------								
39)	S	Toluene-d8 (SU3)	1.209	1.139	1.193	1.149	1.157	1.149	1.166	2.42	
40)	T	(MIBK) 4-Methyl-2-P	0.545	0.324	0.388	0.078	0.072	0.088	0.249	79.95	Not in use.
41)	CM	Toluene	2.231	1.790	1.660	1.584	1.518	1.441	1.704	16.71	

42)	T	trans-1,3-Dichlorop	0.601	0.493	0.586	0.607	0.528	0.560	0.563	7.97	
43)	T	1,1,2-Trichloroetha	0.310	0.285	0.355	0.328	0.286	0.281	0.308	9.58	
44)	M	Tetrachloroethene	0.462	0.392	0.677	0.635	0.590	0.281	0.551	21.81	LINEAR
45)	T	1,3-Dichloropropane	0.710	0.578	0.592	0.569	0.532	0.529	0.585	11.33	
46)	T	2-Hexanone	0.333	0.186	0.340	0.266	0.333	0.182	0.273	27.20	
47)	T	Dibromochloromethan	0.426	0.363	0.496	0.458	0.432	0.459	0.439	10.18	
48)	T	1,2-Dibromoethane	0.412	0.355	0.430	0.402	0.394	0.396	0.398	6.27	
49)	PM	Chlorobenzene	1.366	1.154	1.110	1.134	1.086	1.043	1.149	9.84	
50)	T	1,1,1,2-Tetrachloro	0.449	0.384	0.437	0.407	0.388	0.387	0.409	6.91	
51)	CM	Ethylbenzene	2.333	2.080	1.968	1.851	1.736	1.654	1.937	12.77	
52)	TM	m,p-Xylenes	0.809	0.711	0.727	0.669	0.615	0.602	0.689	11.20	
53)	TM	o-Xylene	0.867	0.664	0.674	0.671	0.615	0.594	0.681	14.25	
54)	T	Styrene	1.563	1.015	1.078	1.049	0.973	0.934	1.102	21.01	LINEAR
55)	P	Bromoform	0.237	0.199	0.286	0.259	0.238	0.276	0.249	12.69	
56)	T	Isopropylbenzene	2.188	1.855	1.900	1.811	1.764	1.674	1.865	9.44	
57)	T	1,2,3-Trichloroprop	0.505	0.491	0.593	0.516	0.480	0.472	0.509	8.58	
58)	S	4-Bromofluorobenzen	0.518	0.507	0.527	0.511	0.510	0.495	0.511	2.08	
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------								
60)	P	1,1,2,2-Tetrachloro	1.020	0.822	1.013	0.870	0.774	0.905	0.901	11.13	
61)	T	Bromobenzene	1.079	1.003	1.043	0.946	0.914	0.907	0.982	7.20	
62)	T	n-Propylbenzene	6.721	5.112	5.219	4.601	4.392	4.279	5.054	17.82	
63)	T	2-Chlorotoluene	3.644	2.948	3.362	3.044	2.868	2.805	3.112	10.48	
64)	T	1,3,5-Trimethylbenz	3.612	3.208	3.247	3.017	2.832	2.775	3.115	9.93	
65)	T	4-Chlorotoluene	3.315	2.950	2.942	2.812	2.597	2.623	2.873	9.19	
66)	T	tert-Butylbenzene	2.817	2.666	3.007	2.633	2.430	2.371	2.654	8.96	
67)	T	1,2,4-Trimethylbenz	3.774	3.331	3.421	3.050	2.968	2.953	3.250	9.91	
68)	T	sec-Butylbenzene	4.837	3.956	4.522	4.187	3.865	3.852	4.203	9.54	
69)	T	p-Isopropyltoluene	3.974	3.475	3.582	3.347	3.061	3.060	3.417	10.13	
70)	T	1,3-Dichlorobenzene	2.120	1.740	1.888	1.871	1.734	1.744	1.850	8.06	
71)	T	1,4-Dichlorobenzene	2.120	1.740	1.974	1.864	1.658	1.729	1.847	9.43	
72)	T	n-Butylbenzene	4.391	3.645	3.644	3.397	3.264	3.192	3.589	12.14	
73)	T	1,2-Dichlorobenzene	1.716	1.534	1.764	1.657	1.614	1.583	1.645	5.20	
74)	T	1,2-Dibromo-3-chlor	0.082	0.104	0.111	0.148	0.133	0.146	0.121	21.61	LINEAR
75)	T	1,2,4-Trichlorobenz	1.184	1.091	1.244	1.074	1.050	1.044	1.115	7.28	
76)	T	Hexachlorobutadiene	0.297	0.477	0.596	0.481	0.499	0.507	0.476	20.56	LINEAR
77)	T	Naphthalene	2.690	2.294	3.052	2.312	2.176	2.294	2.470	13.55	
78)	T	Hexachloroethane	0.306	0.301	0.391	0.362	0.374	0.435	0.361	14.24	
79)	T	1,2,3-Trichlorobenz	1.346	0.926	1.173	0.993	0.940	0.968	1.058	15.82	

(#) = Out of Range

MW111313.M Wed Nov 13 19:25:18 2013

CONTINUING CALIBRATION VERIFICATION

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28CCV01.D
Acq On : 28 May 2014 5:58 am
Sample : 1.25/2.5/12.5 ug/L 8260B std
Misc : 20mL 8260 CCV
MS Integration Params: rteint.p
Quant Time: May 28 6:26 19114

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.31	96	1638975m	12.50 ug/L	0.02
38) Chlorobenzene-d5 (IS)	13.93	117	1173167m	12.50 ug/L	0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	592935	12.50 ug/L	0.01

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.45	113	466076	11.40 ug/L	0.03
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.20%		
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	470409	12.11 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.88%		
39) Toluene-d8 (SU3)	12.22	98	1412274	12.91 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 103.28%		
58) 4-Bromofluorobenzene (SU4)	15.24	95	615874	12.84 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 102.72%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.12	85	54712	1.36 ug/L	98
4) Chloromethane	4.47	50	39381	1.31 ug/L	97
5) Vinyl Chloride	4.61	62	36360	1.26 ug/L	75
6) Bromomethane	5.16	96	26626	1.30 ug/L	41
7) Chloroethane	5.29	64	18897	1.47 ug/L	73
8) (F11) Trichlorofluorometha	5.67	101	62442	1.39 ug/L	96
9) (F113) 1,1,2-Trichloro-tri	6.38	151	39952	1.24 ug/L	100
10) 1,1-Dichloroethene	6.46	96	53223	1.38 ug/L	96
11) Acetone	6.48	58	71408	-12.50 ug/L	99
12) (IPA) Leak Check Compound	6.55	45	322600	163.80 ug/L	99
13) Carbon disulfide	6.88	76	159205	1.17 ug/L	98
14) Methylene Chloride	7.13	84	57862	1.29 ug/L	95
15) (TBA) tert-Butanol	7.12	59	6732	2.41 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.42	73	114428	1.23 ug/L	97
17) trans-1,2-Dichloroethene	7.50	96	59772	1.36 ug/L	95
18) 1,1-Dichloroethane	8.09	63	80462	1.09 ug/L	96
19) cis-1,2-Dichloroethene	8.85	96	59149	1.16 ug/L	93
20) 2,2-Dichloropropane	8.85	77	551	0.01 ug/L #	1
21) (MEK) 2-Butanone	8.82	72	11149	2.42 ug/L #	27
22) (DIPE) Diisopropyl Ether	8.03	45	170156	1.33 ug/L	95
23) Bromochloromethane	9.19	128	24772	1.13 ug/L #	80
24) Chloroform	9.23	83	97344	1.13 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28CCV01.D Vial: 9
Acq On : 28 May 2014 5:58 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 6:26 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	113578	0.96 ug/L #	98
26) 1,1,1-Trichloroethane	10.29	97	85281	1.26 ug/L	97
27) (TAME) tert-Amyl methyl et	10.02	73	108957	1.06 ug/L	96
29) 1,1-Dichloropropene	9.71	75	71988	1.14 ug/L	96
30) Carbon Tetrachloride	13.91	117	61862	1.12 ug/L	93
31) Benzene	10.00	78	198690	1.29 ug/L #	93
32) 1,2-Dichloroethane	10.02	62	65923	1.21 ug/L	94
33) Trichloroethene	10.76	130	61133	1.23 ug/L	97
34) 1,2-Dichloropropane	11.07	63	48761	1.32 ug/L #	79
35) Dibromomethane	11.22	93	38909	1.35 ug/L	97
36) Bromodichloromethane	11.37	83	60627	1.05 ug/L	89
37) cis-1,3-Dichloropropene	11.88	75	64415	1.02 ug/L	95
40) (MIBK) 4-Methyl-2-Pentanon	12.14	43	20558	0.88 ug/L #	100
41) Toluene	12.30	91	233723	1.46 ug/L	98
42) trans-1,3-Dichloropropene	12.52	75	46082	0.87 ug/L #	73
43) 1,1,2-Trichloroethane	12.76	83	42669	1.48 ug/L	90
44) Tetrachloroethene	12.95	164	62147	1.11 ug/L	97
45) 1,3-Dichloropropane	12.98	76	72708	1.32 ug/L	98
46) 2-Hexanone	12.98	43	57411	2.24 ug/L #	95
47) Dibromochloromethane	13.27	129	53548	1.30 ug/L #	96
48) 1,2-Dibromoethane	13.44	107	55951	1.50 ug/L	99
49) Chlorobenzene	13.97	112	140144	1.30 ug/L	96
50) 1,1,1,2-Tetrachloroethane	14.04	131	46797	1.22 ug/L	95
51) Ethylbenzene	14.04	91	233661	1.29 ug/L	98
52) m,p-Xylenes	14.16	106	168546	2.61 ug/L	99
53) o-Xylene	14.63	106	89098	1.39 ug/L	94
54) Styrene	14.64	104	140003	1.52 ug/L	99
55) Bromoform	14.92	173	32899	1.41 ug/L	94
56) Isopropylbenzene	15.02	105	220213	1.26 ug/L	99
57) 1,2,3-Trichloropropane	15.44	75	79302	1.66 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.35	83	74782	1.75 ug/L	95
61) Bromobenzene	15.45	156	60856	1.31 ug/L	96
62) n-Propylbenzene	15.47	91	291317	1.22 ug/L	98
63) 2-Chlorotoluene	15.62	91	182516	1.24 ug/L	100
64) 1,3,5-Trimethylbenzene	15.64	105	187142	1.27 ug/L	98
65) 4-Chlorotoluene	15.73	91	182079	1.34 ug/L	99
66) tert-Butylbenzene	16.02	119	149396	1.19 ug/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28CCV01.D Vial: 9
Acq On : 28 May 2014 5:58 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 6:26 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

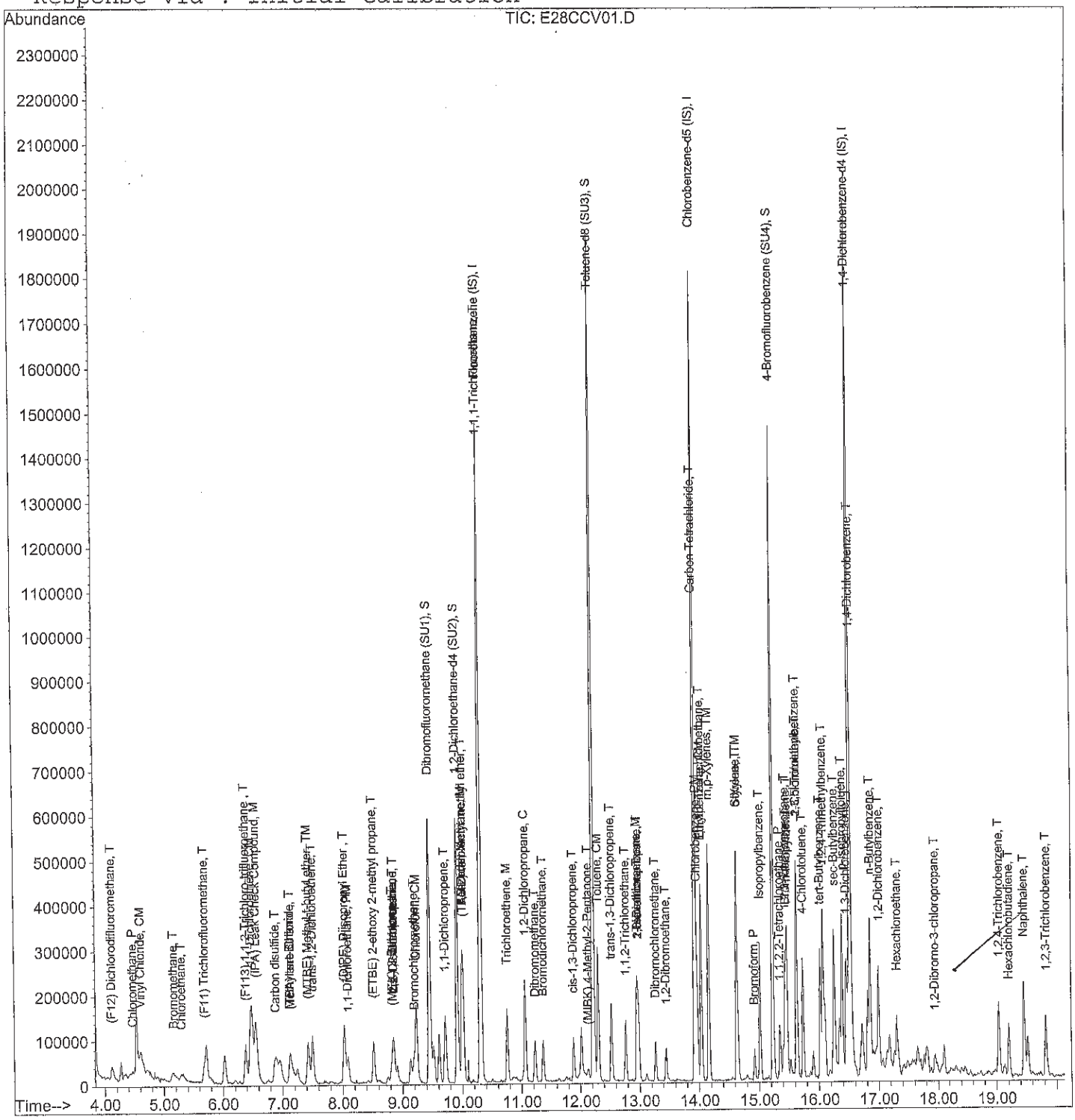
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67)	1,2,4-Trimethylbenzene	16.07	105	223196	1.45 ug/L	91
68)	sec-Butylbenzene	16.26	105	249690	1.25 ug/L	100
69)	p-Isopropyltoluene	16.39	119	233574	1.44 ug/L #	93
70)	1,3-Dichlorobenzene	16.46	146	111873	1.28 ug/L	98
71)	1,4-Dichlorobenzene	16.54	146	114287	1.30 ug/L	96
72)	n-Butylbenzene	16.86	91	221085	1.30 ug/L	99
73)	1,2-Dichlorobenzene	17.00	146	104097	1.33 ug/L	98
74)	1,2-Dibromo-3-chloropropan	17.94	75	13719	2.06 ug/L	86
75)	1,2,4-Trichlorobenzene	19.04	180	67754	1.28 ug/L	98
76)	Hexachlorobutadiene	19.21	225	29740	1.25 ug/L	95
77)	Naphthalene	19.47	128	256456	2.19 ug/L	100
78)	Hexachloroethane	17.30	201	19058	1.11 ug/L #	86
79)	1,2,3-Trichlorobenzene	19.83	180	61579	1.23 ug/L	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28CCV01.D Vial: 9
Acq On : 28 May 2014 5:58 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 6:26 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28CCV01.D Vial: 9
Acq On : 28 May 2014 5:58 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene (IS)	12.500	12.500	0.0	124	0.02
2	S	Dibromofluoromethane (SU1)	12.500	11.401	8.8	110	0.03
3	T	(F12) Dichlorodifluorometha	1.250	1.361	-8.9	141	0.04
4	P	Chloromethane	1.250	1.312	-5.0	135	0.08
5	CM	Vinyl Chloride	1.250	1.257	-0.6	132	0.05
6	T	Bromomethane	1.250	1.299	-3.9	124	0.06
7	T	Chloroethane	1.250	1.473	-17.8	140	0.05
8	T	(F11) Trichlorofluoromethan	1.250	1.388	-11.0	140	0.06
9	T	(F113) 1,1,2-Trichloro-trif	1.250	1.240	0.8	113	0.06
10	CM	1,1-Dichloroethene	1.250	1.376	-10.1	130	0.06
11	T	Acetone	1.250	-12.500	1100.0#	878	0.03
12	M	(IPA) Leak Check Compound	62.500	163.801	-162.1#	348	0.01
13	T	Carbon disulfide	1.250	1.168	6.6	115	0.07
14	T	Methylene Chloride	1.250	1.286	-2.9	129	0.04
15		(TBA) tert-Butanol	12.500	2.408	80.7#	23	0.00
16	TM	(MTBE) Methyl-t-butyl ether	2.500	1.232	50.7#	59	0.02
17	T	trans-1,2-Dichloroethene	1.250	1.355	-8.4	126	0.04
18	PM	1,1-Dichloroethane	1.250	1.092	12.6	104	0.04
19	T	cis-1,2-Dichloroethene	1.250	1.155	7.6	115	0.03
20	T	2,2-Dichloropropane	1.250	0.009	99.3#	1	0.02
21	T	(MEK) 2-Butanone	1.250	2.420	-93.6#	204	0.04
22	T	(DIPE) Diisopropyl Ether	1.250	1.329	-6.3	125	0.02
23	T	Bromochloromethane	1.250	1.129	9.7	99	0.04
24	CM	Chloroform	1.250	1.134	9.3	108	0.03
25	T	(ETBE) 2-ethoxy 2-methyl pr	1.250	0.959	23.3	92	0.01
26	T	1,1,1-Trichloroethane	1.250	1.259	-0.7	123	0.81#
27	T	(TAME) tert-Amyl methyl eth	1.250	1.057	15.4	107	0.02
28	S	1,2-Dichloroethane-d4 (SU2)	12.500	12.107	3.1	118	0.02
29	T	1,1-Dichloropropene	1.250	1.138	9.0	111	0.03
30	T	Carbon Tetrachloride	1.250	1.121	10.3	101	4.20#
31	M	Benzene	1.250	1.287	-3.0	123	0.02
32	M	1,2-Dichloroethane	1.250	1.208	3.4	119	0.03
33	M	Trichloroethene	1.250	1.228	1.8	116	0.02
34	C	1,2-Dichloropropane	1.250	1.325	-6.0	127	0.02
35	T	Dibromomethane	1.250	1.351	-8.1	120	0.01
36	T	Bromodichloromethane	1.250	1.046	16.3	102	0.02
37	T	cis-1,3-Dichloropropene	1.250	1.019	18.5	98	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28CCV01.D Vial: 9
Acq On : 28 May 2014 5:58 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
38	I	Chlorobenzene-d5 (IS)	12.500	12.500	0.0	113	0.01
39	S	Toluene-d8 (SU3)	12.500	12.907	-3.3	119	0.01
40	T	(MIBK) 4-Methyl-2-Pentanone	1.250	0.878	29.8	254	0.02
41	CM	Toluene	1.250	1.461	-16.9	143	0.02
42	T	trans-1,3-Dichloropropene	1.250	0.873	30.2#	73	0.01
43	T	1,1,2-Trichloroethane	1.250	1.478	-18.2	126	0.01
44	M	Tetrachloroethene	1.250	1.106	11.5	95	0.01
45	T	1,3-Dichloropropane	1.250	1.324	-5.9	124	0.01
46	T	2-Hexanone	1.250	2.237	-79.0#	208	0.01
47	T	Dibromochloromethane	1.250	1.299	-3.9	113	0.01
48	T	1,2-Dibromoethane	1.250	1.497	-19.8	135	0.01
49	PM	Chlorobenzene	1.250	1.300	-4.0	120	0.01
50	T	1,1,1,2-Tetrachloroethane	1.250	1.220	2.4	111	0.01
51	CM	Ethylbenzene	1.250	1.285	-2.8	122	0.01
52	TM	m,p-Xylenes	2.500	2.608	-4.3	122	0.01
53	TM	o-Xylene	1.250	1.394	-11.5	128	0.01
54	T	Styrene	1.250	1.518	-21.4	129	0.00
55	P	Bromoform	1.250	1.406	-12.5	123	0.01
56	T	Isopropylbenzene	1.250	1.258	-0.6	118	0.01
57	T	1,2,3-Trichloropropane	1.250	1.659	-32.7#	149	0.01
58	S	4-Bromofluorobenzene (SU4)	12.500	12.835	-2.7	117	0.01
59	I	1,4-Dichlorobenzene-d4 (IS)	12.500	12.500	0.0	118	0.01
60	P	1,1,2,2-Tetrachloroethane	1.250	1.750	-40.0#	171	0.00
61	T	Bromobenzene	1.250	1.307	-4.6	128	0.00
62	T	n-Propylbenzene	1.250	1.215	2.8	126	0.01
63	T	2-Chlorotoluene	1.250	1.237	1.0	119	0.01
64	T	1,3,5-Trimethylbenzene	1.250	1.267	-1.4	124	0.01
65	T	4-Chlorotoluene	1.250	1.336	-6.9	129	0.00
66	T	tert-Butylbenzene	1.250	1.187	5.0	113	0.00
67	T	1,2,4-Trimethylbenzene	1.250	1.448	-15.8	146	0.01
68	T	sec-Butylbenzene	1.250	1.252	-0.2	119	0.00
69	T	p-Isopropyltoluene	1.250	1.441	-15.3	139	0.01
70	T	1,3-Dichlorobenzene	1.250	1.275	-2.0	119	0.01
71	T	1,4-Dichlorobenzene	1.250	1.304	-4.3	122	0.00
72	T	n-Butylbenzene	1.250	1.299	-3.9	130	0.01
73	T	1,2-Dichlorobenzene	1.250	1.334	-6.7	125	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28CCV01.D Vial: 9
Acq On : 28 May 2014 5:58 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
74	T	1,2-Dibromo-3-chloropropane	1.250	2.056	-64.5#	184	0.00
75	T	1,2,4-Trichlorobenzene	1.250	1.281	-2.5	126	0.01
76	T	Hexachlorobutadiene	1.250	1.250	0.0	123	0.01
77	T	Naphthalene	1.250	2.189	-75.1#	221	0.01
78	T	Hexachloroethane	1.250	1.112	11.0	105	0.00
79	T	1,2,3-Trichlorobenzene	1.250	1.227	1.8	123	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SUMMARY OF INTERNAL STANDARDS

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\052814L3\E28BFB01.D
Tune Time : 28 May 14 5:46 am

Daily Calibration File : C:\HPCHEM\1\DATA\013014L3\A30CCV01.D

						(PFB)	(CLBD	(1,4-
						1590180	1163370	587649
File	Sample	Surrogate Recovery %				Internal Standard Responses		
E2800001.D	3E42801-	88	90	98	106	1767160	1332651	691087
E2800002.D	3E42801-	93	98	95	107	1628814	1280080	672692
E2800003.D	34E2801-	91	94	96	109	1647725	1270840	683800
E2800004.D	3E42801-	94	95	98	110	1588325	1230604	662439
E2800005.D	3E42801-	90	94	97	109	1591812	1232045	673028
E2800006.D	3E42801-	92	95	96	105	1624445	1300399	693251
E2800007.D	3E42801-	91	89	97	105	1784446	1395228	722995
E2800008.D	3E42801-	90	89	96	105	1702842	1327452	706606
E2800009.D	3E42801-	93	93	96	112	1630177	1266889	700521
E2800010.D	3E42801-	87	88	95	106	1758241	1351582	724286
E2800011.D	3E42801-	91	93	96	108	1619122	1276085	681965
E2800012.D	3E42801-	93	95	97	110	1597393	1246183	690192
E28BLK01.D	34E2801-	89	93	98	107	1886088	1421471	727836
E28LCS01.D	34E2801-	90	95	103	101	1521673	1091734	541503
E28LCS02.D	34E2801-	93	92	99	100	1584704	1196933	588085

t - fails 12hr time check * - fails criteria

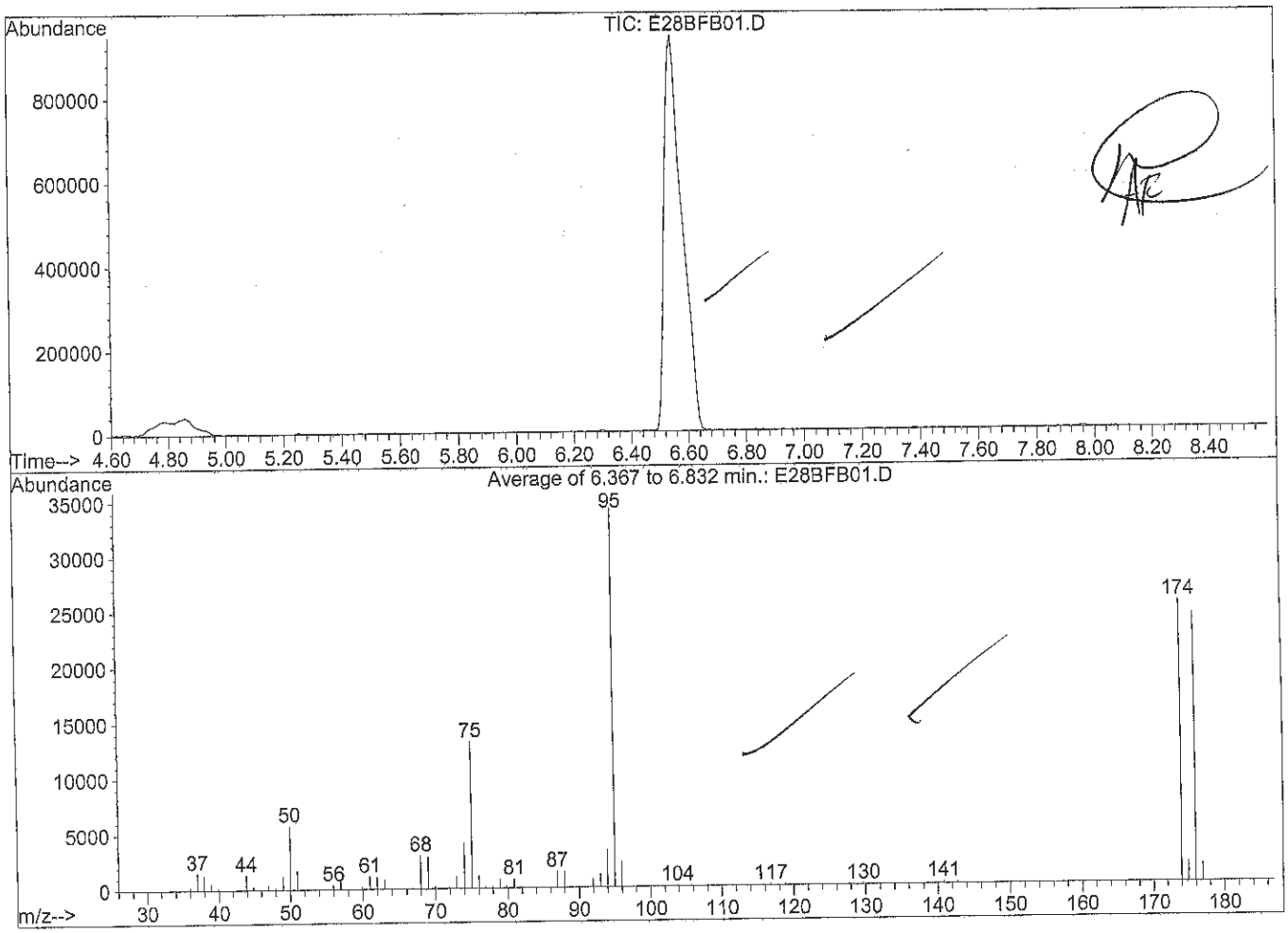
Created: Sun Jun 08 11:44:57 2014 GC
MS Ins

Summary of Instrument Tuning

BFB

Data File : C:\HPCHEM\1\DATA\052814L3\E28BFB01.D
Acq On : 28 May 2014 5:46 am
Sample : 50 ng BFB tune
Misc : 12HRS SYSTEM BFB TUNING
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00



Spectrum Information: Average of 6.367 to 6.832 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	5733	PASS
75	95	30	60	38.7	13215	PASS
95	95	100	100	100.0	34153	PASS
96	95	5	9	6.7	2301	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	74.1	25306	PASS
175	174	5	9	7.1	1804	PASS
176	174	95	101	95.6	24197	PASS
177	176	5	9	6.4	1555	PASS

E28BFB01.D SS072713.M Wed May 28 05:54:54 2014

INJECTION LOG

Injection Log

Directory: c:\hpchem\1\data\052814l3

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	11	e2800001.d	10.	3E42801-01	100cc Equipment Blank	28 May 14 08:13
2	1	e2800002.d	10.	3E42801-02	100cc SVL-515-SA5D-SV-5.0-6.0	28 May 14 08:47
3	2	e2800003.d	10.	34E2801-DUP1	100cc SVL-515-SA5D-SV-5.0-6.0	28 May 14 09:20
4	3	e2800004.d	10.	3E42801-03	100cc SVL-815-SA5D-SV-5.0-6.0	28 May 14 09:49
5	4	e2800005.d	10.	3E42801-04	100cc SVL-515-SA5D-SV-12.5-13.8	28 May 14 10:19
6	5	e2800006.d	10.	3E42801-05	100cc SVL-511-SA5D-SV-4.5-5.5	28 May 14 10:47
7	6	e2800007.d	10.	3E42801-06	100cc SVL-511-SA5D-SV-9.5-10.5	28 May 14 11:18
8	7	e2800008.d	10.	3E42801-07	100cc SVL-516-SA5D-SV-6.0-7.0	28 May 14 11:47
9	8	e2800009.d	10.	3E42801-08	100cc SVL-516-SA5D-SV-14.0-15.0	28 May 14 12:16
10	1	e2800010.d	10.	3E42801-09	100cc SVL-510-SA5D-SV-7.5-8.5	28 May 14 13:14
11	2	e2800011.d	10.	3E42801-10	100cc SVL-544-SA5D-SV-4.5-5.5	28 May 14 13:50
12	3	e2800012.d	10.	3E42801-11	100cc FB-052814	28 May 14 14:19
13	1	e28bfb01.d	1.	50 ng BFB tune	12HRS SYSTEM BFB TUNING	28 May 14 05:46
14	11	e28blk01.d	10.	34E2801-BLK1	100cc AMBIENT AIR/H20	28 May 14 07:43
15	9	e28ccv01.d	1.	1.25/2.5/12.5 ug/L 8260B std	20mL 8260 CCV	28 May 14 05:58
16	10	e28lcs01.d	1.	34E2801-BS1	20cc 1.25/2.5/12.5 ug/L LCS	28 May 14 06:28
17	9	e28lcs02.d	1.	34E2801-BSD1	20cc 1.25/2.5/12.5 ug/L LCS	28 May 14 14:47

SAMPLE LOG SHEET

Environmental Support Technologies, Inc.
SOIL GAS - FIELD ANALYSIS
Sample Log Sheet

Date:_05/28/2014_____
Analyst:_____DN_____
Lab ID:_____# 3_____
Batch Number:_34E2801_____
Project Number:_EST2754___

EPA Method:_8260B CHHSLS 0.02 RL GILAN AIR5 PUMP
Initial Calibration:_MW111313.MTH FLOW RATE @ 200mL/min
Cal Std Lot No.:__4D14009_____
LCS Std Lot No.:_4D14008_____ Glass Bulb Bake @
IS/SS Lot No.:___4D14001_____ 130 degree for 30 min

MWH SSFL , CA

File No.	Port No.	Sample Lab No.	Sample ID	Amount	Dilution Factor	Bulb Surr added	Time Sample Loaded	Time Sample Analyzed	Glass Bulb #	PID READING
E428BFB1	1	50uL BFB1	12HRS TUNING	1uL	1x	PASS	@	546		
CCV1	9	1.25/2.5/12.5 CCV1	8260 STARDARD	20mL	1x	550	551	558		
BS1	9	34E2801-BS1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	610	611	628		
BLK1	1	34E2801-BLK1	METHOD BLANK	100cc	1x	730	731	743		
1	2	3E42801-01	EQUIPMENT BLANK	100cc	1x	800	801	813	8	0.0
2	1	3E42801-02	SVL-515-SA5D-SV-5.0-6.0	100cc	1x	816	817	847	3	0.0
3	2	34E2801-DUP1	SVL-515-SA5D-SV-5.0-6.0	100cc	1x	816	817	920	3	0.0
4	3	3E42801-03	SVL-815-SA5D-SV-5.0-6.0	100cc	1x	816	817	949	10	0.0
5	4	3E42801-04	SVL-515-SA5D-SV-12.5-13.8	100cc	1x	857	858	1019	13	0.0
6	5	3E42801-05	SVL-511-SA5D-SV-4.5-5.5	100cc	1x	946	947	1047	11	0.0
7	6	3E42801-06	SVL-511-SA5D-SV-9.5-10.5	100cc	1x	1019	1020	1118	12	0.0
8	7	3E42801-07	SVL-516-SA5D-SV-6.0-7.0	100cc	1x	1055	1056	1147	5	0.0
9	8	3E42801-08	SVL-516-SA5D-SV-14.0-15.0	100cc	1x	1126	1127	1216	6	0.0
10	1	3E42801-09	SVL-510-SA5D-SV-7.5-8.5	100cc	1x	1250	1251	1314	9	0.0
11	2	3E42801-10	SVL-544-SA5D-SV-4.5-5.5	100cc	1x	1325	1326	1350	1	0.0
12	3	3E42801-11	FB-052814	100cc	1x	1356	1357	1419	7	0.0
BSD1	9	34E2801-BSD1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	1430	1431	1447		

CASE NARRATIVE

LABORATORY CASE NARRATIVE
(EPA 8260B)

SDG: 34E2801
DATE: May 28, 2014
PROJECT No.: EST2754

Eleven (11) Glass Bulb soil vapor samples were analyzed on May 28, 2014, by EPA Method Analysis performed using a gas chromatograph/mass spectrometer (GC/MS).

Sample Preservation and Holding Times

Samples were preserved according to the method recommendation, unless otherwise noted on the chain-of-custody (COC) and /or the sample log sheet. Holding times were met, unless otherwise noted in the report with data qualifiers.

QA/QC Criteria

All quality objective criteria were met, except as noted in the report with data qualifiers.

Samples Analysis

No anomalies were observes during analysis of the samples.

COMMENTS:

Results that fall between the MDL and RL are 'J' flagged.

Adjusted values corrected for significant figure correction (10X) and sample volume (5X).

RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION DUPLICATE SAMPLE

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800003.D
Acq On : 28 May 2014 9:20 am
Sample : 34E2801-DUP1
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 28 9:54 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1647725	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1270840	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	683800	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	467241	11.37 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.96%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	459221	11.76 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	94.08%	
39) Toluene-d8 (SU3)	12.20	98	1428098	12.05 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	96.40%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	705094	13.57 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	108.56%	

Target Compounds					Qvalue
4) Chloromethane	4.40	50	2193	-0.43 ~~ug/L~~ # SM	41
6) Bromomethane	5.14	96	6394	1.75 ~~ug/L~~	90
7) Chloroethane	5.21	64	672	1.18 ~~ug/L~~	95
11) Acetone	6.48	58	7290	6.58 ~~ug/L~~	91
12) (IPA) Leak Check Compound	6.48	45	138535	699.68 ~~ug/L~~ # SM	83
13) Carbon disulfide	6.85	76	2497	0.18 ~~ug/L~~ #	76
14) Methylene Chloride	7.09	84	7137	1.58 ~~ug/L~~ #	9
15) (TBA) tert-Butanol	6.90	59	3310	11.78 ~~ug/L~~ #	77
20) 2,2-Dichloropropane	8.72	77	259	0.04 ~~ug/L~~ # SM	1
24) Chloroform	9.21	83	2106	0.24 ~~ug/L~~ #	1
29) 1,1-Dichloropropene	9.94	75	254	0.04 ~~ug/L~~ #	1
31) Benzene	9.98	78	539	0.03 ~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.93	62	7312	1.33 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	6600	2.60 ~~ug/L~~ #	100
41) Toluene	12.29	91	4279	0.25 ug/L 0.005	88
46) 2-Hexanone	12.93	43	1553	0.56 ~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	3080	0.16 ug/L 0.0032	93
52) m,p-Xylenes	14.15	106	1929	0.28 ug/L # 0.0056	51
53) o-Xylene	14.63	106	280	0.04 ug/L # 0.0008	1
54) Styrene	14.63	104	1580	-0.72 ~~ug/L~~ # SM	61
56) Isopropylbenzene	15.22	105	1317	0.07 ~~ug/L~~ #	1
62) n-Propylbenzene	15.46	91	587	0.02 ~~ug/L~~ #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800003.D Vial: 2
Acq On : 28 May 2014 9:20 am Operator: DN
Sample : 34E2801-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:54 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

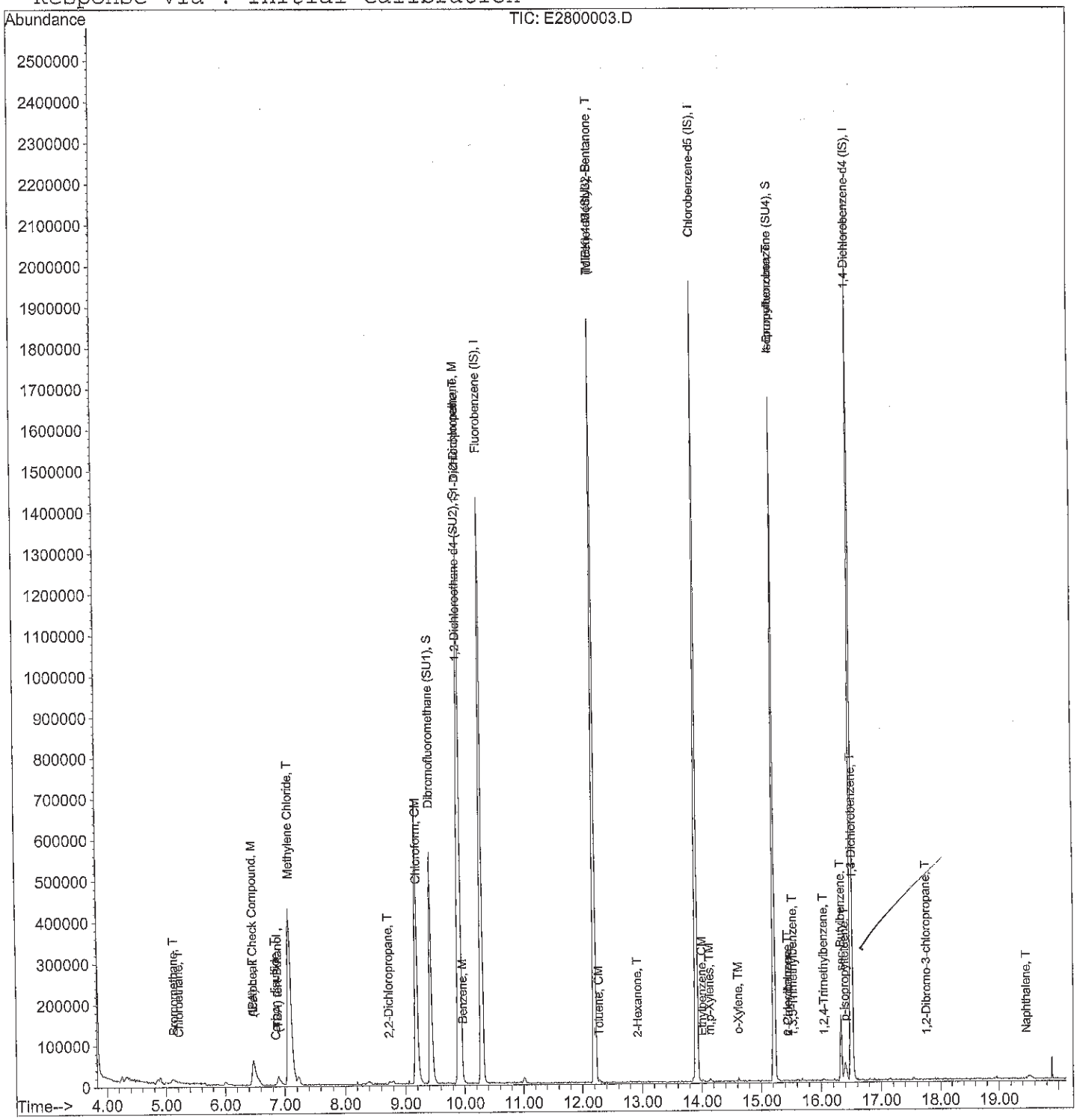
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.46	91	587	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.54	105	541	0.03 ~~ug/L~~ #	31
67) 1,2,4-Trimethylbenzene	16.05	105	1414	0.08 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.33	105	2000	0.09 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	656	0.04 ~~ug/L~~ #	52
70) 1,3-Dichlorobenzene	16.54	146	267	0.03 ~~ug/L~~ #	24
71) 1,4-Dichlorobenzene	16.54	146	267	0.03 ~~ug/L~~ #	22
74) 1,2-Dibromo-3-chloropropan	17.75	75	320	1.29 ug/L #	6
77) Naphthalene	19.45	128	436	0.03 ~~ug/L~~	100

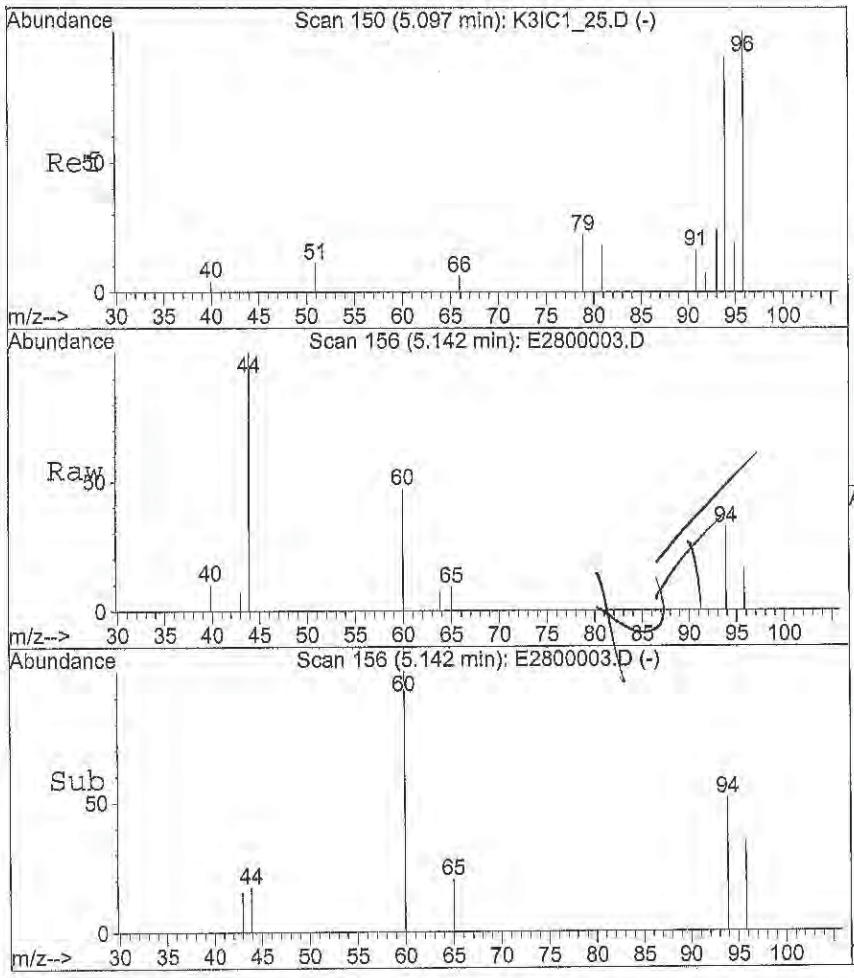
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800003.D Vial: 2
Acq On : 28 May 2014 9:20 am Operator: DN
Sample : 34E2801-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:54 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

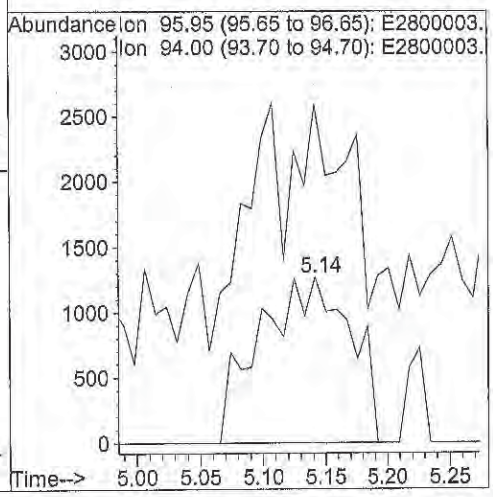


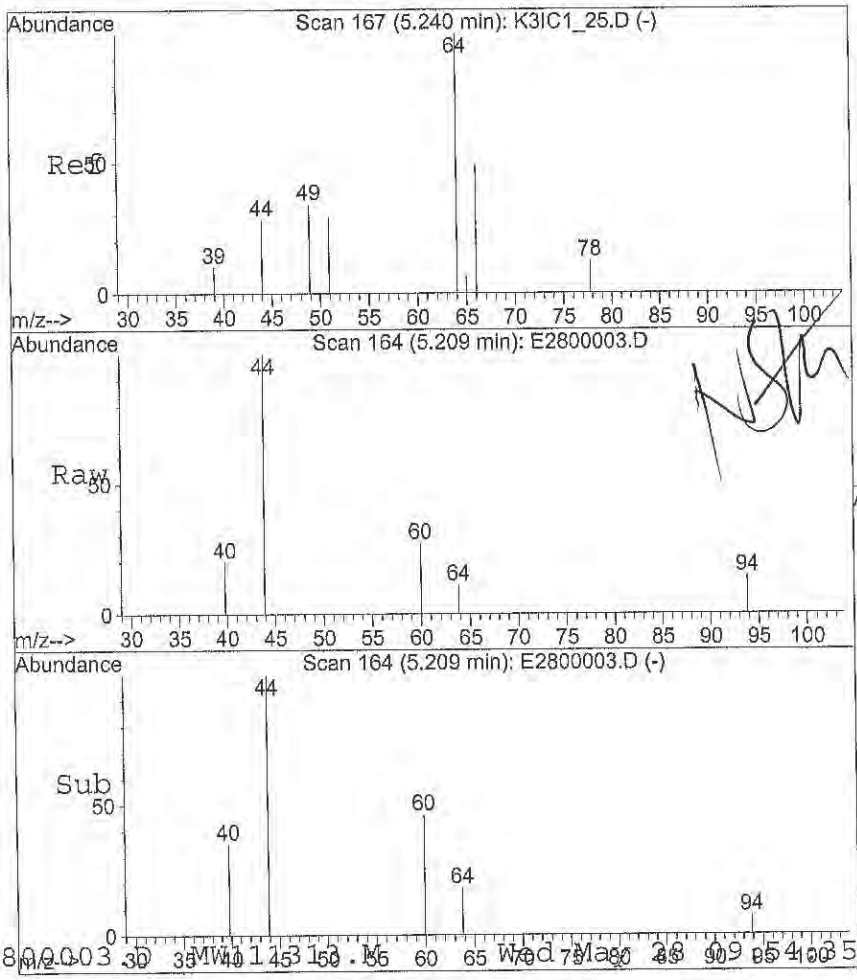


#6
Bromomethane
Concen: 1.75 ug/L
RT: 5.14 min Scan# 156
Delta R.T. 0.05 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 96 Resp: 6394

Ion	Ratio	Lower	Upper
96	100		
94	114.8	101.0	151.4

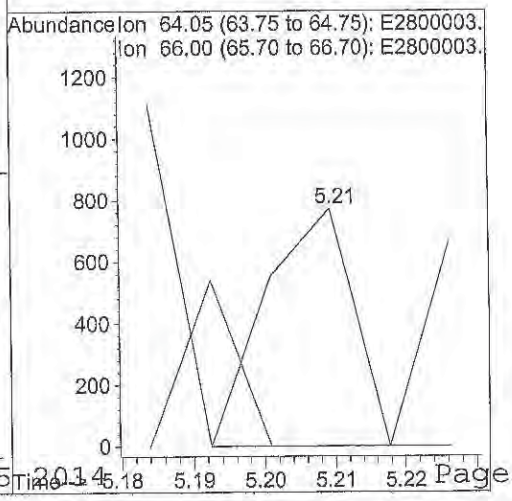


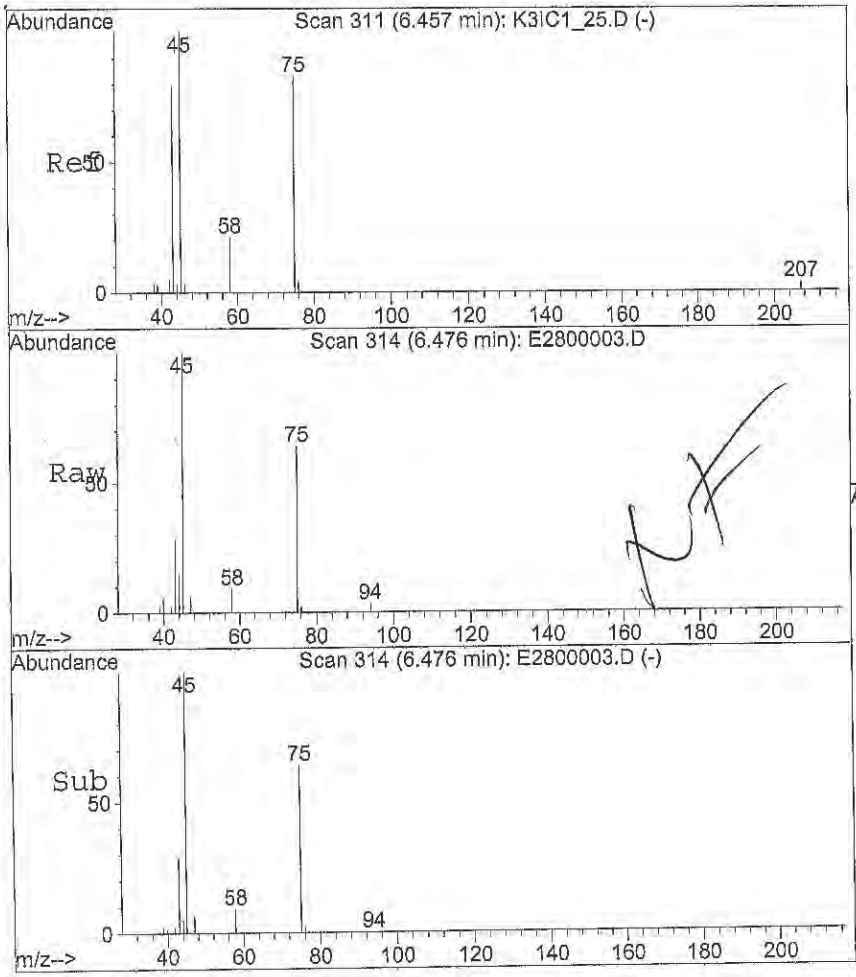


#7
Chloroethane
Concen: 1.18 ug/L
RT: 5.21 min Scan# 164
Delta R.T. -0.03 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 64 Resp: 672

Ion	Ratio	Lower	Upper
64	100		
66	40.8	35.4	53.0

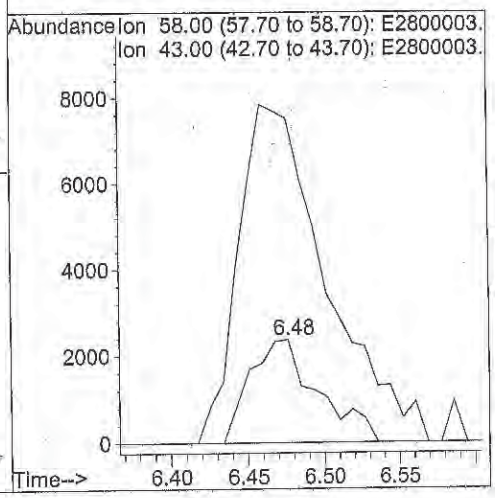


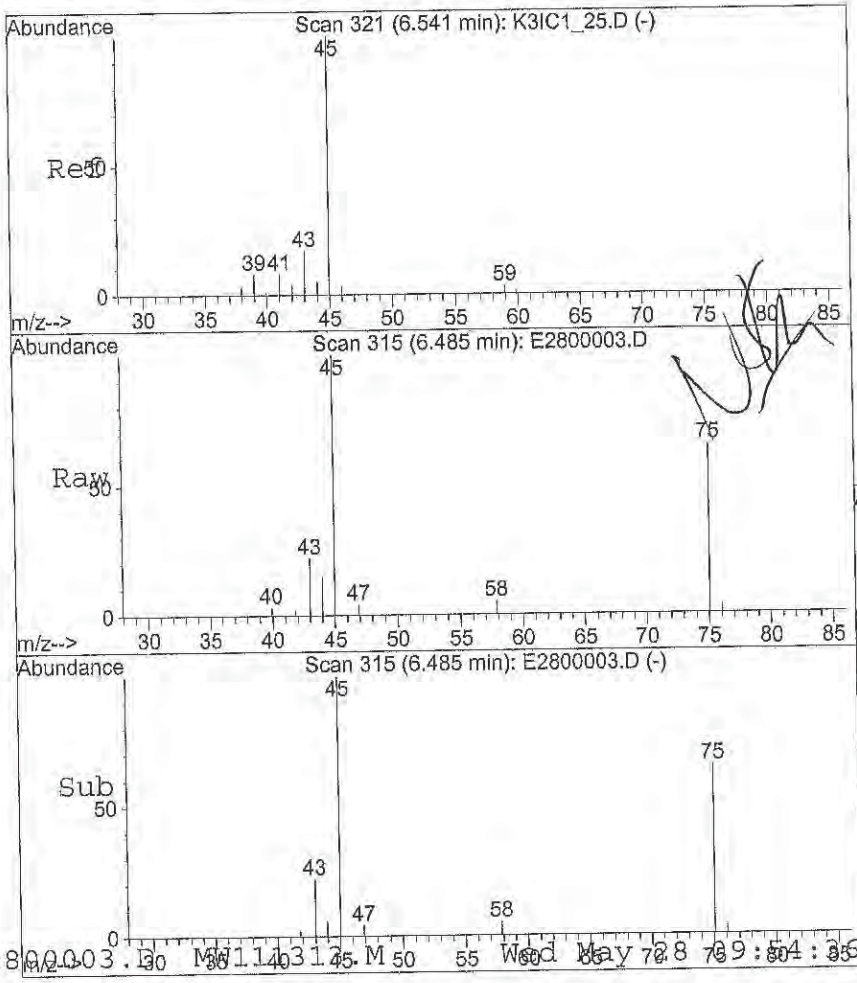


#11
Acetone
Concen: 6.58 ug/L
RT: 6.48 min Scan# 314
Delta R.T. 0.02 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 58 Resp: 7290

Ion	Ratio	Lower	Upper
58	100		
43	426.7	360.9	541.3

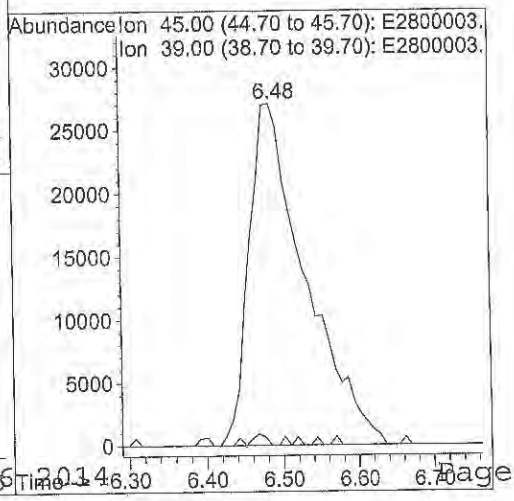


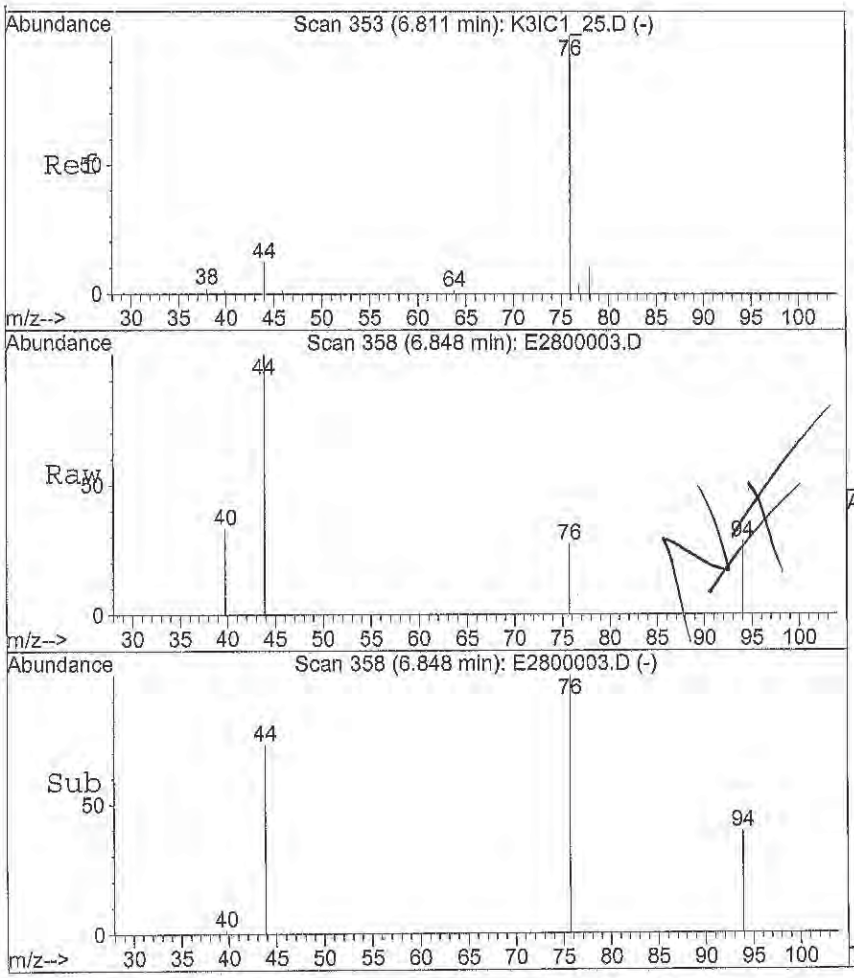


#12
(IPA) Leak Check Compound
Concen: 699.68 ug/L
RT: 6.48 min Scan# 315
Delta R.T. -0.06 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 45 Resp: 138535

Ion	Ratio	Lower	Upper
45	100		
39	0.5	4.9	7.3#

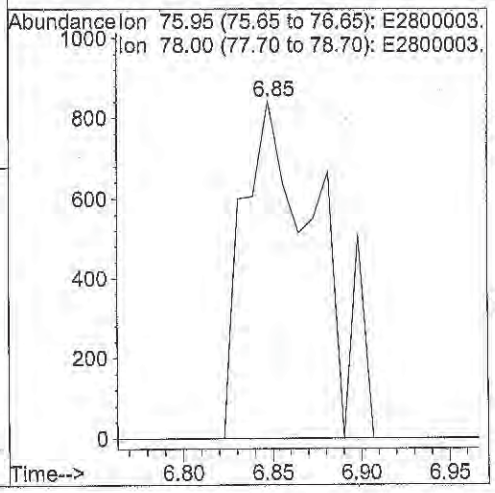


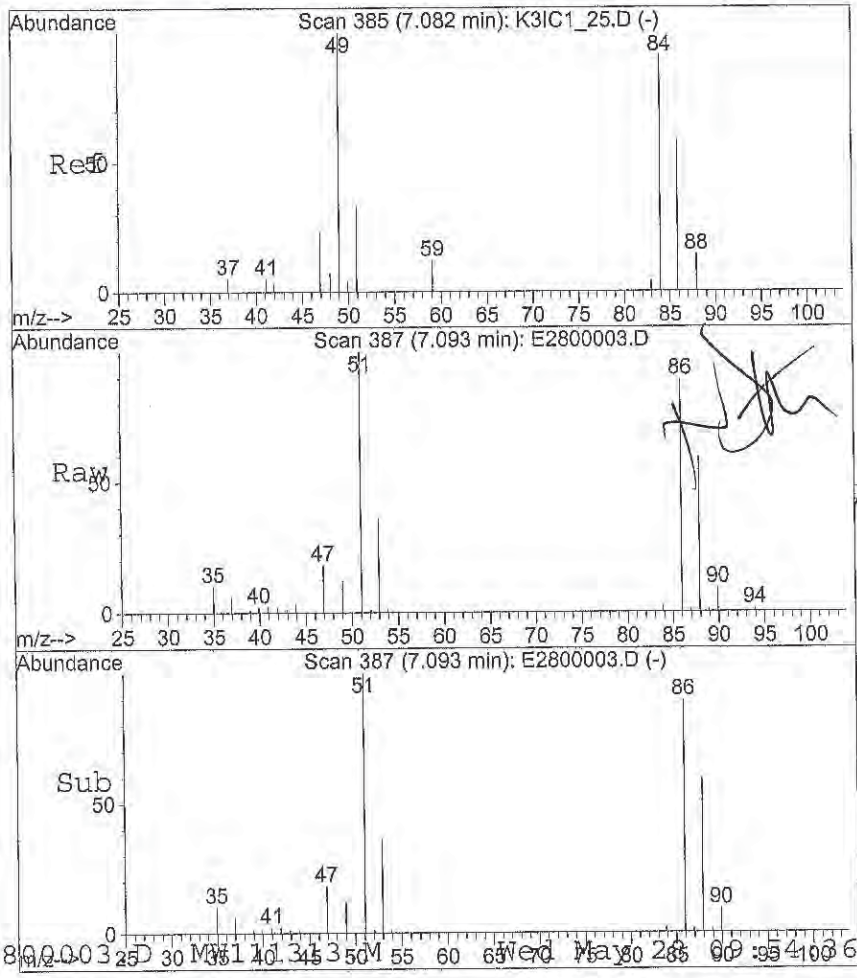


#13
Carbon disulfide
Concen: 0.18 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 76 Resp: 2497

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

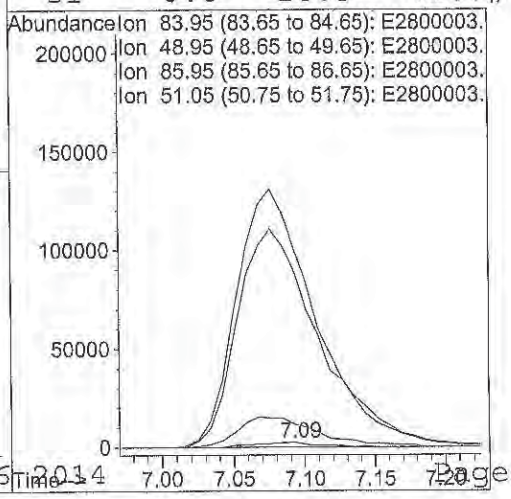


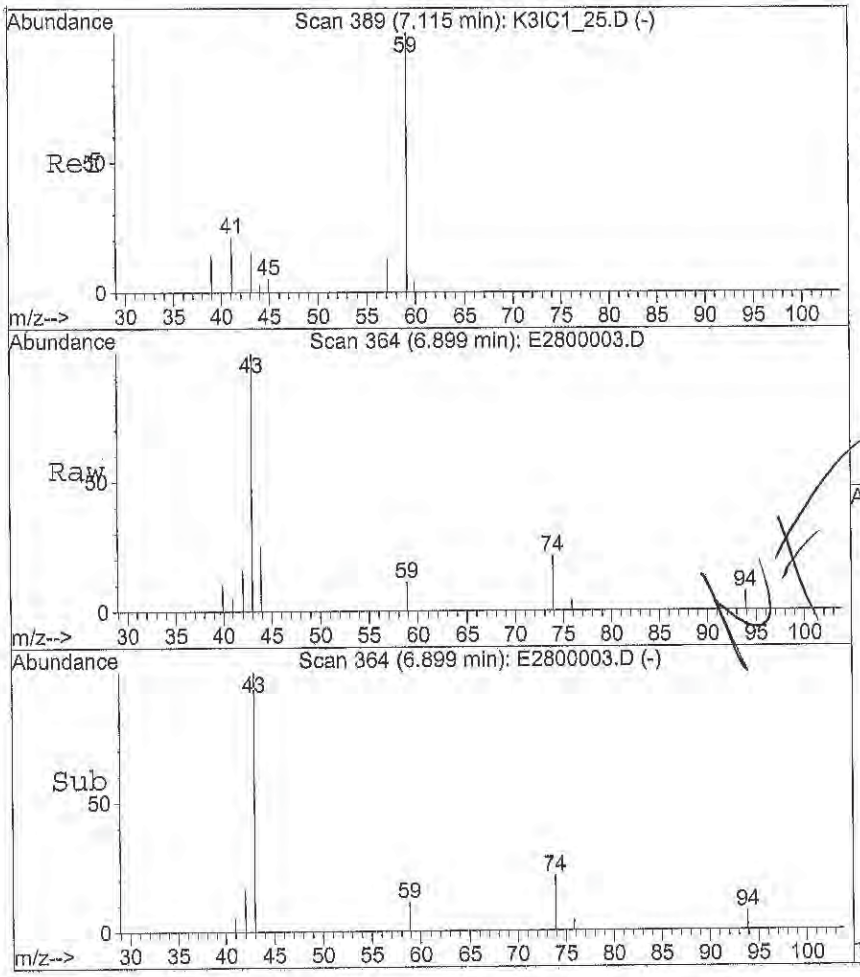


#14
Methylene Chloride
Concen: 1.58 ug/L
RT: 7.09 min Scan# 387
Delta R.T. 0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 84 Resp: 7137

Ion	Ratio	Lower	Upper
84	100		
49	0.0	89.8	134.6#
86	0.0	51.1	76.7#
51	0.0	28.5	42.7#

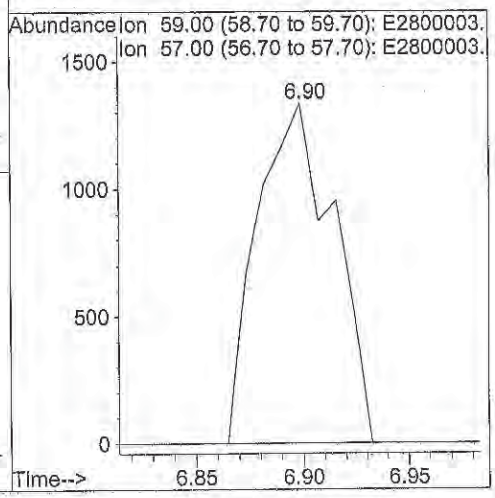


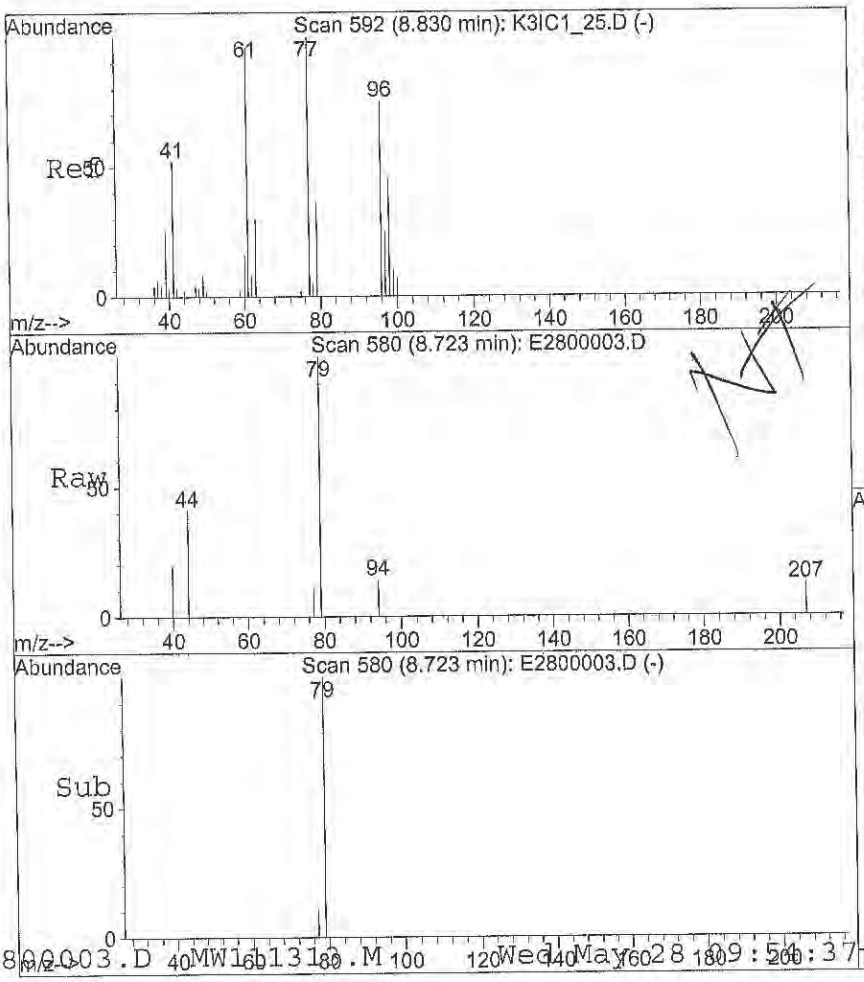


#15
(TBA) tert-Butanol
Concen: 11.78 ug/L
RT: 6.90 min Scan# 364
Delta R.T. -0.22 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 59 Resp: 3310

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

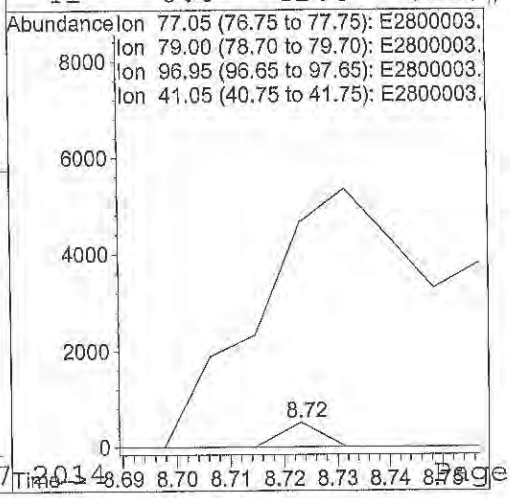


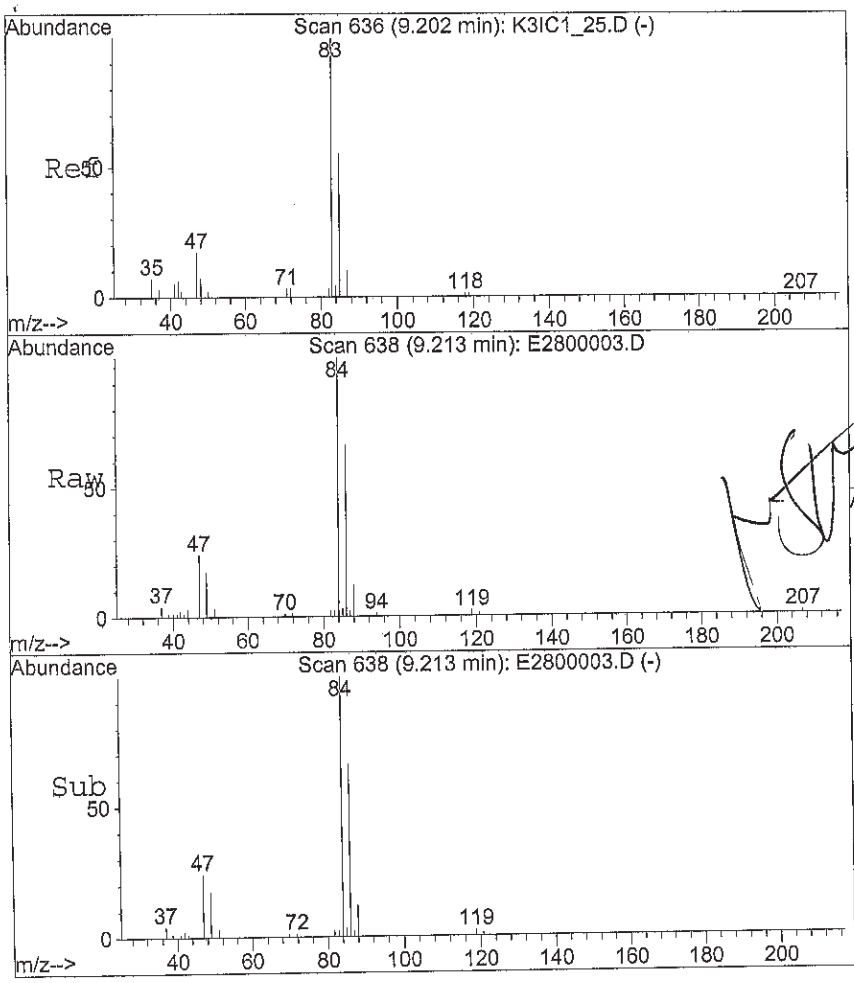


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.72 min Scan# 580
Delta R.T. -0.11 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 77 Resp: 259

Ion	Ratio	Lower	Upper
77	100		
79	6874.9	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

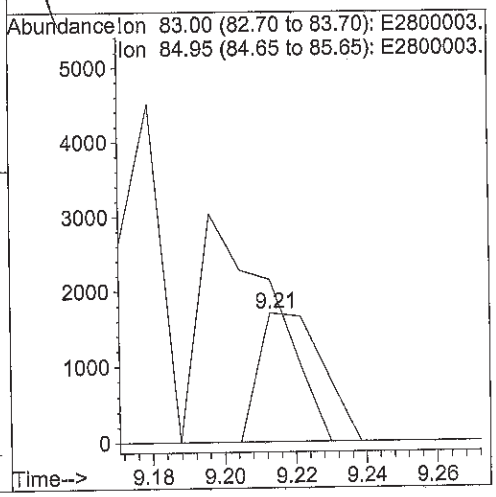


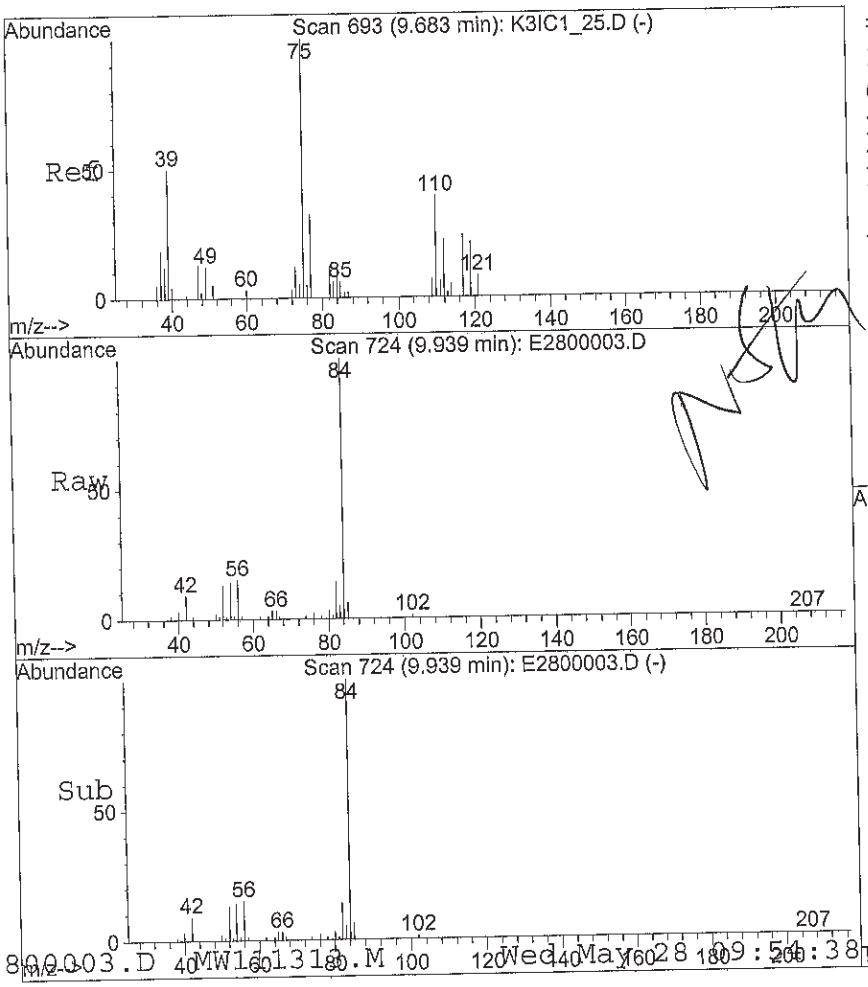


#24
Chloroform
Concen: 0.24 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 83 Resp: 2106

Ion	Ratio	Lower	Upper
83	100		
85	203.6	51.8	77.6#

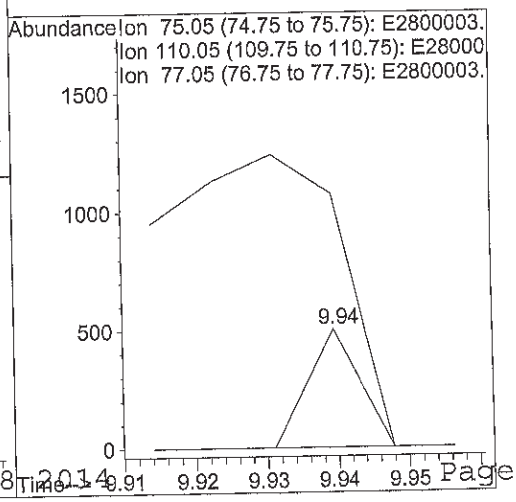


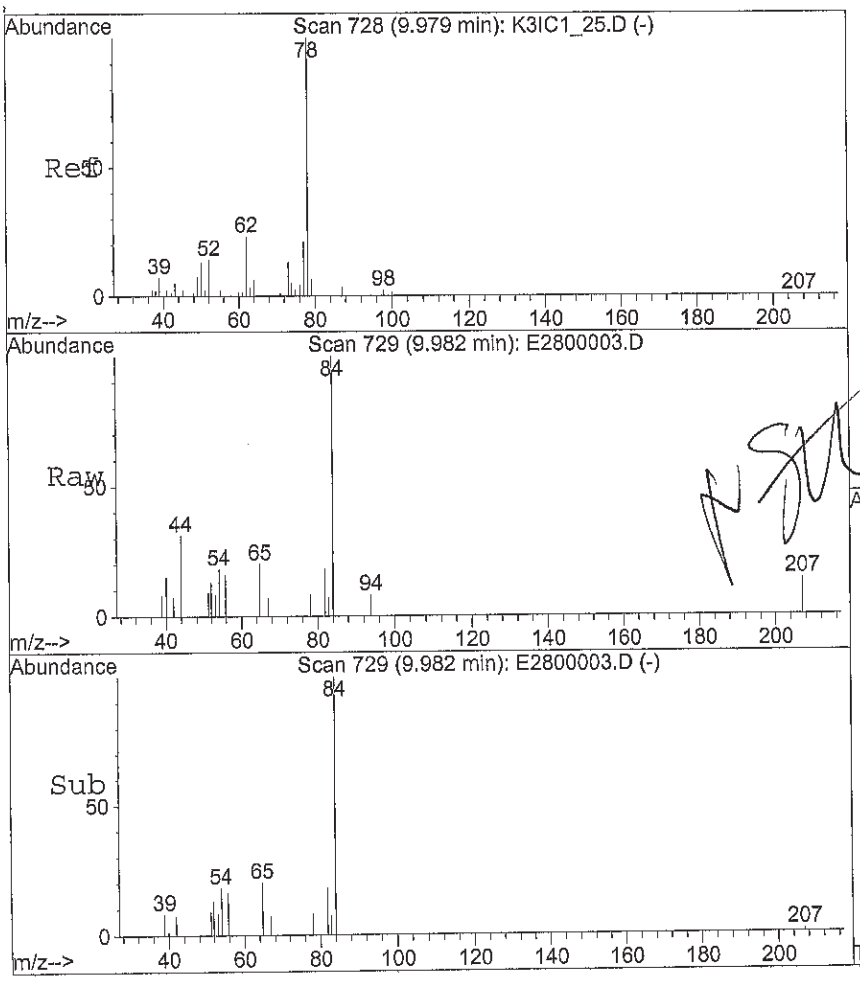


#29
1,1-Dichloropropene
Concen: 0.04 ug/L
RT: 9.94 min Scan# 724
Delta R.T. 0.26 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 75 Resp: 254

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	1151.6	25.0	37.4#

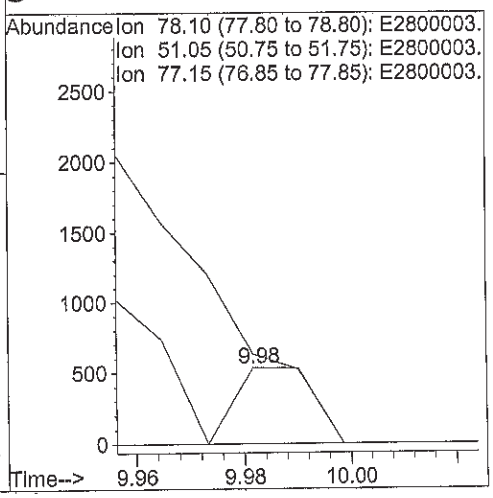


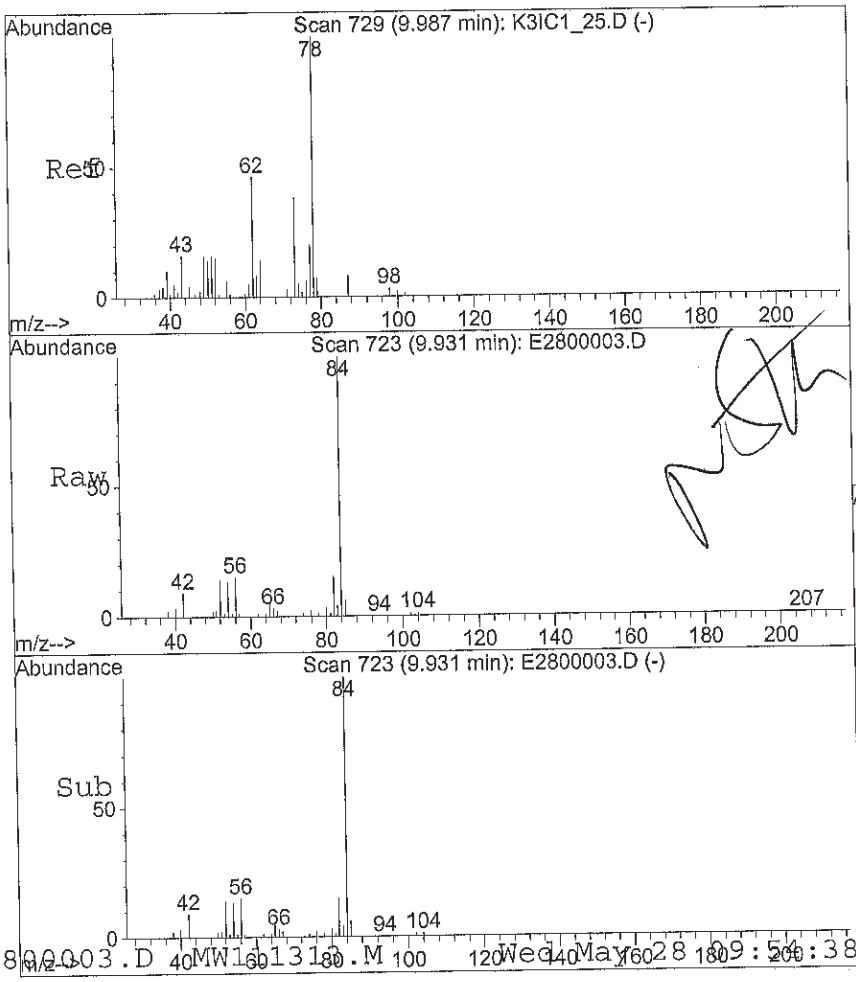


#31
Benzene
Concen: 0.03 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 78 Resp: 539

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

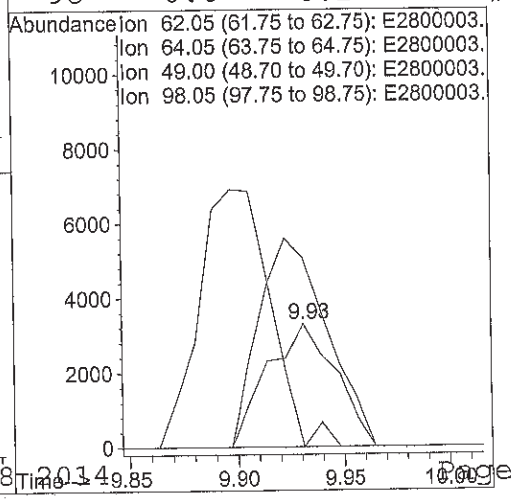


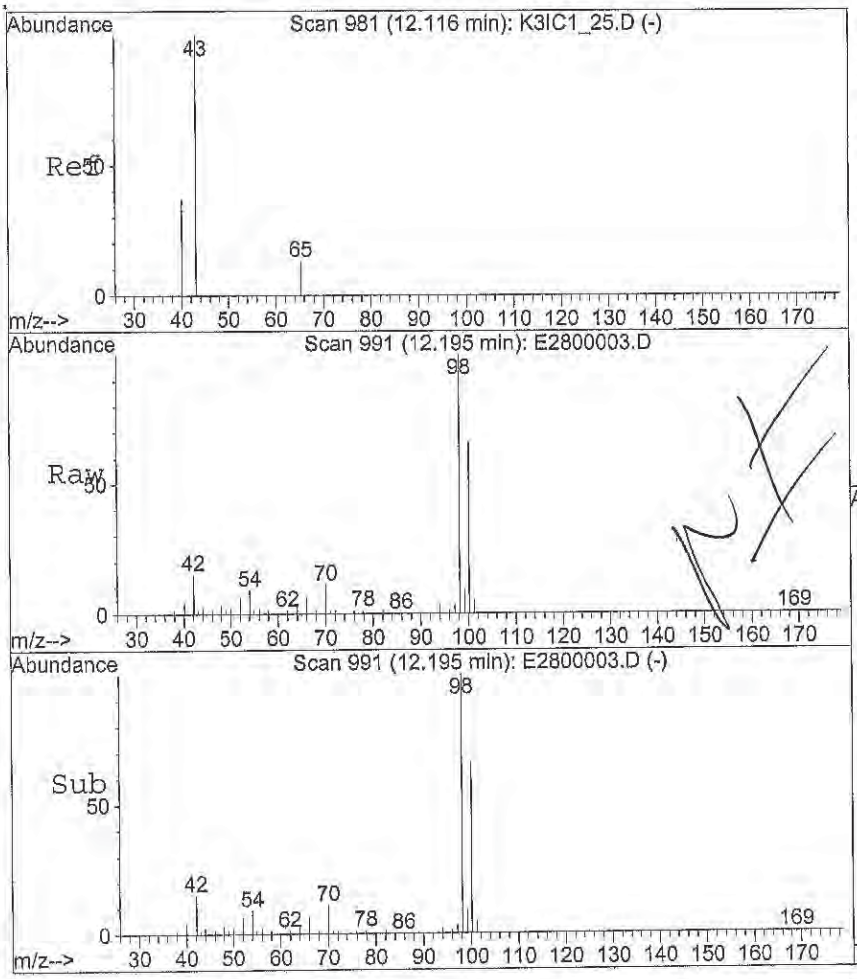


#32
1,2-Dichloroethane
Concen: 1.33 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 62 Resp: 7312

Ion	Ratio	Lower	Upper
62	100		
64	170.1	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

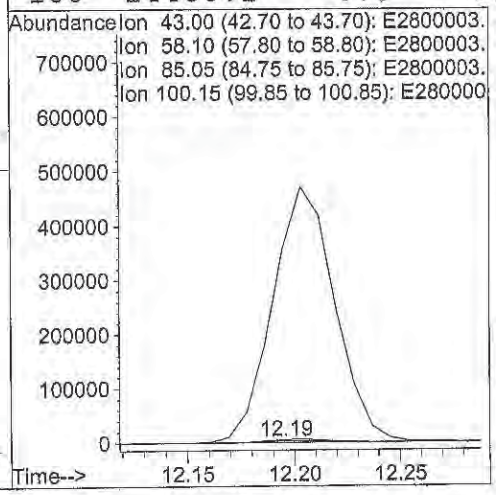


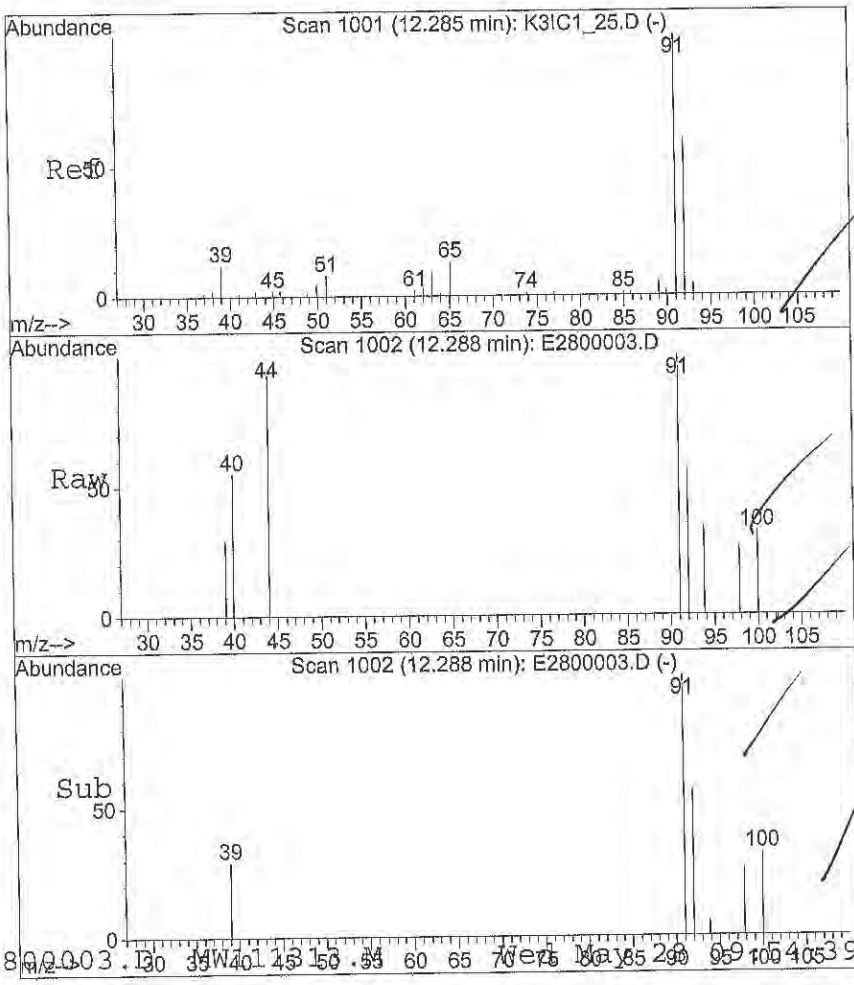


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.60 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 43 Resp: 6600

Ion	Ratio	Lower	Upper
43	100		
58	166.0	0.0	0.0#
85	0.0	0.0	0.0
100	14460.1	0.0	0.0#

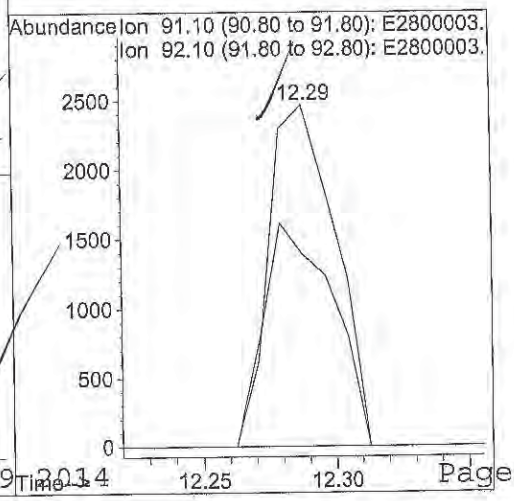


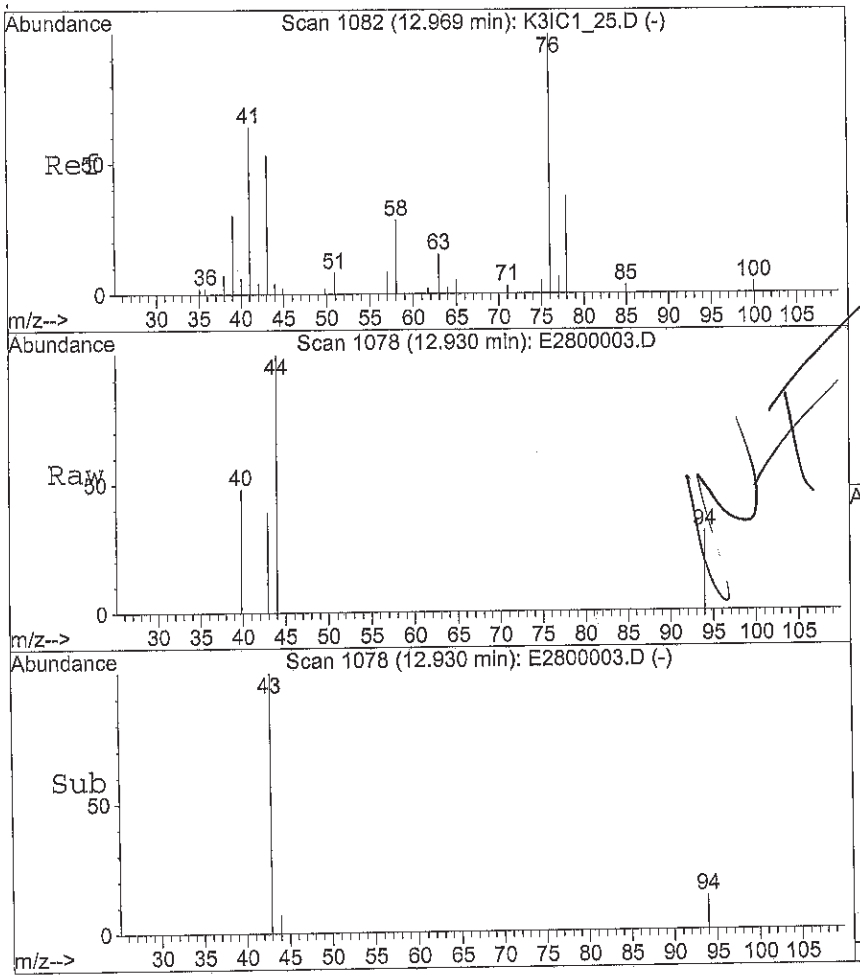


#41
Toluene
Concen: 0.25 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 91 Resp: 4279

Ion	Ratio	Lower	Upper
91	100		
92	68.3	47.4	71.0

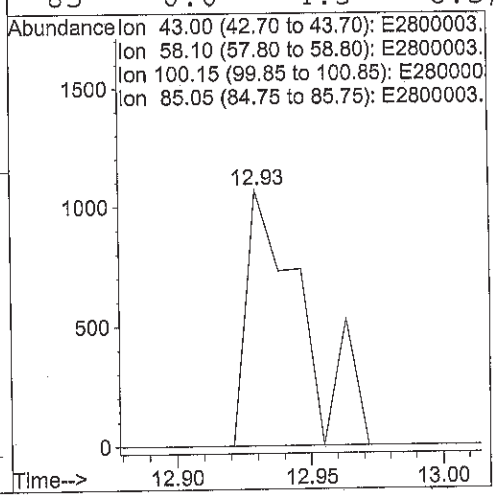


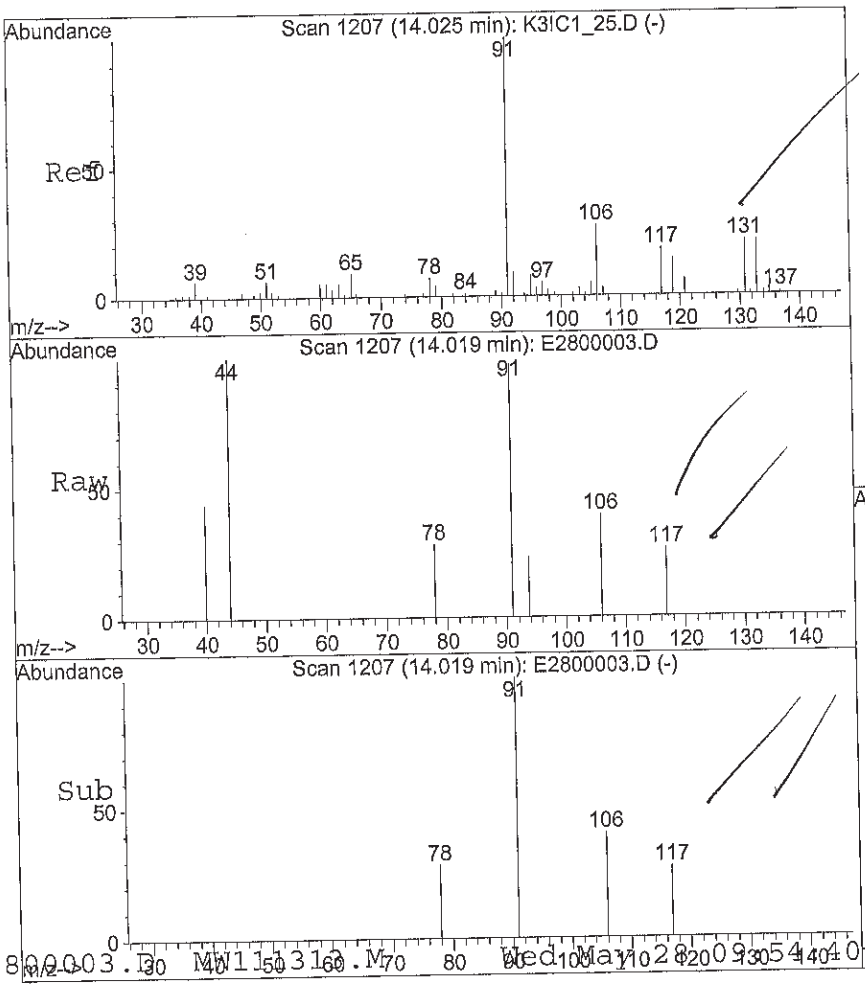


#46
2-Hexanone
Concen: 0.56 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.04 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 43 Resp: 1553

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

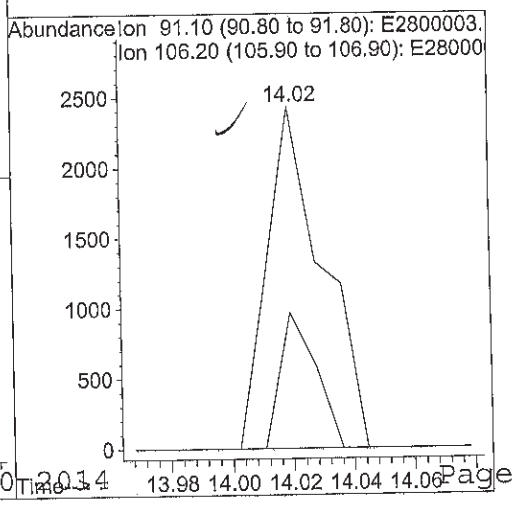


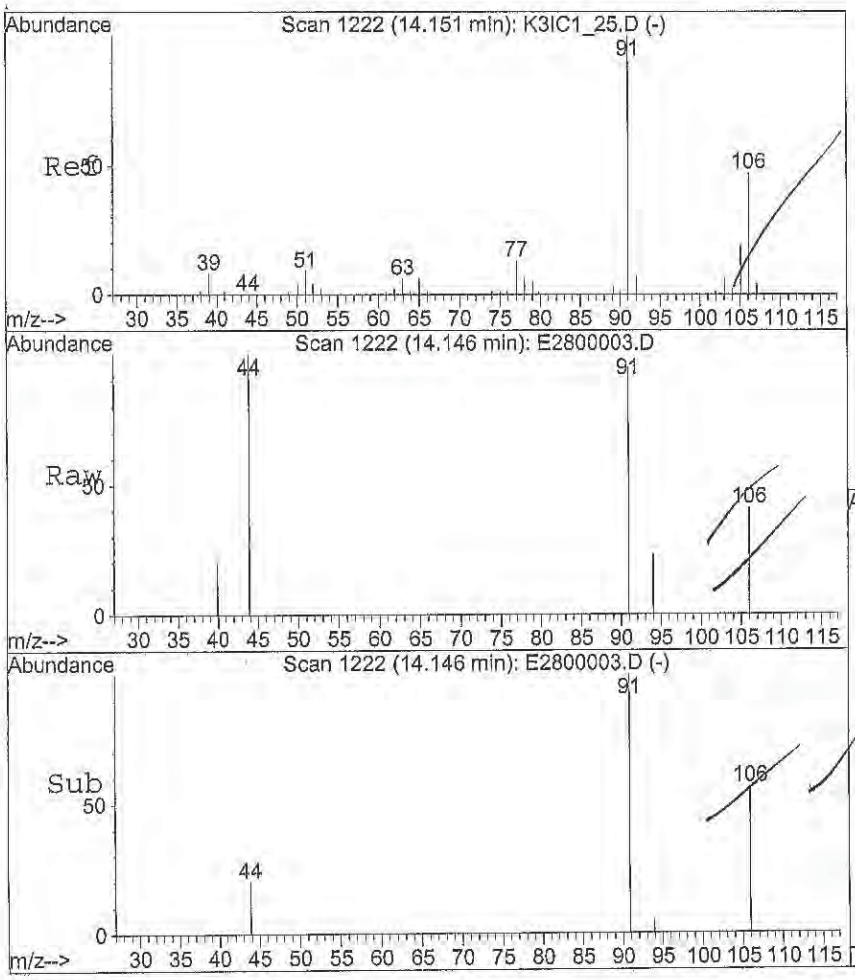


#51
Ethylbenzene
Concen: 0.16 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 91 Resp: 3080

Ion	Ratio	Lower	Upper
91	100		
106	25.5	23.5	35.3

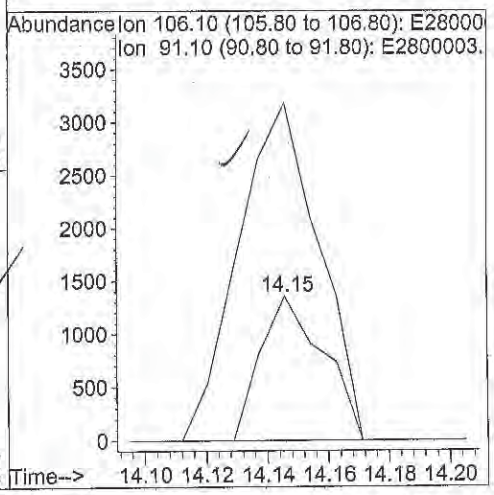


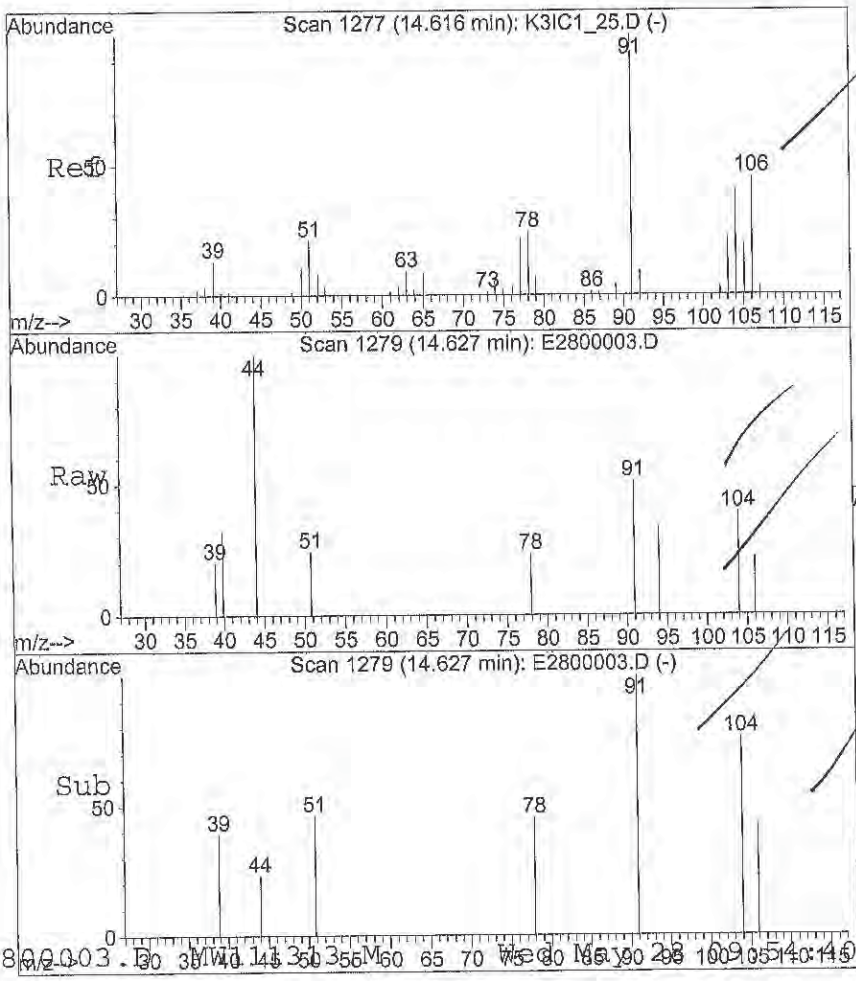


#52
m,p-Xylenes
Concen: 0.28 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:106 Resp: 1929

Ion	Ratio	Lower	Upper
106	100		
91	301.0	177.1	265.7#

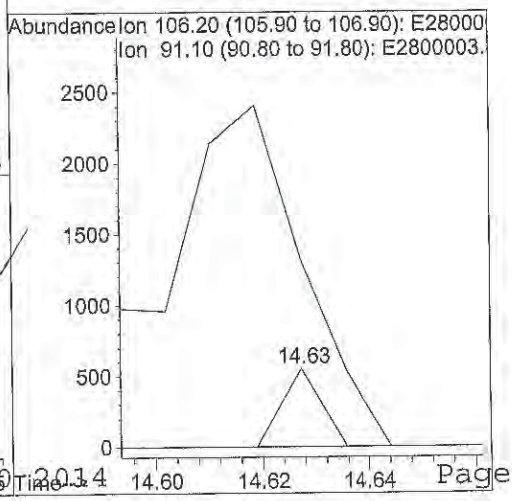


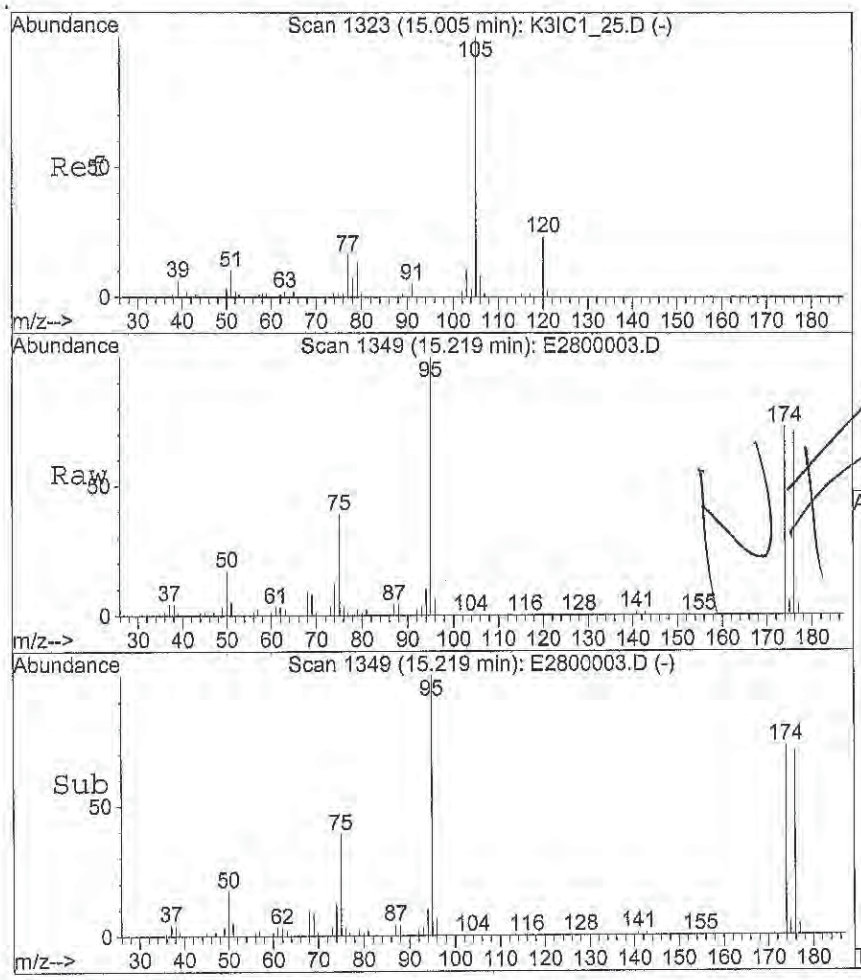


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.63 min Scan# 1279
Delta R.T. 0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:106 Resp: 280

Ion	Ratio	Lower	Upper
106	100		
91	1509.3	179.0	268.6#

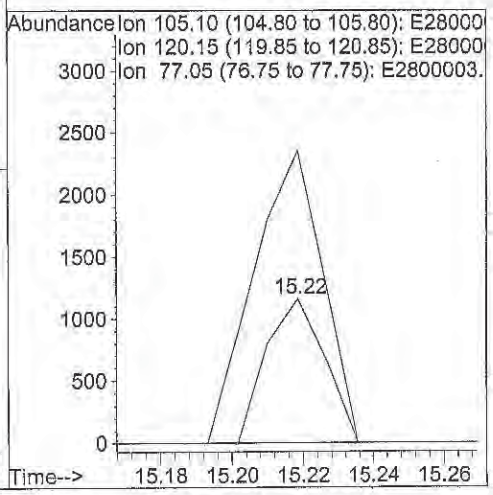


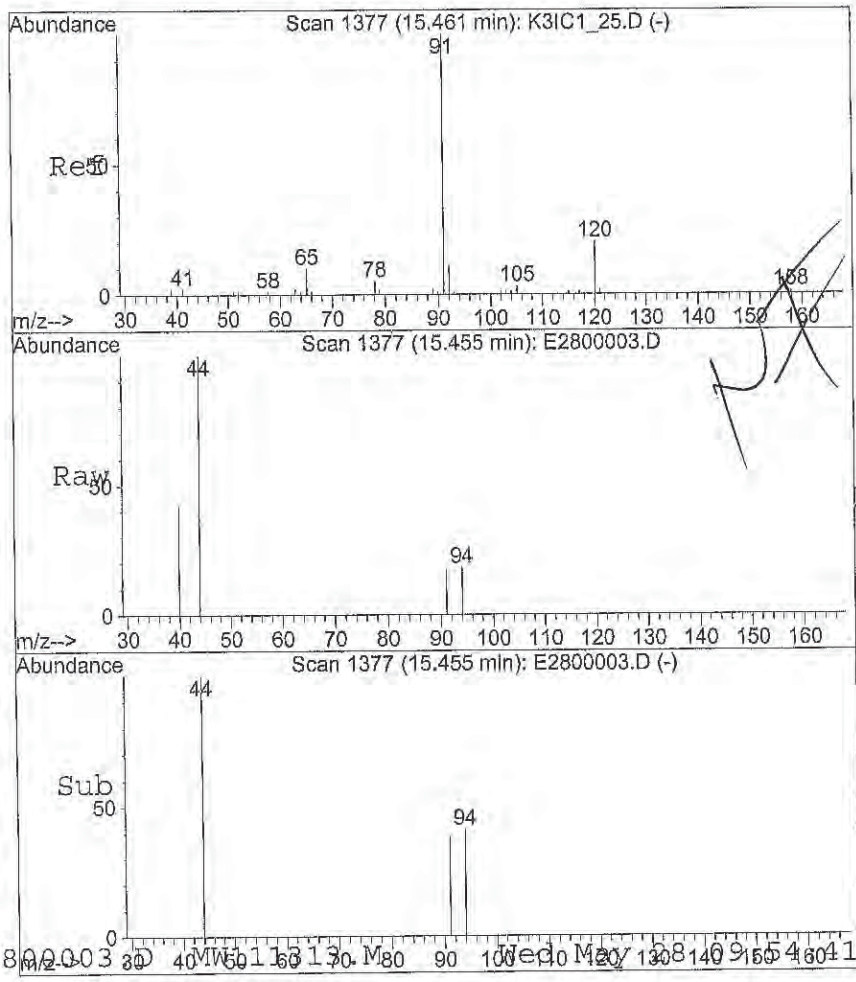


#56
Isopropylbenzene
Concen: 0.07 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:105 Resp: 1317

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	240.2	13.1	19.7#

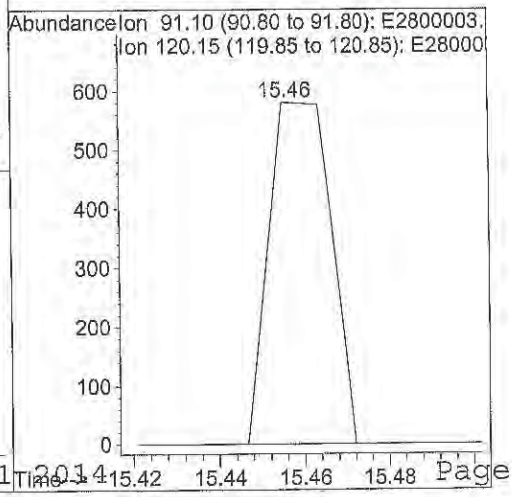


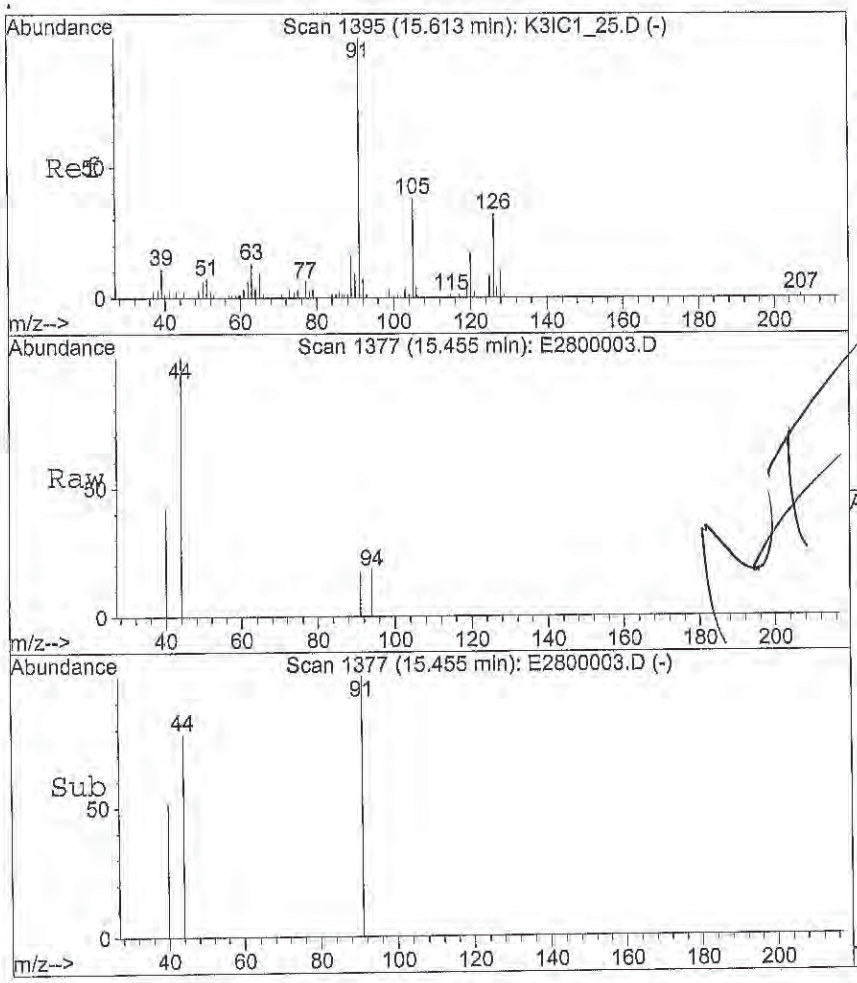


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 91 Resp: 587

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

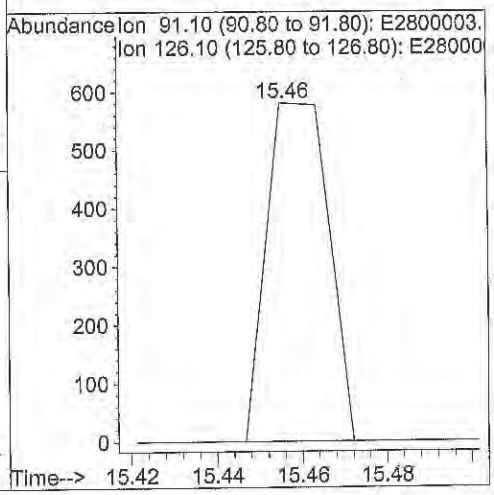


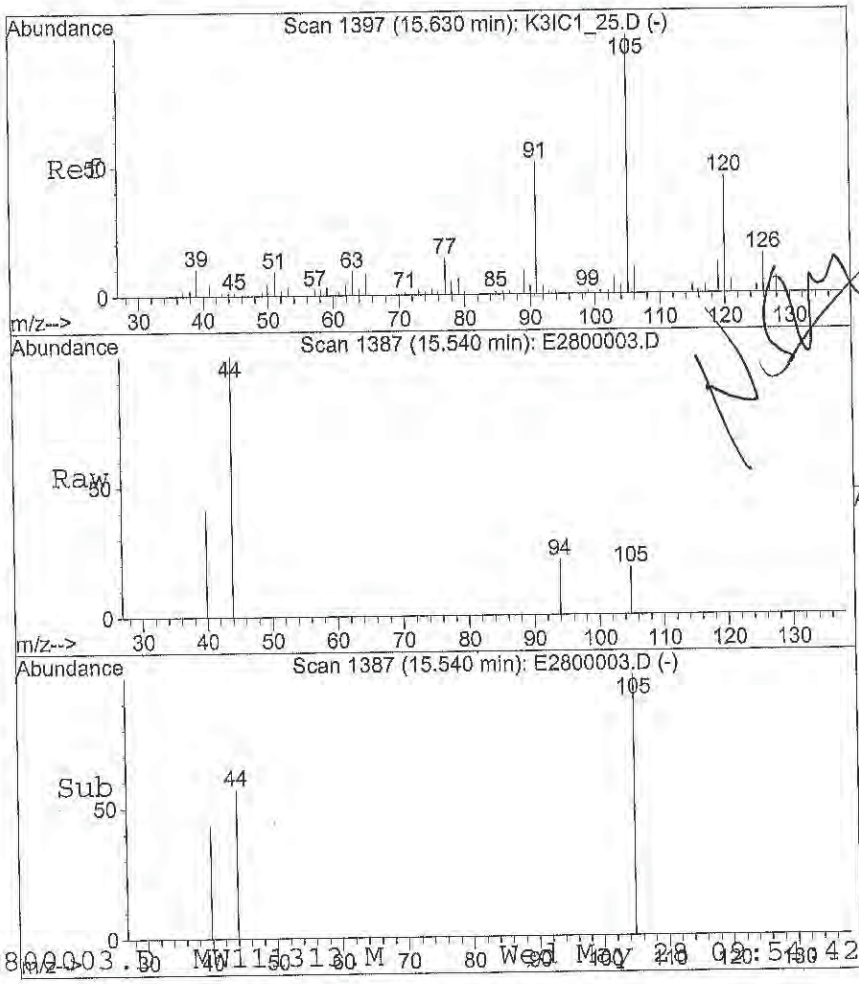


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.16 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 91 Resp: 587

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

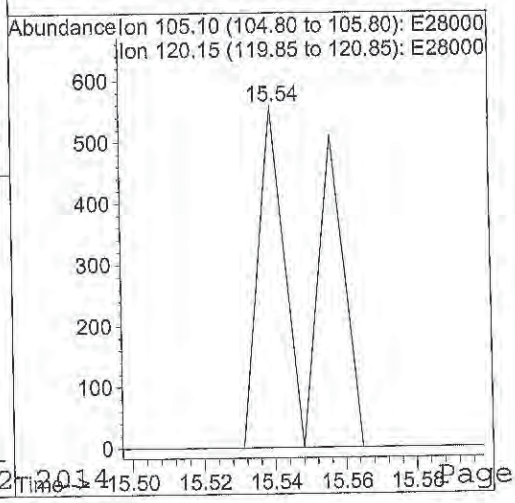


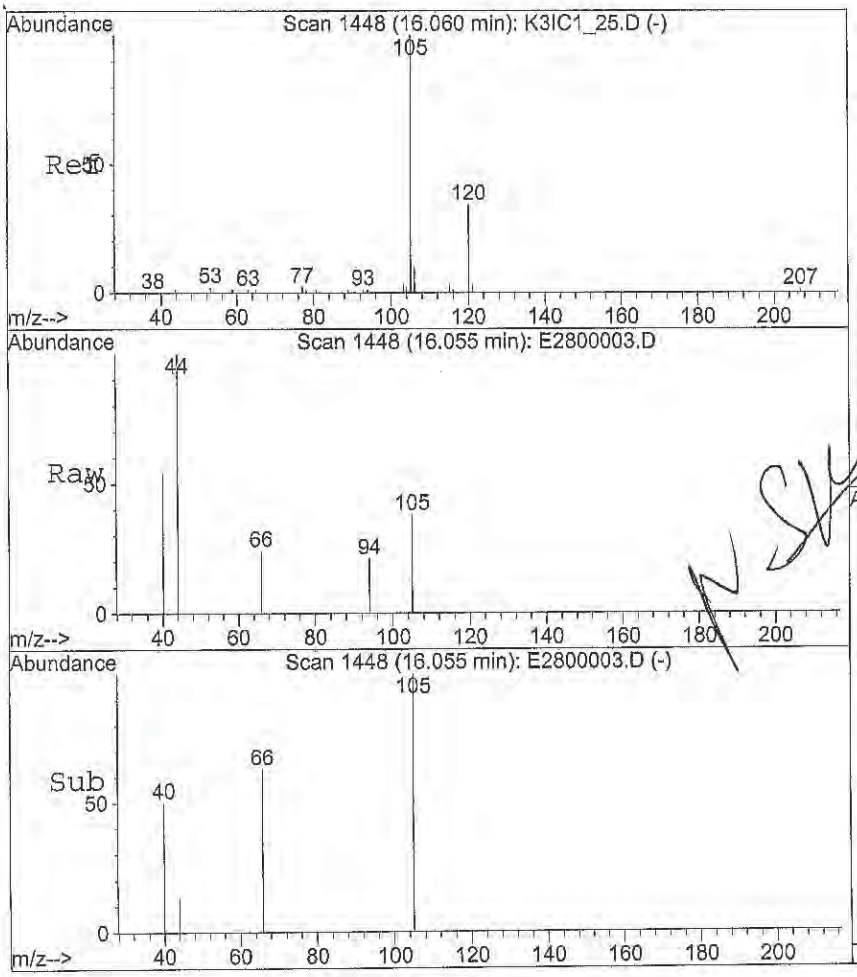


#64
1,3,5-Trimethylbenzene
Concen: 0.03 ug/L
RT: 15.54 min Scan# 1387
Delta R.T. -0.09 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:105 Resp: 541

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

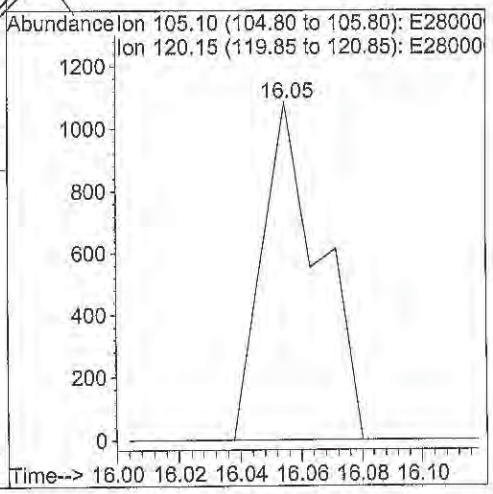


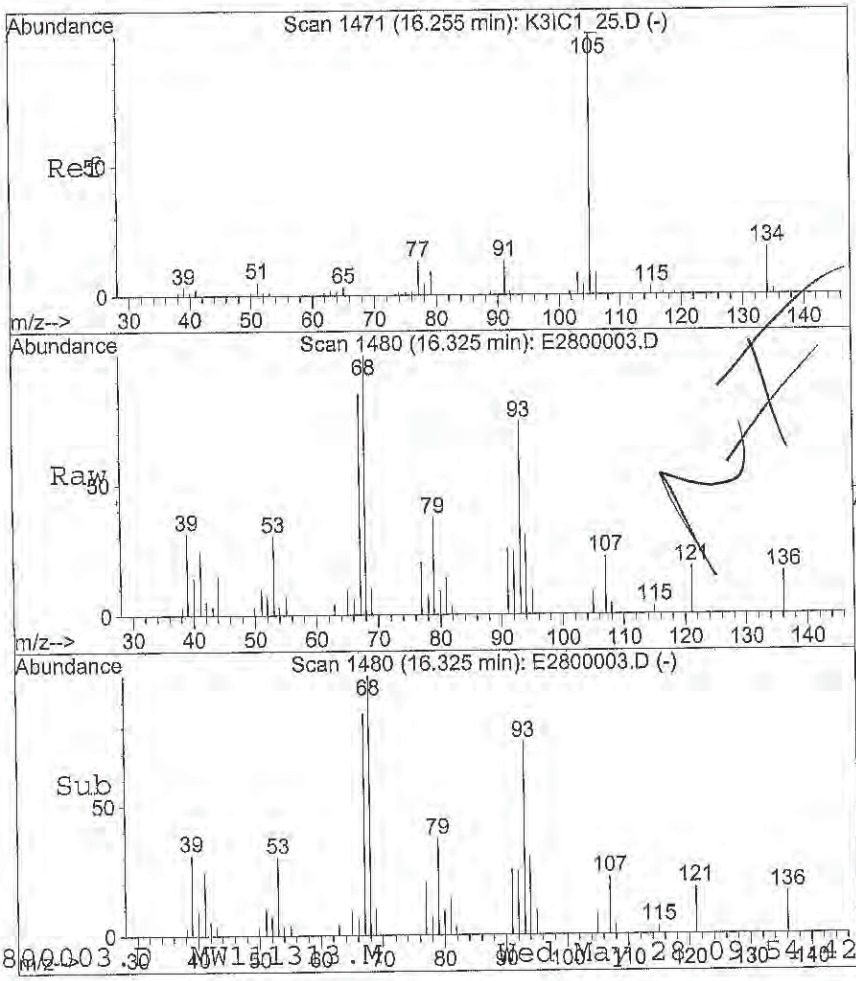


#67
1,2,4-Trimethylbenzene
Concen: 0.08 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:105 Resp: 1414

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

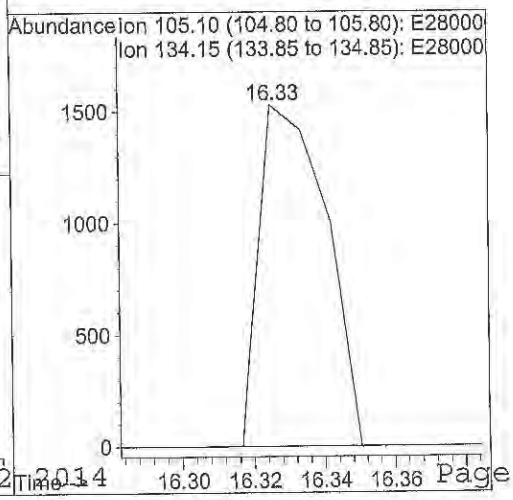


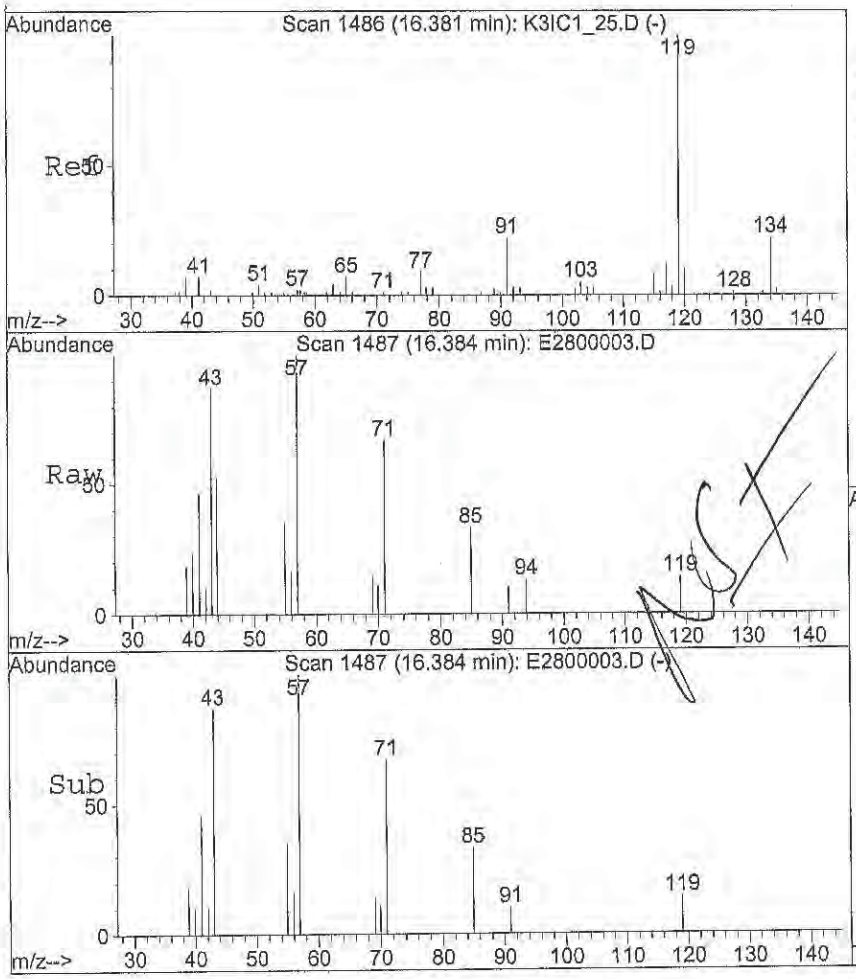


#68
sec-Butylbenzene
Concen: 0.09 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.07 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:105 Resp: 2000

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

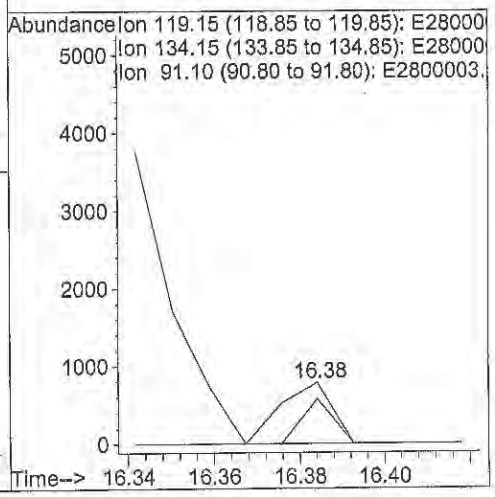


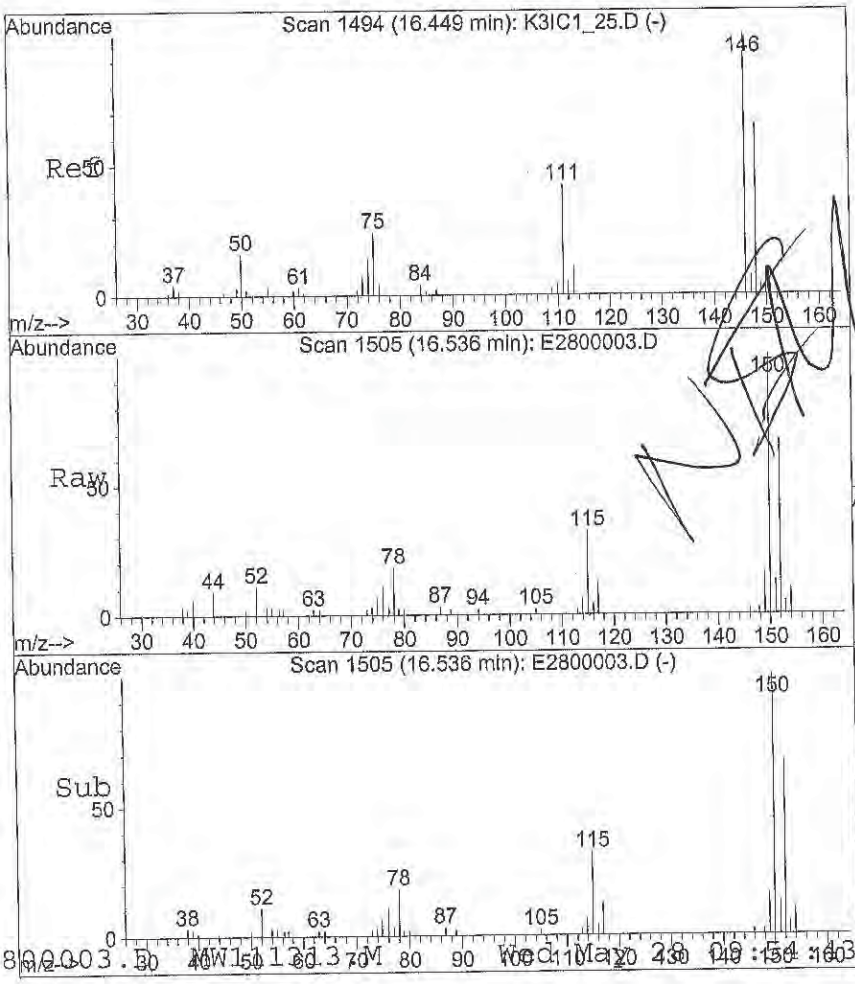


#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:119 Resp: 656

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

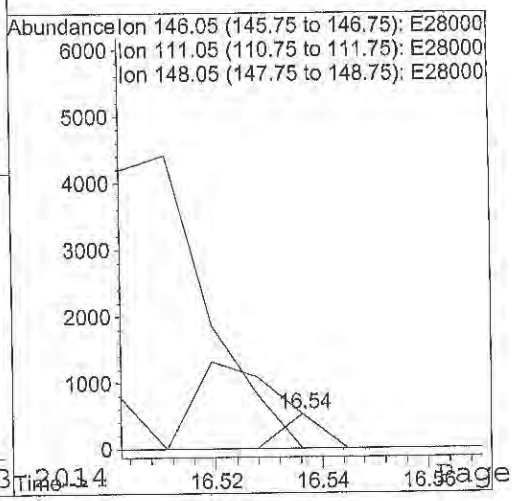


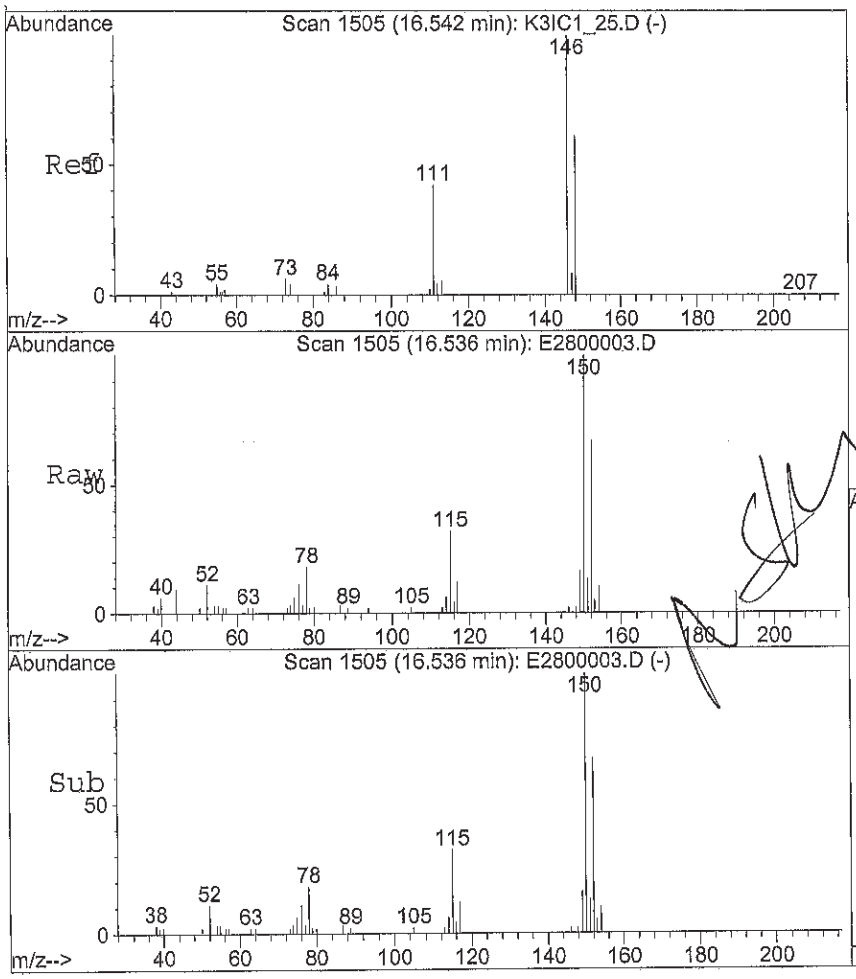


#70
1,3-Dichlorobenzene
Concen: 0.03 ug/L
RT: 16.54 min Scan# 1505
Delta R.T. 0.09 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:146 Resp: 267

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.2	51.4#
148	0.0	50.9	76.3#

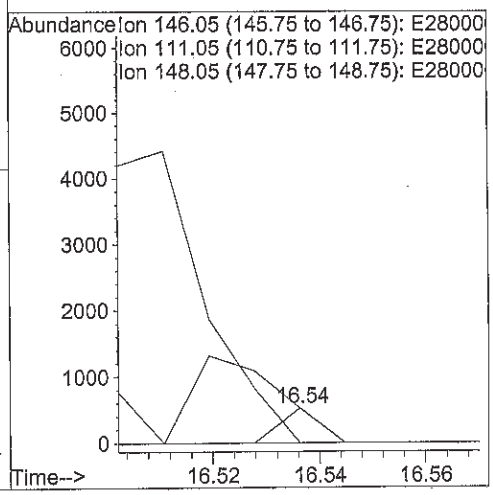


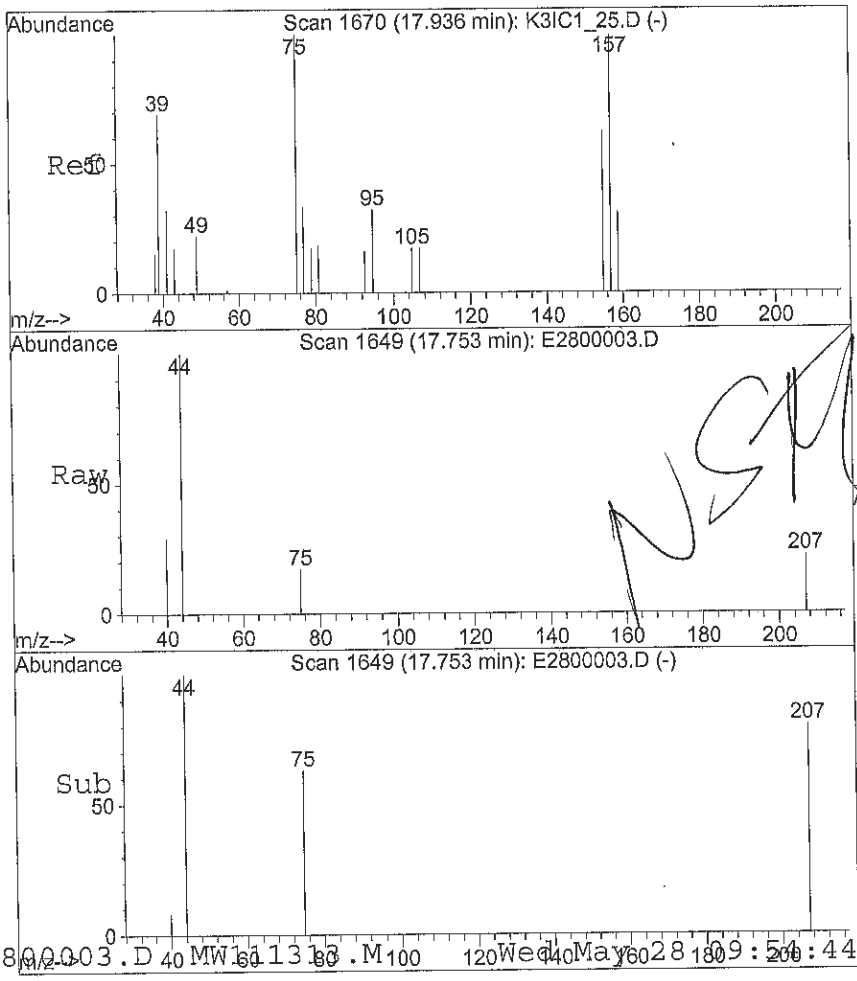


#71
1,4-Dichlorobenzene
Concen: 0.03 ug/L
RT: 16.54 min Scan# 1505
Delta R.T. -0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:146 Resp: 267

Ion	Ratio	Lower	Upper
146	100		
111	0.0	37.6	56.4#
148	0.0	52.6	78.8#

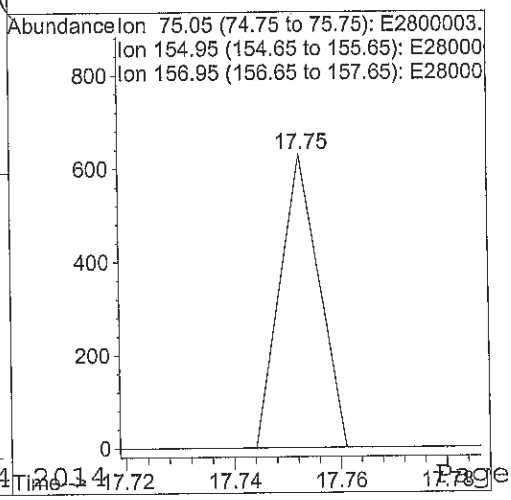


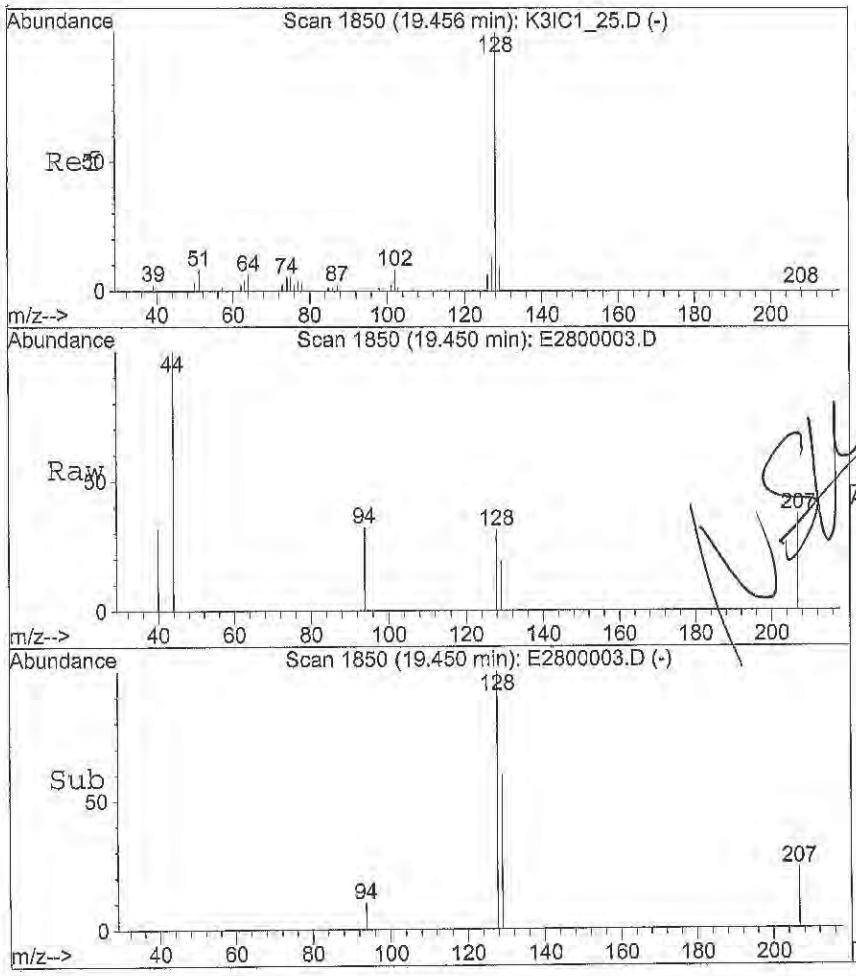


#74
1,2-Dibromo-3-chloropropane
Concen: 1.29 ug/L
RT: 17.75 min Scan# 1649
Delta R.T. -0.18 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion: 75 Resp: 320

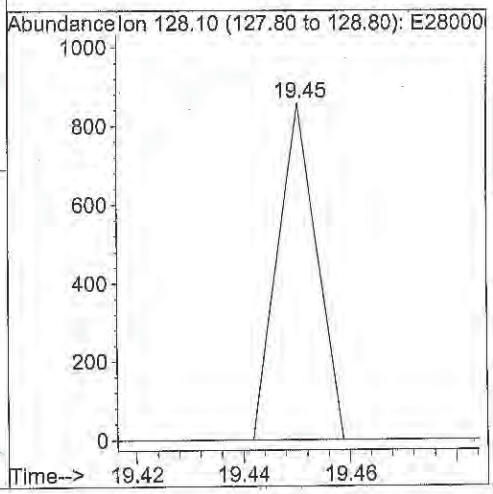
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.03 ug/L
RT: 19.45 min Scan# 1850
Delta R.T. -0.01 min
Lab File: E2800003.D
Acq: 28 May 2014 9:20 am

Tgt Ion:128 Resp: 436



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800003.D Vial: 2
Acq On : 28 May 2014 9:20 am Operator: DN
Sample : 34E2801-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:54 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1647725	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1270840	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	683800	12.50	ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	467241	10.90	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.20%			
3) Chloroform-d (SU6)	9.19	84	771632	12.55	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.40%			
4) Methylene Chloride-d2 (SU5	7.08	86	444290	12.36	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 98.88%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	459221	15.68	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 125.44%#			
6) Benzene-d6 (SU7)	9.93	84	1476360	11.42	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 91.36%			
8) Toluene-d8 (SU3)	12.20	98	1428098	11.84	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.72%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	705094	14.17	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 113.36%			

Target Compounds Qvalue

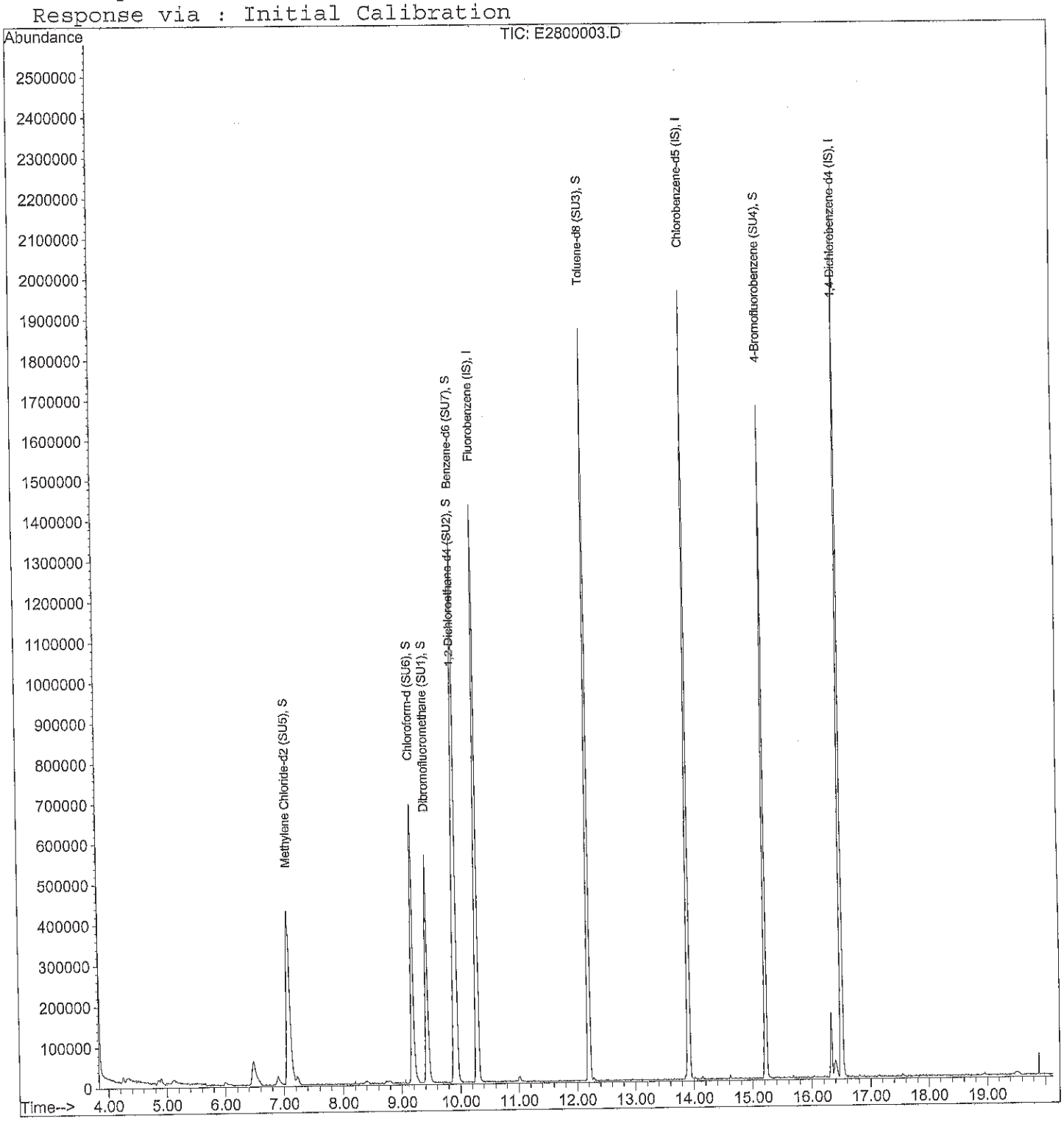
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800003.D
Acq On : 28 May 2014 9:20 am
Sample : 34E2801-DUP1
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 28 9:54 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION LABORATORY CONTROL SAMPLES

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS01.D Vial: 10
Acq On : 28 May 2014 6:28 am Operator: DN
Sample : 34E2801-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 7:05 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1521673	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1091734	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	541503	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.45	113	427522	11.26 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.08%	
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	429310	11.90 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.20%	
39) Toluene-d8 (SU3)	12.22	98	1313190	12.90 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	103.20%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	565781	12.67 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	101.36%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	51531	1.38 ug/L	96
4) Chloromethane	4.45	50	32449	1.15 ug/L	41
5) Vinyl Chloride	4.61	62	38058	1.42 ug/L	81
6) Bromomethane	5.14	96	24975	1.31 ug/L	99
7) Chloroethane	5.28	64	16993	1.43 ug/L	88
8) (F11) Trichlorofluorometha	5.67	101	59206	1.42 ug/L	91
9) (F113) 1,1,2-Trichloro-tri	6.38	151	38237	1.28 ug/L	97
10) 1,1-Dichloroethene	6.45	96	50573	1.41 ug/L	90
11) Acetone	6.46	58	49860	-12.50 ug/L	73
12) (IPA) Leak Check Compound	6.54	45	434841	237.81 ug/L	100
13) Carbon disulfide	6.87	76	144270	1.14 ug/L	100
14) Methylene Chloride	7.12	84	57184	1.37 ug/L	97
15) (TBA) tert-Butanol	7.11	59	9123	3.52 ug/L	96
16) (MTBE) Methyl-t-butyl ethe	7.42	73	121500	1.41 ug/L	97
17) trans-1,2-Dichloroethene	7.49	96	57431	1.40 ug/L	96
18) 1,1-Dichloroethane	8.08	63	80543	1.18 ug/L	98
19) cis-1,2-Dichloroethene	8.85	96	56496	1.19 ug/L	93
20) 2,2-Dichloropropane	8.84	77	673	0.01 ug/L #	1
21) (MEK) 2-Butanone	8.80	72	11356	2.65 ug/L #	52
22) (DIPE) Diisopropyl Ether	8.02	45	163308	1.37 ug/L	98
23) Bromochloromethane	9.18	128	23745	1.17 ug/L #	84
24) Chloroform	9.23	83	98332	1.23 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS01.D Vial: 10
Acq On : 28 May 2014 6:28 am Operator: DN
Sample : 34E2801-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 7:05 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	114728	1.04 ug/L #	99
26) 1,1,1-Trichloroethane	9.51	97	72777	1.16 ug/L	95
27) (TAME) tert-Amyl methyl et	10.01	73	103114	1.08 ug/L	95
29) 1,1-Dichloropropene	9.70	75	70687	1.20 ug/L	97
30) Carbon Tetrachloride	13.90	117	58555	1.14 ug/L	97
31) Benzene	9.99	78	181411	1.27 ug/L	96
32) 1,2-Dichloroethane	10.00	62	58990	1.16 ug/L	95
33) Trichloroethene	10.75	130	58787	1.27 ug/L	98
34) 1,2-Dichloropropane	11.06	63	45156	1.32 ug/L #	79
35) Dibromomethane	11.22	93	36426	1.36 ug/L	98
36) Bromodichloromethane	11.36	83	61039	1.13 ug/L	95
37) cis-1,3-Dichloropropene	11.88	75	58023	0.99 ug/L	94
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	25643	1.18 ug/L #	100
41) Toluene	12.29	91	194649	1.31 ug/L	99
42) trans-1,3-Dichloropropene	12.52	75	45472	0.93 ug/L #	76
43) 1,1,2-Trichloroethane	12.76	83	37347	1.39 ug/L #	87
44) Tetrachloroethene	12.94	164	60650	1.16 ug/L	95
45) 1,3-Dichloropropane	12.97	76	65111	1.27 ug/L	100
46) 2-Hexanone	12.98	43	66688	2.79 ug/L #	96
47) Dibromochloromethane	13.26	129	49025	1.28 ug/L #	100
48) 1,2-Dibromoethane	13.43	107	50983	1.47 ug/L	97
49) Chlorobenzene	13.97	112	137573	1.37 ug/L	98
50) 1,1,1,2-Tetrachloroethane	14.03	131	44494	1.25 ug/L	94
51) Ethylbenzene	14.03	91	223863	1.32 ug/L	99
52) m,p-Xylenes	14.15	106	163234	2.71 ug/L	98
53) o-Xylene	14.62	106	77130	1.30 ug/L	95
54) Styrene	14.63	104	129033	1.50 ug/L	97
55) Bromoform	14.92	173	33864	1.56 ug/L	96
56) Isopropylbenzene	15.01	105	216011	1.33 ug/L	100
57) 1,2,3-Trichloropropane	15.43	75	78760	1.77 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	68427	1.75 ug/L	94
61) Bromobenzene	15.44	156	57443	1.35 ug/L	93
62) n-Propylbenzene	15.47	91	277436	1.27 ug/L	99
63) 2-Chlorotoluene	15.62	91	182660	1.36 ug/L	98
64) 1,3,5-Trimethylbenzene	15.63	105	178725	1.32 ug/L	99
65) 4-Chlorotoluene	15.73	91	177020	1.42 ug/L	99
66) tert-Butylbenzene	16.02	119	146106	1.27 ug/L	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS01.D Vial: 10
Acq On : 28 May 2014 6:28 am Operator: DN
Sample : 34E2801-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 7:05 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

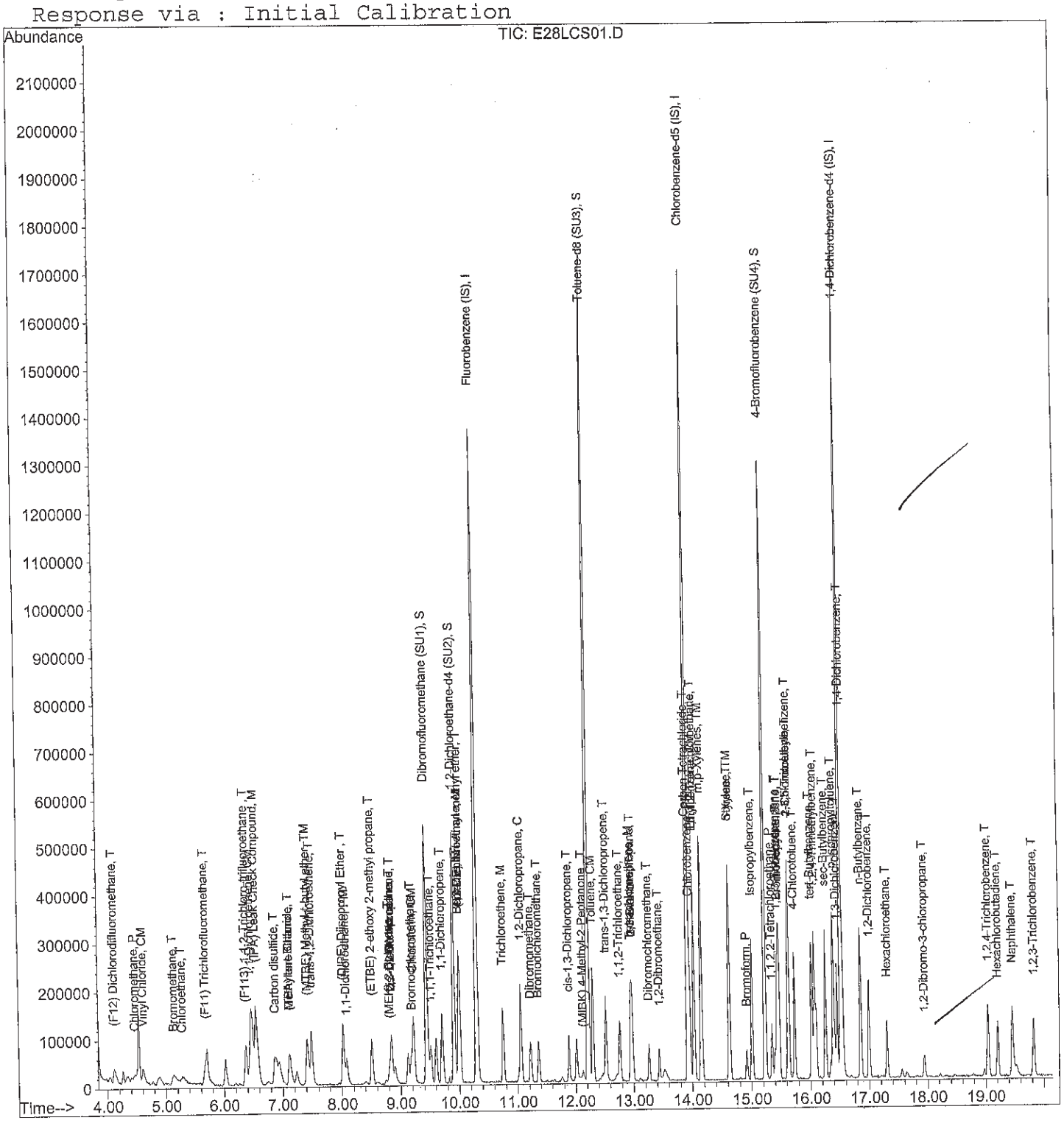
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.07	105	194221	1.38 ug/L	98
68) sec-Butylbenzene	16.25	105	249450	1.37 ug/L	96
69) p-Isopropyltoluene	16.39	119	185276	1.25 ug/L	93
70) 1,3-Dichlorobenzene	16.45	146	108377	1.35 ug/L	98
71) 1,4-Dichlorobenzene	16.54	146	105481	1.32 ug/L	98
72) n-Butylbenzene	16.85	91	207803	1.34 ug/L	98
73) 1,2-Dichlorobenzene	17.00	146	99955	1.40 ug/L	98
74) 1,2-Dibromo-3-chloropropan	17.94	75	14914	2.43 ug/L #	81
75) 1,2,4-Trichlorobenzene	19.04	180	64610	1.34 ug/L	97
76) Hexachlorobutadiene	19.21	225	28036	1.29 ug/L	95
77) Naphthalene	19.46	128	169799	1.59 ug/L	100
78) Hexachloroethane	17.30	201	19328	1.23 ug/L	91
79) 1,2,3-Trichlorobenzene	19.83	180	57578	1.26 ug/L	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS01.D Vial: 10
Acq On : 28 May 2014 6:28 am Operator: DN
Sample : 34E2801-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 7:05 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION BLANK

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28BLK01.D
Acq On : 28 May 2014 7:43 am
Sample : 34E2801-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: May 28 8:13 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1886088	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1421471	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	727836	12.50	ug/L	0.00

System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	523637	11.13	ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.04%			
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	519676	11.62	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.96%			
39) Toluene-d8 (SU3)	12.20	98	1619271	12.21	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.68%			
58) 4-Bromofluorobenzene (SU4)	15.22	95	780429	13.42	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.36%			

Target Compounds						Qvalue
4) Chloromethane	4.40	50	4477	0.19	~~ug/L #~~	63
6) Bromomethane	5.14	96	4630	0.45	~~ug/L~~	90
7) Chloroethane	5.47	64	779	1.18	~~ug/L~~	89
11) Acetone	6.47	58	6791	4.29	~~ug/L~~	79
12) (IPA) Leak Check Compound	6.49	45	79782	352.02	~~ug/L #~~	84
14) Methylene Chloride	7.08	84	6757	1.30	~~ug/L #~~	1
15) (TBA) tert-Butanol	6.90	59	613	1.91	~~ug/L #~~	77
24) Chloroform	9.21	83	11505	1.16	~~ug/L #~~	18
31) Benzene	9.98	78	1971	0.11	~~ug/L #~~	57
32) 1,2-Dichloroethane	9.92	62	6880	1.10	~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	8470	2.99	~~ug/L #~~	100
41) Toluene	12.29	91	12619	0.65	ug/L 0.013	86
46) 2-Hexanone	12.97	43	627	0.20	~~ug/L #~~	37
51) Ethylbenzene	14.15	91	4274	0.19	~~ug/L~~	96
52) m,p-Xylenes	14.14	106	1580	0.20	ug/L #0.0047	70
53) o-Xylene	14.62	106	455	0.06	ug/L #0.0012	71
54) Styrene	14.62	104	1816	-0.71	~~ug/L #~~	61
56) Isopropylbenzene	15.22	105	1840	0.09	~~ug/L #~~	1
62) n-Propylbenzene	15.46	91	902	0.03	~~ug/L #~~	56
63) 2-Chlorotoluene	15.62	91	283	0.02	~~ug/L #~~	45
64) 1,3,5-Trimethylbenzene	15.54	105	623	0.03	~~ug/L #~~	31
65) 4-Chlorotoluene	15.62	91	283	0.02	~~ug/L #~~	44

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28BLK01.D Vial: 11
Acq On : 28 May 2014 7:43 am Operator: DN
Sample : 34E2801-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 8:13 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

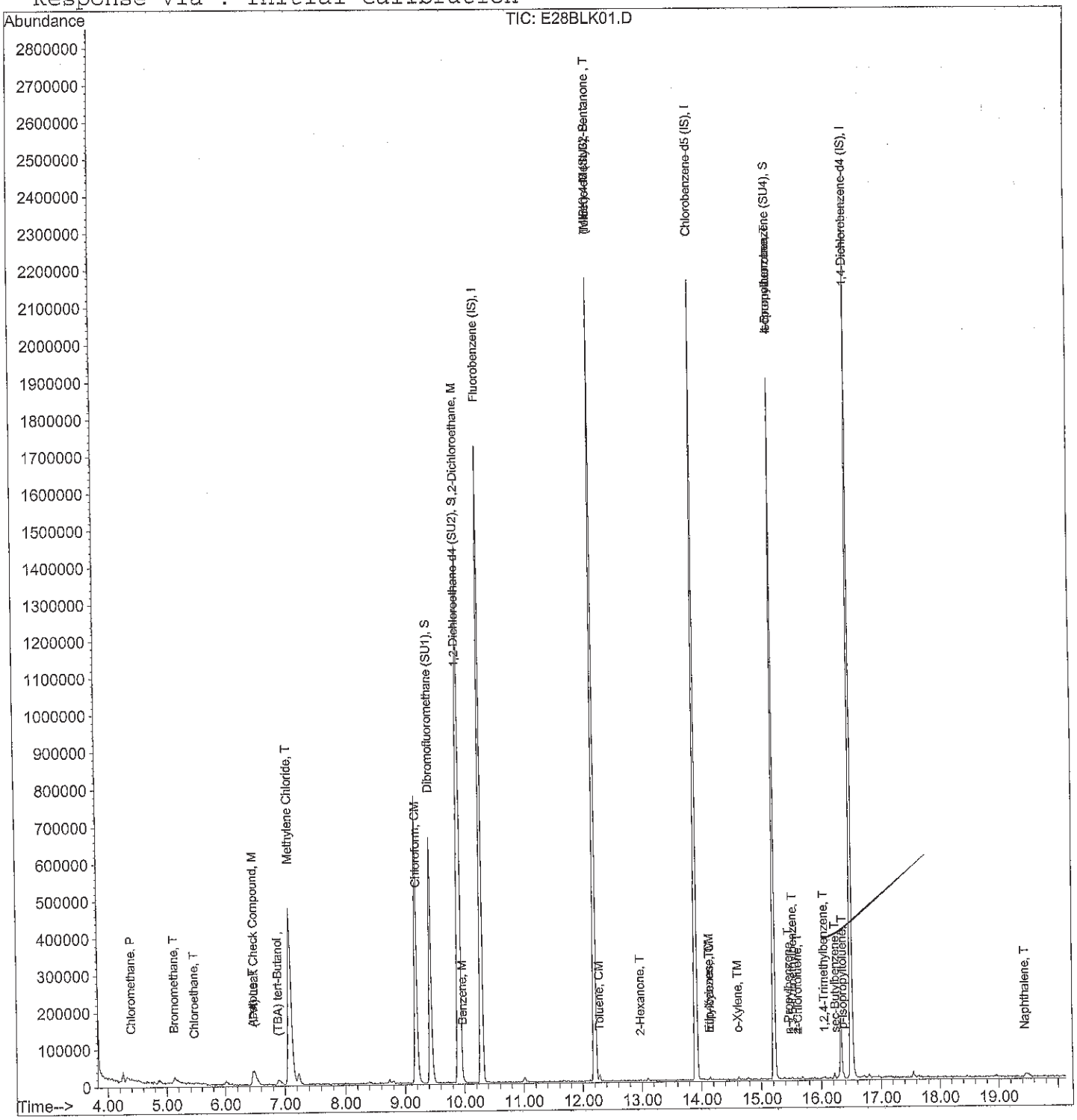
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	3223	0.17 ug/L 0.0034	92
68) sec-Butylbenzene	16.25	105	317	0.01 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	5081	0.26 ~~ug/L~~ #	67
77) Naphthalene	19.44	128	813	0.06 ~~ug/L~~	100

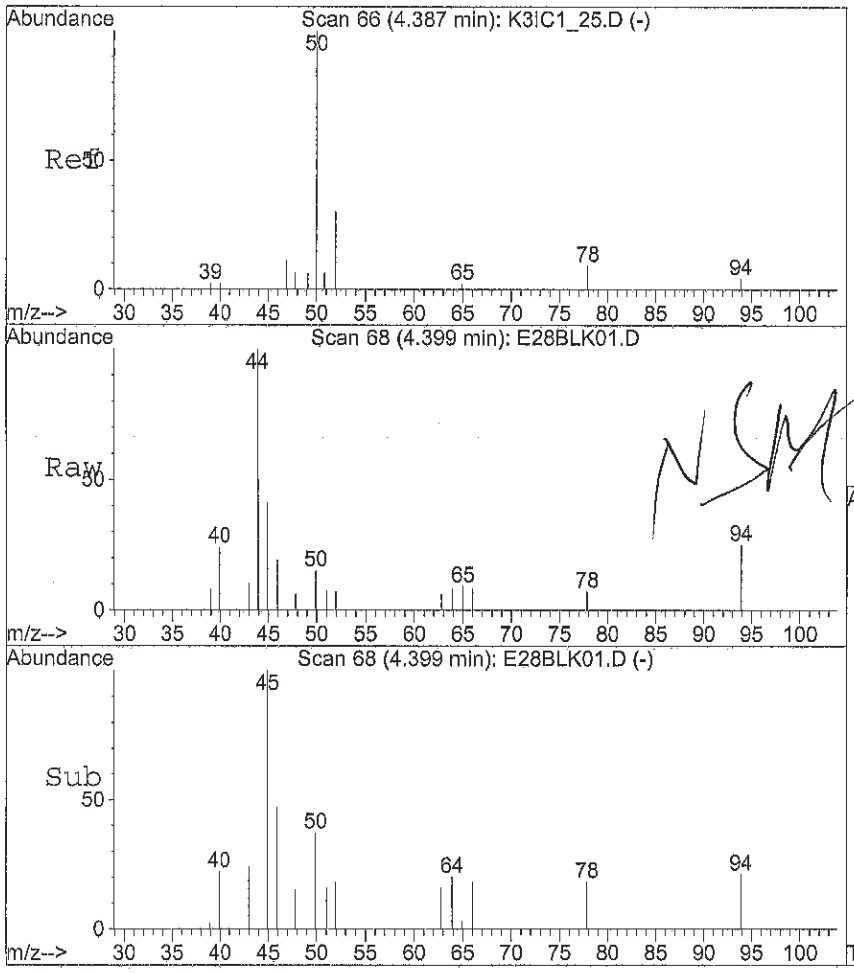
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28BLK01.D Vial: 11
Acq On : 28 May 2014 7:43 am Operator: DN
Sample : 34E2801-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 8:13 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

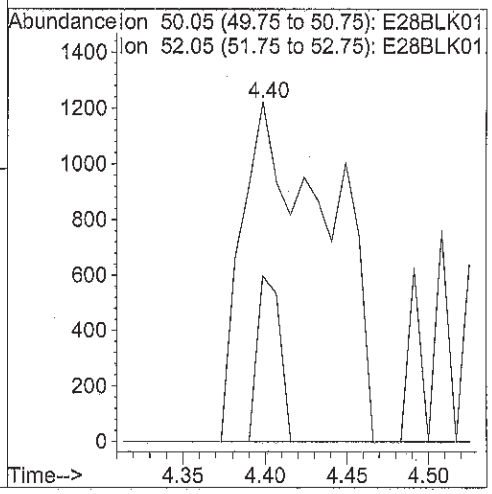


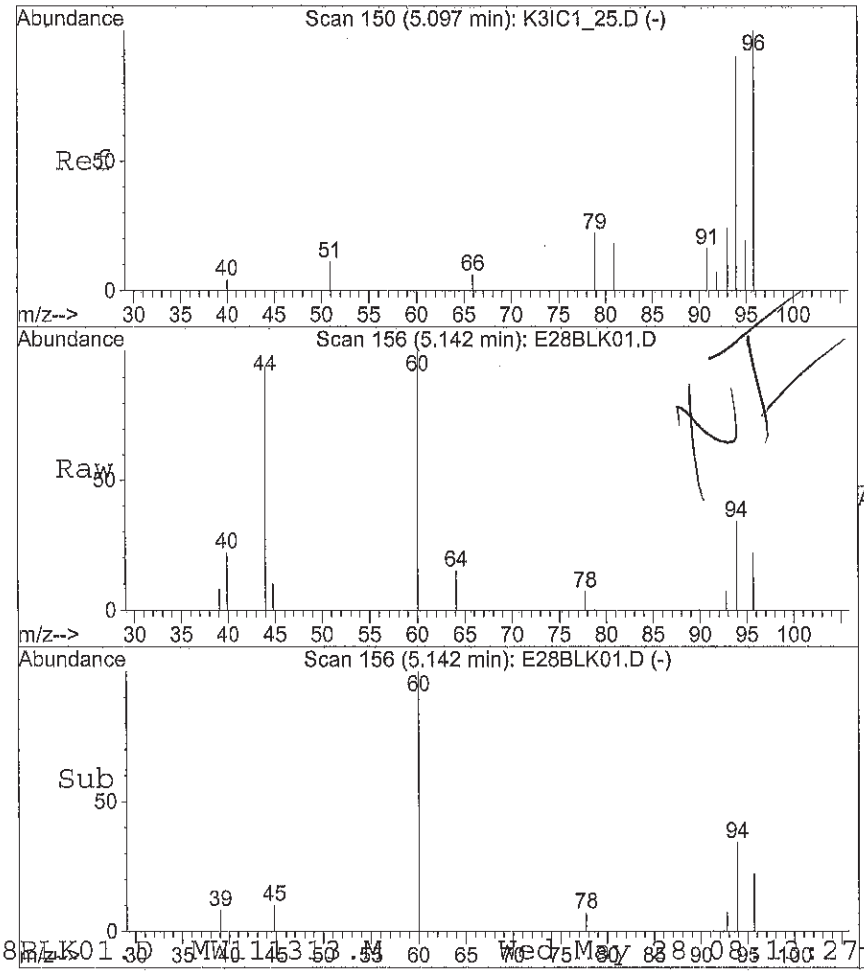


#4
Chloromethane
Concen: 0.19 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 50 Resp: 4477

Ion	Ratio	Lower	Upper
50	100		
52	12.8	26.9	40.3#

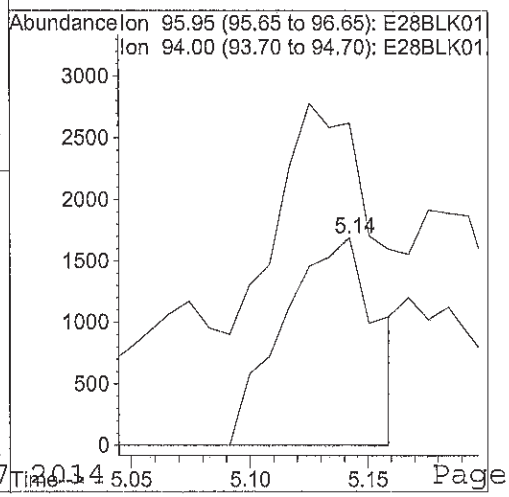


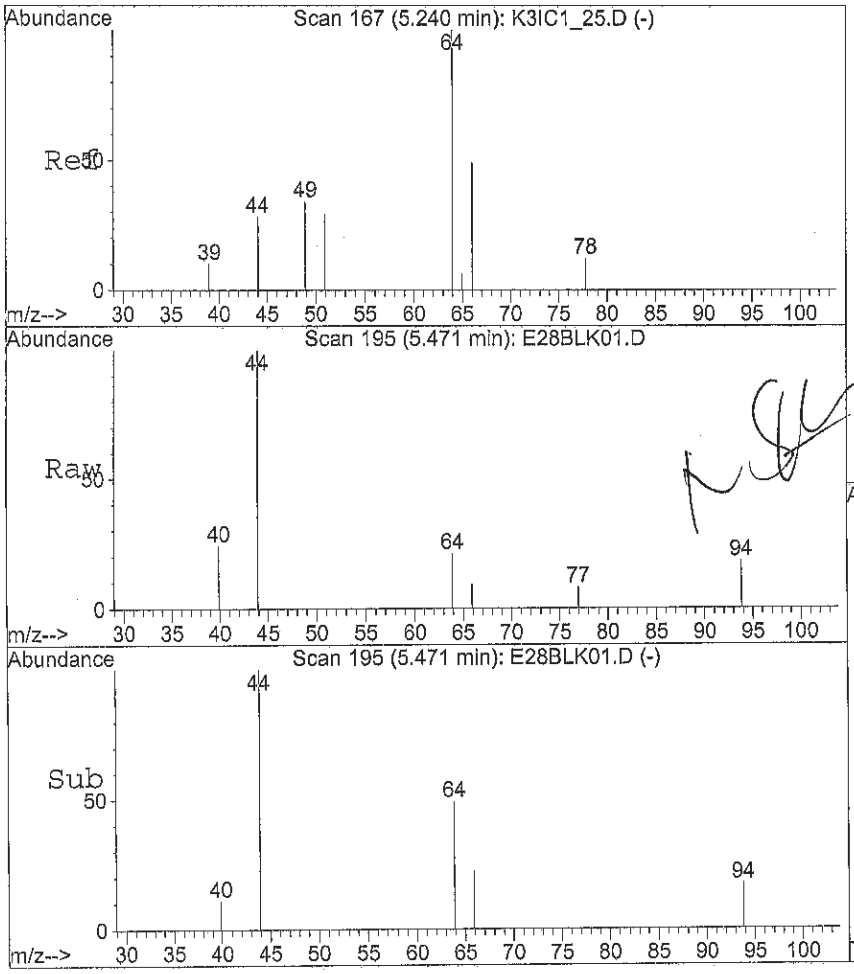


#6
Bromomethane
Concen: 0.45 ug/L
RT: 5.14 min Scan# 156
Delta R.T. 0.05 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 96 Resp: 4630

Ion	Ratio	Lower	Upper
96	100		
94	115.0	101.0	151.4

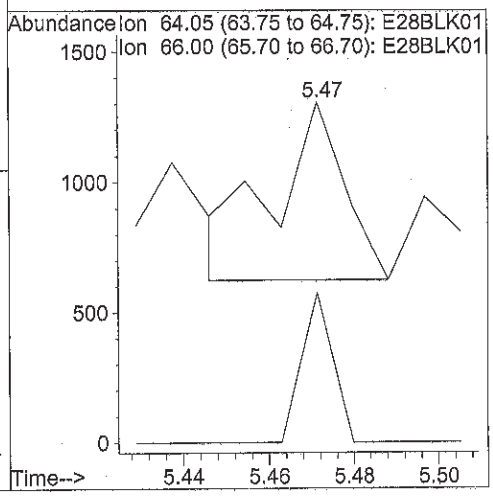


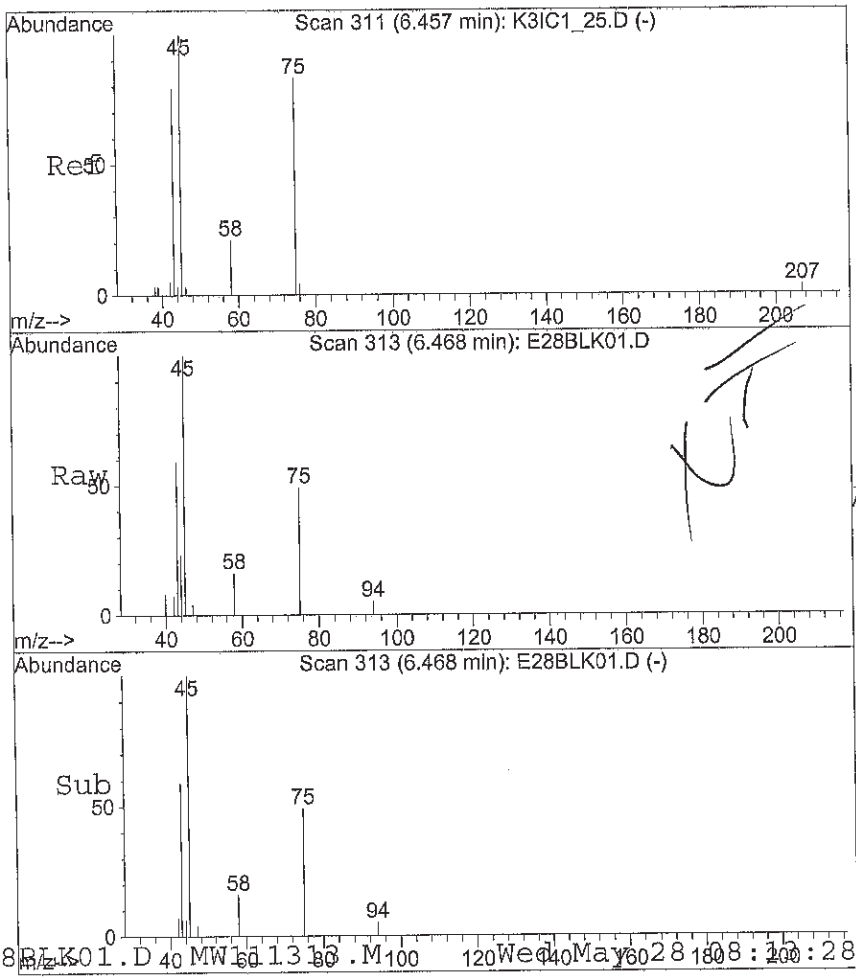


#7
Chloroethane
Concen: 1.18 ug/L
RT: 5.47 min Scan# 195
Delta R.T. 0.23 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 64 Resp: 779

Ion	Ratio	Lower	Upper
64	100		
66	37.4	35.4	53.0

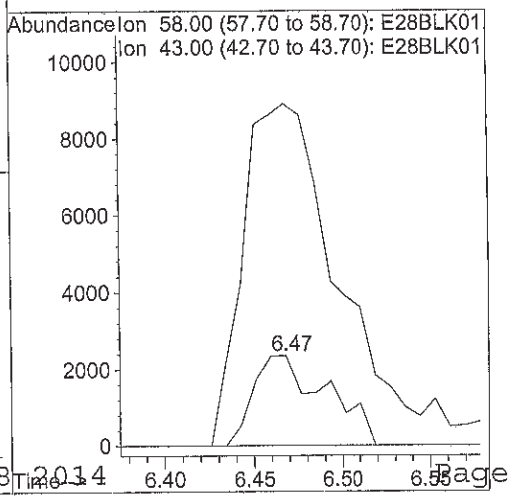


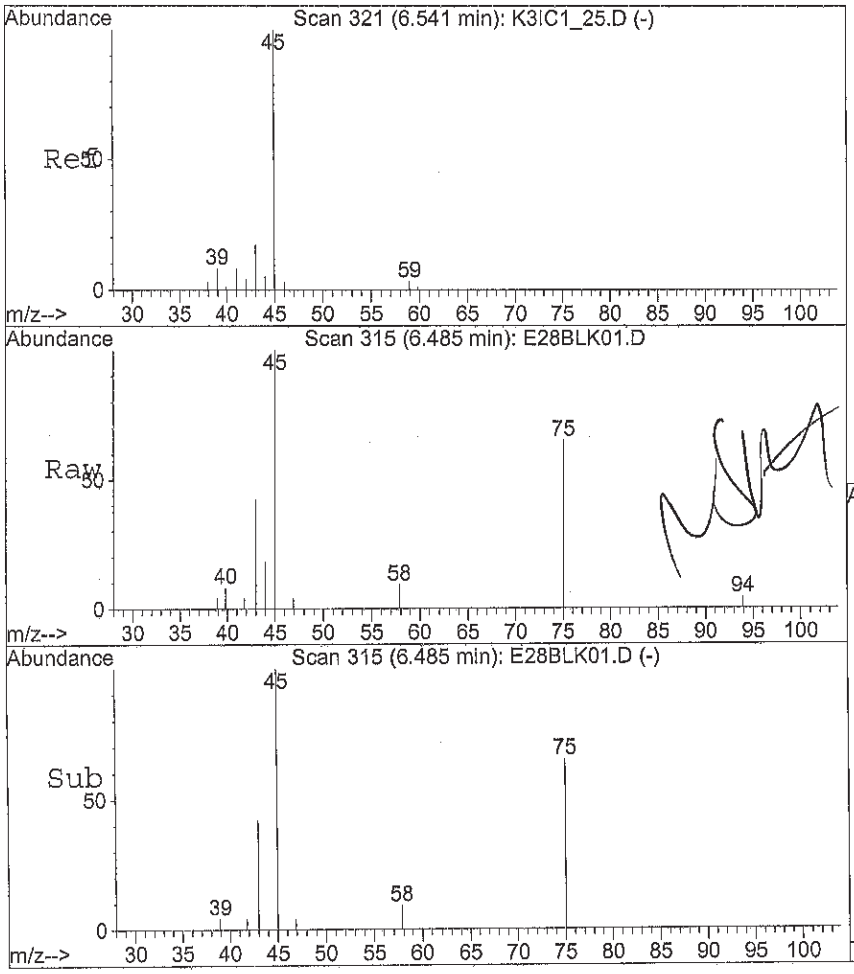


#11
Acetone
Concen: 4.29 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 58 Resp: 6791

Ion	Ratio	Lower	Upper
58	100		
43	504.8	360.9	541.3

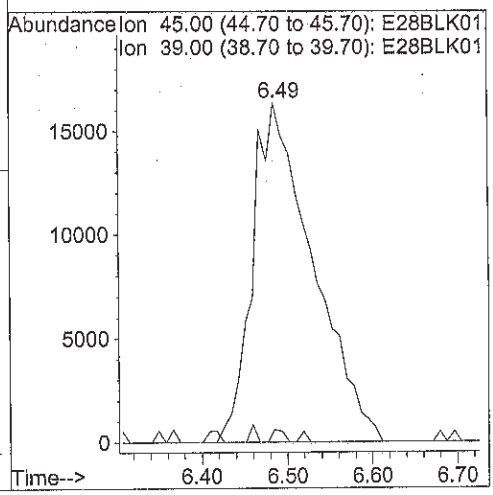


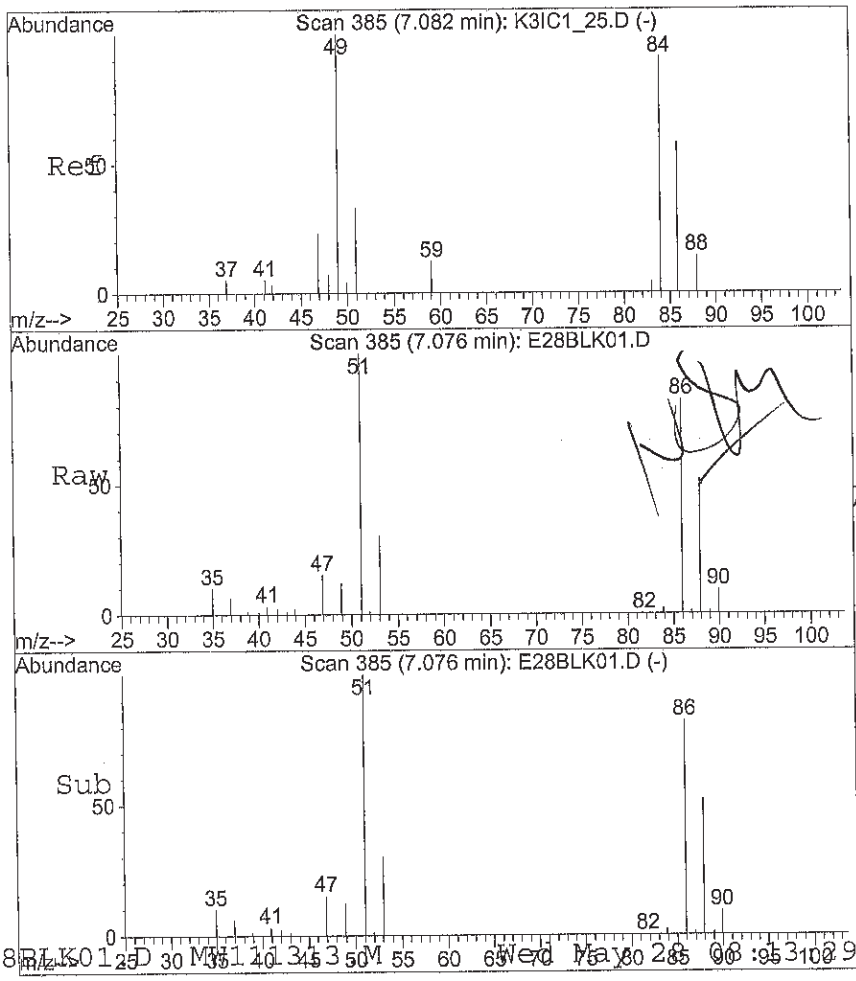


#12
(IPA) Leak Check Compound
Concen: 352.02 ug/L
RT: 6.49 min Scan# 315
Delta R.T. -0.06 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 45 Resp: 79782

Ion	Ratio	Lower	Upper
45	100		
39	0.7	4.9	7.3#

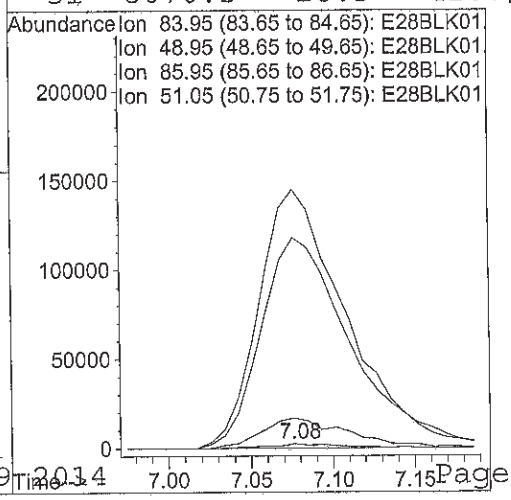


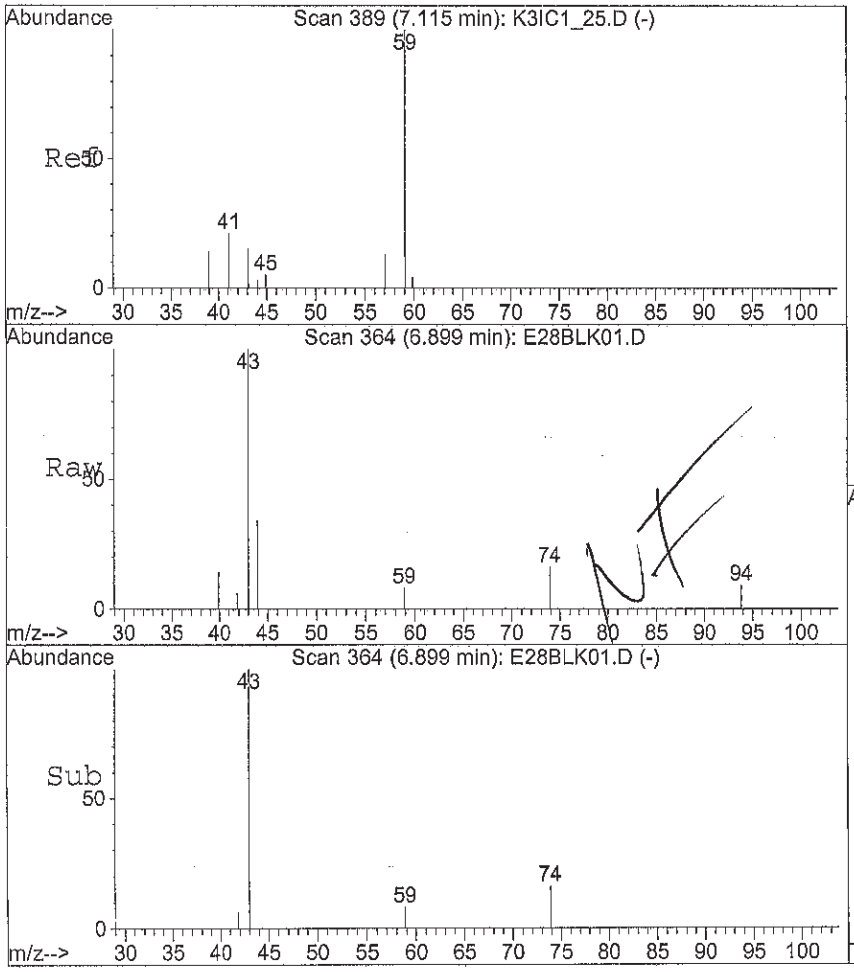


#14
Methylene Chloride
Concen: 1.30 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 84 Resp: 6757

Ion	Ratio	Lower	Upper
84	100		
49	895.4	89.8	134.6#
86	6642.1	51.1	76.7#
51	8070.3	28.5	42.7#

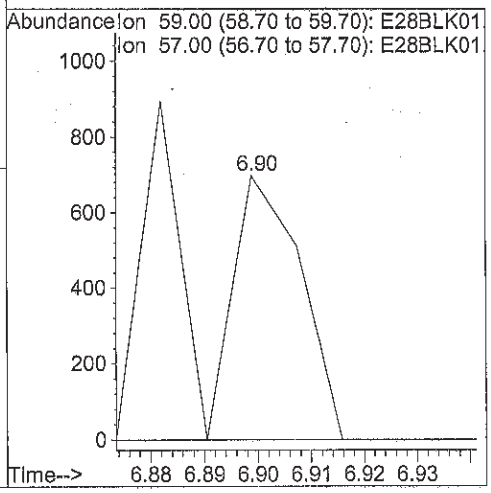


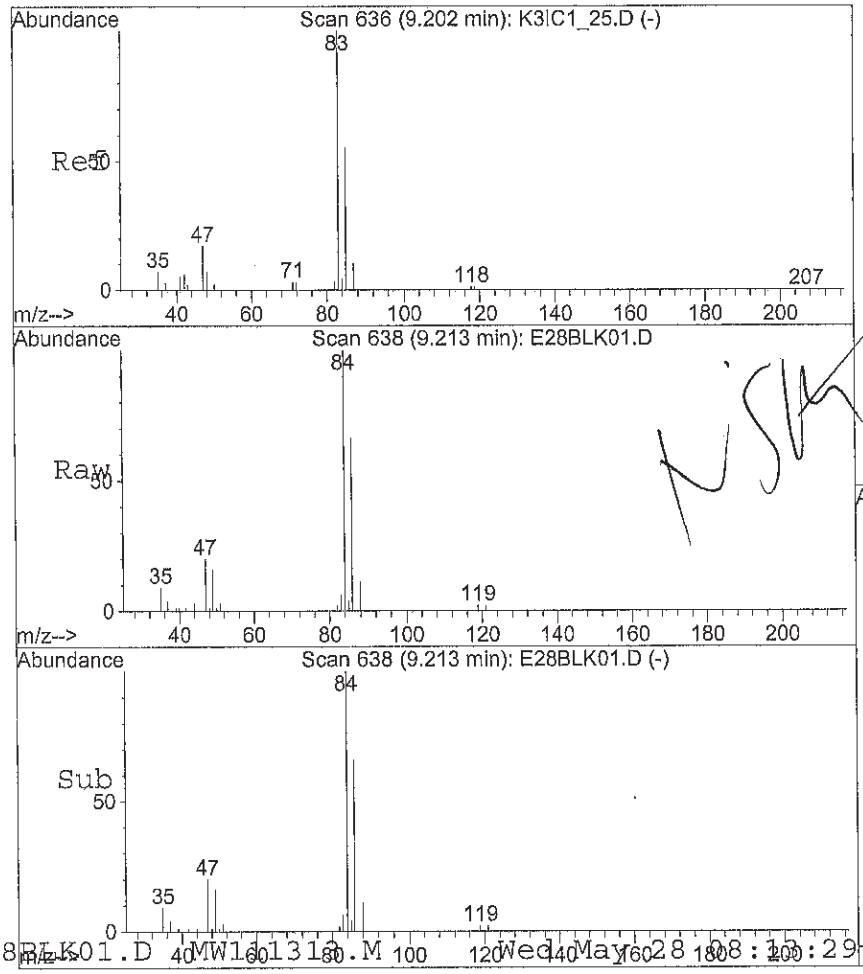


#15
(TBA) tert-Butanol
Concen: 1.91 ug/L
RT: 6.90 min Scan# 364
Delta R.T. -0.22 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 59 Resp: 613

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

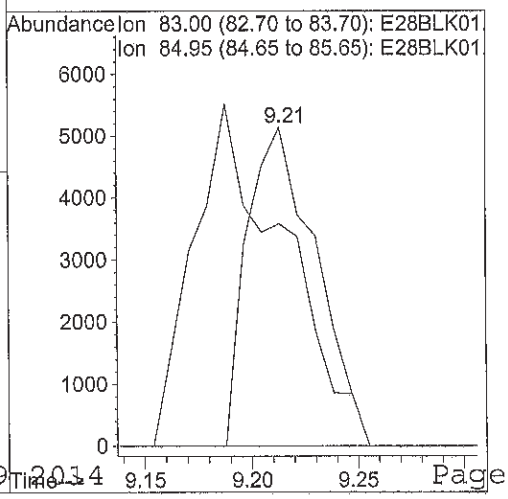


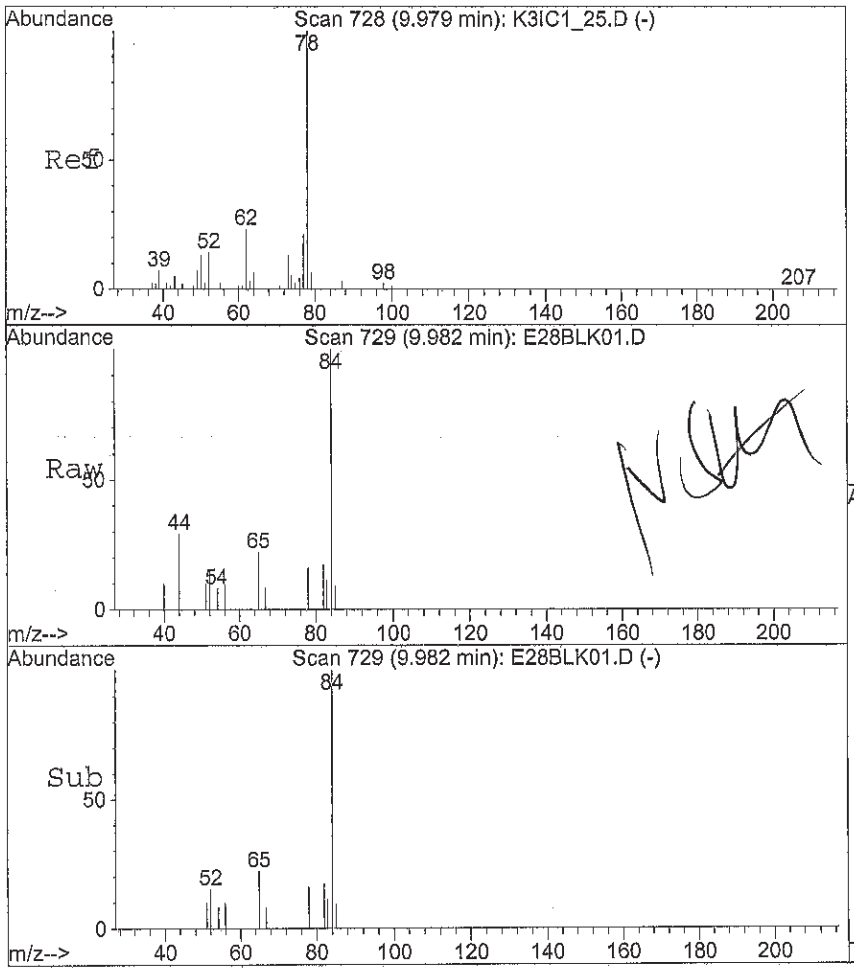


#24
Chloroform
Concen: 1.16 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 83 Resp: 11505

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

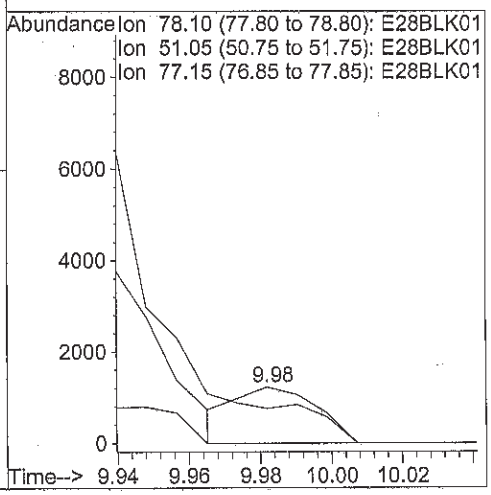


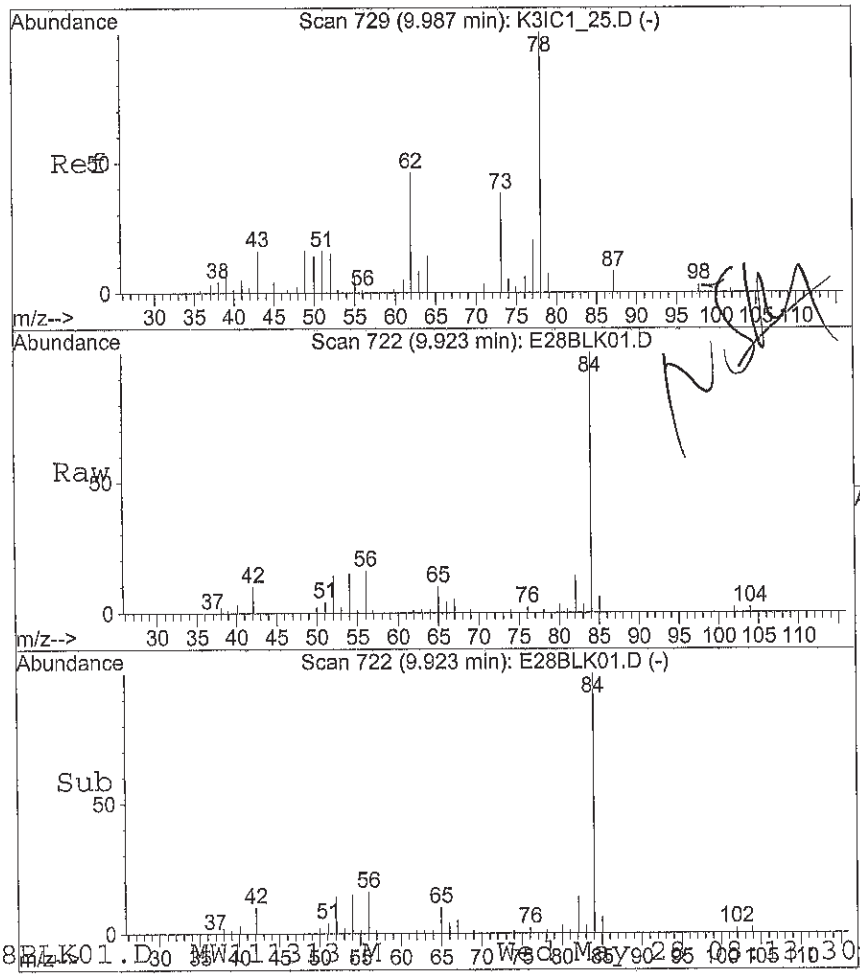


#31
Benzene
Concen: 0.11 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 78 Resp: 1971

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

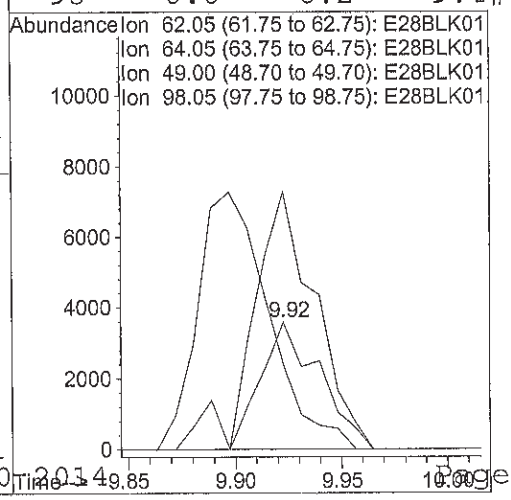


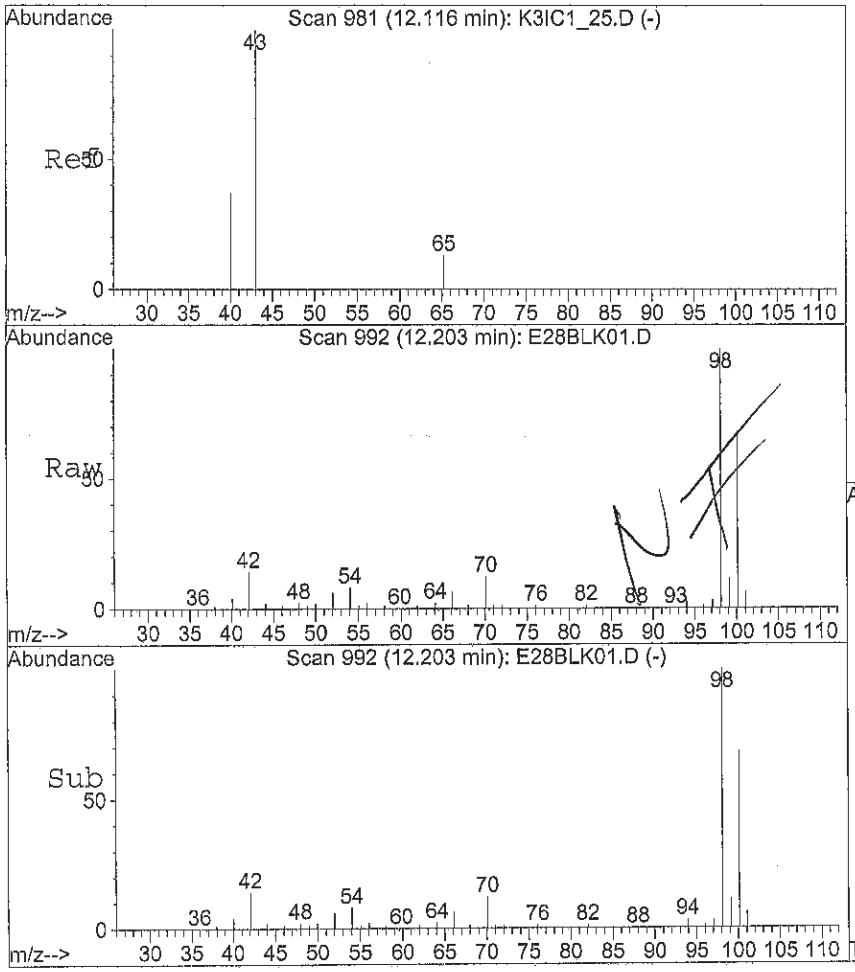


#32
1,2-Dichloroethane
Concen: 1.10 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 62 Resp: 6880

Ion	Ratio	Lower	Upper
62	100		
64	216.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

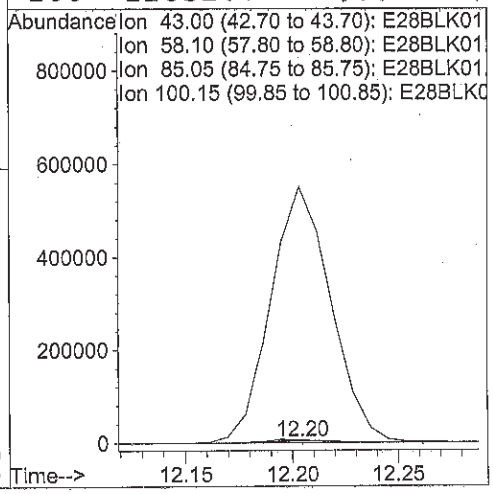


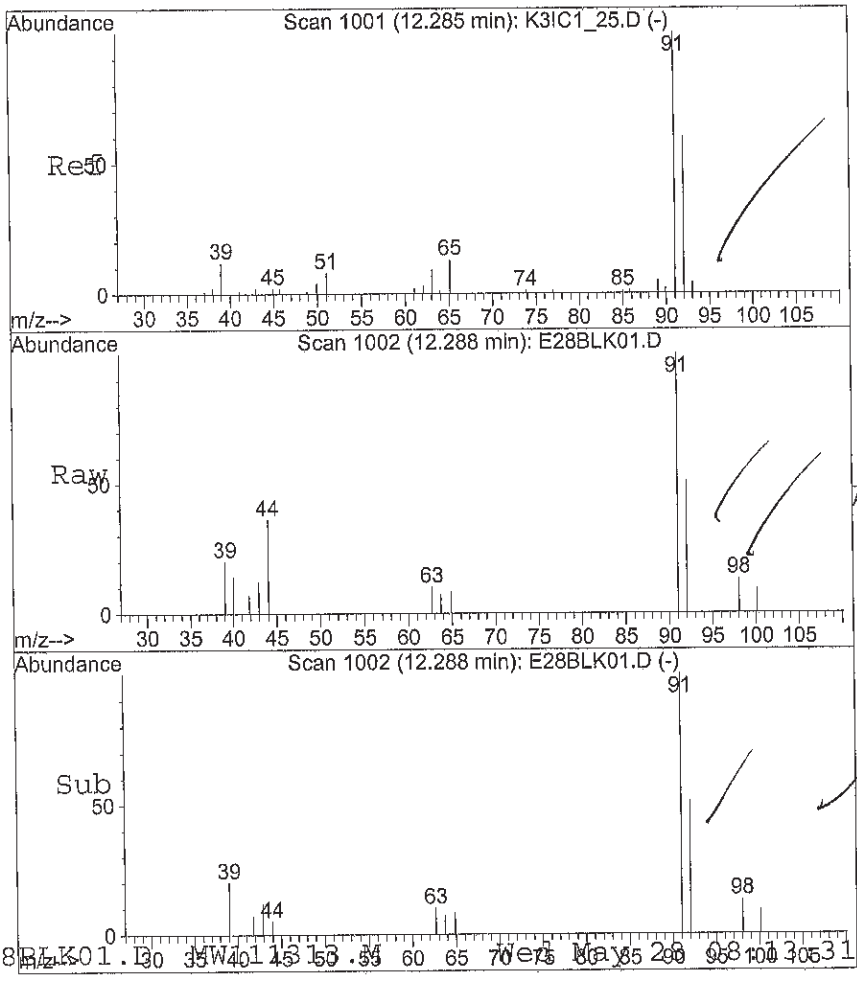


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.99 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 43 Resp: 8470

Ion	Ratio	Lower	Upper
43	100		
58	154.5	0.0	0.0#
85	0.0	0.0	0.0
100	12852.7	0.0	0.0#

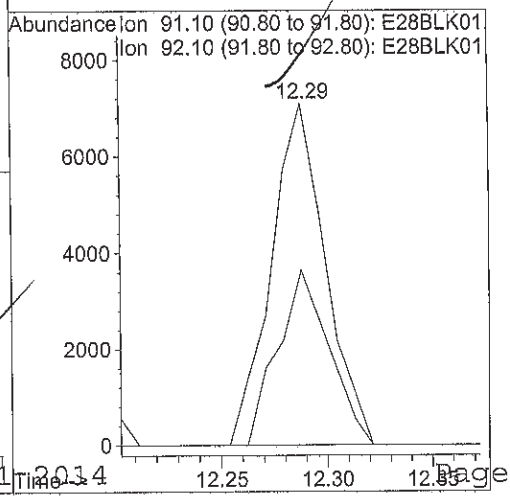


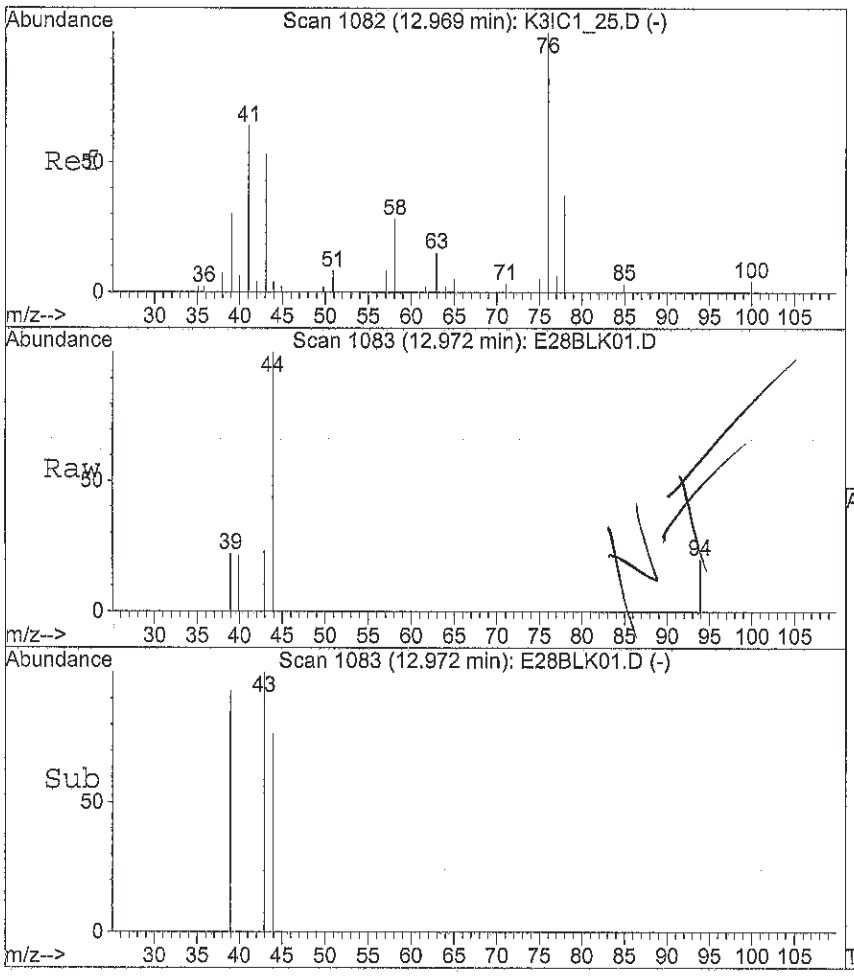


#41
Toluene
Concen: 0.65 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 91 Resp: 12619

Ion	Ratio	Lower	Upper
91	100		
92	48.7	47.4	71.0

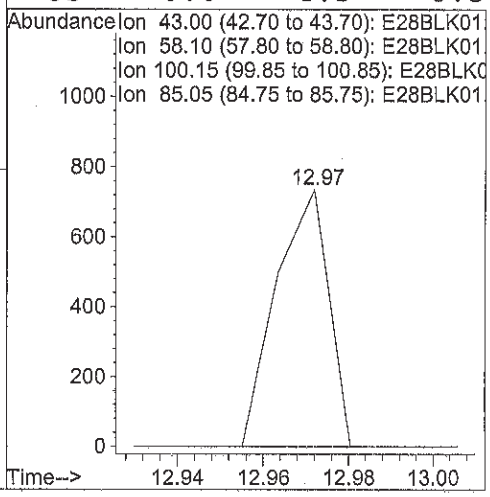


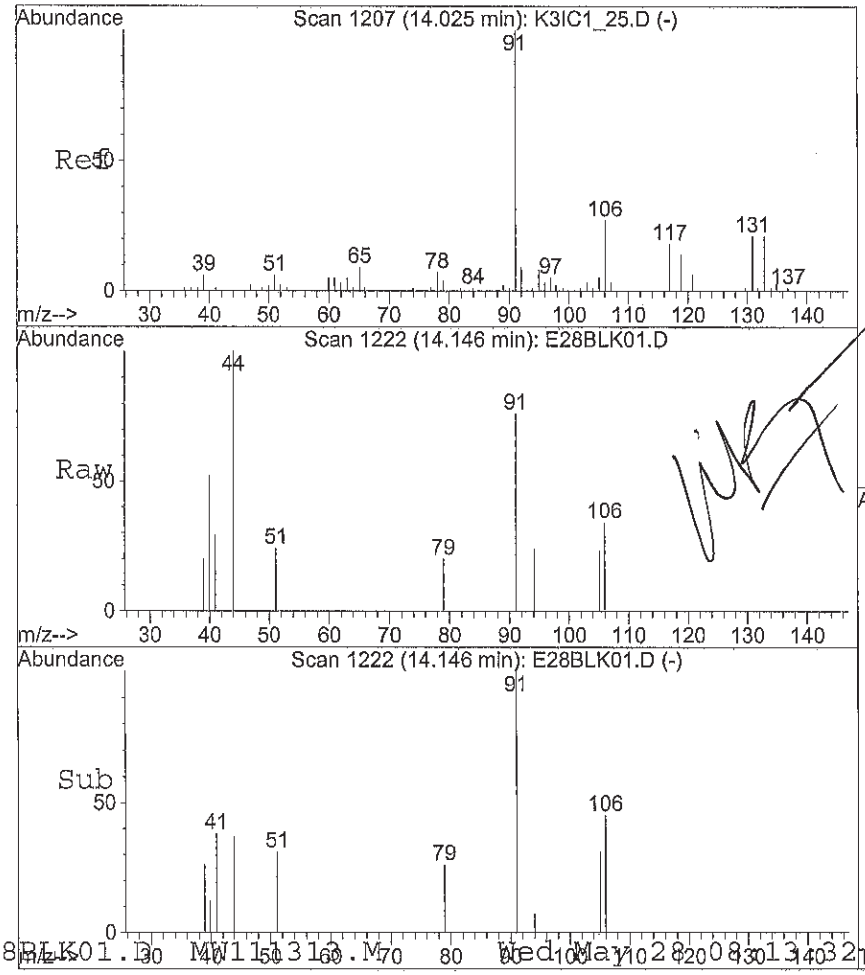


#46
2-Hexanone
Concen: 0.20 ug/L
RT: 12.97 min Scan# 1083
Delta R.T. 0.00 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 43 Resp: 627

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

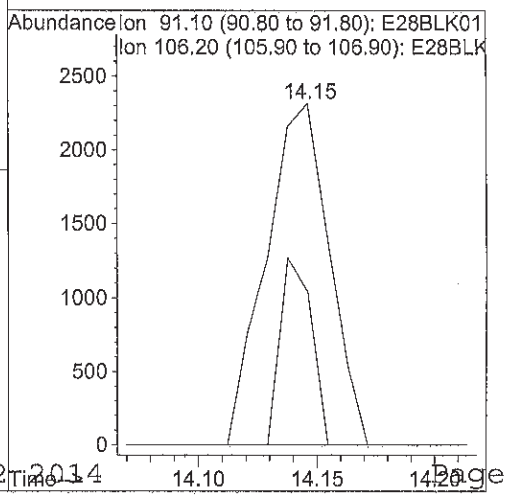


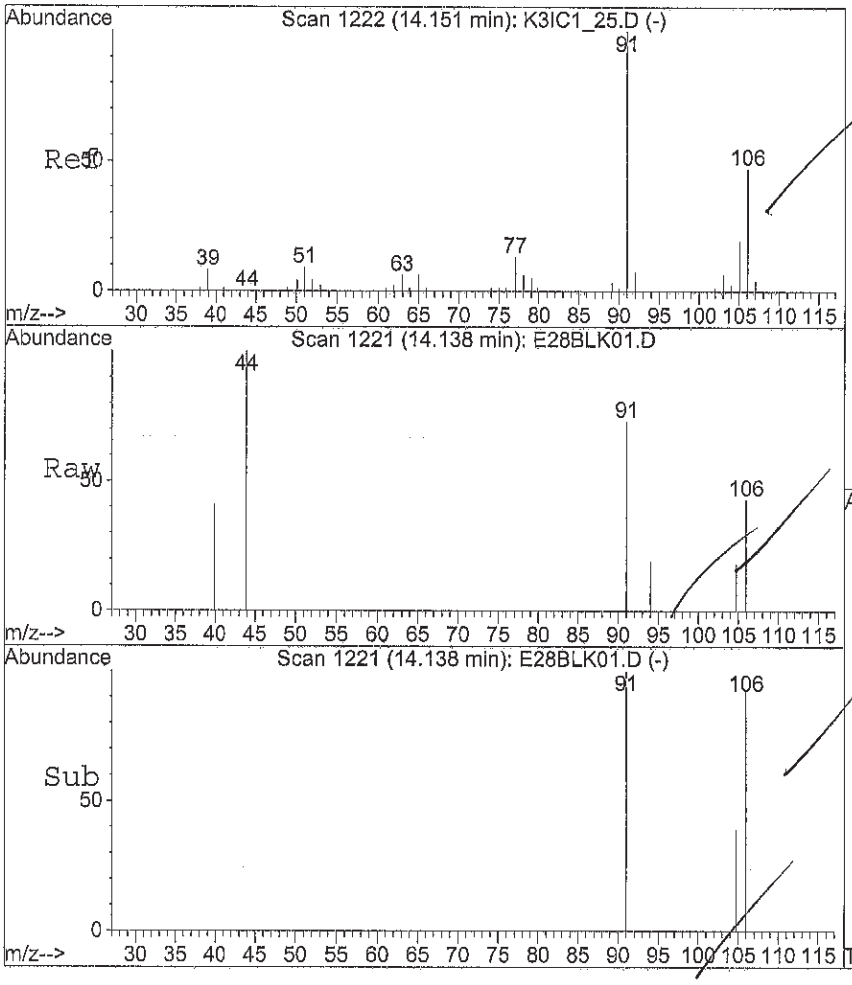


#51
Ethylbenzene
Concen: 0.19 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. 0.12 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 91 Resp: 4274

Ion	Ratio	Lower	Upper
91	100		
106	27.4	23.5	35.3

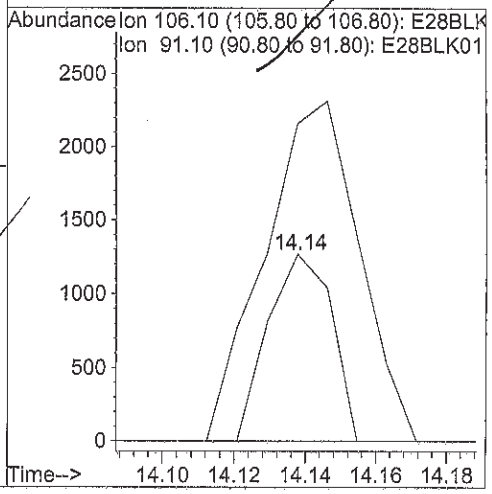


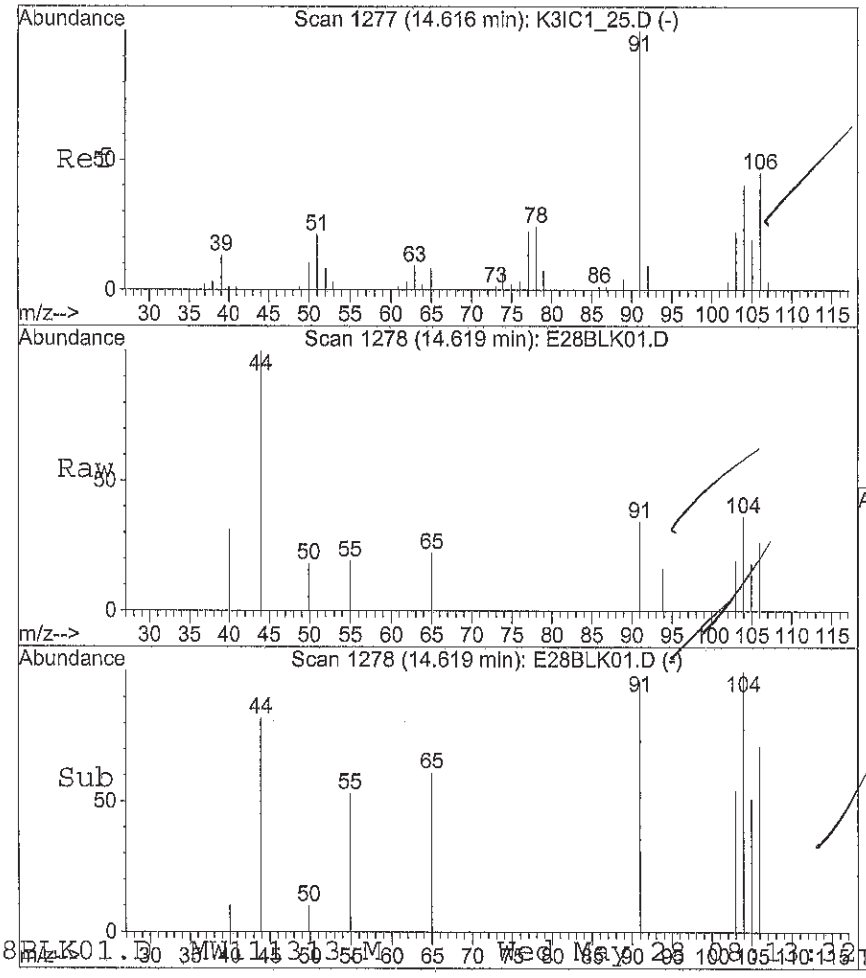


#52
m,p-Xylenes
Concen: 0.20 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:106 Resp: 1580

Ion	Ratio	Lower	Upper
106	100		
91	270.5	177.1	265.7#

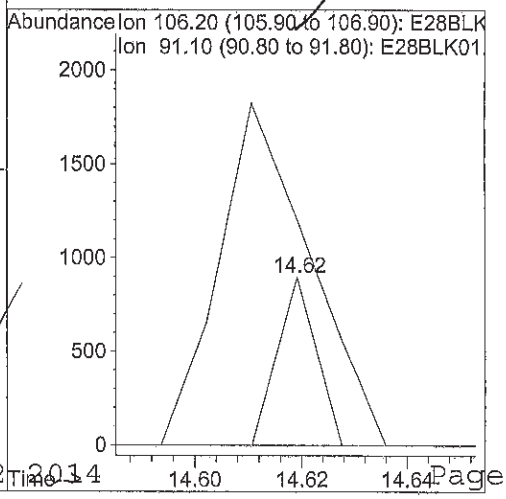


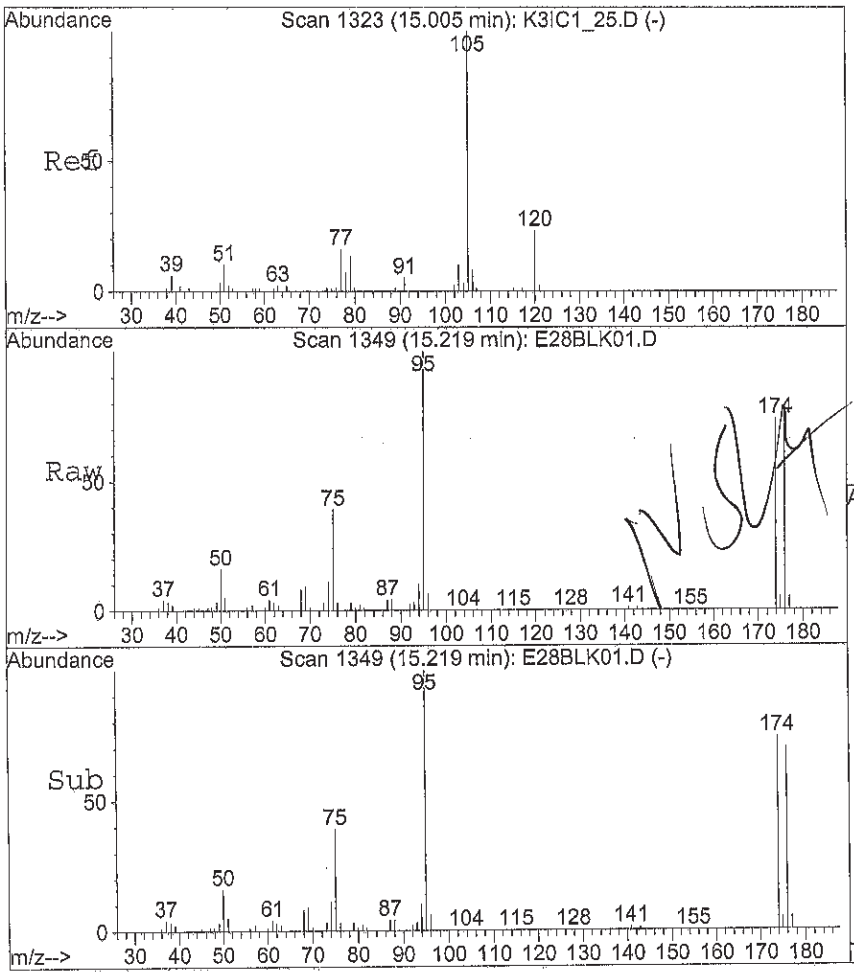


#53
o-Xylene
Concen: 0.06 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:106 Resp: 455

Ion	Ratio	Lower	Upper
106	100		
91	473.2	179.0	268.6#

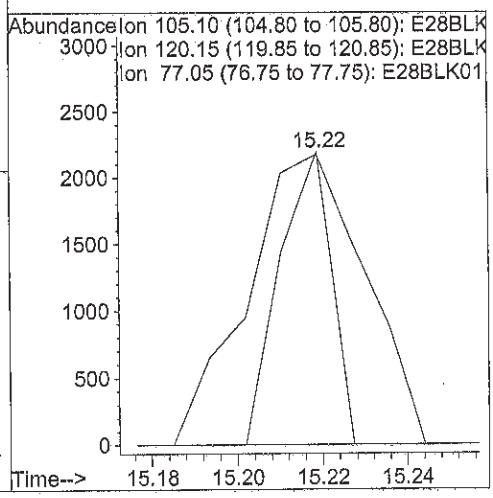


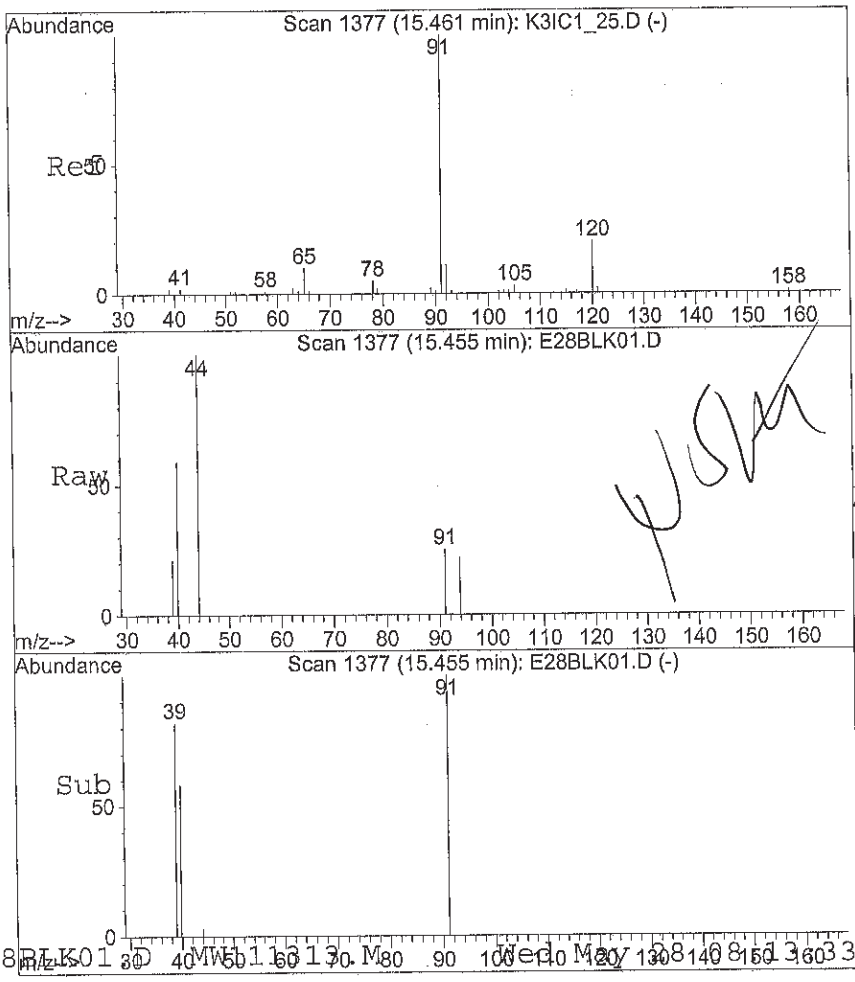


#56
Isopropylbenzene
Concen: 0.09 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:105 Resp: 1840

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	224.8	13.1	19.7#

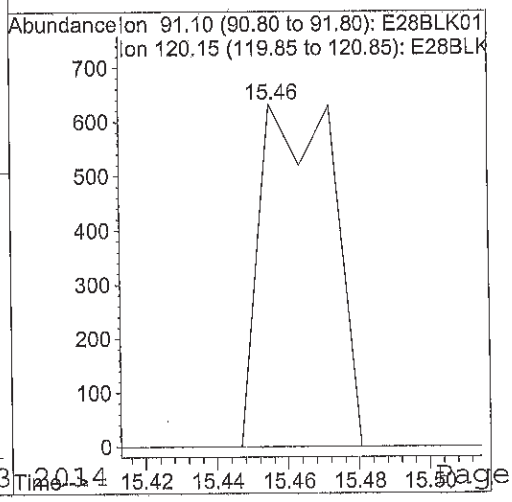


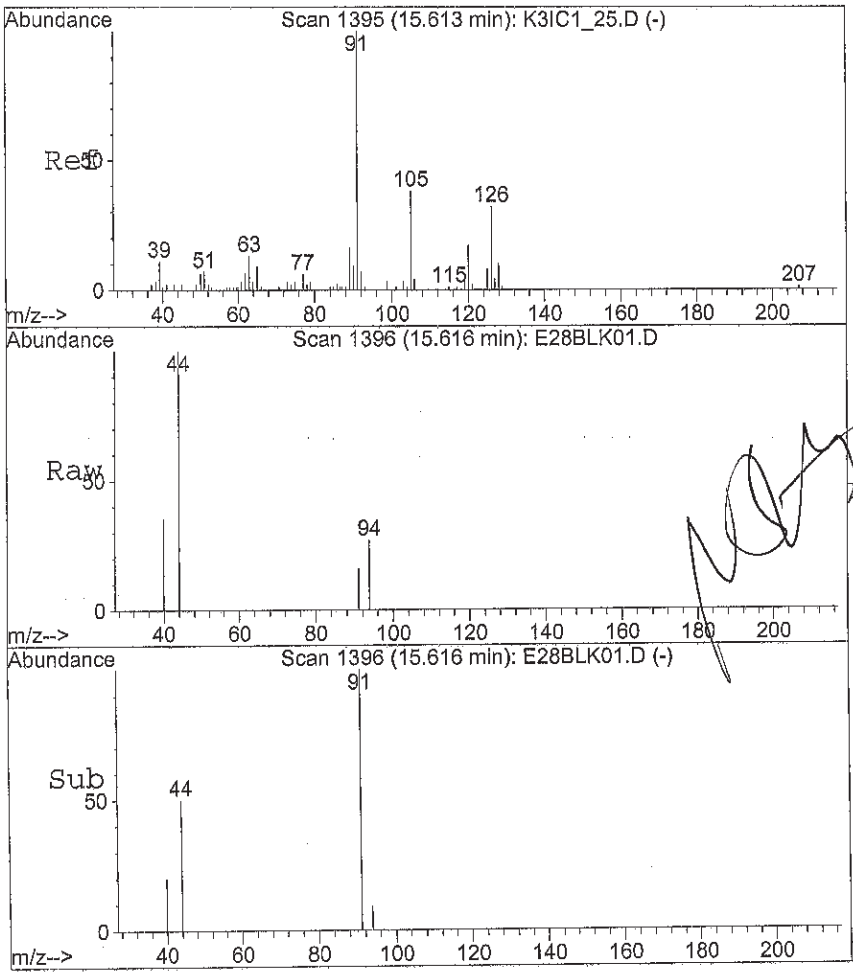


#62
n-Propylbenzene
Concen: 0.03 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 91 Resp: 902

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

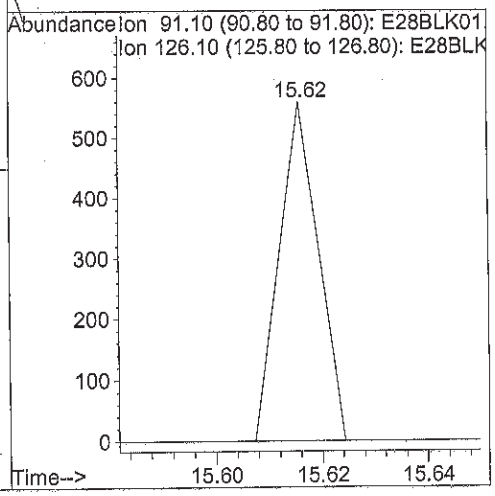


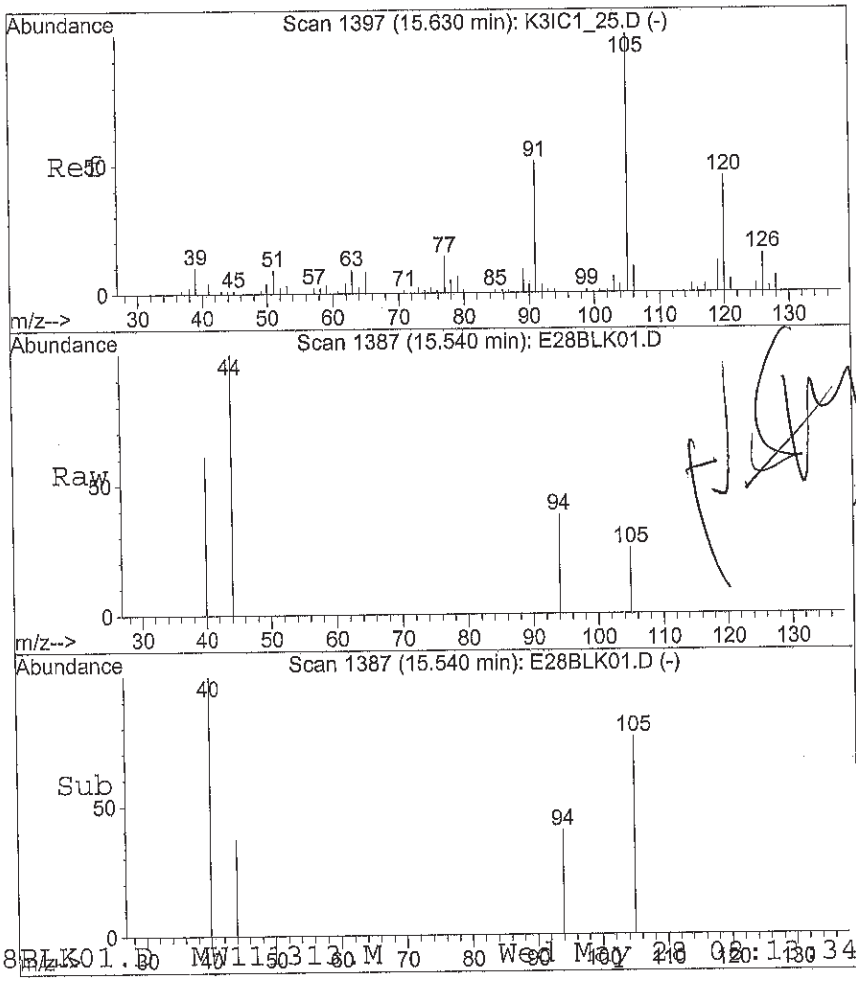


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. 0.00 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 91 Resp: 283

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

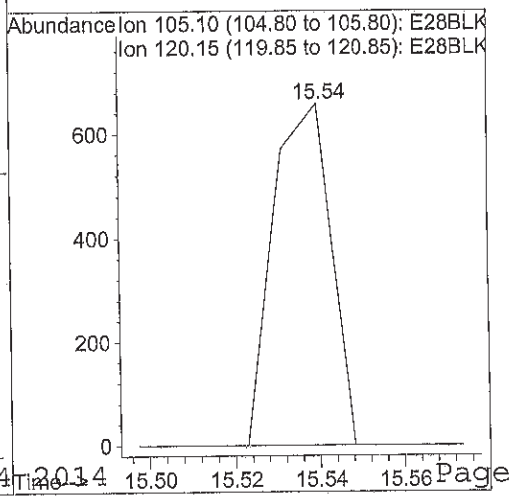


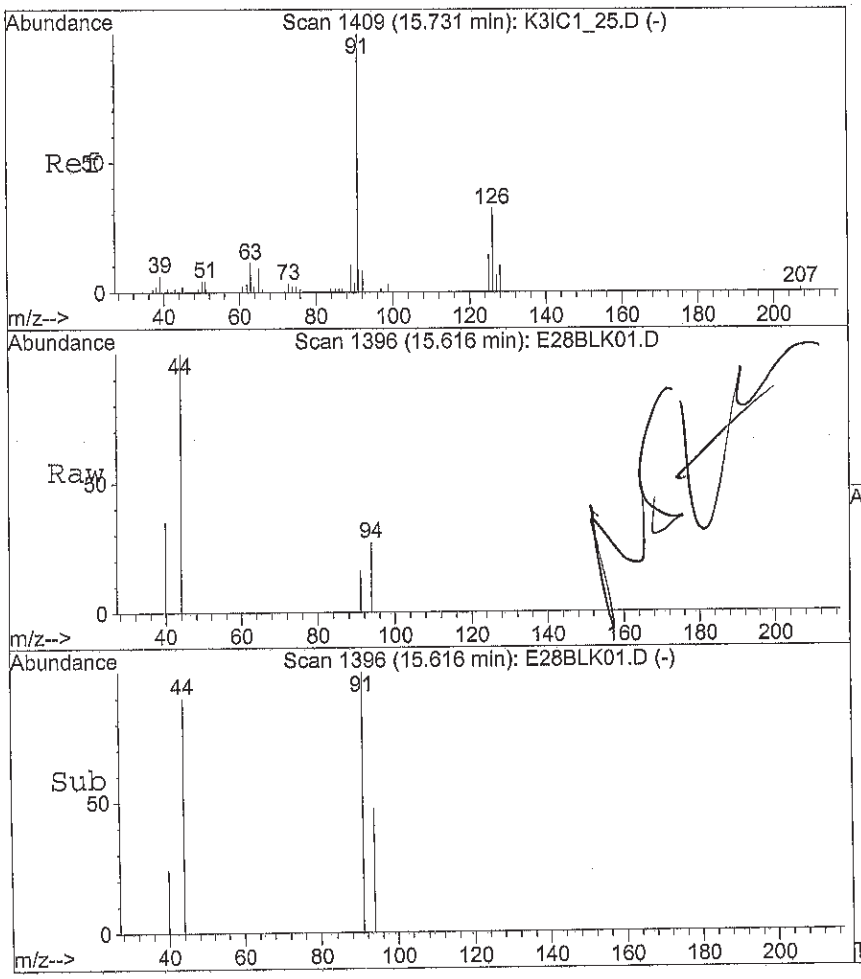


#64
1,3,5-Trimethylbenzene
Concen: 0.03 ug/L
RT: 15.54 min Scan# 1387
Delta R.T. -0.09 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:105 Resp: 623

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

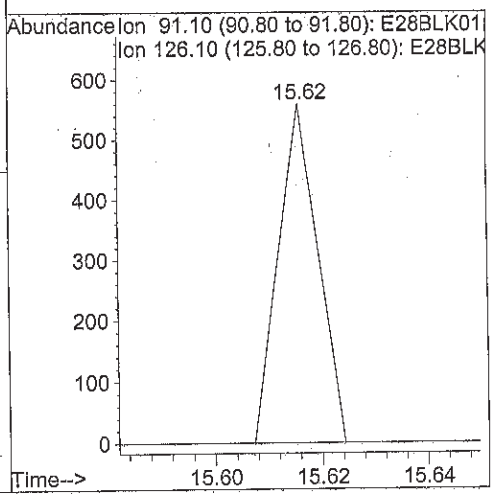


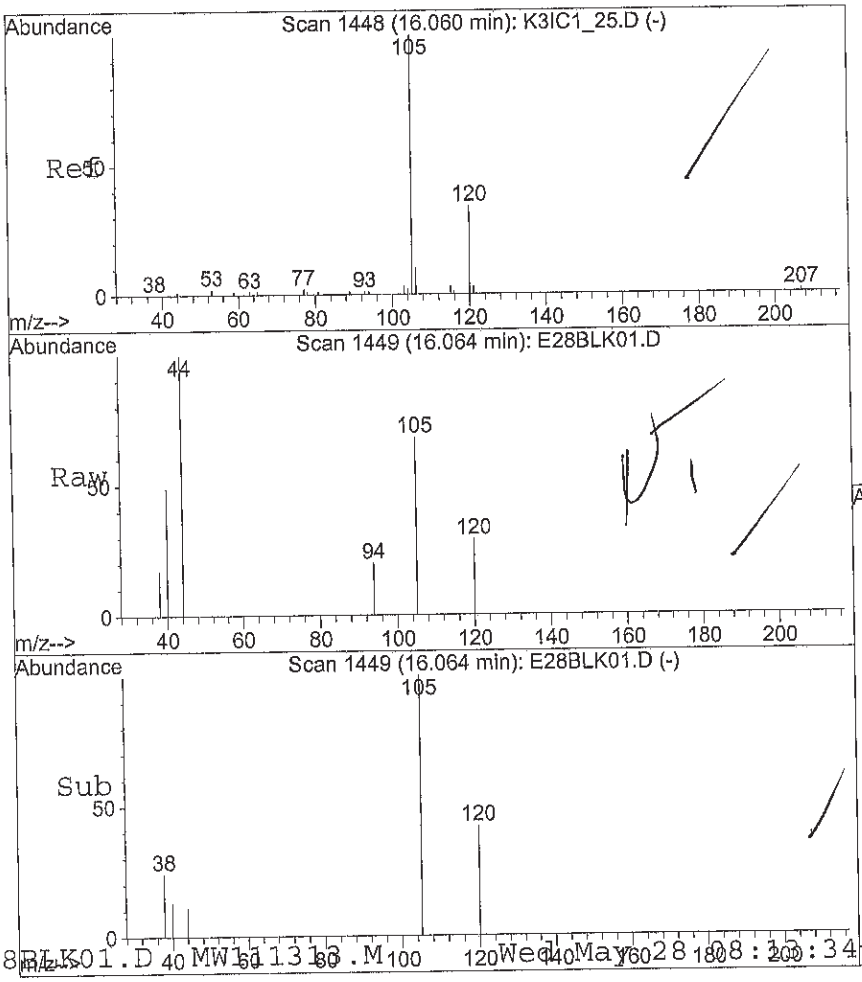


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.12 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion: 91 Resp: 283

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

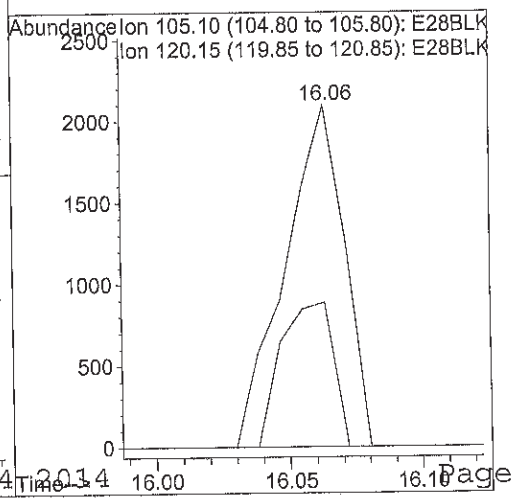


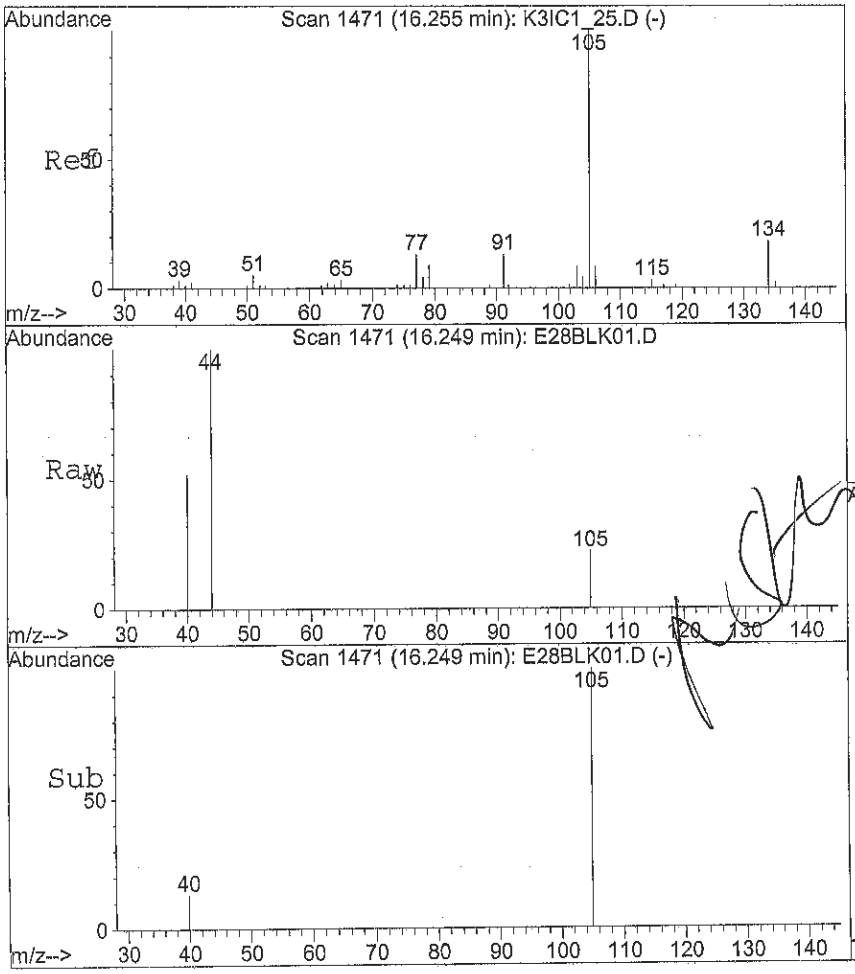


#67
1,2,4-Trimethylbenzene
Concen: 0.17 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:105 Resp: 3223

Ion	Ratio	Lower	Upper
105	100		
120	37.4	33.8	50.8

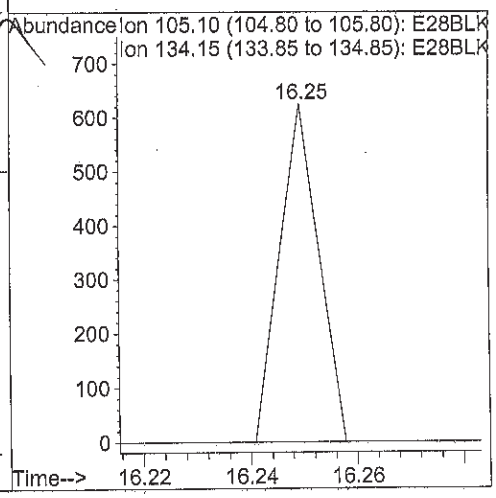


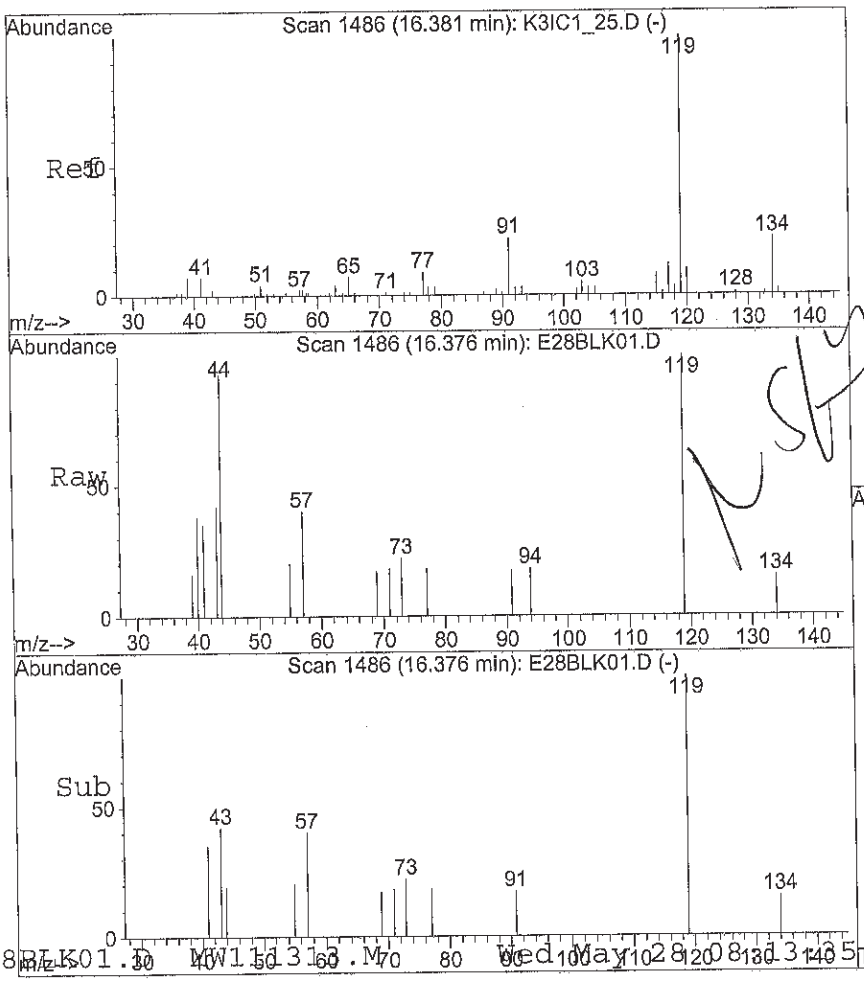


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.25 min Scan# 1471
Delta R.T. -0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:105 Resp: 317

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

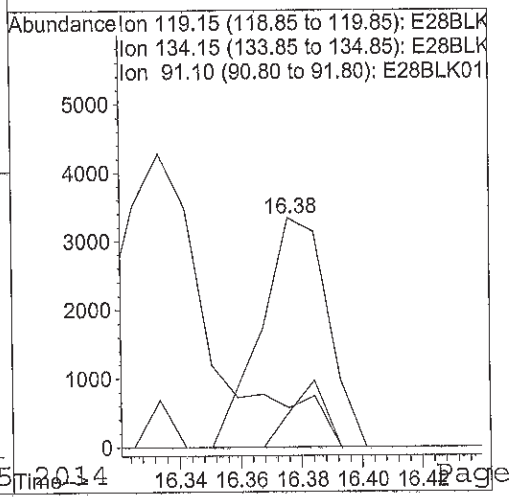


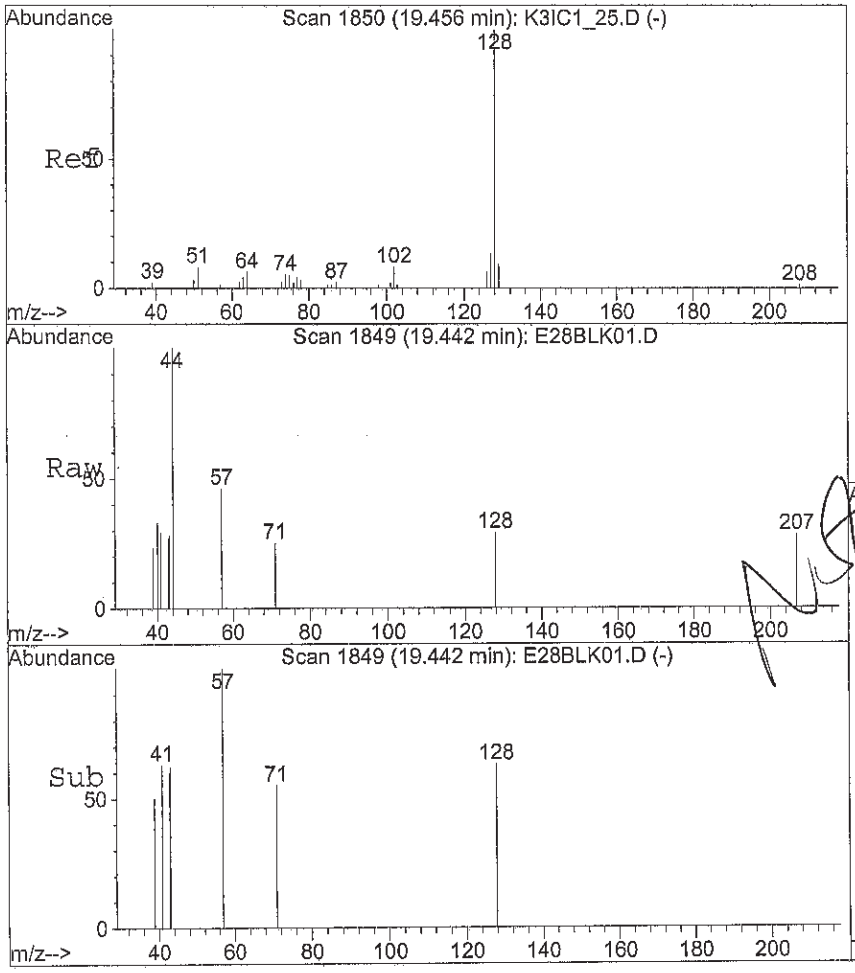


#69
p-Isopropyltoluene
Concen: 0.26 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:119 Resp: 5081

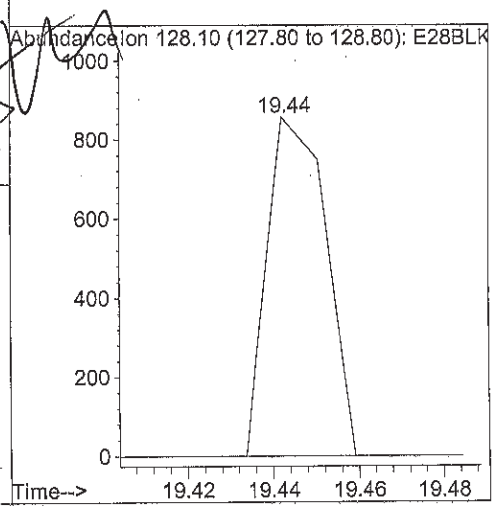
Ion	Ratio	Lower	Upper
119	100		
134	14.6	17.4	26.2#
91	0.0	19.6	29.4#





#77
Naphthalene
Concen: 0.06 ug/L
RT: 19.44 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E28BLK01.D
Acq: 28 May 2014 7:43 am

Tgt Ion:128 Resp: 813



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28BLK01.D Vial: 11
Acq On : 28 May 2014 7:43 am Operator: DN
Sample : 34E2801-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 8:14 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1886088	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1419861	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	727836	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	523637	10.68 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 85.44%		
3) Chloroform-d (SU6)	9.19	84	774698	11.01 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.08%		
4) Methylene Chloride-d2 (SU5	7.08	86	448808	10.91 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.28%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	519676	15.50 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 124.00%		
6) Benzene-d6 (SU7)	9.93	84	1546292	10.45 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 83.60%		
8) Toluene-d8 (SU3)	12.20	98	1619271	12.02 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.16%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	780429	14.03 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 112.24%		

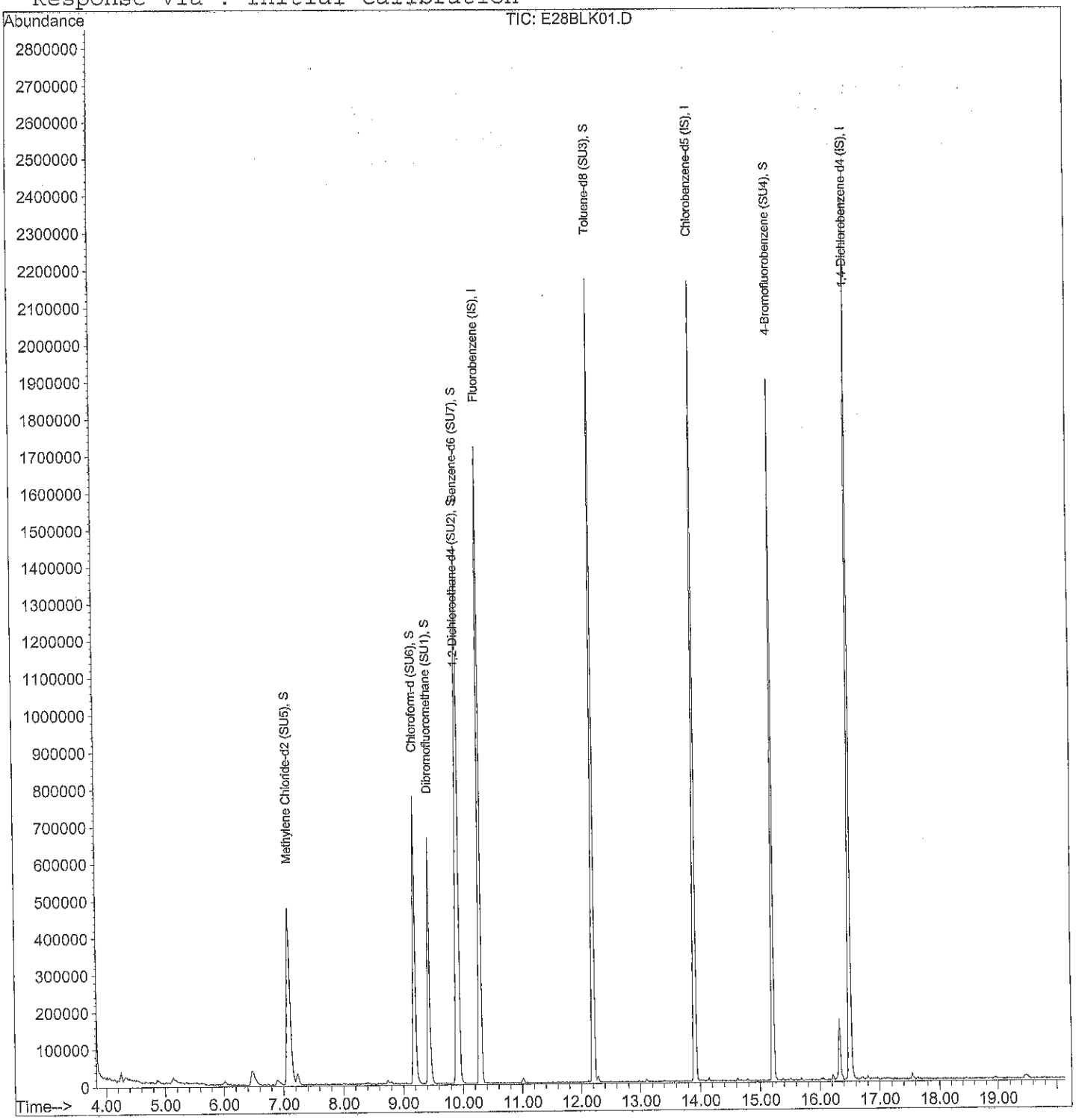
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28BLK01.D Vial: 11
Acq On : 28 May 2014 7:43 am Operator: DN
Sample : 34E2801-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 8:14 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR ANALYZED SAMPLES INCLUDING CHROMATOGRAMS, QUANTITATION REPORTS AND SPECTRA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800001.D Vial: 11
Acq On : 28 May 2014 8:13 am Operator: DN
Sample : 3E42801-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:13 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AE

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1767160	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1332651	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	691087	12.50	ug/L	0.00
System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	484006	10.98	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 87.84%						
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	470035	11.22	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 89.76%						
39) Toluene-d8 (SU3)	12.21	98	1528587	12.30	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 98.40%						
58) 4-Bromofluorobenzene (SU4)	15.22	95	724152	13.29	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 106.32%						

Target Compounds						Qvalue
4) Chloromethane	4.40	50	2886	-0.25	~~ug/L~~ #	60
6) Bromomethane	5.16	96	4146	0.36	~~ug/L~~ #	1
7) Chloroethane	5.25	64	1246	1.53	~~ug/L~~ #	32
11) Acetone	6.47	58	7159	5.54	~~ug/L~~	97
12) (IPA) Leak Check Compound	6.48	45	67832	319.44	~~ug/L~~ #	87
14) Methylene Chloride	7.06	84	5508	1.13	~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.90	59	746	2.48	~~ug/L~~ #	77
24) Chloroform	9.22	83	2878	0.31	~~ug/L~~ #	60
29) 1,1-Dichloropropene	9.93	75	304	0.04	~~ug/L~~ #	1
31) Benzene	9.99	78	706	0.04	~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.93	62	6196	1.05	~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	7862	2.96	~~ug/L~~ #	100
41) Toluene	12.29	91	2749	0.15	ug/L # 0.005	80
46) 2-Hexanone	12.98	43	741	0.25	~~ug/L~~	37
51) Ethylbenzene	14.15	91	1034	0.05	~~ug/L~~	98
52) m,p-Xylenes	14.15	106	314	0.04	ug/L # 0.0002	83
54) Styrene	14.63	104	1249	-0.76	~~ug/L~~ #	43
62) n-Propylbenzene	15.22	91	1869	0.07	~~ug/L~~ #	56
68) sec-Butylbenzene	16.33	105	1441	0.06	~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	764	0.04	~~ug/L~~ #	52
74) 1,2-Dibromo-3-chloropropan	17.77	75	307	1.27	~~ug/L~~ #	6
77) Naphthalene	19.46	128	341	0.02	~~ug/L~~	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800001.D Vial: 11
Acq On : 28 May 2014 8:13 am Operator: DN
Sample : 3E42801-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:13 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

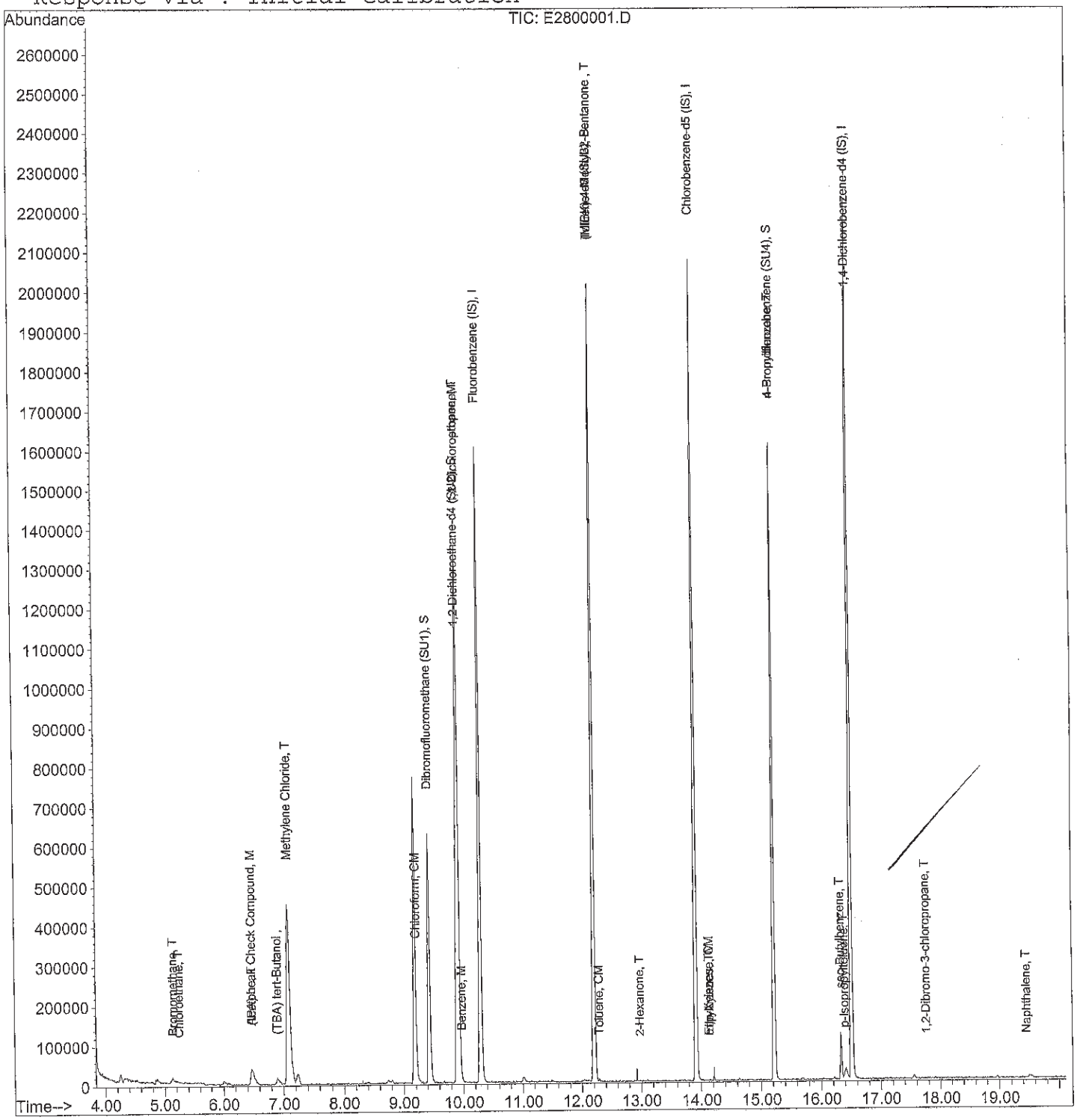
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue

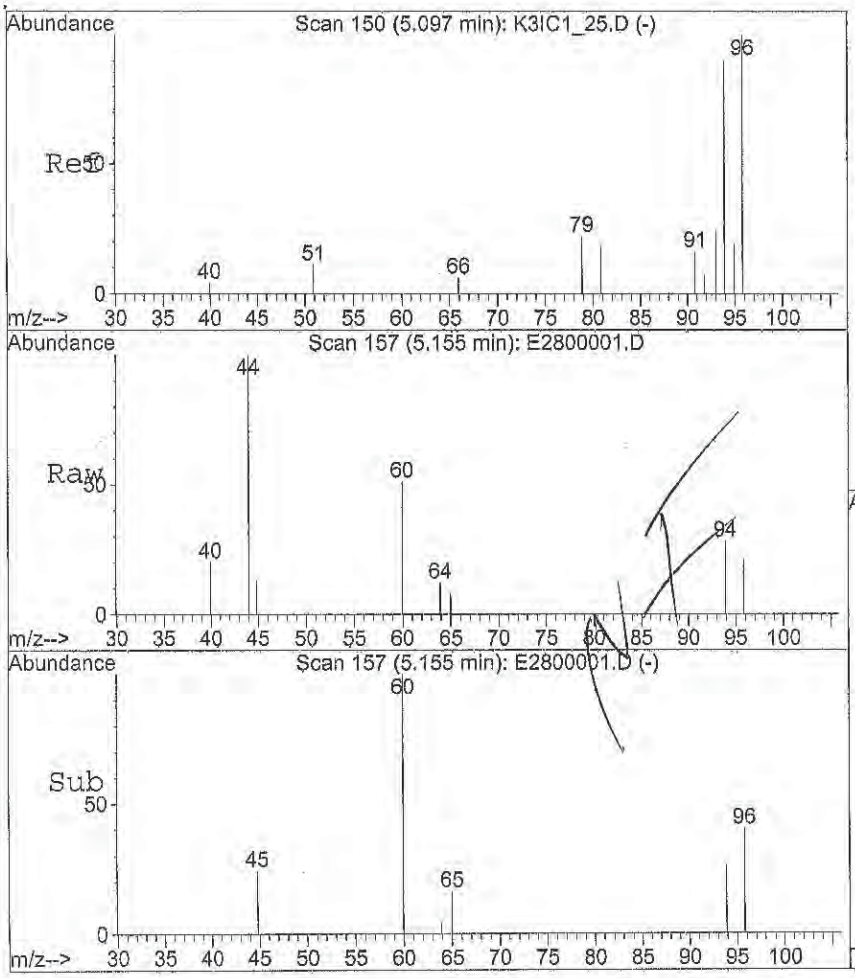
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800001.D Vial: 11
Acq On : 28 May 2014 8:13 am Operator: DN
Sample : 3E42801-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:13 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

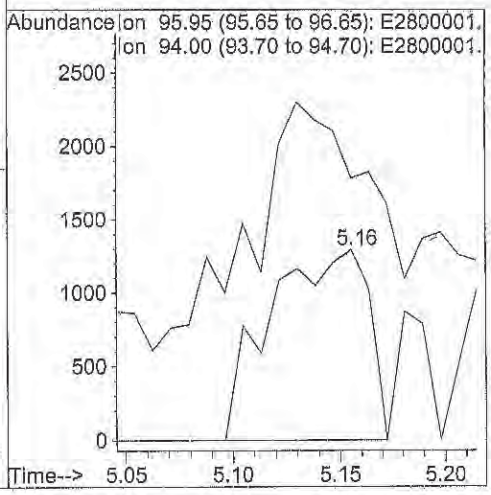


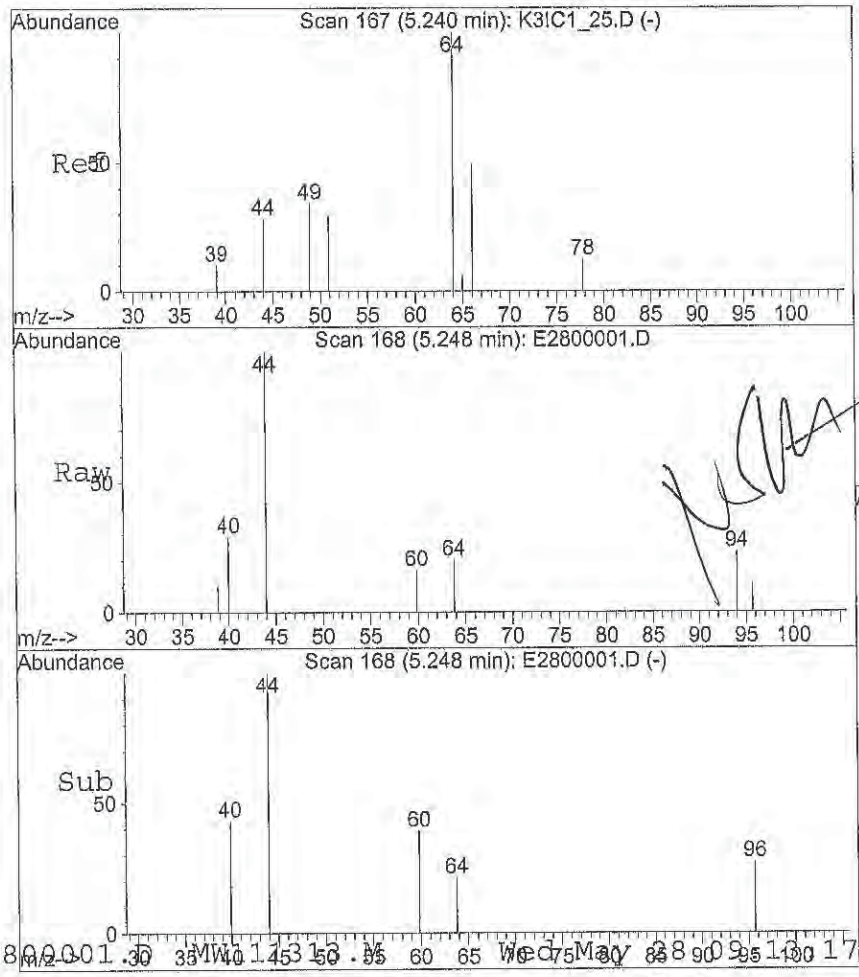


#6
Bromomethane
Concen: 0.36 ug/L
RT: 5.16 min Scan# 157
Delta R.T. 0.06 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 96 Resp: 4146

Ion	Ratio	Lower	Upper
96	100		
94	0.0	101.0	151.4#

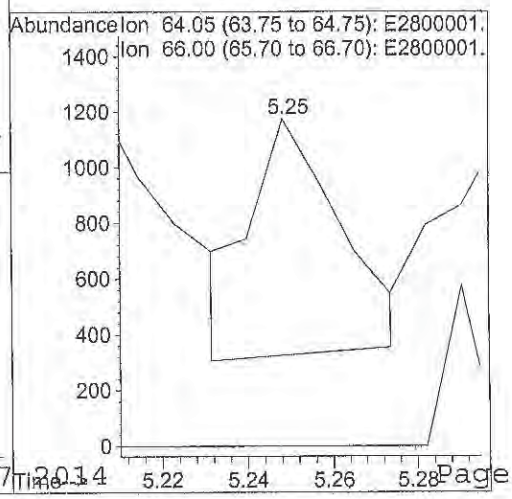


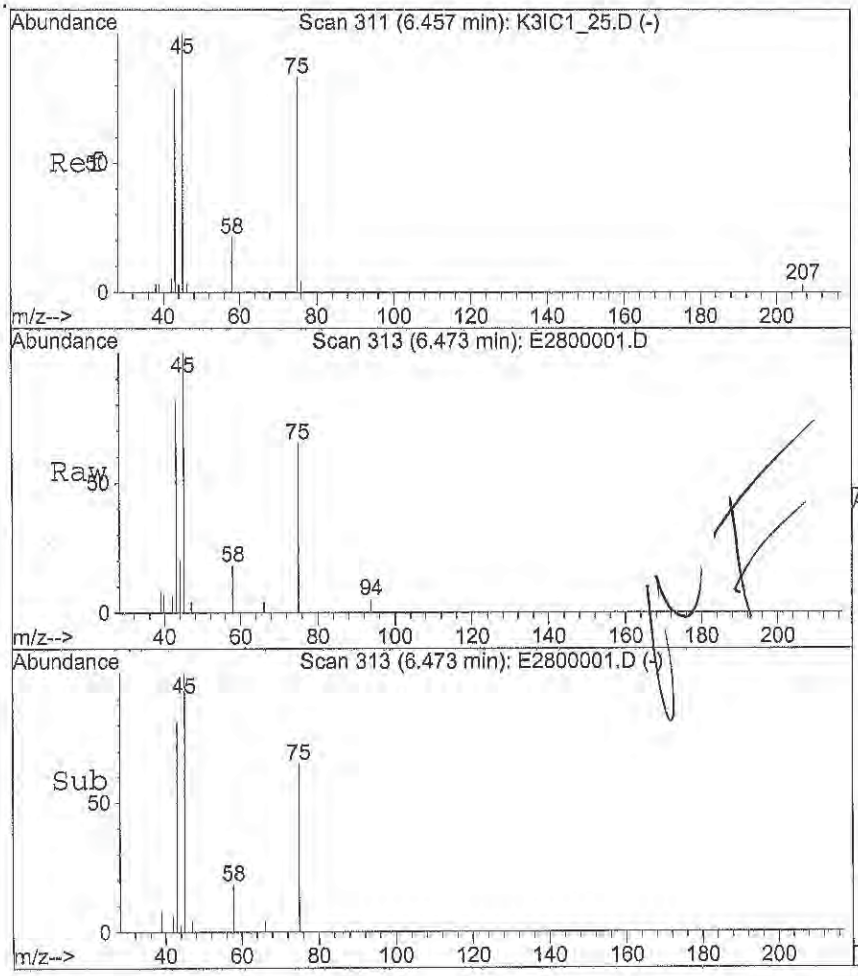


#7
Chloroethane
Concen: 1.53 ug/L
RT: 5.25 min Scan# 168
Delta R.T. 0.01 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 64 Resp: 1246

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

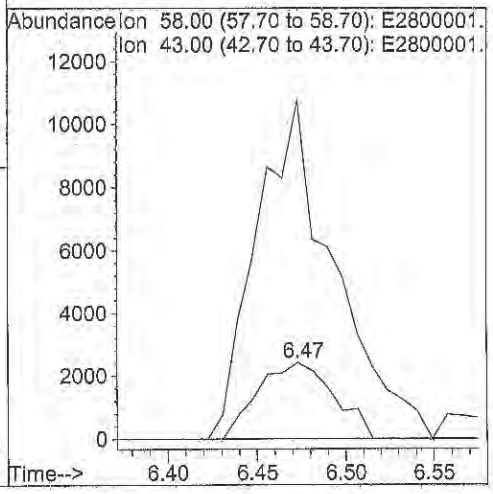


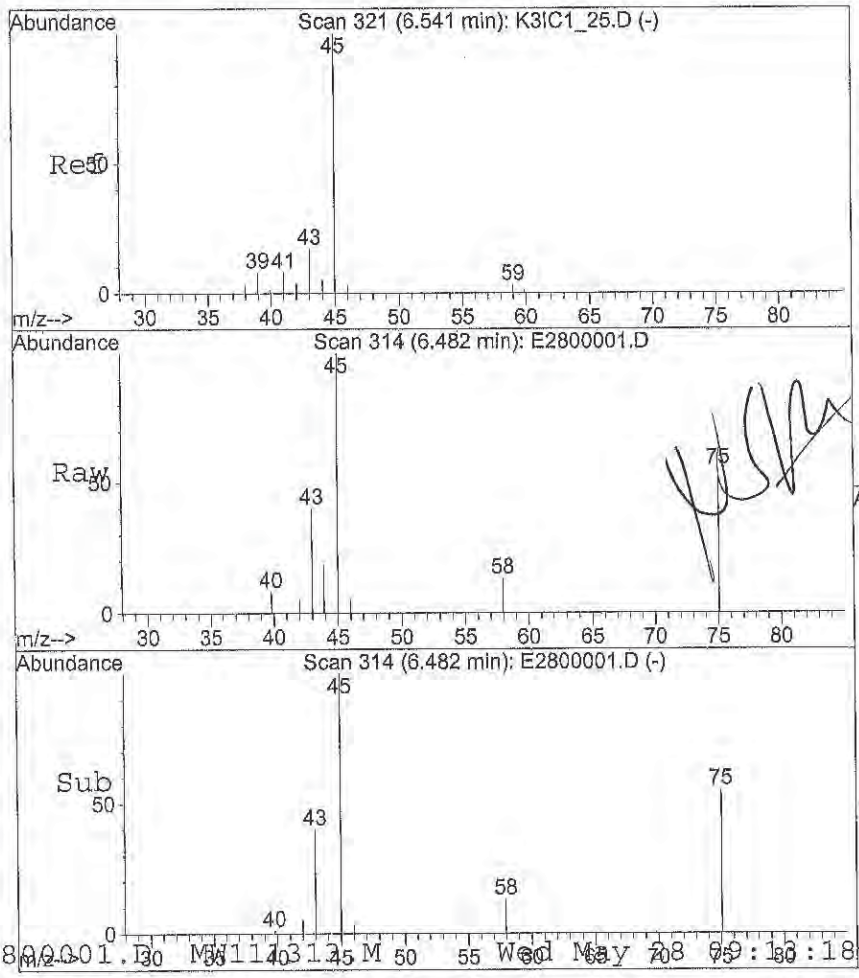


#11
Acetone
Concen: 5.54 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.02 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 58 Resp: 7159

Ion	Ratio	Lower	Upper
58	100		
43	459.5	360.9	541.3

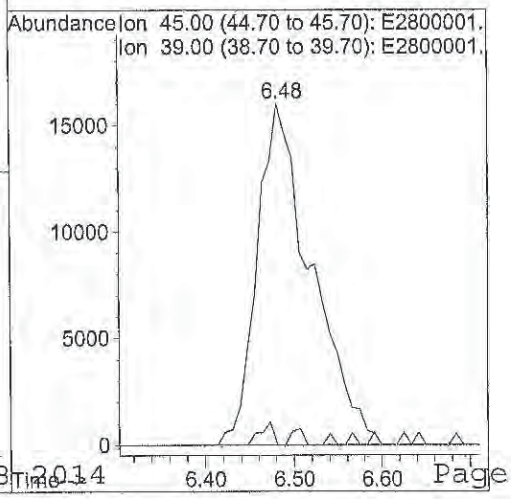


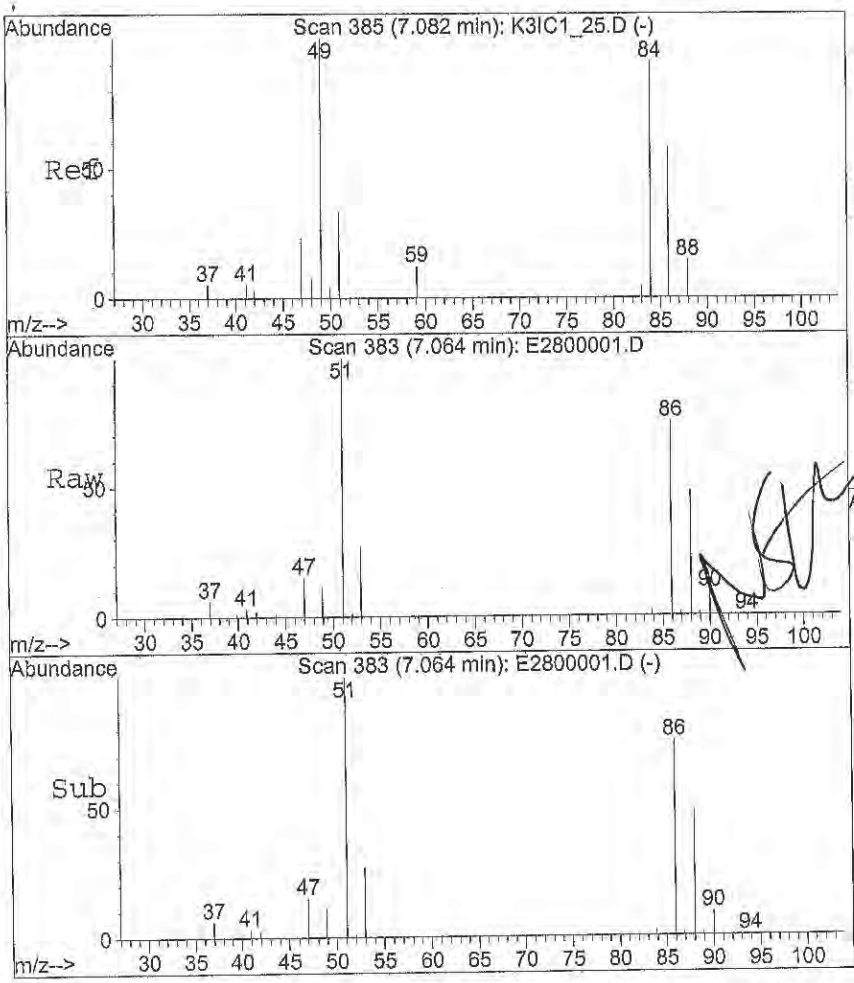


#12
(IPA) Leak Check Compound
Concen: 319.44 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.06 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 45 Resp: 67832

Ion	Ratio	Lower	Upper
45	100		
39	1.7	4.9	7.3#

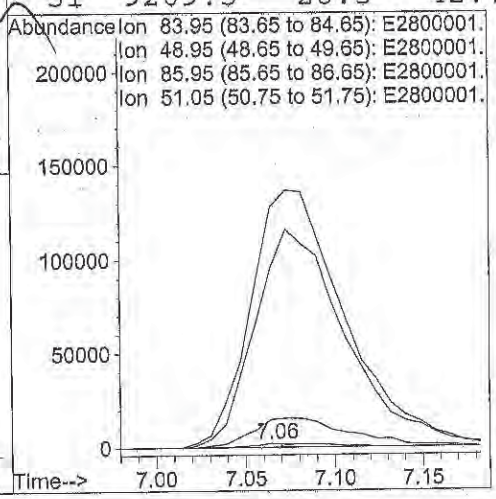


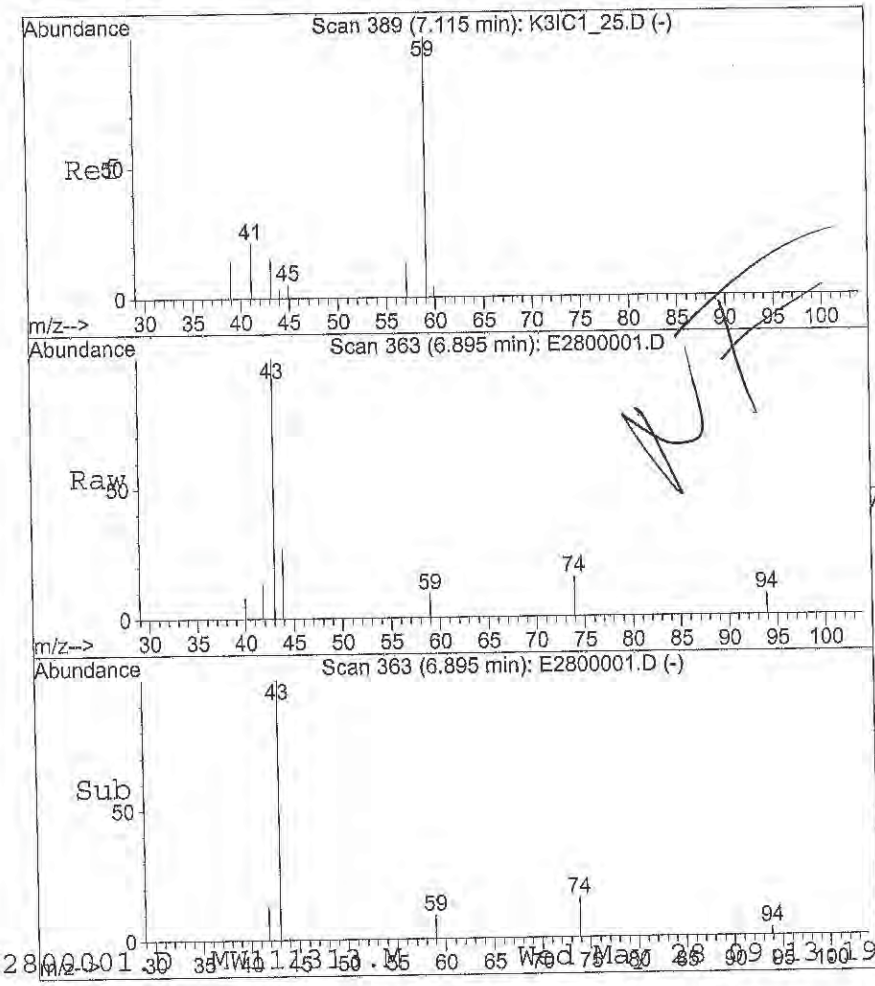


#14
Methylene Chloride
Concen: 1.13 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 84 Resp: 5508

Ion	Ratio	Lower	Upper
84	100		
49	1049.4	89.8	134.6#
86	7519.1	51.1	76.7#
51	9209.5	28.5	42.7#

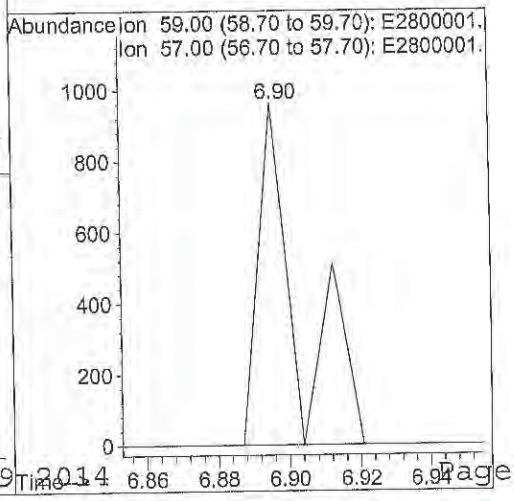


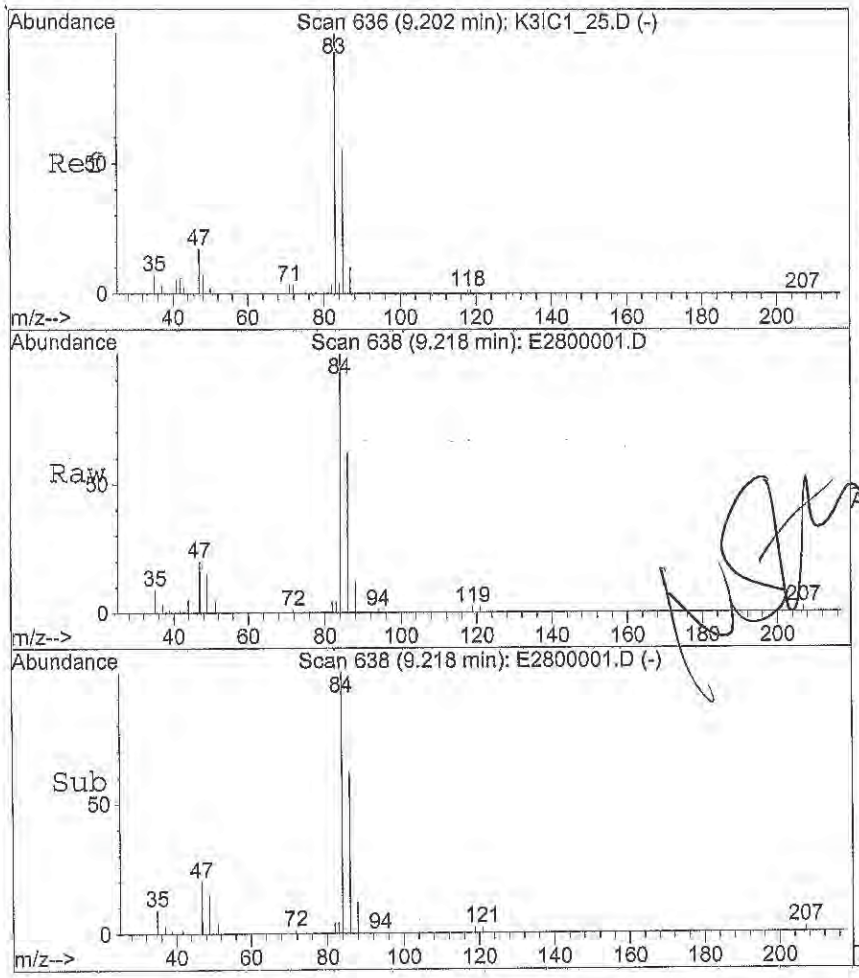


#15
(TBA) tert-Butanol
Concen: 2.48 ug/L
RT: 6.90 min Scan# 363
Delta R.T. -0.22 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 59 Resp: 746

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

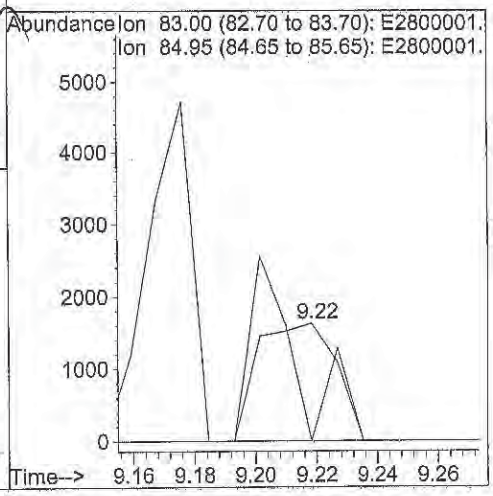


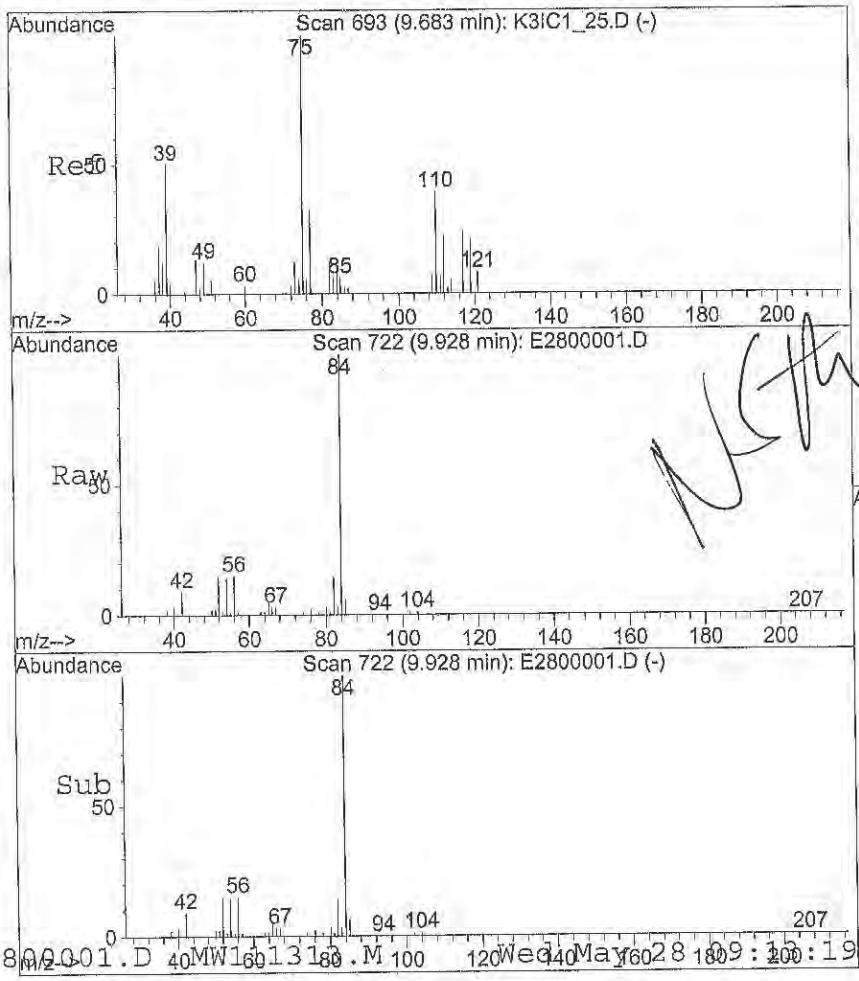


#24
Chloroform
Concen: 0.31 ug/L
RT: 9.22 min Scan# 638
Delta R.T. 0.02 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 83 Resp: 2878

Ion	Ratio	Lower	Upper
83	100		
85	96.0	51.8	77.6#

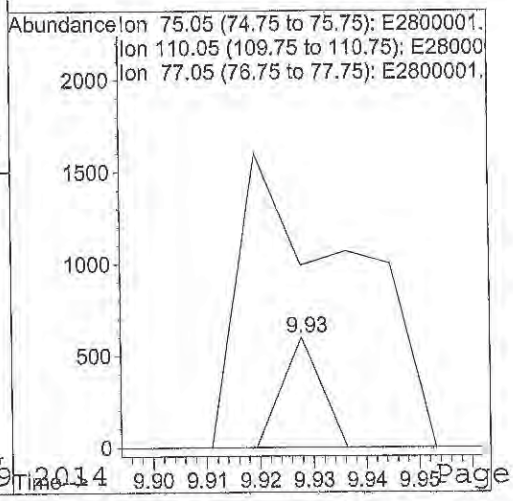


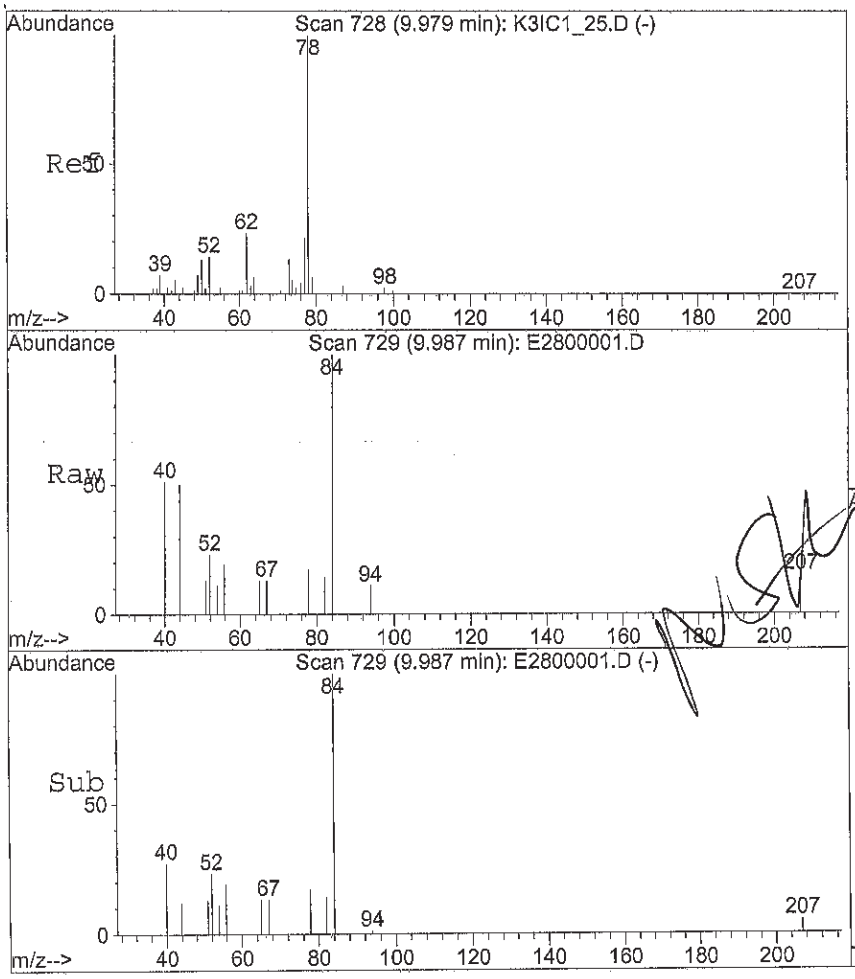


#29
1,1-Dichloropropene
Concen: 0.04 ug/L
RT: 9.93 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 75 Resp: 304

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	777.6	25.0	37.4#

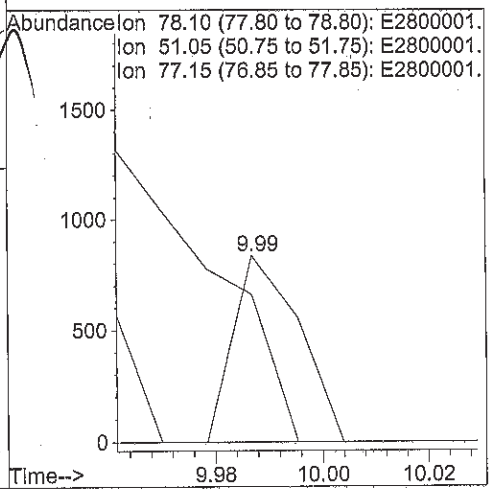


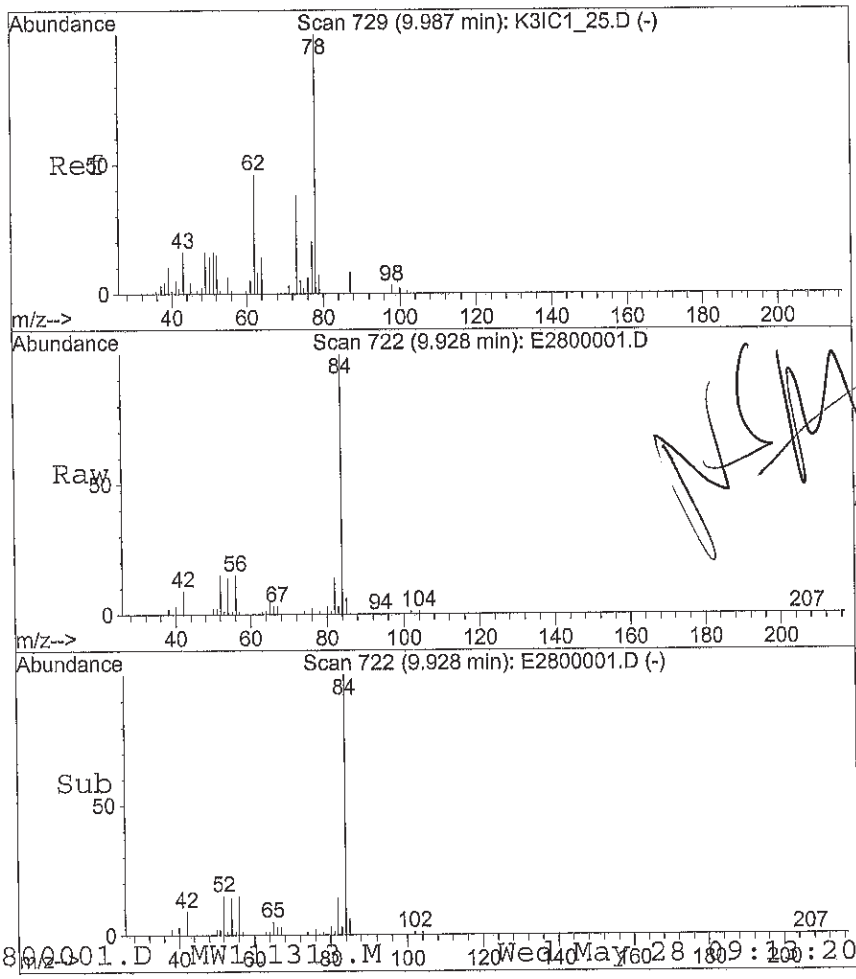


#31
Benzene
Concen: 0.04 ug/L
RT: 9.99 min Scan# 729
Delta R.T. 0.01 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 78 Resp: 706

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

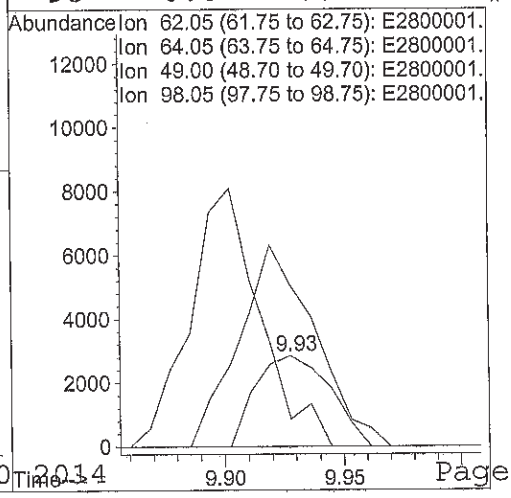


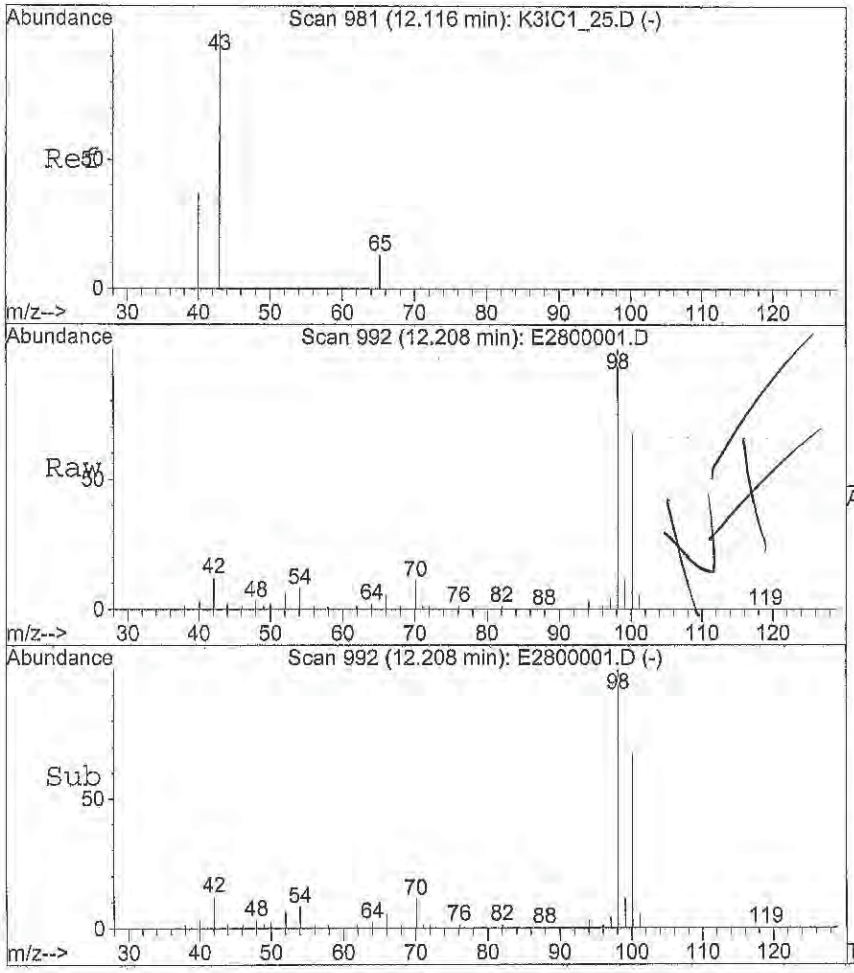


#32
1,2-Dichloroethane
Concen: 1.05 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 62 Resp: 6196

Ion	Ratio	Lower	Upper
62	100		
64	226.1	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

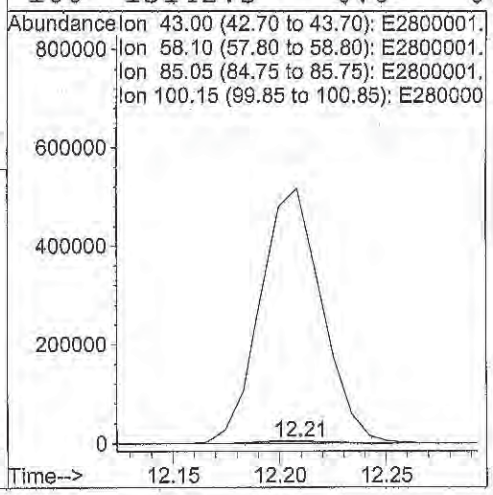


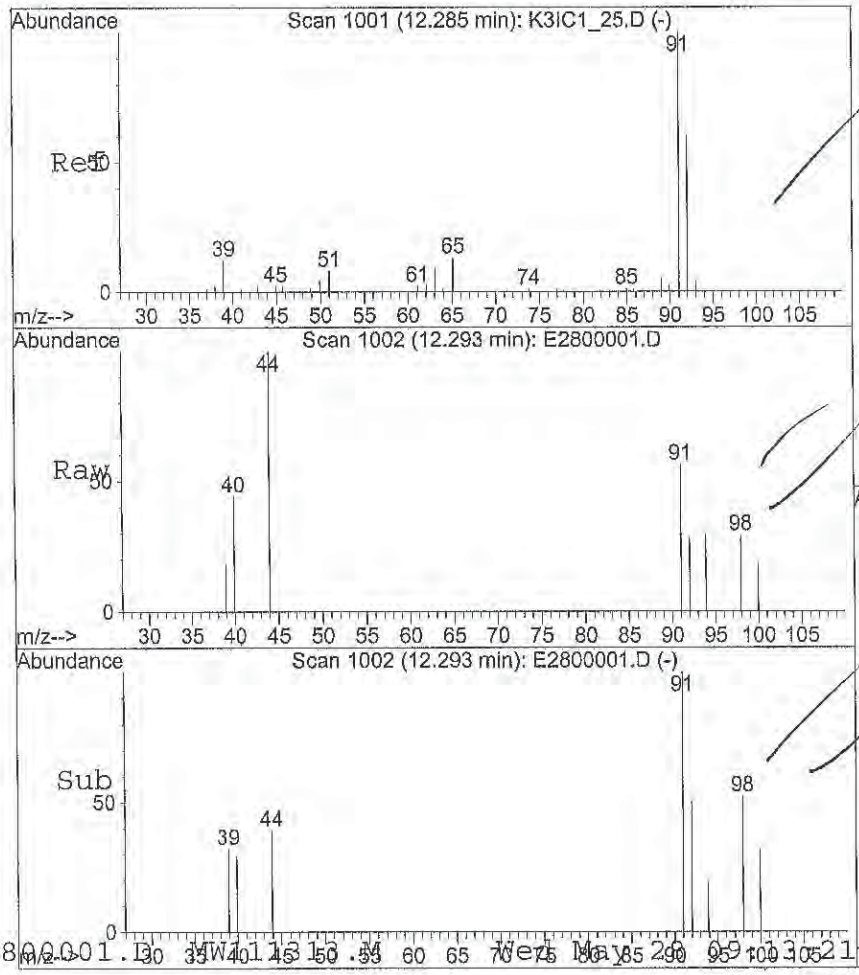


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.96 ug/L
RT: 12.21 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 43 Resp: 7862

Ion	Ratio	Lower	Upper
43	100		
58	149.7	0.0	0.0#
85	0.0	0.0	0.0
100	13142.5	0.0	0.0#

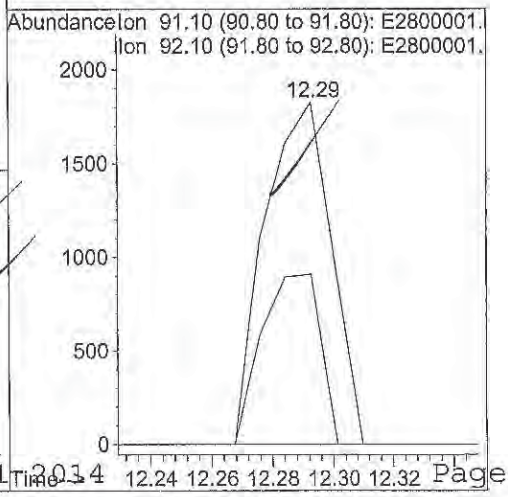


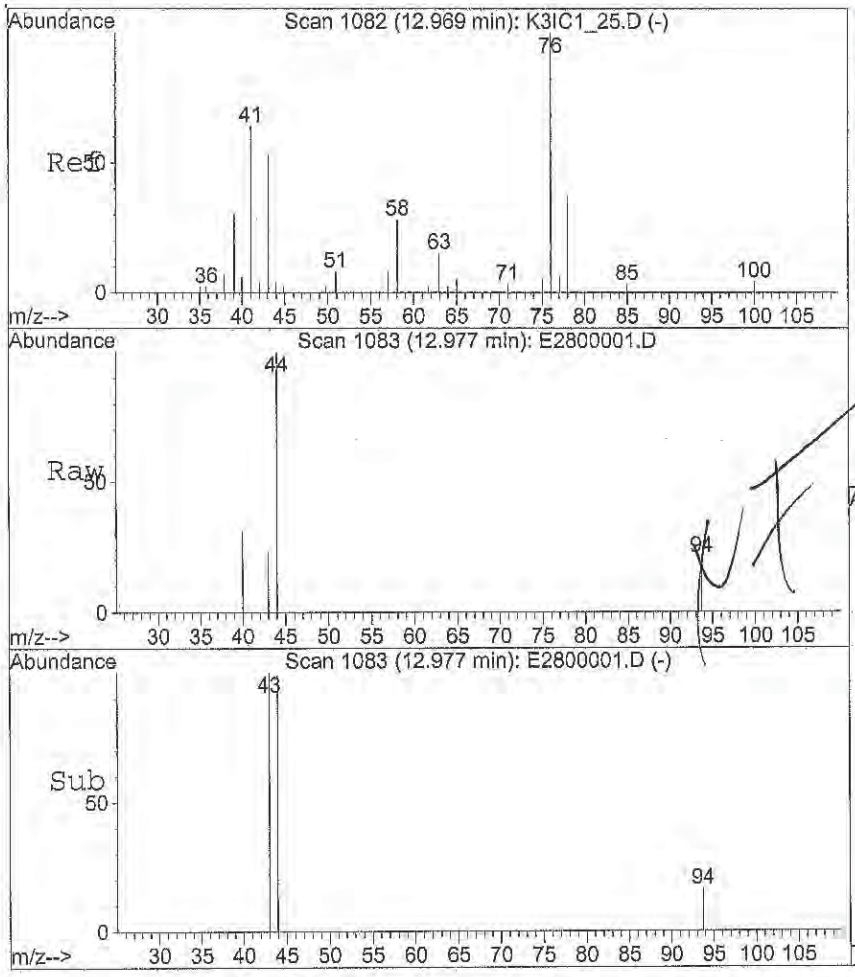


#41
Toluene
Concen: 0.15 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 91 Resp: 2749

Ion	Ratio	Lower	Upper
91	100		
92	43.9	47.4	71.0#

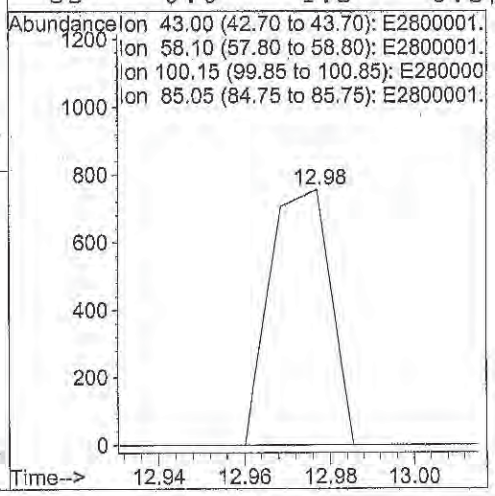


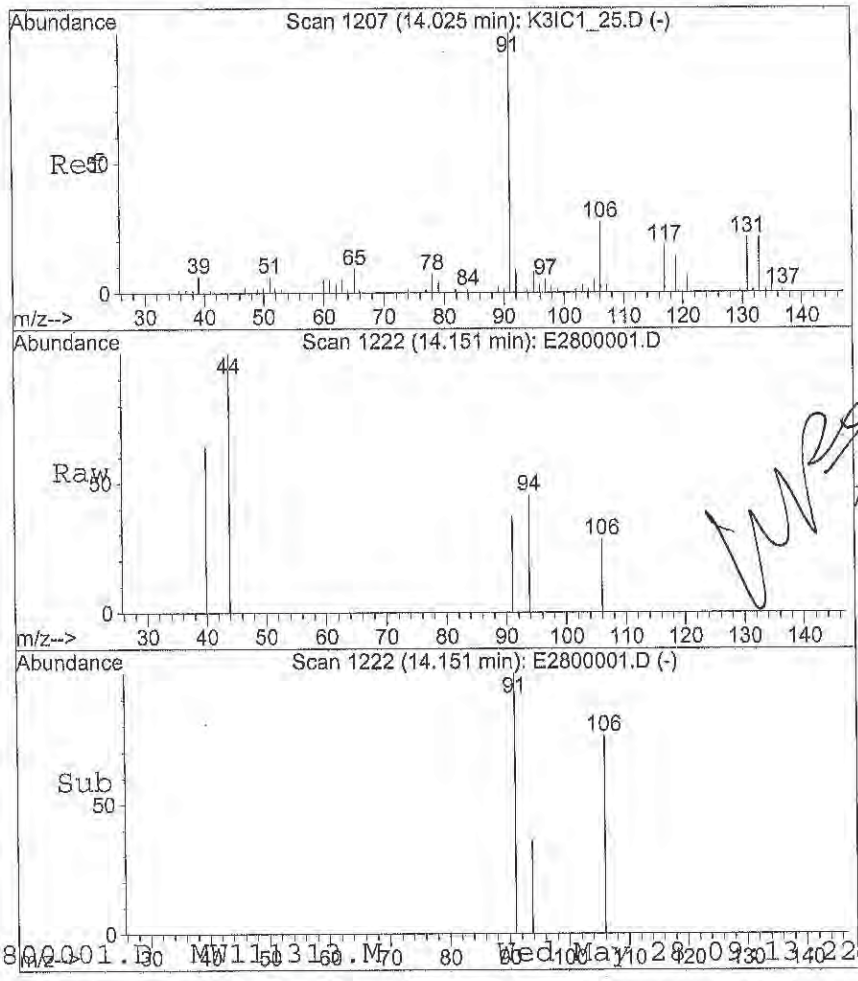


#46
2-Hexanone
Concen: 0.25 ug/L
RT: 12.98 min Scan# 1083
Delta R.T. 0.01 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 43 Resp: 741

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

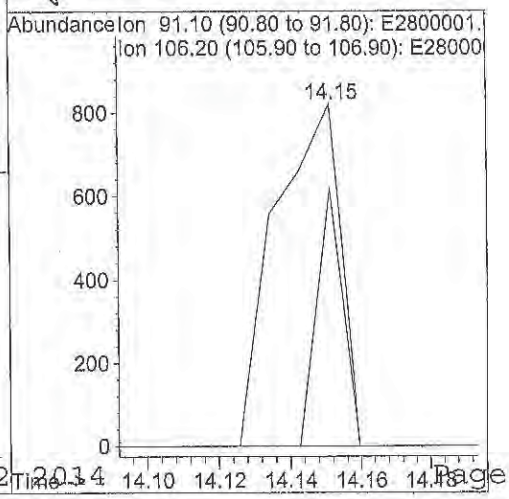


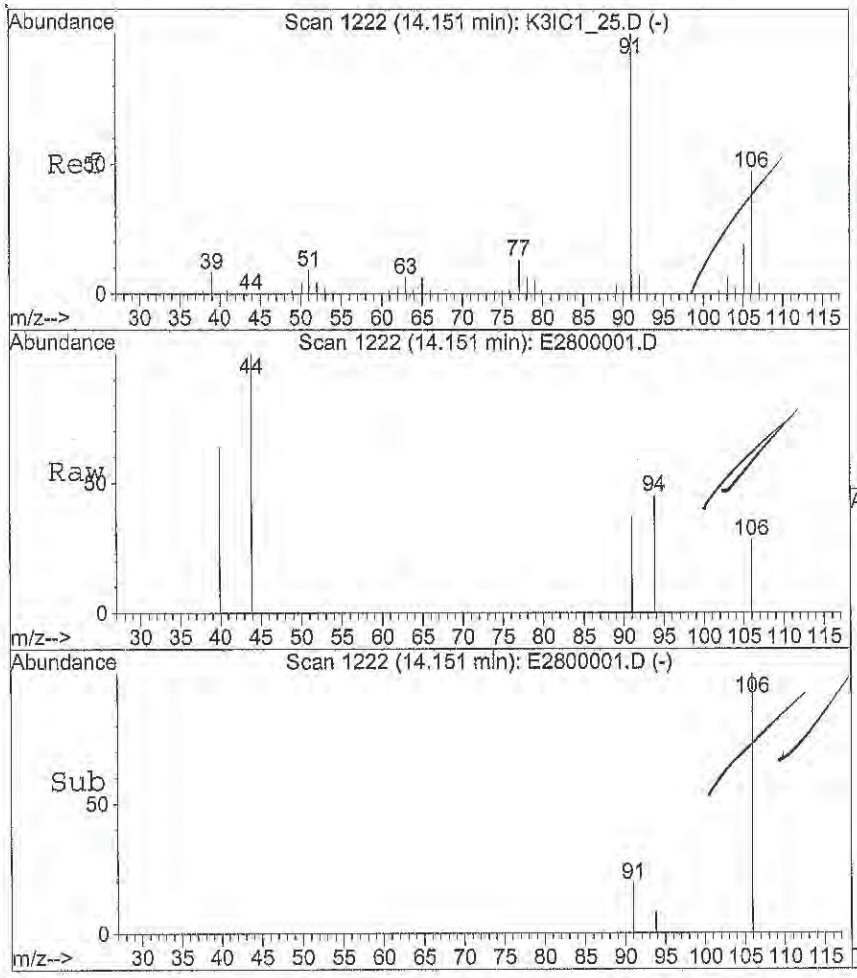


#51
Ethylbenzene
Concen: 0.05 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. 0.13 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 91 Resp: 1034

Ion	Ratio	Lower	Upper
91	100		
106	30.4	23.5	35.3

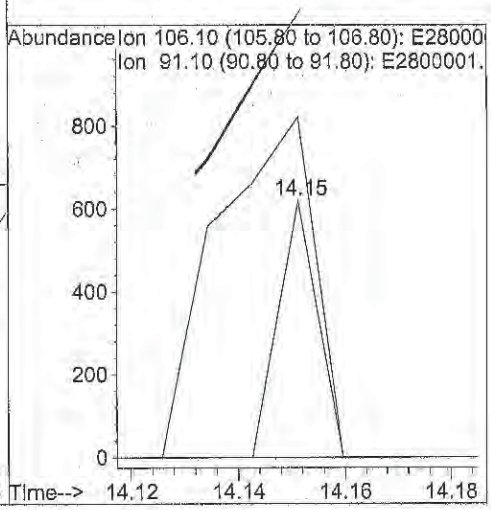


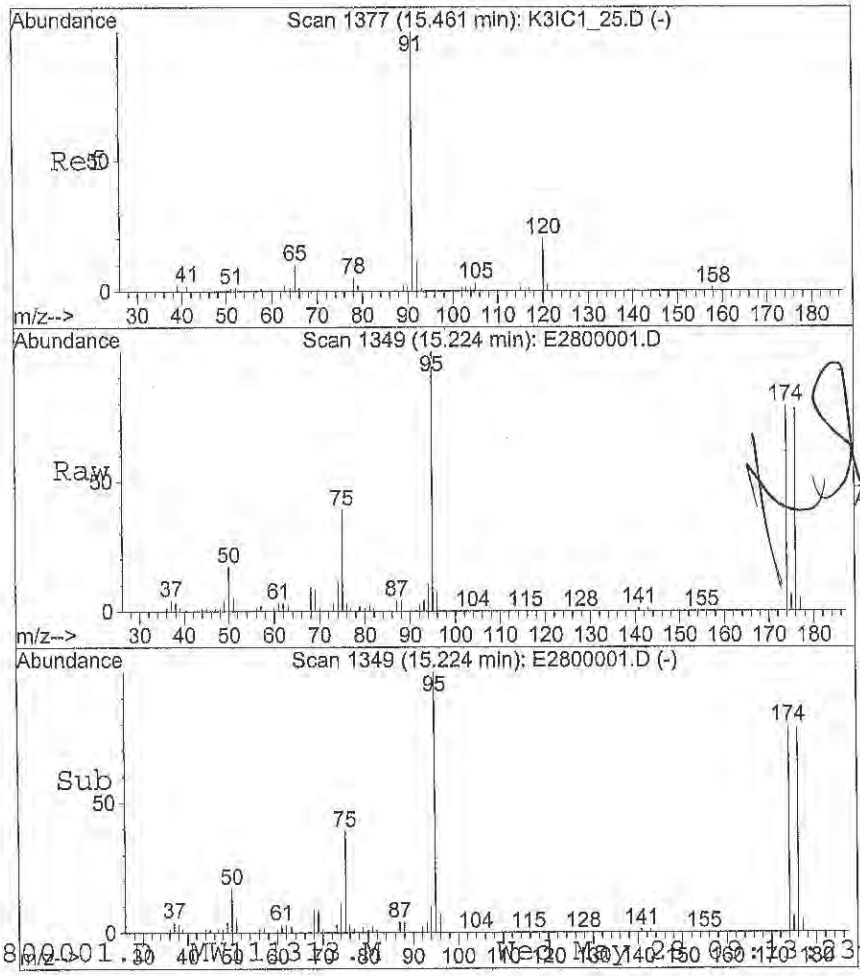


#52
m,p-Xylenes
Concen: 0.04 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion:106 Resp: 314

Ion	Ratio	Lower	Upper
106	100		
91	329.3	177.1	265.7#

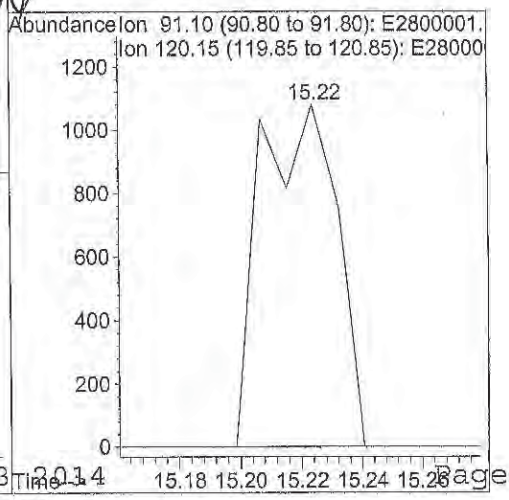


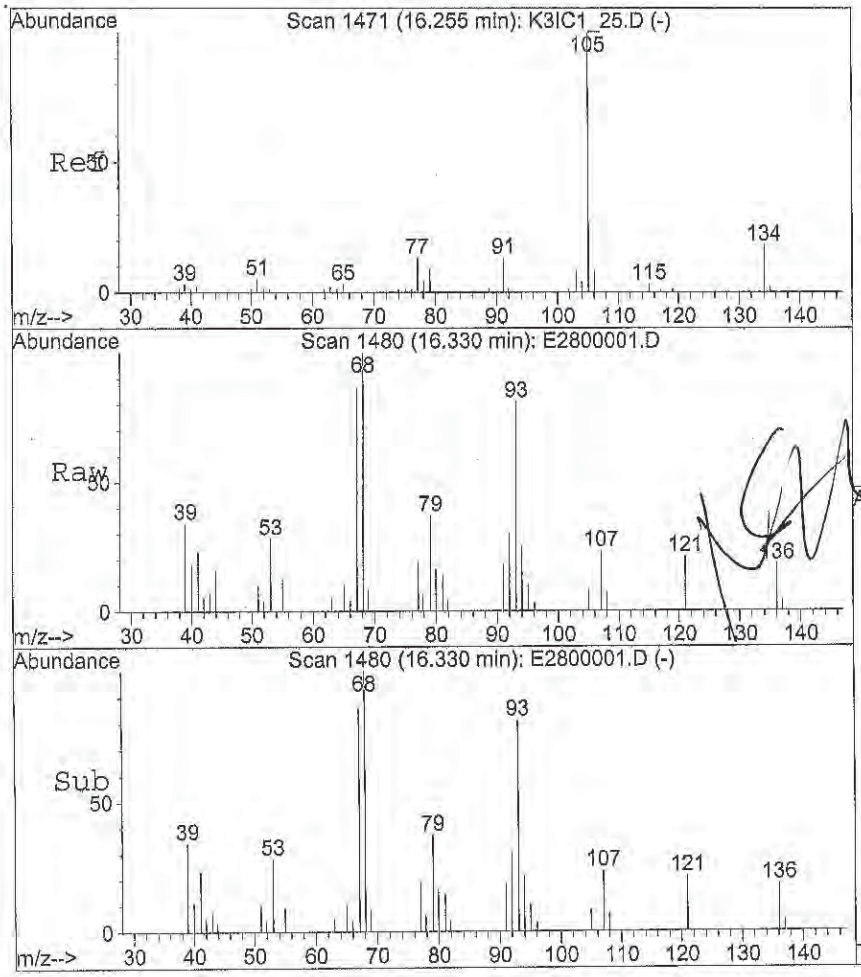


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. -0.24 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 91 Resp: 1869

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

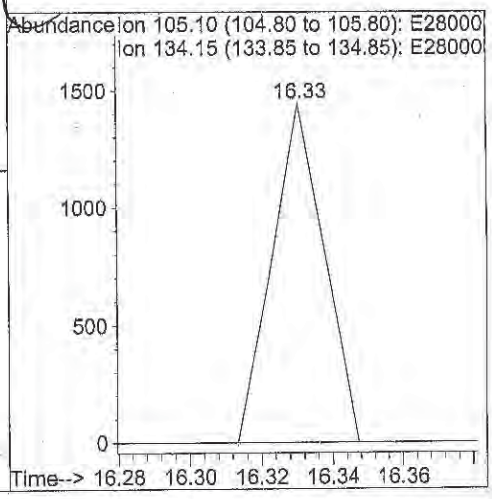


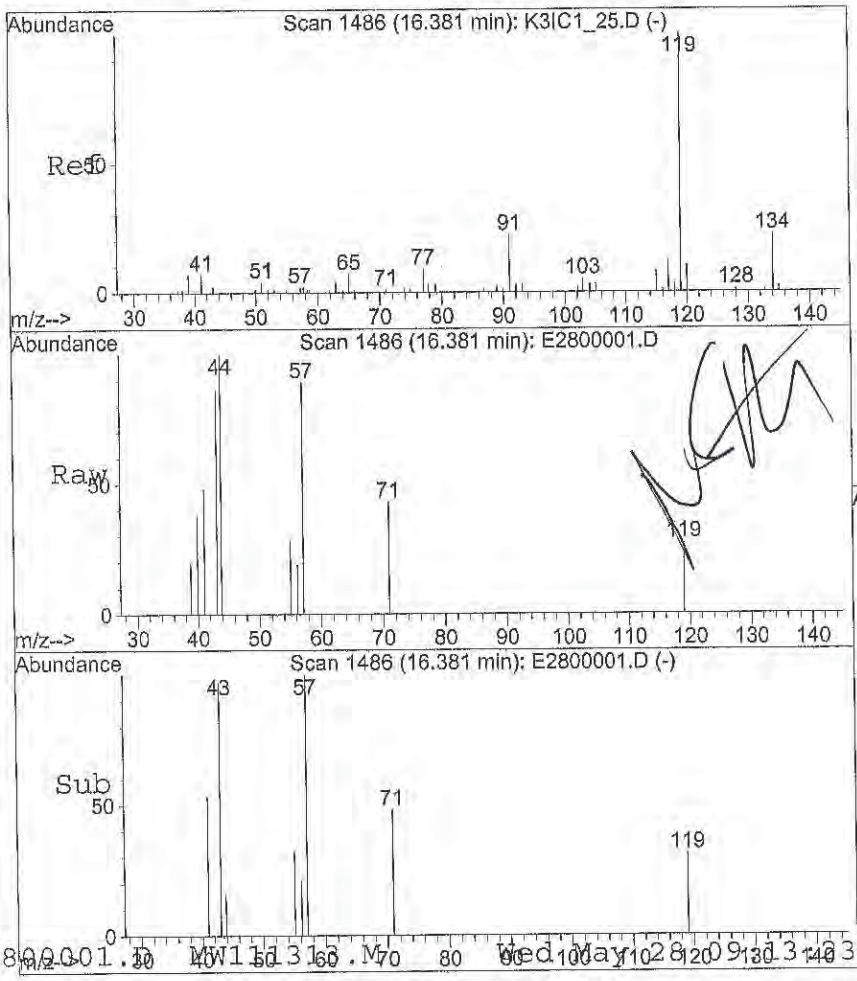


#68
sec-Butylbenzene
Concen: 0.06 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion:105 Resp: 1441

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

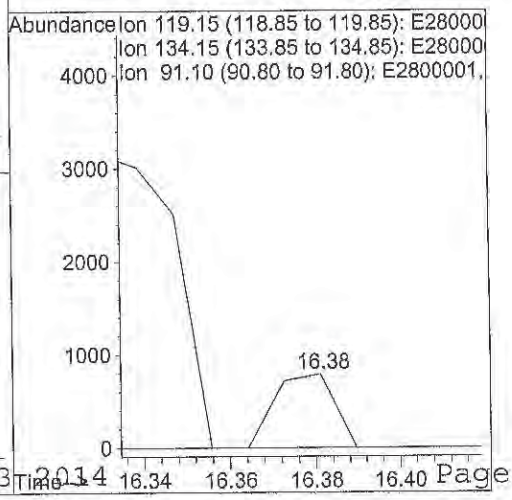


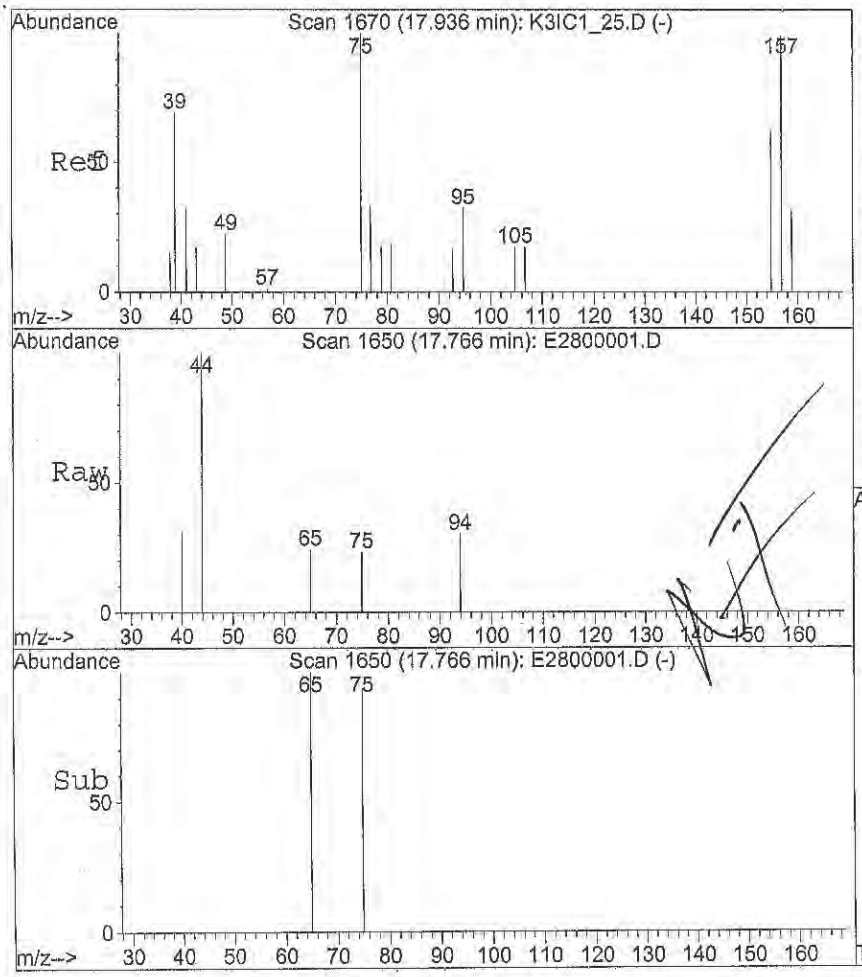


#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion:119 Resp: 764

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

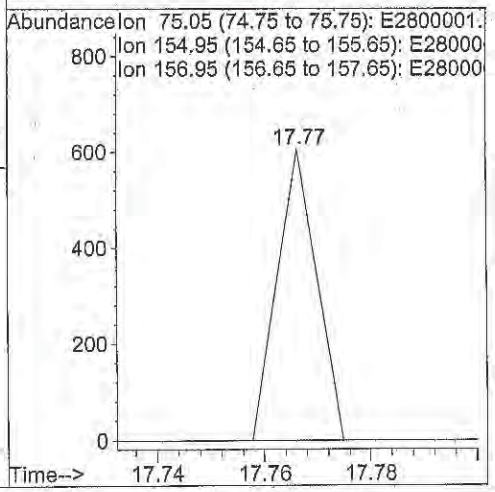


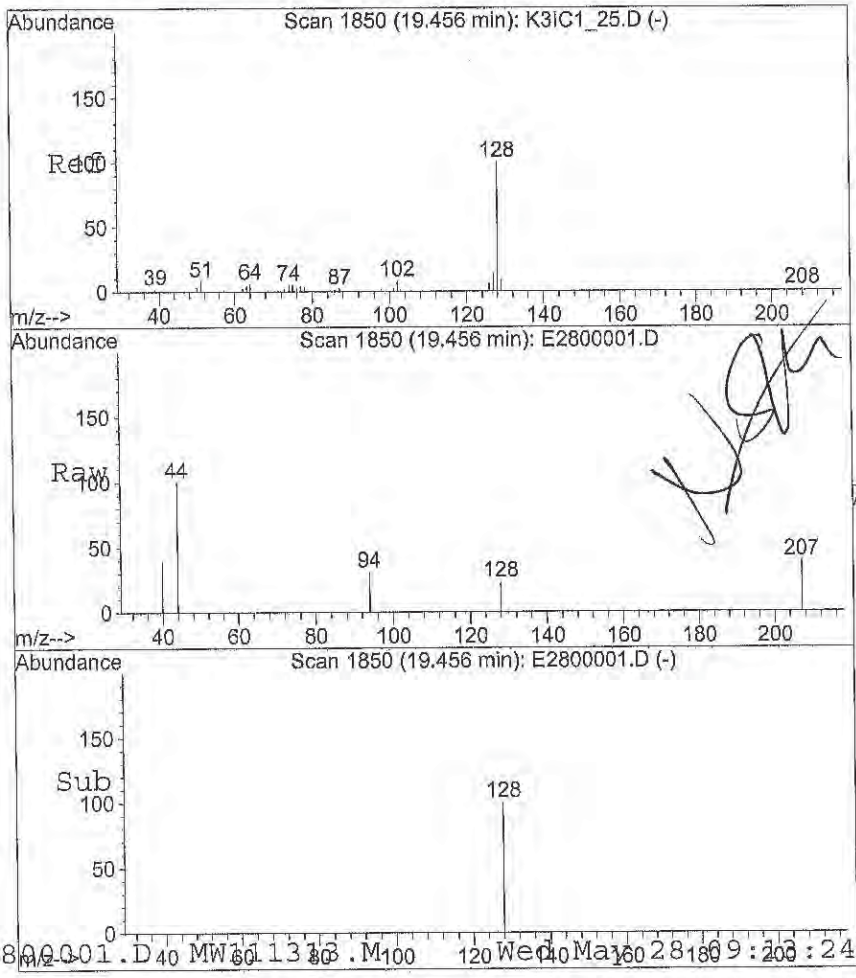


#74
1,2-Dibromo-3-chloropropane
Concen: 1.27 ug/L
RT: 17.77 min Scan# 1650
Delta R.T. -0.17 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion: 75 Resp: 307

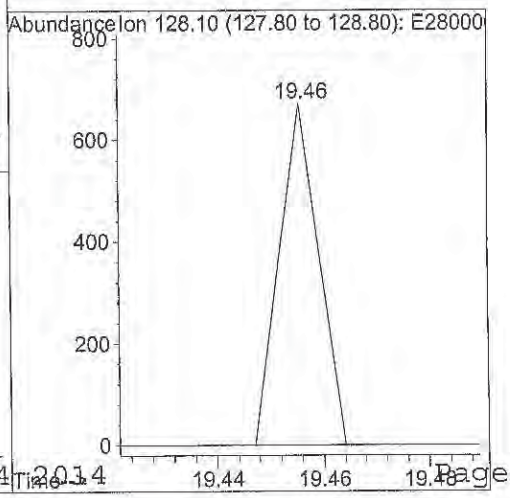
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.46 min Scan# 1850
Delta R.T. -0.00 min
Lab File: E2800001.D
Acq: 28 May 2014 8:13 am

Tgt Ion:128 Resp: 341



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800001.D Vial: 11
Acq On : 28 May 2014 8:13 am Operator: DN
Sample : 3E42801-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:12 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1767160	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1332346	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	691087	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	484006	10.53	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 84.24%			
3) Chloroform-d (SU6)	9.18	84	734985	11.15	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.20%			
4) Methylene Chloride-d2 (SU5	7.07	86	414154	10.75	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.00%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	470035	14.97	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 119.76%			
6) Benzene-d6 (SU7)	9.93	84	1424963	10.28	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 82.24%			
8) Toluene-d8 (SU3)	12.21	98	1528587	12.09	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.72%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	724152	13.88	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.04%			

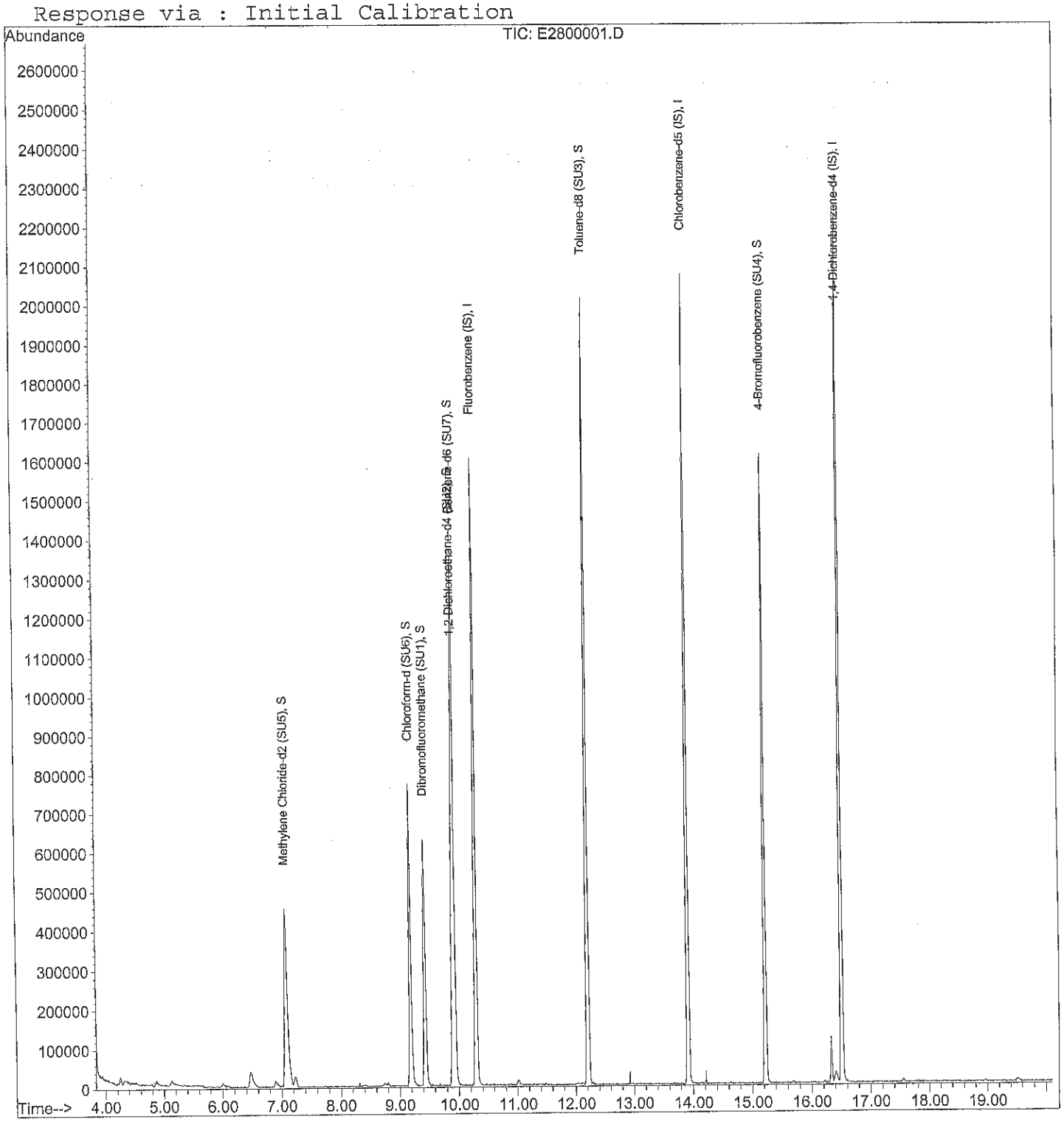
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800001.D Vial: 11
Acq On : 28 May 2014 8:13 am Operator: DN
Sample : 3E42801-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:12 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800002.D Vial: 1
Acq On : 28 May 2014 8:47 am Operator: DN
Sample : 3E42801-02 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:14 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1628814	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1280080	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	672692	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	473247	11.65 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.20%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	471749	12.22 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.76%		
39) Toluene-d8 (SU3)	12.21	98	1410542	11.81 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.48%		
58) 4-Bromofluorobenzene (SU4)	15.21	95	700102	13.37 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.96%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.17	85	309	0.08 ~~ug/L~~ #	44
4) Chloromethane	4.39	50	1164	-0.80 ~~ug/L~~ #	41
6) Bromomethane	5.11	96	1662	-0.85 ~~ug/L~~ #	1
7) Chloroethane	5.25	64	4511	4.02 ~~ug/L~~ #	32
11) Acetone	6.46	58	7704	7.45 ~~ug/L~~	88
12) (IPA) Leak Check Compound	6.49	45	93153	475.94 ~~ug/L~~ #	83
13) Carbon disulfide	6.85	76	1311	0.10 ~~ug/L~~ #	76
14) Methylene Chloride	7.09	84	6524	1.46 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.95	59	354	1.27 ~~ug/L~~ #	77
24) Chloroform	9.23	83	1652	0.19 ~~ug/L~~ #	18
29) 1,1-Dichloropropene	9.94	75	777	0.12 ~~ug/L~~ #	1
31) Benzene	9.99	78	1147	0.07 ~~ug/L~~ #	79
32) 1,2-Dichloroethane	9.92	62	6151	1.13 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	7286	2.85 ~~ug/L~~ #	100
41) Toluene	12.29	91	4573	0.26 ug/L #	0.00528 0
46) 2-Hexanone	12.97	43	415	0.15 ~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	3307	0.17 ~~ug/L~~ #	45
52) m,p-Xylenes	14.15	106	2542	0.36 ug/L	0.0072 99
53) o-Xylene	14.62	106	1697	0.24 ug/L	0.0048 90
54) Styrene	14.62	104	1312	-0.75 ~~ug/L~~ #	41
56) Isopropylbenzene	15.21	105	1657	0.09 ~~ug/L~~ #	1
62) n-Propylbenzene	15.46	91	832	0.03 ~~ug/L~~ #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800002.D Vial: 1
Acq On : 28 May 2014 8:47 am Operator: DN
Sample : 3E42801-02 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:14 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

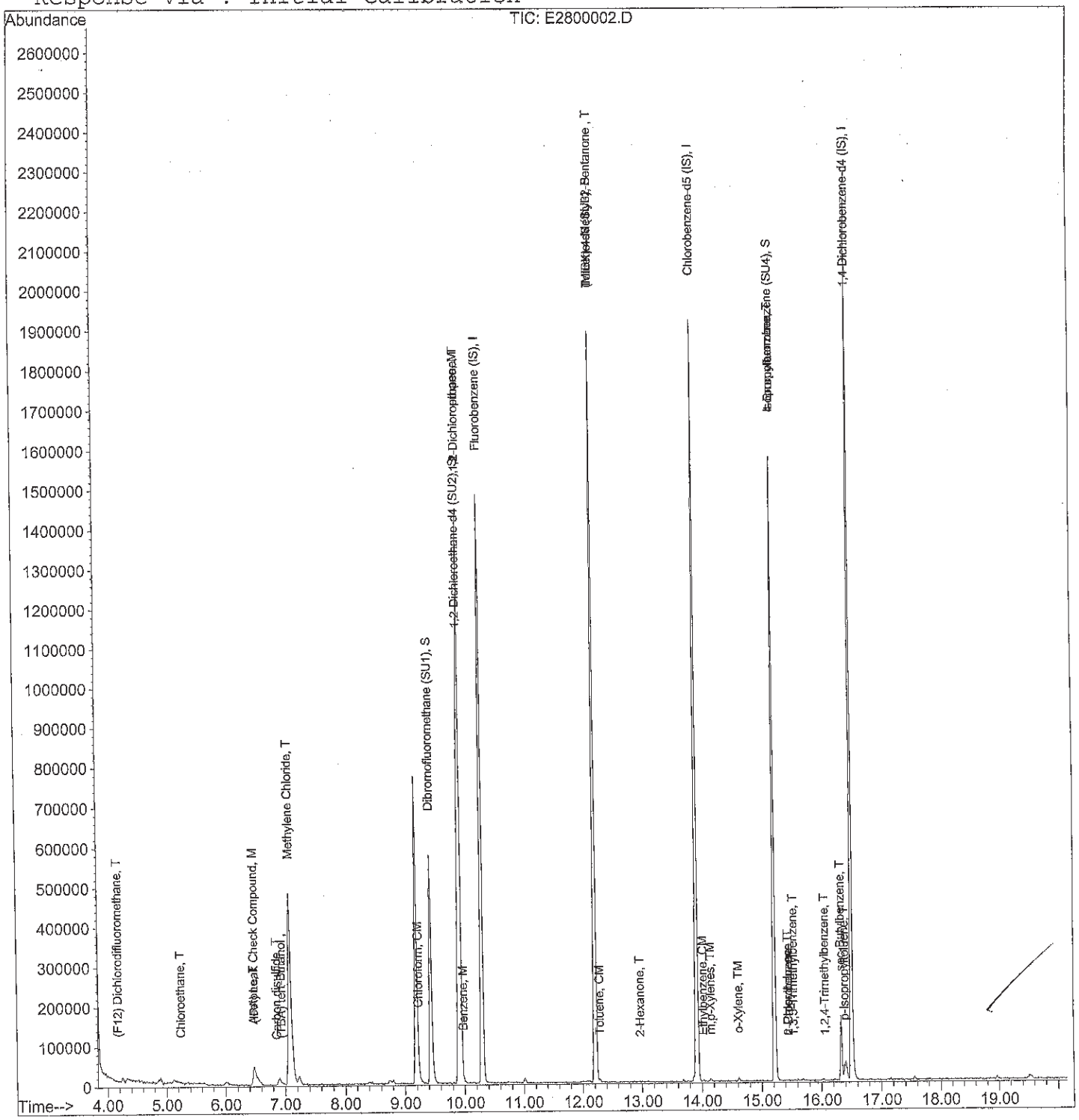
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.46	91	832	0.05 ~~ug/L~~ # NSV	45
64) 1,3,5-Trimethylbenzene	15.54	105	648	0.04 ~~ug/L~~ #	31
67) 1,2,4-Trimethylbenzene	16.06	105	1569	0.09 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.33	105	2565	0.11 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1963	0.11 ~~ug/L~~ #	52

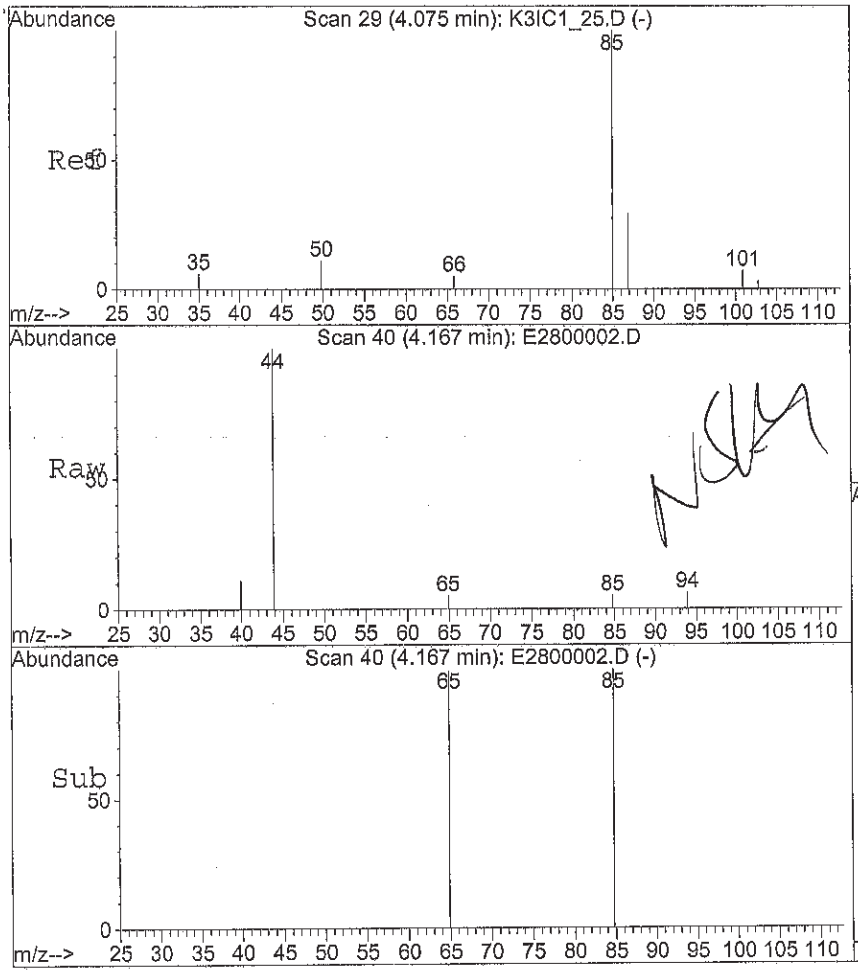
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800002.D Vial: 1
Acq On : 28 May 2014 8:47 am Operator: DN
Sample : 3E42801-02 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:14 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

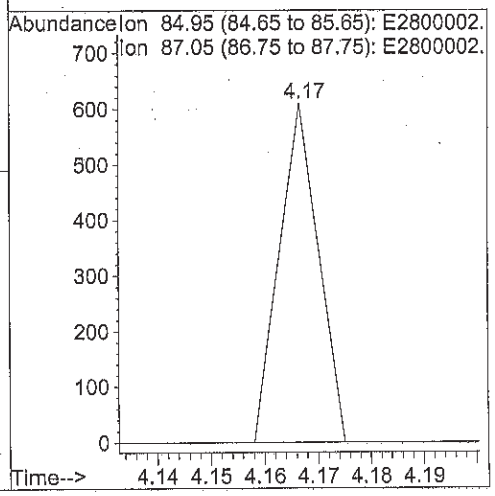


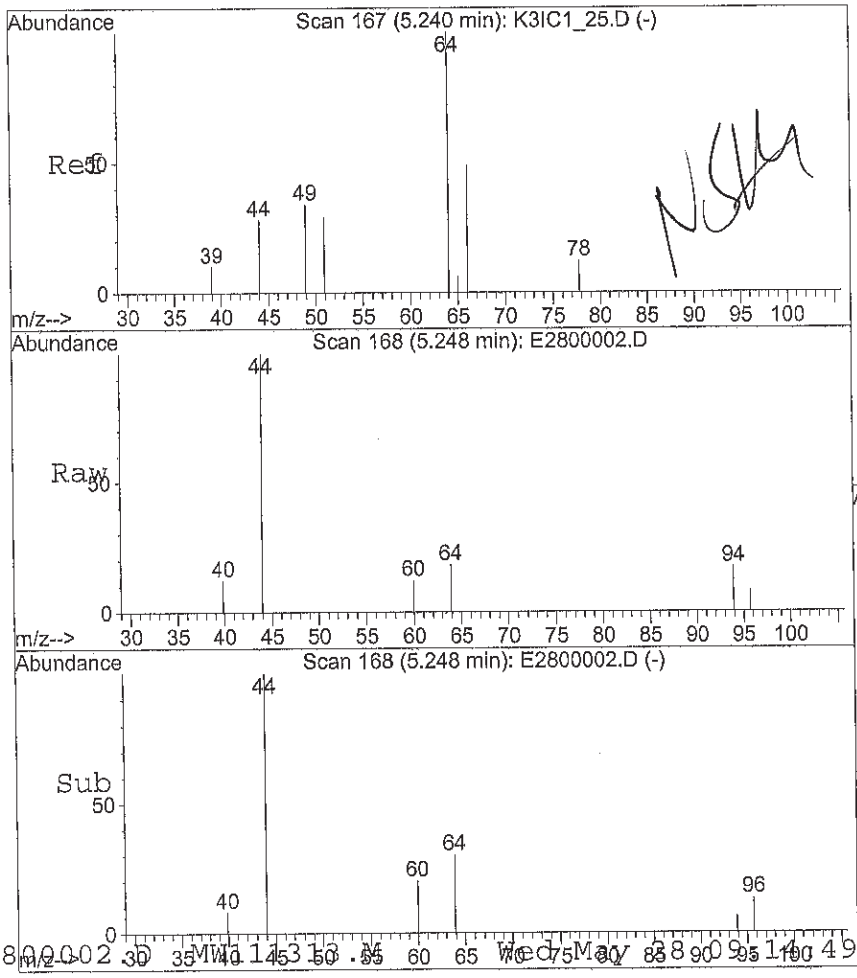


#3
(F12) Dichlorodifluoromethane
Concen: 0.08 ug/L
RT: 4.17 min Scan# 40
Delta R.T. 0.09 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 85 Resp: 309

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

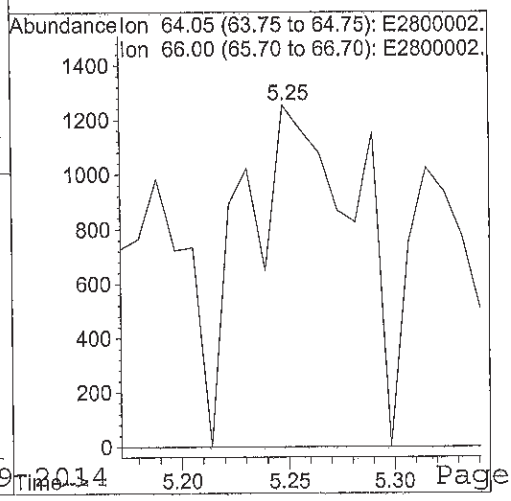


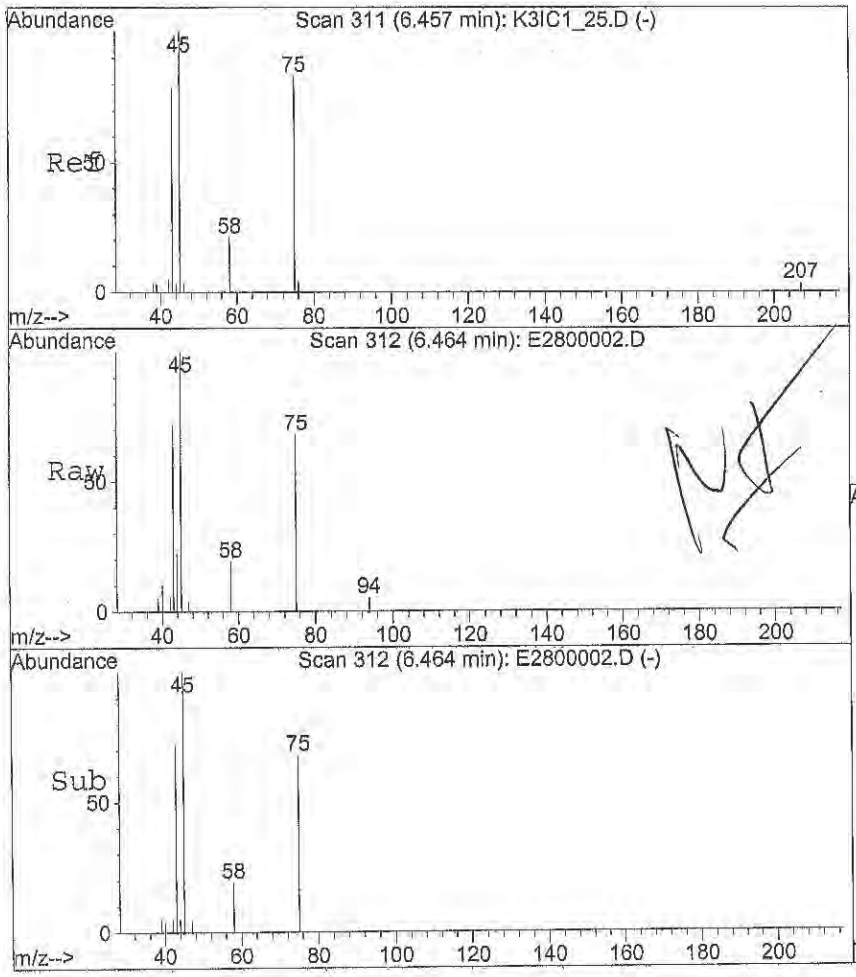


#7
Chloroethane
Concen: 4.02 ug/L
RT: 5.25 min Scan# 168
Delta R.T. 0.01 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 64 Resp: 4511

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

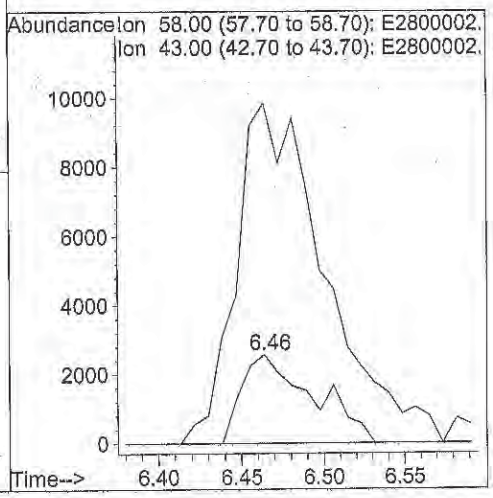


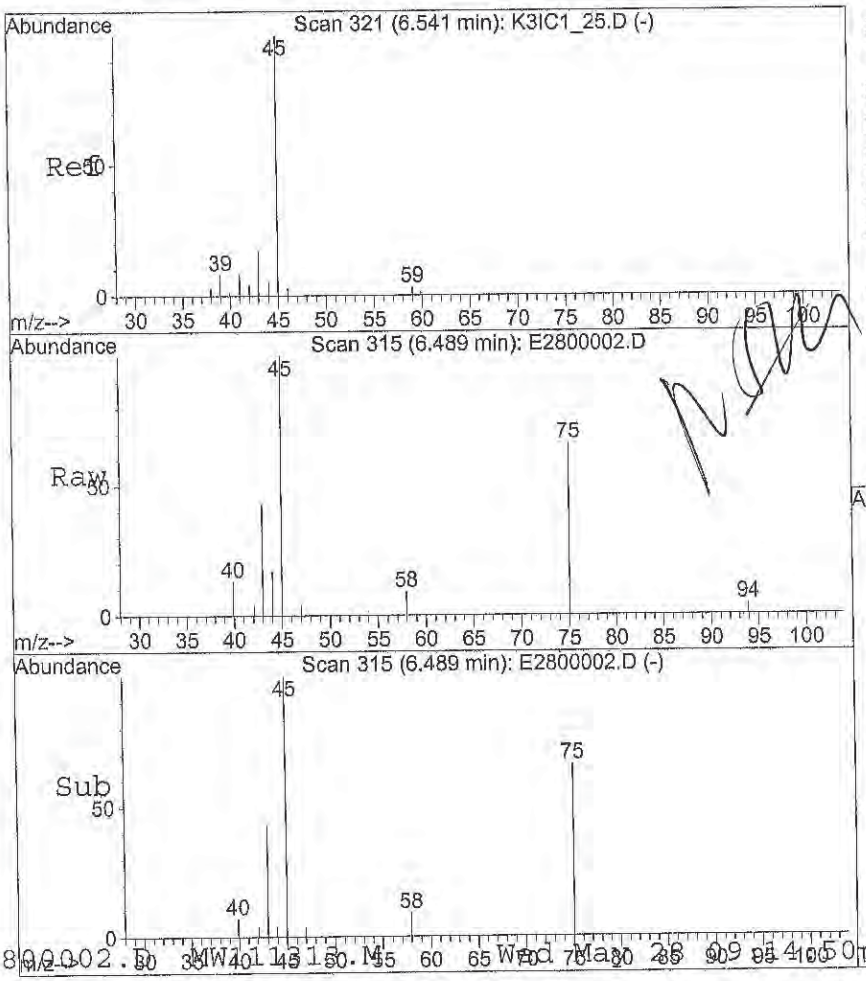


#11
Acetone
Concen: 7.45 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 58 Resp: 7704

Ion	Ratio	Lower	Upper
58	100		
43	480.8	360.9	541.3

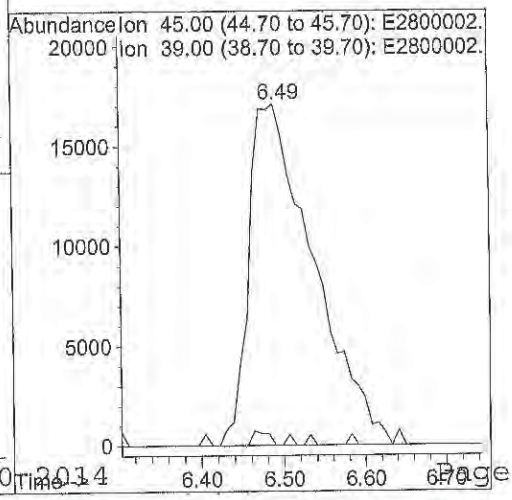


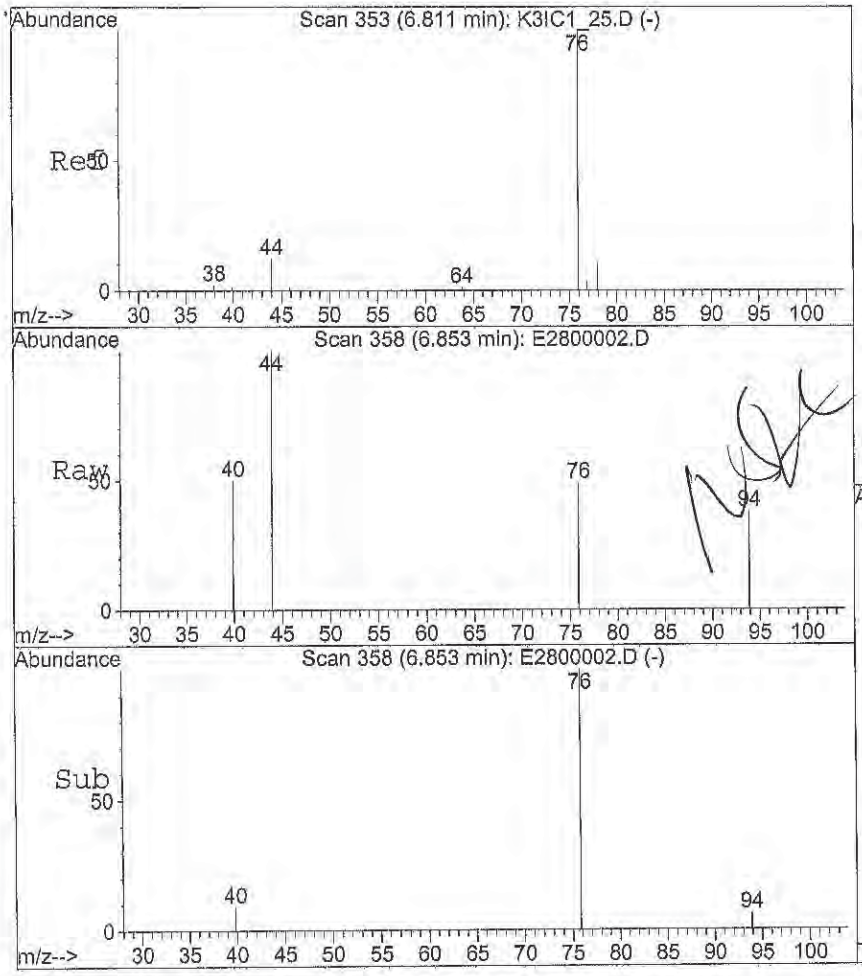


#12
(IPA) Leak Check Compound
Concen: 475.94 ug/L
RT: 6.49 min Scan# 315
Delta R.T. -0.05 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 45 Resp: 93153

Ion	Ratio	Lower	Upper
45	100		
39	0.3	4.9	7.3#

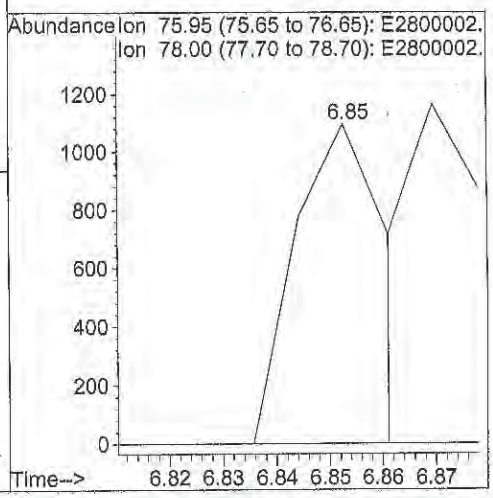


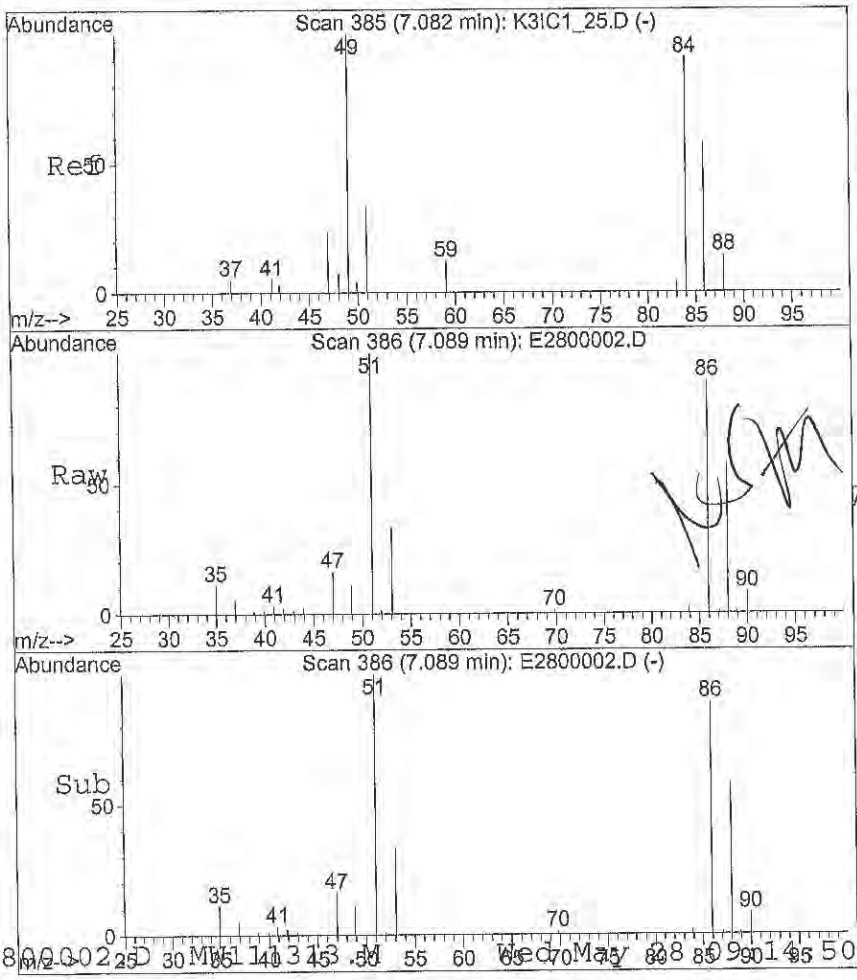


#13
Carbon disulfide
Concen: 0.10 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 76 Resp: 1311

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

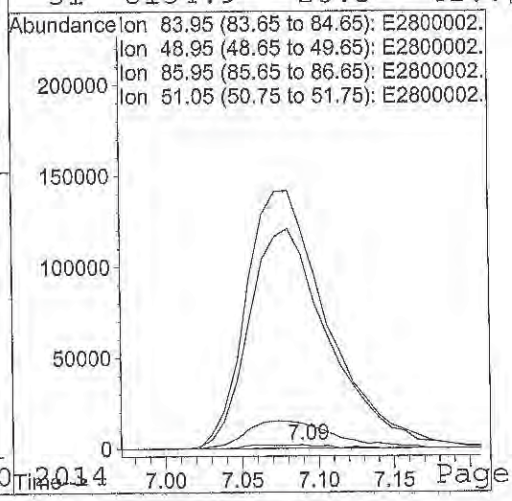


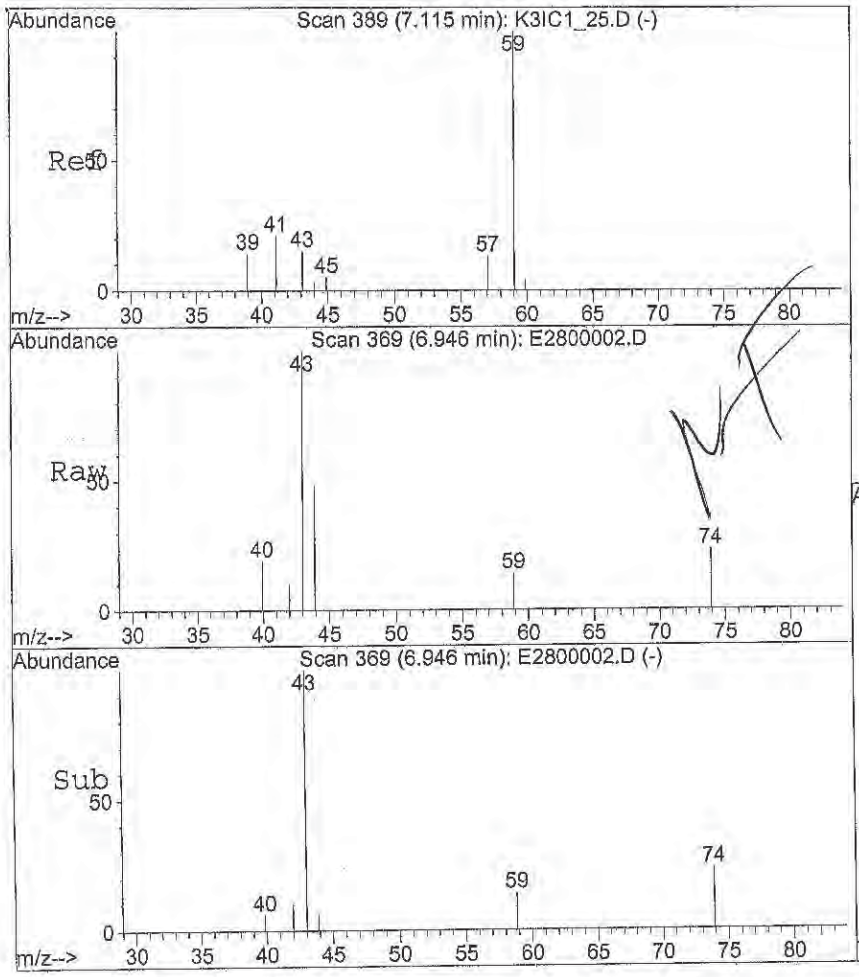


#14
Methylene Chloride
Concen: 1.46 ug/L
RT: 7.09 min Scan# 386
Delta R.T. 0.01 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 84 Resp: 6524

Ion	Ratio	Lower	Upper
84	100		
49	917.0	89.8	134.6#
86	6838.7	51.1	76.7#
51	8134.9	28.5	42.7#

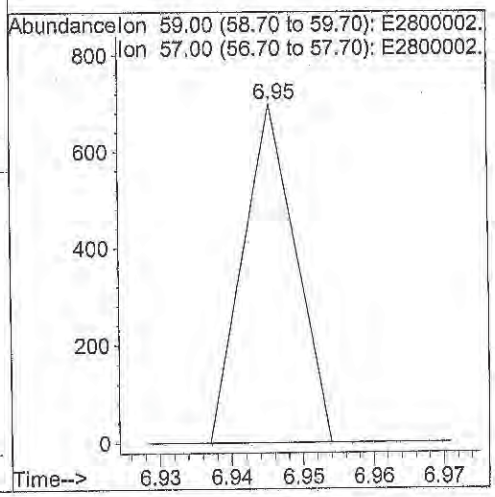


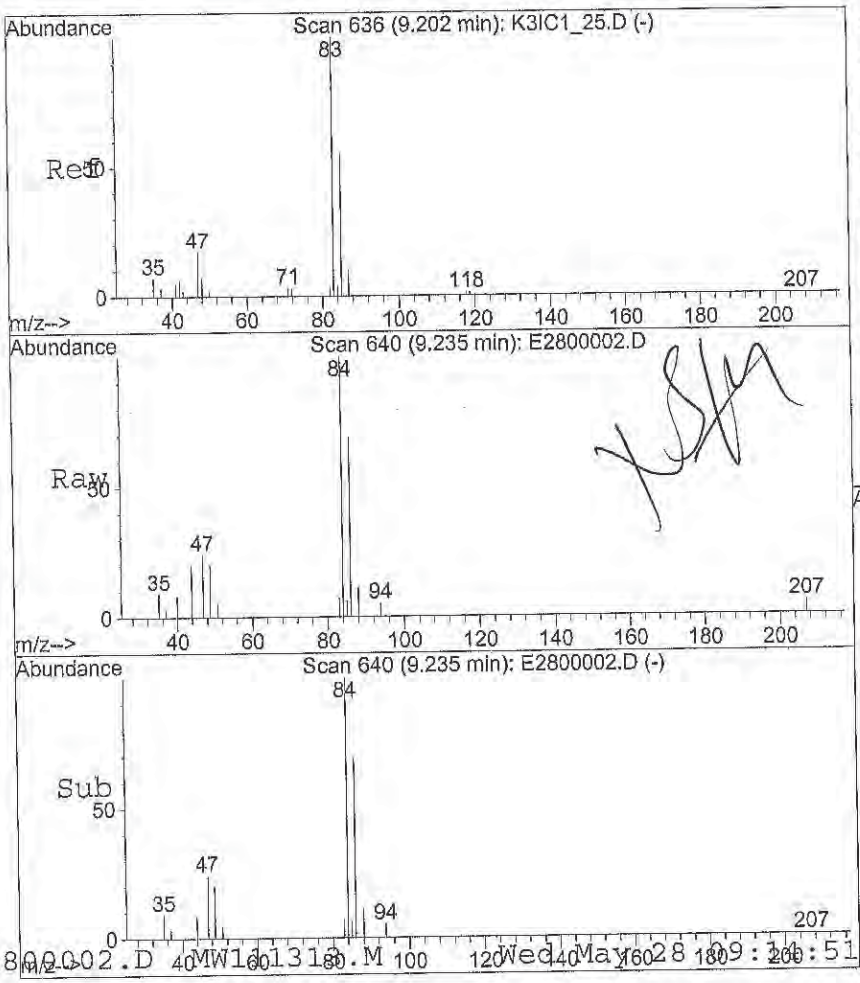


#15
(TBA) tert-Butanol
Concen: 1.27 ug/L
RT: 6.95 min Scan# 369
Delta R.T. -0.17 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 59 Resp: 354

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

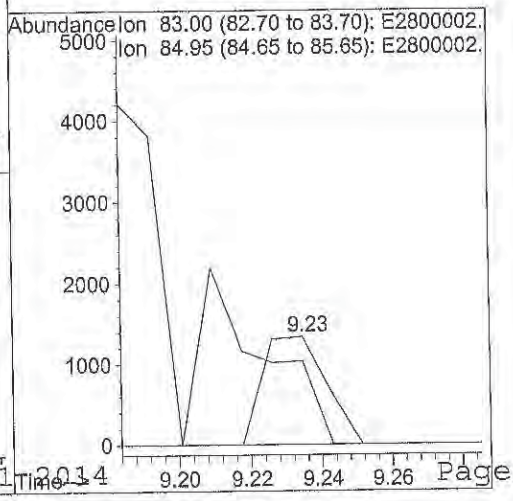


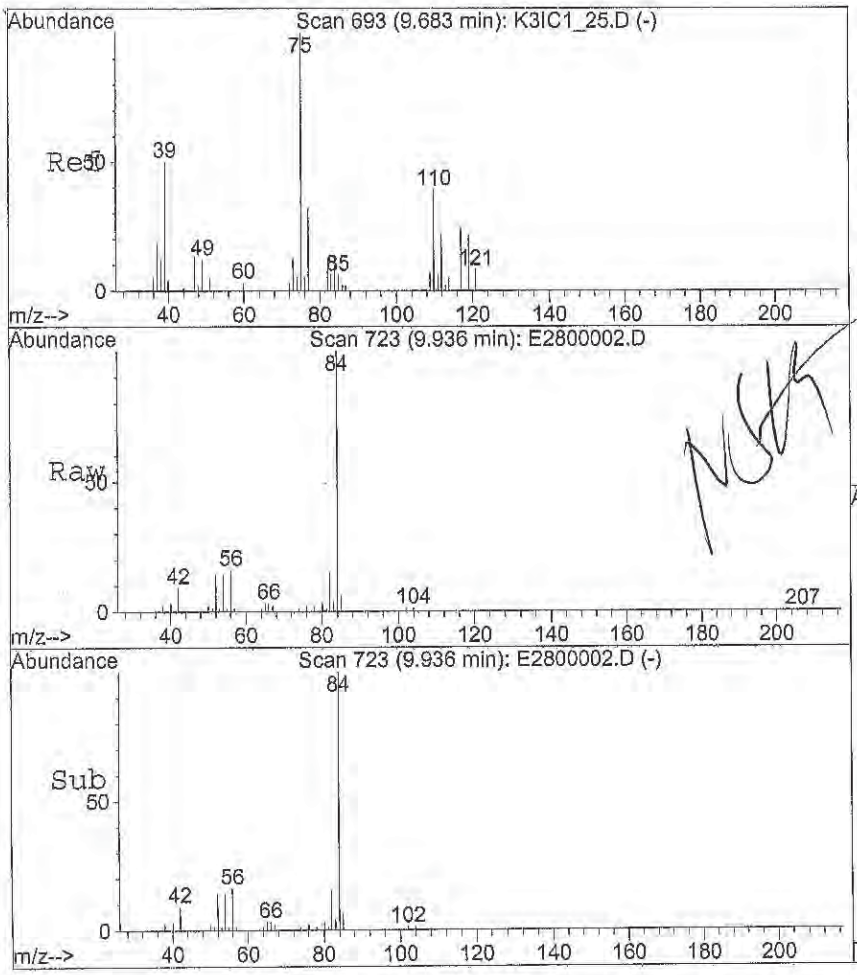


#24
Chloroform
Concen: 0.19 ug/L
RT: 9.23 min Scan# 640
Delta R.T. 0.03 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 83 Resp: 1652

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

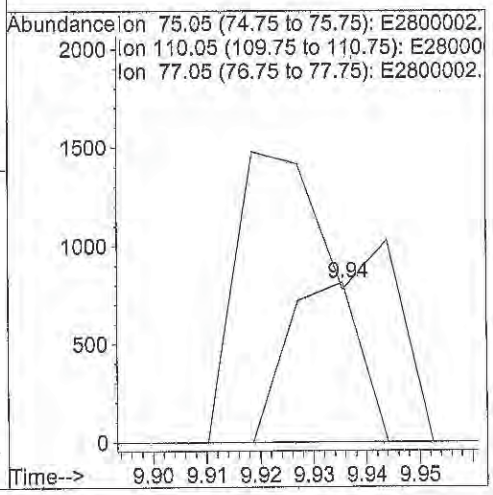


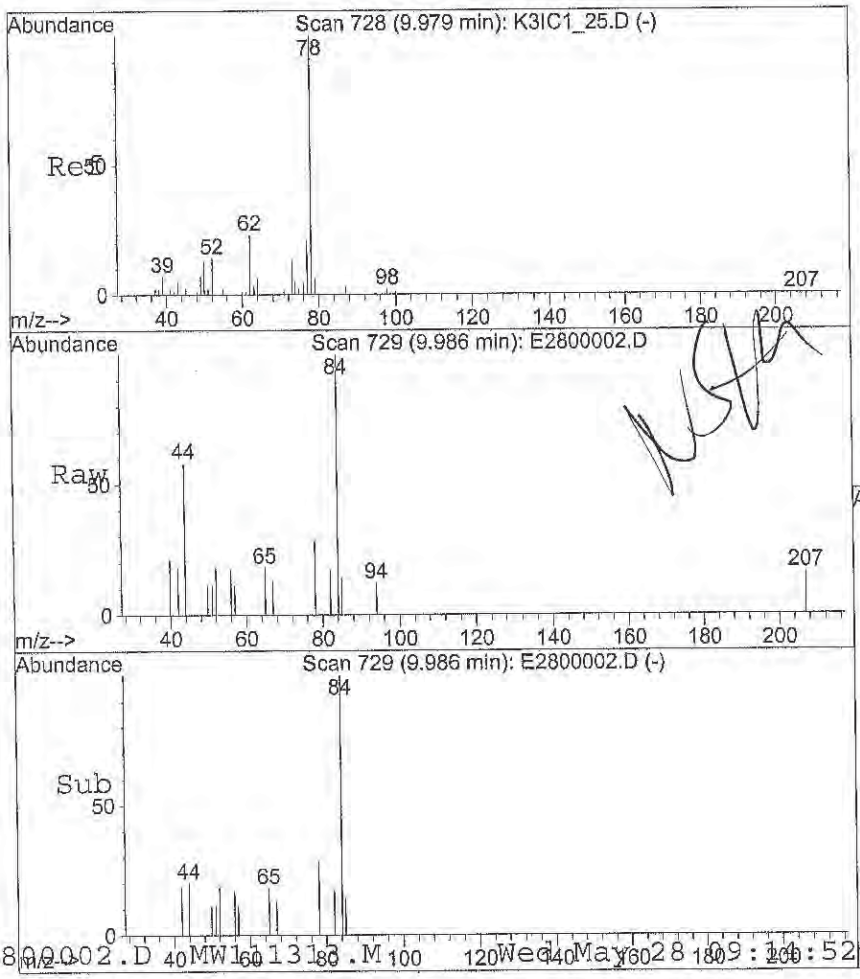


#29
1,1-Dichloropropene
Concen: 0.12 ug/L
RT: 9.94 min Scan# 723
Delta R.T. 0.25 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 75 Resp: 777

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	306.4	25.0	37.4#

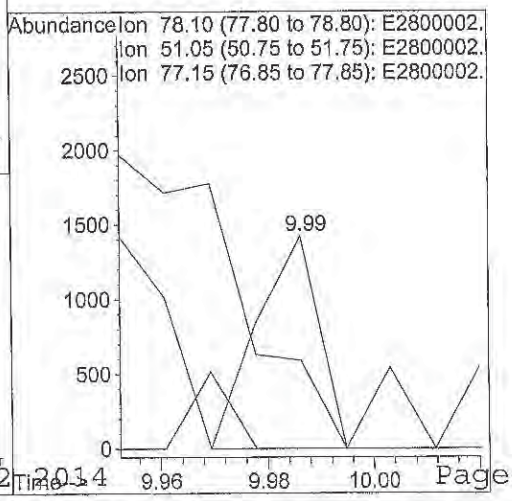


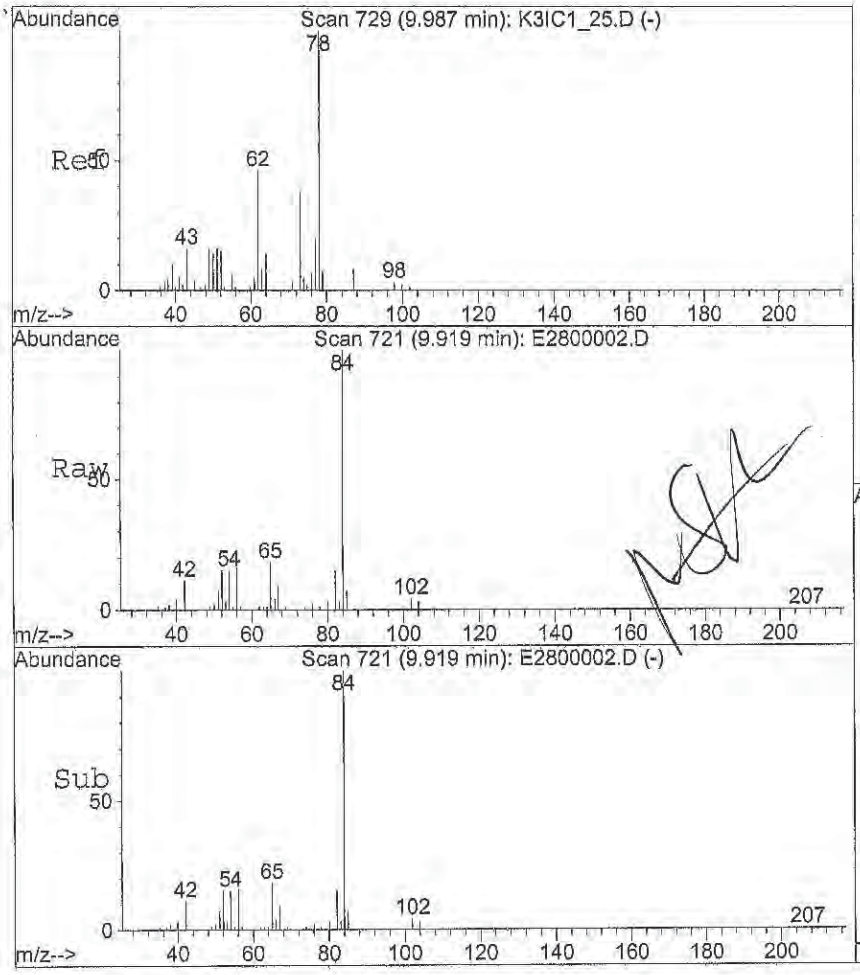


#31
Benzene
Concen: 0.07 ug/L
RT: 9.99 min Scan# 729
Delta R.T. 0.01 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 78 Resp: 1147

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	22.8	16.6	24.8

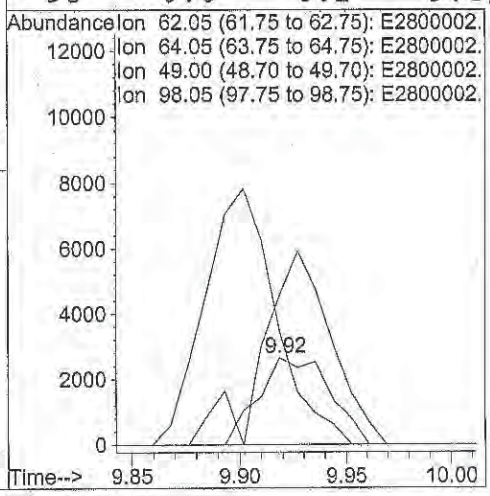


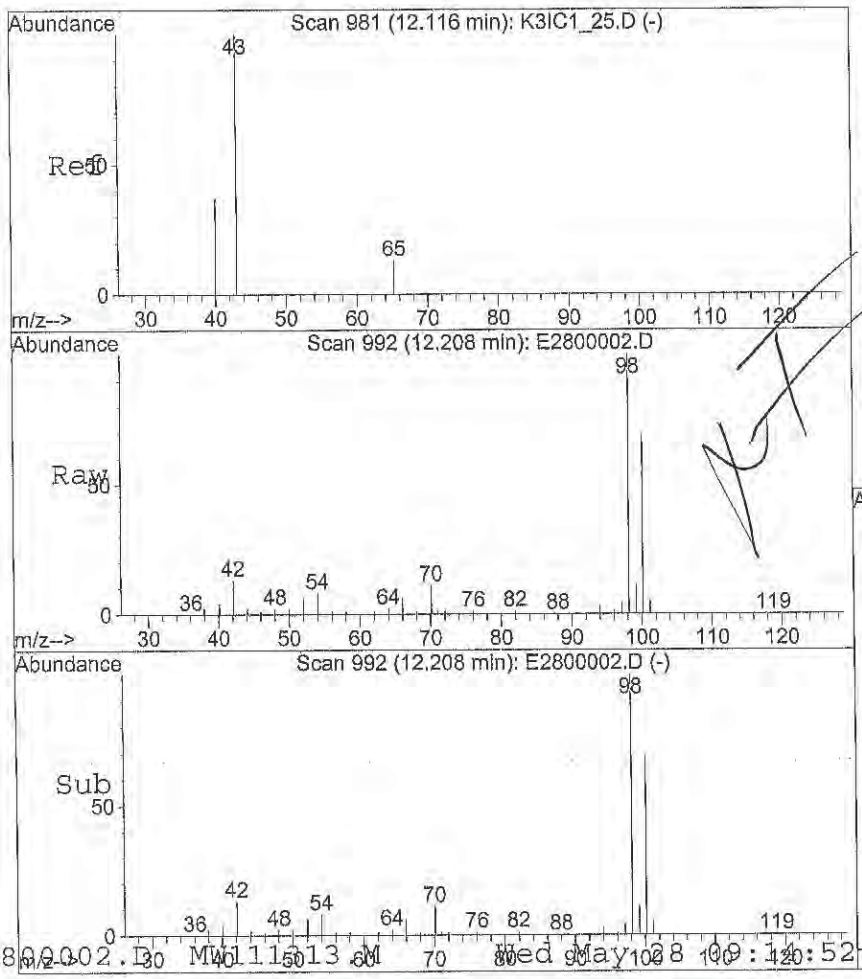


#32
1,2-Dichloroethane
Concen: 1.13 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 62 Resp: 6151

Ion	Ratio	Lower	Upper
62	100		
64	214.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

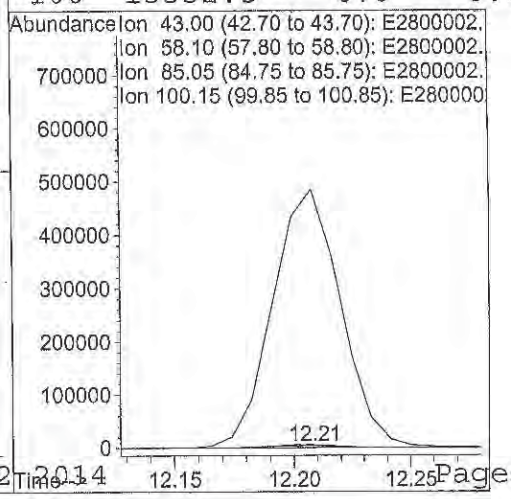


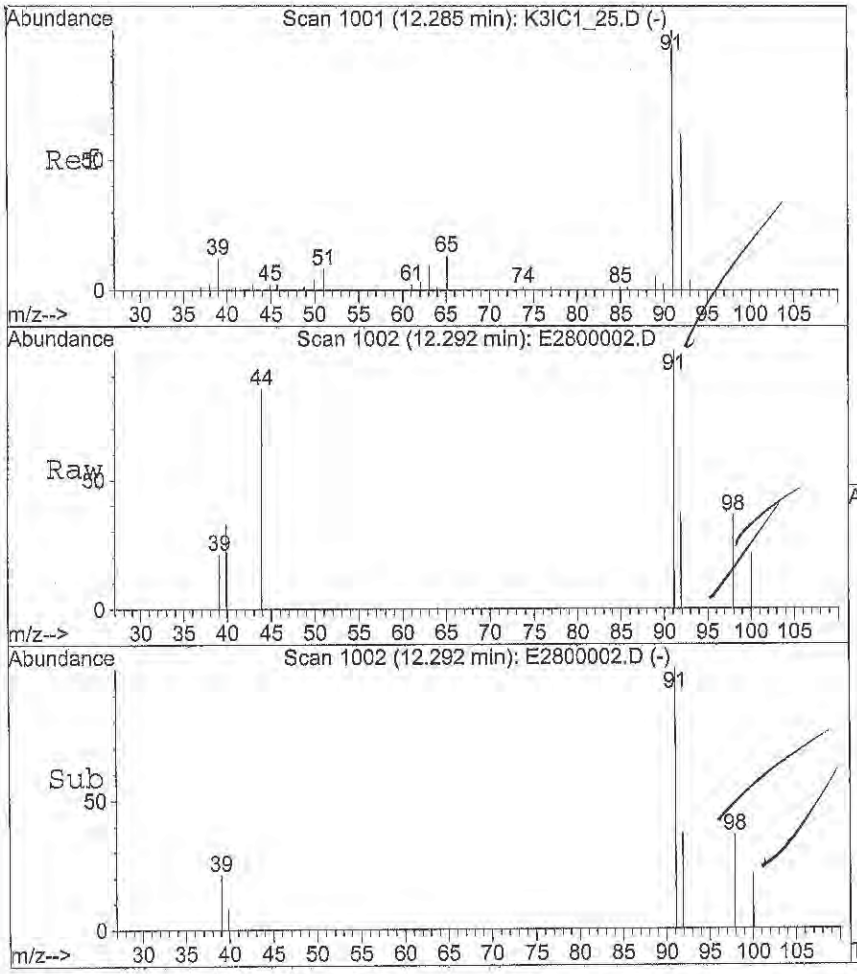


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.85 ug/L
RT: 12.21 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 43 Resp: 7286

Ion	Ratio	Lower	Upper
43	100		
58	132.5	0.0	0.0#
85	0.0	0.0	0.0
100	13352.5	0.0	0.0#

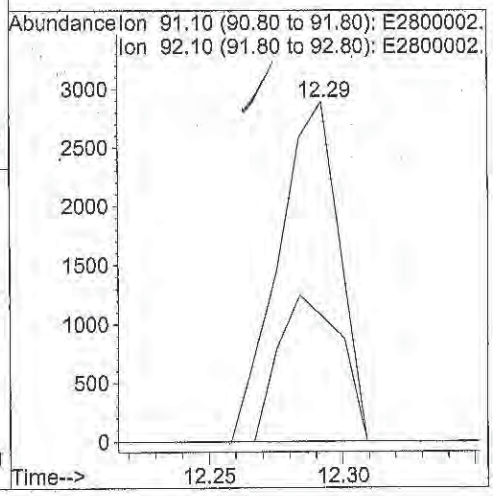


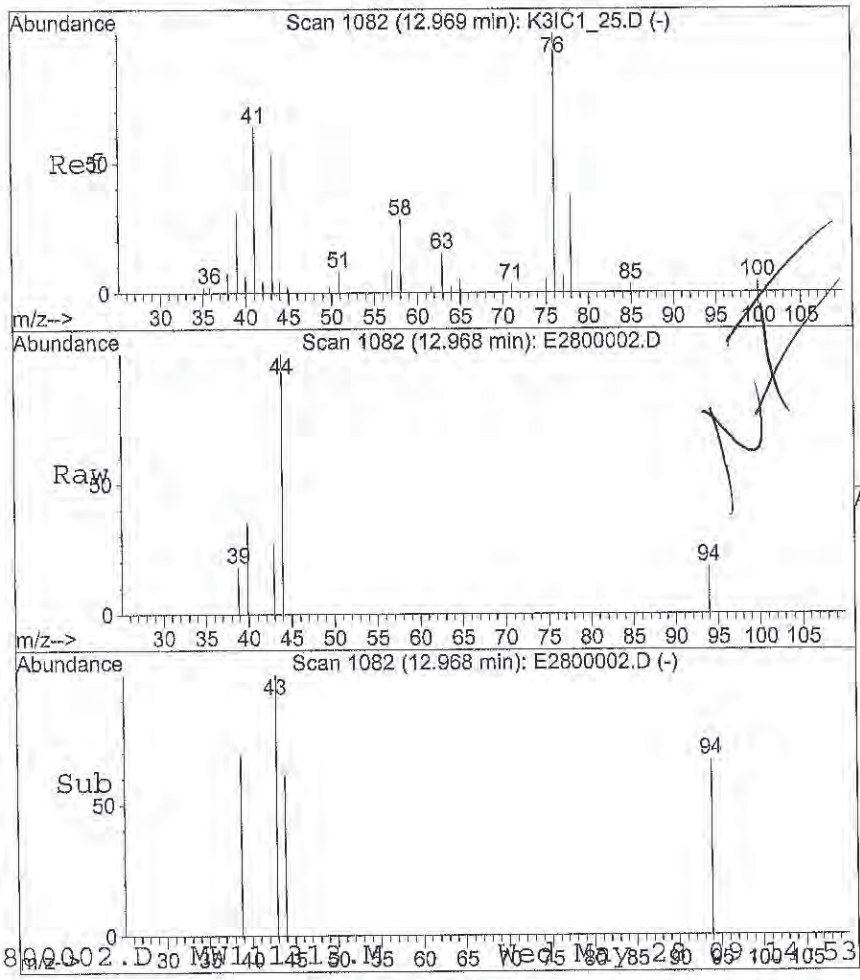


#41
Toluene
Concen: 0.26 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 91 Resp: 4573

Ion	Ratio	Lower	Upper
91	100		
92	44.1	47.4	71.0#

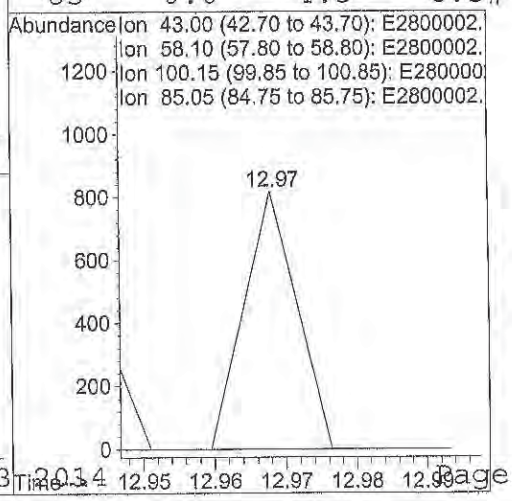


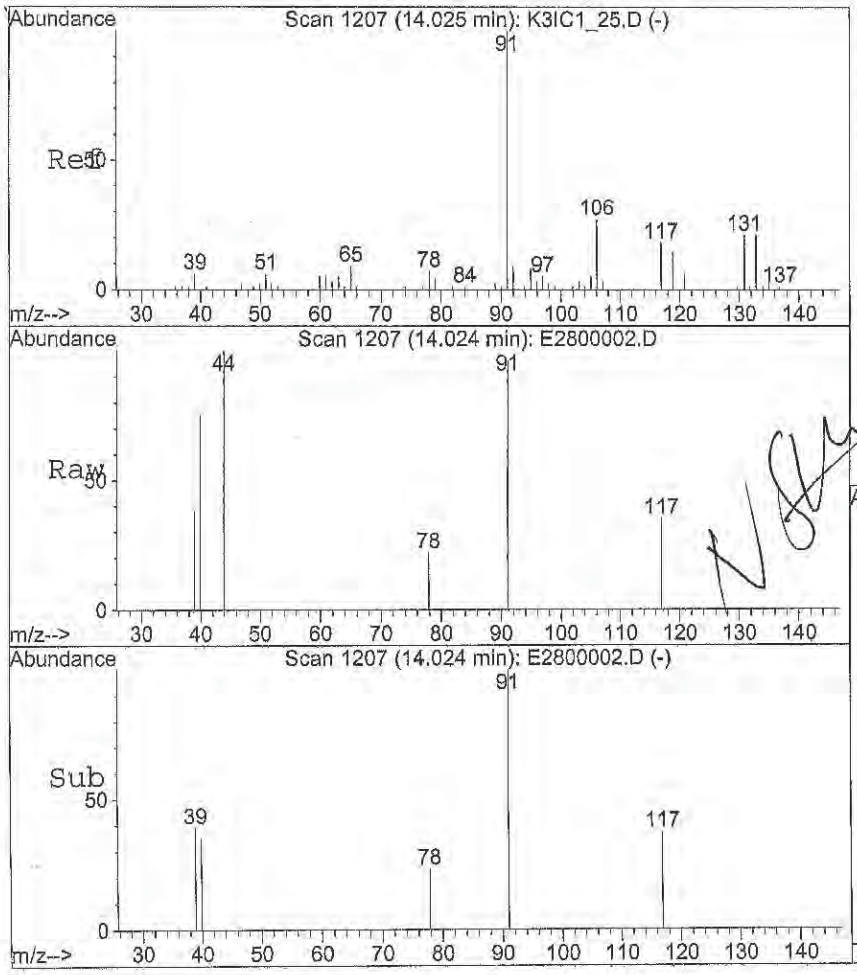


#46
2-Hexanone
Concen: 0.15 ug/L
RT: 12.97 min Scan# 1082
Delta R.T. -0.00 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 43 Resp: 415

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

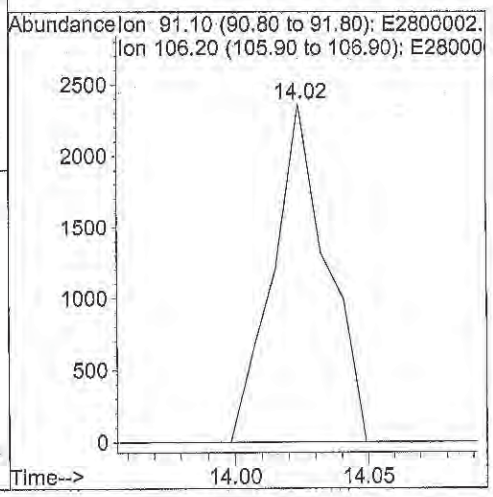


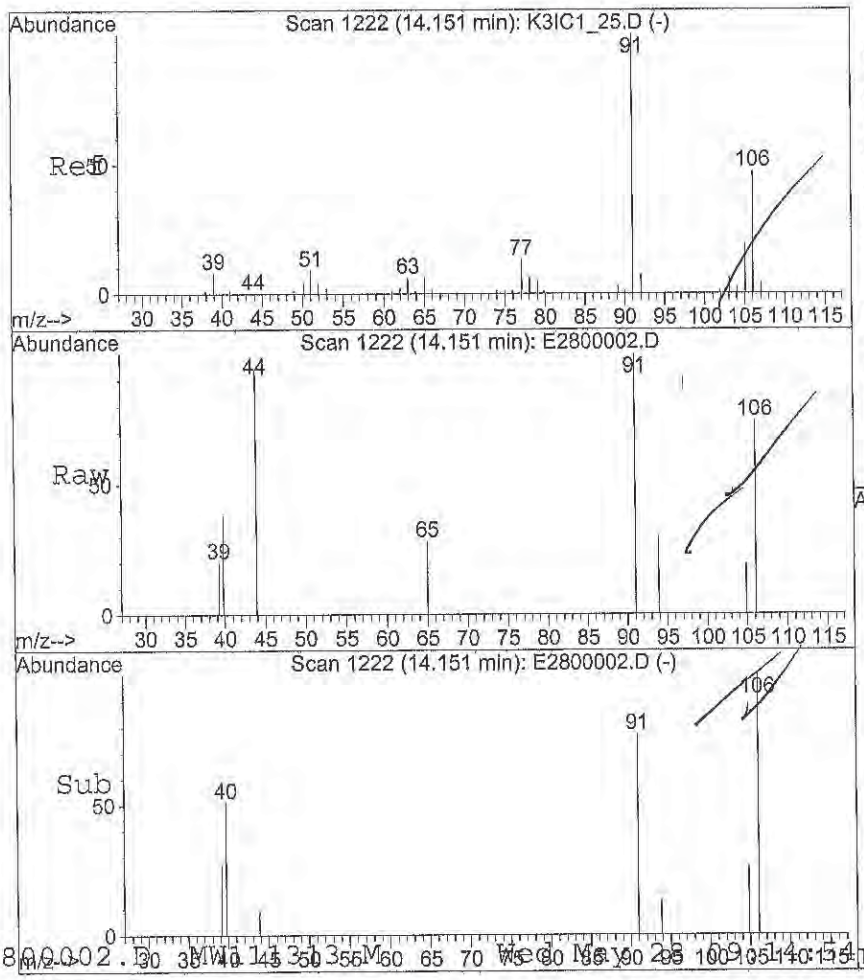


#51
Ethylbenzene
Concen: 0.17 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 91 Resp: 3307

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

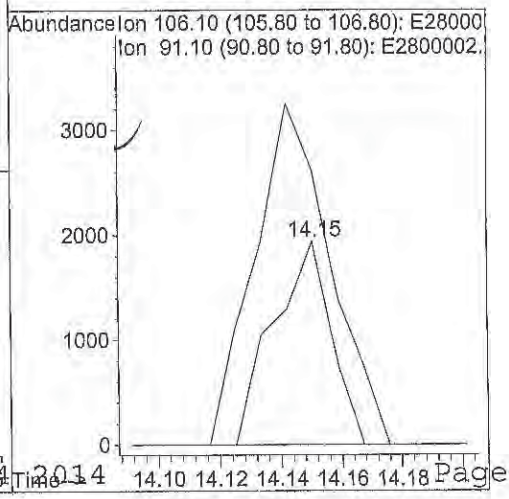


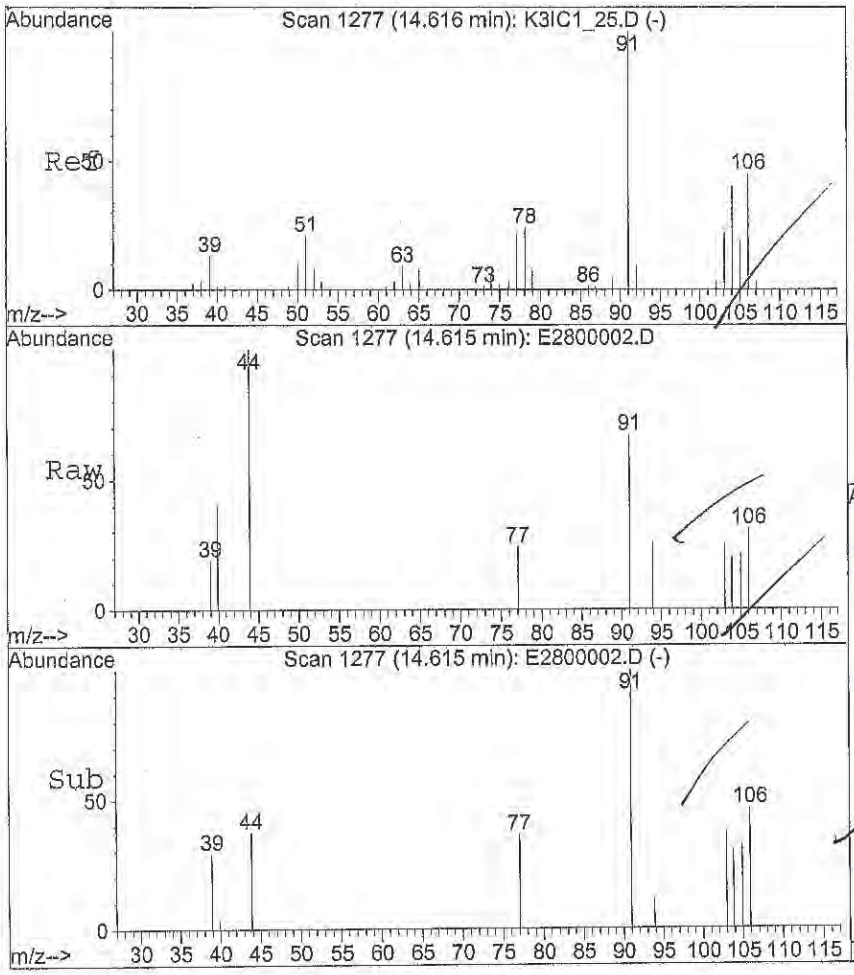


#52
m,p-Xylenes
Concen: 0.36 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion:106 Resp: 2542

Ion	Ratio	Lower	Upper
106	100		
91	220.4	177.1	265.7

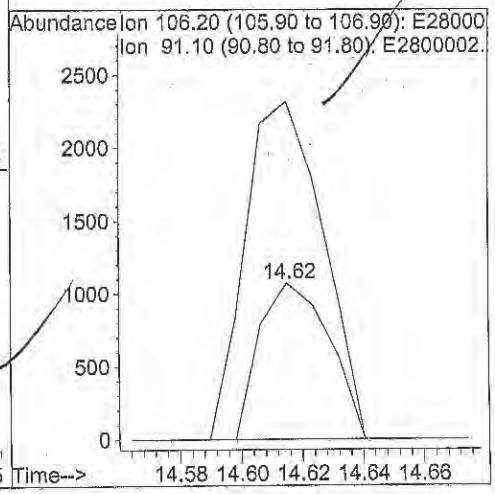


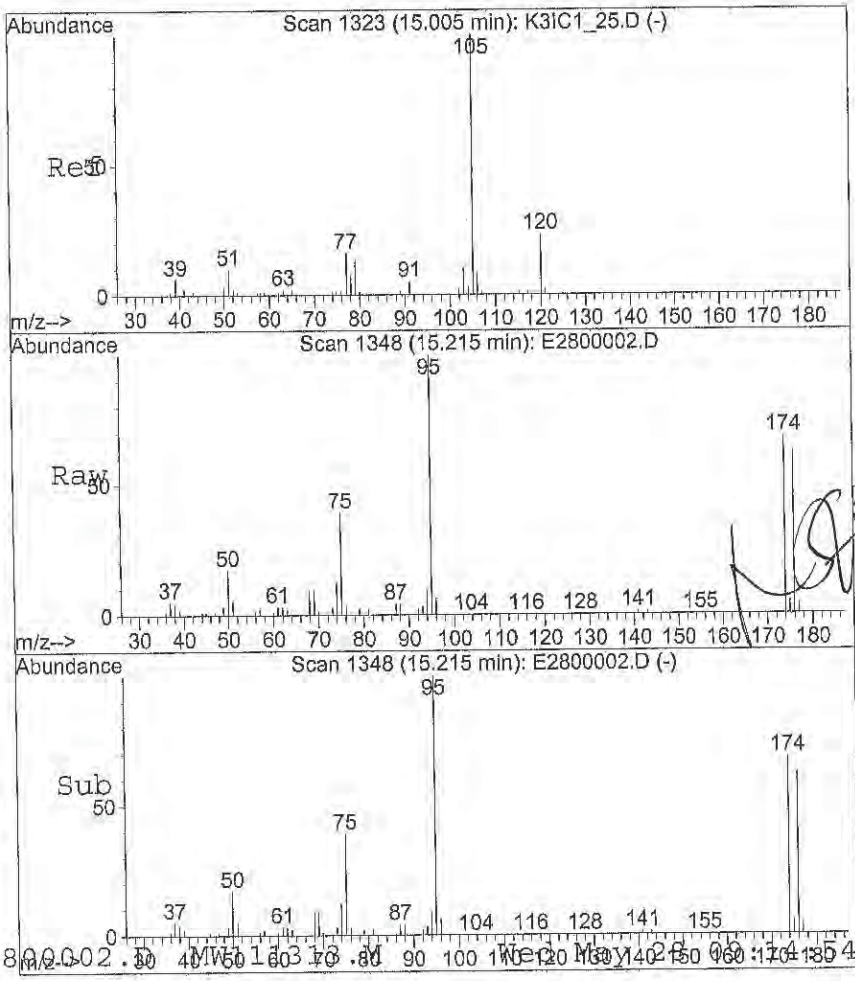


#53
o-Xylene
Concen: 0.24 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion:106 Resp: 1697

Ion	Ratio	Lower	Upper
106	100		
91	240.7	179.0	268.6

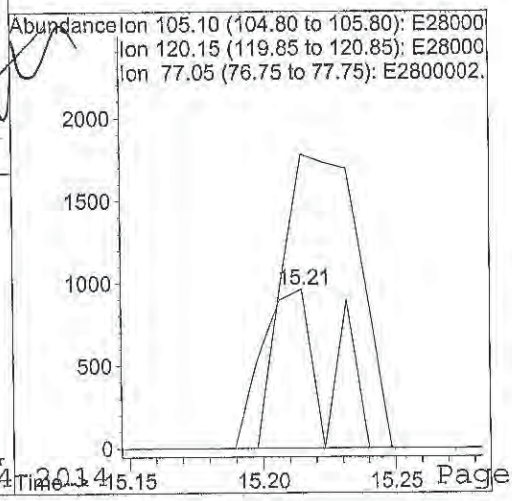


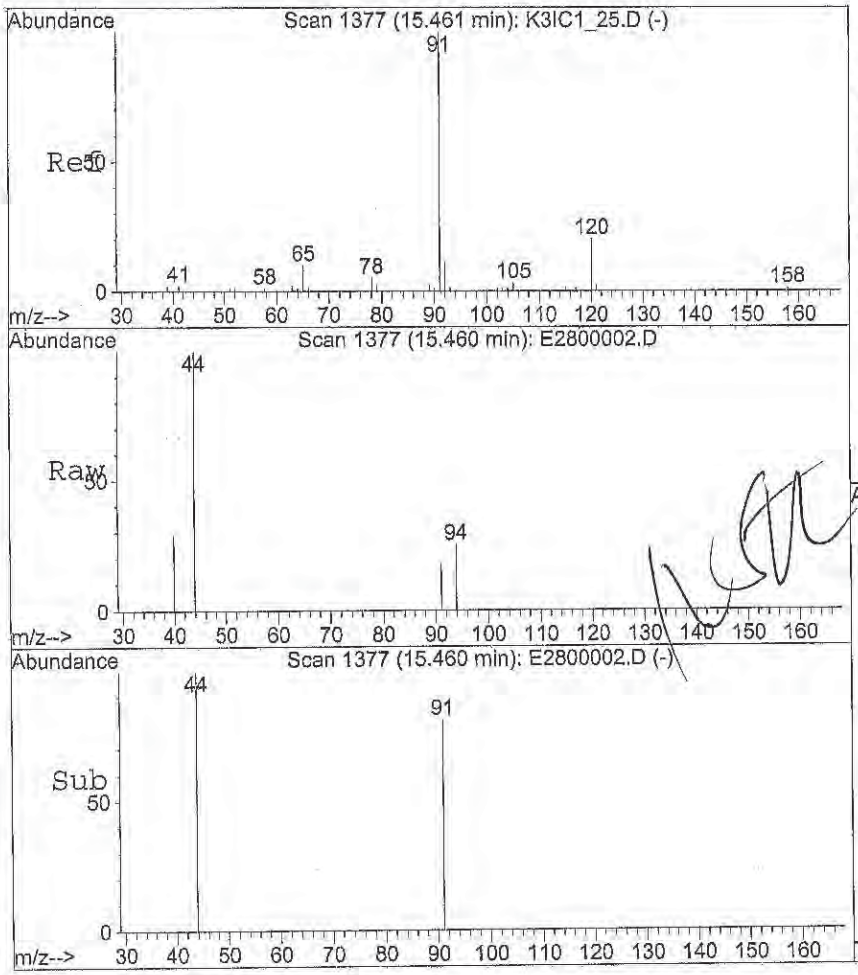


#56
Isopropylbenzene
Concen: 0.09 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. 0.21 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion:105 Resp: 1657

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	215.3	13.1	19.7#

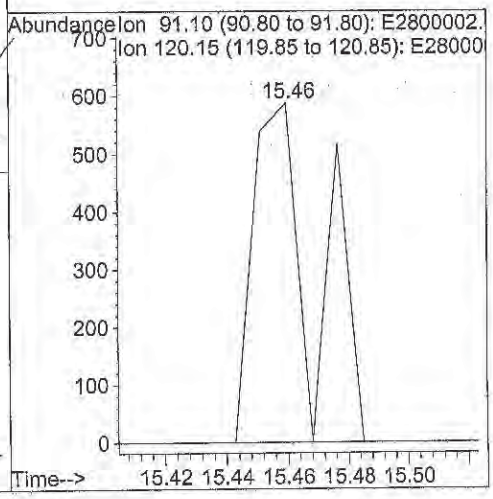


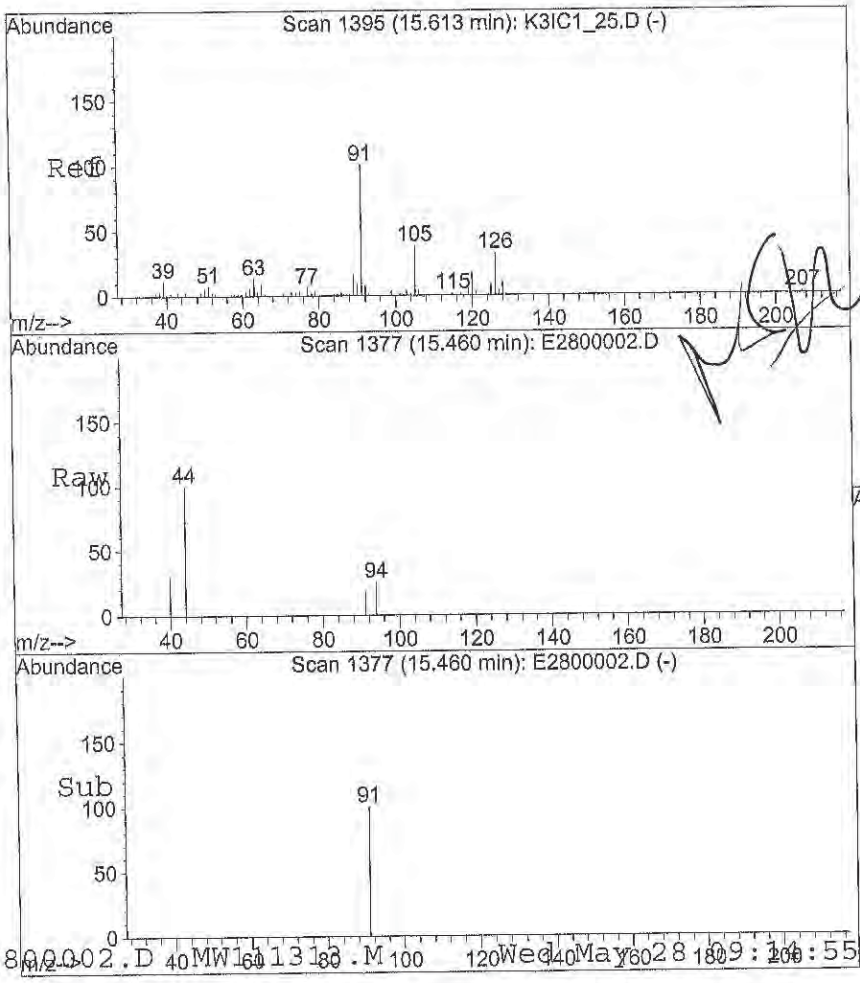


#62
n-Propylbenzene
Concen: 0.03 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 91 Resp: 832

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

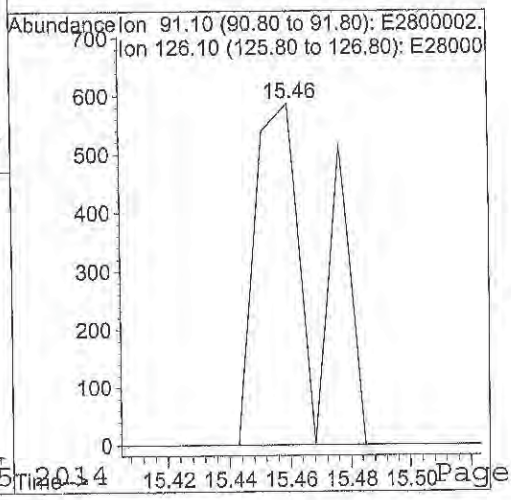


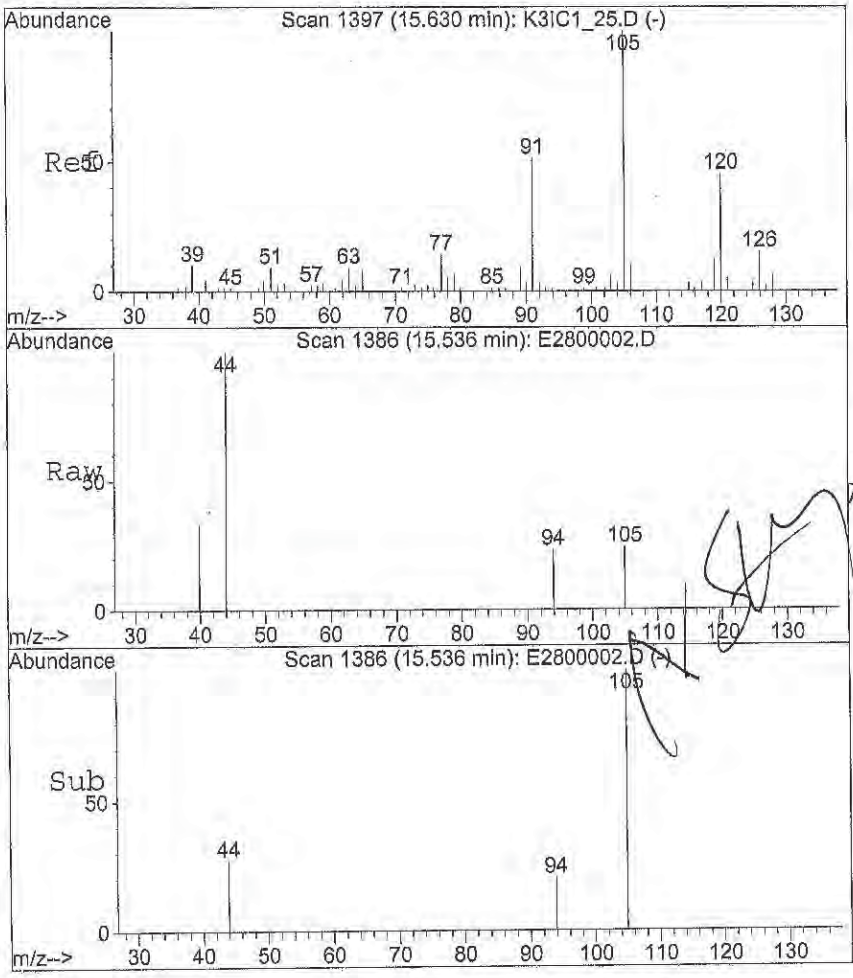


#63
2-Chlorotoluene
Concen: 0.05 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.15 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion: 91 Resp: 832

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

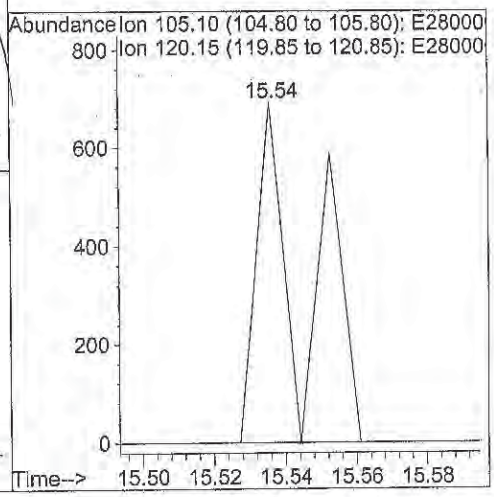


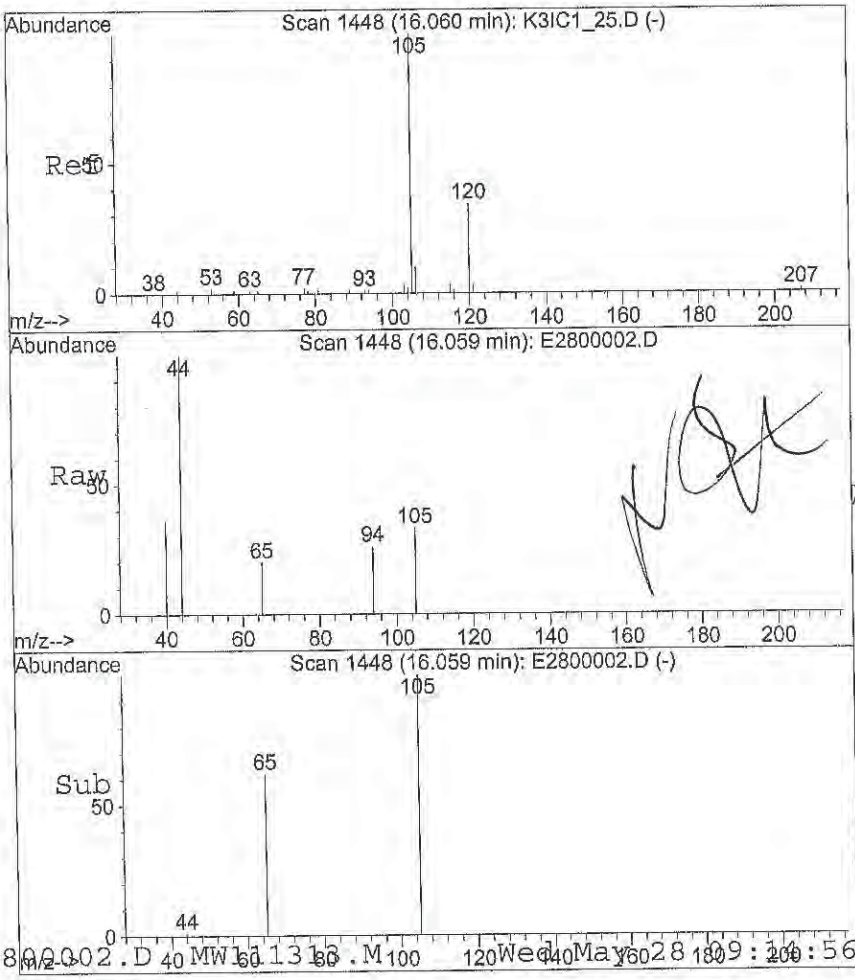


#64
1,3,5-Trimethylbenzene
Concen: 0.04 ug/L
RT: 15.54 min Scan# 1386
Delta R.T. -0.09 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion:105 Resp: 648

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

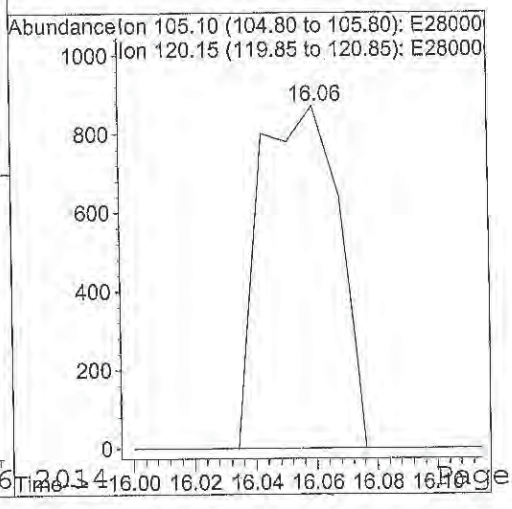


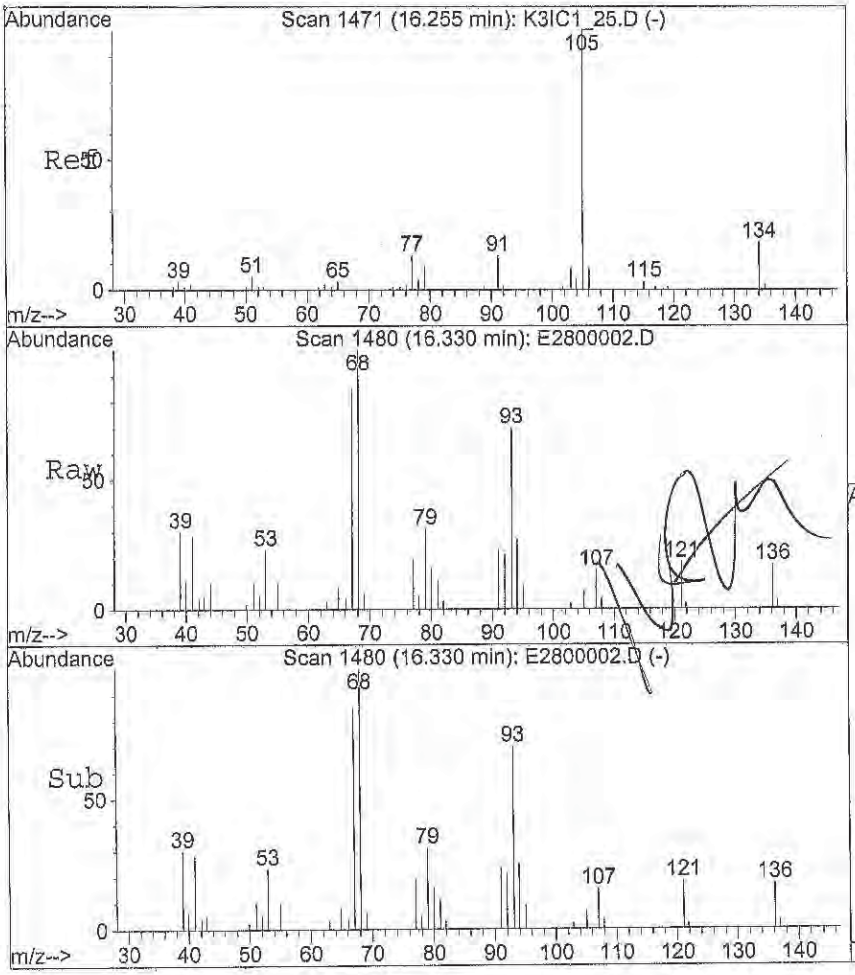


#67
1,2,4-Trimethylbenzene
Concen: 0.09 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion:105 Resp: 1569

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

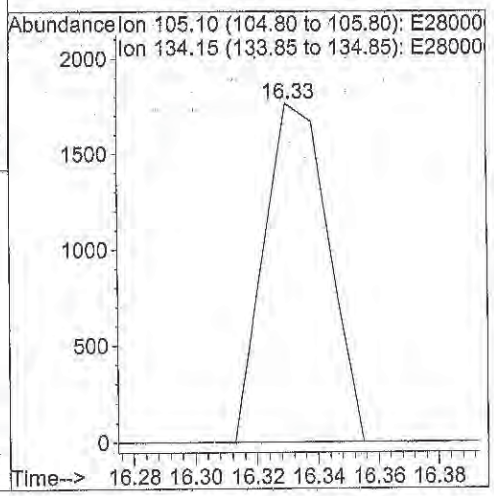


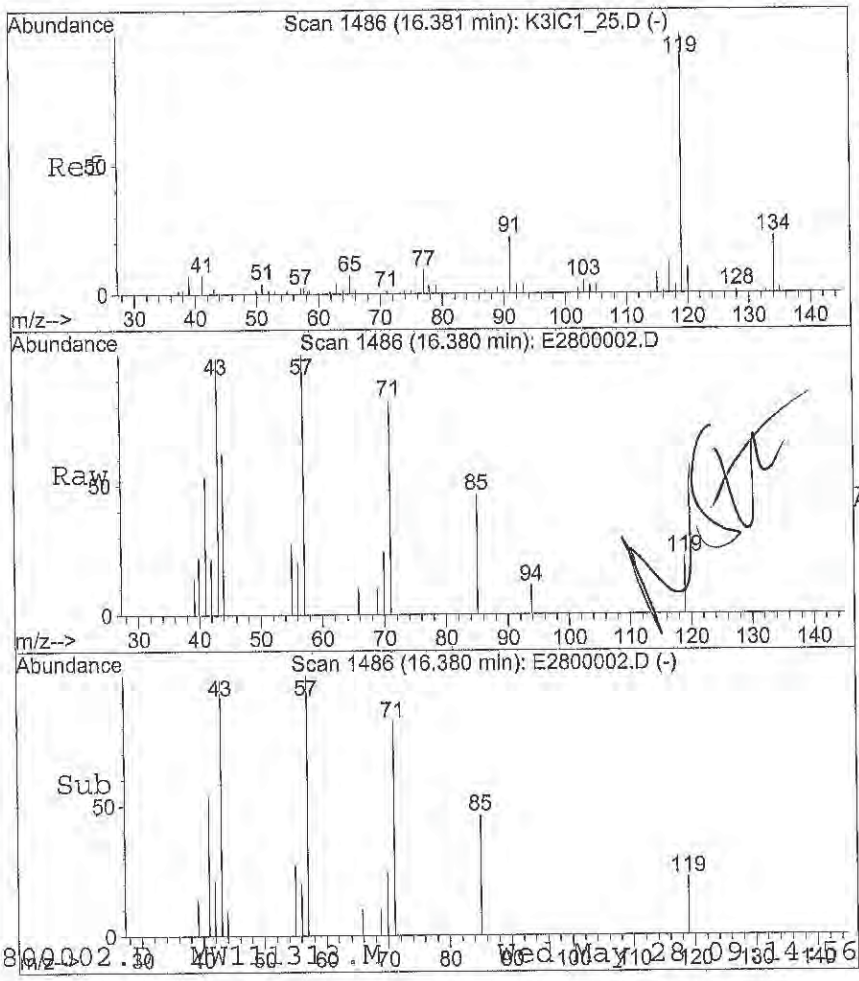


#68
sec-Butylbenzene
Concen: 0.11 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion:105 Resp: 2565

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

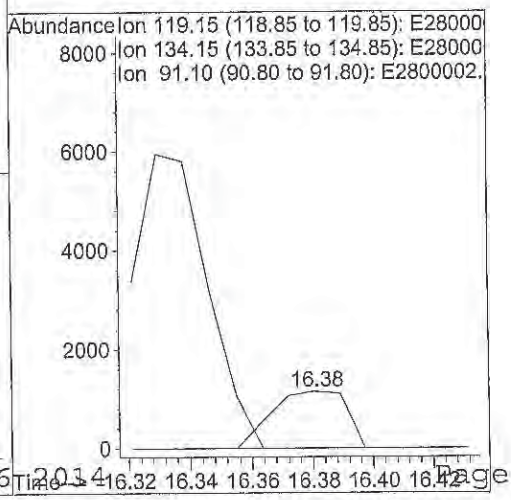




#69
p-Isopropyltoluene
Concen: 0.11 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2800002.D
Acq: 28 May 2014 8:47 am

Tgt Ion:119 Resp: 1963

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800002.D Vial: 1
Acq On : 28 May 2014 8:47 am Operator: DN
Sample : 3E42801-02 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:16 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1628814	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1280080	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	672692	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	473247	11.17 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.36%		
3) Chloroform-d (SU6)	9.18	84	793675	13.06 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 104.48%		
4) Methylene Chloride-d2 (SU5	7.08	86	446157	12.56 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.48%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	471749	16.30 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 130.40%#		
6) Benzene-d6 (SU7)	9.93	84	1463973	11.45 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 91.60%		
8) Toluene-d8 (SU3)	12.21	98	1410542	11.61 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.88%		
9) 4-Bromofluorobenzene (SU4)	15.21	95	700102	13.96 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.68%		

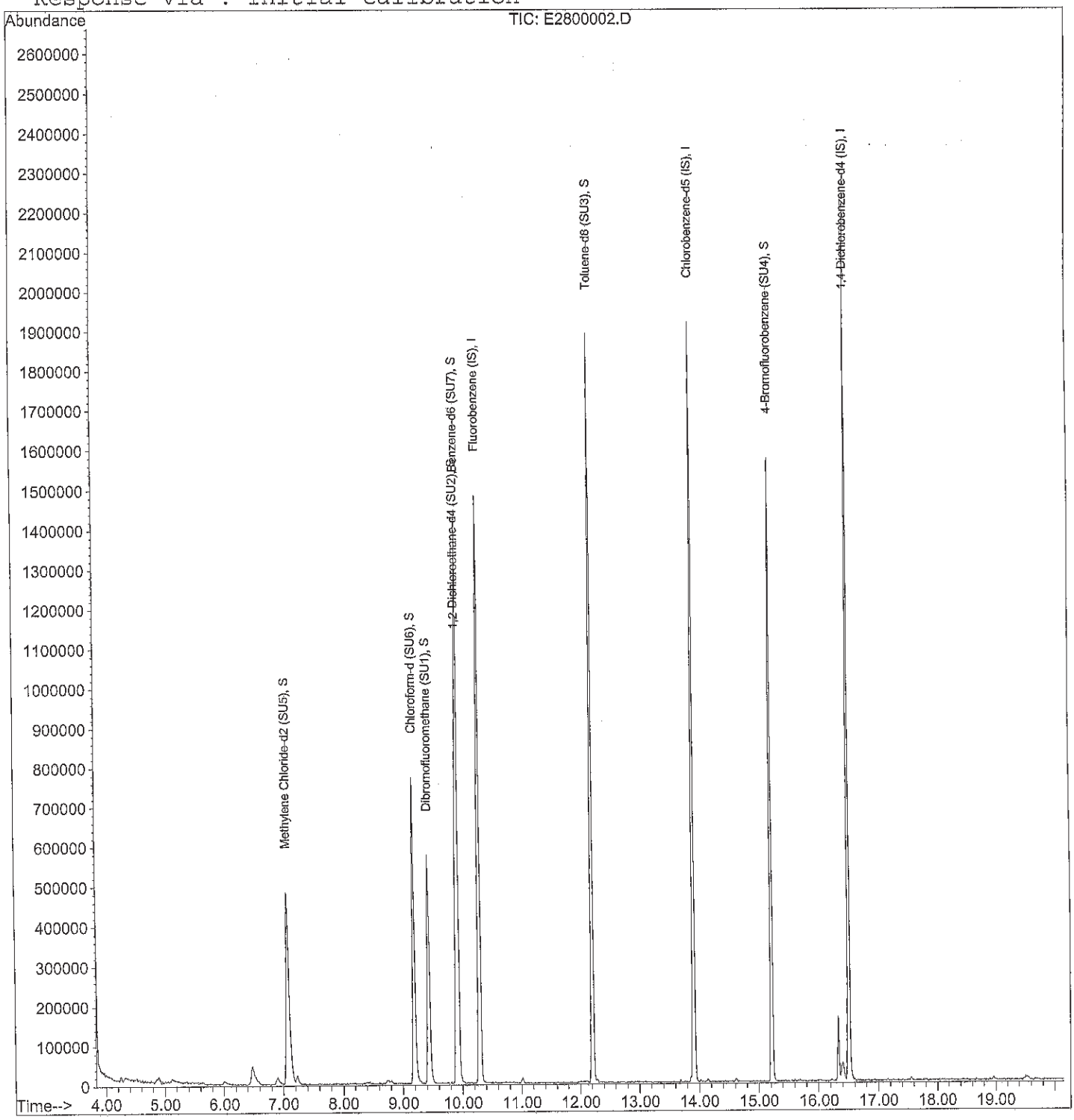
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800002.D Vial: 1
Acq On : 28 May 2014 8:47 am Operator: DN
Sample : 3E42801-02 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 9:16 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800004.D
Acq On : 28 May 2014 9:49 am
Sample : 3E42801-03
Misc : 100cc SVL-815-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 28 10:16 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1588325	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1230604	12.50	ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	662439	12.50	ug/L	0.00

System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	467461	11.80	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.40%			
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	447278	11.88	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.04%			
39) Toluene-d8 (SU3)	12.21	98	1406762	12.26	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.08%			
58) 4-Bromofluorobenzene (SU4)	15.22	95	693511	13.78	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.24%			

Target Compounds						Qvalue
4) Chloromethane	4.40	50	1770	-0.56	~~ug/L~~ #	41
6) Bromomethane	5.12	96	5143	1.17	~~ug/L~~ #	20
7) Chloroethane	5.27	64	1444	1.78	~~ug/L~~ #	32
11) Acetone	6.45	58	2870	179.09	~~ug/L~~ #	1
12) (IPA) Leak Check Compound	6.48	45	115496	605.13	~~ug/L~~ #	87
13) Carbon disulfide	6.85	76	2830	0.21	ug/L #	76
14) Methylene Chloride	7.07	84	6463	1.48	~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.98	59	262	0.97	~~ug/L~~ #	77
20) 2,2-Dichloropropane	8.86	77	256	0.04	~~ug/L~~ #	36
24) Chloroform	9.21	83	3231	0.39	~~ug/L~~ #	18
29) 1,1-Dichloropropene	9.92	75	254	0.04	~~ug/L~~ #	1
31) Benzene	9.93	78	11131	0.74	ug/L #	78
32) 1,2-Dichloroethane	9.93	62	7685	1.45	ug/L #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	6666	2.71	~~ug/L~~ #	~~100~~
41) Toluene	12.28	91	6141	0.37	ug/L 0.0074	~~92~~
46) 2-Hexanone	12.93	43	1905	0.71	~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	2528	0.13	~~ug/L~~ #	45
52) m,p-Xylenes	14.14	106	2389	0.35	ug/L 0.007	97
53) o-Xylene	14.61	106	976	0.15	ug/L # 0.003	36
54) Styrene	14.62	104	1867	-0.68	~~ug/L~~ #	68
56) Isopropylbenzene	15.00	105	297	0.02	~~ug/L~~ #	55
62) n-Propylbenzene	15.46	91	641	0.02	~~ug/L~~ #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800004.D Vial: 3
Acq On : 28 May 2014 9:49 am Operator: DN
Sample : 3E42801-03 Inst : GC/MS Ins
Misc : 100cc SVL-815-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:16 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

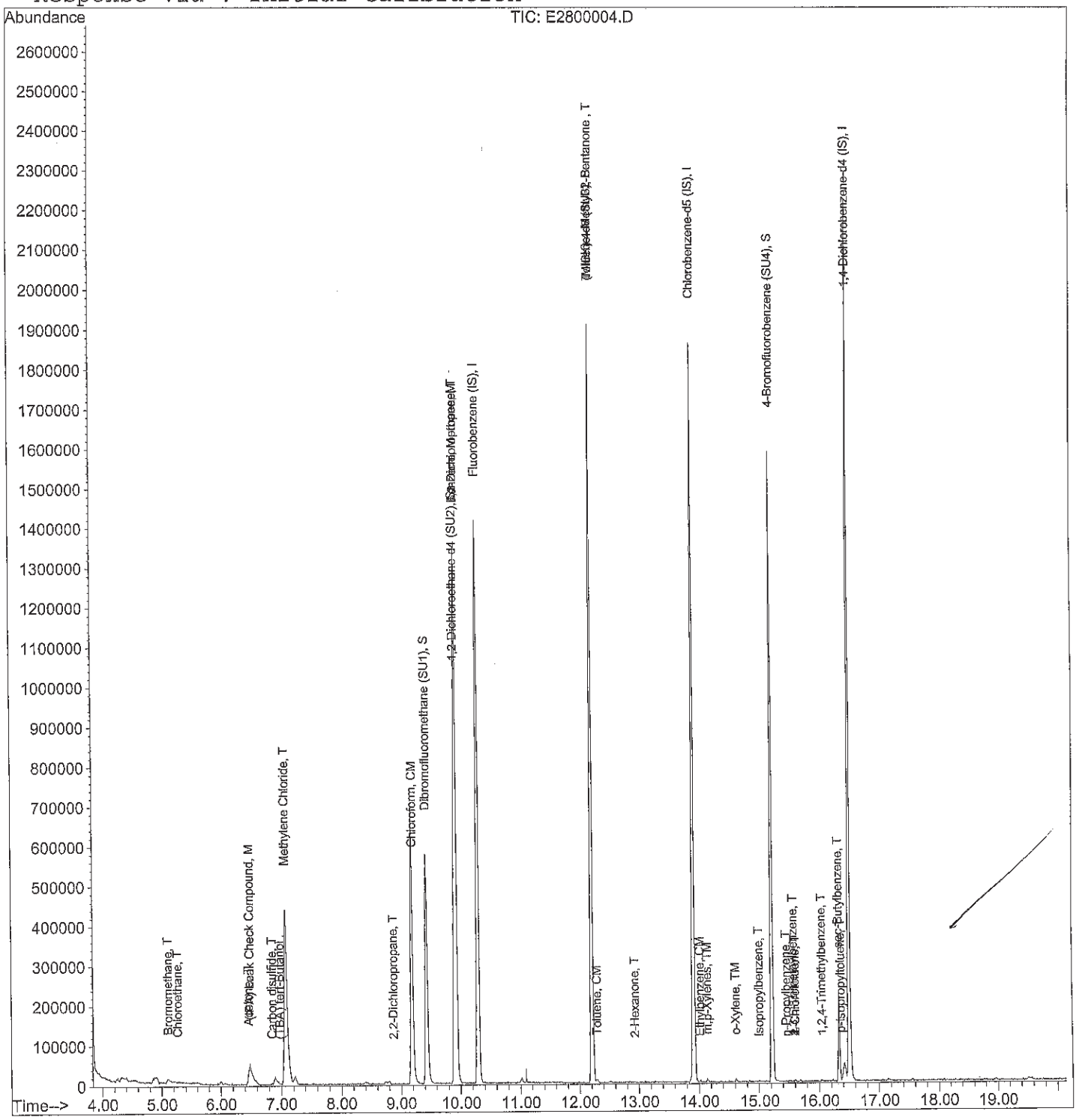
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
63) 2-Chlorotoluene	15.60	91	302	0.02	ug/L #	45
64) 1,3,5-Trimethylbenzene	15.57	105	292	0.02	~~ug/L~~ #	31
65) 4-Chlorotoluene	15.60	91	302	0.02	~~ug/L~~ #	44
67) 1,2,4-Trimethylbenzene	16.06	105	1104	0.06	~~ug/L~~ #	33
68) sec-Butylbenzene	16.33	105	3272	0.15	~~ug/L~~ #	62
69) p-Isopropyltoluene	16.37	119	1069	0.06	~~ug/L~~ #	52

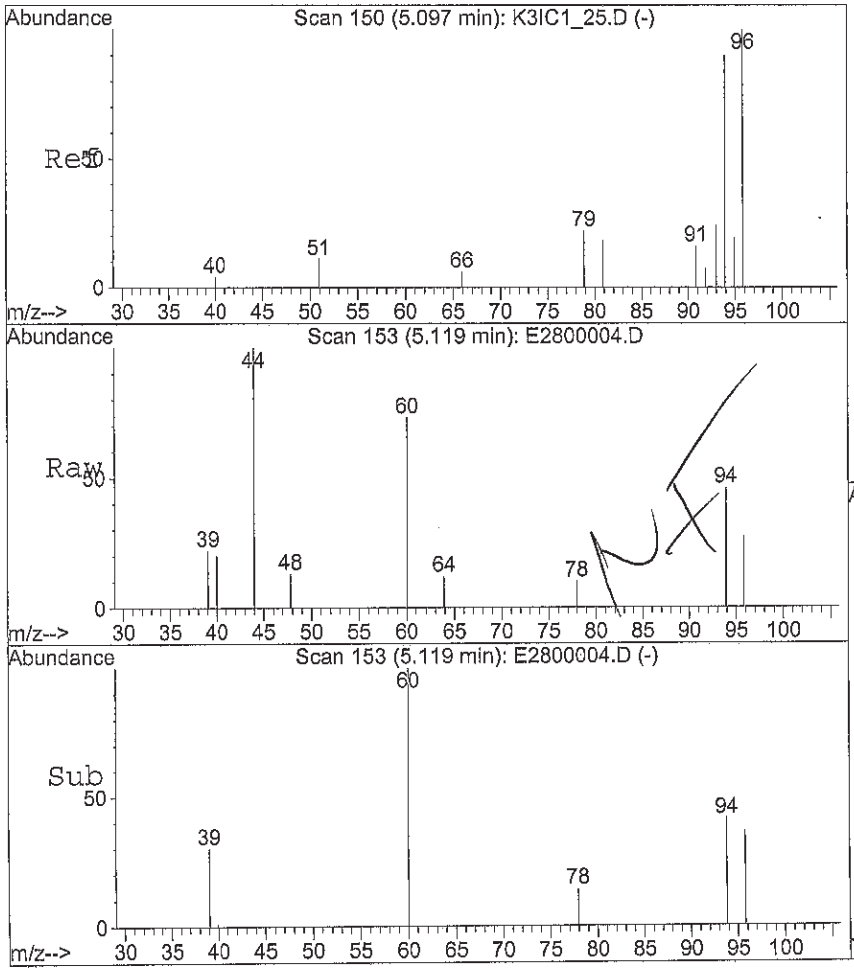
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800004.D Vial: 3
Acq On : 28 May 2014 9:49 am Operator: DN
Sample : 3E42801-03 Inst : GC/MS Ins
Misc : 100cc SVL-815-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:16 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

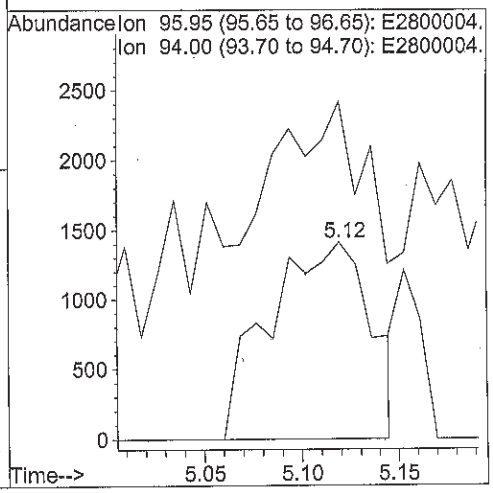


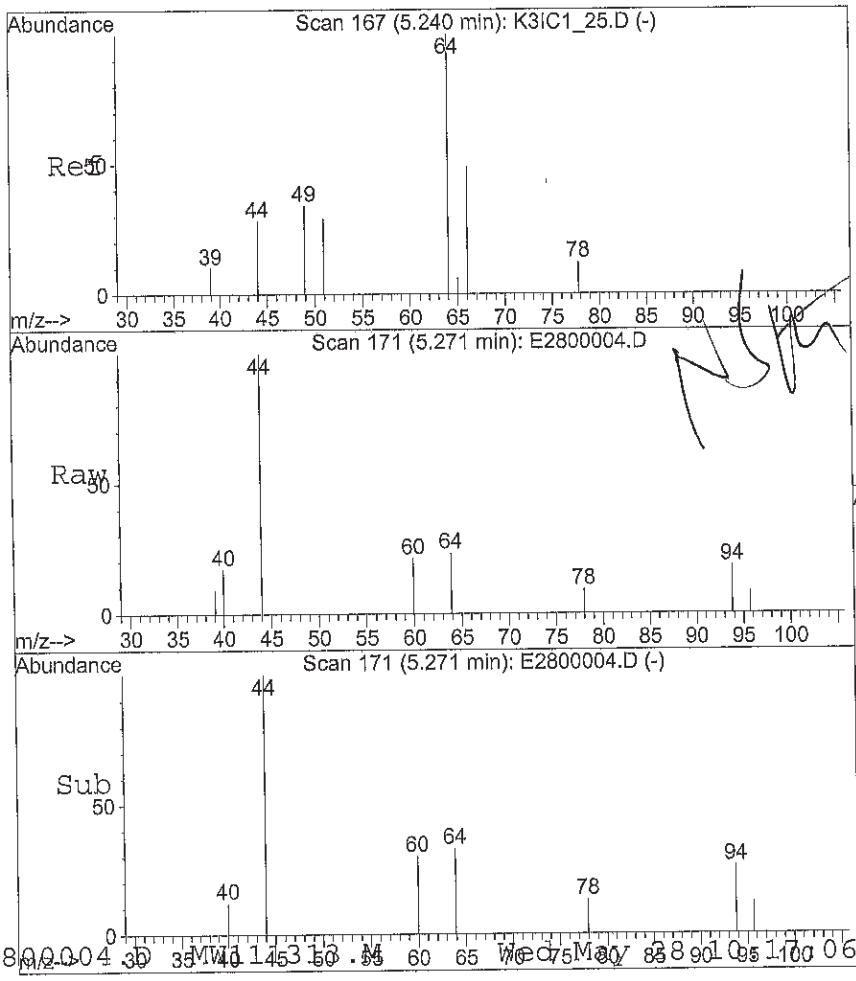


#6
Bromomethane
Concen: 1.17 ug/L
RT: 5.12 min Scan# 153
Delta R.T. 0.02 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 96 Resp: 5143

Ion	Ratio	Lower	Upper
96	100		
94	217.3	101.0	151.4#

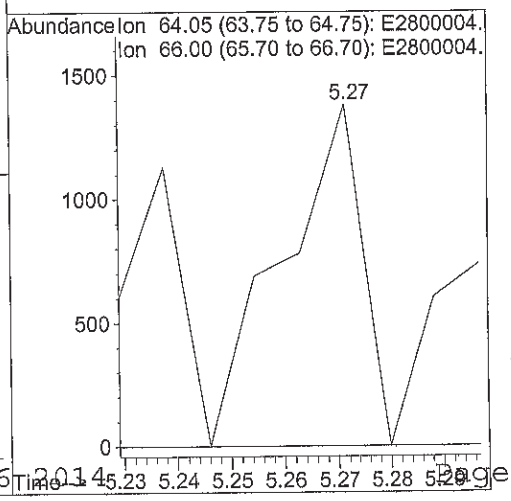


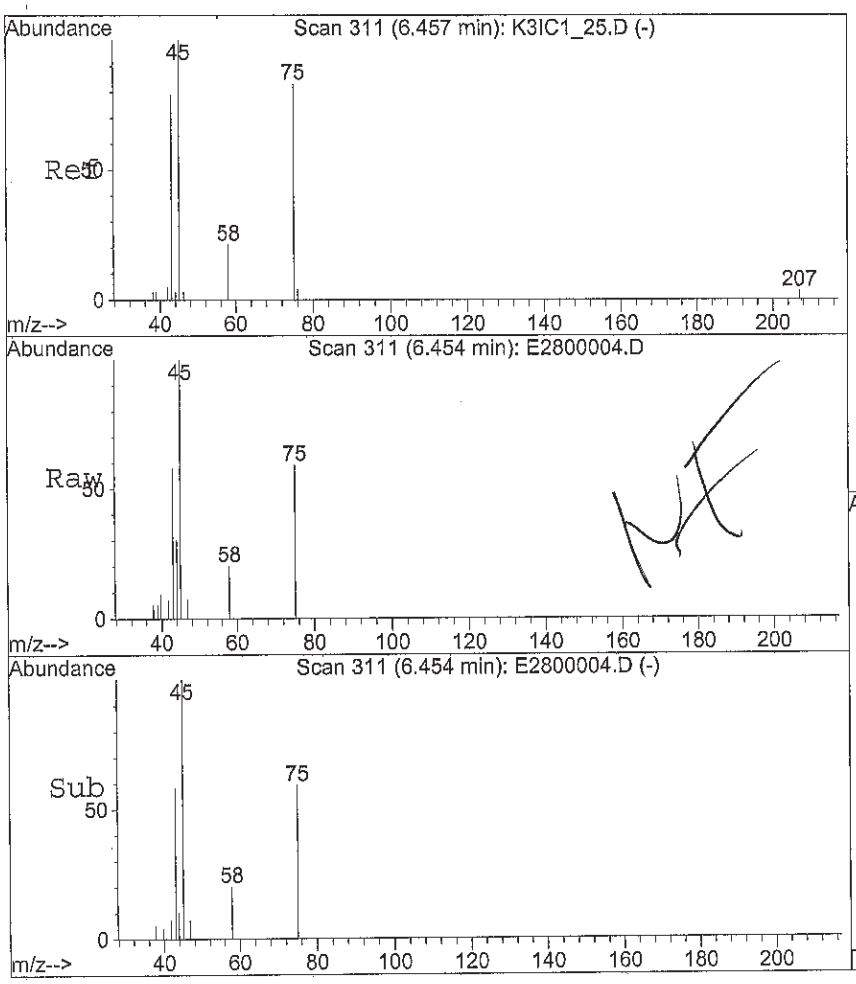


#7
Chloroethane
Concen: 1.78 ug/L
RT: 5.27 min Scan# 171
Delta R.T. 0.03 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 64 Resp: 1444

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

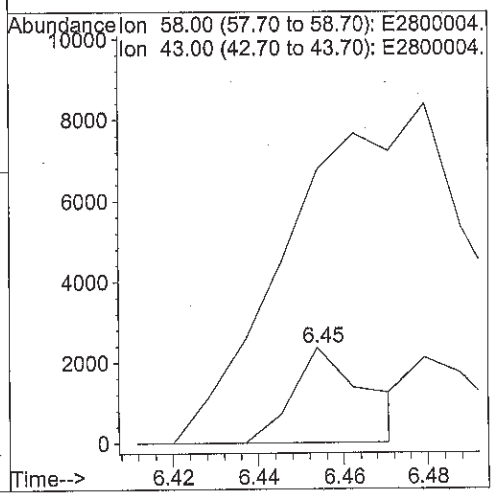


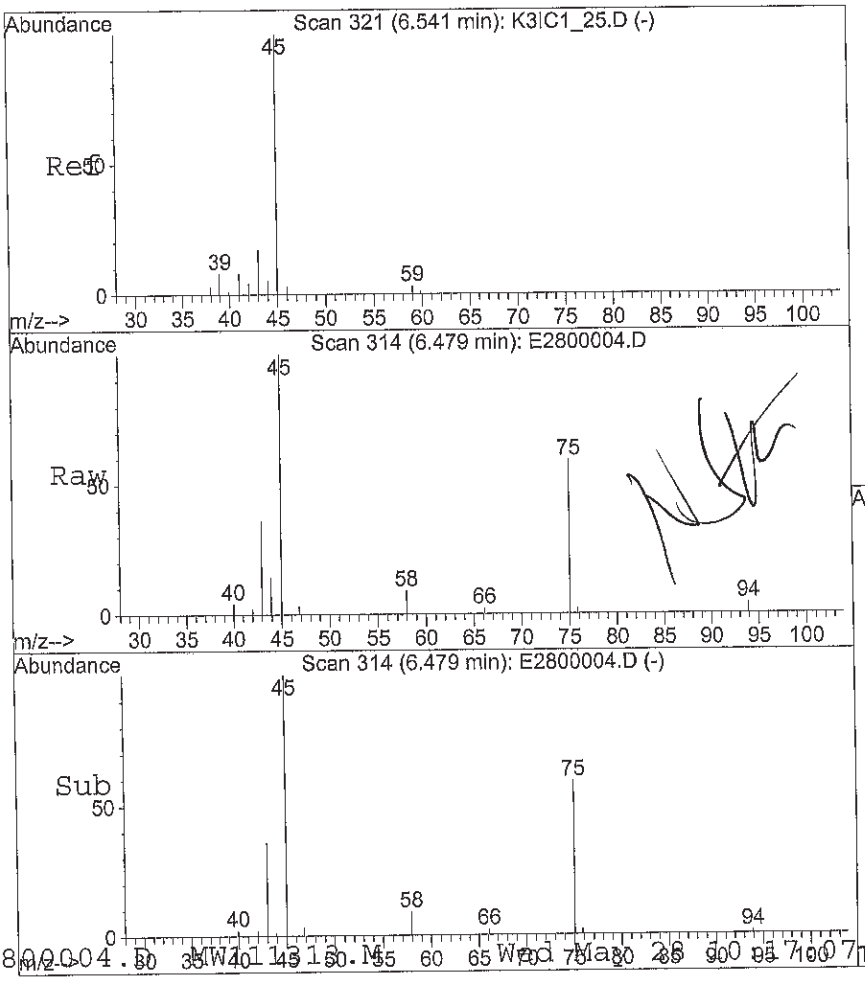


#11
Acetone
Concen: 179.09 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.00 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 58 Resp: 2870

Ion	Ratio	Lower	Upper
58	100		
43	0.0	360.9	541.3#

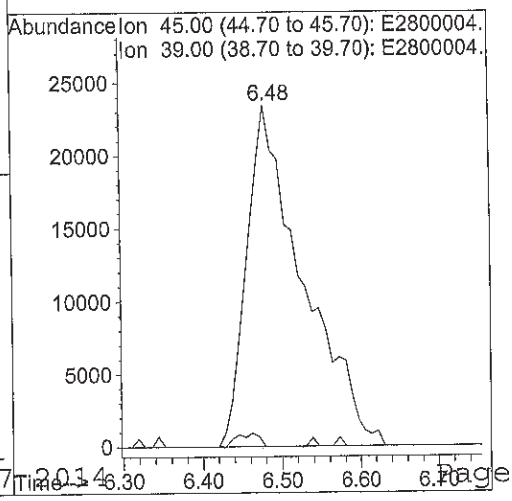


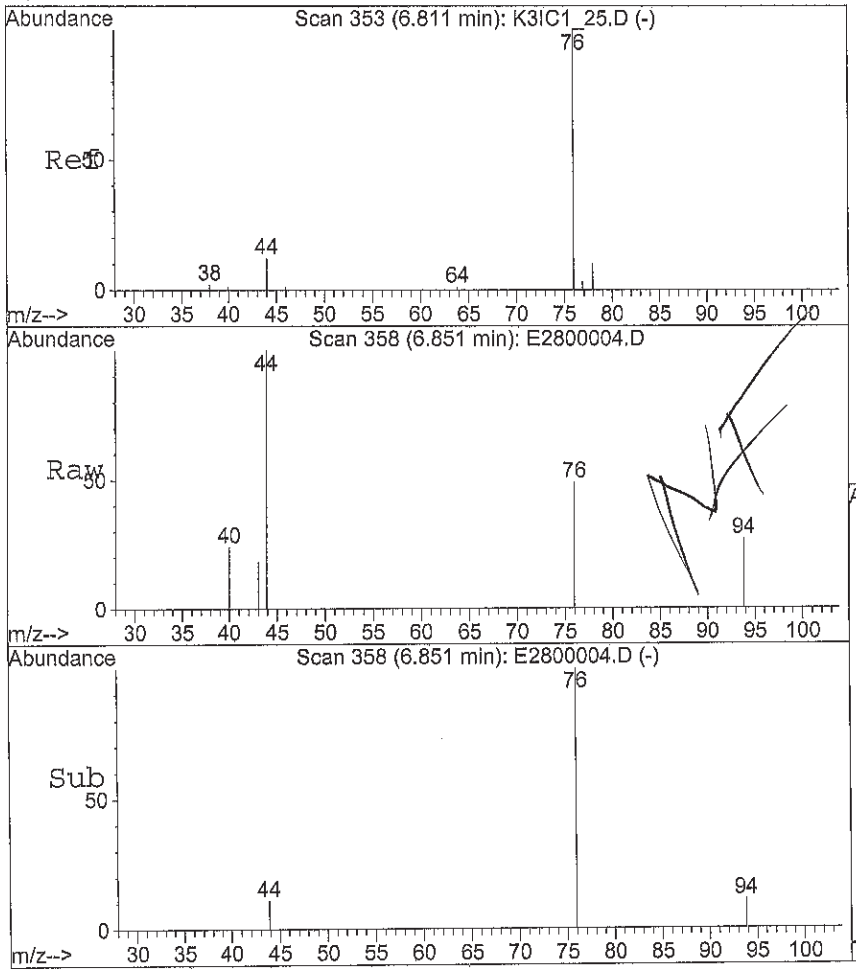


#12
(IPA) Leak Check Compound
Concen: 605.13 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.06 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 45 Resp: 115496

Ion	Ratio	Lower	Upper
45	100		
39	1.6	4.9	7.3#

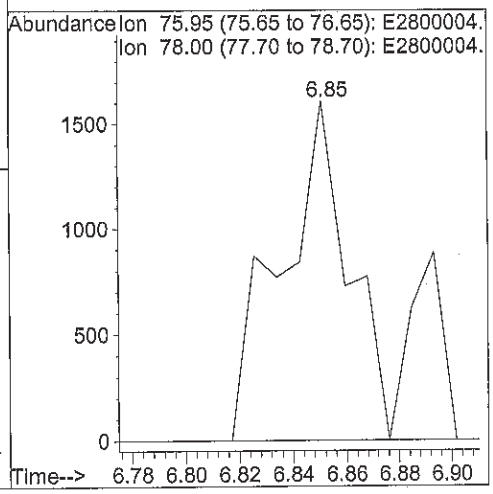


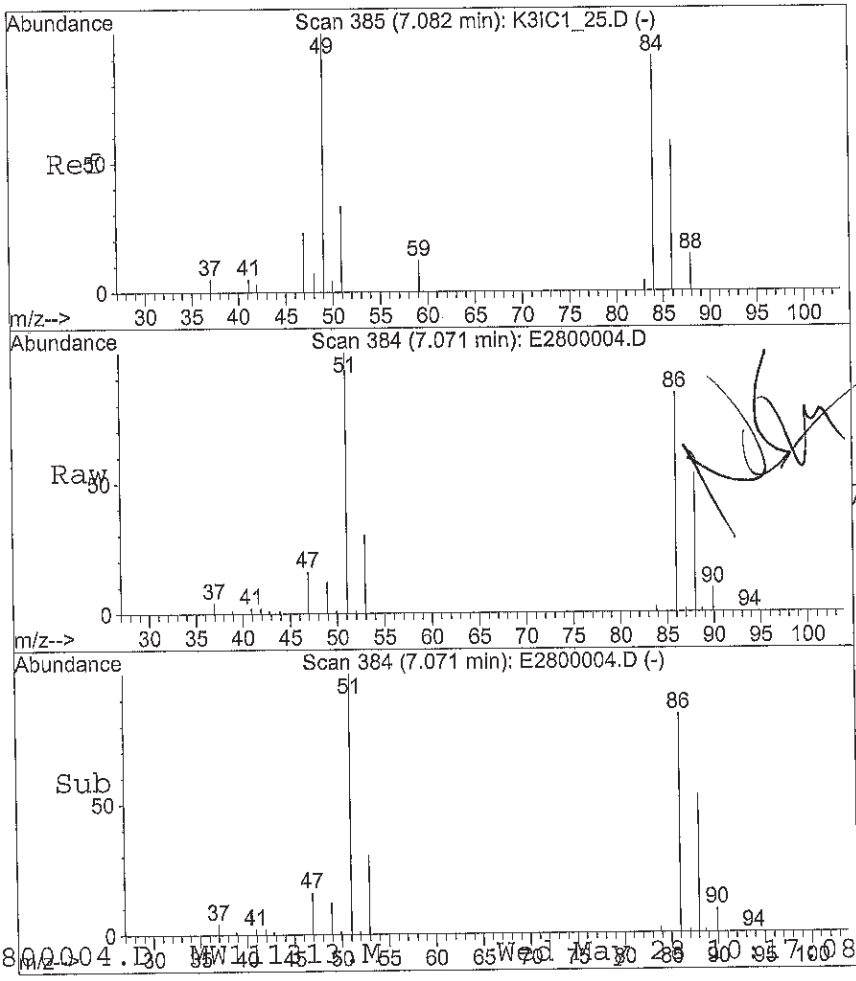


#13
Carbon disulfide
Concen: 0.21 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 76 Resp: 2830

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

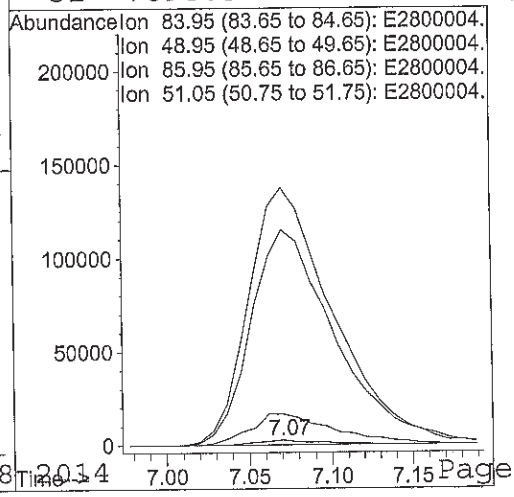


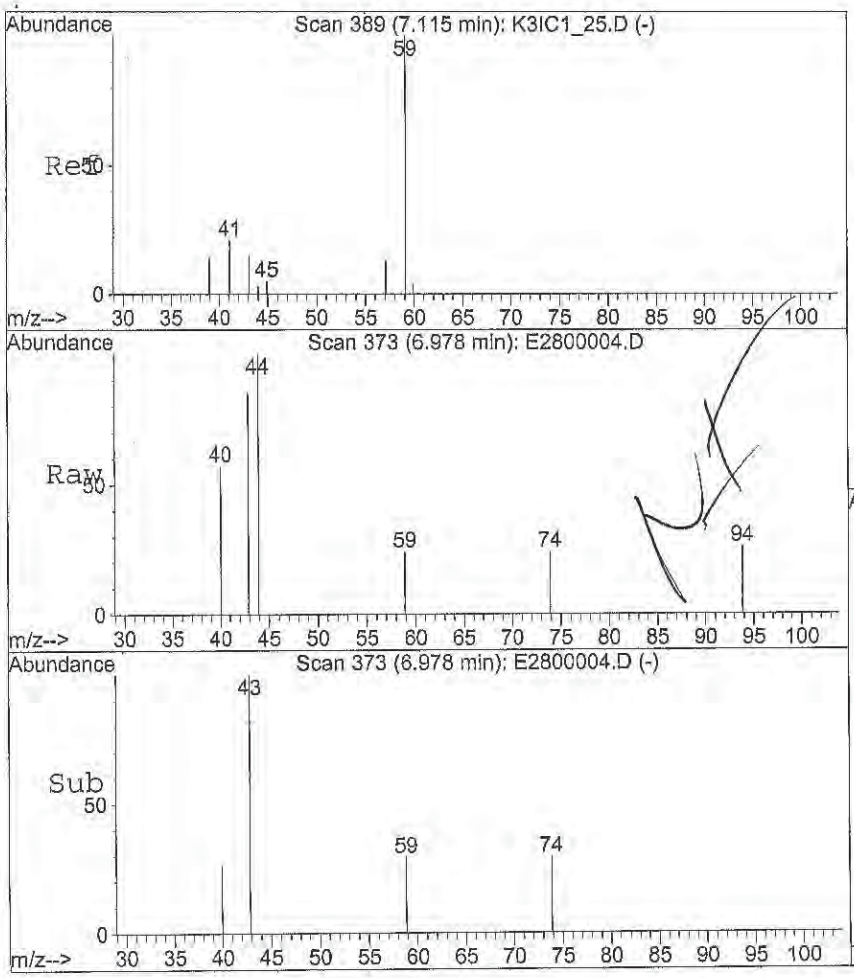


#14
Methylene Chloride
Concen: 1.48 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 84 Resp: 6463

Ion	Ratio	Lower	Upper
84	100		
49	905.0	89.8	134.6#
86	6361.0	51.1	76.7#
51	7698.3	28.5	42.7#

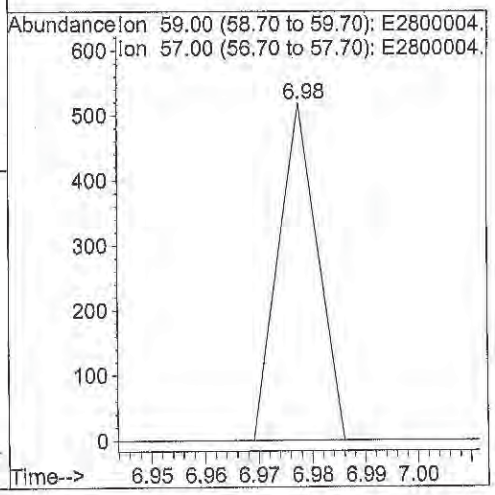


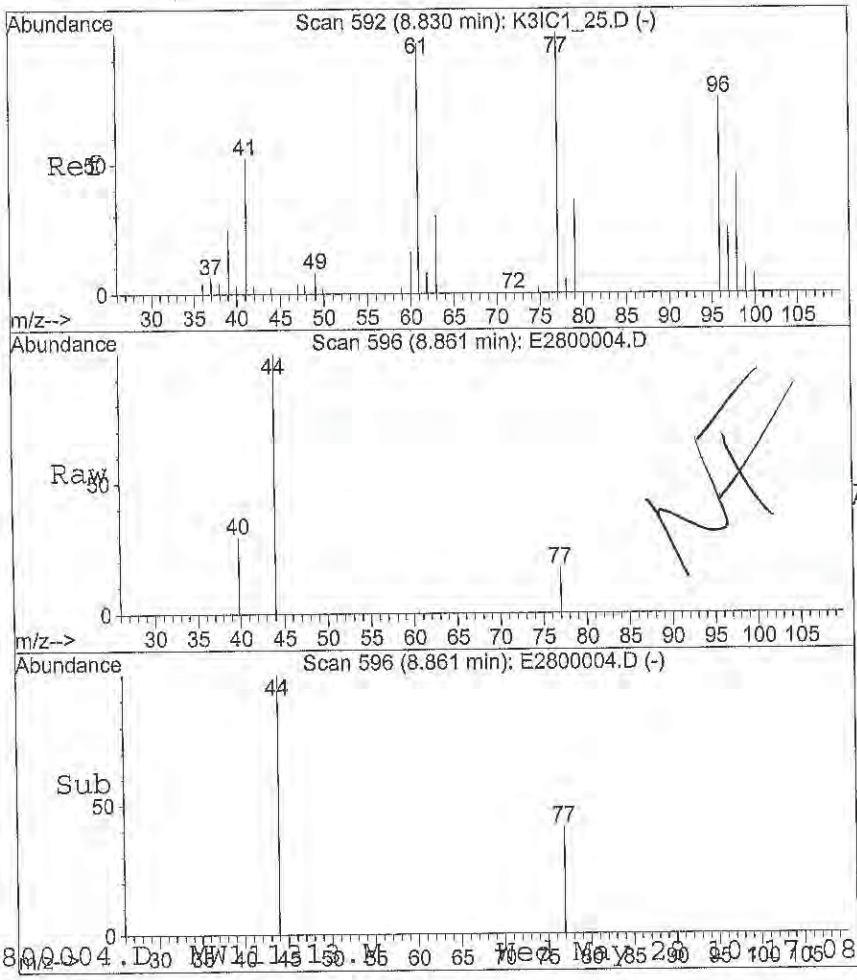


#15
(TBA) tert-Butanol
Concen: 0.97 ug/L
RT: 6.98 min Scan# 373
Delta R.T. -0.14 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 59 Resp: 262

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

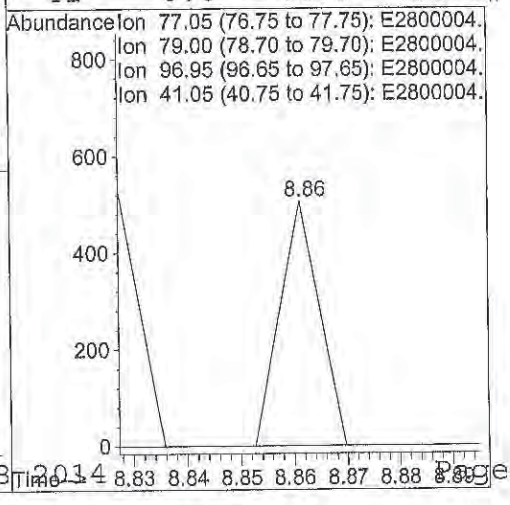


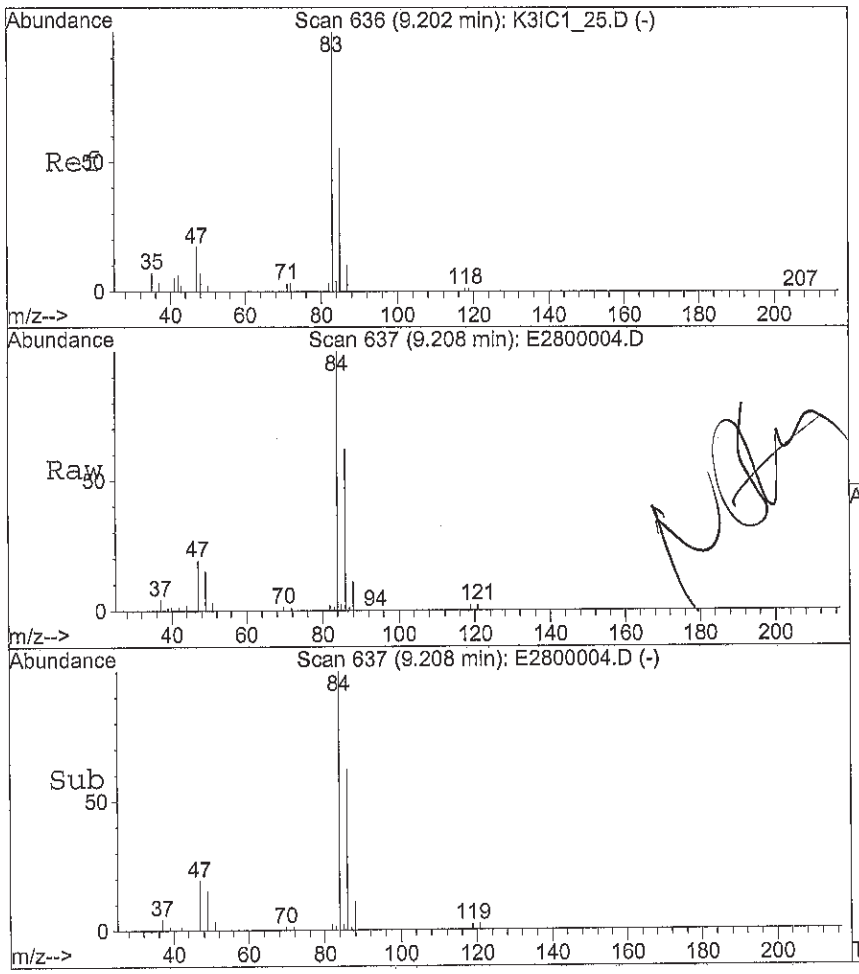


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.86 min Scan# 596
Delta R.T. 0.03 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 77 Resp: 256

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

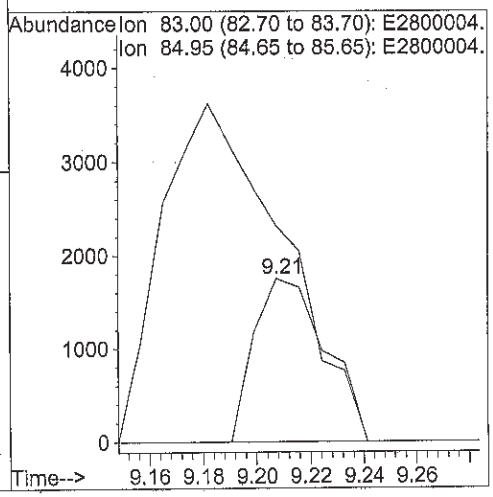


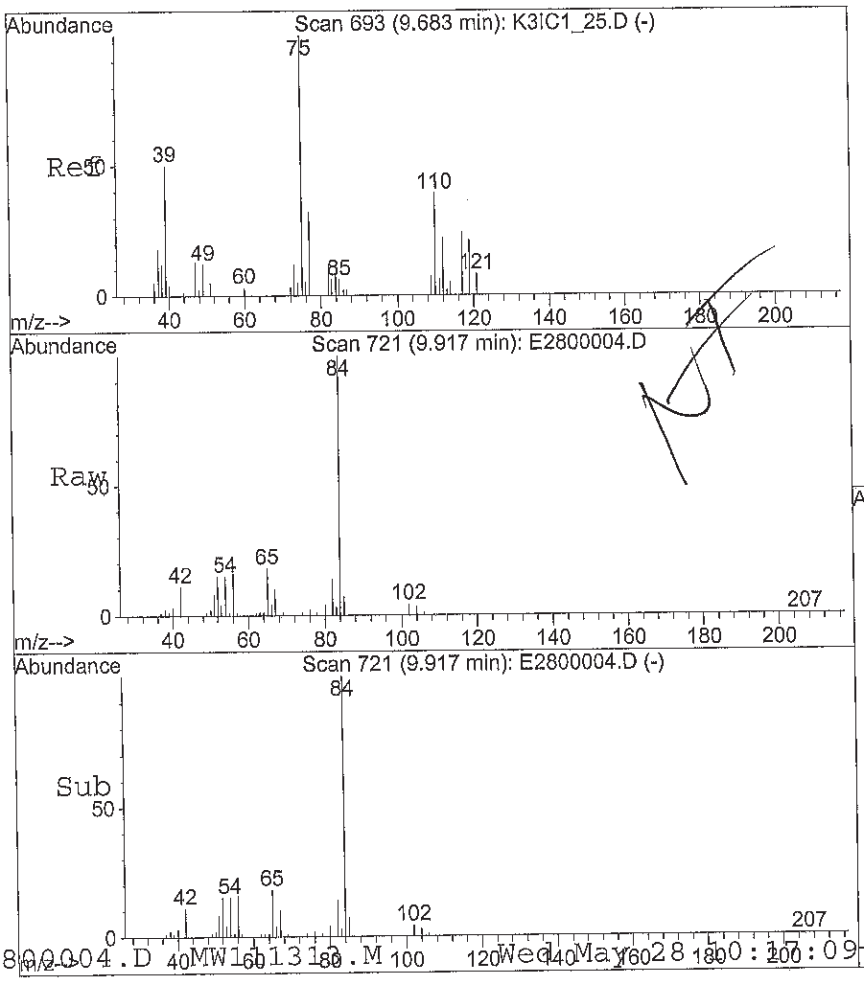


#24
Chloroform
Concen: 0.39 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 83 Resp: 3231

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

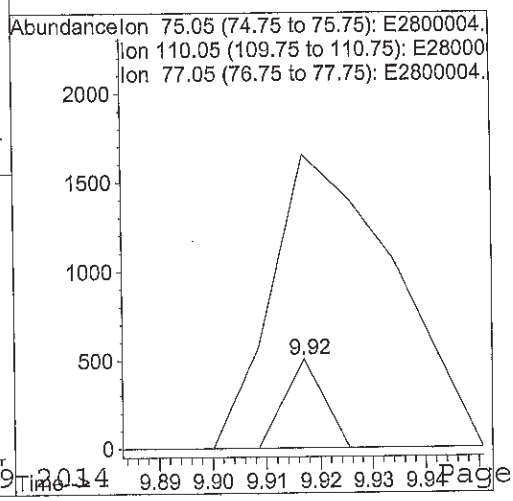


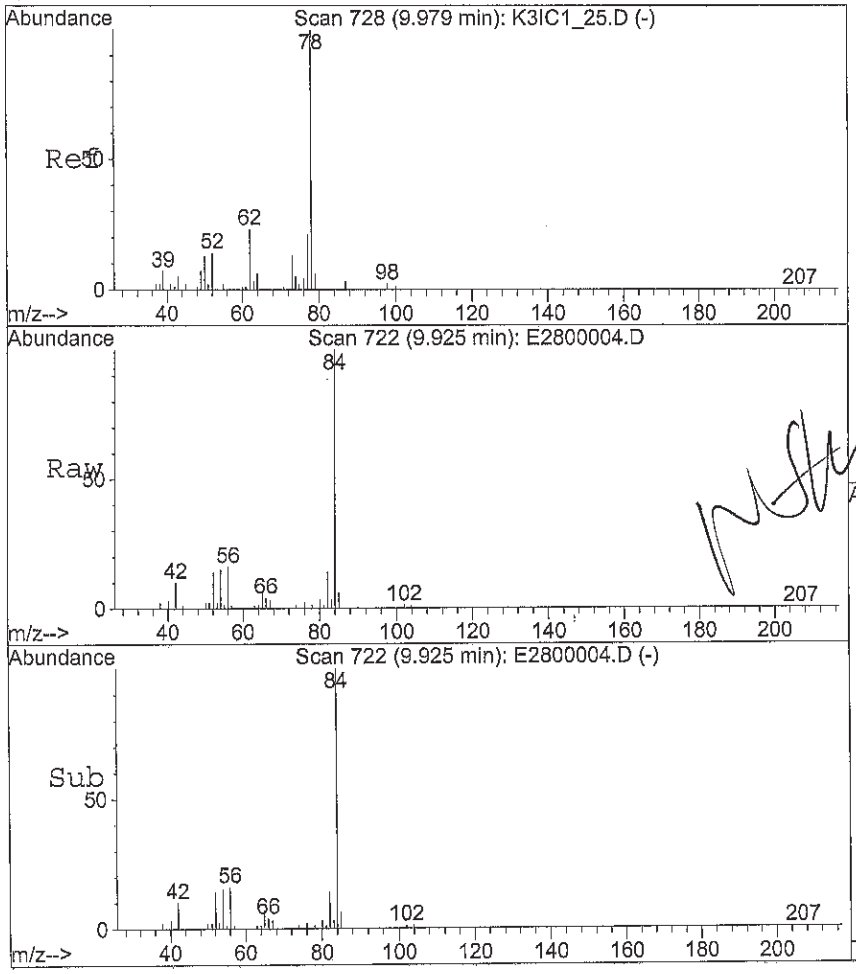


#29
1,1-Dichloropropene
Concen: 0.04 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.23 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 75 Resp: 254

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	1042.9	25.0	37.4#

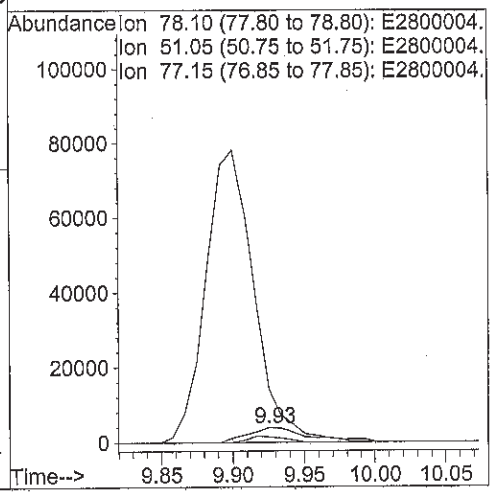


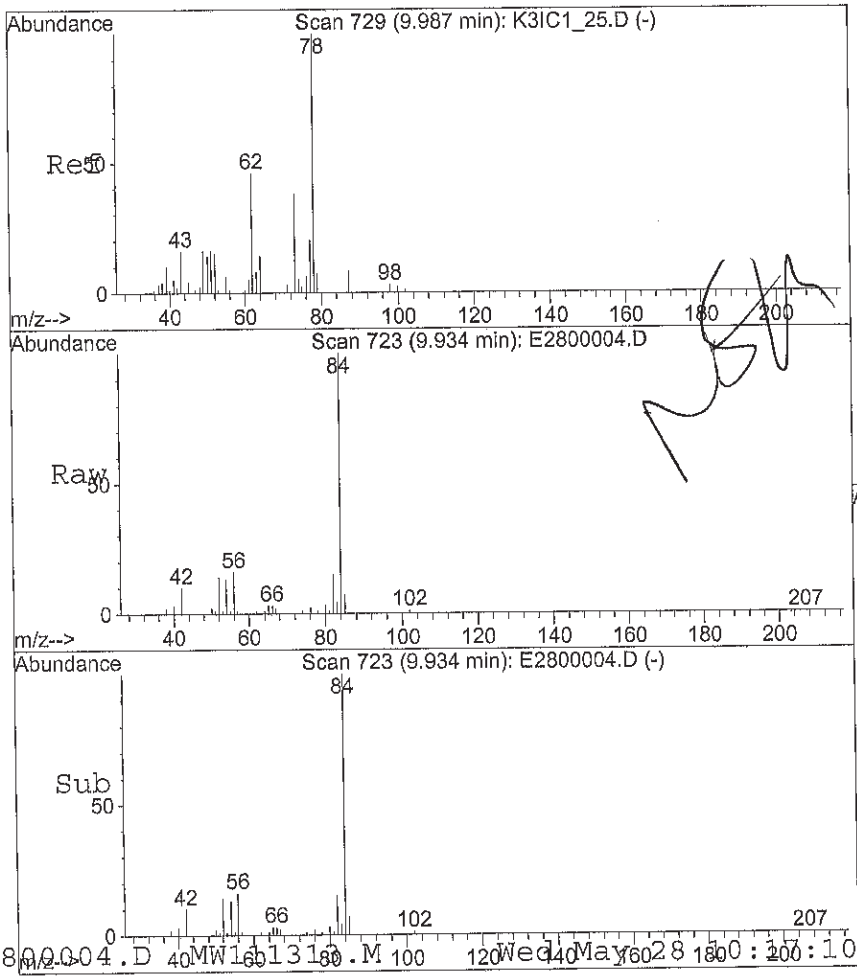


#31
Benzene
Concen: 0.74 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.05 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 78 Resp: 11131

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	23.8	16.6	24.8

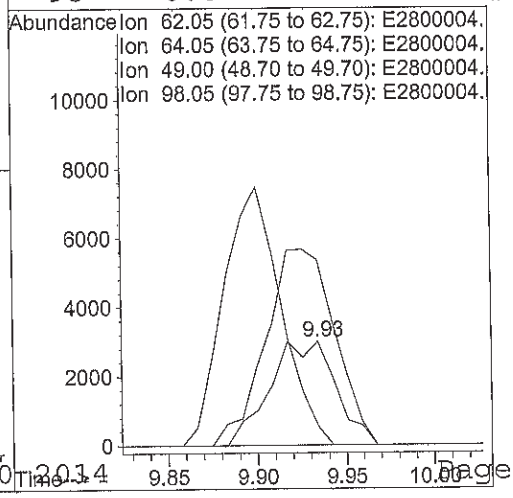


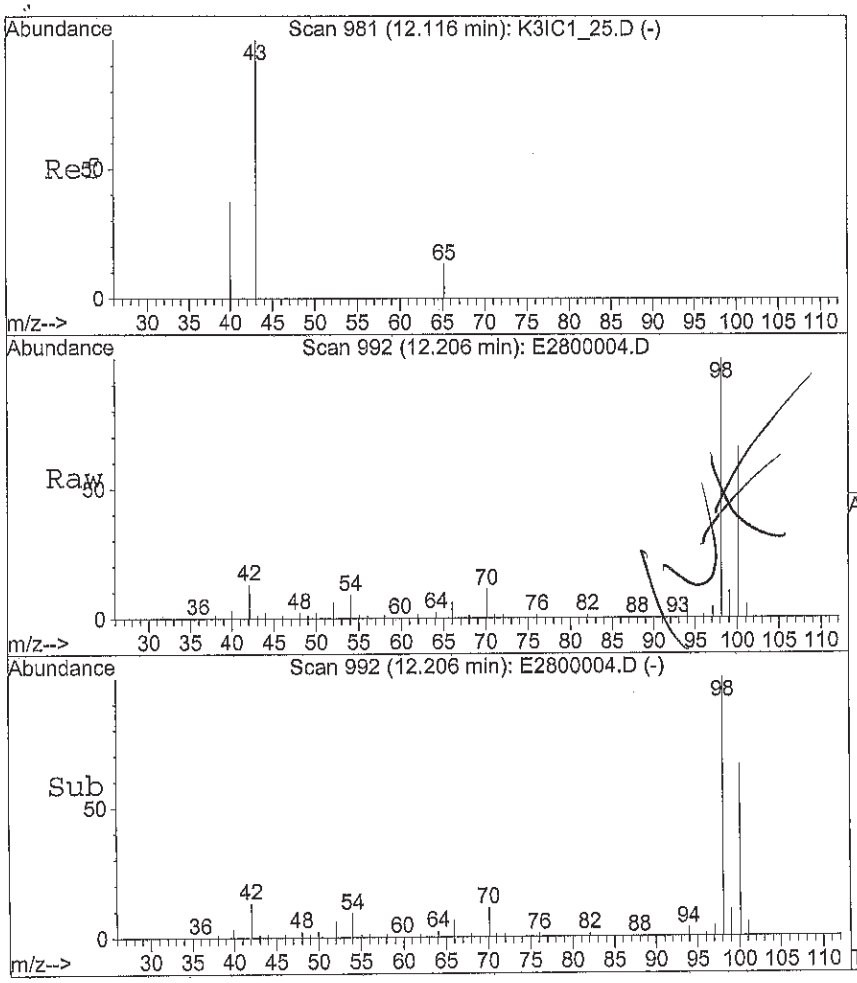


#32
1,2-Dichloroethane
Concen: 1.45 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.05 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 62 Resp: 7685

Ion	Ratio	Lower	Upper
62	100		
64	198.2	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

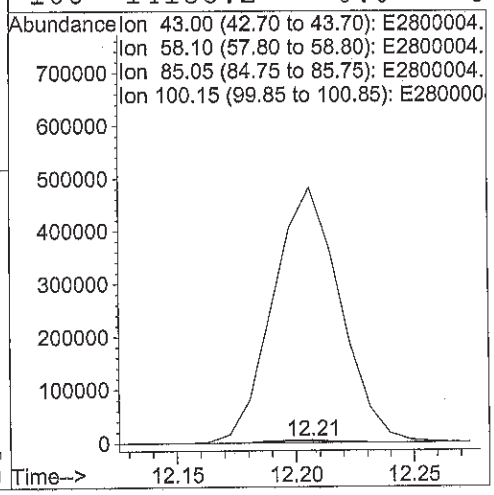


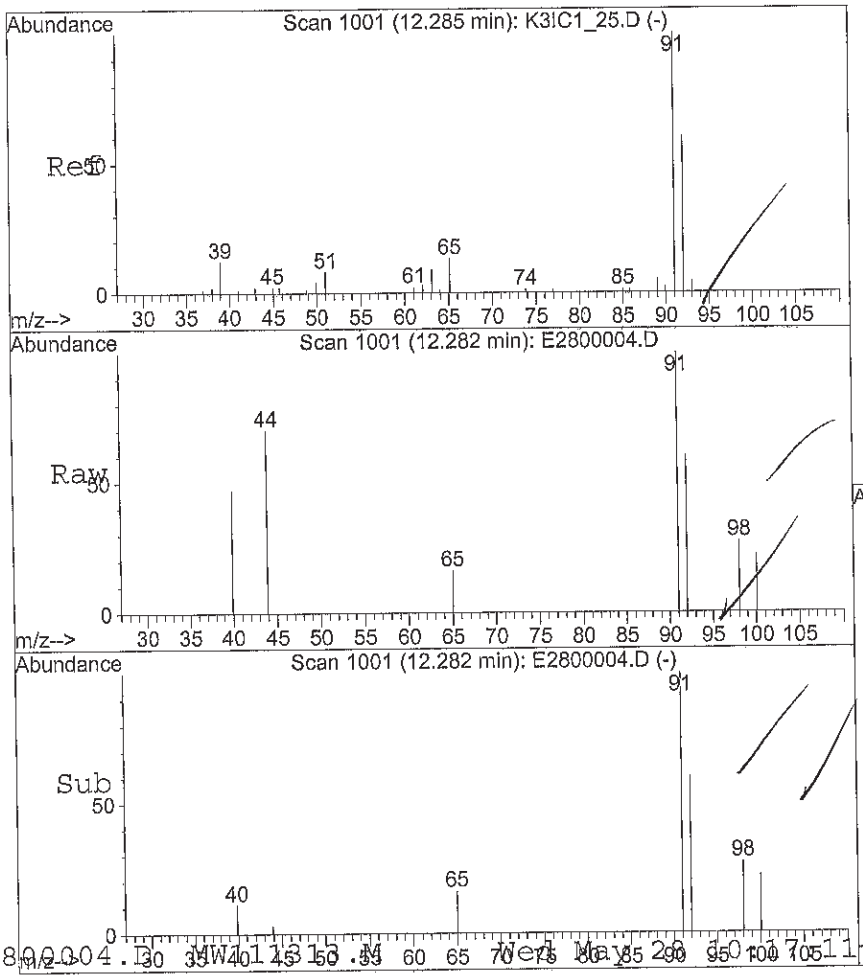


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.71 ug/L
RT: 12.21 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 43 Resp: 6666

Ion	Ratio	Lower	Upper
43	100		
58	156.8	0.0	0.0#
85	0.0	0.0	0.0
100	14186.2	0.0	0.0#

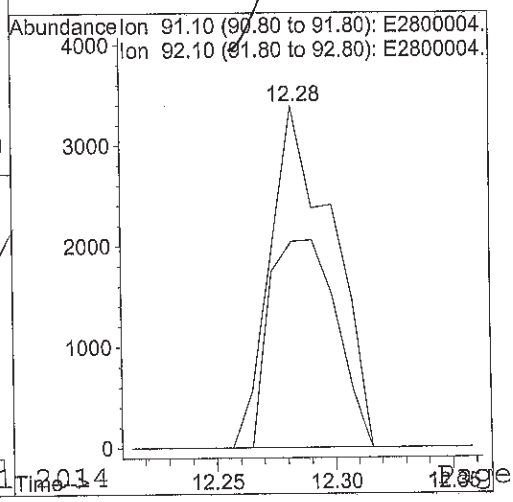


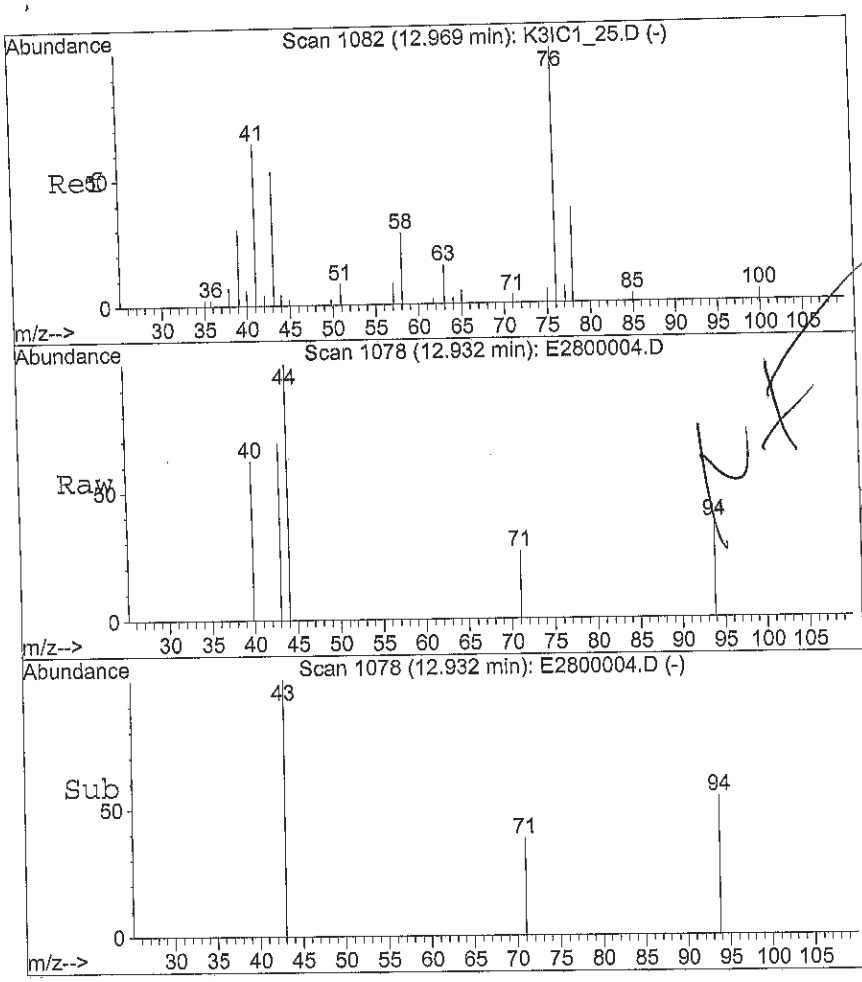


#41
Toluene
Concen: 0.37 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 91 Resp: 6141

Ion	Ratio	Lower	Upper
91	100		
92	65.3	47.4	71.0

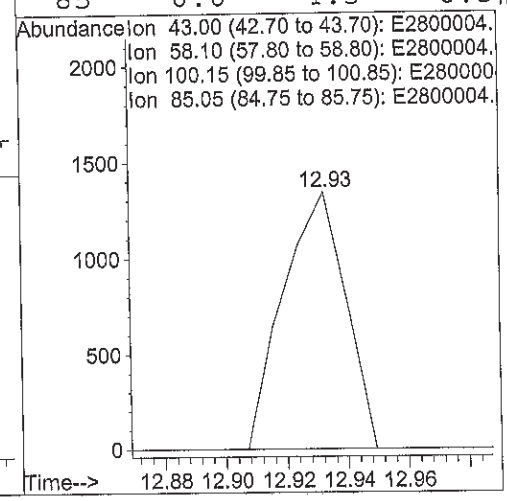


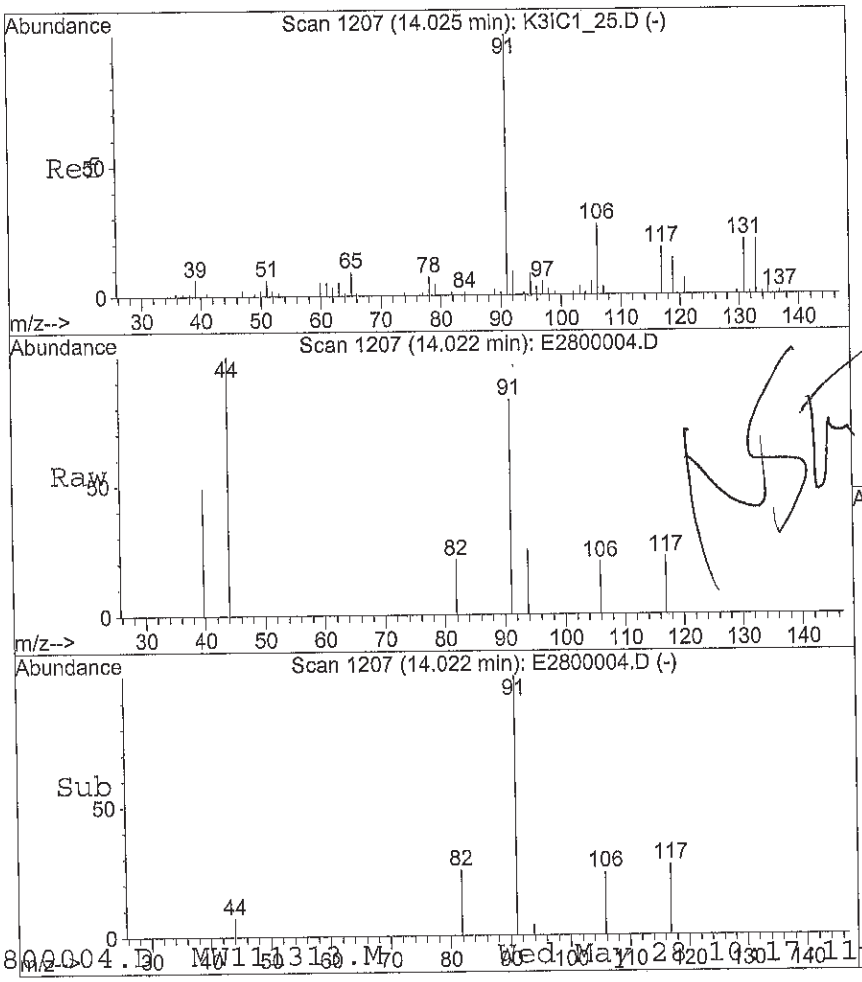


#46
2-Hexanone
Concen: 0.71 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.04 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 43 Resp: 1905

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

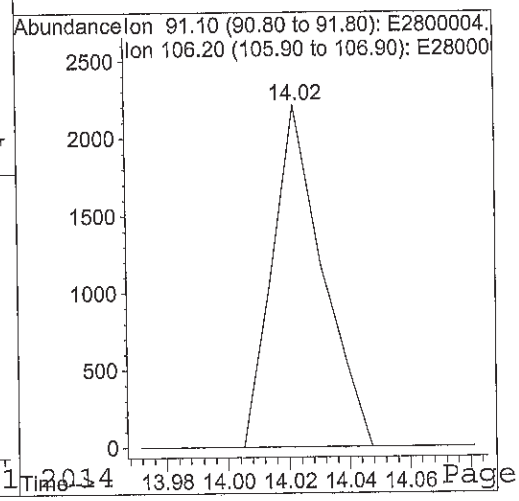


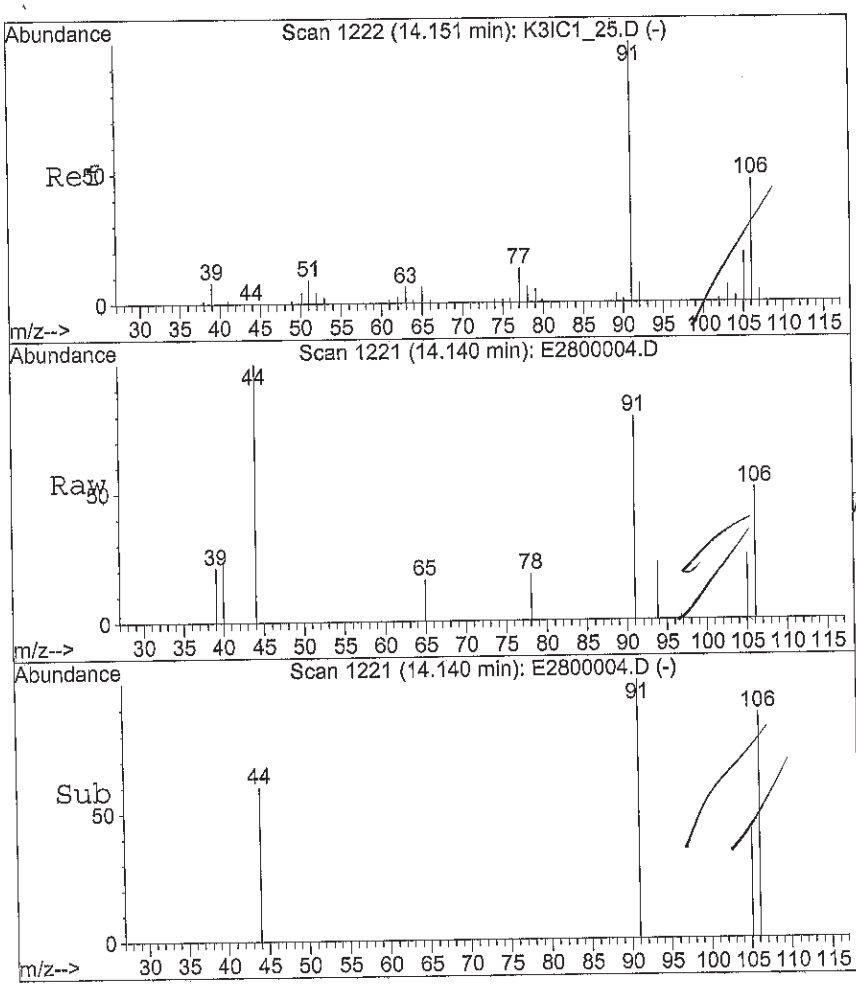


#51
Ethylbenzene
Concen: 0.13 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 91 Resp: 2528

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

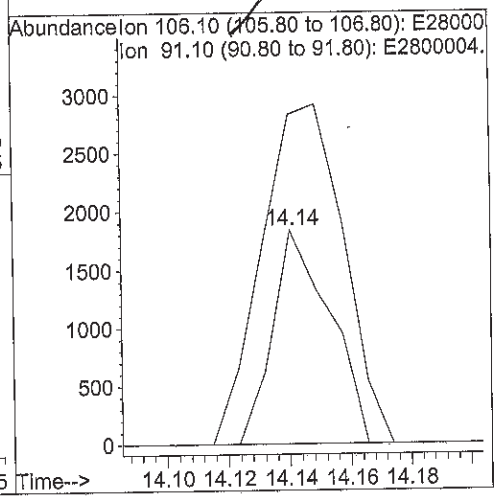


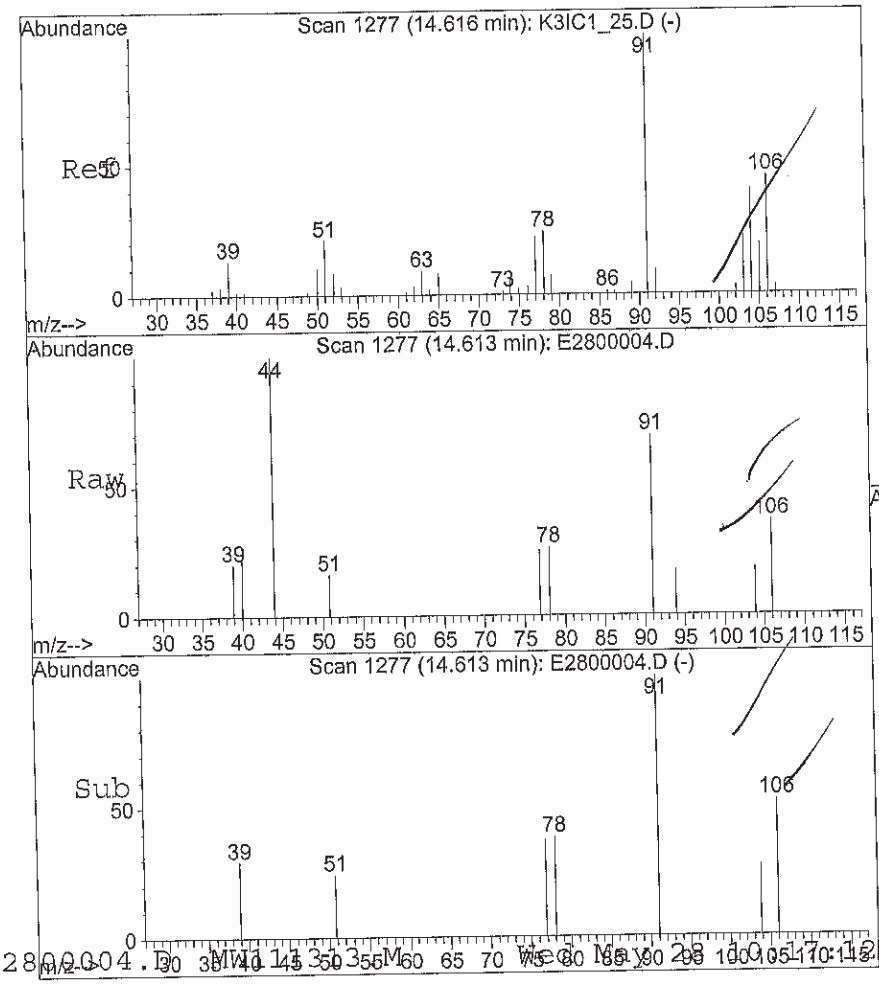


#52
m,p-Xylenes
Concen: 0.35 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion:106 Resp: 2389

Ion	Ratio	Lower	Upper
106	100		
91	225.4	177.1	265.7

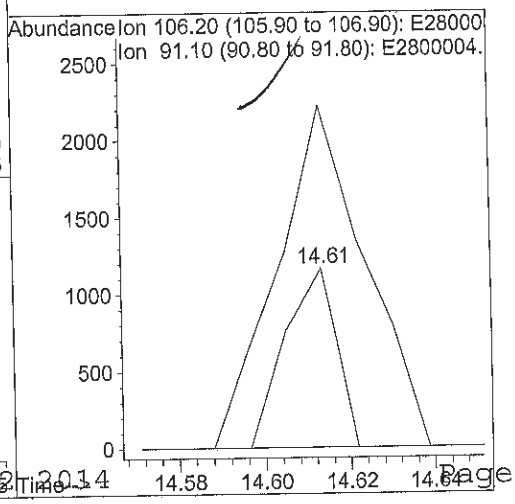


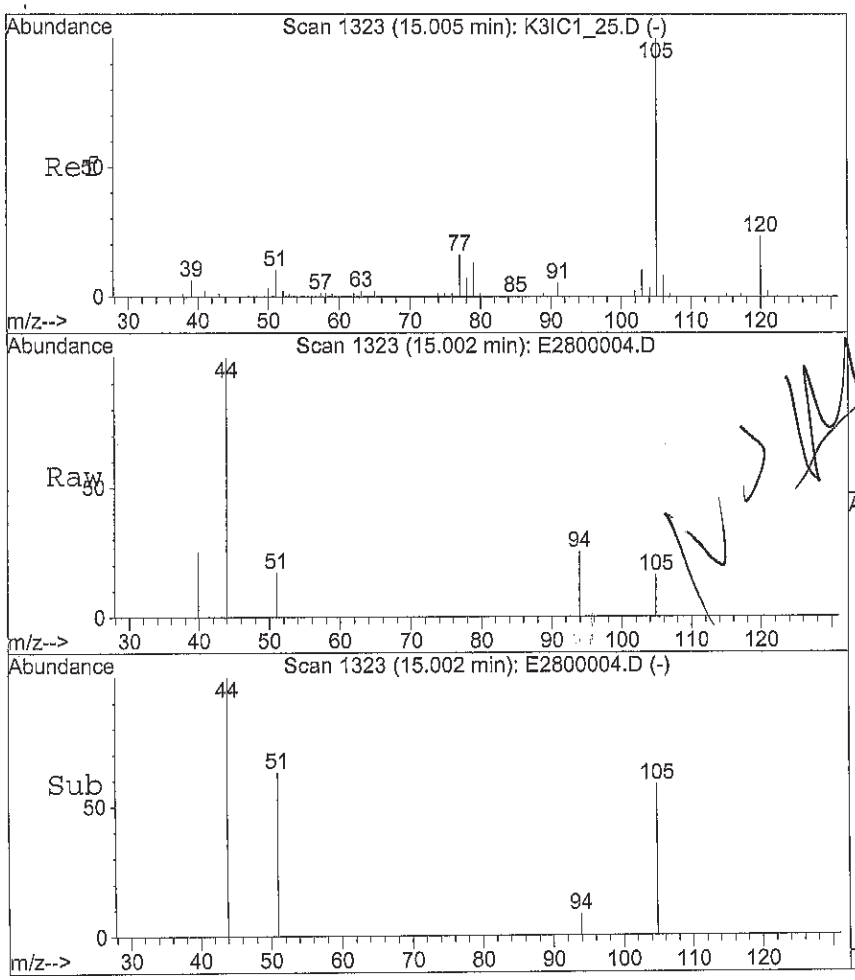


#53
o-Xylene
Concen: 0.15 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion:106 Resp: 976

Ion	Ratio	Lower	Upper
106	100		
91	327.3	179.0	268.6#

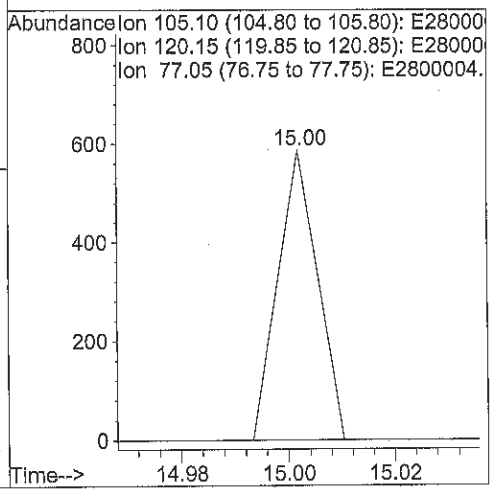


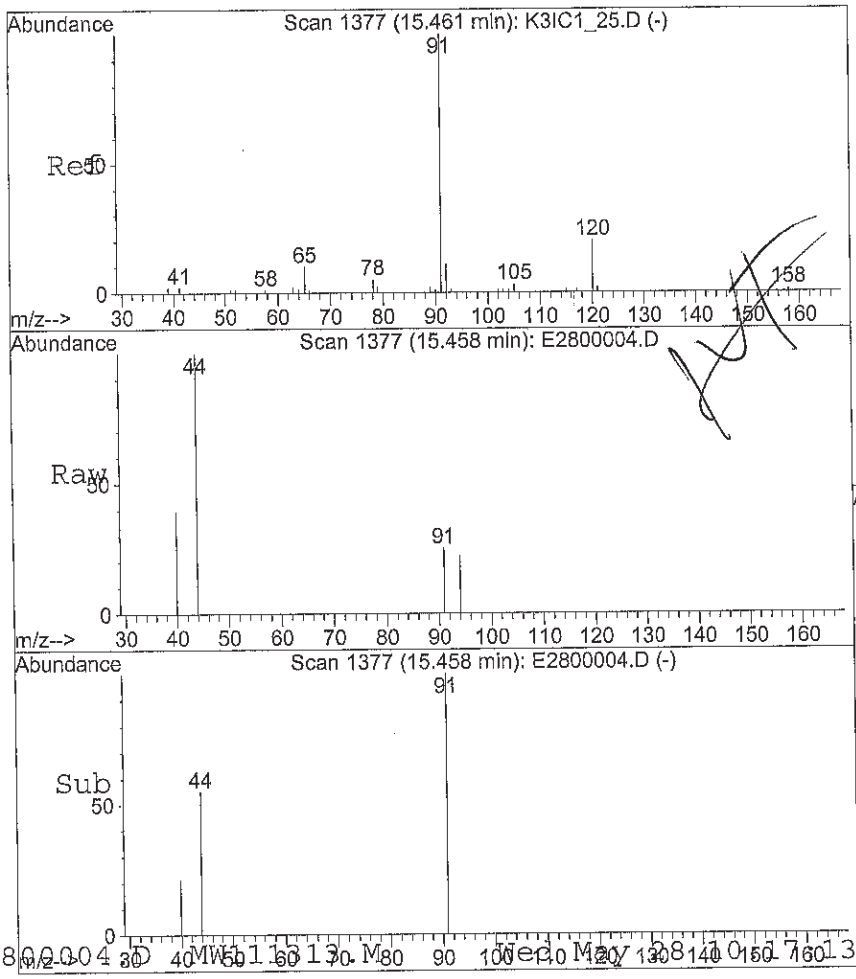


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.00 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion:105 Resp: 297

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

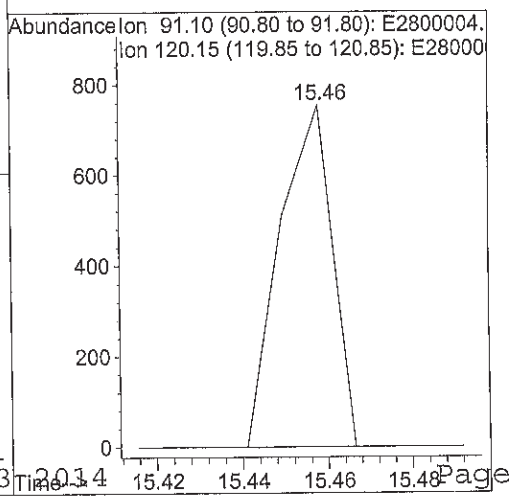


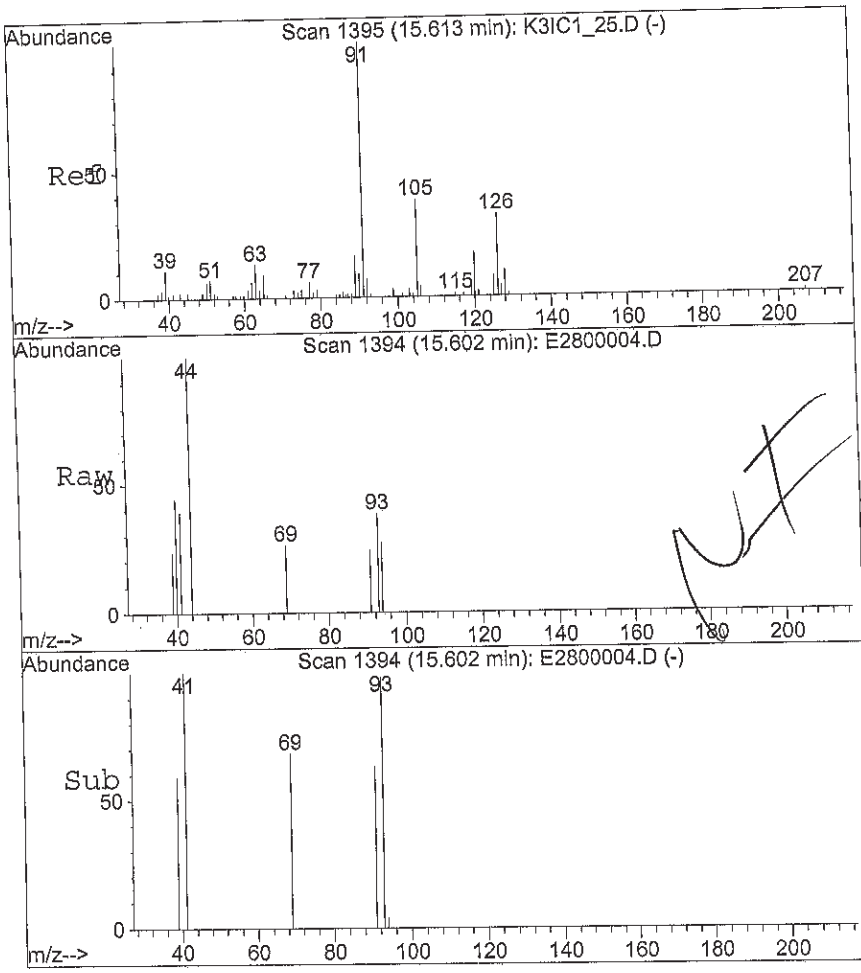


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 91 Resp: 641

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

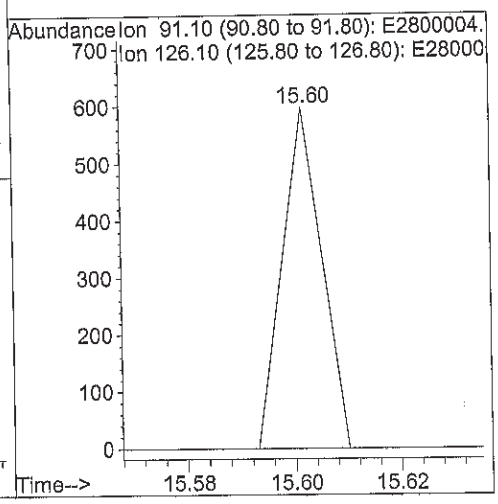


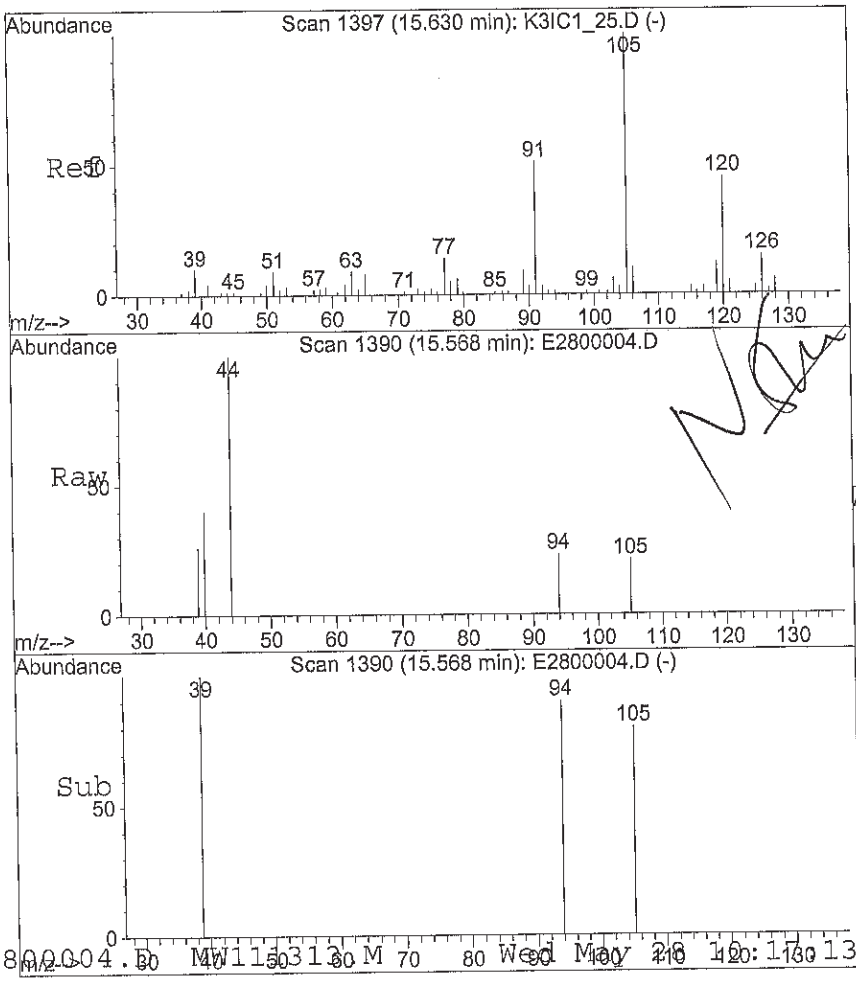


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 91 Resp: 302

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

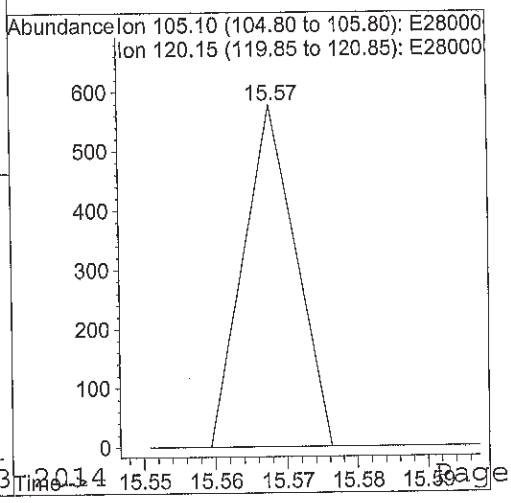


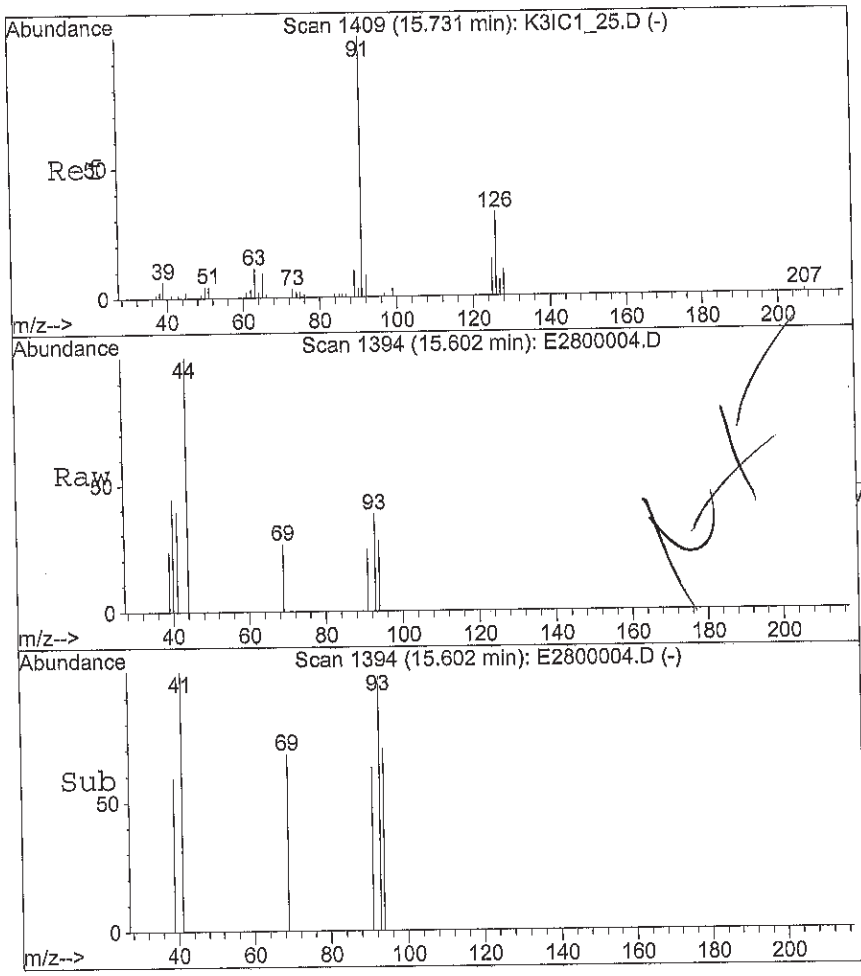


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.57 min Scan# 1390
Delta R.T. -0.06 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion:105 Resp: 292

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

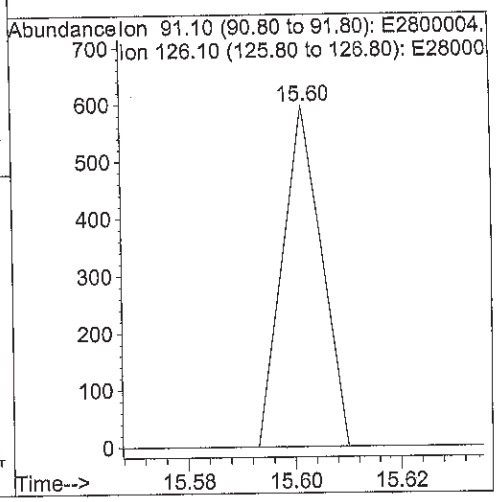


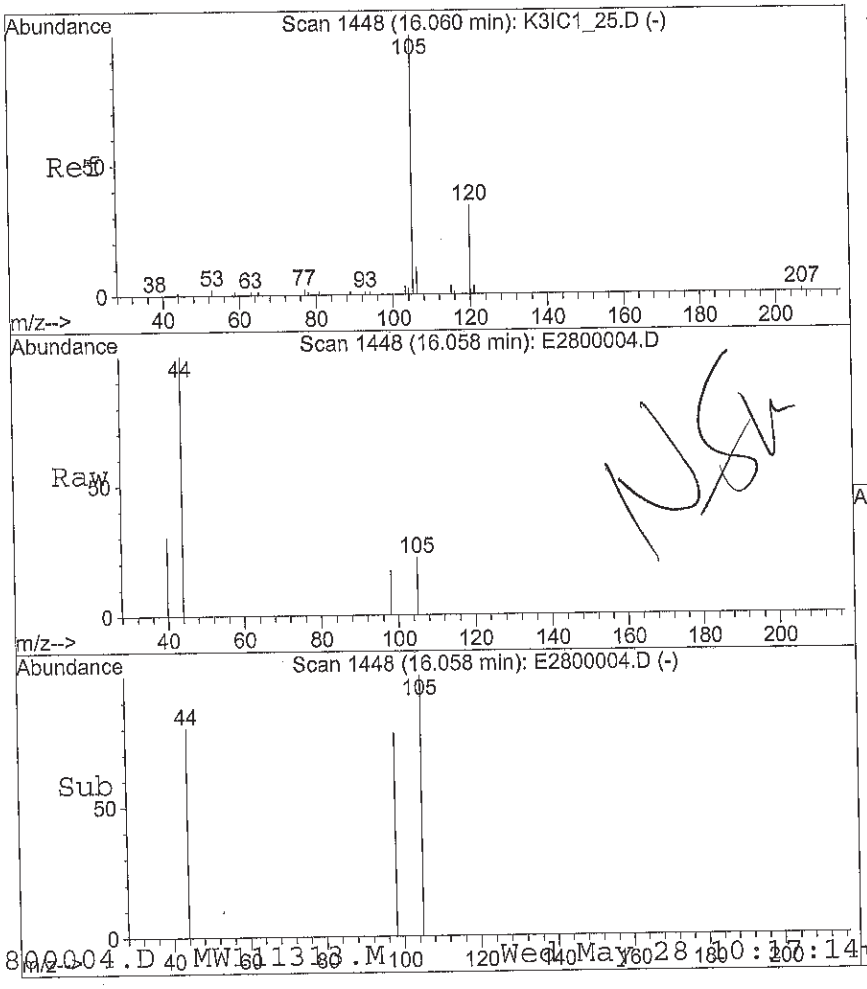


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.13 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion: 91 Resp: 302

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

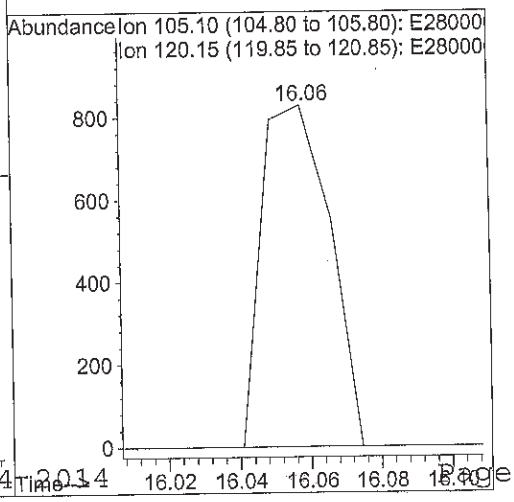


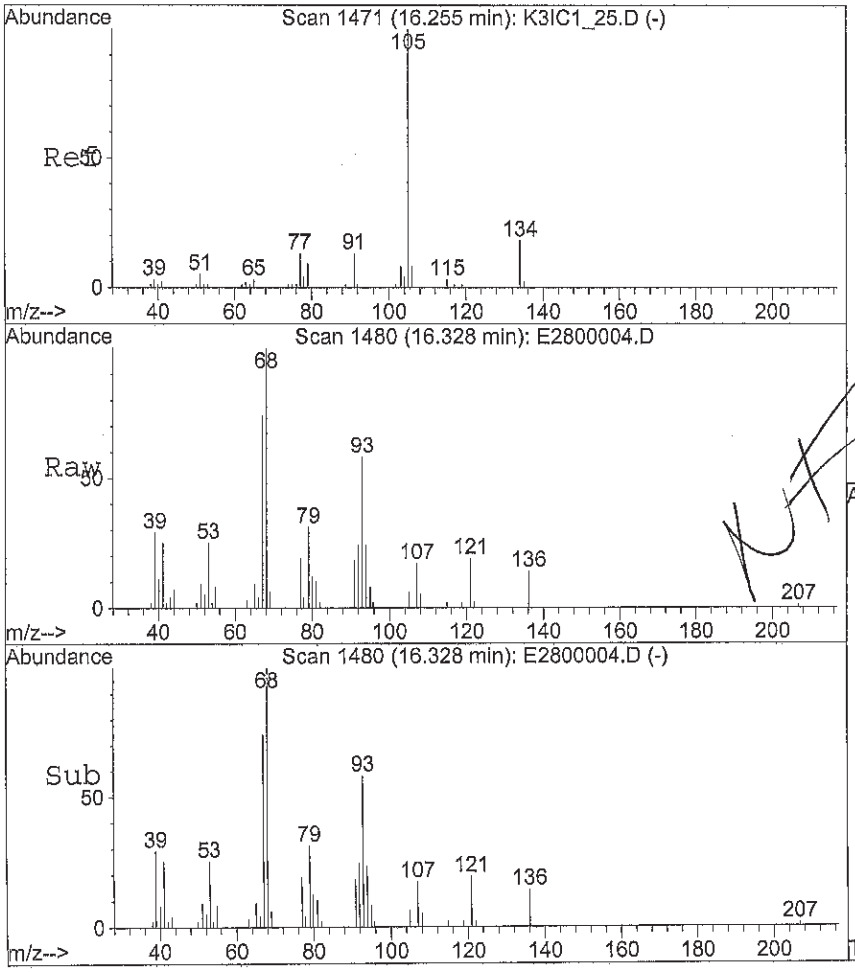


#67
1,2,4-Trimethylbenzene
Concen: 0.06 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion:105 Resp: 1104

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

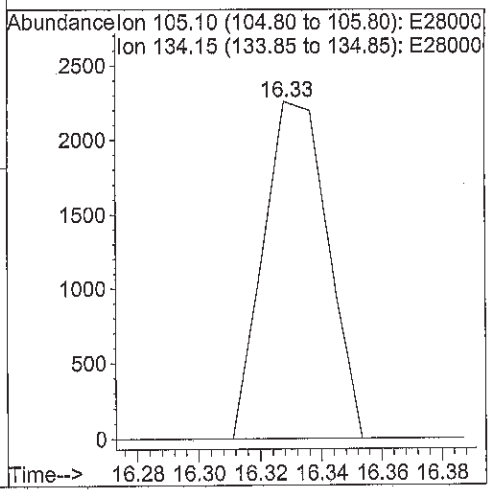


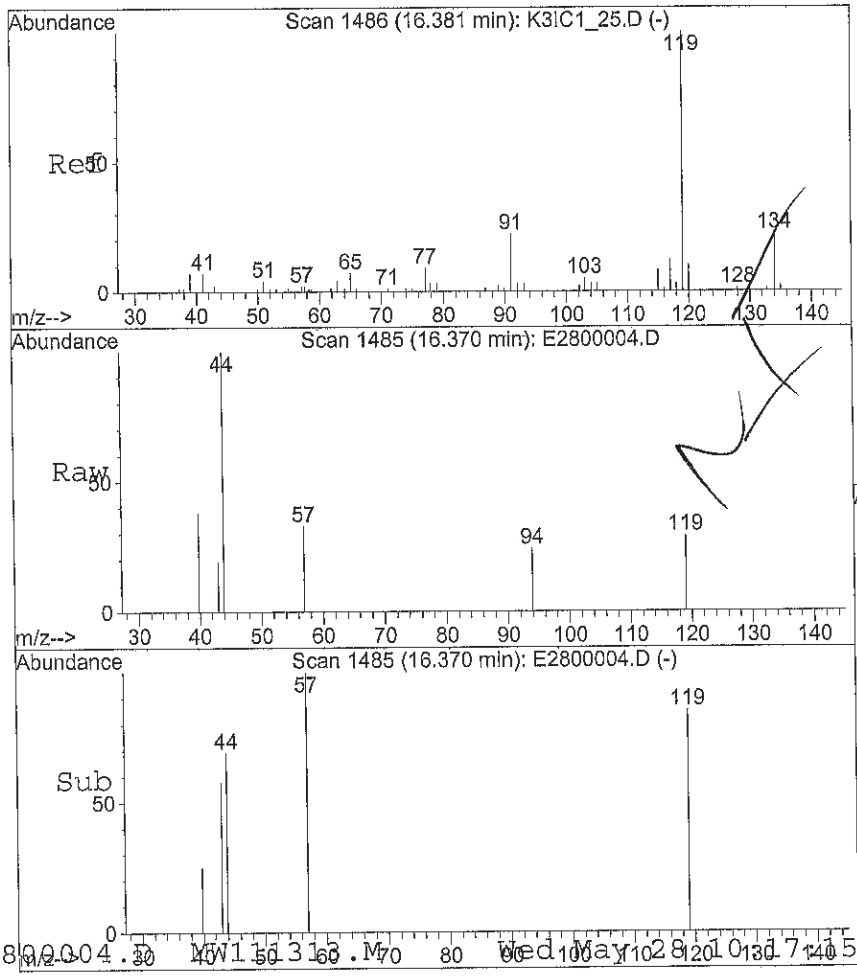


#68
sec-Butylbenzene
Concen: 0.15 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.07 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion:105 Resp: 3272

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

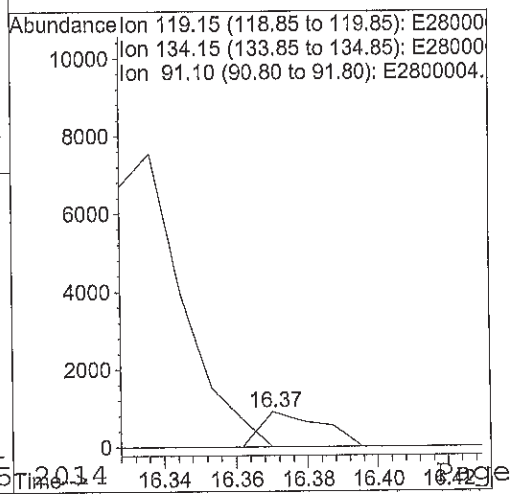




#69
p-Isopropyltoluene
Concen: 0.06 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E2800004.D
Acq: 28 May 2014 9:49 am

Tgt Ion:119 Resp: 1069

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800004.D Vial: 3
Acq On : 28 May 2014 9:49 am Operator: DN
Sample : 3E42801-03 Inst : GC/MS Ins
Misc : 100cc SVL-815-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:17 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1588325	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1230604	12.50 ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	662439	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	467461	11.32 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.56%		
3) Chloroform-d (SU6)	9.18	84	743312	12.54 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.32%		
4) Methylene Chloride-d2 (SU5	7.07	86	411111	11.87 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.96%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	447278	15.84 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 126.72%#		
6) Benzene-d6 (SU7)	9.93	84	1392764	11.17 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.36%		
8) Toluene-d8 (SU3)	12.21	98	1406762	12.05 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.40%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	693511	14.39 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.12%		

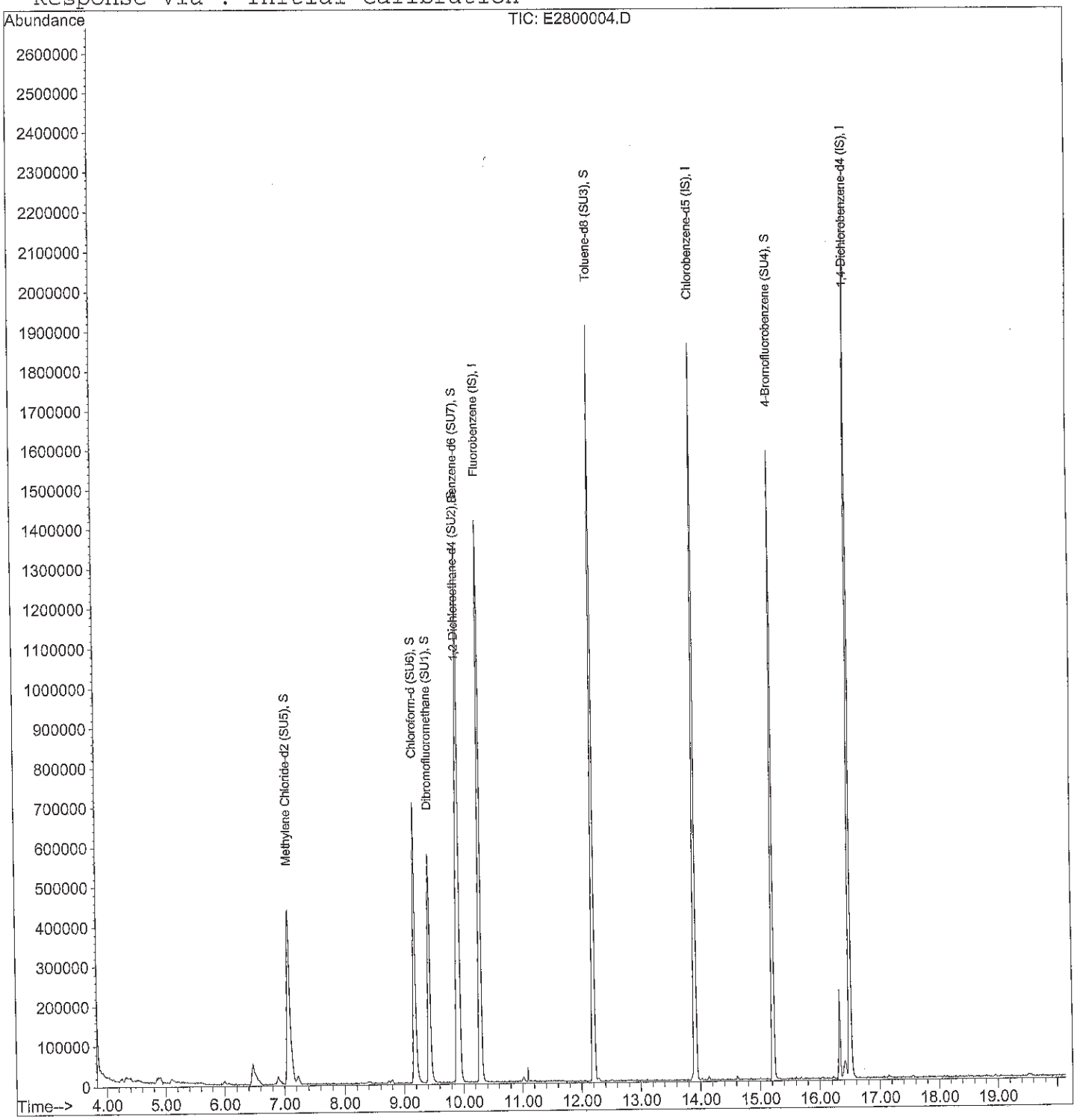
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800004.D Vial: 3
Acq On : 28 May 2014 9:49 am Operator: DN
Sample : 3E42801-03 Inst : GC/MS Ins
Misc : 100cc SVL-815-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:17 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800005.D Vial: 4
Acq On : 28 May 2014 10:19 am Operator: DN
Sample : 3E42801-04 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-12.5-13.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:42 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1591812	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1232045	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	673028	12.50	ug/L	0.00

System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	445744	11.23	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.84%			
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	442549	11.73	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.84%			
39) Toluene-d8 (SU3)	12.21	98	1397374	12.16	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.28%			
58) 4-Bromofluorobenzene (SU4)	15.22	95	685176	13.60	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 108.80%			

Target Compounds						Qvalue
4) Chloromethane	4.40	50	5074	0.68	~~ug/L~~ # SM	41
6) Bromomethane	5.11	96	6639	2.01	~~ug/L~~ #	4
7) Chloroethane	5.32	64	880	1.35	~~ug/L~~	90
11) Acetone	6.47	58	6122	4.97	~~ug/L~~	98
12) (IPA) Leak Check Compound	6.47	45	125299	655.06	~~ug/L~~ # SM	84
13) Carbon disulfide	6.85	76	6994	0.53	~~ug/L~~ #	76
14) Methylene Chloride	7.07	84	6664	1.52	~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.93	59	607	2.24	~~ug/L~~ #	77
24) Chloroform	9.20	83	3421	0.41	~~ug/L~~ # SM	57
25) (ETBE) 2-ethoxy 2-methyl p	8.36	59	276	0.02	~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.93	75	365	0.06	~~ug/L~~ #	1
31) Benzene	9.97	78	2221	0.15	~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.92	62	6578	1.24	~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7946	3.23	~~ug/L~~ #	100
41) Toluene	12.28	91	46319	2.76	ug/L 0.0552	96
46) 2-Hexanone	12.92	43	1053	0.39	~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	8269	0.43	ug/L 0.0086	96
52) m,p-Xylenes	14.14	106	9659	1.42	ug/L 0.0284	85
53) o-Xylene	14.61	106	2154	0.32	ug/L # 0.0064	78
54) Styrene	14.62	104	1747	-0.69	~~ug/L~~ # SM	68
56) Isopropylbenzene	15.00	105	345	0.02	~~ug/L~~ #	1
62) n-Propylbenzene	15.46	91	672	0.02	~~ug/L~~ #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800005.D Vial: 4
Acq On : 28 May 2014 10:19 am Operator: DN
Sample : 3E42801-04 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-12.5-13.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:42 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

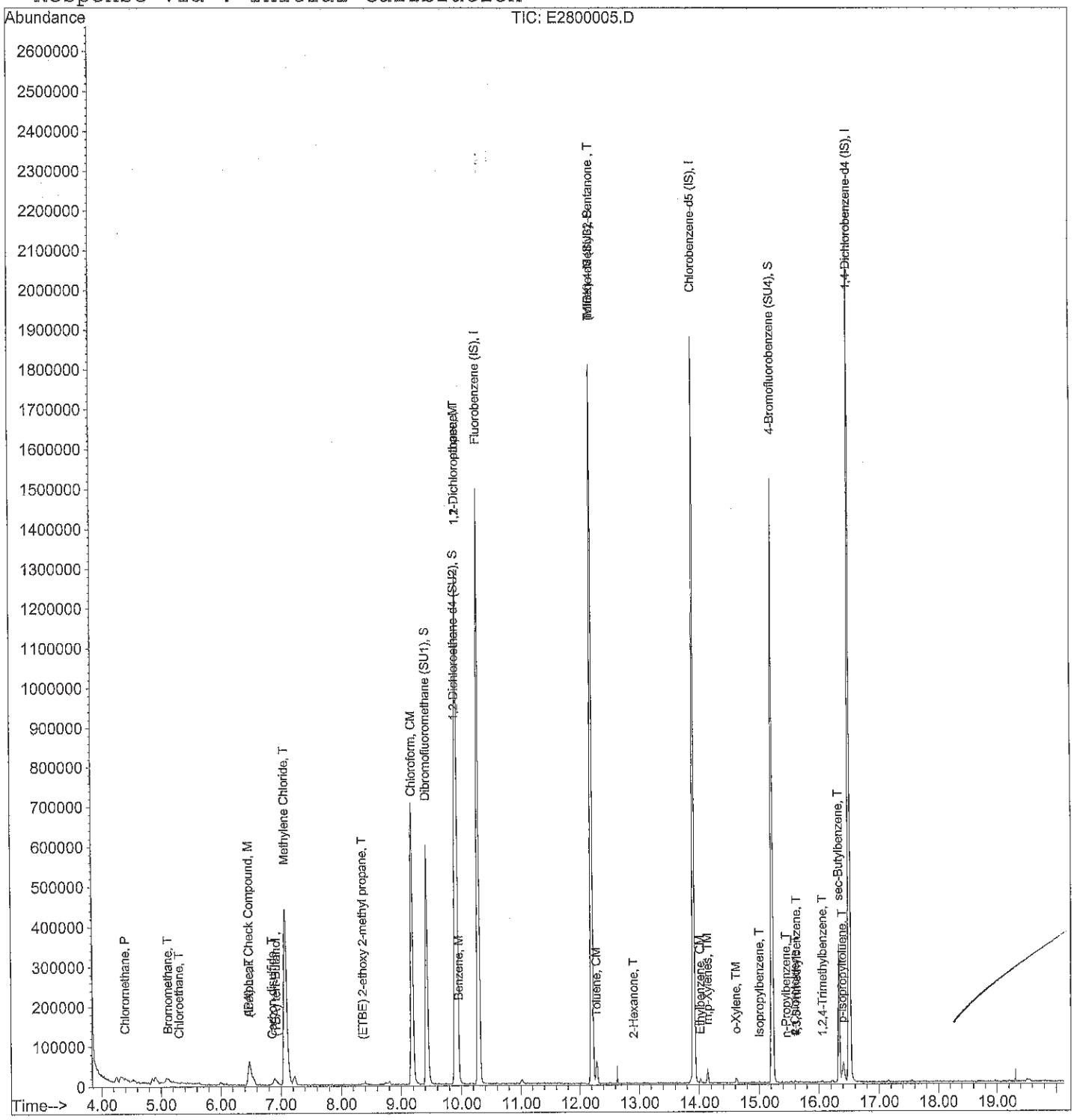
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.60	91	254	0.02 ~~ug/L #~~	45
64) 1,3,5-Trimethylbenzene	15.63	105	765	0.05 ~~ug/L #~~	31
65) 4-Chlorotoluene	15.60	91	254	0.02 ~~ug/L #~~	44
67) 1,2,4-Trimethylbenzene	16.06	105	1584	0.09 ug/L #0.0018	62
68) sec-Butylbenzene	16.33	105	4882	0.22 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	1255	0.07 ~~ug/L #~~	52

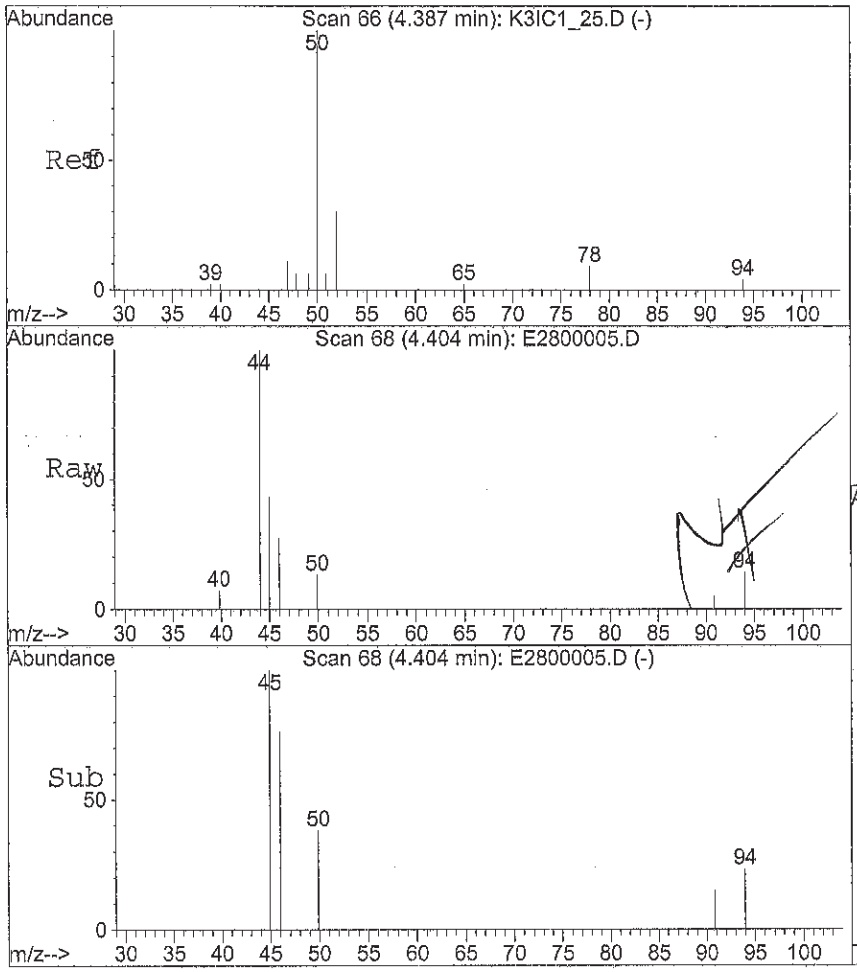
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800005.D Vial: 4
Acq On : 28 May 2014 10:19 am Operator: DN
Sample : 3E42801-04 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-12.5-13.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:42 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

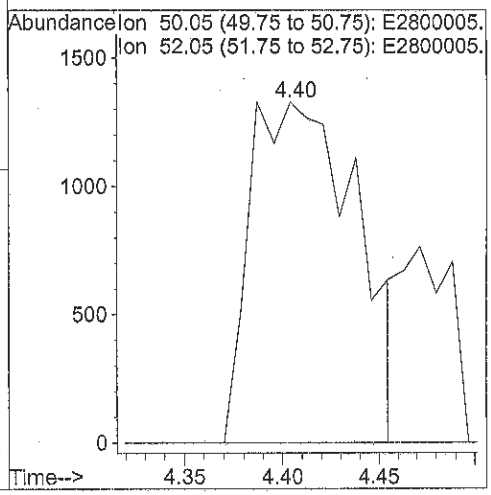


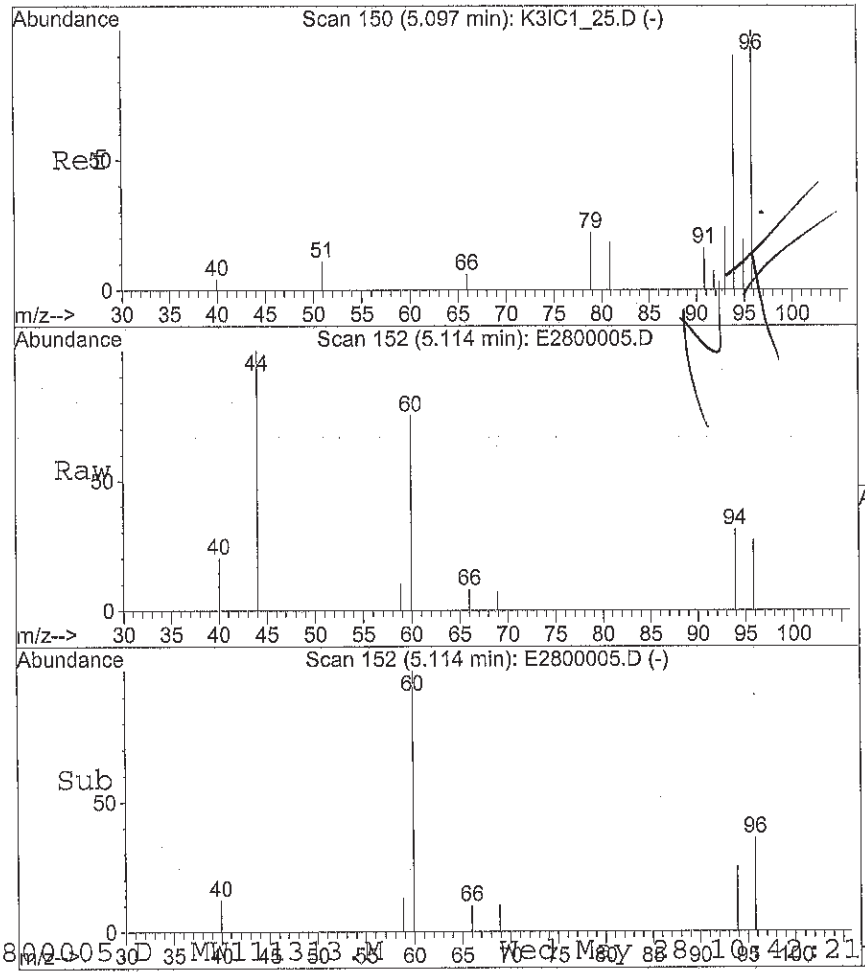


#4
Chloromethane
Concen: 0.68 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.02 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 50 Resp: 5074

Ion	Ratio	Lower	Upper
50	100		
52	0.0	26.9	40.3#

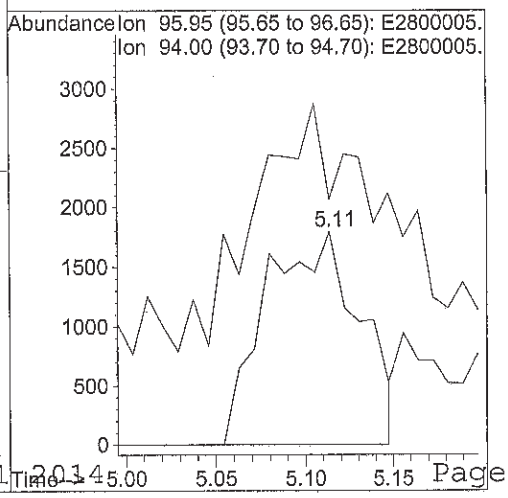


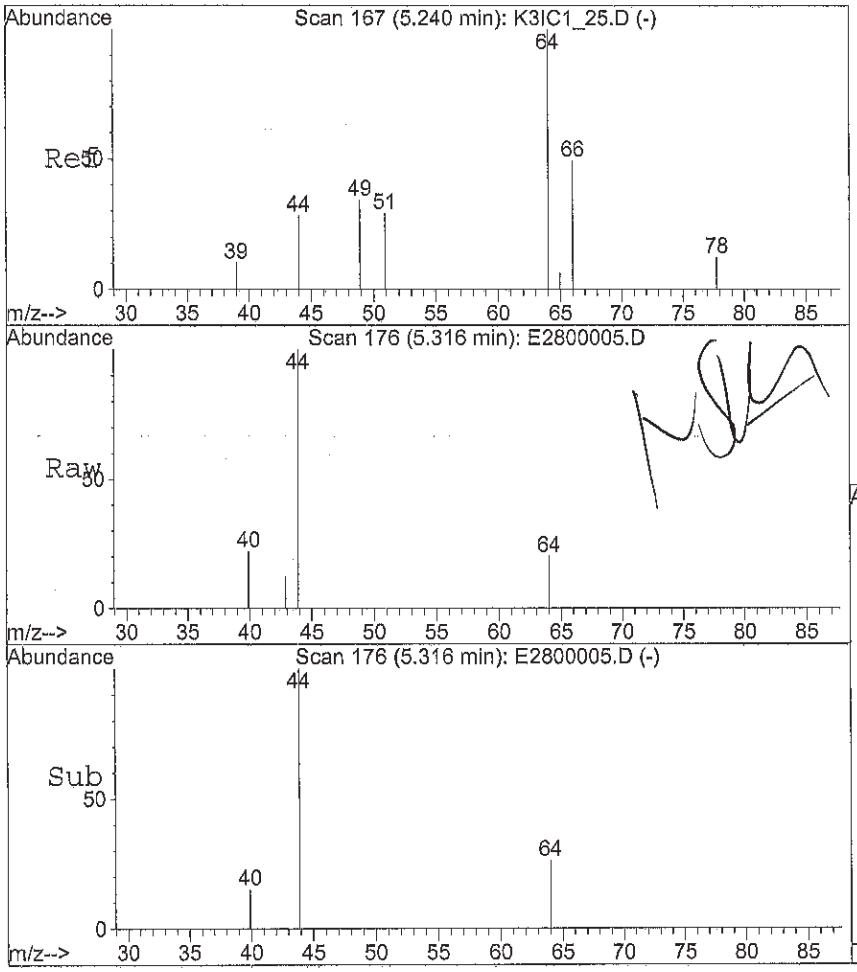


#6
Bromomethane
Concen: 2.01 ug/L
RT: 5.11 min Scan# 152
Delta R.T. 0.02 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 96 Resp: 6639

Ion	Ratio	Lower	Upper
96	100		
94	235.7	101.0	151.4#

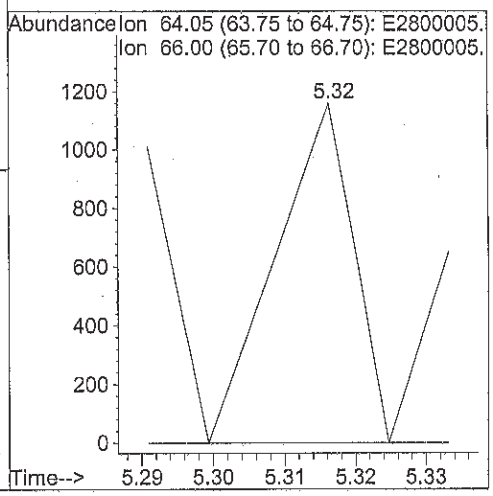


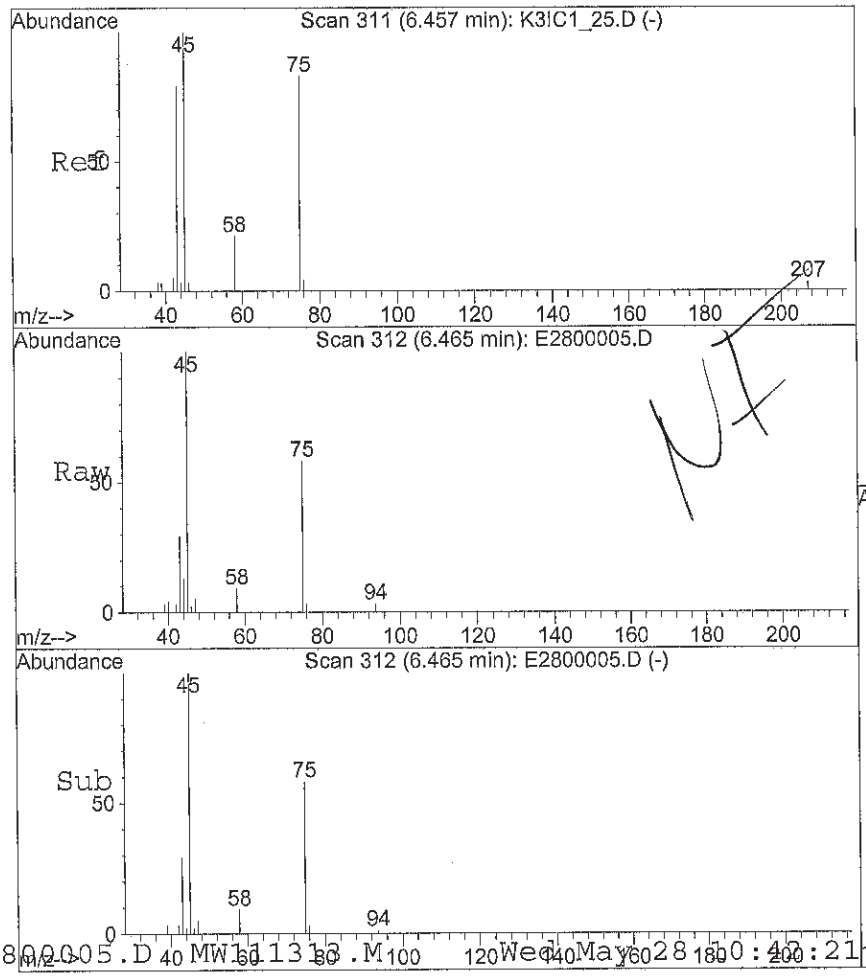


#7
Chloroethane
Concen: 1.35 ug/L
RT: 5.32 min Scan# 176
Delta R.T. 0.08 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 64 Resp: 880

Ion	Ratio	Lower	Upper
64	100		
66	37.5	35.4	53.0

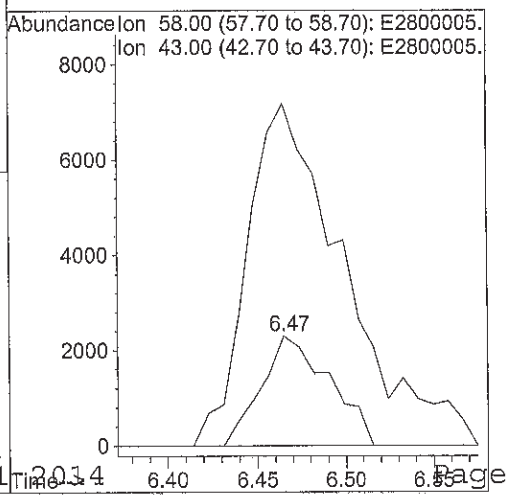


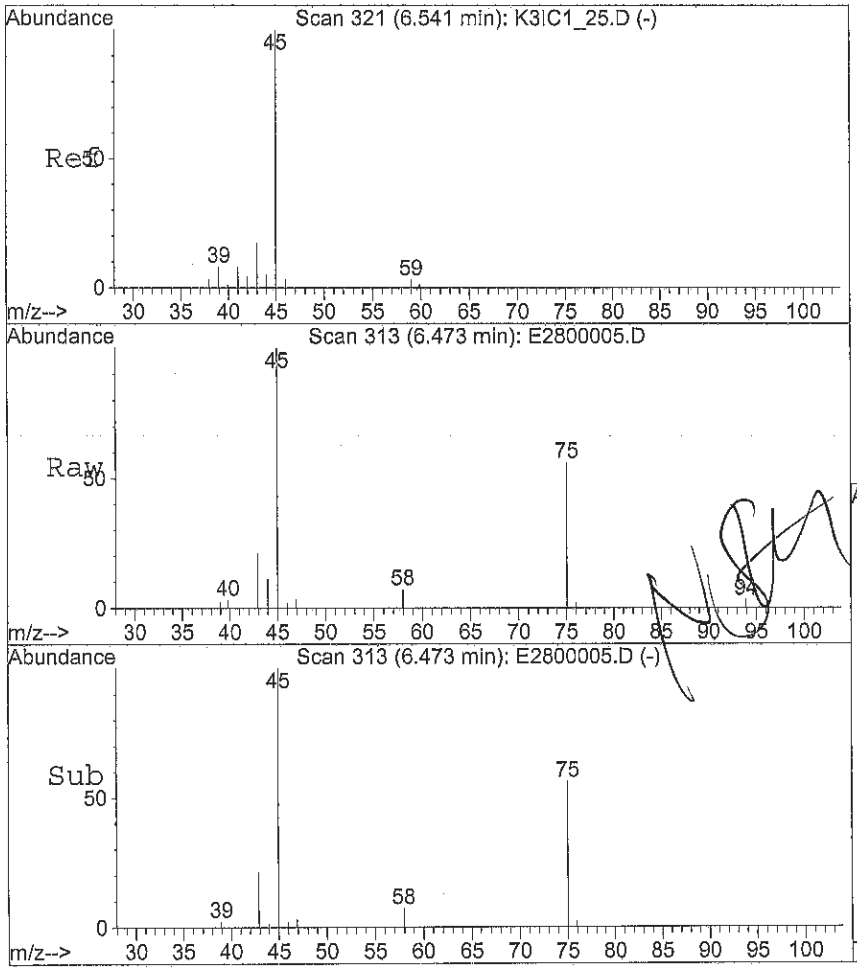


#11
Acetone
Concen: 4.97 ug/L
RT: 6.47 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 58 Resp: 6122

Ion	Ratio	Lower	Upper
58	100		
43	446.4	360.9	541.3

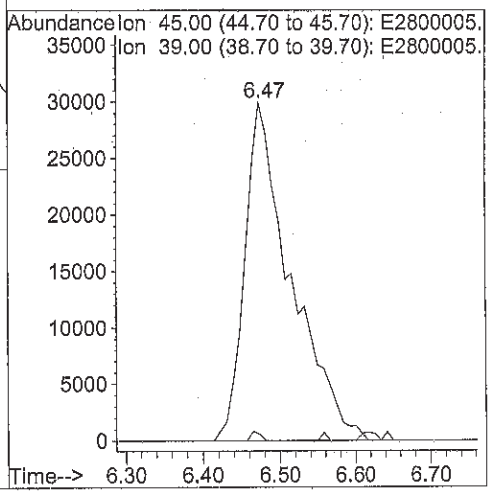


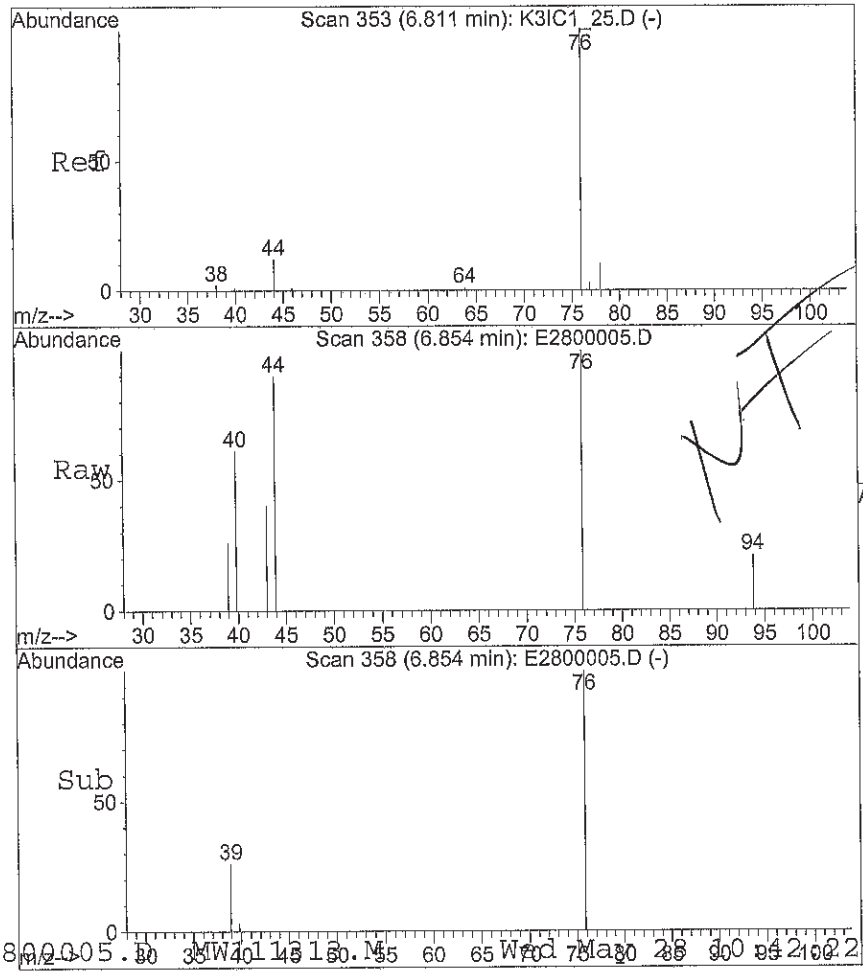


#12
(IPA) Leak Check Compound
Concen: 655.06 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 45 Resp: 125299

Ion	Ratio	Lower	Upper
45	100		
39	0.6	4.9	7.3#

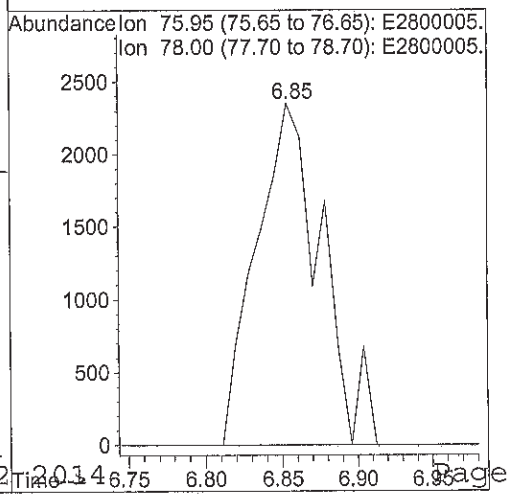


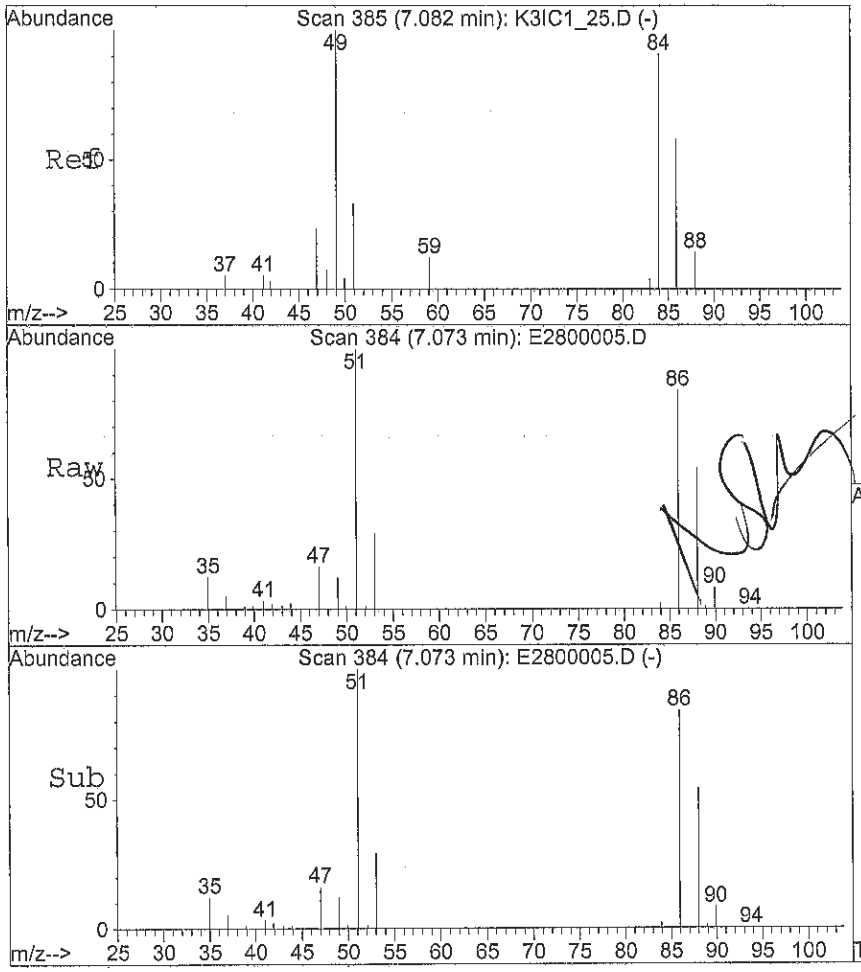


#13
Carbon disulfide
Concen: 0.53 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 76 Resp: 6994

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

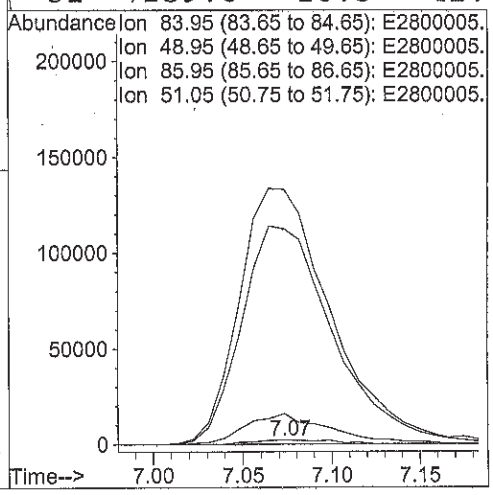


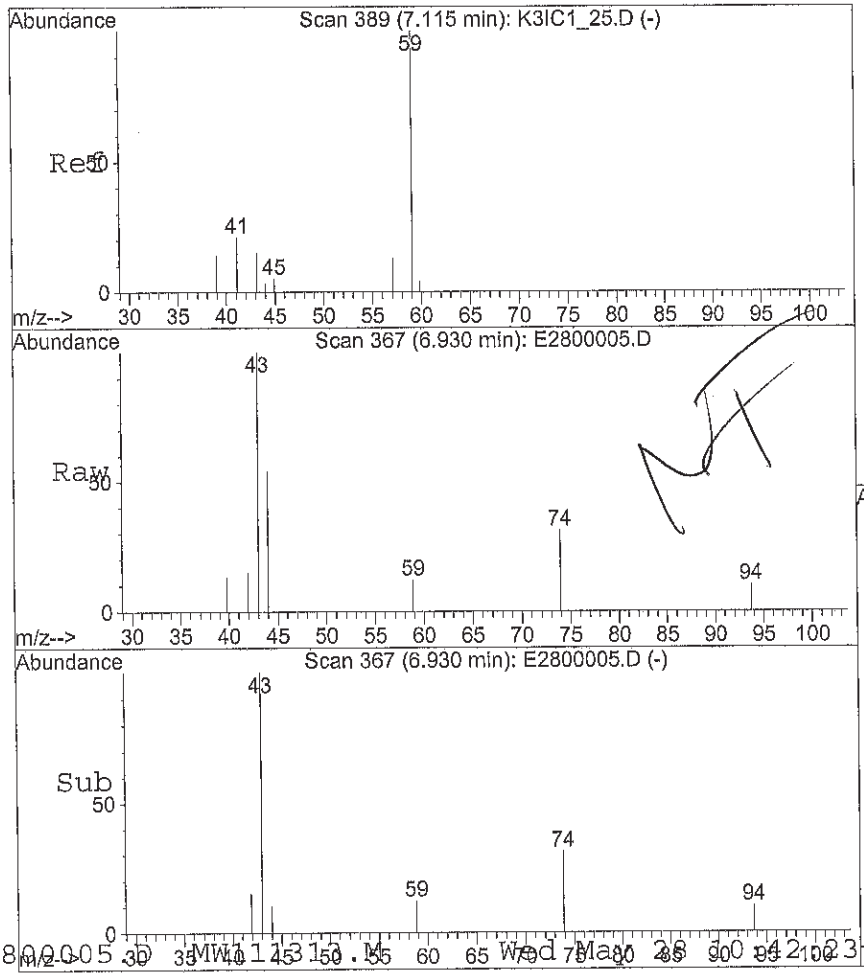


#14
Methylene Chloride
Concen: 1.52 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 84 Resp: 6664

Ion	Ratio	Lower	Upper
84	100		
49	779.7	89.8	134.6#
86	6152.1	51.1	76.7#
51	7259.6	28.5	42.7#

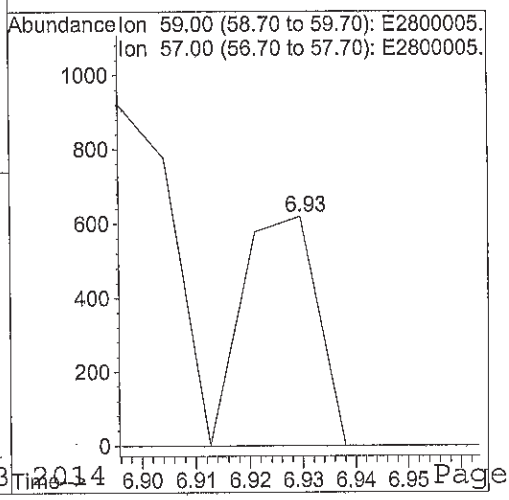


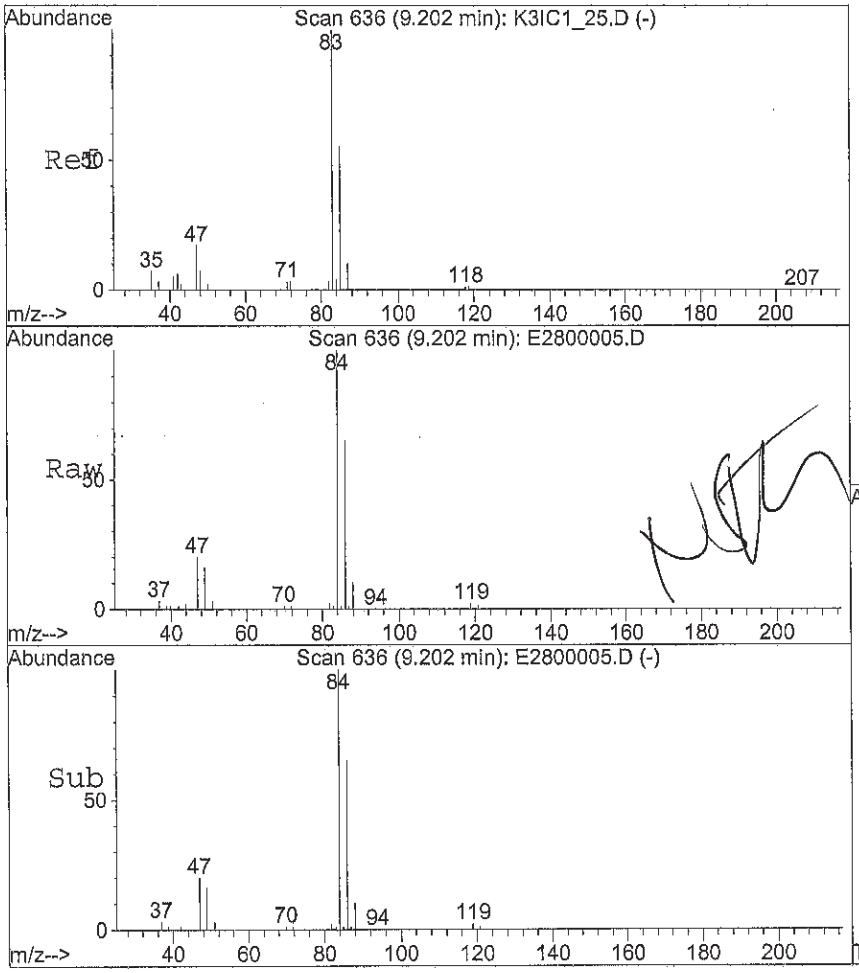


#15
(TBA) tert-Butanol
Concen: 2.24 ug/L
RT: 6.93 min Scan# 367
Delta R.T. -0.19 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 59 Resp: 607

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

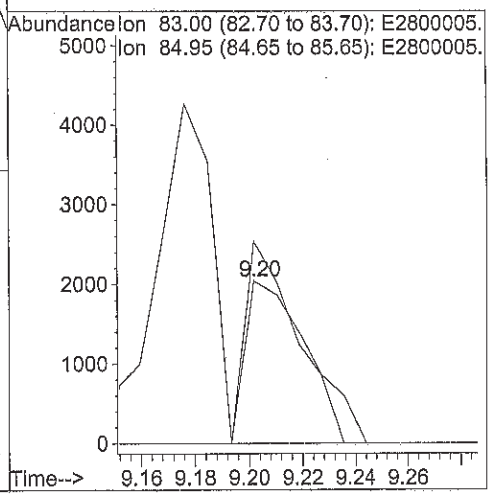


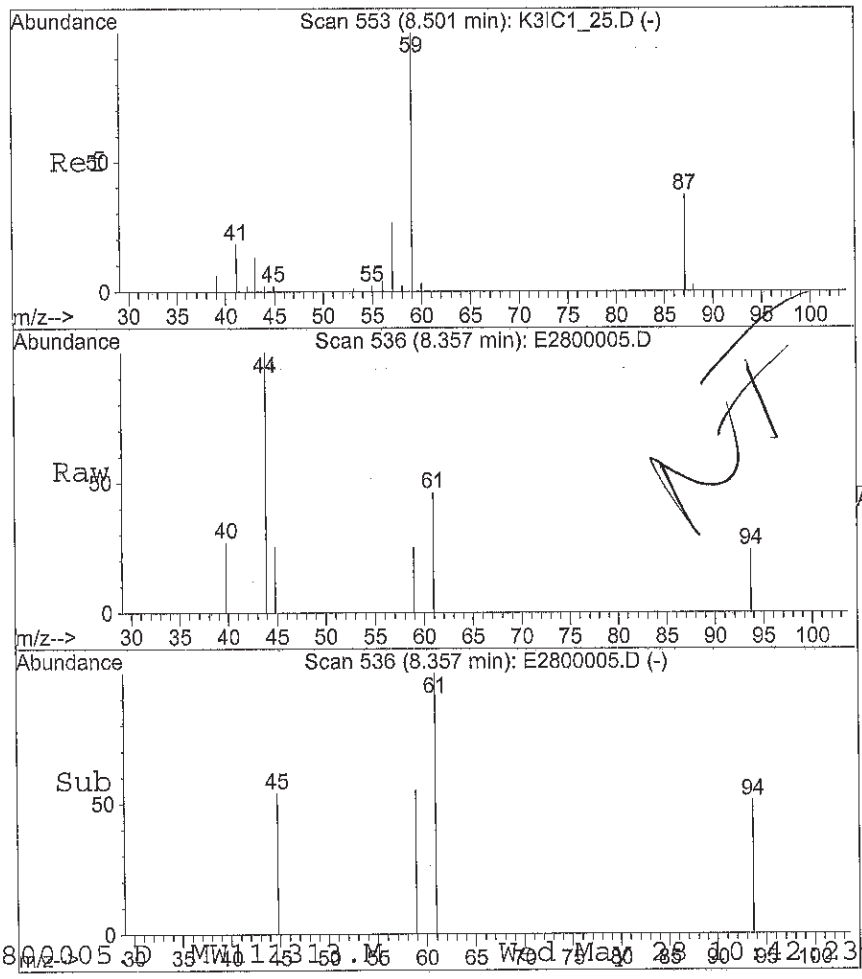


#24
Chloroform
Concen: 0.41 ug/L
RT: 9.20 min Scan# 636
Delta R.T. -0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 83 Resp: 3421

Ion	Ratio	Lower	Upper
83	100		
85	98.5	51.8	77.6#

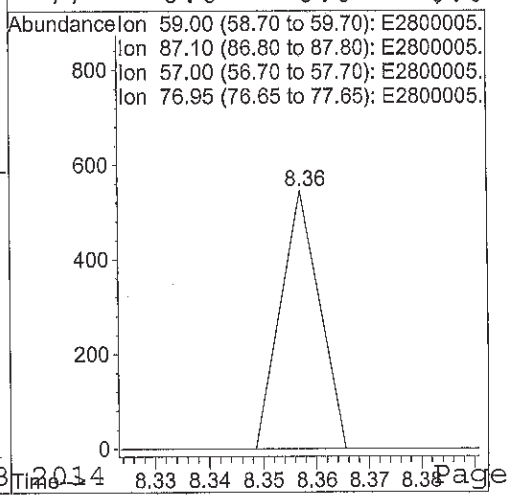


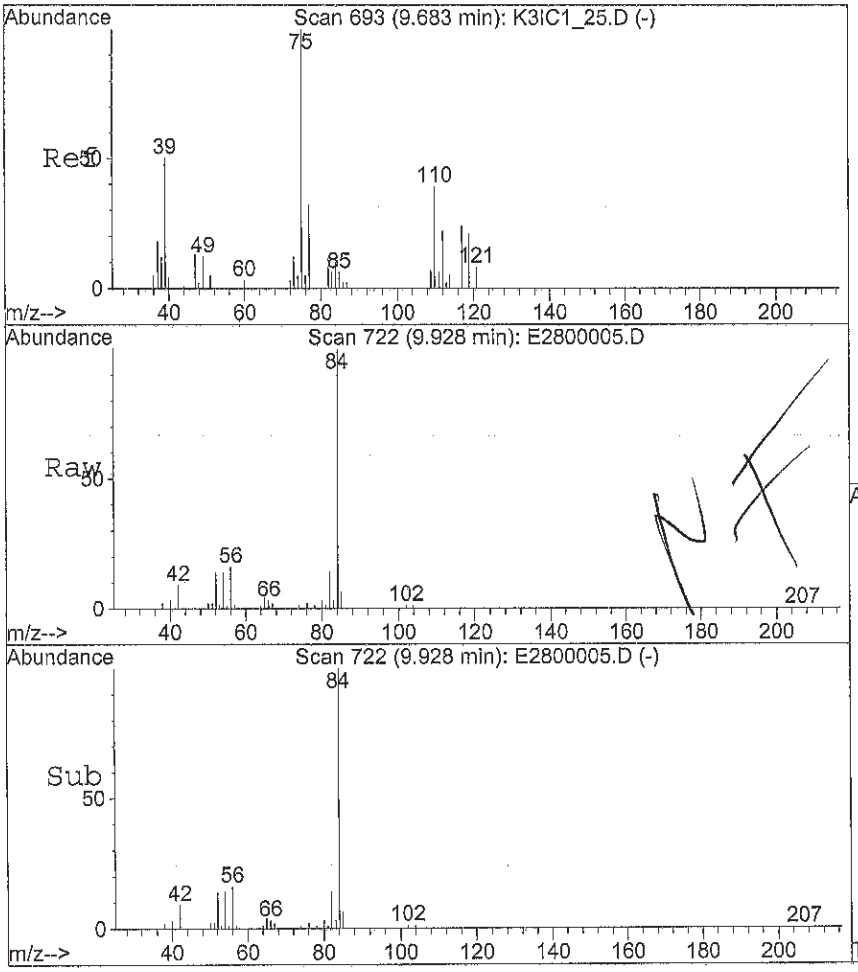


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.02 ug/L
RT: 8.36 min Scan# 536
Delta R.T. -0.14 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 59 Resp: 276

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

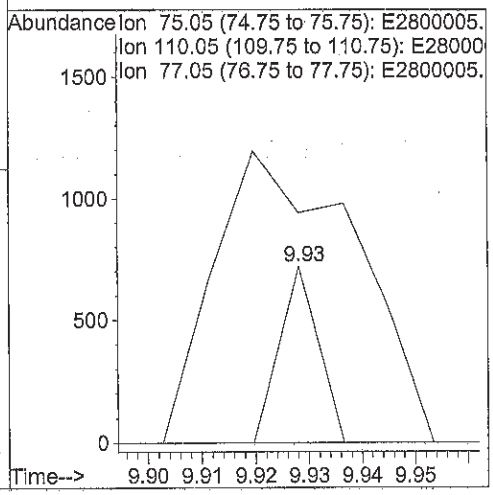


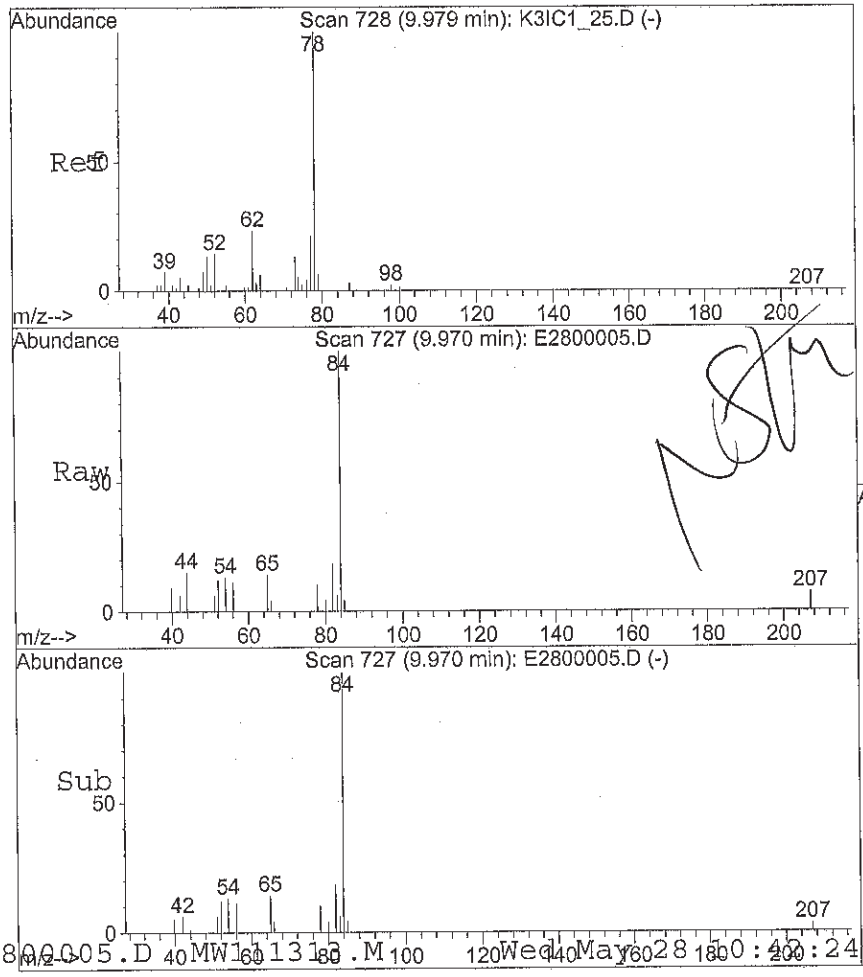


#29
1,1-Dichloropropene
Concen: 0.06 ug/L
RT: 9.93 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 75 Resp: 365

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	601.1	25.0	37.4#

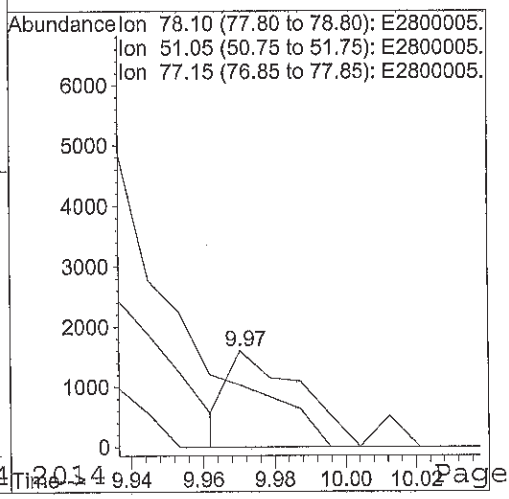


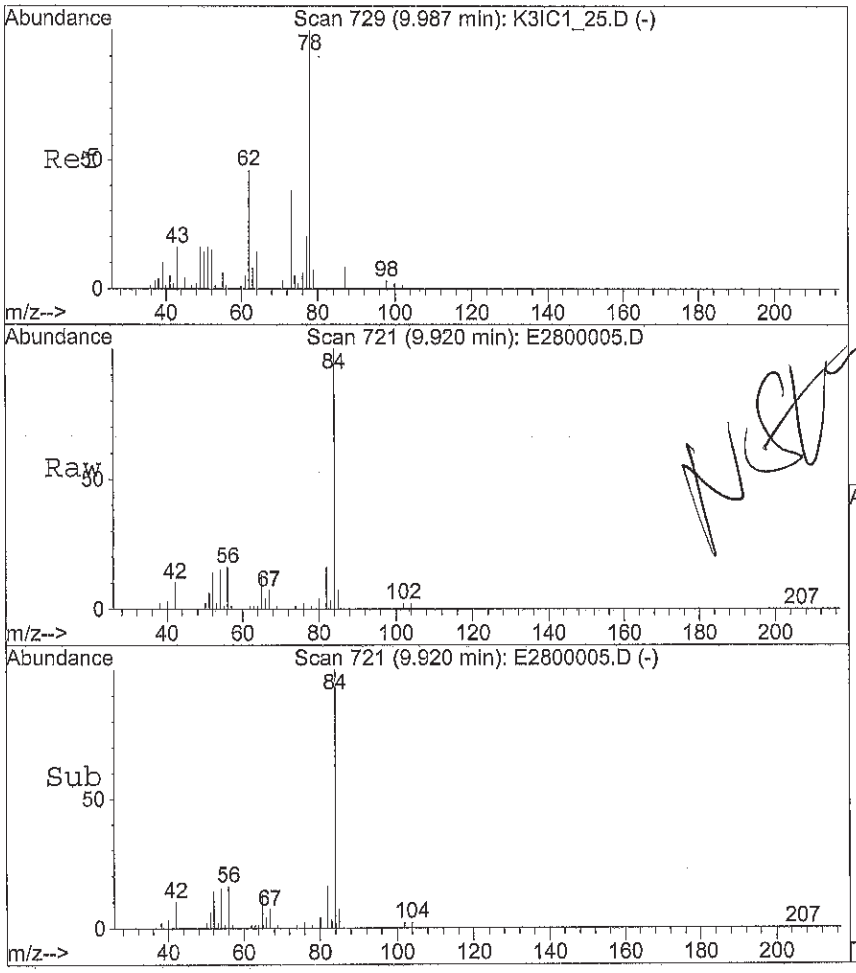


#31
Benzene
Concen: 0.15 ug/L
RT: 9.97 min Scan# 727
Delta R.T. -0.01 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 78 Resp: 2221

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

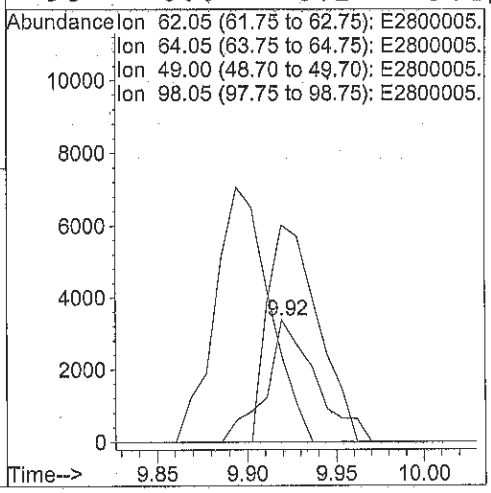


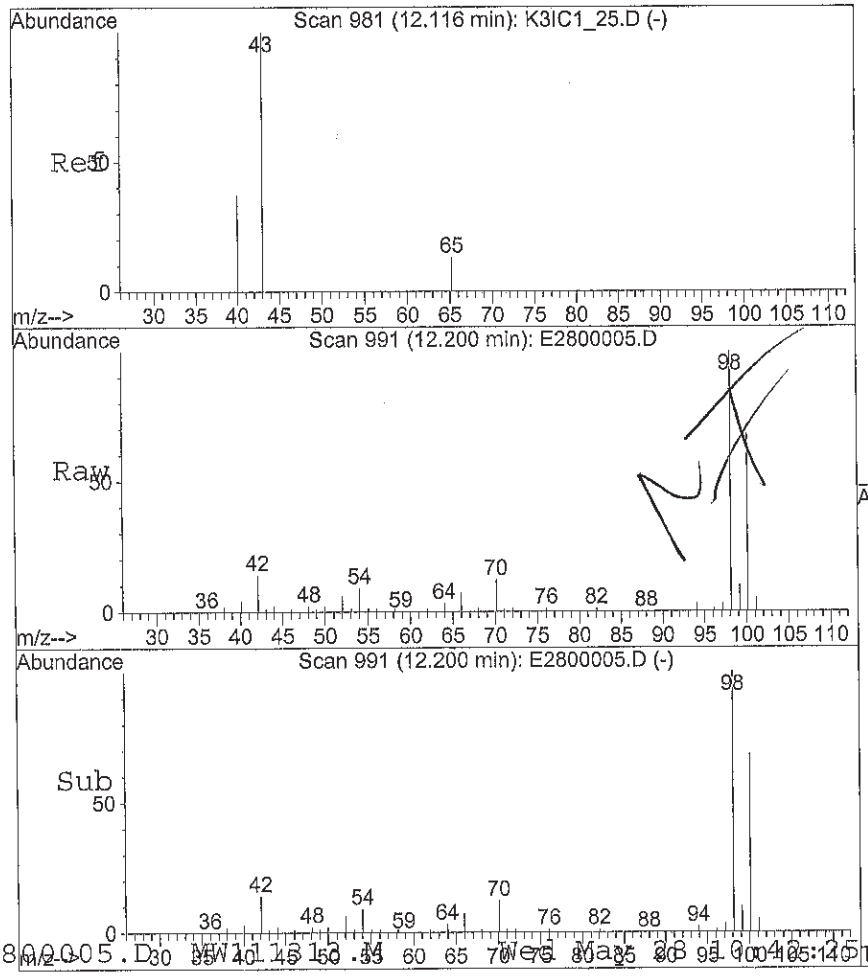


#32
1,2-Dichloroethane
Concen: 1.24 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 62 Resp: 6578

Ion	Ratio	Lower	Upper
62	100		
64	180.8	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

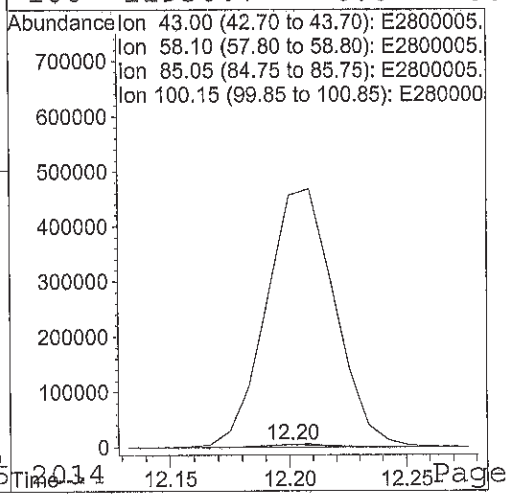


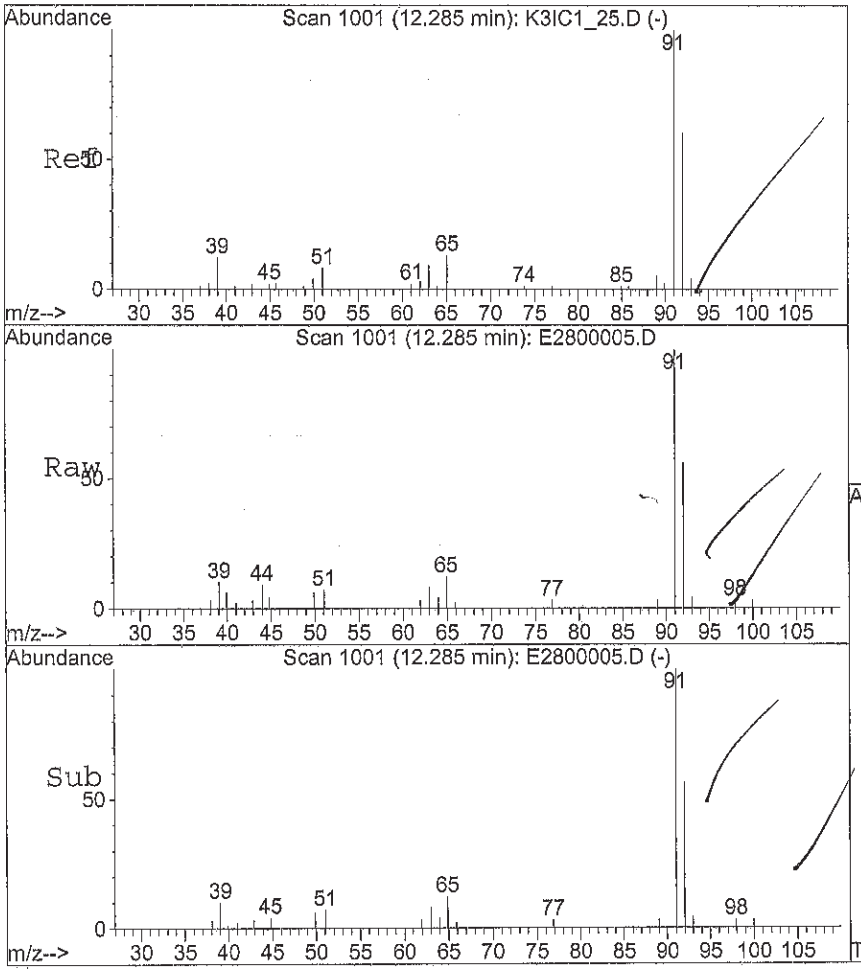


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.23 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 43 Resp: 7946

Ion	Ratio	Lower	Upper
43	100		
58	127.9	0.0	0.0#
85	0.0	0.0	0.0
100	11930.7	0.0	0.0#

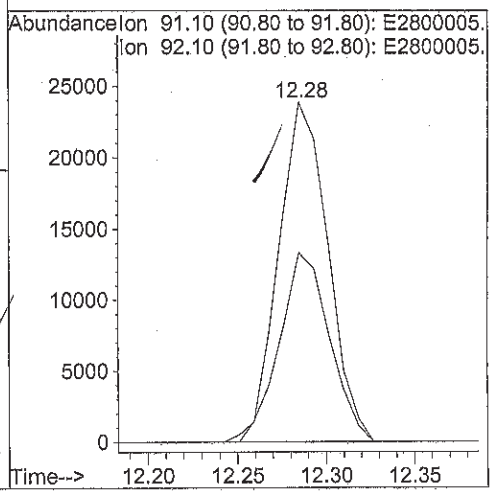


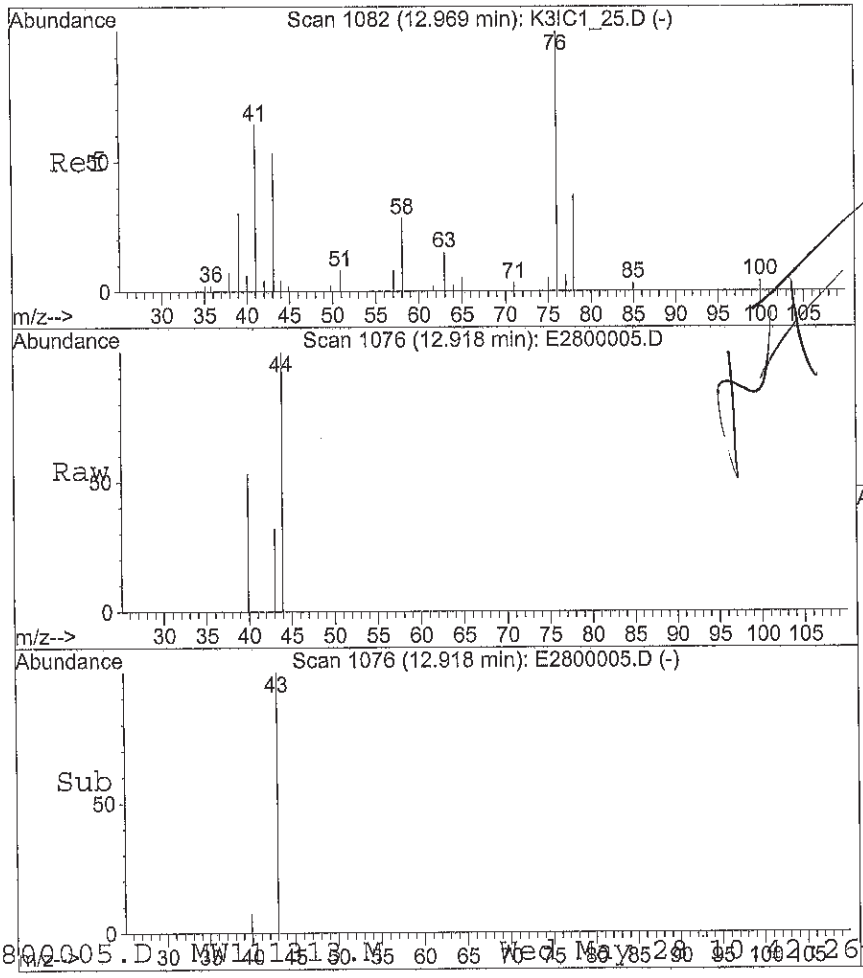


#41
Toluene
Concen: 2.76 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. 0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 91 Resp: 46319

Ion	Ratio	Lower	Upper
91	100		
92	56.2	47.4	71.0

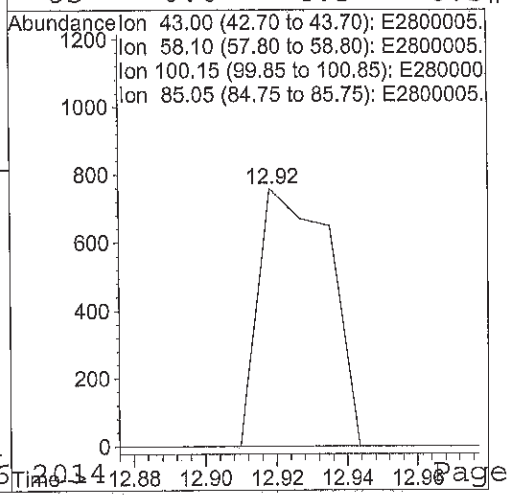


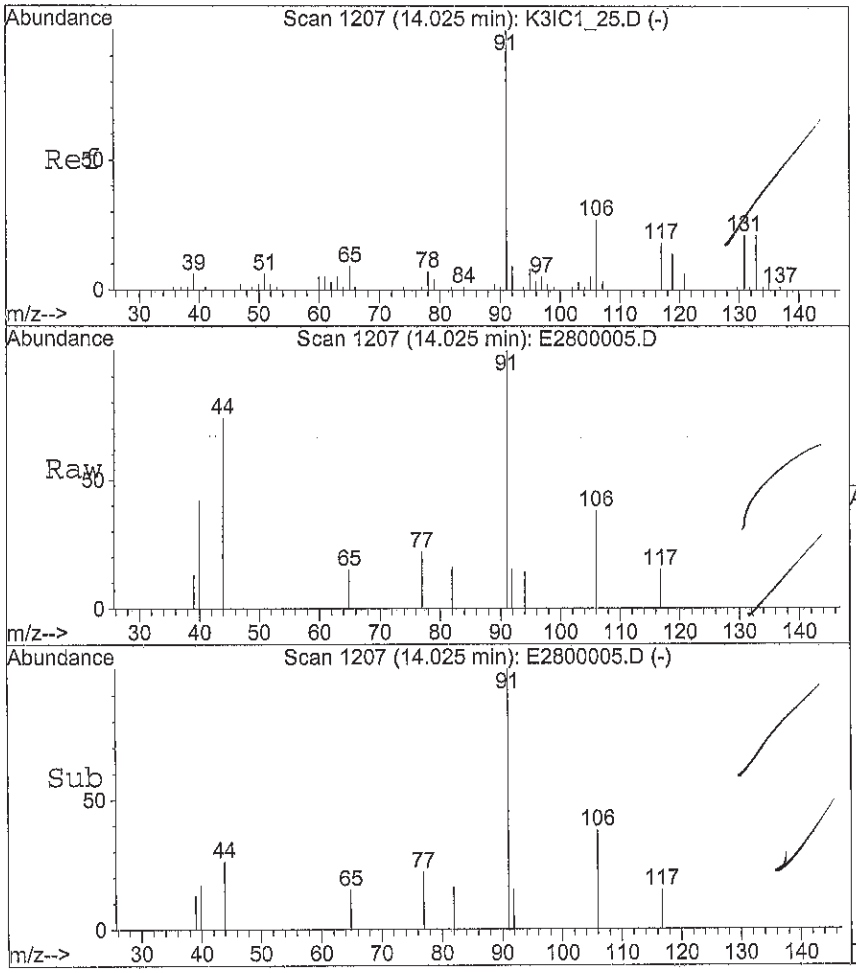


#46
2-Hexanone
Concen: 0.39 ug/L
RT: 12.92 min Scan# 1076
Delta R.T. -0.05 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 43 Resp: 1053

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

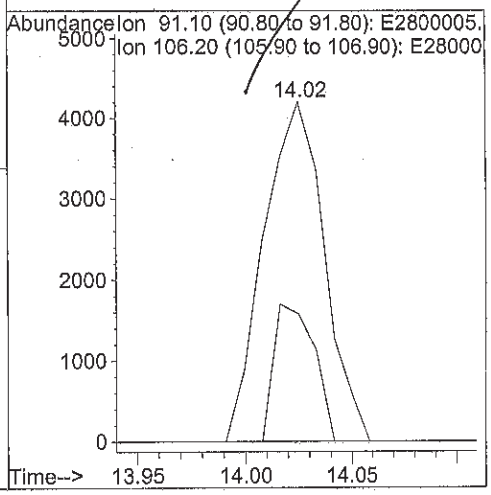


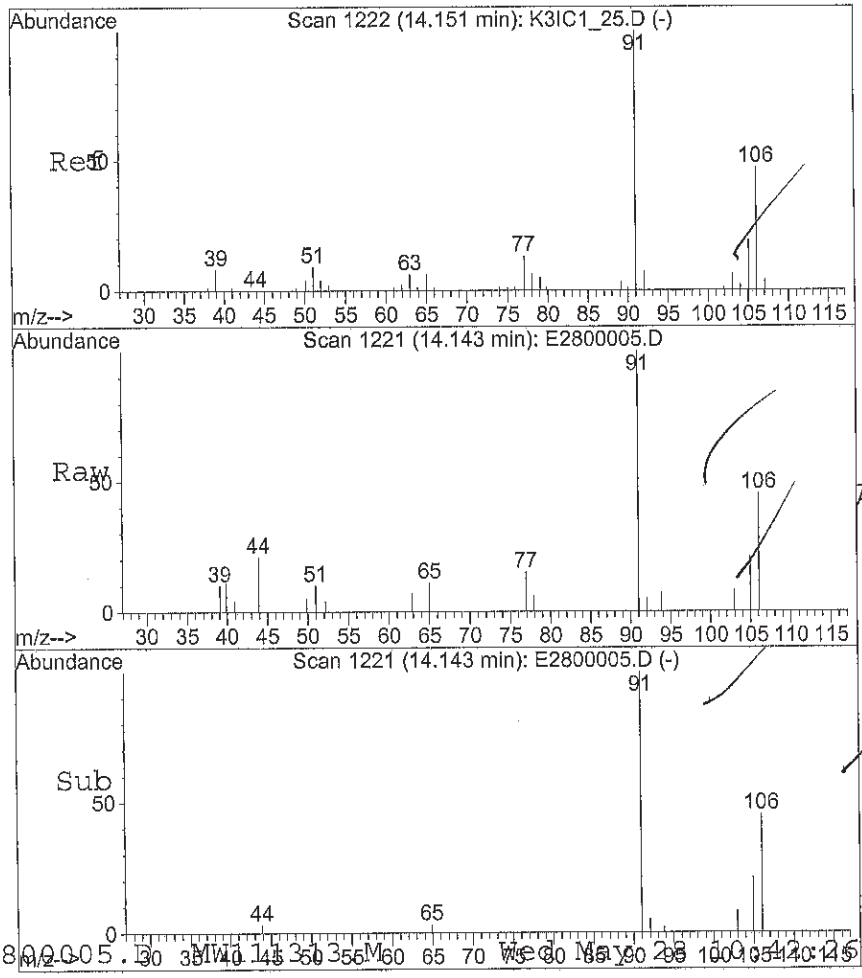


#51
Ethylbenzene
Concen: 0.43 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 91 Resp: 8269

Ion	Ratio	Lower	Upper
91	100		
106	27.1	23.5	35.3

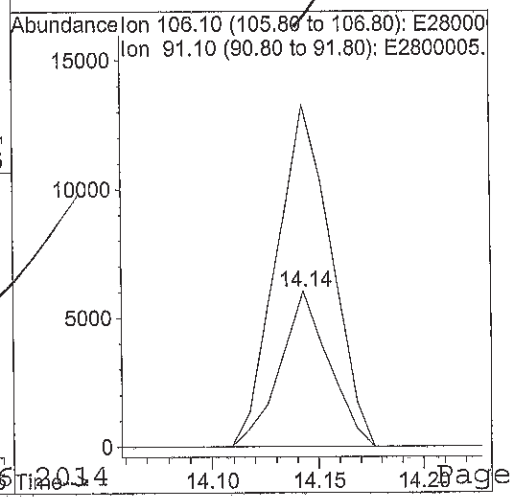


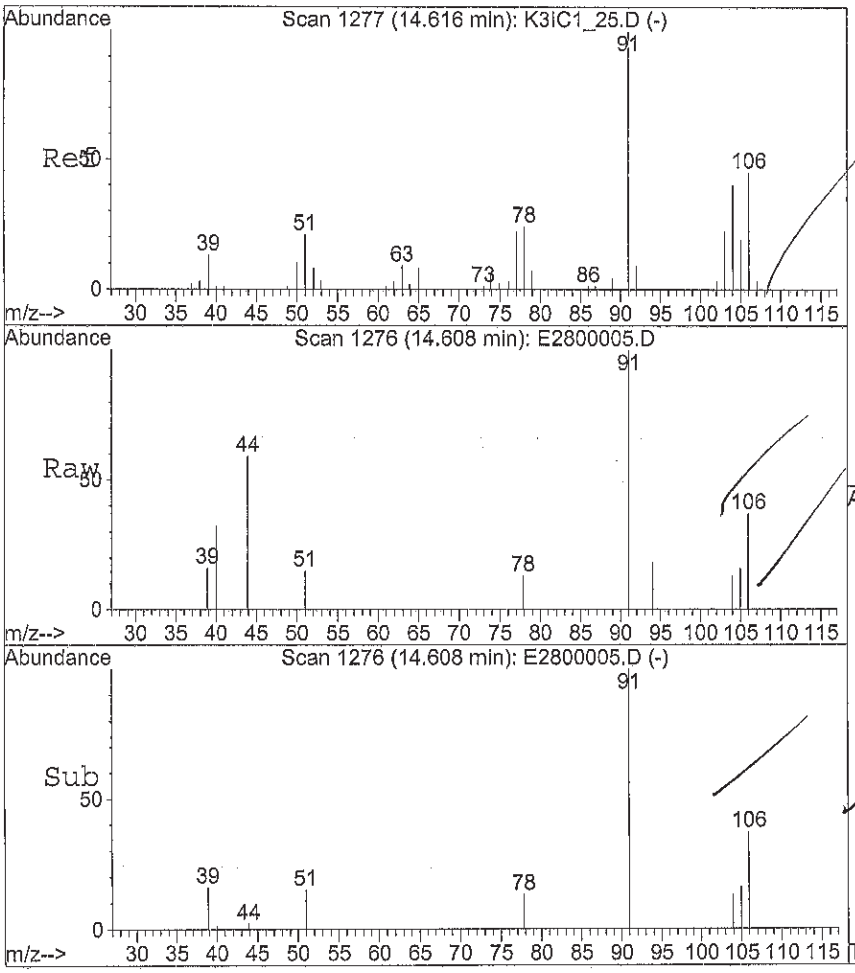


#52
m,p-Xylenes
Concen: 1.42 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion:106 Resp: 9659

Ion	Ratio	Lower	Upper
106	100		
91	246.3	177.1	265.7

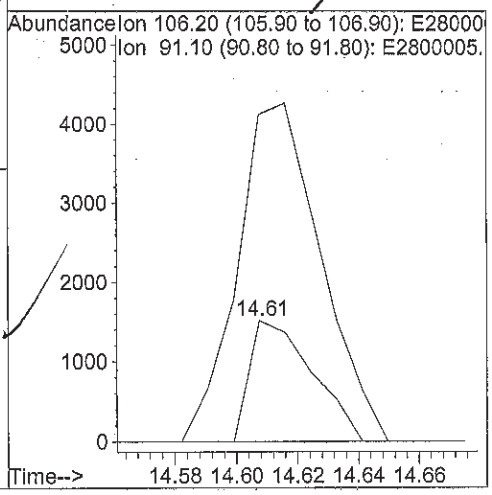


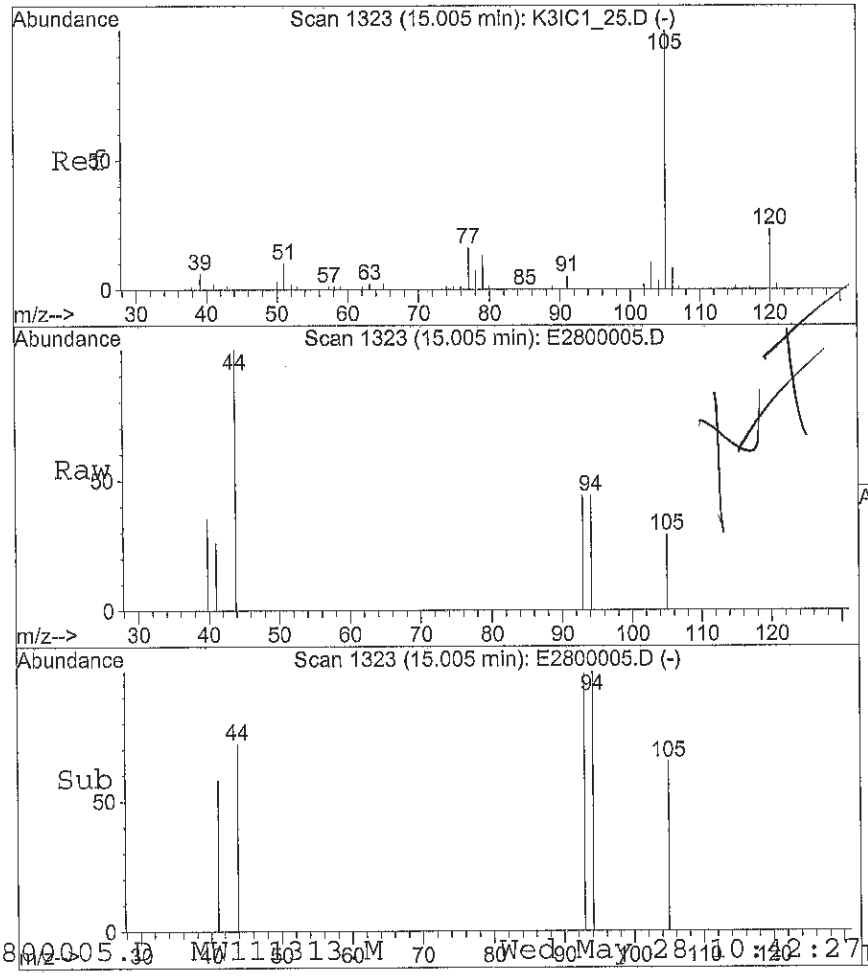


#53
o-Xylene
Concen: 0.32 ug/L
RT: 14.61 min Scan# 1276
Delta R.T. -0.01 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion:106 Resp: 2154

Ion	Ratio	Lower	Upper
106	100		
91	373.6	179.0	268.6#

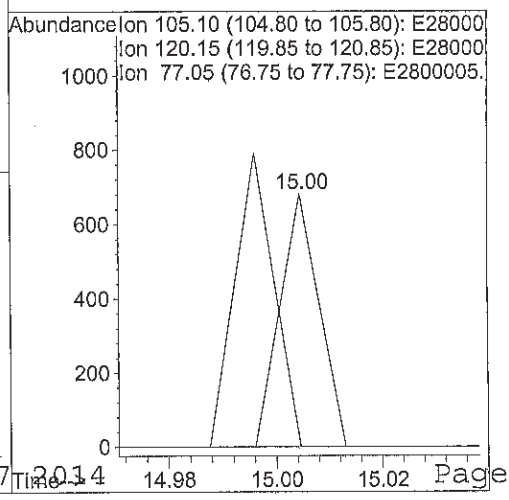


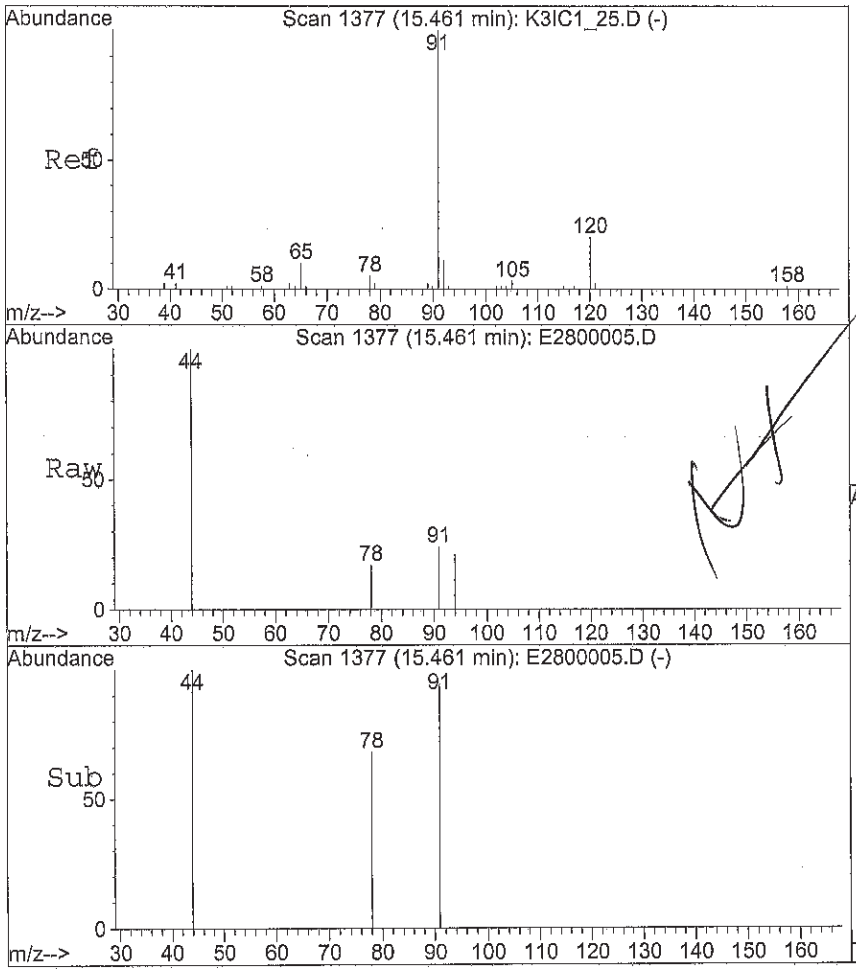


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion:105 Resp: 345

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	116.2	13.1	19.7#

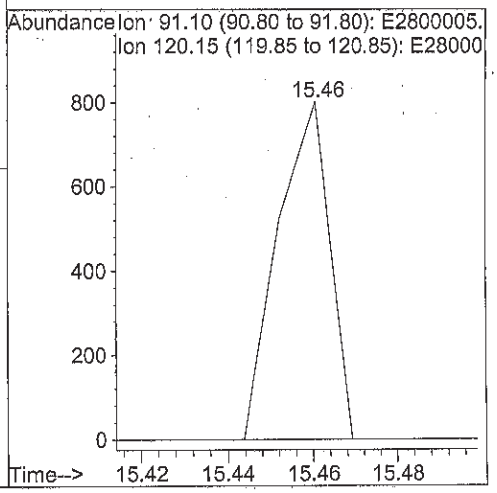


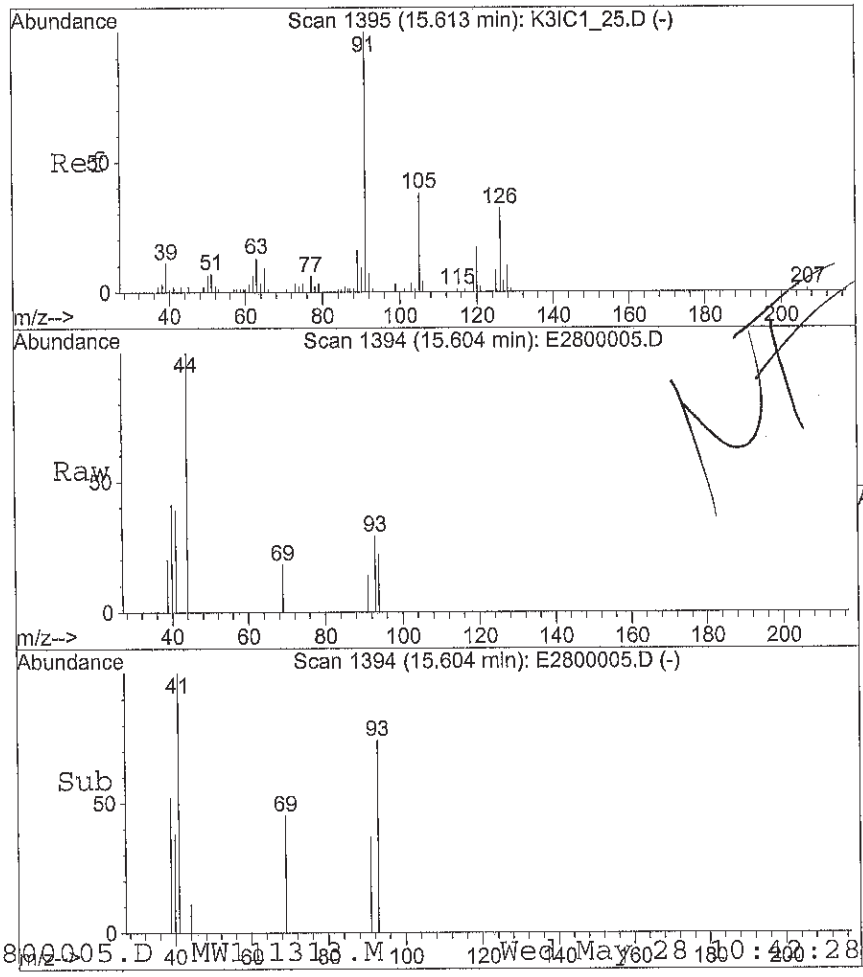


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 91 Resp: 672

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

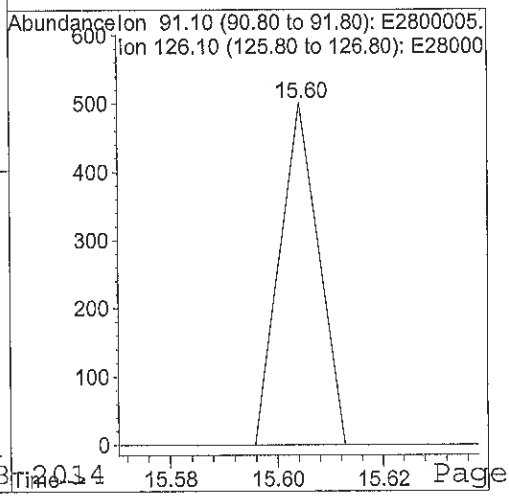


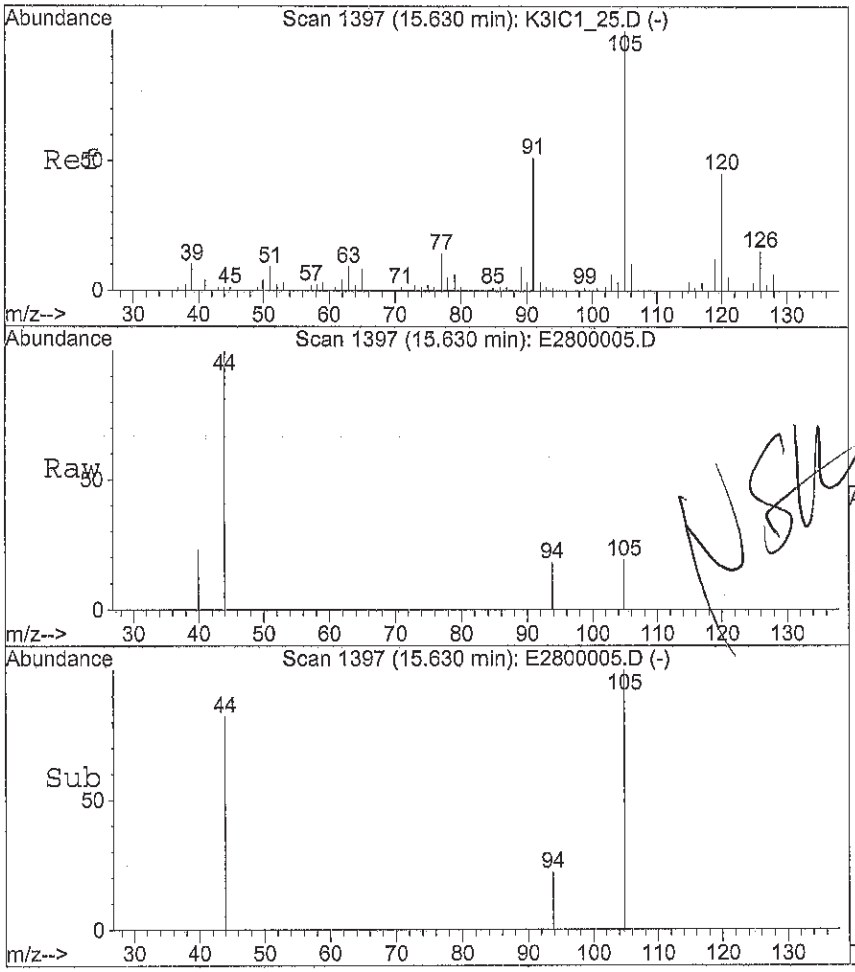


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 91 Resp: 254

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

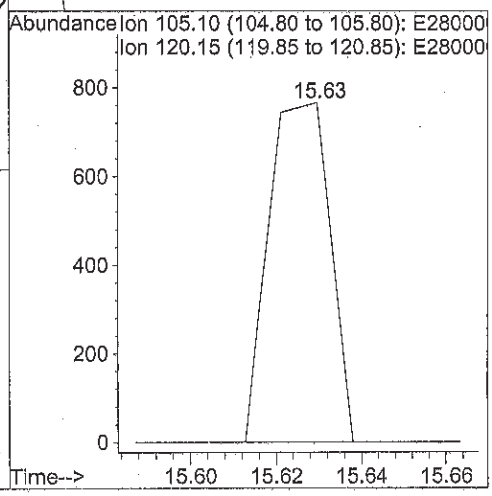


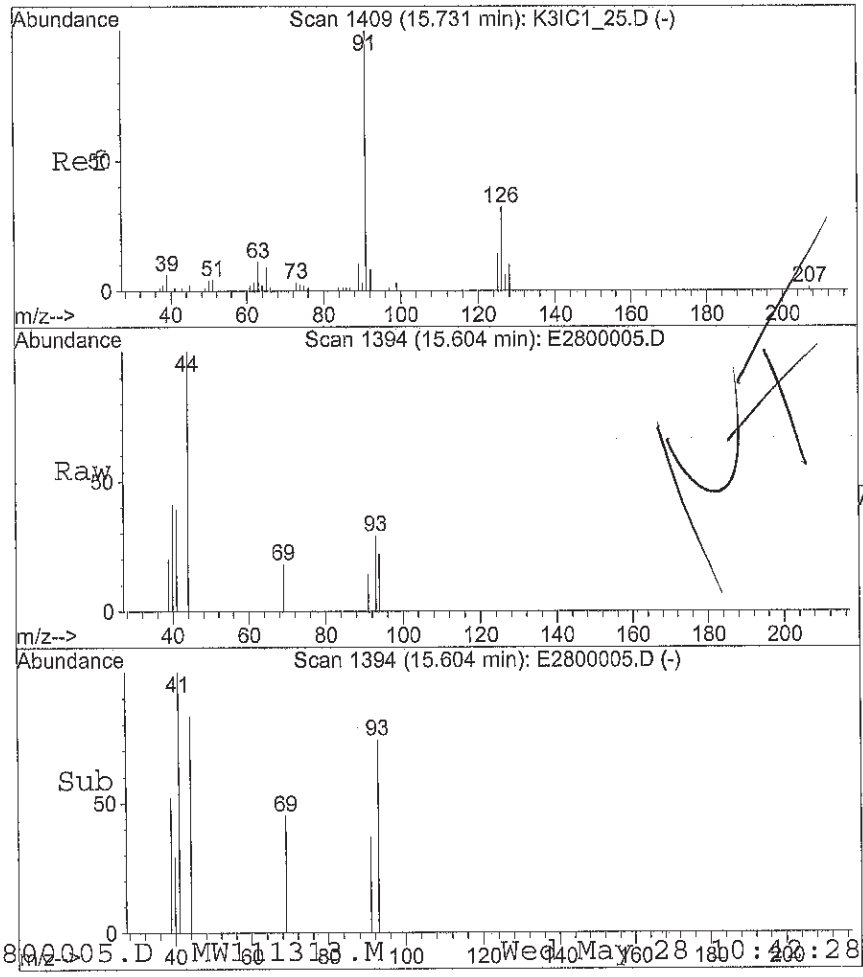


#64
1,3,5-Trimethylbenzene
Concen: 0.05 ug/L
RT: 15.63 min Scan# 1397
Delta R.T. -0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion:105 Resp: 765

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

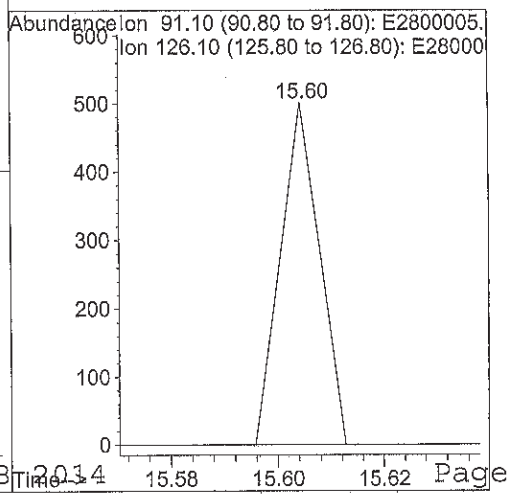


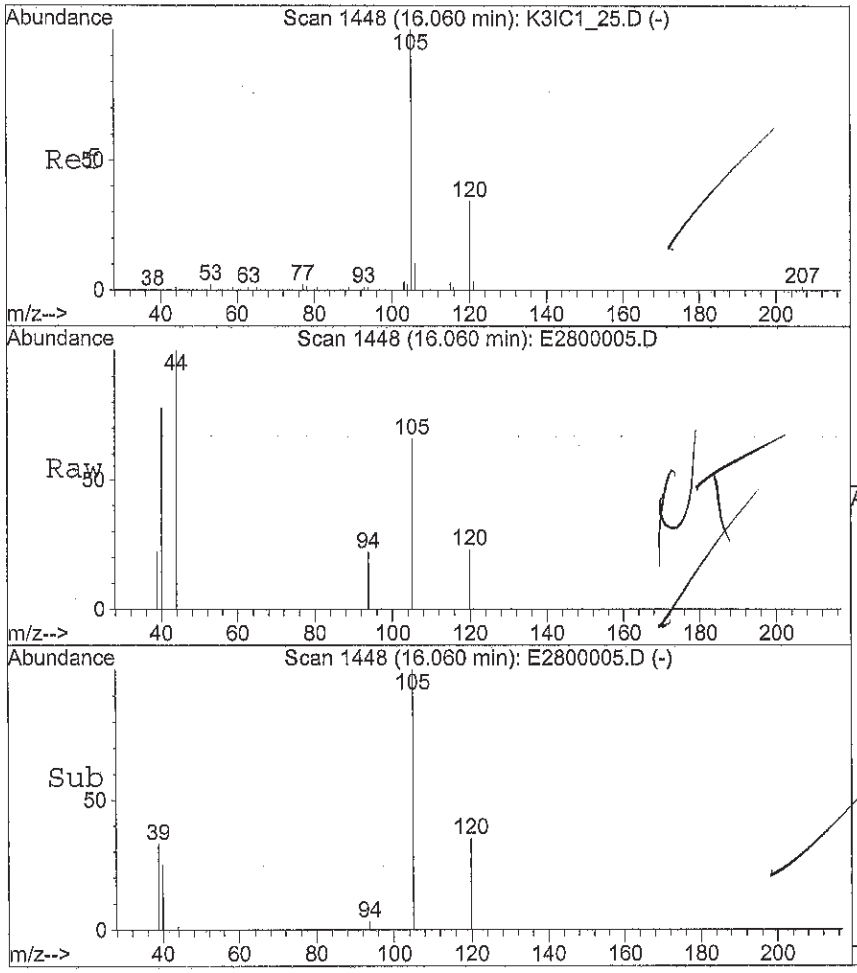


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.13 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion: 91 Resp: 254

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

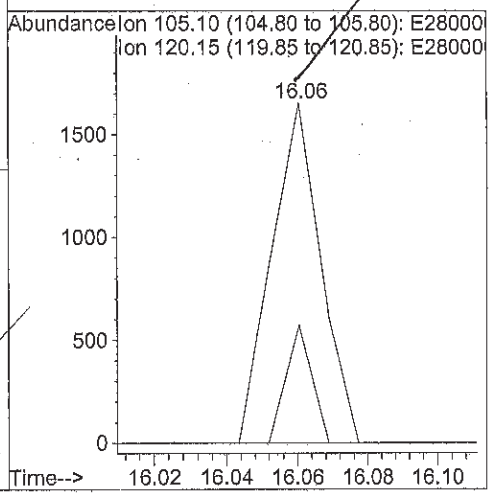


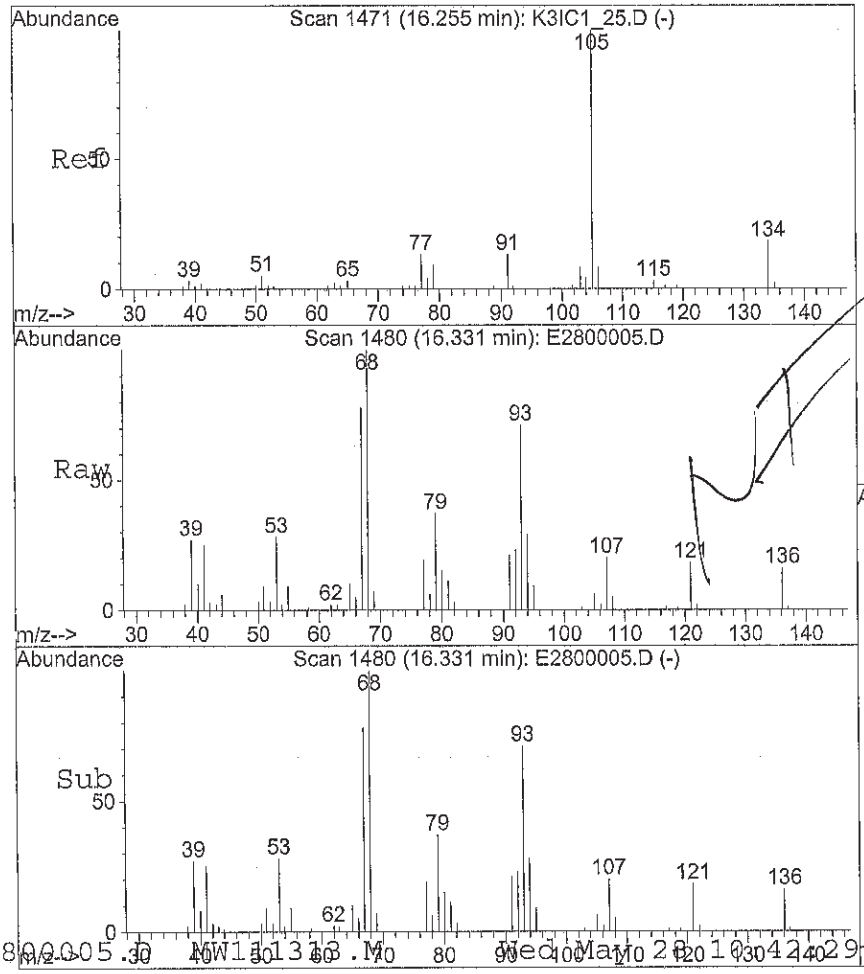


#67
1,2,4-Trimethylbenzene
Concen: 0.09 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion:105 Resp: 1584

Ion	Ratio	Lower	Upper
105	100		
120	18.3	33.8	50.8#

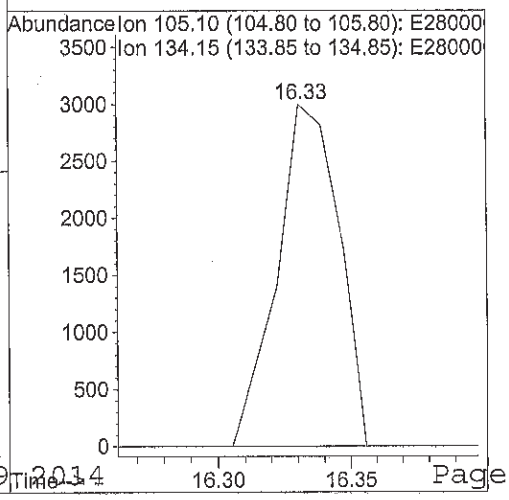


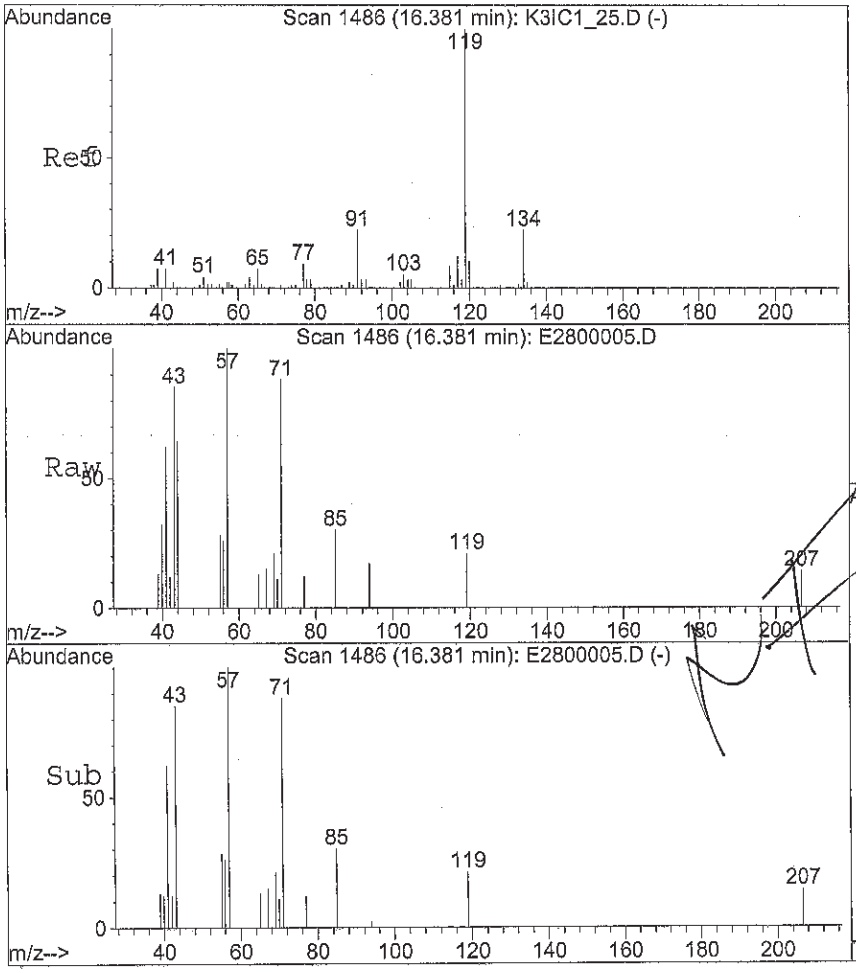


#68
sec-Butylbenzene
Concen: 0.22 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion:105 Resp: 4882

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

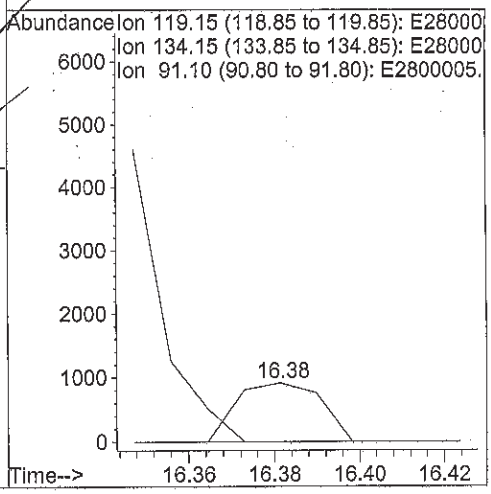




#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2800005.D
Acq: 28 May 2014 10:19 am

Tgt Ion:119 Resp: 1255

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800005.D Vial: 4
Acq On : 28 May 2014 10:19 am Operator: DN
Sample : 3E42801-04 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-12.5-13.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:41 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1591812	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1232045	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	673028	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	445744	10.77	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.16%			
3) Chloroform-d (SU6)	9.18	84	720165	12.12	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.96%			
4) Methylene Chloride-d2 (SU5	7.06	86	409978	11.81	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.48%			
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	442549	15.64	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 125.12%#			
6) Benzene-d6 (SU7)	9.93	84	1359515	10.88	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.04%			
8) Toluene-d8 (SU3)	12.21	98	1397374	11.95	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.60%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	685176	14.20	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 113.60%			

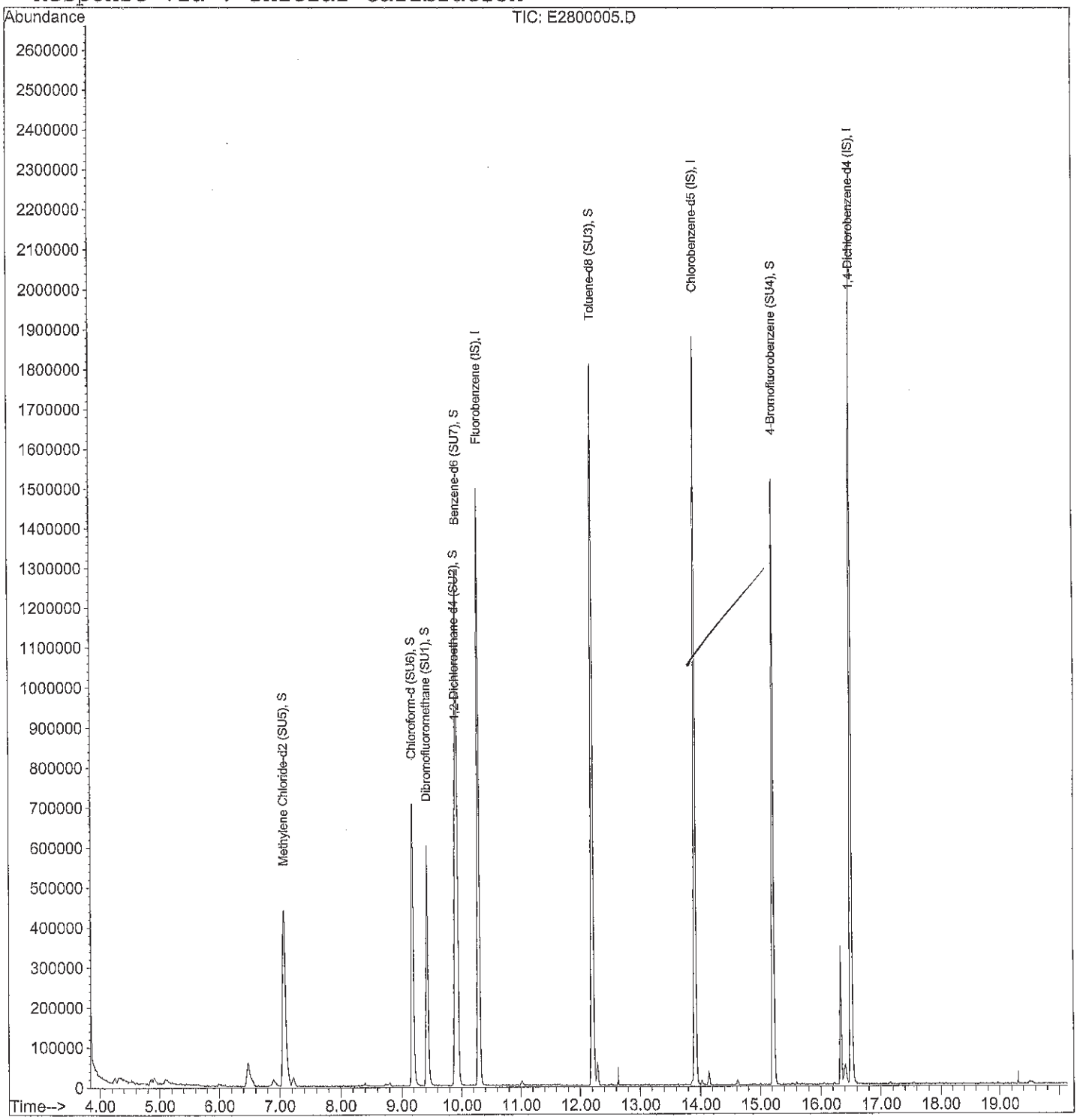
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800005.D Vial: 4
Acq On : 28 May 2014 10:19 am Operator: DN
Sample : 3E42801-04 Inst : GC/MS Ins
Misc : 100cc SVL-515-SA5D-SV-12.5-13.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 10:41 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800006.D
Acq On : 28 May 2014 10:47 am
Sample : 3E42801-05
Misc : 100cc SVL-511-SA5D-SV-4.5-5.5
MS Integration Params: rteint.p
Quant Time: May 28 11:34 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1624445	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1300399	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	693251	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	464182	11.46 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	91.68%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	459490	11.93 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.44%	
39) Toluene-d8 (SU3)	12.21	98	1455888	12.00 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	96.00%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	697818	13.12 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	104.96%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.12	85	351	0.09 ~~ug/L #~~ NSL	44
4) Chloromethane	4.40	50	2784	-0.20 ~~ug/L #~~	41
6) Bromomethane	5.08	96	2262	-0.51 ~~ug/L #~~	1
7) Chloroethane	5.25	64	1048	1.46 ug/L #	78
11) Acetone	6.46	58	4246	1.63 ~~ug/L #~~	54
12) (IPA) Leak Check Compound	6.48	45	153790	787.86 ~~ug/L #~~	84
14) Methylene Chloride	7.07	84	5413	1.21 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.89	59	2736	9.87 ~~ug/L #~~	77
24) Chloroform	9.21	83	2159	0.25 ~~ug/L~~ NSL	85
29) 1,1-Dichloropropene	9.93	75	259	0.04 ~~ug/L #~~	1
31) Benzene	9.98	78	697	0.05 ~~ug/L #~~	59
32) 1,2-Dichloroethane	9.92	62	6872	1.27 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	8293	3.20 ~~ug/L #~~	100
41) Toluene	12.29	91	3128	0.18 ug/L 0.0036	90
46) 2-Hexanone	12.92	43	4327	1.52 ~~ug/L #~~	37
49) Chlorobenzene	13.95	112	295	0.02 ~~ug/L #~~	28
51) Ethylbenzene	14.02	91	698	0.03 ~~ug/L #~~	45
53) o-Xylene	14.60	106	296	0.04 ug/L 0.0008	92
54) Styrene	14.62	104	1569	-0.72 ~~ug/L #~~	60
56) Isopropylbenzene	15.22	105	634	0.03 ~~ug/L #~~	1
62) n-Propylbenzene	15.21	91	1863	0.07 ~~ug/L #~~	56
67) 1,2,4-Trimethylbenzene	16.15	105	290	0.02 ~~ug/L #~~	33

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800006.D Vial: 5
Acq On : 28 May 2014 10:47 am Operator: DN
Sample : 3E42801-05 Inst : GC/MS Ins
Misc : 100cc SVL-511-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 11:34 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

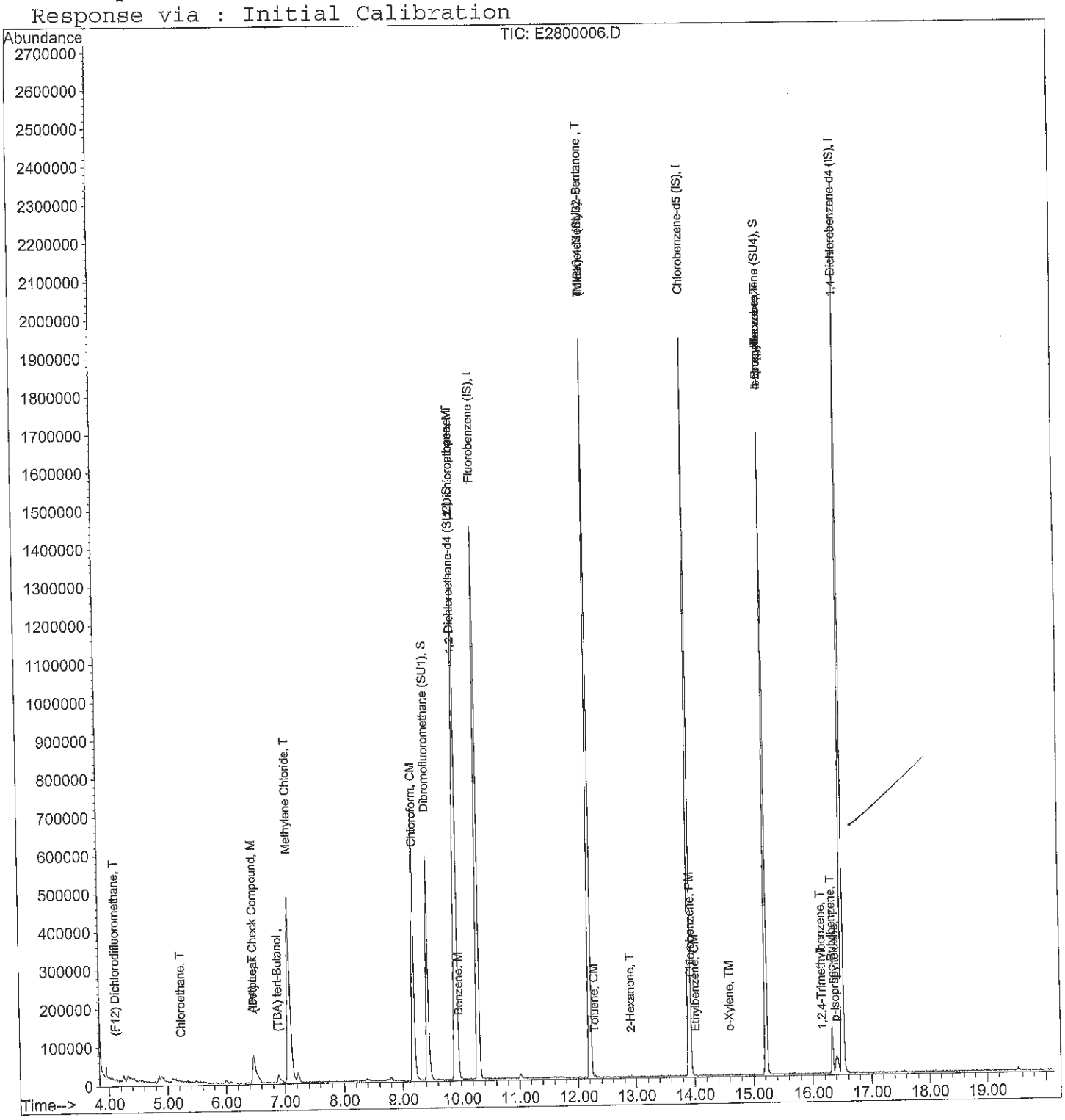
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) sec-Butylbenzene	16.34	105	1737	0.07 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	714	0.04 ~~ug/L #~~	52

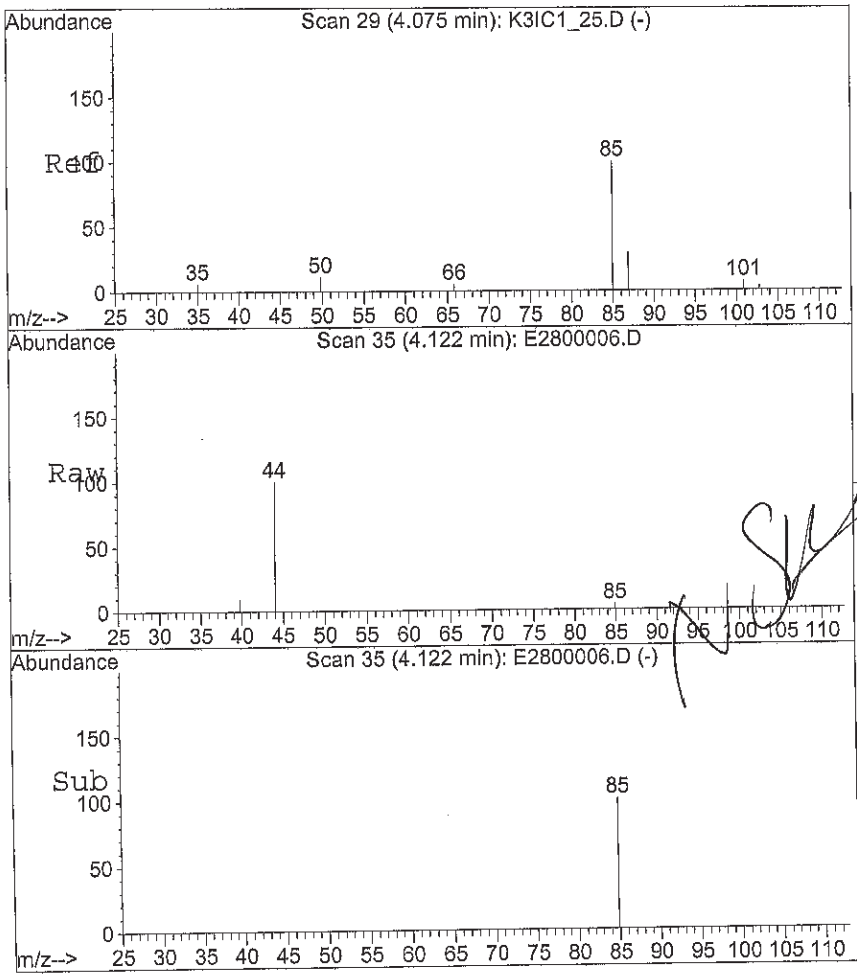
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800006.D Vial: 5
Acq On : 28 May 2014 10:47 am Operator: DN
Sample : 3E42801-05 Inst : GC/MS Ins
Misc : 100cc SVL-511-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 11:34 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

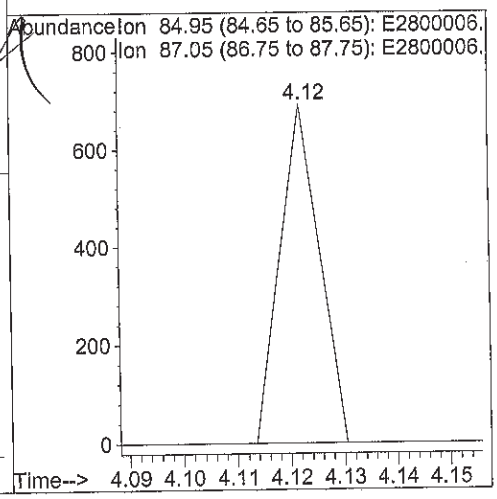


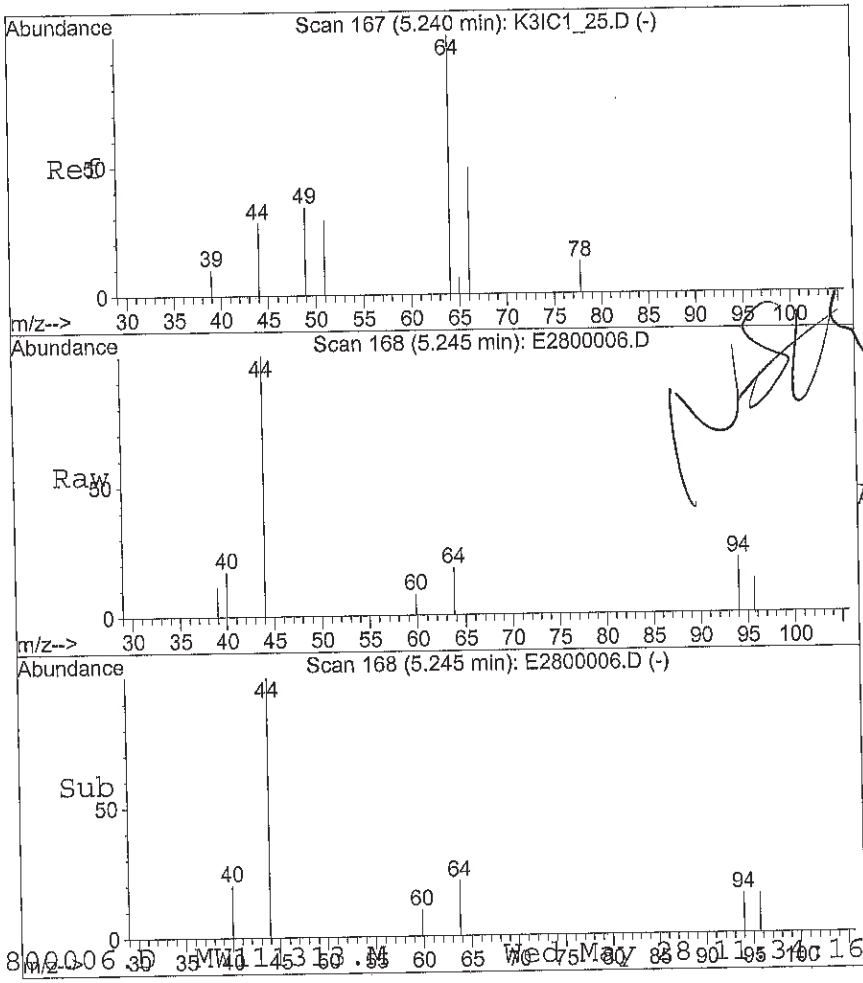


#3
(F12) Dichlorodifluoromethane
Concen: 0.09 ug/L
RT: 4.12 min Scan# 35
Delta R.T. 0.05 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 85 Resp: 351

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

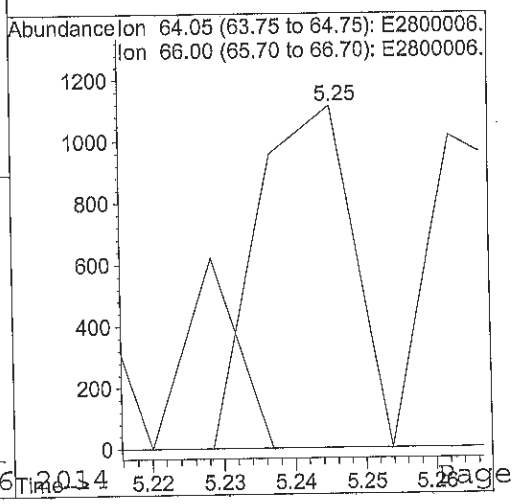


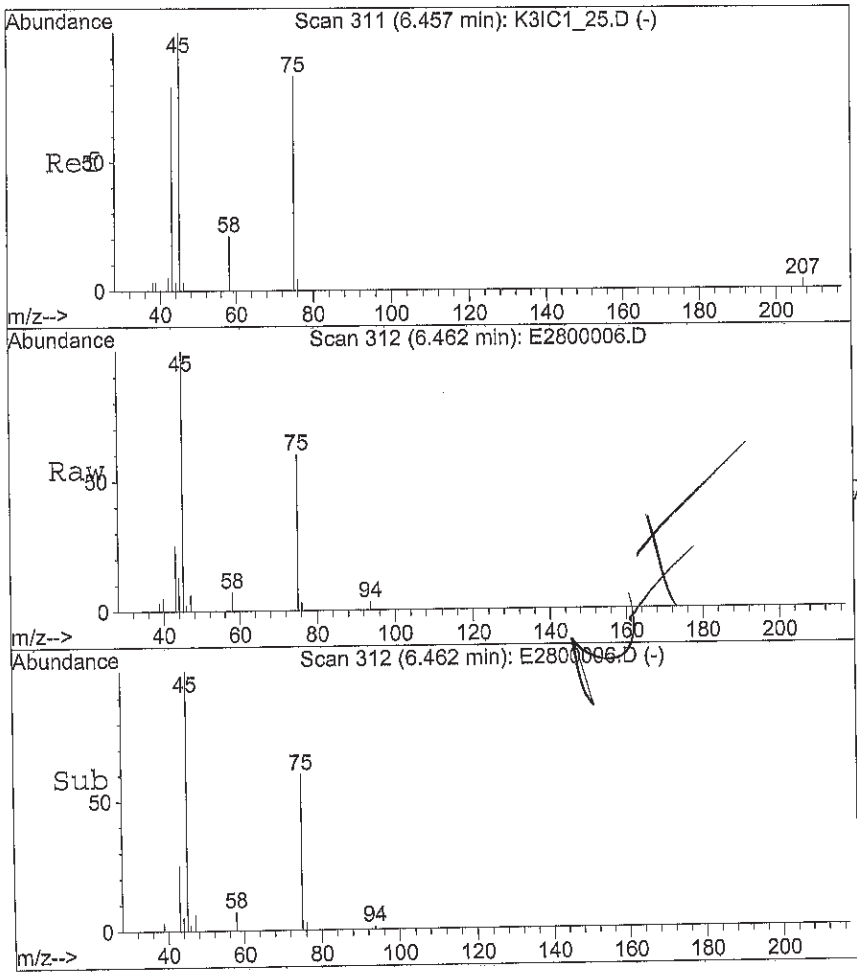


#7
Chloroethane
Concen: 1.46 ug/L
RT: 5.25 min Scan# 168
Delta R.T. 0.01 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 64 Resp: 1048

Ion	Ratio	Lower	Upper
64	100		
66	30.1	35.4	53.0#

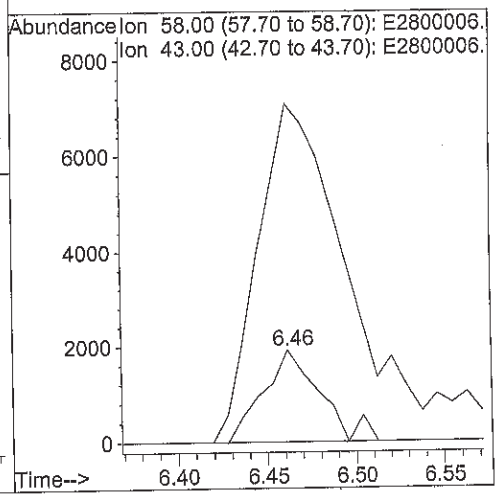


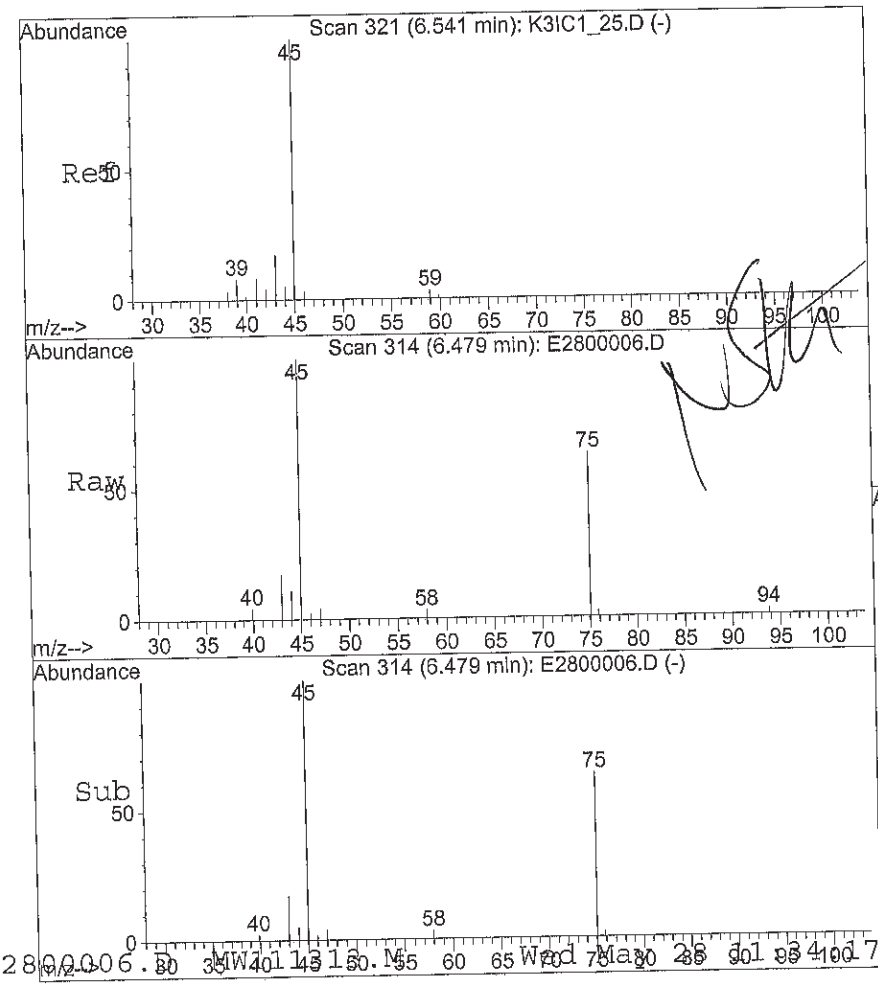


#11
Acetone
Concen: 1.63 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 58 Resp: 4246

Ion	Ratio	Lower	Upper
58	100		
43	570.4	360.9	541.3#

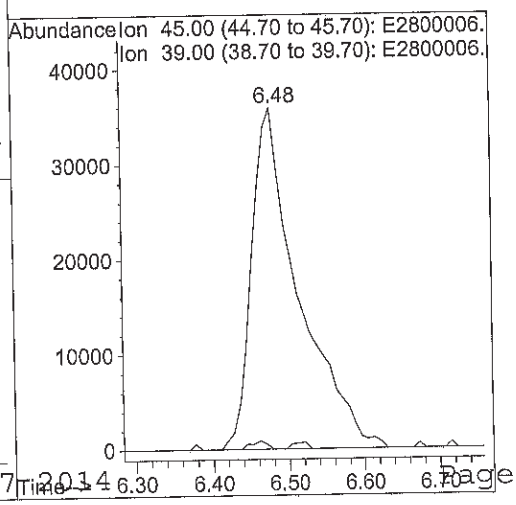


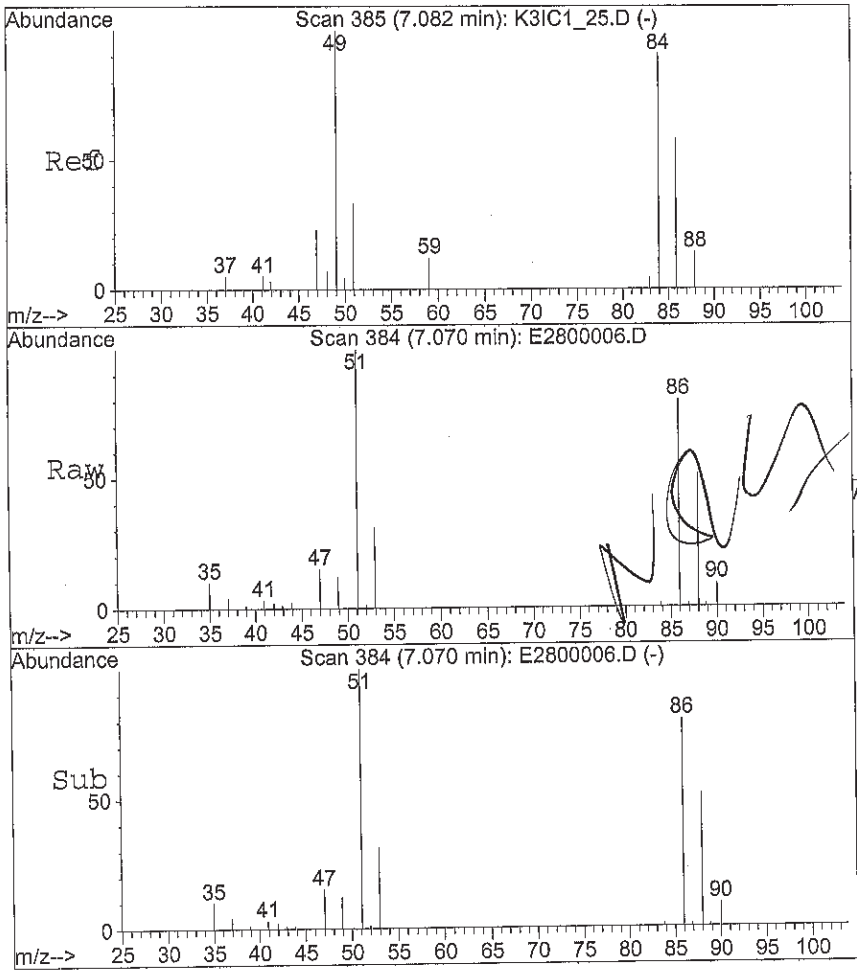


#12
(IPA) Leak Check Compound
Concen: 787.86 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.06 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 45 Resp: 153790

Ion	Ratio	Lower	Upper
45	100		
39	0.8	4.9	7.3#

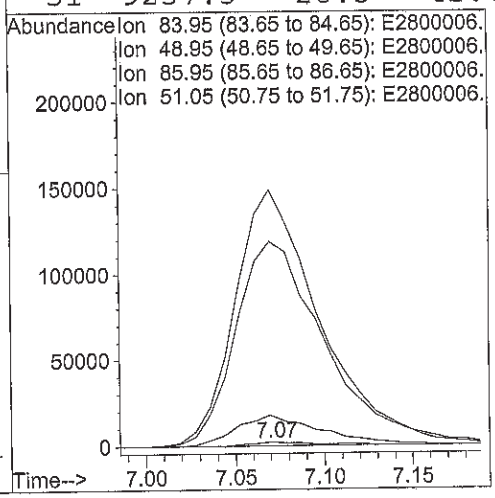


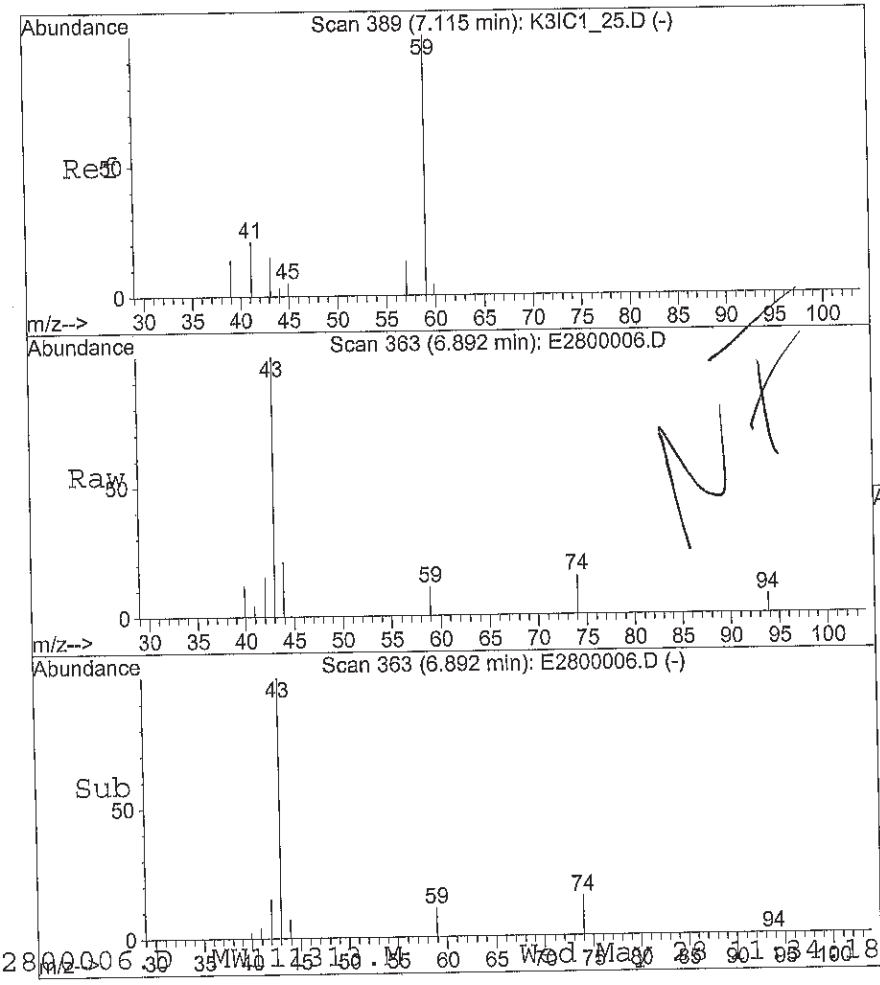


#14
Methylene Chloride
Concen: 1.21 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 84 Resp: 5413

Ion	Ratio	Lower	Upper
84	100		
49	1076.5	89.8	134.6#
86	7685.5	51.1	76.7#
51	9237.3	28.5	42.7#

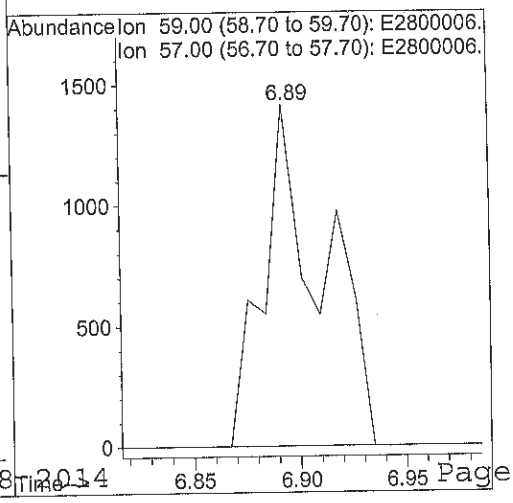


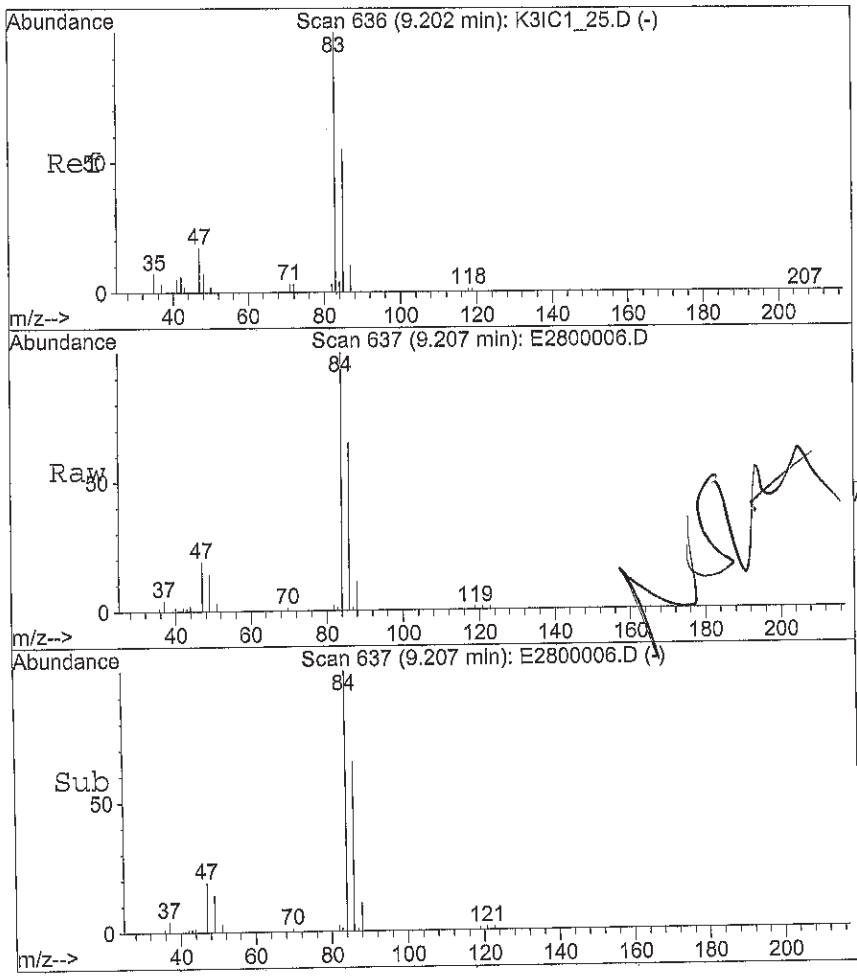


#15
(TBA) tert-Butanol
Concen: 9.87 ug/L
RT: 6.89 min Scan# 363
Delta R.T. -0.22 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 59 Resp: 2736

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

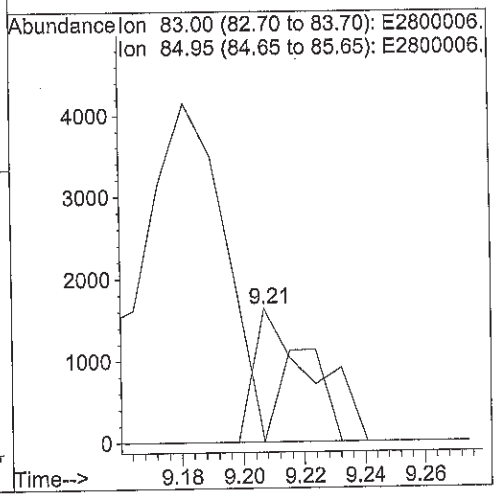


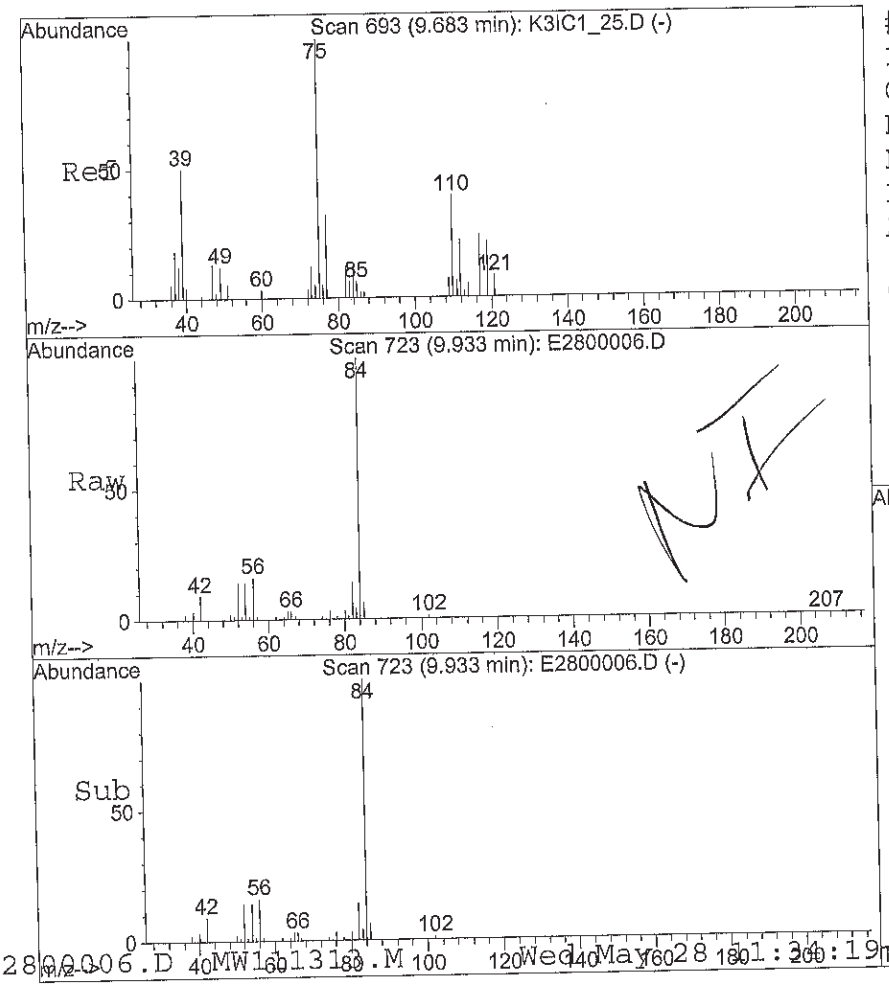


#24
Chloroform
Concen: 0.25 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 83 Resp: 2159

Ion	Ratio	Lower	Upper
83	100		
85	52.7	51.8	77.6

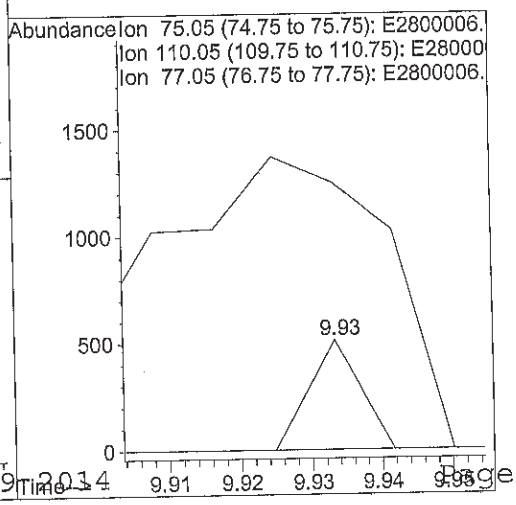


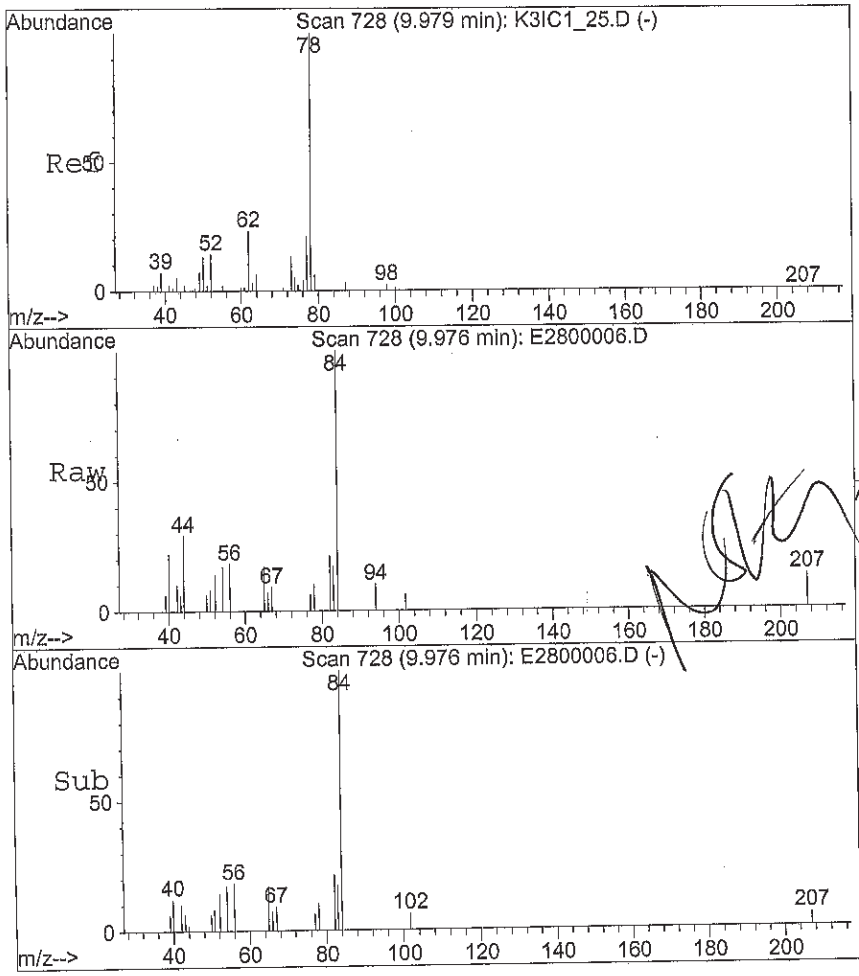


#29
1,1-Dichloropropene
Concen: 0.04 ug/L
RT: 9.93 min Scan# 723
Delta R.T. 0.25 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 75 Resp: 259

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	1225.9	25.0	37.4#

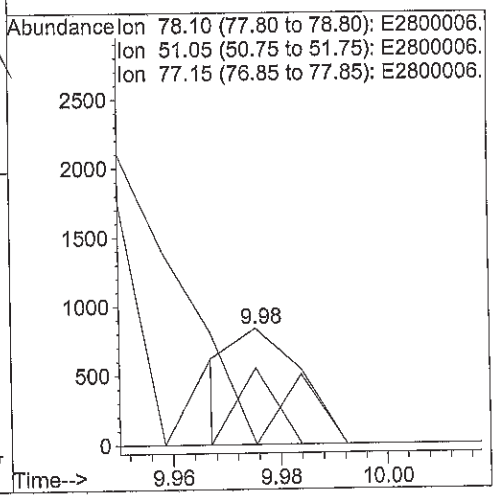


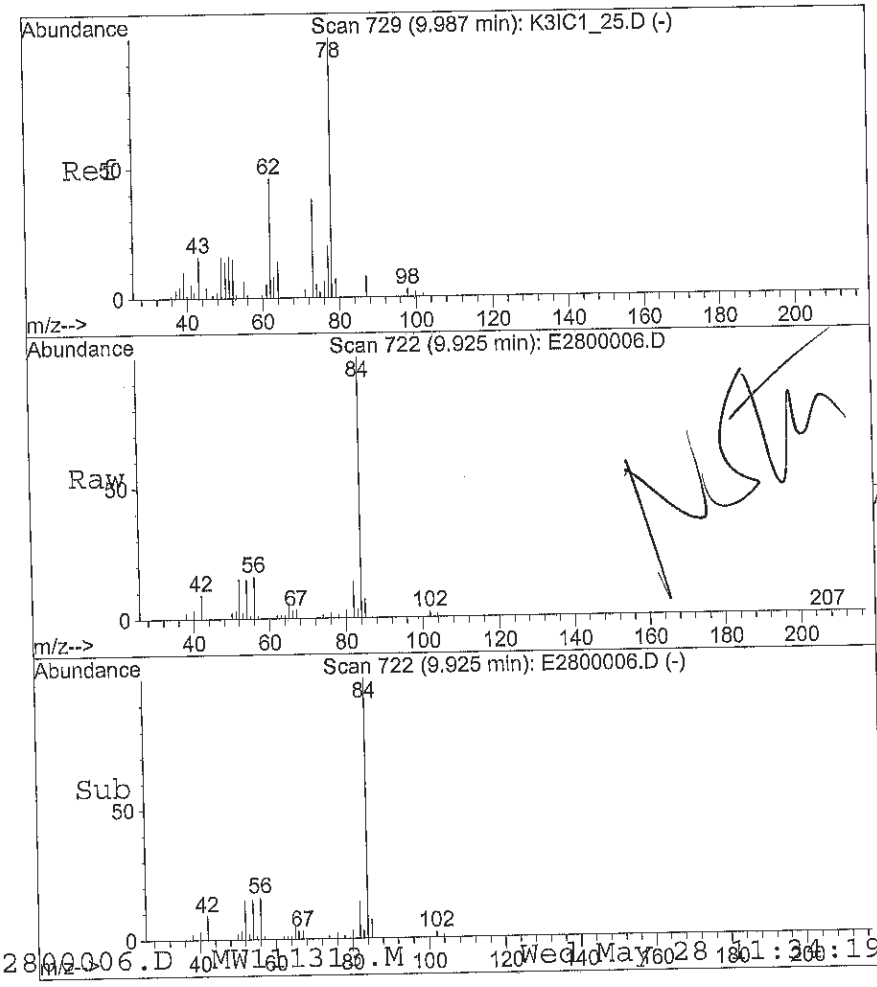


#31
Benzene
Concen: 0.05 ug/L
RT: 9.98 min Scan# 728
Delta R.T. -0.00 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 78 Resp: 697

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	39.9	16.6	24.8#

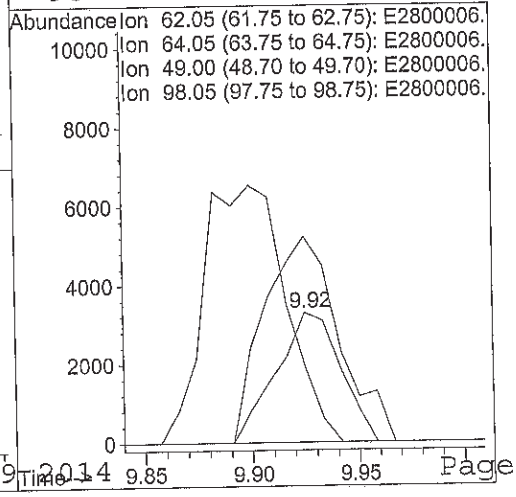


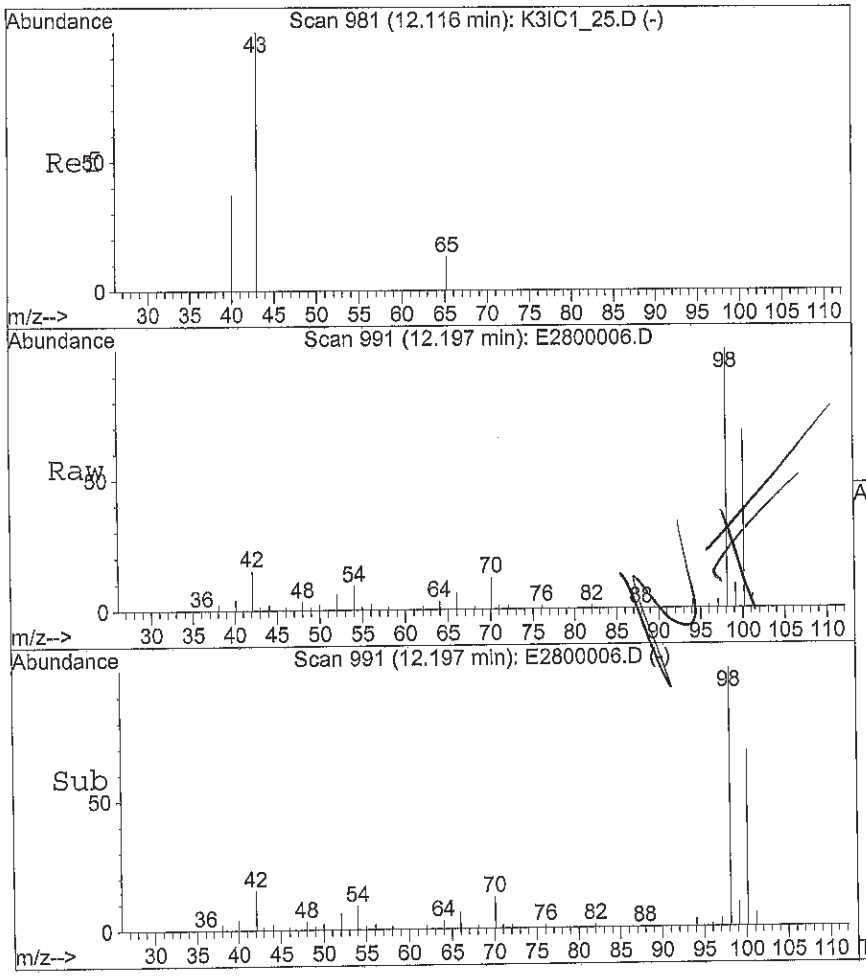


#32
1,2-Dichloroethane
Concen: 1.27 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 62 Resp: 6872

Ion	Ratio	Lower	Upper
62	100		
64	184.9	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

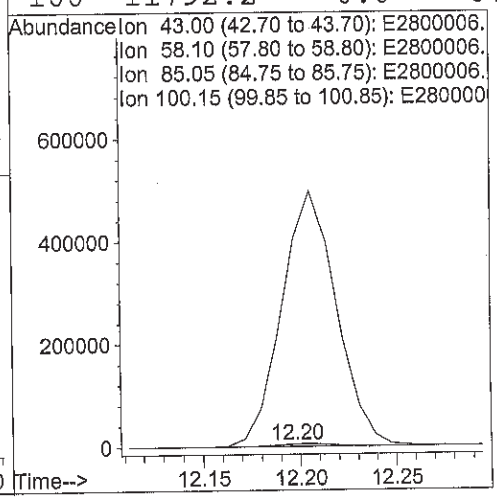


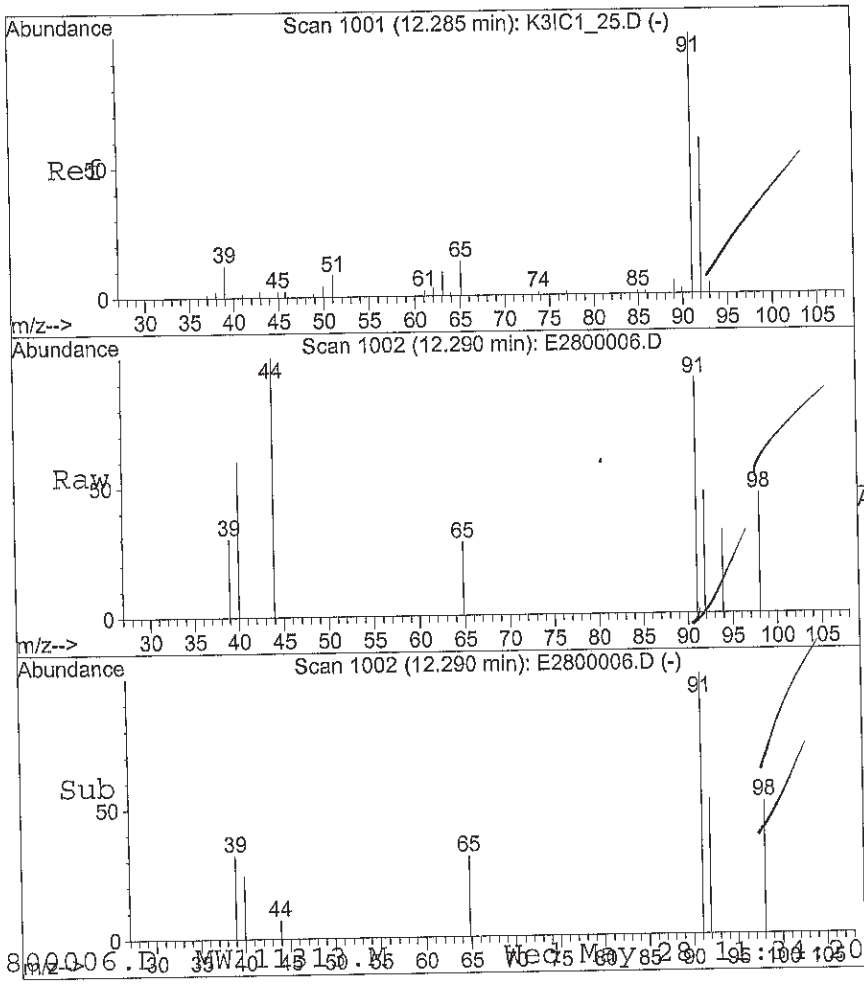


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.20 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 43 Resp: 8293

Ion	Ratio	Lower	Upper
43	100		
58	127.8	0.0	0.0#
85	0.0	0.0	0.0
100	11792.2	0.0	0.0#

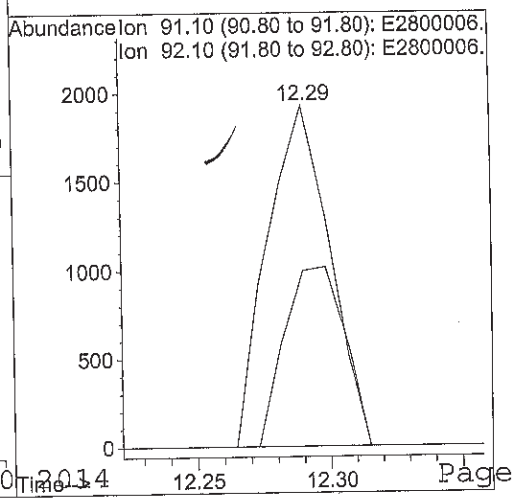


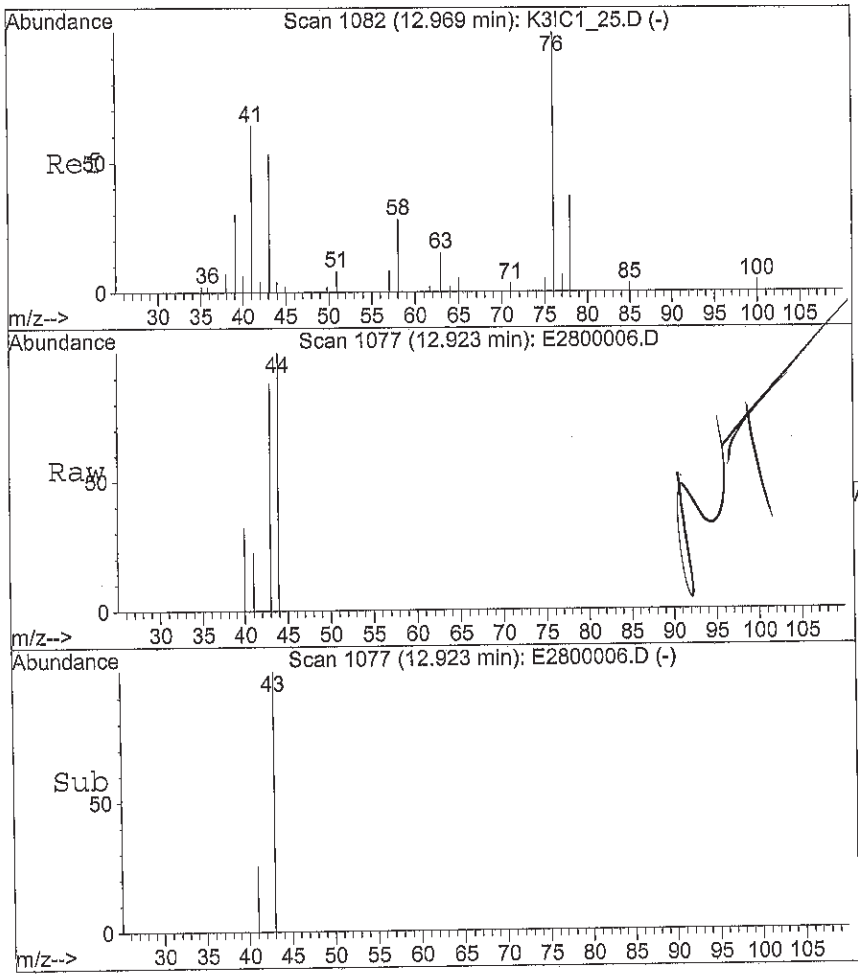


#41
Toluene
Concen: 0.18 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 91 Resp: 3128

Ion	Ratio	Lower	Upper
91	100		
92	51.4	47.4	71.0

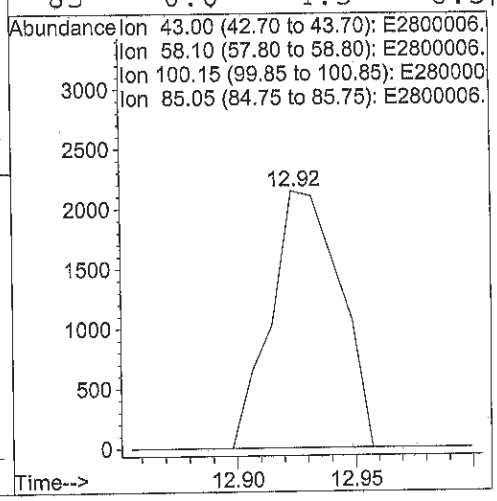


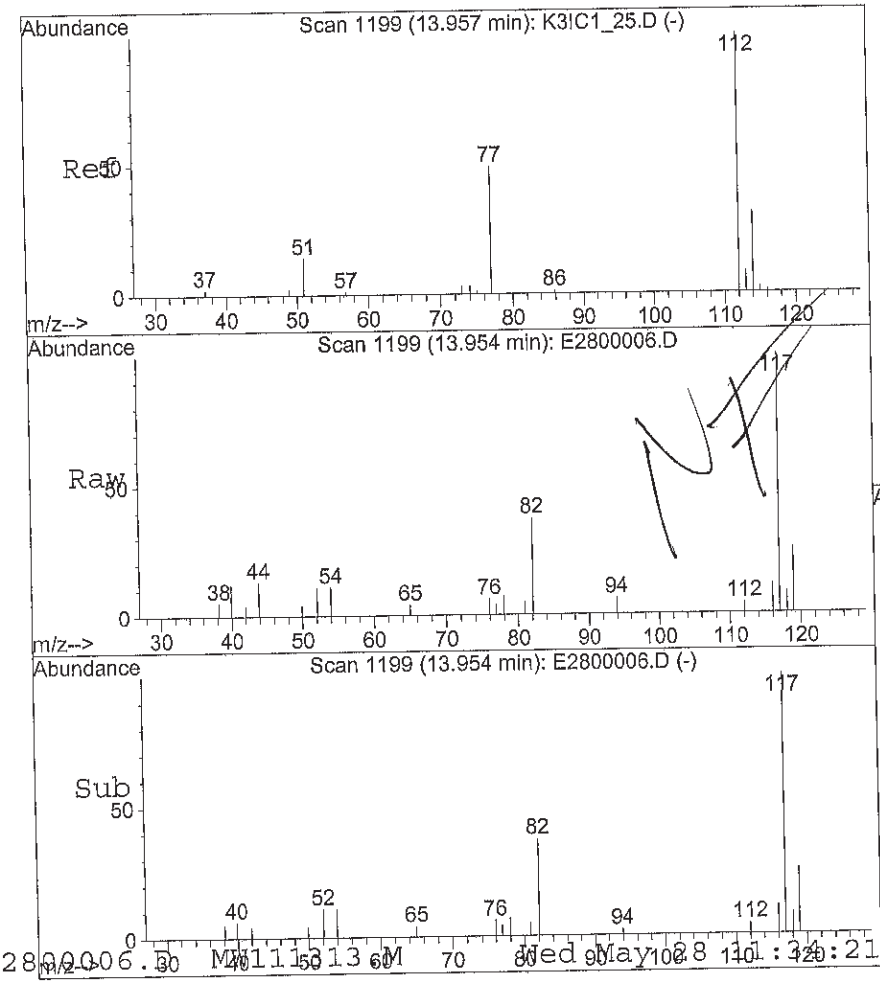


#46
2-Hexanone
Concen: 1.52 ug/L
RT: 12.92 min Scan# 1077
Delta R.T. -0.05 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 43 Resp: 4327

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

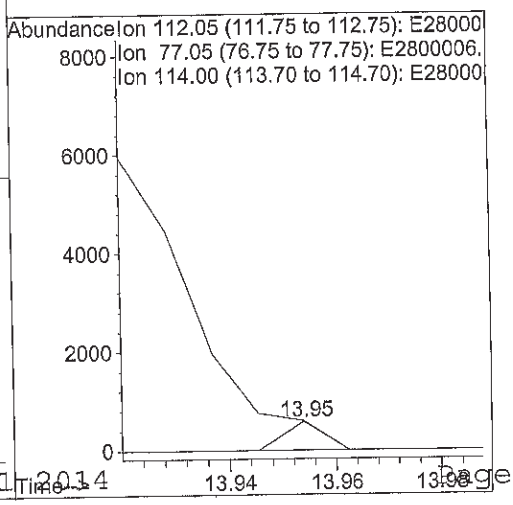


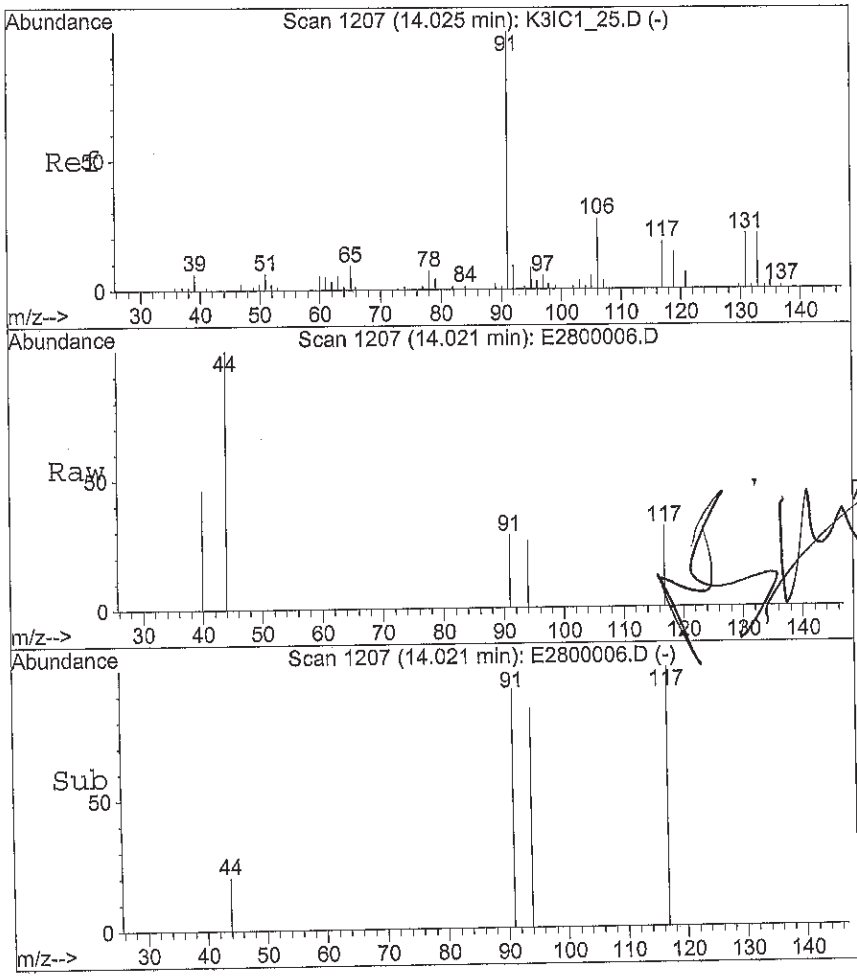


#49
Chlorobenzene
Concen: 0.02 ug/L
RT: 13.95 min Scan# 1199
Delta R.T. -0.00 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion:112 Resp: 295

Ion	Ratio	Lower	Upper
112	100		
77	0.0	48.2	72.4#
114	0.0	24.4	36.6#

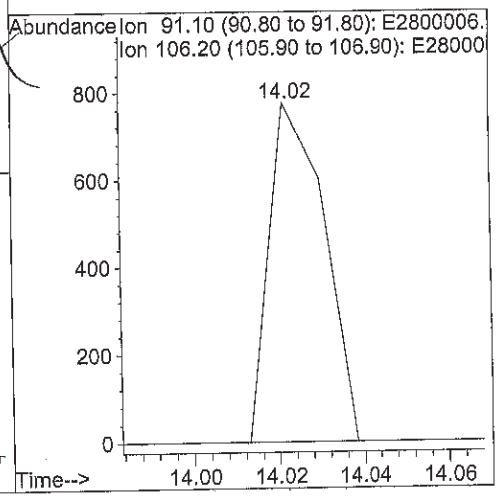


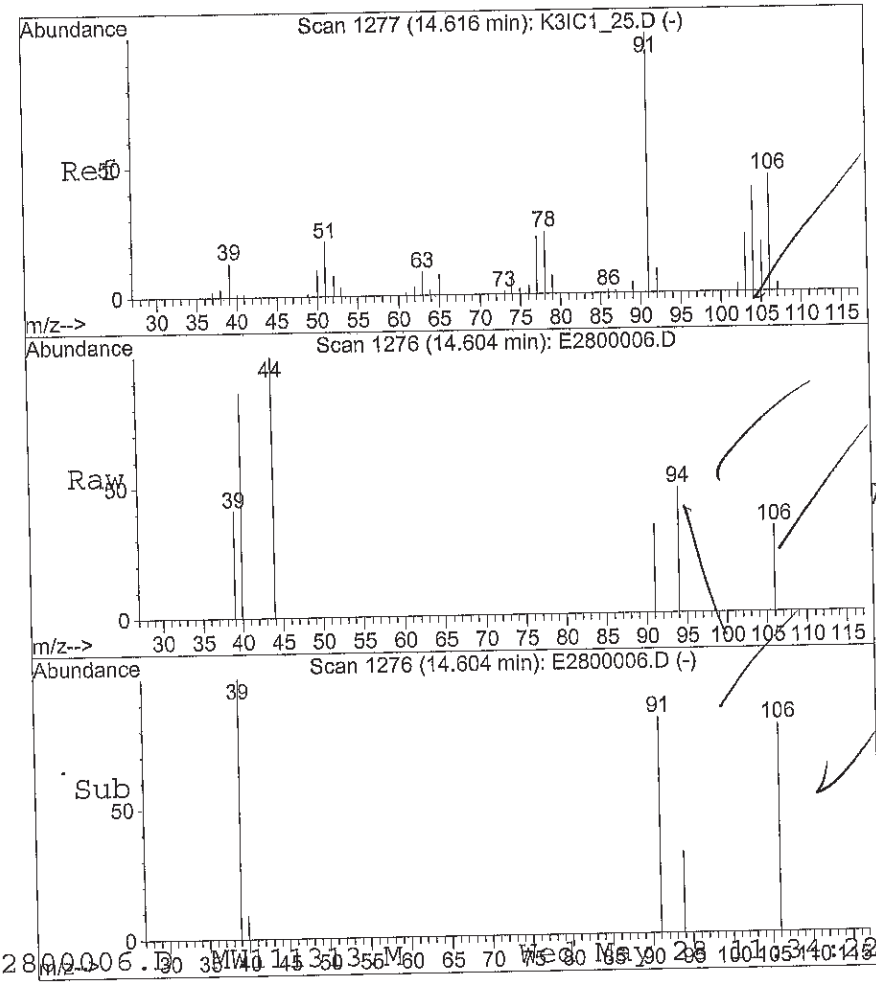


#51
Ethylbenzene
Concen: 0.03 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 91 Resp: 698

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

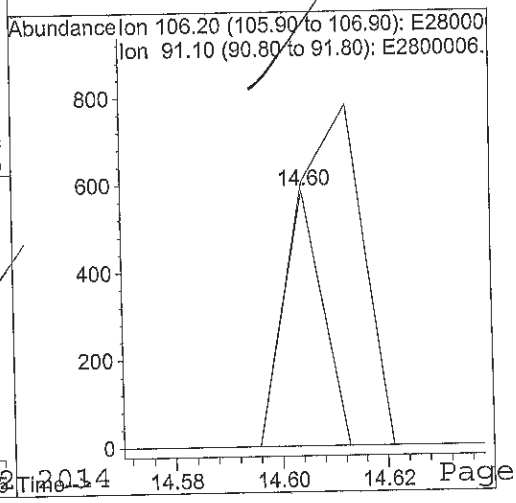


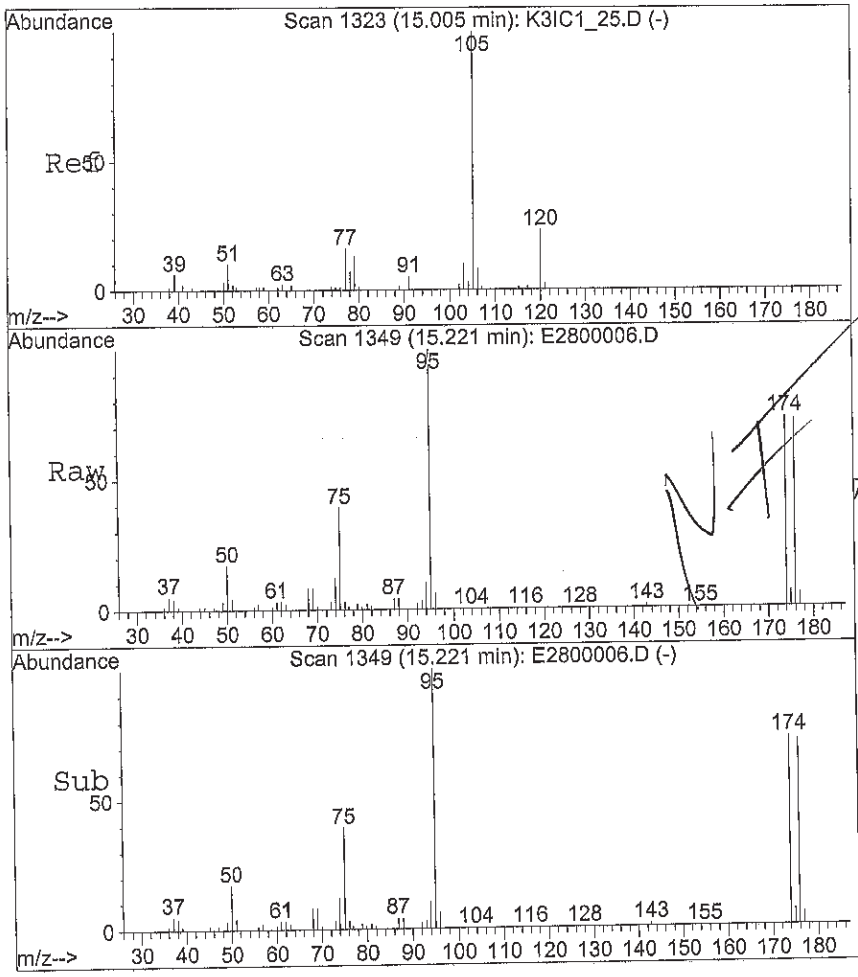


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.60 min Scan# 1276
Delta R.T. -0.01 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion:106 Resp: 296

Ion	Ratio	Lower	Upper
106	100		
91	237.2	179.0	268.6

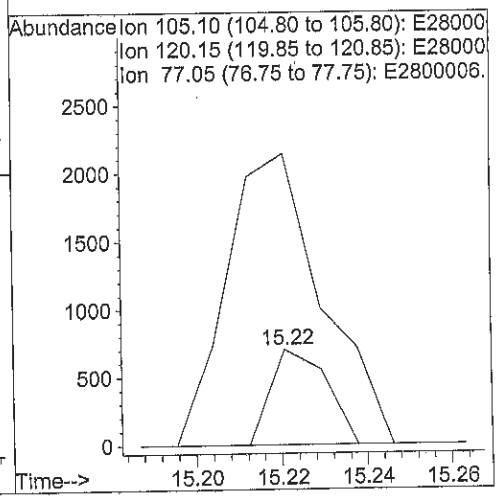


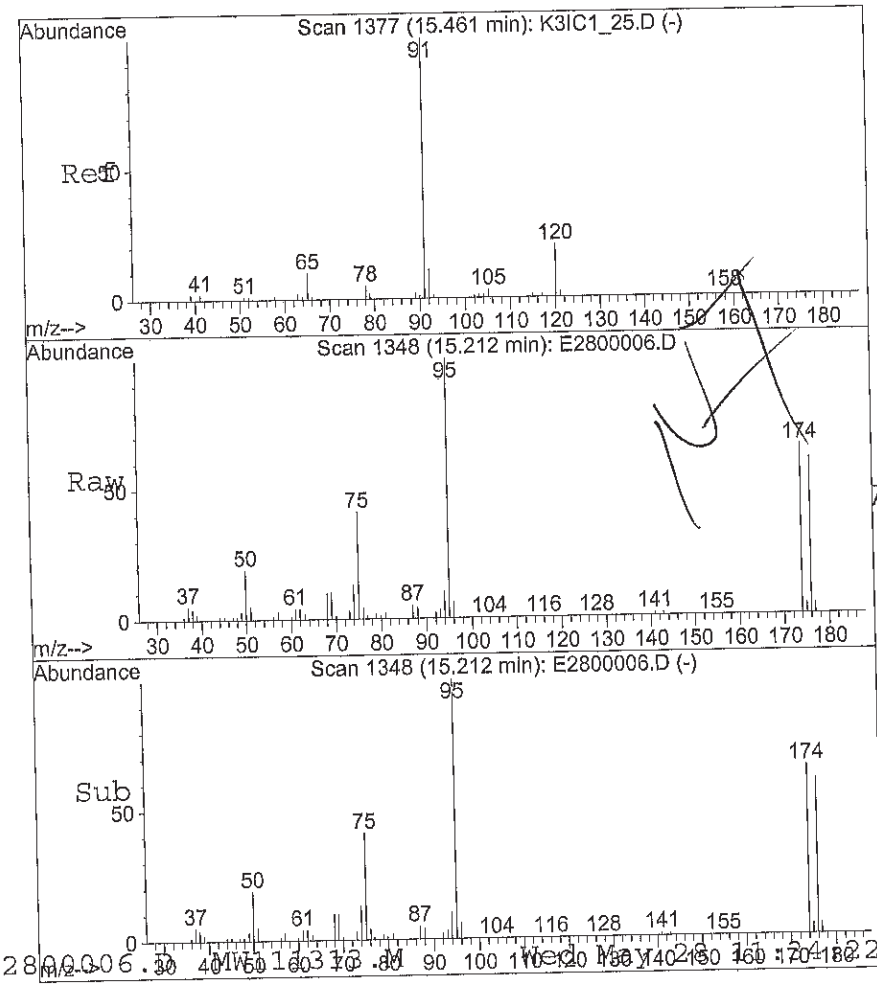


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.22 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion:105 Resp: 634

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	523.7	13.1	19.7#

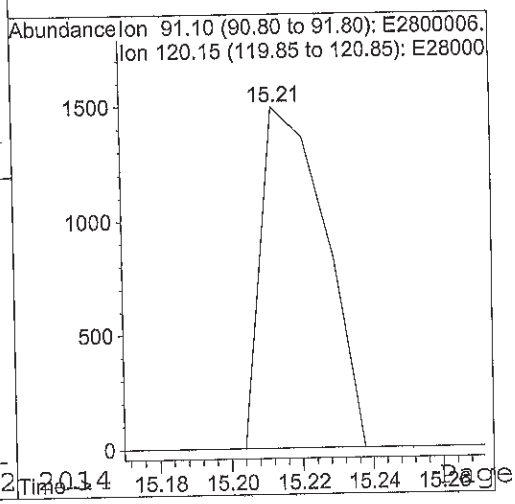


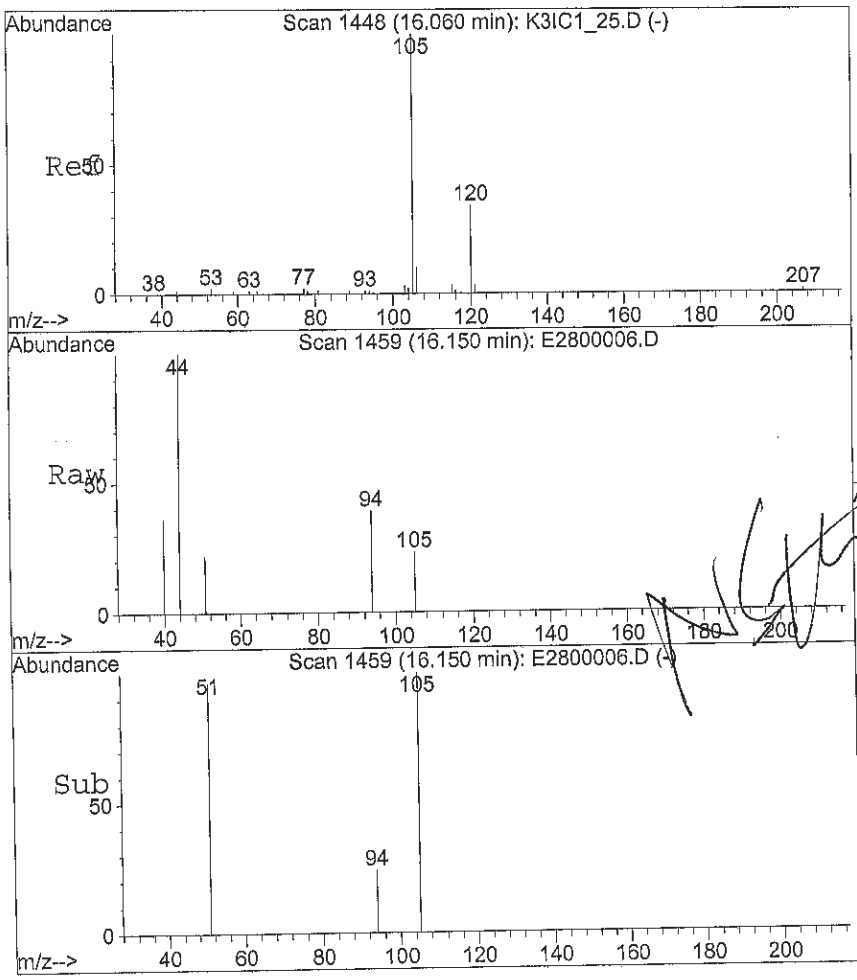


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. -0.25 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion: 91 Resp: 1863

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

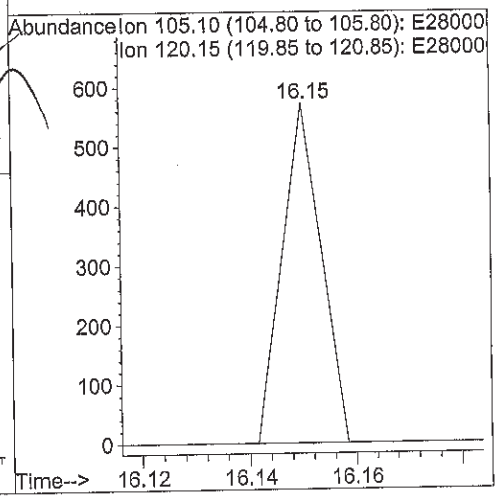


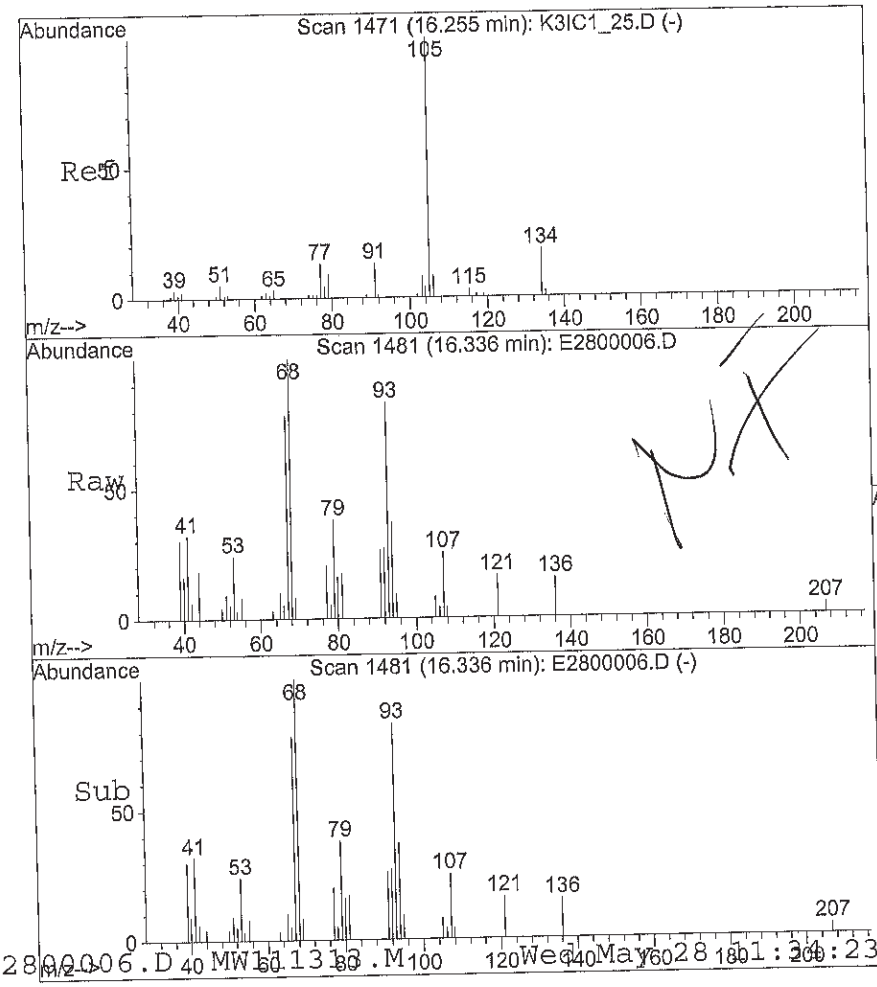


#67
1,2,4-Trimethylbenzene
Concen: 0.02 ug/L
RT: 16.15 min Scan# 1459
Delta R.T. 0.09 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion:105 Resp: 290

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

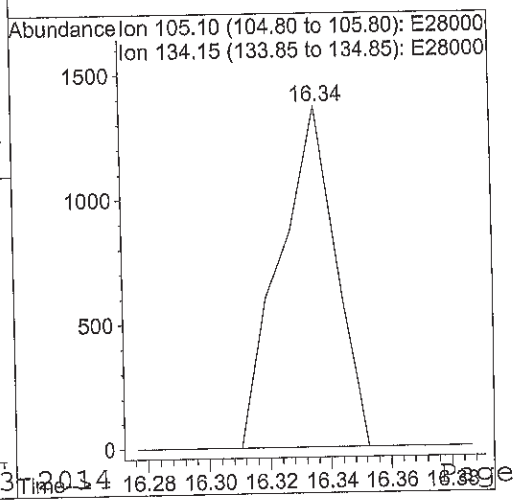


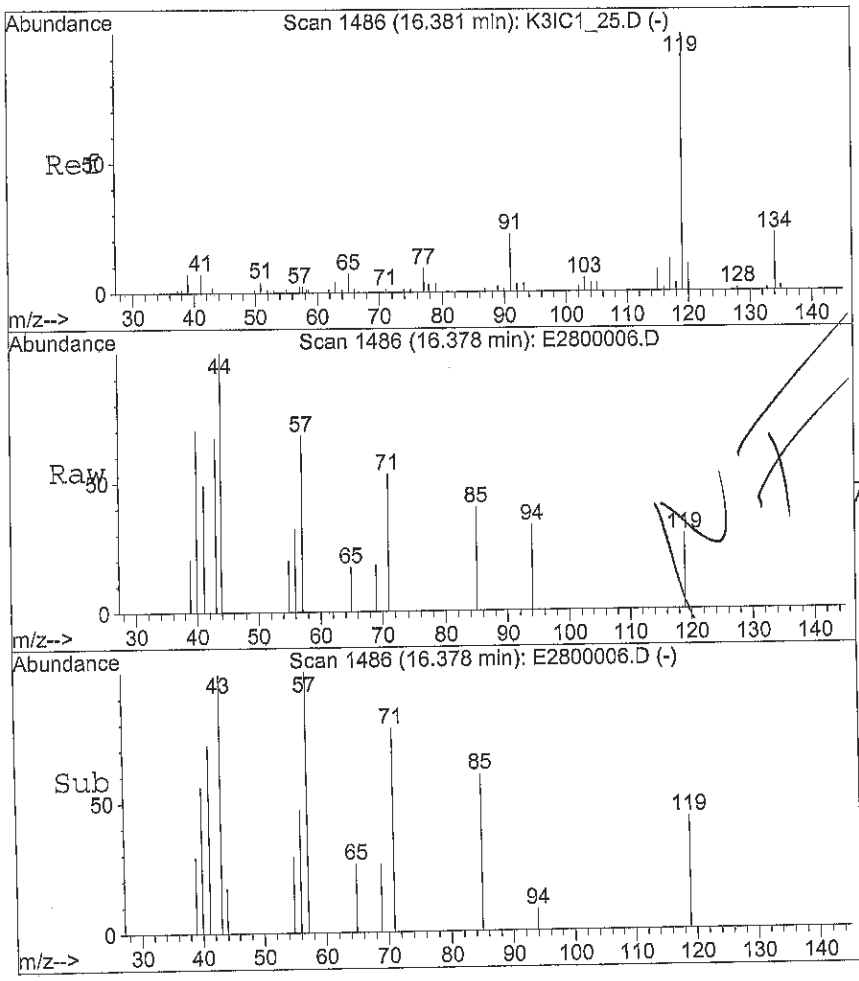


#68
sec-Butylbenzene
Concen: 0.07 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion:105 Resp: 1737

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

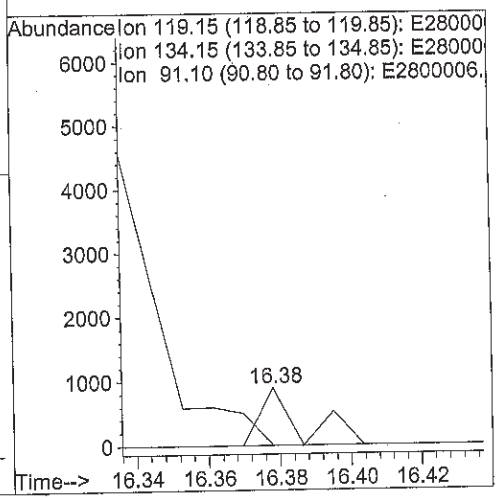




#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2800006.D
Acq: 28 May 2014 10:47 am

Tgt Ion:119 Resp: 714

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800006.D Vial: 5
Acq On : 28 May 2014 10:47 am Operator: DN
Sample : 3E42801-05 Inst : GC/MS Ins
Misc : 100cc SVL-511-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 11:34 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1624445	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1300399	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	693251	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	464182	10.99 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.92%		
3) Chloroform-d (SU6)	9.18	84	719640	11.87 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.96%		
4) Methylene Chloride-d2 (SU5	7.07	86	416017	11.74 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.92%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	459490	15.91 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 127.28%#		
6) Benzene-d6 (SU7)	9.92	84	1374808	10.79 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.32%		
8) Toluene-d8 (SU3)	12.21	98	1455888	11.80 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.40%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	697818	13.70 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 109.60%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

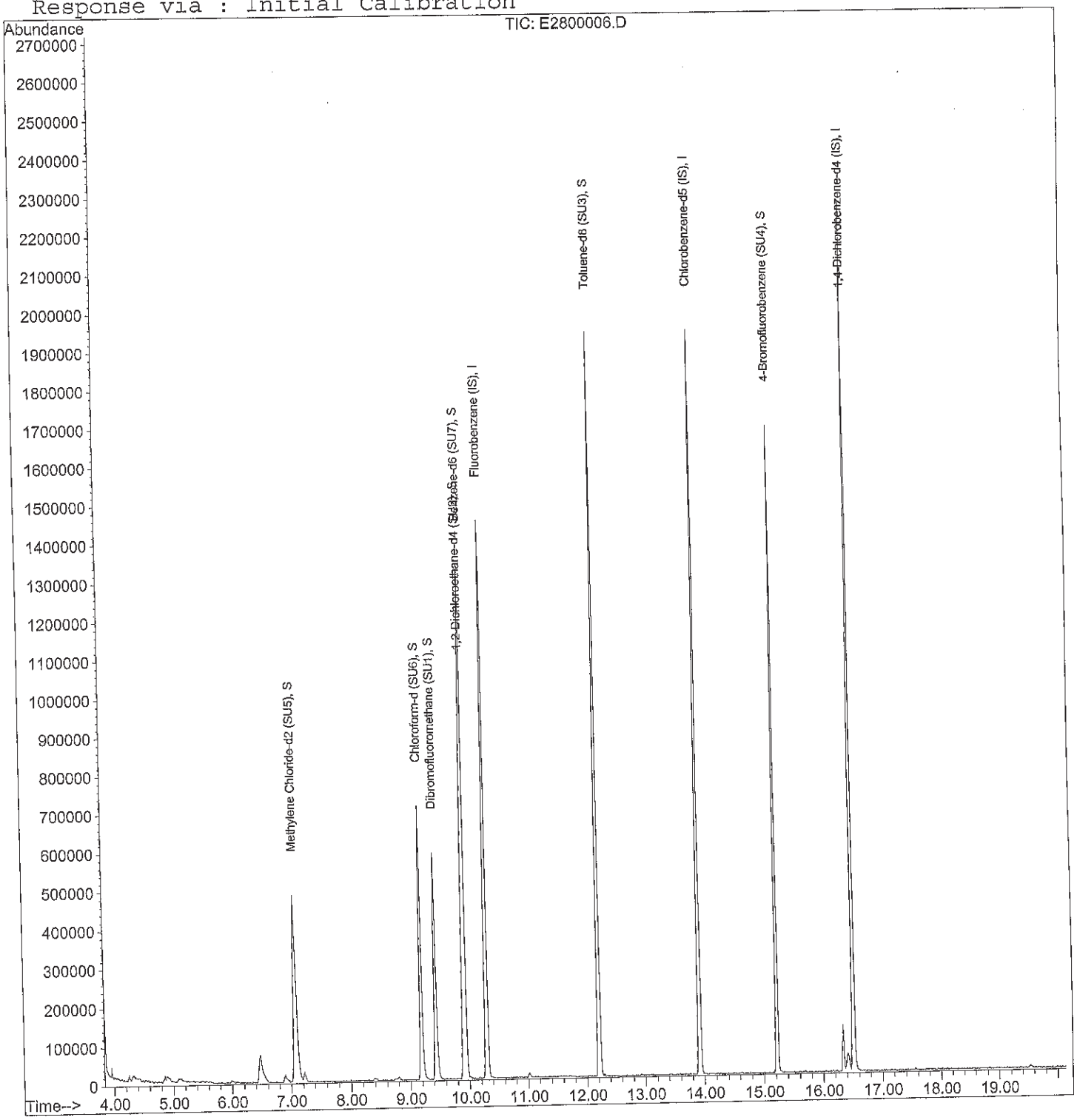
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800006.D
Acq On : 28 May 2014 10:47 am
Sample : 3E42801-05
Misc : 100cc SVL-511-SA5D-SV-4.5-5.5
MS Integration Params: rteint.p
Quant Time: May 28 11:34 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800007.D
Acq On : 28 May 2014 11:18 am
Sample : 3E42801-06
Misc : 100cc SVL-511-SA5D-SV-9.5-10.5
MS Integration Params: rteint.p
Quant Time: May 28 12:19 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1784446	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1395228	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	722995	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	503819	11.32 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.56%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	471106	11.14 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.12%		
39) Toluene-d8 (SU3)	12.20	98	1572941	12.09 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.72%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	748409	13.12 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 104.96%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	811	0.19 ~~ug/L #~~	44
4) Chloromethane	4.40	50	3087	-0.19 ~~ug/L #~~	74
6) Bromomethane	5.09	96	5625	1.09 ~~ug/L #~~	61
7) Chloroethane	5.23	64	2126	2.12 ~~ug/L #~~	32
9) (F113) 1,1,2-Trichloro-tri	6.37	151	761	0.22 ~~ug/L~~ 0.00044	
11) Acetone	6.45	58	5598	3.03 ~~ug/L~~	94
12) (IPA) Leak Check Compound	6.47	45	181212	845.10 ~~ug/L~~	83
13) Carbon disulfide	6.84	76	269	0.02 ~~ug/L #~~	76
14) Methylene Chloride	7.07	84	6120	1.25 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.91	59	1057	3.47 ~~ug/L #~~	77
24) Chloroform	9.22	83	780	0.08 ~~ug/L #~~	18
31) Benzene	9.92	78	9348	0.56 ~~ug/L #~~	79
32) 1,2-Dichloroethane	9.92	62	6673	1.12 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	8174	2.94 ~~ug/L #~~	100
41) Toluene	12.29	91	3040	0.16 ug/L #0.0032	77
46) 2-Hexanone	12.94	43	3004	0.98 ~~ug/L #~~	37
51) Ethylbenzene	14.14	91	2182	0.10 ~~ug/L~~	97
52) m,p-Xylenes	14.14	106	682	0.09 ug/L #0.0018	39
54) Styrene	14.63	104	2622	-0.63 ~~ug/L #~~	54
56) Isopropylbenzene	15.20	105	313	0.02 ~~ug/L #~~	1
57) 1,2,3-Trichloropropane	15.32	75	255	0.04 ug/L #	36
62) n-Propylbenzene	15.45	91	285	0.01 ~~ug/L #~~	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800007.D Vial: 6
Acq On : 28 May 2014 11:18 am Operator: DN
Sample : 3E42801-06 Inst : GC/MS Ins
Misc : 100cc SVL-511-SA5D-SV-9.5-10.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 12:19 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

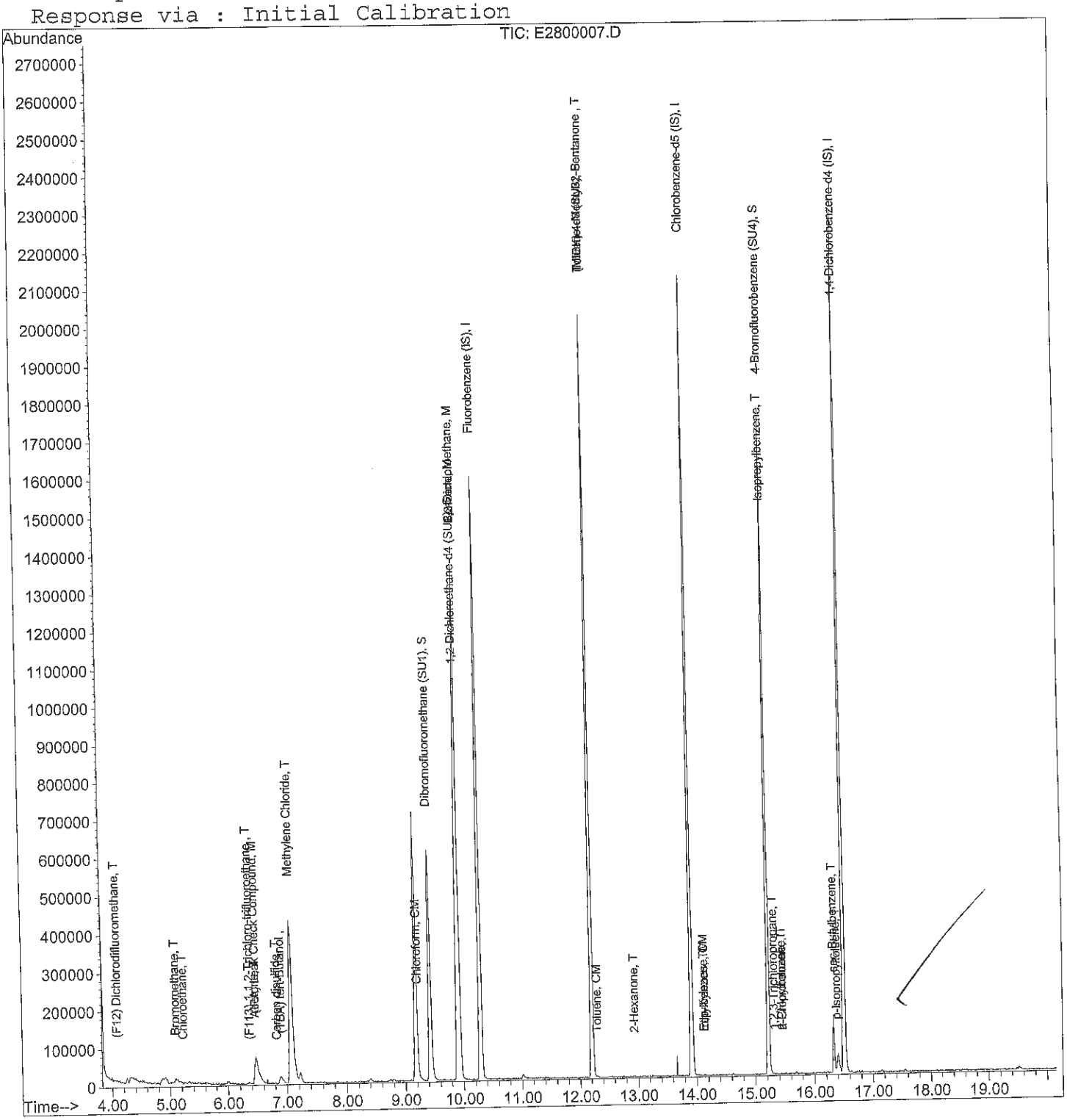
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.45	91	285	0.02 ug ~~/L #~~	45
68) sec-Butylbenzene	16.33	105	2110	0.09 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1118	0.06 ~~ug/L~~ #	52

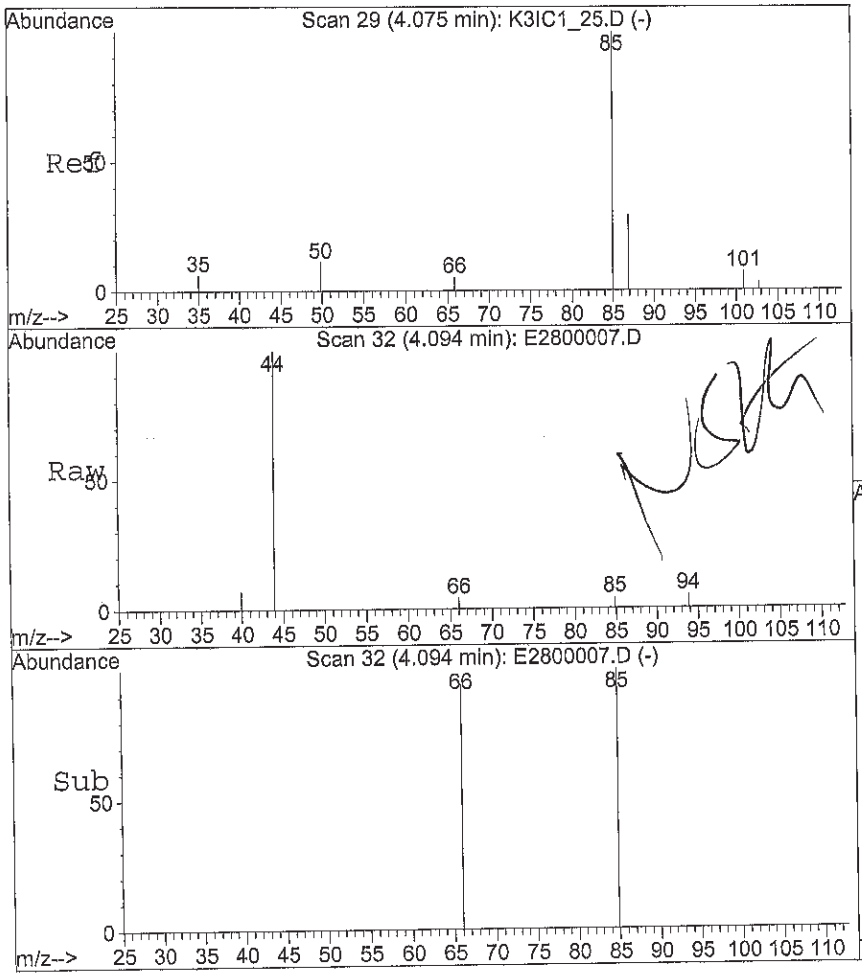
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800007.D Vial: 6
Acq On : 28 May 2014 11:18 am Operator: DN
Sample : 3E42801-06 Inst : GC/MS Ins
Misc : 100cc SVL-511-SA5D-SV-9.5-10.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 12:19 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

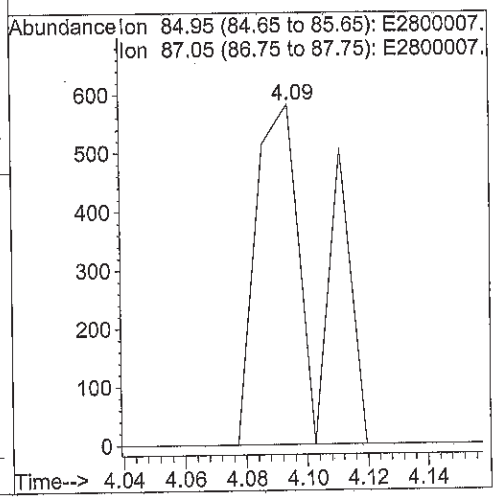


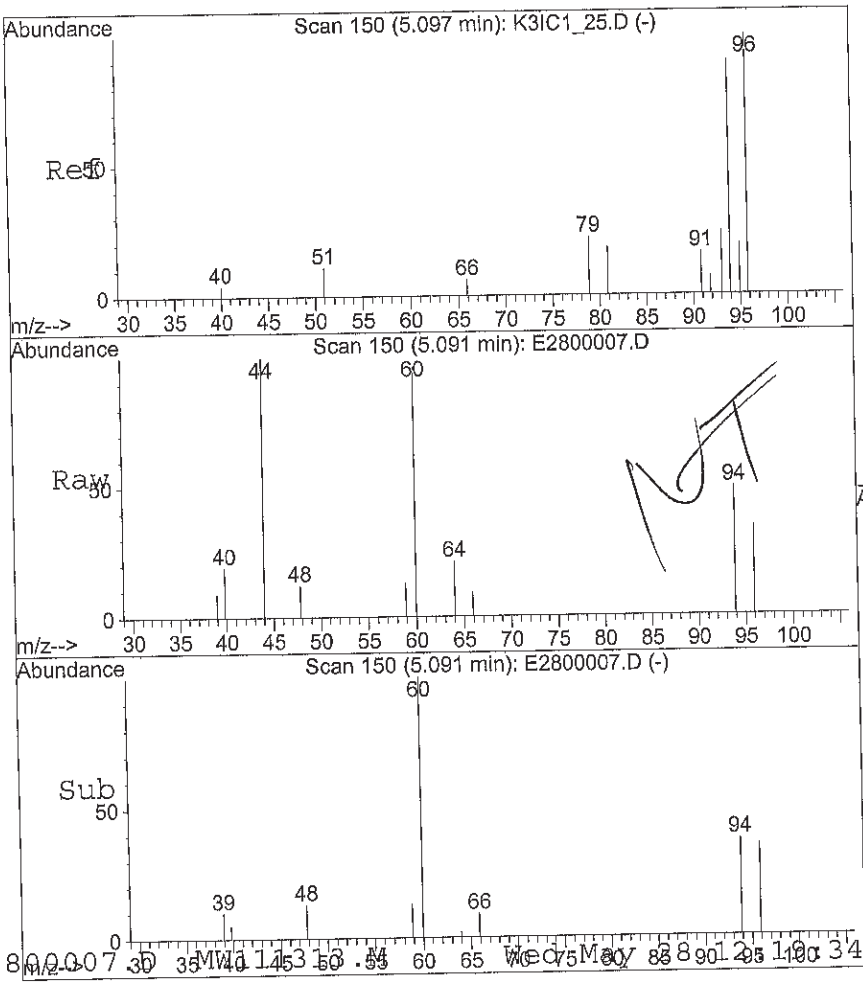


#3
(F12) Dichlorodifluoromethane
Concen: 0.19 ug/L
RT: 4.09 min Scan# 32
Delta R.T. 0.02 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 85 Resp: 811

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

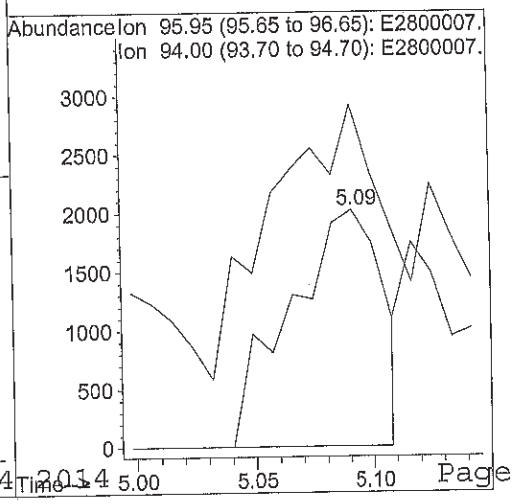


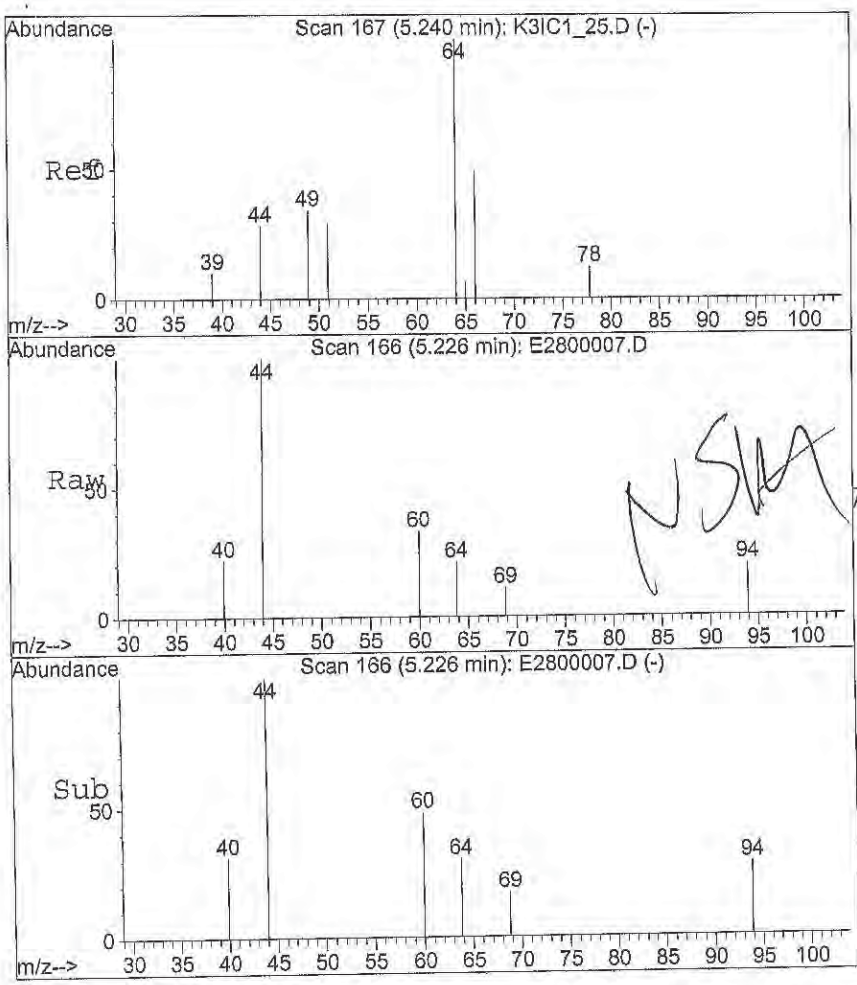


#6
Bromomethane
Concen: 1.09 ug/L
RT: 5.09 min Scan# 150
Delta R.T. -0.01 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 96 Resp: 5625

Ion	Ratio	Lower	Upper
96	100		
94	170.9	101.0	151.4#

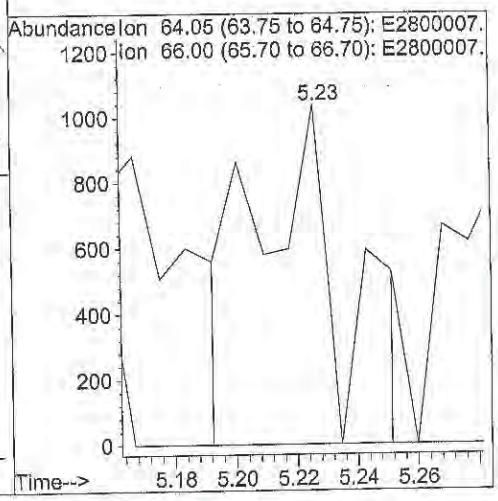


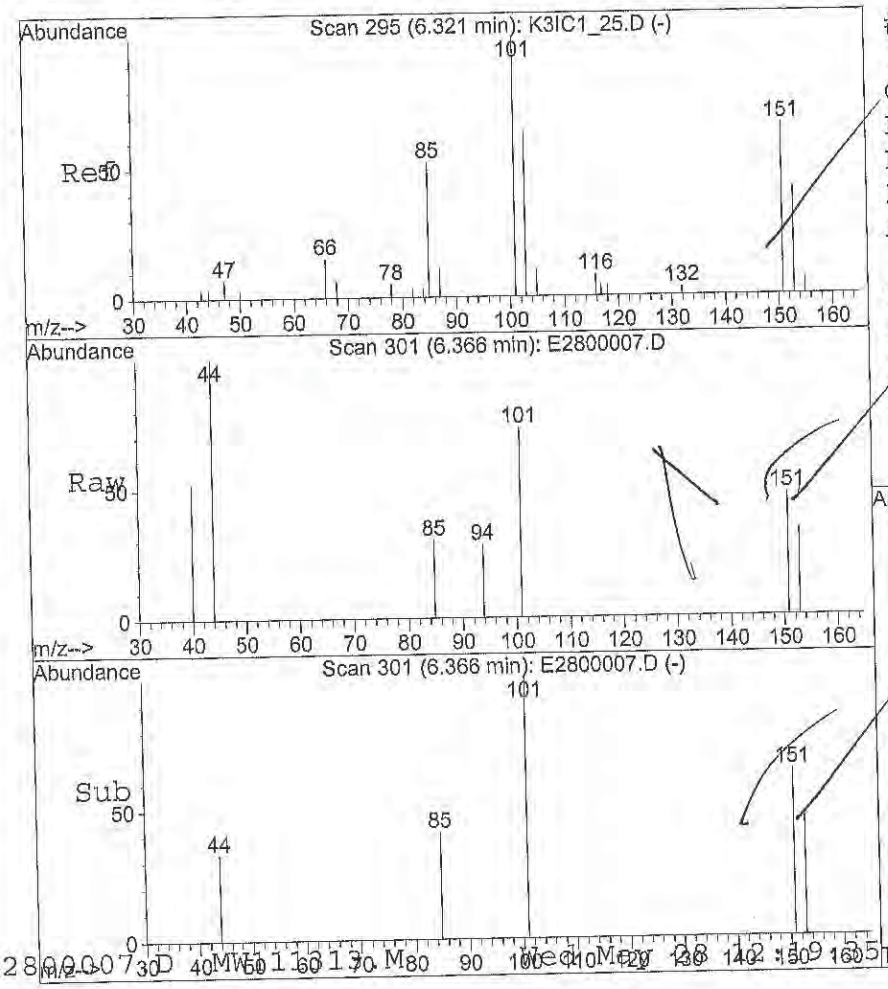


#7
Chloroethane
Concen: 2.12 ug/L
RT: 5.23 min Scan# 166
Delta R.T. -0.01 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 64 Resp: 2126

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

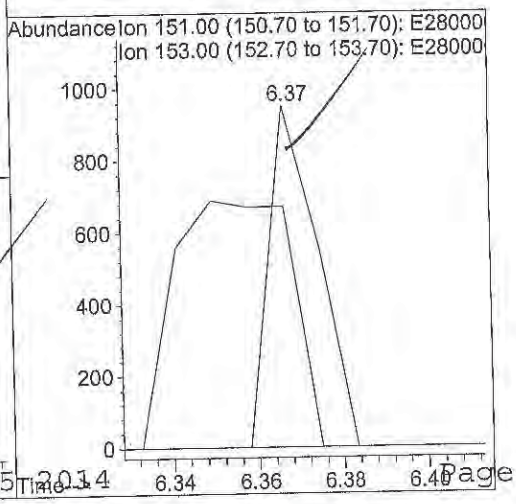


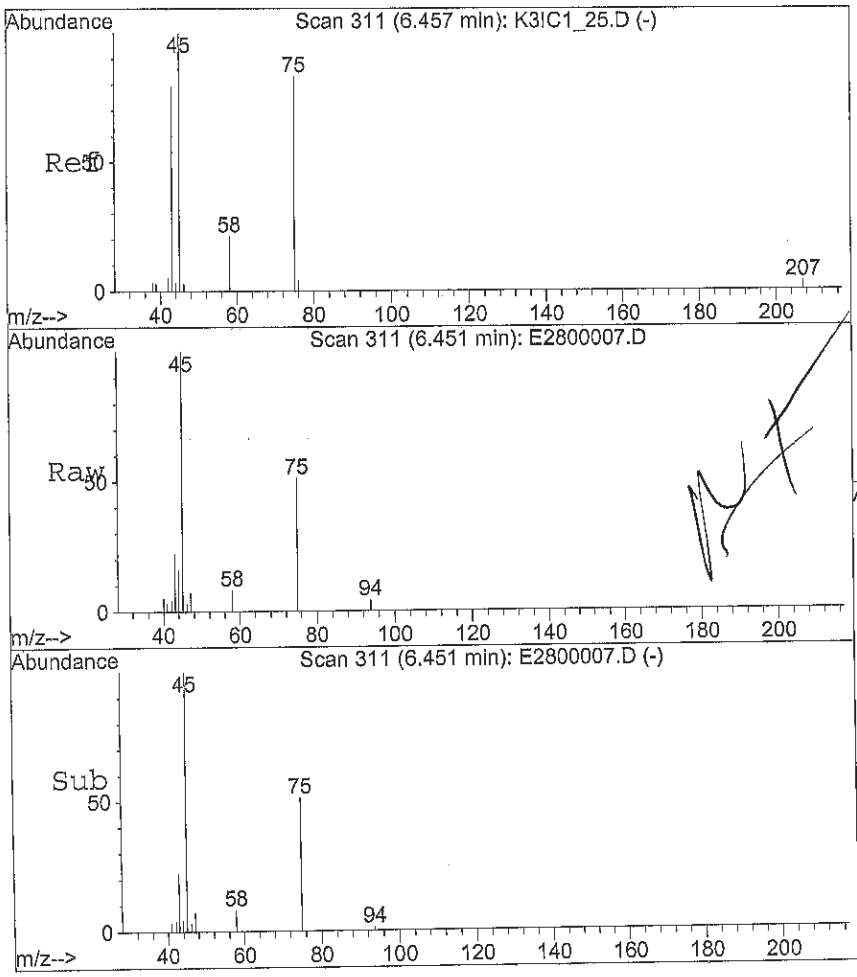


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 0.22 ug/L
RT: 6.37 min Scan# 301
Delta R.T. 0.05 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion:151 Resp: 761

Ion	Ratio	Lower	Upper
151	100		
153	172.5	49.6	74.4#

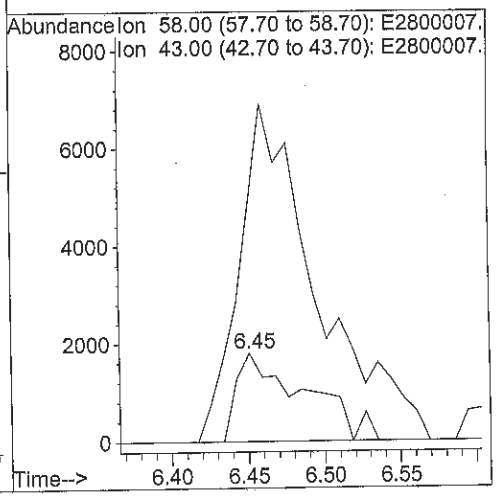


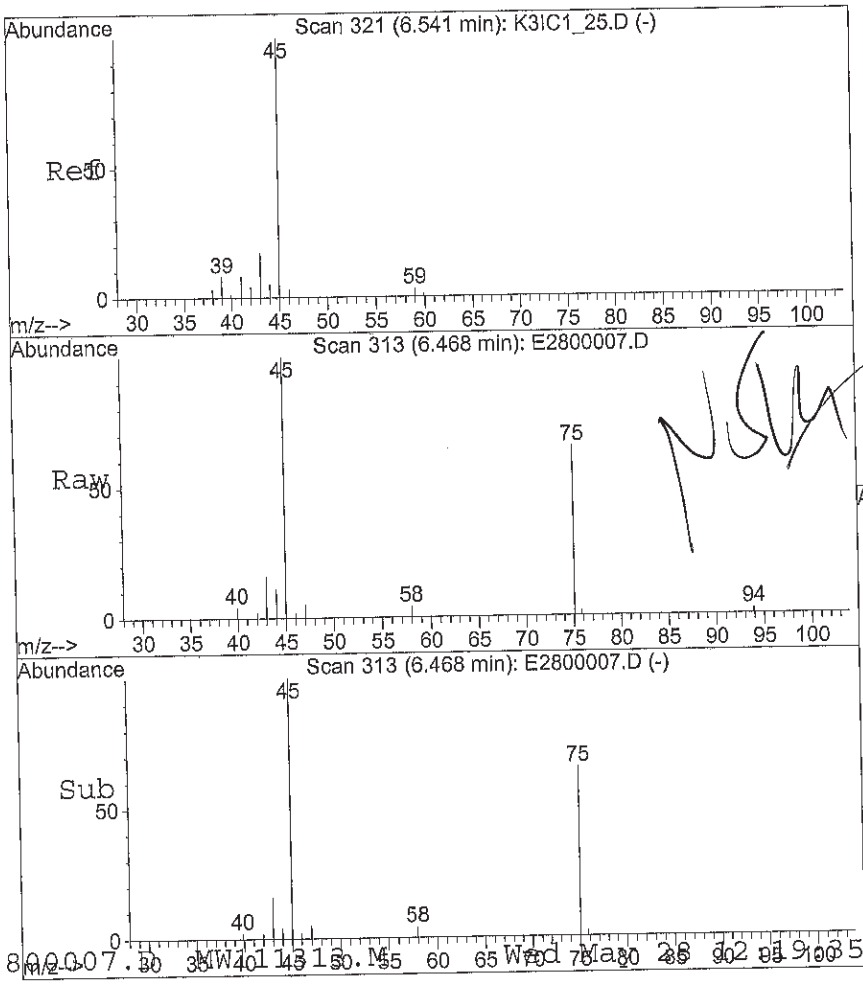


#11
Acetone
Concen: 3.03 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.01 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 58 Resp: 5598

Ion	Ratio	Lower	Upper
58	100		
43	435.1	360.9	541.3

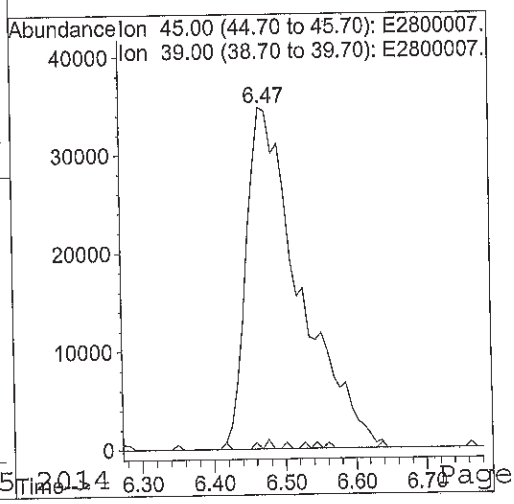


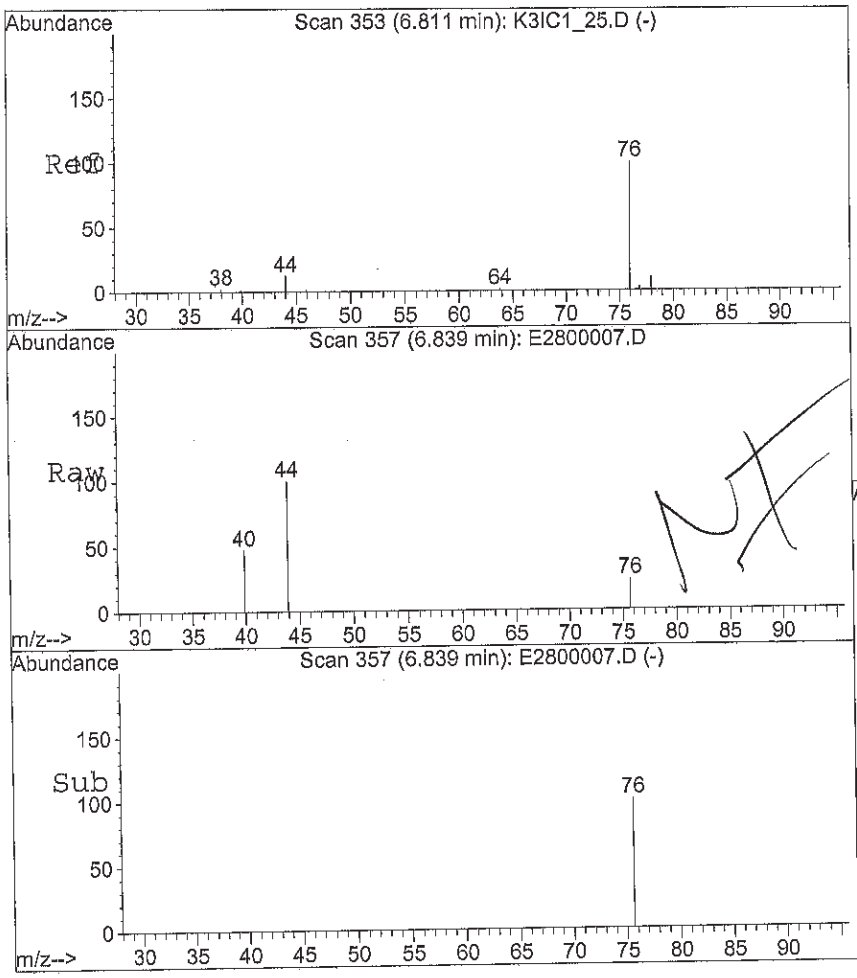


#12
(IPA) Leak Check Compound
Concen: 845.10 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 45 Resp: 181212

Ion	Ratio	Lower	Upper
45	100		
39	0.3	4.9	7.3#

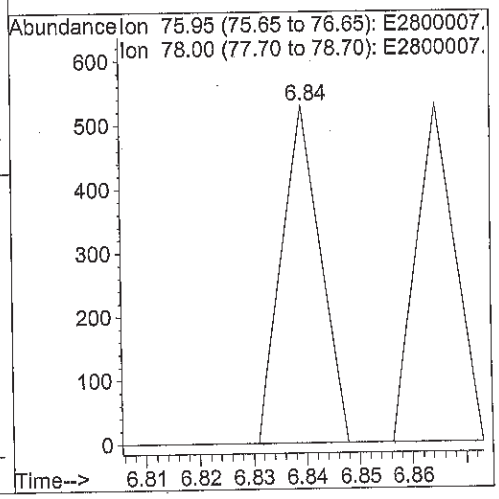


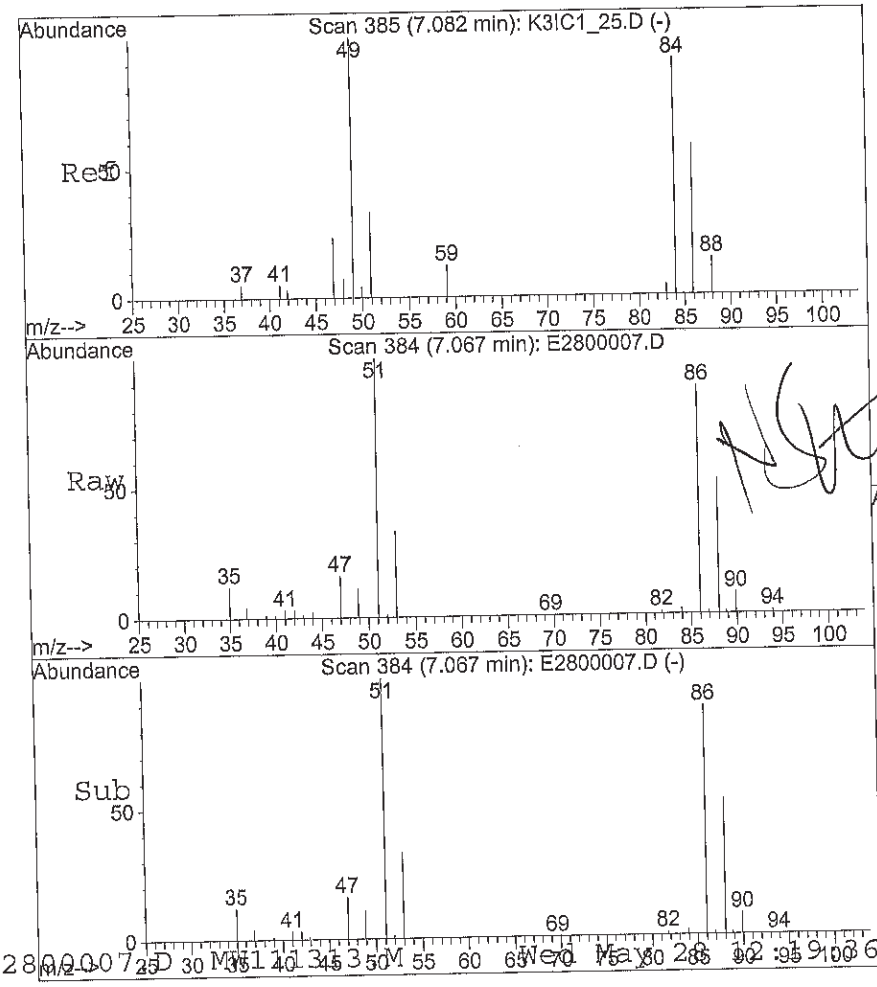


#13
Carbon disulfide
Concen: 0.02 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 76 Resp: 269

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

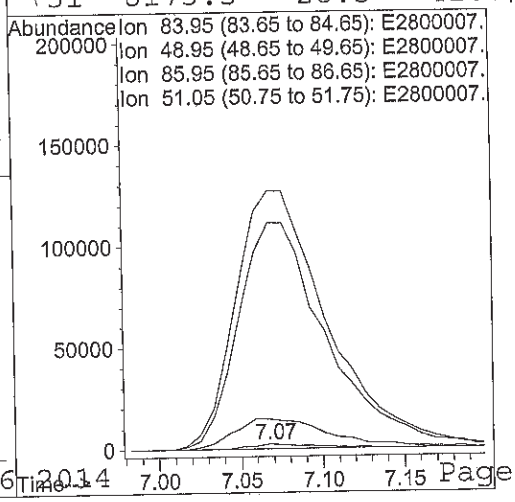


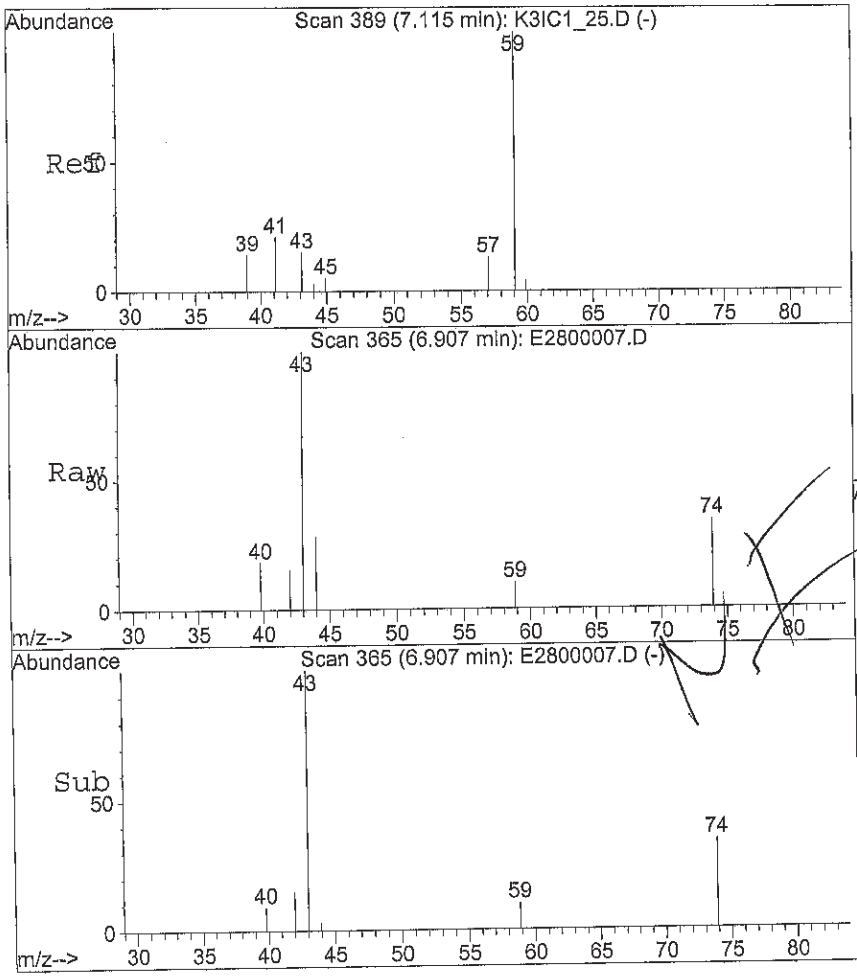


#14
Methylene Chloride
Concen: 1.25 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 84 Resp: 6120

Ion	Ratio	Lower	Upper
84	100		
49	975.8	89.8	134.6#
86	6888.9	51.1	76.7#
51	8173.3	28.5	42.7#

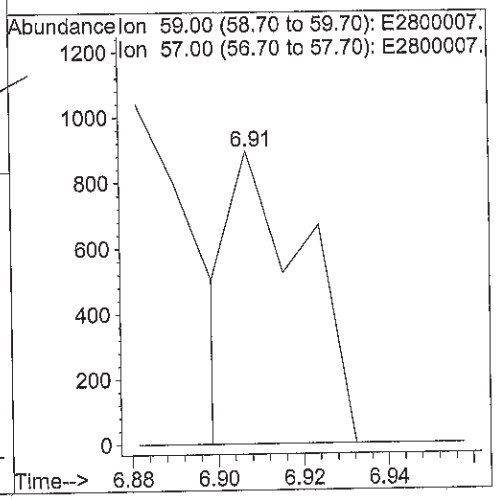


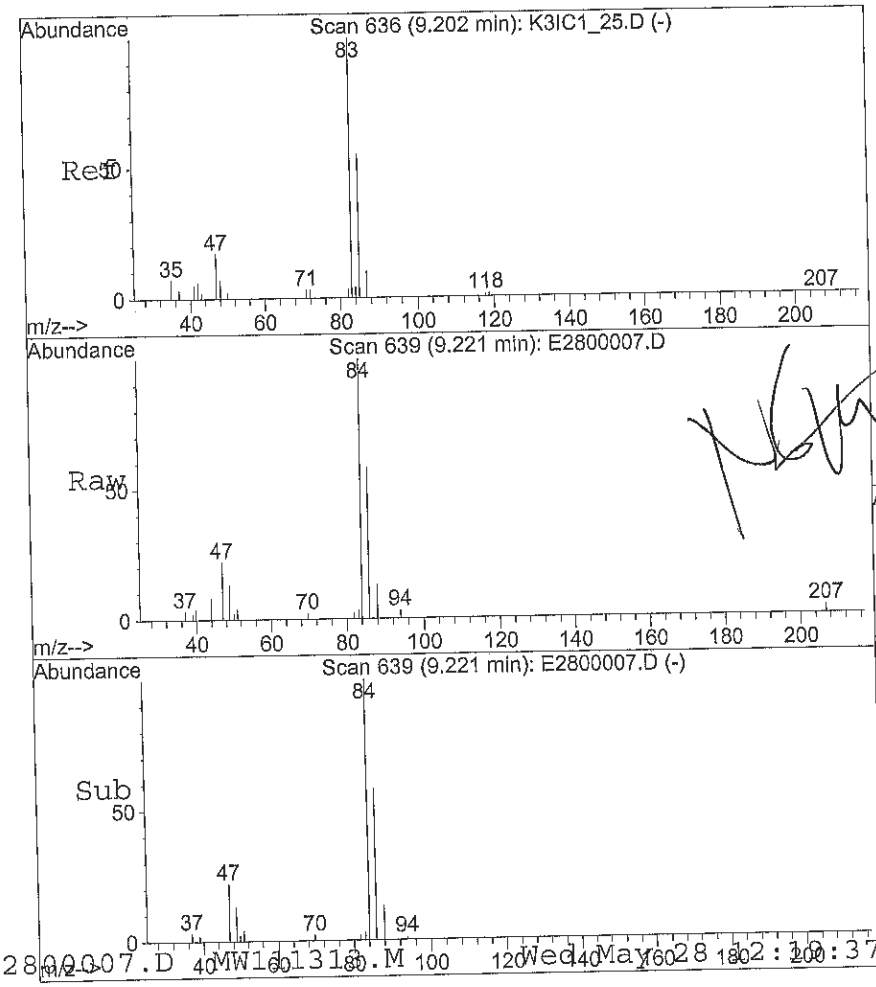


#15
(TBA) tert-Butanol
Concen: 3.47 ug/L
RT: 6.91 min Scan# 365
Delta R.T. -0.21 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 59 Resp: 1057

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

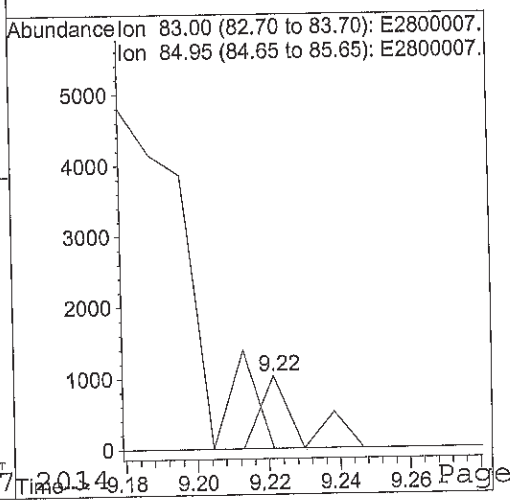


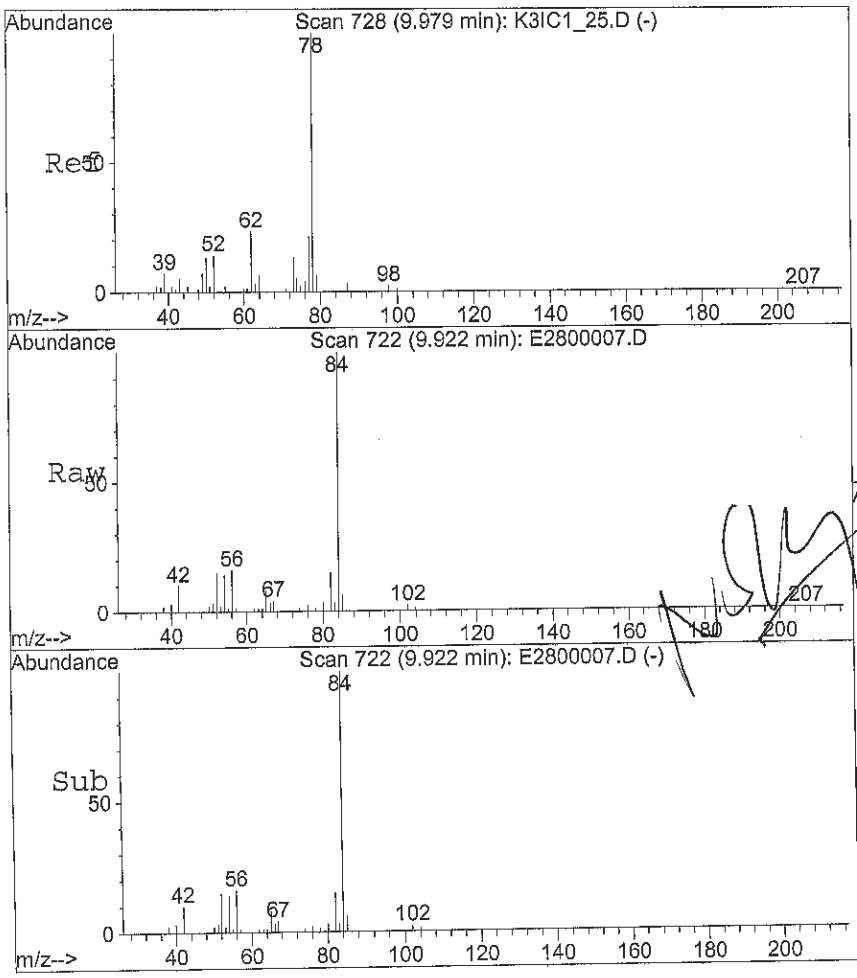


#24
Chloroform
Concen: 0.08 ug/L
RT: 9.22 min Scan# 639
Delta R.T. 0.02 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 83 Resp: 780

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

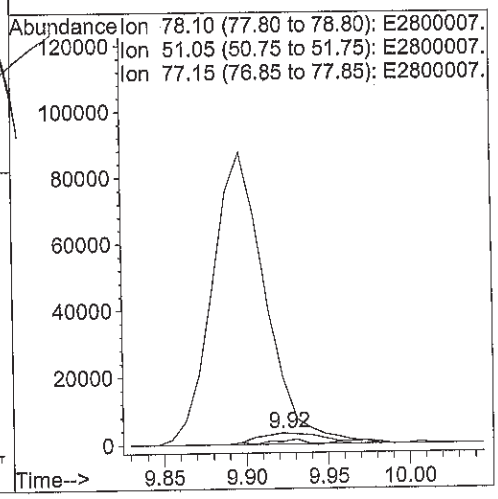


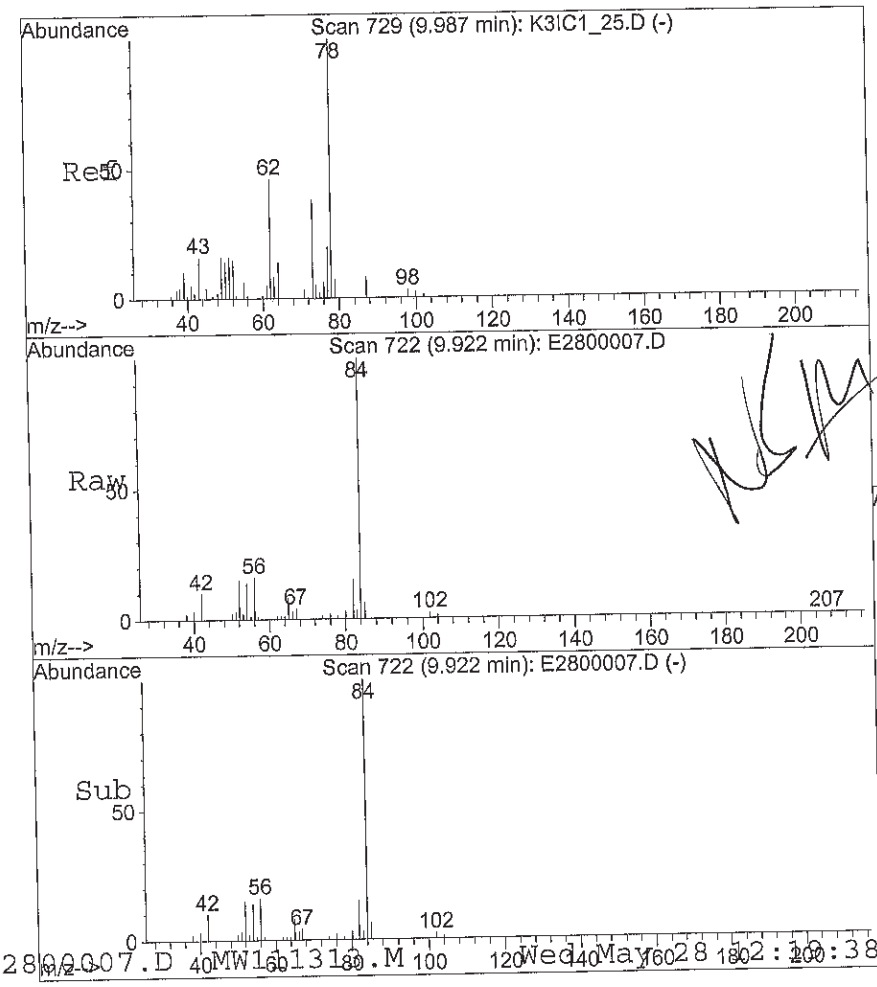


#31
Benzene
Concen: 0.56 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 78 Resp: 9348

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	18.7	16.6	24.8

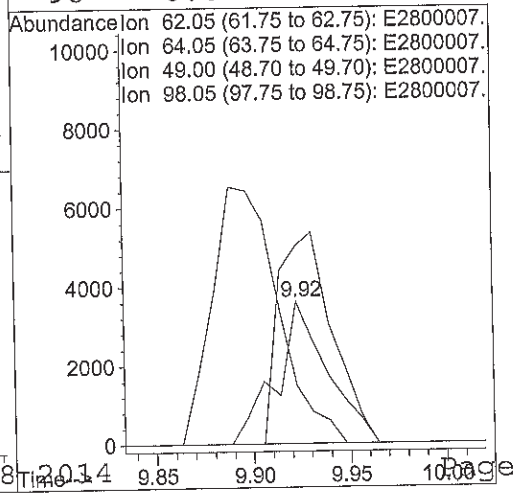


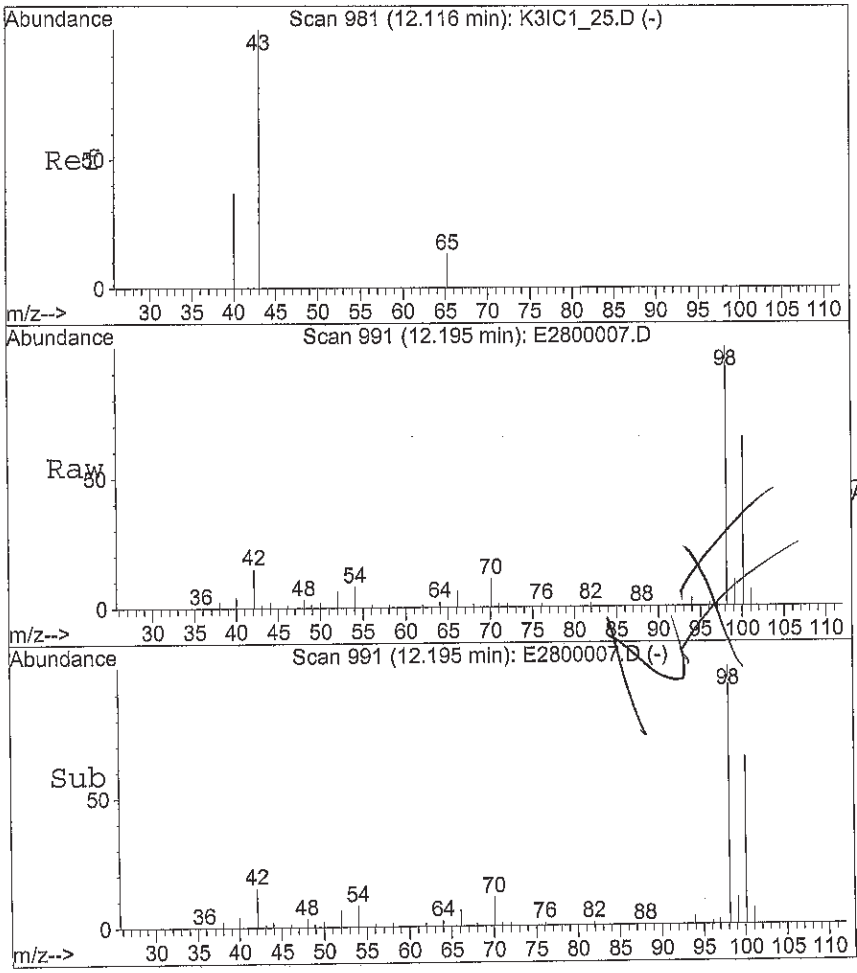


#32
1,2-Dichloroethane
Concen: 1.12 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 62 Resp: 6673

Ion	Ratio	Lower	Upper
62	100		
64	155.2	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

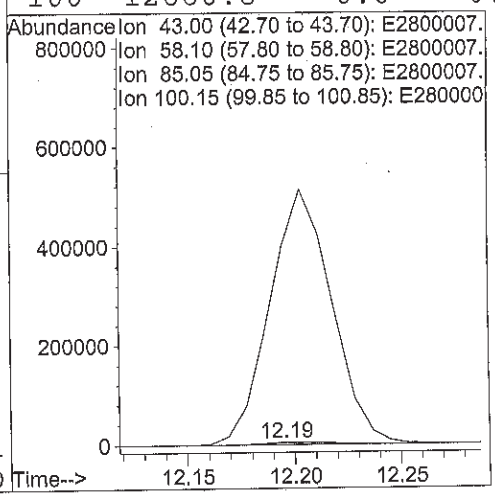


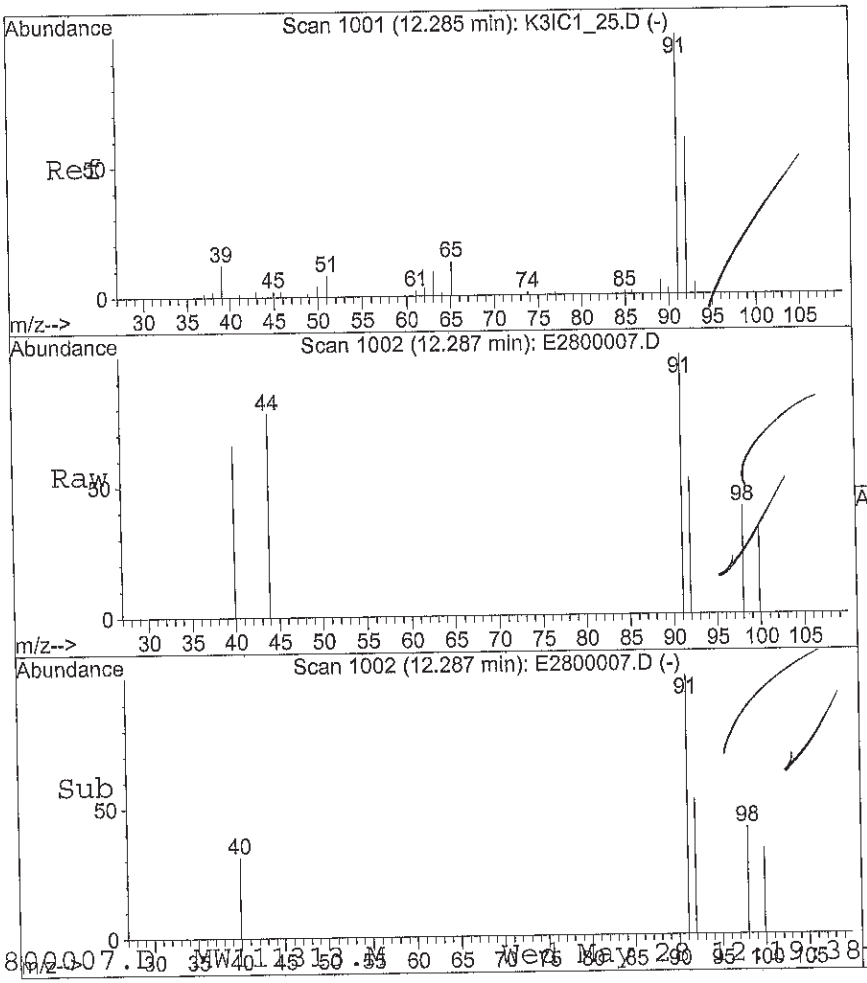


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.94 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 43 Resp: 8174

Ion	Ratio	Lower	Upper
43	100		
58	131.0	0.0	0.0#
85	0.0	0.0	0.0
100	12660.8	0.0	0.0#

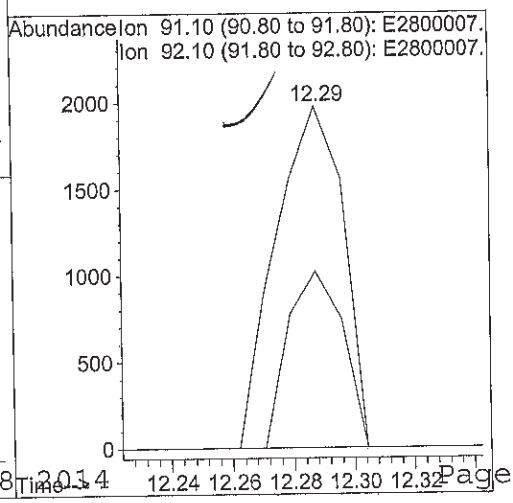


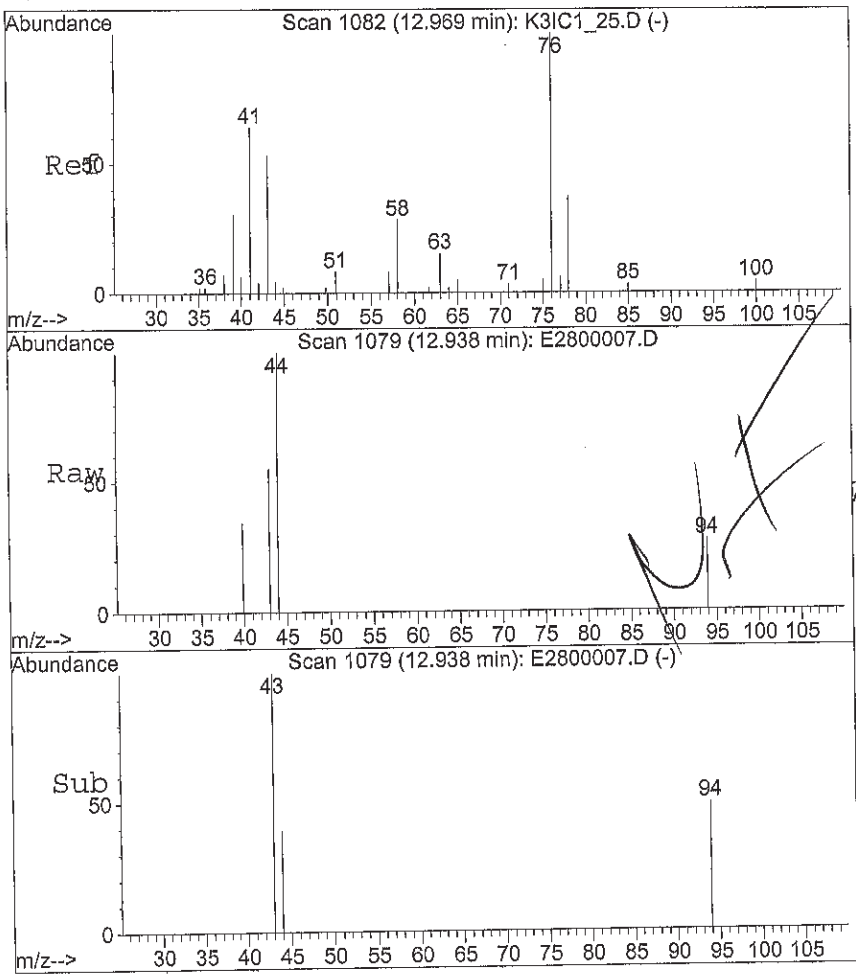


#41
Toluene
Concen: 0.16 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 91 Resp: 3040

Ion	Ratio	Lower	Upper
91	100		
92	42.3	47.4	71.0#

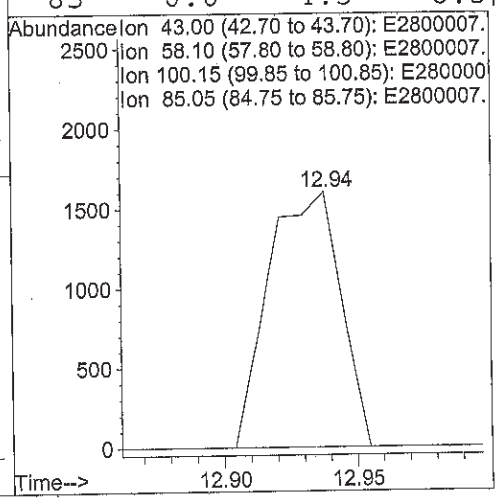


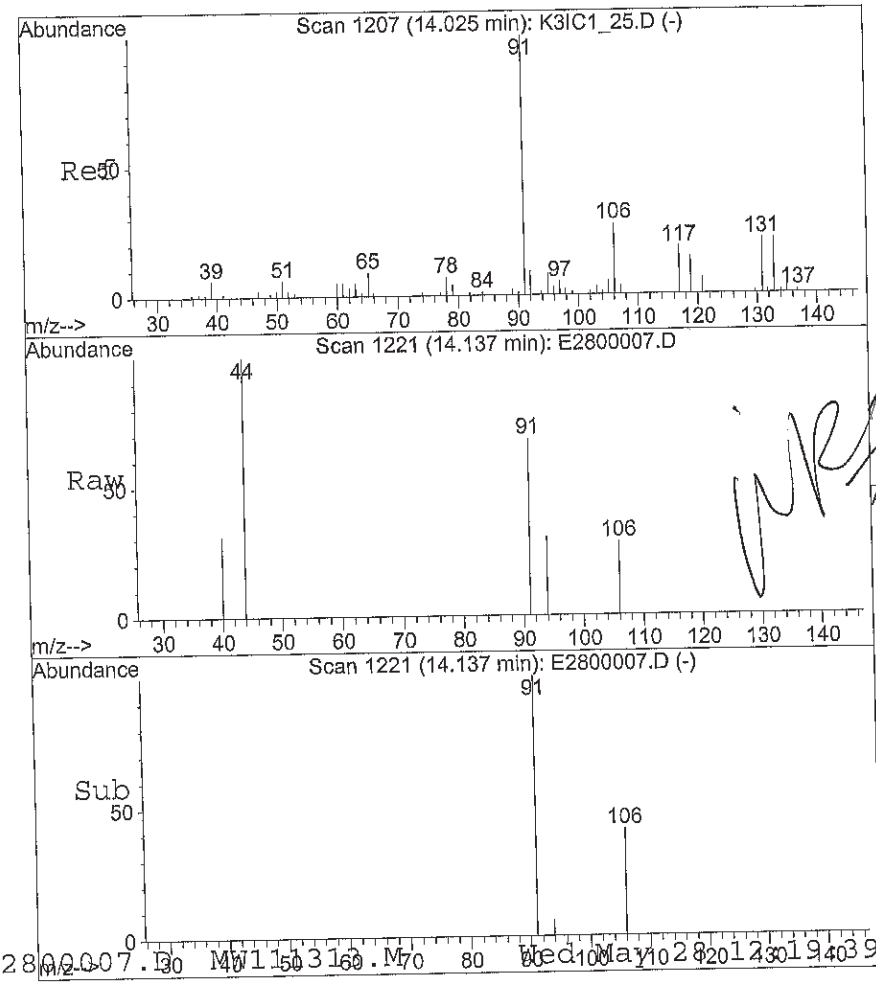


#46
2-Hexanone
Concen: 0.98 ug/L
RT: 12.94 min Scan# 1079
Delta R.T. -0.03 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 43 Resp: 3004

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

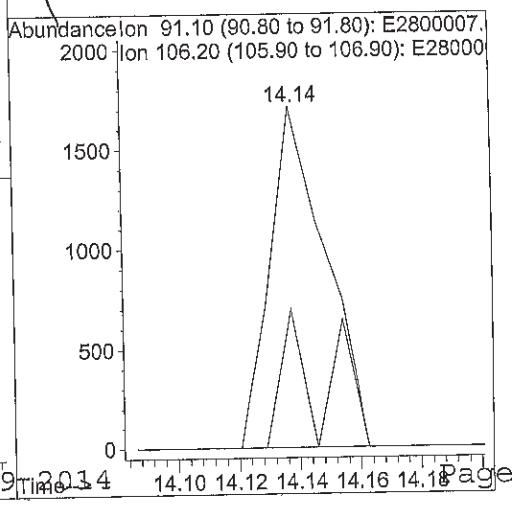


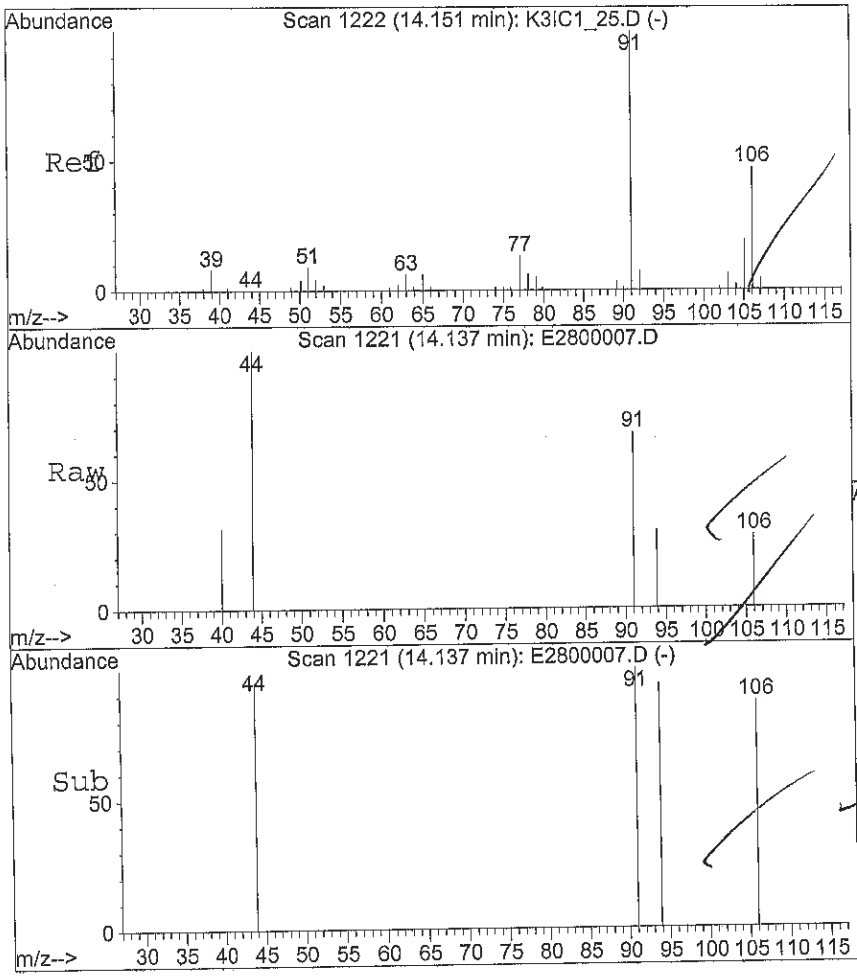


#51
Ethylbenzene
Concen: 0.10 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. 0.11 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 91 Resp: 2182

Ion	Ratio	Lower	Upper
91	100		
106	31.3	23.5	35.3

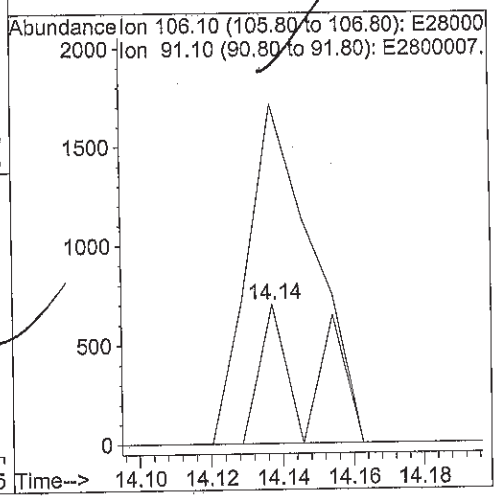


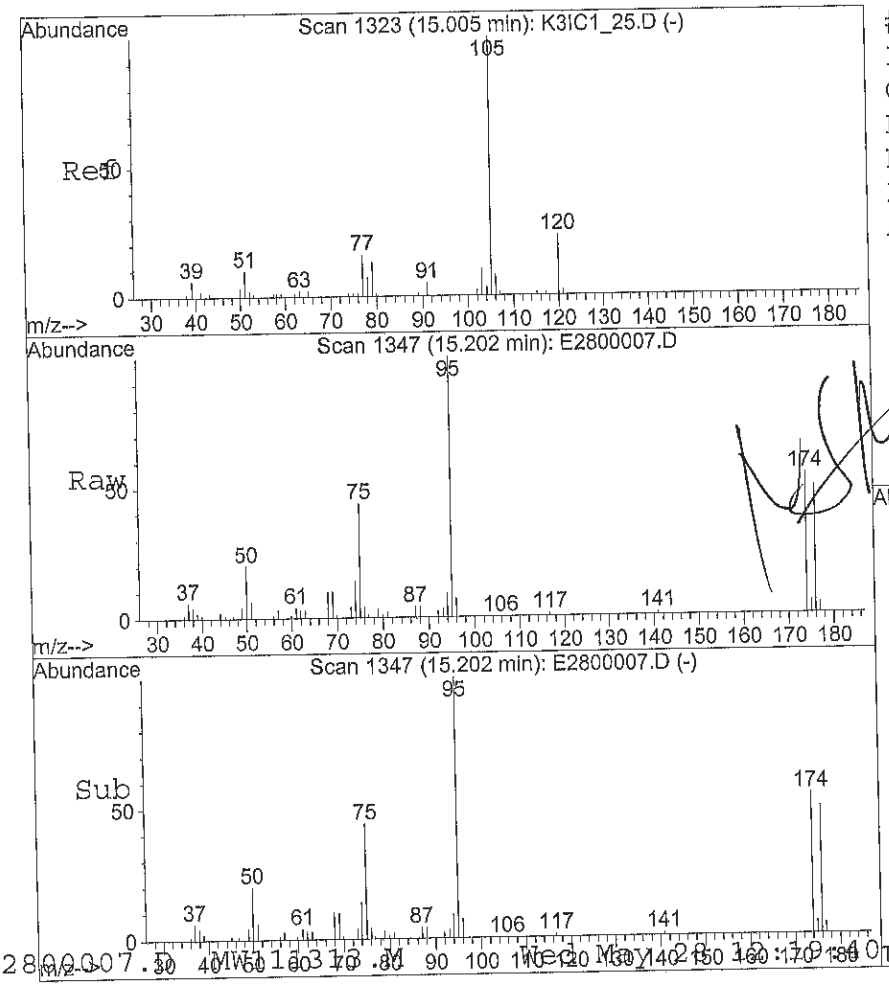


#52
m,p-Xylenes
Concen: 0.09 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion:106 Resp: 682

Ion	Ratio	Lower	Upper
106	100		
91	319.9	177.1	265.7#

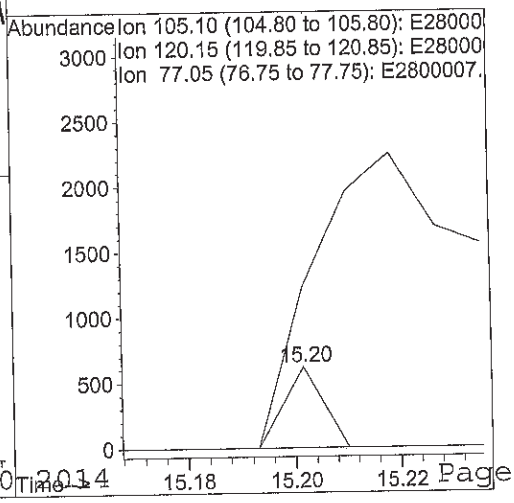


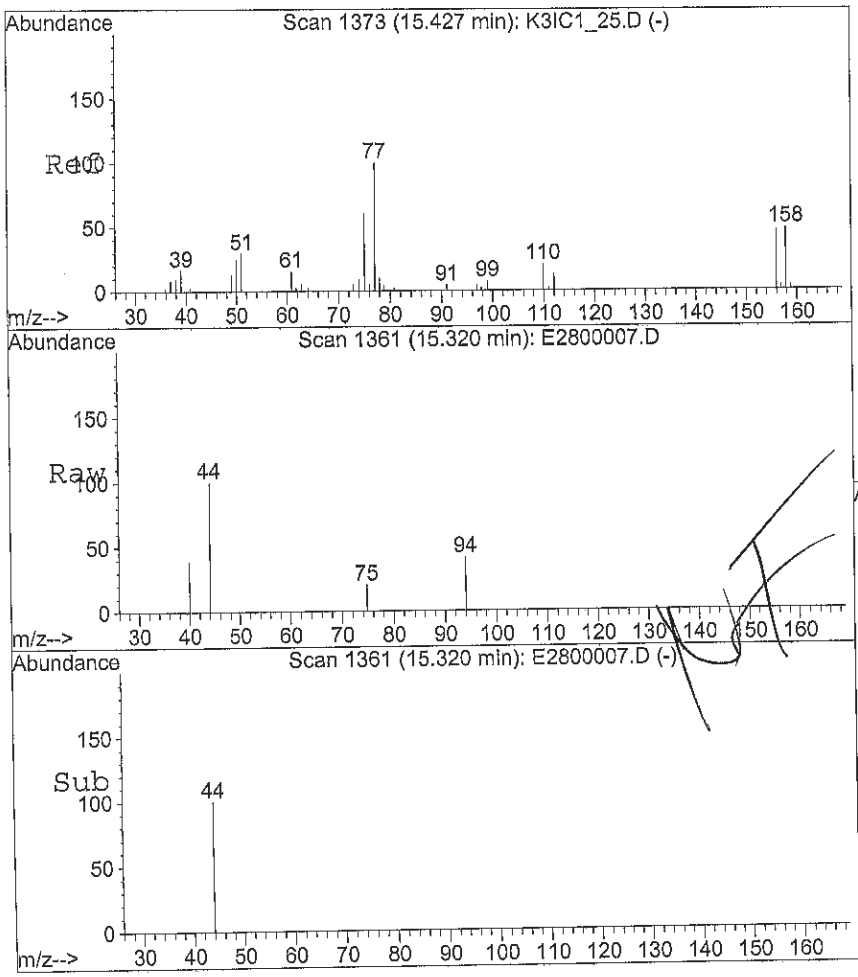


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.20 min Scan# 1347
Delta R.T. 0.20 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion:105 Resp: 313

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	1406.1	13.1	19.7#

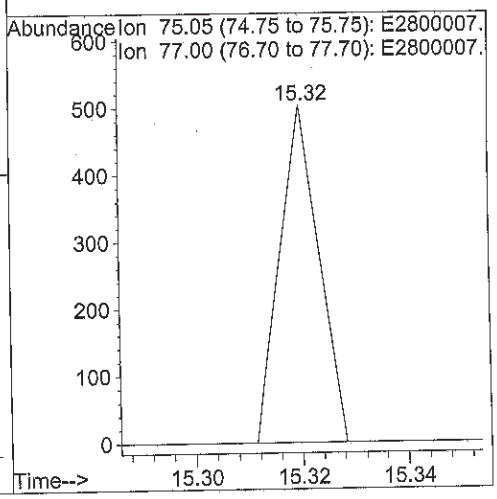


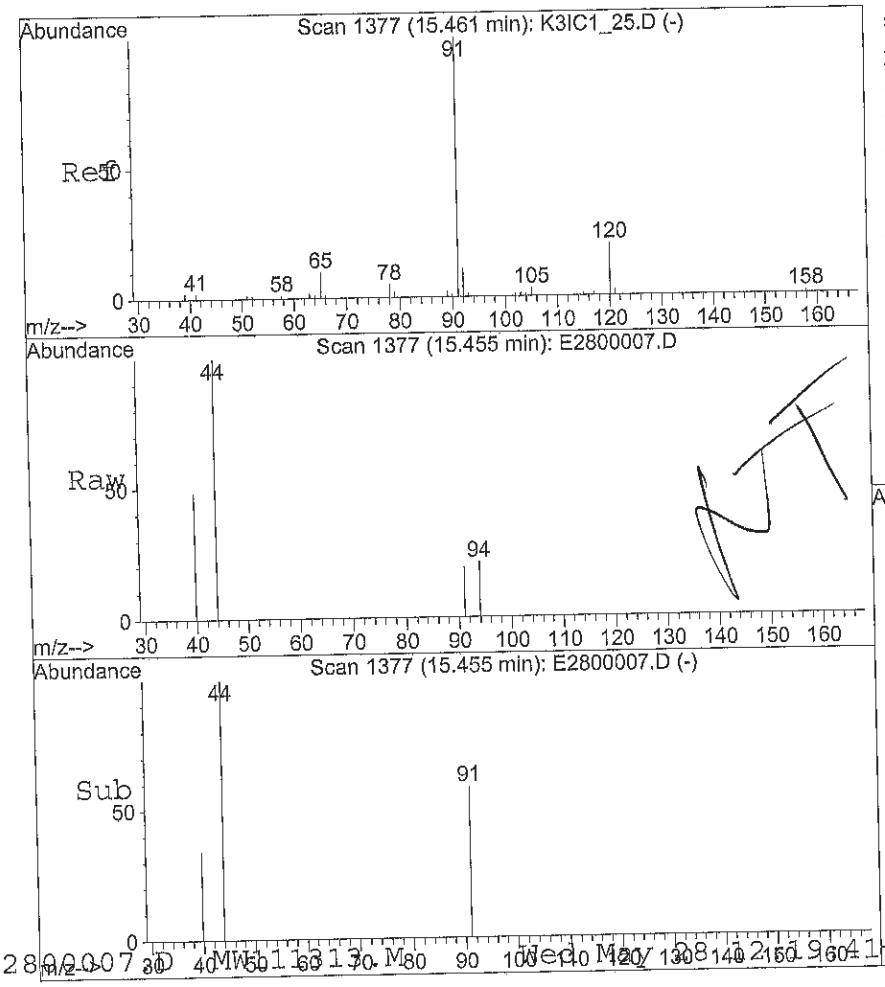


#57
1,2,3-Trichloropropane
Concen: 0.04 ug/L
RT: 15.32 min Scan# 1361
Delta R.T. -0.11 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 75 Resp: 255

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

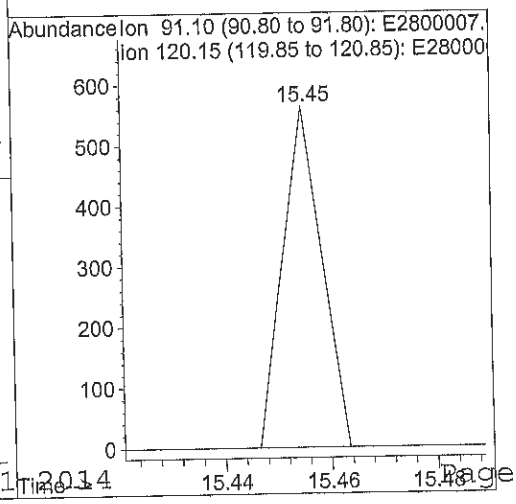


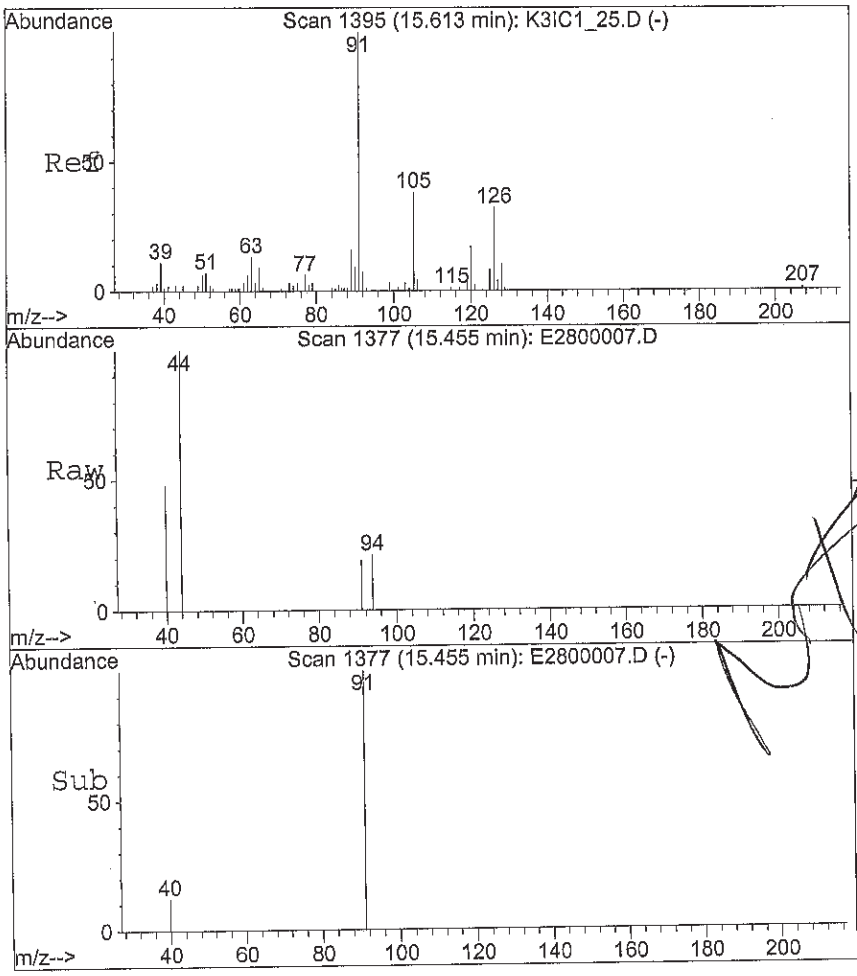


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 91 Resp: 285

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

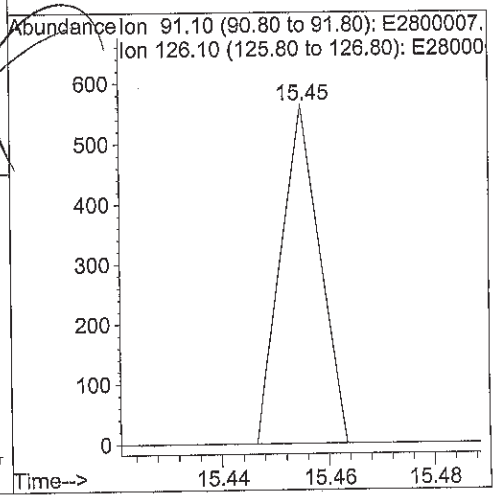


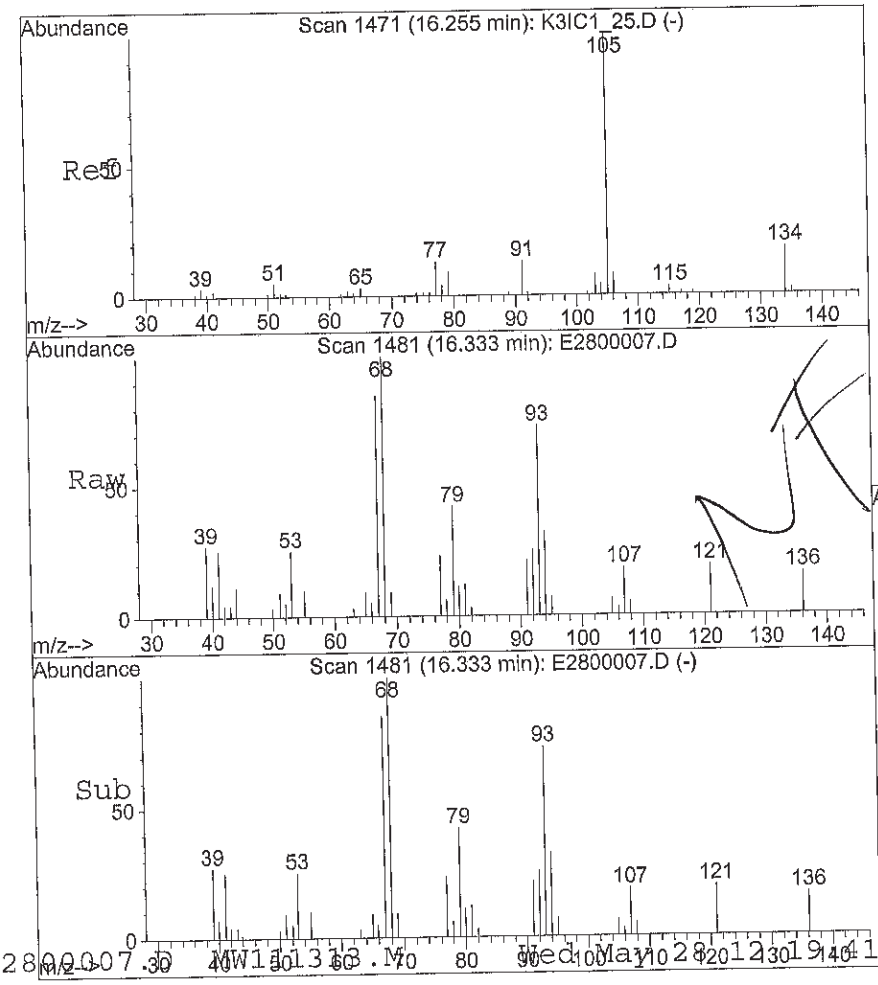


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.16 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion: 91 Resp: 285

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

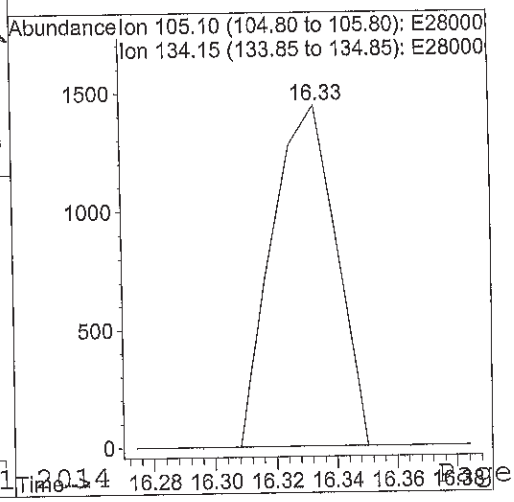


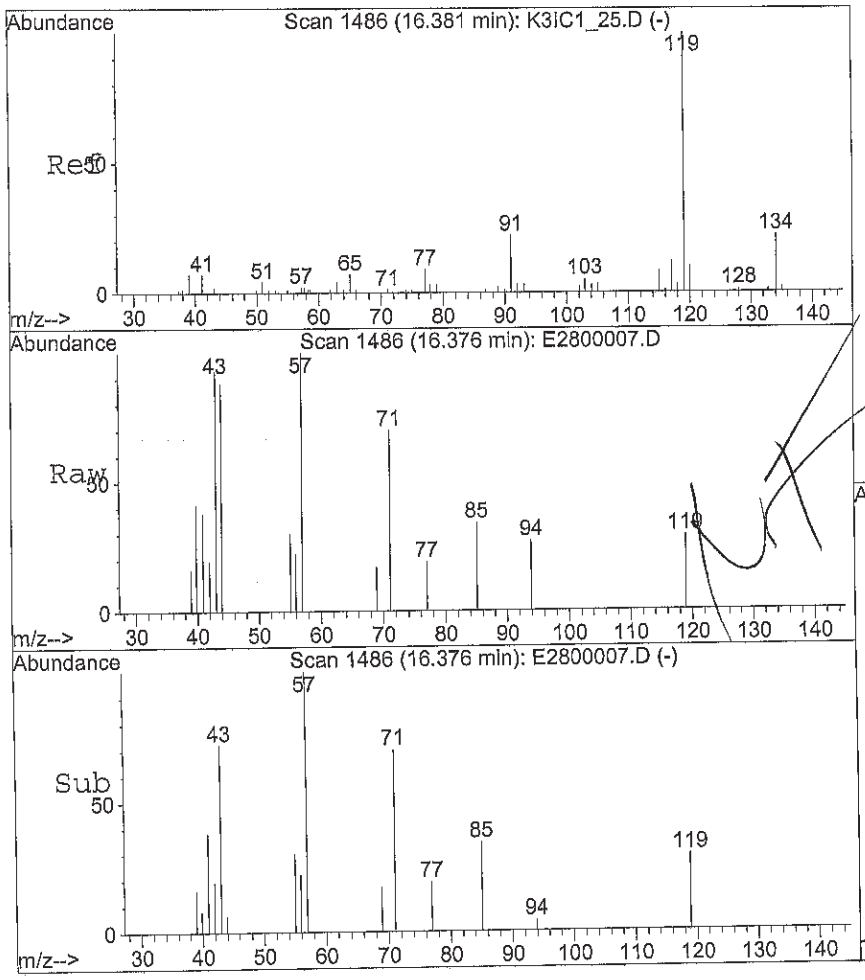


#68
sec-Butylbenzene
Concen: 0.09 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion:105 Resp: 2110

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

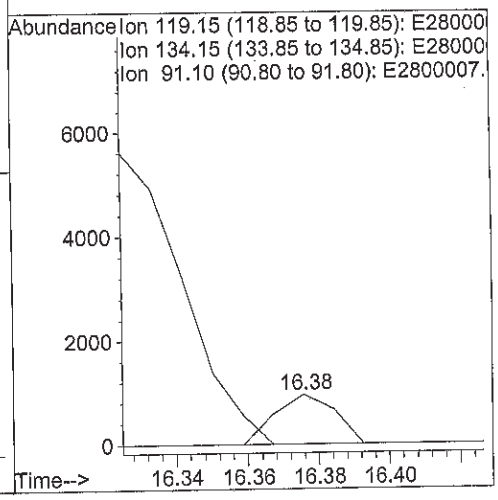




#69
p-Isopropyltoluene
Concen: 0.06 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2800007.D
Acq: 28 May 2014 11:18 am

Tgt Ion:119 Resp: 1118

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800007.D Vial: 6
Acq On : 28 May 2014 11:18 am Operator: DN
Sample : 3E42801-06 Inst : GC/MS Ins
Misc : 100cc SVL-511-SA5D-SV-9.5-10.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 11:46 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1784446	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1395196	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	722995	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	503819	10.86 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.88%		
3) Chloroform-d (SU6)	9.18	84	721792	10.84 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.72%		
4) Methylene Chloride-d2 (SU5	7.07	86	421187	10.82 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.56%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	471106	14.85 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 118.80%		
6) Benzene-d6 (SU7)	9.92	84	1418662	10.13 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 81.04%		
8) Toluene-d8 (SU3)	12.20	98	1572941	11.88 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.04%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	748409	13.70 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 109.60%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

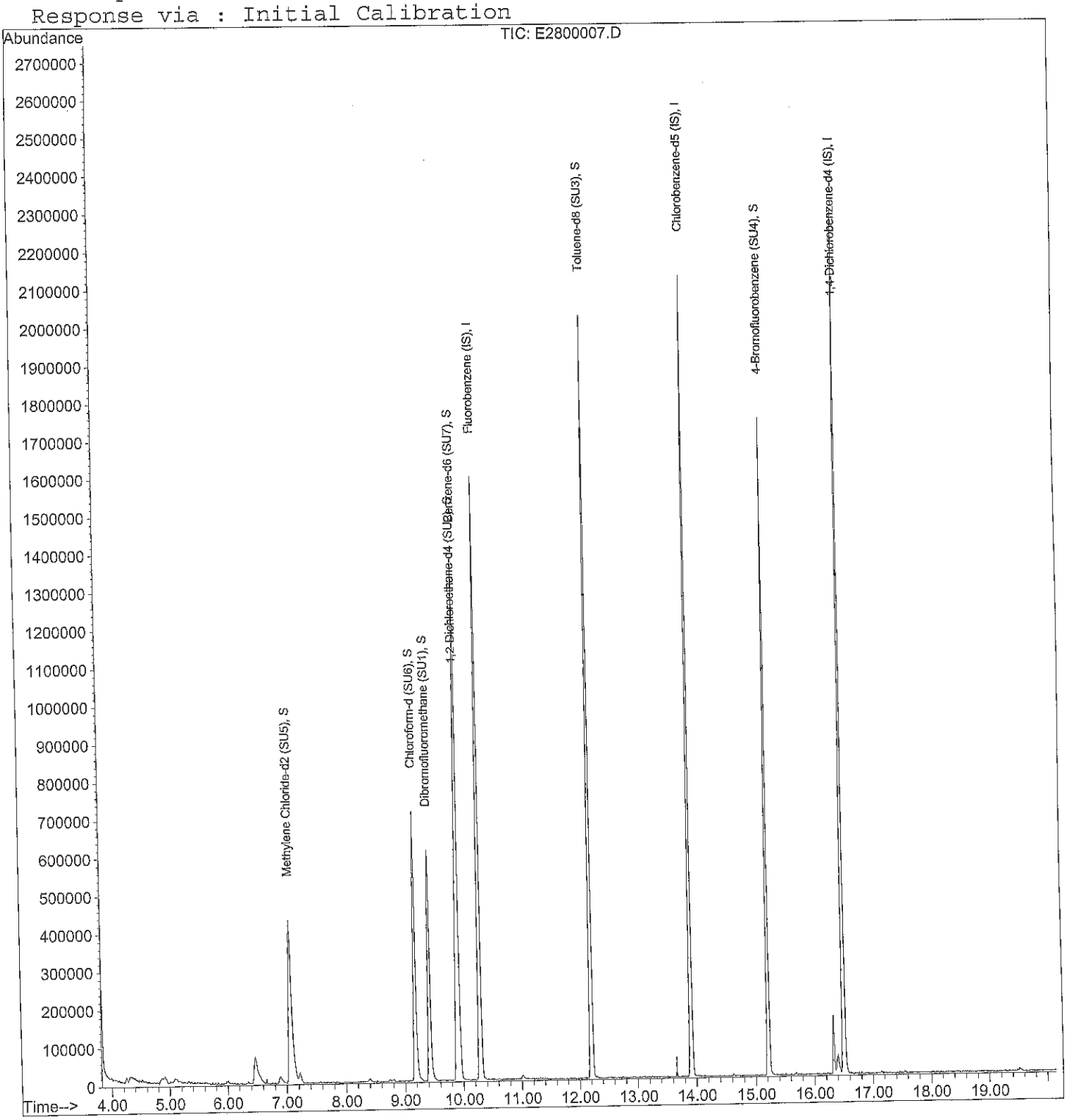
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800007.D
Acq On : 28 May 2014 11:18 am
Sample : 3E42801-06
Misc : 100cc SVL-511-SA5D-SV-9.5-10.5
MS Integration Params: rteint.p
Quant Time: May 28 11:46 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800008.D
Acq On : 28 May 2014 11:47 am
Sample : 3E42801-07
Misc : 100cc SVL-516-SA5D-SV-6.0-7.0
MS Integration Params: rteint.p
Quant Time: May 28 12:21 19114

Vial: 7
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1702842	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1327452	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	706606	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	476094	11.21 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	89.68%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	450359	11.16 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	89.28%	
39) Toluene-d8 (SU3)	12.21	98	1487149	12.01 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	96.08%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	713660	13.14 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	105.12%	

Target Compounds					Qvalue
4) Chloromethane	4.40	50	2285	-0.42 ~~ug/L #~~ DSM	41
6) Bromomethane	5.25	96	1364	-1.05 ~~ug/L~~	91
7) Chloroethane	5.03	64	984	1.38 ~~ug/L~~	89
9) (F113) 1,1,2-Trichloro-tri	6.33	151	1099	0.33 ug/L #0.0066	19
11) Acetone	6.47	58	4411	1.56 ~~ug/L #~~	88
12) (IPA) Leak Check Compound	6.48	45	151076	738.32 ~~ug/L #~~ DSM	83
13) Carbon disulfide	6.83	76	482	0.03 ~~ug/L #~~	76
14) Methylene Chloride	7.08	84	5529	1.18 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.90	59	2162	7.44 ~~ug/L #~~	77
24) Chloroform	9.21	83	2118	0.24 ~~ug/L #~~ DSM	76
29) 1,1-Dichloropropene	9.93	75	458	0.07 ~~ug/L #~~	1
31) Benzene	9.93	78	10123	0.63 ~~ug/L #~~	81
32) 1,2-Dichloroethane	9.93	62	6954	1.23 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	7168	2.71 ~~ug/L #~~	100
41) Toluene	12.29	91	2320	0.13 ug/L 0.0026	98
46) 2-Hexanone	12.93	43	2227	0.77 ~~ug/L #~~	37
51) Ethylbenzene	14.02	91	1536	0.07 ~~ug/L #~~ DSM	45
52) m,p-Xylenes	14.15	106	281	0.04 ug/L #0.0008	1
53) o-Xylene	14.61	106	275	0.04 ug/L #0.0008	1
54) Styrene	14.62	104	1523	-0.73 ~~ug/L #~~ DSM	50
56) Isopropylbenzene	15.23	105	1208	0.06 ~~ug/L #~~	1
62) n-Propylbenzene	15.47	91	506	0.02 ~~ug/L #~~	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800008.D Vial: 7
Acq On : 28 May 2014 11:47 am Operator: DN
Sample : 3E42801-07 Inst : GC/MS Ins
Misc : 100cc SVL-516-SA5D-SV-6.0-7.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 12:21 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

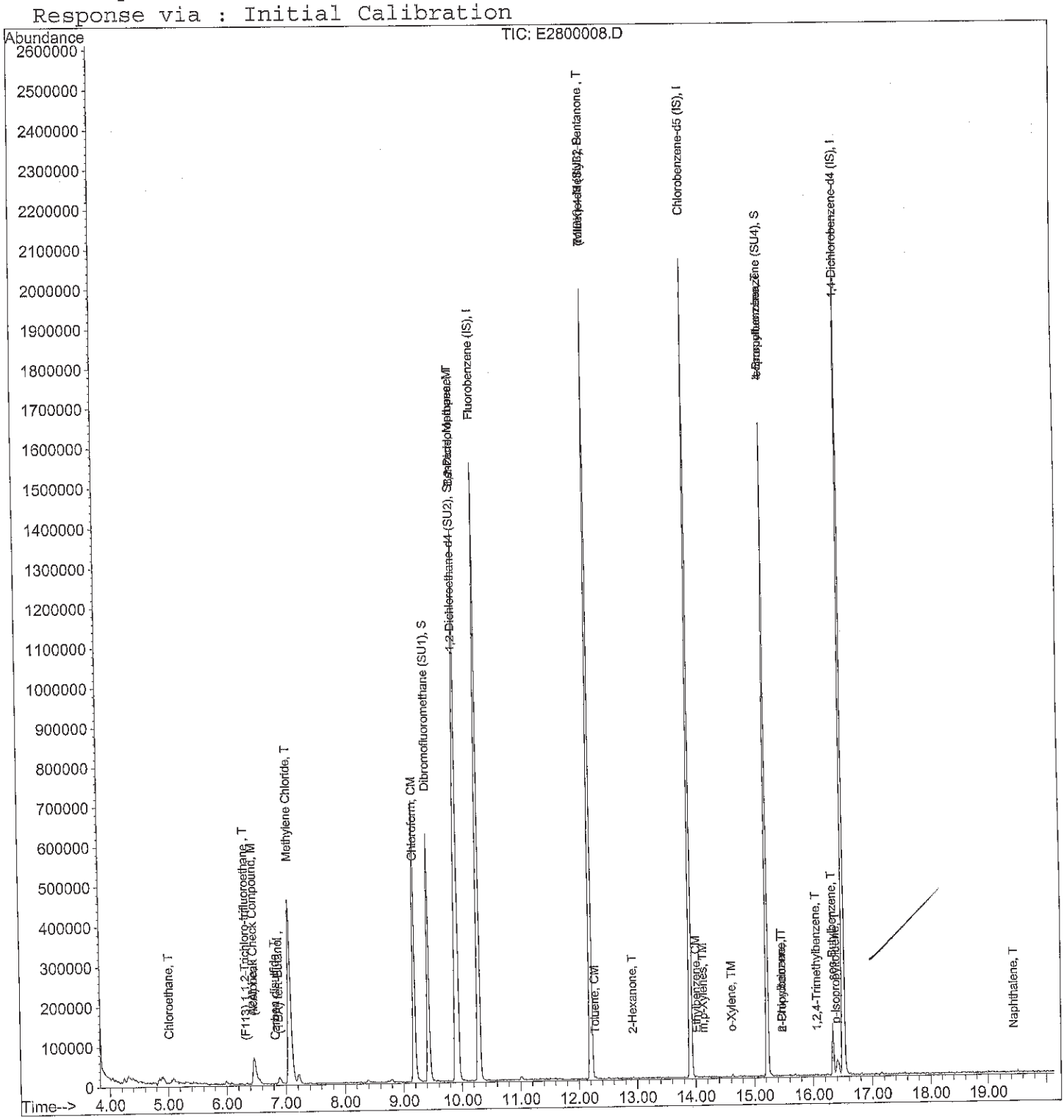
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.47	91	506	0.03 ~~ug/L~~ ~~#~~ DM	45
67) 1,2,4-Trimethylbenzene	16.07	105	399	0.02 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.34	105	1218	0.05 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	423	0.02 ~~ug/L~~ #	52
77) Naphthalene	19.44	128	276	0.02 ~~ug/L~~	100

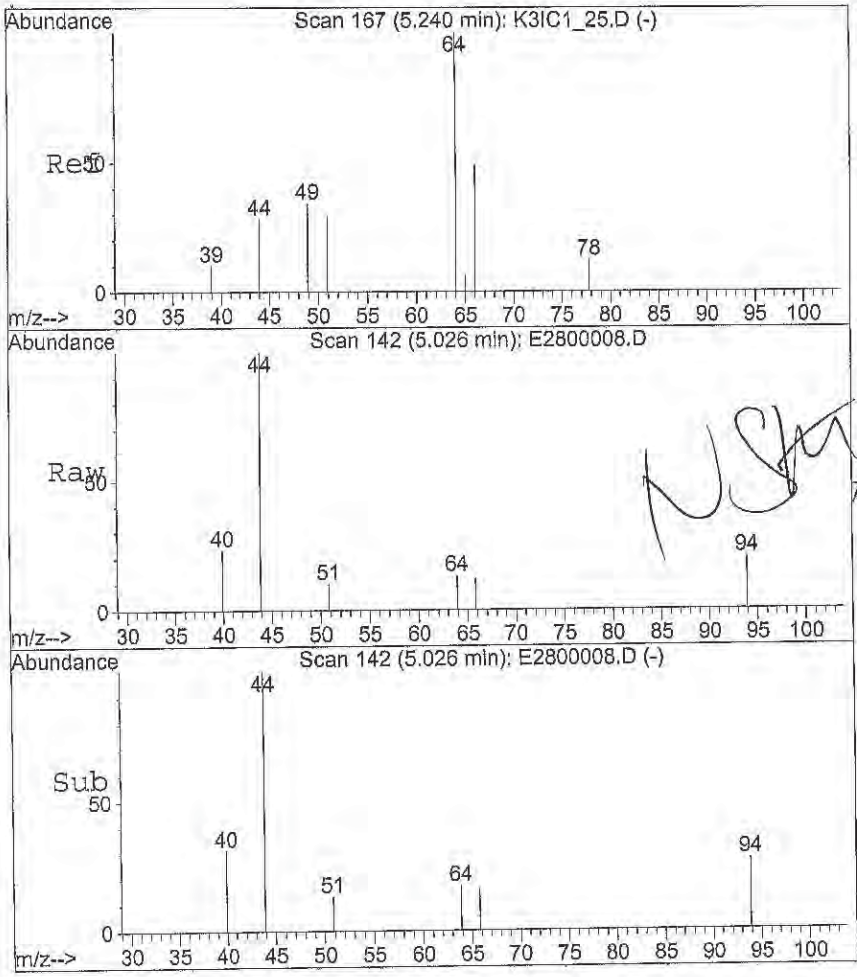
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800008.D Vial: 7
Acq On : 28 May 2014 11:47 am Operator: DN
Sample : 3E42801-07 Inst : GC/MS Ins
Misc : 100cc SVL-516-SA5D-SV-6.0-7.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 12:21 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

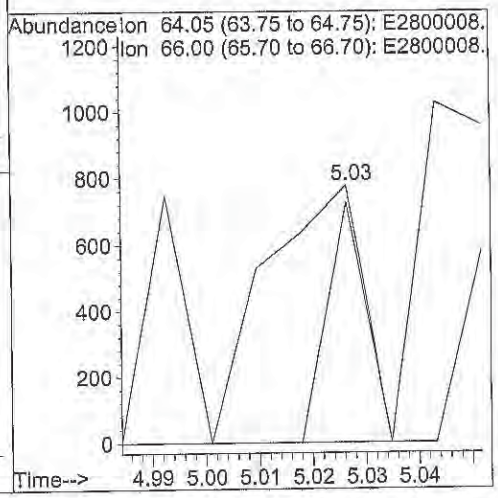


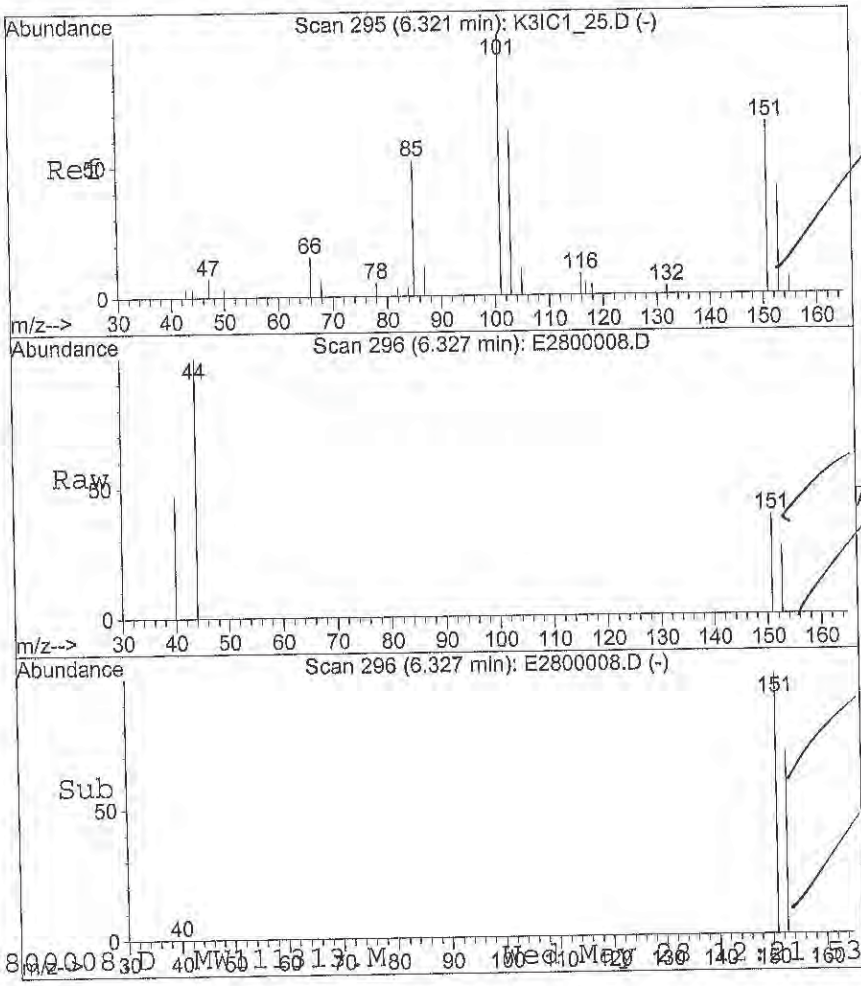


#7
Chloroethane
Concen: 1.38 ug/L
RT: 5.03 min Scan# 142
Delta R.T. -0.21 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 64 Resp: 984

Ion	Ratio	Lower	Upper
64	100		
66	37.3	35.4	53.0

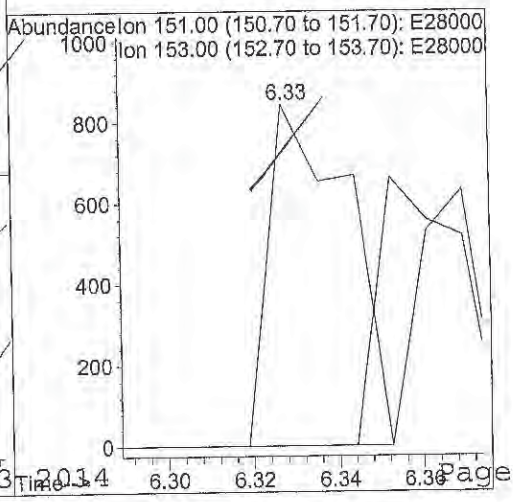


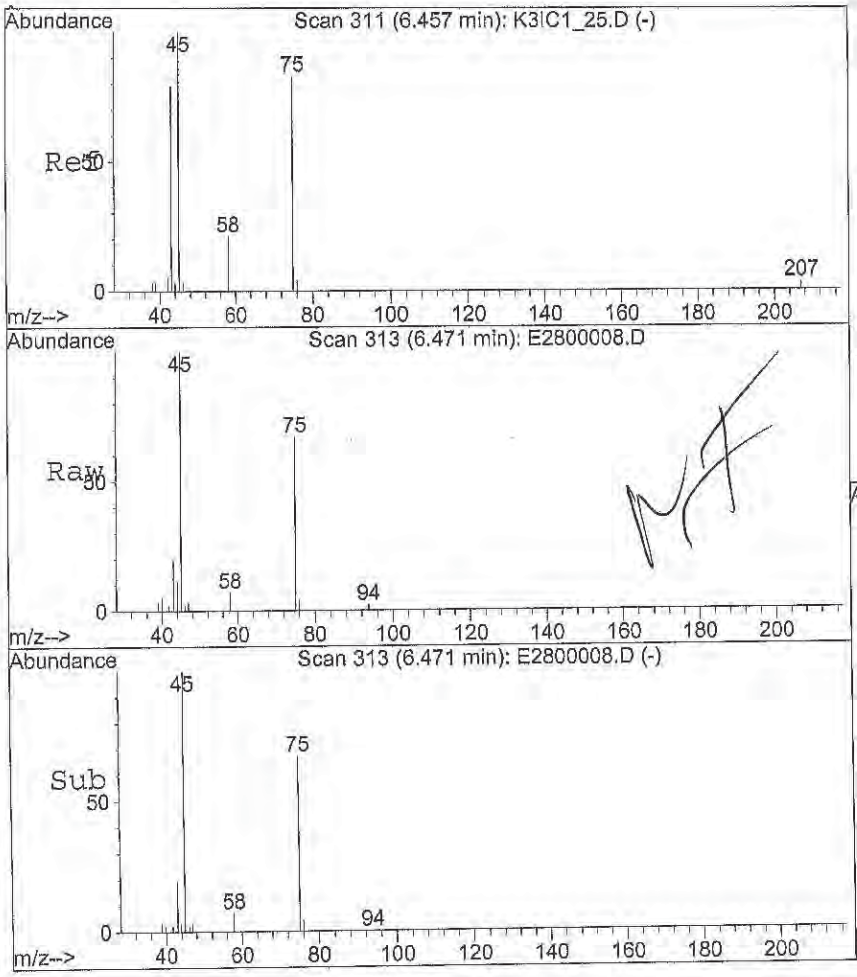


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 0.33 ug/L
RT: 6.33 min Scan# 296
Delta R.T. 0.01 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:151 Resp: 1099

Ion	Ratio	Lower	Upper
151	100		
153	0.0	49.6	74.4#

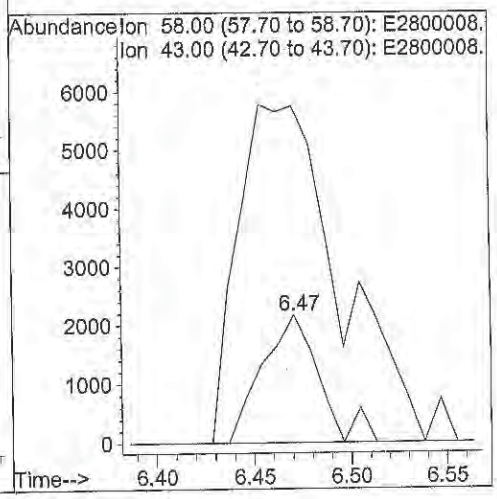


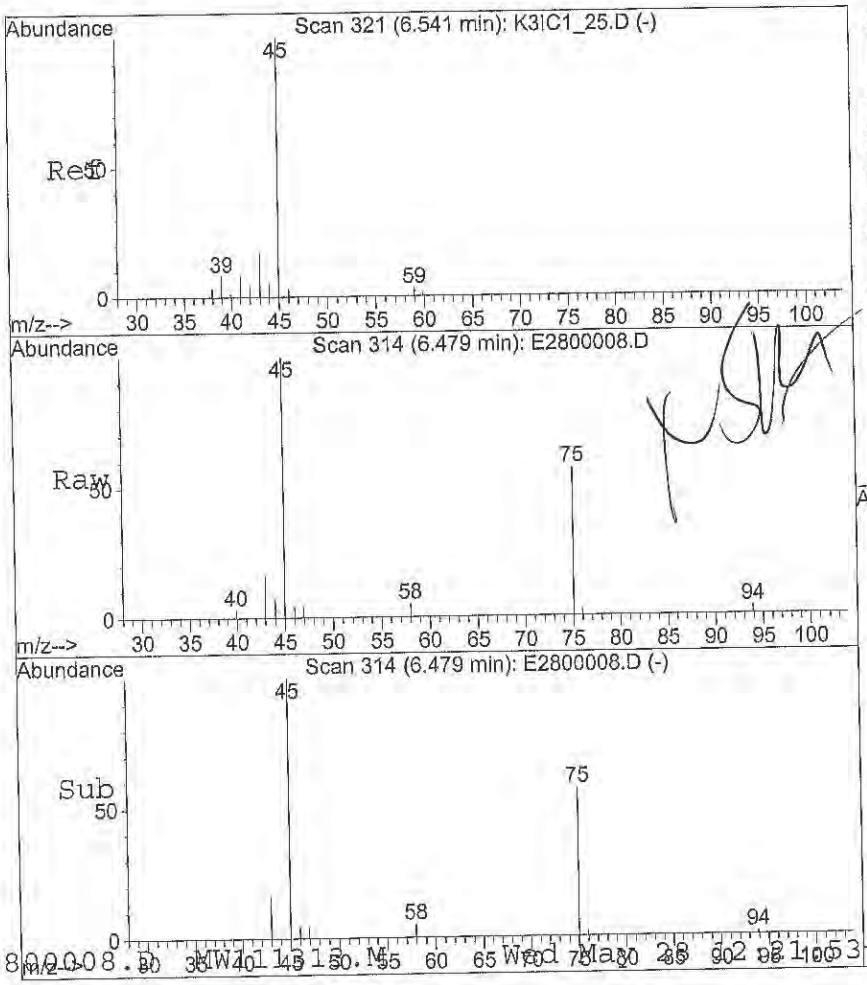


#11
Acetone
Concen: 1.56 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 58 Resp: 4411

Ion	Ratio	Lower	Upper
58	100		
43	480.9	360.9	541.3

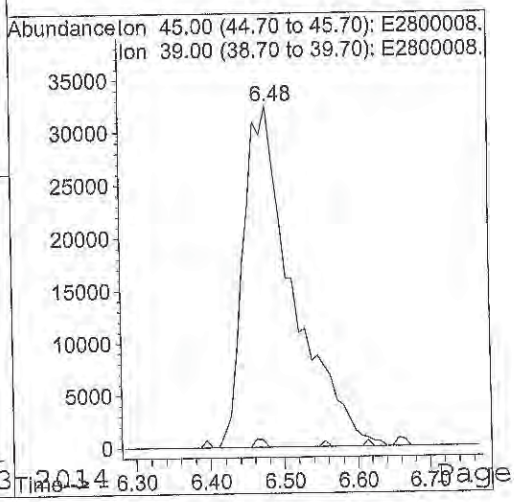


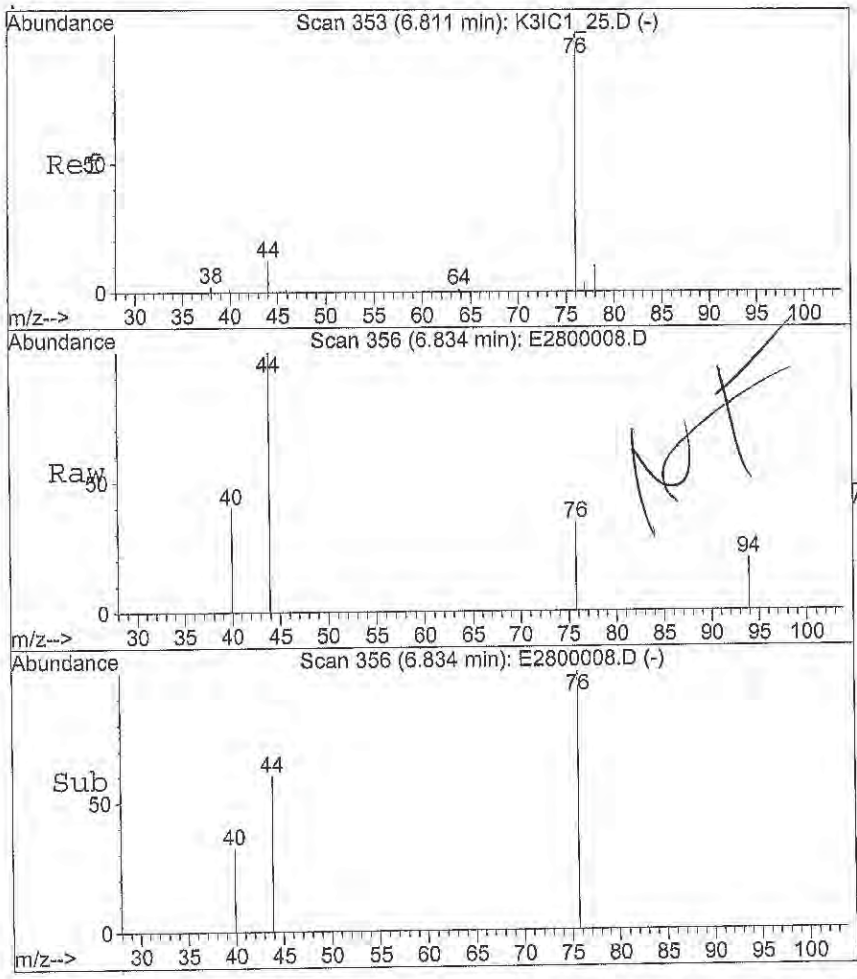


#12
(IPA) Leak Check Compound
Concen: 738.32 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.06 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 45 Resp: 151076

Ion	Ratio	Lower	Upper
45	100		
39	0.5	4.9	7.3#

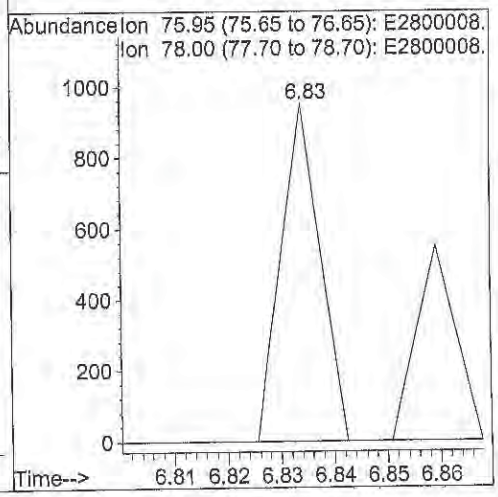


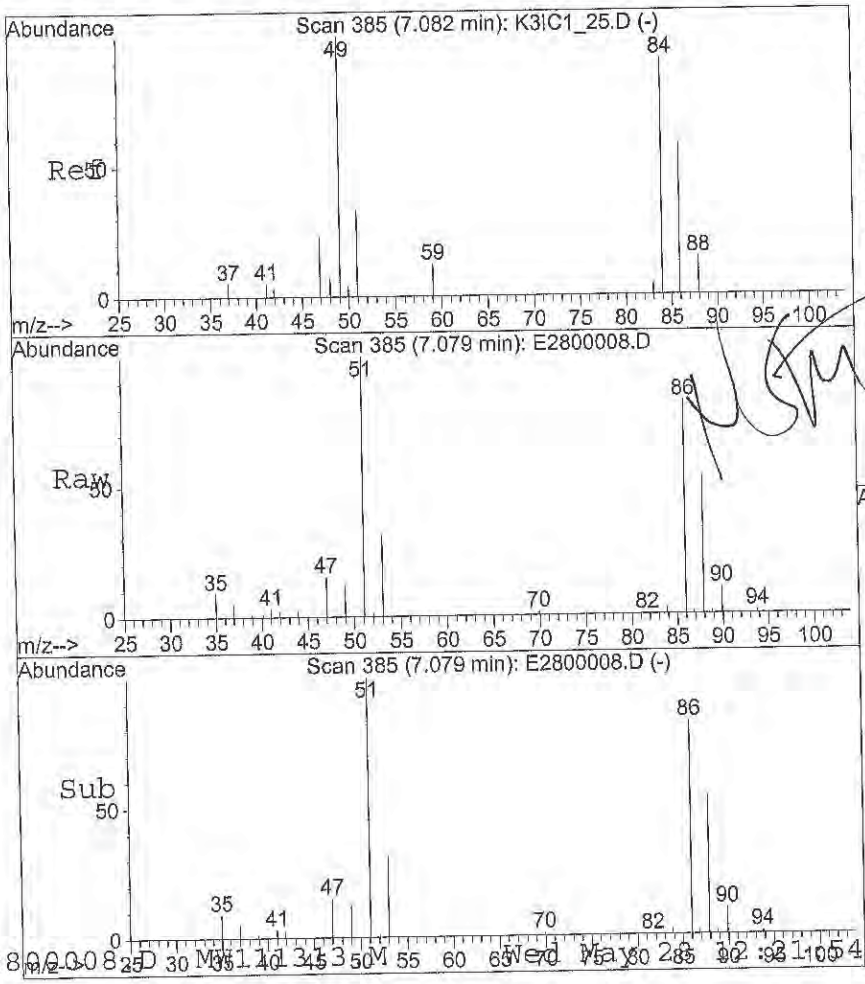


#13
Carbon disulfide
Concen: 0.03 ug/L
RT: 6.83 min Scan# 356
Delta R.T. 0.02 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 76 Resp: 482

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

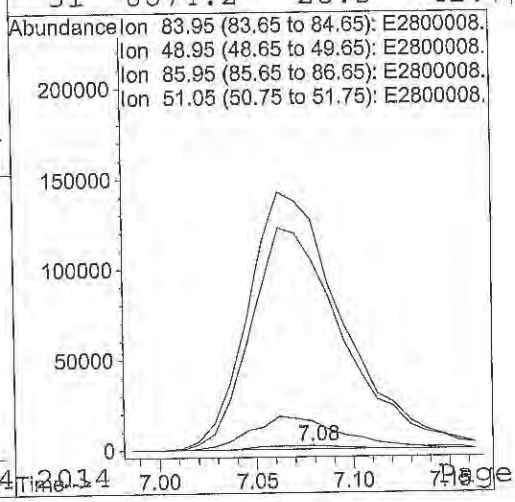


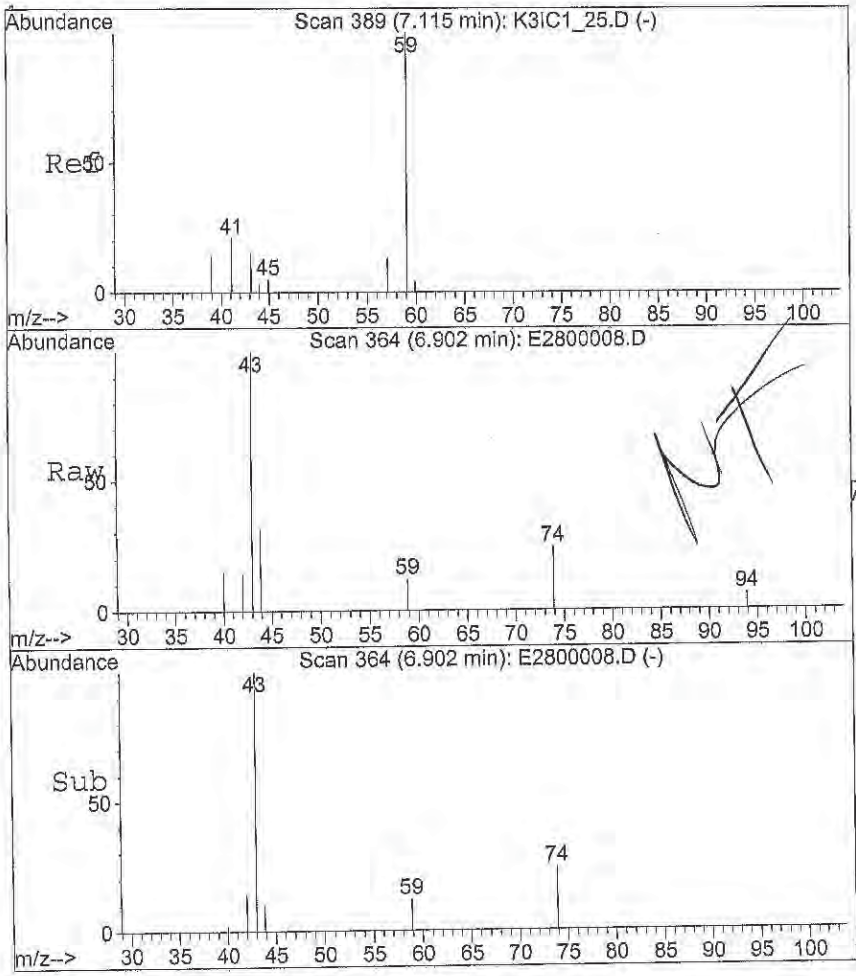


#14
Methylene Chloride
Concen: 1.18 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.00 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 84 Resp: 5529

Ion	Ratio	Lower	Upper
84	100		
49	1069.4	89.8	134.6#
86	7505.3	51.1	76.7#
51	8874.2	28.5	42.7#

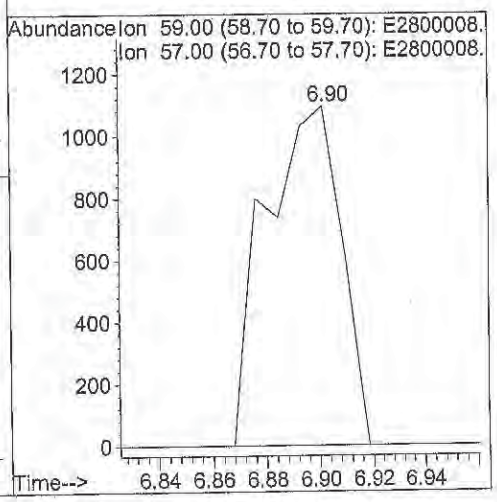


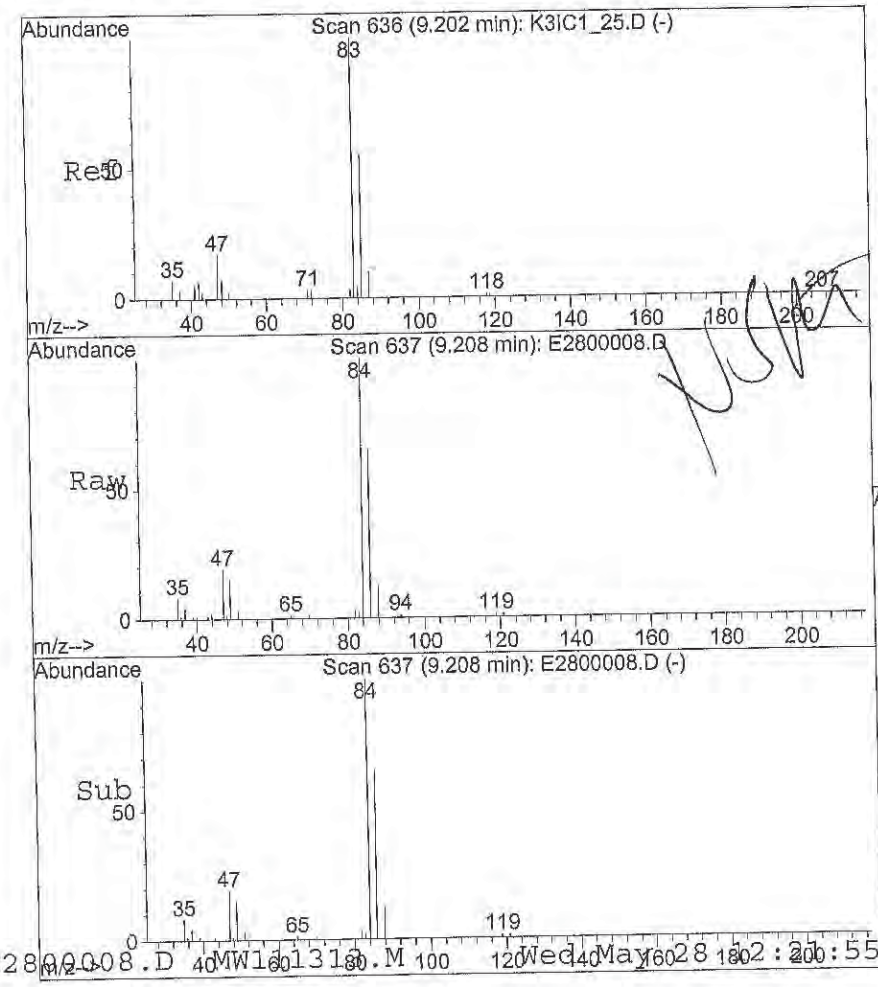


#15
(TBA) tert-Butanol
Concen: 7.44 ug/L
RT: 6.90 min Scan# 364
Delta R.T. -0.21 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 59 Resp: 2162

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

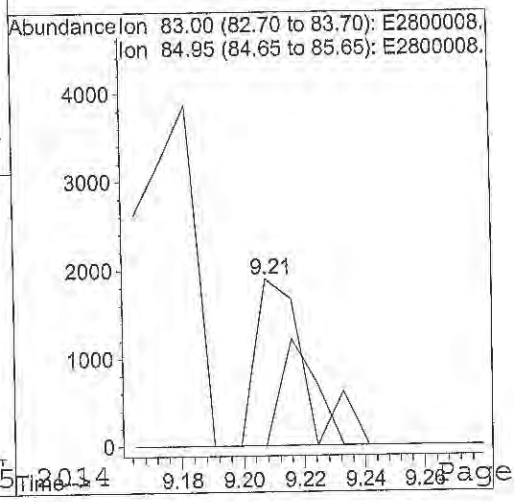


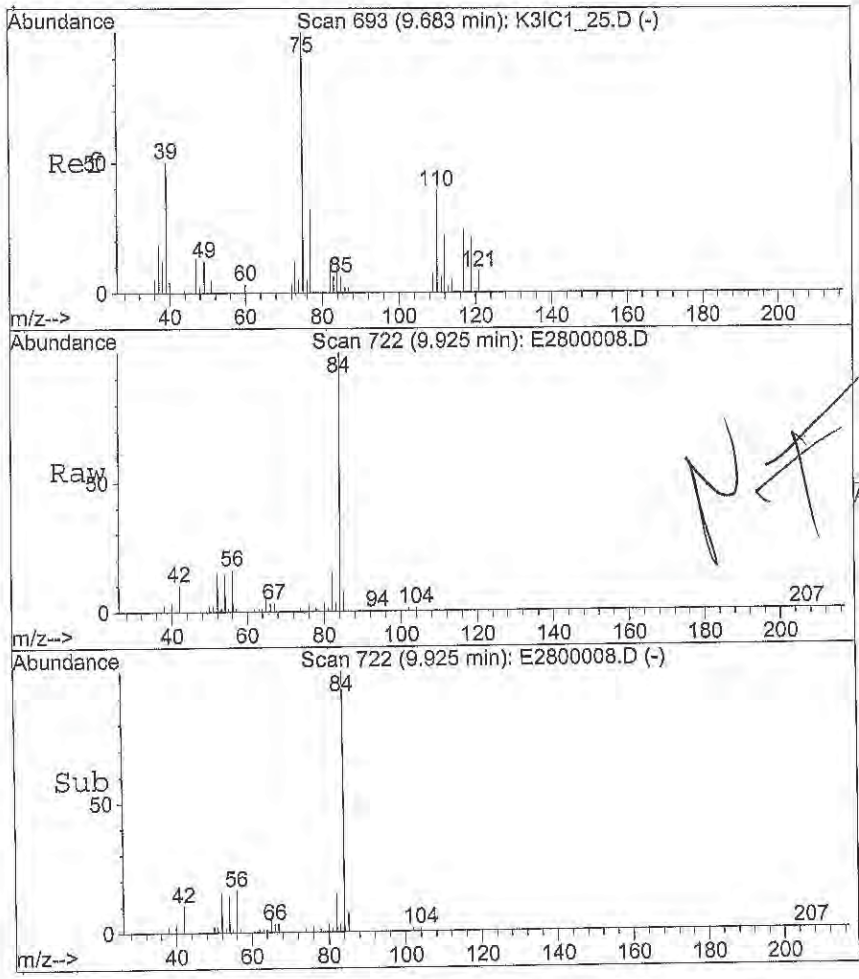


#24
Chloroform
Concen: 0.24 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 83 Resp: 2118

Ion	Ratio	Lower	Upper
83	100		
85	45.9	51.8	77.6#

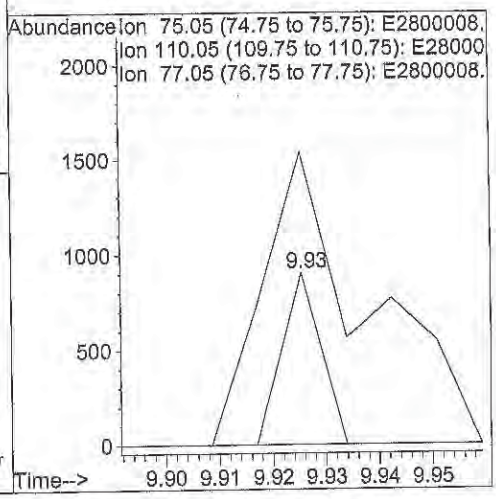


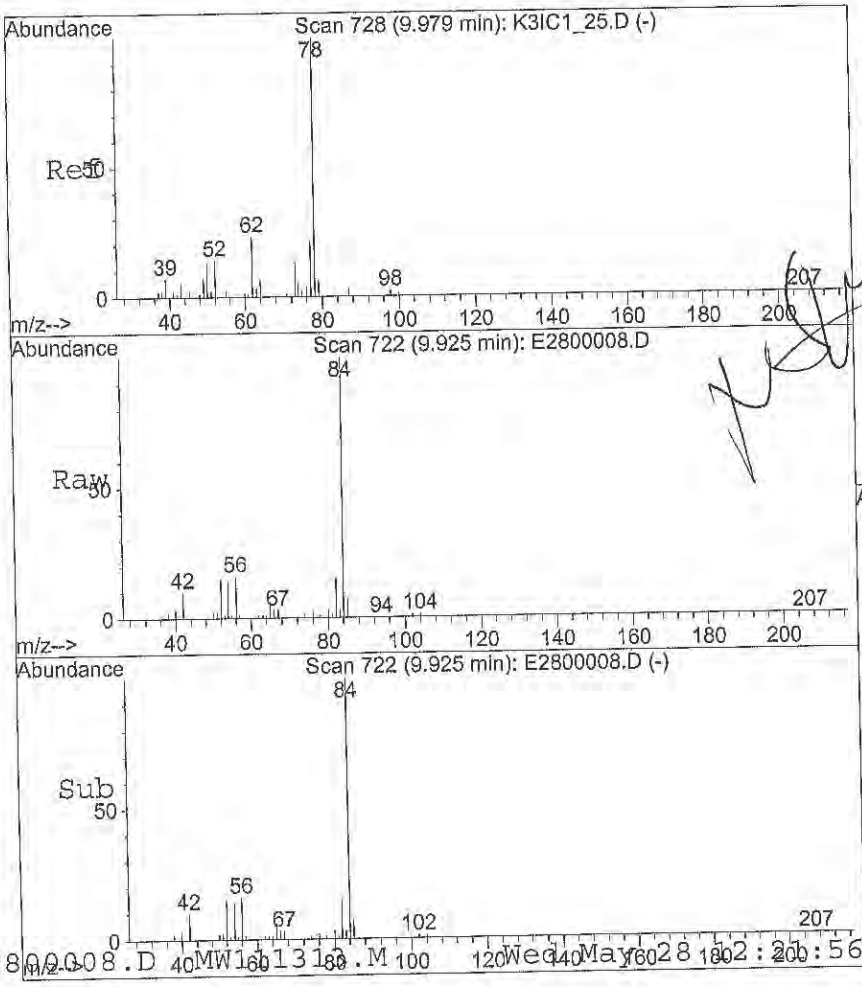


#29
1,1-Dichloropropene
Concen: 0.07 ug/L
RT: 9.93 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 75 Resp: 458

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	458.5	25.0	37.4#

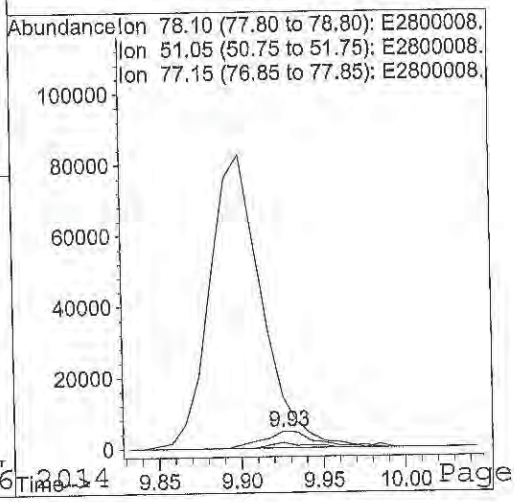


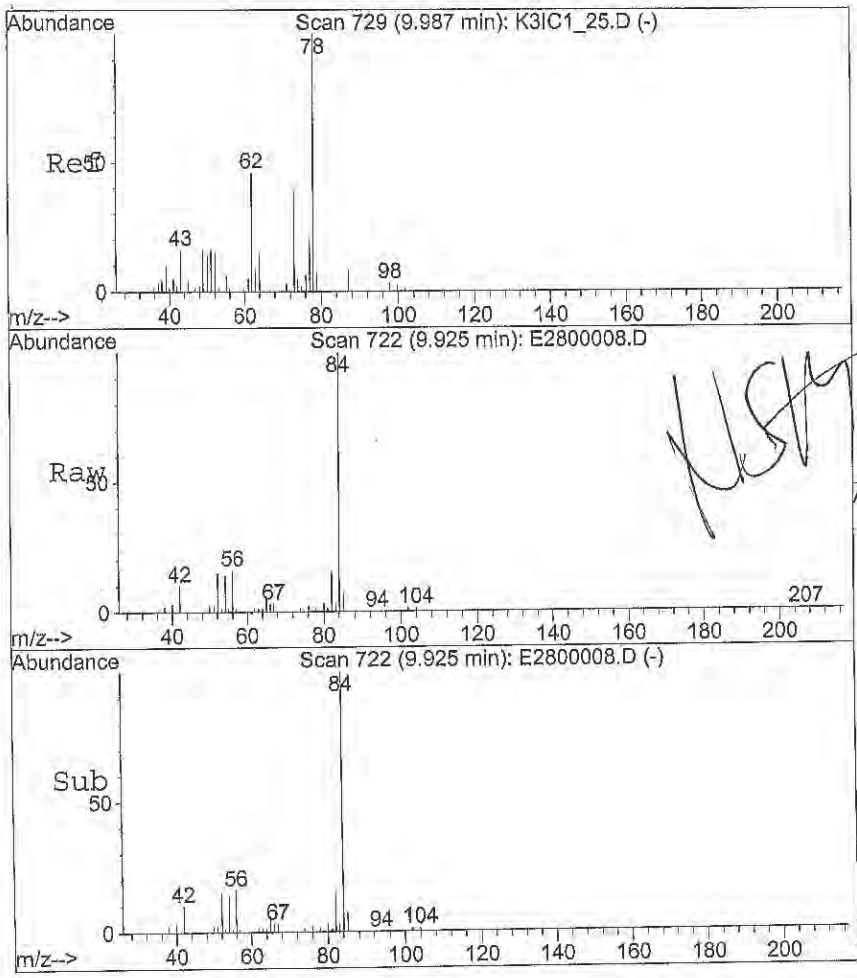


#31
Benzene
Concen: 0.63 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.05 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 78 Resp: 10123

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	20.7	16.6	24.8

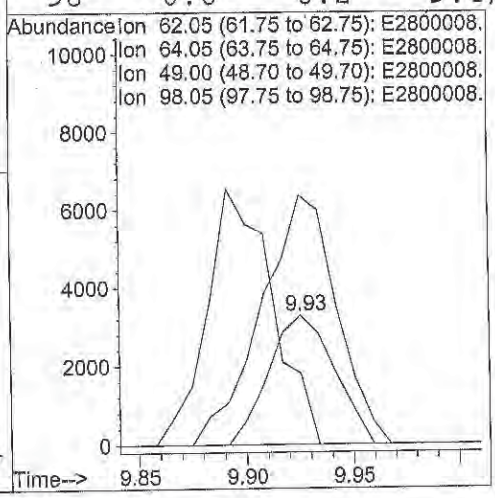


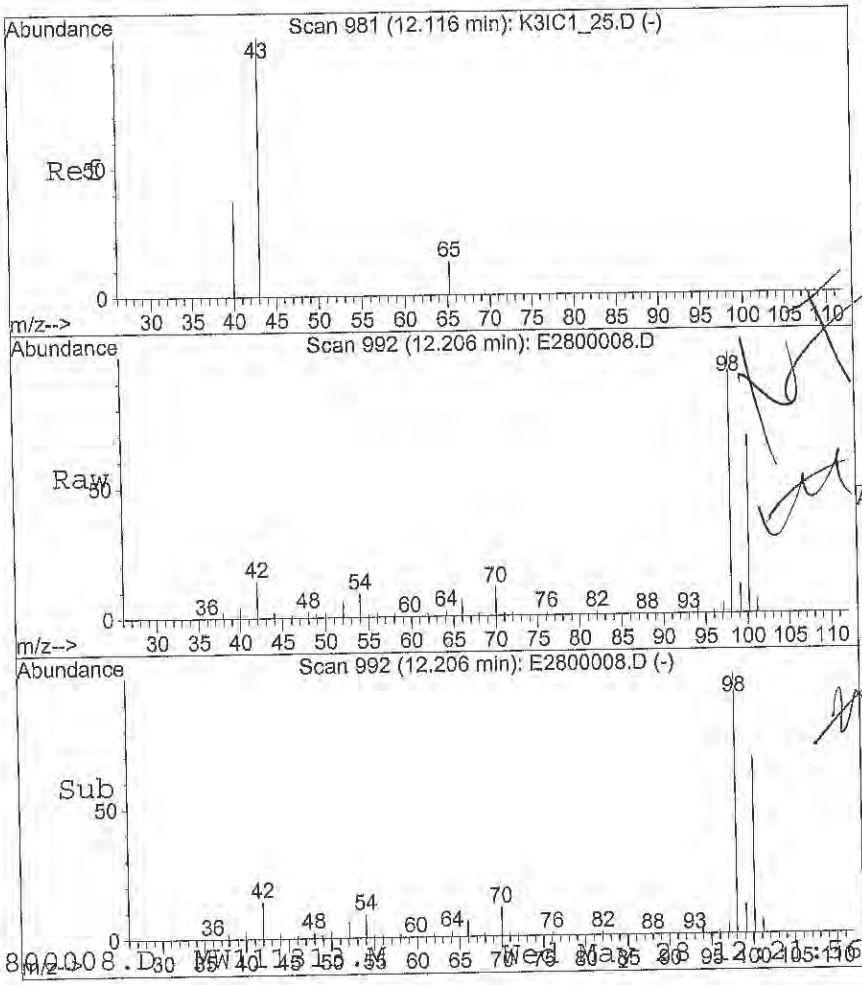


#32
1,2-Dichloroethane
Concen: 1.23 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 62 Resp: 6954

Ion	Ratio	Lower	Upper
62	100		
64	222.9	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

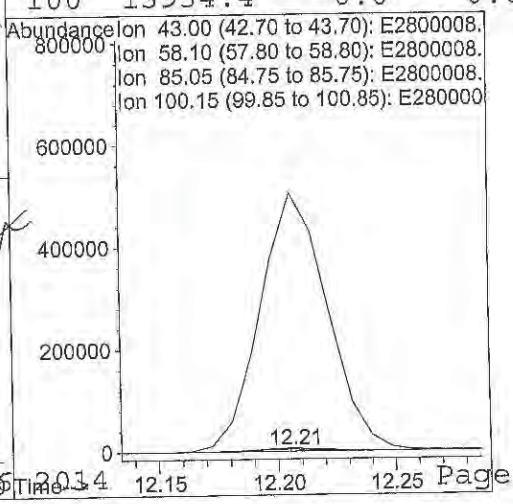


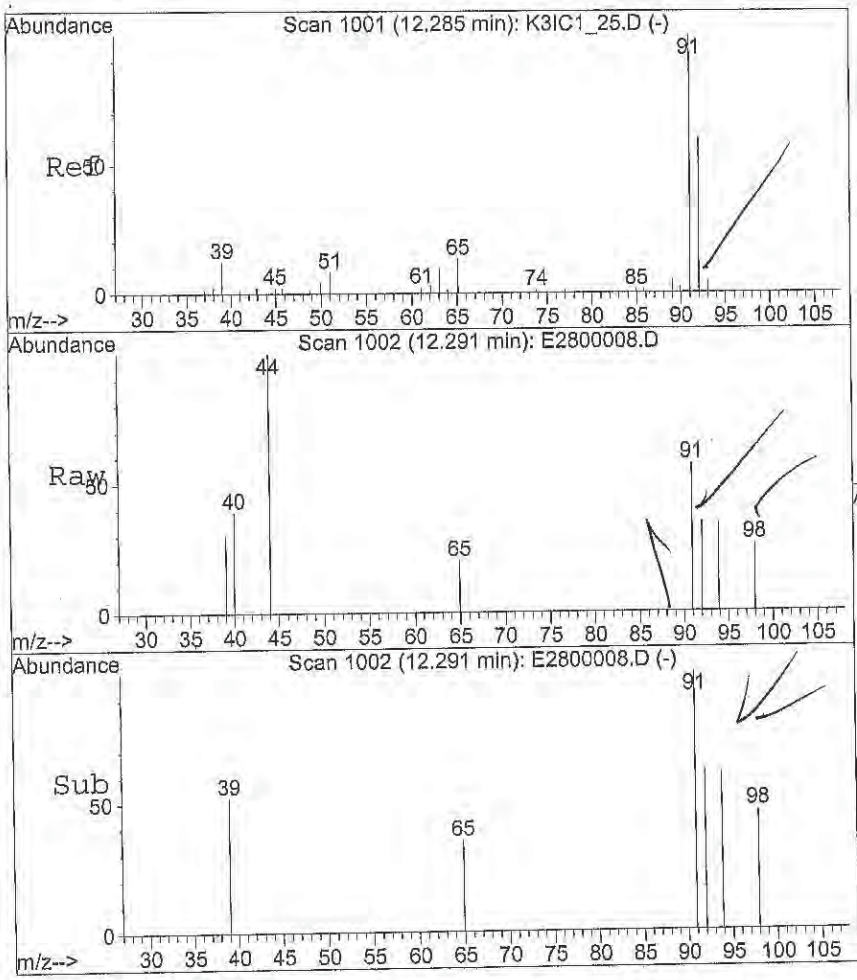


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.71 ug/L
RT: 12.21 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 43 Resp: 7168

Ion	Ratio	Lower	Upper
43	100		
58	157.1	0.0	0.0#
85	0.0	0.0	0.0
100	13934.4	0.0	0.0#

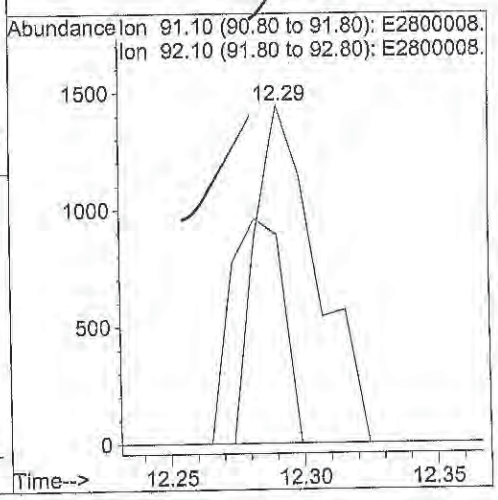


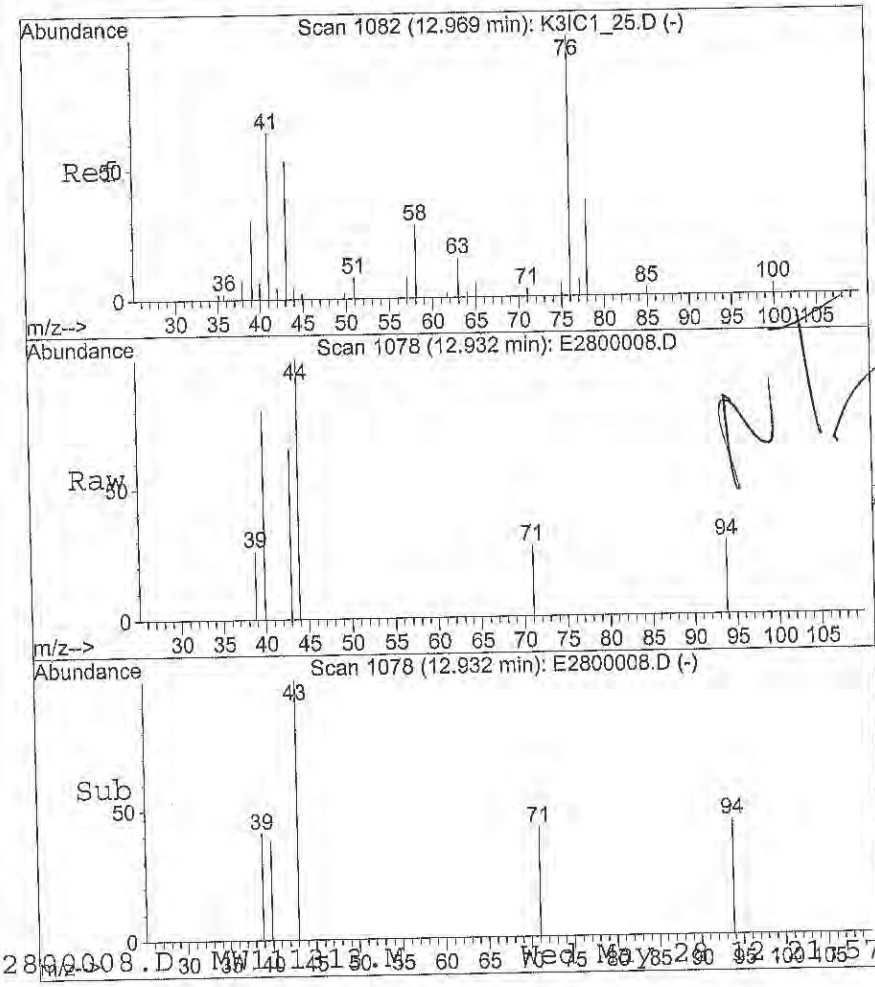


#41
Toluene
Concen: 0.13 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 91 Resp: 2320

Ion	Ratio	Lower	Upper
91	100		
92	57.4	47.4	71.0

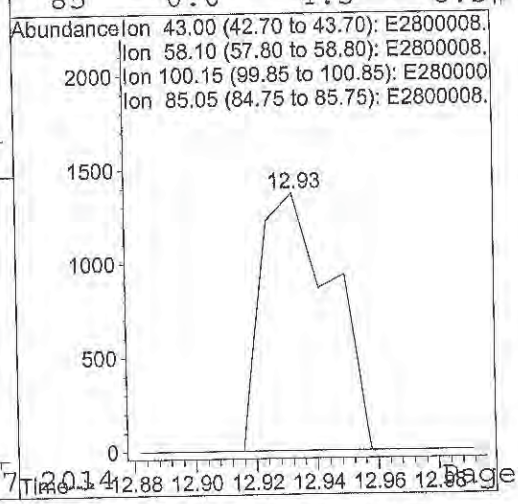


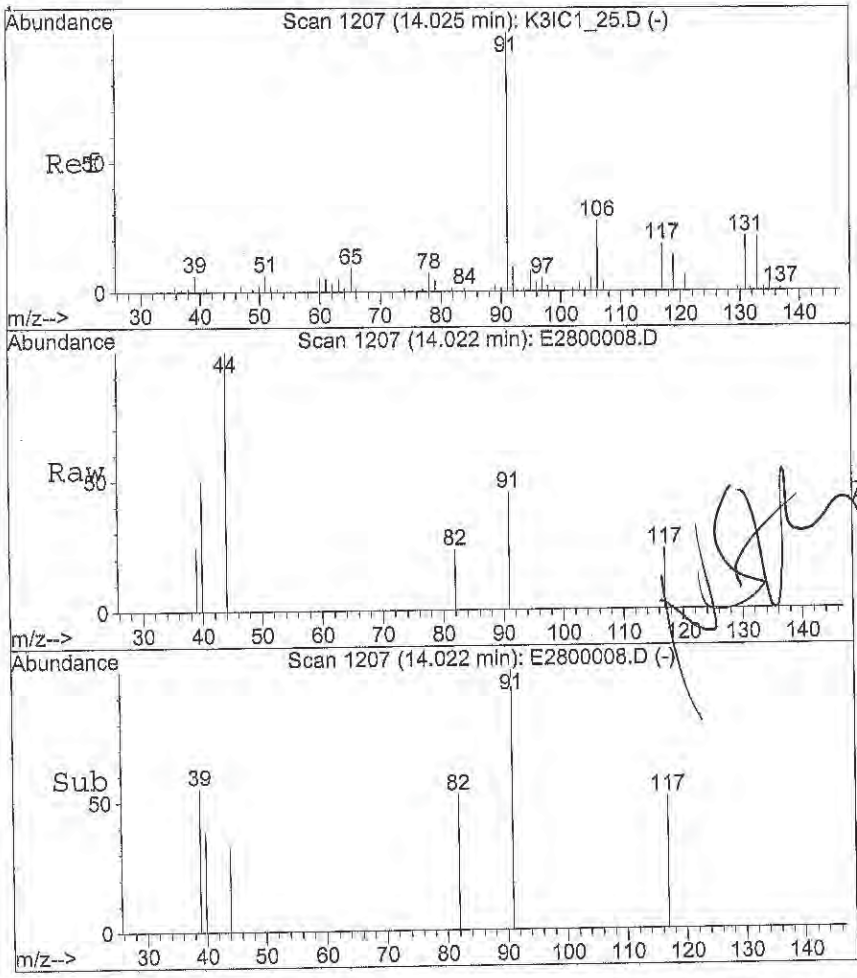


#46
2-Hexanone
Concen: 0.77 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.04 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 43 Resp: 2227

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

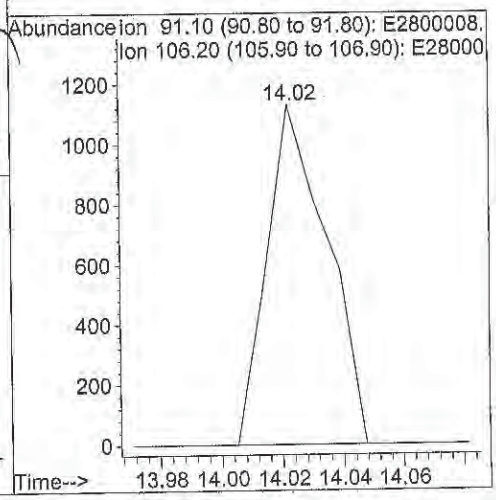


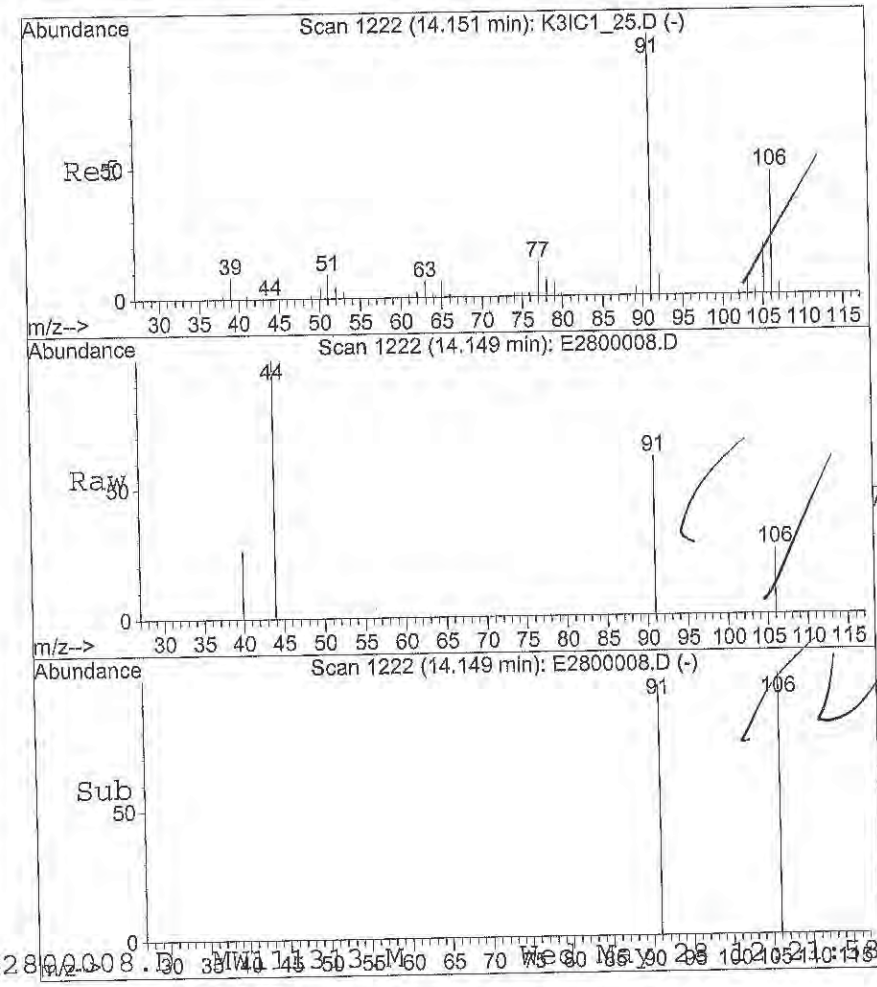


#51
Ethylbenzene
Concen: 0.07 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 91 Resp: 1536

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

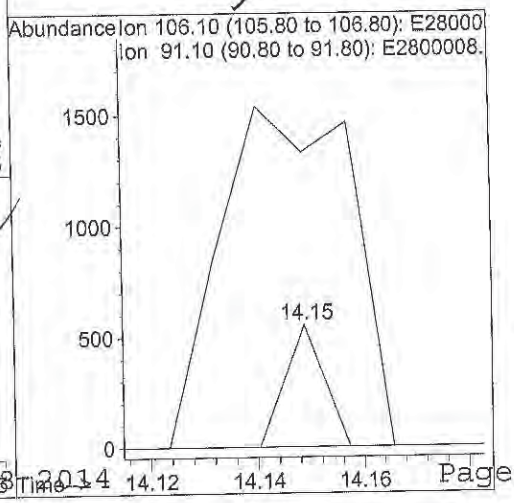


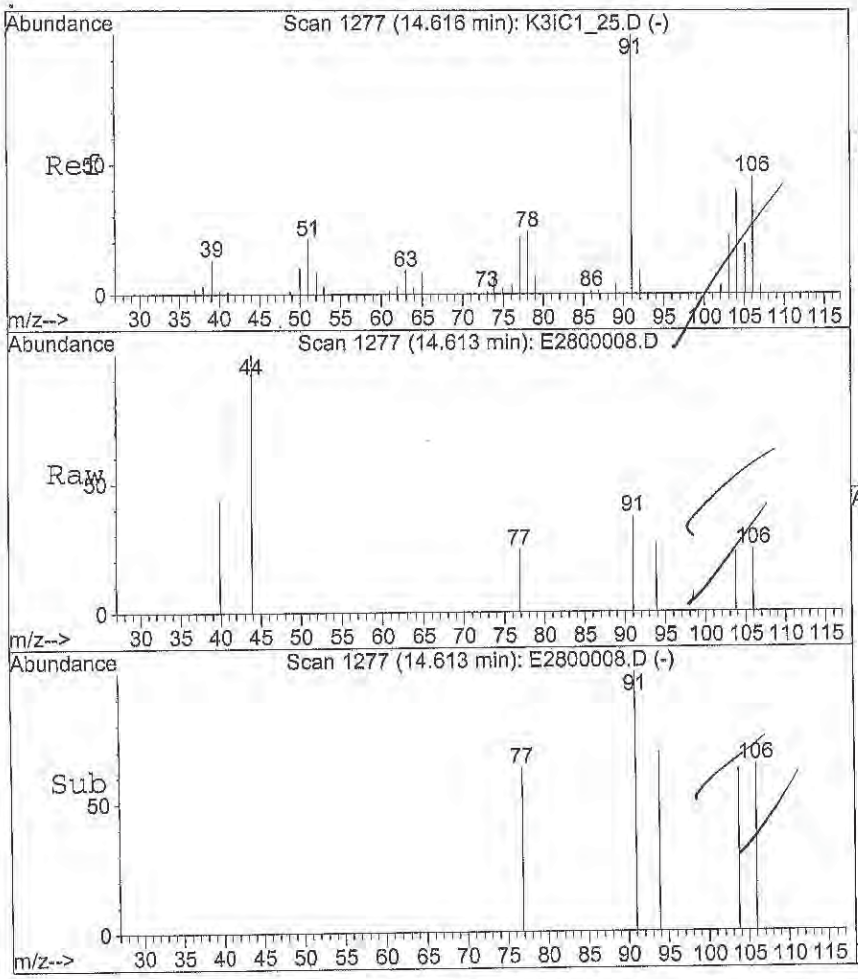


#52
m,p-Xylenes
Concen: 0.04 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:106 Resp: 281

Ion	Ratio	Lower	Upper
106	100		
91	935.2	177.1	265.7#

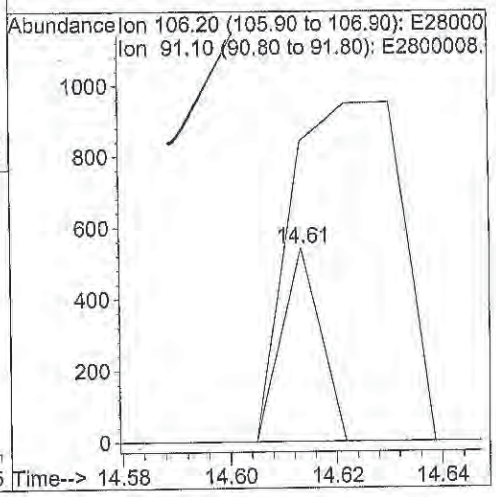


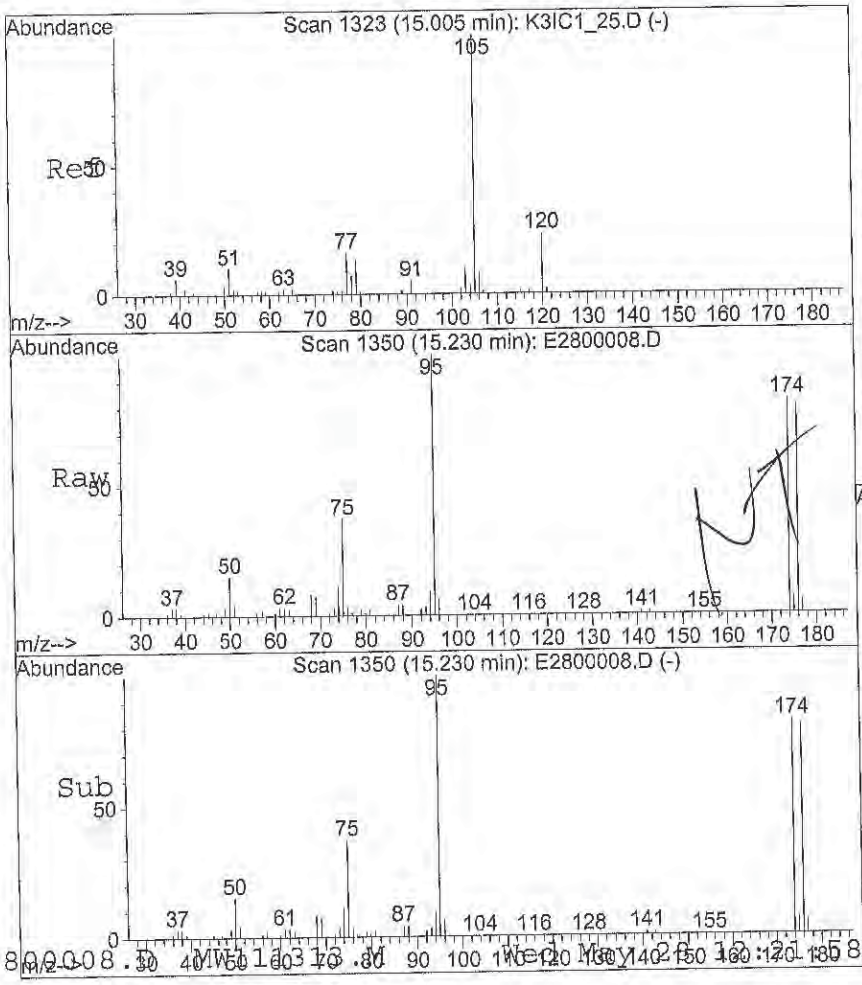


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:106 Resp: 275

Ion	Ratio	Lower	Upper
106	100		
91	505.1	179.0	268.6#

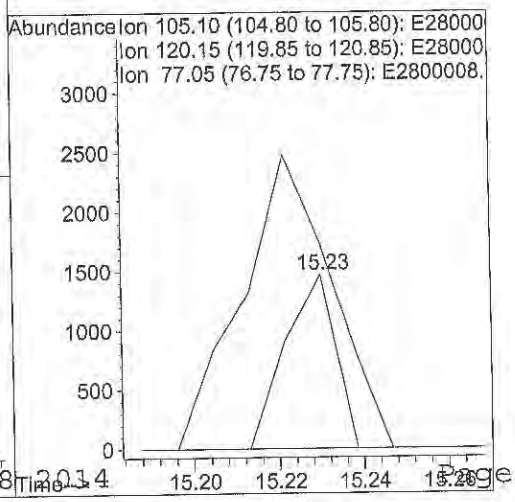


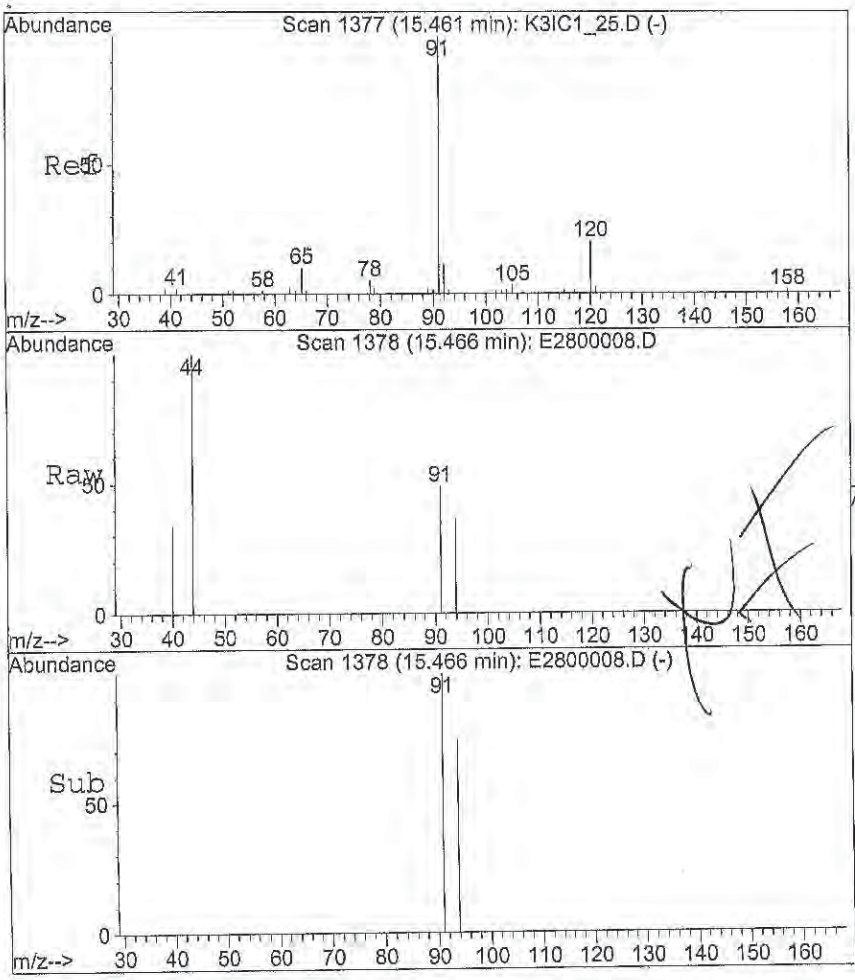


#56
Isopropylbenzene
Concen: 0.06 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.23 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:105 Resp: 1208

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	300.0	13.1	19.7#

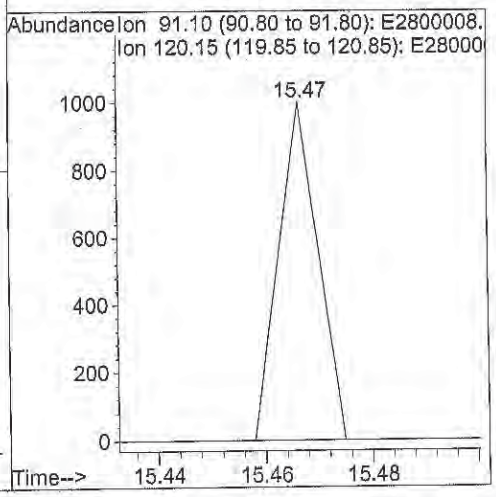


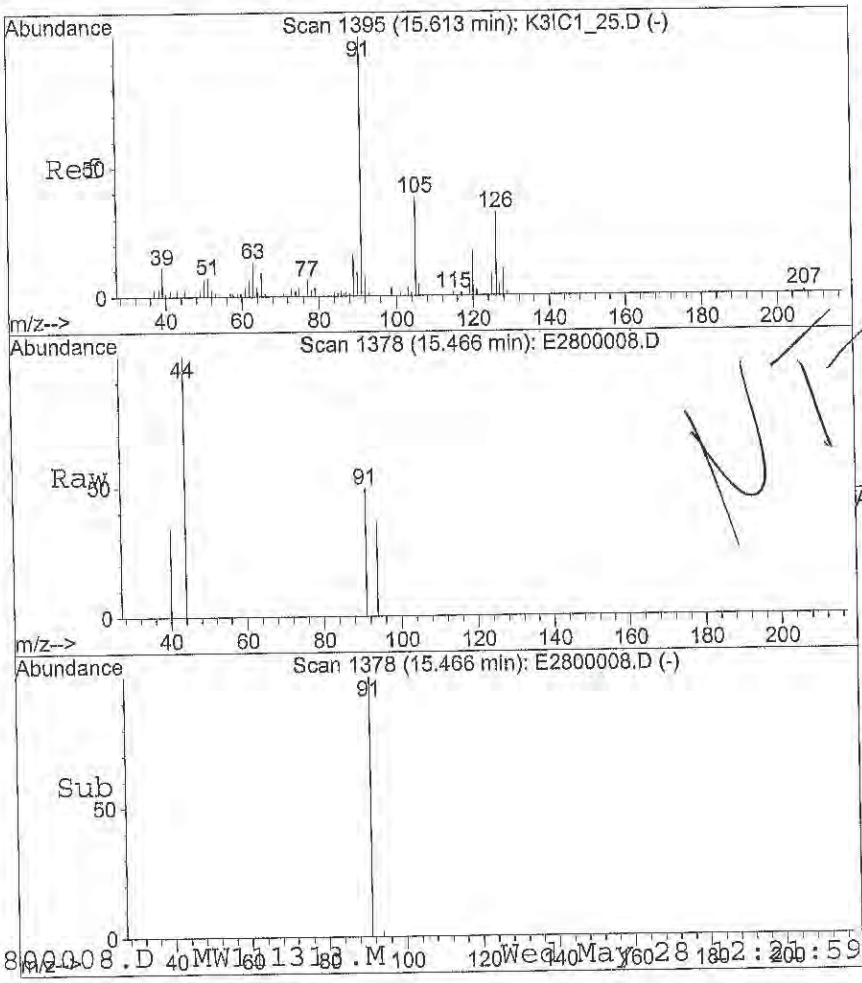


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.47 min Scan# 1378
Delta R.T. 0.01 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 91 Resp: 506

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

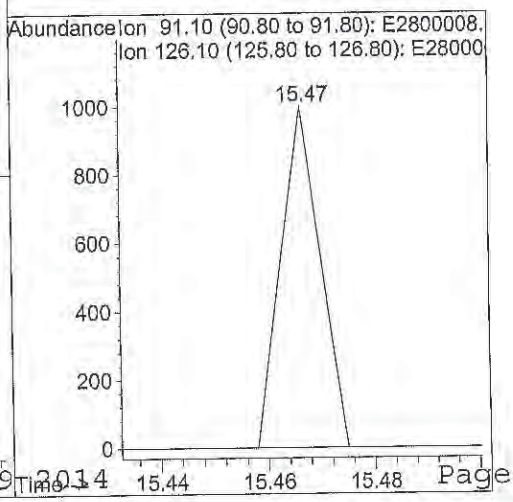


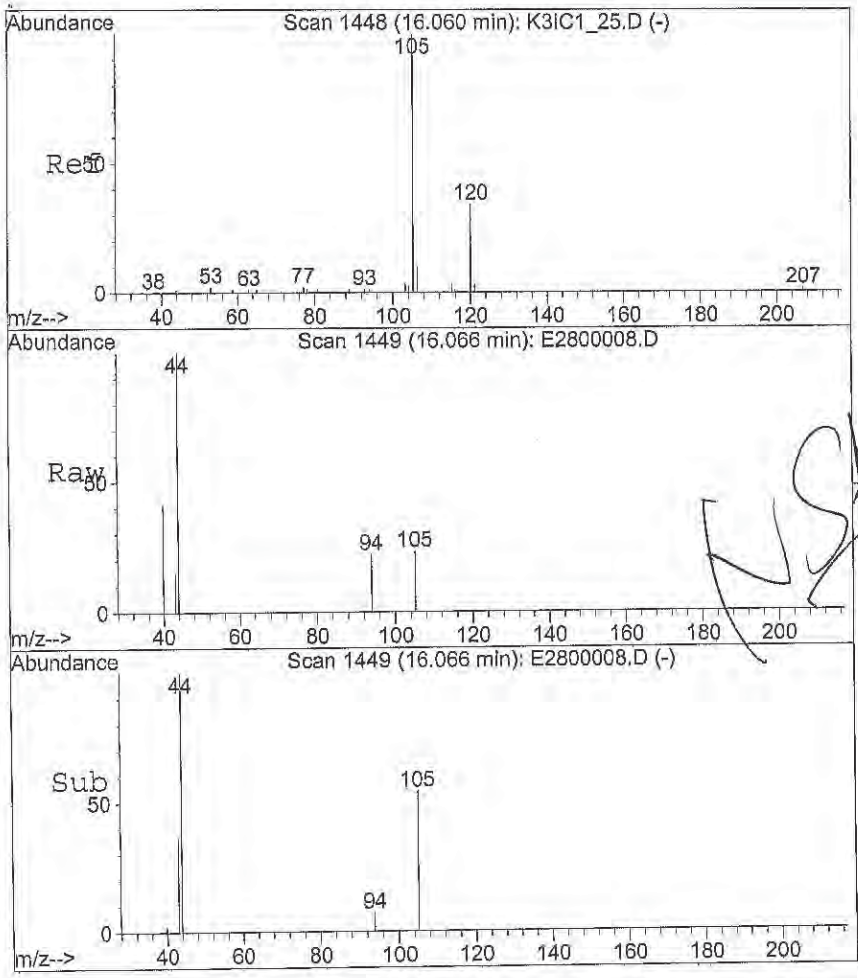


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.47 min Scan# 1378
Delta R.T. -0.15 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion: 91 Resp: 506

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

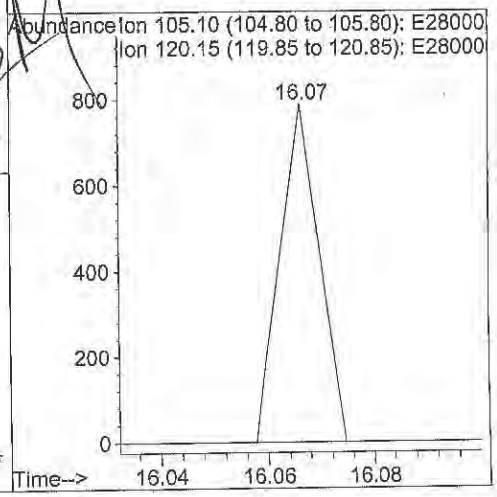


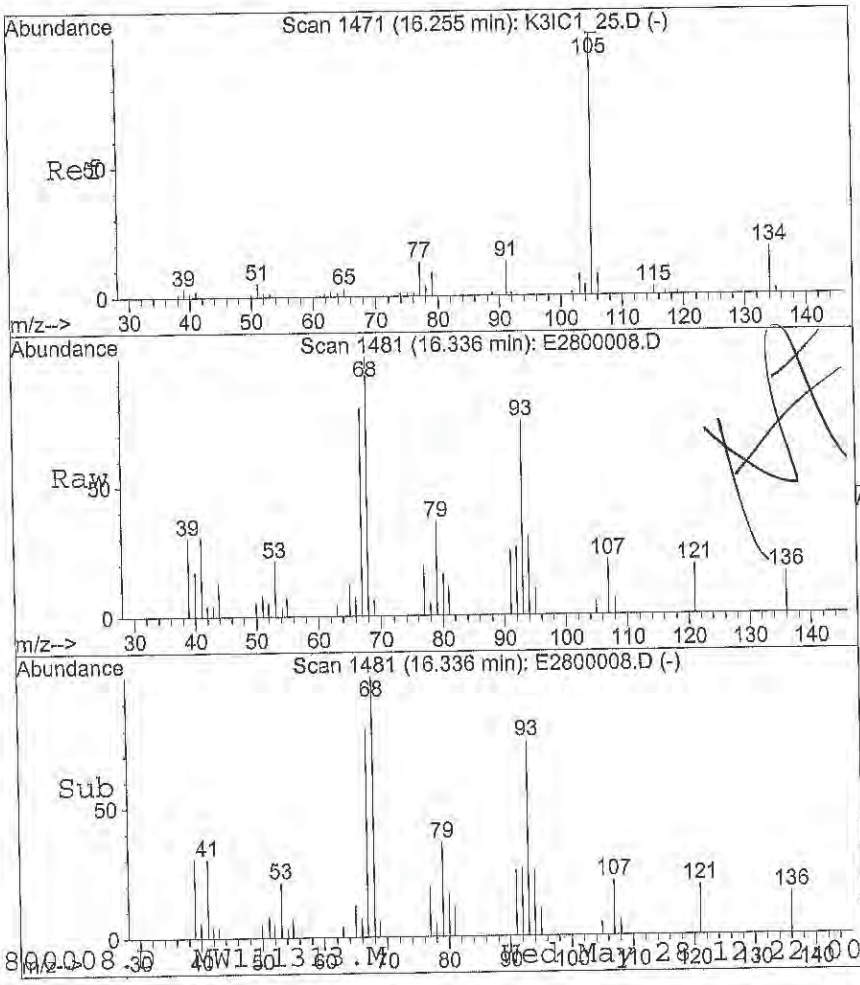


#67
1,2,4-Trimethylbenzene
Concen: 0.02 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.01 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:105 Resp: 399

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

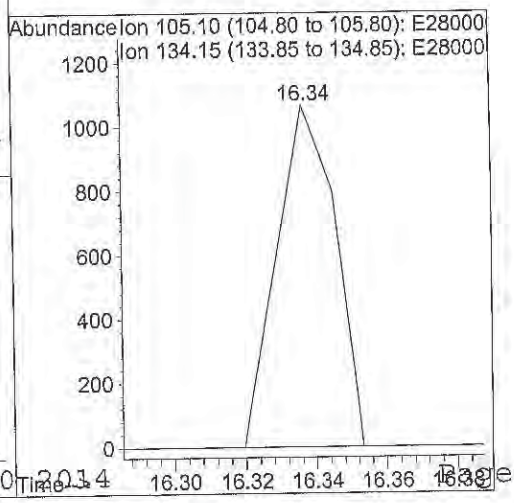


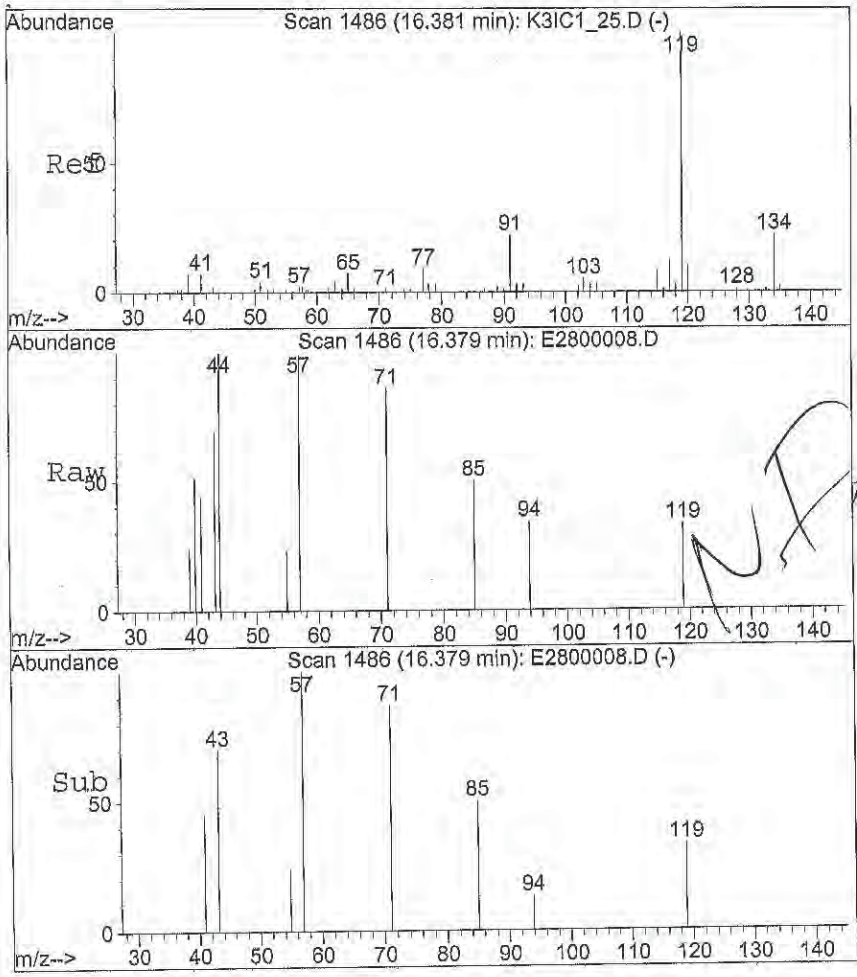


#68
sec-Butylbenzene
Concen: 0.05 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:105 Resp: 1218

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

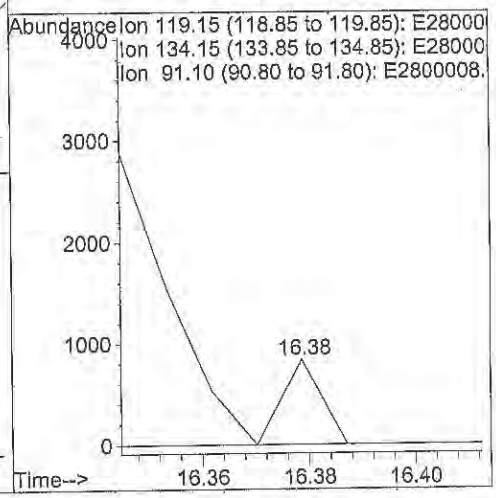


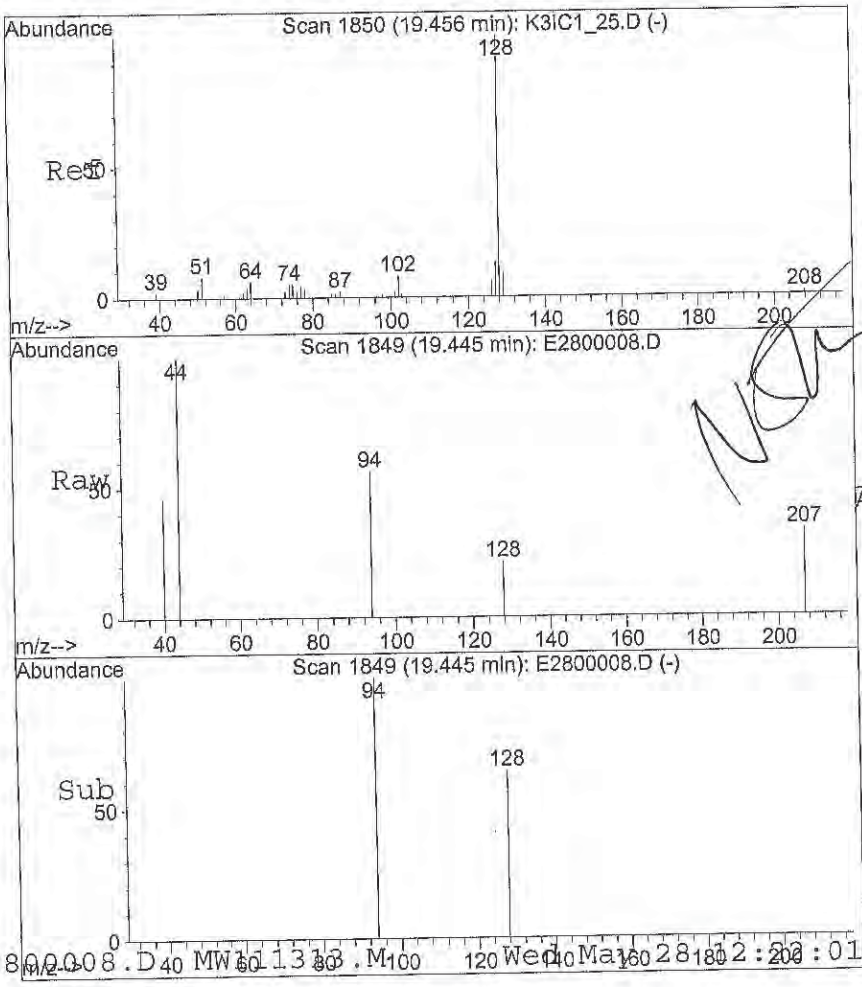


#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:119 Resp: 423

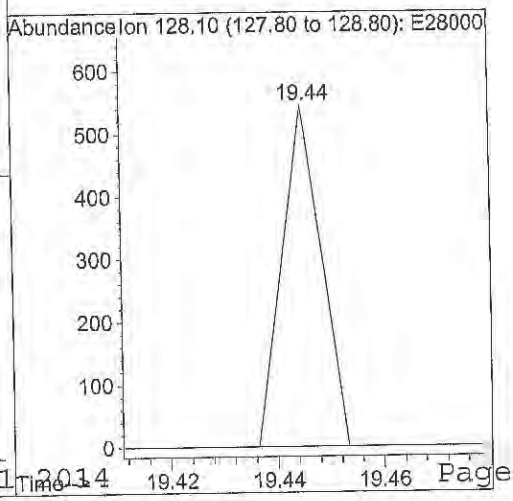
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.44 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2800008.D
Acq: 28 May 2014 11:47 am

Tgt Ion:128 Resp: 276



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800008.D Vial: 7
Acq On : 28 May 2014 11:47 am Operator: DN
Sample : 3E42801-07 Inst : GC/MS Ins
Misc : 100cc SVL-516-SA5D-SV-6.0-7.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 12:23 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1702842	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1327452	12.50	ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	706606	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	476094	10.75	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.00%			
3) Chloroform-d (SU6)	9.18	84	707571	11.14	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.12%			
4) Methylene Chloride-d2 (SU5	7.06	86	414968	11.17	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.36%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	450359	14.88	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 119.04%			
6) Benzene-d6 (SU7)	9.93	84	1387995	10.39	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 83.12%			
8) Toluene-d8 (SU3)	12.21	98	1487149	11.81	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.48%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	713660	13.73	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 109.84%			

Target Compounds Qvalue

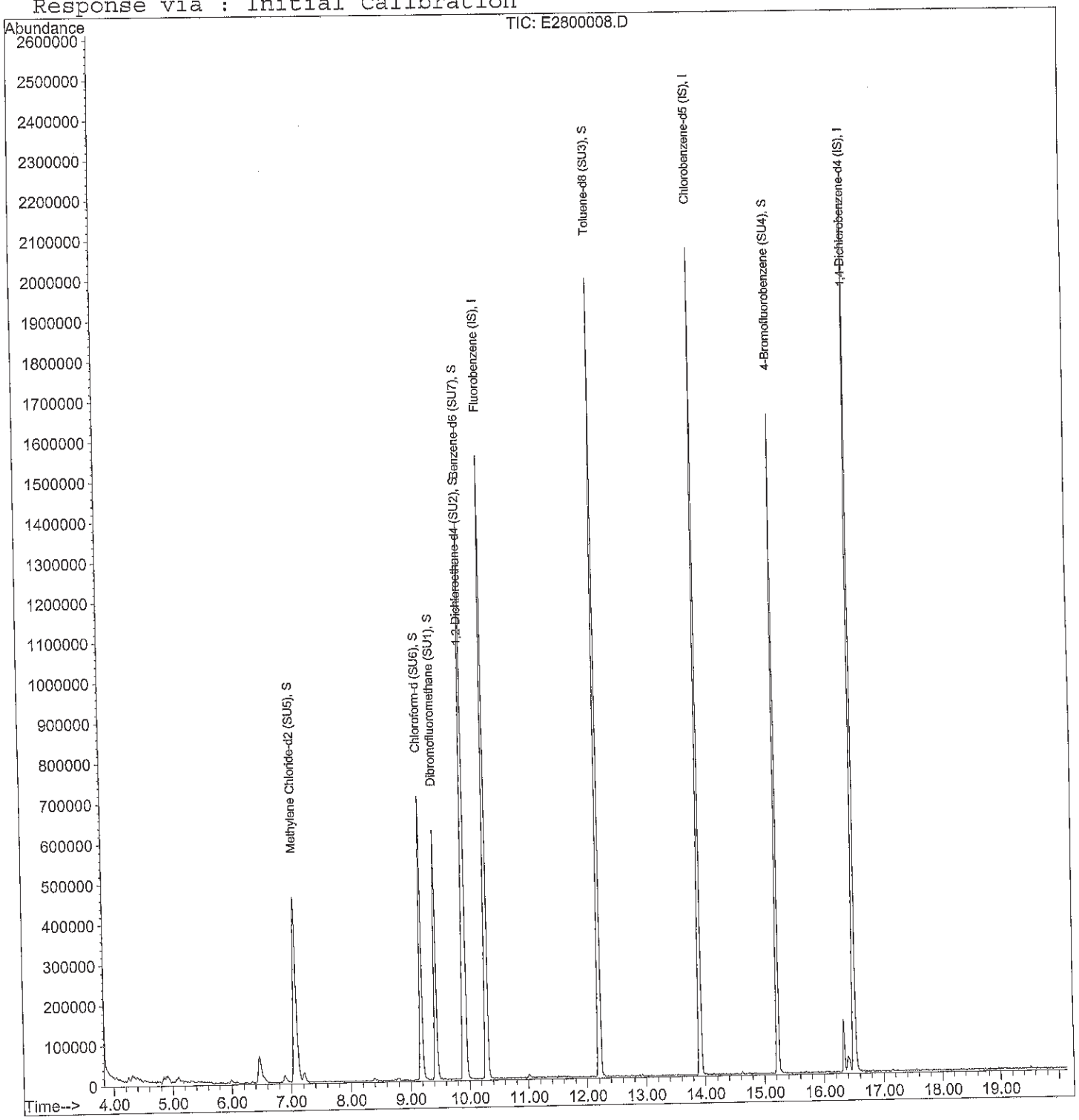
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800008.D
Acq On : 28 May 2014 11:47 am
Sample : 3E42801-07
Misc : 100cc SVL-516-SA5D-SV-6.0-7.0
MS Integration Params: rteint.p
Quant Time: May 28 12:23 19114

Vial: 7
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800009.D
Acq On : 28 May 2014 12:16 pm
Sample : 3E42801-08
Misc : 100cc SVL-516-SA5D-SV-14.0-15.0
MS Integration Params: rteint.p
Quant Time: May 28 12:39 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1630177	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1266889	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	700521	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	470798	11.58 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	92.64%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	448247	11.60 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	92.80%	
39) Toluene-d8 (SU3)	12.20	98	1416688	11.99 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.92%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	724371	13.98 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	111.84%	

Target Compounds					Qvalue
4) Chloromethane	4.41	50	7133	1.39 ~~ug/L #~~ 0.24	66
6) Bromomethane	5.08	96	4550	0.76 ~~ug/L #~~	1
7) Chloroethane	5.23	64	2108	2.24 ~~ug/L #~~	32
8) (F11) Trichlorofluorometha	5.64	101	1569	0.35 ~~ug/L #~~ 0.01	16
9) (F113) 1,1,2-Trichloro-tri	6.34	151	3852	1.20 ug/L #0.024	53
11) Acetone	6.45	58	1827	180.85 ~~ug/L #~~	1
12) (IPA) Leak Check Compound	6.47	45	159436	813.91 ~~ug/L #~~ 5.4	83
13) Carbon disulfide	6.84	76	17001	1.25 ~~ug/L #~~	94
14) Methylene Chloride	7.07	84	5854	1.31 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.89	59	2399	8.63 ~~ug/L #~~	77
24) Chloroform	9.21	83	1362	0.16 ~~ug/L #~~ 0.01	18
25) (ETBE) 2-ethoxy 2-methyl p	8.46	59	270	0.02 ~~ug/L #~~	44
29) 1,1-Dichloropropene	9.92	75	296	0.05 ~~ug/L #~~	1
31) Benzene	9.98	78	2629	0.17 ~~ug/L #~~	69
32) 1,2-Dichloroethane	9.92	62	6134	1.13 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	7671	3.03 ~~ug/L #~~	100
41) Toluene	12.30	91	3995	0.23 ug/L 0.0046	92
46) 2-Hexanone	12.93	43	1862	0.67 ~~ug/L #~~	37
51) Ethylbenzene	14.02	91	1789	0.09 ug/L #0.0018	87
52) m,p-Xylenes	14.15	106	1170	0.17 ug/L 0.0034	91
54) Styrene	14.64	104	1932	-0.68 ~~ug/L #~~	57
56) Isopropylbenzene	15.00	105	328	0.02 ~~ug/L #~~	55

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800009.D Vial: 8
Acq On : 28 May 2014 12:16 pm Operator: DN
Sample : 3E42801-08 Inst : GC/MS Ins
Misc : 100cc SVL-516-SA5D-SV-14.0-15.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 12:39 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

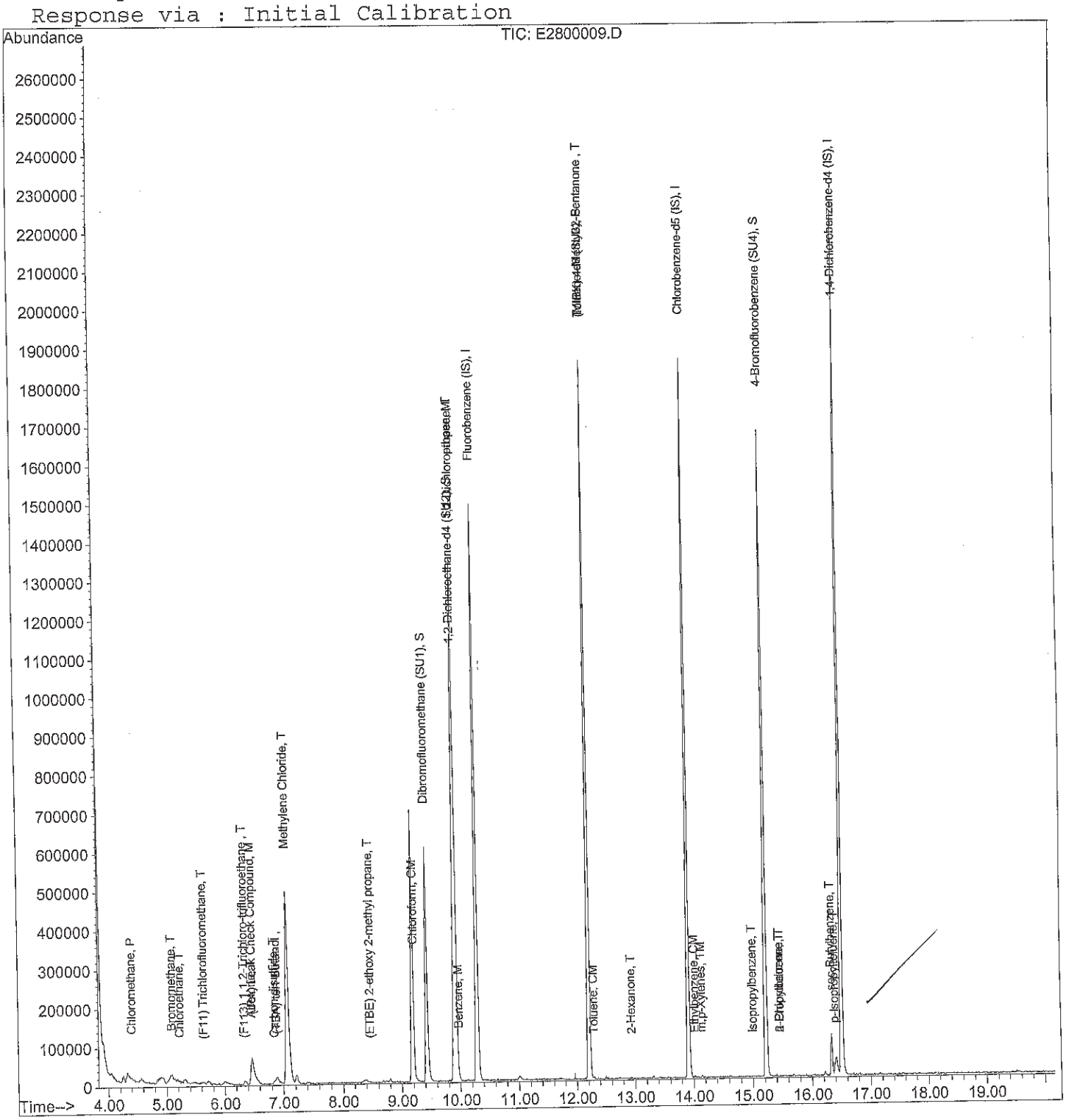
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62) n-Propylbenzene	15.45	91	362	0.01 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.45	91	362	0.02 ~~ug/L #~~	45
68) sec-Butylbenzene	16.33	105	924	0.04 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	256	0.01 ~~ug/L #~~	52

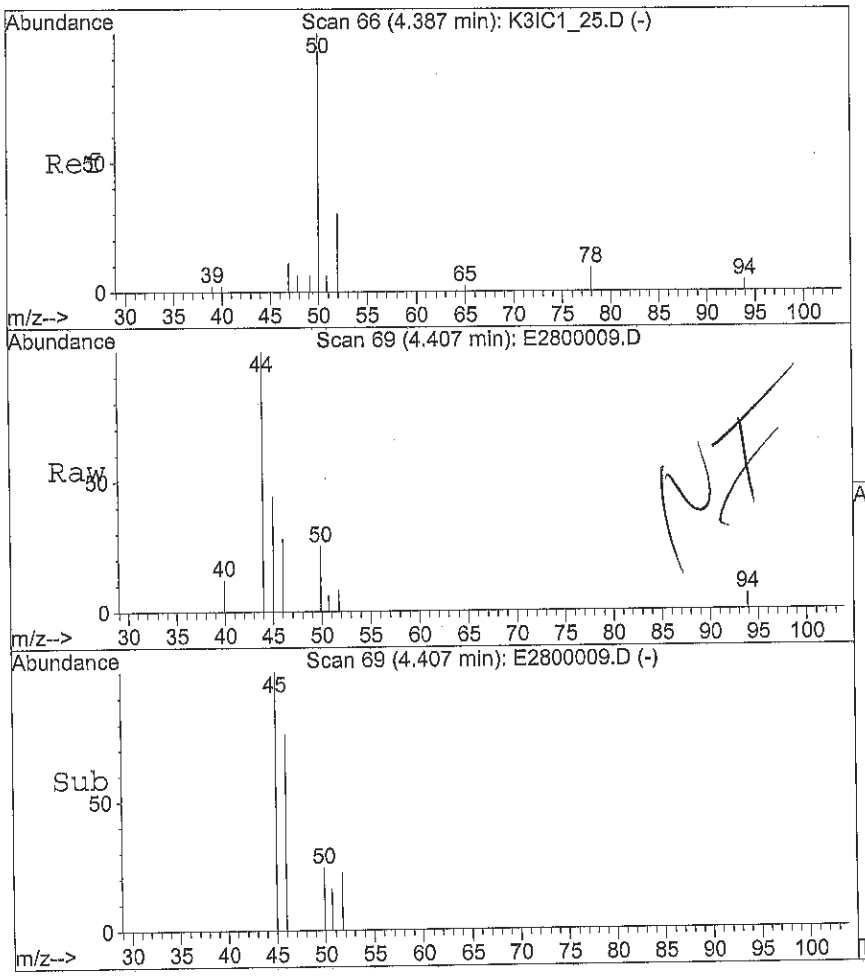
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800009.D Vial: 8
Acq On : 28 May 2014 12:16 pm Operator: DN
Sample : 3E42801-08 Inst : GC/MS Ins
Misc : 100cc SVL-516-SA5D-SV-14.0-15.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 12:39 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

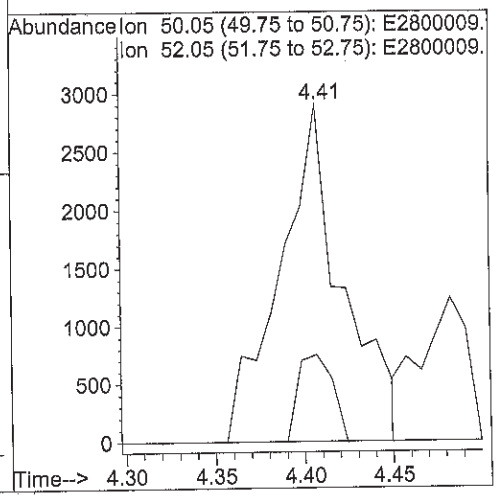


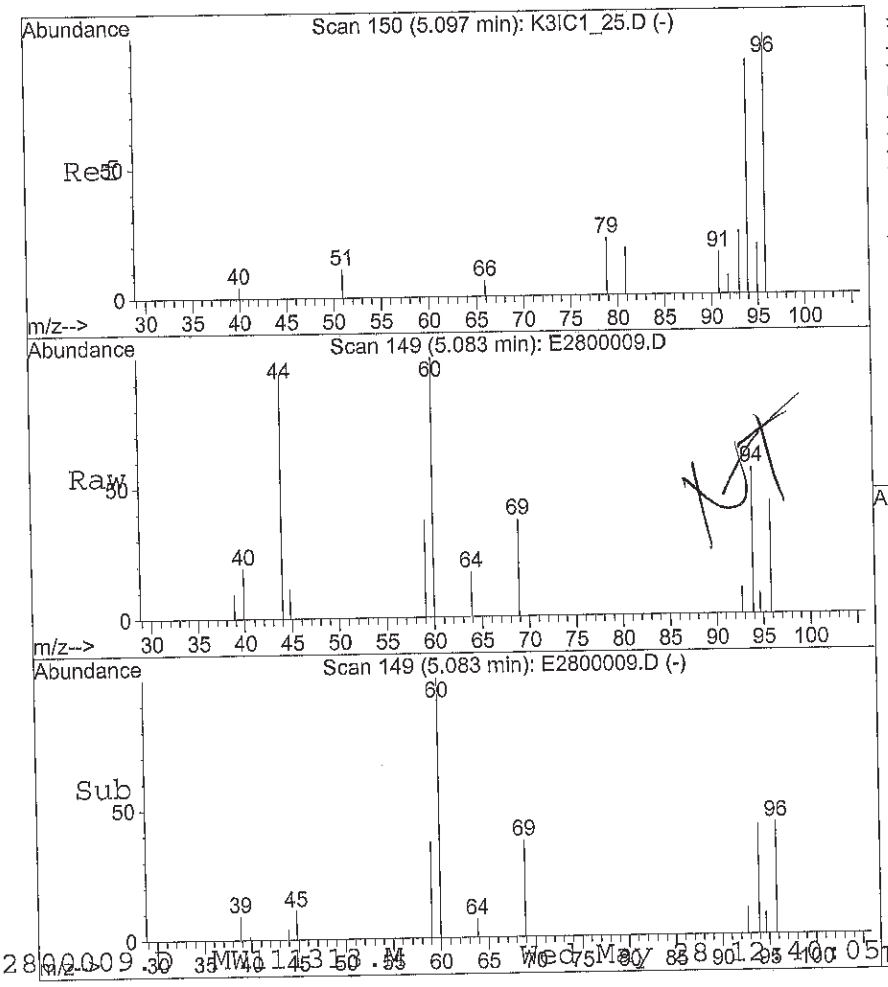


#4
Chloromethane
Concen: 1.39 ug/L
RT: 4.41 min Scan# 69
Delta R.T. 0.02 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 50 Resp: 7133

Ion	Ratio	Lower	Upper
50	100		
52	14.1	26.9	40.3#

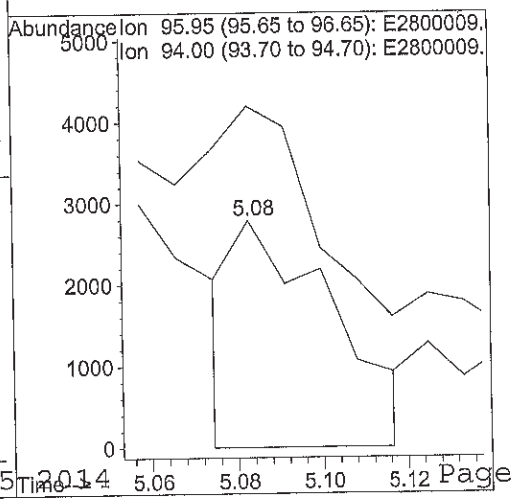


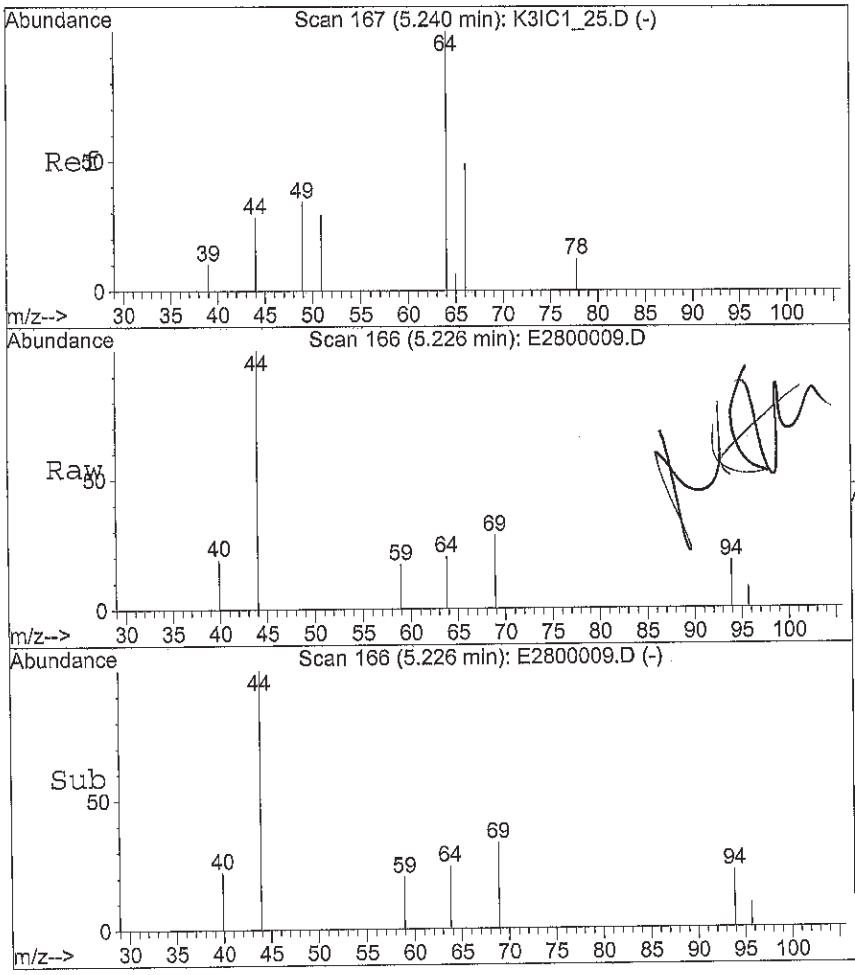


#6
Bromomethane
Concen: 0.76 ug/L
RT: 5.08 min Scan# 149
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 96 Resp: 4550

Ion	Ratio	Lower	Upper
96	100		
94	560.5	101.0	151.4#

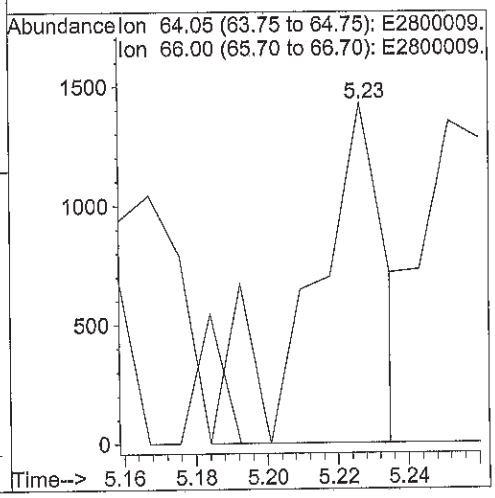


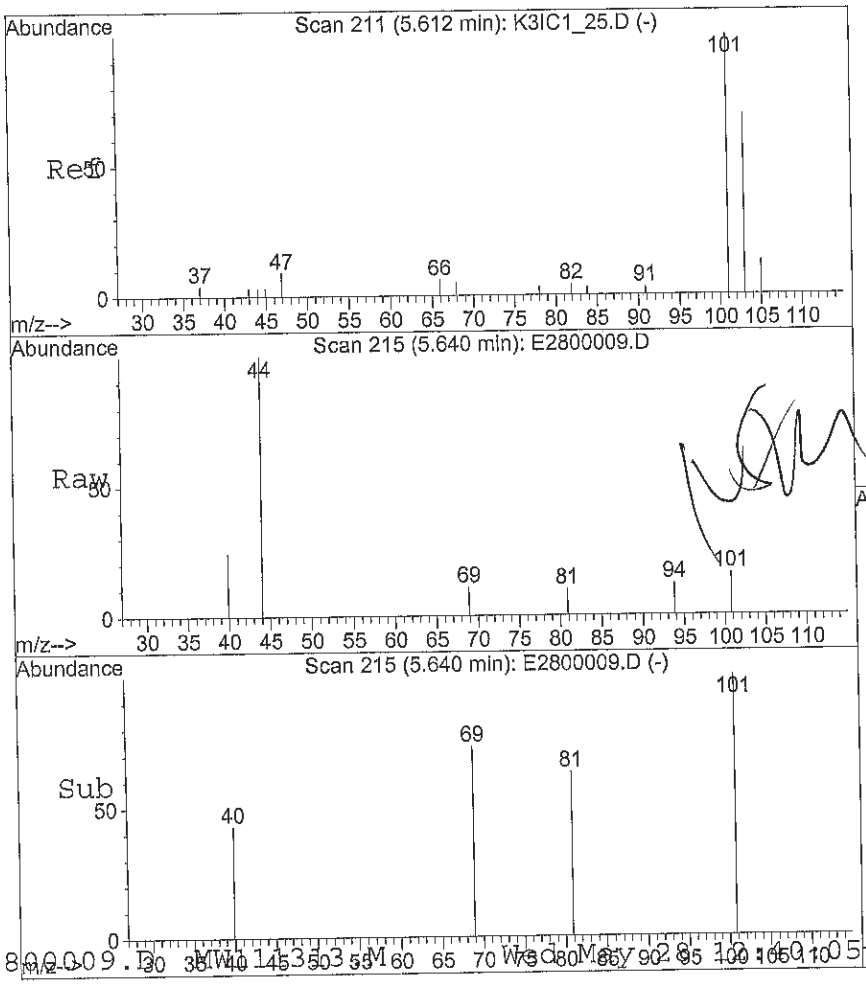


#7
Chloroethane
Concen: 2.24 ug/L
RT: 5.23 min Scan# 166
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 64 Resp: 2108

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

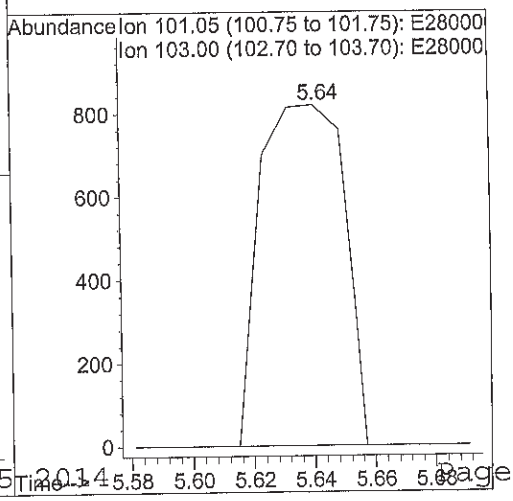


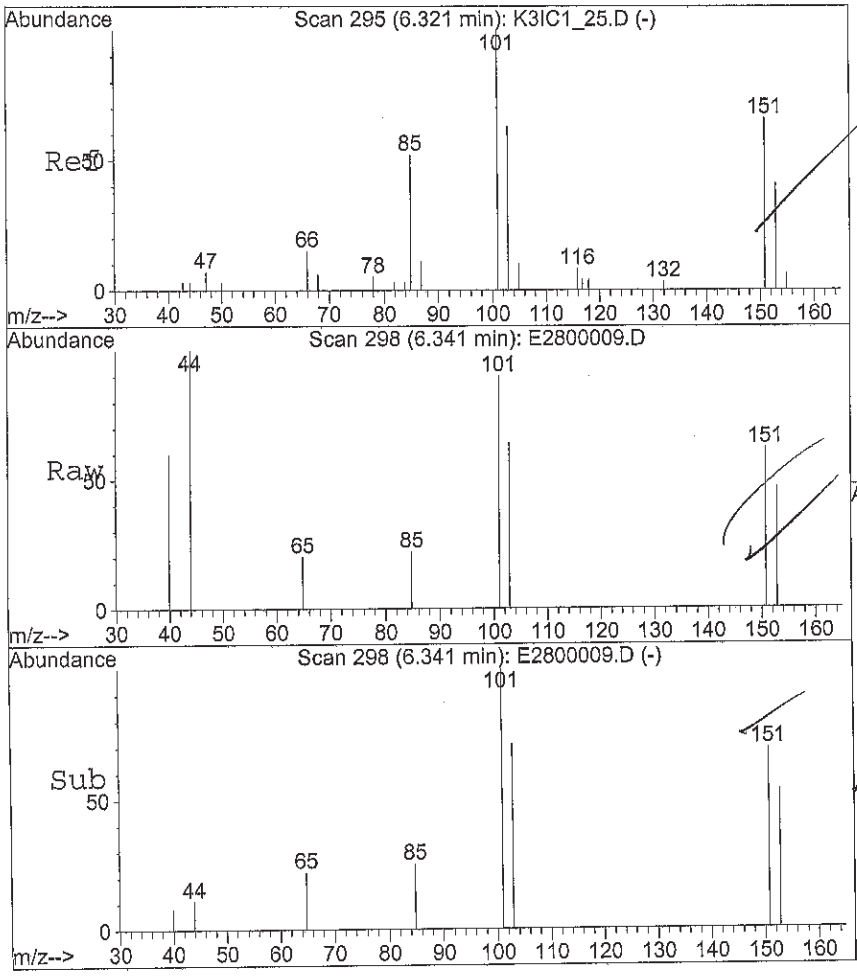


#8
(F11) Trichlorofluoromethane
Concen: 0.35 ug/L
RT: 5.64 min Scan# 215
Delta R.T. 0.03 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion:101 Resp: 1569

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

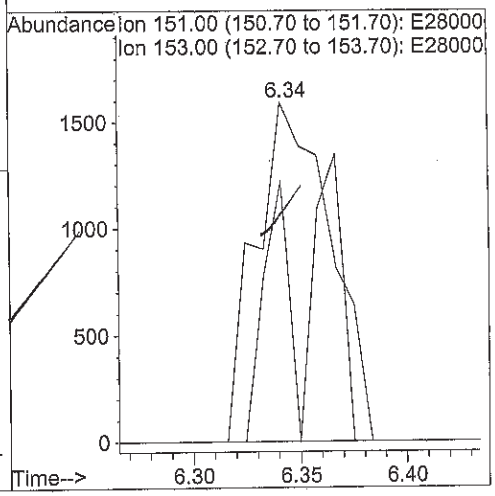


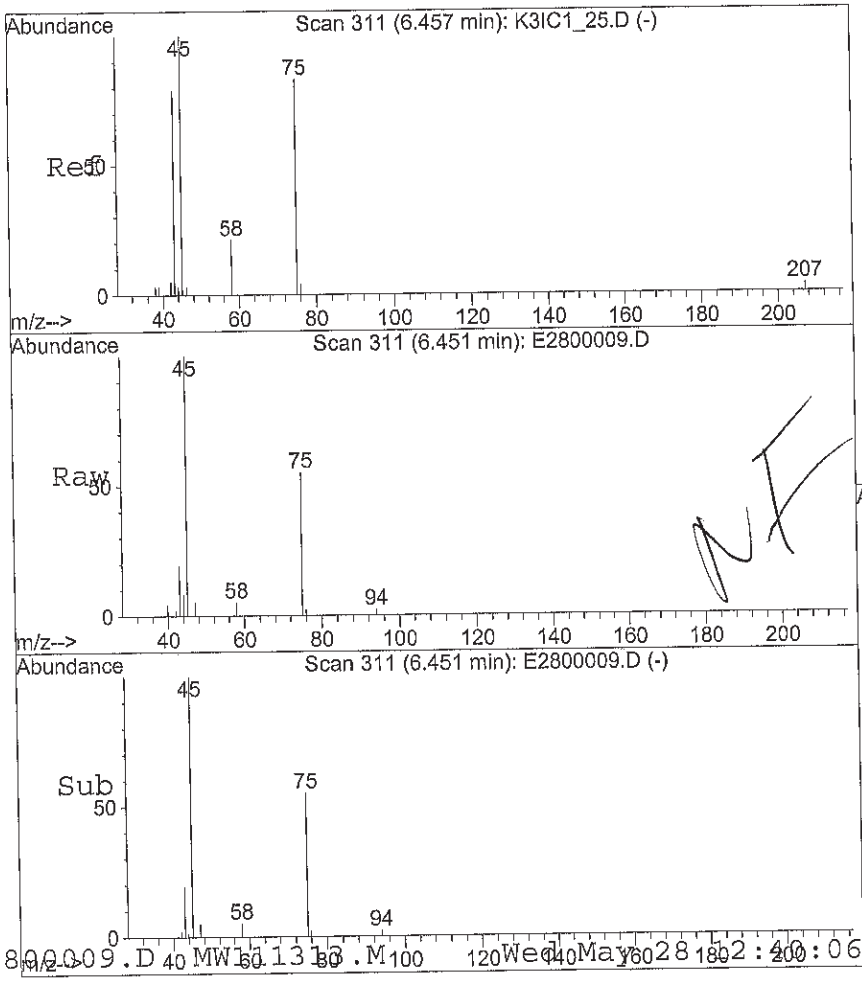


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 1.20 ug/L
RT: 6.34 min Scan# 298
Delta R.T. 0.02 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion:151 Resp: 3852

Ion	Ratio	Lower	Upper
151	100		
153	26.2	49.6	74.4#

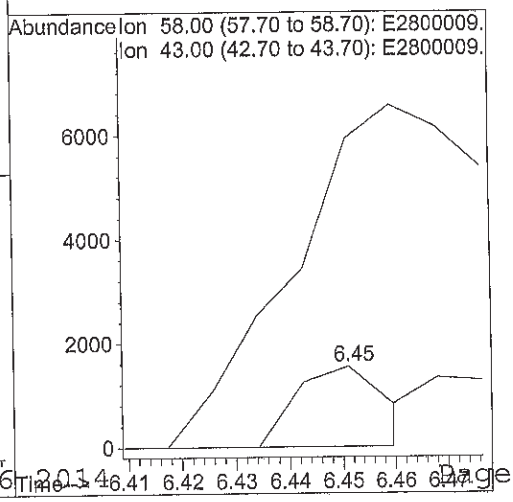


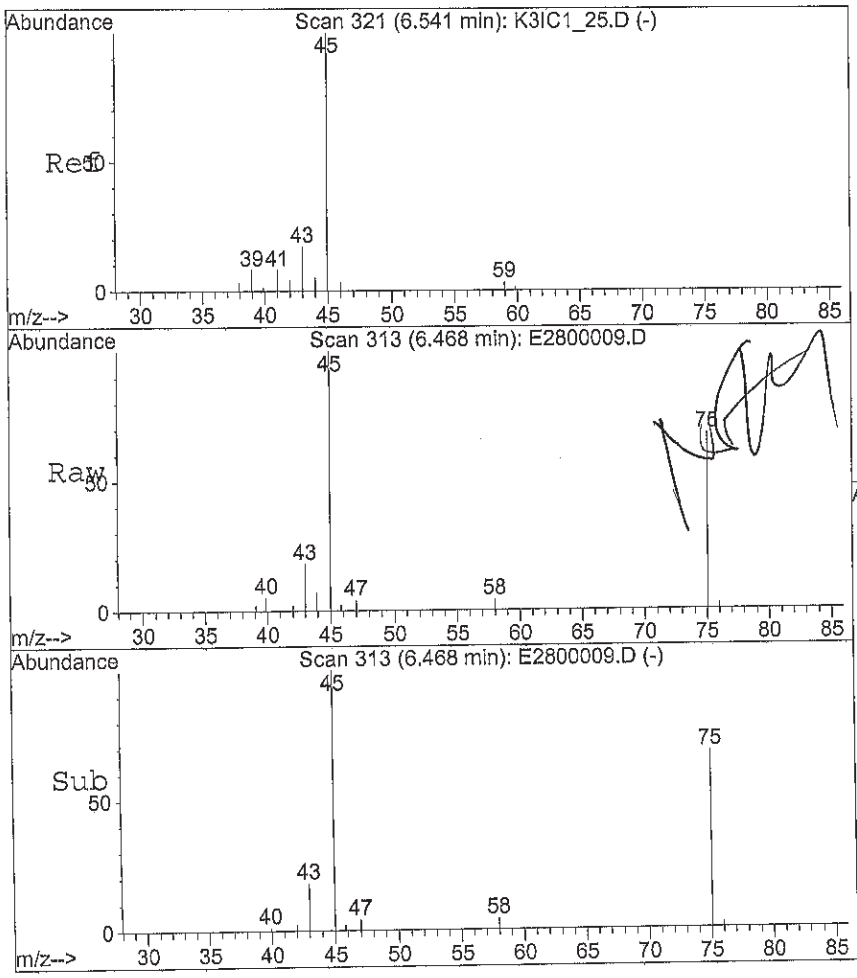


#11
Acetone
Concen: 180.85 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 58 Resp: 1827

Ion	Ratio	Lower	Upper
58	100		
43	0.0	360.9	541.3#

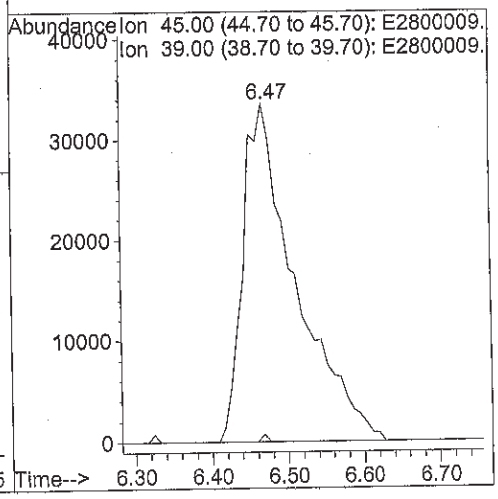


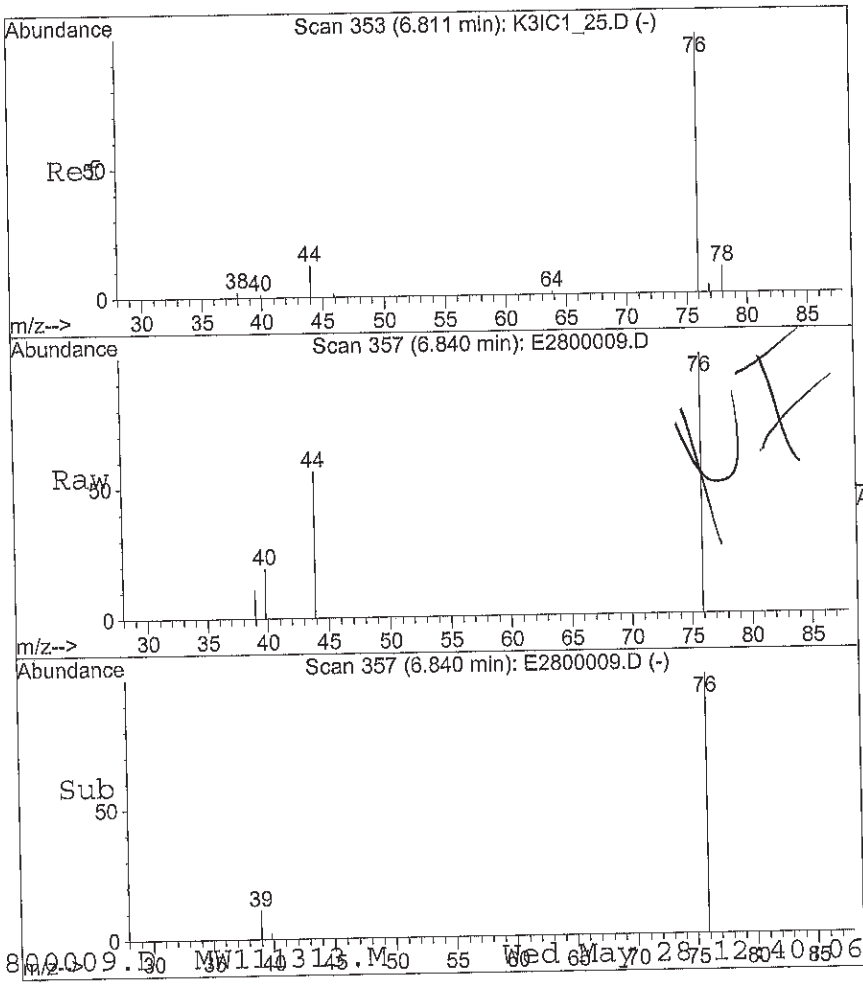


#12
(IPA) Leak Check Compound
Concen: 813.91 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 45 Resp: 159436

Ion	Ratio	Lower	Upper
45	100		
39	0.2	4.9	7.3#

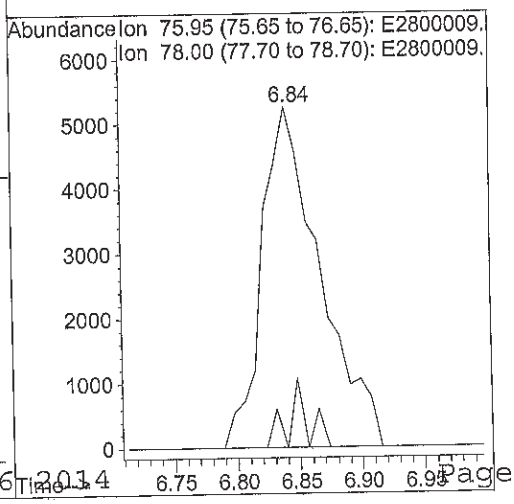


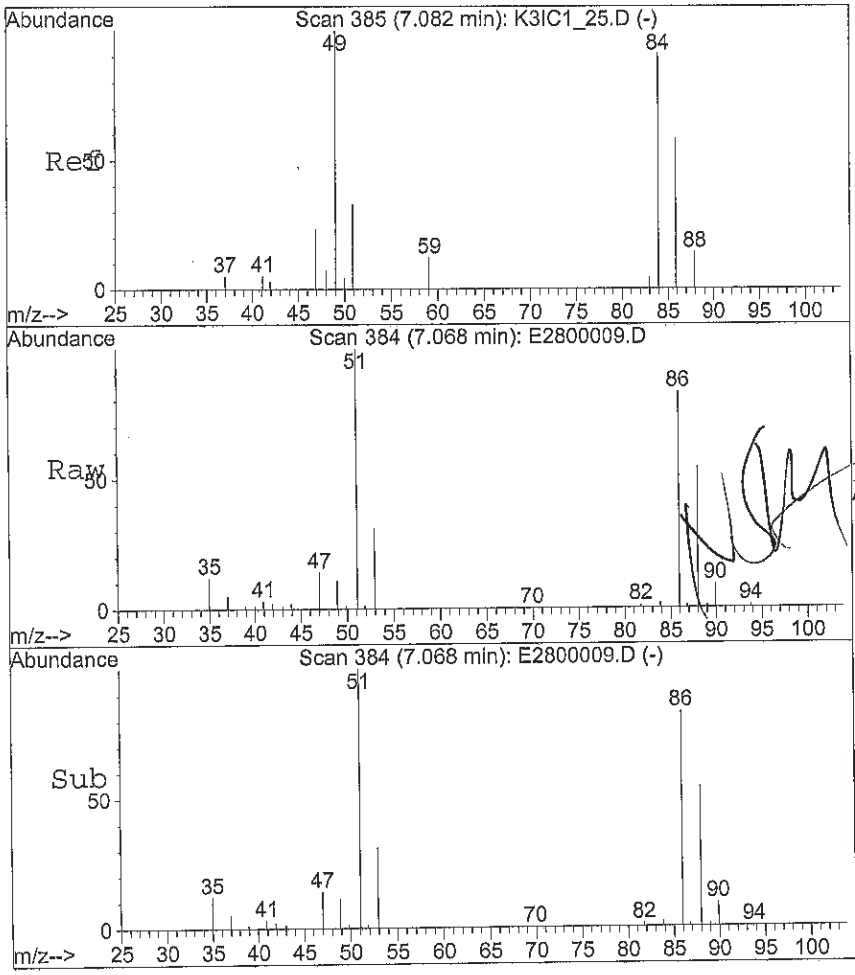


#13
Carbon disulfide
Concen: 1.25 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 76 Resp: 17001

Ion	Ratio	Lower	Upper
76	100		
78	6.7	7.0	10.4#

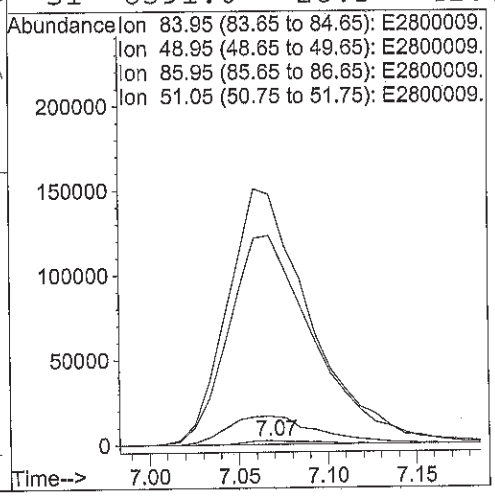


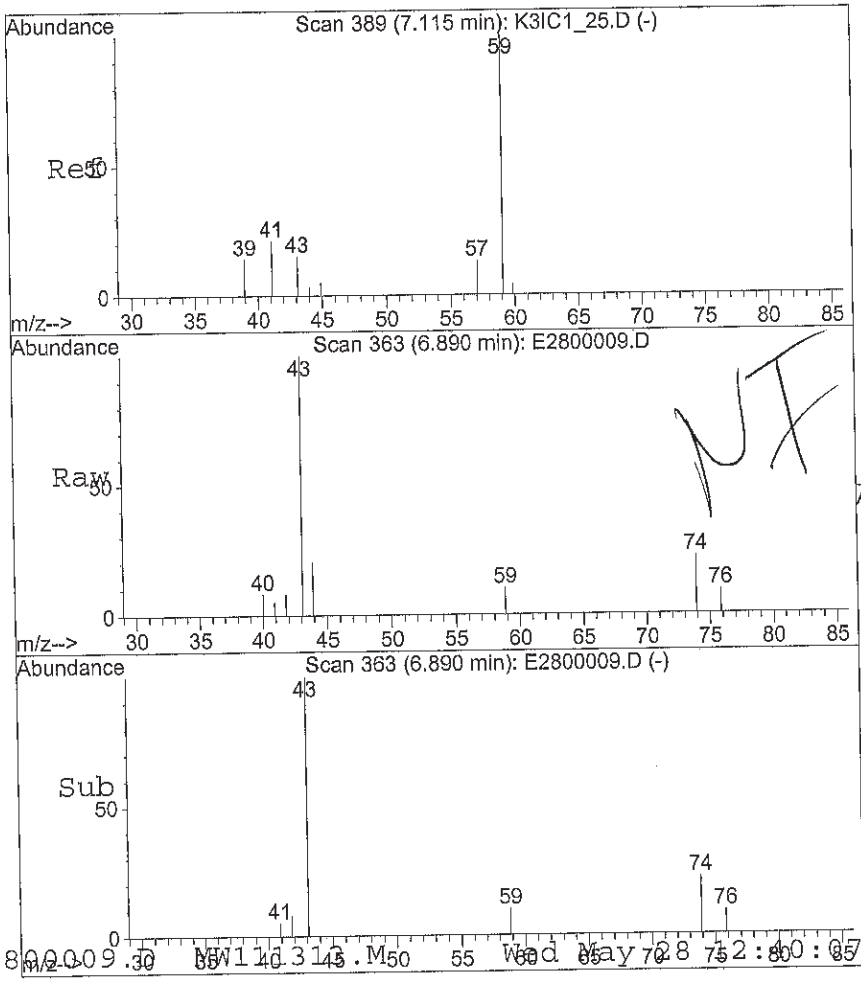


#14
Methylene Chloride
Concen: 1.31 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 84 Resp: 5854

Ion	Ratio	Lower	Upper
84	100		
49	998.3	89.8	134.6#
86	7073.7	51.1	76.7#
51	8391.0	28.5	42.7#

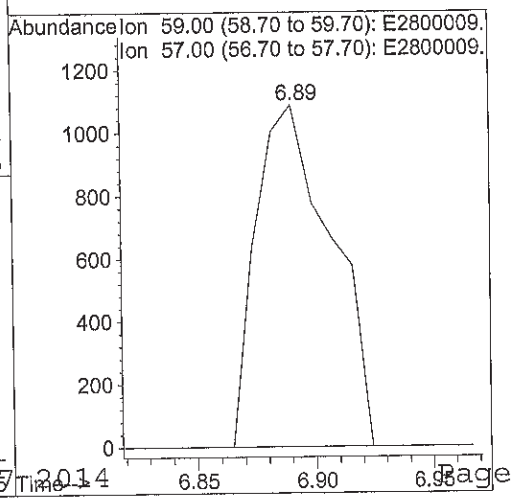


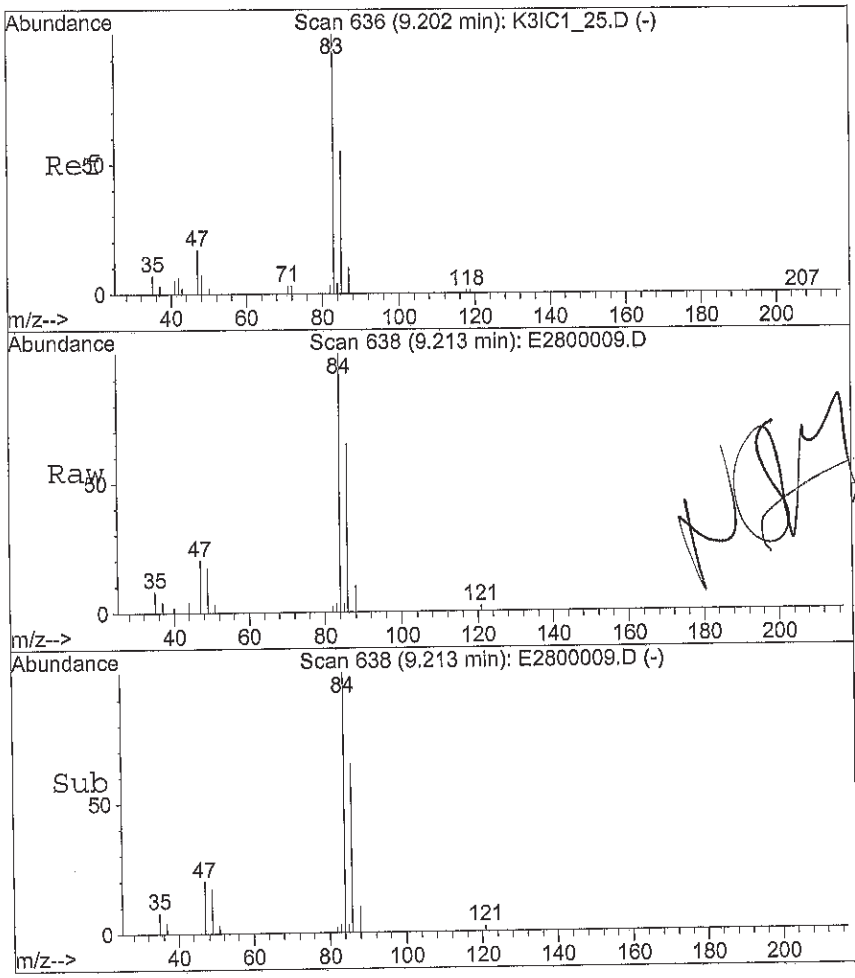


#15
(TBA) tert-Butanol
Concen: 8.63 ug/L
RT: 6.89 min Scan# 363
Delta R.T. -0.23 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 59 Resp: 2399

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

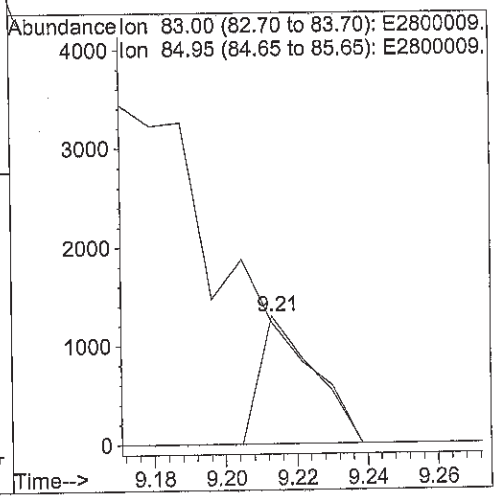


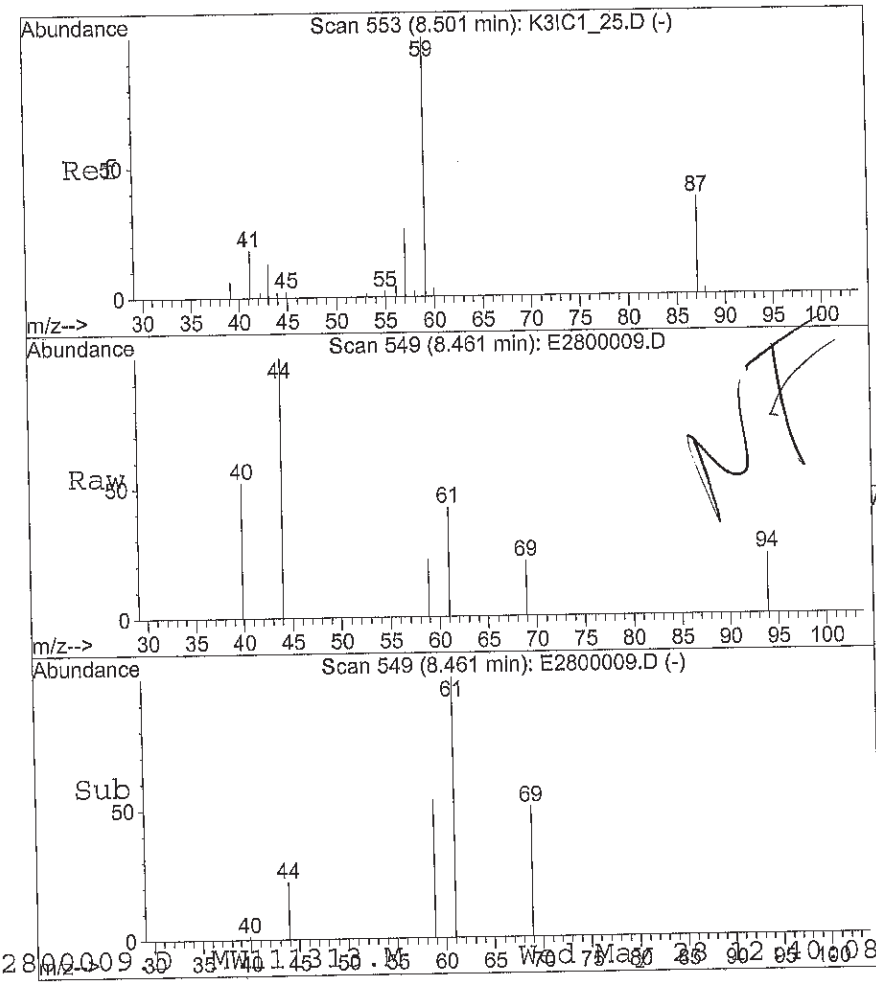


#24
Chloroform
Concen: 0.16 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 83 Resp: 1362

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

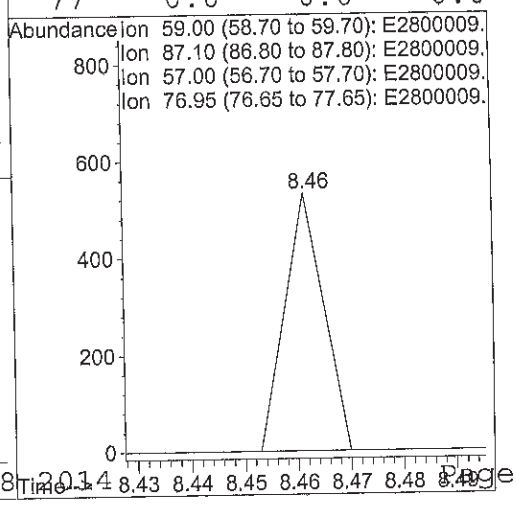


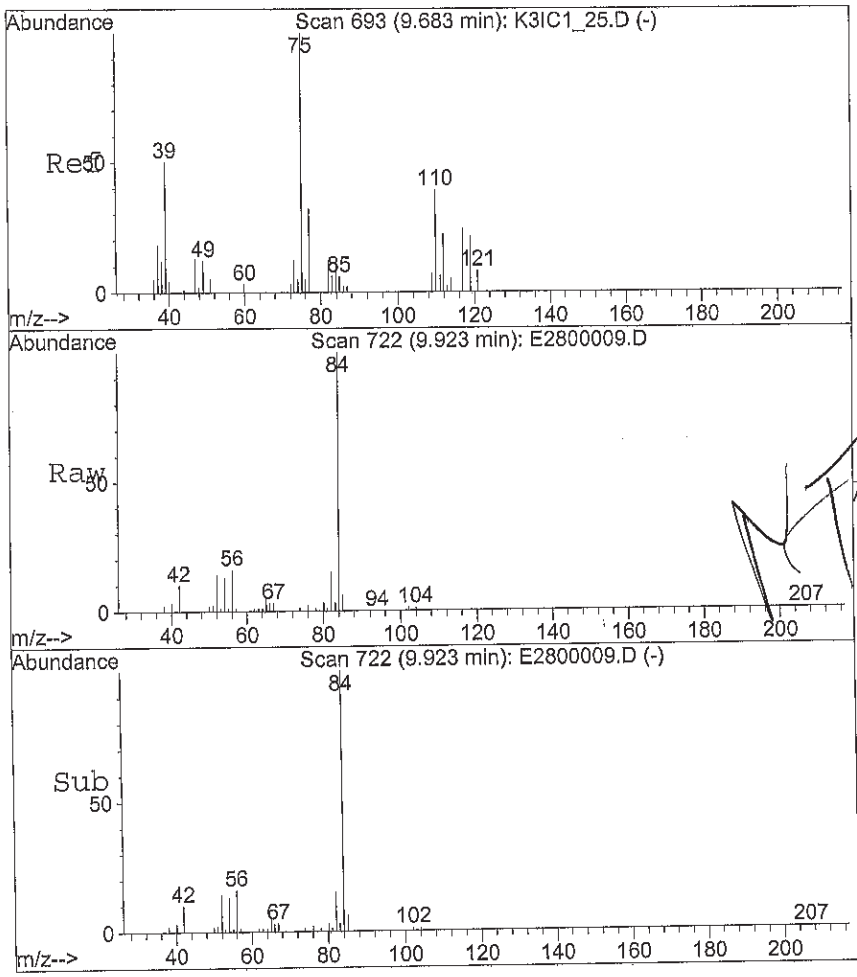


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.02 ug/L
RT: 8.46 min Scan# 549
Delta R.T. -0.04 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 59 Resp: 270

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

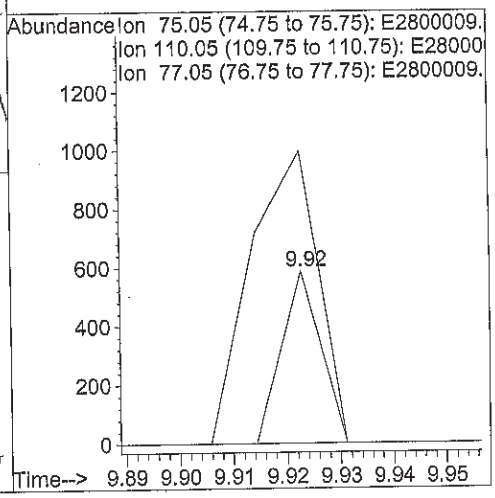


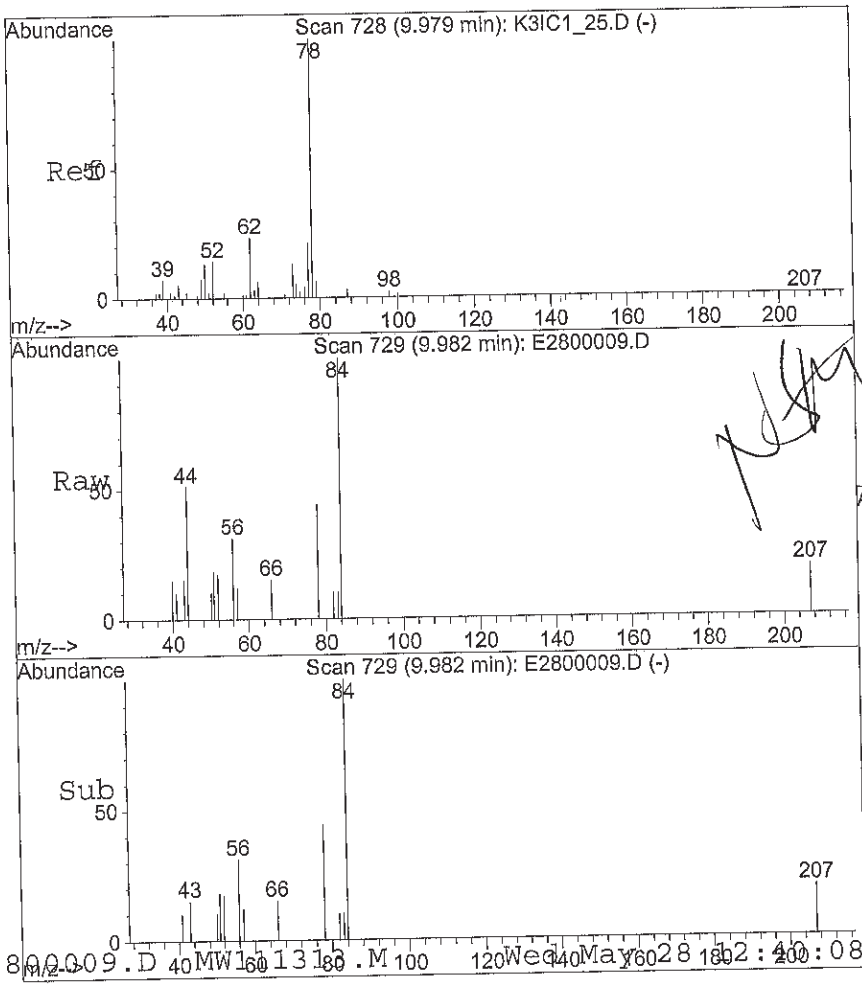


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 75 Resp: 296

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	293.2	25.0	37.4#

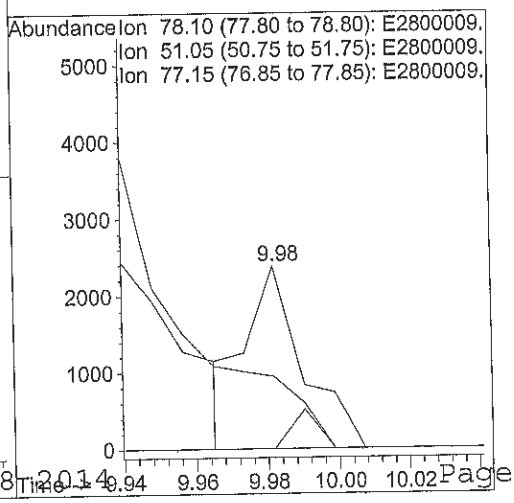


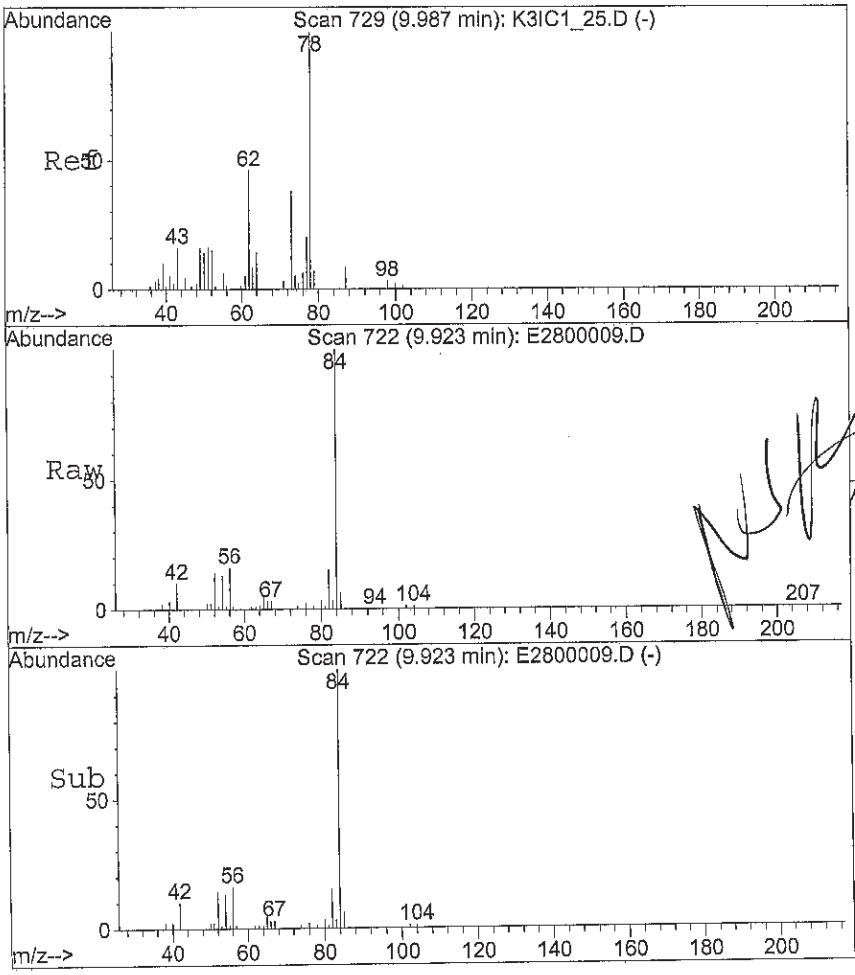


#31
Benzene
Concen: 0.17 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 78 Resp: 2629

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	9.9	16.6	24.8#

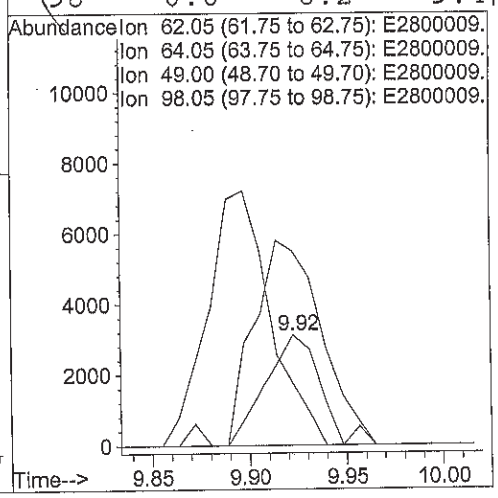


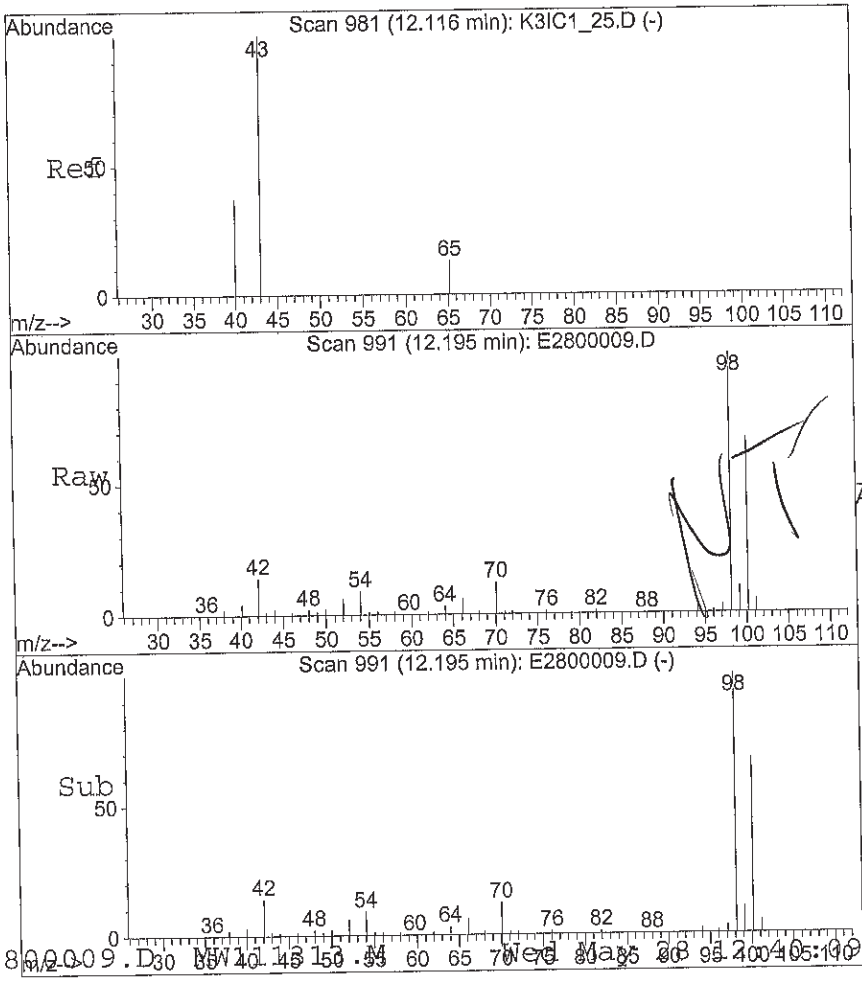


#32
1,2-Dichloroethane
Concen: 1.13 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 62 Resp: 6134

Ion	Ratio	Lower	Upper
62	100		
64	232.2	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

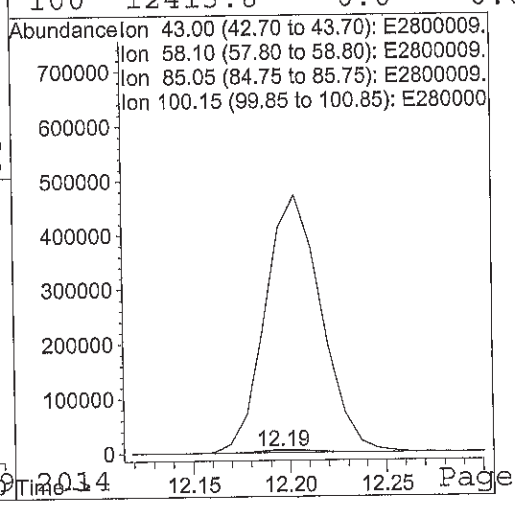


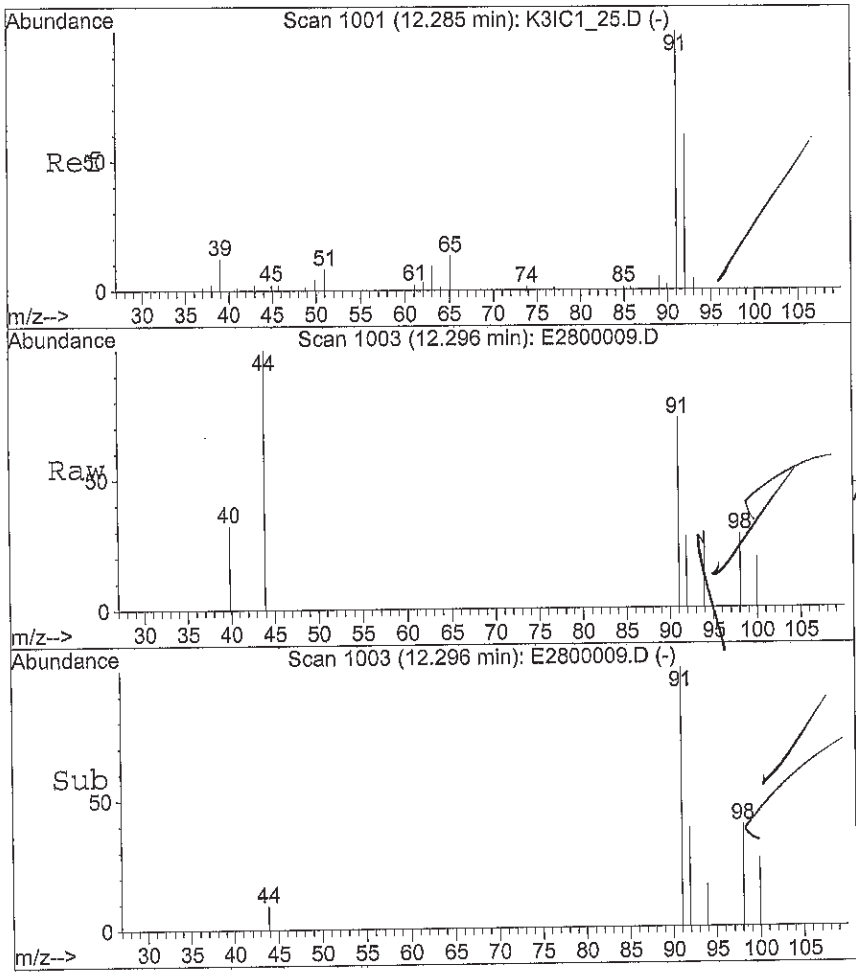


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.03 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 43 Resp: 7671

Ion	Ratio	Lower	Upper
43	100		
58	144.3	0.0	0.0#
85	0.0	0.0	0.0
100	12413.8	0.0	0.0#

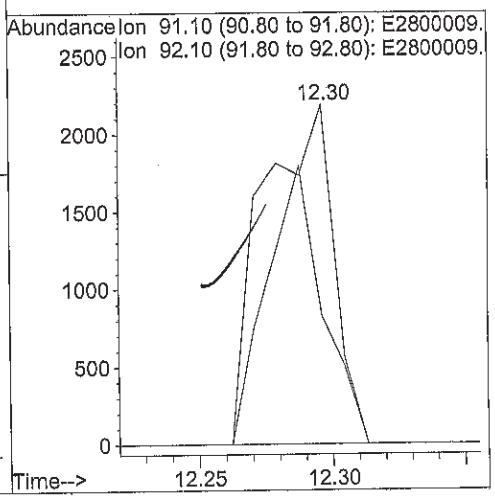


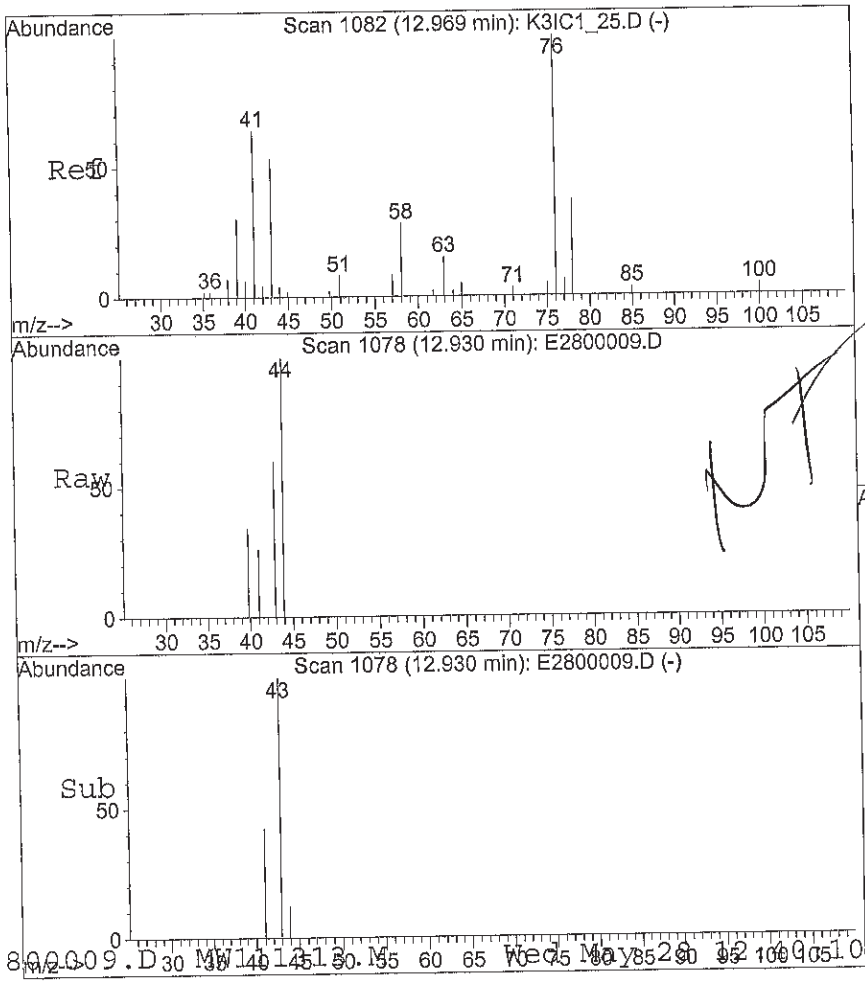


#41
Toluene
Concen: 0.23 ug/L
RT: 12.30 min Scan# 1003
Delta R.T. 0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 91 Resp: 3995

Ion	Ratio	Lower	Upper
91	100		
92	65.2	47.4	71.0

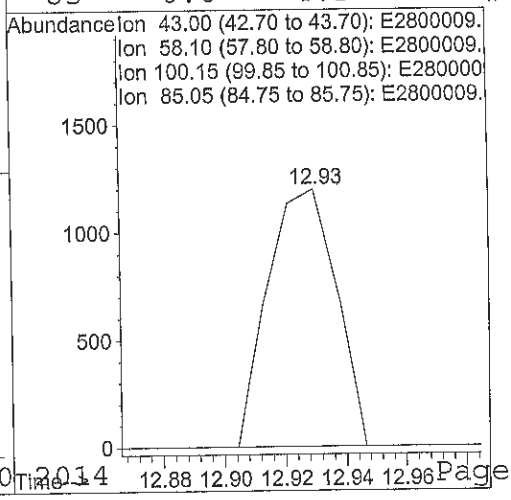


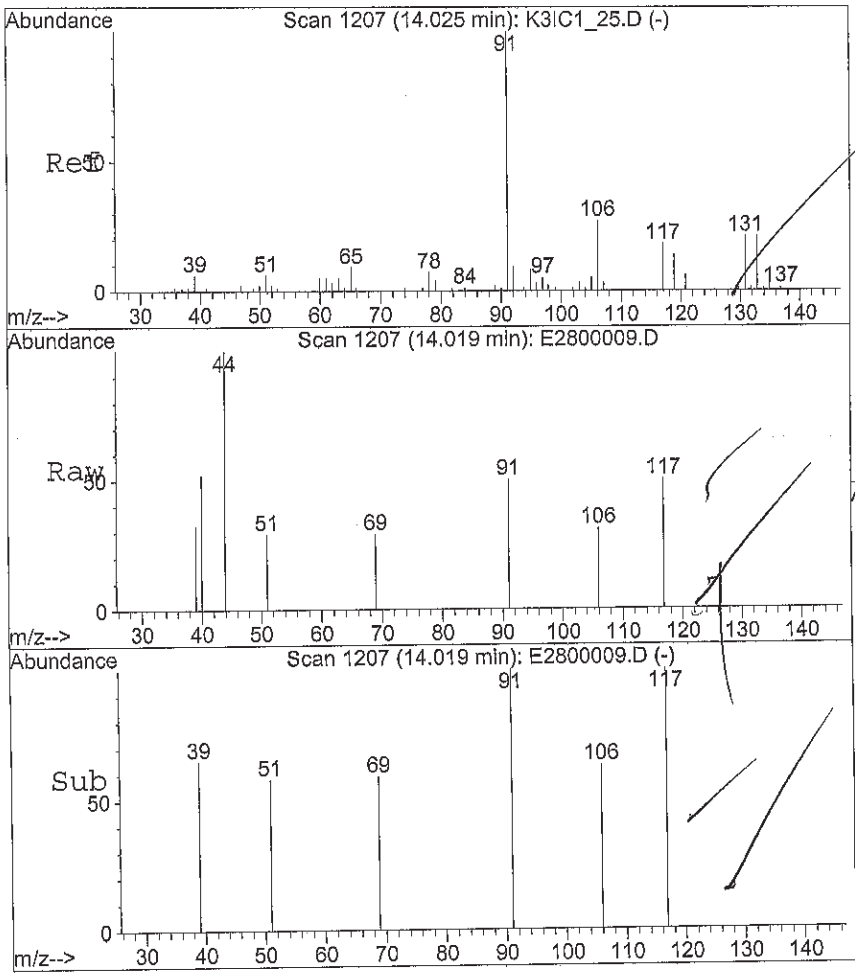


#46
2-Hexanone
Concen: 0.67 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.04 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 43 Resp: 1862

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

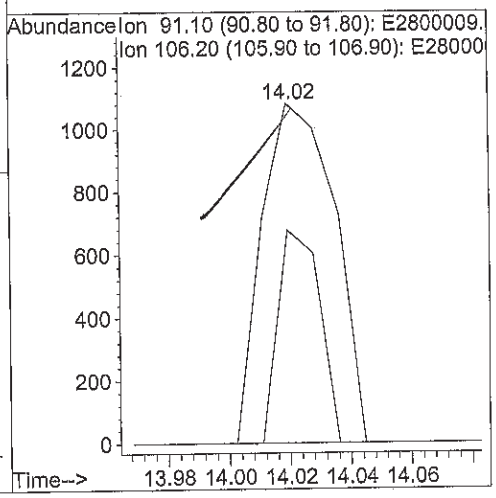


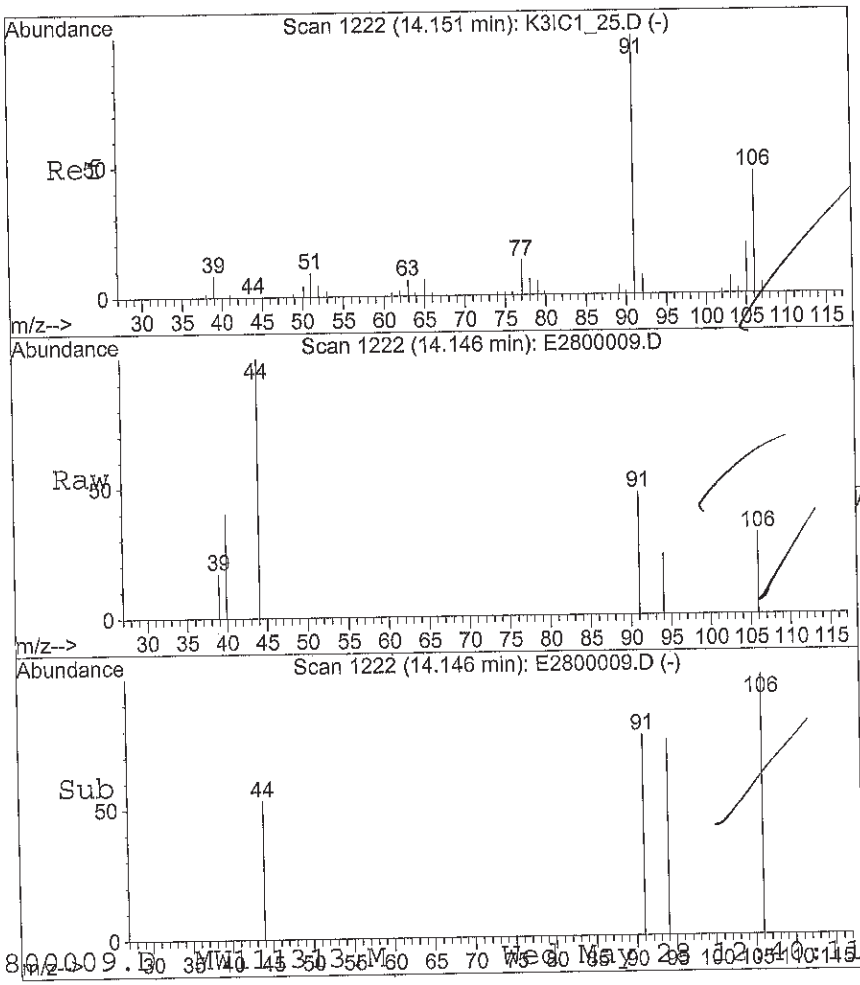


#51
Ethylbenzene
Concen: 0.09 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 91 Resp: 1789

Ion	Ratio	Lower	Upper
91	100		
106	36.3	23.5	35.3#

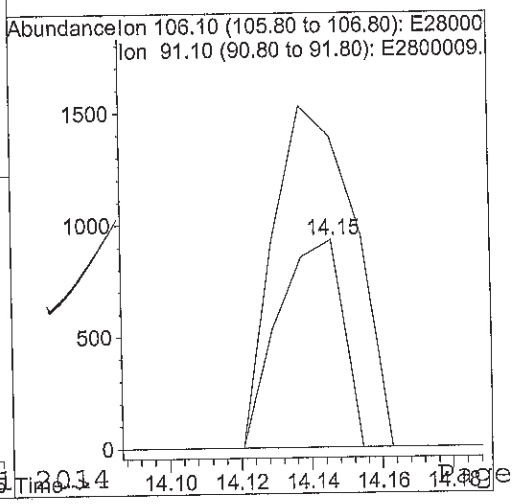


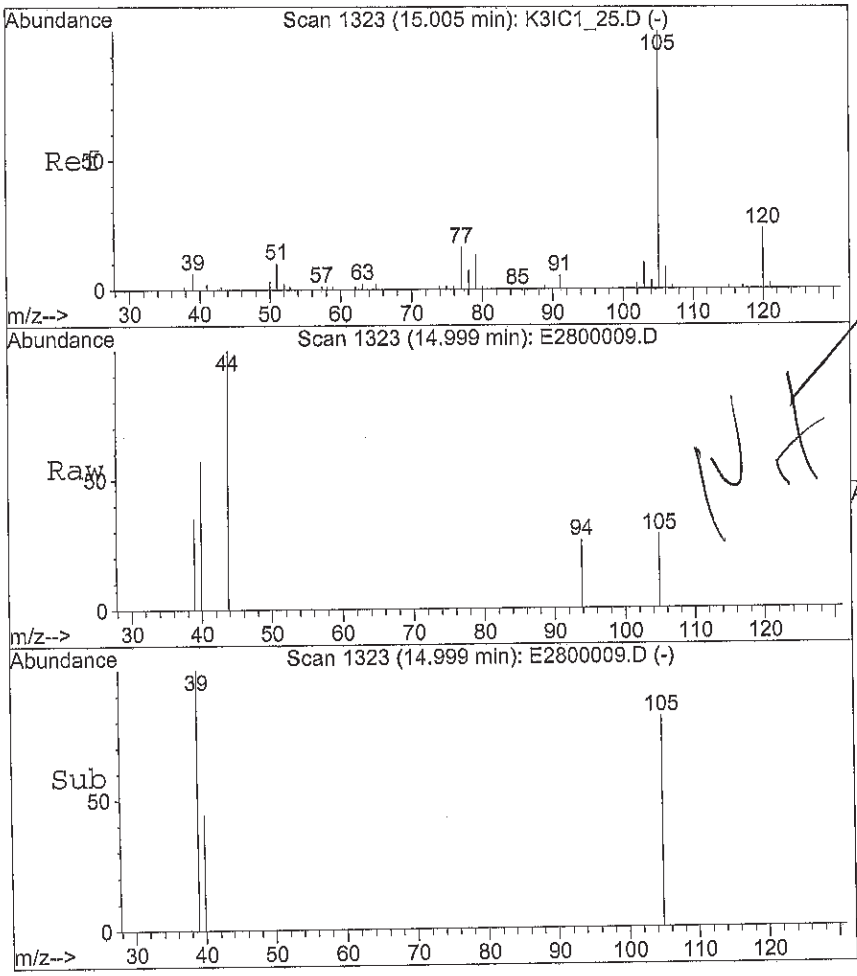


#52
m,p-Xylenes
Concen: 0.17 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion:106 Resp: 1170

Ion	Ratio	Lower	Upper
106	100		
91	207.4	177.1	265.7

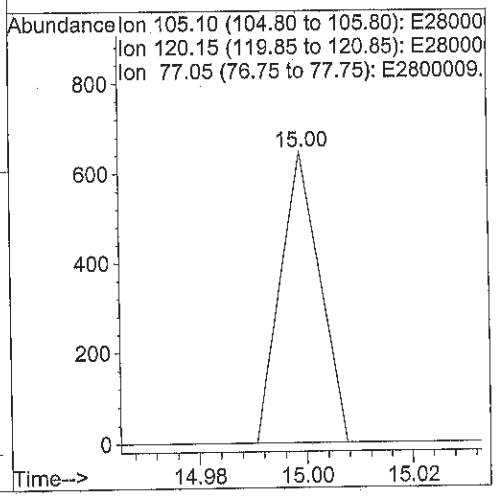


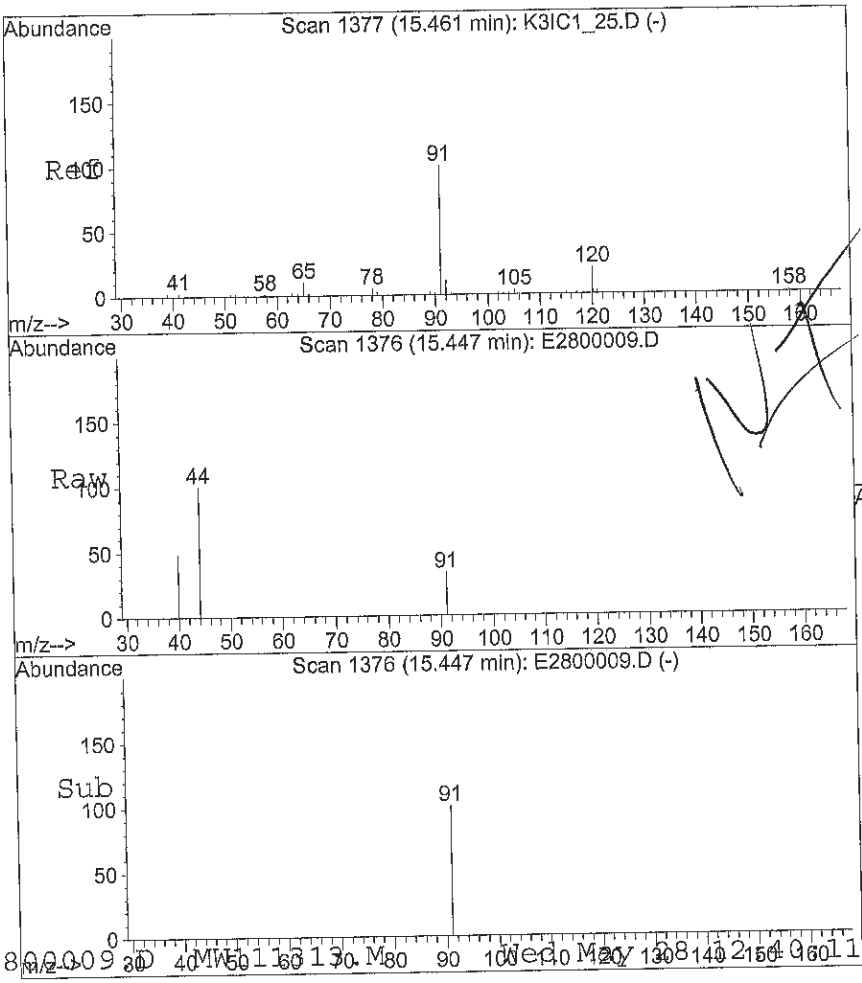


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion:105 Resp: 328

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

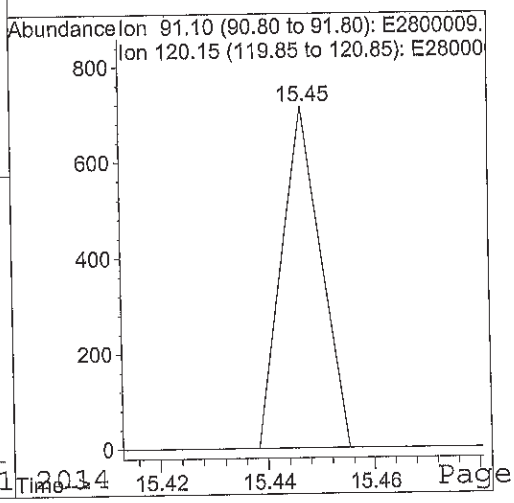


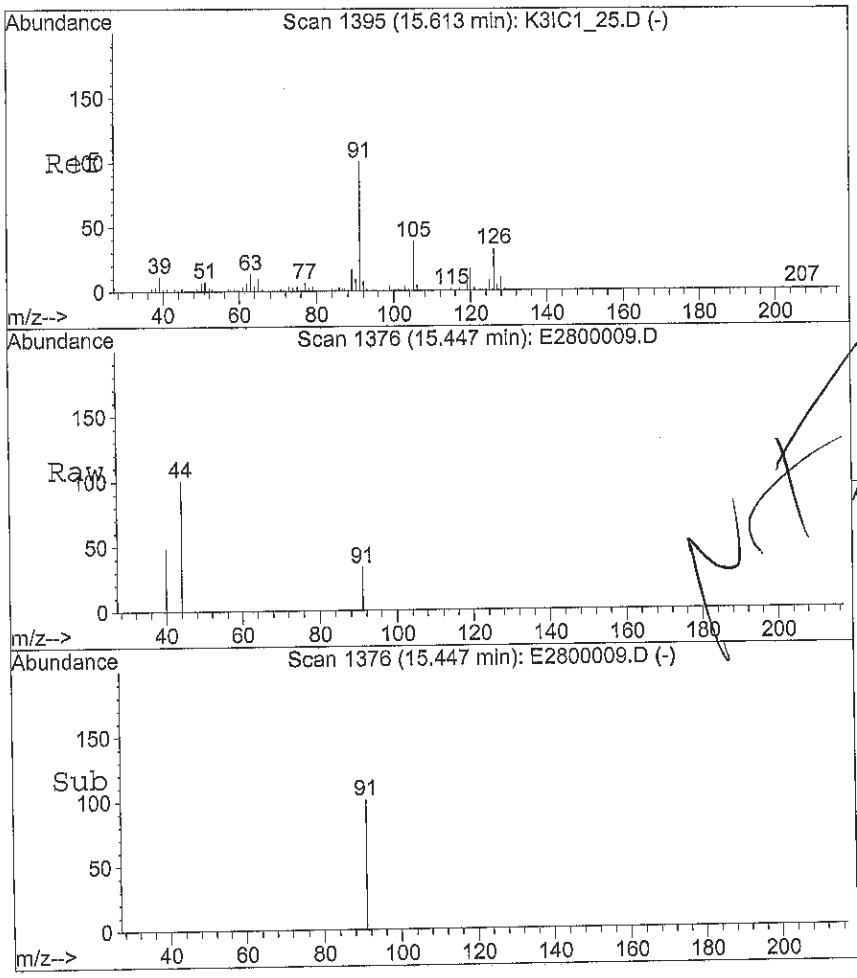


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 91 Resp: 362

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

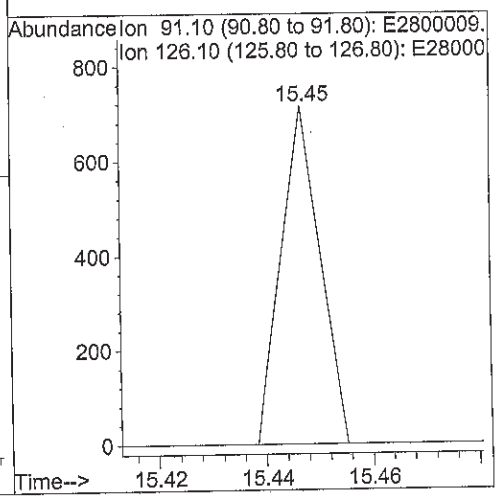


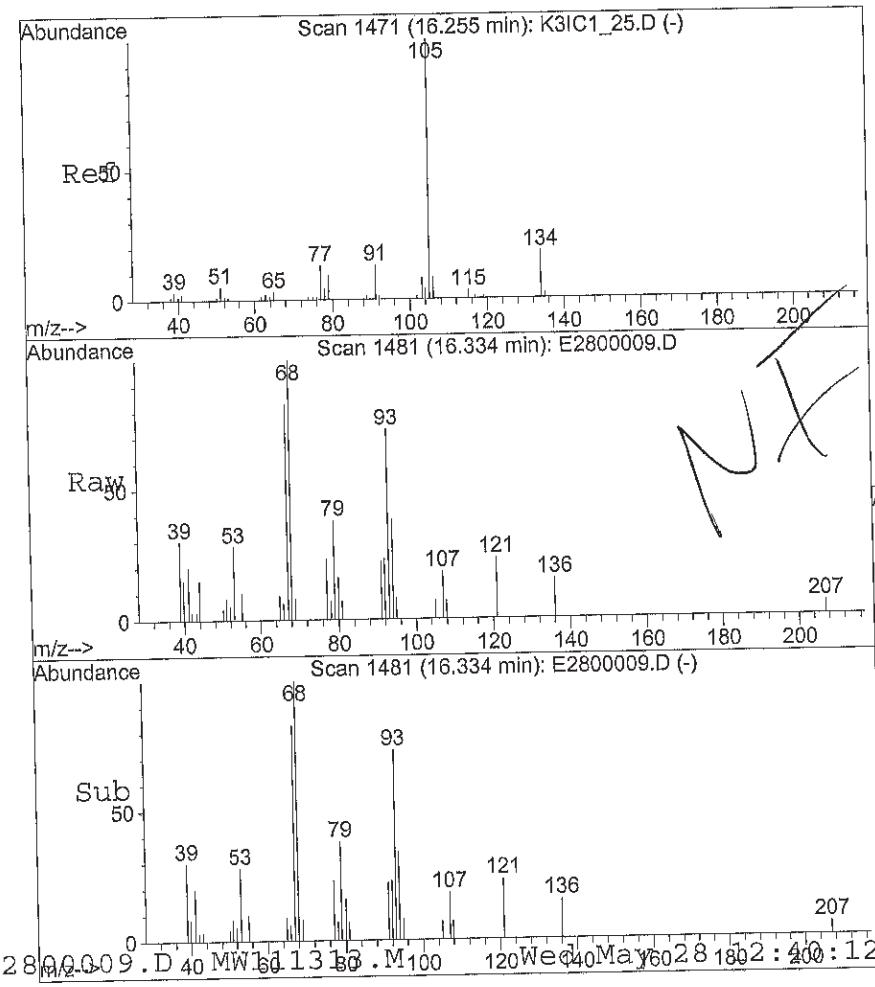


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.17 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion: 91 Resp: 362

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

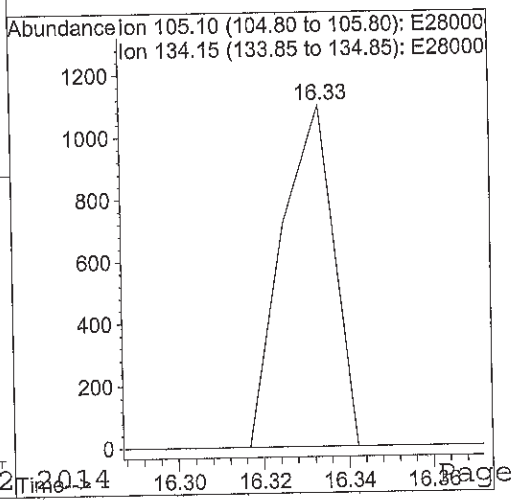


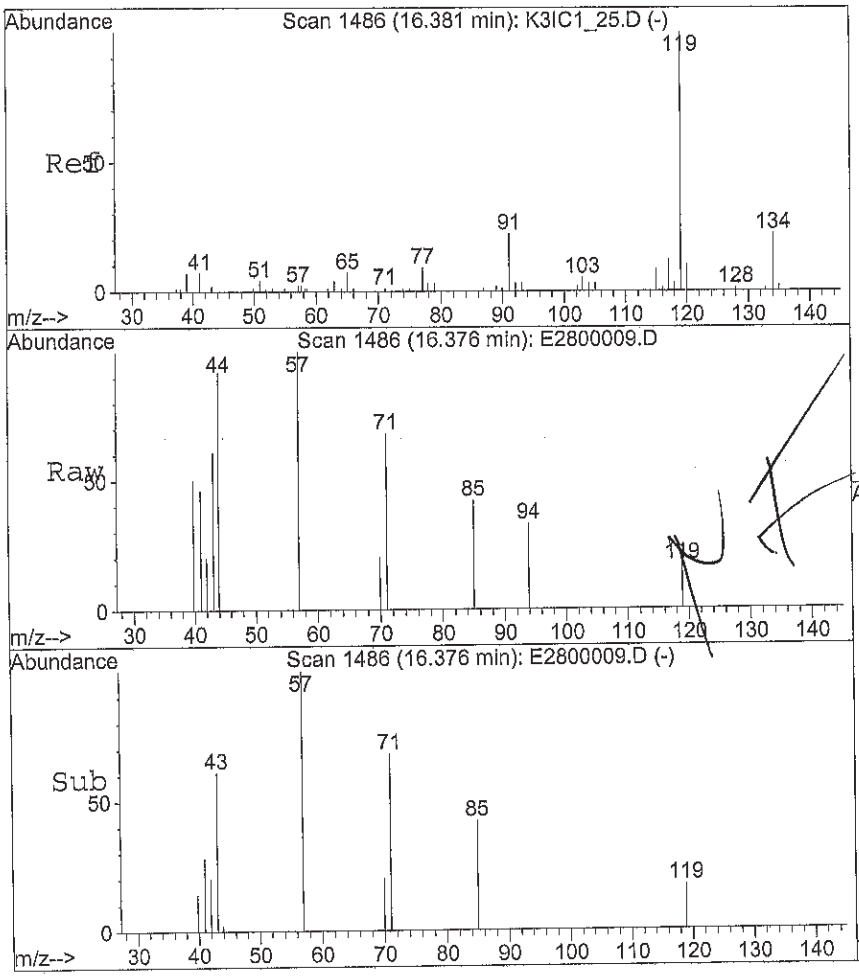


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion:105 Resp: 924

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

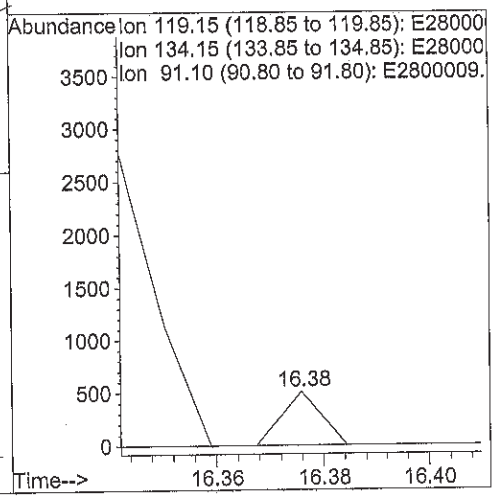




#69
p-Isopropyltoluene
Concen: 0.01 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2800009.D
Acq: 28 May 2014 12:16 pm

Tgt Ion:119 Resp: 256

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800009.D
Acq On : 28 May 2014 12:16 pm
Sample : 3E42801-08
Misc : 100cc SVL-516-SA5D-SV-14.0-15.0
MS Integration Params: rteint.p
Quant Time: May 28 12:36 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1630177	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1266889	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	700521	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	470798	11.10 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.80%		
3) Chloroform-d (SU6)	9.18	84	701694	11.54 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.32%		
4) Methylene Chloride-d2 (SU5	7.07	86	414093	11.65 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.20%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	448247	15.47 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 123.76%		
6) Benzene-d6 (SU7)	9.92	84	1407368	11.00 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.00%		
8) Toluene-d8 (SU3)	12.20	98	1416688	11.79 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.32%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	724371	14.60 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 116.80%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

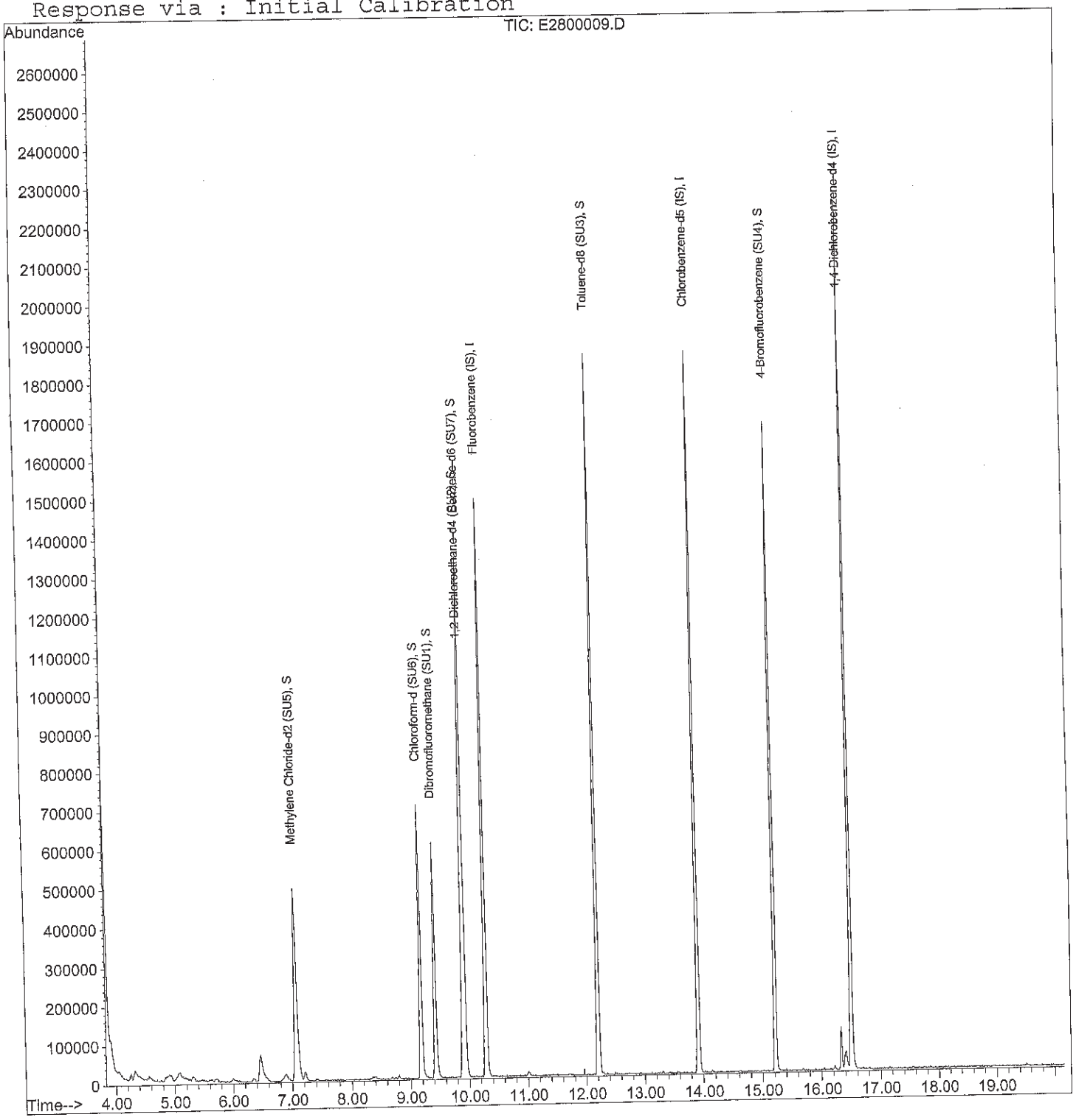
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800009.D
Acq On : 28 May 2014 12:16 pm
Sample : 3E42801-08
Misc : 100cc SVL-516-SA5D-SV-14.0-15.0
MS Integration Params: rteint.p
Quant Time: May 28 12:36 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800010.D
Acq On : 28 May 2014 1:14 pm
Sample : 3E42801-09
Misc : 100cc SVL-510-SA5D-SV-7.5-8.5
MS Integration Params: rteint.p
Quant Time: May 28 13:42 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1758241	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1351582	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	724286	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	477796	10.89 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.12%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	457547	10.98 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.84%		
39) Toluene-d8 (SU3)	12.20	98	1500571	11.90 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.20%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	730869	13.22 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 105.76%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	277	0.06 ~~ug/L~~ #	44
4) Chloromethane	4.41	50	5502	0.65 ~~ug/L~~ #	58
6) Bromomethane	5.05	96	5592	1.11 ~~ug/L~~ #	1
7) Chloroethane	5.23	64	709	1.17 ~~ug/L~~ #	45
9) (F113) 1,1,2-Trichloro-tri	6.35	151	4183	1.21 ug/L # 0.0024	83
11) Acetone	6.48	58	4735	1.84 ~~ug/L~~ #	62
12) (IPA) Leak Check Compound	6.47	45	189166	895.34 ~~ug/L~~ #	84
13) Carbon disulfide	6.85	76	6419	0.44 ~~ug/L~~ #	89
14) Methylene Chloride	7.09	84	6389	1.32 ~~ug/L~~ #	9
15) (TBA) tert-Butanol	6.91	59	474	1.58 ~~ug/L~~ #	77
24) Chloroform	9.21	83	907	0.10 ~~ug/L~~ #	1
25) (ETBE) 2-ethoxy 2-methyl p	8.37	59	2158	0.17 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.92	75	306	0.05 ~~ug/L~~ #	1
31) Benzene	9.98	78	3347	0.20 ~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.92	62	6114	1.04 ~~ug/L~~ #	1
34) 1,2-Dichloropropane	10.97	63	279	0.07 ~~ug/L~~ #	2
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7402	2.74 ~~ug/L~~ #	100
41) Toluene	12.28	91	8050	0.44 ug/L 0.0088	98
46) 2-Hexanone	12.93	43	2499	0.85 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	3958	0.19 ~~ug/L~~ #	45
52) m,p-Xylenes	14.14	106	2727	0.37 ug/L 0.0074	78
53) o-Xylene	14.62	106	1514	0.21 ug/L 0.0042	82

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800010.D
Acq On : 28 May 2014 1:14 pm
Sample : 3E42801-09
Misc : 100cc SVL-510-SA5D-SV-7.5-8.5
MS Integration Params: rteint.p
Quant Time: May 28 13:42 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) Styrene	14.63	104	2835	-0.60 ~~ug/L #~~ SM	65
56) Isopropylbenzene	15.00	105	648	0.03 ~~ug/L #~~	55
57) 1,2,3-Trichloropropane	15.30	75	308	0.06 ~~ug/L #~~	36
62) n-Propylbenzene	15.44	91	1030	0.04 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.60	91	303	0.02 ~~ug/L #~~	45
64) 1,3,5-Trimethylbenzene	15.62	105	1083	0.06 ~~ug/L #~~	31
65) 4-Chlorotoluene	15.60	91	303	0.02 ~~ug/L #~~	44
67) 1,2,4-Trimethylbenzene	16.05	105	3979	0.21 ug/L # 0.0042	71
68) sec-Butylbenzene	16.33	105	1984	0.08 ~~ug/L #~~ SM	62
69) p-Isopropyltoluene	16.37	119	2595	0.13 ~~ug/L #~~	78
72) n-Butylbenzene	16.85	91	670	0.03 ~~ug/L #~~	30
77) Naphthalene	19.45	128	1678	0.12 ~~ug/L~~	100

(#) = qualifier out of range (m) = manual integration

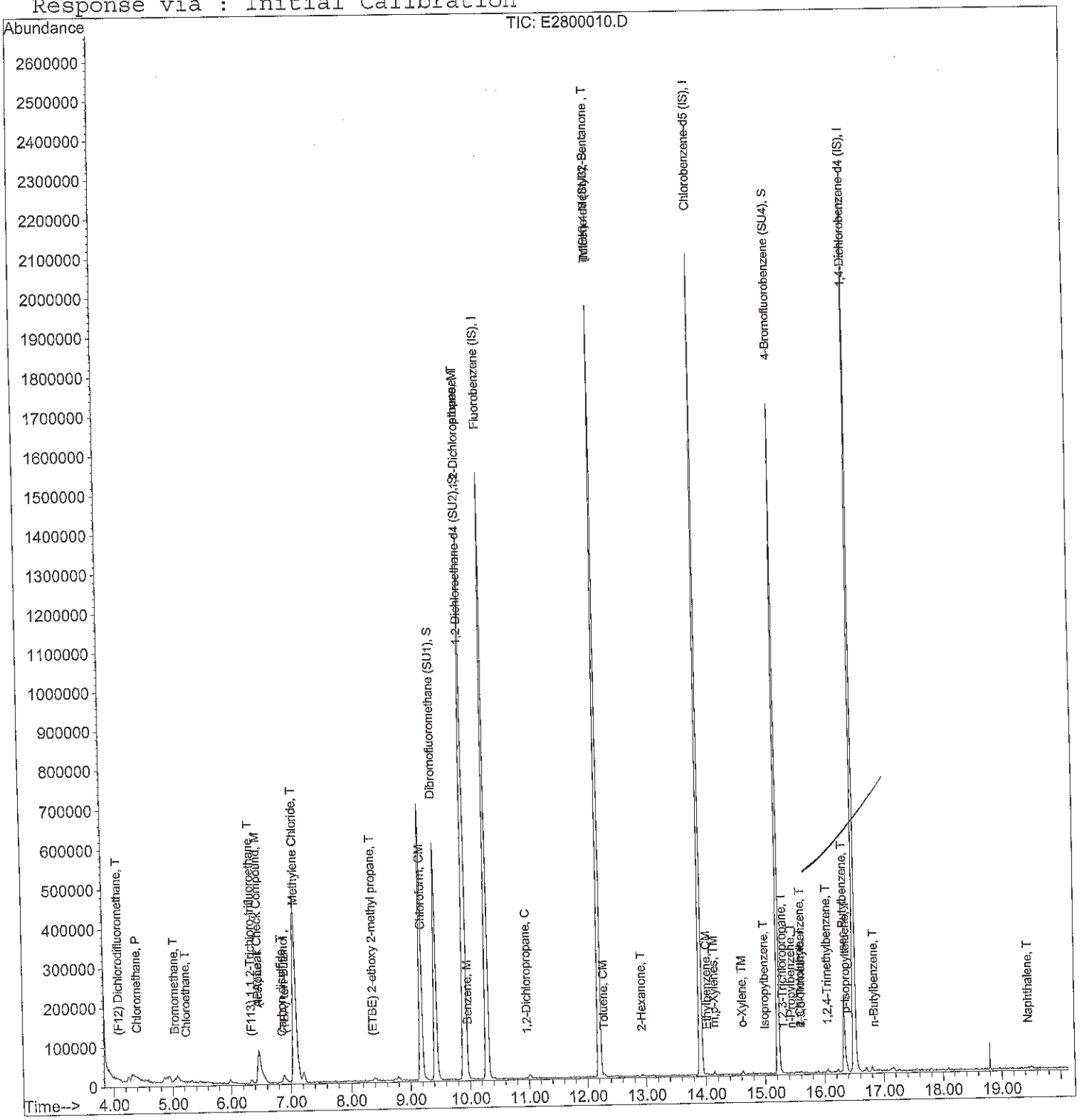
Quantitation Report

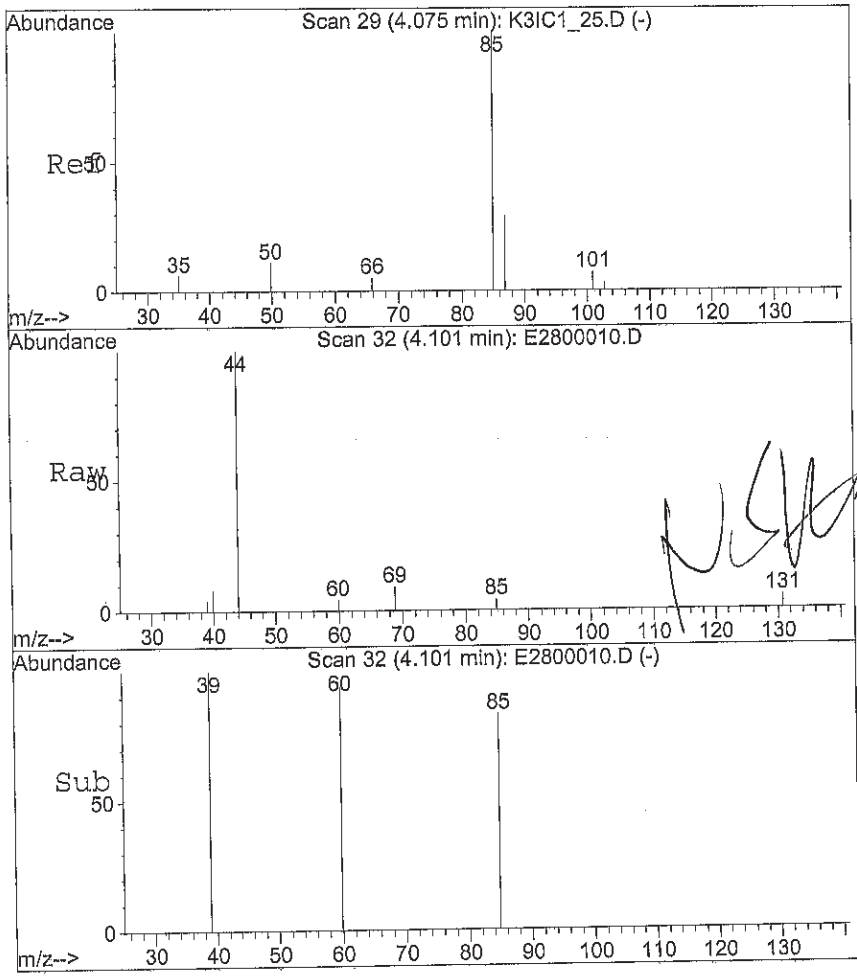
Data File : C:\HPCHEM\1\DATA\052814L3\E2800010.D
Acq On : 28 May 2014 1:14 pm
Sample : 3E42801-09
Misc : 100cc SVL-510-SA5D-SV-7.5-8.5
MS Integration Params: rteint.p
Quant Time: May 28 13:42 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

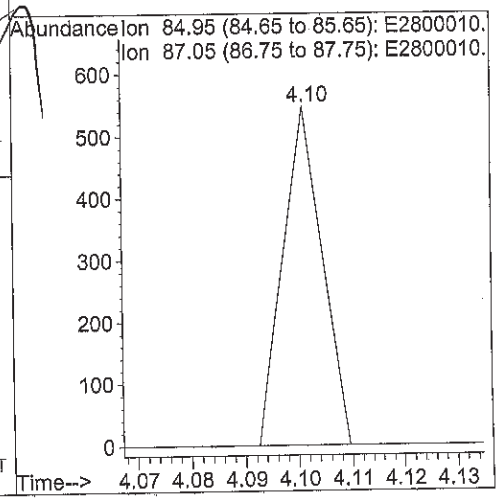


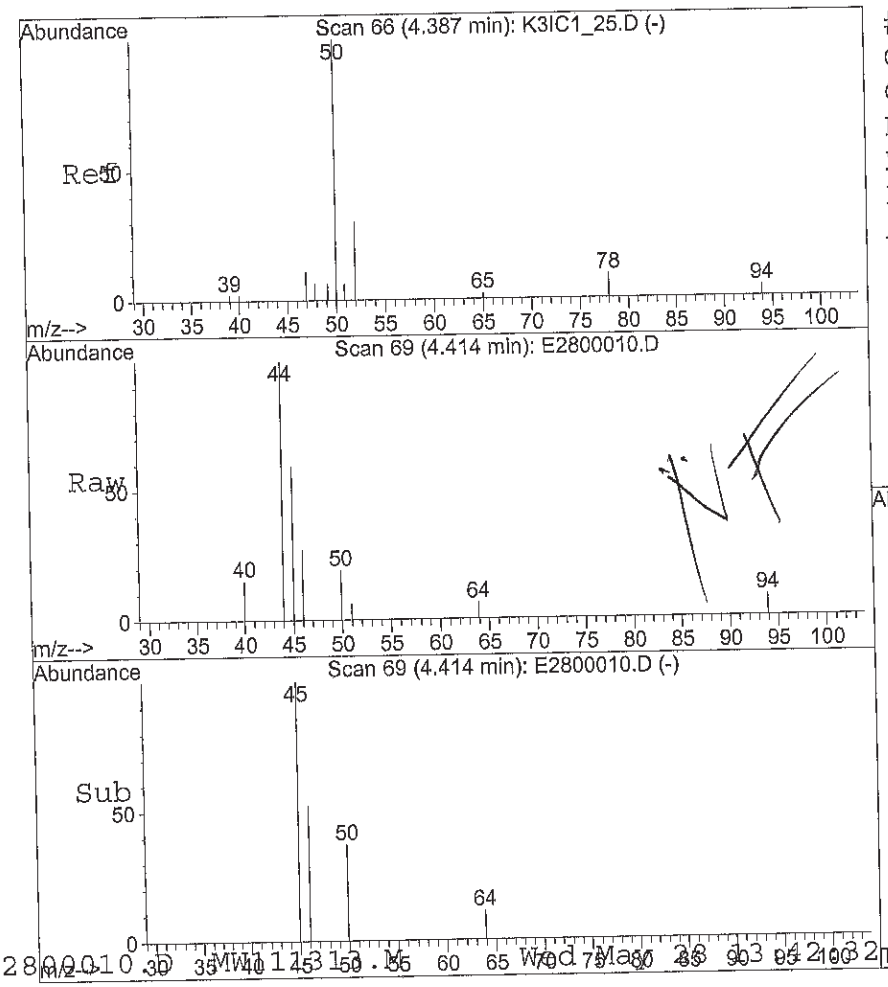


#3
(F12) Dichlorodifluoromethane
Concen: 0.06 ug/L
RT: 4.10 min Scan# 32
Delta R.T. 0.03 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 85 Resp: 277

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

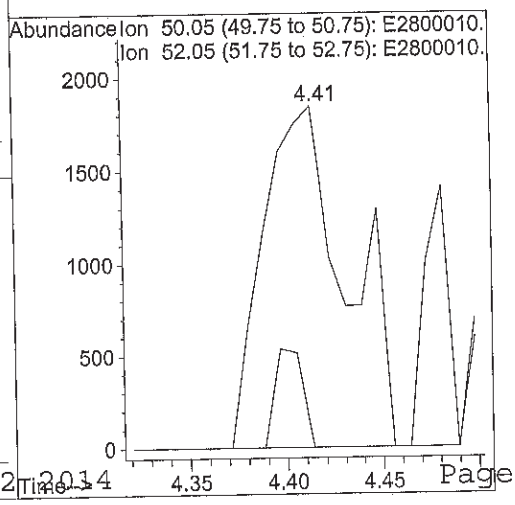


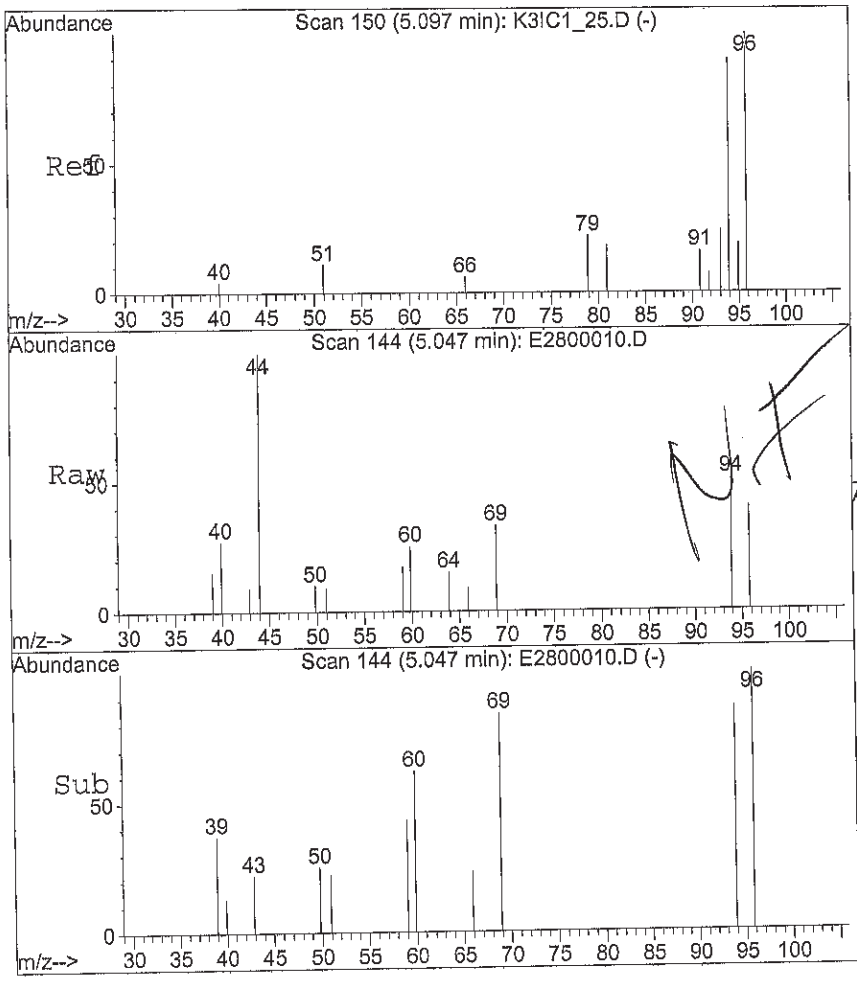


#4
Chloromethane
Concen: 0.65 ug/L
RT: 4.41 min Scan# 69
Delta R.T. 0.03 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 50 Resp: 5502

Ion	Ratio	Lower	Upper
50	100		
52	9.7	26.9	40.3#

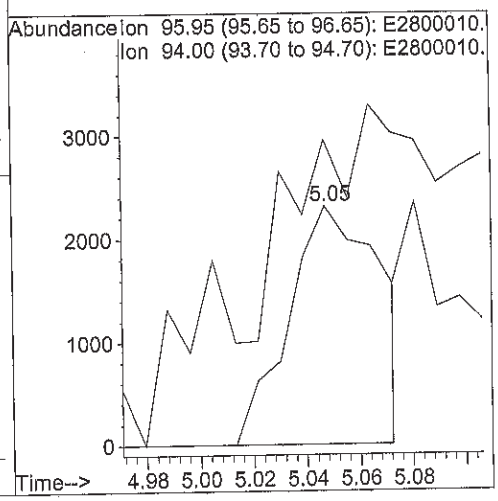


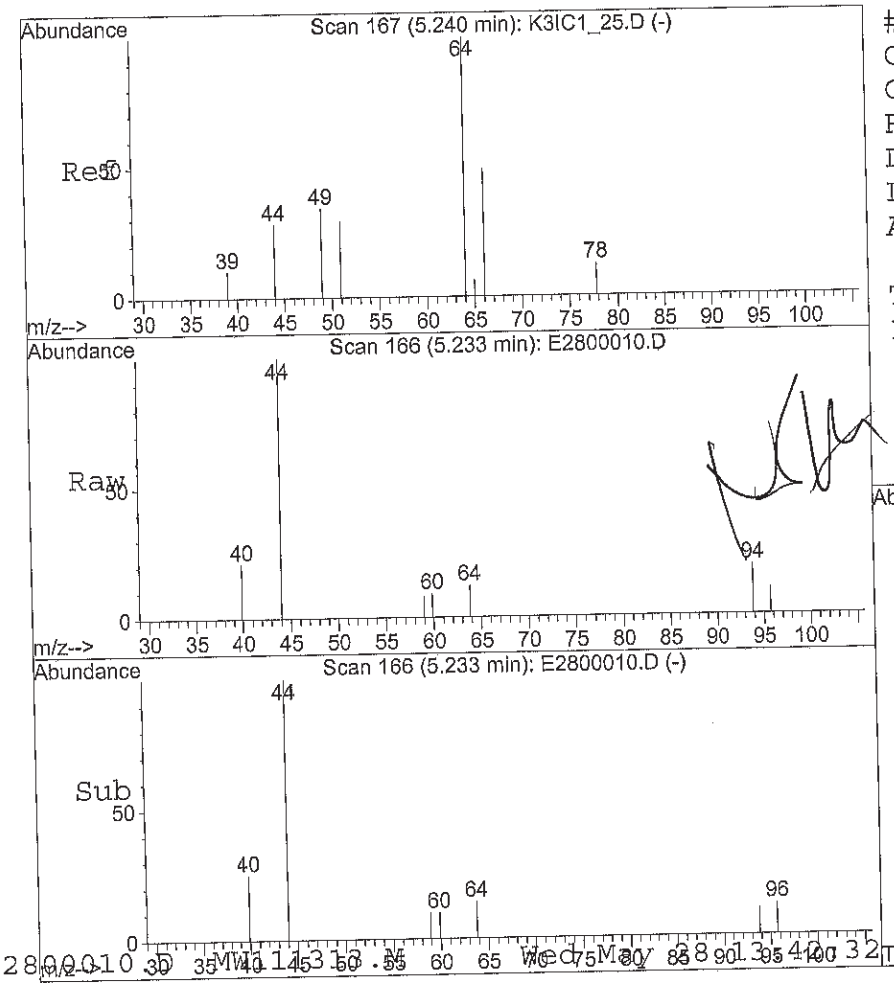


#6
Bromomethane
Concen: 1.11 ug/L
RT: 5.05 min Scan# 144
Delta R.T. -0.05 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 96 Resp: 5592

Ion	Ratio	Lower	Upper
96	100		
94	270.7	101.0	151.4#

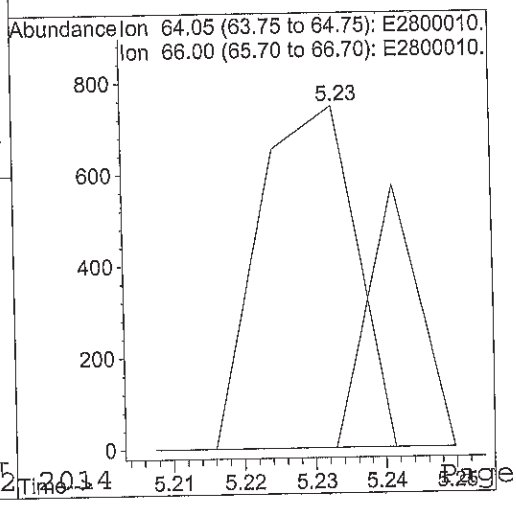


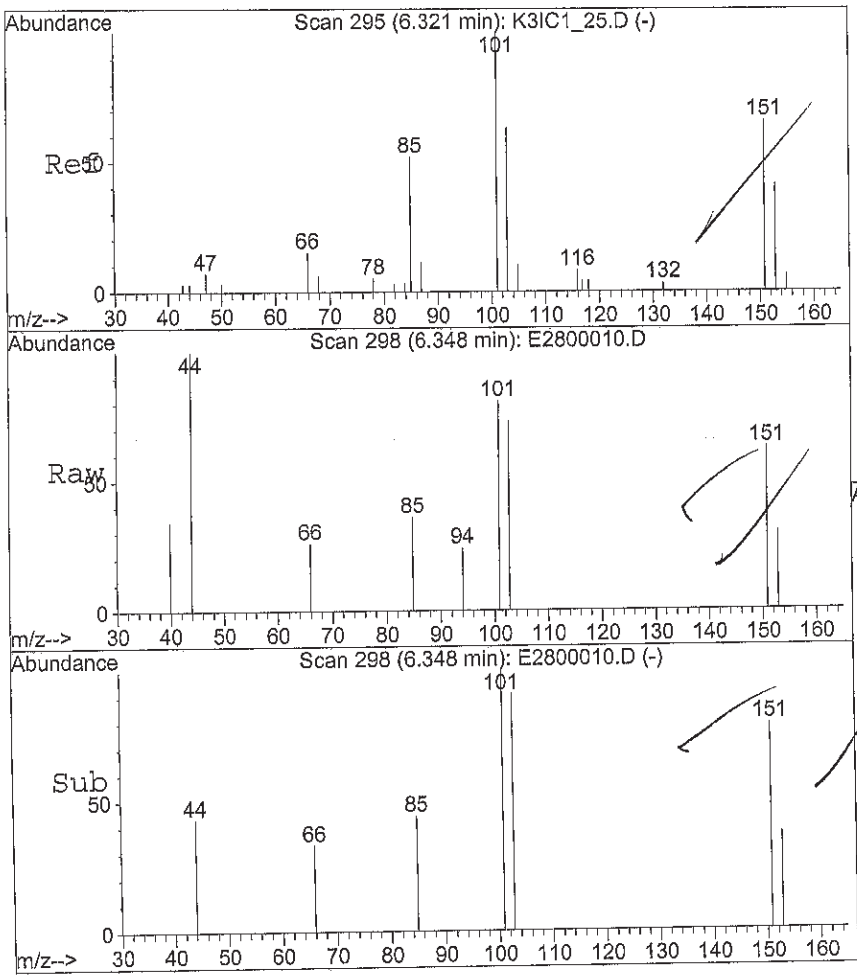


#7
Chloroethane
Concen: 1.17 ug/L
RT: 5.23 min Scan# 166
Delta R.T. -0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 64 Resp: 709

Ion	Ratio	Lower	Upper
64	100		
66	79.5	35.4	53.0#

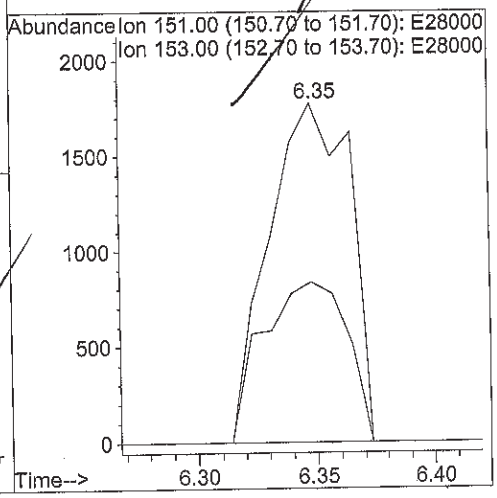


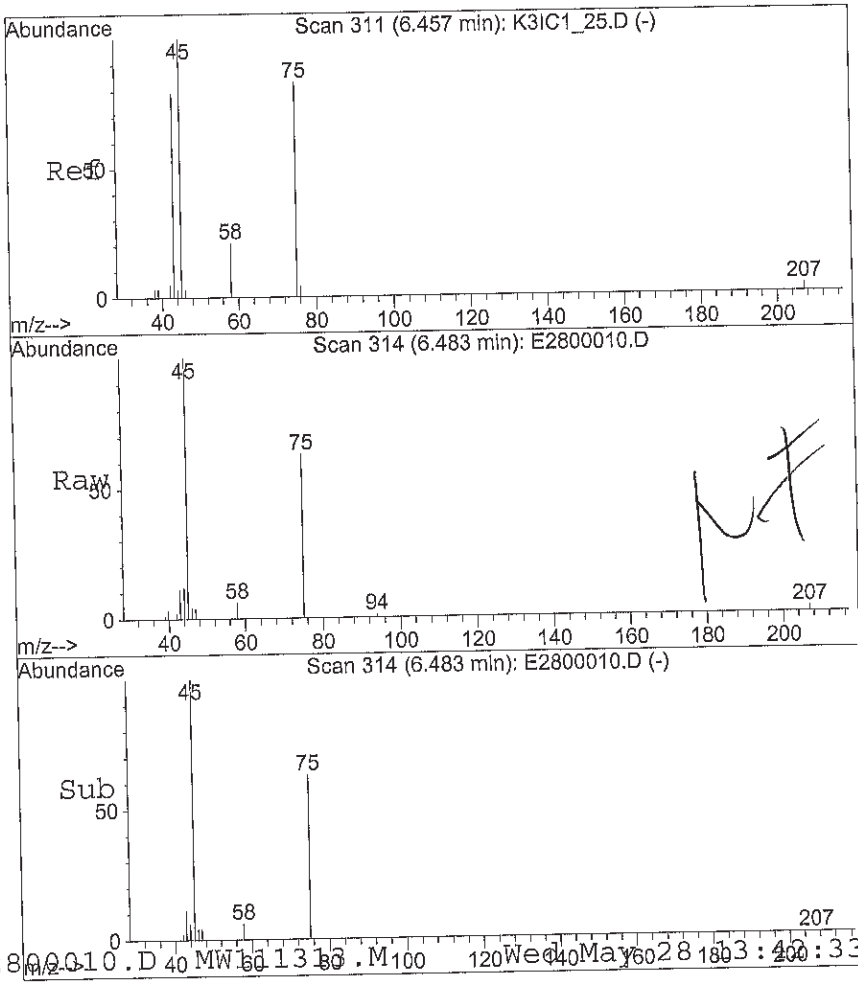


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 1.21 ug/L
RT: 6.35 min Scan# 298
Delta R.T. 0.03 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:151 Resp: 4183

Ion	Ratio	Lower	Upper
151	100		
153	48.9	49.6	74.4#

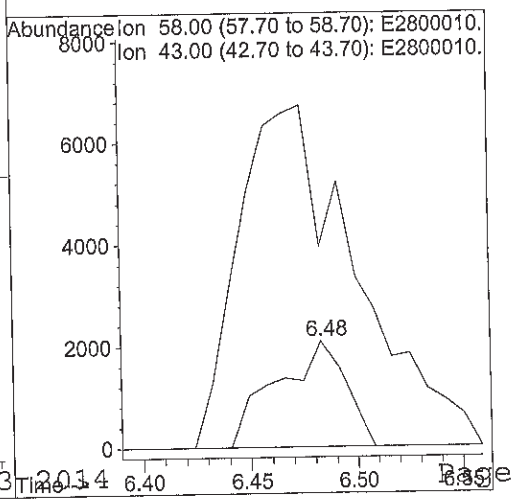


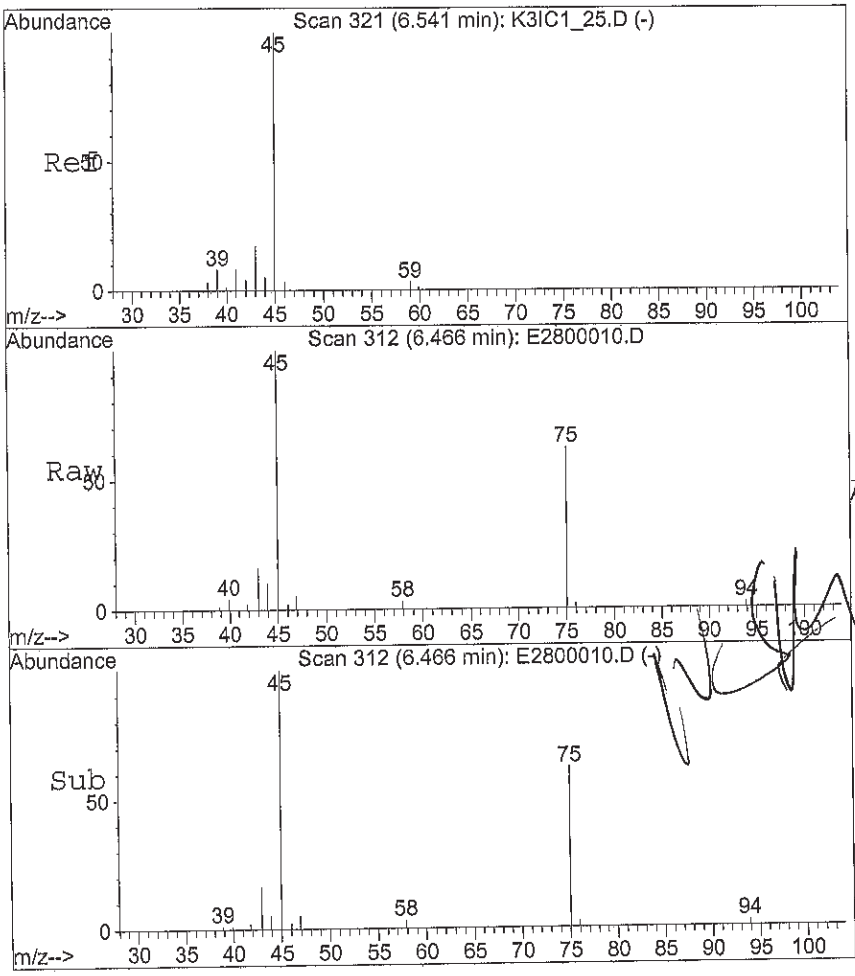


#11
Acetone
Concen: 1.84 ug/L
RT: 6.48 min Scan# 314
Delta R.T. 0.03 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 58 Resp: 4735

Ion	Ratio	Lower	Upper
58	100		
43	547.9	360.9	541.3#

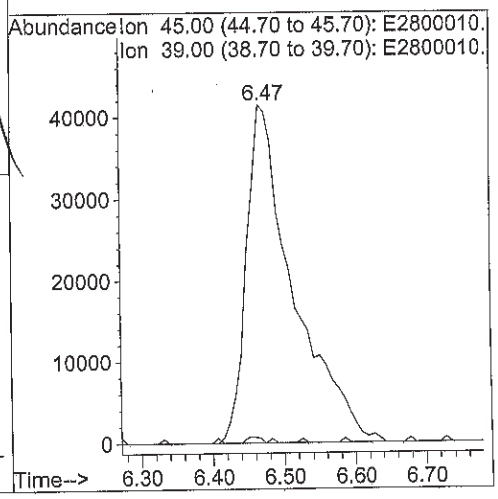


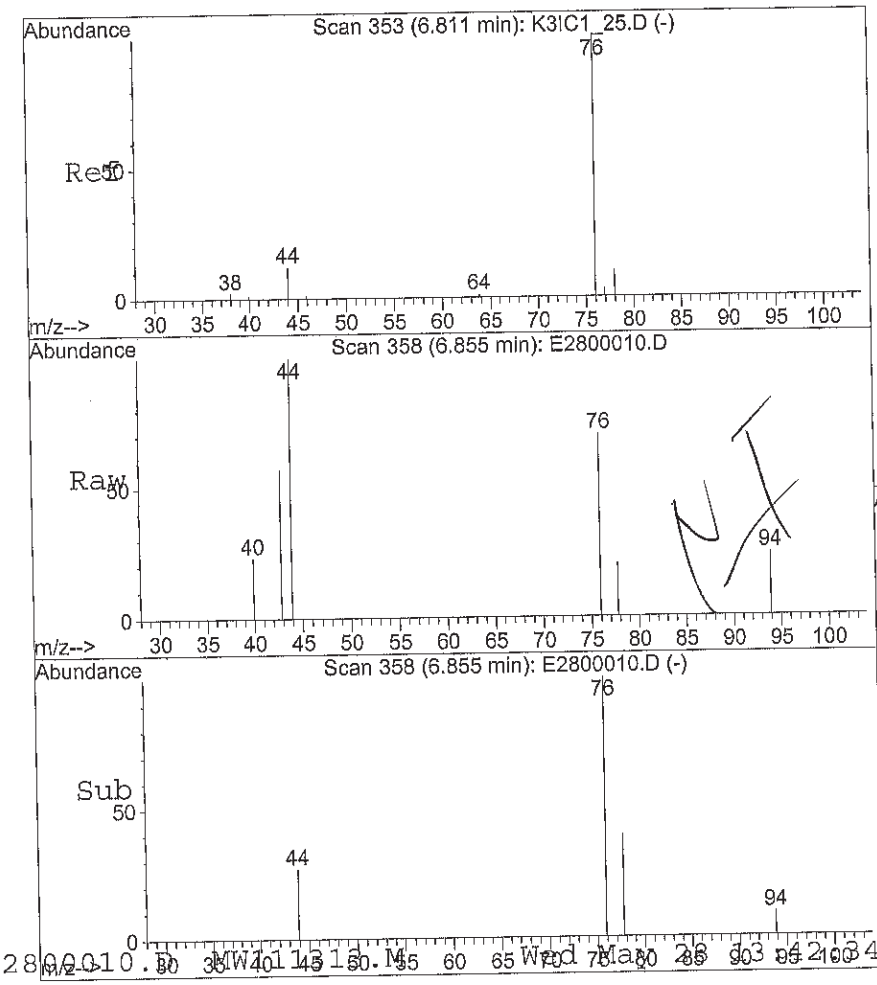


#12
(IPA) Leak Check Compound
Concen: 895.34 ug/L
RT: 6.47 min Scan# 312
Delta R.T. -0.07 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 45 Resp: 189166

Ion	Ratio	Lower	Upper
45	100		
39	0.7	4.9	7.3#

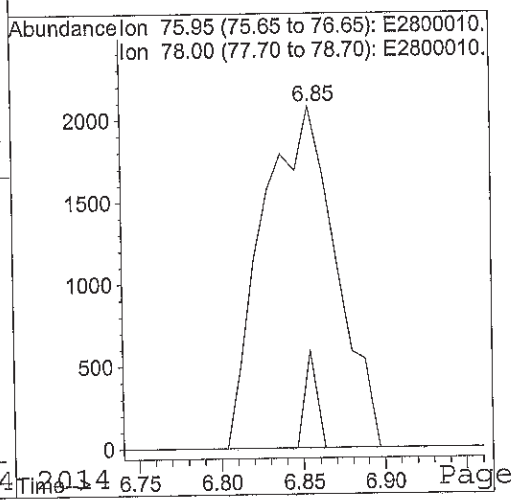


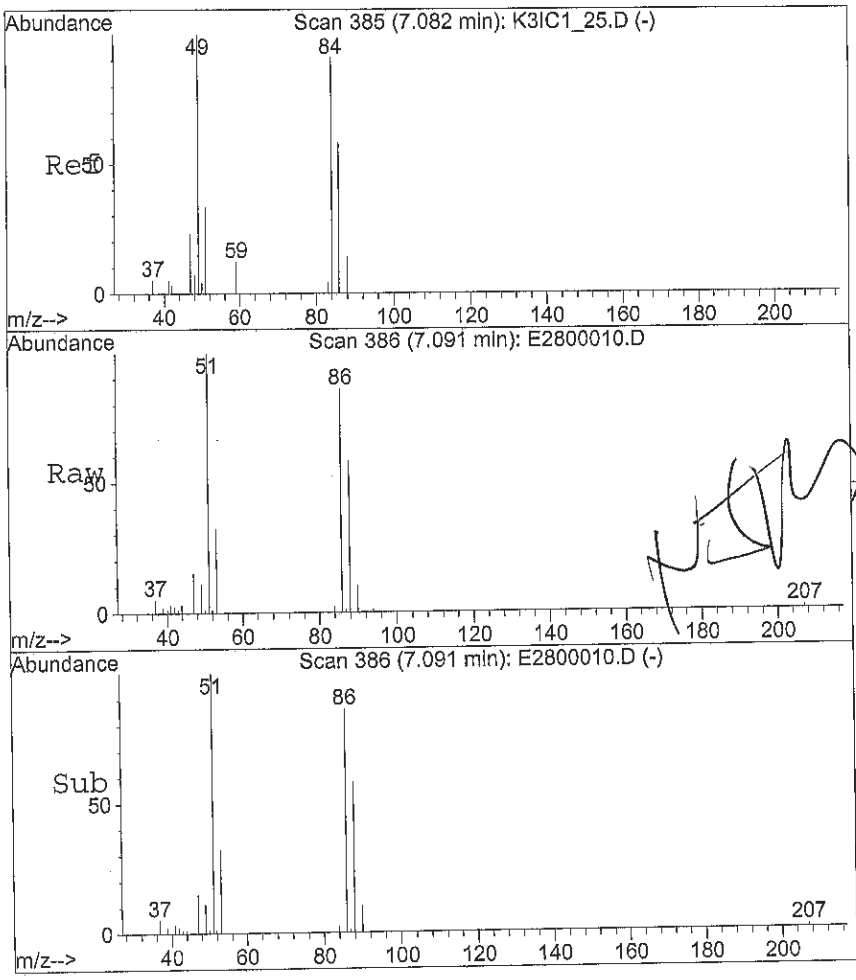


#13
Carbon disulfide
Concen: 0.44 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 76 Resp: 6419

Ion	Ratio	Lower	Upper
76	100		
78	4.7	7.0	10.4#

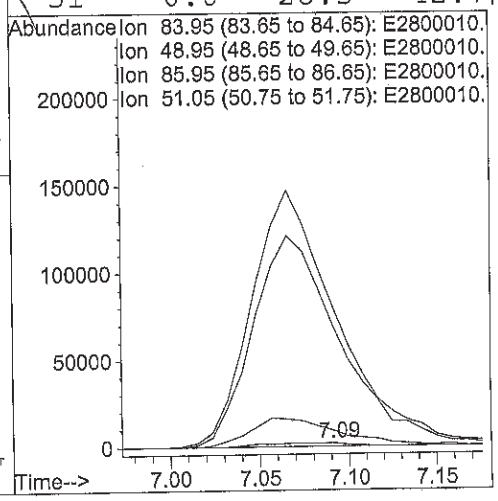


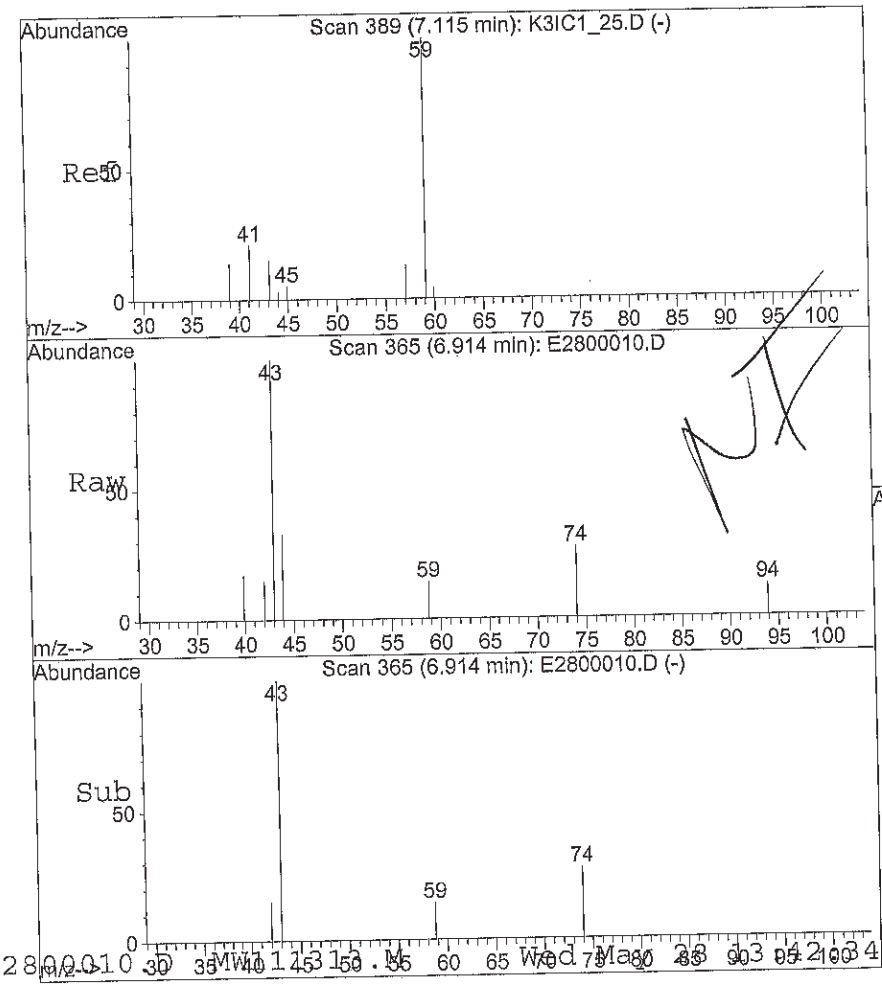


#14
Methylene Chloride
Concen: 1.32 ug/L
RT: 7.09 min Scan# 386
Delta R.T. 0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 84 Resp: 6389

Ion	Ratio	Lower	Upper
84	100		
49	0.0	89.8	134.6#
86	0.0	51.1	76.7#
51	0.0	28.5	42.7#

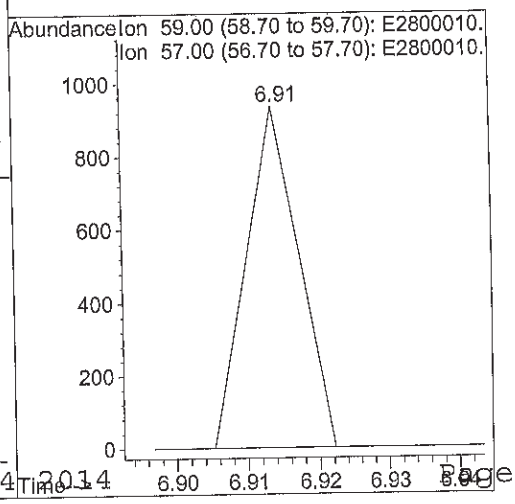


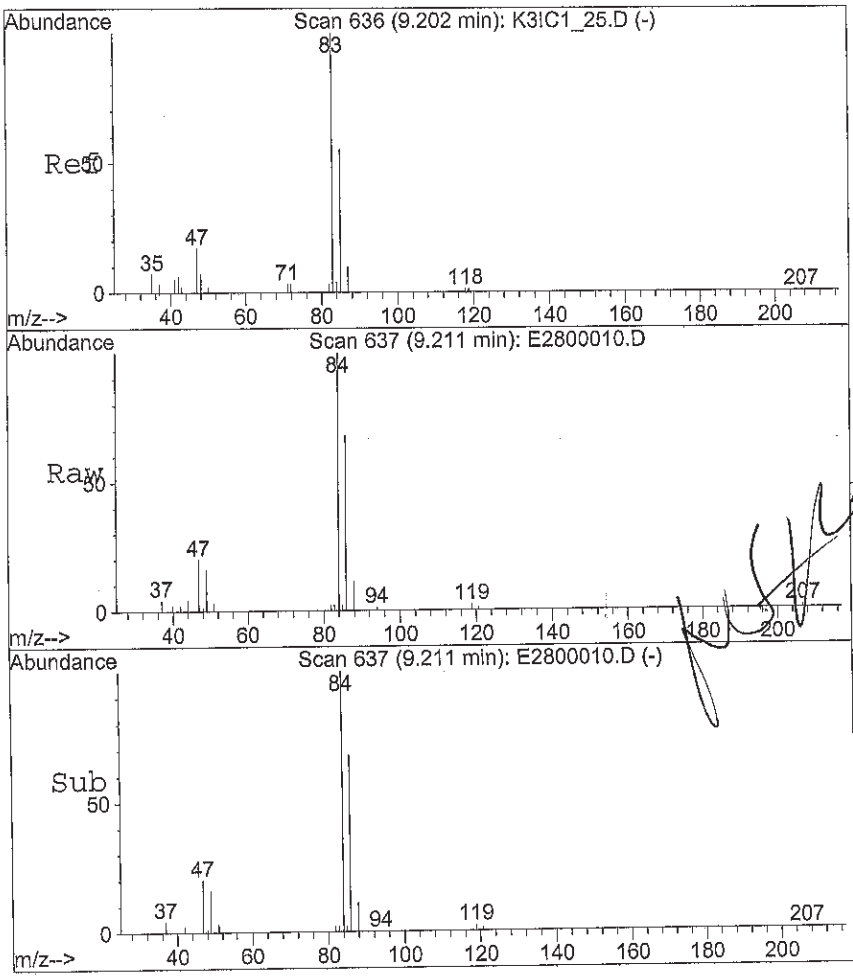


#15
(TBA) tert-Butanol
Concen: 1.58 ug/L
RT: 6.91 min Scan# 365
Delta R.T. -0.20 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 59 Resp: 474

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

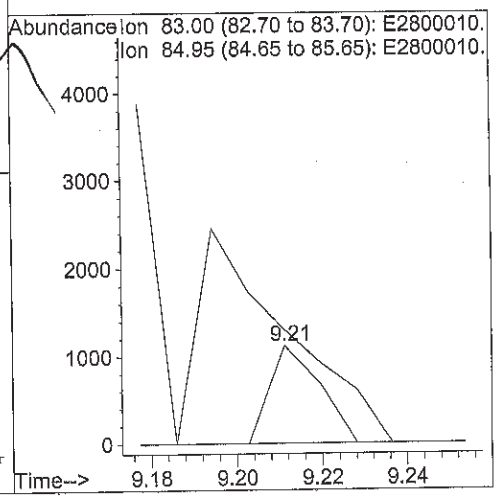


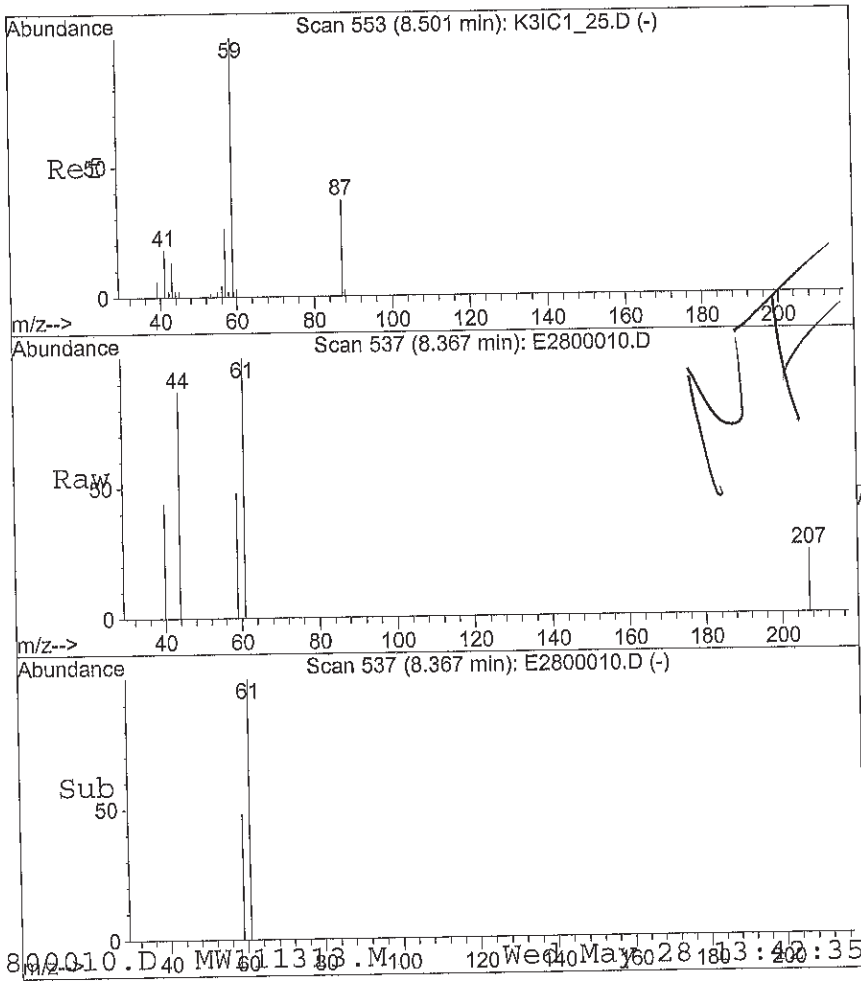


#24
Chloroform
Concen: 0.10 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 83 Resp: 907

Ion	Ratio	Lower	Upper
83	100		
85	391.5	51.8	77.6#

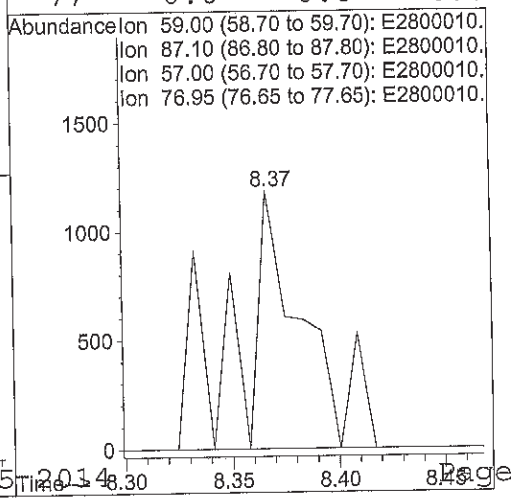


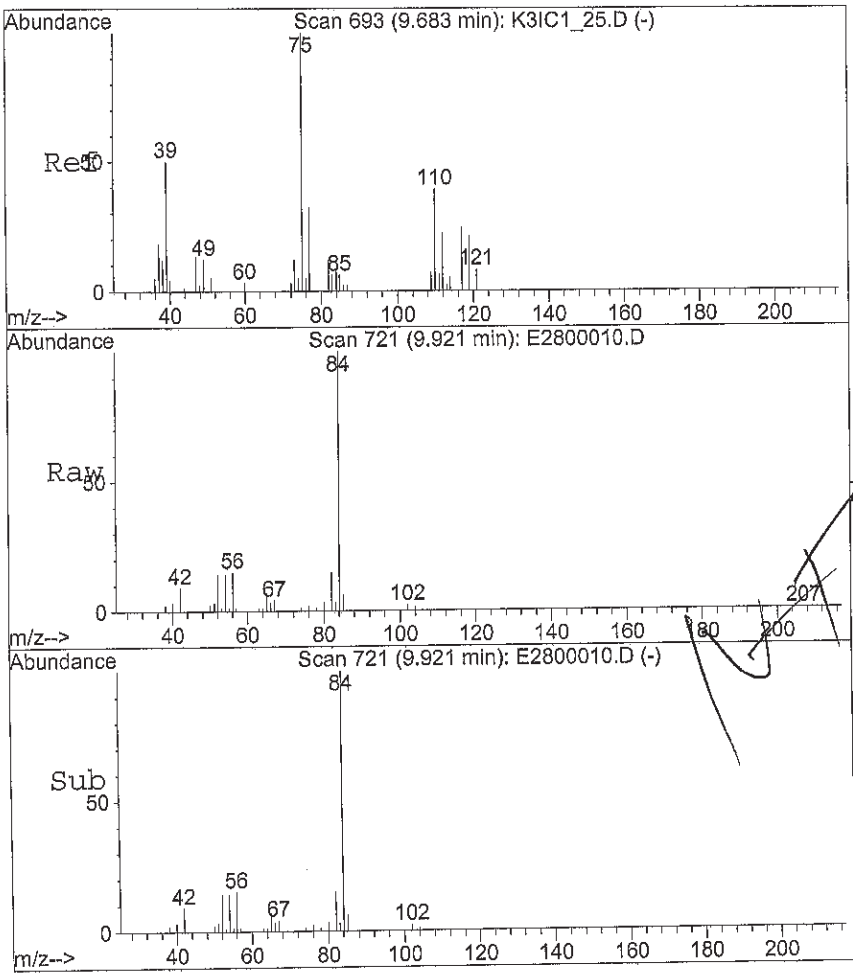


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.17 ug/L
RT: 8.37 min Scan# 537
Delta R.T. -0.13 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 59 Resp: 2158

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

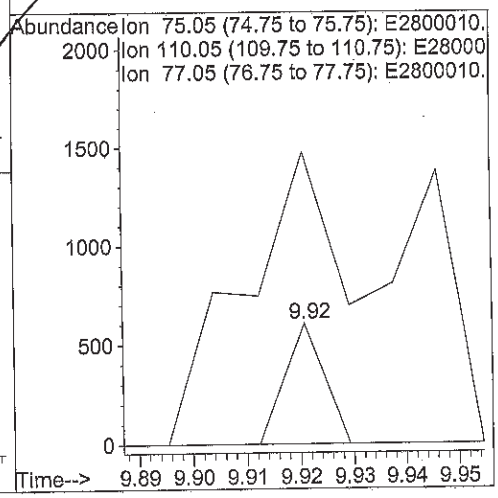


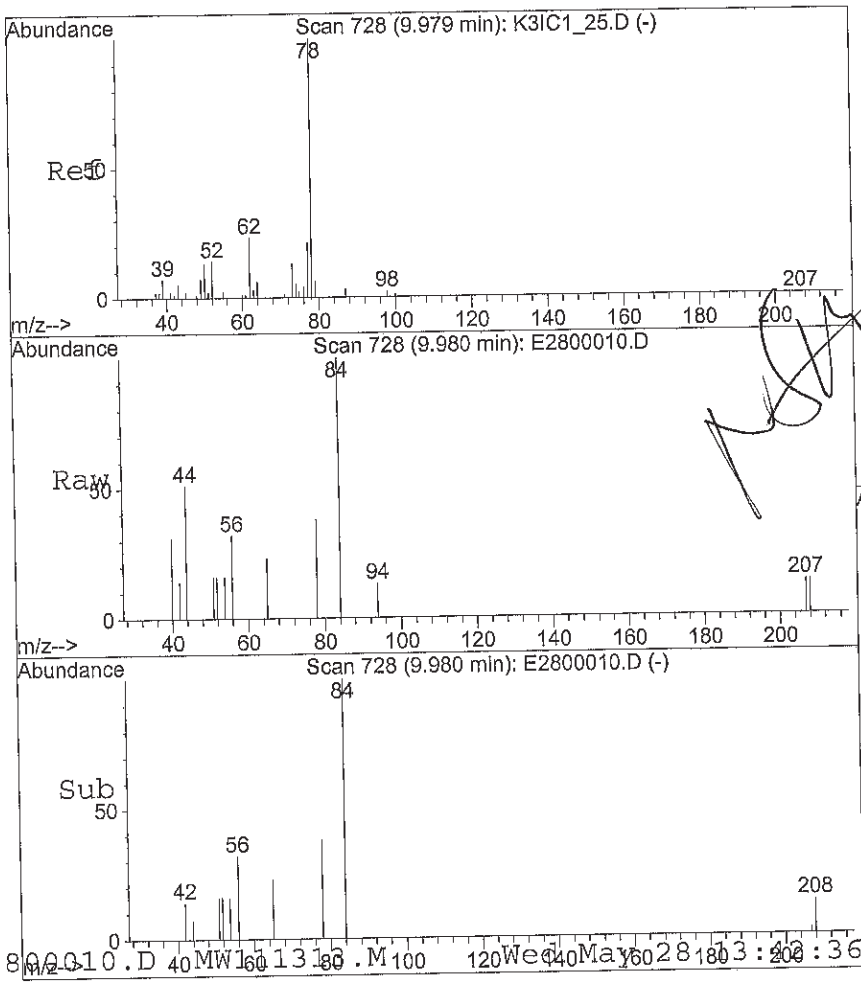


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 75 Resp: 306

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	743.1	25.0	37.4#

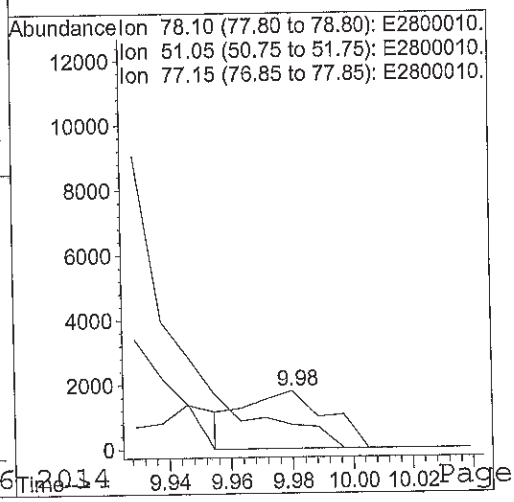


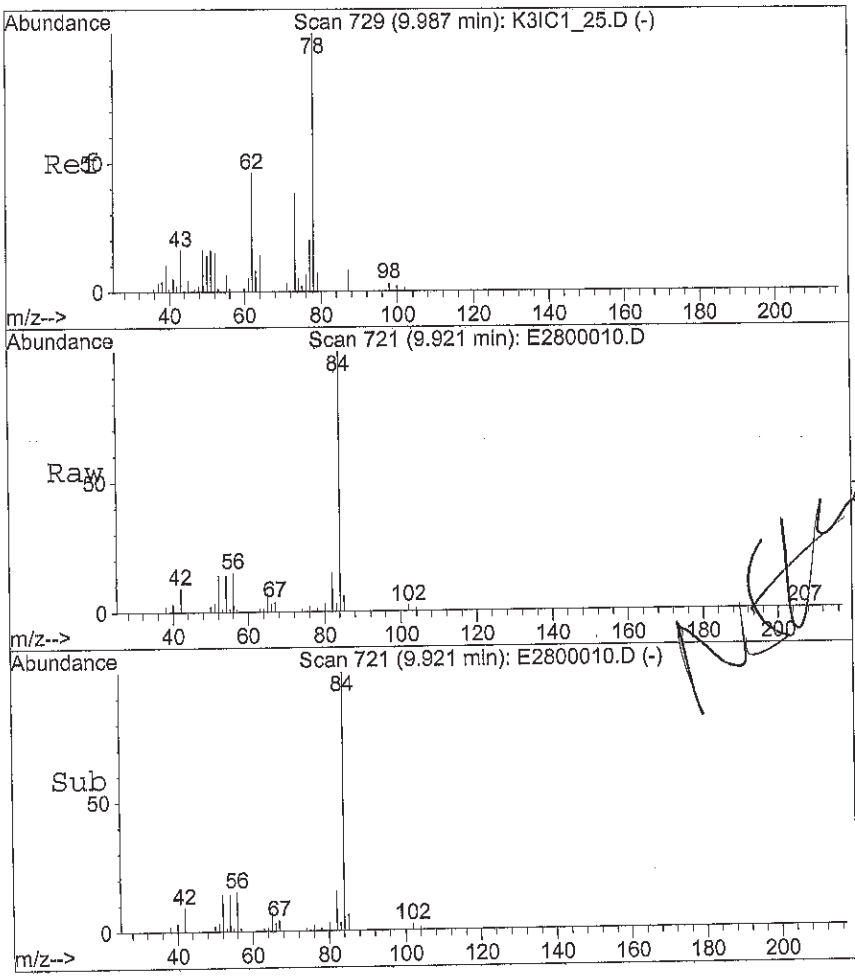


#31
Benzene
Concen: 0.20 ug/L
RT: 9.98 min Scan# 728
Delta R.T. 0.00 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 78 Resp: 3347

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

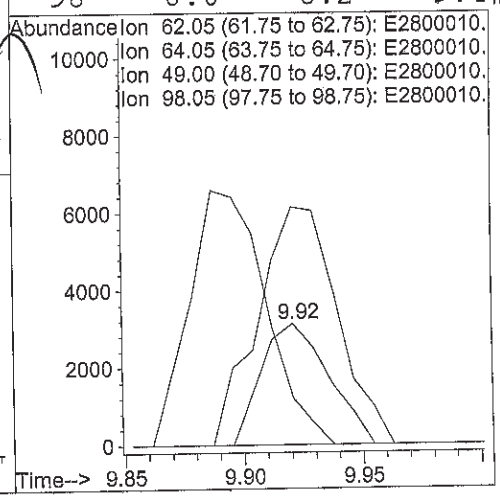


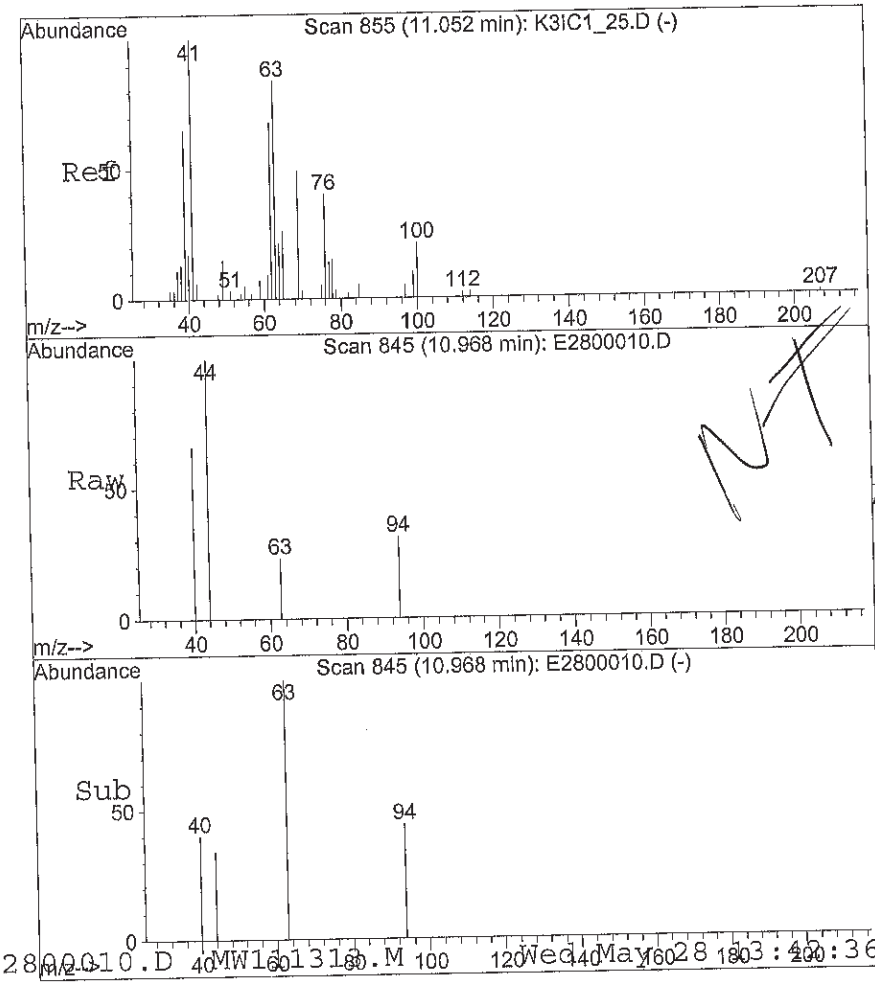


#32
1,2-Dichloroethane
Concen: 1.04 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 62 Resp: 6114

Ion	Ratio	Lower	Upper
62	100		
64	232.6	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

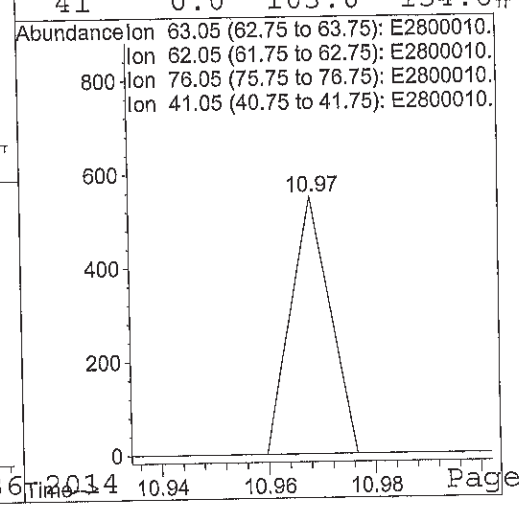


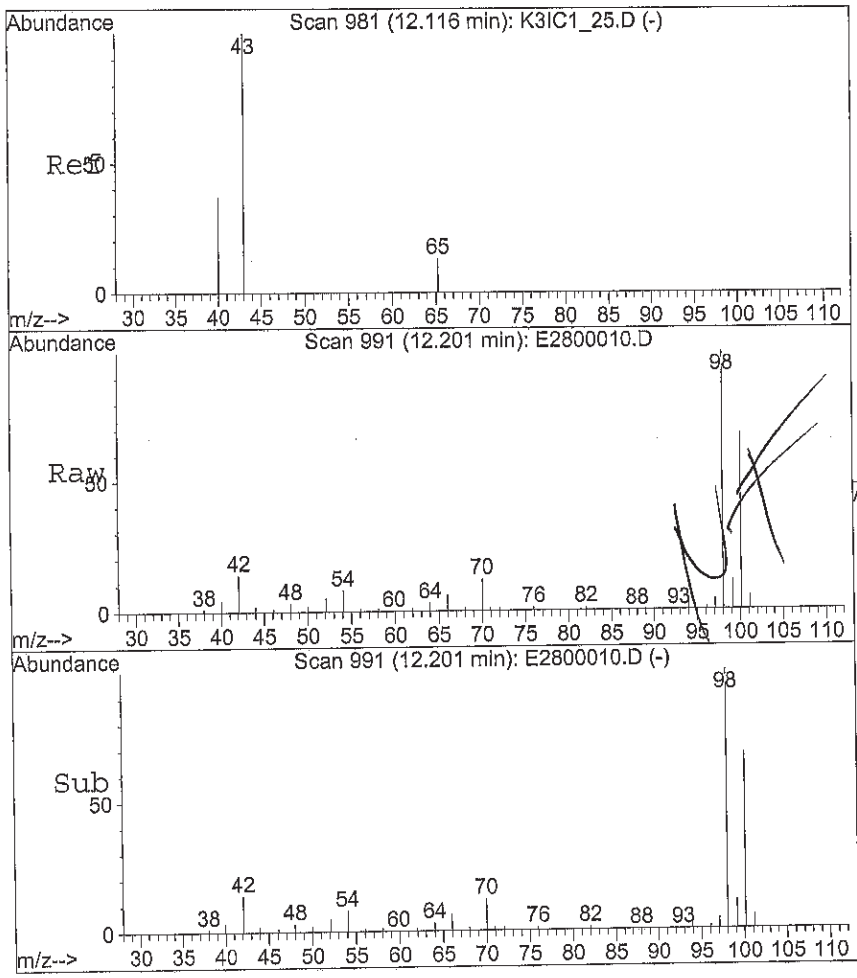


#34
1,2-Dichloropropane
Concen: 0.07 ug/L
RT: 10.97 min Scan# 845
Delta R.T. -0.08 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 63 Resp: 279

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

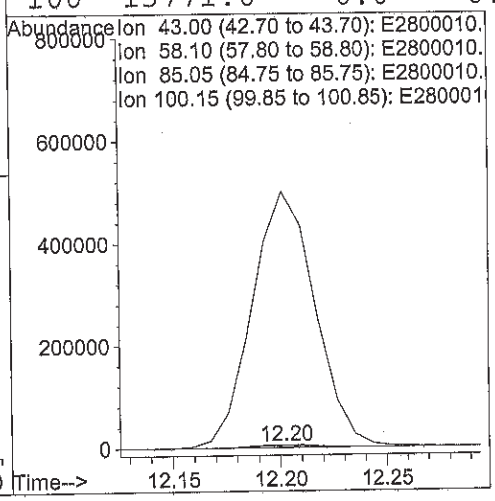


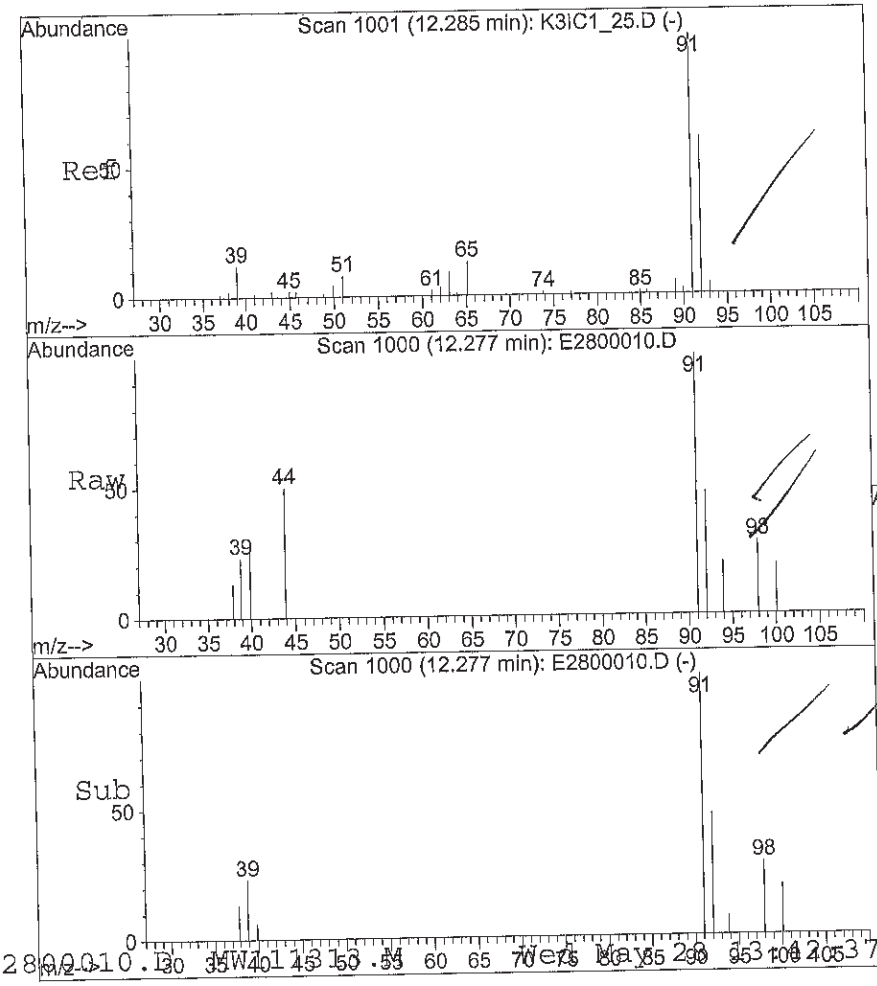


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.74 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.09 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 43 Resp: 7402

Ion	Ratio	Lower	Upper
43	100		
58	141.2	0.0	0.0#
85	0.0	0.0	0.0
100	13771.0	0.0	0.0#

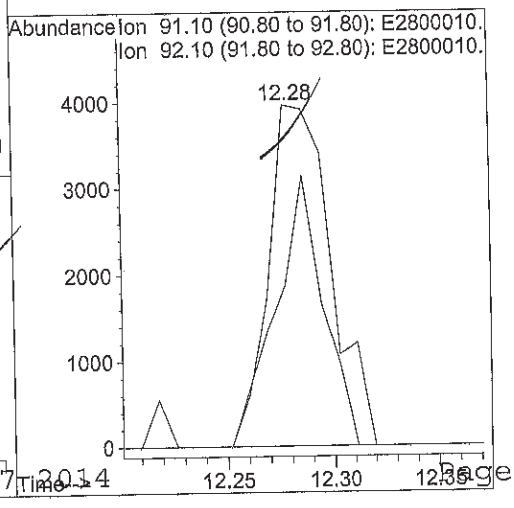


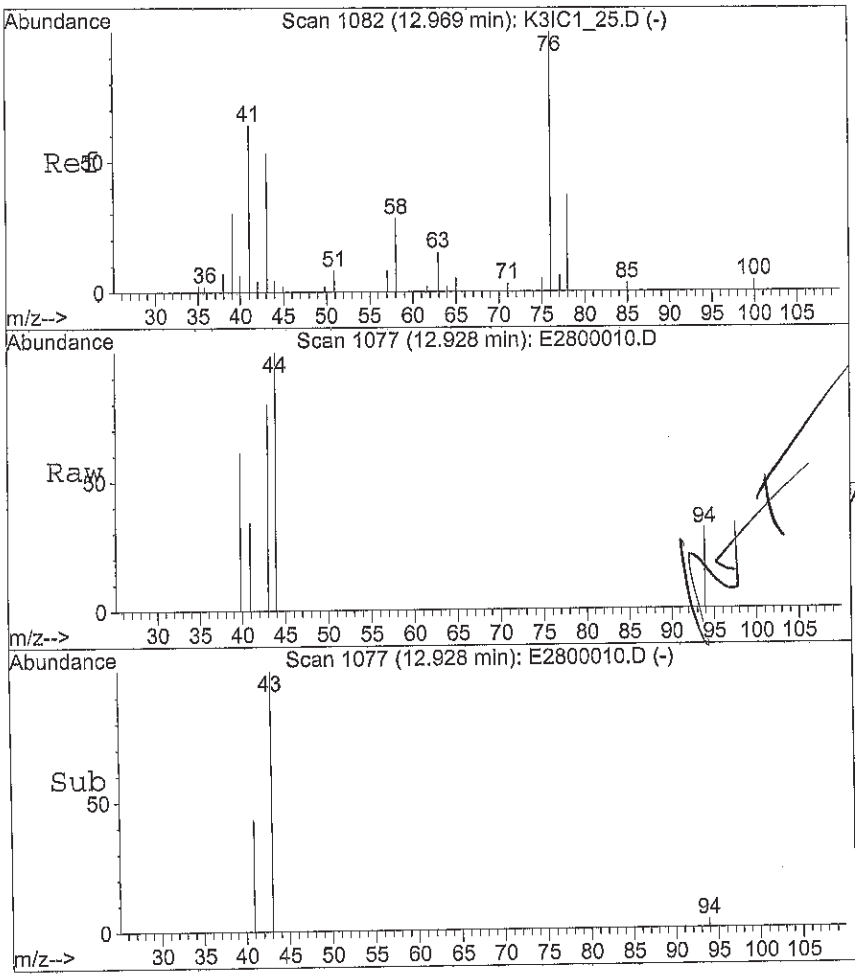


#41
Toluene
Concen: 0.44 ug/L
RT: 12.28 min Scan# 1000
Delta R.T. -0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 91 Resp: 8050

Ion	Ratio	Lower	Upper
91	100		
92	60.6	47.4	71.0

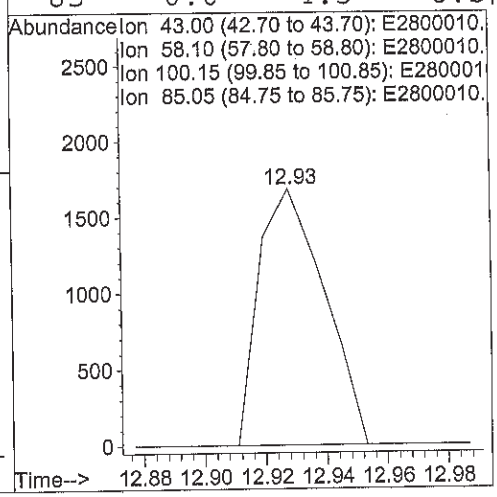


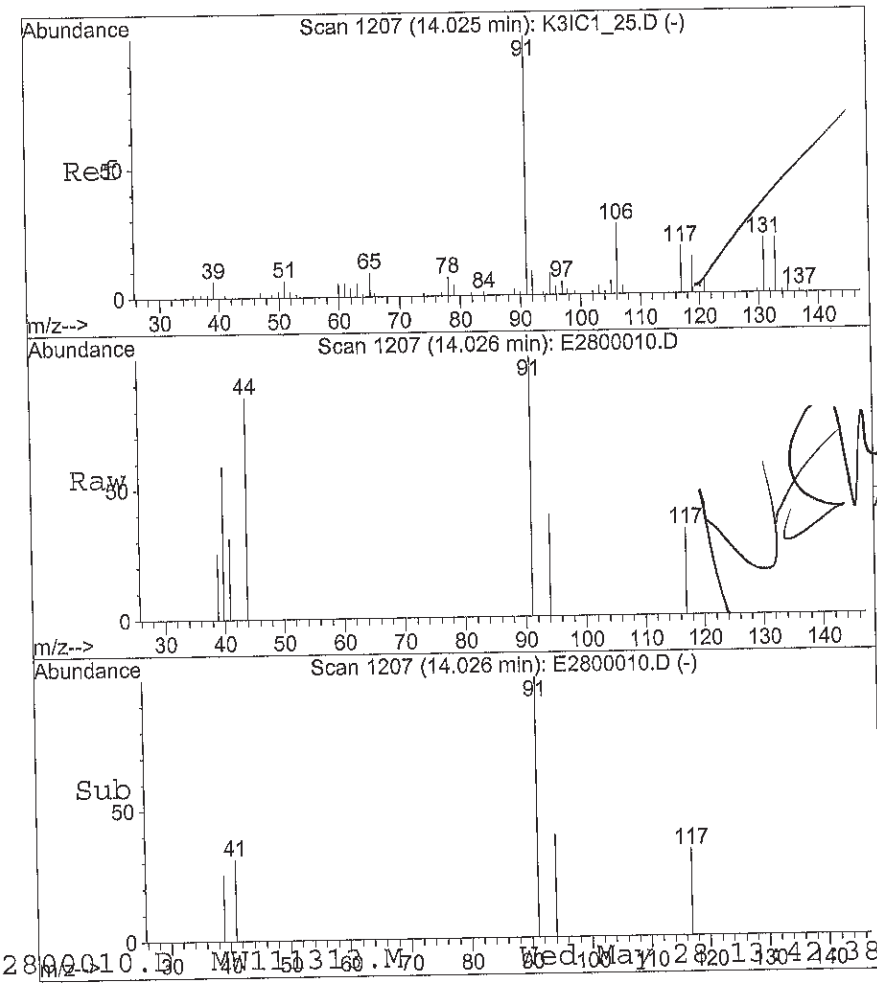


#46
2-Hexanone
Concen: 0.85 ug/L
RT: 12.93 min Scan# 1077
Delta R.T. -0.04 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 43 Resp: 2499

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

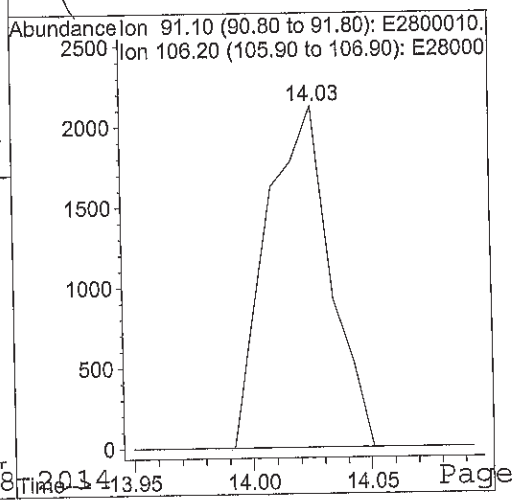


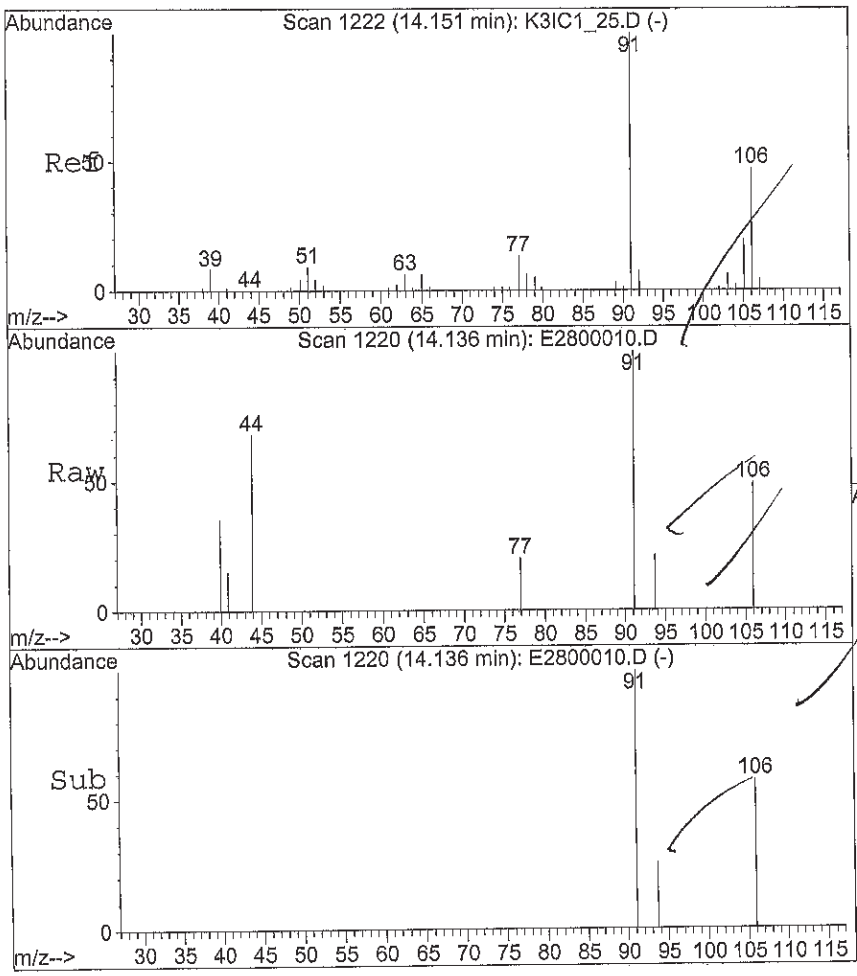


#51
Ethylbenzene
Concen: 0.19 ug/L
RT: 14.03 min Scan# 1207
Delta R.T. 0.00 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 91 Resp: 3958

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

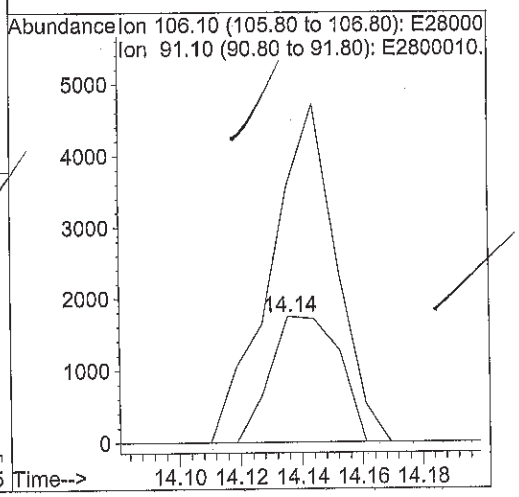


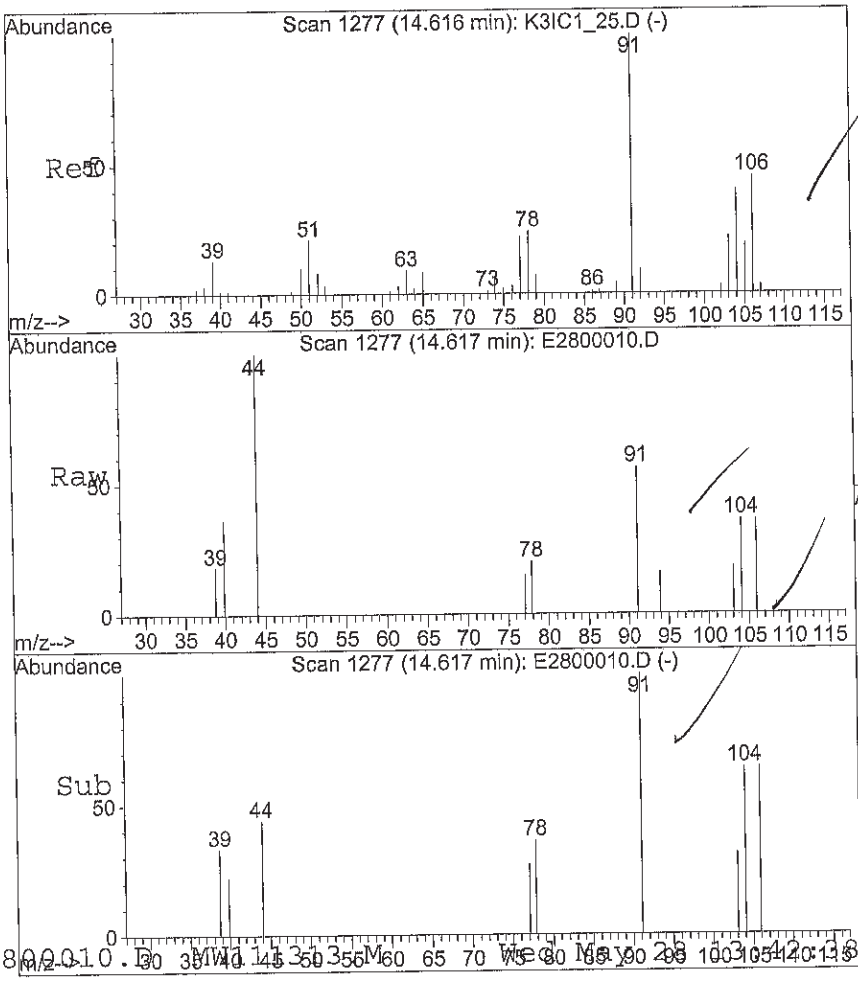


#52
m,p-Xylenes
Concen: 0.37 ug/L
RT: 14.14 min Scan# 1220
Delta R.T. -0.02 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:106 Resp: 2727

Ion	Ratio	Lower	Upper
106	100		
91	257.2	177.1	265.7

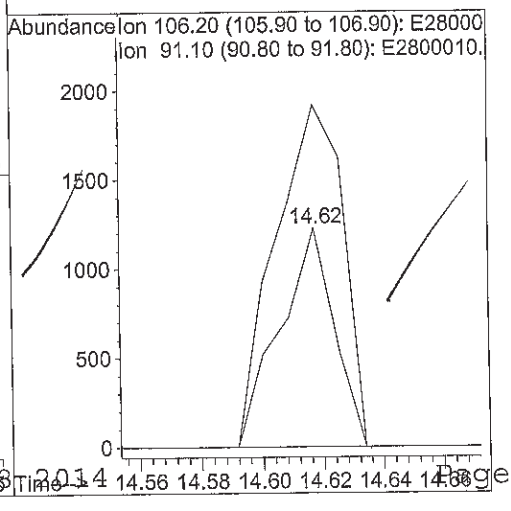


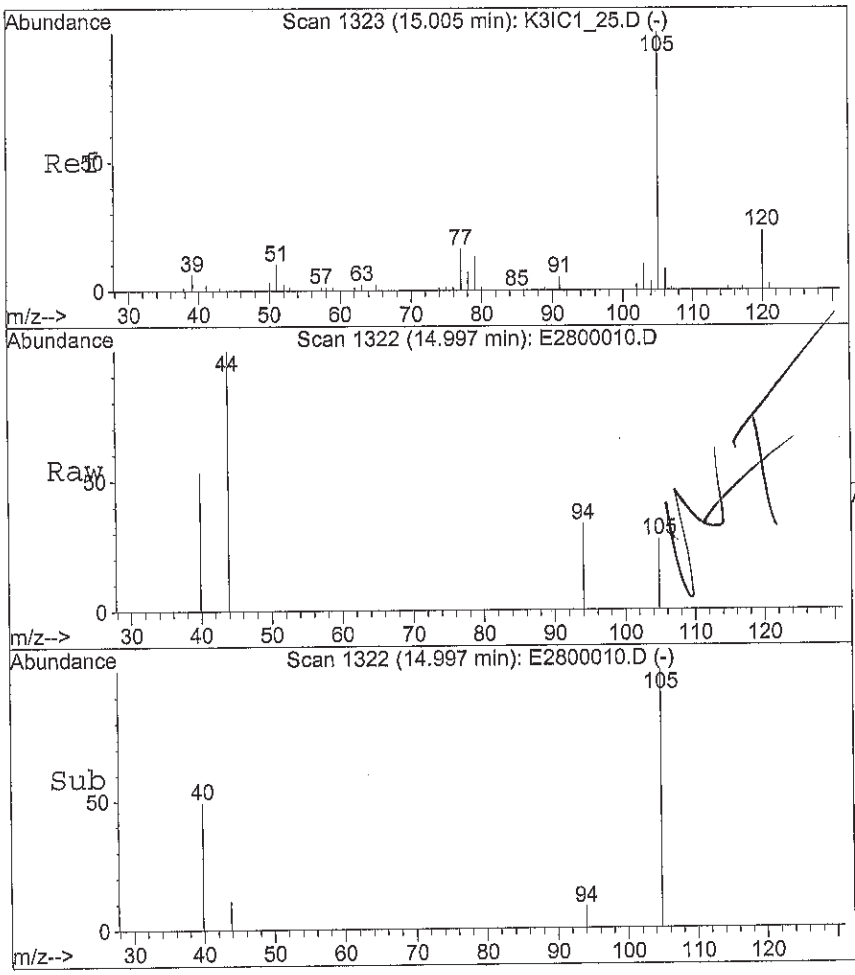


#53
o-Xylene
Concen: 0.21 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. 0.00 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:106 Resp: 1514

Ion	Ratio	Lower	Upper
106	100		
91	195.2	179.0	268.6

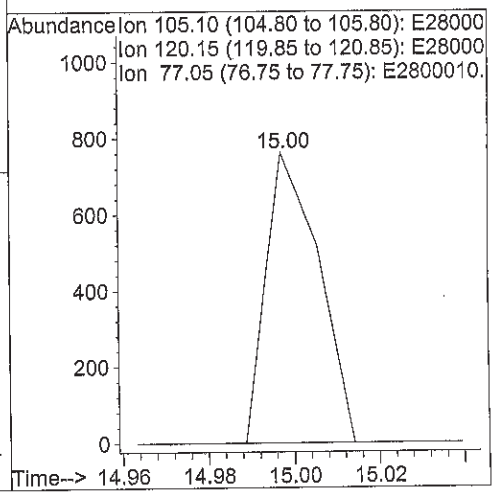


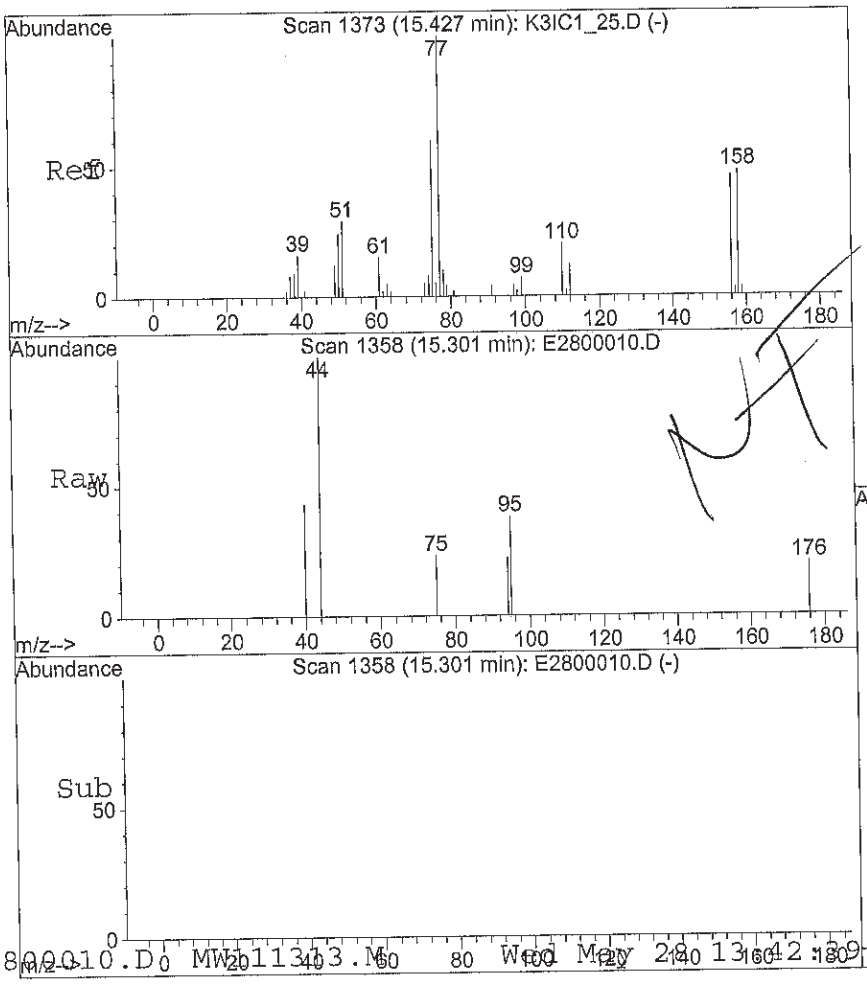


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.00 min Scan# 1322
Delta R.T. -0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:105 Resp: 648

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

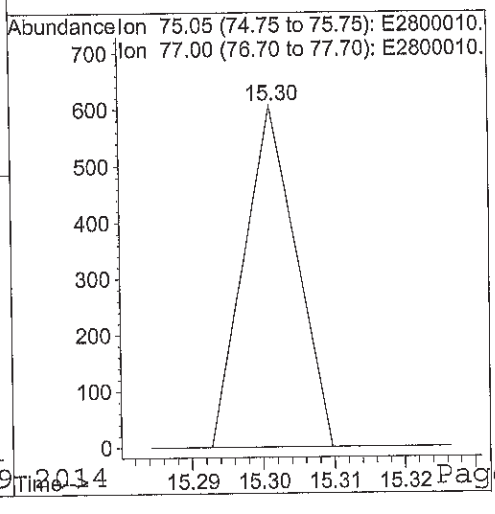


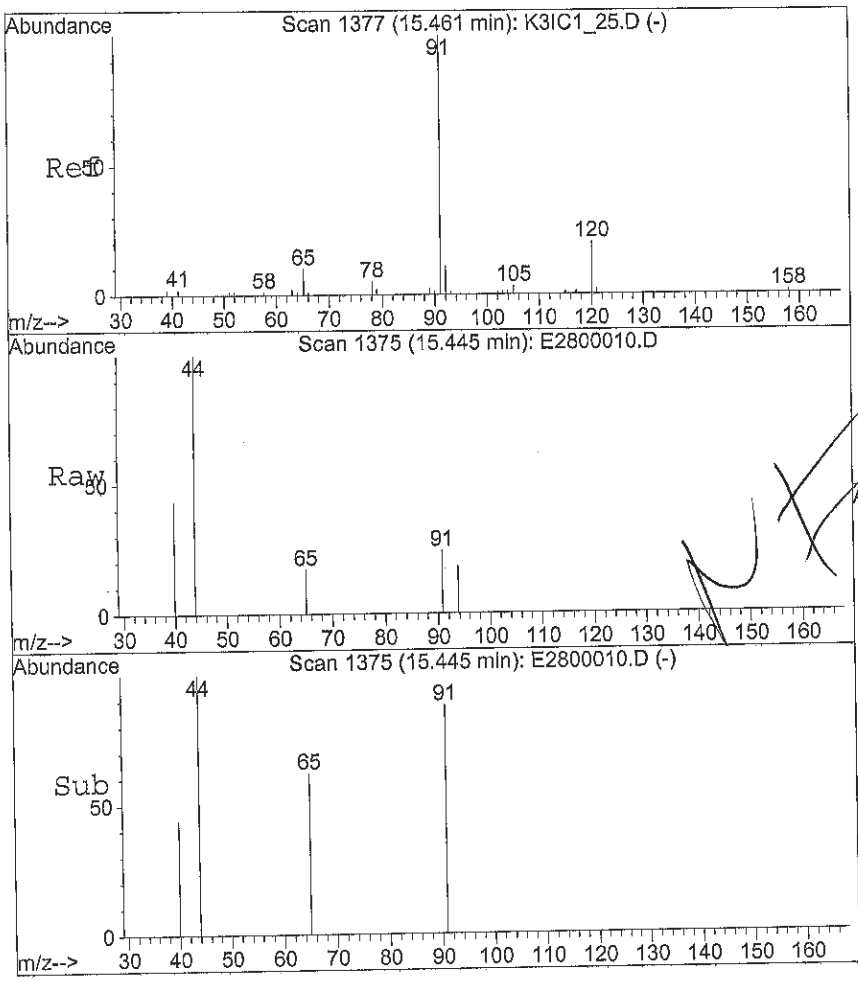


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.30 min Scan# 1358
Delta R.T. -0.13 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 75 Resp: 308

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

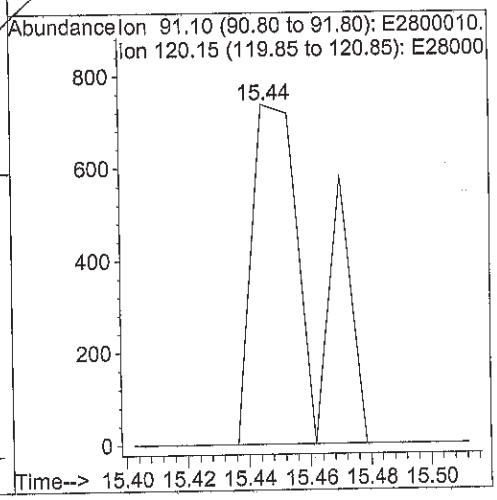


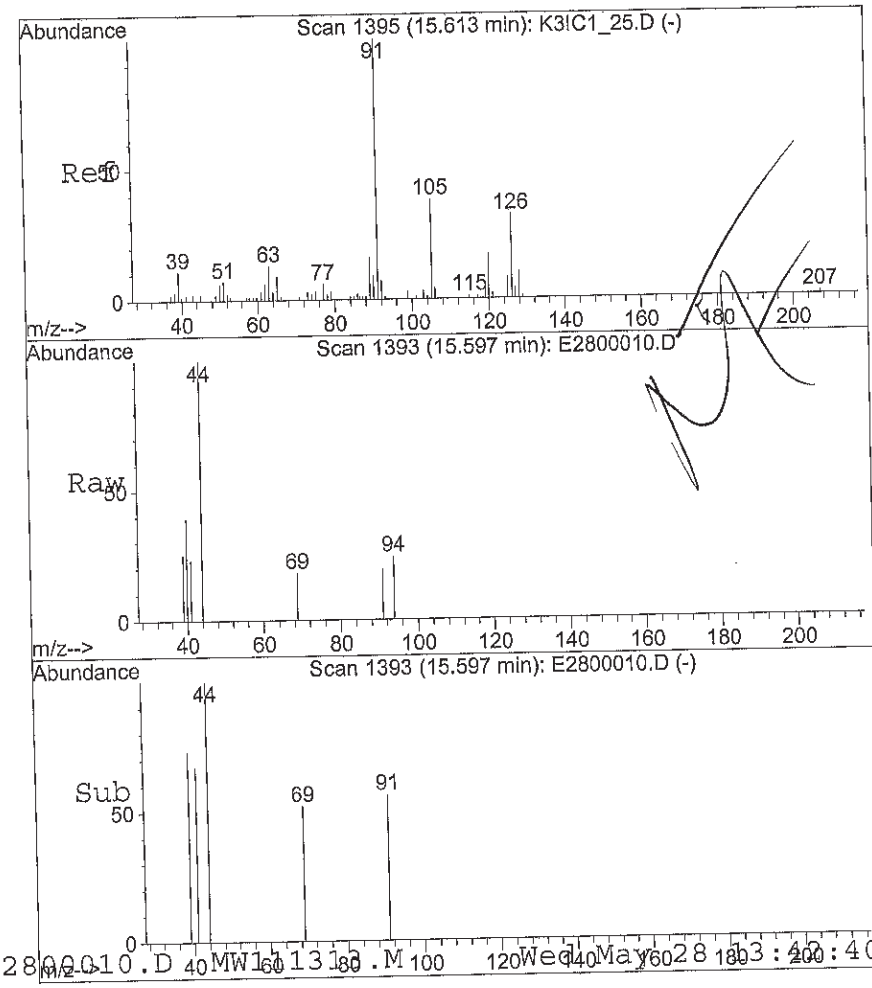


#62
n-Propylbenzene
Concen: 0.04 ug/L
RT: 15.44 min Scan# 1375
Delta R.T. -0.02 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 91 Resp: 1030

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

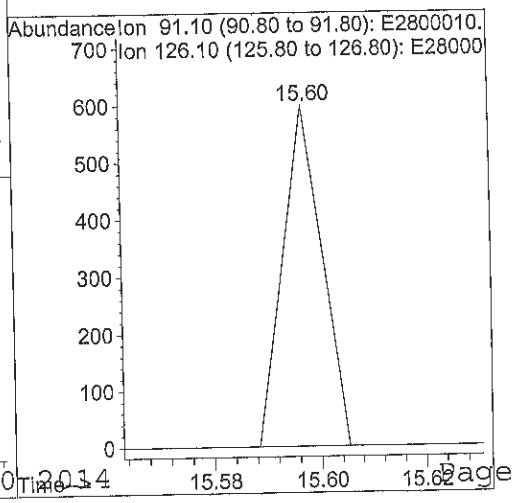


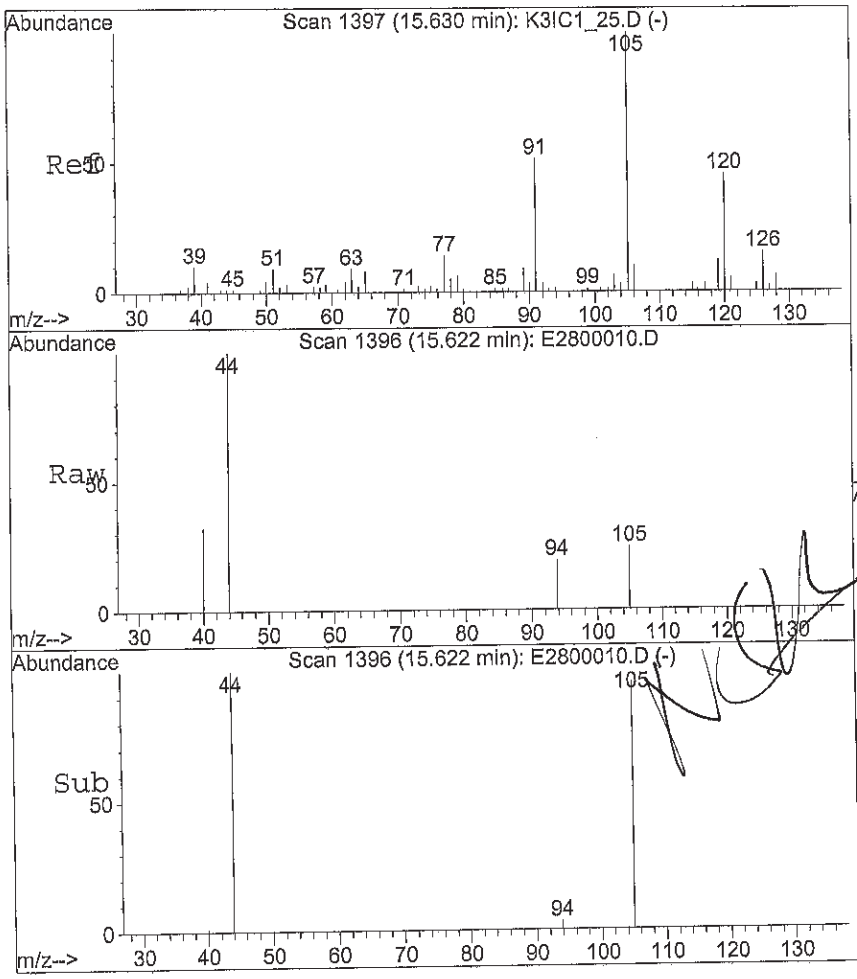


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1393
Delta R.T. -0.02 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 91 Resp: 303

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

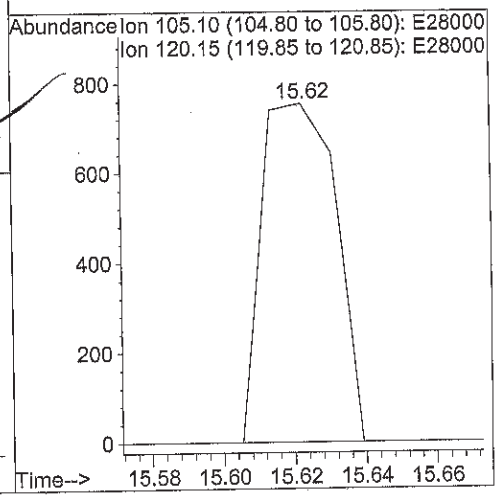


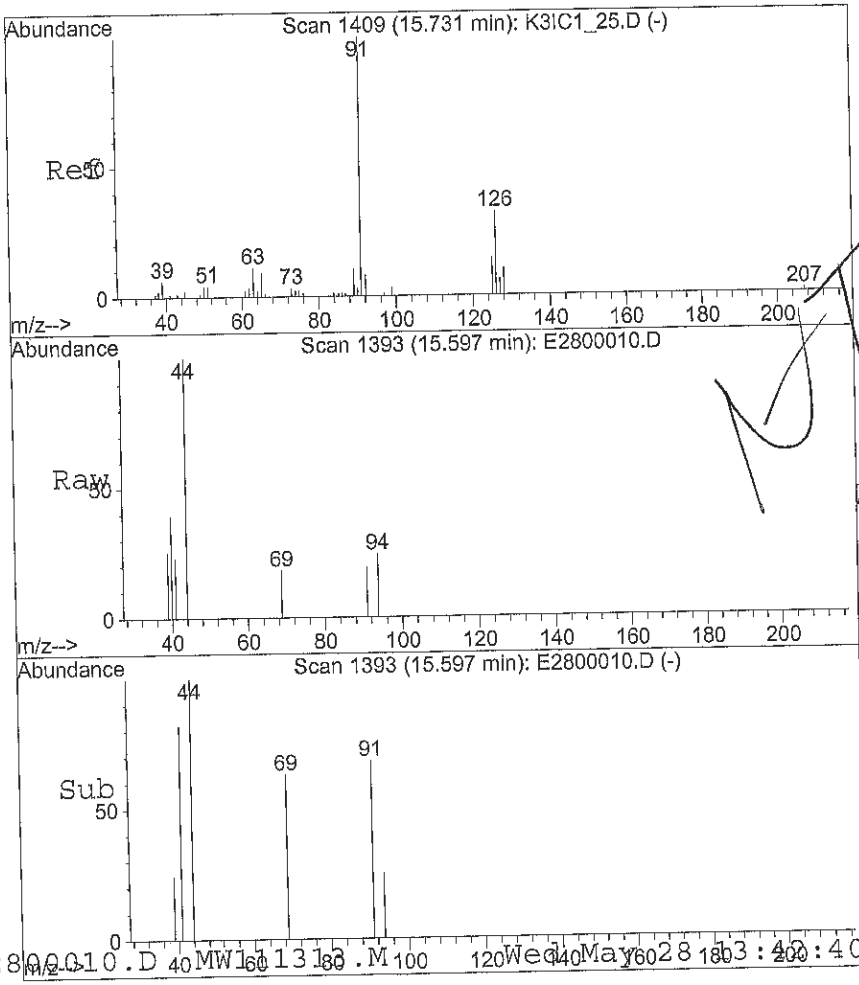


#64
1,3,5-Trimethylbenzene
Concen: 0.06 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:105 Resp: 1083

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

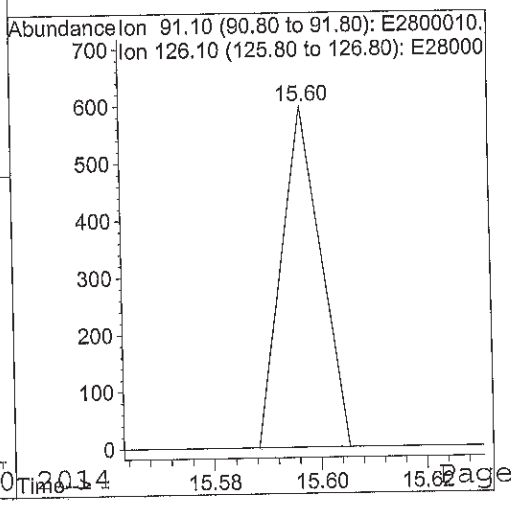


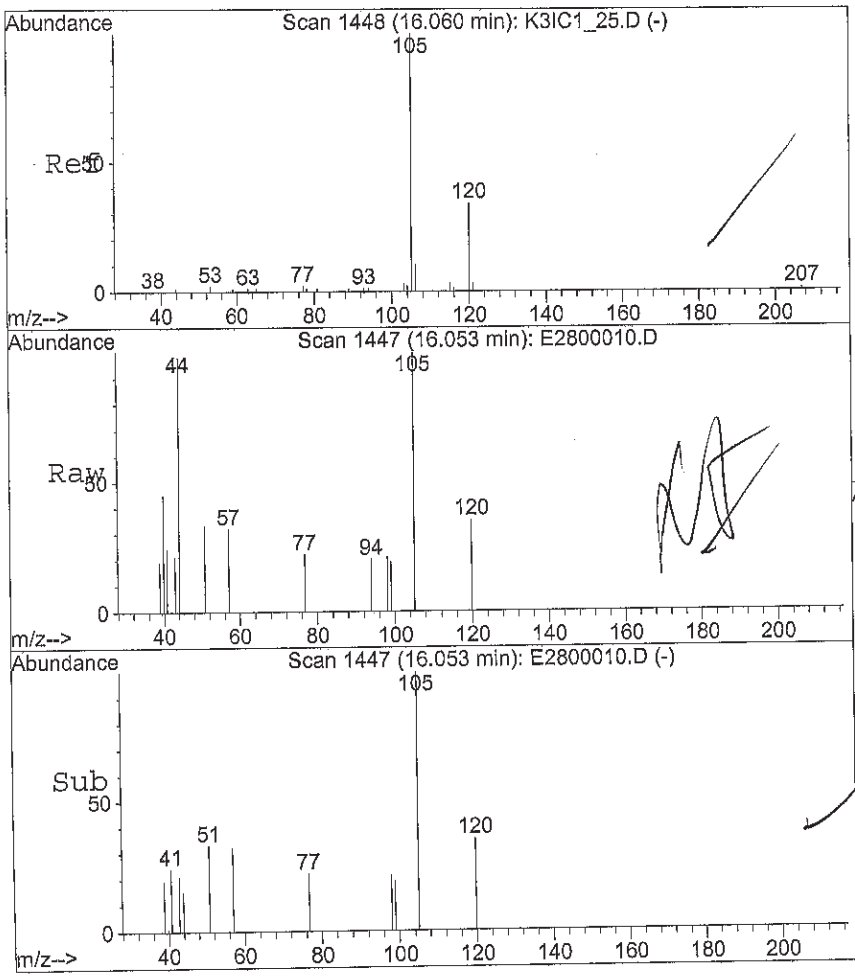


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1393
Delta R.T. -0.13 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 91 Resp: 303

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

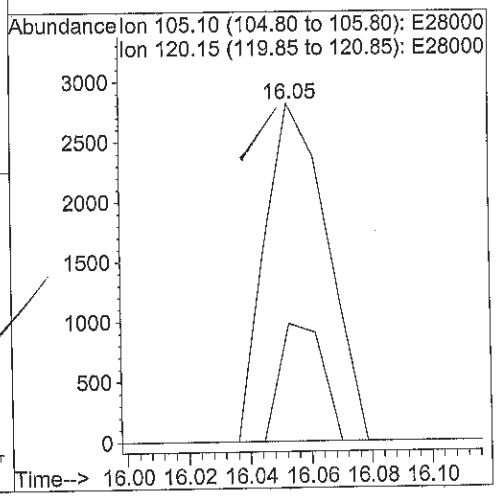


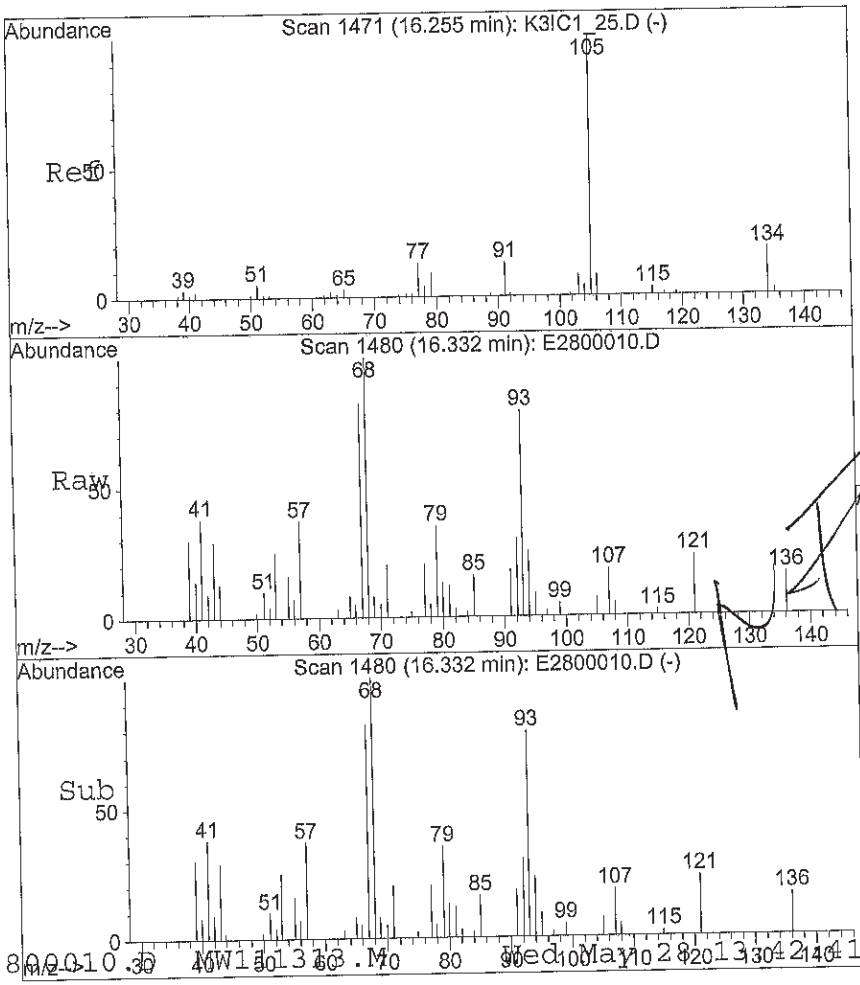


#67
1,2,4-Trimethylbenzene
Concen: 0.21 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:105 Resp: 3979

Ion	Ratio	Lower	Upper
105	100		
120	23.8	33.8	50.8#

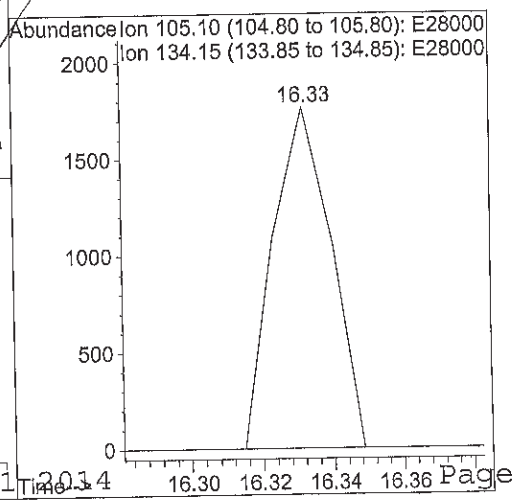


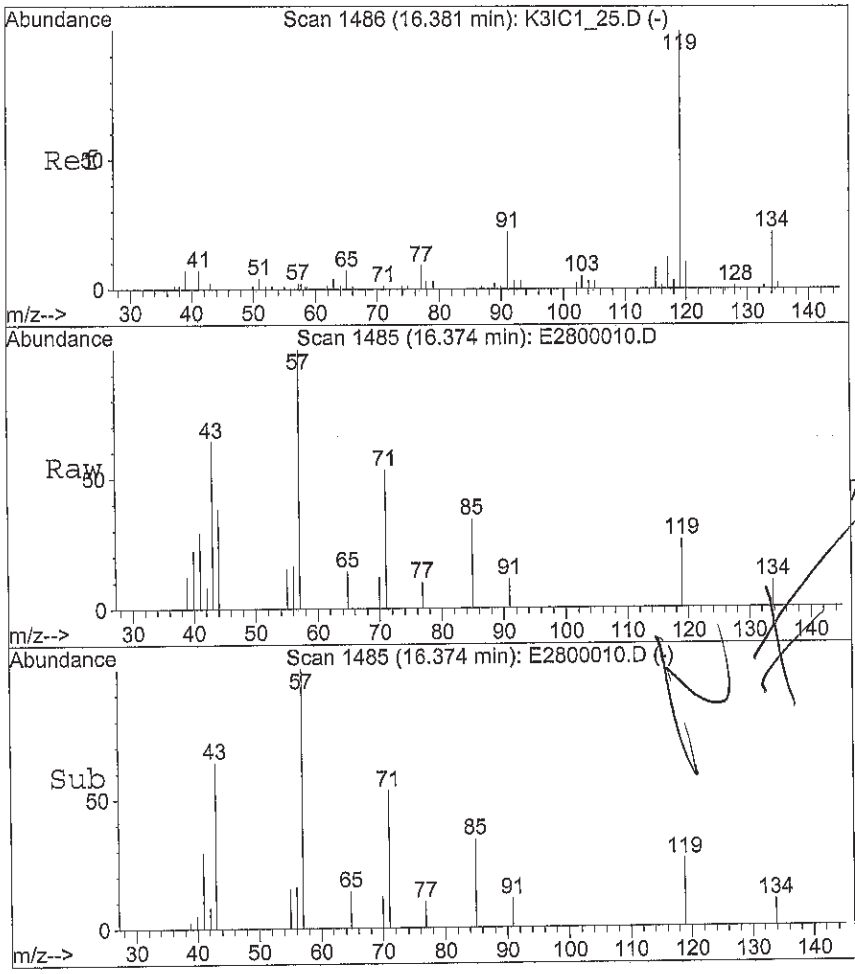


#68
sec-Butylbenzene
Concen: 0.08 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:105 Resp: 1984

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

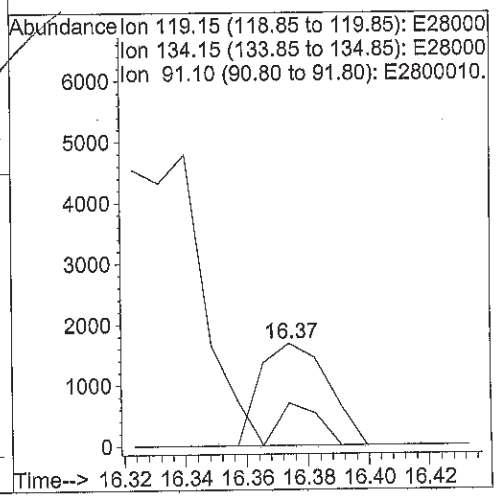


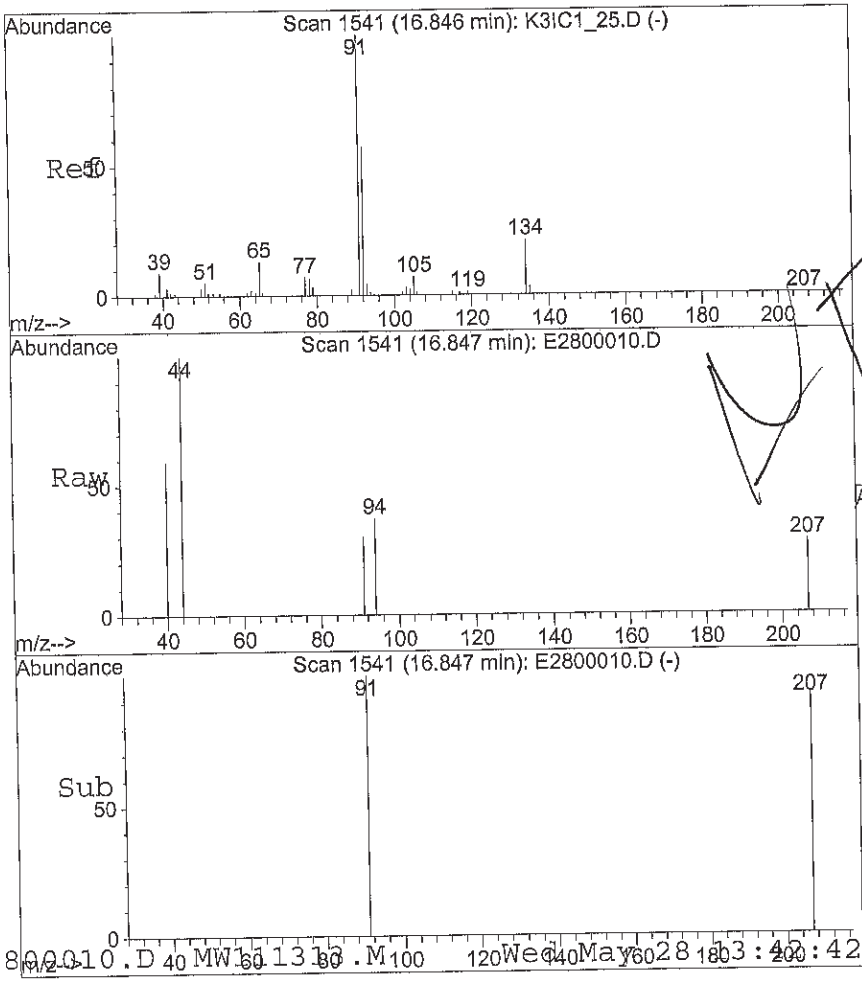


#69
p-Isopropyltoluene
Concen: 0.13 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:119 Resp: 2595

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	23.8	19.6	29.4

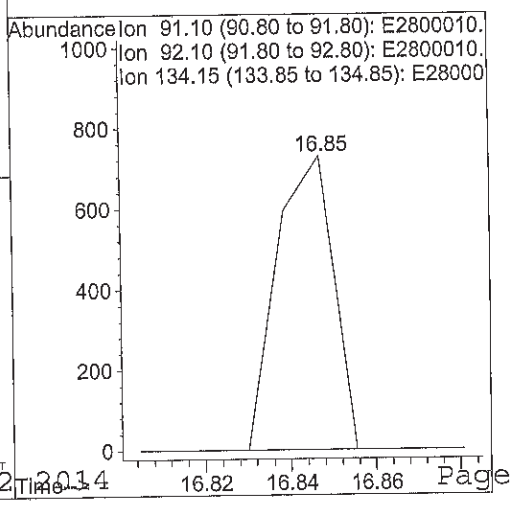


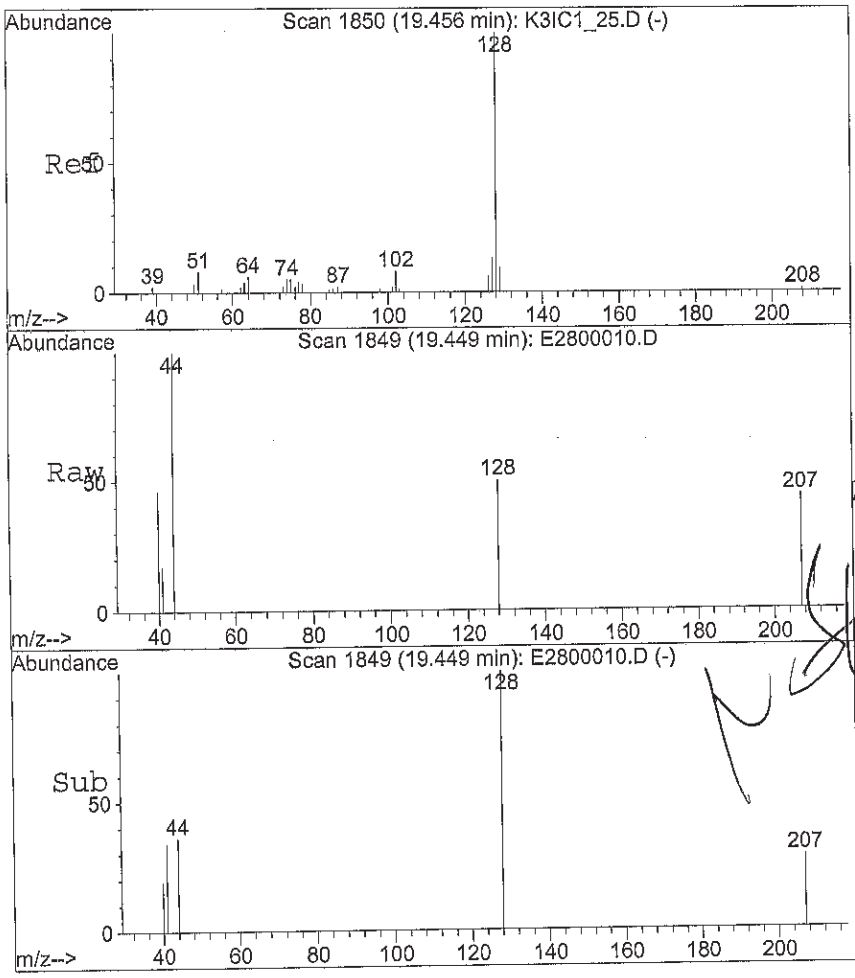


#72
n-Butylbenzene
Concen: 0.03 ug/L
RT: 16.85 min Scan# 1541
Delta R.T. 0.00 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion: 91 Resp: 670

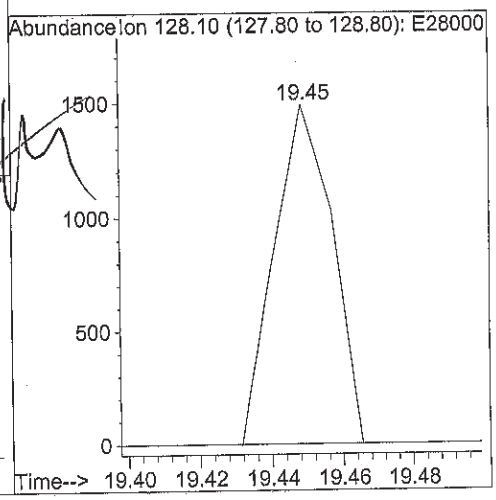
Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#





#77
Naphthalene
Concen: 0.12 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2800010.D
Acq: 28 May 2014 1:14 pm

Tgt Ion:128 Resp: 1678



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800010.D Vial: 1
Acq On : 28 May 2014 1:14 pm Operator: DN
Sample : 3E42801-09 Inst : GC/MS Ins
Misc : 100cc SVL-510-SA5D-SV-7.5-8.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 13:45 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1758241	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1350650	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	724286	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	477796	10.45 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 83.60%		
3) Chloroform-d (SU6)	9.18	84	725914	11.06 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.48%		
4) Methylene Chloride-d2 (SU5	7.07	86	414130	10.80 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.40%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	457547	14.64 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 117.12%		
6) Benzene-d6 (SU7)	9.92	84	1433329	10.39 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 83.12%		
8) Toluene-d8 (SU3)	12.20	98	1500571	11.71 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.68%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	730869	13.82 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.56%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

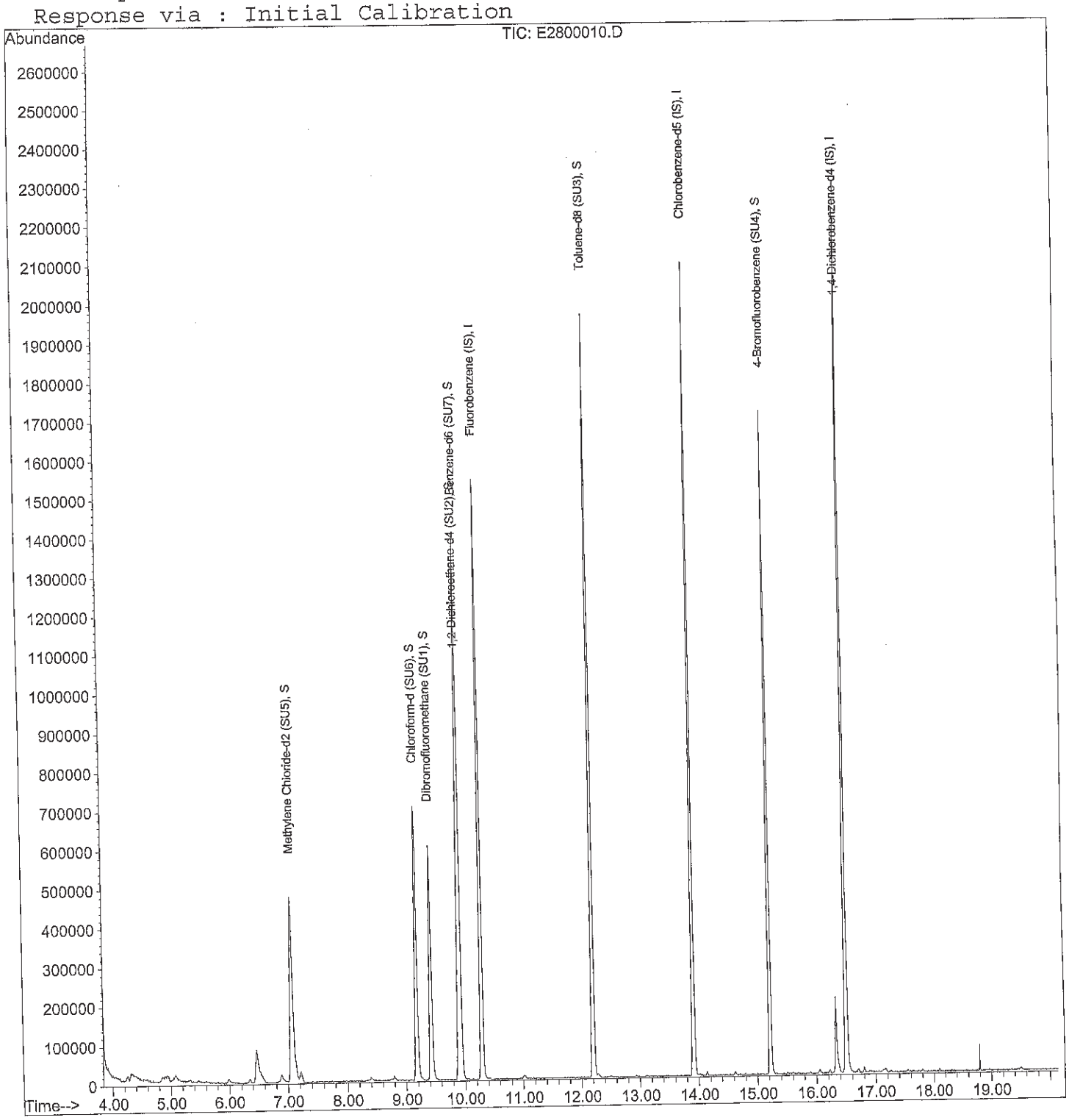
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800010.D
Acq On : 28 May 2014 1:14 pm
Sample : 3E42801-09
Misc : 100cc SVL-510-SA5D-SV-7.5-8.5
MS Integration Params: rteint.p
Quant Time: May 28 13:45 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800011.D
Acq On : 28 May 2014 1:50 pm
Sample : 3E42801-10
Misc : 100cc SVL-544-SA5D-SV-4.5-5.5
MS Integration Params: rteint.p
Quant Time: May 28 14:11 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1619122	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1276085	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	681965	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	460228	11.40 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.20%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	447728	11.66 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.28%		
39) Toluene-d8 (SU3)	12.20	98	1424769	11.97 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.76%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	701649	13.44 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.52%		

Target Compounds					Qvalue
4) Chloromethane	4.40	50	4606	0.48 ~~ug/L #~~ SM	41
6) Bromomethane	5.06	96	7305	2.32 ~~ug/L #~~	1
7) Chloroethane	5.07	64	1204	1.58 ~~ug/L~~	87
9) (F113) 1,1,2-Trichloro-tri	6.35	151	1201	0.38 ug/L 0.0076	86
10) 1,1-Dichloroethene	6.33	96	280	0.07 ~~ug/L #~~ SM	1
11) Acetone	6.47	58	2346	180.01 ~~ug/L #~~	1
12) (IPA) Leak Check Compound	6.47	45	216673	1113.65 ~~ug/L #~~ SM	83
13) Carbon disulfide	6.84	76	10529	0.78 ~~ug/L~~	99
14) Methylene Chloride	7.06	84	6857	1.54 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.88	59	2446	8.86 ~~ug/L #~~	77
24) Chloroform	9.20	83	1832	0.22 ~~ug/L #~~ SM	18
25) (ETBE) 2-ethoxy 2-methyl p	8.33	59	554	0.05 ~~ug/L #~~	44
29) 1,1-Dichloropropene	9.93	75	310	0.05 ~~ug/L #~~	1
31) Benzene	9.98	78	8467	0.56 ~~ug/L #~~	77
32) 1,2-Dichloroethane	9.92	62	6108	1.13 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	7870	3.09 ~~ug/L #~~	100
41) Toluene	12.29	91	60653	3.49 ug/L 0.0698	95
42) trans-1,3-Dichloropropene	12.51	75	275	0.05 ~~ug/L #~~ SM	36
46) 2-Hexanone	12.91	43	894	0.32 ~~ug/L #~~	37
51) Ethylbenzene	14.02	91	18307	0.93 ug/L 0.0186	95
52) m,p-Xylenes	14.14	106	18414	2.62 ug/L 0.0524	87
53) o-Xylene	14.61	106	10065	1.45 ug/L 0.029	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800011.D Vial: 2
Acq On : 28 May 2014 1:50 pm Operator: DN
Sample : 3E42801-10 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 14:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) Styrene	14.62	104	2047	-0.67 ~~ug/L #~~ NSM	5
56) Isopropylbenzene	15.01	105	602	0.03 ~~ug/L #~~	44
57) 1,2,3-Trichloropropane	15.34	75	337	0.06 ~~ug/L #~~	36
62) n-Propylbenzene	15.46	91	1688	0.06 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.54	91	477	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	1411	0.08 ~~ug/L #~~	31
65) 4-Chlorotoluene	15.54	91	477	0.03 ~~ug/L #~~	44
66) tert-Butylbenzene	16.07	119	286	0.02 ~~ug/L #~~	24
67) 1,2,4-Trimethylbenzene	16.05	105	4975	0.28 ug/L 0.0056	89
68) sec-Butylbenzene	16.32	105	1057	0.05 ~~ug/L #~~ NSM	62
69) p-Isopropyltoluene	16.37	119	1376	0.07 ~~ug/L #~~	74
77) Naphthalene	19.45	128	732	0.05 ~~ug/L~~	100

(#) = qualifier out of range (m) = manual integration

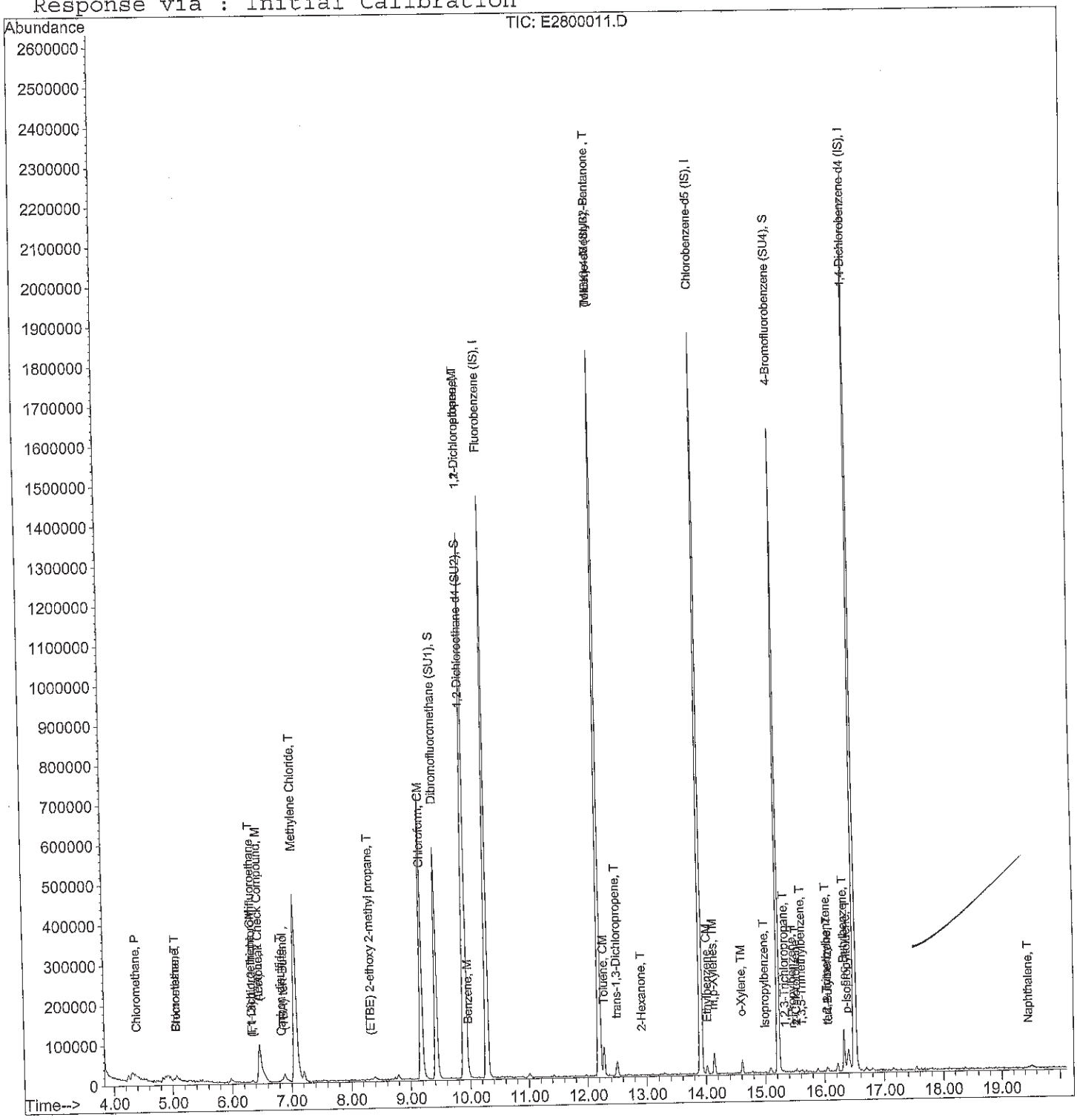
Quantitation Report

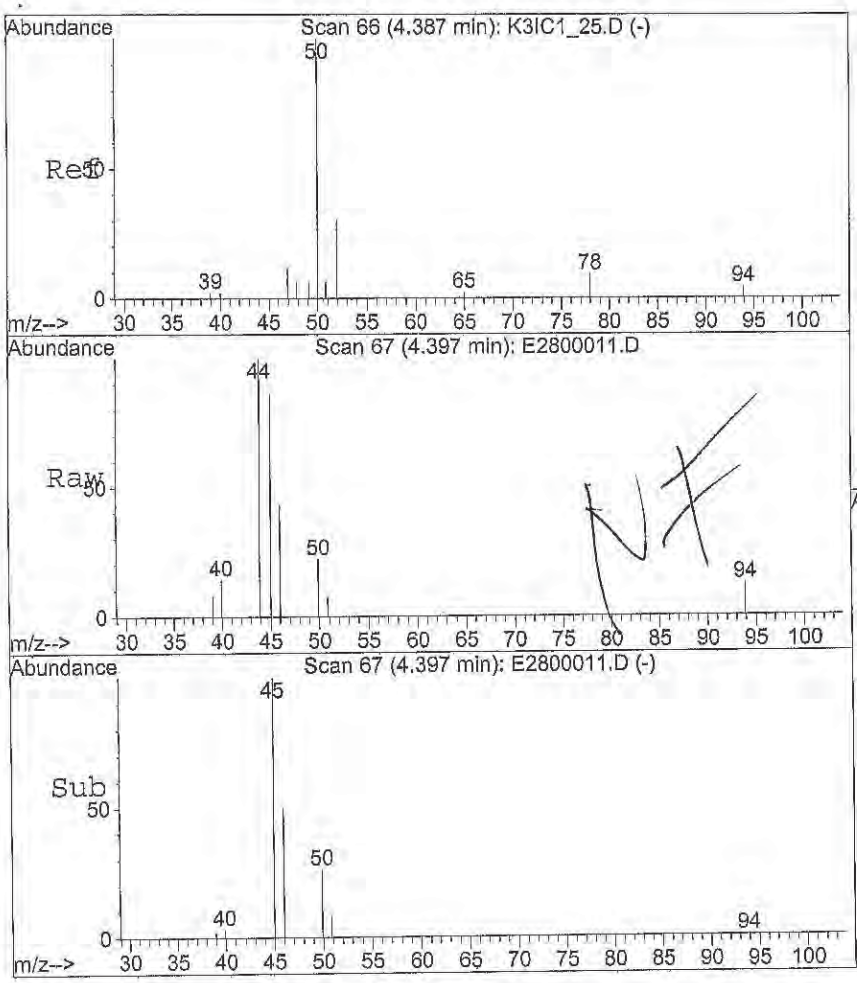
Data File : C:\HPCHEM\1\DATA\052814L3\E2800011.D
Acq On : 28 May 2014 1:50 pm
Sample : 3E42801-10
Misc : 100cc SVL-544-SA5D-SV-4.5-5.5
MS Integration Params: rteint.p
Quant Time: May 28 14:11 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

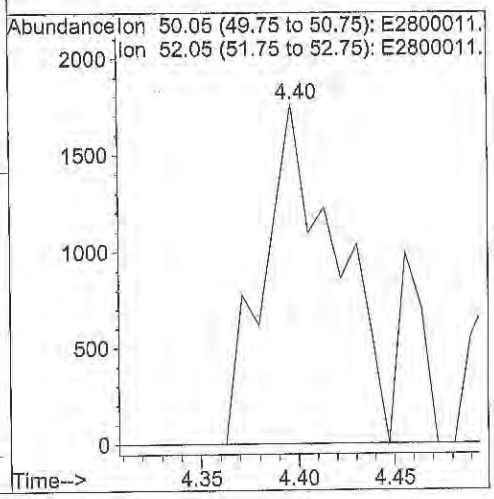


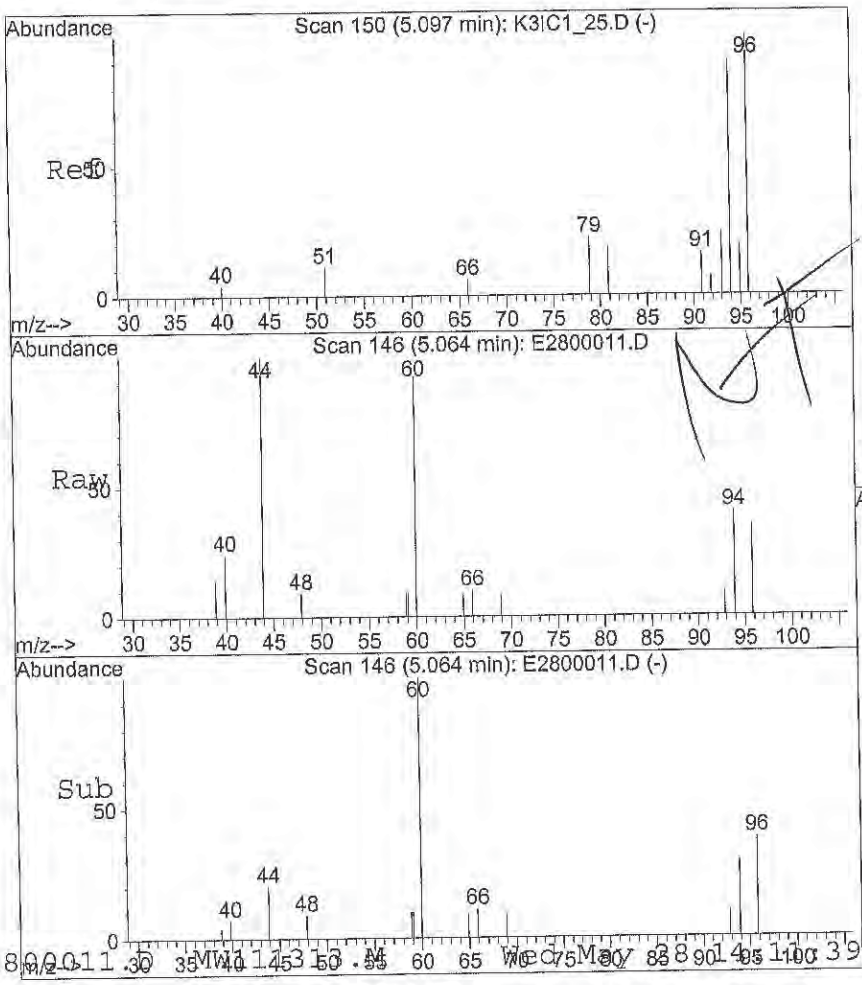


#4
Chloromethane
Concen: 0.48 ug/L
RT: 4.40 min Scan# 67
Delta R.T. 0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 50 Resp: 4606

Ion	Ratio	Lower	Upper
50	100		
52	0.0	26.9	40.3#

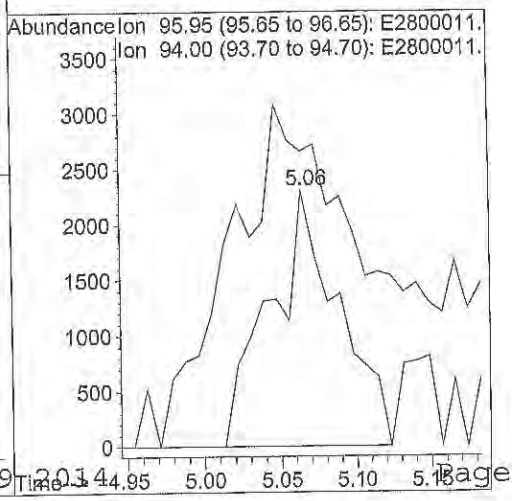


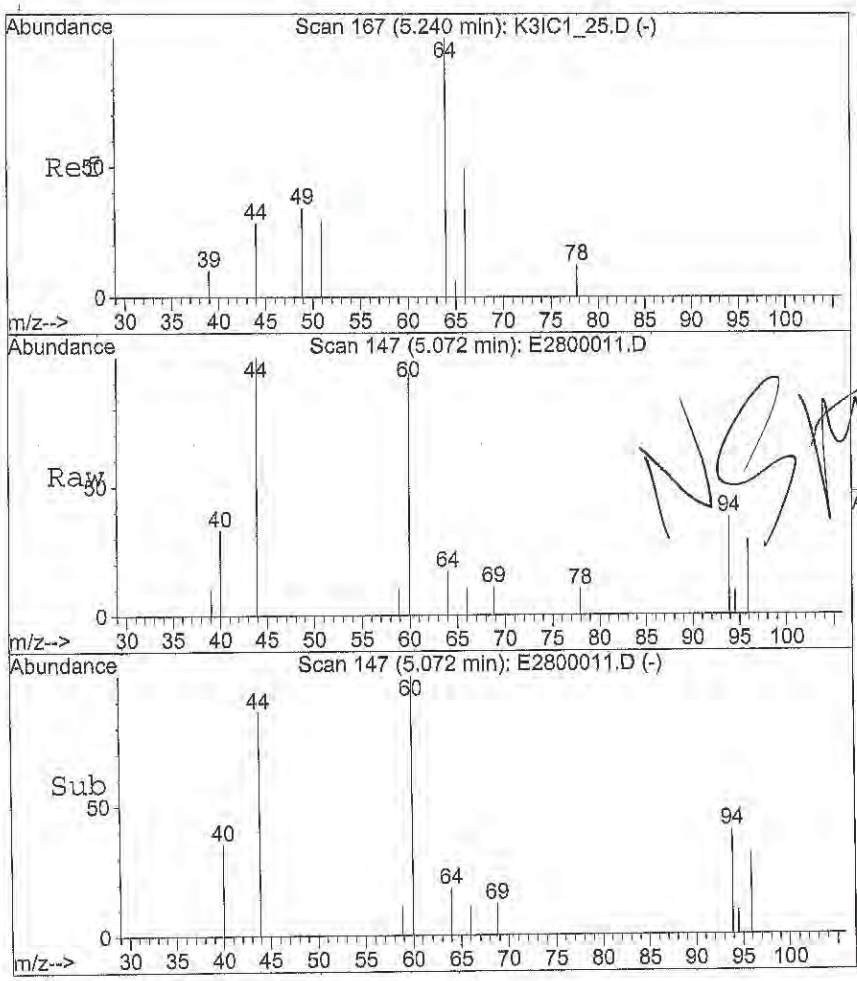


#6
Bromomethane
Concen: 2.32 ug/L
RT: 5.06 min Scan# 146
Delta R.T. -0.03 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 96 Resp: 7305

Ion	Ratio	Lower	Upper
96	100		
94	273.5	101.0	151.4#



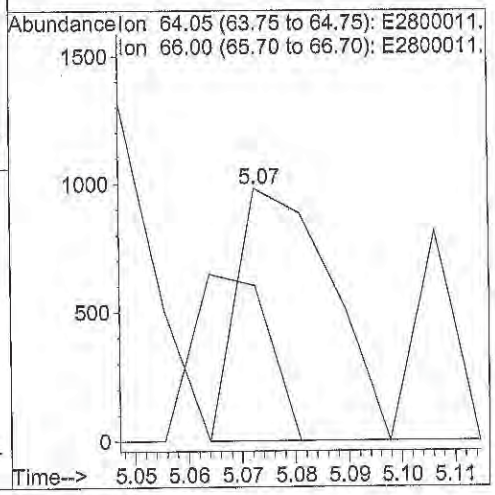


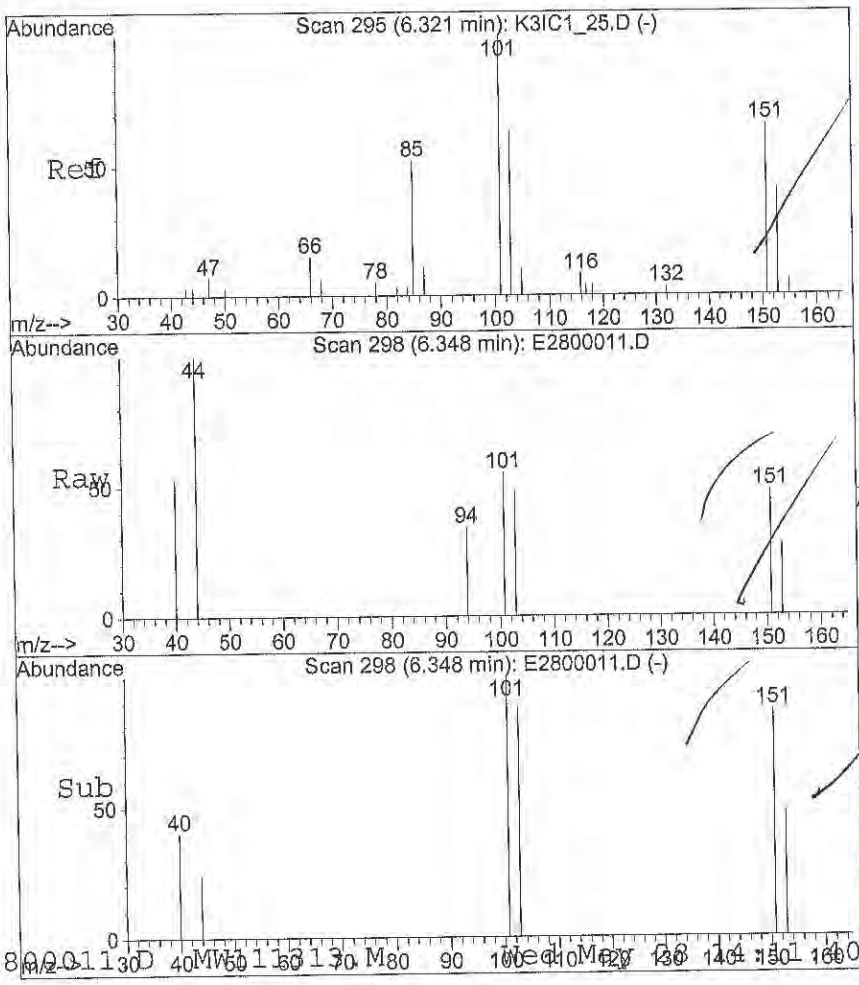
#7
Chloroethane
Concen: 1.58 ug/L
RT: 5.07 min Scan# 147
Delta R.T. -0.17 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 64 Resp: 1204

Ion	Ratio	Lower	Upper
64	100		
66	52.6	35.4	53.0

NSM

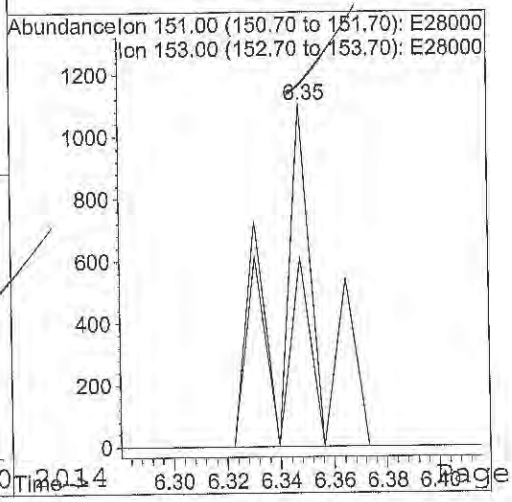


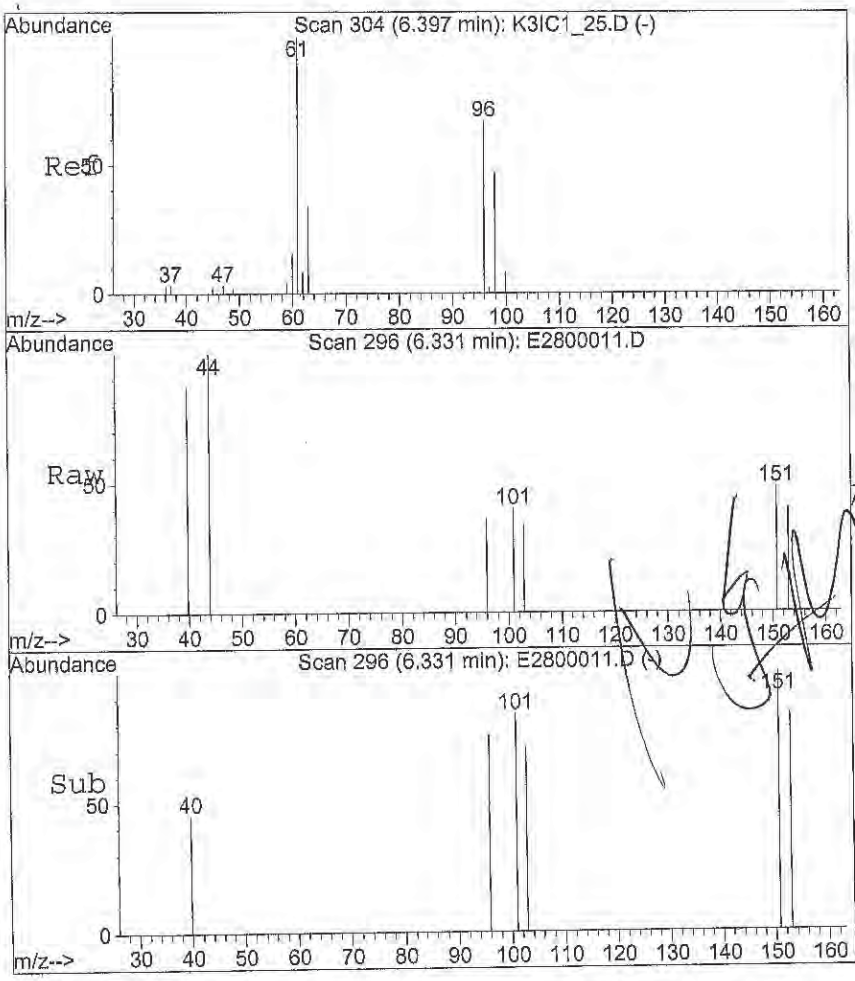


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 0.38 ug/L
RT: 6.35 min Scan# 298
Delta R.T. 0.03 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:151 Resp: 1201

Ion	Ratio	Lower	Upper
151	100		
153	51.5	49.6	74.4

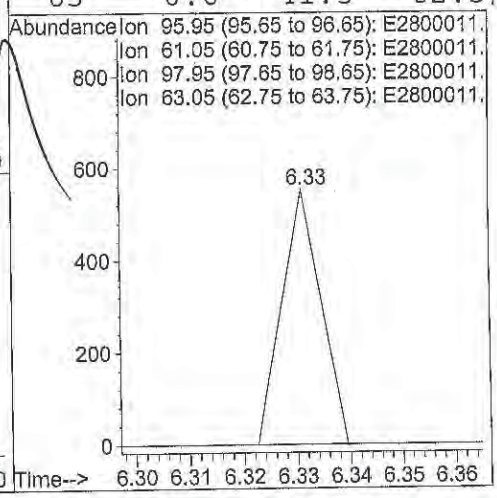


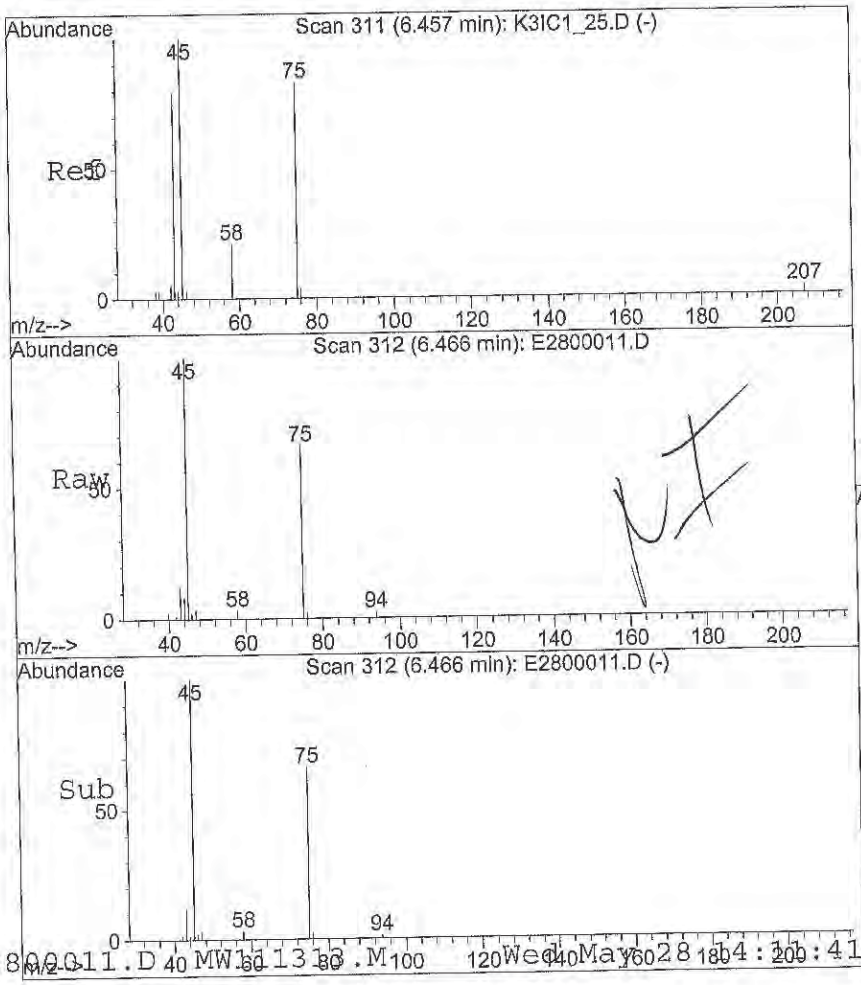


#10
1,1-Dichloroethene
Concen: 0.07 ug/L
RT: 6.33 min Scan# 296
Delta R.T. -0.07 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 96 Resp: 280

Ion	Ratio	Lower	Upper
96	100		
61	0.0	130.0	195.0#
98	0.0	56.2	84.4#
63	0.0	41.5	62.3#

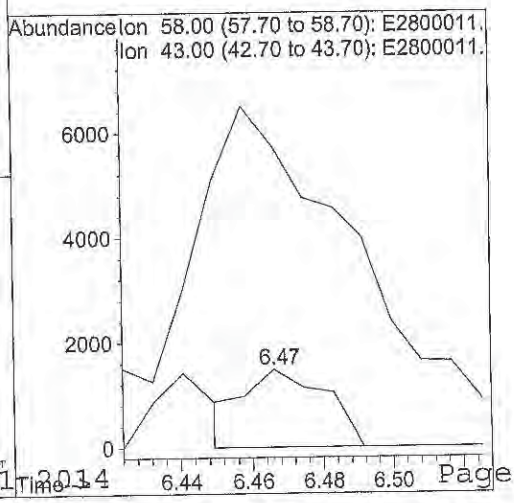


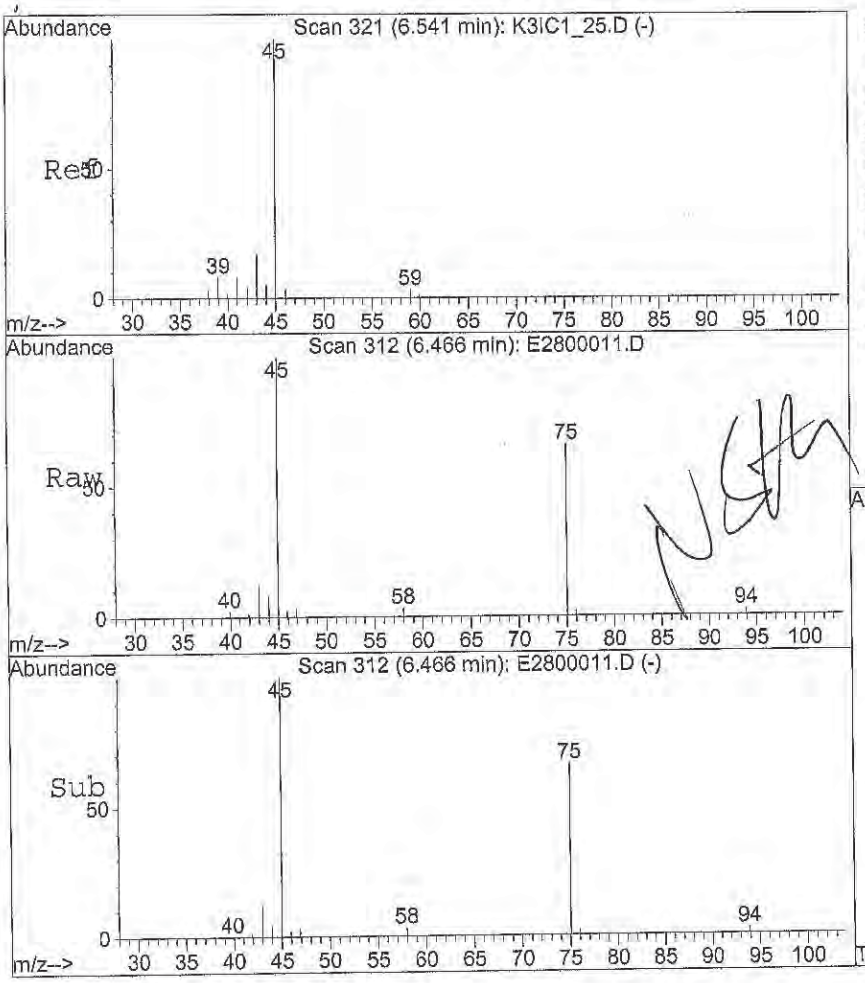


#11
Acetone
Concen: 180.01 ug/L
RT: 6.47 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 58 Resp: 2346

Ion	Ratio	Lower	Upper
58	100		
43	1004.4	360.9	541.3#

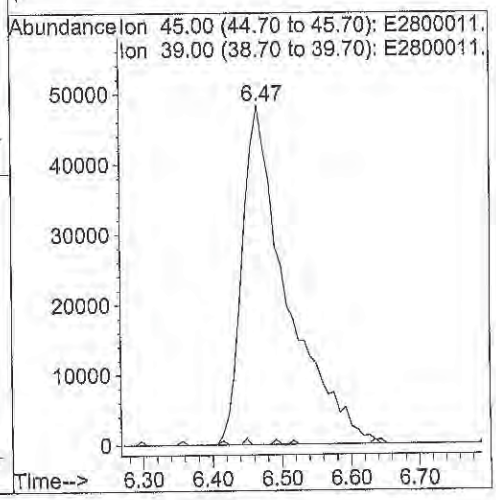


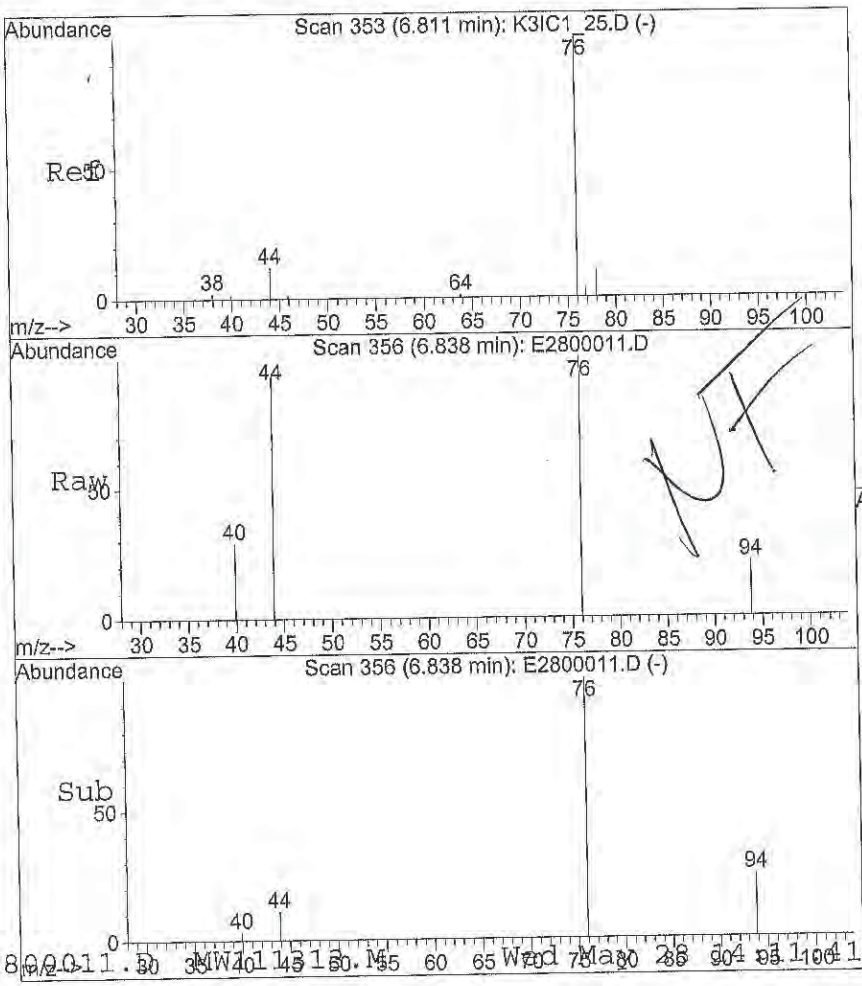


#12
(IPA) Leak Check Compound
Concen: 1113.65 ug/L
RT: 6.47 min Scan# 312
Delta R.T. -0.07 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 45 Resp: 216673

Ion	Ratio	Lower	Upper
45	100		
39	0.2	4.9	7.3#

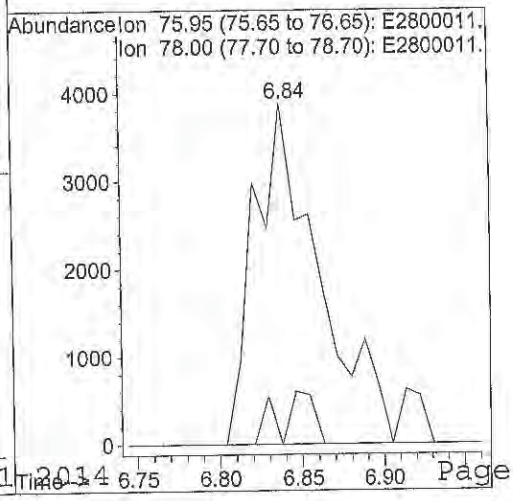


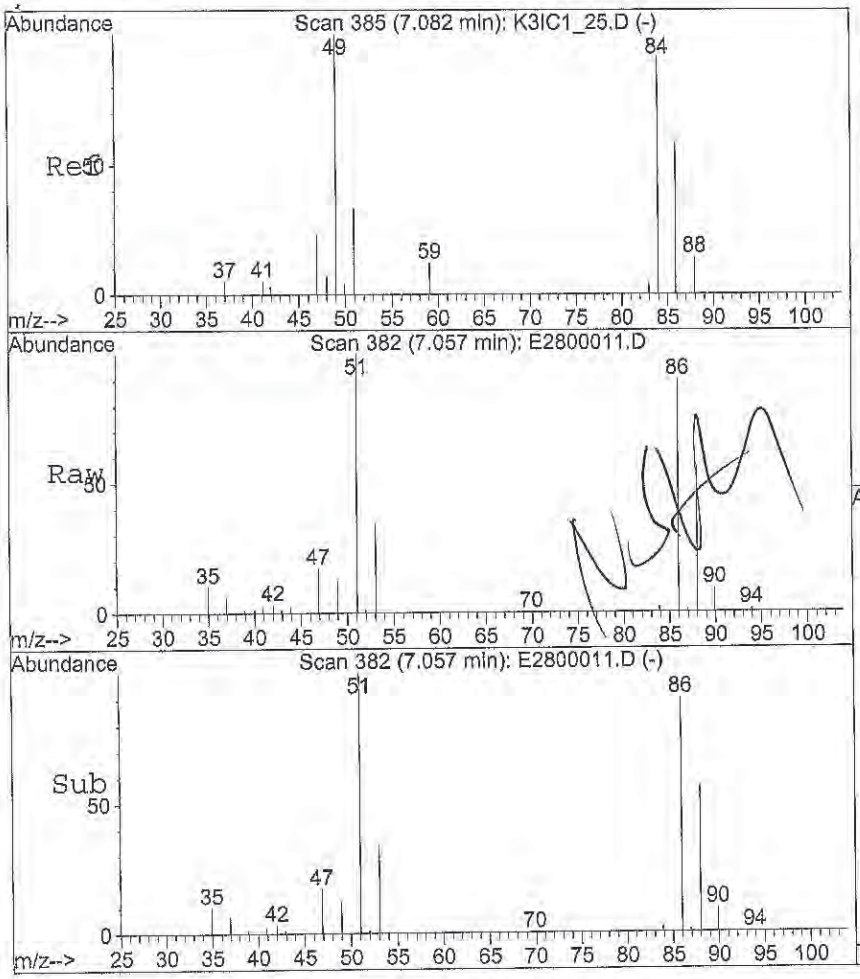


#13
Carbon disulfide
Concen: 0.78 ug/L
RT: 6.84 min Scan# 356
Delta R.T. 0.03 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 76 Resp: 10529

Ion	Ratio	Lower	Upper
76	100		
78	8.2	7.0	10.4

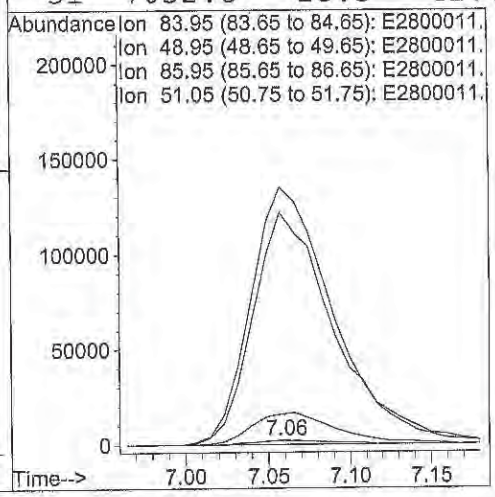


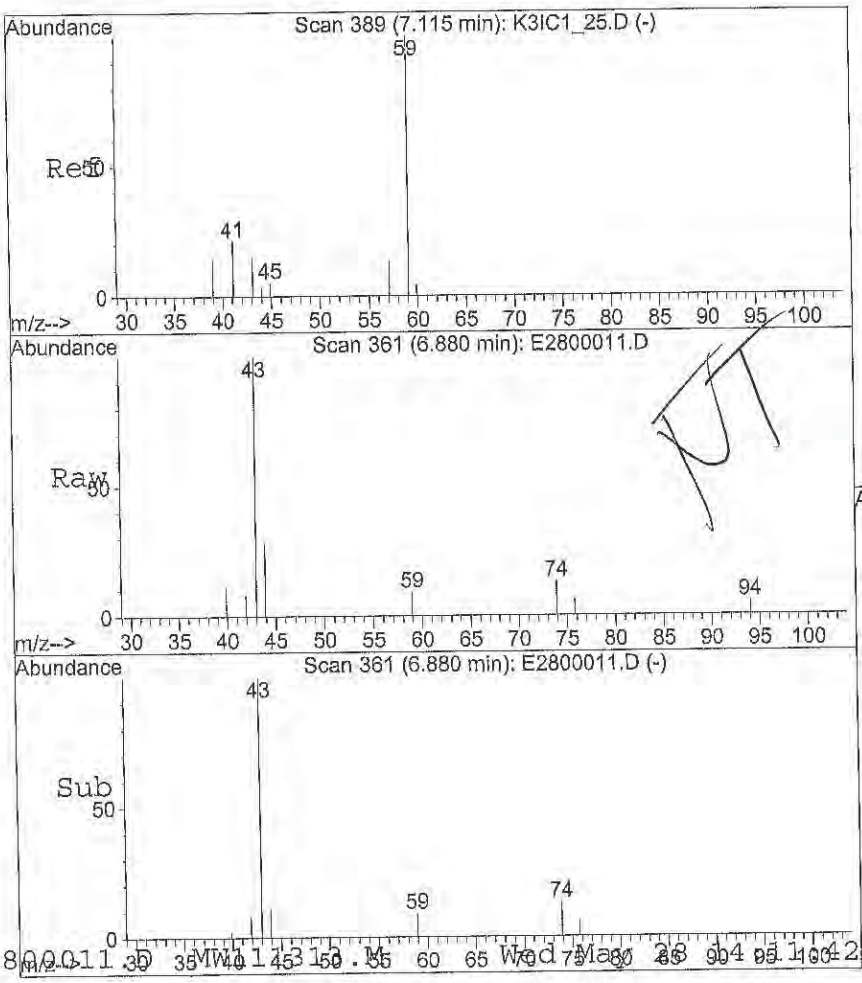


#14
Methylene Chloride
Concen: 1.54 ug/L
RT: 7.06 min Scan# 382
Delta R.T. -0.02 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 84 Resp: 6857

Ion	Ratio	Lower	Upper
84	100		
49	855.7	89.8	134.6#
86	6168.4	51.1	76.7#
51	7032.8	28.5	42.7#

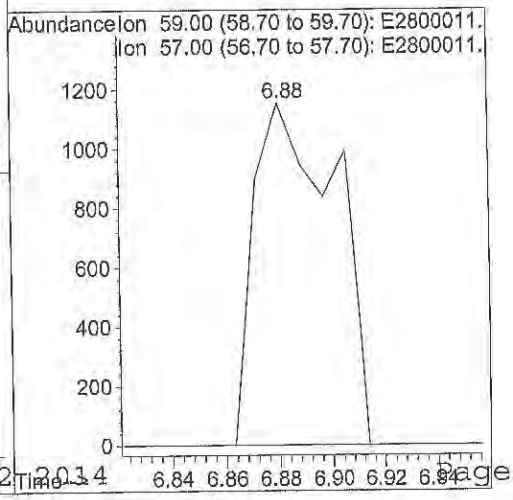


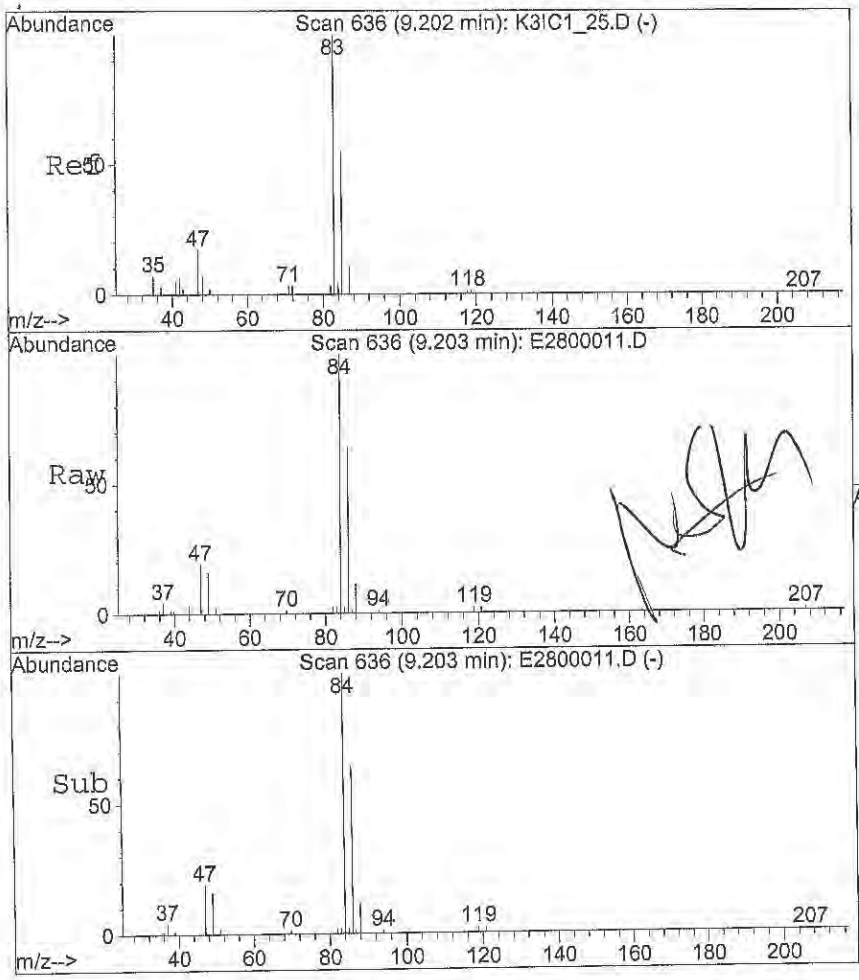


#15
(TBA) tert-Butanol
Concen: 8.86 ug/L
RT: 6.88 min Scan# 361
Delta R.T. -0.24 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 59 Resp: 2446

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

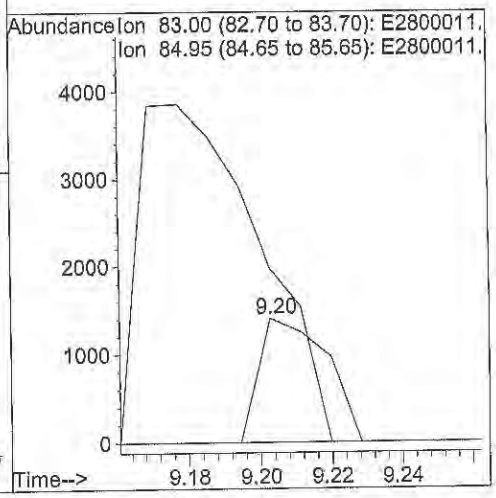


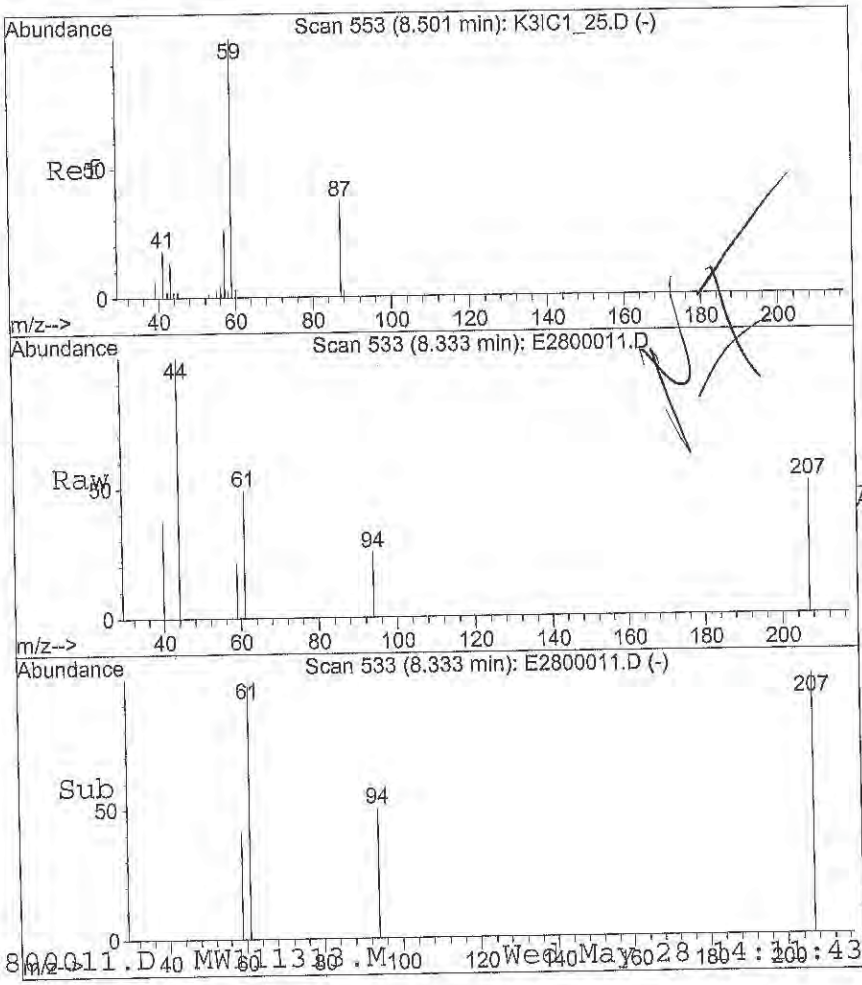


#24
Chloroform
Concen: 0.22 ug/L
RT: 9.20 min Scan# 636
Delta R.T. 0.00 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 83 Resp: 1832

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

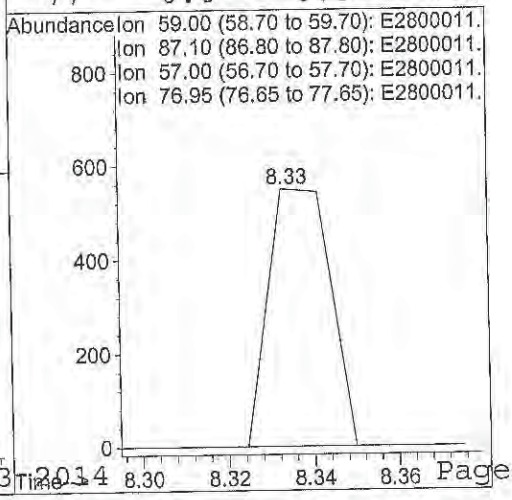


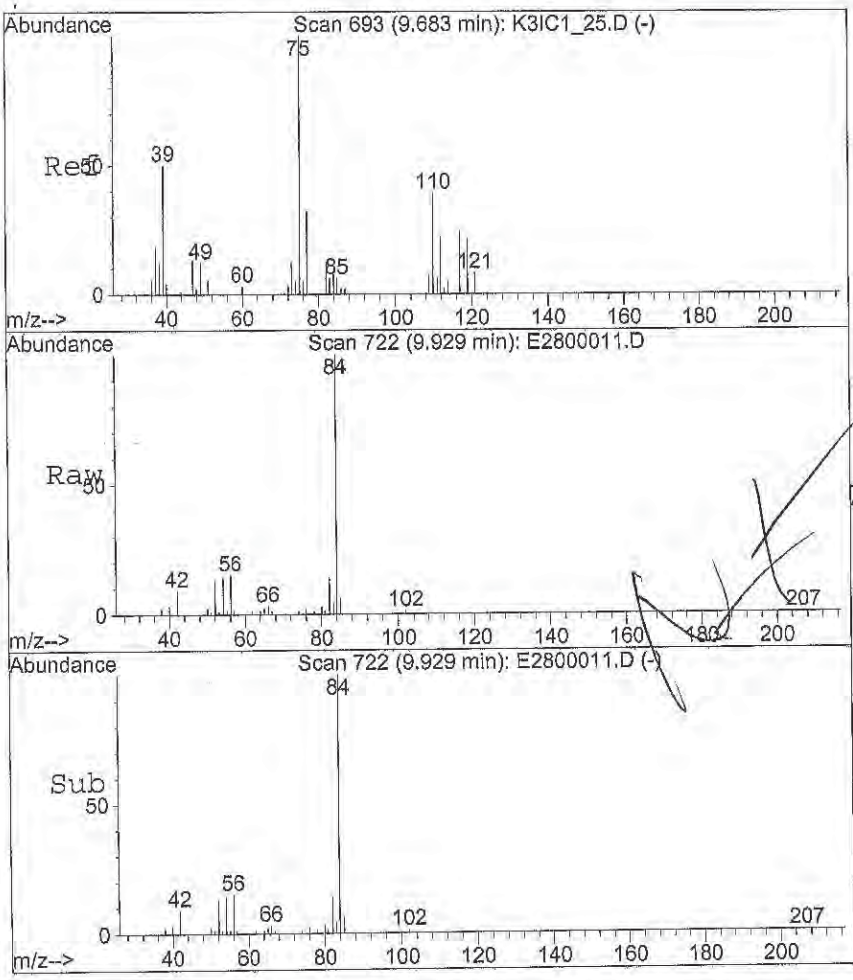


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.05 ug/L
RT: 8.33 min Scan# 533
Delta R.T. -0.17 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 59 Resp: 554

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

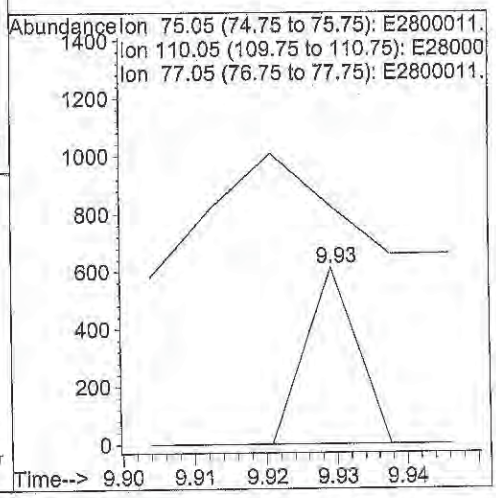


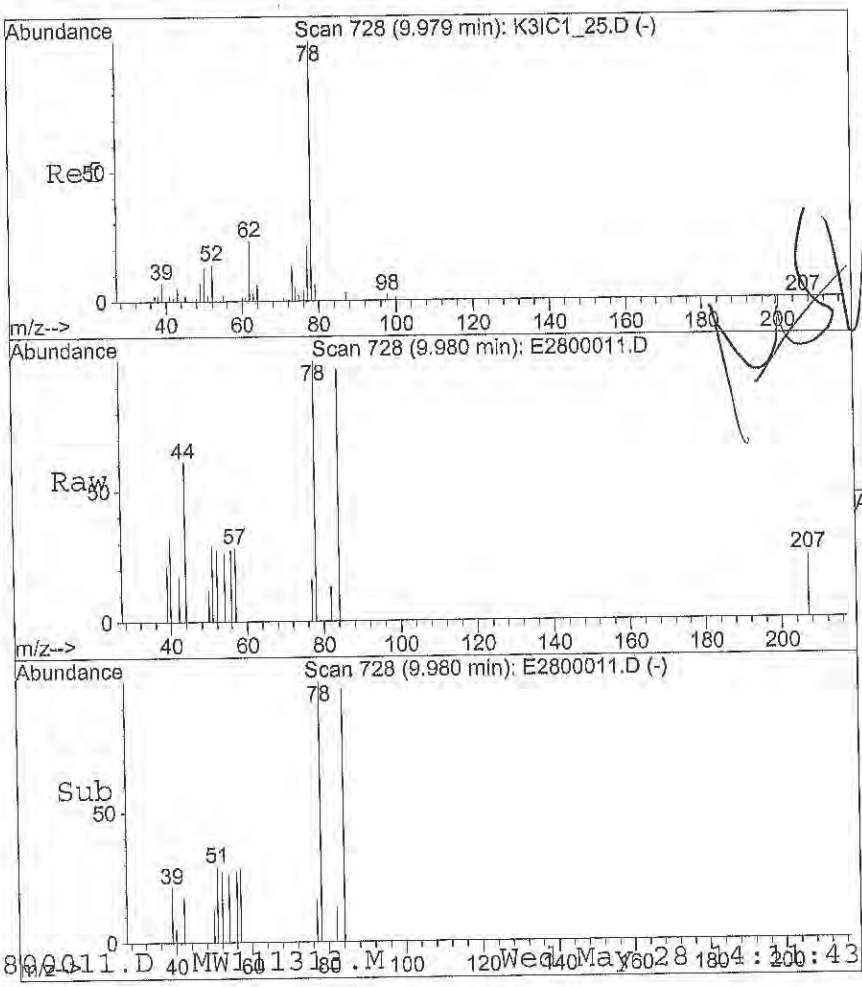


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.93 min Scan# 722
Delta R.T. 0.25 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 75 Resp: 310

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	635.5	25.0	37.4#

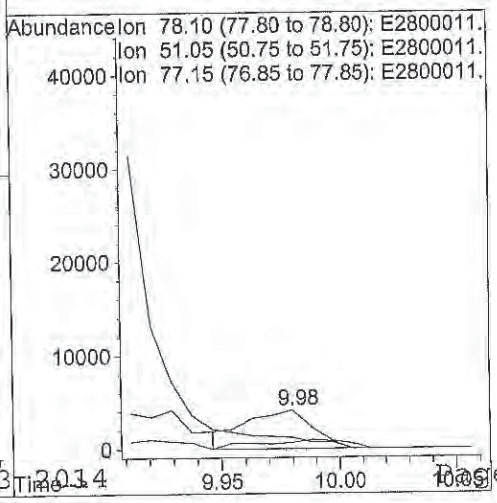


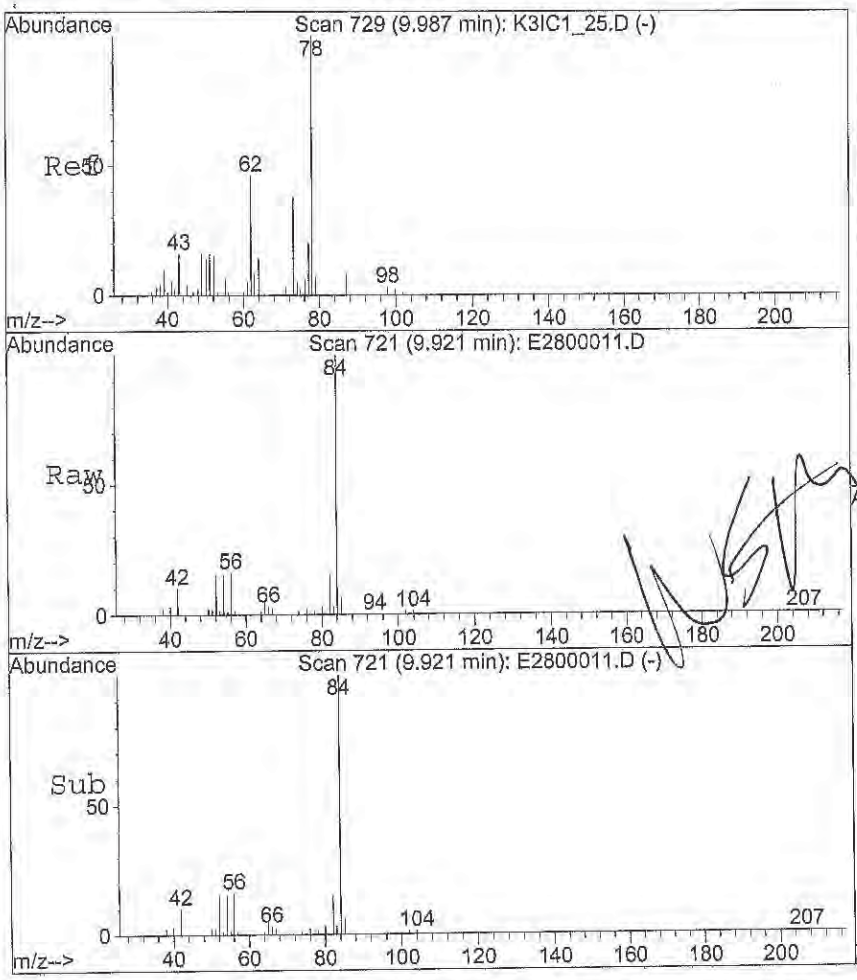


#31
Benzene
Concen: 0.56 ug/L
RT: 9.98 min Scan# 728
Delta R.T. 0.00 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 78 Resp: 8467

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	24.4	16.6	24.8

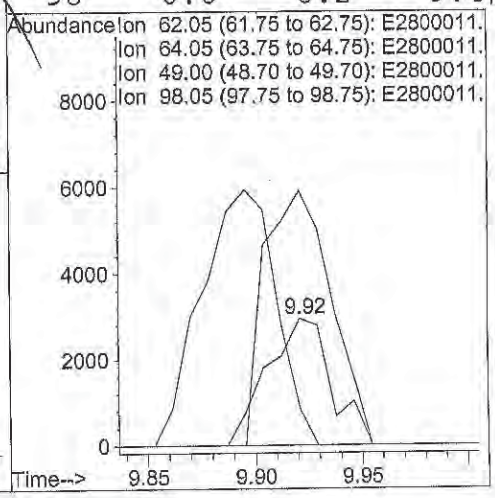


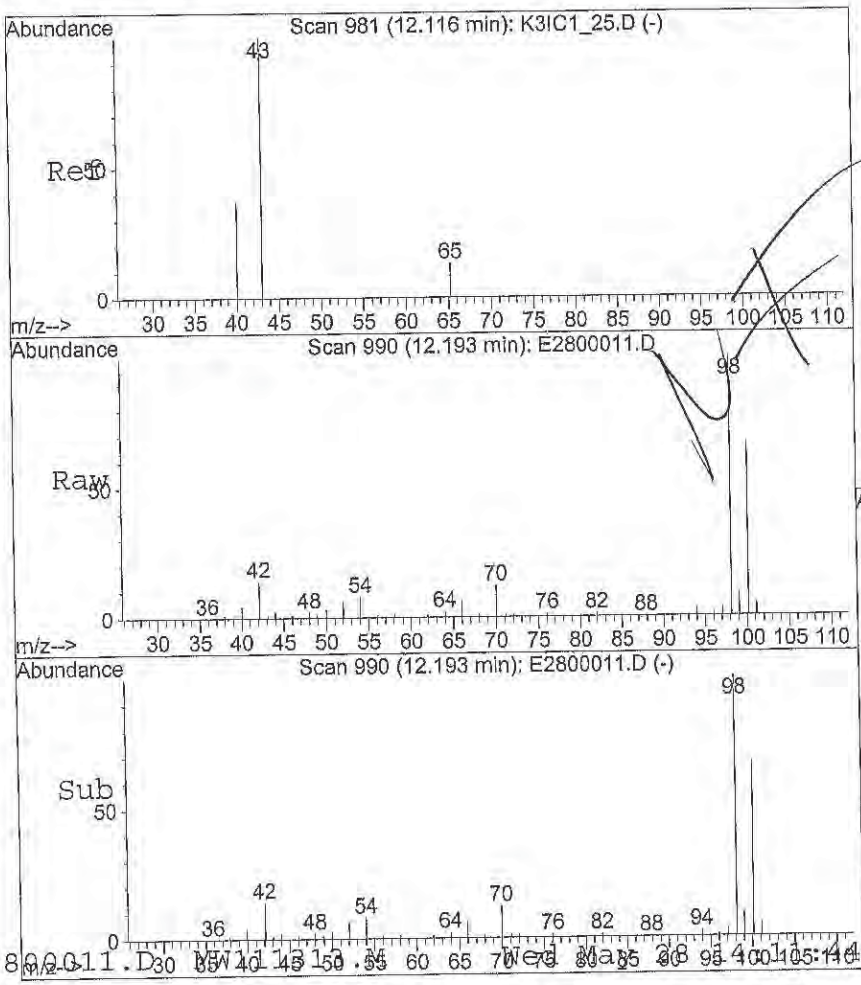


#32
1,2-Dichloroethane
Concen: 1.13 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 62 Resp: 6108

Ion	Ratio	Lower	Upper
62	100		
64	210.7	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

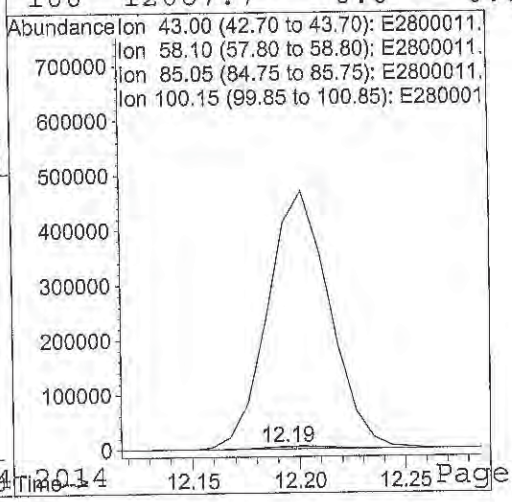


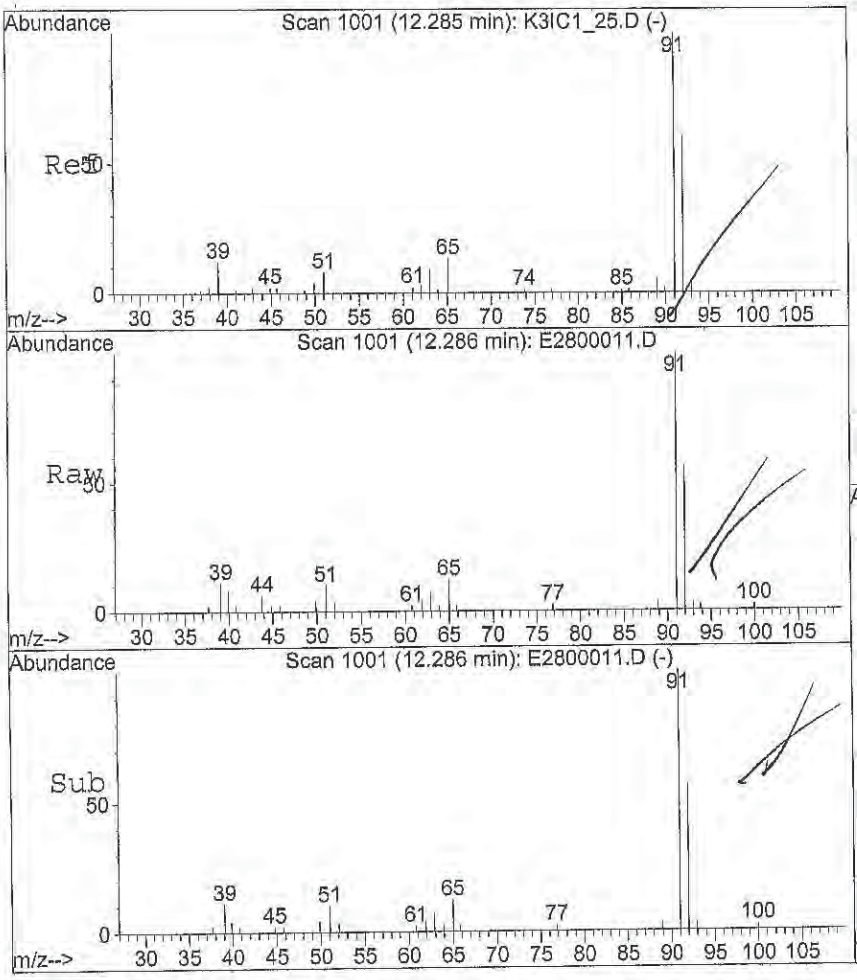


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.09 ug/L
RT: 12.19 min Scan# 990
Delta R.T. 0.08 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 43 Resp: 7870

Ion	Ratio	Lower	Upper
43	100		
58	134.7	0.0	0.0#
85	0.0	0.0	0.0
100	12067.7	0.0	0.0#

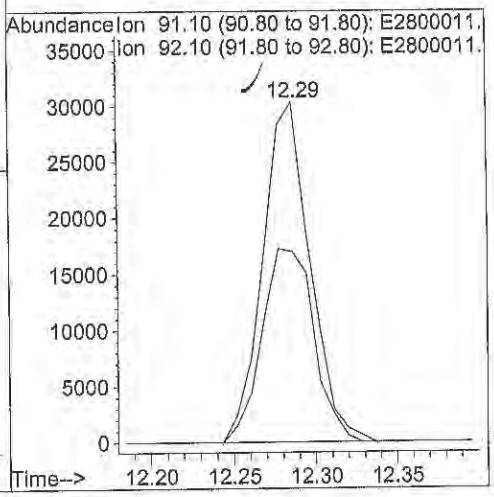


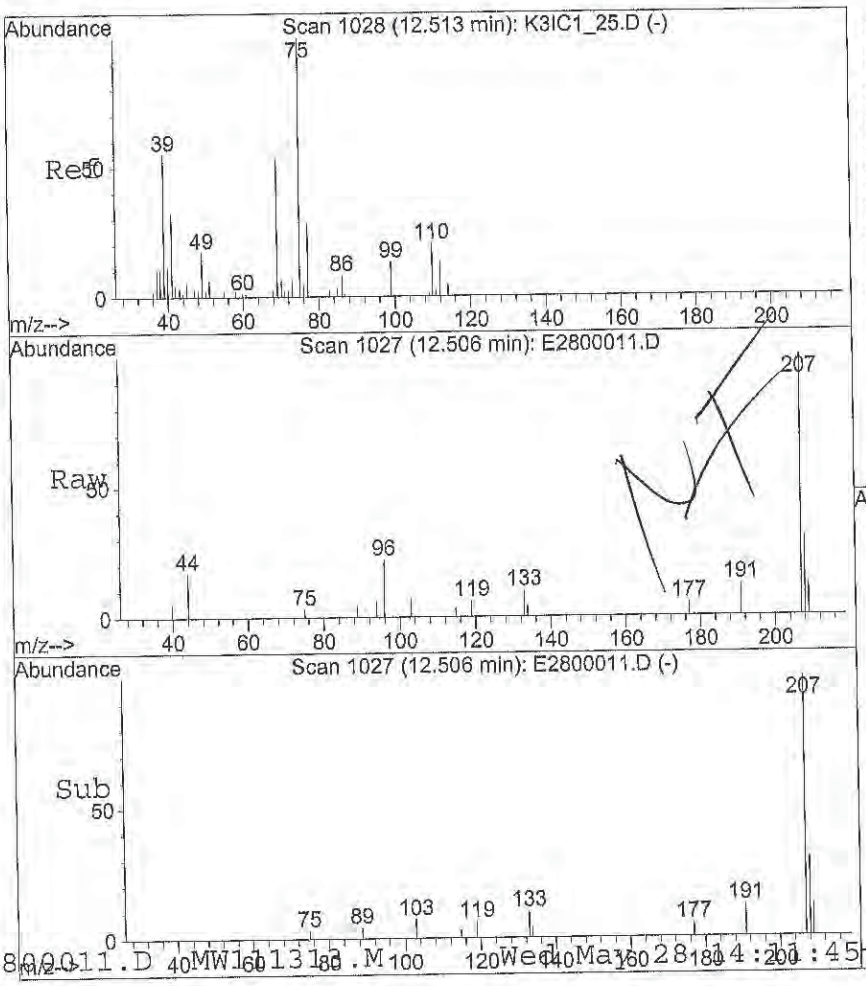


#41
Toluene
Concen: 3.49 ug/L
RT: 12.29 min Scan# 1001
Delta R.T. 0.00 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 91 Resp: 60653

Ion	Ratio	Lower	Upper
91	100		
92	62.7	47.4	71.0

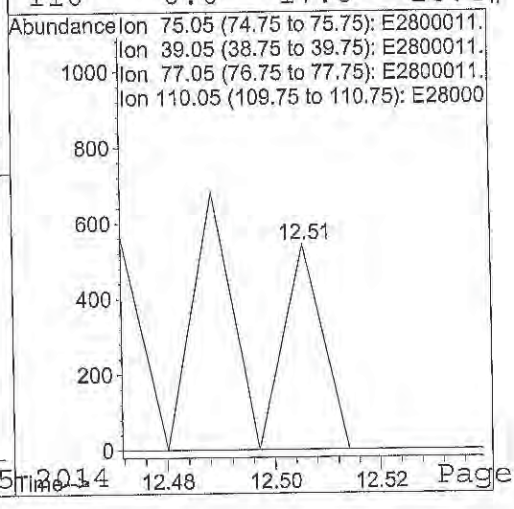


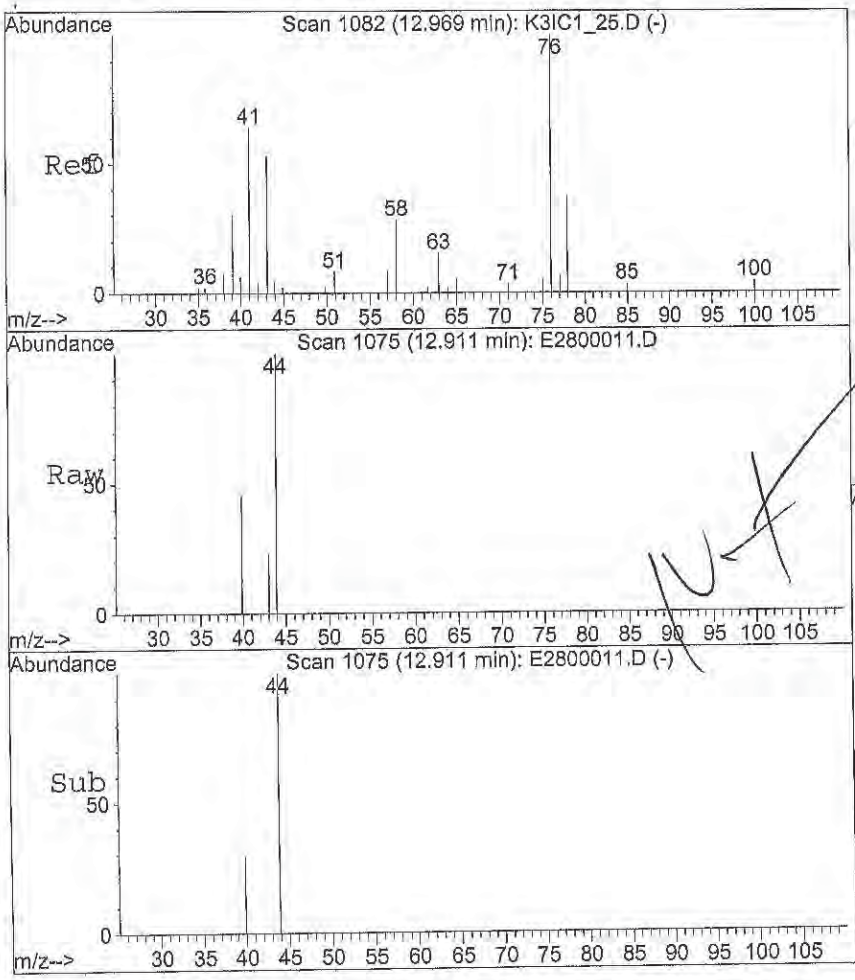


#42
trans-1,3-Dichloropropene
Concen: 0.05 ug/L
RT: 12.51 min Scan# 1027
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 75 Resp: 275

Ion	Ratio	Lower	Upper
75	100		
39	125.8	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

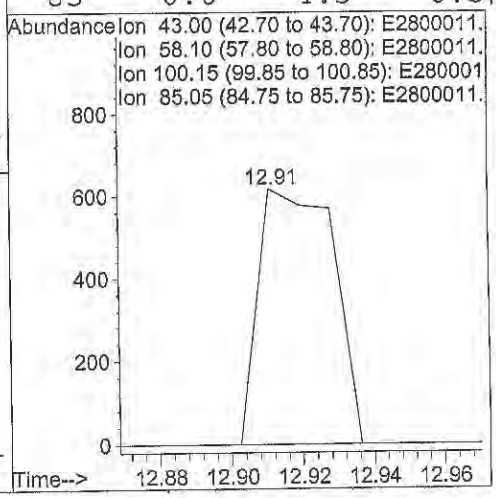


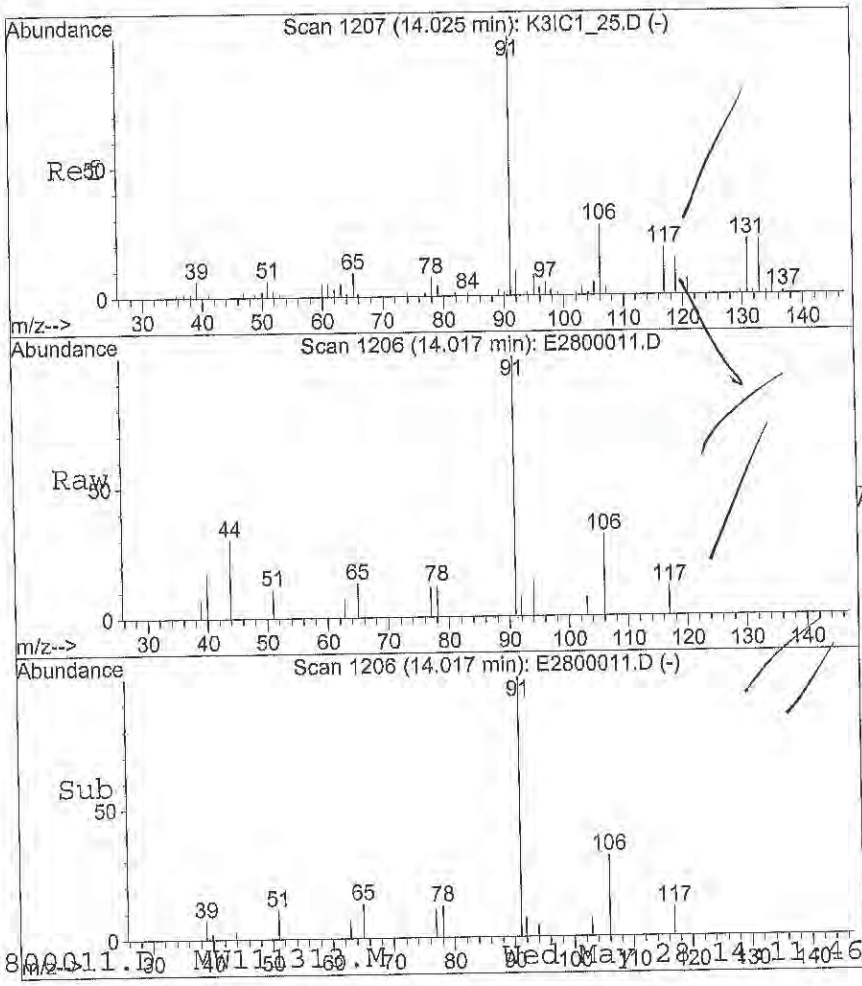


#46
2-Hexanone
Concen: 0.32 ug/L
RT: 12.91 min Scan# 1075
Delta R.T. -0.06 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 43 Resp: 894

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

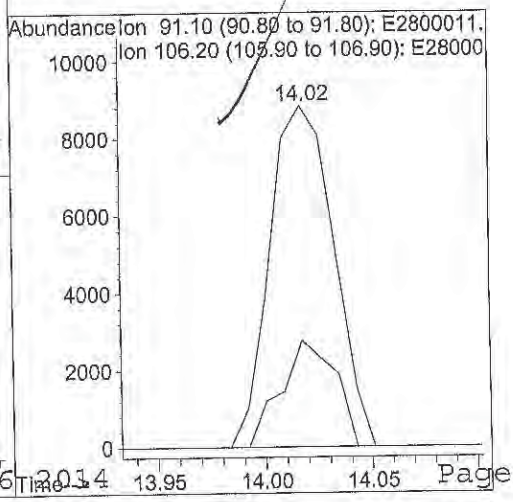


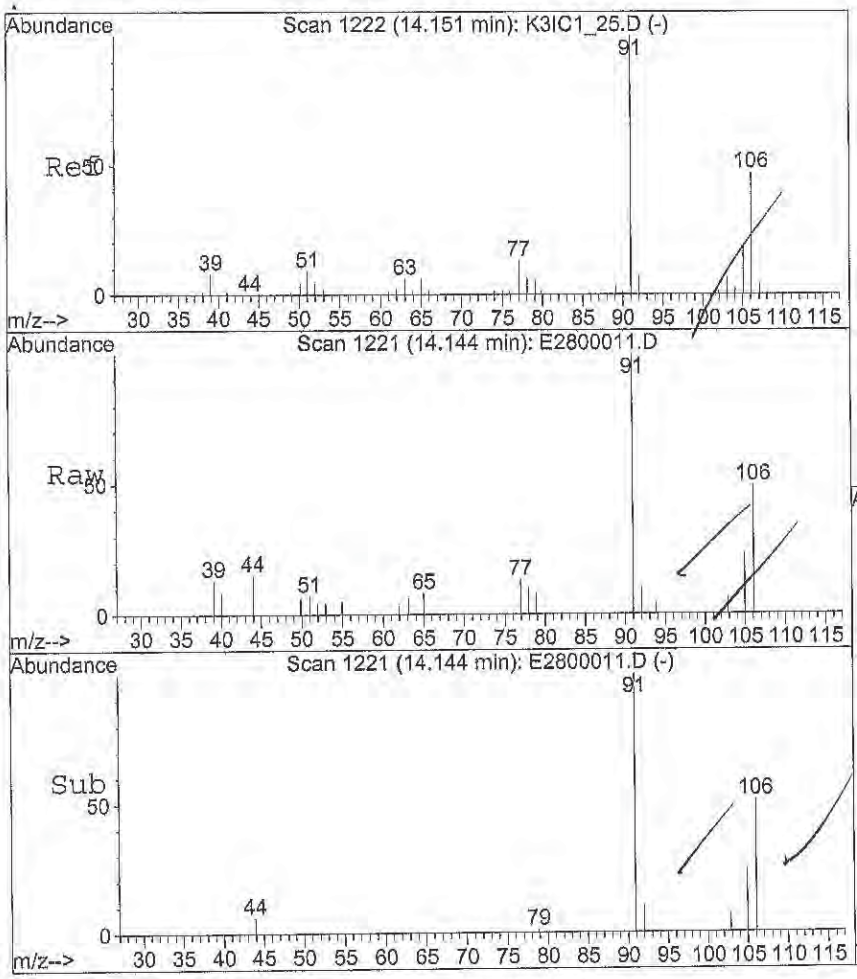


#51
Ethylbenzene
Concen: 0.93 ug/L
RT: 14.02 min Scan# 1206
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 91 Resp: 18307

Ion	Ratio	Lower	Upper
91	100		
106	26.6	23.5	35.3

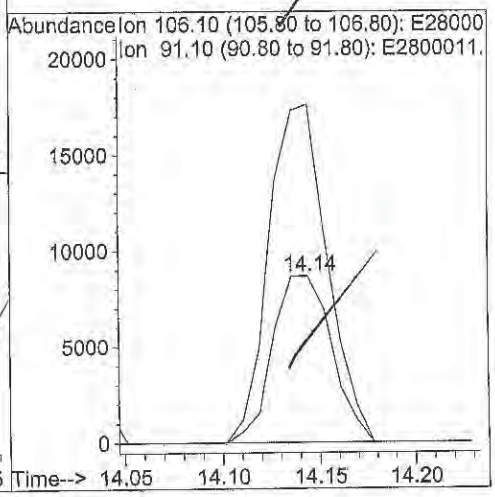


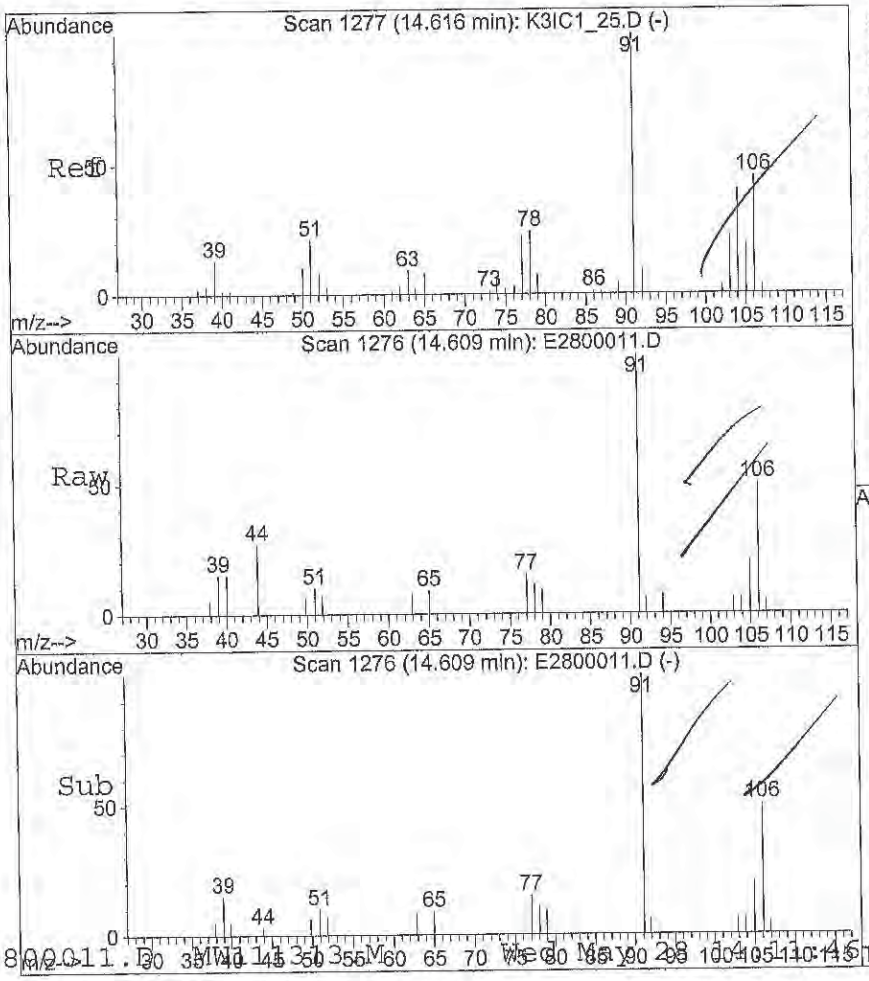


#52
m,p-Xylenes
Concen: 2.62 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:106 Resp: 18414

Ion	Ratio	Lower	Upper
106	100		
91	200.0	177.1	265.7

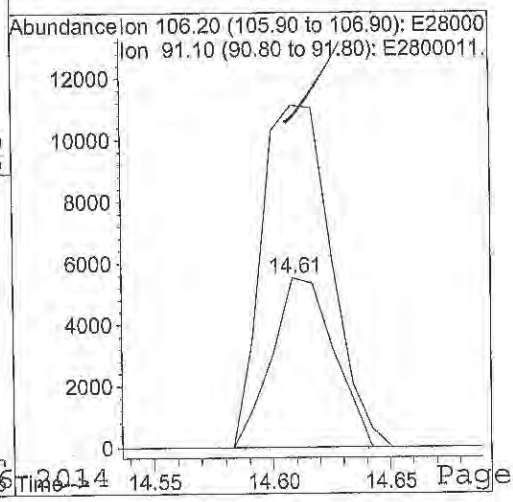


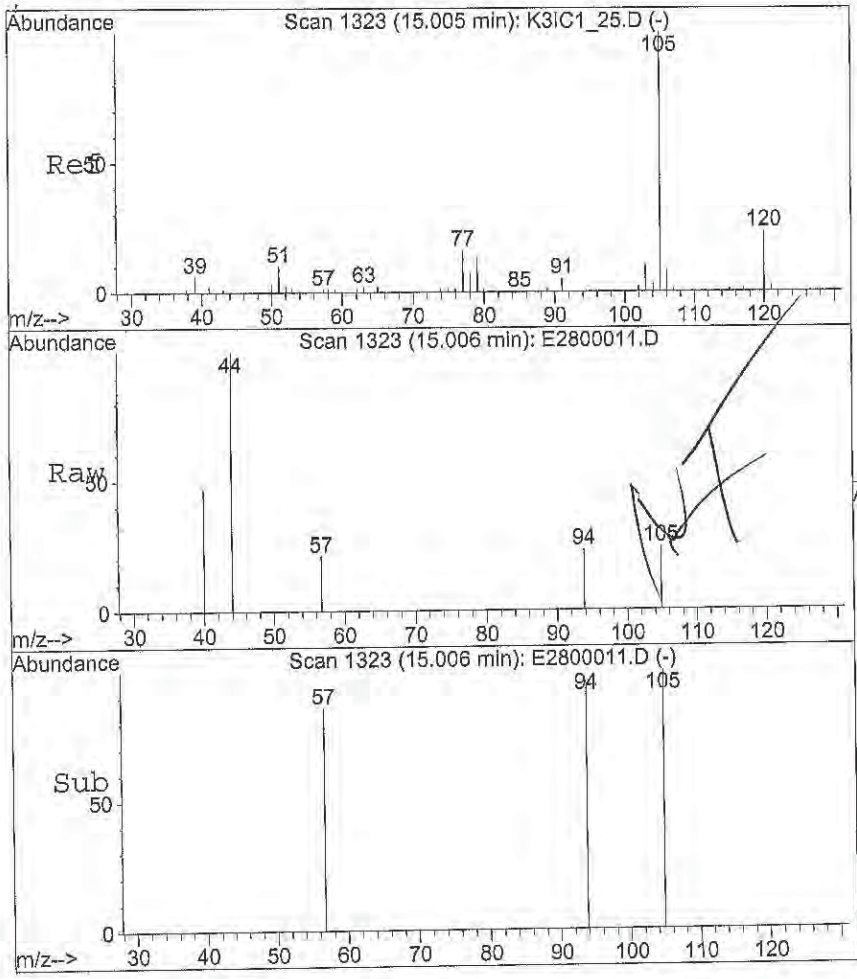


#53
o-Xylene
Concen: 1.45 ug/L
RT: 14.61 min Scan# 1276
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:106 Resp: 10065

Ion	Ratio	Lower	Upper
106	100		
91	225.1	179.0	268.6

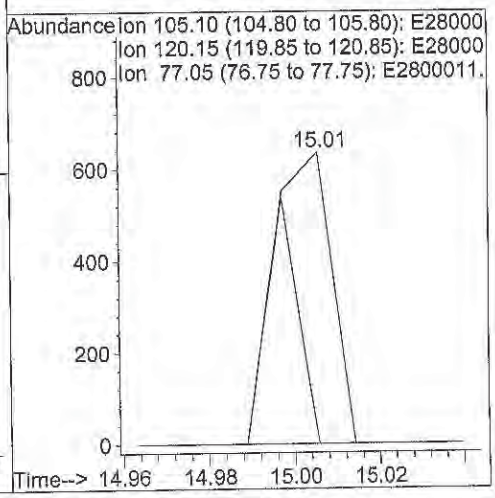


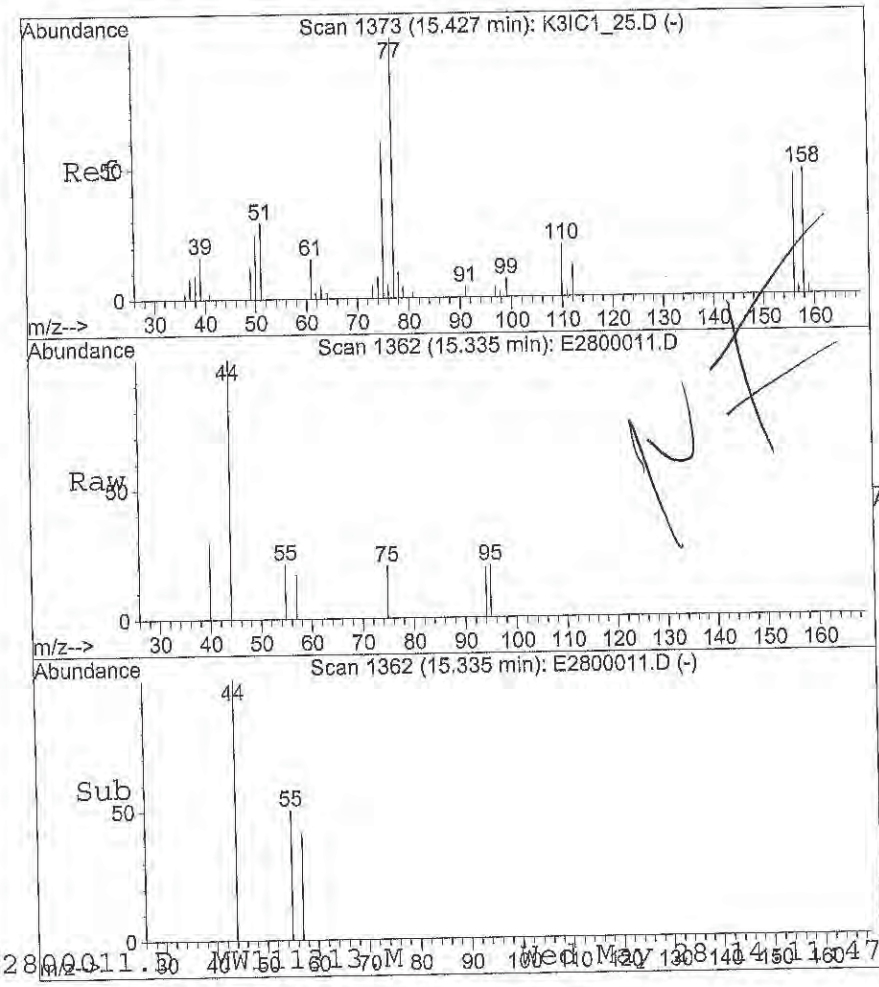


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.01 min Scan# 1323
Delta R.T. 0.00 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:105 Resp: 602

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	45.0	13.1	19.7#

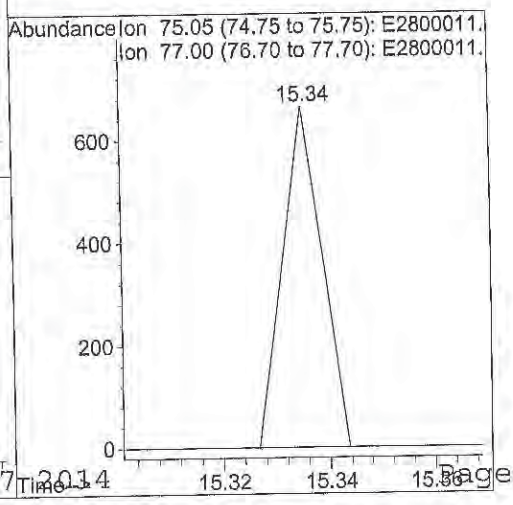


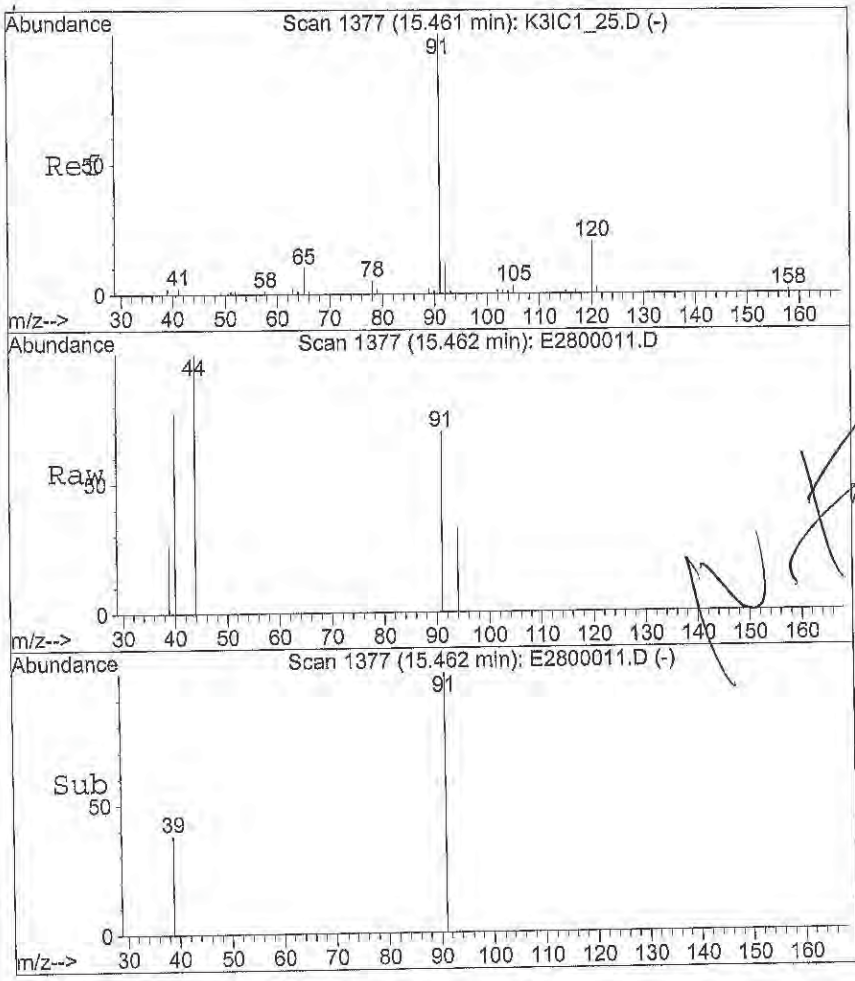


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.34 min Scan# 1362
Delta R.T. -0.09 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 75 Resp: 337

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

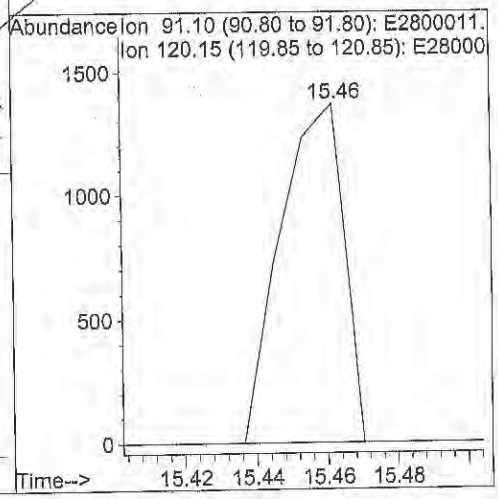


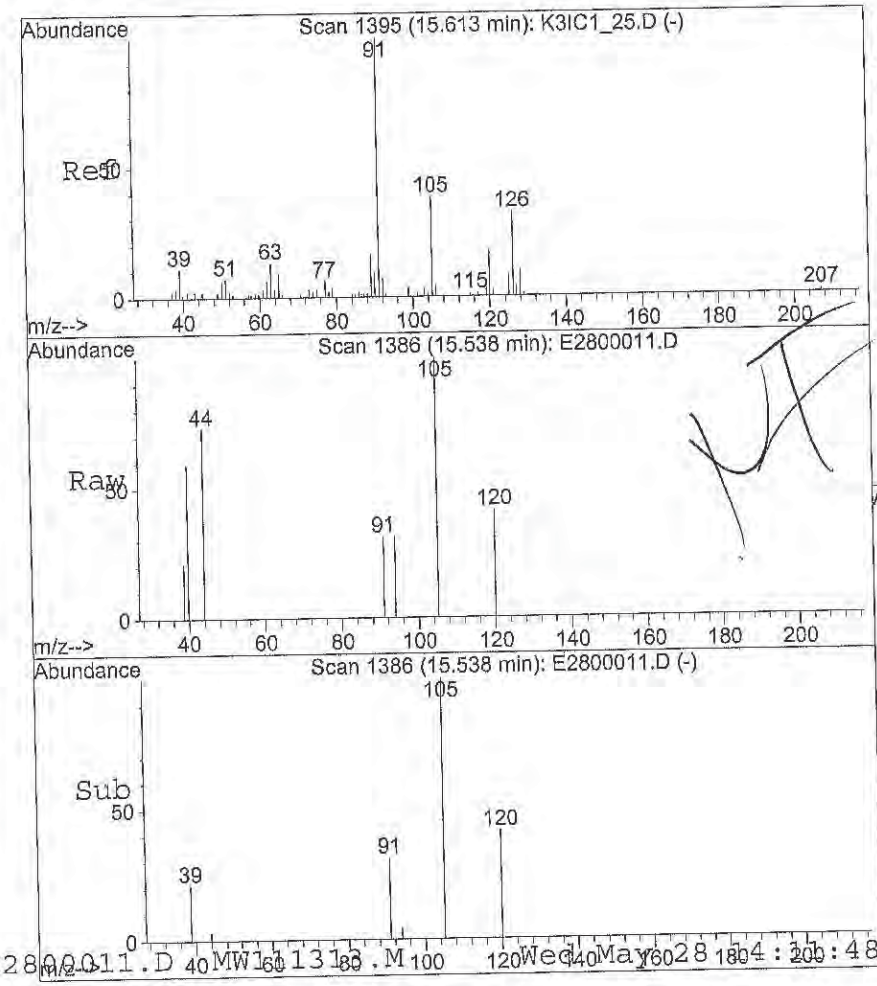


#62
n-Propylbenzene
Concen: 0.06 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. 0.00 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 91 Resp: 1688

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

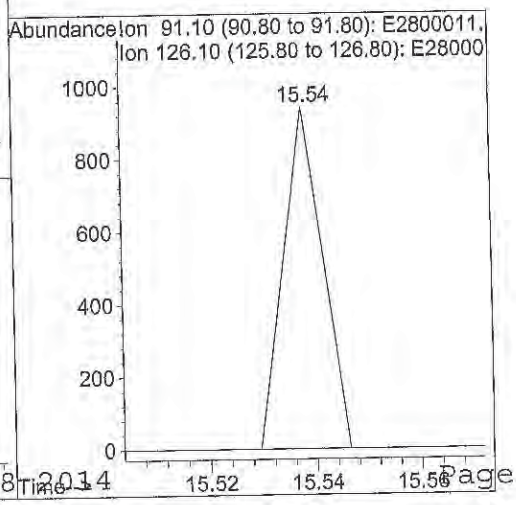


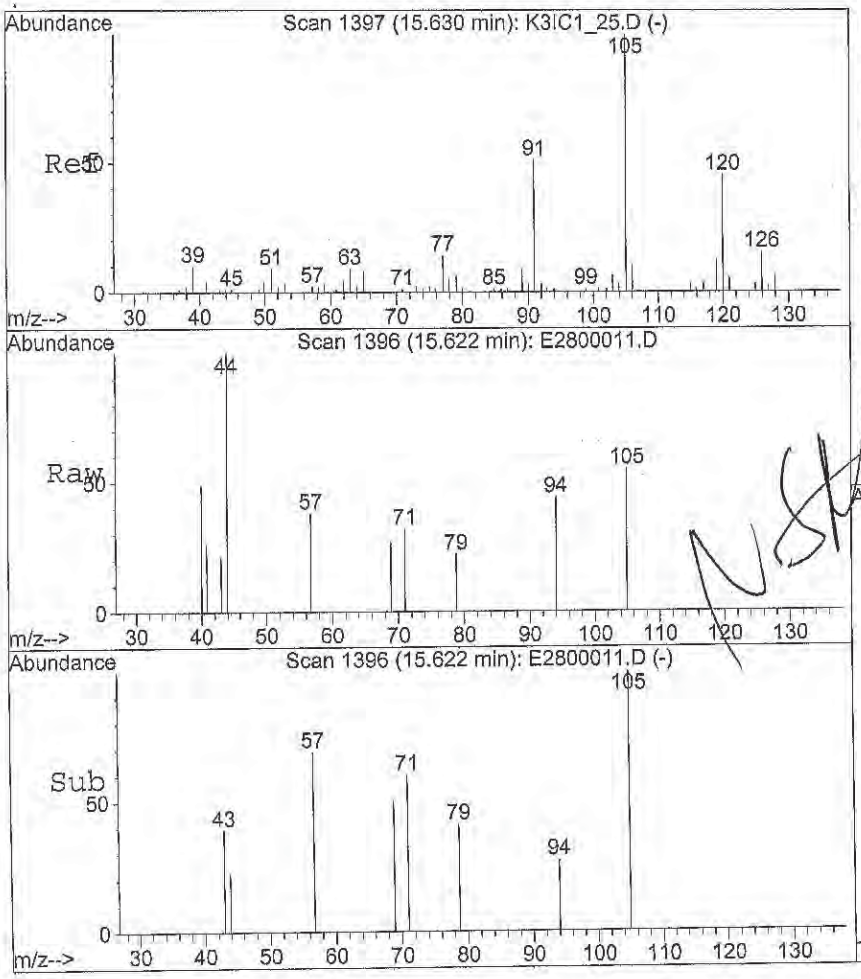


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.54 min Scan# 1386
Delta R.T. -0.07 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 91 Resp: 477

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

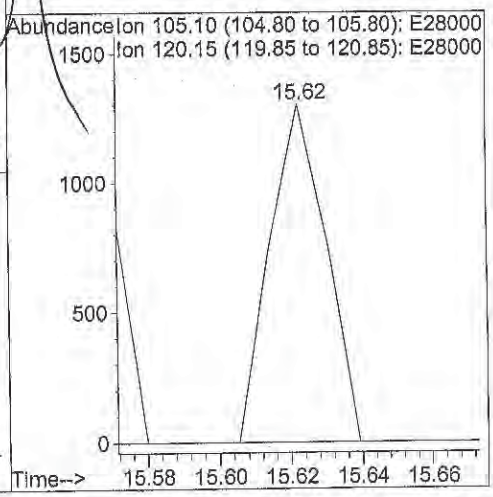


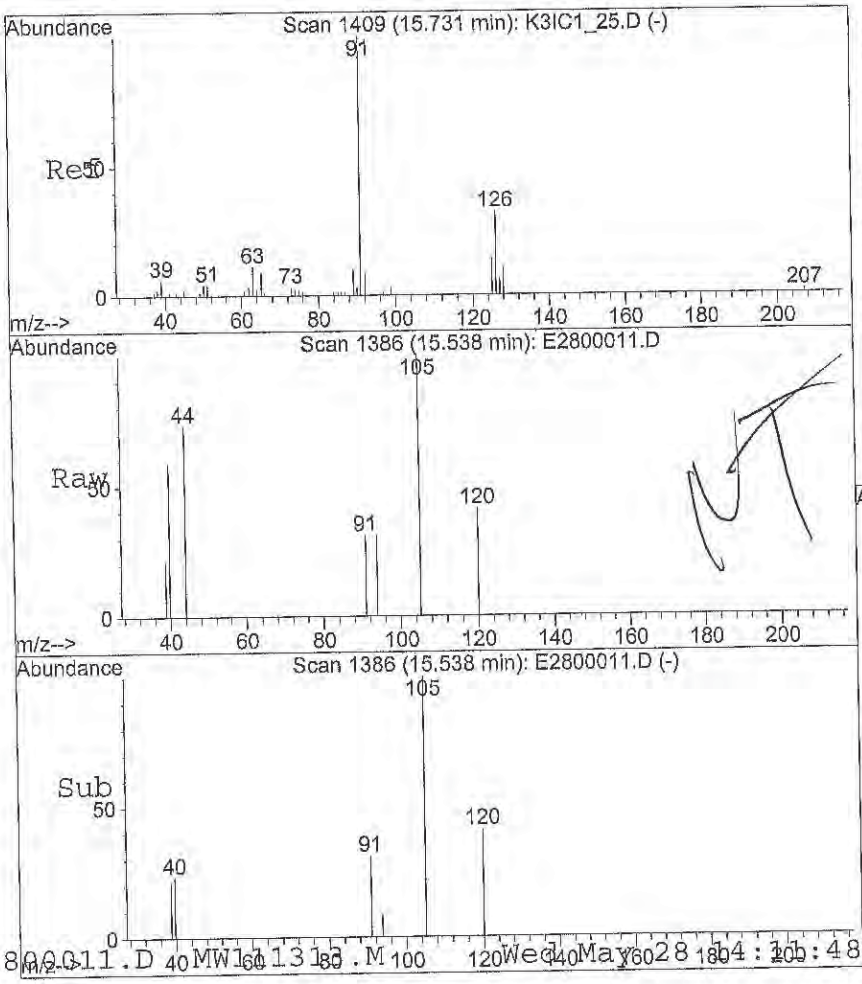


#64
1,3,5-Trimethylbenzene
Concen: 0.08 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:105 Resp: 1411

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

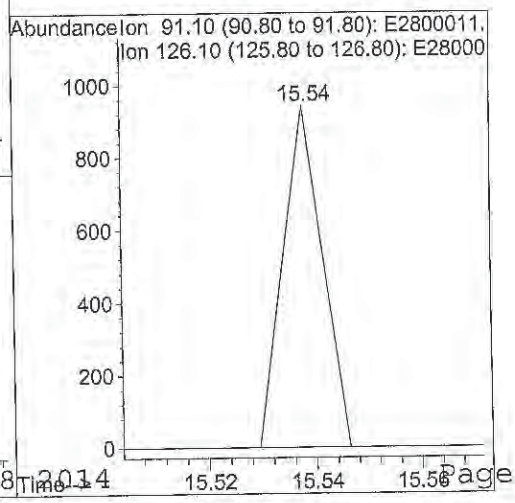


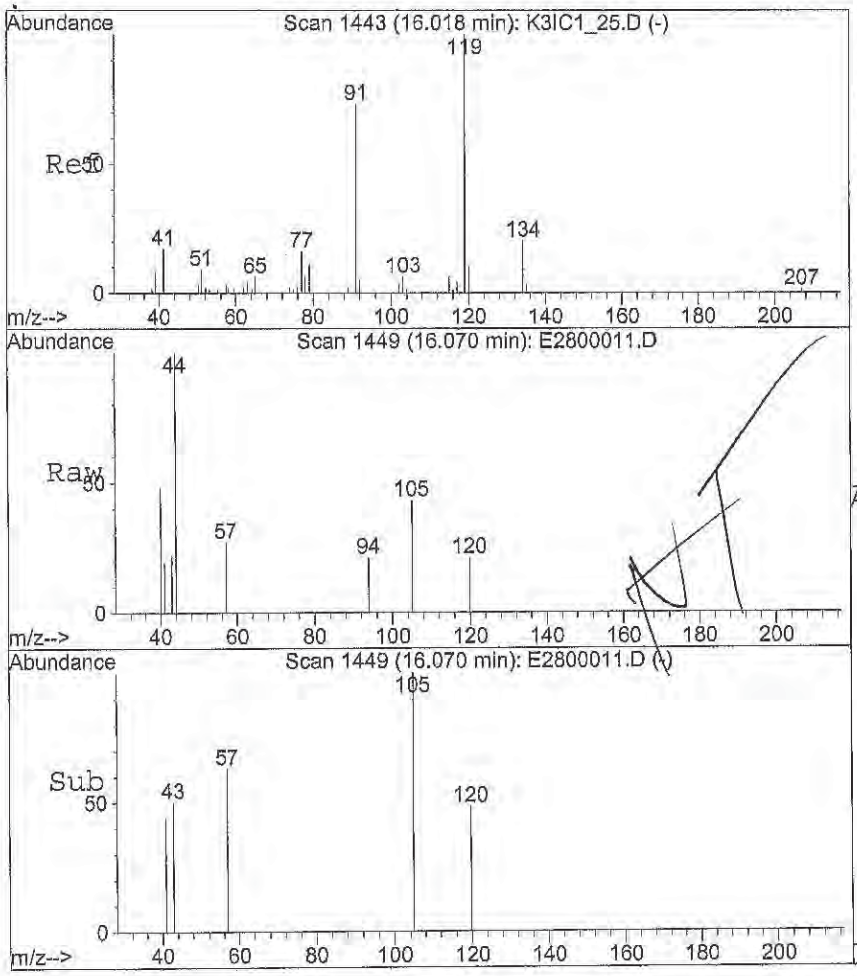


#65
4-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.54 min Scan# 1386
Delta R.T. -0.19 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion: 91 Resp: 477

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

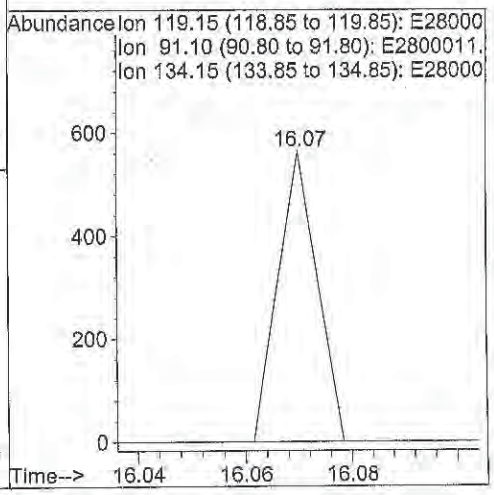


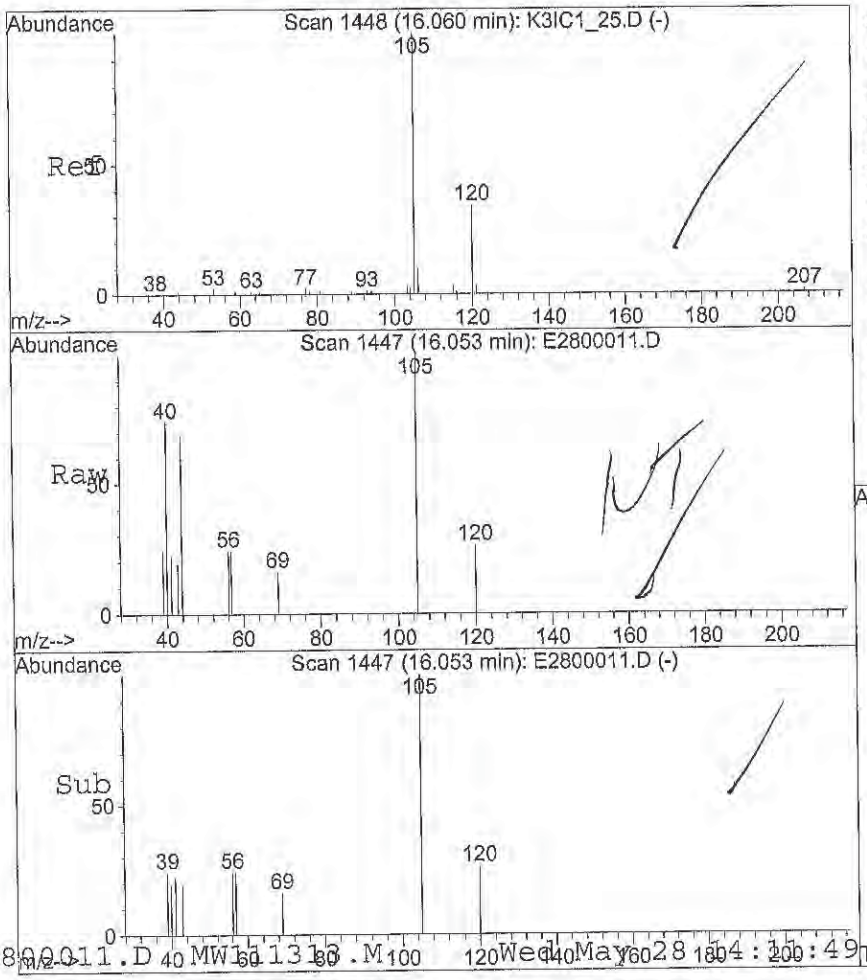


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.05 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:119 Resp: 286

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

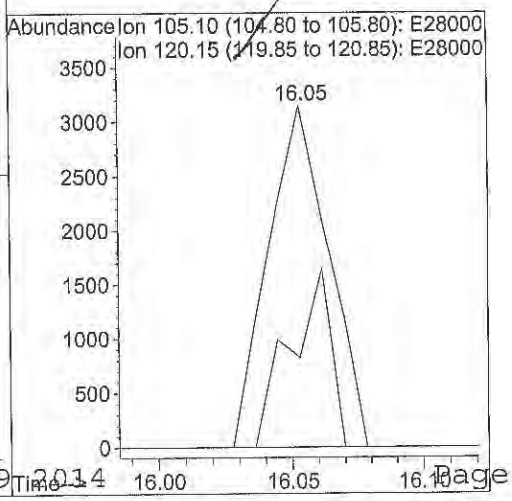


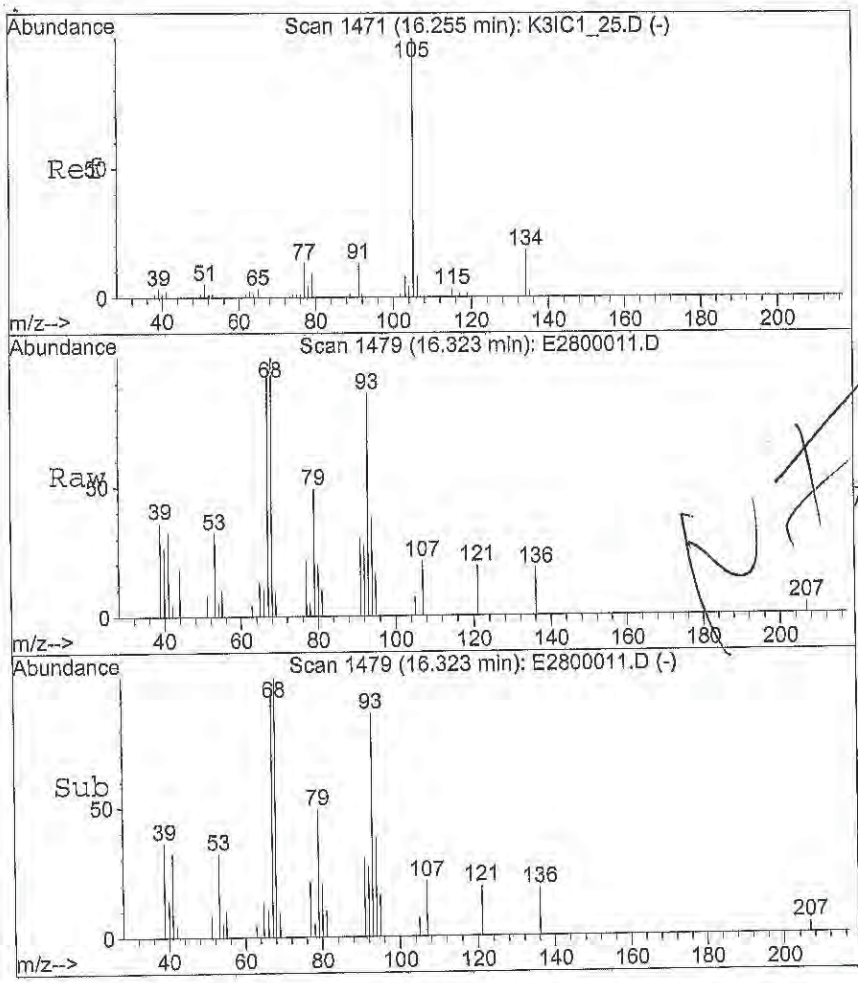


#67
1,2,4-Trimethylbenzene
Concen: 0.28 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:105 Resp: 4975

Ion	Ratio	Lower	Upper
105	100		
120	35.2	33.8	50.8

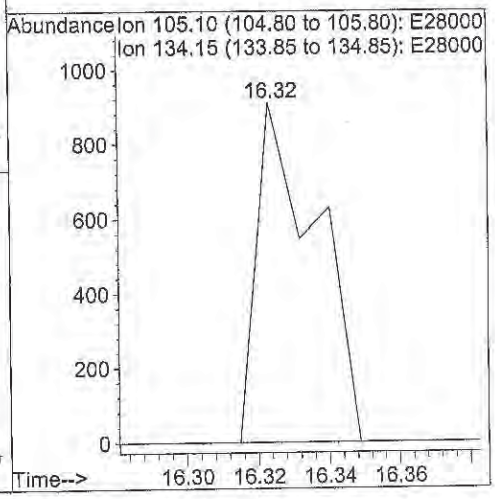


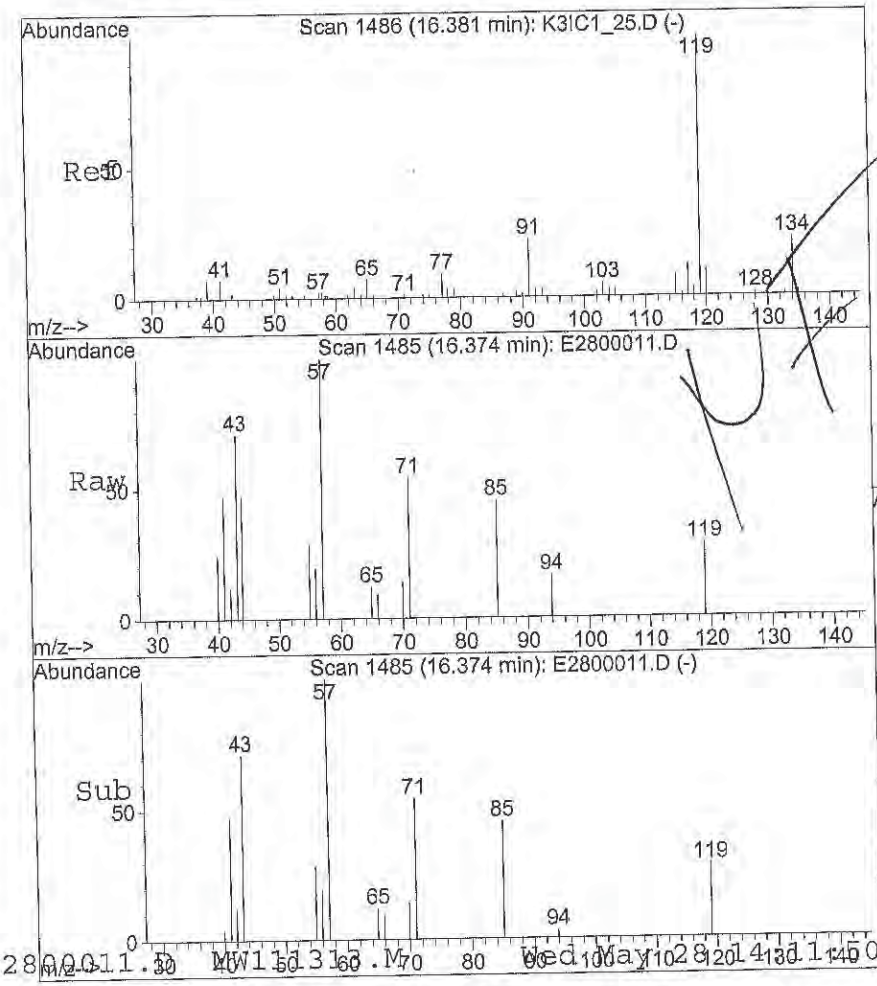


#68
sec-Butylbenzene
Concen: 0.05 ug/L
RT: 16.32 min Scan# 1479
Delta R.T. 0.07 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:105 Resp: 1057

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

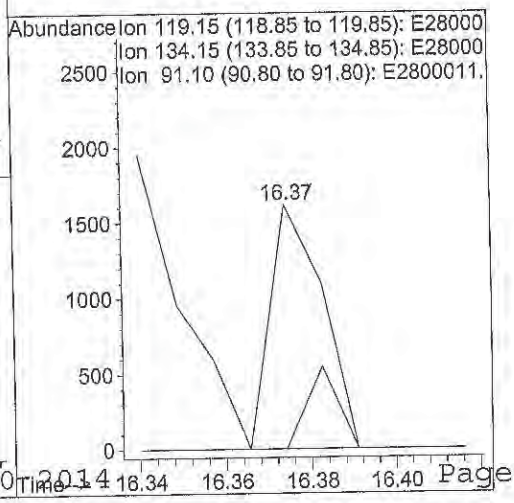


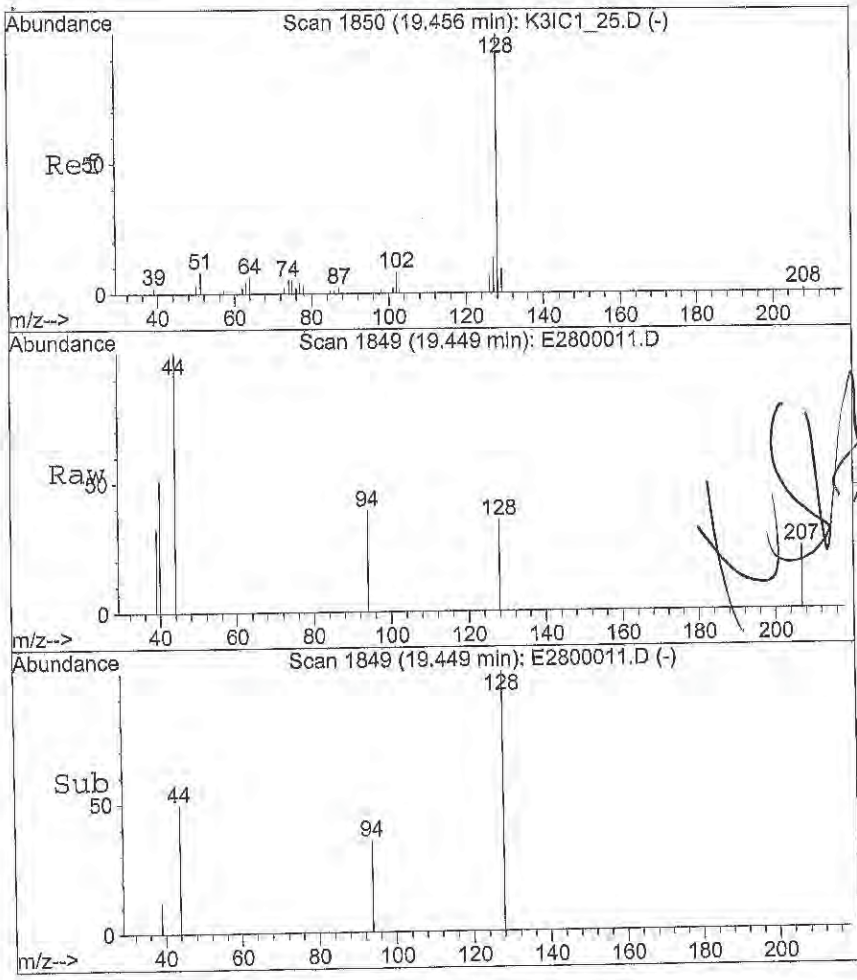


#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:119 Resp: 1376

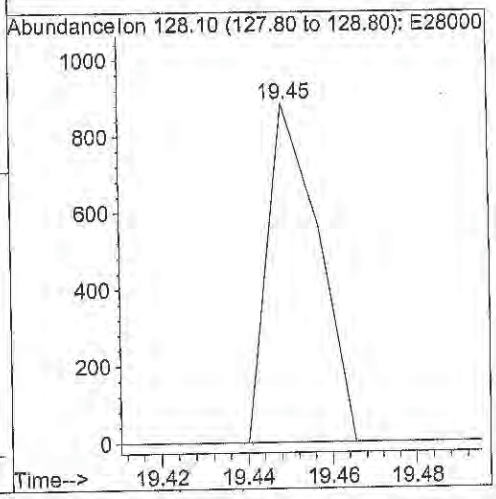
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	20.1	19.6	29.4





#77
Naphthalene
Concen: 0.05 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2800011.D
Acq: 28 May 2014 1:50 pm

Tgt Ion:128 Resp: 732



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800011.D Vial: 2
Acq On : 28 May 2014 1:50 pm Operator: DN
Sample : 3E42801-10 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 14:11 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1619122	12.50	ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1274498	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	681965	12.50	ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	460228	10.93	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.44%			
3) Chloroform-d (SU6)	9.18	84	731445	12.11	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.88%			
4) Methylene Chloride-d2 (SU5	7.06	86	422604	11.97	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 95.76%			
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	447728	15.56	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 124.48%			
6) Benzene-d6 (SU7)	9.92	84	1424918	11.22	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.76%			
8) Toluene-d8 (SU3)	12.20	98	1424769	11.78	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.24%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	701649	14.06	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 112.48%			

Target Compounds Qvalue

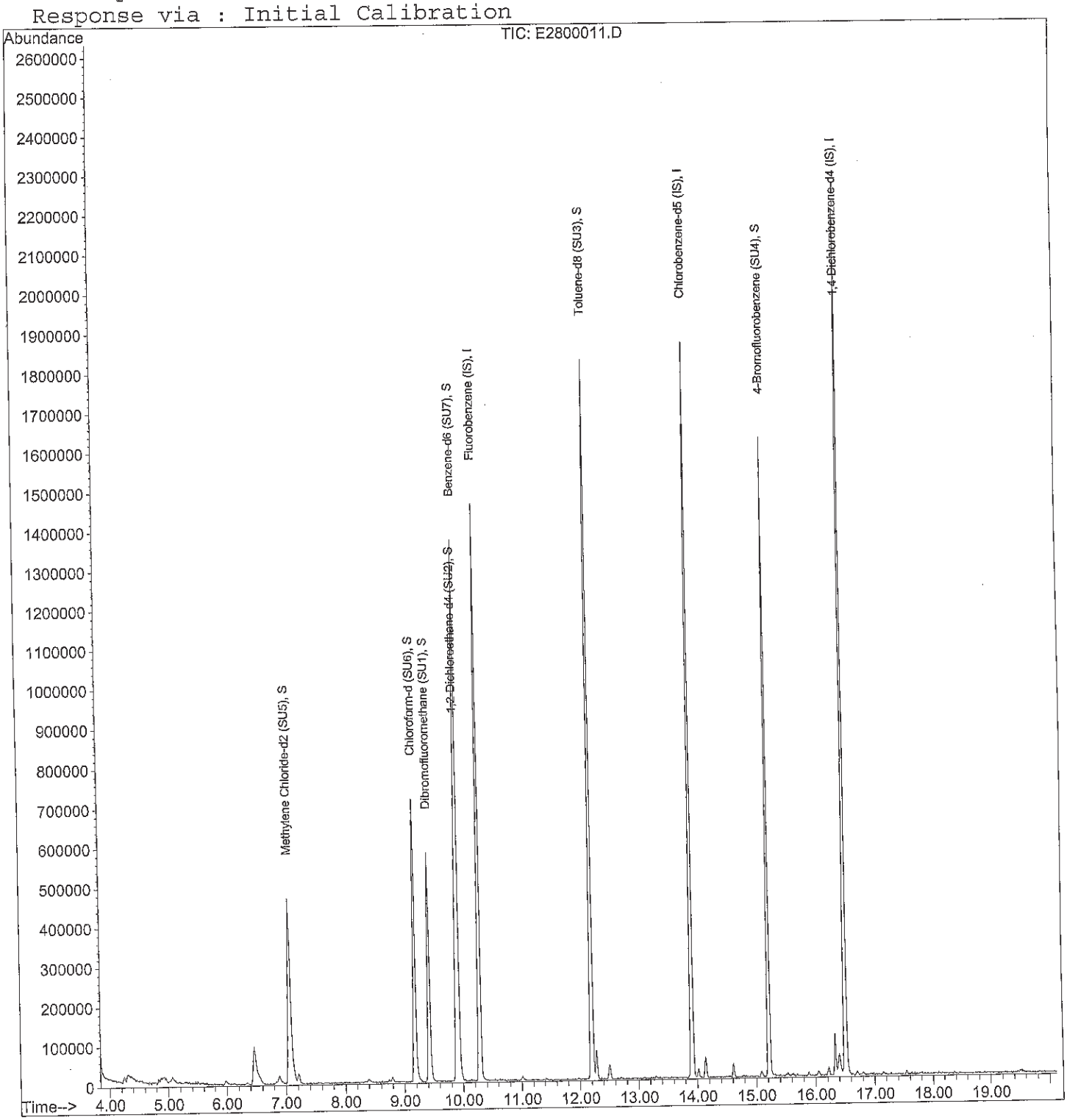
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800011.D
Acq On : 28 May 2014 1:50 pm
Sample : 3E42801-10
Misc : 100cc SVL-544-SA5D-SV-4.5-5.5
MS Integration Params: rteint.p
Quant Time: May 28 14:11 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800012.D
Acq On : 28 May 2014 2:19 pm
Sample : 3E42801-11
Misc : 100cc FB-052814
MS Integration Params: rteint.p
Quant Time: May 28 14:40 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1597393	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1246183	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	690192	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	461787	11.59	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.72%			
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	448354	11.84	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.72%			
39) Toluene-d8 (SU3)	12.20	98	1416371	12.19	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.52%			
58) 4-Bromofluorobenzene (SU4)	15.22	95	702382	13.78	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.24%			

Target Compounds

						Qvalue
4) Chloromethane	4.39	50	1628	-0.61	~~ug/L~~ #	41
6) Bromomethane	5.11	96	1676	-0.82	~~ug/L~~ #	28
7) Chloroethane	5.33	64	743	1.25	~~ug/L~~	94
9) (F113) 1,1,2-Trichloro-tri	6.35	151	2701	0.86	ug/L 0.0172	97
11) Acetone	6.46	58	5255	3.44	~~ug/L~~	90
12) (IPA) Leak Check Compound	6.46	45	212767	1108.45	~~ug/L~~ #	83
13) Carbon disulfide	6.83	76	2495	0.19	~~ug/L~~ #	76
14) Methylene Chloride	7.06	84	5938	1.35	ug/L #	1
15) (TBA) tert-Butanol	6.90	59	2009	7.37	~~ug/L~~ #	77
22) (DIPE) Diisopropyl Ether	8.10	45	261	0.02	~~ug/L~~ #	48
24) Chloroform	9.20	83	2971	0.36	ug/L	92
29) 1,1-Dichloropropene	9.93	75	297	0.05	~~ug/L~~ #	1
31) Benzene	9.98	78	1711	0.11	~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.92	62	6097	1.15	~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7284	2.93	~~ug/L~~ #	100
41) Toluene	12.28	91	6782	0.40	ug/L 0.008	99
46) 2-Hexanone	12.94	43	306	0.11	~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	2553	0.13	~~ug/L~~ #	45
52) m,p-Xylenes	14.14	106	2017	0.29	ug/L 0.0058	77
53) o-Xylene	14.62	106	285	0.04	~~ug/L~~ # 0.0008	1
54) Styrene	14.63	104	1707	-0.70	~~ug/L~~ #	69
56) Isopropylbenzene	15.22	105	980	0.05	~~ug/L~~ #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800012.D Vial: 3
Acq On : 28 May 2014 2:19 pm Operator: DN
Sample : 3E42801-11 Inst : GC/MS Ins
Misc : 100cc FB-052814 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 14:40 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

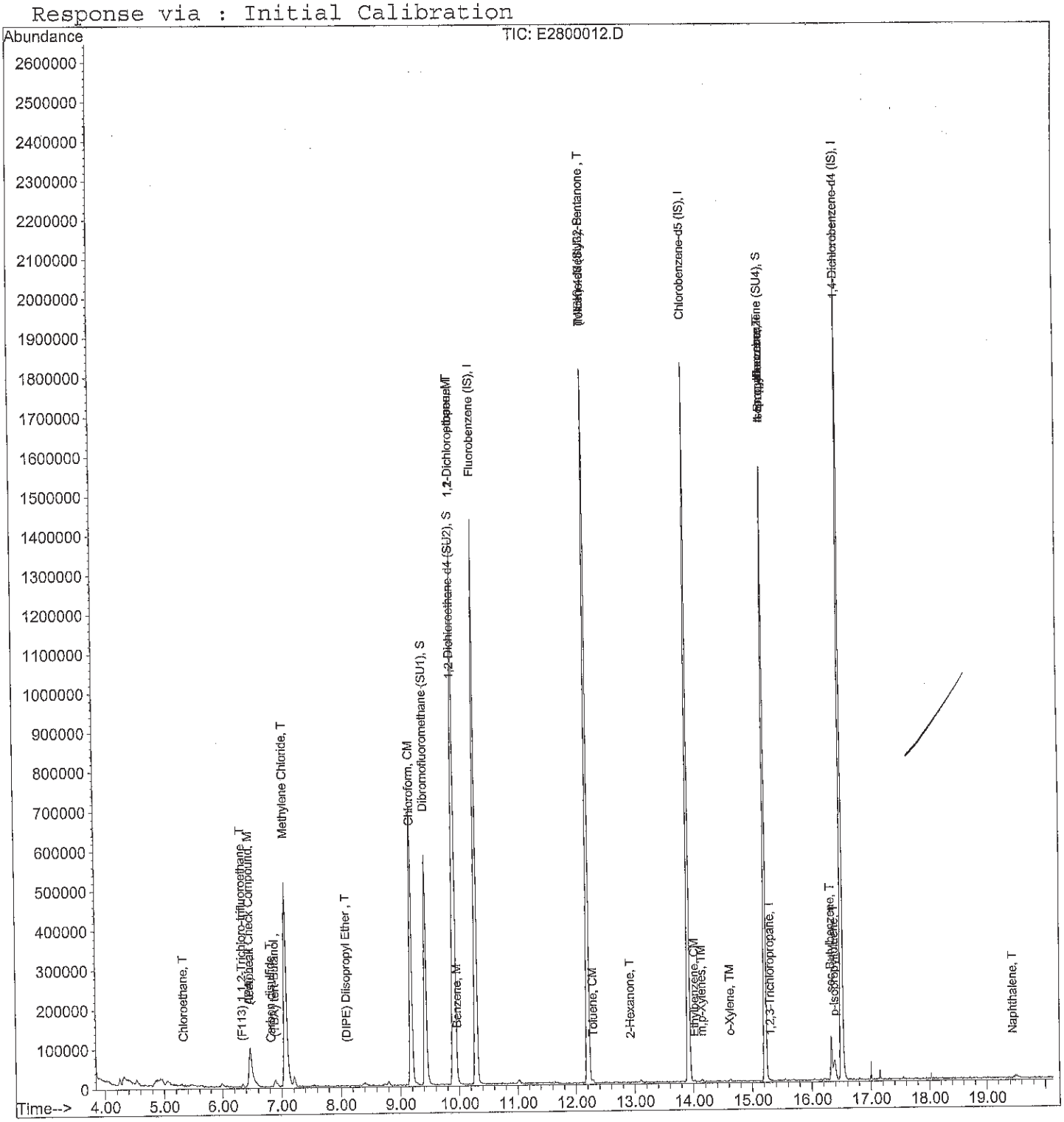
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
57) 1,2,3-Trichloropropane	15.31	75	302	0.06 ~~ug/L~~ # SM	36
62) n-Propylbenzene	15.22	91	2161	0.08 ~~ug/L~~ #	56
68) sec-Butylbenzene	16.33	105	907	0.04 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	294	0.02 ~~ug/L~~ #	52
77) Naphthalene	19.44	128	353	0.03 ~~ug/L~~	100

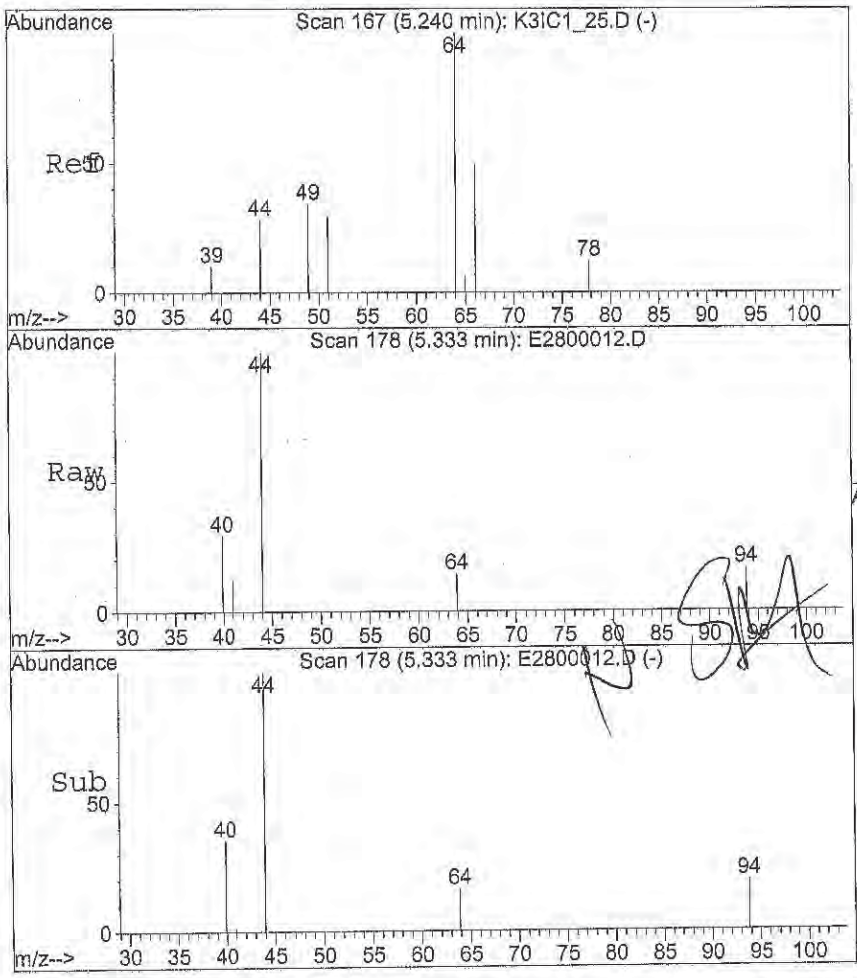
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800012.D Vial: 3
Acq On : 28 May 2014 2:19 pm Operator: DN
Sample : 3E42801-11 Inst : GC/MS Ins
Misc : 100cc FB-052814 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 14:40 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

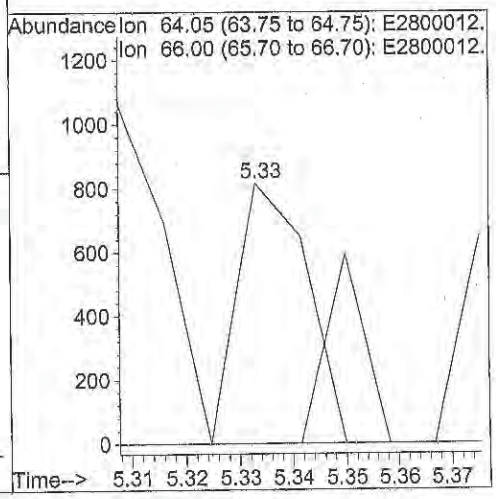


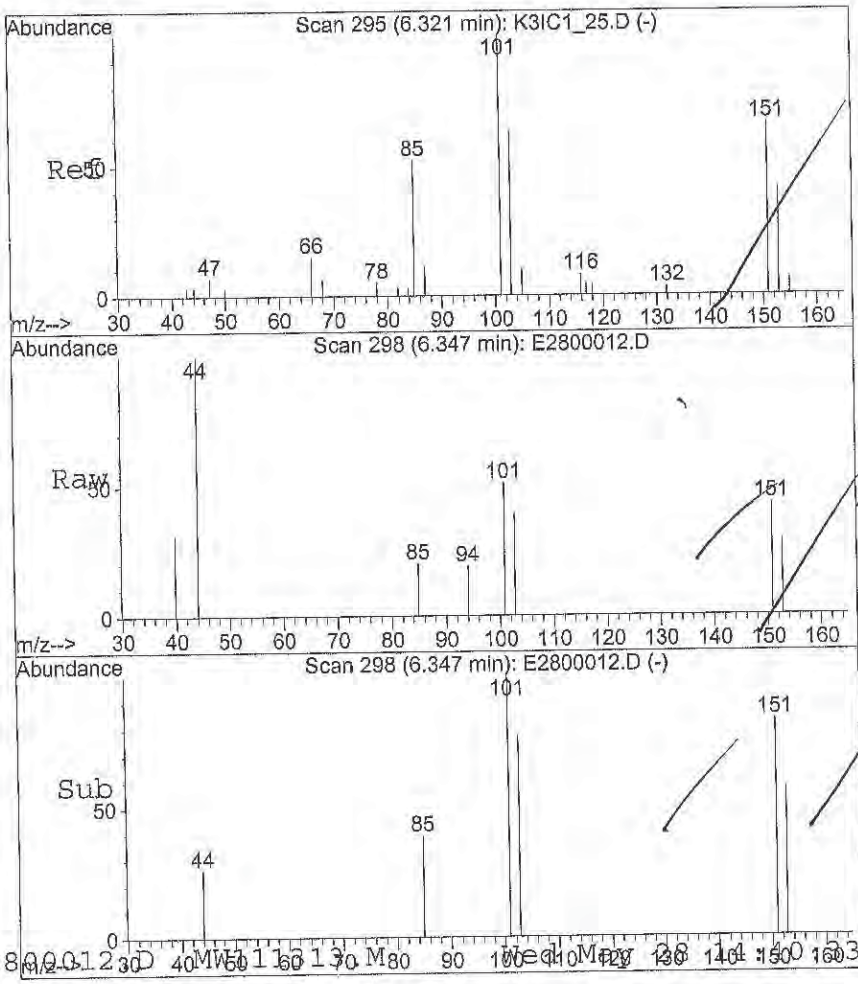


#7
Chloroethane
Concen: 1.25 ug/L
RT: 5.33 min Scan# 178
Delta R.T. 0.09 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 64 Resp: 743

Ion	Ratio	Lower	Upper
64	100		
66	40.4	35.4	53.0

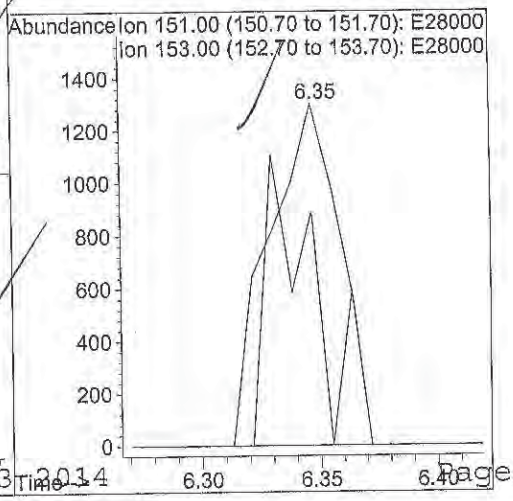


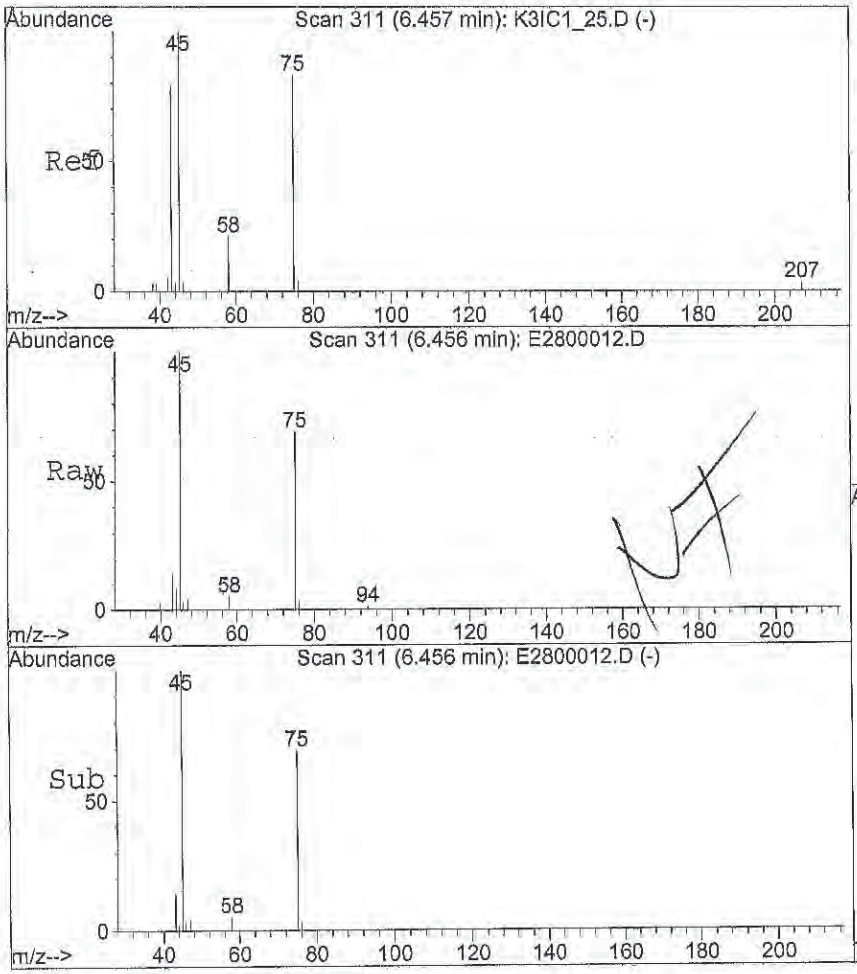


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 0.86 ug/L
RT: 6.35 min Scan# 298
Delta R.T. 0.03 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion:151 Resp: 2701

Ion	Ratio	Lower	Upper
151	100		
153	59.6	49.6	74.4

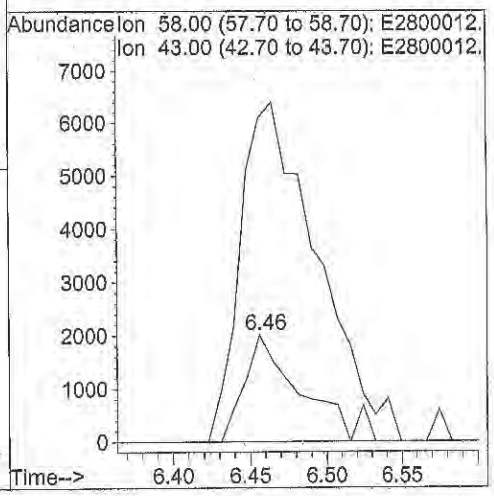


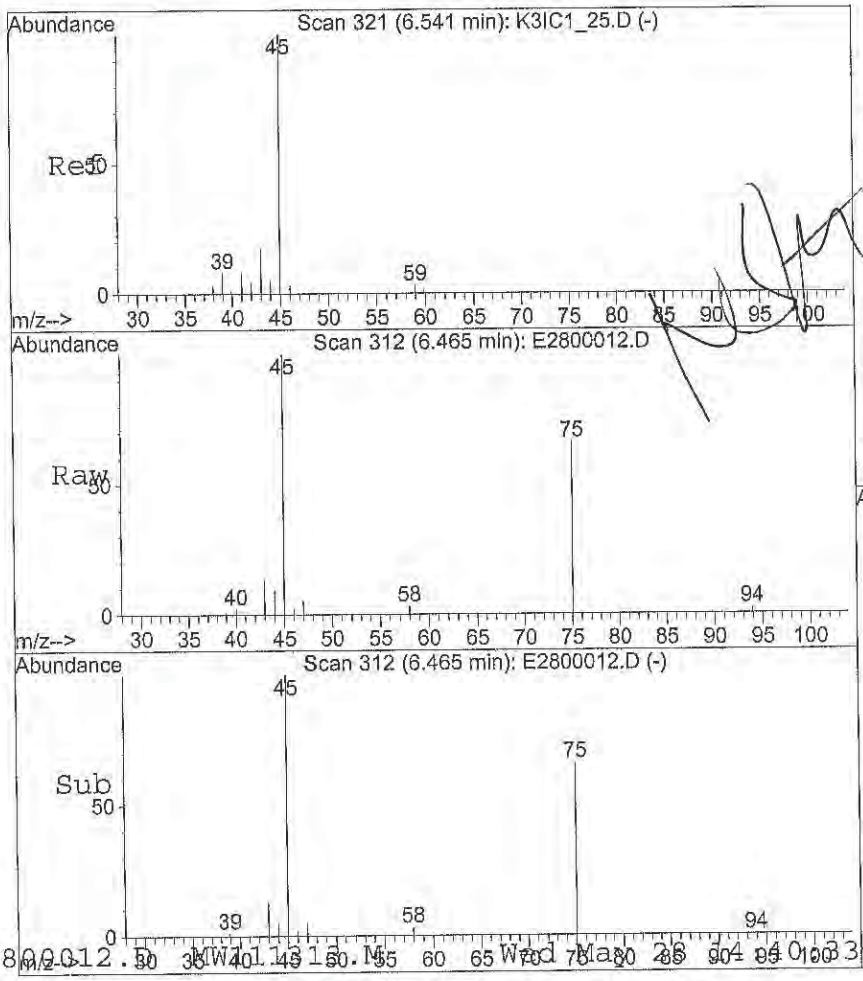


#11
Acetone
Concen: 3.44 ug/L
RT: 6.46 min Scan# 311
Delta R.T. -0.00 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 58 Resp: 5255

Ion	Ratio	Lower	Upper
58	100		
43	425.0	360.9	541.3

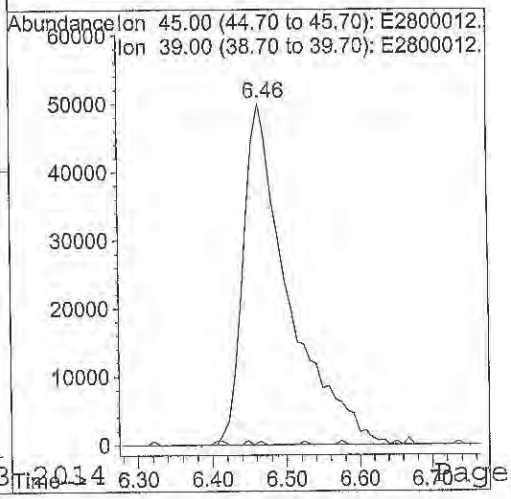


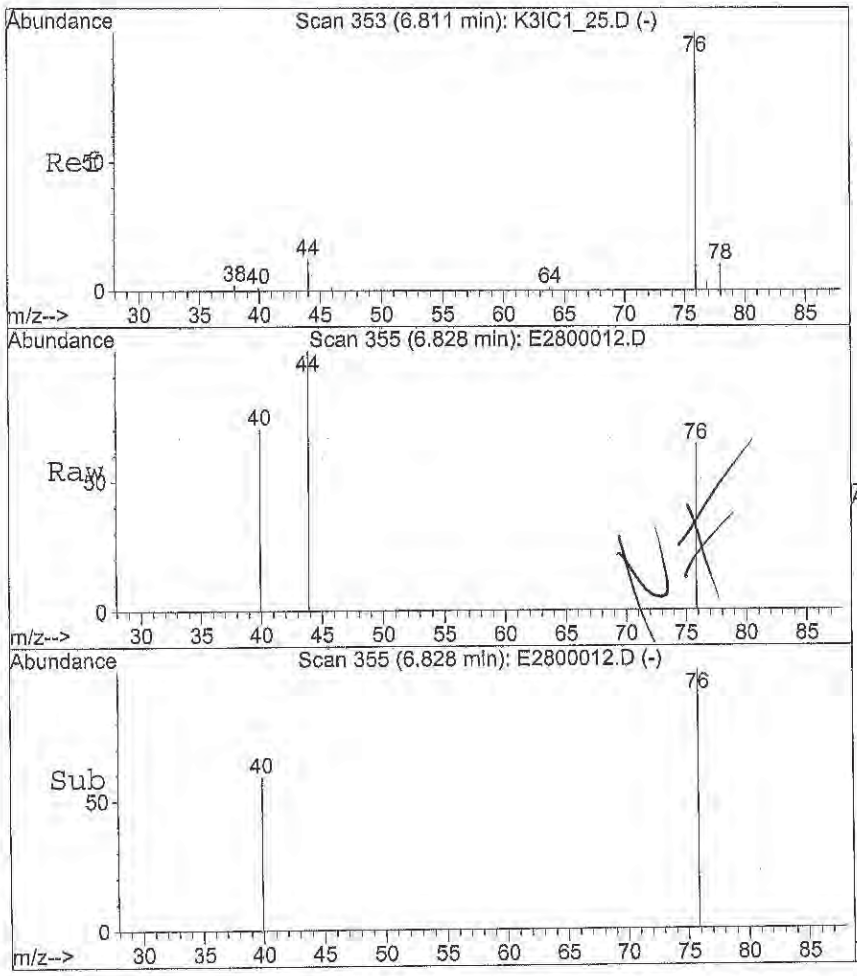


#12
(IPA) Leak Check Compound
Concen: 1108.45 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 45 Resp: 212767

Ion	Ratio	Lower	Upper
45	100		
39	0.3	4.9	7.3#

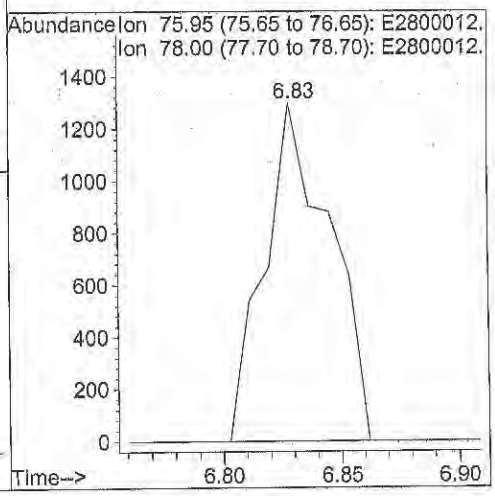


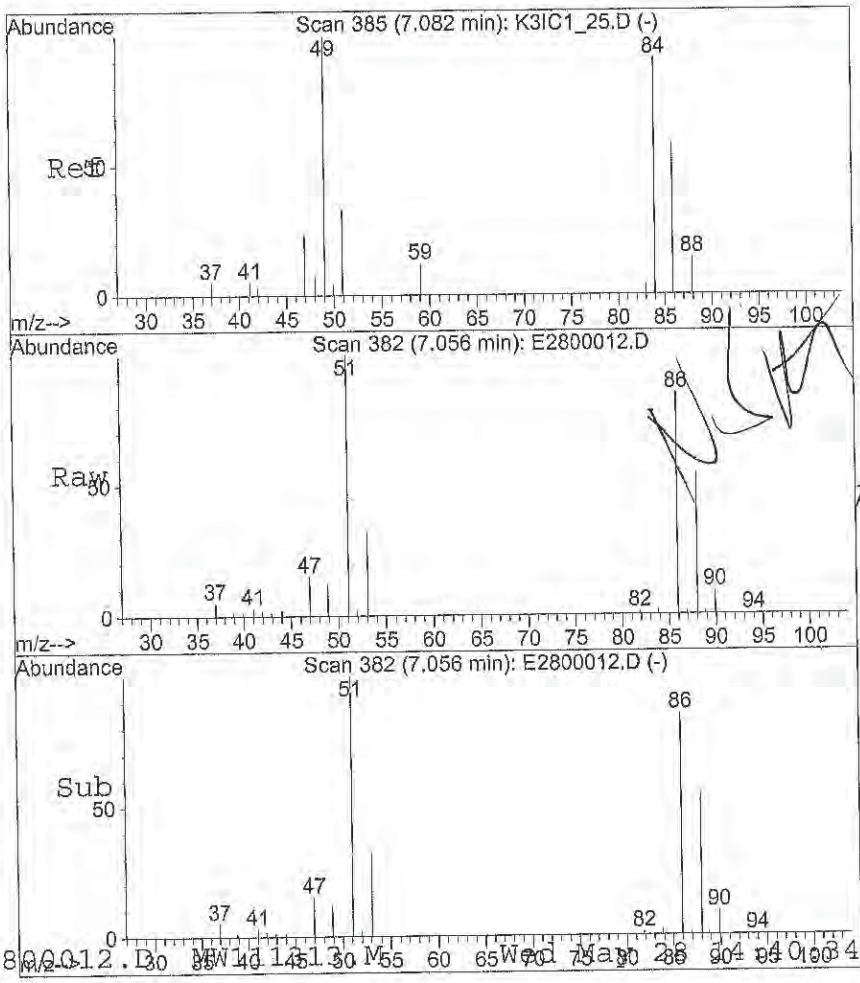


#13
Carbon disulfide
Concen: 0.19 ug/L
RT: 6.83 min Scan# 355
Delta R.T. 0.02 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 76 Resp: 2495

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

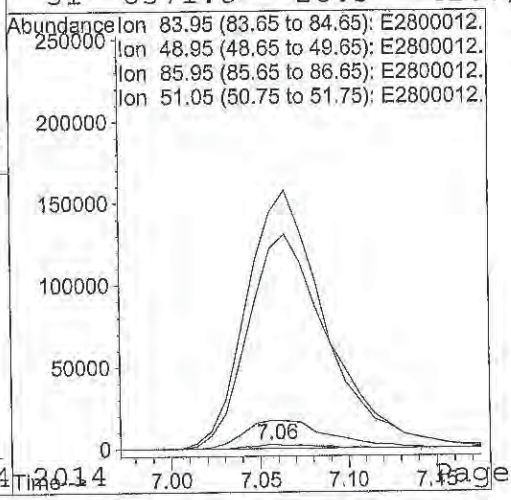


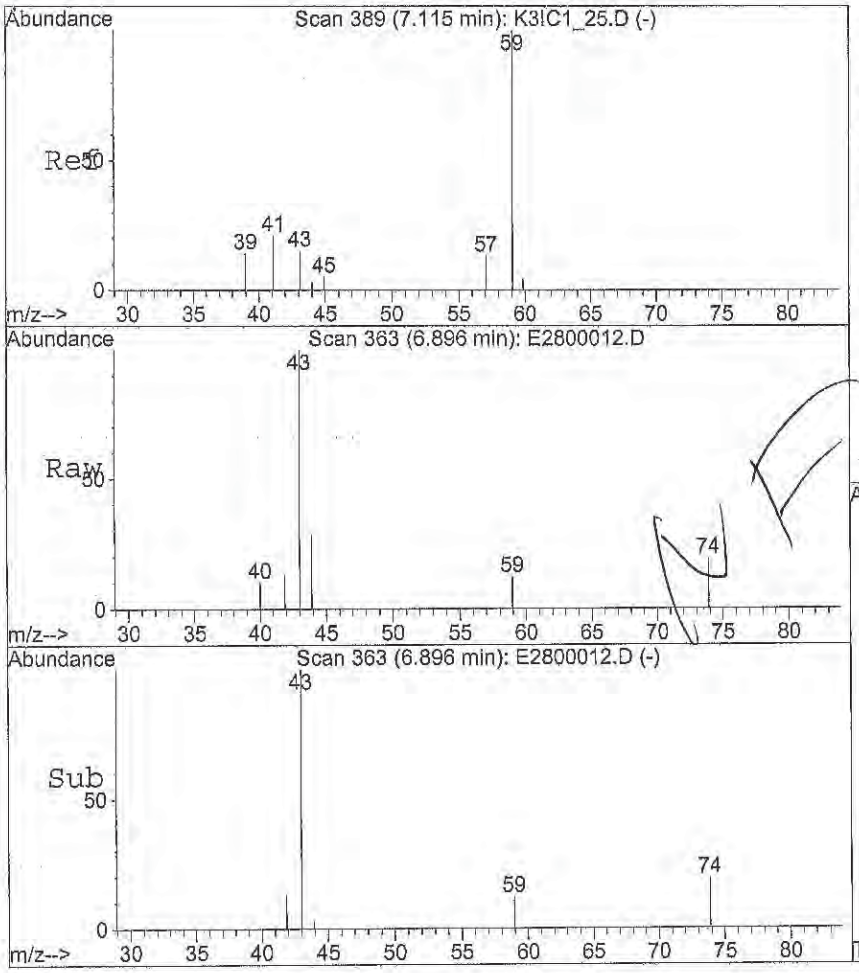


#14
Methylene Chloride
Concen: 1.35 ug/L
RT: 7.06 min Scan# 382
Delta R.T. -0.03 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 84 Resp: 5938

Ion	Ratio	Lower	Upper
84	100		
49	960.8	89.8	134.6#
86	7024.4	51.1	76.7#
51	8371.8	28.5	42.7#

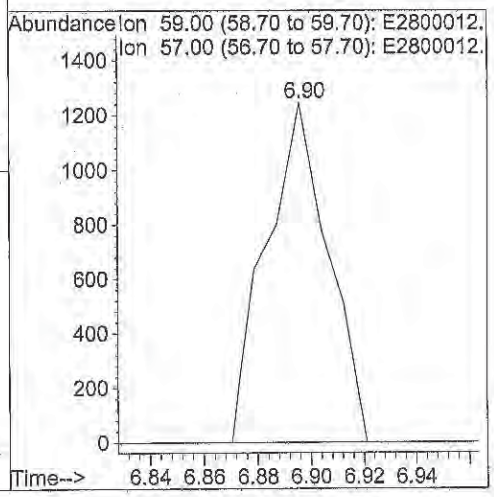


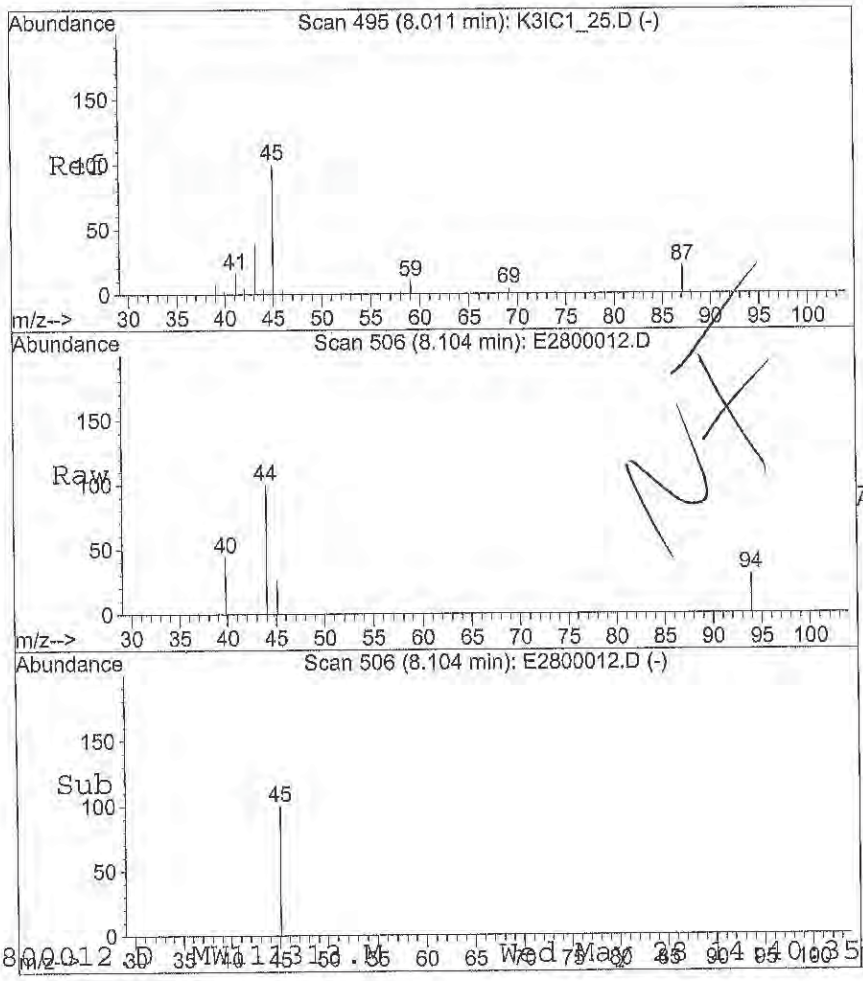


#15
(TBA) tert-Butanol
Concen: 7.37 ug/L
RT: 6.90 min Scan# 363
Delta R.T. -0.22 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 59 Resp: 2009

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

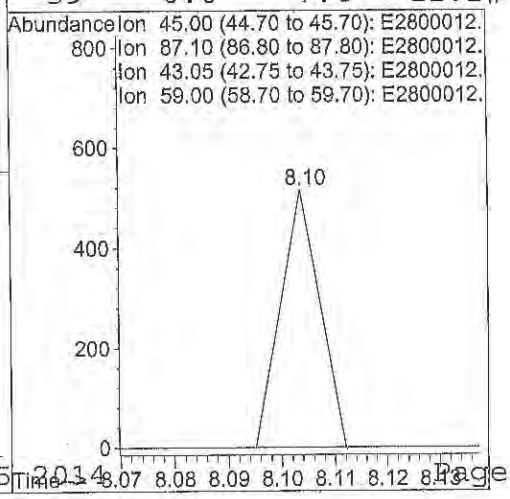


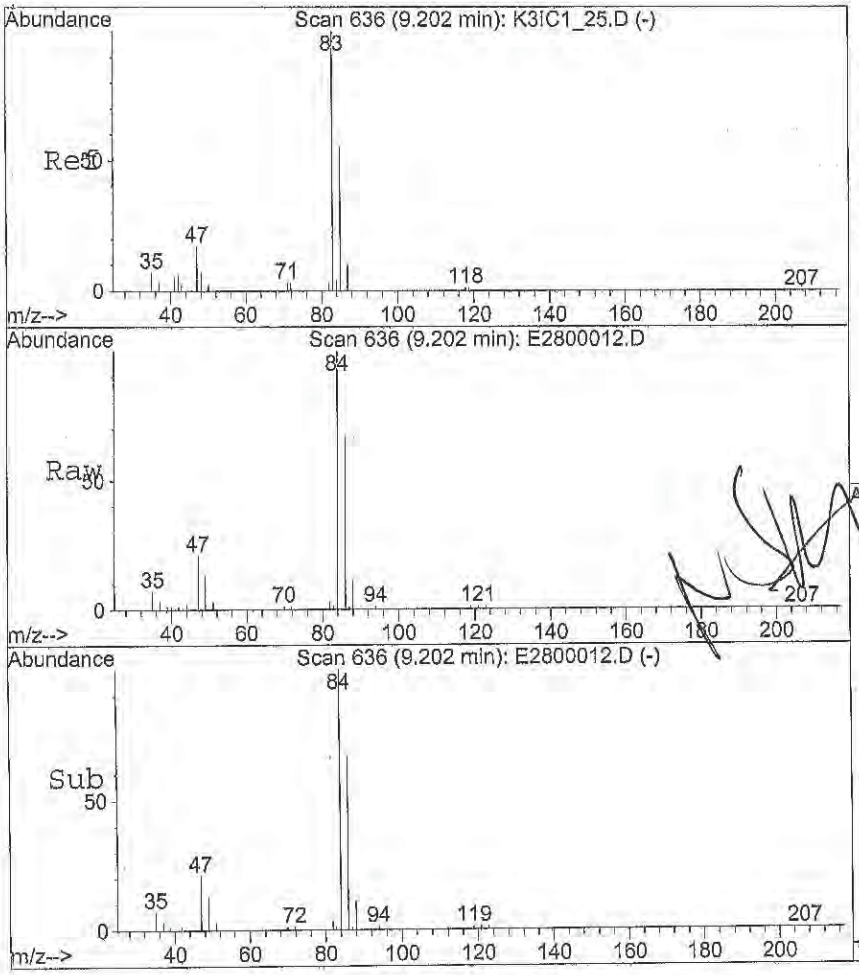


#22
(DIPE) Diisopropyl Ether
Concen: 0.02 ug/L
RT: 8.10 min Scan# 506
Delta R.T. 0.09 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 45 Resp: 261

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

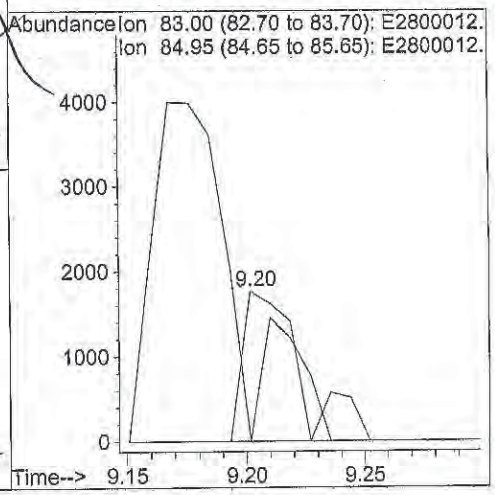


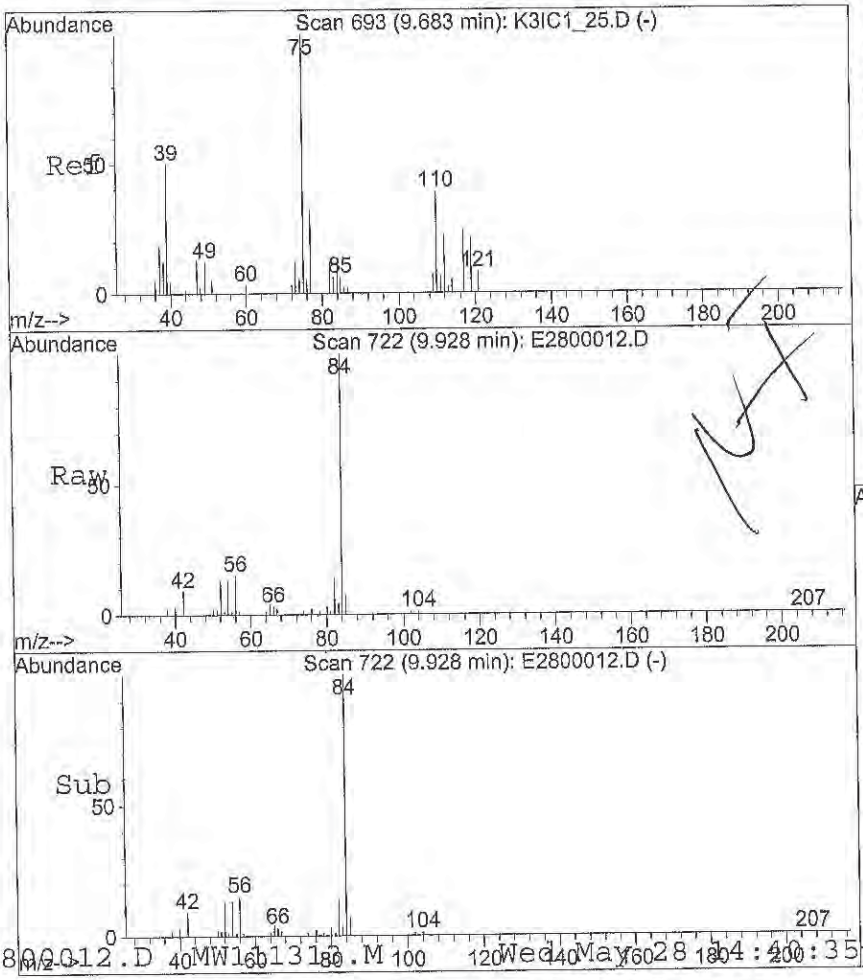


#24
Chloroform
Concen: 0.36 ug/L
RT: 9.20 min Scan# 636
Delta R.T. -0.00 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 83 Resp: 2971

Ion	Ratio	Lower	Upper
83	100		
85	58.4	51.8	77.6

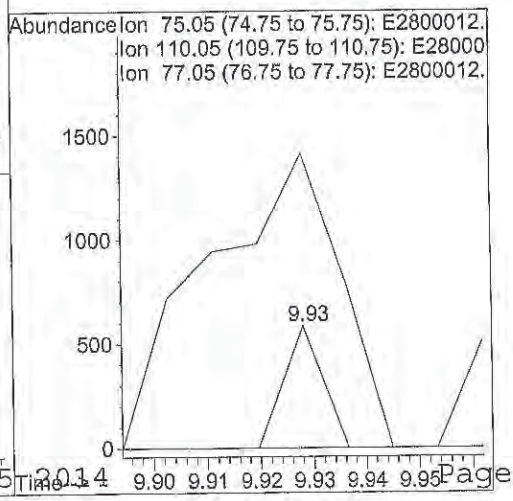


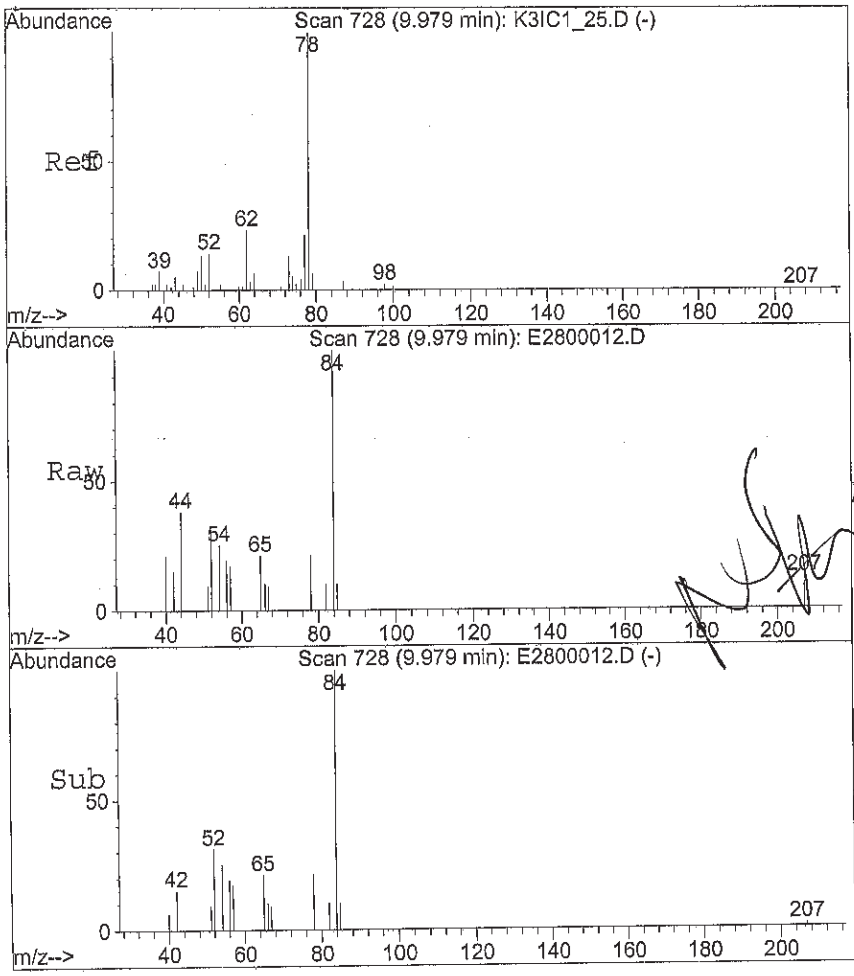


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.93 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 75 Resp: 297

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	823.2	25.0	37.4#

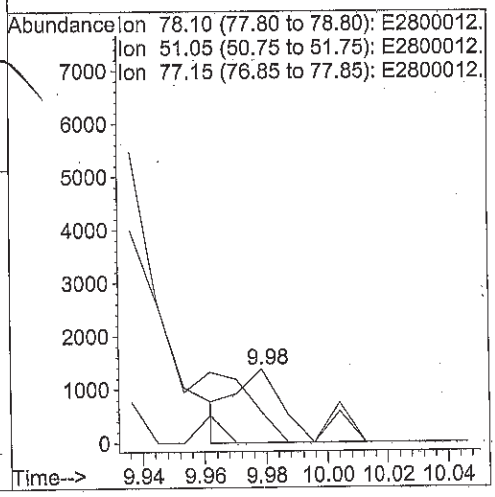


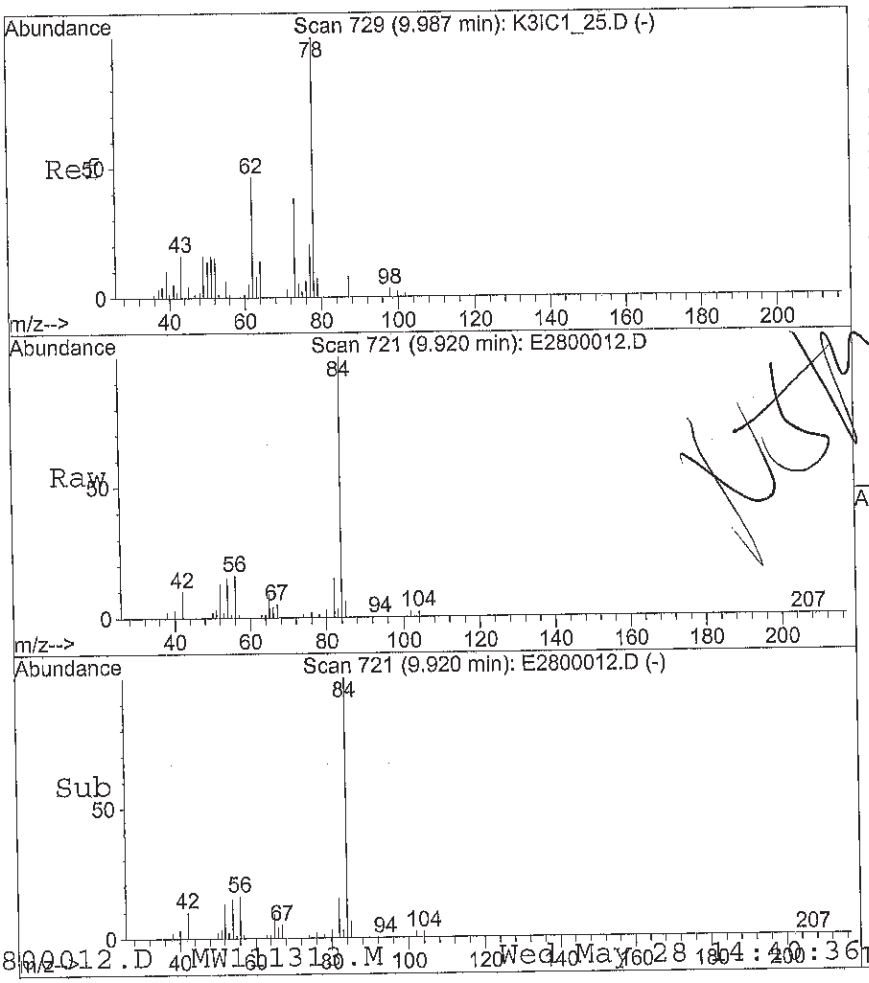


#31
Benzene
Concen: 0.11 ug/L
RT: 9.98 min Scan# 728
Delta R.T. -0.00 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 78 Resp: 1711

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

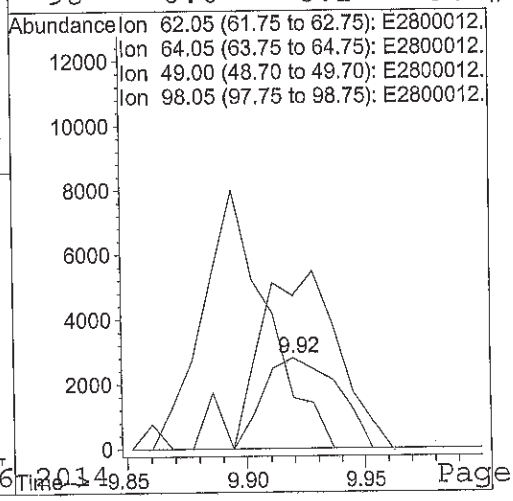


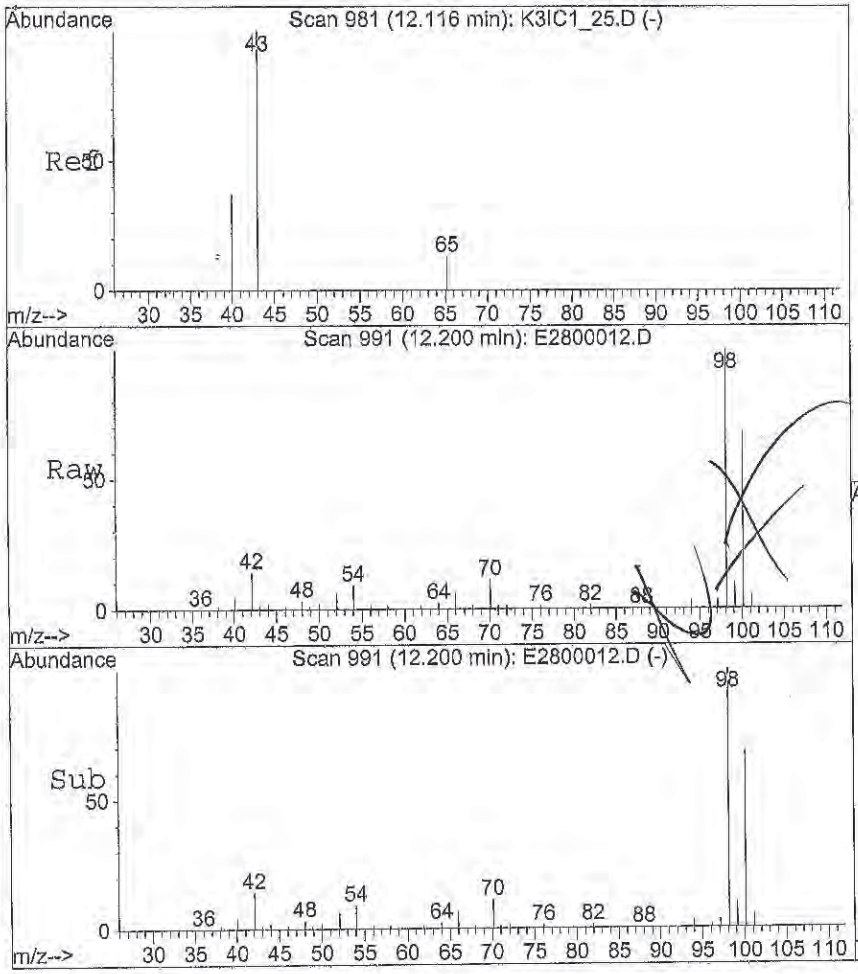


#32
1,2-Dichloroethane
Concen: 1.15 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 62 Resp: 6097

Ion	Ratio	Lower	Upper
62	100		
64	216.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

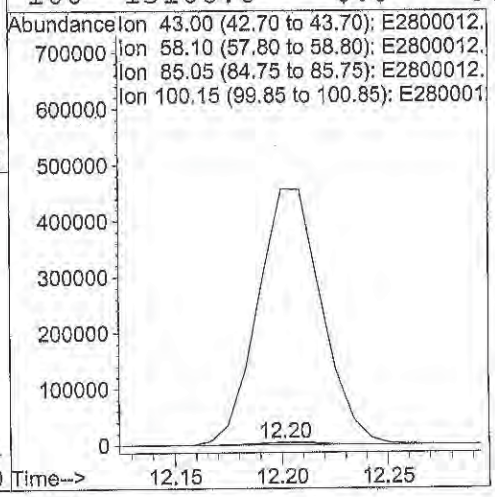


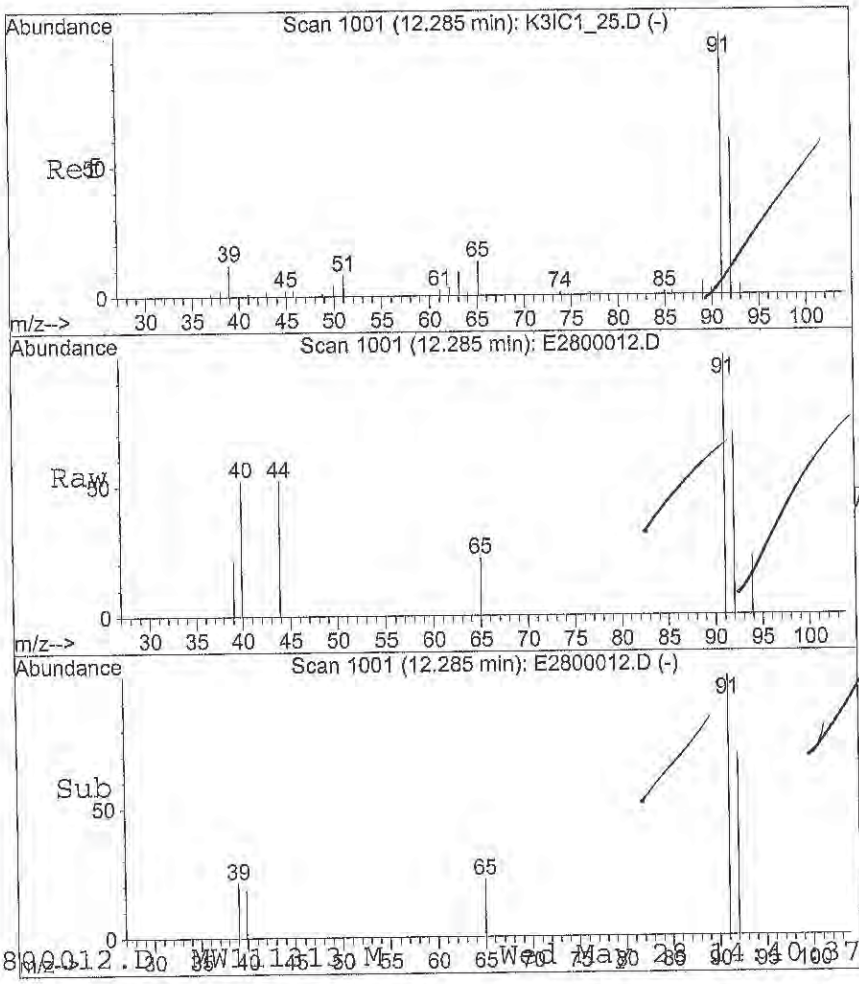


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.93 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 43 Resp: 7284

Ion	Ratio	Lower	Upper
43	100		
58	145.0	0.0	0.0#
85	0.0	0.0	0.0
100	13106.0	0.0	0.0#

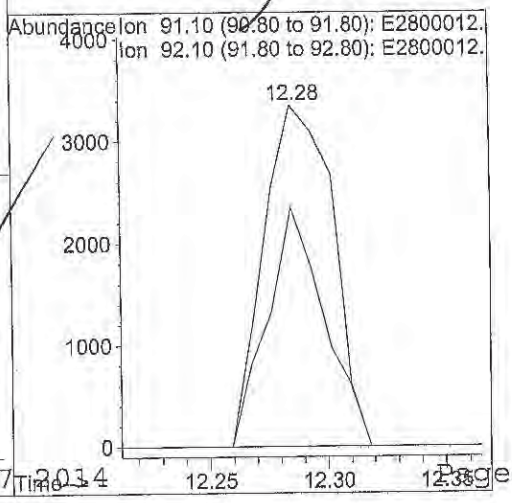


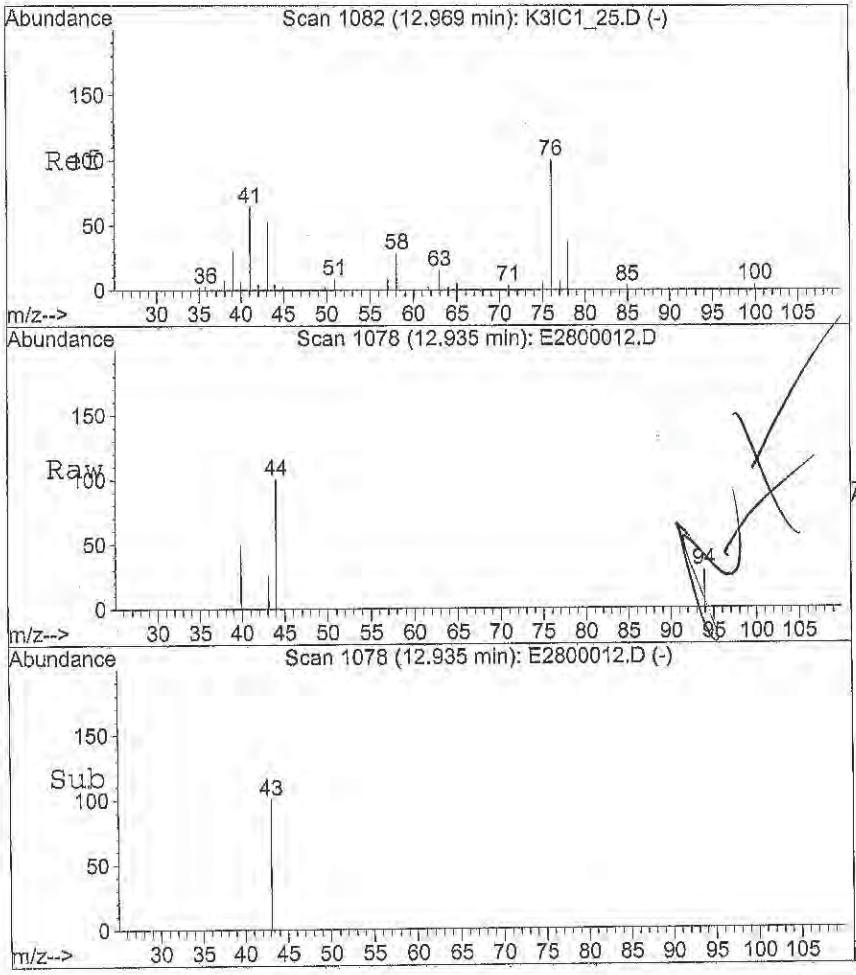


#41
Toluene
Concen: 0.40 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 91 Resp: 6782

Ion	Ratio	Lower	Upper
91	100		
92	58.5	47.4	71.0

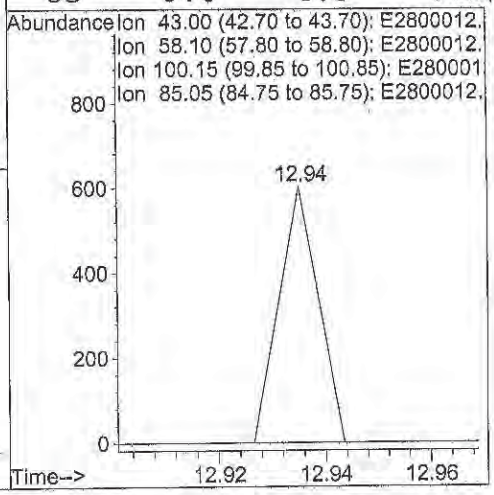


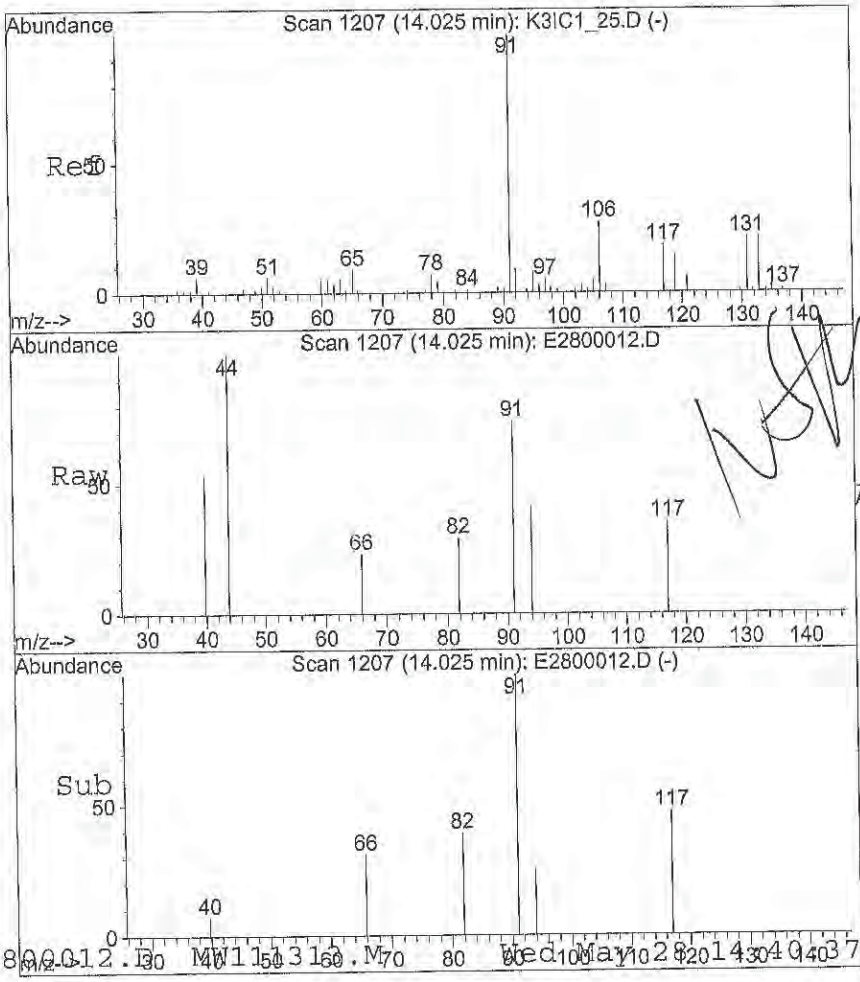


#46
2-Hexanone
Concen: 0.11 ug/L
RT: 12.94 min Scan# 1078
Delta R.T. -0.03 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 43 Resp: 306

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

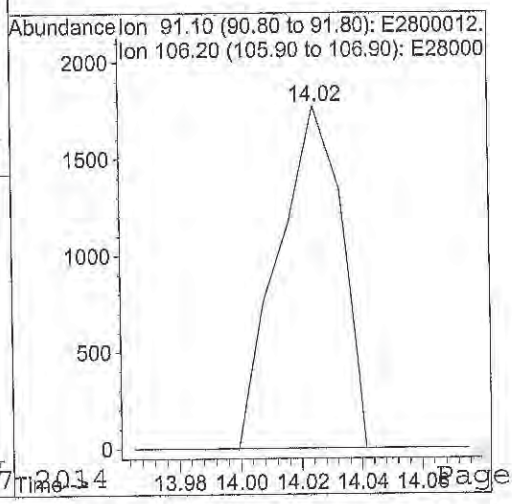


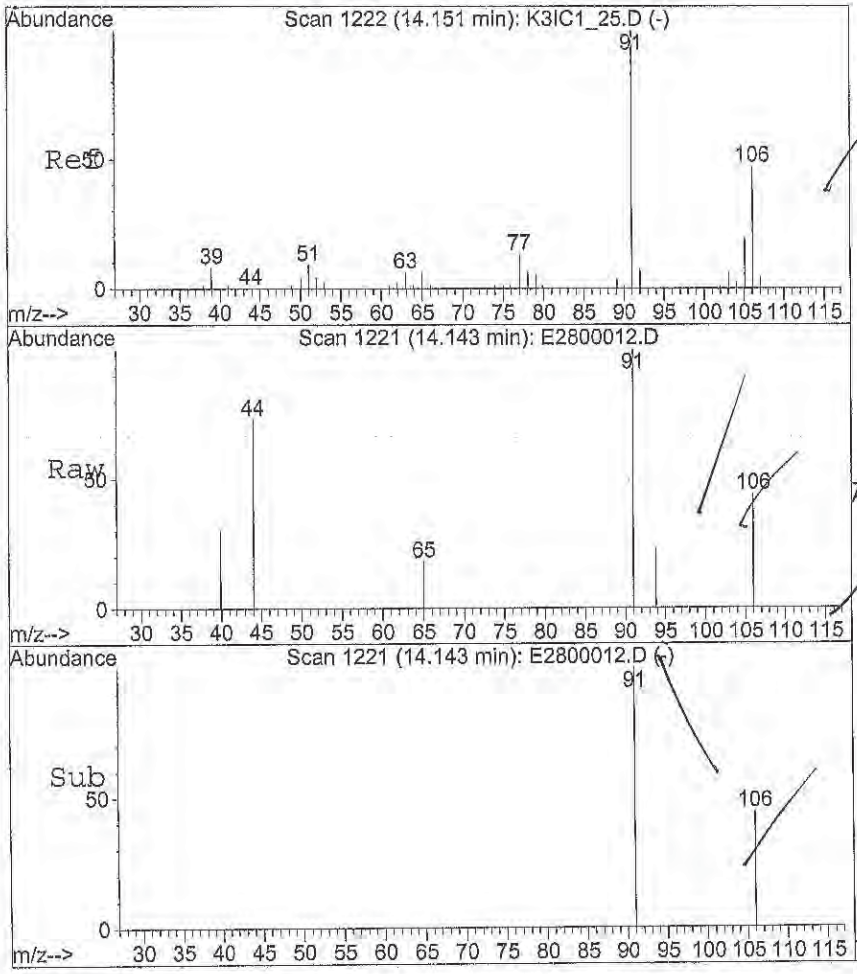


#51
Ethylbenzene
Concen: 0.13 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 91 Resp: 2553

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

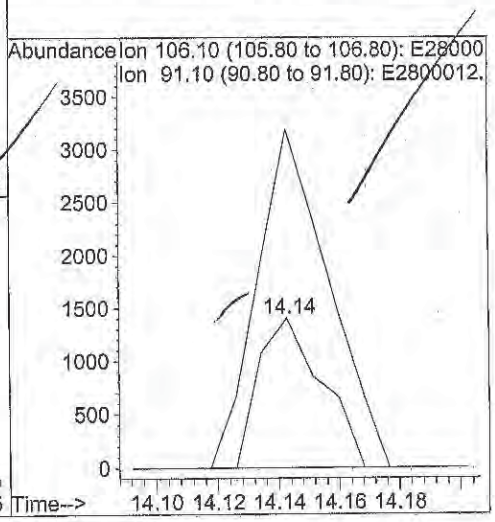


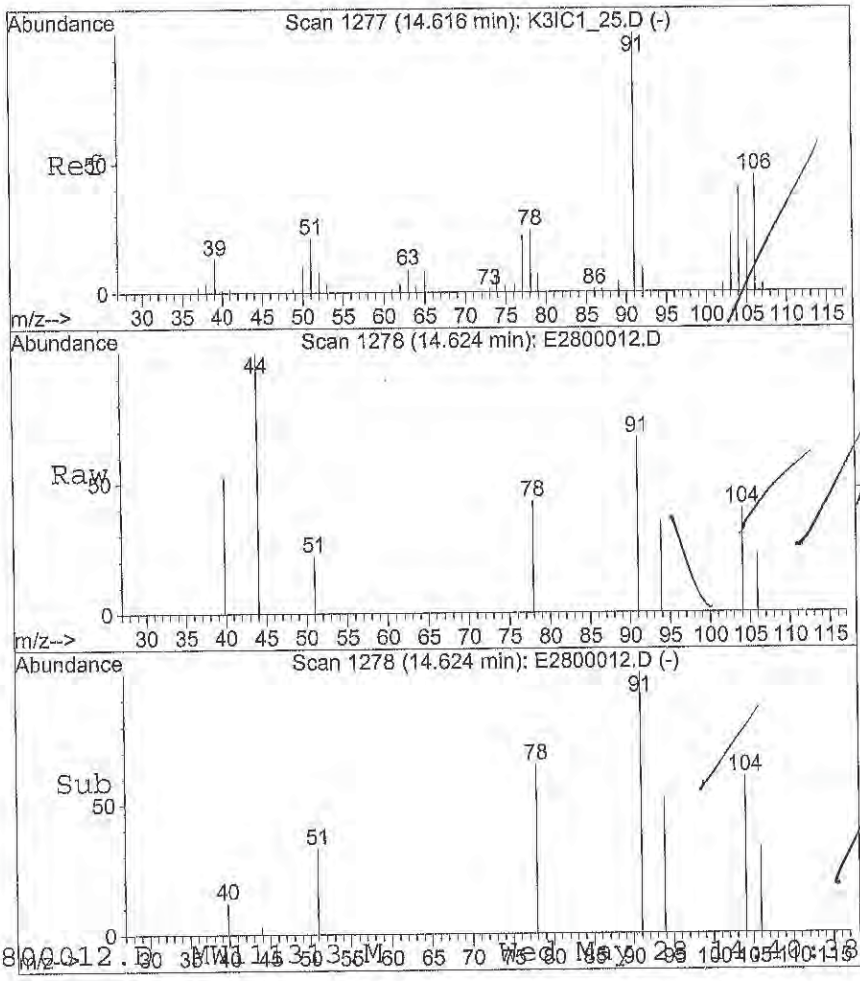


#52
m,p-Xylenes
Concen: 0.29 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion:106 Resp: 2017

Ion	Ratio	Lower	Upper
106	100		
91	258.2	177.1	265.7

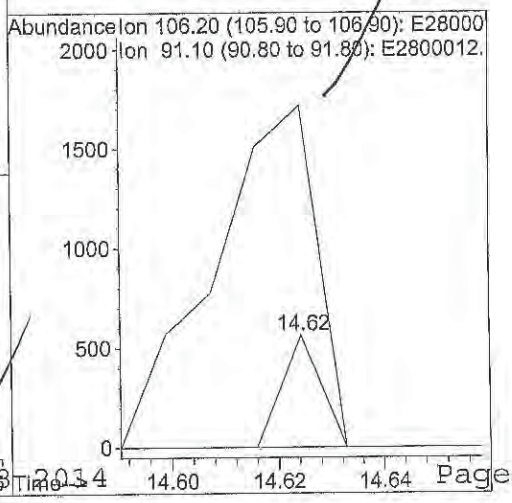


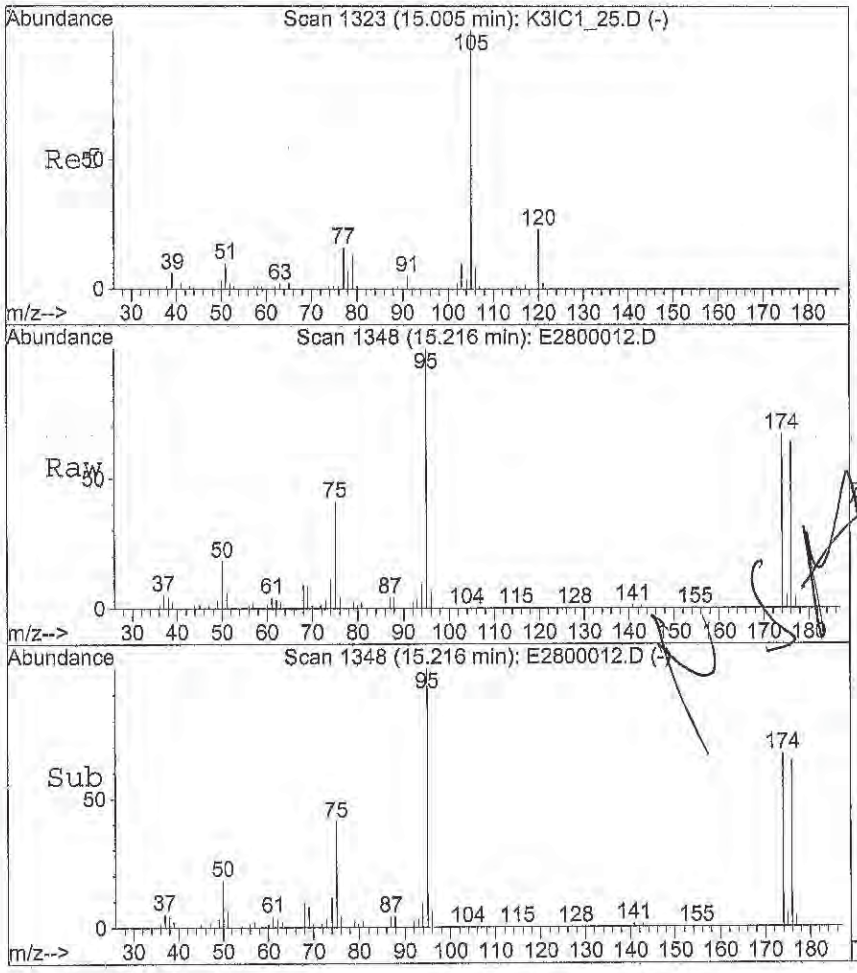


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.01 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion:106 Resp: 285

Ion	Ratio	Lower	Upper
106	100		
91	812.6	179.0	268.6#

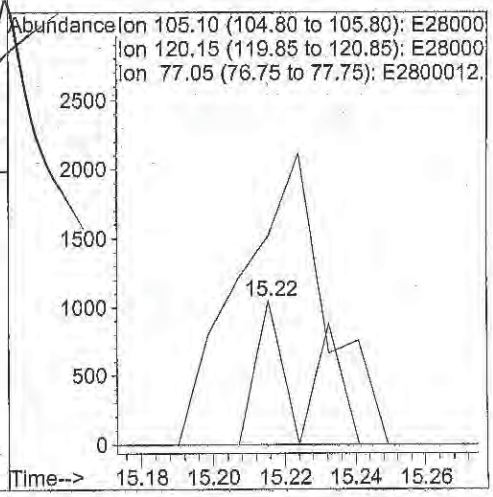


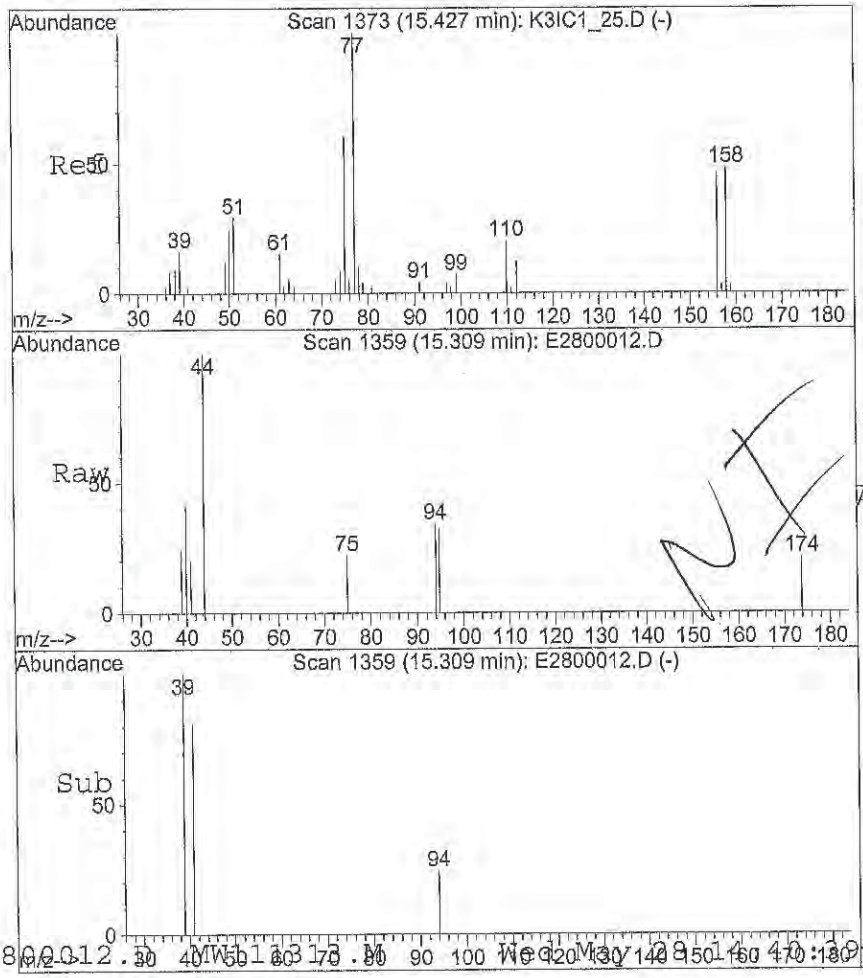


#56
Isopropylbenzene
Concen: 0.05 ug/L
RT: 15.22 min Scan# 1348
Delta R.T. 0.21 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion:105 Resp: 980

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	365.2	13.1	19.7#

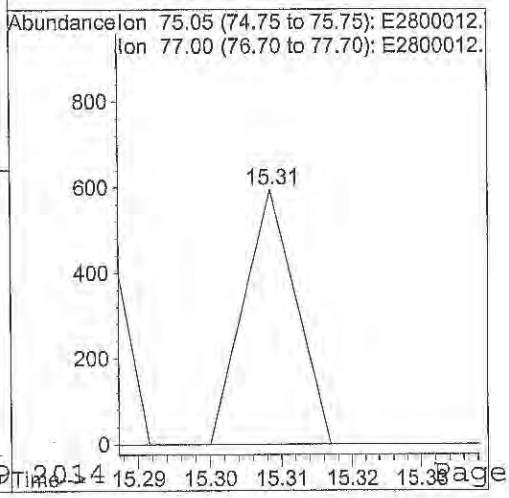


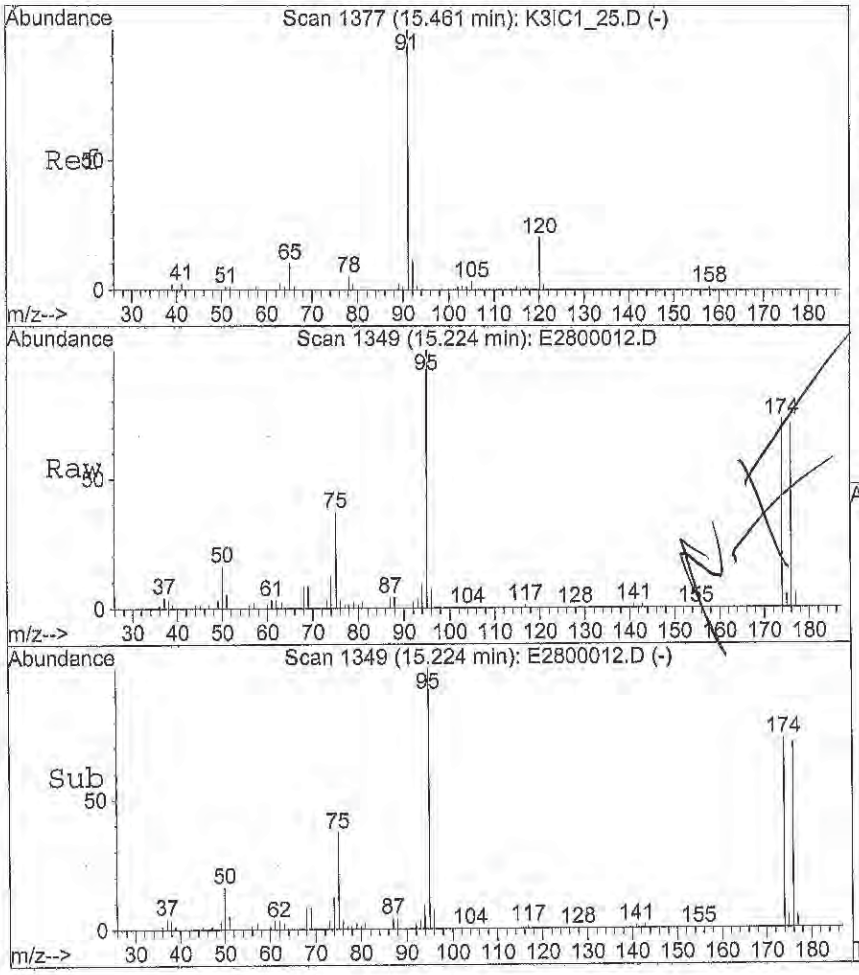


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.31 min Scan# 1359
Delta R.T. -0.12 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 75 Resp: 302

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

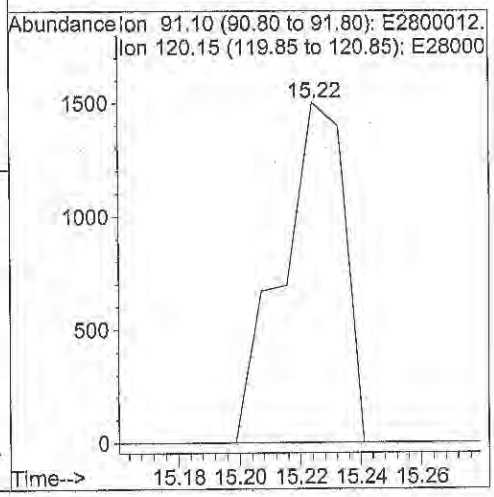


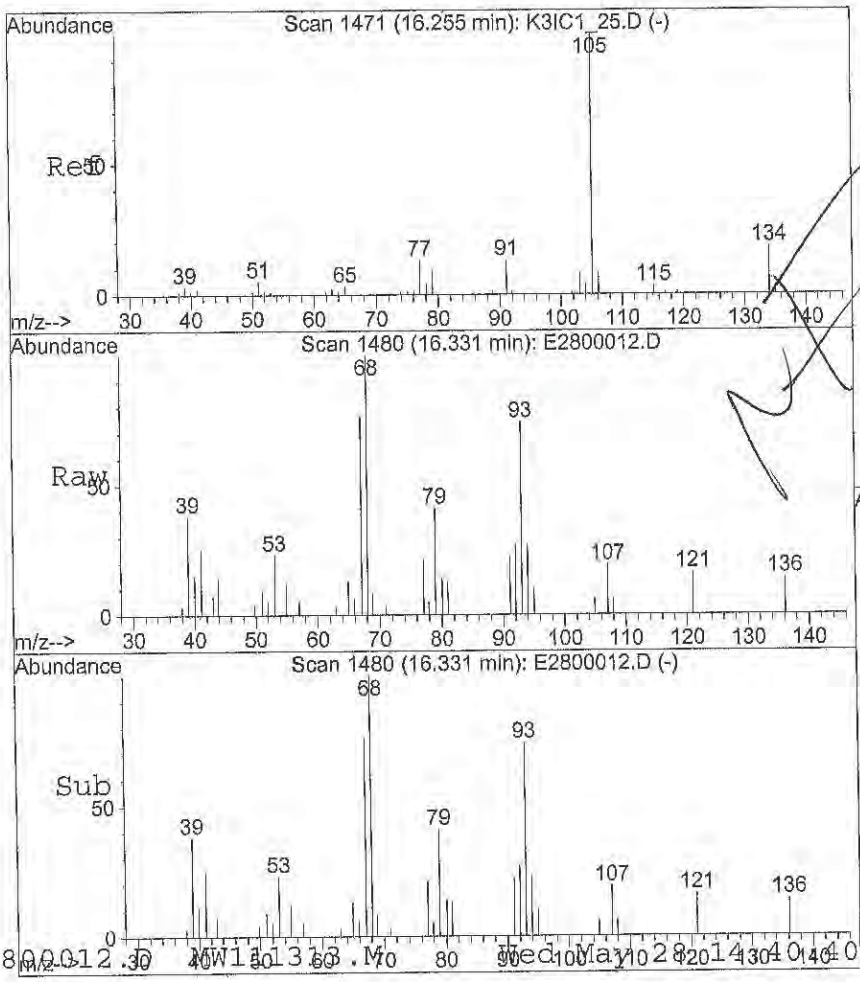


#62
n-Propylbenzene
Concen: 0.08 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. -0.24 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion: 91 Resp: 2161

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

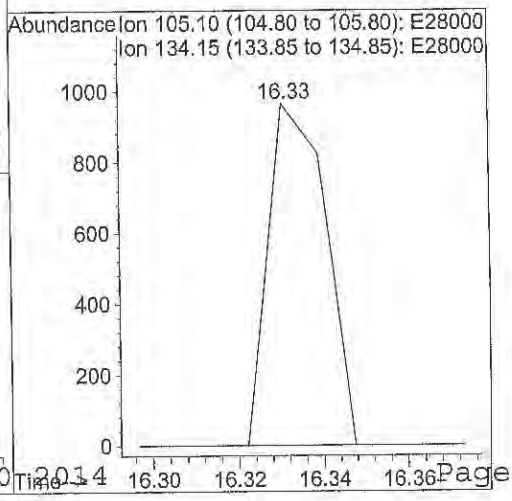


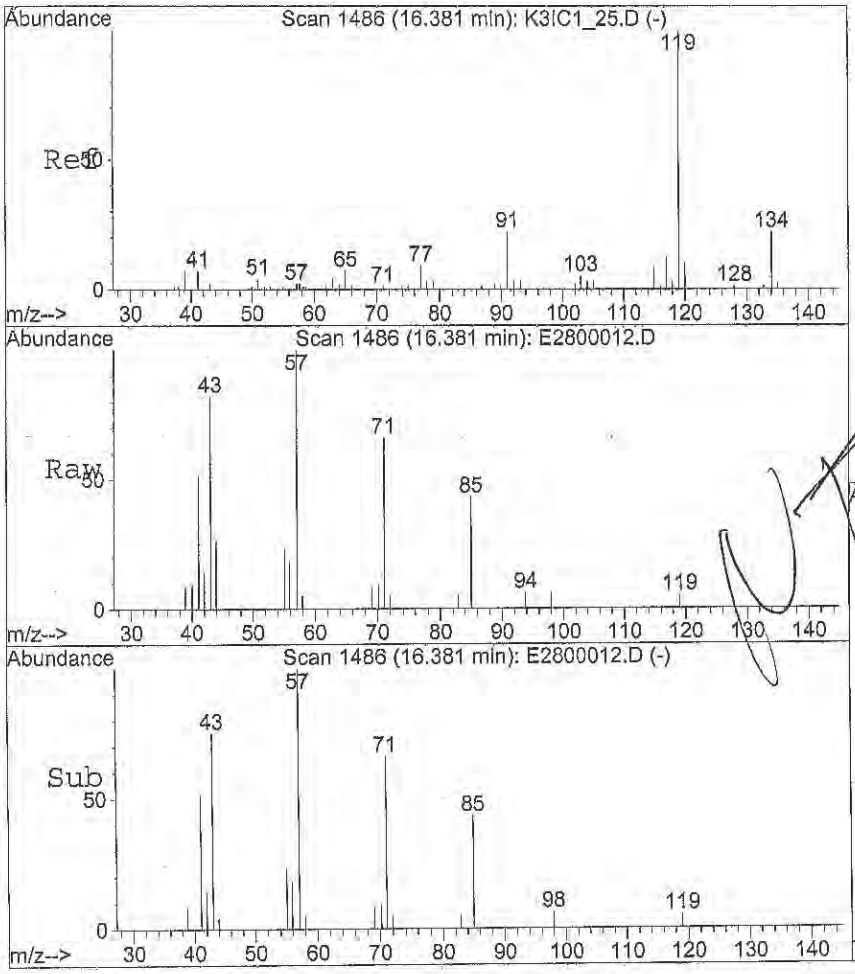


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion:105 Resp: 907

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

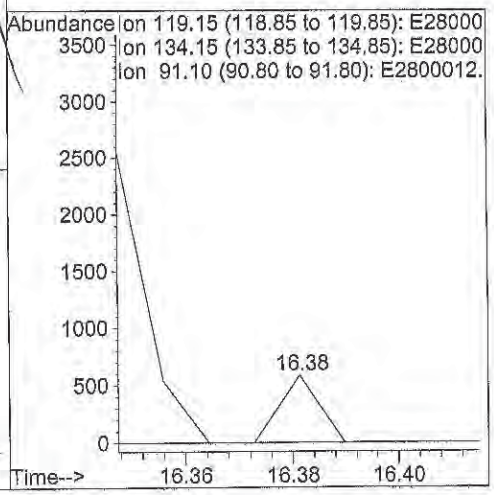


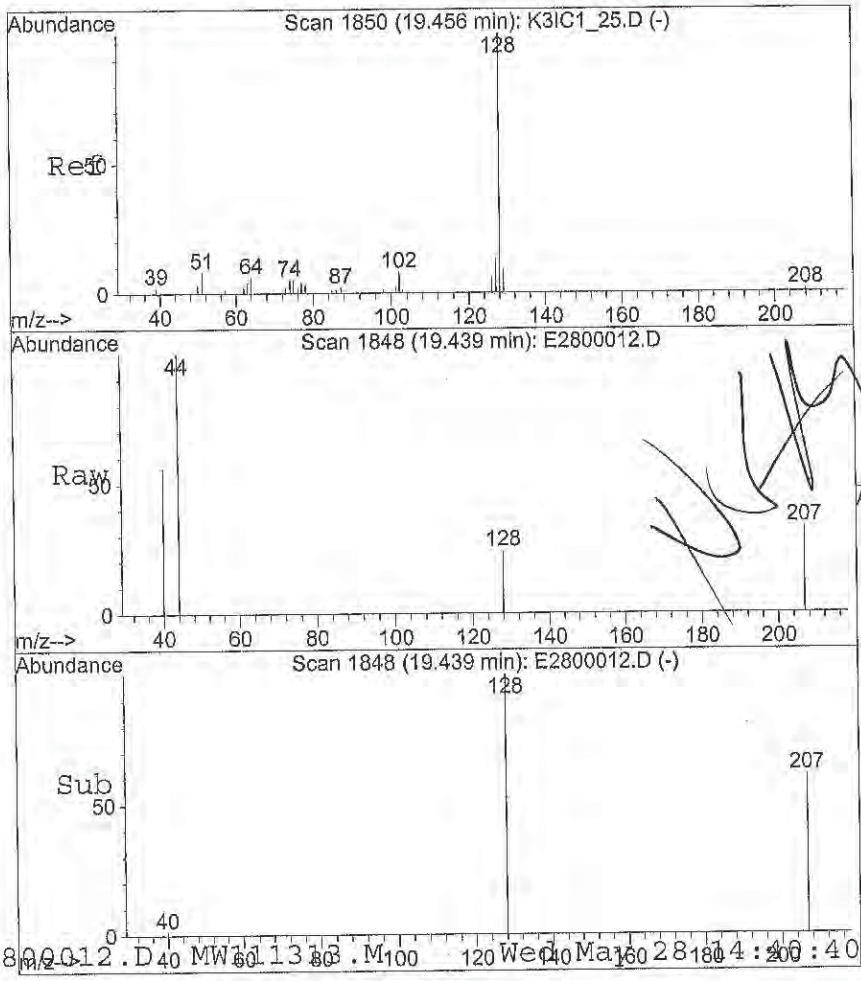


#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion:119 Resp: 294

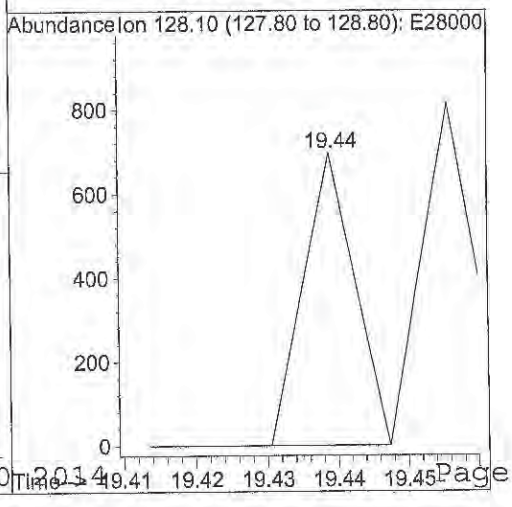
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#





#77
Naphthalene
Concen: 0.03 ug/L
RT: 19.44 min Scan# 1848
Delta R.T. -0.02 min
Lab File: E2800012.D
Acq: 28 May 2014 2:19 pm

Tgt Ion:128 Resp: 353



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E2800012.D Vial: 3
Acq On : 28 May 2014 2:19 pm Operator: DN
Sample : 3E42801-11 Inst : GC/MS Ins
Misc : 100cc FB-052814 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 14:40 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1597393	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1245718	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	690192	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	461787	11.12 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.96%		
3) Chloroform-d (SU6)	9.18	84	717266	12.03 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.24%		
4) Methylene Chloride-d2 (SU5	7.06	86	417106	11.97 ug/L	0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 95.76%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	448354	15.79 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 126.32%#		
6) Benzene-d6 (SU7)	9.93	84	1398264	11.16 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.28%		
8) Toluene-d8 (SU3)	12.20	98	1416371	11.98 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.84%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	702382	14.40 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.20%		

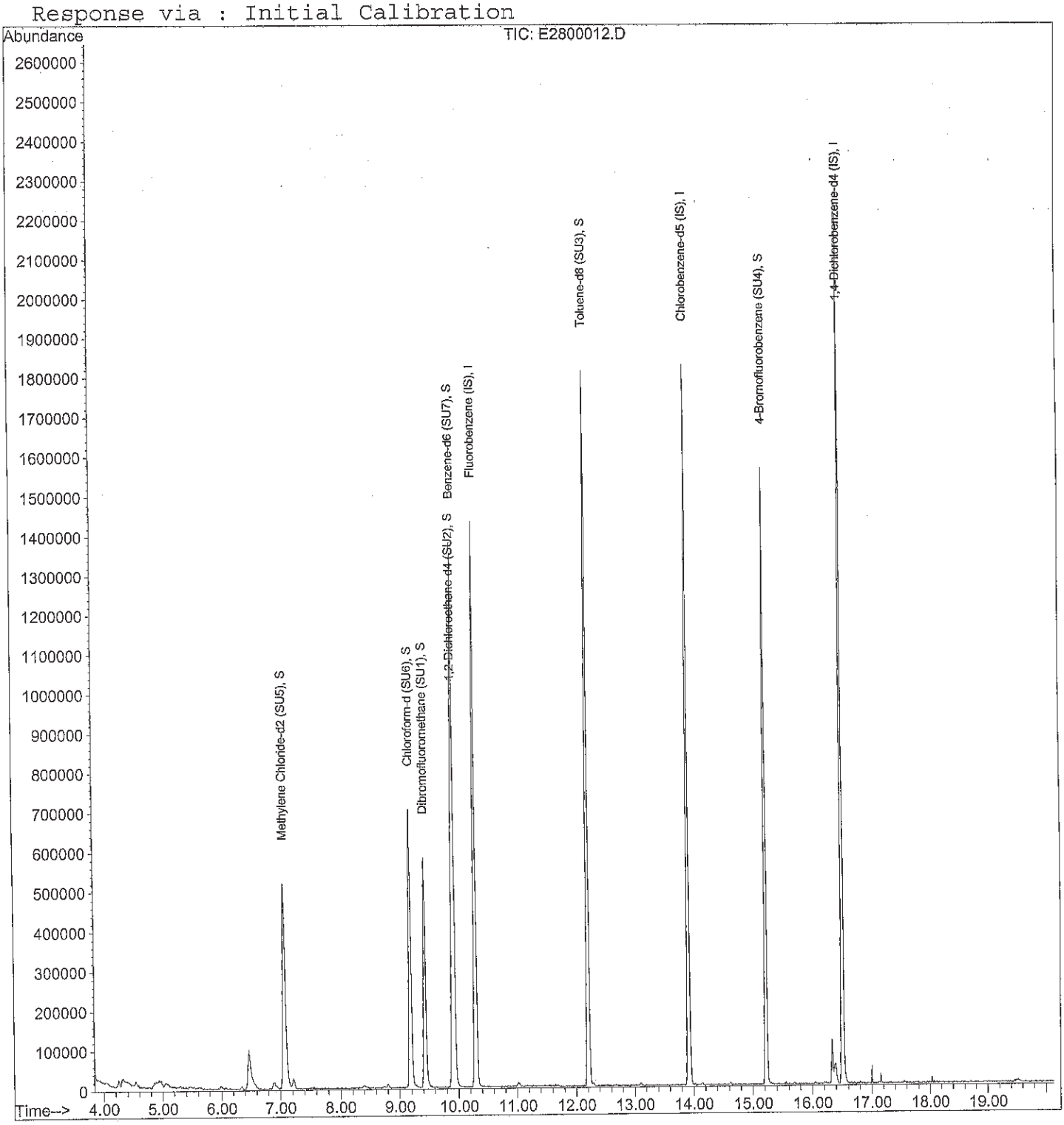
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E2800012.D Vial: 3
Acq On : 28 May 2014 2:19 pm Operator: DN
Sample : 3E42801-11 Inst : GC/MS Ins
Misc : 100cc FB-052814 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 28 14:40 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS02.D
Acq On : 28 May 2014 2:47 pm
Sample : 34E2801-BSD1
Misc : 20cc 1.25/2.5/12.5 ug/L LCS
MS Integration Params: rteint.p
Quant Time: May 28 15:11 19114

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1584704	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1196933	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	588085	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.44	113	458056	11.59 ug/L	0.01
Spiked Amount 12.500 Range 75 - 125			Recovery = 92.72%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	431893	11.50 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 92.00%		
39) Toluene-d8 (SU3)	12.21	98	1387417	12.43 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 99.44%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	611624	12.49 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 99.92%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	52320	1.35 ug/L	99
4) Chloromethane	4.47	50	37196	1.28 ug/L	41
5) Vinyl Chloride	4.60	62	37116	1.33 ug/L	88
6) Bromomethane	5.16	96	21253	1.04 ug/L	85
7) Chloroethane	5.30	64	16978	1.37 ug/L	32
8) (F11) Trichlorofluorometha	5.67	101	64911	1.49 ug/L	99
9) (F113) 1,1,2-Trichloro-tri	6.37	151	39551	1.27 ug/L	99
10) 1,1-Dichloroethene	6.44	96	47142	1.26 ug/L	92
11) Acetone	6.46	58	19483	3.30 ug/L	99
12) (IPA) Leak Check Compound	6.55	45	110725	58.15 ug/L	97
13) Carbon disulfide	6.87	76	181355	1.38 ug/L	100
14) Methylene Chloride	7.12	84	56450	1.30 ug/L	92
15) (TBA) tert-Butanol	7.10	59	1169	0.43 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	89924	1.00 ug/L	96
17) trans-1,2-Dichloroethene	7.49	96	58020	1.36 ug/L	98
18) 1,1-Dichloroethane	8.08	63	86601	1.22 ug/L	100
19) cis-1,2-Dichloroethene	8.84	96	61259	1.24 ug/L	92
20) 2,2-Dichloropropane	8.84	77	514	0.01 ug/L #	1
21) (MEK) 2-Butanone	8.80	72	2677	0.60 ug/L #	1
22) (DIPE) Diisopropyl Ether	8.02	45	164490	1.33 ug/L	97
23) Bromochloromethane	9.17	128	22806	1.07 ug/L #	86
24) Chloroform	9.22	83	100714	1.21 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS02.D Vial: 9
Acq On : 28 May 2014 2:47 pm Operator: DN
Sample : 34E2801-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 15:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	108388	0.95 ug/L #	98
26) 1,1,1-Trichloroethane	10.28	97	75689	1.16 ug/L	94
27) (TAME) tert-Amyl methyl et	10.00	73	98598	0.99 ug/L	97
29) 1,1-Dichloropropene	9.70	75	72833	1.19 ug/L	99
30) Carbon Tetrachloride	13.90	117	79554	1.49 ug/L	96
31) Benzene	9.99	78	186516	1.25 ug/L	95
32) 1,2-Dichloroethane	10.00	62	60831	1.15 ug/L	98
33) Trichloroethene	10.75	130	60481	1.26 ug/L	97
34) 1,2-Dichloropropane	11.05	63	49158	1.38 ug/L	93
35) Dibromomethane	11.22	93	33231	1.19 ug/L	97
36) Bromodichloromethane	11.35	83	57283	1.02 ug/L	96
37) cis-1,3-Dichloropropene	11.88	75	53811	0.88 ug/L	98
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	7879	0.33 ug/L #	100
41) Toluene	12.29	91	195168	1.20 ug/L	99
42) trans-1,3-Dichloropropene	12.51	75	40943	0.76 ug/L #	86
43) 1,1,2-Trichloroethane	12.76	83	35817	1.22 ug/L	89
44) Tetrachloroethene	12.94	164	63755	1.11 ug/L	97
45) 1,3-Dichloropropane	12.97	76	64173	1.15 ug/L	99
46) 2-Hexanone	12.97	43	23830	0.91 ug/L #	92
47) Dibromochloromethane	13.25	129	44284	1.05 ug/L #	96
48) 1,2-Dibromoethane	13.43	107	46188	1.21 ug/L	99
49) Chlorobenzene	13.96	112	139849	1.27 ug/L	98
50) 1,1,1,2-Tetrachloroethane	14.02	131	41863	1.07 ug/L	94
51) Ethylbenzene	14.02	91	228073	1.23 ug/L	97
52) m,p-Xylenes	14.15	106	171264	2.60 ug/L	94
53) o-Xylene	14.62	106	80023	1.23 ug/L	99
54) Styrene	14.63	104	133472	1.41 ug/L	98
55) Bromoform	14.91	173	23986	1.01 ug/L #	93
56) Isopropylbenzene	15.00	105	222301	1.24 ug/L	98
57) 1,2,3-Trichloropropane	15.42	75	53400	1.09 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	49020	1.16 ug/L	97
61) Bromobenzene	15.43	156	57038	1.23 ug/L	92
62) n-Propylbenzene	15.46	91	294304	1.24 ug/L	99
63) 2-Chlorotoluene	15.61	91	182181	1.24 ug/L	98
64) 1,3,5-Trimethylbenzene	15.63	105	178341	1.22 ug/L	100
65) 4-Chlorotoluene	15.73	91	173912	1.29 ug/L	98
66) tert-Butylbenzene	16.02	119	153236	1.23 ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS02.D Vial: 9
Acq On : 28 May 2014 2:47 pm Operator: DN
Sample : 34E2801-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 15:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

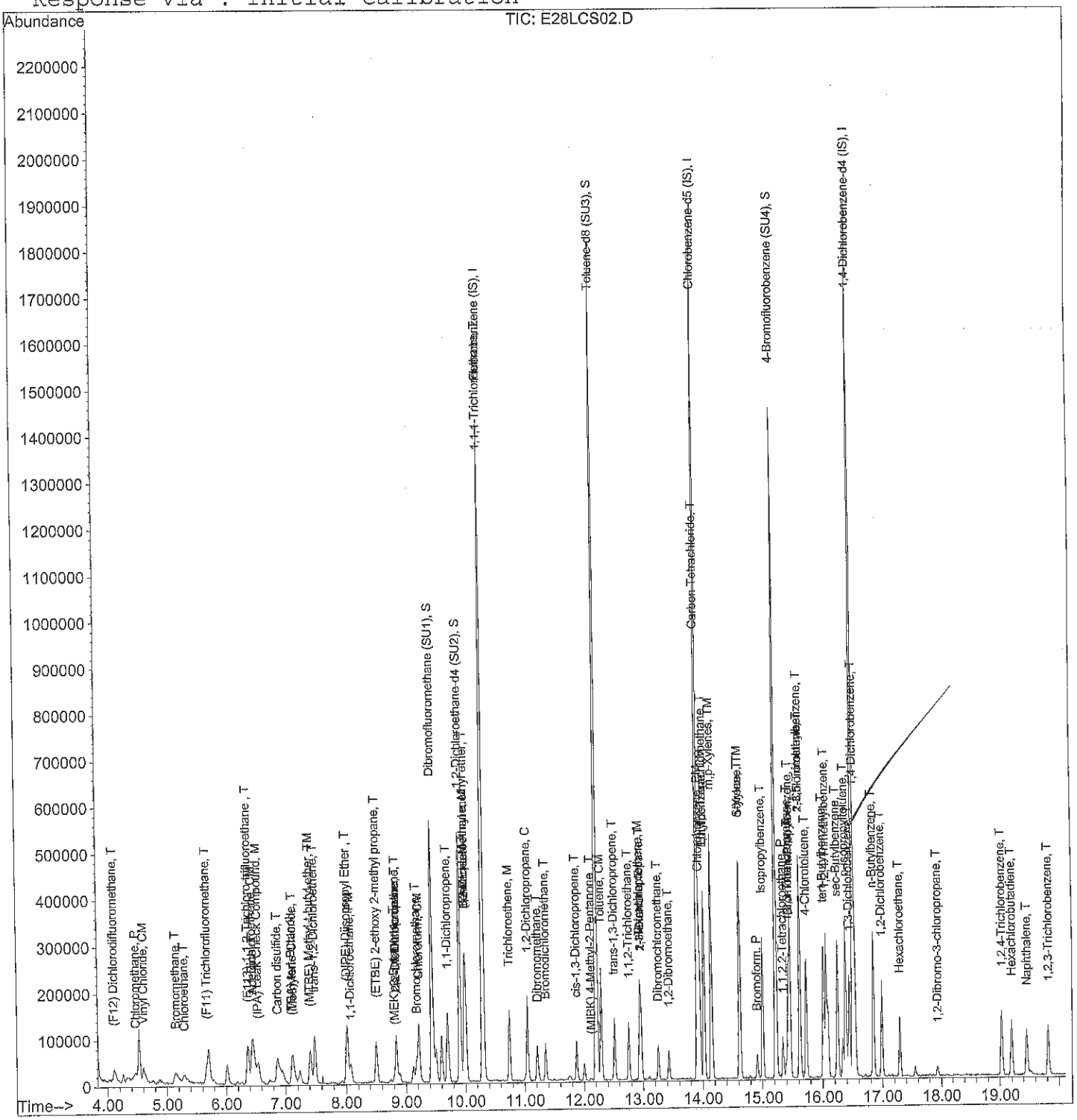
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	186994	1.22 ug/L	92
68) sec-Butylbenzene	16.25	105	250292	1.27 ug/L	99
69) p-Isopropyltoluene	16.38	119	194879	1.21 ug/L	97
70) 1,3-Dichlorobenzene	16.45	146	107562	1.24 ug/L	97
71) 1,4-Dichlorobenzene	16.54	146	112062	1.29 ug/L	95
72) n-Butylbenzene	16.84	91	209350	1.24 ug/L	99
73) 1,2-Dichlorobenzene	16.99	146	103508	1.34 ug/L	98
74) 1,2-Dibromo-3-chloropropan	17.93	75	6625	1.05 ug/L	93
75) 1,2,4-Trichlorobenzene	19.03	180	62552	1.19 ug/L	99
76) Hexachlorobutadiene	19.20	225	30675	1.30 ug/L	98
77) Naphthalene	19.45	128	119145	1.03 ug/L	100
78) Hexachloroethane	17.29	201	19233	1.13 ug/L	92
79) 1,2,3-Trichlorobenzene	19.83	180	51866	1.04 ug/L	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052814L3\E28LCS02.D Vial: 9
Acq On : 28 May 2014 2:47 pm Operator: DN
Sample : 34E2801-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 28 15:11 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



ENVIRONMENTAL SUPPORT TECHNOLOGIES

16510 Aston St. Irvine, CA 92606
Tel (949) 679-9500 Fax (949) 679-9501

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SANTA SUSANA FIELD LABORATORY:
DEPARTMENT OF ENERGY
5800 WOOLSEY CANYON ROAD
CANOGA PARK, CA

LEVEL IV DATA PACKAGE

MWH AMERICAS
2121 NORTH CALIFORNIA BLVD.
SUITE 600
WALNUT CREEK, CA

EST2754
May 29, 2014

EST
ENVIRONMENTAL SUPPORT TECHNOLOGIES

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13 Raw Data for Analyzed Samples Including Chromatograms, Quantitation Reports and Spectra

CHAIN-OF-CUSTODY

CHAIN-OF-CUSTODY RECORD

Environmental Support Technologies
16510 Aston St., Irvine, CA 92606 · Tel (949) 679-9500 · Fax (949) 679-9501

Client: MWH Americas
Address: 250 North Madison Avenue
Pasadena, Ca
Project Manager: Sarah Von Raesfield

Sampler Name: Ashley Flores
EST Project#: **EST2754**
Custody Seals:
Site Location: SSFL
Phone: ( )
Email:

Turnaround Time:
(Check one)

Normal:

Rush: X

Sample Receipt

Intact: Yes: X No:

On Ice: Yes: No: X N/A

Custody Seals: Yes: No: X

N/A (Received on Site):

Sample Name	Sample Matrix	Container Type	# of Container	Sampling Date	Sampling Time	Preservative Type	Purge Volume (ml)	Vacuum (inches of H_2O)	8260B VOC's 0.02 RL						Special Instructions
Equipment Blank	Air	Glass Bulb	1	5/29/2014	800	Surr			X						Bulb # 1
SVL-544-SA5D-SV-10.0-11.0	Air	Glass Bulb	1	5/29/2014	750	Surr			X						Bulb # 9
SVL-844-SA5D-SV-10.0-11.0	Air	Glass Bulb	1	5/29/2014	750	Surr			X						Bulb # 6
SVL-530-SA5C-SV-6.5-7.5	Air	Glass Bulb	1	5/29/2014	843	Surr			X						Bulb # 5
SVL-519-SA5D-SV-8.5-9.5	Air	Glass Bulb	1	5/29/2014	930	Surr			X						Bulb # 8
SVL-526-SA5D-SV-7.5-8.5	Air	Glass Bulb	1	5/29/2014	1012	Surr			X						Bulb # 3
SVL-530-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/29/2014	1046	Surr			X						Bulb # 13
SVL-531-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/29/2014	1120	Surr			X						Bulb # 7
SVL-539-SA5D-SV-4.5-5.5	Air	Glass Bulb	1	5/29/2014	1229	Surr			X						Bulb # 12
SVL-539-SA5D-SV-8.5-9.5	Air	Glass Bulb	1	5/29/2014	1300	Surr			X						Bulb # 10
SVL-572-SA5C-SV-8.5-9.5	Air	Glass Bulb	1	5/29/2014	1339	Surr			X						Bulb # 11
FB-0529-14	Air	Glass Bulb	1	5/29/2014	1359	Surr			X						Bulb # 2

Relinquished by: (Signature)	Date/Time: 05/29/14	Received by:	Date/Time:
Relinquished by: (Signature)	Date/Time:	Received by:	Date/Time:

SAMPLE RESULTS WITH ANALYSIS AND EXTRACTIONS PREPARATION DATES

June 0q, 2014

Sarah Von Raesfield
MWH Americas, Inc.
250 No. Madison Avenue
Pasadena, CA 91107

RE: Santa Susana Field Laboratory, Canoga Park

Enclosed are the results of analyses for soil gas samples received by Environmental Support Technologies laboratory on 05/29/14 15:13. The analyses 6 ere performed according to the prescribed method as outlined by EPA 32w08 . A shut in test 6 as performed, leak test 6 as performed, eBuipment blank 6 as run, and selected purge volume 6 as qPV. If you have any Buestions concerning this report, please feel free to contact Project Manager.

Sincerely,

Ashley Flores

Ashley Flores
Project Manager

Environmental Support Technologies laboratories are certified by the California Department of Health Services (CDHS), Environmental Laboratory Accreditation Program (ELAP) No's. 2772, 277q, and 27w7.

1w510 Aston Street, Irvine, California 92w0w
Telephone: (949) w79-9500 Fax: (949) w79-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Analyzed
EBuipment 8 lank	qE42901-01	Air	29-May-14 03:00	29-May-14 03:11
SVL-544-SA5D-SV-10.0-11.0	qE42901-02	Air	29-May-14 07:50	29-May-14 03:4w
SVL-344-SA5D-SV-10.0-11.0	qE42901-0q	Air	29-May-14 07:50	29-May-14 09:44
SVL-5q0-SA5C-SV-w.5-7.5	qE42901-04	Air	29-May-14 03:4q	29-May-14 10:1q
SVL-519-SA5D-SV-3.9-9.5	qE42901-05	Air	29-May-14 09:q0	29-May-14 10:44
SVL-52w-SA5D-SV-7.5-3.5	qE42901-0w	Air	29-May-14 10:12	29-May-14 11:1q
SVL-5q0-SA5D-SV-5.0-w.0	qE42901-07	Air	29-May-14 10:4w	29-May-14 11:42
SVL-5q1-SA5D-SV-5.0-w.0	qE42901-03	Air	29-May-14 11:20	29-May-14 12:11
SVL-5q9-SA5D-SV-4.5-5.5	qE42901-09	Air	29-May-14 11:20	29-May-14 12:57
SVL-5q9-SA5D-SV-3.5-9.5	qE42901-10	Air	29-May-14 1q:00	29-May-14 1q:2w
SVL-572-SA5C-SV-3.5-9.5	qE42901-11	Air	29-May-14 1q:q9	29-May-14 1q:59
F8 -052914	qE42901-12	Air	29-May-14 1q:59	29-May-14 14:23

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
Equipment Blank (3E42701-01) Air Sampled: 05/27/14 09:00 Analyzed: 05/27/14 09:11									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*90.1 %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*94.4 %*		*75-2S5*	"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*264 %*		*75-2S5*	"	"	"	"	
gurro: ateDCenzene-d4		*96.4 %*		*76-206*	"	"	"	"	
gurro: ateDMhloroform-d		*266 %*		*76-206*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*90.9 %*		*76-206*	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-544-SA5D-SV-10.0-11.0 (3E42701-02) Air Sampled: 05/27/14 06:50 Analyzed: 05/27/14 09:48									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.015**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.024**	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.080**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.037**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*96.1 %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*94.4 %*		*75-2S5*	"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*26B %*		*75-2S5*	"	"	"	"	
gurro: ateDCenzene-d4		*B7.6 %*		*76-206*	"	"	"	"	
gurro: ateDMhloroform-d		*90.S %*		*76-206*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*B9.4 %*		*76-206*	"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-944-SA5D-SV-10.0-11.0 (3E42701-03) Air Sampled: 05/27/14 06:50 Analyzed: 05/27/14 07:44									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.013**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.013**	0.020	"	"	"	"	"	"	J
meta- and para-Xylenes	**0.046**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.034**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*92.9 %*	*75-2S5*		"	"	"	"	
gurro: ateDToluene-dB		*95.S %*	*75-2S5*		"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*226 %*	*75-2S5*		"	"	"	"	
gurro: ateDCenzene-d4		*BB.0 %*	*76-206*		"	"	"	"	
gurro: ateDMhloroform-d		*90.0 %*	*76-206*		"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*91.2 %*	*76-206*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-530-SA5C-SV-8.5-6.5 (3E42701-04) Air Sampled: 05/27/14 09:43 Analyzed: 05/27/14 10:13									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*96.2 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*95.B %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateD0-Cromofluorobenzene		*222 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateDCenzene-d4		*96.6 %*	*76-206*		*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*97.S %*	*76-206*		*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*90.2 %*	*76-206*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-517-SA5D-SV-9.7-7.5 (3E42701-05) Air Sampled: 05/27/14 07:30 Analyzed: 05/27/14 10:44									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	**3.0**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0090**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.026**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.030**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*91.6 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*91.7 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateD0-Cromofluorobenzene		*222 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateDCenzene-d4		*9S.2 %*	*76-206*		*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*95.9 %*	*76-206*		*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*90.2 %*	*76-206*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-528-SA5D-SV-6.5-9.5 (3E42701-08) Air Sampled: 05/27/14 10:12 Analyzed: 05/27/14 11:13									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.011**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	**0.010**	0.020	"	"	"	"	"	"	J
meta- and para-Xylenes	**0.031**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.044**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*96.5 %*	*75-2S5*		"	"	"	"	
gurro: ateDToluene-dB		*91.4 %*	*75-2S5*		"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*222 %*	*75-2S5*		"	"	"	"	
gurro: ateDCenzene-d4		*9S.5 %*	*76-206*		"	"	"	"	
gurro: ateDMhloroform-d		*97.1 %*	*76-206*		"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*9S.6 %*	*76-206*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-530-SA5D-SV-5.0-8.0 (3E42701-06) Air Sampled: 05/27/14 10:48 Analyzed: 05/27/14 11:42									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*BB.5 %*	*75-2S5*		"	"	"	"	
gurro: ateDToluene-dB		*90.6 %*	*75-2S5*		"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*267 %*	*75-2S5*		"	"	"	"	
gurro: ateDCenzene-d4		*BB.9 %*	*76-206*		"	"	"	"	
gurro: ateDMhloroform-d		*94.4 %*	*76-206*		"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*91.7 %*	*76-206*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-531-SA5D-SV-5.0-8.0 (3E42701-09) Air Sampled: 05/27/14 11:20 Analyzed: 05/27/14 12:11									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*B9.7 %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*9S.B %*		*75-2S5*	"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*267 %*		*75-2S5*	"	"	"	"	
gurro: ateDCenzene-d4		*BB.5 %*		*76-206*	"	"	"	"	
gurro: ateDMhloroform-d		*91.2 %*		*76-206*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*9S.0 %*		*76-206*	"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-537-SA5D-SV-4.5-5.5 (3E42701-07) Air Sampled: 05/27/14 11:20 Analyzed: 05/27/14 12:56									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0049**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*91.B %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*91.0 %*		*75-2S5*	"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*264 %*		*75-2S5*	"	"	"	"	
gurro: ateDCenzene-d4		*90.5 %*		*76-206*	"	"	"	"	
gurro: ateDMhloroform-d		*262 %*		*76-206*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*99.S %*		*76-206*	"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-537-SA5D-SV-9.5-7.5 (3E42701-10) Air Sampled: 05/27/14 13:00 Analyzed: 05/27/14 13:28									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0052**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.014**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0062**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*B5.0 %*	*75-2S5*		"	"	"	"	
gurro: ateDToluene-dB		*99.6 %*	*75-2S5*		"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*261 %*	*75-2S5*		"	"	"	"	
gurro: ateDCenzene-d4		*B4.2 %*	*76-206*		"	"	"	"	
gurro: ateDMhloroform-d		*B7.S %*	*76-206*		"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*B7.4 %*	*76-206*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
SVL-562-SA5C-SV-9.5-7.5 (3E42701-11) Air Sampled: 05/27/14 13:37 Analyzed: 05/27/14 13:57									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.011**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*96.5 %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*9S.B %*		*75-2S5*	"	"	"	"	
gurro: ateD0-Cromofluorobenzene		*264 %*		*75-2S5*	"	"	"	"	
gurro: ateDCenzene-d4		*92.S %*		*76-206*	"	"	"	"	
gurro: ateDMhloroform-d		*97.1 %*		*76-206*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*97.0 %*		*76-206*	"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	8 atch	Prepared	Analyzed	Method	Notes
FB-052714 (3E42701-12) Air Sampled: 05/27/14 13:57 Analyzed: 05/27/14 14:29									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	q4E2901	05/29/14	05/29/14	EPA 32w08	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
8 enzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*92.0 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*9S.7 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateD0-Cromofluorobenzene		*264 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateDCenzene-d4		*91.B %*	*76-206*		*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*99.0 %*	*76-206*		*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*97.2 %*	*76-206*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
Blank (34E2701-BLK1)				Prepared & Analyzed: 05/29/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l							
1,1,1-Trichloroethane	ND	0.020	"							
1,1,2,2-Tetrachloroethane	ND	0.020	"							
1,1,2-Trichloro-trifluoroethane	ND	0.020	"							
1,1,2-Trichloroethane	ND	0.020	"							
1,1-Dichloroethane	ND	0.020	"							
1,1-Dichloroethene	ND	0.020	"							
1,2-Dichloroethane	ND	0.020	"							
8 enzene	ND	0.020	"							
cis-1,2-Dichloroethene	ND	0.020	"							
Carbon tetrachloride	ND	0.020	"							
Chloroethane	ND	0.020	"							
Chloroform	ND	0.020	"							
Dichlorodifluoromethane	ND	0.020	"							
Ethylbenzene	ND	0.020	"							
Methylene Chloride	ND	0.020	"							
ortho-Xylene	ND	0.020	"							
meta- and para-Xylenes	ND	0.020	"							
trans-1,2-Dichloroethene	ND	0.020	"							
Tetrachloroethene	ND	0.020	"							
Toluene	0.0113	0.020	"							J
Trichloroethene	ND	0.020	"							
Trichlorofluoromethane	ND	0.020	"							
Vinyl Chloride	ND	0.020	"							
gurro: ateD8 ibromofluoromethane	*S.S4*		*"*	*S.56*		*96.5*	*75-2S5*			
gurro: ateDToluene-dB	*S.19*		*"*	*S.56*		*95.B*	*75-2S5*			
gurro: ateD0-Cromofluorobenzene	*S.71*		*"*	*S.56*		*269*	*75-2S5*			
gurro: ateDCenzene-d4	*S.6B*		*"*	*S.56*		*B1.S*	*76-206*			
gurro: ateDMhloroform-d	*S.1S*		*"*	*S.56*		*9S.9*	*76-206*			
gurro: ateD3 ethylene chloride-dS	*S.20*		*"*	*S.56*		*B5.B*	*76-206*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
LCS (34E2701-BS1)				Prepared & Analyzed: 05/29/14						
1,1,1,2-Tetrachloroethane	1.21	0.020	ug/l	1.25		9w.3	75-1qw			
1,1,1-Trichloroethane	1.15	0.020	"	1.25		92.0	7q-1q4			
1,1,2,2-Tetrachloroethane	1.w5	0.020	"	1.25		1q2	5w-149			
1,1,2-Trichloro-trifluoroethane	1.qq	0.020	"	1.25		10w	3q-125			
1,1,2-Trichloroethane	1.47	0.020	"	1.25		113	w7-1q7			
1,1-Dichloroethane	1.09	0.020	"	1.25		37.2	30-121			
1,1-Dichloroethene	1.4q	0.020	"	1.25		114	7q-1q7			
1,2-Dichloroethane	1.27	0.020	"	1.25		102	75-1q1			
8 enzene	1.27	0.020	"	1.25		102	79-113			
cis-1,2-Dichloroethene	1.2q	0.020	"	1.25		93.4	35-11w			
Carbon tetrachloride	1.1q	0.020	"	1.25		90.4	74-14q			
Chloroethane	1.2q	0.020	"	1.25		93.4	w0-1q7			
Chloroform	1.20	0.020	"	1.25		9w.0	32-140			
Dichlorodifluoromethane	1.4q	0.020	"	1.25		114	47-129			
Ethylbenzene	1.q0	0.020	"	1.25		104	3q-125			
Methylene Chloride	1.qq	0.020	"	1.25		10w	31-12w			
ortho-Xylene	1.q9	0.020	"	1.25		111	35-115			
meta- and para-Xylenes	2.w5	0.020	"	2.50		10w	3q-115			
trans-1,2-Dichloroethene	1.qq	0.020	"	1.25		10w	72-1qq			
Tetrachloroethene	1.12	0.020	"	1.25		39.w	w0-144			
Toluene	1.25	0.020	"	1.25		100	70-115			
Trichloroethene	1.q2	0.020	"	1.25		10w	w3-1q2			
Trichlorofluoromethane	1.45	0.020	"	1.25		11w	w2-144			
Vinyl Chloride	1.19	0.020	"	1.25		95.2	ww-1q7			
gurro: ateD8 ibromofluoromethane	*22.7*		*"*	*2S.5*		*91.7*	*75-2S5*			
gurro: ateDToluene-dB	*2S.4*		*"*	*2S.5*		*262*	*75-2S5*			
gurro: ateD0-Cromofluorobenzene	*21.6*		*"*	*2S.5*		*260*	*75-2S5*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
LCS Dup (34E2701-BSD1)				Prepared & Analyzed: 05/29/14						
1,1,1,2-Tetrachloroethane	1.1w	0.020	ug/l	1.25		92.3	75-1qw	4.22	20	
1,1,1-Trichloroethane	0.9q0	0.020	"	1.25		74.4	7q-1q4	21.2	20	QR-04
1,1,2,2-Tetrachloroethane	1.23	0.020	"	1.25		102	5w-149	25.q	20	QR-04
1,1,2-Trichloro-trifluoroethane	1.22	0.020	"	1.25		97.w	3q-125	3.wq	20	
1,1,2-Trichloroethane	1.q1	0.020	"	1.25		105	w7-1q7	11.5	20	
1,1-Dichloroethane	1.05	0.020	"	1.25		34.0	30-121	q.74	20	
1,1-Dichloroethene	1.1q	0.020	"	1.25		90.4	7q-1q7	2q.4	20	QR-04
1,2-Dichloroethane	1.15	0.020	"	1.25		92.0	75-1q1	9.92	20	
8 enzene	1.22	0.020	"	1.25		97.w	79-113	4.02	20	
cis-1,2-Dichloroethene	1.2q	0.020	"	1.25		93.4	35-11w	0.00	20	
Carbon tetrachloride	1.13	0.020	"	1.25		94.4	74-14q	4.qq	20	
Chloroethane	1.22	0.020	"	1.25		97.w	w0-1q7	0.31w	20	
Chloroform	1.14	0.020	"	1.25		91.2	32-140	5.1q	20	
Dichlorodifluoromethane	1.q5	0.020	"	1.25		103	47-129	5.7w	20	
Ethylbenzene	1.2w	0.020	"	1.25		101	3q-125	q.12	20	
Methylene Chloride	1.29	0.020	"	1.25		10q	31-12w	q.05	20	
ortho-Xylene	1.q7	0.020	"	1.25		110	35-115	1.45	20	
meta- and para-Xylenes	2.w9	0.020	"	2.50		103	3q-115	1.50	20	
trans-1,2-Dichloroethene	1.27	0.020	"	1.25		102	72-1qq	4.w2	20	
Tetrachloroethene	1.12	0.020	"	1.25		39.w	w0-144	0.00	20	
Toluene	1.25	0.020	"	1.25		100	70-115	0.00	20	
Trichloroethene	1.2w	0.020	"	1.25		101	w3-1q2	4.w5	20	
Trichlorofluoromethane	1.45	0.020	"	1.25		11w	w2-144	0.00	20	
Vinyl Chloride	1.2q	0.020	"	1.25		93.4	ww-1q7	q.q1	20	
gurro: ateD8 ibromofluoromethane	*22.S*		*"*	*2S.5*		*B9.B*	*75-2S5*			
gurro: ateDToluene-dB	*2S.4*		*"*	*2S.5*		*262*	*75-2S5*			
gurro: ateD0-Cromofluorobenzene	*2S.7*		*"*	*2S.5*		*262*	*75-2S5*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 0q-Jun-14 14:55

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E2701 - Volatiles										
Duplicate (34E2701-DUP1)		**Source: 3E42701-02**		Prepared & Analyzed: 05/29/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l		ND				50	
1,1,1-Trichloroethane	ND	0.020	"		ND				50	
1,1,2,2-Tetrachloroethane	ND	0.020	"		ND				50	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"		ND				50	
1,1,2-Trichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethene	ND	0.020	"		ND				50	
1,2-Dichloroethane	ND	0.020	"		ND				50	
8 enzene	ND	0.020	"		ND				50	
cis-1,2-Dichloroethene	ND	0.020	"		ND				50	
Carbon tetrachloride	ND	0.020	"		ND				50	
Chloroethane	ND	0.020	"		ND				50	
Chloroform	ND	0.020	"		ND				50	
Dichlorodifluoromethane	ND	0.020	"		ND				50	
Ethylbenzene	0.0143	0.020	"		0.0150			1.q4	50	J
Methylene Chloride	ND	0.020	"		ND				50	
ortho-Xylene	0.0200	0.020	"		0.0242			19.0	50	
meta- and para-Xylenes	0.055w	0.020	"		0.059w			w.94	50	
trans-1,2-Dichloroethene	ND	0.020	"		ND				50	
Tetrachloroethene	ND	0.020	"		ND				50	
Toluene	0.0420	0.020	"		0.0q94			w.q9	50	
Trichloroethene	ND	0.020	"		ND				50	
Trichlorofluoromethane	ND	0.020	"		ND				50	
Vinyl Chloride	ND	0.020	"		ND				50	
gurro: ateD8 ibromofluoromethane	*S.SB*		*"*	*S.56*		*92.0*	*75-2S5*			
gurro: ateDToluene-dB	*S.10*		*"*	*S.56*		*91.4*	*75-2S5*			
gurro: ateD0-Cromofluorobenzene	*S.72*		*"*	*S.56*		*26B*	*75-2S5*			
gurro: ateDCenzene-d4	*S.S2*		*"*	*S.56*		*BB.S*	*76-206*			
gurro: ateDMhloroform-d	*S.14*		*"*	*S.56*		*90.4*	*76-206*			
gurro: ateD3 ethylene chloride-dS	*S.S4*		*"*	*S.56*		*96.4*	*76-206*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1w510 Aston Street, Irvine, California 92w0w
Telephone: (949) w79-9500 Fax: (949) w79-9501

Notes and Definitions

QR-04	The RPD result for this analyte in the sample exceeded the QC control limits; ho6 ever, the RPD for other analytes 6 ere 6 ithin the QC control limits.
J	Detected but belo6 the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry 6 eight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SUMMARY OF INITIAL CALIBRATION

Rerun sample @ 5ppb @ Most.

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:24:09 2013
Response via : Initial Calibration

Calibration Files
1 =K3IC00_1.D 2 =K3IC0_25.D 3 =K07LCS01.D
4 =K3IC1_25.D 5 =K3IC02_5.D 6 =K3IC12_5.D

		Compound	1	2	3	4	5	6	Avg	%RSD	
1)	I	Fluorobenzene (IS)	----------ISTD----------								
2)	S	Dibromofluoromethan	0.311	0.300	0.318	0.319	0.312	0.311	0.312	2.10	
3)	T	(F12) Dichlorodiflu	0.320	0.284	0.302	0.292	0.321	0.321	0.307	5.36	
4)	P	Chloromethane	0.422	0.302	0.293	0.219	0.221	0.212	0.278	29.02	Linear
5)	CM	Vinyl Chloride	0.276	0.224	0.211	0.207	0.207	0.199	0.221	12.88	
6)	T	Bromomethane	0.338	0.225	0.179	0.162	0.150	0.139	0.199	37.55	Linear
7)	T	Chloroethane	0.030	0.106	0.066	0.102	0.098	0.089	0.082	35.53	Quadratic
8)	T	(F11) Trichlorofluo	0.379	0.365	0.327	0.337	0.323	0.326	0.343	6.87	
9)	T	(F113) 1,1,2-Trichl	0.291	0.221	0.227	0.267	0.239	0.229	0.246	11.15	
10)	CM	1,1-Dichloroethene	0.277	0.287	0.322	0.307	0.291	0.286	0.295	5.61	
11)	T	Acetone	0.267	0.136	0.115	0.061	0.051	0.016	0.108	82.94	Quadratic
12)	M	(IPA) Leak Check Co	0.012	0.022	0.014	0.013	0.014	0.016	0.015	27.59	
13)	T	Carbon disulfide	1.178	1.037	1.080	1.042	0.958	0.941	1.039	8.28	
14)	T	Methylene Chloride	0.418	0.313	0.349	0.339	0.327	0.314	0.343	11.47	
15)		(TBA) tert-Butanol	0.022	0.019	0.027	0.022	0.018	0.020	0.021	16.39	
16)	TM	(MTBE) Methyl-t-but	0.789	0.678	0.760	0.729	0.655	0.638	0.708	8.56	
17)	T	trans-1,2-Dichloroe	0.331	0.360	0.342	0.357	0.310	0.318	0.336	6.07	
18)	PM	1,1-Dichloroethane	0.582	0.580	0.586	0.585	0.521	0.518	0.562	5.90	
19)	T	cis-1,2-Dichloroeth	0.442	0.415	0.416	0.387	0.339	0.345	0.390	10.66	
20)	T	2,2-Dichloropropane	0.561	0.489	0.520	0.497	0.440	0.435	0.490	9.80	
21)	T	(MEK) 2-Butanone	0.036	0.041	0.042	0.021	0.440	0.435	0.035	26.97	Not in use.
22)	T	(DIPE) Diisopropyl	1.055	1.006	1.006	1.025	0.901	0.867	0.977	7.64	
23)	T	Bromochloromethane	0.110	0.155	0.185	0.189	0.182	0.184	0.167	18.39	
24)	CM	Chloroform	0.723	0.654	0.684	0.676	0.594	0.598	0.655	7.70	
25)	T	(ETBE) 2-ethoxy 2-m	1.034	0.874	0.941	0.927	0.821	0.823	0.903	9.00	
26)	T	1,1,1-Trichloroetha	0.516	0.540	0.535	0.523	0.496	0.488	0.517	4.07	
27)	T	(TAME) tert-Amyl me	1.000	0.749	0.821	0.764	0.701	0.680	0.786	14.75	
28)	S	1,2-Dichloroethane-	0.309	0.278	0.303	0.299	0.296	0.293	0.296	3.50	
29)	T	1,1-Dichloropropene	0.547	0.492	0.502	0.489	0.439	0.427	0.482	9.13	
30)	T	Carbon Tetrachlorid	0.401	0.388	0.449	0.460	0.412	0.416	0.421	6.66	
31)	M	Benzene	1.374	1.155	1.267	1.217	1.042	1.008	1.177	11.75	
32)	M	1,2-Dichloroethane	0.501	0.382	0.445	0.419	0.385	0.365	0.416	12.20	
33)	M	Trichloroethene	0.480	0.355	0.386	0.399	0.336	0.324	0.380	14.87	
34)	C	1,2-Dichloropropane	0.298	0.297	0.277	0.290	0.264	0.258	0.281	6.17	
35)	T	Dibromomethane	0.207	0.209	0.227	0.244	0.215	0.216	0.220	6.33	
36)	T	Bromodichloromethan	0.459	0.407	0.479	0.446	0.428	0.433	0.442	5.69	
37)	T	cis-1,3-Dichloropro	0.508	0.451	0.526	0.493	0.447	0.467	0.482	6.63	
38)	I	Chlorobenzene-d5 (IS)	----------ISTD----------								
39)	S	Toluene-d8 (SU3)	1.209	1.139	1.193	1.149	1.157	1.149	1.166	2.42	
40)	T	(MIBK) 4-Methyl-2-P	0.545	0.324	0.388	0.078	0.072	0.088	0.249	79.95	Not in use.
41)	CM	Toluene	2.231	1.790	1.660	1.584	1.518	1.441	1.704	16.71	

42)	T	trans-1,3-Dichlorop	0.601	0.493	0.586	0.607	0.528	0.560	0.563	7.97	
43)	T	1,1,2-Trichloroetha	0.310	0.285	0.355	0.328	0.286	0.281	0.308	9.58	
44)	M	Tetrachloroethene	0.462	0.392	0.677	0.635	0.590	0.281	0.551	21.81	LINEAR
45)	T	1,3-Dichloropropane	0.710	0.578	0.592	0.569	0.532	0.529	0.585	11.33	
46)	T	2-Hexanone	0.333	0.186	0.340	0.266	0.333	0.182	0.273	27.20	
47)	T	Dibromochloromethan	0.426	0.363	0.496	0.458	0.432	0.459	0.439	10.18	
48)	T	1,2-Dibromoethane	0.412	0.355	0.430	0.402	0.394	0.396	0.398	6.27	
49)	PM	Chlorobenzene	1.366	1.154	1.110	1.134	1.086	1.043	1.149	9.84	
50)	T	1,1,1,2-Tetrachloro	0.449	0.384	0.437	0.407	0.388	0.387	0.409	6.91	
51)	CM	Ethylbenzene	2.333	2.080	1.968	1.851	1.736	1.654	1.937	12.77	
52)	TM	m,p-Xylenes	0.809	0.711	0.727	0.669	0.615	0.602	0.689	11.20	
53)	TM	o-Xylene	0.867	0.664	0.674	0.671	0.615	0.594	0.681	14.25	
54)	T	Styrene	1.563	1.015	1.078	1.049	0.973	0.934	1.102	21.01	LINEAR
55)	P	Bromoform	0.237	0.199	0.286	0.259	0.238	0.276	0.249	12.69	
56)	T	Isopropylbenzene	2.188	1.855	1.900	1.811	1.764	1.674	1.865	9.44	
57)	T	1,2,3-Trichloroprop	0.505	0.491	0.593	0.516	0.480	0.472	0.509	8.58	
58)	S	4-Bromofluorobenzen	0.518	0.507	0.527	0.511	0.510	0.495	0.511	2.08	
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------								
60)	P	1,1,2,2-Tetrachloro	1.020	0.822	1.013	0.870	0.774	0.905	0.901	11.13	
61)	T	Bromobenzene	1.079	1.003	1.043	0.946	0.914	0.907	0.982	7.20	
62)	T	n-Propylbenzene	6.721	5.112	5.219	4.601	4.392	4.279	5.054	17.82	
63)	T	2-Chlorotoluene	3.644	2.948	3.362	3.044	2.868	2.805	3.112	10.48	
64)	T	1,3,5-Trimethylbenz	3.612	3.208	3.247	3.017	2.832	2.775	3.115	9.93	
65)	T	4-Chlorotoluene	3.315	2.950	2.942	2.812	2.597	2.623	2.873	9.19	
66)	T	tert-Butylbenzene	2.817	2.666	3.007	2.633	2.430	2.371	2.654	8.96	
67)	T	1,2,4-Trimethylbenz	3.774	3.331	3.421	3.050	2.968	2.953	3.250	9.91	
68)	T	sec-Butylbenzene	4.837	3.956	4.522	4.187	3.865	3.852	4.203	9.54	
69)	T	p-Isopropyltoluene	3.974	3.475	3.582	3.347	3.061	3.060	3.417	10.13	
70)	T	1,3-Dichlorobenzene	2.120	1.740	1.888	1.871	1.734	1.744	1.850	8.06	
71)	T	1,4-Dichlorobenzene	2.120	1.740	1.974	1.864	1.658	1.729	1.847	9.43	
72)	T	n-Butylbenzene	4.391	3.645	3.644	3.397	3.264	3.192	3.589	12.14	
73)	T	1,2-Dichlorobenzene	1.716	1.534	1.764	1.657	1.614	1.583	1.645	5.20	
74)	T	1,2-Dibromo-3-chlor	0.082	0.104	0.111	0.148	0.133	0.146	0.121	21.61	LINEAR
75)	T	1,2,4-Trichlorobenz	1.184	1.091	1.244	1.074	1.050	1.044	1.115	7.28	
76)	T	Hexachlorobutadiene	0.297	0.477	0.596	0.481	0.499	0.507	0.476	20.56	LINEAR
77)	T	Naphthalene	2.690	2.294	3.052	2.312	2.176	2.294	2.470	13.55	
78)	T	Hexachloroethane	0.306	0.301	0.391	0.362	0.374	0.435	0.361	14.24	
79)	T	1,2,3-Trichlorobenz	1.346	0.926	1.173	0.993	0.940	0.968	1.058	15.82	

(#) = Out of Range

MW111313.M Wed Nov 13 19:25:18 2013

CONTINUING CALIBRATION VERIFICATION

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29CCV01.D
Acq On : 29 May 2014 6:09 am
Sample : 1.25/2.5/12.5 ug/L 8260B std
Misc : 20mL 8260 CCV
MS Integration Params: rteint.p
Quant Time: May 29 7:05 19114

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.31	96	1605228m	12.50 ug/L	0.02
38) Chlorobenzene-d5 (IS)	13.93	117	1137403m	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	564416	12.50 ug/L	0.01
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.45	113	457275	11.42 ug/L	0.03
Spiked Amount 12.500 Range 75 - 125 Recovery = 91.36%					
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	460410	12.10 ug/L	0.02
Spiked Amount 12.500 Range 75 - 125 Recovery = 96.80%					
39) Toluene-d8 (SU3)	12.22	98	1391767	13.12 ug/L	0.01
Spiked Amount 12.500 Range 75 - 125 Recovery = 104.96%					
58) 4-Bromofluorobenzene (SU4)	15.23	95	617202	13.27 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 106.16%					

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	50750	1.29 ug/L	97
4) Chloromethane	4.47	50	35459	1.20 ug/L	96
5) Vinyl Chloride	4.60	62	35914	1.27 ug/L	79
6) Bromomethane	5.16	96	26183	1.31 ug/L	47
7) Chloroethane	5.29	64	14309	1.15 ug/L	71
8) (F11) Trichlorofluorometha	5.67	101	60534	1.37 ug/L	96
9) (F113) 1,1,2-Trichloro-tri	6.37	151	40051	1.27 ug/L	96
10) 1,1-Dichloroethene	6.45	96	48721	1.29 ug/L	92
11) Acetone	6.47	58	52055	-12.50 ug/L	89
12) (IPA) Leak Check Compound	6.55	45	201994	104.72 ug/L #	91
13) Carbon disulfide	6.88	76	167901	1.26 ug/L	99
14) Methylene Chloride	7.13	84	53258	1.21 ug/L	94
15) (TBA) tert-Butanol	7.12	59	7999	2.92 ug/L #	92
16) (MTBE) Methyl-t-butyl ethe	7.42	73	132170	1.45 ug/L	98
17) trans-1,2-Dichloroethene	7.50	96	59027	1.37 ug/L	97
18) 1,1-Dichloroethane	8.09	63	77282	1.07 ug/L	95
19) cis-1,2-Dichloroethene	8.85	96	60457	1.21 ug/L	91
20) 2,2-Dichloropropane	8.84	77	1221	0.02 ug/L #	1
21) (MEK) 2-Butanone	8.82	72	10605	2.35 ug/L #	57
22) (DIPE) Diisopropyl Ether	8.03	45	177767	1.42 ug/L	98
23) Bromochloromethane	9.19	128	23822	1.11 ug/L #	84
24) Chloroform	9.23	83	97656	1.16 ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29CCV01.D Vial: 9
Acq On : 29 May 2014 6:09 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 7:05 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	121633	1.05 ug/L #	97
26) 1,1,1-Trichloroethane	9.52	97	74247	1.12 ug/L	96
27) (TAME) tert-Amyl methyl et	10.02	73	111792	1.11 ug/L	95
29) 1,1-Dichloropropene	9.70	75	72977	1.18 ug/L	97
30) Carbon Tetrachloride	13.90	117	62783	1.16 ug/L	94
31) Benzene	10.00	78	204543	1.35 ug/L	94
32) 1,2-Dichloroethane	10.01	62	67078	1.26 ug/L	94
33) Trichloroethene	10.76	130	59810	1.23 ug/L	97
34) 1,2-Dichloropropane	11.06	63	48722	1.35 ug/L #	85
35) Dibromomethane	11.22	93	37563	1.33 ug/L	95
36) Bromodichloromethane	11.37	83	66664	1.17 ug/L	96
37) cis-1,3-Dichloropropene	11.88	75	66265	1.07 ug/L	93
40) (MIBK) 4-Methyl-2-Pentanon	12.13	43	22655	1.00 ug/L #	100
41) Toluene	12.30	91	211702	1.37 ug/L	99
42) trans-1,3-Dichloropropene	12.52	75	52531	1.03 ug/L	76
43) 1,1,2-Trichloroethane	12.76	83	40786	1.46 ug/L	89
44) Tetrachloroethene	12.95	164	63149	1.16 ug/L	97
45) 1,3-Dichloropropane	12.97	76	70753	1.33 ug/L	99
46) 2-Hexanone	12.99	43	57975	2.33 ug/L #	97
47) Dibromochloromethane	13.27	129	53863	1.35 ug/L	99
48) 1,2-Dibromoethane	13.44	107	55297	1.53 ug/L	92
49) Chlorobenzene	13.96	112	142694	1.37 ug/L	98
50) 1,1,1,2-Tetrachloroethane	14.04	131	46774	1.26 ug/L	96
51) Ethylbenzene	14.04	91	236809	1.34 ug/L	99
52) m,p-Xylenes	14.15	106	168781	2.69 ug/L	98
53) o-Xylene	14.63	106	87187	1.41 ug/L	98
54) Styrene	14.64	104	145355	1.63 ug/L	98
55) Bromoform	14.92	173	33471	1.48 ug/L	99
56) Isopropylbenzene	15.02	105	229593	1.35 ug/L	99
57) 1,2,3-Trichloropropane	15.43	75	79034	1.70 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.35	83	72651	1.79 ug/L	91
61) Bromobenzene	15.45	156	58542	1.32 ug/L	96
62) n-Propylbenzene	15.46	91	296699	1.30 ug/L	99
63) 2-Chlorotoluene	15.62	91	189355	1.35 ug/L	98
64) 1,3,5-Trimethylbenzene	15.63	105	191781	1.36 ug/L	95
65) 4-Chlorotoluene	15.73	91	180710	1.39 ug/L	97
66) tert-Butylbenzene	16.02	119	153673	1.28 ug/L	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29CCV01.D Vial: 9
Acq On : 29 May 2014 6:09 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 7:05 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

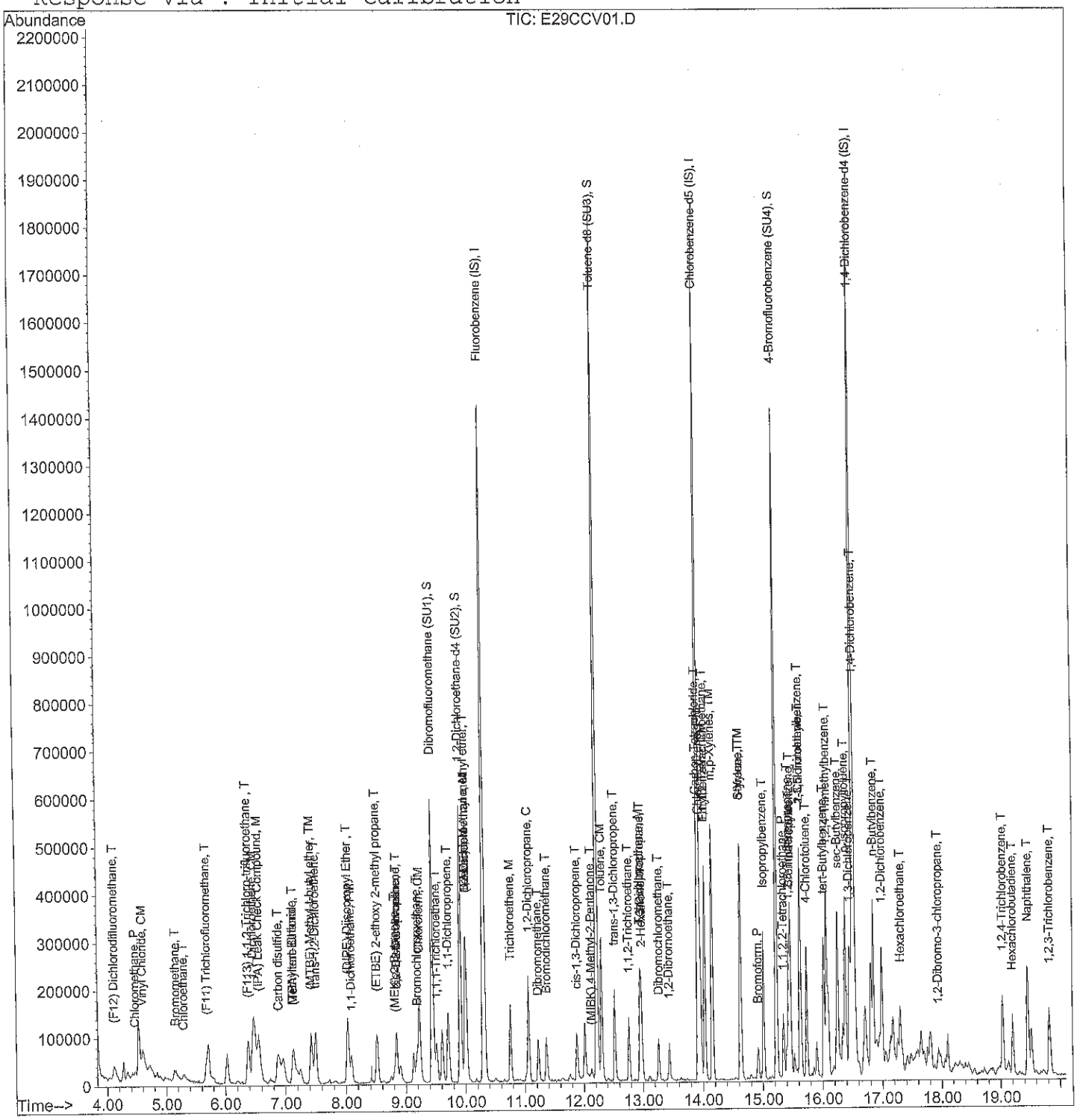
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.07	105	239508	1.63 ug/L	99
68) sec-Butylbenzene	16.26	105	254519	1.34 ug/L	99
69) p-Isopropyltoluene	16.39	119	242334	1.57 ug/L	95
70) 1,3-Dichlorobenzene	16.45	146	114869	1.38 ug/L	99
71) 1,4-Dichlorobenzene	16.54	146	113465	1.36 ug/L	98
72) n-Butylbenzene	16.86	91	220920	1.36 ug/L	97
73) 1,2-Dichlorobenzene	17.00	146	104513	1.41 ug/L	99
74) 1,2-Dibromo-3-chloropropan	17.94	75	12039	1.90 ug/L #	66
75) 1,2,4-Trichlorobenzene	19.04	180	69928	1.39 ug/L	96
76) Hexachlorobutadiene	19.21	225	33129	1.46 ug/L	97
77) Naphthalene	19.47	128	270161	2.42 ug/L	100
78) Hexachloroethane	17.30	201	19462	1.19 ug/L	95
79) 1,2,3-Trichlorobenzene	19.82	180	66459	1.39 ug/L	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29CCV01.D Vial: 9
Acq On : 29 May 2014 6:09 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 7:05 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29CCV01.D Vial: 9
Acq On : 29 May 2014 6:09 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene (IS)	12.500	12.500	0.0	121	0.02
2	S	Dibromofluoromethane (SU1)	12.500	11.420	8.6	108	0.03
3	T	(F12) Dichlorodifluorometha	1.250	1.289	-3.1	131	0.04
4	P	Chloromethane	1.250	1.196	4.3	122	0.09
5	CM	Vinyl Chloride	1.250	1.267	-1.4	131	0.05
6	T	Bromomethane	1.250	1.305	-4.4	122	0.06
7	T	Chloroethane	1.250	1.150	8.0	106	0.05
8	T	(F11) Trichlorofluoromethan	1.250	1.374	-9.9	135	0.06
9	T	(F113) 1,1,2-Trichloro-trif	1.250	1.269	-1.5	113	0.05
10	CM	1,1-Dichloroethene	1.250	1.286	-2.9	119	0.05
11	T	Acetone	1.250	-12.500	1100.0#	640	0.01
12	M	(IPA) Leak Check Compound	62.500	104.719	-67.6#	218	0.01
13	T	Carbon disulfide	1.250	1.258	-0.6	121	0.07
14	T	Methylene Chloride	1.250	1.208	3.4	118	0.05
15		(TBA) tert-Butanol	12.500	2.922	76.6#	27	0.00
16	TM	(MTBE) Methyl-t-butyl ether	2.500	1.453	41.9#	68	0.02
17	T	trans-1,2-Dichloroethene	1.250	1.367	-9.4	125	0.04
18	PM	1,1-Dichloroethane	1.250	1.071	14.3	99	0.04
19	T	cis-1,2-Dichloroethene	1.250	1.206	3.5	118	0.03
20	T	2,2-Dichloropropane	1.250	0.019	98.5#	2	0.01
21	T	(MEK) 2-Butanone	1.250	2.350	-88.0#	194	0.03
22	T	(DIPE) Diisopropyl Ether	1.250	1.417	-13.4	131	0.02
23	T	Bromochloromethane	1.250	1.108	11.4	95	0.04
24	CM	Chloroform	1.250	1.161	7.1	109	0.03
25	T	(ETBE) 2-ethoxy 2-methyl pr	1.250	1.049	16.1	99	0.01
26	T	1,1,1-Trichloroethane	1.250	1.119	10.5	107	0.03
27	T	(TAME) tert-Amyl methyl eth	1.250	1.108	11.4	110	0.01
28	S	1,2-Dichloroethane-d4 (SU2)	12.500	12.099	3.2	116	0.02
29	T	1,1-Dichloropropene	1.250	1.178	5.8	113	0.02
30	T	Carbon Tetrachloride	1.250	1.161	7.1	103	4.19#
31	M	Benzene	1.250	1.353	-8.2	127	0.02
32	M	1,2-Dichloroethane	1.250	1.255	-0.4	121	0.02
33	M	Trichloroethene	1.250	1.226	1.9	113	0.02
34	C	1,2-Dichloropropane	1.250	1.351	-8.1	127	0.01
35	T	Dibromomethane	1.250	1.331	-6.5	116	0.01
36	T	Bromodichloromethane	1.250	1.174	6.1	113	0.02
37	T	cis-1,3-Dichloropropene	1.250	1.071	14.3	101	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29CCV01.D Vial: 9
Acq On : 29 May 2014 6:09 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
38	I	Chlorobenzene-d5 (IS)	12.500	12.500	0.0	110	0.00
39	S	Toluene-d8 (SU3)	12.500	13.119	-5.0	117	0.01
40	T	(MIBK) 4-Methyl-2-Pentanone	1.250	0.998	20.2	280	0.01
41	CM	Toluene	1.250	1.365	-9.2	129	0.02
42	T	trans-1,3-Dichloropropene	1.250	1.026	17.9	84	0.01
43	T	1,1,2-Trichloroethane	1.250	1.458	-16.6	120	0.01
44	M	Tetrachloroethene	1.250	1.159	7.3	96	0.01
45	T	1,3-Dichloropropane	1.250	1.329	-6.3	120	0.00
46	T	2-Hexanone	1.250	2.330	-86.4#	211	0.02
47	T	Dibromochloromethane	1.250	1.348	-7.8	114	0.01
48	T	1,2-Dibromoethane	1.250	1.526	-22.1	133	0.00
49	PM	Chlorobenzene	1.250	1.365	-9.2	122	0.00
50	T	1,1,1,2-Tetrachloroethane	1.250	1.258	-0.6	111	0.01
51	CM	Ethylbenzene	1.250	1.344	-7.5	124	0.01
52	TM	m,p-Xylenes	2.500	2.693	-7.7	122	0.00
53	TM	o-Xylene	1.250	1.407	-12.6	126	0.01
54	T	Styrene	1.250	1.632	-30.6#	134	0.00
55	P	Bromoform	1.250	1.476	-18.1	125	0.01
56	T	Isopropylbenzene	1.250	1.353	-8.2	123	0.01
57	T	1,2,3-Trichloropropane	1.250	1.705	-36.4#	148	0.00
58	S	4-Bromofluorobenzene (SU4)	12.500	13.268	-6.1	117	0.00
59	I	1,4-Dichlorobenzene-d4 (IS)	12.500	12.500	0.0	112	0.01
60	P	1,1,2,2-Tetrachloroethane	1.250	1.786	-42.9#	166	0.00
61	T	Bromobenzene	1.250	1.320	-5.6	123	0.00
62	T	n-Propylbenzene	1.250	1.300	-4.0	128	0.00
63	T	2-Chlorotoluene	1.250	1.348	-7.8	124	0.01
64	T	1,3,5-Trimethylbenzene	1.250	1.363	-9.0	127	0.00
65	T	4-Chlorotoluene	1.250	1.393	-11.4	128	0.00
66	T	tert-Butylbenzene	1.250	1.282	-2.6	116	0.00
67	T	1,2,4-Trimethylbenzene	1.250	1.632	-30.6#	156	0.01
68	T	sec-Butylbenzene	1.250	1.341	-7.3	121	0.00
69	T	p-Isopropyltoluene	1.250	1.571	-25.7	144	0.01
70	T	1,3-Dichlorobenzene	1.250	1.375	-10.0	122	0.00
71	T	1,4-Dichlorobenzene	1.250	1.360	-8.8	121	0.00
72	T	n-Butylbenzene	1.250	1.363	-9.0	130	0.01
73	T	1,2-Dichlorobenzene	1.250	1.407	-12.6	126	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29CCV01.D Vial: 9
Acq On : 29 May 2014 6:09 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
74	T	1,2-Dibromo-3-chloropropane	1.250	1.903	-52.2#	162	0.00
75	T	1,2,4-Trichlorobenzene	1.250	1.389	-11.1	130	0.00
76	T	Hexachlorobutadiene	1.250	1.460	-16.8	137	0.00
77	T	Naphthalene	1.250	2.423	-93.8#	233	0.01
78	T	Hexachloroethane	1.250	1.193	4.6	107	0.00
79	T	1,2,3-Trichlorobenzene	1.250	1.391	-11.3	133	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SUMMARY OF INTERNAL STANDARDS

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\052914L3\E29BFB01.D
Tune Time : 29 May 14 5:56 am

Daily Calibration File : C:\HPCHEM\1\DATA\013014L3\A30CCV01.D

						(PFB)	(CLBD	(1,4-
						1590180	1163370	587649
File	Sample	Surrogate Recovery %				Internal Standard Responses		
E2900001.D	3E42901-	94	97	97	106	1446066	1151739	631317
E2900002.D	3E42901-	90	91	97	108	1583591	1245807	686848
E2900003.D	34E2901-	91	96	94	108	1515026	1225648	671159
E2900004.D	3E42901-	92	96	95	110	1527639	1240492	660440
E2900005.D	3E42901-	90	93	96	111	1531628	1208919	672911
E2900006.D	3E42901-	93	96	94	111	1523502	1220492	678647
E2900007.D	3E42901-	90	94	94	111	1551642	1248508	679192
E2900008.D	3E42901-	88	91	94	107	1603103	1279952	698801
E2900009.D	3E42901-	90	94	93	107	1563526	1280591	693986
E2900010.D	3E42901-	94	95	93	106	1549175	1274965	707525
E2900011.D	3E42901-	85	76	99	103	2000126	1513788	768922
E2900012.D	3E42901-	90	94	93	106	1633764	1325951	712550
E2900013.D	3E42901-	91	96	93	107	1606122	1324344	689225
E29BLK01.D	34E2901-	90	91	96	109	1637712	1287902	712164
E29LCS01.D	34E2901-	94	96	101	104	1513544	1118075	552768
E29LCS02.D	34E2901-	90	90	101	101	1677230	1202455	584740

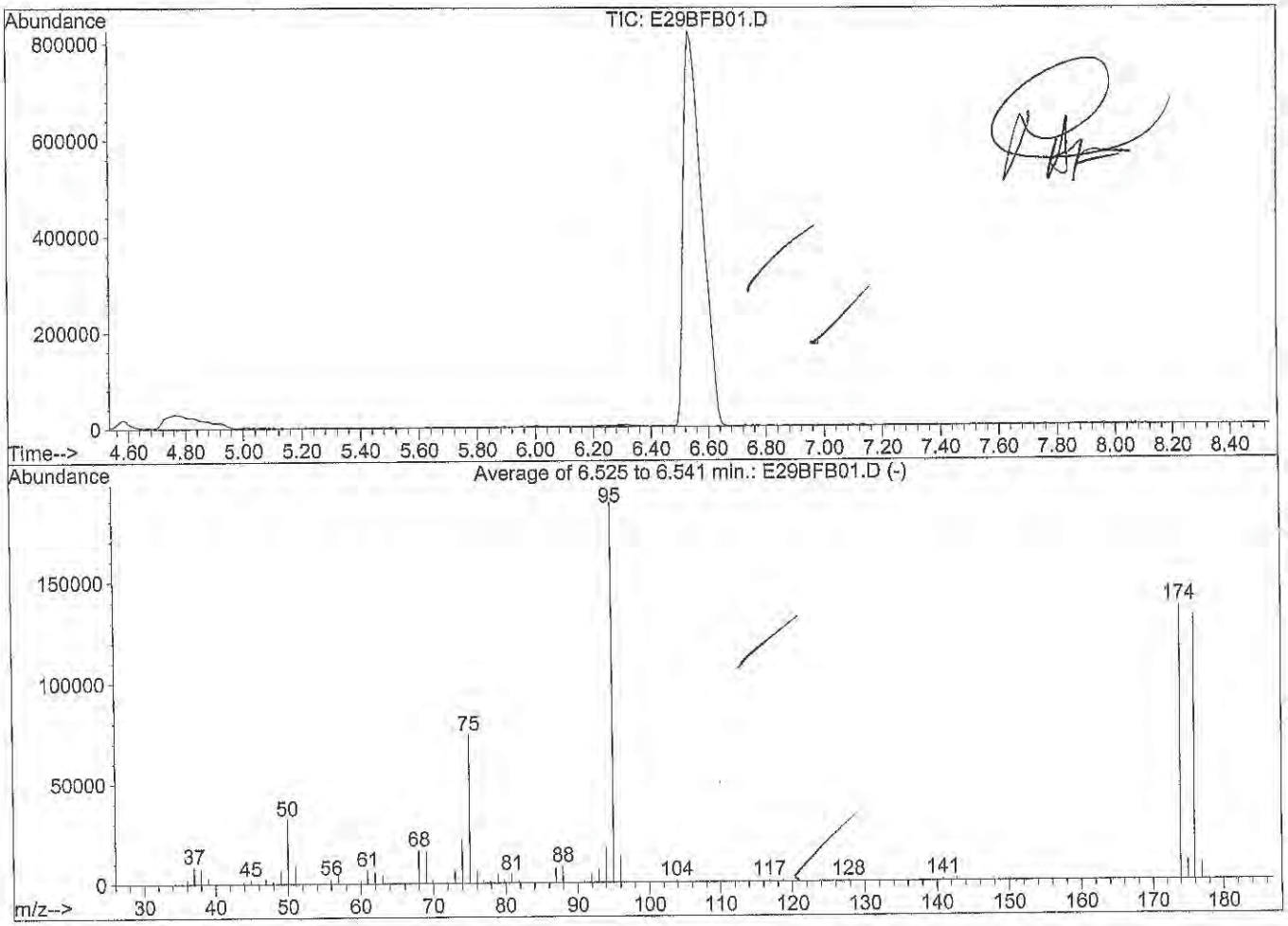
t - fails 12hr time check * - fails criteria

Created: Sun Jun 08 11:45:53 2014 GC
MS Ins

Summary of Instrument Tuning

BFB

Data File : C:\HPCHEM\1\DATA\052914L3\E29BFB01.D Vial: 1
Acq On : 29 May 2014 5:56 am Operator: DN
Sample : 50 ng BFB tune Inst : GC/MS Ins
Misc : 12HRS SYSTEM BFB TUNING Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN



AutoFind: Scans 320, 321, 322; Background Corrected with Scan 313

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	32032	PASS
75	95	30	60	39.2	73792	PASS
95	95	100	100	100.0	188245	PASS
96	95	5	9	6.8	12848	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.4	136301	PASS
175	174	5	9	7.0	9551	PASS
176	174	95	101	96.4	131344	PASS
177	176	5	9	6.3	8283	PASS

E29BFB01.D MW111313.M Thu May 29 06:06:11 2014

INJECTION LOG

Injection Log

Directory: c:\hpchem\1\data\052914I3

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	11	e2900001.d	10.	3E42901-01	100cc Equipment Blank	29 May 14 08:11
2	1	e2900002.d	10.	3E42901-02	100cc SVL-544-SA5D-SV-10.0-11.0	29 May 14 08:46
3	2	e2900003.d	10.	34E2901-DUP1	100cc SVL-544-SA5D-SV-10.0-11.0	29 May 14 09:15
4	3	e2900004.d	10.	3E42901-03	100cc SVL-844-SA5D-SV-10.0-11.0	29 May 14 09:44
5	4	e2900005.d	10.	3E42901-04	100cc SVL-530-SA5C-SV-6.5-7.5	29 May 14 10:13
6	5	e2900006.d	10.	3E42901-05	100cc SVL-519-SA5D-SV-8.9-9.5	29 May 14 10:44
7	6	e2900007.d	10.	3E42901-06	100cc SVL-526-SA5D-SV-7.5-8.5	29 May 14 11:13
8	7	e2900008.d	10.	3E42901-07	100cc SVL-530-SA5D-SV-5.0-6.0	29 May 14 11:42
9	8	e2900009.d	10.	3E42901-08	100cc SVL-531-SA5D-SV-5.0-6.0	29 May 14 12:11
10	1	e2900010.d	10.	3E42901-09	100cc SVL-539-SA5D-SV-4.5-5.5	29 May 14 12:57
11	2	e2900011.d	10.	3E42901-10	100cc SVL-539-SA5D-SV-8.5-9.5	29 May 14 13:26
12	3	e2900012.d	10.	3E42901-11	100cc SVL-572-SA5C-SV-6.8-7.8	29 May 14 13:59
13	4	e2900013.d	10.	3E42901-12	100cc FB-052914	29 May 14 14:28
14	1	e29bfb01.d	1.	50 ng BFB tune	12HRS SYSTEM BFB TUNING	29 May 14 05:56
15	11	e29blk01.d	10.	34E2901-BLK1	100cc AMBIENT AIR/H20	29 May 14 07:39
16	9	e29ccv01.d	1.	1.25/2.5/12.5 ug/L 8260B std	20mL 8260 CCV	29 May 14 06:09
17	10	e29lcs01.d	1.	34E2901-BS1	20cc 1.25/2.5/12.5 ug/L LCS	29 May 14 06:38
18	9	e29lcs02.d	1.	34E2901-BSD1	20cc 1.25/2.5/12.5 ug/L LCS	29 May 14 14:57

SAMPLE LOG SHEET

Environmental Support Technologies, Inc.
SOIL GAS - FIELD ANALYSIS
Sample Log Sheet

Date:_05/29/2014_____
Analyst:_____DN_____
Lab ID:_____# 3_____
Batch Number:_34E2901_____
Project Number:_EST2754___

EPA Method:_8260B CHHSLS 0.02 RL GILAN AIR5 PUMP
Initial Calibration:_MW111313.MTH FLOW RATE @ 200mL/min
Cal Std Lot No.:__4D14009_____
LCS Std Lot No.:_4D14008_____ Glass Bulb Bake @
IS/SS Lot No.:___4D14001_____ 130 degree for 30 min

MWH SSFL , CA

File No.	Port No.	Sample Lab No.	Sample ID	Amount	Dilution Factor	Bulb Surr added	Time Sample Loaded	Time Sample Analyzed	Glass Bulb #	PID READING
E429BFB1	1	50uL BFB1	12HRS TUNING	1uL	1x	PASS	@	556		
CCV1	9	1.25/2.5/12.5 CCV1	8260 STARDARD	20mL	1x	555	556	609		
BS1	9	34E2901-BS1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	620	621	638		
BLK1	1	34E2901-BLK1	METHOD BLANK	100cc	1x	710	711	739		
1	2	3E42901-01	EQUIPMENT BLANK	100cc	1x	800	801	811	1	0.0
2	1	3E42901-02	SVL-544-SA5D-SV-10.0-11.0	100cc	1x	750	751	846	9	0.0
3	2	34E2901-DUP1	SVL-544-SA5D-SV-10.0-11.0	100cc	1x	750	751	915	9	0.0
4	3	3E42901-03	SVL-844-SA5D-SV-10.0-11.0	100cc	1x	750	751	944	6	0.0
5	4	3E42901-04	SVL-530-SA5C-SV-6.5-7.5	100cc	1x	843	844	1013	5	0.0
6	5	3E42901-05	SVL-519-SA5D-SV-8.9-9.5	100cc	1x	930	931	1044	8	0.0
7	6	3E42901-06	SVL-526-SA5D-SV-7.5-8.5	100cc	1x	1012	1013	1113	3	0.0
8	7	3E42901-07	SVL-530-SA5D-SV-5.0-6.0	100cc	1x	1046	1047	1142	13	0.0
9	8	3E42901-08	SVL-531-SA5D-SV-5.0-6.0	100cc	1x	1120	1121	1211	7	0.0
10	1	3E42901-09	SVL-539-SA5D-SV-4.5-5.5	100cc	1x	1229	1230	1257	12	0.0
11	2	3E42901-10	SVL-539-SA5D-SV-8.5-9.5	100cc	1x	1300	1301	1326	10	0.0
12	3	3E42901-11	SVL-572-SA5C-SV-8.5-9.5	100cc	1x	1339	1340	1359	11	0.0
12	4	3E42901-12	FB-052914	100cc	1x	1359	1400	1428	2	0.0
BSD1	9	34E2901-BSD1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	1440	1441	1457		

CASE NARRATIVE

LABORATORY CASE NARRATIVE
(EPA 8260B)

SDG: 34E2901
DATE: May 29, 2014
PROJECT No.: EST2754

Twelve (12) Glass Bulb soil vapor samples were analyzed on May 29, 2014, by EPA Method Analysis performed using a gas chromatograph/mass spectrometer (GC/MS).

Sample Preservation and Holding Times

Samples were preserved according to the method recommendation, unless otherwise noted on the chain-of-custody (COC) and /or the sample log sheet. Holding times were met, unless otherwise noted in the report with data qualifiers.

QA/QC Criteria

All quality objective criteria were met, except as noted in the report with data qualifiers.

Samples Analysis

No anomalies were observes during analysis of the samples.

COMMENTS:

Results that fall between the MDL and RL are 'J' flagged.

Adjusted values corrected for significant figure correction (10X) and sample volume (5X).

RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION DUPLICATE SAMPLE

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900003.D
Acq On : 29 May 2014 9:15 am
Sample : 34E2901-DUP1
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: May 29 9:38 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1515026	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1225648	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	671159	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	431751	11.42 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	91.36%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	429929	11.97 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.76%	
39) Toluene-d8 (SU3)	12.21	98	1337766	11.70 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	93.60%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	678795	13.54 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	108.32%	

Target Compounds					Qvalue
4) Chloromethane	4.40	50	4893	0.71 ~~ug/L~~ # SM	72
6) Bromomethane	5.11	96	386	-1.55 ~~ug/L~~ #	1
7) Chloroethane	5.31	64	797	1.32 ~~ug/L~~	96
11) Acetone	6.48	58	3820	1.38 ~~ug/L~~ #	56
12) (IPA) Leak Check Compound	6.46	45	337071	1851.51 ~~ug/L~~ # SM	83
13) Carbon disulfide	6.83	76	5188	0.41 ~~ug/L~~ #	93
14) Methylene Chloride	7.06	84	5988	1.44 ~~ug/L~~ # SM	1
15) (TBA) tert-Butanol	7.16	59	958	3.71 ~~ug/L~~ #	77
22) (DIPE) Diisopropyl Ether	8.09	45	265	0.02 ~~ug/L~~ # SM	48
24) Chloroform	9.21	83	1732	0.22 ~~ug/L~~ #	1
25) (ETBE) 2-ethoxy 2-methyl p	8.37	59	265	0.02 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.92	75	273	0.05 ~~ug/L~~ #	1
31) Benzene	9.98	78	2886	0.20 ~~ug/L~~ #	74
32) 1,2-Dichloroethane	9.92	62	6094	1.21 ~~ug/L~~ #	1
35) Dibromomethane	11.04	93	255	0.10 ~~ug/L~~ #	5
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	7469	3.05 ~~ug/L~~ #	100
41) Toluene	12.29	91	35142	2.10 ug/L 0.042	89
46) 2-Hexanone	13.11	43	344	0.13 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	14143	0.74 ug/L #0.0148	86
52) m,p-Xylenes	14.15	106	18774	2.78 ug/L 0.0556	92
53) o-Xylene	14.62	106	6648	1.00 ug/L 0.02	85
54) Styrene	14.62	104	1322	-0.74 ~~ug/L~~ # SM	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900003.D
Acq On : 29 May 2014 9:15 am
Sample : 34E2901-DUP1
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: May 29 9:38 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

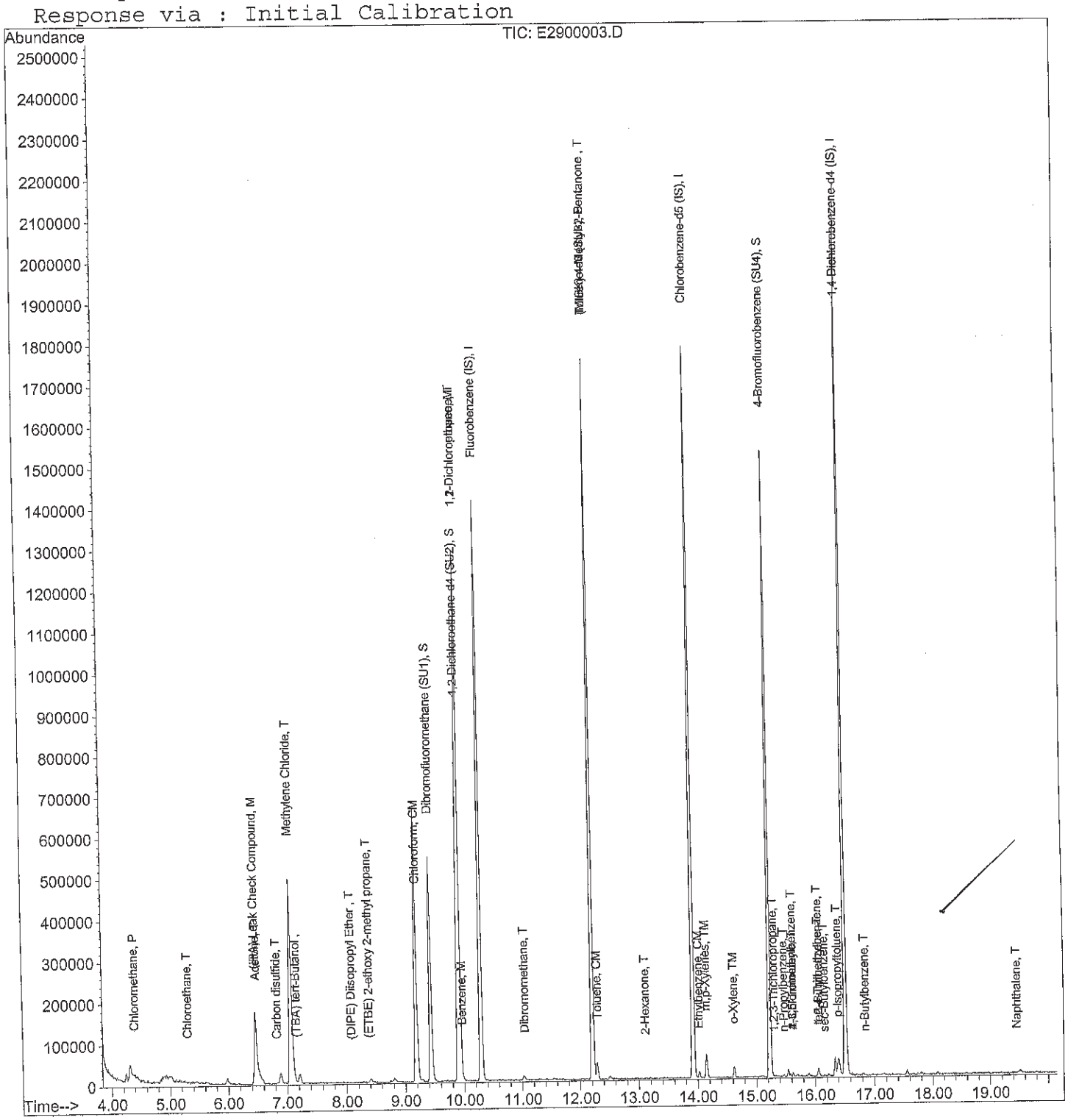
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
57) 1,2,3-Trichloropropane	15.30	75	282	0.06 ~~ug/L~~ # NSM	36
62) n-Propylbenzene	15.46	91	4077	0.15 ~~ug/L~~ #	75
63) 2-Chlorotoluene	15.62	91	553	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.63	105	5088	0.30 ug/L 0.006	98
65) 4-Chlorotoluene	15.62	91	553	0.04 ~~ug/L~~ # NSM	44
66) tert-Butylbenzene	16.07	119	1609	0.11 ~~ug/L~~ #	70
67) 1,2,4-Trimethylbenzene	16.06	105	11902	0.68 ug/L 0.036	94
68) sec-Butylbenzene	16.15	105	406	0.02 ~~ug/L~~ # NSM	62
69) p-Isopropyltoluene	16.38	119	805	0.04 ~~ug/L~~ #	52
72) n-Butylbenzene	16.85	91	269	0.01 ~~ug/L~~ #	30
77) Naphthalene	19.45	128	277	0.02 ~~ug/L~~	100

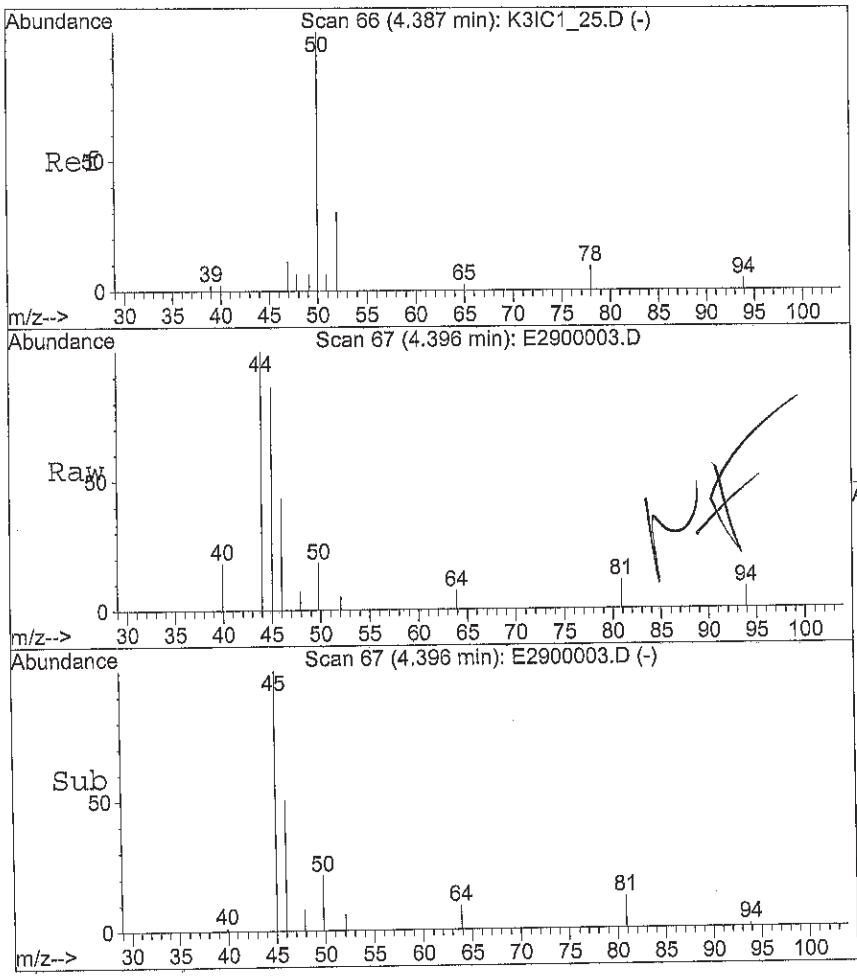
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900003.D Vial: 2
Acq On : 29 May 2014 9:15 am Operator: DN
Sample : 34E2901-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 9:38 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

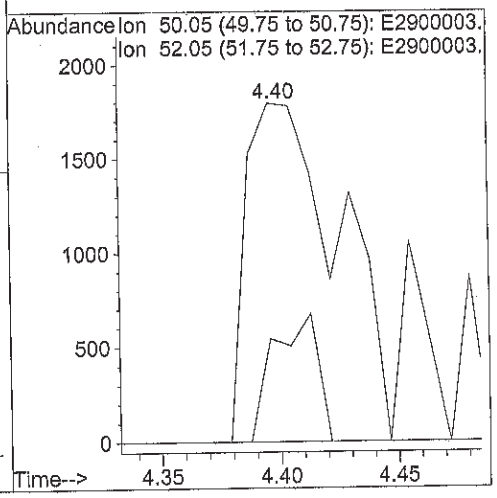


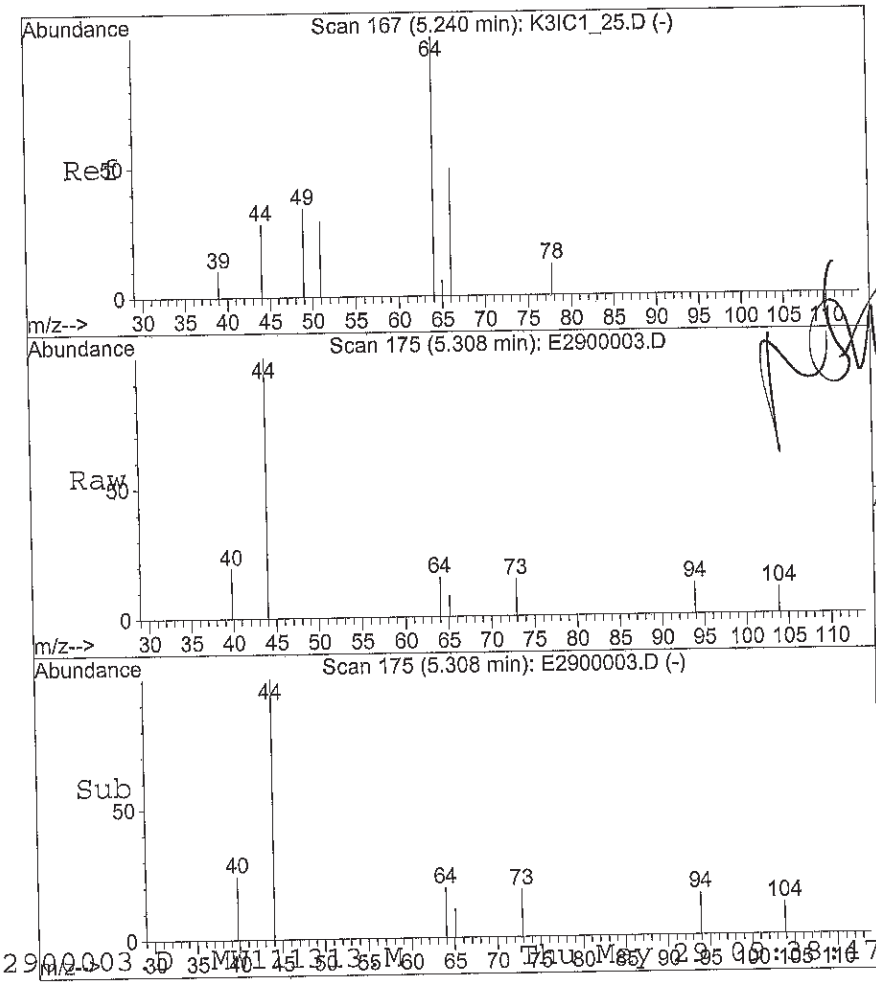


#4
Chloromethane
Concen: 0.71 ug/L
RT: 4.40 min Scan# 67
Delta R.T. 0.01 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 50 Resp: 4893

Ion	Ratio	Lower	Upper
50	100		
52	17.8	26.9	40.3#

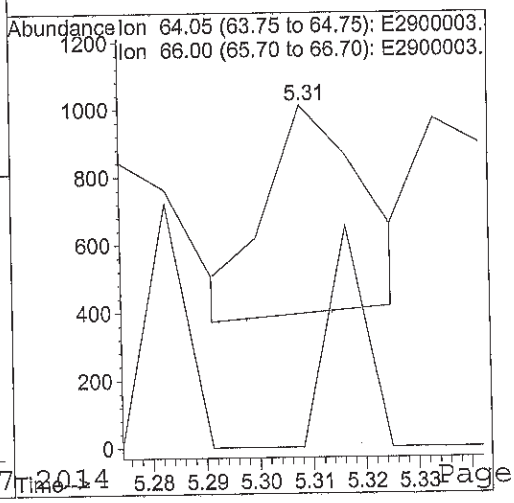


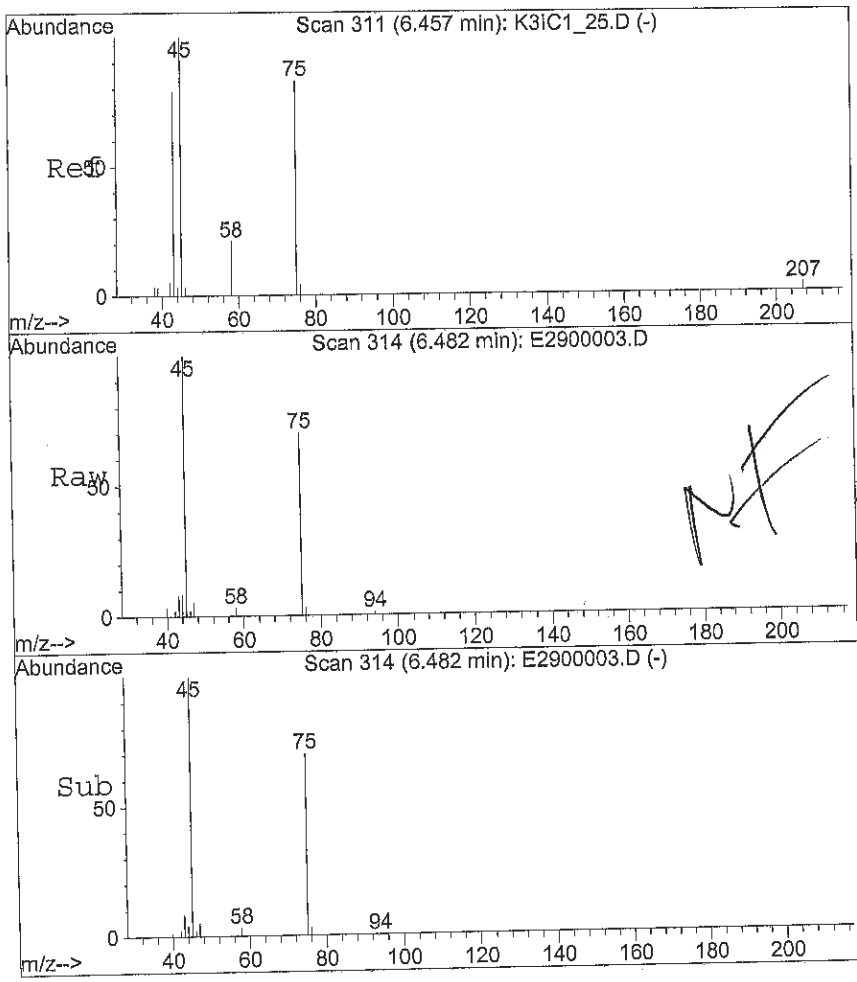


#7
Chloroethane
Concen: 1.32 ug/L
RT: 5.31 min Scan# 175
Delta R.T. 0.07 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 64 Resp: 797

Ion	Ratio	Lower	Upper
64	100		
66	41.7	35.4	53.0

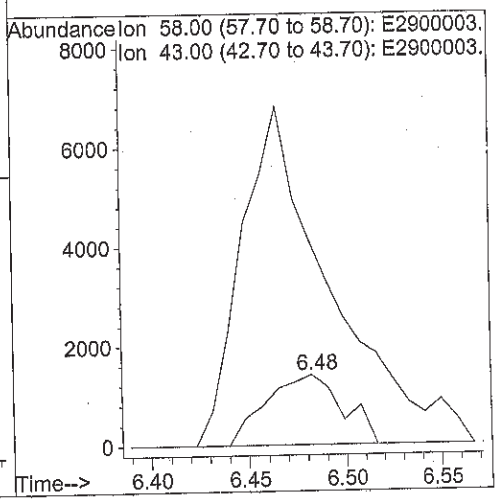


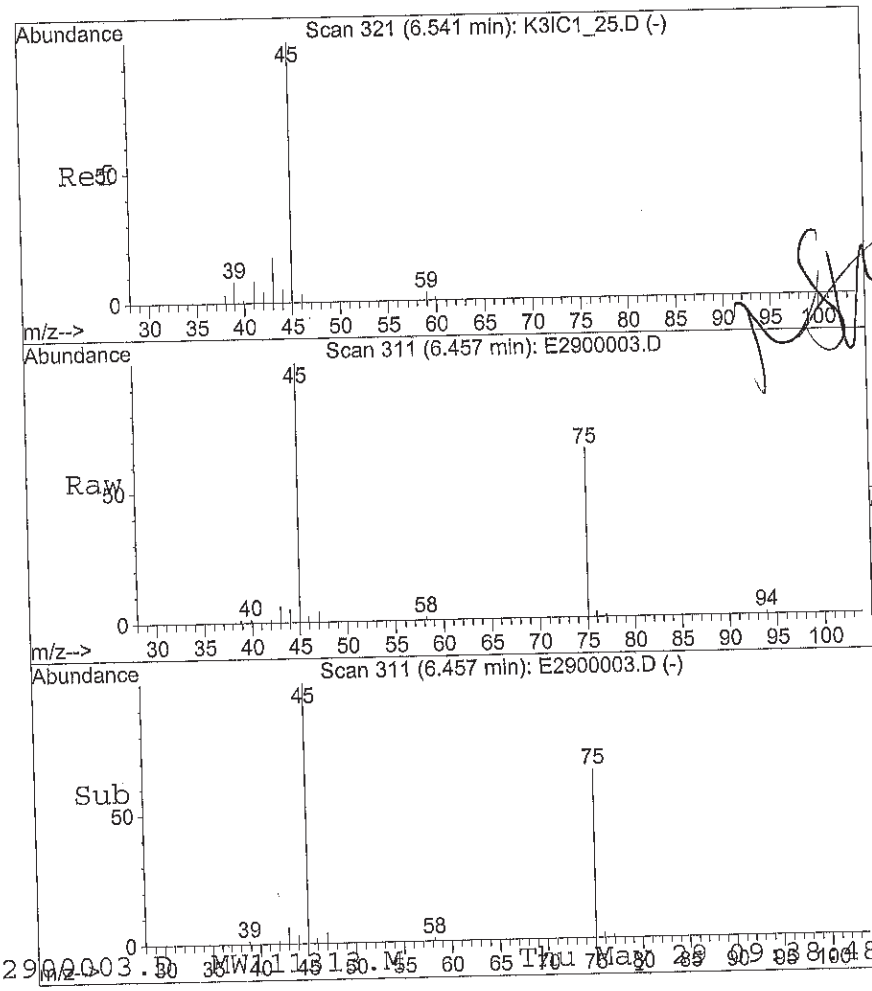


#11
Acetone
Concen: 1.38 ug/L
RT: 6.48 min Scan# 314
Delta R.T. 0.03 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 58 Resp: 3820

Ion	Ratio	Lower	Upper
58	100		
43	565.3	360.9	541.3#

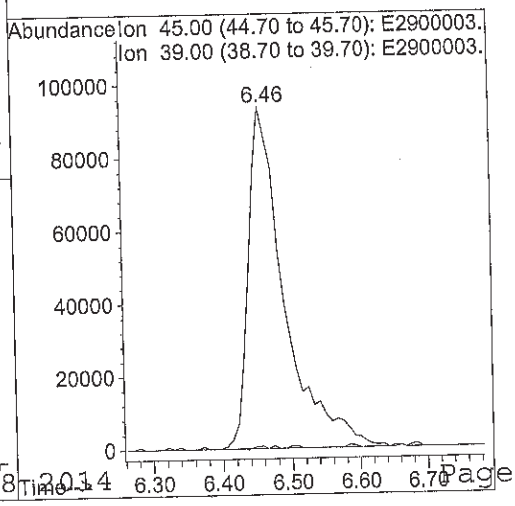


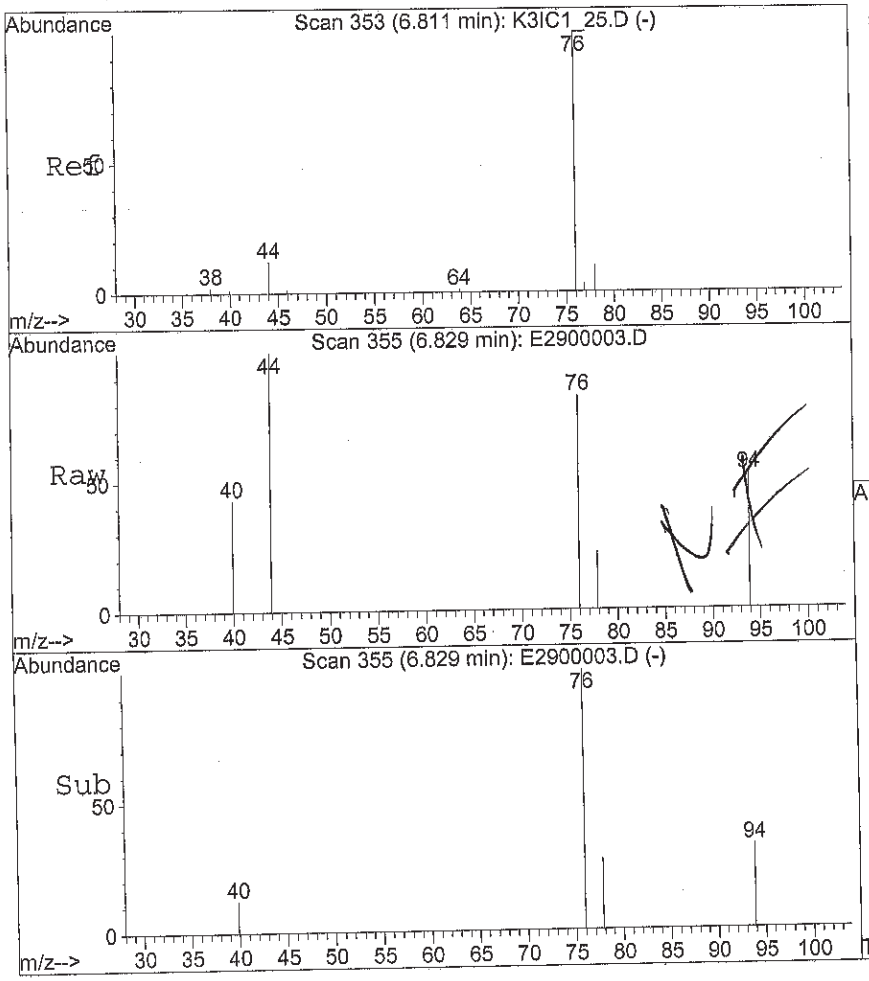


#12
(IPA) Leak Check Compound
Concen: 1851.51 ug/L
RT: 6.46 min Scan# 311
Delta R.T. -0.08 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 45 Resp: 337071

Ion	Ratio	Lower	Upper
45	100		
39	0.3	4.9	7.3#

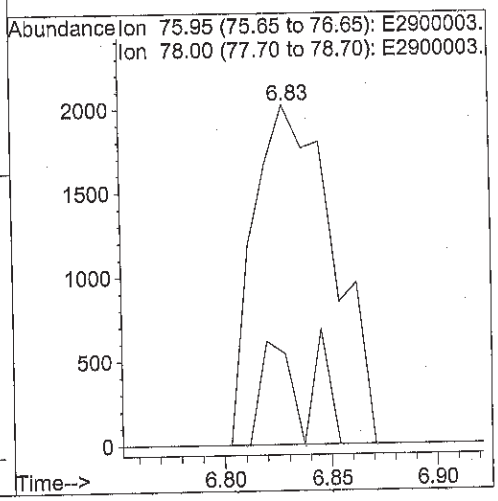


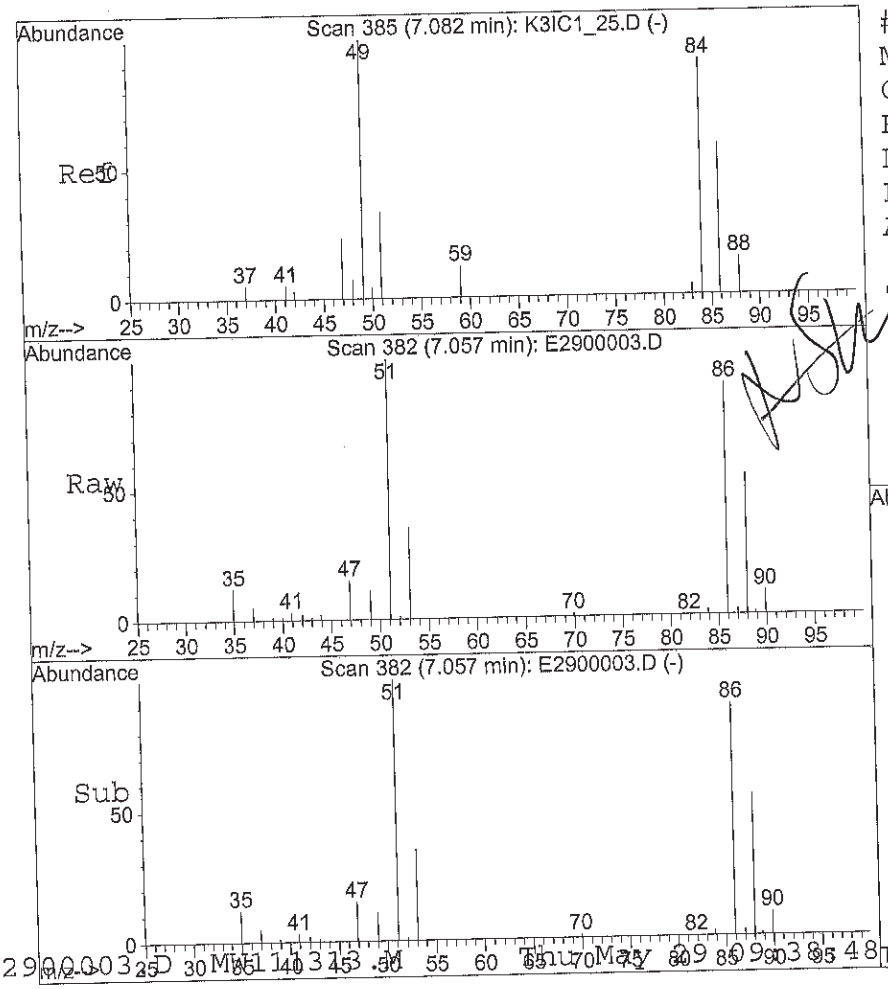


#13
Carbon disulfide
Concen: 0.41 ug/L
RT: 6.83 min Scan# 355
Delta R.T. 0.02 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 76 Resp: 5188

Ion	Ratio	Lower	Upper
76	100		
78	11.2	7.0	10.4#

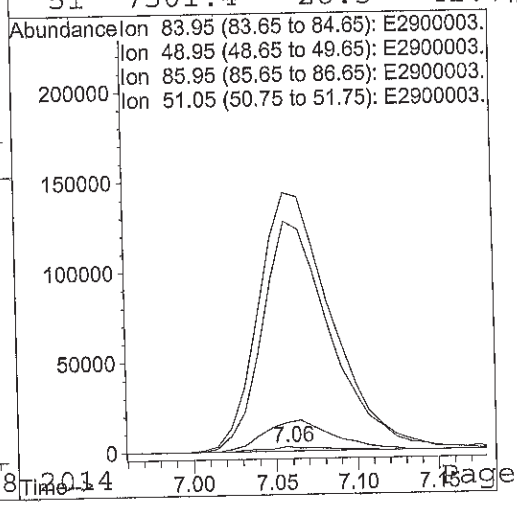


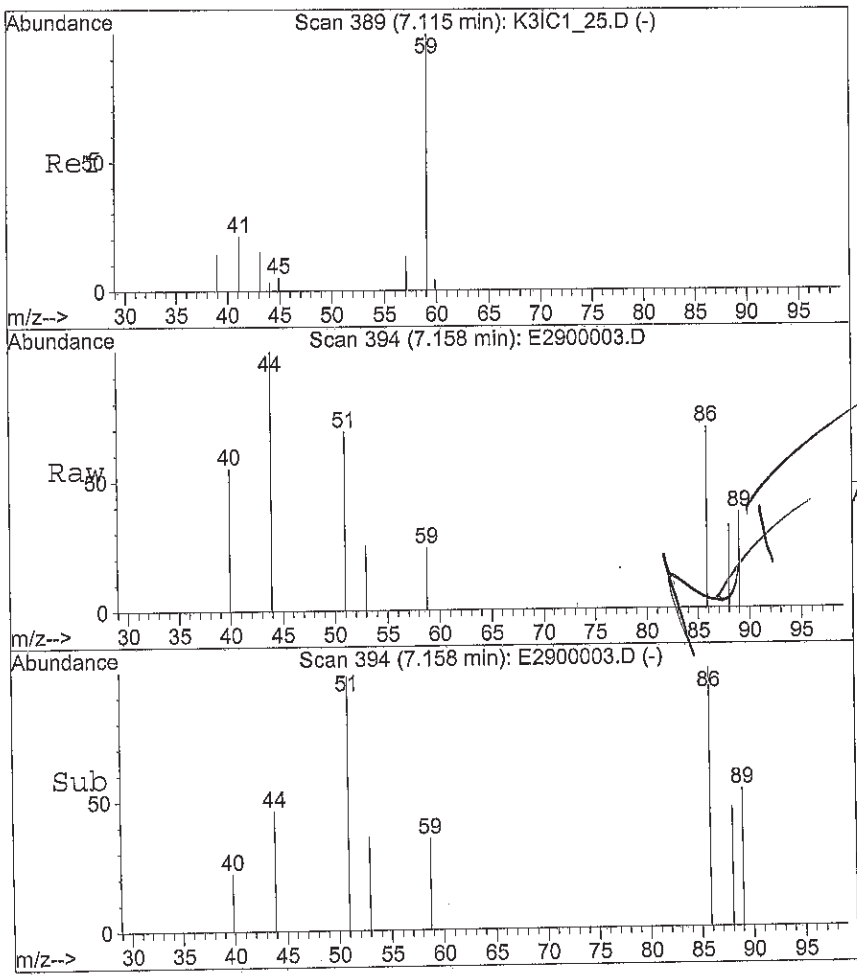


#14
Methylene Chloride
Concen: 1.44 ug/L
RT: 7.06 min Scan# 382
Delta R.T. -0.03 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 84 Resp: 5988

Ion	Ratio	Lower	Upper
84	100		
49	839.5	89.8	134.6#
86	6245.0	51.1	76.7#
51	7501.4	28.5	42.7#

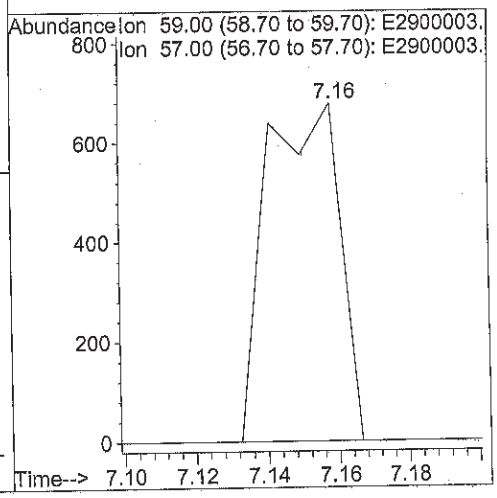


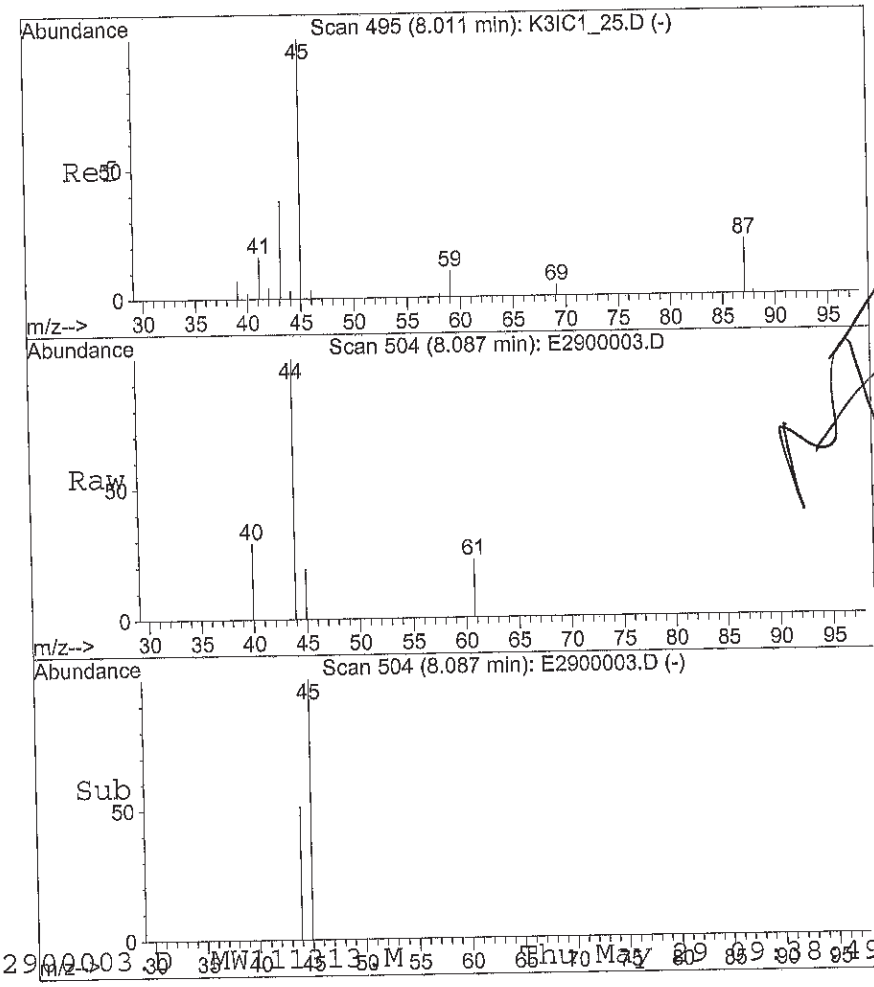


#15
(TBA) tert-Butanol
Concen: 3.71 ug/L
RT: 7.16 min Scan# 394
Delta R.T. 0.04 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 59 Resp: 958

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

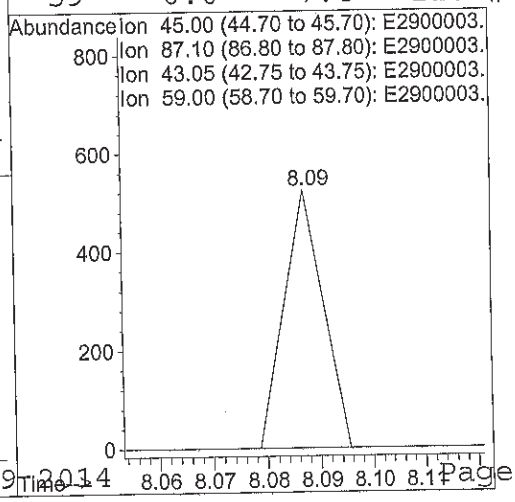


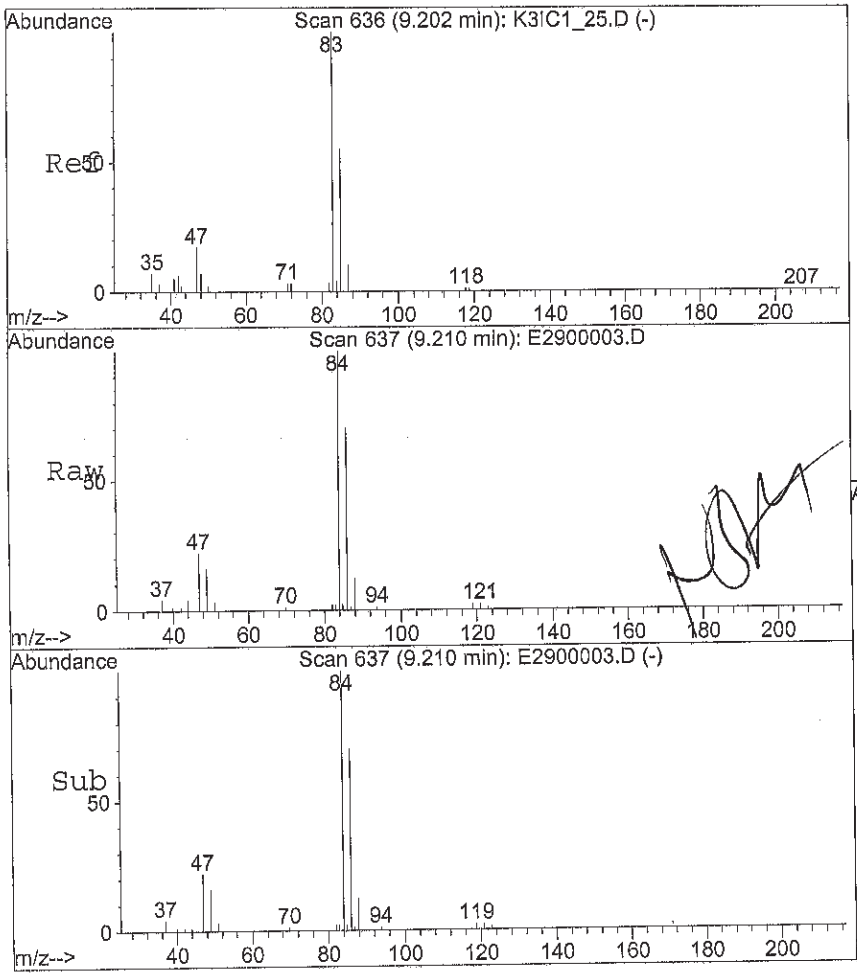


#22
(DIPE) Diisopropyl Ether
Concen: 0.02 ug/L
RT: 8.09 min Scan# 504
Delta R.T. 0.08 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 45 Resp: 265

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

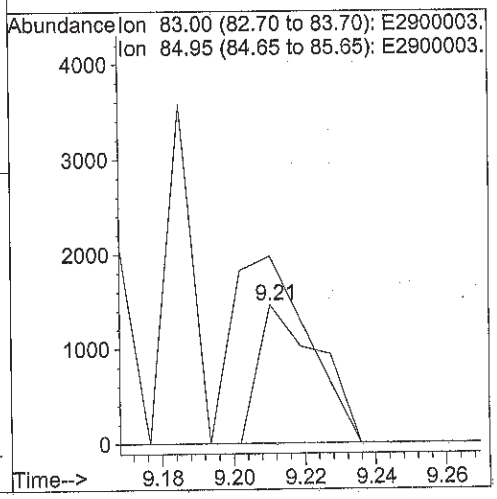


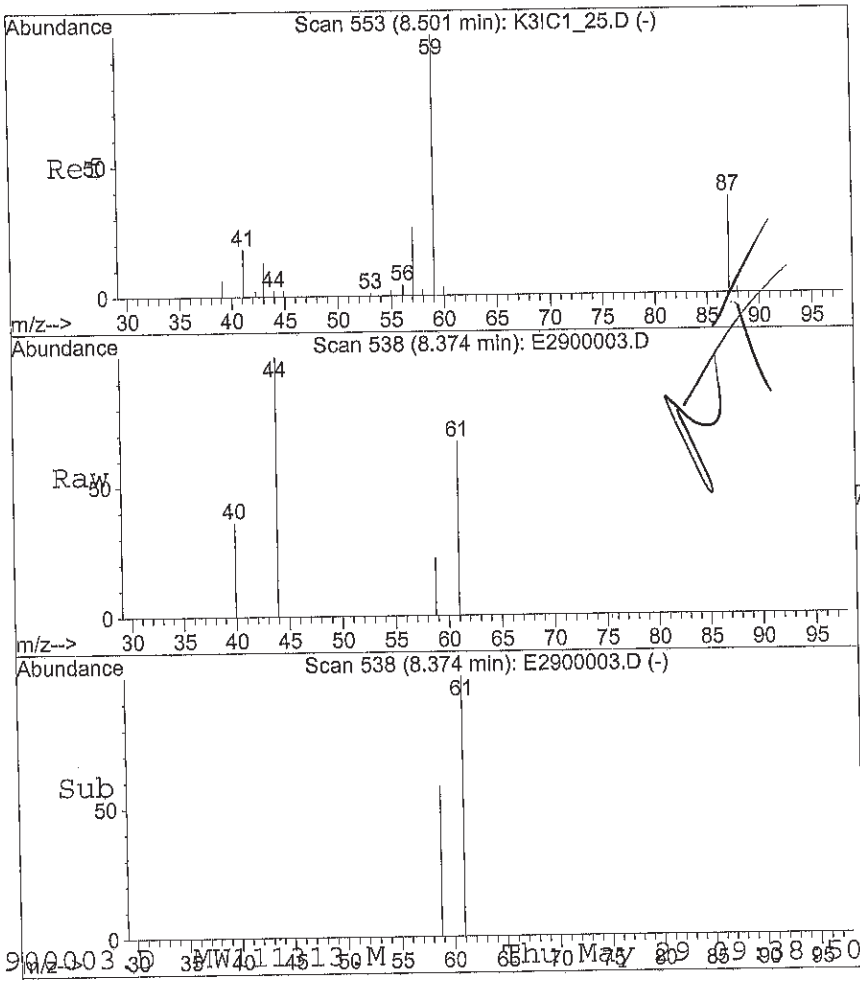


#24
Chloroform
Concen: 0.22 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 83 Resp: 1732

Ion	Ratio	Lower	Upper
83	100		
85	167.7	51.8	77.6#

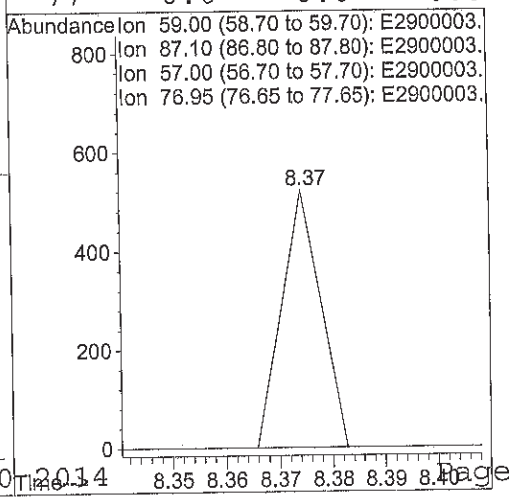


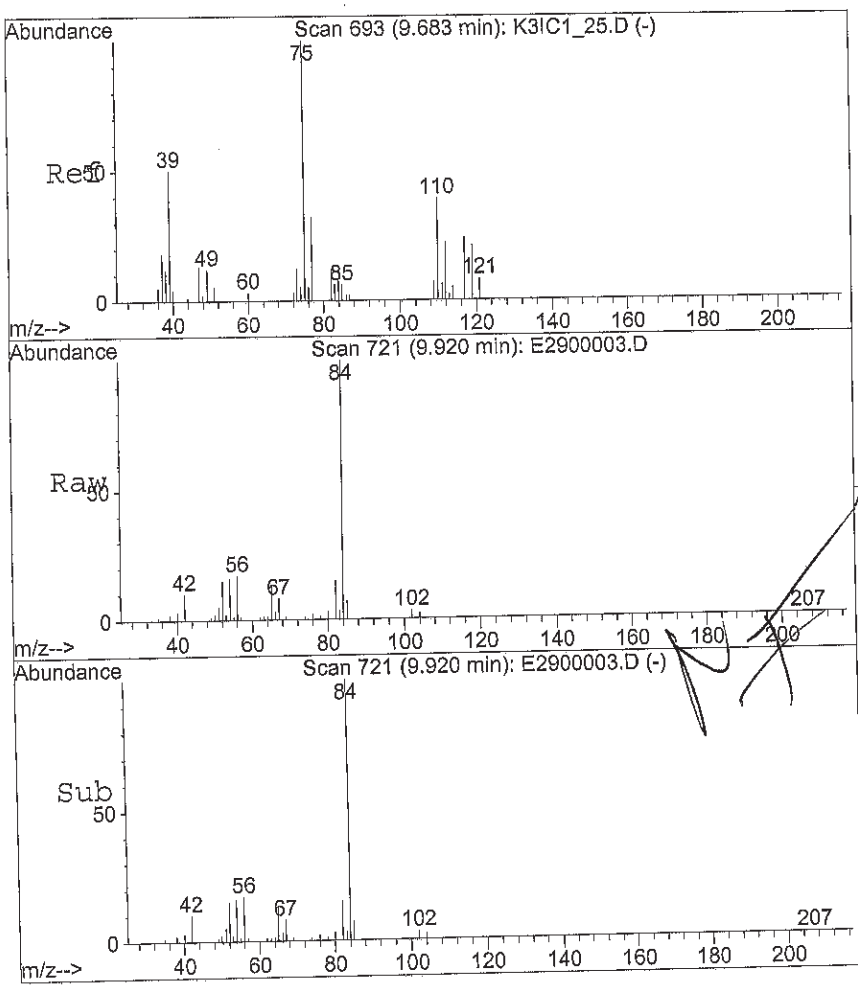


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.02 ug/L
RT: 8.37 min Scan# 538
Delta R.T. -0.13 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 59 Resp: 265

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

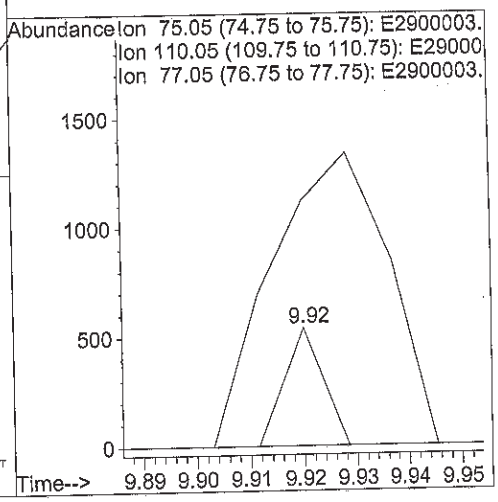


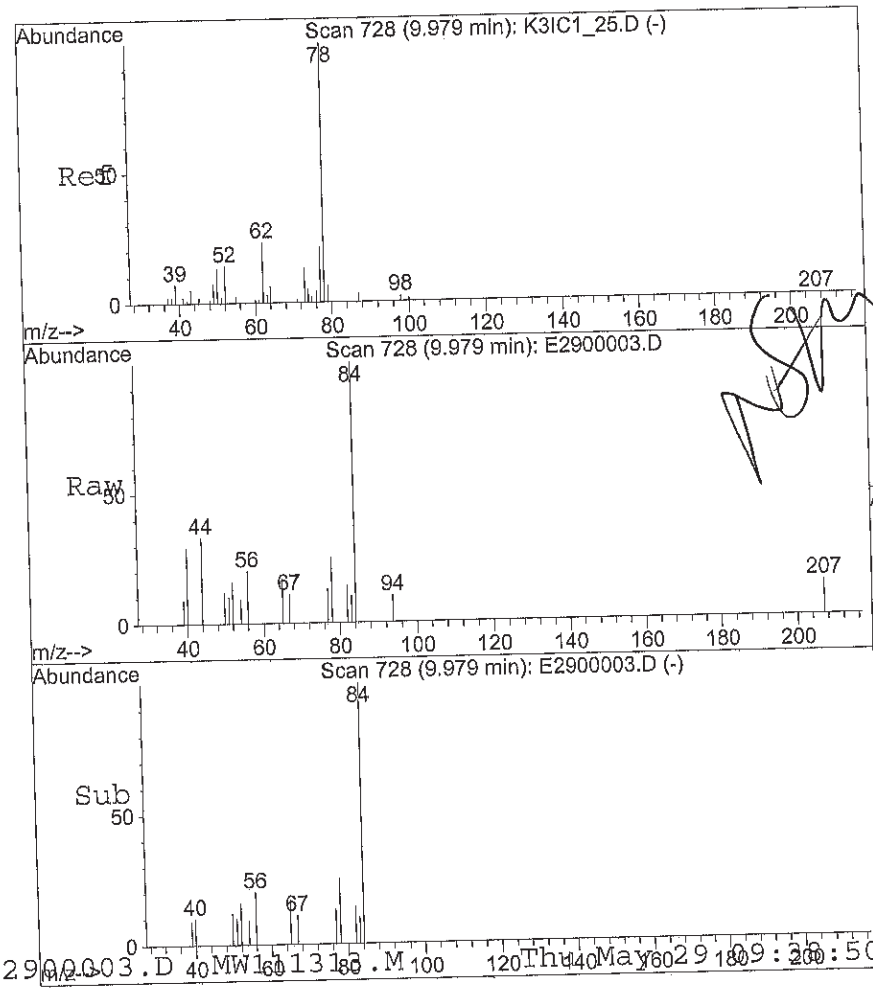


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 75 Resp: 273

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	741.4	25.0	37.4#

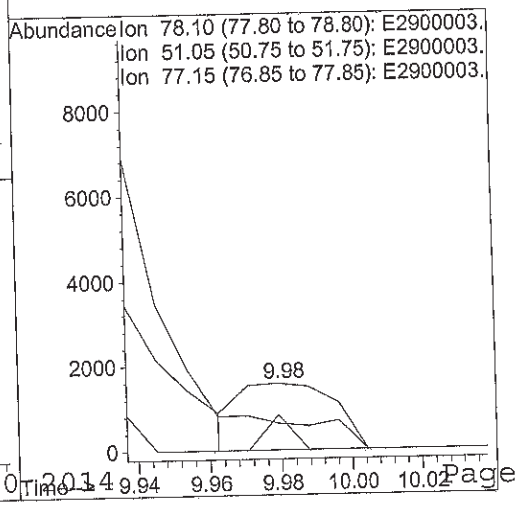


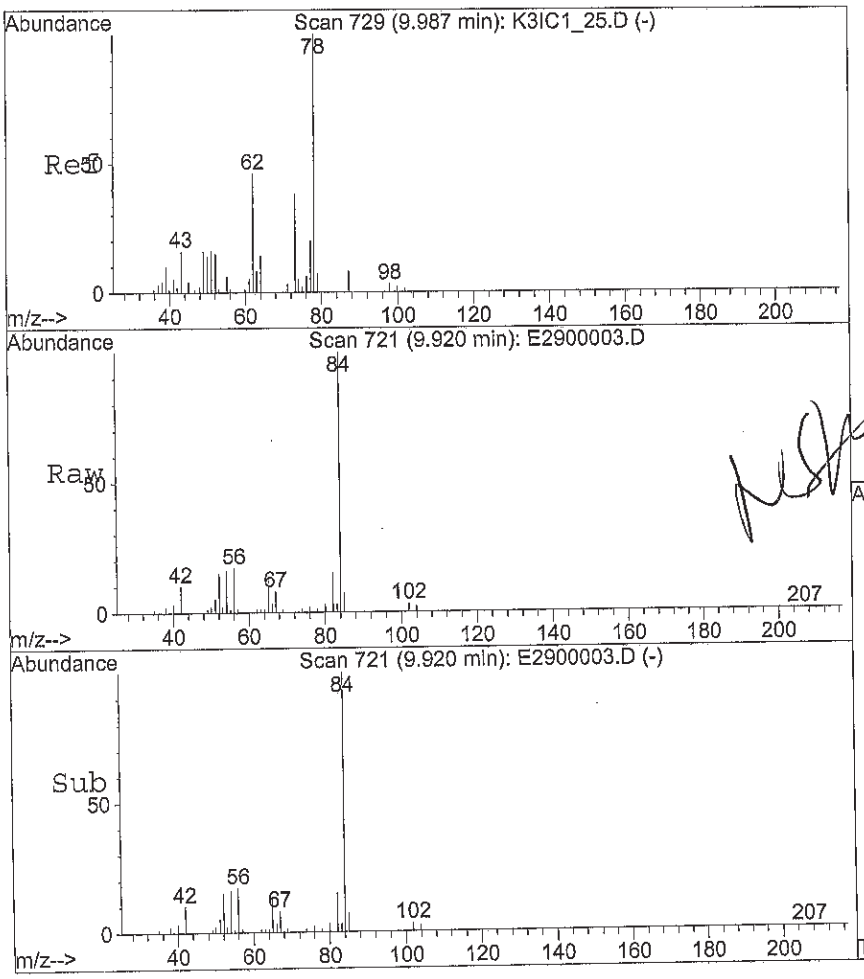


#31
Benzene
Concen: 0.20 ug/L
RT: 9.98 min Scan# 728
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 78 Resp: 2886

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	14.6	16.6	24.8#

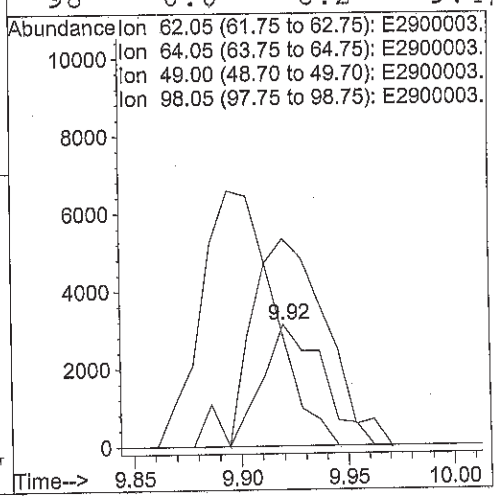


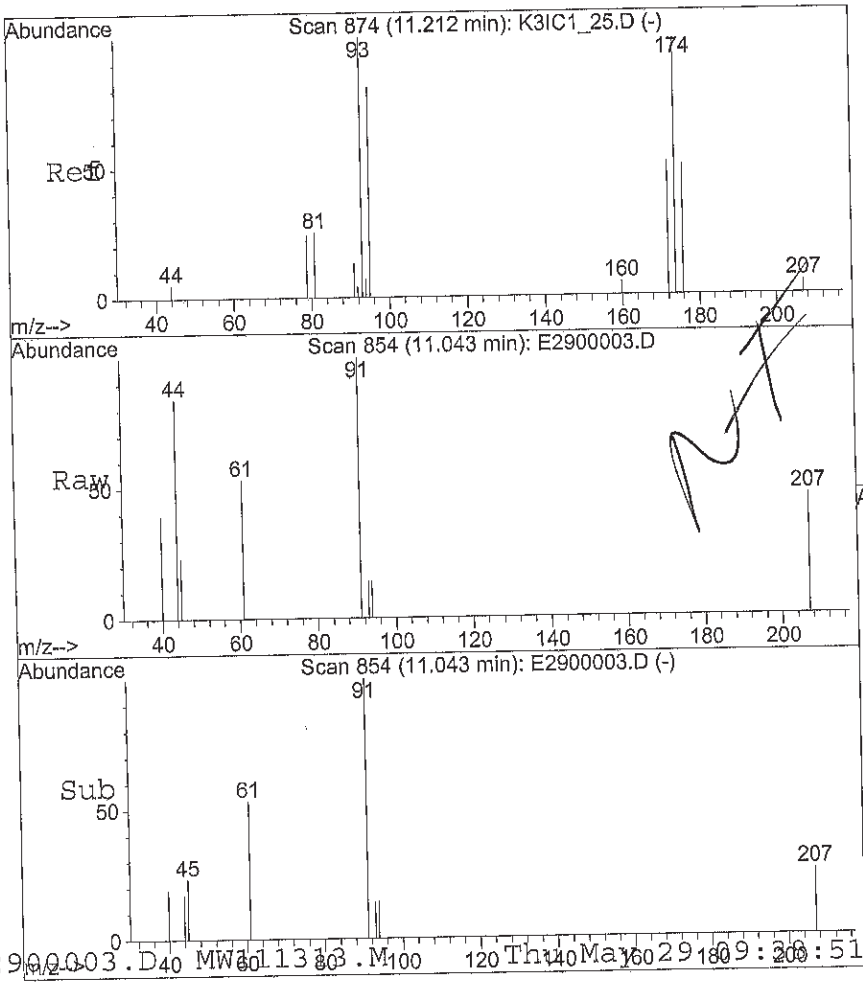


#32
1,2-Dichloroethane
Concen: 1.21 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 62 Resp: 6094

Ion	Ratio	Lower	Upper
62	100		
64	217.9	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

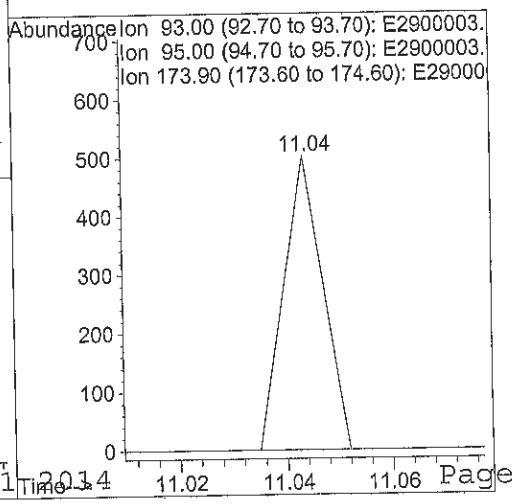


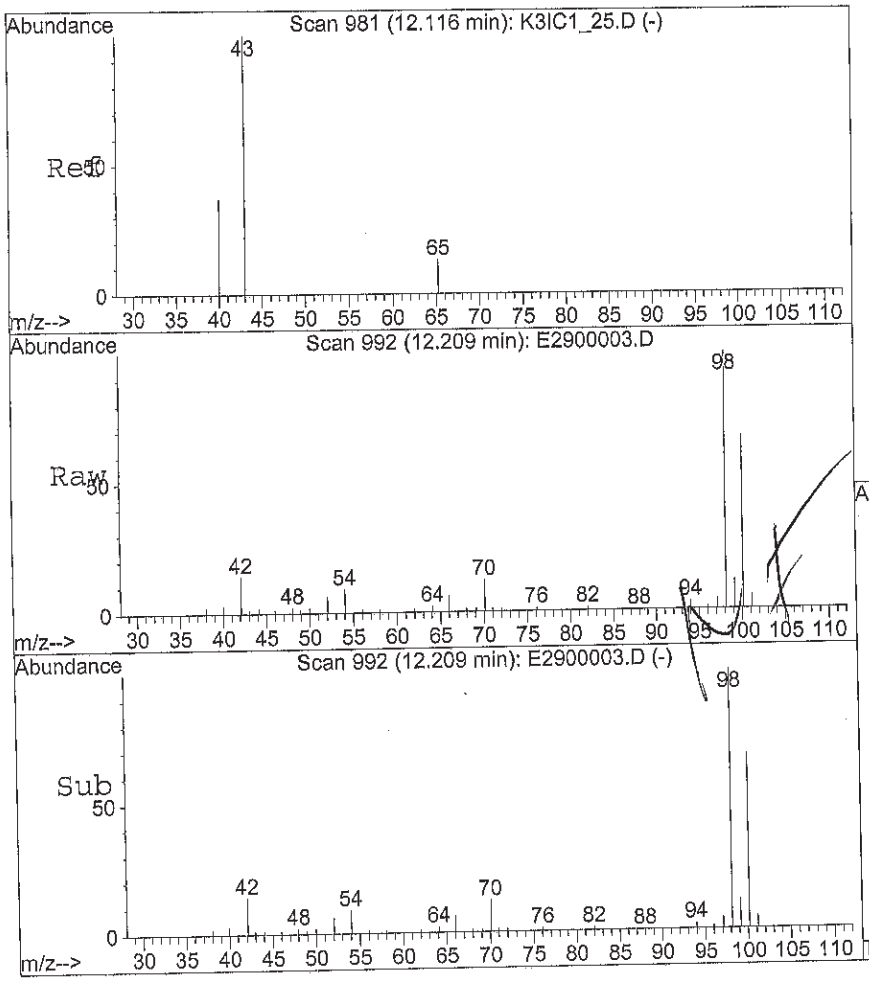


#35
Dibromomethane
Concen: 0.10 ug/L
RT: 11.04 min Scan# 854
Delta R.T. -0.17 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 93 Resp: 255

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

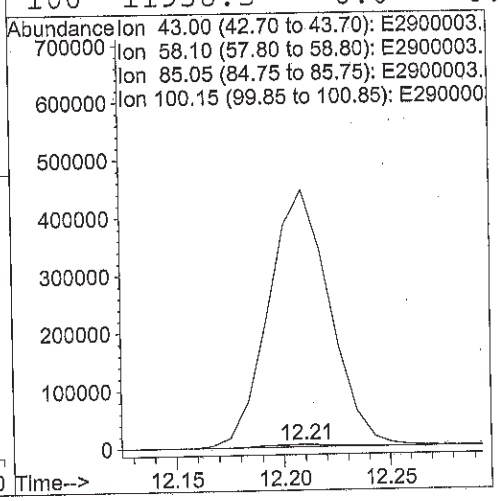


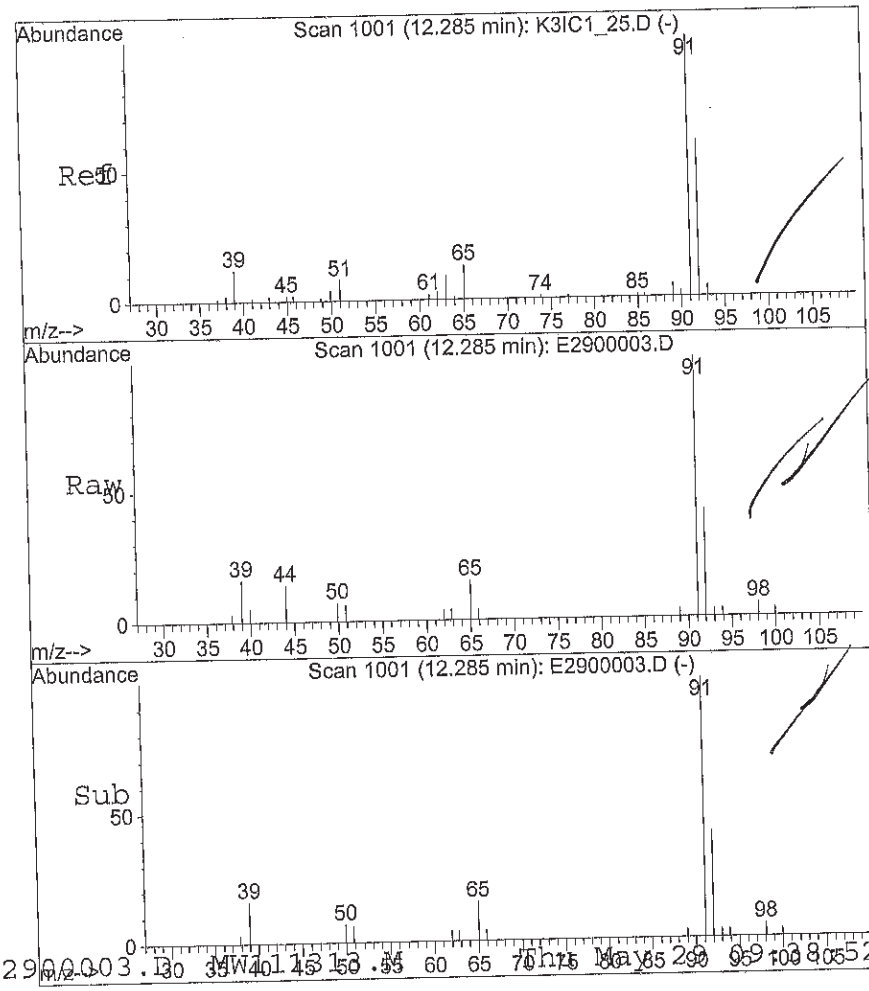


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.05 ug/L
RT: 12.21 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 43 Resp: 7469

Ion	Ratio	Lower	Upper
43	100		
58	130.2	0.0	0.0#
85	0.0	0.0	0.0
100	11938.5	0.0	0.0#

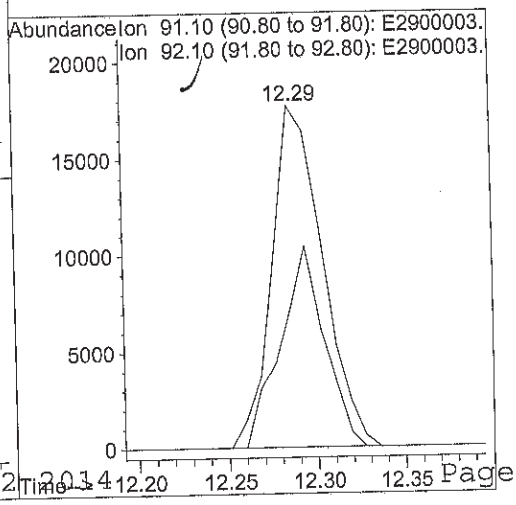


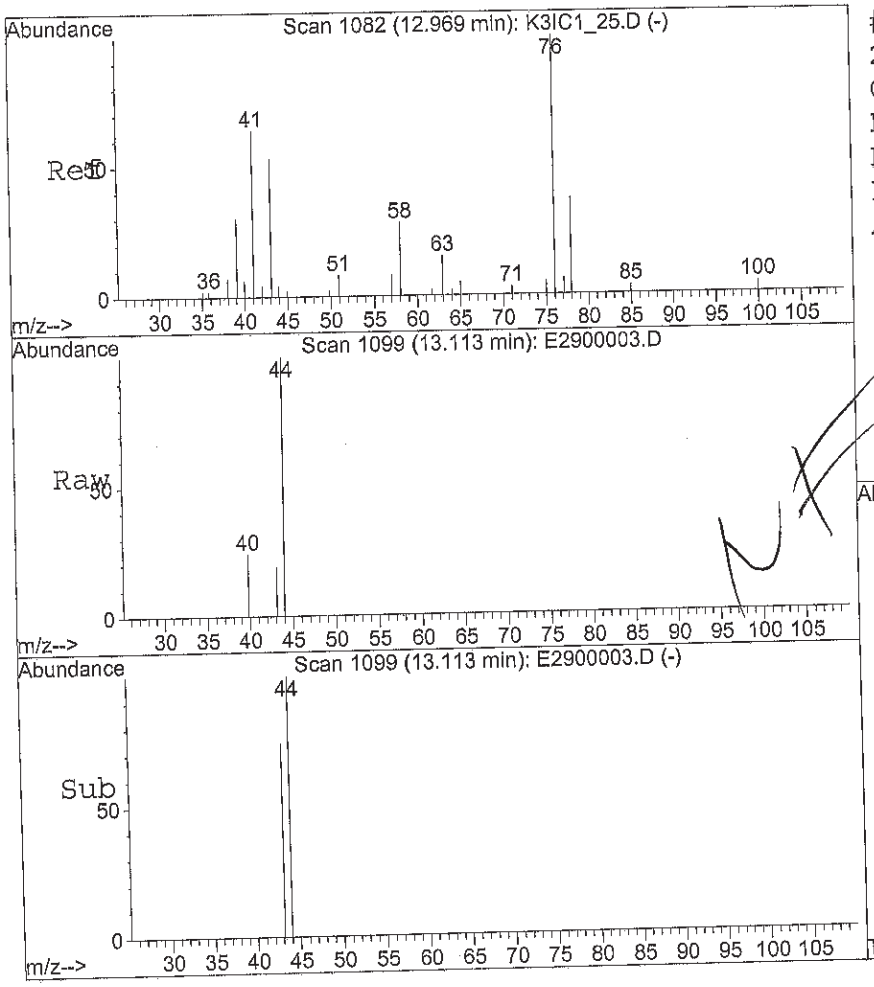


#41
Toluene
Concen: 2.10 ug/L
RT: 12.29 min Scan# 1001
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 91 Resp: 35142

Ion	Ratio	Lower	Upper
91	100		
92	51.2	47.4	71.0

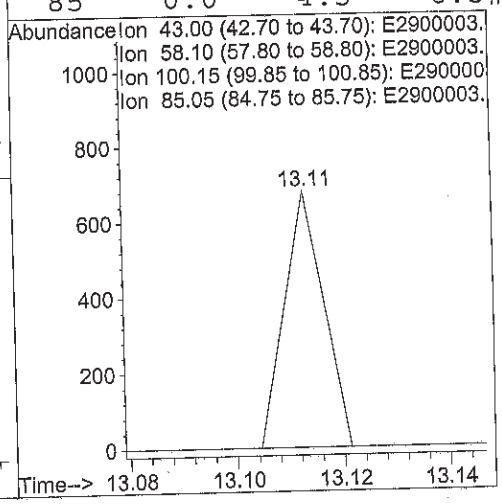


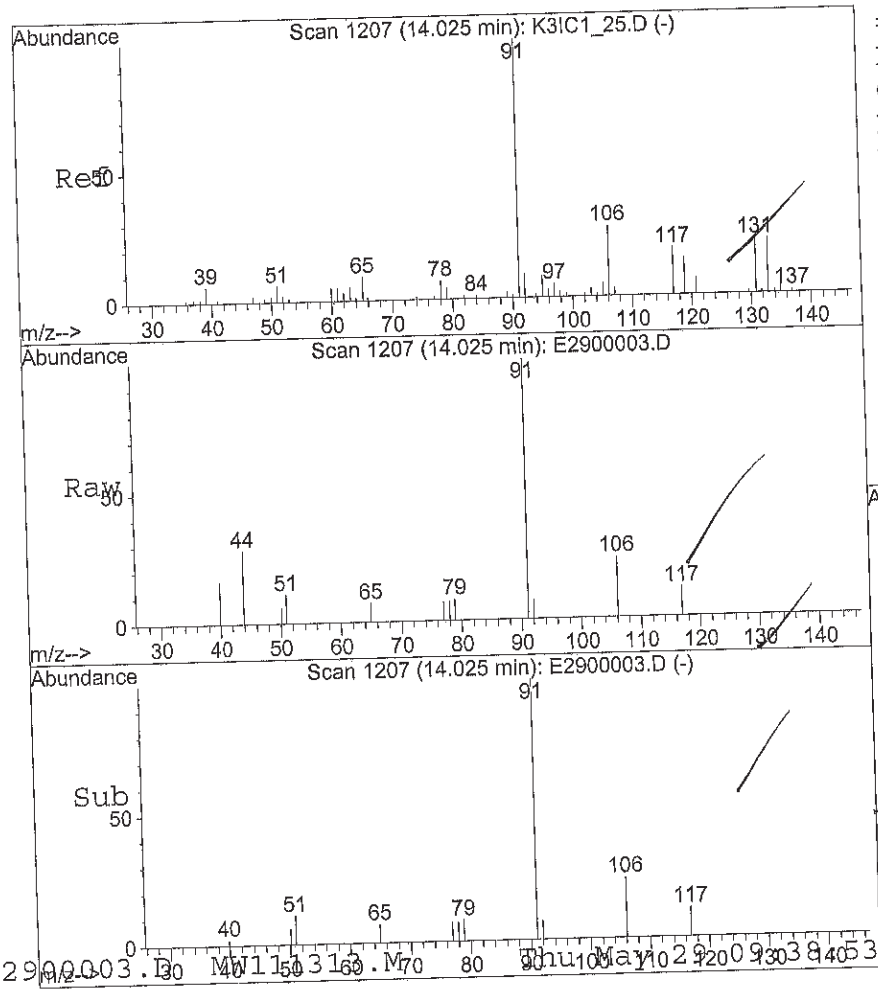


#46
2-Hexanone
Concen: 0.13 ug/L
RT: 13.11 min Scan# 1099
Delta R.T. 0.14 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 43 Resp: 344

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

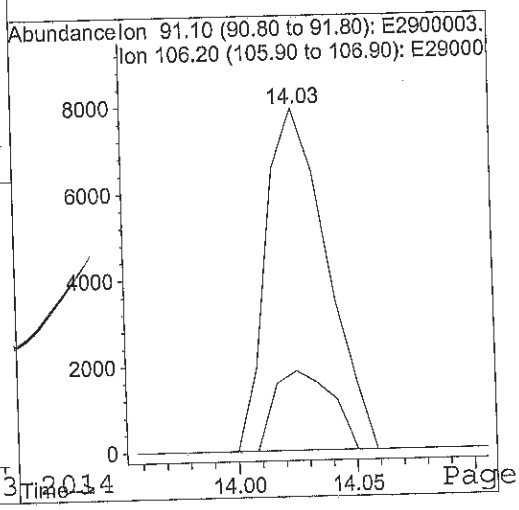


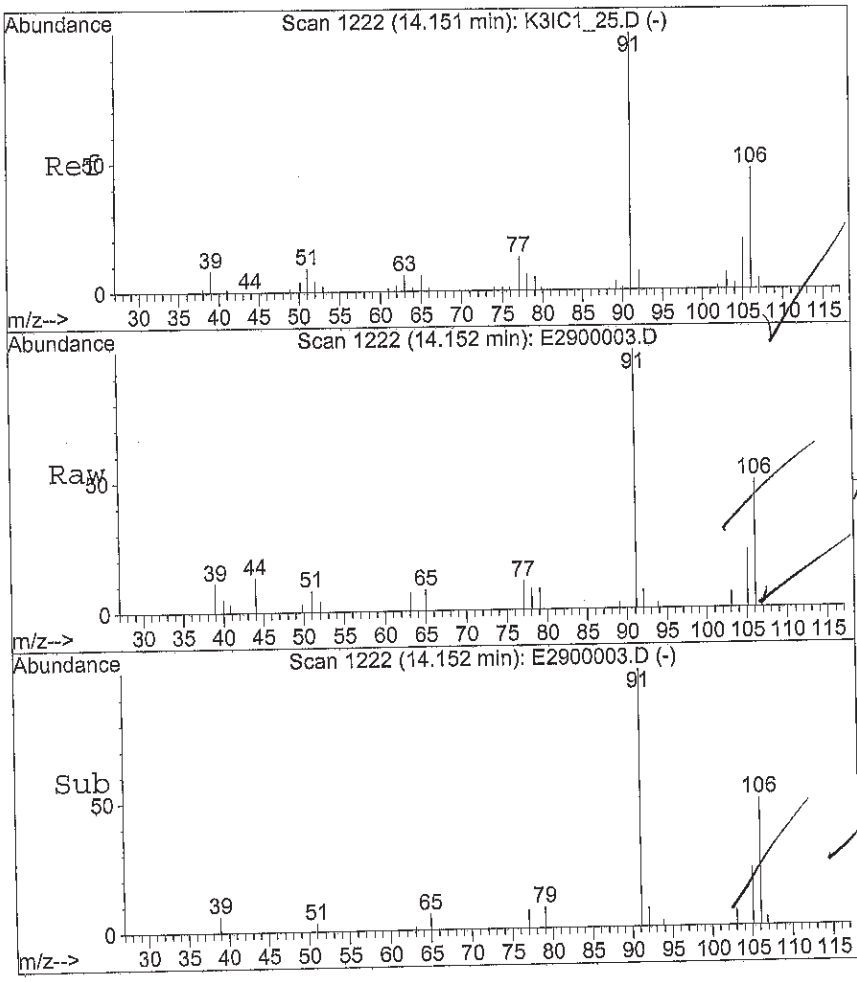


#51
Ethylbenzene
Concen: 0.74 ug/L
RT: 14.03 min Scan# 1207
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 91 Resp: 14143

Ion	Ratio	Lower	Upper
91	100		
106	22.0	23.5	35.3#

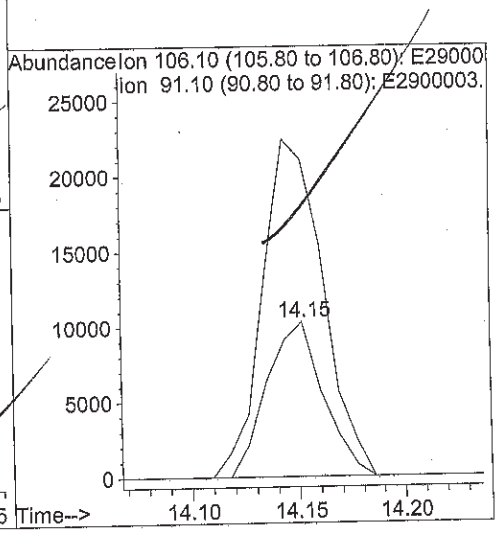


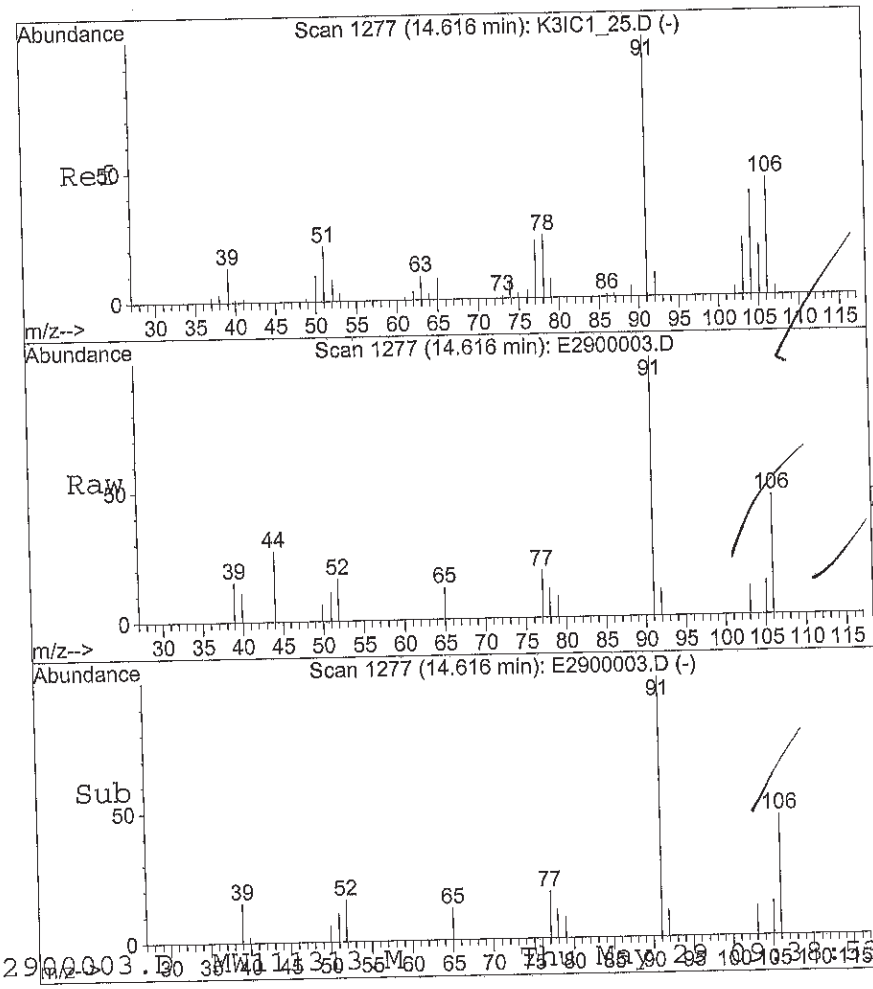


#52
m,p-Xylenes
Concen: 2.78 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion:106 Resp: 18774

Ion	Ratio	Lower	Upper
106	100		
91	233.7	177.1	265.7

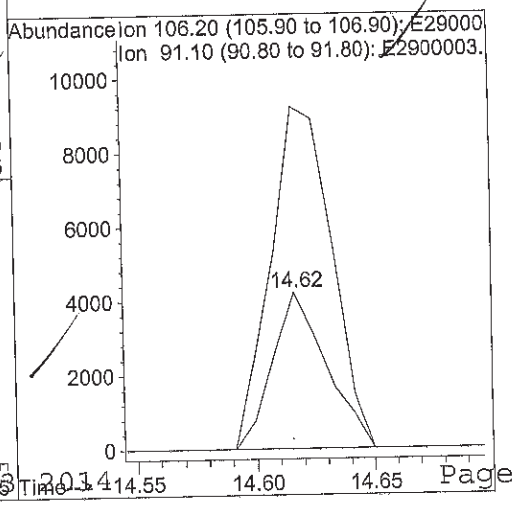


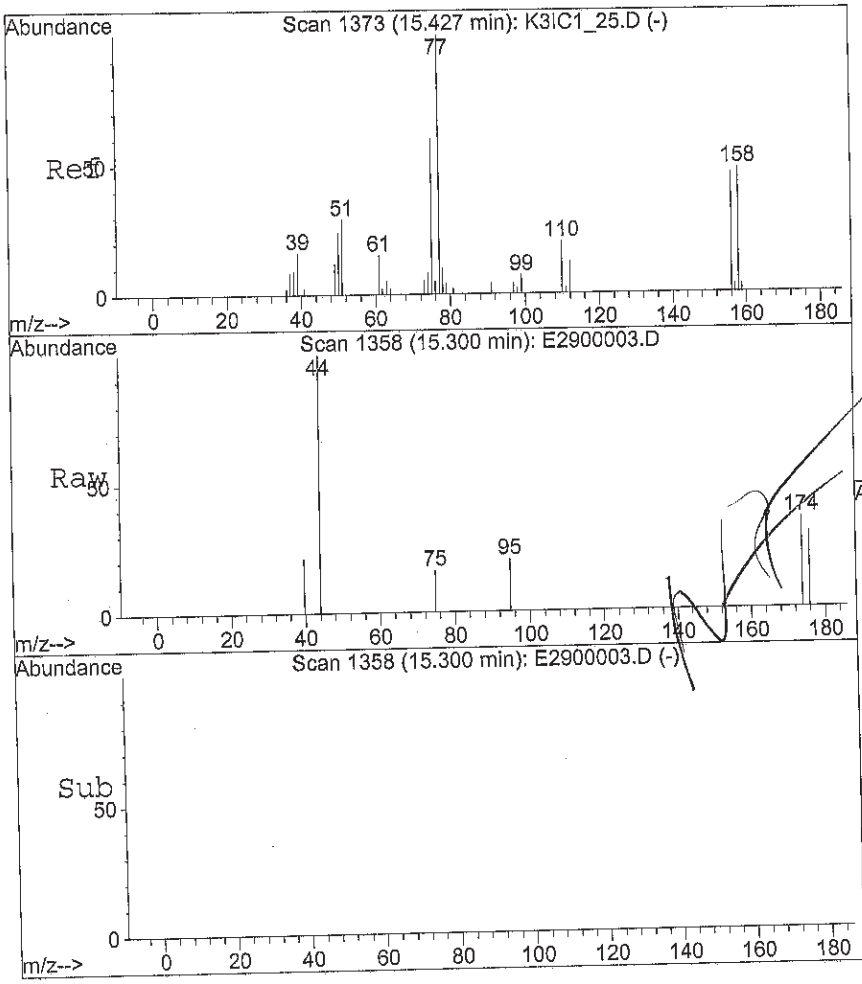


#53
o-Xylene
Concen: 1.00 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion:106 Resp: 6648

Ion	Ratio	Lower	Upper
106	100		
91	248.8	179.0	268.6

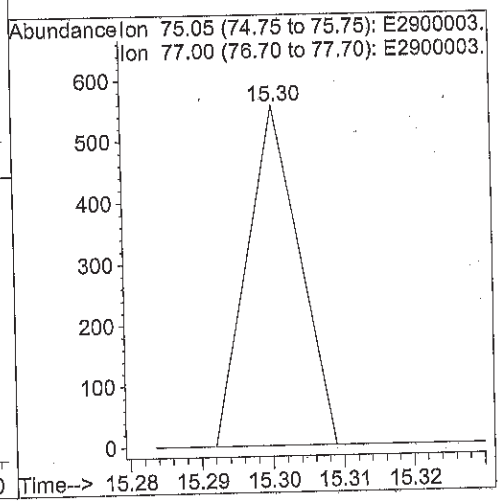


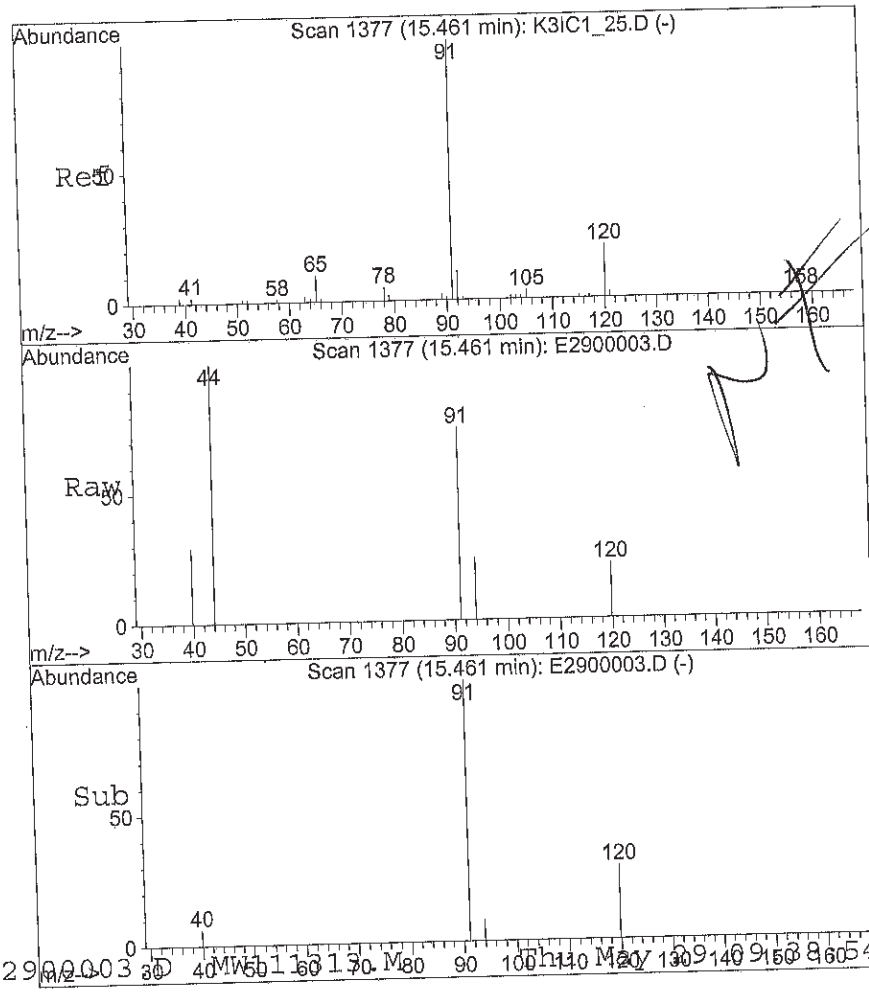


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.30 min Scan# 1358
Delta R.T. -0.13 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 75 Resp: 282

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

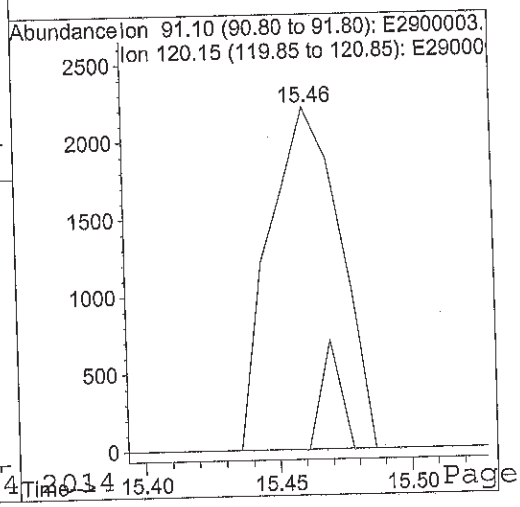


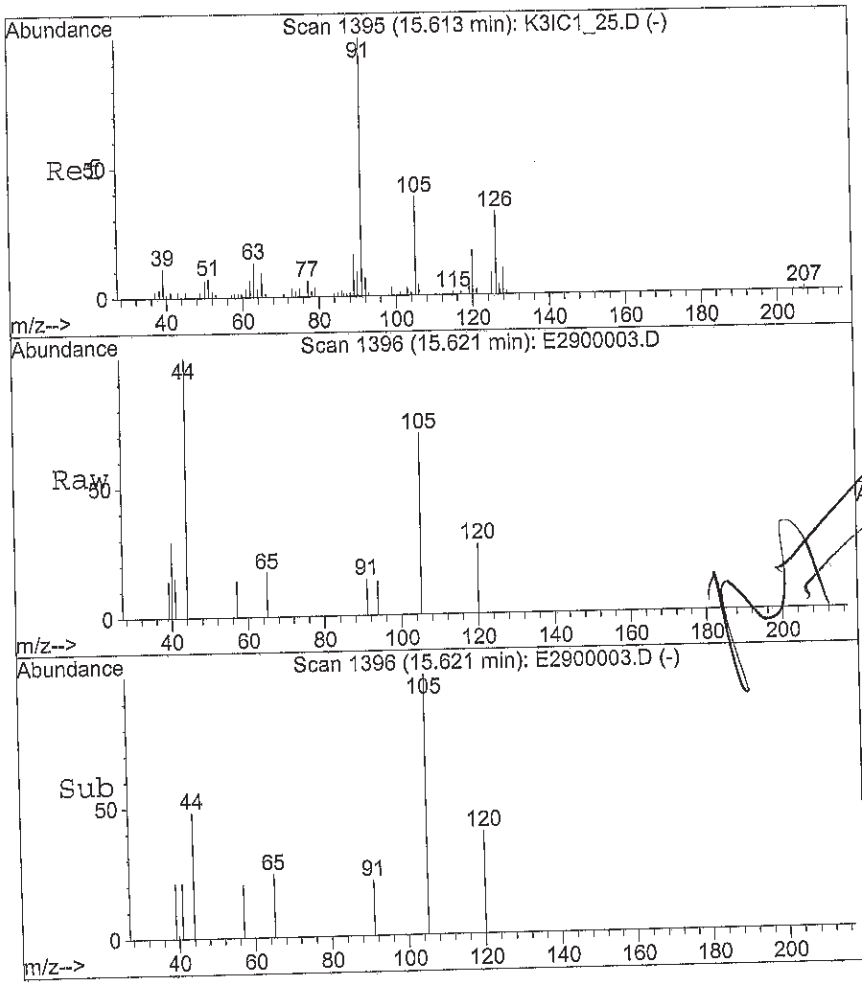


#62
n-Propylbenzene
Concen: 0.15 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 91 Resp: 4077

Ion	Ratio	Lower	Upper
91	100		
120	8.7	16.1	24.1#

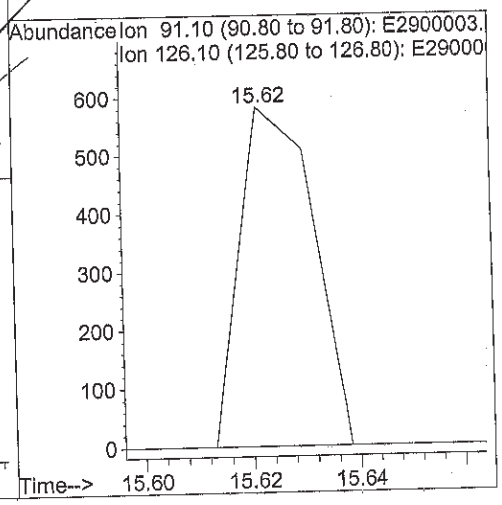


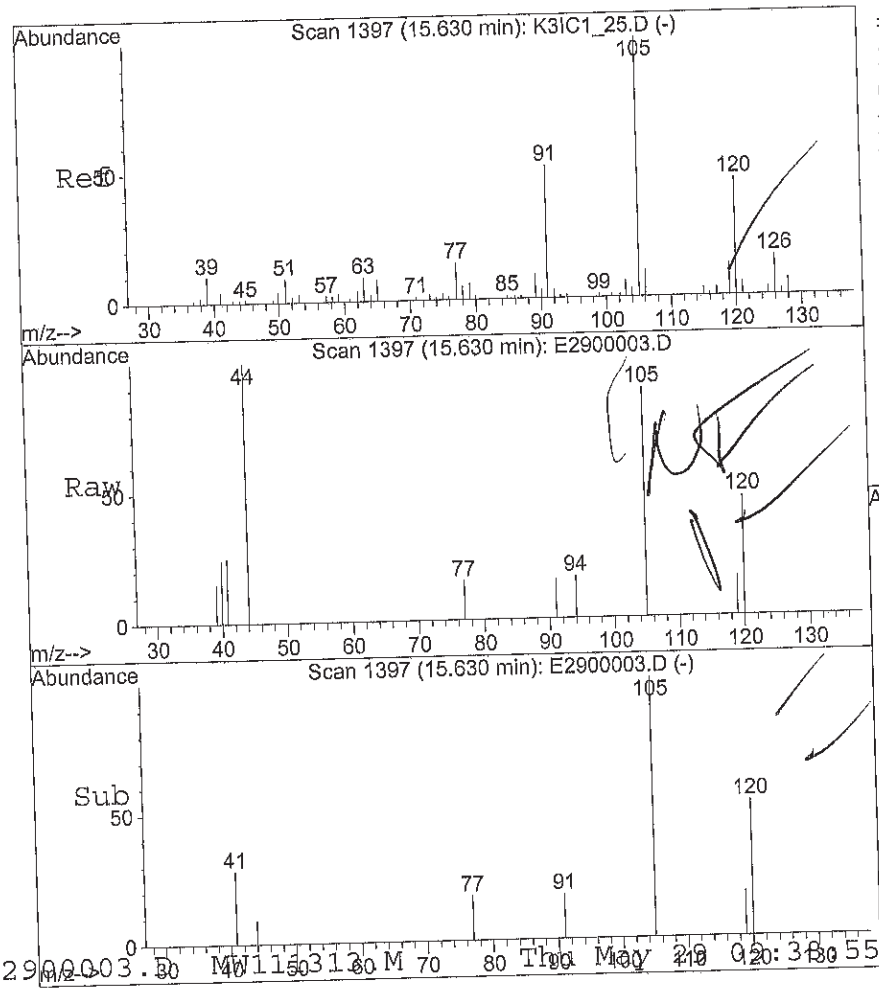


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. 0.01 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 91 Resp: 553

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

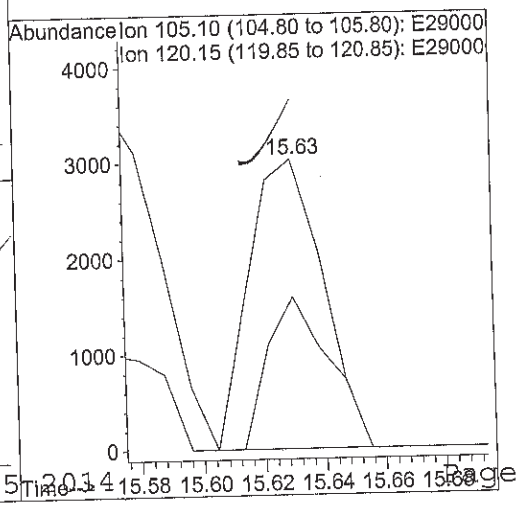


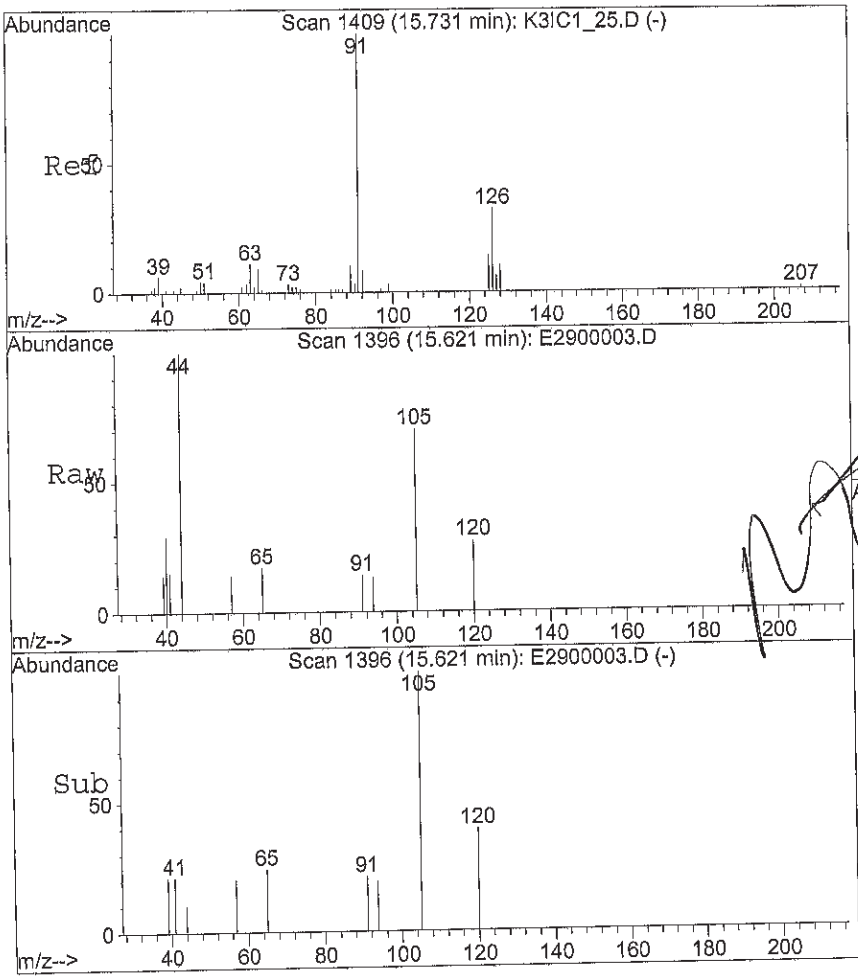


#64
1,3,5-Trimethylbenzene
Concen: 0.30 ug/L
RT: 15.63 min Scan# 1397
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion:105 Resp: 5088

Ion	Ratio	Lower	Upper
105	100		
120	44.3	36.4	54.6

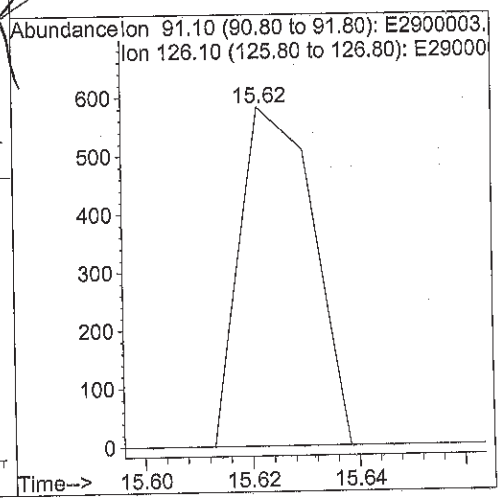


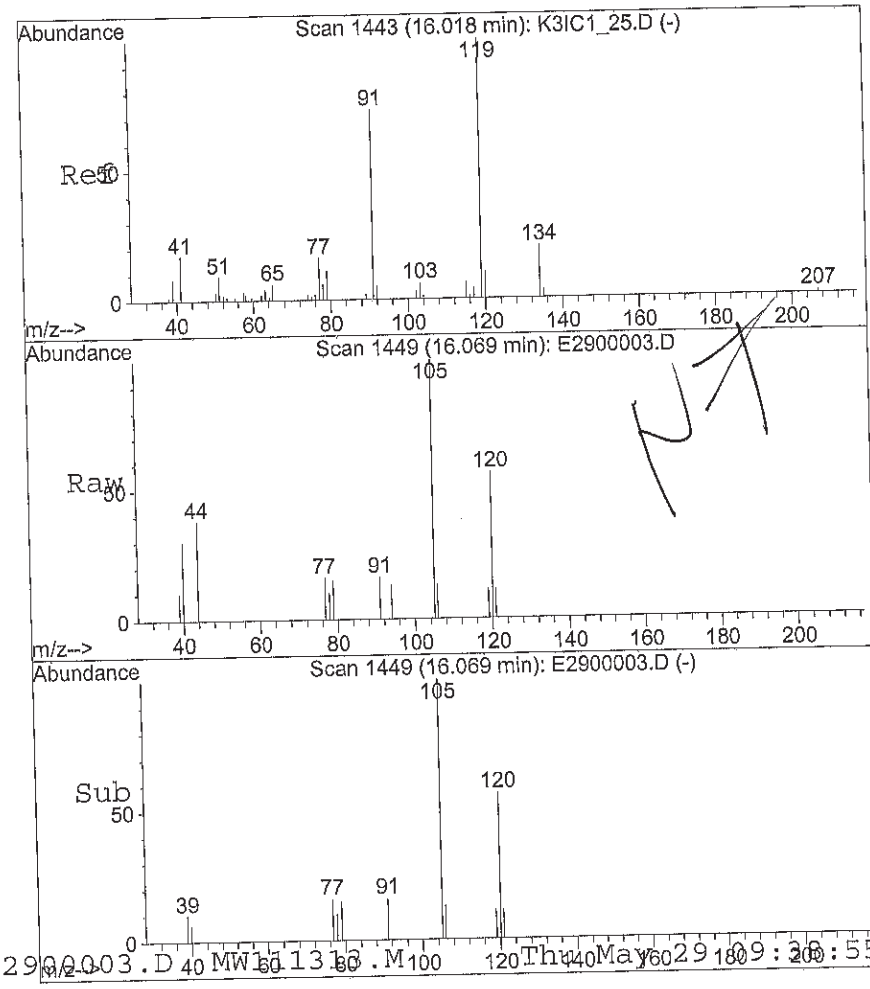


#65
4-Chlorotoluene
Concen: 0.04 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.11 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 91 Resp: 553

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

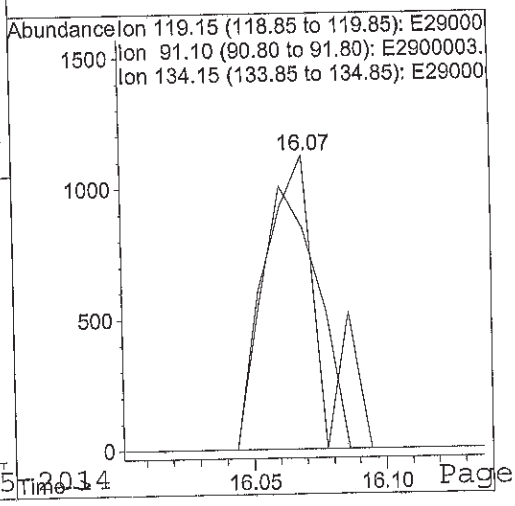


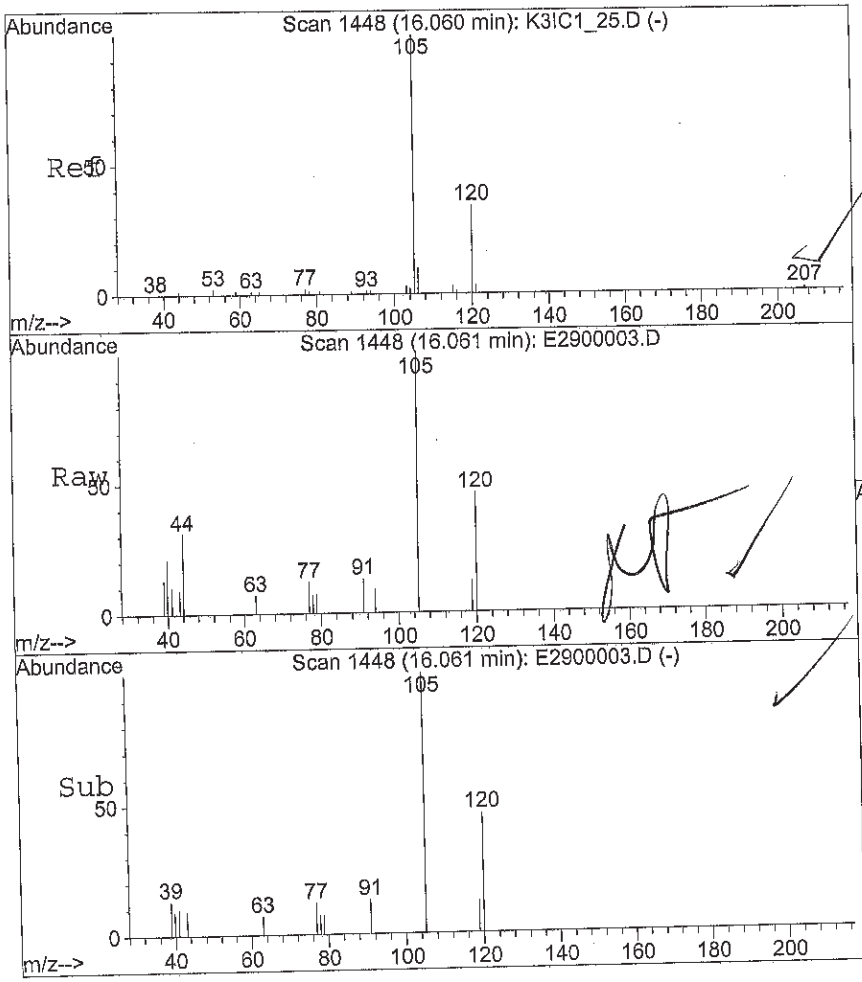


#66
tert-Butylbenzene
Concen: 0.11 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.05 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion:119 Resp: 1609

Ion	Ratio	Lower	Upper
119	100		
91	92.1	56.3	84.5#
134	0.0	16.1	24.1#

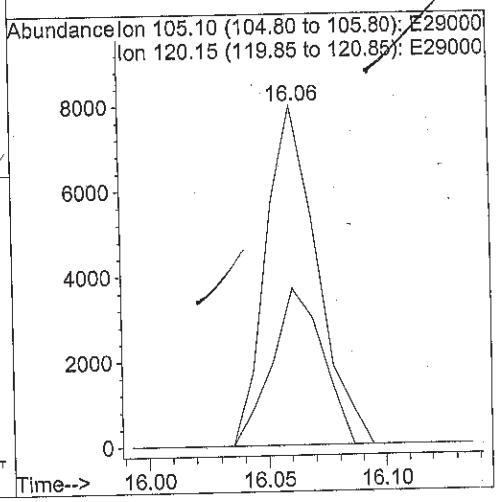


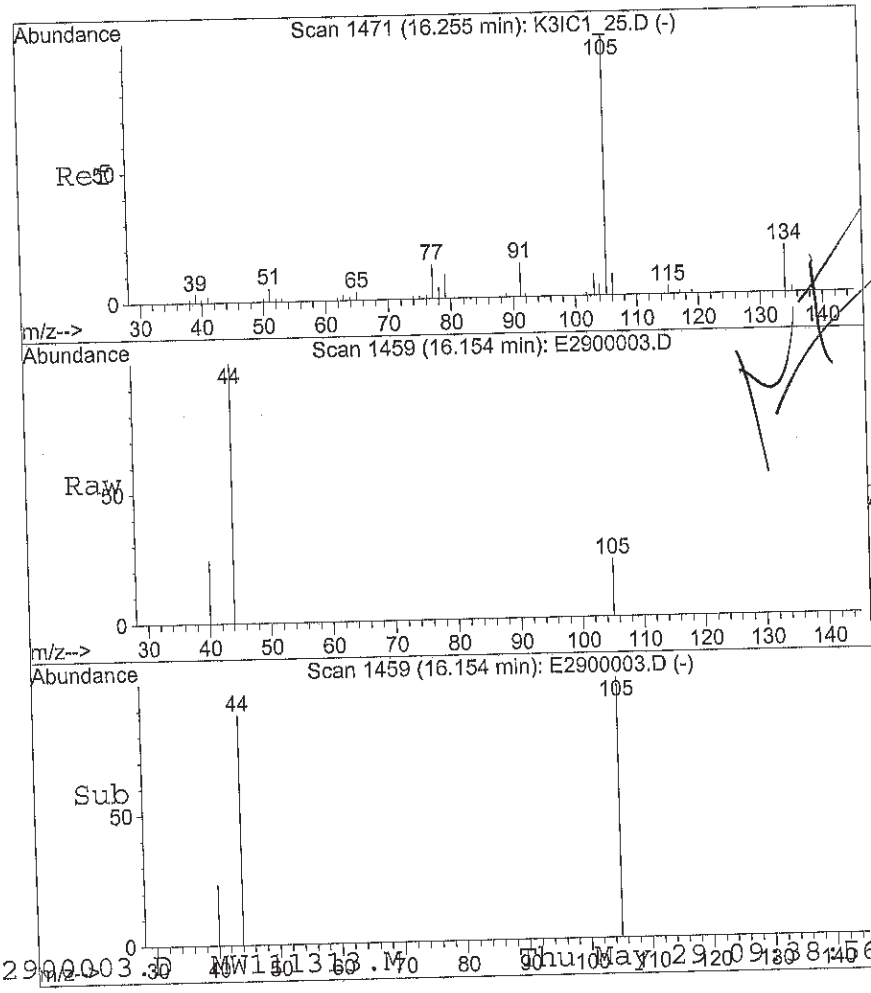


#67
1,2,4-Trimethylbenzene
Concen: 0.68 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion:105 Resp: 11902

Ion	Ratio	Lower	Upper
105	100		
120	46.0	33.8	50.8

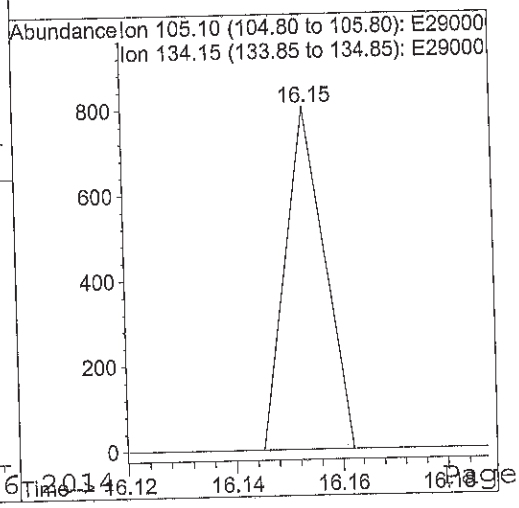


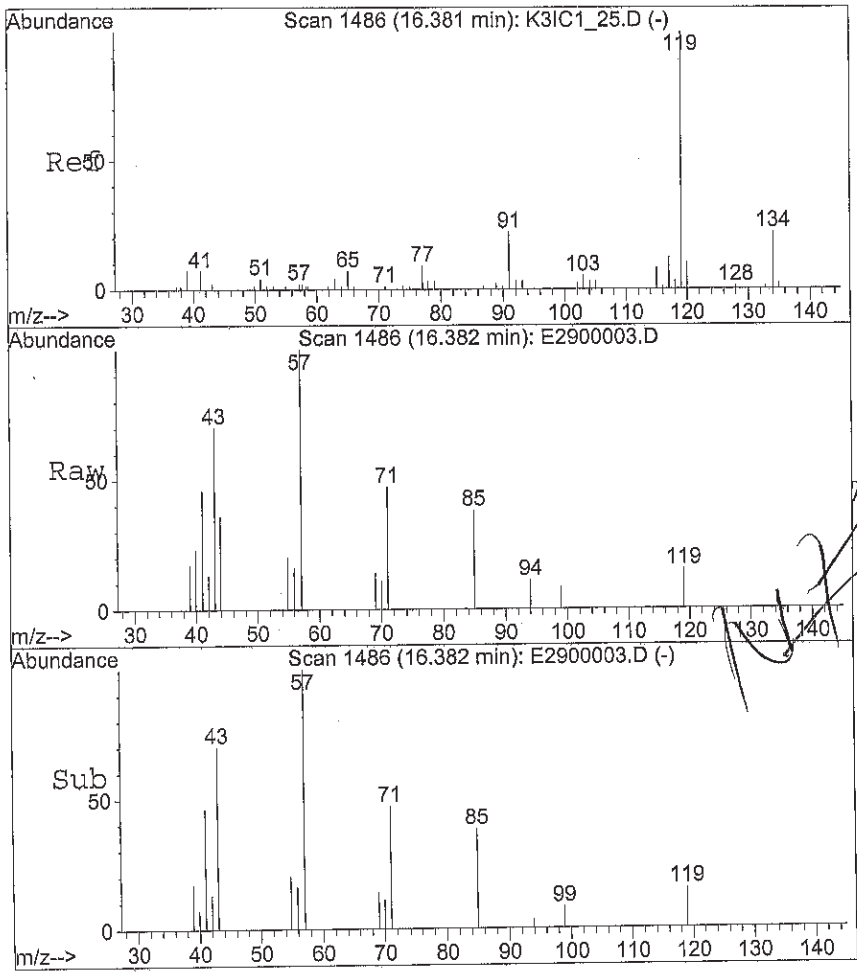


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.15 min Scan# 1459
Delta R.T. -0.10 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion:105 Resp: 406

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

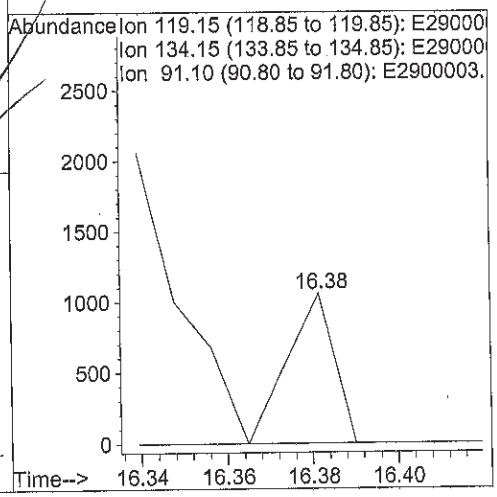


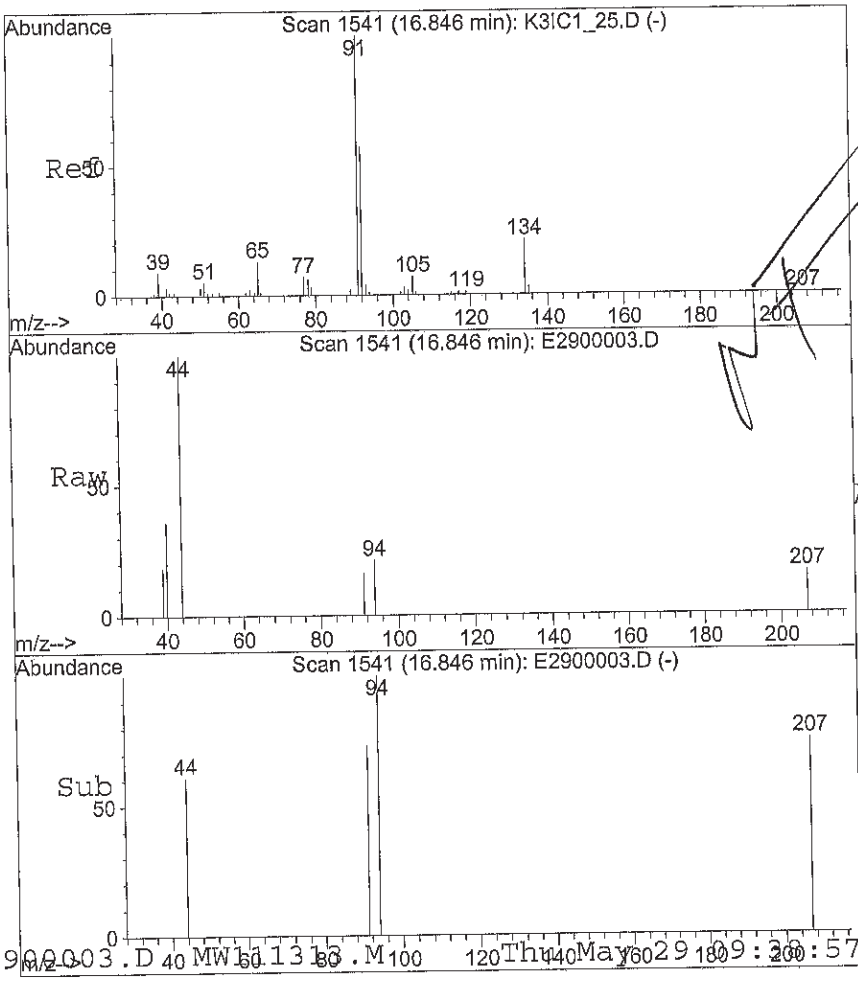


#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion:119 Resp: 805

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

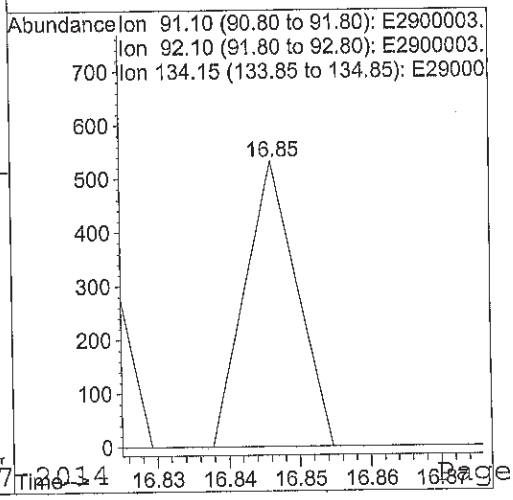




#72
n-Butylbenzene
Concen: 0.01 ug/L
RT: 16.85 min Scan# 1541
Delta R.T. 0.00 min
Lab File: E2900003.D
Acq: 29 May 2014 9:15 am

Tgt Ion: 91 Resp: 269

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900003.D Vial: 2
Acq On : 29 May 2014 9:15 am Operator: DN
Sample : 34E2901-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 9:38 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1515026	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1225648	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.52	152	671159	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	431751	10.96 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.68%		
3) Chloroform-d (SU6)	9.19	84	668409	11.82 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.56%		
4) Methylene Chloride-d2 (SU5	7.06	86	373952	11.32 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.56%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	429929	15.97 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 127.76%#		
6) Benzene-d6 (SU7)	9.93	84	1311525	11.03 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.24%		
8) Toluene-d8 (SU3)	12.21	98	1337766	11.50 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.00%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	678795	14.14 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 113.12%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

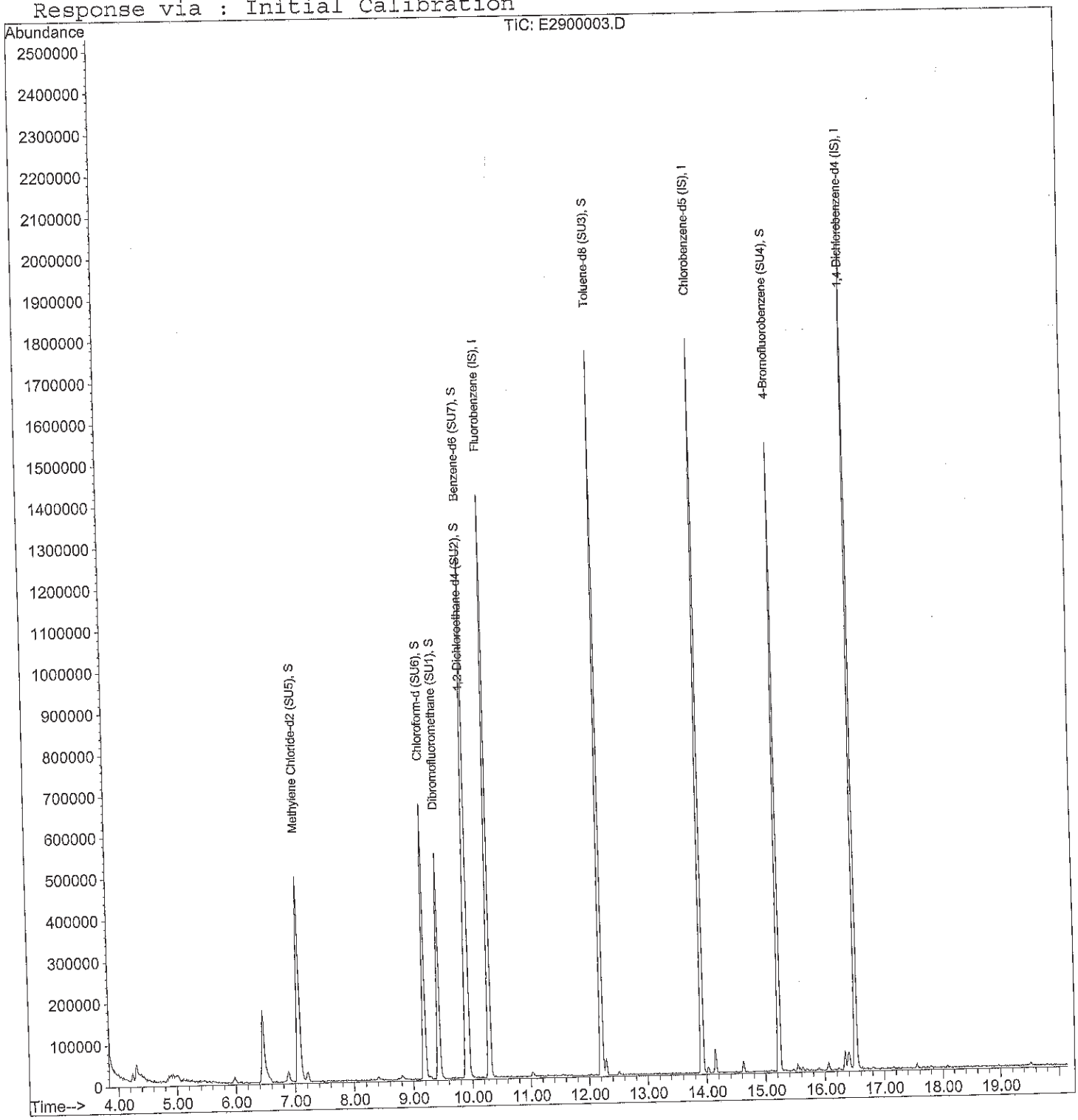
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900003.D
Acq On : 29 May 2014 9:15 am
Sample : 34E2901-DUP1
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: May 29 9:38 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION LABORATORY CONTROL SAMPLES

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS01.D
Acq On : 29 May 2014 6:38 am
Sample : 34E2901-BS1
Misc : 20cc 1.25/2.5/12.5 ug/L LCS
MS Integration Params: rteint.p
Quant Time: May 29 7:09 19114

Vial: 10
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1513544	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.93	117	1118075	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	552768	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.45	113	442129	11.71 ug/L	0.03
Spiked Amount 12.500 Range 75 - 125 Recovery = 93.68%					
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	431806	12.03 ug/L	0.02
Spiked Amount 12.500 Range 75 - 125 Recovery = 96.24%					
39) Toluene-d8 (SU3)	12.22	98	1317186	12.63 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 101.04%					
58) 4-Bromofluorobenzene (SU4)	15.23	95	594028	12.99 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 103.92%					
Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	52971	1.43 ug/L	94
4) Chloromethane	4.48	50	34284	1.23 ug/L	99
5) Vinyl Chloride	4.60	62	31751	1.19 ug/L	75
6) Bromomethane	5.13	96	24516	1.29 ug/L #	56
7) Chloroethane	5.28	64	14482	1.23 ug/L	63
8) (F11) Trichlorofluorometha	5.68	101	60235	1.45 ug/L	95
9) (F113) 1,1,2-Trichloro-tri	6.37	151	39693	1.33 ug/L	99
10) 1,1-Dichloroethene	6.45	96	51104	1.43 ug/L	97
11) Acetone	6.48	58	33396	-12.50 ug/L #	60
12) (IPA) Leak Check Compound	6.55	45	263139	144.68 ug/L #	95
13) Carbon disulfide	6.87	76	154184	1.23 ug/L	95
14) Methylene Chloride	7.12	84	55307	1.33 ug/L	93
15) (TBA) tert-Butanol	7.11	59	9416	3.65 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.42	73	123085	1.44 ug/L	98
17) trans-1,2-Dichloroethene	7.50	96	54145	1.33 ug/L	92
18) 1,1-Dichloroethane	8.09	63	73933	1.09 ug/L	100
19) cis-1,2-Dichloroethene	8.85	96	58076	1.23 ug/L	92
21) (MEK) 2-Butanone	8.80	72	9848	2.31 ug/L #	53
22) (DIPE) Diisopropyl Ether	8.02	45	162808	1.38 ug/L	98
23) Bromochloromethane	9.18	128	22368	1.10 ug/L #	83
24) Chloroform	9.23	83	95140	1.20 ug/L	98
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	113135	1.03 ug/L #	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS01.D Vial: 10
Acq On : 29 May 2014 6:38 am Operator: DN
Sample : 34E2901-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 7:09 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26) 1,1,1-Trichloroethane	9.51	97	72030	1.15 ug/L	94
27) (TAME) tert-Amyl methyl et	10.01	73	105240	1.11 ug/L	95
29) 1,1-Dichloropropene	9.70	75	71076	1.22 ug/L	98
30) Carbon Tetrachloride	13.90	117	57676	1.13 ug/L	94
31) Benzene	10.00	78	181266	1.27 ug/L #	93
32) 1,2-Dichloroethane	10.00	62	63816	1.27 ug/L	96
33) Trichloroethene	10.75	130	60820	1.32 ug/L	95
34) 1,2-Dichloropropane	11.06	63	47056	1.38 ug/L #	83
35) Dibromomethane	11.22	93	36600	1.38 ug/L	97
36) Bromodichloromethane	11.36	83	62133	1.16 ug/L	98
37) cis-1,3-Dichloropropene	11.88	75	62445	1.07 ug/L	93
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	26965	1.21 ug/L #	100
41) Toluene	12.30	91	190640	1.25 ug/L	98
42) trans-1,3-Dichloropropene	12.51	75	48831	0.97 ug/L	72
43) 1,1,2-Trichloroethane	12.77	83	40463	1.47 ug/L	92
44) Tetrachloroethene	12.95	164	60156	1.12 ug/L	96
45) 1,3-Dichloropropane	12.98	76	70028	1.34 ug/L	98
46) 2-Hexanone	12.99	43	65174	2.66 ug/L #	97
47) Dibromochloromethane	13.26	129	48637	1.24 ug/L #	94
48) 1,2-Dibromoethane	13.43	107	52563	1.48 ug/L	98
49) Chlorobenzene	13.97	112	134834	1.31 ug/L	98
50) 1,1,1,2-Tetrachloroethane	14.02	131	44351	1.21 ug/L	98
51) Ethylbenzene	14.03	91	224569	1.30 ug/L	98
52) m,p-Xylenes	14.15	106	163446	2.65 ug/L	99
53) o-Xylene	14.62	106	84402	1.39 ug/L	94
54) Styrene	14.63	104	130975	1.49 ug/L	98
55) Bromoform	14.92	173	31266	1.40 ug/L #	94
56) Isopropylbenzene	15.01	105	219944	1.32 ug/L	99
57) 1,2,3-Trichloropropane	15.43	75	80960	1.78 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	65580	1.65 ug/L	99
61) Bromobenzene	15.44	156	57939	1.33 ug/L	97
62) n-Propylbenzene	15.47	91	289508	1.30 ug/L	97
63) 2-Chlorotoluene	15.62	91	182936	1.33 ug/L	97
64) 1,3,5-Trimethylbenzene	15.64	105	178716	1.30 ug/L	99
65) 4-Chlorotoluene	15.73	91	173225	1.36 ug/L	100
66) tert-Butylbenzene	16.02	119	148634	1.27 ug/L	94
67) 1,2,4-Trimethylbenzene	16.07	105	192356	1.34 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS01.D Vial: 10
Acq On : 29 May 2014 6:38 am Operator: DN
Sample : 34E2901-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 7:09 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) sec-Butylbenzene	16.25	105	248773	1.34 ug/L	99
69) p-Isopropyltoluene	16.39	119	190518	1.26 ug/L	97
70) 1,3-Dichlorobenzene	16.45	146	108623	1.33 ug/L	99
71) 1,4-Dichlorobenzene	16.54	146	110235	1.35 ug/L	97
72) n-Butylbenzene	16.85	91	213125	1.34 ug/L	97
73) 1,2-Dichlorobenzene	17.00	146	101232	1.39 ug/L	98
74) 1,2-Dibromo-3-chloropropan	17.94	75	13505	2.17 ug/L #	57
75) 1,2,4-Trichlorobenzene	19.04	180	67554	1.37 ug/L	96
76) Hexachlorobutadiene	19.21	225	30858	1.39 ug/L	98
77) Naphthalene	19.46	128	171234	1.57 ug/L	100
78) Hexachloroethane	17.30	201	21007	1.31 ug/L #	86
79) 1,2,3-Trichlorobenzene	19.83	180	60288	1.29 ug/L	98

(#) = qualifier out of range (m) = manual integration

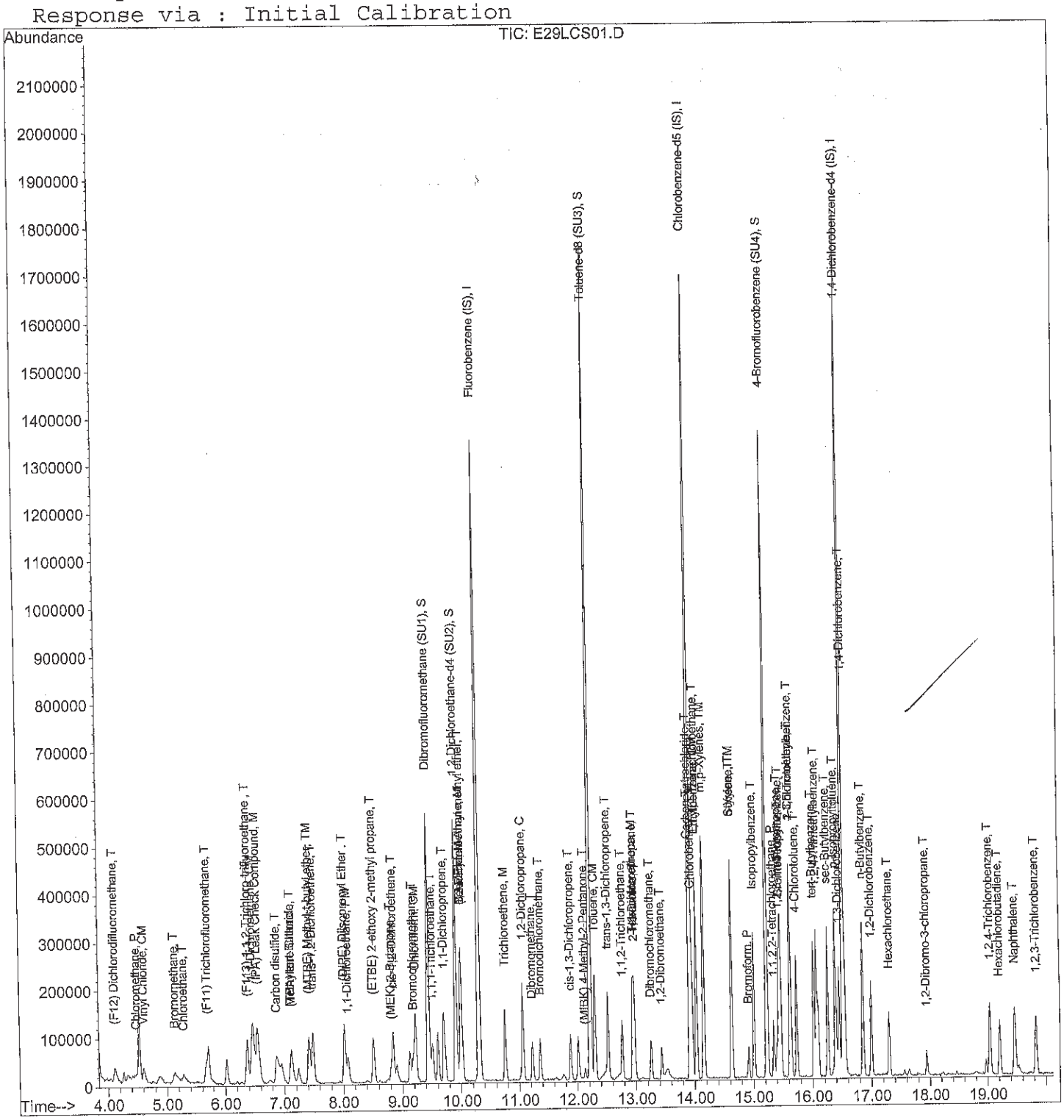
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS01.D
Acq On : 29 May 2014 6:38 am
Sample : 34E2901-BS1
Misc : 20cc 1.25/2.5/12.5 ug/L LCS
MS Integration Params: rteint.p
Quant Time: May 29 7:09 19114

Vial: 10
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION BLANK

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29BLK01.D
Acq On : 29 May 2014 7:39 am
Sample : 34E2901-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: May 29 8:01 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1637712	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1287902	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	712164	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	461987	11.31 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.48%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	440900	11.36 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.88%	
39) Toluene-d8 (SU3)	12.20	98	1438243	11.97 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.76%	
58) 4-Bromofluorobenzene (SU4)	15.23	95	718141	13.63 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	109.04%	

Target Compounds					Qvalue
4) Chloromethane	4.41	50	6366	1.10 ~~ug/L #~~ SM	54
6) Bromomethane	5.10	96	1032	-1.20 ~~ug/L #~~	1
7) Chloroethane	5.25	64	1245	1.60 ~~ug/L #~~	32
11) Acetone	6.46	58	4117	1.36 ~~ug/L #~~ T	44
12) (IPA) Leak Check Compound	6.46	45	508091	2581.83 ~~ug/L #~~ SM	82
14) Methylene Chloride	7.06	84	5401	1.20 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.14	59	274	0.98 ~~ug/L #~~ T	77
20) 2,2-Dichloropropane	8.84	77	259	0.04 ~~ug/L #~~ SM	1
22) (DIPE) Diisopropyl Ether	7.85	45	334	0.03 ~~ug/L #~~	48
24) Chloroform	9.21	83	4797	0.56 ~~ug/L #~~	18
29) 1,1-Dichloropropene	9.91	75	296	0.05 ~~ug/L #~~	1
31) Benzene	9.93	78	11166	0.72 ~~ug/L #~~	78
32) 1,2-Dichloroethane	9.92	62	5924	1.09 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7209	2.80 ~~ug/L #~~ T	100
41) Toluene	12.29	91	10430	0.59 ug/L 0.018	91
46) 2-Hexanone	13.11	43	860	0.31 ~~ug/L #~~ T	37
51) Ethylbenzene	14.02	91	1370	0.07 ~~ug/L #~~ SM	45
52) m,p-Xylenes	14.15	106	1393	0.20 ug/L #0.004	63
54) Styrene	14.64	104	1928	-0.68 ~~ug/L #~~ SM	53
56) Isopropylbenzene	15.22	105	1511	0.08 ~~ug/L #~~	1
62) n-Propylbenzene	15.46	91	1255	0.04 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.46	91	1255	0.07 ~~ug/L #~~	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29BLK01.D Vial: 11
Acq On : 29 May 2014 7:39 am Operator: DN
Sample : 34E2901-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 8:01 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

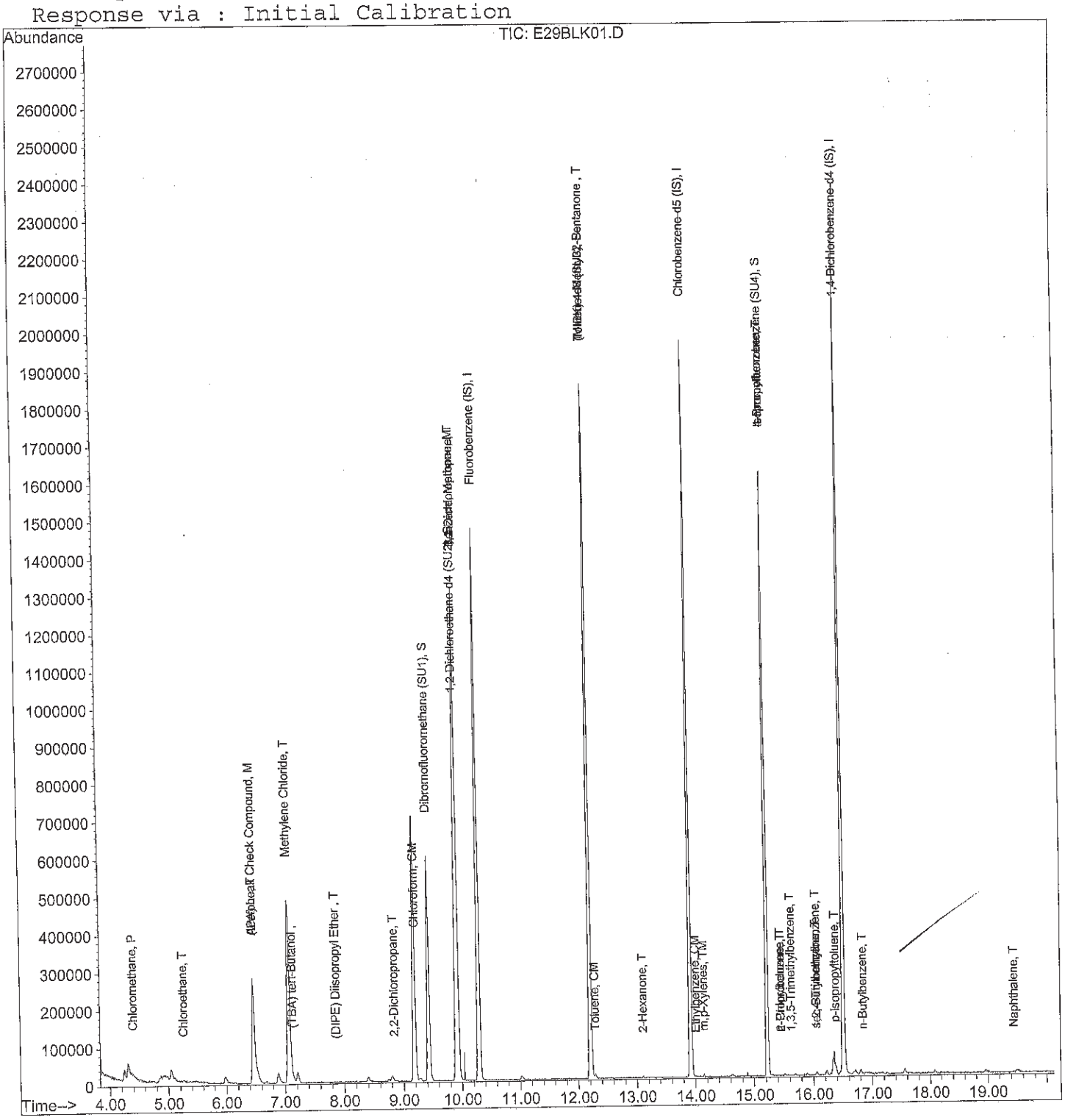
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
64)	1,3,5-Trimethylbenzene	15.63	105	1382	0.08	~~ug/L~~	# N&M	31
67)	1,2,4-Trimethylbenzene	16.06	105	5208	0.28	ug/L	# 0.0056	7
68)	sec-Butylbenzene	16.06	105	5208	0.22	~~ug/L~~	# N&M	62
69)	p-Isopropyltoluene	16.38	119	7742	0.40	~~ug/L~~	#	88
72)	n-Butylbenzene	16.85	91	354	0.02	~~ug/L~~	#	30
77)	Naphthalene	19.44	128	761	0.05	~~ug/L~~		100

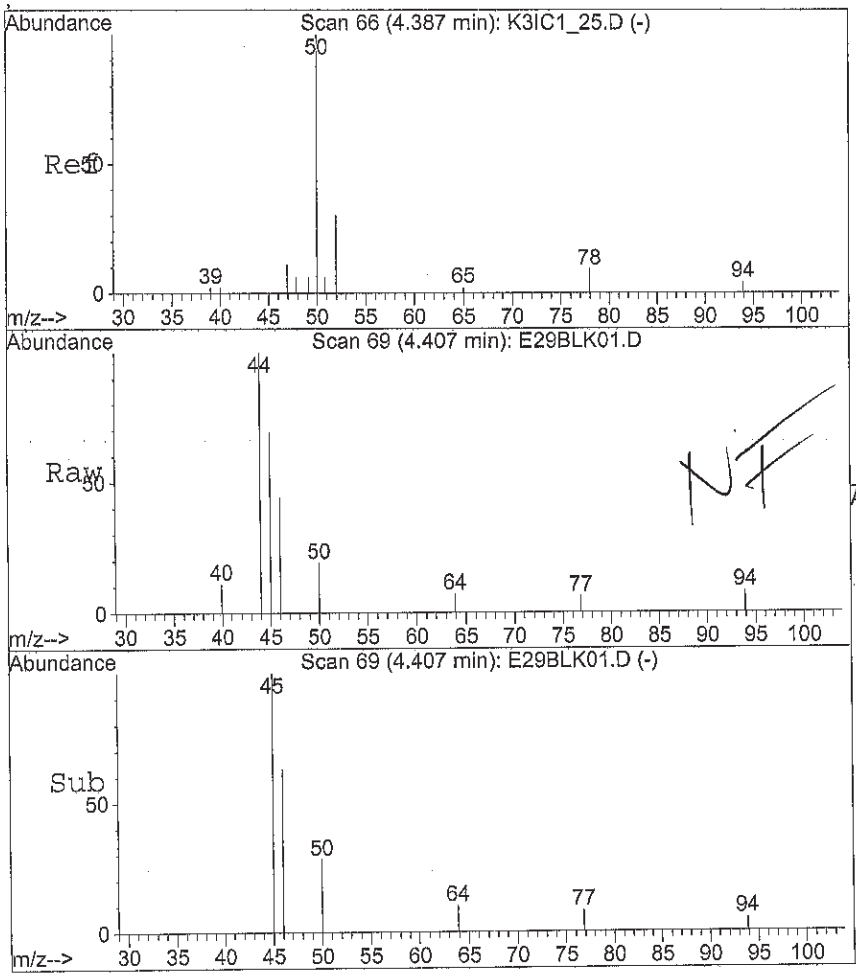
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29BLK01.D Vial: 11
Acq On : 29 May 2014 7:39 am Operator: DN
Sample : 34E2901-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 8:01 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

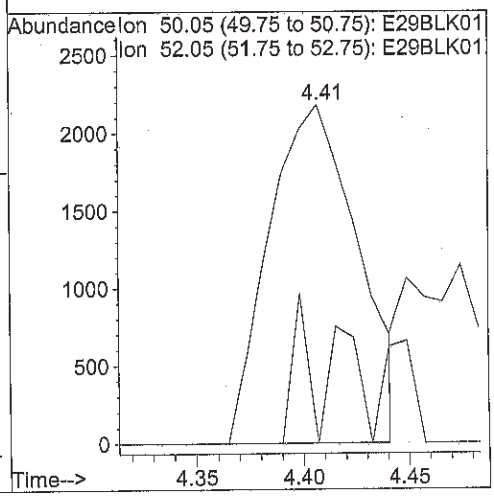


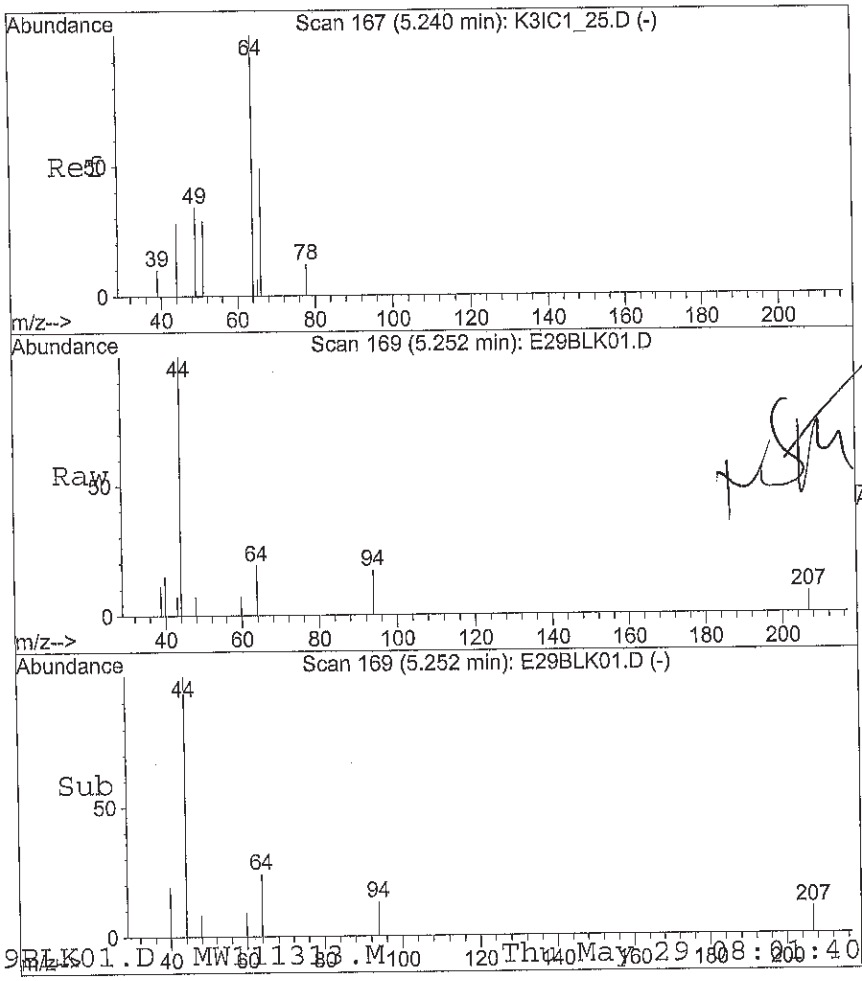


#4
Chloromethane
Concen: 1.10 ug/L
RT: 4.41 min Scan# 69
Delta R.T. 0.02 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 50 Resp: 6366

Ion	Ratio	Lower	Upper
50	100		
52	7.7	26.9	40.3#

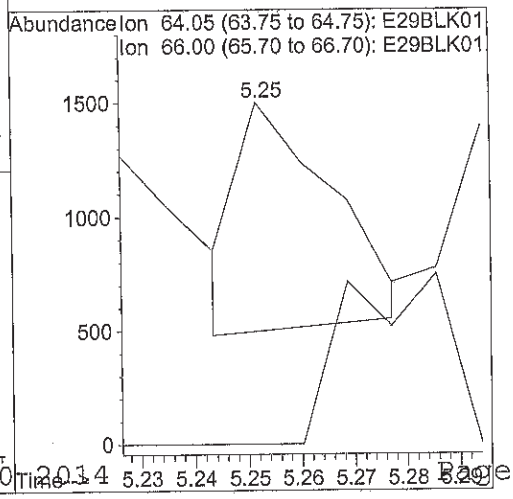


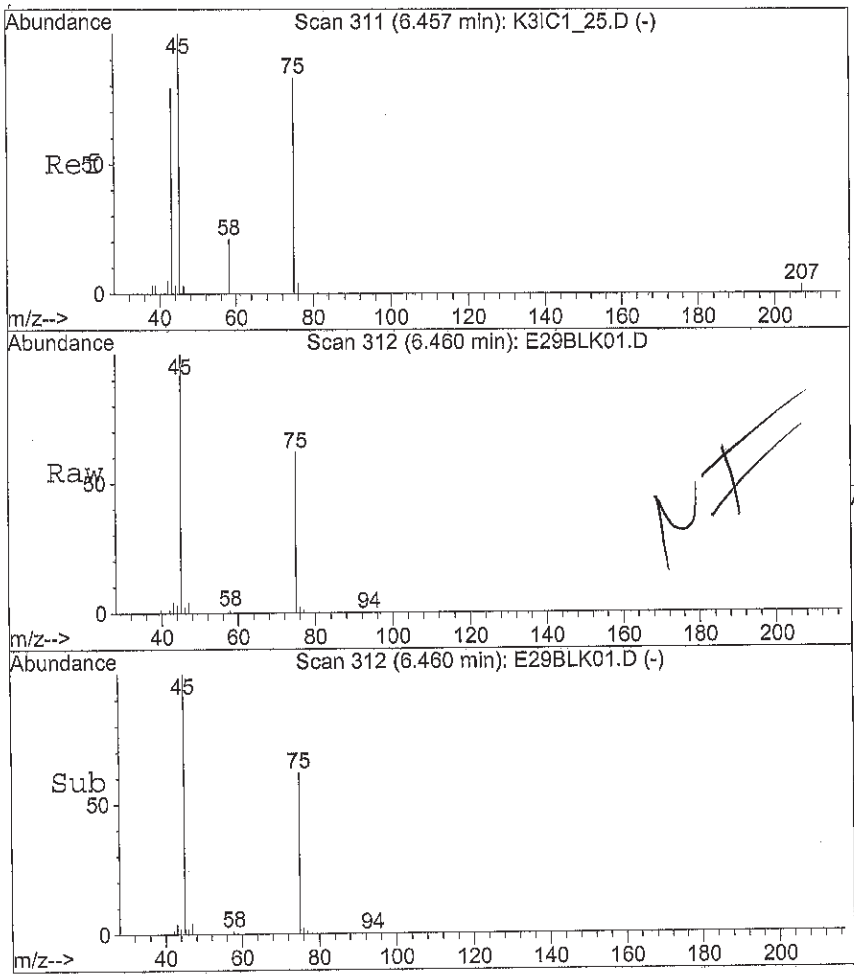


#7
Chloroethane
Concen: 1.60 ug/L
RT: 5.25 min Scan# 169
Delta R.T. 0.01 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 64 Resp: 1245

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

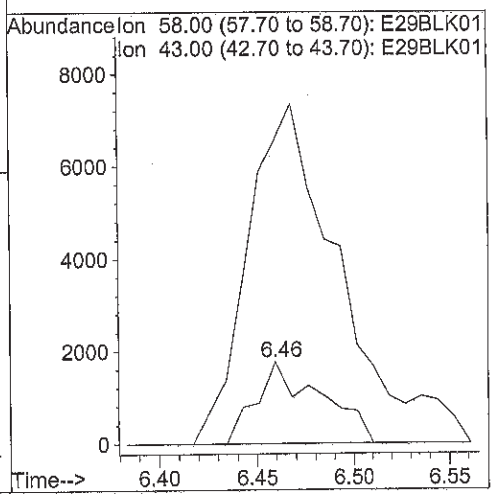


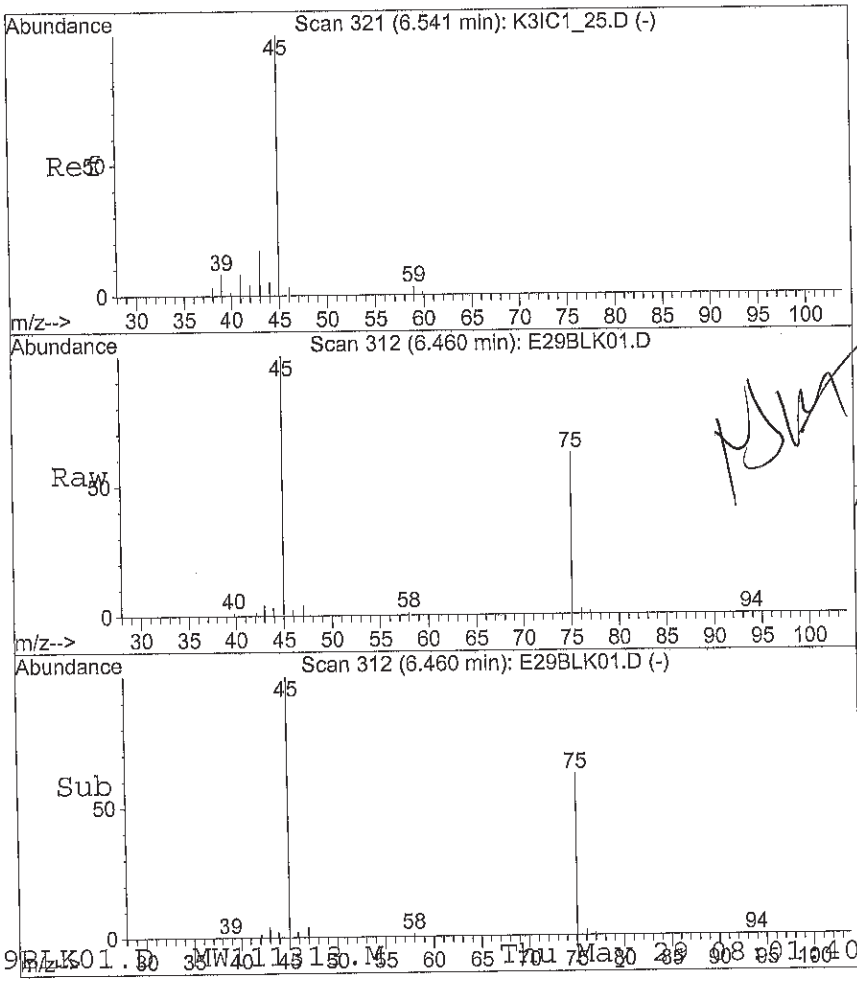


#11
Acetone
Concen: 1.36 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 58 Resp: 4117

Ion	Ratio	Lower	Upper
58	100		
43	595.5	360.9	541.3#

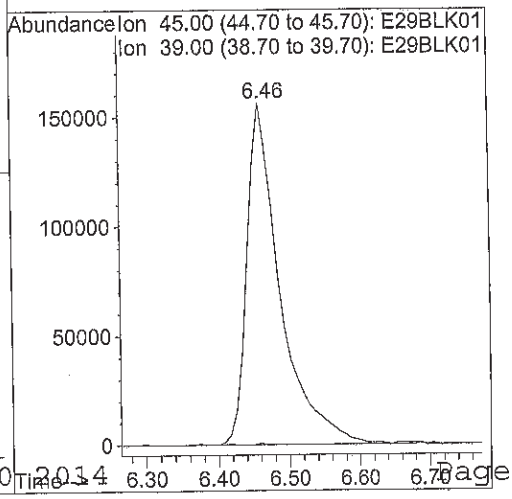


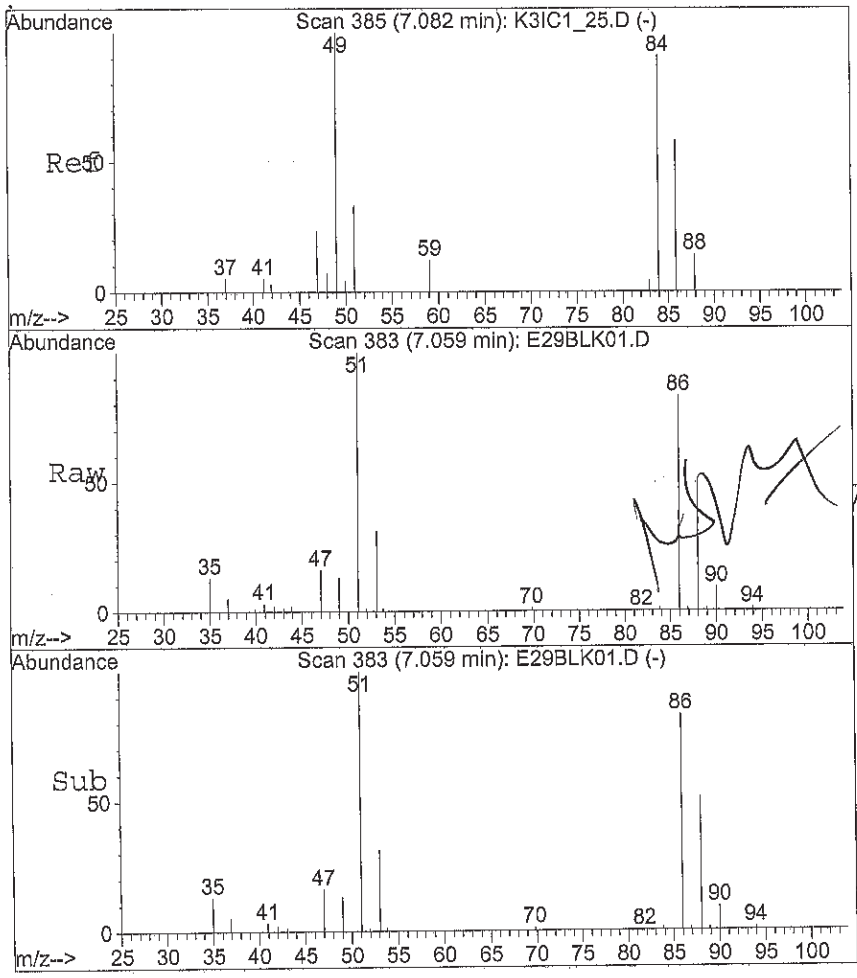


#12
(IPA) Leak Check Compound
Concen: 2581.83 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 45 Resp: 508091

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

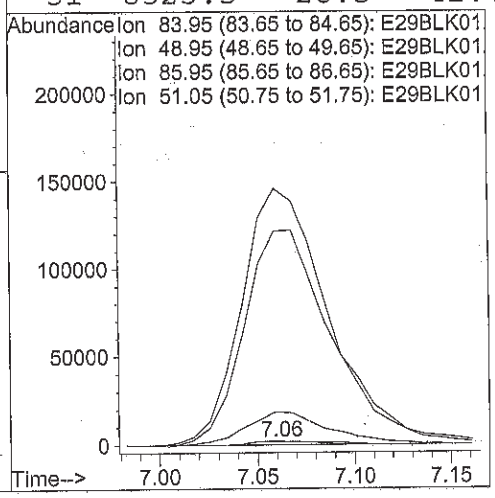


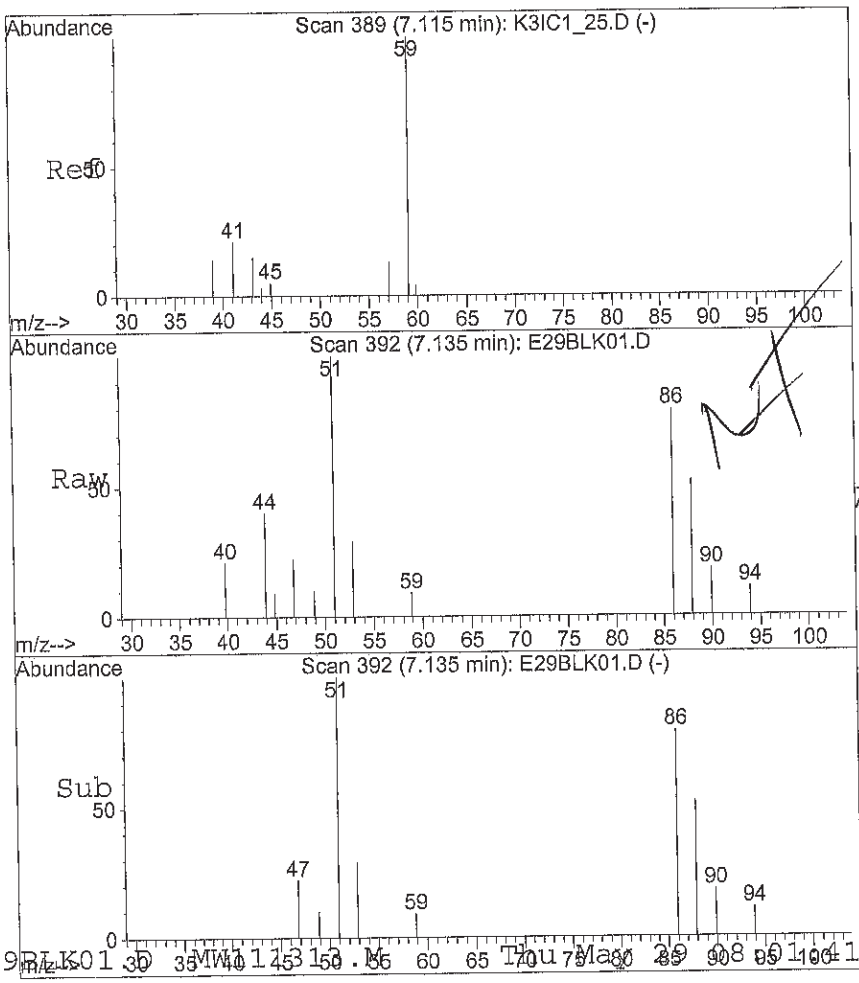


#14
Methylene Chloride
Concen: 1.20 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 84 Resp: 5401

Ion	Ratio	Lower	Upper
84	100		
49	1012.4	89.8	134.6#
86	7088.8	51.1	76.7#
51	8523.5	28.5	42.7#

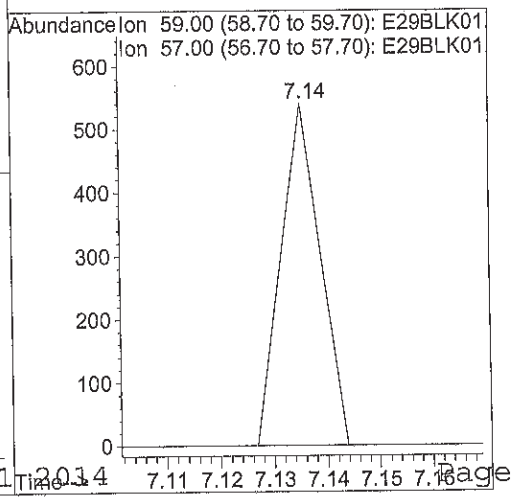


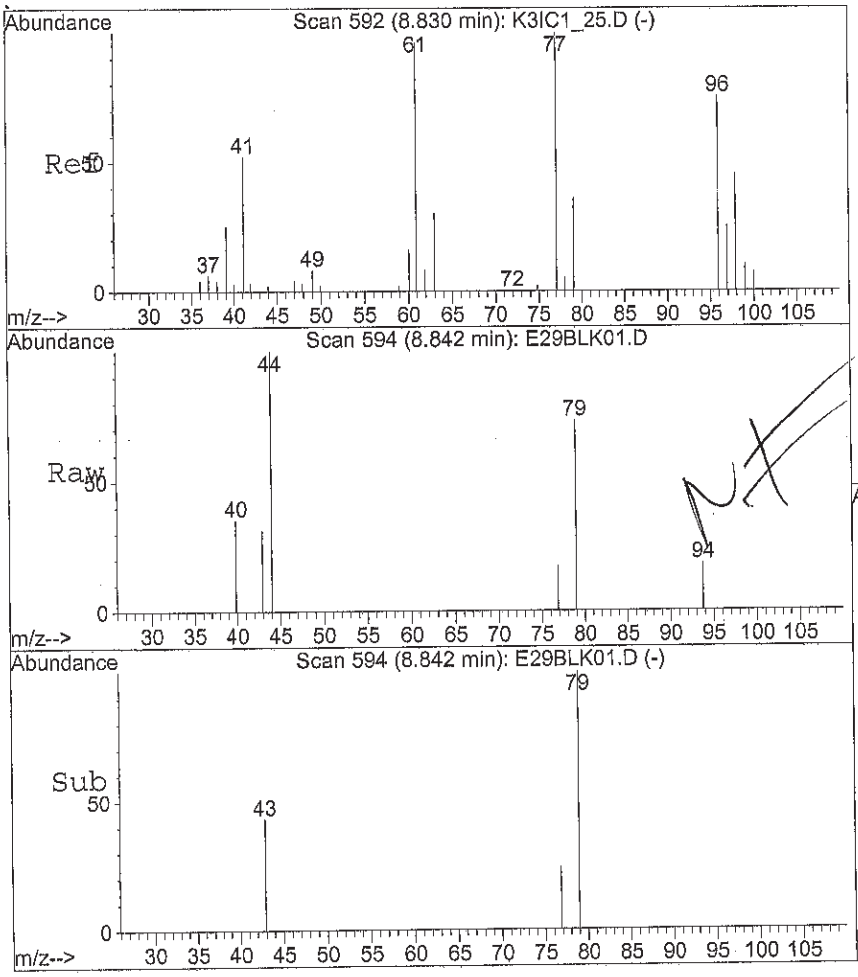


#15
(TBA) tert-Butanol
Concen: 0.98 ug/L
RT: 7.14 min Scan# 392
Delta R.T. 0.02 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 59 Resp: 274

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

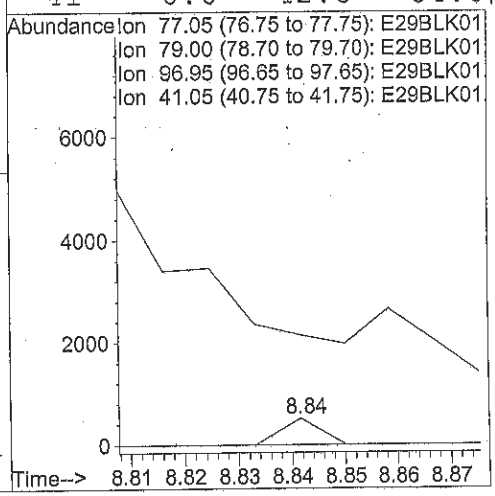


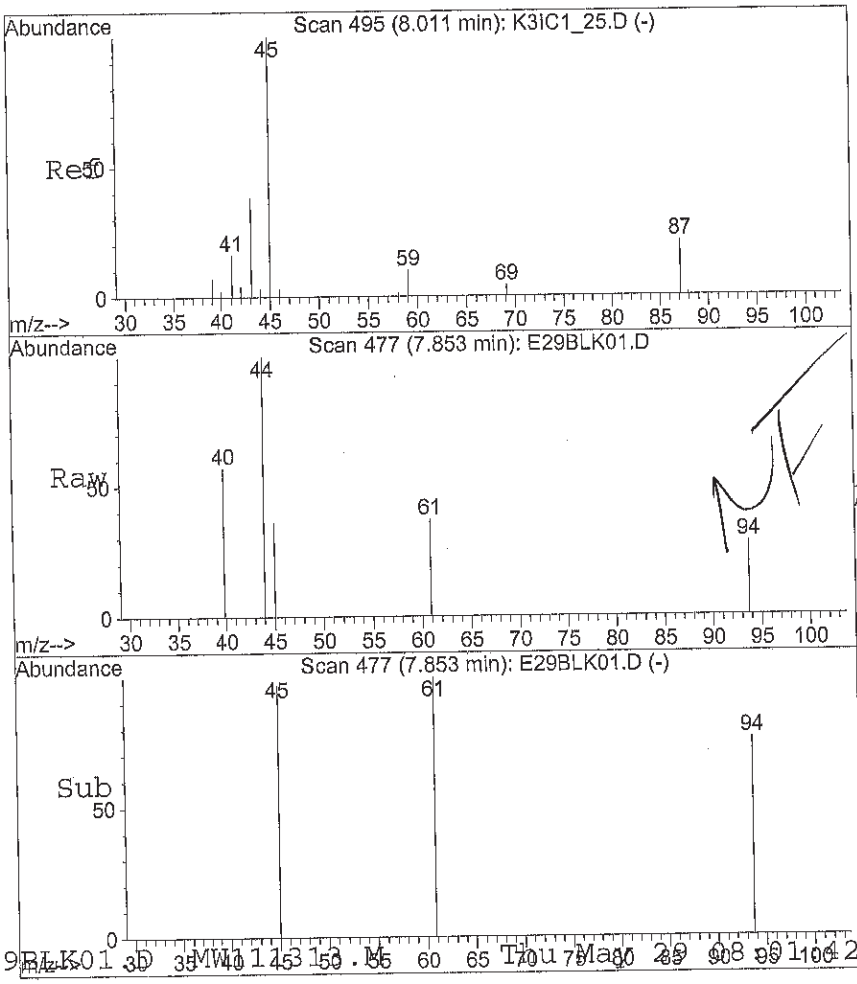


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.84 min Scan# 594
Delta R.T. 0.01 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 77 Resp: 259

Ion	Ratio	Lower	Upper
77	100		
79	1676.8	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

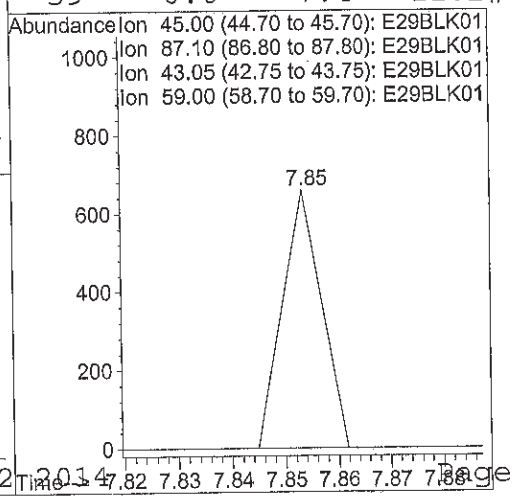


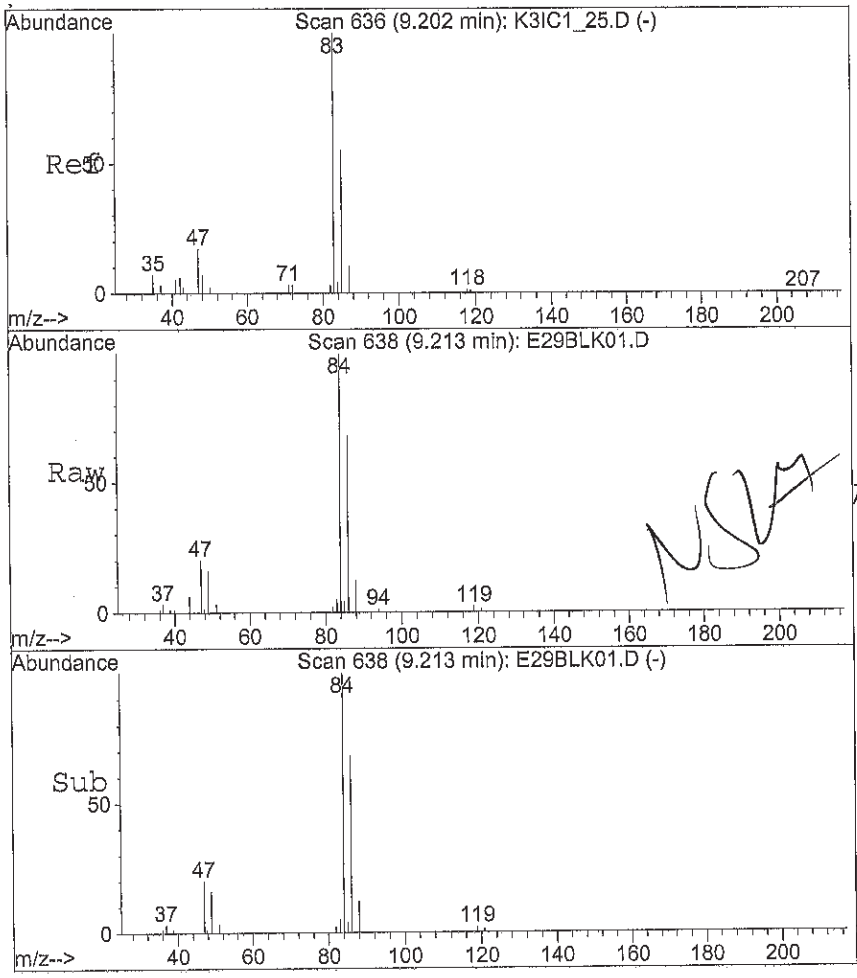


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 7.85 min Scan# 477
Delta R.T. -0.16 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 45 Resp: 334

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

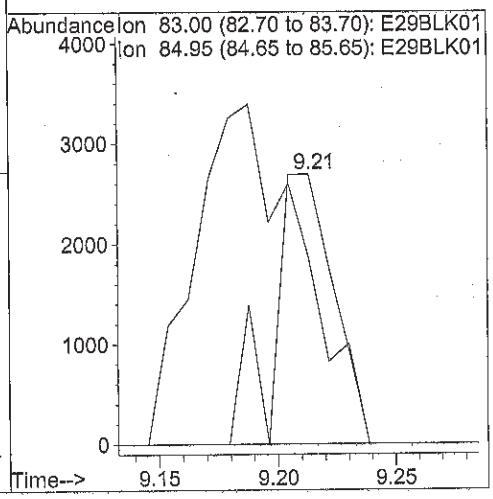


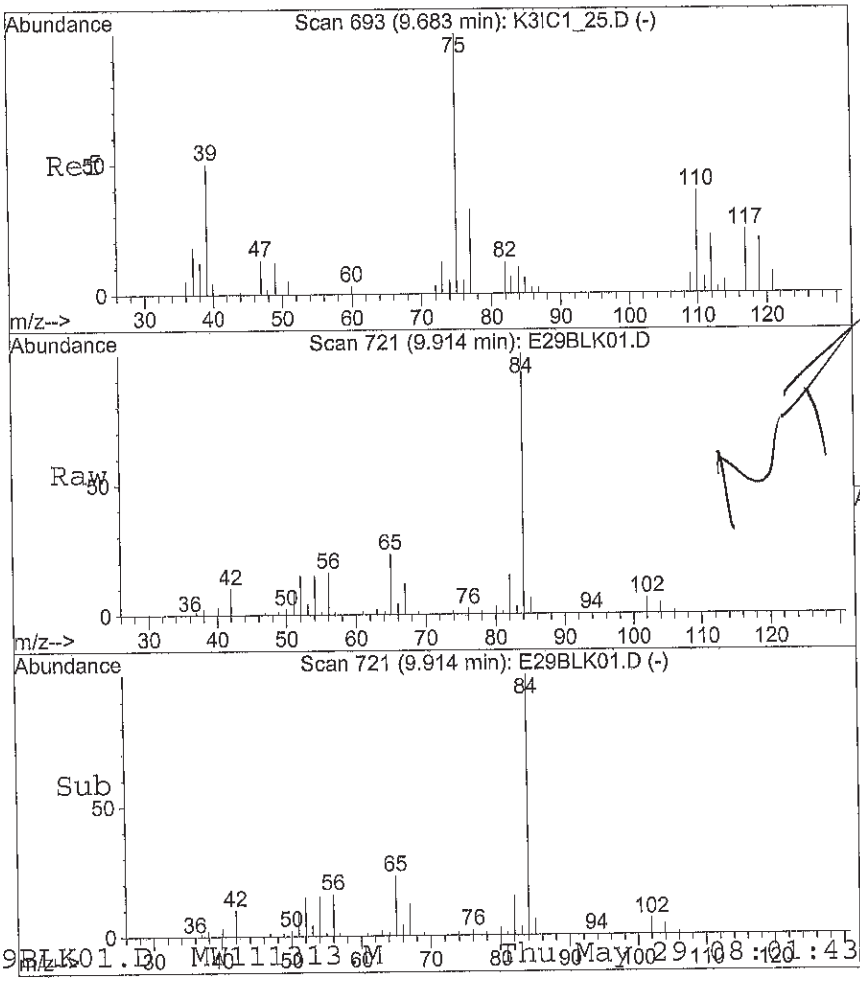


#24
Chloroform
Concen: 0.56 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 83 Resp: 4797

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

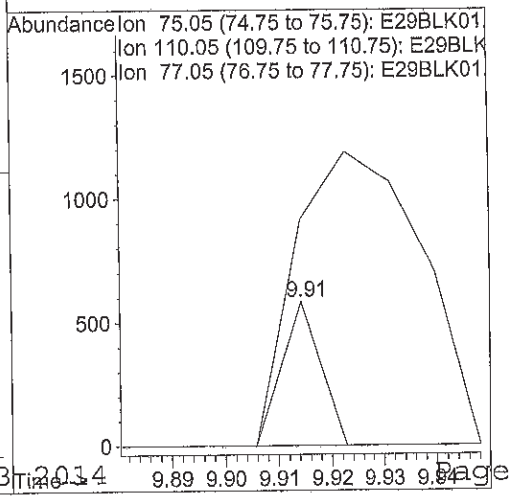


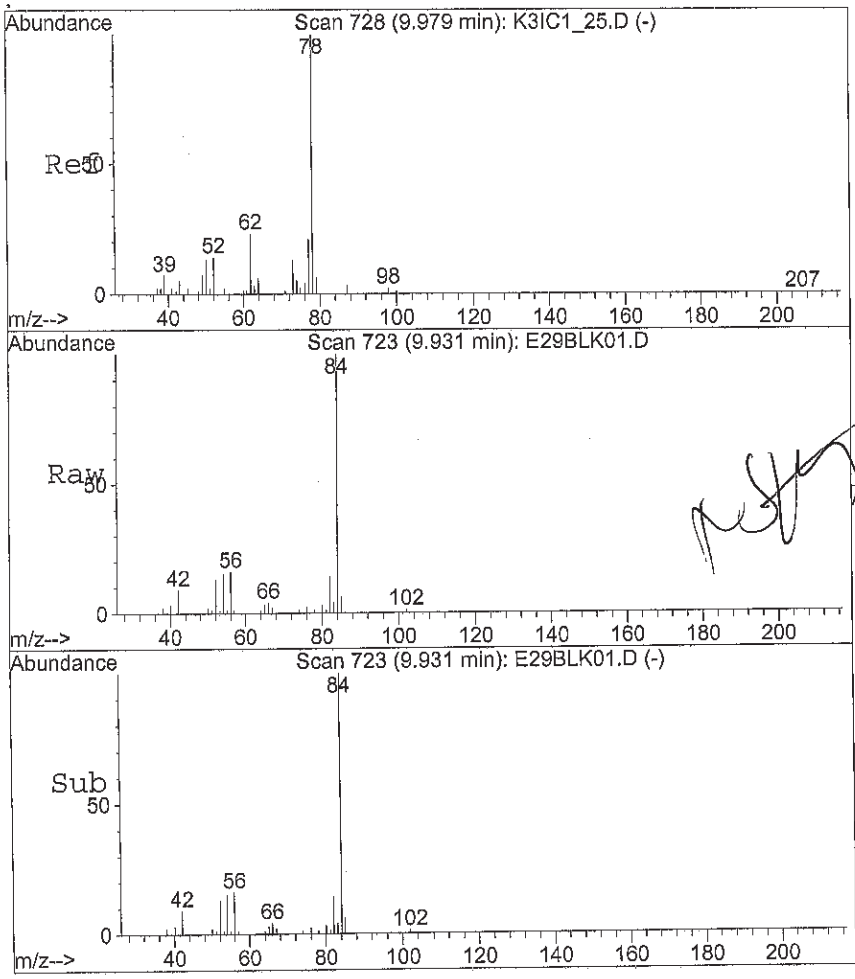


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.91 min Scan# 721
Delta R.T. 0.23 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 75 Resp: 296

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	664.5	25.0	37.4#

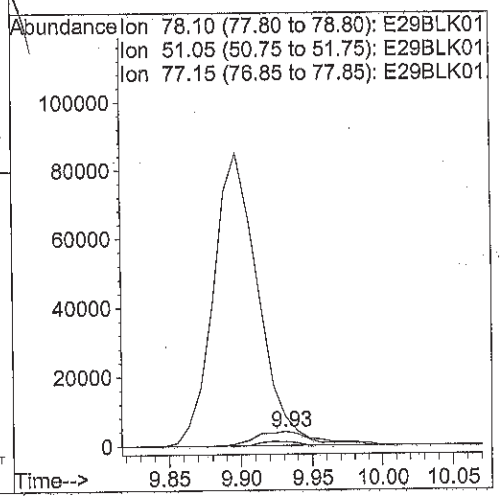


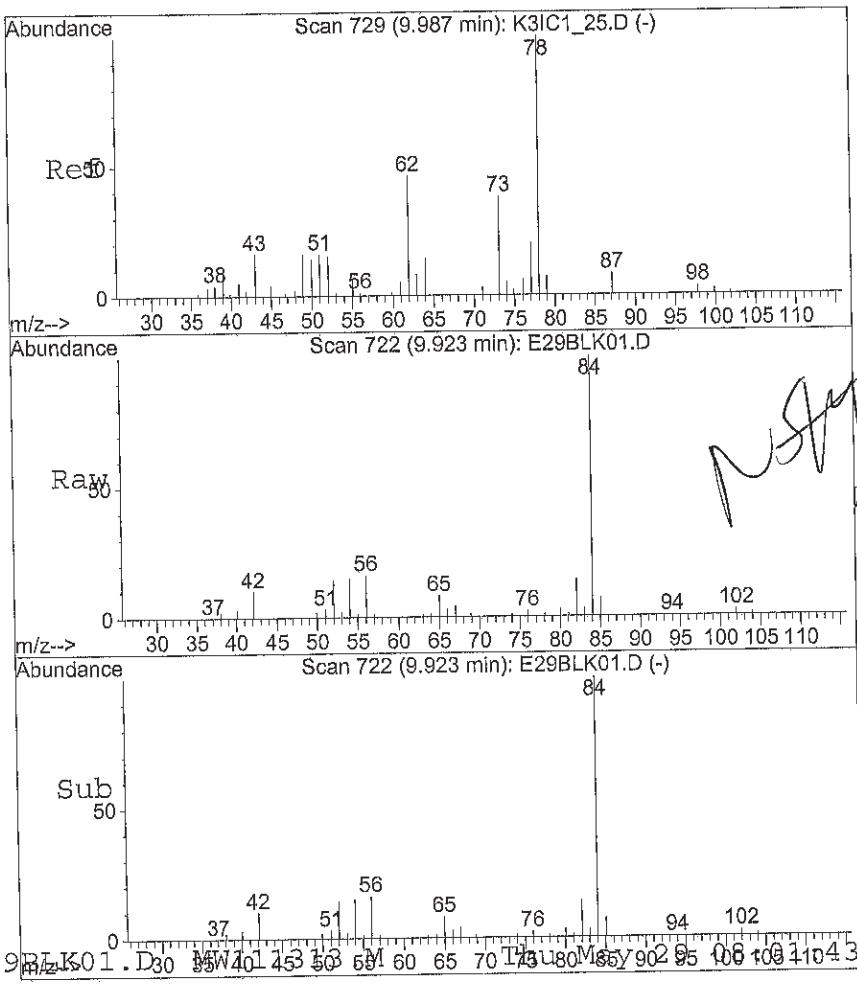


#31
Benzene
Concen: 0.72 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.05 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 78 Resp: 11166

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	17.6	16.6	24.8

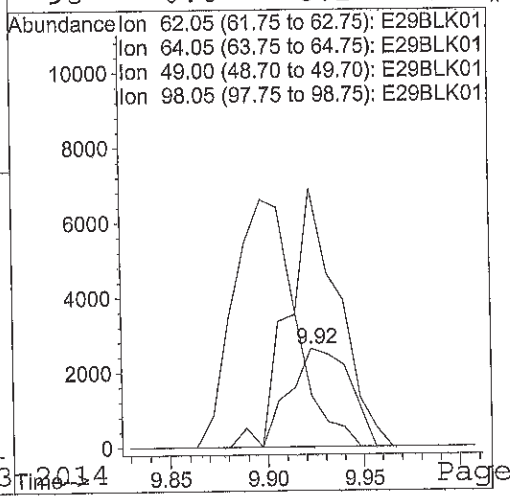


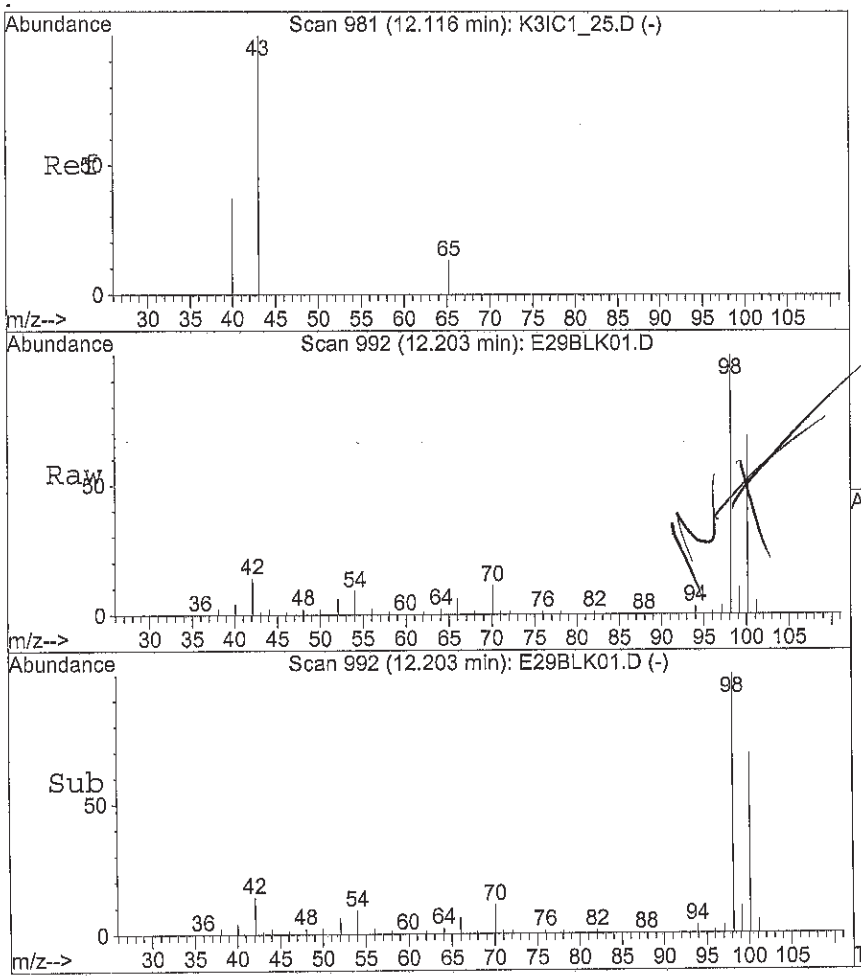


#32
1,2-Dichloroethane
Concen: 1.09 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 62 Resp: 5924

Ion	Ratio	Lower	Upper
62	100		
64	206.9	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

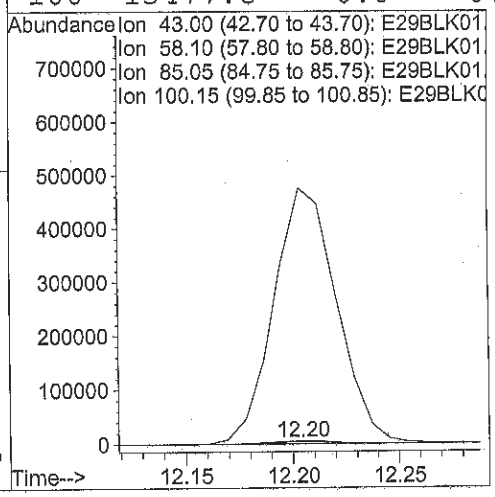


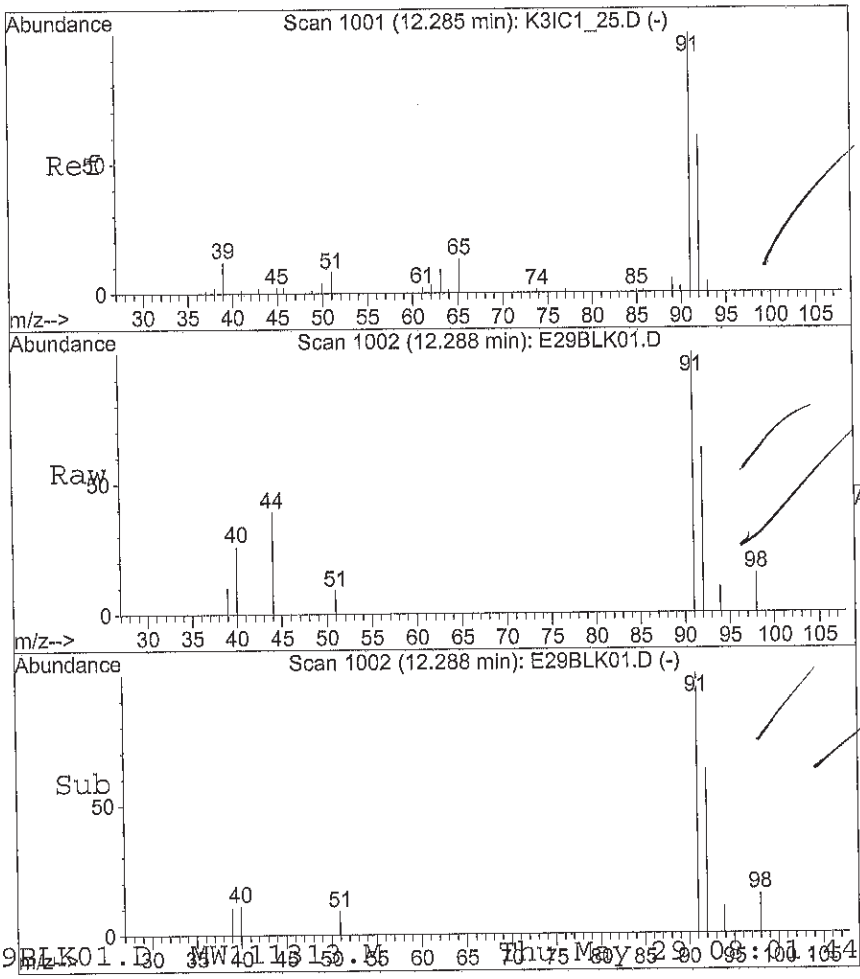


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.80 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 43 Resp: 7209

Ion	Ratio	Lower	Upper
43	100		
58	147.8	0.0	0.0#
85	0.0	0.0	0.0
100	13477.8	0.0	0.0#

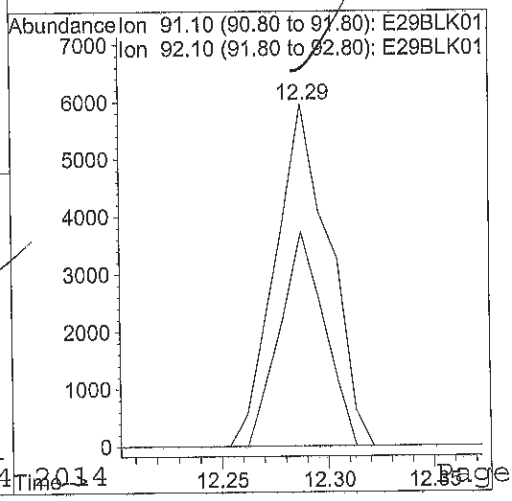


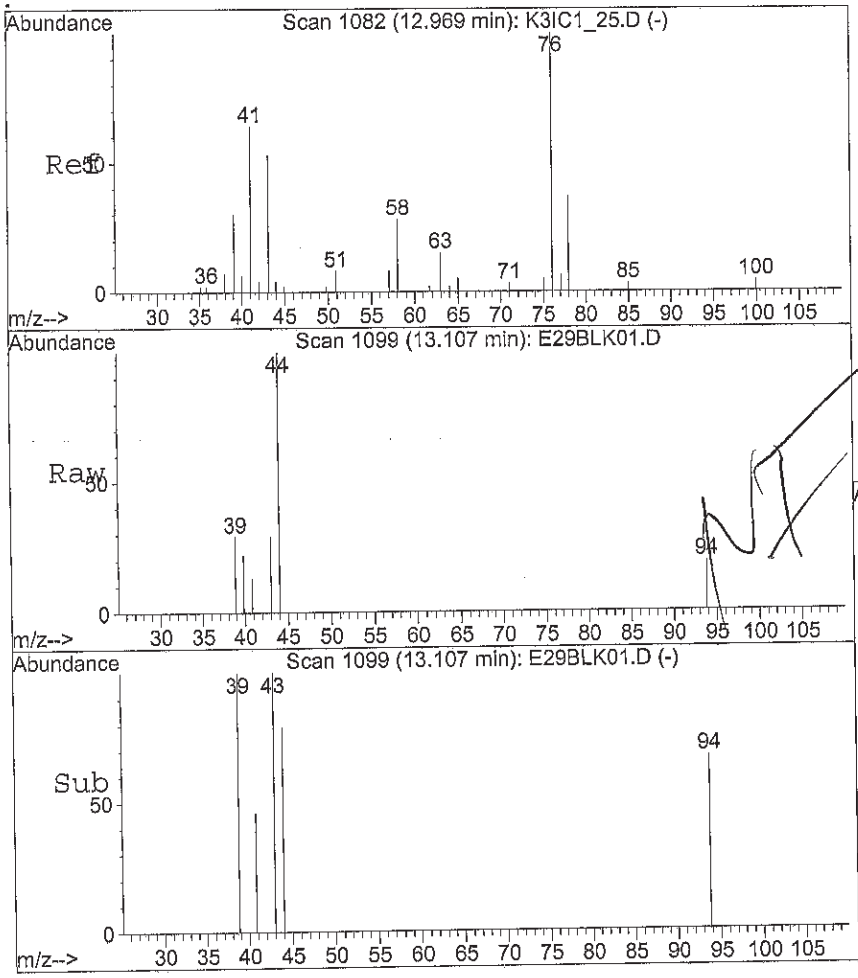


#41
Toluene
Concen: 0.59 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 91 Resp: 10430

Ion	Ratio	Lower	Upper
91	100		
92	52.1	47.4	71.0

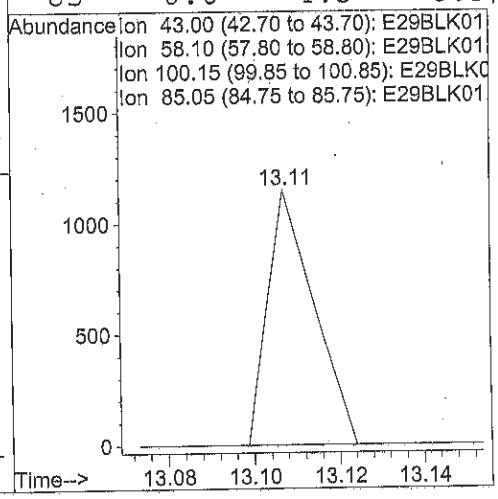


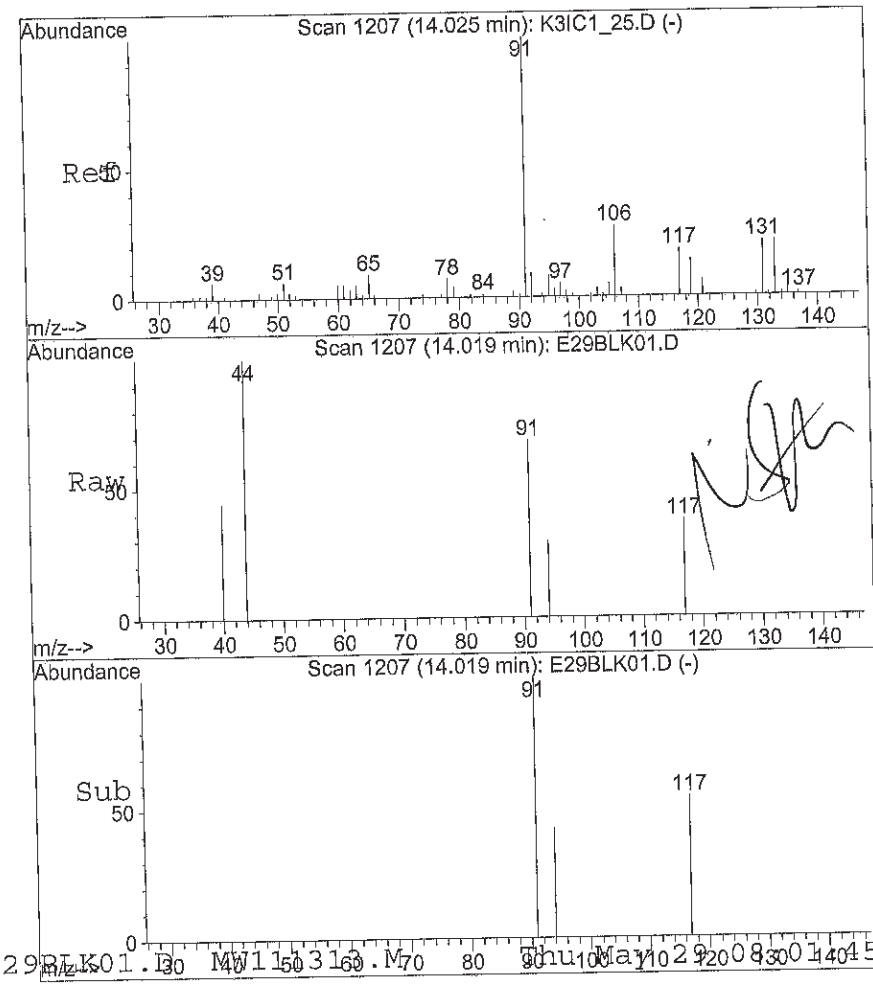


#46
2-Hexanone
Concen: 0.31 ug/L
RT: 13.11 min Scan# 1099
Delta R.T. 0.14 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 43 Resp: 860

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

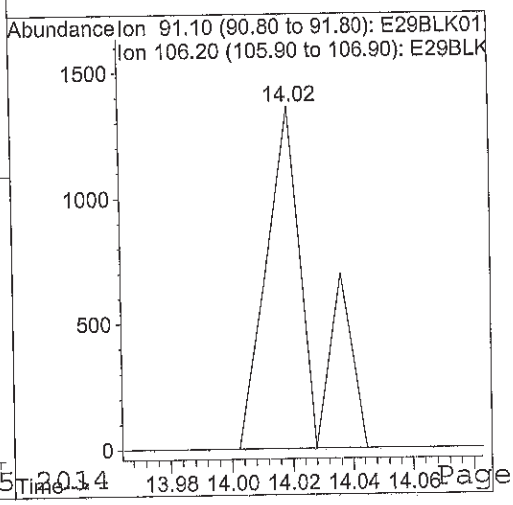


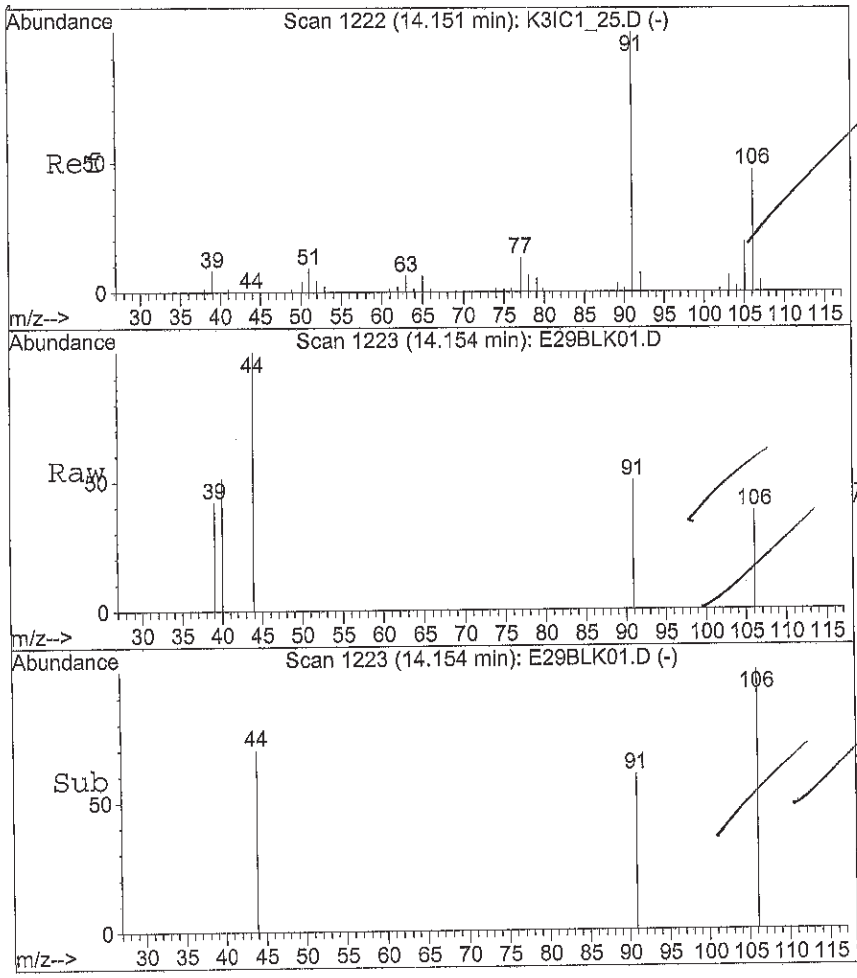


#51
Ethylbenzene
Concen: 0.07 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 91 Resp: 1370

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

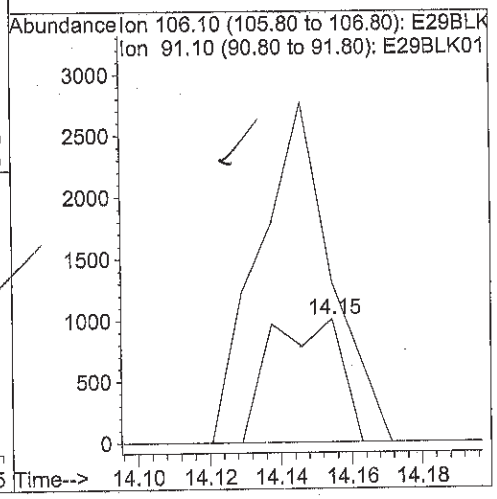


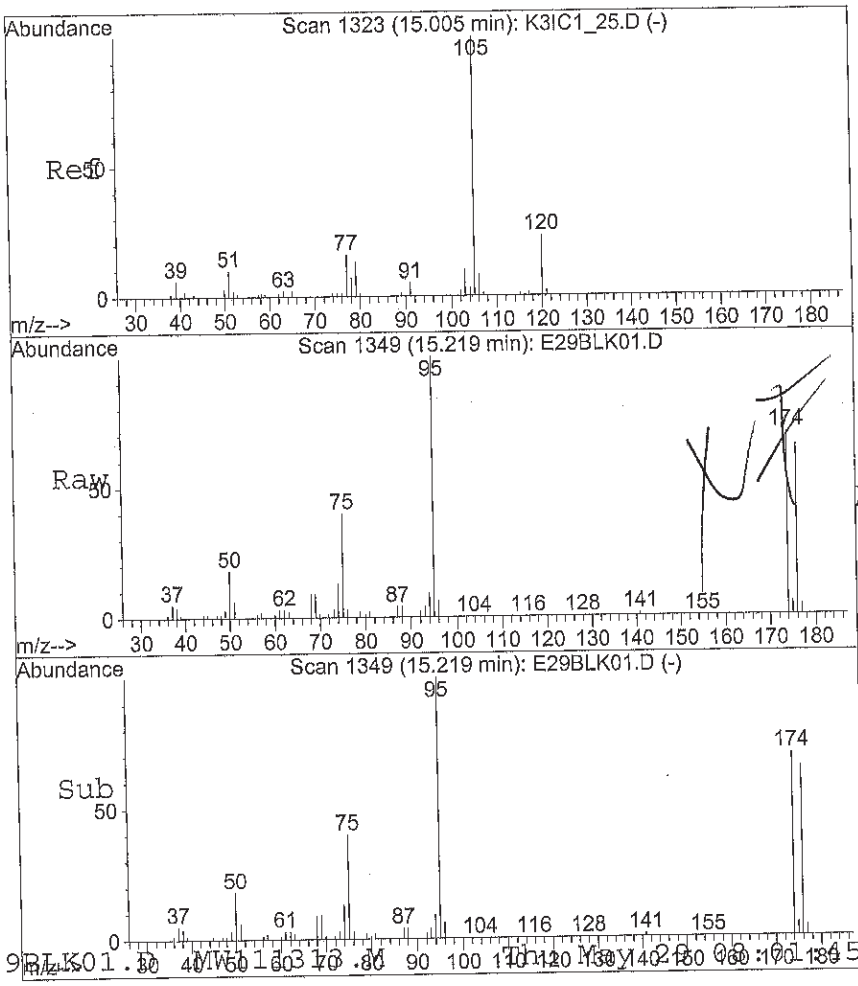


#52
m,p-Xylenes
Concen: 0.20 ug/L
RT: 14.15 min Scan# 1223
Delta R.T. 0.00 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion:106 Resp: 1393

Ion	Ratio	Lower	Upper
106	100		
91	281.3	177.1	265.7#

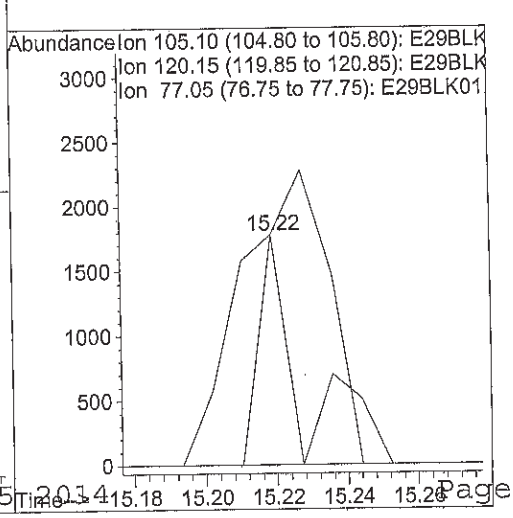


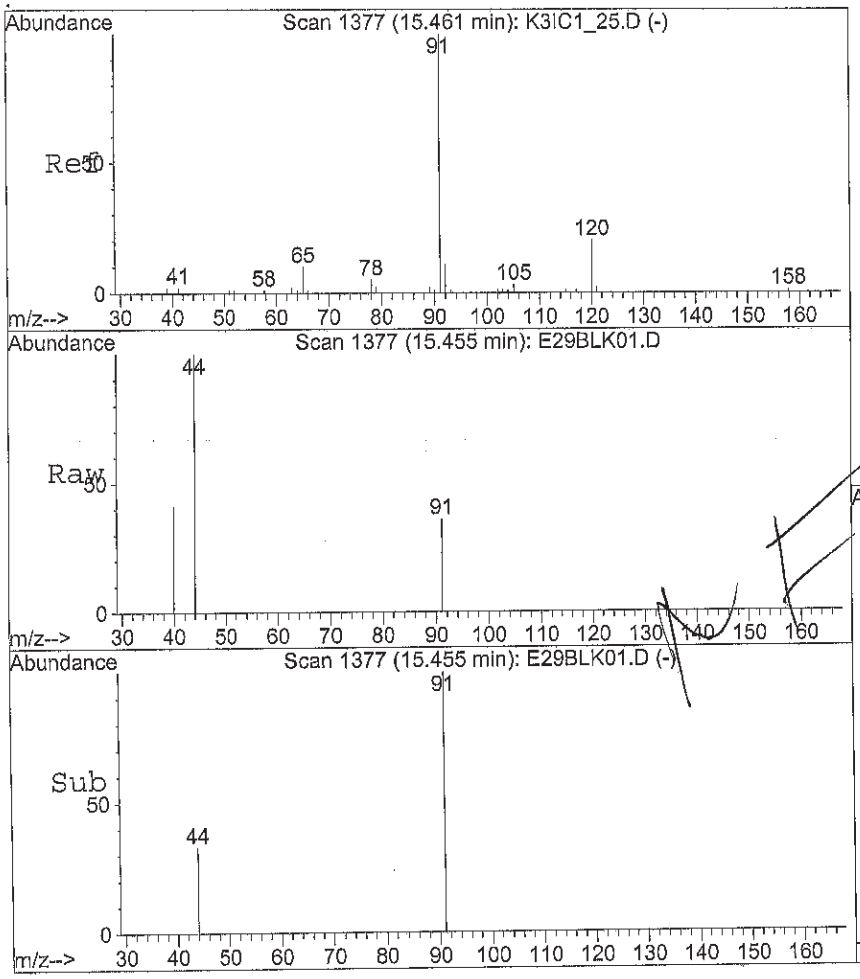


#56
Isopropylbenzene
Concen: 0.08 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion:105 Resp: 1511

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	257.6	13.1	19.7#

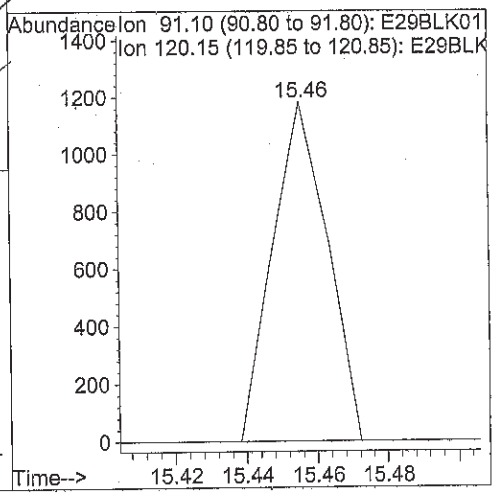


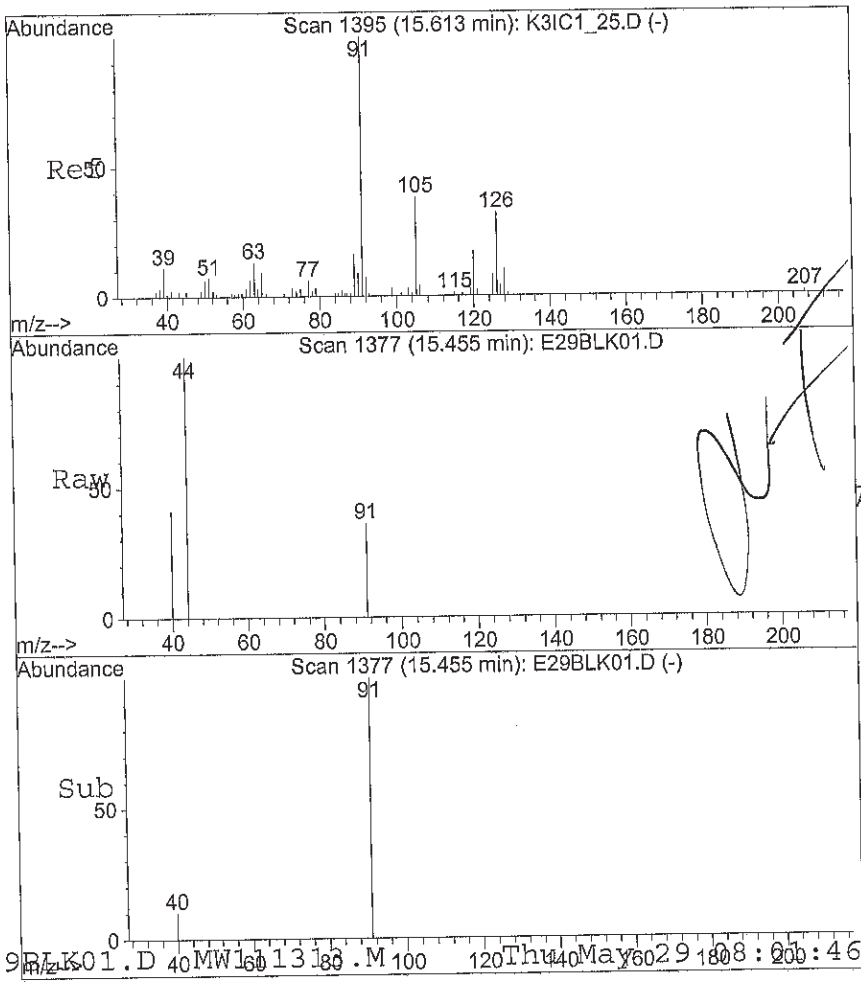


#62
n-Propylbenzene
Concen: 0.04 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 91 Resp: 1255

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

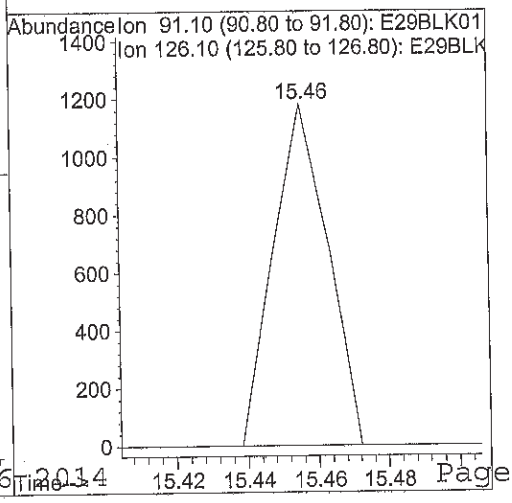


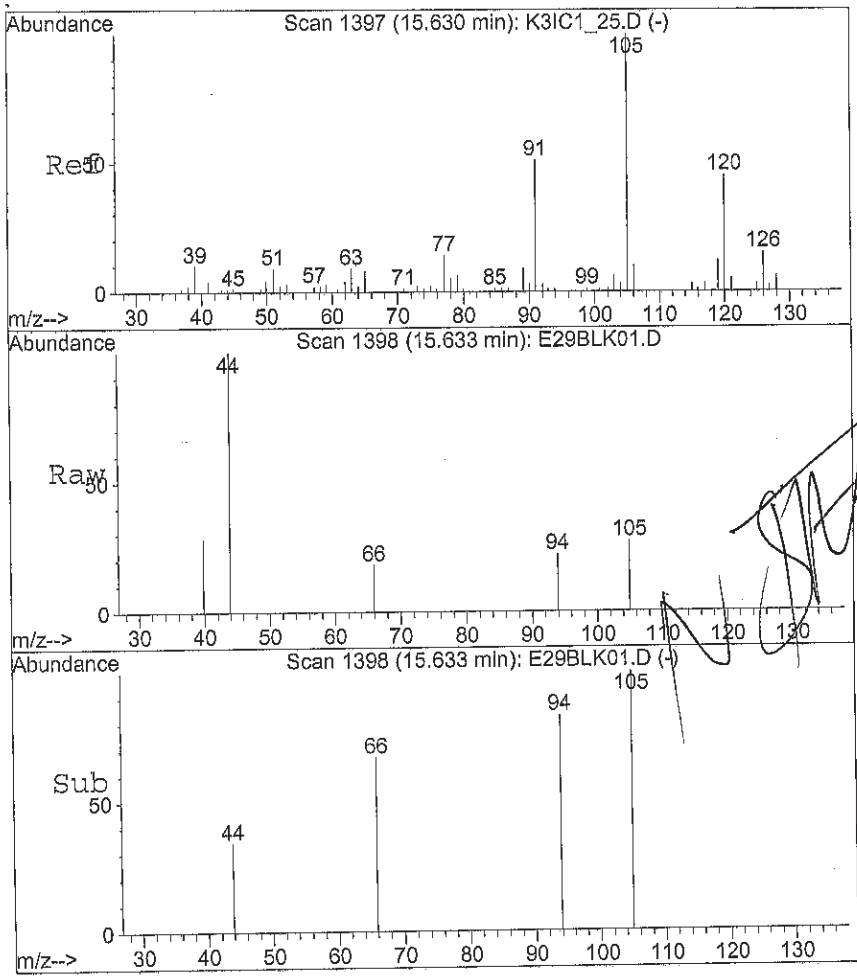


#63
2-Chlorotoluene
Concen: 0.07 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.16 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 91 Resp: 1255

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

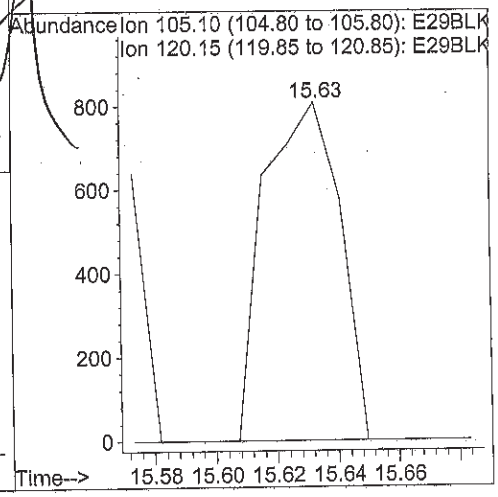


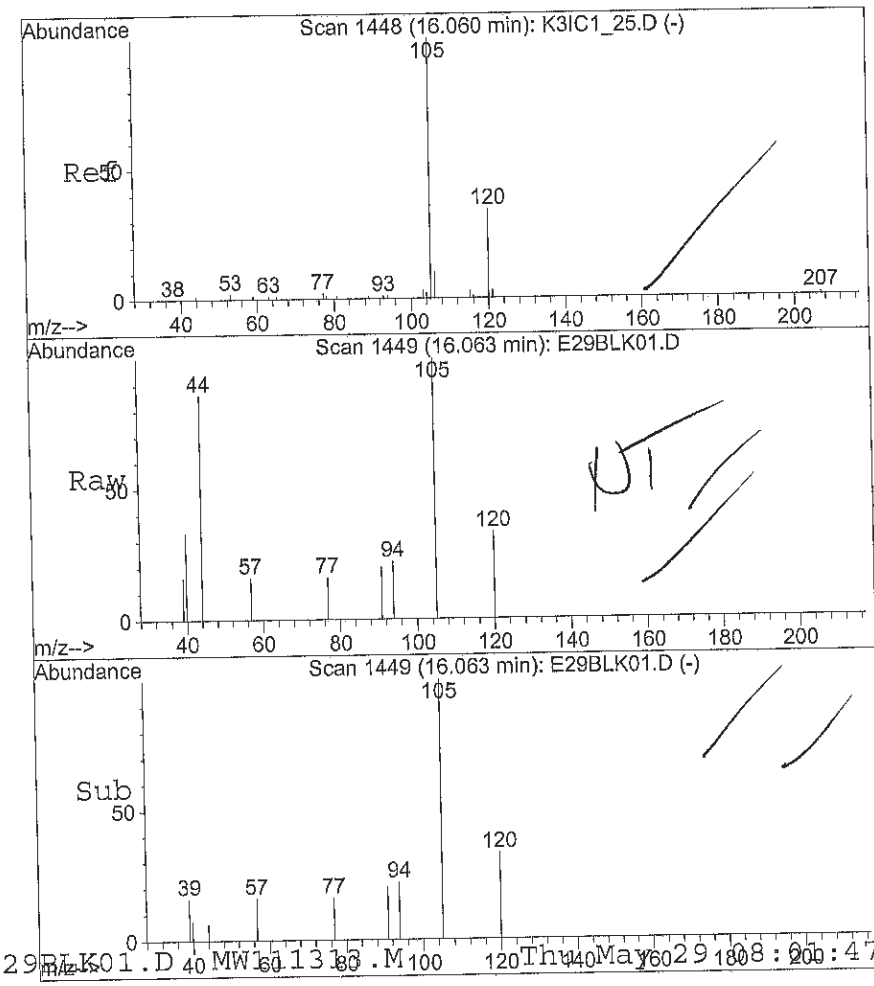


#64
1,3,5-Trimethylbenzene
Concen: 0.08 ug/L
RT: 15.63 min Scan# 1398
Delta R.T. 0.00 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion:105 Resp: 1382

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

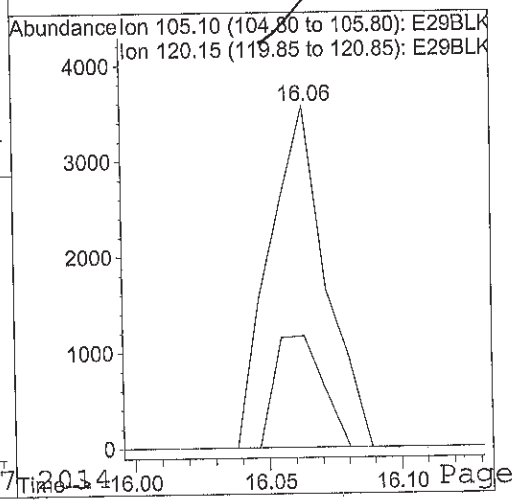


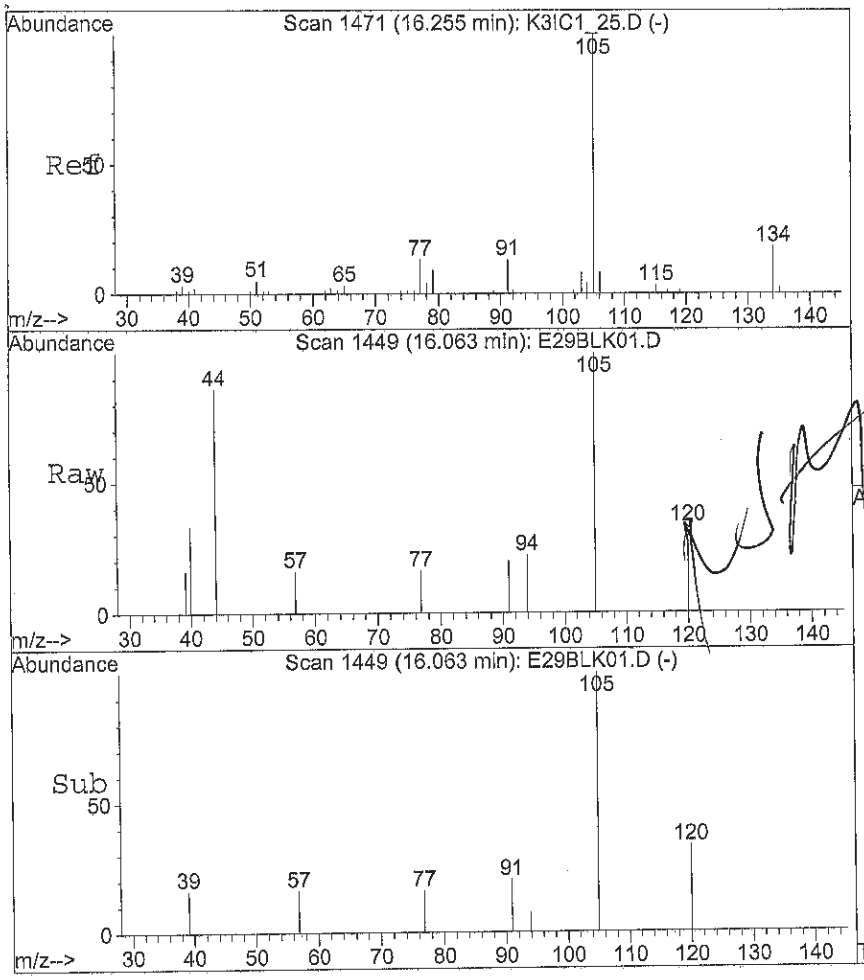


#67
1,2,4-Trimethylbenzene
Concen: 0.28 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion:105 Resp: 5208

Ion	Ratio	Lower	Upper
105	100		
120	28.0	33.8	50.8#

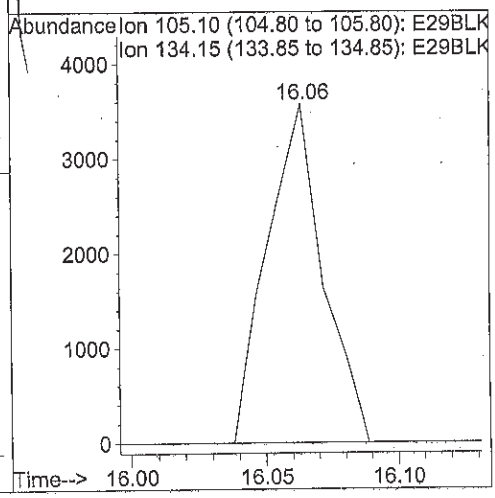


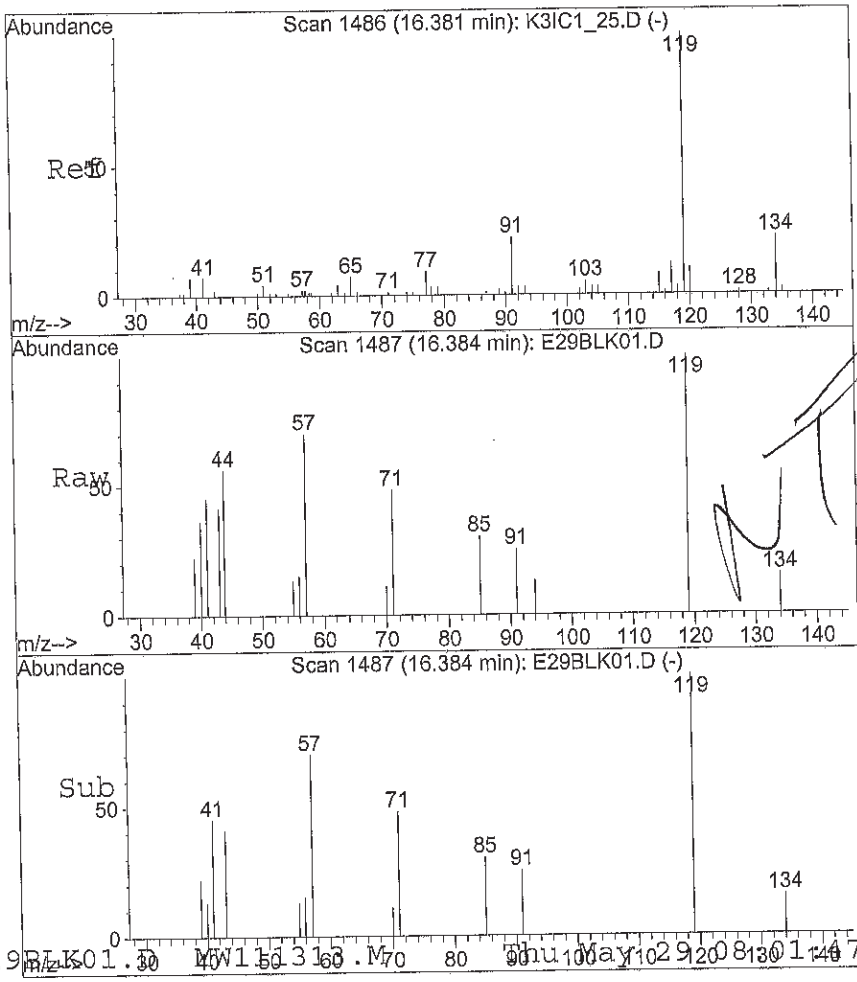


#68
sec-Butylbenzene
Concen: 0.22 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. -0.19 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion:105 Resp: 5208

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

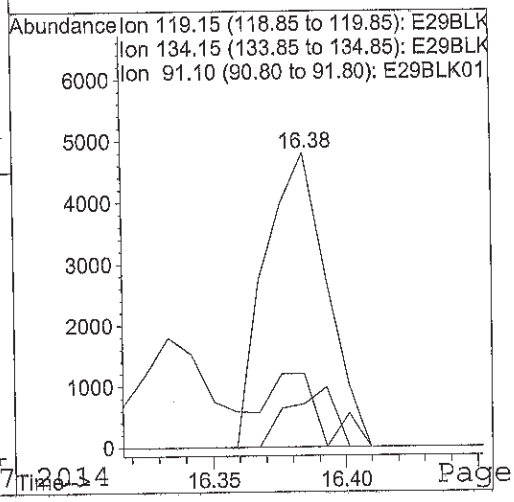


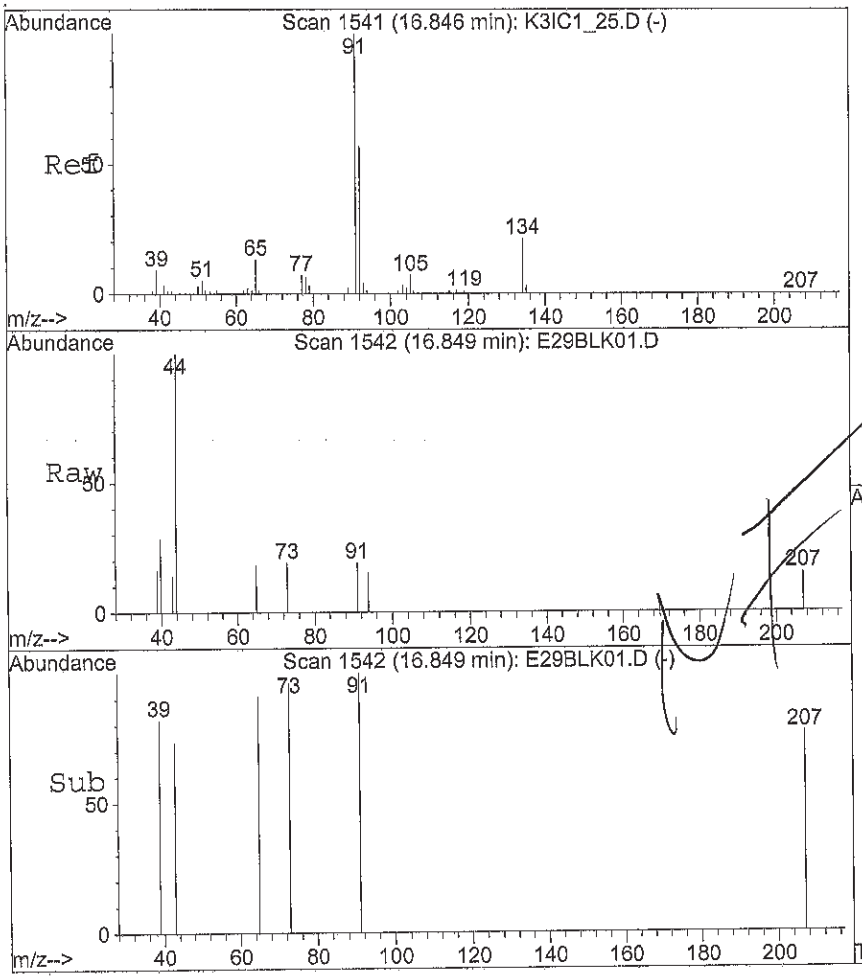


#69
p-Isopropyltoluene
Concen: 0.40 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion:119 Resp: 7742

Ion	Ratio	Lower	Upper
119	100		
134	15.0	17.4	26.2#
91	19.2	19.6	29.4#

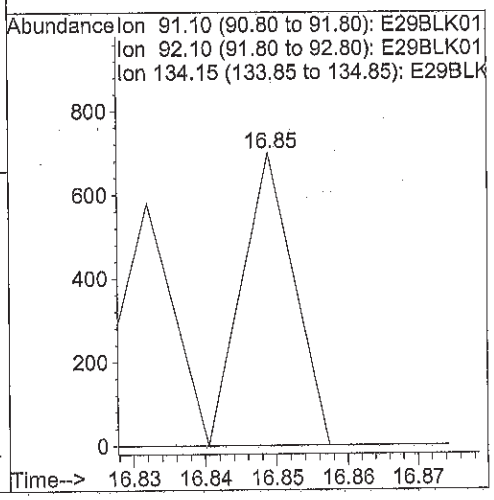


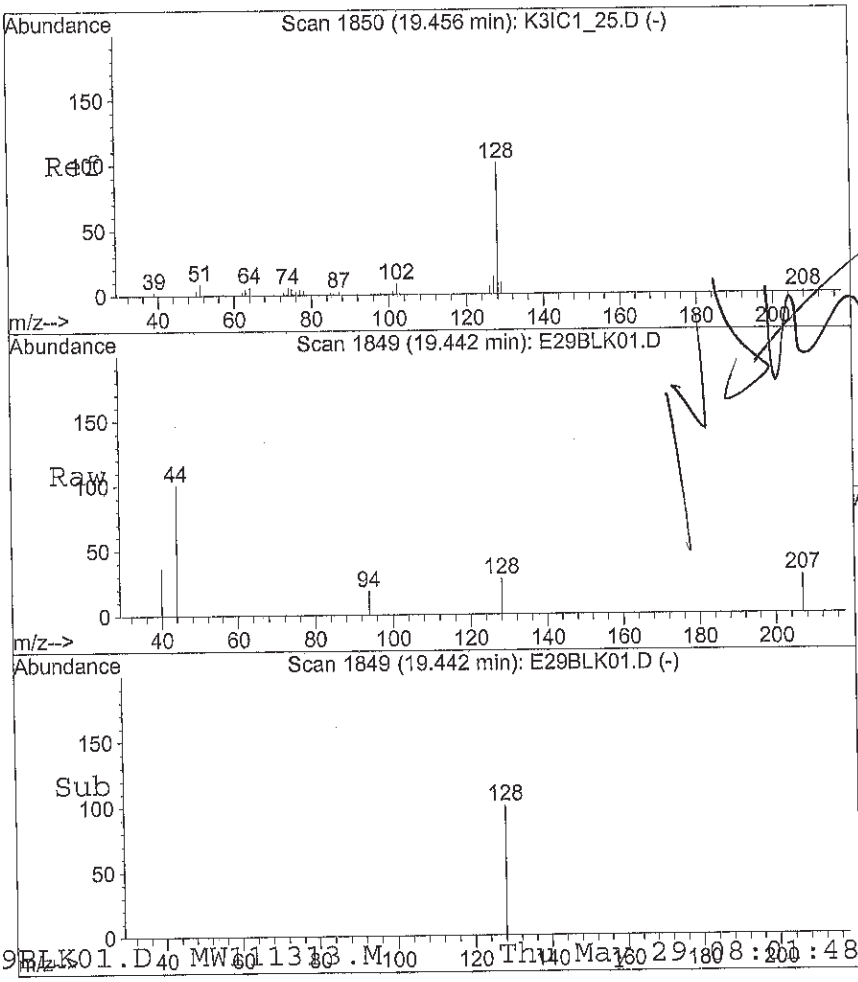


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.85 min Scan# 1542
Delta R.T. 0.00 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion: 91 Resp: 354

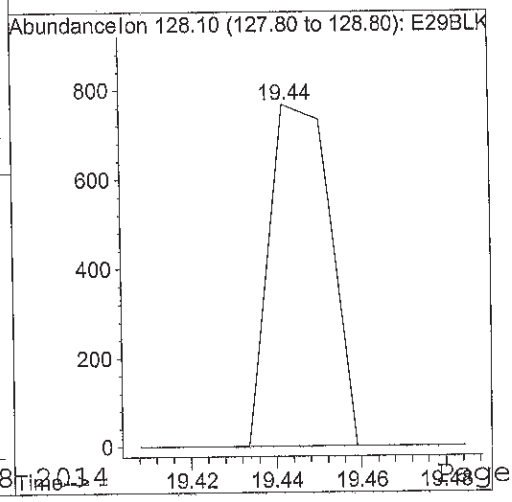
Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#





#77
Naphthalene
Concen: 0.05 ug/L
RT: 19.44 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E29BLK01.D
Acq: 29 May 2014 7:39 am

Tgt Ion:128 Resp: 761



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29BLK01.D Vial: 11
Acq On : 29 May 2014 7:39 am Operator: DN
Sample : 34E2901-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 8:02 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1637712	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1287295	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	712164	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	461987	10.85	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.80%			
3) Chloroform-d (SU6)	9.19	84	709597	11.61	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.88%			
4) Methylene Chloride-d2 (SU5	7.07	86	382866	10.72	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 85.76%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	440900	15.15	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 121.20%			
6) Benzene-d6 (SU7)	9.92	84	1336050	10.40	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 83.20%			
8) Toluene-d8 (SU3)	12.20	98	1438243	11.78	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.24%			
9) 4-Bromofluorobenzene (SU4)	15.23	95	718141	14.24	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 113.92%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

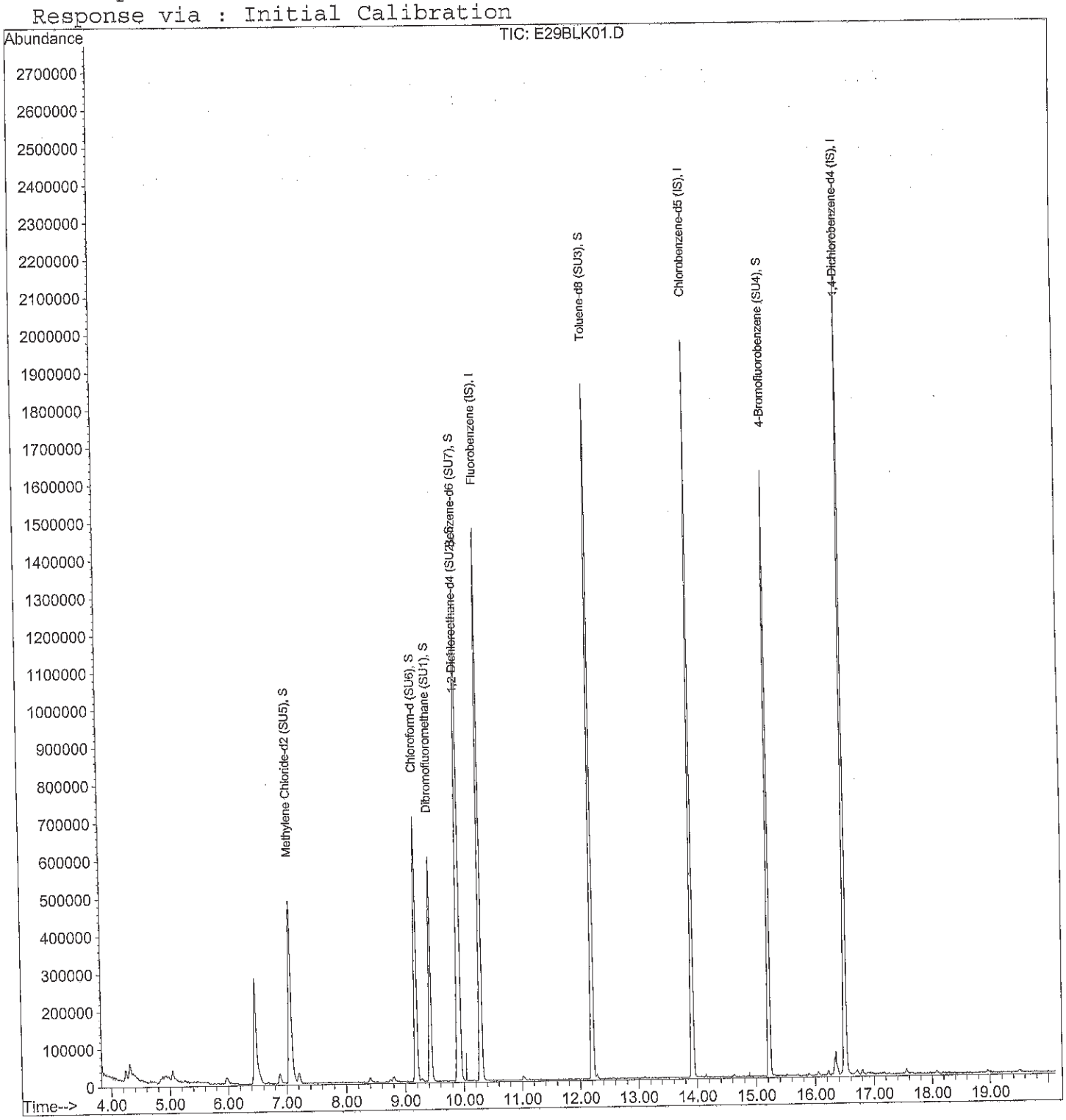
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29BLK01.D
Acq On : 29 May 2014 7:39 am
Sample : 34E2901-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: May 29 8:02 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR ANALYZED SAMPLES INCLUDING CHROMATOGRAMS, QUANTITATION REPORTS AND SPECTRA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900001.D
Acq On : 29 May 2014 8:11 am
Sample : 3E42901-01
Misc : 100cc Equipment Blank
MS Integration Params: rteint.p
Quant Time: May 29 8:33 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1446066	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1151739	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	631317	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	425314	11.79 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.32%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	415497	12.12 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.96%		
39) Toluene-d8 (SU3)	12.21	98	1298038	12.08 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.64%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	625891	13.29 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.32%		

Target Compounds					Qvalue
4) Chloromethane	4.39	50	5990	1.25 ~~ug/L #~~	41
6) Bromomethane	5.06	96	631	-1.38 ~~ug/L #~~	1
7) Chloroethane	5.25	64	2249	2.56 ~~ug/L #~~	32
11) Acetone	6.46	58	2410	179.45 ~~ug/L #~~	1
12) (IPA) Leak Check Compound	6.46	45	285364	1642.23 ~~ug/L #~~	83
14) Methylene Chloride	7.06	84	5760	1.45 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.16	59	1201	4.87 ~~ug/L #~~	77
20) 2,2-Dichloropropane	8.83	77	274	0.05 ~~ug/L #~~	1
24) Chloroform	9.21	83	2796	0.37 ~~ug/L~~	94
29) 1,1-Dichloropropene	9.92	75	364	0.07 ~~ug/L #~~	1
31) Benzene	9.92	78	9506	0.70 ~~ug/L #~~	1
32) 1,2-Dichloroethane	9.92	62	5008	1.04 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7212	3.14 ~~ug/L #~~	100
41) Toluene	12.29	91	1289	0.08 ~~ug/L #~~	51
46) 2-Hexanone	13.06	43	301	0.12 ~~ug/L #~~	37
51) Ethylbenzene	14.02	91	797	0.04 ~~ug/L #~~	45
54) Styrene	14.64	104	1255	-0.74 ~~ug/L #~~	40
56) Isopropylbenzene	15.23	105	1037	0.06 ~~ug/L #~~	1
62) n-Propylbenzene	15.23	91	1856	0.07 ~~ug/L #~~	56
68) sec-Butylbenzene	16.35	105	267	0.01 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.50	119	262	0.02 ~~ug/L #~~	1
72) n-Butylbenzene	16.79	91	316	0.02 ~~ug/L #~~	30

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900001.D Vial: 11
Acq On : 29 May 2014 8:11 am Operator: DN
Sample : 3E42901-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 8:33 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

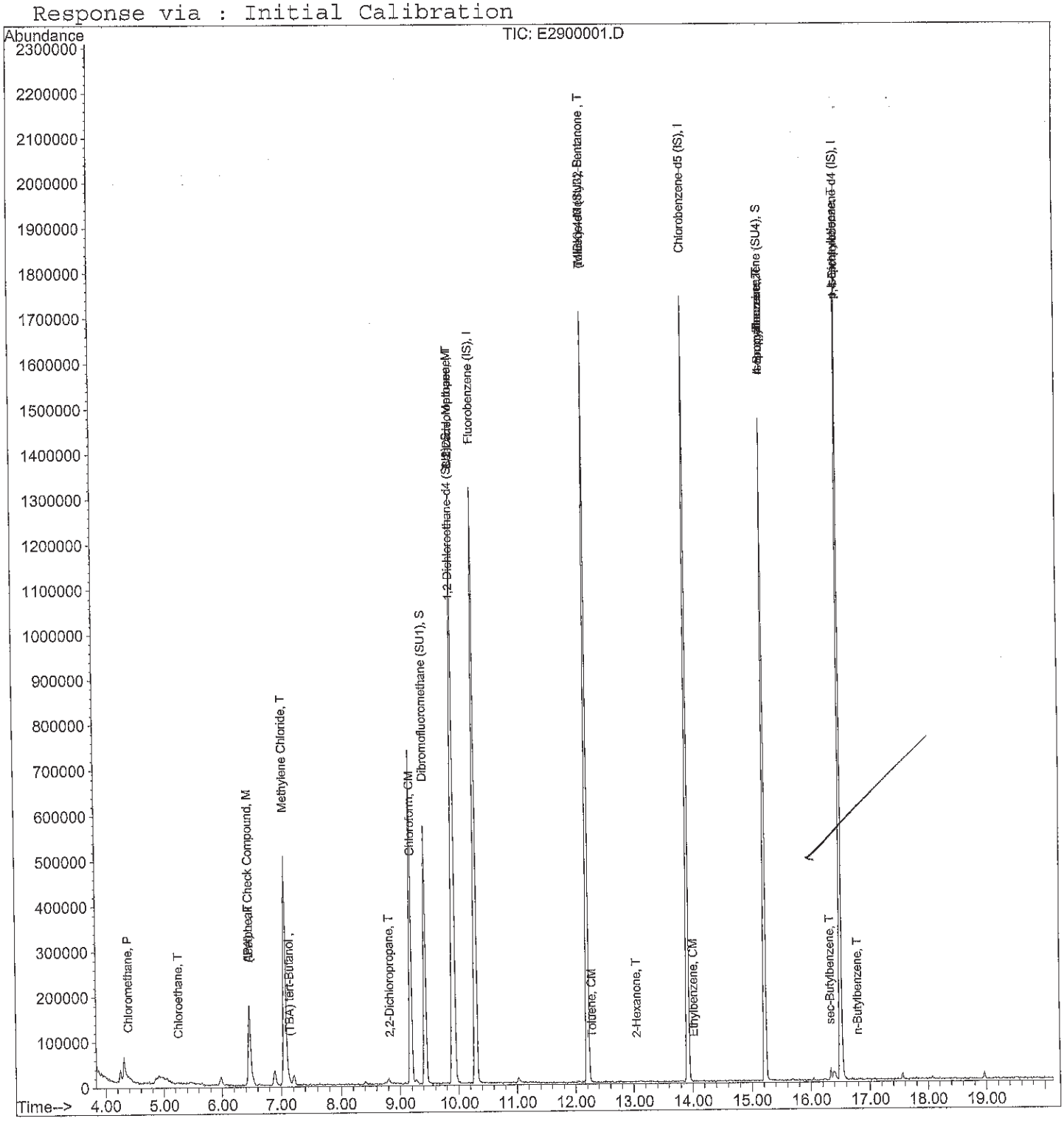
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue

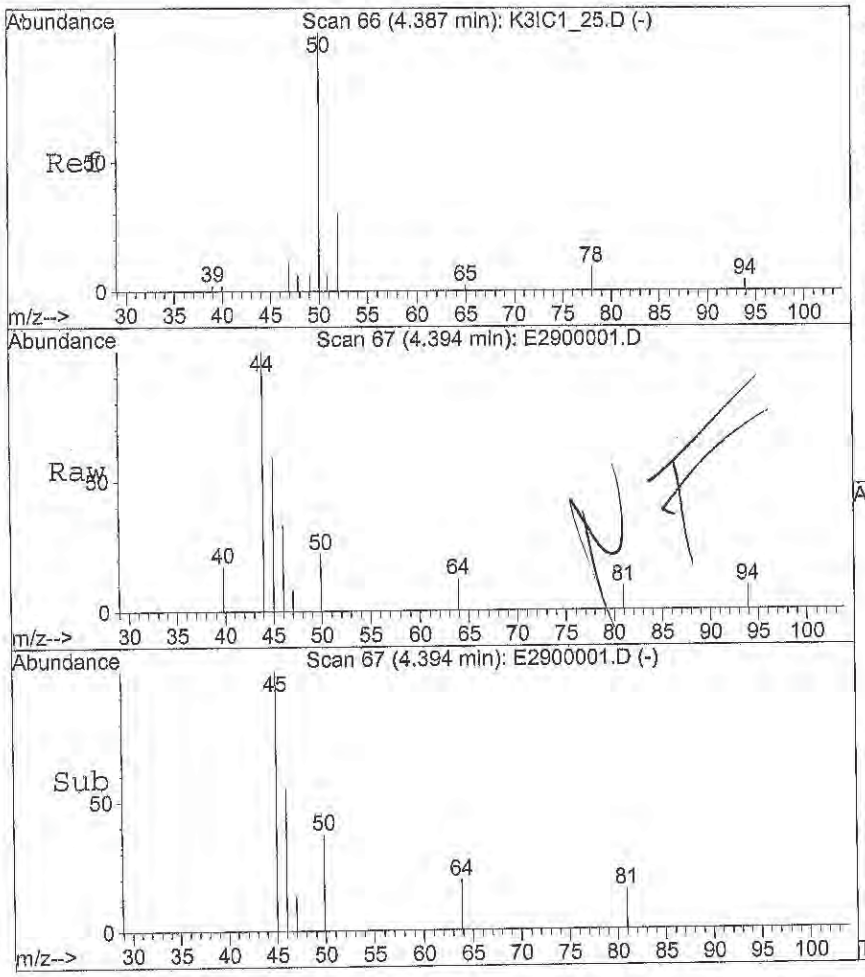
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900001.D Vial: 11
Acq On : 29 May 2014 8:11 am Operator: DN
Sample : 3E42901-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 8:33 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

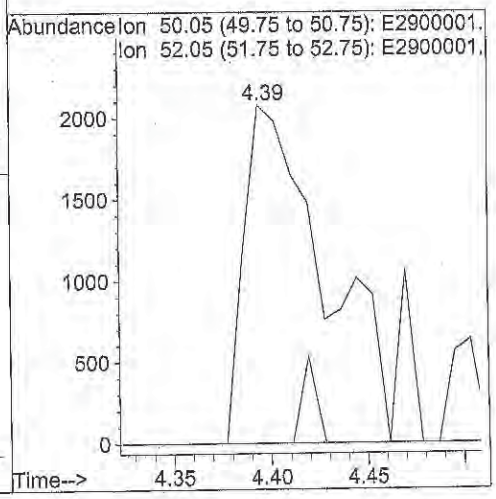


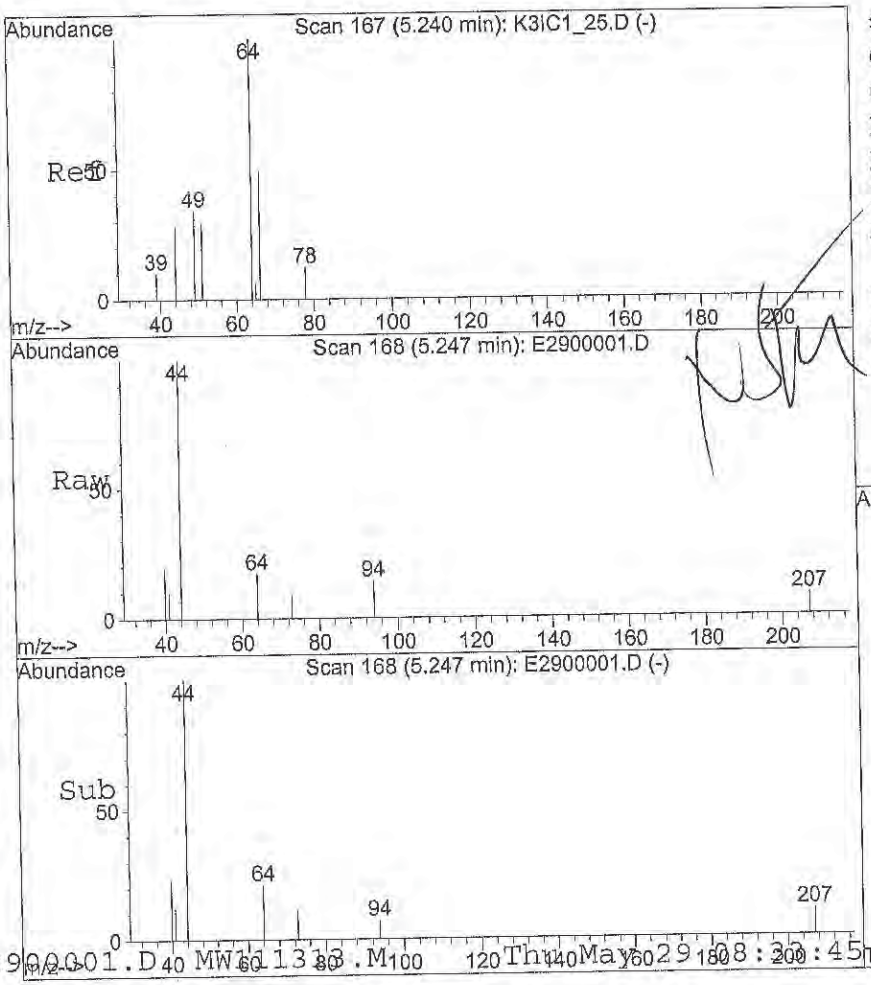


#4
Chloromethane
Concen: 1.25 ug/L
RT: 4.39 min Scan# 67
Delta R.T. 0.01 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 50 Resp: 5990

Ion	Ratio	Lower	Upper
50	100		
52	0.0	26.9	40.3#

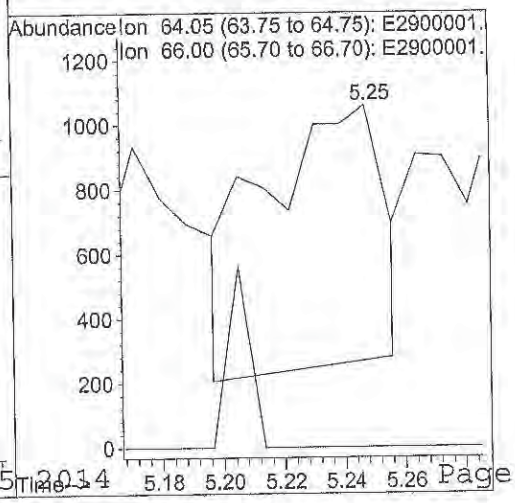


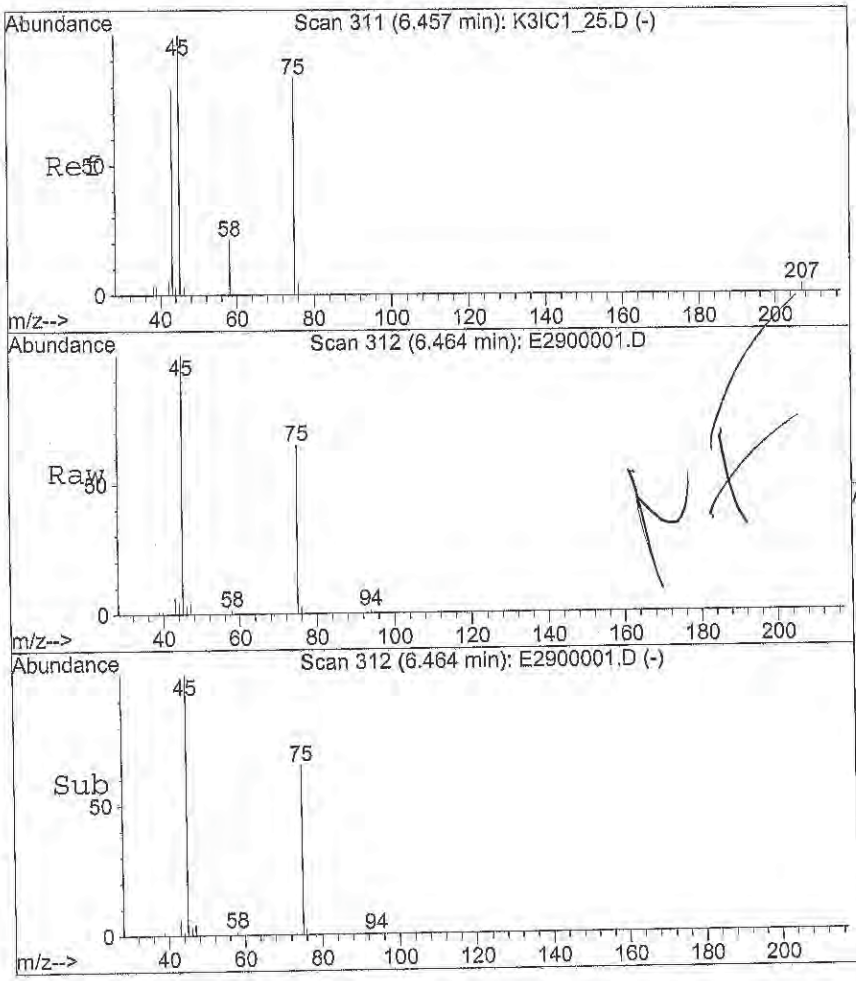


#7
Chloroethane
Concen: 2.56 ug/L
RT: 5.25 min Scan# 168
Delta R.T. 0.01 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 64 Resp: 2249

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

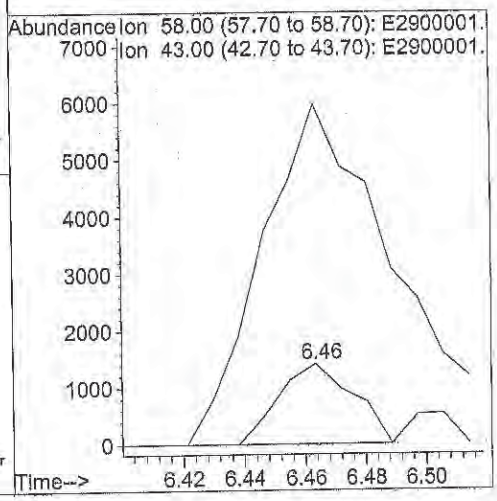


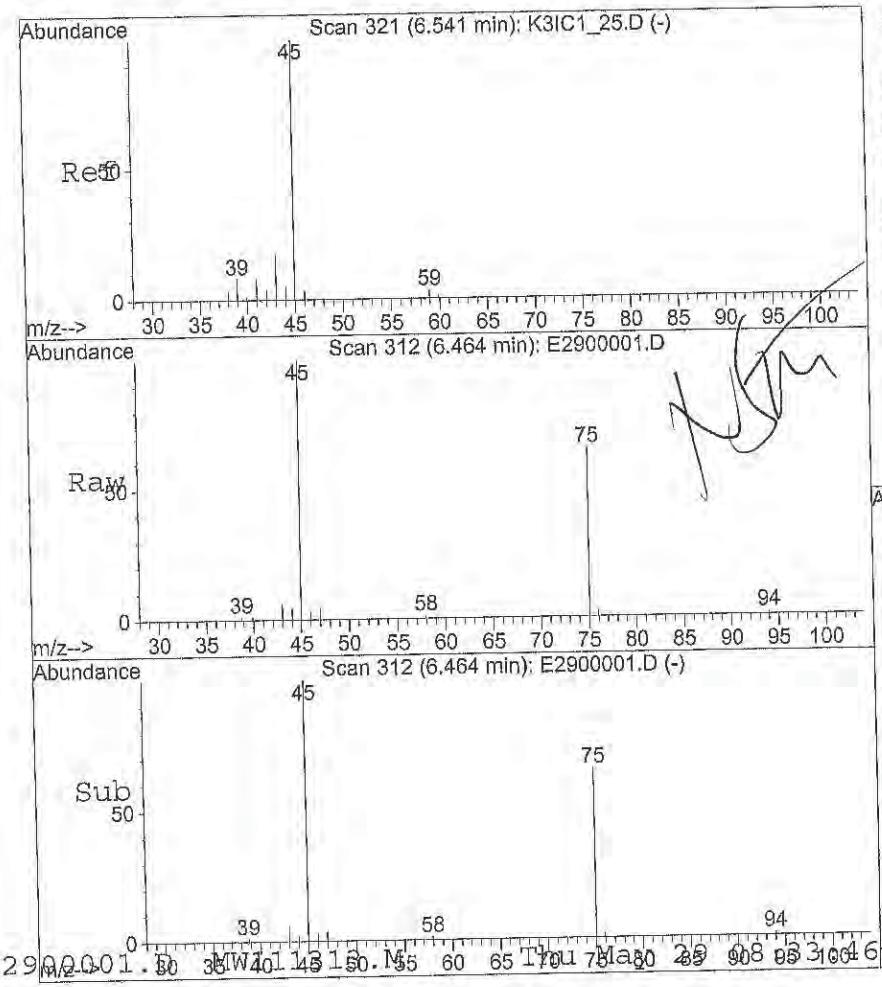


#11
Acetone
Concen: 179.45 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 58 Resp: 2410

Ion	Ratio	Lower	Upper
58	100		
43	782.0	360.9	541.3#

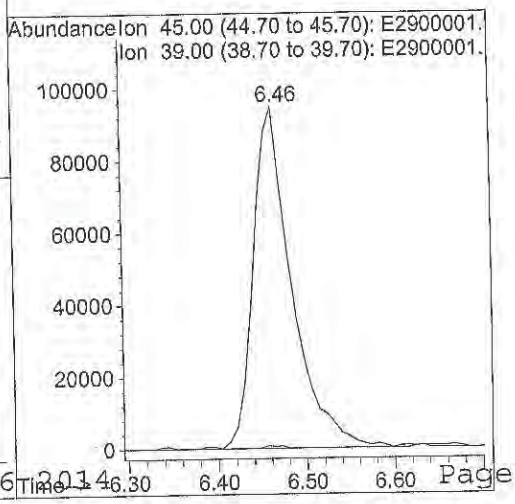


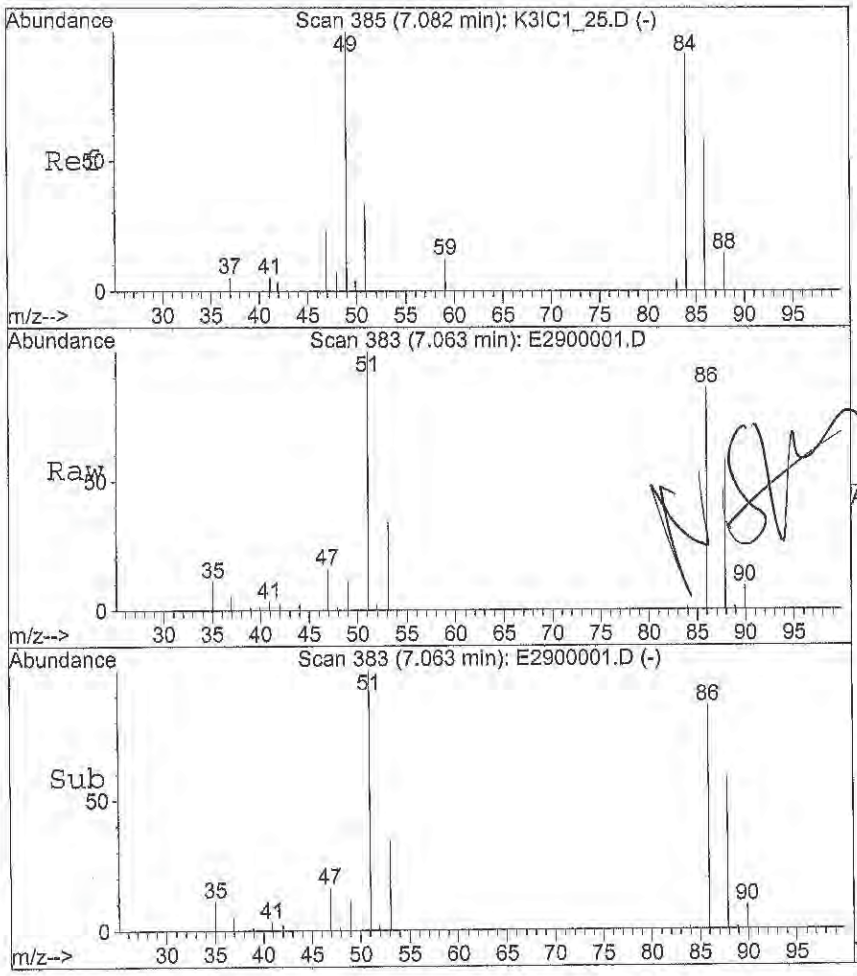


#12
(IPA) Leak Check Compound
Concen: 1642.23 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 45 Resp: 285364

Ion	Ratio	Lower	Upper
45	100		
39	0.3	4.9	7.3#

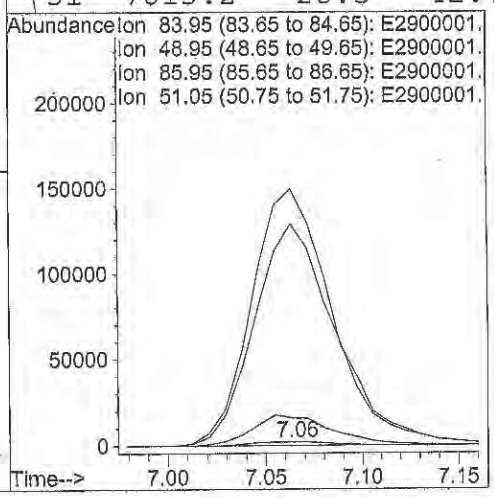


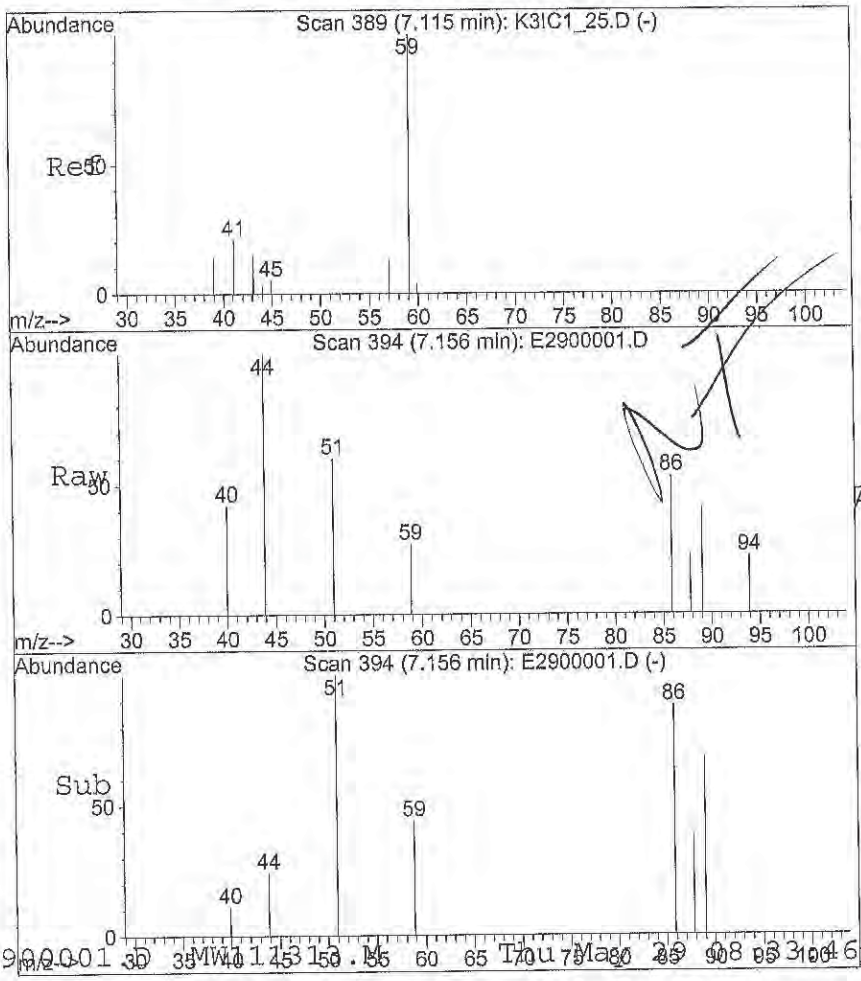


#14
Methylene Chloride
Concen: 1.45 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 84 Resp: 5760

Ion	Ratio	Lower	Upper
84	100		
49	863.0	89.8	134.6#
86	6493.7	51.1	76.7#
51	7613.2	28.5	42.7#

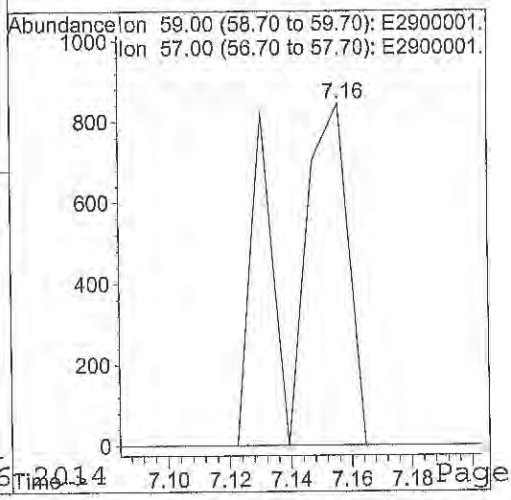


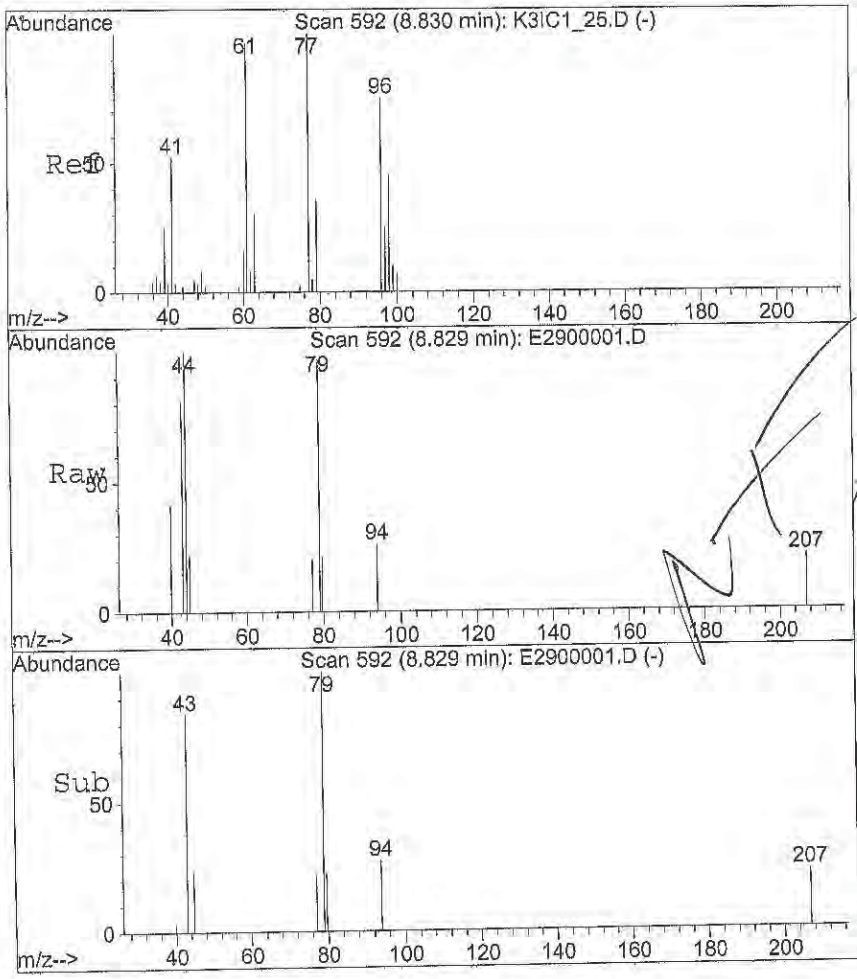


#15
(TBA) tert-Butanol
Concen: 4.87 ug/L
RT: 7.16 min Scan# 394
Delta R.T. 0.04 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 59 Resp: 1201

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

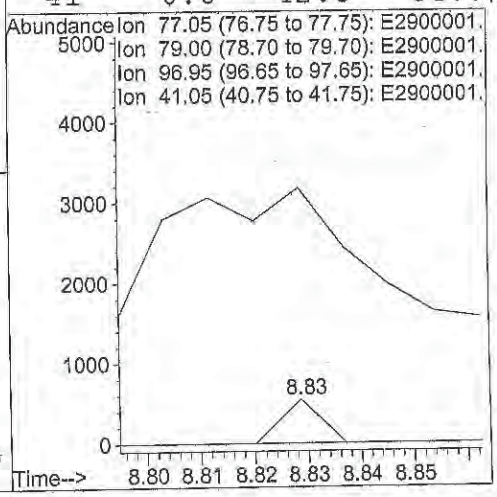


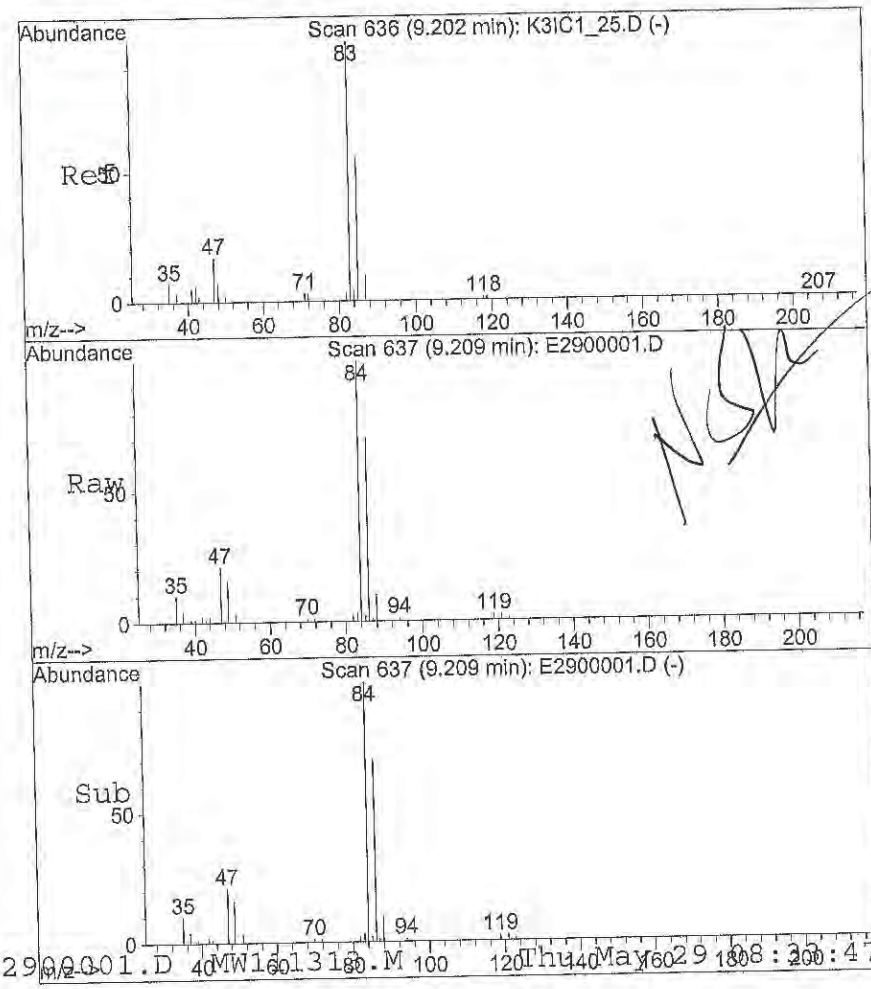


#20
2,2-Dichloropropane
Concen: 0.05 ug/L
RT: 8.83 min Scan# 592
Delta R.T. -0.00 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 77 Resp: 274

Ion	Ratio	Lower	Upper
77	100		
79	5173.4	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

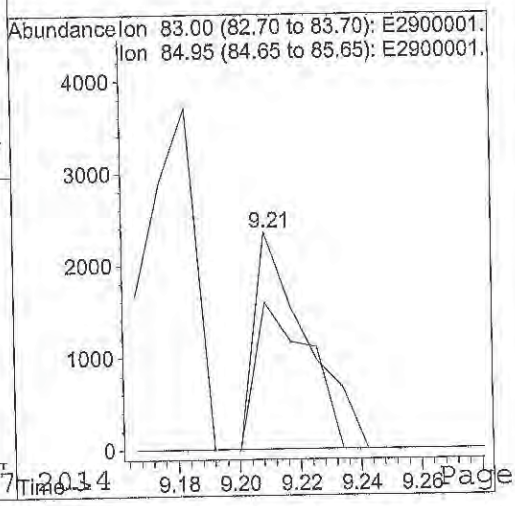


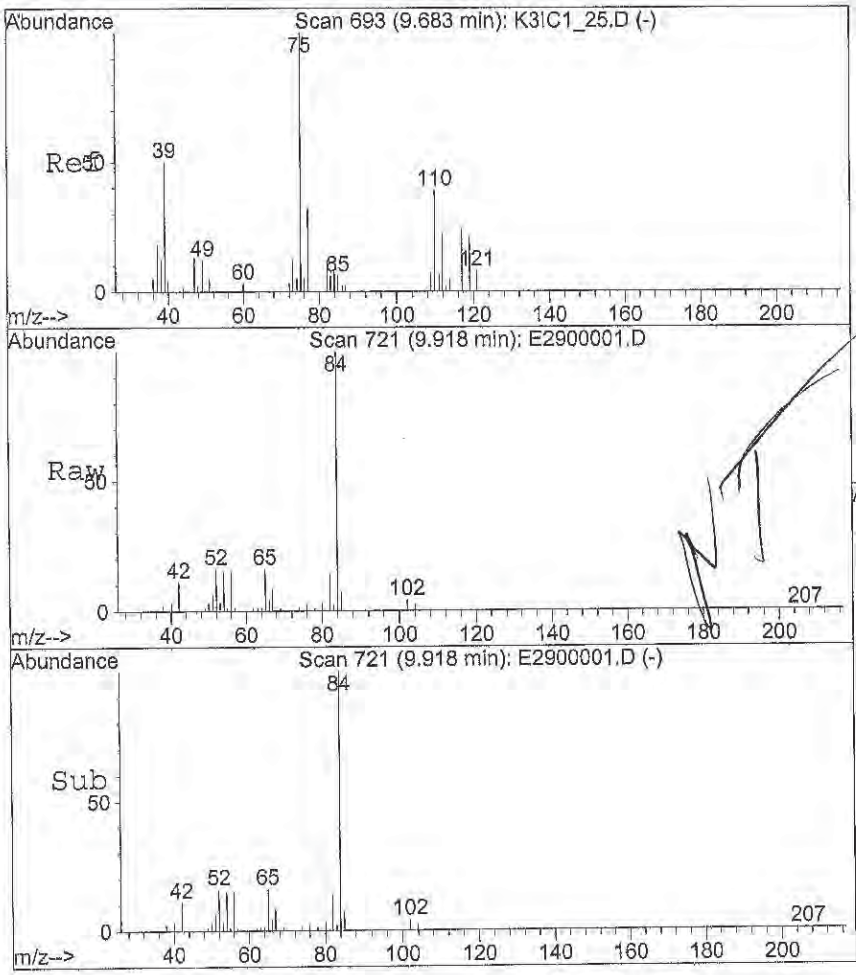


#24
Chloroform
Concen: 0.37 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 83 Resp: 2796

Ion	Ratio	Lower	Upper
83	100		
85	69.7	51.8	77.6

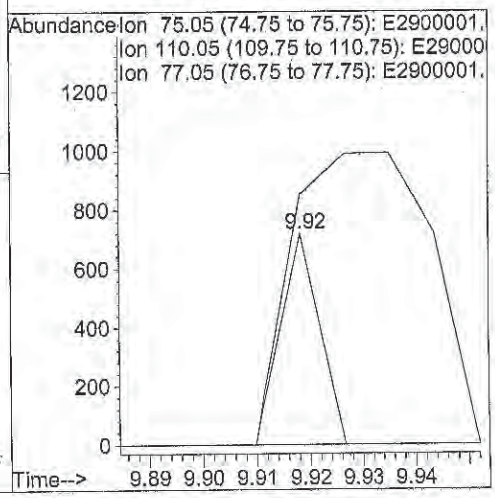


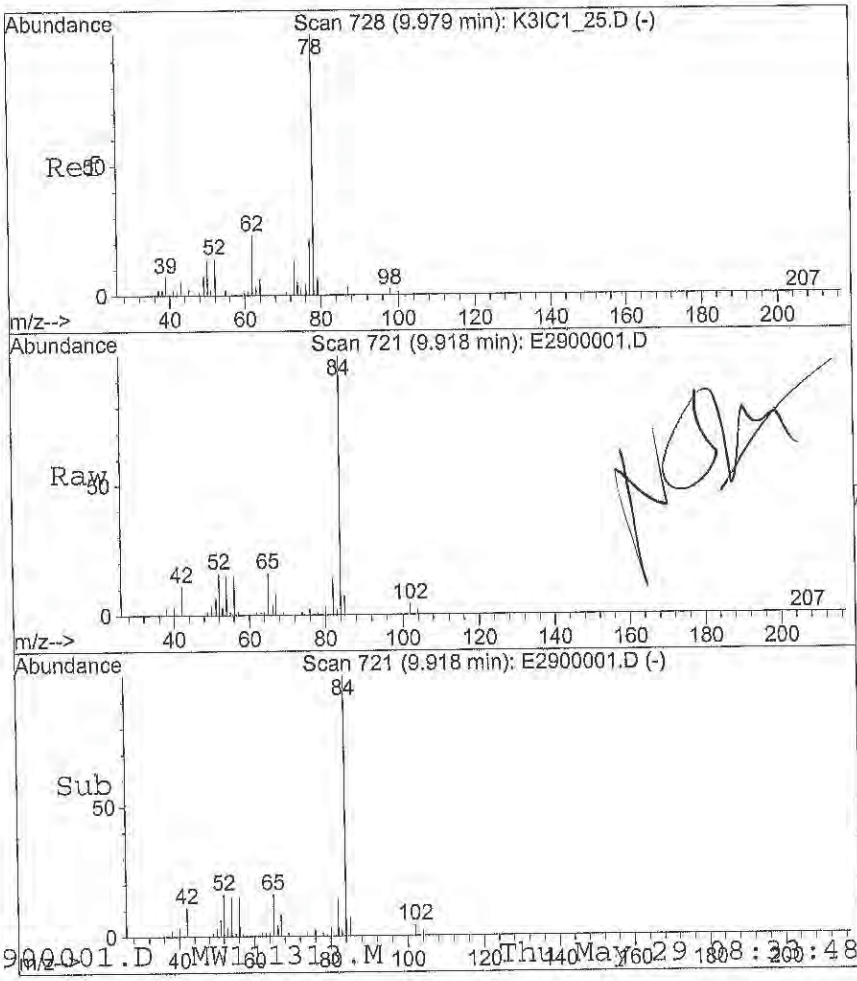


#29
1,1-Dichloropropene
Concen: 0.07 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 75 Resp: 364

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	495.3	25.0	37.4#

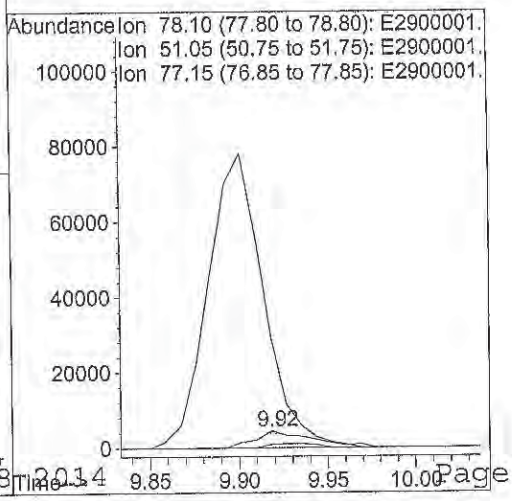


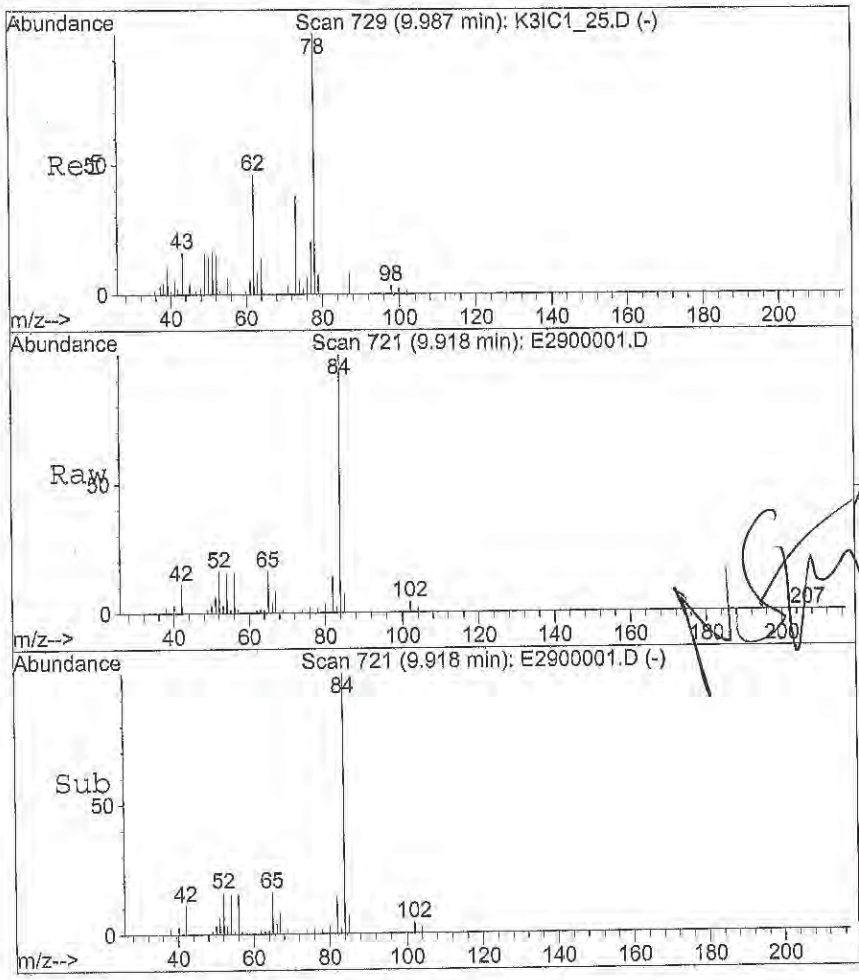


#31
Benzene
Concen: 0.70 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.06 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 78 Resp: 9506

Ion	Ratio	Lower	Upper
78	100		
51	1774.2	14.2	21.2#
77	0.0	16.6	24.8#

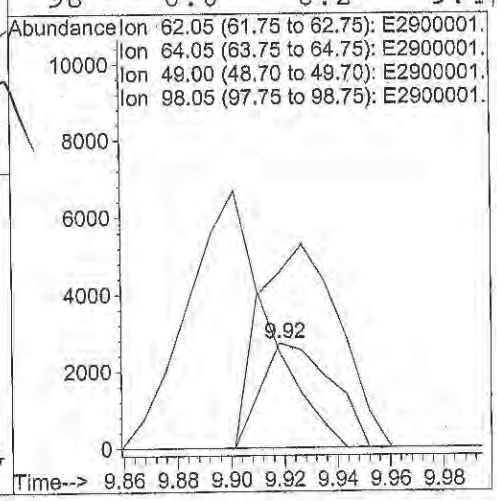


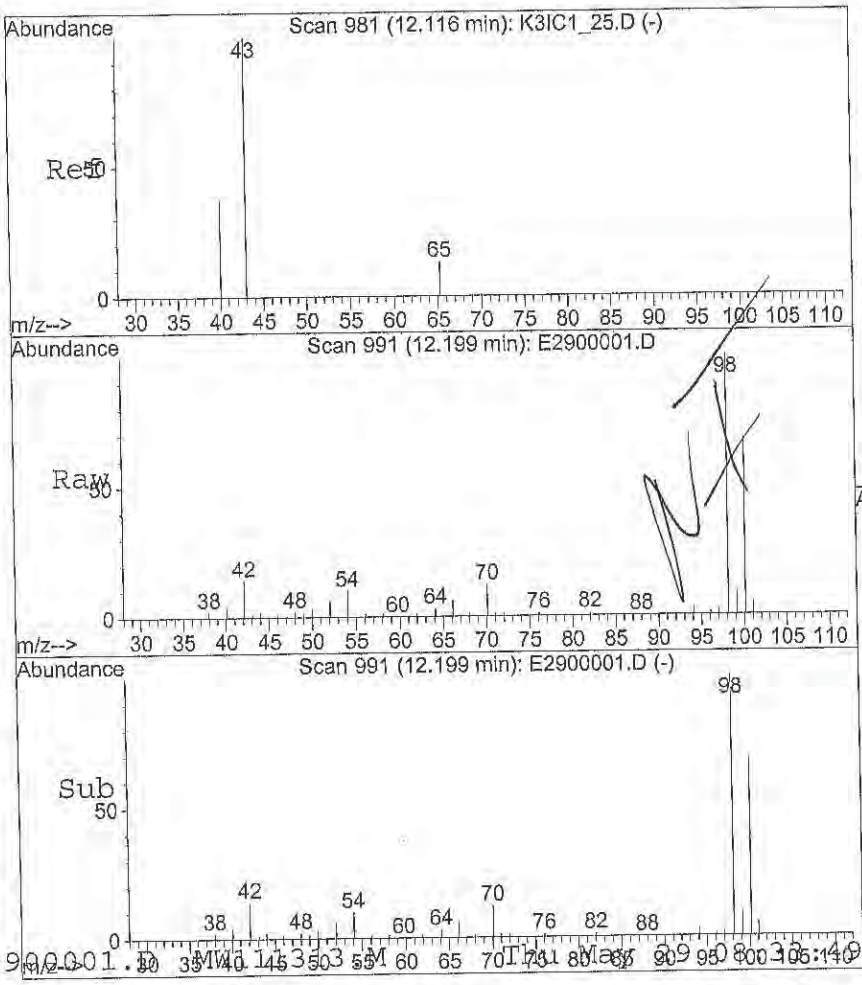


#32
1,2-Dichloroethane
Concen: 1.04 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 62 Resp: 5008

Ion	Ratio	Lower	Upper
62	100		
64	222.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

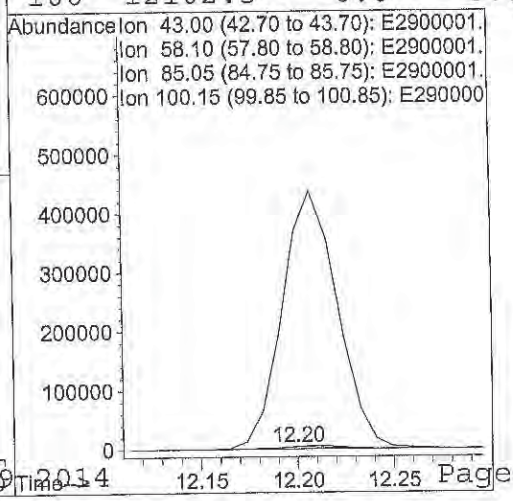


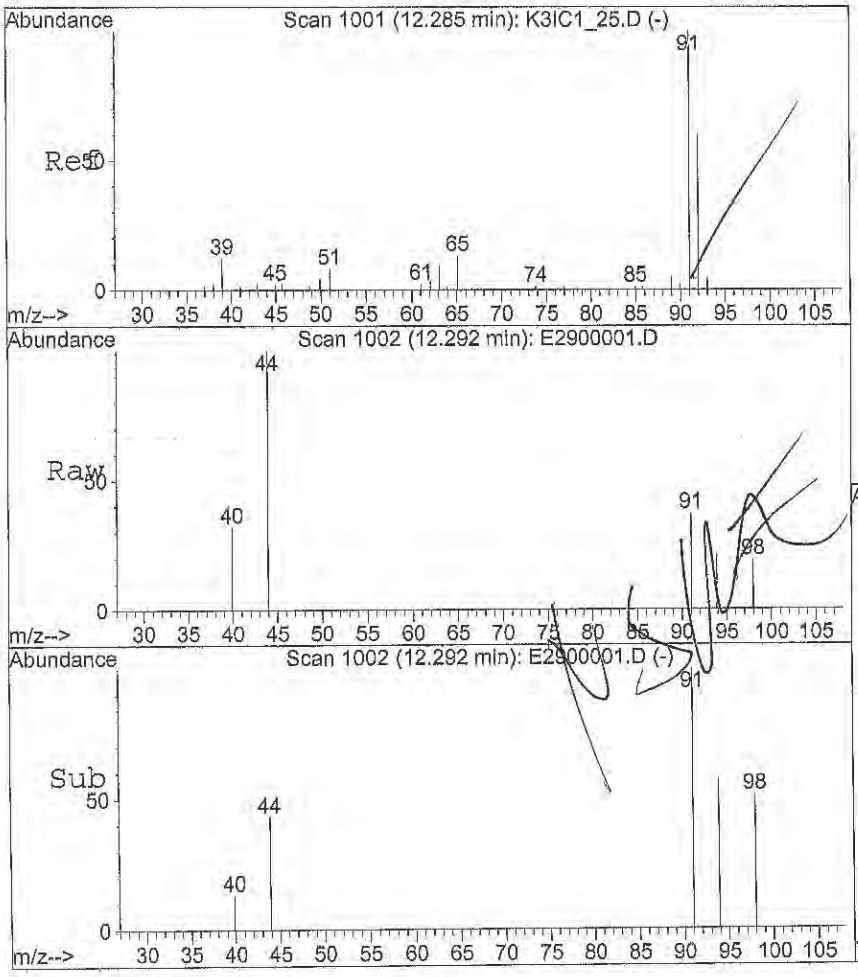


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.14 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 43 Resp: 7212

Ion	Ratio	Lower	Upper
43	100		
58	134.5	0.0	0.0#
85	0.0	0.0	0.0
100	12102.5	0.0	0.0#

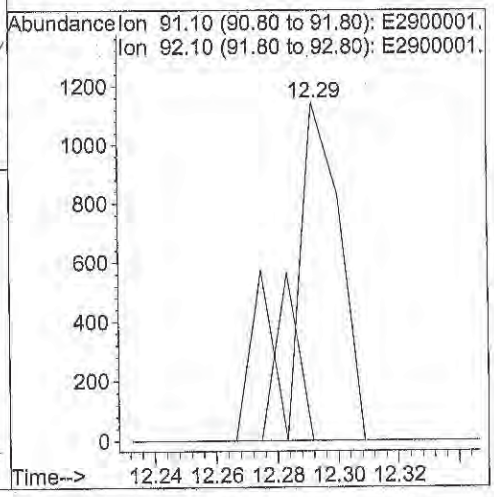


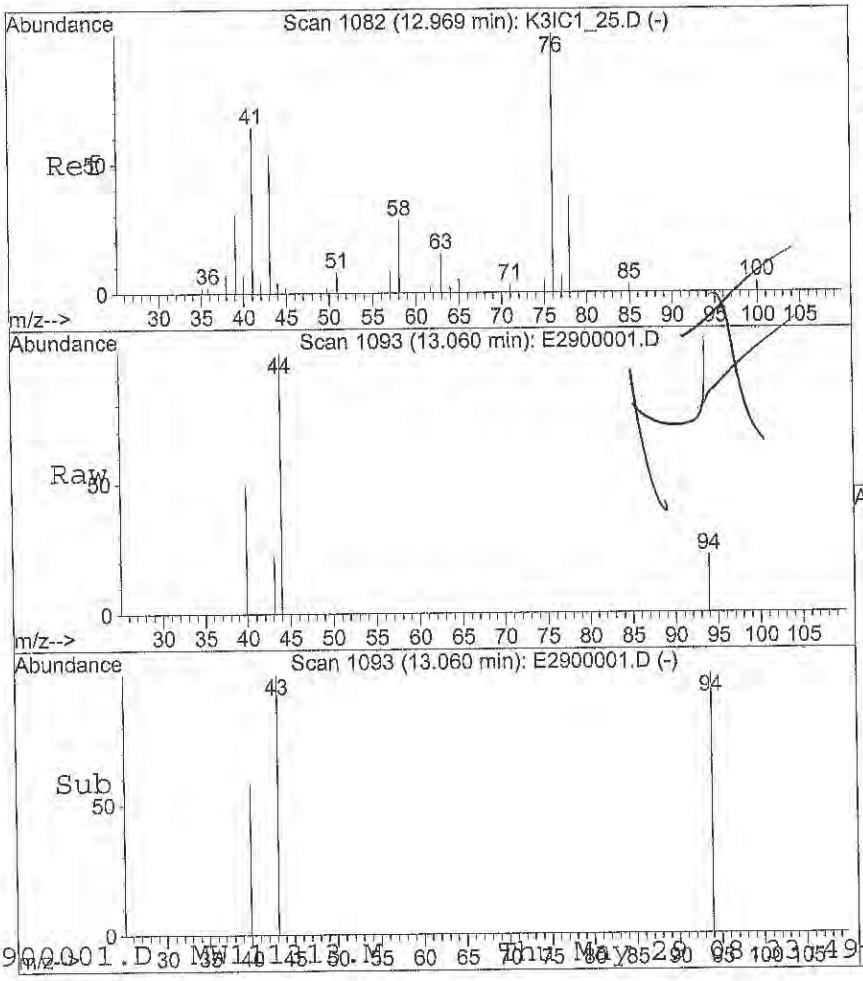


#41
Toluene
Concen: 0.08 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 91 Resp: 1289

Ion	Ratio	Lower	Upper
91	100		
92	22.1	47.4	71.0#

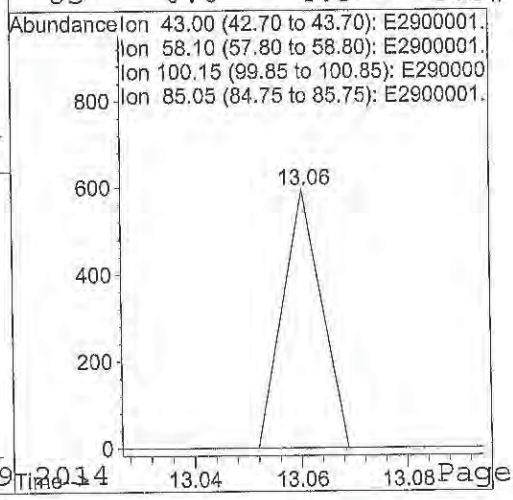


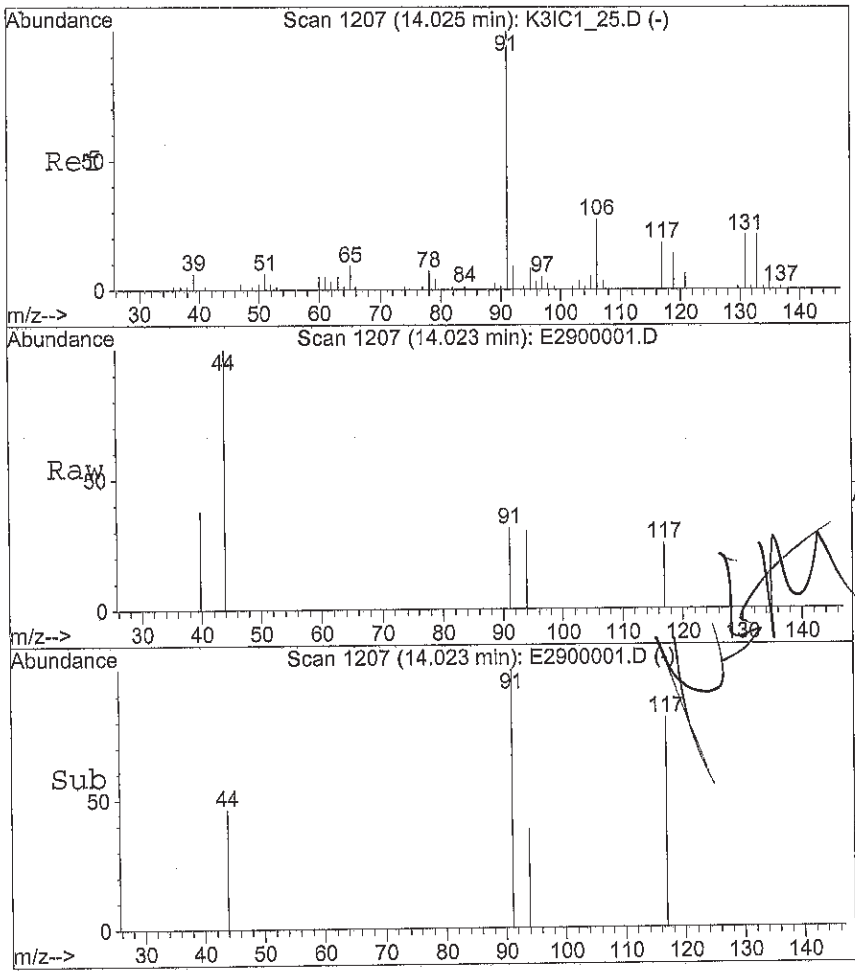


#46
2-Hexanone
Concen: 0.12 ug/L
RT: 13.06 min Scan# 1093
Delta R.T. 0.09 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 43 Resp: 301

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

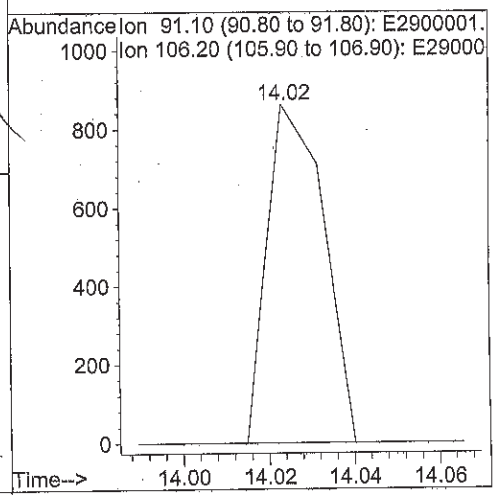


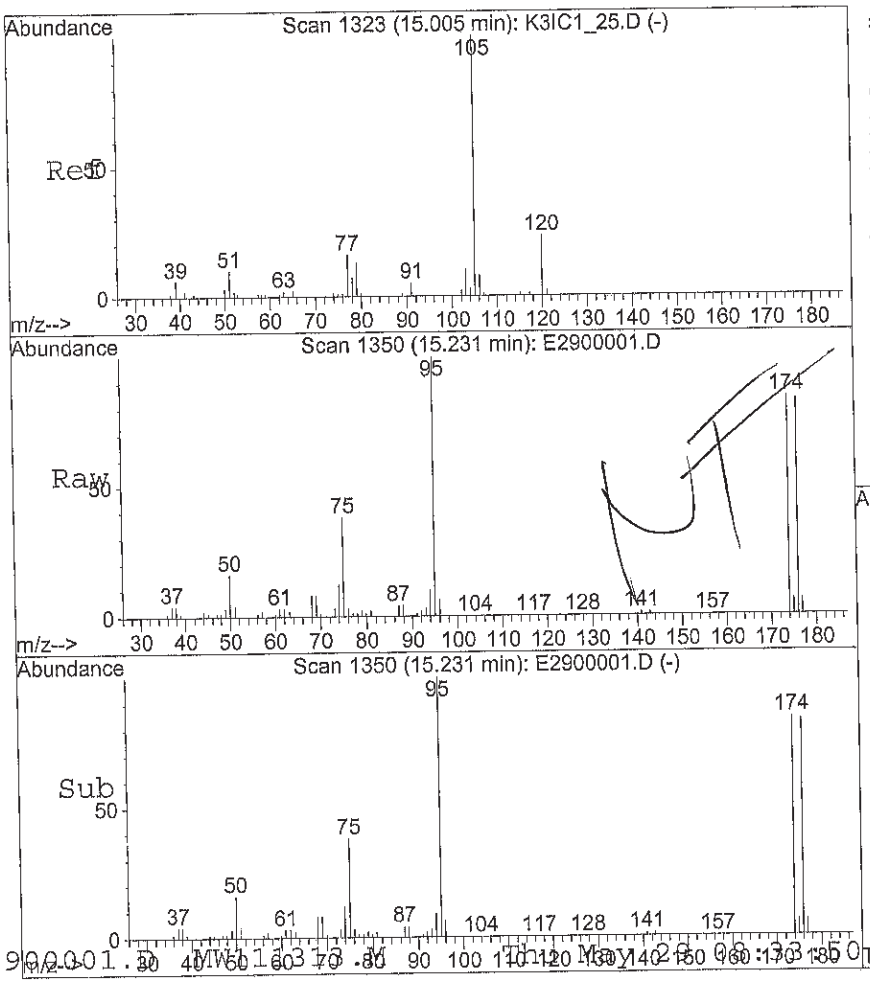


#51
Ethylbenzene
Concen: 0.04 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 91 Resp: 797

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

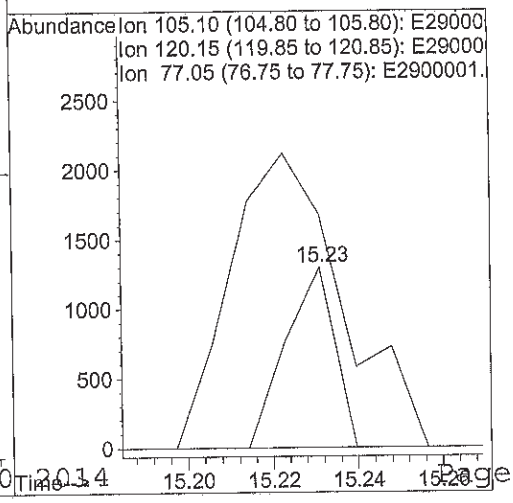


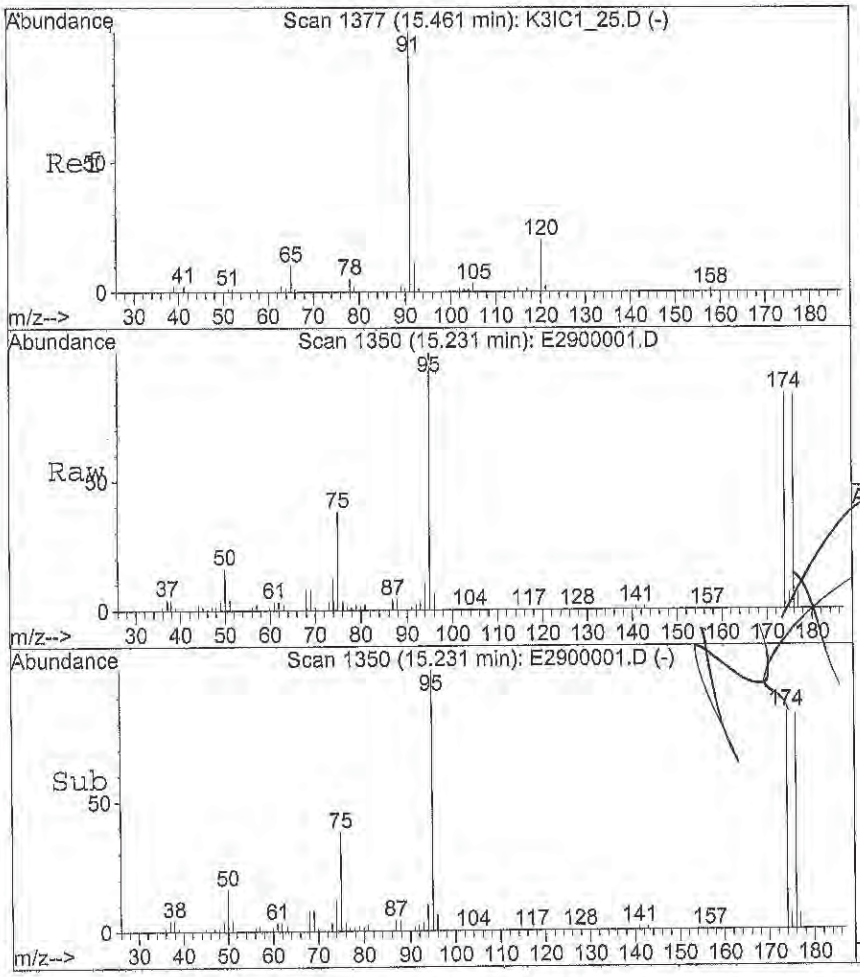


#56
Isopropylbenzene
Concen: 0.06 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.23 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion:105 Resp: 1037

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	371.7	13.1	19.7#

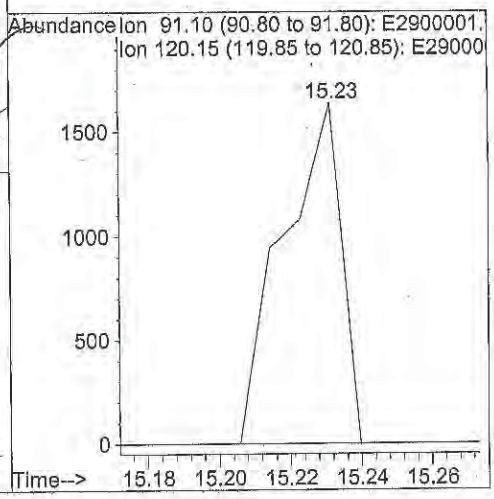


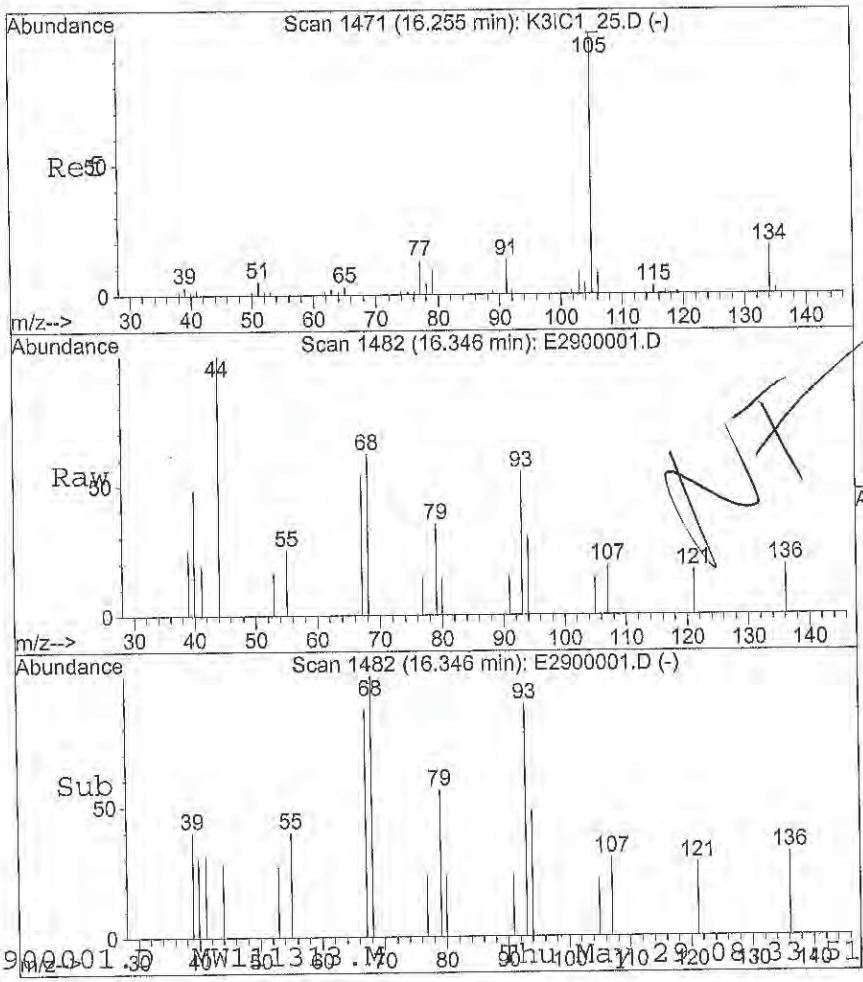


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. -0.23 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 91 Resp: 1856

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

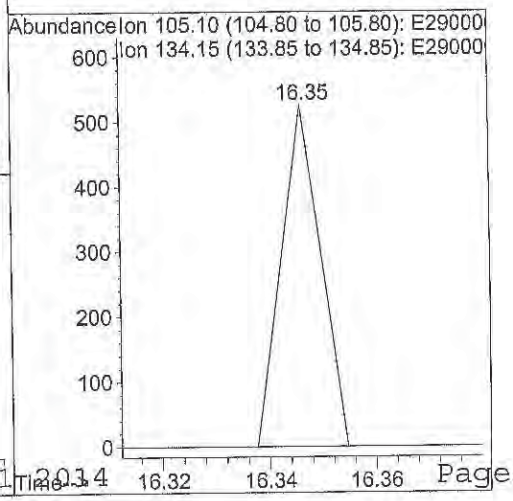


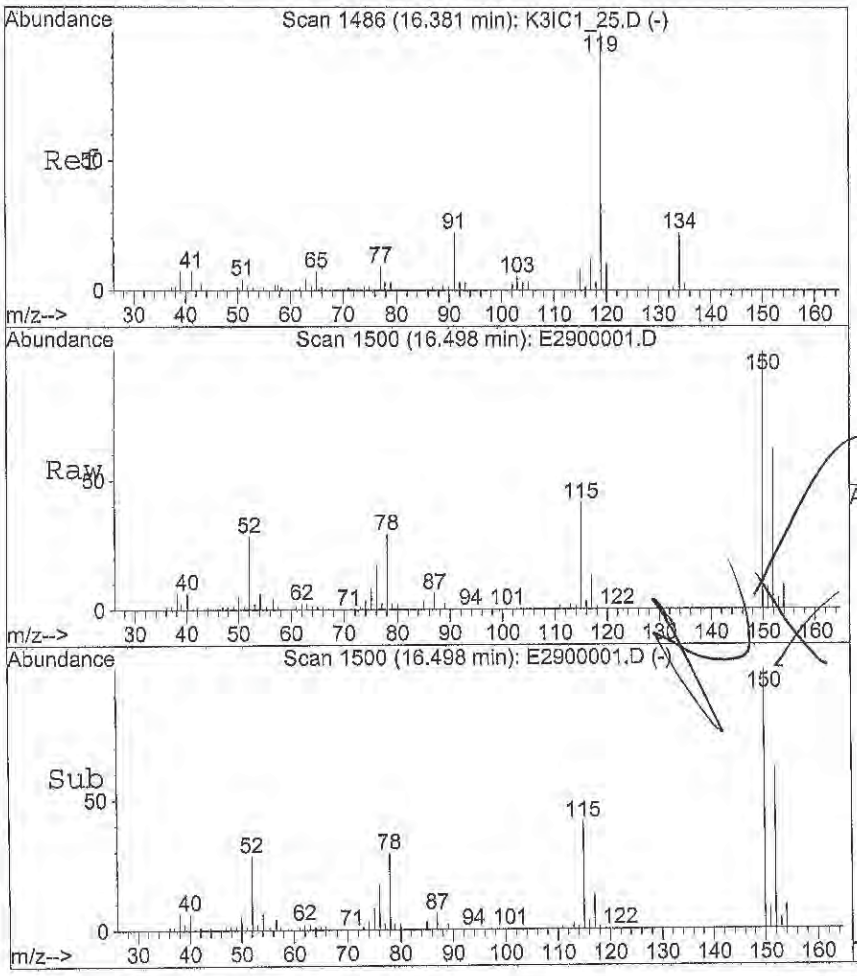


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.35 min Scan# 1482
Delta R.T. 0.09 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion:105 Resp: 267

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

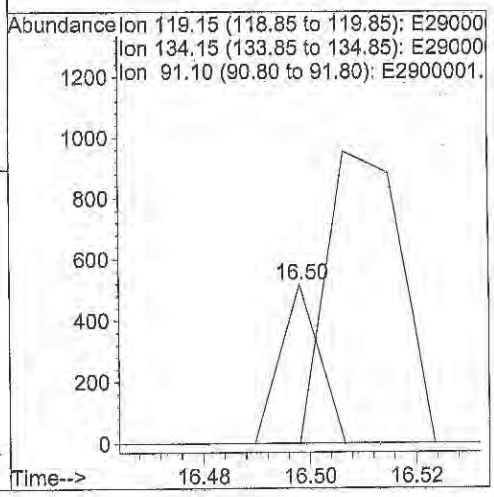


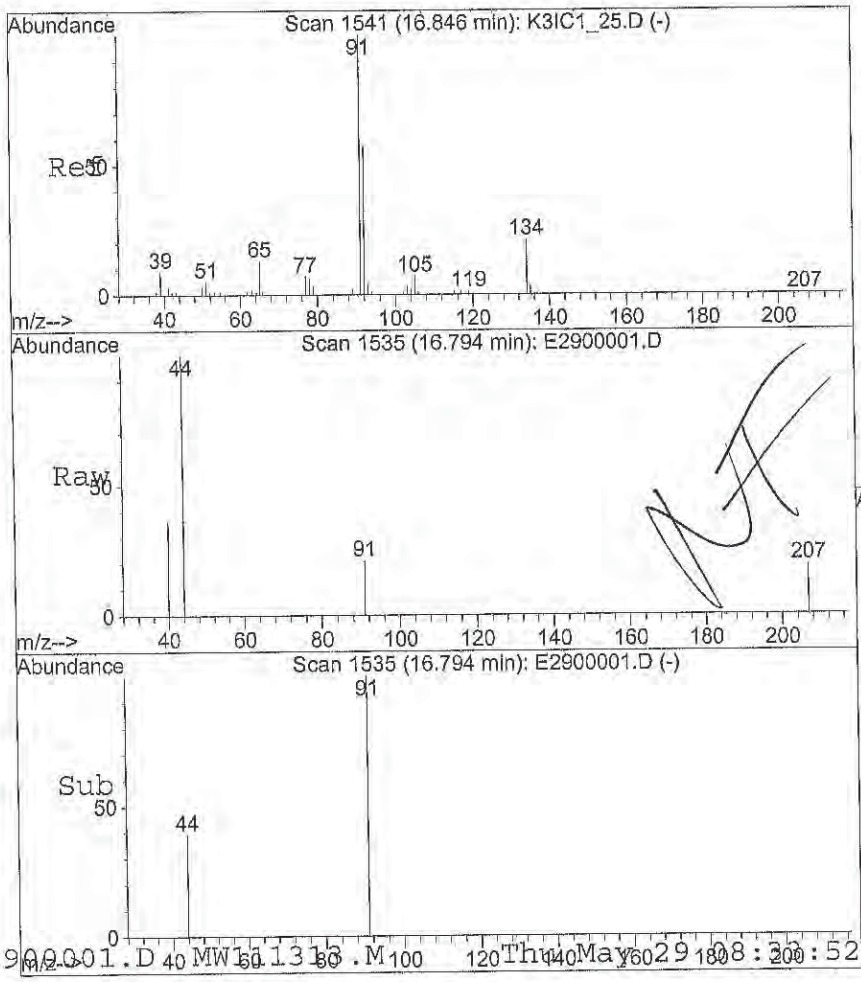


#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.50 min Scan# 1500
Delta R.T. 0.12 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion:119 Resp: 262

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	355.0	19.6	29.4#

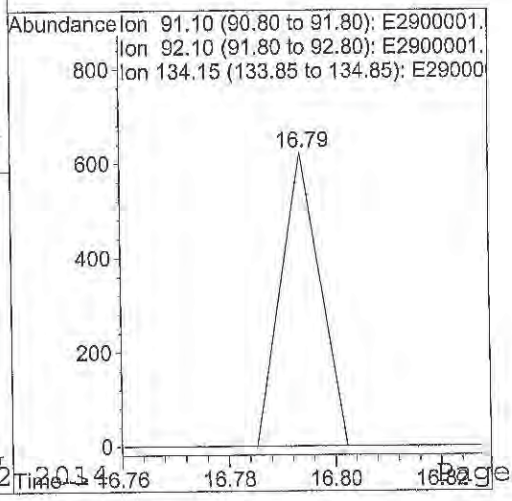




#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.79 min Scan# 1535
Delta R.T. -0.05 min
Lab File: E2900001.D
Acq: 29 May 2014 8:11 am

Tgt Ion: 91 Resp: 316

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900001.D Vial: 11
Acq On : 29 May 2014 8:11 am Operator: DN
Sample : 3E42901-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 8:33 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1446066	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1151739	12.50	ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.52	152	631317	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	425314	11.31	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.48%			
3) Chloroform-d (SU6)	9.18	84	677793	12.56	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.48%			
4) Methylene Chloride-d2 (SU5	7.06	86	374035	11.86	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.88%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	415497	16.17	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 129.36%#			
6) Benzene-d6 (SU7)	9.93	84	1285978	11.33	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.64%			
8) Toluene-d8 (SU3)	12.21	98	1298038	11.88	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.04%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	625891	13.88	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.04%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

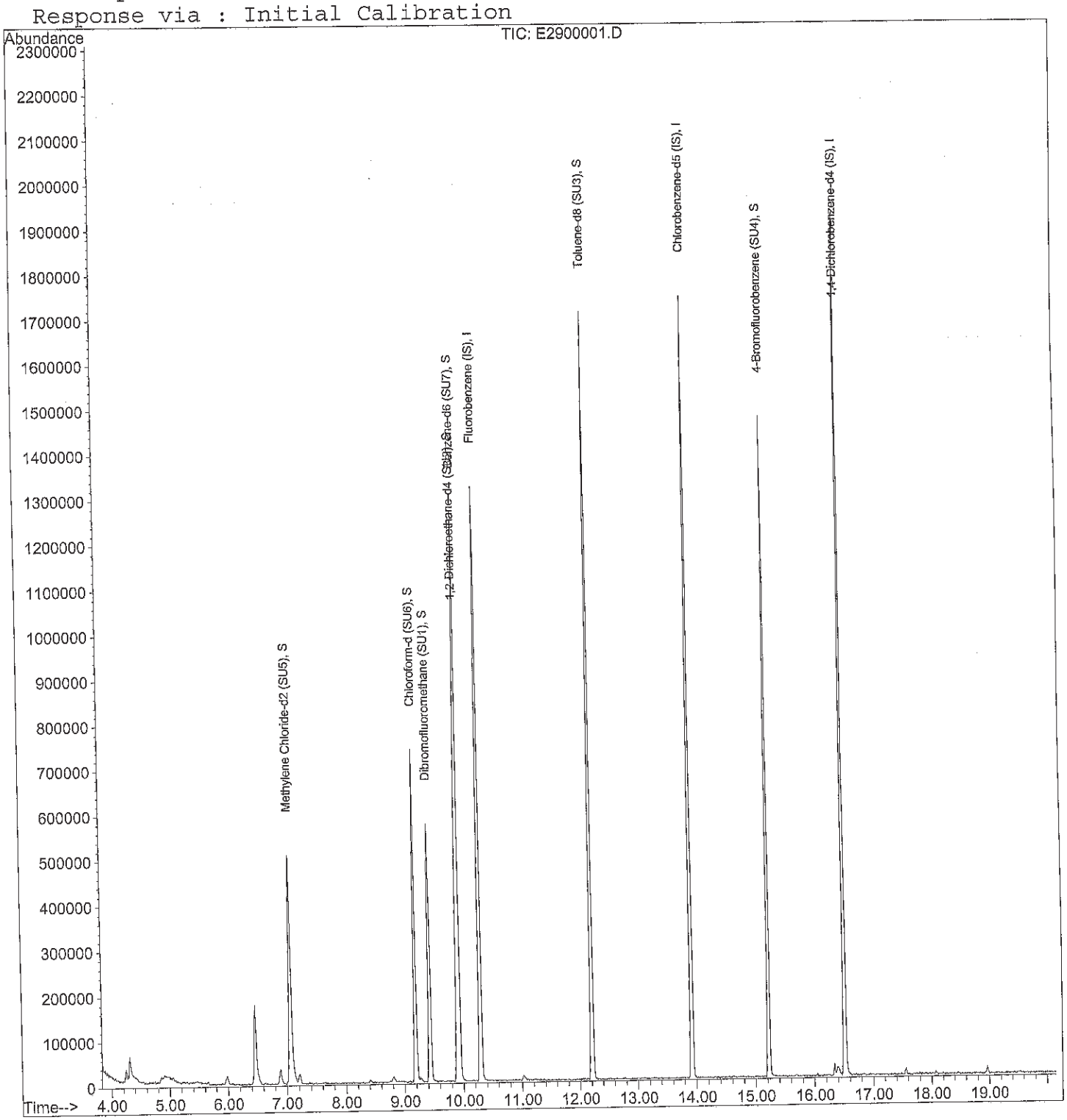
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900001.D
Acq On : 29 May 2014 8:11 am
Sample : 3E42901-01
Misc : 100cc Equipment Blank
MS Integration Params: rteint.p
Quant Time: May 29 8:33 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900002.D
Acq On : 29 May 2014 8:46 am
Sample : 3E42901-02
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: May 29 9:11 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1583591	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1245807	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	686848	12.50	ug/L	0.00

System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	445930	11.29	ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.32%			
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	428901	11.43	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.44%			
39) Toluene-d8 (SU3)	12.20	98	1403987	12.08	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.64%			
58) 4-Bromofluorobenzene (SU4)	15.23	95	686956	13.48	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.84%			

Target Compounds						Qvalue
4) Chloromethane	4.39	50	4916	0.63	~~ug/L #~~ SM	52
6) Bromomethane	5.10	96	373	-1.56	~~ug/L #~~	1
7) Chloroethane	5.18	64	1417	1.76	~~ug/L~~	91
11) Acetone	6.47	58	4126	1.60	~~ug/L~~ NT	91
12) (IPA) Leak Check Compound	6.46	45	283658	1490.65	~~ug/L #~~ SM	82
13) Carbon disulfide	6.83	76	4844	0.37	~~ug/L #~~	76
14) Methylene Chloride	7.06	84	5824	1.34	~~ug/L #~~ NT	1
15) (TBA) tert-Butanol	7.13	59	307	1.14	~~ug/L #~~ SM	77
20) 2,2-Dichloropropane	9.04	77	311	0.05	~~ug/L #~~	36
22) (DIPE) Diisopropyl Ether	7.97	45	256	0.02	~~ug/L #~~	48
24) Chloroform	9.21	83	1538	0.19	~~ug/L #~~	18
25) (ETBE) 2-ethoxy 2-methyl p	8.37	59	293	0.03	~~ug/L #~~	44
31) Benzene	9.97	78	2529	0.17	~~ug/L #~~	72
32) 1,2-Dichloroethane	9.91	62	7172	1.36	~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	7284	2.93	~~ug/L #~~ NT	100
41) Toluene	12.29	91	33408	1.97	ug/L 0.0394	99
46) 2-Hexanone	12.93	43	270	0.10	~~ug/L #~~ NT	37
51) Ethylbenzene	14.03	91	14449	0.75	ug/L 0.015	97
52) m,p-Xylenes	14.15	106	20420	2.98	ug/L 0.0596	100
53) o-Xylene	14.61	106	8215	1.21	ug/L 0.0242	90
54) Styrene	14.63	104	2252	-0.64	~~ug/L #~~ SM	51
56) Isopropylbenzene	15.01	105	324	0.02	~~ug/L #~~	55

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900002.D Vial: 1
Acq On : 29 May 2014 8:46 am Operator: DN
Sample : 3E42901-02 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 9:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

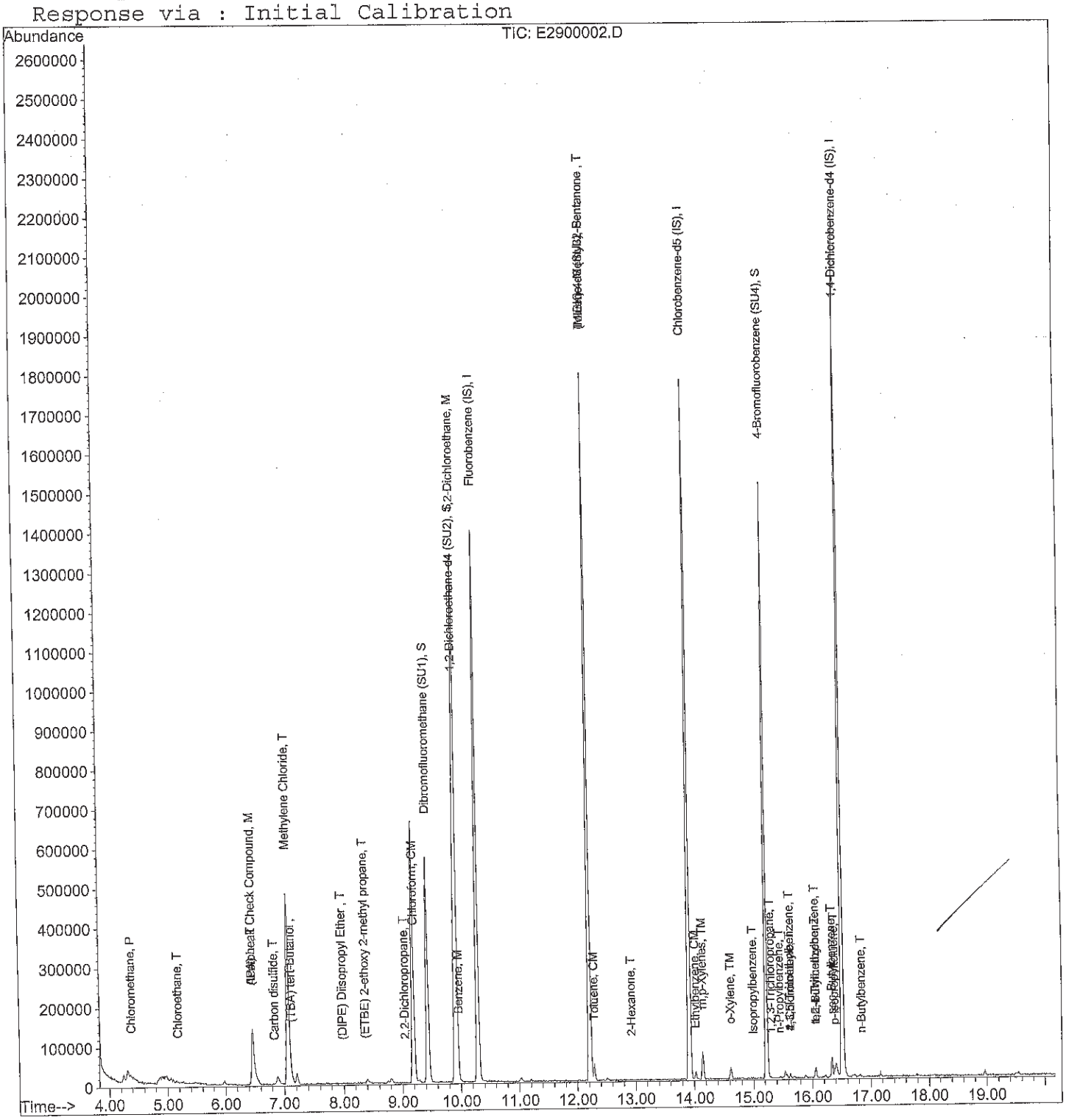
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
57) 1,2,3-Trichloropropane	15.30	75	255	0.05 ~~ug/L~~ #	36
62) n-Propylbenzene	15.45	91	5039	0.18 ug/L #	90
63) 2-Chlorotoluene	15.62	91	271	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.63	105	7988	0.47 ug/L 0.0094	91
65) 4-Chlorotoluene	15.62	91	271	0.02 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.06	119	1529	0.10 ~~ug/L~~ #	82
67) 1,2,4-Trimethylbenzene	16.06	105	16484	0.92 ~~ug/L~~ 0.0184	94
68) sec-Butylbenzene	16.34	105	800	0.03 ug/L #	62
69) p-Isopropyltoluene	16.38	119	1383	0.07 ~~ug/L~~ #	52
72) n-Butylbenzene	16.84	91	628	0.03 ~~ug/L~~ #	30

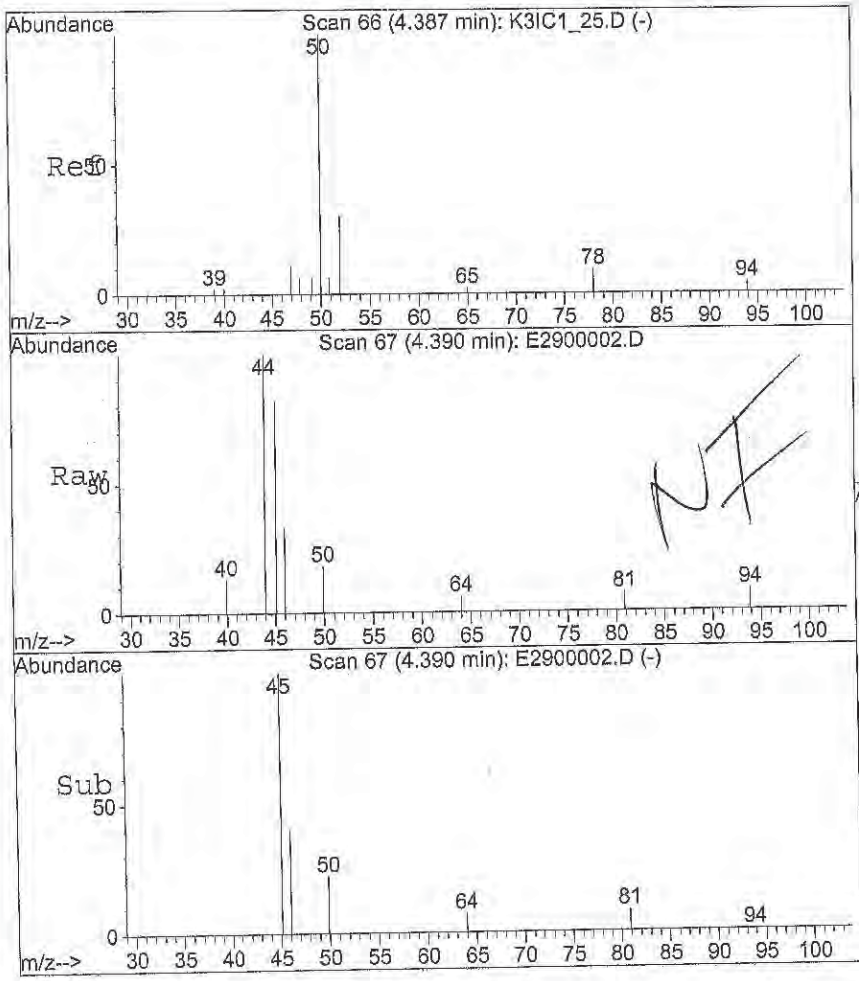
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900002.D Vial: 1
Acq On : 29 May 2014 8:46 am Operator: DN
Sample : 3E42901-02 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 9:11 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

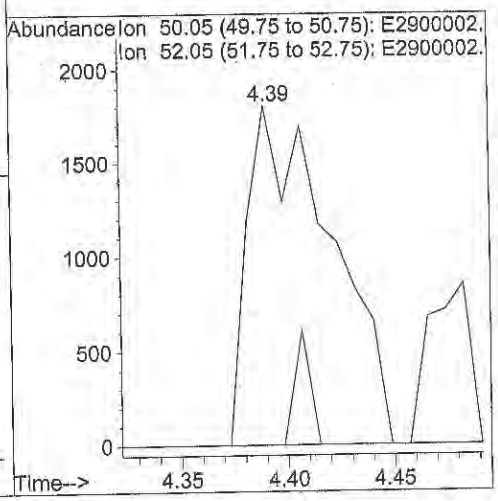


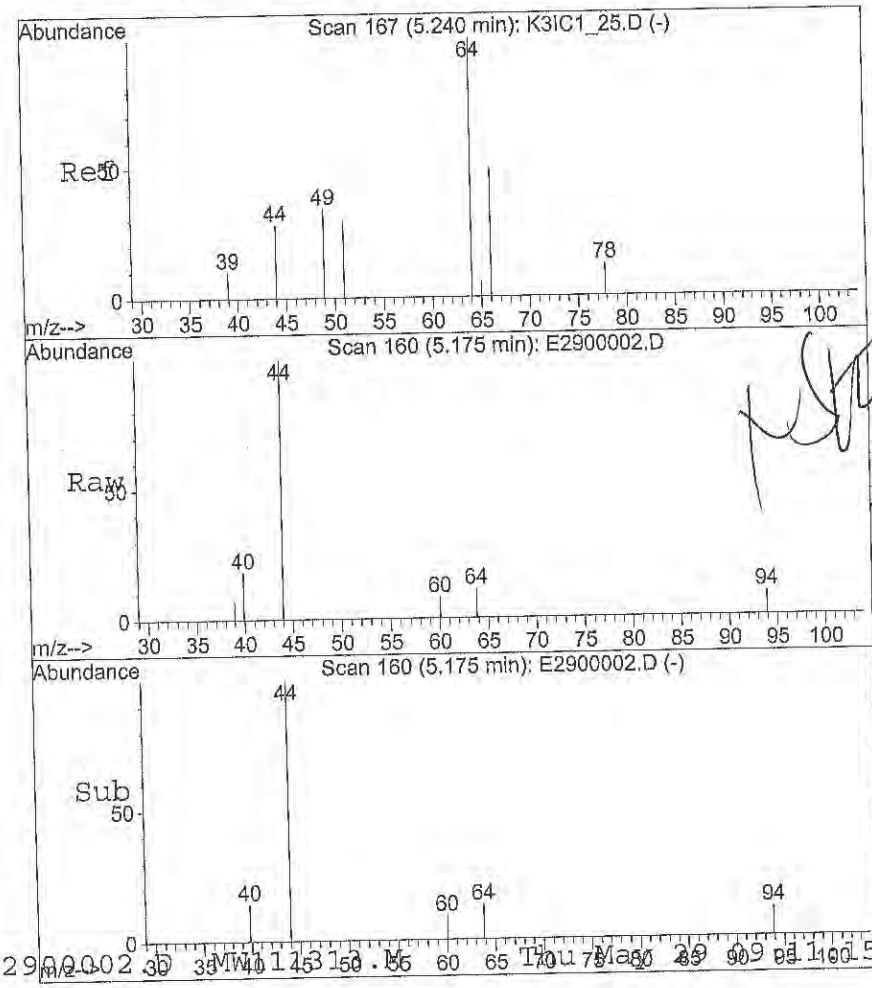


#4
Chloromethane
Concen: 0.63 ug/L
RT: 4.39 min Scan# 67
Delta R.T. 0.00 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 50 Resp: 4916

Ion	Ratio	Lower	Upper
50	100		
52	6.3	26.9	40.3#

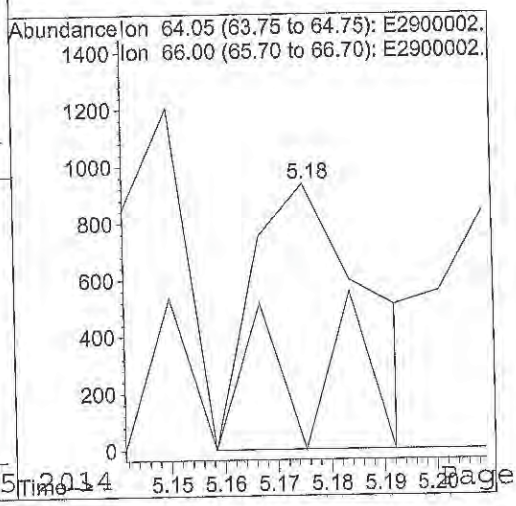


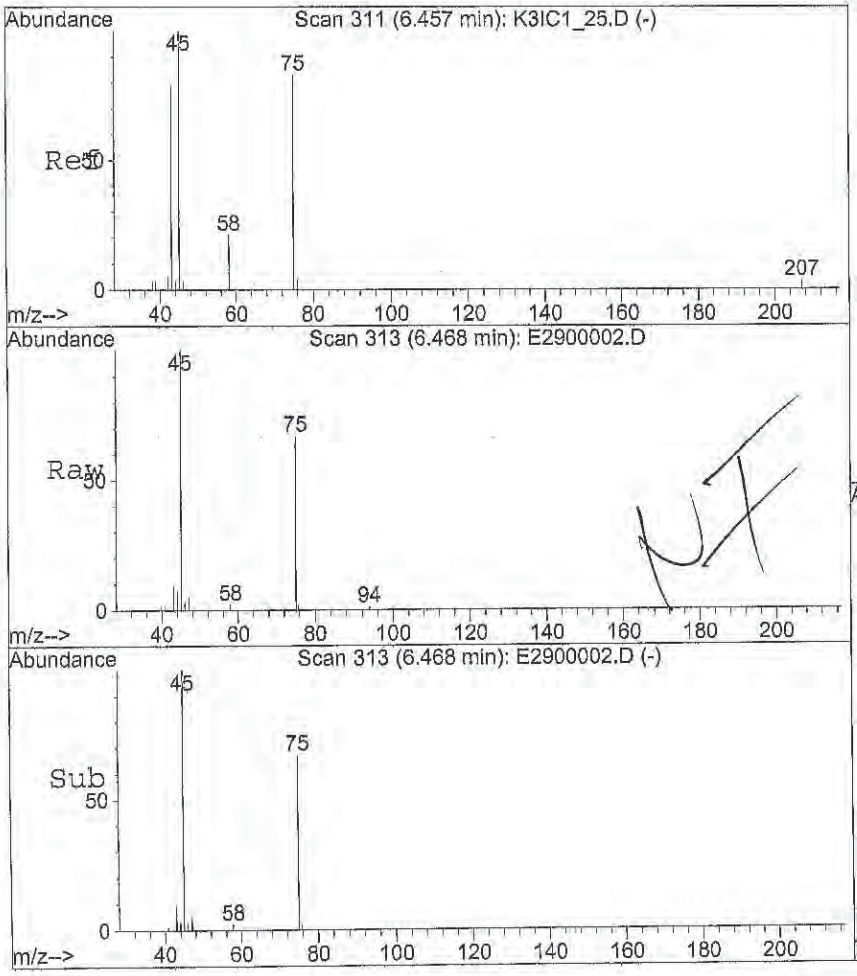


#7
Chloroethane
Concen: 1.76 ug/L
RT: 5.18 min Scan# 160
Delta R.T. -0.06 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 64 Resp: 1417

Ion	Ratio	Lower	Upper
64	100		
66	38.4	35.4	53.0

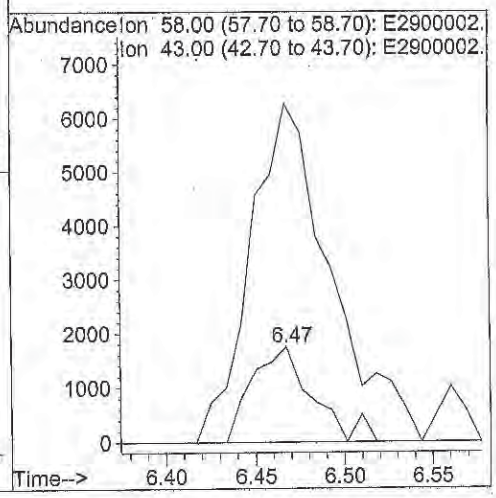


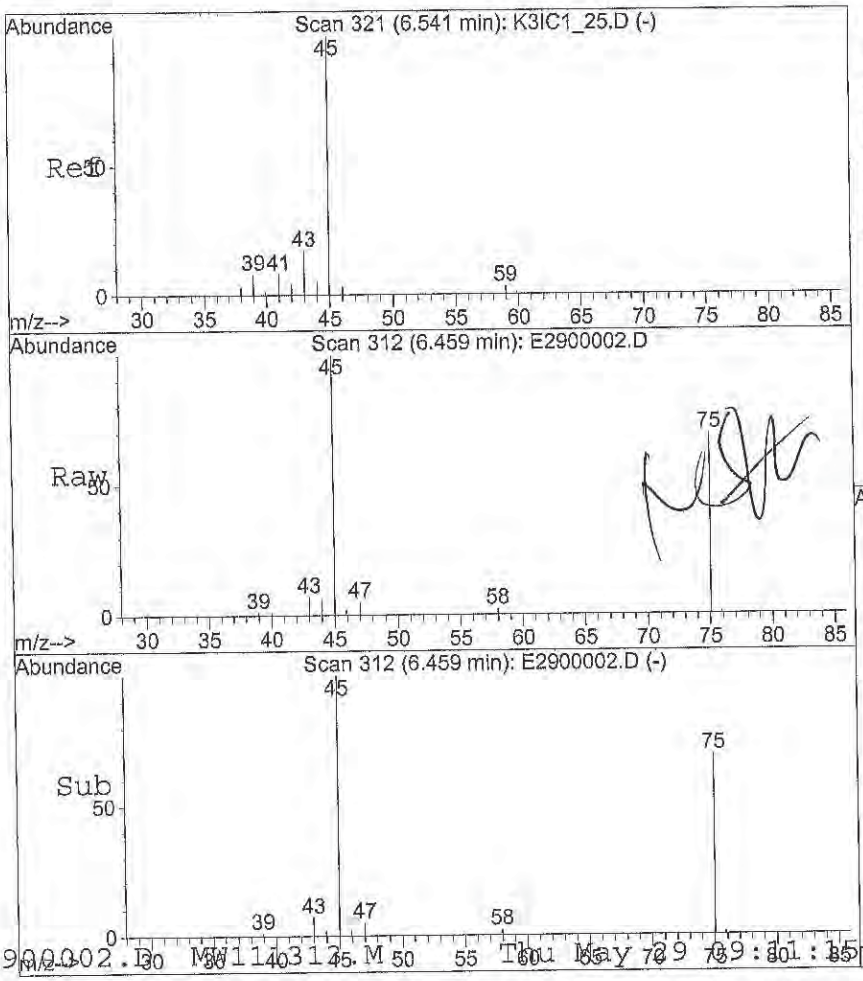


#11
Acetone
Concen: 1.60 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 58 Resp: 4126

Ion	Ratio	Lower	Upper
58	100		
43	474.3	360.9	541.3

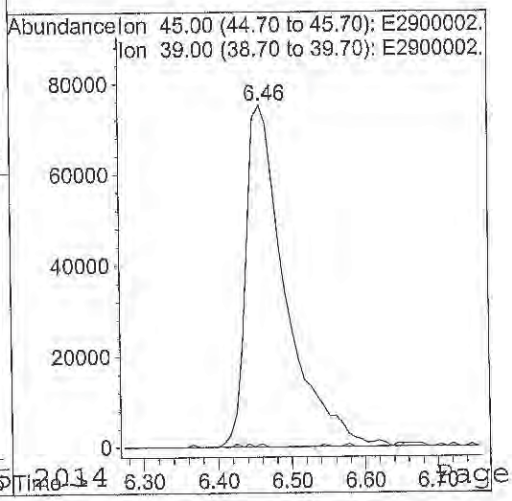


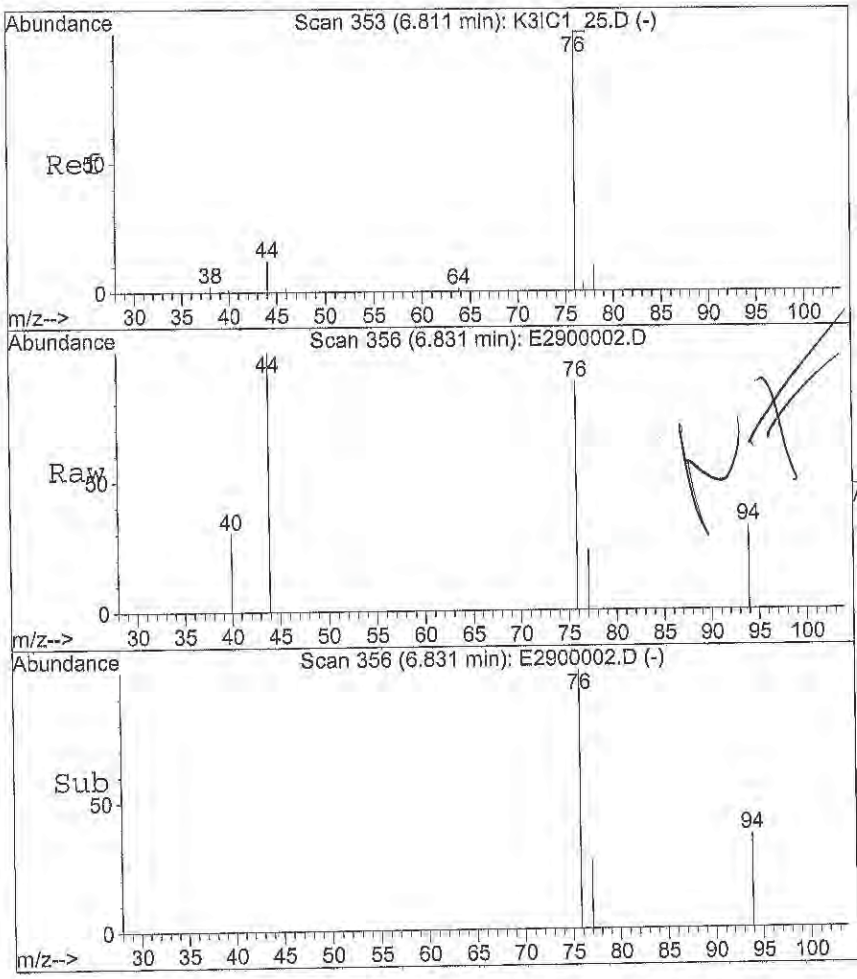


#12
(IPA) Leak Check Compound
Concen: 1490.65 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 45 Resp: 283658

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

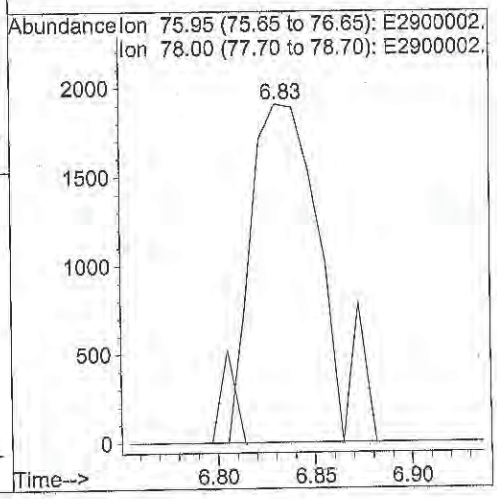


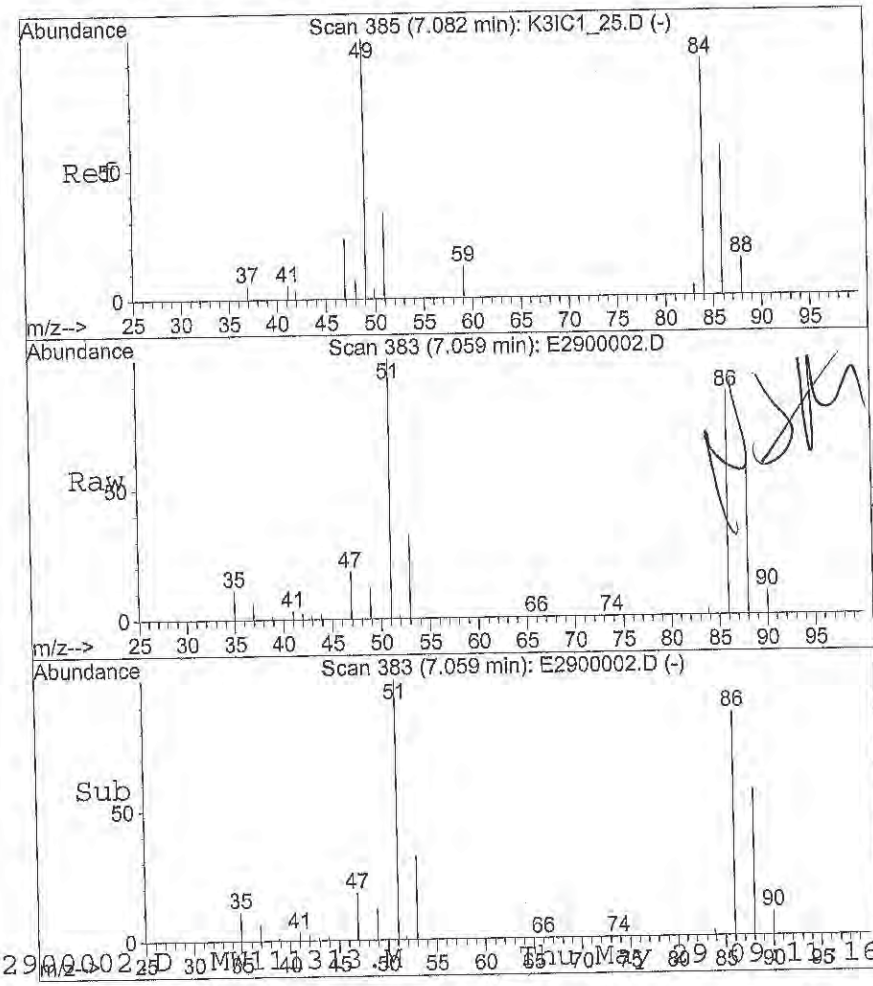


#13
Carbon disulfide
Concen: 0.37 ug/L
RT: 6.83 min Scan# 356
Delta R.T. 0.02 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 76 Resp: 4844

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

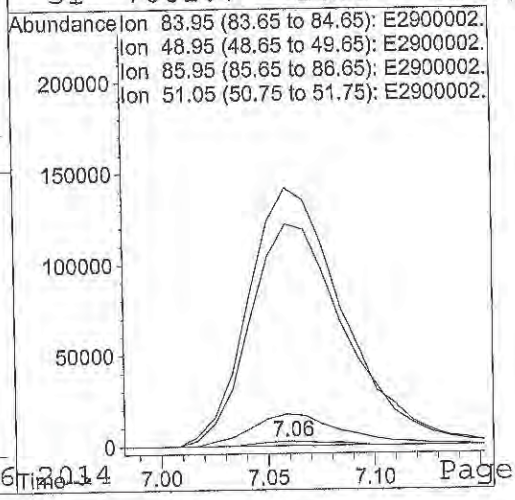


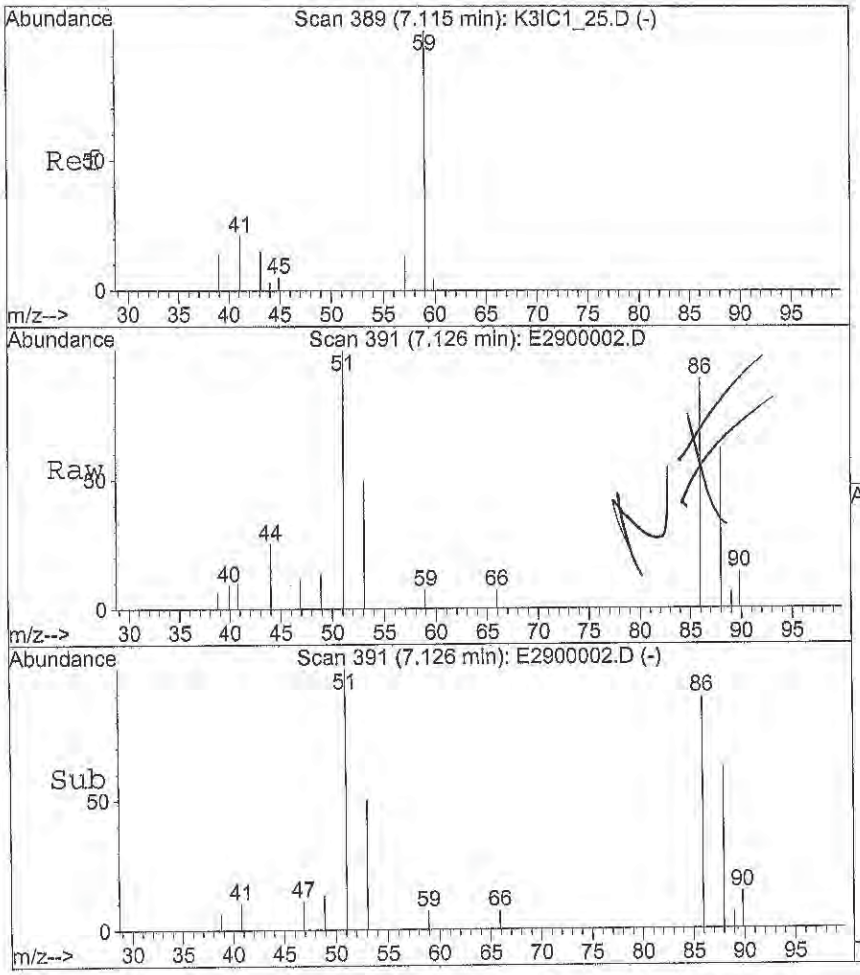


#14
Methylene Chloride
Concen: 1.34 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 84 Resp: 5824

Ion	Ratio	Lower	Upper
84	100		
49	894.0	89.8	134.6#
86	6643.4	51.1	76.7#
51	7661.7	28.5	42.7#

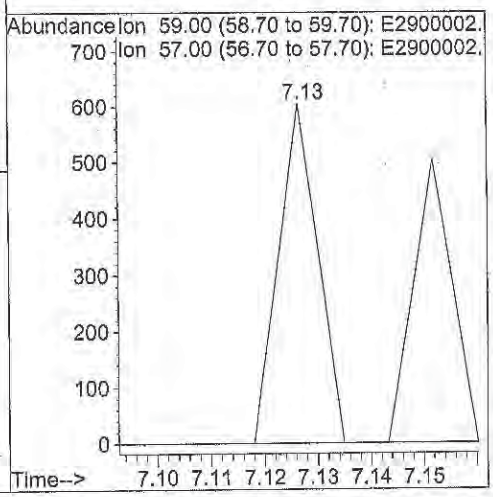


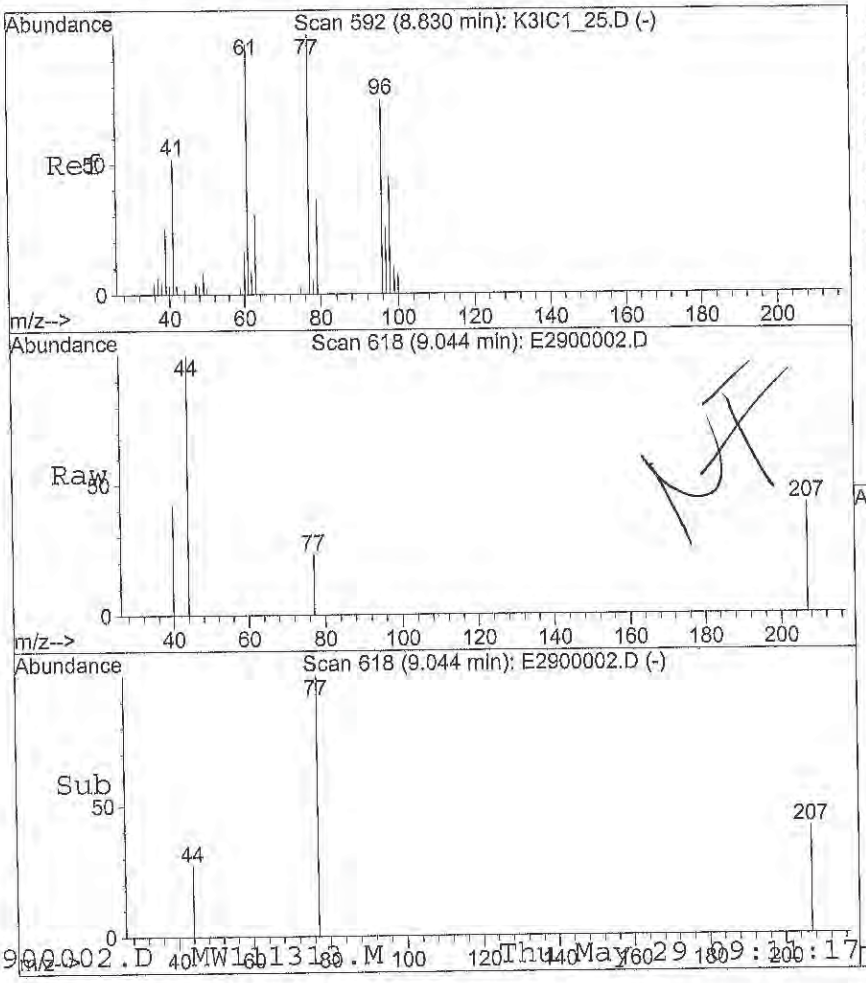


#15
(TBA) tert-Butanol
Concen: 1.14 ug/L
RT: 7.13 min Scan# 391
Delta R.T. 0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 59 Resp: 307

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

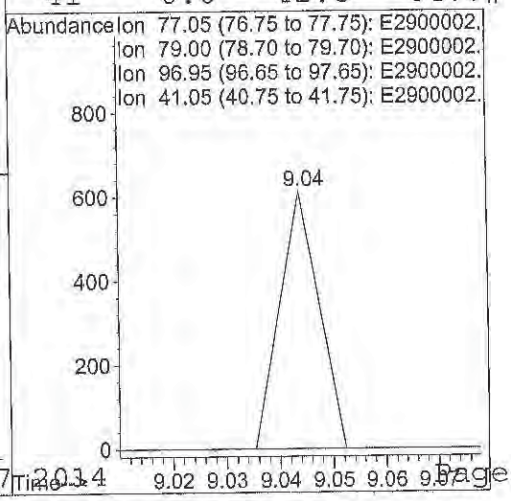


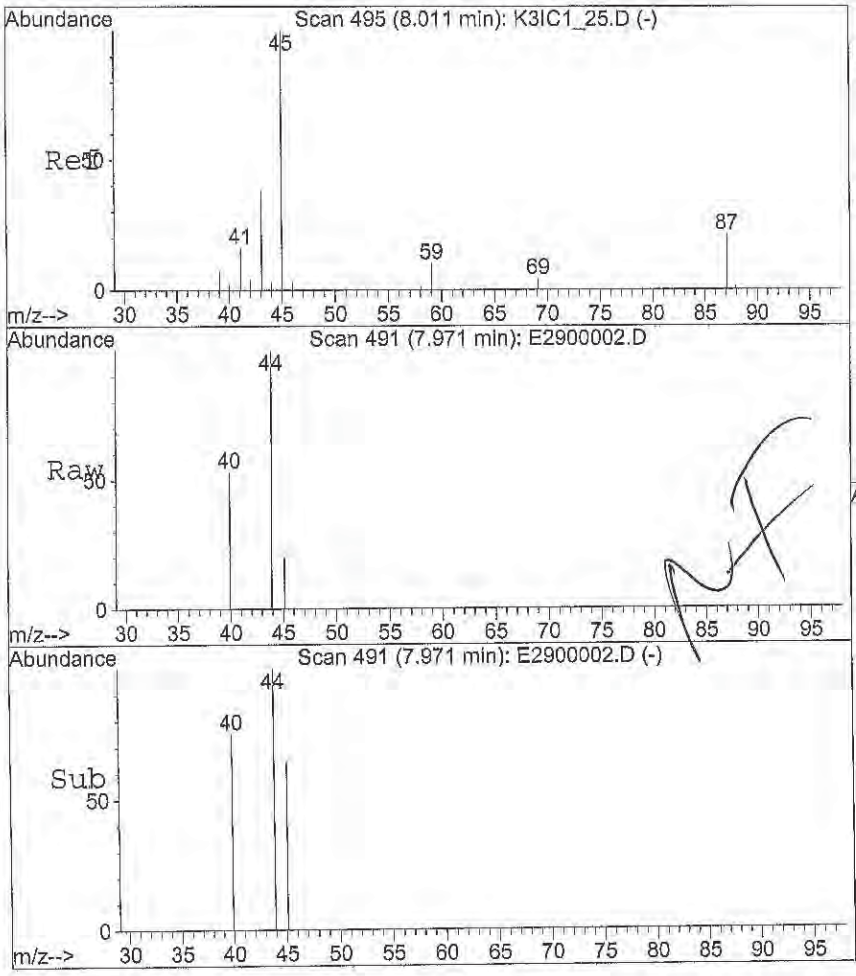


#20
2,2-Dichloropropane
Concen: 0.05 ug/L
RT: 9.04 min Scan# 618
Delta R.T. 0.21 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 77 Resp: 311

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

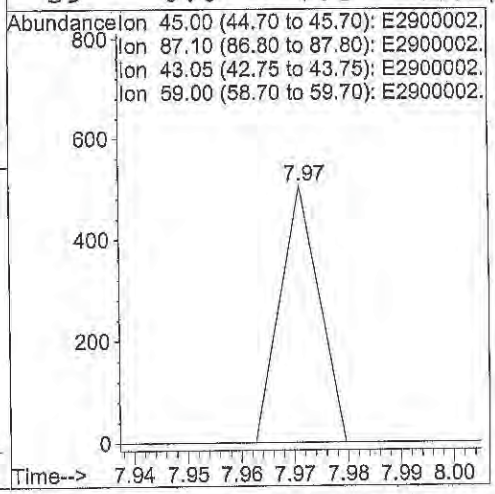


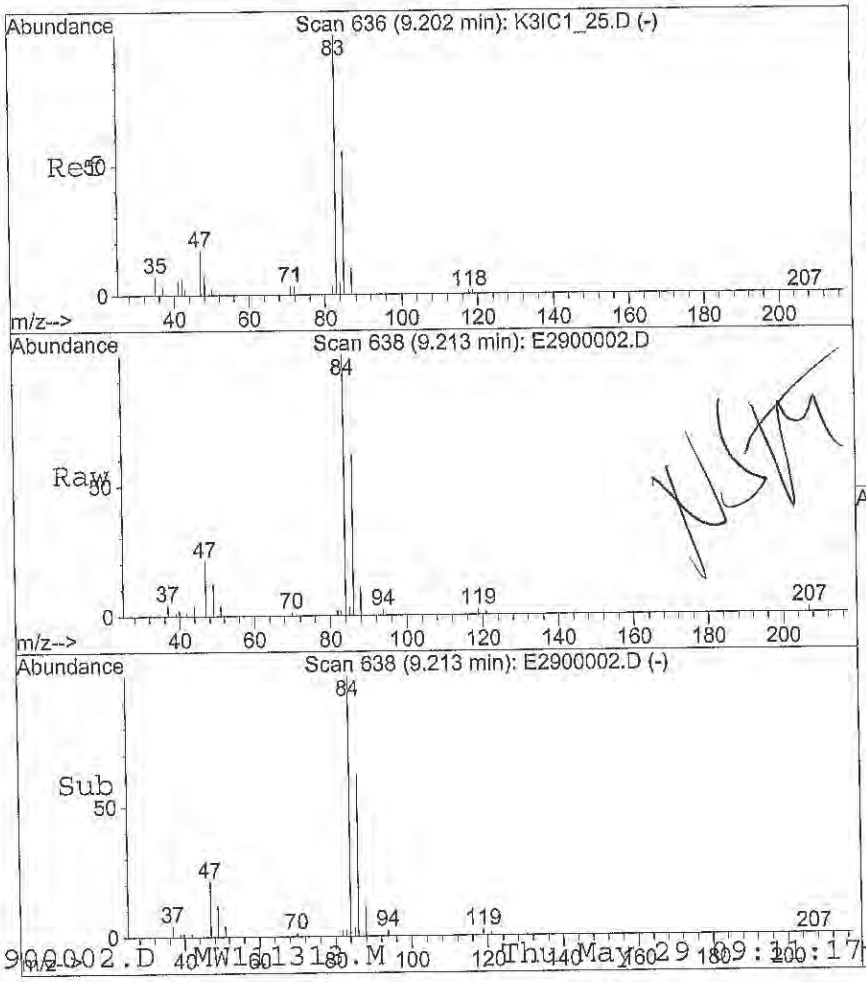


#22
(DIPE) Diisopropyl Ether
Concen: 0.02 ug/L
RT: 7.97 min Scan# 491
Delta R.T. -0.04 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 45 Resp: 256

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

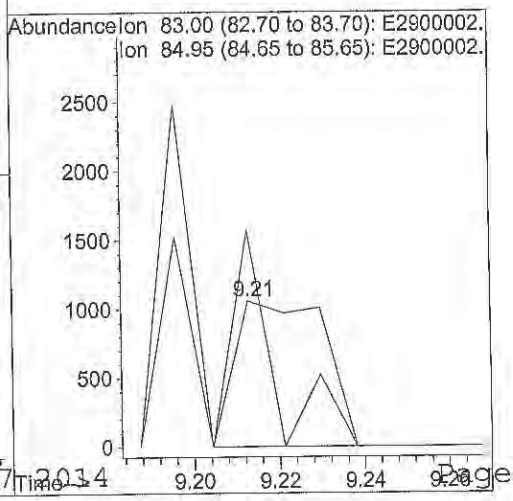


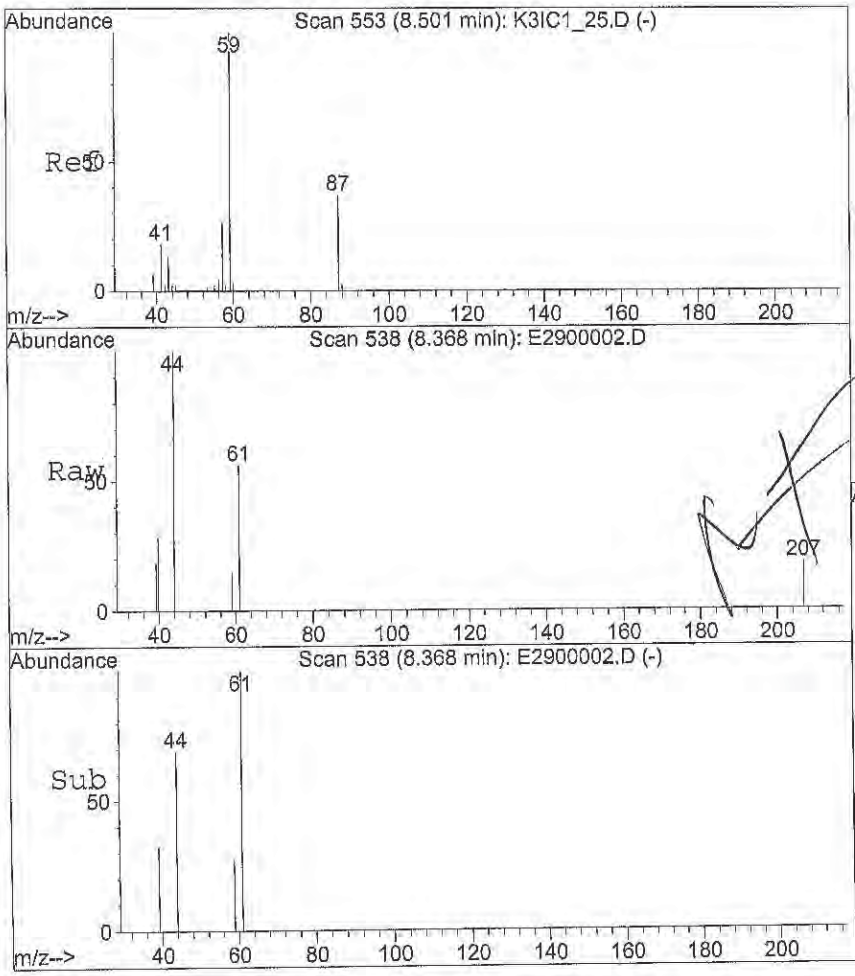


#24
Chloroform
Concen: 0.19 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 83 Resp: 1538

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

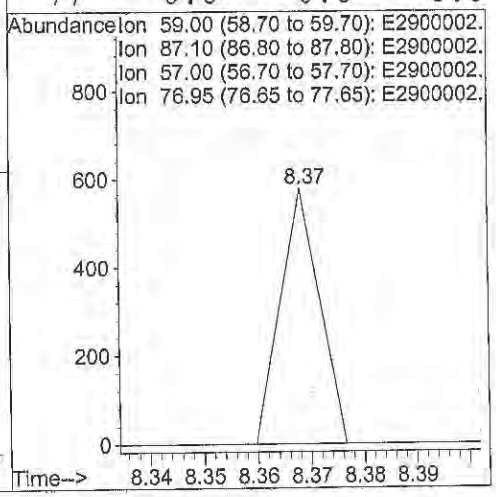


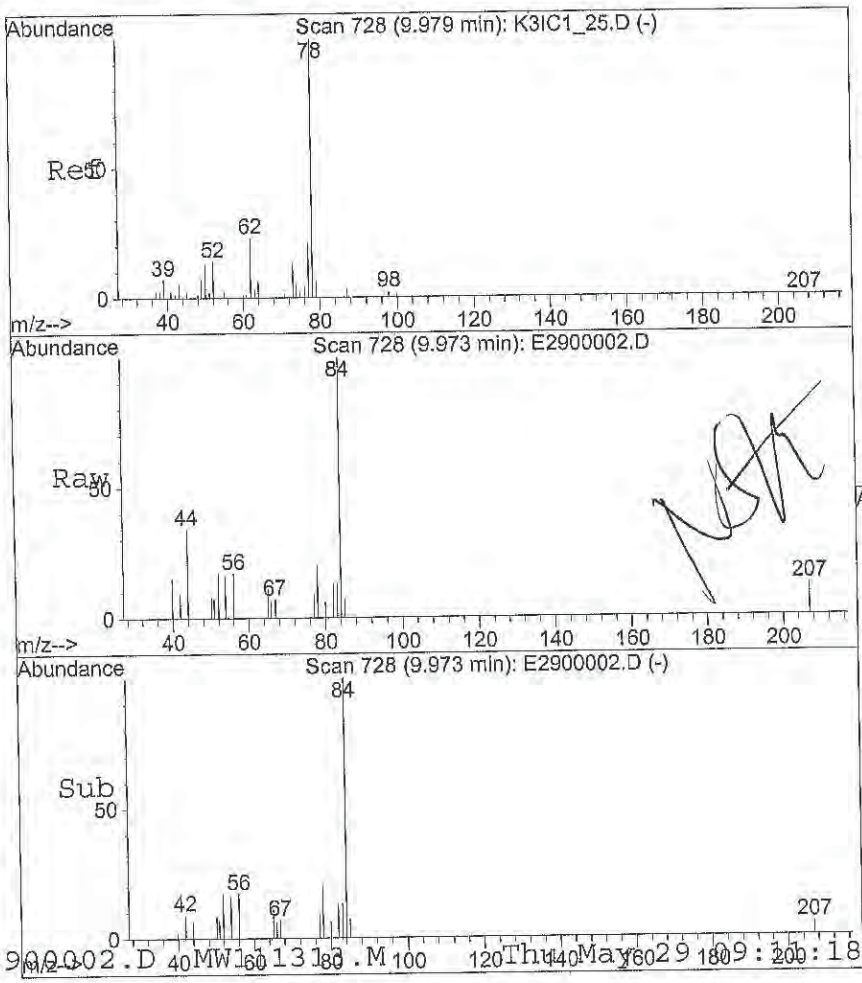


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.37 min Scan# 538
Delta R.T. -0.13 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 59 Resp: 293

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

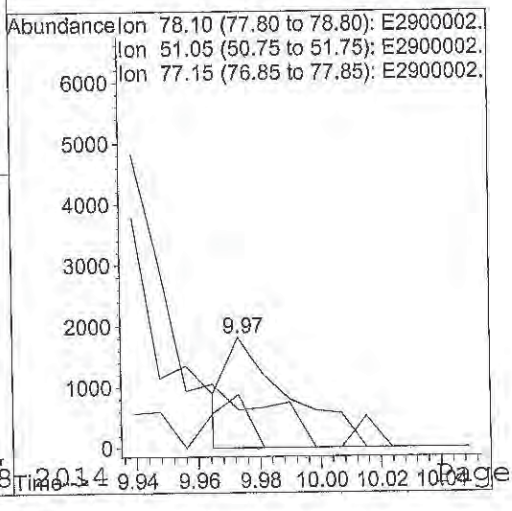


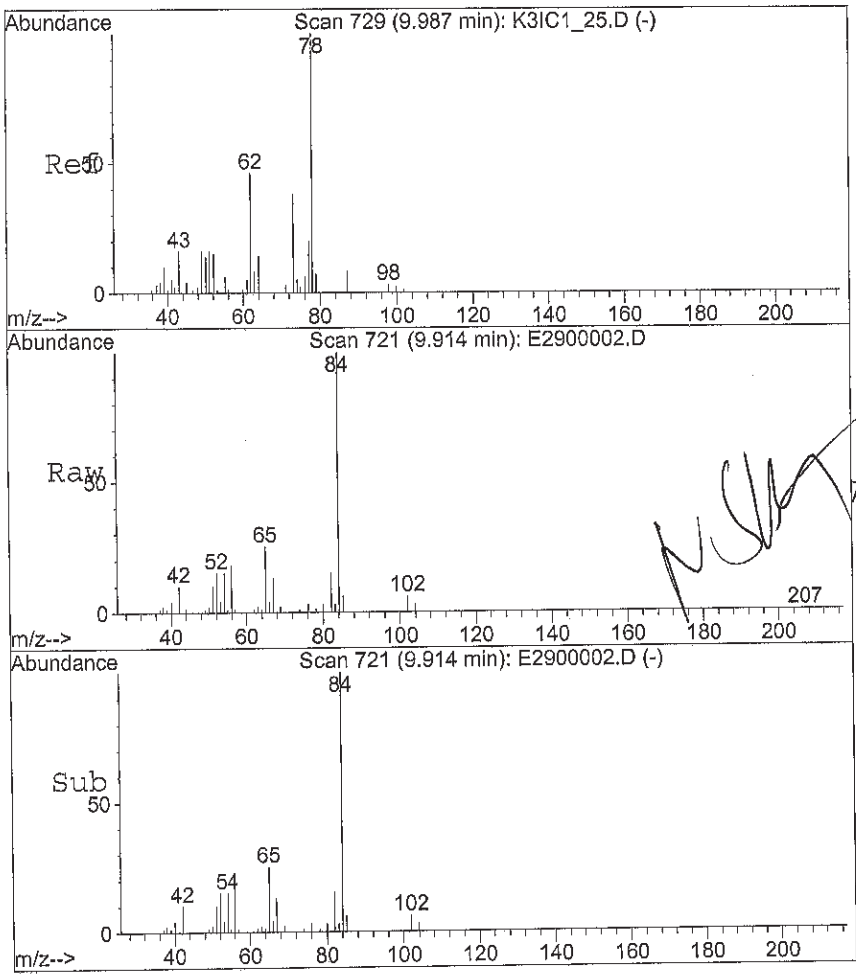


#31
Benzene
Concen: 0.17 ug/L
RT: 9.97 min Scan# 728
Delta R.T. -0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 78 Resp: 2529

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	28.7	16.6	24.8#

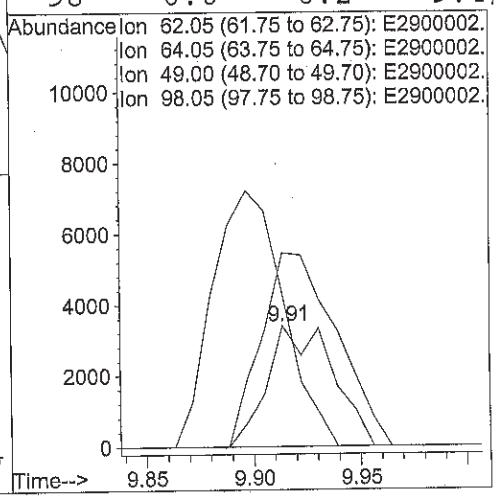


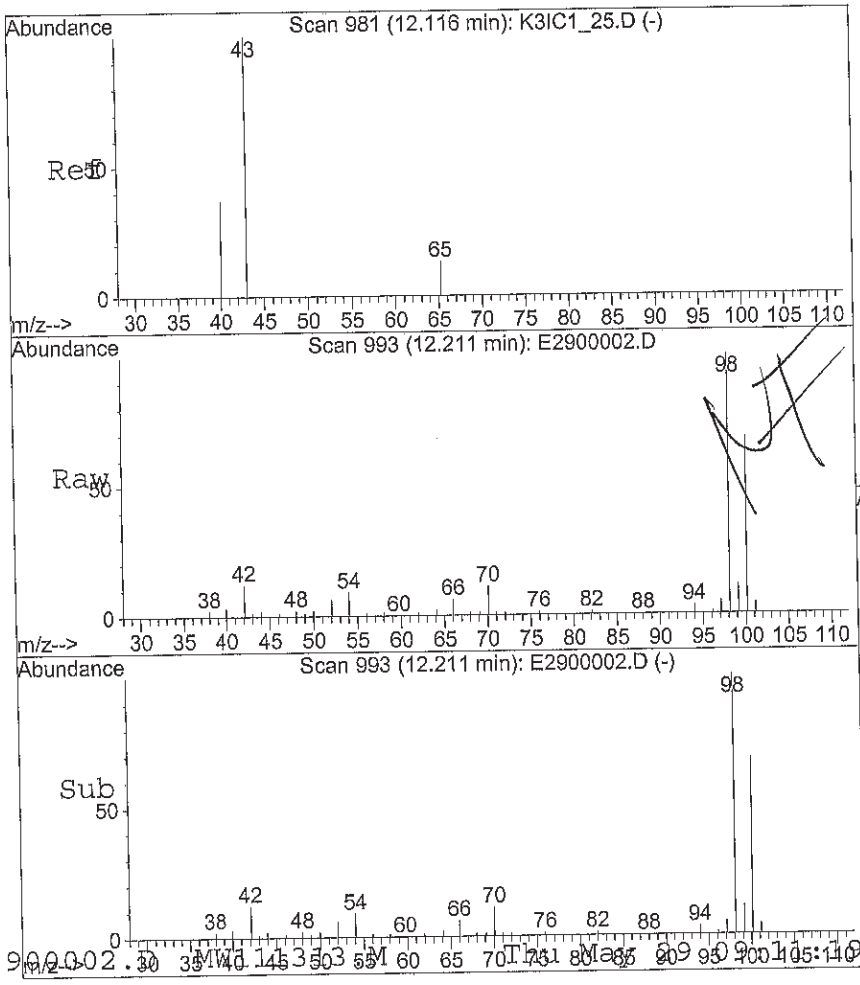


#32
1,2-Dichloroethane
Concen: 1.36 ug/L
RT: 9.91 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 62 Resp: 7172

Ion	Ratio	Lower	Upper
62	100		
64	185.4	28.0	42.0#
49	230.6	28.5	42.7#
98	0.0	6.2	9.4#

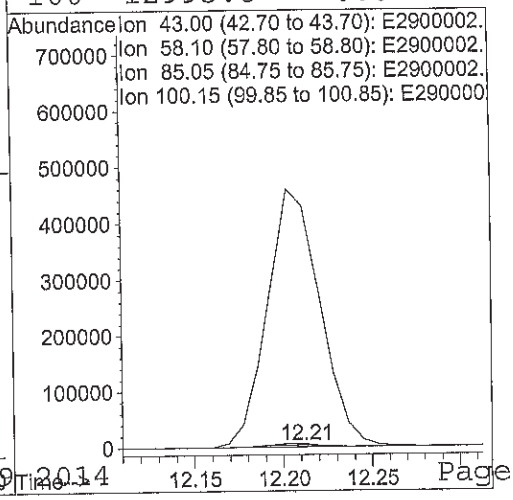


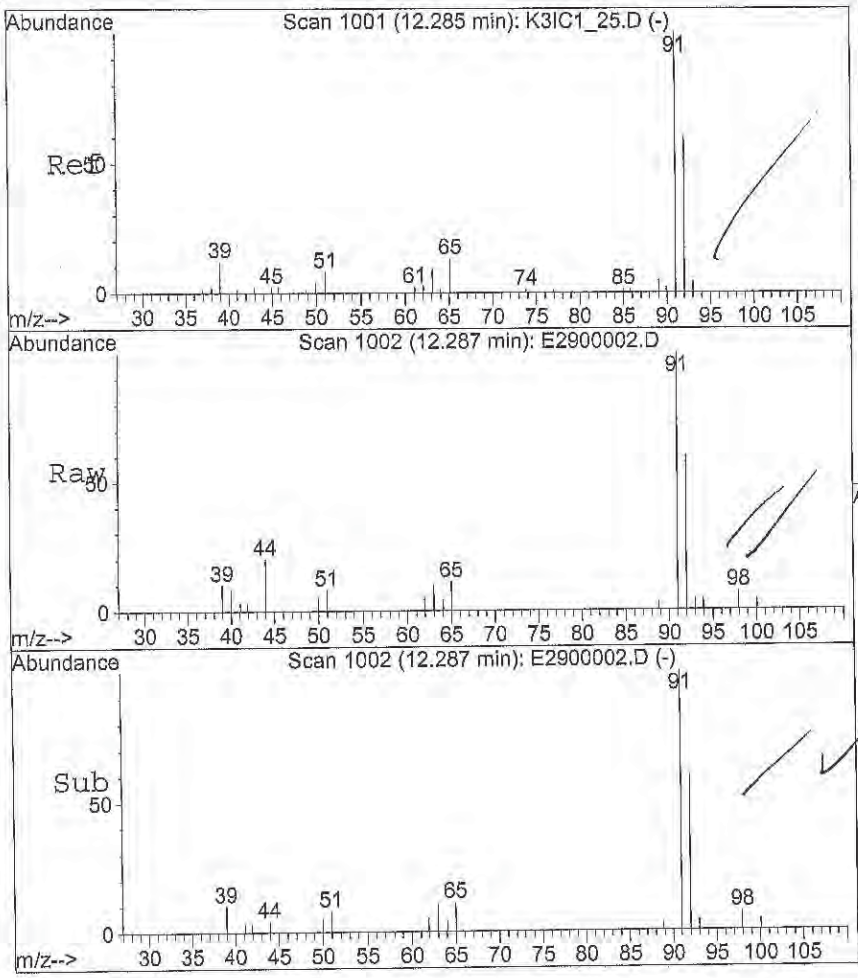


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.93 ug/L
RT: 12.21 min Scan# 993
Delta R.T. 0.10 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 43 Resp: 7284

Ion	Ratio	Lower	Upper
43	100		
58	153.0	0.0	0.0#
85	0.0	0.0	0.0
100	12995.8	0.0	0.0#

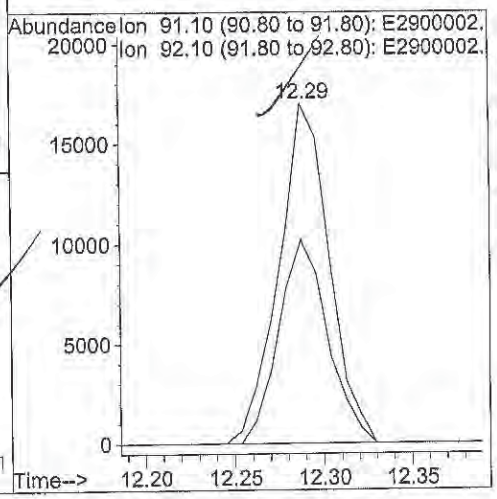


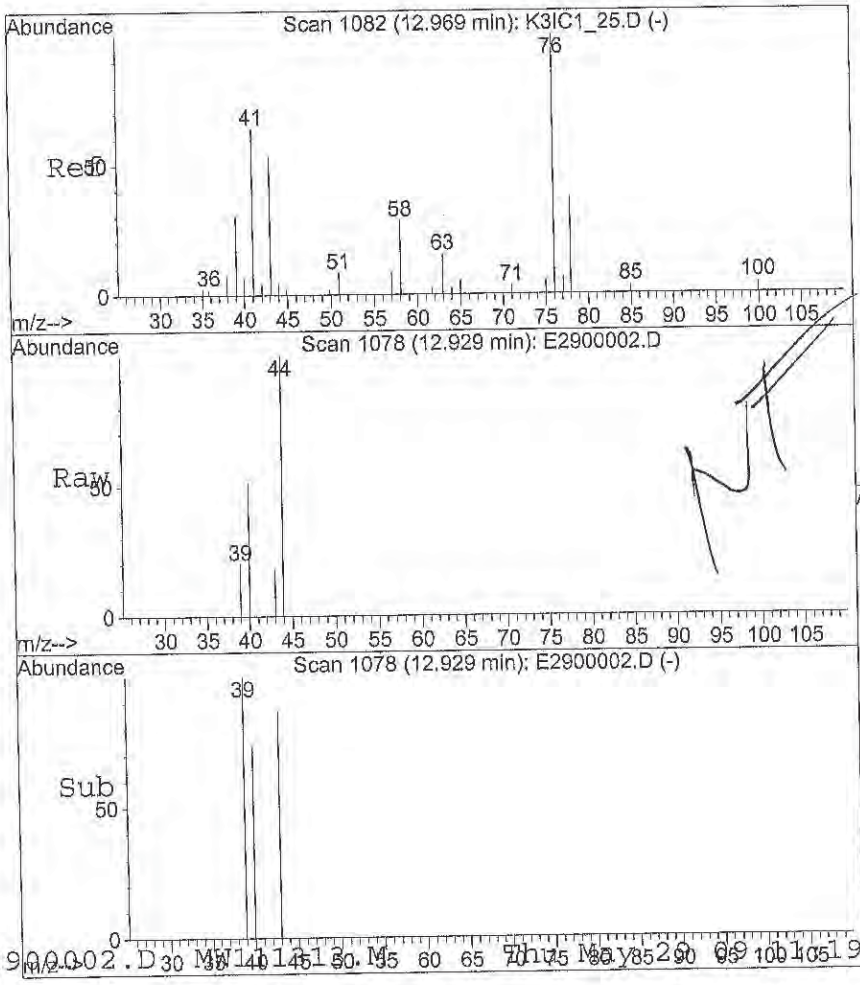


#41
Toluene
Concen: 1.97 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 91 Resp: 33408

Ion	Ratio	Lower	Upper
91	100		
92	58.4	47.4	71.0

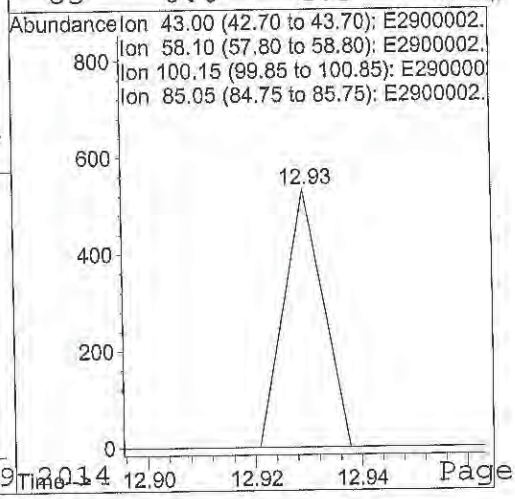


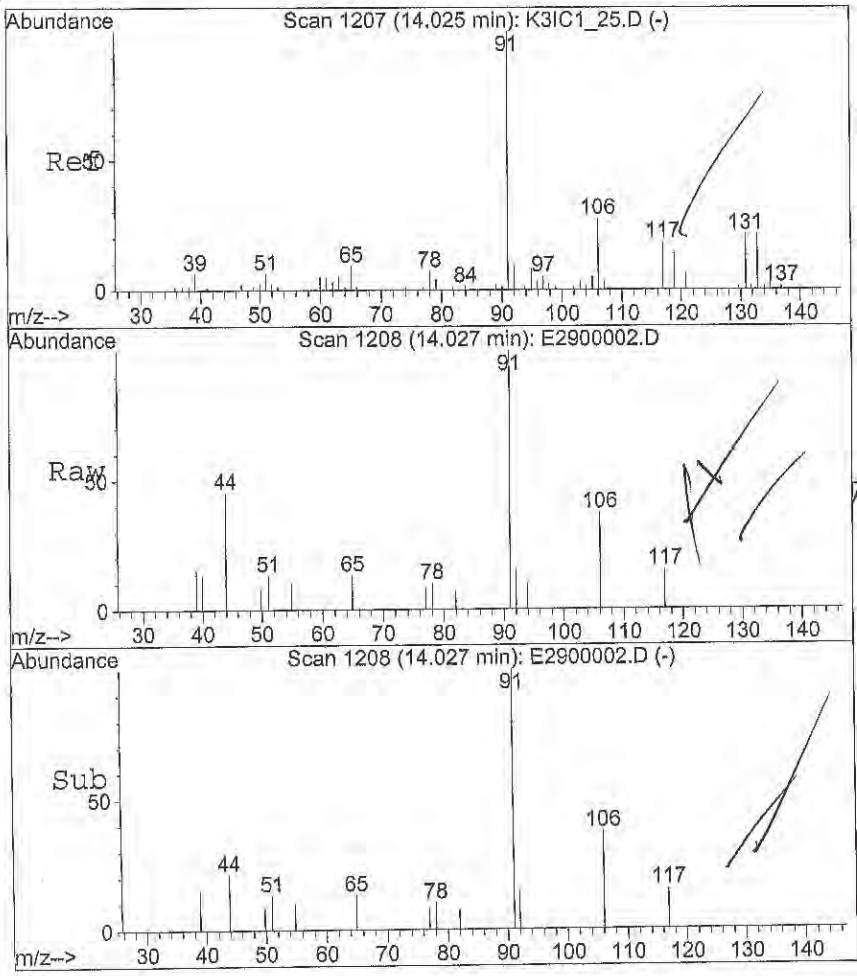


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.04 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 43 Resp: 270

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

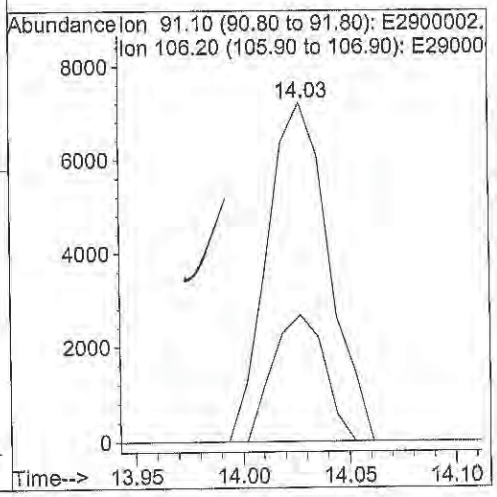


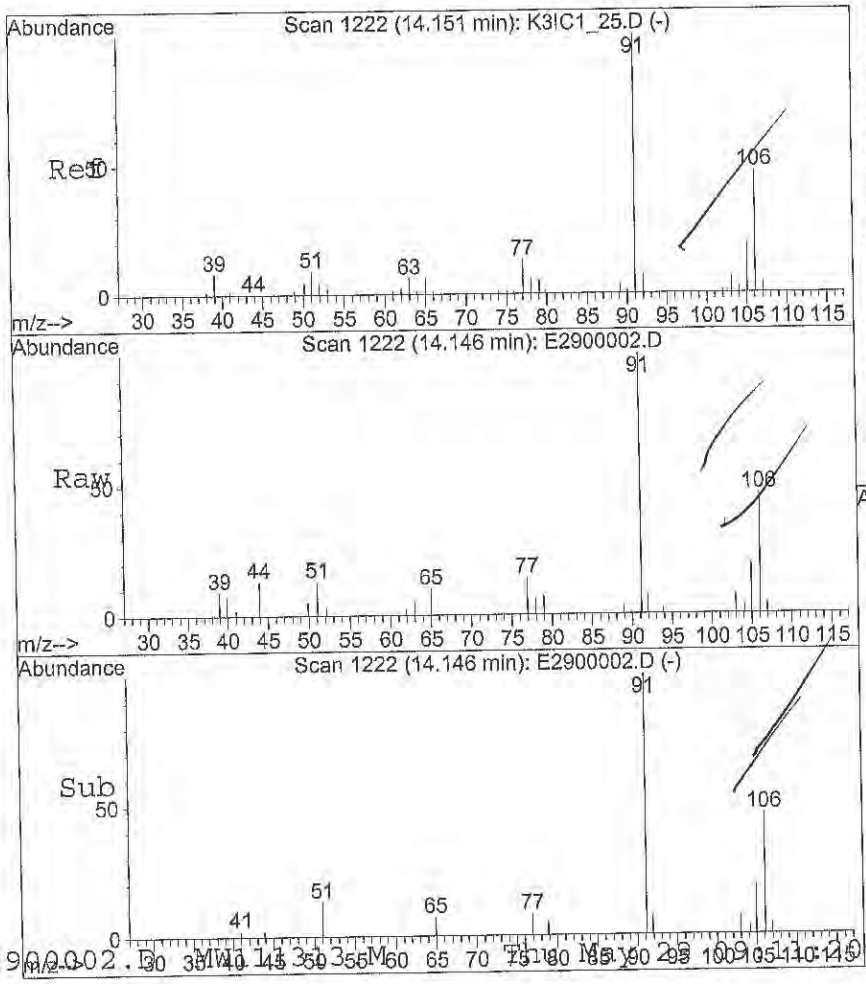


#51
Ethylbenzene
Concen: 0.75 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 91 Resp: 14449

Ion	Ratio	Lower	Upper
91	100		
106	31.2	23.5	35.3

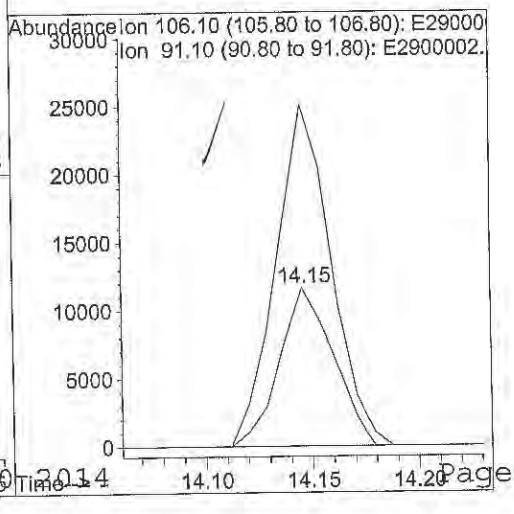


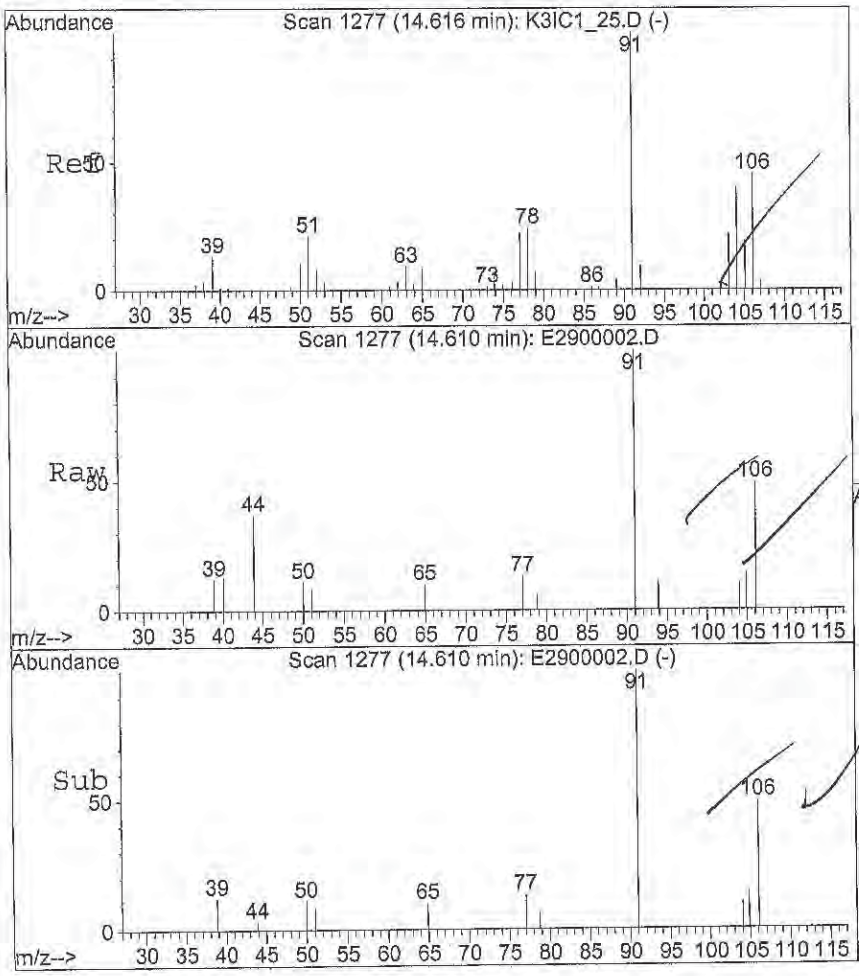


#52
m,p-Xylenes
Concen: 2.98 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:106 Resp: 20420

Ion	Ratio	Lower	Upper
106	100		
91	220.6	177.1	265.7

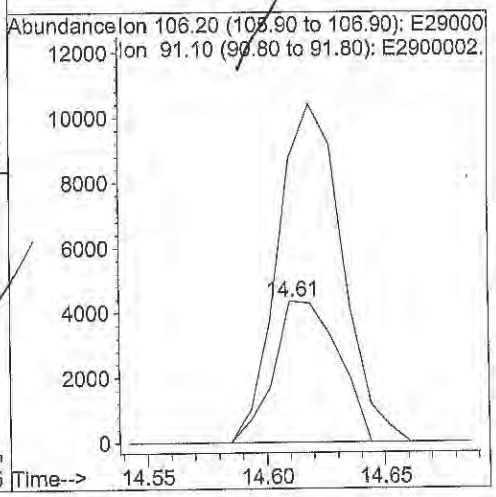


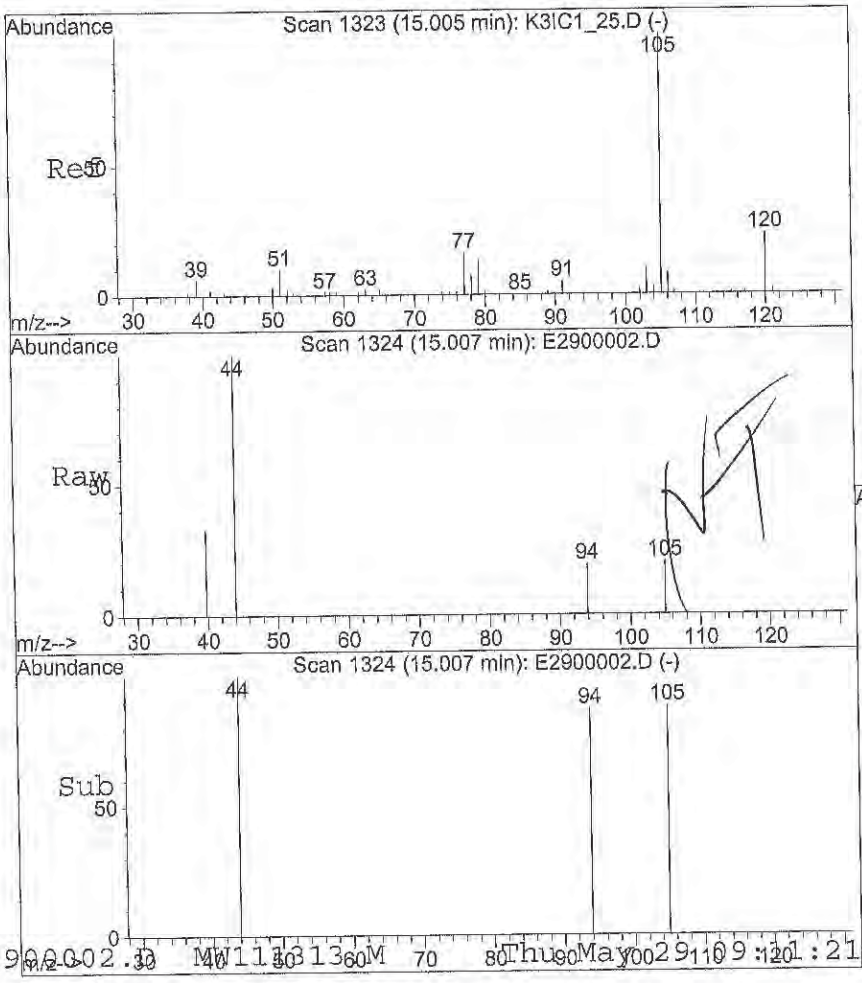


#53
o-Xylene
Concen: 1.21 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:106 Resp: 8215

Ion	Ratio	Lower	Upper
106	100		
91	239.8	179.0	268.6

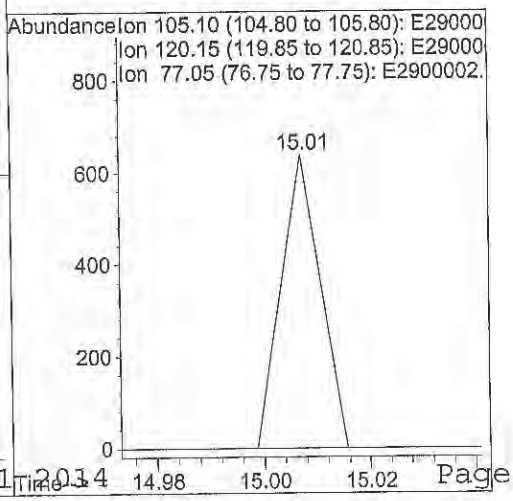


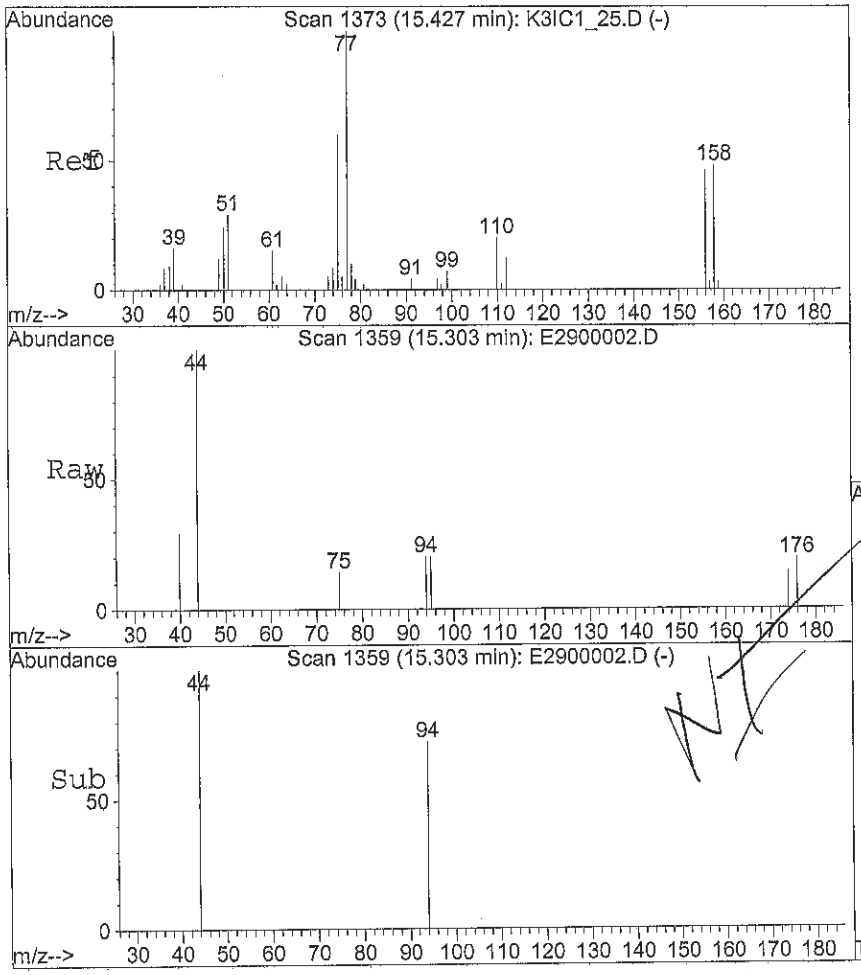


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.01 min Scan# 1324
Delta R.T. 0.00 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:105 Resp: 324

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

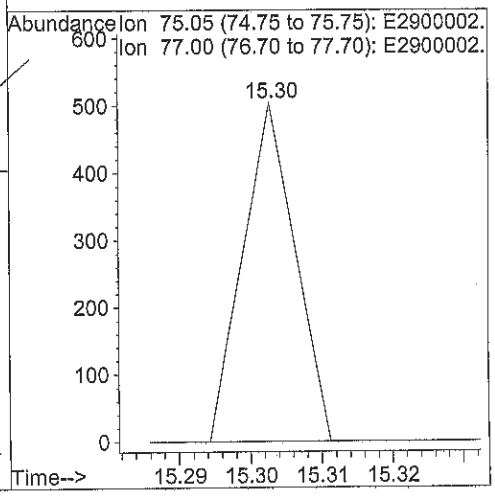


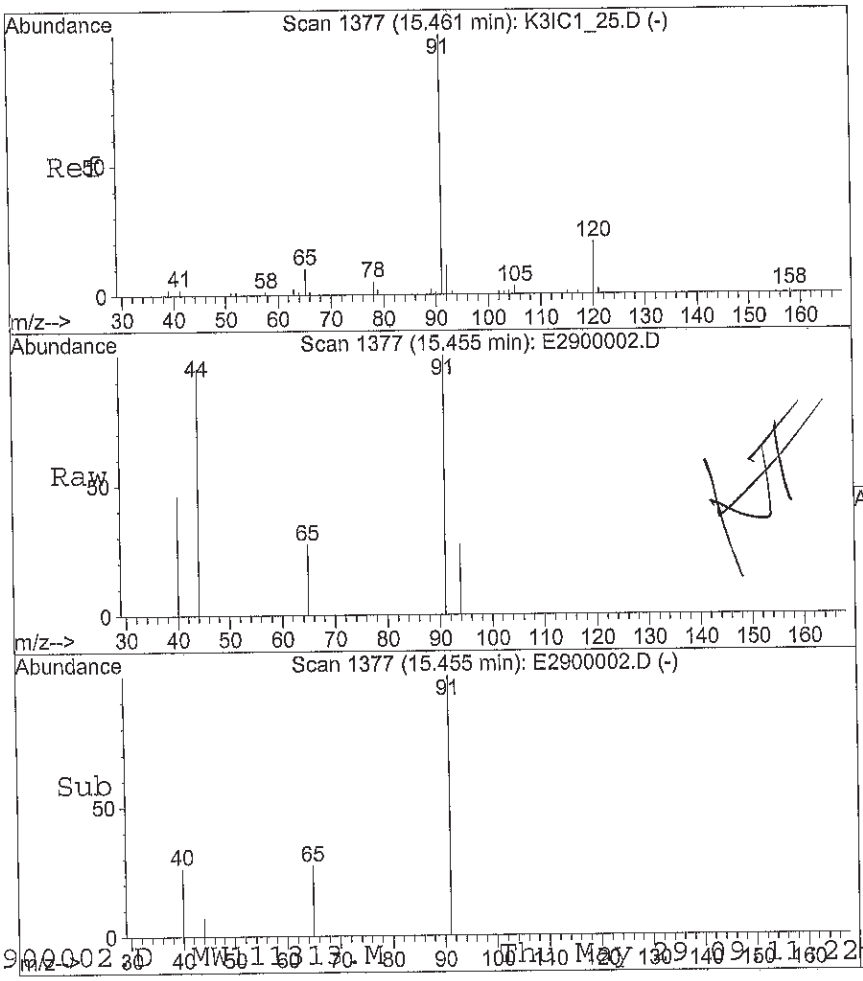


#57
1,2,3-Trichloropropane
Concen: 0.05 ug/L
RT: 15.30 min Scan# 1359
Delta R.T. -0.12 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 75 Resp: 255

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

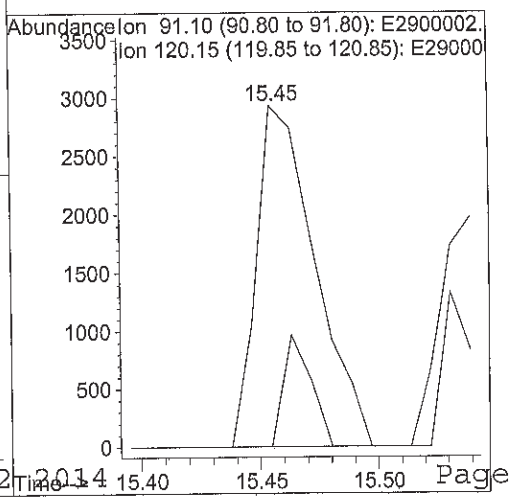


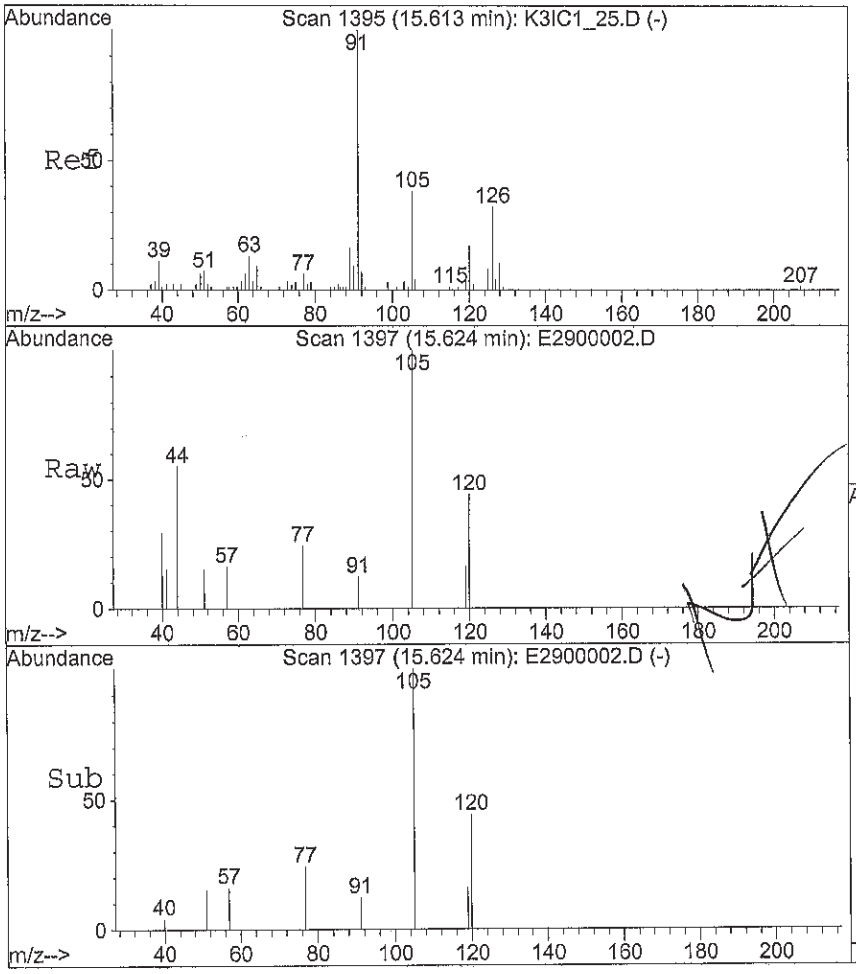


#62
n-Propylbenzene
Concen: 0.18 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 91 Resp: 5039

Ion	Ratio	Lower	Upper
91	100		
120	15.3	16.1	24.1#

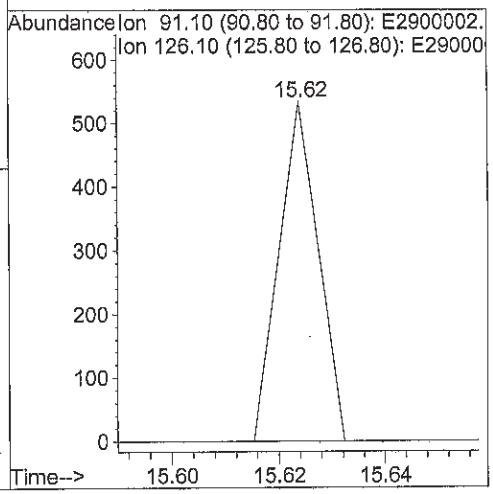


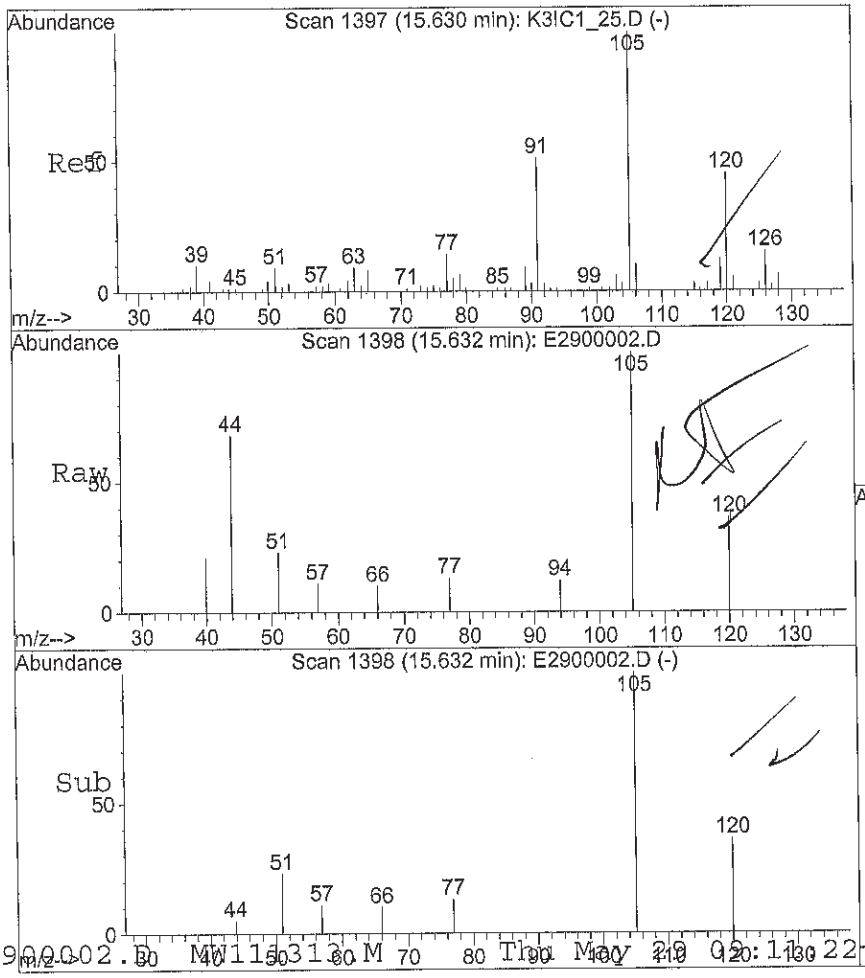


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. 0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 91 Resp: 271

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

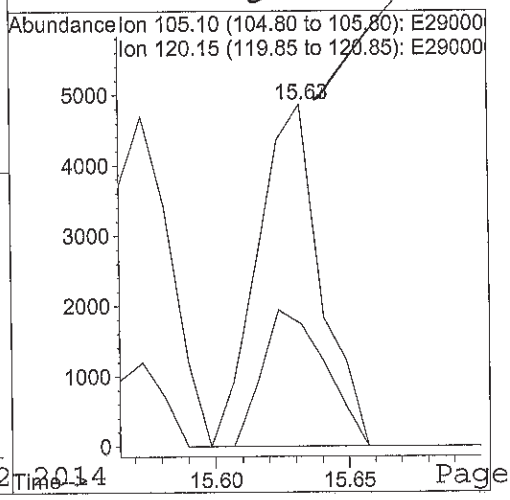


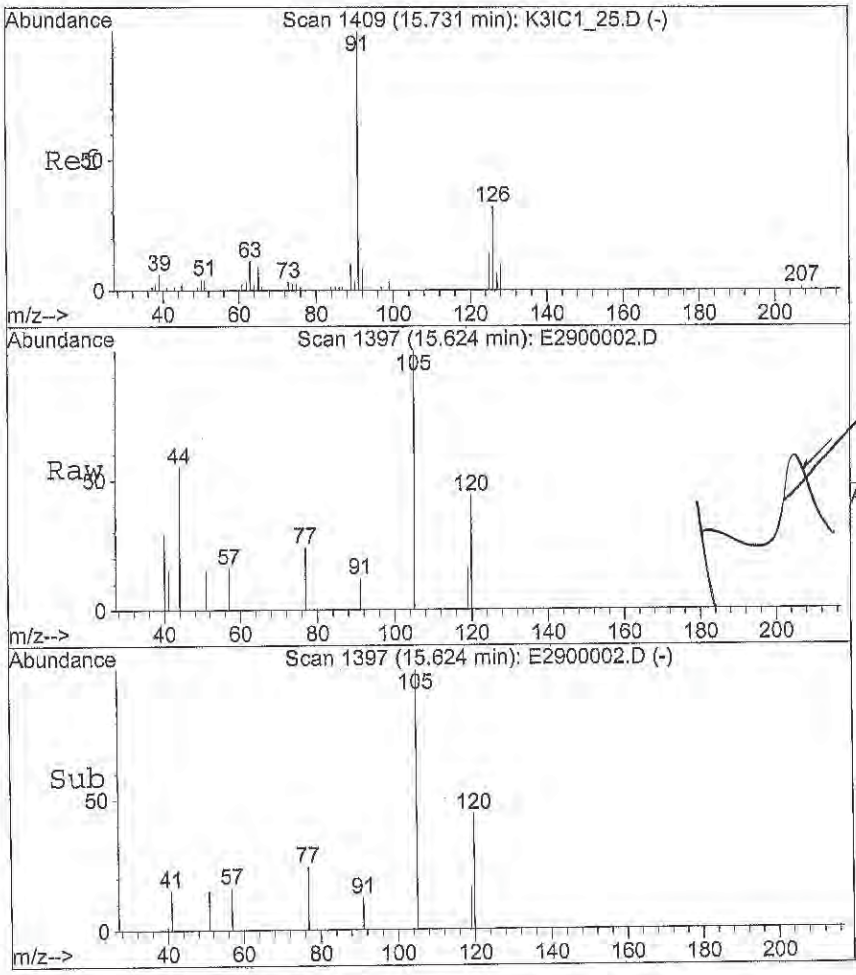


#64
1,3,5-Trimethylbenzene
Concen: 0.47 ug/L
RT: 15.63 min Scan# 1398
Delta R.T. 0.00 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:105 Resp: 7988

Ion	Ratio	Lower	Upper
105	100		
120	39.8	36.4	54.6

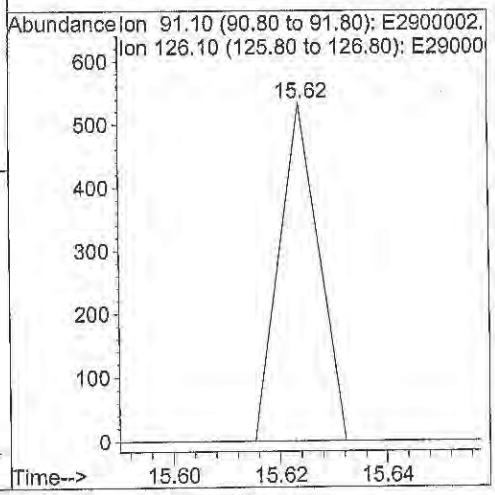


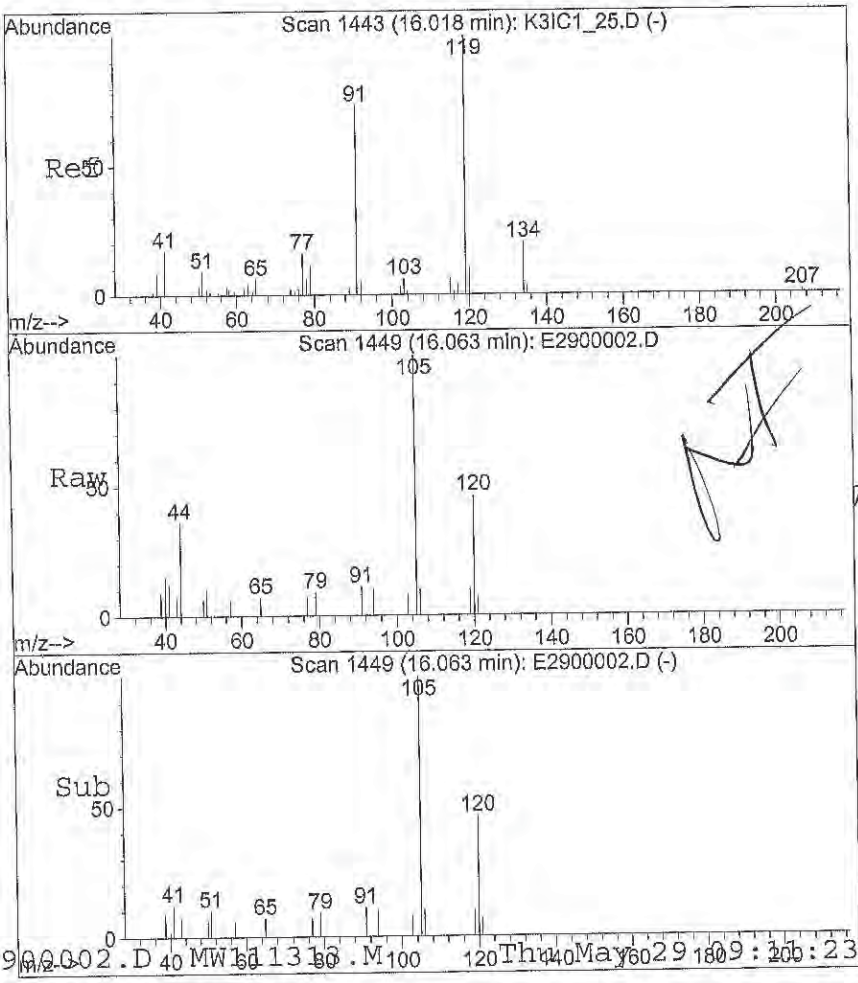


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.11 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 91 Resp: 271

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

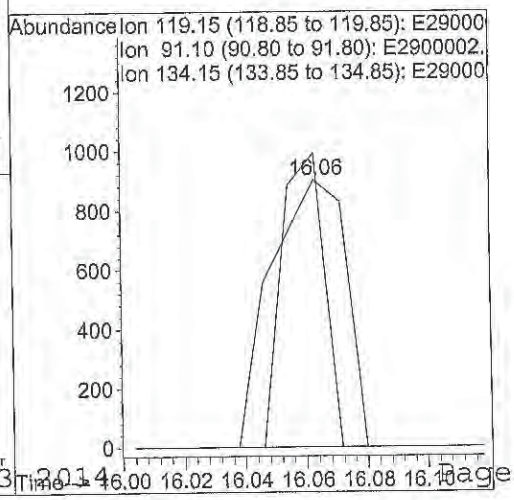


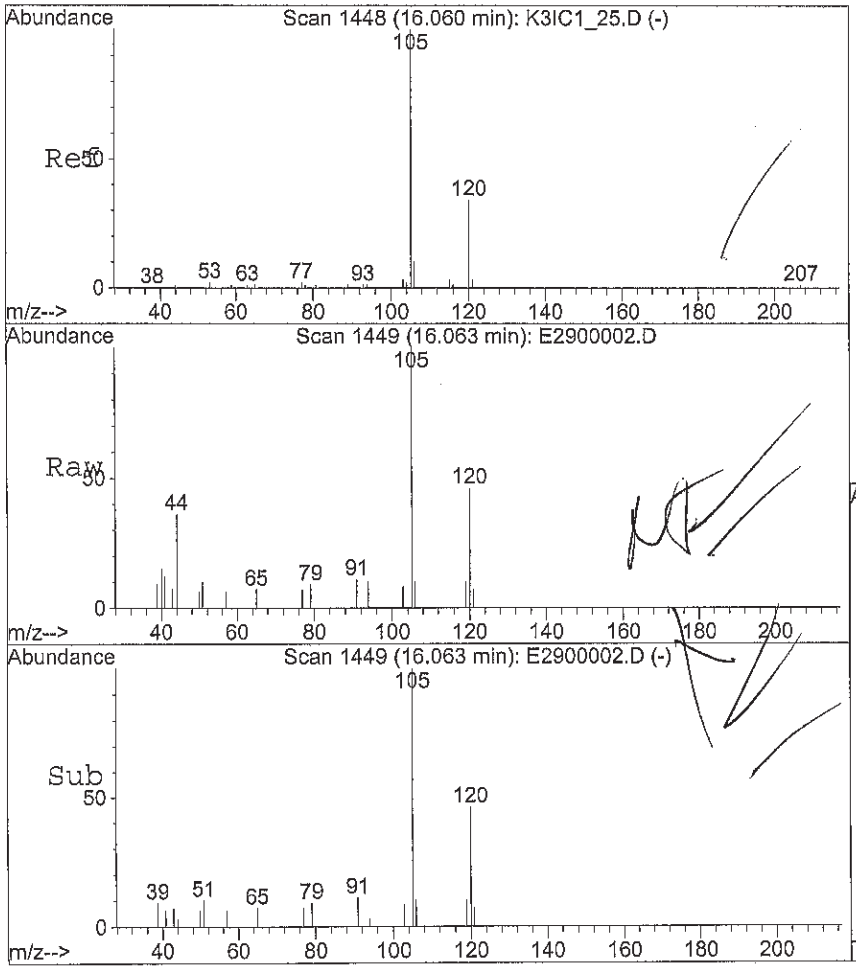


#66
tert-Butylbenzene
Concen: 0.10 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.04 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:119 Resp: 1529

Ion	Ratio	Lower	Upper
119	100		
91	62.1	56.3	84.5
134	0.0	16.1	24.1#

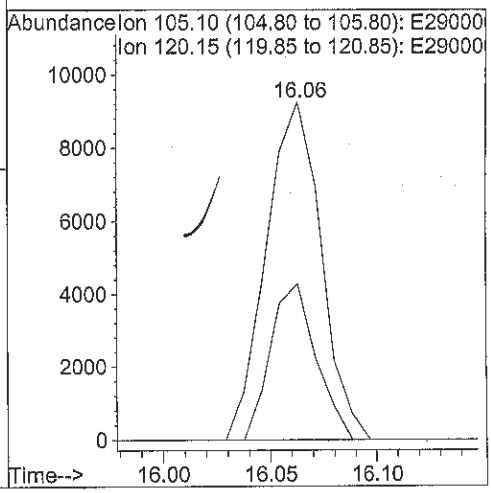


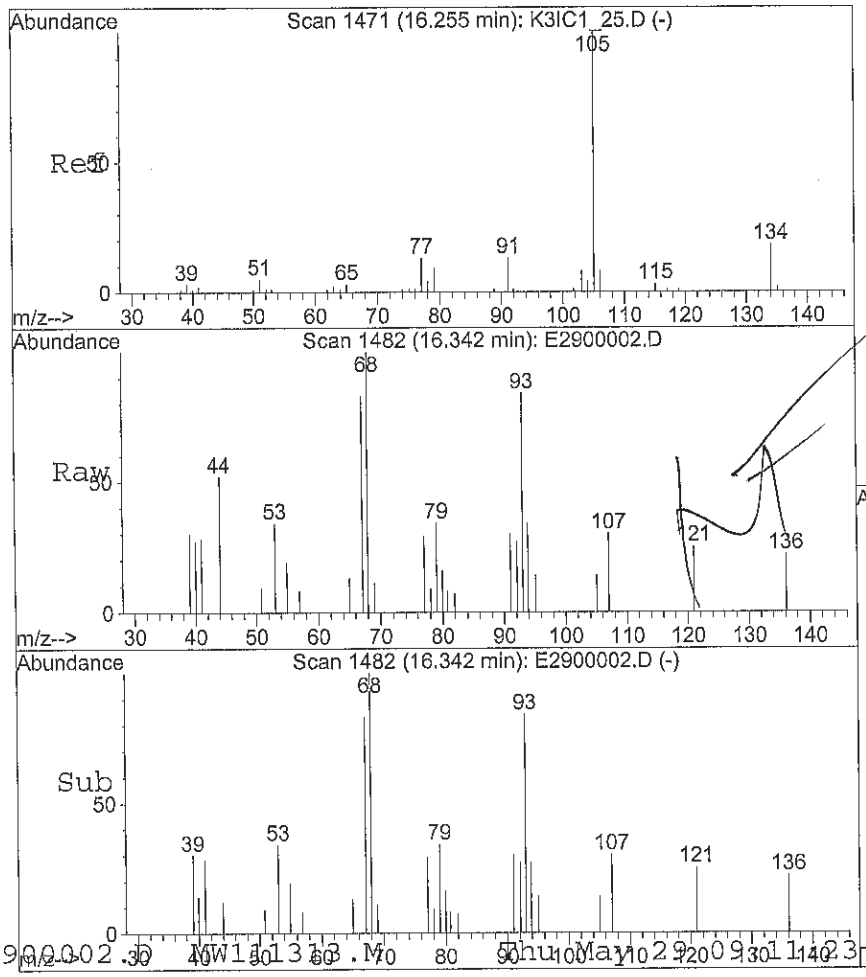


#67
1,2,4-Trimethylbenzene
Concen: 0.92 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:105 Resp: 16484

Ion	Ratio	Lower	Upper
105	100		
120	38.3	33.8	50.8

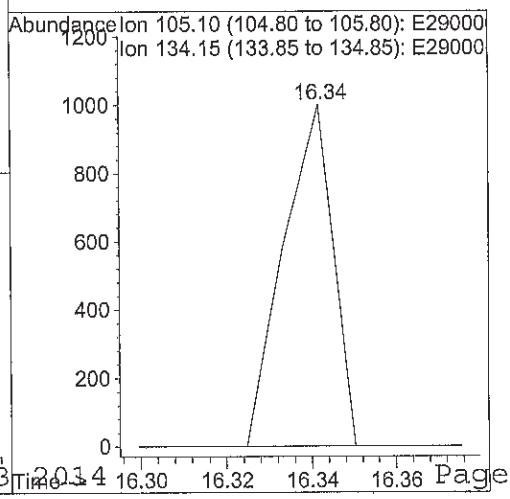


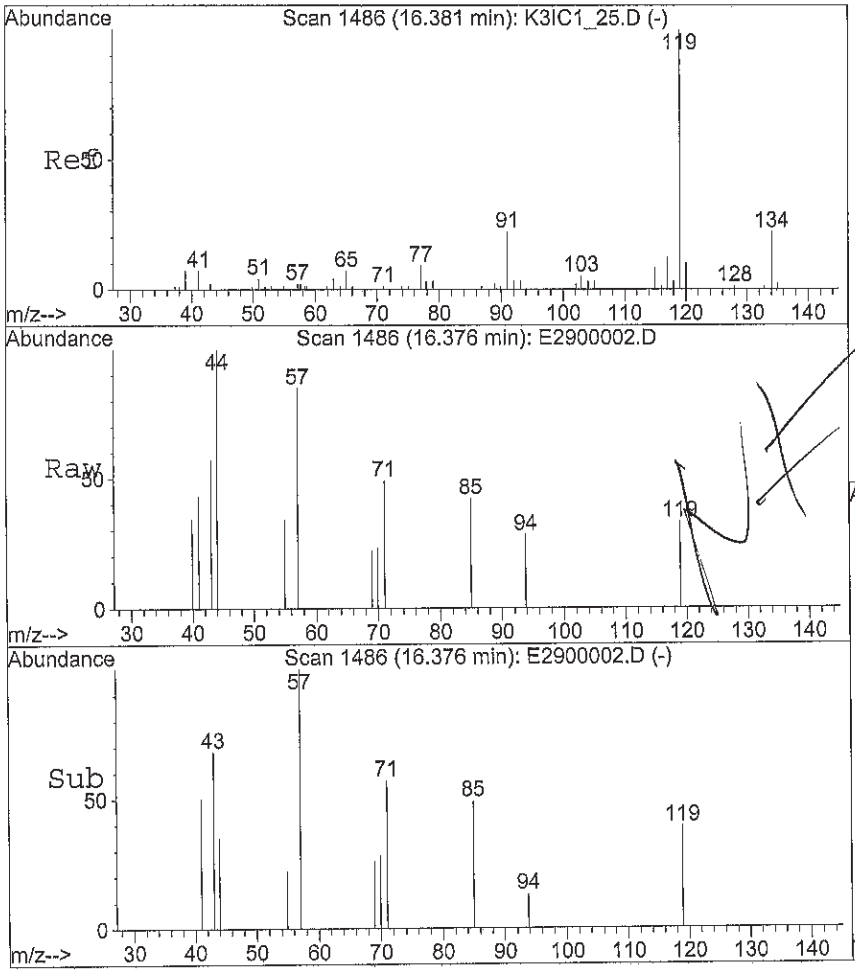


#68
sec-Butylbenzene
Concen: 0.03 ug/L
RT: 16.34 min Scan# 1482
Delta R.T. 0.09 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:105 Resp: 800

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

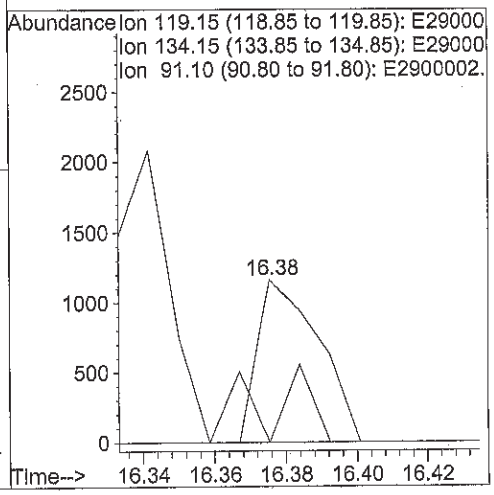


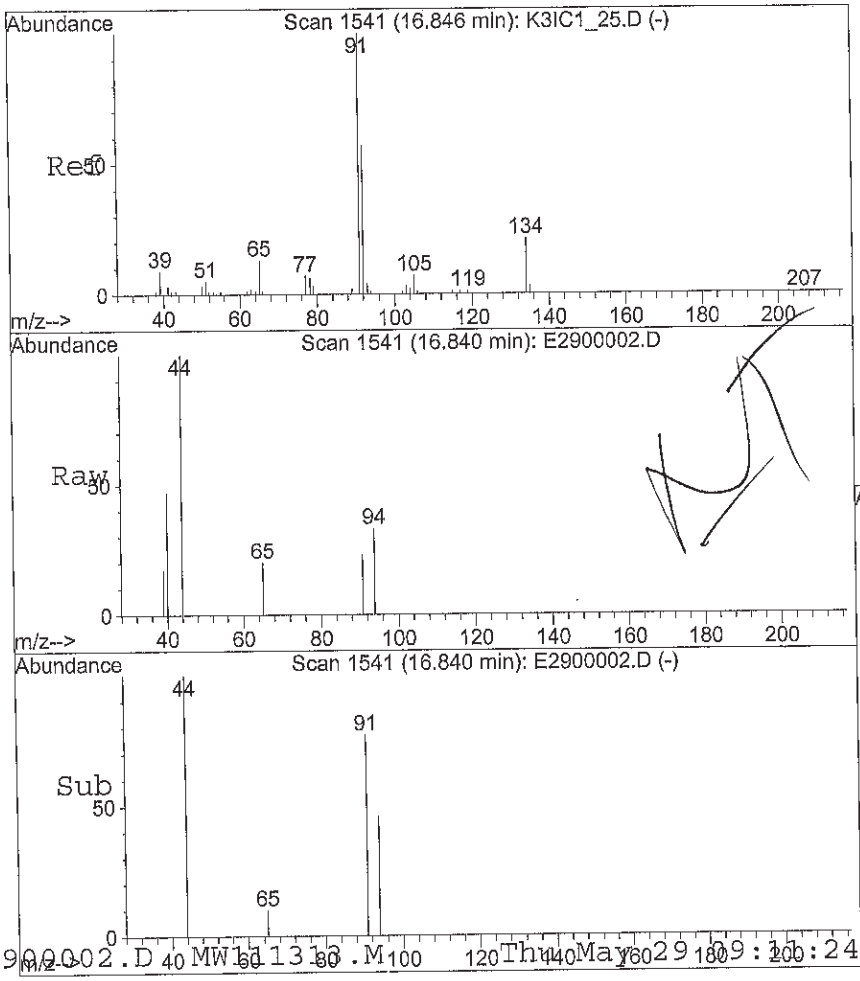


#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion:119 Resp: 1383

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

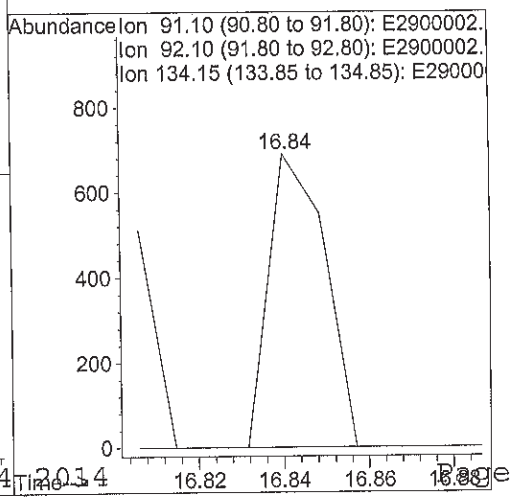




#72
n-Butylbenzene
Concen: 0.03 ug/L
RT: 16.84 min Scan# 1541
Delta R.T. -0.01 min
Lab File: E2900002.D
Acq: 29 May 2014 8:46 am

Tgt Ion: 91 Resp: 628

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900002.D Vial: 1
Acq On : 29 May 2014 8:46 am Operator: DN
Sample : 3E42901-02 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 9:12 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1583591	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1245807	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	686848	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	445930	10.83	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.64%			
3) Chloroform-d (SU6)	9.19	84	695550	11.77	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.16%			
4) Methylene Chloride-d2 (SU5	7.06	86	386909	11.20	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.60%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	428901	15.24	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 121.92%			
6) Benzene-d6 (SU7)	9.92	84	1350642	10.87	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.96%			
8) Toluene-d8 (SU3)	12.20	98	1403987	11.88	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.04%			
9) 4-Bromofluorobenzene (SU4)	15.23	95	686956	14.08	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 112.64%			

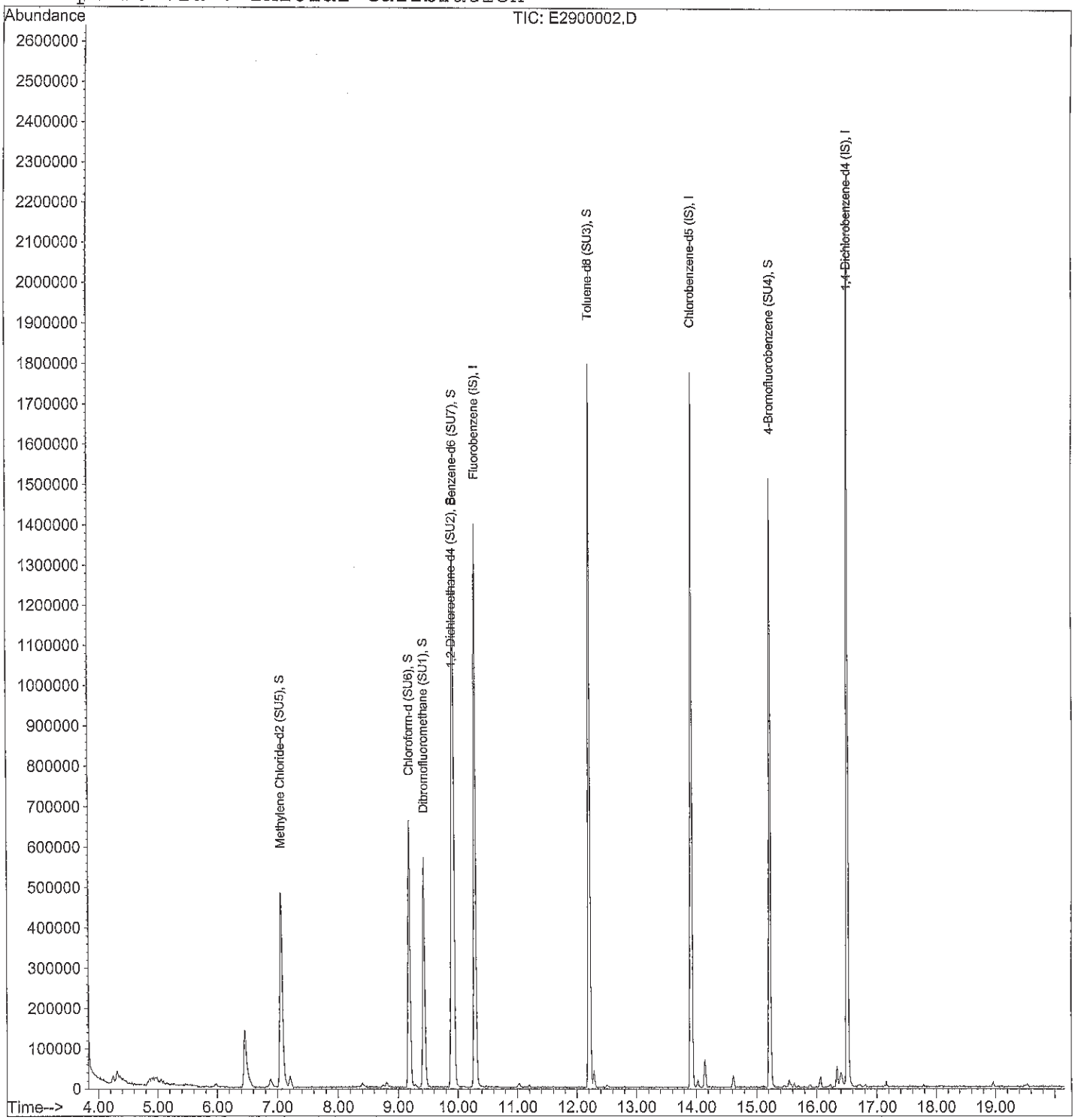
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900002.D Vial: 1
Acq On : 29 May 2014 8:46 am Operator: DN
Sample : 3E42901-02 Inst : GC/MS Ins
Misc : 100cc SVL-544-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 9:12 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900004.D Vial: 3
Acq On : 29 May 2014 9:44 am Operator: DN
Sample : 3E42901-03 Inst : GC/MS Ins
Misc : 100cc SVL-844-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 10:14 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1527639	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1240492	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	660440	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	437790	11.49 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.92%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	433414	11.97 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.76%		
39) Toluene-d8 (SU3)	12.20	98	1377058	11.90 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.20%		
58) 4-Bromofluorobenzene (SU4)	15.23	95	698892	13.78 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.24%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	254	0.07 ~~ug/L~~ # NSM	44
4) Chloromethane	4.40	50	4170	0.41 ~~ug/L~~ #	82
6) Bromomethane	5.07	96	2378	-0.36 ~~ug/L~~ #	1
7) Chloroethane	5.22	64	1040	1.51 ~~ug/L~~	93
11) Acetone	6.46	58	3498	0.77 ~~ug/L~~ #	58
12) (IPA) Leak Check Compound	6.46	45	301468	1642.27 ~~ug/L~~ # NSM	82
13) Carbon disulfide	6.83	76	5438	0.43 ~~ug/L~~ #	76
14) Methylene Chloride	7.08	84	5856	1.40 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	7.15	59	1734	6.66 ~~ug/L~~ #	77
24) Chloroform	9.20	83	590	0.07 ~~ug/L~~ # NSM	1
25) (ETBE) 2-ethoxy 2-methyl p	8.38	59	337	0.03 ~~ug/L~~ #	44
31) Benzene	9.98	78	3768	0.26 ~~ug/L~~ #	66
32) 1,2-Dichloroethane	9.92	62	6222	1.22 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7080	2.86 ~~ug/L~~ #	100
41) Toluene	12.29	91	29119	1.72 ug/L 0.034	93
46) 2-Hexanone	12.82	43	263	0.10 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	12707	0.66 ug/L #0.0132	86
52) m,p-Xylenes	14.15	106	16135	2.36 ug/L 0.0472	95
53) o-Xylene	14.63	106	4266	0.63 ug/L # 0.0126	44
54) Styrene	14.64	104	1887	-0.68 ~~ug/L~~ # NSM	43
56) Isopropylbenzene	15.22	105	1755	0.09 ~~ug/L~~ #	1
62) n-Propylbenzene	15.46	91	3422	0.13 ~~ug/L~~ #	73

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900004.D Vial: 3
Acq On : 29 May 2014 9:44 am Operator: DN
Sample : 3E42901-03 Inst : GC/MS Ins
Misc : 100cc SVL-844-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 10:14 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

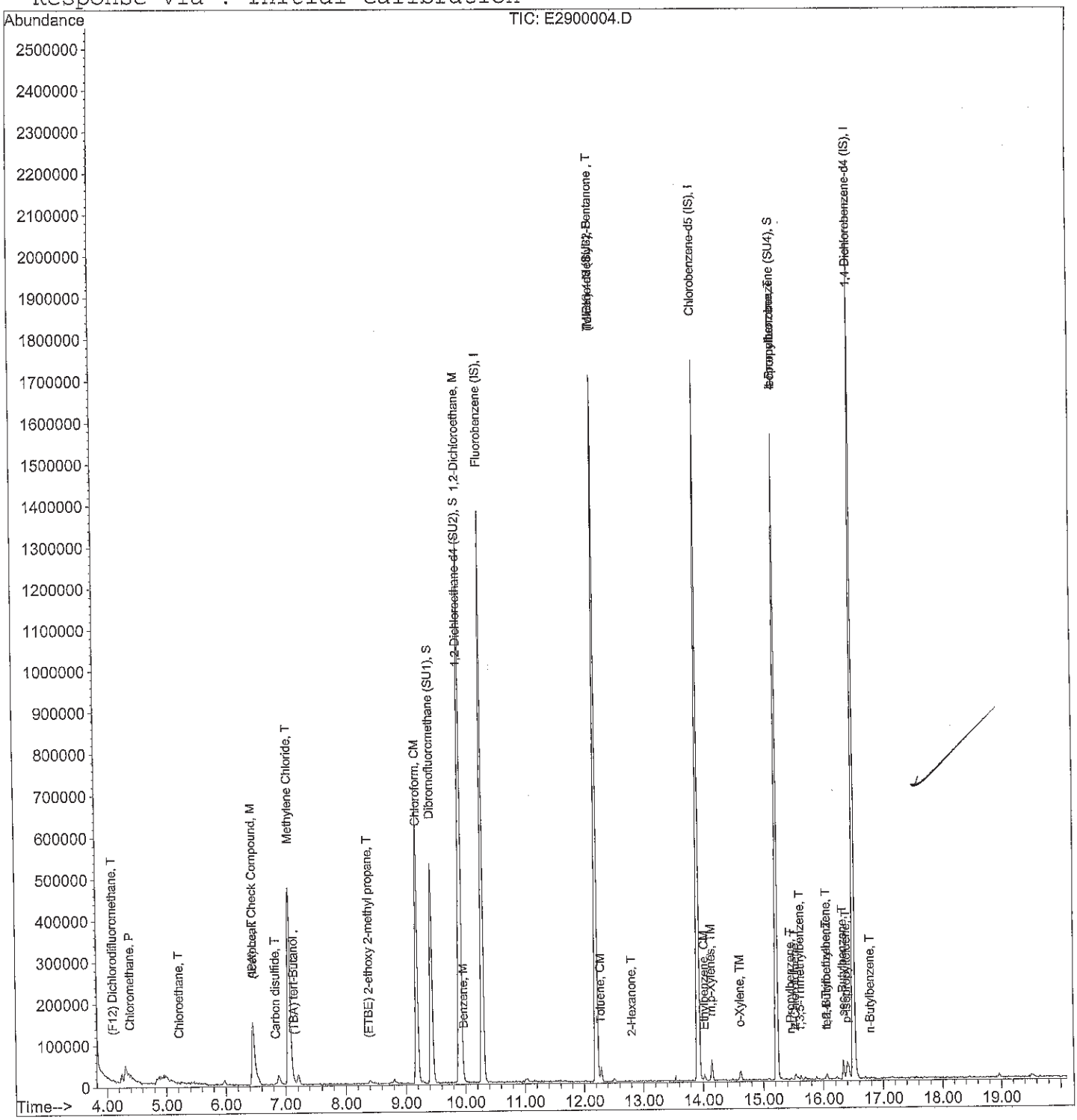
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.54	91	877	0.05 ~~ug/L #~~ SM	45
64) 1,3,5-Trimethylbenzene	15.62	105	4049	0.25 ug/L # 0.005	68
65) 4-Chlorotoluene	15.54	91	877	0.06 ~~ug/L #~~ SM	44
66) tert-Butylbenzene	16.07	119	768	0.05 ~~ug/L #~~	1
67) 1,2,4-Trimethylbenzene	16.06	105	8420	0.49 ug/L 0.008	88
68) sec-Butylbenzene	16.32	105	389	0.02 ~~ug/L #~~ SM	62
69) p-Isopropyltoluene	16.38	119	293	0.02 ~~ug/L~~ #	52
72) n-Butylbenzene	16.79	91	318	0.02 ~~ug/L~~ #	30

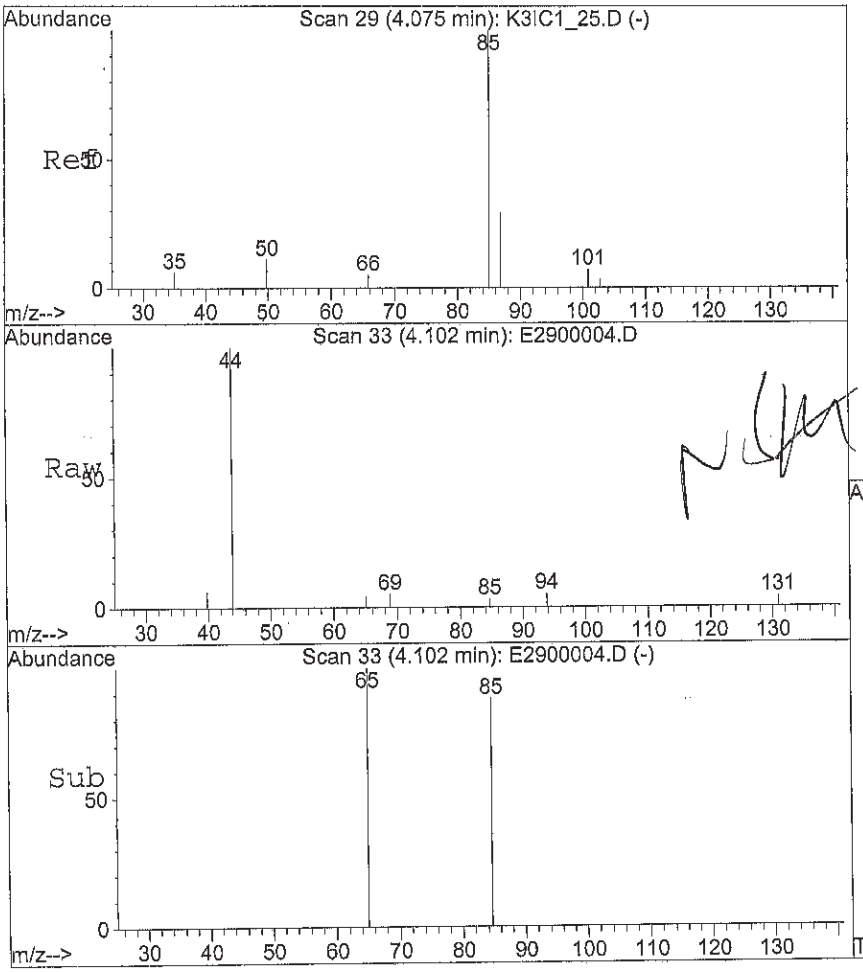
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900004.D Vial: 3
Acq On : 29 May 2014 9:44 am Operator: DN
Sample : 3E42901-03 Inst : GC/MS Ins
Misc : 100cc SVL-844-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 10:14 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

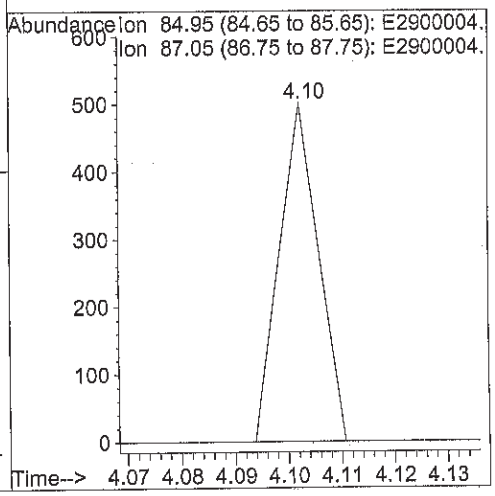


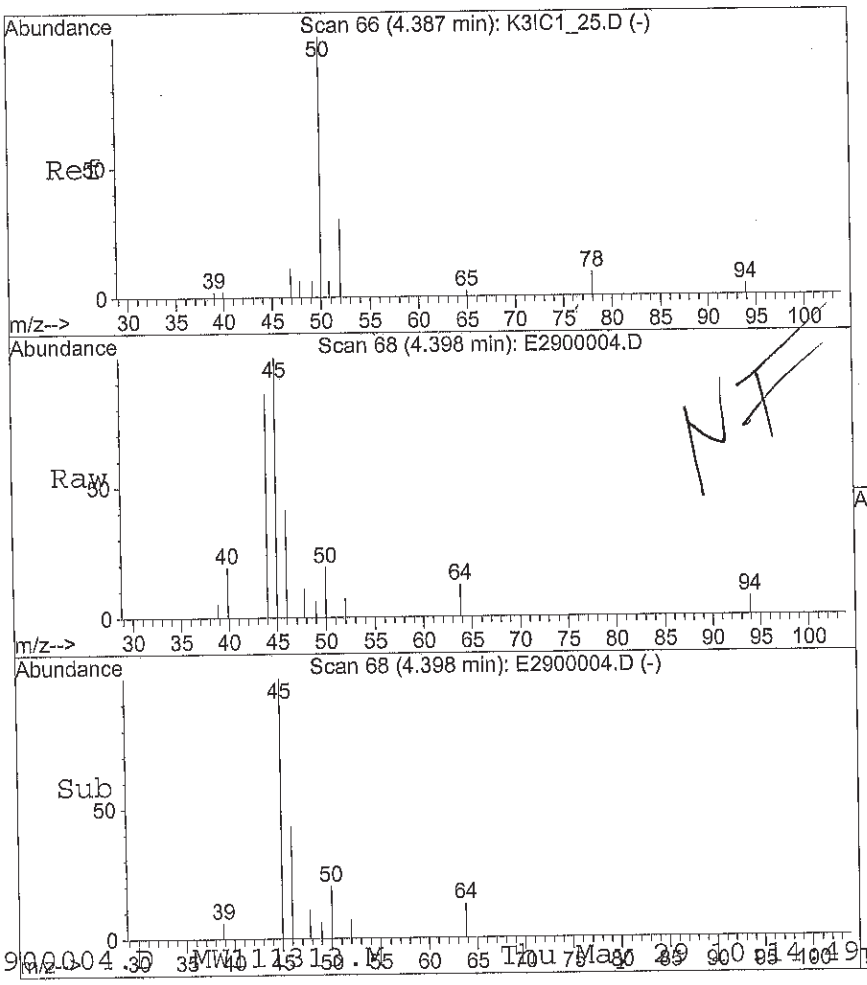


#3
(F12) Dichlorodifluoromethane
Concen: 0.07 ug/L
RT: 4.10 min Scan# 33
Delta R.T. 0.03 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 85 Resp: 254

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

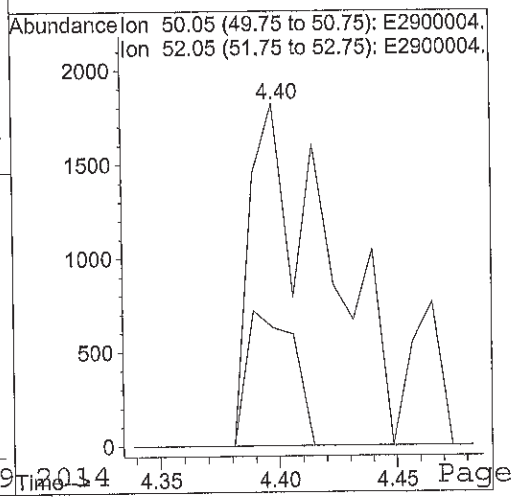


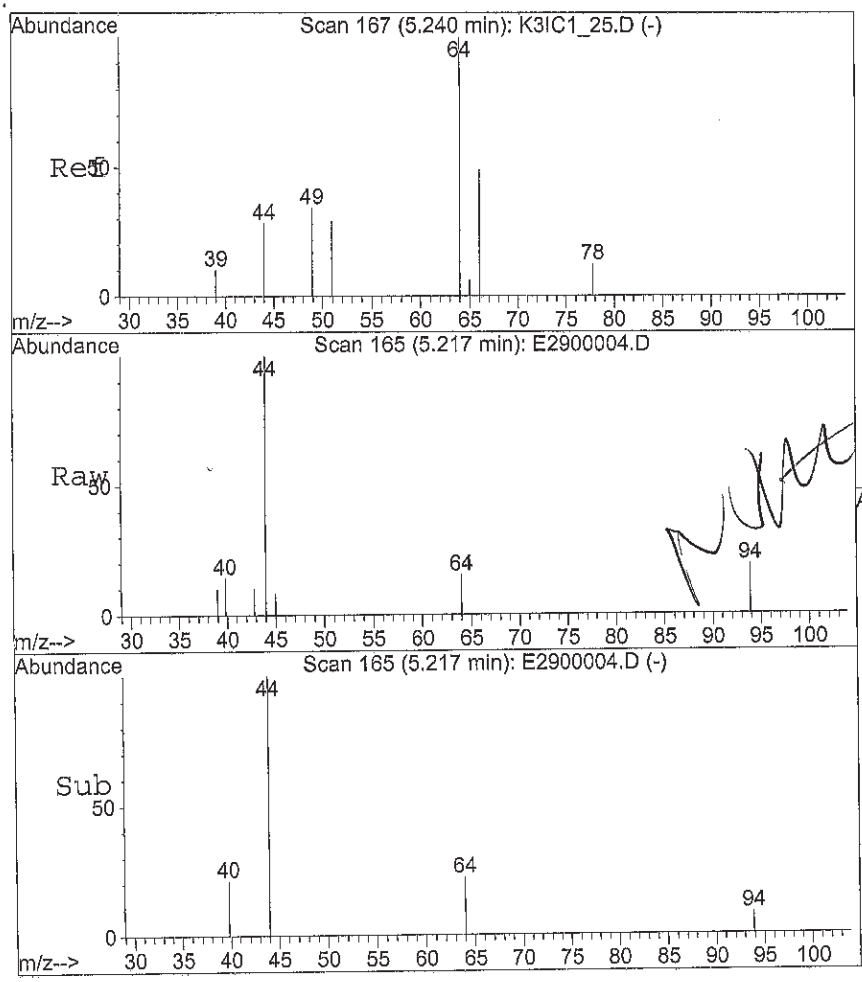


#4
Chloromethane
Concen: 0.41 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.01 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 50 Resp: 4170

Ion	Ratio	Lower	Upper
50	100		
52	23.5	26.9	40.3#

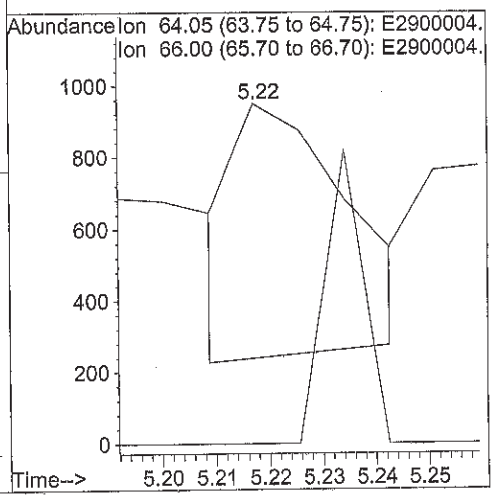


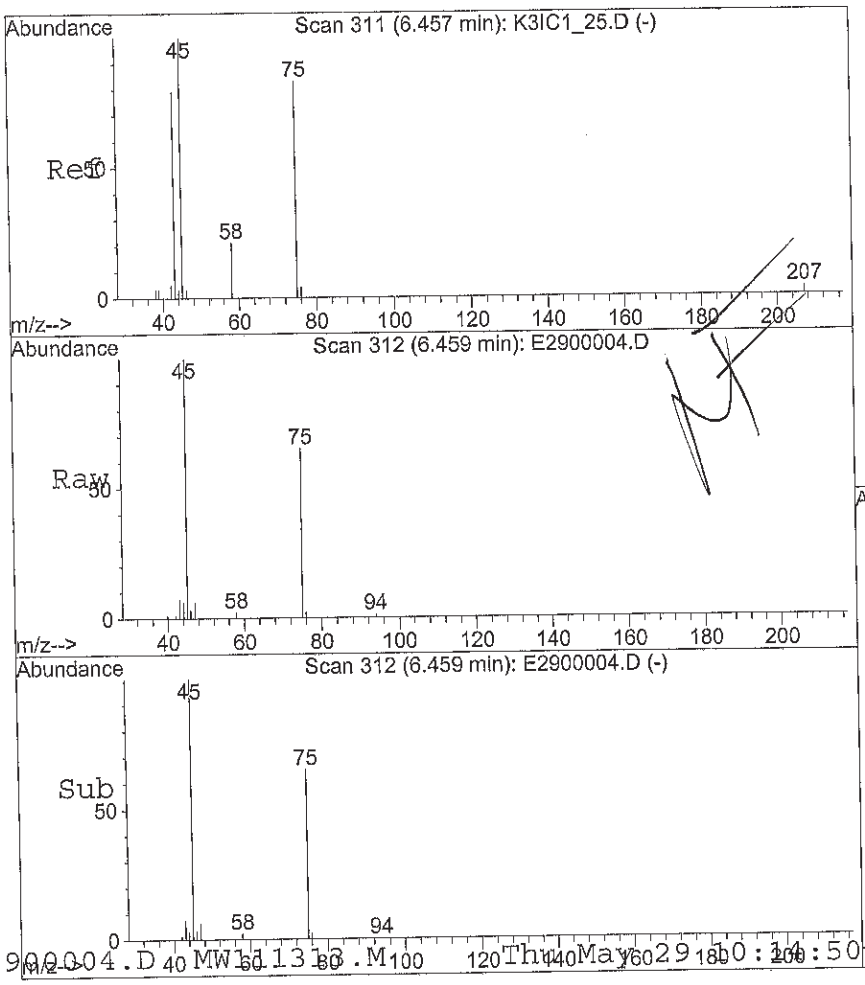


#7
Chloroethane
Concen: 1.51 ug/L
RT: 5.22 min Scan# 165
Delta R.T. -0.02 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 64 Resp: 1040

Ion	Ratio	Lower	Upper
64	100		
66	39.8	35.4	53.0

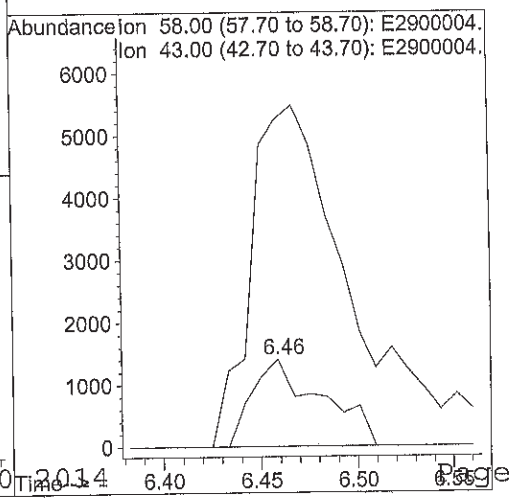


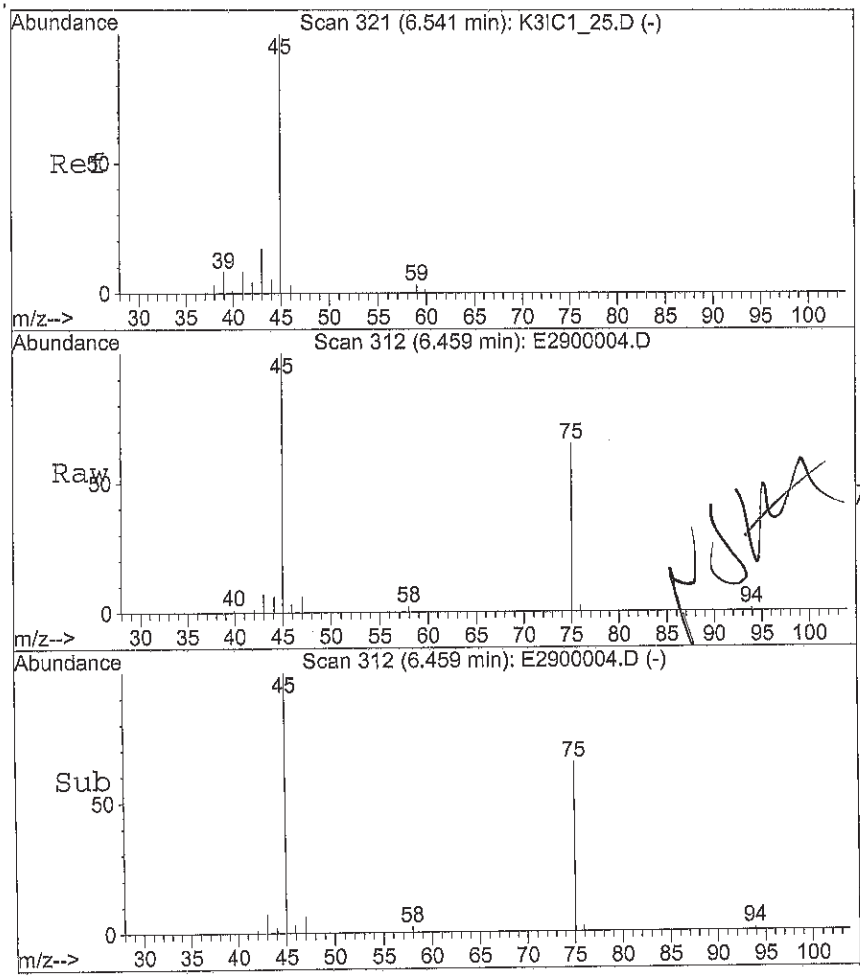


#11
Acetone
Concen: 0.77 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 58 Resp: 3498

Ion	Ratio	Lower	Upper
58	100		
43	559.9	360.9	541.3#

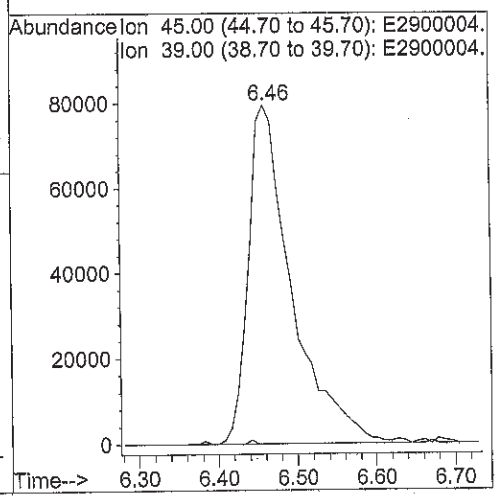


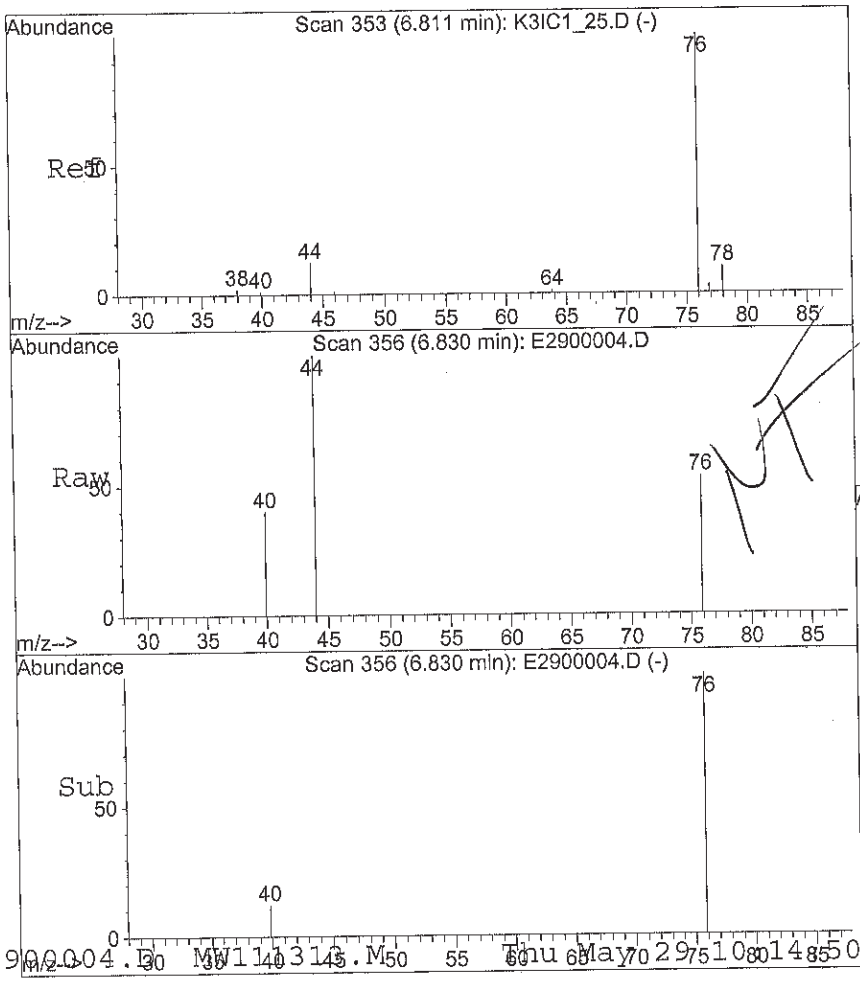


#12
(IPA) Leak Check Compound
Concen: 1642.27 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 45 Resp: 301468

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

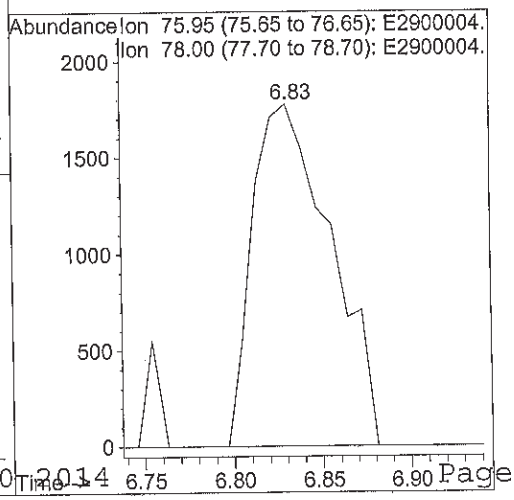


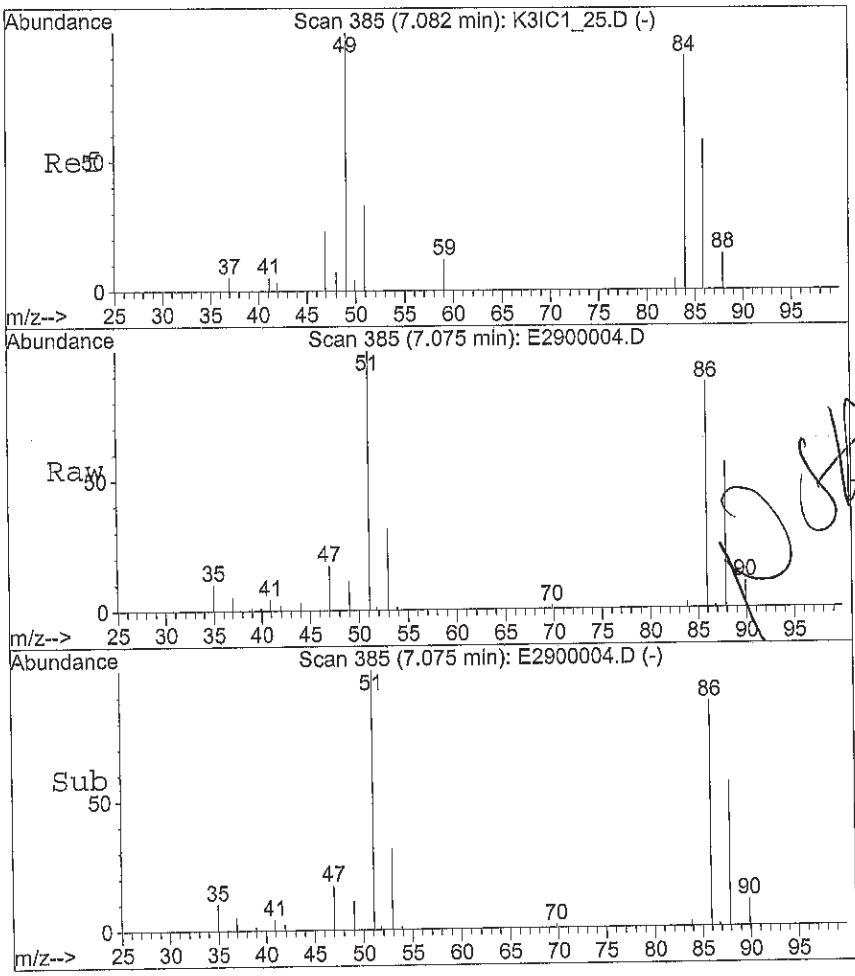


#13
Carbon disulfide
Concen: 0.43 ug/L
RT: 6.83 min Scan# 356
Delta R.T. 0.02 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 76 Resp: 5438

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

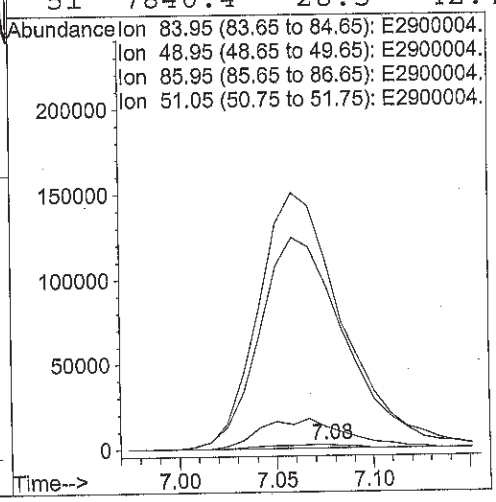


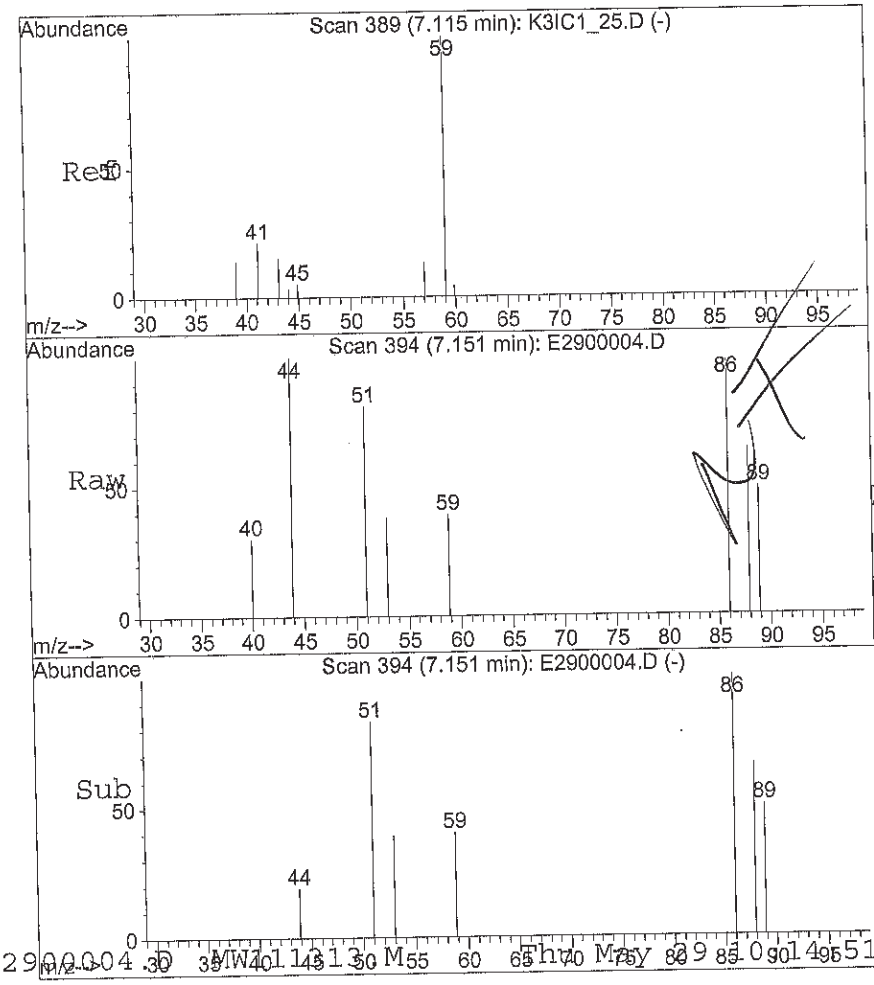


#14
Methylene Chloride
Concen: 1.40 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.01 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 84 Resp: 5856

Ion	Ratio	Lower	Upper
84	100		
49	887.6	89.8	134.6#
86	6623.3	51.1	76.7#
51	7840.4	28.5	42.7#

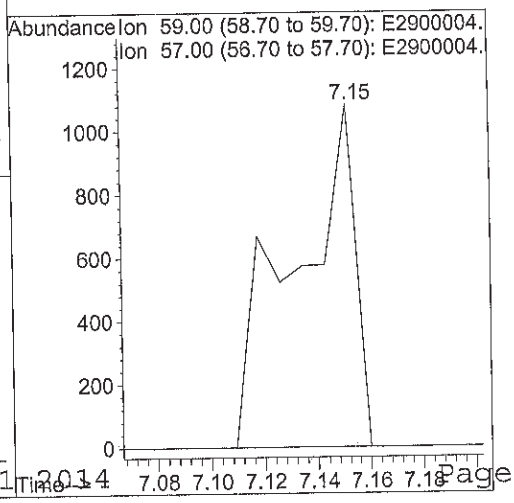


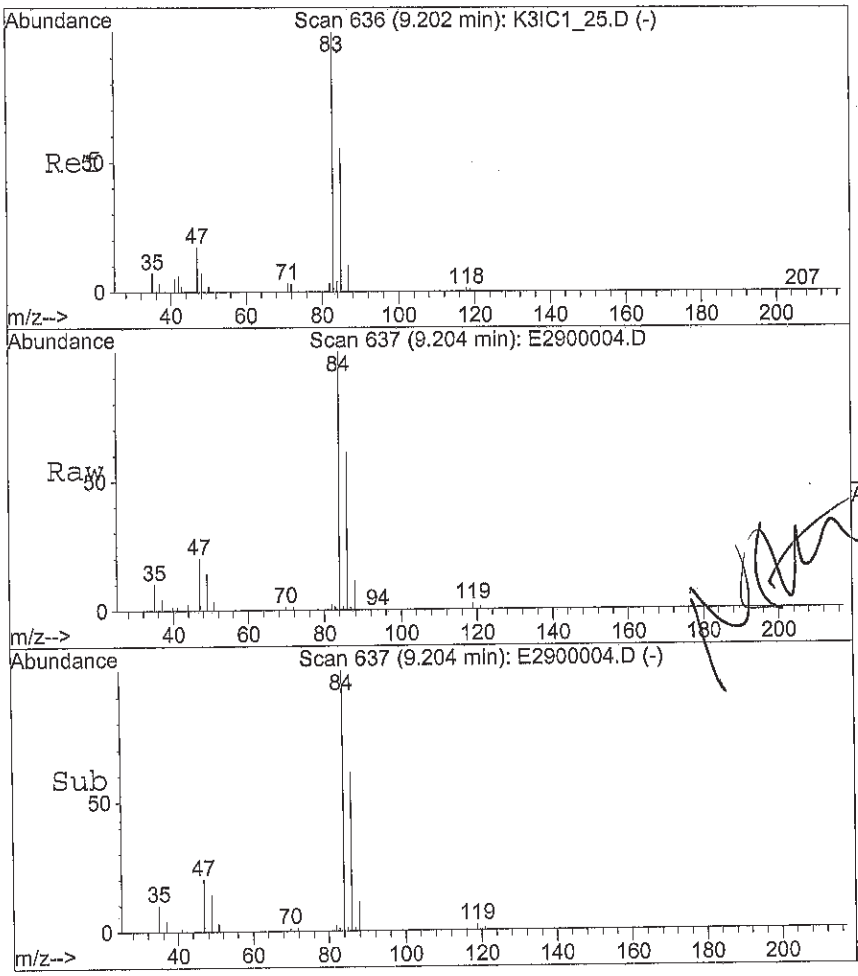


#15
(TBA) tert-Butanol
Concen: 6.66 ug/L
RT: 7.15 min Scan# 394
Delta R.T. 0.04 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 59 Resp: 1734

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

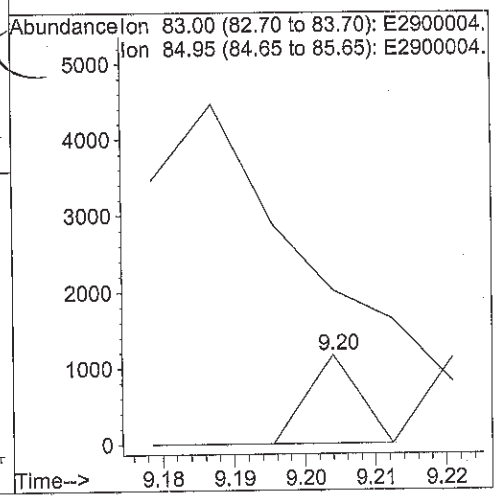


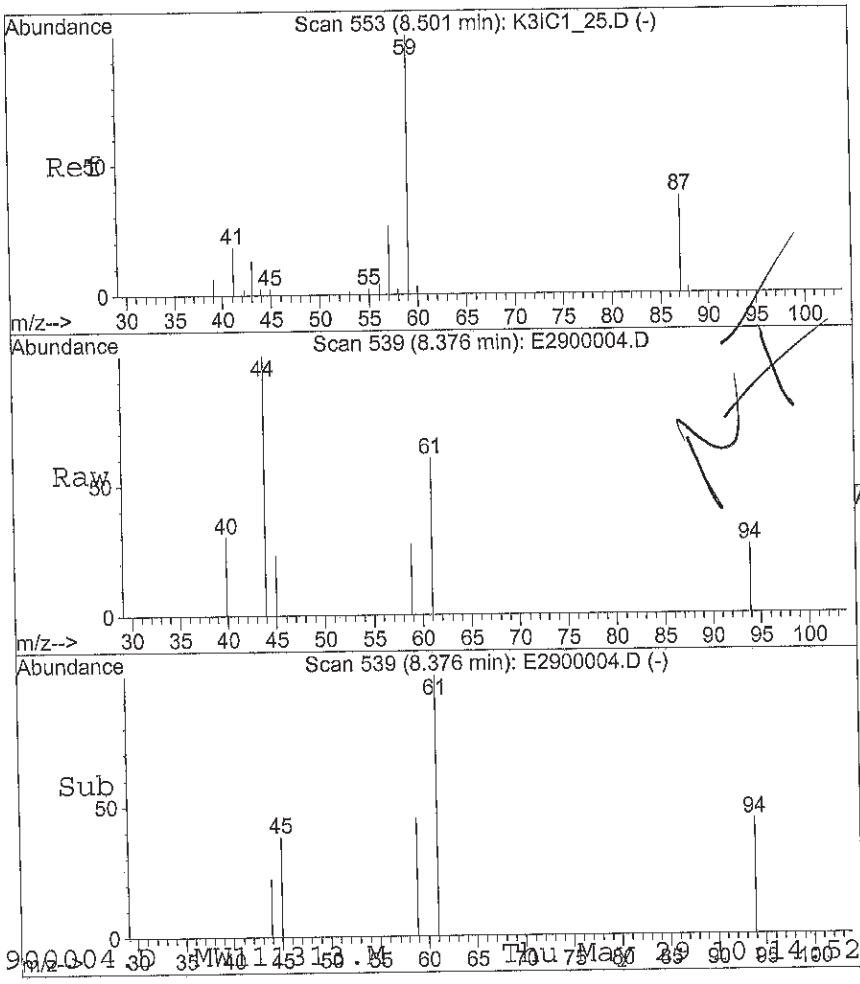


#24
Chloroform
Concen: 0.07 ug/L
RT: 9.20 min Scan# 637
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 83 Resp: 590

Ion	Ratio	Lower	Upper
83	100		
85	1526.1	51.8	77.6#

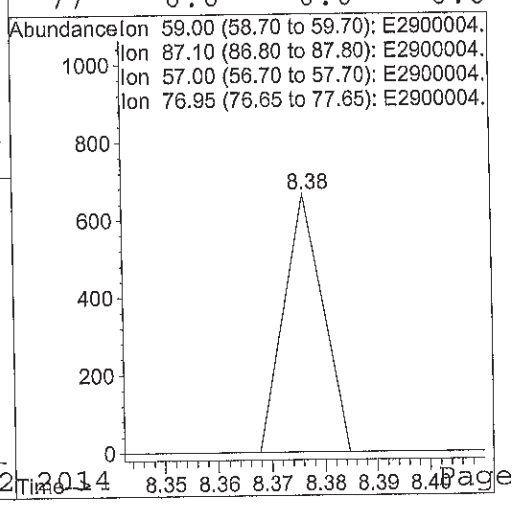


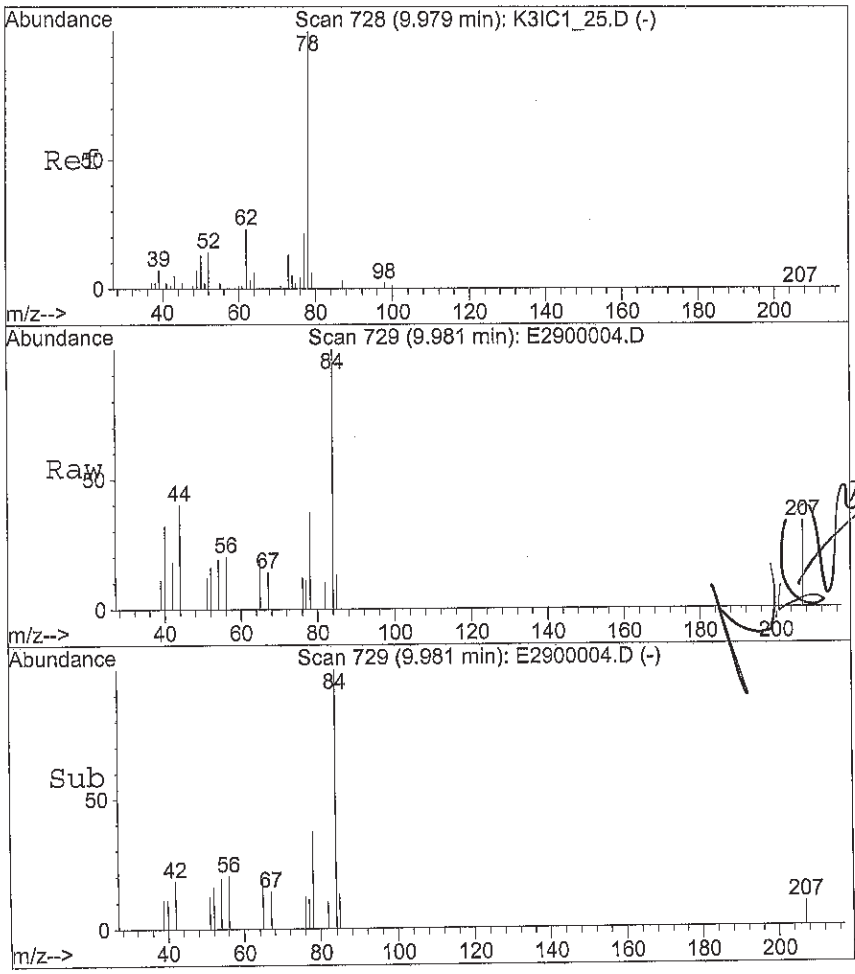


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.38 min Scan# 539
Delta R.T. -0.12 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 59 Resp: 337

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

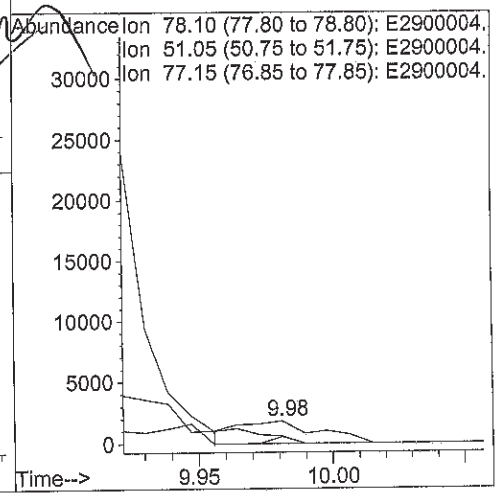


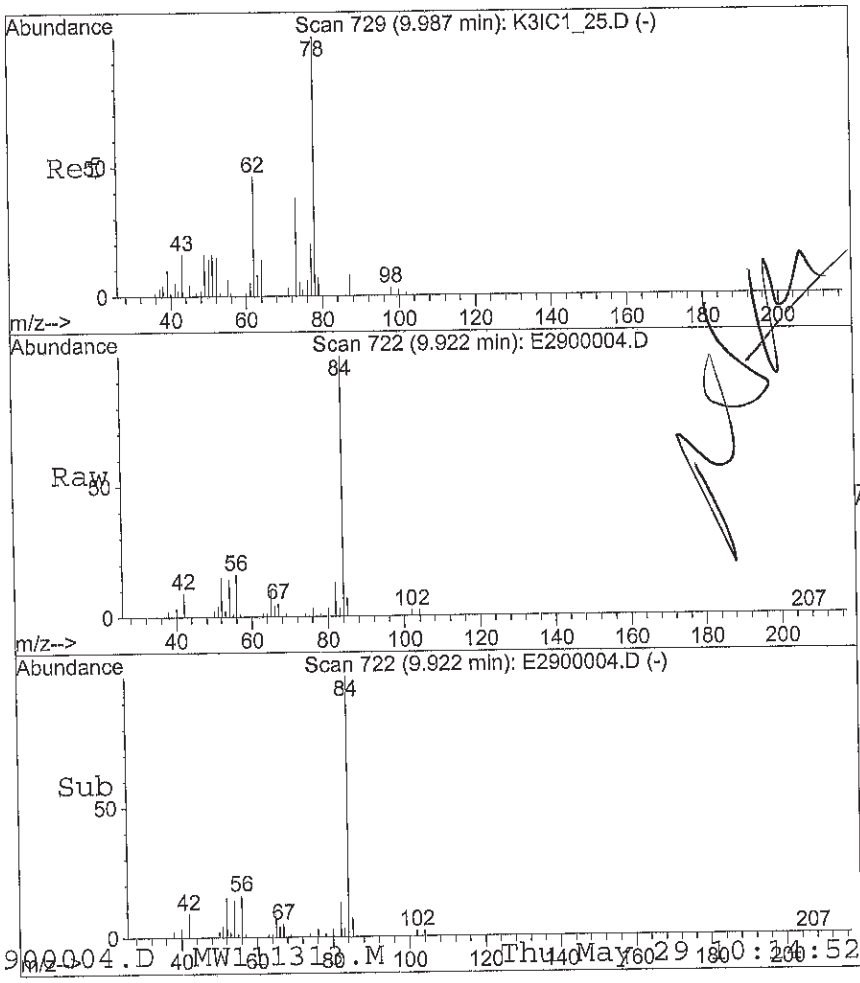


#31
Benzene
Concen: 0.26 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 78 Resp: 3768

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	7.4	16.6	24.8#

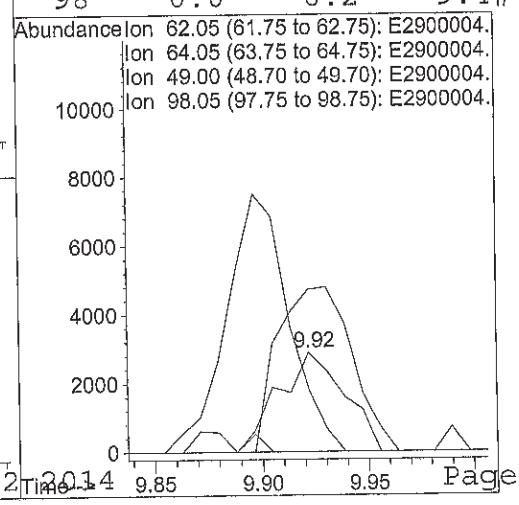


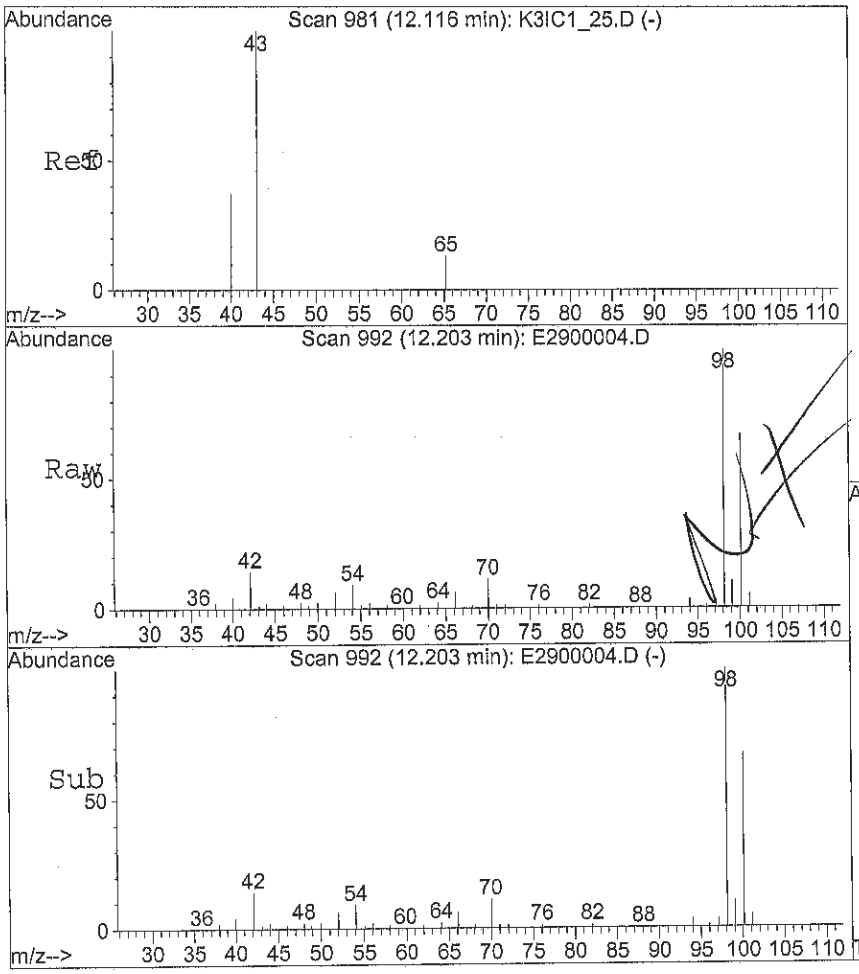


#32
1,2-Dichloroethane
Concen: 1.22 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.07 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 62 Resp: 6222

Ion	Ratio	Lower	Upper
62	100		
64	186.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

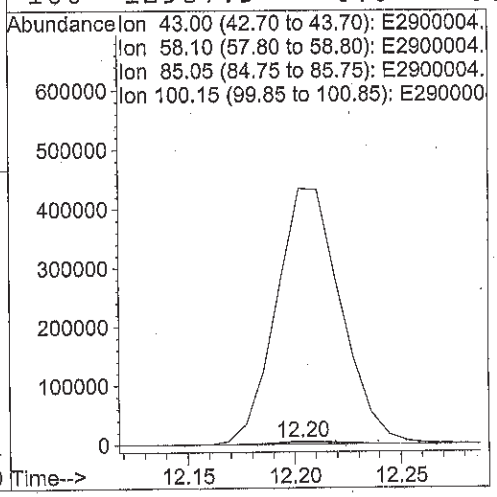


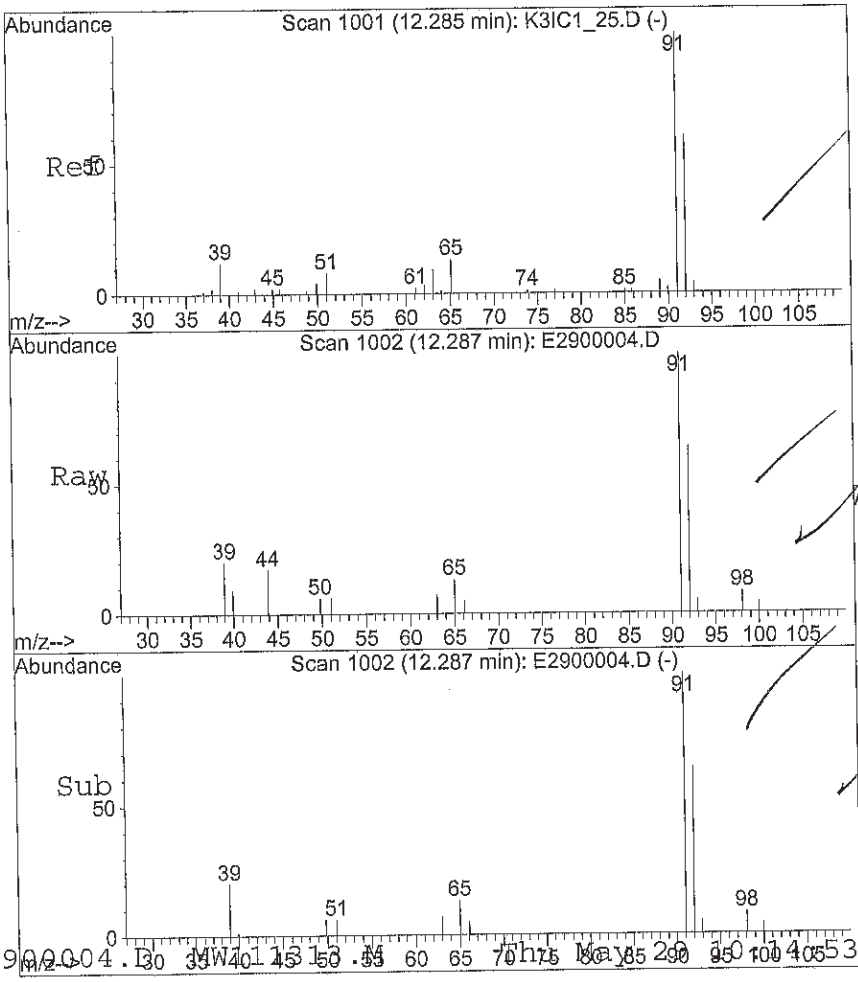


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.86 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 43 Resp: 7080

Ion	Ratio	Lower	Upper
43	100		
58	144.2	0.0	0.0#
85	0.0	0.0	0.0
100	12987.9	0.0	0.0#

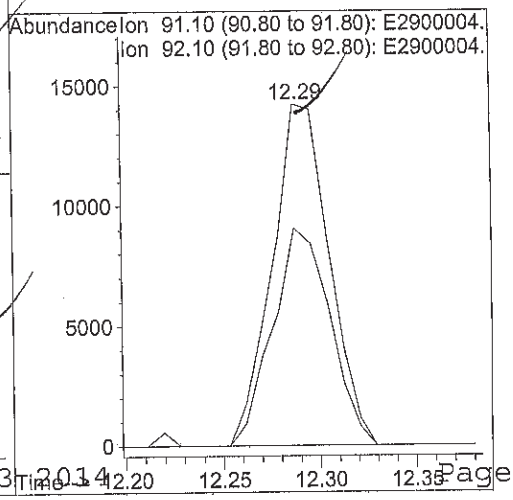


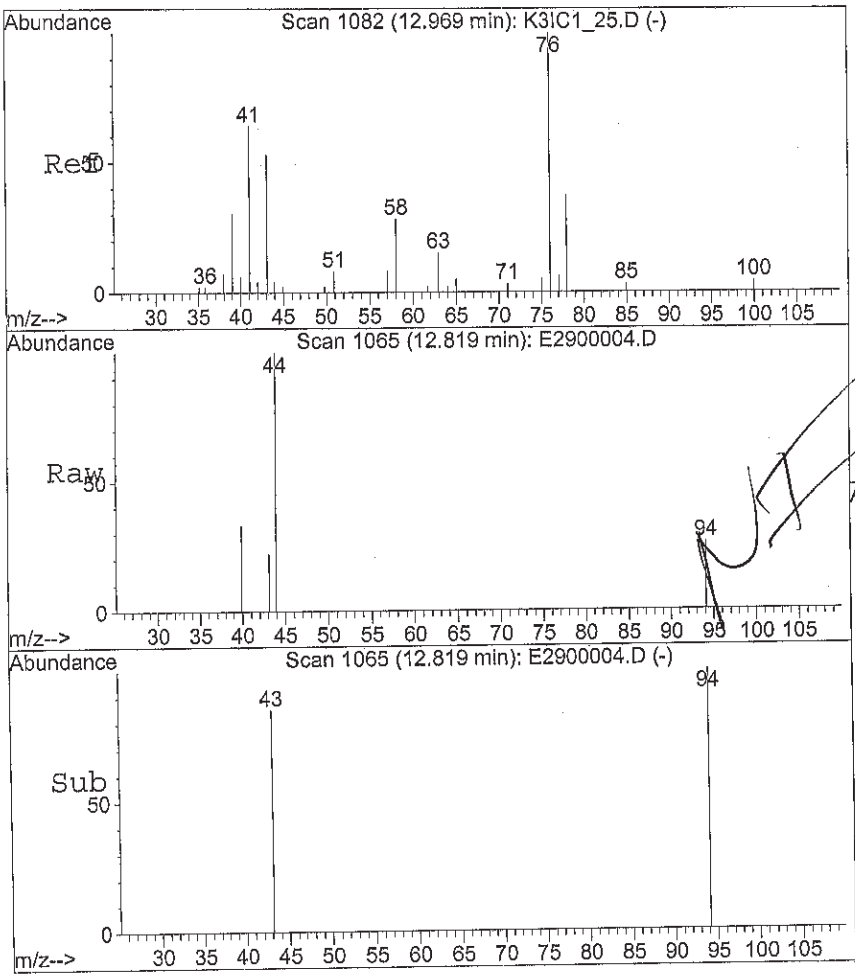


#41
Toluene
Concen: 1.72 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 91 Resp: 29119

Ion	Ratio	Lower	Upper
91	100		
92	64.3	47.4	71.0

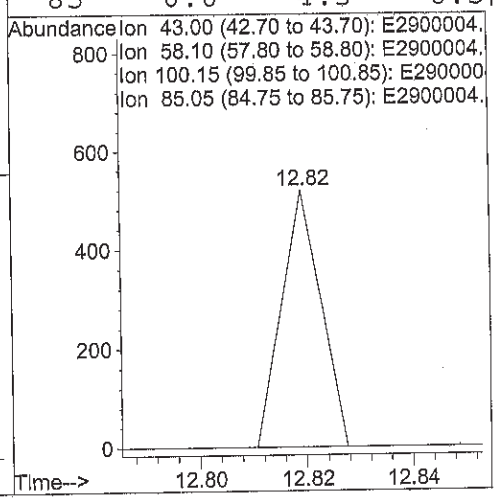


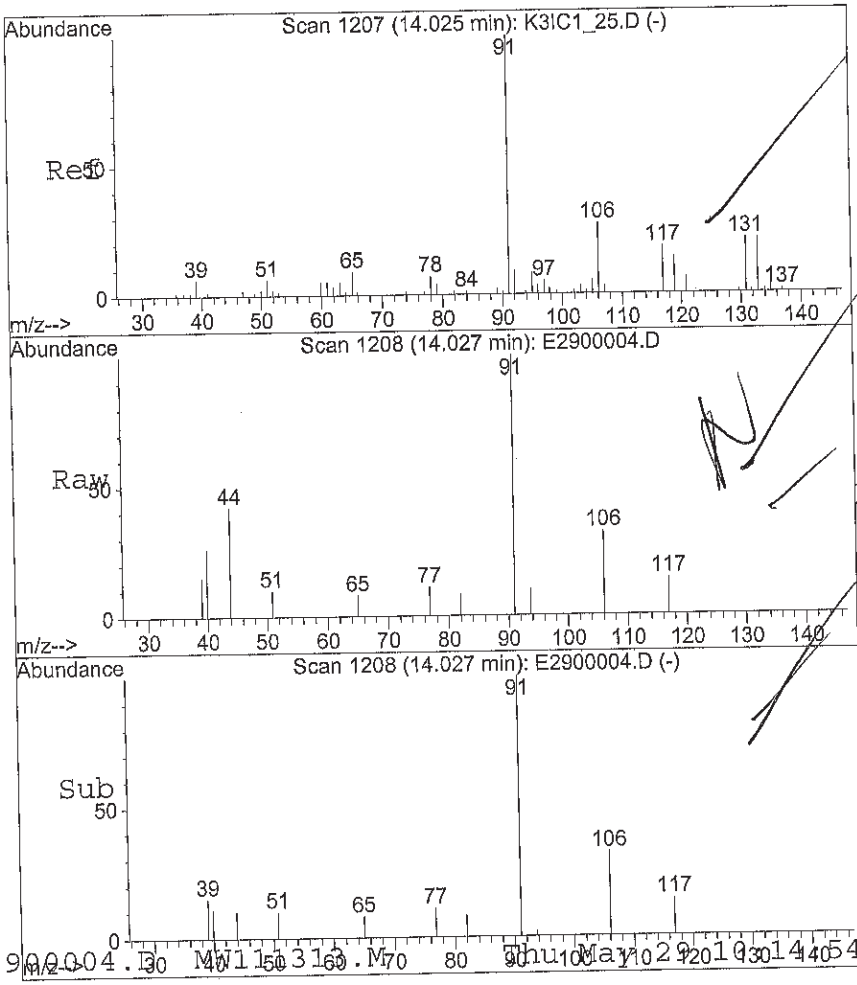


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 12.82 min Scan# 1065
Delta R.T. -0.15 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 43 Resp: 263

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

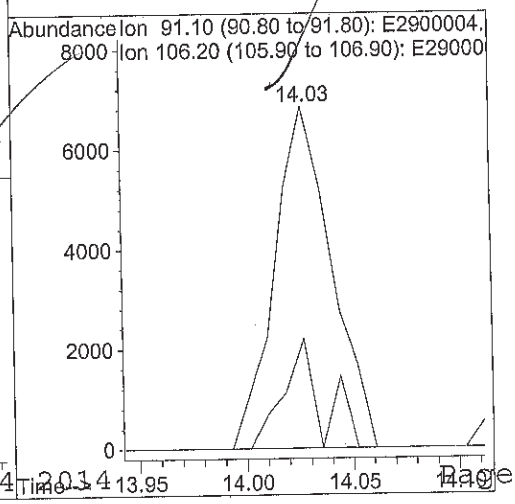


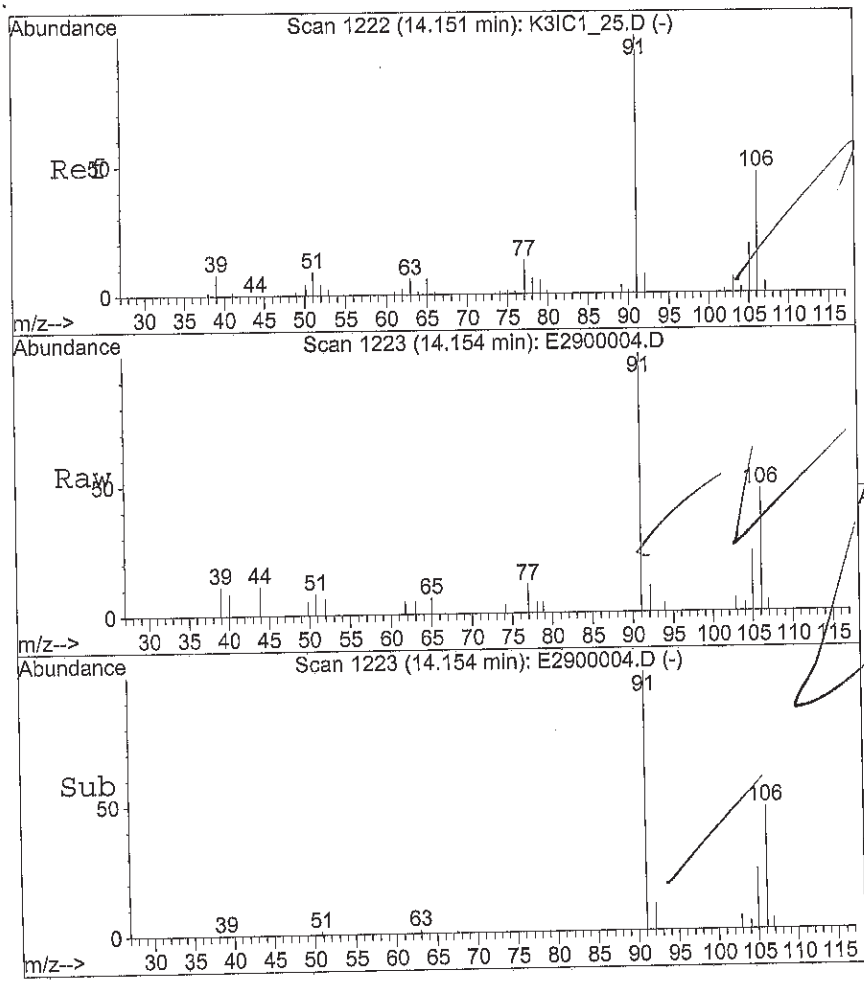


#51
Ethylbenzene
Concen: 0.66 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 91 Resp: 12707

Ion	Ratio	Lower	Upper
91	100		
106	21.7	23.5	35.3#

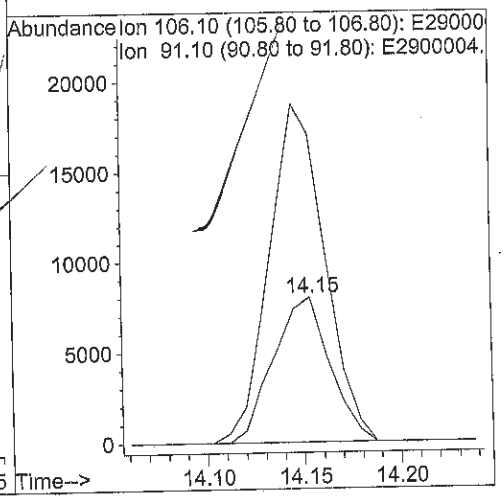


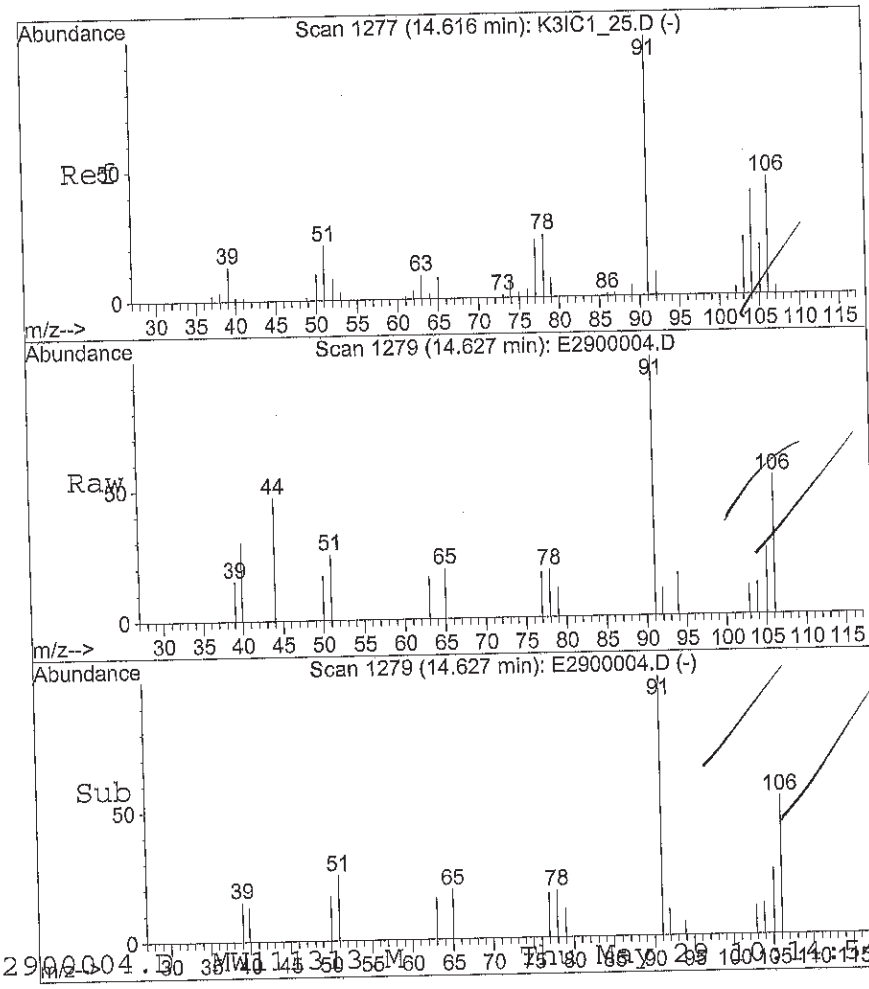


#52
m,p-Xylenes
Concen: 2.36 ug/L
RT: 14.15 min Scan# 1223
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:106 Resp: 16135

Ion	Ratio	Lower	Upper
106	100		
91	230.0	177.1	265.7

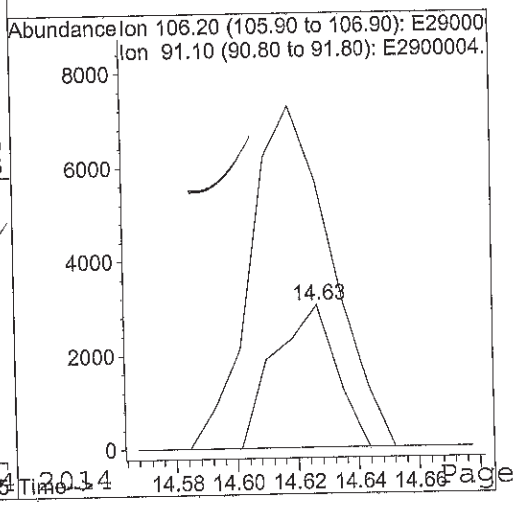


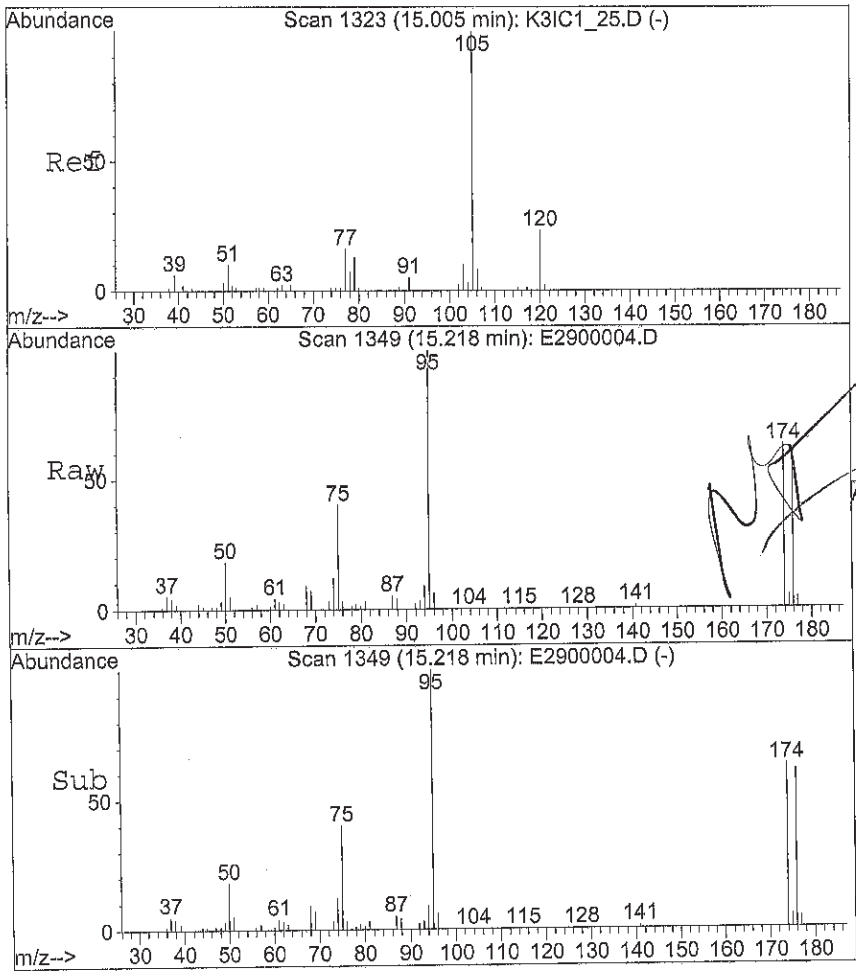


#53
o-Xylene
Concen: 0.63 ug/L
RT: 14.63 min Scan# 1279
Delta R.T. 0.01 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:106 Resp: 4266

Ion	Ratio	Lower	Upper
106	100		
91	314.9	179.0	268.6#

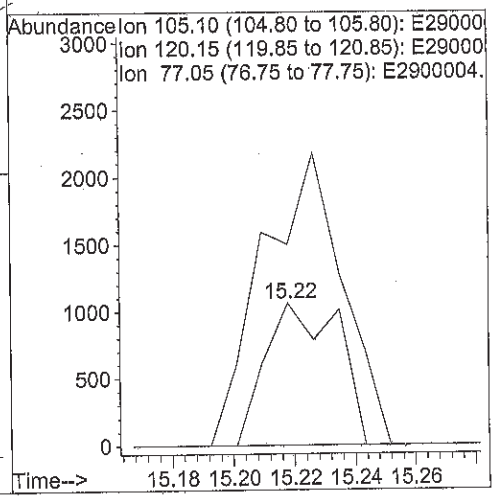


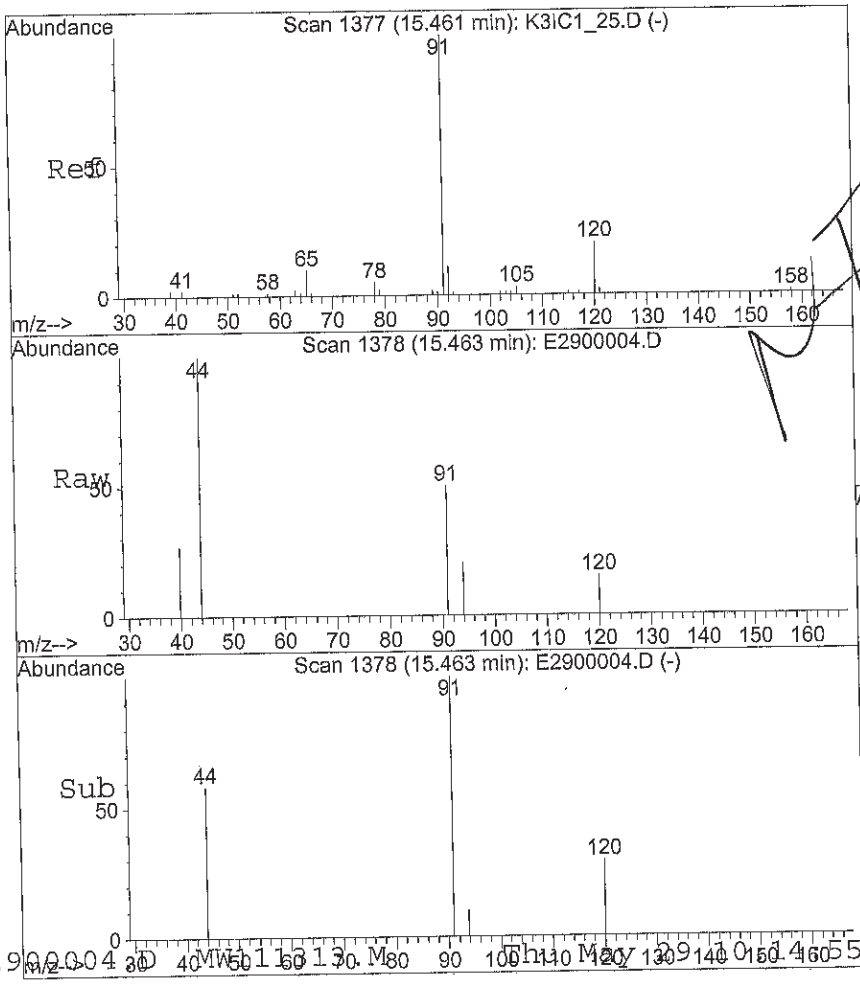


#56
Isopropylbenzene
Concen: 0.09 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:105 Resp: 1755

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	226.4	13.1	19.7#

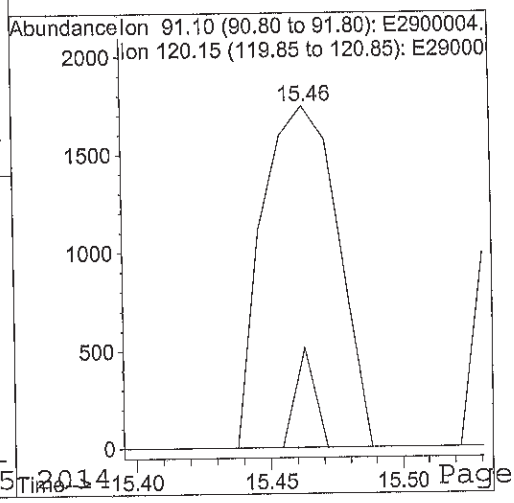


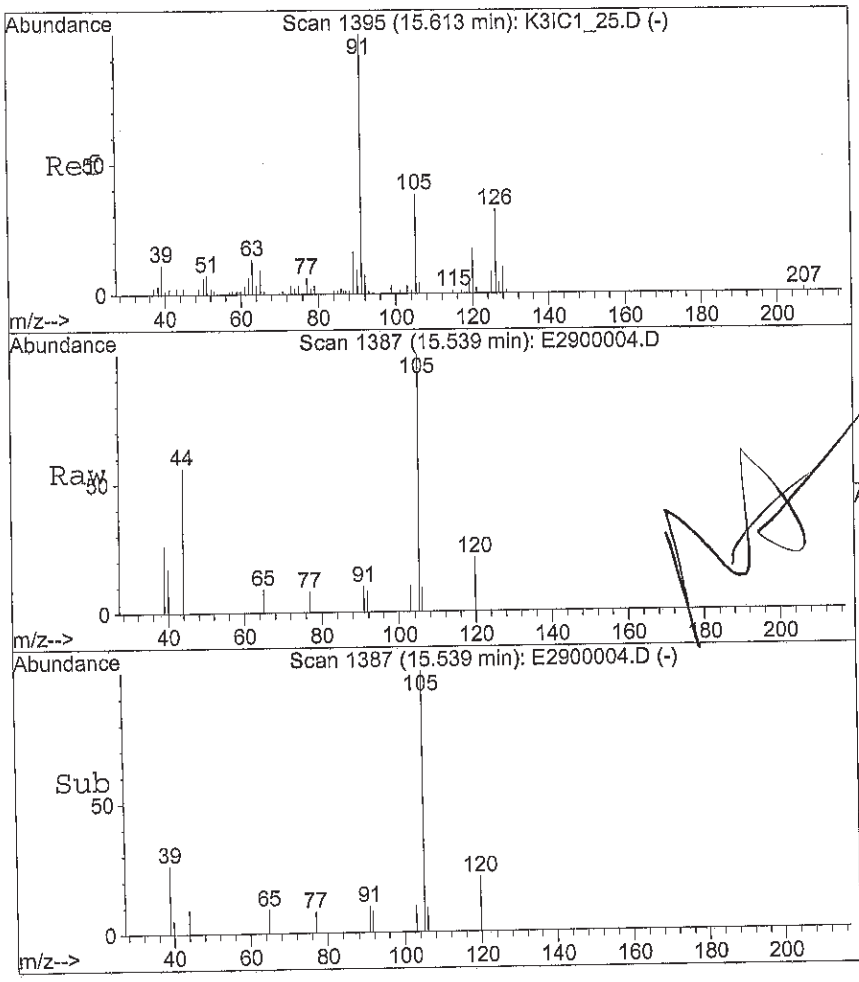


#62
n-Propylbenzene
Concen: 0.13 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 91 Resp: 3422

Ion	Ratio	Lower	Upper
91	100		
120	7.6	16.1	24.1#

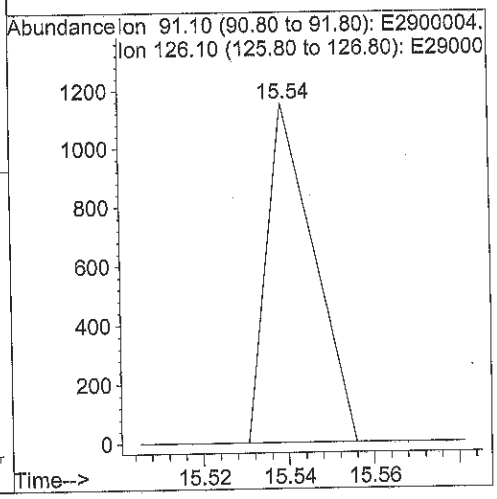


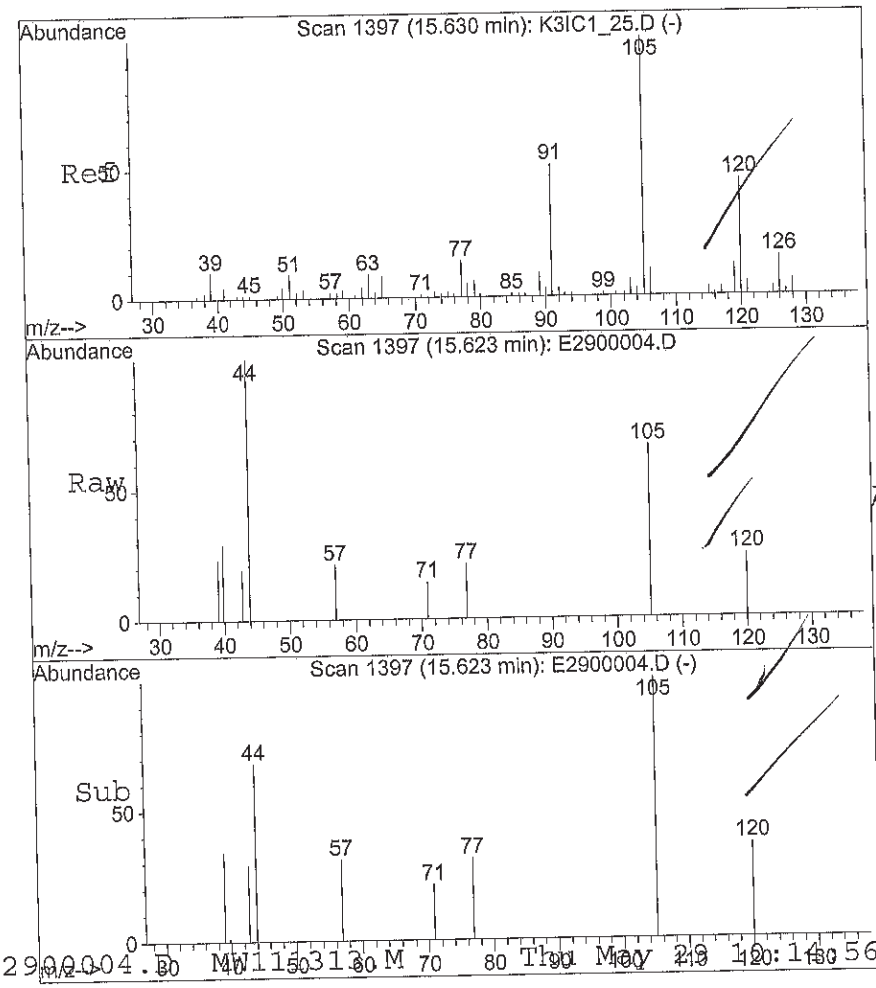


#63
2-Chlorotoluene
Concen: 0.05 ug/L
RT: 15.54 min Scan# 1387
Delta R.T. -0.07 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 91 Resp: 877

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

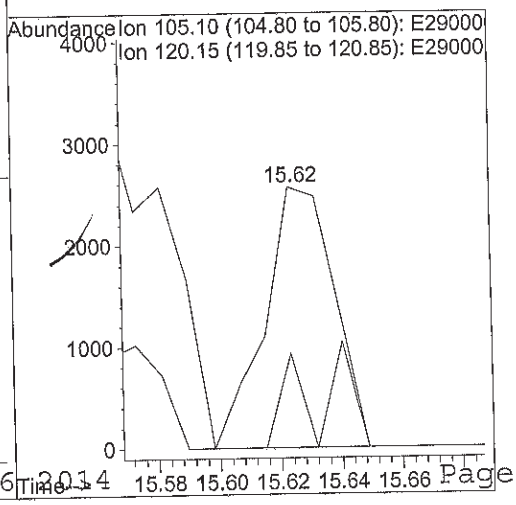


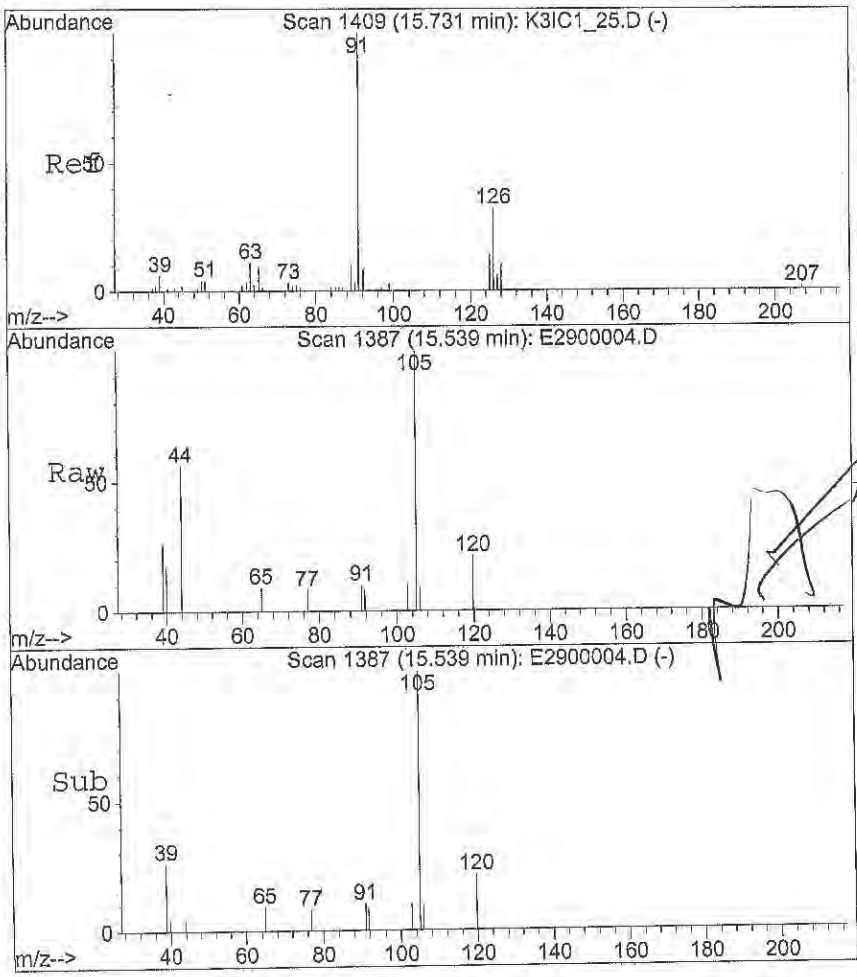


#64
1,3,5-Trimethylbenzene
Concen: 0.25 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:105 Resp: 4049

Ion	Ratio	Lower	Upper
105	100		
120	24.5	36.4	54.6#

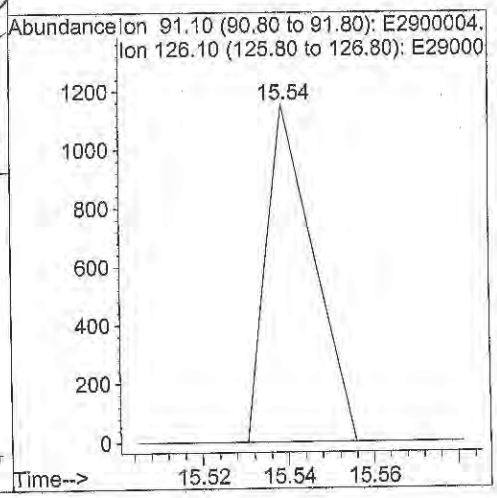


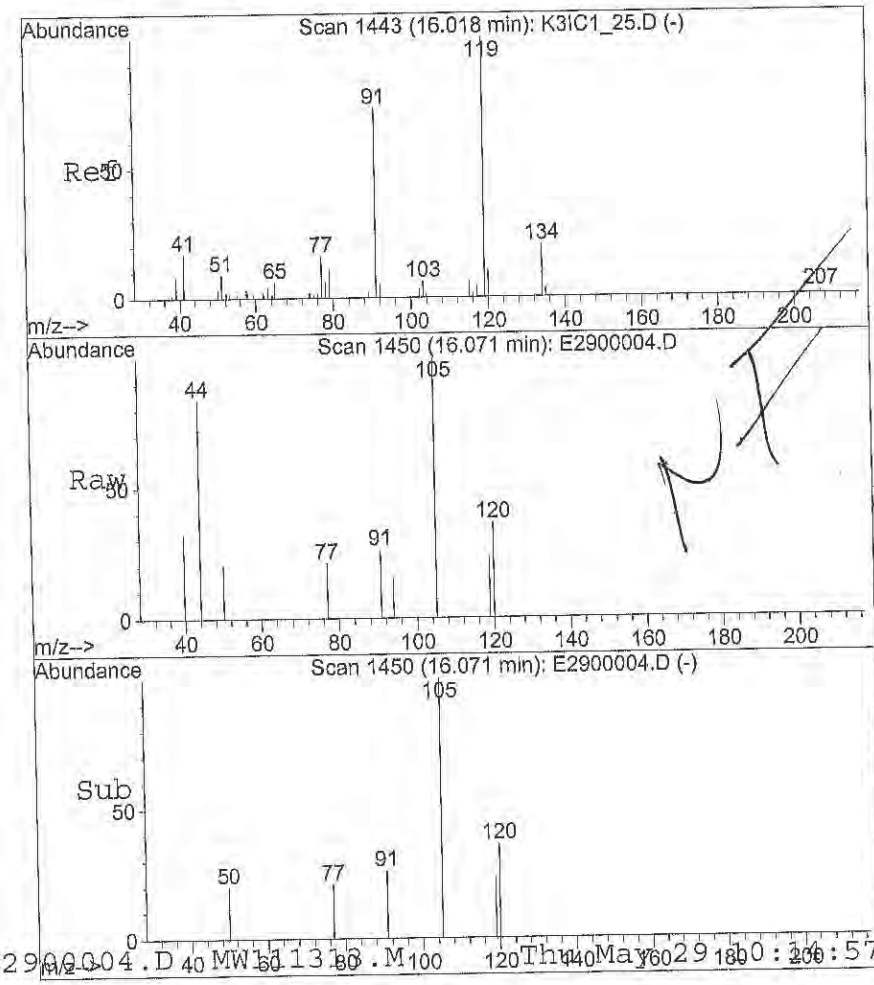


#65
4-Chlorotoluene
Concen: 0.06 ug/L
RT: 15.54 min Scan# 1387
Delta R.T. -0.19 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 91 Resp: 877

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

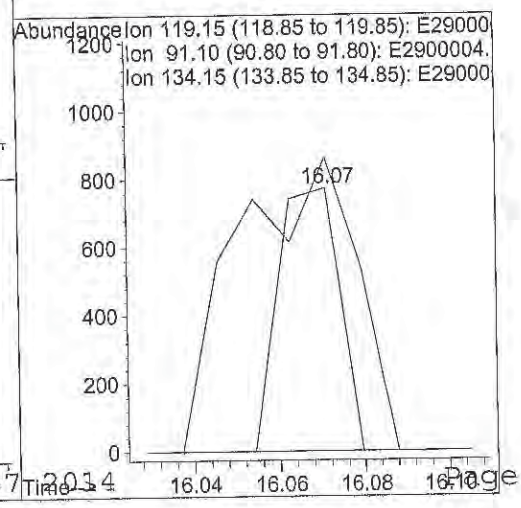


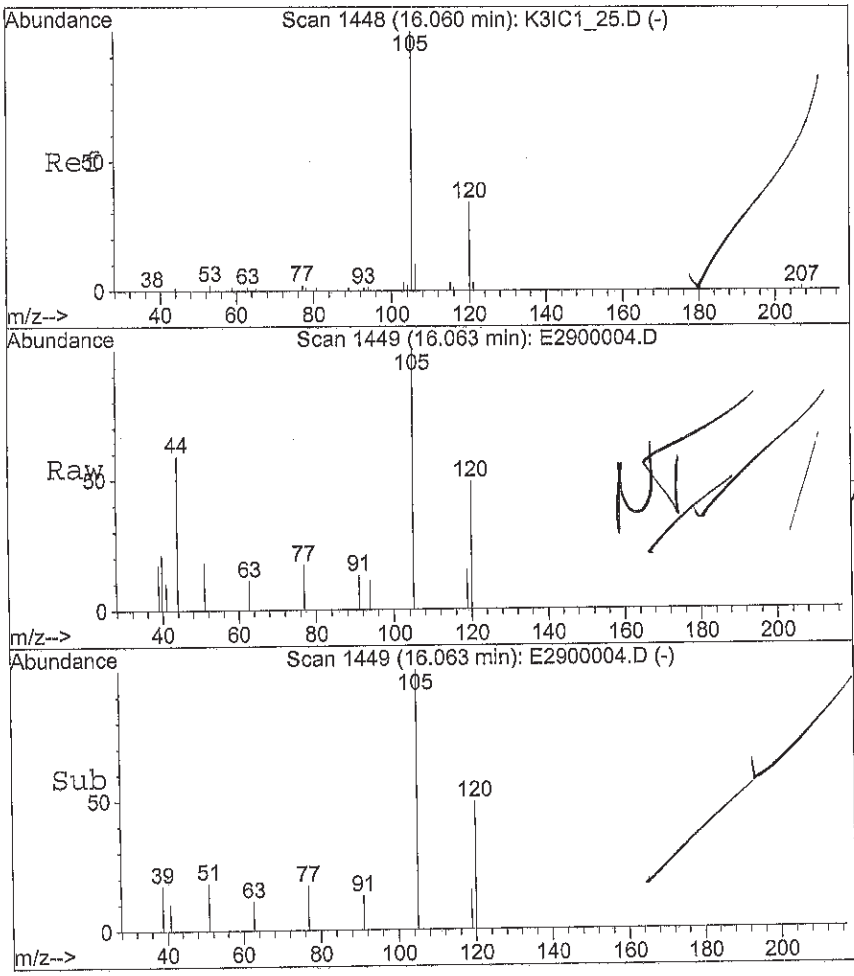


#66
tert-Butylbenzene
Concen: 0.05 ug/L
RT: 16.07 min Scan# 1450
Delta R.T. 0.05 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:119 Resp: 768

Ion	Ratio	Lower	Upper
119	100		
91	218.5	56.3	84.5#
134	0.0	16.1	24.1#

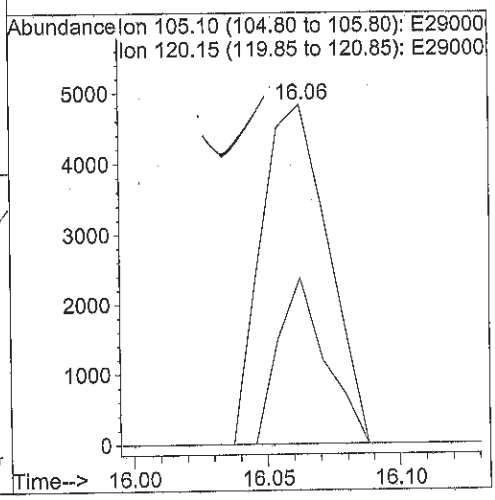


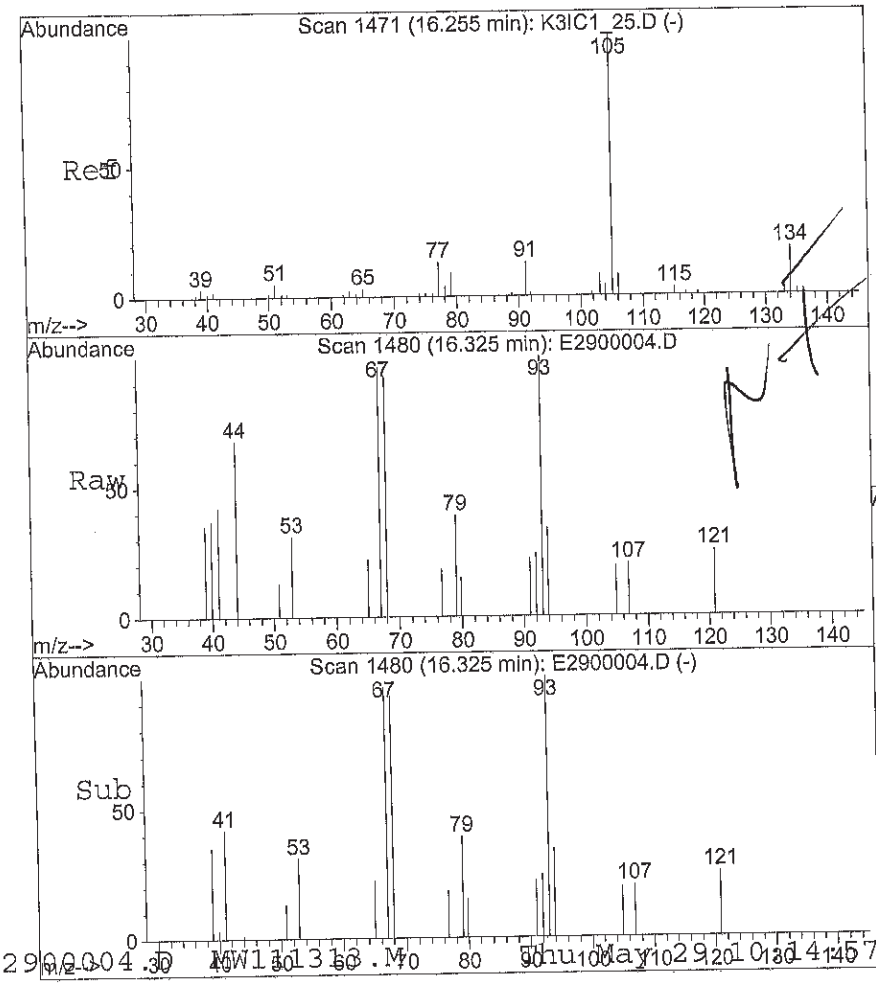


#67
1,2,4-Trimethylbenzene
Concen: 0.49 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:105 Resp: 8420

Ion	Ratio	Lower	Upper
105	100		
120	34.5	33.8	50.8

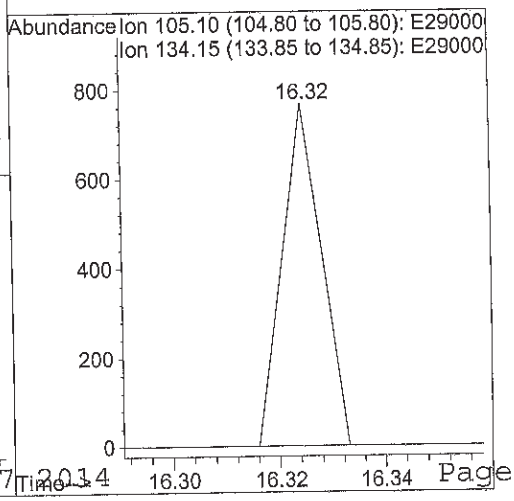


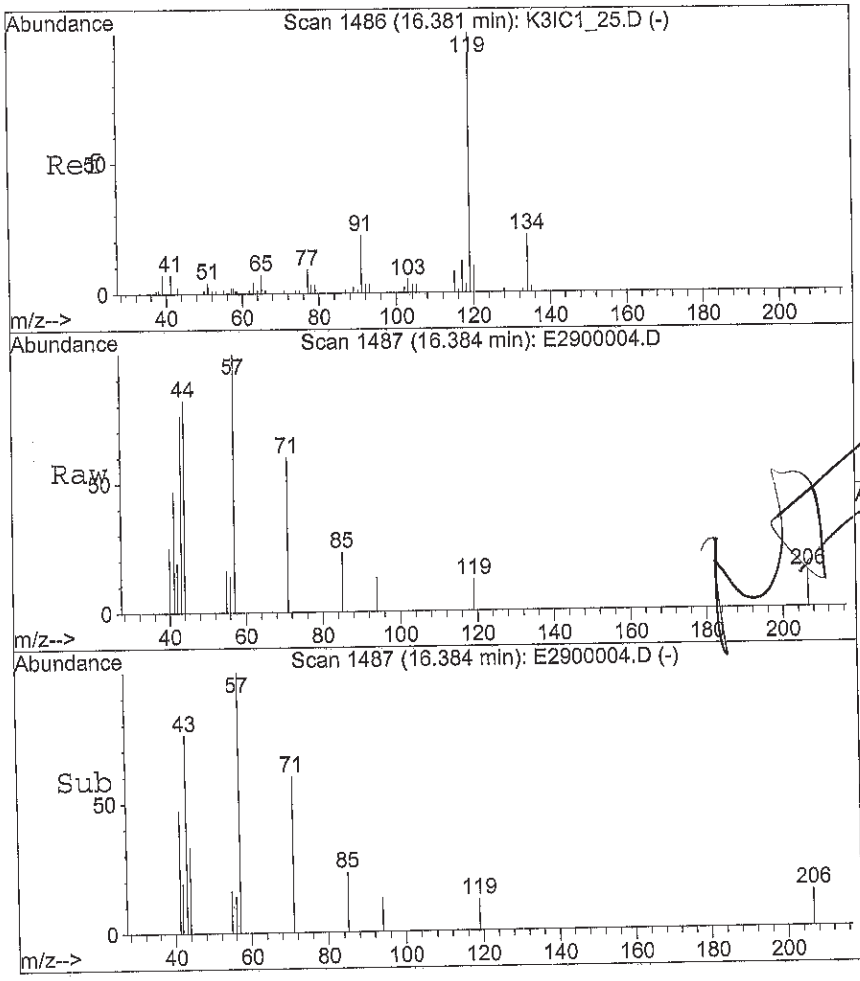


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.32 min Scan# 1480
Delta R.T. 0.07 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:105 Resp: 389

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

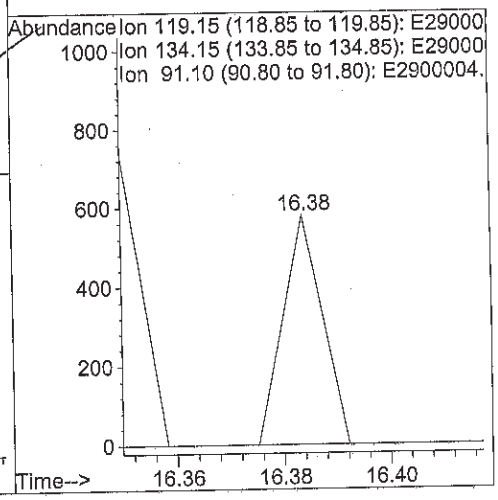


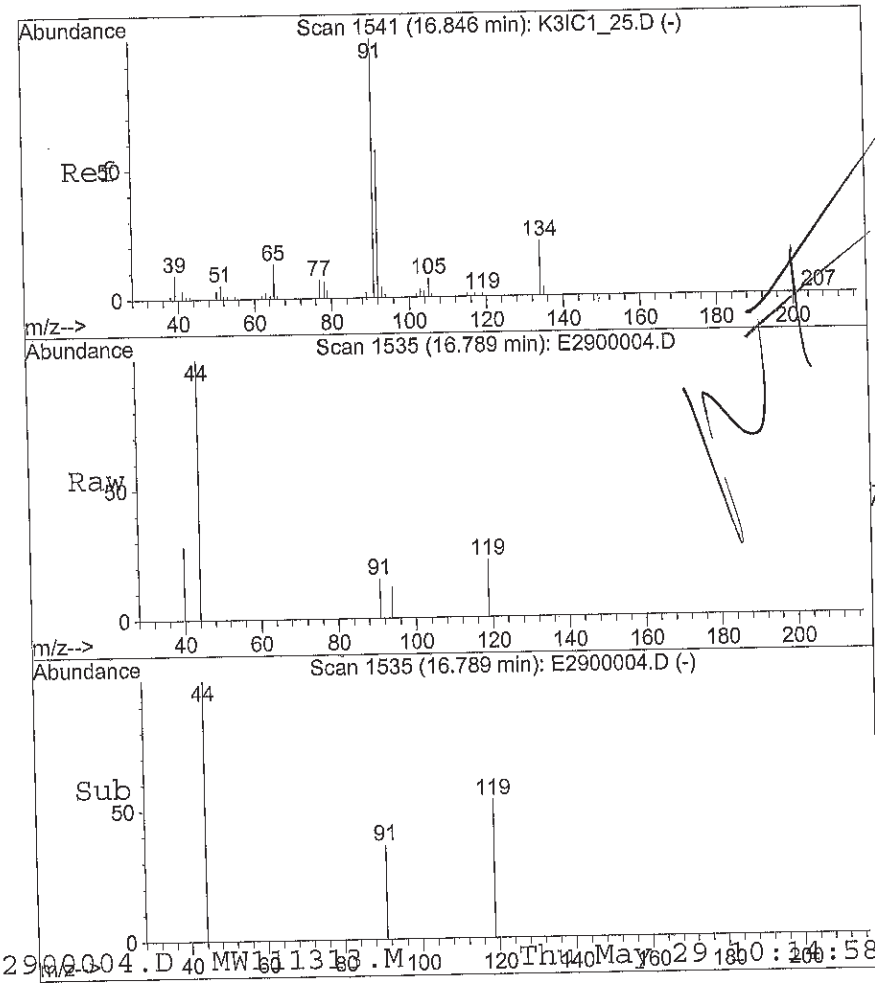


#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion:119 Resp: 293

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

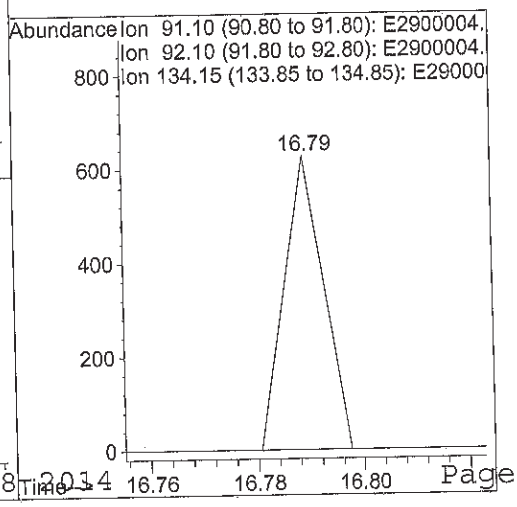




#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.79 min Scan# 1535
Delta R.T. -0.06 min
Lab File: E2900004.D
Acq: 29 May 2014 9:44 am

Tgt Ion: 91 Resp: 318

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900004.D Vial: 3
Acq On : 29 May 2014 9:44 am Operator: DN
Sample : 3E42901-03 Inst : GC/MS Ins
Misc : 100cc SVL-844-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 10:15 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1527639	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1240492	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	660440	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	437790	11.02 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.16%		
3) Chloroform-d (SU6)	9.19	84	672355	11.80 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.40%		
4) Methylene Chloride-d2 (SU5	7.06	86	387858	11.64 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.12%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	433414	15.96 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 127.68%#		
6) Benzene-d6 (SU7)	9.92	84	1324875	11.05 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.40%		
8) Toluene-d8 (SU3)	12.20	98	1377058	11.70 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.60%		
9) 4-Bromofluorobenzene (SU4)	15.23	95	698892	14.38 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.04%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

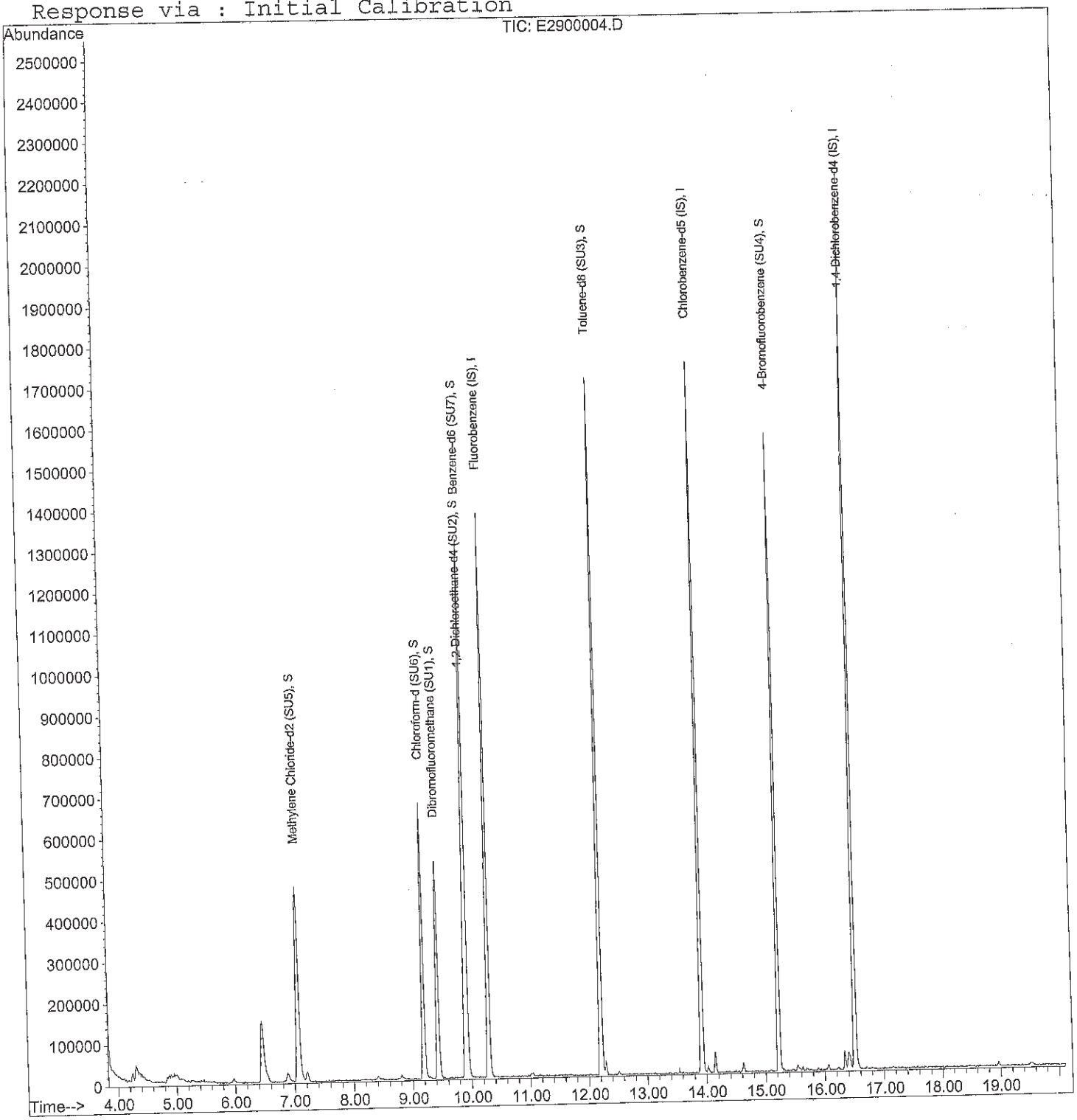
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900004.D
Acq On : 29 May 2014 9:44 am
Sample : 3E42901-03
Misc : 100cc SVL-844-SA5D-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: May 29 10:15 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900005.D
Acq On : 29 May 2014 10:13 am
Sample : 3E42901-04
Misc : 100cc SVL-530-SA5C-SV-6.5-7.5
MS Integration Params: rteint.p
Quant Time: May 29 11:09 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1531628	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1208919	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	672911	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	430212	11.26 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.08%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	422014	11.62 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	92.96%	
39) Toluene-d8 (SU3)	12.21	98	1351245	11.98 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.84%	
58) 4-Bromofluorobenzene (SU4)	15.23	95	685935	13.87 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	110.96%	

Target Compounds					Qvalue
4) Chloromethane	4.39	50	1260	-0.73 ~~ug/L~~ #	76
6) Bromomethane	5.09	96	580	-1.43 ~~ug/L~~ #	1
7) Chloroethane	5.26	64	2772	2.86 ~~ug/L~~ #	32
11) Acetone	6.47	58	3053	178.60 ~~ug/L~~	79
12) (IPA) Leak Check Compound	6.47	45	346021	1880.07 ~~ug/L~~ #	82
13) Carbon disulfide	6.86	76	328	0.03 ~~ug/L~~ #	76
14) Methylene Chloride	7.06	84	6288	1.49 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	7.13	59	257	0.98 ~~ug/L~~ #	77
24) Chloroform	9.22	83	1545	0.19 ~~ug/L~~ #	18
29) 1,1-Dichloropropene	9.94	75	288	0.05 ~~ug/L~~ #	1
31) Benzene	9.92	78	10801	0.75 ~~ug/L~~ #	76
32) 1,2-Dichloroethane	9.92	62	5603	1.10 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	6839	2.83 ~~ug/L~~ #	100
41) Toluene	12.28	91	3043	0.18 ug/L # 0.003	76
46) 2-Hexanone	13.11	43	542	0.20 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	1088	0.06 ~~ug/L~~ #	45
52) m,p-Xylenes	14.14	106	349	0.05 ug/L # 0.001	1
54) Styrene	14.63	104	1776	-0.69 ~~ug/L~~	53
56) Isopropylbenzene	15.23	105	288	0.02 ~~ug/L~~ #	1
62) n-Propylbenzene	15.23	91	2506	0.09 ~~ug/L~~ #	56
67) 1,2,4-Trimethylbenzene	16.07	105	702	0.04 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.34	105	342	0.02 ~~ug/L~~ #	62

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900005.D Vial: 4
Acq On : 29 May 2014 10:13 am Operator: DN
Sample : 3E42901-04 Inst : GC/MS Ins
Misc : 100cc SVL-530-SA5C-SV-6.5-7.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 11:09 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue

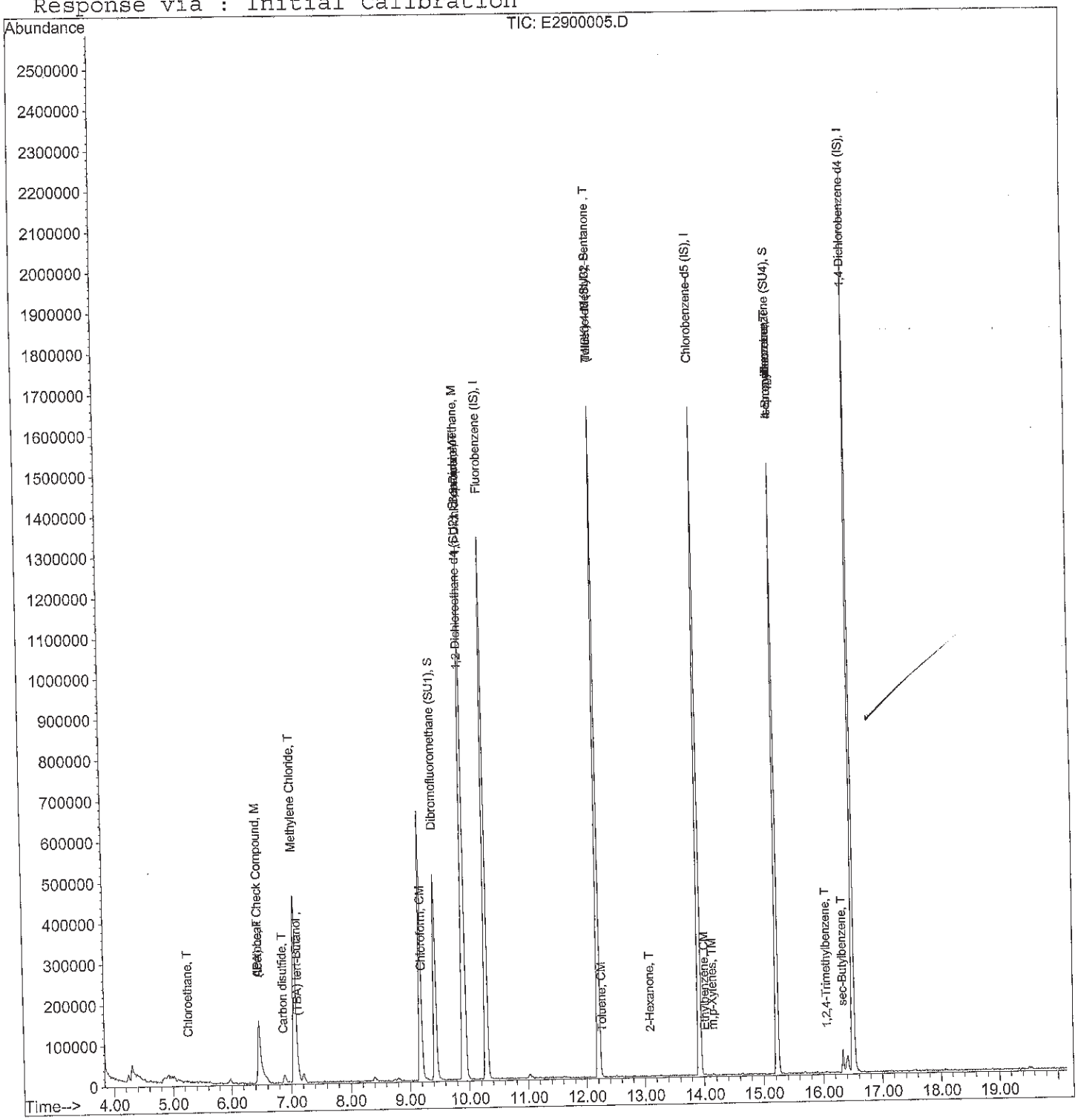
(#) = qualifier out of range (m) = manual integration

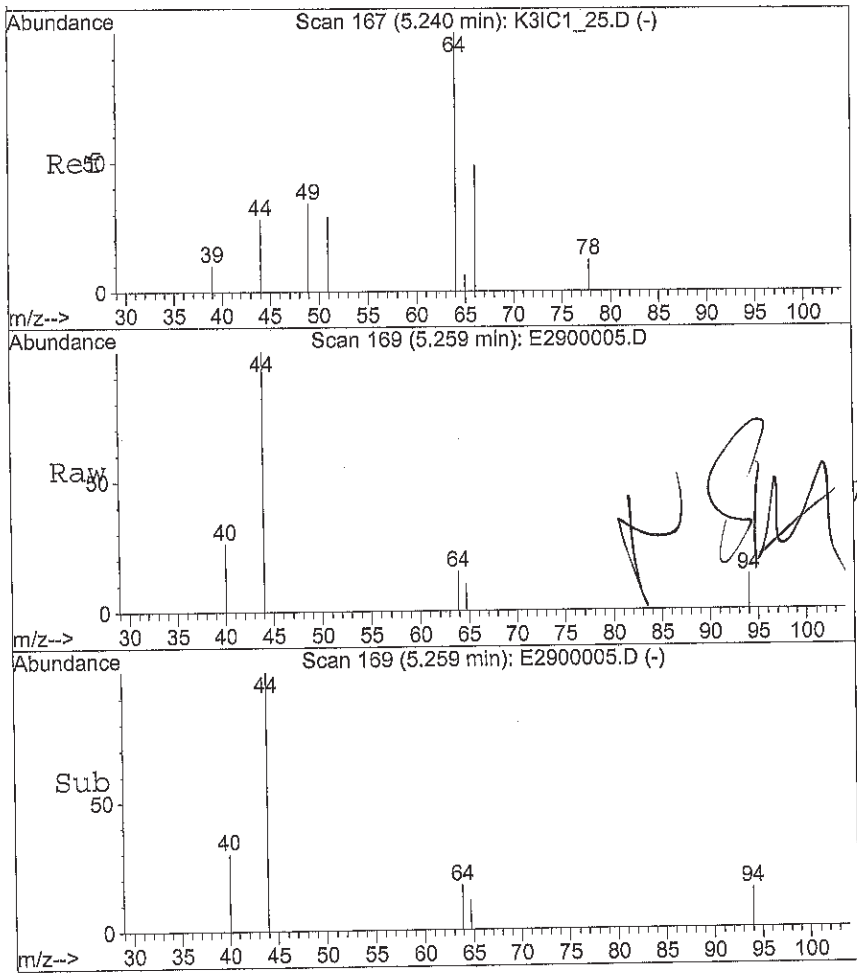
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900005.D
Acq On : 29 May 2014 10:13 am
Sample : 3E42901-04
Misc : 100cc SVL-530-SA5C-SV-6.5-7.5
MS Integration Params: rteint.p
Quant Time: May 29 11:09 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

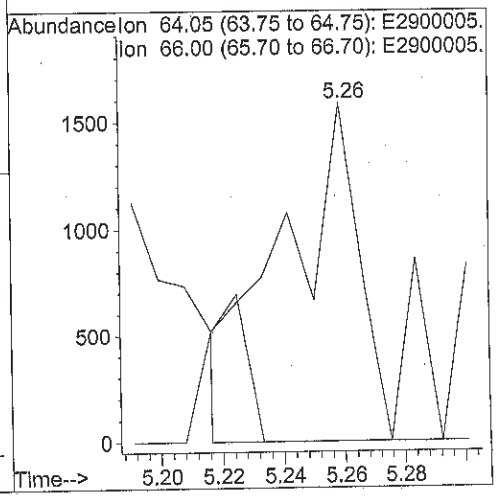


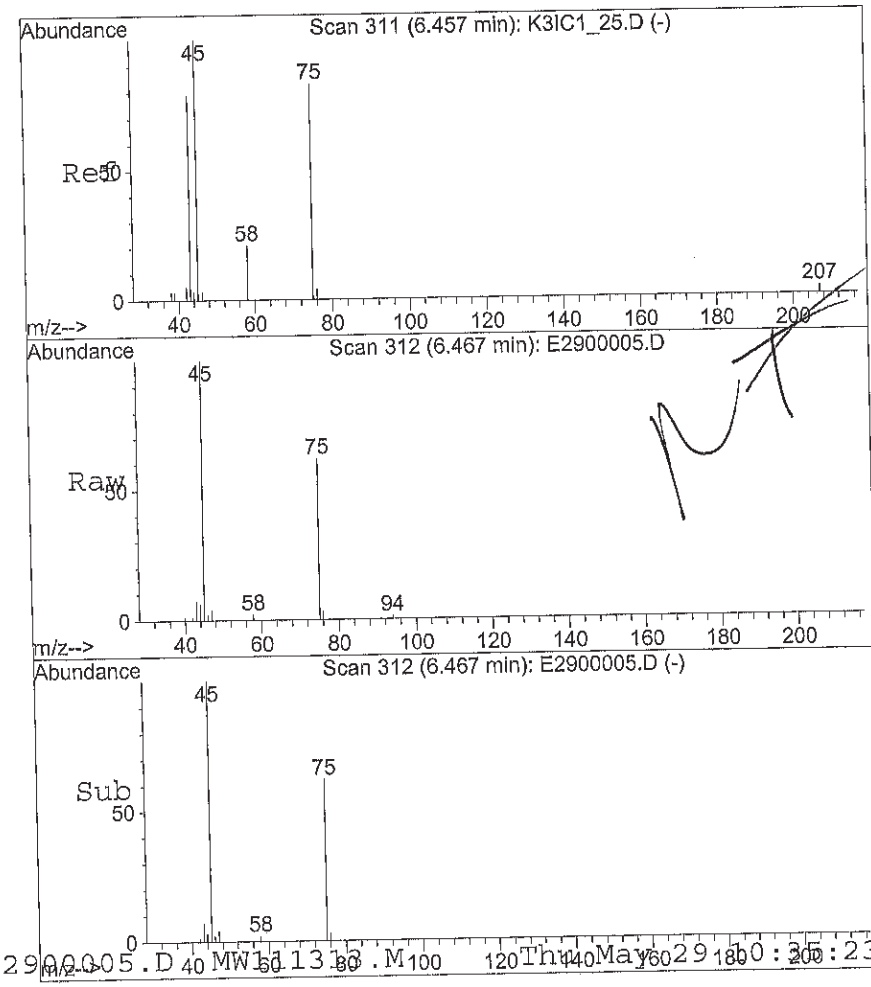


#7
Chloroethane
Concen: 2.86 ug/L
RT: 5.26 min Scan# 169
Delta R.T. 0.02 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 64 Resp: 2772

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

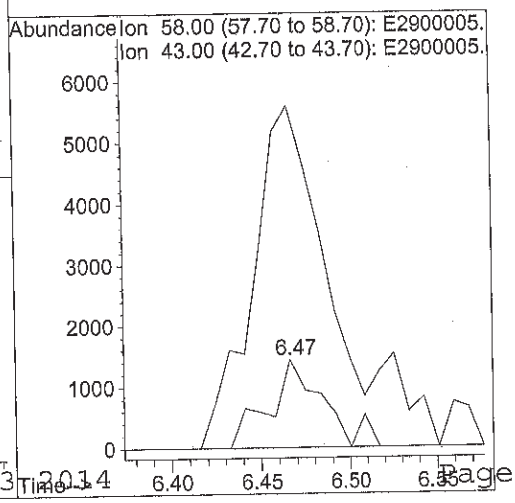


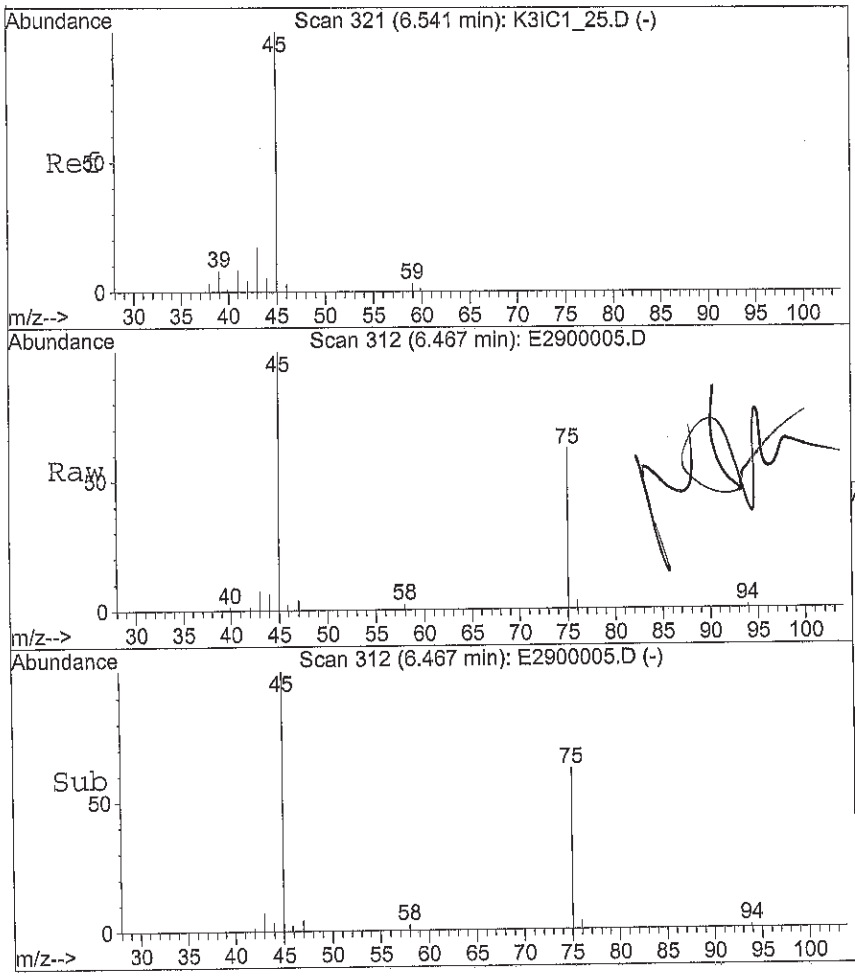


#11
Acetone
Concen: 178.60 ug/L
RT: 6.47 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 58 Resp: 3053

Ion	Ratio	Lower	Upper
58	100		
43	505.6	360.9	541.3

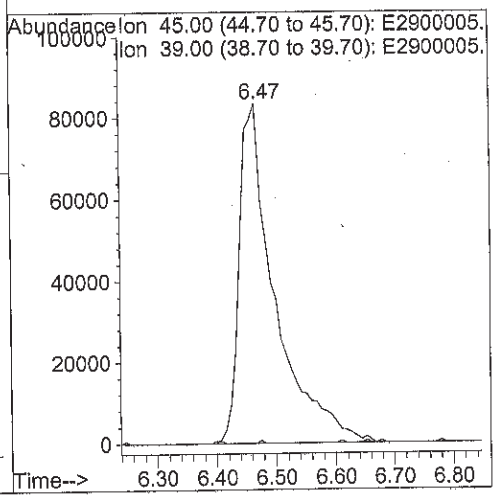


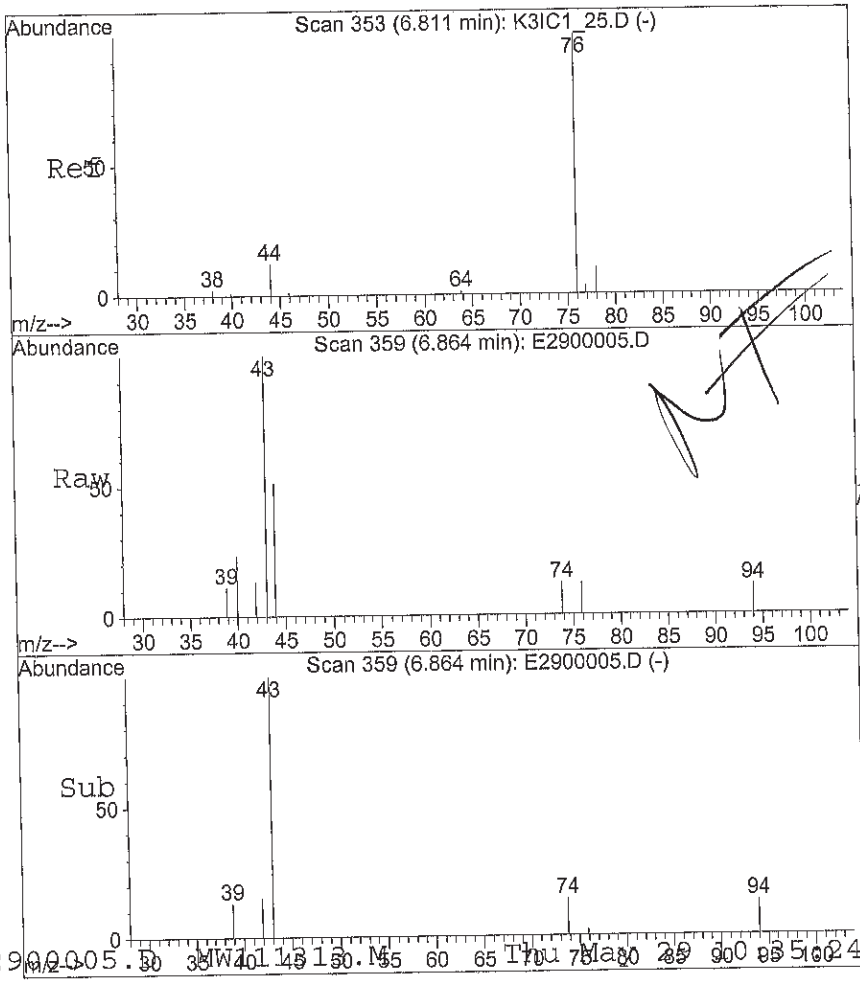


#12
(IPA) Leak Check Compound
Concen: 1880.07 ug/L
RT: 6.47 min Scan# 312
Delta R.T. -0.07 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 45 Resp: 346021

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

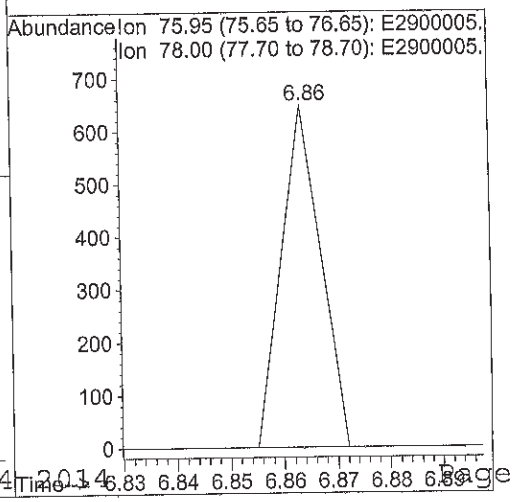


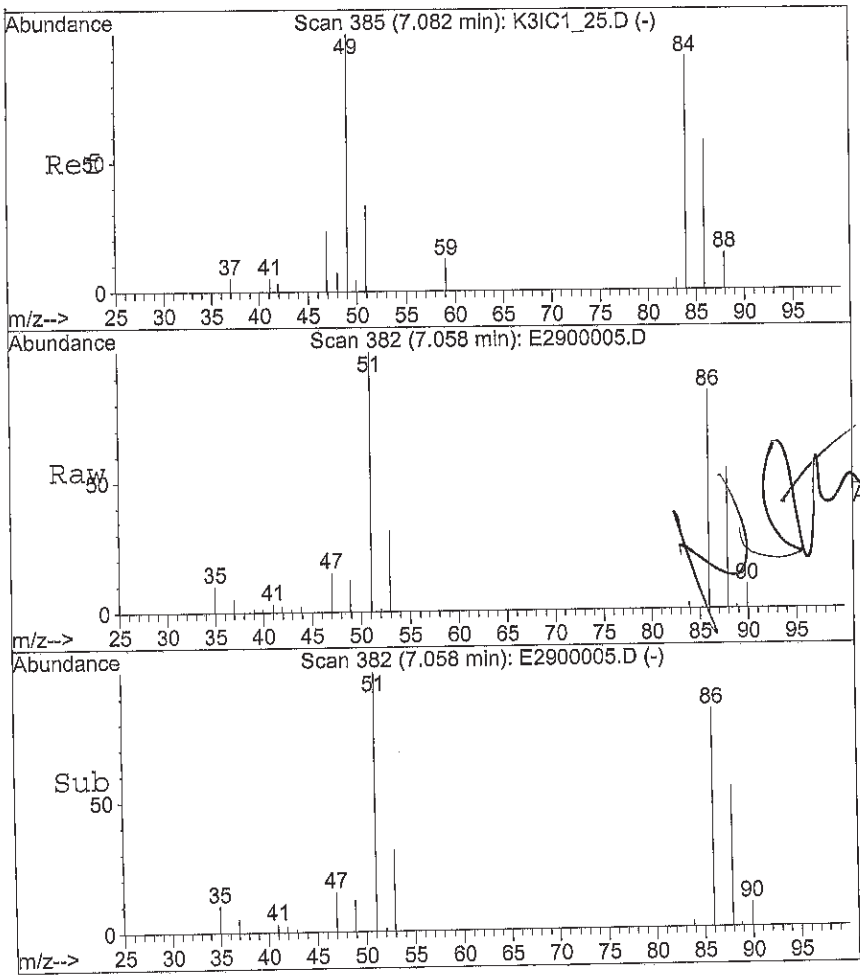


#13
Carbon disulfide
Concen: 0.03 ug/L
RT: 6.86 min Scan# 359
Delta R.T. 0.05 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 76 Resp: 328

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

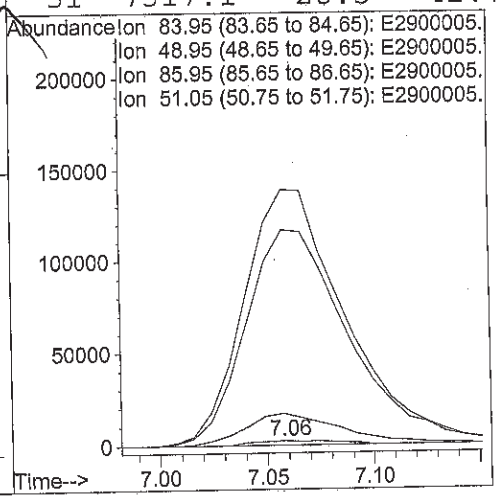


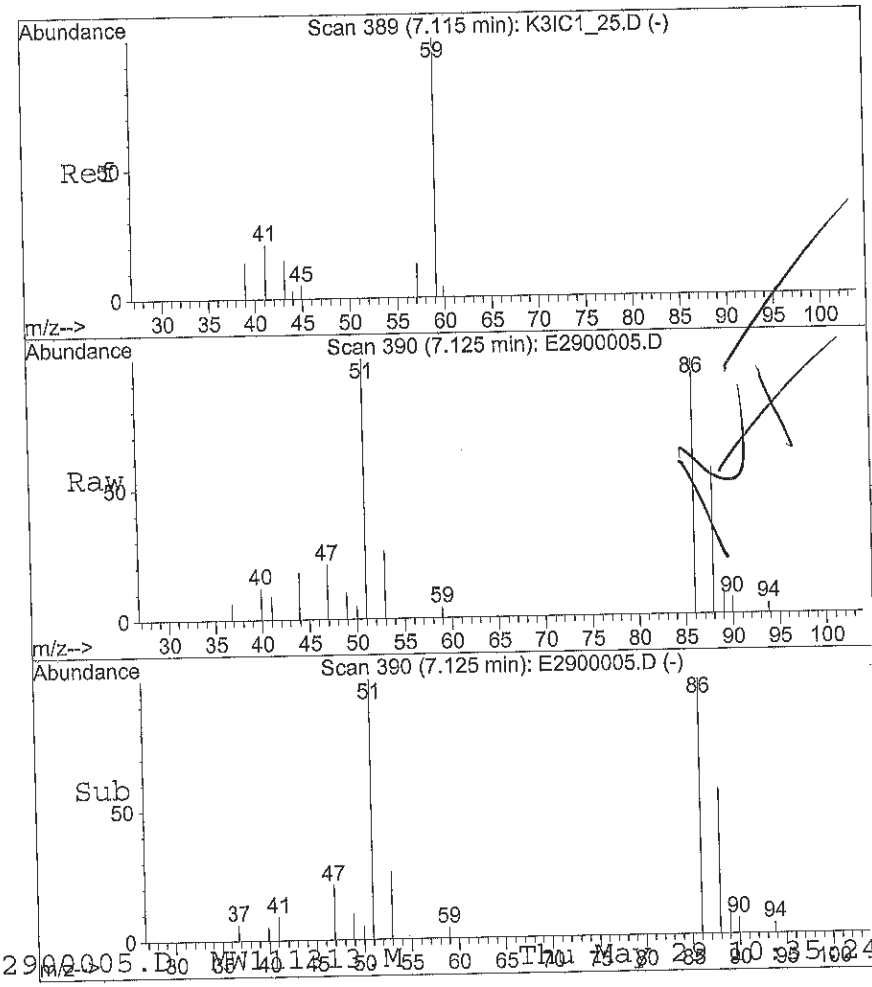


#14
Methylene Chloride
Concen: 1.49 ug/L
RT: 7.06 min Scan# 382
Delta R.T. -0.02 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 84 Resp: 6288

Ion	Ratio	Lower	Upper
84	100		
49	840.8	89.8	134.6#
86	6246.3	51.1	76.7#
51	7317.1	28.5	42.7#

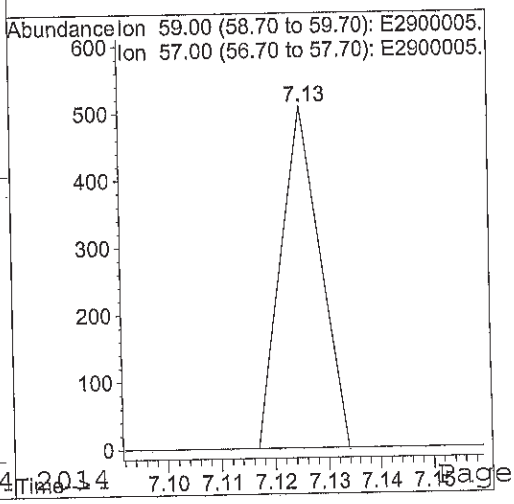


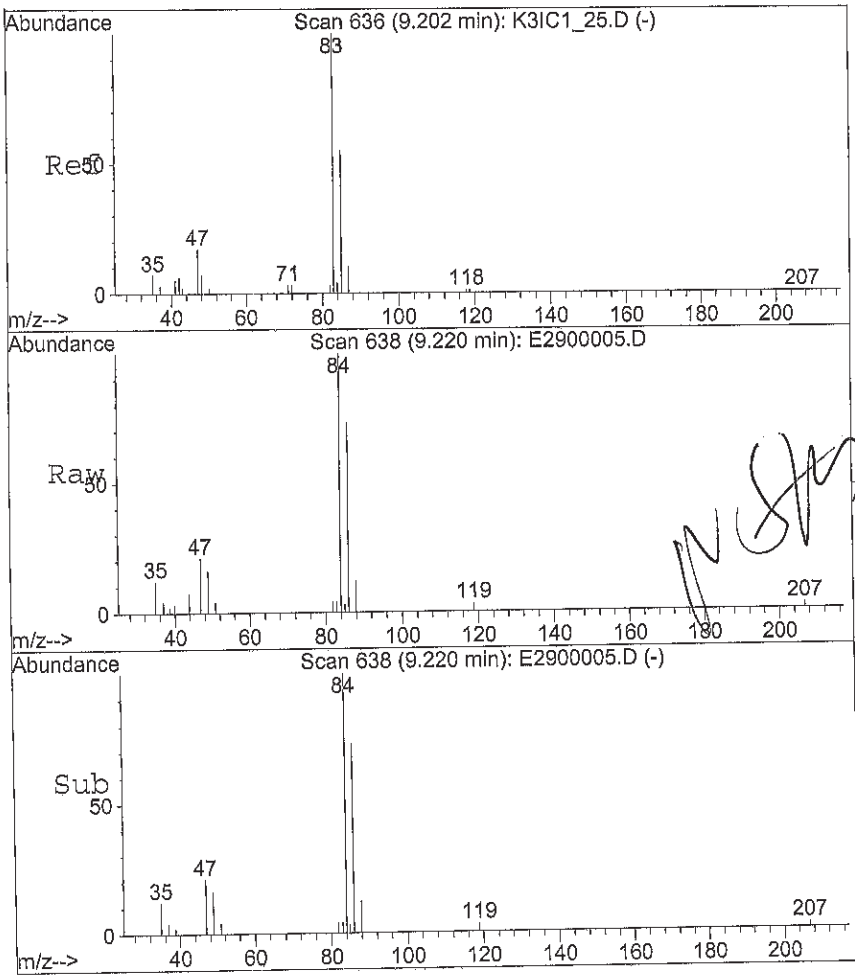


#15
(TBA) tert-Butanol
Concen: 0.98 ug/L
RT: 7.13 min Scan# 390
Delta R.T. 0.01 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 59 Resp: 257

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

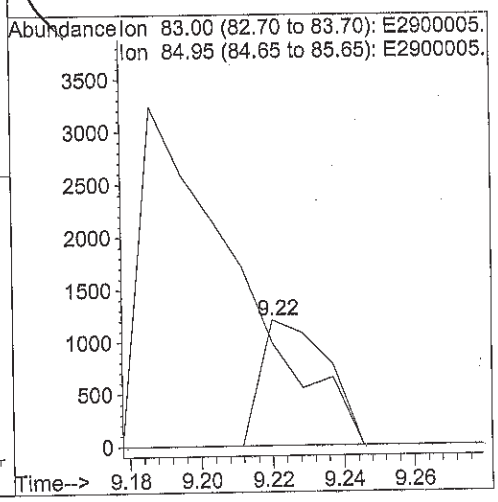


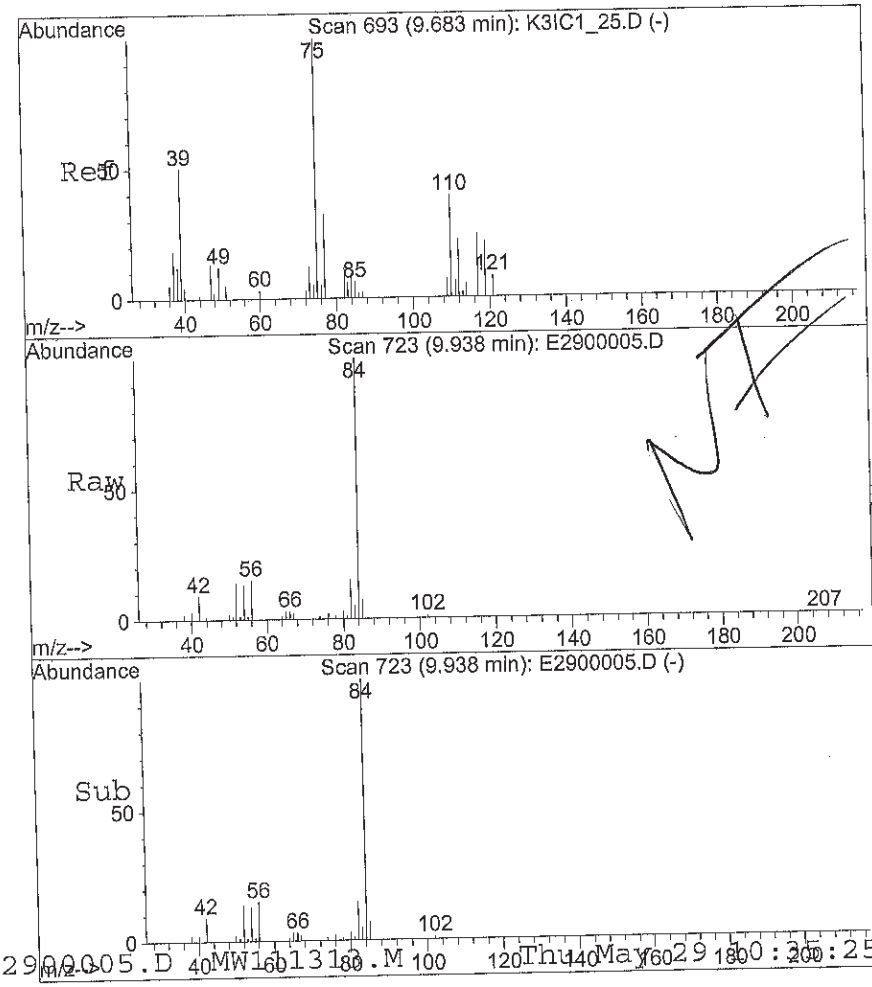


#24
Chloroform
Concen: 0.19 ug/L
RT: 9.22 min Scan# 638
Delta R.T. 0.02 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 83 Resp: 1545

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

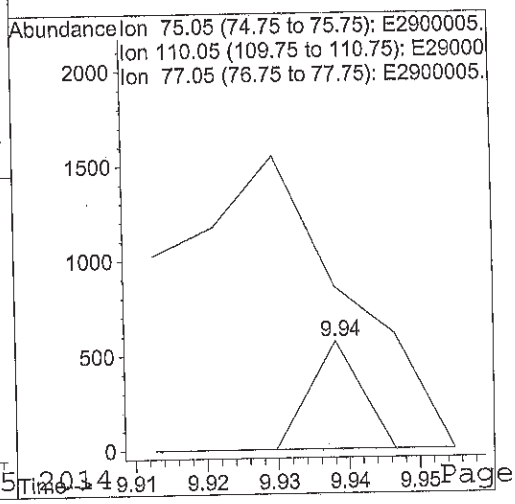


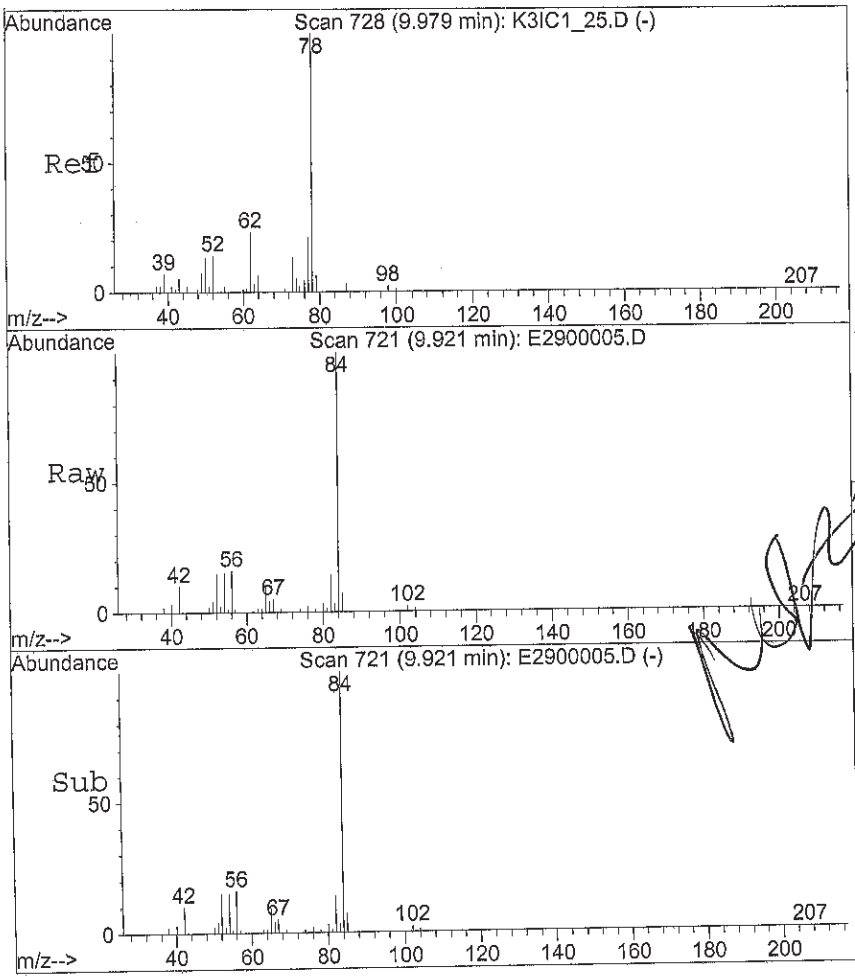


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.94 min Scan# 723
Delta R.T. 0.25 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 75 Resp: 288

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	1051.0	25.0	37.4#

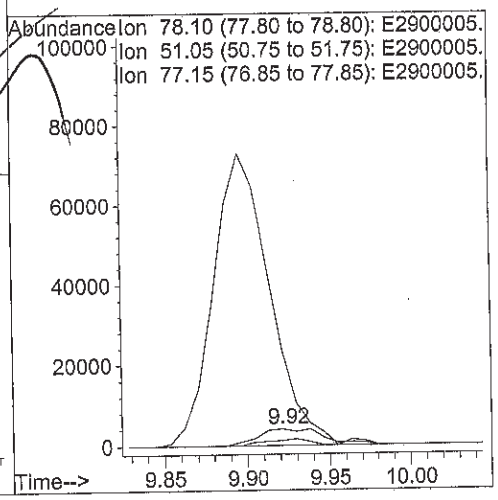


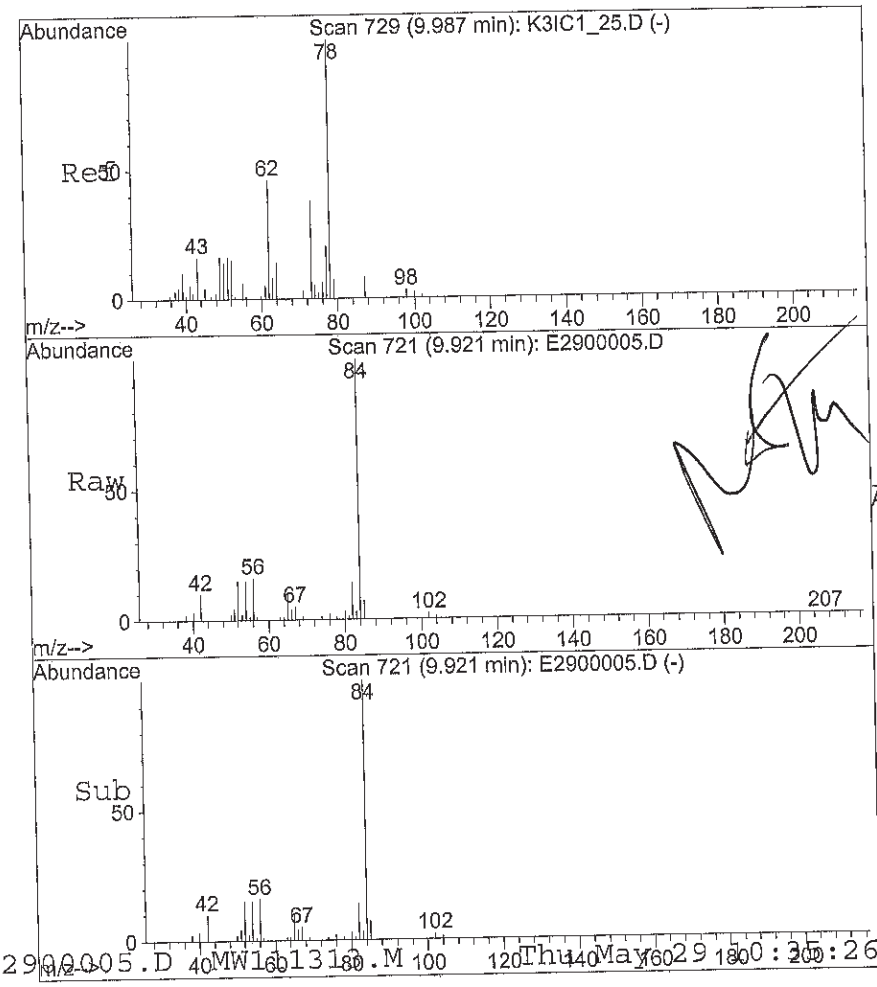


#31
Benzene
Concen: 0.75 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.06 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 78 Resp: 10801

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	25.2	16.6	24.8#

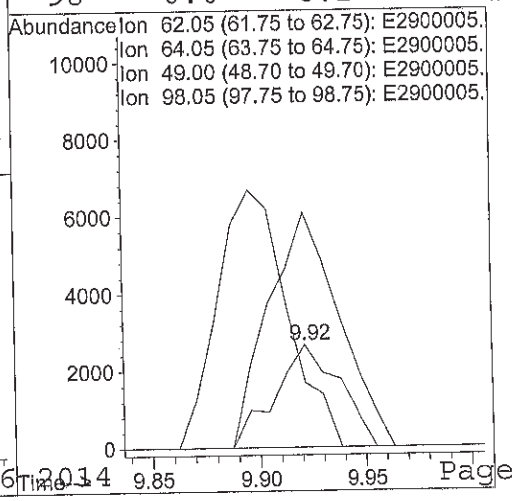


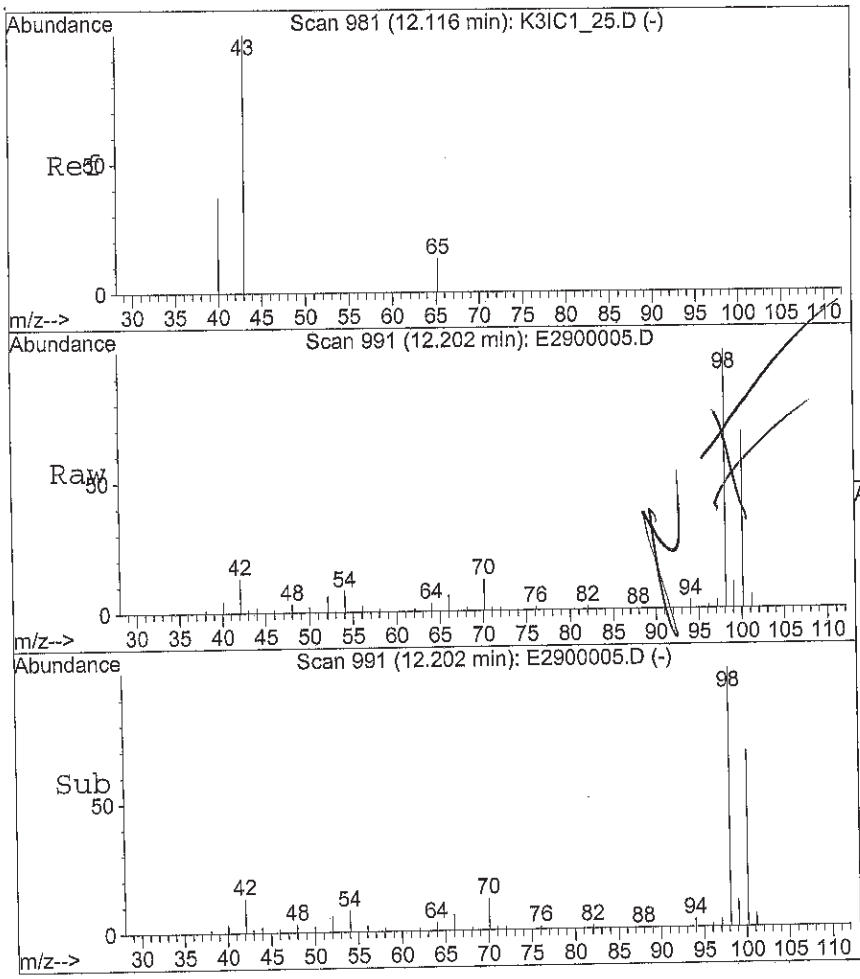


#32
1,2-Dichloroethane
Concen: 1.10 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 62 Resp: 5603

Ion	Ratio	Lower	Upper
62	100		
64	251.4	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

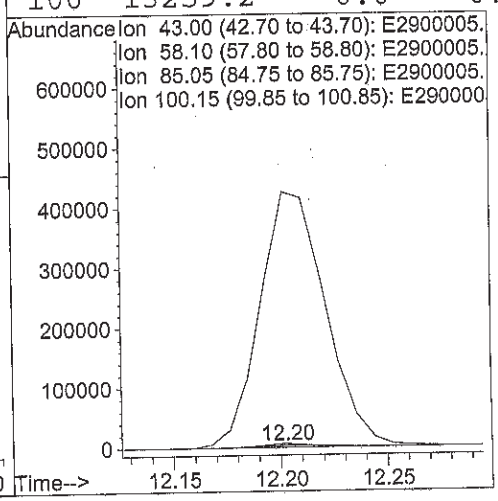


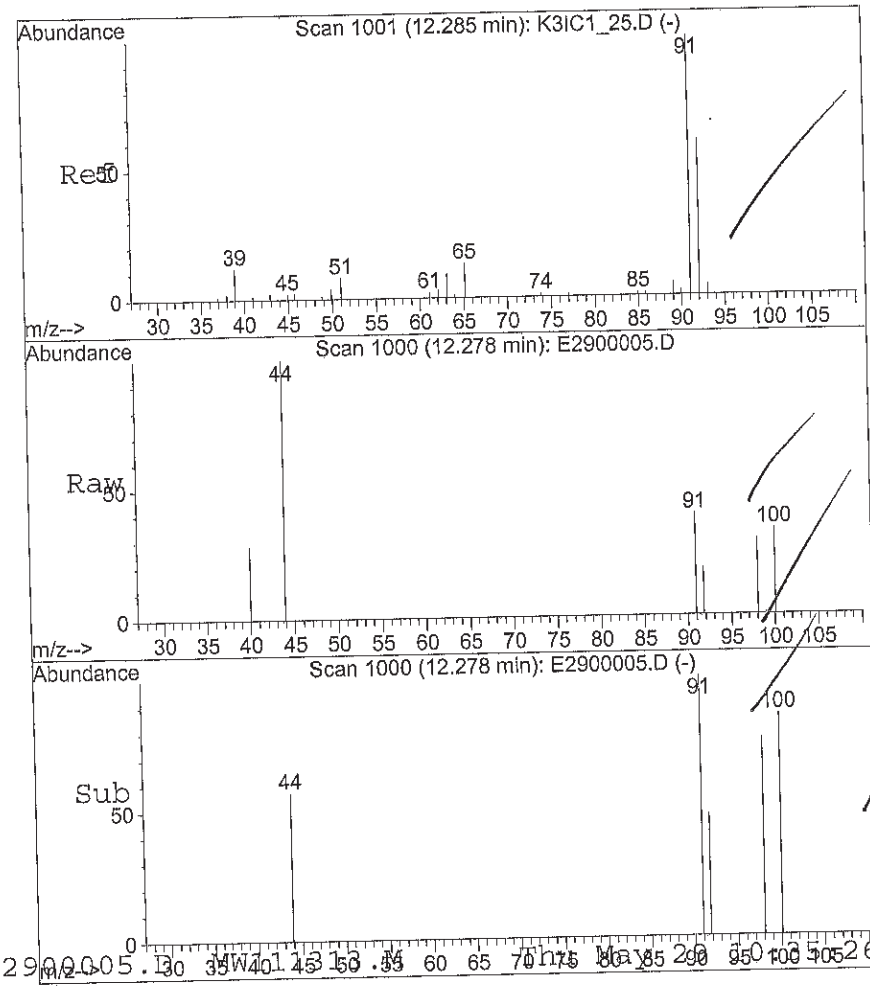


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.83 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.09 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 43 Resp: 6839

Ion	Ratio	Lower	Upper
43	100		
58	153.1	0.0	0.0#
85	0.0	0.0	0.0
100	13259.2	0.0	0.0#

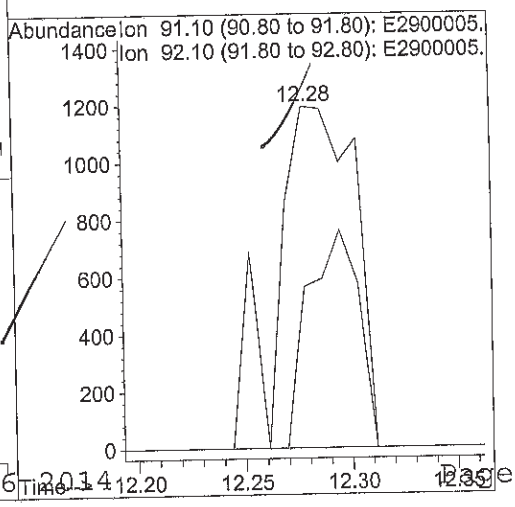


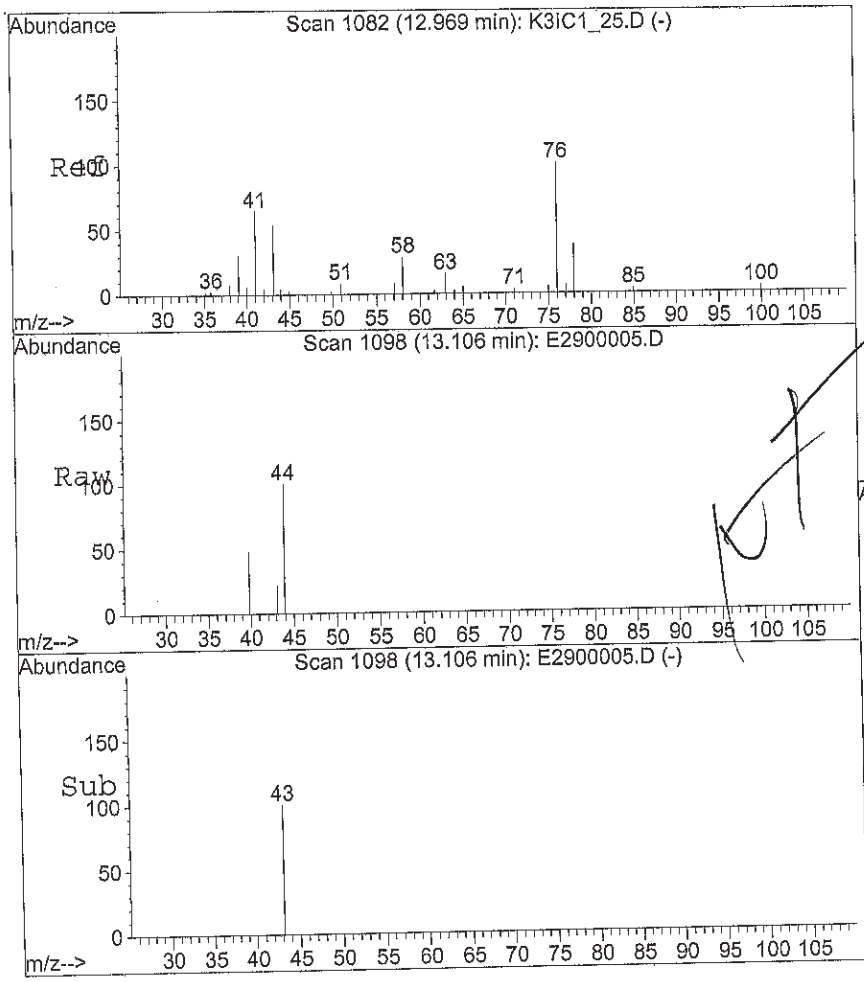


#41
Toluene
Concen: 0.18 ug/L
RT: 12.28 min Scan# 1000
Delta R.T. -0.01 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
92	41.5	47.4	71.0#

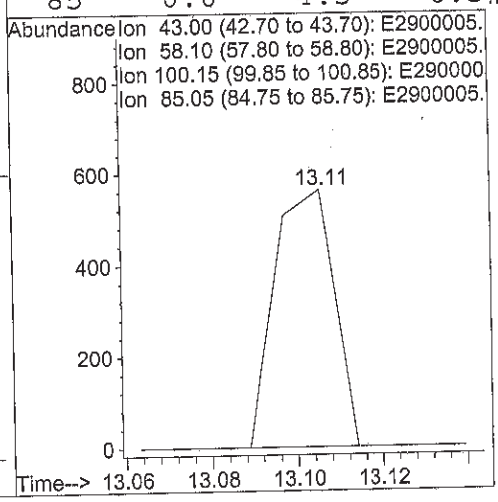


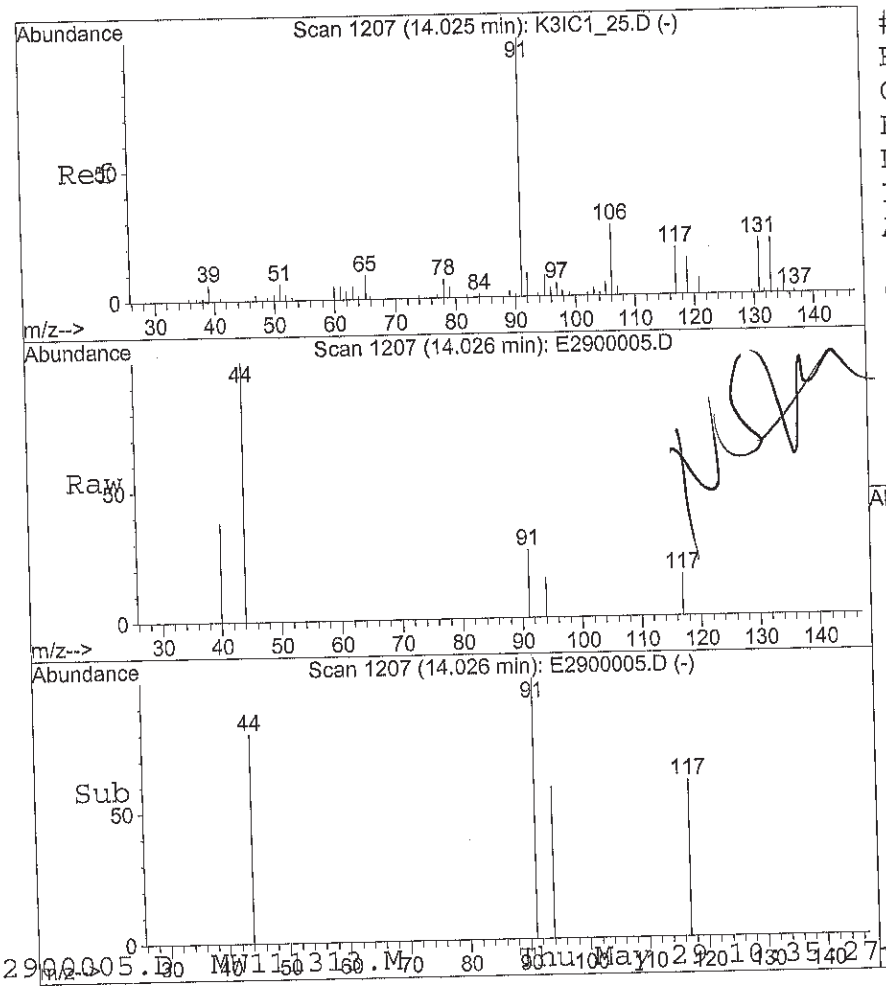


#46
2-Hexanone
Concen: 0.20 ug/L
RT: 13.11 min Scan# 1098
Delta R.T. 0.14 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 43 Resp: 542

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

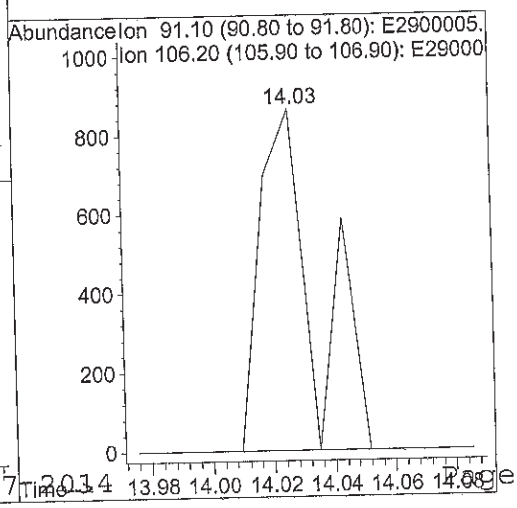


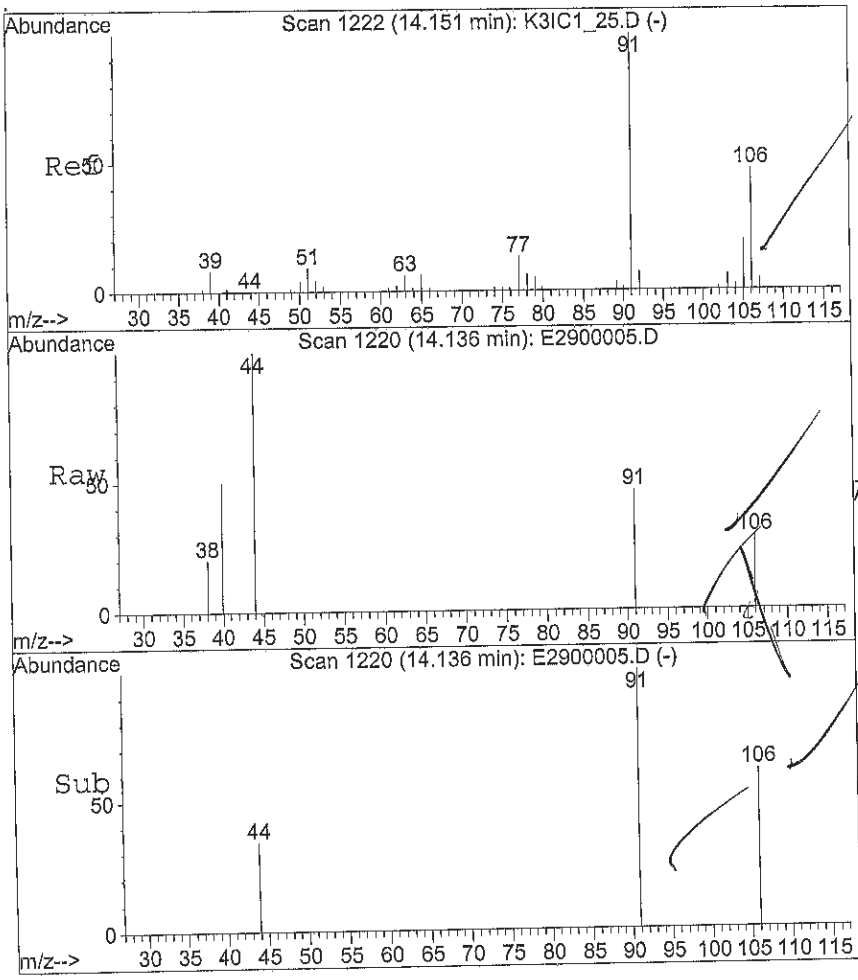


#51
Ethylbenzene
Concen: 0.06 ug/L
RT: 14.03 min Scan# 1207
Delta R.T. 0.00 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 91 Resp: 1088

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

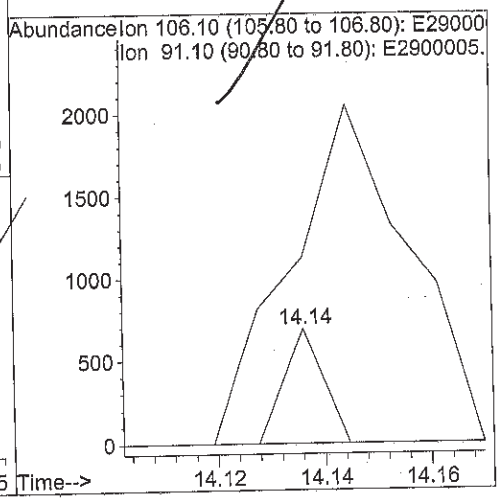


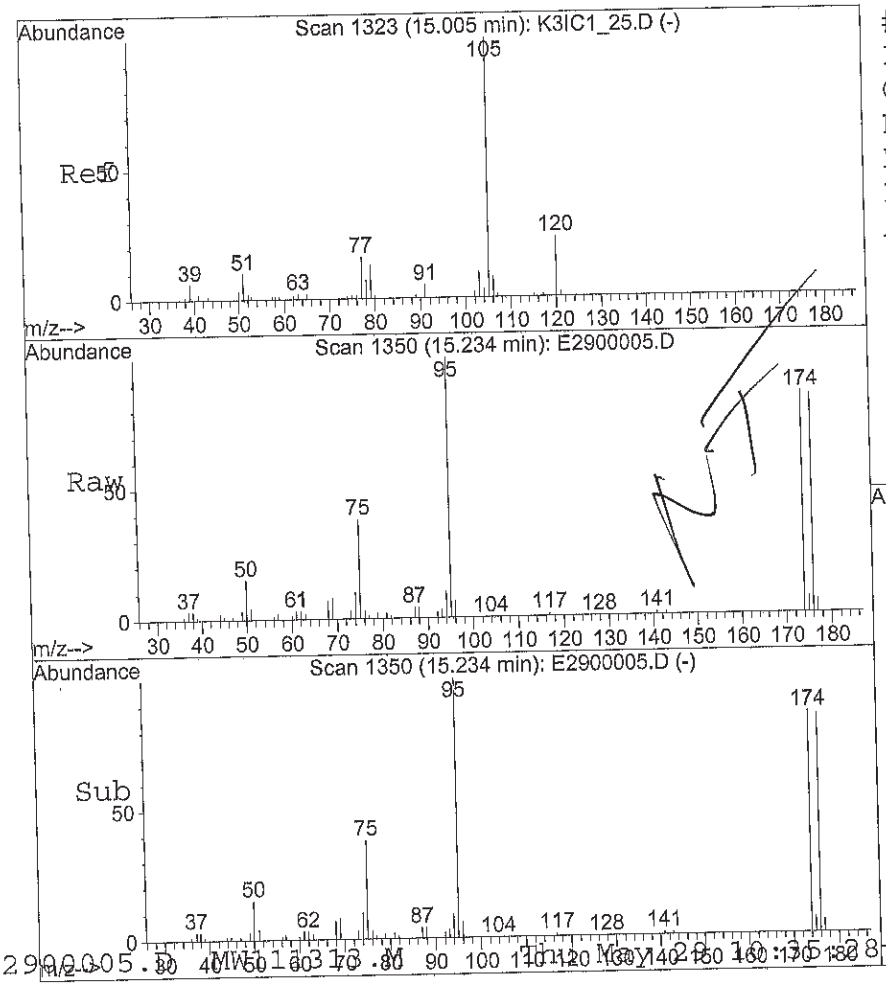


#52
m,p-Xylenes
Concen: 0.05 ug/L
RT: 14.14 min Scan# 1220
Delta R.T. -0.02 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion:106 Resp: 349

Ion	Ratio	Lower	Upper
106	100		
91	910.0	177.1	265.7#

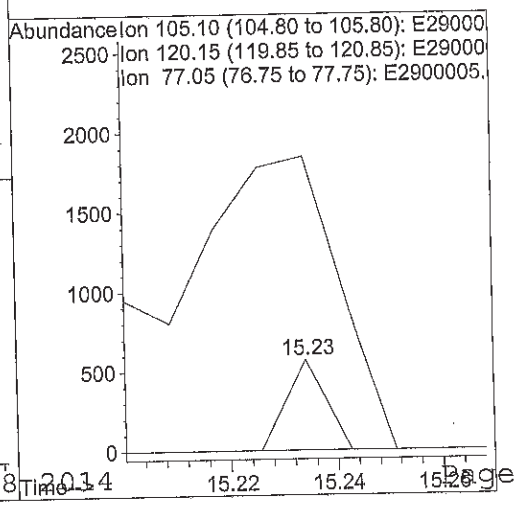


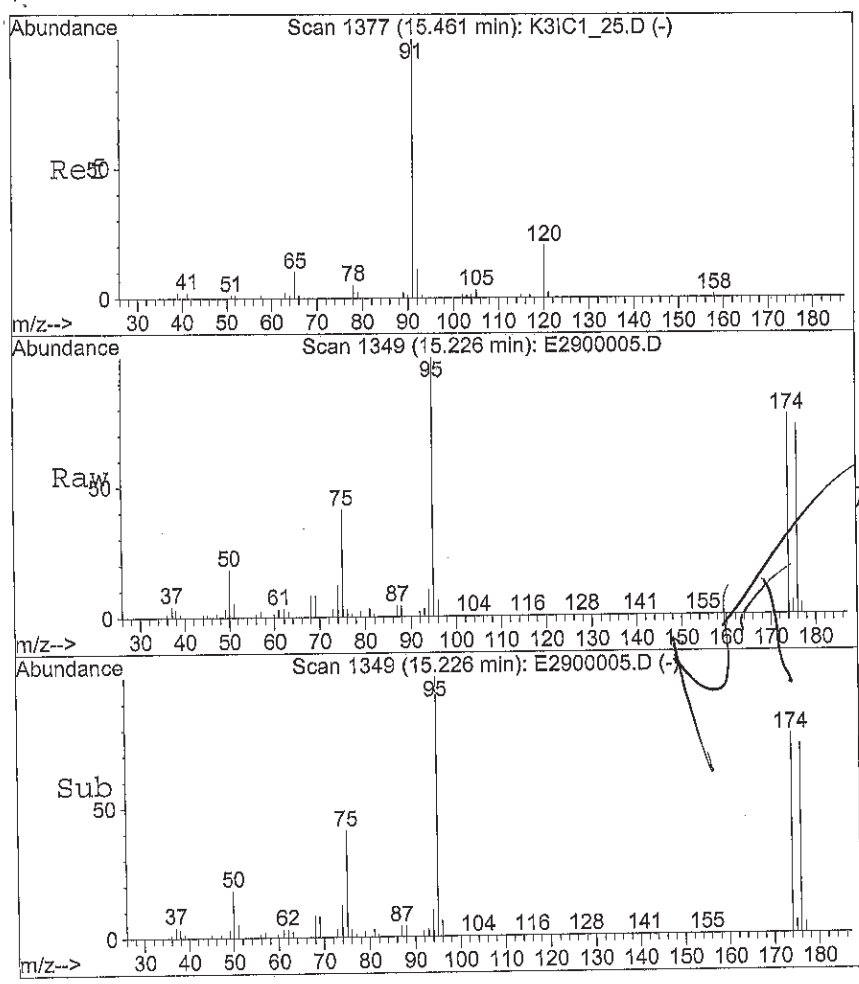


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.23 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion:105 Resp: 288

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	1343.1	13.1	19.7#

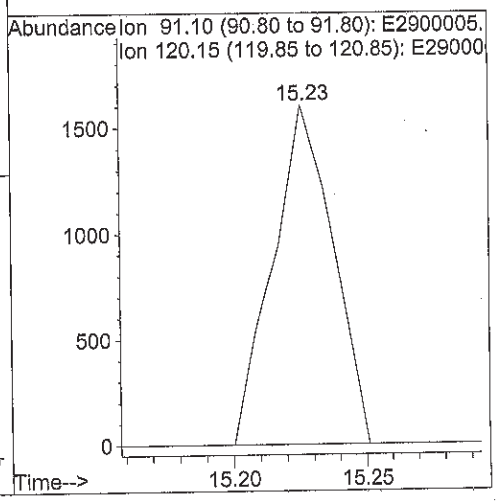


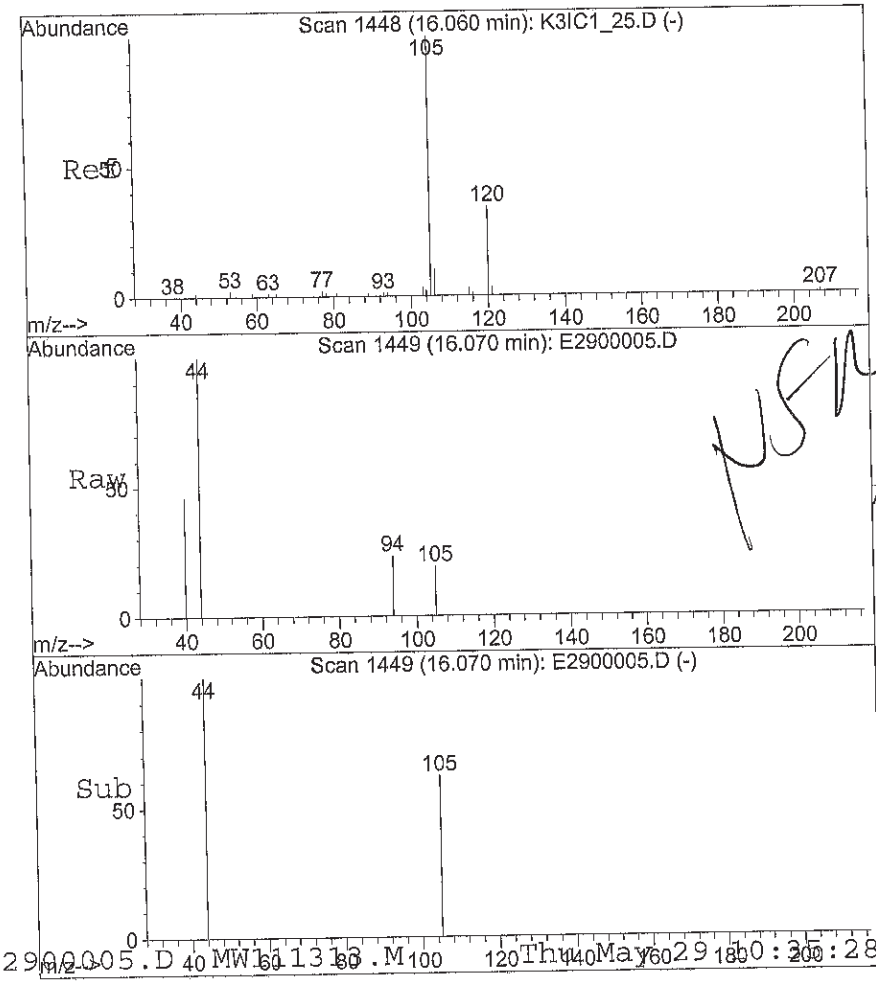


#62
n-Propylbenzene
Concen: 0.09 ug/L
RT: 15.23 min Scan# 1349
Delta R.T. -0.23 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion: 91 Resp: 2506

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

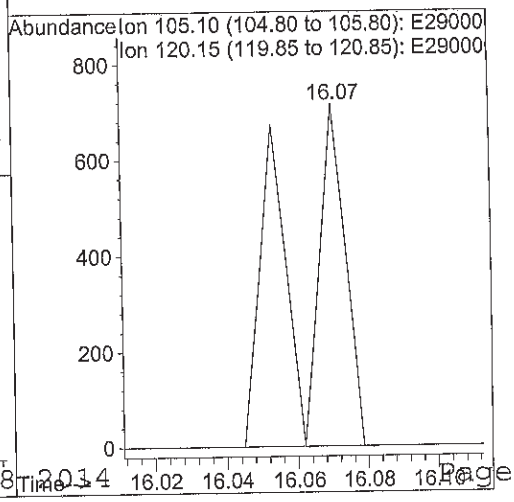


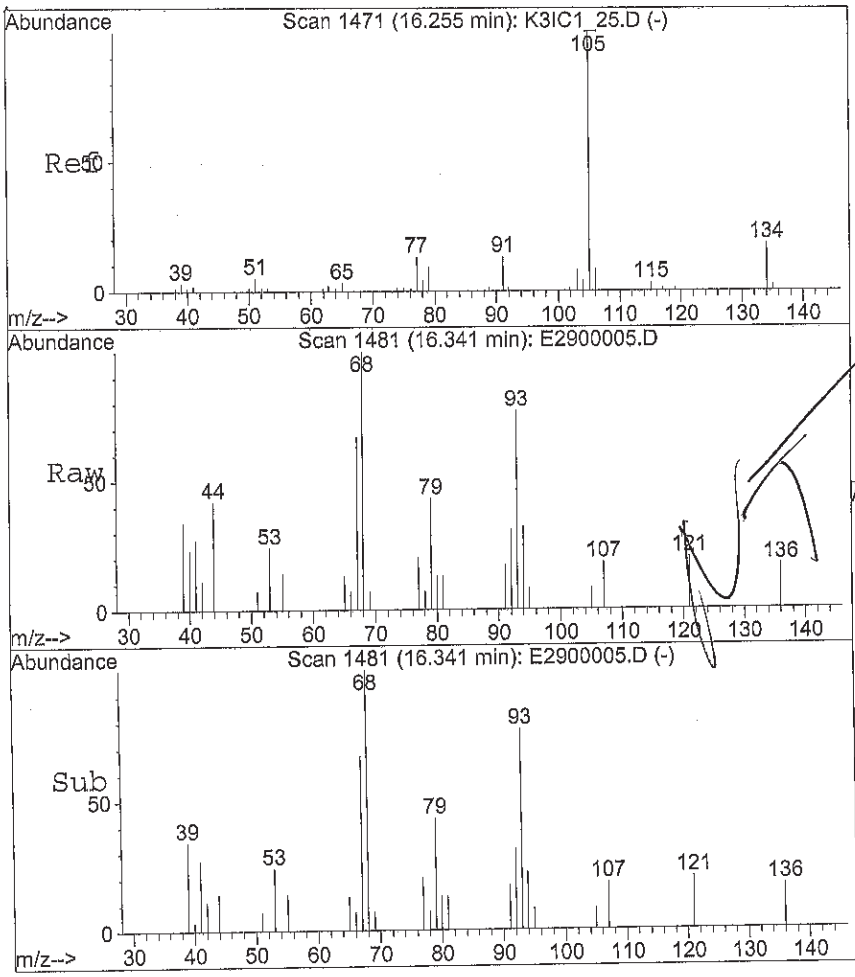


#67
1,2,4-Trimethylbenzene
Concen: 0.04 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.01 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion:105 Resp: 702

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

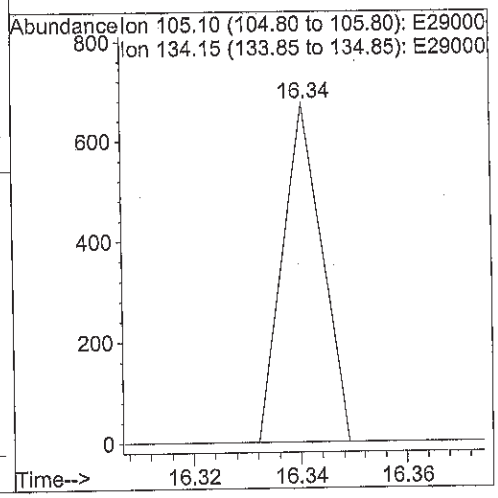




#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.09 min
Lab File: E2900005.D
Acq: 29 May 2014 10:13 am

Tgt Ion:105 Resp: 342

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900005.D
Acq On : 29 May 2014 10:13 am
Sample : 3E42901-04
Misc : 100cc SVL-530-SA5C-SV-6.5-7.5
MS Integration Params: rteint.p
Quant Time: May 29 11:08 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1531628	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1208919	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	672911	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	430212	10.80	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.40%			
3) Chloroform-d (SU6)	9.19	84	694393	12.15	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.20%			
4) Methylene Chloride-d2 (SU5	7.06	86	392766	11.76	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.08%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	422014	15.50	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 124.00%			
6) Benzene-d6 (SU7)	9.92	84	1351810	11.25	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.00%			
8) Toluene-d8 (SU3)	12.21	98	1351245	11.78	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.24%			
9) 4-Bromofluorobenzene (SU4)	15.23	95	685935	14.49	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.92%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

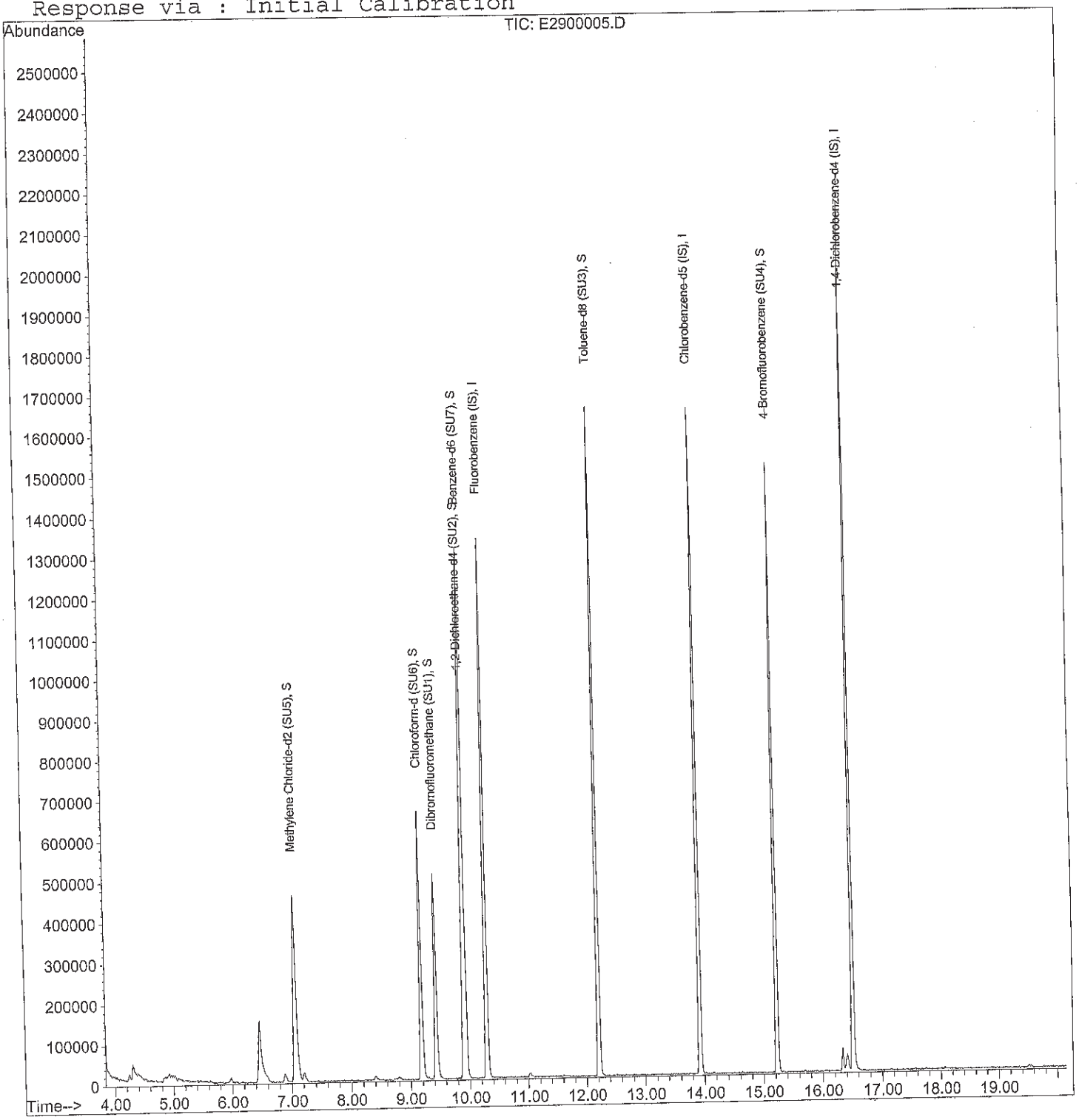
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900005.D
Acq On : 29 May 2014 10:13 am
Sample : 3E42901-04
Misc : 100cc SVL-530-SA5C-SV-6.5-7.5
MS Integration Params: rteint.p
Quant Time: May 29 11:08 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900006.D
Acq On : 29 May 2014 10:44 am
Sample : 3E42901-05
Misc : 100cc SVL-519-SA5D-SV-8.9-9.5
MS Integration Params: rteint.p
Quant Time: May 29 11:06 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1523502	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1220492	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	678647	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	441774	11.63 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.04%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	431270	11.94 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.52%		
39) Toluene-d8 (SU3)	12.20	98	1332969	11.71 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.68%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	690525	13.83 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.64%		

Target Compounds					Qvalue
4) Chloromethane	4.40	50	5919	1.10 ~~ug/L~~ #	50
6) Bromomethane	5.09	96	291	-1.60 ~~ug/L~~ #	1
7) Chloroethane	5.24	64	1348	1.75 ~~ug/L~~	92
9) (F113) 1,1,2-Trichloro-tri	6.33	151	453315	151.36 ug/L 3.0272	97
10) 1,1-Dichloroethene	6.34	96	348	0.10 ~~ug/L~~ #	1
11) Acetone	6.47	58	2419	179.65 ~~ug/L~~ #	1
12) (IPA) Leak Check Compound	6.46	45	336691	1839.13 ~~ug/L~~ #	82
13) Carbon disulfide	6.83	76	21881	1.73 ~~ug/L~~ #	92
14) Methylene Chloride	7.06	84	5429	1.30 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	7.13	59	262	1.01 ~~ug/L~~ #	77
24) Chloroform	9.21	83	1790	0.22 ~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.40	59	4743	0.43 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.92	75	299	0.05 ~~ug/L~~ #	1
31) Benzene	9.98	78	3027	0.21 ~~ug/L~~ #	68
32) 1,2-Dichloroethane	9.91	62	6402	1.26 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	6777	2.78 ~~ug/L~~ #	100
41) Toluene	12.28	91	24544	1.48 ug/L 0.0296	93
42) trans-1,3-Dichloropropene	12.50	75	1576	0.29 ~~ug/L~~ #	30
46) 2-Hexanone	12.88	43	273	0.10 ~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	7514	0.40 ug/L #0.008	64
52) m,p-Xylenes	14.14	106	9032	1.34 ug/L 0.0268	99
53) o-Xylene	14.61	106	2464	0.37 ug/L 0.0074	80

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900006.D
Acq On : 29 May 2014 10:44 am
Sample : 3E42901-05
Misc : 100cc SVL-519-SA5D-SV-8.9-9.5
MS Integration Params: rteint.p
Quant Time: May 29 11:06 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

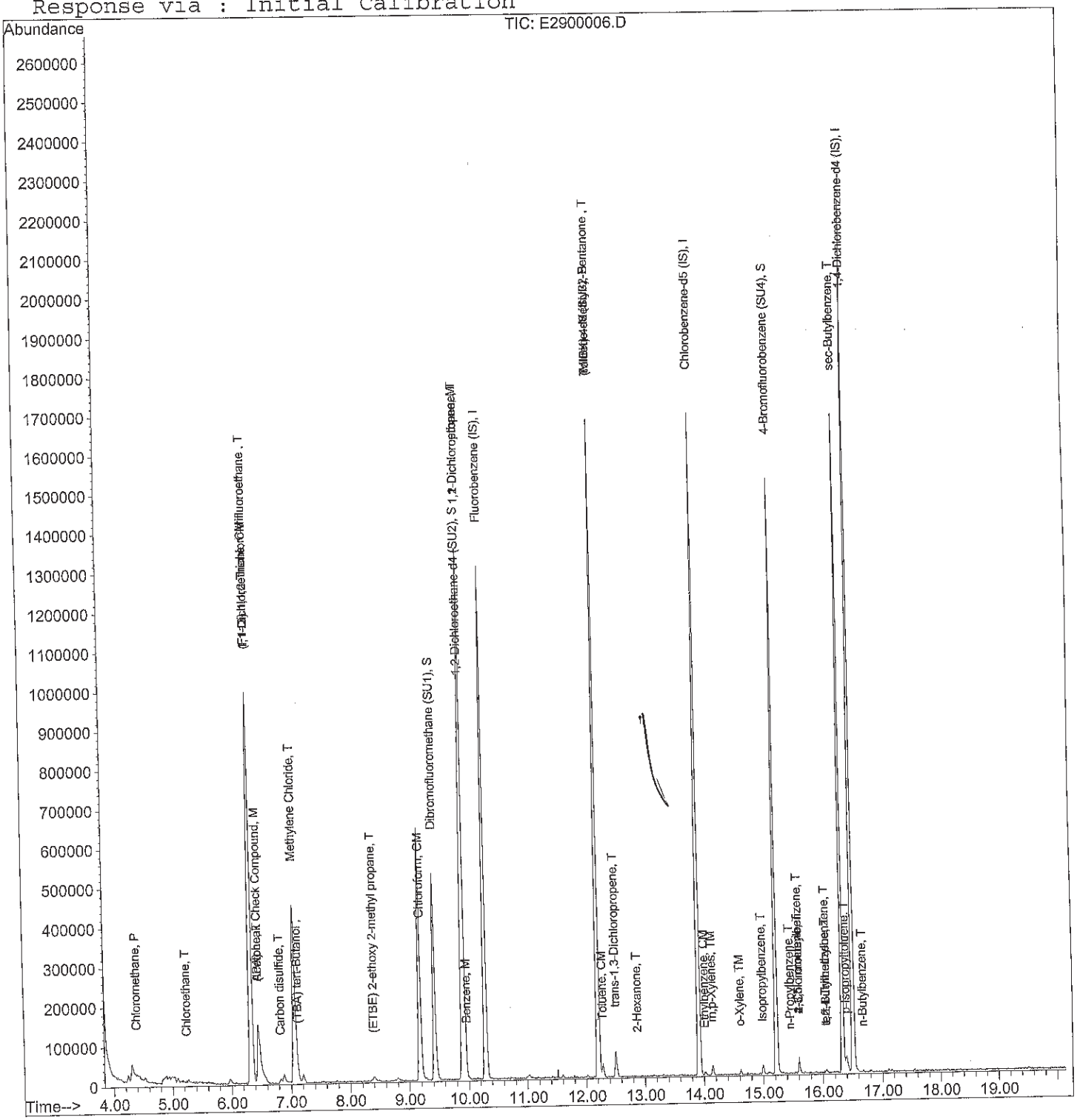
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) Styrene	14.62	104	1128	-0.76 ~~ug/L #~~	38
56) Isopropylbenzene	15.00	105	1459	0.08 ~~ug/L #~~	1
62) n-Propylbenzene	15.45	91	1471	0.05 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.60	91	3150	0.19 ~~ug/L #~~	45
64) 1,3,5-Trimethylbenzene	15.61	105	972	0.06 ug/L #0.0012	71
65) 4-Chlorotoluene	15.60	91	3150	0.20 ~~ug/L #~~	44
66) tert-Butylbenzene	16.07	119	272	0.02 ~~ug/L #~~	24
67) 1,2,4-Trimethylbenzene	16.06	105	4296	0.24 ug/L #0.0048	70
68) sec-Butylbenzene	16.34	105	24166	1.06 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	2404	0.13 ~~ug/L #~~	52
72) n-Butylbenzene	16.67	91	646	0.03 ~~ug/L #~~	30

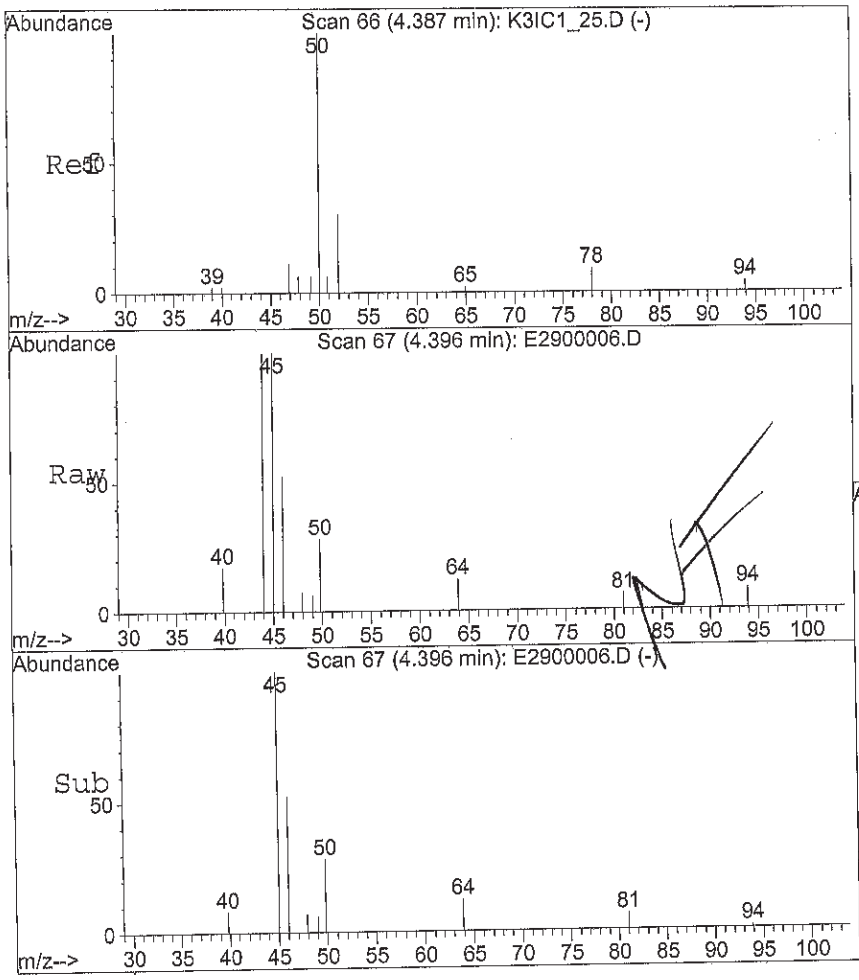
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900006.D Vial: 5
Acq On : 29 May 2014 10:44 am Operator: DN
Sample : 3E42901-05 Inst : GC/MS Ins
Misc : 100cc SVL-519-SA5D-SV-8.9-9.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 11:06 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

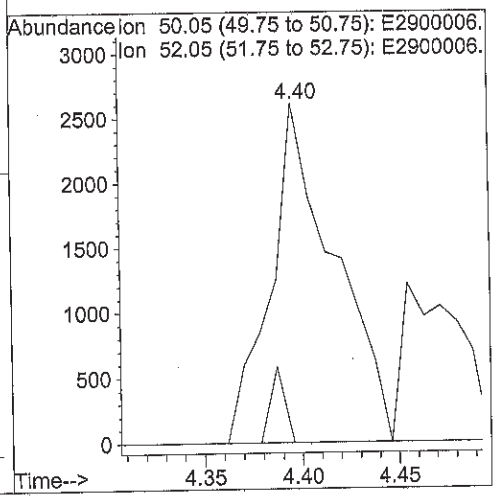


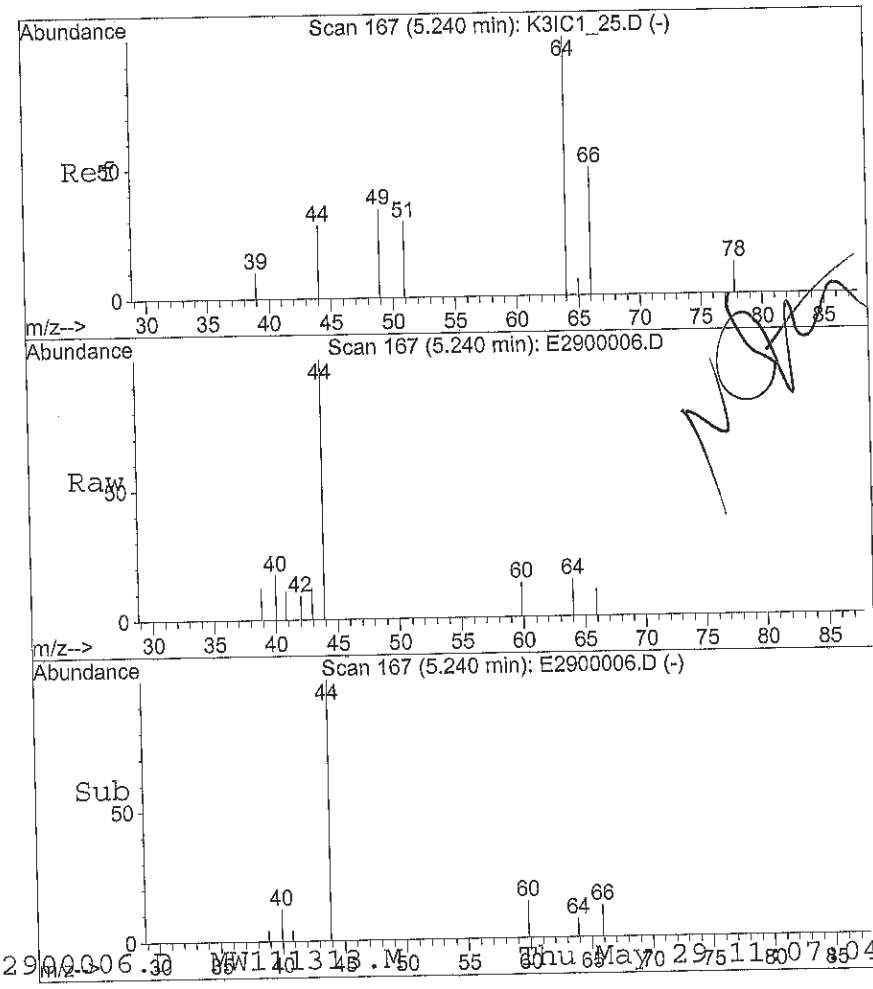


#4
Chloromethane
Concen: 1.10 ug/L
RT: 4.40 min Scan# 67
Delta R.T. 0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 50 Resp: 5919

Ion	Ratio	Lower	Upper
50	100		
52	5.0	26.9	40.3#

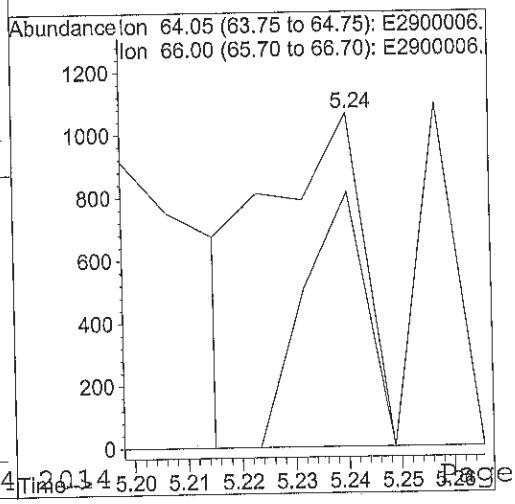


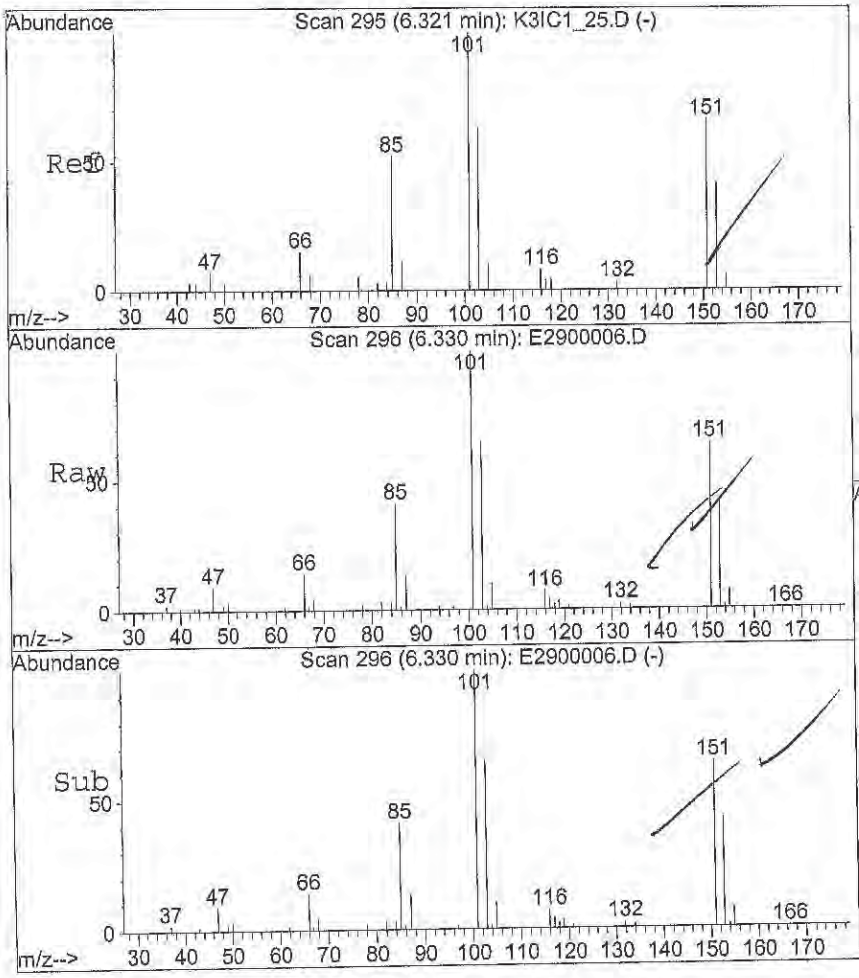


#7
Chloroethane
Concen: 1.75 ug/L
RT: 5.24 min Scan# 167
Delta R.T. 0.00 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 64 Resp: 1348

Ion	Ratio	Lower	Upper
64	100		
66	49.5	35.4	53.0

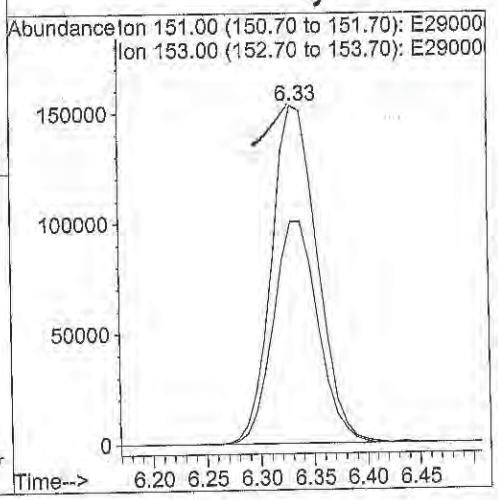


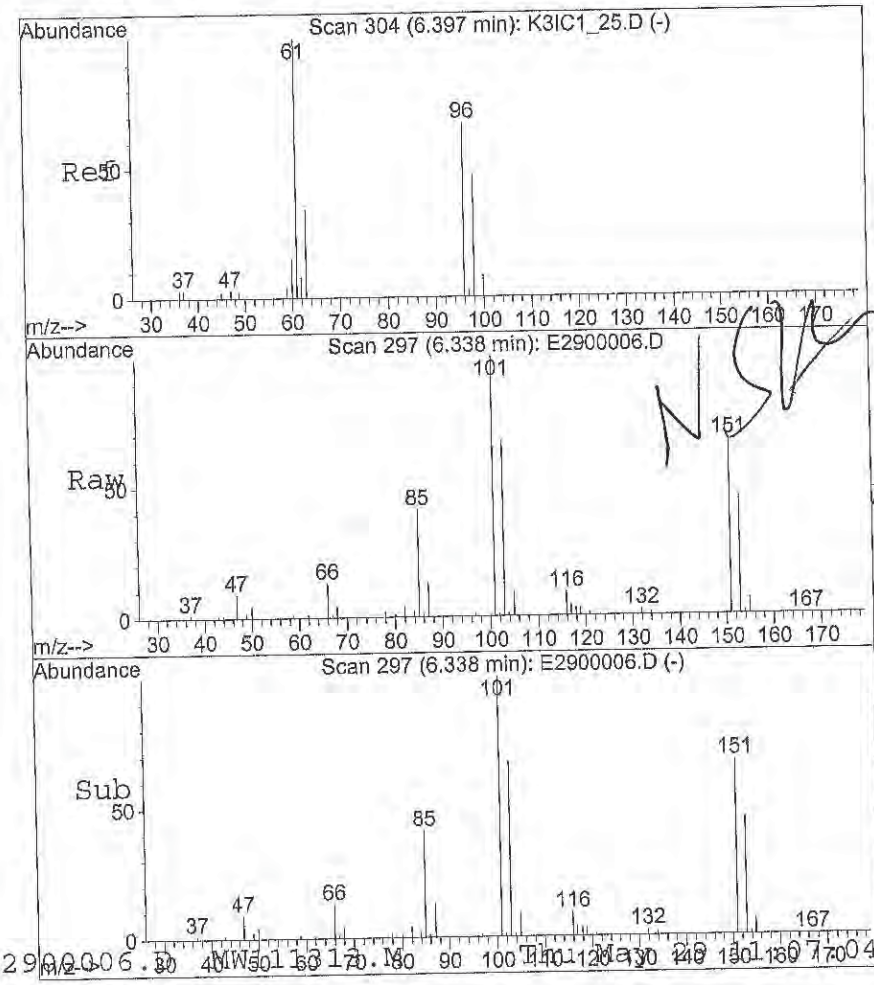


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 151.36 ug/L
RT: 6.33 min Scan# 296
Delta R.T. 0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:151 Resp: 453315

Ion	Ratio	Lower	Upper
151	100		
153	64.5	49.6	74.4

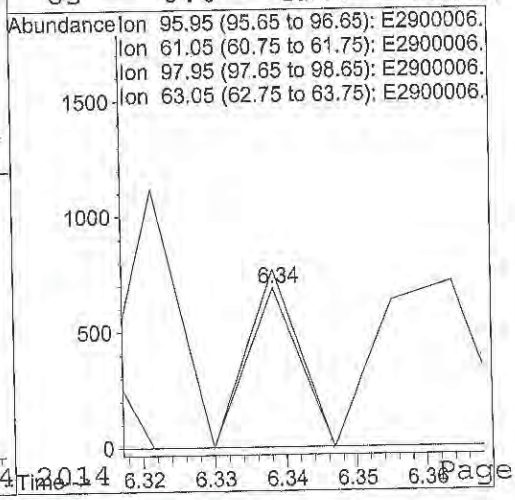


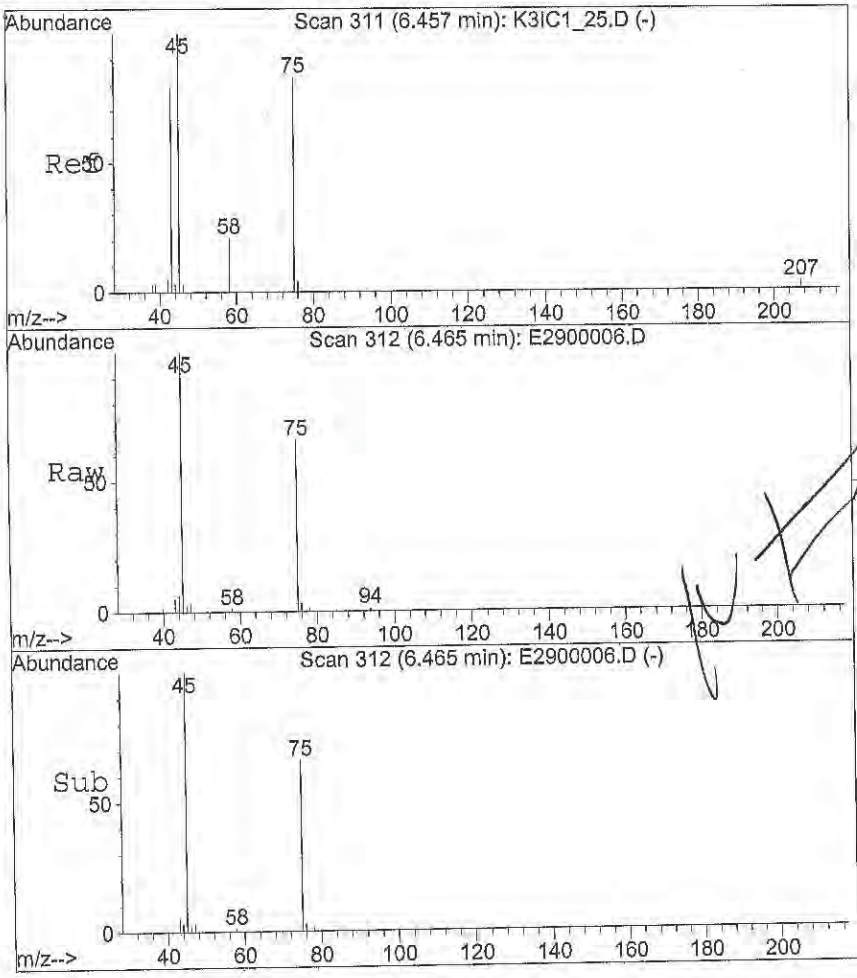


#10
1,1-Dichloroethene
Concen: 0.10 ug/L
RT: 6.34 min Scan# 297
Delta R.T. -0.06 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 96 Resp: 348

Ion	Ratio	Lower	Upper
96	100		
61	0.0	130.0	195.0#
98	0.0	56.2	84.4#
63	0.0	41.5	62.3#

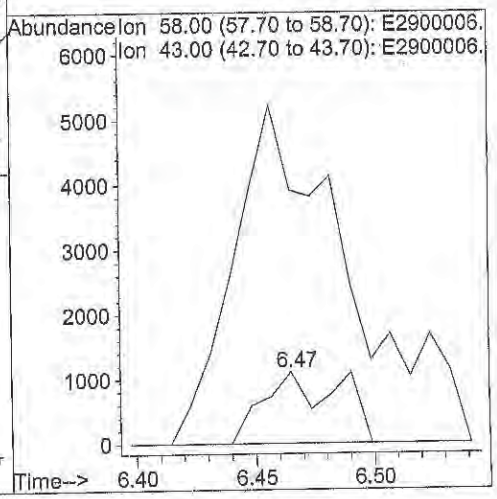


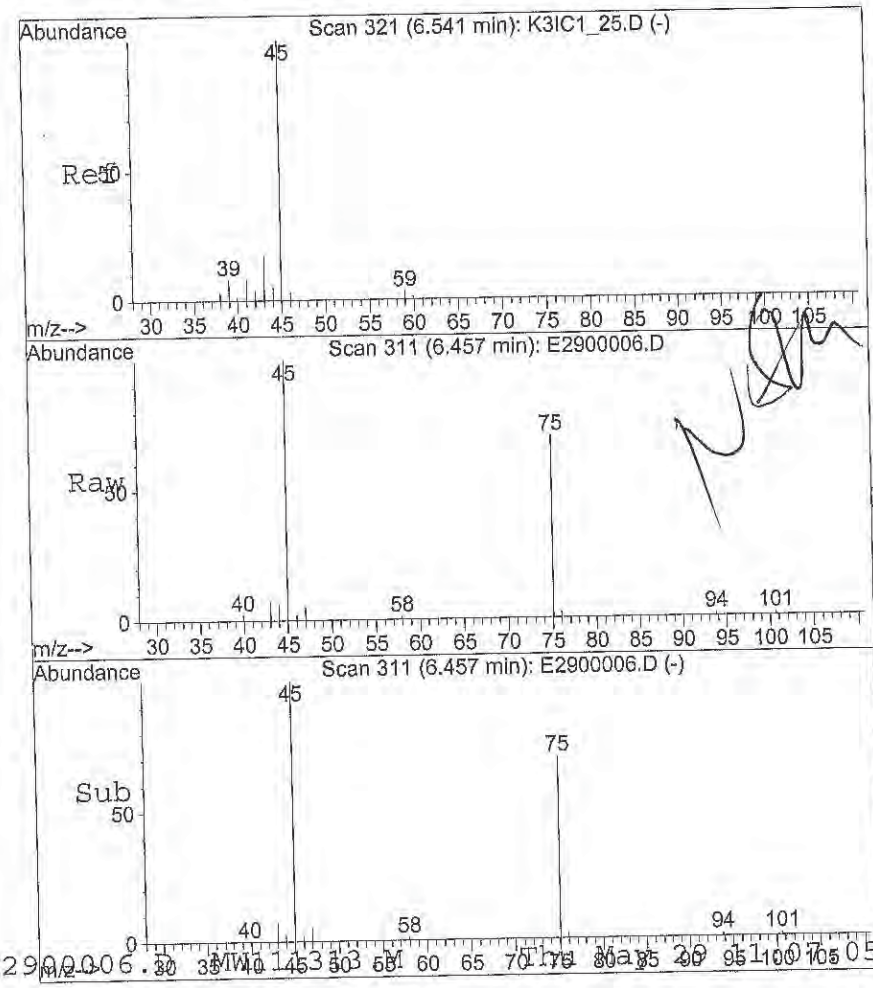


#11
Acetone
Concen: 179.65 ug/L
RT: 6.47 min Scan# 312
Delta R.T. 0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 58 Resp: 2419

Ion	Ratio	Lower	Upper
58	100		
43	731.0	360.9	541.3#

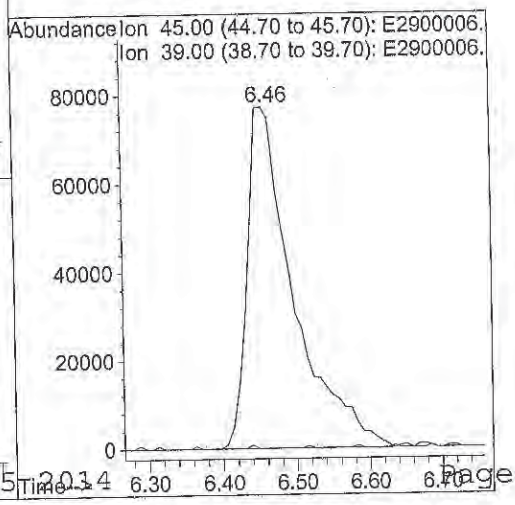


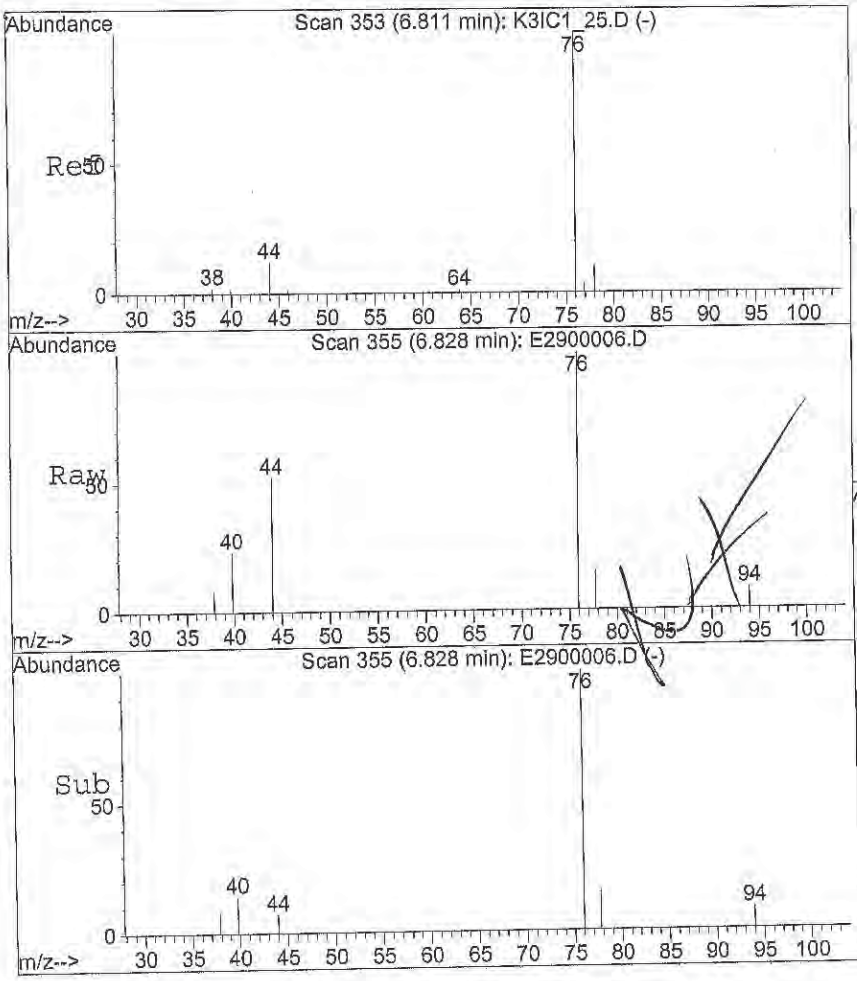


#12
(IPA) Leak Check Compound
Concen: 1839.13 ug/L
RT: 6.46 min Scan# 311
Delta R.T. -0.08 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 45 Resp: 336691

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

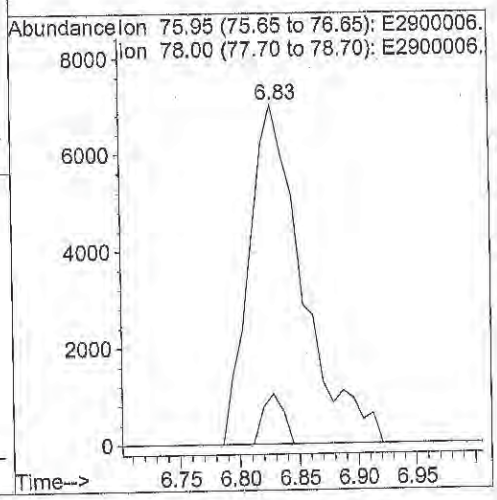


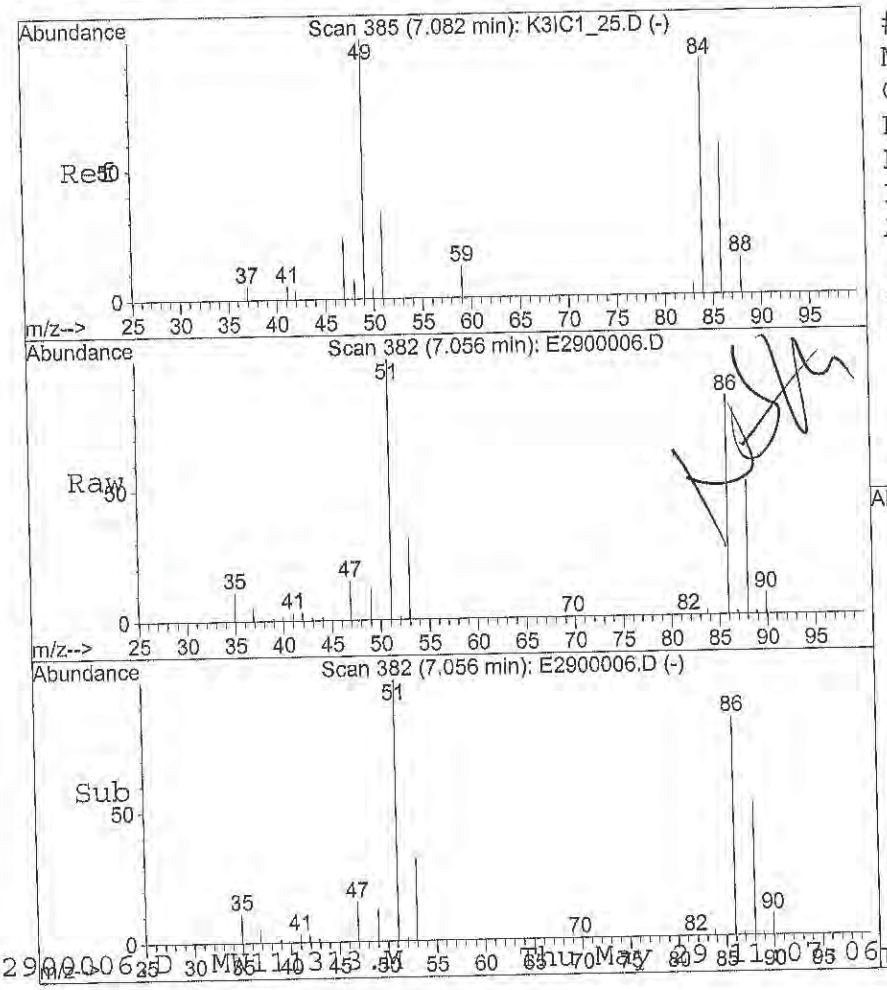


#13
Carbon disulfide
Concen: 1.73 ug/L
RT: 6.83 min Scan# 355
Delta R.T. 0.02 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 76 Resp: 21881

Ion	Ratio	Lower	Upper
76	100		
78	5.7	7.0	10.4#

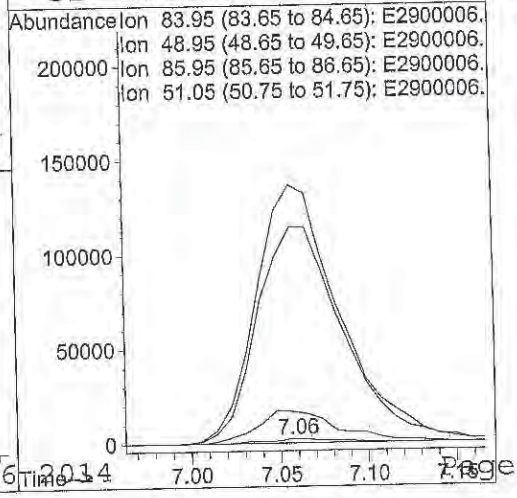


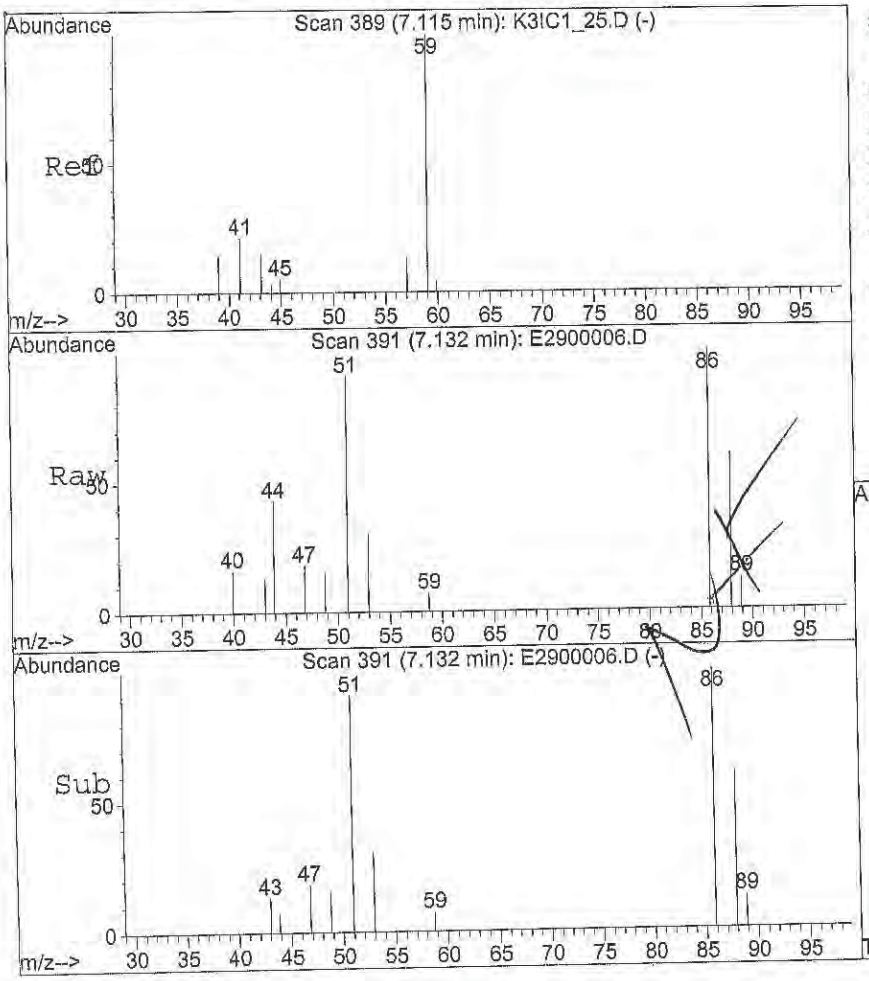


#14
Methylene Chloride
Concen: 1.30 ug/L
RT: 7.06 min Scan# 382
Delta R.T. -0.03 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 84 Resp: 5429

Ion	Ratio	Lower	Upper
84	100		
49	997.3	89.8	134.6#
86	7209.5	51.1	76.7#
51	8336.6	28.5	42.7#

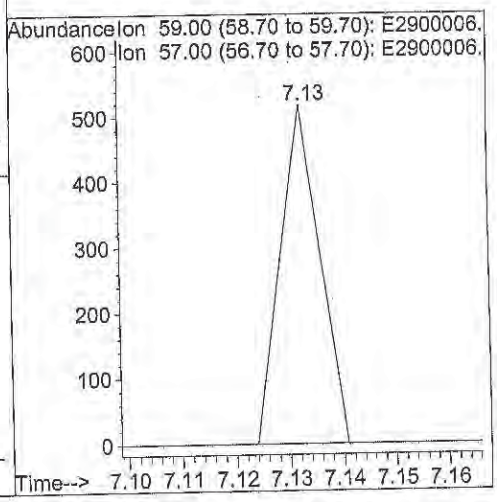


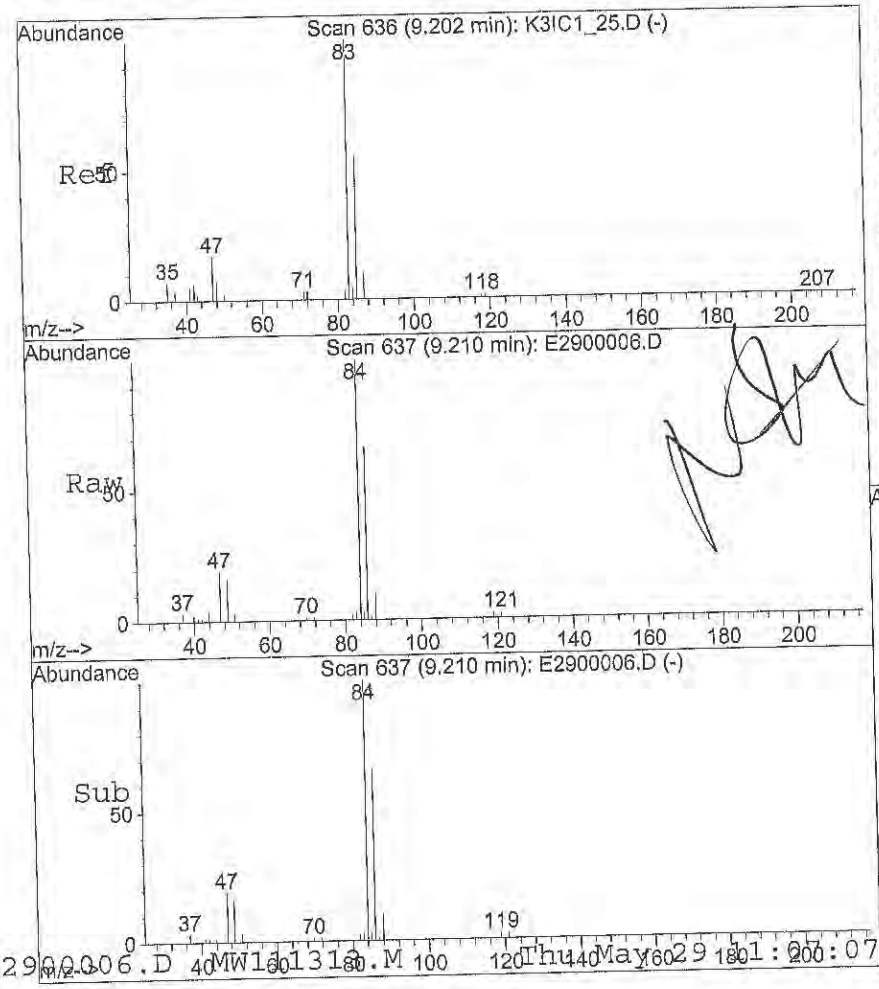


#15
(TBA) tert-Butanol
Concen: 1.01 ug/L
RT: 7.13 min Scan# 391
Delta R.T. 0.02 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 59 Resp: 262

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

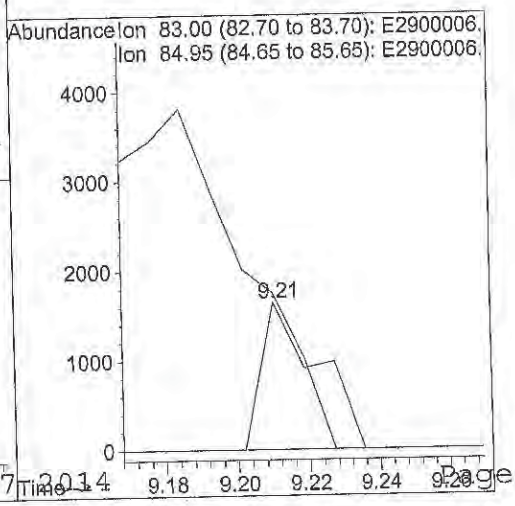


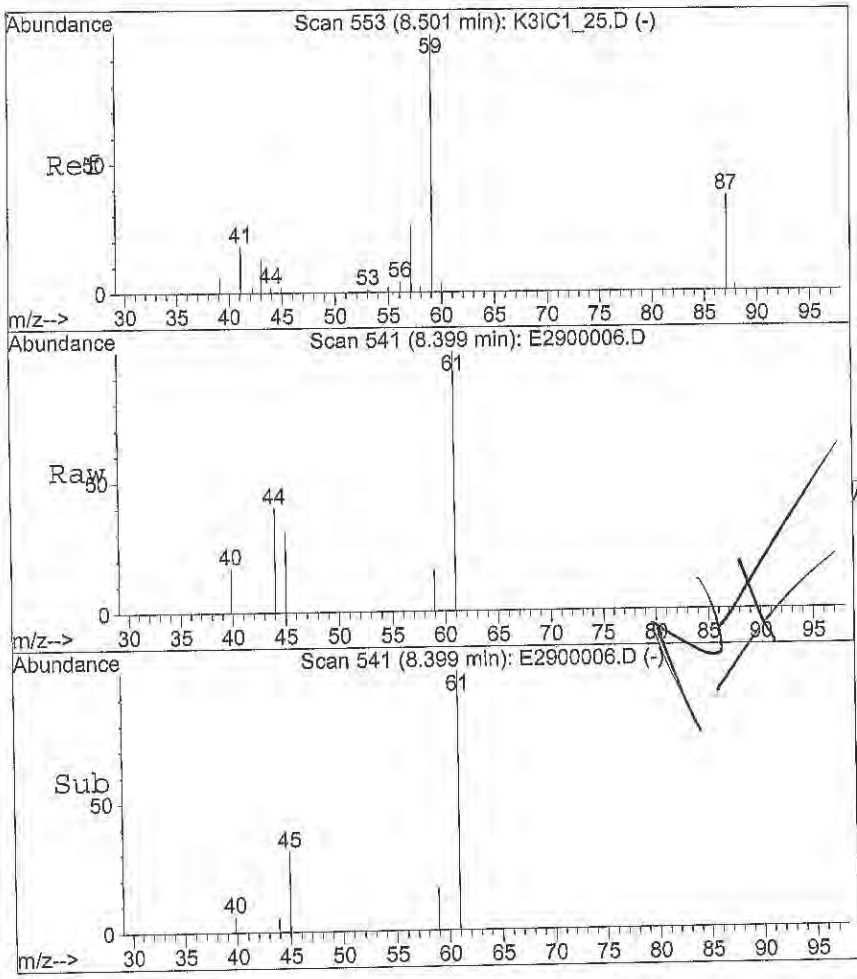


#24
Chloroform
Concen: 0.22 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 83 Resp: 1790

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

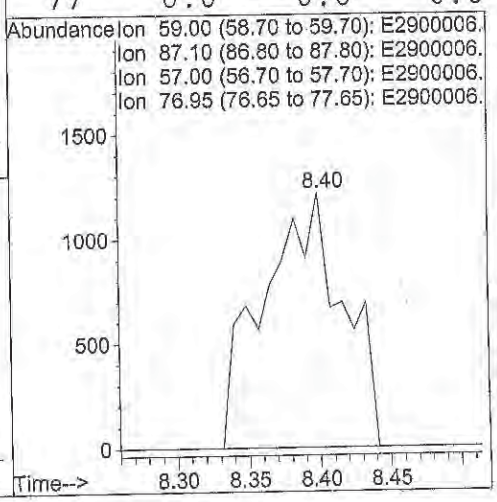


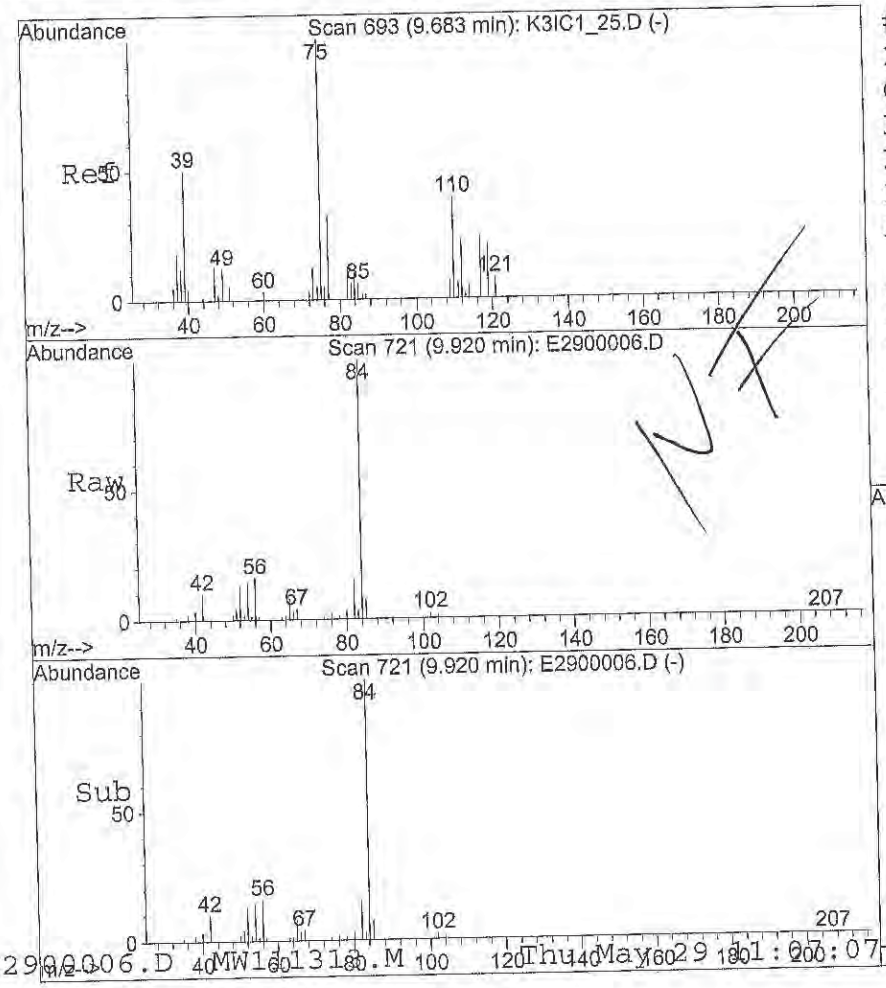


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.43 ug/L
RT: 8.40 min Scan# 541
Delta R.T. -0.10 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 59 Resp: 4743

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

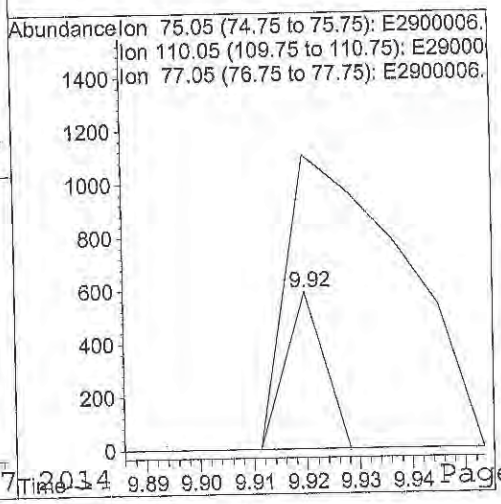


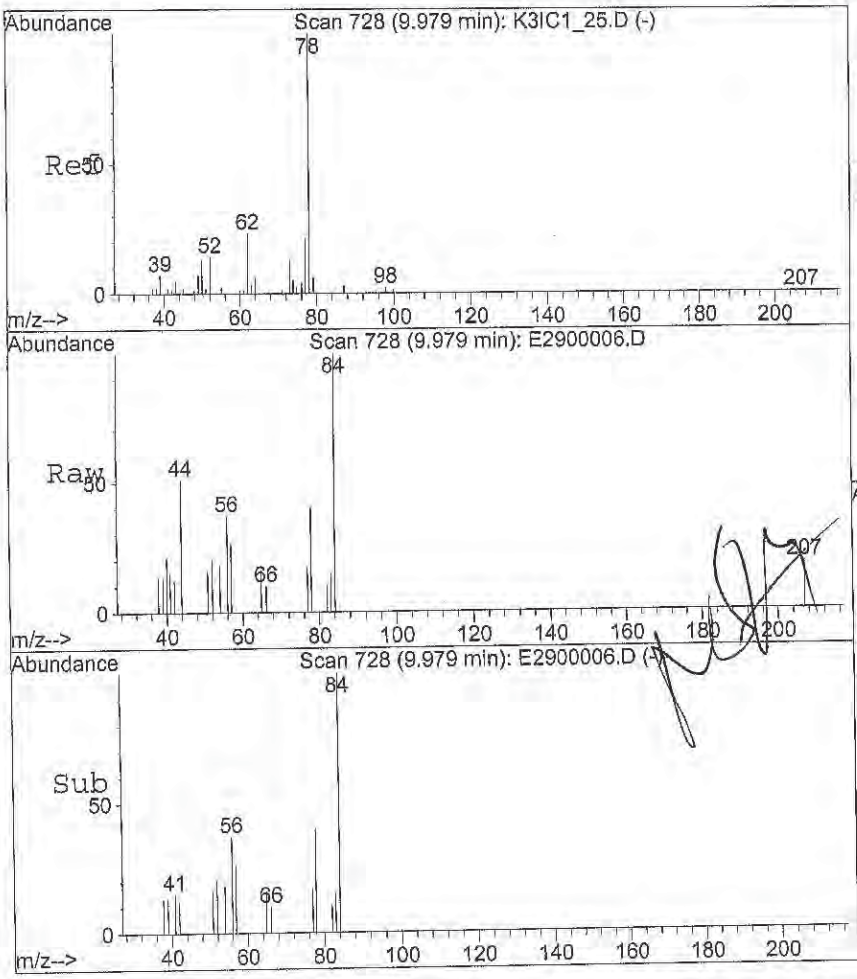


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 75 Resp: 299

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	574.6	25.0	37.4#

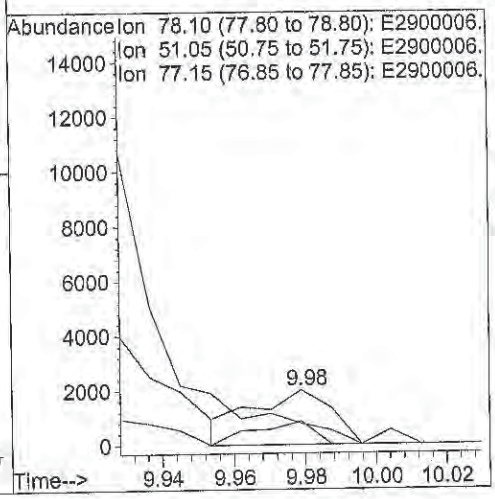


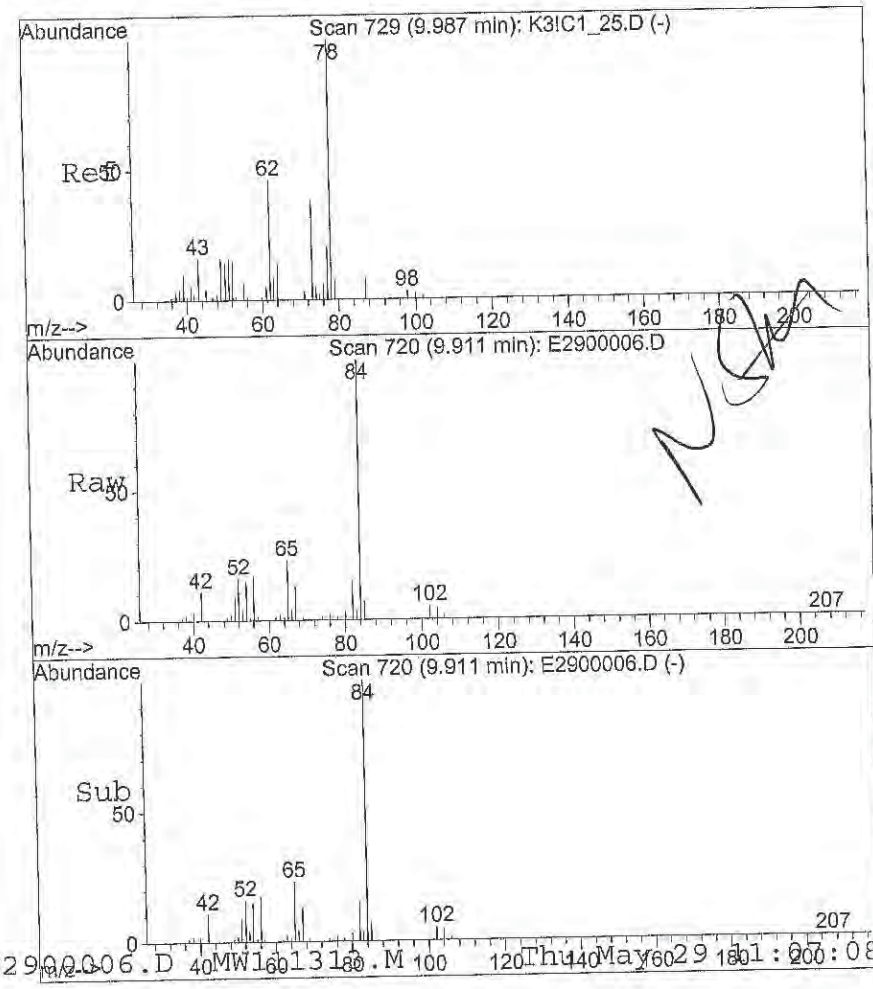


#31
Benzene
Concen: 0.21 ug/L
RT: 9.98 min Scan# 728
Delta R.T. 0.00 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 78 Resp: 3027

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	32.1	16.6	24.8#

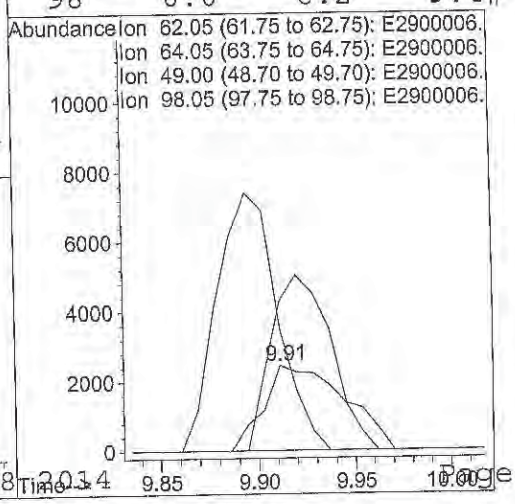


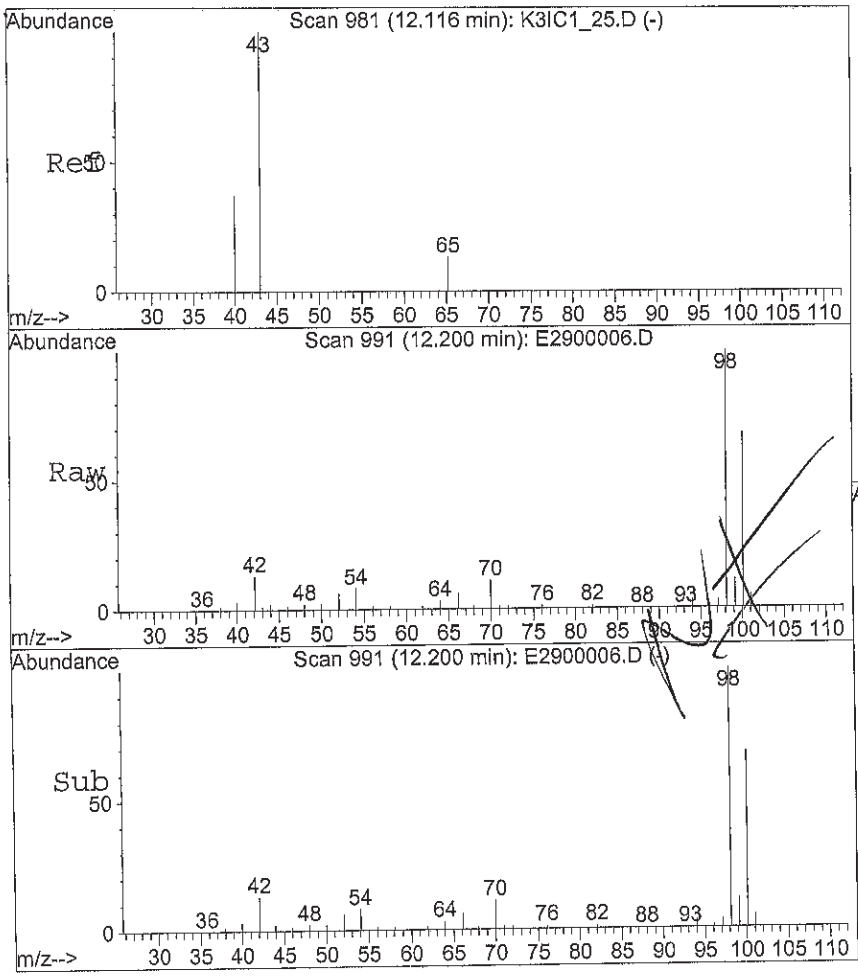


#32
1,2-Dichloroethane
Concen: 1.26 ug/L
RT: 9.91 min Scan# 720
Delta R.T. -0.08 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 62 Resp: 6402

Ion	Ratio	Lower	Upper
62	100		
64	180.2	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

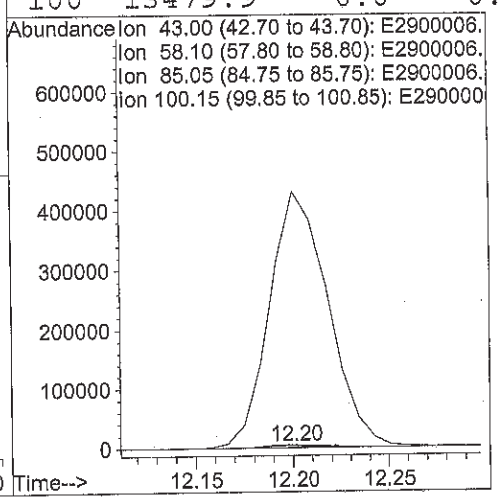


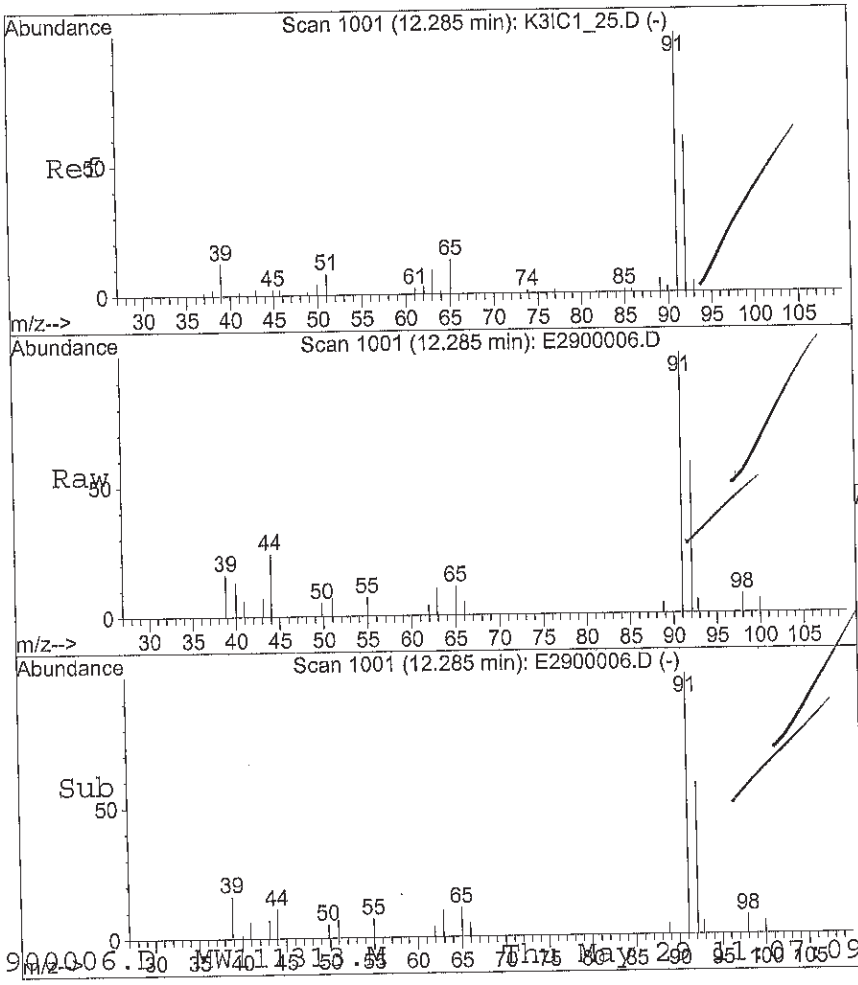


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.78 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 43 Resp: 6777

Ion	Ratio	Lower	Upper
43	100		
58	150.2	0.0	0.0#
85	0.0	0.0	0.0
100	13479.9	0.0	0.0#

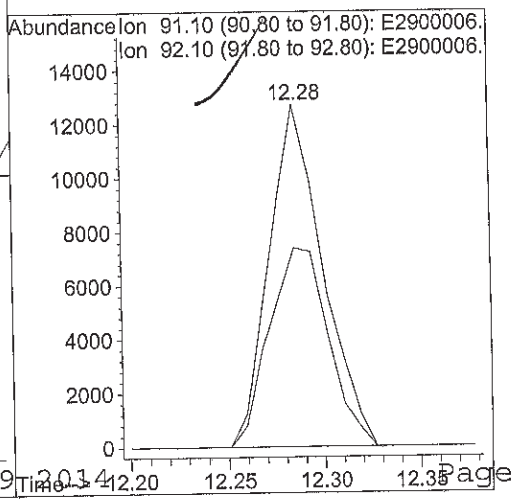


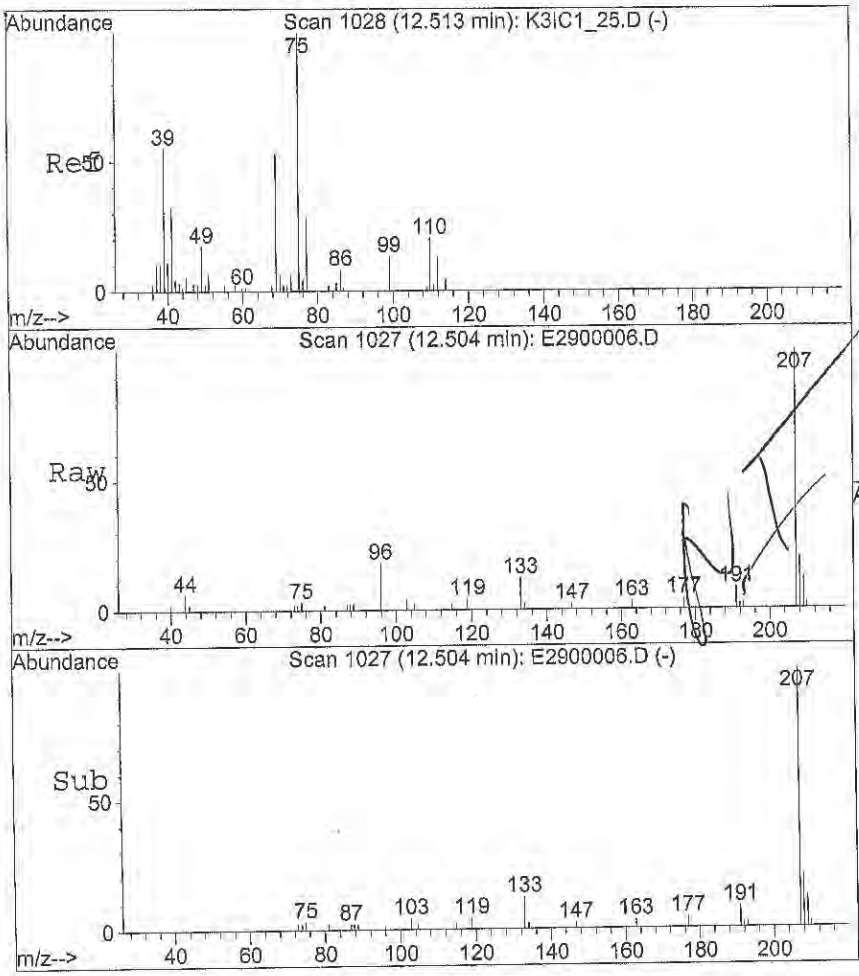


#41
Toluene
Concen: 1.48 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. 0.00 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 91 Resp: 24544

Ion	Ratio	Lower	Upper
91	100		
92	64.1	47.4	71.0

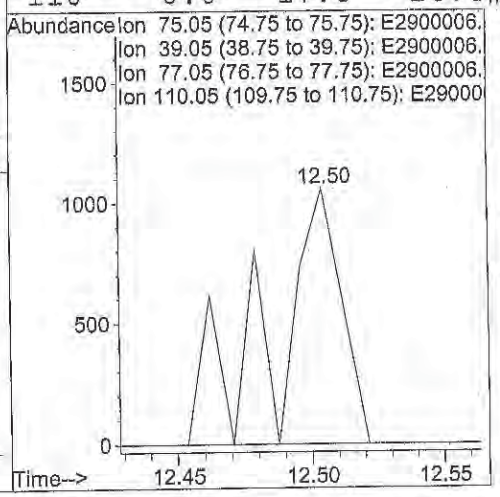


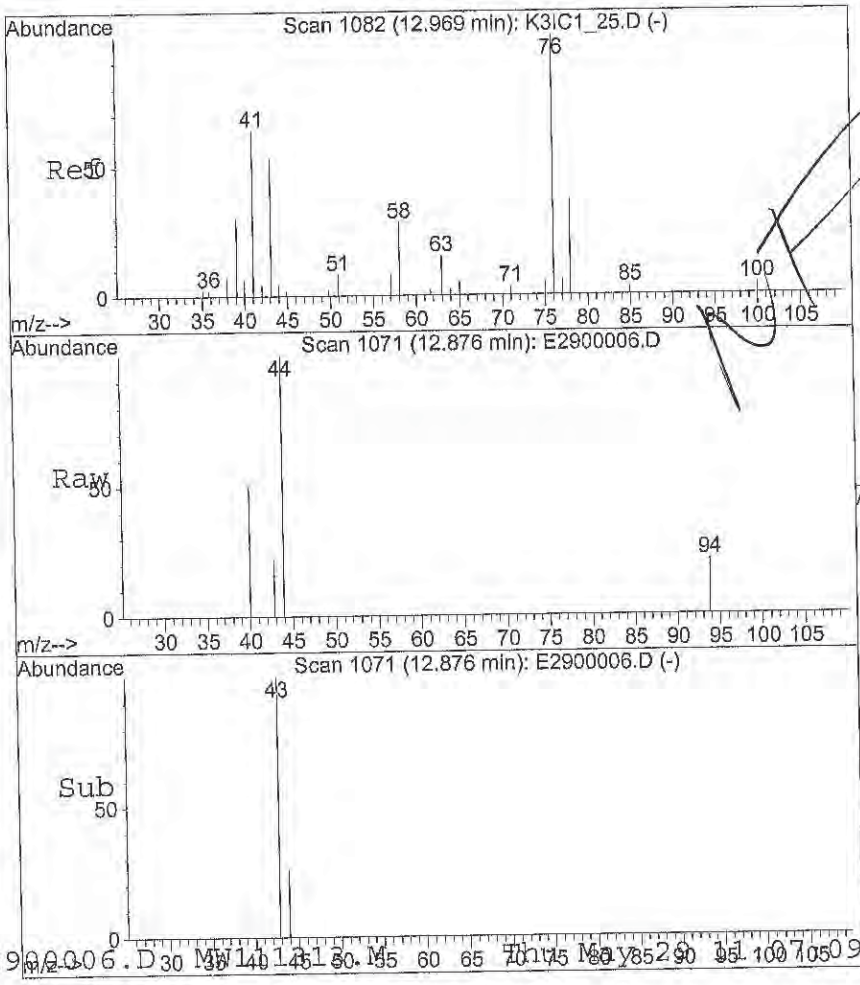


#42
trans-1,3-Dichloropropene
Concen: 0.29 ug/L
RT: 12.50 min Scan# 1027
Delta R.T. -0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 75 Resp: 1576

Ion	Ratio	Lower	Upper
75	100		
39	0.0	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

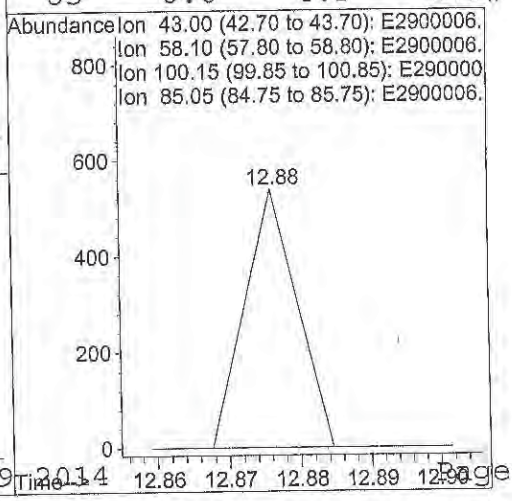


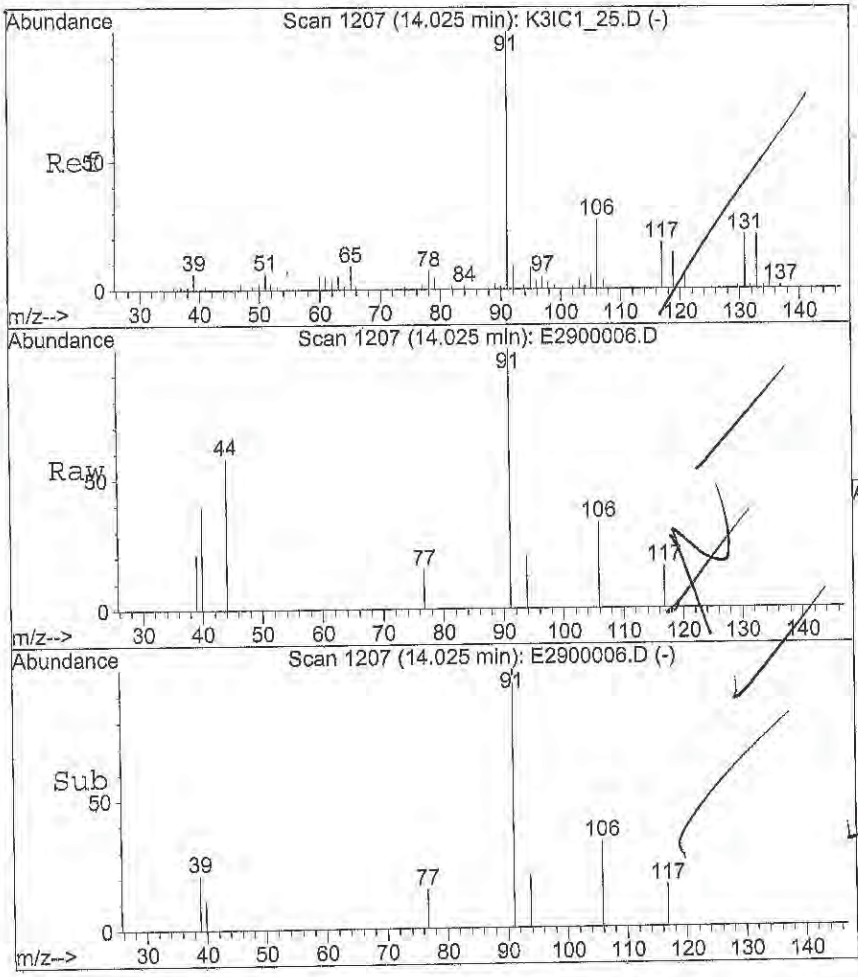


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 12.88 min Scan# 1071
Delta R.T. -0.09 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 43 Resp: 273

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

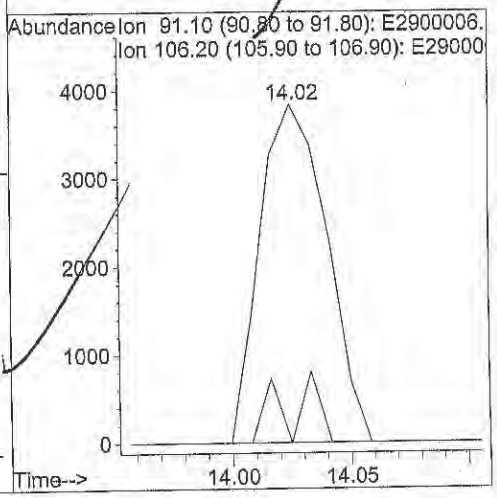


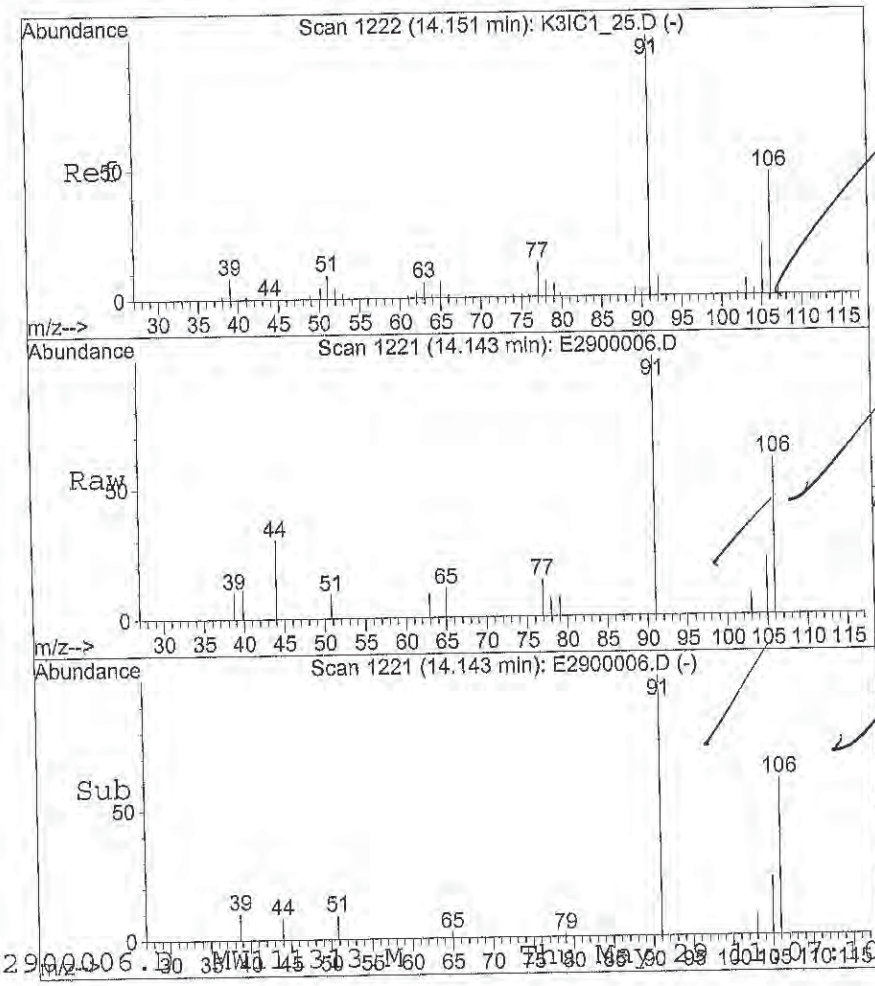


#51
Ethylbenzene
Concen: 0.40 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. 0.00 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 91 Resp: 7514

Ion	Ratio	Lower	Upper
91	100		
106	10.3	23.5	35.3#

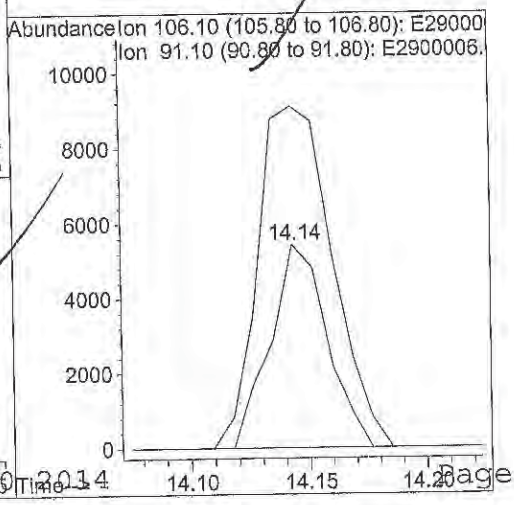


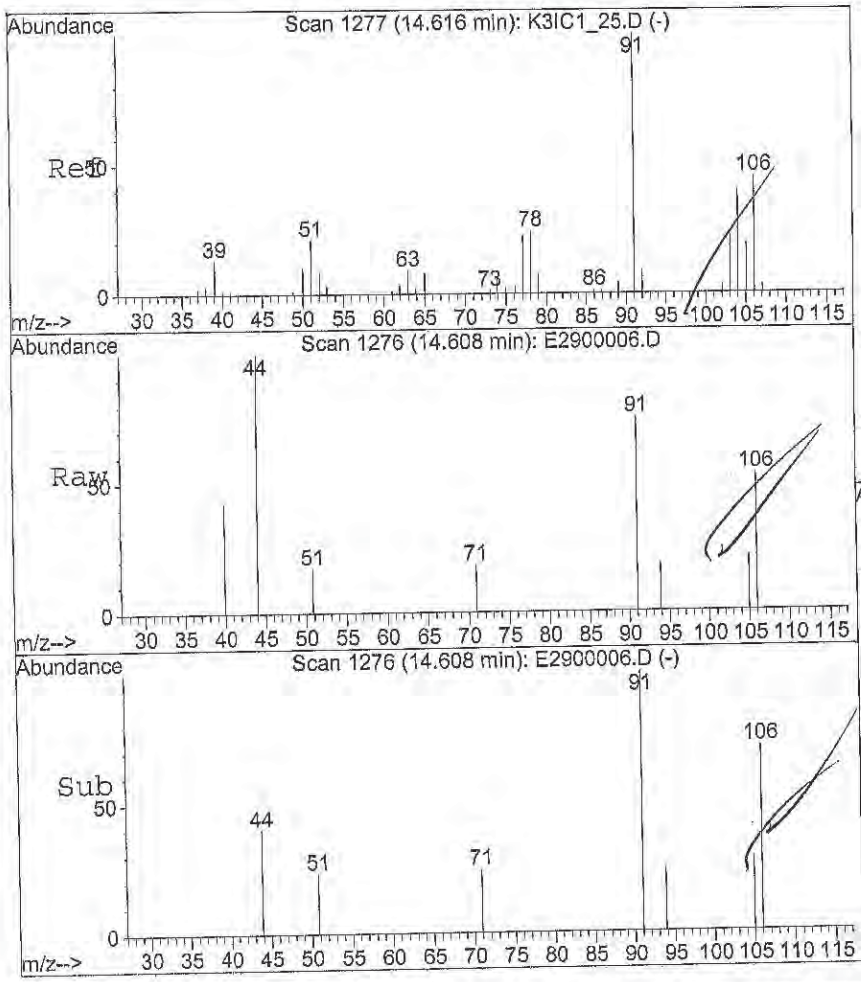


#52
m,p-Xylenes
Concen: 1.34 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:106 Resp: 9032

Ion	Ratio	Lower	Upper
106	100		
91	219.8	177.1	265.7

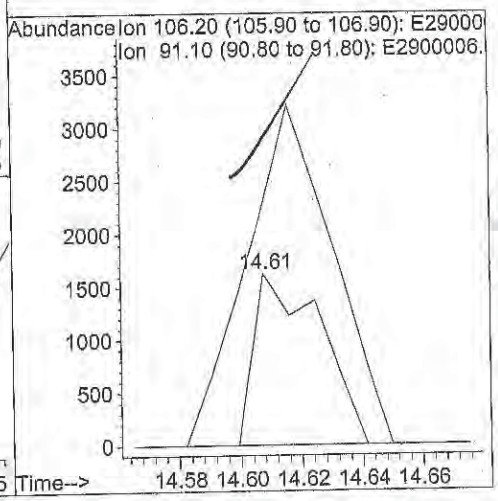


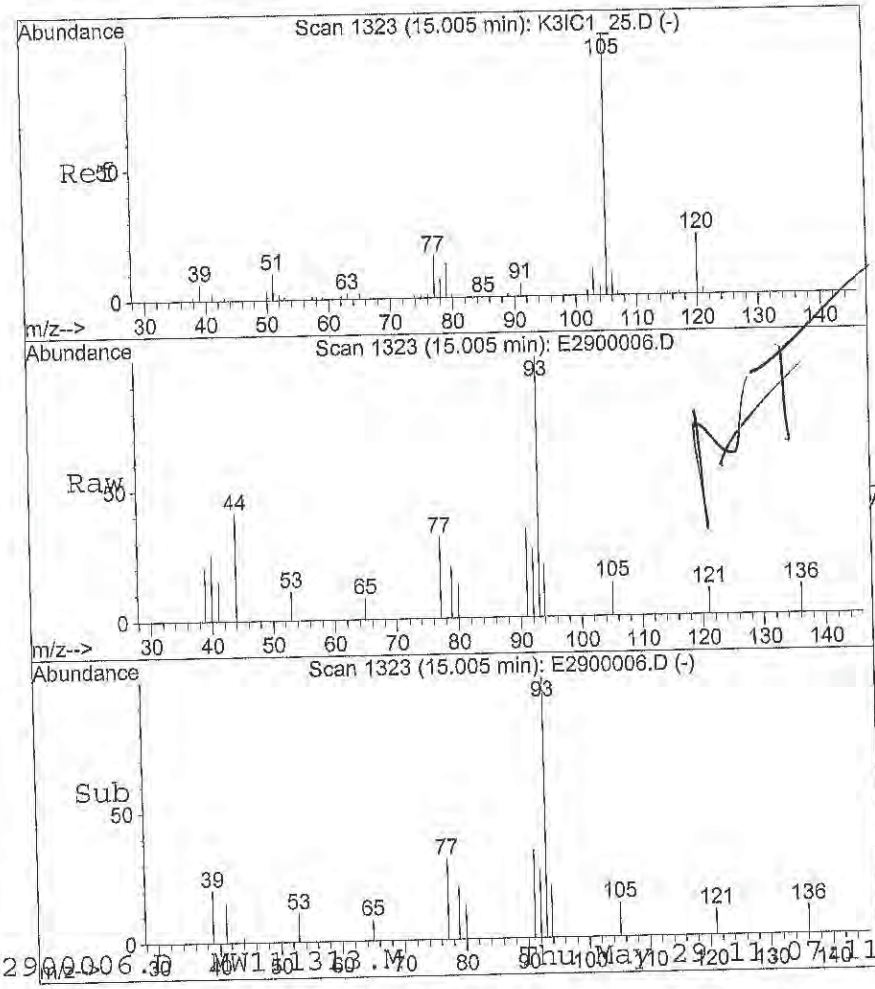


#53
o-Xylene
Concen: 0.37 ug/L
RT: 14.61 min Scan# 1276
Delta R.T. -0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:106 Resp: 2464

Ion	Ratio	Lower	Upper
106	100		
91	255.9	179.0	268.6

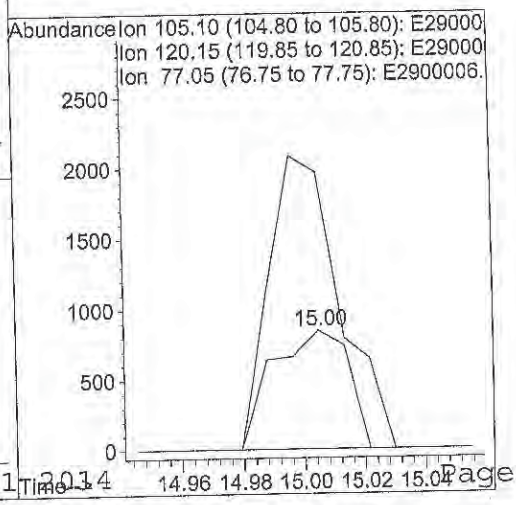


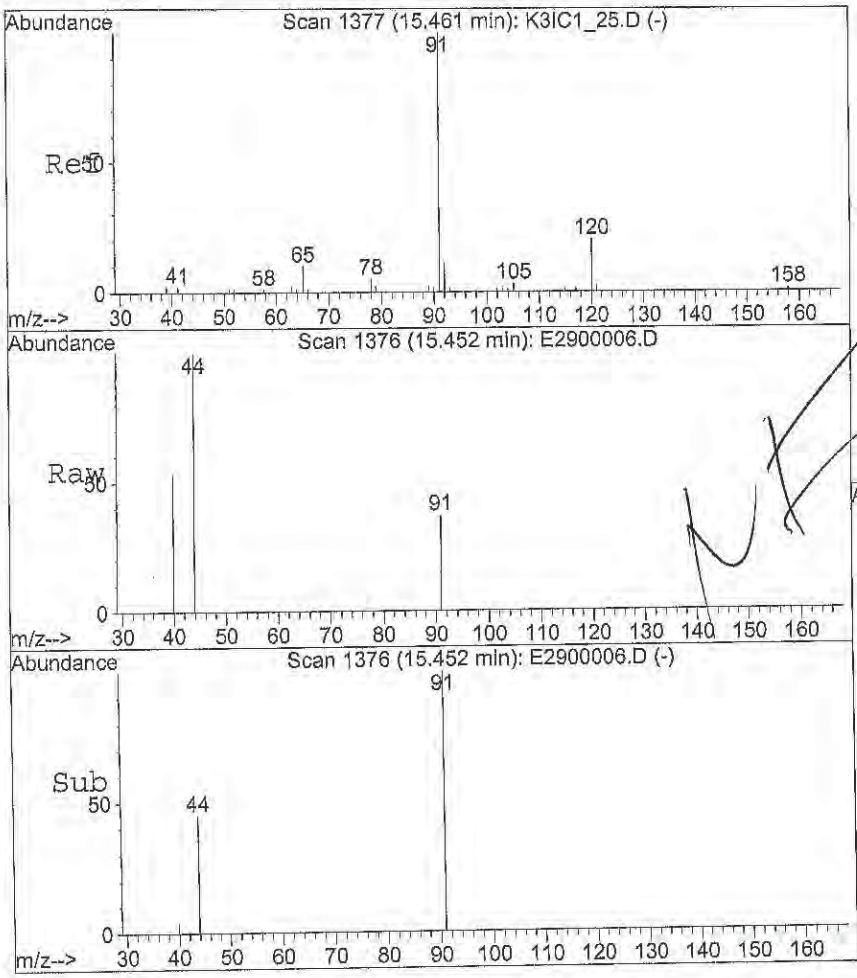


#56
Isopropylbenzene
Concen: 0.08 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. 0.00 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:105 Resp: 1459

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	229.4	13.1	19.7#

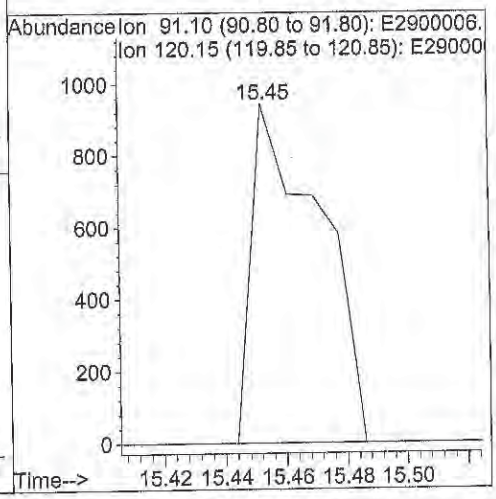


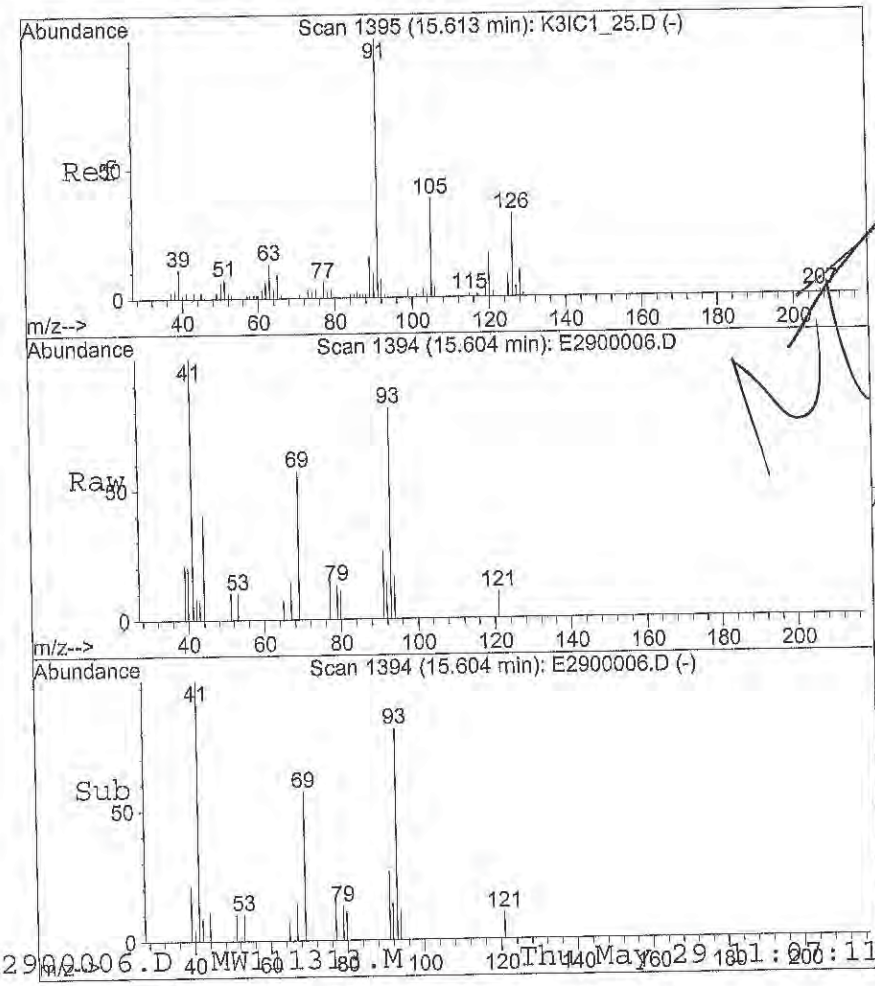


#62
n-Propylbenzene
Concen: 0.05 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 91 Resp: 1471

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

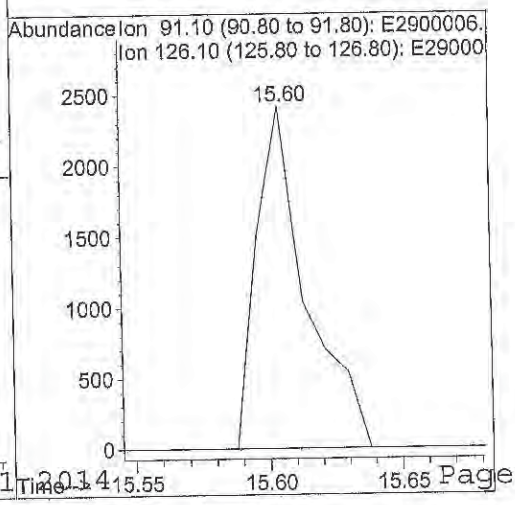


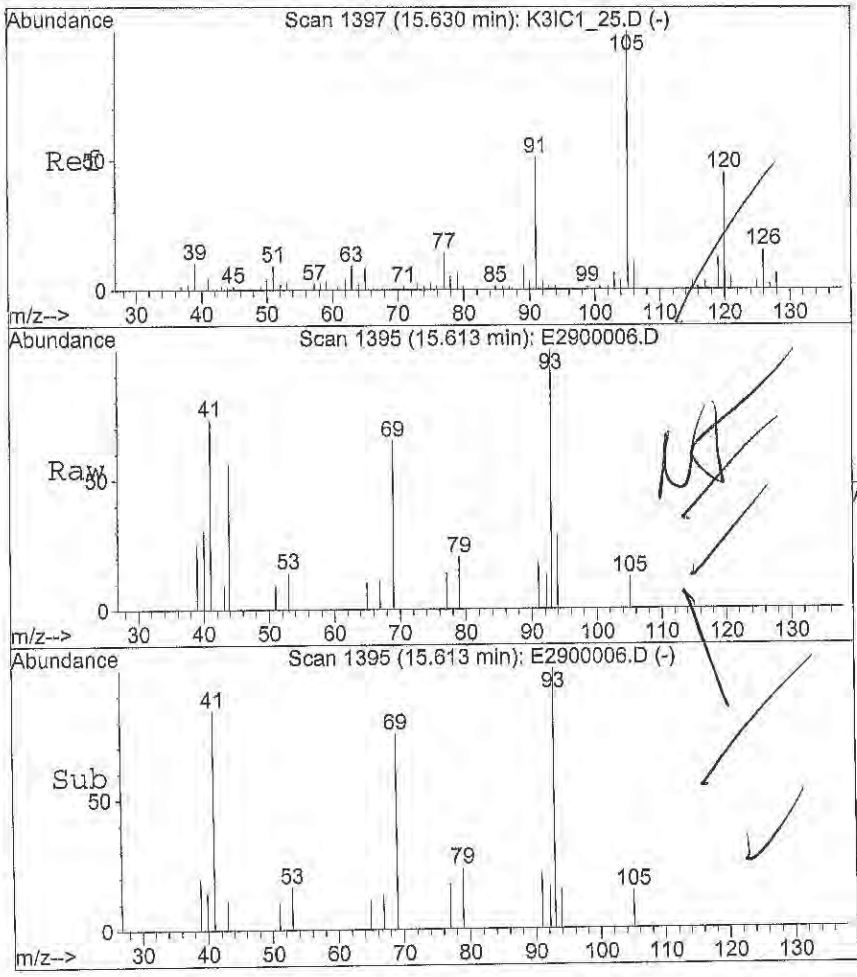


#63
2-Chlorotoluene
Concen: 0.19 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 91 Resp: 3150

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

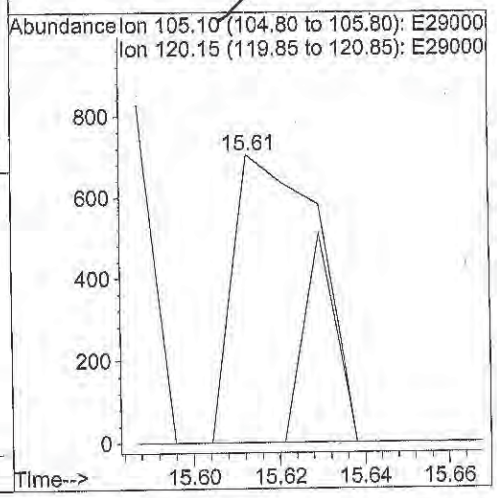


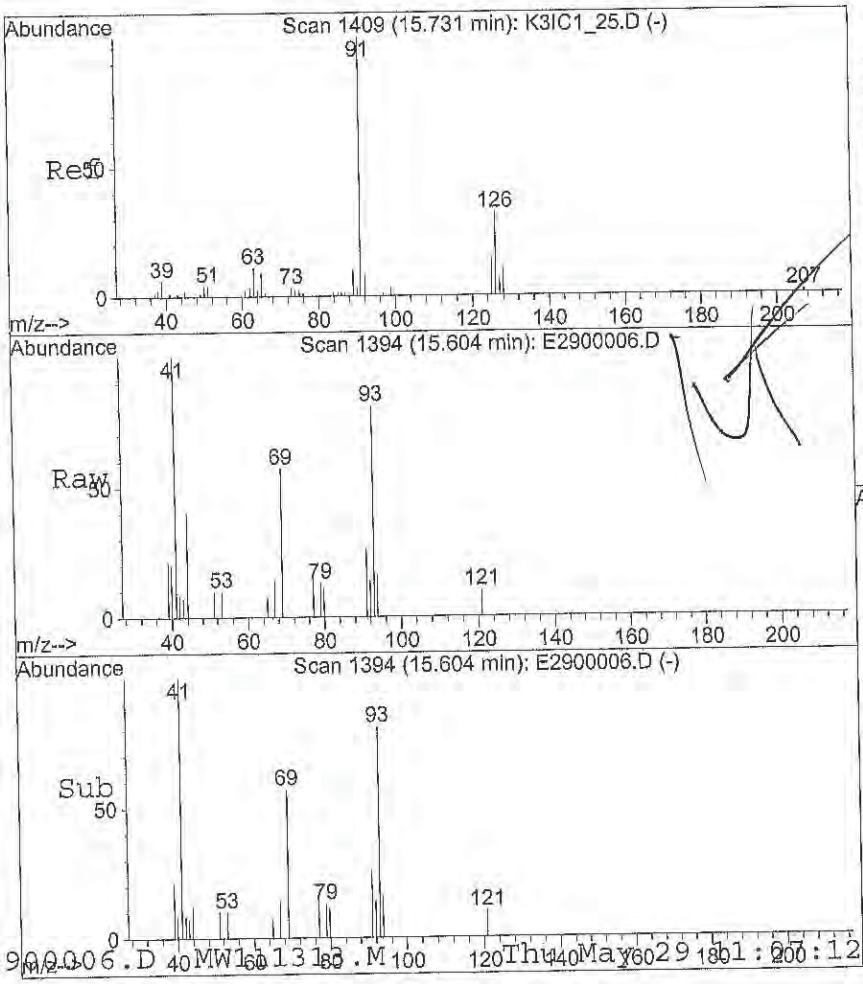


#64
1,3,5-Trimethylbenzene
Concen: 0.06 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.02 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:105 Resp: 972

Ion	Ratio	Lower	Upper
105	100		
120	26.6	36.4	54.6#

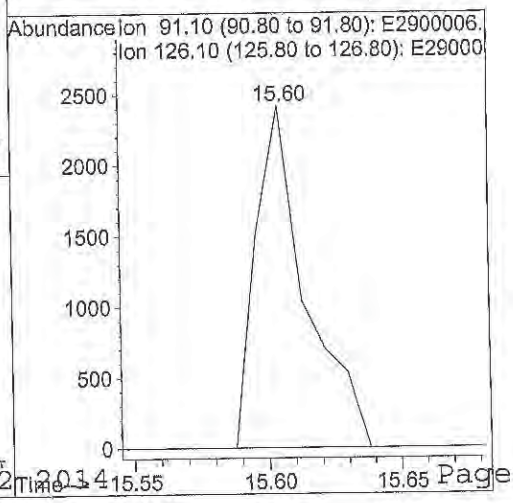


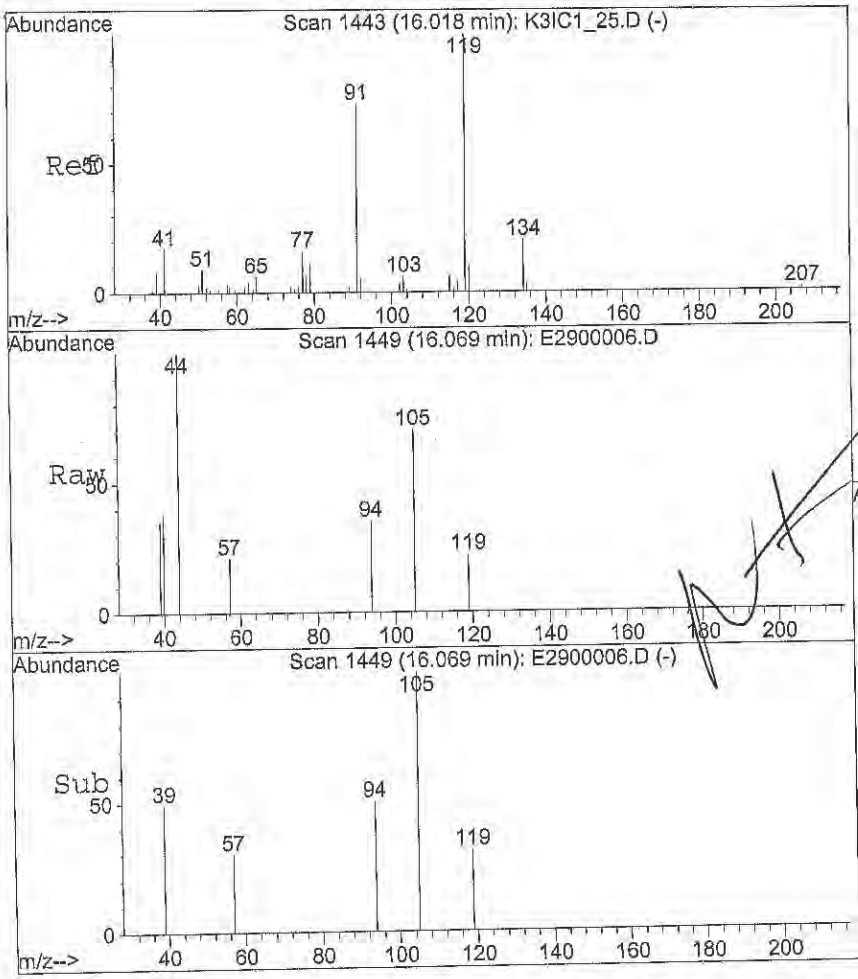


#65
4-Chlorotoluene
Concen: 0.20 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.13 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 91 Resp: 3150

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

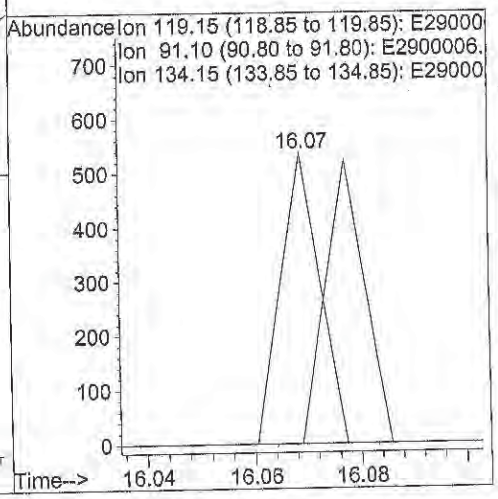


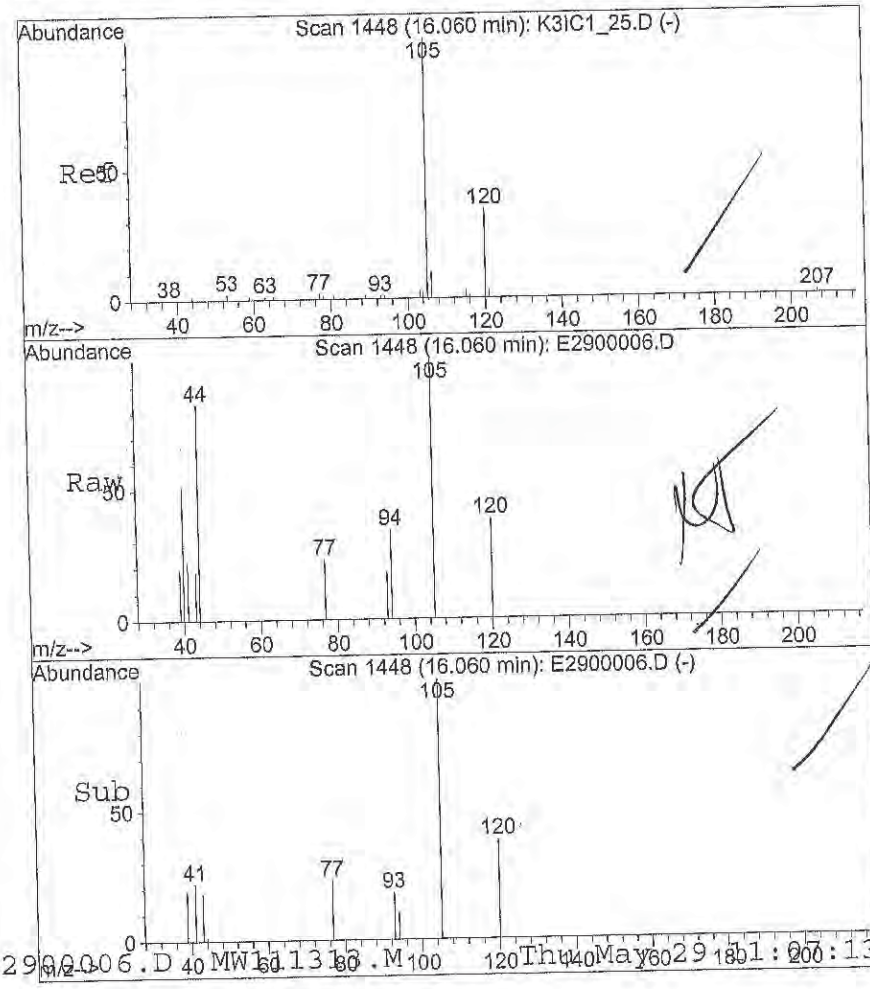


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.05 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:119 Resp: 272

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

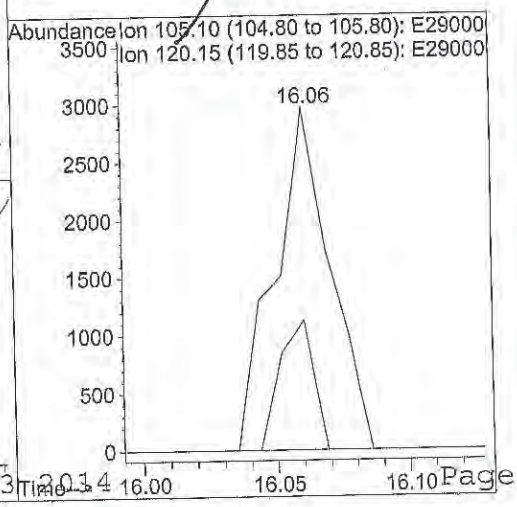


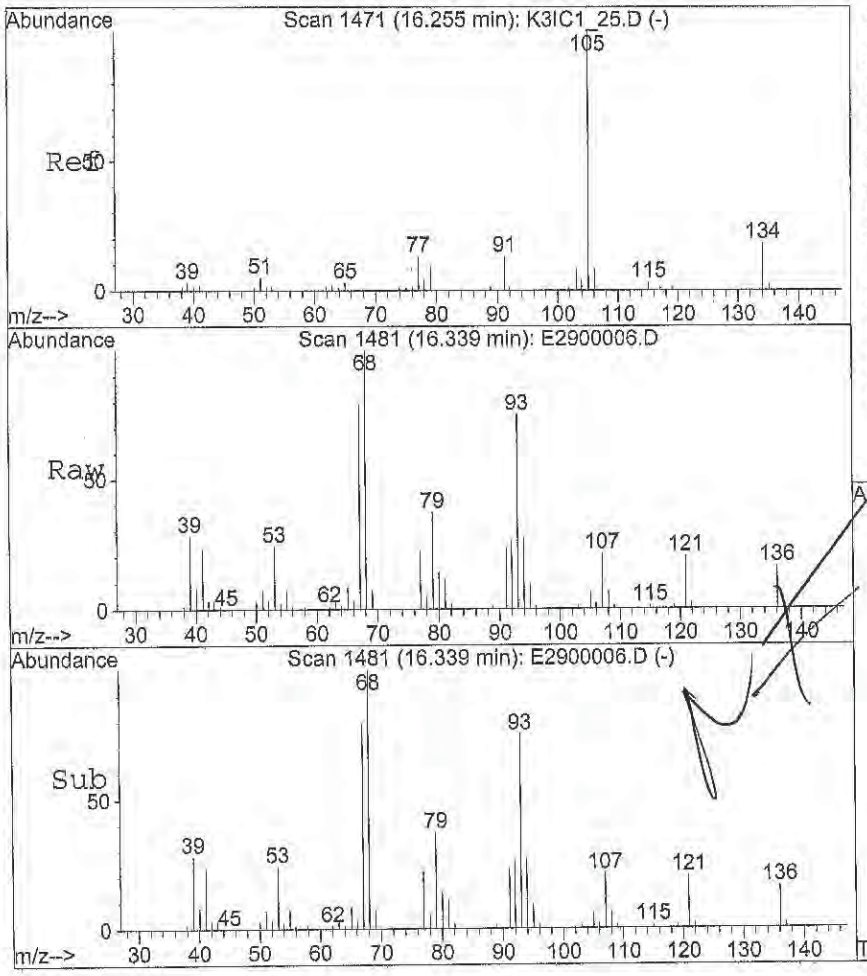


#67
1,2,4-Trimethylbenzene
Concen: 0.24 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.00 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:105 Resp: 4296

Ion	Ratio	Lower	Upper
105	100		
120	23.2	33.8	50.8#

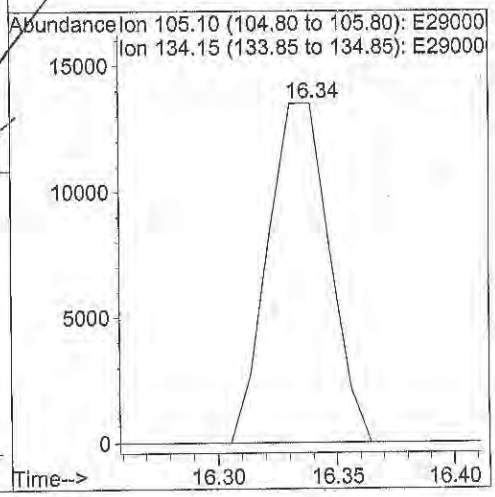


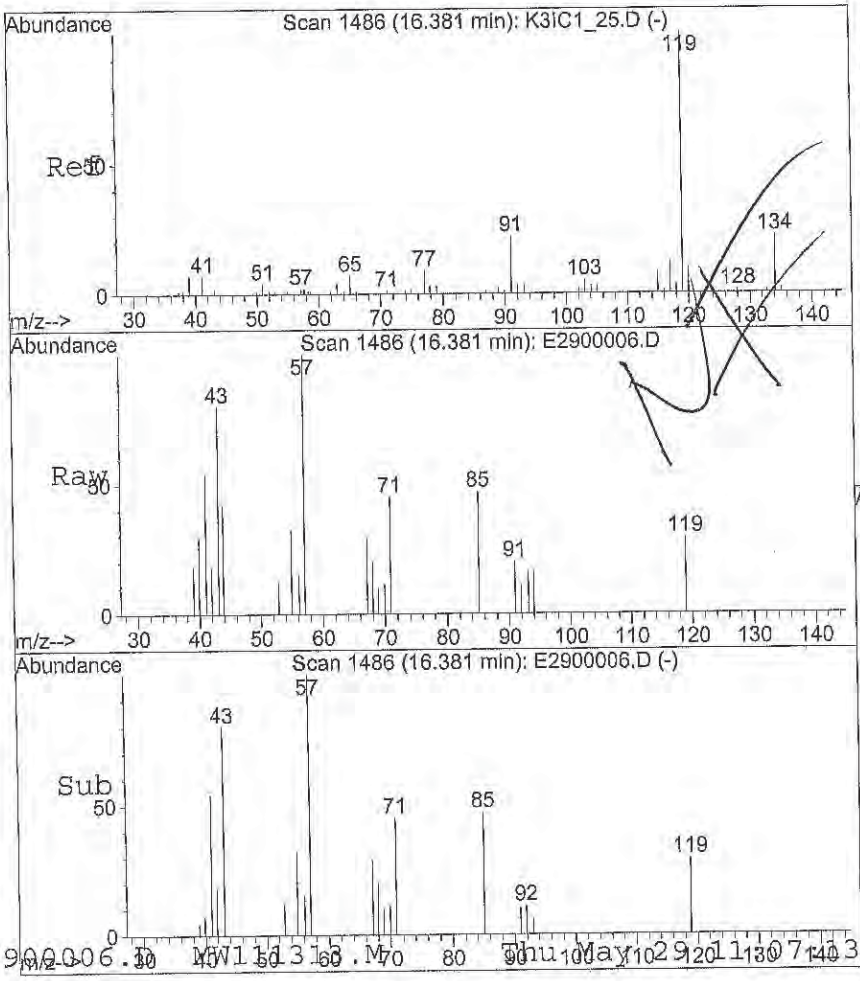


#68
sec-Butylbenzene
Concen: 1.06 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:105 Resp: 24166

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

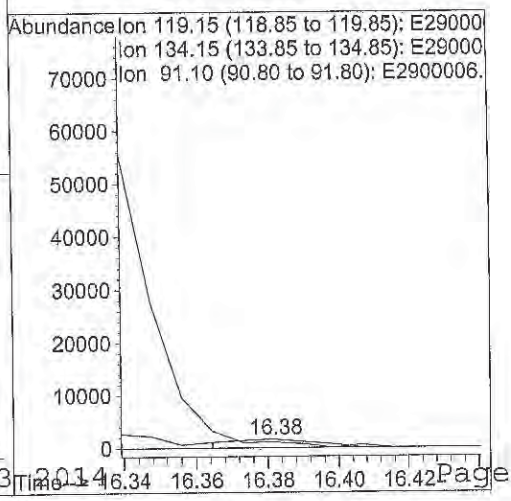


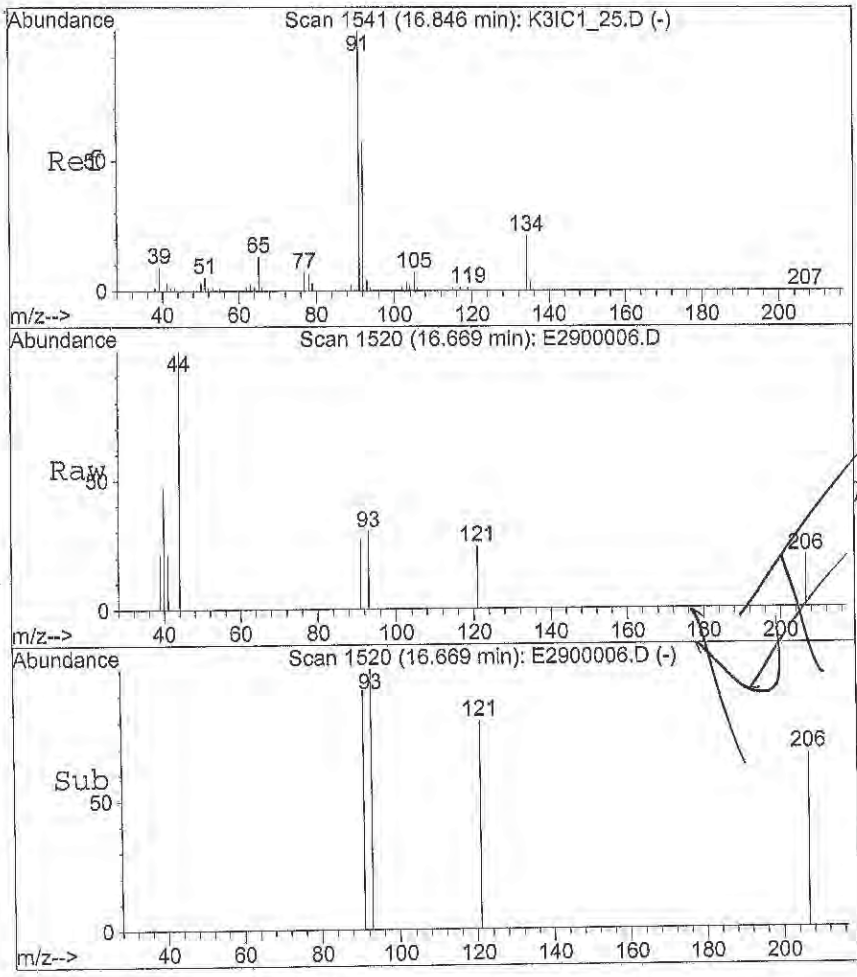


#69
p-Isopropyltoluene
Concen: 0.13 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. 0.00 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion:119 Resp: 2404

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

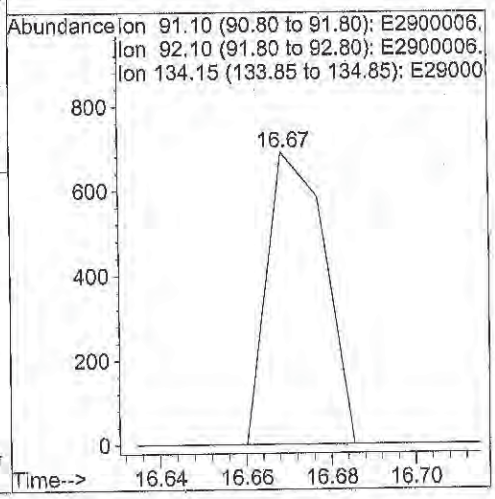




#72
n-Butylbenzene
Concen: 0.03 ug/L
RT: 16.67 min Scan# 1520
Delta R.T. -0.18 min
Lab File: E2900006.D
Acq: 29 May 2014 10:44 am

Tgt Ion: 91 Resp: 646

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900006.D Vial: 5
Acq On : 29 May 2014 10:44 am Operator: DN
Sample : 3E42901-05 Inst : GC/MS Ins
Misc : 100cc SVL-519-SA5D-SV-8.9-9.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 11:08 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1523502	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1220492	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	678647	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	441774	11.15 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.20%		
3) Chloroform-d (SU6)	9.18	84	681544	11.99 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 95.92%		
4) Methylene Chloride-d2 (SU5	7.06	86	390836	11.76 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.08%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	431270	15.93 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 127.44%#		
6) Benzene-d6 (SU7)	9.92	84	1375471	11.51 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.08%		
8) Toluene-d8 (SU3)	12.20	98	1332969	11.51 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.08%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	690525	14.45 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.60%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

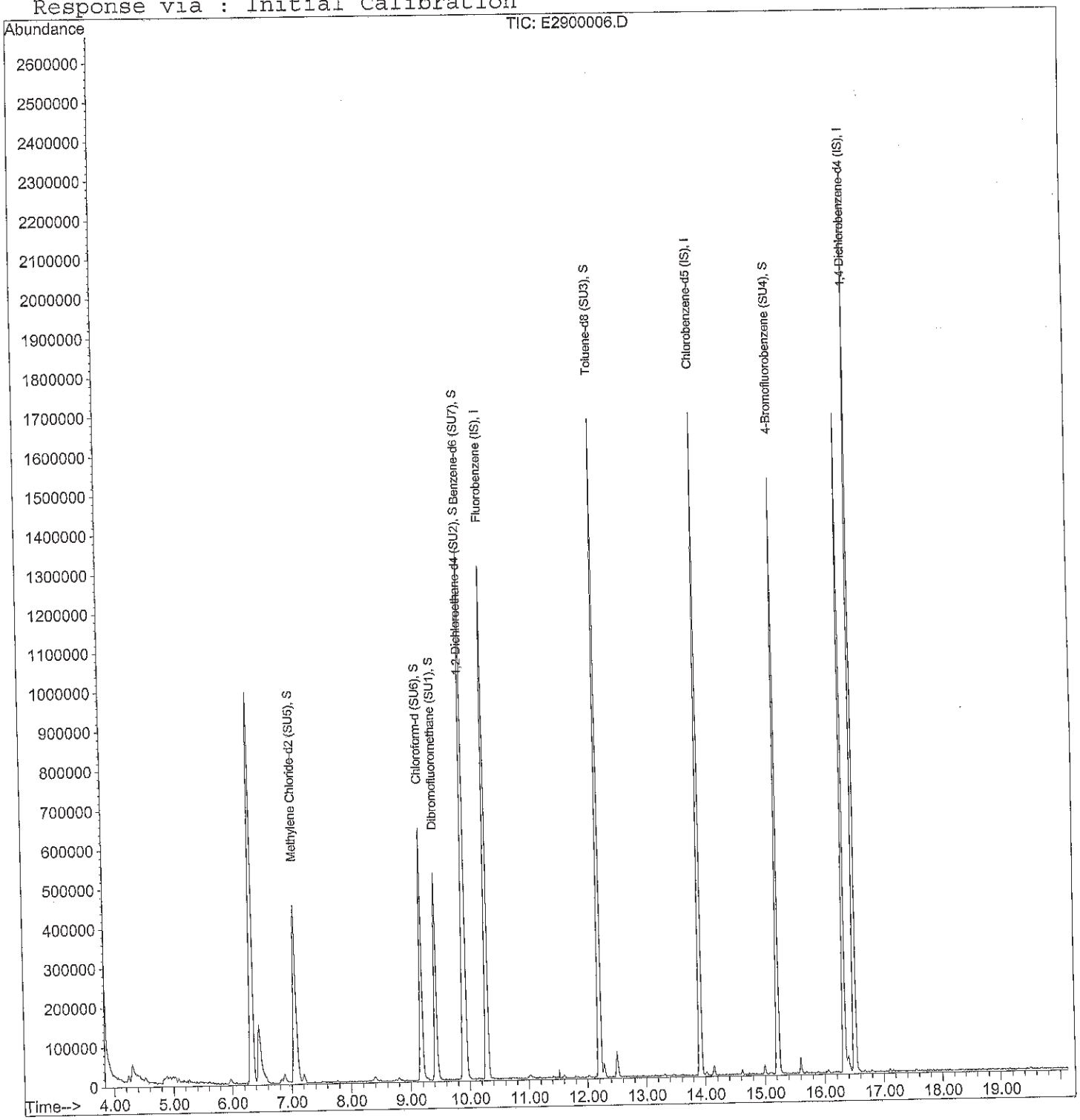
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900006.D
Acq On : 29 May 2014 10:44 am
Sample : 3E42901-05
Misc : 100cc SVL-519-SA5D-SV-8.9-9.5
MS Integration Params: rteint.p
Quant Time: May 29 11:08 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900007.D
Acq On : 29 May 2014 11:13 am
Sample : 3E42901-06
Misc : 100cc SVL-526-SA5D-SV-7.5-8.5
MS Integration Params: rteint.p
Quant Time: May 29 11:51 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1551642	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1248508	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	679192	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	437808	11.31 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.48%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	431713	11.74 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.92%		
39) Toluene-d8 (SU3)	12.20	98	1362829	11.70 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.60%		
58) 4-Bromofluorobenzene (SU4)	15.23	95	709659	13.90 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.20%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	531	0.14 ~~ug/L #~~	44
4) Chloromethane	4.39	50	4670	0.57 ~~ug/L #~~	52
6) Bromomethane	5.08	96	280	-1.61 ~~ug/L #~~	1
7) Chloroethane	5.14	64	799	1.31 ~~ug/L~~	93
9) (F113) 1,1,2-Trichloro-tri	6.34	151	293	0.10 ~~ug/L #~~	19
11) Acetone	6.47	58	3064	178.65 ~~ug/L #~~	66
12) (IPA) Leak Check Compound	6.46	45	292755	1570.13 ~~ug/L #~~	82
13) Carbon disulfide	6.83	76	21476	1.66 ~~ug/L~~	99
14) Methylene Chloride	7.06	84	5560	1.30 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.14	59	1430	5.40 ~~ug/L #~~	77
20) 2,2-Dichloropropane	8.61	77	257	0.04 ~~ug/L #~~	36
24) Chloroform	9.21	83	1064	0.13 ~~ug/L #~~	18
25) (ETBE) 2-ethoxy 2-methyl p	8.38	59	1057	0.09 ~~ug/L #~~	44
31) Benzene	9.96	78	11256	0.77 ~~ug/L #~~	76
32) 1,2-Dichloroethane	9.92	62	6881	1.33 ~~ug/L #~~	1
33) Trichloroethene	10.73	130	260	0.06 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.10	43	321	0.13 ~~ug/L #~~	100
41) Toluene	12.29	91	37091	2.18 ug/L 0.0436	99
42) trans-1,3-Dichloropropene	12.51	75	3365	0.60 ~~ug/L #~~	30
46) 2-Hexanone	12.96	43	341	0.12 ~~ug/L #~~	37
51) Ethylbenzene	14.02	91	10427	0.54 ug/L #0.0108	81
52) m,p-Xylenes	14.15	106	10538	1.53 ug/L 0.0306	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900007.D
Acq On : 29 May 2014 11:13 am
Sample : 3E42901-06
Misc : 100cc SVL-526-SA5D-SV-7.5-8.5
MS Integration Params: rteint.p
Quant Time: May 29 11:51 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

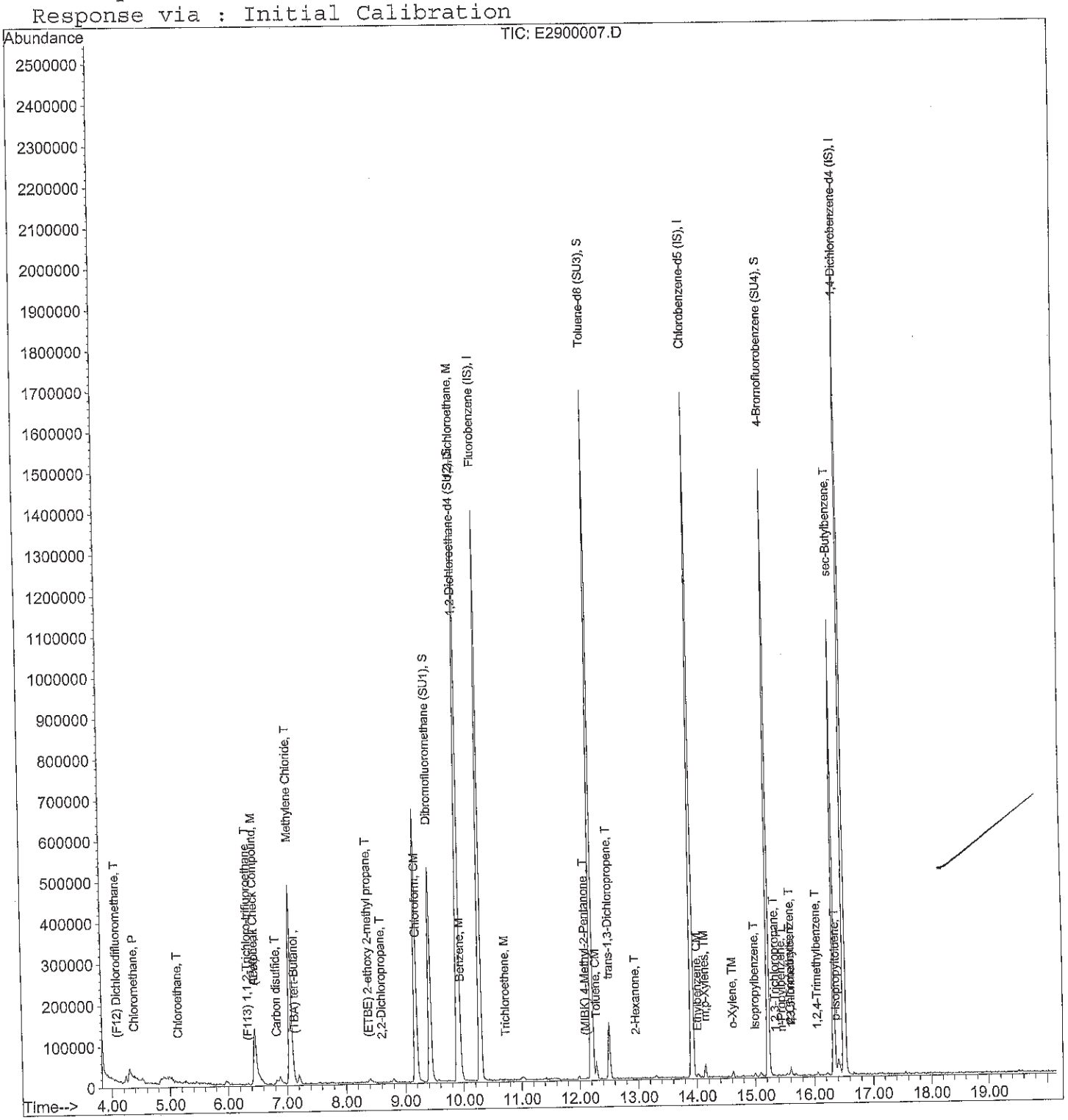
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) o-Xylene	14.62	106	3375	0.50 ~~ug/L~~ 0.01	79
54) Styrene	14.62	104	2097	-0.66 ~~ug/L~~ #	60
56) Isopropylbenzene	15.00	105	329	0.02 ~~ug/L~~ #	1
57) 1,2,3-Trichloropropane	15.34	75	275	0.05 ~~ug/L~~ #	36
62) n-Propylbenzene	15.45	91	2023	0.07 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.61	91	1425	0.08 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	2072	0.12 ~~ug/L~~ #	31
65) 4-Chlorotoluene	15.61	91	1425	0.09 ~~ug/L~~ #	44
67) 1,2,4-Trimethylbenzene	16.05	105	3872	0.22 ug/L #	85
68) sec-Butylbenzene	16.33	105	16654	0.73 ug/L #	62
69) p-Isopropyltoluene	16.38	119	2184	0.12 ~~ug/L~~ #	67

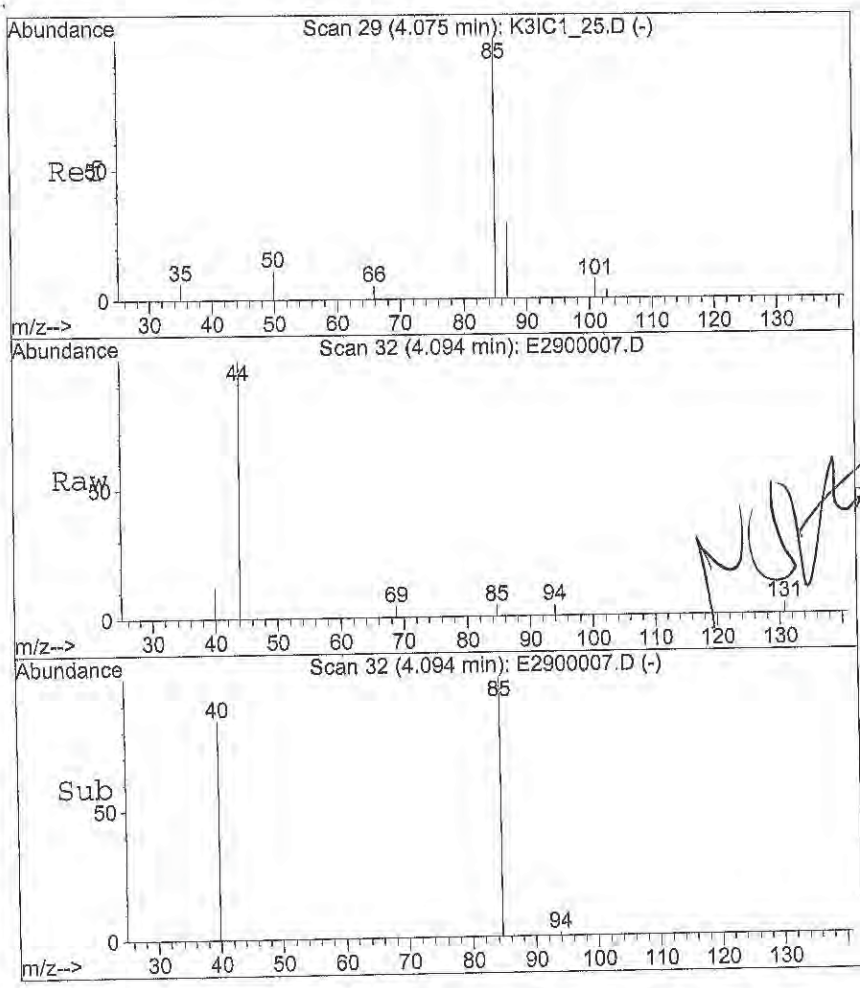
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900007.D Vial: 6
Acq On : 29 May 2014 11:13 am Operator: DN
Sample : 3E42901-06 Inst : GC/MS Ins
Misc : 100cc SVL-526-SA5D-SV-7.5-8.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 11:51 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

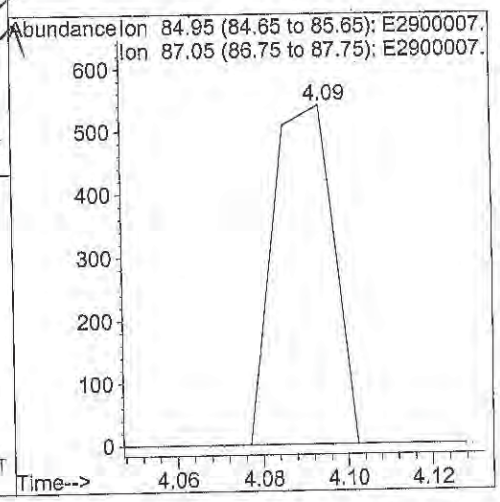


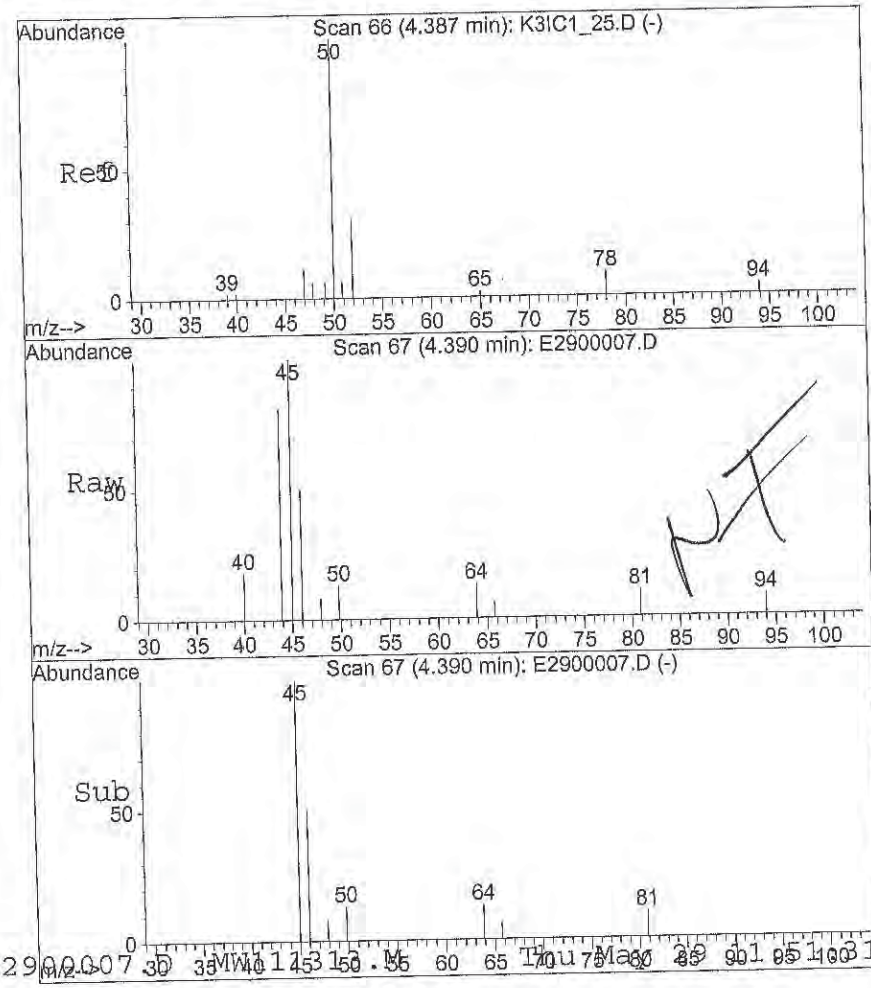


#3
(F12) Dichlorodifluoromethane
Concen: 0.14 ug/L
RT: 4.09 min Scan# 32
Delta R.T. 0.02 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 85 Resp: 531

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

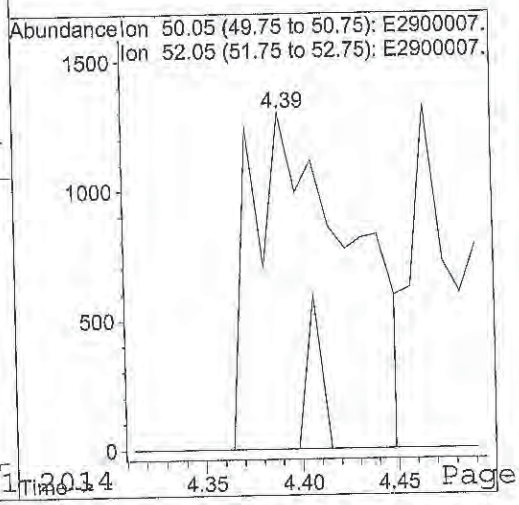


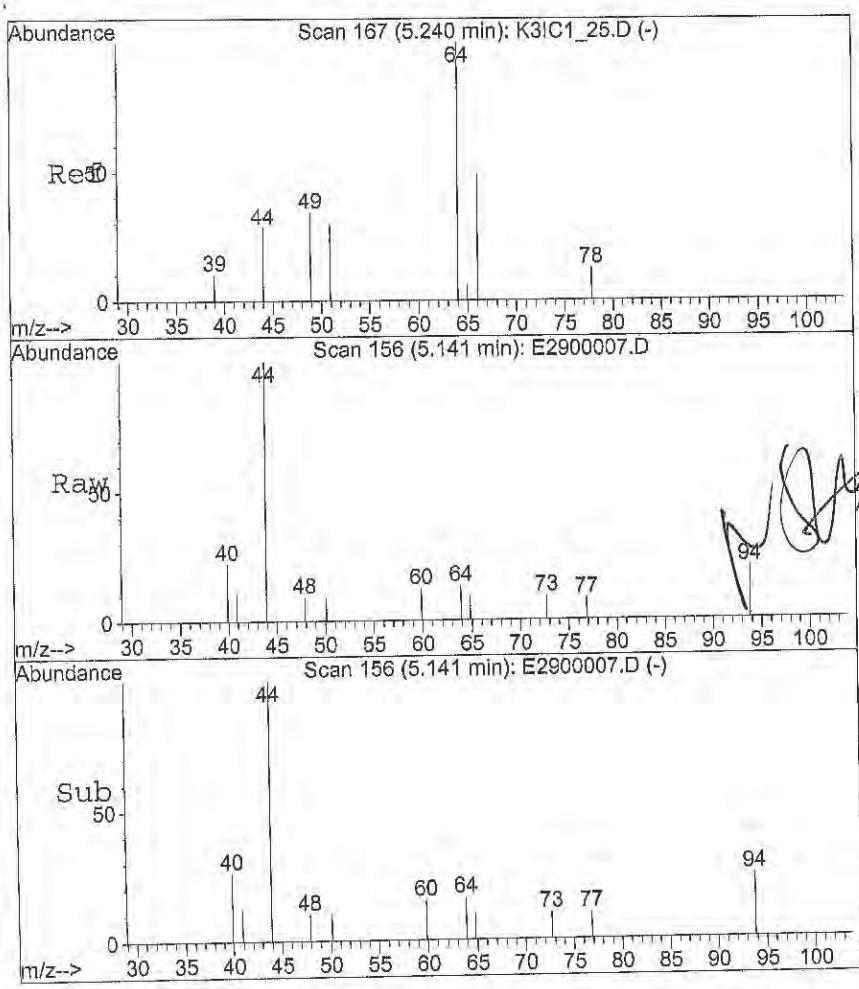


#4
Chloromethane
Concen: 0.57 ug/L
RT: 4.39 min Scan# 67
Delta R.T. 0.00 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 50 Resp: 4670

Ion	Ratio	Lower	Upper
50	100		
52	6.4	26.9	40.3#

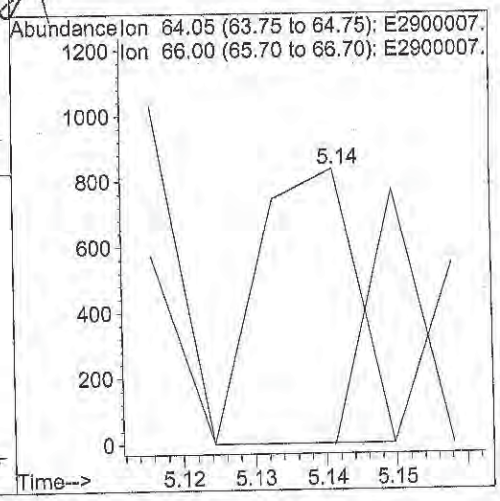


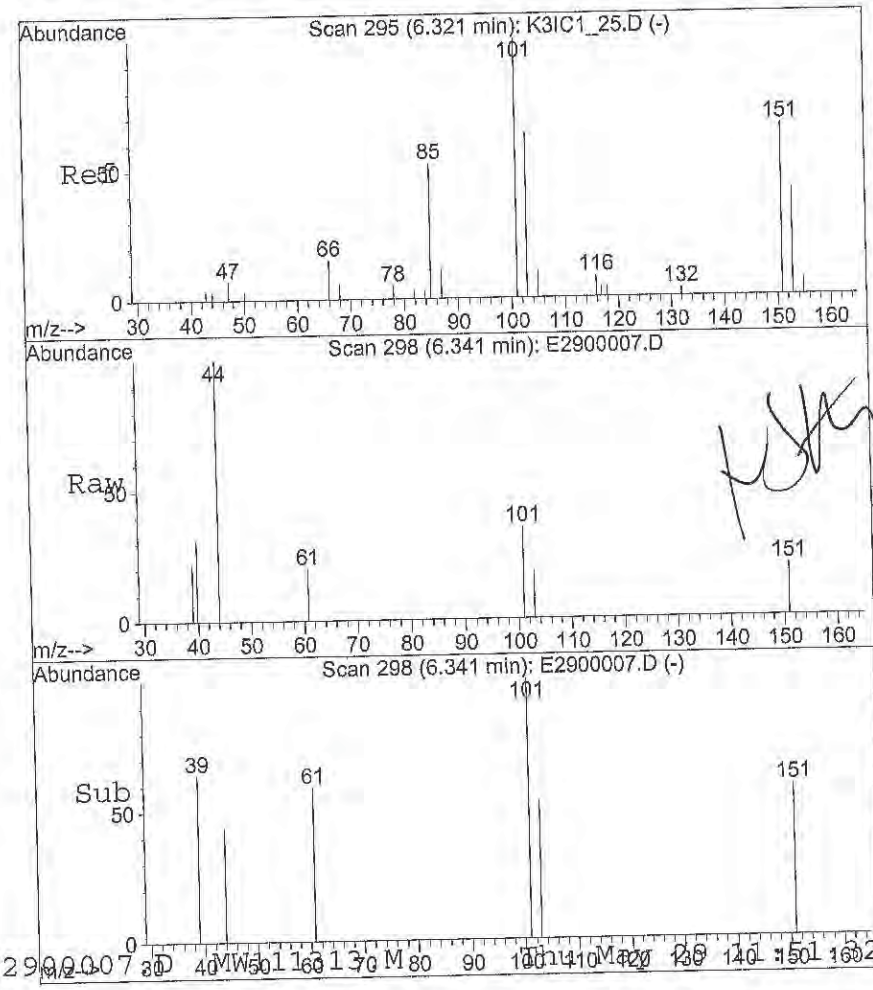


#7
Chloroethane
Concen: 1.31 ug/L
RT: 5.14 min Scan# 156
Delta R.T. -0.10 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 64 Resp: 799

Ion	Ratio	Lower	Upper
64	100		
66	48.9	35.4	53.0

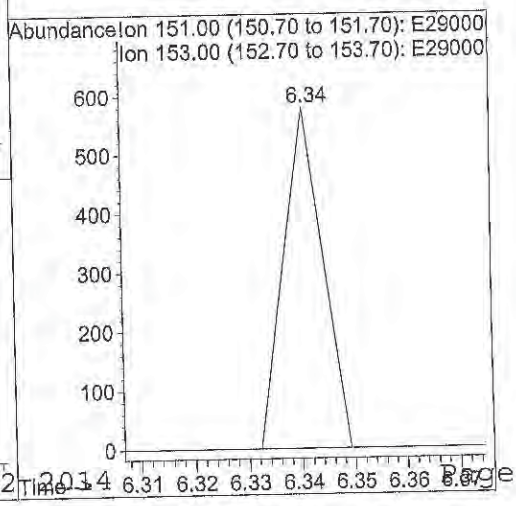


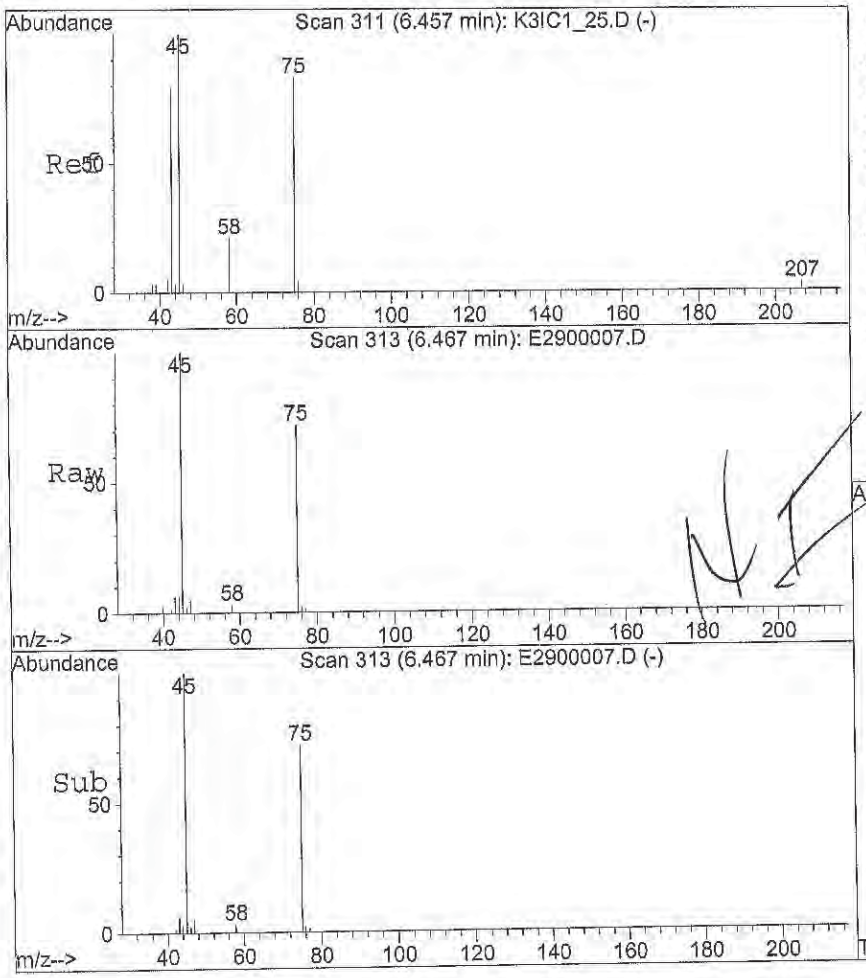


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 0.10 ug/L
RT: 6.34 min Scan# 298
Delta R.T. 0.02 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:151 Resp: 293

Ion	Ratio	Lower	Upper
151	100		
153	0.0	49.6	74.4#

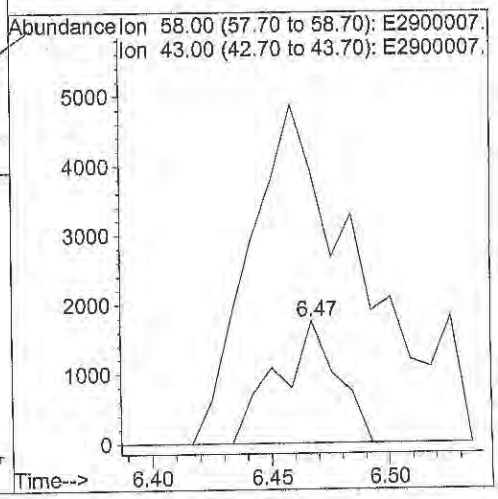


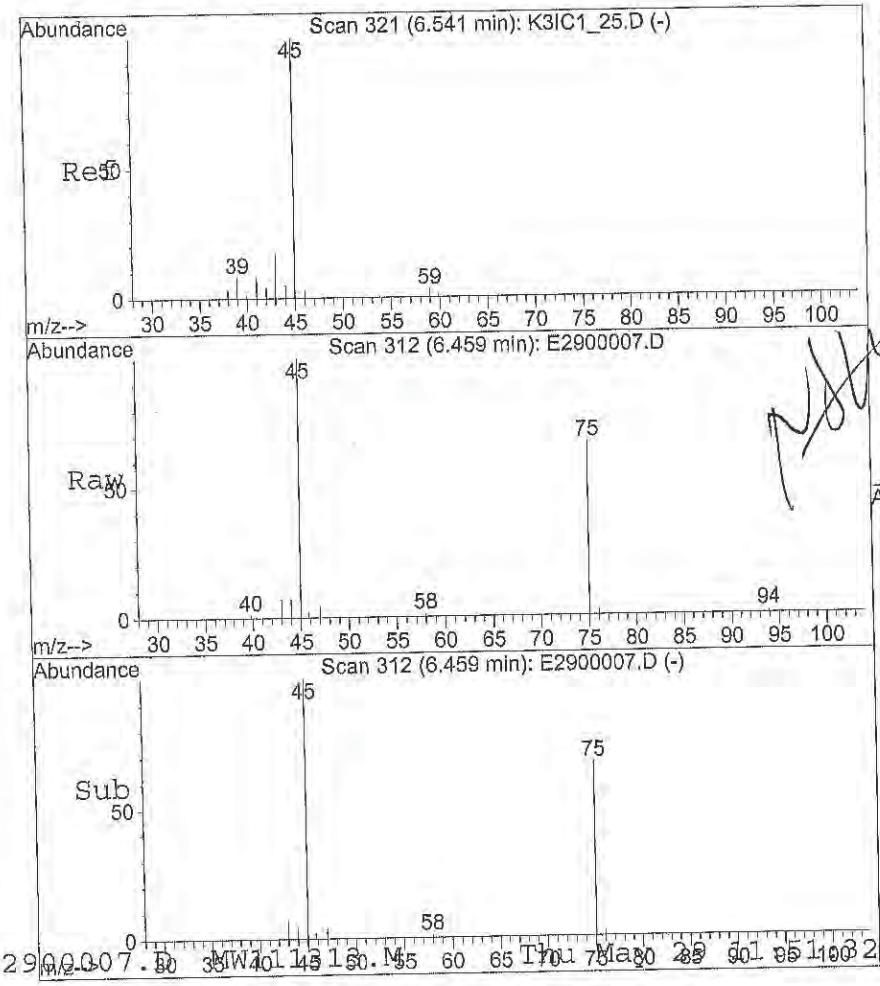


#11
Acetone
Concen: 178.65 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 58 Resp: 3064

Ion	Ratio	Lower	Upper
58	100		
43	539.6	360.9	541.3

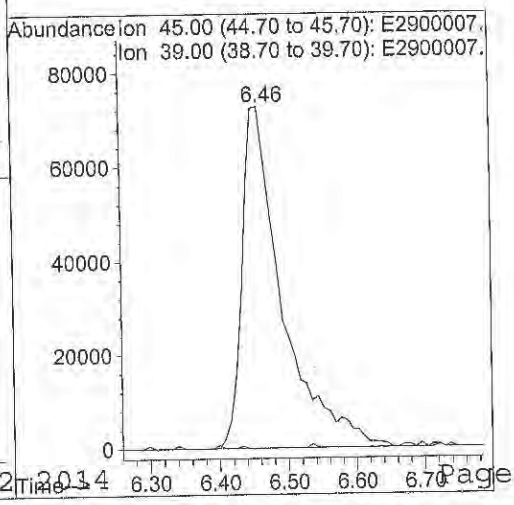


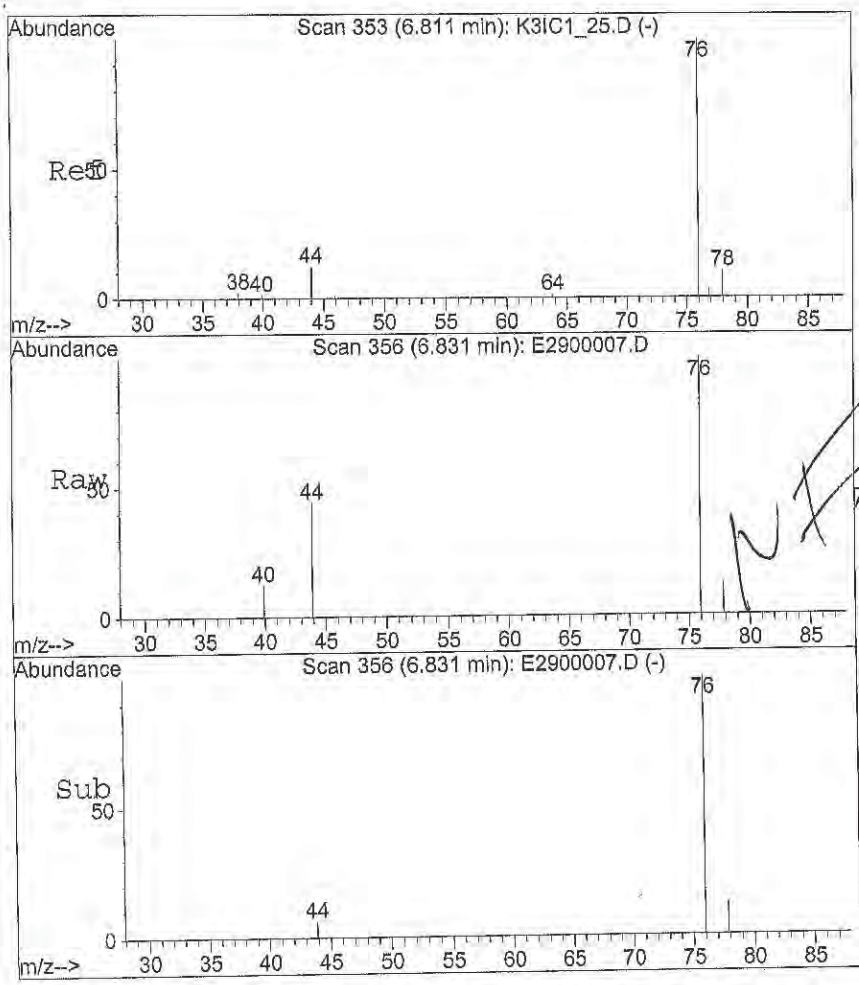


#12
(IPA) Leak Check Compound
Concen: 1570.13 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 45 Resp: 292755

Ion	Ratio	Lower	Upper
45	100		
39	0.0	4.9	7.3#

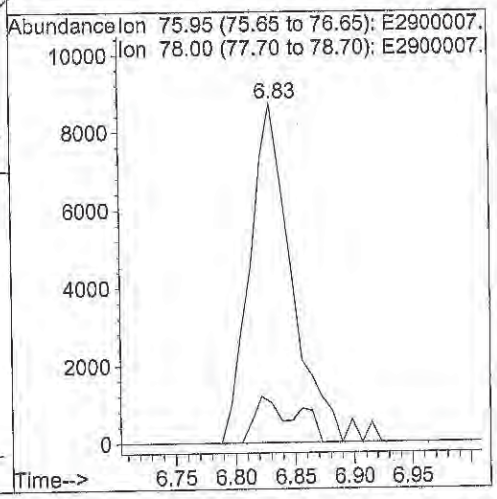


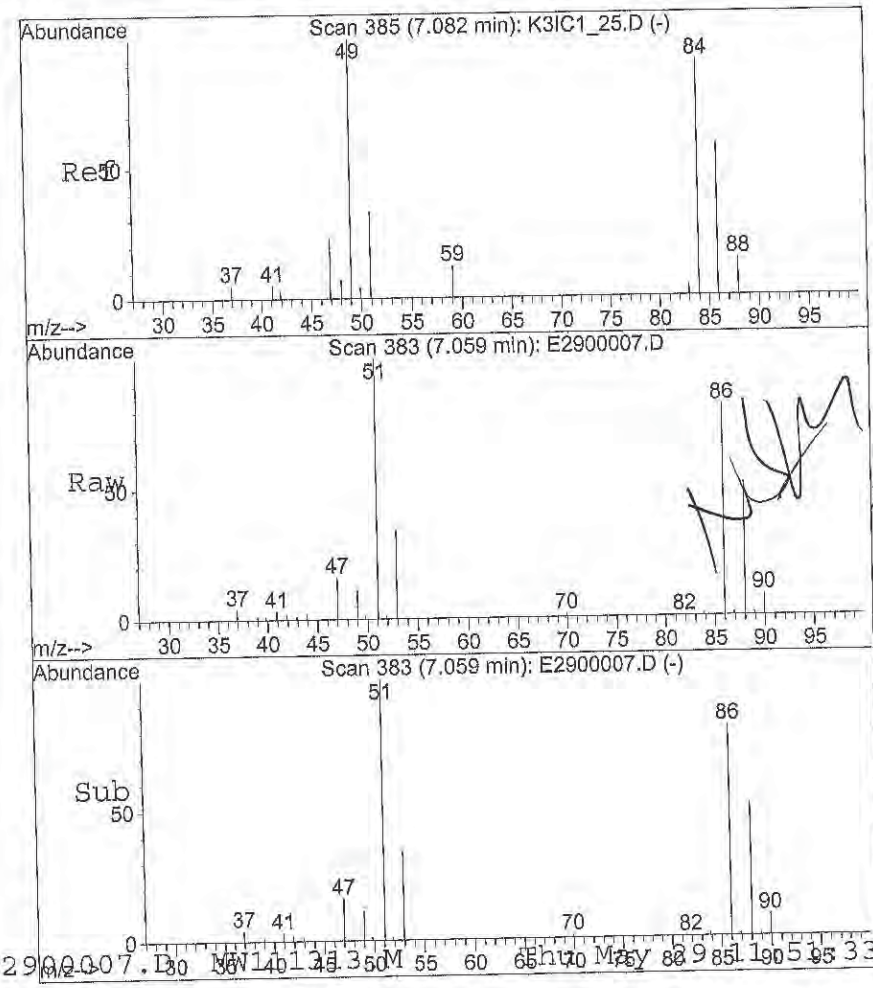


#13
Carbon disulfide
Concen: 1.66 ug/L
RT: 6.83 min Scan# 356
Delta R.T. 0.02 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 76 Resp: 21476

Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.0	10.4

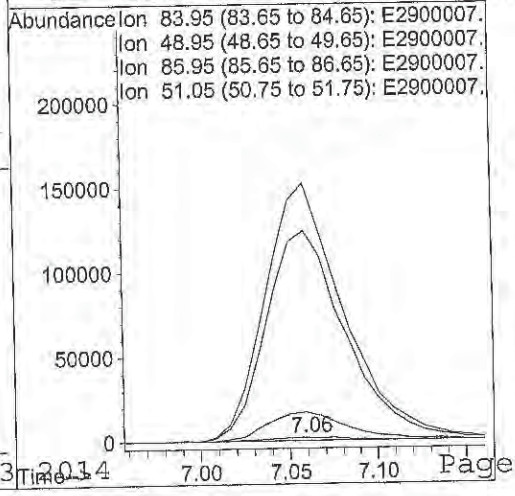


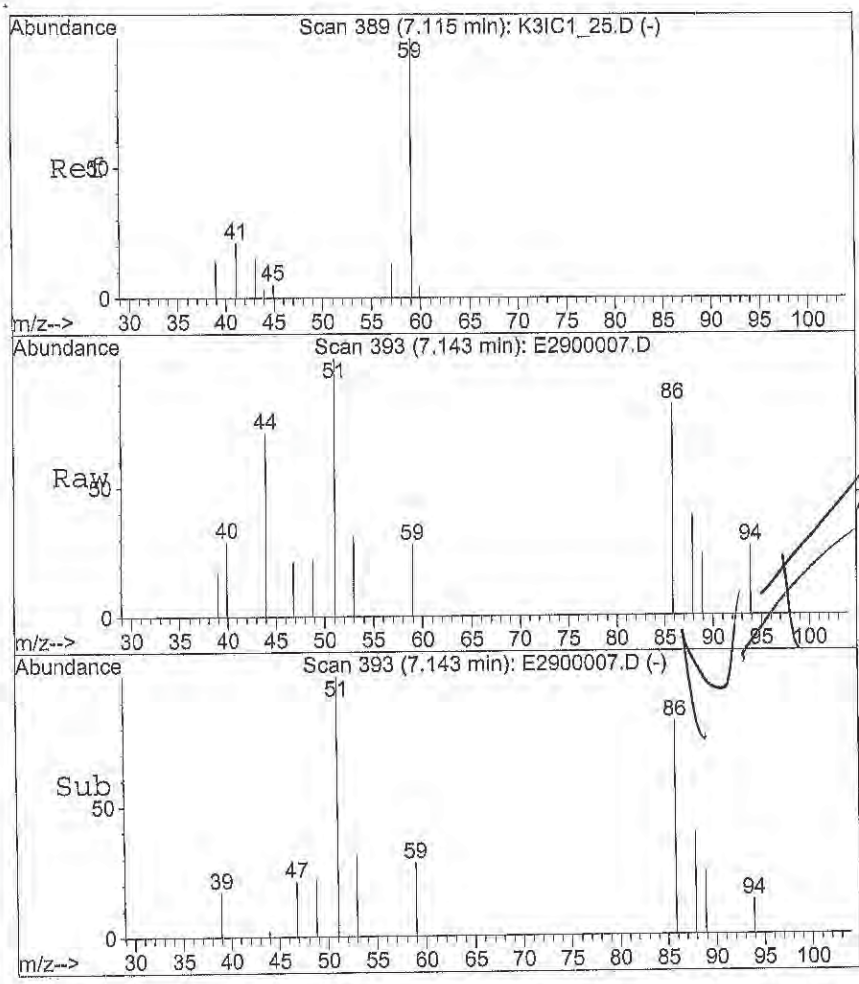


#14
Methylene Chloride
Concen: 1.30 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 84 Resp: 5560

Ion	Ratio	Lower	Upper
84	100		
49	952.9	89.8	134.6#
86	6998.6	51.1	76.7#
51	8508.1	28.5	42.7#

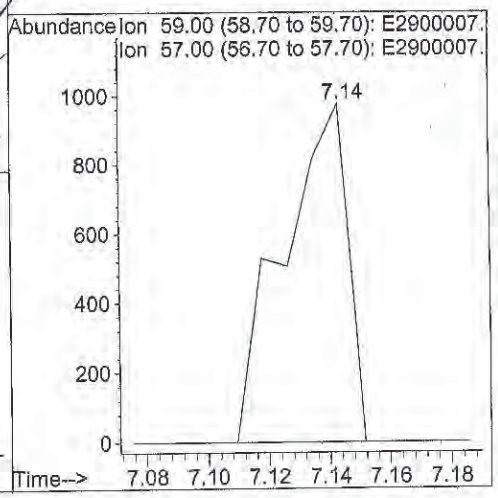


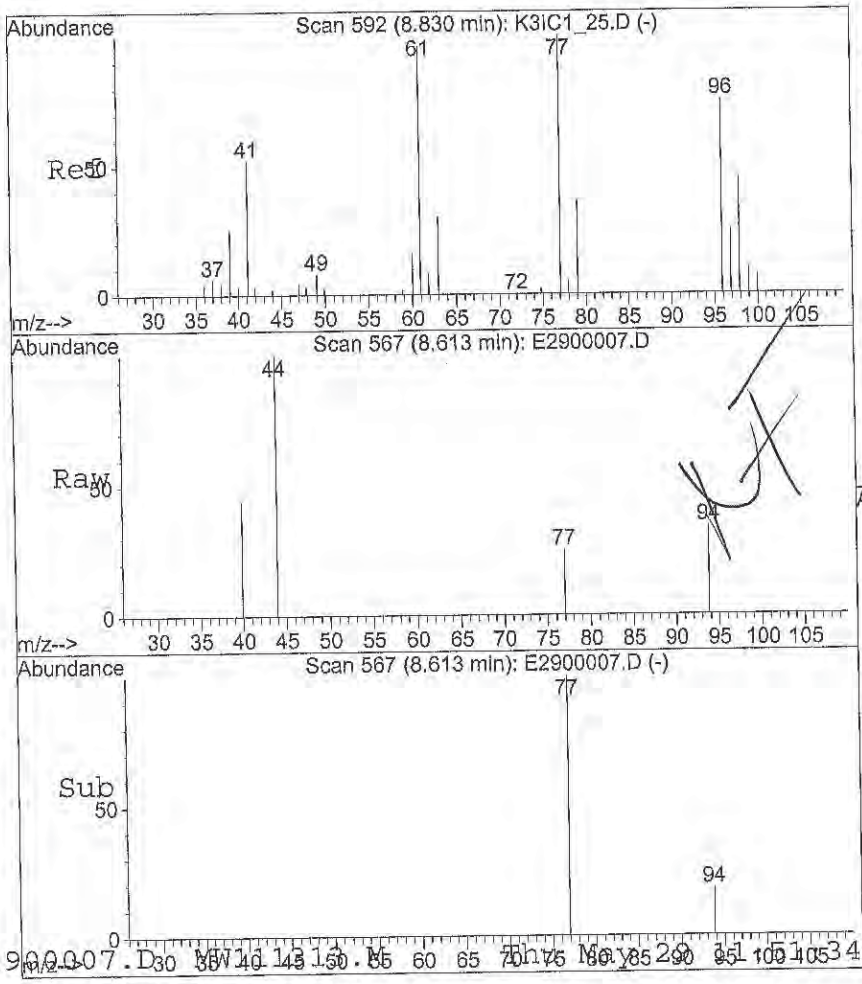


#15
(TBA) tert-Butanol
Concen: 5.40 ug/L
RT: 7.14 min Scan# 393
Delta R.T. 0.03 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 59 Resp: 1430

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

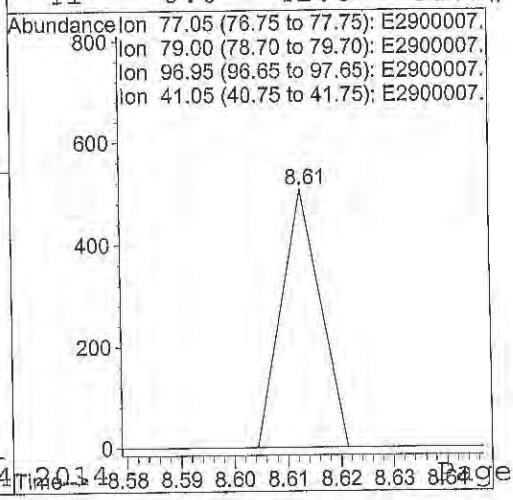


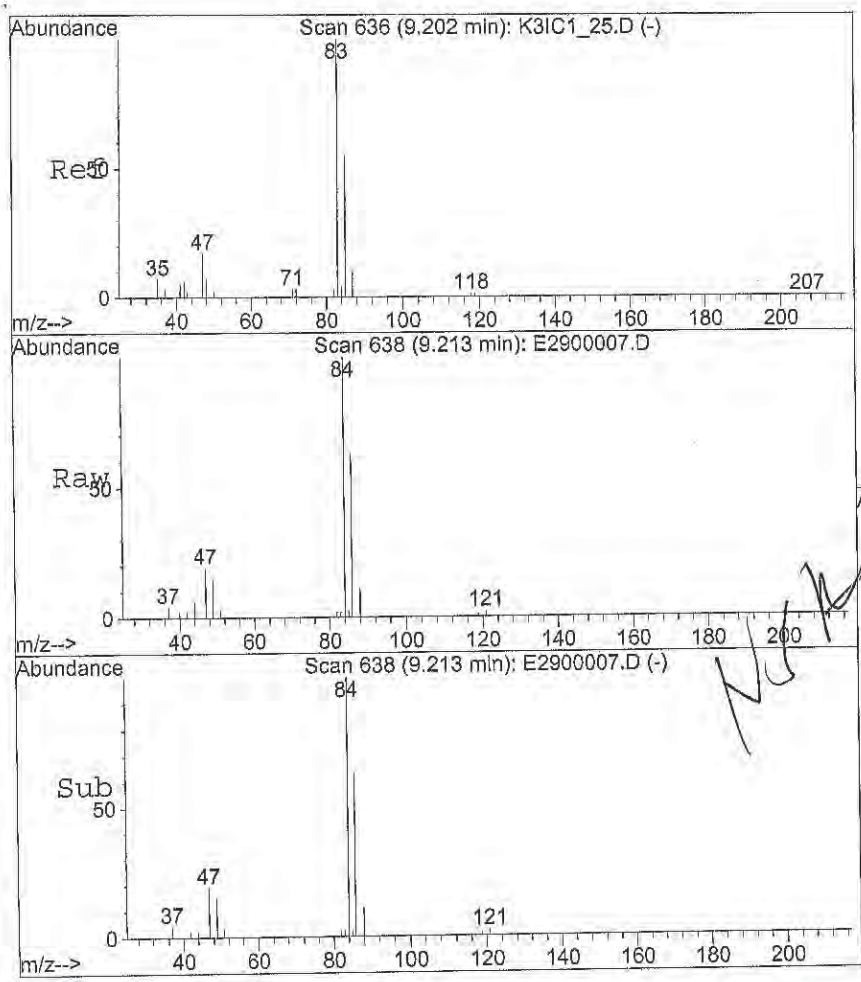


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.61 min Scan# 567
Delta R.T. -0.22 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 77 Resp: 257

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

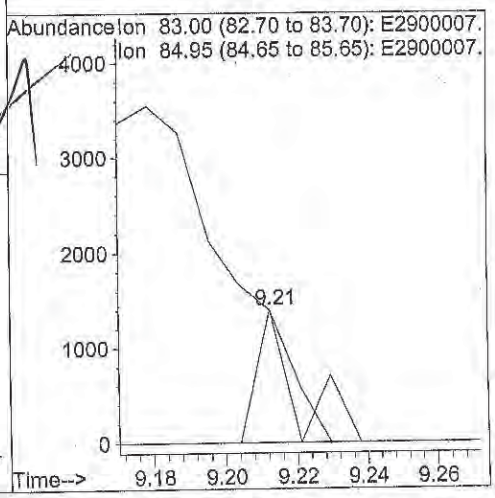


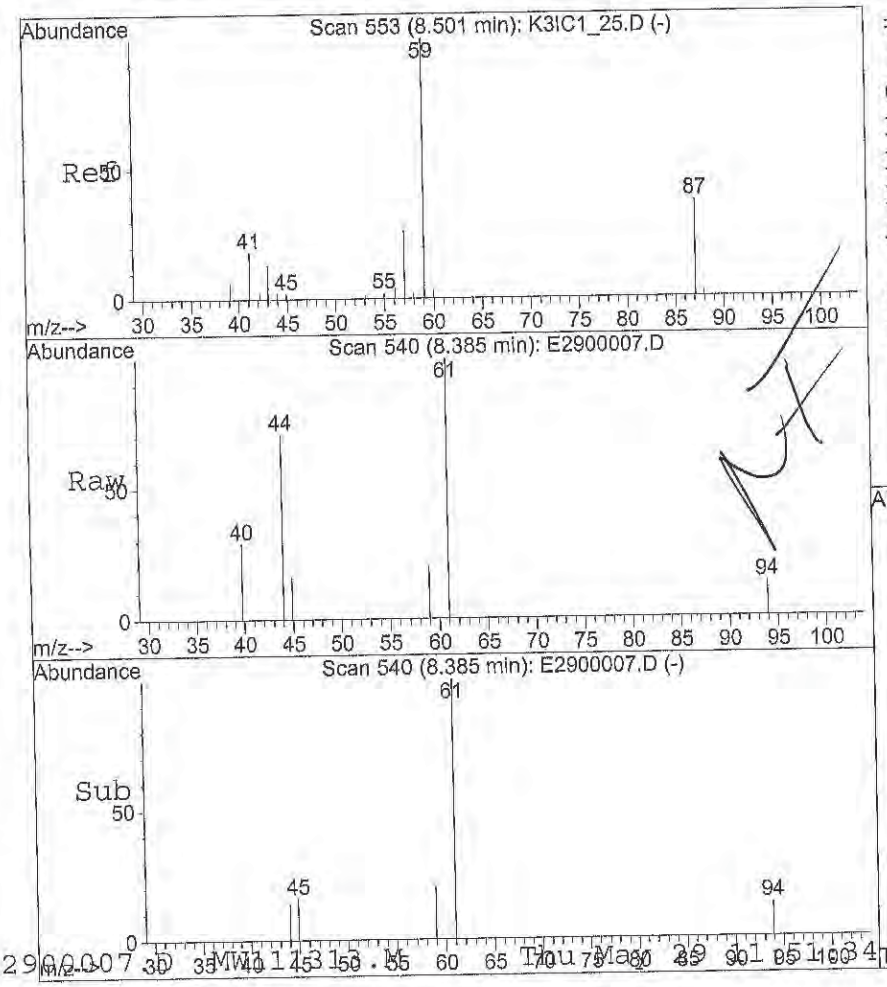


#24
Chloroform
Concen: 0.13 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 83 Resp: 1064

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

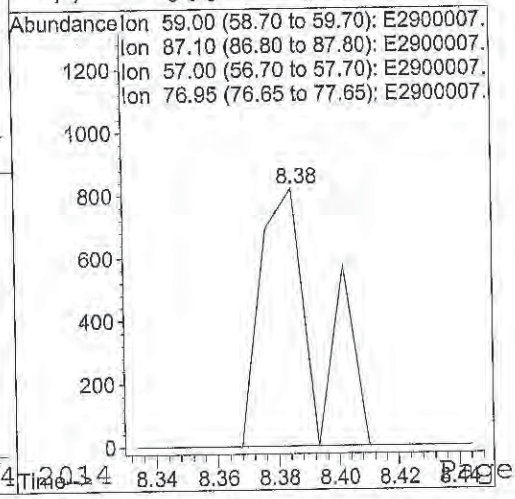


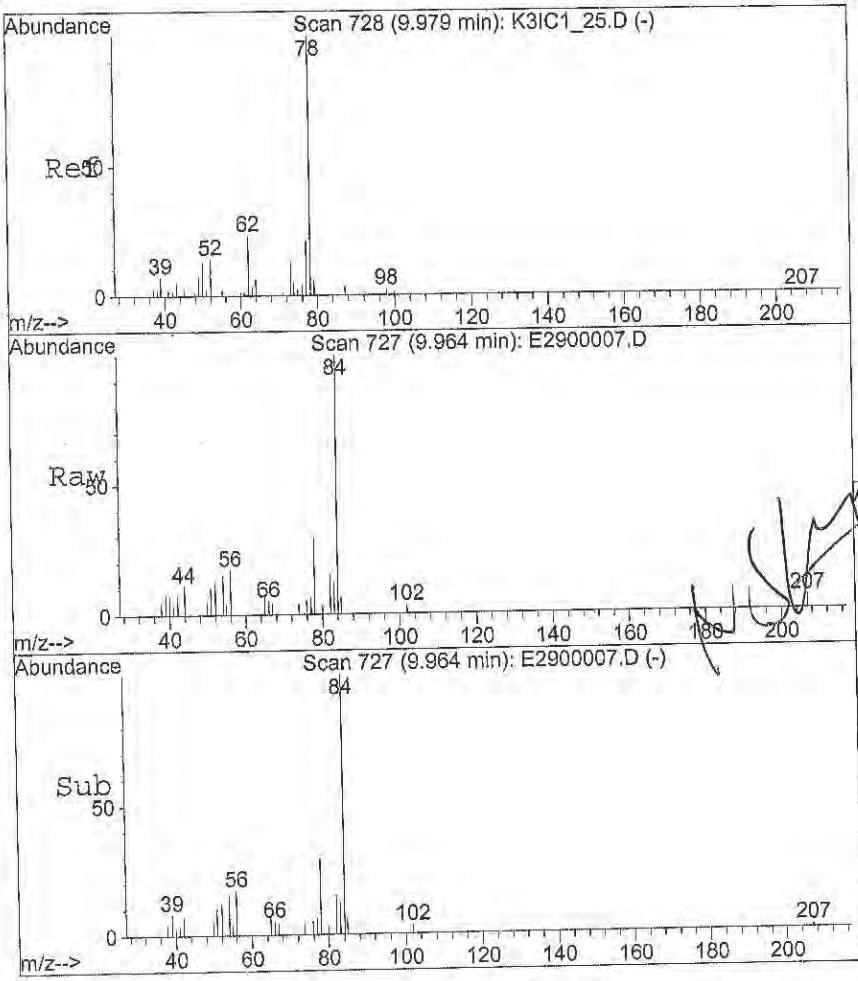


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.09 ug/L
RT: 8.38 min Scan# 540
Delta R.T. -0.12 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 59 Resp: 1057

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

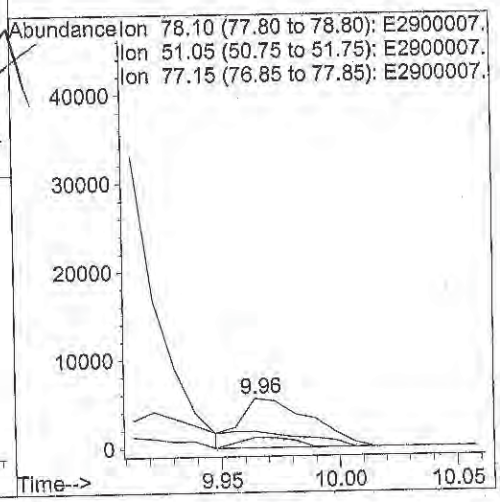


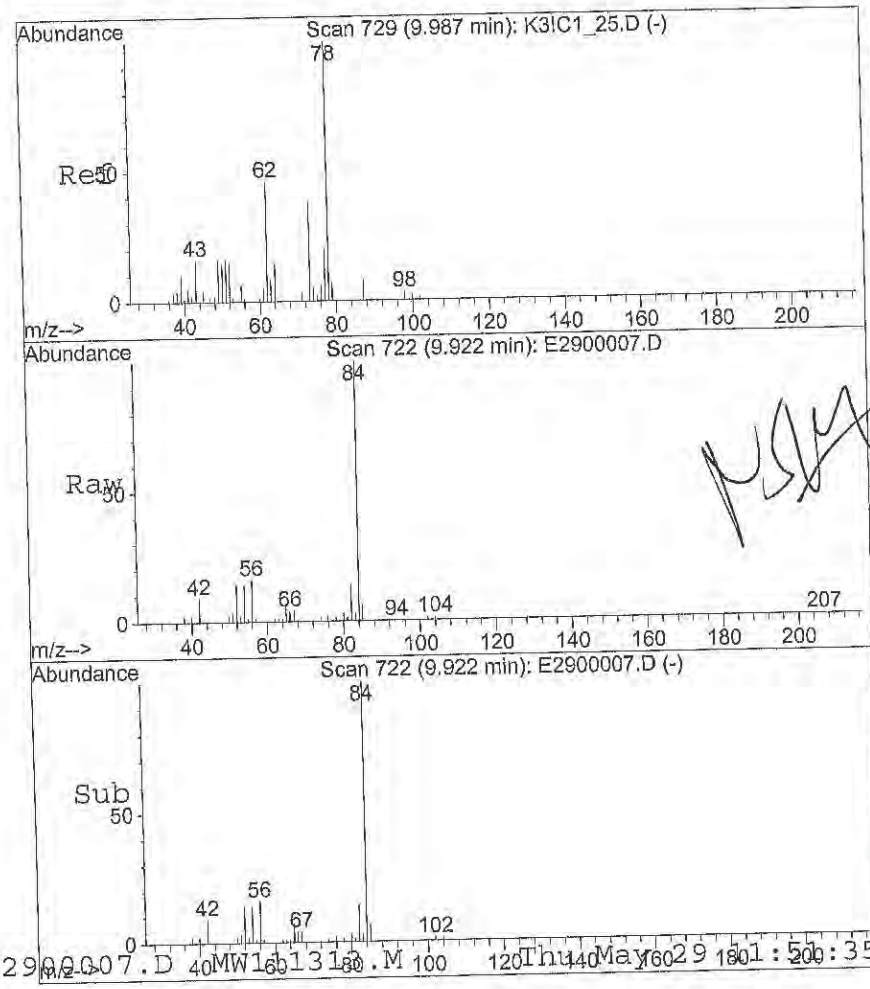


#31
Benzene
Concen: 0.77 ug/L
RT: 9.96 min Scan# 727
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 78 Resp: 11256

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	15.9	16.6	24.8#

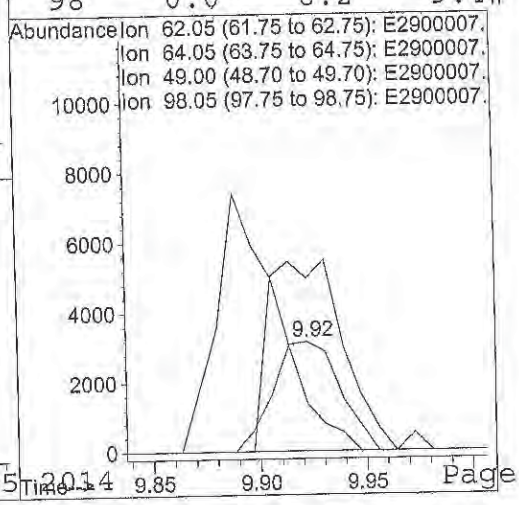


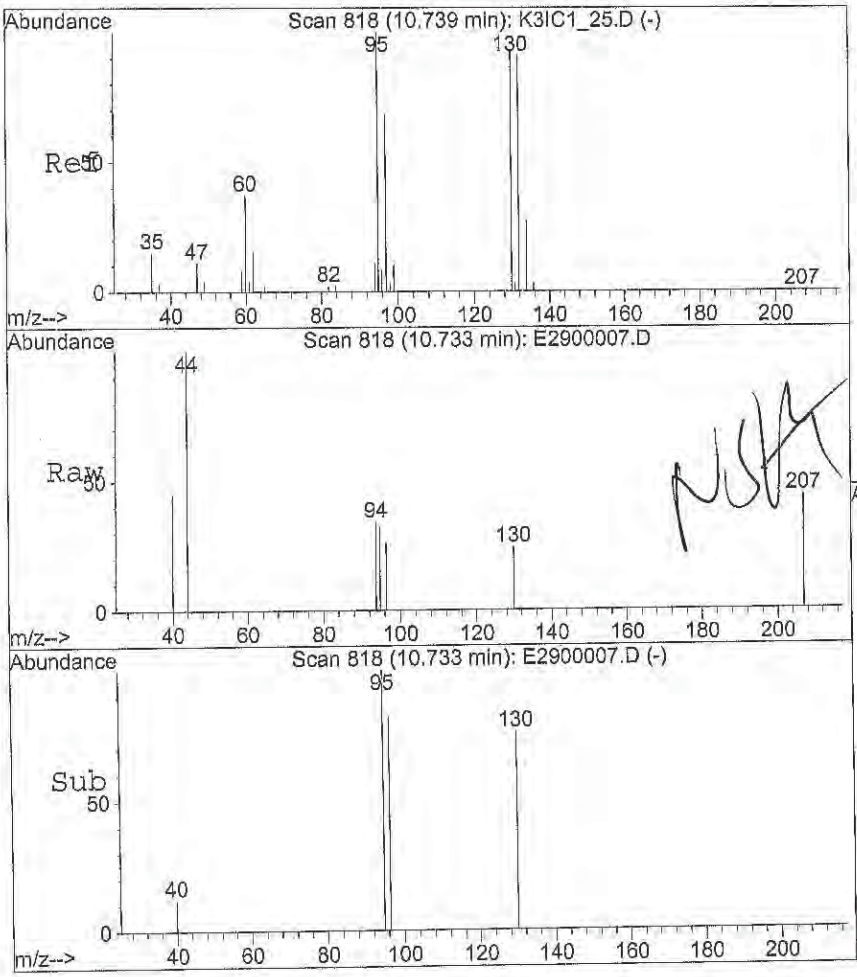


#32
1,2-Dichloroethane
Concen: 1.33 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.07 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 62 Resp: 6881

Ion	Ratio	Lower	Upper
62	100		
64	193.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

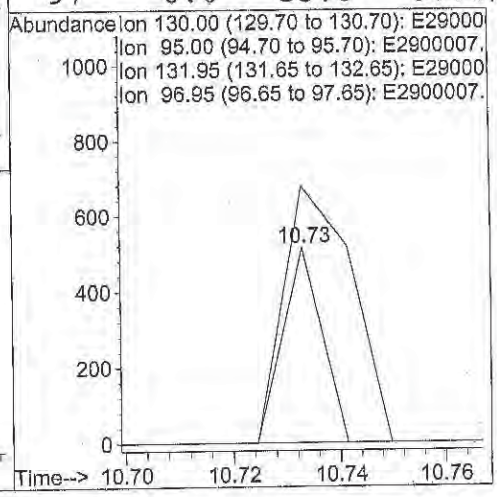


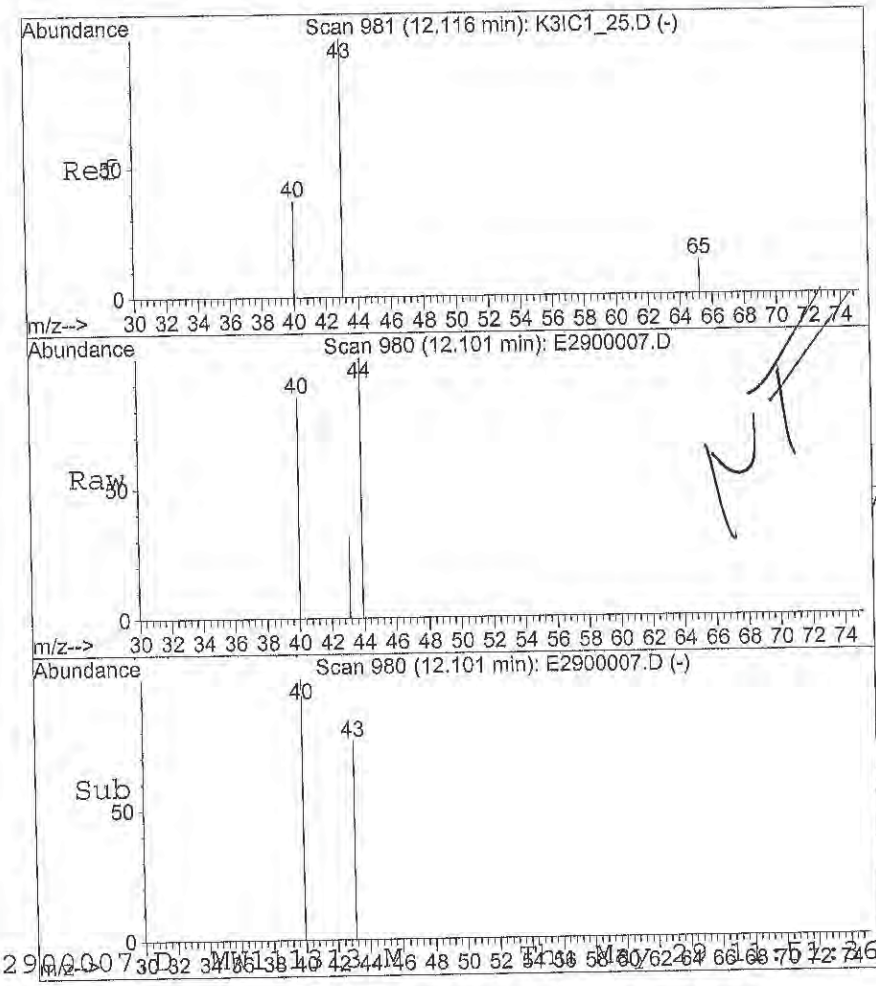


#33
Trichloroethene
Concen: 0.06 ug/L
RT: 10.73 min Scan# 818
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:130 Resp: 260

Ion	Ratio	Lower	Upper
130	100		
95	232.7	82.8	124.2#
132	0.0	77.4	116.2#
97	0.0	53.8	80.6#

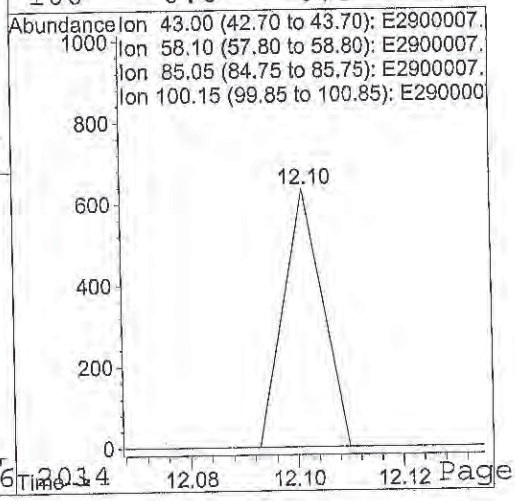


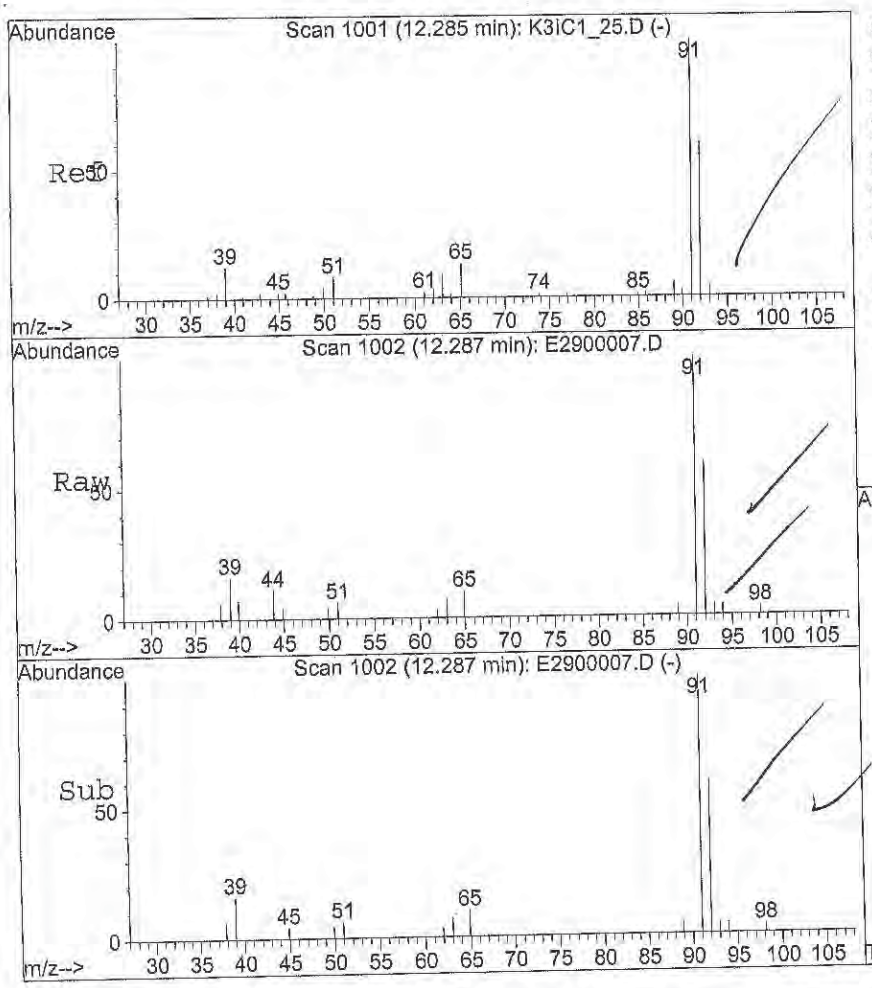


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.13 ug/L
RT: 12.10 min Scan# 980
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 43 Resp: 321

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

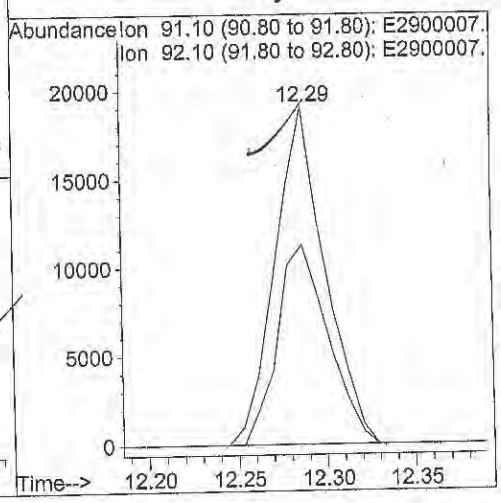


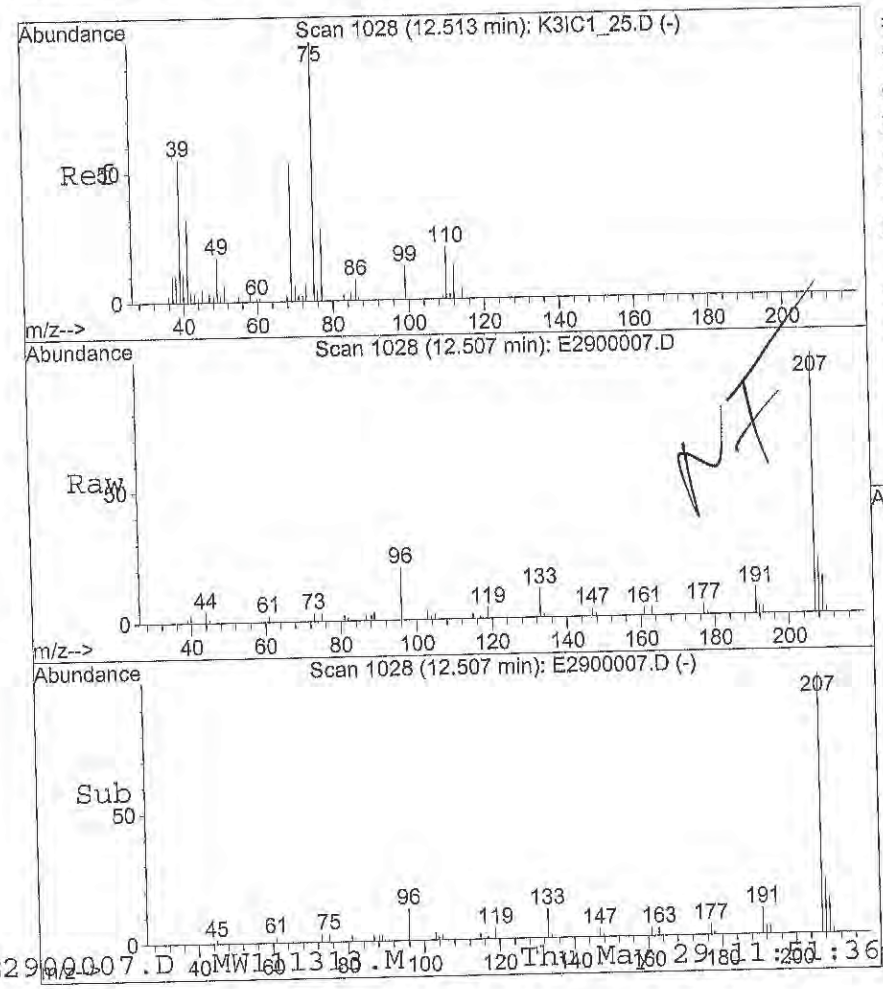


#41
Toluene
Concen: 2.18 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 91 Resp: 37091

Ion	Ratio	Lower	Upper
91	100		
92	60.1	47.4	71.0

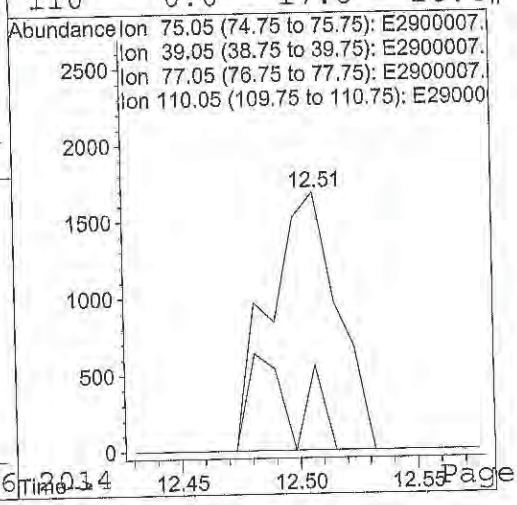


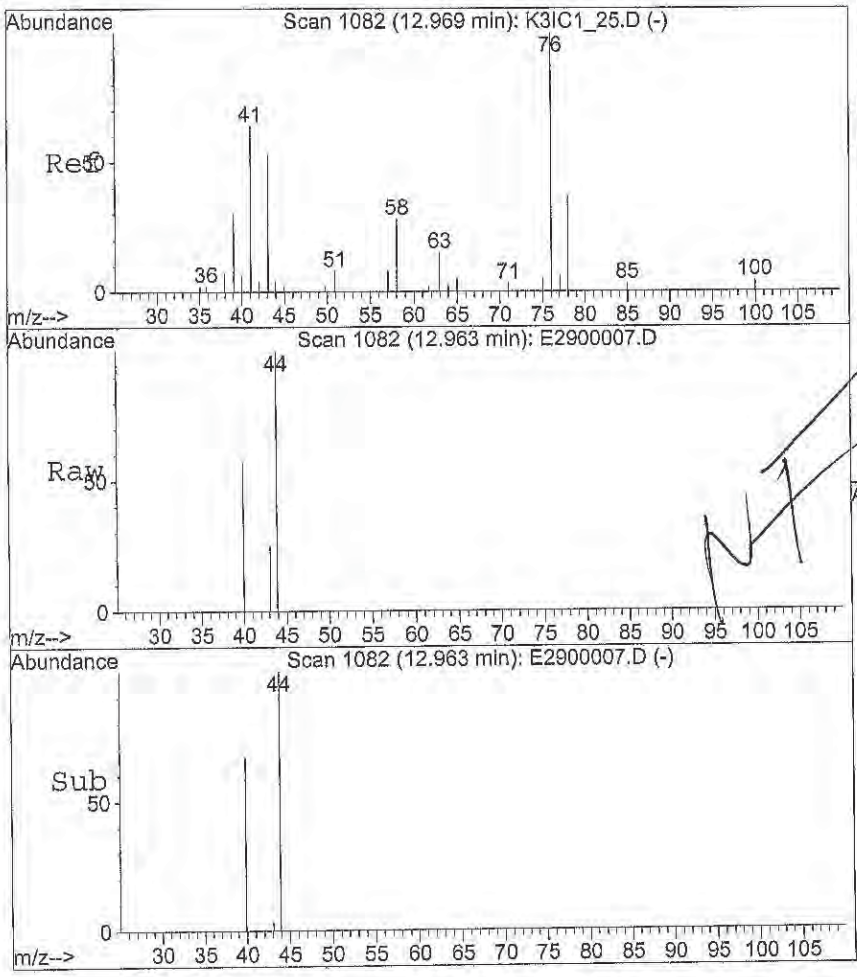


#42
trans-1,3-Dichloropropene
Concen: 0.60 ug/L
RT: 12.51 min Scan# 1028
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 75 Resp: 3365

Ion	Ratio	Lower	Upper
75	100		
39	0.0	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

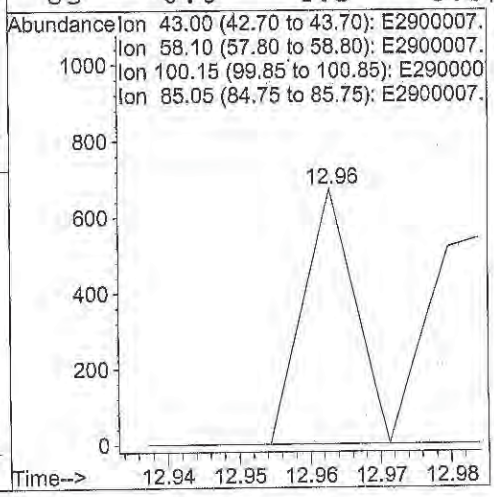


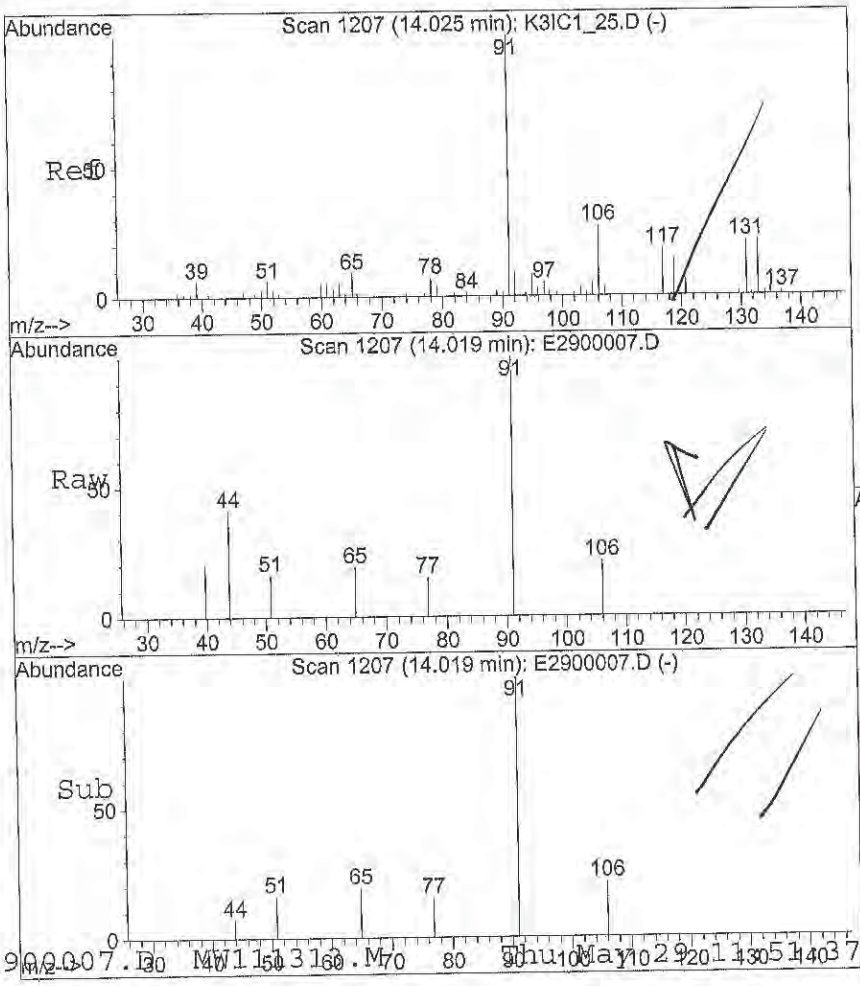


#46
2-Hexanone
Concen: 0.12 ug/L
RT: 12.96 min Scan# 1082
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 43 Resp: 341

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

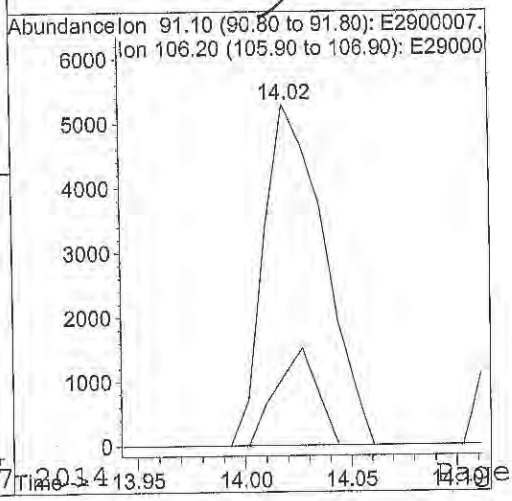


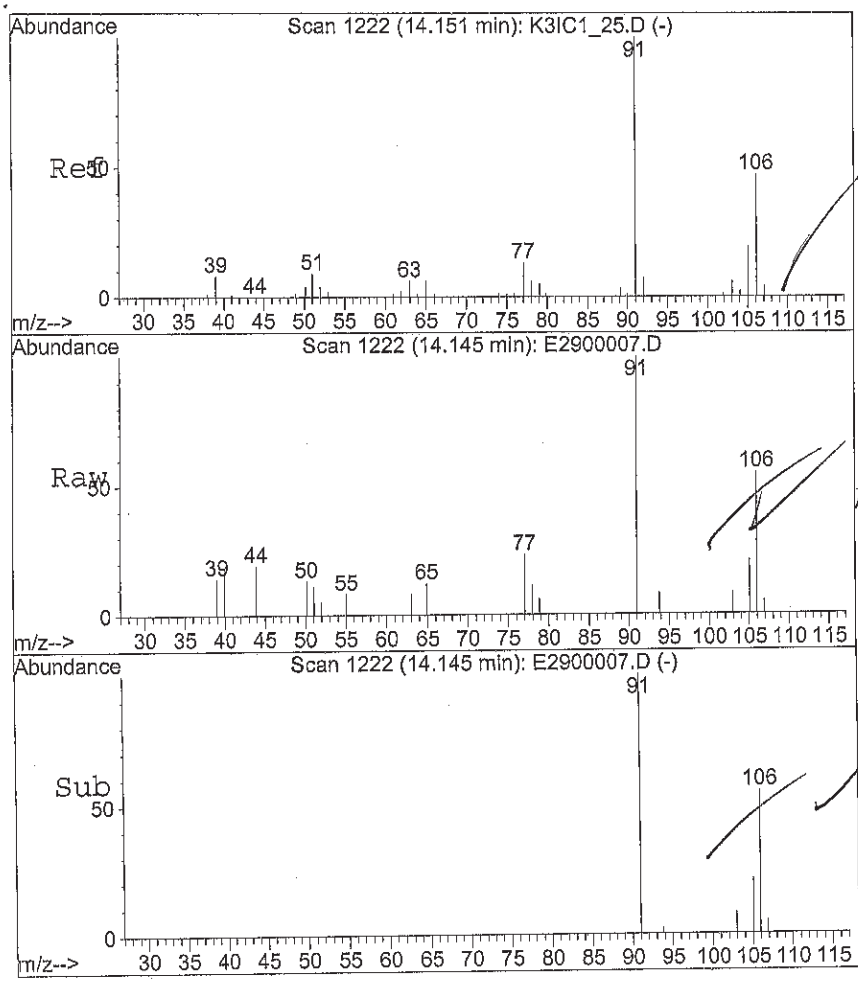


#51
Ethylbenzene
Concen: 0.54 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 91 Resp: 10427

Ion	Ratio	Lower	Upper
91	100		
106	19.4	23.5	35.3#

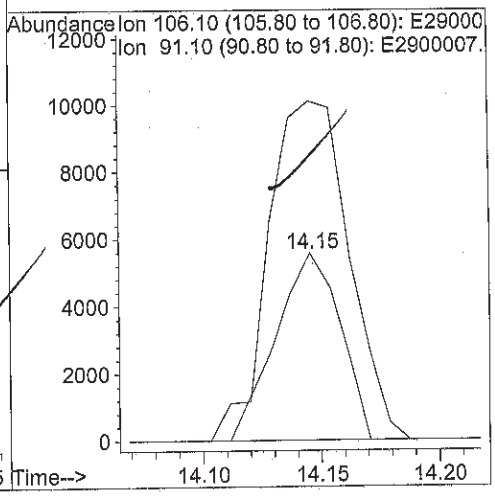


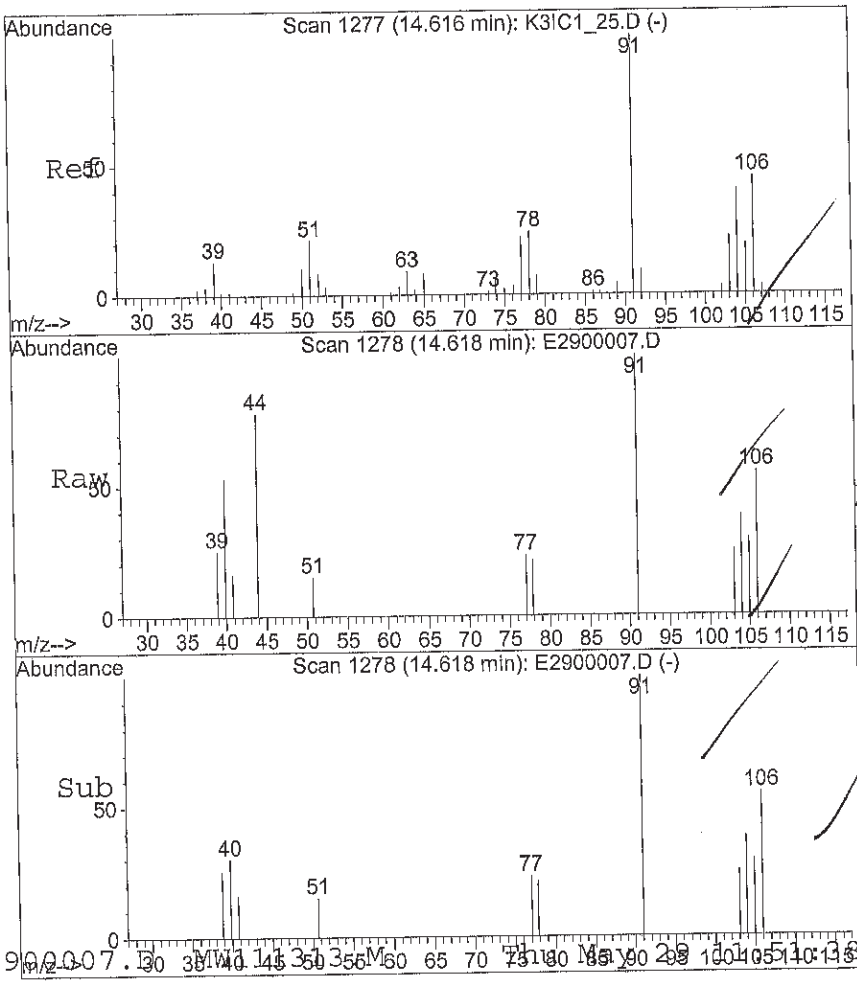


#52
m,p-Xylenes
Concen: 1.53 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:106 Resp: 10538

Ion	Ratio	Lower	Upper
106	100		
91	225.7	177.1	265.7

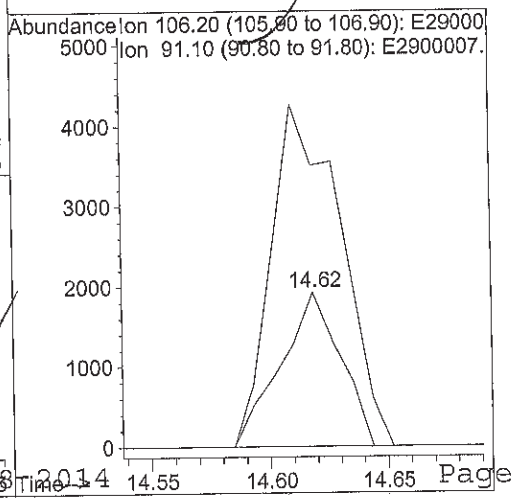


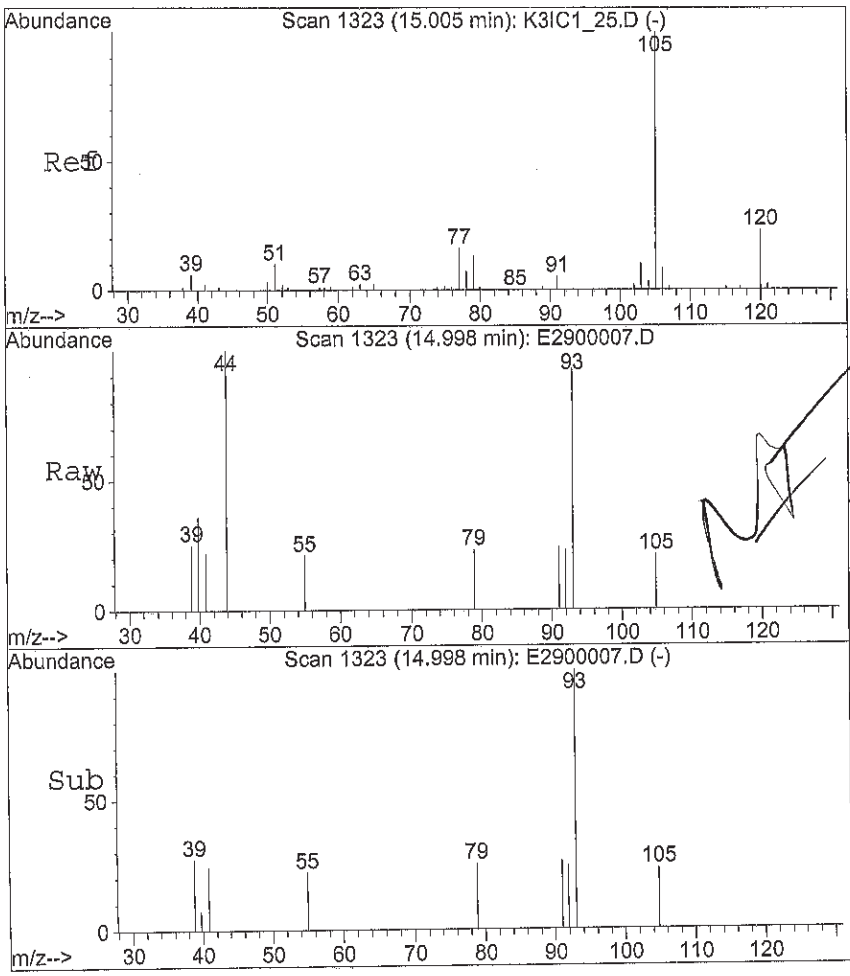


#53
o-Xylene
Concen: 0.50 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:106 Resp: 3375

Ion	Ratio	Lower	Upper
106	100		
91	258.4	179.0	268.6

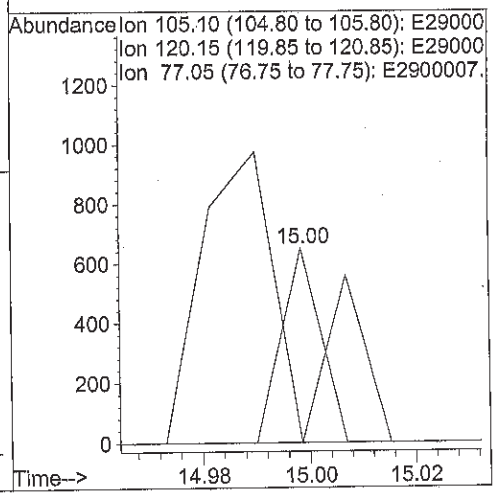


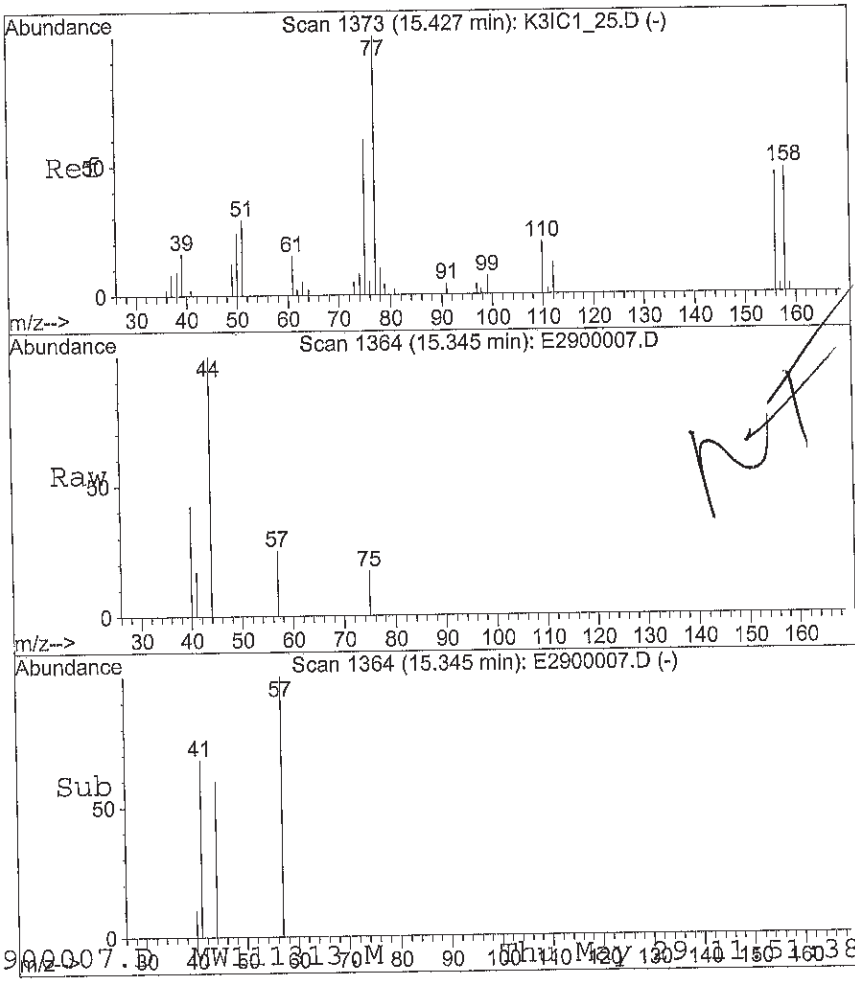


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:105 Resp: 329

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	357.8	13.1	19.7#

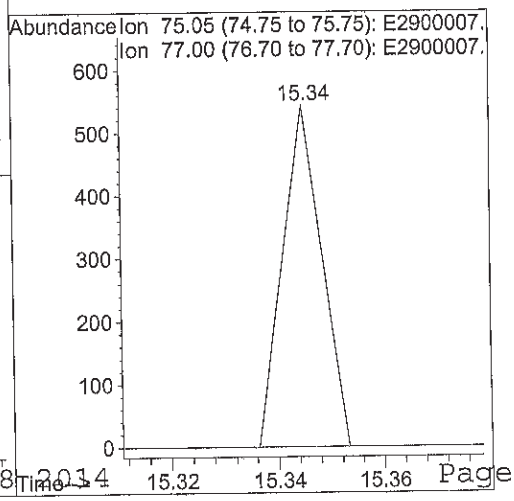


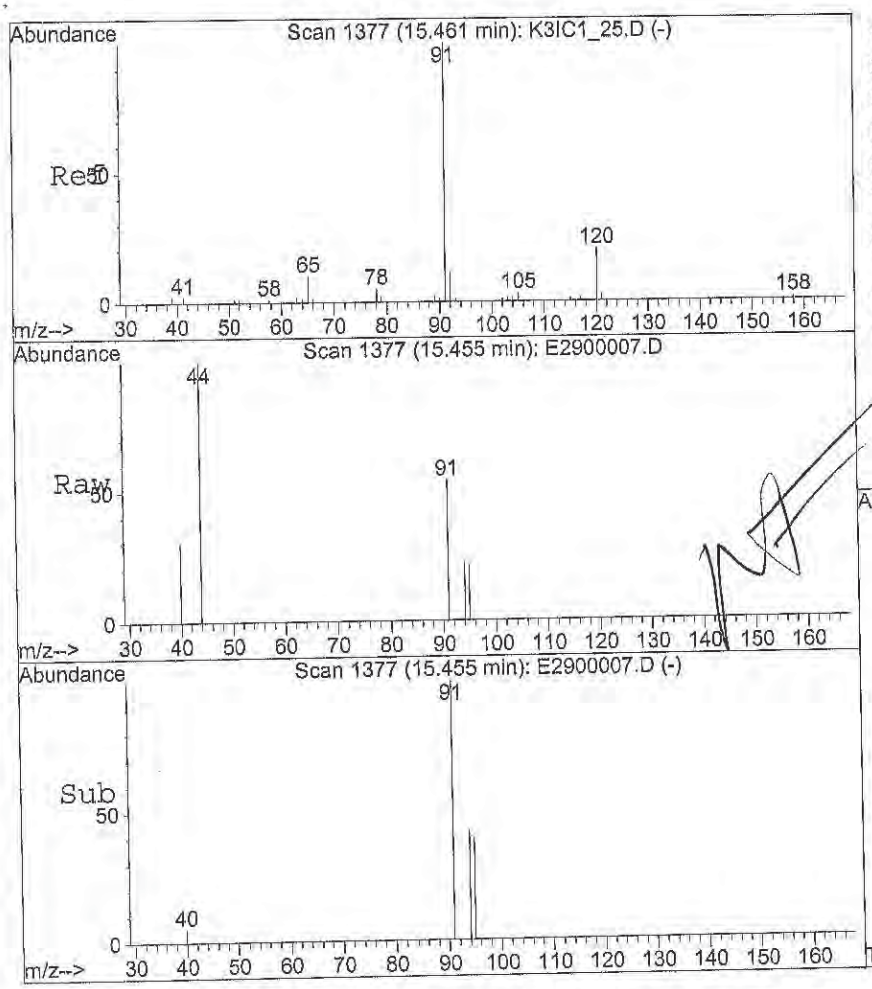


#57
1,2,3-Trichloropropane
Concen: 0.05 ug/L
RT: 15.34 min Scan# 1364
Delta R.T. -0.08 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 75 Resp: 275

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

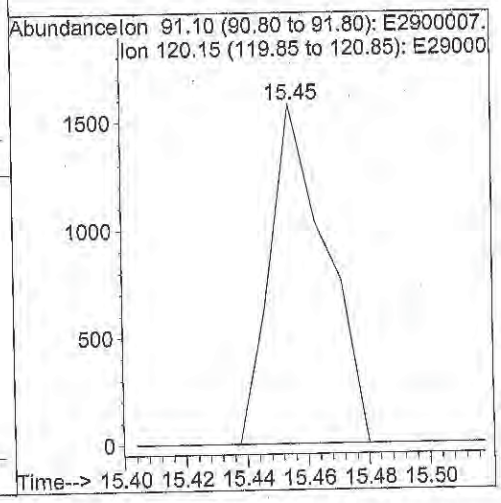


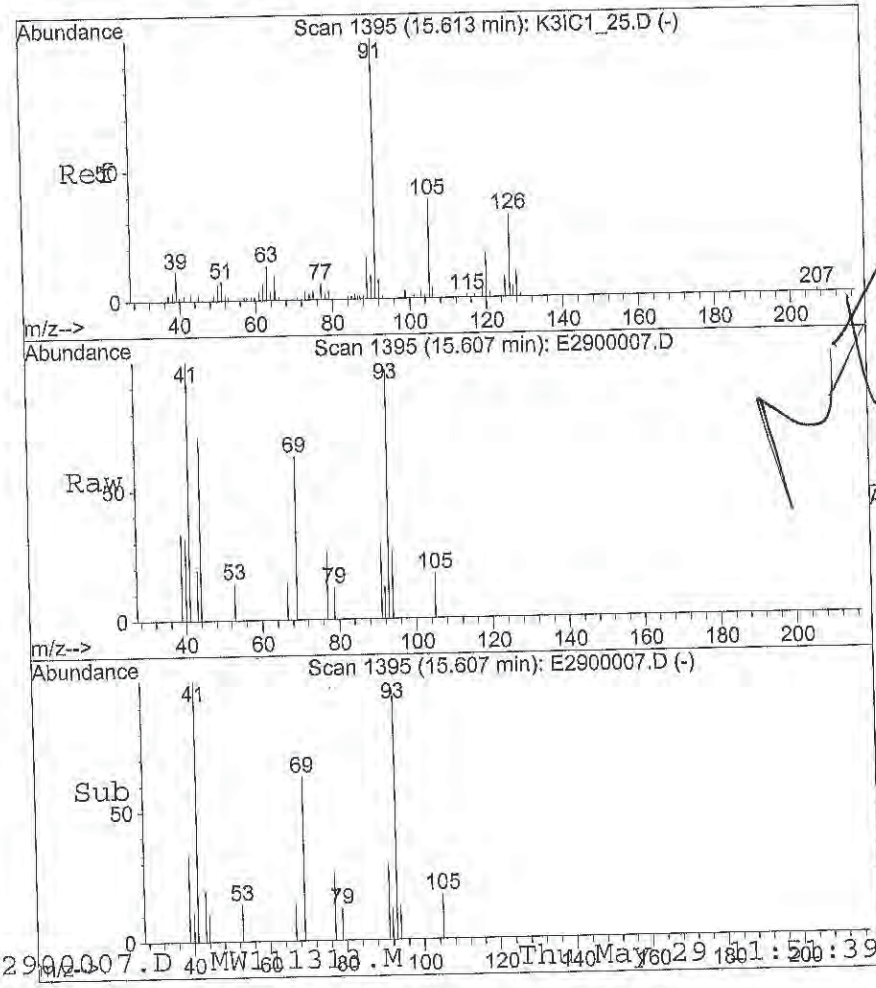


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 91 Resp: 2023

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

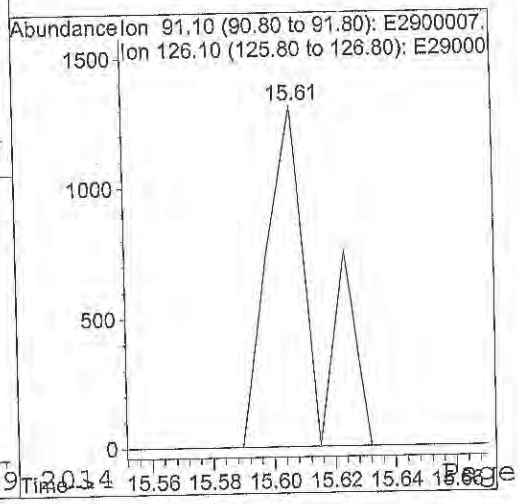


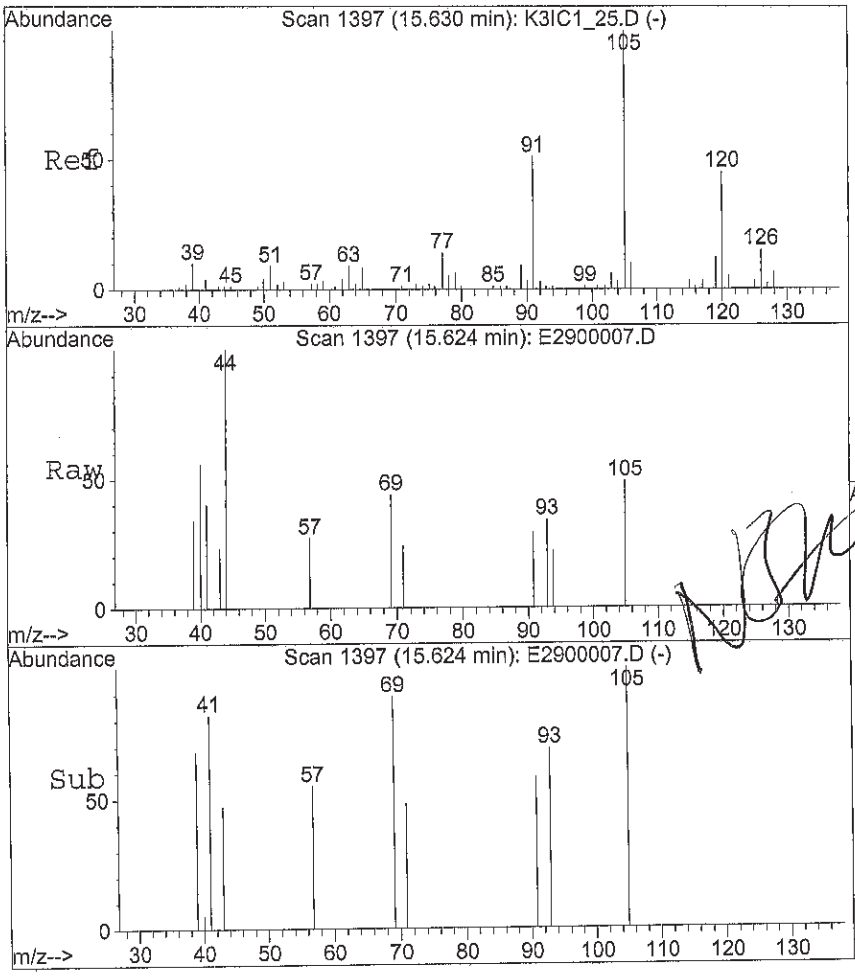


#63
2-Chlorotoluene
Concen: 0.08 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 91 Resp: 1425

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

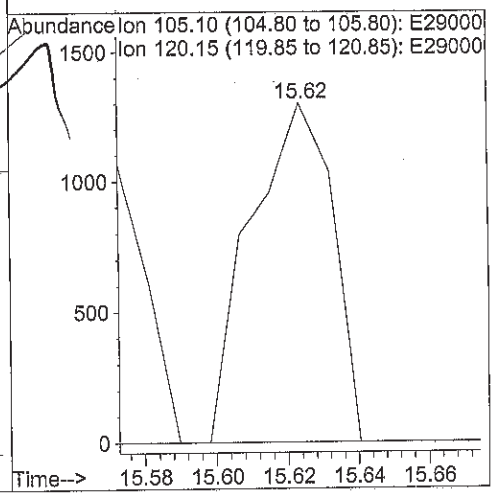


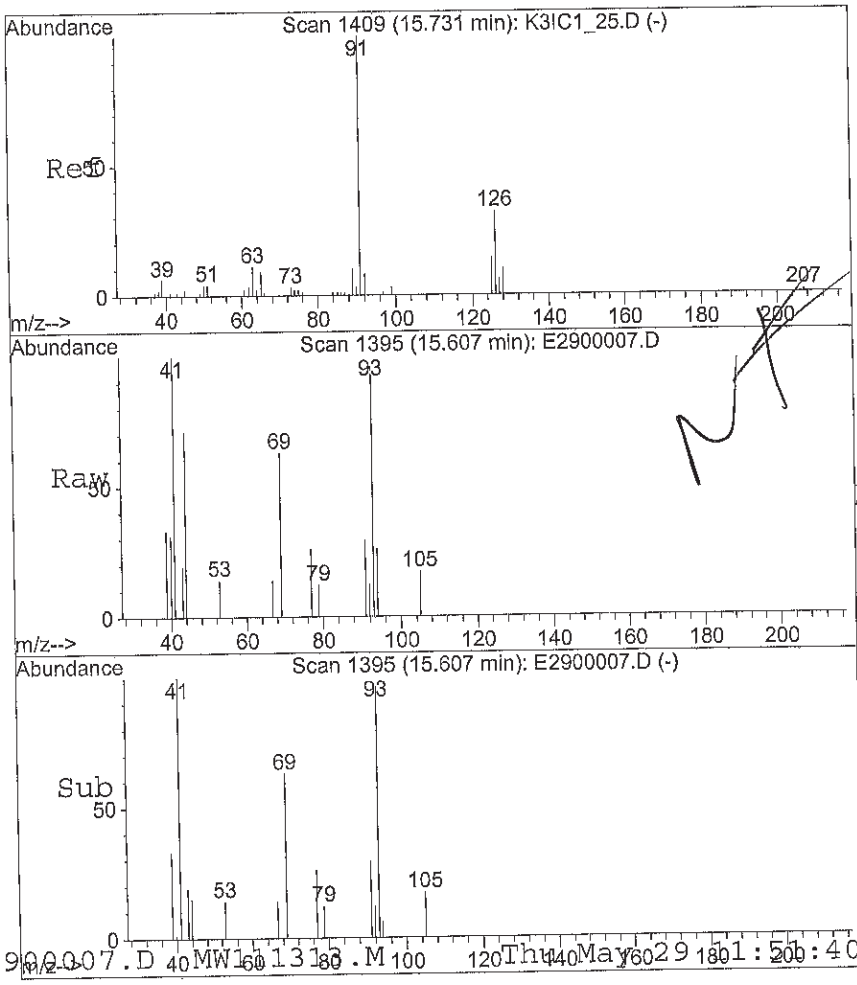


#64
1,3,5-Trimethylbenzene
Concen: 0.12 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:105 Resp: 2072

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

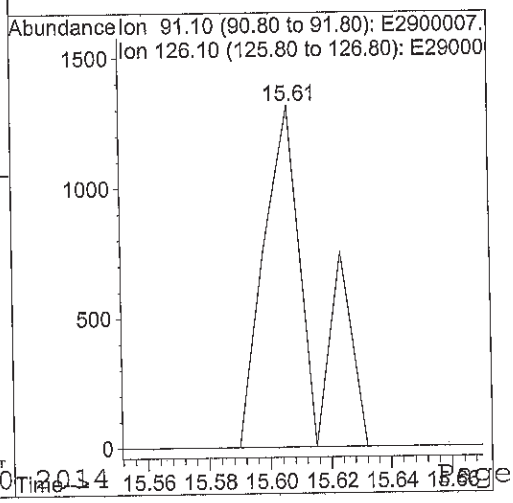


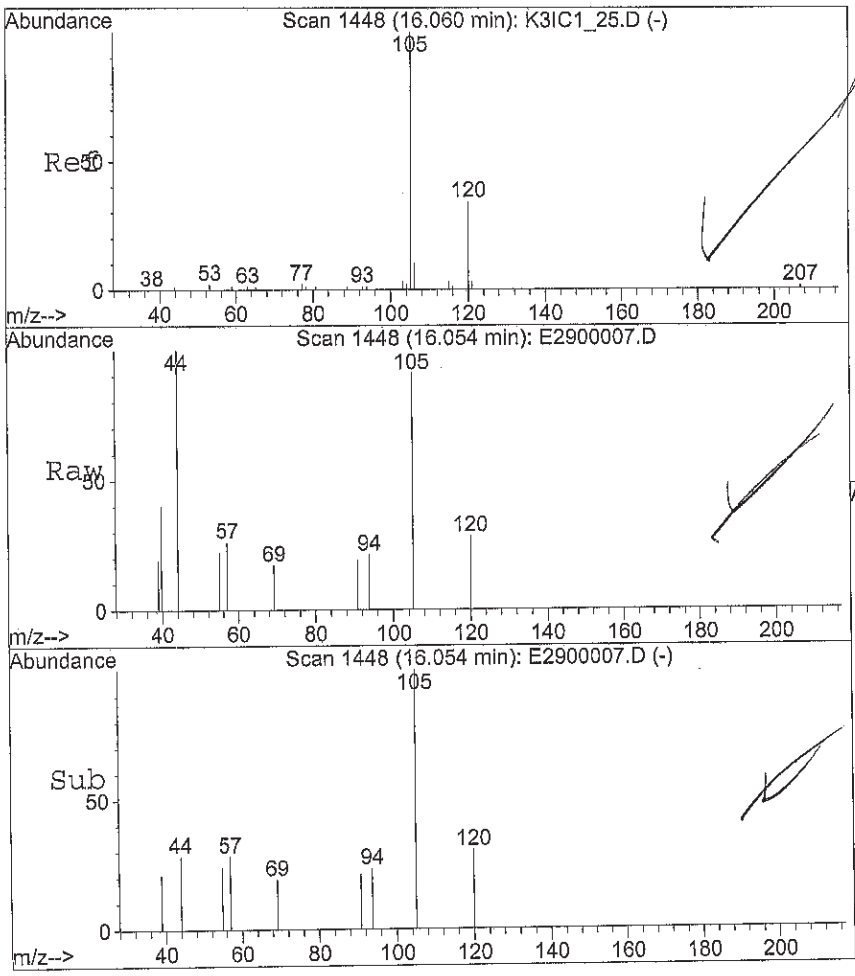


#65
4-Chlorotoluene
Concen: 0.09 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.12 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion: 91 Resp: 1425

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

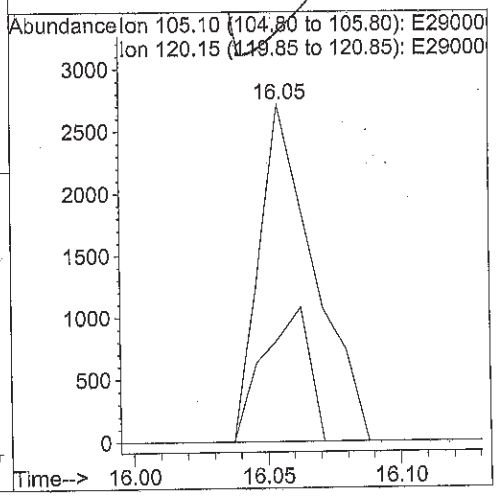


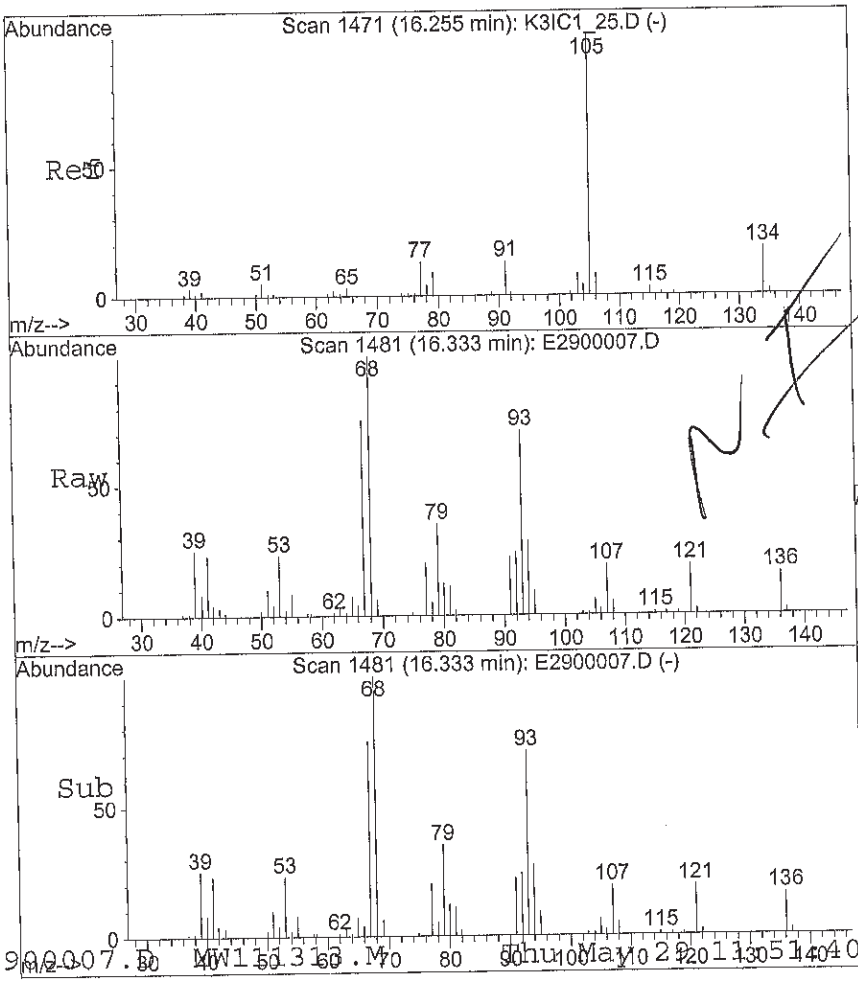


#67
1,2,4-Trimethylbenzene
Concen: 0.22 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:105 Resp: 3872

Ion	Ratio	Lower	Upper
105	100		
120	33.1	33.8	50.8#

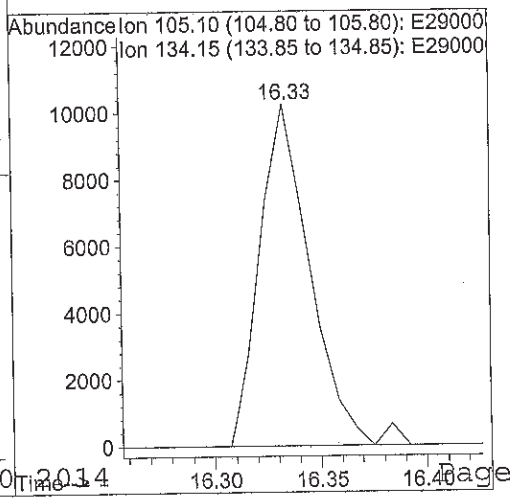


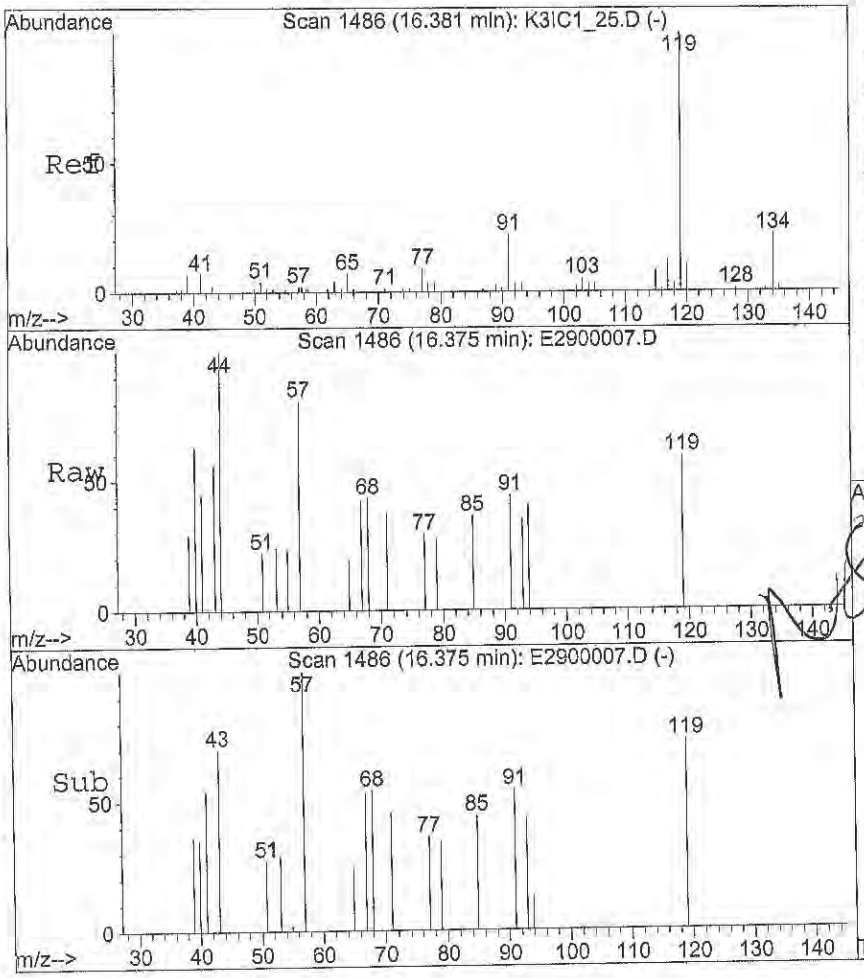


#68
sec-Butylbenzene
Concen: 0.73 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:105 Resp: 16654

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

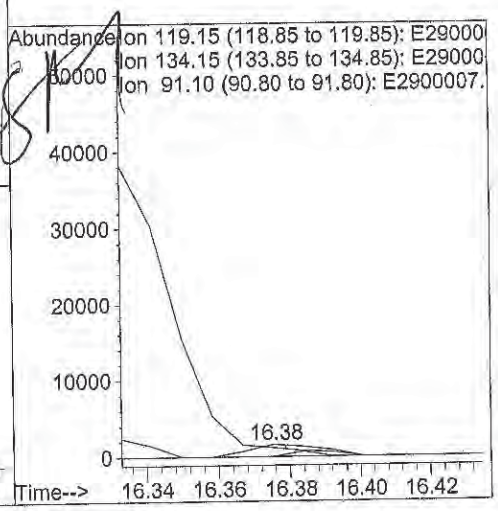




#69
p-Isopropyltoluene
Concen: 0.12 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2900007.D
Acq: 29 May 2014 11:13 am

Tgt Ion:119 Resp: 2184

Ion	Ratio	Lower	Upper
119	100		
134	15.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900007.D Vial: 6
Acq On : 29 May 2014 11:13 am Operator: DN
Sample : 3E42901-06 Inst : GC/MS Ins
Misc : 100cc SVL-526-SA5D-SV-7.5-8.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 11:52 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1551642	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1247708	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	679192	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	437808	10.85 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.80%		
3) Chloroform-d (SU6)	9.18	84	704166	12.16 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.28%		
4) Methylene Chloride-d2 (SU5	7.06	86	389124	11.50 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.00%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	431713	15.65 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 125.20%#		
6) Benzene-d6 (SU7)	9.92	84	1407871	11.56 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.48%		
8) Toluene-d8 (SU3)	12.20	98	1362829	11.51 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.08%		
9) 4-Bromofluorobenzene (SU4)	15.23	95	709659	14.52 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 116.16%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

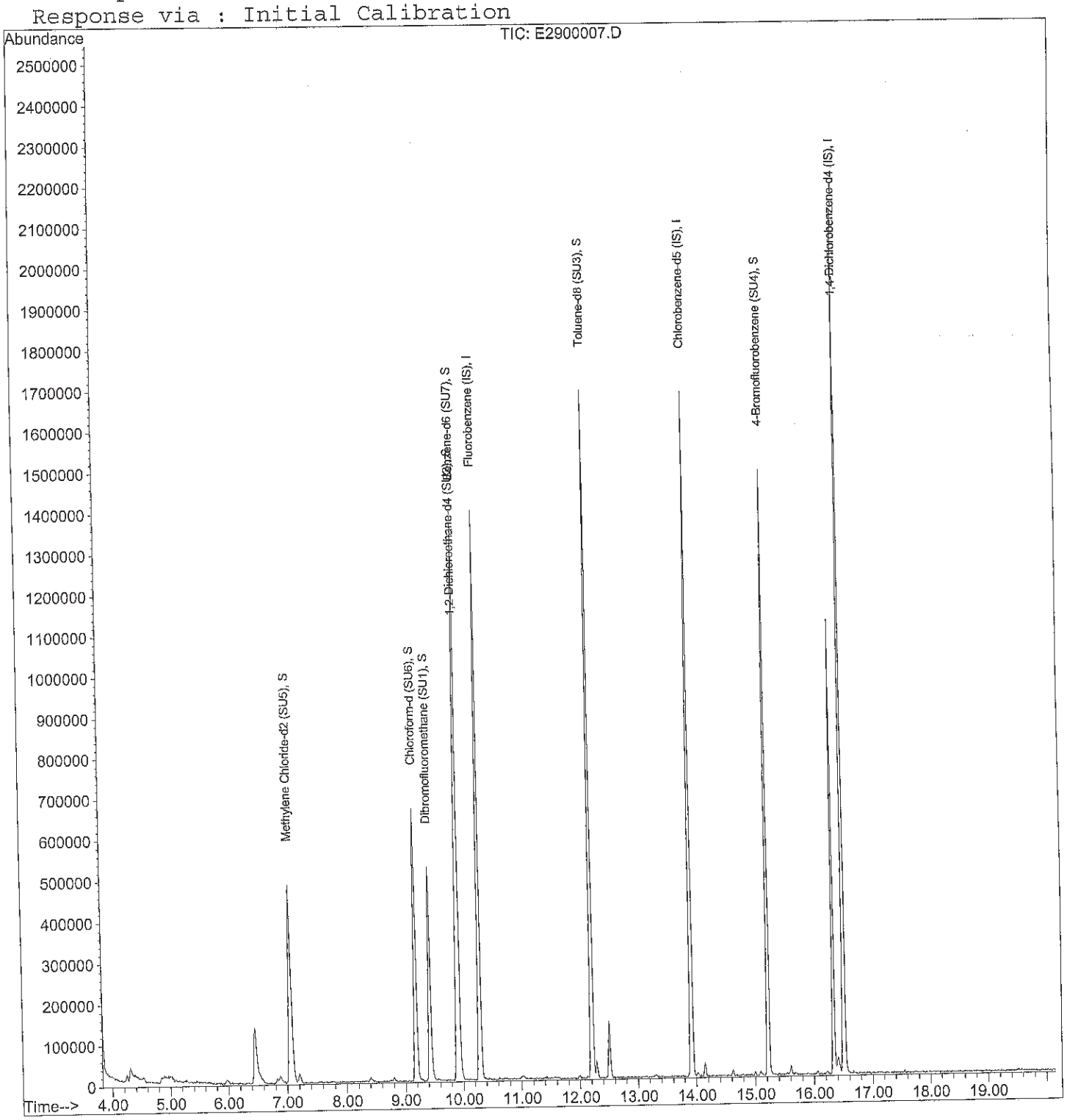
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900007.D
Acq On : 29 May 2014 11:13 am
Sample : 3E42901-06
Misc : 100cc SVL-526-SA5D-SV-7.5-8.5
MS Integration Params: rteint.p
Quant Time: May 29 11:52 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900008.D Vial: 7
Acq On : 29 May 2014 11:42 am Operator: DN
Sample : 3E42901-07 Inst : GC/MS Ins
Misc : 100cc SVL-530-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 12:04 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

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Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1603103	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1279952	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	698801	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	442263	11.06 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 88.48%					
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	431768	11.36 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 90.88%					
39) Toluene-d8 (SU3)	12.20	98	1402626	11.75 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 94.00%					
58) 4-Bromofluorobenzene (SU4)	15.23	95	702303	13.42 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 107.36%					

Target Compounds					Qvalue
4) Chloromethane	4.40	50	2526	-0.28 ~~ug/L #~~ PM	41
6) Bromomethane	5.09	96	333	-1.59 ~~ug/L #~~	1
7) Chloroethane	5.20	64	1371	1.71 ~~ug/L~~	93
11) Acetone	6.47	58	2322	180.01 ~~ug/L #~~	47
12) (IPA) Leak Check Compound	6.46	45	259542	1347.32 ~~ug/L #~~ BM	83
13) Carbon disulfide	6.82	76	339	0.03 ~~ug/L #~~	76
14) Methylene Chloride	7.05	84	6217	1.41 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.13	59	970	3.55 ~~ug/L #~~	77
20) 2,2-Dichloropropane	8.90	77	269	0.04 ~~ug/L #~~ BM	36
22) (DIPE) Diisopropyl Ether	8.01	45	301	0.02 ~~ug/L #~~	48
24) Chloroform	9.20	83	2201	0.26 ~~ug/L #~~	18
31) Benzene	9.97	78	392	0.03 ~~ug/L #~~	57
32) 1,2-Dichloroethane	9.92	62	6837	1.28 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7219	2.83 ~~ug/L #~~	100
41) Toluene	12.29	91	2908	0.17 ug/L #0.0034	55
46) 2-Hexanone	12.81	43	317	0.11 ~~ug/L #~~	37
51) Ethylbenzene	14.15	91	2819	0.14 ~~ug/L #~~	99
52) m,p-Xylenes	14.15	106	815	0.12 ug/L #0.0024	23
54) Styrene	14.64	104	1516	-0.72 ~~ug/L #~~ BM	52
56) Isopropylbenzene	15.24	105	817	0.04 ~~ug/L #~~	1
62) n-Propylbenzene	15.60	91	262	0.01 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.60	91	262	0.02 ~~ug/L #~~	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900008.D Vial: 7
Acq On : 29 May 2014 11:42 am Operator: DN
Sample : 3E42901-07 Inst : GC/MS Ins
Misc : 100cc SVL-530-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 12:04 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

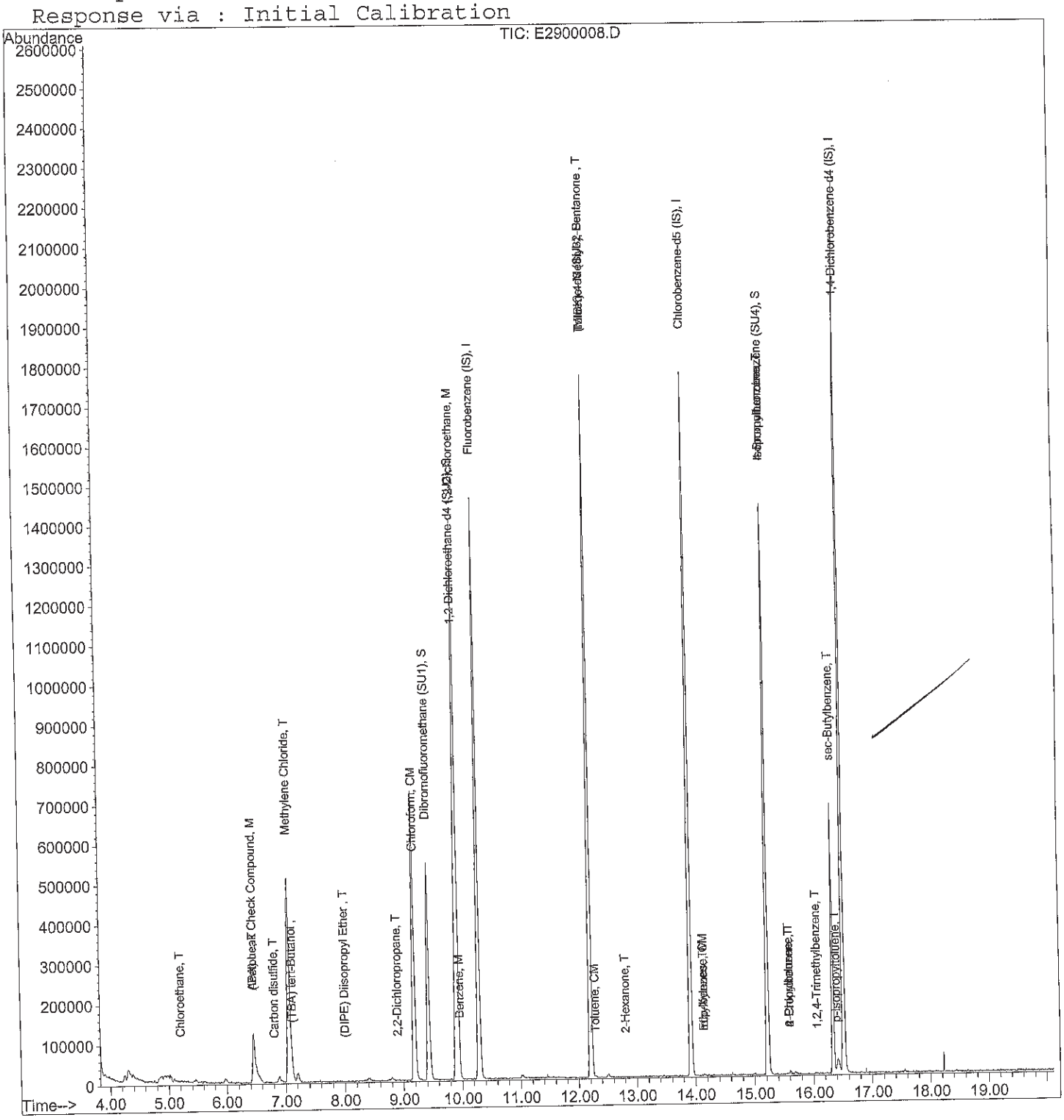
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
65) 4-Chlorotoluene	15.60	91	262	0.02 ~~ug/L #~~	44
67) 1,2,4-Trimethylbenzene	16.06	105	343	0.02 ~~ug/L #~~	33
68) sec-Butylbenzene	16.33	105	10905	0.46 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	2011	0.11 ug/L #	52

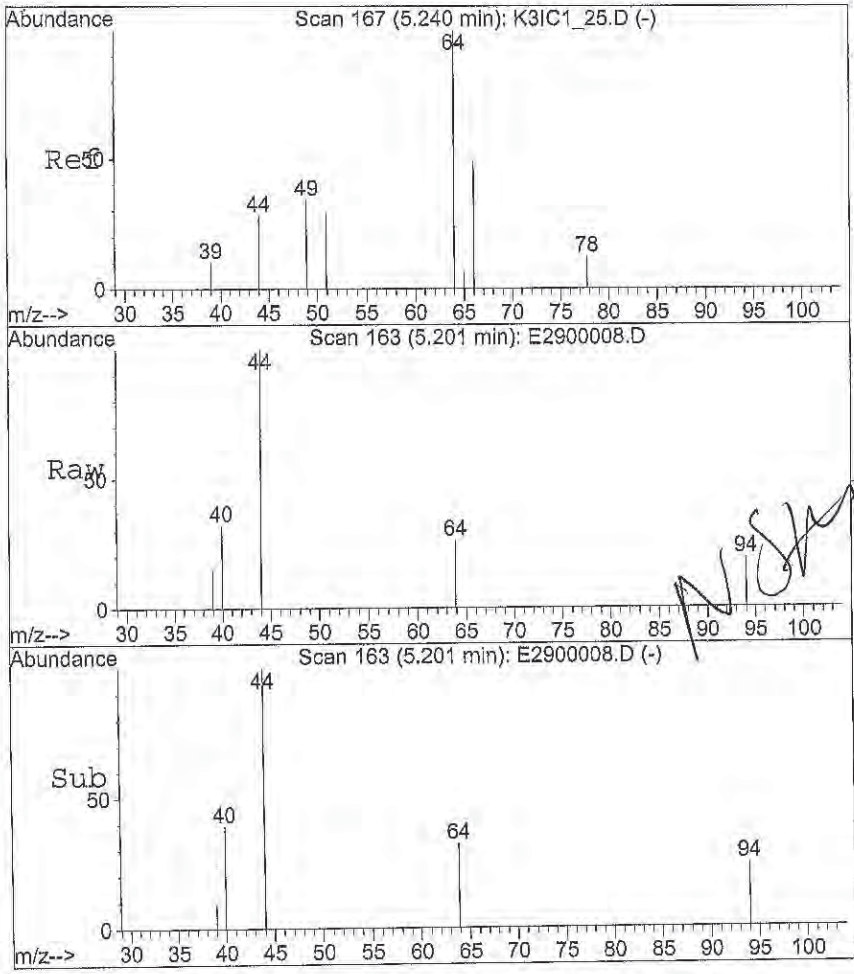
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900008.D Vial: 7
Acq On : 29 May 2014 11:42 am Operator: DN
Sample : 3E42901-07 Inst : GC/MS Ins
Misc : 100cc SVL-530-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 12:04 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

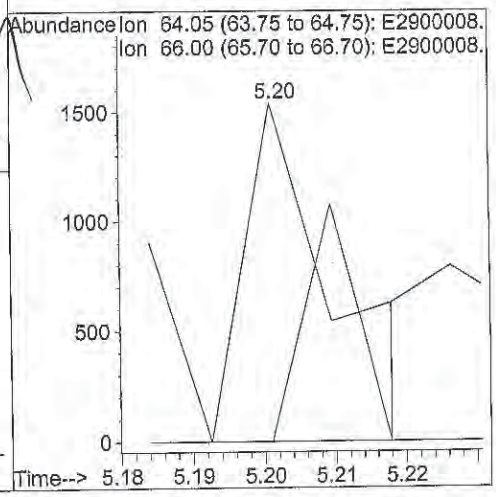


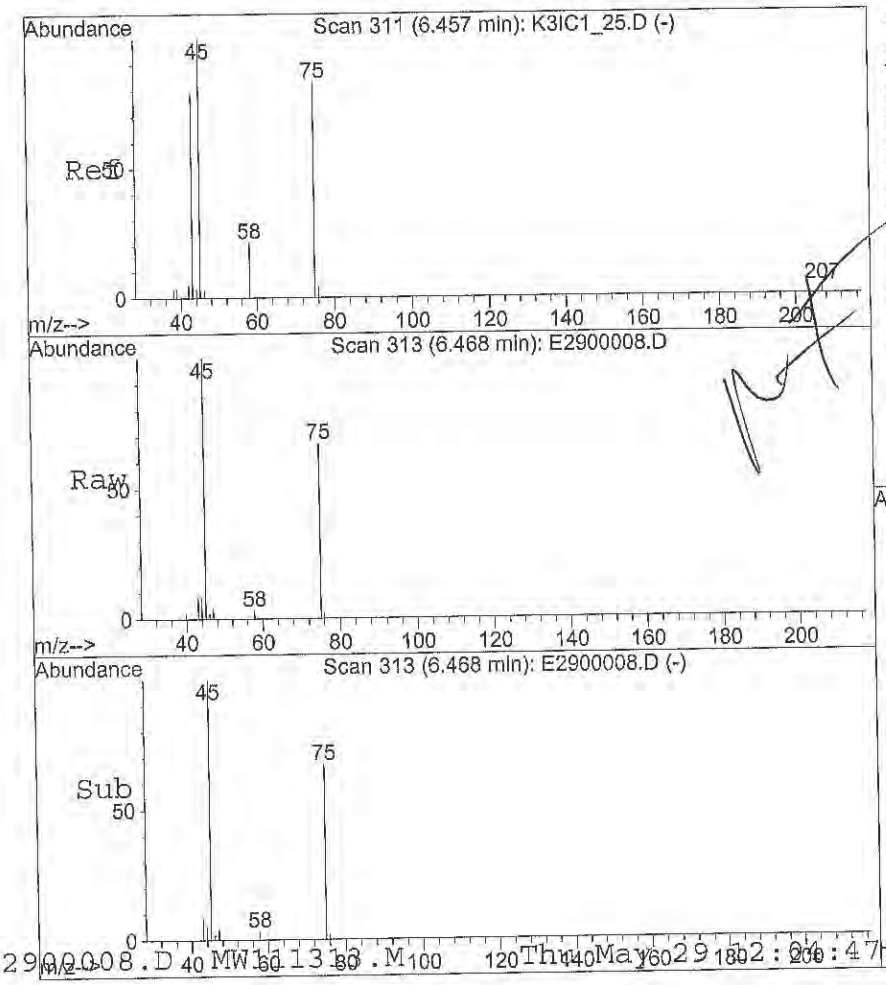


#7
Chloroethane
Concen: 1.71 ug/L
RT: 5.20 min Scan# 163
Delta R.T. -0.04 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 64 Resp: 1371

Ion	Ratio	Lower	Upper
64	100		
66	39.7	35.4	53.0

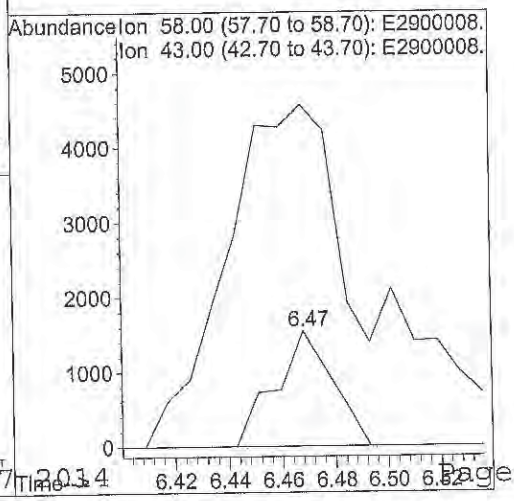


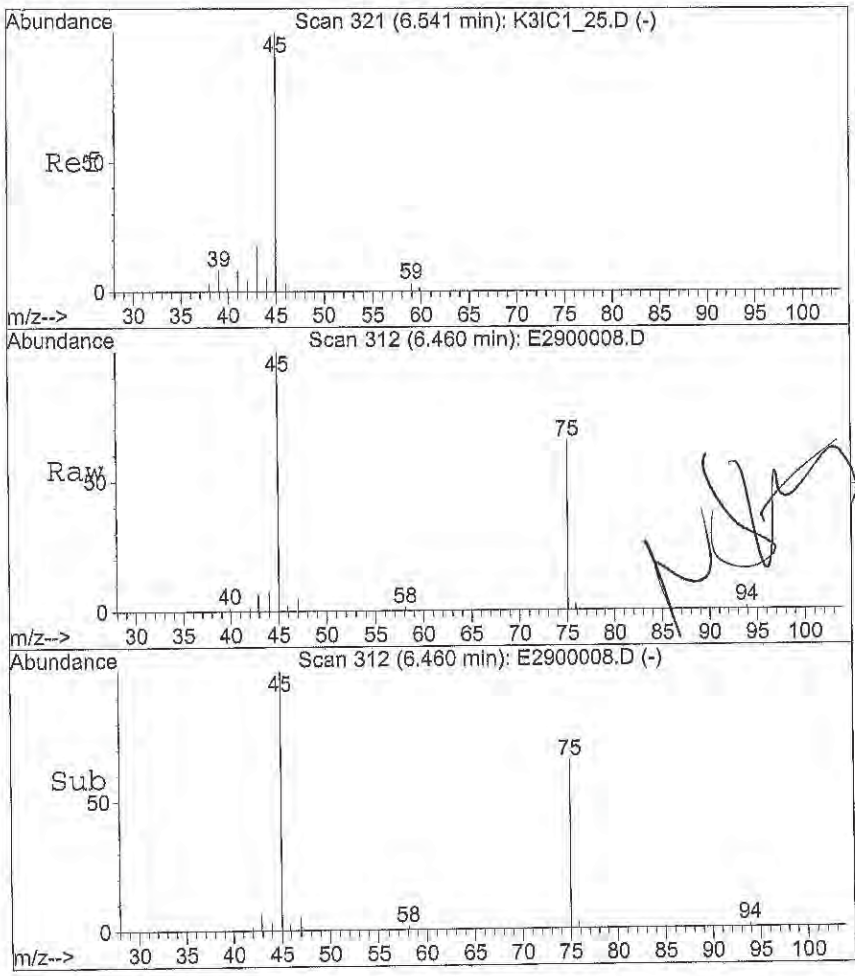


#11
Acetone
Concen: 180.01 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 58 Resp: 2322

Ion	Ratio	Lower	Upper
58	100		
43	587.3	360.9	541.3#

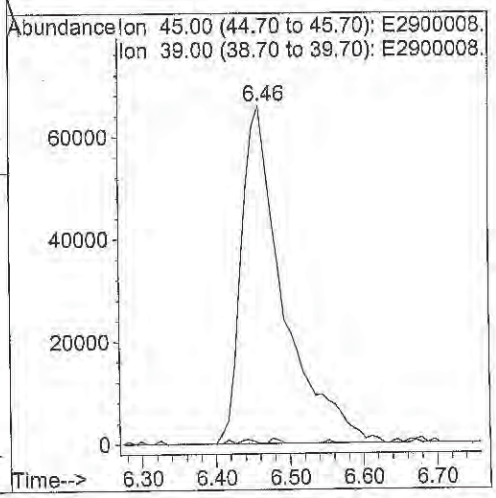


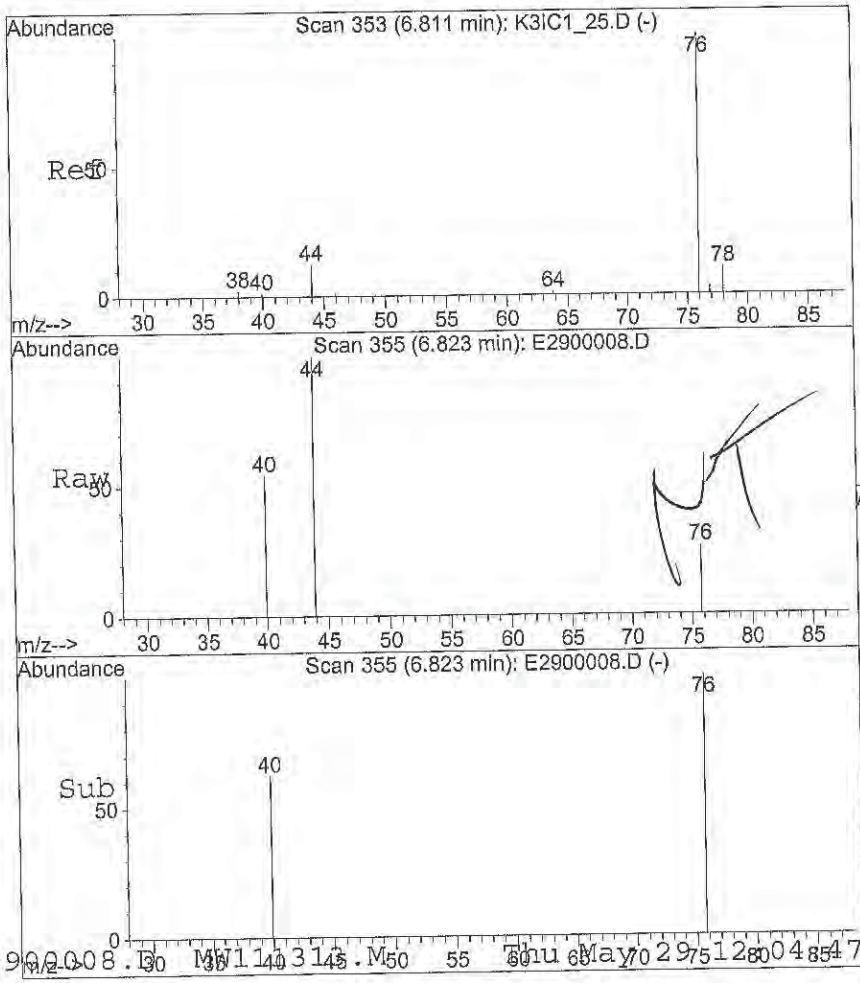


#12
(IPA) Leak Check Compound
Concen: 1347.32 ug/L
RT: 6.46 min Scan# 312
Delta R.T. -0.08 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 45 Resp: 259542

Ion	Ratio	Lower	Upper
45	100		
39	0.4	4.9	7.3#

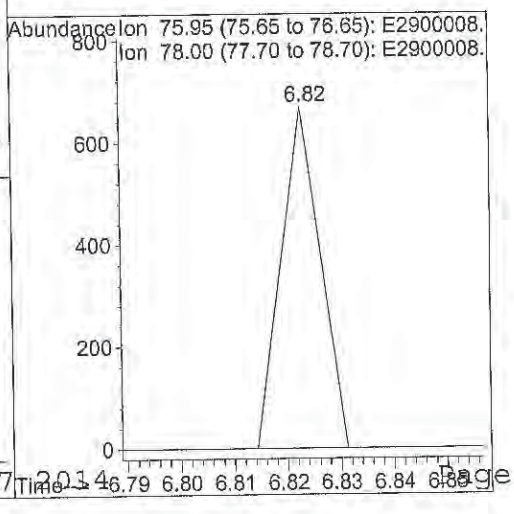


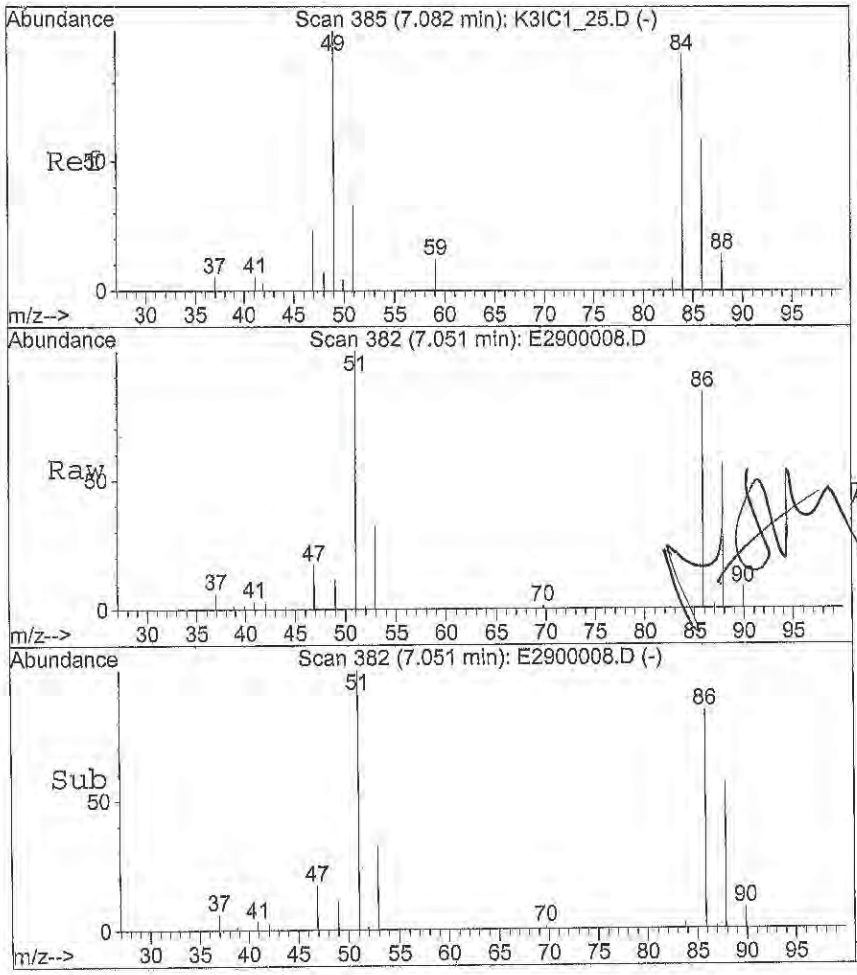


#13
Carbon disulfide
Concen: 0.03 ug/L
RT: 6.82 min Scan# 355
Delta R.T. 0.01 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 76 Resp: 339

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

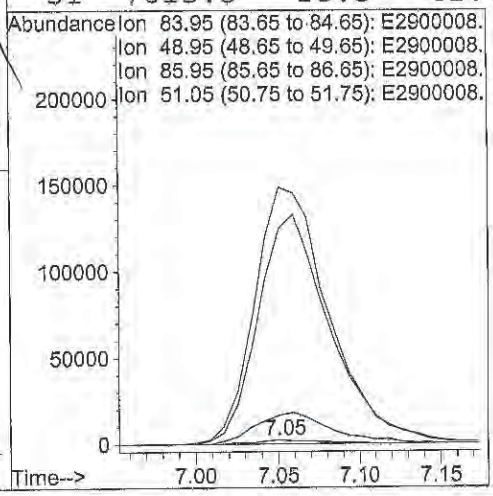


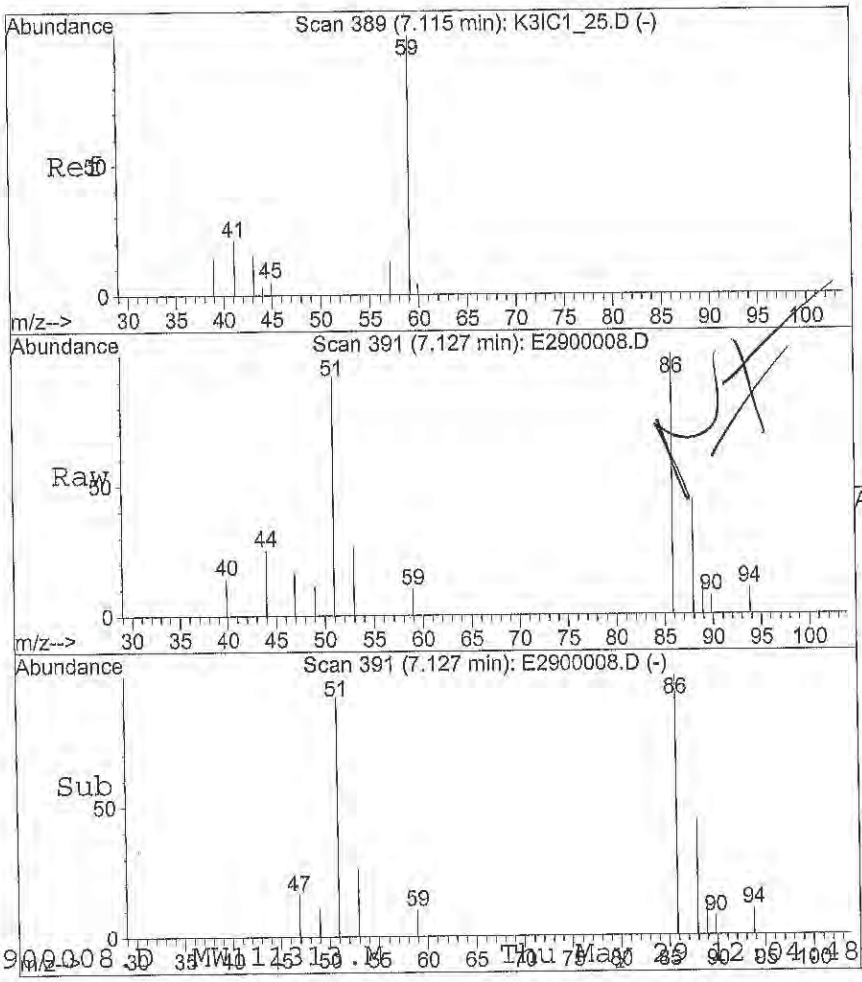


#14
Methylene Chloride
Concen: 1.41 ug/L
RT: 7.05 min Scan# 382
Delta R.T. -0.03 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 84 Resp: 6217

Ion	Ratio	Lower	Upper
84	100		
49	922.7	89.8	134.6#
86	6583.7	51.1	76.7#
51	7615.3	28.5	42.7#

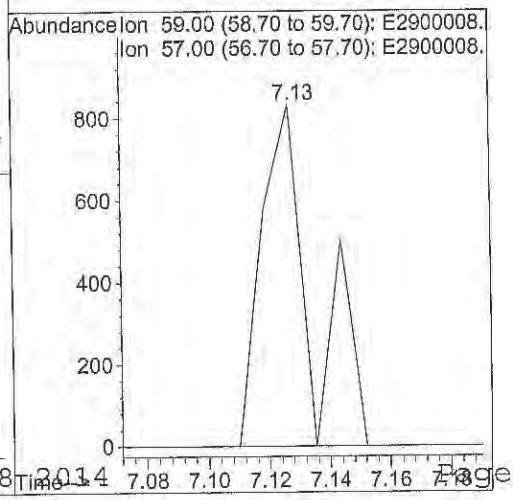


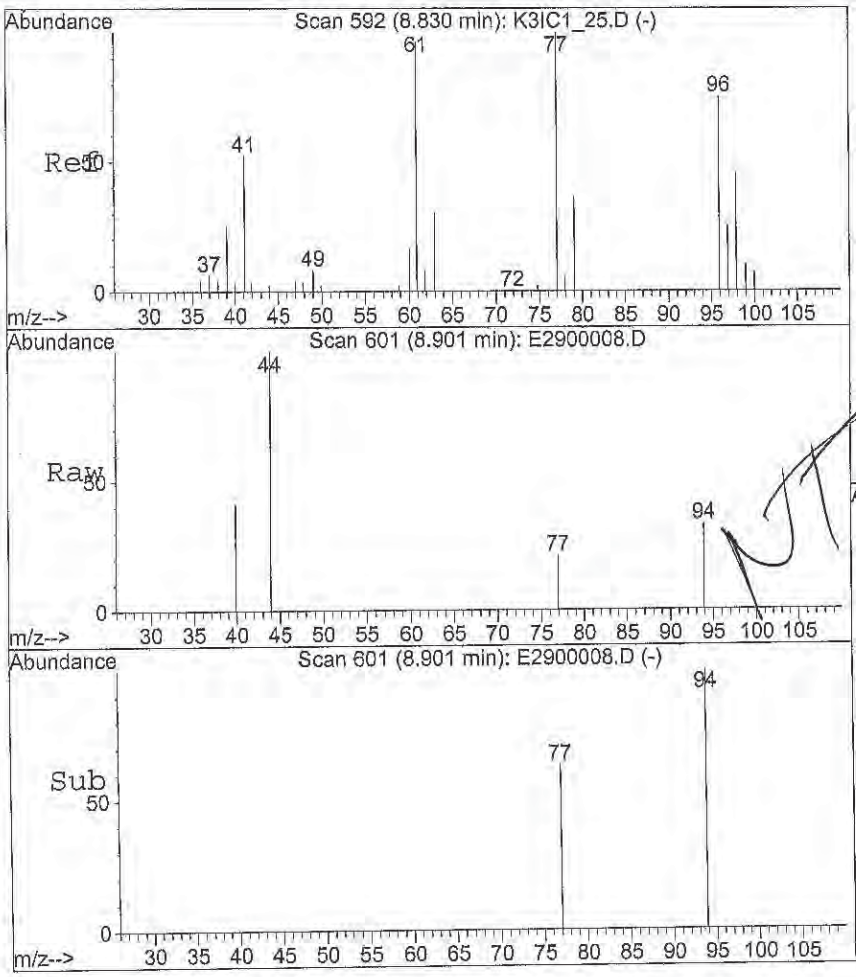


#15
(TBA) tert-Butanol
Concen: 3.55 ug/L
RT: 7.13 min Scan# 391
Delta R.T. 0.01 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 59 Resp: 970

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

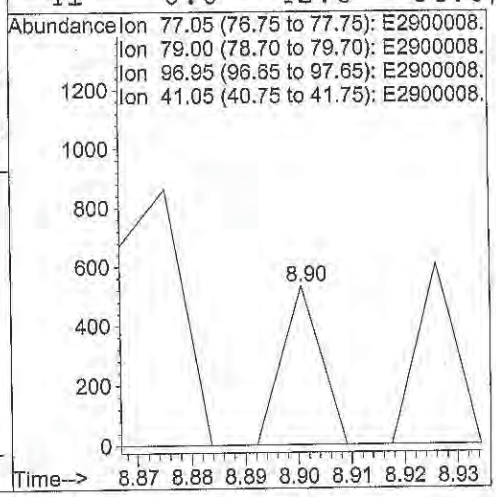


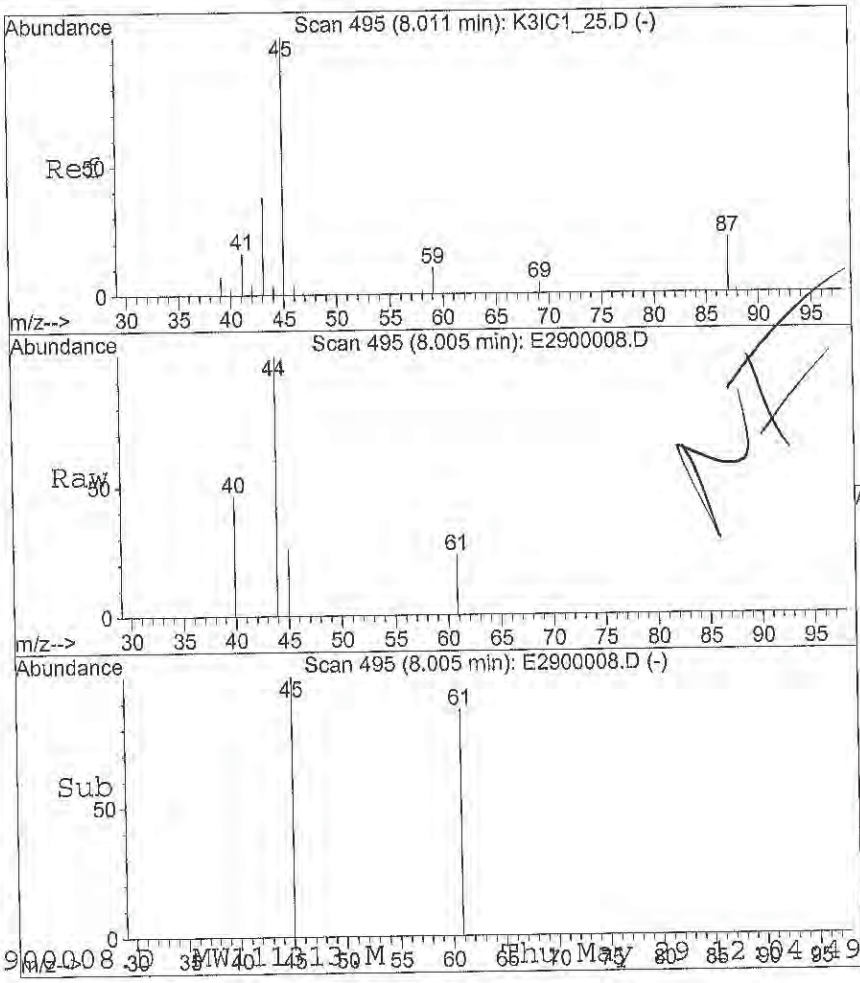


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.90 min Scan# 601
Delta R.T. 0.07 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 77 Resp: 269

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

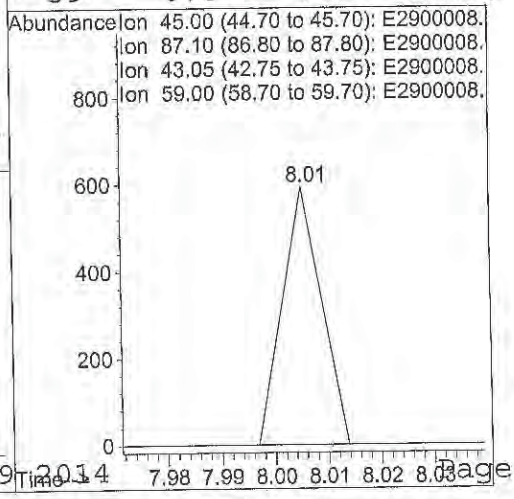


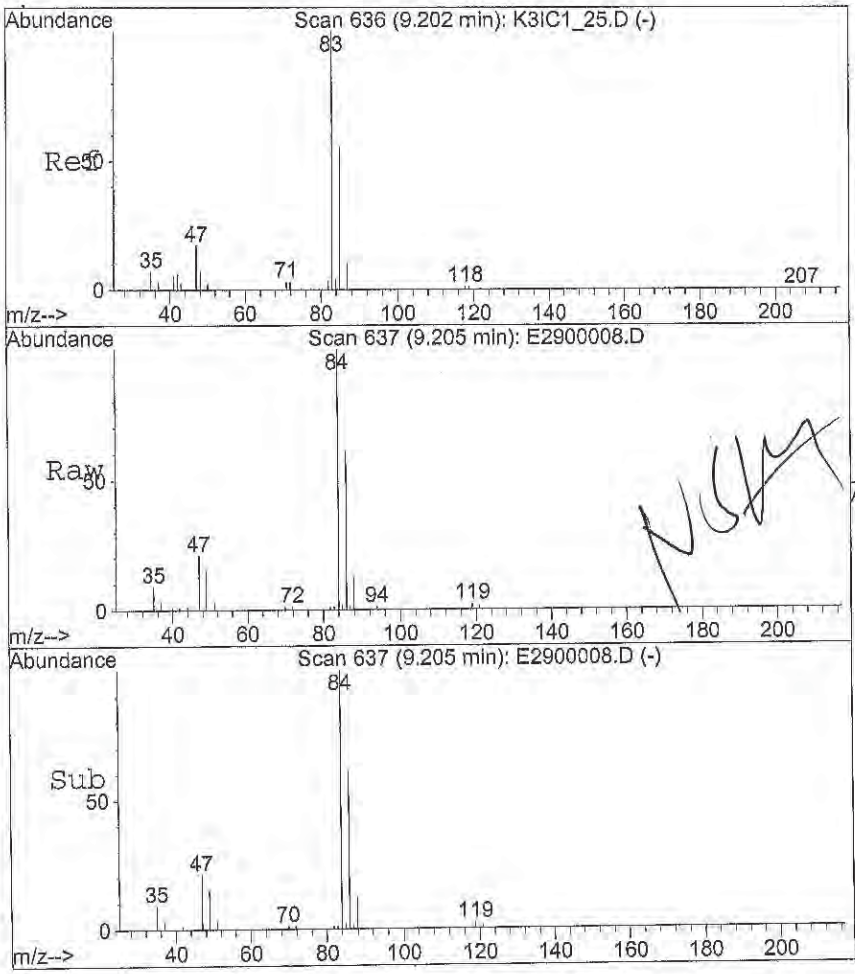


#22
(DIPE) Diisopropyl Ether
Concen: 0.02 ug/L
RT: 8.01 min Scan# 495
Delta R.T. -0.01 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 45 Resp: 301

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

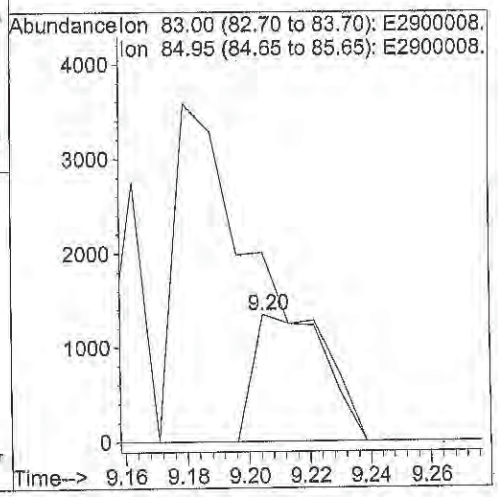


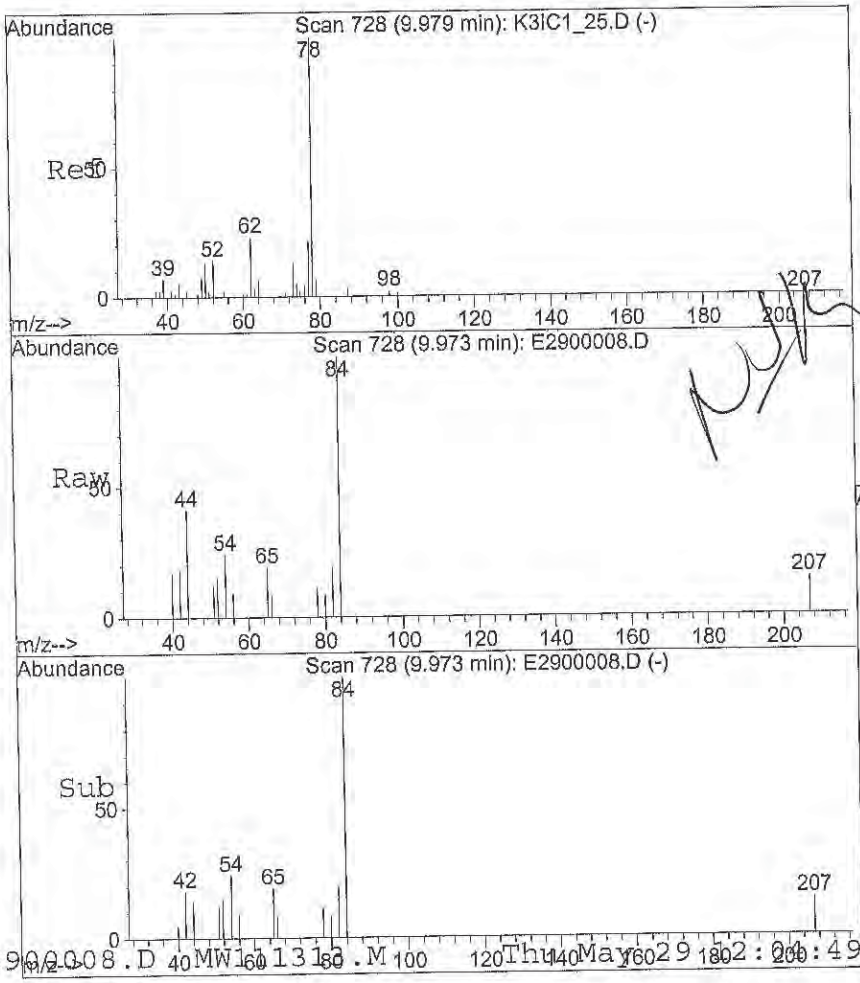


#24
Chloroform
Concen: 0.26 ug/L
RT: 9.20 min Scan# 637
Delta R.T. 0.00 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 83 Resp: 2201

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

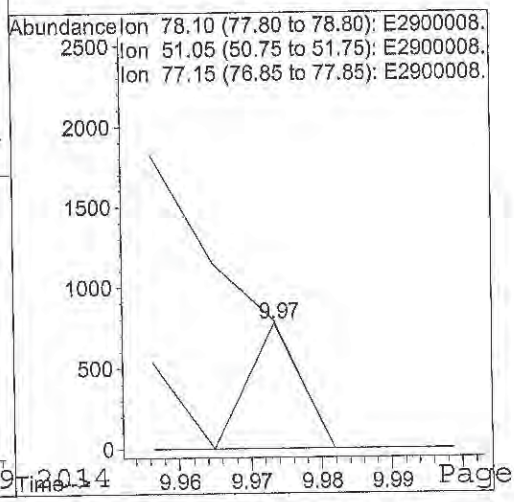


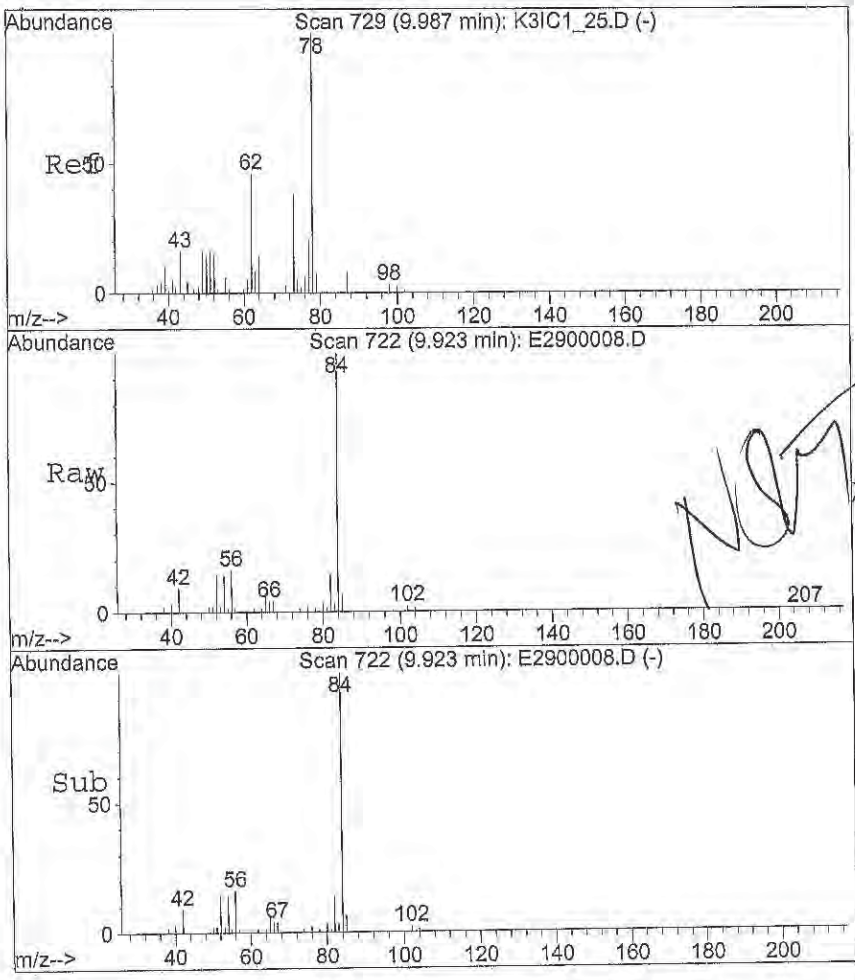


#31
Benzene
Concen: 0.03 ug/L
RT: 9.97 min Scan# 728
Delta R.T. -0.01 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 78 Resp: 392

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

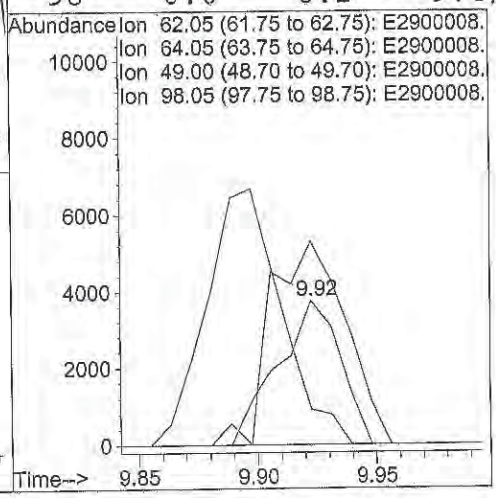


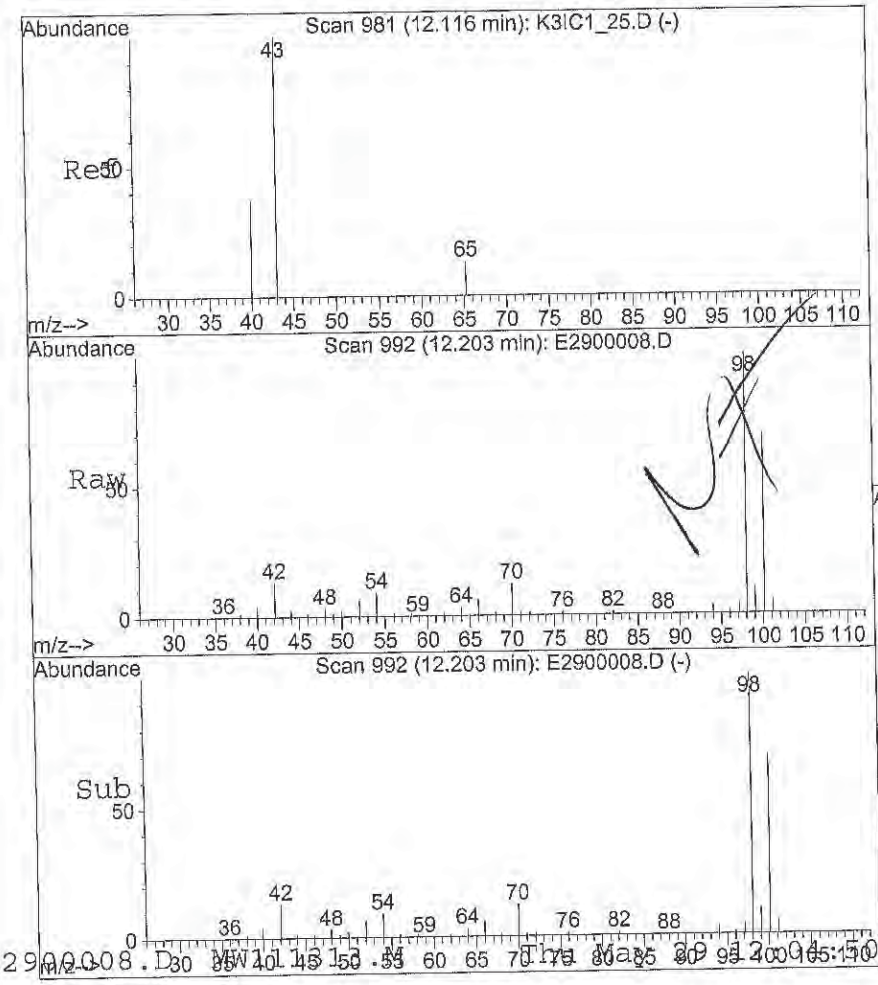


#32
1,2-Dichloroethane
Concen: 1.28 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 62 Resp: 6837

Ion	Ratio	Lower	Upper
62	100		
64	164.8	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

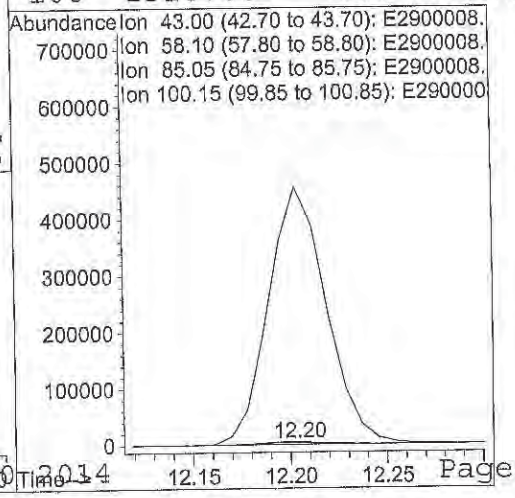


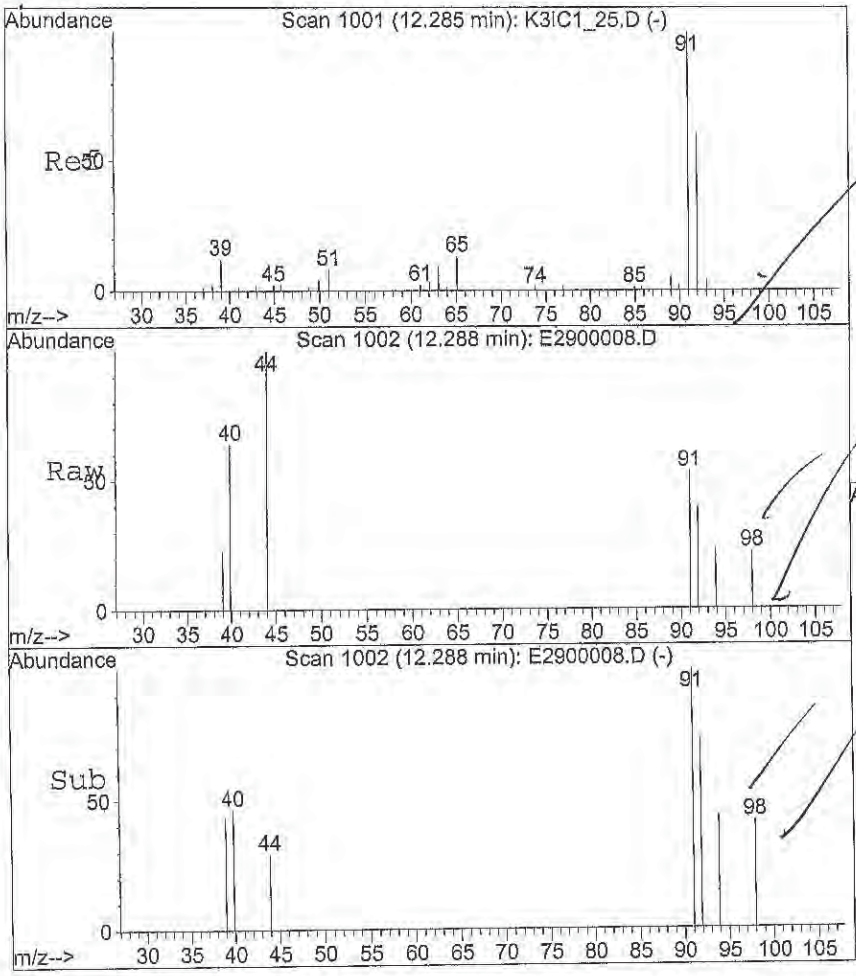


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.83 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 43 Resp: 7219

Ion	Ratio	Lower	Upper
43	100		
58	131.5	0.0	0.0#
85	0.0	0.0	0.0
100	13107.0	0.0	0.0#

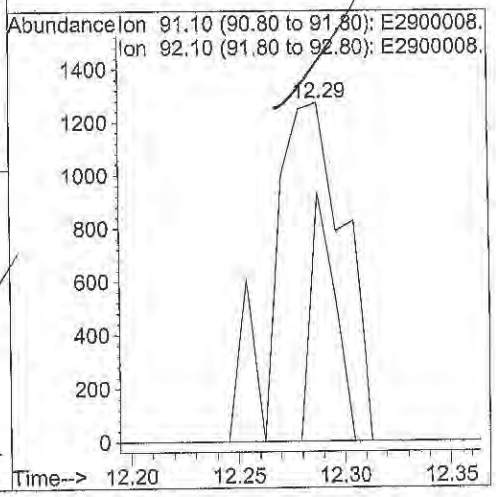


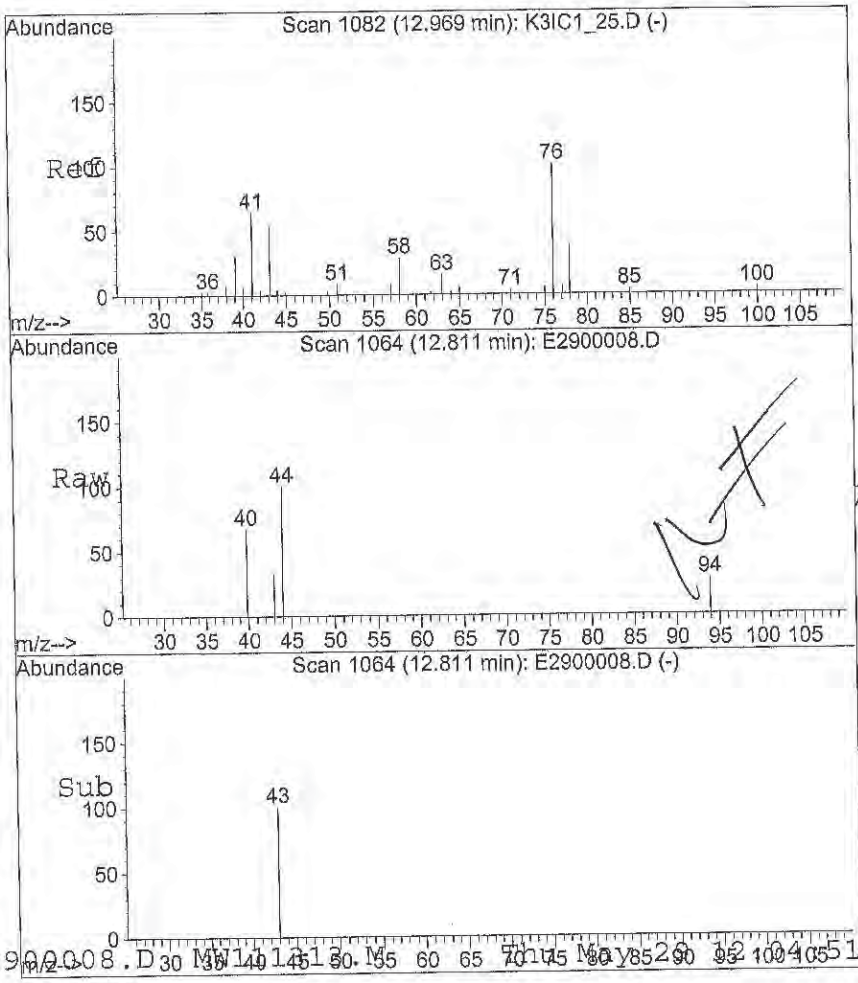


#41
Toluene
Concen: 0.17 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 91 Resp: 2908

Ion	Ratio	Lower	Upper
91	100		
92	25.3	47.4	71.0#

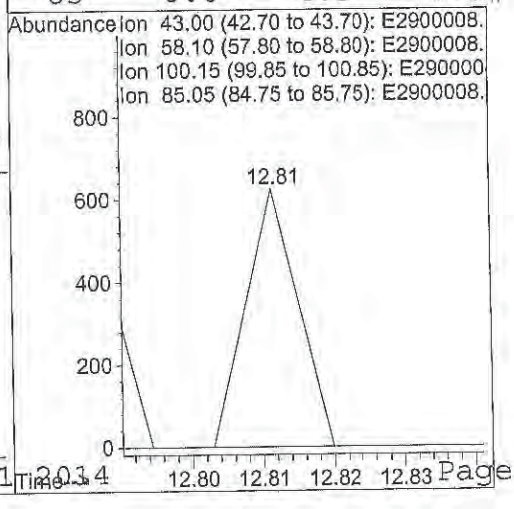


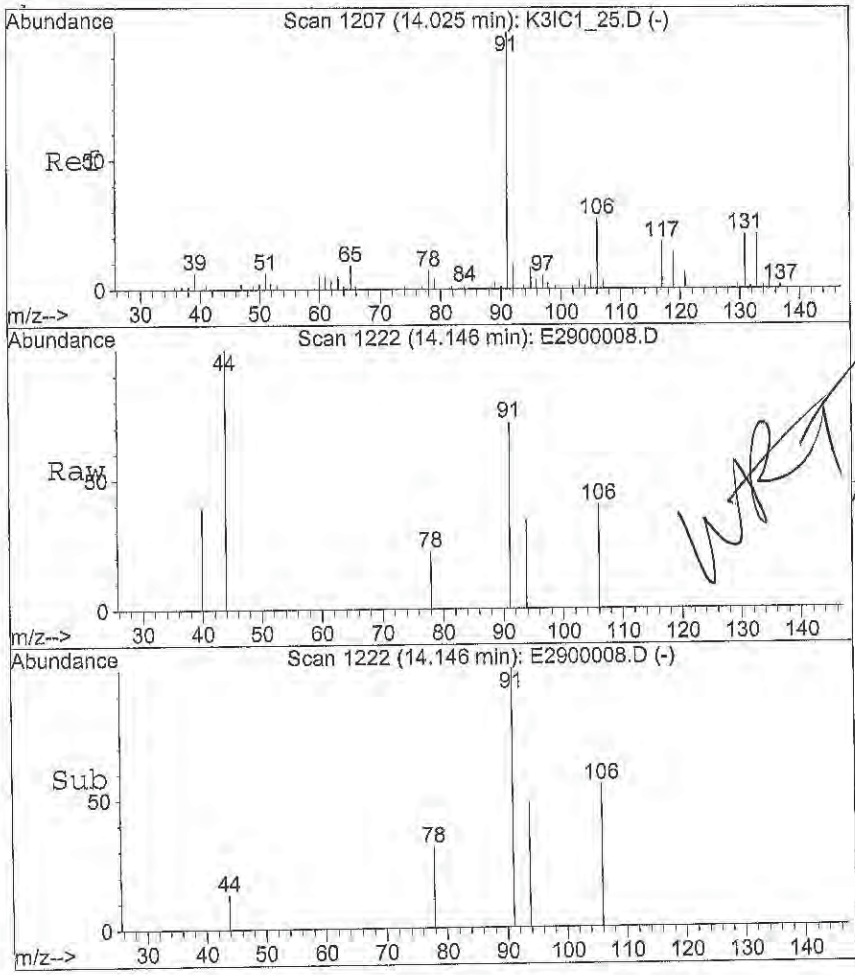


#46
2-Hexanone
Concen: 0.11 ug/L
RT: 12.81 min Scan# 1064
Delta R.T. -0.16 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 43 Resp: 317

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

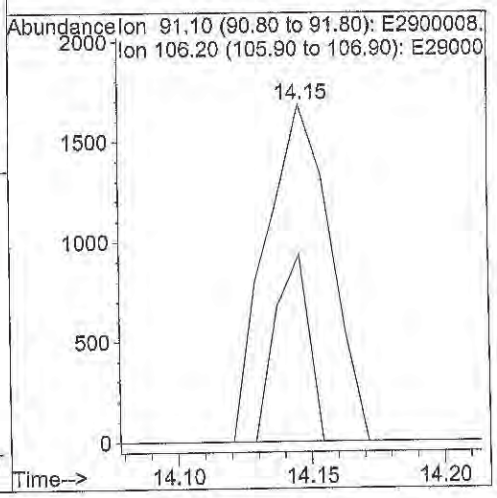


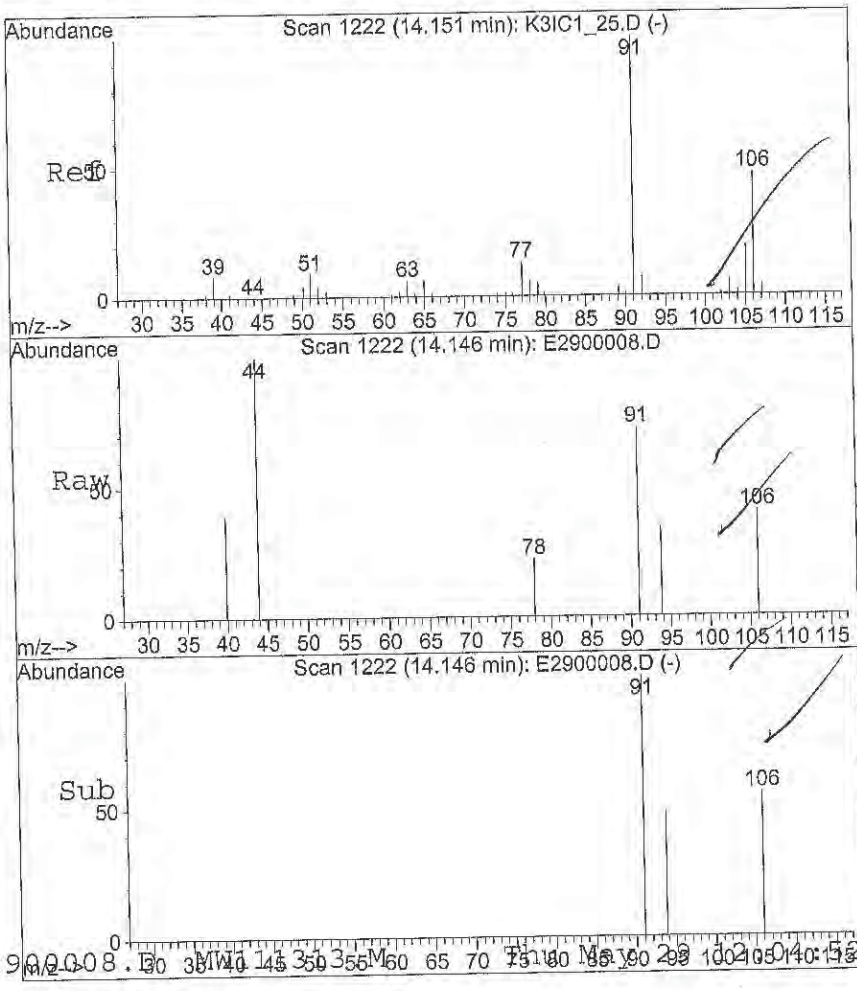


#51
Ethylbenzene
Concen: 0.14 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. 0.12 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 91 Resp: 2819

Ion	Ratio	Lower	Upper
91	100		
106	28.9	23.5	35.3

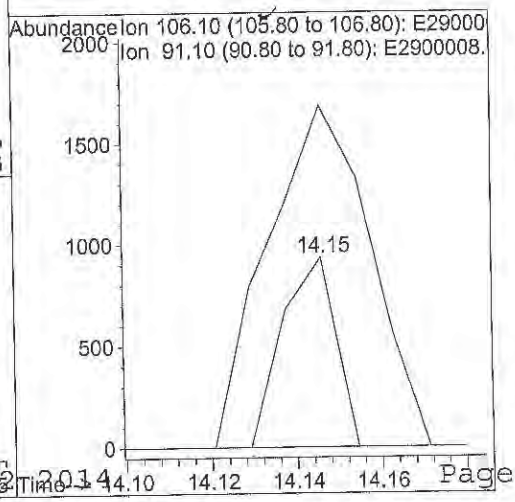


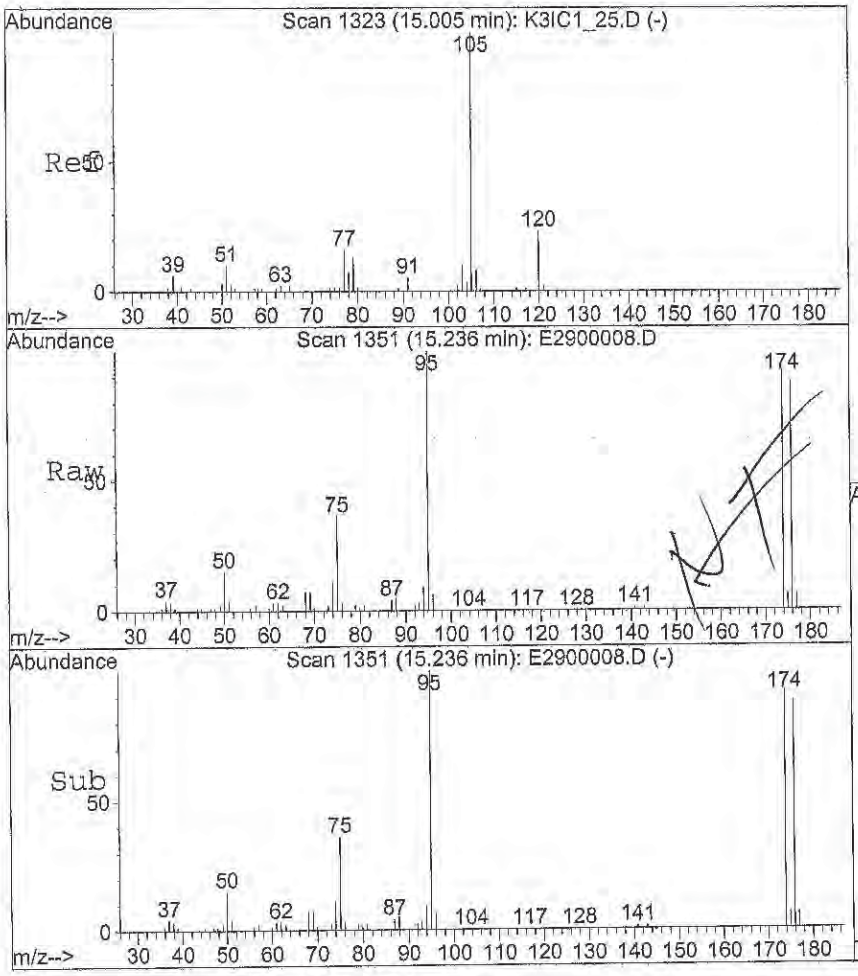


#52
m,p-Xylenes
Concen: 0.12 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion:106 Resp: 815

Ion	Ratio	Lower	Upper
106	100		
91	345.9	177.1	265.7#

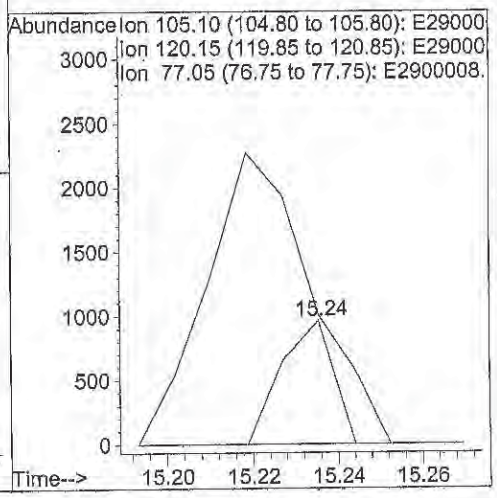


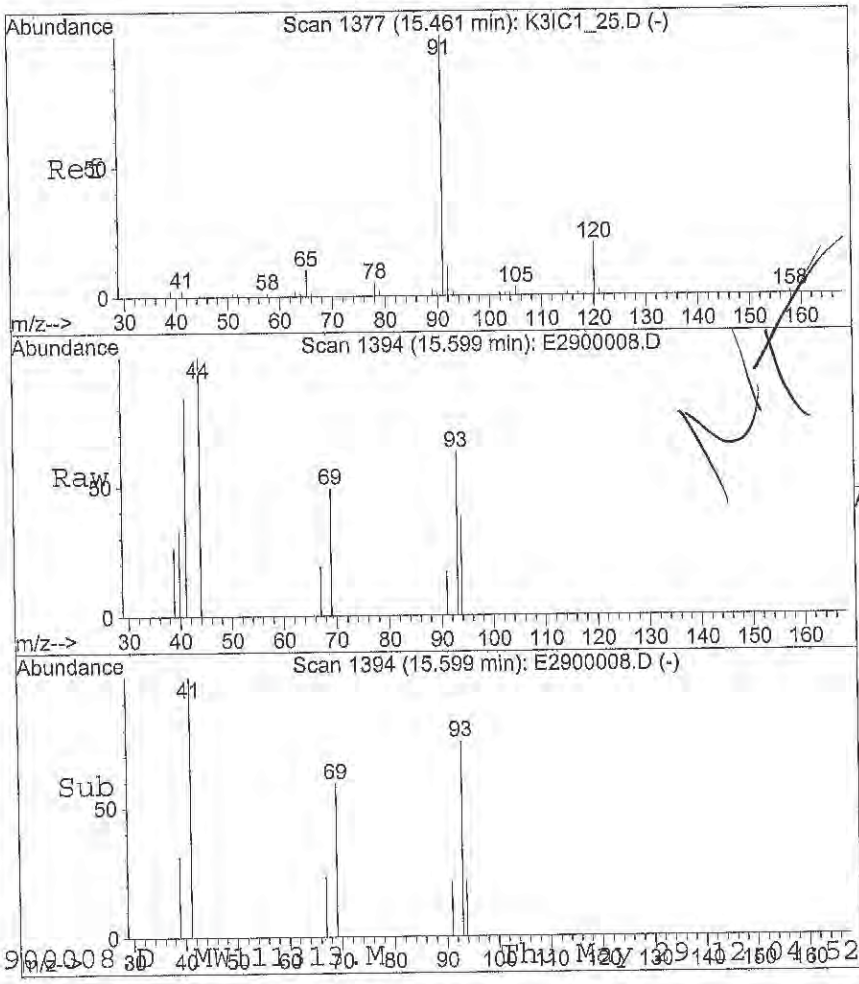


#56
Isopropylbenzene
Concen: 0.04 ug/L
RT: 15.24 min Scan# 1351
Delta R.T. 0.23 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion:105 Resp: 817

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	472.9	13.1	19.7#

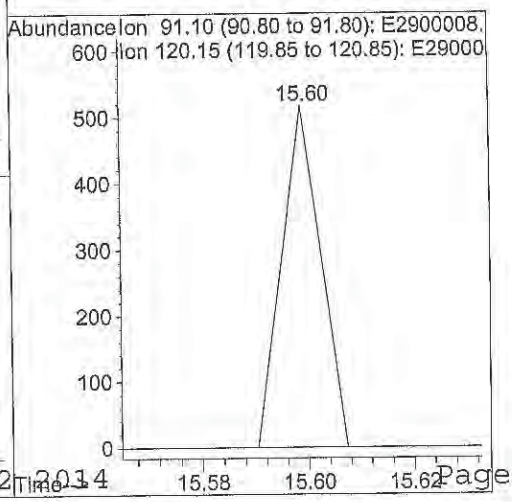


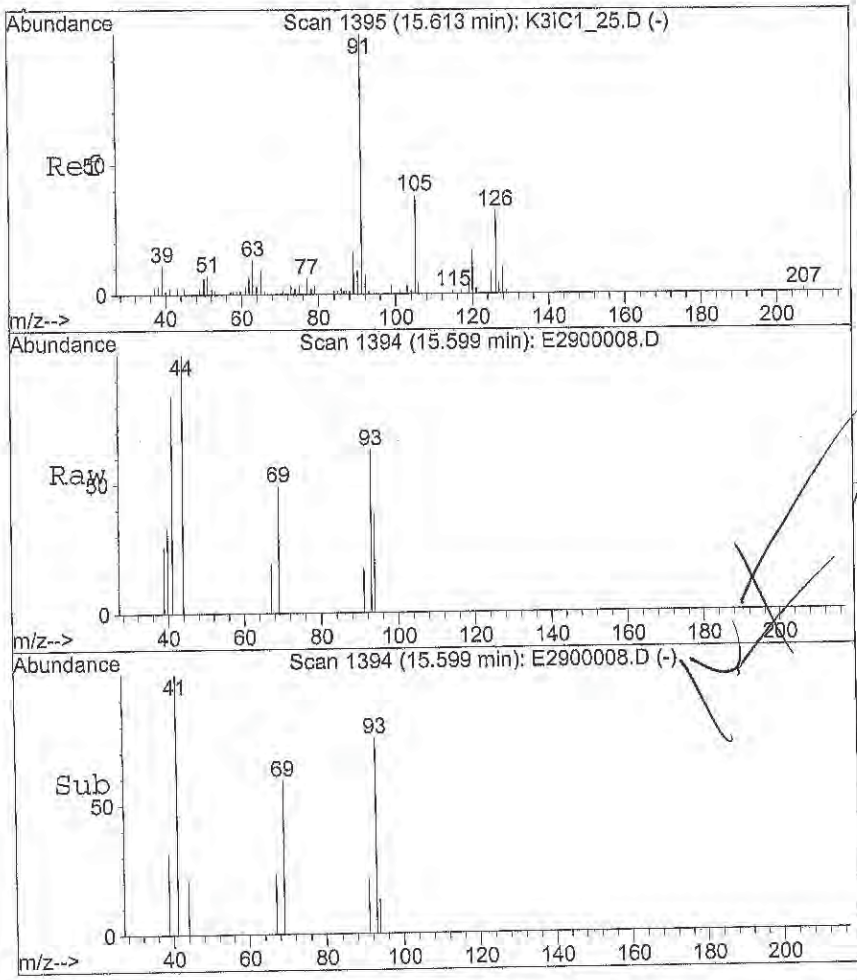


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. 0.14 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 91 Resp: 262

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

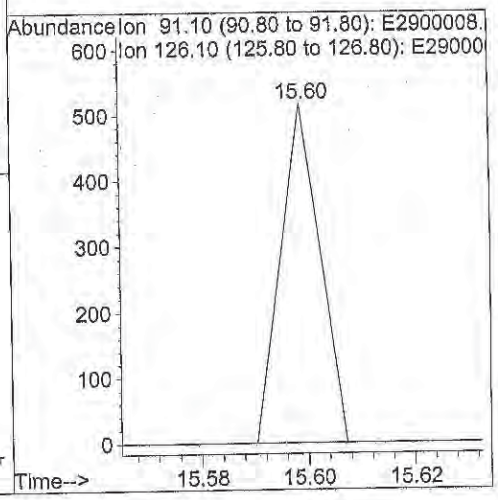


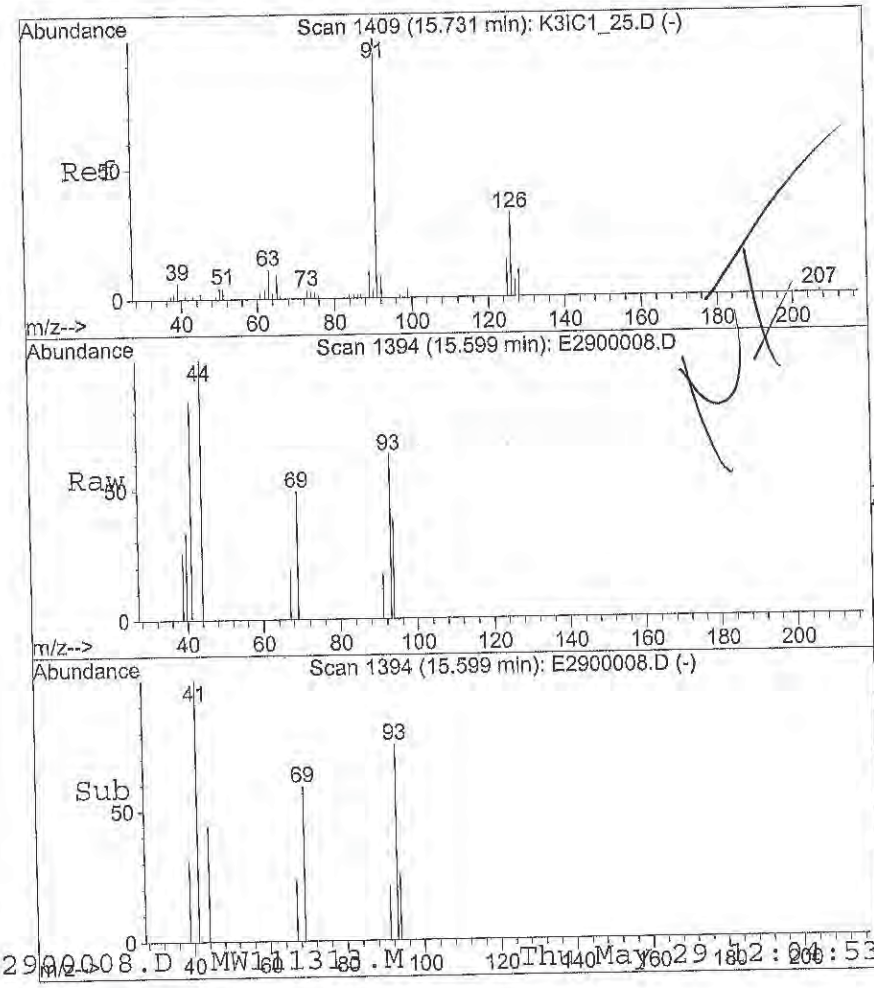


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 91 Resp: 262

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

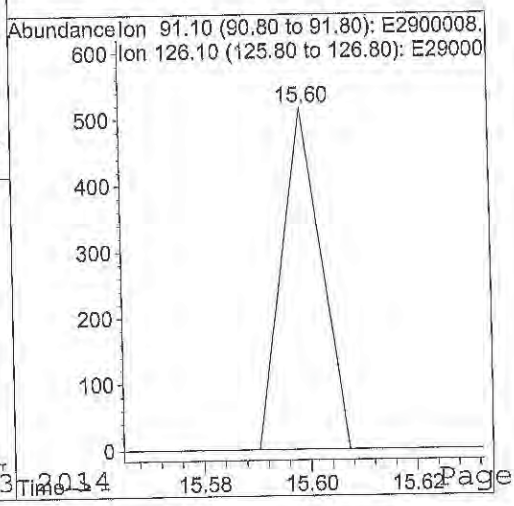


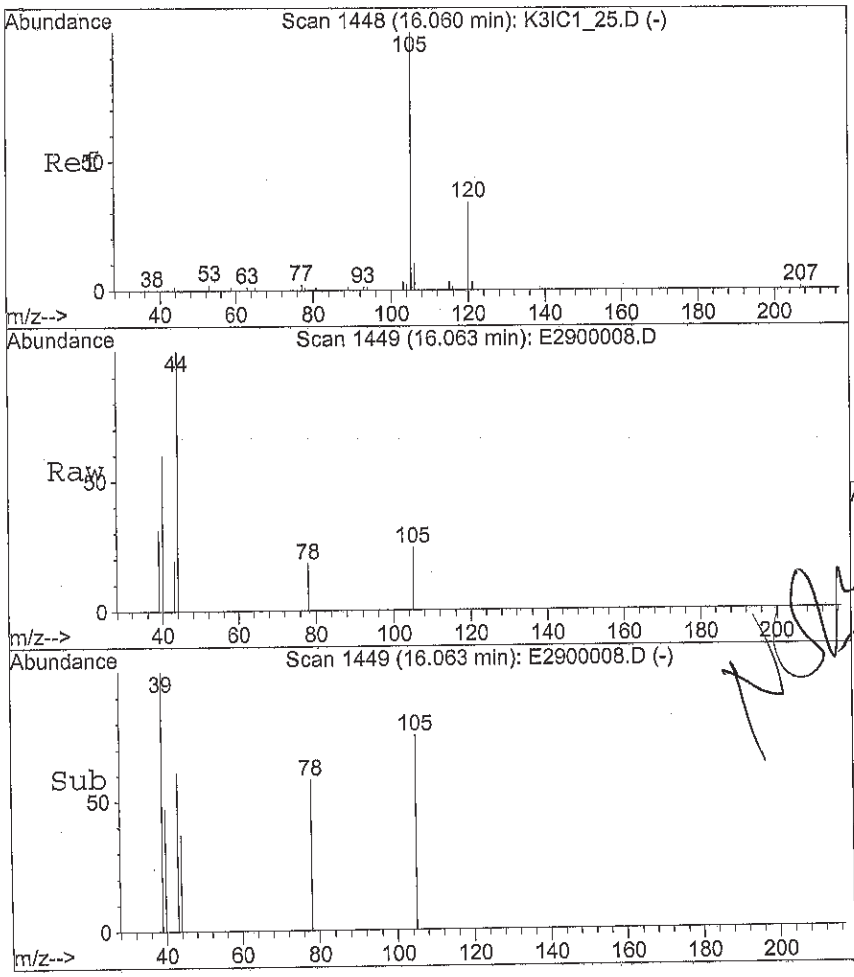


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.13 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion: 91 Resp: 262

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

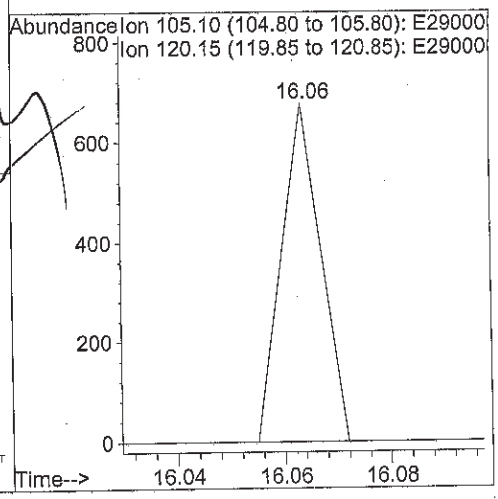


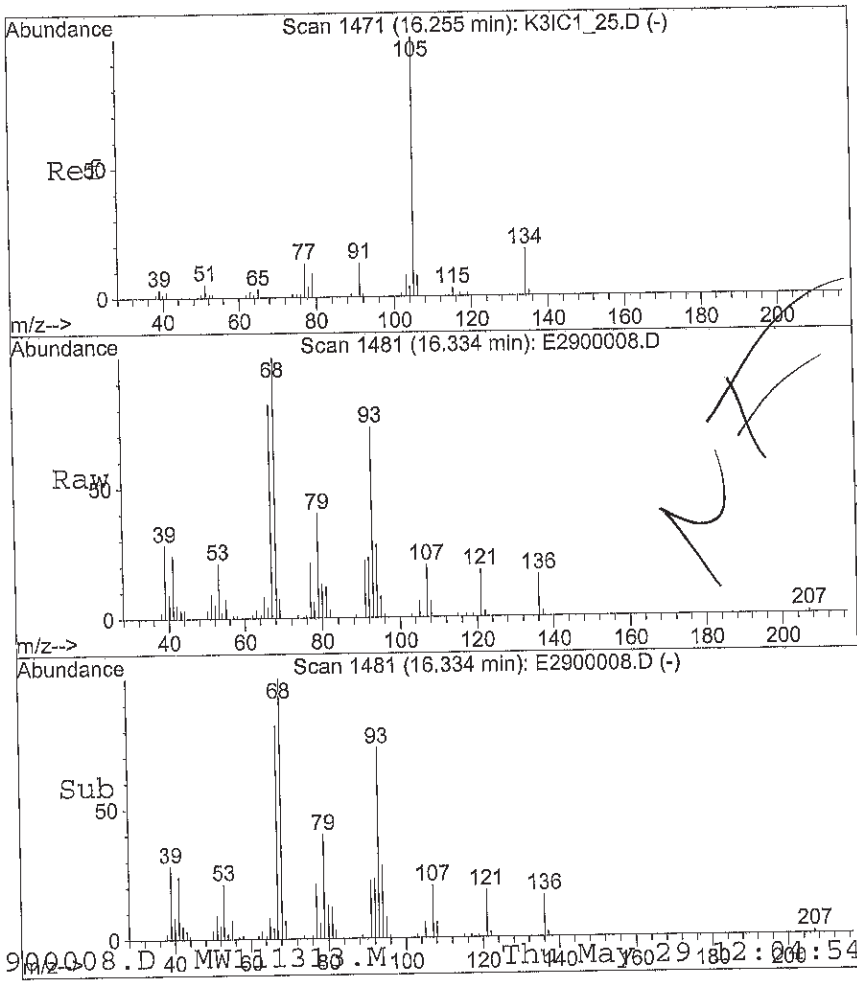


#67
1,2,4-Trimethylbenzene
Concen: 0.02 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion:105 Resp: 343

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

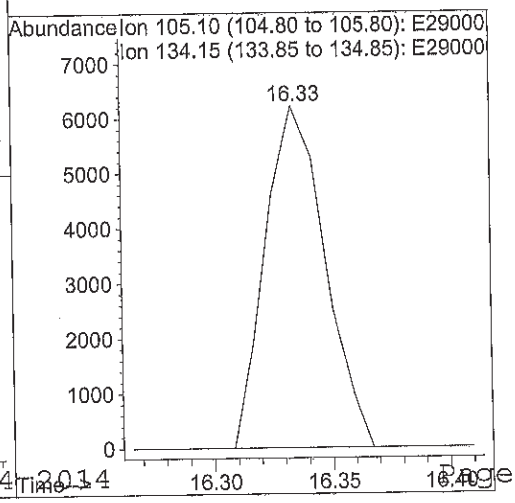


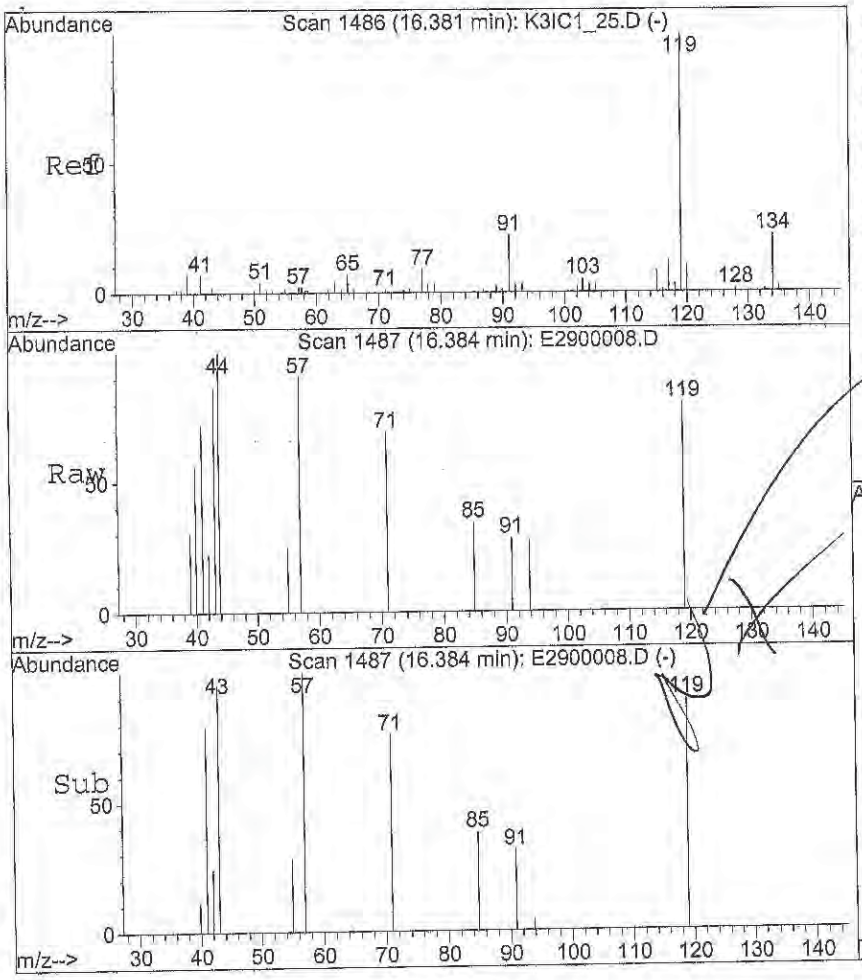


#68
sec-Butylbenzene
Concen: 0.46 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion:105 Resp: 10905

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

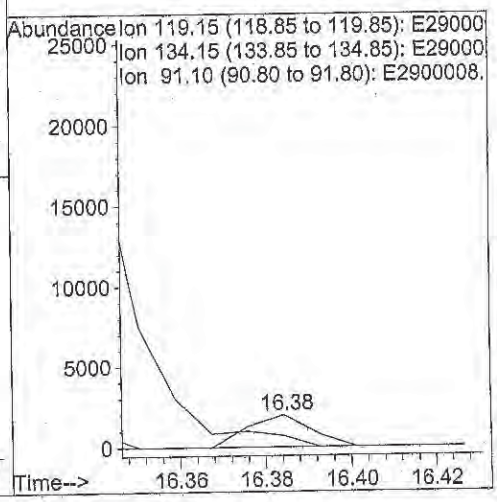




#69
p-Isopropyltoluene
Concen: 0.11 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E2900008.D
Acq: 29 May 2014 11:42 am

Tgt Ion:119 Resp: 2011

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900008.D Vial: 7
Acq On : 29 May 2014 11:42 am Operator: DN
Sample : 3E42901-07 Inst : GC/MS Ins
Misc : 100cc SVL-530-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 12:04 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1603103	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1279188	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	698801	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	442263	10.61 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 84.88%		
3) Chloroform-d (SU6)	9.18	84	722030	12.07 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 96.56%		
4) Methylene Chloride-d2 (SU5	7.06	86	409307	11.71 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.68%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	431768	15.15 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 121.20%		
6) Benzene-d6 (SU7)	9.92	84	1397048	11.11 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.88%		
8) Toluene-d8 (SU3)	12.20	98	1402626	11.56 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.48%		
9) 4-Bromofluorobenzene (SU4)	15.23	95	702303	14.02 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 112.16%		

Target Compounds Qvalue

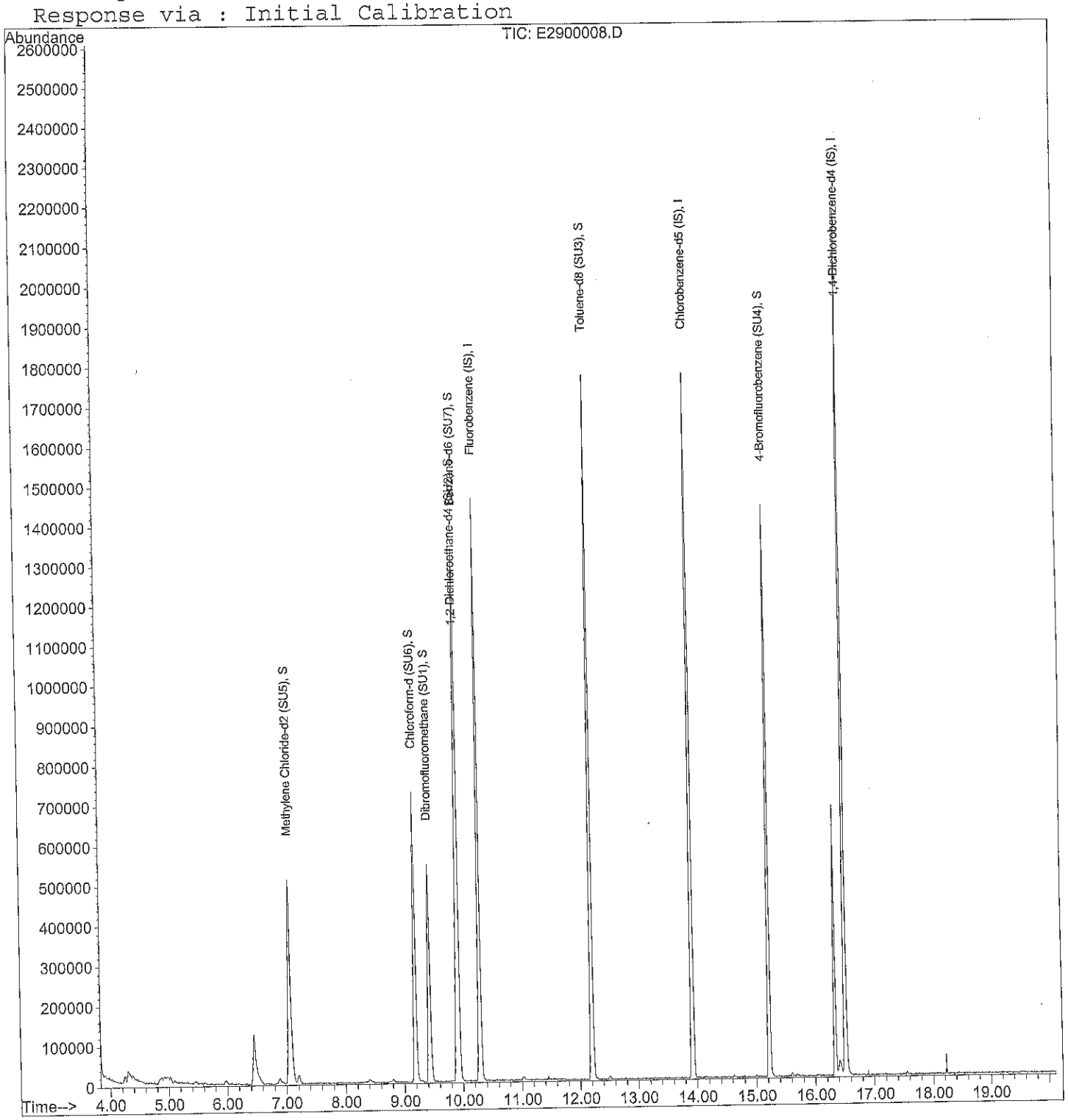
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900008.D
Acq On : 29 May 2014 11:42 am
Sample : 3E42901-07
Misc : 100cc SVL-530-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 29 12:04 19114

Vial: 7
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900009.D
Acq On : 29 May 2014 12:11 pm
Sample : 3E42901-08
Misc : 100cc SVL-531-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 29 12:47 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1563526	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1280591	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	693986	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	437328	11.21 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.68%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	433965	11.71 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.68%		
39) Toluene-d8 (SU3)	12.21	98	1385172	11.60 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.80%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	698027	13.33 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.64%		

Target Compounds					Qvalue
4) Chloromethane	4.38	50	2306	-0.34 ~~ug/L~~ #	64
6) Bromomethane	5.11	96	309	-1.60 ~~ug/L~~ #	1
7) Chloroethane	5.25	64	942	1.41 ~~ug/L~~ #	32
11) Acetone	6.44	58	2469	179.68 ~~ug/L~~ #	5
12) (IPA) Leak Check Compound	6.59	45	19743	105.08 ~~ug/L~~ # SM	86
14) Methylene Chloride	7.05	84	7007	1.63 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	7.13	59	352	1.32 ~~ug/L~~ #	77
24) Chloroform	9.19	83	913	0.11 ~~ug/L~~ #	1
29) 1,1-Dichloropropene	9.92	75	274	0.05 ~~ug/L~~ # SM	1
31) Benzene	9.92	78	11161	0.76 ~~ug/L~~ #	79
32) 1,2-Dichloroethane	9.92	62	5925	1.14 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	5742	2.25 ~~ug/L~~ #	100
41) Toluene	12.29	91	2191	0.13 ~~ug/L~~ #	37
46) 2-Hexanone	12.93	43	274	0.10 ~~ug/L~~ #	37
51) Ethylbenzene	14.14	91	2992	0.15 ~~ug/L~~ ug/L	97
52) m,p-Xylenes	14.15	106	1298	0.18 ug/L 0.0036	94
54) Styrene	14.63	104	2244	-0.65 ~~ug/L~~ # SM	35
56) Isopropylbenzene	15.22	105	1301	0.07 ~~ug/L~~ #	1
62) n-Propylbenzene	15.47	91	384	0.01 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.60	91	416	0.02 ~~ug/L~~ #	45
65) 4-Chlorotoluene	15.60	91	416	0.03 ~~ug/L~~ #	44
67) 1,2,4-Trimethylbenzene	16.06	105	928	0.05 ~~ug/L~~ #	33

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900009.D Vial: 8
Acq On : 29 May 2014 12:11 pm Operator: DN
Sample : 3E42901-08 Inst : GC/MS Ins
Misc : 100cc SVL-531-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 12:47 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

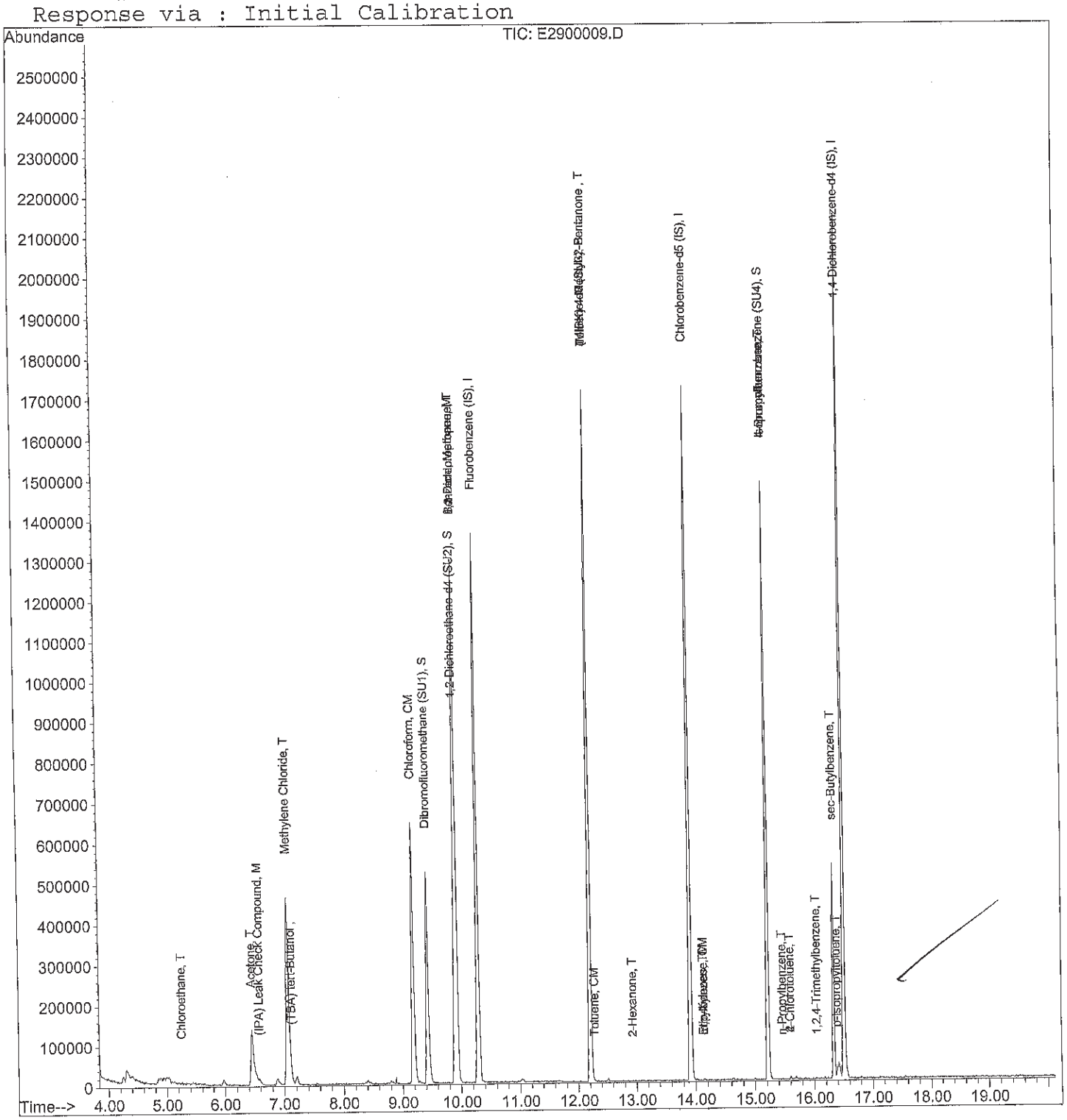
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) sec-Butylbenzene	16.34	105	7599	0.33 ~~ug/L~~ # ug	62
69) p-Isopropyltoluene	16.38	119	1382	0.07 ~~ug/L~~ #	52

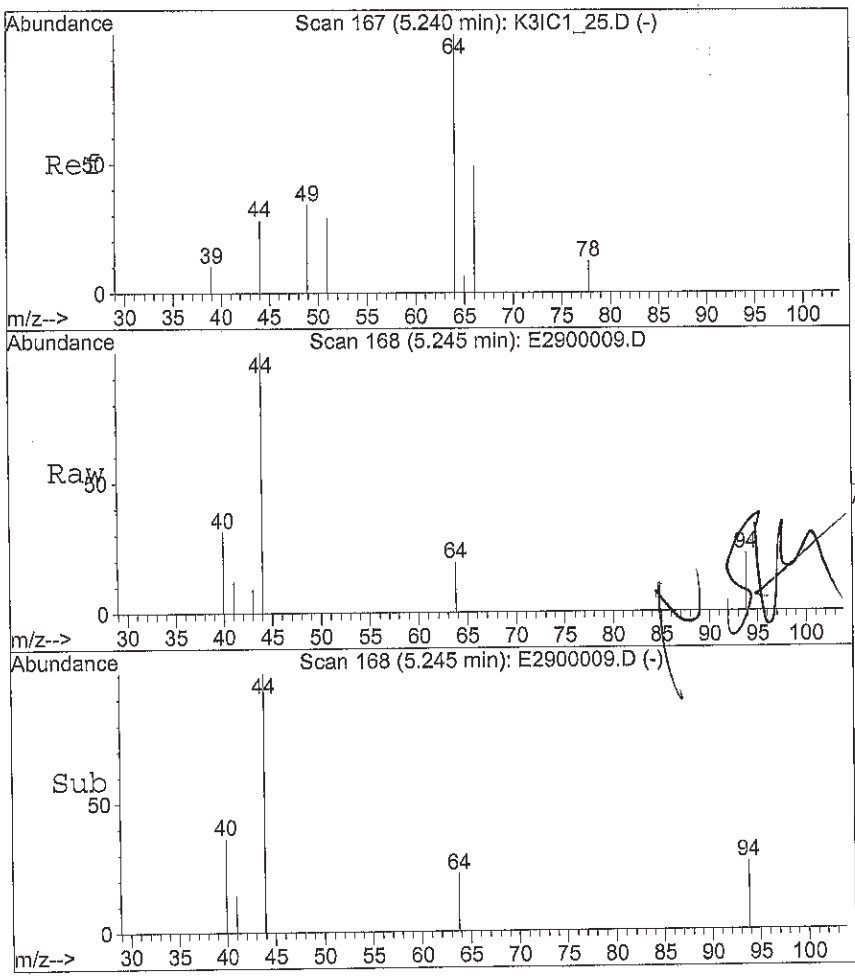
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900009.D Vial: 8
Acq On : 29 May 2014 12:11 pm Operator: DN
Sample : 3E42901-08 Inst : GC/MS Ins
Misc : 100cc SVL-531-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 12:47 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

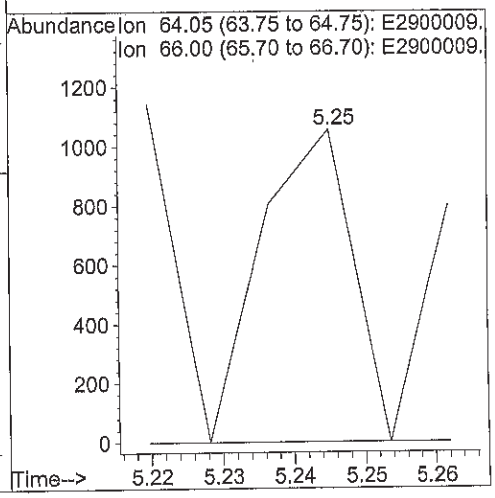


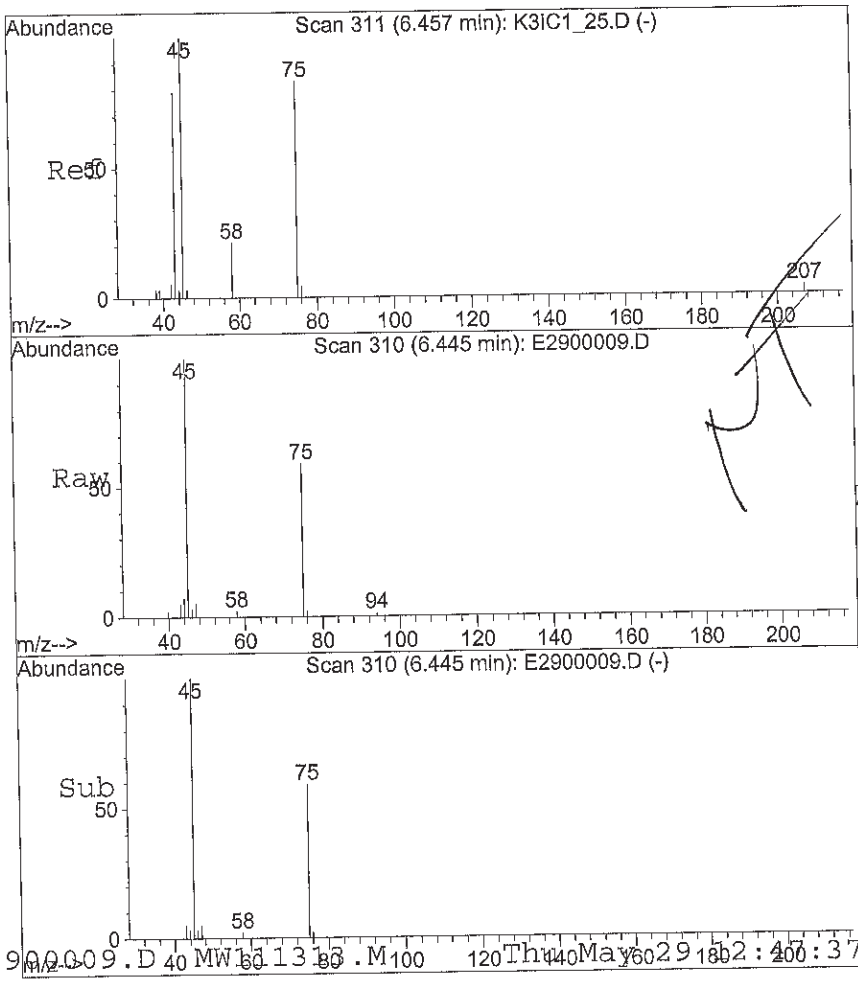


#7
Chloroethane
Concen: 1.41 ug/L
RT: 5.25 min Scan# 168
Delta R.T. 0.01 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 64 Resp: 942

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

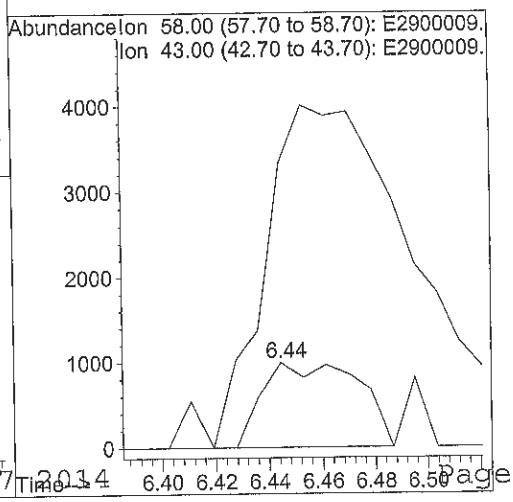


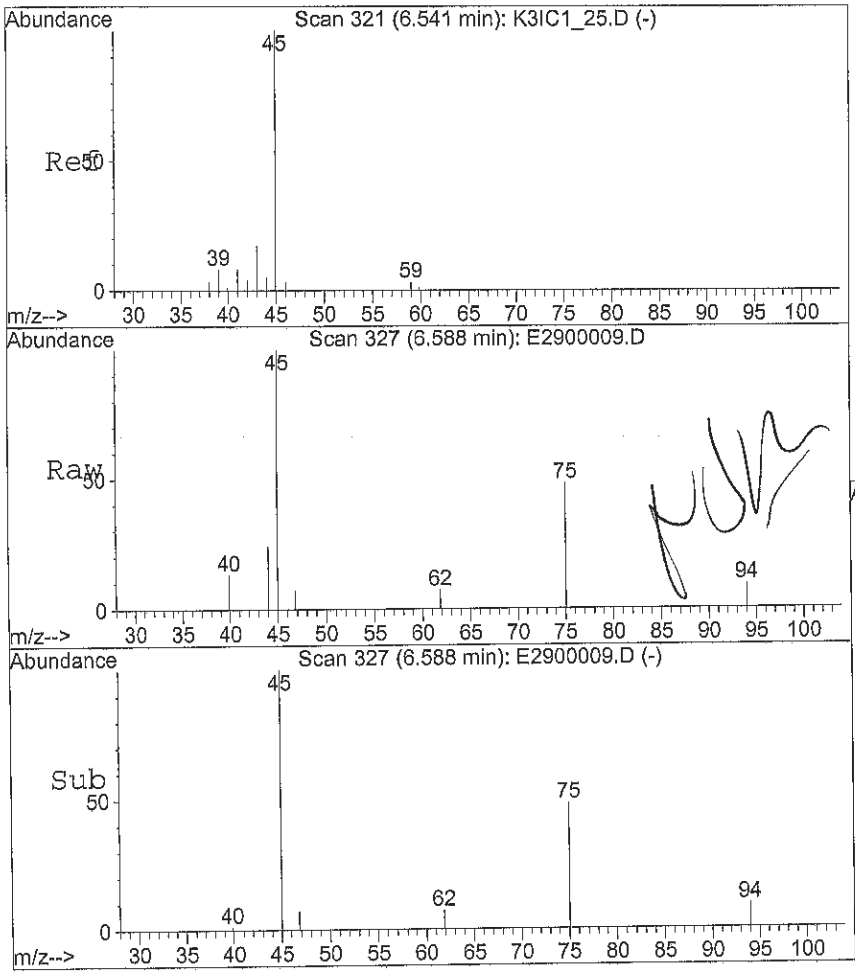


#11
Acetone
Concen: 179.68 ug/L
RT: 6.44 min Scan# 310
Delta R.T. -0.01 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 58 Resp: 2469

Ion	Ratio	Lower	Upper
58	100		
43	695.2	360.9	541.3#

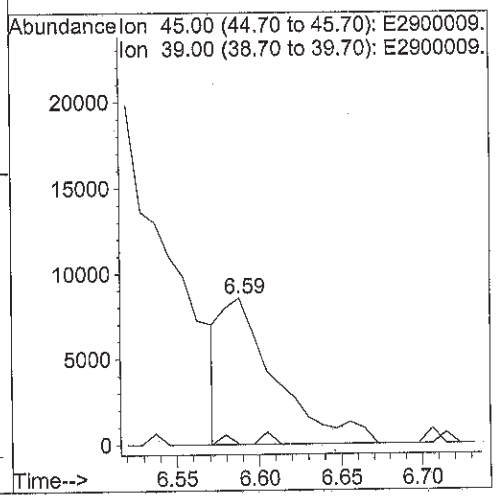


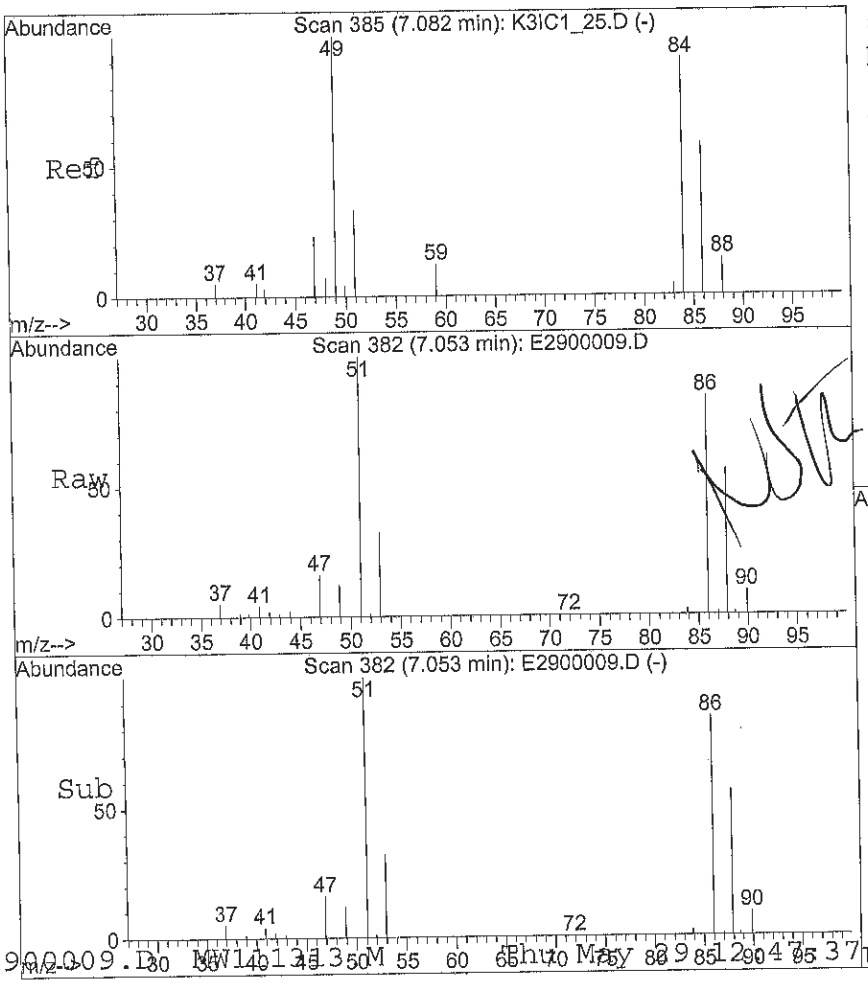


#12
(IPA) Leak Check Compound
Concen: 105.08 ug/L
RT: 6.59 min Scan# 327
Delta R.T. 0.05 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 45 Resp: 19743

Ion	Ratio	Lower	Upper
45	100		
39	1.4	4.9	7.3#

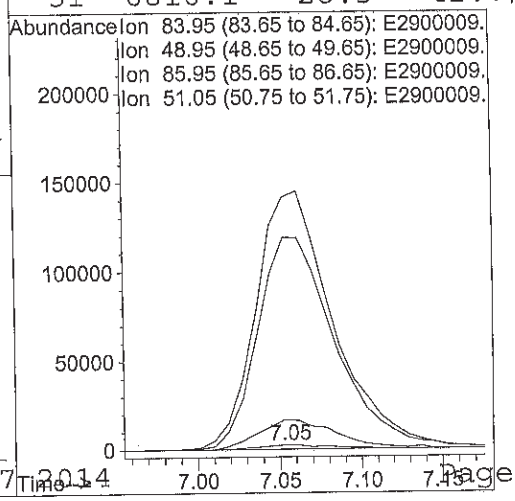


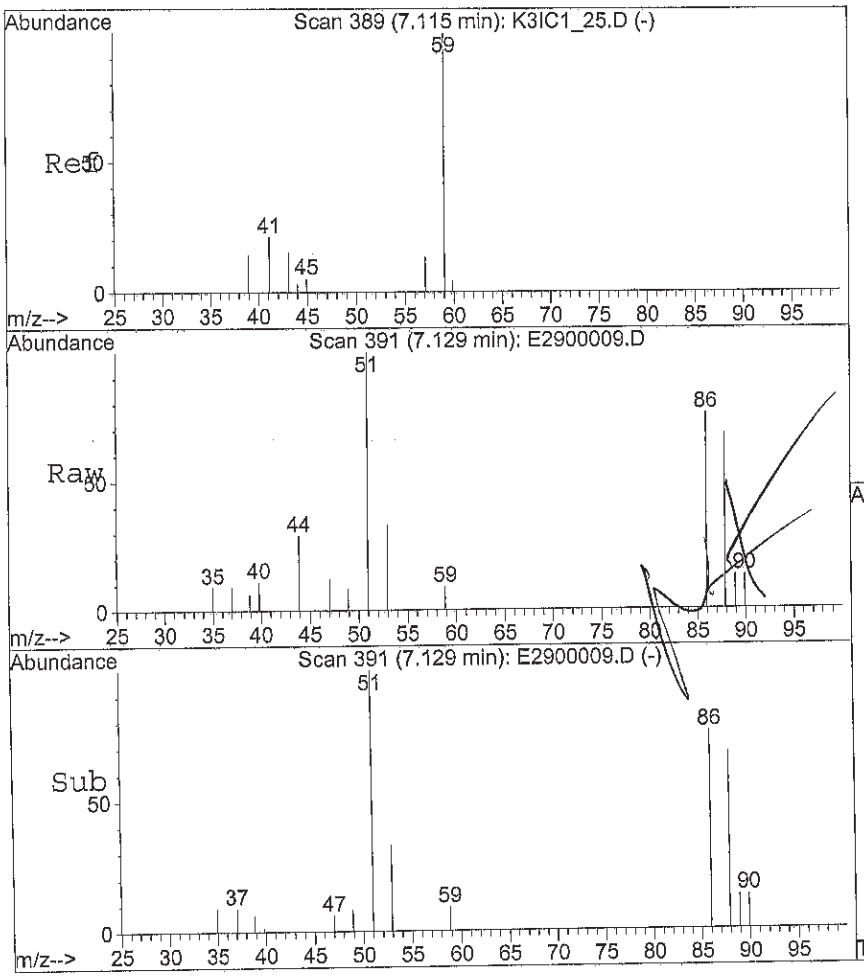


#14
Methylene Chloride
Concen: 1.63 ug/L
RT: 7.05 min Scan# 382
Delta R.T. -0.03 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 84 Resp: 7007

Ion	Ratio	Lower	Upper
84	100		
49	773.9	89.8	134.6#
86	5621.4	51.1	76.7#
51	6816.1	28.5	42.7#

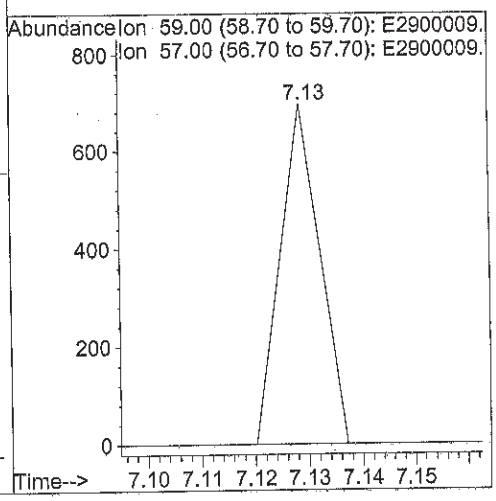


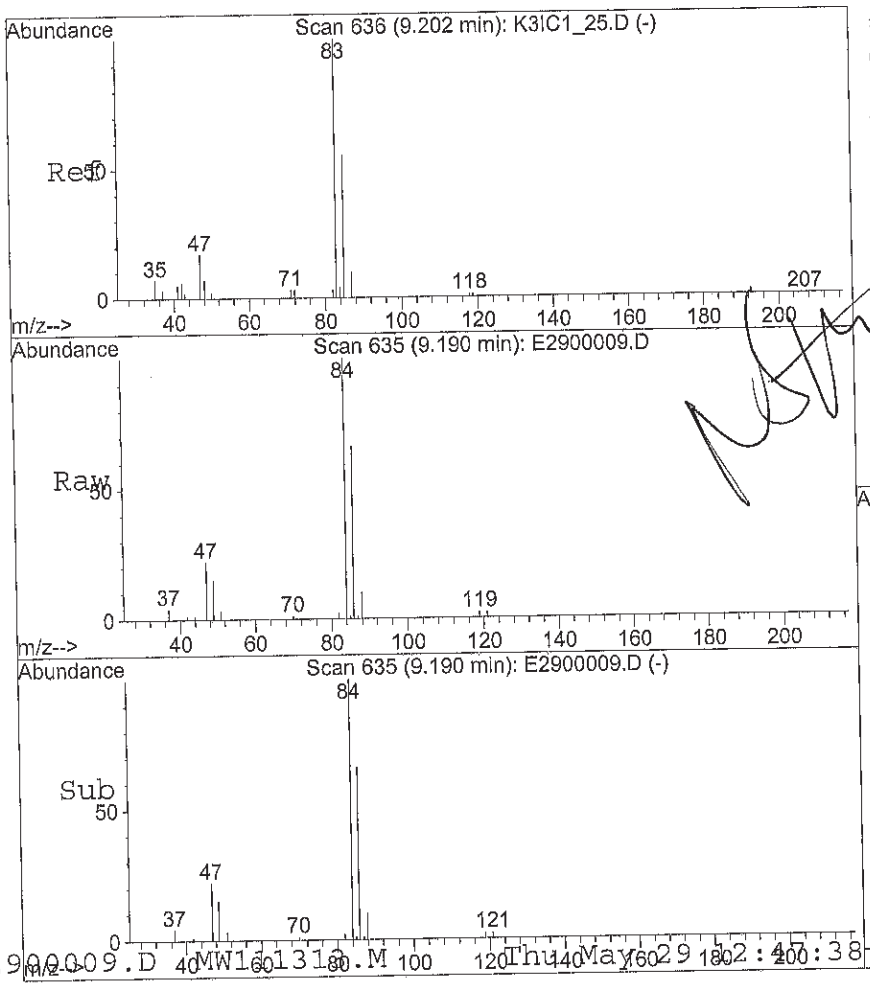


#15
(TBA) tert-Butanol
Concen: 1.32 ug/L
RT: 7.13 min Scan# 391
Delta R.T. 0.01 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 59 Resp: 352

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

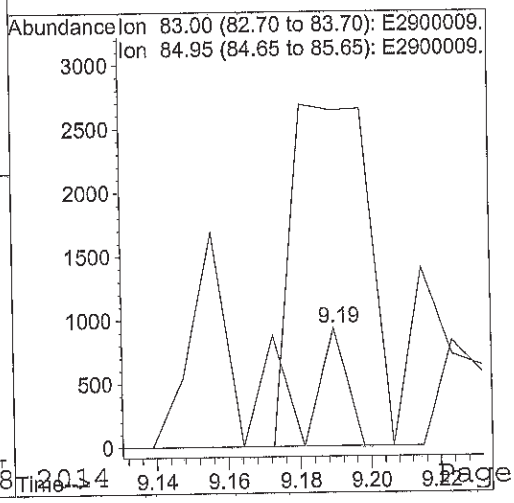


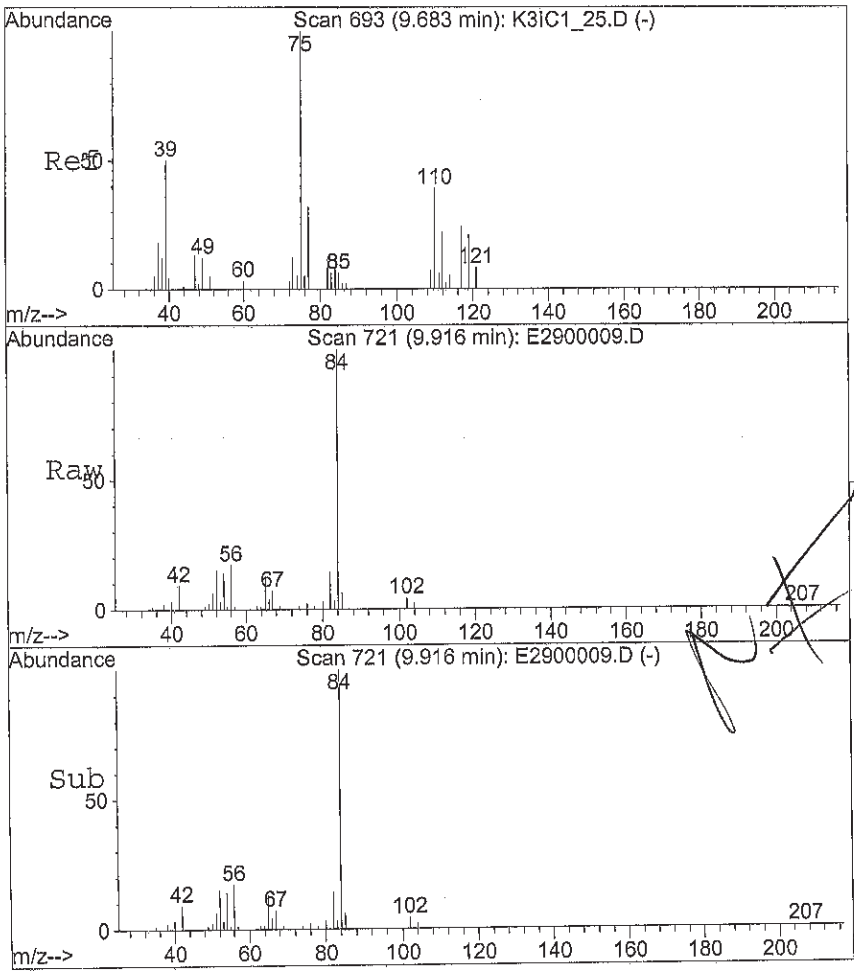


#24
Chloroform
Concen: 0.11 ug/L
RT: 9.19 min Scan# 635
Delta R.T. -0.01 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 83 Resp: 913

Ion	Ratio	Lower	Upper
83	100		
85	594.7	51.8	77.6#

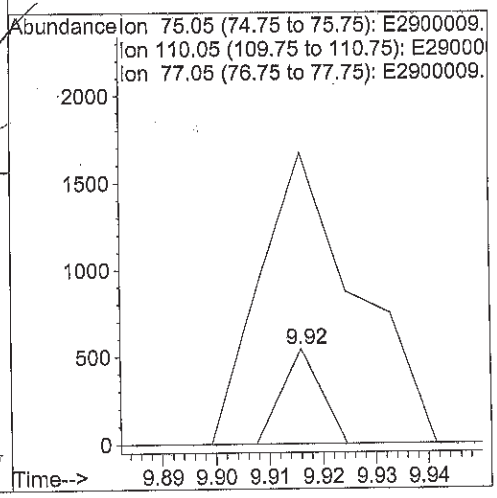


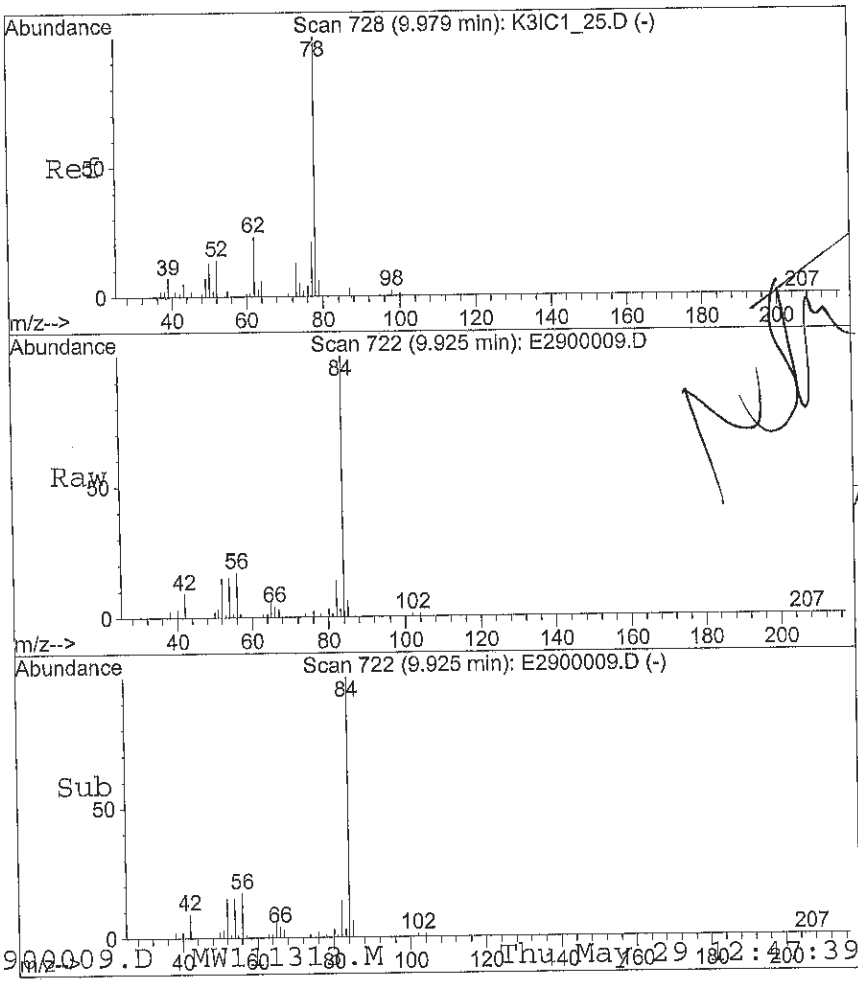


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.23 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 75 Resp: 274

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	768.6	25.0	37.4#

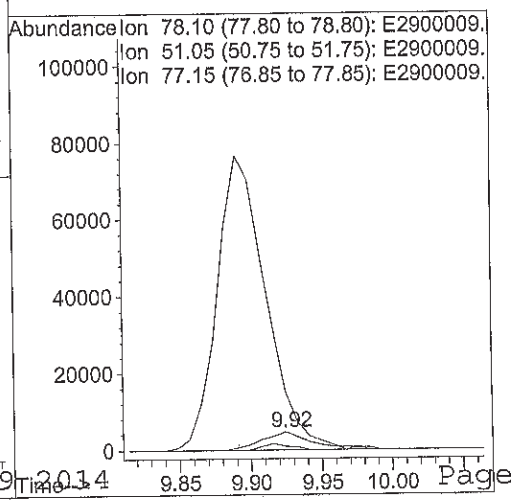


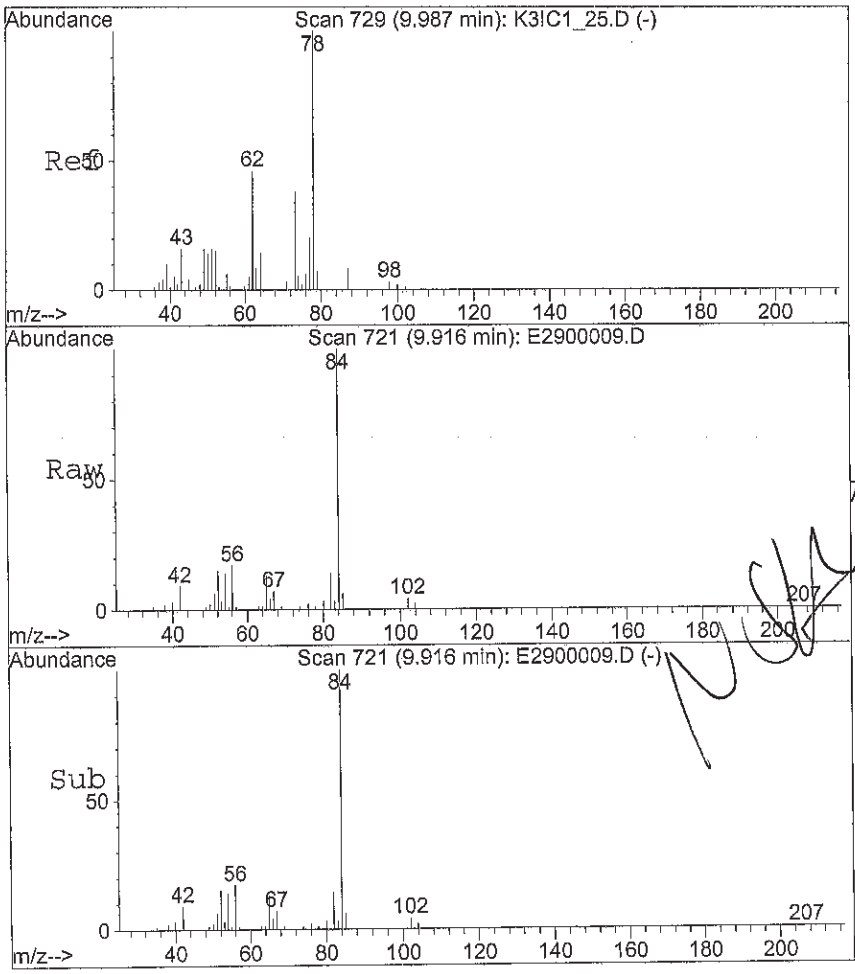


#31
Benzene
Concen: 0.76 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.05 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 78 Resp: 11161

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	18.9	16.6	24.8

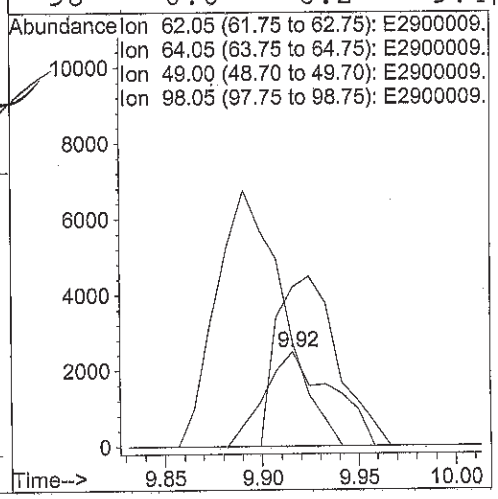


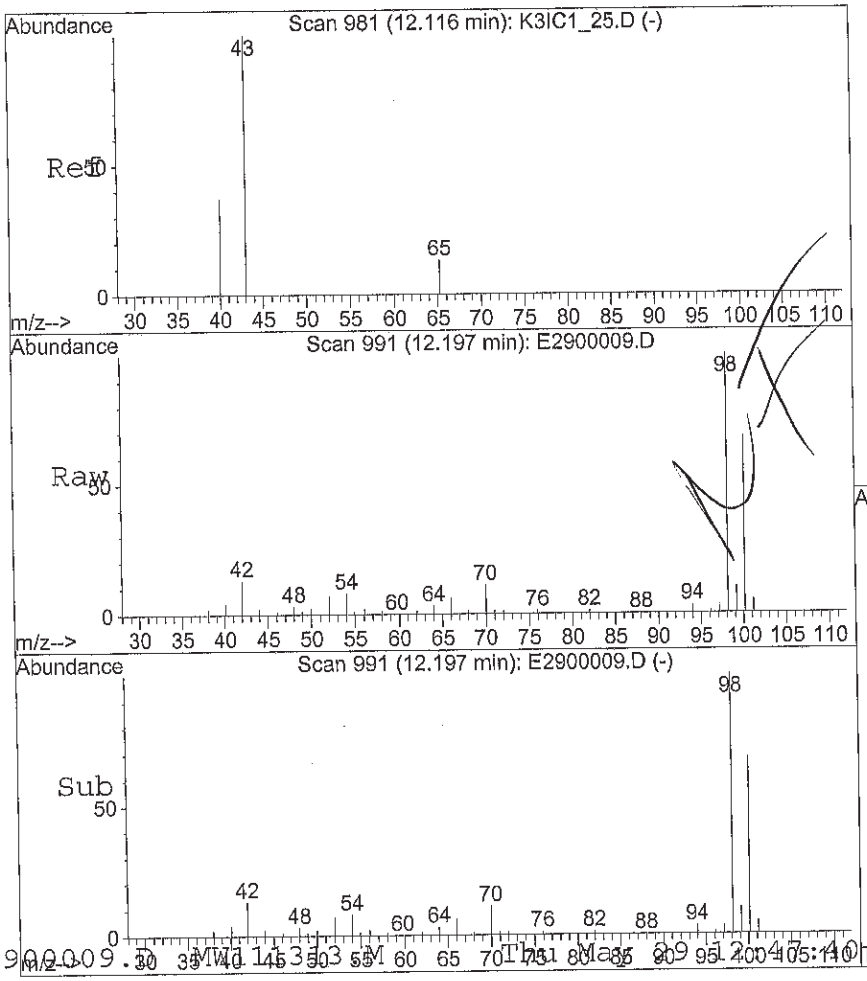


#32
1,2-Dichloroethane
Concen: 1.14 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 62 Resp: 5925

Ion	Ratio	Lower	Upper
62	100		
64	165.1	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

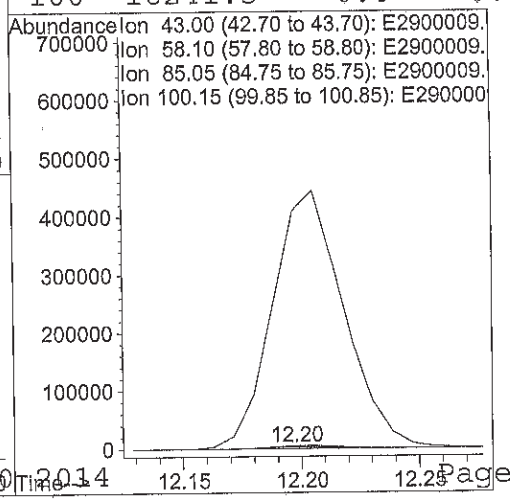


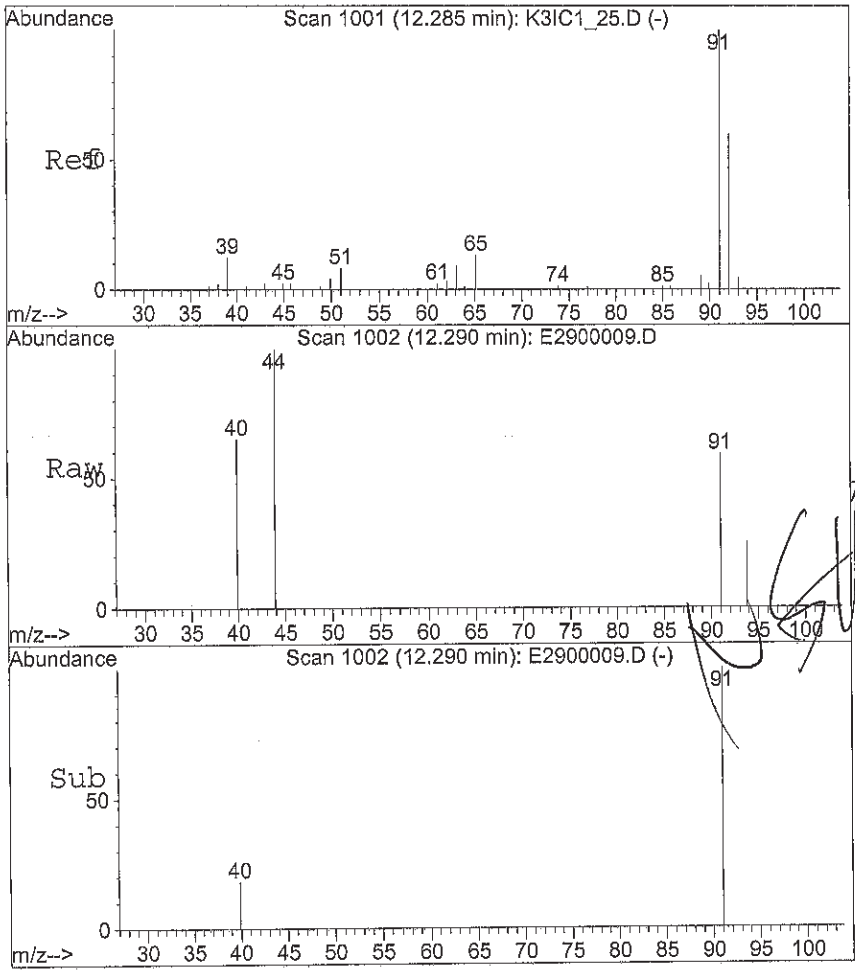


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.25 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 43 Resp: 5742

Ion	Ratio	Lower	Upper
43	100		
58	168.1	0.0	0.0#
85	0.0	0.0	0.0
100	16241.5	0.0	0.0#

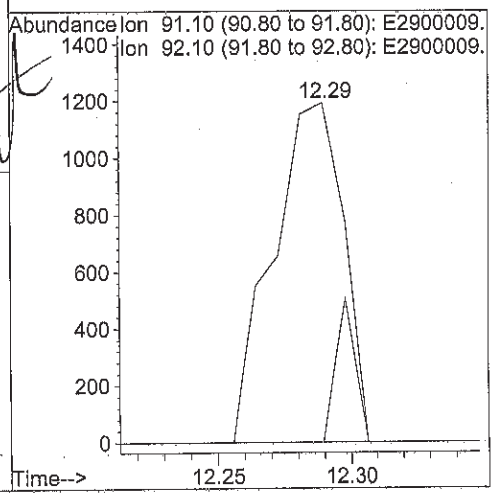


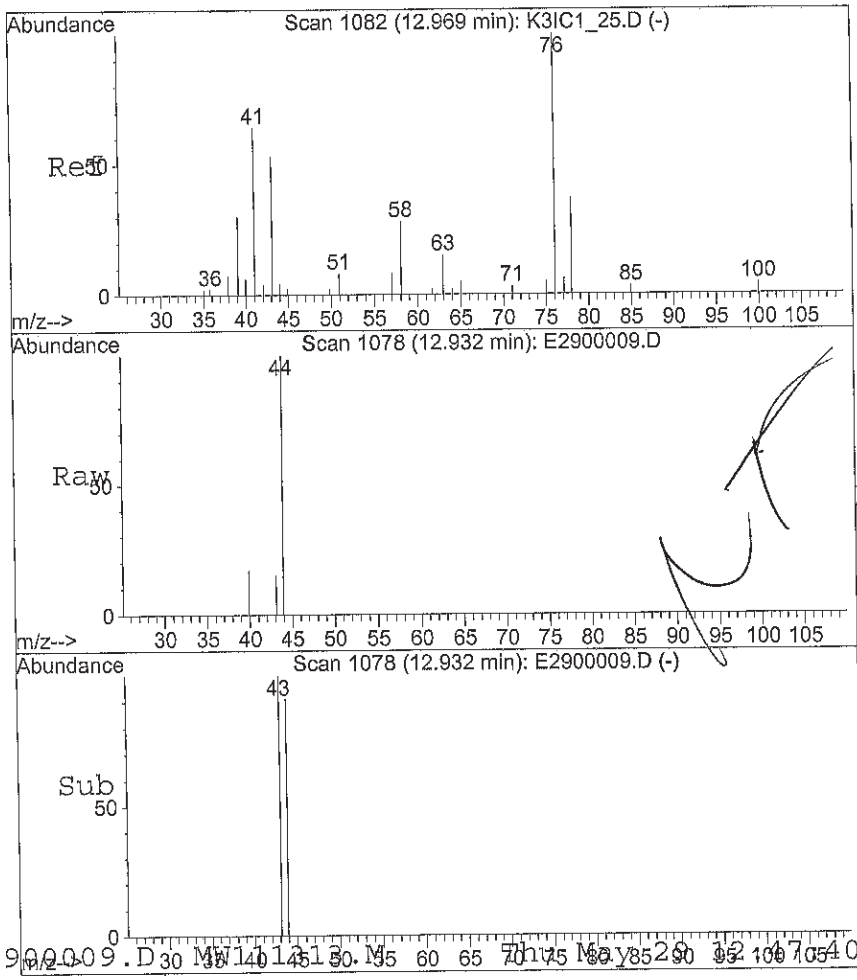


#41
Toluene
Concen: 0.13 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 91 Resp: 2191

Ion	Ratio	Lower	Upper
91	100		
92	11.7	47.4	71.0#

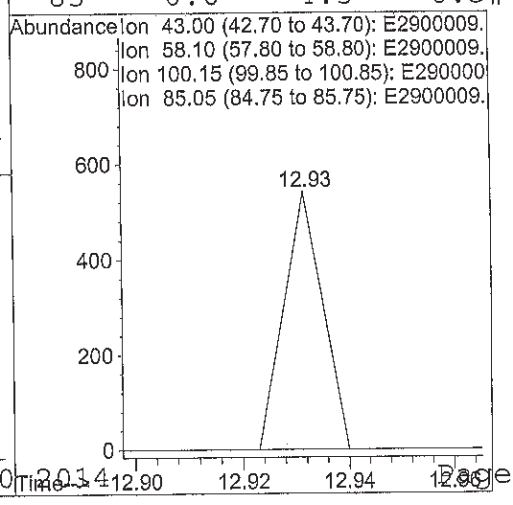


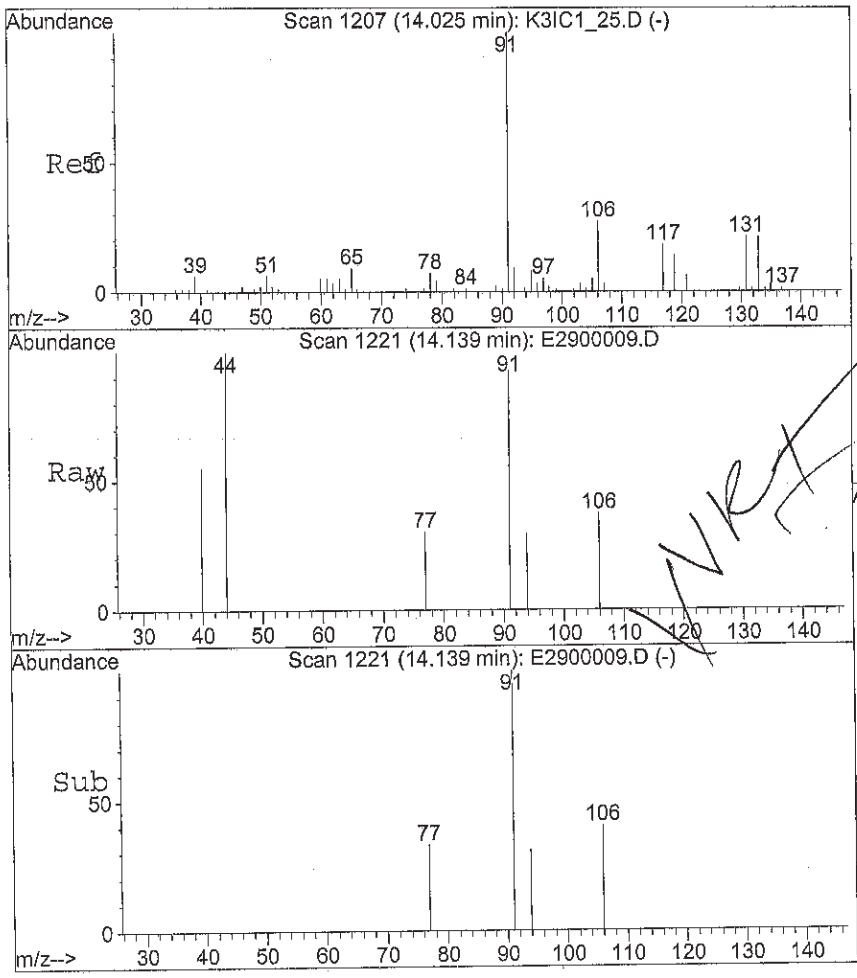


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.04 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 43 Resp: 274

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#



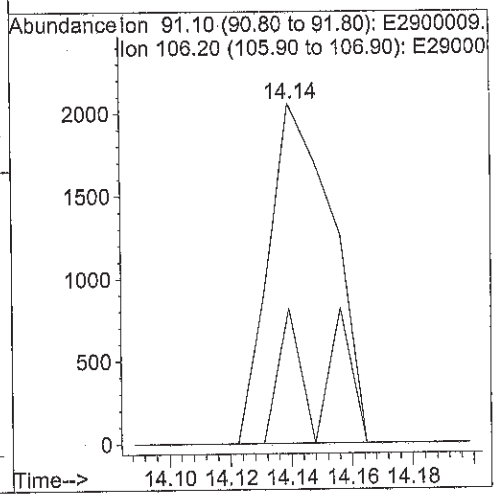


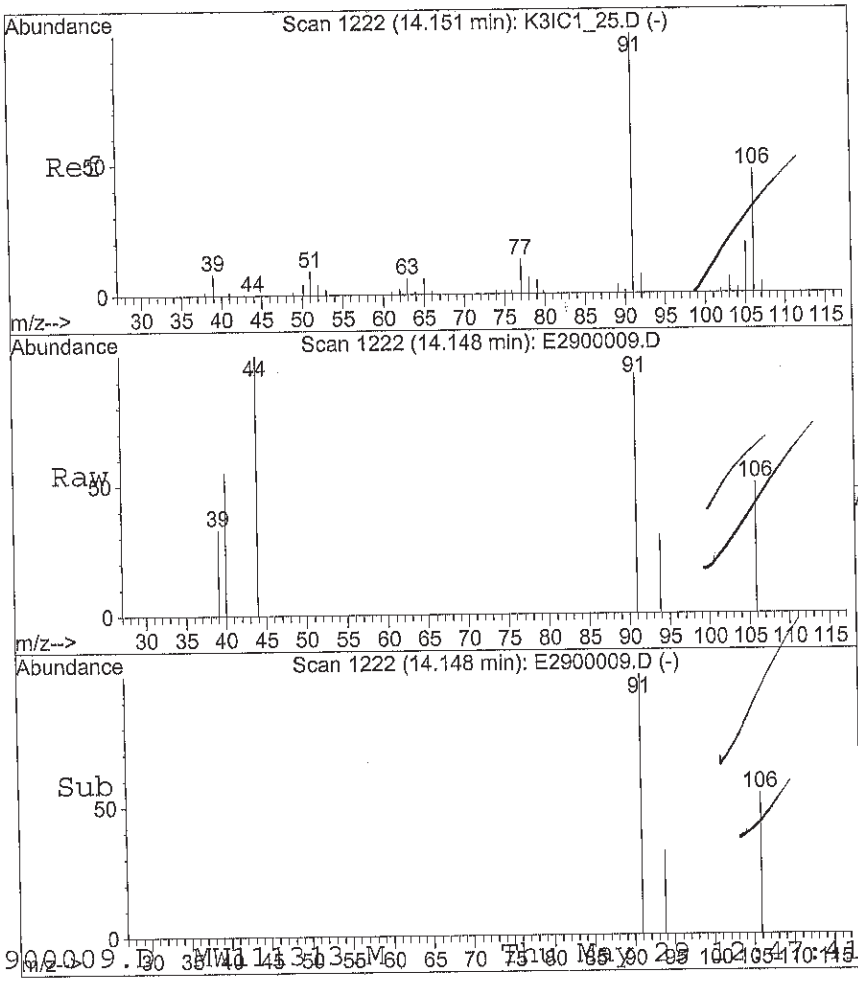
#51
Ethylbenzene
Concen: 0.15 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. 0.11 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 91 Resp: 2992

Ion	Ratio	Lower	Upper
91	100		
106	27.7	23.5	35.3

NRT

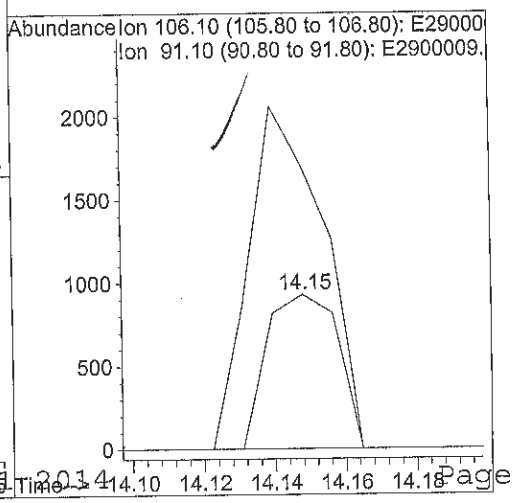


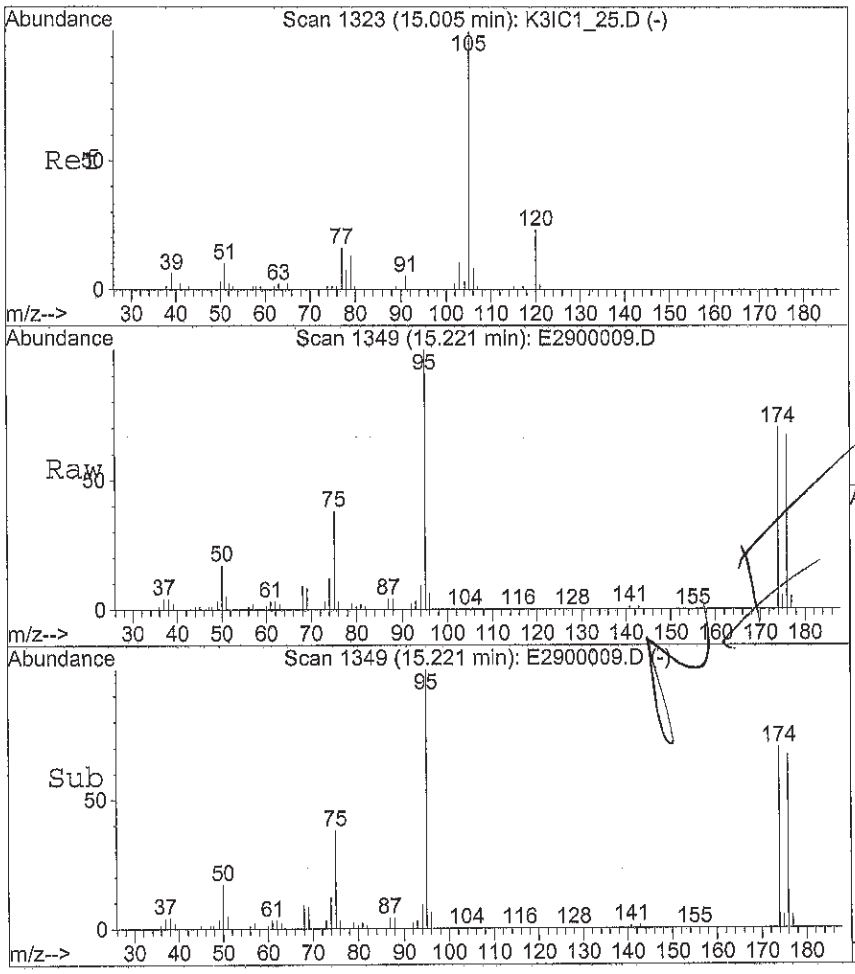


#52
m,p-Xylenes
Concen: 0.18 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion:106 Resp: 1298

Ion	Ratio	Lower	Upper
106	100		
91	230.5	177.1	265.7

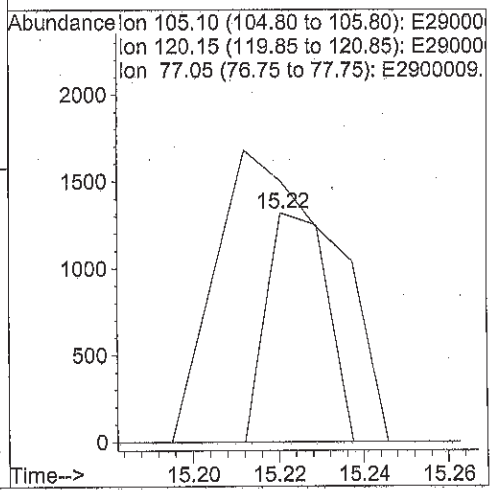


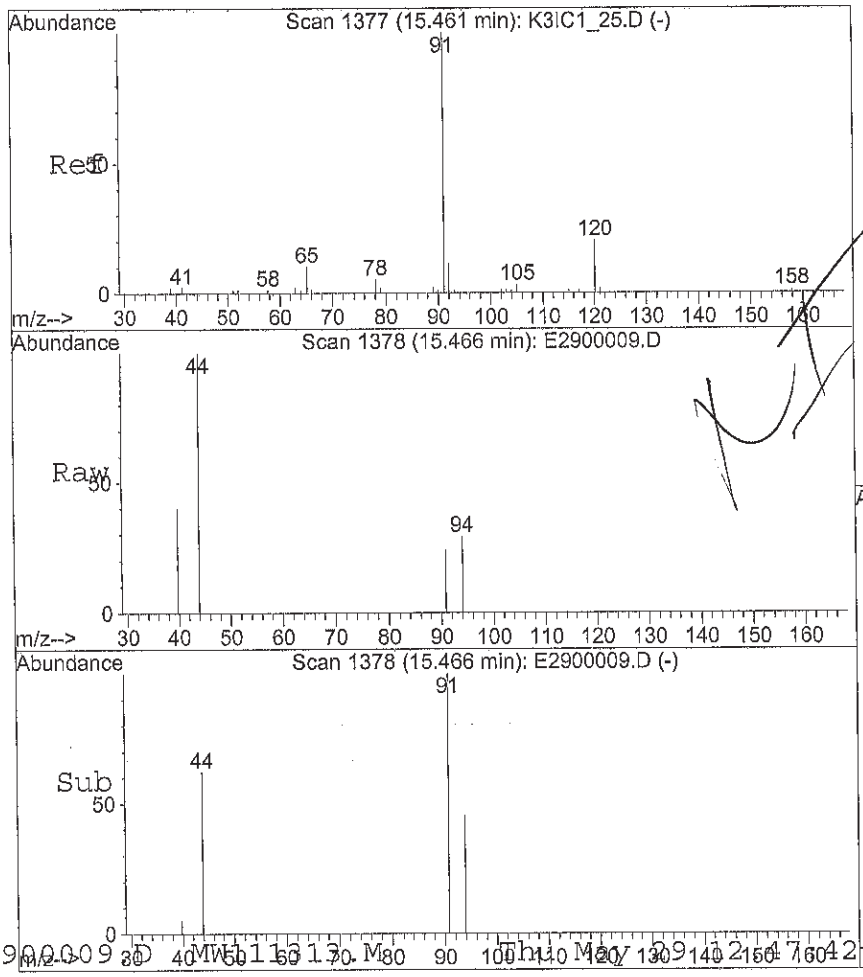


#56
Isopropylbenzene
Concen: 0.07 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.22 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion:105 Resp: 1301

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	244.7	13.1	19.7#

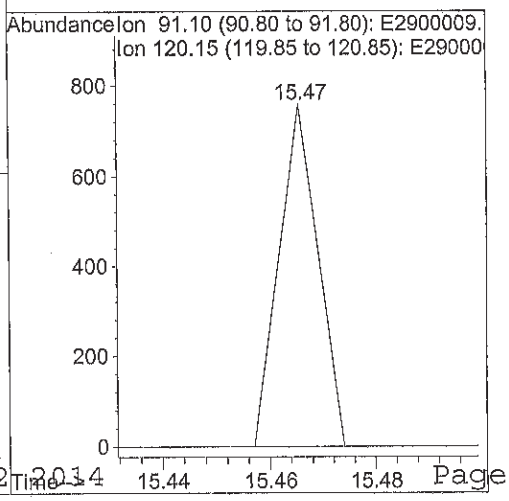


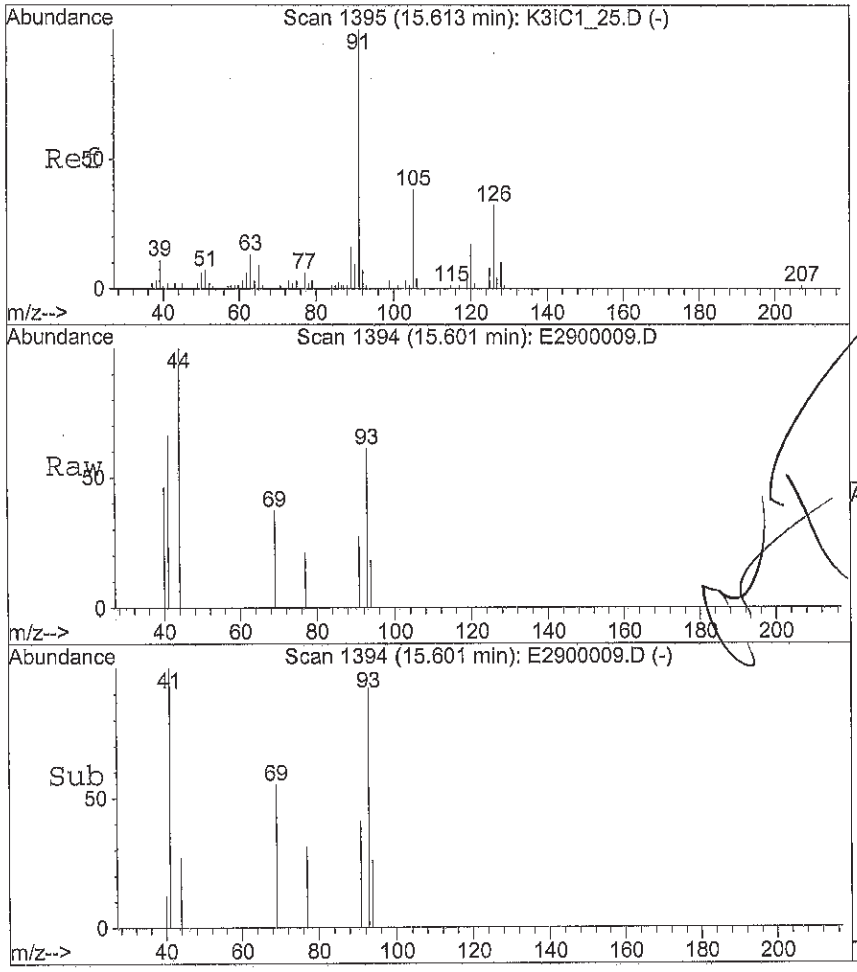


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.47 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 91 Resp: 384

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

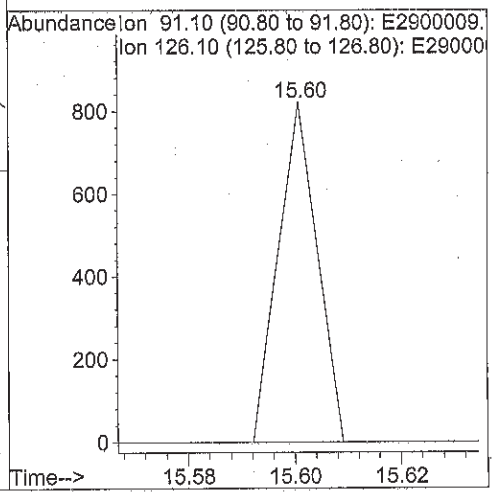


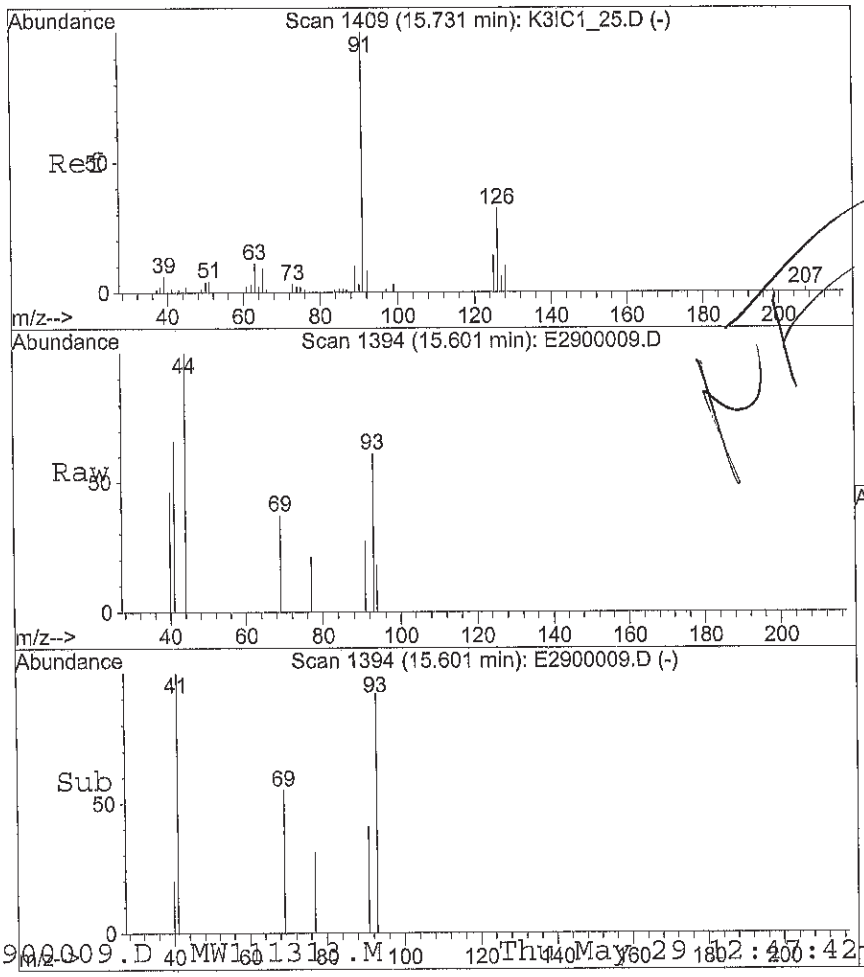


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 91 Resp: 416

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

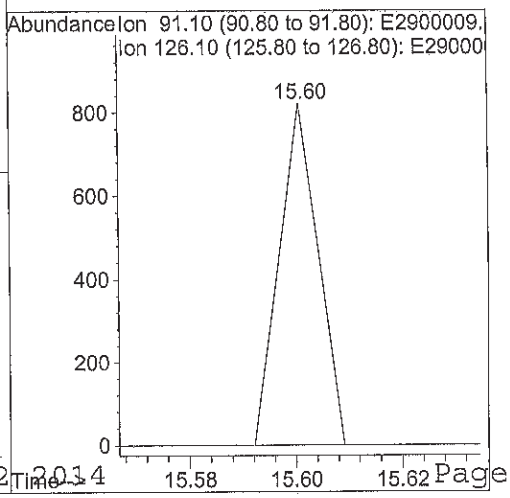


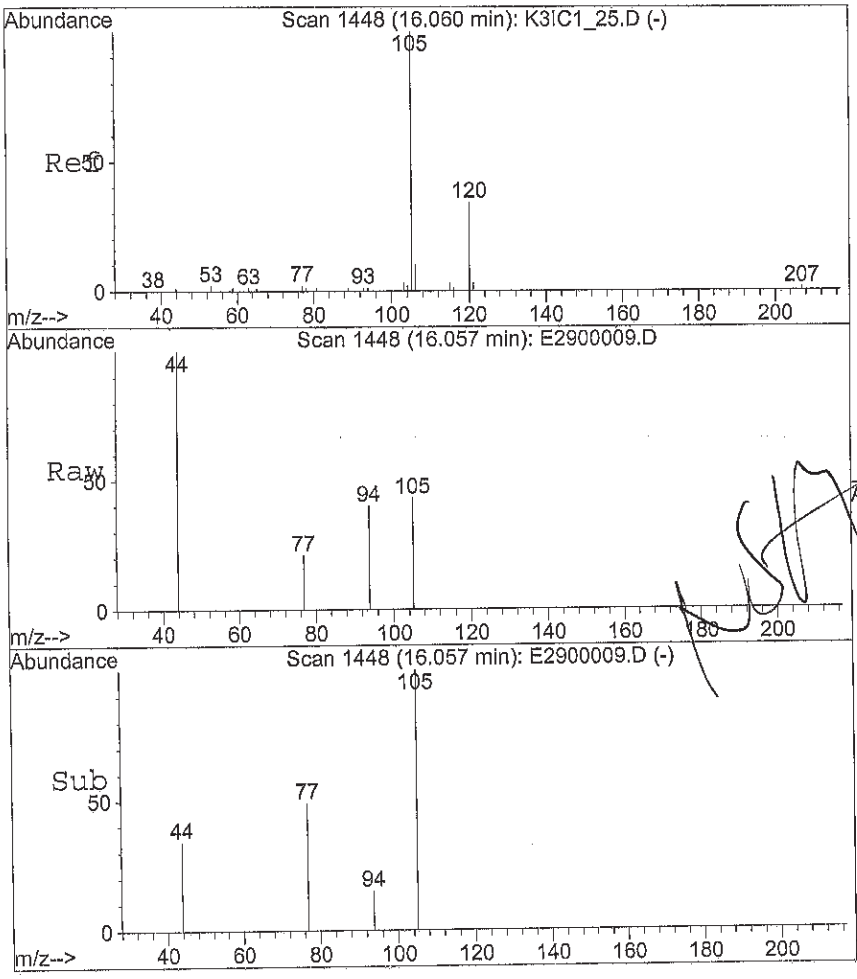


#65
4-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.13 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion: 91 Resp: 416

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

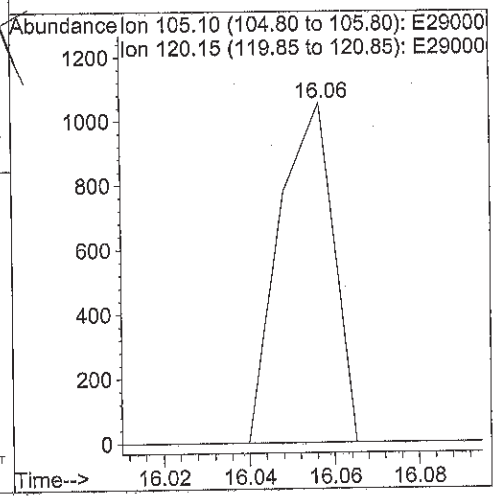


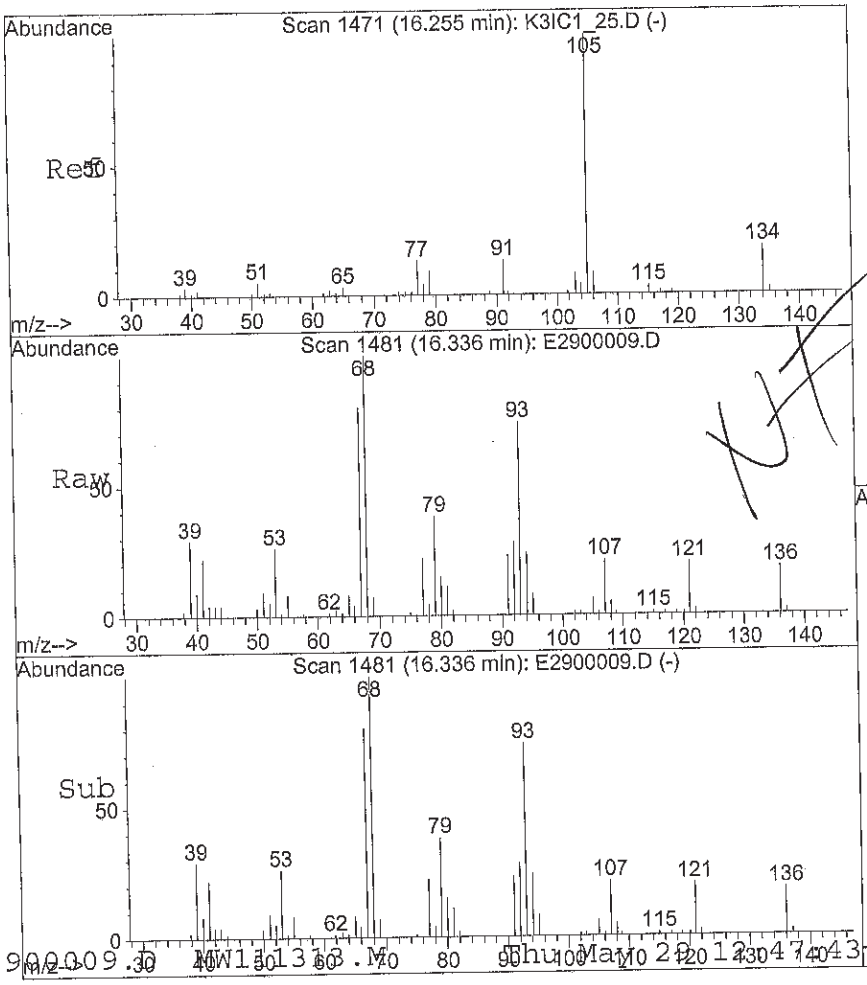


#67
1,2,4-Trimethylbenzene
Concen: 0.05 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion:105 Resp: 928

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

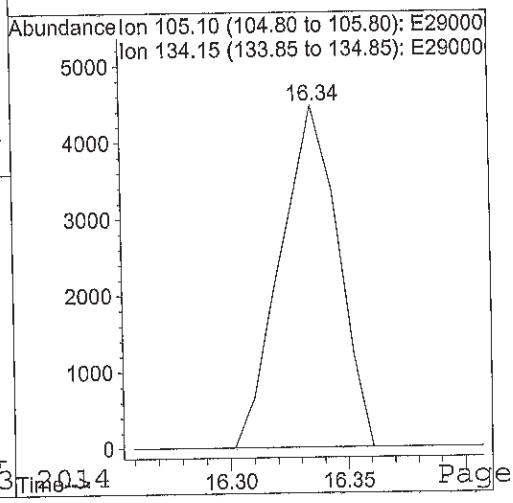


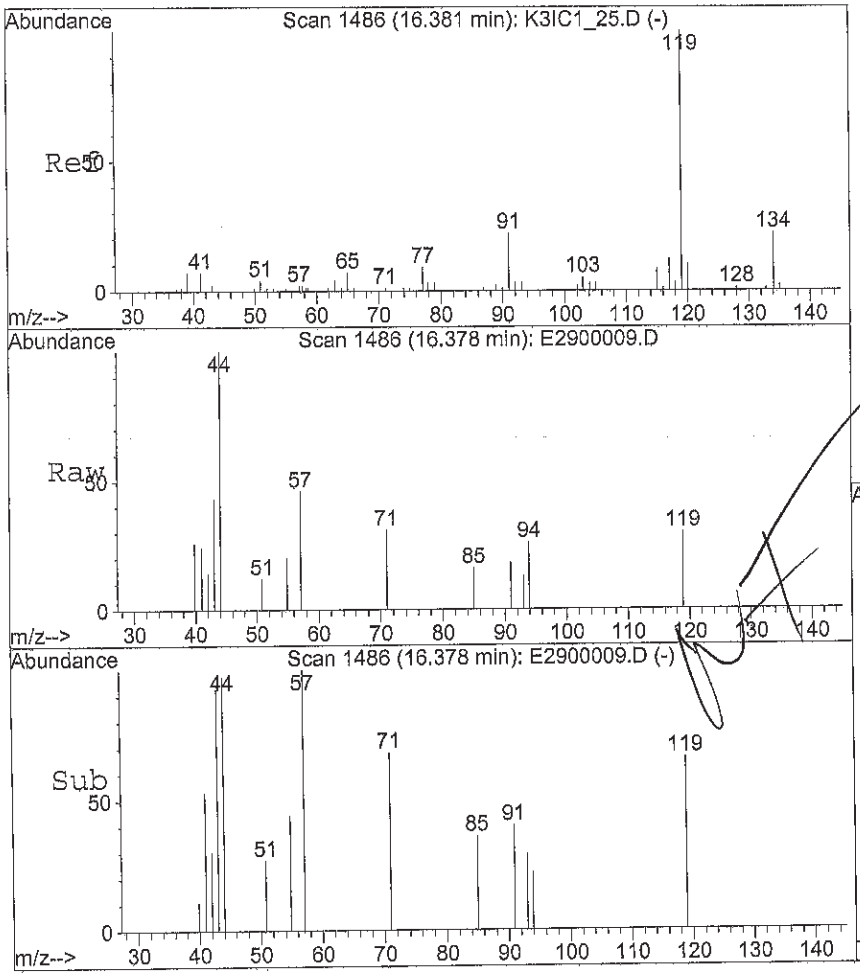


#68
sec-Butylbenzene
Concen: 0.33 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion:105 Resp: 7599

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

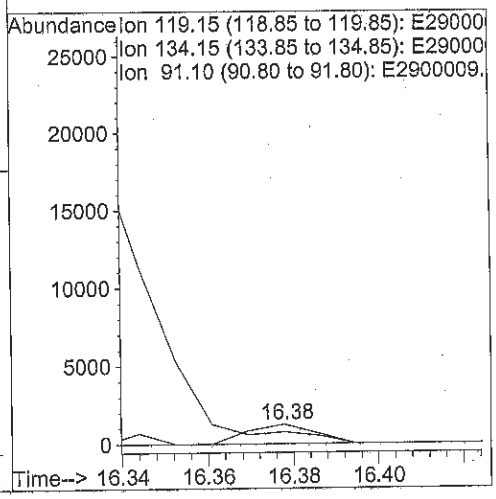




#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2900009.D
Acq: 29 May 2014 12:11 pm

Tgt Ion:119 Resp: 1382

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900009.D
Acq On : 29 May 2014 12:11 pm
Sample : 3E42901-08
Misc : 100cc SVL-531-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 29 13:01 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1563526	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1279374	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	693986	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	437328	10.76 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.08%		
3) Chloroform-d (SU6)	9.18	84	679265	11.64 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.12%		
4) Methylene Chloride-d2 (SU5	7.05	86	393895	11.55 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.40%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	433965	15.62 ug/L	-0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 124.96%		
6) Benzene-d6 (SU7)	9.92	84	1357517	11.06 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.48%		
8) Toluene-d8 (SU3)	12.21	98	1385172	11.41 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.28%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	698027	13.93 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.44%		

Target Compounds Qvalue

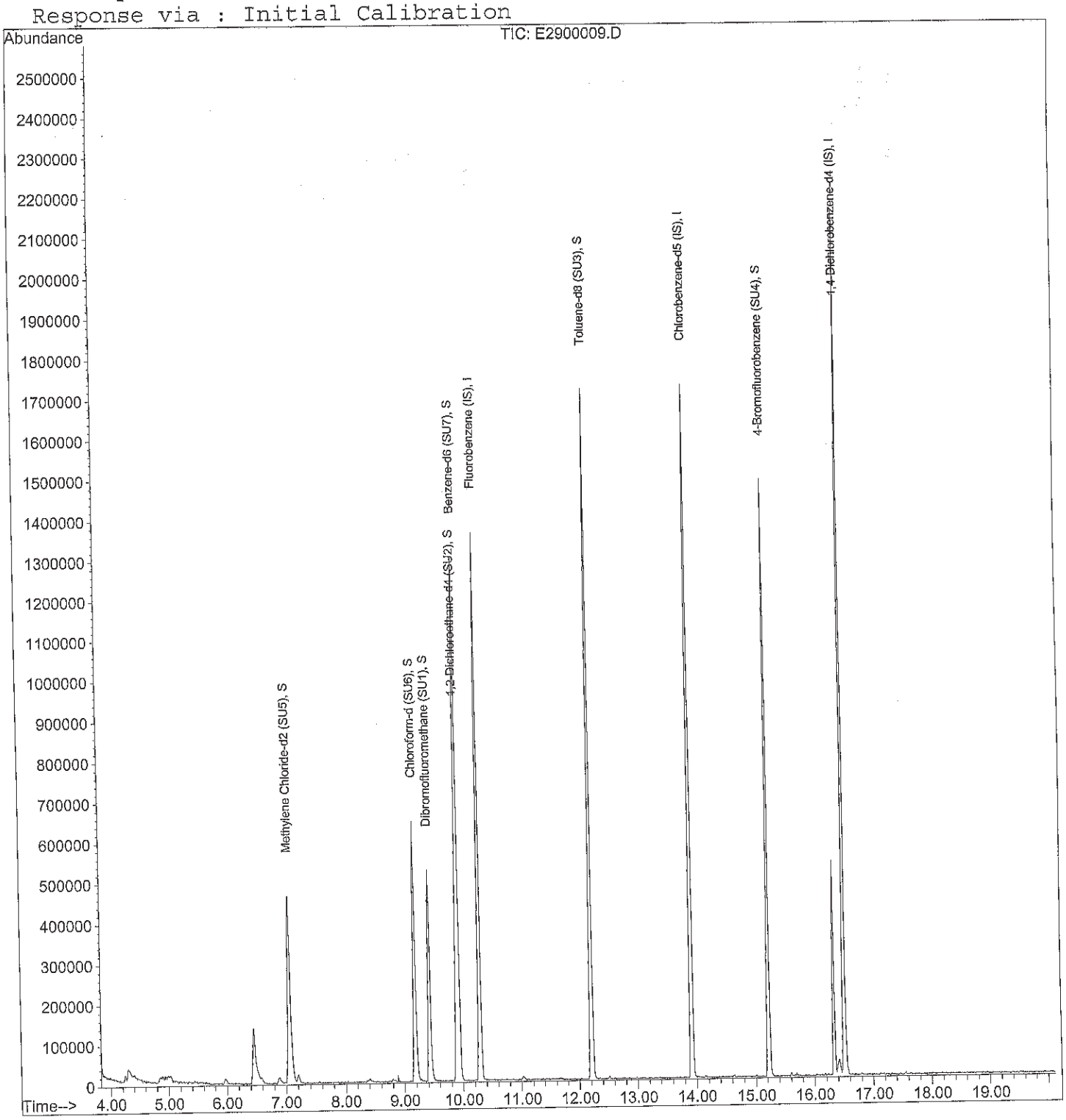
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900009.D
Acq On : 29 May 2014 12:11 pm
Sample : 3E42901-08
Misc : 100cc SVL-531-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 29 13:01 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900010.D Vial: 1
Acq On : 29 May 2014 12:57 pm Operator: DN
Sample : 3E42901-09 Inst : GC/MS Ins
Misc : 100cc SVL-539-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 13:19 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1549175	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1274965	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	707525	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	452955	11.72 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.76%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	438016	11.93 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.44%		
39) Toluene-d8 (SU3)	12.20	98	1388281	11.67 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.36%		
58) 4-Bromofluorobenzene (SU4)	15.23	95	693437	13.30 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.40%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	285	0.08 ~~ug/L~~ #	44
4) Chloromethane	4.39	50	1846	-0.51 ~~ug/L~~ #	41
7) Chloroethane	5.18	64	1705	2.01 ~~ug/L~~	86
11) Acetone	6.45	58	3282	0.32 ~~ug/L~~	89
12) (IPA) Leak Check Compound	6.45	45	295413	1586.91 ~~ug/L #~~	82
14) Methylene Chloride	7.04	84	6276	1.48 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.14	59	276	1.04 ~~ug/L #~~	77
24) Chloroform	9.20	83	5430	0.67 ~~ug/L #~~	72
29) 1,1-Dichloropropene	9.91	75	337	0.06 ~~ug/L #~~	1
31) Benzene	9.91	78	11857	0.81 ~~ug/L #~~	77
32) 1,2-Dichloroethane	9.92	62	6485	1.26 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7141	2.81 ~~ug/L #~~	100
41) Toluene	12.27	91	4180	0.24 ug/L	86
46) 2-Hexanone	12.96	43	288	0.10 ~~ug/L #~~	37
51) Ethylbenzene	14.02	91	948	0.05 ~~ug/L #~~	45
52) m,p-Xylenes	14.14	106	990	0.14 ug/L	83
54) Styrene	14.63	104	2208	-0.65 ~~ug/L #~~	63
56) Isopropylbenzene	15.24	105	847	0.04 ~~ug/L #~~	1
57) 1,2,3-Trichloropropane	15.29	75	707	0.14 ~~ug/L #~~	36
62) n-Propylbenzene	15.46	91	640	0.02 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.61	91	540	0.03 ~~ug/L #~~	45
65) 4-Chlorotoluene	15.63	91	361	0.02 ~~ug/L #~~	44

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900010.D Vial: 1
Acq On : 29 May 2014 12:57 pm Operator: DN
Sample : 3E42901-09 Inst : GC/MS Ins
Misc : 100cc SVL-539-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 13:19 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	2229	0.12	~~ug/L~~ # SV	56
68) sec-Butylbenzene	16.33	105	7772	0.33	ug/L #	62
69) p-Isopropyltoluene	16.38	119	3006	0.16	~~ug/L~~ #	52
72) n-Butylbenzene	16.84	91	260	0.01	~~ug/L~~ #	30
77) Naphthalene	19.44	128	818	0.06	~~ug/L~~	100

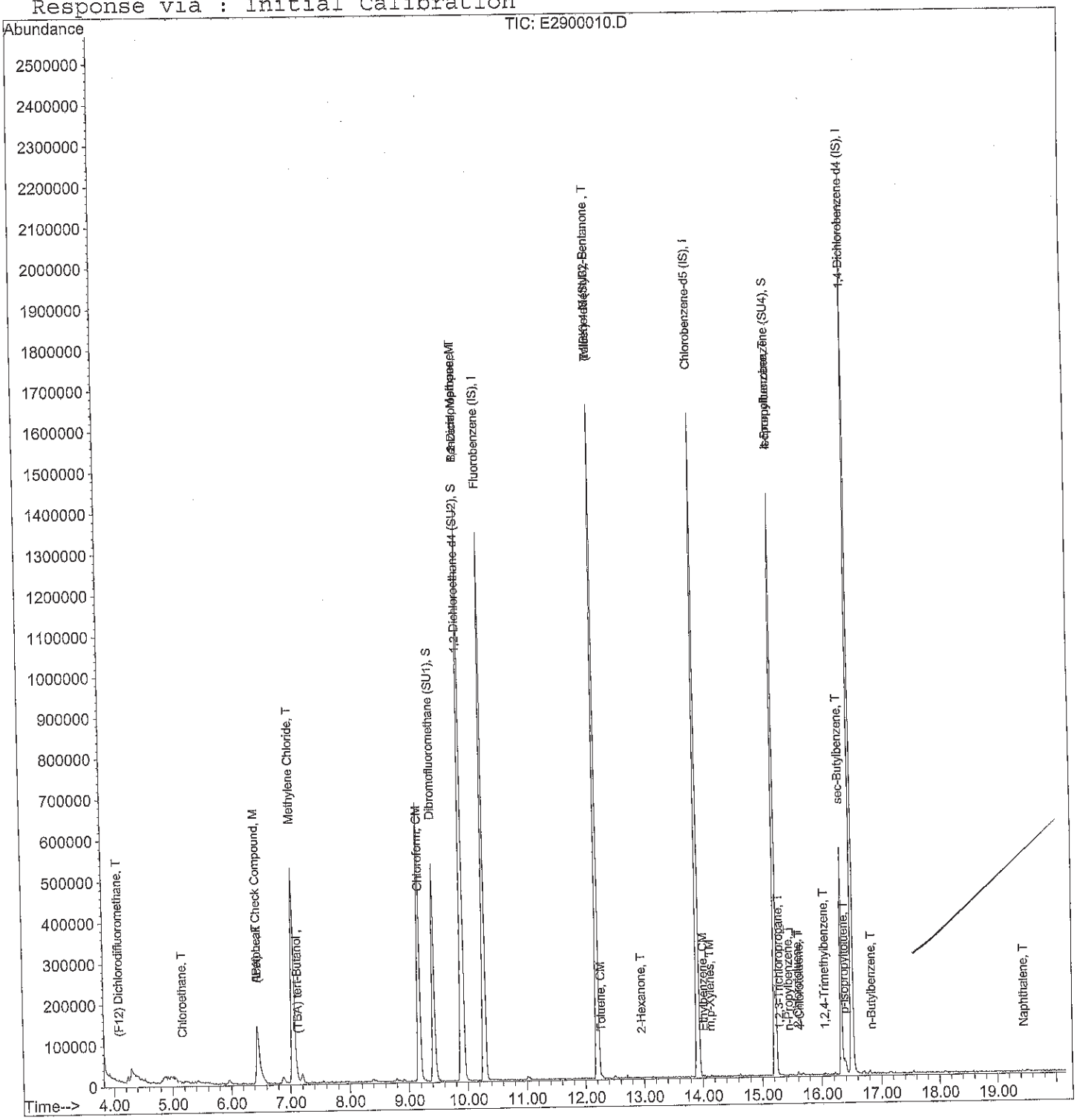
(#) = qualifier out of range (m) = manual integration

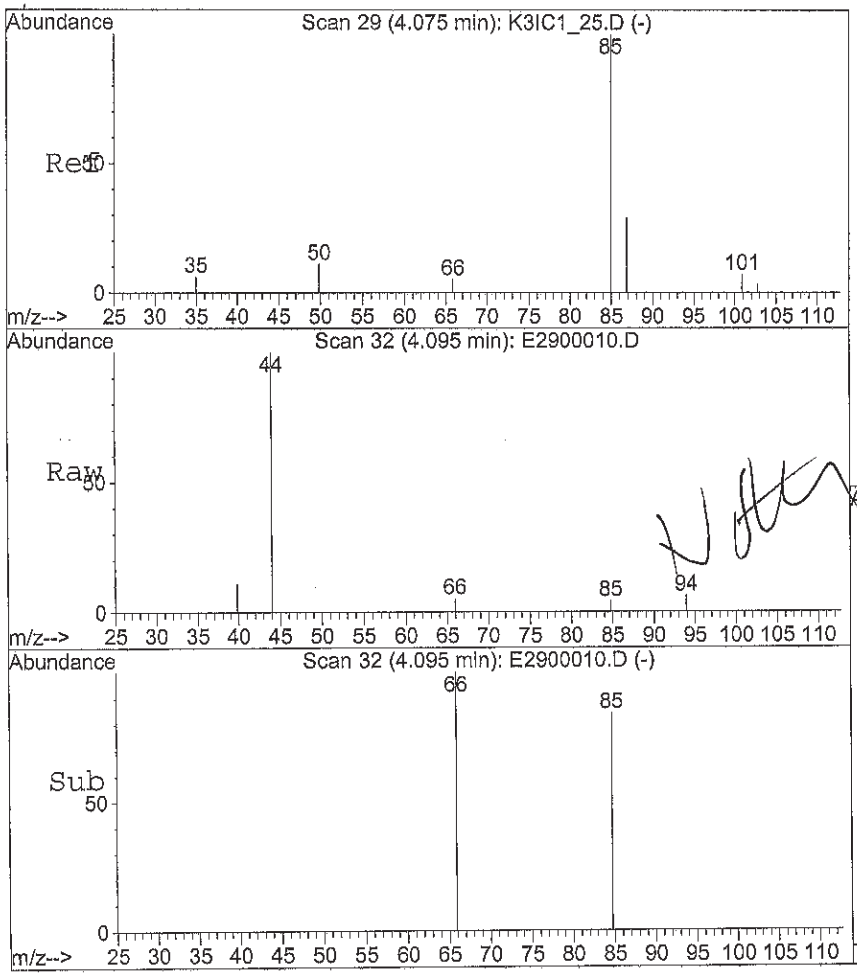
Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900010.D
Acq On : 29 May 2014 12:57 pm
Sample : 3E42901-09
Misc : 100cc SVL-539-SA5D-SV-4.5-5.5
MS Integration Params: rteint.p
Quant Time: May 29 13:19 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

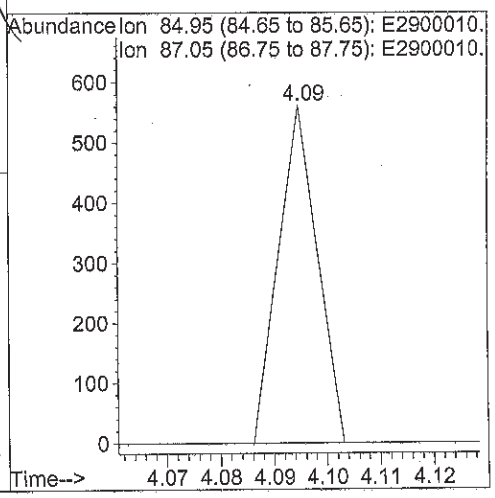


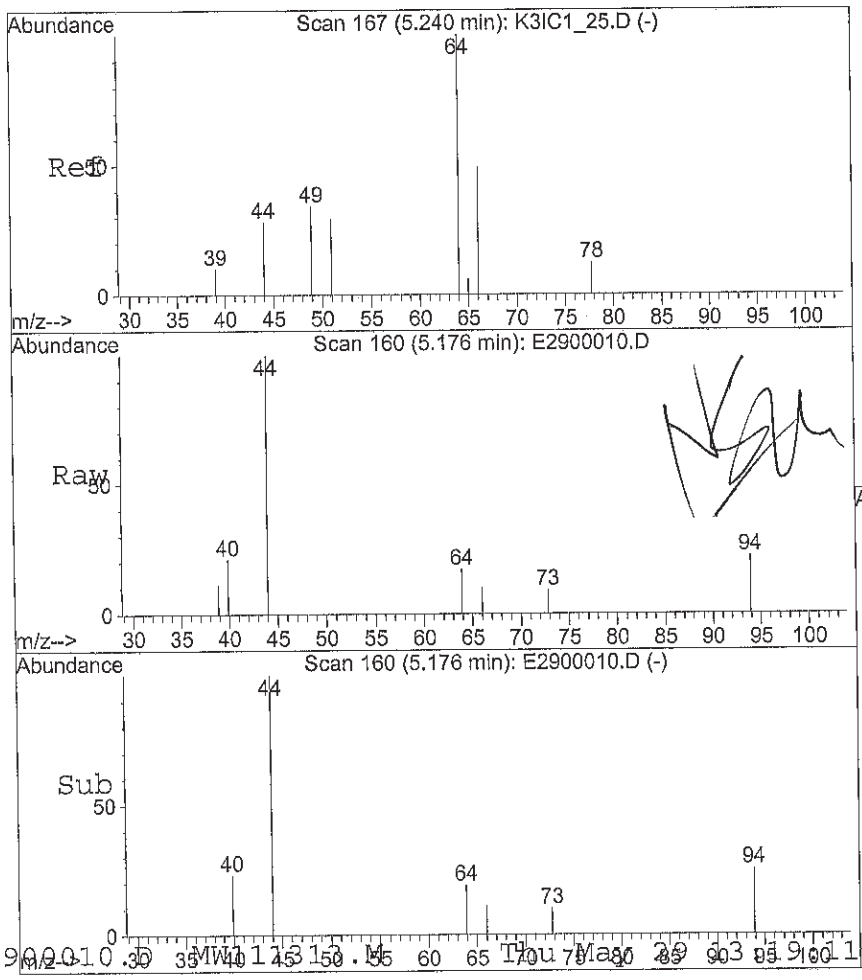


#3
(F12) Dichlorodifluoromethane
Concen: 0.08 ug/L
RT: 4.09 min Scan# 32
Delta R.T. 0.02 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 85 Resp: 285

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

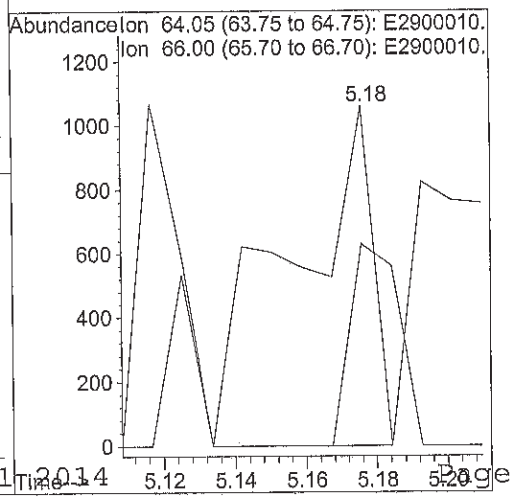


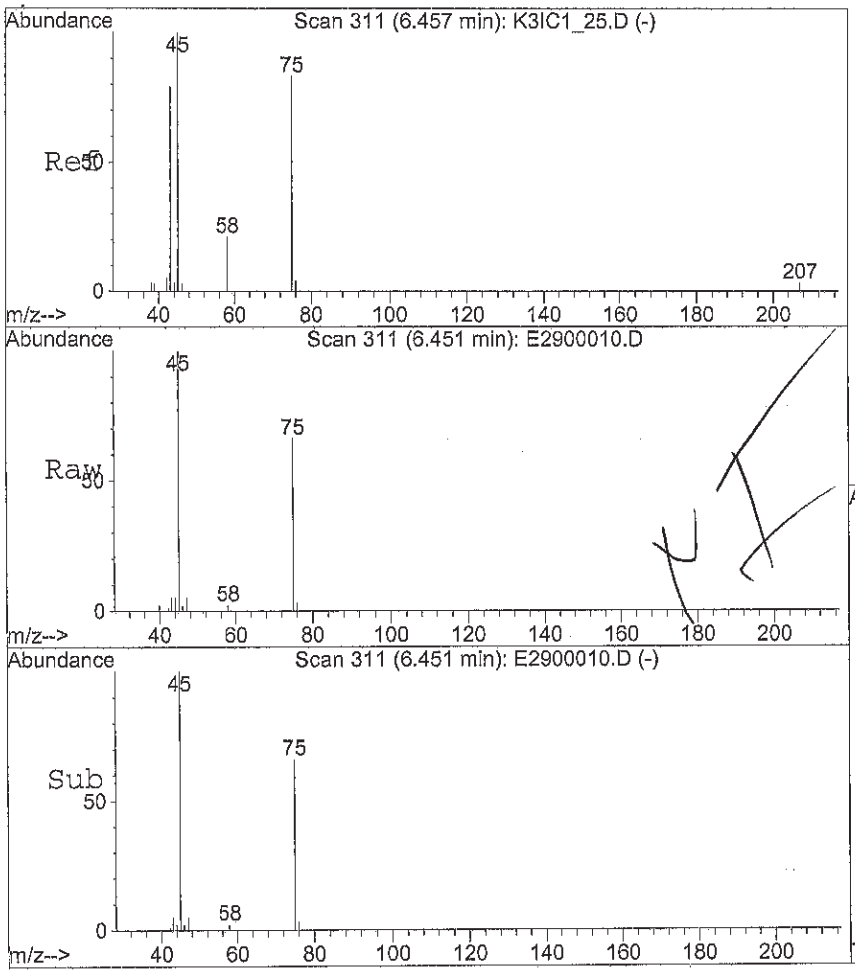


#7
Chloroethane
Concen: 2.01 ug/L
RT: 5.18 min Scan# 160
Delta R.T. -0.06 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 64 Resp: 1705

Ion	Ratio	Lower	Upper
64	100		
66	35.4	35.4	53.0

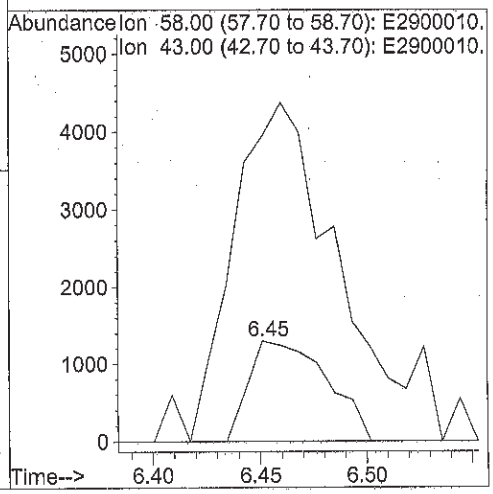


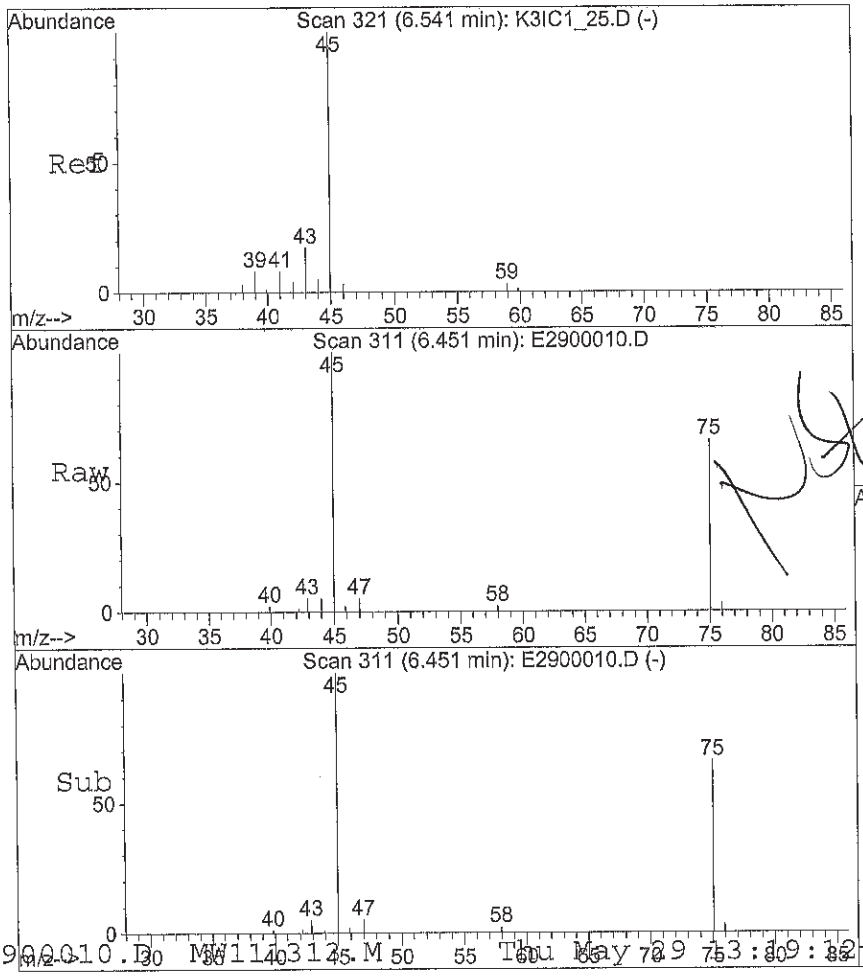


#11
Acetone
Concen: 0.32 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 58 Resp: 3282

Ion	Ratio	Lower	Upper
58	100		
43	478.2	360.9	541.3

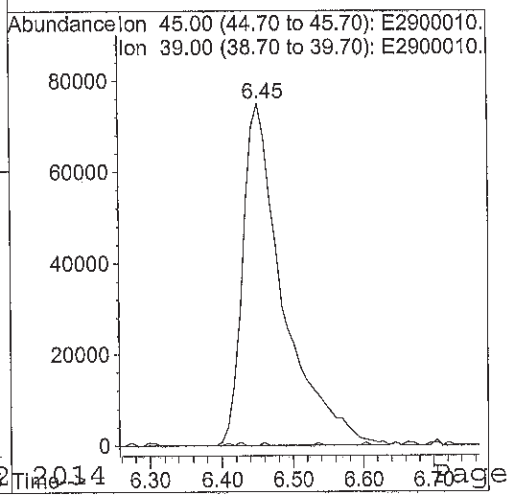


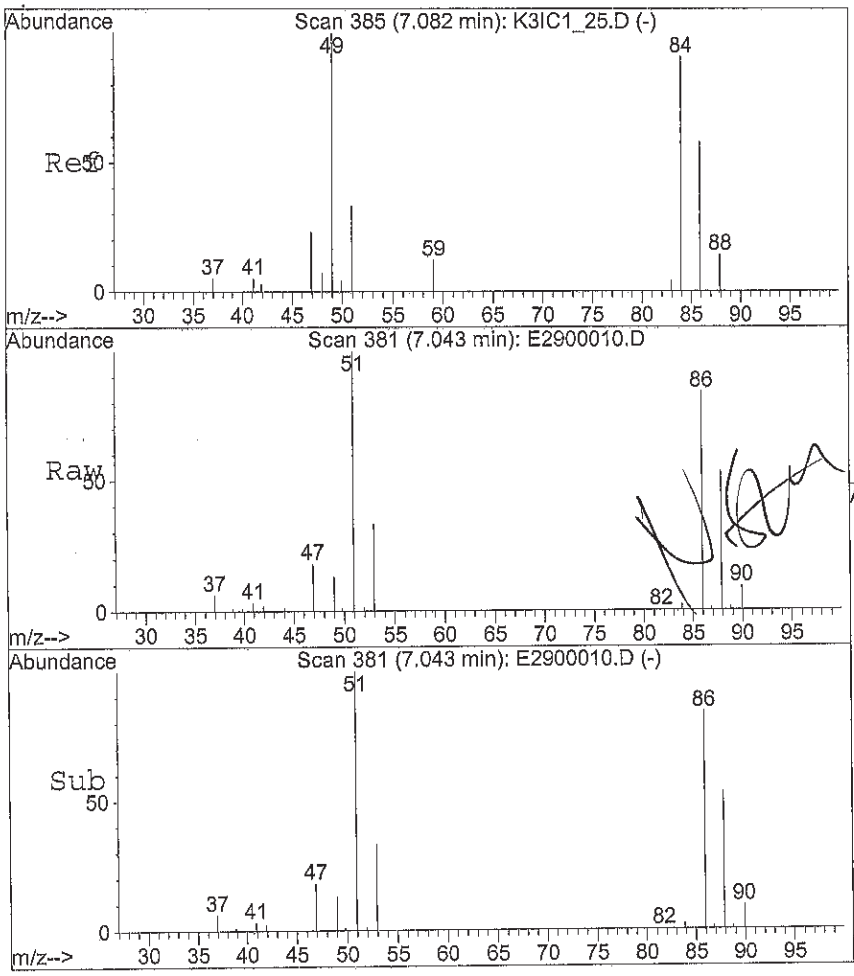


#12
(IPA) Leak Check Compound
Concen: 1586.91 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.09 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 45 Resp: 295413

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

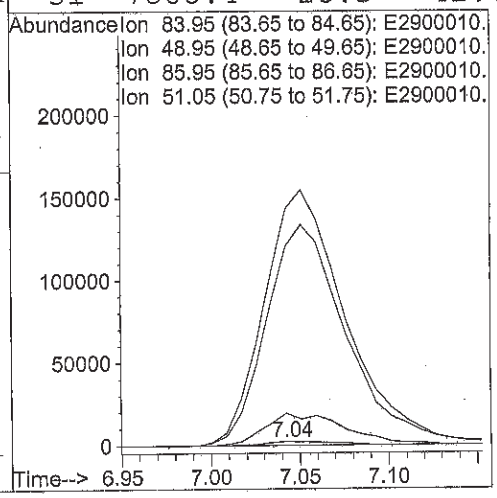


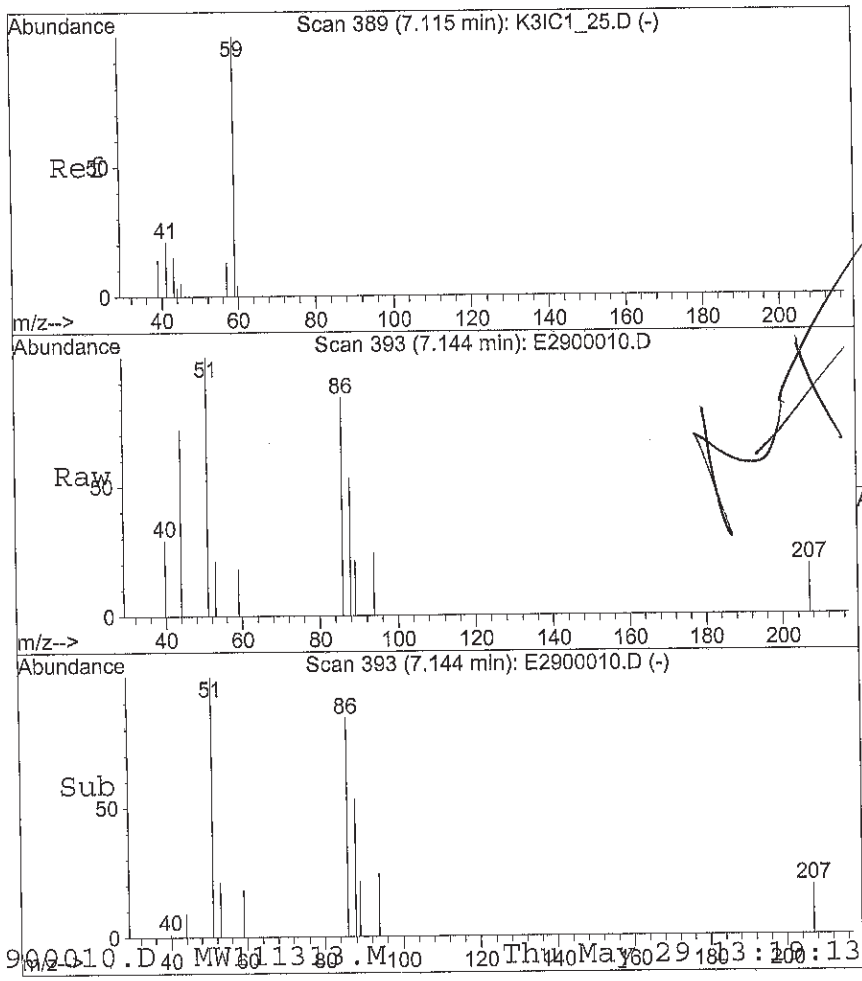


#14
Methylene Chloride
Concen: 1.48 ug/L
RT: 7.04 min Scan# 381
Delta R.T. -0.04 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 84 Resp: 6276

Ion	Ratio	Lower	Upper
84	100		
49	955.2	89.8	134.6#
86	6681.1	51.1	76.7#
51	7868.4	28.5	42.7#

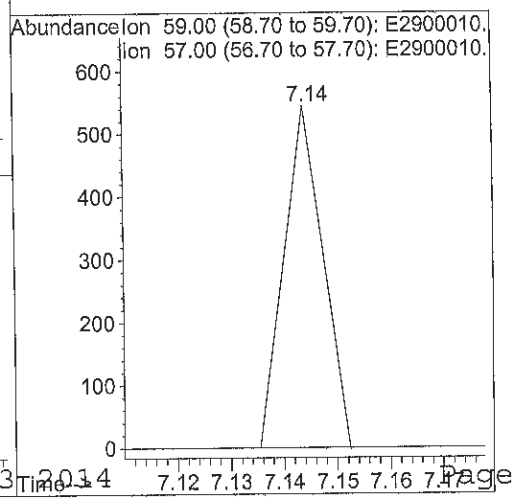


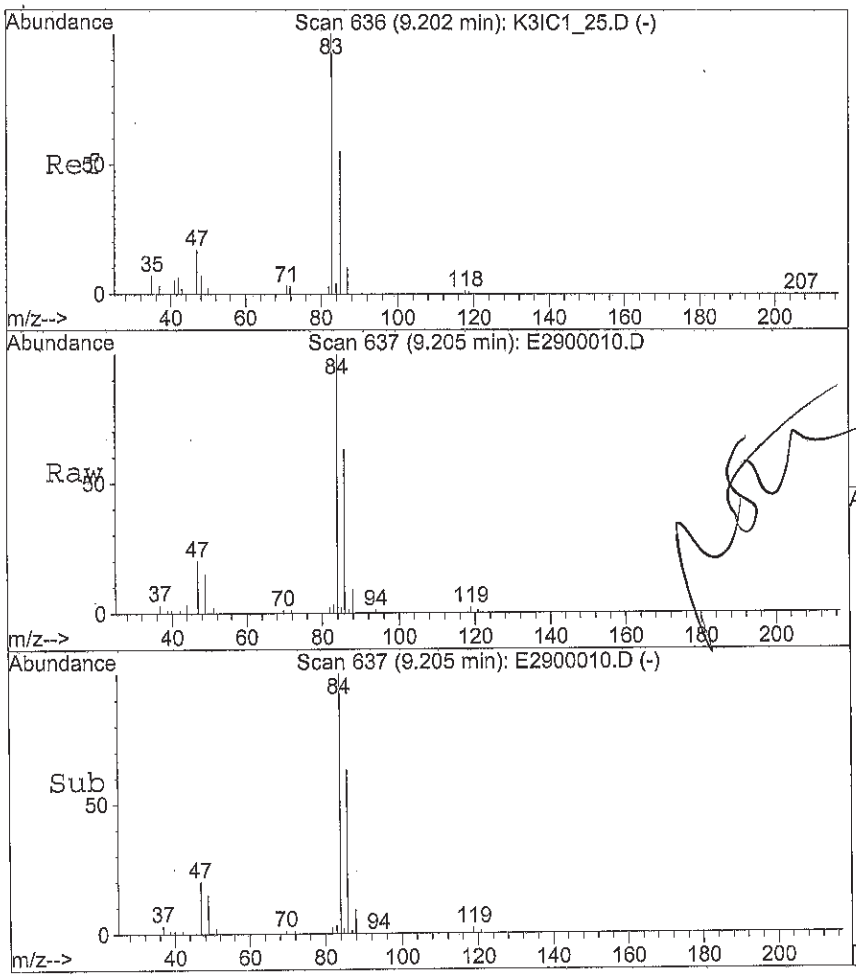


#15
(TBA) tert-Butanol
Concen: 1.04 ug/L
RT: 7.14 min Scan# 393
Delta R.T. 0.03 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 59 Resp: 276

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

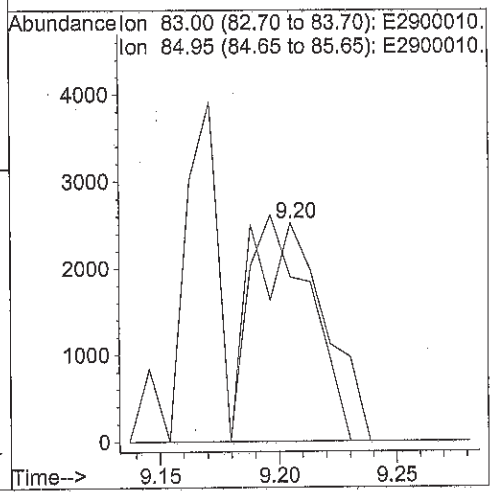


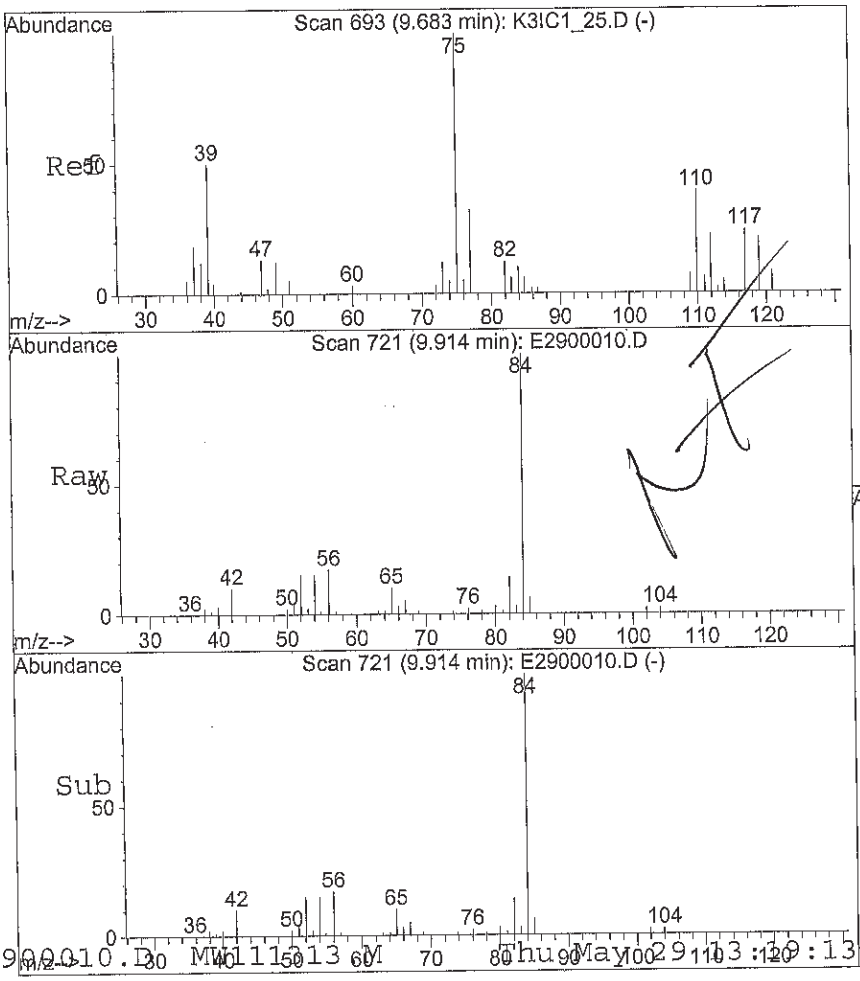


#24
Chloroform
Concen: 0.67 ug/L
RT: 9.20 min Scan# 637
Delta R.T. 0.00 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 83 Resp: 5430

Ion	Ratio	Lower	Upper
83	100		
85	87.1	51.8	77.6#

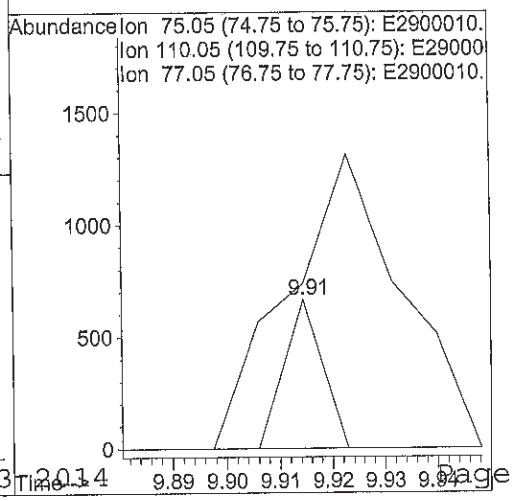


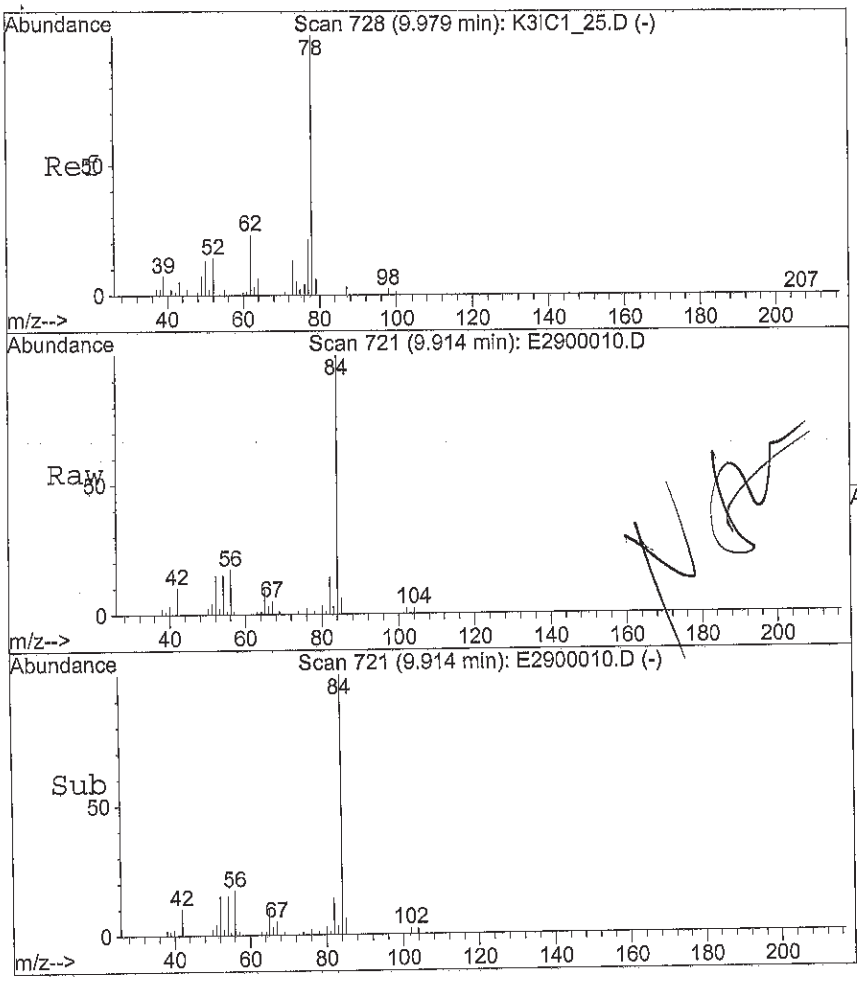


#29
1,1-Dichloropropene
Concen: 0.06 ug/L
RT: 9.91 min Scan# 721
Delta R.T. 0.23 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 75 Resp: 337

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	582.8	25.0	37.4#

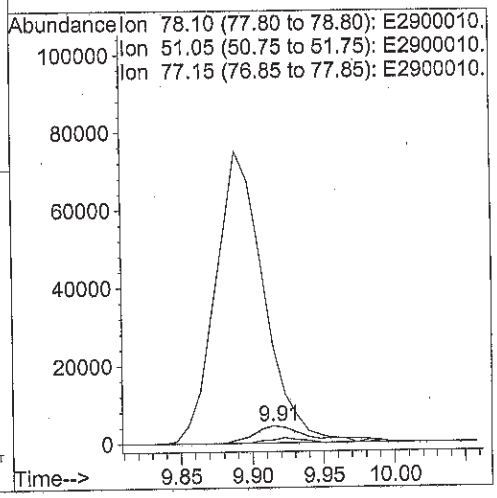


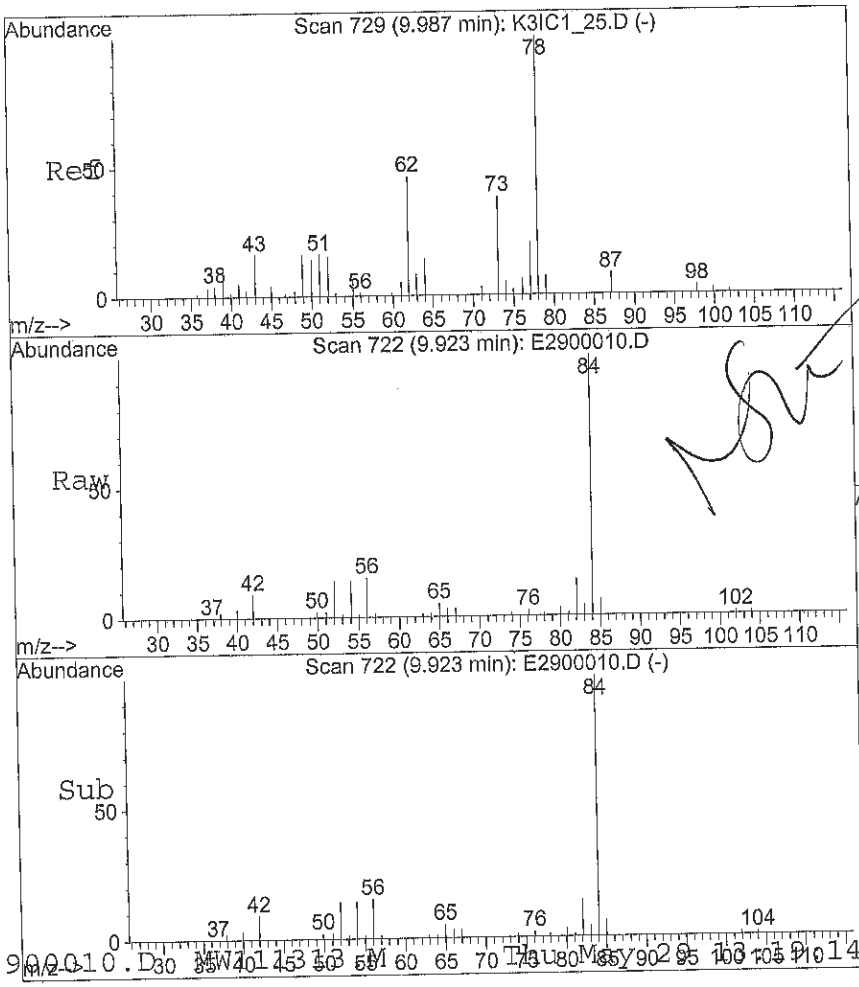


#31
Benzene
Concen: 0.81 ug/L
RT: 9.91 min Scan# 721
Delta R.T. -0.06 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 78 Resp: 11857

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	16.6	16.6	24.8

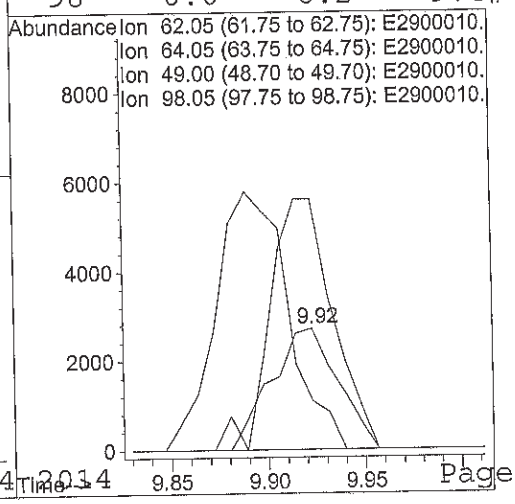


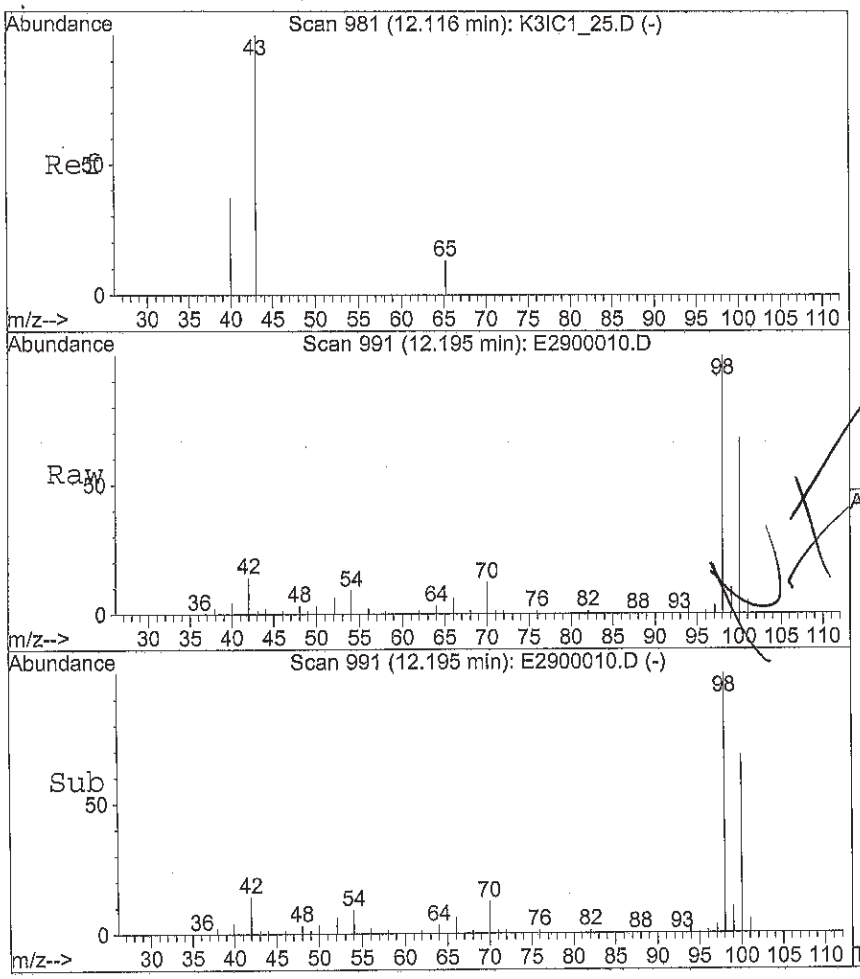


#32
1,2-Dichloroethane
Concen: 1.26 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 62 Resp: 6485

Ion	Ratio	Lower	Upper
62	100		
64	194.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

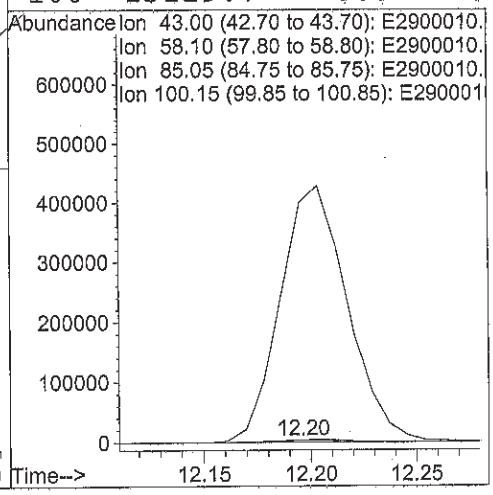


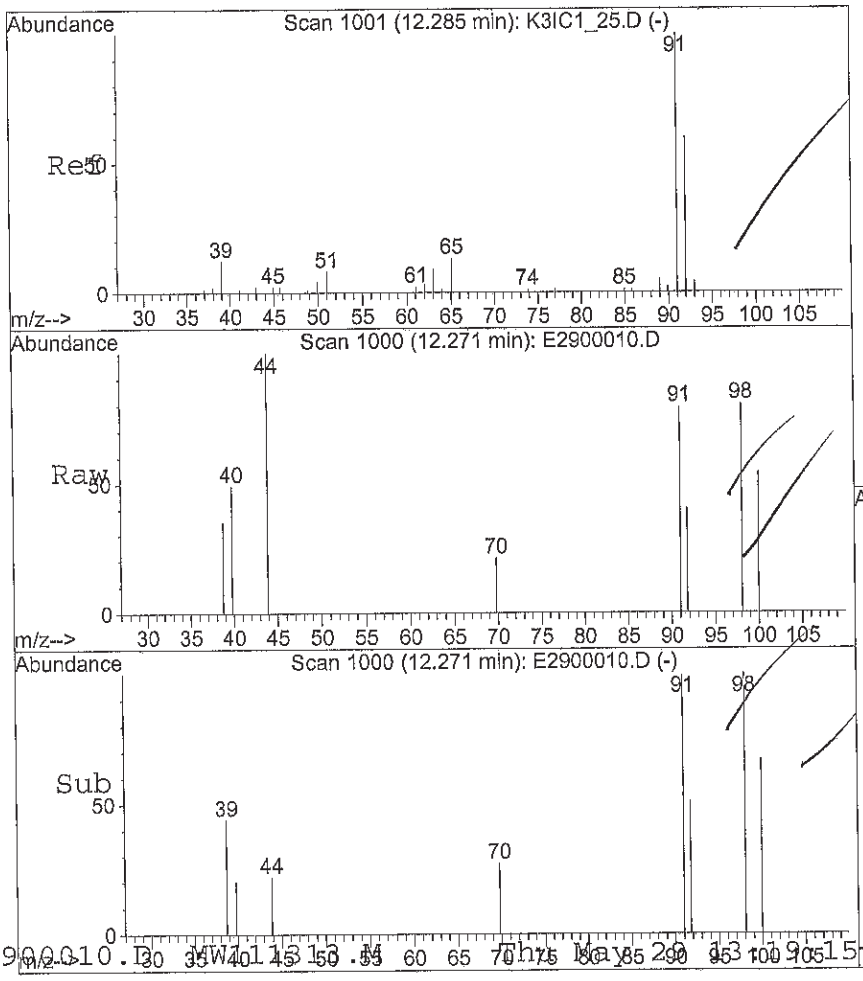


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.81 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 43 Resp: 7141

Ion	Ratio	Lower	Upper
43	100		
58	136.7	0.0	0.0#
85	0.0	0.0	0.0
100	13119.7	0.0	0.0#

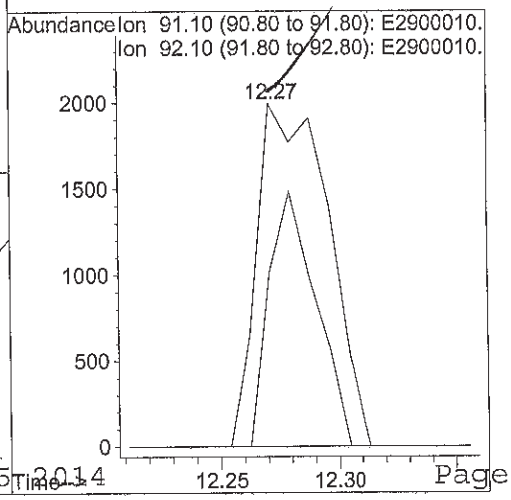


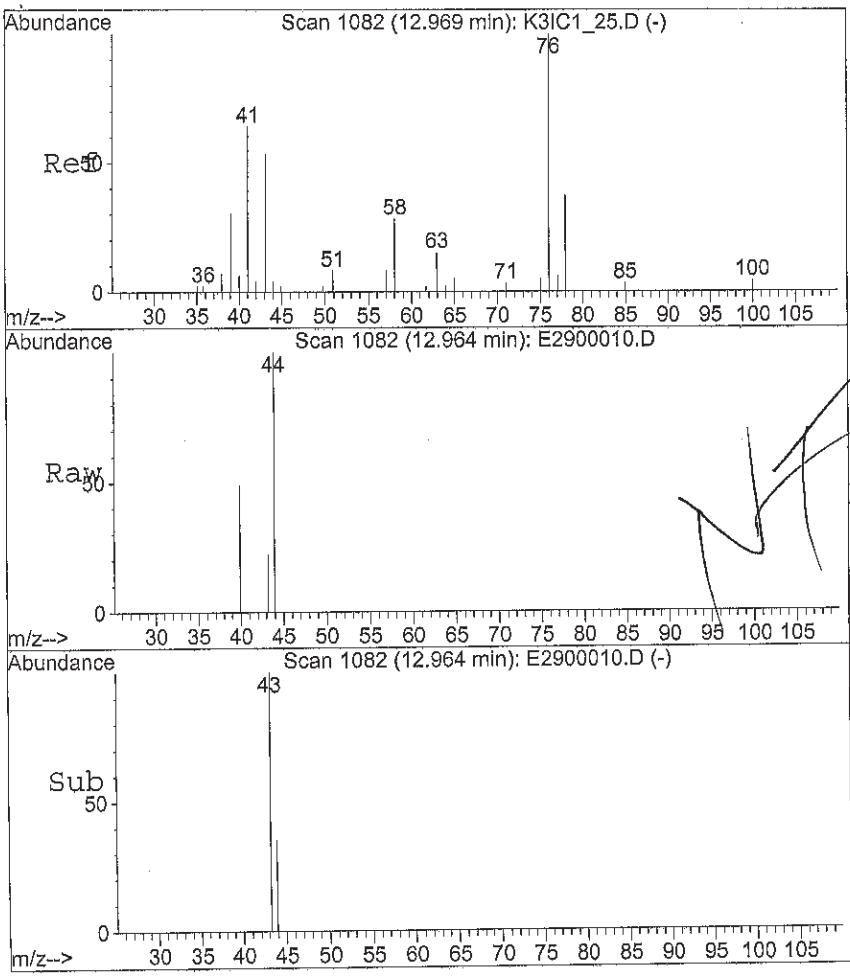


#41
Toluene
Concen: 0.24 ug/L
RT: 12.27 min Scan# 1000
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 91 Resp: 4180

Ion	Ratio	Lower	Upper
91	100		
92	49.0	47.4	71.0

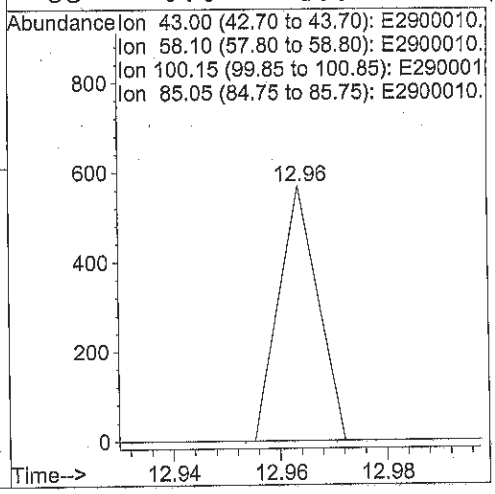


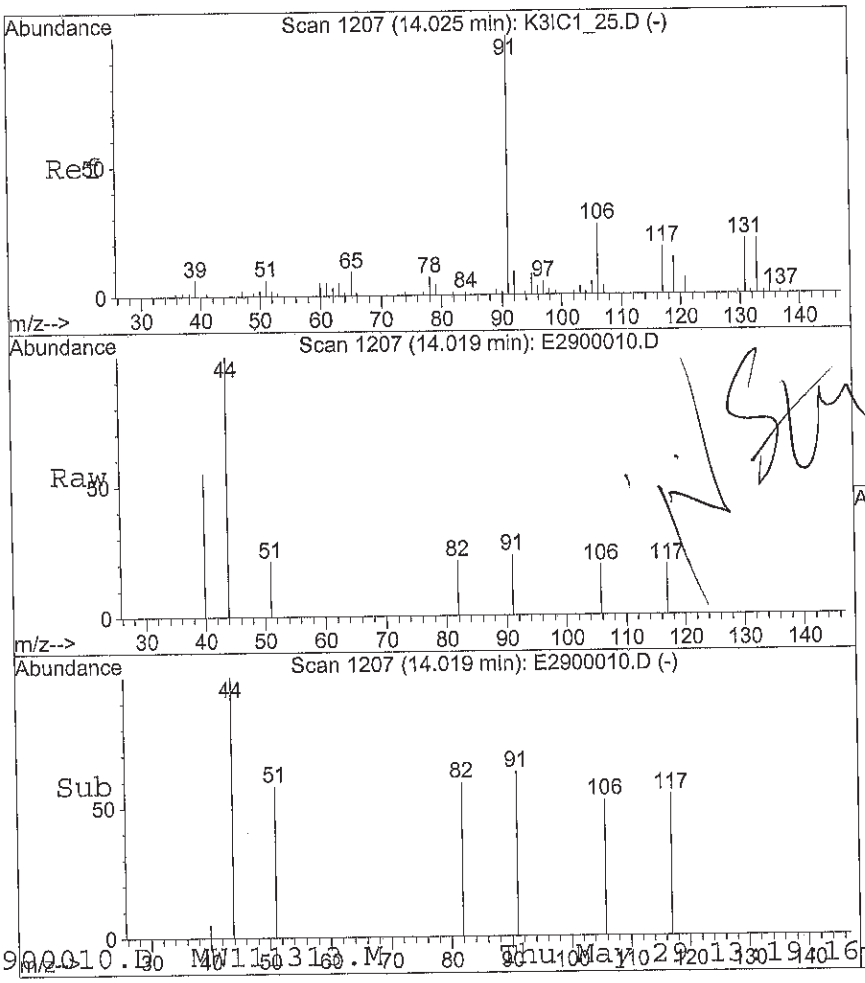


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 12.96 min Scan# 1082
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 43 Resp: 288

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

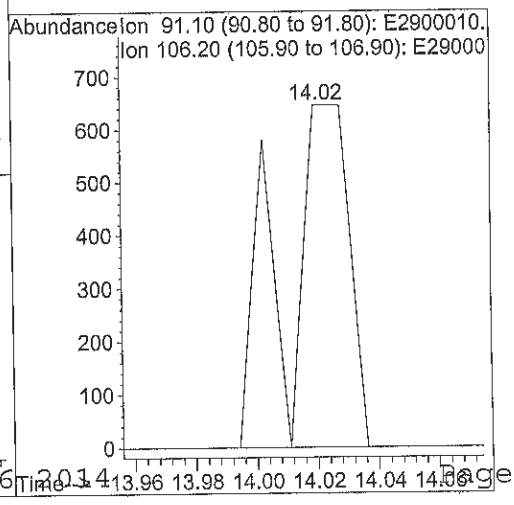


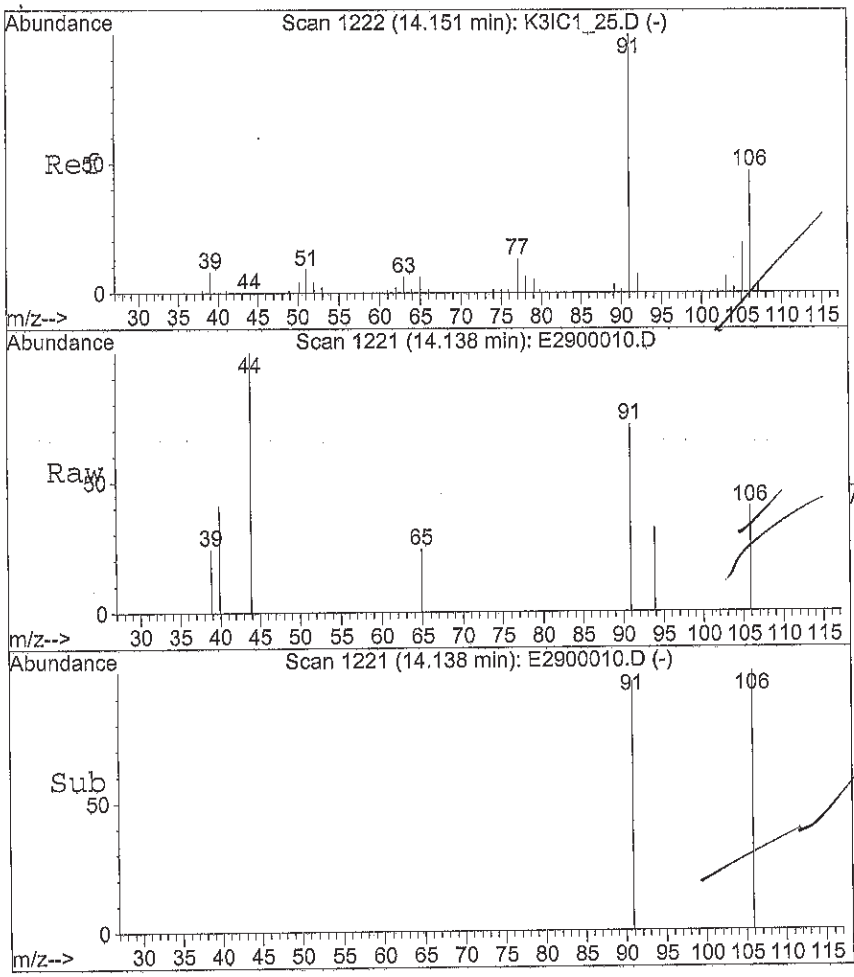


#51
Ethylbenzene
Concen: 0.05 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 91 Resp: 948

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

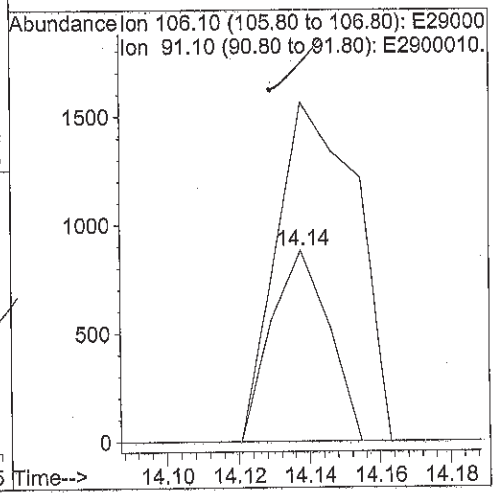


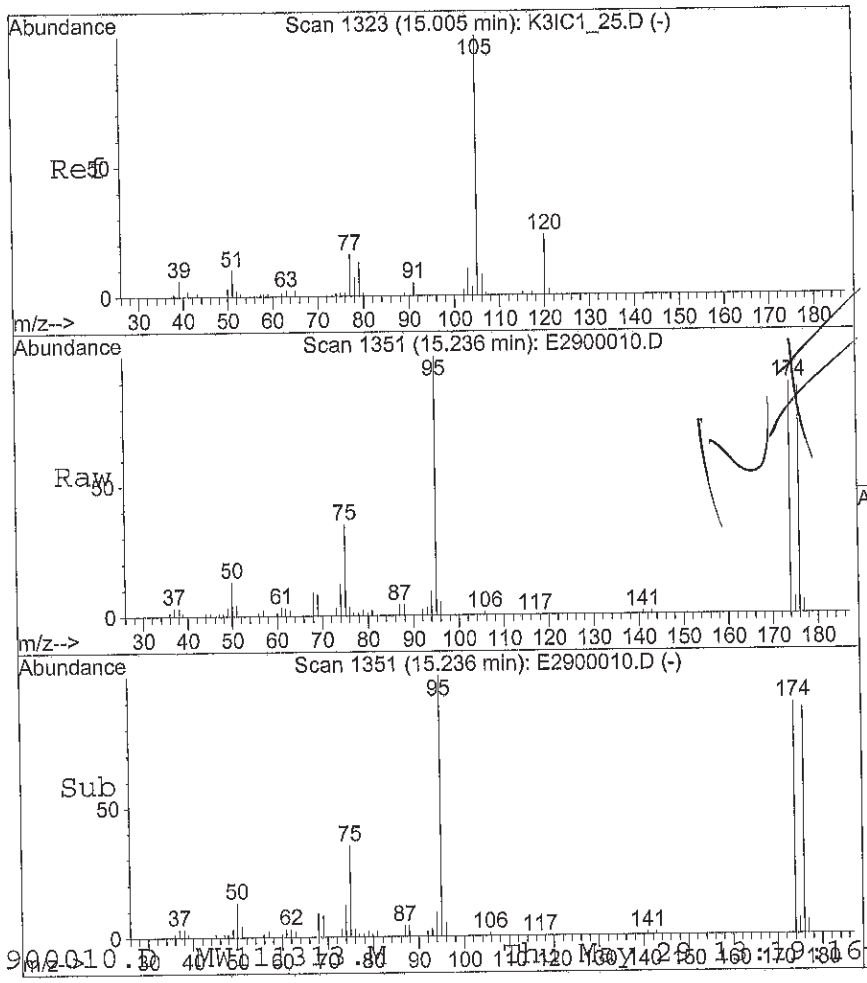


#52
m,p-Xylenes
Concen: 0.14 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion:106 Resp: 990

Ion	Ratio	Lower	Upper
106	100		
91	249.0	177.1	265.7

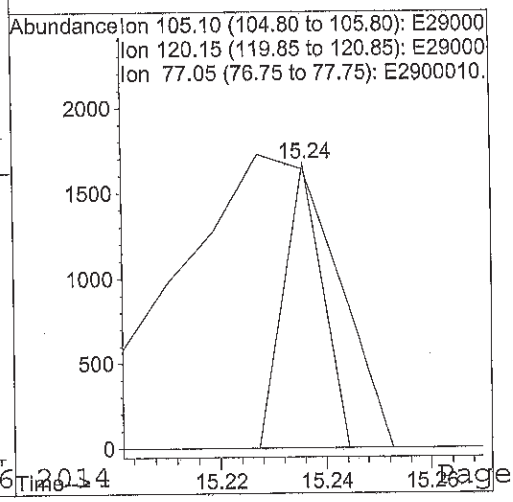


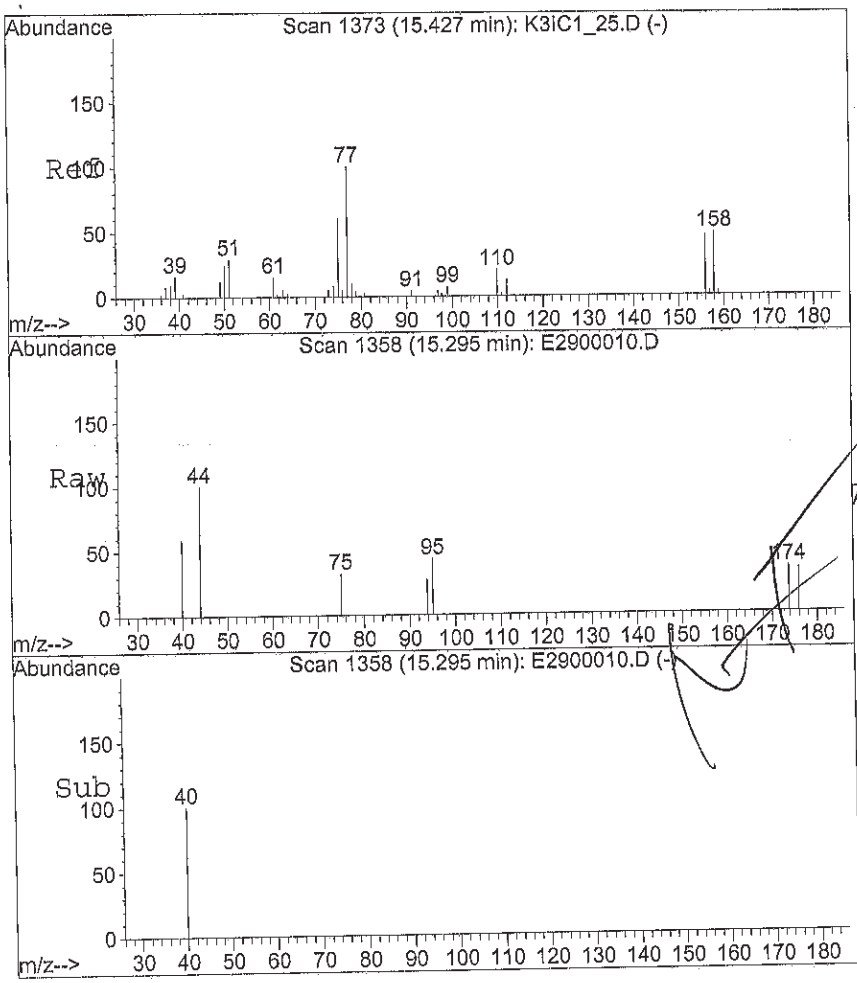


#56
Isopropylbenzene
Concen: 0.04 ug/L
RT: 15.24 min Scan# 1351
Delta R.T. 0.23 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion:105 Resp: 847

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	420.9	13.1	19.7#

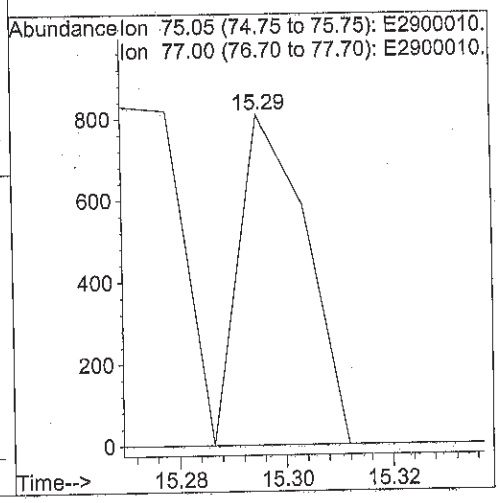


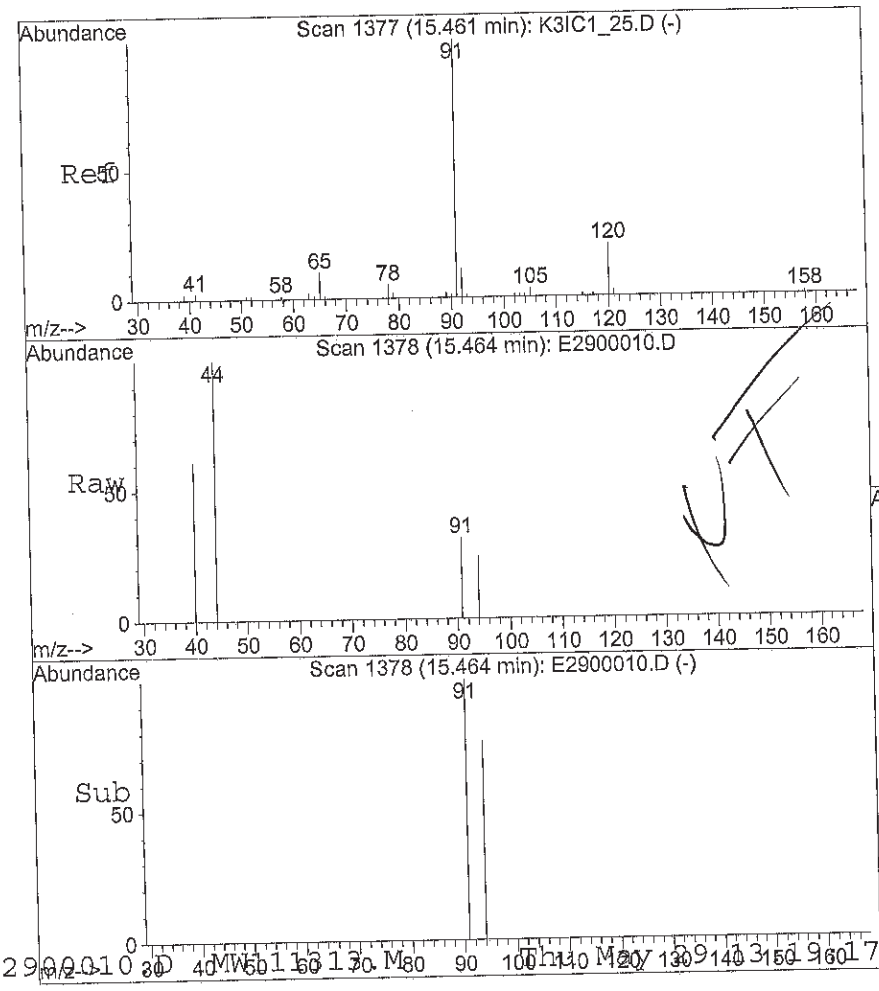


#57
1,2,3-Trichloropropane
Concen: 0.14 ug/L
RT: 15.29 min Scan# 1358
Delta R.T. -0.13 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 75 Resp: 707

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

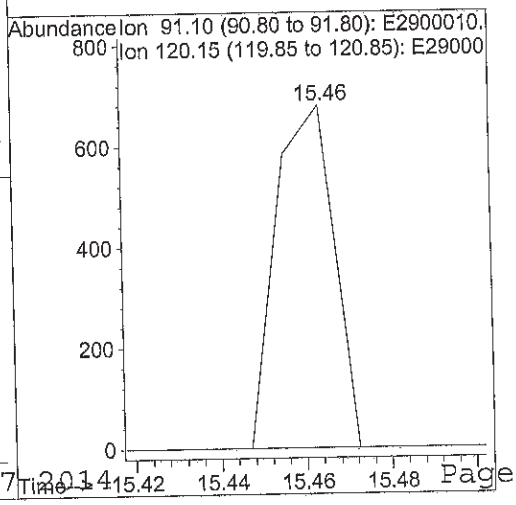


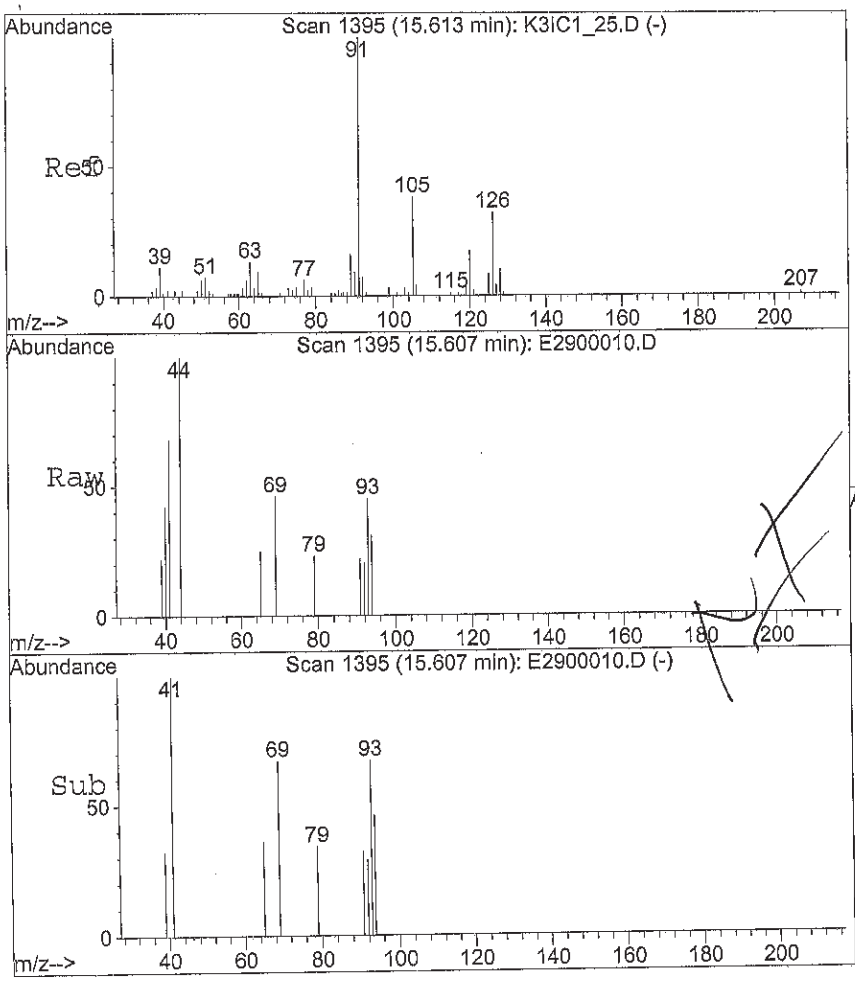


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 91 Resp: 640

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

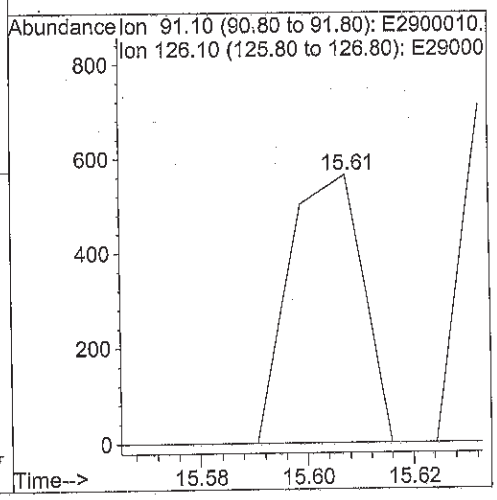


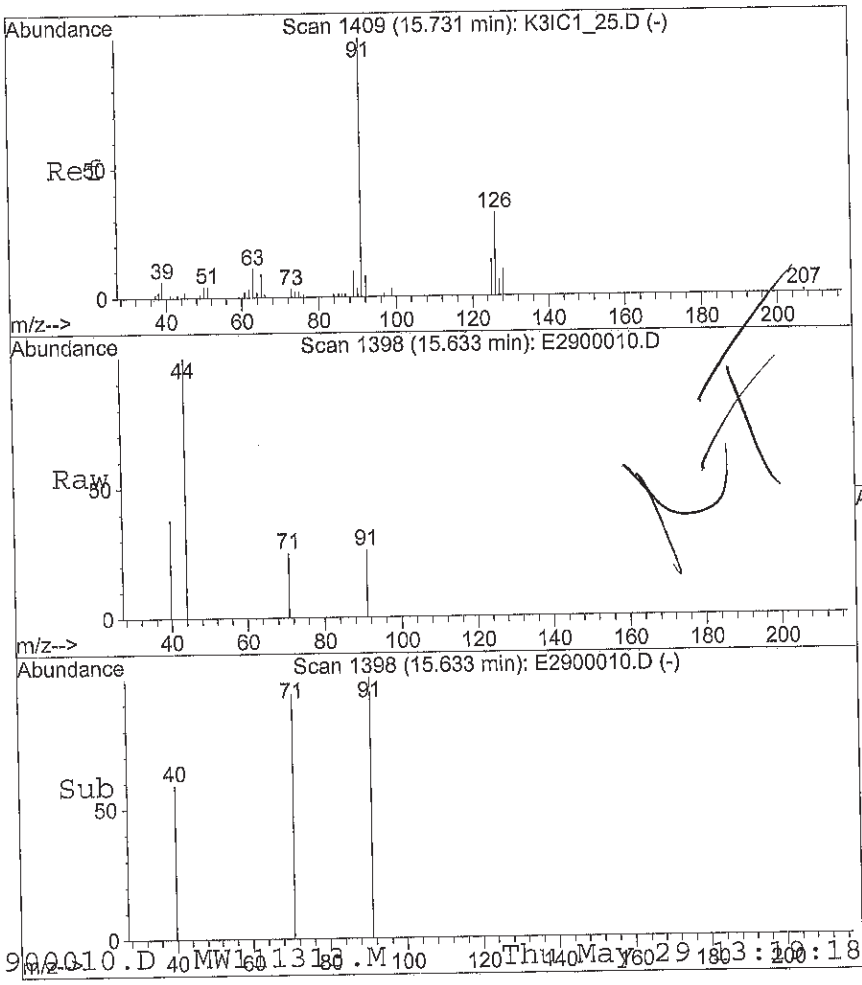


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 91 Resp: 540

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

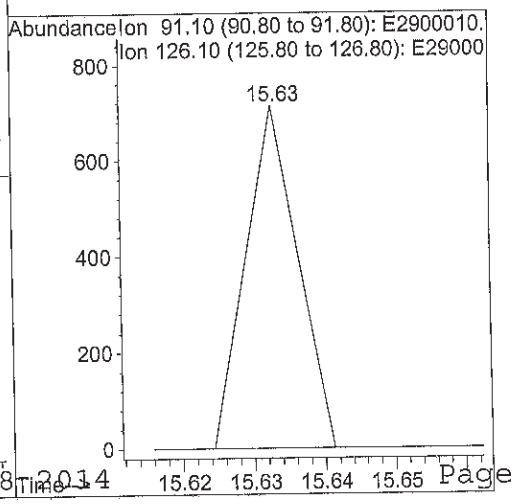


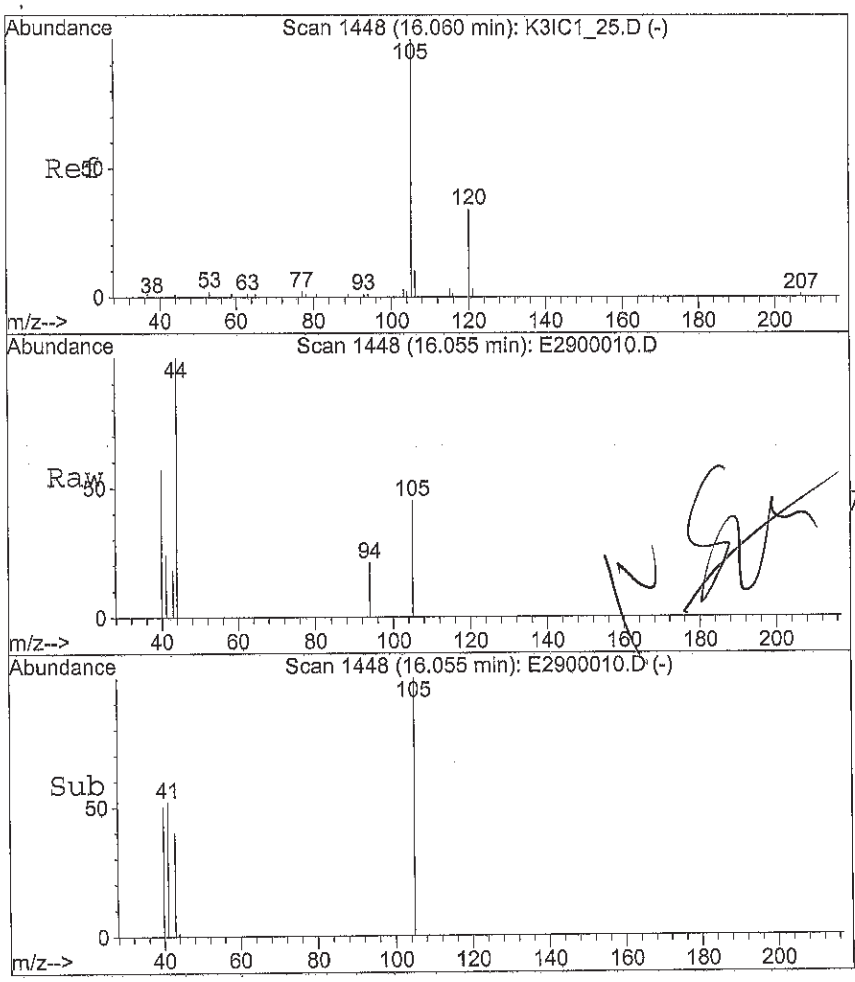


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.63 min Scan# 1398
Delta R.T. -0.10 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 91 Resp: 361

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

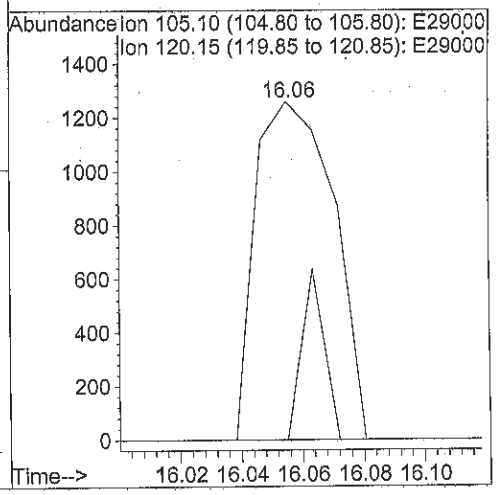


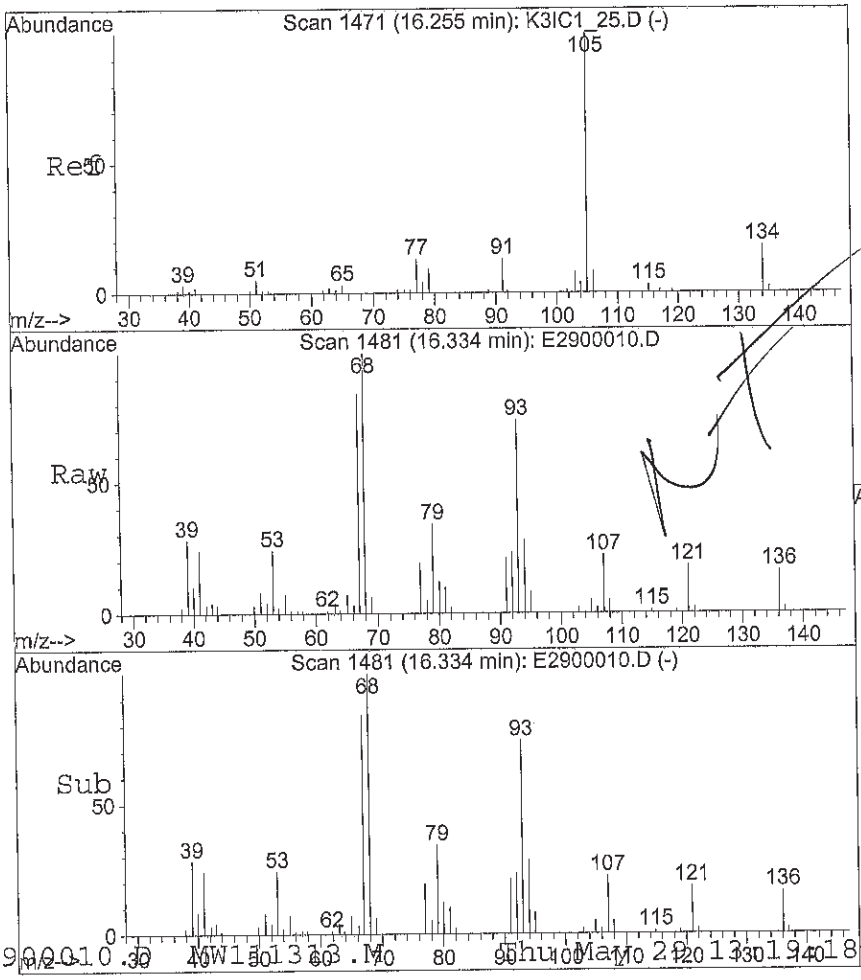


#67
1,2,4-Trimethylbenzene
Concen: 0.12 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion:105 Resp: 2229

Ion	Ratio	Lower	Upper
105	100		
120	14.4	33.8	50.8#

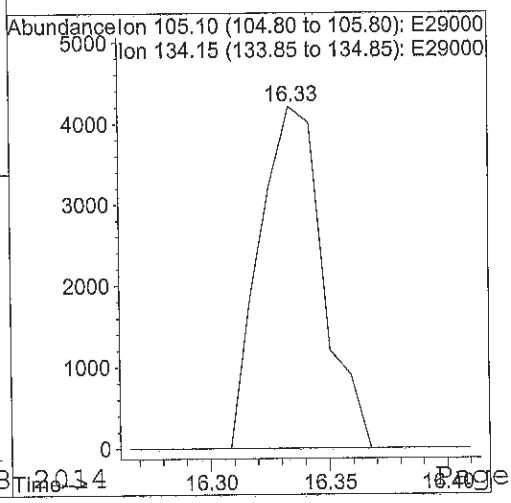


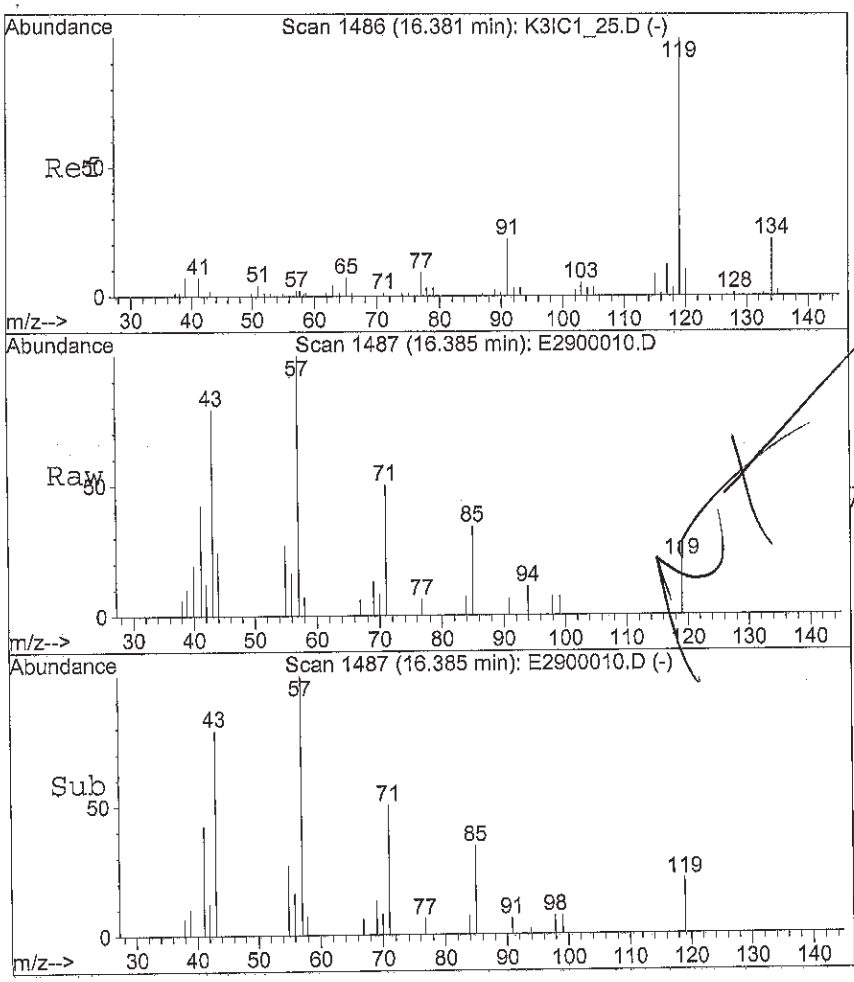


#68
sec-Butylbenzene
Concen: 0.33 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion:105 Resp: 7772

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

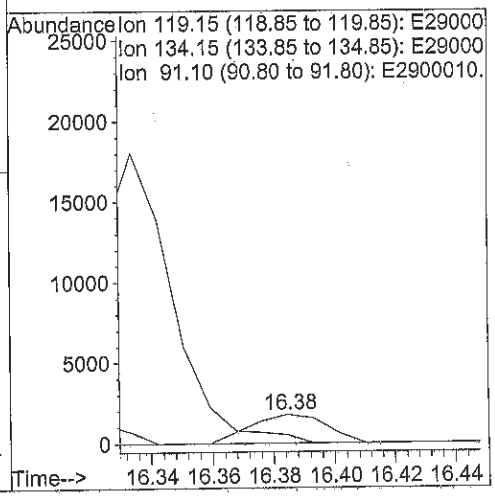


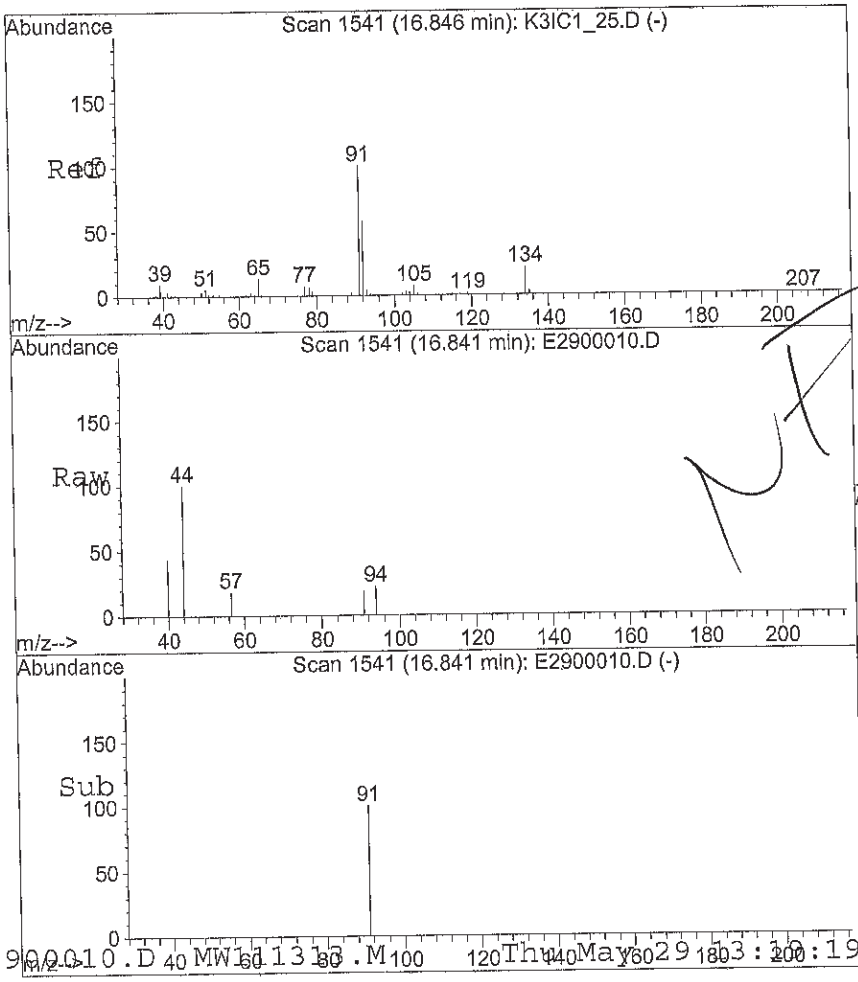


#69
p-Isopropyltoluene
Concen: 0.16 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion:119 Resp: 3006

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

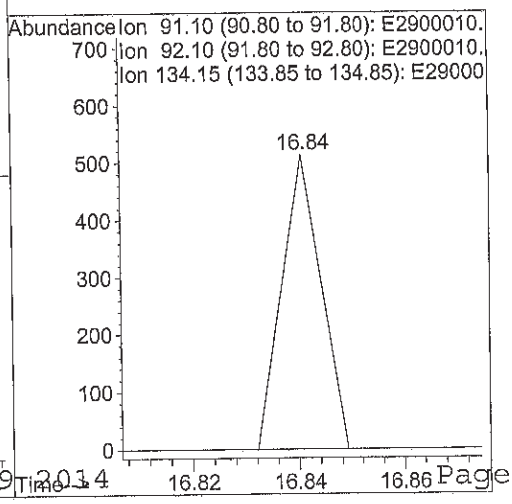


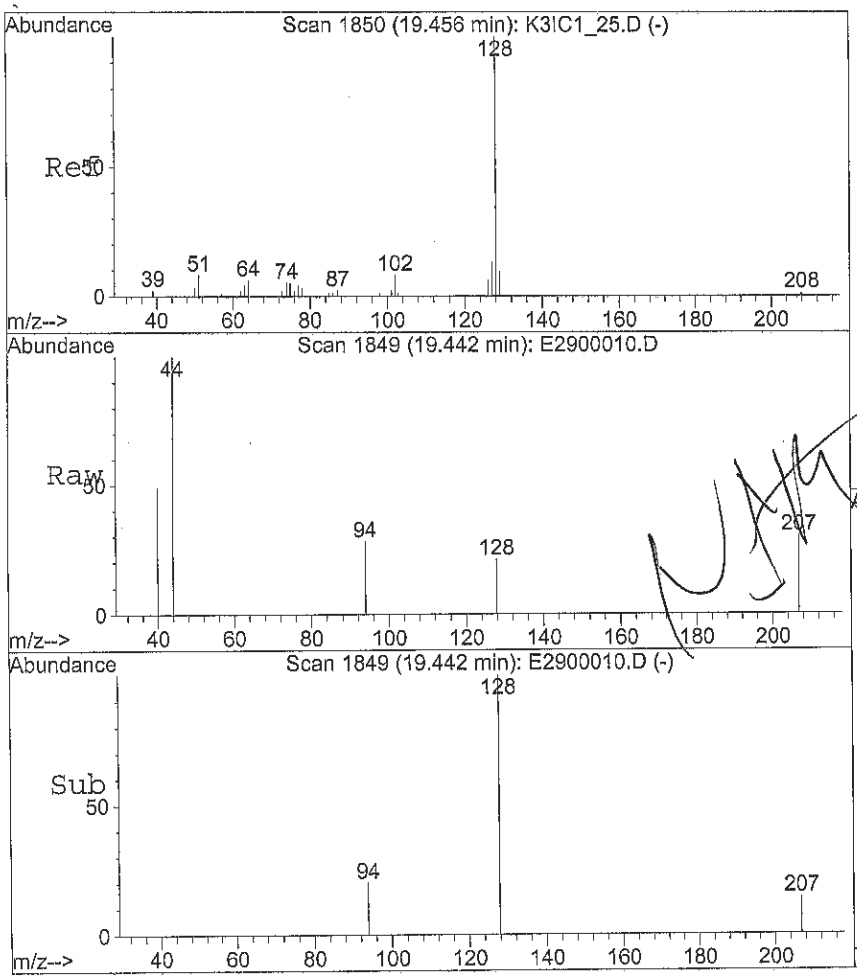


#72
n-Butylbenzene
Concen: 0.01 ug/L
RT: 16.84 min Scan# 1541
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion: 91 Resp: 260

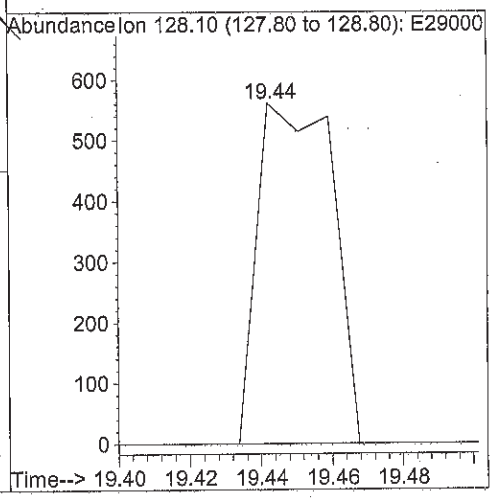
Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#





#77
Naphthalene
Concen: 0.06 ug/L
RT: 19.44 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2900010.D
Acq: 29 May 2014 12:57 pm

Tgt Ion:128 Resp: 818



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900010.D Vial: 1
Acq On : 29 May 2014 12:57 pm Operator: DN
Sample : 3E42901-09 Inst : GC/MS Ins
Misc : 100cc SVL-539-SA5D-SV-4.5-5.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 13:18 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1549175	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1274770	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	707525	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	452955	11.24 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.92%		
3) Chloroform-d (SU6)	9.18	84	733074	12.68 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 101.44%		
4) Methylene Chloride-d2 (SU5	7.05	86	419040	12.40 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 99.20%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	438016	15.91 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 127.28%#		
6) Benzene-d6 (SU7)	9.92	84	1435161	11.81 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.48%		
8) Toluene-d8 (SU3)	12.20	98	1388281	11.48 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.84%		
9) 4-Bromofluorobenzene (SU4)	15.23	95	693437	13.89 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.12%		

Target Compounds Qvalue

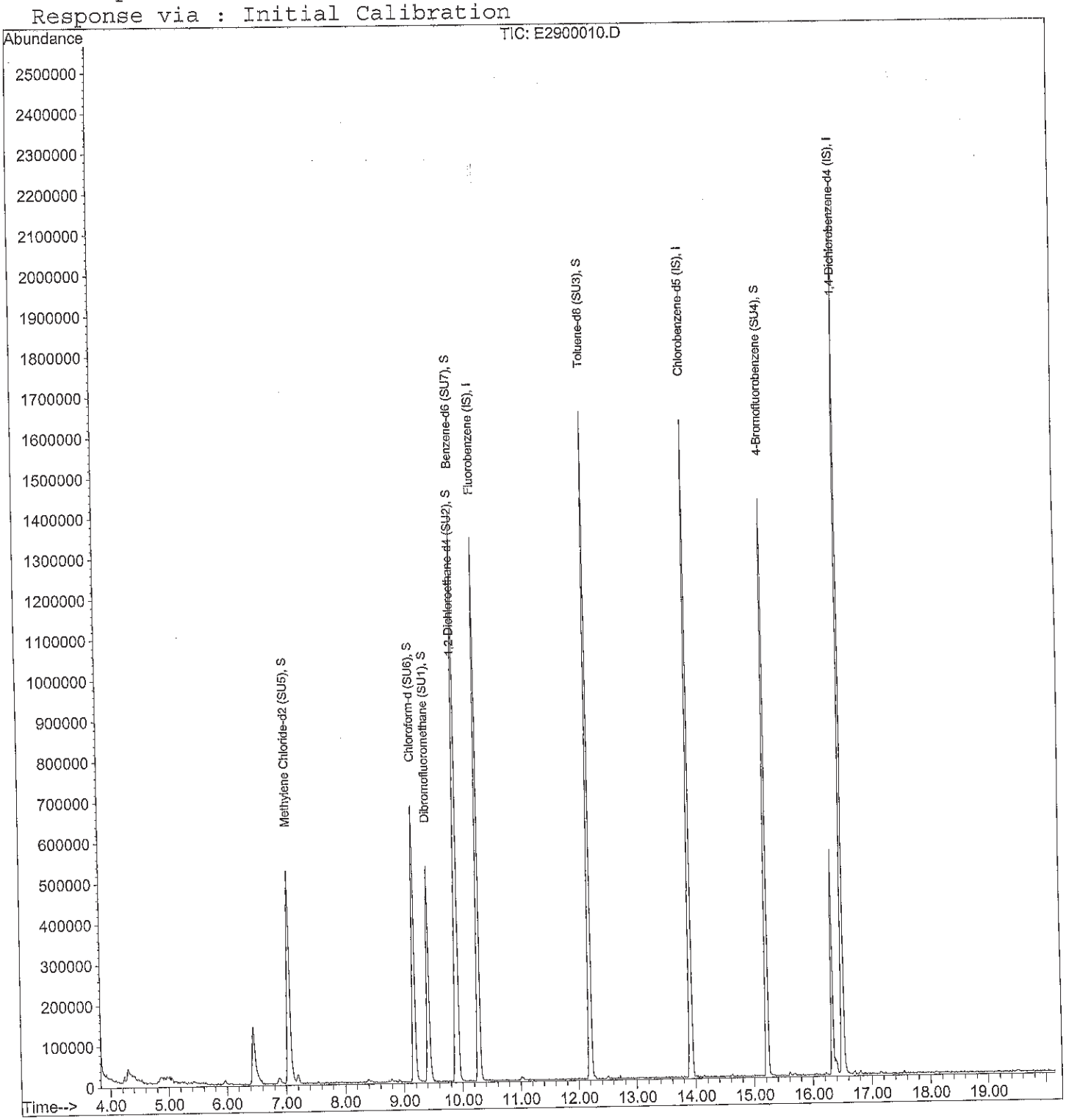
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900010.D
Acq On : 29 May 2014 12:57 pm
Sample : 3E42901-09
Misc : 100cc SVL-539-SA5D-SV-4.5-5.5
MS Integration Params: rteint.p
Quant Time: May 29 13:18 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900011.D Vial: 2
Acq On : 29 May 2014 1:26 pm Operator: DN
Sample : 3E42901-10 Inst : GC/MS Ins
Misc : 100cc SVL-539-SA5D-SV-8.5-9.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 13:54 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	2000126	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1513788	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	768922	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	532657	10.68 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 85.44%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	447940	9.45 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 75.60%		
39) Toluene-d8 (SU3)	12.20	98	1746770	12.37 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.96%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	794899	12.84 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 102.72%		

Target Compounds					Qvalue
4) Chloromethane	4.37	50	1149	-0.88 ~~ug/L #~~	41
6) Bromomethane	5.15	96	4493	0.27 ~~ug/L #~~	1
7) Chloroethane	5.24	64	1927	1.84 ~~ug/L #~~	32
11) Acetone	6.47	58	10071	8.32 ~~ug/L #~~	91
12) (IPA) Leak Check Compound	6.50	45	9253	38.50 ~~ug/L #~~	82
13) Carbon disulfide	6.86	76	8384	0.50 ~~ug/L #~~	76
14) Methylene Chloride	7.08	84	6717	1.22 ~~ug/L #~~	1
20) 2,2-Dichloropropane	8.91	77	280	0.04 ~~ug/L #~~	36
24) Chloroform	9.20	83	4681	0.45 ~~ug/L #~~	10
29) 1,1-Dichloropropene	9.92	75	383	0.05 ~~ug/L #~~	1
31) Benzene	9.97	78	3112	0.17 ~~ug/L #~~	57
32) 1,2-Dichloroethane	9.93	62	8001	1.20 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	9526	3.15 ~~ug/L #~~	100
41) Toluene	12.29	91	7506	0.36 ug/L 0.0072	94
46) 2-Hexanone	12.96	43	1813	0.55 ~~ug/L #~~	80
51) Ethylbenzene	14.02	91	6143	0.26 ug/L # 0.0052	56
52) m,p-Xylenes	14.15	106	5691	0.68 ug/L 0.0136	96
53) o-Xylene	14.62	106	1440	0.17 ug/L # 0.0034	27
54) Styrene	14.62	104	3272	-0.59 ~~ug/L #~~	84
56) Isopropylbenzene	15.22	105	482	0.02 ~~ug/L #~~	1
57) 1,2,3-Trichloropropane	15.31	75	259	0.04 ~~ug/L #~~	36
62) n-Propylbenzene	15.46	91	1082	0.03 ~~ug/L #~~	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900011.D Vial: 2
Acq On : 29 May 2014 1:26 pm Operator: DN
Sample : 3E42901-10 Inst : GC/MS Ins
Misc : 100cc SVL-539-SA5D-SV-8.5-9.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 13:54 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

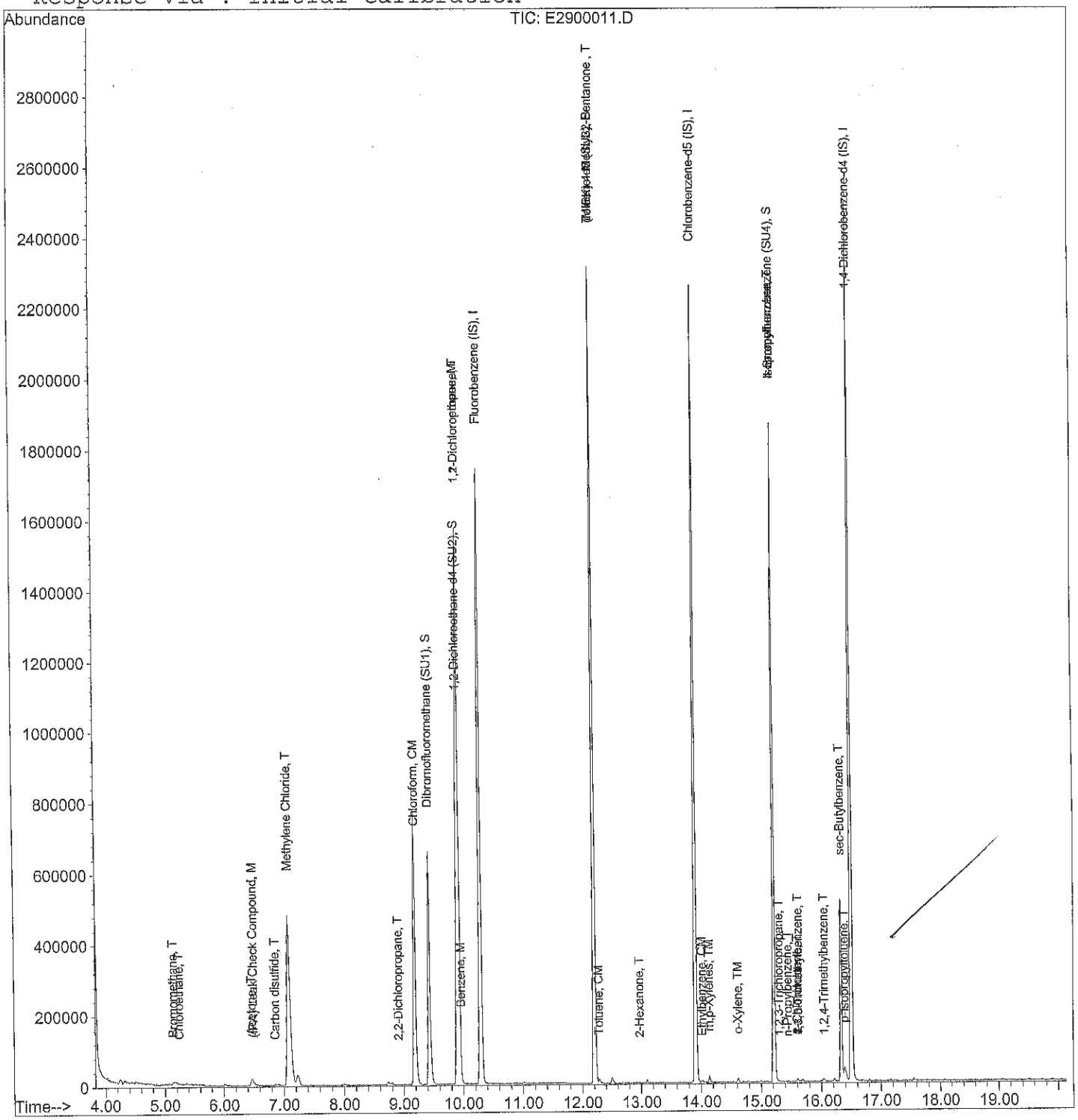
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.60	91	341	0.02 ~~ug/L #~~ ng/L	45
64) 1,3,5-Trimethylbenzene	15.62	105	307	0.02 ~~ug/L #~~	31
65) 4-Chlorotoluene	15.60	91	341	0.02 ~~ug/L #~~	44
67) 1,2,4-Trimethylbenzene	16.06	105	2781	0.14 ~~ug/L #~~	50
68) sec-Butylbenzene	16.33	105	8897	0.34 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	2962	0.14 ~~ug/L #~~	63

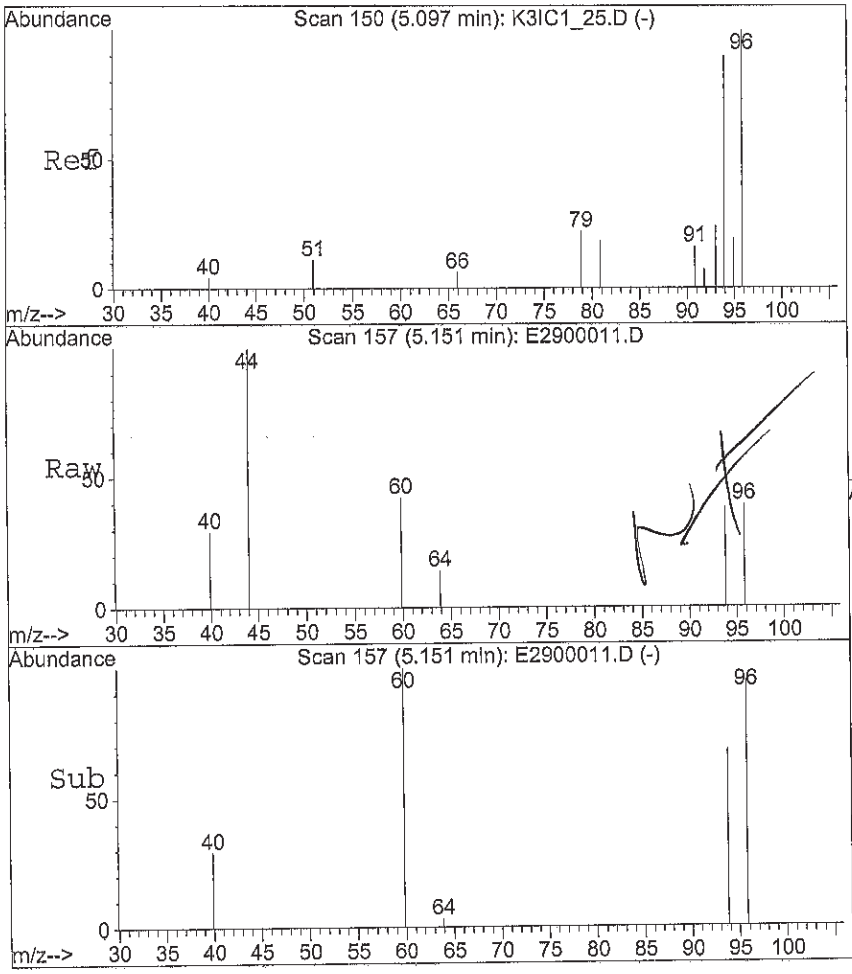
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900011.D Vial: 2
Acq On : 29 May 2014 1:26 pm Operator: DN
Sample : 3E42901-10 Inst : GC/MS Ins
Misc : 100cc SVL-539-SA5D-SV-8.5-9.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 13:54 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

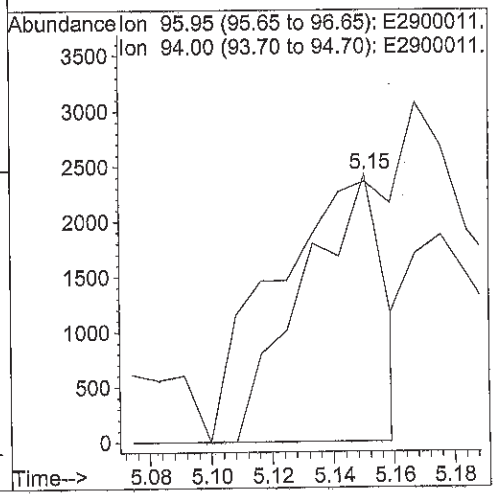


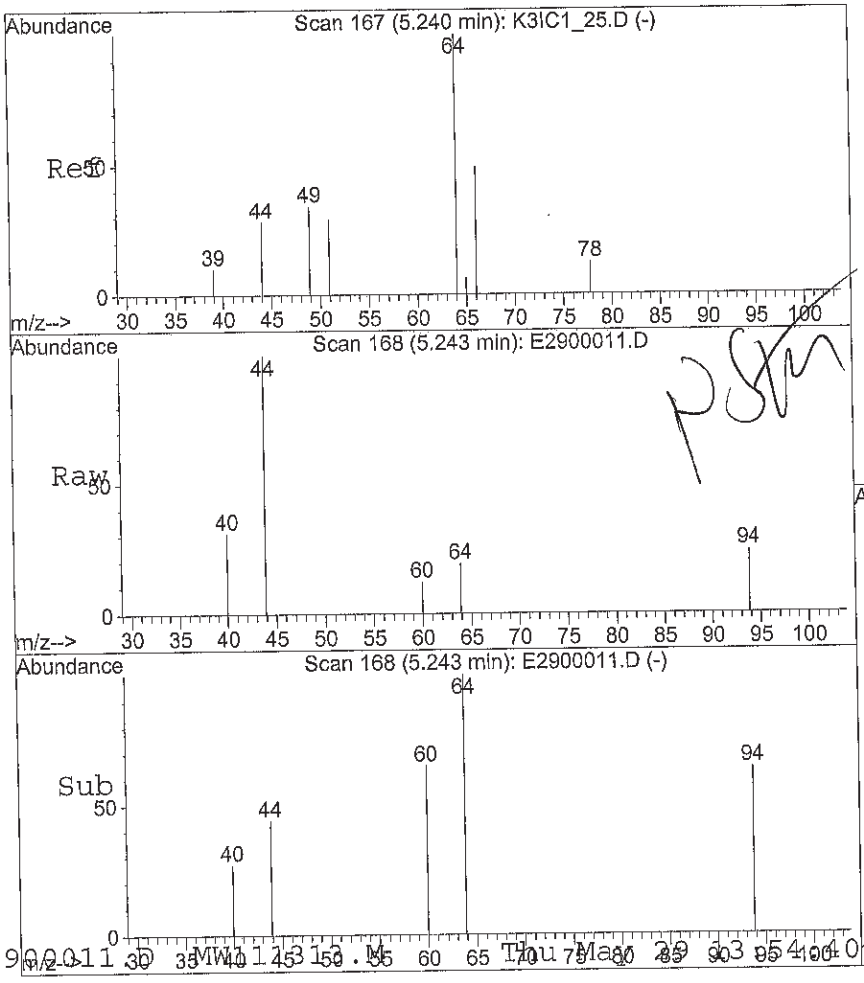


#6
Bromomethane
Concen: 0.27 ug/L
RT: 5.15 min Scan# 157
Delta R.T. 0.05 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 96 Resp: 4493

Ion	Ratio	Lower	Upper
96	100		
94	0.0	101.0	151.4#

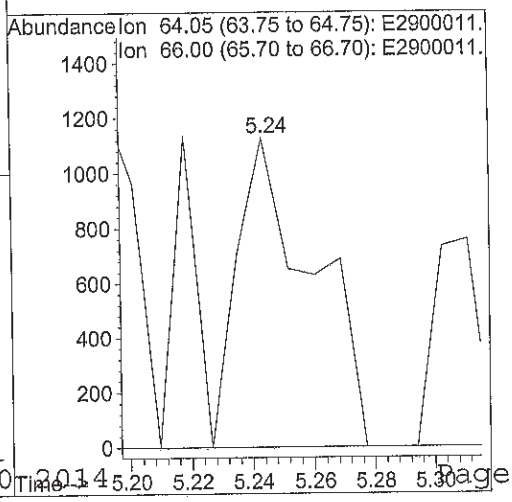


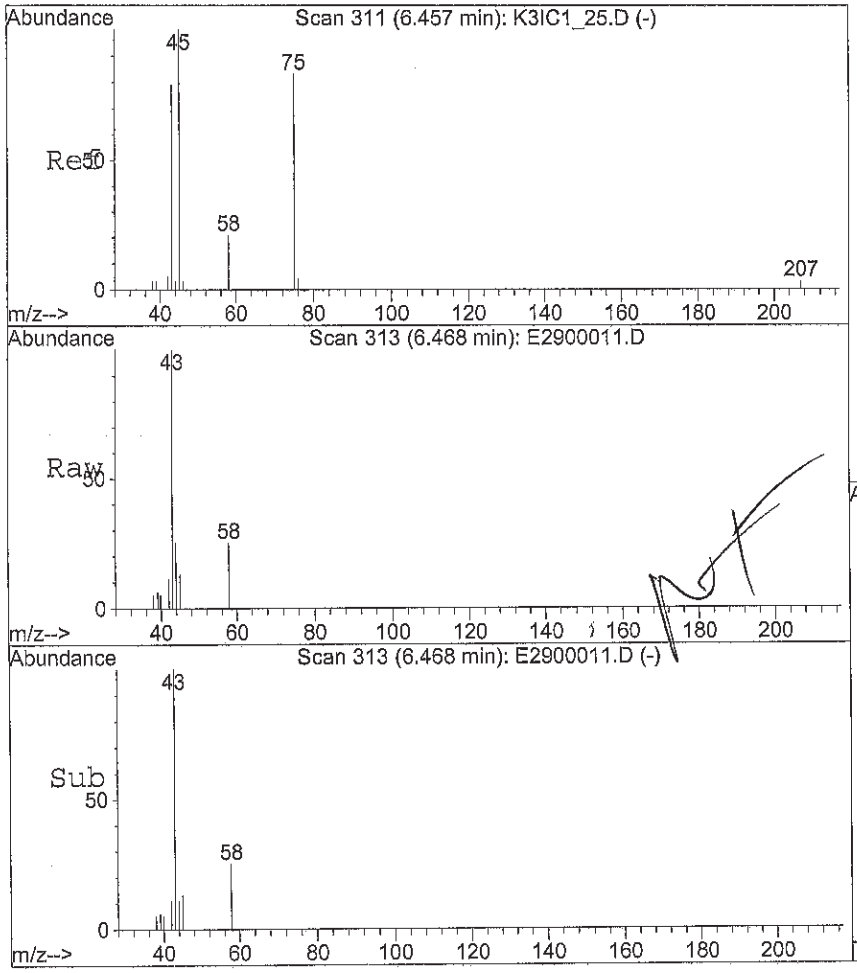


#7
Chloroethane
Concen: 1.84 ug/L
RT: 5.24 min Scan# 168
Delta R.T. 0.00 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 64 Resp: 1927

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

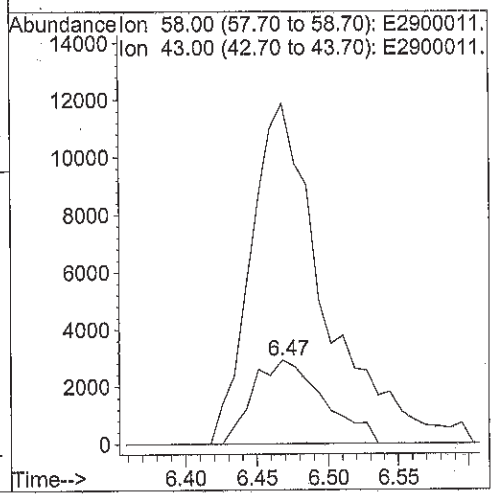


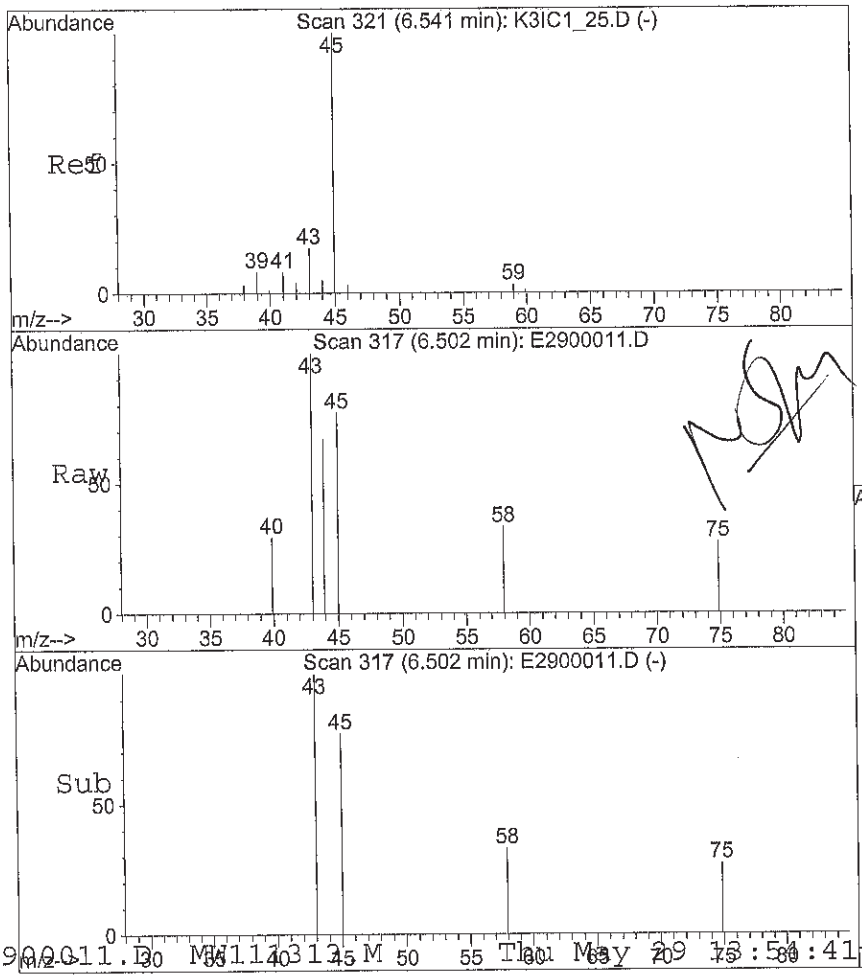


#11
Acetone
Concen: 8.32 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 58 Resp: 10071

Ion	Ratio	Lower	Upper
58	100		
43	427.4	360.9	541.3

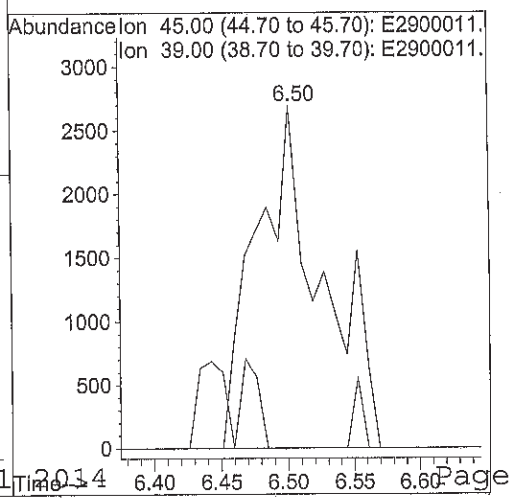


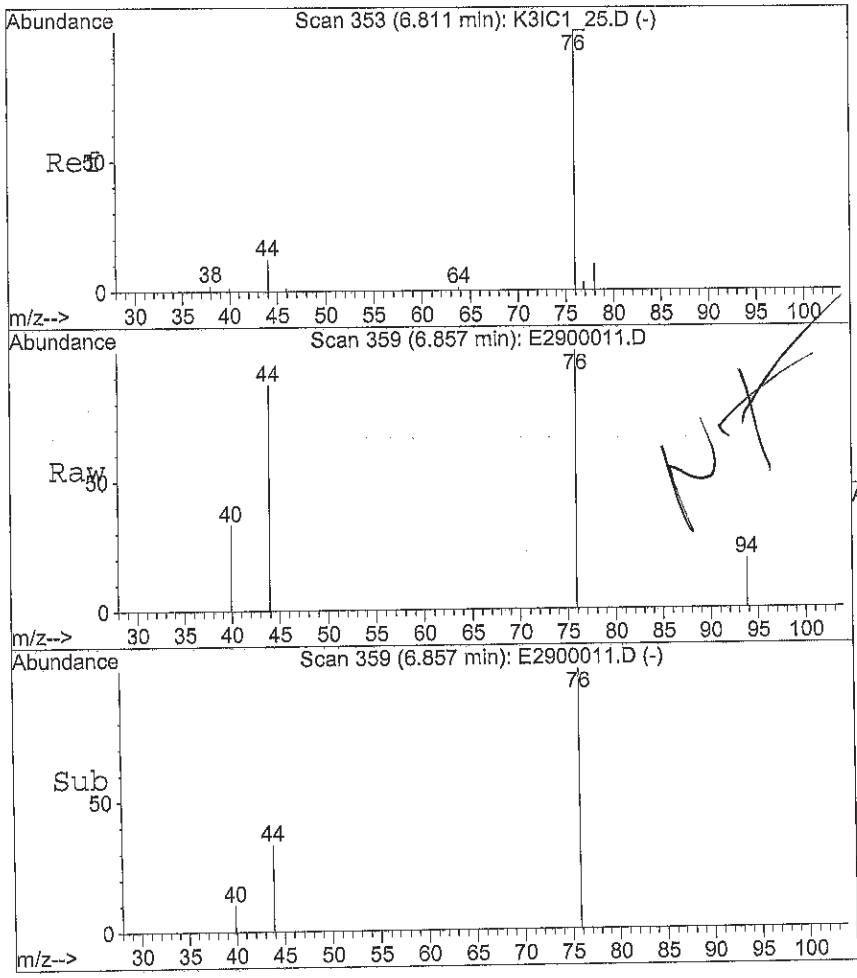


#12
(IPA) Leak Check Compound
Concen: 38.50 ug/L
RT: 6.50 min Scan# 317
Delta R.T. -0.04 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 45 Resp: 9253

Ion	Ratio	Lower	Upper
45	100		
39	0.0	4.9	7.3#

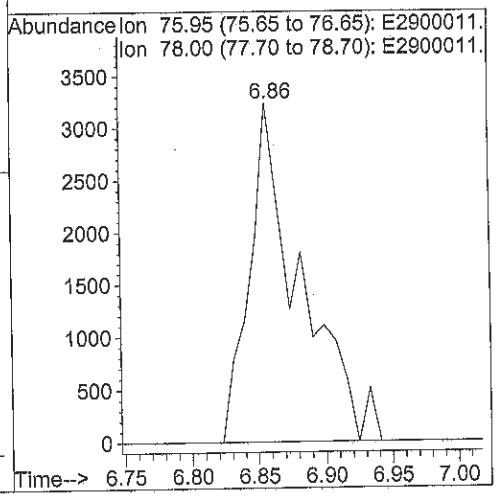


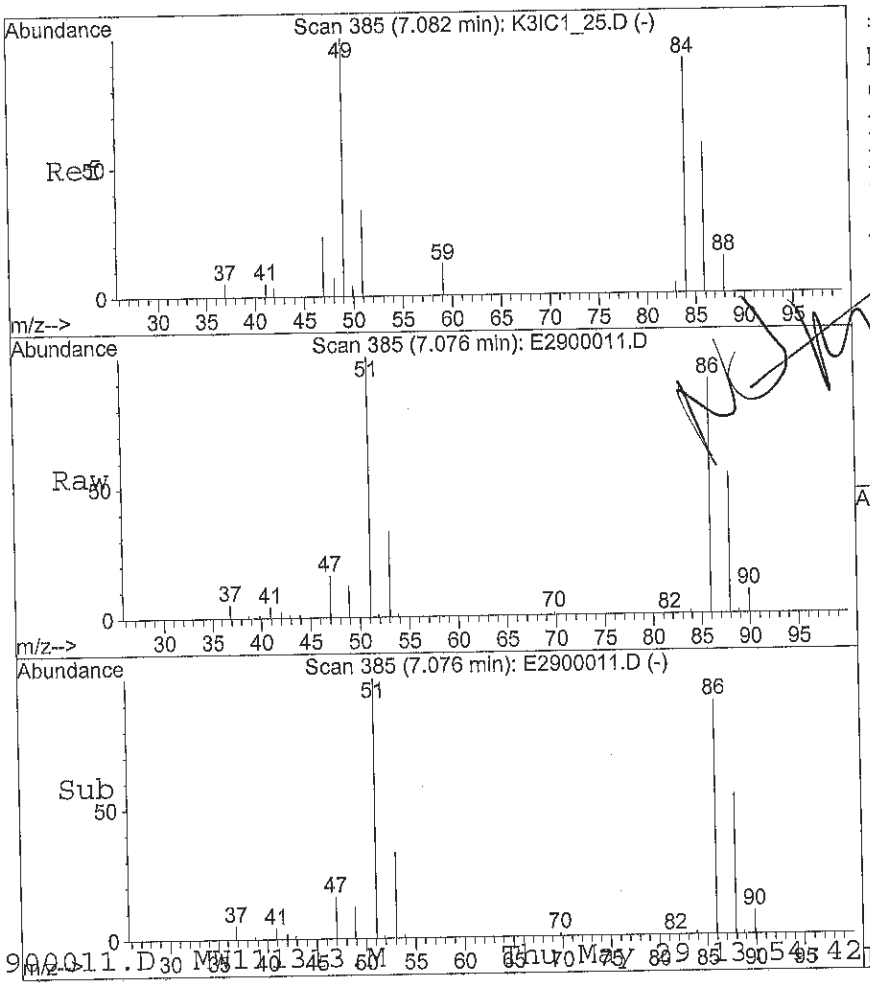


#13
Carbon disulfide
Concen: 0.50 ug/L
RT: 6.86 min Scan# 359
Delta R.T. 0.05 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 76 Resp: 8384

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

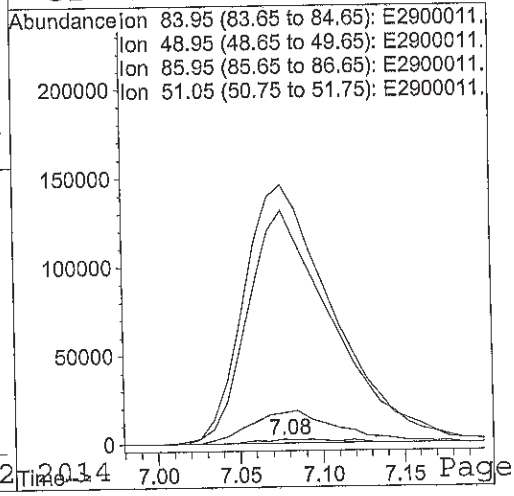


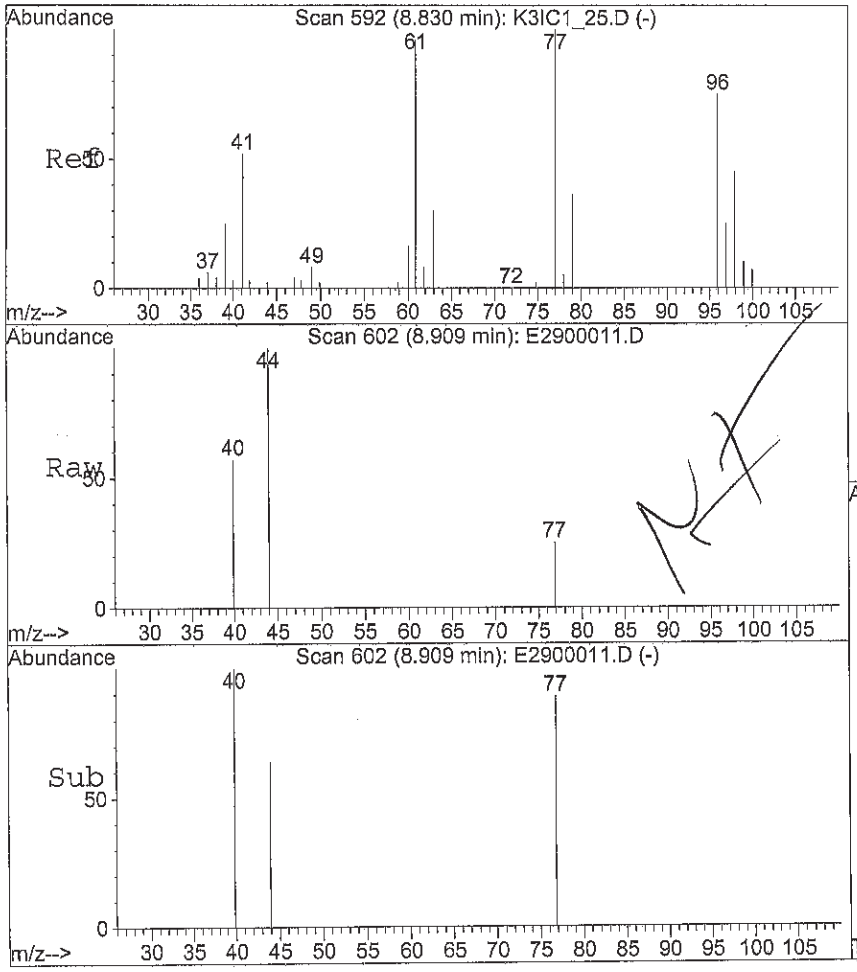


#14
Methylene Chloride
Concen: 1.22 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 84 Resp: 6717

Ion	Ratio	Lower	Upper
84	100		
49	993.8	89.8	134.6#
86	7114.6	51.1	76.7#
51	8276.6	28.5	42.7#

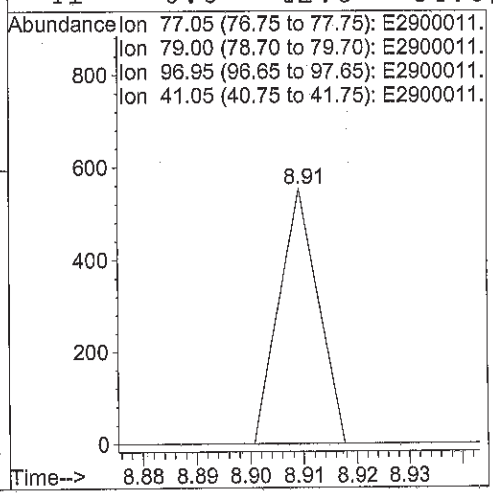


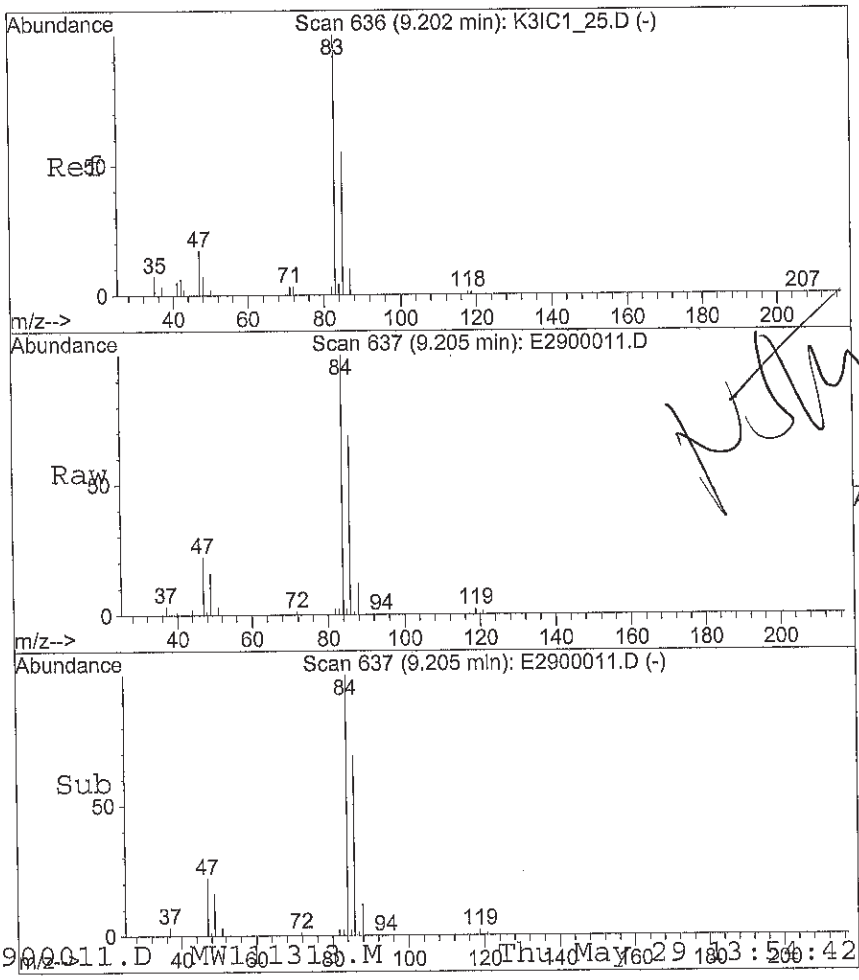


#20
2,2-Dichloropropane
Concen: 0.04 ug/L
RT: 8.91 min Scan# 602
Delta R.T. 0.08 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 77 Resp: 280

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

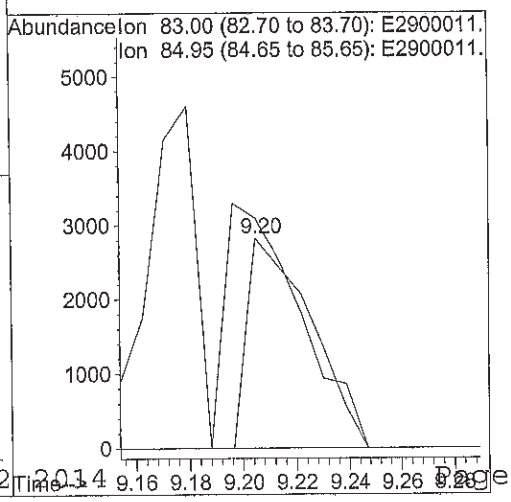


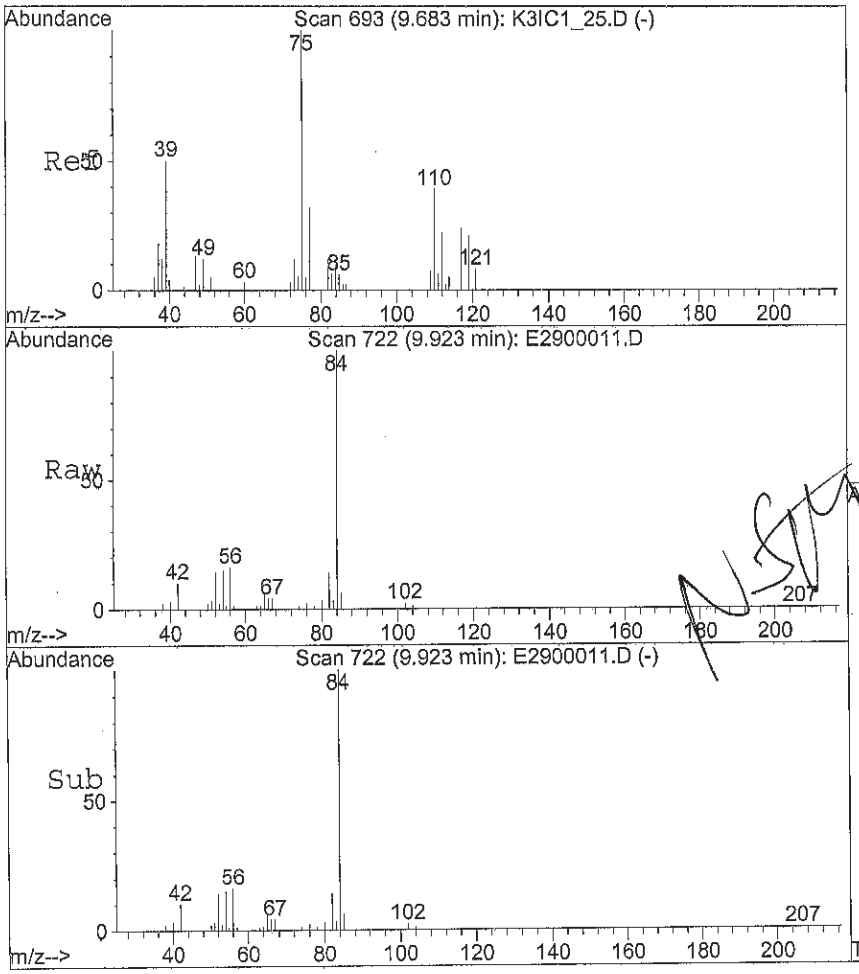


#24
Chloroform
Concen: 0.45 ug/L
RT: 9.20 min Scan# 637
Delta R.T. 0.00 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 83 Resp: 4681

Ion	Ratio	Lower	Upper
83	100		
85	135.8	51.8	77.6#

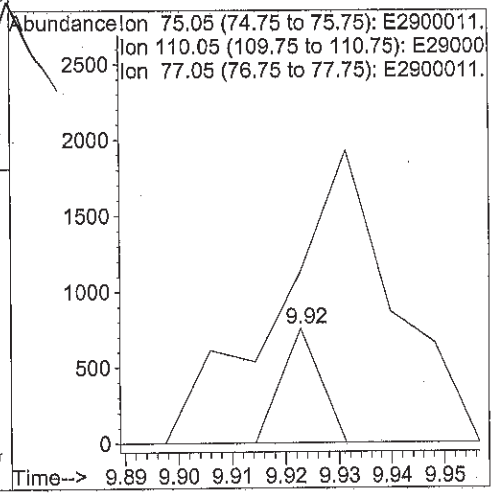


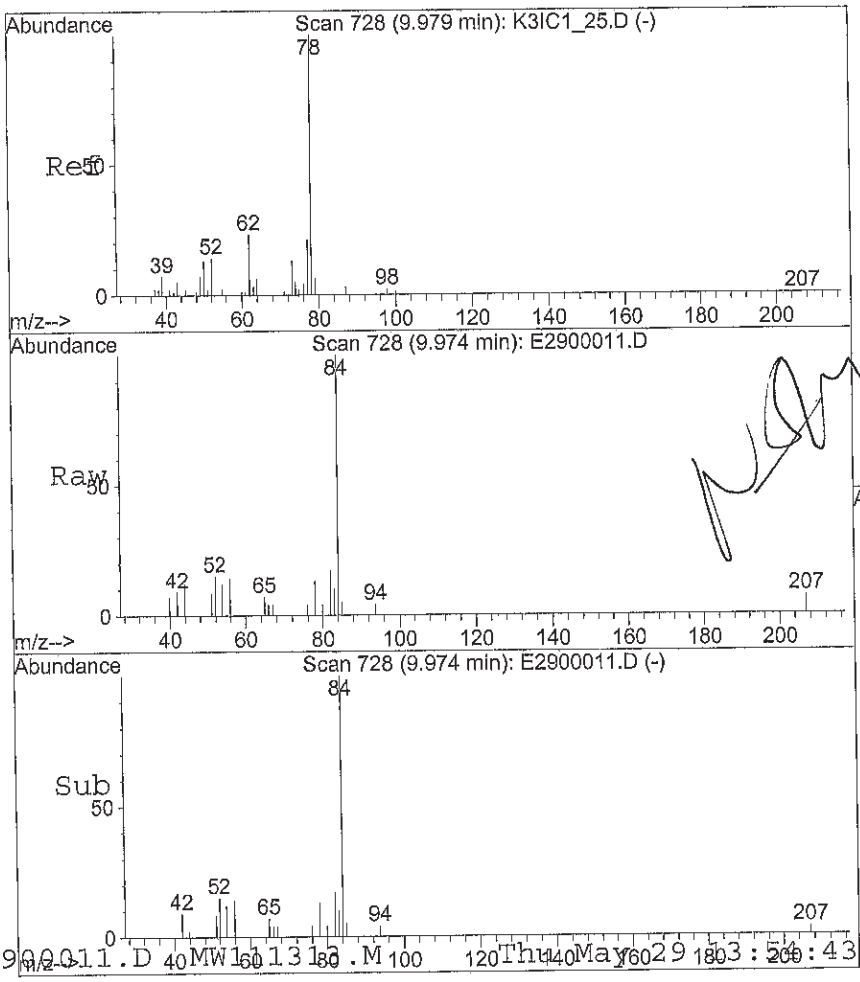


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 75 Resp: 383

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	757.7	25.0	37.4#

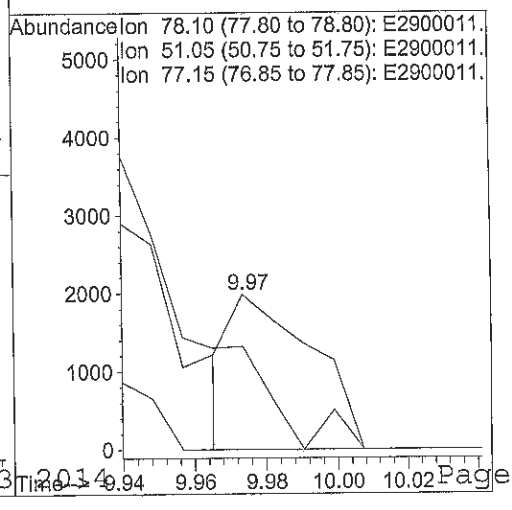


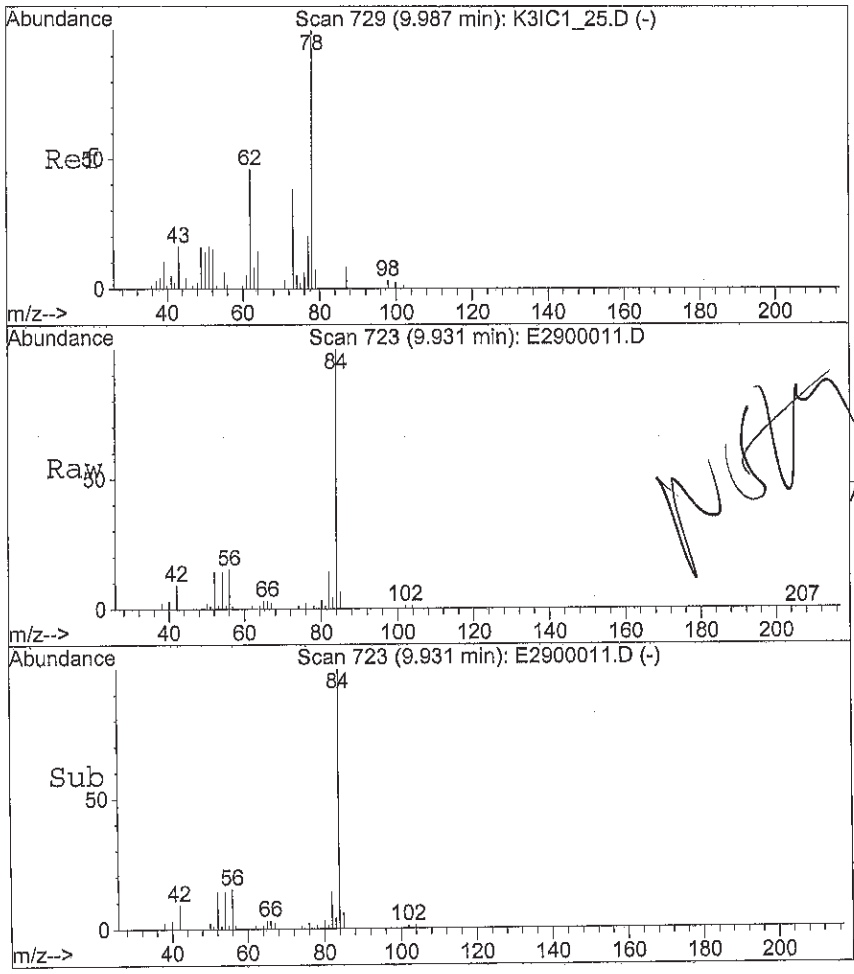


#31
Benzene
Concen: 0.17 ug/L
RT: 9.97 min Scan# 728
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 78 Resp: 3112

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

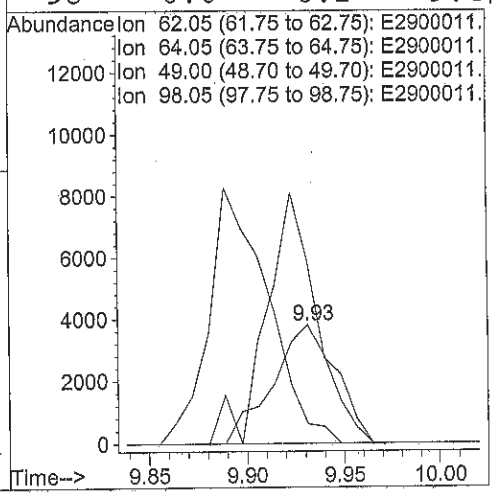


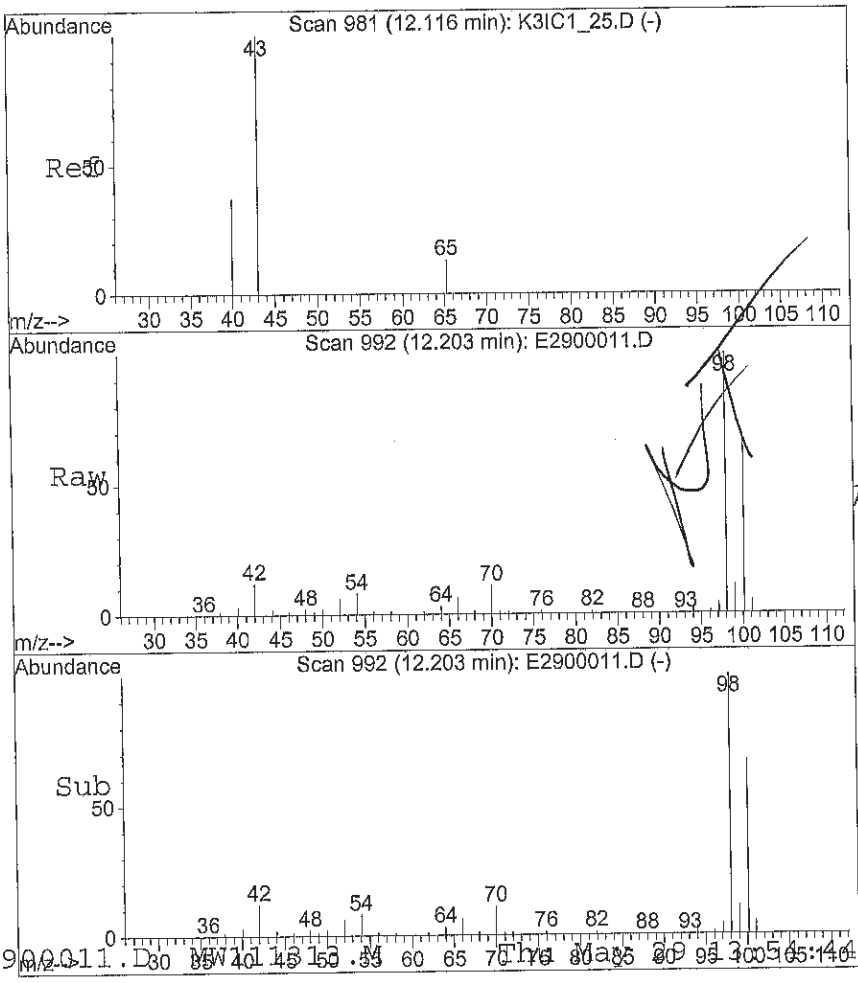


#32
1,2-Dichloroethane
Concen: 1.20 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 62 Resp: 8001

Ion	Ratio	Lower	Upper
62	100		
64	187.4	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

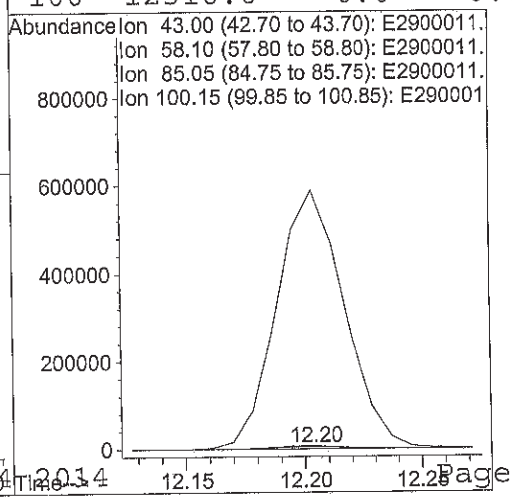


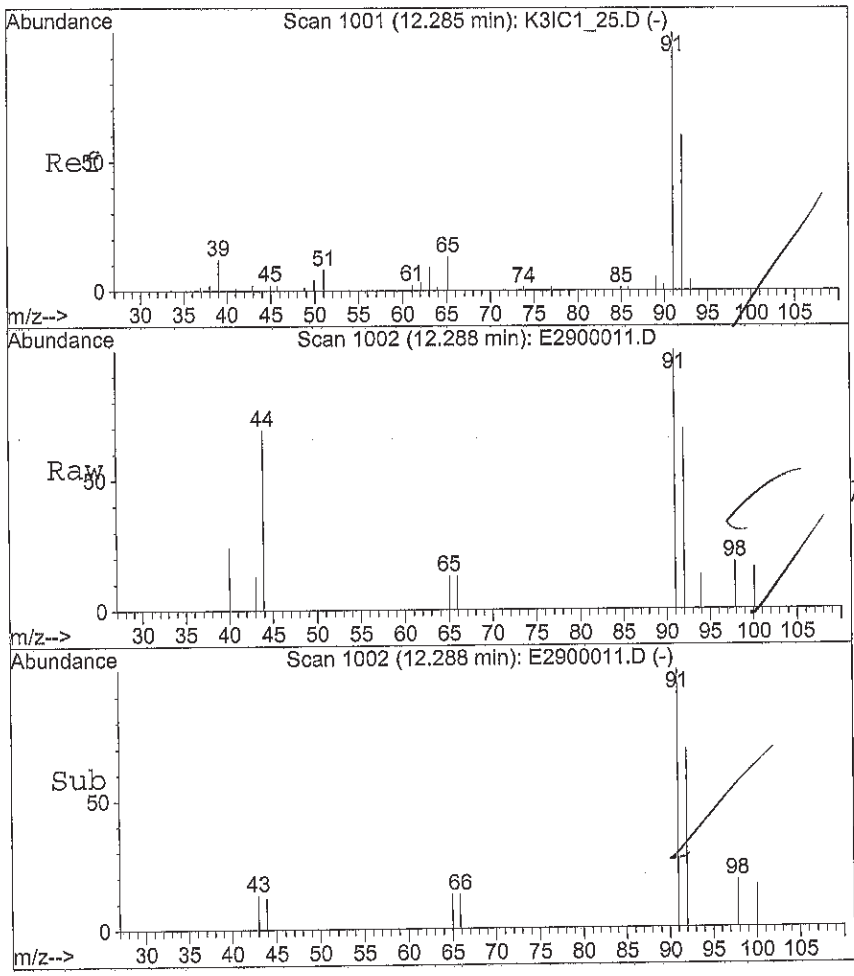


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.15 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 43 Resp: 9526

Ion	Ratio	Lower	Upper
43	100		
58	135.6	0.0	0.0#
85	0.0	0.0	0.0
100	12316.0	0.0	0.0#

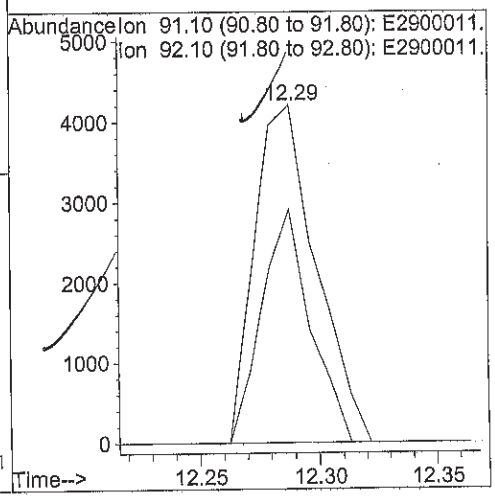


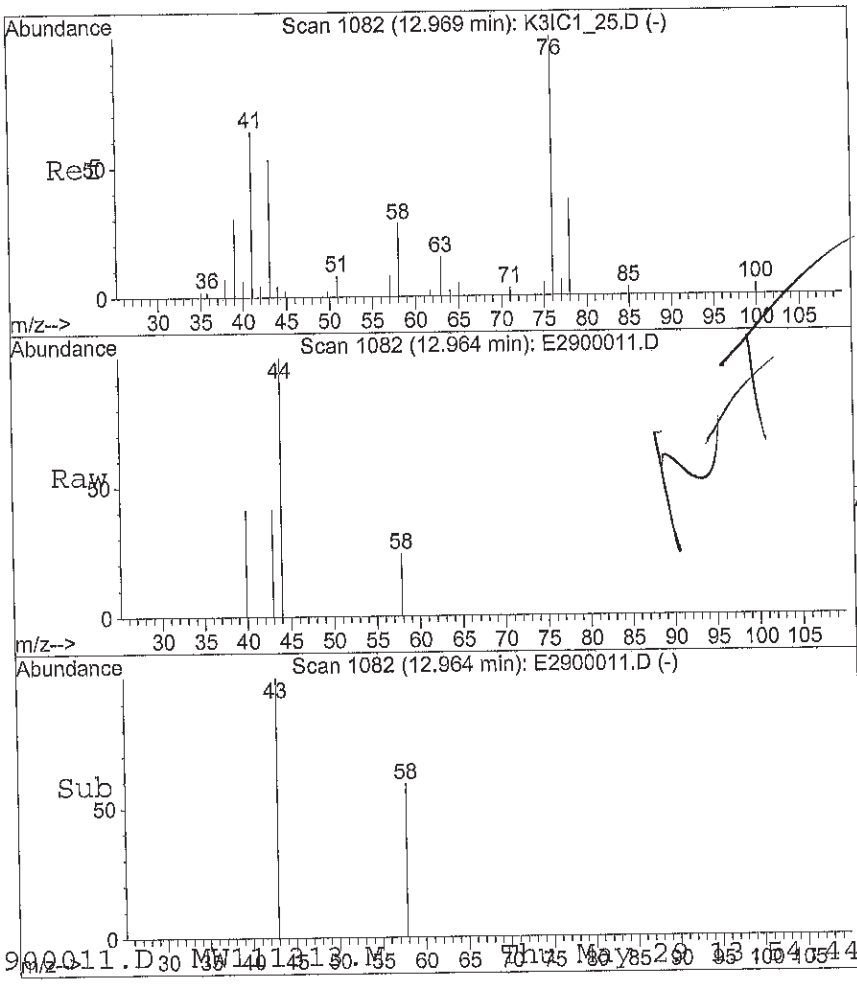


#41
Toluene
Concen: 0.36 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 91 Resp: 7506

Ion	Ratio	Lower	Upper
91	100		
92	54.8	47.4	71.0

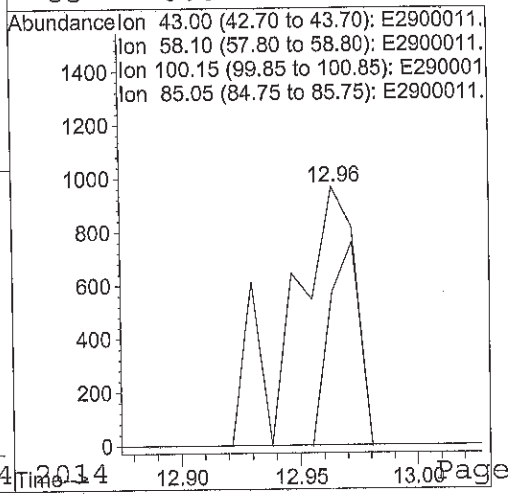


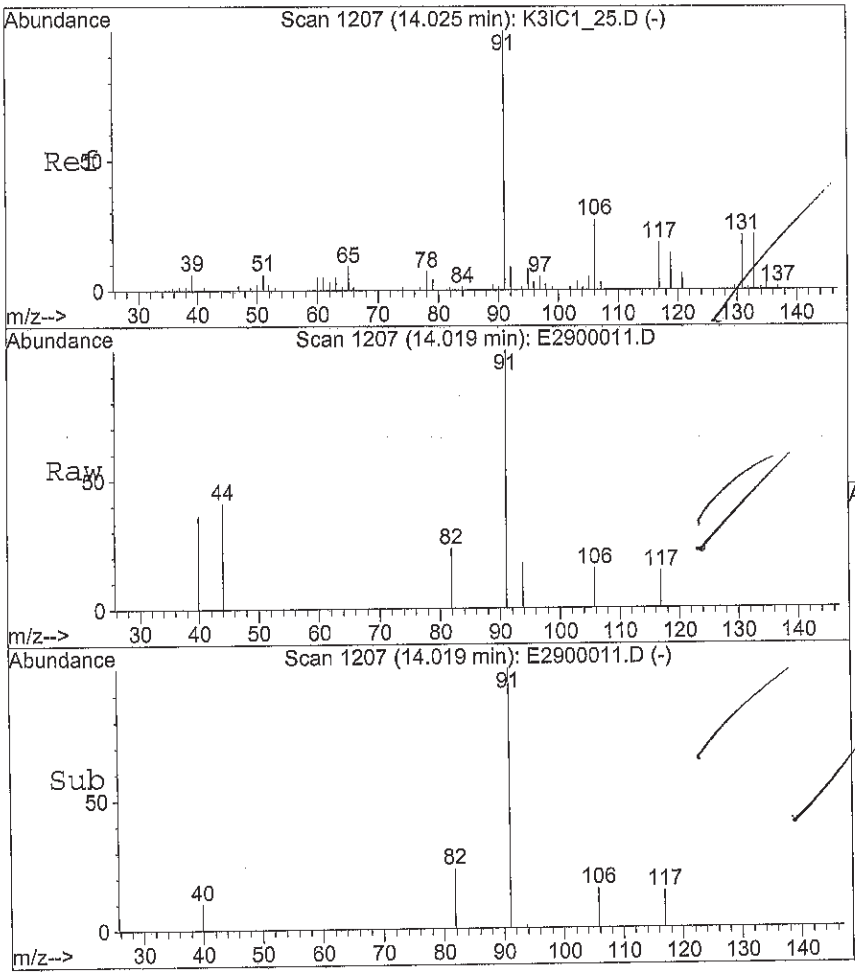


#46
2-Hexanone
Concen: 0.55 ug/L
RT: 12.96 min Scan# 1082
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 43 Resp: 1813

Ion	Ratio	Lower	Upper
43	100		
58	37.3	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

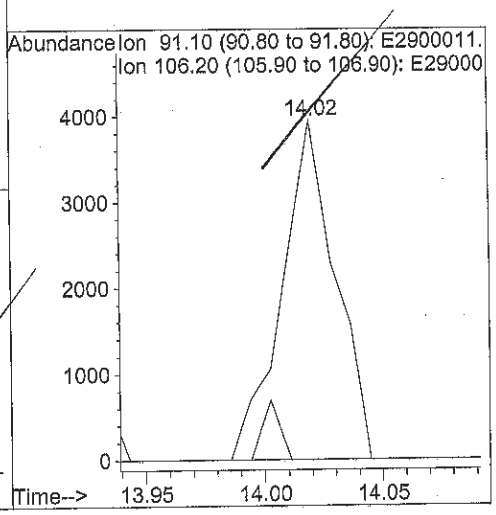


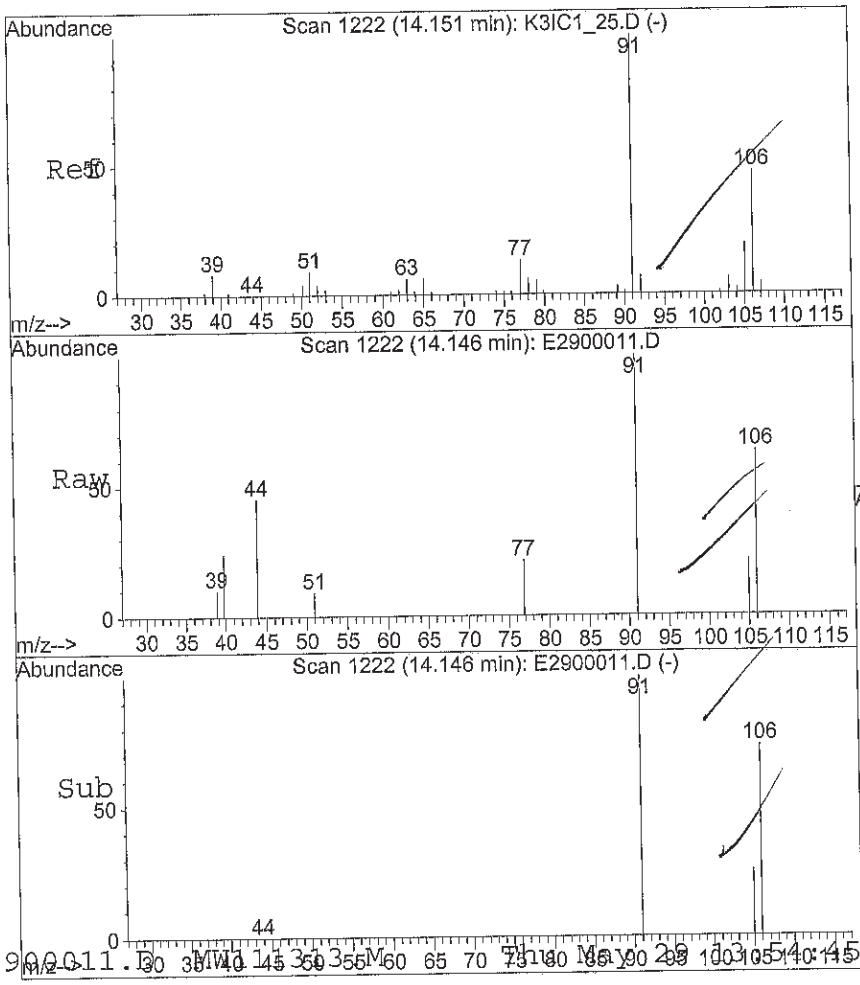


#51
Ethylbenzene
Concen: 0.26 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 91 Resp: 6143

Ion	Ratio	Lower	Upper
91	100		
106	5.7	23.5	35.3#

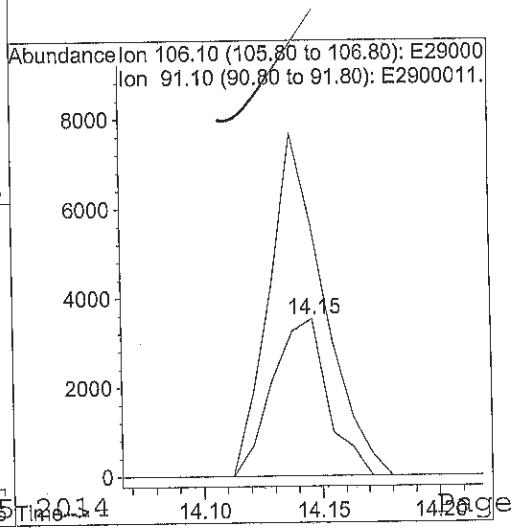


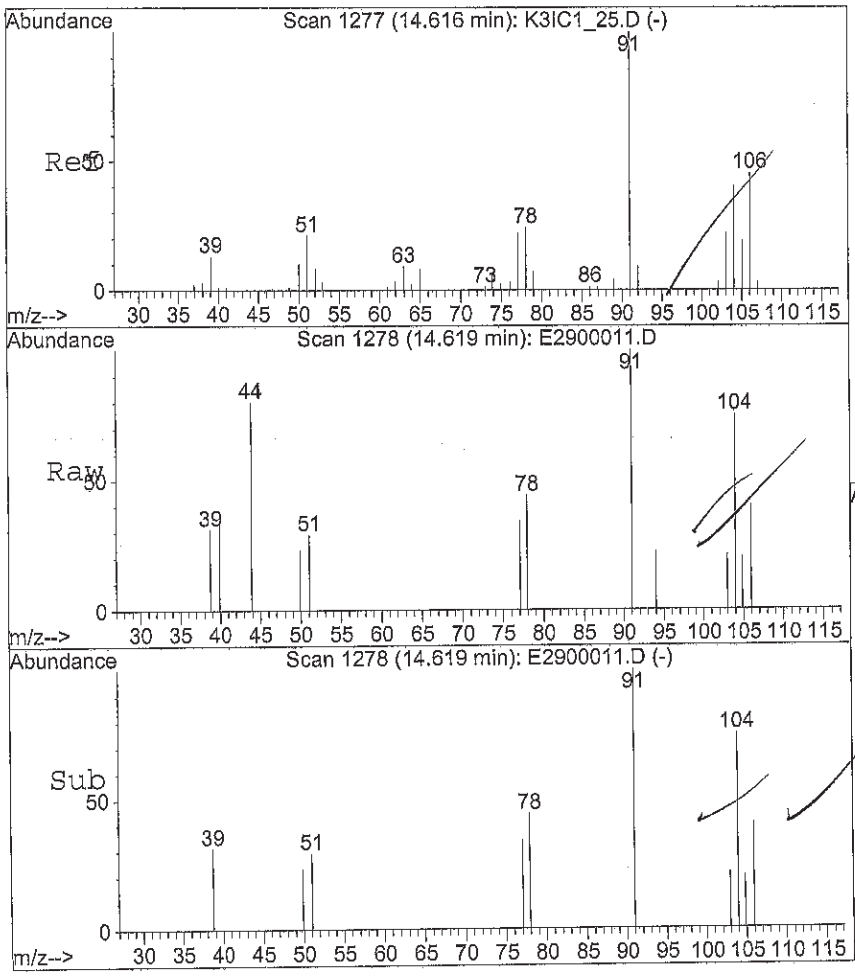


#52
m,p-Xylenes
Concen: 0.68 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion:106 Resp: 5691

Ion	Ratio	Lower	Upper
106	100		
91	215.3	177.1	265.7

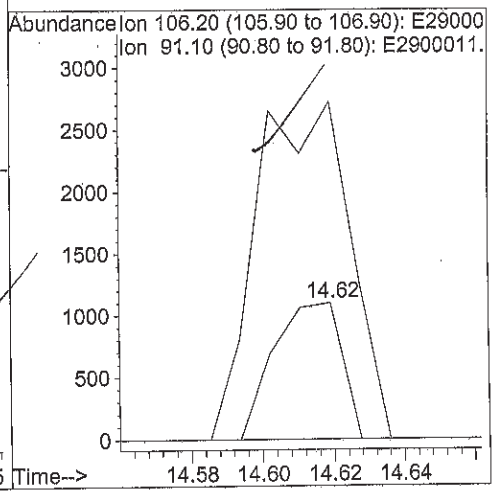


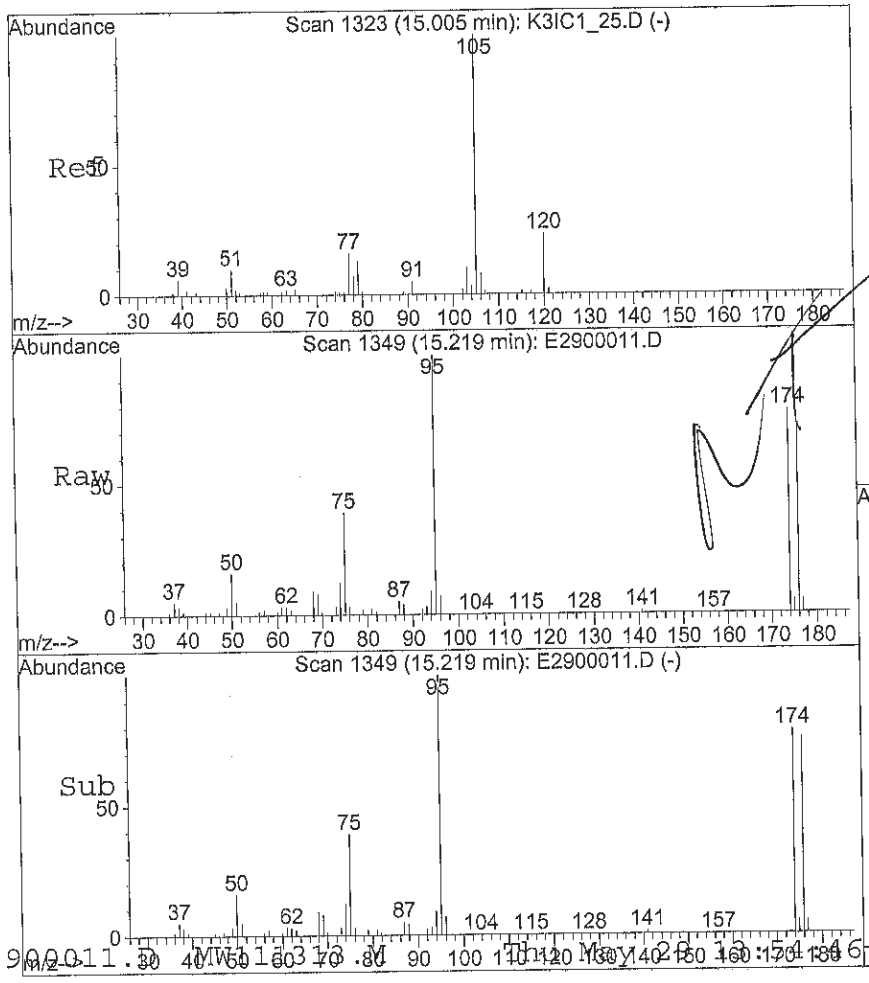


#53
o-Xylene
Concen: 0.17 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion:106 Resp: 1440

Ion	Ratio	Lower	Upper
106	100		
91	342.0	179.0	268.6#

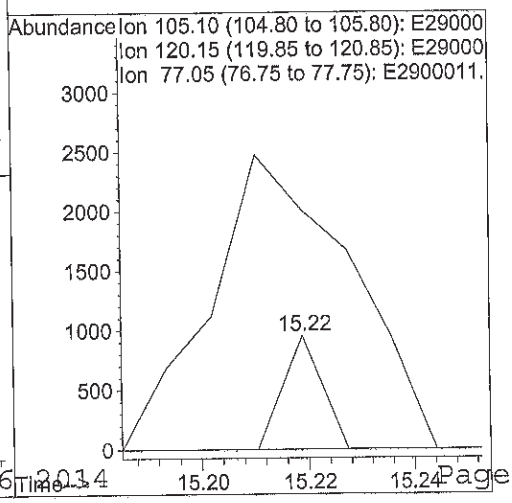


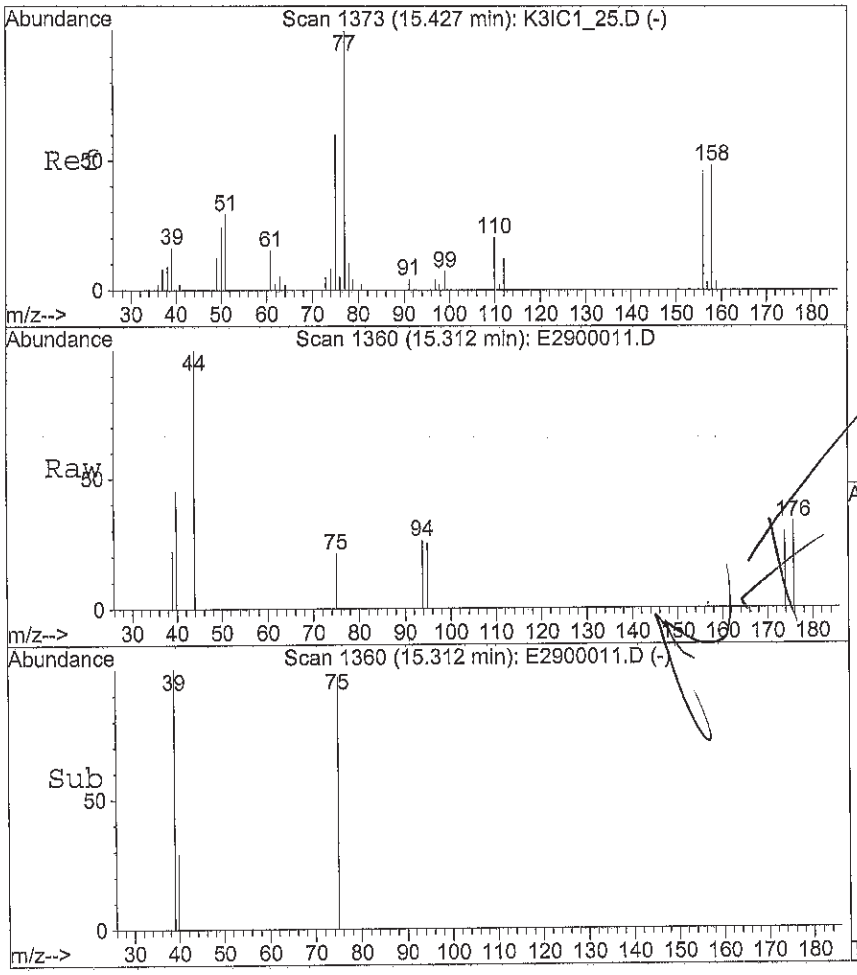


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion:105 Resp: 482

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	935.9	13.1	19.7#

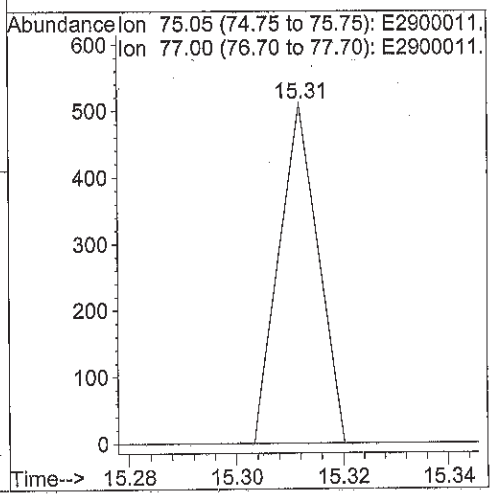


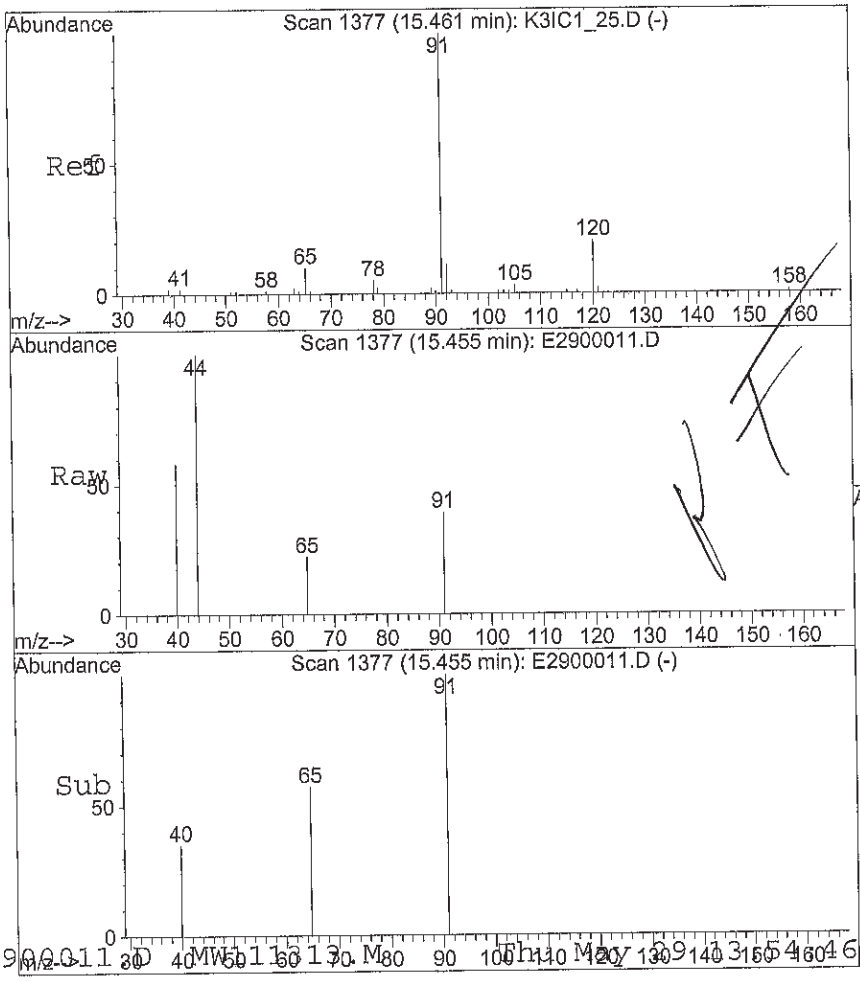


#57
1,2,3-Trichloropropane
Concen: 0.04 ug/L
RT: 15.31 min Scan# 1360
Delta R.T. -0.12 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 75 Resp: 259

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

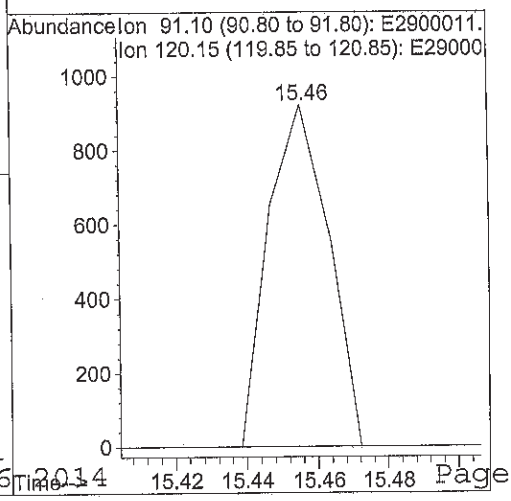


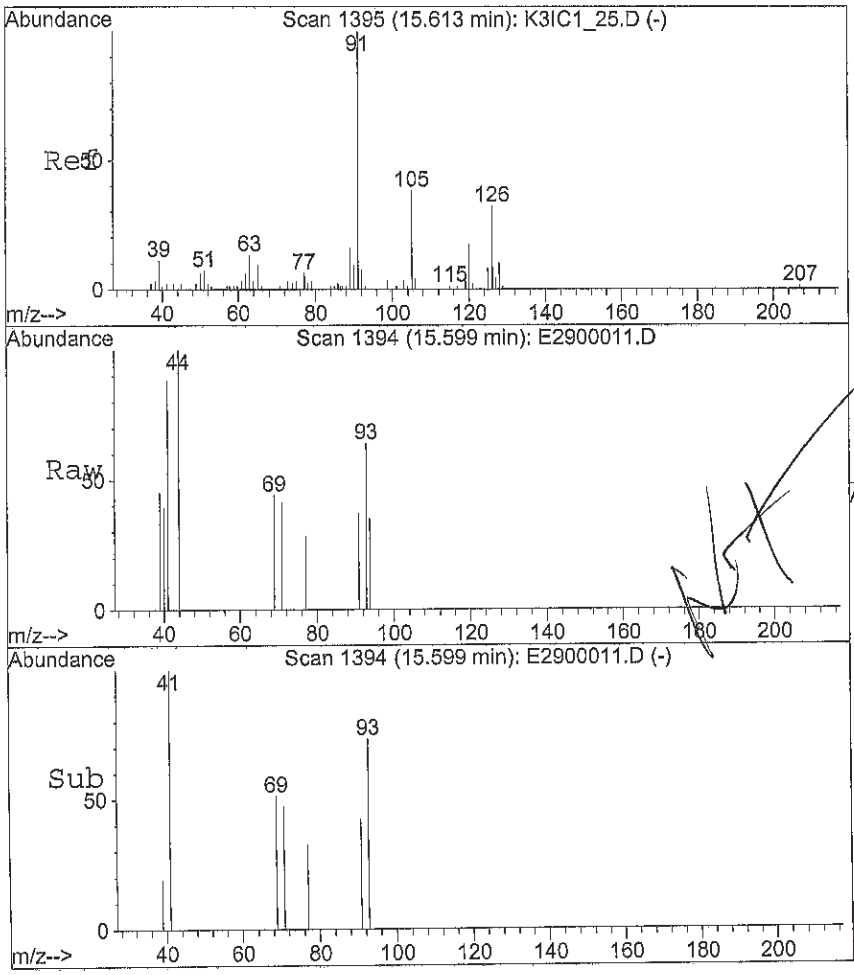


#62
n-Propylbenzene
Concen: 0.03 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 91 Resp: 1082

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

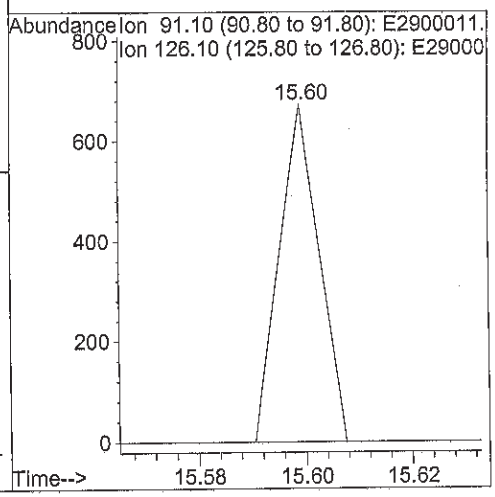


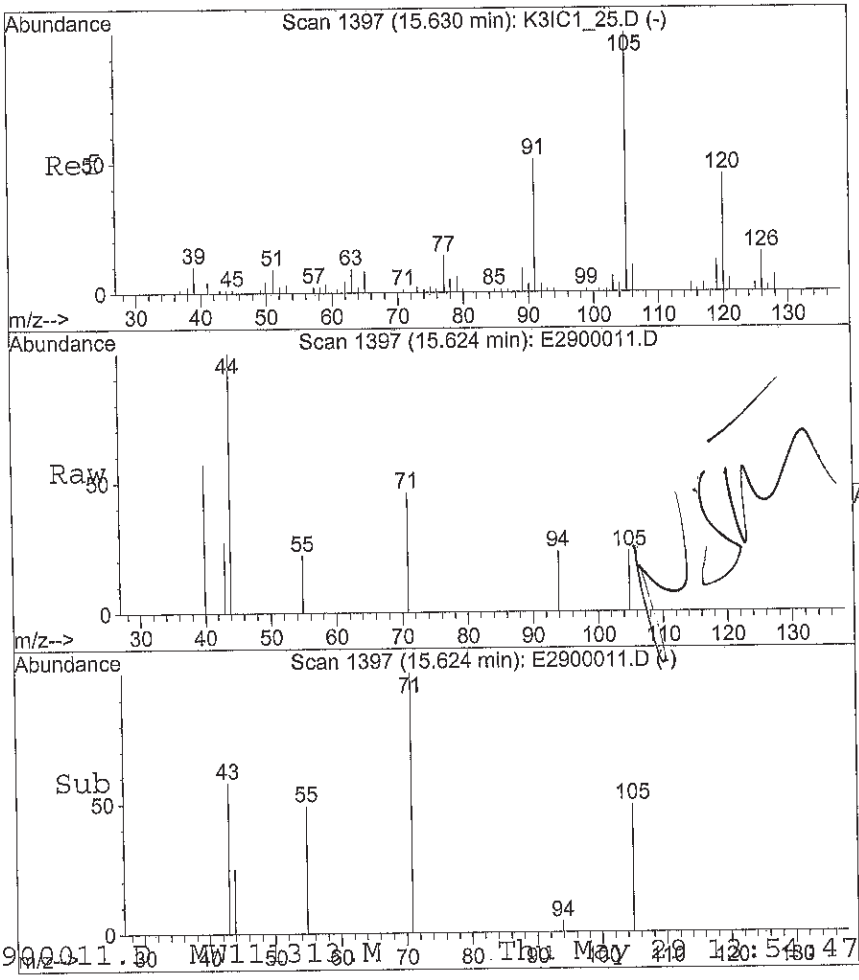


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 91 Resp: 341

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

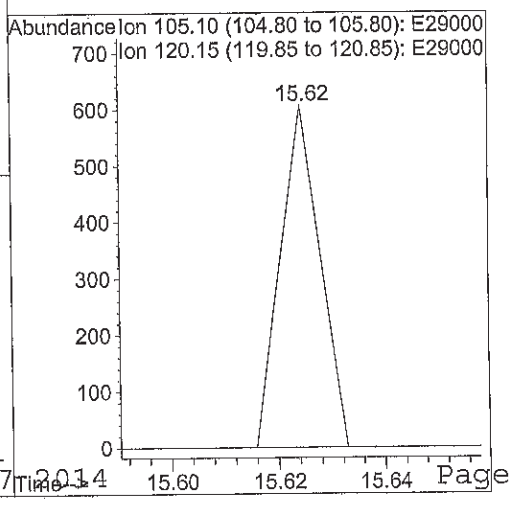


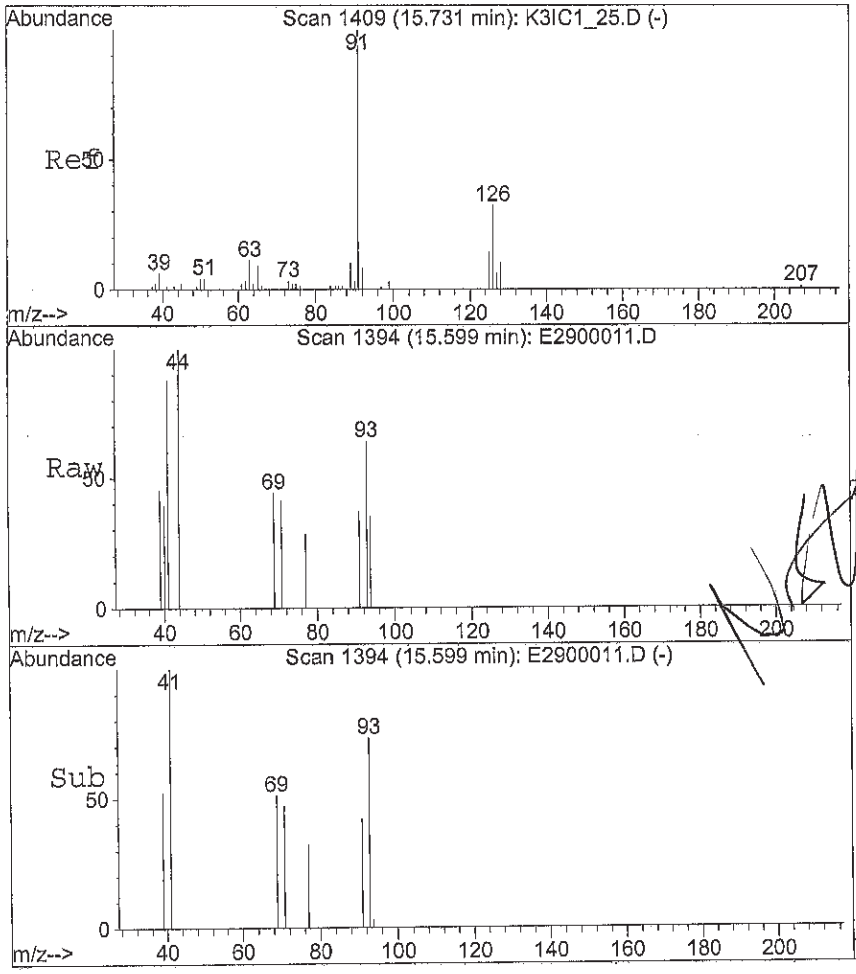


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion:105 Resp: 307

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

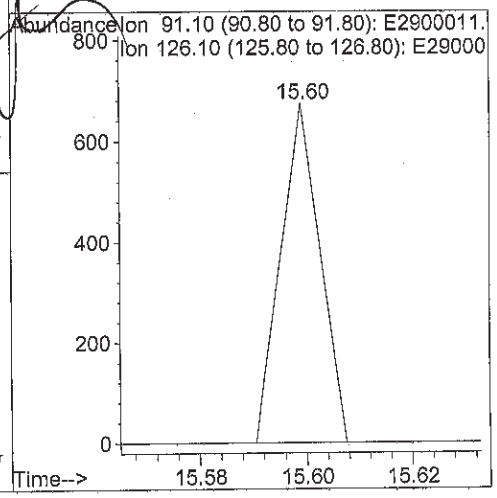


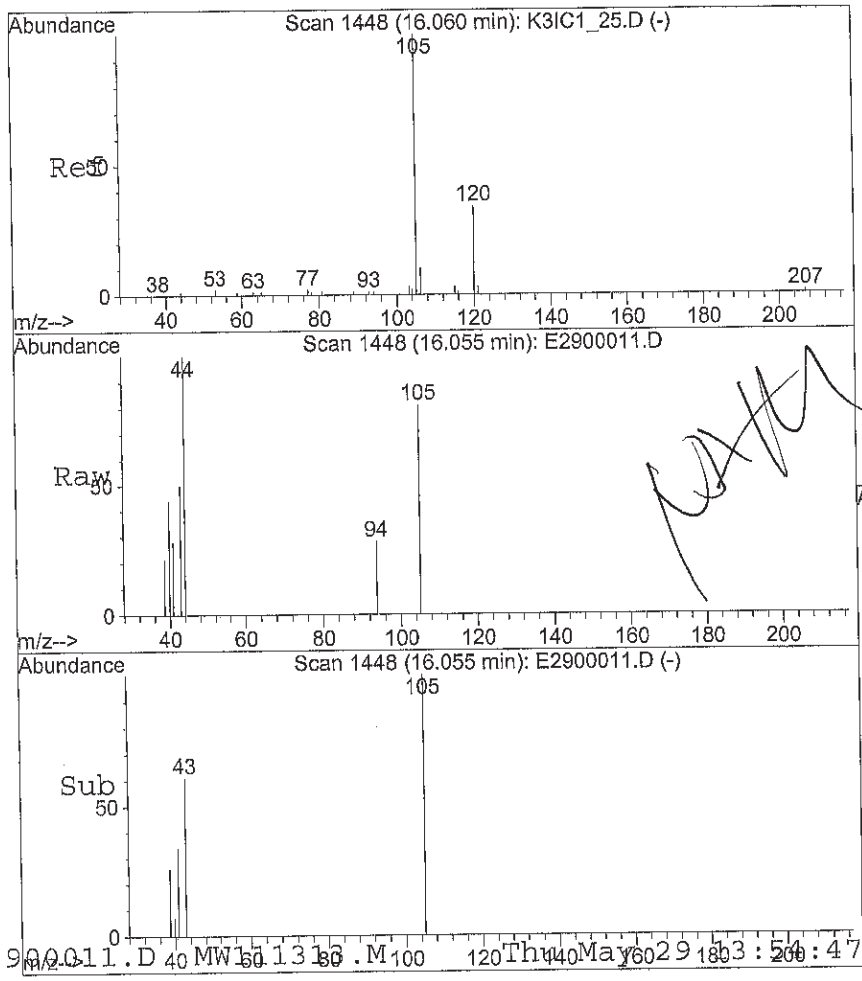


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.13 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion: 91 Resp: 341

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

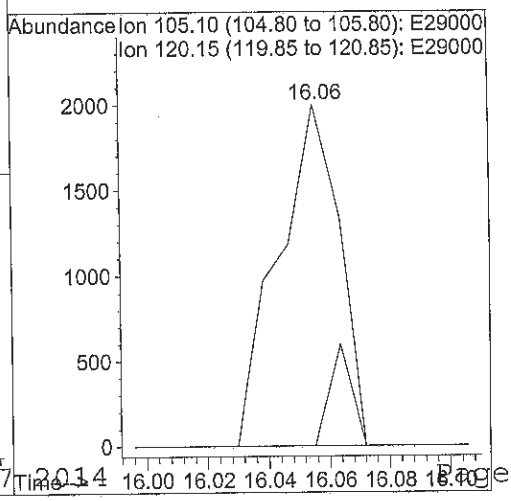


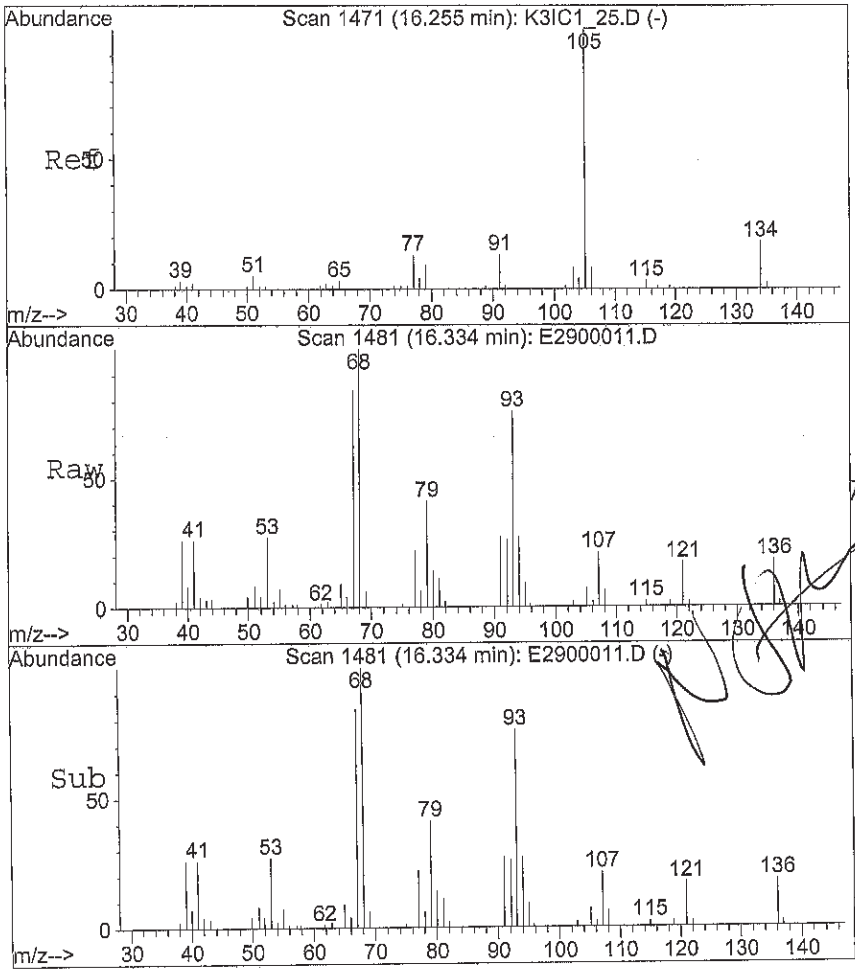


#67
1,2,4-Trimethylbenzene
Concen: 0.14 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion:105 Resp: 2781

Ion	Ratio	Lower	Upper
105	100		
120	10.9	33.8	50.8#

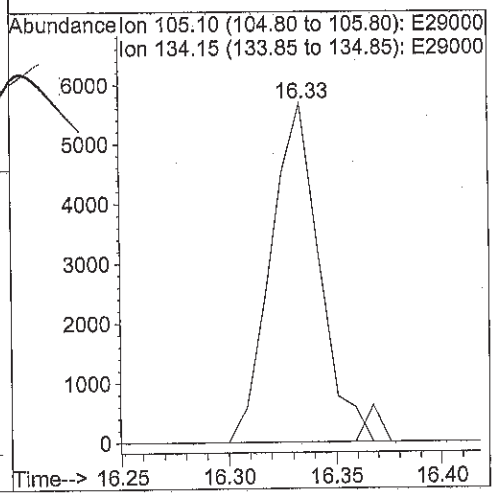


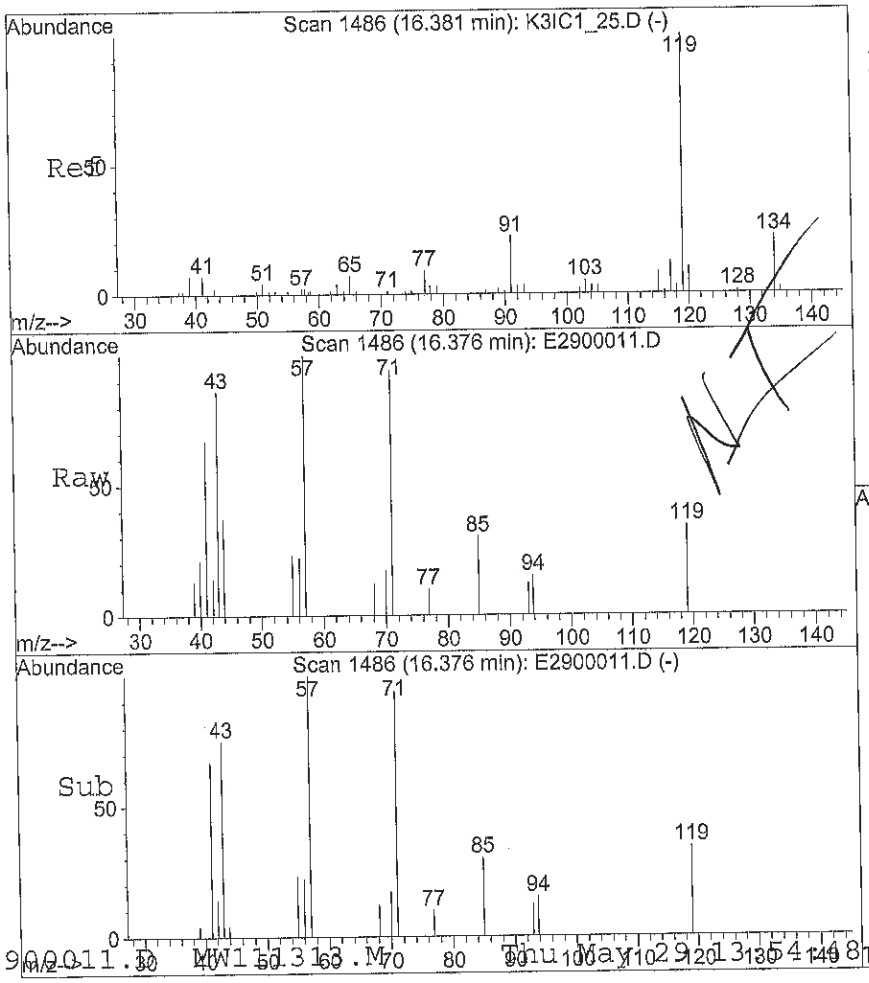


#68
sec-Butylbenzene
Concen: 0.34 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion:105 Resp: 8897

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

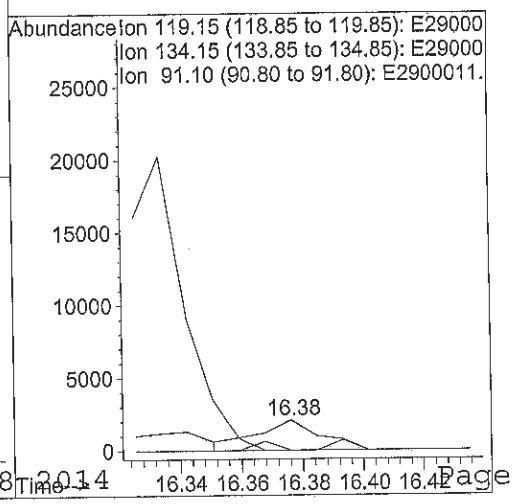




#69
p-Isopropyltoluene
Concen: 0.14 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2900011.D
Acq: 29 May 2014 1:26 pm

Tgt Ion:119 Resp: 2962

Ion	Ratio	Lower	Upper
119	100		
134	10.5	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900011.D
Acq On : 29 May 2014 1:26 pm
Sample : 3E42901-10
Misc : 100cc SVL-539-SA5D-SV-8.5-9.5
MS Integration Params: rteint.p
Quant Time: May 29 13:55 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	2000126	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1513788	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	768922	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	532657	10.24 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 81.92%		
3) Chloroform-d (SU6)	9.19	84	813721	10.90 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.20%		
4) Methylene Chloride-d2 (SU5	7.08	86	477891	10.95 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.60%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	447940	12.60 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.80%		
6) Benzene-d6 (SU7)	9.93	84	1688413	10.76 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.08%		
8) Toluene-d8 (SU3)	12.20	98	1746770	12.16 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.28%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	794899	13.41 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.28%		

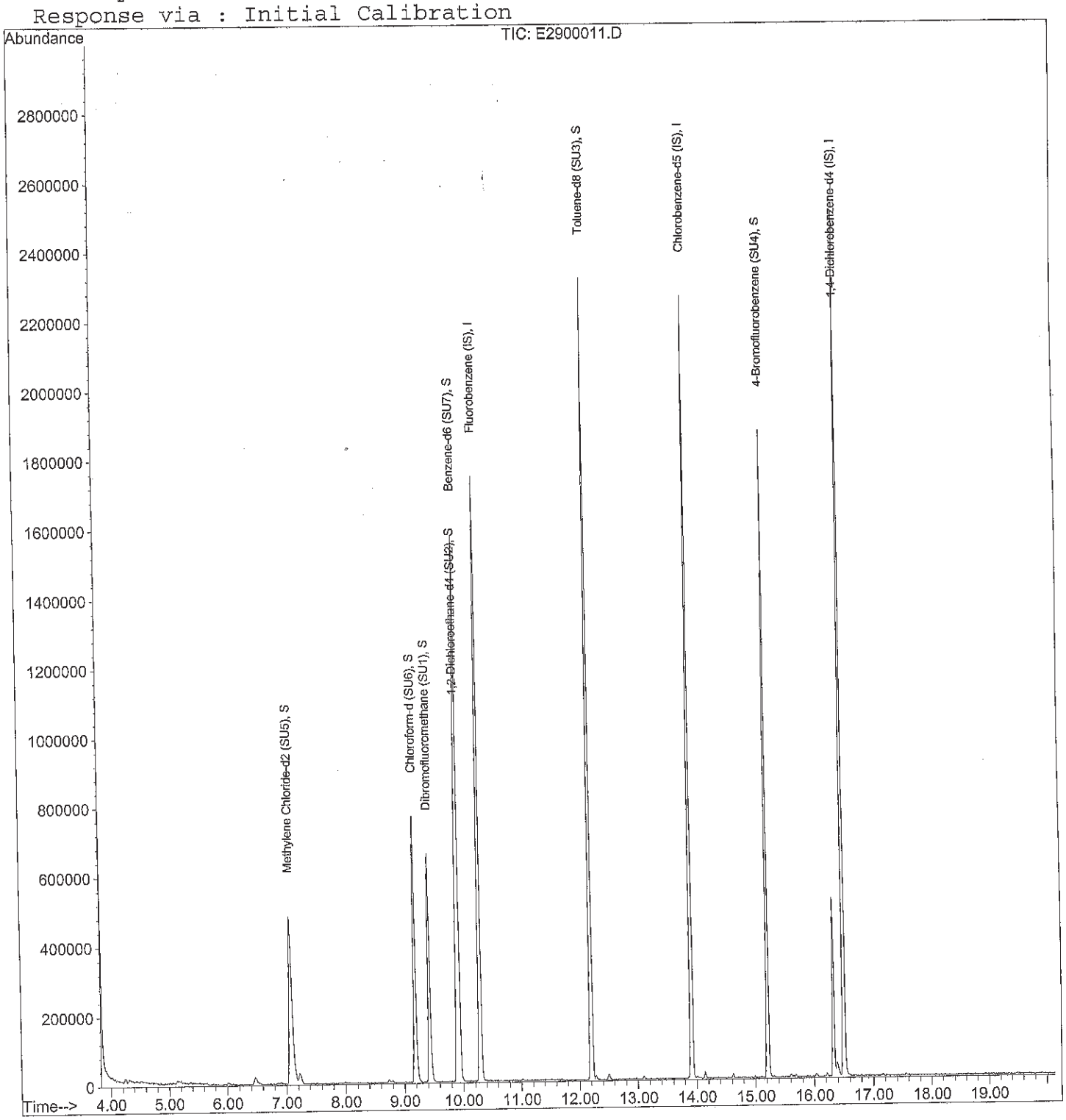
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900011.D Vial: 2
Acq On : 29 May 2014 1:26 pm Operator: DN
Sample : 3E42901-10 Inst : GC/MS Ins
Misc : 100cc SVL-539-SA5D-SV-8.5-9.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 13:55 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900012.D
Acq On : 29 May 2014 1:59 pm
Sample : 3E42901-11
Misc : 100cc SVL-572-SA5C-SV-6.8-7.8
MS Integration Params: rteint.p
Quant Time: May 29 14:26 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1633764	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1325951	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	712550	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	460794	11.31 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.48%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	456427	11.78 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.24%		
39) Toluene-d8 (SU3)	12.21	98	1434293	11.60 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.80%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	718920	13.26 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.08%		

Target Compounds					Qvalue
4) Chloromethane	4.39	50	1151	-0.80 ~~ug/L #~~	41
6) Bromomethane	5.15	96	5492	1.28 ~~ug/L~~	79
7) Chloroethane	5.26	64	1113	1.51 ~~ug/L #~~	32
11) Acetone	6.46	58	10258	11.99 ~~ug/L~~	77
12) (IPA) Leak Check Compound	6.49	45	26815	136.59 ~~ug/L #~~	82
13) Carbon disulfide	6.86	76	2205	0.16 ~~ug/L #~~	76
14) Methylene Chloride	7.10	84	6276	1.40 ~~ug/L #~~	9
15) (TBA) tert-Butanol	6.92	59	322	1.16 ~~ug/L #~~	77
19) cis-1,2-Dichloroethene	9.06	96	305	0.06 ~~ug/L #~~	3
21) (MEK) 2-Butanone	8.80	72	258	0.56 ~~ug/L #~~	1
24) Chloroform	9.21	83	3518	0.41 ~~ug/L #~~	4
29) 1,1-Dichloropropene	9.94	75	273	0.04 ~~ug/L~~ #	1
31) Benzene	9.97	78	1431	0.09 ~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.93	62	6207	1.14 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	7126	2.69 ~~ug/L #~~	100
41) Toluene	12.29	91	10065	0.56 ug/L 0.012	99
46) 2-Hexanone	12.97	43	1248	0.43 ~~ug/L #~~	37
51) Ethylbenzene	14.03	91	2711	0.13 ~~ug/L #~~	45
52) m,p-Xylenes	14.15	106	2519	0.34 ug/L # 0.0068	68
53) o-Xylene	14.60	106	254	0.04 ug/L # 0.0008	1
54) Styrene	14.63	104	2859	-0.59 ~~ug/L #~~	91
56) Isopropylbenzene	15.23	105	2409	0.12 ~~ug/L #~~	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900012.D Vial: 3
Acq On : 29 May 2014 1:59 pm Operator: DN
Sample : 3E42901-11 Inst : GC/MS Ins
Misc : 100cc SVL-572-SA5C-SV-6.8-7.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 14:26 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

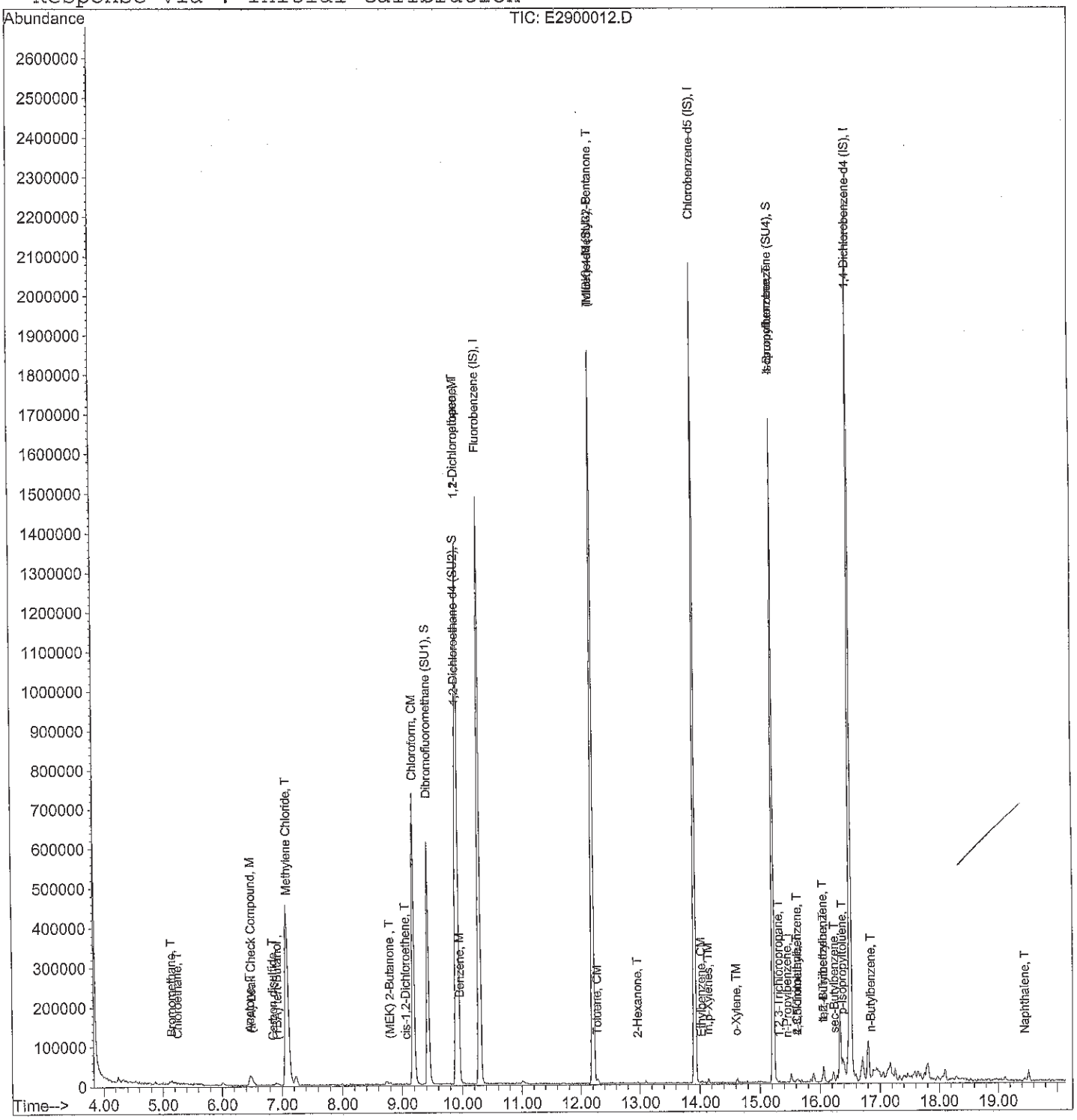
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
57) 1,2,3-Trichloropropane	15.31	75	316	0.06 ~~ug/L~~ #	36
62) n-Propylbenzene	15.46	91	1972	0.07 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.61	91	269	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	3333	0.19 ug/L #	71 0.0038
65) 4-Chlorotoluene	15.61	91	269	0.02 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.06	119	1776	0.12 ~~ug/L~~ #	29
67) 1,2,4-Trimethylbenzene	16.06	105	20952	1.13 ug/L 0.0226	92
68) sec-Butylbenzene	16.25	105	1225	0.05 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	22128	1.14 ~~ug/L~~ #	94
72) n-Butylbenzene	16.85	91	3048	0.15 ~~ug/L~~ #	75
77) Naphthalene	19.45	128	9577	0.68 ~~ug/L~~	100 0.0136

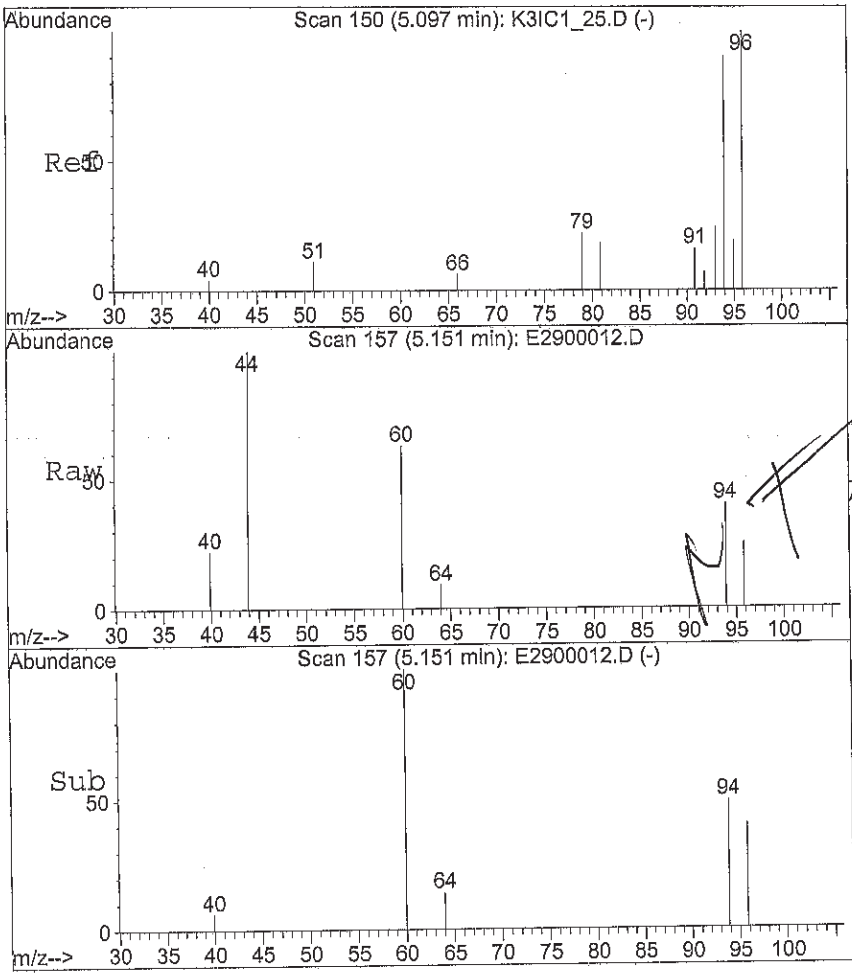
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900012.D Vial: 3
Acq On : 29 May 2014 1:59 pm Operator: DN
Sample : 3E42901-11 Inst : GC/MS Ins
Misc : 100cc SVL-572-SA5C-SV-6.8-7.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 14:26 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

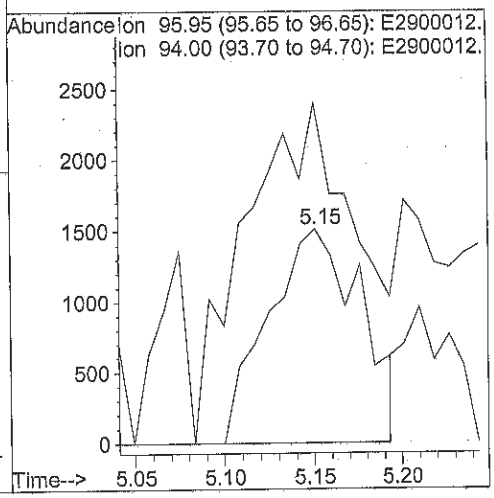


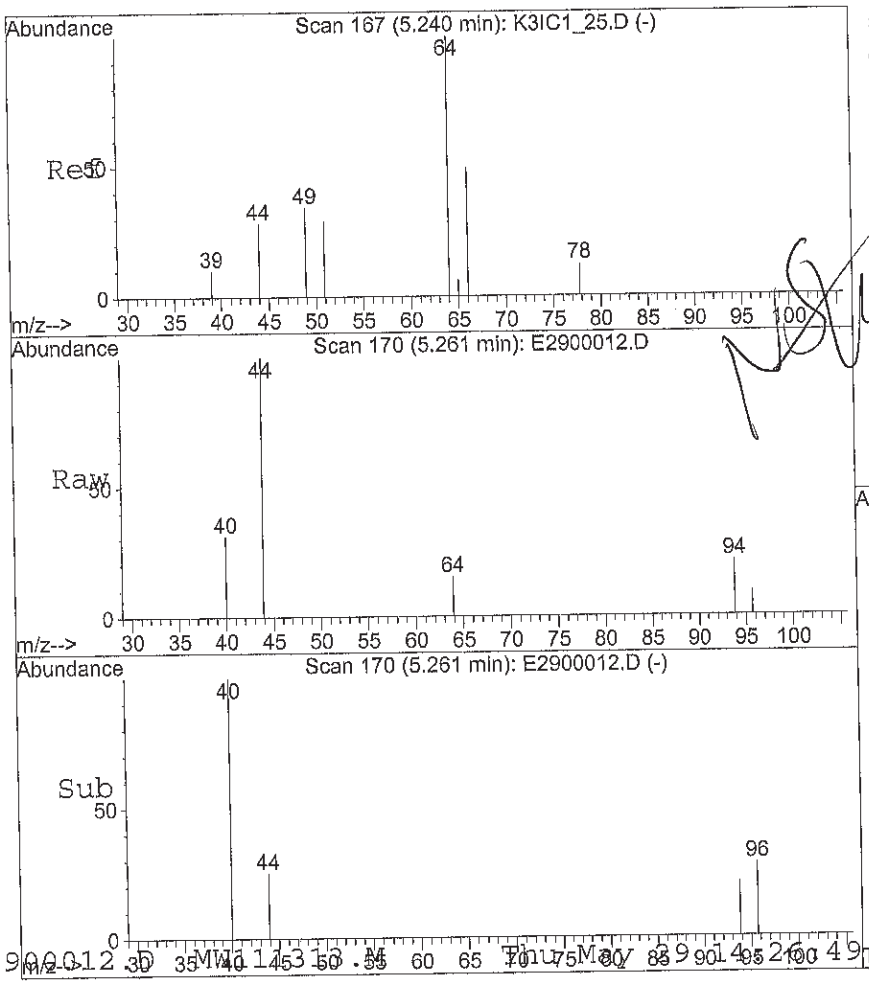


#6
Bromomethane
Concen: 1.28 ug/L
RT: 5.15 min Scan# 157
Delta R.T. 0.05 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 96 Resp: 5492

Ion	Ratio	Lower	Upper
96	100		
94	101.7	101.0	151.4

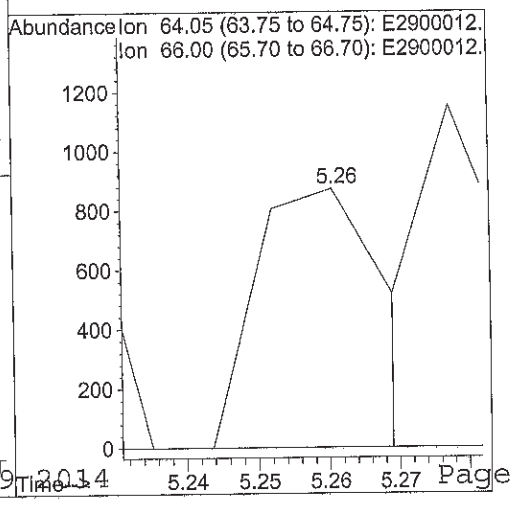


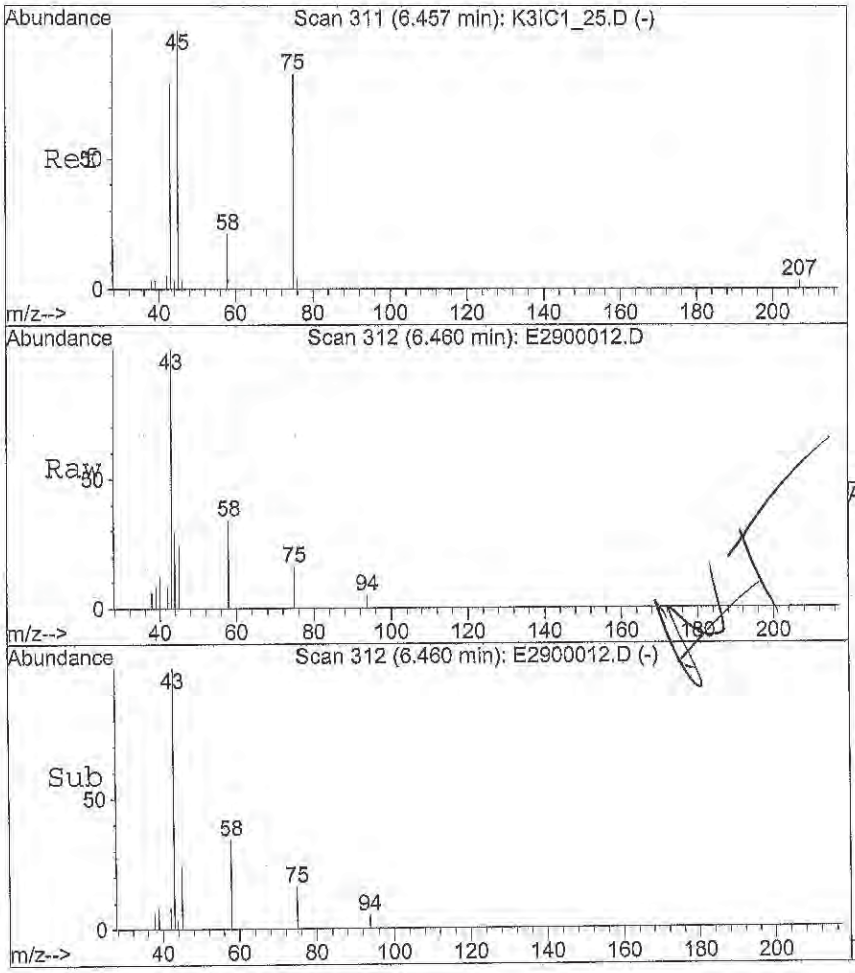


#7
Chloroethane
Concen: 1.51 ug/L
RT: 5.26 min Scan# 170
Delta R.T. 0.02 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 64 Resp: 1113

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

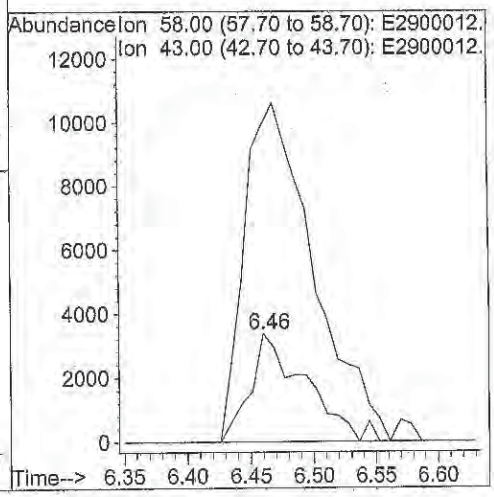


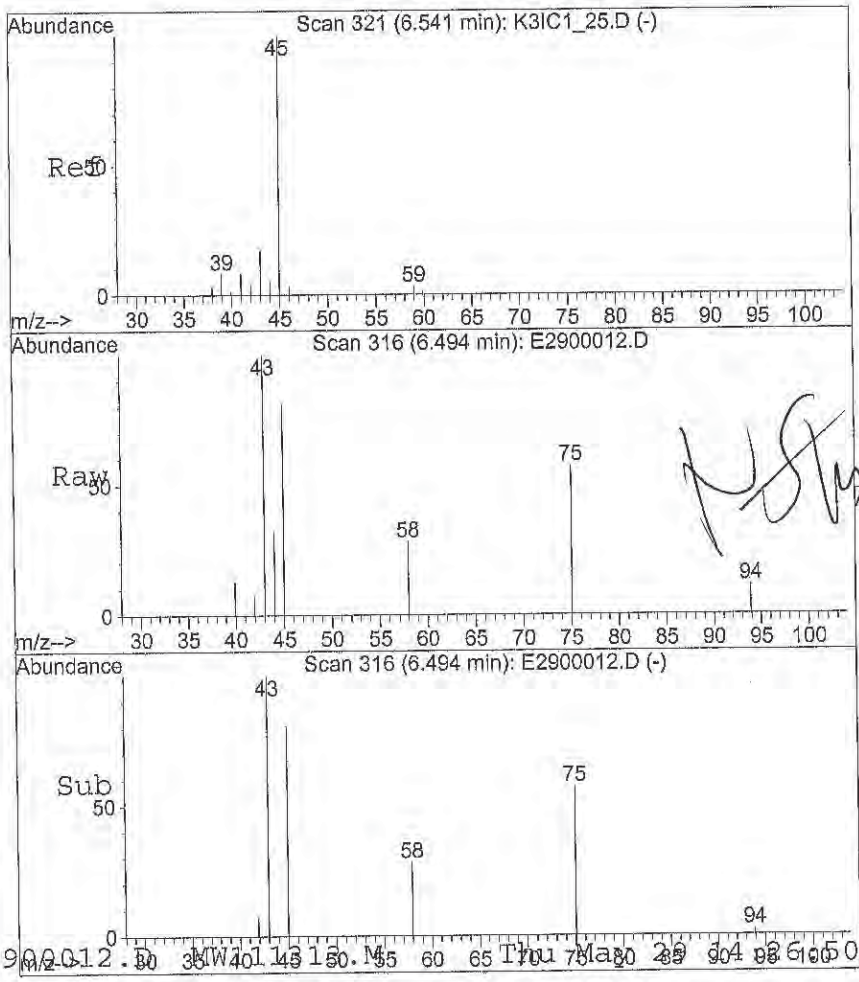


#11
Acetone
Concen: 11.99 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 58 Resp: 10258

Ion	Ratio	Lower	Upper
58	100		
43	392.9	360.9	541.3

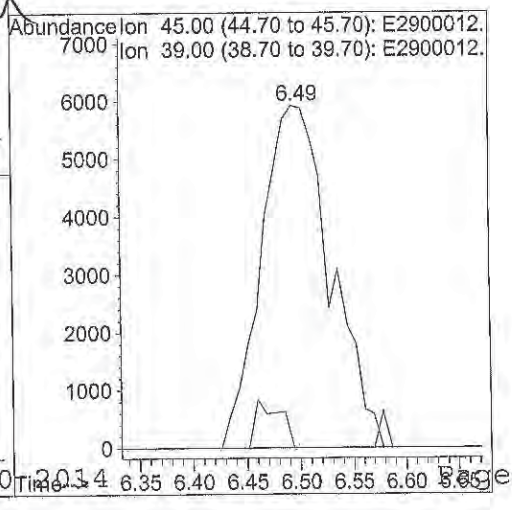


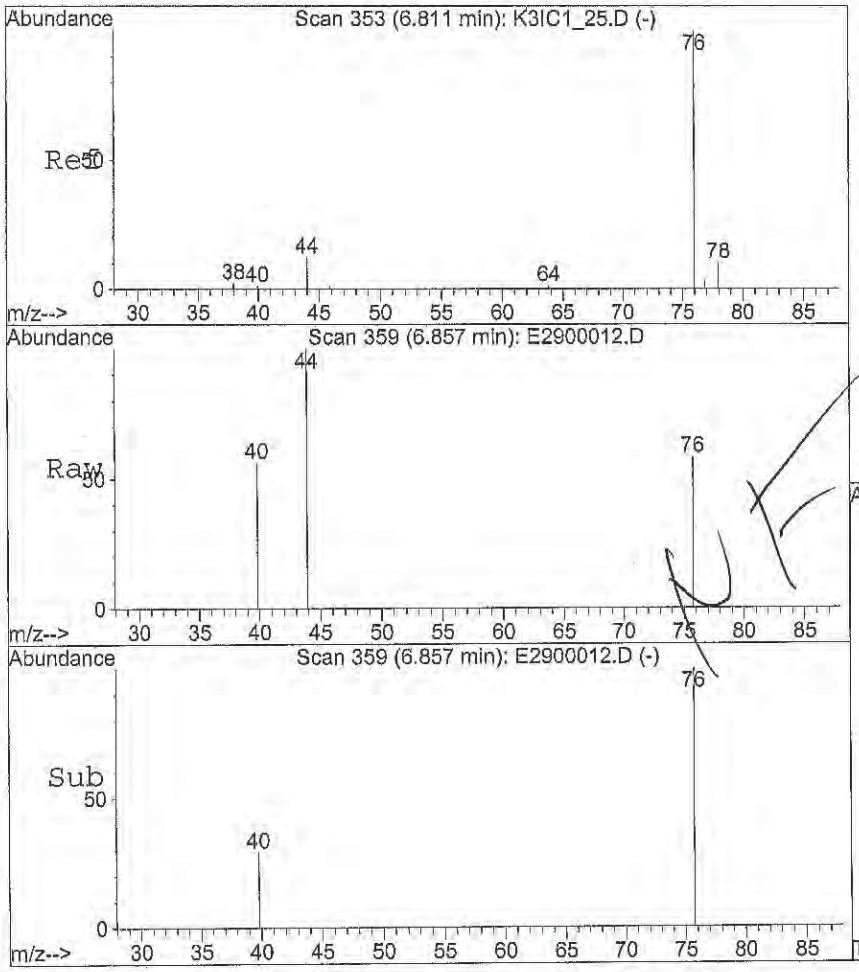


#12
(IPA) Leak Check Compound
Concen: 136.59 ug/L
RT: 6.49 min Scan# 316
Delta R.T. -0.05 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 45 Resp: 26815

Ion	Ratio	Lower	Upper
45	100		
39	0.0	4.9	7.3#

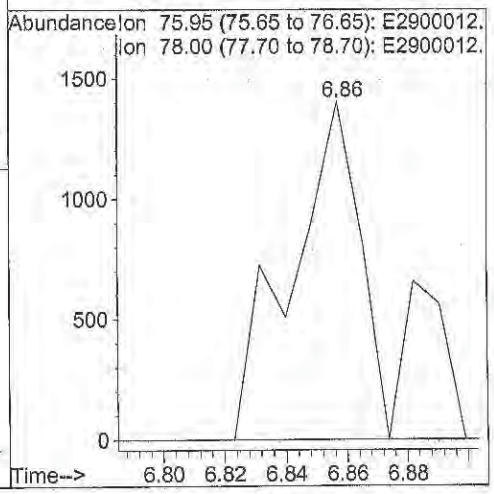


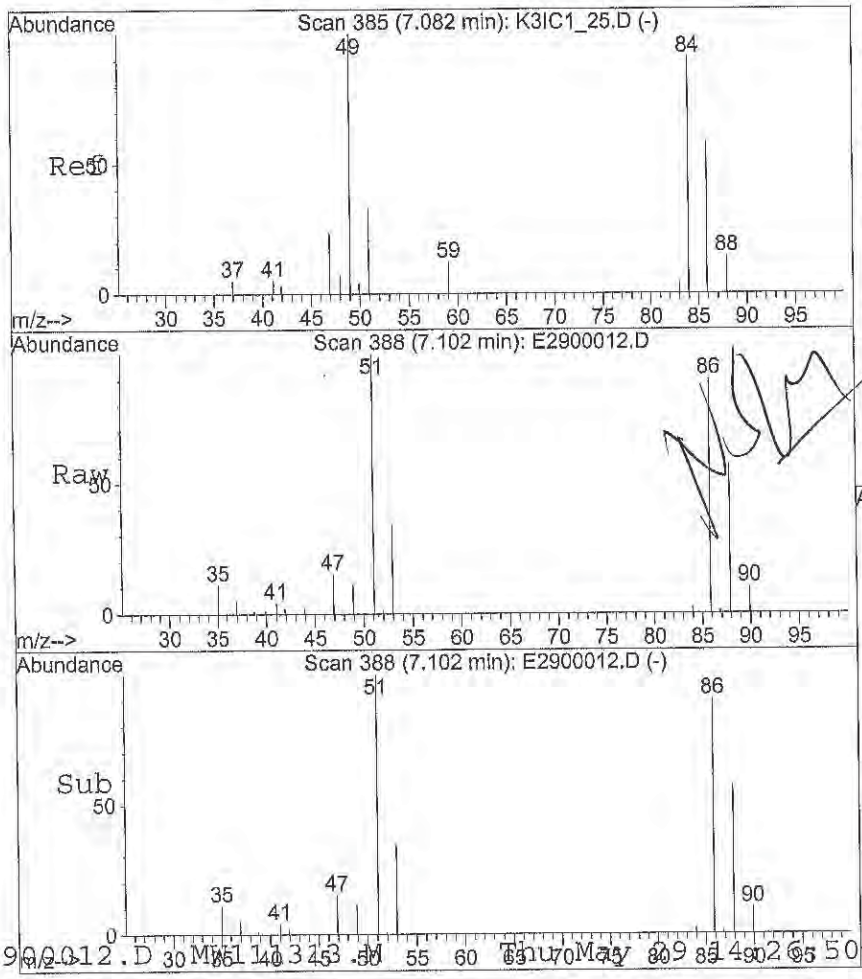


#13
Carbon disulfide
Concen: 0.16 ug/L
RT: 6.86 min Scan# 359
Delta R.T. 0.05 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 76 Resp: 2205

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

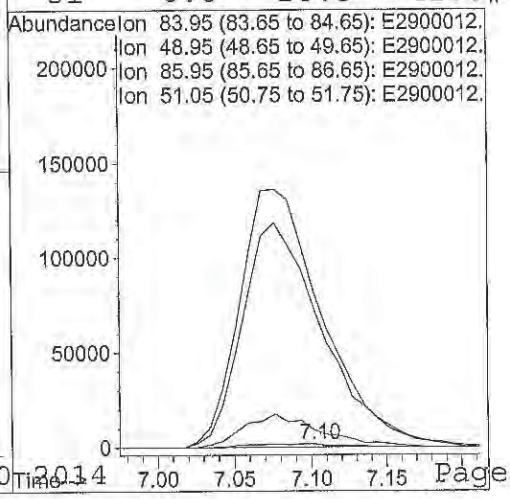


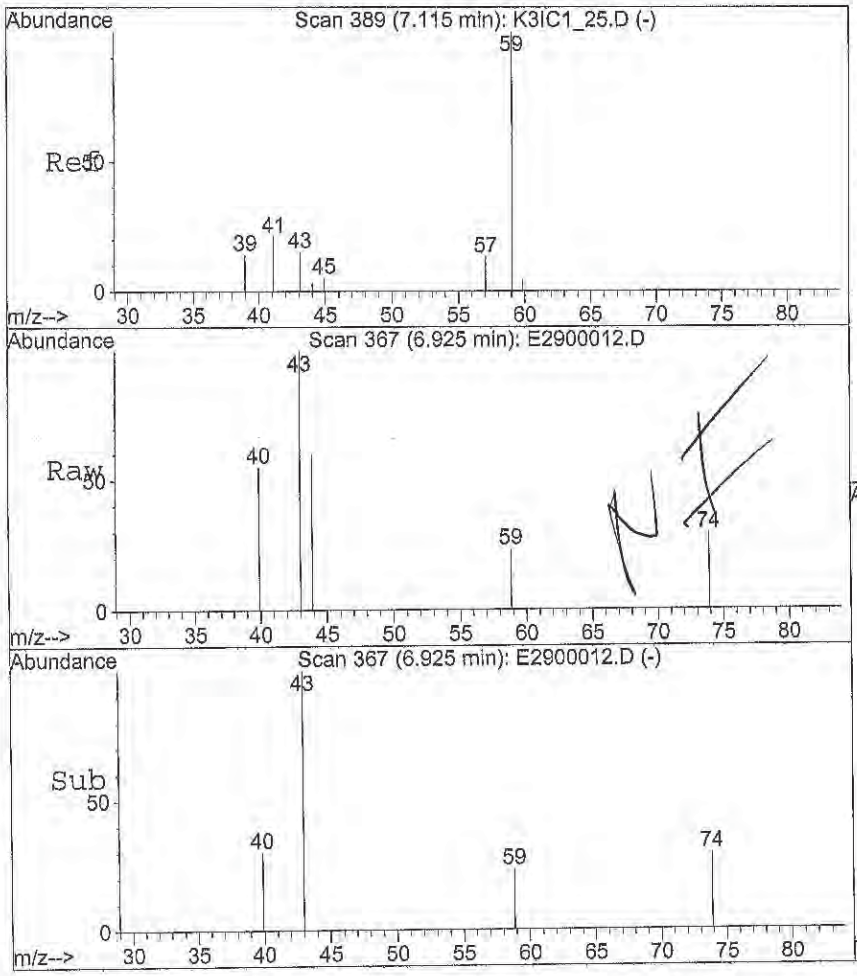


#14
Methylene Chloride
Concen: 1.40 ug/L
RT: 7.10 min Scan# 388
Delta R.T. 0.02 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 84 Resp: 6276

Ion	Ratio	Lower	Upper
84	100		
49	0.0	89.8	134.6#
86	0.0	51.1	76.7#
51	0.0	28.5	42.7#

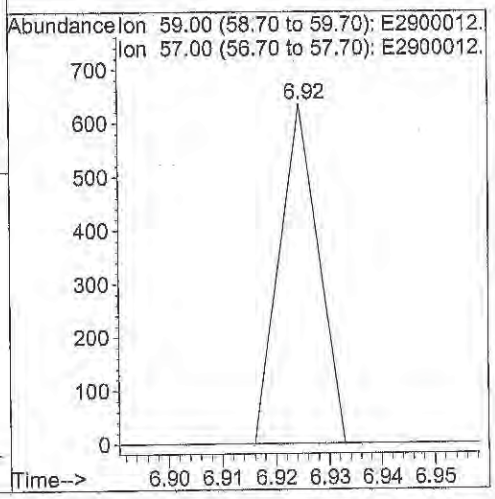


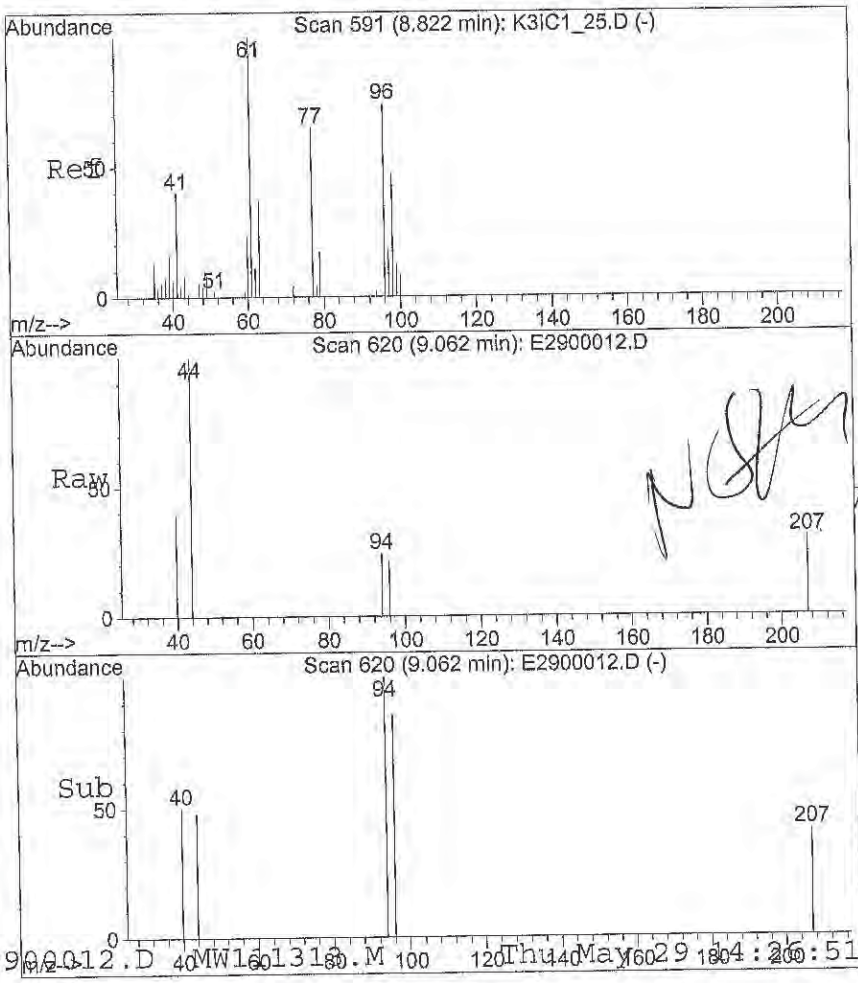


#15
(TBA) tert-Butanol
Concen: 1.16 ug/L
RT: 6.92 min Scan# 367
Delta R.T. -0.19 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 59 Resp: 322

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

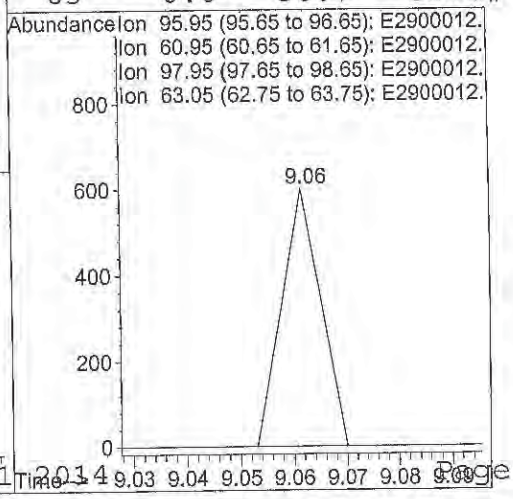


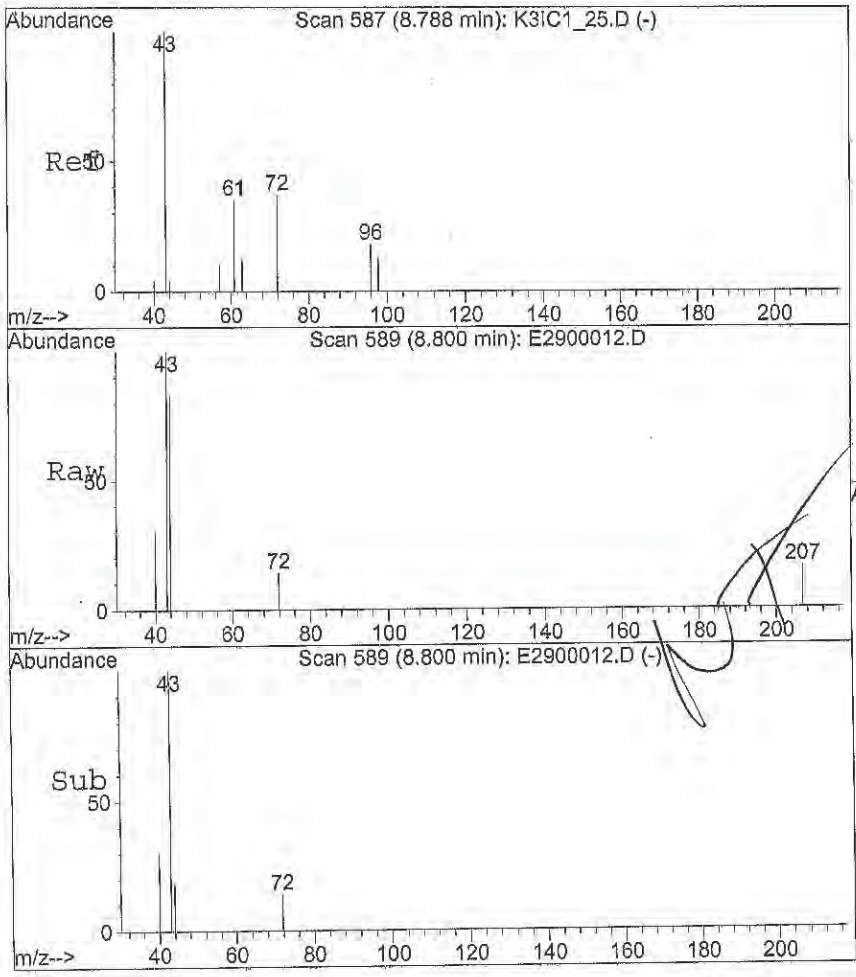


#19
cis-1,2-Dichloroethene
Concen: 0.06 ug/L
RT: 9.06 min Scan# 620
Delta R.T. 0.24 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 96 Resp: 305

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

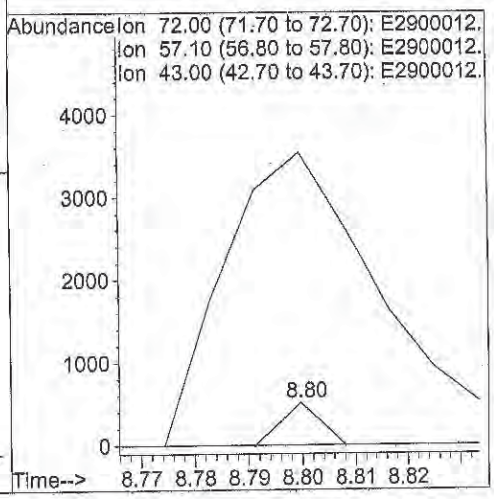


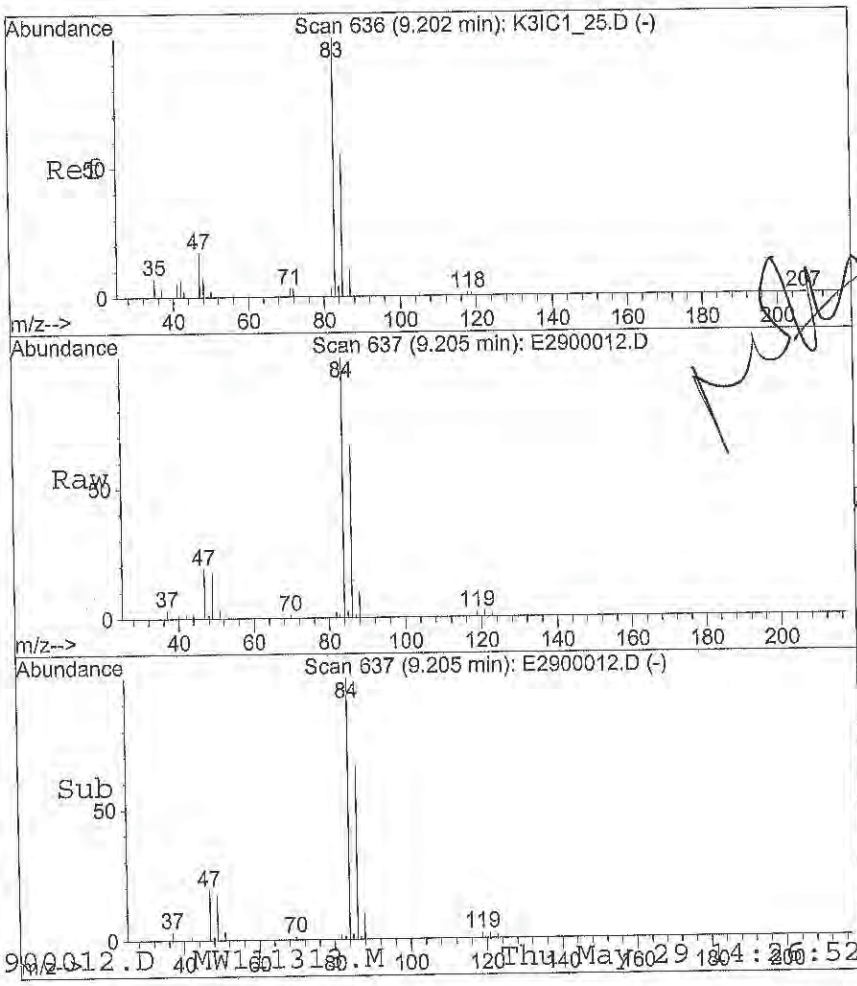


#21
(MEK) 2-Butanone
Concen: 0.56 ug/L
RT: 8.80 min Scan# 589
Delta R.T. 0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 72 Resp: 258

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	2762.8	314.2	471.2#

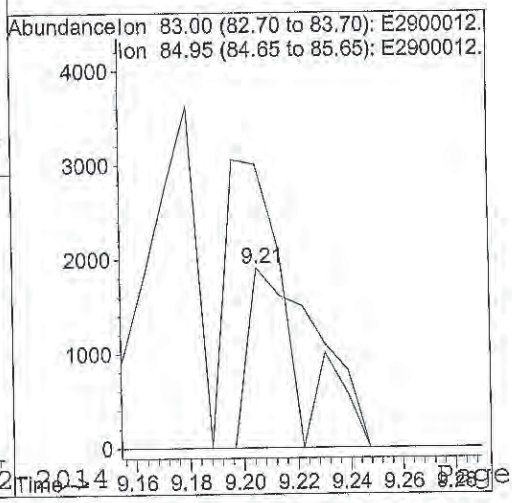


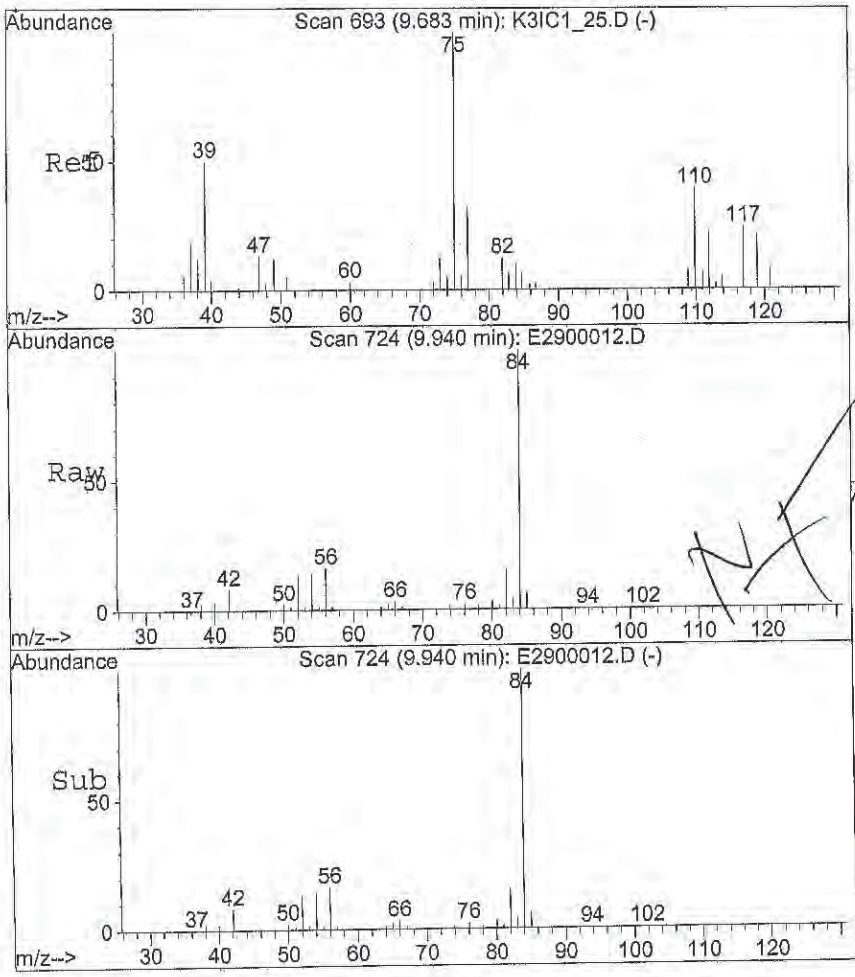


#24
Chloroform
Concen: 0.41 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.00 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 83 Resp: 3518

Ion	Ratio	Lower	Upper
83	100		
85	139.9	51.8	77.6#

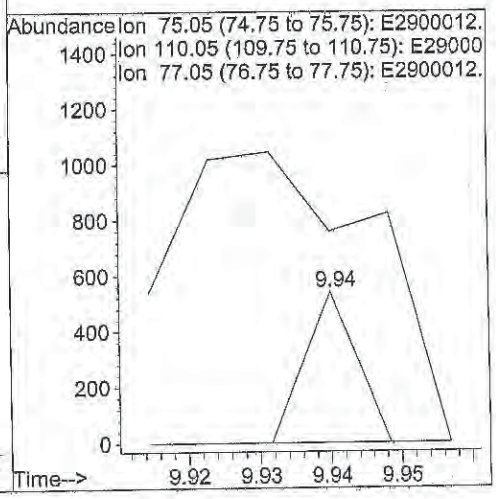


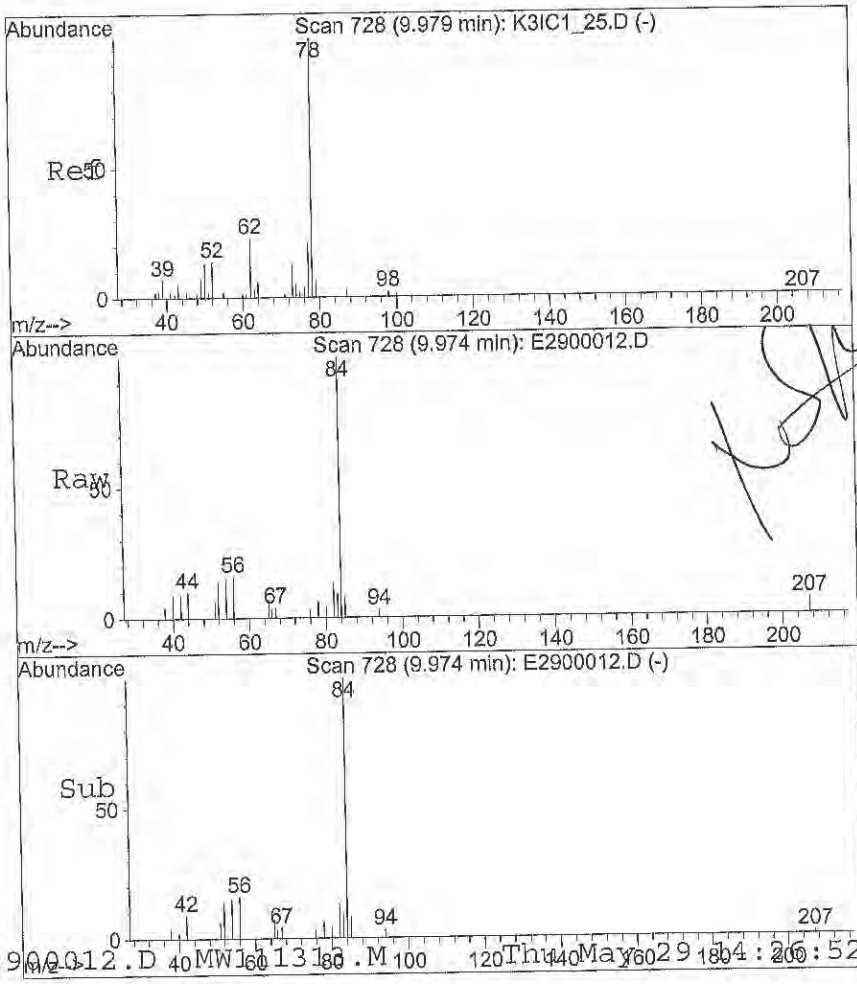


#29
1,1-Dichloropropene
Concen: 0.04 ug/L
RT: 9.94 min Scan# 724
Delta R.T. 0.26 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 75 Resp: 273

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	776.6	25.0	37.4#

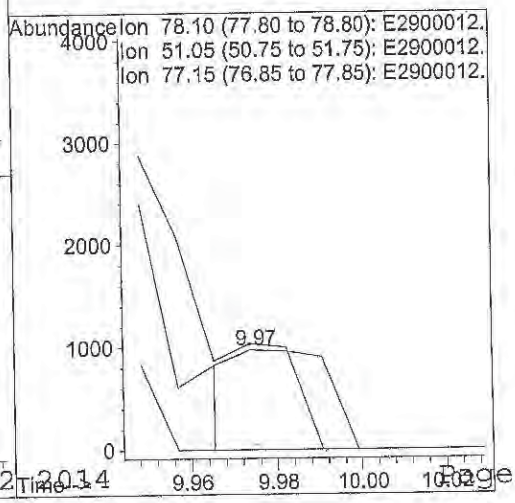


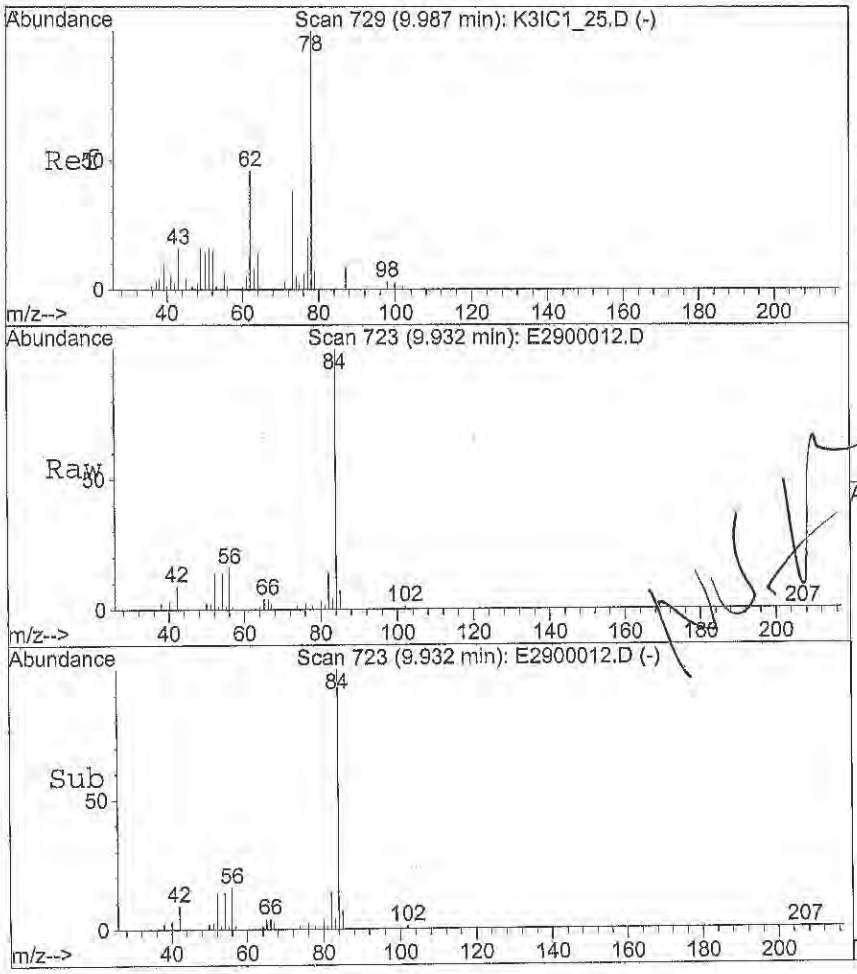


#31
Benzene
Concen: 0.09 ug/L
RT: 9.97 min Scan# 728
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 78 Resp: 1431

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

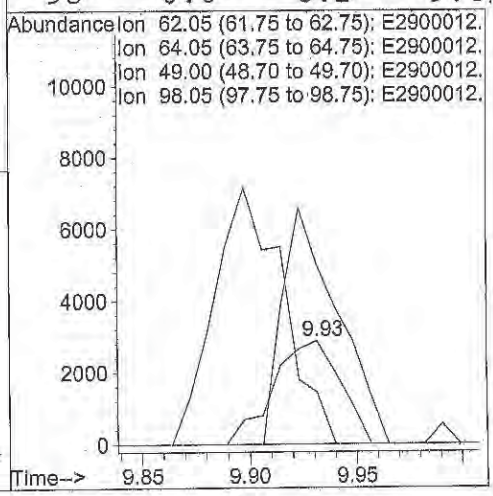


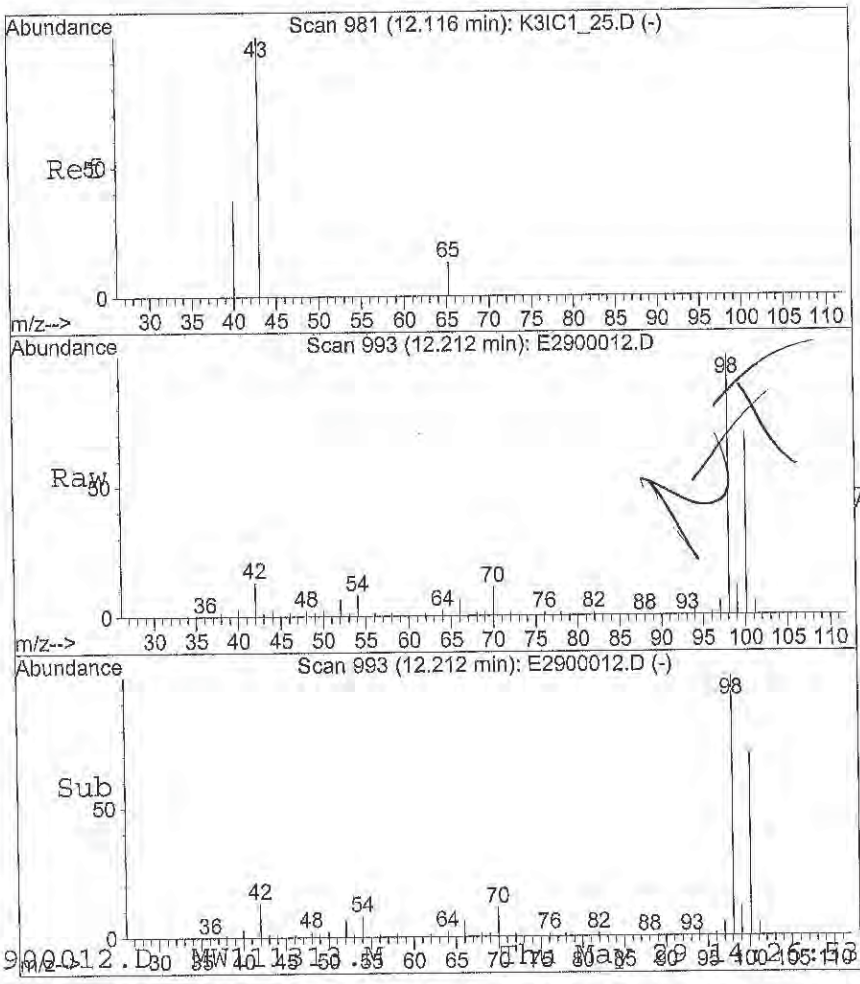


#32
1,2-Dichloroethane
Concen: 1.14 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 62 Resp: 6207

Ion	Ratio	Lower	Upper
62	100		
64	191.4	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

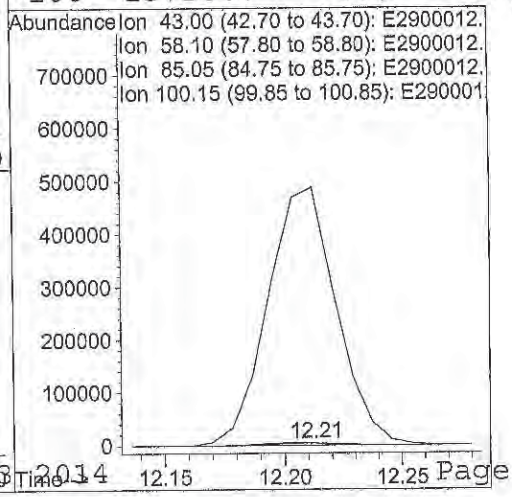


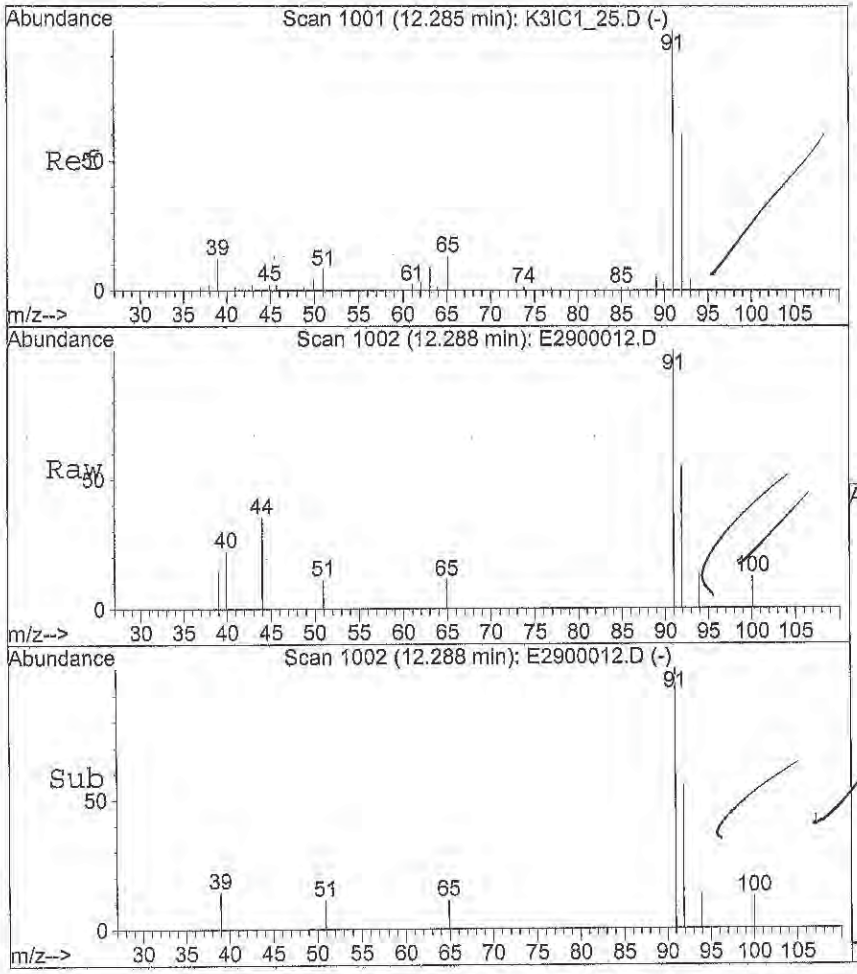


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.69 ug/L
RT: 12.21 min Scan# 993
Delta R.T. 0.10 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 43 Resp: 7126

Ion	Ratio	Lower	Upper
43	100		
58	140.7	0.0	0.0#
85	0.0	0.0	0.0
100	13750.7	0.0	0.0#

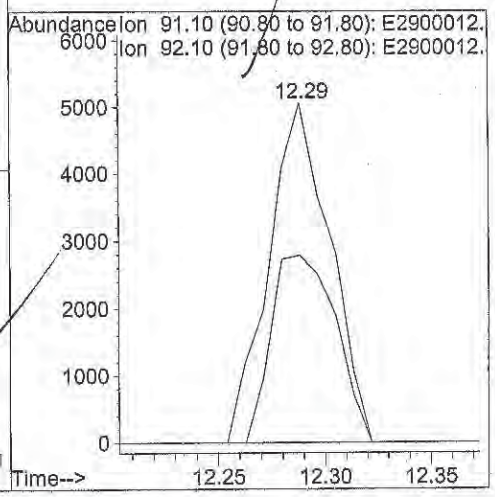


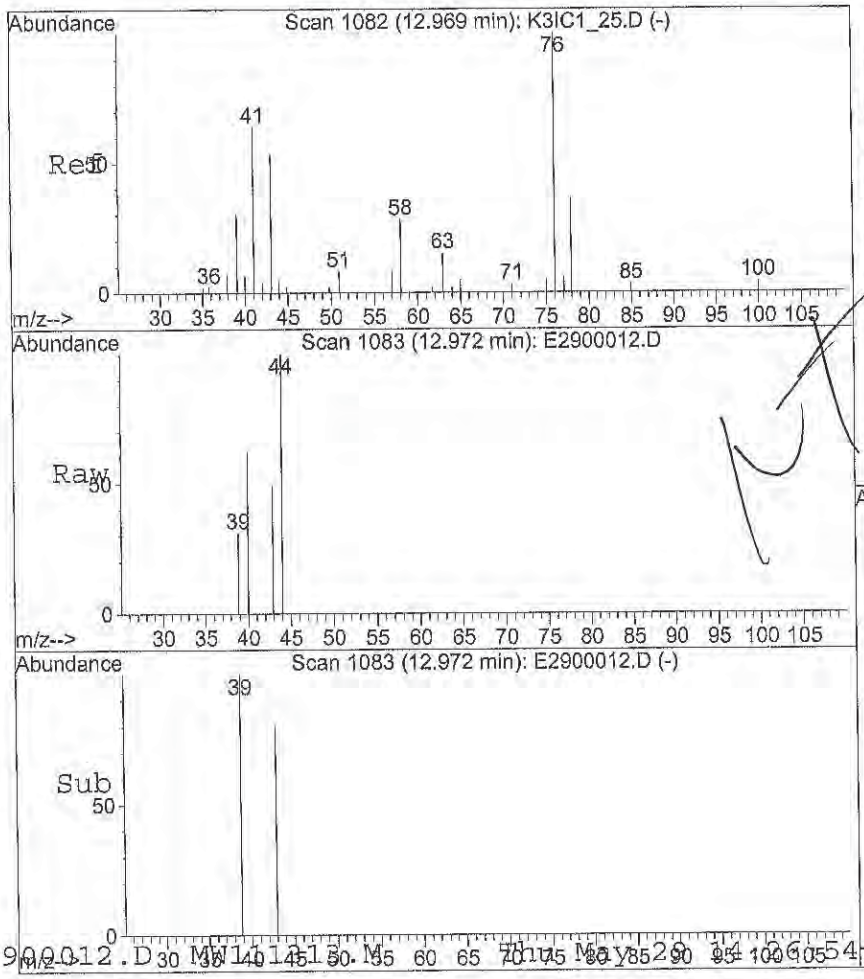


#41
Toluene
Concen: 0.56 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 91 Resp: 10065

Ion	Ratio	Lower	Upper
91	100		
92	58.4	47.4	71.0

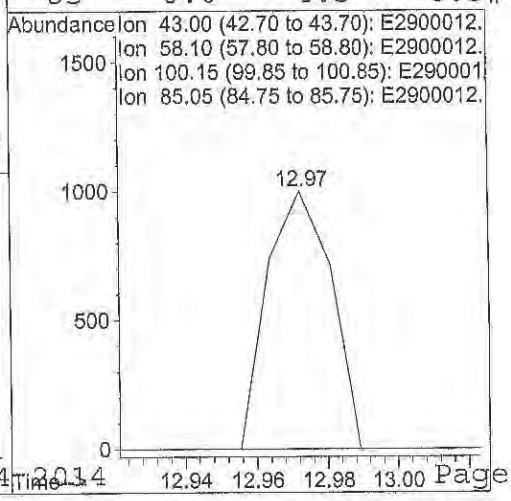


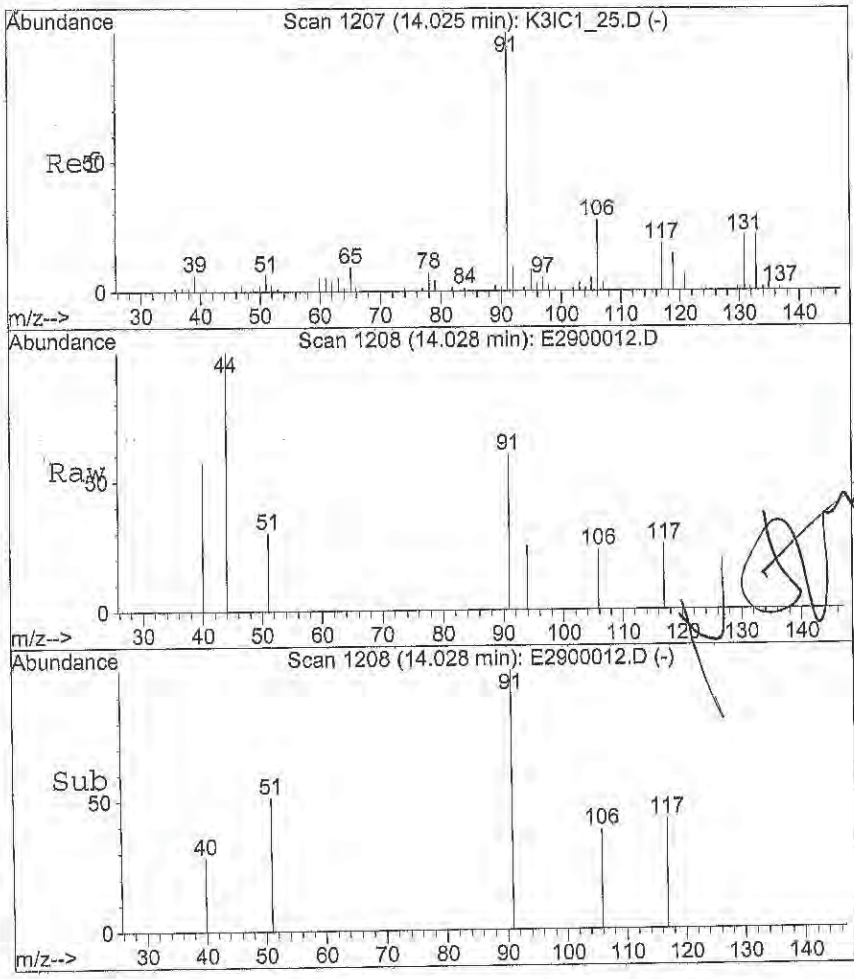


#46
2-Hexanone
Concen: 0.43 ug/L
RT: 12.97 min Scan# 1083
Delta R.T. 0.00 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 43 Resp: 1248

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

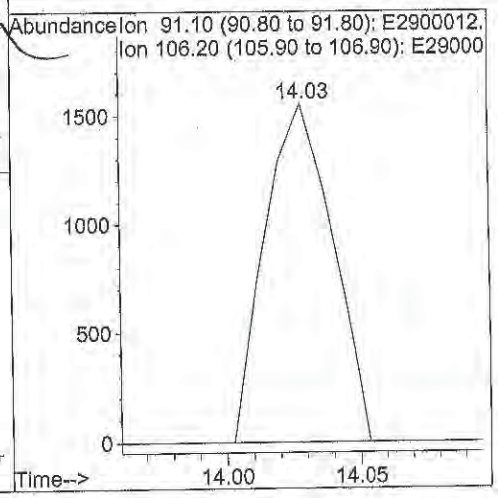


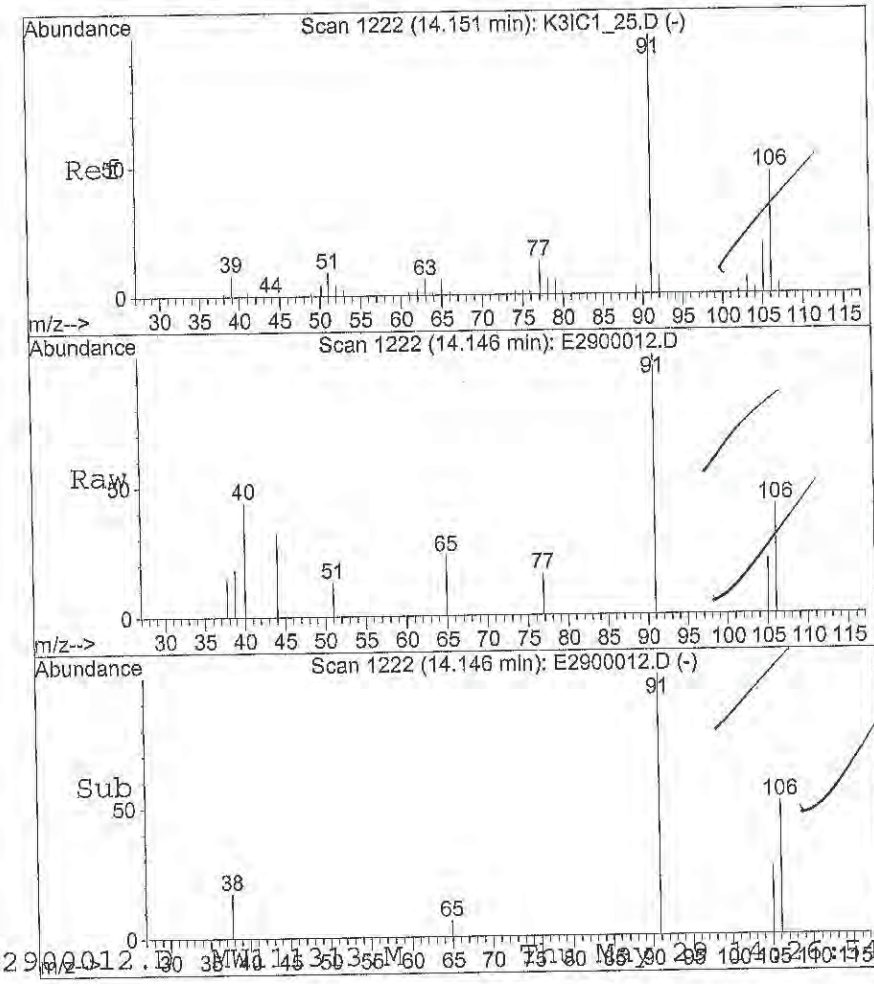


#51
Ethylbenzene
Concen: 0.13 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 91 Resp: 2711

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

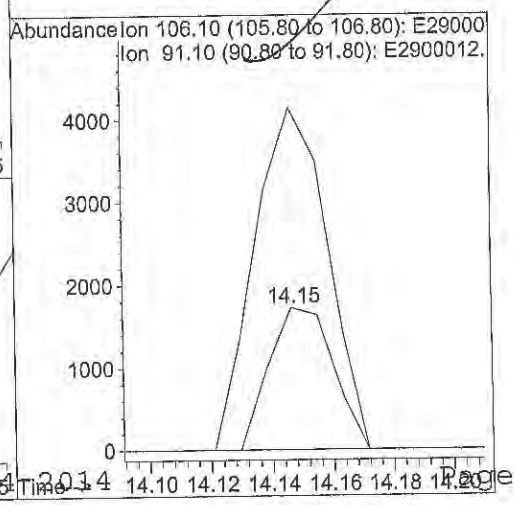


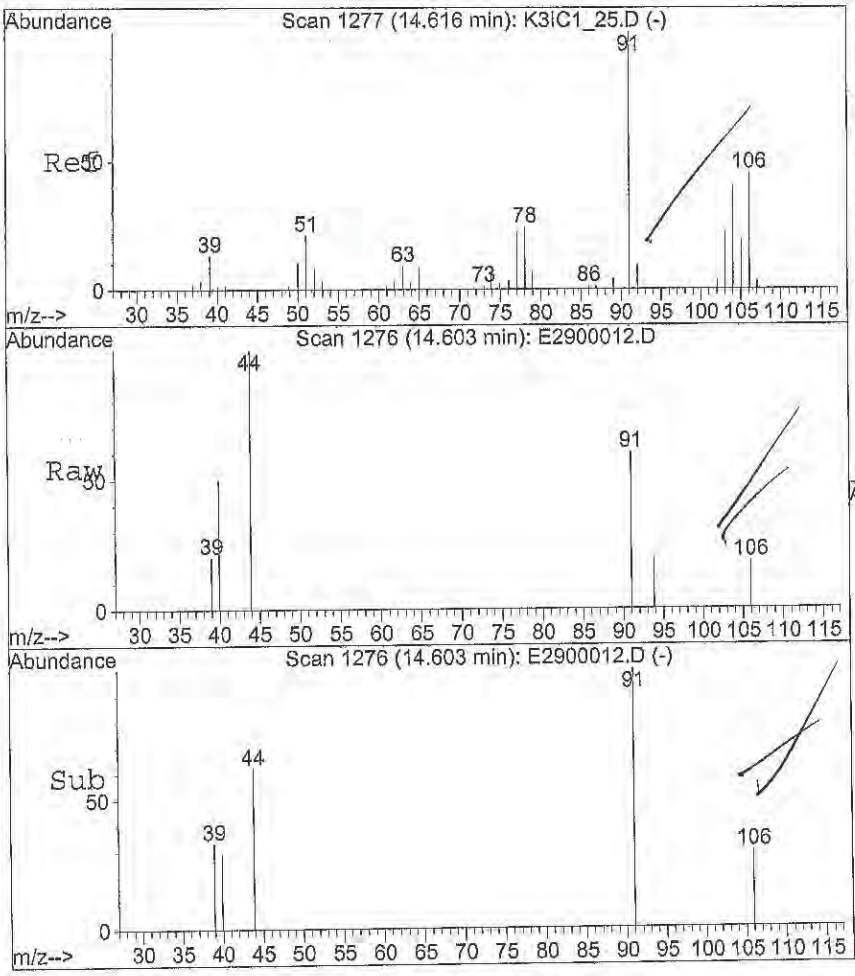


#52
m,p-Xylenes
Concen: 0.34 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:106 Resp: 2519

Ion	Ratio	Lower	Upper
106	100		
91	272.5	177.1	265.7#

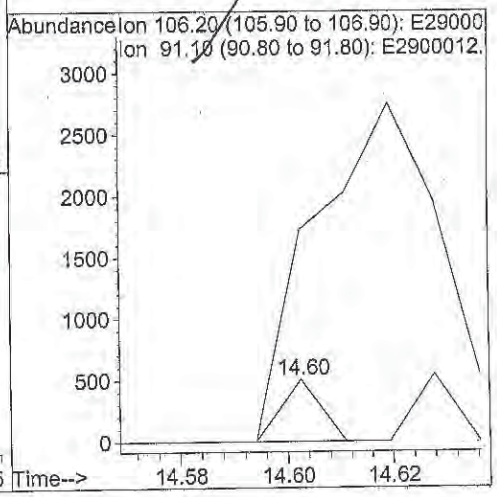


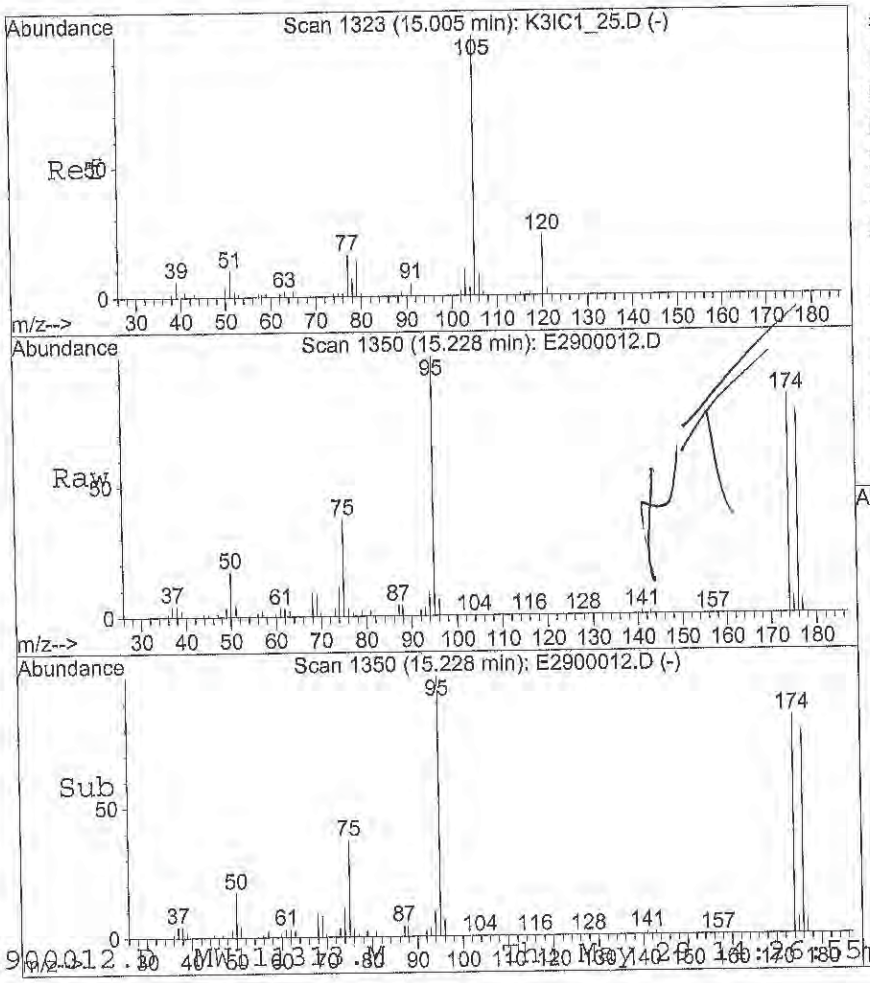


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.60 min Scan# 1276
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:106 Resp: 254

Ion	Ratio	Lower	Upper
106	100		
91	0.0	179.0	268.6#

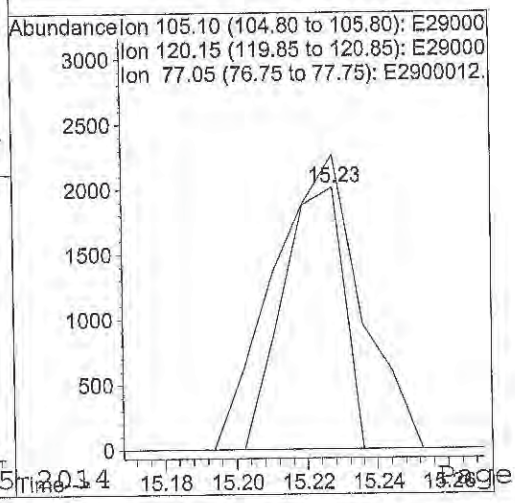


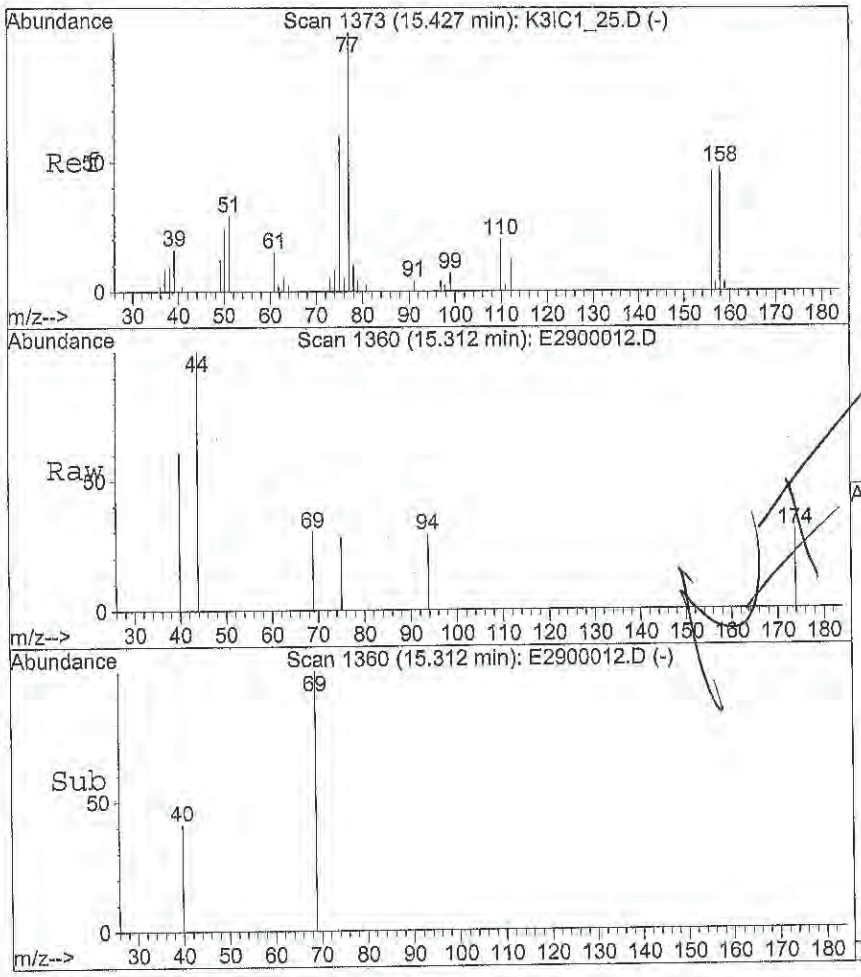


#56
Isopropylbenzene
Concen: 0.12 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.22 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:105 Resp: 2409

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	161.6	13.1	19.7#

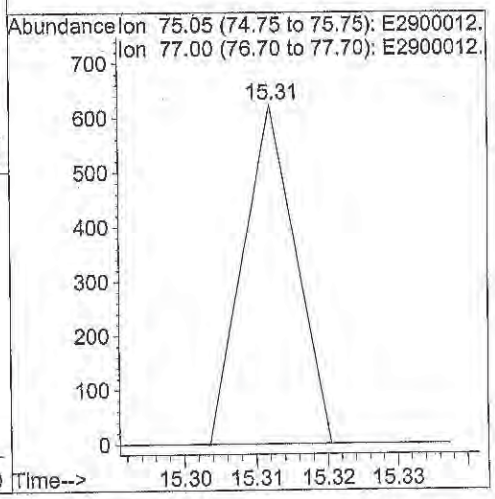


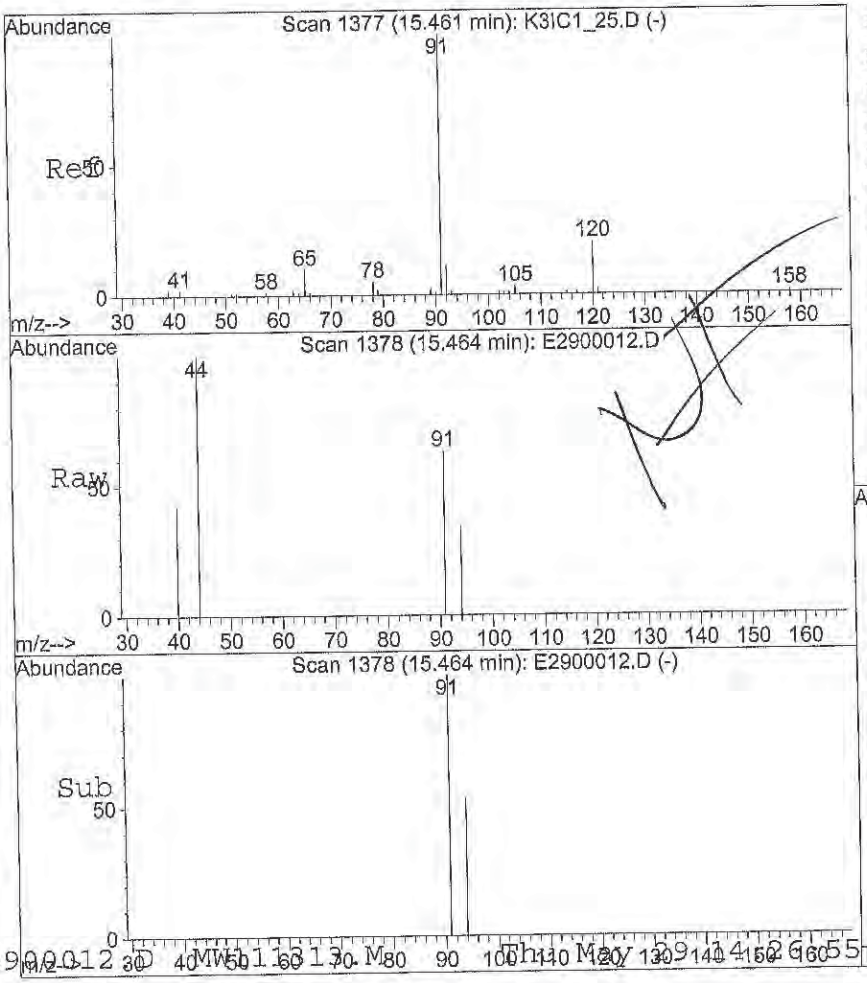


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.31 min Scan# 1360
Delta R.T. -0.11 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 75 Resp: 316

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

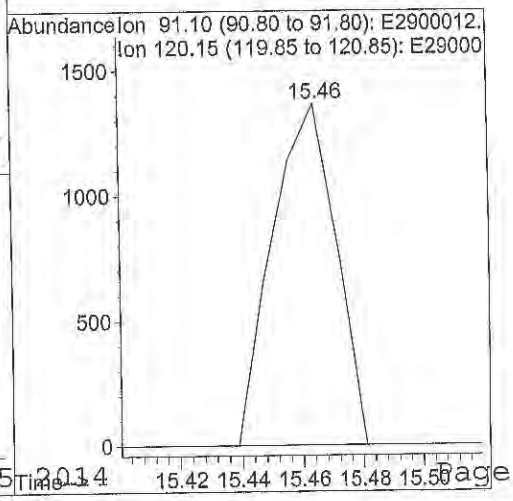


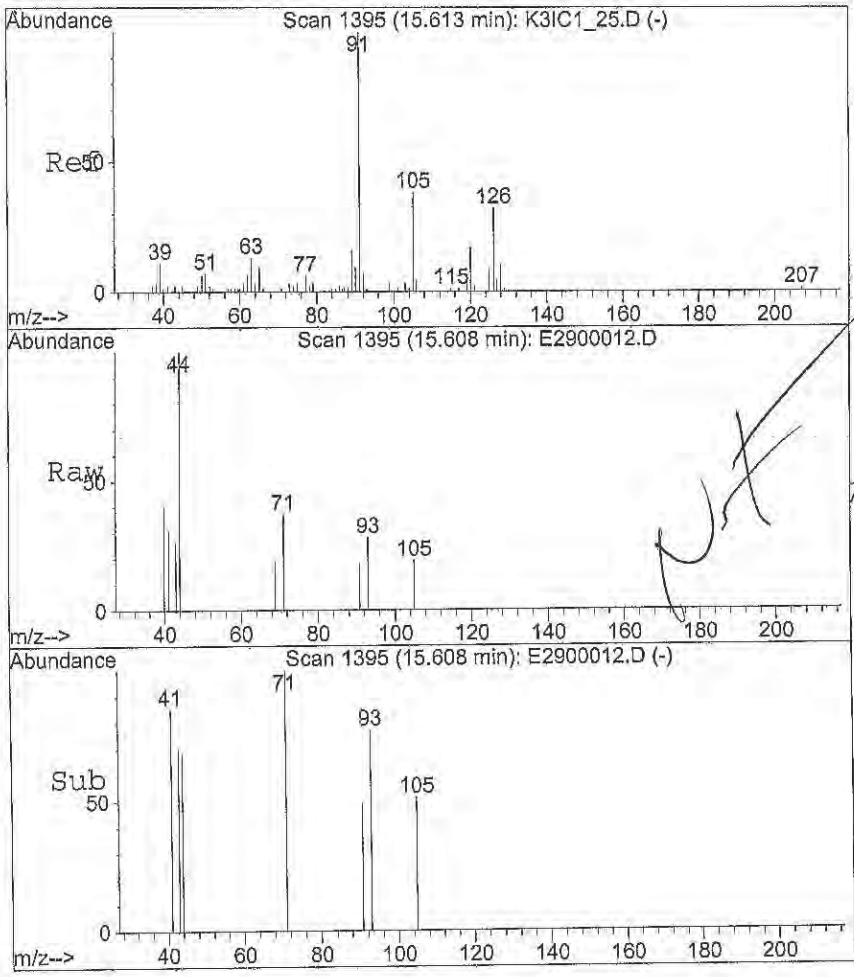


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 91 Resp: 1972

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

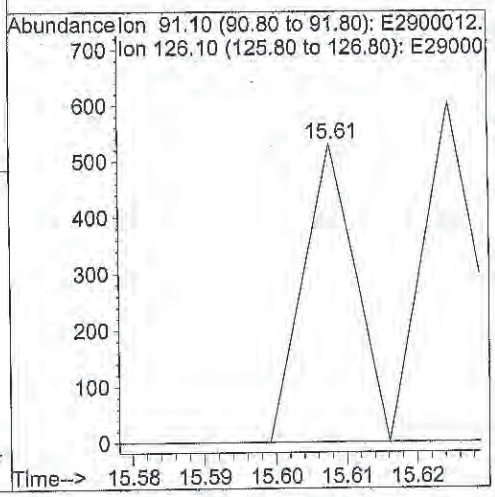


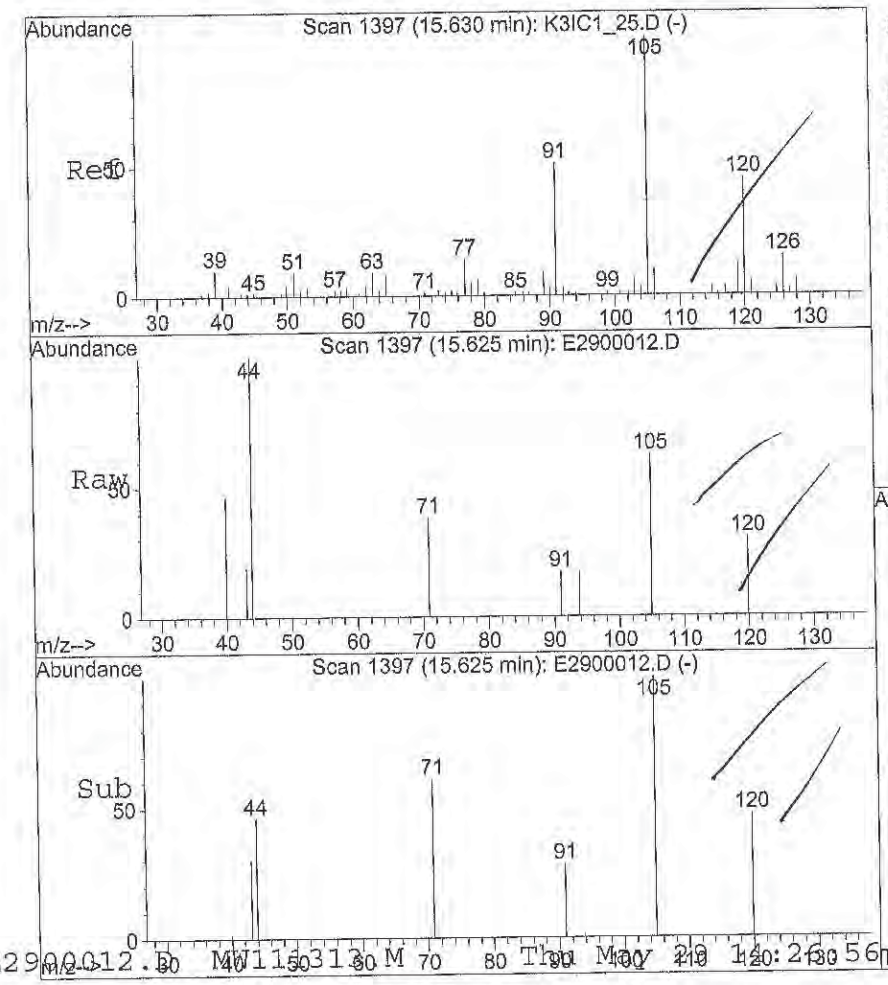


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 91 Resp: 269

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

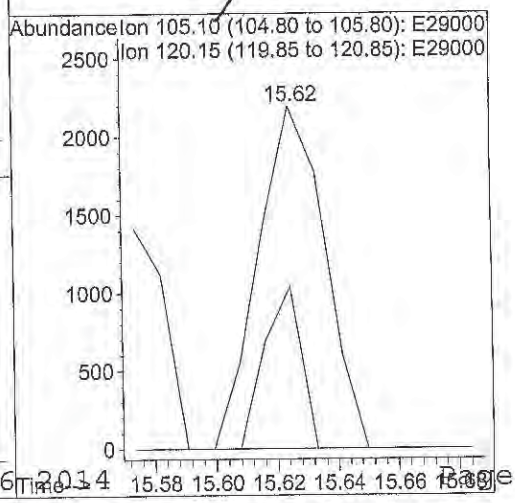


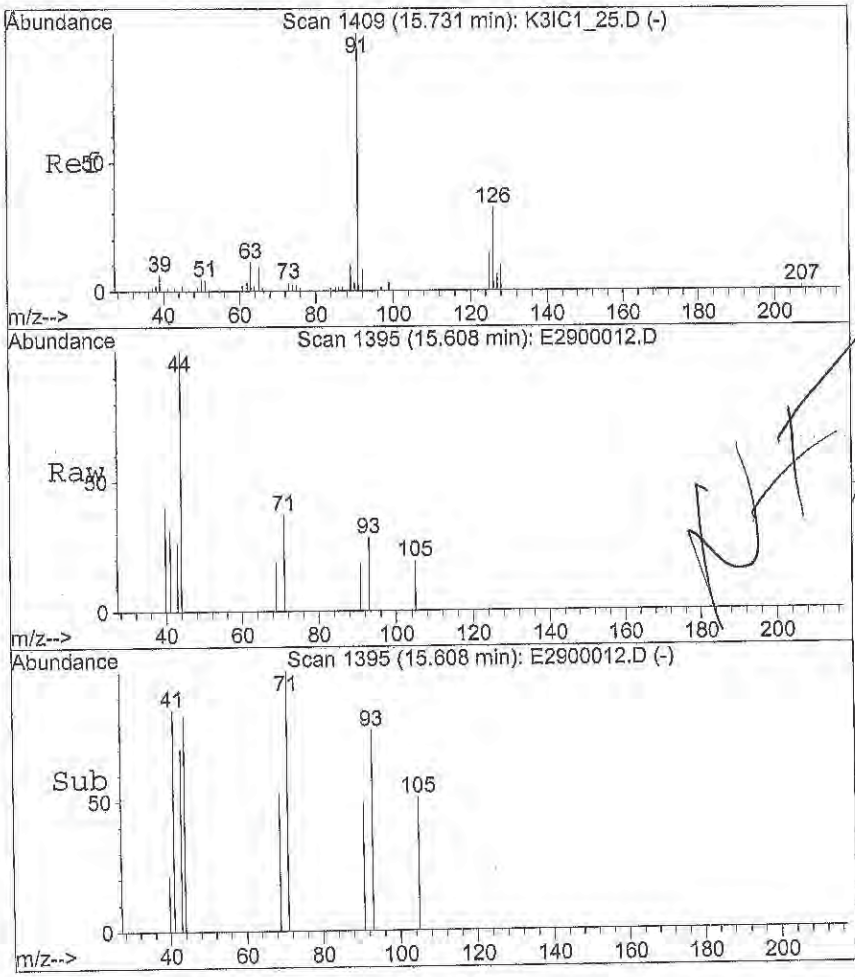


#64
1,3,5-Trimethylbenzene
Concen: 0.19 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:105 Resp: 3333

Ion	Ratio	Lower	Upper
105	100		
120	26.3	36.4	54.6#

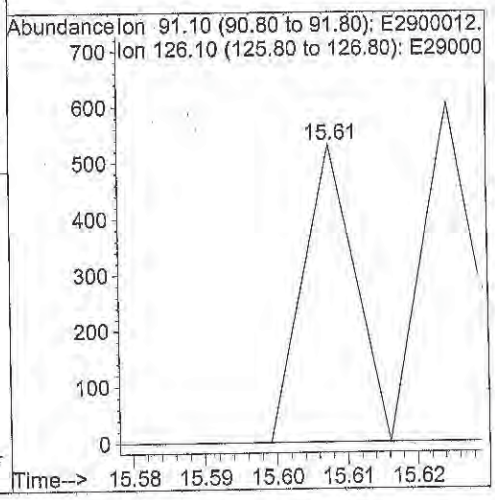


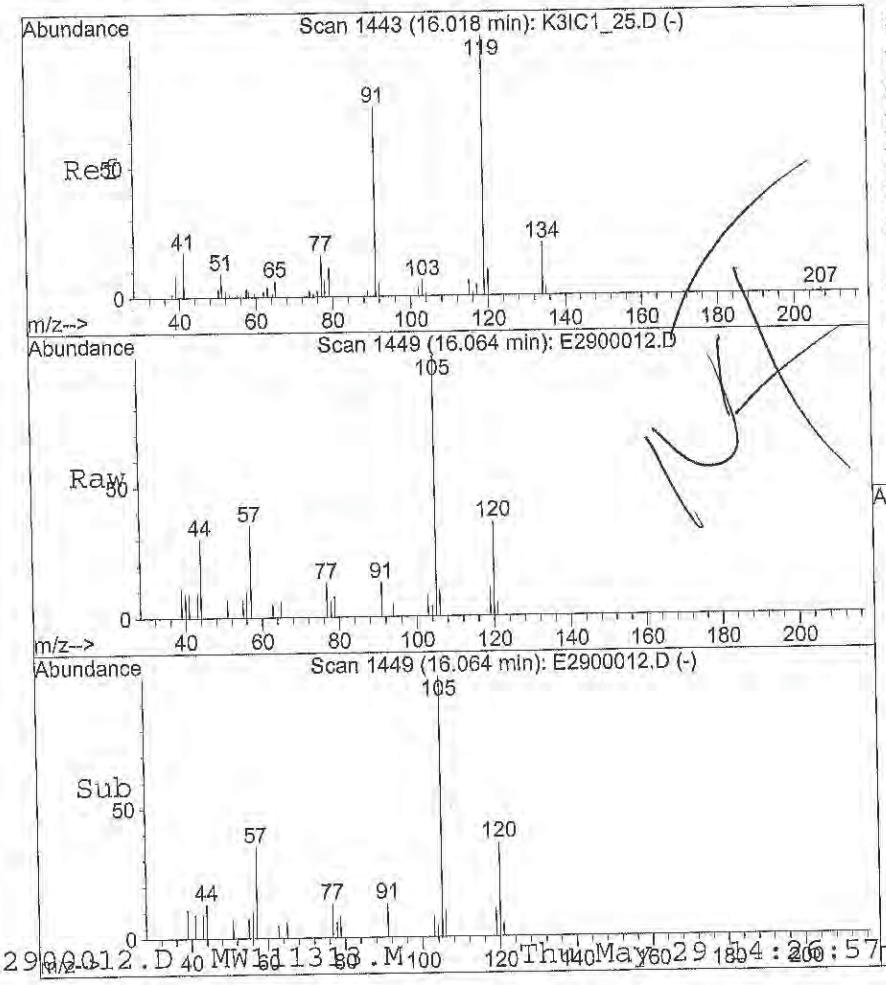


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. -0.12 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 91 Resp: 269

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

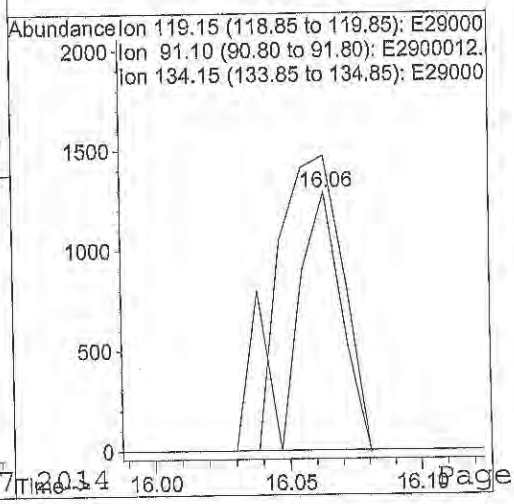


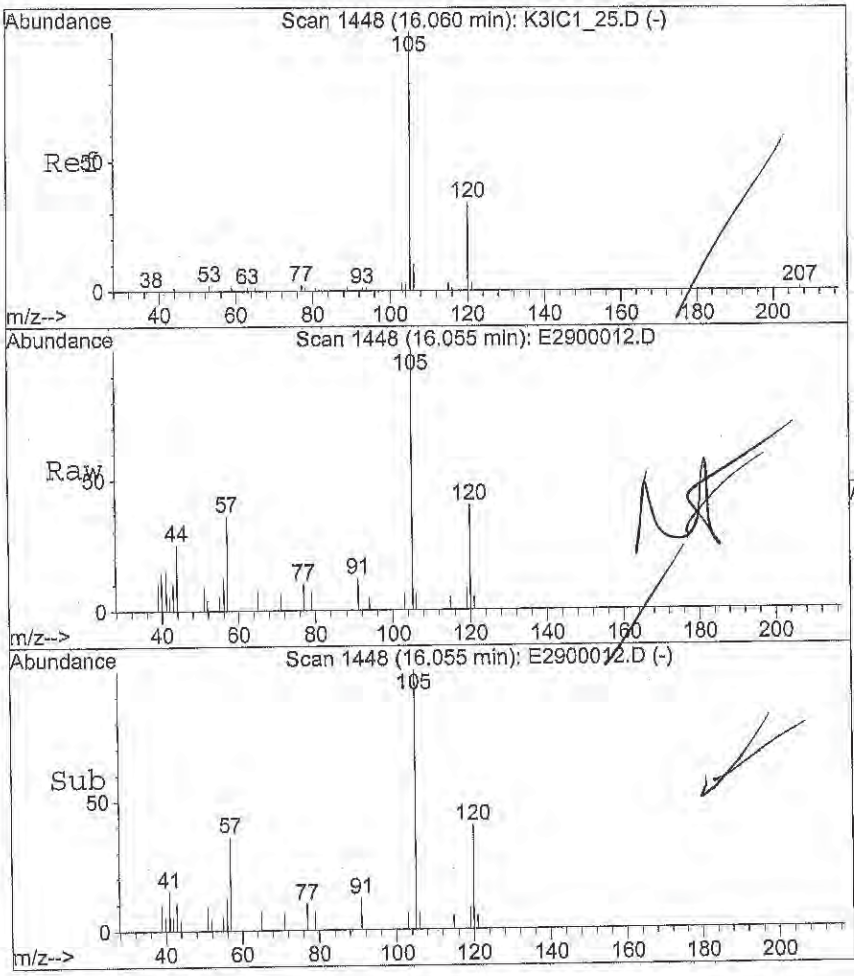


#66
tert-Butylbenzene
Concen: 0.12 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.05 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:119 Resp: 1776

Ion	Ratio	Lower	Upper
119	100		
91	135.0	56.3	84.5#
134	0.0	16.1	24.1#

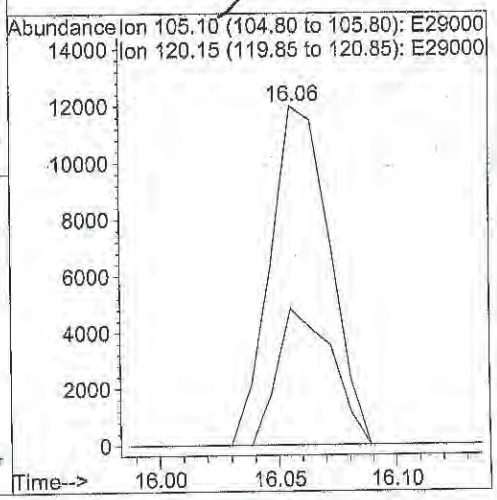


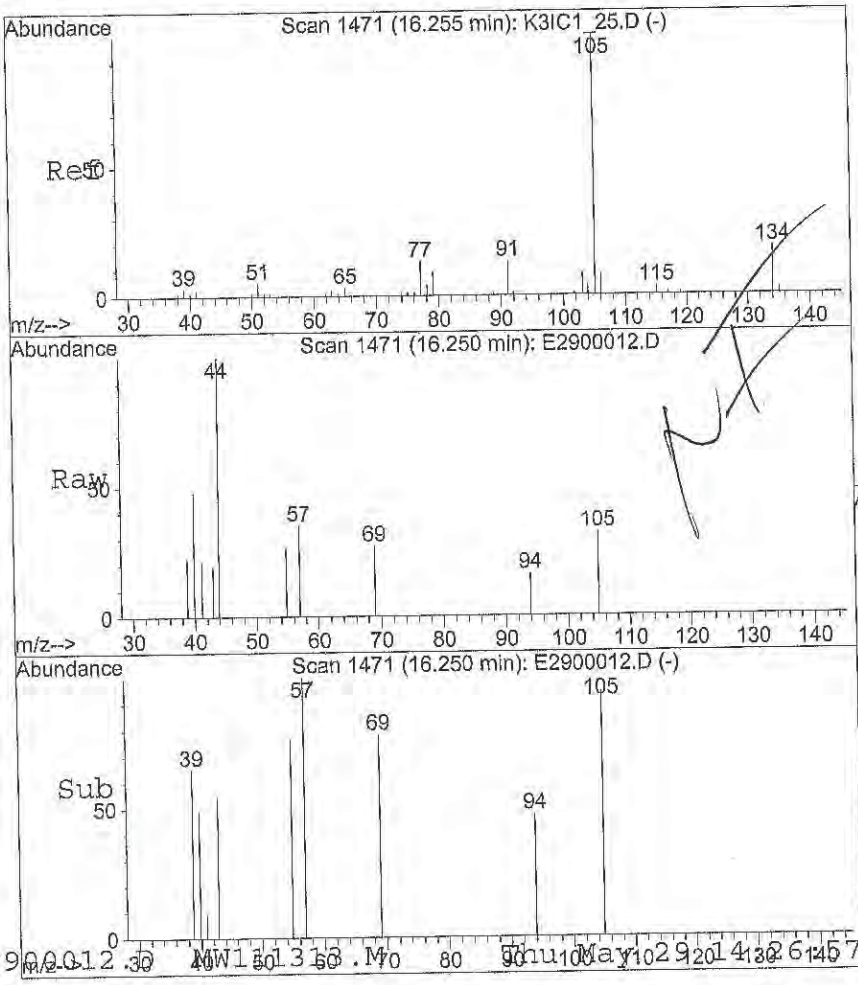


#67
1,2,4-Trimethylbenzene
Concen: 1.13 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:105 Resp: 20952

Ion	Ratio	Lower	Upper
105	100		
120	37.1	33.8	50.8

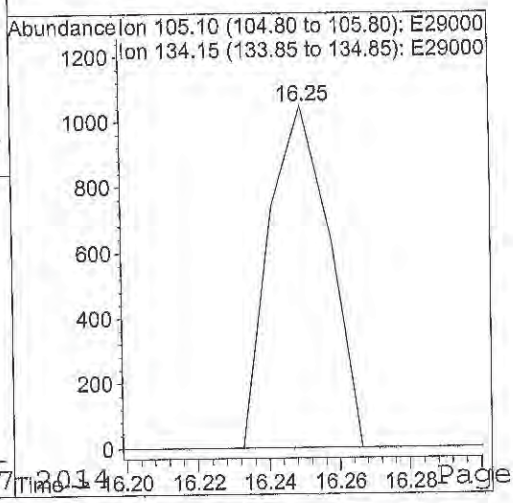


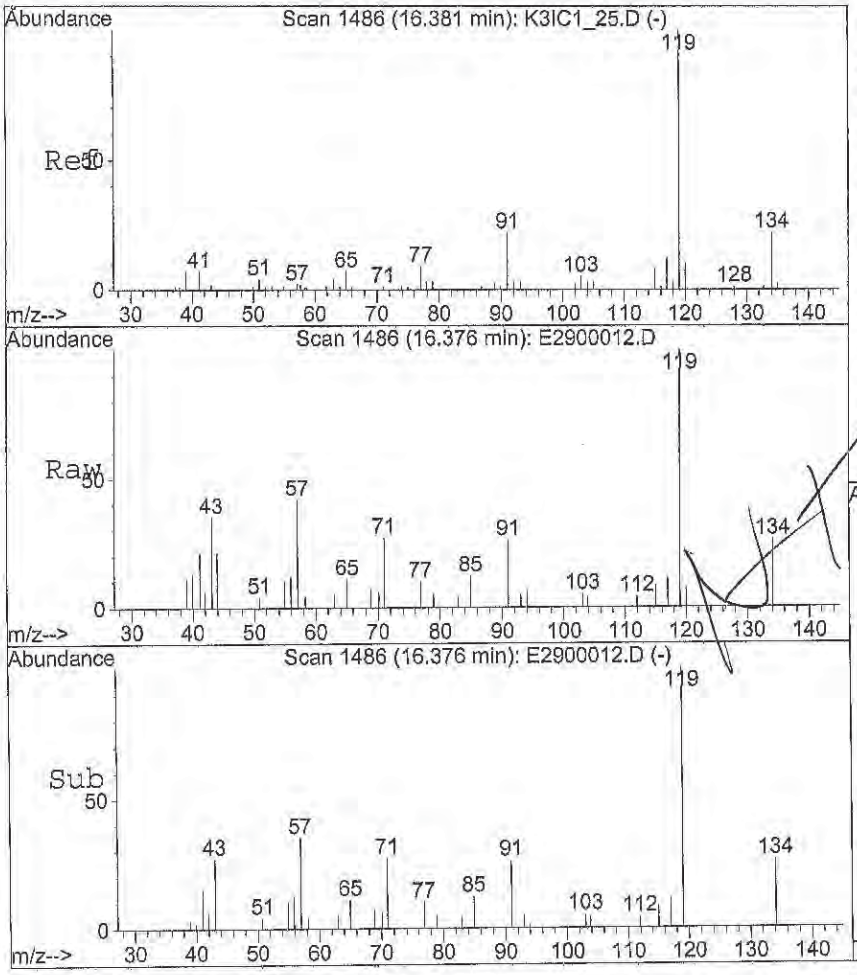


#68
sec-Butylbenzene
Concen: 0.05 ug/L
RT: 16.25 min Scan# 1471
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:105 Resp: 1225

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

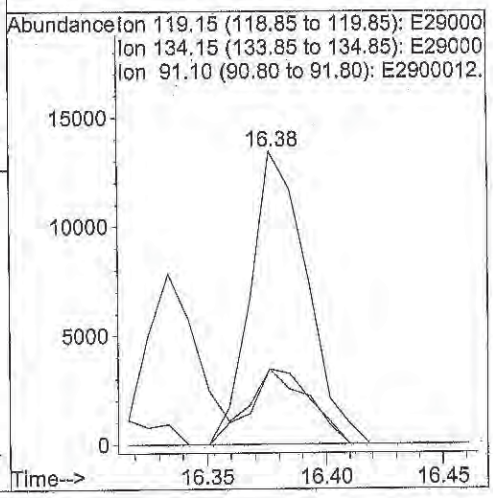


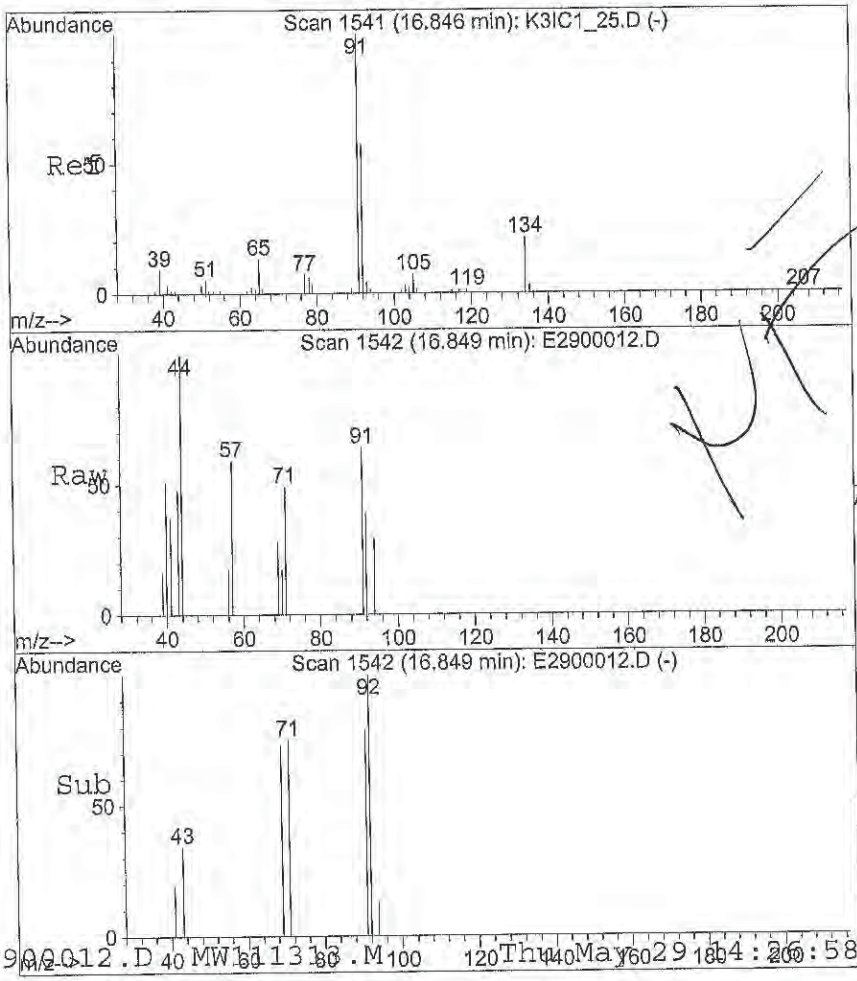


#69
p-Isopropyltoluene
Concen: 1.14 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:119 Resp: 22128

Ion	Ratio	Lower	Upper
119	100		
134	27.9	17.4	26.2#
91	24.9	19.6	29.4

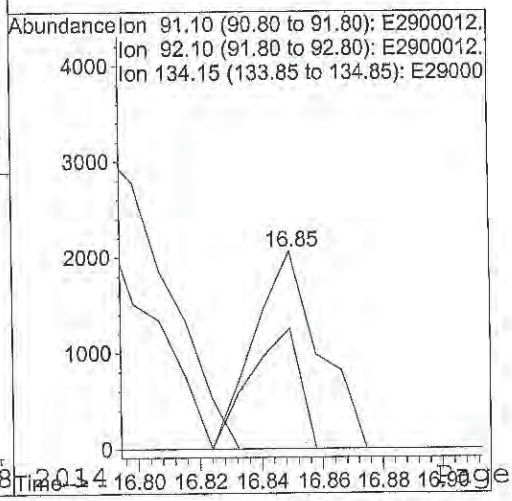


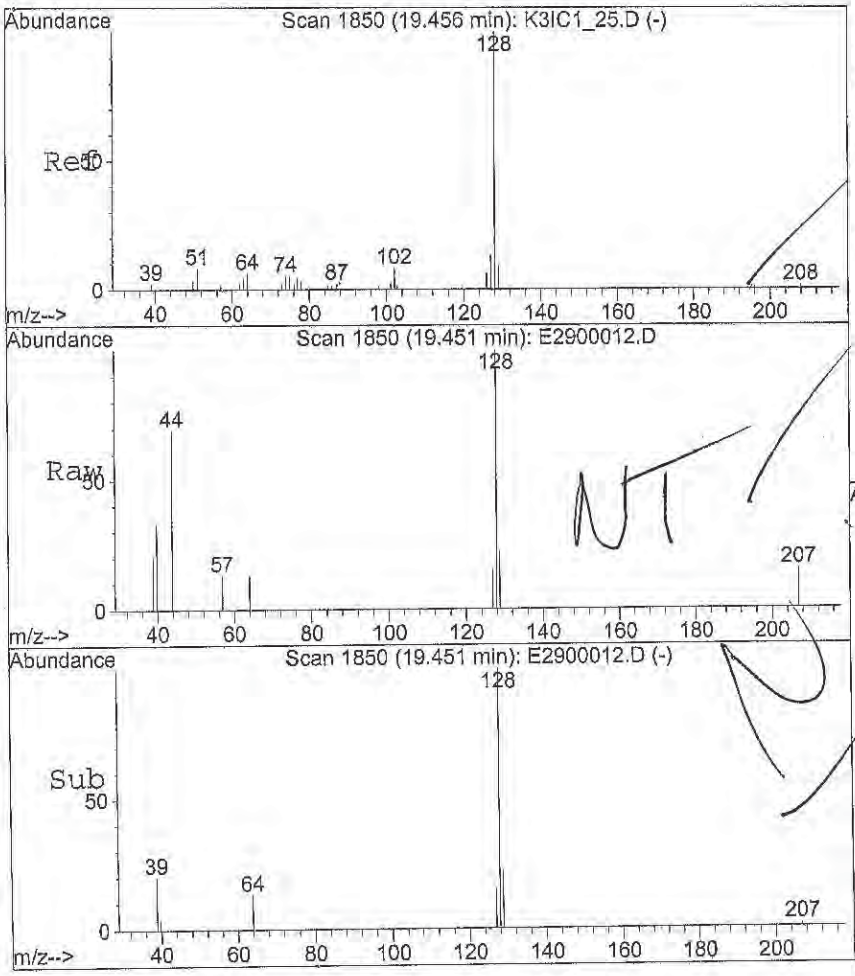


#72
n-Butylbenzene
Concen: 0.15 ug/L
RT: 16.85 min Scan# 1542
Delta R.T. 0.00 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion: 91 Resp: 3048

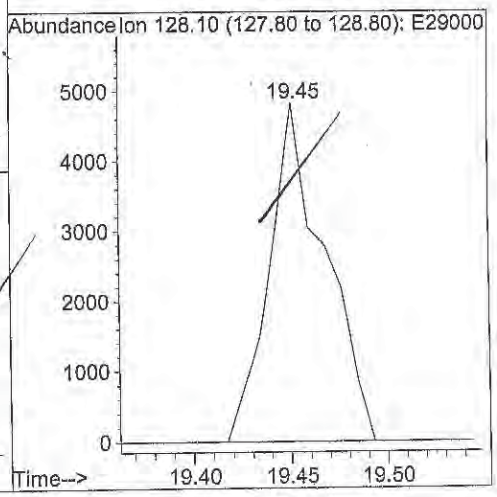
Ion	Ratio	Lower	Upper
91	100		
92	46.7	47.0	70.4#
134	0.0	18.1	27.1#





#77
Naphthalene
Concen: 0.68 ug/L
RT: 19.45 min Scan# 1850
Delta R.T. -0.01 min
Lab File: E2900012.D
Acq: 29 May 2014 1:59 pm

Tgt Ion:128 Resp: 9577



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900012.D Vial: 3
Acq On : 29 May 2014 1:59 pm Operator: DN
Sample : 3E42901-11 Inst : GC/MS Ins
Misc : 100cc SVL-572-SA5C-SV-6.8-7.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 14:26 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1633764	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1324915	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	712550	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	460794	10.85 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.80%		
3) Chloroform-d (SU6)	9.19	84	741067	12.16 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.28%		
4) Methylene Chloride-d2 (SU5	7.08	86	433540	12.17 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.36%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	456427	15.72 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 125.76%#		
6) Benzene-d6 (SU7)	9.93	84	1461011	11.40 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 91.20%		
8) Toluene-d8 (SU3)	12.21	98	1434293	11.41 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.28%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	718920	13.85 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.80%		

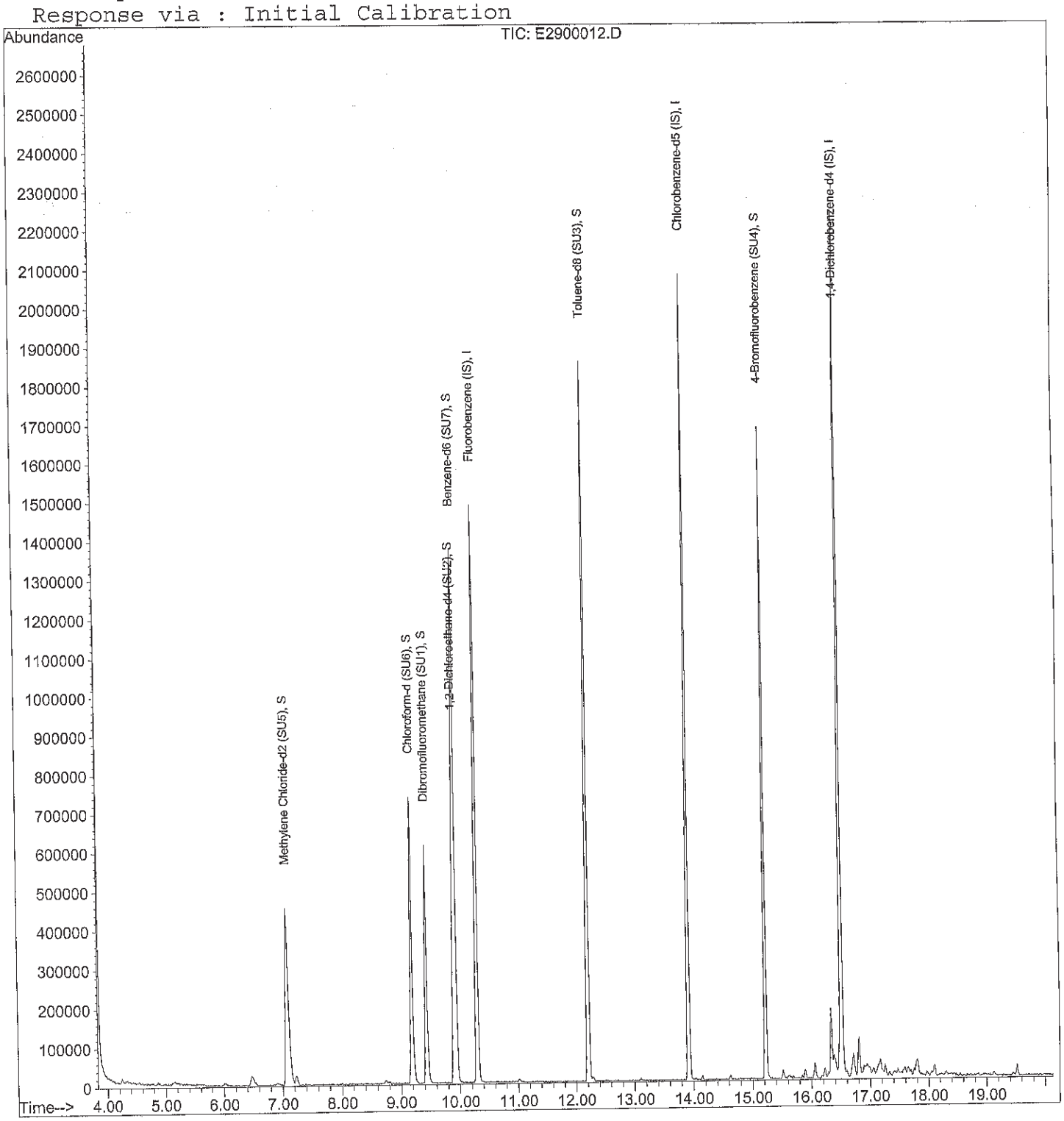
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900012.D Vial: 3
Acq On : 29 May 2014 1:59 pm Operator: DN
Sample : 3E42901-11 Inst : GC/MS Ins
Misc : 100cc SVL-572-SA5C-SV-6.8-7.8 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 14:26 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900013.D
Acq On : 29 May 2014 2:28 pm
Sample : 3E42901-12
Misc : 100cc FB-052914
MS Integration Params: rteint.p
Quant Time: May 29 15:12 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1606122	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1324344	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	689225	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	457486	11.42 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.36%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	457628	12.02 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.16%		
39) Toluene-d8 (SU3)	12.21	98	1432099	11.59 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.72%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	721134	13.31 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.48%		

Target Compounds					Qvalue
4) Chloromethane	4.41	50	1924	-0.51 ~~ug/L #~~ SM	41
6) Bromomethane	5.16	96	1652	-0.84 ~~ug/L~~	95
7) Chloroethane	5.26	64	637	1.16 ~~ug/L #~~	32
11) Acetone	6.47	58	8255	8.62 ~~ug/L~~ NT	95
12) (IPA) Leak Check Compound	6.47	45	50191	260.06 ~~ug/L #~~ SM	89
14) Methylene Chloride	7.09	84	6814	1.54 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.99	59	263	0.96 ~~ug/L #~~	77
24) Chloroform	9.23	83	784	0.09 ~~ug/L #~~	18
29) 1,1-Dichloropropene	9.92	75	262	0.04 ~~ug/L #~~	1
31) Benzene	9.94	78	10520	0.70 ~~ug/L #~~ SM	79
32) 1,2-Dichloroethane	9.93	62	7181	1.34 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7231	2.74 ~~ug/L #~~	100
41) Toluene	12.28	91	2346	0.13 ~~ug/L #~~	53
46) 2-Hexanone	12.97	43	1710	0.59 ~~ug/L #~~	37
51) Ethylbenzene	14.14	91	2242	0.11 ~~ug/L~~ Invest	93
52) m,p-Xylenes	14.14	106	577	0.08 ug/L # 0.0016	1
54) Styrene	14.62	104	2002	-0.68 ~~ug/L #~~ NSM	60
56) Isopropylbenzene	15.22	105	753	0.04 ~~ug/L #~~	1
62) n-Propylbenzene	15.23	91	1379	0.05 ~~ug/L #~~	56
66) tert-Butylbenzene	16.05	119	261	0.02 ~~ug/L #~~	24
67) 1,2,4-Trimethylbenzene	16.06	105	816	0.05 ~~ug/L #~~	33
68) sec-Butylbenzene	16.33	105	2560	0.11 ~~ug/L #~~	62

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900013.D Vial: 4
Acq On : 29 May 2014 2:28 pm Operator: DN
Sample : 3E42901-12 Inst : GC/MS Ins
Misc : 100cc FB-052914 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 15:12 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) p-Isopropyltoluene	16.38	119	1400	0.07 ug/L #CK	34
77) Naphthalene	19.45	128	7084	0.52 ug/L	100

(#) = qualifier out of range (m) = manual integration

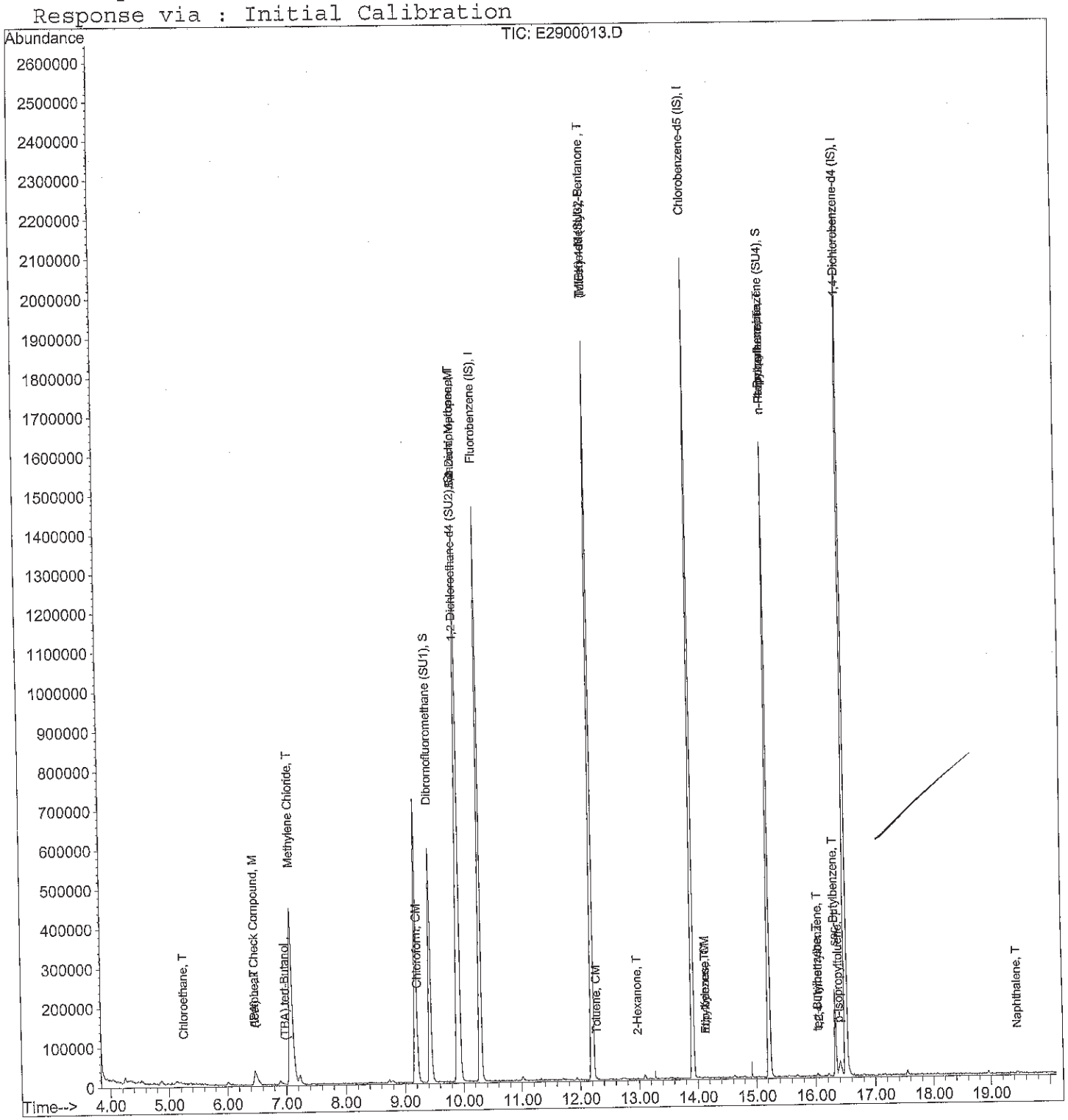
Quantitation Report

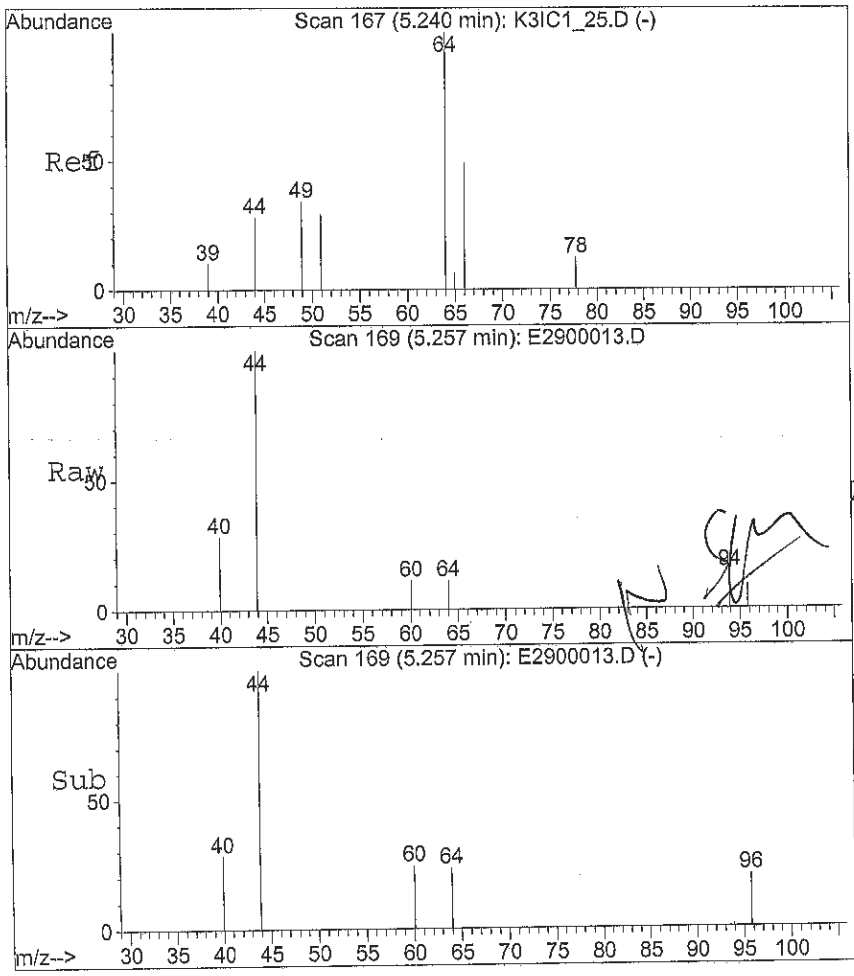
Data File : C:\HPCHEM\1\DATA\052914L3\E2900013.D
Acq On : 29 May 2014 2:28 pm
Sample : 3E42901-12
Misc : 100cc FB-052914
MS Integration Params: rteint.p
Quant Time: May 29 15:12 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

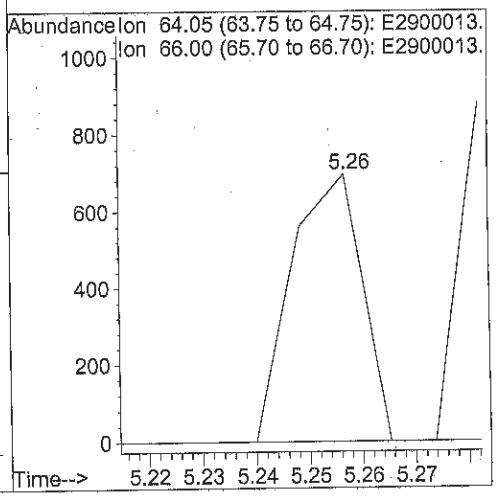


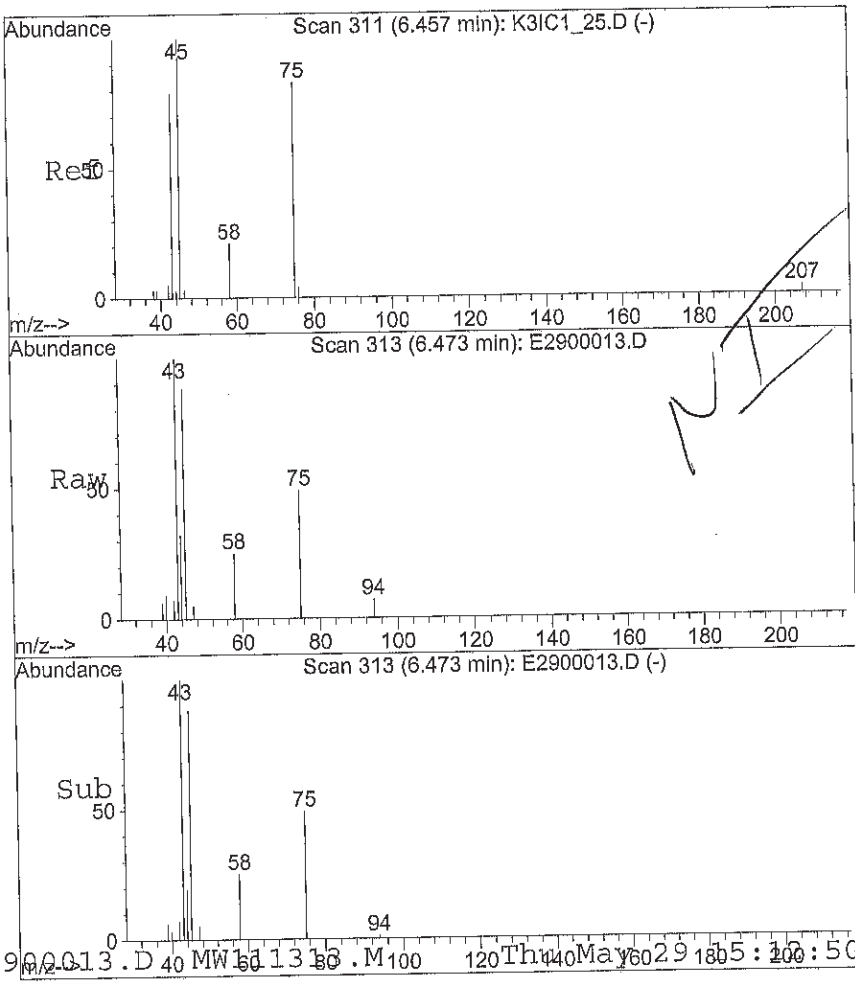


#7
Chloroethane
Concen: 1.16 ug/L
RT: 5.26 min Scan# 169
Delta R.T. 0.02 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 64 Resp: 637

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

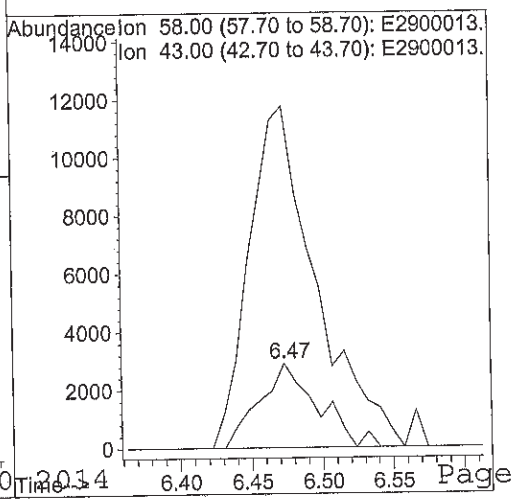


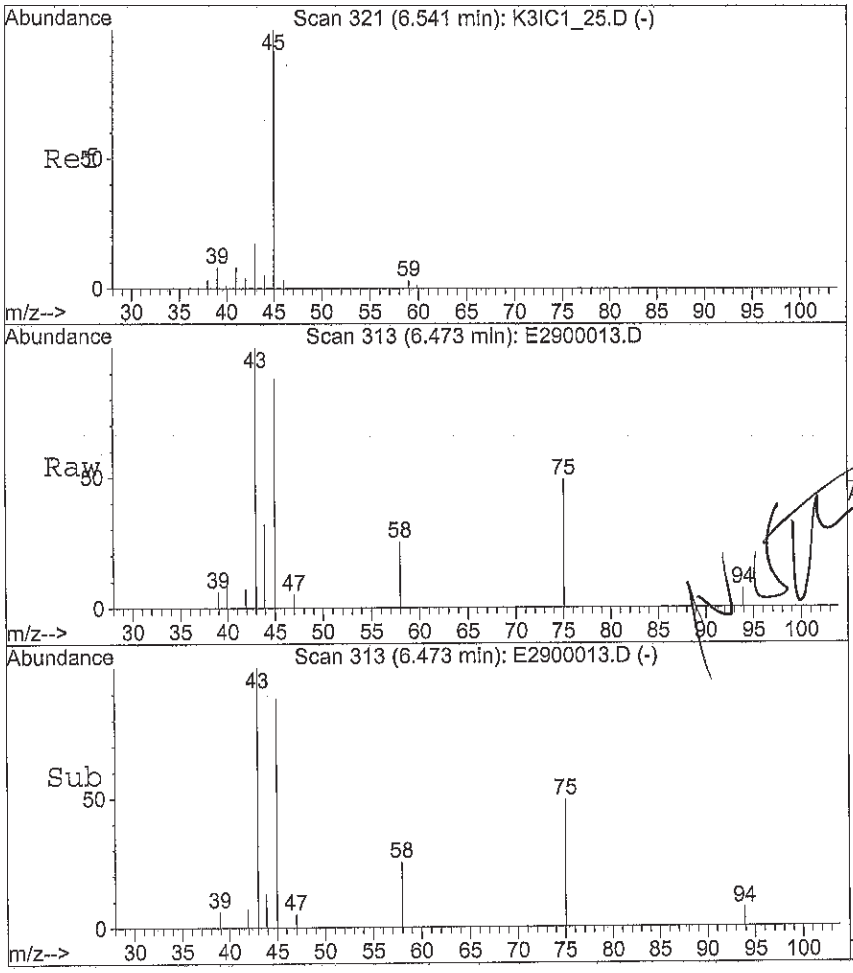


#11
Acetone
Concen: 8.62 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.02 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 58 Resp: 8255

Ion	Ratio	Lower	Upper
58	100		
43	463.8	360.9	541.3

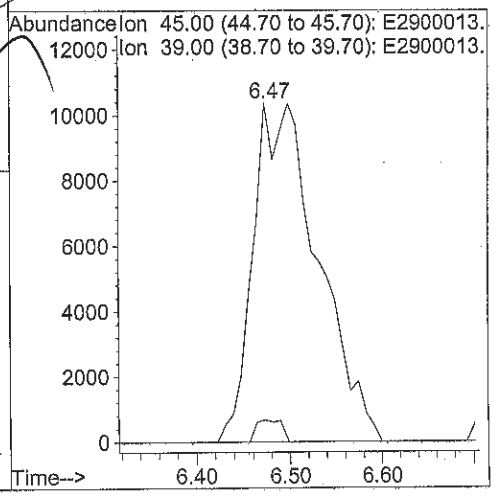


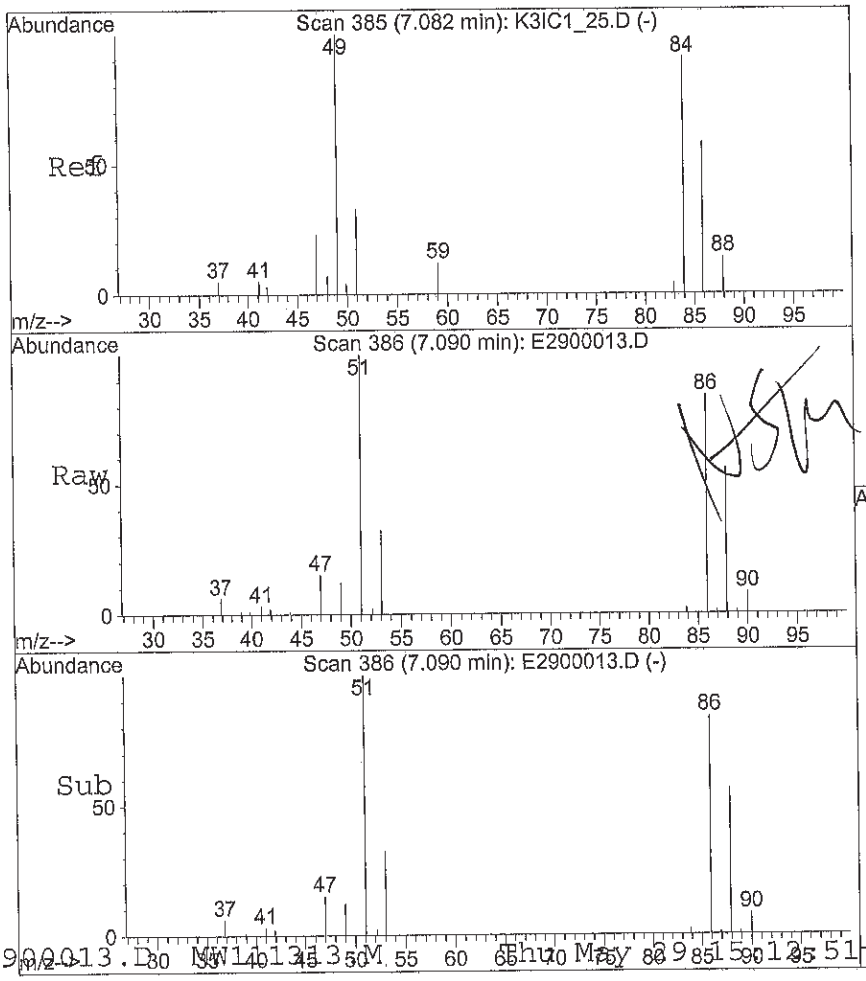


#12
(IPA) Leak Check Compound
Concen: 260.06 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 45 Resp: 50191

Ion	Ratio	Lower	Upper
45	100		
39	2.5	4.9	7.3#

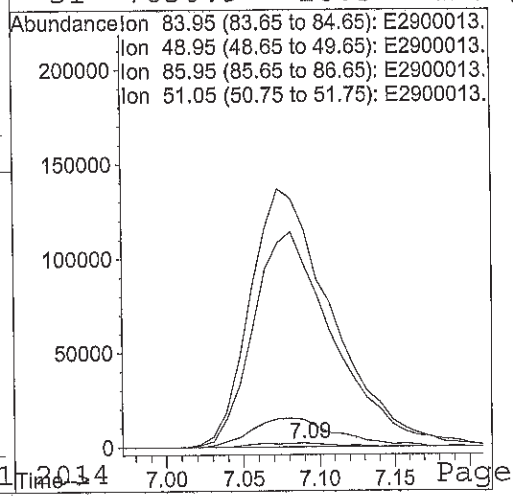


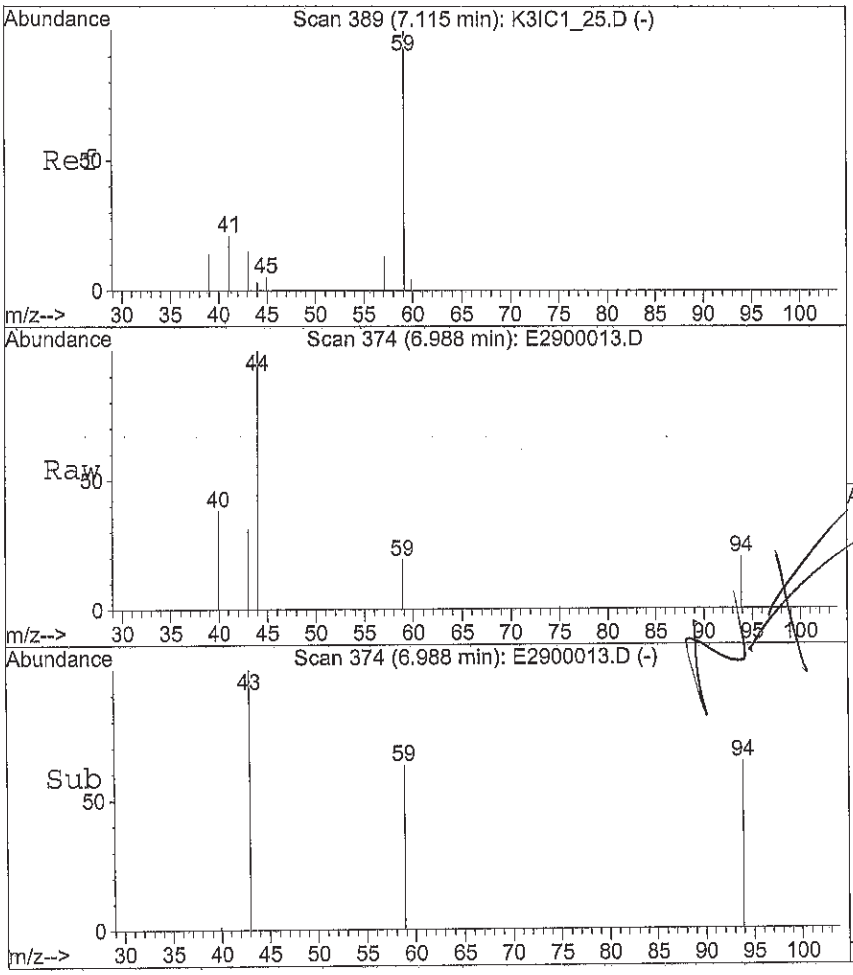


#14
Methylene Chloride
Concen: 1.54 ug/L
RT: 7.09 min Scan# 386
Delta R.T. 0.01 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 84 Resp: 6814

Ion	Ratio	Lower	Upper
84	100		
49	862.7	89.8	134.6#
86	6244.3	51.1	76.7#
51	7630.9	28.5	42.7#

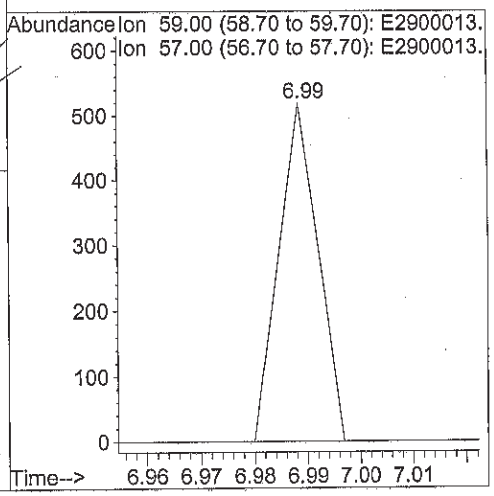


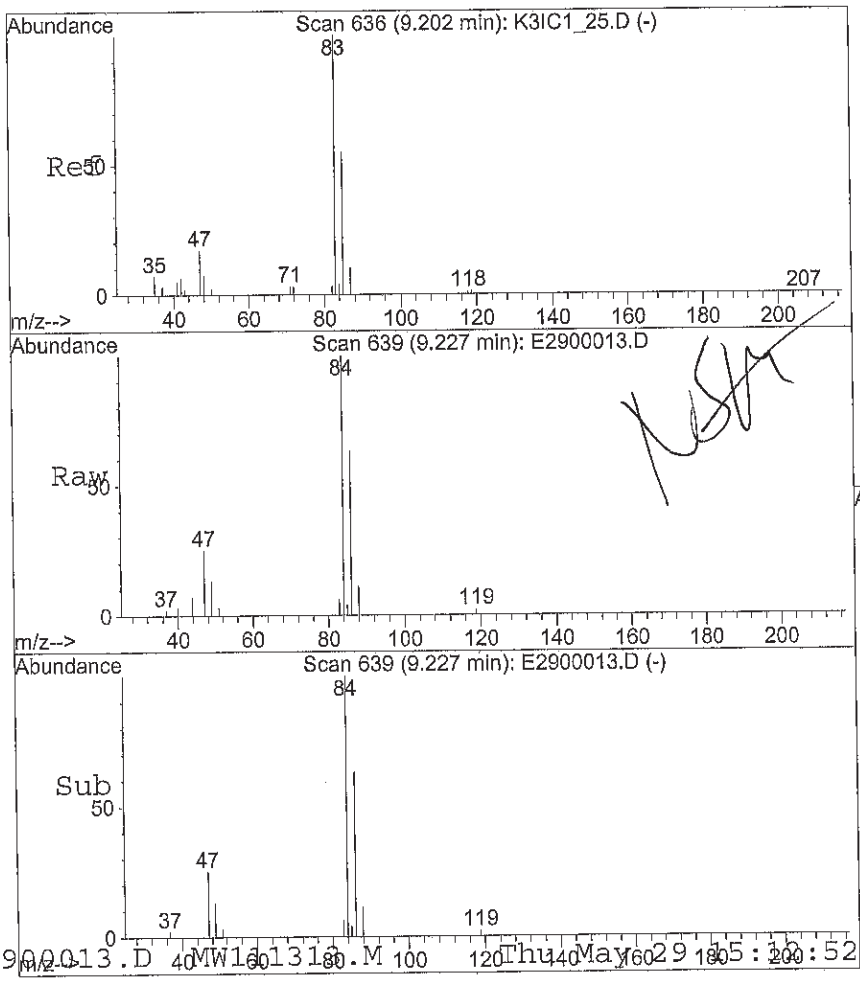


#15
(TBA) tert-Butanol
Concen: 0.96 ug/L
RT: 6.99 min Scan# 374
Delta R.T. -0.13 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 59 Resp: 263

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

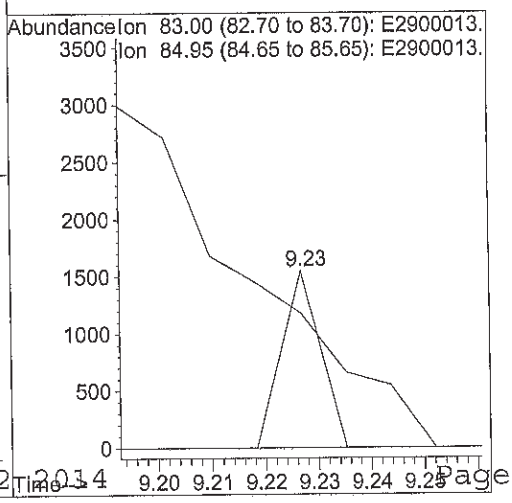


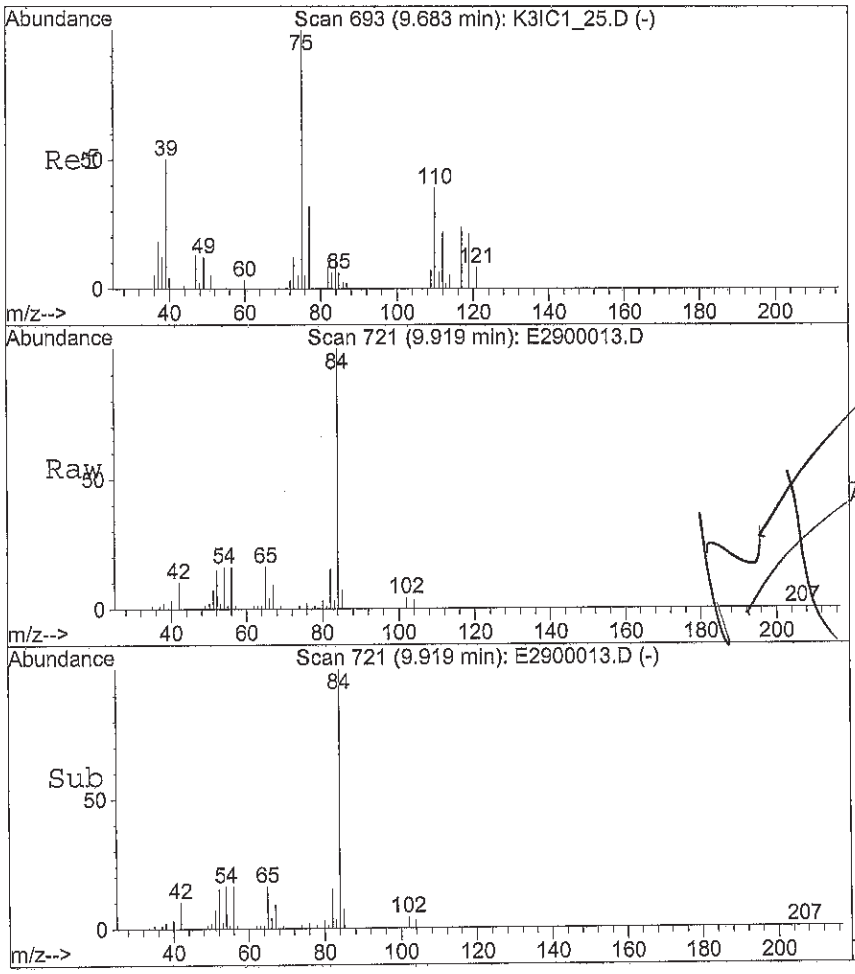


#24
Chloroform
Concen: 0.09 ug/L
RT: 9.23 min Scan# 639
Delta R.T. 0.03 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 83 Resp: 784

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

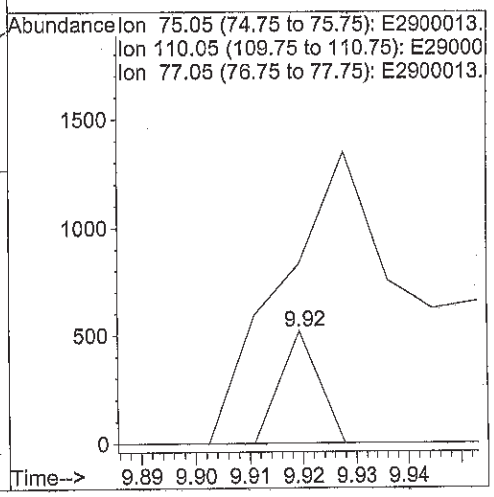


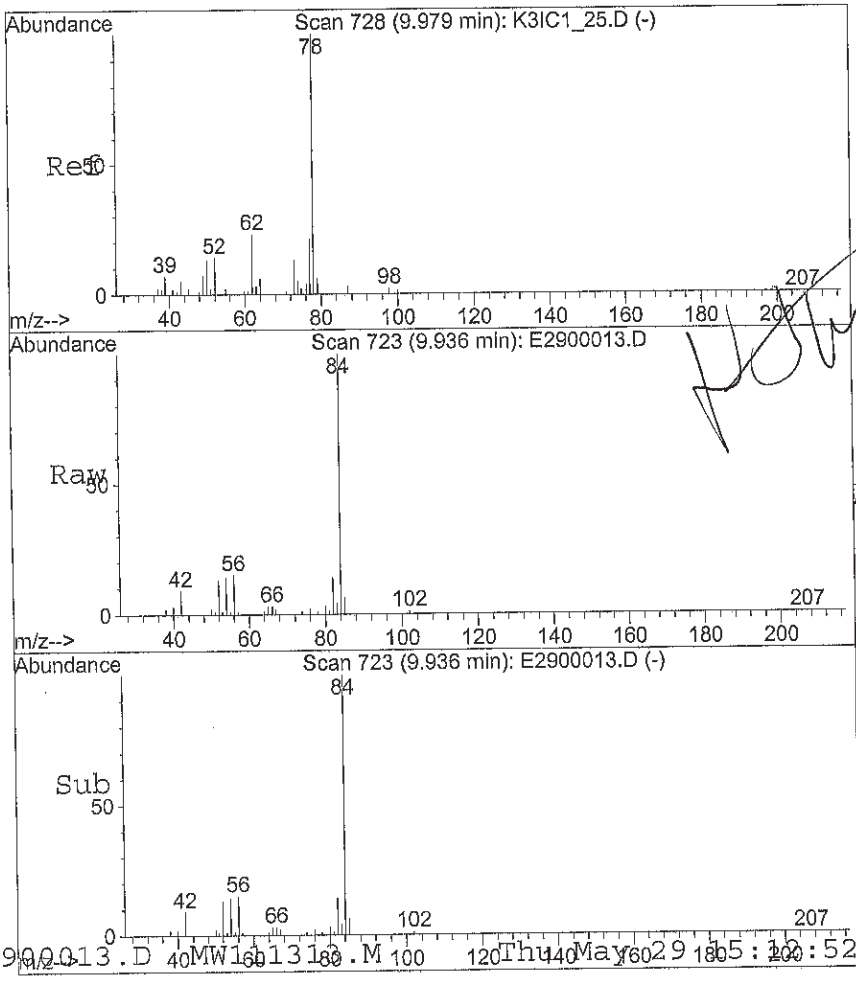


#29
1,1-Dichloropropene
Concen: 0.04 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 75 Resp: 262

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	801.5	25.0	37.4#

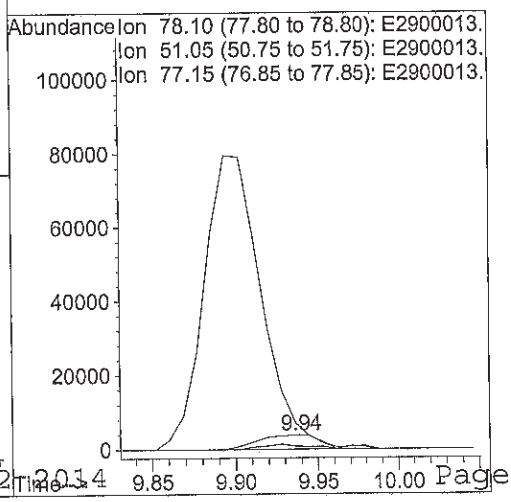


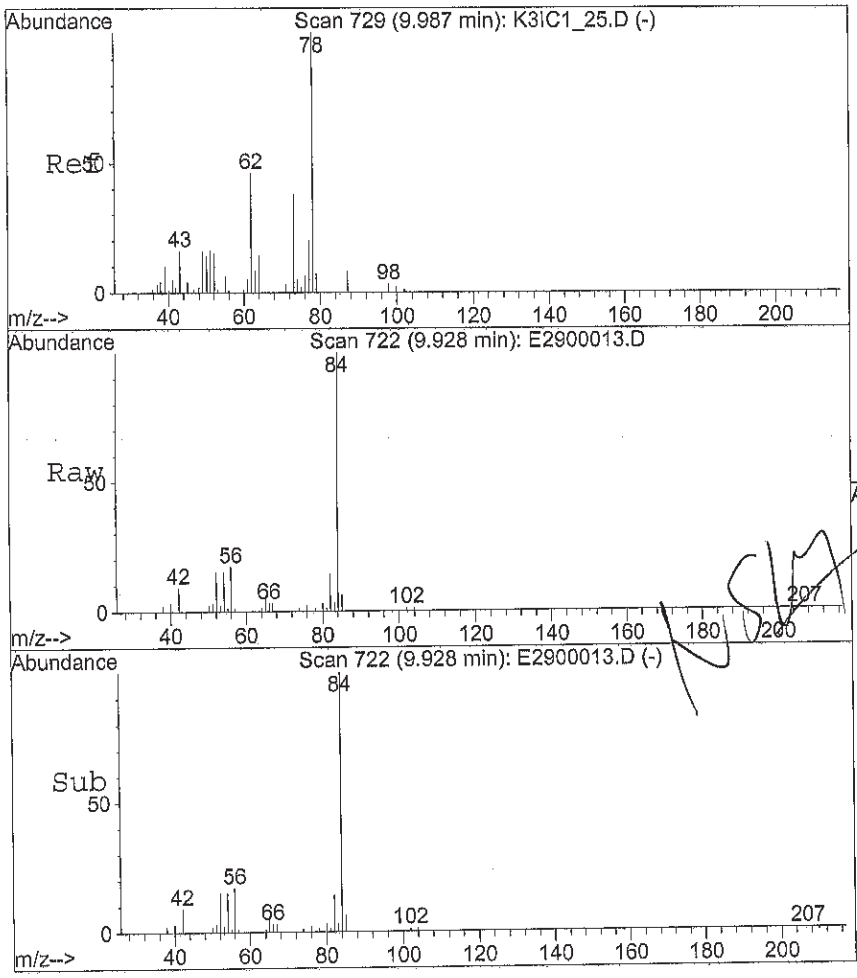


#31
Benzene
Concen: 0.70 ug/L
RT: 9.94 min Scan# 723
Delta R.T. -0.04 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 78 Resp: 10520

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	23.1	16.6	24.8

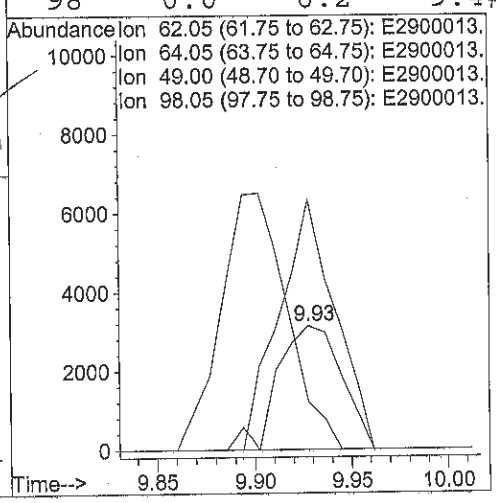


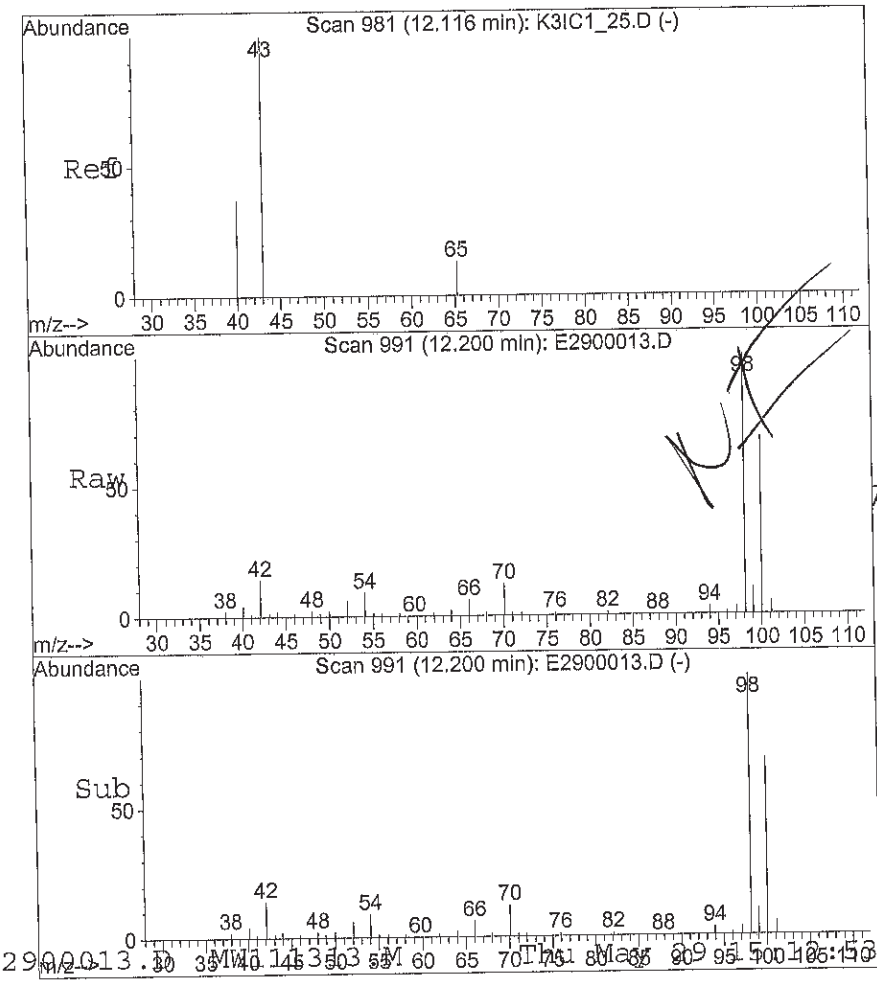


#32
1,2-Dichloroethane
Concen: 1.34 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 62 Resp: 7181

Ion	Ratio	Lower	Upper
62	100		
64	176.9	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

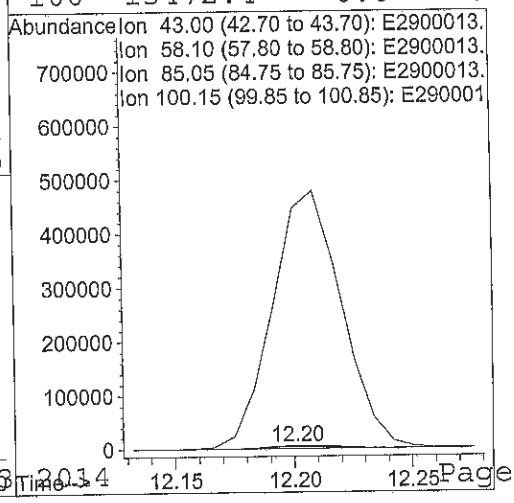


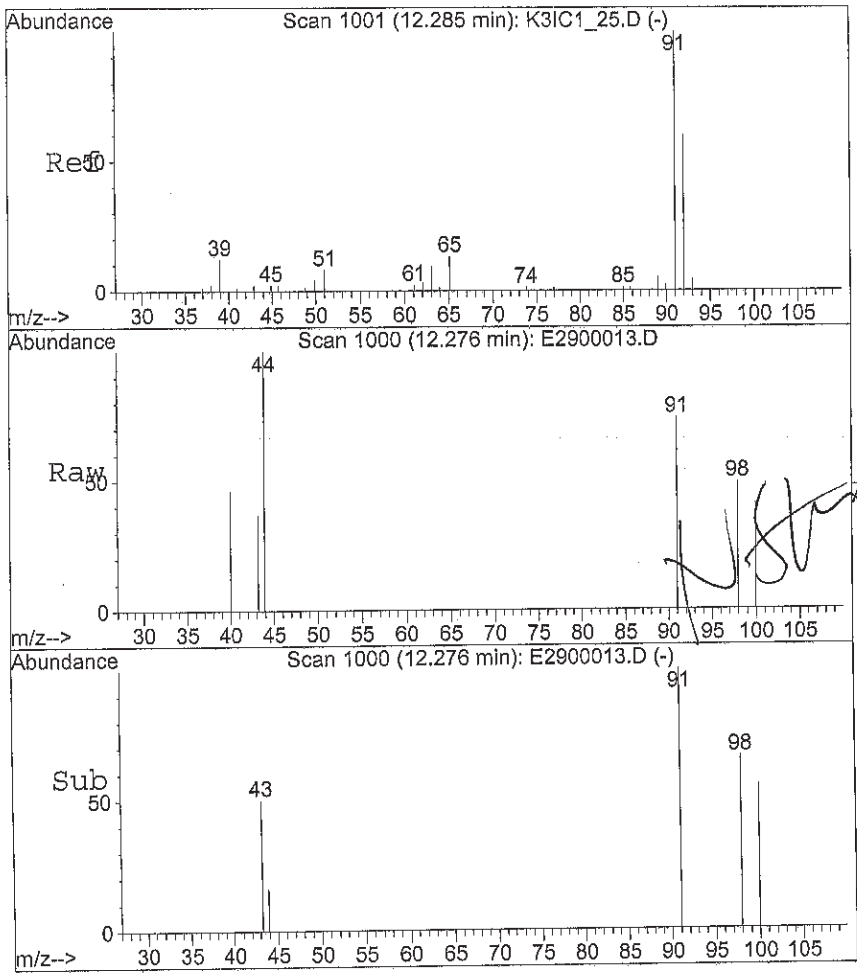


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.74 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 43 Resp: 7231

Ion	Ratio	Lower	Upper
43	100		
58	150.7	0.0	0.0#
85	0.0	0.0	0.0
100	13472.4	0.0	0.0#

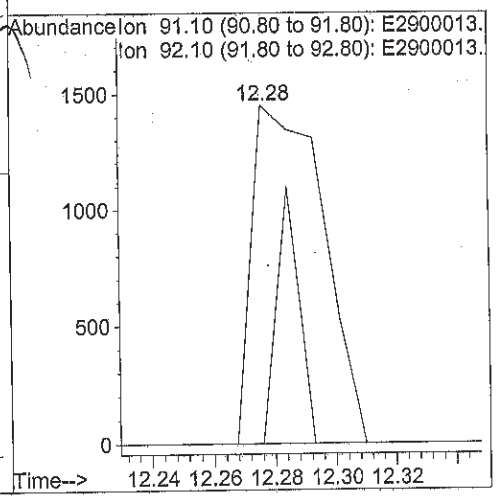


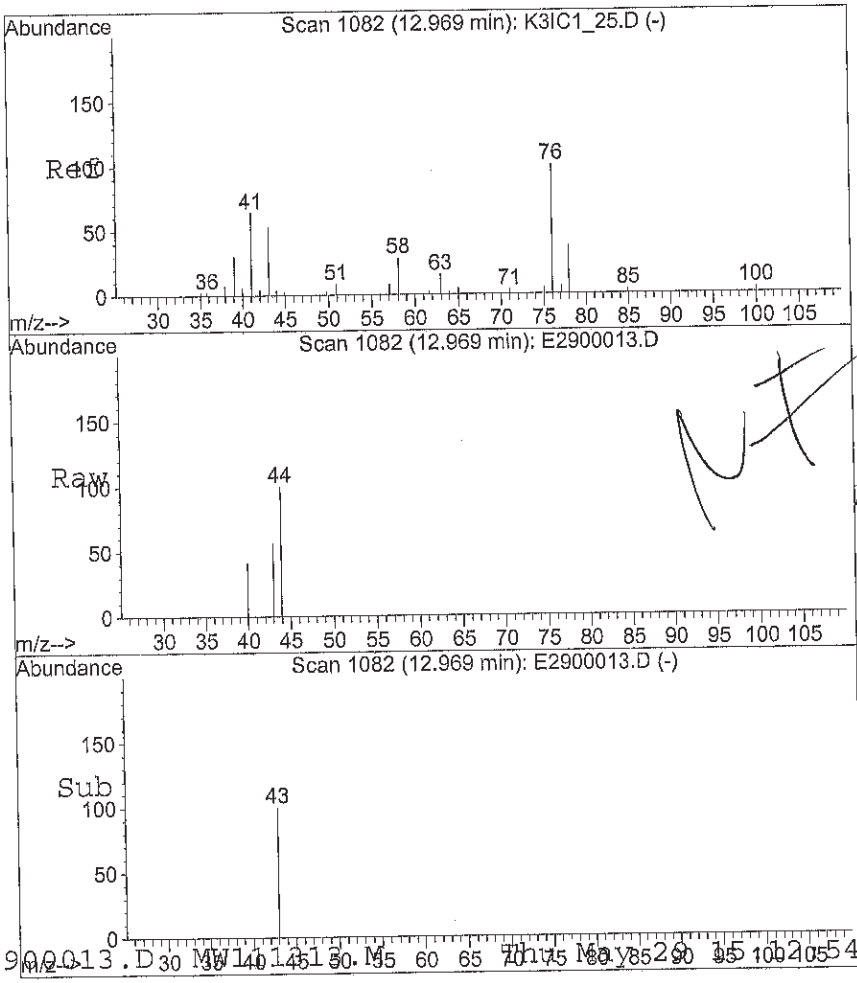


#41
Toluene
Concen: 0.13 ug/L
RT: 12.28 min Scan# 1000
Delta R.T. -0.01 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 91 Resp: 2346

Ion	Ratio	Lower	Upper
91	100		
92	23.7	47.4	71.0#

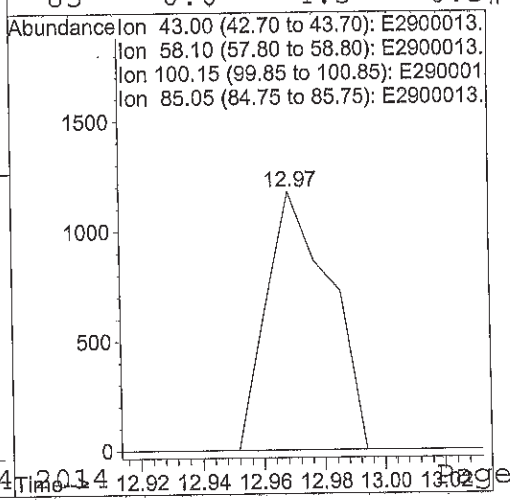


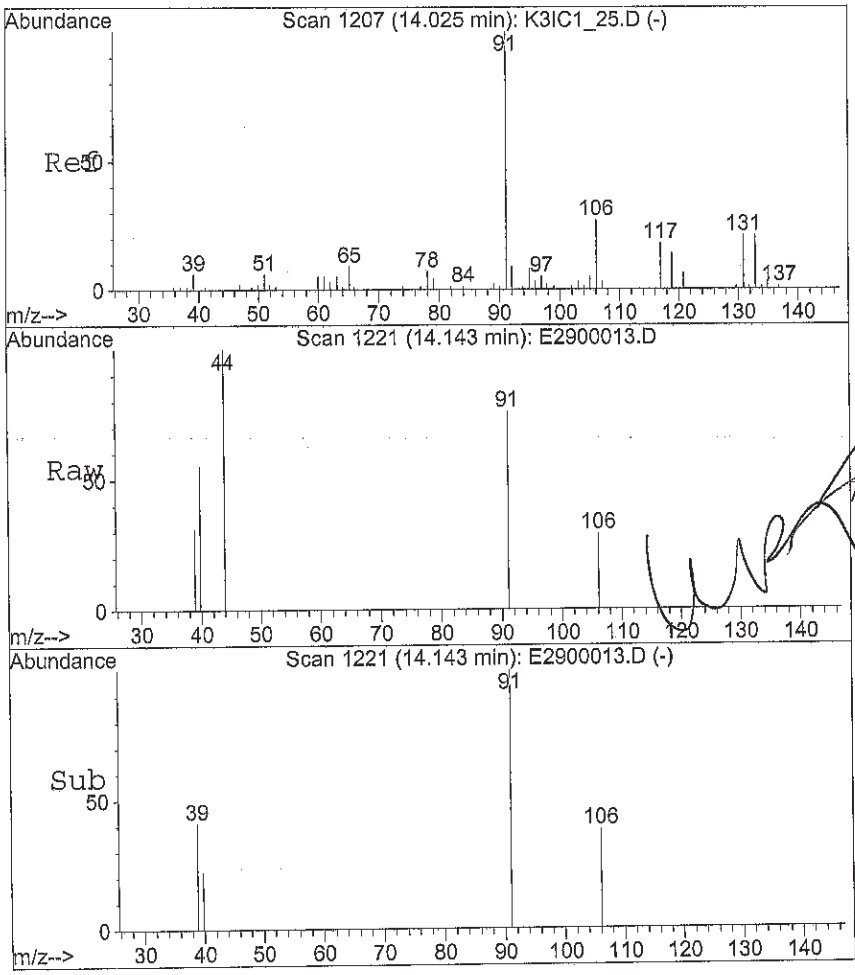


#46
2-Hexanone
Concen: 0.59 ug/L
RT: 12.97 min Scan# 1082
Delta R.T. -0.00 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 43 Resp: 1710

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

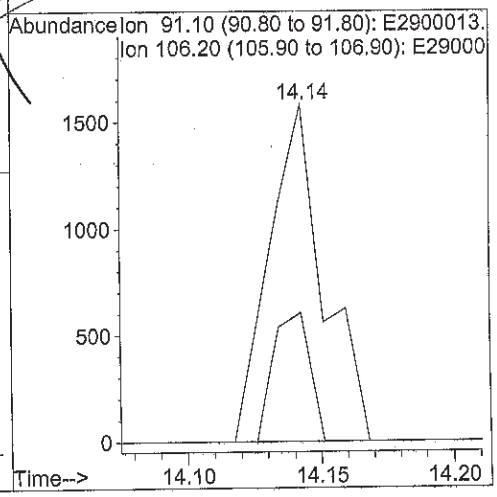


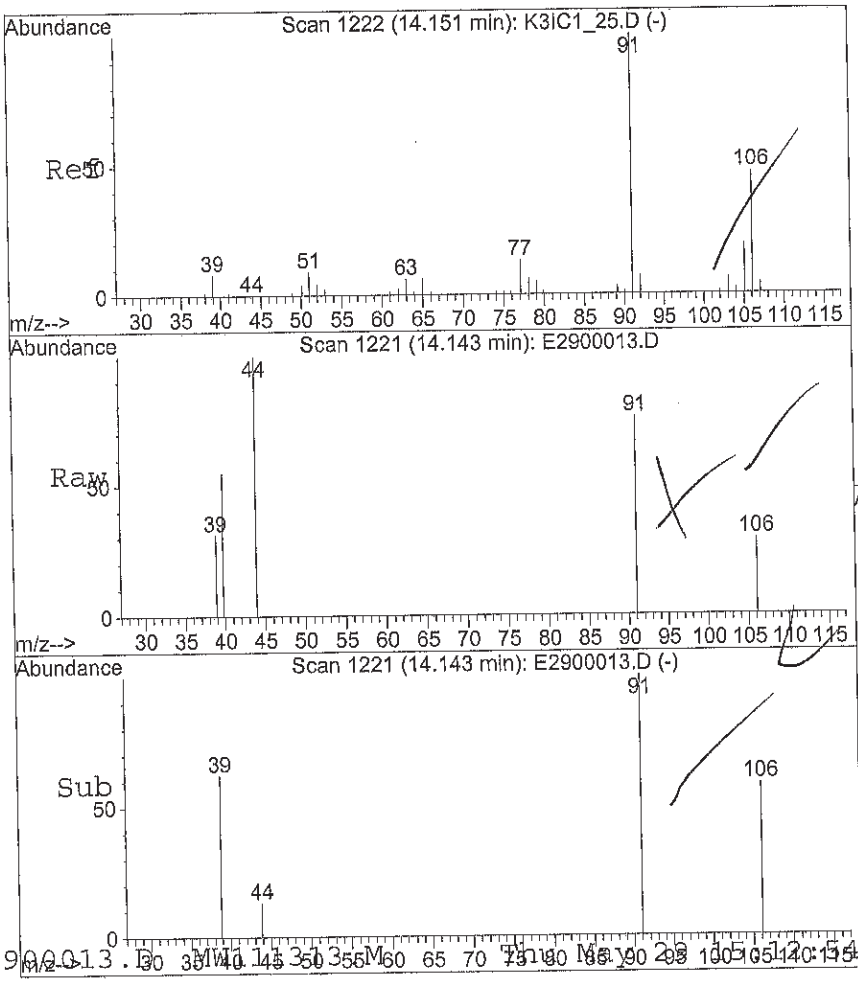


#51
Ethylbenzene
Concen: 0.11 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. 0.12 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 91 Resp: 2242

Ion	Ratio	Lower	Upper
91	100		
106	25.7	23.5	35.3

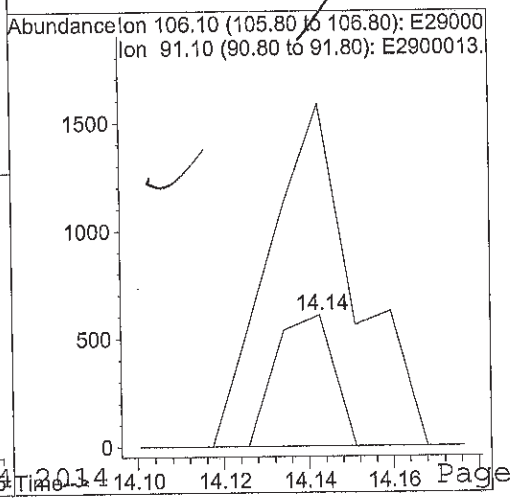


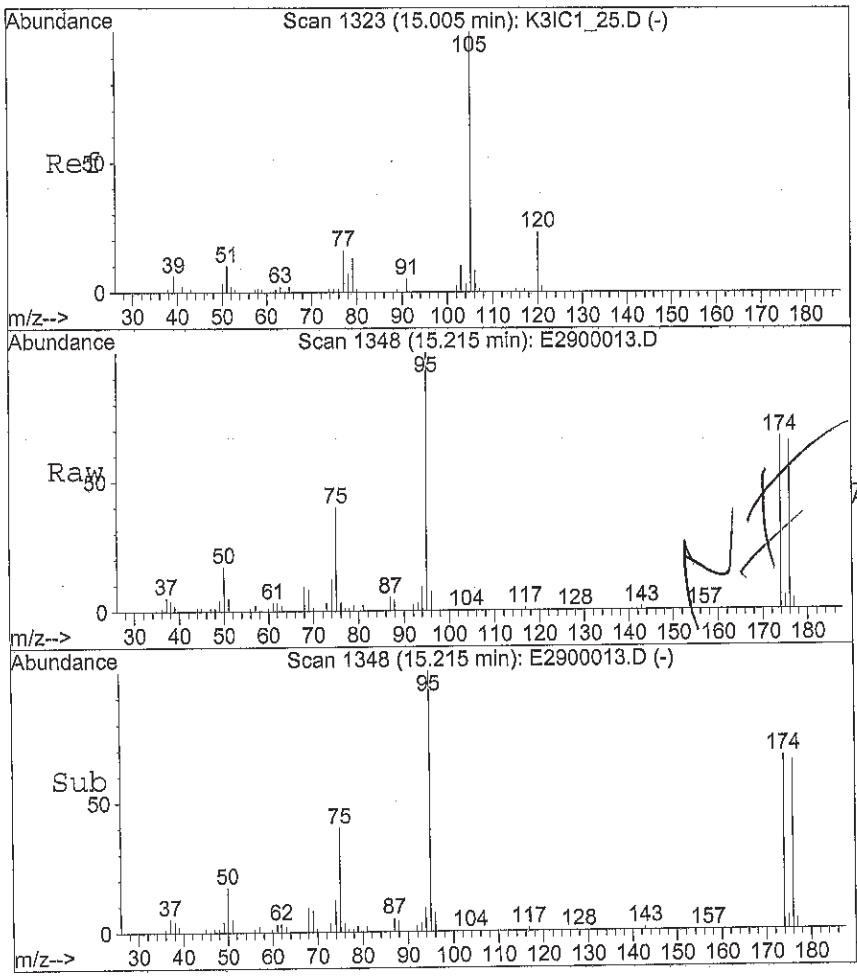


#52
m,p-Xylenes
Concen: 0.08 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion:106 Resp: 577

Ion	Ratio	Lower	Upper
106	100		
91	388.6	177.1	265.7#

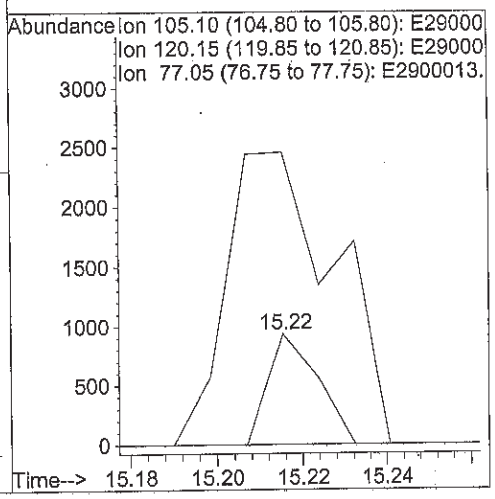


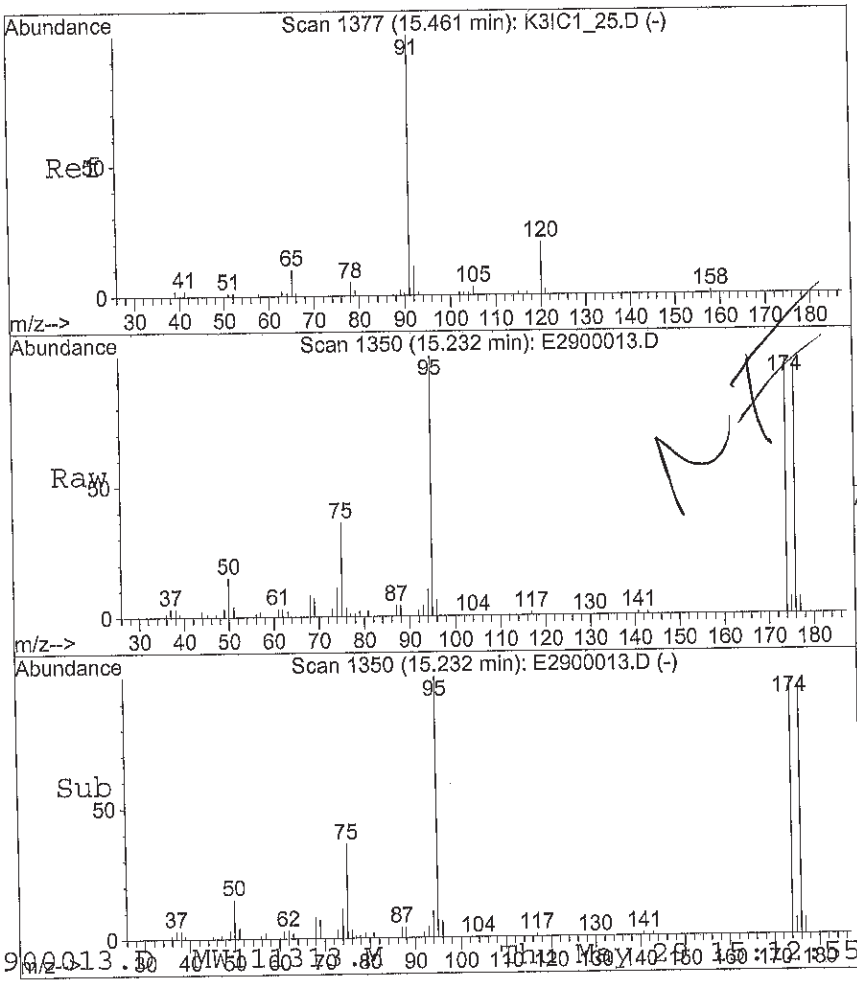


#56
Isopropylbenzene
Concen: 0.04 ug/L
RT: 15.22 min Scan# 1348
Delta R.T. 0.21 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion:105 Resp: 753

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	573.3	13.1	19.7#

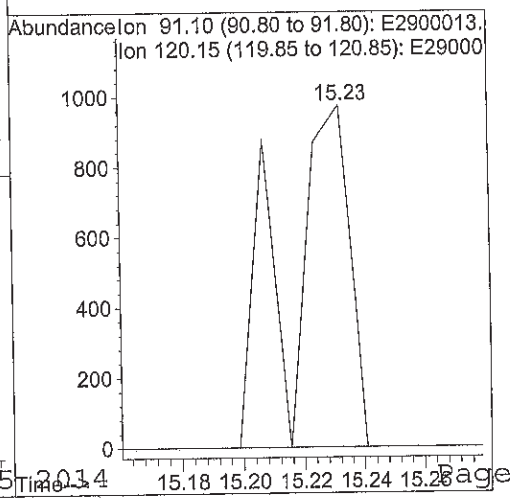


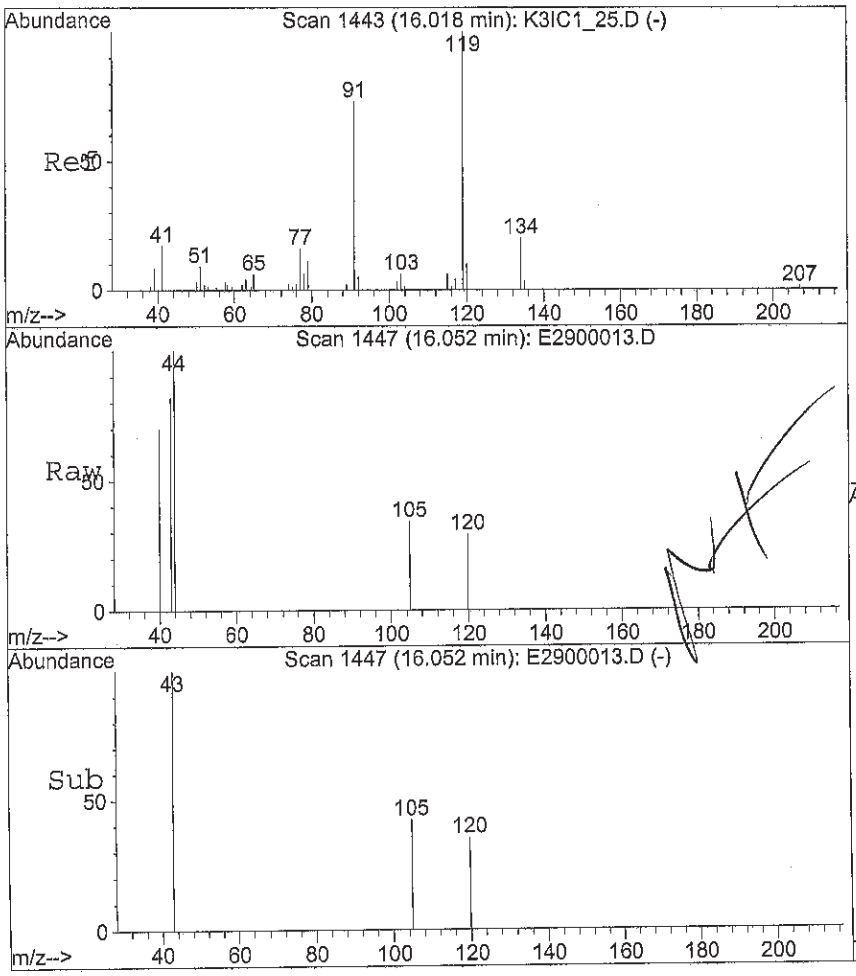


#62
n-Propylbenzene
Concen: 0.05 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. -0.23 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion: 91 Resp: 1379

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

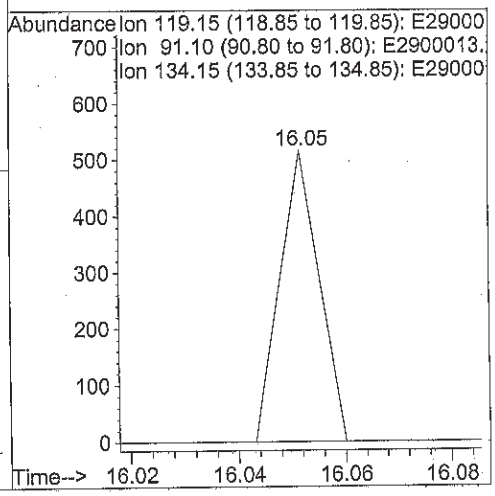


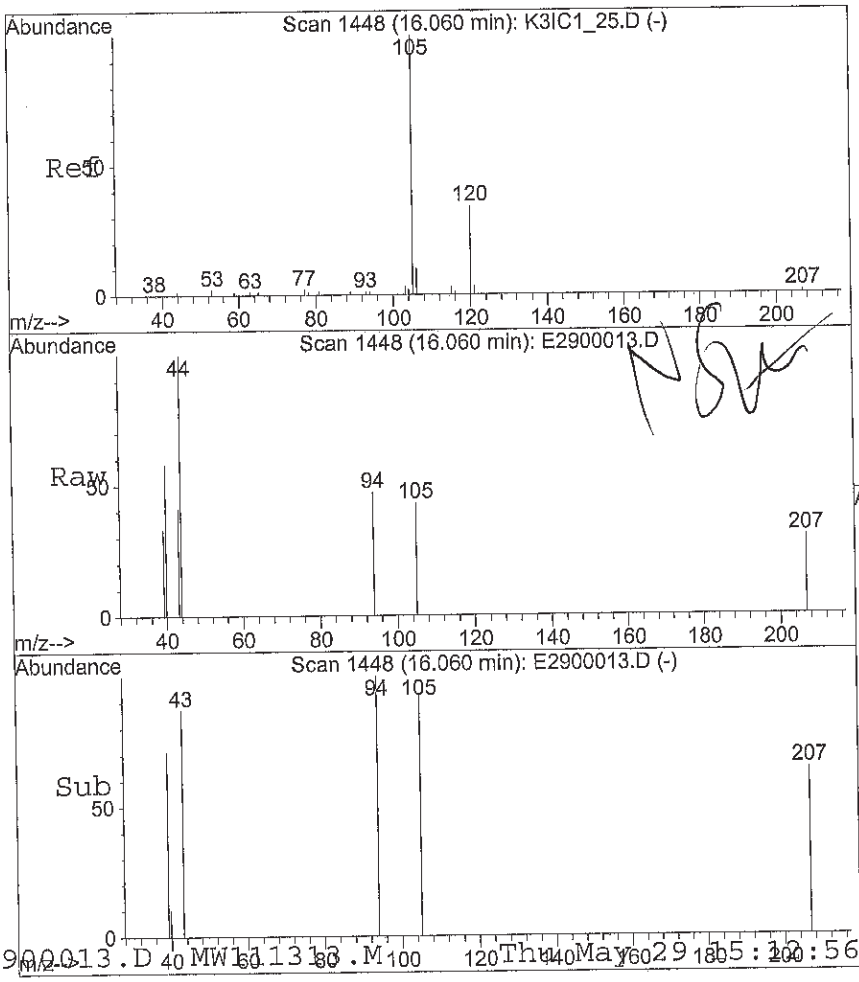


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. 0.03 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion:119 Resp: 261

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

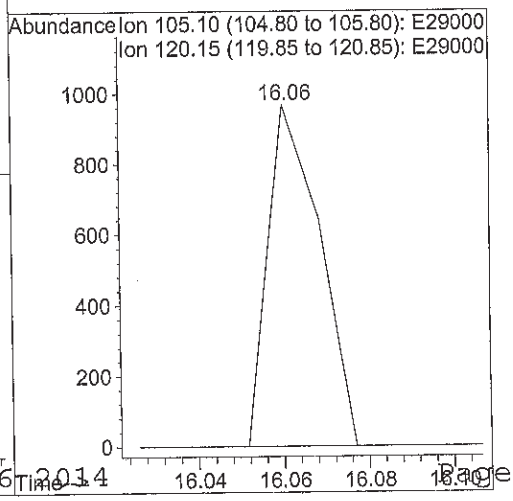


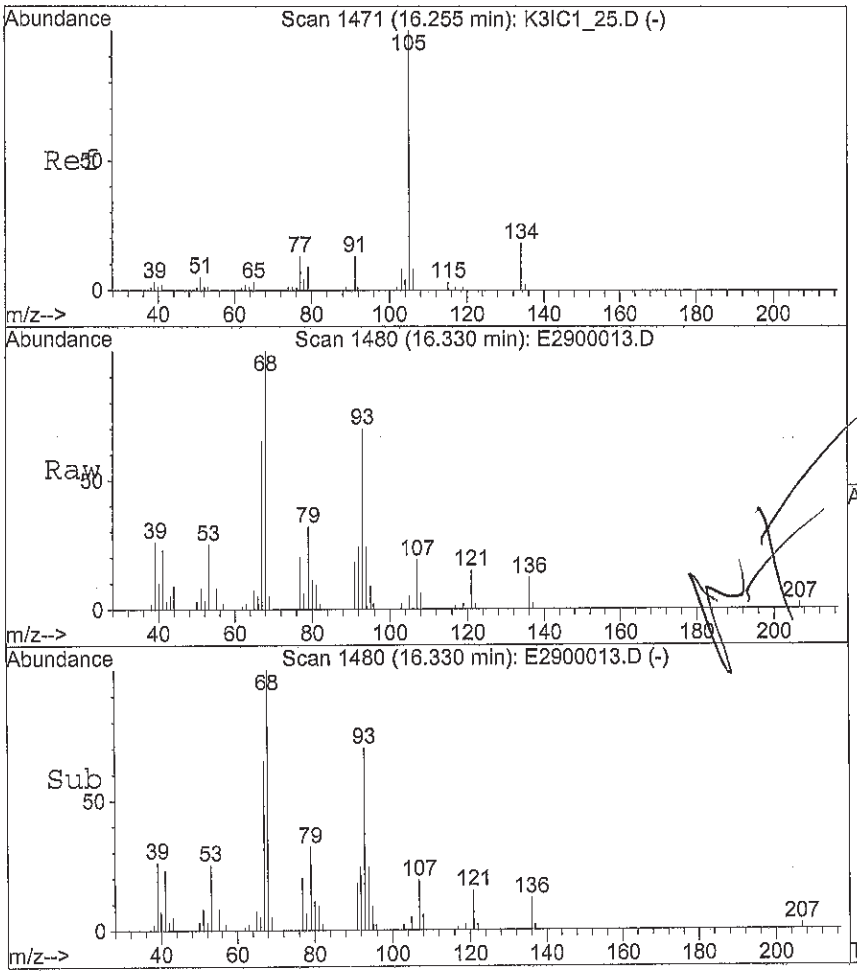


#67
1,2,4-Trimethylbenzene
Concen: 0.05 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion:105 Resp: 816

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

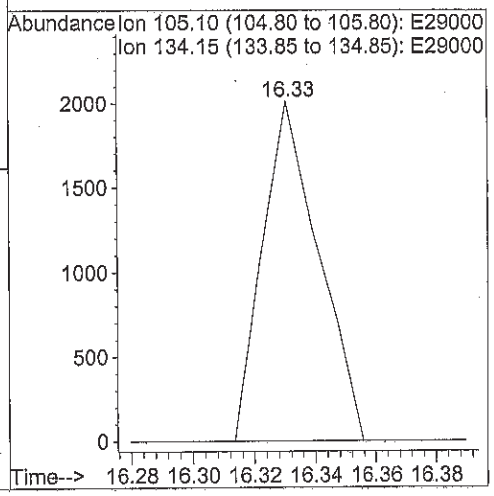


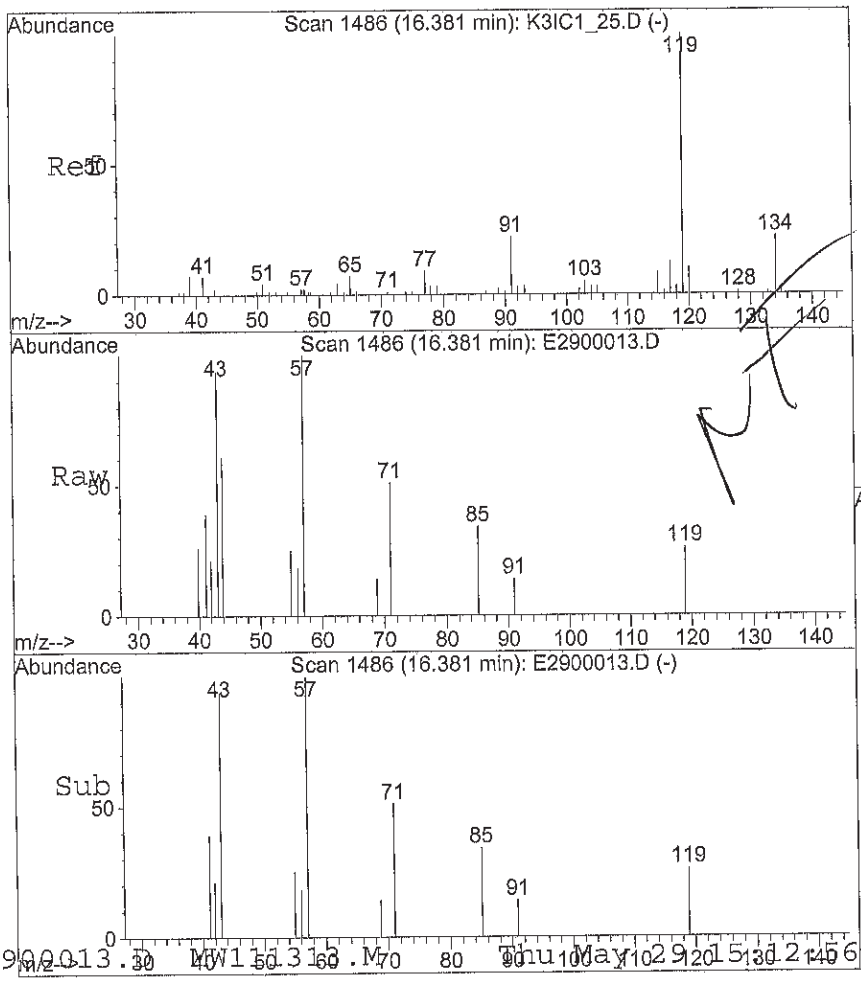


#68
sec-Butylbenzene
Concen: 0.11 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion:105 Resp: 2560

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

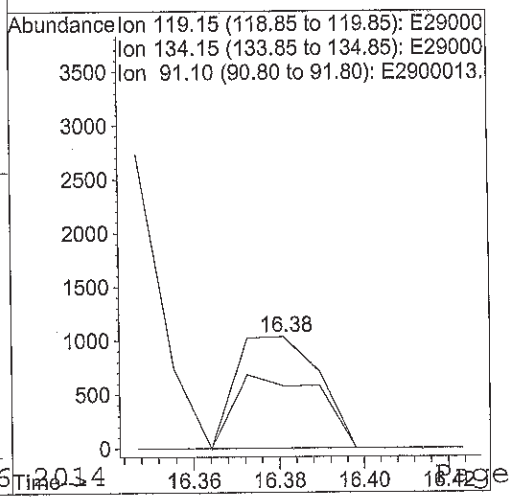


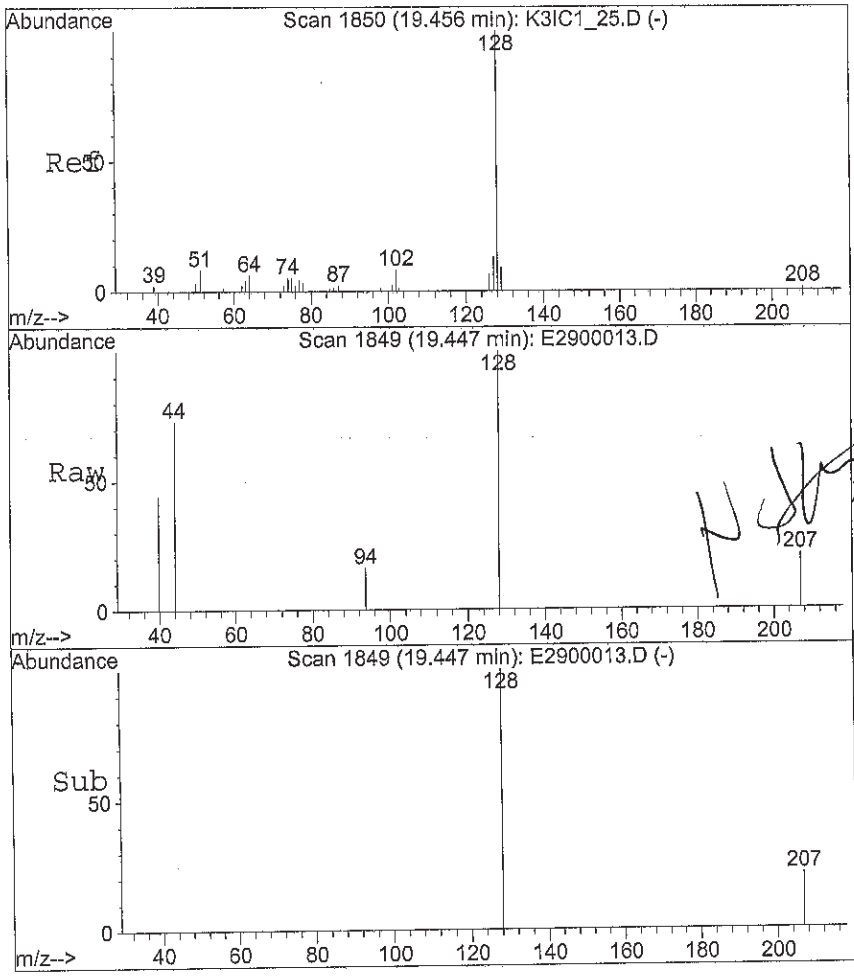


#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion:119 Resp: 1400

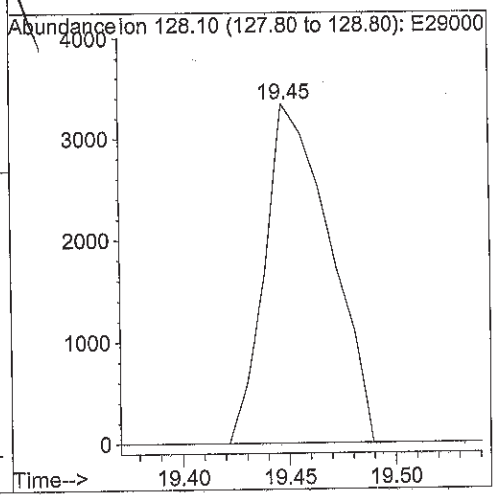
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	66.4	19.6	29.4#





#77
Naphthalene
Concen: 0.52 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E2900013.D
Acq: 29 May 2014 2:28 pm

Tgt Ion:128 Resp: 7084



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E2900013.D Vial: 4
Acq On : 29 May 2014 2:28 pm Operator: DN
Sample : 3E42901-12 Inst : GC/MS Ins
Misc : 100cc FB-052914 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 29 15:13 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1606122	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1324344	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	689225	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	457486	10.95 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.60%		
3) Chloroform-d (SU6)	9.18	84	744541	12.42 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 99.36%		
4) Methylene Chloride-d2 (SU5	7.08	86	425140	12.14 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.12%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	457628	16.03 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 128.24%#		
6) Benzene-d6 (SU7)	9.93	84	1477135	11.72 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.76%		
8) Toluene-d8 (SU3)	12.21	98	1432099	11.40 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.20%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	721134	13.90 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.20%		

Target Compounds Qvalue

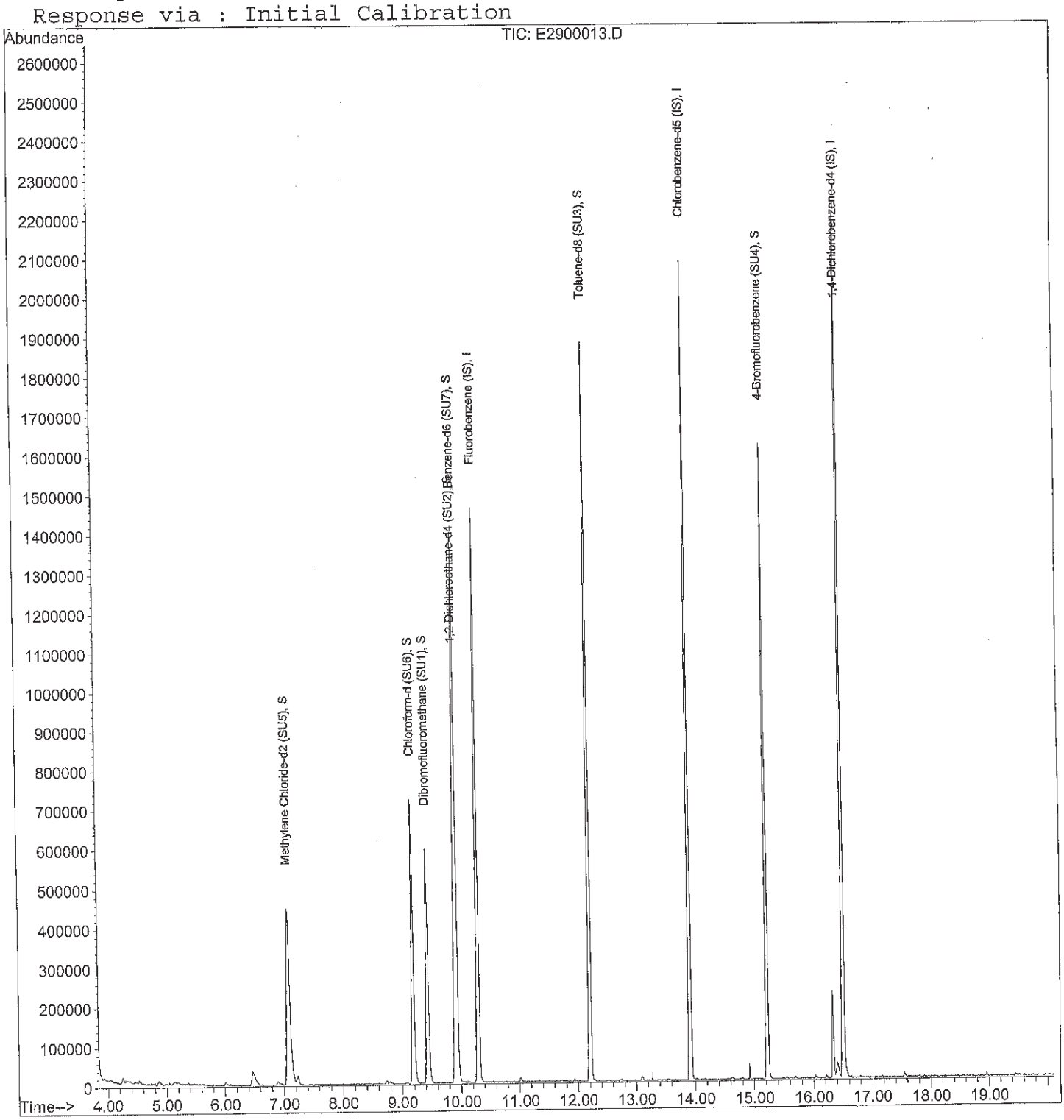
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E2900013.D
Acq On : 29 May 2014 2:28 pm
Sample : 3E42901-12
Misc : 100cc FB-052914
MS Integration Params: rteint.p
Quant Time: May 29 15:13 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS02.D Vial: 9
Acq On : 29 May 2014 2:57 pm Operator: DN
Sample : 34E2901-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 15:32 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1677230m	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1202455m	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	584740	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.44	113	469231	11.22 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	89.76%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	448147	11.27 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.16%	
39) Toluene-d8 (SU3)	12.22	98	1412629	12.60 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	100.80%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	623724	12.68 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	101.44%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	55672	1.35 ug/L	97
4) Chloromethane	4.48	50	39411	1.28 ug/L	88
5) Vinyl Chloride	4.60	62	36351	1.23 ug/L	80
6) Bromomethane	5.16	96	27716	1.32 ug/L	96
7) Chloroethane	5.29	64	15857	1.22 ug/L	78
8) (F11) Trichlorofluorometha	5.68	101	66747	1.45 ug/L	90
9) (F113) 1,1,2-Trichloro-tri	6.38	151	40102	1.22 ug/L	94
10) 1,1-Dichloroethene	6.44	96	44806	1.13 ug/L	94
11) Acetone	6.47	58	19639	3.06 ug/L	97
12) (IPA) Leak Check Compound	6.54	45	83783	41.57 ug/L #	87
13) Carbon disulfide	6.86	76	185521	1.33 ug/L	99
14) Methylene Chloride	7.12	84	59448	1.29 ug/L #	63
15) (TBA) tert-Butanol	7.10	59	2334	0.82 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	89517	0.94 ug/L	98
17) trans-1,2-Dichloroethene	7.49	96	57191	1.27 ug/L	95
18) 1,1-Dichloroethane	8.08	63	79341	1.05 ug/L	98
19) cis-1,2-Dichloroethene	8.84	96	64273	1.23 ug/L	88
21) (MEK) 2-Butanone	8.81	72	4205	0.89 ug/L #	66
22) (DIPE) Diisopropyl Ether	8.02	45	173550	1.32 ug/L	97
23) Bromochloromethane	9.18	128	22819	1.02 ug/L #	85
24) Chloroform	9.23	83	99813	1.14 ug/L	98
25) (ETBE) 2-ethoxy 2-methyl p	8.50	59	113927	0.94 ug/L #	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS02.D Vial: 9
Acq On : 29 May 2014 2:57 pm Operator: DN
Sample : 34E2901-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 15:32 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26) 1,1,1-Trichloroethane	9.51	97	64429	0.93 ug/L	97
27) (TAME) tert-Amyl methyl et	10.01	73	103175	0.98 ug/L	96
29) 1,1-Dichloropropene	9.70	75	75972	1.17 ug/L	100
30) Carbon Tetrachloride	13.90	117	66562	1.18 ug/L	99
31) Benzene	9.99	78	192057	1.22 ug/L #	93
32) 1,2-Dichloroethane	10.00	62	64418	1.15 ug/L	97
33) Trichloroethene	10.76	130	64001	1.26 ug/L	96
34) 1,2-Dichloropropane	11.06	63	50008	1.33 ug/L	95
35) Dibromomethane	11.21	93	37518	1.27 ug/L	97
36) Bromodichloromethane	11.36	83	63154	1.06 ug/L	98
37) cis-1,3-Dichloropropene	11.88	75	60069	0.93 ug/L #	93
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	7742	0.32 ug/L #	100
41) Toluene	12.29	91	205399	1.25 ug/L	99
42) trans-1,3-Dichloropropene	12.51	75	43779	0.81 ug/L	84
43) 1,1,2-Trichloroethane	12.76	83	38667	1.31 ug/L	93
44) Tetrachloroethene	12.95	164	64777	1.12 ug/L	95
45) 1,3-Dichloropropane	12.97	76	69463	1.23 ug/L	97
46) 2-Hexanone	12.98	43	25391	0.97 ug/L	99
47) Dibromochloromethane	13.26	129	50787	1.20 ug/L	96
48) 1,2-Dibromoethane	13.43	107	50197	1.31 ug/L	100
49) Chlorobenzene	13.96	112	140913	1.28 ug/L	97
50) 1,1,1,2-Tetrachloroethane	14.03	131	45573	1.16 ug/L	96
51) Ethylbenzene	14.03	91	235306	1.26 ug/L	98
52) m,p-Xylenes	14.15	106	178441	2.69 ug/L	91
53) o-Xylene	14.62	106	89510	1.37 ug/L	92
54) Styrene	14.63	104	135063	1.42 ug/L	97
55) Bromoform	14.91	173	27447	1.14 ug/L #	98
56) Isopropylbenzene	15.00	105	233133	1.30 ug/L	99
57) 1,2,3-Trichloropropane	15.43	75	57600	1.18 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	54071	1.28 ug/L	99
61) Bromobenzene	15.44	156	60756	1.32 ug/L	90
62) n-Propylbenzene	15.46	91	298005	1.26 ug/L	97
63) 2-Chlorotoluene	15.62	91	185571	1.27 ug/L	99
64) 1,3,5-Trimethylbenzene	15.63	105	179157	1.23 ug/L	98
65) 4-Chlorotoluene	15.73	91	180327	1.34 ug/L	99
66) tert-Butylbenzene	16.02	119	153304	1.23 ug/L	93
67) 1,2,4-Trimethylbenzene	16.06	105	189335	1.25 ug/L	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS02.D Vial: 9
Acq On : 29 May 2014 2:57 pm Operator: DN
Sample : 34E2901-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 15:32 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

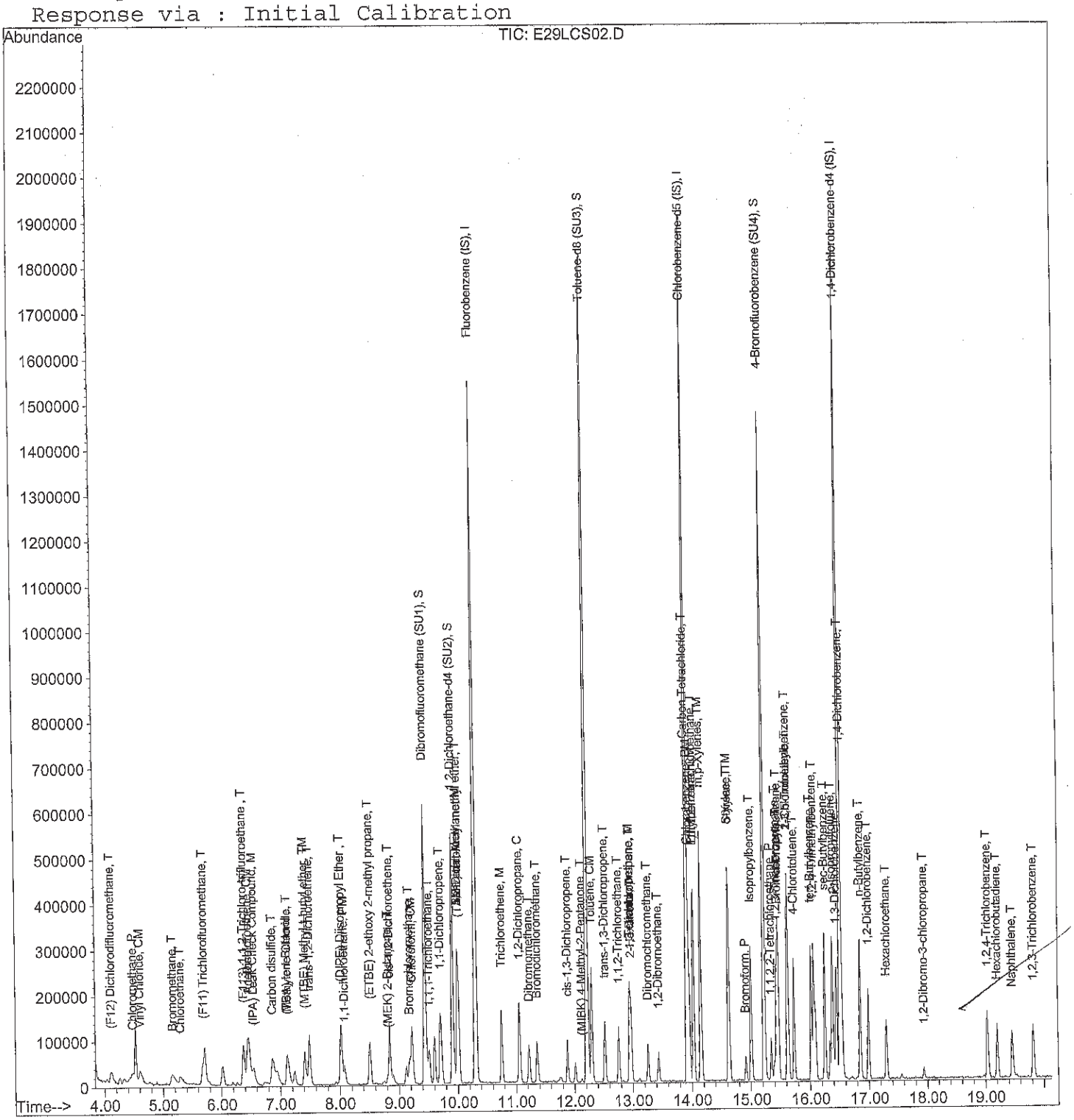
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68)	sec-Butylbenzene	16.26	105	258701	1.32 ug/L	99
69)	p-Isopropyltoluene	16.38	119	198948	1.24 ug/L	95
70)	1,3-Dichlorobenzene	16.45	146	112235	1.30 ug/L	97
71)	1,4-Dichlorobenzene	16.54	146	111187	1.29 ug/L	98
72)	n-Butylbenzene	16.85	91	212110	1.26 ug/L	98
73)	1,2-Dichlorobenzene	16.99	146	97695	1.27 ug/L	99
74)	1,2-Dibromo-3-chloropropan	17.93	75	7084	1.12 ug/L #	76
75)	1,2,4-Trichlorobenzene	19.04	180	64769	1.24 ug/L	99
76)	Hexachlorobutadiene	19.20	225	30609	1.30 ug/L	98
77)	Naphthalene	19.46	128	122813	1.06 ug/L	100
78)	Hexachloroethane	17.30	201	20579	1.22 ug/L	93
79)	1,2,3-Trichlorobenzene	19.82	180	56547	1.14 ug/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052914L3\E29LCS02.D Vial: 9
Acq On : 29 May 2014 2:57 pm Operator: DN
Sample : 34E2901-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 15:32 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



ENVIRONMENTAL SUPPORT TECHNOLOGIES

16510 Aston St. Irvine, CA 92606
Tel (949) 679-9500 Fax (949) 679-9501

www.est-inc.com

SOIL GAS SURVEY
SANTA SUSANA FIELD LABORATORY:
DEPARTMENT OF ENERGY
5800 WOOLSEY CANYON ROAD
CANOGA PARK, CA

LEVEL IV DATA PACKAGE

MWH AMERICAS
2121 NORTH CALIFORNIA BLVD.
SUITE 600
WALNUT CREEK, CA

EST2754
May 30, 2014

ENVIRONMENTAL SUPPORT TECHNOLOGIES

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10 Raw Data for QC Samples and Initial Calibration, Duplicate Samples (DS)

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12 Raw Data for QC Samples and Initial Calibration, Blank

13 Raw Data for Analyzed Samples Including Chromatograms, Quantitation Reports and Spectra

CHAIN-OF-CUSTODY

CHAIN-OF-CUSTODY RECORD

Environmental Support Technologies
16510 Aston St., Irvine, CA 92606 · Tel (949) 679-9500 · Fax (949) 679-9501

Client: MWH Americas
Address: 250 North Madison Avenue
Pasadena, Ca
Project Manager: Sarah Von Raesfield

Sampler Name: Ashley Flores
EST Project#: EST2754
Site Location: SSFL
Phone: ( )

Page: 1 of 1
Custody Seals:
Email:

Turnaround Time:
(Check one)

Normal:

Rush: X

Sample Receipt

Intact: Yes: X No:

On Ice: Yes: No: X N/A

Custody Seals: Yes: No: X

N/A (Received on Site):

Sample Name	Sample Matrix	Container Type	# of Container	Sampling Date	Sampling Time	Preservative Type	Purge Volume (ml)	Vacuum (inches of H_2O)	8260B VOC's 0.02 RL						Special Instructions
Equipment Blank	Air	Glass Bulb	1	5/30/2014	755	Surr			X						Bulb # 8
SVL-546-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/30/2014	746	Surr			X						Bulb # 2
SVL-846-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/30/2014	746	Surr			X						Bulb # 13
SVL-546-SA5D-SV-10.0-11.0	Air	Glass Bulb	1	5/30/2014	819	Surr			X						Bulb # 11
SVL-546-SA5D-SV-16.0-17.0	Air	Glass Bulb	1	5/30/2014	900	Surr			X						Bulb # 9
SVL-550-SA5D-SV-5.0-6.0	Air	Glass Bulb	1	5/30/2014	939	Surr			X						Bulb # 12
SVL-550-SA5D-SV-11.0-12.0	Air	Glass Bulb	1	5/30/2014	1007	Surr			X						Bulb # 7
SVL-550-SA5D-SV-17.0-18.0	Air	Glass Bulb	1	5/30/2014	1042	Surr			X						Bulb # 6
FB-~~052914~~ 05314	Air	Glass Bulb	1	5/30/2014	1109	Surr			X						Bulb # 1

Relinquished by: (Signature)	Date/Time: 05/30/14	Received by:	Date/Time:
Relinquished by: (Signature)	Date/Time:	Received by:	Date/Time:

SAMPLE RESULTS WITH ANALYSIS AND EXTRACTIONS PREPARATION DATES

June 04, 2013

Sarah Von Raesfield
MWH Americas, Inc.
250 No. Madison Avenue
Pasadena, CA 91107

RE: Santa Susana Field Laboratory, Canoga Park

Enclosed are the results of analyses for soil gas samples received by Environmental Support Technologies laboratory on 05/40/13 13:06. The analyses were performed according to the prescribed method as outlined by EPA 8260B. A shut in test was performed, leak test was performed, equipment blank was run, and selected purge volume was 4PV. If you have any questions concerning this report, please feel free to contact Project Manager.

Sincerely,

Ashley Flores

Ashley Flores
Project Manager

Environmental Support Technologies laboratories are certified by the California Department of Health Services (CDHS), Environmental Laboratory Accreditation Program (ELAP) No's. 2772, 2774, and 2767.

16510 Aston Street, Irvine, California 92606
Telephone: (939) 679-9500 Fax: (939) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Analyzed
Equipment Blank	4E34001-01	Air	40-May-13 07:55	40-May-13 08:15
SVL-536-SA5D-SV-5.0-6.0	4E34001-02	Air	40-May-13 07:36	40-May-13 08:33
SVL-836-SA5D-SV-5.0-6.0	4E34001-04	Air	40-May-13 07:36	40-May-13 09:51
SVL-536-SA5D-SV-10.0-11.0	4E34001-03	Air	40-May-13 08:19	40-May-13 10:23
SVL-536-SA5D-SV-16.0-17.0	4E34001-05	Air	40-May-13 09:00	40-May-13 10:57
SVL-550-SA5D-SV-5.0-6.0	4E34001-06	Air	40-May-13 09:49	40-May-13 11:29
SVL-550-SA5D-SV-11.0-12.0	4E34001-07	Air	40-May-13 10:07	40-May-13 12:00
SVL-550-SA5D-SV-17.0-18.0	4E34001-08	Air	40-May-13 10:32	40-May-13 12:44
FB-054013	4E34001-09	Air	40-May-13 11:09	40-May-13 14:01

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

16510 Aston Street, Irvine, California 92606
Telephone: (939) 679-9500 Fax: (939) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Equipment Blank (3E43001-01) Air Sampled: 05/30/14 07:55 Analyzed: 05/30/14 08:15									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*90.0 1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*9D8 1*	*%75-07*		"	"	"	"	
2urroSateg D56romofluorobenzene		*-B8 1*	*%75-07*		"	"	"	"	
2urroSateg 6enzene5d8		*9B.- 1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*97.0 1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*9DD1*	*%B5-DB*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-546-SA5D-SV-5.0-6.0 (3E43001-02) Air Sampled: 05/30/14 07:46 Analyzed: 05/30/14 08:44									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.011**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.013**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*90.%1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*9%B 1*	*%75-07*		"	"	"	"	
2urroSateg D56romofluorobenzene		*--B 1*	*%75-07*		"	"	"	"	
2urroSateg 6enzene5d8		*48.8 1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*97.B 1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*9-.B 1*	*%B5-DB*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-846-SA5D-SV-5.0-6.0 (3E43001-03) Air Sampled: 05/30/14 07:46 Analyzed: 05/30/14 09:51									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.0094**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.013**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*93.4 1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*98.3 1*	*%75-07*		"	"	"	"	
2urroSateg D56 romofluorobenzene		*--B 1*	*%75-07*		"	"	"	"	
2urroSateg 6 enzene5d8		*4%0 1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*97.B 1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*93.4 1*	*%B5-DB*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-546-SA5D-SV-10.0-11.0 (3E43001-04) Air Sampled: 05/30/14 08:19 Analyzed: 05/30/14 10:24									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.010**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*9D- 1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*97.8 1*	*%75-07*		"	"	"	"	
2urroSateg D56romofluorobenzene		*--0 1*	*%75-07*		"	"	"	"	
2urroSateg 6enzene5d8		*49.B 1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*98.0 1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*9-.B 1*	*%B5-DB*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-546-SA5D-SV-16.0-17.0 (3E43001-05) Air Sampled: 05/30/14 09:00 Analyzed: 05/30/14 10:57									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0044**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*9D7 1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*9D7 1*	*%75-07*		"	"	"	"	
2urroSateg D56romofluorobenzene		*--01*	*%75-07*		"	"	"	"	
2urroSateg6enzene5d8		*90.B 1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*-B- 1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*99.9 1*	*%B5-DB*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-550-SA5D-SV-5.0-6.0 (3E43001-06) Air Sampled: 05/30/14 09:39 Analyzed: 05/30/14 11:29									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*9-.7 1*	*%75-07*		*"*	*"*	*"*	*"*	
2urroSateg Toluene5d4		*9D- 1*	*%75-07*		*"*	*"*	*"*	*"*	
2urroSateg D56romofluorobenzene		*-B9 1*	*%75-07*		*"*	*"*	*"*	*"*	
2urroSateg 6enzene5d8		*4D4 1*	*%B5-DB*		*"*	*"*	*"*	*"*	
2urroSateg Chloroform5d		*9B.%1*	*%B5-DB*		*"*	*"*	*"*	*"*	
2urroSateg Methylene chloride5d0		*4%9 1*	*%B5-DB*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-550-SA5D-SV-11.0-12.0 (3E43001-07) Air Sampled: 05/30/14 10:07 Analyzed: 05/30/14 12:00									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0088**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.030**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.028**	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*93.3 1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*9-.B 1*	*%75-07*		"	"	"	"	
2urroSateg D56romofluorobenzene		*--- 1*	*%75-07*		"	"	"	"	
2urroSateg 6enzene5d8		*93.D1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*-B0 1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*-BB 1*	*%B5-DB*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-550-SA5D-SV-17.0-18.0 (3E43001-08) Air Sampled: 05/30/14 10:42 Analyzed: 05/30/14 12:33									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**0.0060**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.023**	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.011**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*90.0 1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*93.B 1*	*%75-07*		"	"	"	"	
2urroSateg D56 romofluorobenzene		*--B 1*	*%75-07*		"	"	"	"	
2urroSateg 6 enzene5d8		*44.0 1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*97.9 1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*90.B 1*	*%B5-DB*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
FB-053014 (3E43001-09) Air Sampled: 05/30/14 11:09 Analyzed: 05/30/14 13:01									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	43E4001	05/40/13	05/40/13	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.012**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
2urroSateg: ibromofluoromethane		*9D.8 1*	*%75-07*		"	"	"	"	
2urroSateg Toluene5d4		*9B.B 1*	*%75-07*		"	"	"	"	
2urroSateg D56romofluorobenzene		*-B9 1*	*%75-07*		"	"	"	"	
2urroSateg 6enzene5d8		*9B.8 1*	*%B5-DB*		"	"	"	"	
2urroSateg Chloroform5d		*9%D1*	*%B5-DB*		"	"	"	"	
2urroSateg Methylene chloride5d0		*94.0 1*	*%B5-DB*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E3001 - Volatiles										
Blank (34E3001-BLK1)				Prepared & Analyzed: 05/40/13						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l							
1,1,1-Trichloroethane	ND	0.020	"							
1,1,2,2-Tetrachloroethane	ND	0.020	"							
1,1,2-Trichloro-trifluoroethane	ND	0.020	"							
1,1,2-Trichloroethane	ND	0.020	"							
1,1-Dichloroethane	ND	0.020	"							
1,1-Dichloroethene	ND	0.020	"							
1,2-Dichloroethane	ND	0.020	"							
Benzene	ND	0.020	"							
cis-1,2-Dichloroethene	ND	0.020	"							
Carbon tetrachloride	ND	0.020	"							
Chloroethane	ND	0.020	"							
Chloroform	ND	0.020	"							
Dichlorodifluoromethane	ND	0.020	"							
Ethylbenzene	ND	0.020	"							
Methylene Chloride	ND	0.020	"							
ortho-Xylene	ND	0.020	"							
meta- and para-Xylenes	ND	0.020	"							
trans-1,2-Dichloroethene	ND	0.020	"							
Tetrachloroethene	ND	0.020	"							
Toluene	0.00380	0.020	"							J
Trichloroethene	ND	0.020	"							
Trichlorofluoromethane	ND	0.020	"							
Vinyl Chloride	ND	0.020	"							
2urroSateg: ibromofluoromethane	*0.0%*		*"*	*0.7B*		*9-.B*	*%75-07*			
2urroSategToluene5d4	*0.3-*		*"*	*0.7B*		*90.7*	*%75-07*			
2urroSategD56romofluorobenzene	*0.89*		*"*	*0.7B*		*-B%*	*%75-07*			
2urroSateg6enzene5d8	*0.-D*		*"*	*0.7B*		*47.%*	*%B5-DB*			
2urroSategChloroform5d	*0.30*		*"*	*0.7B*		*90.%*	*%B5-DB*			
2urroSategMethylene chloride5d0	*0.04*		*"*	*0.7B*		*9-.D*	*%B5-DB*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E3001 - Volatiles										
LCS (34E3001-BS1)				Prepared & Analyzed: 05/40/13						
1,1,1,2-Tetrachloroethane	1.23	0.020	ug/l	1.25		99.2	75-146			
1,1,1-Trichloroethane	1.04	0.020	"	1.25		82.3	74-143			
1,1,2,2-Tetrachloroethane	1.66	0.020	"	1.25		144	56-139			
1,1,2-Trichloro-trifluoroethane	1.26	0.020	"	1.25		101	84-125			
1,1,2-Trichloroethane	1.49	0.020	"	1.25		111	67-147			
1,1-Dichloroethane	1.06	0.020	"	1.25		83.8	80-121			
1,1-Dichloroethene	1.33	0.020	"	1.25		115	74-147			
1,2-Dichloroethane	1.28	0.020	"	1.25		102	75-141			
Benzene	1.24	0.020	"	1.25		98.3	79-118			
cis-1,2-Dichloroethene	1.25	0.020	"	1.25		100	85-116			
Carbon tetrachloride	1.00	0.020	"	1.25		80.0	73-134			
Chloroethane	1.30	0.020	"	1.25		112	60-147			
Chloroform	1.21	0.020	"	1.25		96.8	82-130			
Dichlorodifluoromethane	1.45	0.020	"	1.25		108	37-129			
Ethylbenzene	1.28	0.020	"	1.25		102	84-125			
Methylene Chloride	1.40	0.020	"	1.25		103	81-126			
ortho-Xylene	1.40	0.020	"	1.25		103	85-115			
meta- and para-Xylenes	2.64	0.020	"	2.50		105	84-115			
trans-1,2-Dichloroethene	1.24	0.020	"	1.25		98.3	72-144			
Tetrachloroethene	1.14	0.020	"	1.25		90.3	60-133			
Toluene	1.20	0.020	"	1.25		96.0	70-115			
Trichloroethene	1.25	0.020	"	1.25		100	68-142			
Trichlorofluoromethane	1.41	0.020	"	1.25		105	62-133			
Vinyl Chloride	1.13	0.020	"	1.25		91.2	66-147			
2urroSateg: ibromofluoromethane	*- - .7*		*"*	*- 0.7*		*90.0*	*%75- 07*			
2urroSateg ToluneSd4	*- 0.%*		*"*	*- 0.7*		*- B-*	*%75- 07*			
2urroSateg D56 romofluorobenzene	*- 0.8*		*"*	*- 0.7*		*- B-*	*%75- 07*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E3001 - Volatiles										
LCS Dup (34E3001-BSD1)				Prepared & Analyzed: 05/40/13						
1,1,1,2-Tetrachloroethane	1.12	0.020	ug/l	1.25		89.6	75-146	10.2	20	
1,1,1-Trichloroethane	1.24	0.020	"	1.25		98.3	74-143	17.7	20	
1,1,2,2-Tetrachloroethane	1.18	0.020	"	1.25		93.3	56-139	44.8	20	QR-03
1,1,2-Trichloro-trifluoroethane	1.13	0.020	"	1.25		91.2	84-125	10.0	20	
1,1,2-Trichloroethane	1.22	0.020	"	1.25		97.6	67-147	14.0	20	
1,1-Dichloroethane	1.29	0.020	"	1.25		104	80-121	19.6	20	
1,1-Dichloroethene	1.43	0.020	"	1.25		107	74-147	7.19	20	
1,2-Dichloroethane	1.16	0.020	"	1.25		92.8	75-141	9.83	20	
Benzene	1.19	0.020	"	1.25		95.2	79-118	4.41	20	
cis-1,2-Dichloroethene	1.19	0.020	"	1.25		95.2	85-116	3.92	20	
Carbon tetrachloride	1.05	0.020	"	1.25		83.0	73-134	3.88	20	
Chloroethane	1.23	0.020	"	1.25		99.2	60-147	12.1	20	
Chloroform	1.15	0.020	"	1.25		92.0	82-130	5.08	20	
Dichlorodifluoromethane	1.47	0.020	"	1.25		110	37-129	1.37	20	
Ethylbenzene	1.26	0.020	"	1.25		101	84-125	1.57	20	
Methylene Chloride	1.20	0.020	"	1.25		96.0	81-126	8.00	20	
ortho-Xylene	1.23	0.020	"	1.25		99.2	85-115	3.72	20	
meta- and para-Xylenes	2.59	0.020	"	2.50		103	84-115	1.54	20	
trans-1,2-Dichloroethene	1.18	0.020	"	1.25		93.3	72-144	3.15	20	
Tetrachloroethene	1.14	0.020	"	1.25		90.3	60-133	0.00	20	
Toluene	1.21	0.020	"	1.25		96.8	70-115	0.840	20	
Trichloroethene	1.15	0.020	"	1.25		92.0	68-142	8.44	20	
Trichlorofluoromethane	1.51	0.020	"	1.25		121	62-133	13.2	20	
Vinyl Chloride	1.15	0.020	"	1.25		92.0	66-147	0.874	20	
2urroSateg: ibromofluoromethane	*- - .-*		*"*	*- 0.7*		*44.8*	*%75-07*			
2urroSateg Toluene5d4	*- 0.7*		*"*	*- 0.7*		*- BB*	*%75-07*			
2urroSateg D56romofluorobenzene	*- 0.8*		*"*	*- 0.7*		*- B-*	*%75-07*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2753 Project Manager: Sarah Von Raesfield	**Reported:** 04-Jun-13 13:57

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34E3001 - Volatiles										
Duplicate (34E3001-DUP1)		**Source: 3E43001-02**		Prepared & Analyzed: 05/40/13						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l		ND				50	
1,1,1-Trichloroethane	ND	0.020	"		ND				50	
1,1,2,2-Tetrachloroethane	ND	0.020	"		ND				50	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"		ND				50	
1,1,2-Trichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethene	ND	0.020	"		ND				50	
1,2-Dichloroethane	ND	0.020	"		ND				50	
Benzene	ND	0.020	"		ND				50	
cis-1,2-Dichloroethene	ND	0.020	"		ND				50	
Carbon tetrachloride	ND	0.020	"		ND				50	
Chloroethane	ND	0.020	"		ND				50	
Chloroform	ND	0.020	"		ND				50	
Dichlorodifluoromethane	ND	0.020	"		ND				50	
Ethylbenzene	ND	0.020	"		ND				50	
Methylene Chloride	ND	0.020	"		ND				50	
ortho-Xylene	ND	0.020	"		ND				50	
meta- and para-Xylenes	0.00860	0.020	"		0.0106			20.8	50	J
trans-1,2-Dichloroethene	ND	0.020	"		ND				50	
Tetrachloroethene	ND	0.020	"		ND				50	
Toluene	0.0116	0.020	"		0.0128			9.83	50	J
Trichloroethene	ND	0.020	"		ND				50	
Trichlorofluoromethane	ND	0.020	"		ND				50	
Vinyl Chloride	ND	0.020	"		ND				50	
2urroSateg: ibromofluoromethane	*0.0%*		*"*	*0.7B*		*9-.B*	*%75-07*			
2urroSateg Toluene5d14	*0.3D*		*"*	*0.7B*		*93.7*	*%75-07*			
2urroSateg D56romofluorobenzene	*0.%B*		*"*	*0.7B*		*-B4*	*%75-07*			
2urroSateg 6enzene5d8	*0.B9*		*"*	*0.7B*		*43.4*	*%B5-DB*			
2urroSateg Chloroform5d	*0.04*		*"*	*0.7B*		*9-.B*	*%B5-DB*			
2urroSateg Methylene chloride5d0	*0.04*		*"*	*0.7B*		*9-.3*	*%B5-DB*			

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Notes and Definitions

QR-03	The RPD result for this analyte in the sample exceeded the QC control limits; however, the RPD for other analytes were within the QC control limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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SUMMARY OF INITIAL CALIBRATION

Rerun sample @ 5ppb @ Most.

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:24:09 2013
Response via : Initial Calibration

Calibration Files
1 =K3IC00_1.D 2 =K3IC0_25.D 3 =K07LCS01.D
4 =K3IC1_25.D 5 =K3IC02_5.D 6 =K3IC12_5.D

		Compound	1	2	3	4	5	6	Avg	%RSD	
1)	I	Fluorobenzene (IS)	----------ISTD----------								
2)	S	Dibromofluoromethan	0.311	0.300	0.318	0.319	0.312	0.311	0.312	2.10	
3)	T	(F12) Dichlorodiflu	0.320	0.284	0.302	0.292	0.321	0.321	0.307	5.36	
4)	P	Chloromethane	0.422	0.302	0.293	0.219	0.221	0.212	0.278	29.02	Linear
5)	CM	Vinyl Chloride	0.276	0.224	0.211	0.207	0.207	0.199	0.221	12.88	
6)	T	Bromomethane	0.338	0.225	0.179	0.162	0.150	0.139	0.199	37.55	Linear
7)	T	Chloroethane	0.030	0.106	0.066	0.102	0.098	0.089	0.082	35.53	Quadratic
8)	T	(F11) Trichlorofluo	0.379	0.365	0.327	0.337	0.323	0.326	0.343	6.87	
9)	T	(F113) 1,1,2-Trichl	0.291	0.221	0.227	0.267	0.239	0.229	0.246	11.15	
10)	CM	1,1-Dichloroethene	0.277	0.287	0.322	0.307	0.291	0.286	0.295	5.61	
11)	T	Acetone	0.267	0.136	0.115	0.061	0.051	0.016	0.108	82.94	Quadratic
12)	M	(IPA) Leak Check Co	0.012	0.022	0.014	0.013	0.014	0.016	0.015	27.59	
13)	T	Carbon disulfide	1.178	1.037	1.080	1.042	0.958	0.941	1.039	8.28	
14)	T	Methylene Chloride	0.418	0.313	0.349	0.339	0.327	0.314	0.343	11.47	
15)		(TBA) tert-Butanol	0.022	0.019	0.027	0.022	0.018	0.020	0.021	16.39	
16)	TM	(MTBE) Methyl-t-but	0.789	0.678	0.760	0.729	0.655	0.638	0.708	8.56	
17)	T	trans-1,2-Dichloroe	0.331	0.360	0.342	0.357	0.310	0.318	0.336	6.07	
18)	PM	1,1-Dichloroethane	0.582	0.580	0.586	0.585	0.521	0.518	0.562	5.90	
19)	T	cis-1,2-Dichloroeth	0.442	0.415	0.416	0.387	0.339	0.345	0.390	10.66	
20)	T	2,2-Dichloropropane	0.561	0.489	0.520	0.497	0.440	0.435	0.490	9.80	
21)	T	(MEK) 2-Butanone	0.036	0.041	0.042	0.021	0.440	0.435	0.035	26.97	Not in use.
22)	T	(DIPE) Diisopropyl	1.055	1.006	1.006	1.025	0.901	0.867	0.977	7.64	
23)	T	Bromochloromethane	0.110	0.155	0.185	0.189	0.182	0.184	0.167	18.39	
24)	CM	Chloroform	0.723	0.654	0.684	0.676	0.594	0.598	0.655	7.70	
25)	T	(ETBE) 2-ethoxy 2-m	1.034	0.874	0.941	0.927	0.821	0.823	0.903	9.00	
26)	T	1,1,1-Trichloroetha	0.516	0.540	0.535	0.523	0.496	0.488	0.517	4.07	
27)	T	(TAME) tert-Amyl me	1.000	0.749	0.821	0.764	0.701	0.680	0.786	14.75	
28)	S	1,2-Dichloroethane-	0.309	0.278	0.303	0.299	0.296	0.293	0.296	3.50	
29)	T	1,1-Dichloropropene	0.547	0.492	0.502	0.489	0.439	0.427	0.482	9.13	
30)	T	Carbon Tetrachlorid	0.401	0.388	0.449	0.460	0.412	0.416	0.421	6.66	
31)	M	Benzene	1.374	1.155	1.267	1.217	1.042	1.008	1.177	11.75	
32)	M	1,2-Dichloroethane	0.501	0.382	0.445	0.419	0.385	0.365	0.416	12.20	
33)	M	Trichloroethene	0.480	0.355	0.386	0.399	0.336	0.324	0.380	14.87	
34)	C	1,2-Dichloropropane	0.298	0.297	0.277	0.290	0.264	0.258	0.281	6.17	
35)	T	Dibromomethane	0.207	0.209	0.227	0.244	0.215	0.216	0.220	6.33	
36)	T	Bromodichloromethan	0.459	0.407	0.479	0.446	0.428	0.433	0.442	5.69	
37)	T	cis-1,3-Dichloropro	0.508	0.451	0.526	0.493	0.447	0.467	0.482	6.63	
38)	I	Chlorobenzene-d5 (IS)	----------ISTD----------								
39)	S	Toluene-d8 (SU3)	1.209	1.139	1.193	1.149	1.157	1.149	1.166	2.42	
40)	T	(MIBK) 4-Methyl-2-P	0.545	0.324	0.388	0.078	0.072	0.088	0.249	79.95	Not in use.
41)	CM	Toluene	2.231	1.790	1.660	1.584	1.518	1.441	1.704	16.71	

42)	T	trans-1,3-Dichlorop	0.601	0.493	0.586	0.607	0.528	0.560	0.563	7.97	
43)	T	1,1,2-Trichloroetha	0.310	0.285	0.355	0.328	0.286	0.281	0.308	9.58	
44)	M	Tetrachloroethene	0.462	0.392	0.677	0.635	0.590	0.281	0.551	21.81	LINEAR
45)	T	1,3-Dichloropropane	0.710	0.578	0.592	0.569	0.532	0.529	0.585	11.33	
46)	T	2-Hexanone	0.333	0.186	0.340	0.266	0.333	0.182	0.273	27.20	
47)	T	Dibromochloromethan	0.426	0.363	0.496	0.458	0.432	0.459	0.439	10.18	
48)	T	1,2-Dibromoethane	0.412	0.355	0.430	0.402	0.394	0.396	0.398	6.27	
49)	PM	Chlorobenzene	1.366	1.154	1.110	1.134	1.086	1.043	1.149	9.84	
50)	T	1,1,1,2-Tetrachloro	0.449	0.384	0.437	0.407	0.388	0.387	0.409	6.91	
51)	CM	Ethylbenzene	2.333	2.080	1.968	1.851	1.736	1.654	1.937	12.77	
52)	TM	m,p-Xylenes	0.809	0.711	0.727	0.669	0.615	0.602	0.689	11.20	
53)	TM	o-Xylene	0.867	0.664	0.674	0.671	0.615	0.594	0.681	14.25	
54)	T	Styrene	1.563	1.015	1.078	1.049	0.973	0.934	1.102	21.01	LINEAR
55)	P	Bromoform	0.237	0.199	0.286	0.259	0.238	0.276	0.249	12.69	
56)	T	Isopropylbenzene	2.188	1.855	1.900	1.811	1.764	1.674	1.865	9.44	
57)	T	1,2,3-Trichloroprop	0.505	0.491	0.593	0.516	0.480	0.472	0.509	8.58	
58)	S	4-Bromofluorobenzen	0.518	0.507	0.527	0.511	0.510	0.495	0.511	2.08	
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------								
60)	P	1,1,2,2-Tetrachloro	1.020	0.822	1.013	0.870	0.774	0.905	0.901	11.13	
61)	T	Bromobenzene	1.079	1.003	1.043	0.946	0.914	0.907	0.982	7.20	
62)	T	n-Propylbenzene	6.721	5.112	5.219	4.601	4.392	4.279	5.054	17.82	
63)	T	2-Chlorotoluene	3.644	2.948	3.362	3.044	2.868	2.805	3.112	10.48	
64)	T	1,3,5-Trimethylbenz	3.612	3.208	3.247	3.017	2.832	2.775	3.115	9.93	
65)	T	4-Chlorotoluene	3.315	2.950	2.942	2.812	2.597	2.623	2.873	9.19	
66)	T	tert-Butylbenzene	2.817	2.666	3.007	2.633	2.430	2.371	2.654	8.96	
67)	T	1,2,4-Trimethylbenz	3.774	3.331	3.421	3.050	2.968	2.953	3.250	9.91	
68)	T	sec-Butylbenzene	4.837	3.956	4.522	4.187	3.865	3.852	4.203	9.54	
69)	T	p-Isopropyltoluene	3.974	3.475	3.582	3.347	3.061	3.060	3.417	10.13	
70)	T	1,3-Dichlorobenzene	2.120	1.740	1.888	1.871	1.734	1.744	1.850	8.06	
71)	T	1,4-Dichlorobenzene	2.120	1.740	1.974	1.864	1.658	1.729	1.847	9.43	
72)	T	n-Butylbenzene	4.391	3.645	3.644	3.397	3.264	3.192	3.589	12.14	
73)	T	1,2-Dichlorobenzene	1.716	1.534	1.764	1.657	1.614	1.583	1.645	5.20	
74)	T	1,2-Dibromo-3-chlor	0.082	0.104	0.111	0.148	0.133	0.146	0.121	21.61	LINEAR
75)	T	1,2,4-Trichlorobenz	1.184	1.091	1.244	1.074	1.050	1.044	1.115	7.28	
76)	T	Hexachlorobutadiene	0.297	0.477	0.596	0.481	0.499	0.507	0.476	20.56	LINEAR
77)	T	Naphthalene	2.690	2.294	3.052	2.312	2.176	2.294	2.470	13.55	
78)	T	Hexachloroethane	0.306	0.301	0.391	0.362	0.374	0.435	0.361	14.24	
79)	T	1,2,3-Trichlorobenz	1.346	0.926	1.173	0.993	0.940	0.968	1.058	15.82	

(#) = Out of Range

MW111313.M Wed Nov 13 19:25:18 2013

CONTINUING CALIBRATION VERIFICATION

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30CCV01.D Vial: 9
Acq On : 30 May 2014 6:20 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 7:03 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.31	96	1580949	12.50 ug/L	0.02
38) Chlorobenzene-d5 (IS)	13.93	117	1138816	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.52	152	571082	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.45	113	450247	11.42 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.36%		
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	457427	12.21 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.68%		
39) Toluene-d8 (SU3)	12.22	98	1324474	12.47 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 99.76%		
58) 4-Bromofluorobenzene (SU4)	15.23	95	606379	13.02 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 104.16%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	56999	1.47 ug/L	98
4) Chloromethane	4.52	50	39223	1.36 ug/L	41
5) Vinyl Chloride	4.61	62	37659	1.35 ug/L	80
6) Bromomethane	5.14	96	26034	1.32 ug/L	95
7) Chloroethane	5.29	64	17452	1.41 ug/L	99
8) (F11) Trichlorofluorometha	5.68	101	62656	1.44 ug/L	89
9) (F113) 1,1,2-Trichloro-tri	6.38	151	39033	1.26 ug/L	93
10) 1,1-Dichloroethene	6.46	96	51068	1.37 ug/L	85
11) Acetone	6.47	58	52030	-12.50 ug/L	94
12) (IPA) Leak Check Compound	6.54	45	110129	57.97 ug/L	95
13) Carbon disulfide	6.87	76	182684	1.39 ug/L	97
14) Methylene Chloride	7.14	84	59333	1.37 ug/L #	9
15) (TBA) tert-Butanol	7.11	59	4947	1.83 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.42	73	93080	1.04 ug/L	97
17) trans-1,2-Dichloroethene	7.49	96	52931	1.24 ug/L	93
18) 1,1-Dichloroethane	8.09	63	73113	1.03 ug/L	99
19) cis-1,2-Dichloroethene	8.85	96	59677	1.21 ug/L	90
20) 2,2-Dichloropropane	8.85	77	273	0.00 ug/L #	1
21) (MEK) 2-Butanone	8.82	72	10248	2.31 ug/L #	69
22) (DIPE) Diisopropyl Ether	8.03	45	158818	1.29 ug/L	97
23) Bromochloromethane	9.18	128	23477	1.11 ug/L #	79
24) Chloroform	9.23	83	93729	1.13 ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30CCV01.D Vial: 9
Acq On : 30 May 2014 6:20 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 7:03 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	107299	0.94 ug/L #	99
26) 1,1,1-Trichloroethane	9.51	97	67924	1.04 ug/L	96
27) (TAME) tert-Amyl methyl et	10.01	73	99362	1.00 ug/L	93
29) 1,1-Dichloropropene	9.71	75	69307	1.14 ug/L	97
30) Carbon Tetrachloride	13.91	117	60476	1.14 ug/L	99
31) Benzene	9.99	78	192220	1.29 ug/L	93
32) 1,2-Dichloroethane	10.00	62	63843	1.21 ug/L	94
33) Trichloroethene	10.76	130	55214	1.15 ug/L	94
34) 1,2-Dichloropropane	11.06	63	44004	1.24 ug/L #	72
35) Dibromomethane	11.23	93	36382	1.31 ug/L	99
36) Bromodichloromethane	11.36	83	57941	1.04 ug/L	97
37) cis-1,3-Dichloropropene	11.88	75	60389	0.99 ug/L	93
40) (MIBK) 4-Methyl-2-Pentanon	12.13	43	23418	1.03 ug/L #	100
41) Toluene	12.30	91	185834	1.20 ug/L	98
42) trans-1,3-Dichloropropene	12.52	75	46517	0.91 ug/L	64
43) 1,1,2-Trichloroethane	12.77	83	40313	1.44 ug/L	91
44) Tetrachloroethene	12.95	164	59762	1.10 ug/L	93
45) 1,3-Dichloropropane	12.98	76	70575	1.32 ug/L	99
46) 2-Hexanone	12.99	43	65626	2.63 ug/L #	99
47) Dibromochloromethane	13.26	129	51762	1.29 ug/L #	97
48) 1,2-Dibromoethane	13.44	107	55994	1.54 ug/L	98
49) Chlorobenzene	13.96	112	132368	1.26 ug/L	97
50) 1,1,1,2-Tetrachloroethane	14.03	131	43566	1.17 ug/L	94
51) Ethylbenzene	14.03	91	222323	1.26 ug/L	100
52) m,p-Xylenes	14.16	106	170142	2.71 ug/L	93
53) o-Xylene	14.62	106	83355	1.34 ug/L	97
54) Styrene	14.64	104	135365	1.51 ug/L	96
55) Bromoform	14.92	173	32119	1.41 ug/L	91
56) Isopropylbenzene	15.01	105	213356	1.26 ug/L	99
57) 1,2,3-Trichloropropane	15.43	75	79768	1.72 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	76260	1.85 ug/L	97
61) Bromobenzene	15.44	156	57434	1.28 ug/L	96
62) n-Propylbenzene	15.47	91	273101	1.18 ug/L	99
63) 2-Chlorotoluene	15.62	91	178121	1.25 ug/L	100
64) 1,3,5-Trimethylbenzene	15.64	105	186198	1.31 ug/L	99
65) 4-Chlorotoluene	15.73	91	171261	1.30 ug/L	98
66) tert-Butylbenzene	16.03	119	137344	1.13 ug/L	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30CCV01.D Vial: 9
Acq On : 30 May 2014 6:20 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 7:03 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

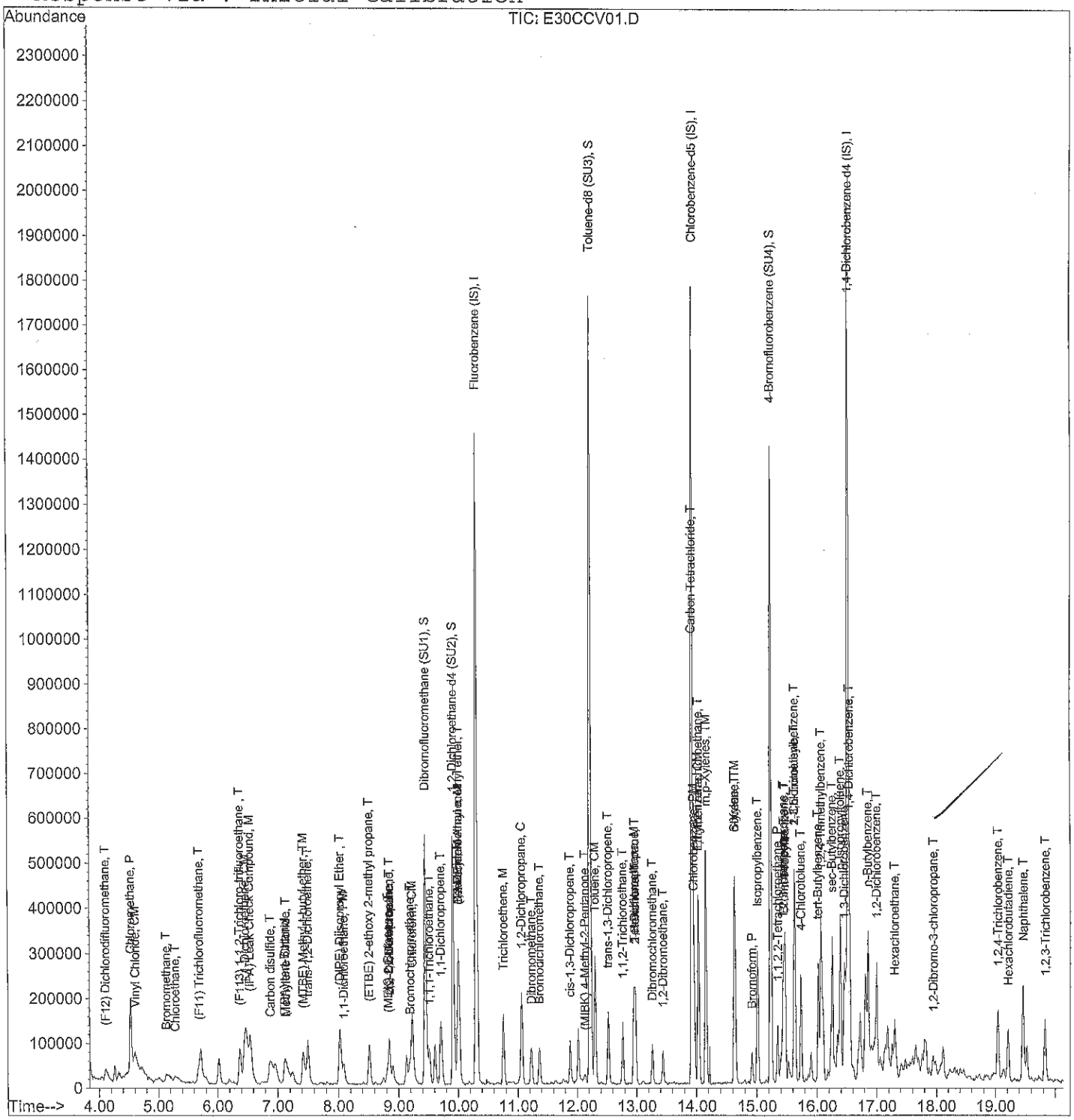
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.07	105	221947	1.49 ug/L #	81
68) sec-Butylbenzene	16.25	105	235325	1.23 ug/L	99
69) p-Isopropyltoluene	16.39	119	224553	1.44 ug/L	94
70) 1,3-Dichlorobenzene	16.46	146	108532	1.28 ug/L	99
71) 1,4-Dichlorobenzene	16.55	146	109870	1.30 ug/L	96
72) n-Butylbenzene	16.85	91	216876	1.32 ug/L	95
73) 1,2-Dichlorobenzene	17.00	146	101033	1.34 ug/L	99
74) 1,2-Dibromo-3-chloropropan	17.94	75	12459	1.94 ug/L #	67
75) 1,2,4-Trichlorobenzene	19.04	180	65372	1.28 ug/L	99
76) Hexachlorobutadiene	19.21	225	29065	1.27 ug/L	90
77) Naphthalene	19.46	128	249355	2.21 ug/L	100
78) Hexachloroethane	17.30	201	20153	1.22 ug/L #	85
79) 1,2,3-Trichlorobenzene	19.83	180	61215	1.27 ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30CCV01.D Vial: 9
Acq On : 30 May 2014 6:20 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 7:03 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30CCV01.D Vial: 9
Acq On : 30 May 2014 6:20 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene (IS)	12.500	12.500	0.0	119	0.02
2	S	Dibromofluoromethane (SU1)	12.500	11.418	8.7	106	0.02
3	T	(F12) Dichlorodifluorometha	1.250	1.470	-17.6	147	0.03
4	P	Chloromethane	1.250	1.358	-8.6	135	0.13
5	CM	Vinyl Chloride	1.250	1.349	-7.9	137	0.05
6	T	Bromomethane	1.250	1.319	-5.5	121	0.04
7	T	Chloroethane	1.250	1.412	-13.0	129	0.05
8	T	(F11) Trichlorofluoromethan	1.250	1.444	-15.5	140	0.07
9	T	(F113) 1,1,2-Trichloro-trif	1.250	1.256	-0.5	110	0.06
10	CM	1,1-Dichloroethene	1.250	1.369	-9.5	125	0.06
11	T	Acetone	1.250	-12.500	1100.0#	640	0.02
12	M	(IPA) Leak Check Compound	62.500	57.971	7.2	119	0.00
13	T	Carbon disulfide	1.250	1.390	-11.2	132	0.06
14	T	Methylene Chloride	1.250	1.367	-9.4	132	0.06
15		(TBA) tert-Butanol	12.500	1.835	85.3#	17	0.00
16	TM	(MTBE) Methyl-t-butyl ether	2.500	1.039	58.4#	48	0.02
17	T	trans-1,2-Dichloroethene	1.250	1.244	0.5	112	0.03
18	PM	1,1-Dichloroethane	1.250	1.029	17.7	94	0.03
19	T	cis-1,2-Dichloroethene	1.250	1.208	3.4	116	0.03
20	T	2,2-Dichloropropane	1.250	0.004	99.7#	0	0.02
21	T	(MEK) 2-Butanone	1.250	2.306	-84.5#	188	0.03
22	T	(DIPE) Diisopropyl Ether	1.250	1.286	-2.9	117	0.02
23	T	Bromochloromethane	1.250	1.109	11.3	94	0.03
24	CM	Chloroform	1.250	1.132	9.4	104	0.02
25	T	(ETBE) 2-ethoxy 2-methyl pr	1.250	0.939	24.9	87	0.00
26	T	1,1,1-Trichloroethane	1.250	1.040	16.8	98	0.02
27	T	(TAME) tert-Amyl methyl eth	1.250	1.000	20.0	98	0.00
28	S	1,2-Dichloroethane-d4 (SU2)	12.500	12.205	2.4	115	0.02
29	T	1,1-Dichloropropene	1.250	1.136	9.1	107	0.02
30	T	Carbon Tetrachloride	1.250	1.136	9.1	99	4.20#
31	M	Benzene	1.250	1.291	-3.3	119	0.02
32	M	1,2-Dichloroethane	1.250	1.213	3.0	115	0.02
33	M	Trichloroethene	1.250	1.149	8.1	104	0.02
34	C	1,2-Dichloropropane	1.250	1.239	0.9	114	0.00
35	T	Dibromomethane	1.250	1.309	-4.7	112	0.02
36	T	Bromodichloromethane	1.250	1.036	17.1	98	0.02
37	T	cis-1,3-Dichloropropene	1.250	0.991	20.7	92	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30CCV01.D Vial: 9
Acq On : 30 May 2014 6:20 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
38	I	Chlorobenzene-d5 (IS)	12.500	12.500	0.0	110	0.00
39	S	Toluene-d8 (SU3)	12.500	12.469	0.2	111	0.00
40	T	(MIBK) 4-Methyl-2-Pentanone	1.250	1.030	17.6	289	0.02
41	CM	Toluene	1.250	1.197	4.2	113	0.02
42	T	trans-1,3-Dichloropropene	1.250	0.908	27.4	74	0.00
43	T	1,1,2-Trichloroethane	1.250	1.439	-15.1	119	0.02
44	M	Tetrachloroethene	1.250	1.096	12.3	91	0.00
45	T	1,3-Dichloropropane	1.250	1.324	-5.9	120	0.00
46	T	2-Hexanone	1.250	2.634	-110.7#	238	0.02
47	T	Dibromochloromethane	1.250	1.294	-3.5	109	0.00
48	T	1,2-Dibromoethane	1.250	1.543	-23.4	135	0.00
49	PM	Chlorobenzene	1.250	1.265	-1.2	113	0.00
50	T	1,1,1,2-Tetrachloroethane	1.250	1.170	6.4	104	0.00
51	CM	Ethylbenzene	1.250	1.260	-0.8	116	0.00
52	TM	m,p-Xylenes	2.500	2.712	-8.5	123	0.00
53	TM	o-Xylene	1.250	1.344	-7.5	120	0.00
54	T	Styrene	1.250	1.511	-20.9	125	0.00
55	P	Bromoform	1.250	1.415	-13.2	120	0.00
56	T	Isopropylbenzene	1.250	1.255	-0.4	114	0.00
57	T	1,2,3-Trichloropropane	1.250	1.719	-37.5#	150	0.00
58	S	4-Bromofluorobenzene (SU4)	12.500	13.019	-4.2	115	0.00
59	I	1,4-Dichlorobenzene-d4 (IS)	12.500	12.500	0.0	114	0.00
60	P	1,1,2,2-Tetrachloroethane	1.250	1.853	-48.2#	175	0.00
61	T	Bromobenzene	1.250	1.280	-2.4	121	0.00
62	T	n-Propylbenzene	1.250	1.183	5.4	118	0.00
63	T	2-Chlorotoluene	1.250	1.253	-0.2	117	0.00
64	T	1,3,5-Trimethylbenzene	1.250	1.308	-4.6	123	0.00
65	T	4-Chlorotoluene	1.250	1.305	-4.4	121	0.00
66	T	tert-Butylbenzene	1.250	1.133	9.4	104	0.00
67	T	1,2,4-Trimethylbenzene	1.250	1.495	-19.6	145	0.00
68	T	sec-Butylbenzene	1.250	1.226	1.9	112	0.00
69	T	p-Isopropyltoluene	1.250	1.439	-15.1	134	0.00
70	T	1,3-Dichlorobenzene	1.250	1.284	-2.7	116	0.00
71	T	1,4-Dichlorobenzene	1.250	1.302	-4.2	117	0.00
72	T	n-Butylbenzene	1.250	1.323	-5.8	127	0.00
73	T	1,2-Dichlorobenzene	1.250	1.345	-7.6	121	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30CCV01.D Vial: 9
Acq On : 30 May 2014 6:20 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
74	T	1,2-Dibromo-3-chloropropane	1.250	1.944	-55.5#	167	0.00
75	T	1,2,4-Trichlorobenzene	1.250	1.284	-2.7	121	0.00
76	T	Hexachlorobutadiene	1.250	1.268	-1.4	120	0.00
77	T	Naphthalene	1.250	2.210	-76.8#	215	0.00
78	T	Hexachloroethane	1.250	1.221	2.3	111	0.00
79	T	1,2,3-Trichlorobenzene	1.250	1.267	-1.4	123	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SUMMARY OF INTERNAL STANDARDS

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\053014L3\E30BFB01.D
Tune Time : 30 May 14 6:06 am

Daily Calibration File : C:\HPCHEM\1\DATA\013014L3\A30CCV01.D

File	Sample	Surrogate Recovery %				Internal Standard Responses		
						(PFB) 1590180	(CLBD 1163370	(1,4- 587649
E3000001.D	3E43001-	92	93	95	106	1463339	1193802	650445
E3000002.D	3E43001-	93	92	97	110	1550819	1252005	689089
E3000003.D	34E3001-	91	92	94	108	1638509	1326871	721605
E3000004.D	3E43001-	94	94	96	110	1575066	1286154	708804
E3000005.D	3E43001-	94	96	96	112	1495954	1233484	698417
E3000006.D	3E43001-	94	97	94	112	1452575	1211623	685597
E3000007.D	3E43001-	92	90	94	109	1576971	1289023	706098
E3000008.D	3E43001-	93	95	91	111	1378002	1166367	644664
E3000009.D	3E43001-	92	94	93	110	1467890	1213356	667526
E3000010.D	3E43001-	95	98	90	109	1340657	1141105	627627
E30BLK01.D	34E3001-	91	94	93	107	1622577	1329092	724181
E30LCS01.D	34E3001-	92	97	101	101	1477084	1081008	551762
E30LCS02.D	34E3001-	89	90	100	101	1547770	1115262	545884

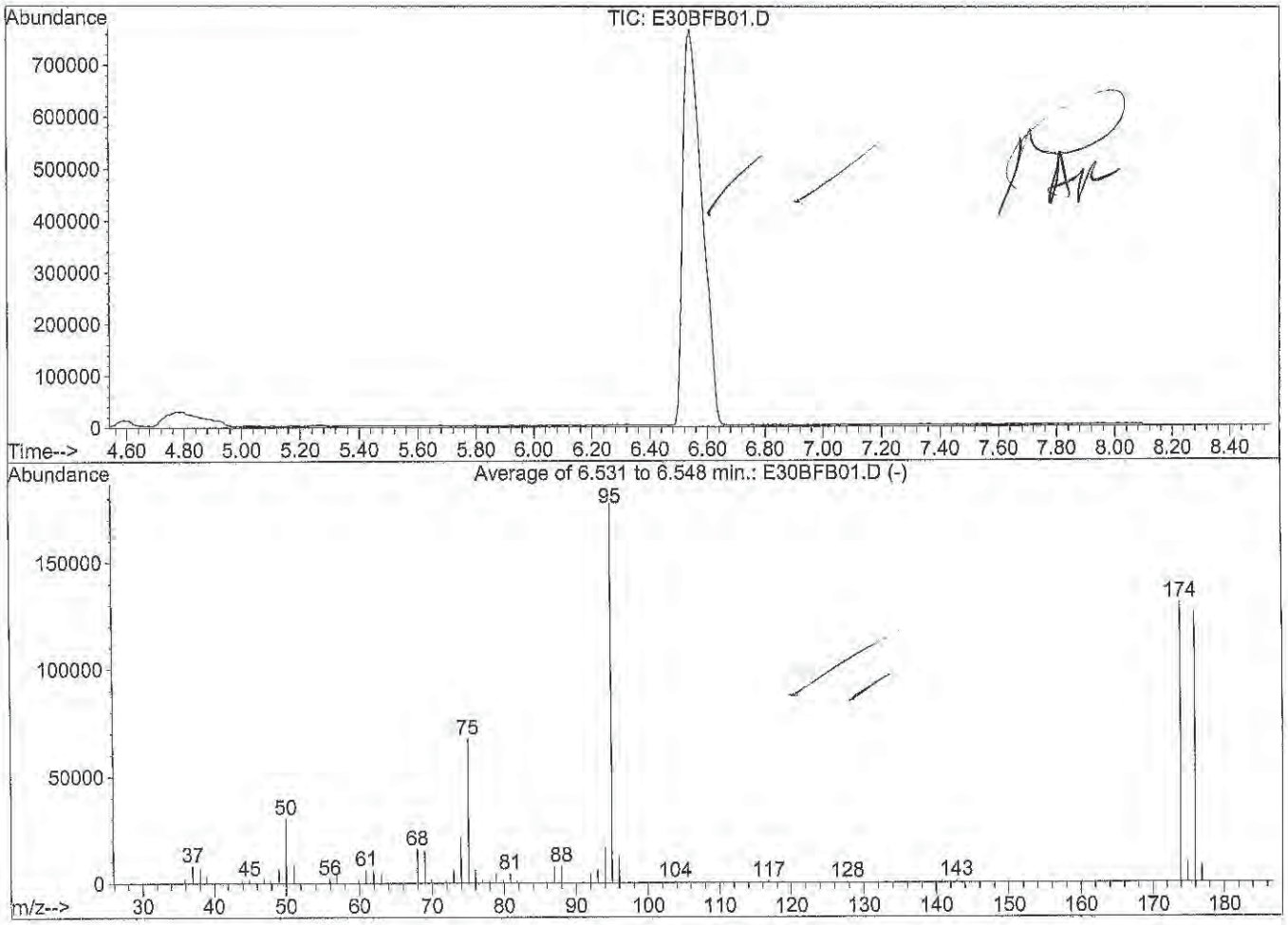
t - fails 12hr time check * - fails criteria

Created: Sun Jun 08 11:47:15 2014 GC
MS Ins

Summary of Instrument Tuning

BFB

Data File : C:\HPCHEM\1\DATA\053014L3\E30BFB01.D Vial: 1
Acq On : 30 May 2014 6:06 am Operator: DN
Sample : 50 ng BFB tune Inst : GC/MS Ins
Misc : 12HRS SYSTEM BFB TUNING Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN



AutoFind: Scans 320, 321, 322; Background Corrected with Scan 312

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	30267	PASS
75	95	30	60	38.0	67488	PASS
95	95	100	100	100.0	177515	PASS
96	95	5	9	6.6	11772	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.7	130805	PASS
175	174	5	9	7.2	9447	PASS
176	174	95	101	96.5	126205	PASS
177	176	5	9	6.4	8123	PASS

E30BFB01.D MW111313.M Fri May 30 06:20:40 2014

INJECTION LOG

Injection Log

Directory: c:\hpchem\1\data\053014l3

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	11	e3000001.d	10.	3E43001-01	100cc Equipment Blank	30 May 14 08:15
2	1	e3000002.d	10.	3E43001-02	100cc SVL-546-SA5D-SV-5.0-6.0	30 May 14 08:44
3	2	e3000003.d	10.	34E3001-DUP1	100cc SVL-546-SA5D-SV-5.0-6.0	30 May 14 09:18
4	3	e3000004.d	10.	3E43001-03	100cc SVL-846-SA5D-SV-5.0-6.0	30 May 14 09:51
5	4	e3000005.d	10.	3E43001-04	100cc SVL-546-SA5D-SV-10.0-11.0	30 May 14 10:24
6	5	e3000006.d	10.	3E43001-05	100cc SVL-546-SA5D-SV-16.0-17.0	30 May 14 10:57
7	6	e3000007.d	10.	3E43001-06	100cc SVL-550-SA5D-SV-5.0-6.0	30 May 14 11:29
8	7	e3000008.d	10.	3E43001-07	100cc SVL-550-SA5D-SV-11.0-12.0	30 May 14 12:00
9	8	e3000009.d	10.	3E43001-08	100cc SVL-550-SA5D-SV-17.0-18.0	30 May 14 12:33
10	1	e3000010.d	10.	3E43001-09	100cc FB-053014	30 May 14 13:01
11	1	e30bfb01.d	1.	50 ng BFB tune	12HRS SYSTEM BFB TUNING	30 May 14 06:06
12	11	e30blk01.d	10.	34E3001-BLK1	100cc AMBIENT AIR/H20	30 May 14 07:45
13	9	e30ccv01.d	1.	1.25/2.5/12.5 ug/L 8260B std	20mL 8260 CCV	30 May 14 06:20
14	10	e30lcs01.d	1.	34E3001-BS1	20cc 1.25/2.5/12.5 ug/L LCS	30 May 14 06:49
15	9	e30lcs02.d	1.	34E3001-BSD1	20cc 1.25/2.5/12.5 ug/L LCS	30 May 14 13:30

SAMPLE LOG SHEET

Environmental Support Technologies, Inc.
SOIL GAS - FIELD ANALYSIS
Sample Log Sheet

Date:_05/30/2014_____
Analyst:_____DN_____
Lab ID:_____# 3_____
Batch Number:_34E3001_____
Project Number:_EST2754___

EPA Method:_8260B CHHSLS 0.02 RL GILAN AIR5 PUMP
Initial Calibration:_MW111313.MTH FLOW RATE @ 200mL/min
Cal Std Lot No.:__4D14009_____
LCS Std Lot No.:_4D14008_____ Glass Bulb Bake @
IS/SS Lot No.:___4D14001_____ 130 degree for 30 min

MWH SSFL , CA

File No.	Port No.	Sample Lab No.	Sample ID	Amount	Dilution Factor	Bulb Surr added	Time Sample Loaded	Time Sample Analyzed	Glass Bulb #	PID READING
E430BFB1	1	50uL BFB1	12HRS TUNING	1uL	1x	PASS	@	606		
CCV1	9	1.25/2.5/12.5 CCV1	8260 STARDARD	20mL	1x	605	606	620		
BS1	9	34E3001-BS1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	635	636	649		
BLK1	1	34E3001-BLK1	METHOD BLANK	100cc	1x	730	731	745		
1	2	3E43001-01	EQUIPMENT BLANK	100cc	1x	755	756	815	8	0.0
2	1	3E43001-02	SVL-546-SA5D-SV-5.0-6.0	100cc	1x	746	747	844	2	0.0
3	2	34E3001-DUP1	SVL-546-SA5D-SV-5.0-6.0	100cc	1x	746	747	918	2	0.0
4	3	3E43001-03	SVL-846-SA5D-SV-5.0-6.0	100cc	1x	746	747	951	13	0.0
5	4	3E43001-04	SVL-546-SA5D-SV-10.0-11.0	100cc	1x	819	820	1024	11	0.0
6	5	3E43001-05	SVL-546-SA5D-SV-16.0-17.0	100cc	1x	900	901	1057	9	0.0
7	6	3E43001-06	SVL-550-SA5D-SV-5.0-6.0	100cc	1x	939	940	1129	12	0.0
8	7	3E43001-07	SVL-550-SA5D-SV-11.0-12.0	100cc	1x	1007	1008	1200	7	0.0
9	8	3E43001-08	SVL-550-SA5D-SV-17.0-18.0	100cc	1x	1042	1043	1233	6	0.0
12	4	3E43001-09	FB-052914	100cc	1x	1109	1110	1301	9	0.0
BSD1	9	34E3001-BSD1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	1320	1321	1330		

CASE NARRATIVE

LABORATORY CASE NARRATIVE
(EPA 8260B)

SDG: 34E3001
DATE: May 30, 2014
PROJECT No.: EST2754

Nine (9) Glass Bulb soil vapor samples were analyzed on May 30, 2014, by EPA Method Analysis performed using a gas chromatograph/mass spectrometer (GC/MS).

Sample Preservation and Holding Times

Samples were preserved according to the method recommendation, unless otherwise noted on the chain-of-custody (COC) and /or the sample log sheet. Holding times were met, unless otherwise noted in the report with data qualifiers.

QA/QC Criteria

All quality objective criteria were met, except as noted in the report with data qualifiers.

Samples Analysis

No anomalies were observes during analysis of the samples.

COMMENTS:

Results that fall between the MDL and RL are 'J' flagged.

Adjusted values corrected for significant figure correction (10X) and sample volume (5X).

RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION DUPLICATE SAMPLE

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000003.D Vial: 2
Acq On : 30 May 2014 9:18 am Operator: DN
Sample : 34E3001-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 9:39 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1638509	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1326871	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	721605	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	464855	11.37 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	90.96%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	444266	11.44 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	91.52%	
39) Toluene-d8 (SU3)	12.20	98	1446994	11.69 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	93.52%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	731976	13.49 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	107.92%	

Target Compounds					Qvalue
4) Chloromethane	4.36	50	267	-1.12 ~~ug/L #~~ NSA	41
6) Bromomethane	5.08	96	12776	5.31 ~~ug/L #~~	1
7) Chloroethane	5.24	64	899	1.35 ~~ug/L #~~	32
11) Acetone	6.47	58	7419	6.87 ~~ug/L #~~	93
12) (IPA) Leak Check Compound	6.47	45	155451	789.53 ~~ug/L #~~ NSA	82
13) Carbon disulfide	6.85	76	18490	1.36 ~~ug/L #~~	80
14) Methylene Chloride	7.08	84	6003	1.33 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.90	59	1775	6.35 ~~ug/L #~~	77
24) Chloroform	9.19	83	1887	0.22 ~~ug/L #~~ NSA	1
25) (ETBE) 2-ethoxy 2-methyl p	8.48	59	535	0.05 ~~ug/L #~~	44
29) 1,1-Dichloropropene	9.93	75	404	0.06 ~~ug/L #~~	1
31) Benzene	9.98	78	8814	0.57 ~~ug/L #~~	80
32) 1,2-Dichloroethane	9.93	62	6045	1.11 ~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7511	2.84 ~~ug/L #~~	100
41) Toluene	12.29	91	10481	0.58 ug/L 0.0116	98
46) 2-Hexanone	13.05	43	304	0.10 ~~ug/L #~~	37
51) Ethylbenzene	14.14	91	8060	0.39 ~~ug/L~~ under	94
52) m,p-Xylenes	14.14	106	3150	0.43 ug/L 0.0086	79
53) o-Xylene	14.61	106	513	0.07 ug/L # 0.0014	1
54) Styrene	14.62	104	2355	-0.64 ~~ug/L #~~ NSA	71
56) Isopropylbenzene	15.00	105	303	0.02 ~~ug/L~~ #	55
62) n-Propylbenzene	15.47	91	638	0.02 ~~ug/L~~ #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000003.D Vial: 2
Acq On : 30 May 2014 9:18 am Operator: DN
Sample : 34E3001-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 9:39 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
63) 2-Chlorotoluene	15.47	91	638	0.04	~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	329	0.02	~~ug/L~~ #	31
67) 1,2,4-Trimethylbenzene	16.05	105	2877	0.15	~~ug/L~~ #	84
68) sec-Butylbenzene	16.33	105	905	0.04	~~ug/L~~ #	62
69) p-Isopropyltoluene	16.37	119	1417	0.07	~~ug/L~~ #	52

(#) = qualifier out of range (m) = manual integration

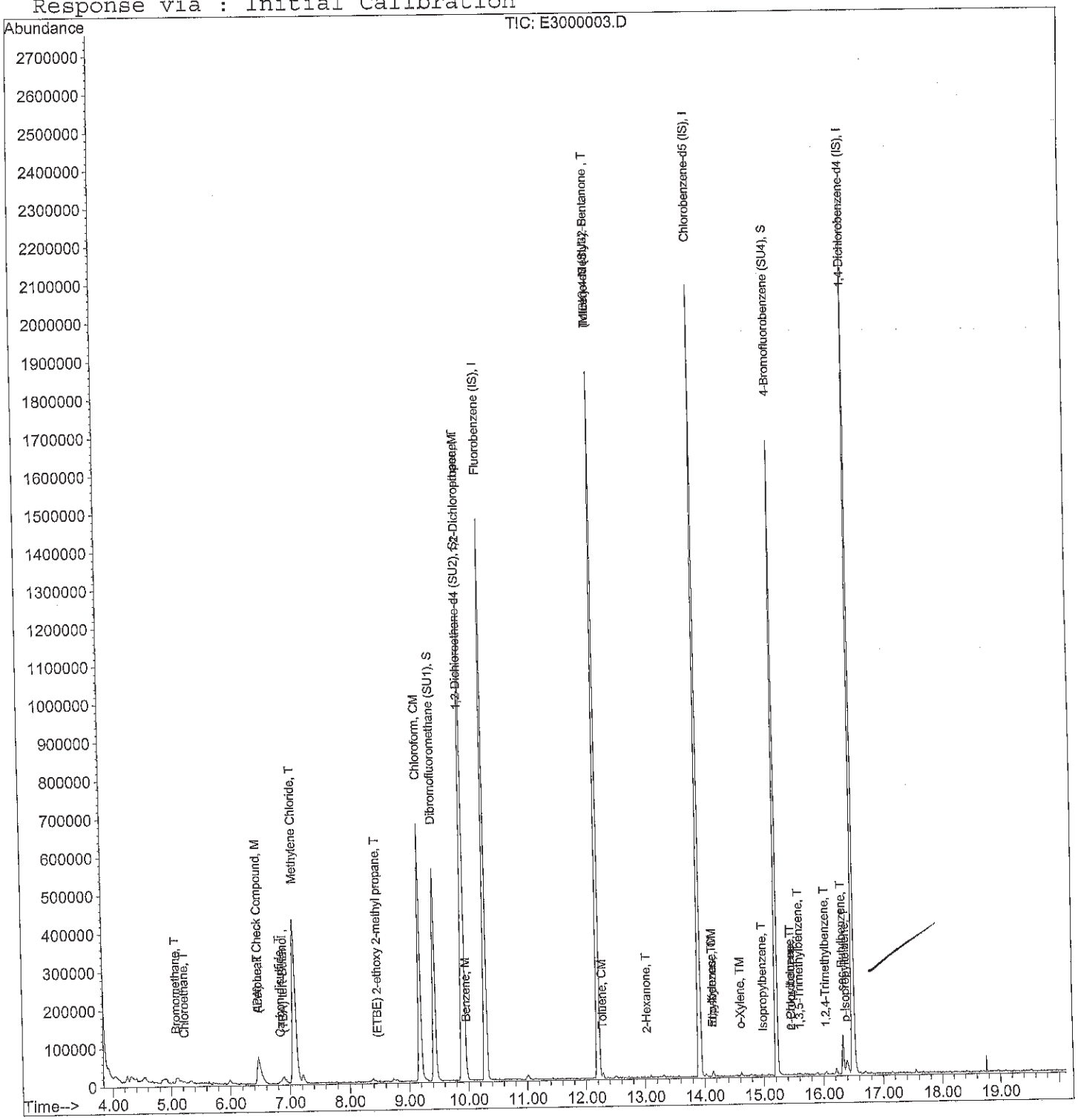
Quantitation Report

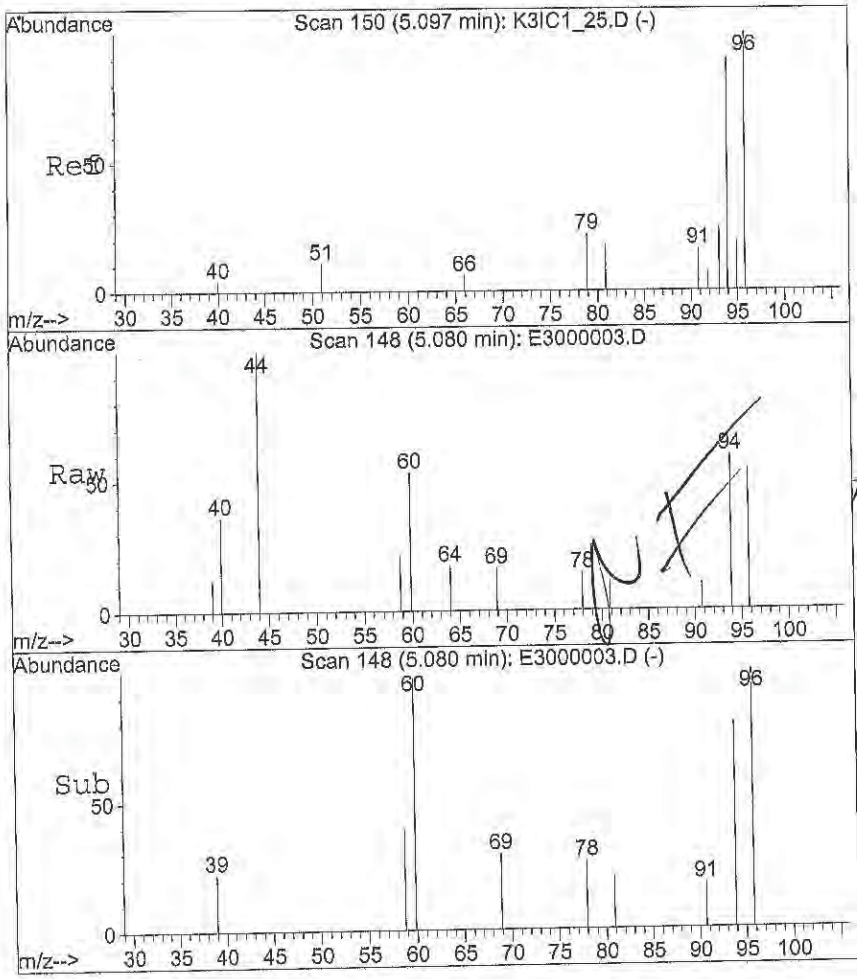
Data File : C:\HPCHEM\1\DATA\053014L3\E3000003.D
Acq On : 30 May 2014 9:18 am
Sample : 34E3001-DUP1
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 9:39 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

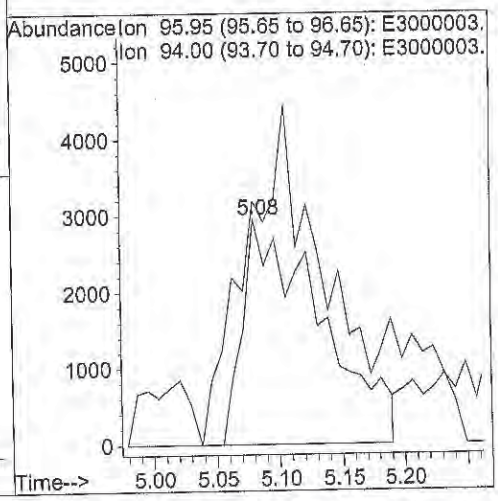


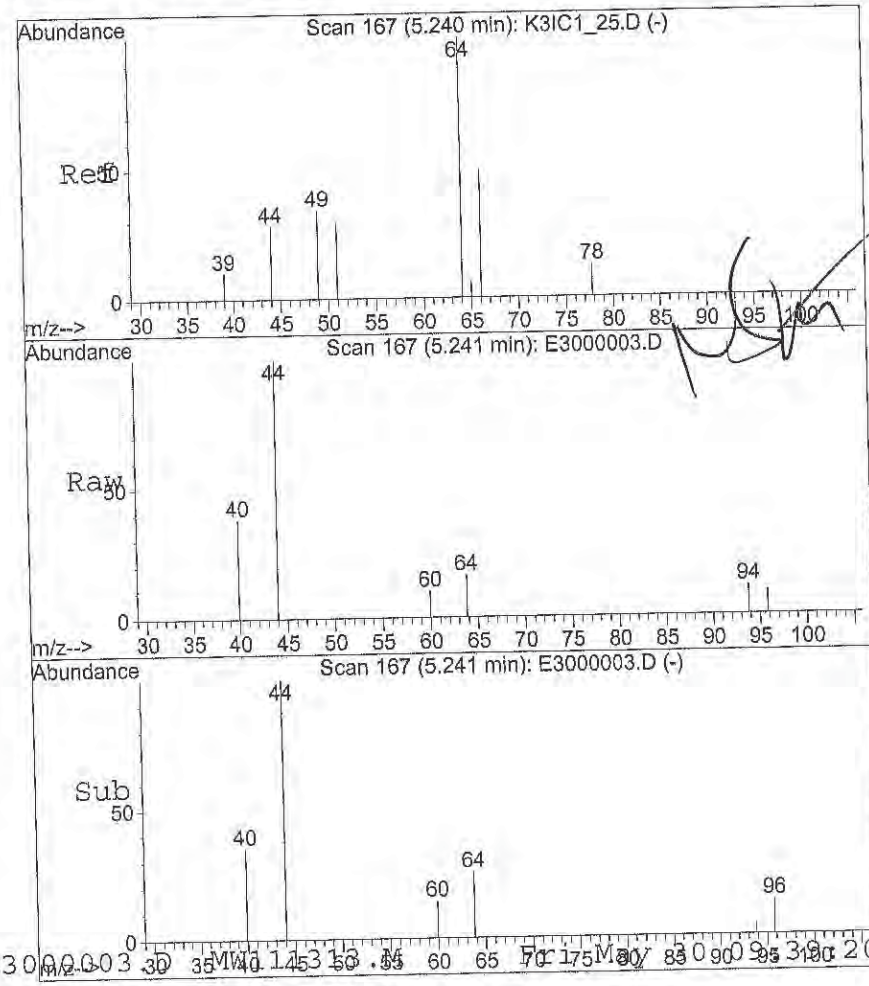


#6
Bromomethane
Concen: 5.31 ug/L
RT: 5.08 min Scan# 148
Delta R.T. -0.02 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 96 Resp: 12776

Ion	Ratio	Lower	Upper
96	100		
94	0.0	101.0	151.4#

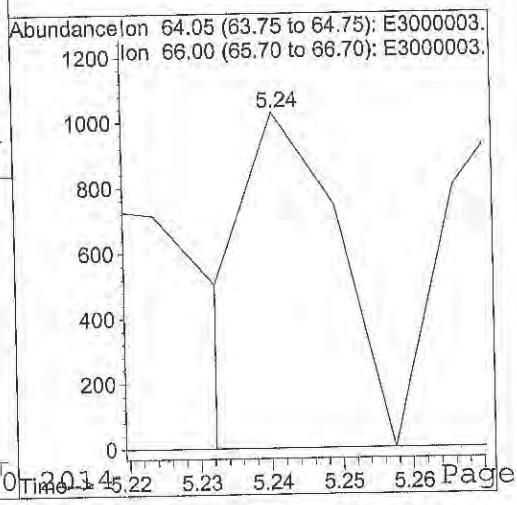


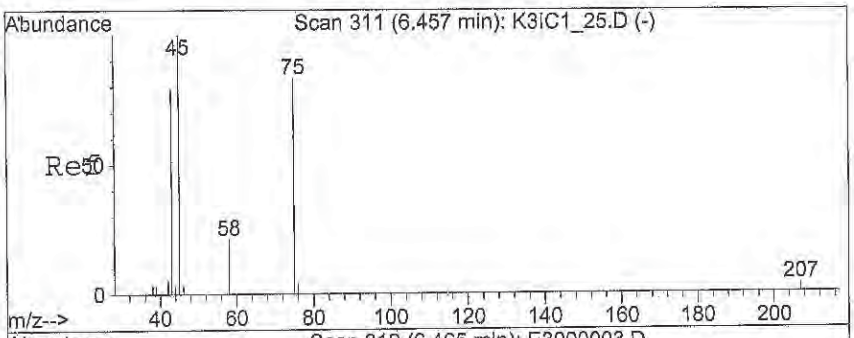


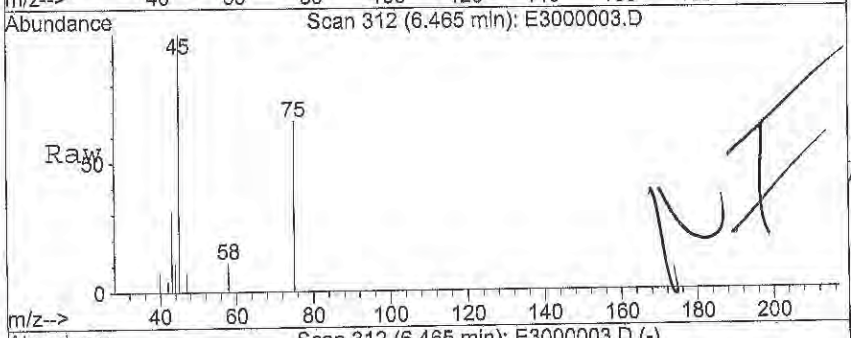
#7
Chloroethane
Concen: 1.35 ug/L
RT: 5.24 min Scan# 167
Delta R.T. 0.00 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

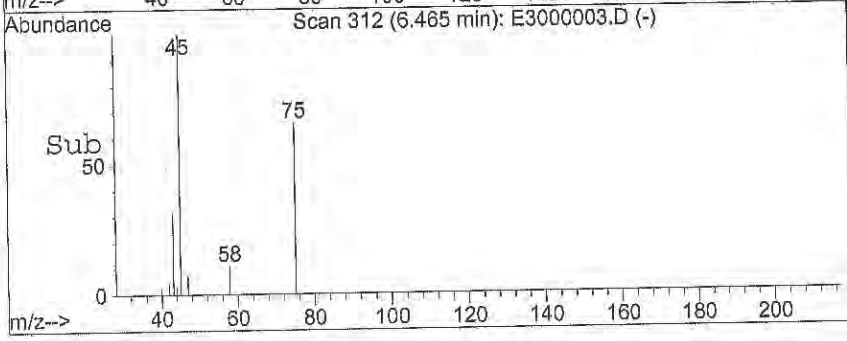
Tgt Ion: 64 Resp: 899

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#





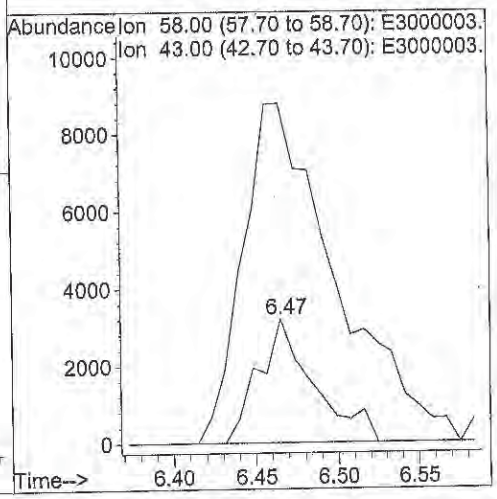


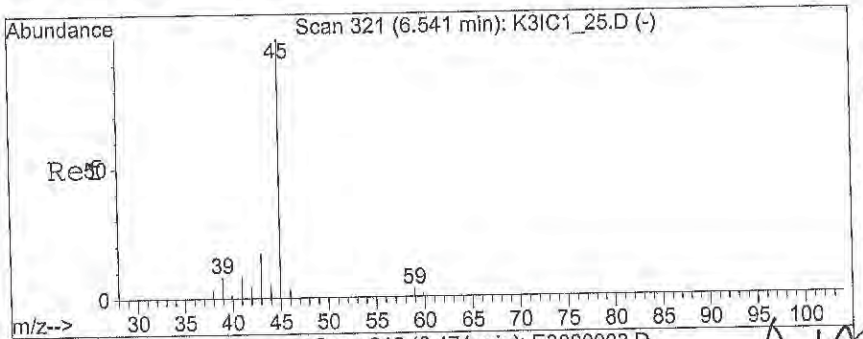


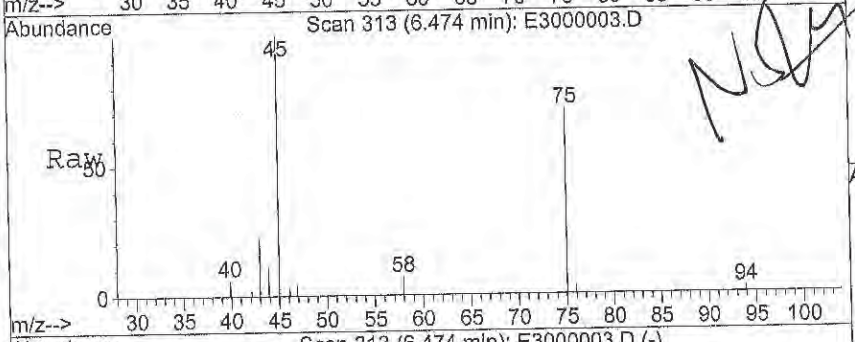
#11
Acetone
Concen: 6.87 ug/L
RT: 6.47 min Scan# 312
Delta R.T. 0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

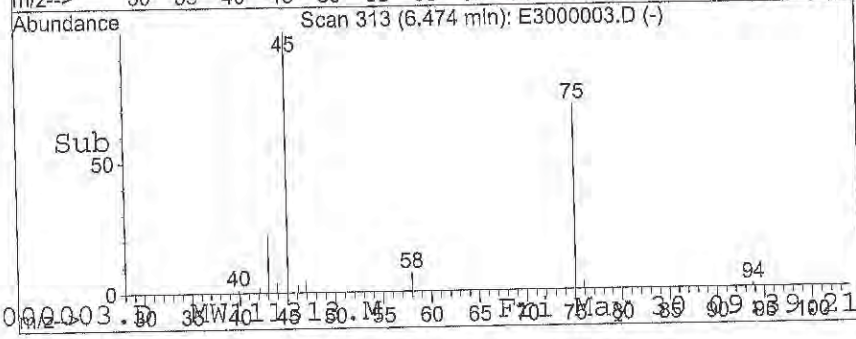
Tgt Ion: 58 Resp: 7419

Ion	Ratio	Lower	Upper
58	100		
43	470.1	360.9	541.3





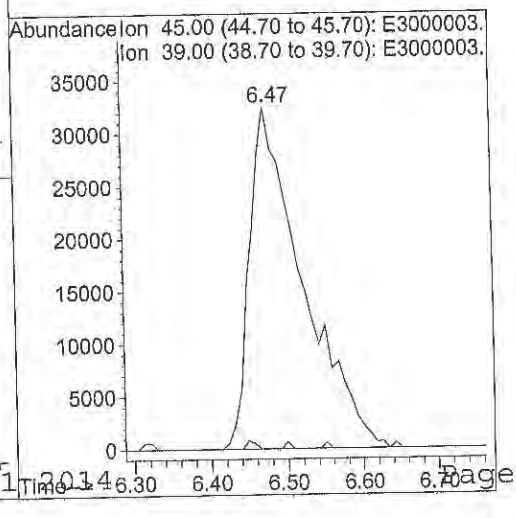


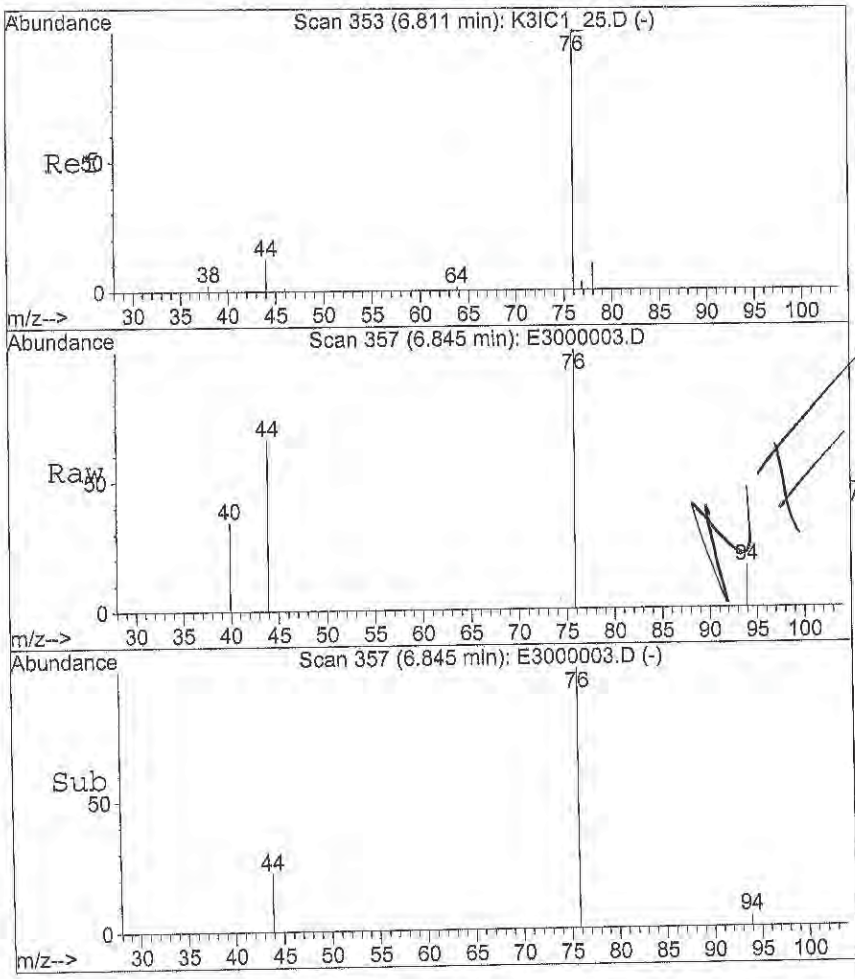


#12
(IPA) Leak Check Compound
Concen: 789.53 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 45 Resp: 155451

Ion	Ratio	Lower	Upper
45	100		
39	0.0	4.9	7.3#

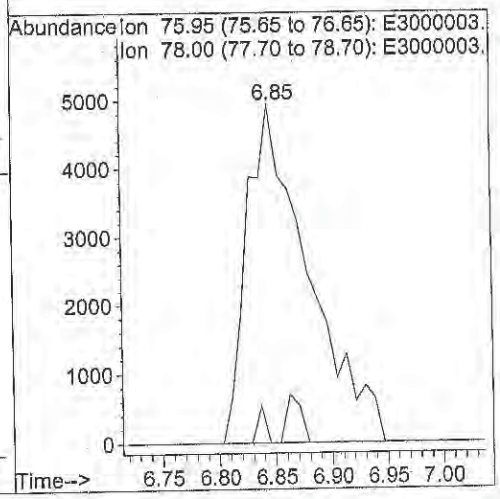


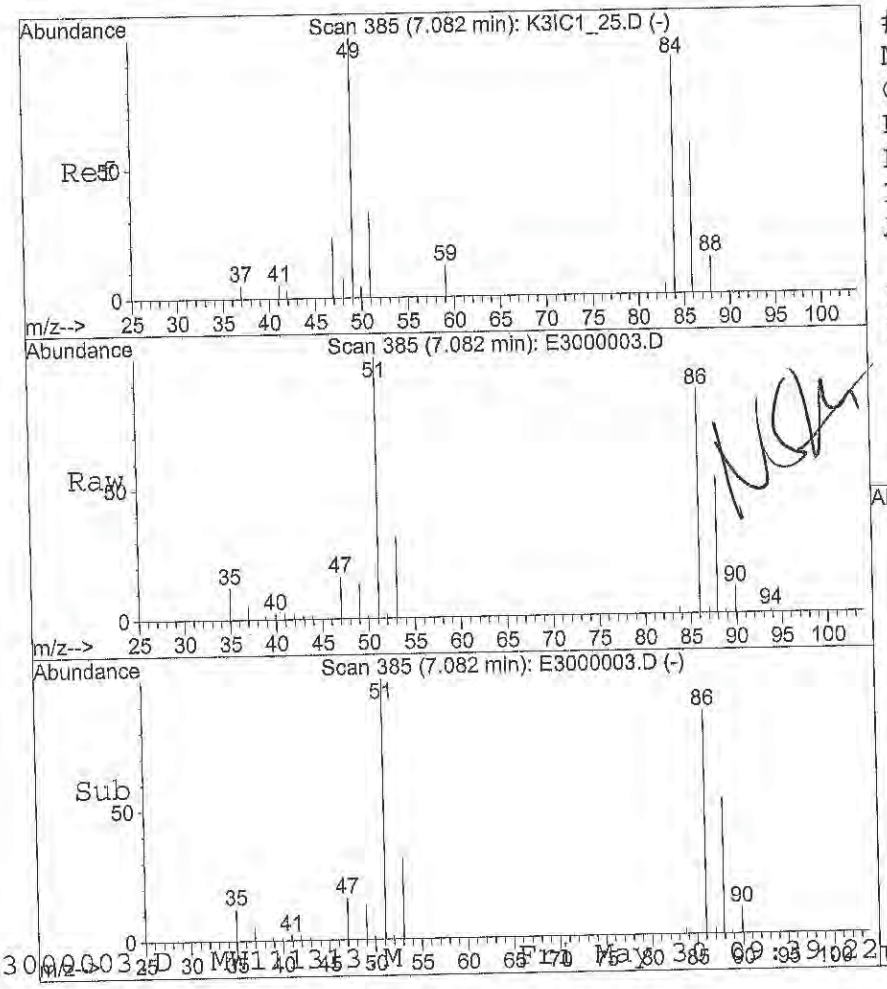


#13
Carbon disulfide
Concen: 1.36 ug/L
RT: 6.85 min Scan# 357
Delta R.T. 0.03 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 76 Resp: 18490

Ion	Ratio	Lower	Upper
76	100		
78	1.5	7.0	10.4#

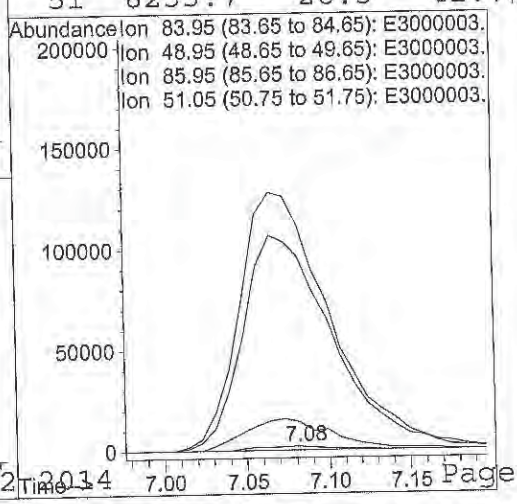


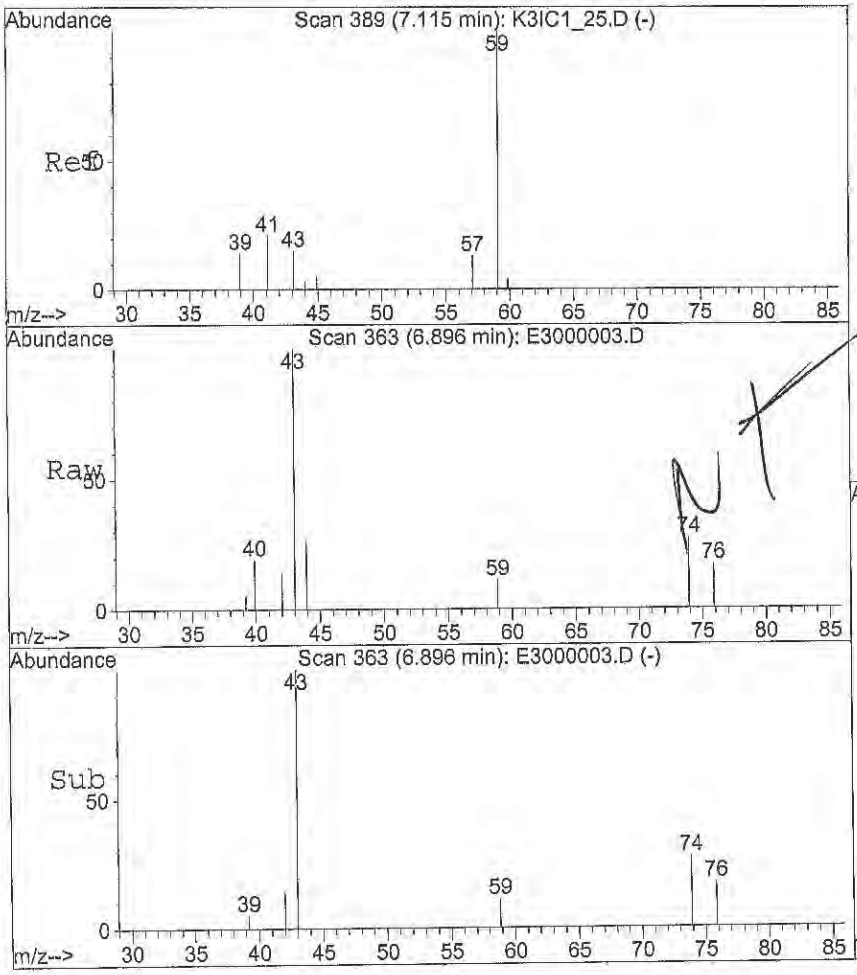


#14
Methylene Chloride
Concen: 1.33 ug/L
RT: 7.08 min Scan# 385
Delta R.T. 0.00 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 84 Resp: 6003

Ion	Ratio	Lower	Upper
84	100		
49	945.3	89.8	134.6#
86	6802.1	51.1	76.7#
51	8233.7	28.5	42.7#

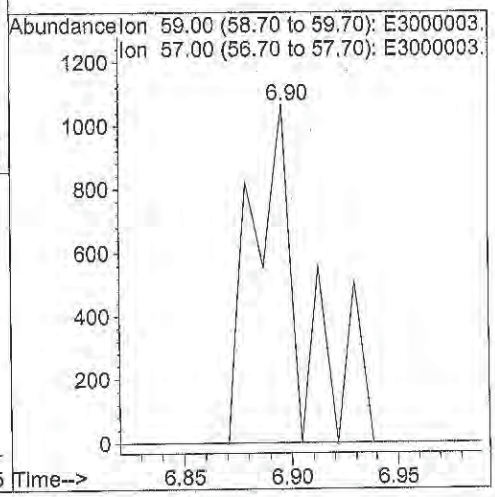


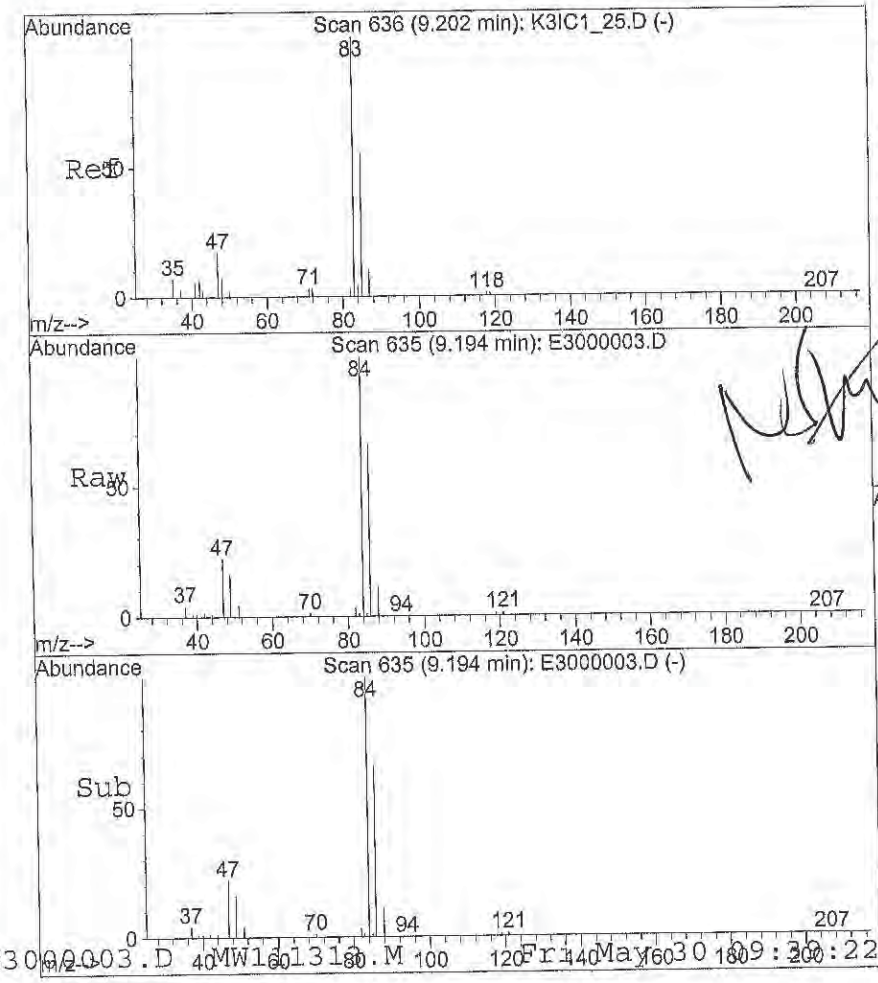


#15
(TBA) tert-Butanol
Concen: 6.35 ug/L
RT: 6.90 min Scan# 363
Delta R.T. -0.22 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 59 Resp: 1775

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

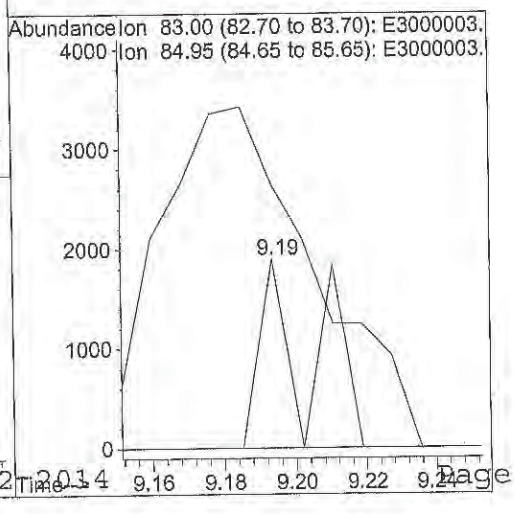


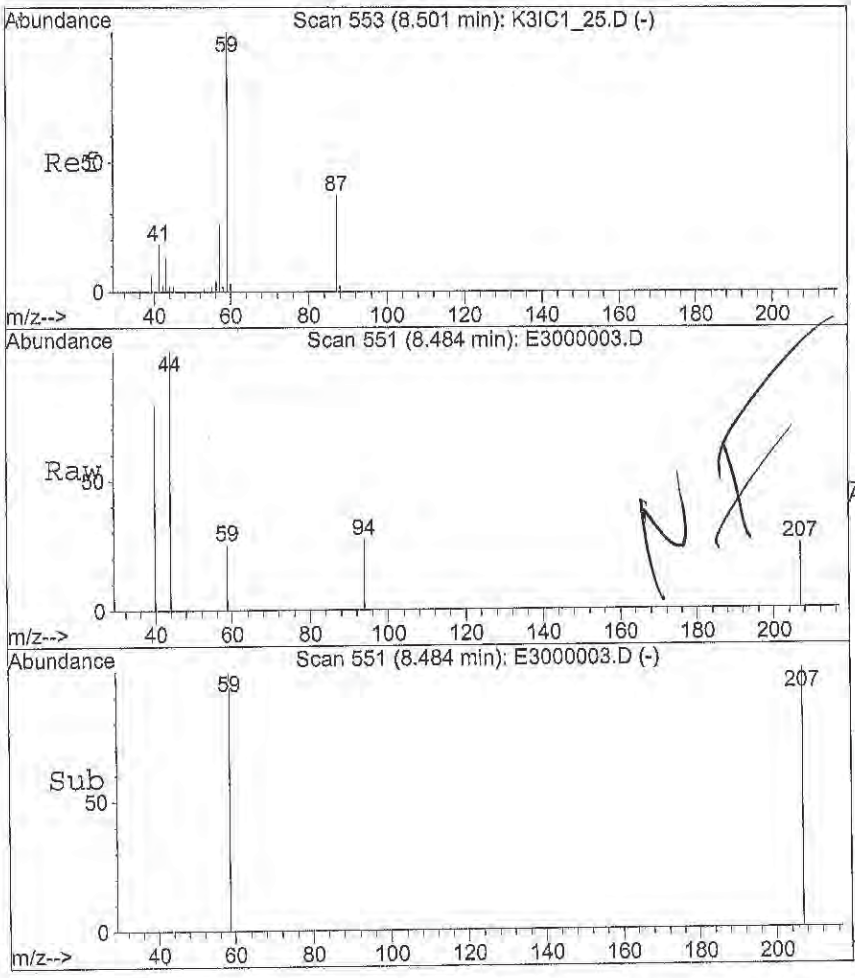


#24
Chloroform
Concen: 0.22 ug/L
RT: 9.19 min Scan# 635
Delta R.T. -0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 83 Resp: 1887

Ion	Ratio	Lower	Upper
83	100		
85	545.4	51.8	77.6#

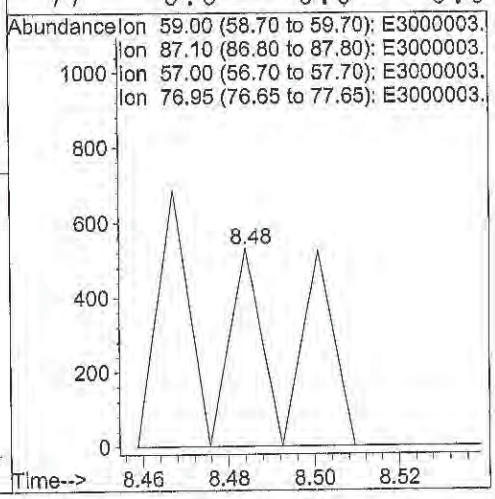


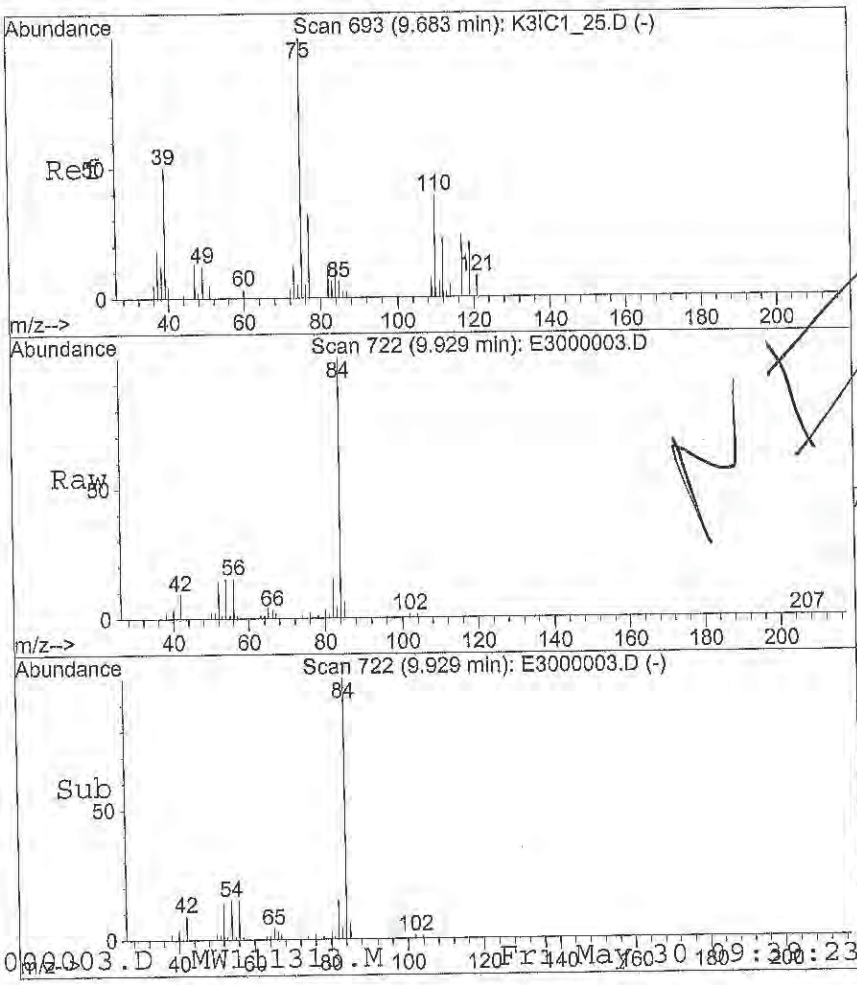


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.05 ug/L
RT: 8.48 min Scan# 551
Delta R.T. -0.02 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 59 Resp: 535

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

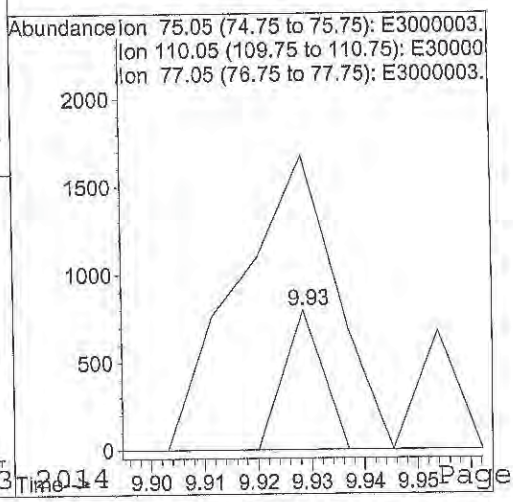


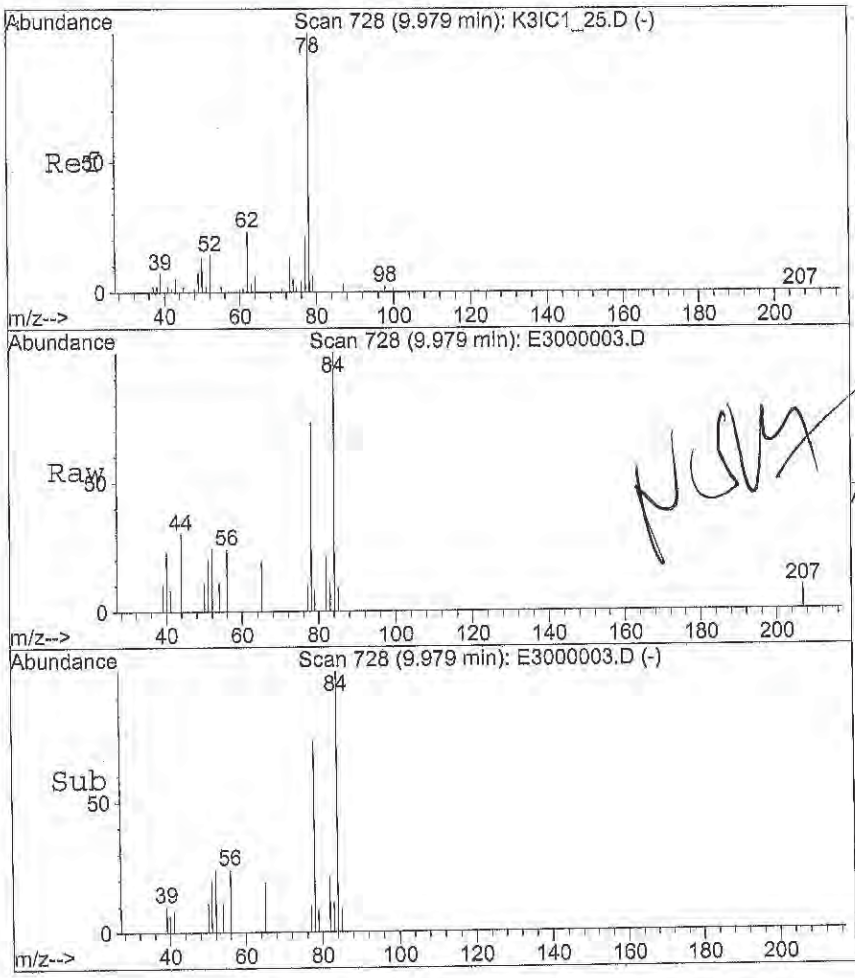


#29
1,1-Dichloropropene
Concen: 0.06 ug/L
RT: 9.93 min Scan# 722
Delta R.T. 0.25 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 75 Resp: 404

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	529.2	25.0	37.4#

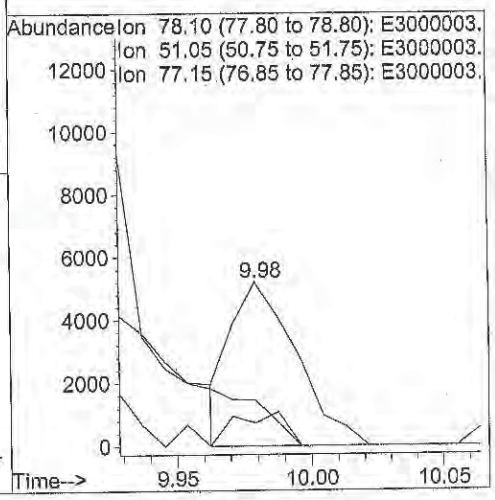


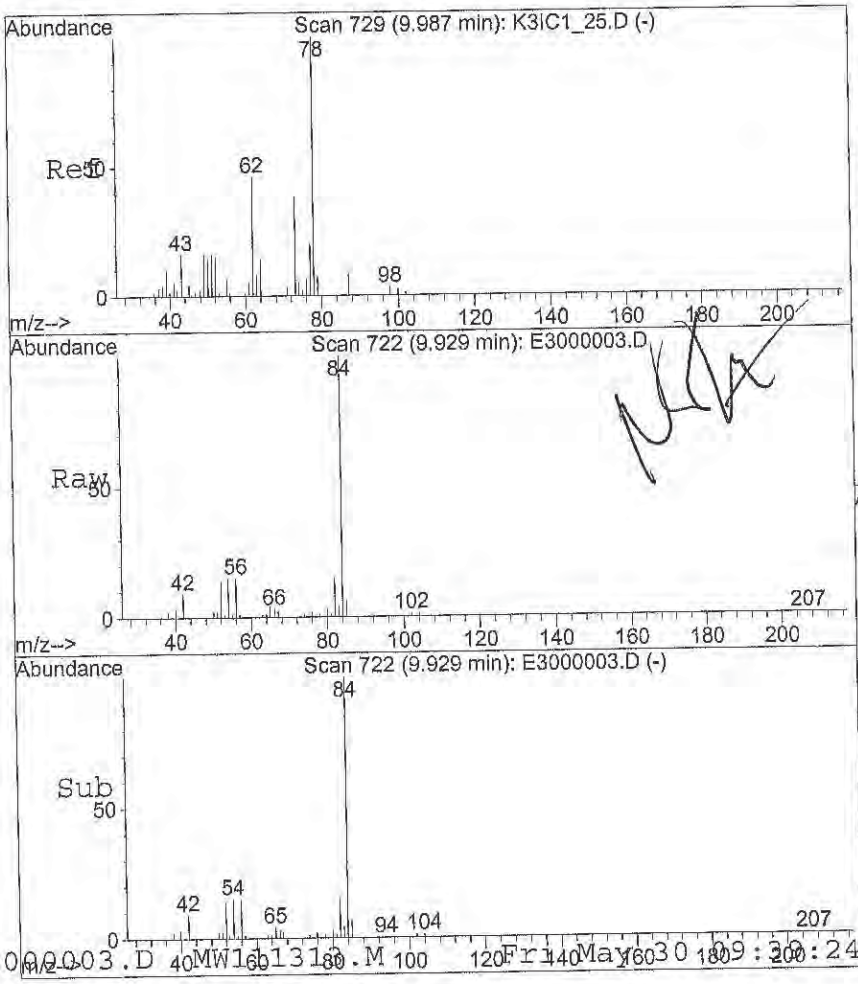


#31
Benzene
Concen: 0.57 ug/L
RT: 9.98 min Scan# 728
Delta R.T. 0.00 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 78 Resp: 8814

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	19.6	16.6	24.8

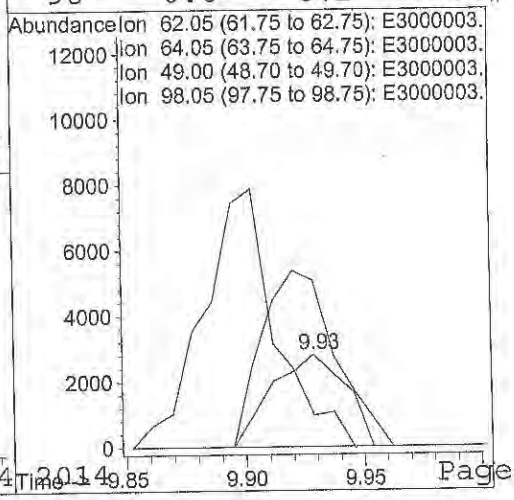


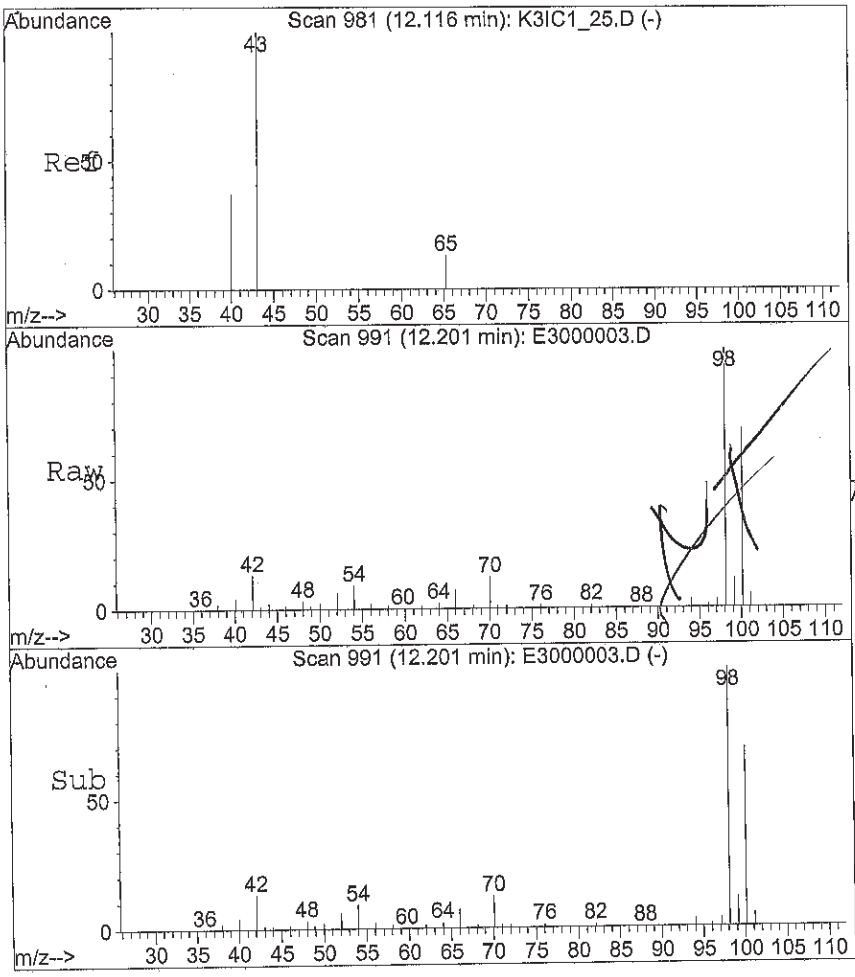


#32
1,2-Dichloroethane
Concen: 1.11 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 62 Resp: 6045

Ion	Ratio	Lower	Upper
62	100		
64	191.1	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

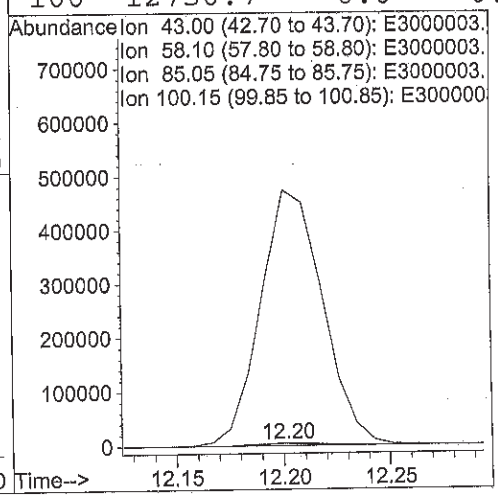


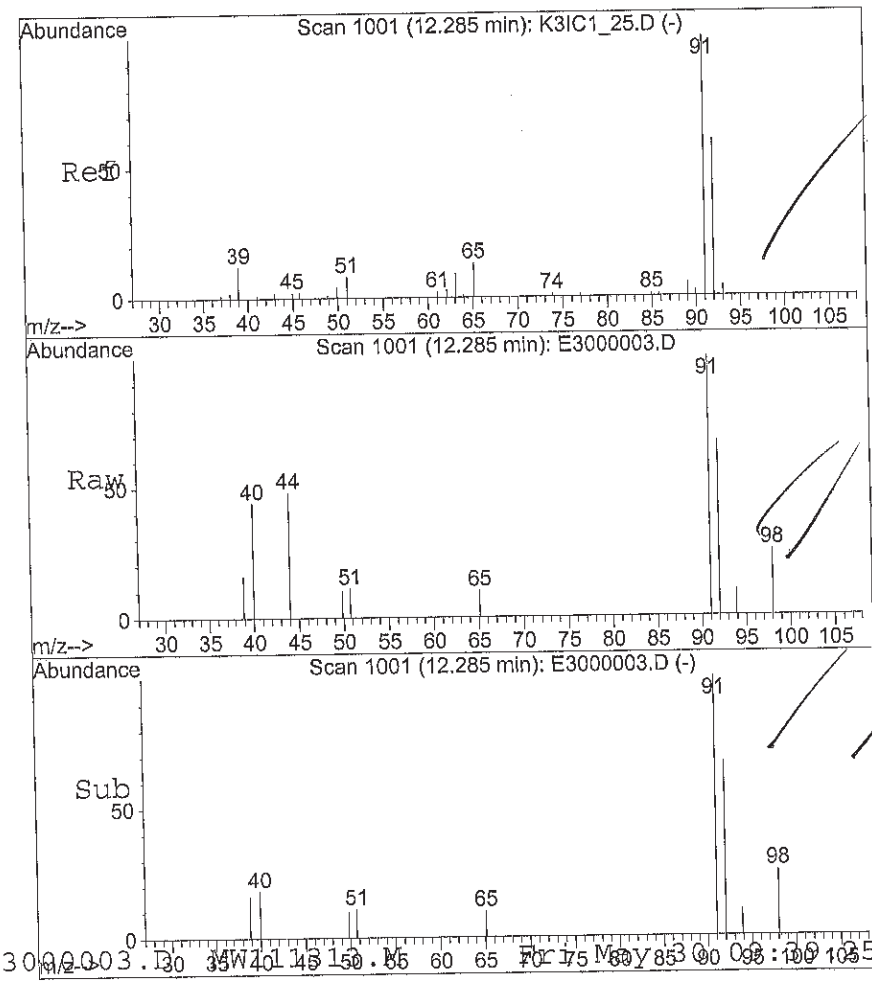


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.84 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 43 Resp: 7511

Ion	Ratio	Lower	Upper
43	100		
58	132.6	0.0	0.0#
85	0.0	0.0	0.0
100	12750.7	0.0	0.0#

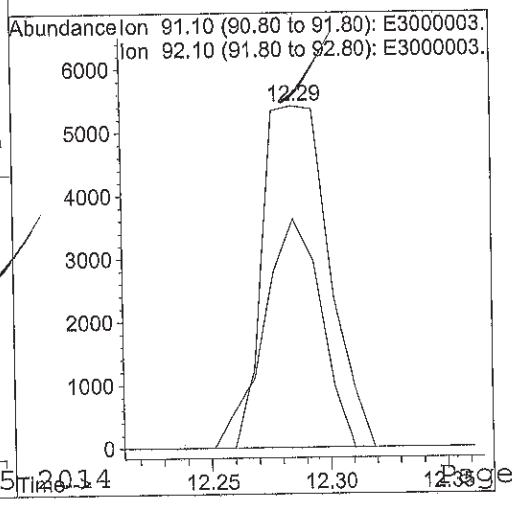


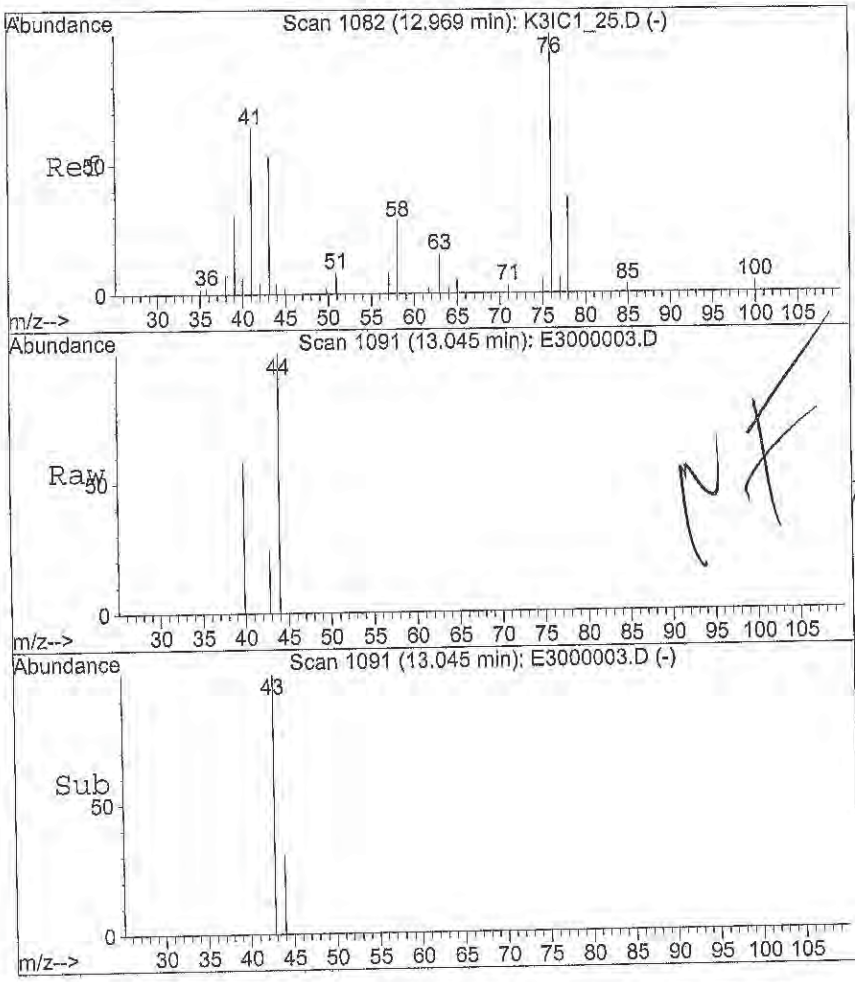


#41
Toluene
Concen: 0.58 ug/L
RT: 12.29 min Scan# 1001
Delta R.T. 0.00 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 91 Resp: 10481

Ion	Ratio	Lower	Upper
91	100		
92	58.0	47.4	71.0

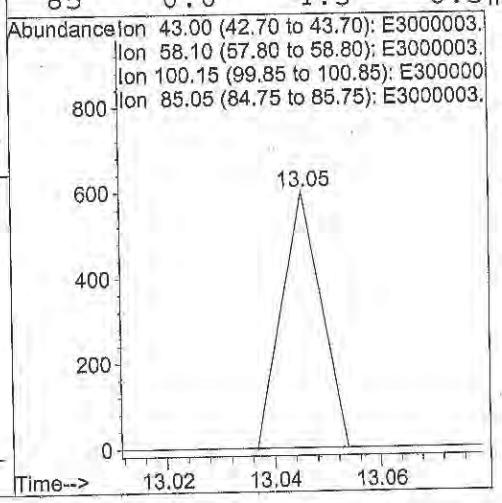


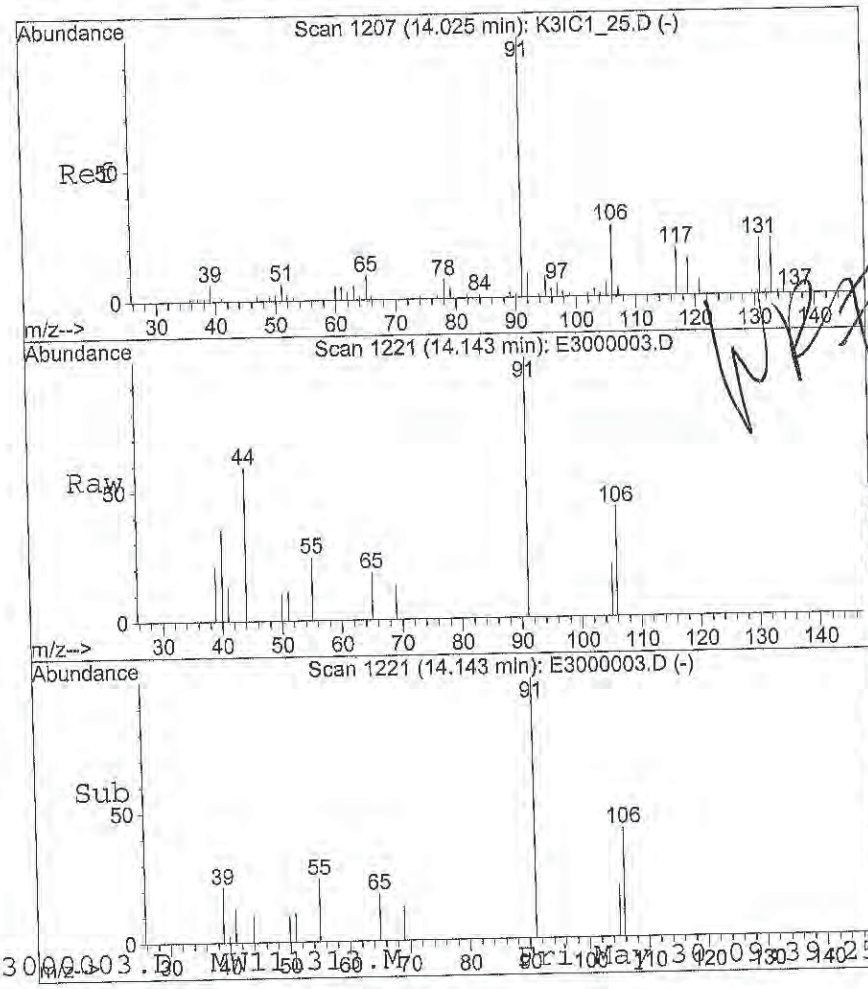


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 13.05 min Scan# 1091
Delta R.T. 0.08 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 43 Resp: 304

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

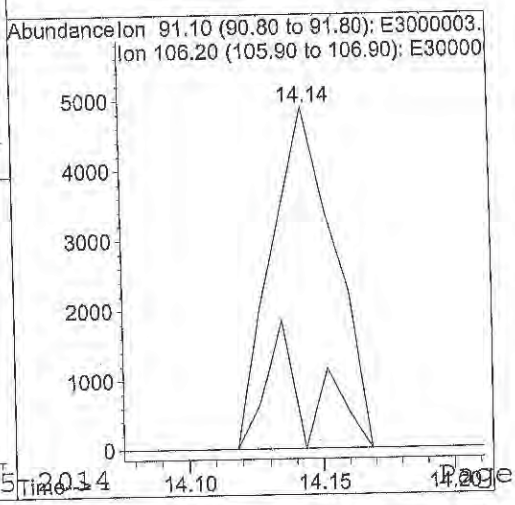


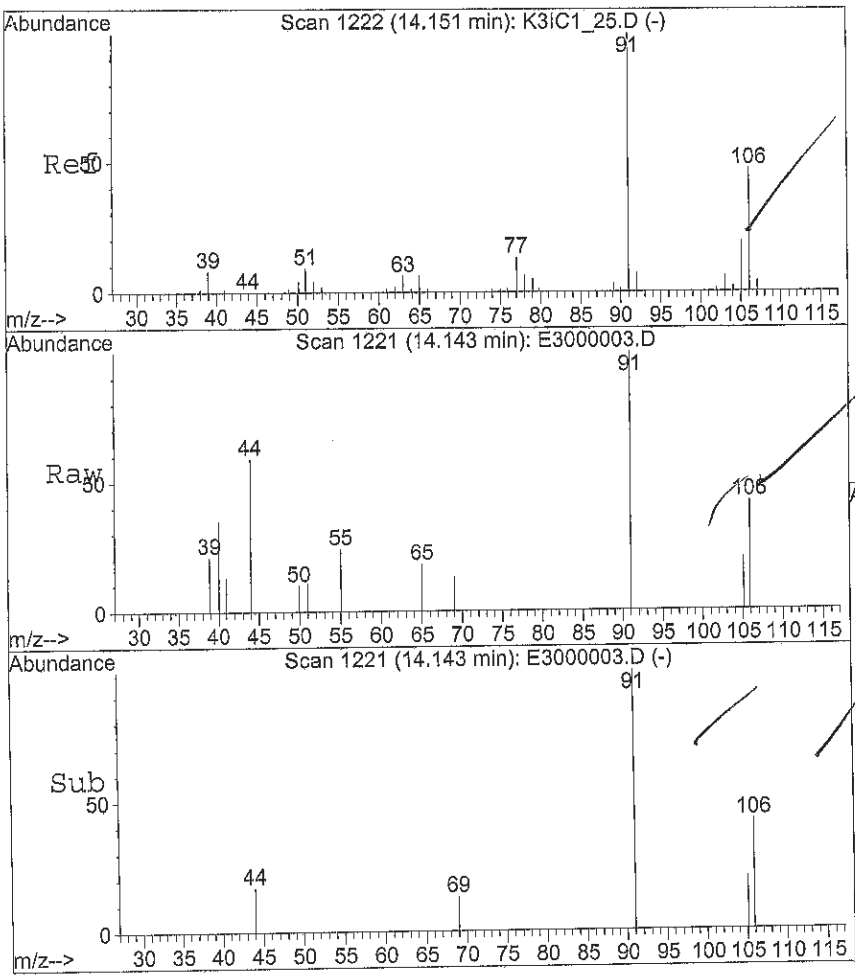


#51
Ethylbenzene
Concen: 0.39 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. 0.12 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 91 Resp: 8060

Ion	Ratio	Lower	Upper
91	100		
106	26.1	23.5	35.3

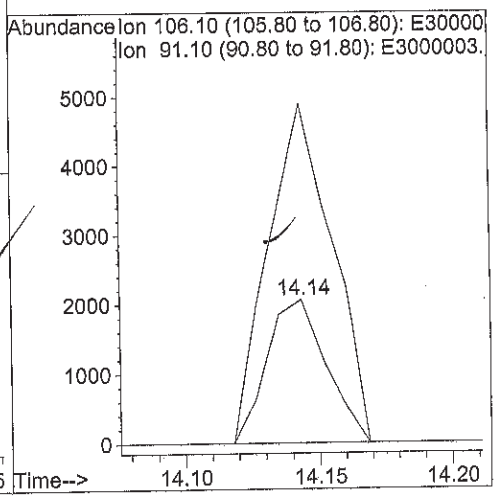


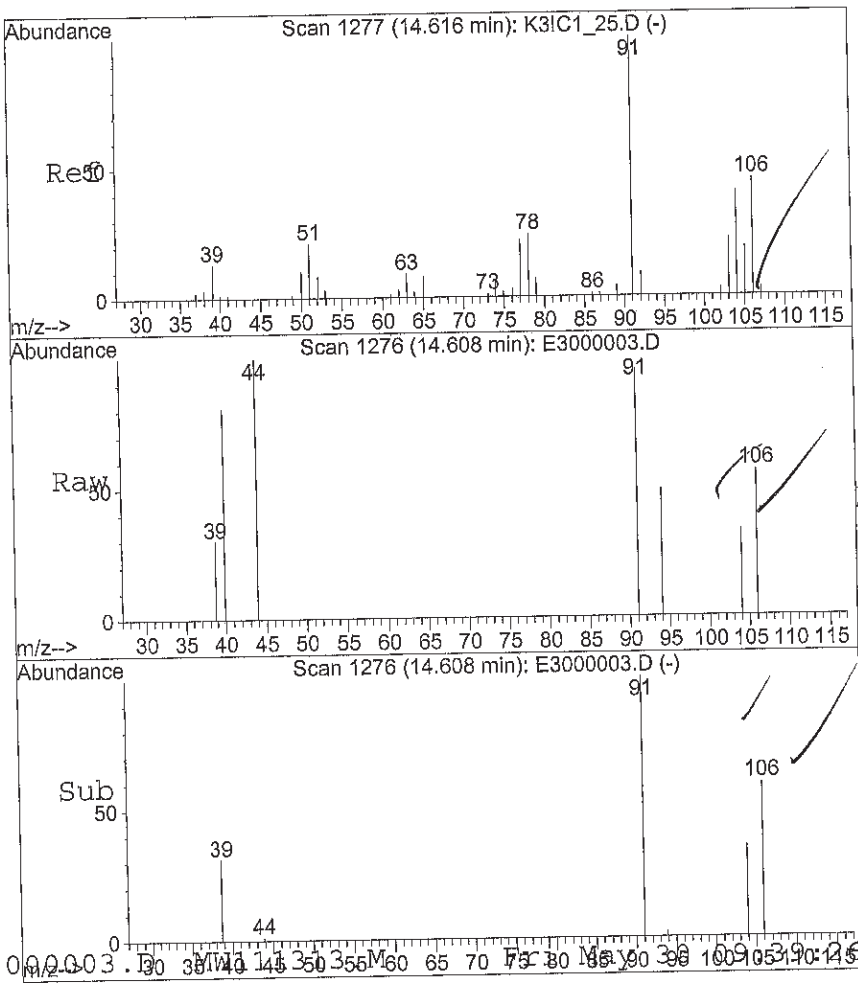


#52
m,p-Xylenes
Concen: 0.43 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion:106 Resp: 3150

Ion	Ratio	Lower	Upper
106	100		
91	255.9	177.1	265.7

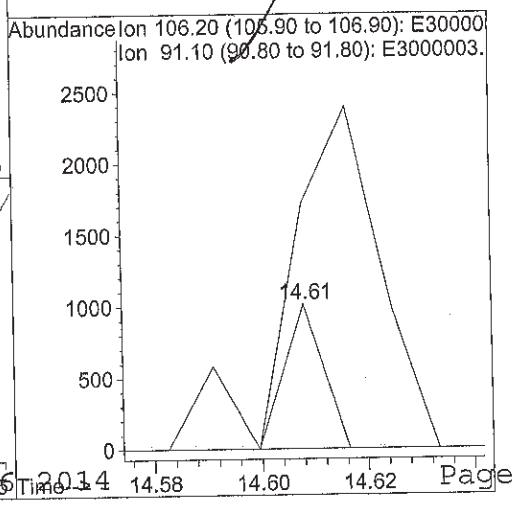


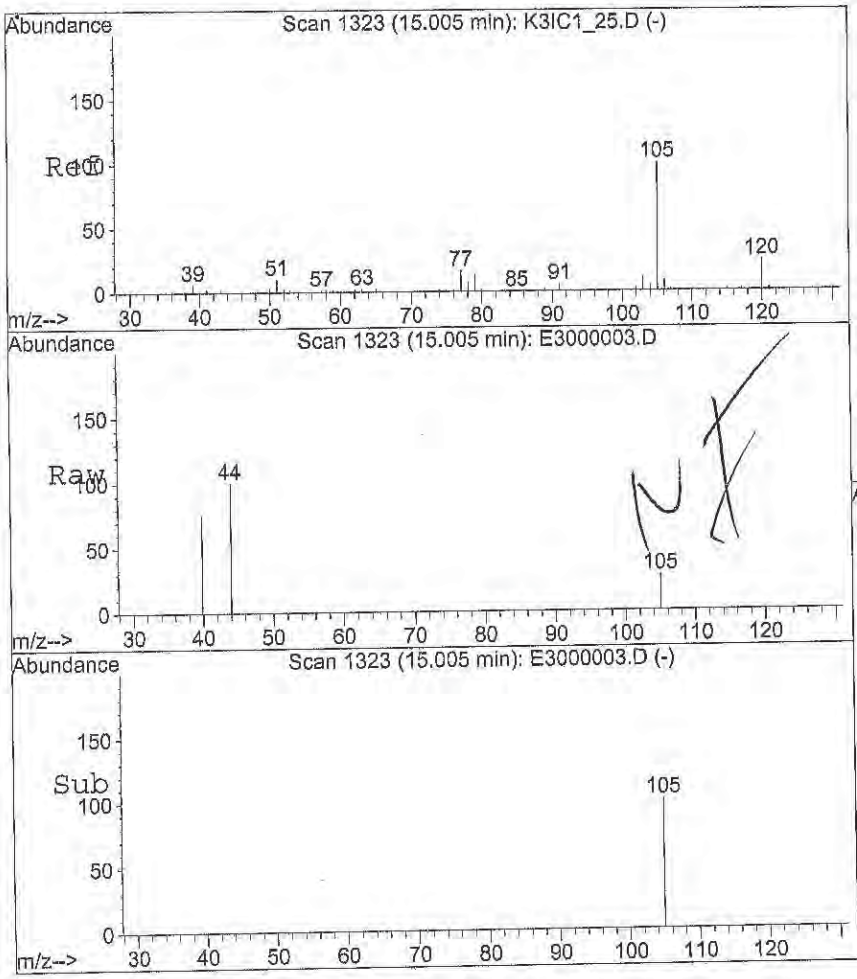


#53
o-Xylene
Concen: 0.07 ug/L
RT: 14.61 min Scan# 1276
Delta R.T. -0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion:106 Resp: 513

Ion	Ratio	Lower	Upper
106	100		
91	559.5	179.0	268.6#

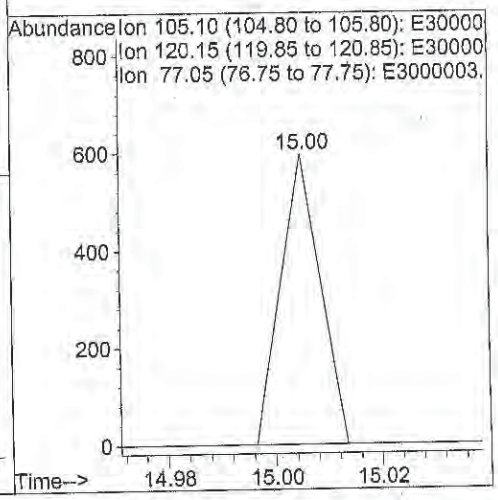


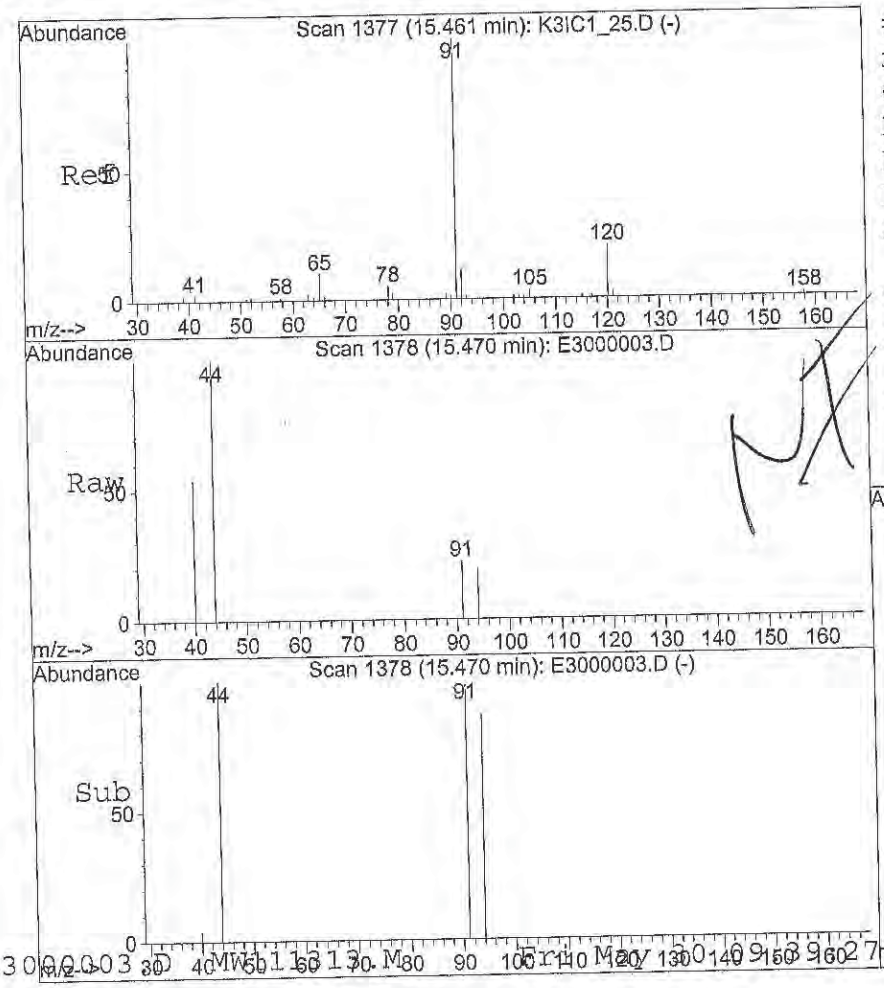


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.00 min Scan# 1323
Delta R.T. 0.00 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion:105 Resp: 303

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

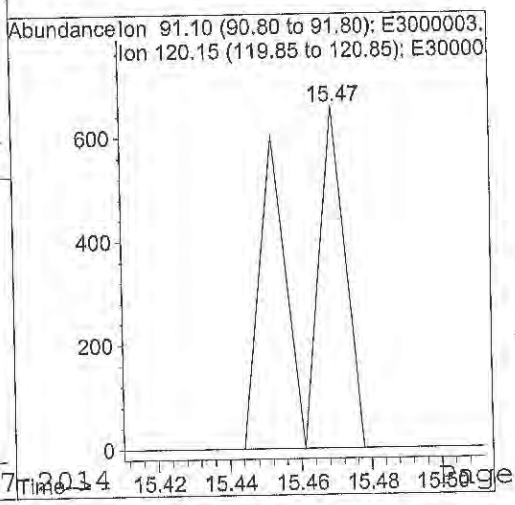


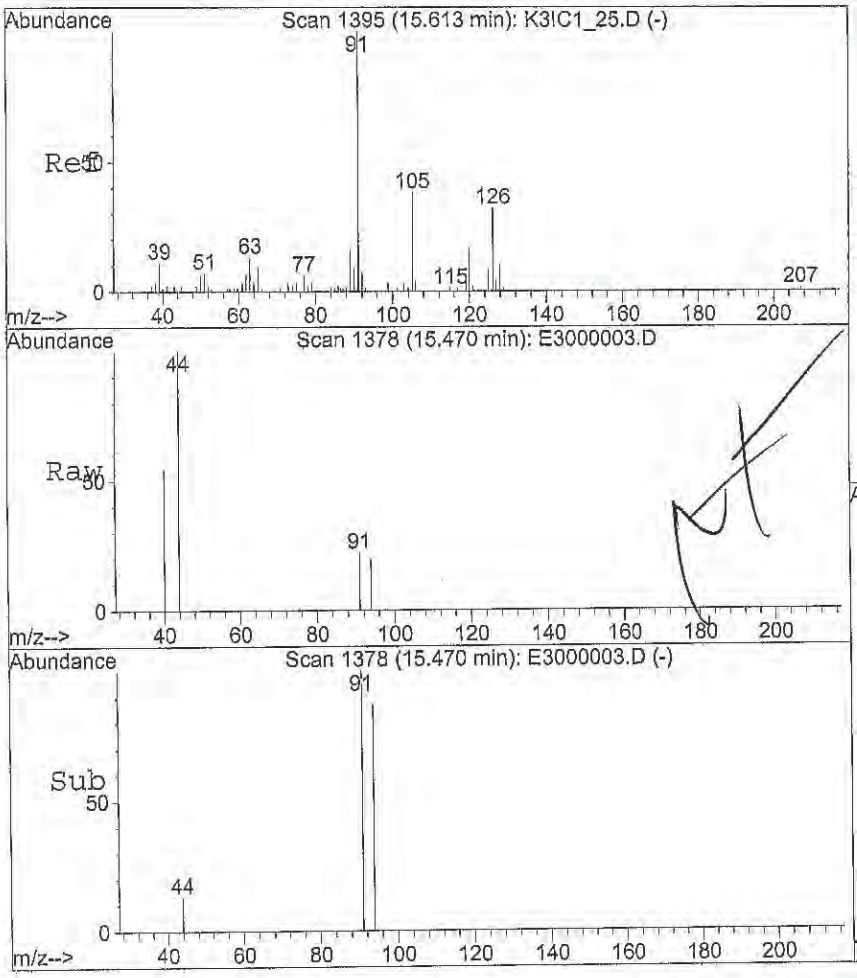


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.47 min Scan# 1378
Delta R.T. 0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 91 Resp: 638

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

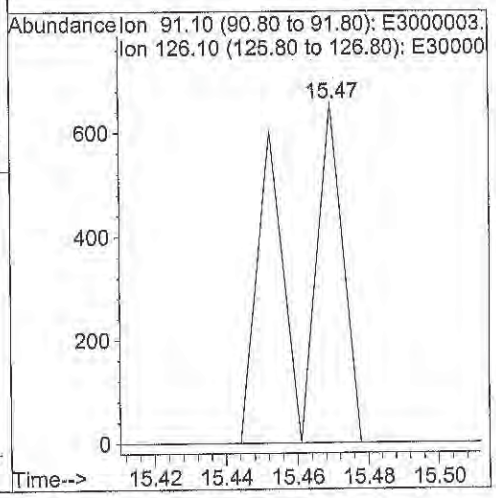


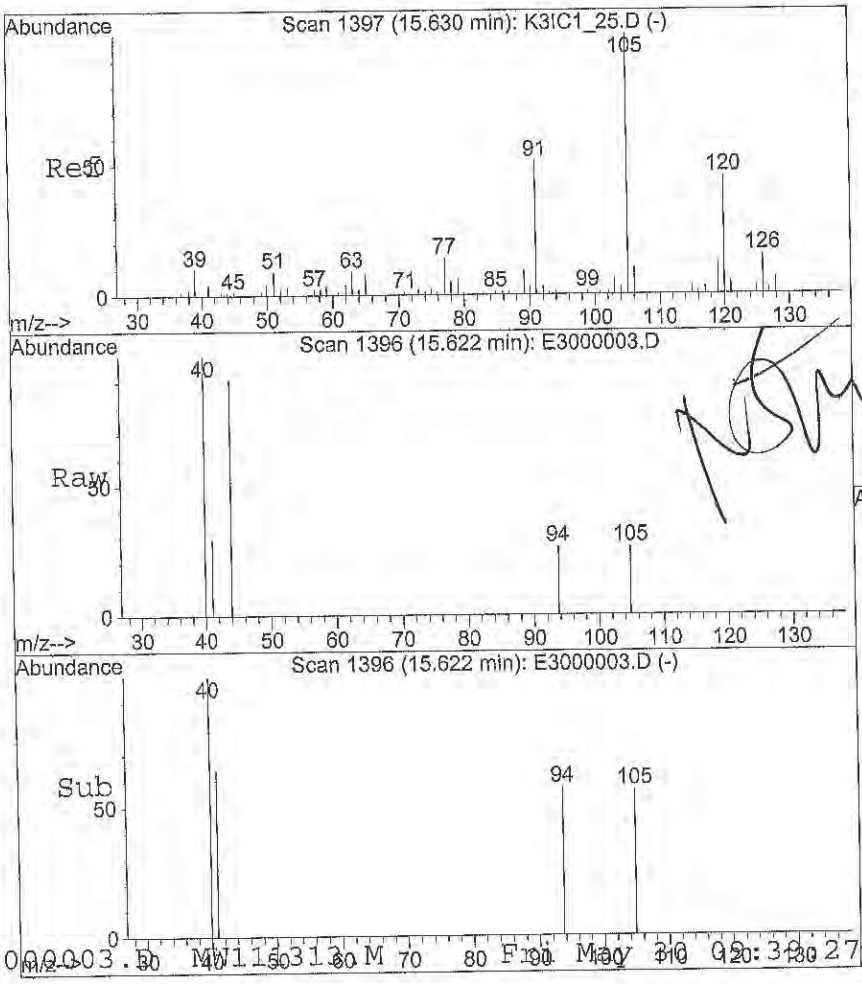


#63
2-Chlorotoluene
Concen: 0.04 ug/L
RT: 15.47 min Scan# 1378
Delta R.T. -0.14 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion: 91 Resp: 638

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

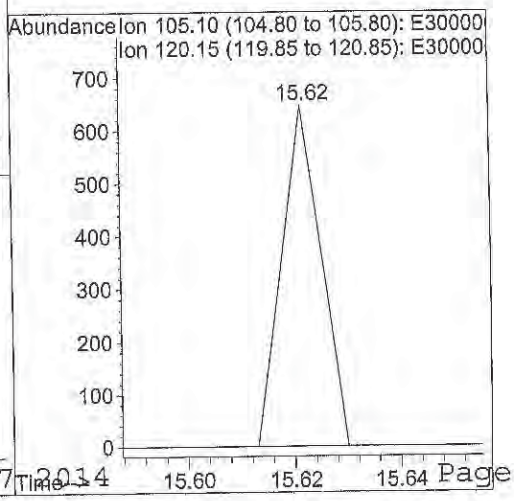


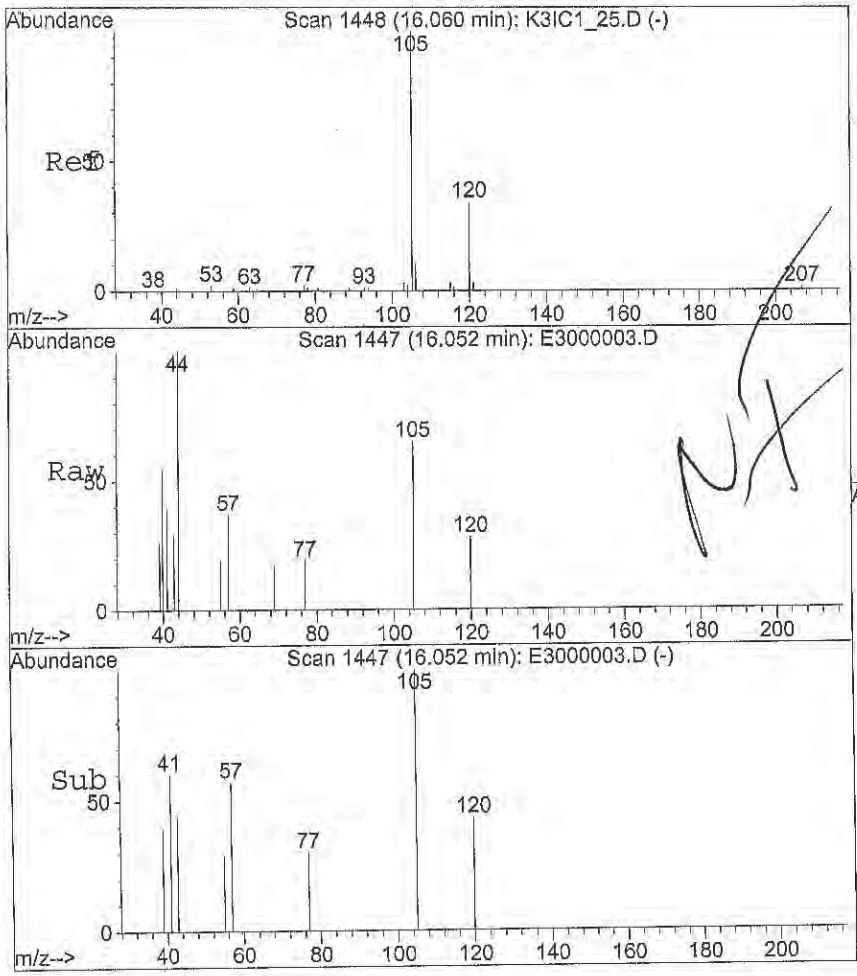


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion:105 Resp: 329

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

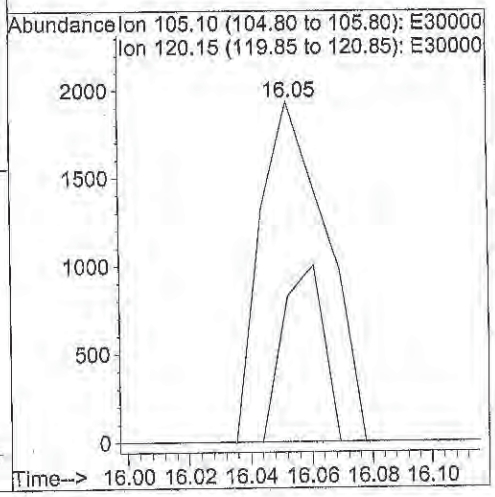


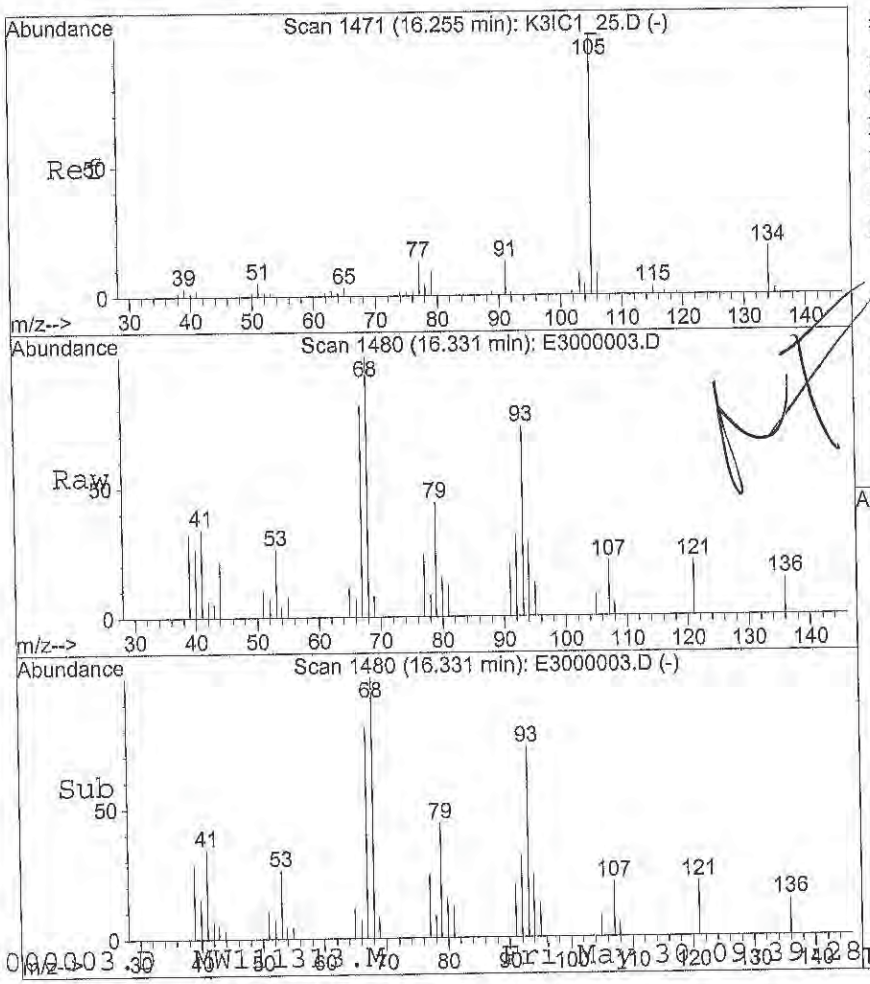


#67
1,2,4-Trimethylbenzene
Concen: 0.15 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion:105 Resp: 2877

Ion	Ratio	Lower	Upper
105	100		
120	32.2	33.8	50.8#

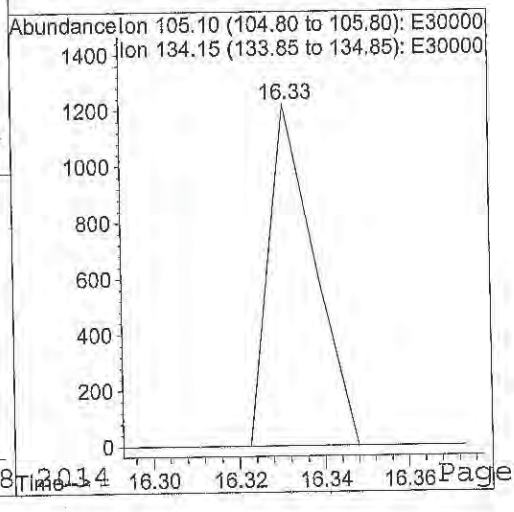


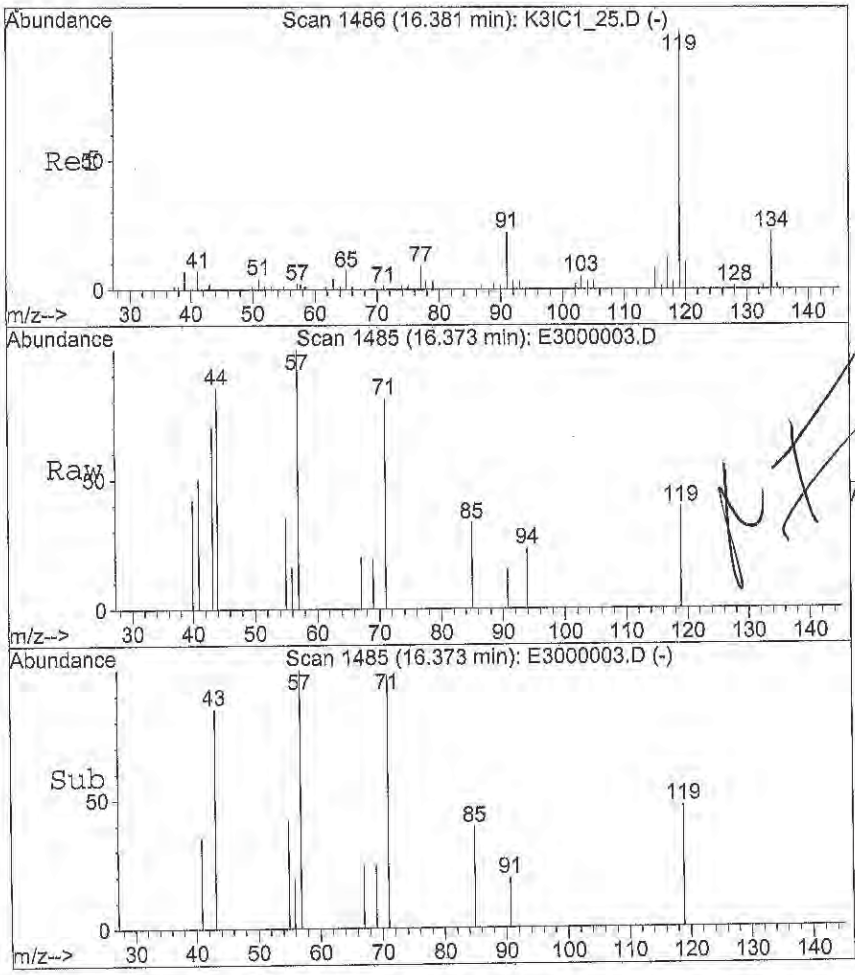


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion:105 Resp: 905

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

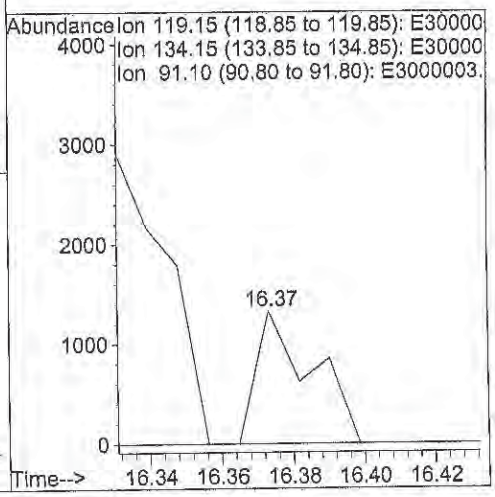




#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E3000003.D
Acq: 30 May 2014 9:18 am

Tgt Ion:119 Resp: 1417

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000003.D
Acq On : 30 May 2014 9:18 am
Sample : 34E3001-DUP1
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 9:38 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1638509	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1326871	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	721605	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	464855	10.91 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	87.28%	
3) Chloroform-d (SU6)	9.19	84	695791	11.38 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery =	91.04%	
4) Methylene Chloride-d2 (SU5	7.07	86	407854	11.41 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery =	91.28%	
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	444266	15.26 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	122.08%	
6) Benzene-d6 (SU7)	9.93	84	1345847	10.47 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery =	83.76%	
8) Toluene-d8 (SU3)	12.20	98	1446994	11.49 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	91.92%	
9) 4-Bromofluorobenzene (SU4)	15.22	95	731976	14.09 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	112.72%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

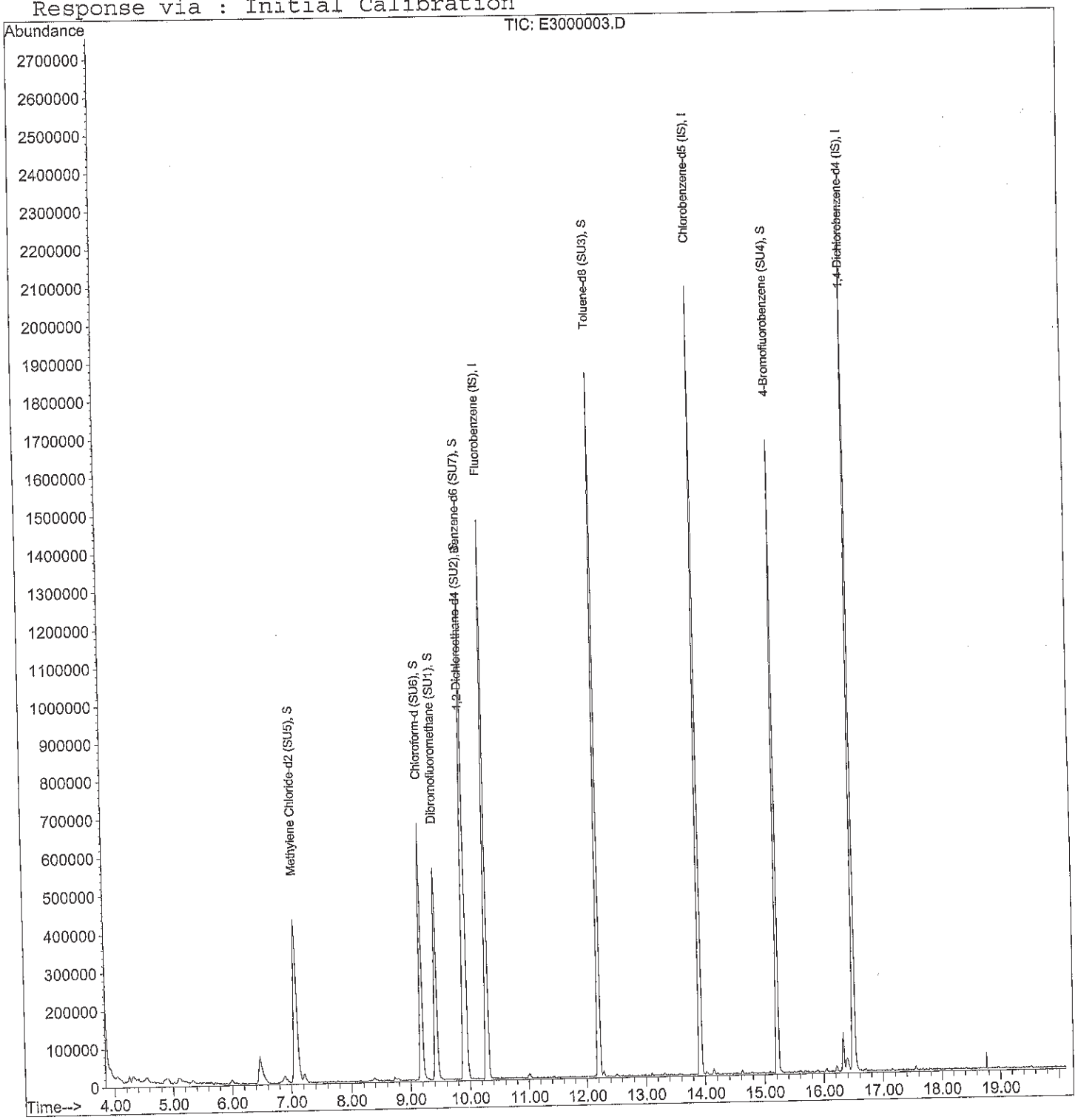
Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000003.D
Acq On : 30 May 2014 9:18 am
Sample : 34E3001-DUP1
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 9:38 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION LABORATORY CONTROL SAMPLES

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS01.D
Acq On : 30 May 2014 6:49 am
Sample : 34E3001-BS1
Misc : 20cc 1.25/2.5/12.5 ug/L LCS
MS Integration Params: rteint.p
Quant Time: May 30 7:23 19114

Vial: 10
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1477084	12.50 ug/L	0.01
38) Chlorobenzene-d5 (IS)	13.93	117	1081008	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	551762	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.44	113	424798	11.53 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.24%		
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	425346	12.15 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.20%		
39) Toluene-d8 (SU3)	12.21	98	1277325	12.67 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 101.36%		
58) 4-Bromofluorobenzene (SU4)	15.23	95	559498	12.65 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 101.20%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	48982	1.35 ug/L	97
4) Chloromethane	4.47	50	34624	1.28 ug/L	89
5) Vinyl Chloride	4.60	62	29650	1.14 ug/L	84
6) Bromomethane	5.17	96	24649	1.34 ug/L	83
7) Chloroethane	5.28	64	16104	1.40 ug/L	76
8) (F11) Trichlorofluorometha	5.67	101	53288	1.31 ug/L	96
9) (F113) 1,1,2-Trichloro-tri	6.38	151	36637	1.26 ug/L	99
10) 1,1-Dichloroethene	6.44	96	50065	1.44 ug/L	97
11) Acetone	6.47	58	33086	-12.50 ug/L	72
12) (IPA) Leak Check Compound	6.54	45	283731	159.85 ug/L	98
13) Carbon disulfide	6.87	76	155531	1.27 ug/L	97
14) Methylene Chloride	7.11	84	52656	1.30 ug/L #	92
15) (TBA) tert-Butanol	7.09	59	9396	3.73 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	116472	1.39 ug/L	98
17) trans-1,2-Dichloroethene	7.49	96	48917	1.23 ug/L	87
18) 1,1-Dichloroethane	8.08	63	70655	1.06 ug/L	96
19) cis-1,2-Dichloroethene	8.84	96	57820	1.25 ug/L	88
20) 2,2-Dichloropropane	8.83	77	901	0.02 ug/L #	29
21) (MEK) 2-Butanone	8.81	72	11282	2.72 ug/L	69
22) (DIPE) Diisopropyl Ether	8.02	45	155599	1.35 ug/L	98
23) Bromochloromethane	9.18	128	24082	1.22 ug/L	85
24) Chloroform	9.22	83	93329	1.21 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS01.D Vial: 10
Acq On : 30 May 2014 6:49 am Operator: DN
Sample : 34E3001-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 7:23 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	118363	1.11 ug/L #	98
26) 1,1,1-Trichloroethane	9.51	97	62736	1.03 ug/L	96
27) (TAME) tert-Amyl methyl et	10.01	73	104254	1.12 ug/L	97
29) 1,1-Dichloropropene	9.69	75	66529	1.17 ug/L	95
30) Carbon Tetrachloride	9.72	117	49762	1.00 ug/L	90
31) Benzene	9.99	78	171661	1.23 ug/L #	91
32) 1,2-Dichloroethane	10.01	62	62852	1.28 ug/L	98
33) Trichloroethene	10.75	130	56219	1.25 ug/L	96
34) 1,2-Dichloropropane	11.05	63	44112	1.33 ug/L #	78
35) Dibromomethane	11.22	93	35682	1.37 ug/L	96
36) Bromodichloromethane	11.36	83	62140	1.19 ug/L	96
37) cis-1,3-Dichloropropene	11.88	75	64187	1.13 ug/L	94
40) (MIBK) 4-Methyl-2-Pentanon	12.13	43	28749	1.33 ug/L #	100
41) Toluene	12.30	91	176127	1.20 ug/L	96
42) trans-1,3-Dichloropropene	12.52	75	51375	1.06 ug/L	78
43) 1,1,2-Trichloroethane	12.76	83	36852	1.39 ug/L #	86
44) Tetrachloroethene	12.95	164	58310	1.13 ug/L	95
45) 1,3-Dichloropropane	12.97	76	66754	1.32 ug/L	100
46) 2-Hexanone	12.98	43	67556	2.86 ug/L #	95
47) Dibromochloromethane	13.26	129	48910	1.29 ug/L #	99
48) 1,2-Dibromoethane	13.44	107	52017	1.51 ug/L	99
49) Chlorobenzene	13.96	112	132861	1.34 ug/L	97
50) 1,1,1,2-Tetrachloroethane	14.03	131	43733	1.24 ug/L	95
51) Ethylbenzene	14.03	91	214205	1.28 ug/L	99
52) m,p-Xylenes	14.15	106	156815	2.63 ug/L	100
53) o-Xylene	14.62	106	76832	1.30 ug/L	97
54) Styrene	14.64	104	130786	1.54 ug/L	95
55) Bromoform	14.91	173	31335	1.45 ug/L #	96
56) Isopropylbenzene	15.01	105	212799	1.32 ug/L	99
57) 1,2,3-Trichloropropane	15.43	75	77766	1.77 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.35	83	65882	1.66 ug/L	96
61) Bromobenzene	15.45	156	55324	1.28 ug/L	96
62) n-Propylbenzene	15.46	91	266664	1.20 ug/L	99
63) 2-Chlorotoluene	15.62	91	178461	1.30 ug/L	99
64) 1,3,5-Trimethylbenzene	15.63	105	177178	1.29 ug/L	97
65) 4-Chlorotoluene	15.73	91	169515	1.34 ug/L	100
66) tert-Butylbenzene	16.02	119	142386	1.22 ug/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS01.D Vial: 10
Acq On : 30 May 2014 6:49 am Operator: DN
Sample : 34E3001-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 7:23 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

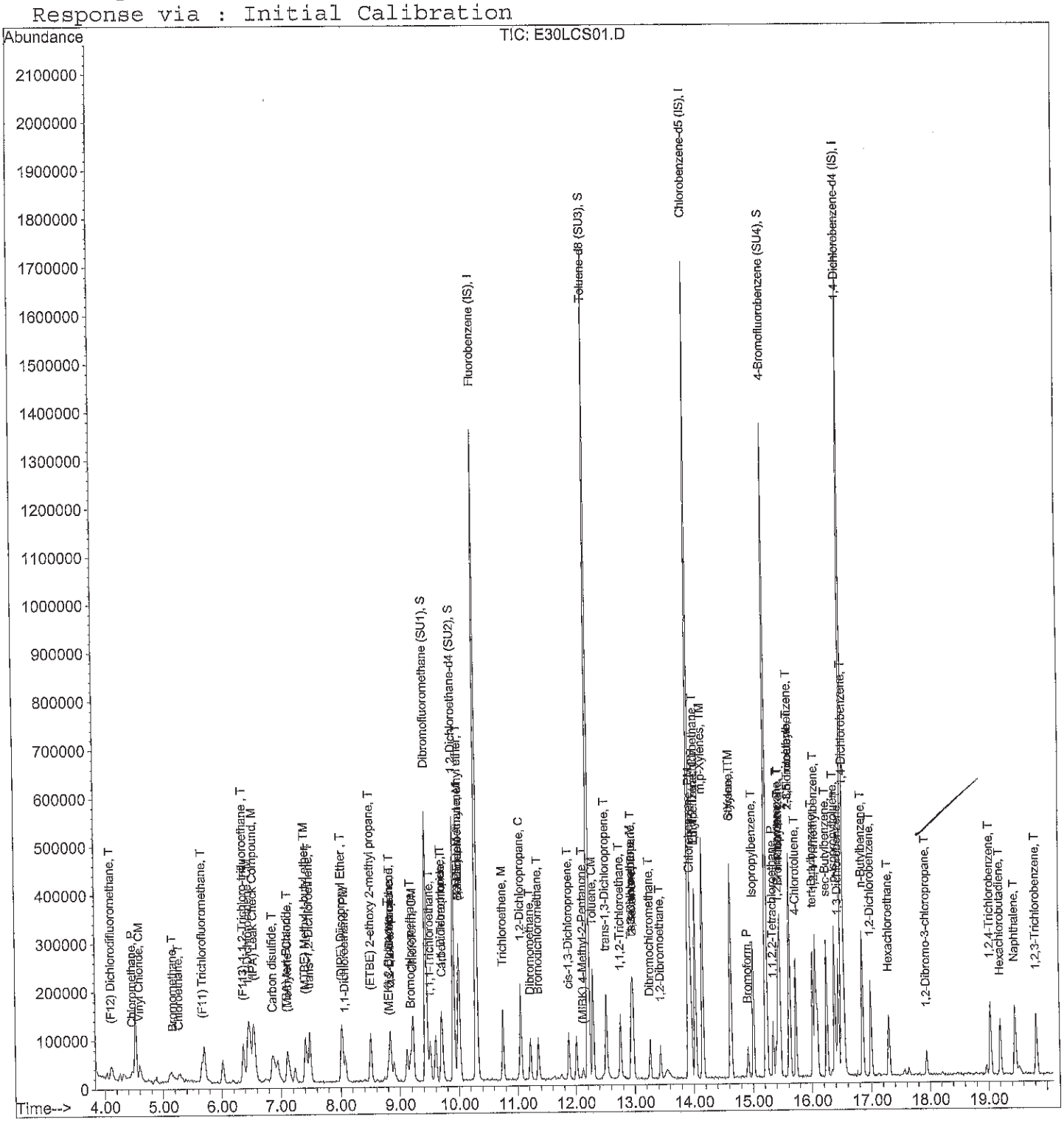
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	174855	1.22 ug/L	92
68) sec-Butylbenzene	16.26	105	231545	1.25 ug/L	100
69) p-Isopropyltoluene	16.38	119	179107	1.19 ug/L	96
70) 1,3-Dichlorobenzene	16.45	146	113995	1.40 ug/L	96
71) 1,4-Dichlorobenzene	16.55	146	106167	1.30 ug/L	98
72) n-Butylbenzene	16.85	91	200743	1.27 ug/L	98
73) 1,2-Dichlorobenzene	16.99	146	96697	1.33 ug/L	98
74) 1,2-Dibromo-3-chloropropan	17.94	75	14251	2.29 ug/L #	70
75) 1,2,4-Trichlorobenzene	19.04	180	64775	1.32 ug/L	96
76) Hexachlorobutadiene	19.21	225	29298	1.32 ug/L	99
77) Naphthalene	19.46	128	170361	1.56 ug/L	100
78) Hexachloroethane	17.31	201	19980	1.25 ug/L	94
79) 1,2,3-Trichlorobenzene	19.82	180	59064	1.26 ug/L	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS01.D Vial: 10
Acq On : 30 May 2014 6:49 am Operator: DN
Sample : 34E3001-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 7:23 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



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Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30BLK01.D
Acq On : 30 May 2014 7:45 am
Sample : 34E3001-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: May 30 8:30 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1622577	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1329092	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	724181	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	460269	11.37 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.96%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	451512	11.74 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.92%		
39) Toluene-d8 (SU3)	12.21	98	1433560	11.56 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.48%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	730091	13.43 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 107.44%		

Target Compounds					Qvalue
4) Chloromethane	4.40	50	2244	-0.40 ~~ug/L~~ #	41
6) Bromomethane	5.12	96	3140	-0.02 ~~ug/L~~ #	70
7) Chloroethane	5.00	64	1490	1.79 ~~ug/L~~	92
11) Acetone	6.48	58	10268	12.14 ~~ug/L~~	73
12) (IPA) Leak Check Compound	6.49	45	145301	745.23 ~~ug/L~~ #	83
14) Methylene Chloride	7.09	84	4882	1.10 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.93	59	271	0.98 ~~ug/L~~ #	77
24) Chloroform	9.21	83	5264	0.62 ug/L #	18
29) 1,1-Dichloropropene	9.92	75	332	0.05 ~~ug/L~~ #	1
31) Benzene	9.99	78	297	0.02 ~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.93	62	6024	1.12 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.21	43	8465	3.19 ~~ug/L~~ #	100
41) Toluene	12.29	91	4316	0.24 ug/L 0.00148	99
46) 2-Hexanone	12.97	43	1032	0.35 ~~ug/L~~ #	37
51) Ethylbenzene	14.04	91	1520	0.07 ~~ug/L~~ #	45
54) Styrene	14.63	104	1534	-0.73 ~~ug/L~~ #	66
56) Isopropylbenzene	15.23	105	1799	0.09 ~~ug/L~~ #	1
62) n-Propylbenzene	15.47	91	915	0.03 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.47	91	915	0.05 ~~ug/L~~ #	45
67) 1,2,4-Trimethylbenzene	16.07	105	337	0.02 ug/L #	33
68) sec-Butylbenzene	16.34	105	264	0.01 ug/L #	62
69) p-Isopropyltoluene	16.38	119	1722	0.09 ~~ug/L~~ #	69

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30BLK01.D Vial: 11
Acq On : 30 May 2014 7:45 am Operator: DN
Sample : 34E3001-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 8:30 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
77) Naphthalene	19.46	128	2096	0.15	~~ug/L~~ NT	100

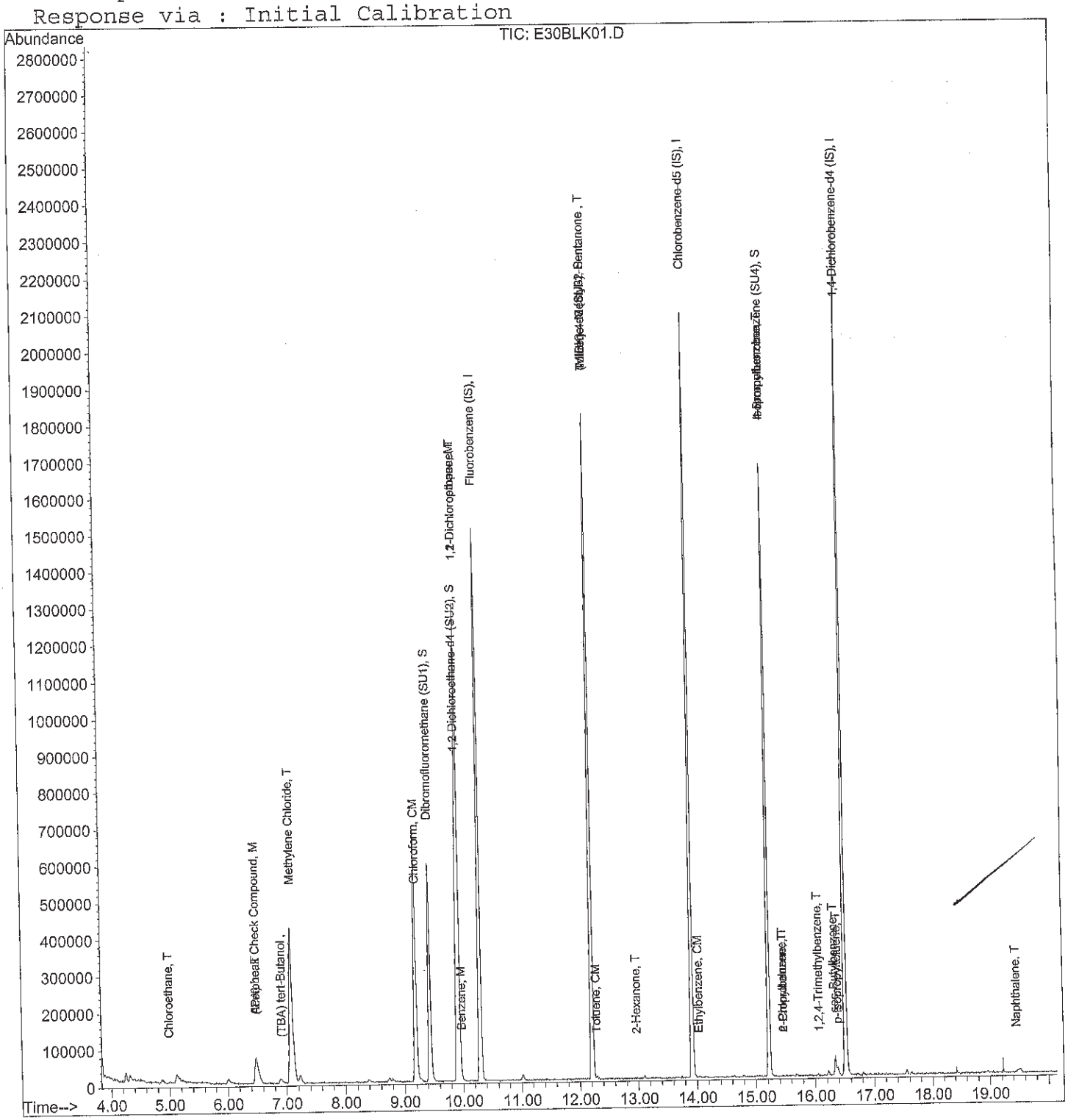
(#) = qualifier out of range (m) = manual integration
E30BLK01.D MW111313.M Fri May 30 08:30:48 2014

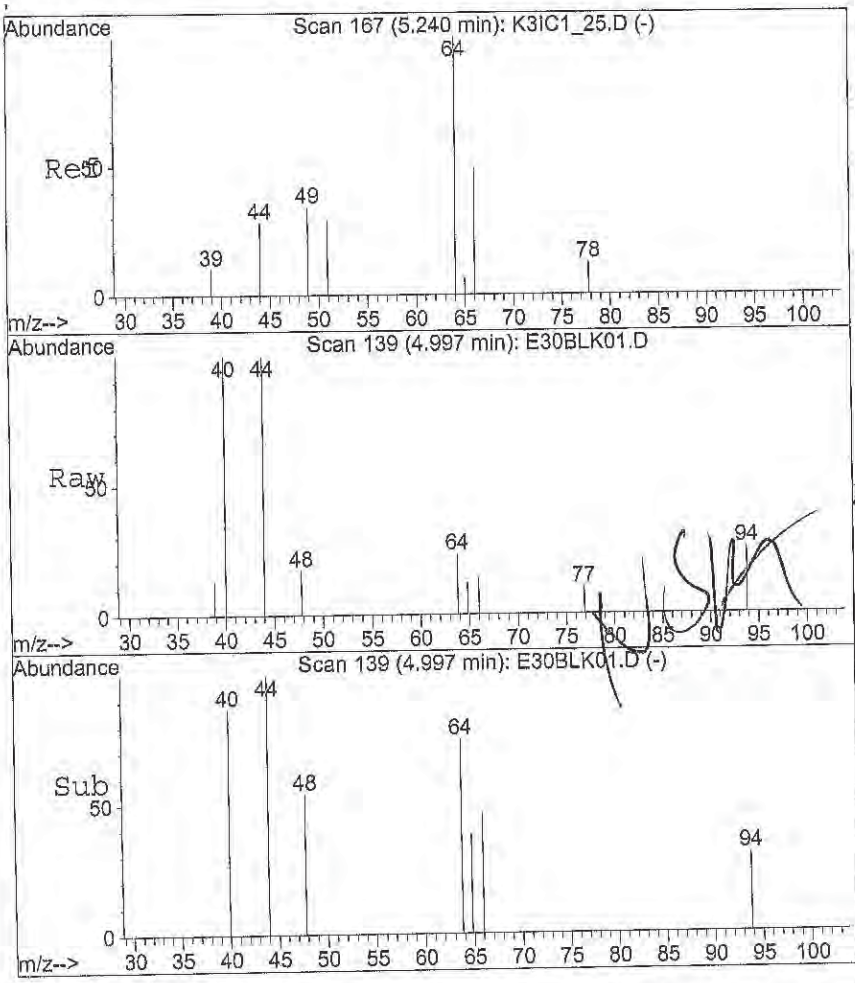
Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30BLK01.D
Acq On : 30 May 2014 7:45 am
Sample : 34E3001-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: May 30 8:30 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

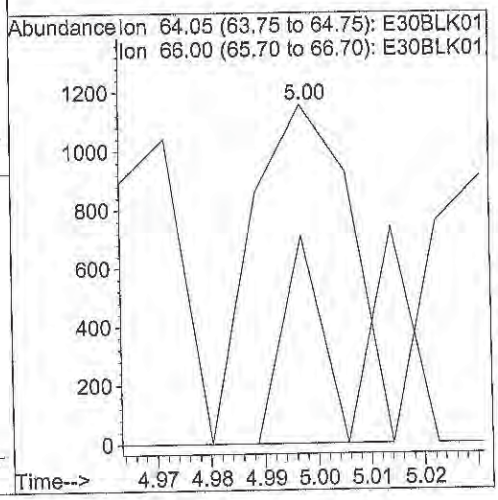


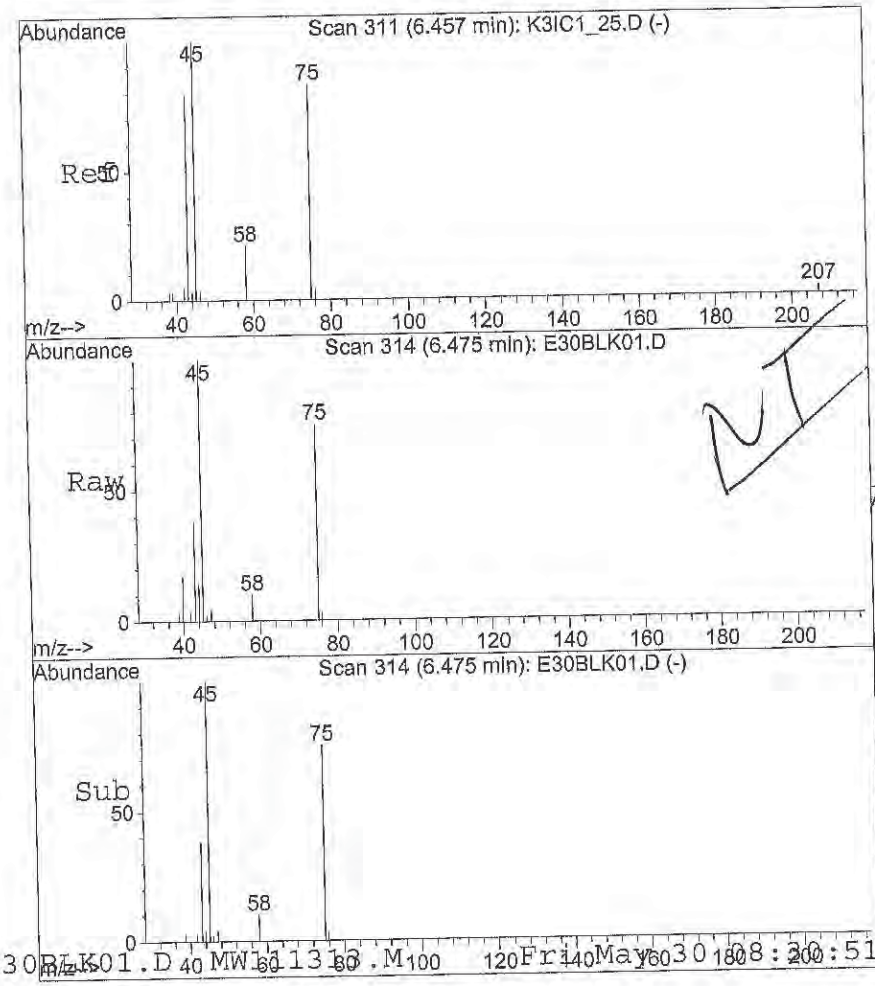


#7
Chloroethane
Concen: 1.79 ug/L
RT: 5.00 min Scan# 139
Delta R.T. -0.24 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 64 Resp: 1490

Ion	Ratio	Lower	Upper
64	100		
66	49.1	35.4	53.0

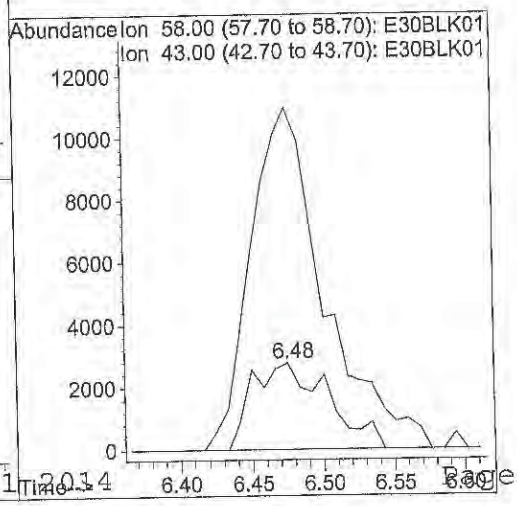


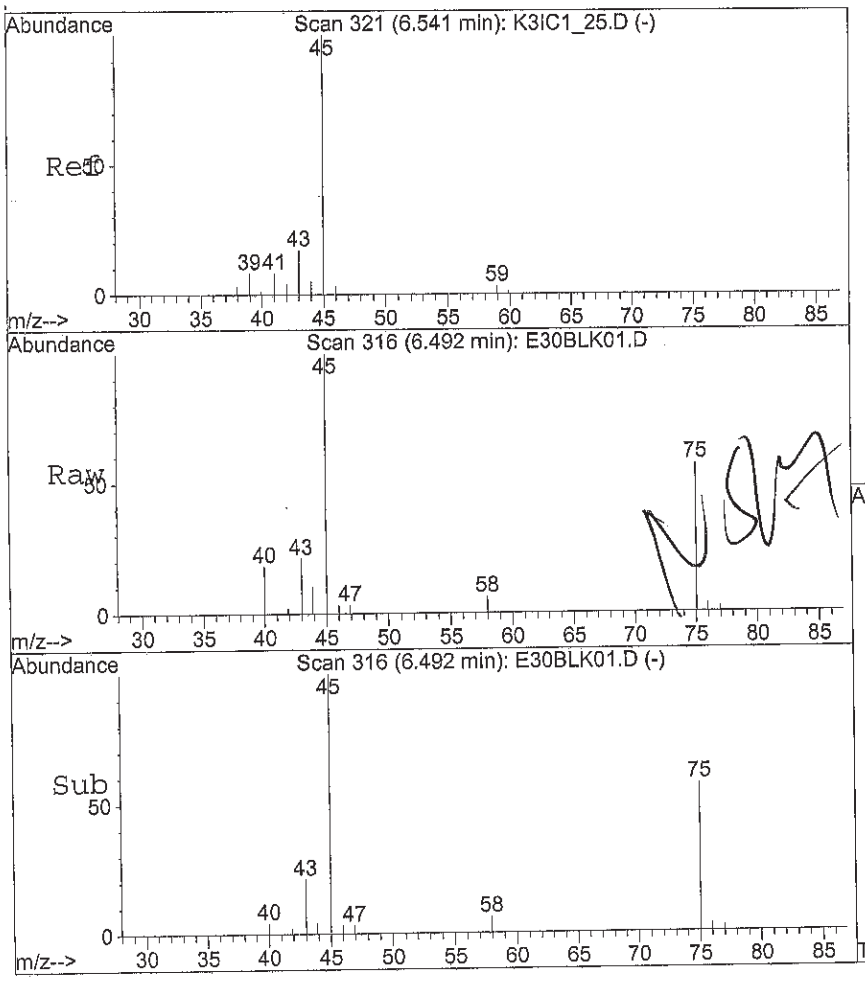


#11
Acetone
Concen: 12.14 ug/L
RT: 6.48 min Scan# 314
Delta R.T. 0.02 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 58 Resp: 10268

Ion	Ratio	Lower	Upper
58	100		
43	382.1	360.9	541.3

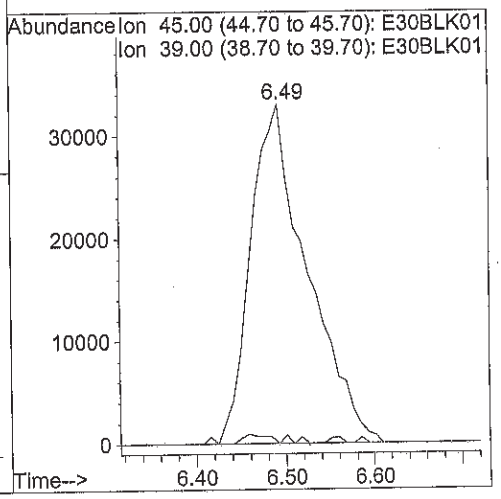


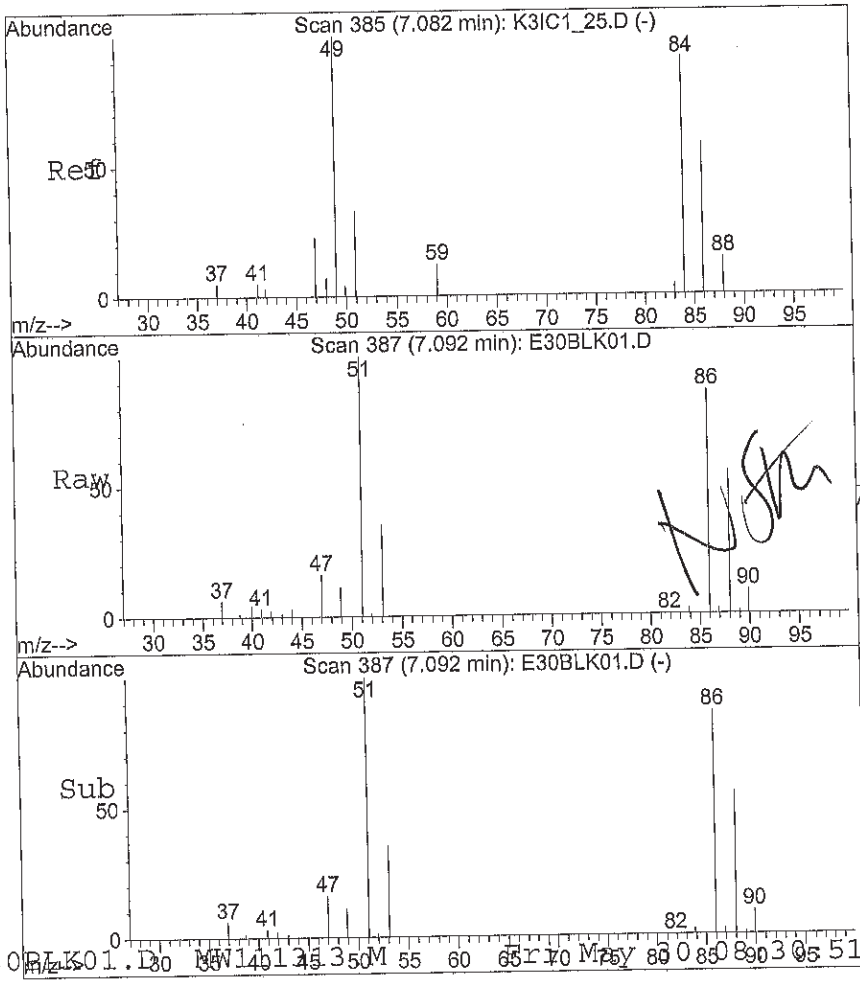


#12
(IPA) Leak Check Compound
Concen: 745.23 ug/L
RT: 6.49 min Scan# 316
Delta R.T. -0.05 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 45 Resp: 145301

Ion	Ratio	Lower	Upper
45	100		
39	0.5	4.9	7.3#

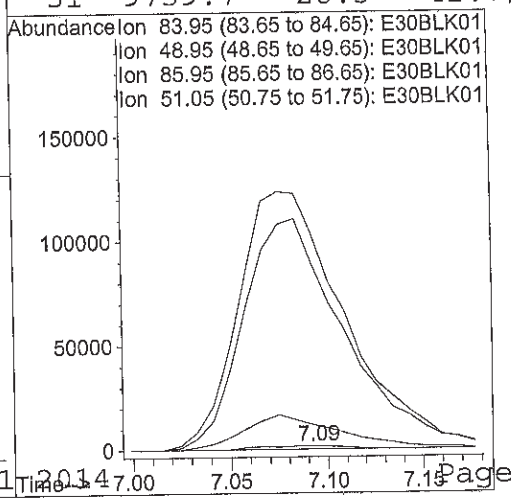


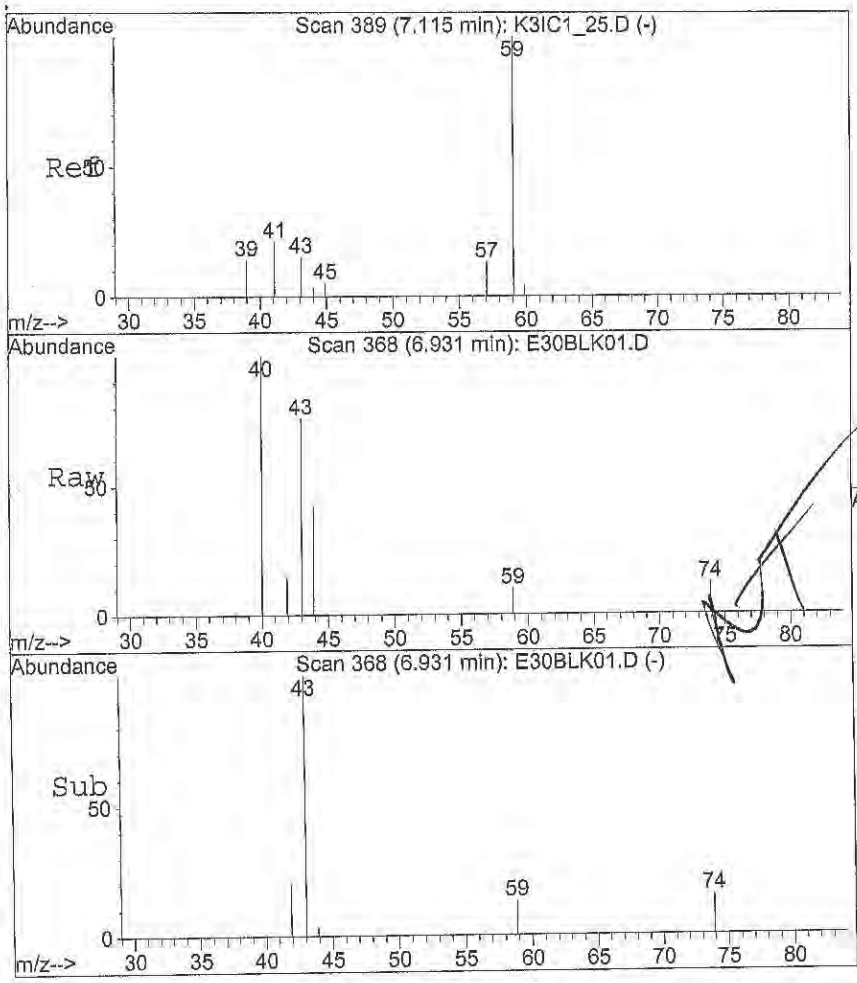


#14
Methylene Chloride
Concen: 1.10 ug/L
RT: 7.09 min Scan# 387
Delta R.T. 0.01 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 84 Resp: 4882

Ion	Ratio	Lower	Upper
84	100		
49	1166.5	89.8	134.6#
86	8280.2	51.1	76.7#
51	9759.7	28.5	42.7#

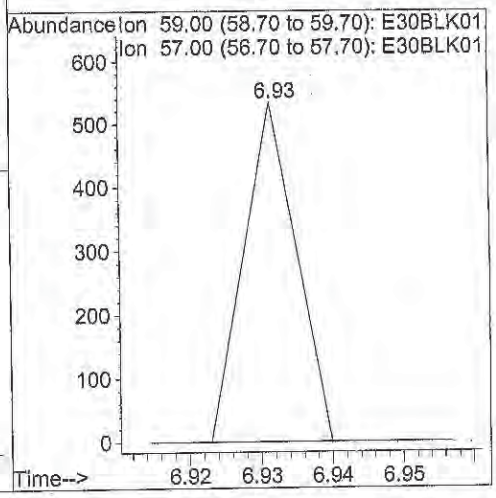


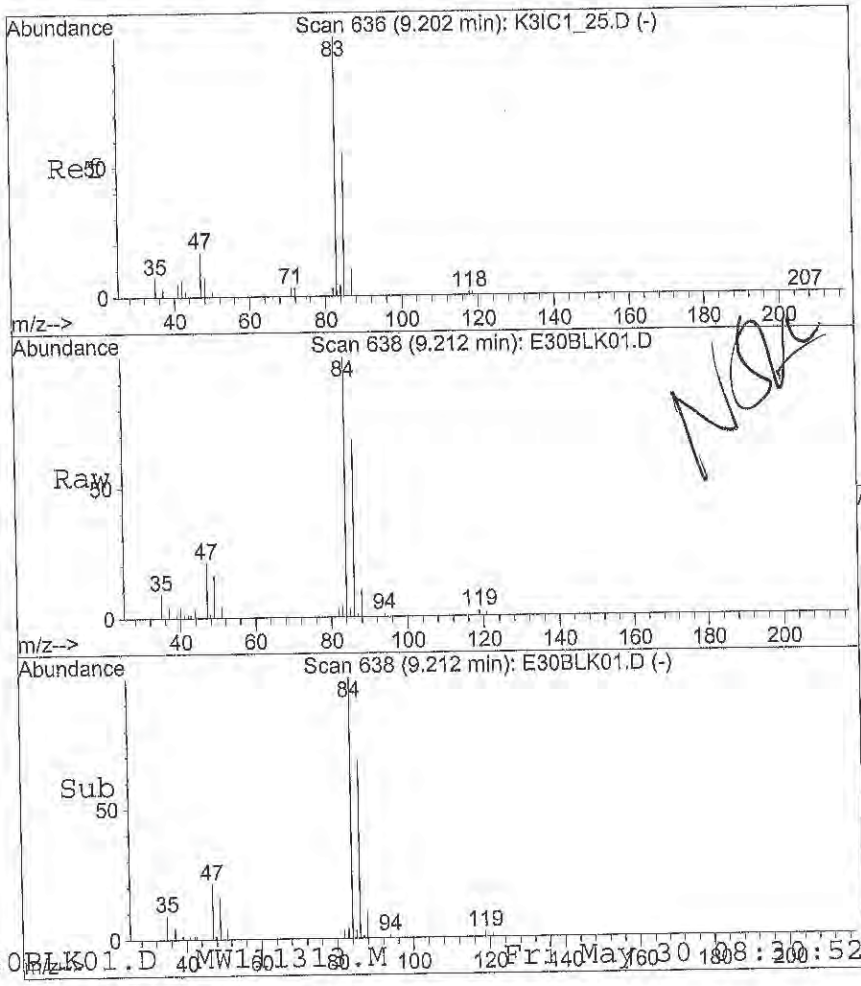


#15
(TBA) tert-Butanol
Concen: 0.98 ug/L
RT: 6.93 min Scan# 368
Delta R.T. -0.18 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 59 Resp: 271

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

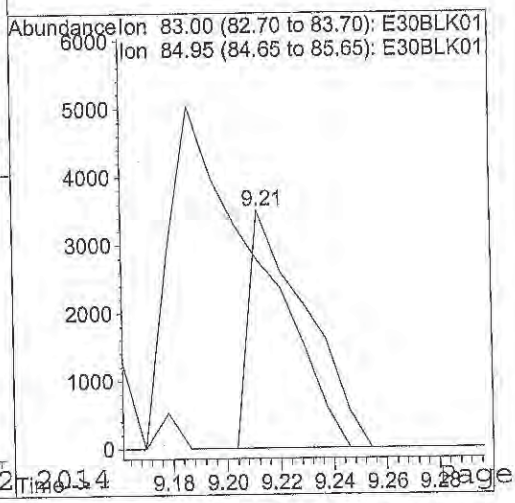


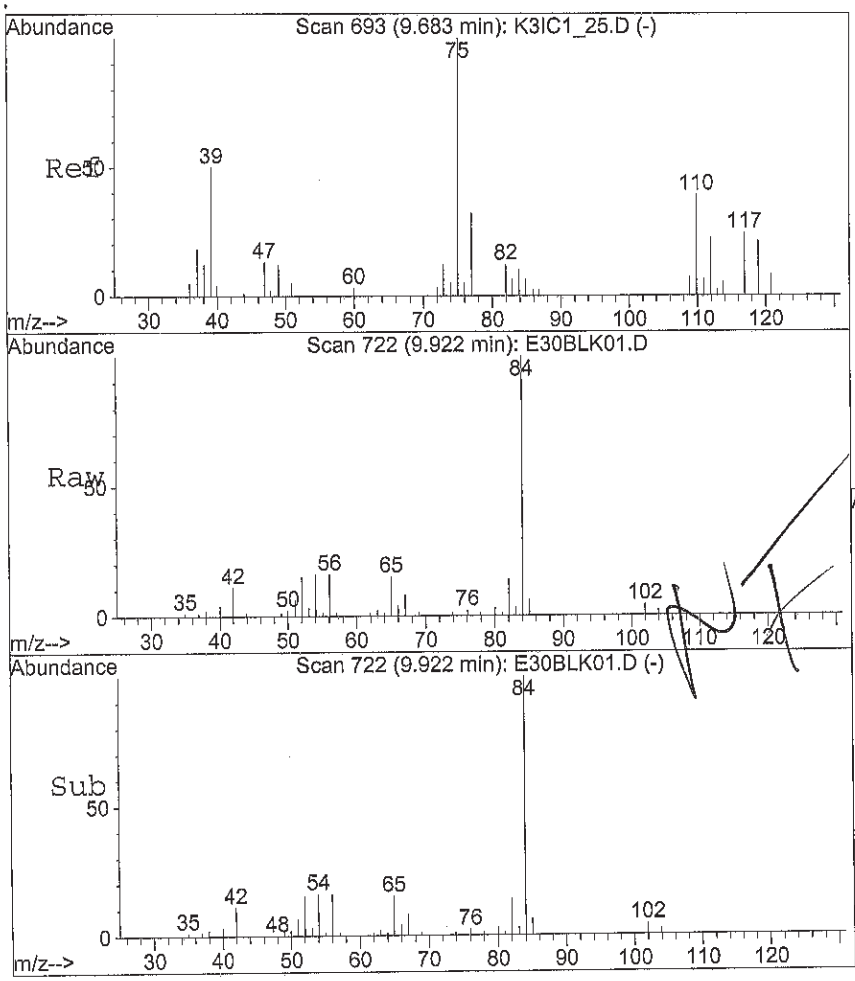


#24
Chloroform
Concen: 0.62 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 83 Resp: 5264

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

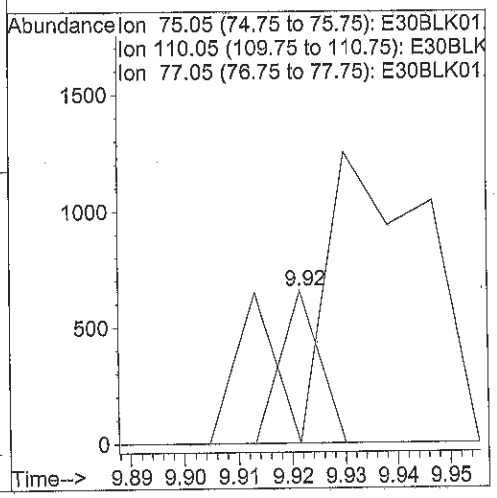


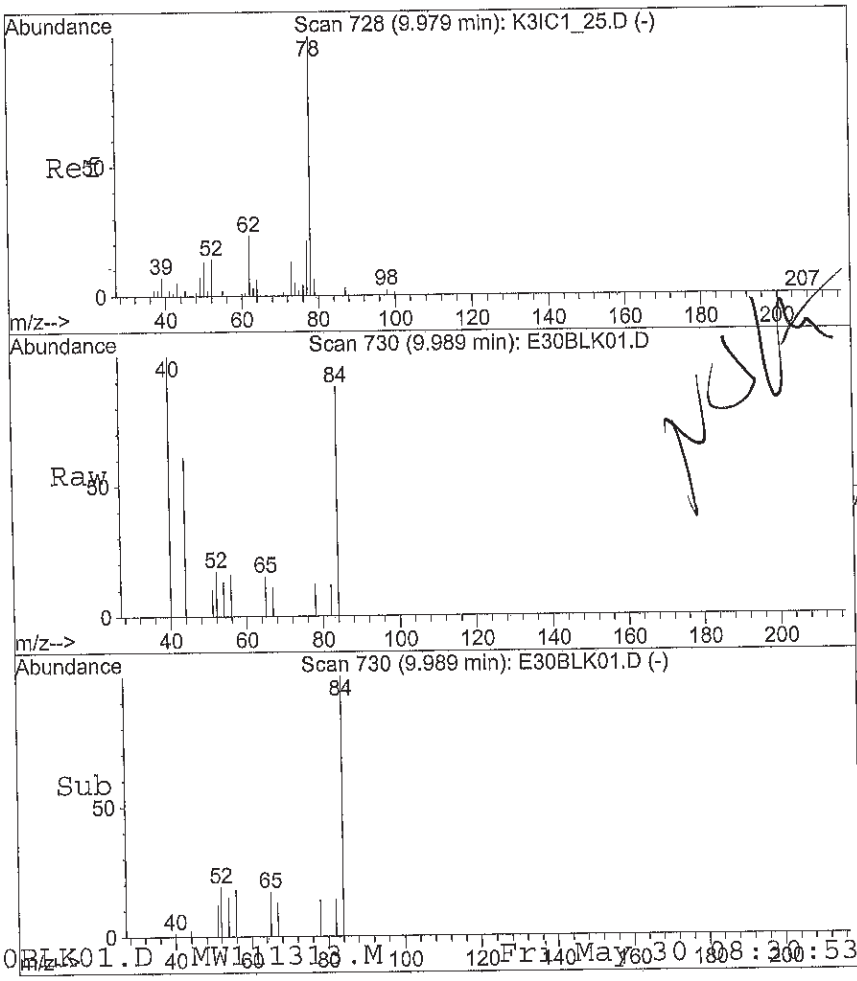


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 75 Resp: 332

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	592.5	25.0	37.4#

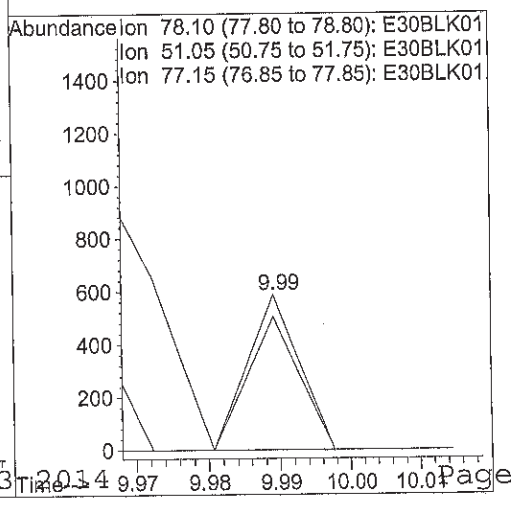


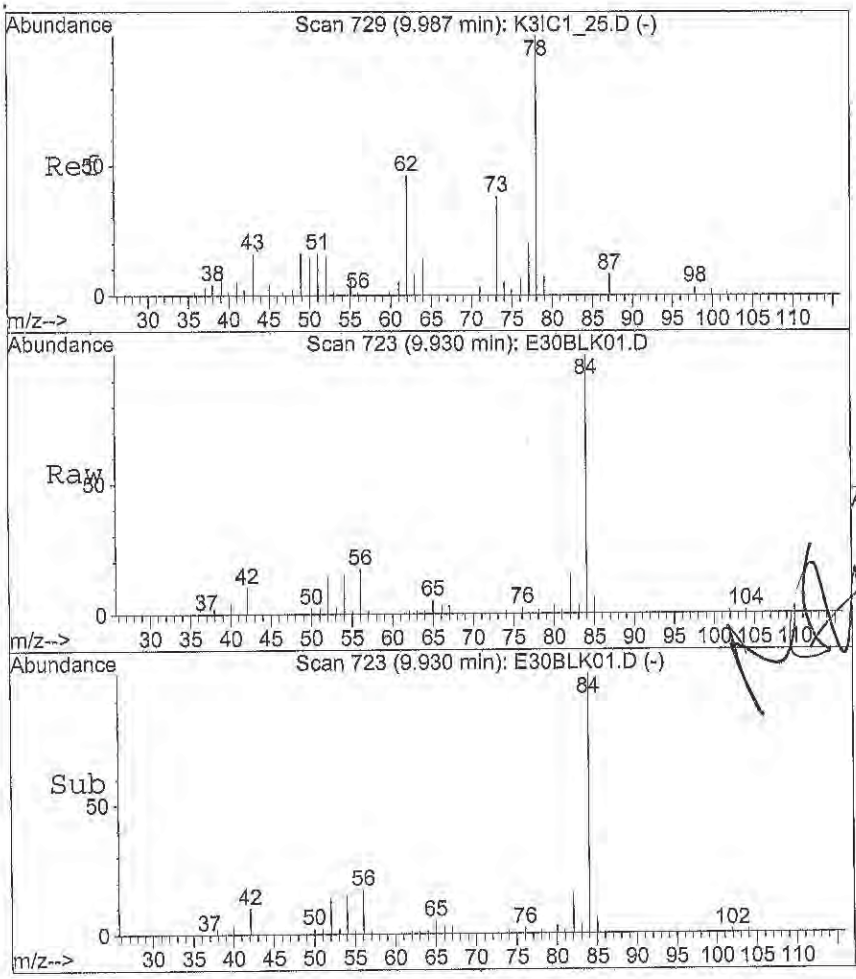


#31
Benzene
Concen: 0.02 ug/L
RT: 9.99 min Scan# 730
Delta R.T. 0.01 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 78 Resp: 297

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

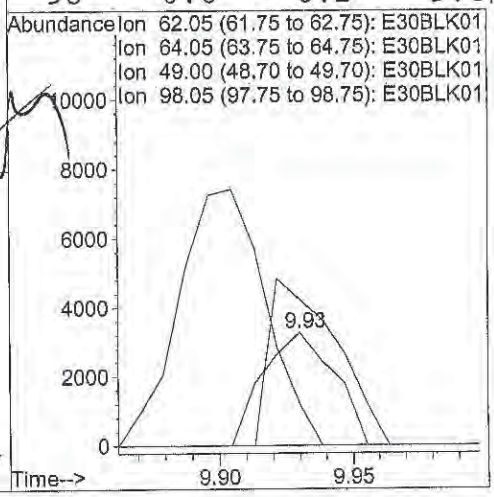


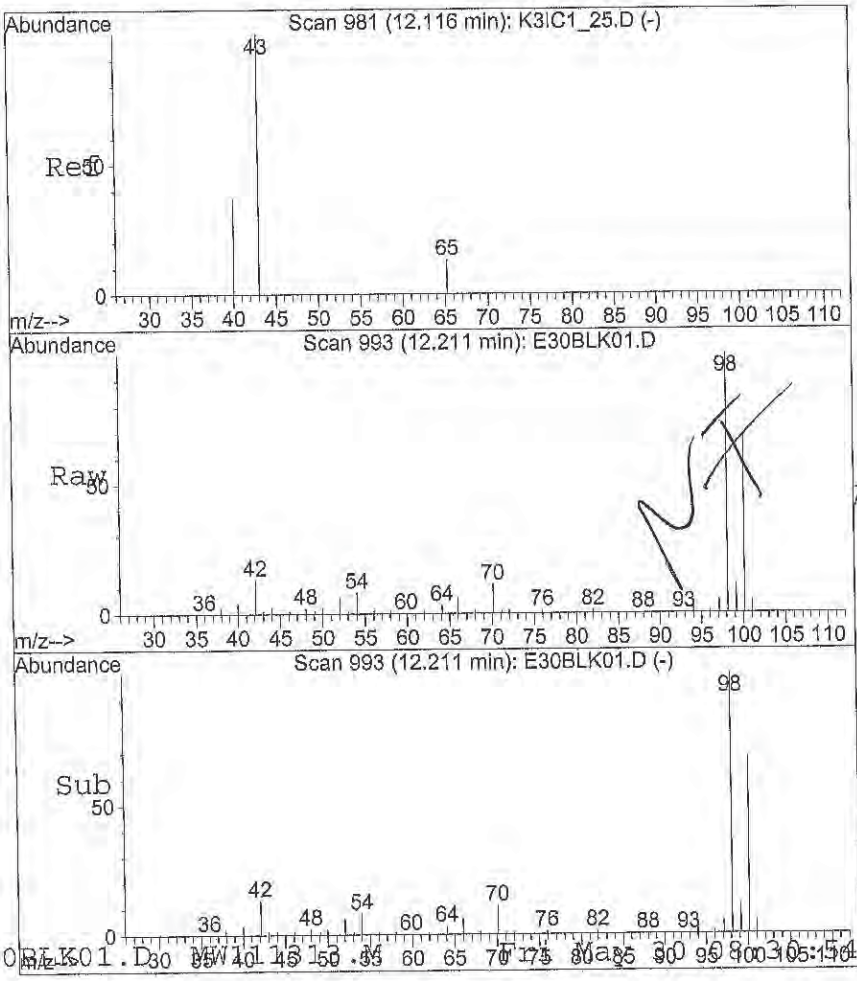


#32
1,2-Dichloroethane
Concen: 1.12 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 62 Resp: 6024

Ion	Ratio	Lower	Upper
62	100		
64	139.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

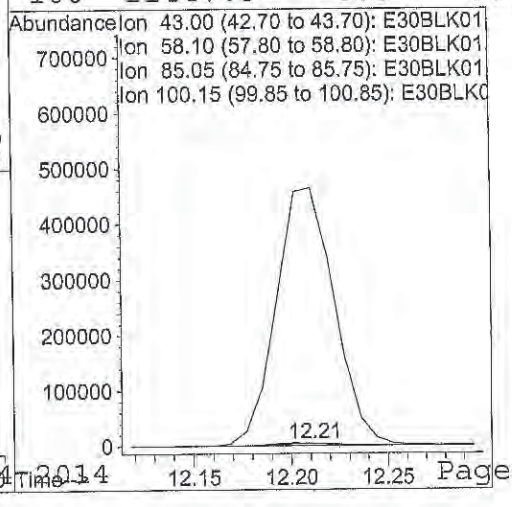


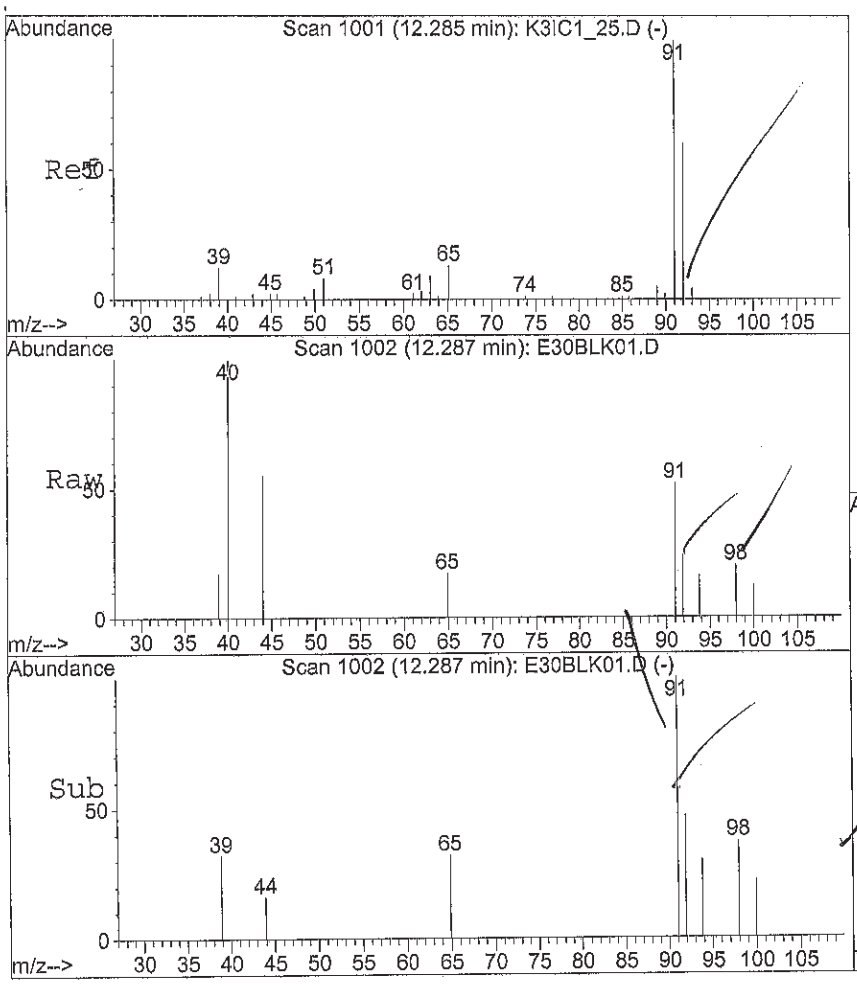


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.19 ug/L
RT: 12.21 min Scan# 993
Delta R.T. 0.09 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 43 Resp: 8465

Ion	Ratio	Lower	Upper
43	100		
58	122.0	0.0	0.0#
85	0.0	0.0	0.0
100	11447.3	0.0	0.0#

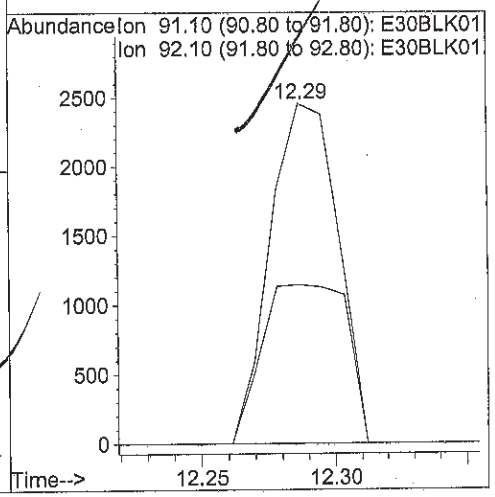


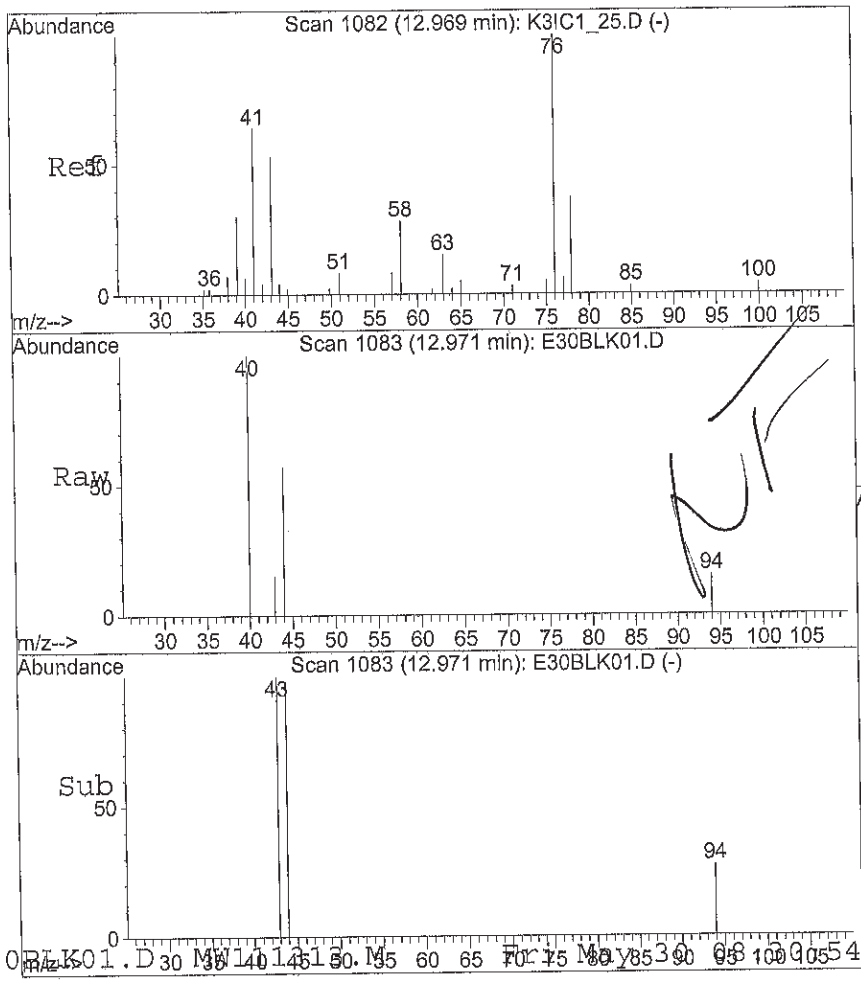


#41
Toluene
Concen: 0.24 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 91 Resp: 4316

Ion	Ratio	Lower	Upper
91	100		
92	58.5	47.4	71.0

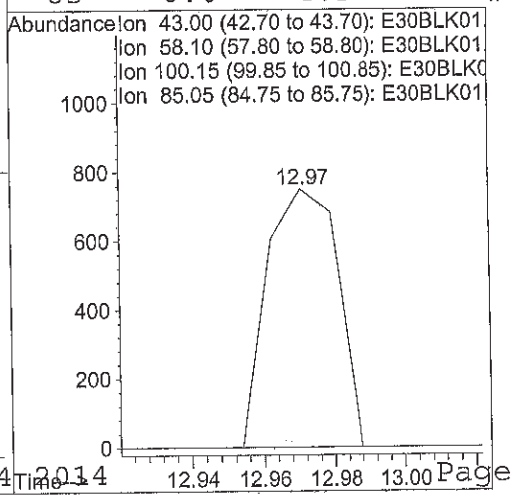


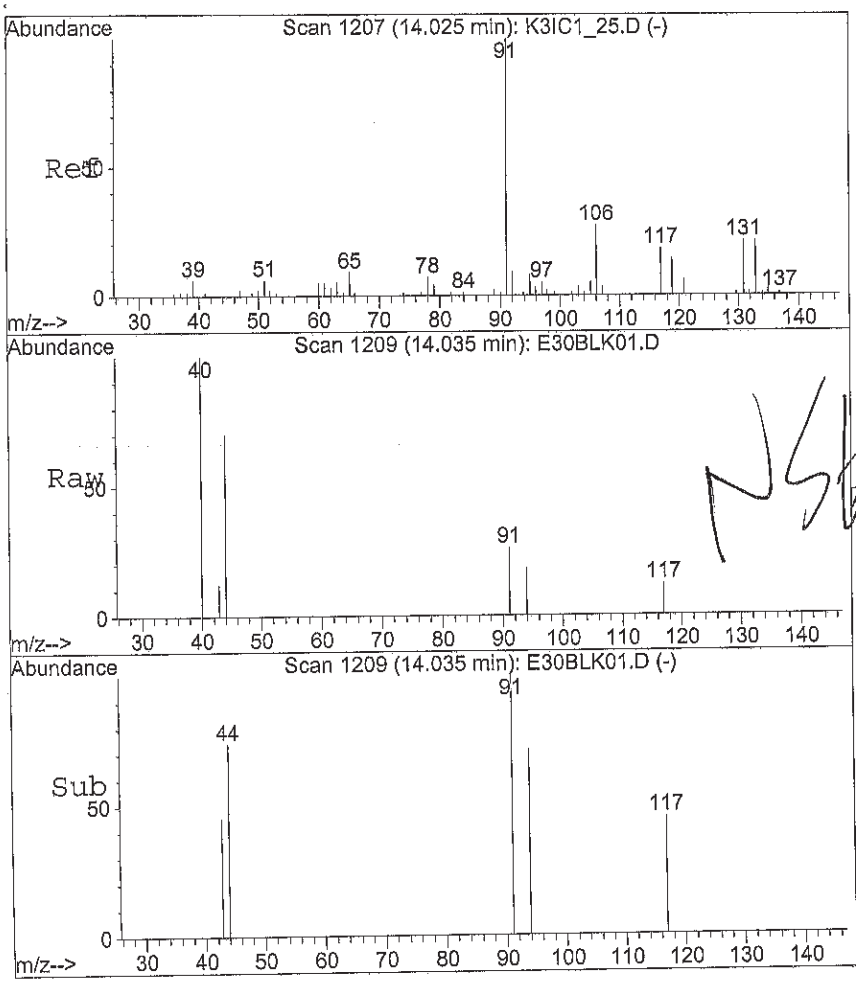


#46
2-Hexanone
Concen: 0.35 ug/L
RT: 12.97 min Scan# 1083
Delta R.T. 0.00 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 43 Resp: 1032

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

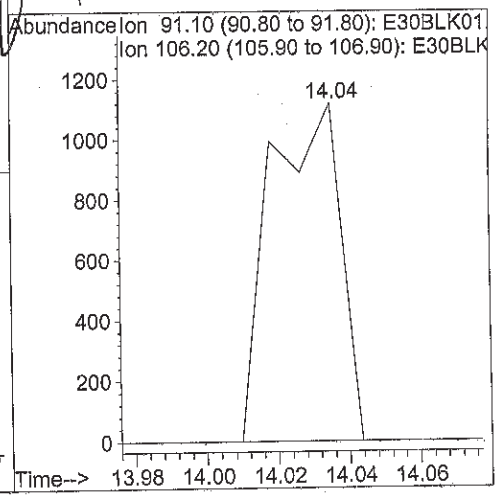


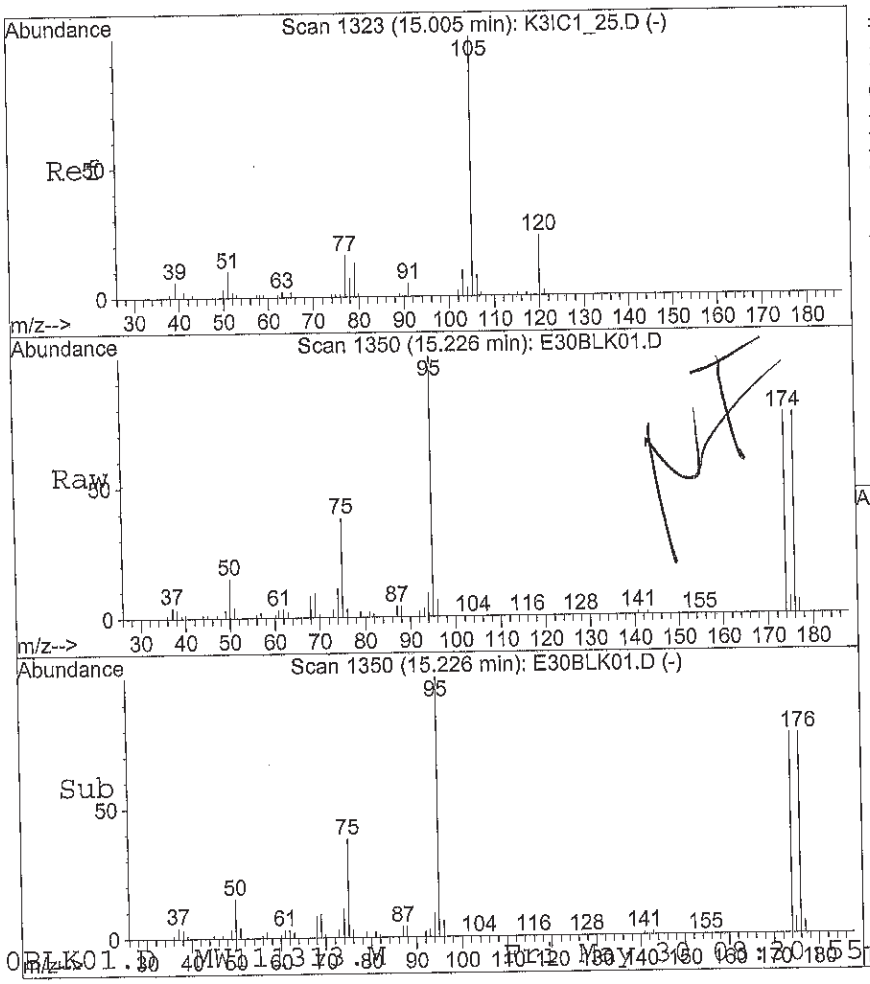


#51
Ethylbenzene
Concen: 0.07 ug/L
RT: 14.04 min Scan# 1209
Delta R.T. 0.01 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 91 Resp: 1520

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

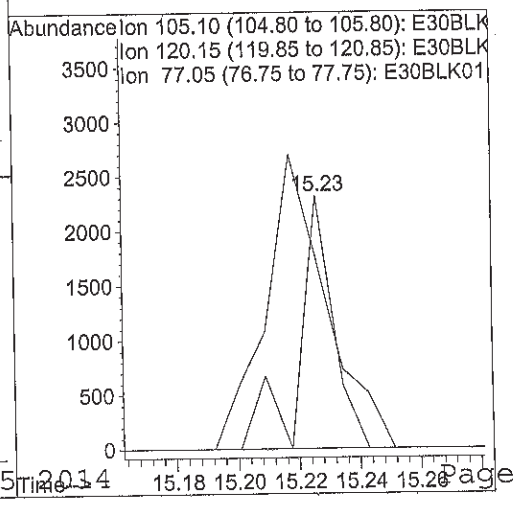


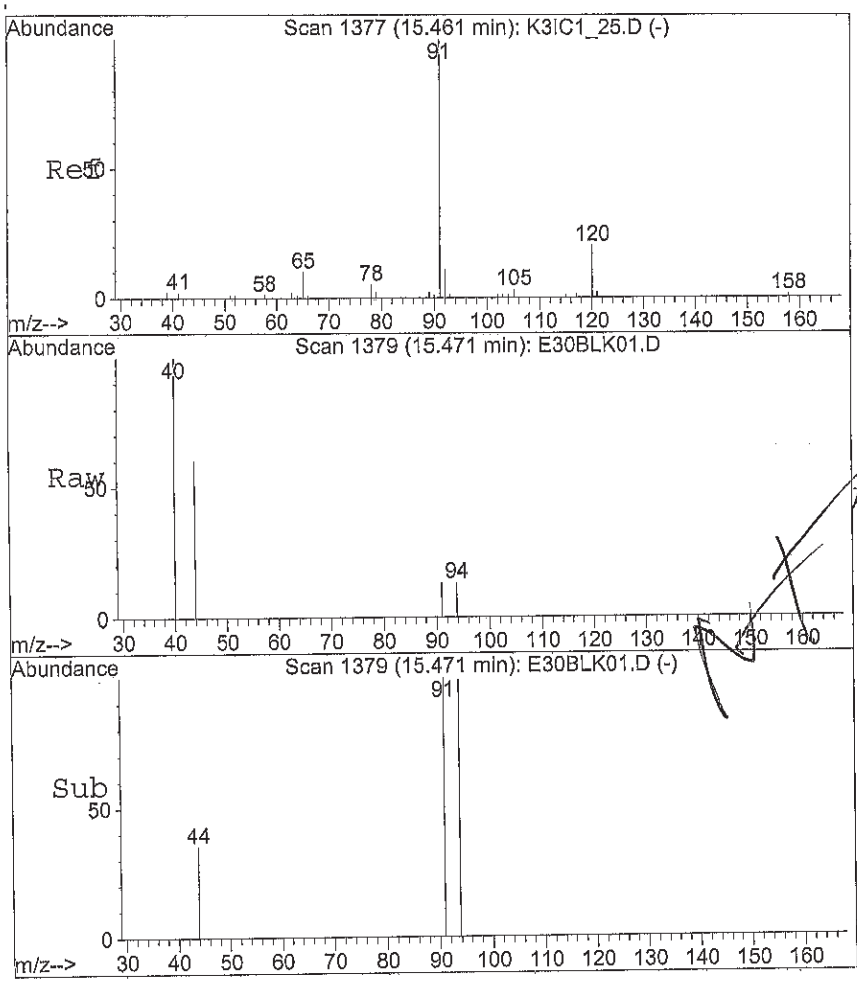


#56
Isopropylbenzene
Concen: 0.09 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.22 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion:105 Resp: 1799

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	206.7	13.1	19.7#

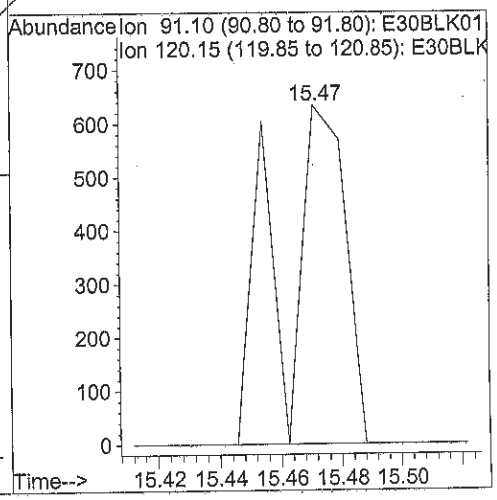


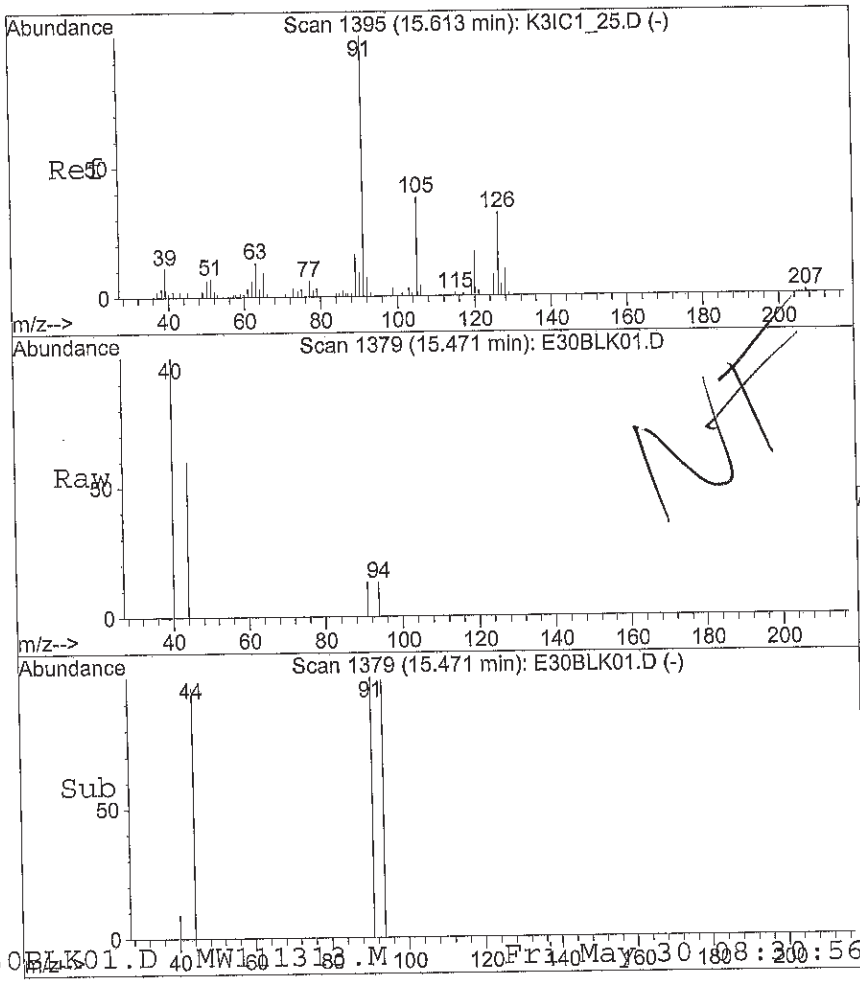


#62
n-Propylbenzene
Concen: 0.03 ug/L
RT: 15.47 min Scan# 1379
Delta R.T. 0.01 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 91 Resp: 915

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

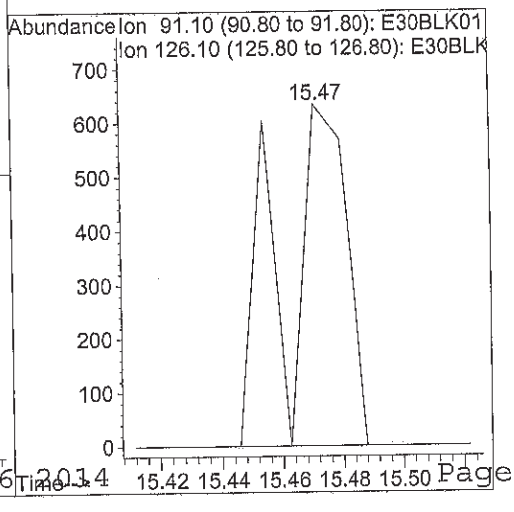


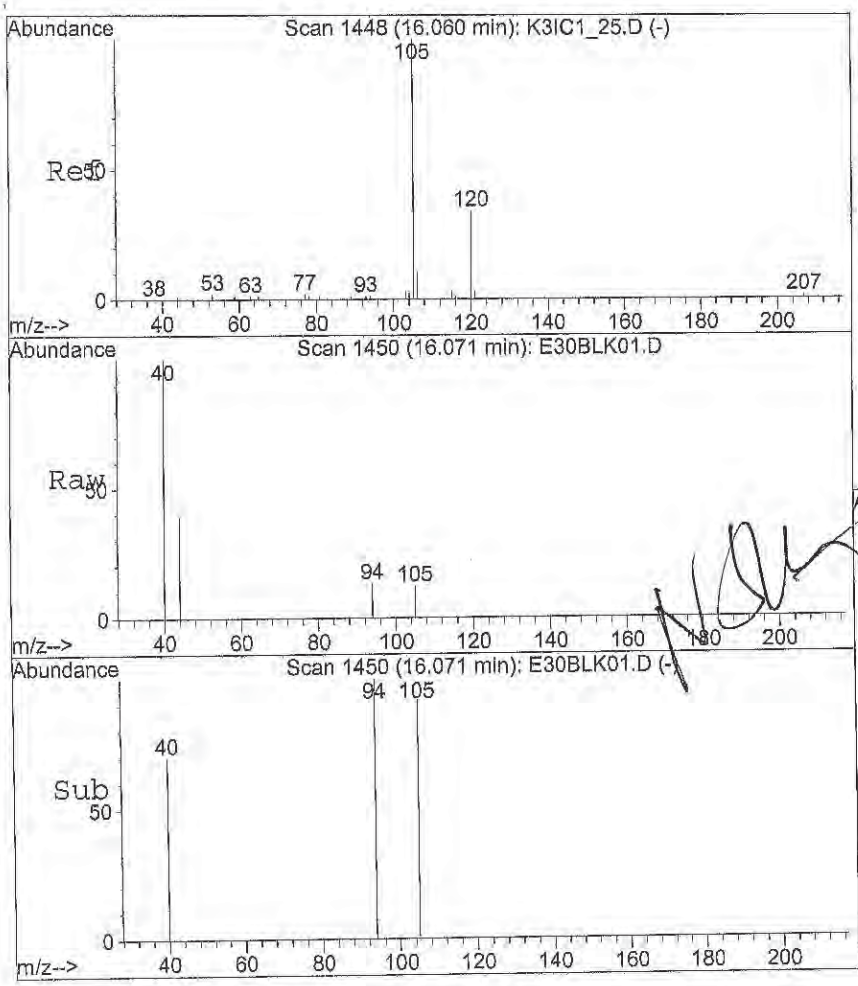


#63
2-Chlorotoluene
Concen: 0.05 ug/L
RT: 15.47 min Scan# 1379
Delta R.T. -0.14 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion: 91 Resp: 915

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

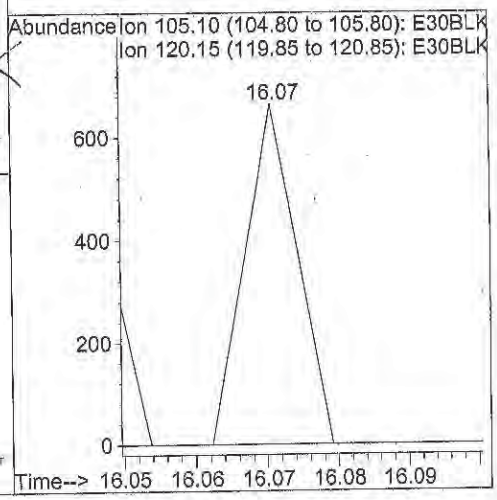


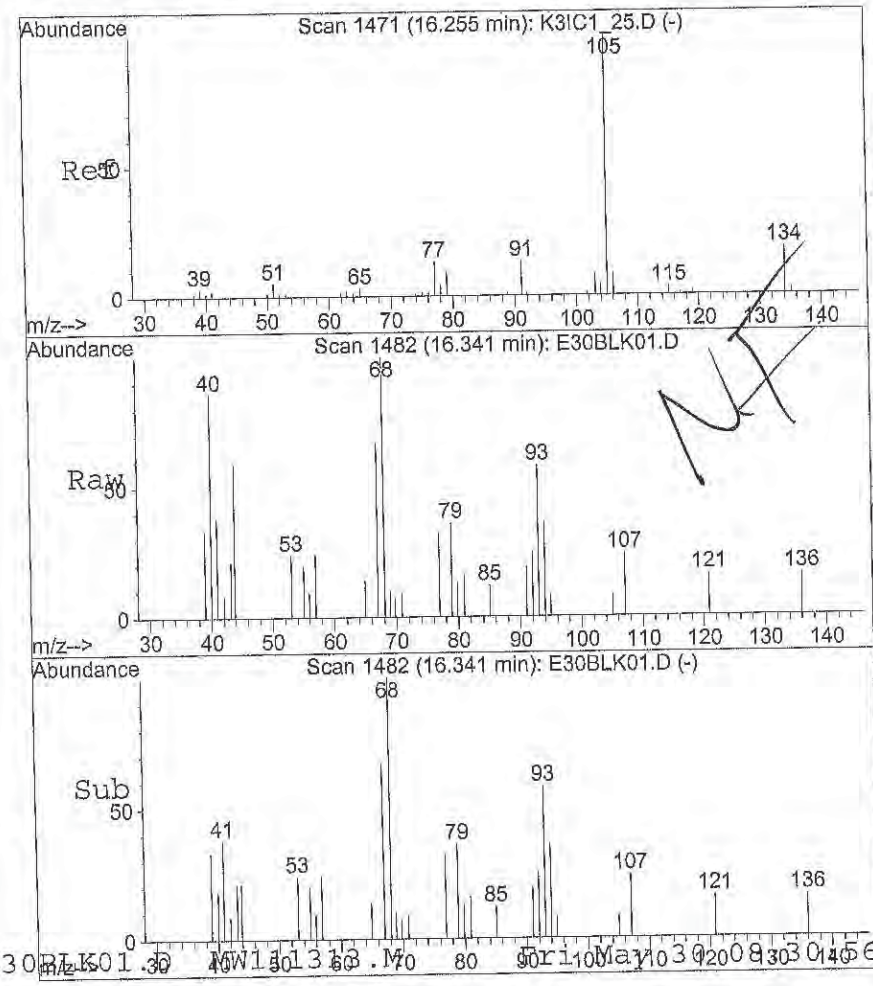


#67
1,2,4-Trimethylbenzene
Concen: 0.02 ug/L
RT: 16.07 min Scan# 1450
Delta R.T. 0.01 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion:105 Resp: 337

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

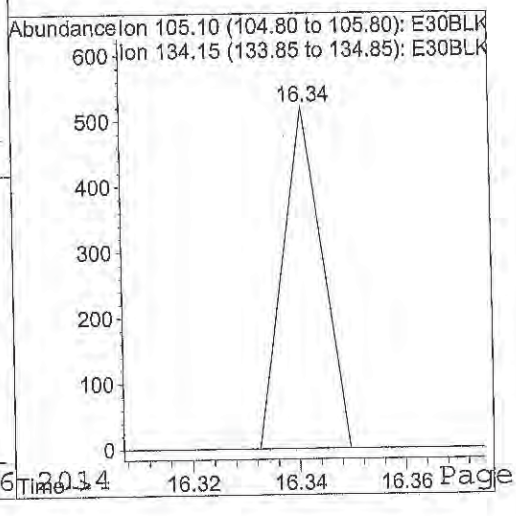


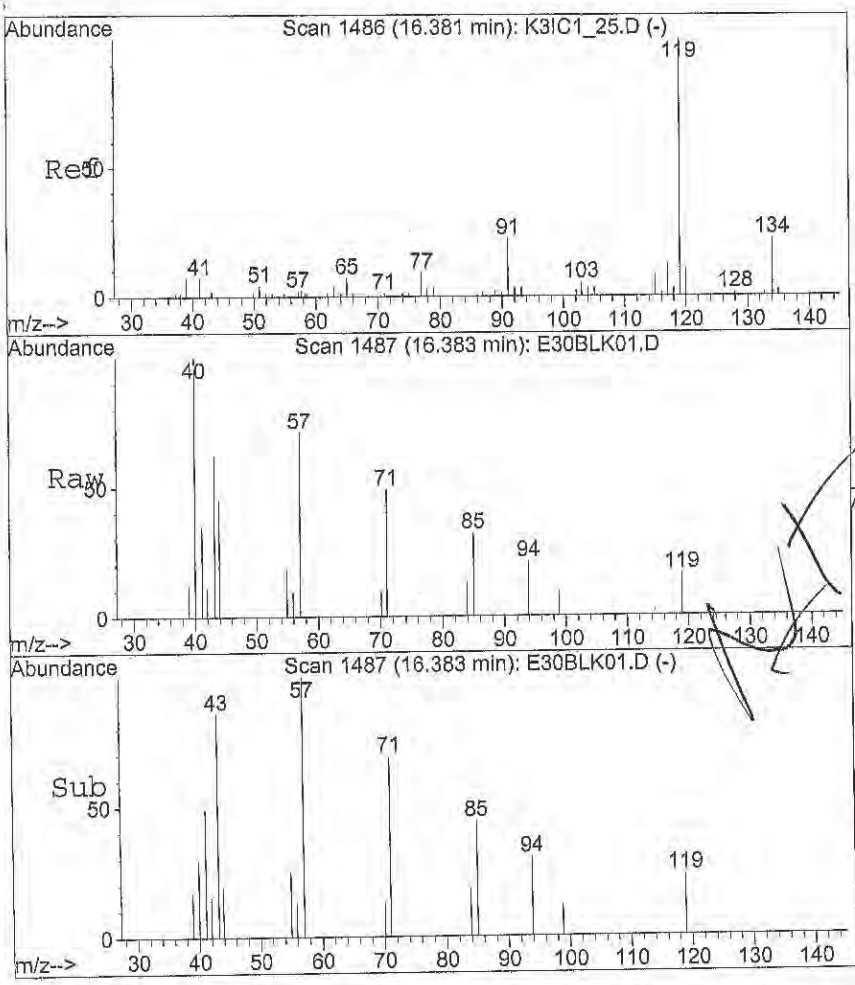


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.34 min Scan# 1482
Delta R.T. 0.09 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion:105 Resp: 264

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

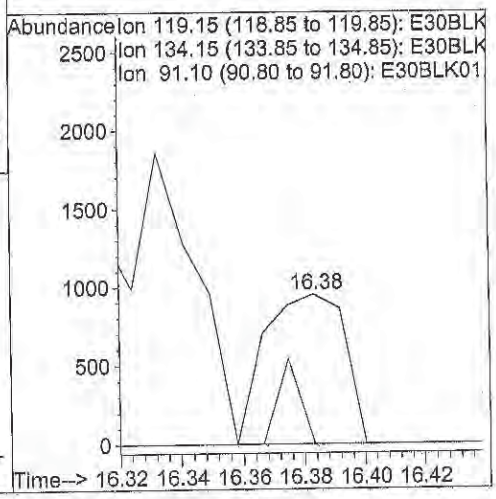


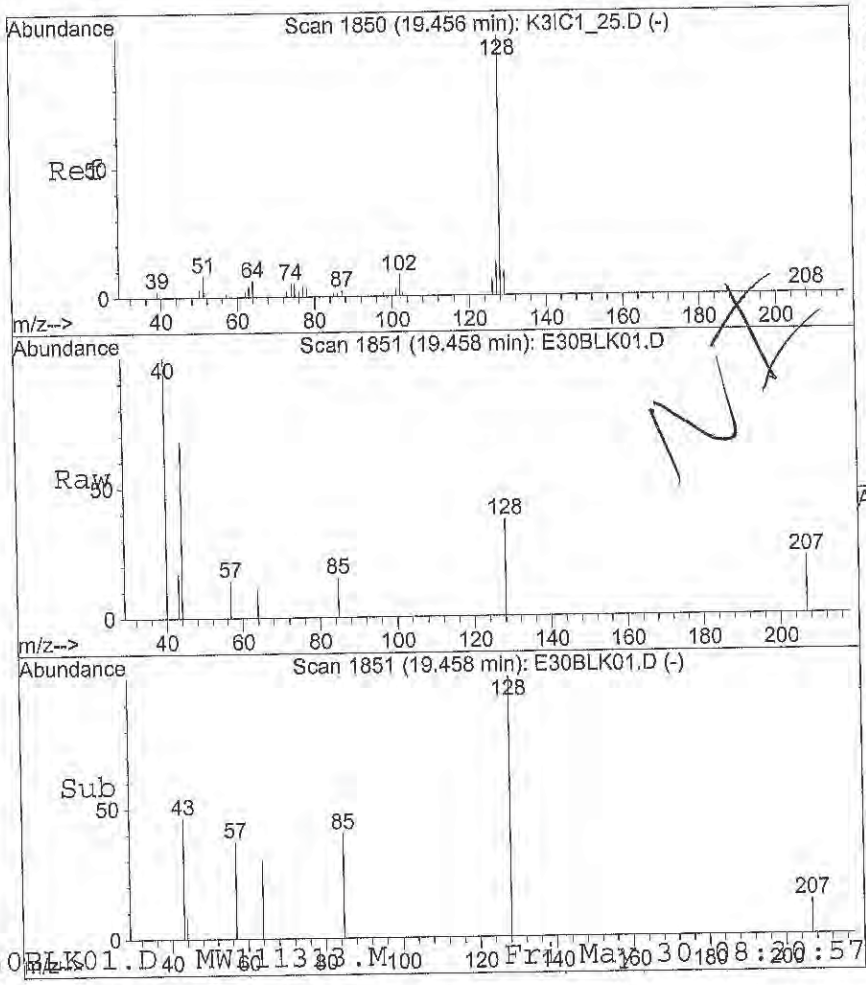


#69
p-Isopropyltoluene
Concen: 0.09 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion:119 Resp: 1722

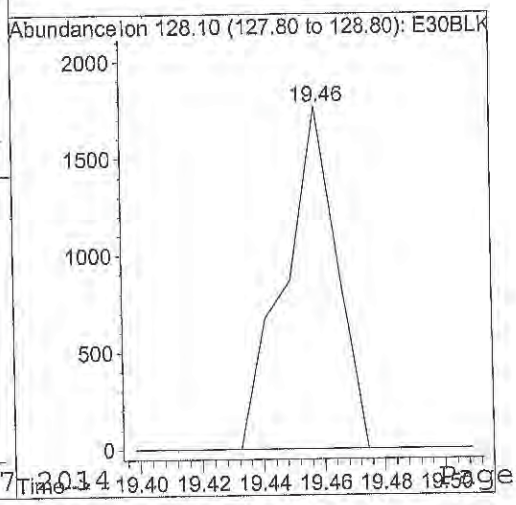
Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	15.8	19.6	29.4#





#77
Naphthalene
Concen: 0.15 ug/L
RT: 19.46 min Scan# 1851
Delta R.T. 0.00 min
Lab File: E30BLK01.D
Acq: 30 May 2014 7:45 am

Tgt Ion:128 Resp: 2096



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30BLK01.D
Acq On : 30 May 2014 7:45 am
Sample : 34E3001-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: May 30 8:33 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1622577	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1329092	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	724181	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	460269	10.91 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.28%		
3) Chloroform-d (SU6)	9.19	84	701756	11.59 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.72%		
4) Methylene Chloride-d2 (SU5	7.08	86	404241	11.42 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 91.36%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	451512	15.66 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 125.28%#		
6) Benzene-d6 (SU7)	9.93	84	1363643	10.71 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 85.68%		
8) Toluene-d8 (SU3)	12.21	98	1433560	11.37 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.96%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	730091	14.03 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 112.24%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

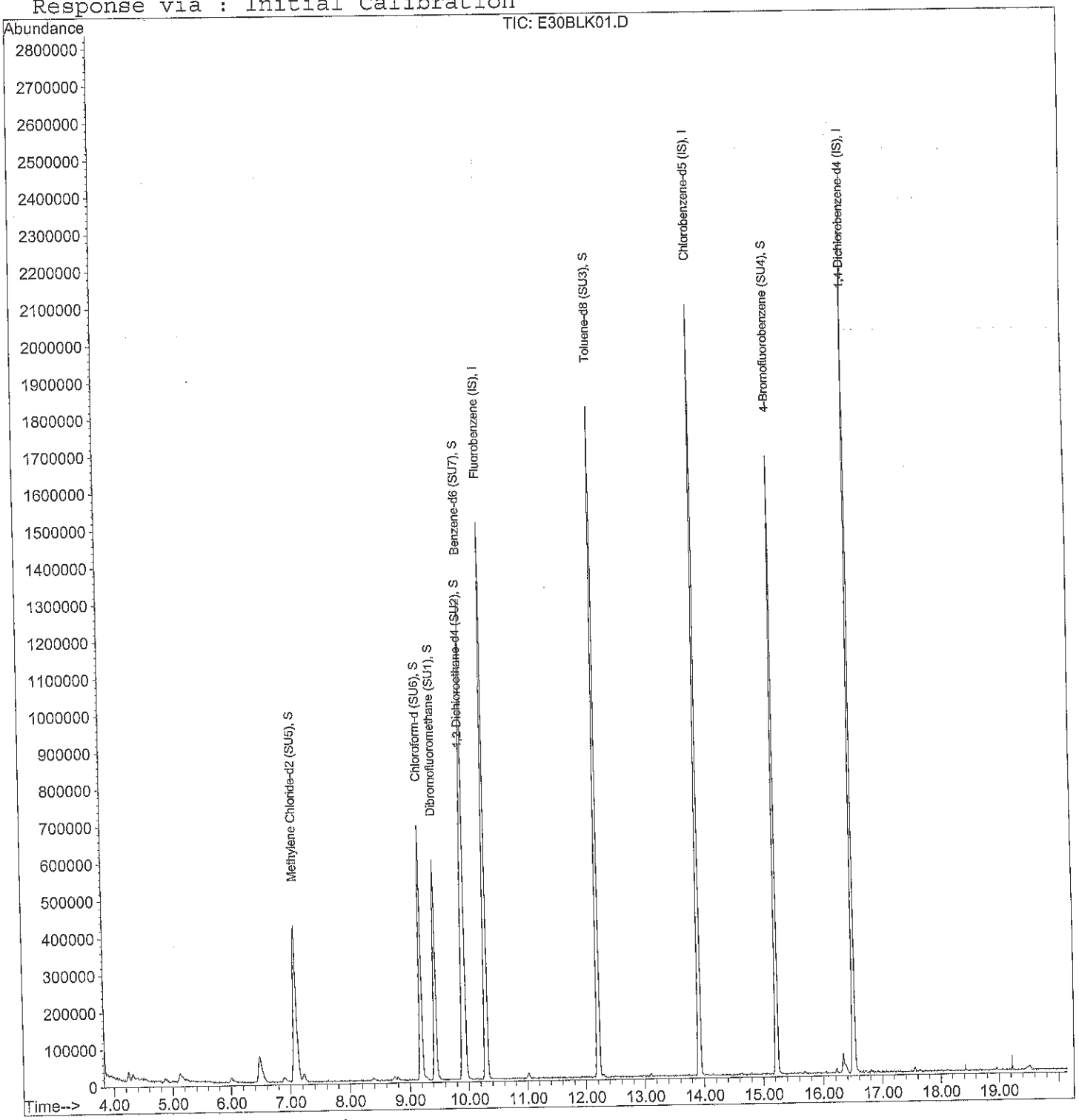
Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30BLK01.D
Acq On : 30 May 2014 7:45 am
Sample : 34E3001-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: May 30 8:33 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR ANALYZED SAMPLES INCLUDING CHROMATOGRAMS, QUANTITATION REPORTS AND SPECTRA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000001.D
Acq On : 30 May 2014 8:15 am
Sample : 3E43001-01
Misc : 100cc Equipment Blank
MS Integration Params: rteint.p
Quant Time: May 30 8:36 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1463339	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1193802	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	650445	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	420773	11.53 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.24%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	404078	11.65 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.20%		
39) Toluene-d8 (SU3)	12.21	98	1315571	11.82 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.56%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	648844	13.29 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.32%		

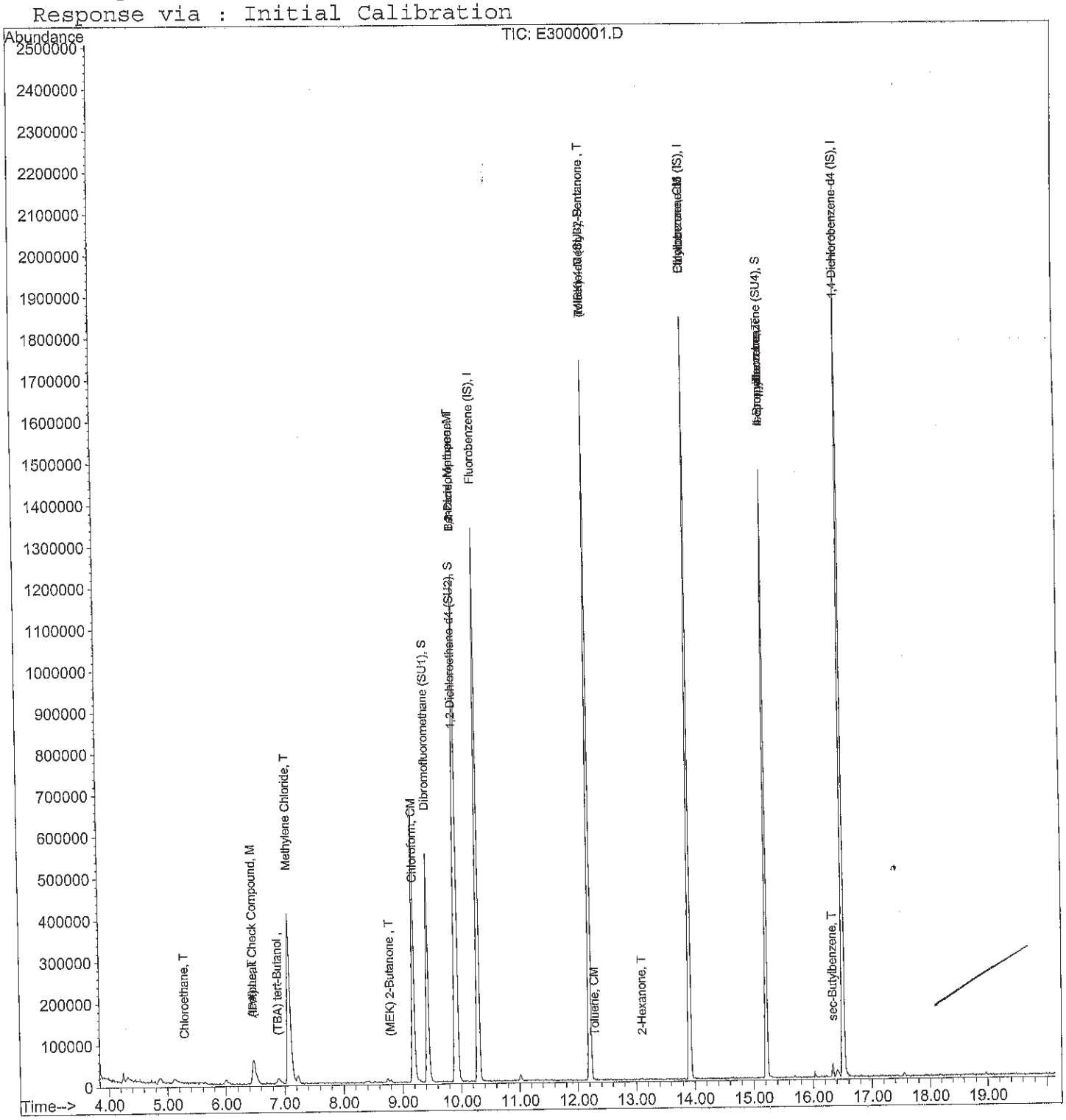
Target Compounds					Qvalue
4) Chloromethane	4.39	50	798	-0.90 ~~ug/L~~ # NSM	41
6) Bromomethane	5.11	96	2313	-0.34 ~~ug/L~~ #	1
7) Chloroethane	5.30	64	1764	2.14 ~~ug/L~~	87
11) Acetone	6.46	58	8296	10.17 ~~ug/L~~ NT	97
12) (IPA) Leak Check Compound	6.47	45	110463	628.20 ~~ug/L~~ # NSM	83
14) Methylene Chloride	7.07	84	5149	1.28 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.91	59	722	2.89 ~~ug/L~~ #	77
21) (MEK) 2-Butanone	8.80	72	276	0.67 ~~ug/L~~ #	1
24) Chloroform	9.21	83	2965	0.39 ~~ug/L~~ #	1
29) 1,1-Dichloropropene	9.92	75	319	0.06 ~~ug/L~~ # NSM	1
31) Benzene	9.93	78	8083	0.59 ~~ug/L~~ #	71
32) 1,2-Dichloroethane	9.93	62	5198	1.07 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	6869	2.88 ~~ug/L~~ #	100
41) Toluene	12.29	91	690	0.04 ~~ug/L~~ # NSM	21
46) 2-Hexanone	13.10	43	421	0.16 ~~ug/L~~ #	37
51) Ethylbenzene	13.92	91	1315	0.07 ~~ug/L~~ #	45
54) Styrene	14.63	104	537	-0.82 ~~ug/L~~ #	40
56) Isopropylbenzene	15.22	105	257	0.01 ~~ug/L~~ #	1
62) n-Propylbenzene	15.22	91	1763	0.07 ~~ug/L~~ #	56
68) sec-Butylbenzene	16.34	105	271	0.01 ~~ug/L~~ #	62

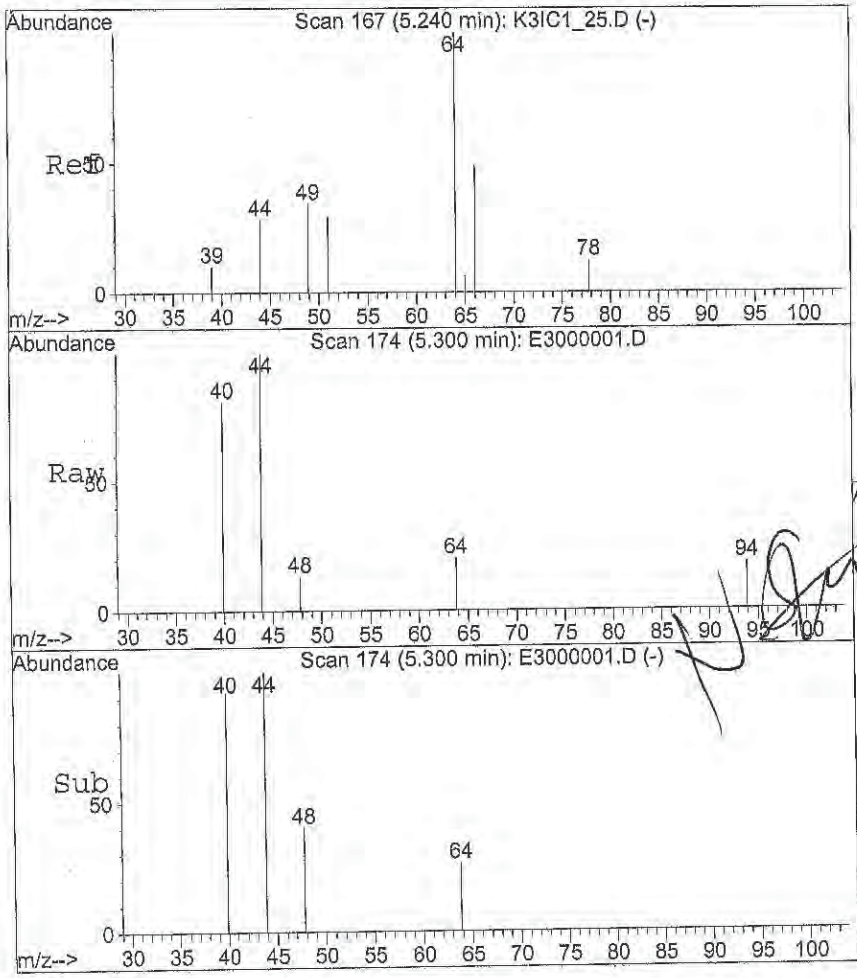
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000001.D Vial: 11
Acq On : 30 May 2014 8:15 am Operator: DN
Sample : 3E43001-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 8:36 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

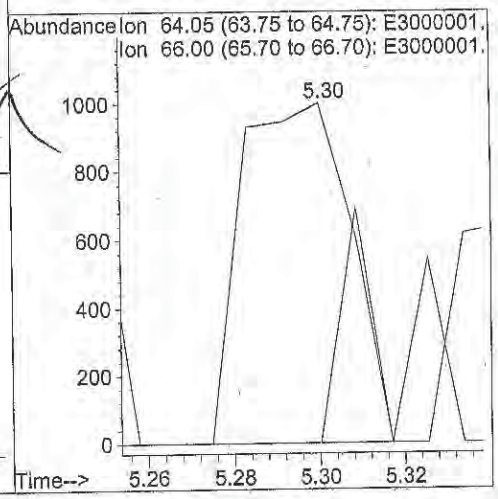


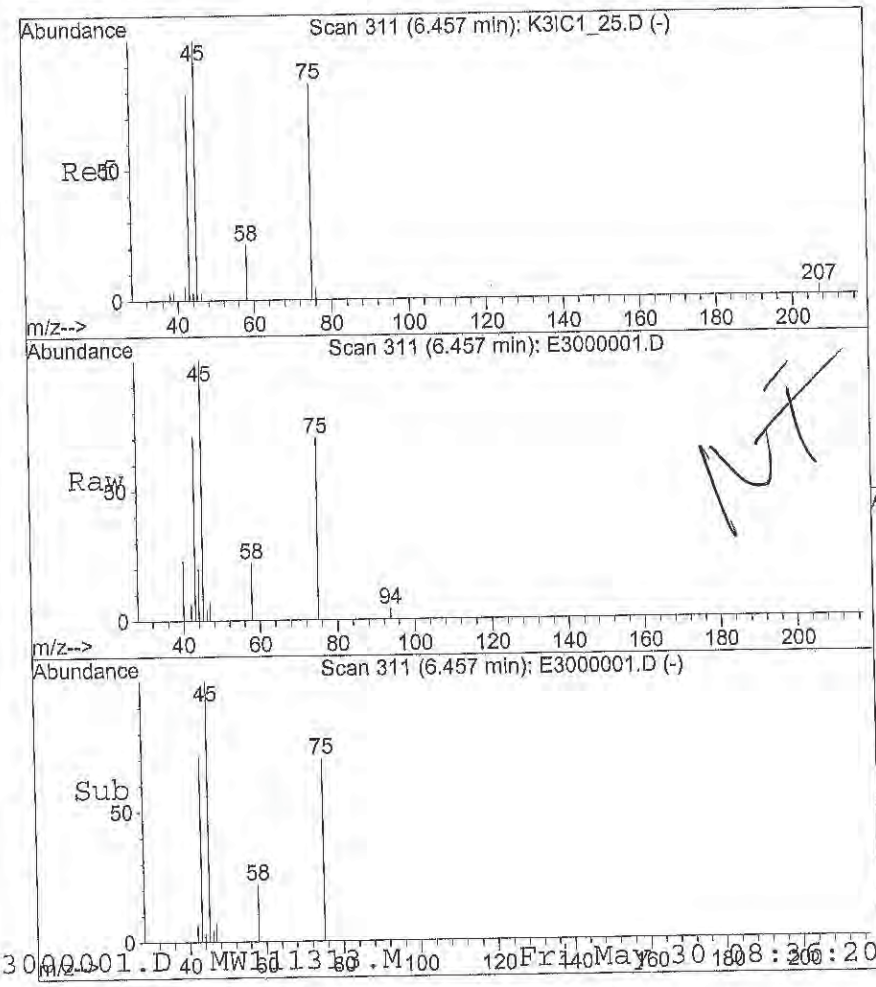


#7
Chloroethane
Concen: 2.14 ug/L
RT: 5.30 min Scan# 174
Delta R.T. 0.06 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 64 Resp: 1764

Ion	Ratio	Lower	Upper
64	100		
66	35.5	35.4	53.0

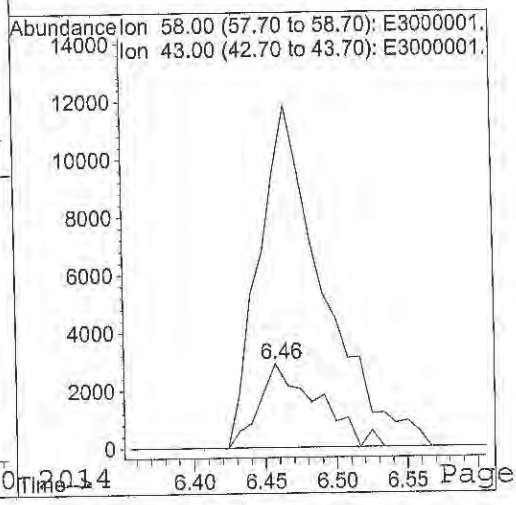


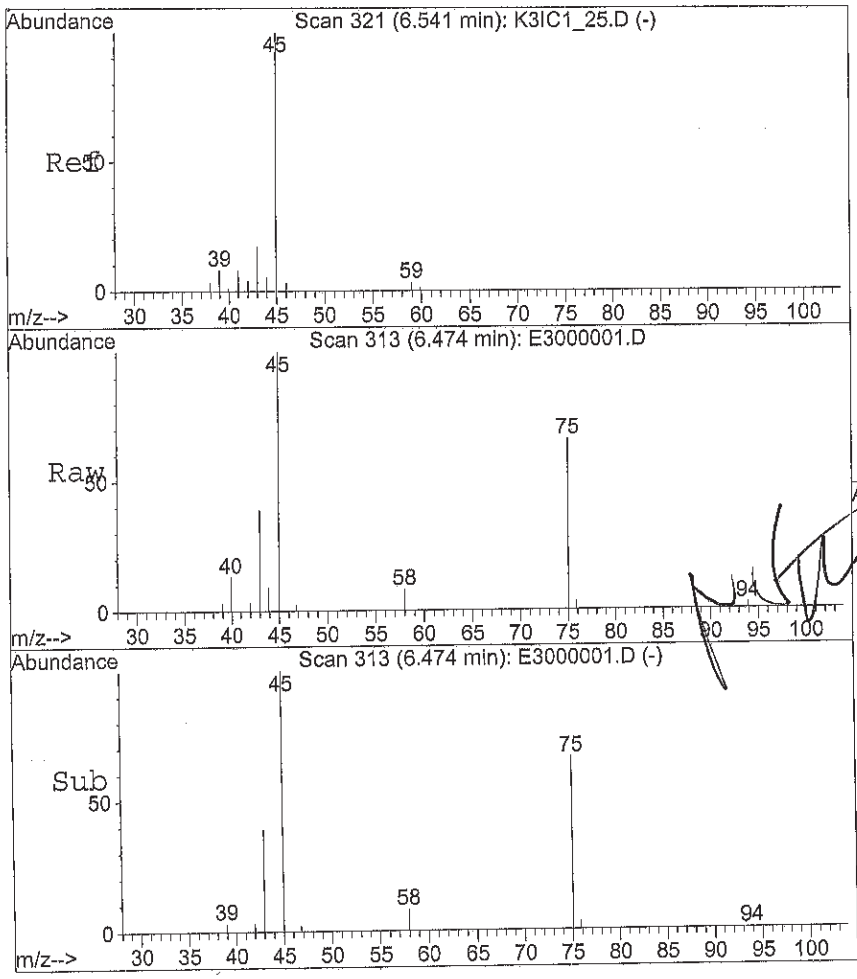


#11
Acetone
Concen: 10.17 ug/L
RT: 6.46 min Scan# 311
Delta R.T. 0.00 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 58 Resp: 8296

Ion	Ratio	Lower	Upper
58	100		
43	444.6	360.9	541.3

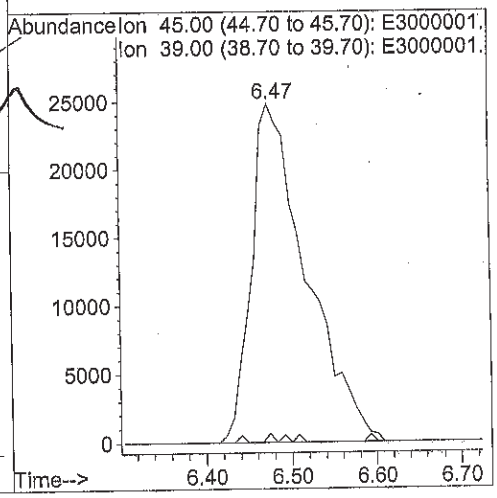


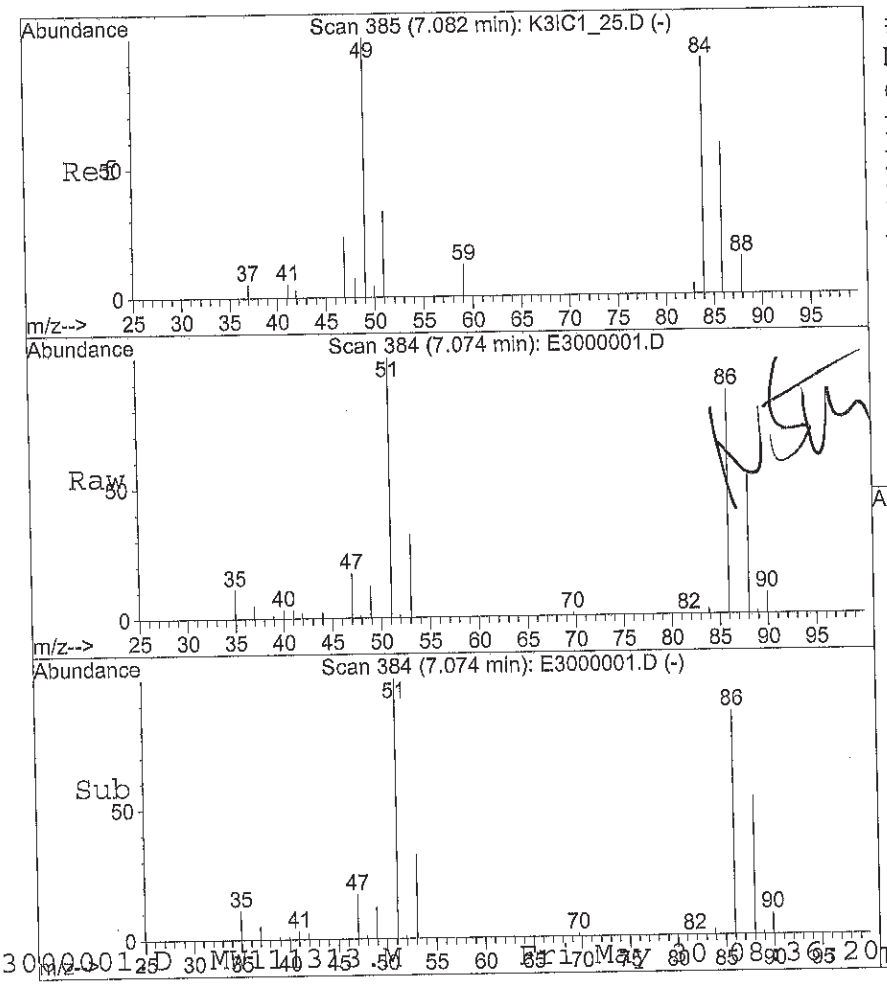


#12
(IPA) Leak Check Compound
Concen: 628.20 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 45 Resp: 110463

Ion	Ratio	Lower	Upper
45	100		
39	0.3	4.9	7.3#

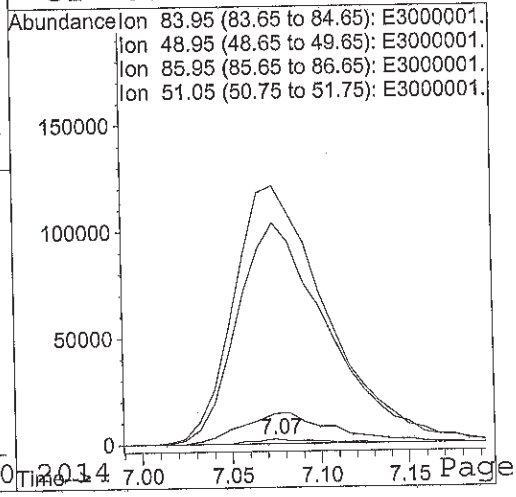


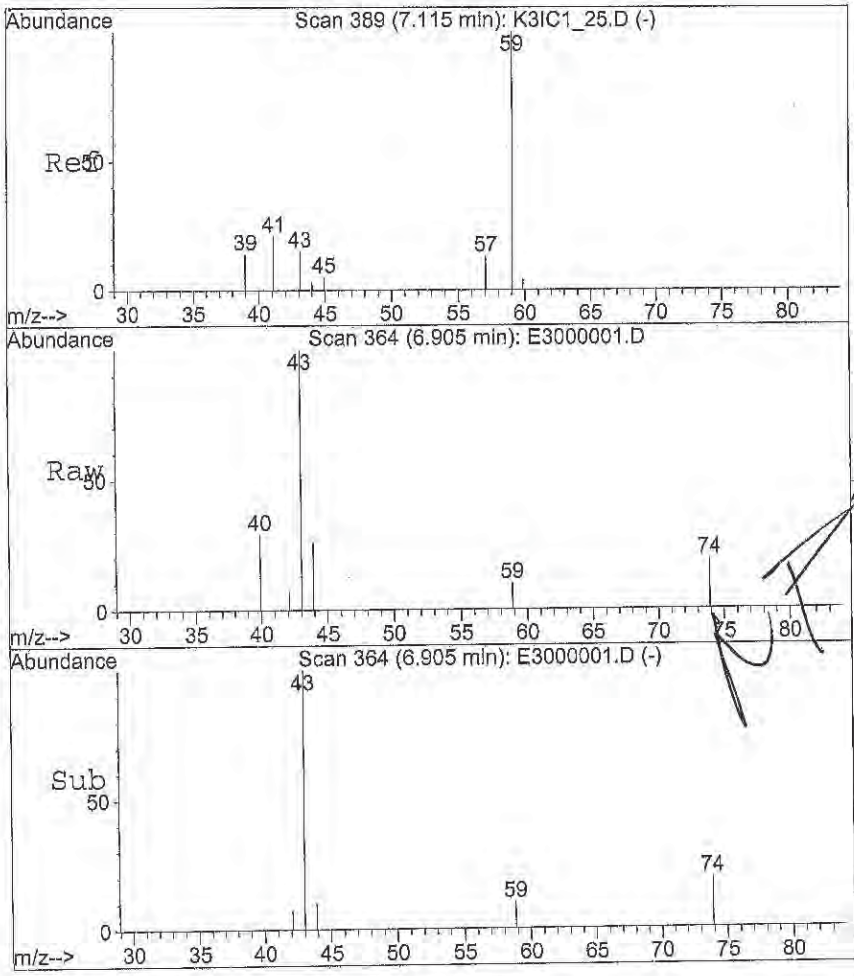


#14
Methylene Chloride
Concen: 1.28 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 84 Resp: 5149

Ion	Ratio	Lower	Upper
84	100		
49	1009.1	89.8	134.6#
86	7314.7	51.1	76.7#
51	8668.2	28.5	42.7#

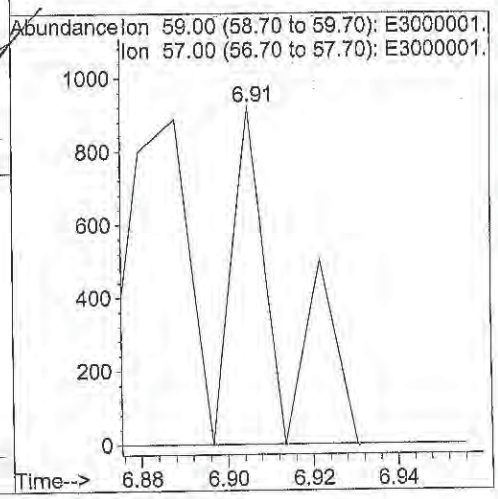


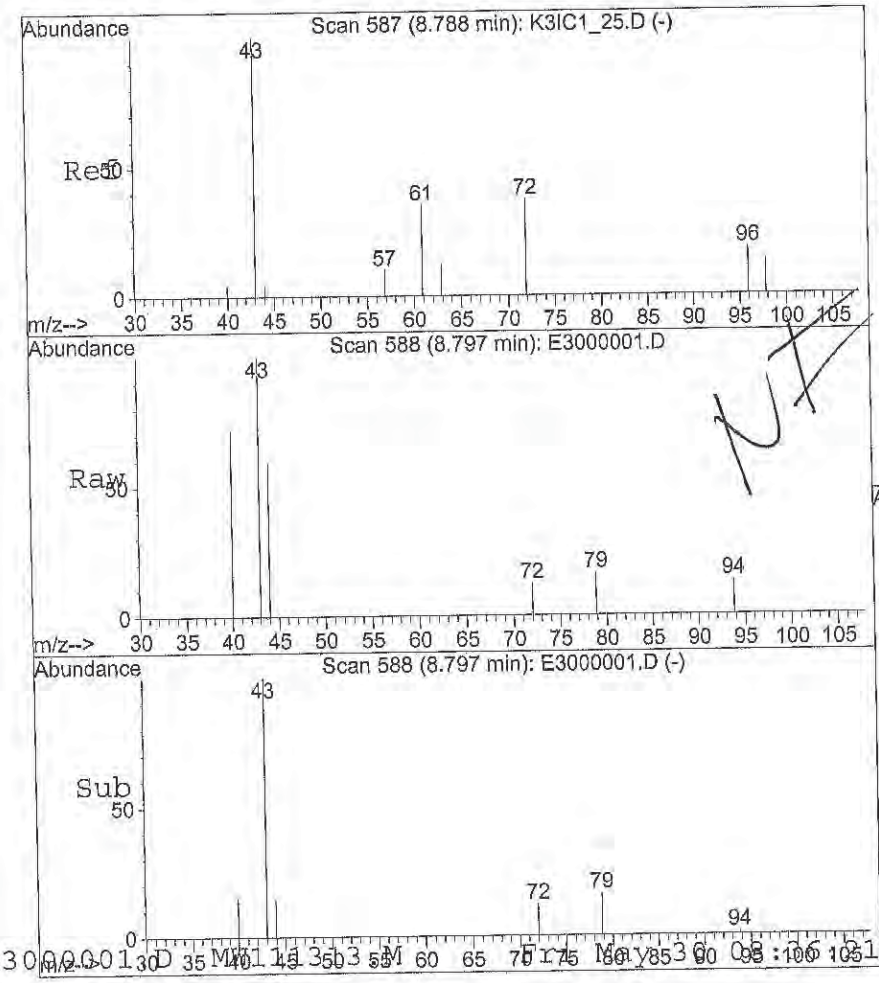


#15
(TBA) tert-Butanol
Concen: 2.89 ug/L
RT: 6.91 min Scan# 364
Delta R.T. -0.21 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 59 Resp: 722

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

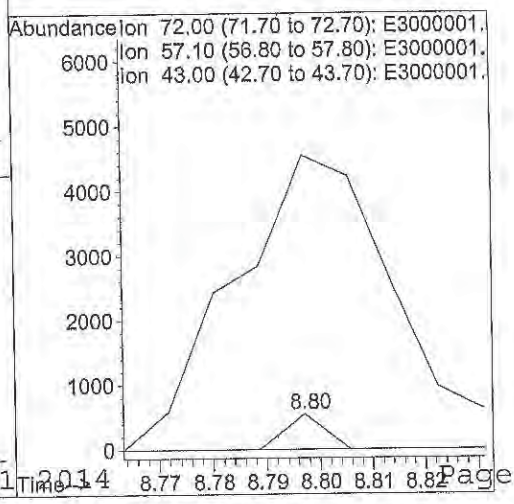


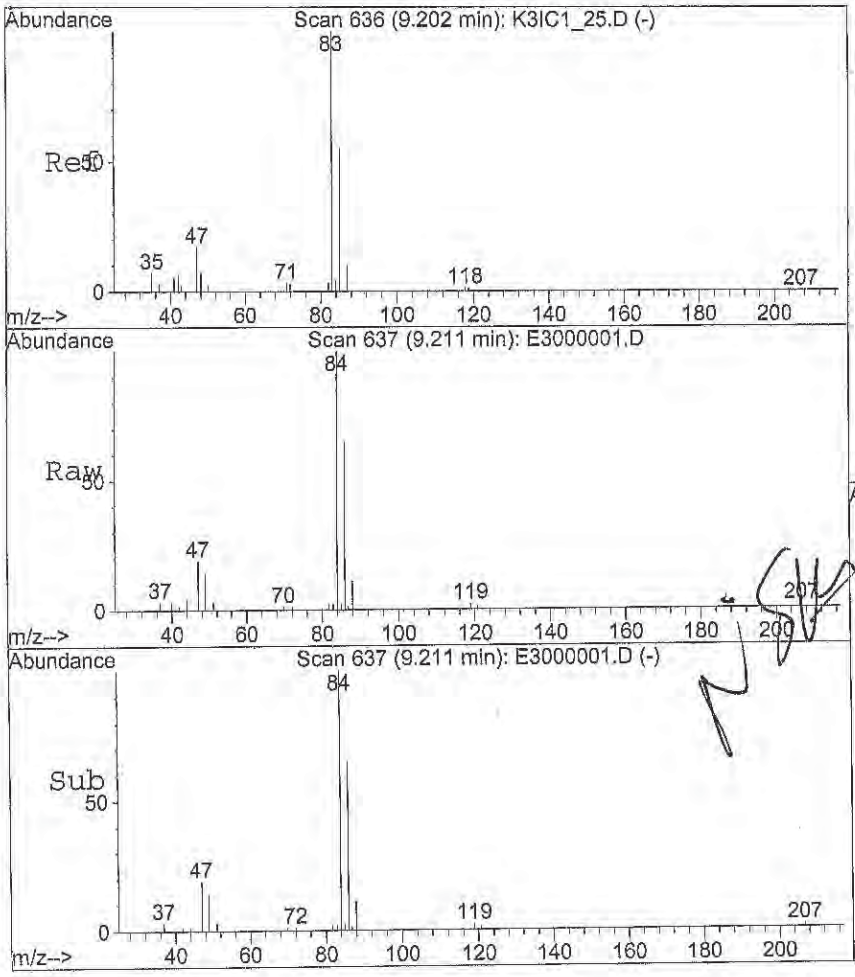


#21
(MEK) 2-Butanone
Concen: 0.67 ug/L
RT: 8.80 min Scan# 588
Delta R.T. 0.01 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 72 Resp: 276

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	3545.3	314.2	471.2#

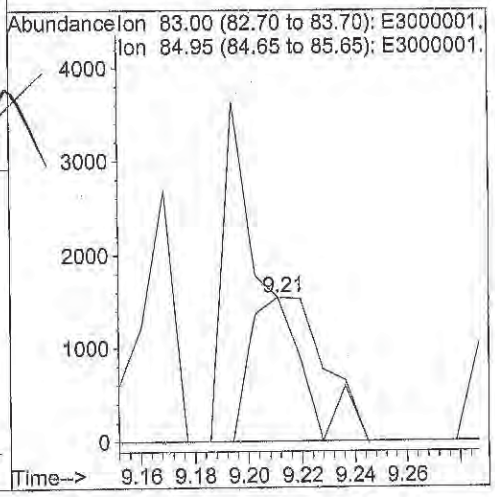


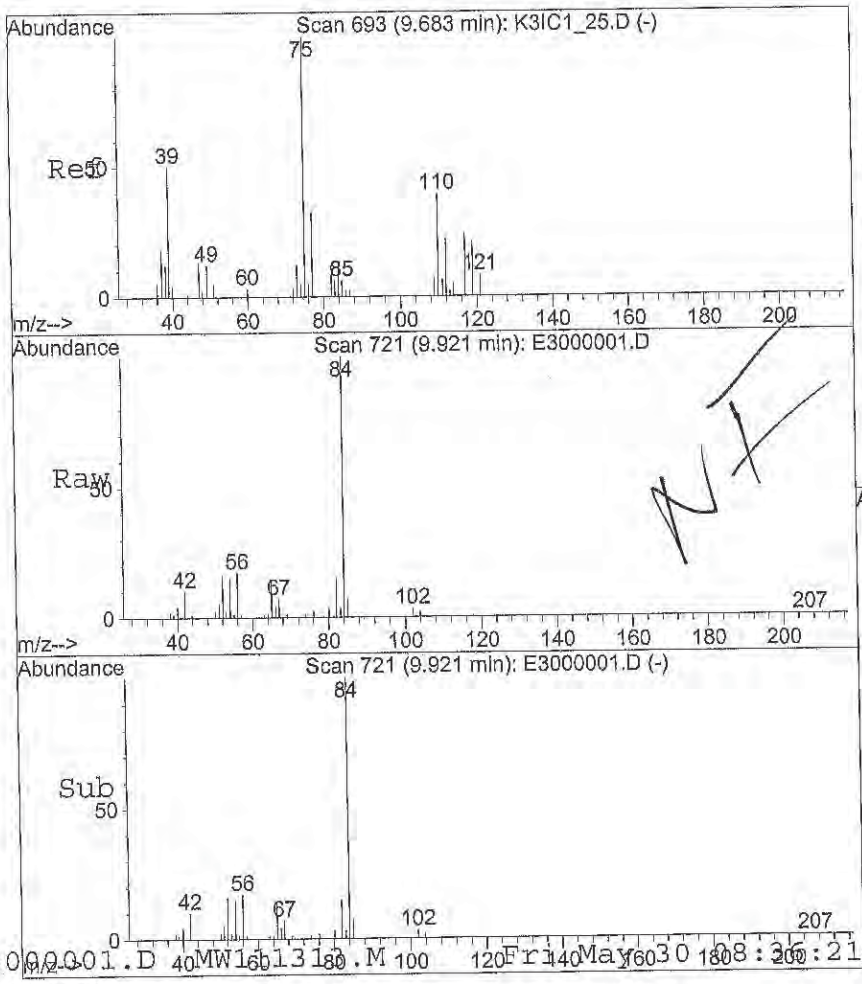


#24
Chloroform
Concen: 0.39 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 83 Resp: 2965

Ion	Ratio	Lower	Upper
83	100		
85	144.0	51.8	77.6#

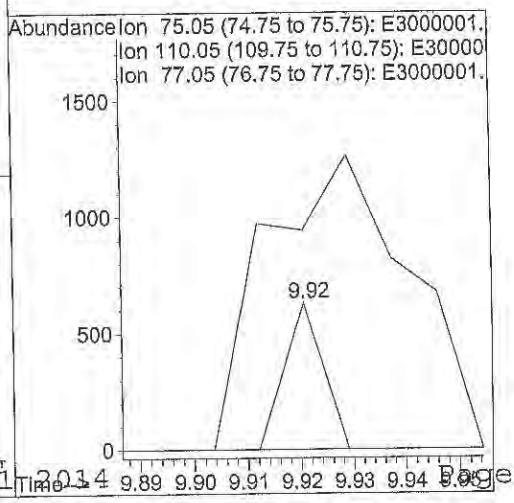


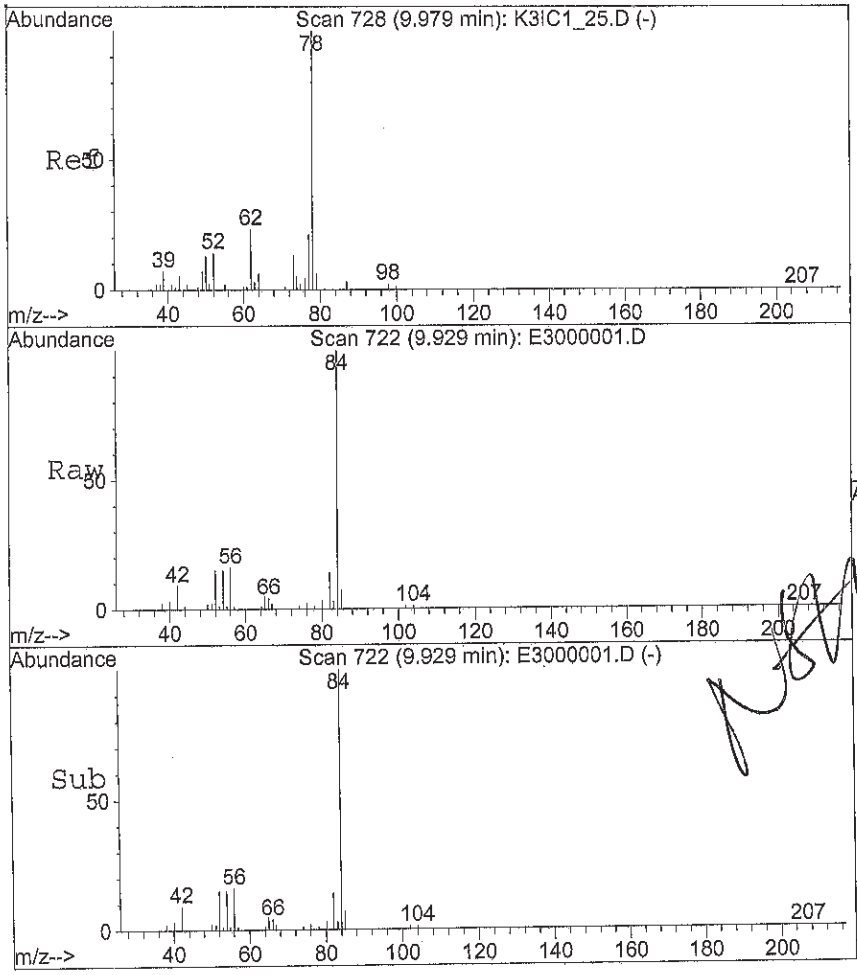


#29
1,1-Dichloropropene
Concen: 0.06 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 75 Resp: 319

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	742.6	25.0	37.4#

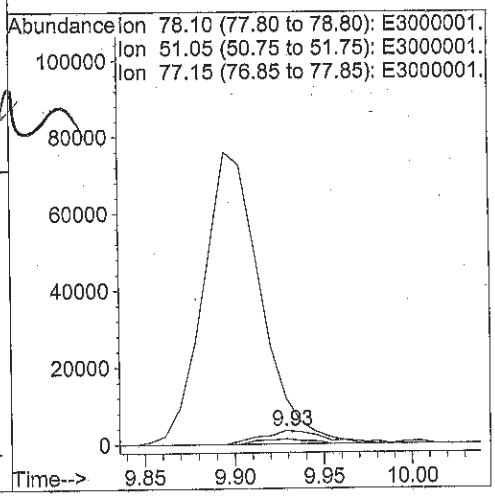


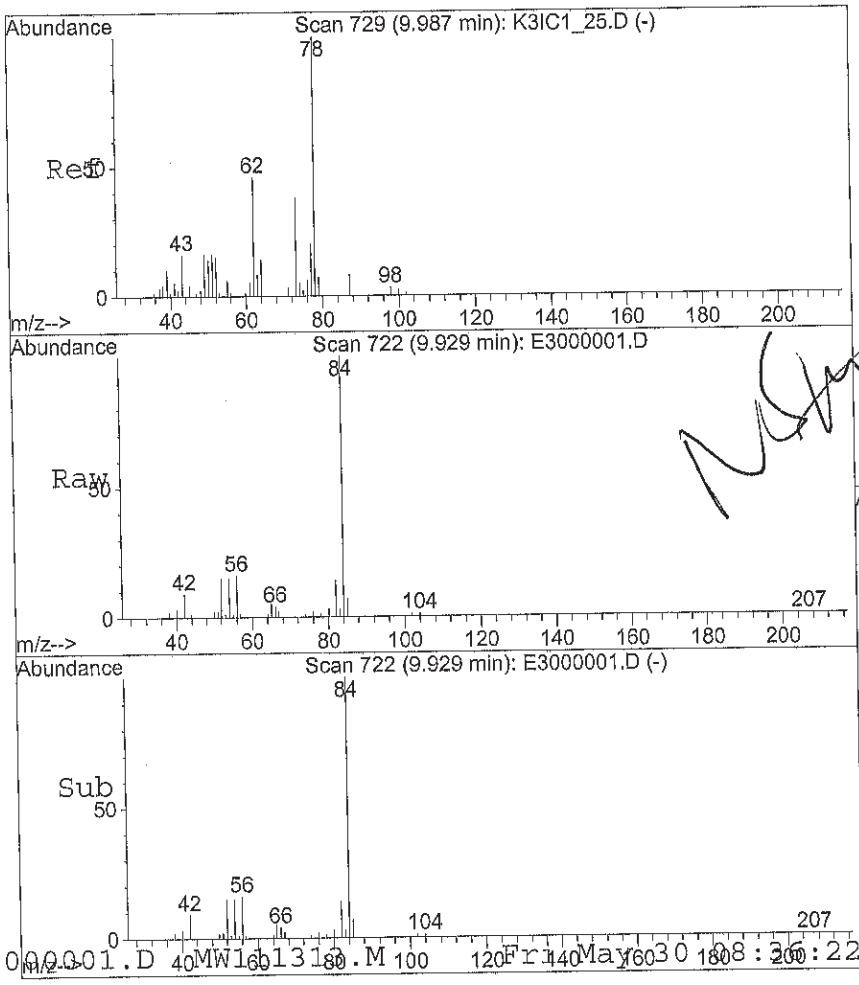


#31
Benzene
Concen: 0.59 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.05 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 78 Resp: 8083

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	29.3	16.6	24.8#

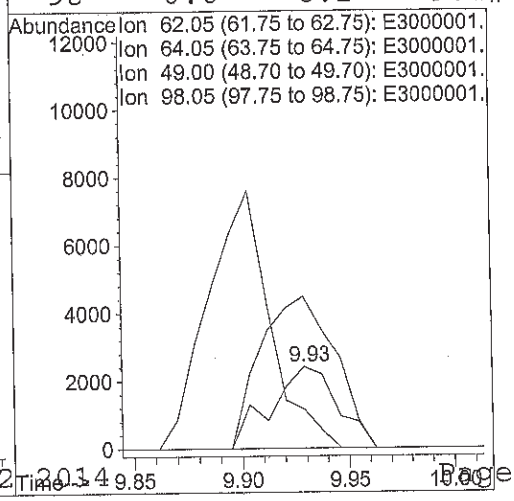


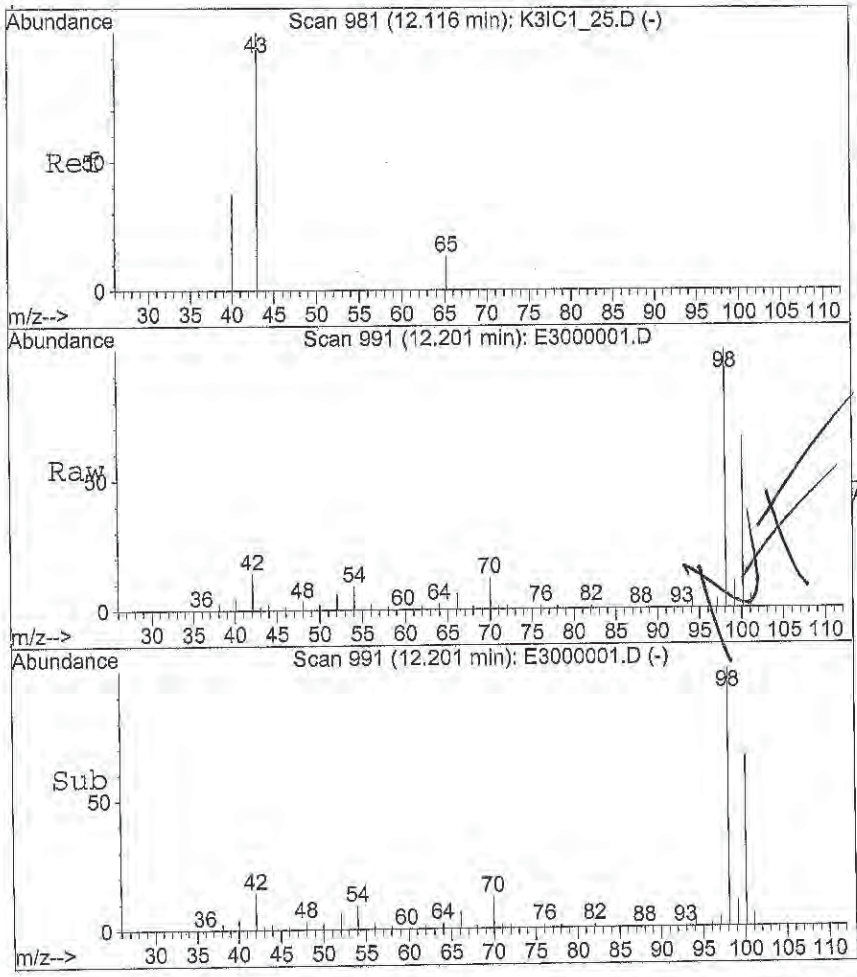


#32
1,2-Dichloroethane
Concen: 1.07 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 62 Resp: 5198

Ion	Ratio	Lower	Upper
62	100		
64	207.8	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

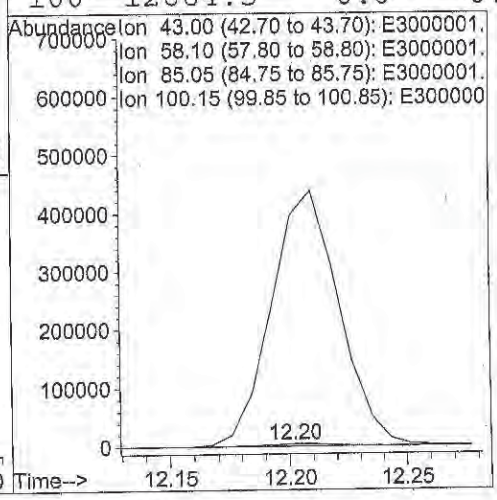


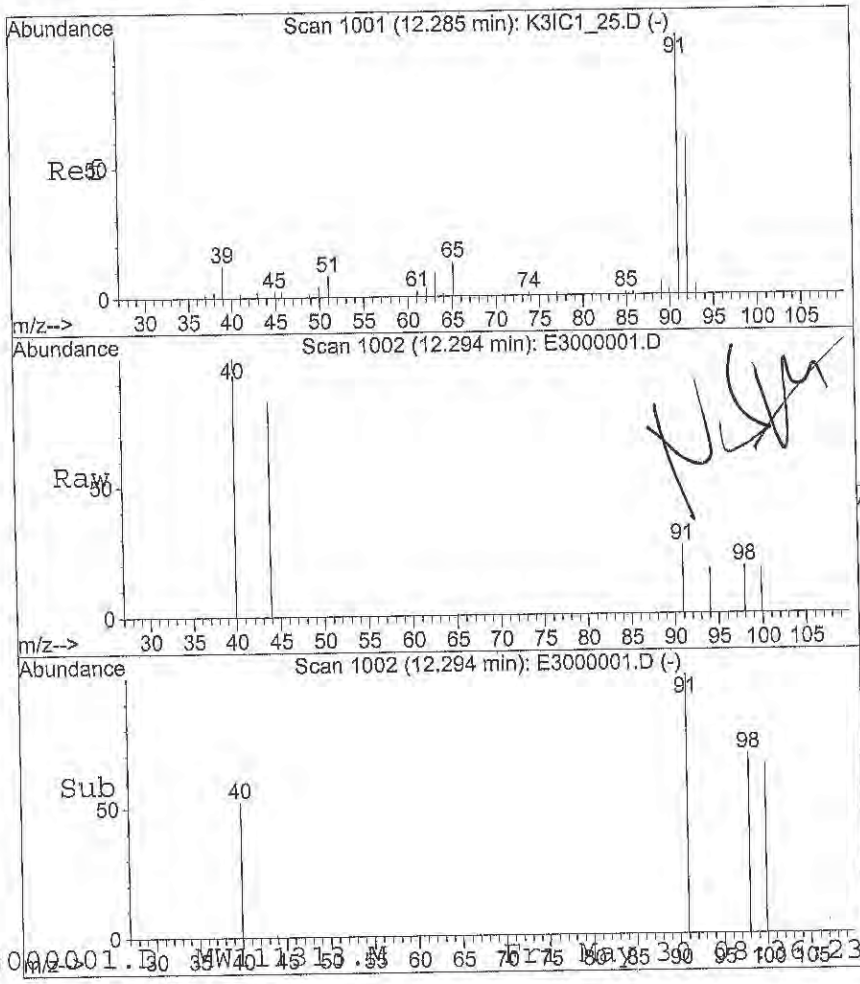


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.88 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.09 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 43 Resp: 6869

Ion	Ratio	Lower	Upper
43	100		
58	126.1	0.0	0.0#
85	0.0	0.0	0.0
100	12664.5	0.0	0.0#

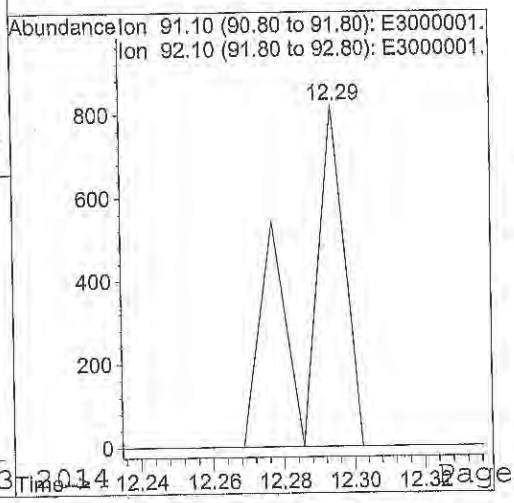


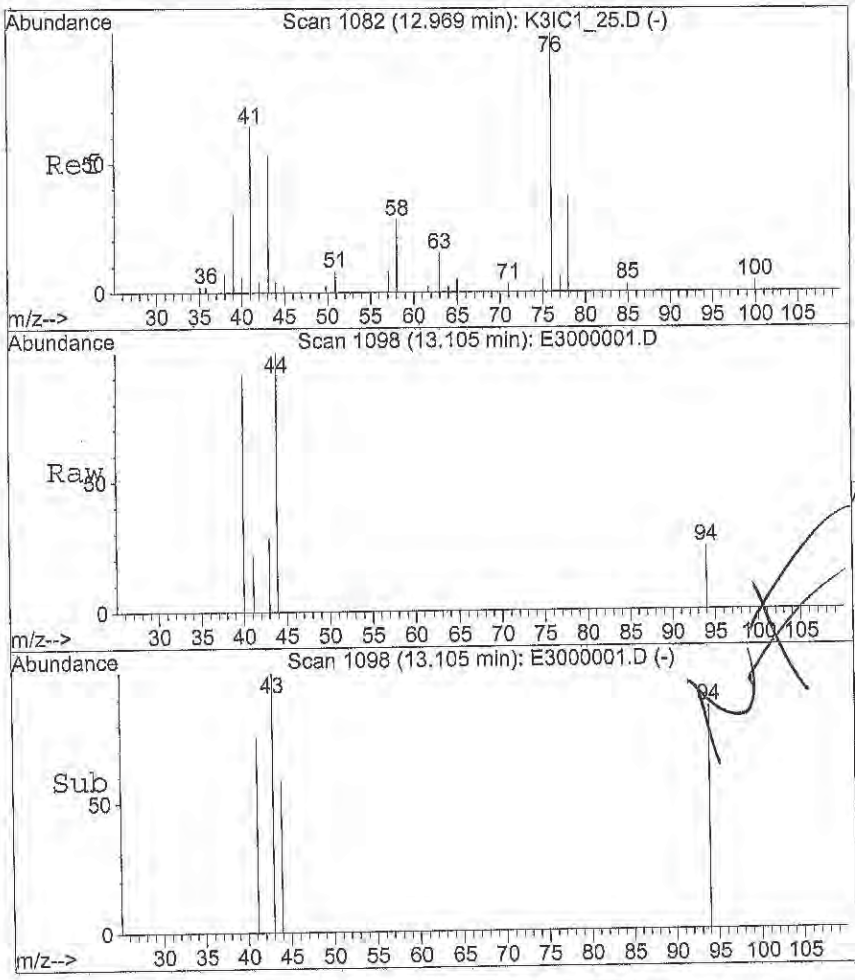


#41
Toluene
Concen: 0.04 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 91 Resp: 690

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.4	71.0#

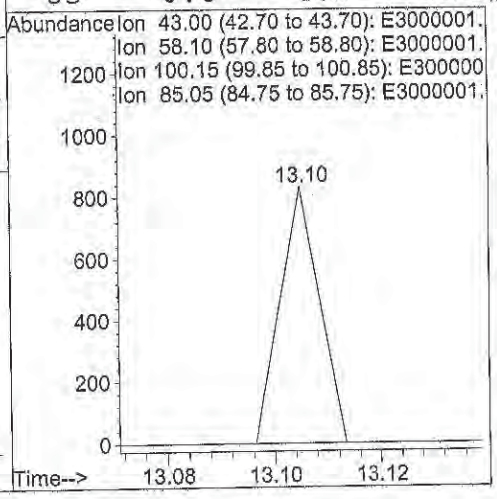


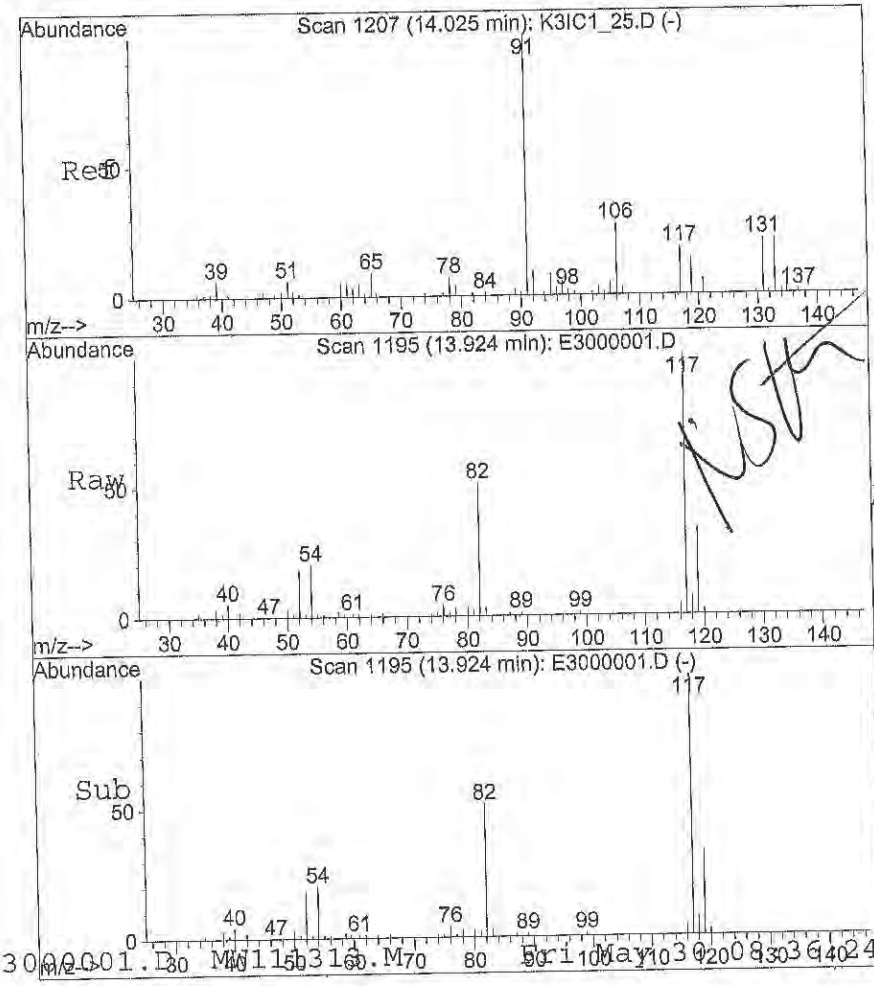


#46
2-Hexanone
Concen: 0.16 ug/L
RT: 13.10 min Scan# 1098
Delta R.T. 0.14 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 43 Resp: 421

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

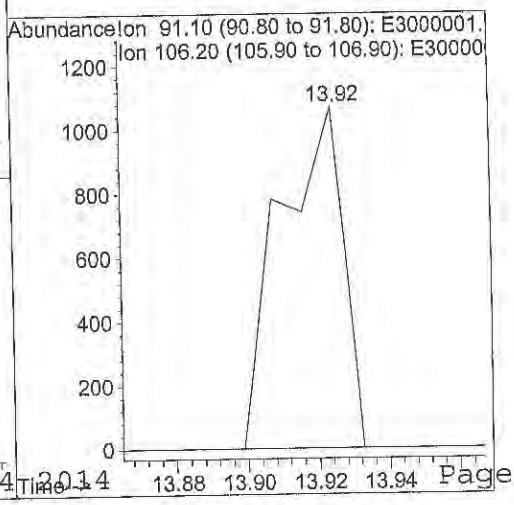


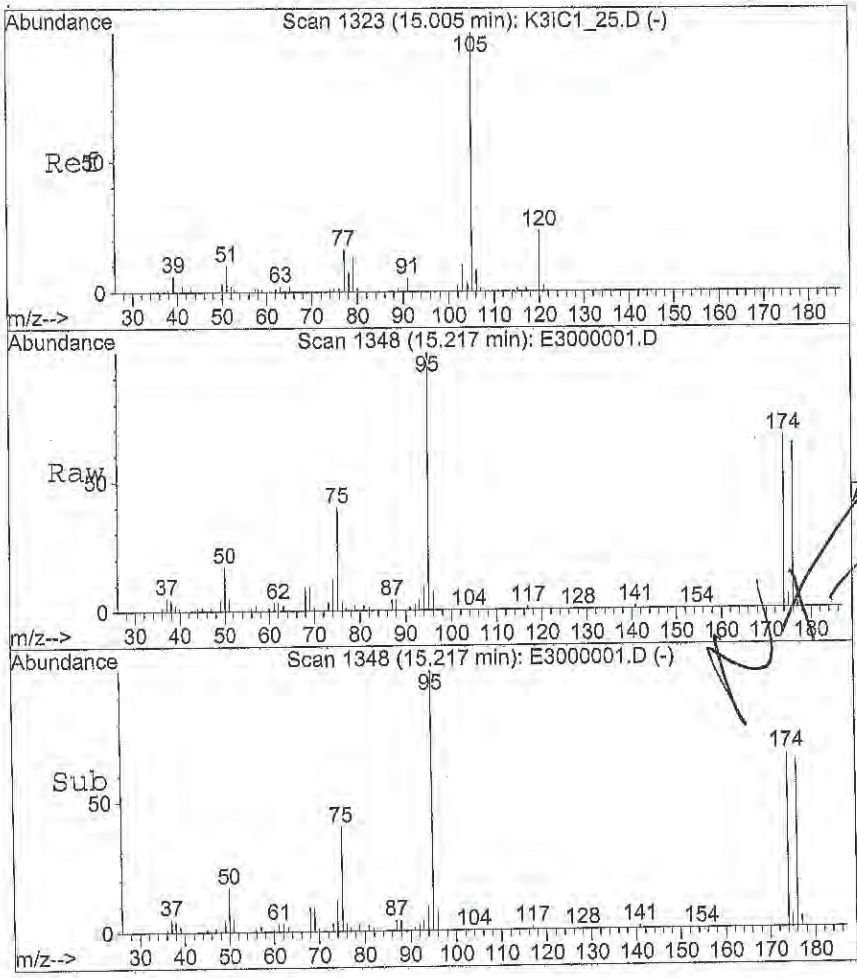


#51
Ethylbenzene
Concen: 0.07 ug/L
RT: 13.92 min Scan# 1195
Delta R.T. -0.10 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 91 Resp: 1315

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

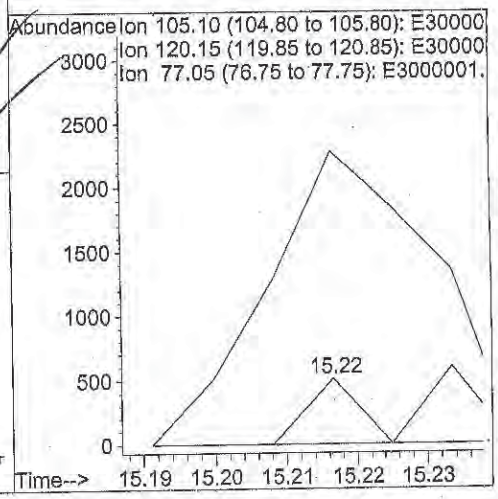


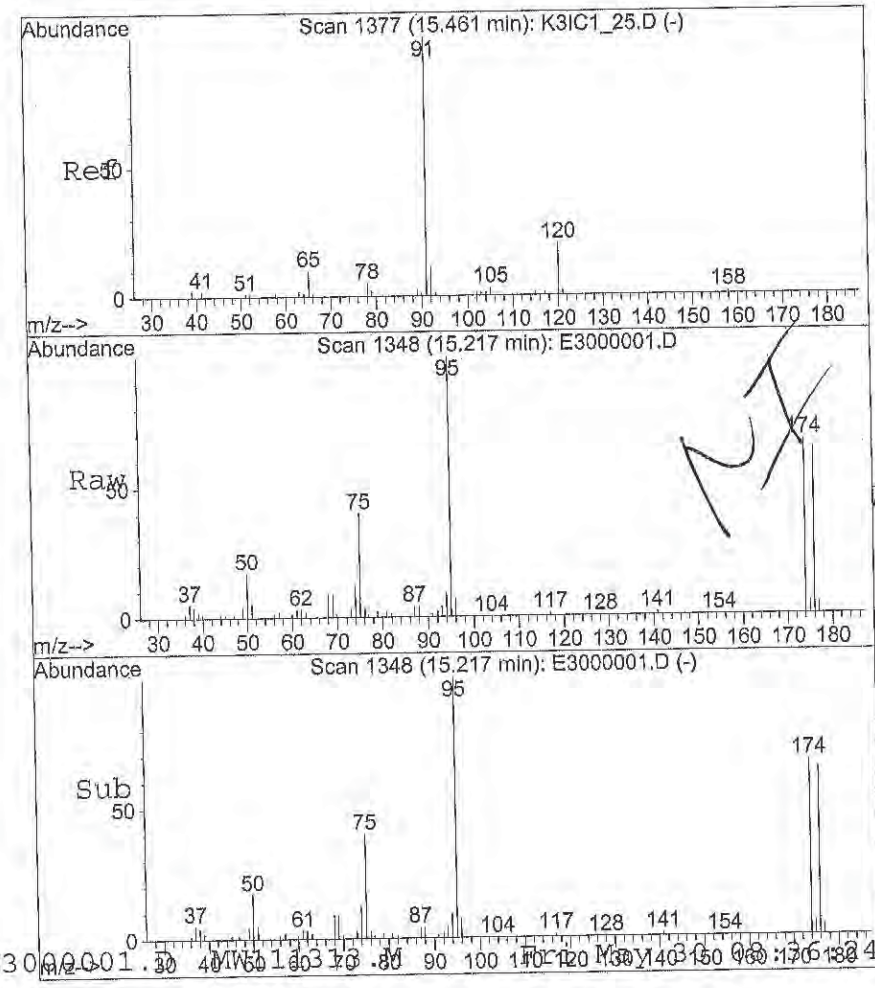


#56
Isopropylbenzene
Concen: 0.01 ug/L
RT: 15.22 min Scan# 1348
Delta R.T. 0.21 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion:105 Resp: 257

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	1430.4	13.1	19.7#

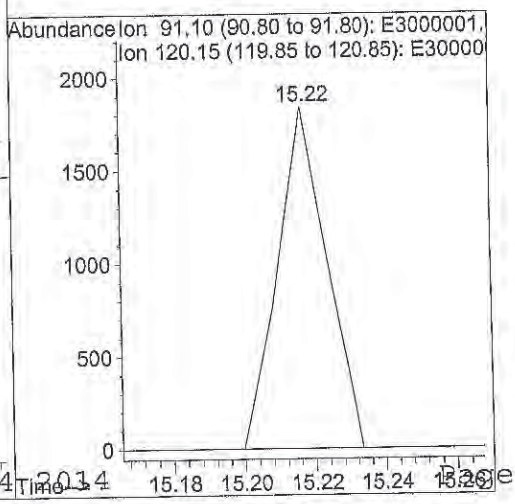


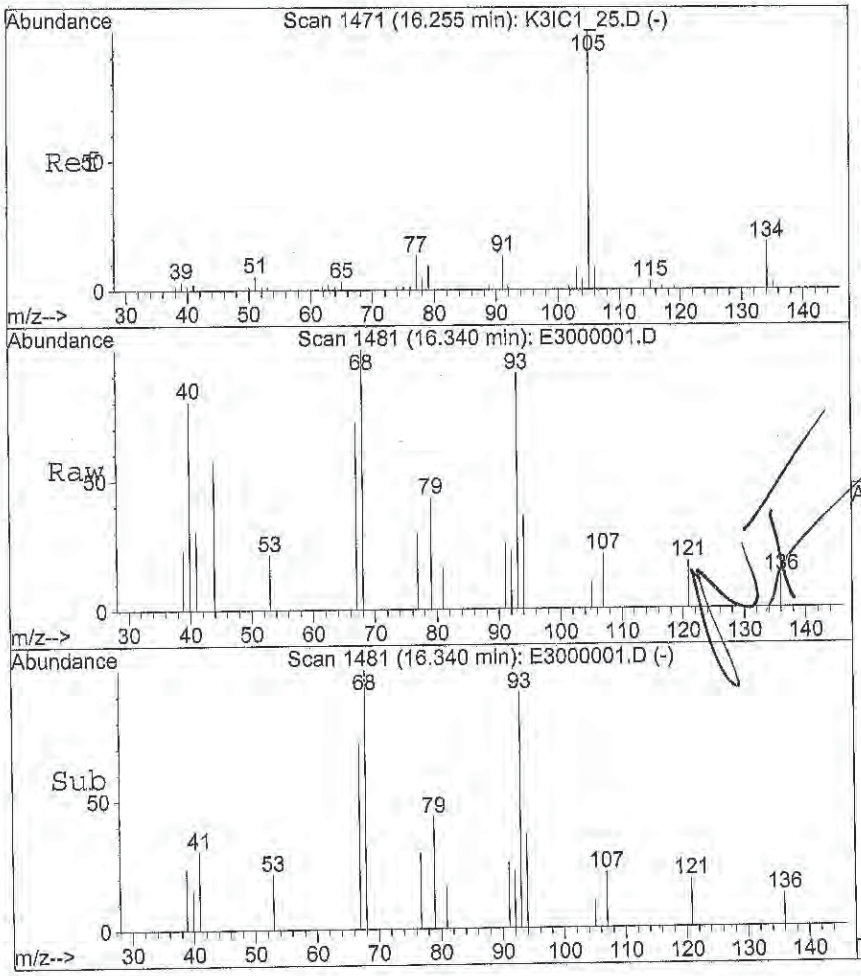


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.22 min Scan# 1348
Delta R.T. -0.24 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion: 91 Resp: 1763

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

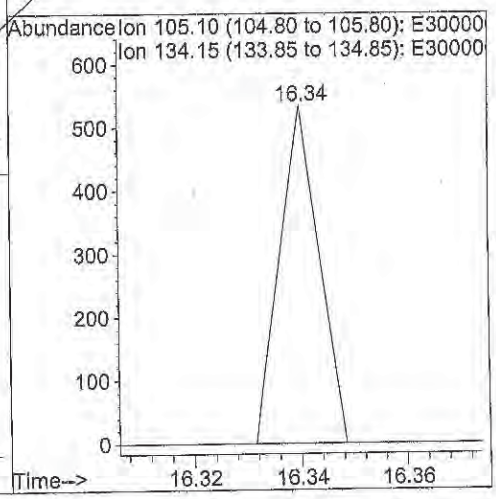




#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.09 min
Lab File: E3000001.D
Acq: 30 May 2014 8:15 am

Tgt Ion:105 Resp: 271

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000001.D Vial: 11
Acq On : 30 May 2014 8:15 am Operator: DN
Sample : 3E43001-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 8:35 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1463339	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1193802	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	650445	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	420773	11.06 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.48%		
3) Chloroform-d (SU6)	9.19	84	649682	11.90 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 95.20%		
4) Methylene Chloride-d2 (SU5	7.07	86	376635	11.80 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.40%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	404078	15.54 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 124.32%		
6) Benzene-d6 (SU7)	9.93	84	1292767	11.26 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.08%		
8) Toluene-d8 (SU3)	12.21	98	1315571	11.62 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.96%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	648844	13.88 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.04%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

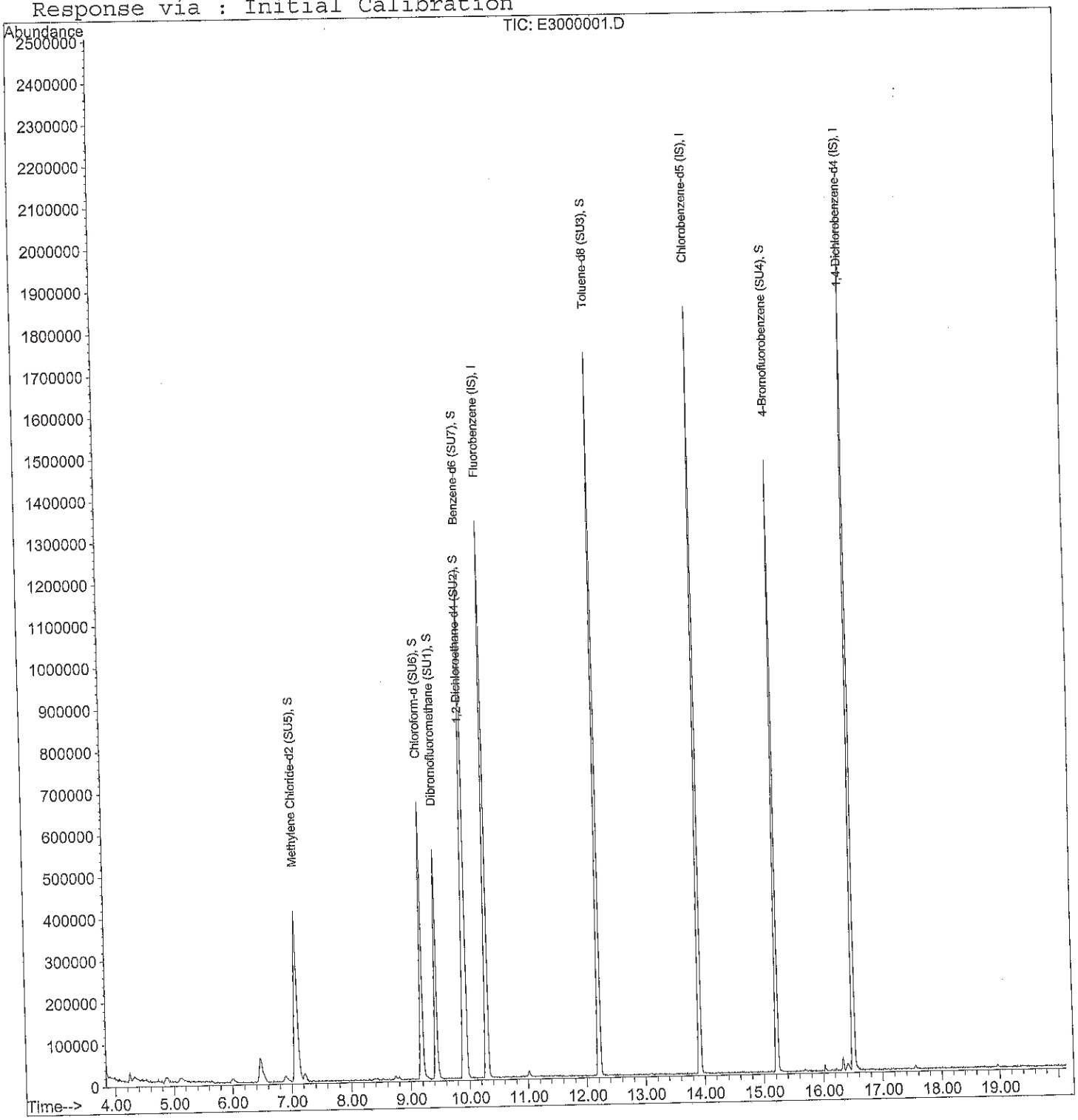
Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000001.D
Acq On : 30 May 2014 8:15 am
Sample : 3E43001-01
Misc : 100cc Equipment Blank
MS Integration Params: rteint.p
Quant Time: May 30 8:35 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000002.D
Acq On : 30 May 2014 8:44 am
Sample : 3E43001-02
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 9:09 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1550819	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1252005	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	689089	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	448446	11.59 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.72%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	422967	11.51 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.08%		
39) Toluene-d8 (SU3)	12.20	98	1415188	12.12 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 96.96%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	704857	13.76 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 110.08%		

Target Compounds					Qvalue
4) Chlorometh[illegible]	4.38	50	824	-0.90 ug/L	34
6) Bromomethane	5.12	96	9764	3.95 ug/L	98
7) Chloroethane	5.08	64	801	1.31 ug/L	89
8) (F11) Trichlorofluorometha	5.69	101	264	0.06 ug/L #	16
11) Acetone	6.47	58	7065	6.95 ug/L	76
12) (IPA) Leak Check Compound	6.49	45	118902	638.05 ug/L #	85
13) Carbon disulfide	6.85	76	17778	1.38 ug/L #	76
14) Methylene Chloride	7.07	84	5202	1.22 ug/L #	1
15) (TBA) tert-Butanol	6.88	59	2054	7.77 ug/L #	77
24) Chloroform	9.21	83	4412	0.54 ug/L #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.38	59	1000	0.09 ug/L #	44
29) 1,1-Dichloropropene	9.92	75	514	0.09 ug/L #	1
31) Benzene	9.98	78	9396	0.64 ug/L #	77
32) 1,2-Dichloroethane	9.93	62	7123	1.38 ug/L #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.11	43	314	0.13 ug/L #	100
41) Toluene	12.29	91	10993	0.64 ug/L 0.0128	91
46) 2-Hexanone	12.99	43	917	0.33 ug/L #	37
51) Ethylbenzene	14.15	91	8003	0.41 ug/L	90
52) m,p-Xylenes	14.15	106	3626	0.53 ug/L 0.0106	100
53) o-Xylene	14.61	106	761	0.11 ug/L # 0.0022	1
54) Styrene	14.64	104	1994	-0.67 ug/L #	86
56) Isopropylbenzene	15.23	105	2675	0.14 ug/L #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000002.D Vial: 1
Acq On : 30 May 2014 8:44 am Operator: DN
Sample : 3E43001-02 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 9:09 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

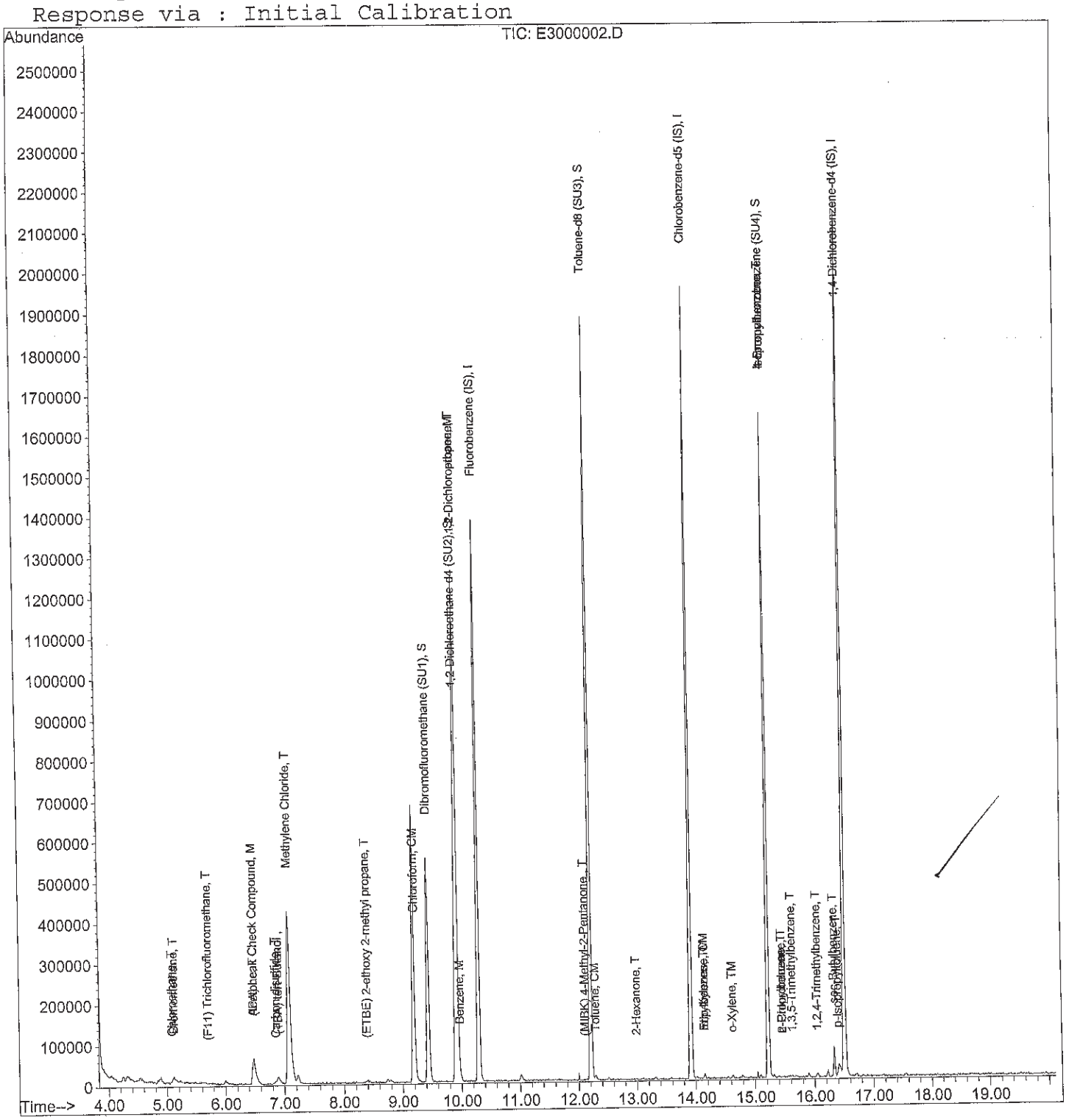
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62) n-Propylbenzene	15.46	91	489	0.02 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.46	91	489	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.63	105	290	0.02 ~~ug/L~~ #	31
67) 1,2,4-Trimethylbenzene	16.06	105	2867	0.16 ~~ug/L~~	98
68) sec-Butylbenzene	16.33	105	360	0.02 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1046	0.06 ~~ug/L~~ #	52

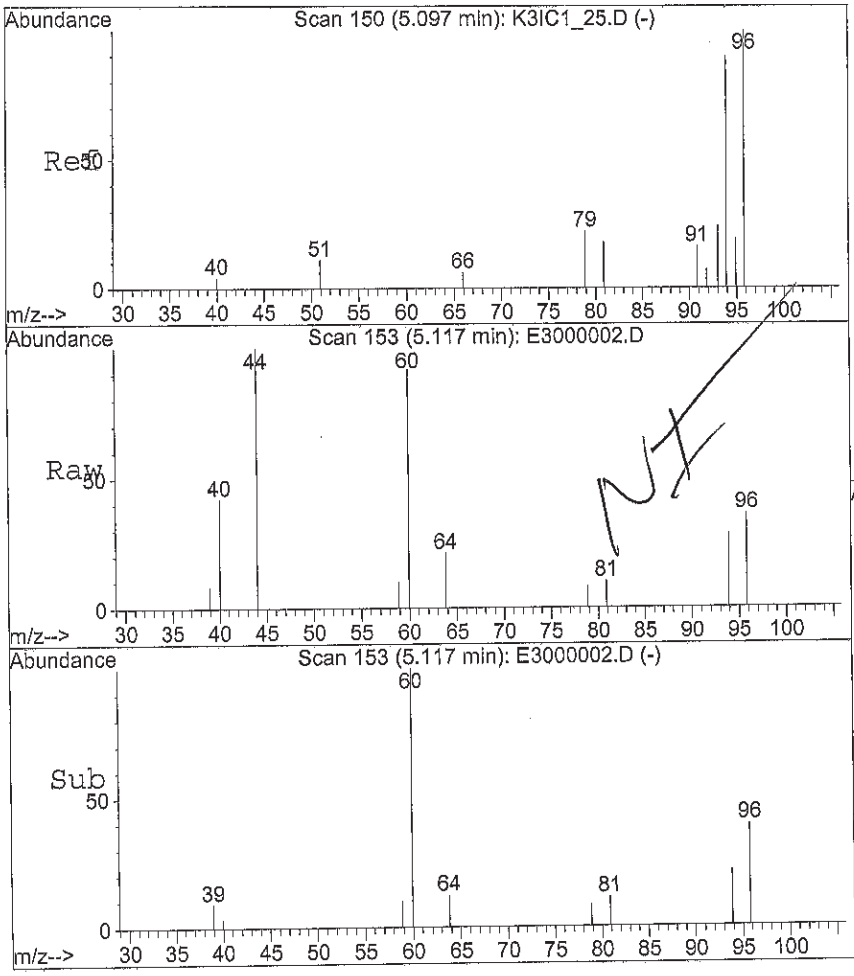
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000002.D Vial: 1
Acq On : 30 May 2014 8:44 am Operator: DN
Sample : 3E43001-02 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 9:09 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

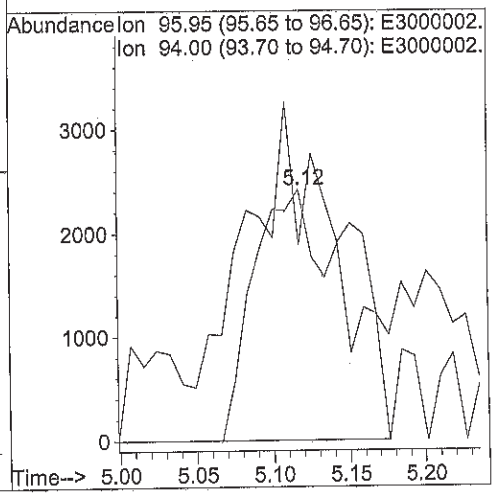


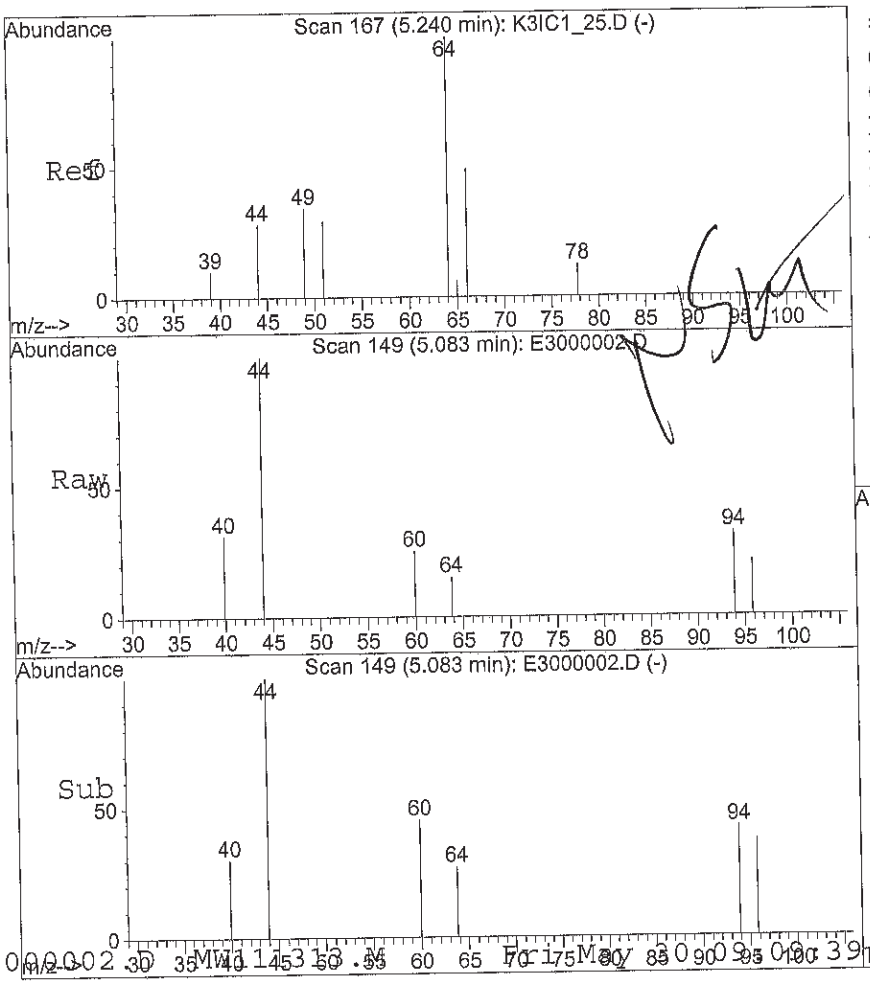


#6
Bromomethane
Concen: 3.95 ug/L
RT: 5.12 min Scan# 153
Delta R.T. 0.02 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 96 Resp: 9764

Ion	Ratio	Lower	Upper
96	100		
94	128.9	101.0	151.4

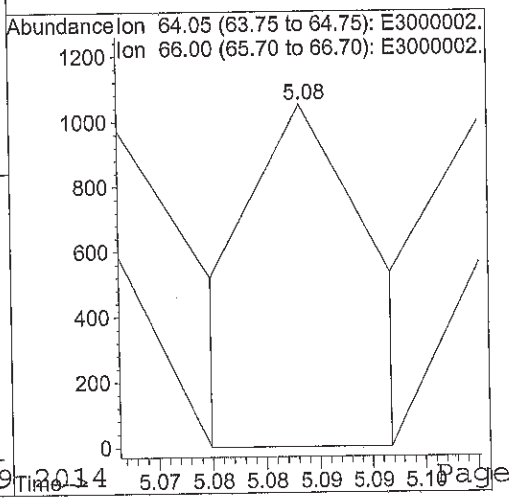


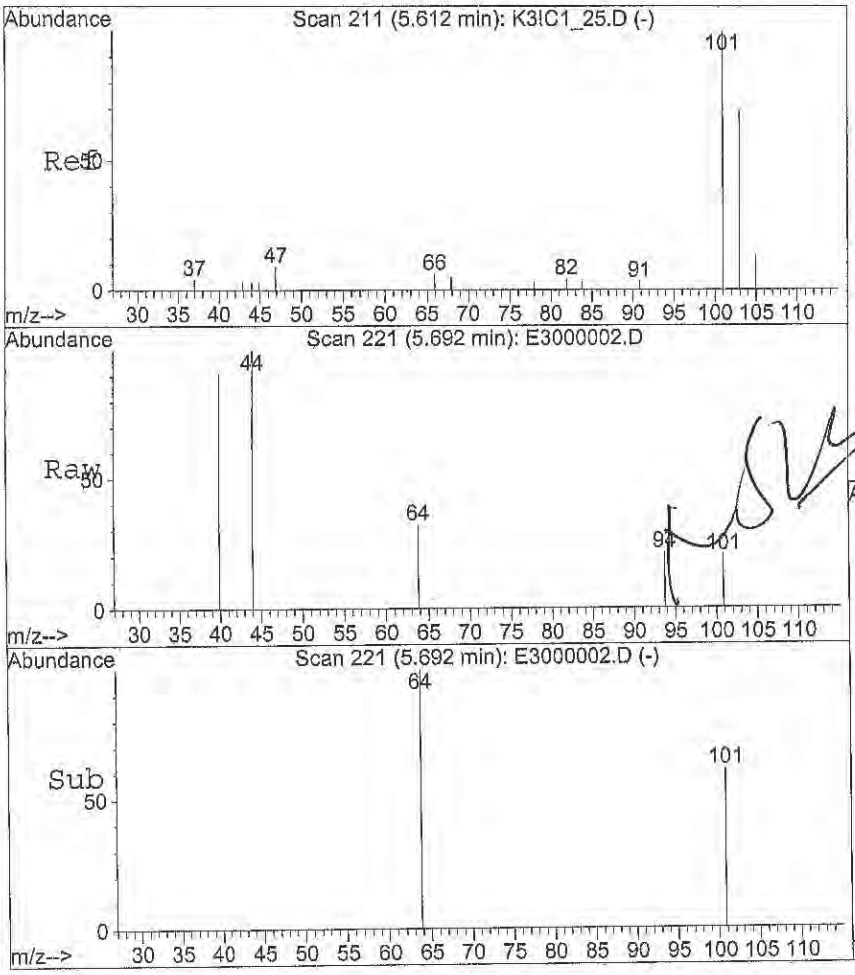


#7
Chloroethane
Concen: 1.31 ug/L
RT: 5.08 min Scan# 149
Delta R.T. -0.16 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 64 Resp: 801

Ion	Ratio	Lower	Upper
64	100		
66	37.0	35.4	53.0

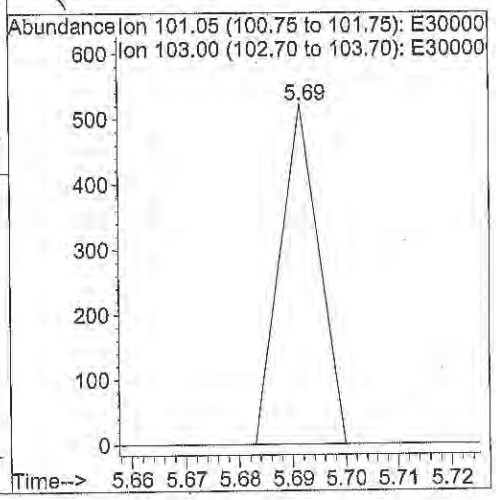


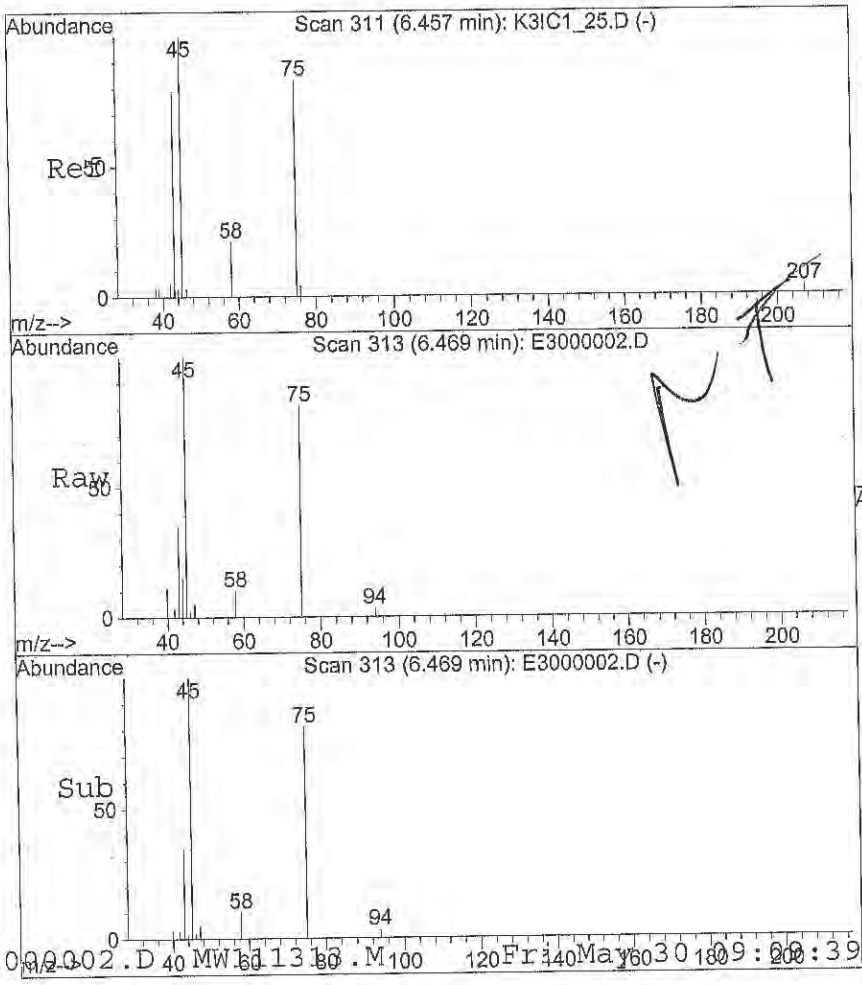


#8
(F11) Trichlorofluoromethane
Concen: 0.06 ug/L
RT: 5.69 min Scan# 221
Delta R.T. 0.08 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:101 Resp: 264

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

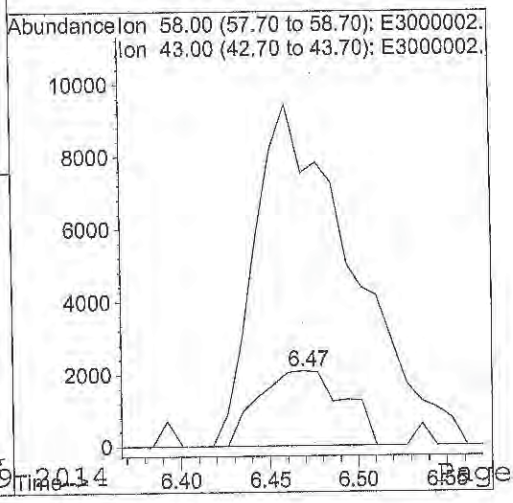


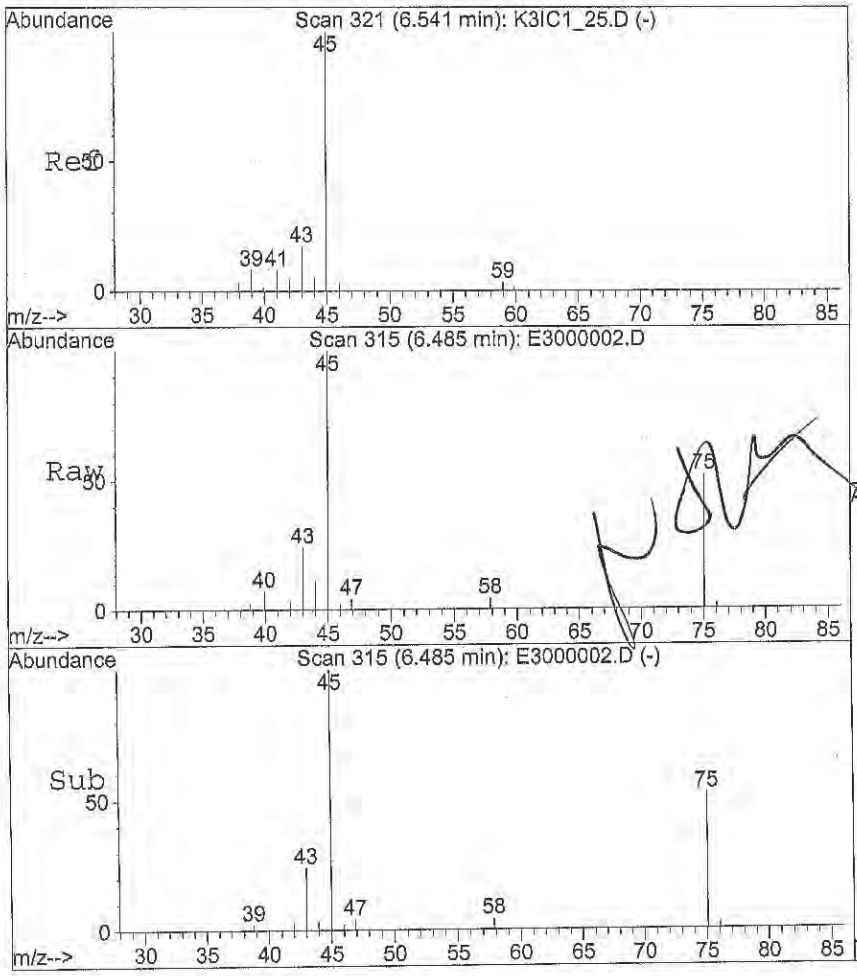


#11
Acetone
Concen: 6.95 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 58 Resp: 7065

Ion	Ratio	Lower	Upper
58	100		
43	512.9	360.9	541.3

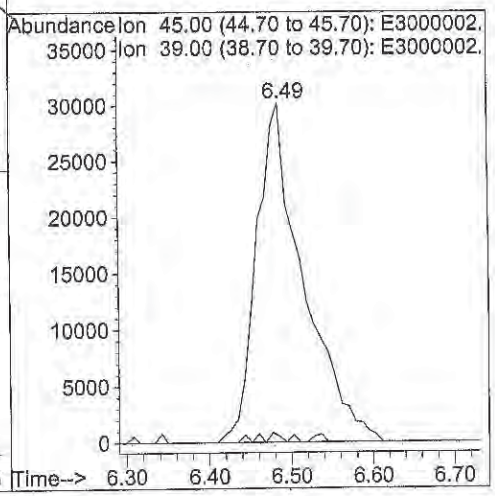


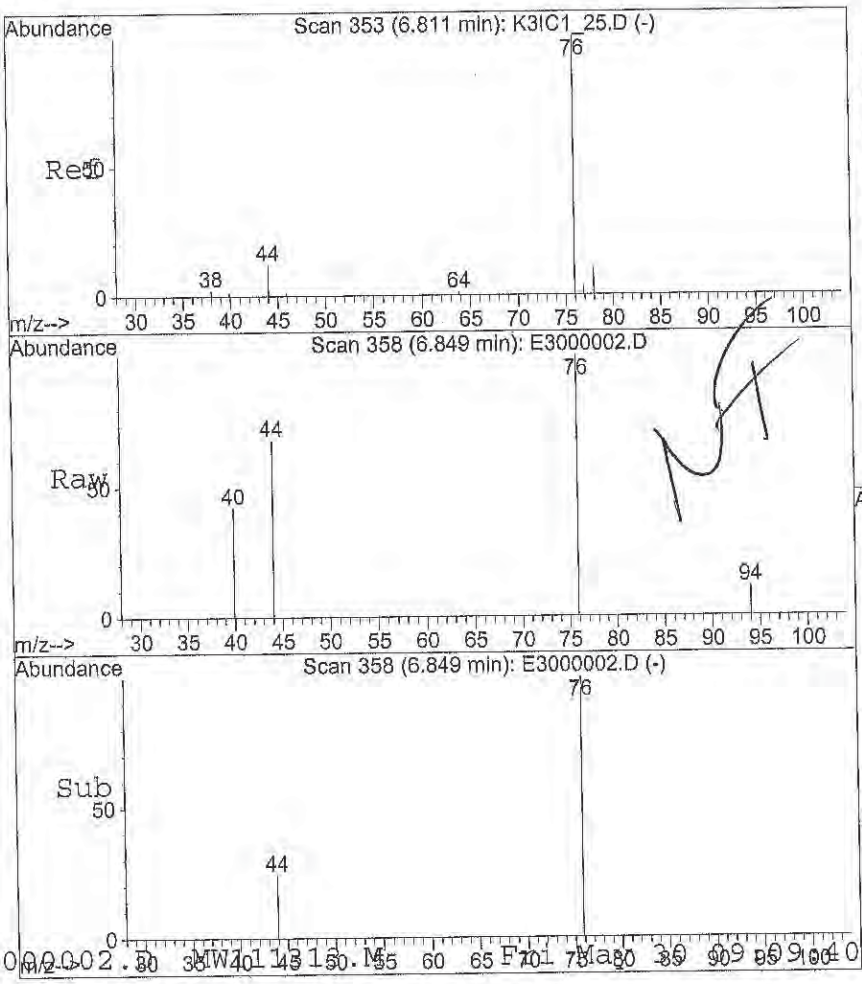


#12
(IPA) Leak Check Compound
Concen: 638.05 ug/L
RT: 6.49 min Scan# 315
Delta R.T. -0.06 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 45 Resp: 118902

Ion	Ratio	Lower	Upper
45	100		
39	0.9	4.9	7.3#

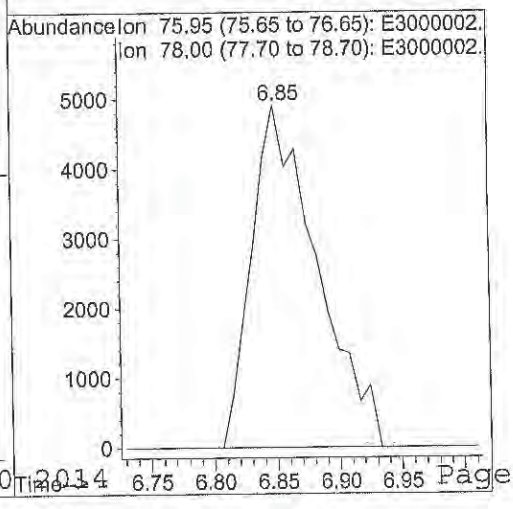


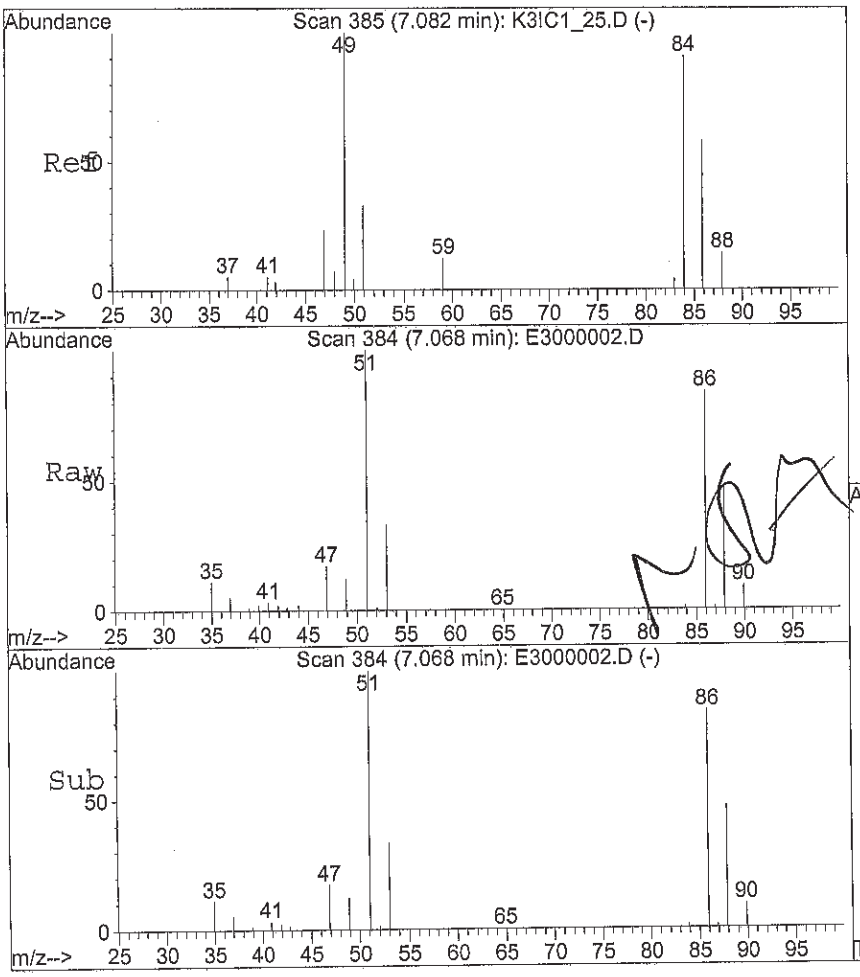


#13
Carbon disulfide
Concen: 1.38 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 76 Resp: 17778

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

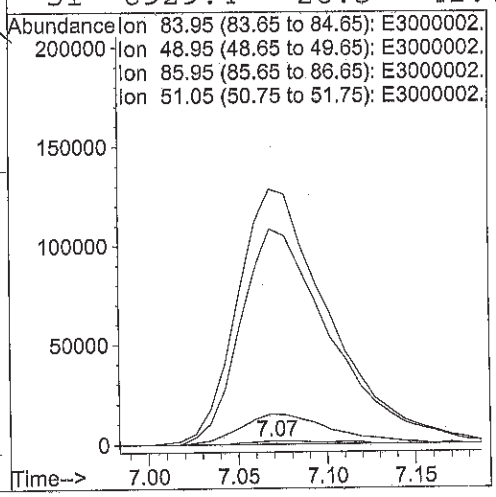


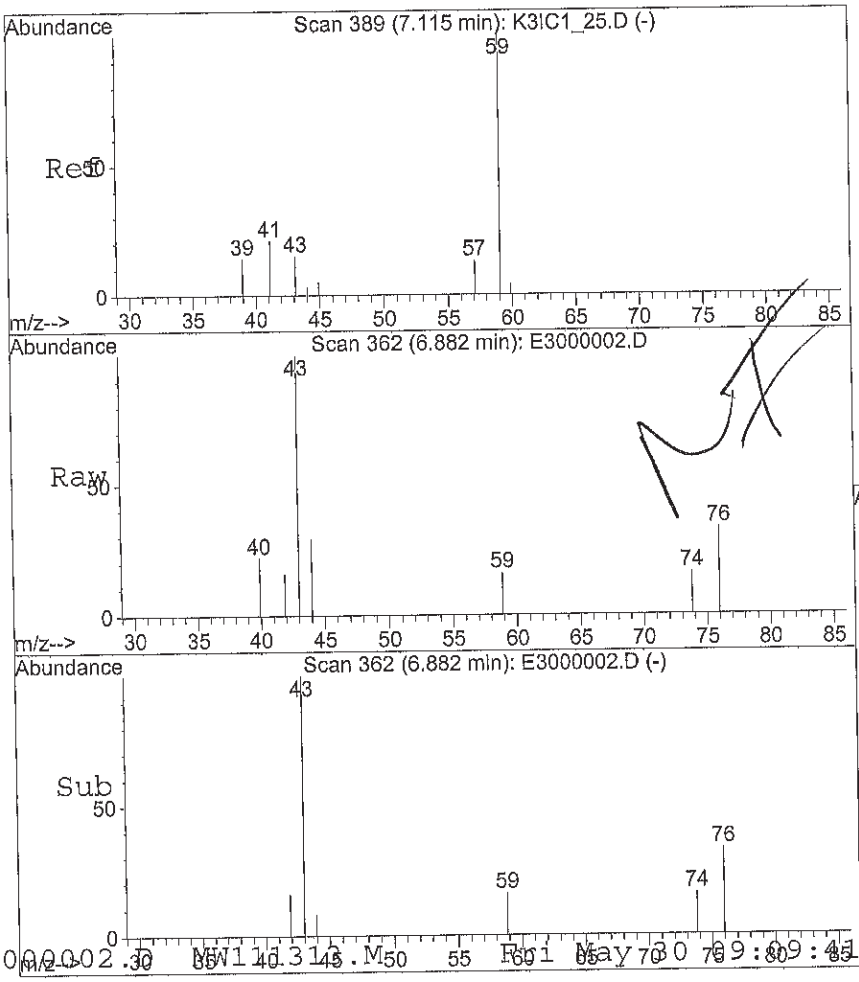


#14
Methylene Chloride
Concen: 1.22 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 84 Resp: 5202

Ion	Ratio	Lower	Upper
84	100		
49	1024.7	89.8	134.6#
86	7400.4	51.1	76.7#
51	8929.4	28.5	42.7#

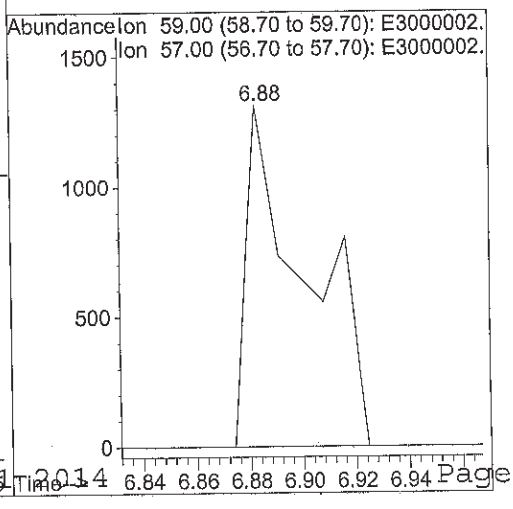


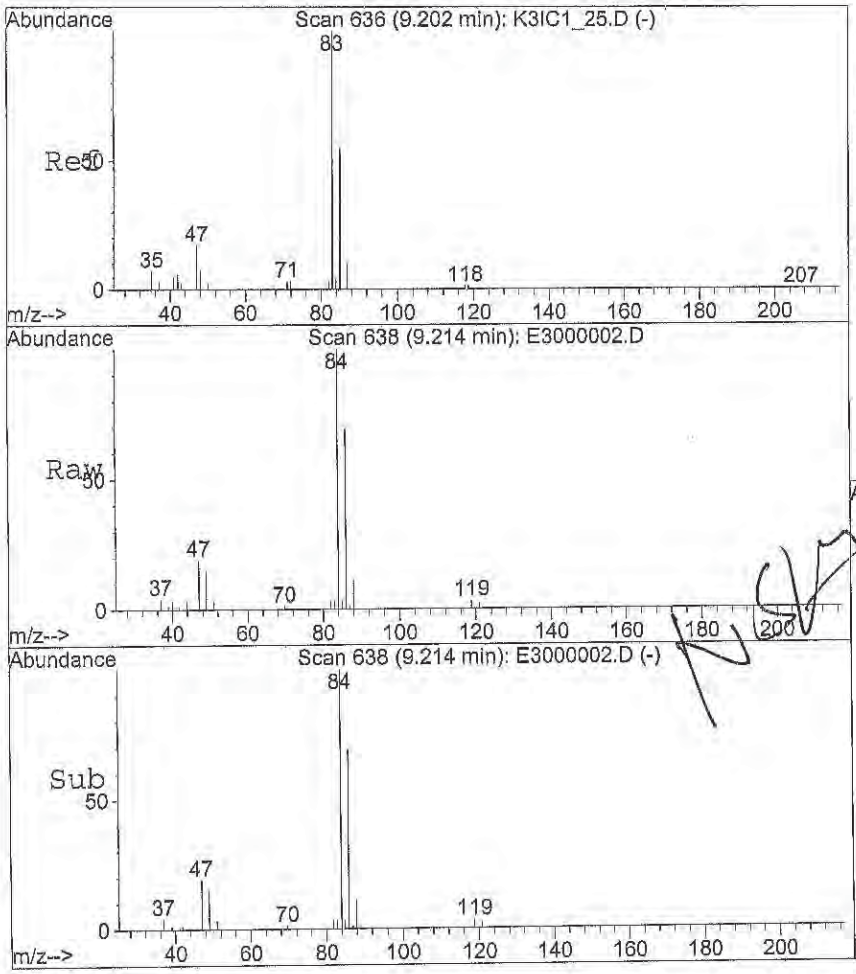


#15
(TBA) tert-Butanol
Concen: 7.77 ug/L
RT: 6.88 min Scan# 362
Delta R.T. -0.23 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 59 Resp: 2054

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

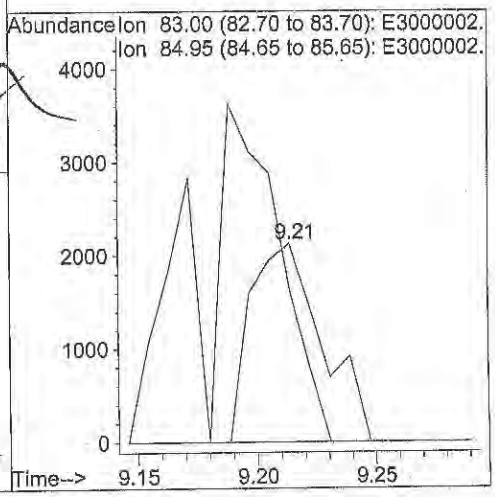


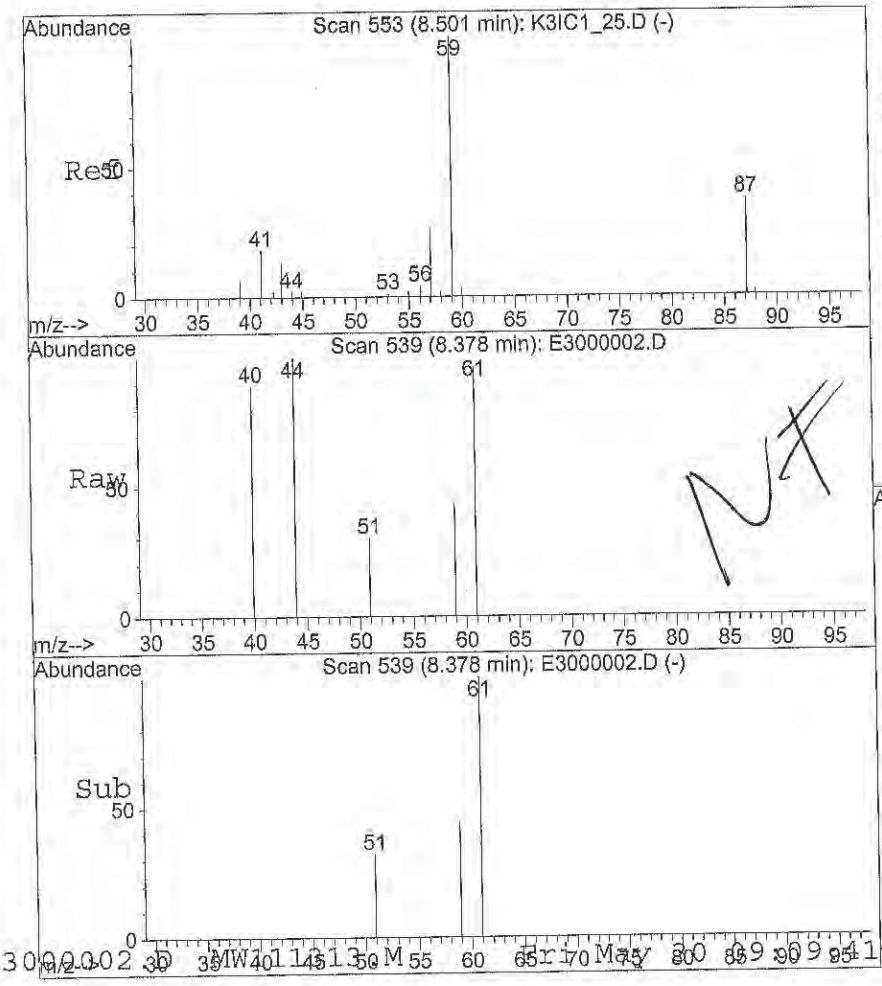


#24
Chloroform
Concen: 0.54 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 83 Resp: 4412

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

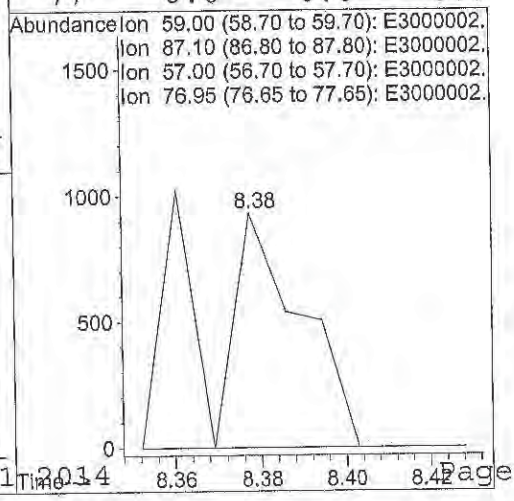


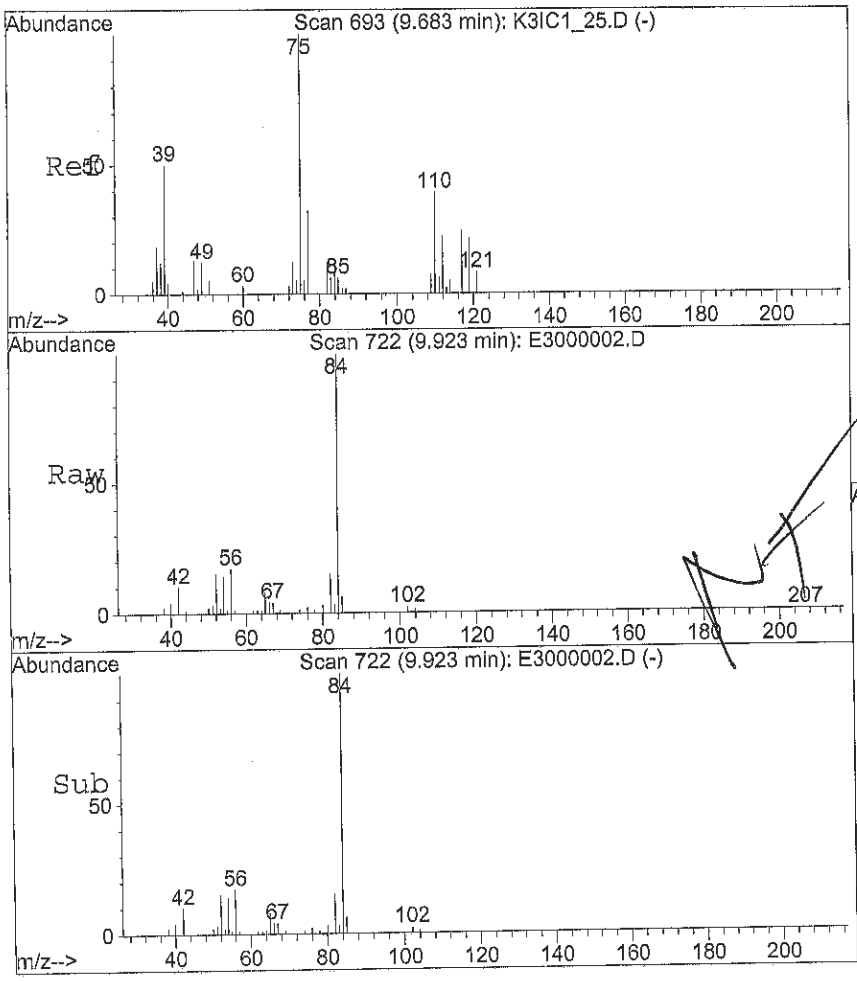


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.09 ug/L
RT: 8.38 min Scan# 539
Delta R.T. -0.12 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 59 Resp: 1000

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

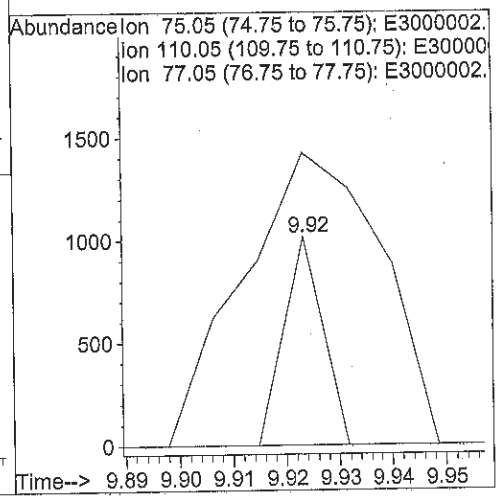


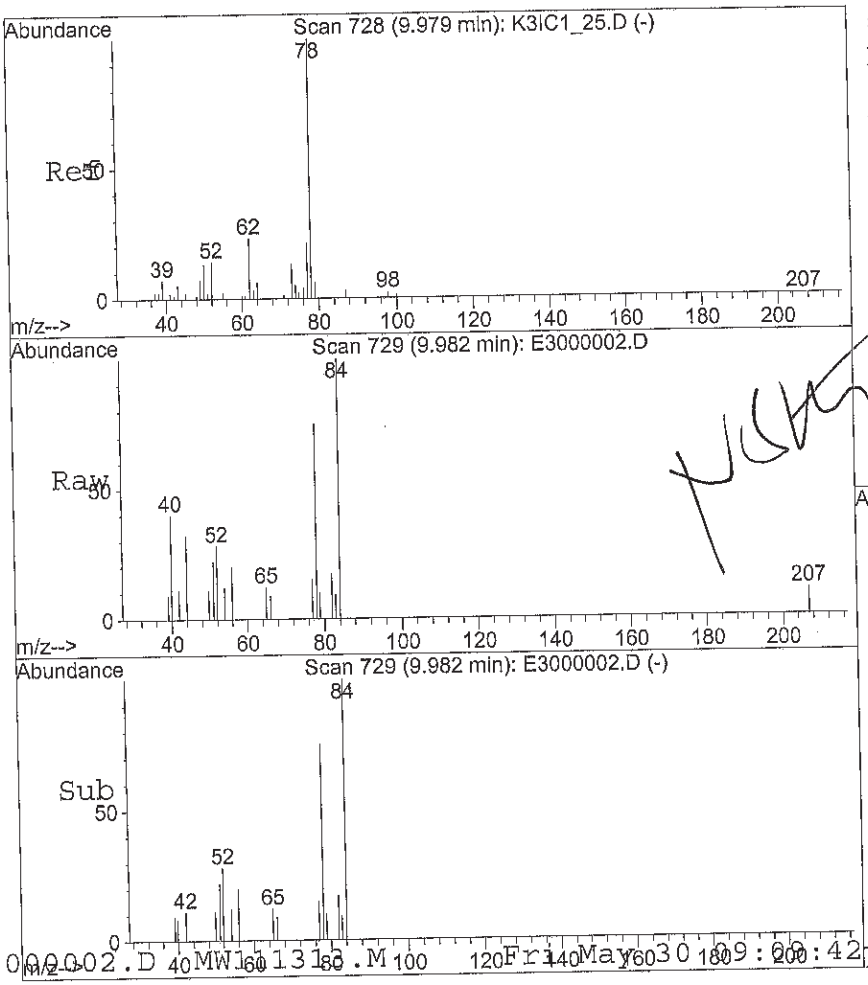


#29
1,1-Dichloropropene
Concen: 0.09 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 75 Resp: 514

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	500.8	25.0	37.4#

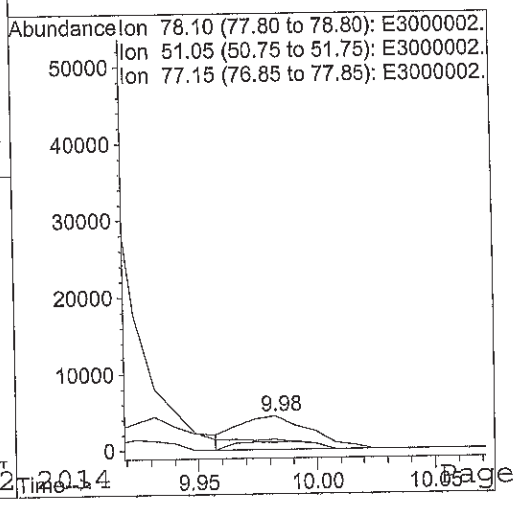


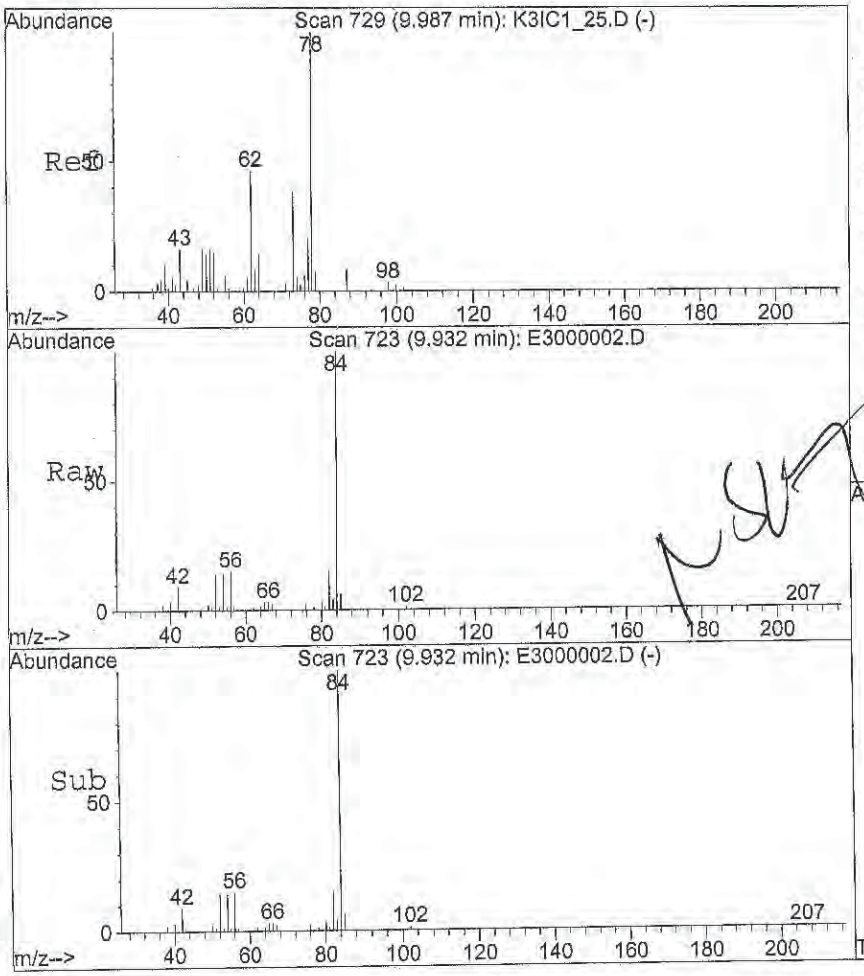


#31
Benzene
Concen: 0.64 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 78 Resp: 9396

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	24.6	16.6	24.8

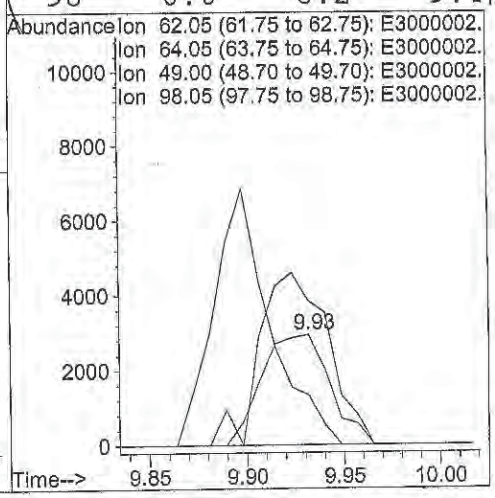


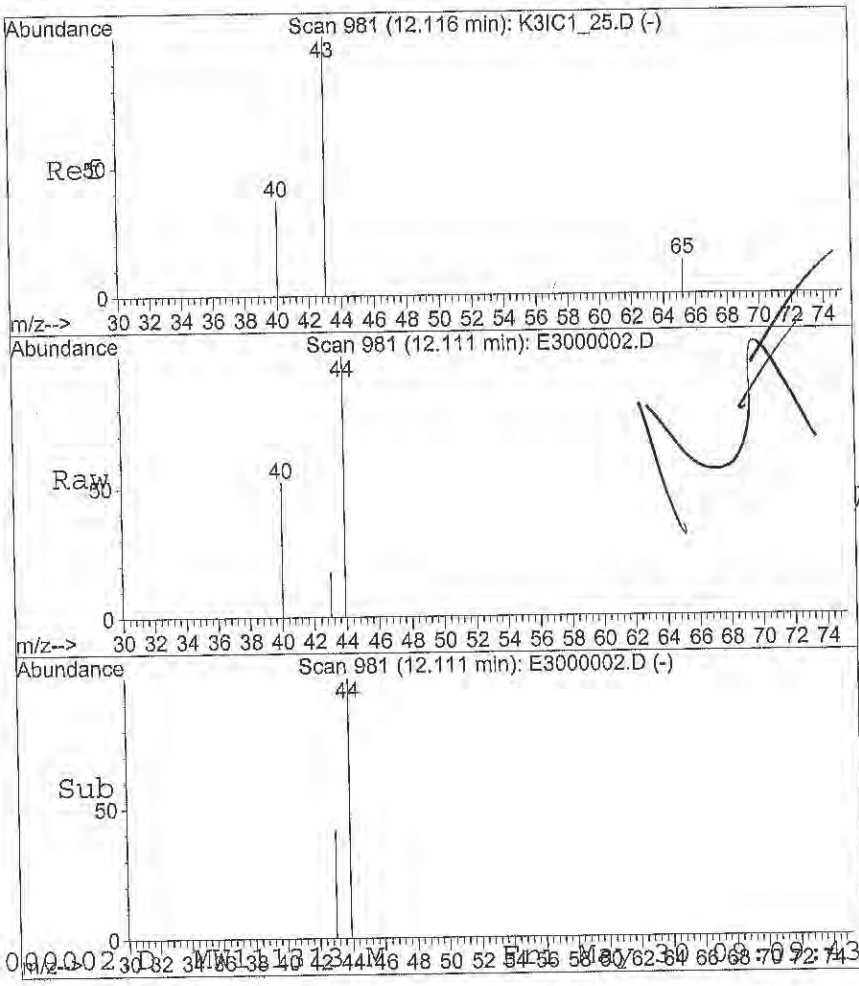


#32
1,2-Dichloroethane
Concen: 1.38 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 62 Resp: 7123

Ion	Ratio	Lower	Upper
62	100		
64	157.6	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

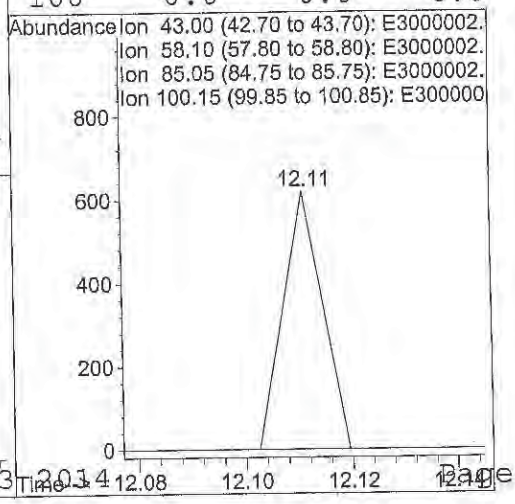


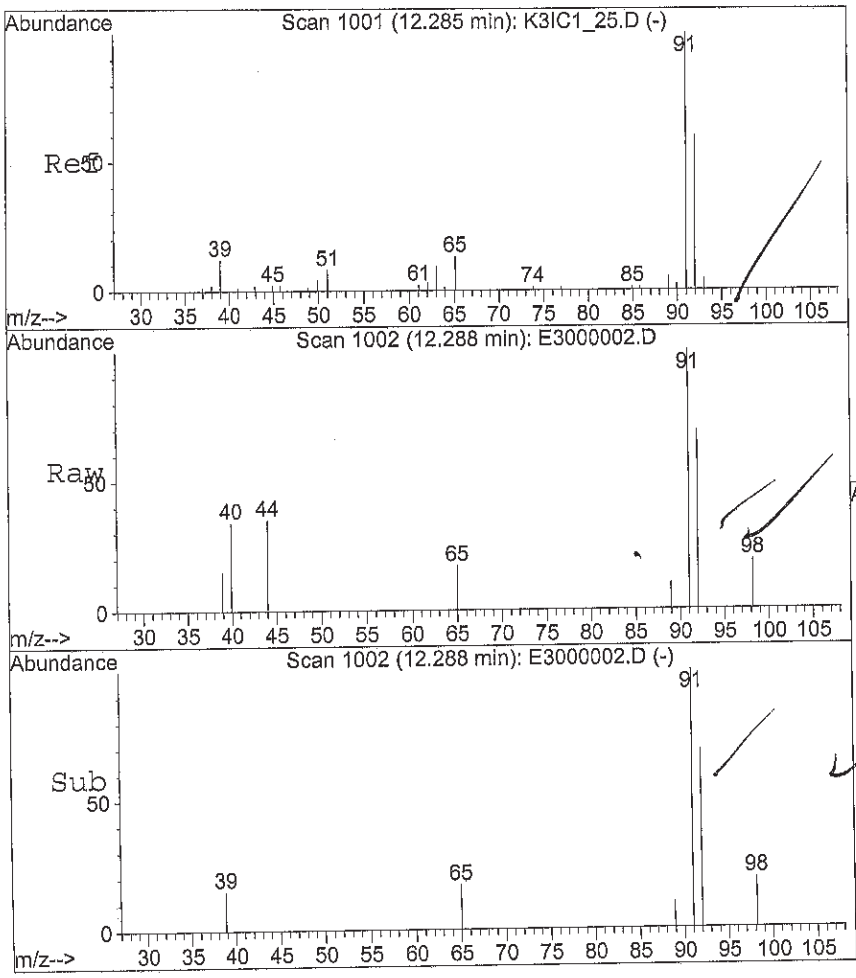


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.13 ug/L
RT: 12.11 min Scan# 981
Delta R.T. -0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 43 Resp: 314

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

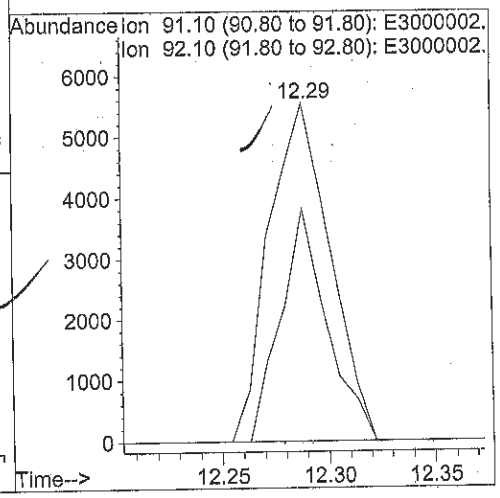


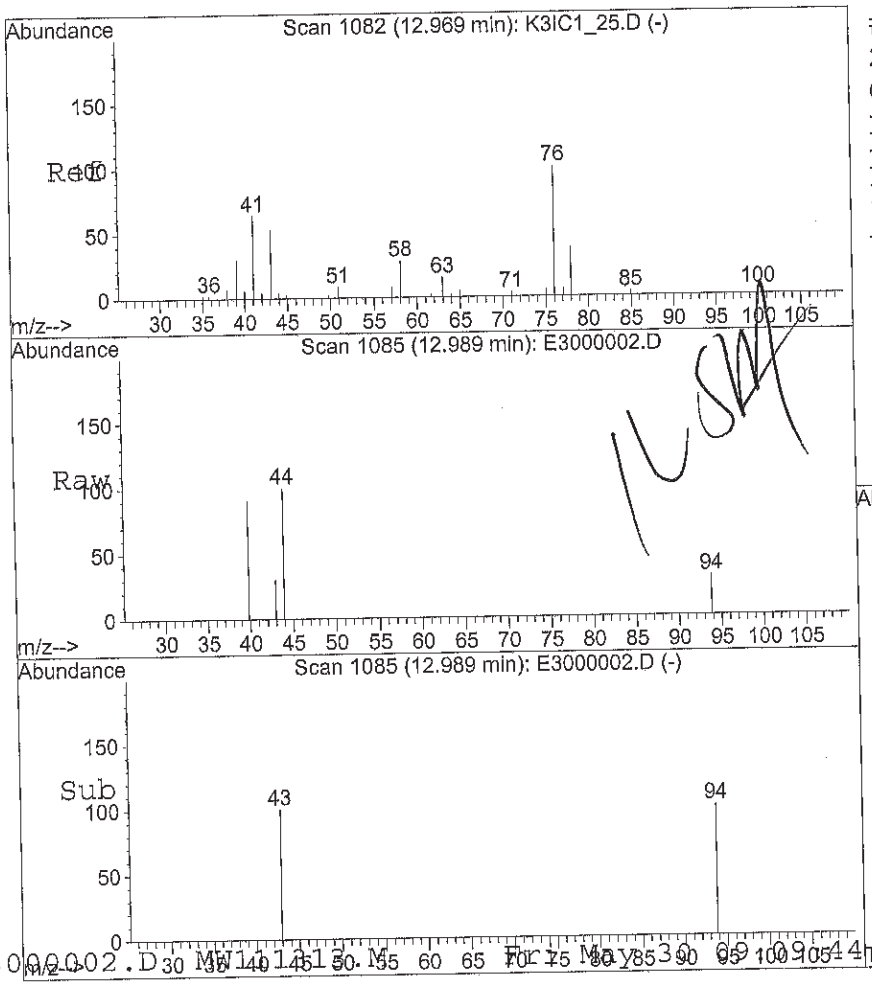


#41
Toluene
Concen: 0.64 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 91 Resp: 10993

Ion	Ratio	Lower	Upper
91	100		
92	52.4	47.4	71.0

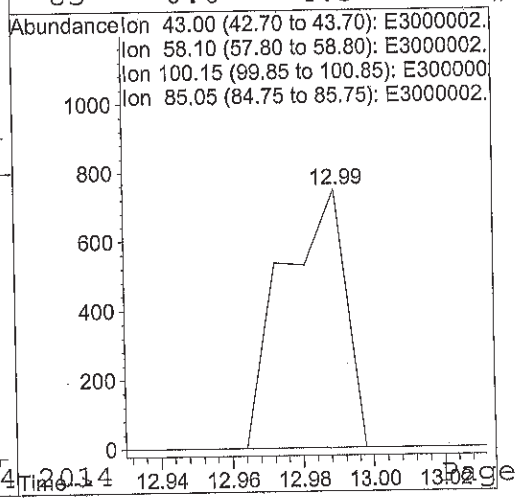


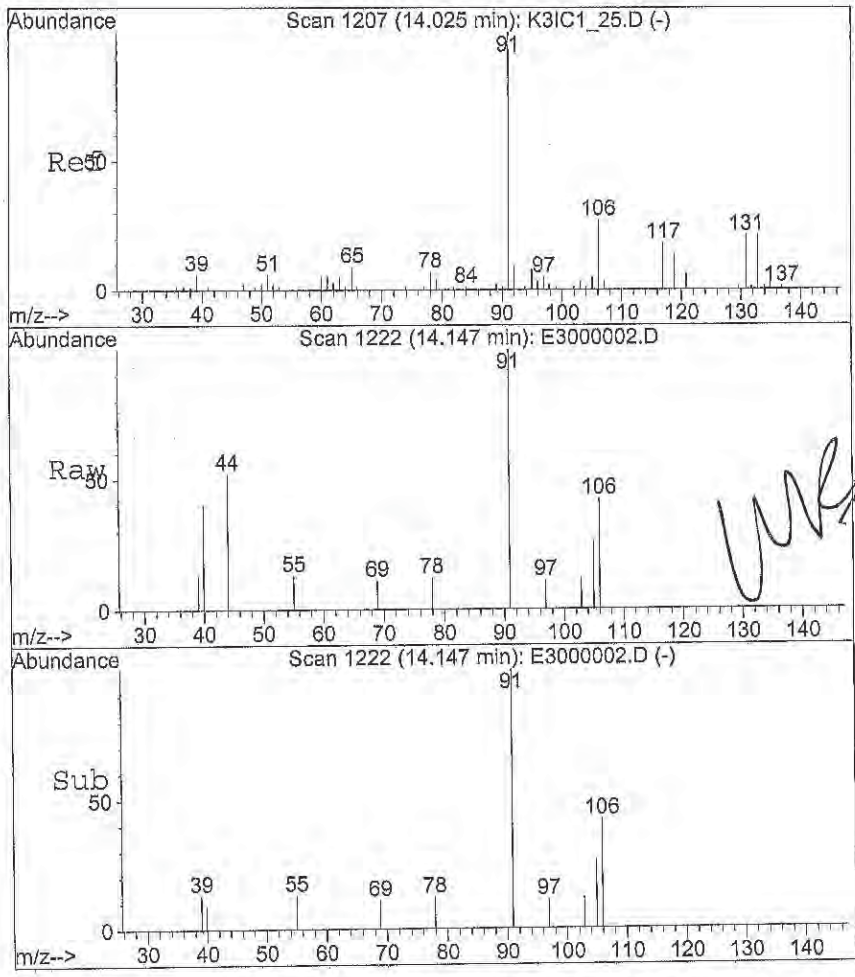


#46
2-Hexanone
Concen: 0.33 ug/L
RT: 12.99 min Scan# 1085
Delta R.T. 0.02 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 43 Resp: 917

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

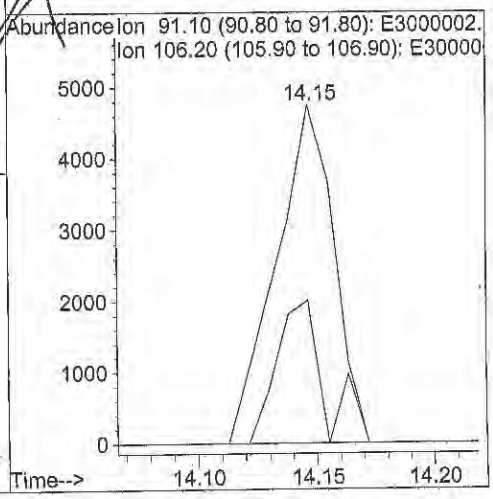


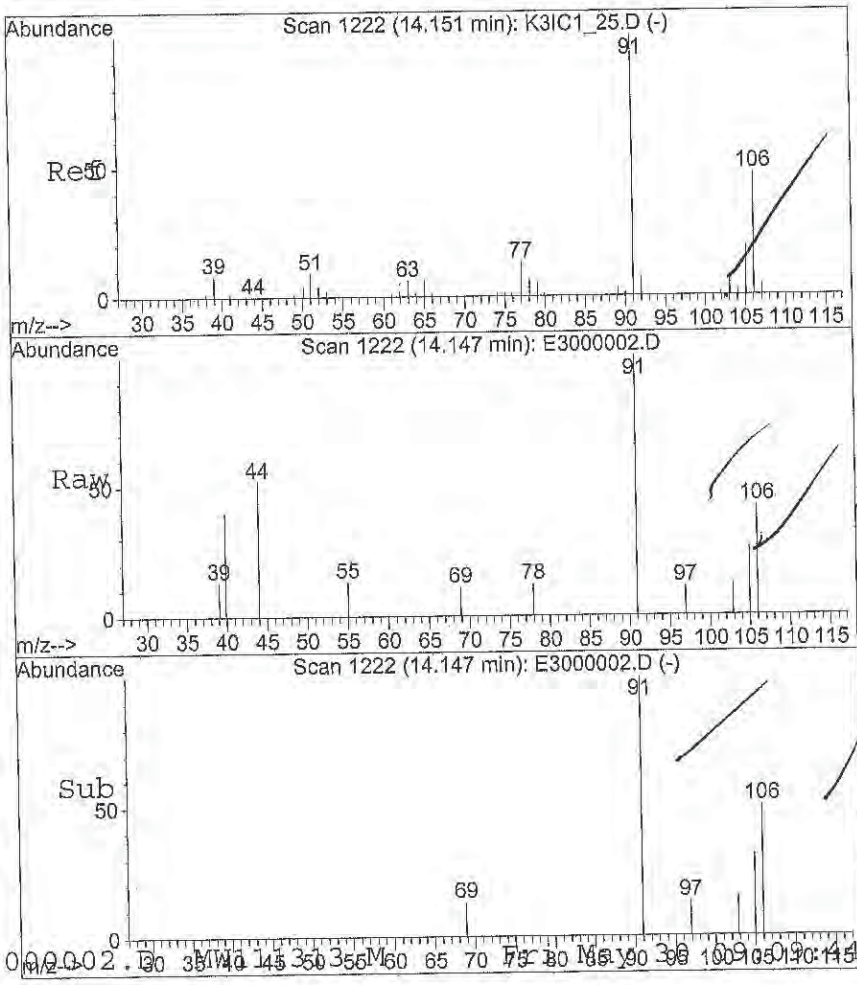


#51
Ethylbenzene
Concen: 0.41 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. 0.12 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 91 Resp: 8003

Ion	Ratio	Lower	Upper
91	100		
106	34.7	23.5	35.3

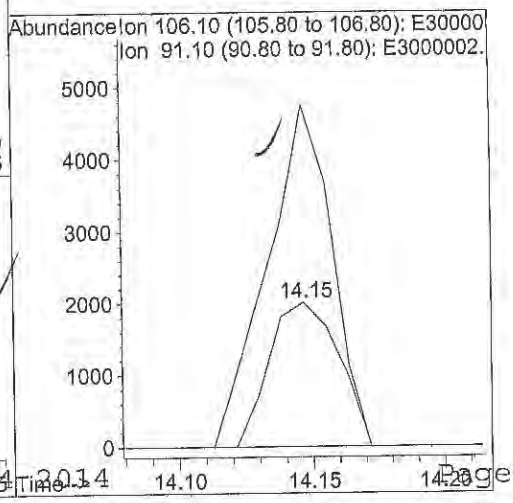


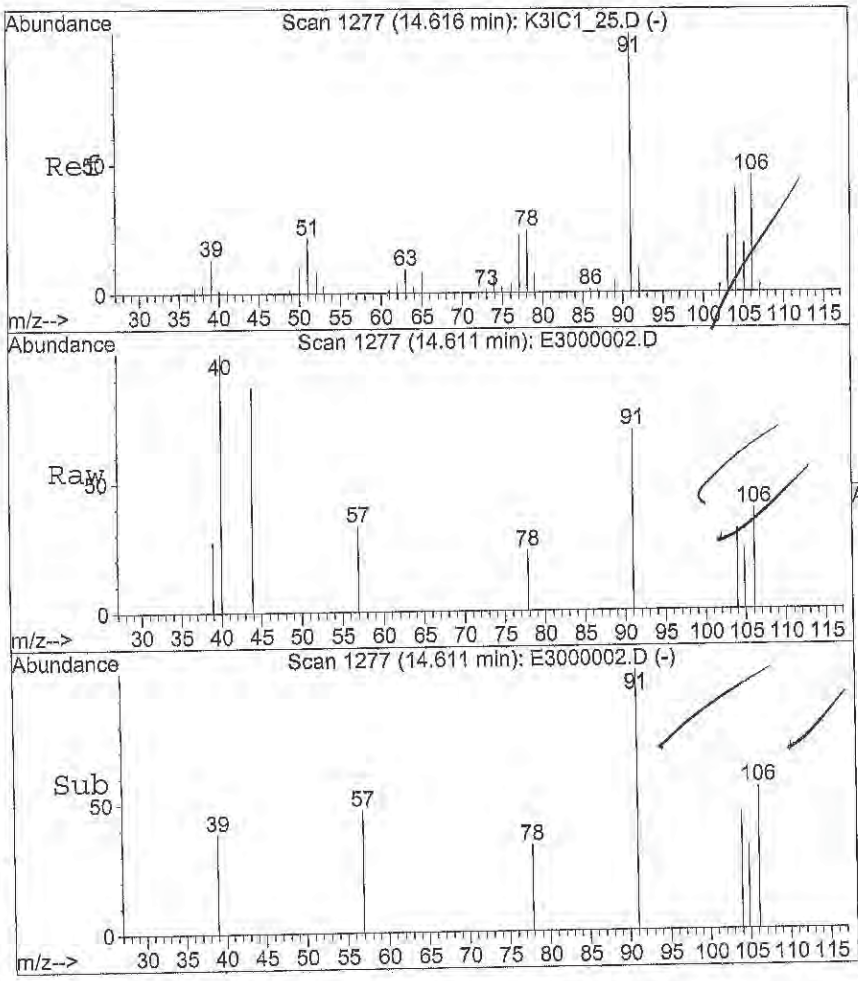


#52
m,p-Xylenes
Concen: 0.53 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:106 Resp: 3626

Ion	Ratio	Lower	Upper
106	100		
91	220.7	177.1	265.7

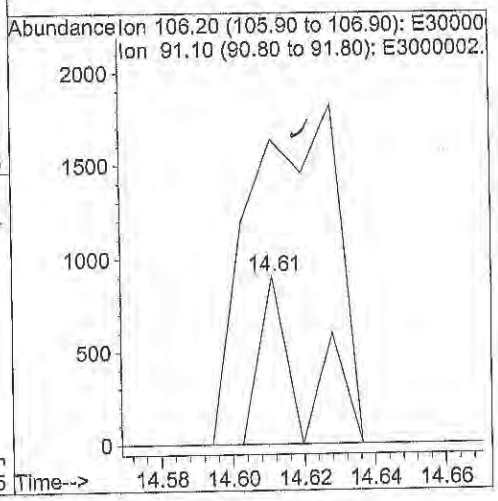


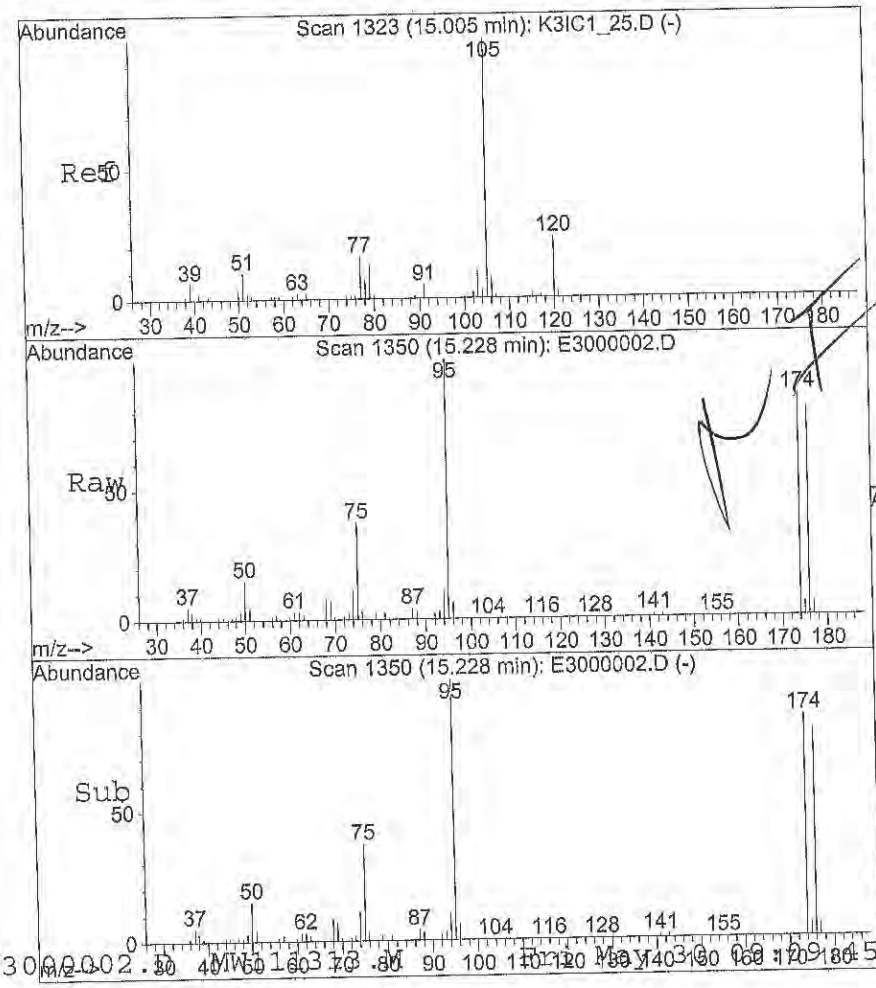


#53
o-Xylene
Concen: 0.11 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:106 Resp: 761

Ion	Ratio	Lower	Upper
106	100		
91	407.2	179.0	268.6#

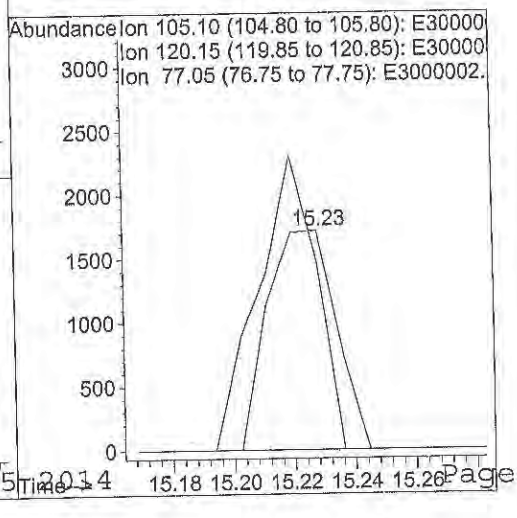


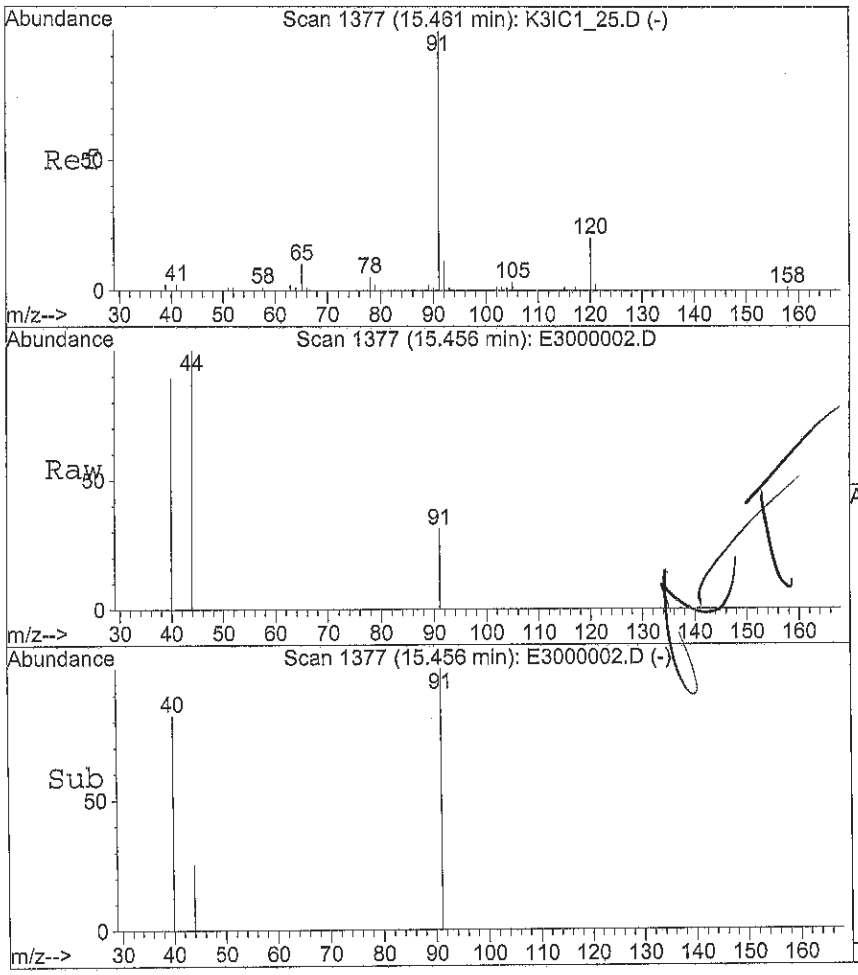


#56
Isopropylbenzene
Concen: 0.14 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.22 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:105 Resp: 2675

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	114.2	13.1	19.7#

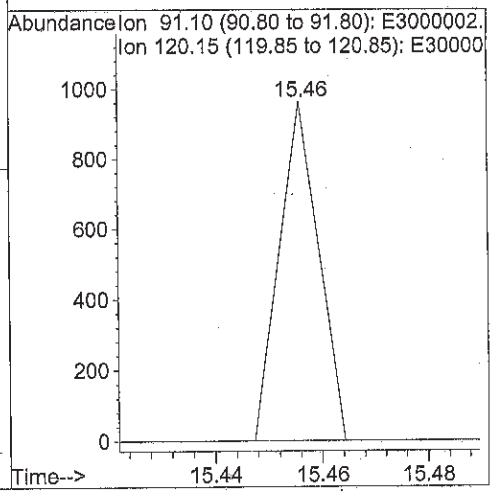


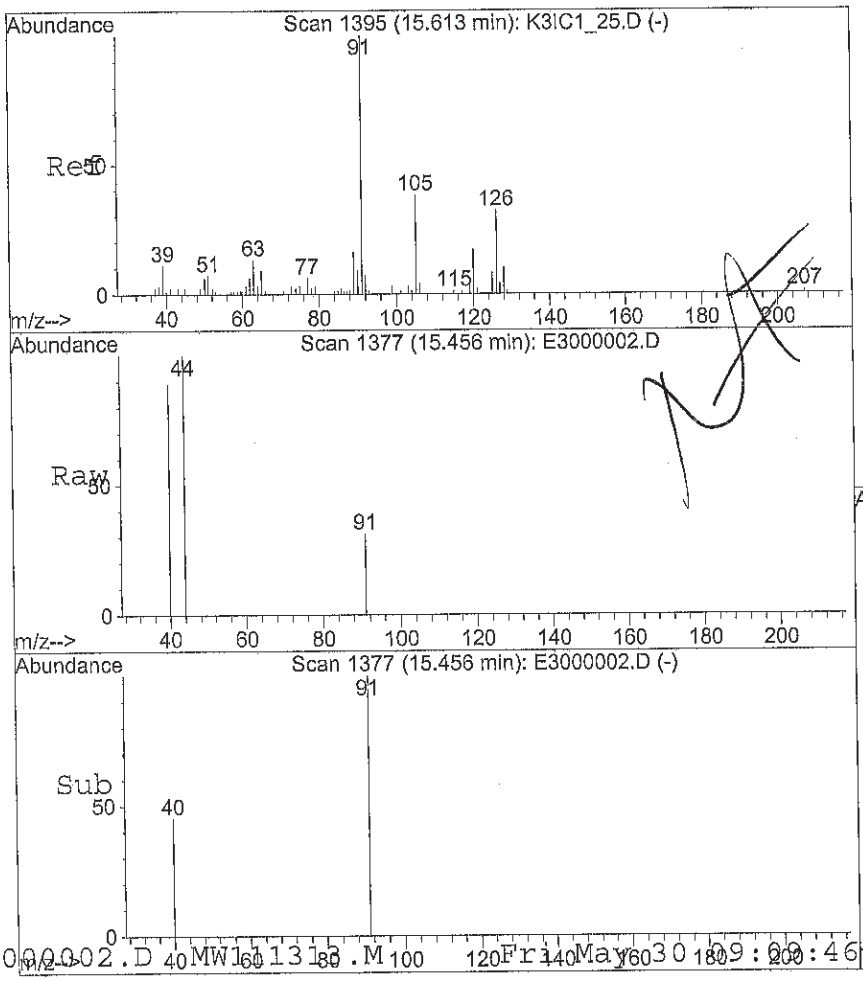


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 91 Resp: 489

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

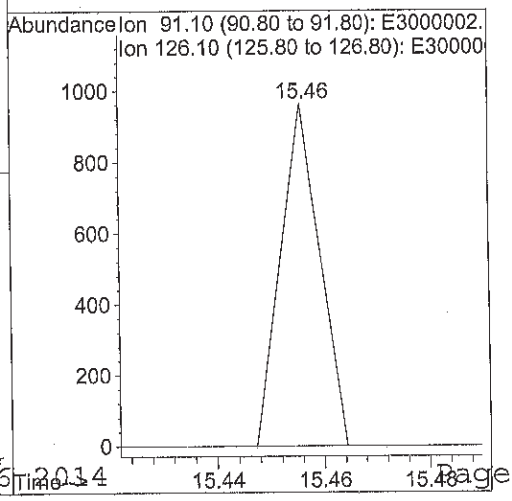


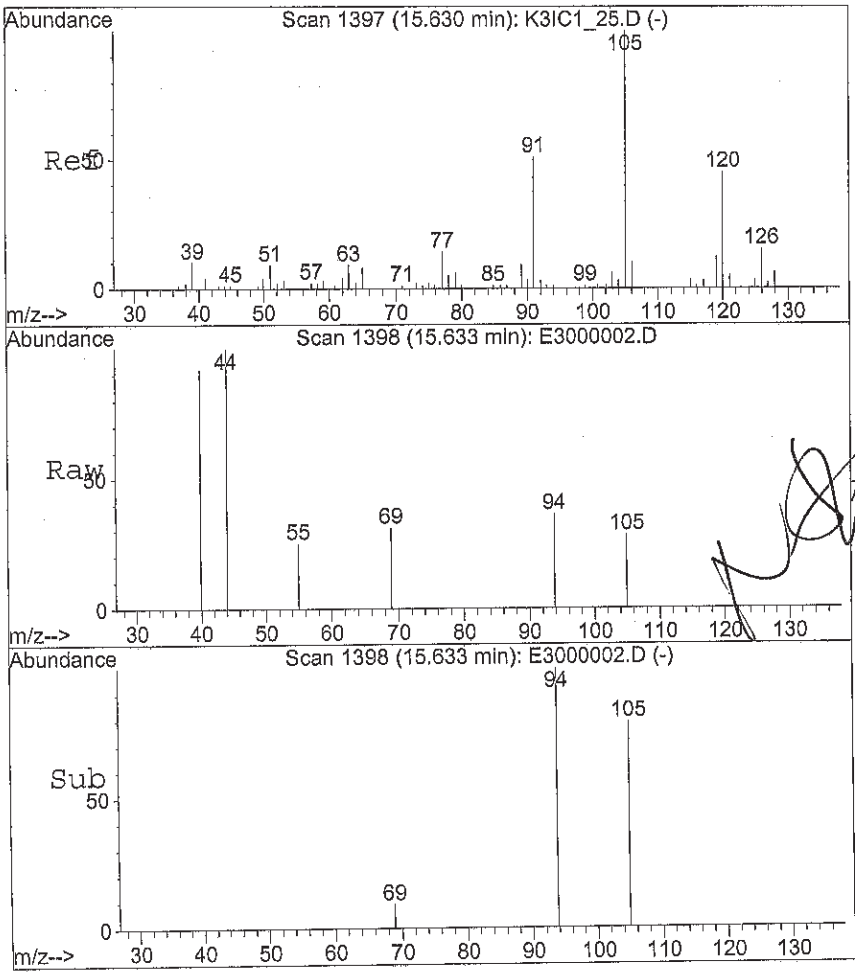


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.16 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion: 91 Resp: 489

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

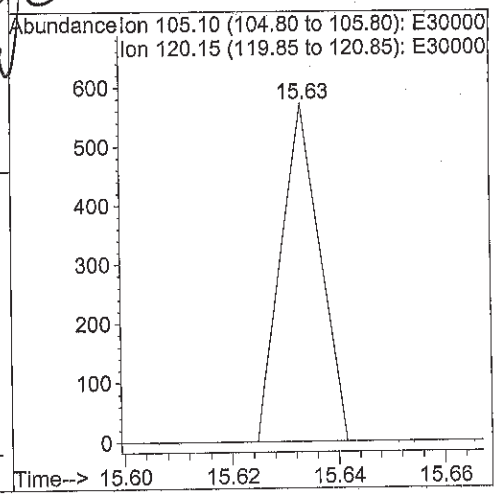


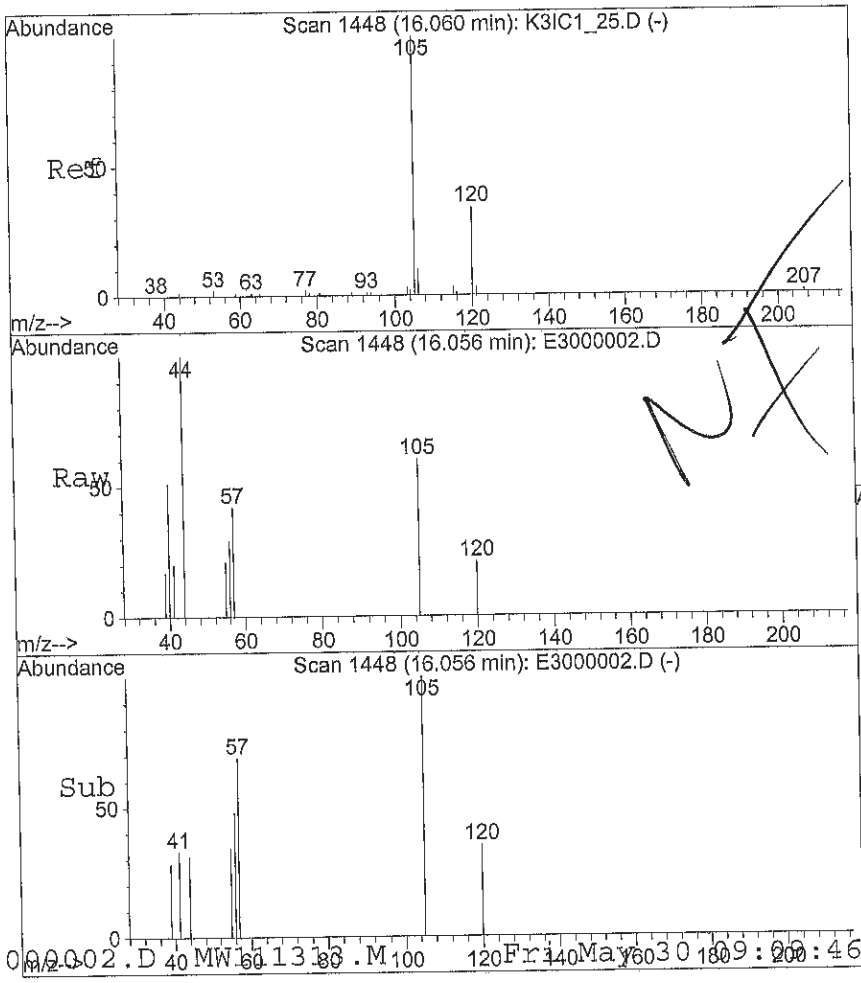


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.63 min Scan# 1398
Delta R.T. 0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:105 Resp: 290

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

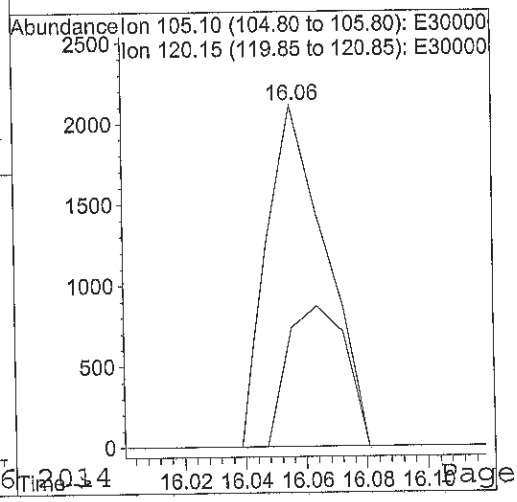


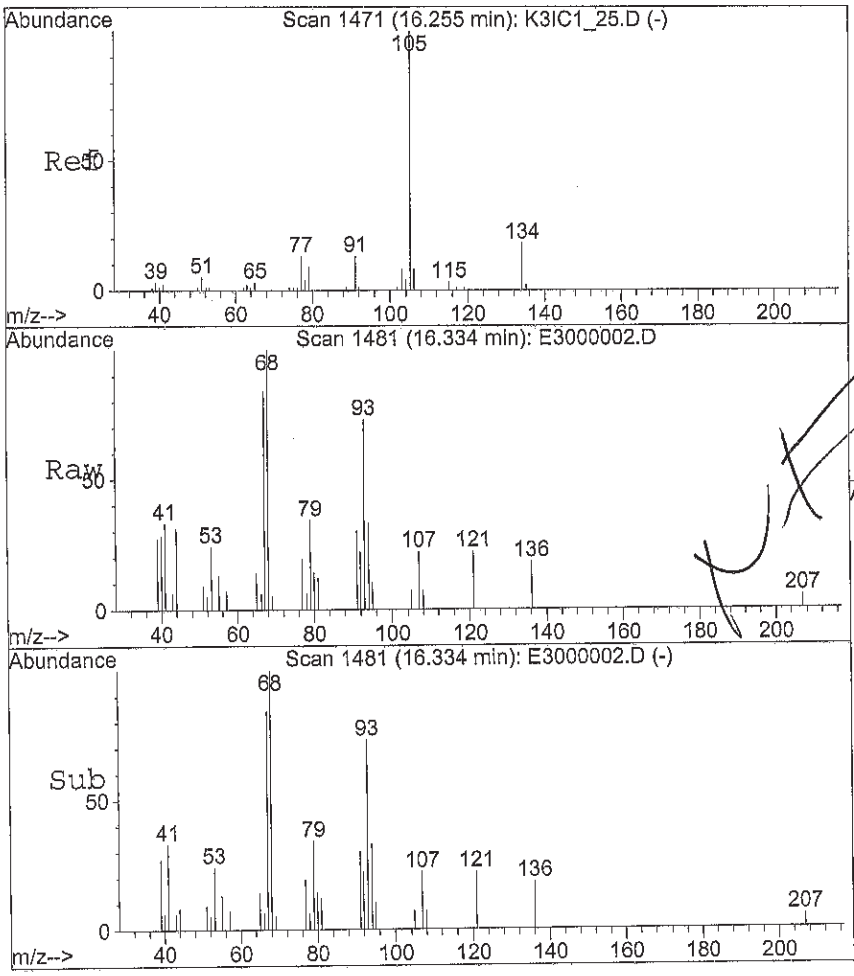


#67
1,2,4-Trimethylbenzene
Concen: 0.16 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:105 Resp: 2867

Ion	Ratio	Lower	Upper
105	100		
120	40.8	33.8	50.8

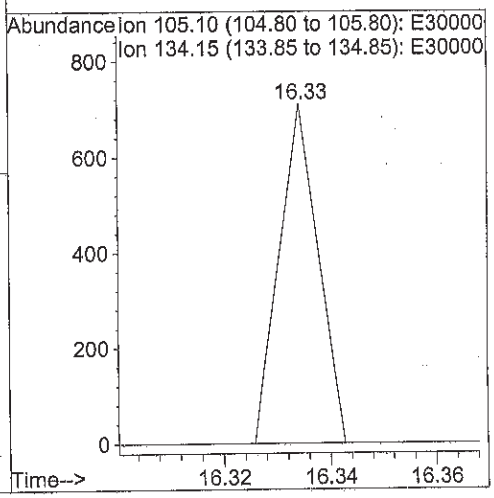


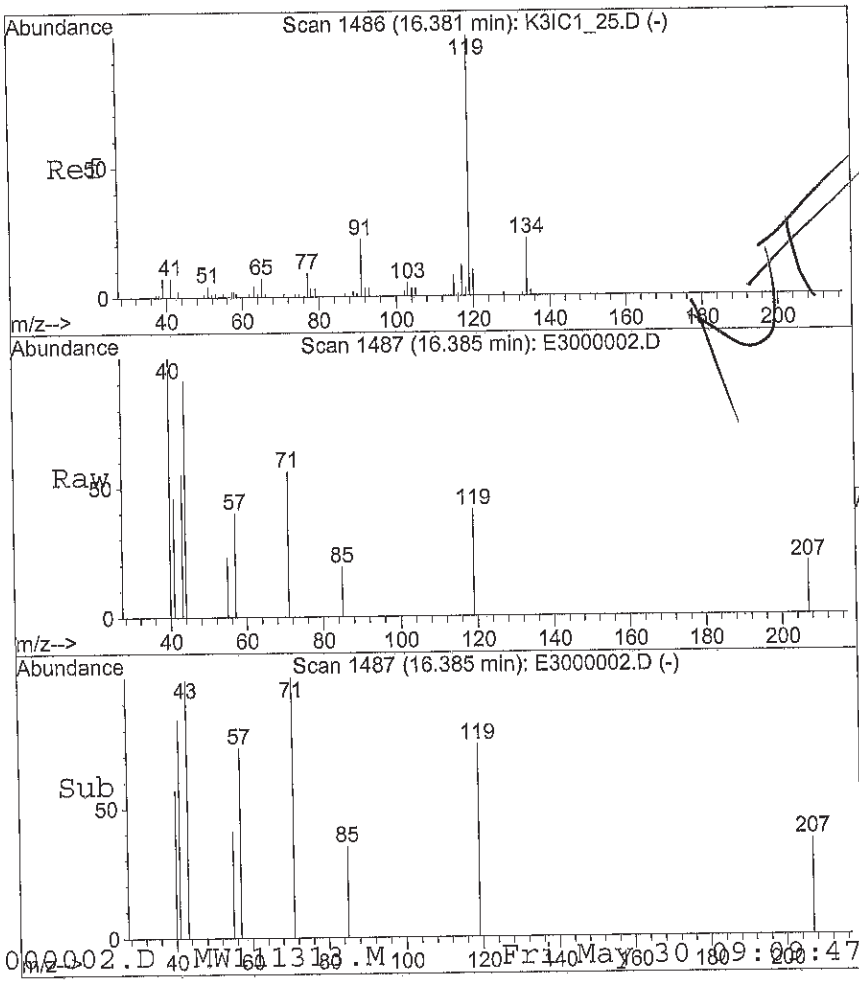


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:105 Resp: 360

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

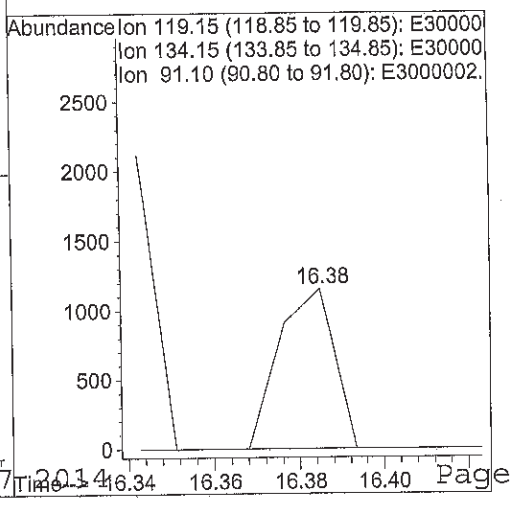




#69
p-Isopropyltoluene
Concen: 0.06 ug/L
RT: 16.38 min Scan# 1487
Delta R.T. 0.00 min
Lab File: E3000002.D
Acq: 30 May 2014 8:44 am

Tgt Ion:119 Resp: 1046

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000002.D Vial: 1
Acq On : 30 May 2014 8:44 am Operator: DN
Sample : 3E43001-02 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 9:10 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1550819	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1251072	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	689089	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	448446	11.12 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.96%		
3) Chloroform-d (SU6)	9.19	84	687259	11.88 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 95.04%		
4) Methylene Chloride-d2 (SU5	7.07	86	384969	11.38 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 91.04%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	422967	15.35 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 122.80%		
6) Benzene-d6 (SU7)	9.93	84	1317496	10.83 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.64%		
8) Toluene-d8 (SU3)	12.20	98	1415188	11.92 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.36%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	704857	14.38 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.04%		

Target Compounds Qvalue

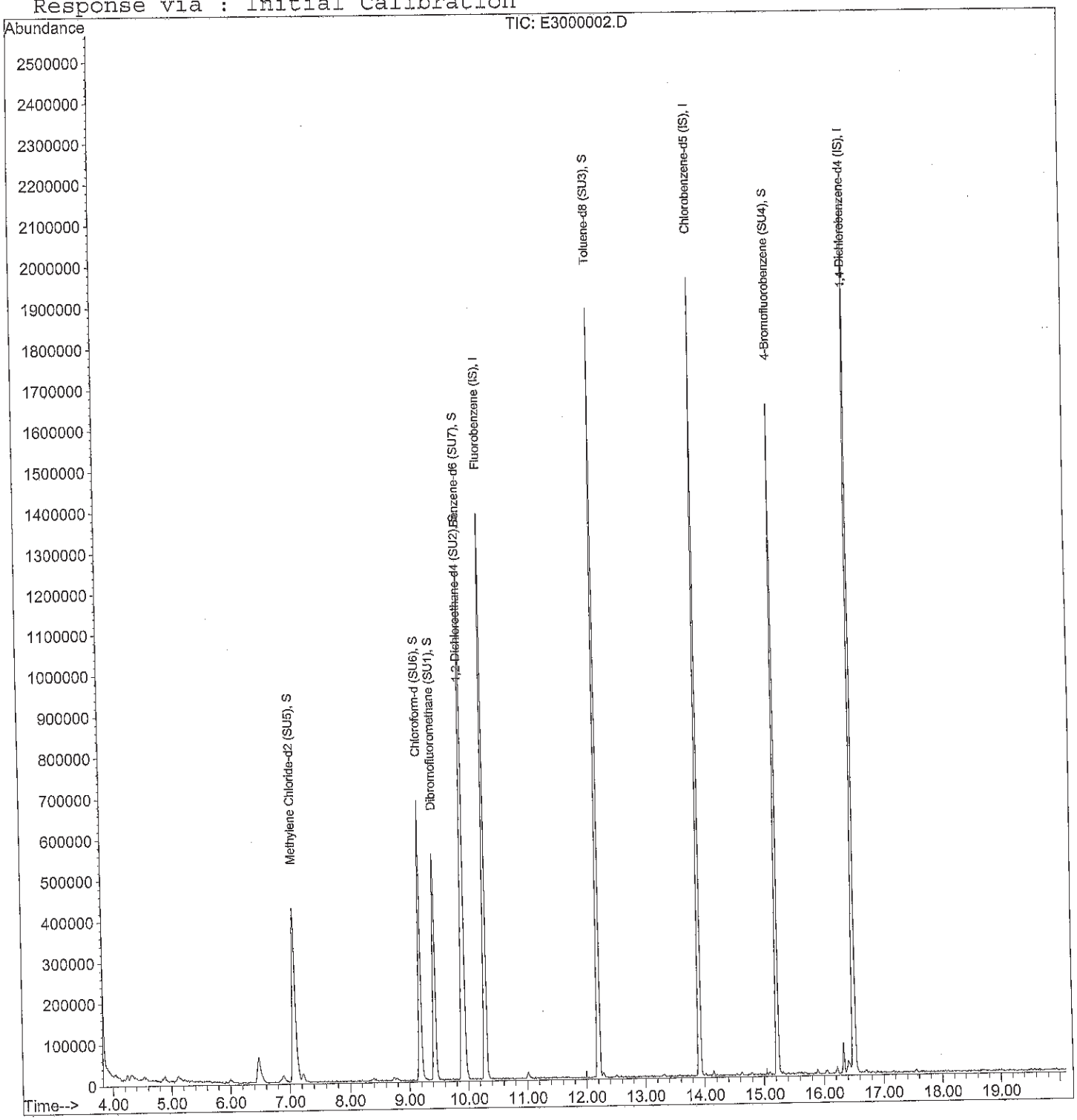
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000002.D
Acq On : 30 May 2014 8:44 am
Sample : 3E43001-02
Misc : 100cc SVL-546-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 9:10 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000004.D
Acq On : 30 May 2014 9:51 am
Sample : 3E43001-03
Misc : 100cc SVL-846-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 10:25 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1575066	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1286154	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	708804	12.50	ug/L	0.00
System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.42	113	460483	11.72	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 93.76%			
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	437810	11.73	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 93.84%			
39) Toluene-d8 (SU3)	12.20	98	1443837	12.04	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 96.32%			
58) 4-Bromofluorobenzene (SU4)	15.22	95	724001	13.76	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 110.08%			

Target Compounds						Qvalue
4) Chloromethane	4.40	50	2050	-0.45	~~ug/L #~~	65
6) Bromomethane	5.10	96	11417	4.81	~~ug/L #~~	53
7) Chloroethane	5.25	64	399	0.99	~~ug/L #~~	61
11) Acetone	6.46	58	5944	4.77	~~ug/L #~~	55
12) (IPA) Leak Check Compound	6.47	45	130349	688.70	~~ug/L #~~	83
13) Carbon disulfide	6.84	76	17997	1.37	~~ug/L #~~	82
14) Methylene Chloride	7.08	84	5745	1.33	~~ug/L #~~	1
15) (TBA) tert-Butanol	6.90	59	637	2.37	~~ug/L #~~	77
24) Chloroform	9.22	83	378	0.05	~~ug/L #~~	18
25) (ETBE) 2-ethoxy 2-methyl p	8.40	59	2724	0.24	~~ug/L #~~	44
29) 1,1-Dichloropropene	9.92	75	548	0.09	~~ug/L #~~	1
31) Benzene	9.96	78	8381	0.57	~~ug/L #~~	73
32) 1,2-Dichloroethane	9.92	62	5964	1.14	~~ug/L #~~	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	7074	2.76	~~ug/L #~~	100
41) Toluene	12.28	91	11061	0.63	ug/L 0.0126	94
46) 2-Hexanone	13.11	43	349	0.12	~~ug/L #~~	37
51) Ethylbenzene	14.03	91	3313	0.17	~~ug/L #~~	45
52) m,p-Xylenes	14.15	106	3296	0.47	ug/L 0.0094	100
53) o-Xylene	14.62	106	748	0.11	ug/L #) 0.0022	27
54) Styrene	14.63	104	2232	-0.65	~~ug/L #~~	60
56) Isopropylbenzene	15.23	105	414	0.02	~~ug/L #~~	1
62) n-Propylbenzene	15.45	91	666	0.02	~~ug/L #~~	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000004.D Vial: 3
Acq On : 30 May 2014 9:51 am Operator: DN
Sample : 3E43001-03 Inst : GC/MS Ins
Misc : 100cc SVL-846-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 10:25 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

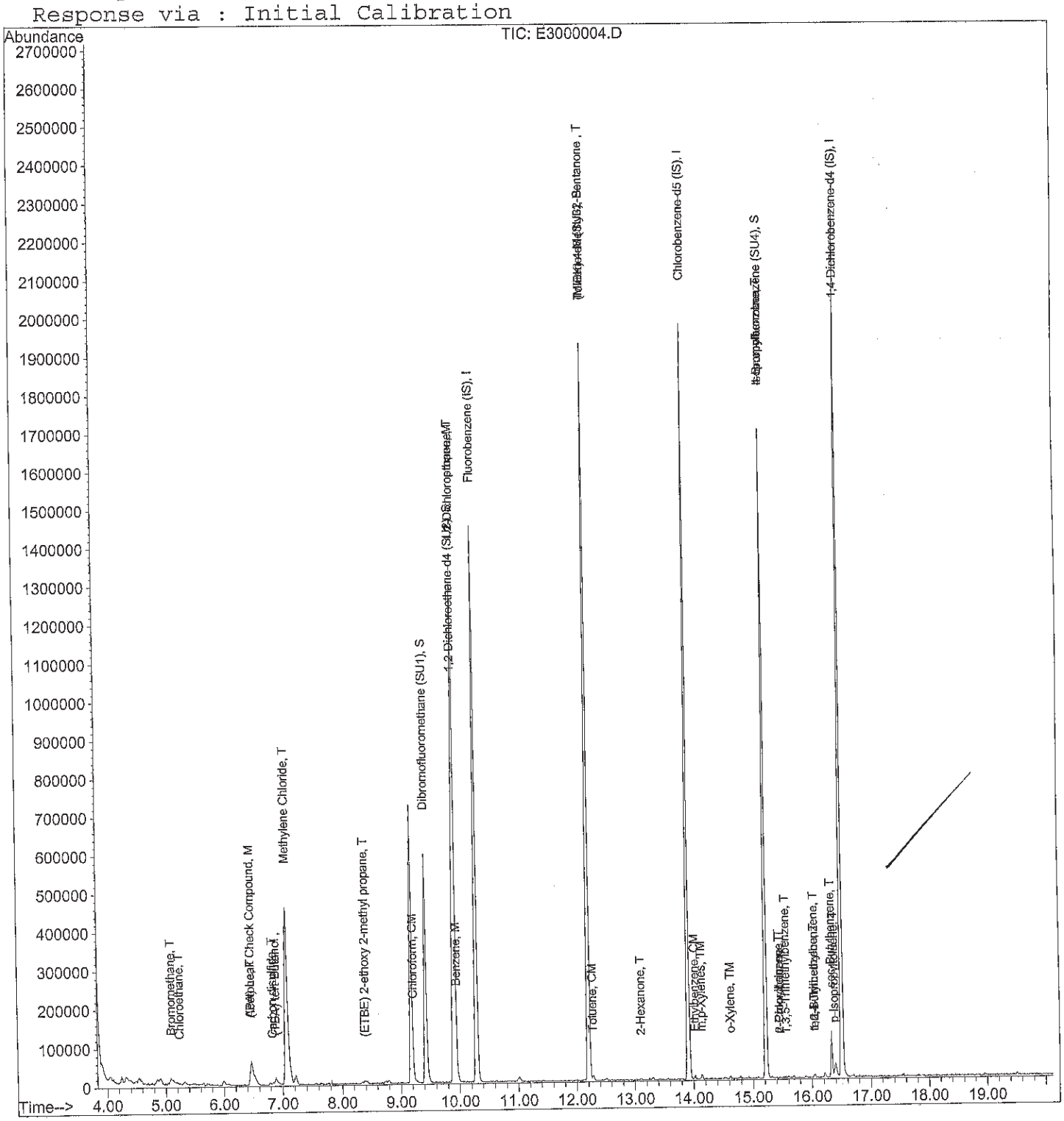
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.45	91	666	0.04 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.57	105	259	0.01 ~~ug/L~~ #	31
66) tert-Butylbenzene	16.05	119	312	0.02 ~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.05	105	2579	0.14 ~~ug/L~~ #	50
68) sec-Butylbenzene	16.33	105	1916	0.08 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1254	0.06 ~~ug/L~~ #	52

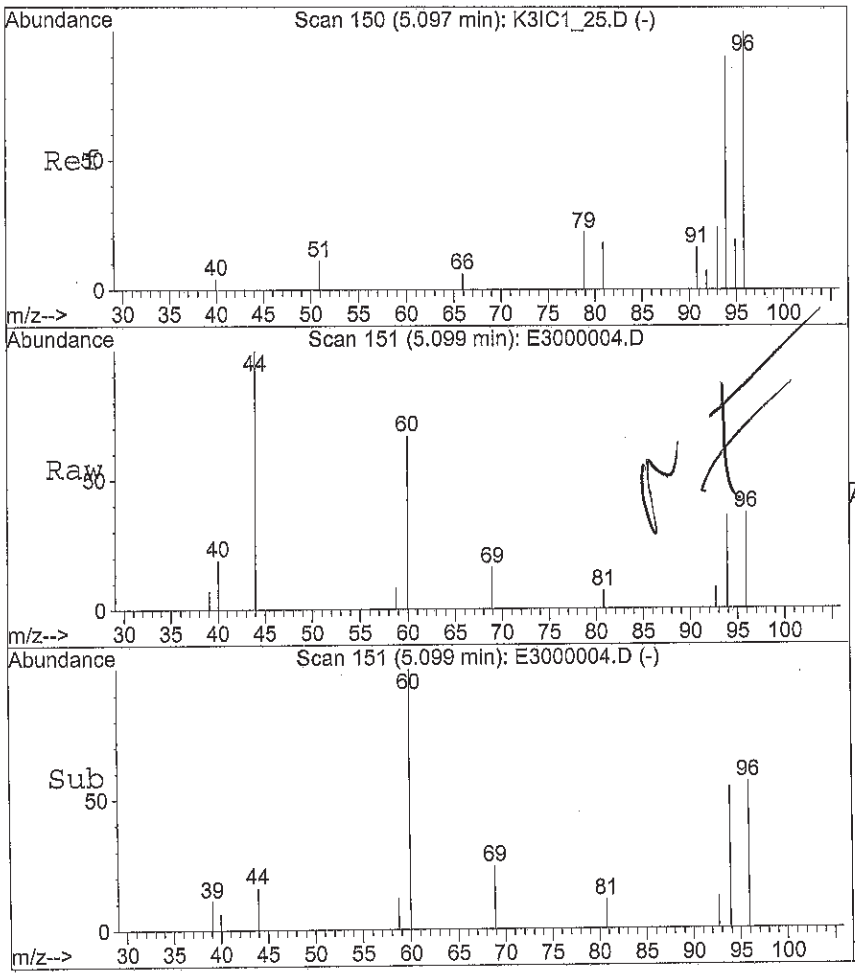
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000004.D Vial: 3
Acq On : 30 May 2014 9:51 am Operator: DN
Sample : 3E43001-03 Inst : GC/MS Ins
Misc : 100cc SVL-846-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 10:25 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

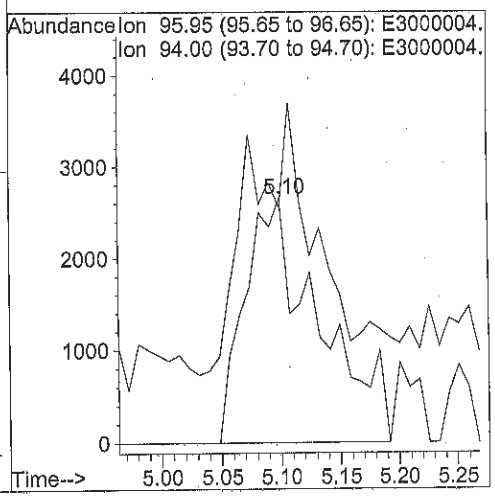


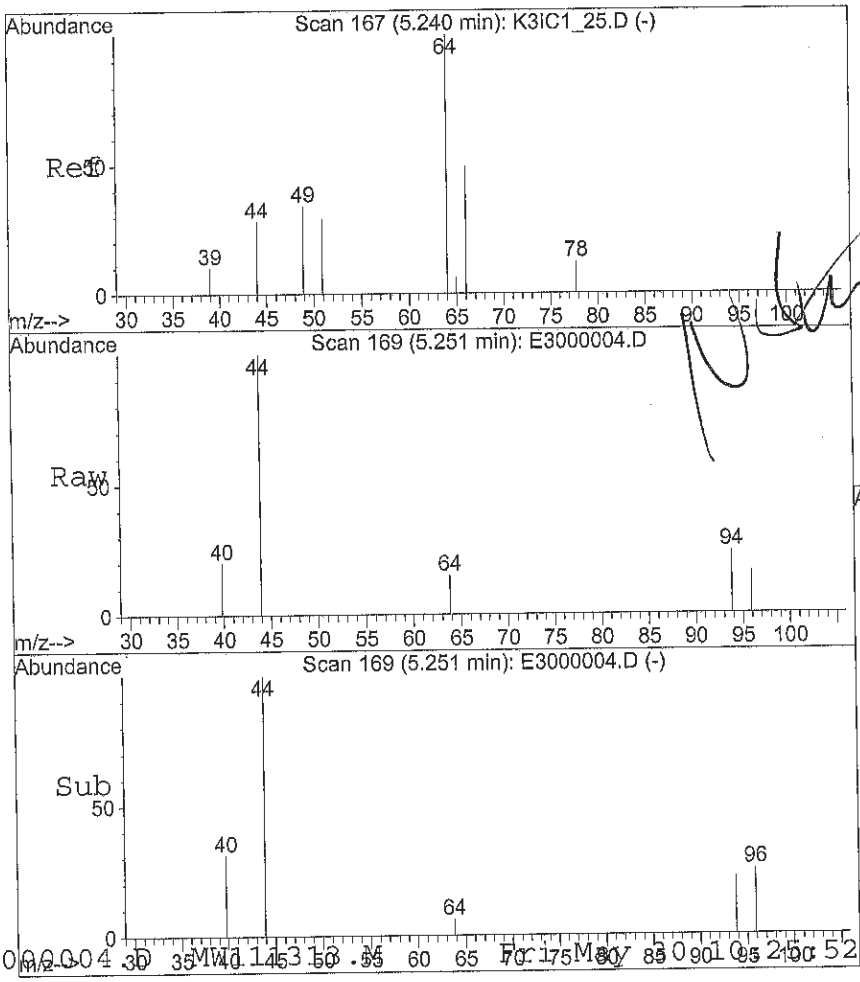


#6
Bromomethane
Concen: 4.81 ug/L
RT: 5.10 min Scan# 151
Delta R.T. 0.00 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 96 Resp: 11417

Ion	Ratio	Lower	Upper
96	100		
94	72.7	101.0	151.4#

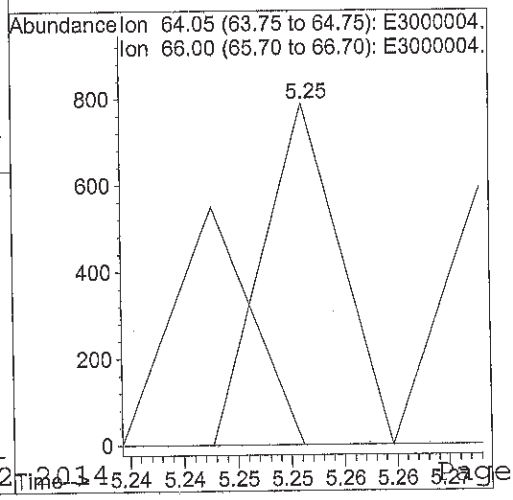


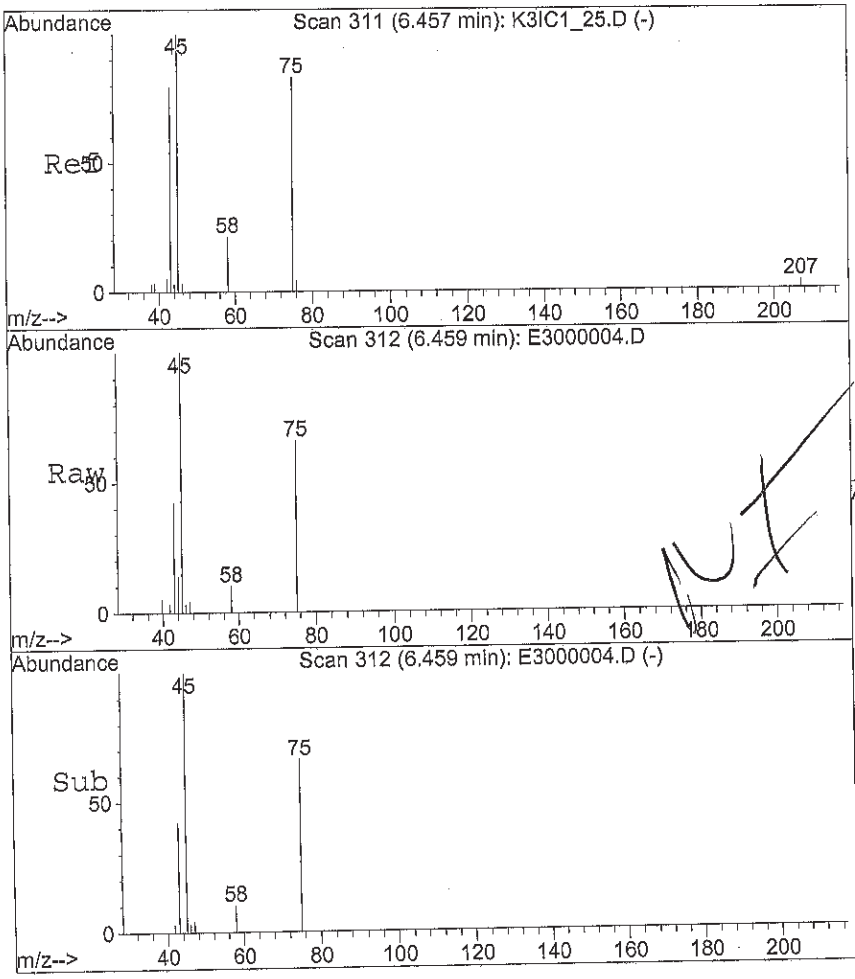


#7
Chloroethane
Concen: 0.99 ug/L
RT: 5.25 min Scan# 169
Delta R.T. 0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 64 Resp: 399

Ion	Ratio	Lower	Upper
64	100		
66	69.7	35.4	53.0#

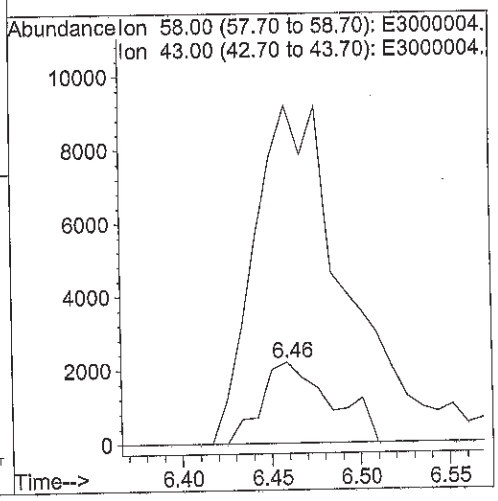


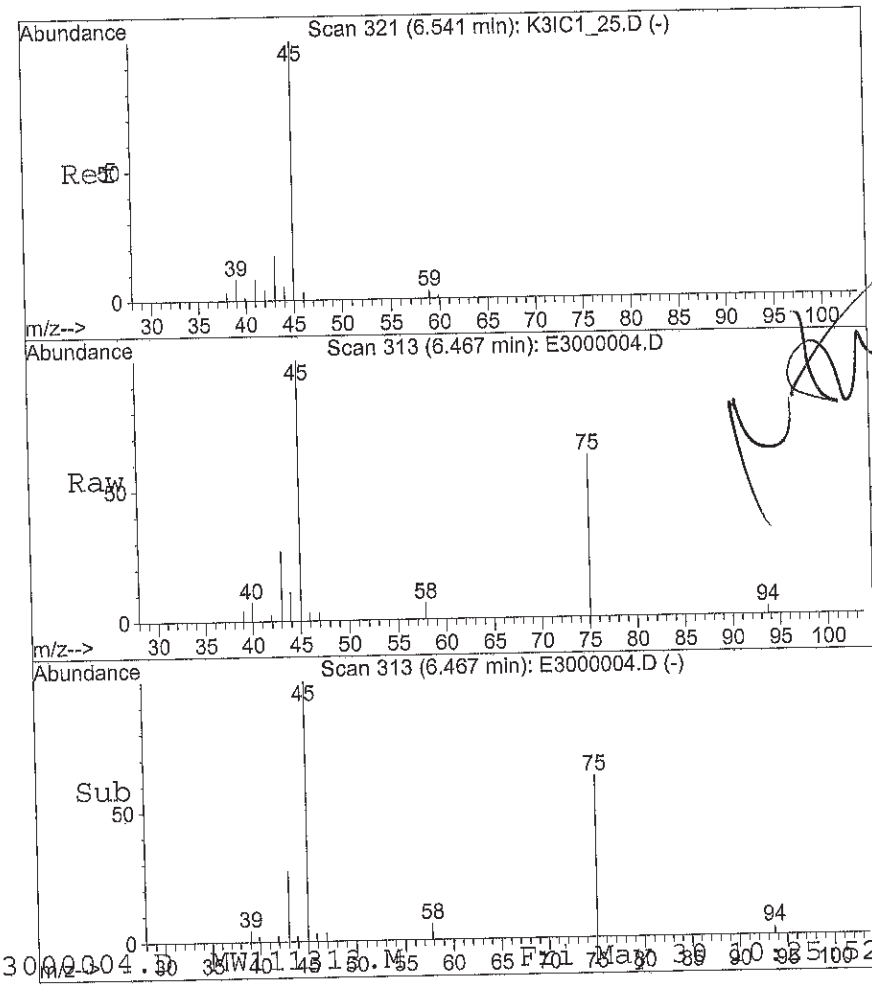


#11
Acetone
Concen: 4.77 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 58 Resp: 5944

Ion	Ratio	Lower	Upper
58	100		
43	565.8	360.9	541.3#

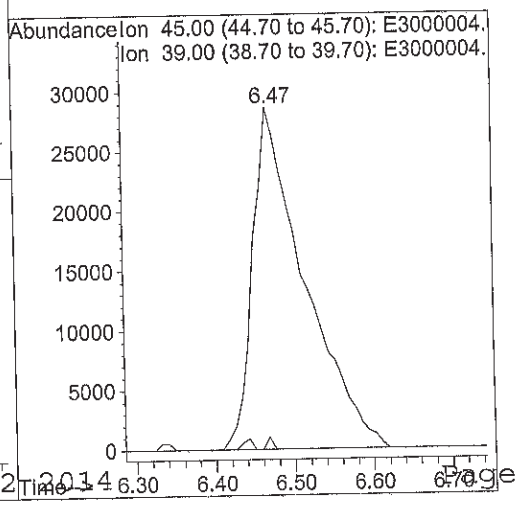


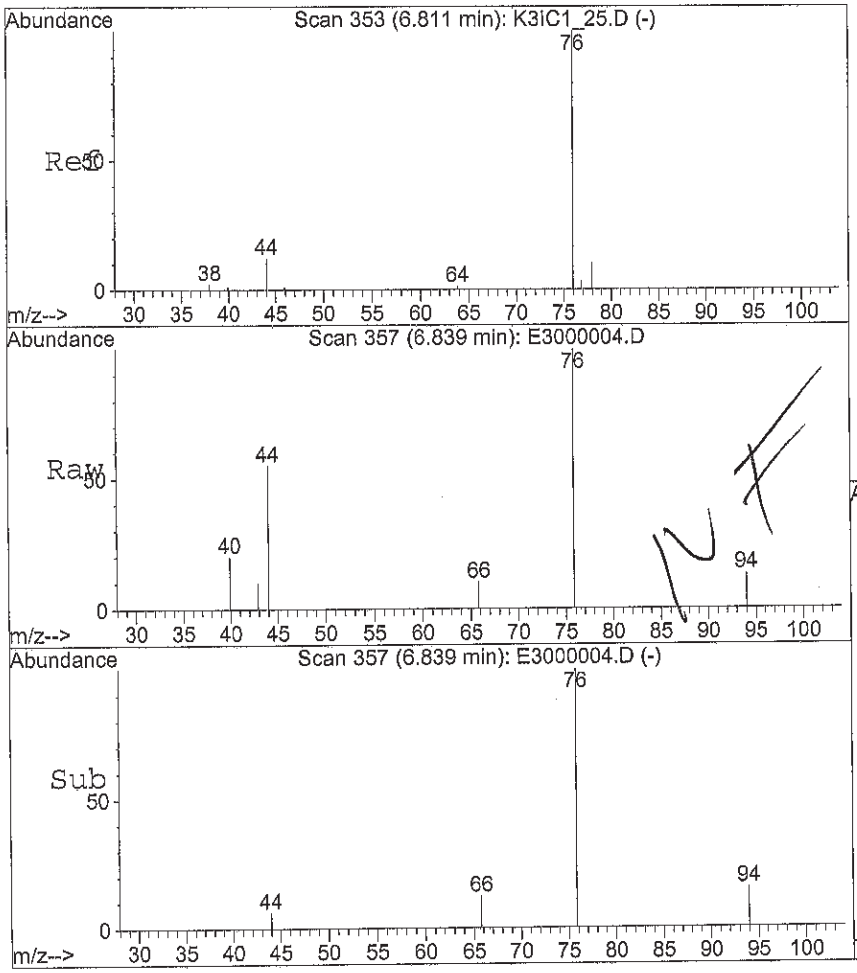


#12
(IPA) Leak Check Compound
Concen: 688.70 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 45 Resp: 130349

Ion	Ratio	Lower	Upper
45	100		
39	0.4	4.9	7.3#

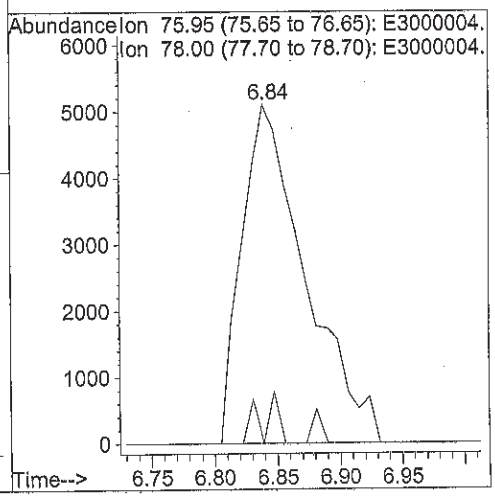


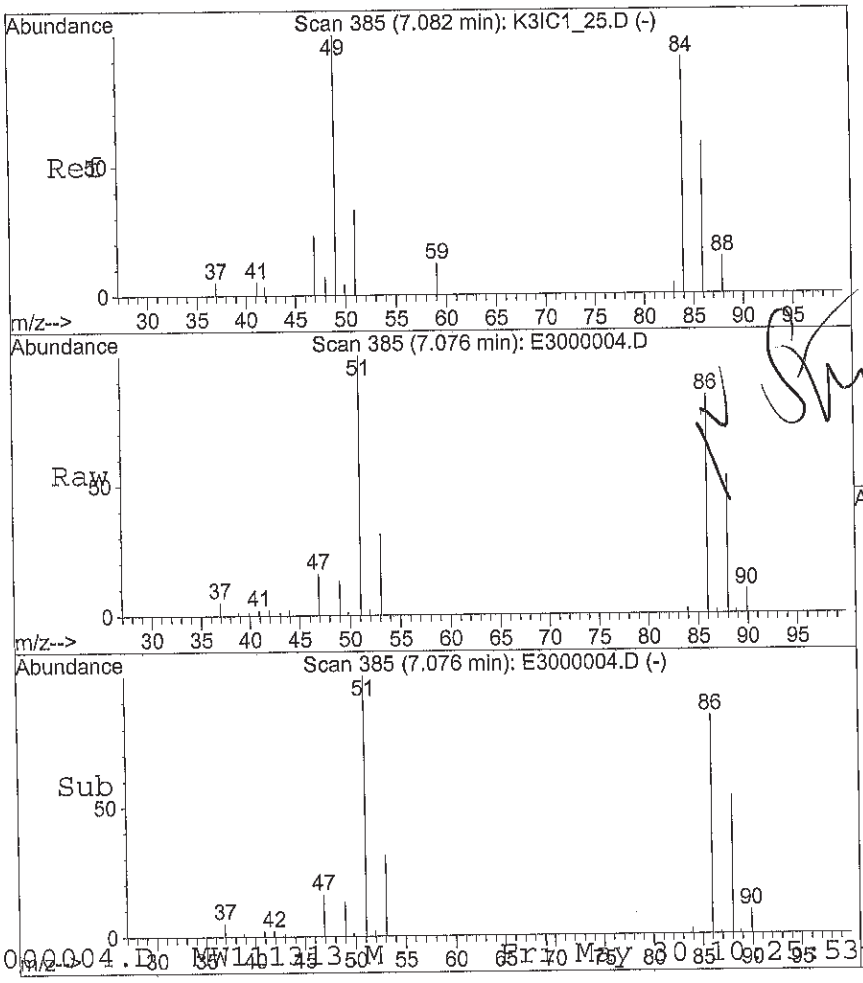


#13
Carbon disulfide
Concen: 1.37 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 76 Resp: 17997

Ion	Ratio	Lower	Upper
76	100		
78	2.2	7.0	10.4#

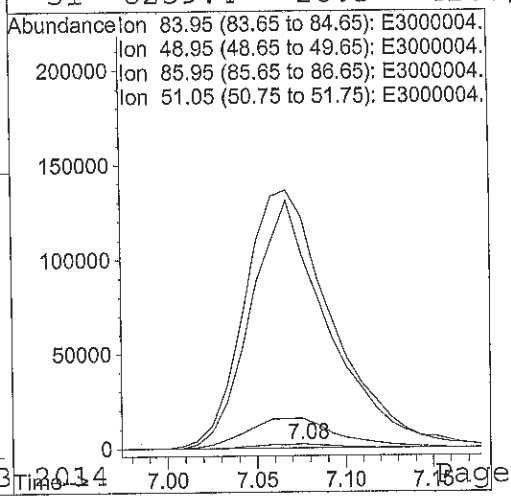


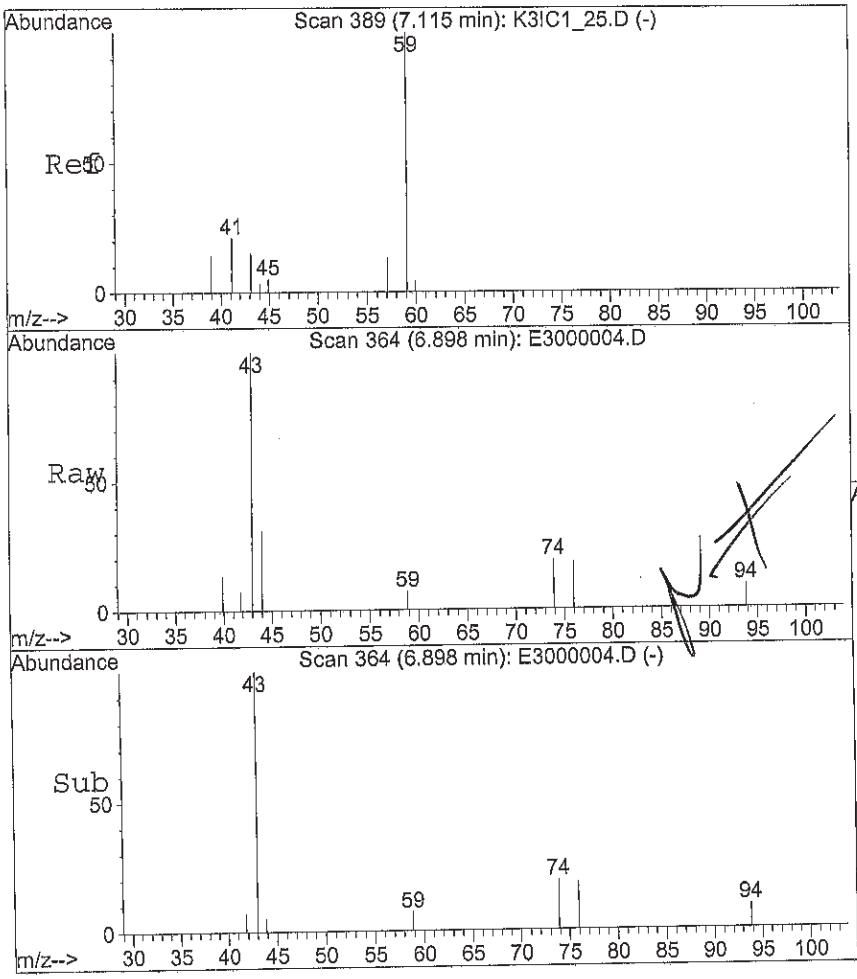


#14
Methylene Chloride
Concen: 1.33 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 84 Resp: 5745

Ion	Ratio	Lower	Upper
84	100		
49	968.7	89.8	134.6#
86	7027.3	51.1	76.7#
51	8259.4	28.5	42.7#

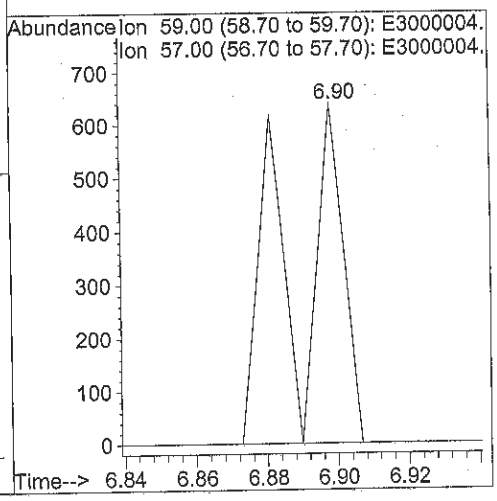


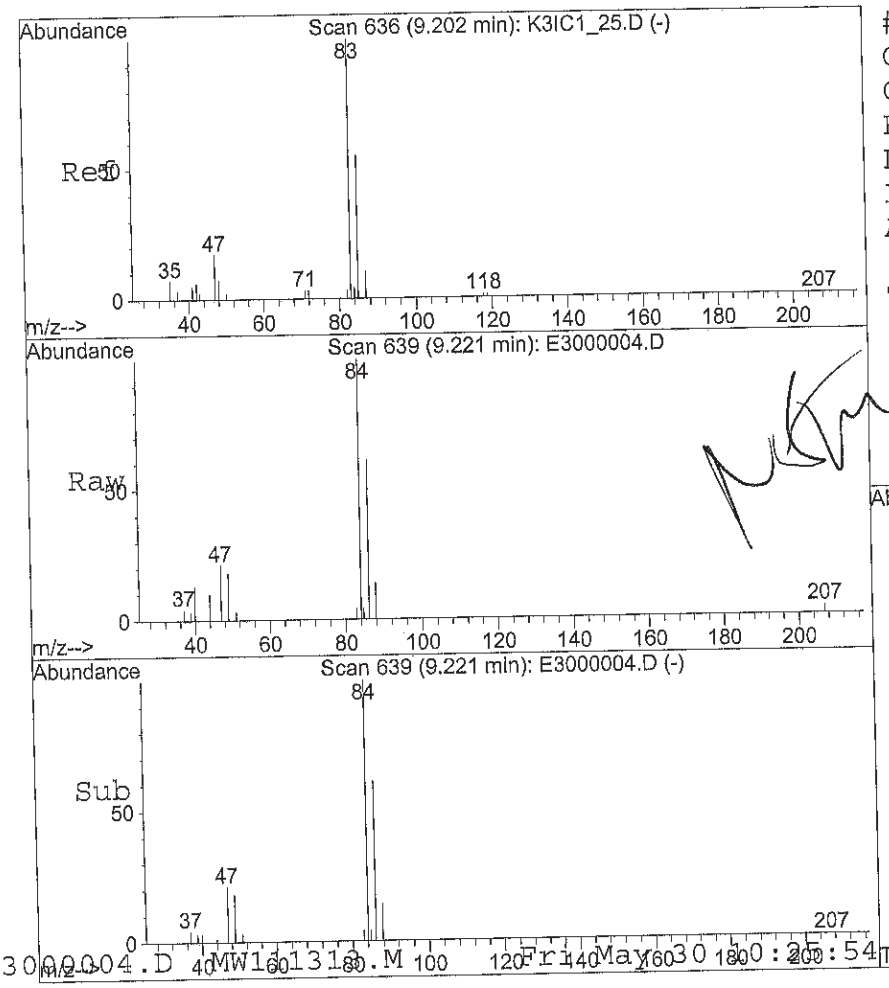


#15
(TBA) tert-Butanol
Concen: 2.37 ug/L
RT: 6.90 min Scan# 364
Delta R.T. -0.22 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 59 Resp: 637

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

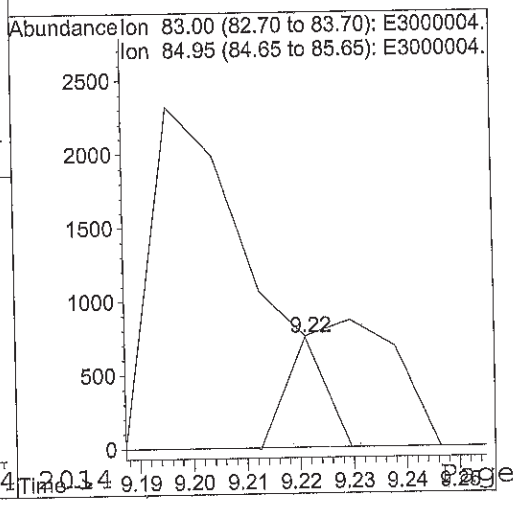


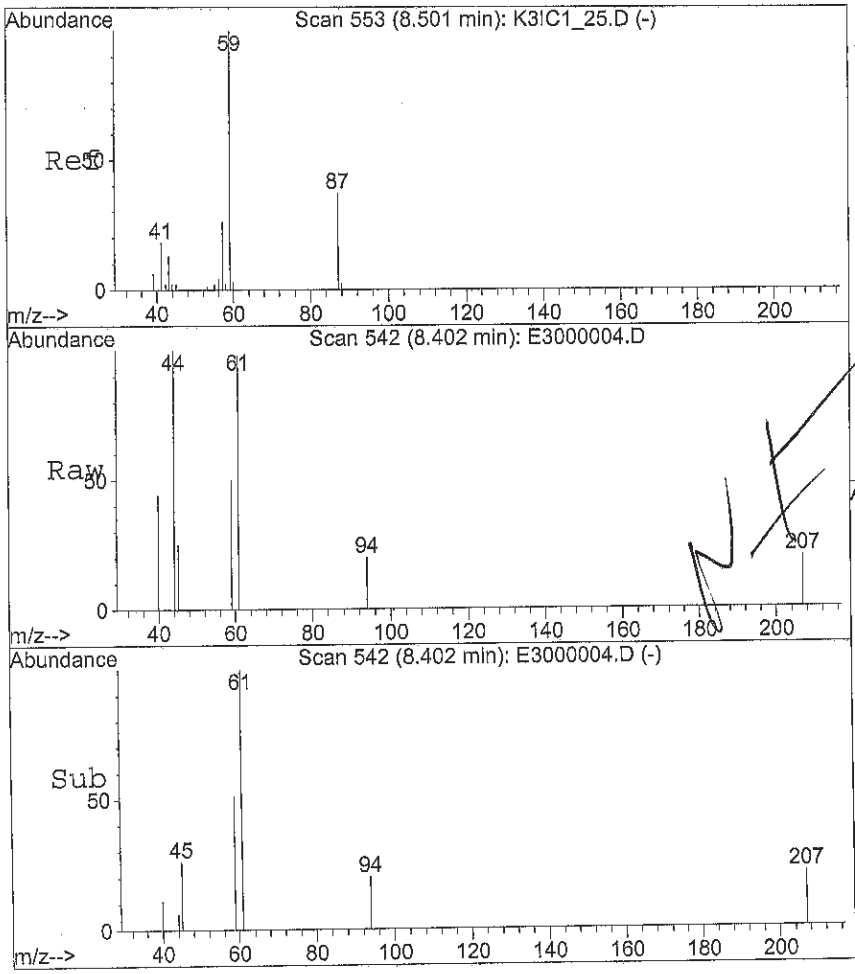


#24
Chloroform
Concen: 0.05 ug/L
RT: 9.22 min Scan# 639
Delta R.T. 0.02 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 83 Resp: 378

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

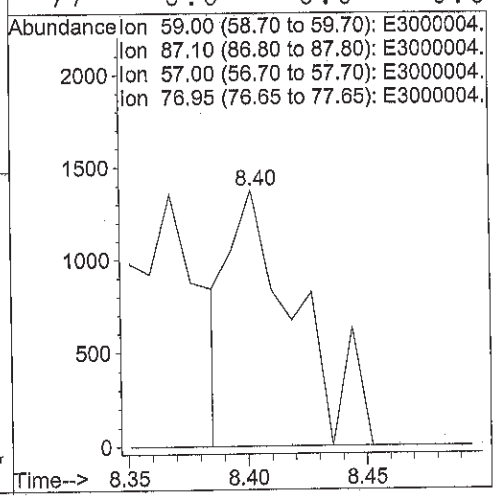


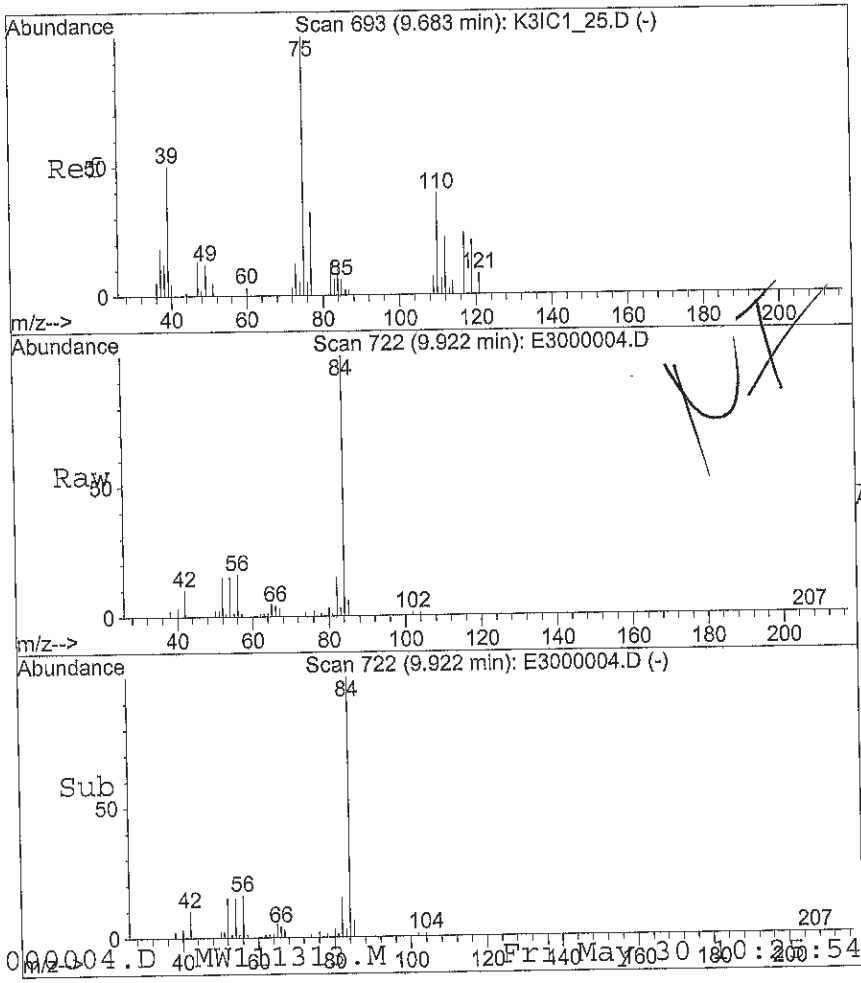


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.24 ug/L
RT: 8.40 min Scan# 542
Delta R.T. -0.10 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 59 Resp: 2724

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

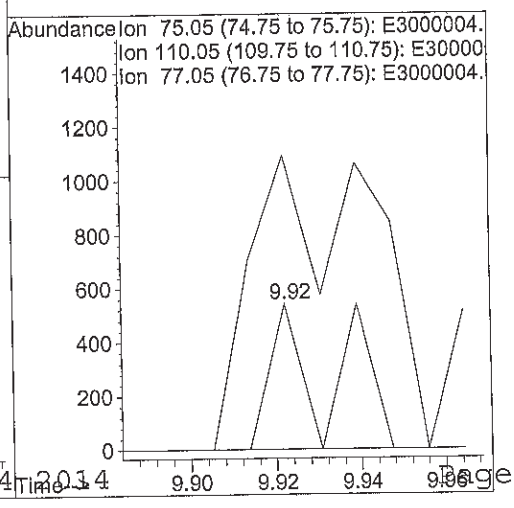


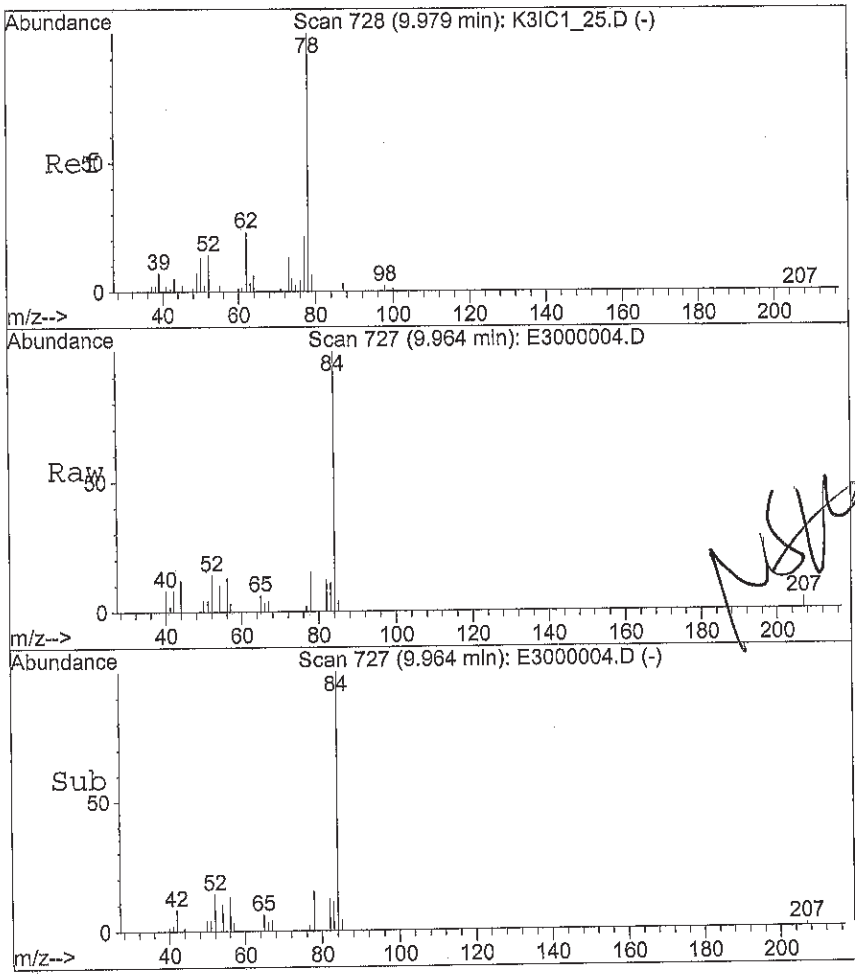


#29
1,1-Dichloropropene
Concen: 0.09 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 75 Resp: 548

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	395.4	25.0	37.4#

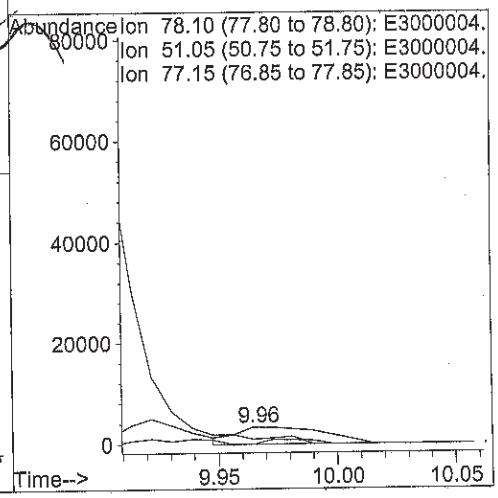


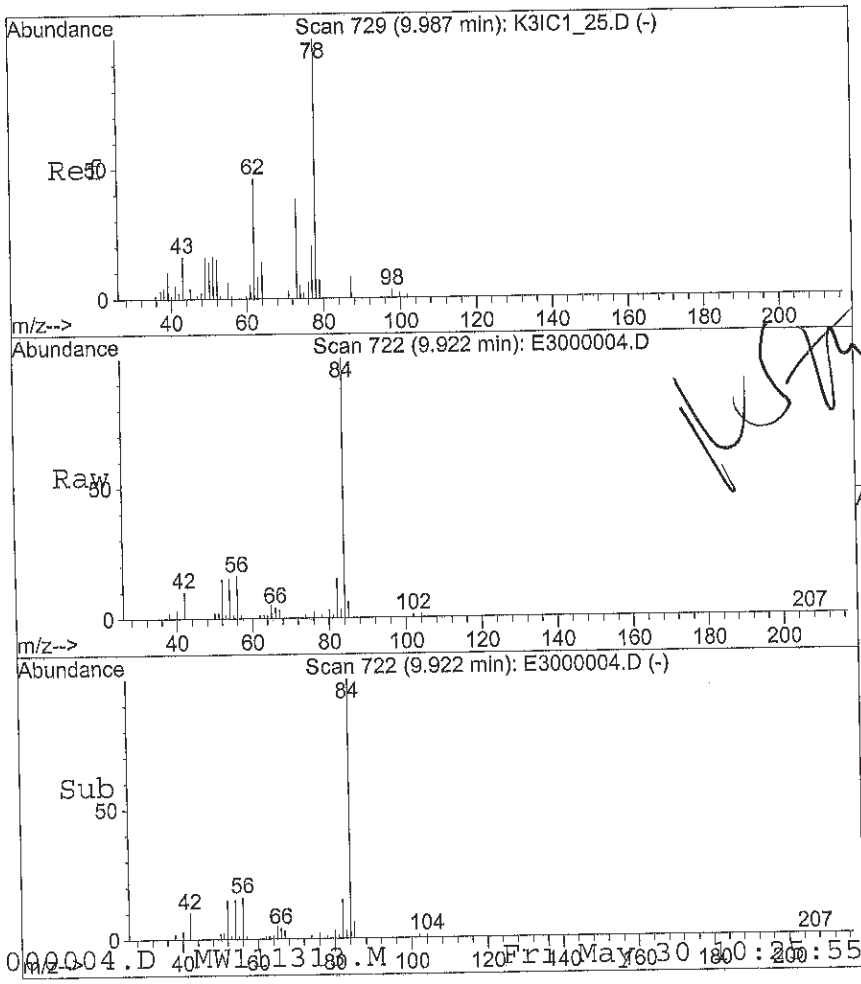


#31
Benzene
Concen: 0.57 ug/L
RT: 9.96 min Scan# 727
Delta R.T. -0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 78 Resp: 8381

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	13.6	16.6	24.8#

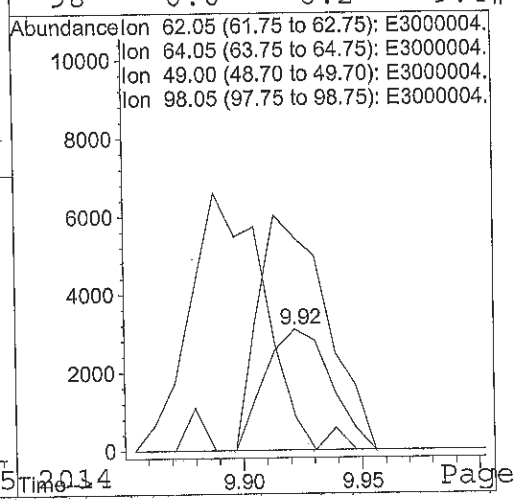


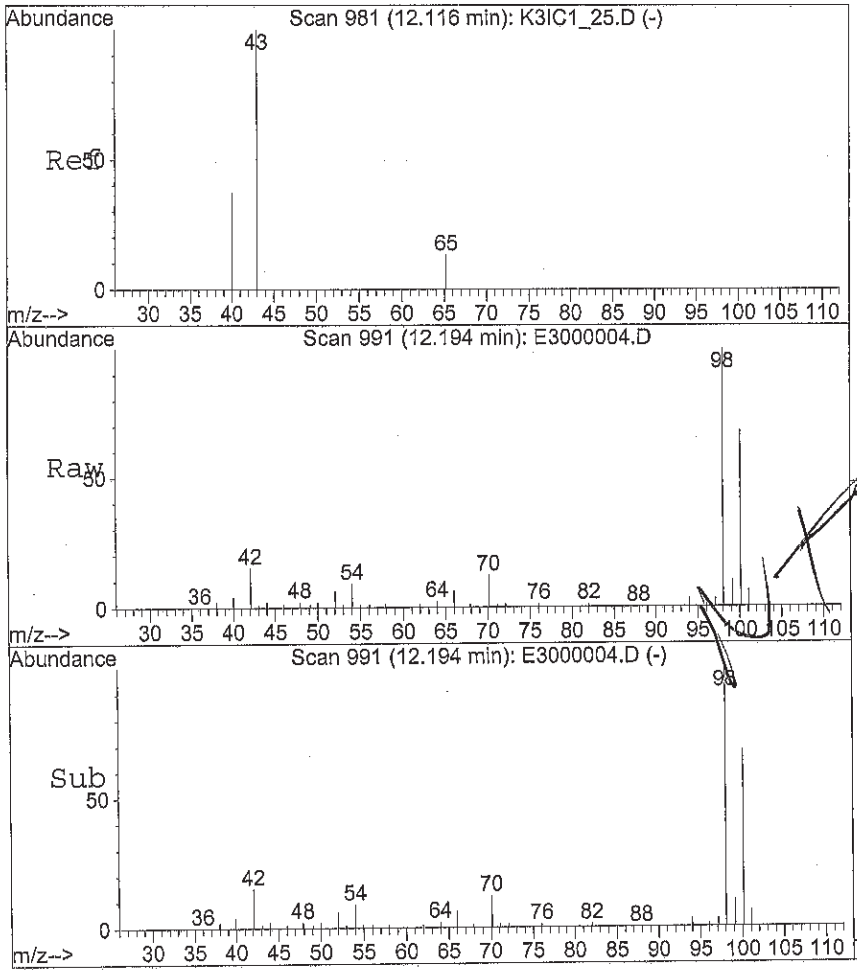


#32
1,2-Dichloroethane
Concen: 1.14 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.07 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 62 Resp: 5964

Ion	Ratio	Lower	Upper
62	100		
64	211.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

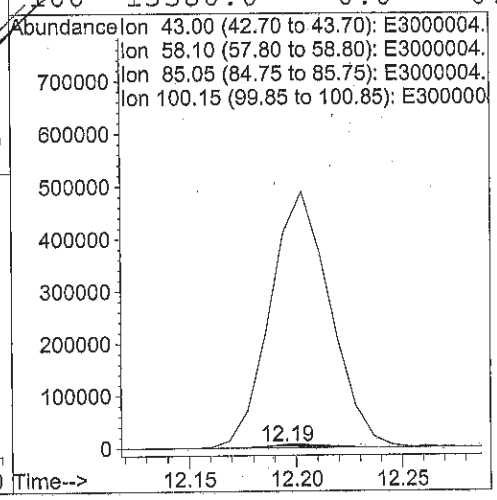


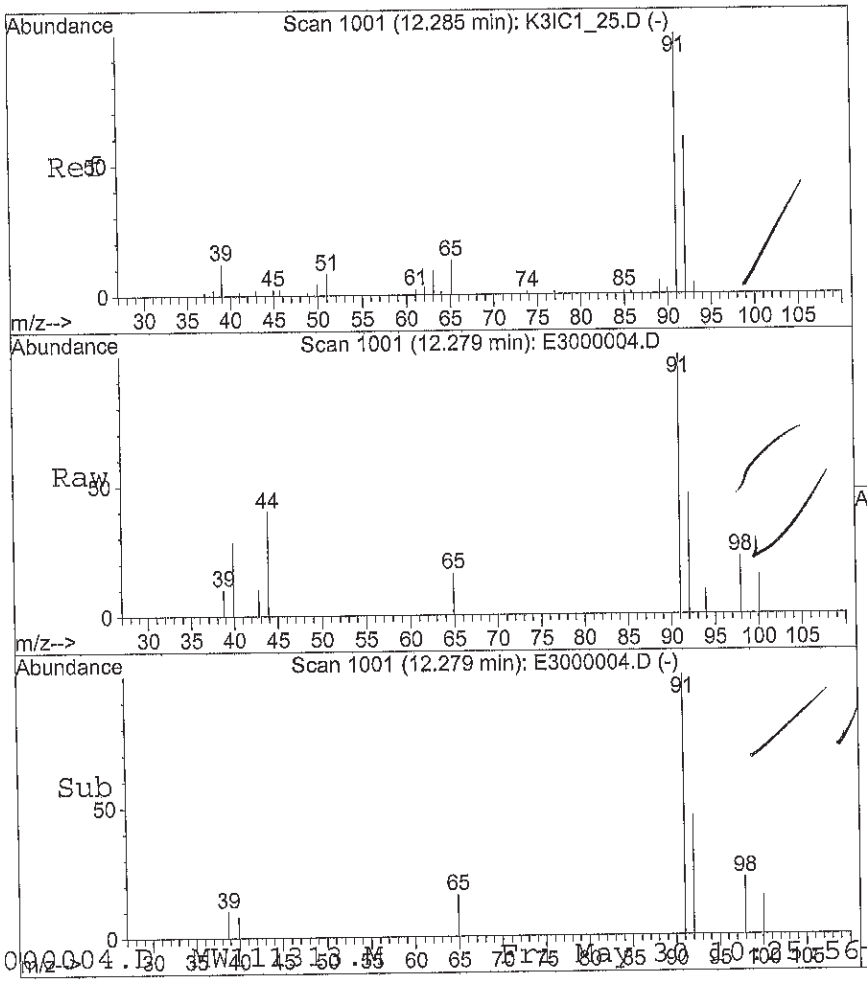


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.76 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 43 Resp: 7074

Ion	Ratio	Lower	Upper
43	100		
58	172.7	0.0	0.0#
85	0.0	0.0	0.0
100	13580.0	0.0	0.0#

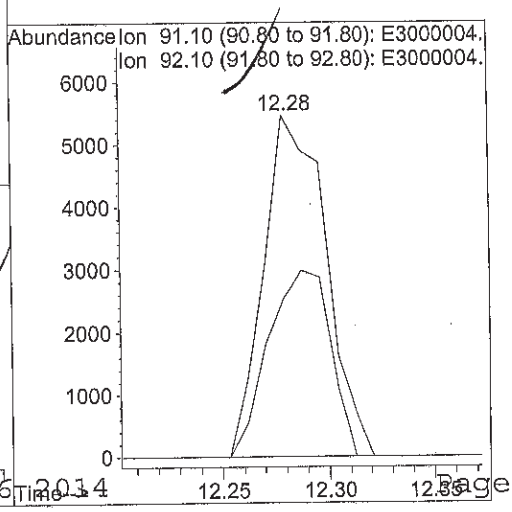


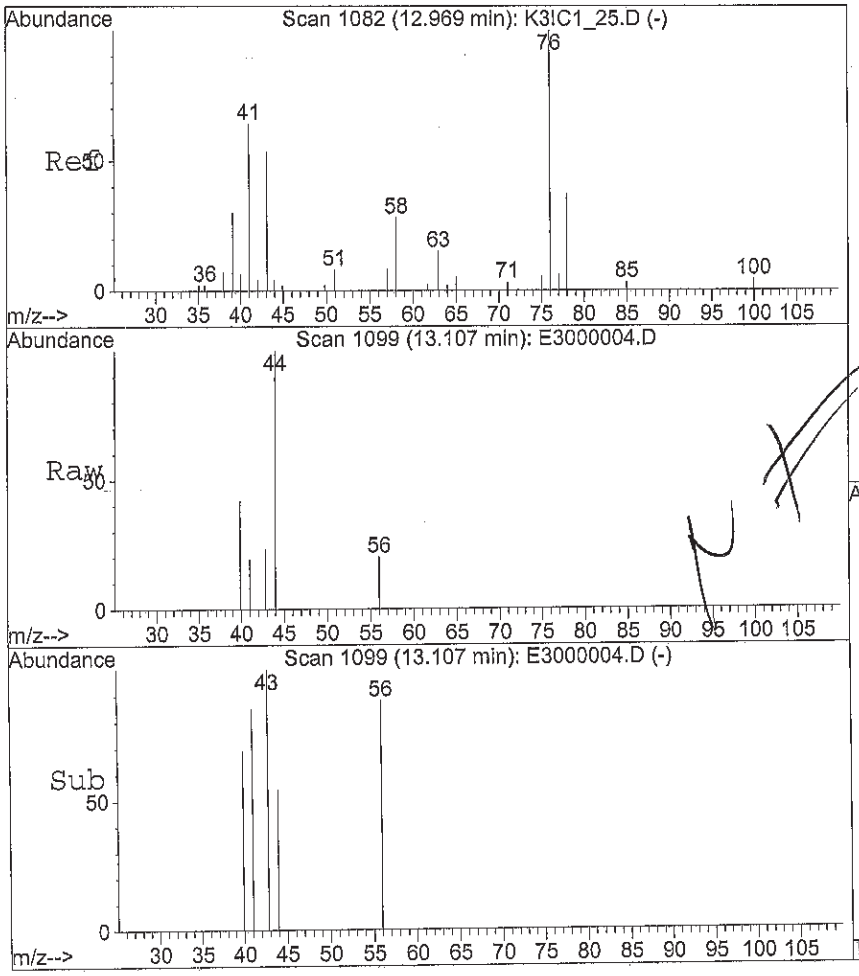


#41
Toluene
Concen: 0.63 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 91 Resp: 11061

Ion	Ratio	Lower	Upper
91	100		
92	54.4	47.4	71.0

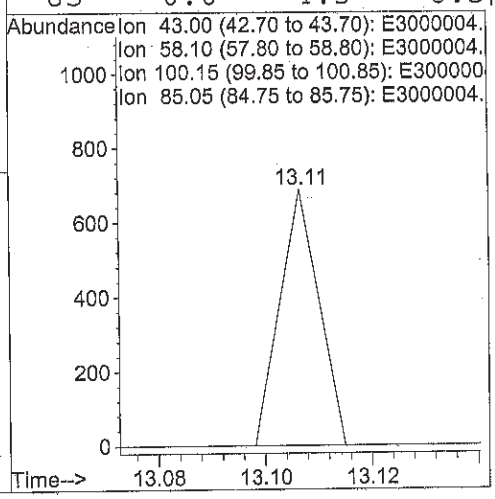


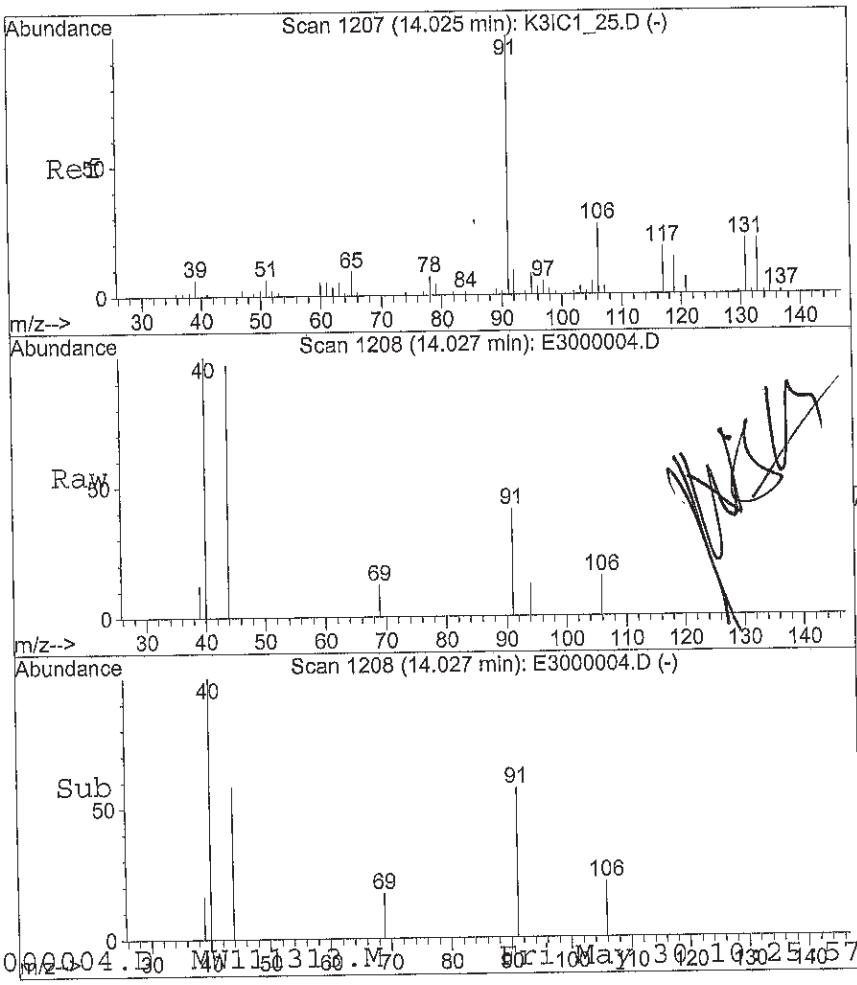


#46
2-Hexanone
Concen: 0.12 ug/L
RT: 13.11 min Scan# 1099
Delta R.T. 0.14 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 43 Resp: 349

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

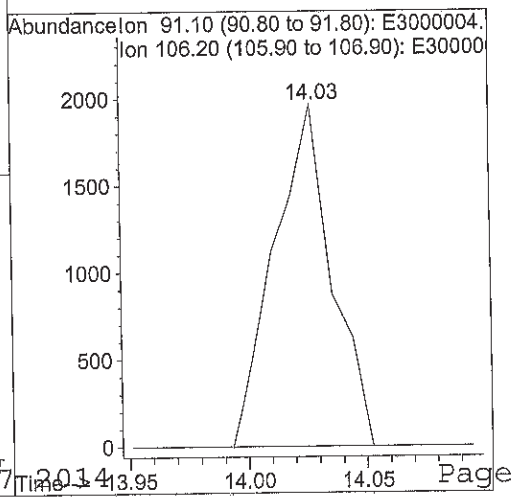


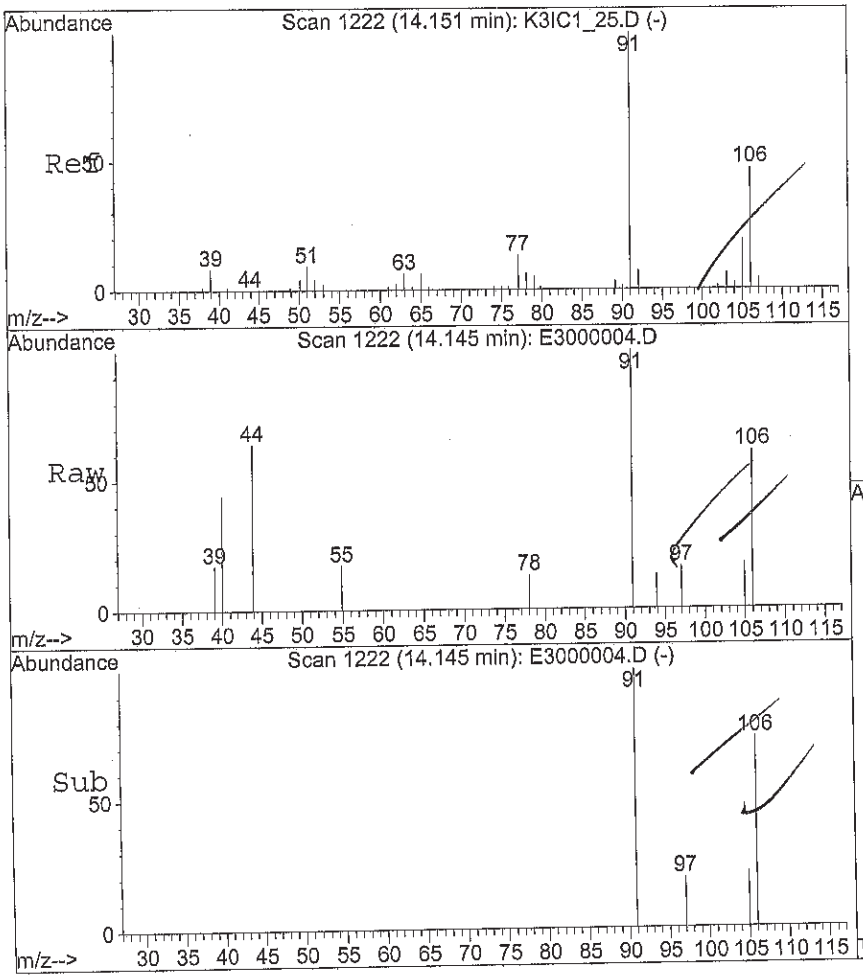


#51
Ethylbenzene
Concen: 0.17 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 91 Resp: 3313

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

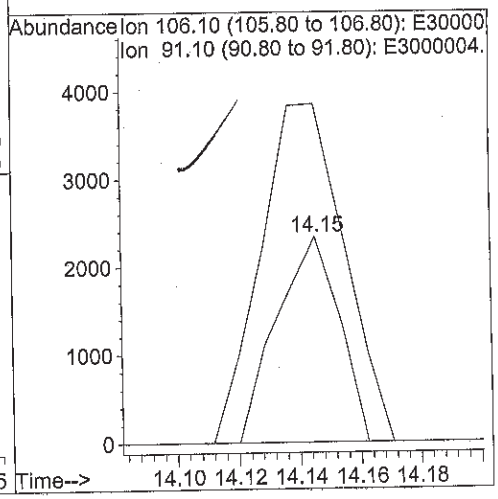


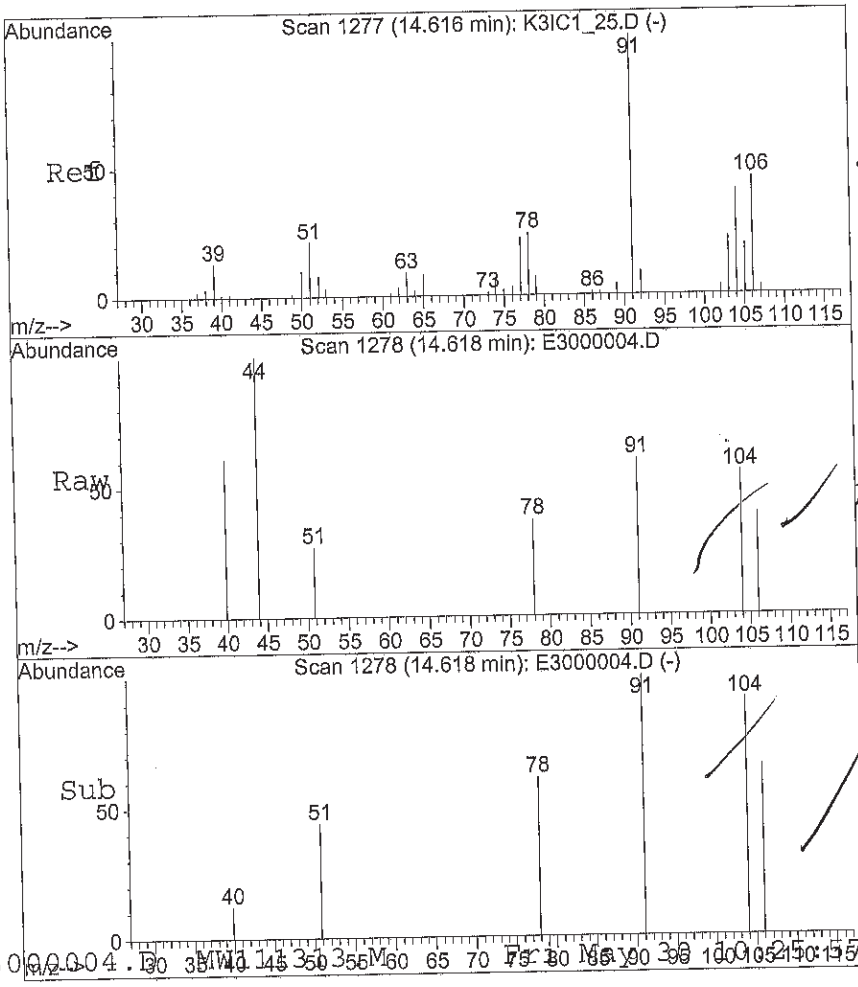


#52
m,p-Xylenes
Concen: 0.47 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:106 Resp: 3296

Ion	Ratio	Lower	Upper
106	100		
91	221.2	177.1	265.7

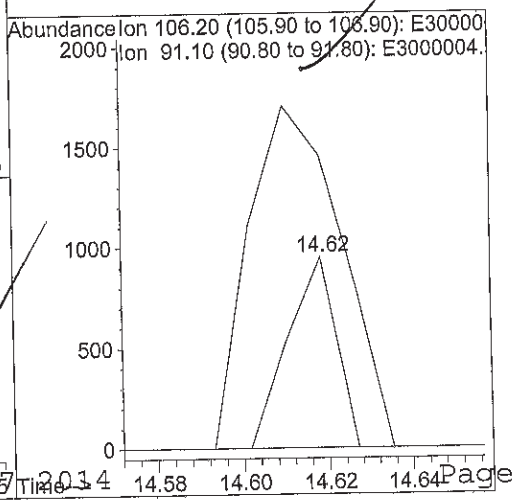


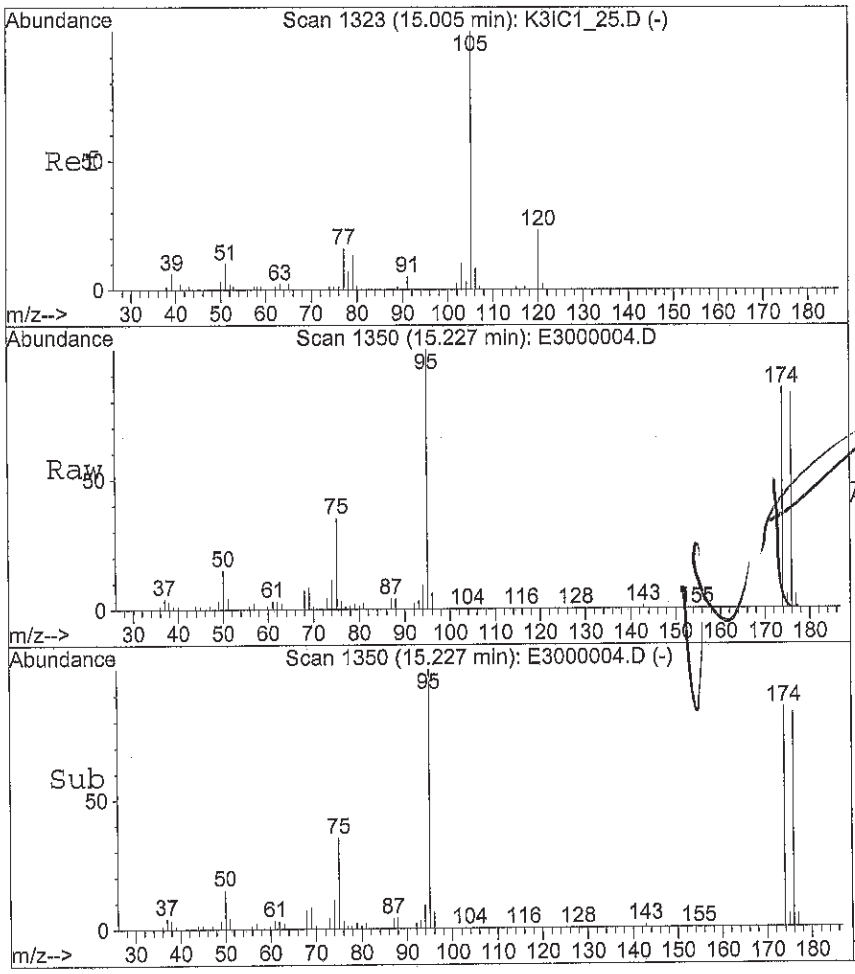


#53
o-Xylene
Concen: 0.11 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:106 Resp: 748

Ion	Ratio	Lower	Upper
106	100		
91	341.7	179.0	268.6#

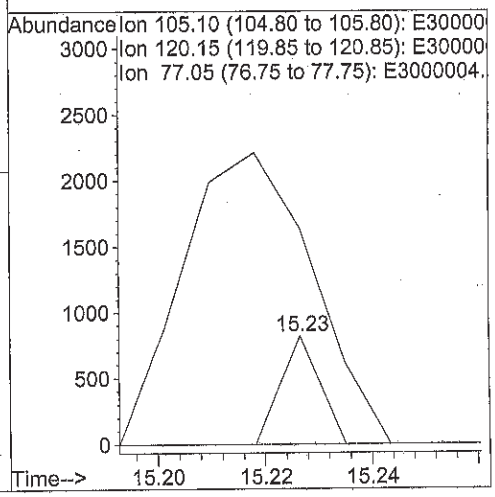


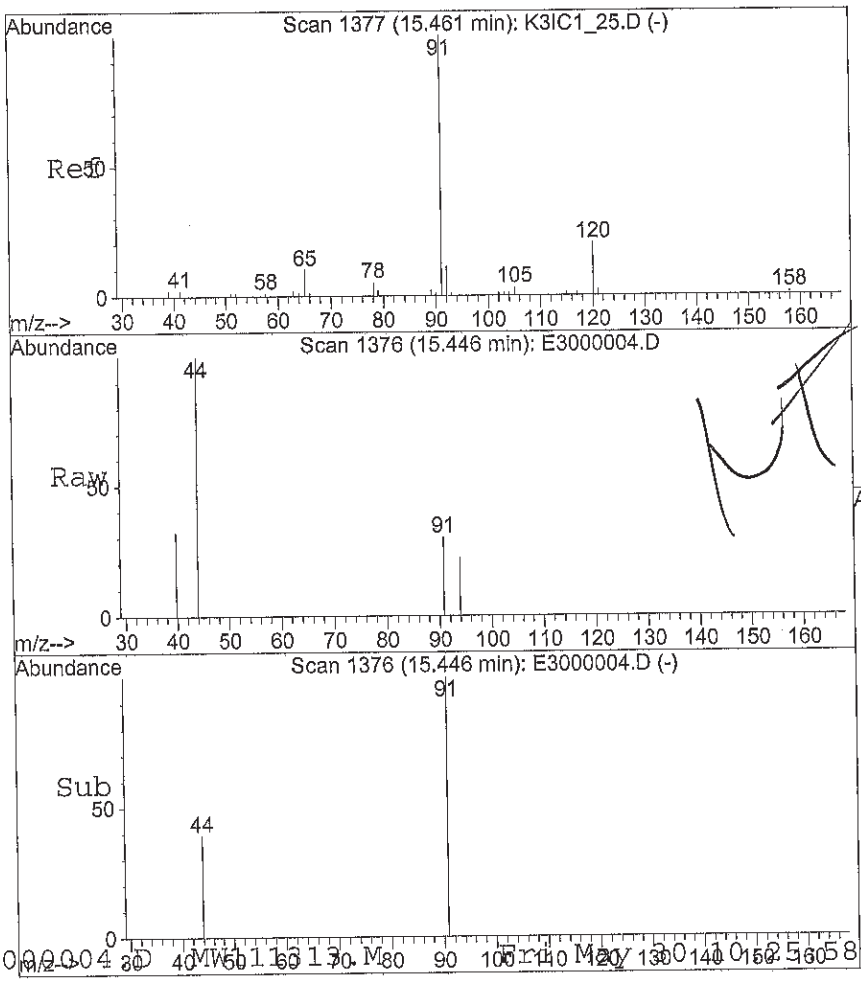


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.23 min Scan# 1350
Delta R.T. 0.22 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:105 Resp: 414

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	895.7	13.1	19.7#

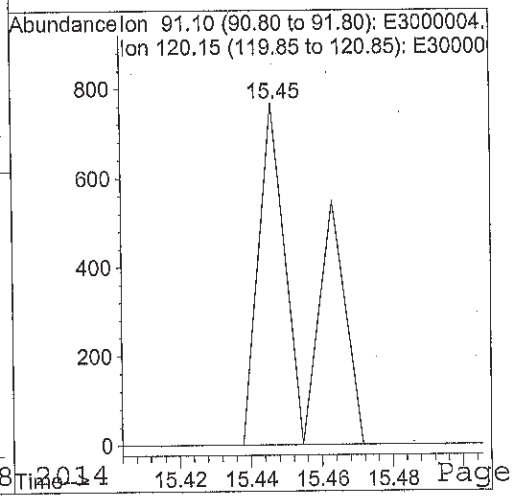


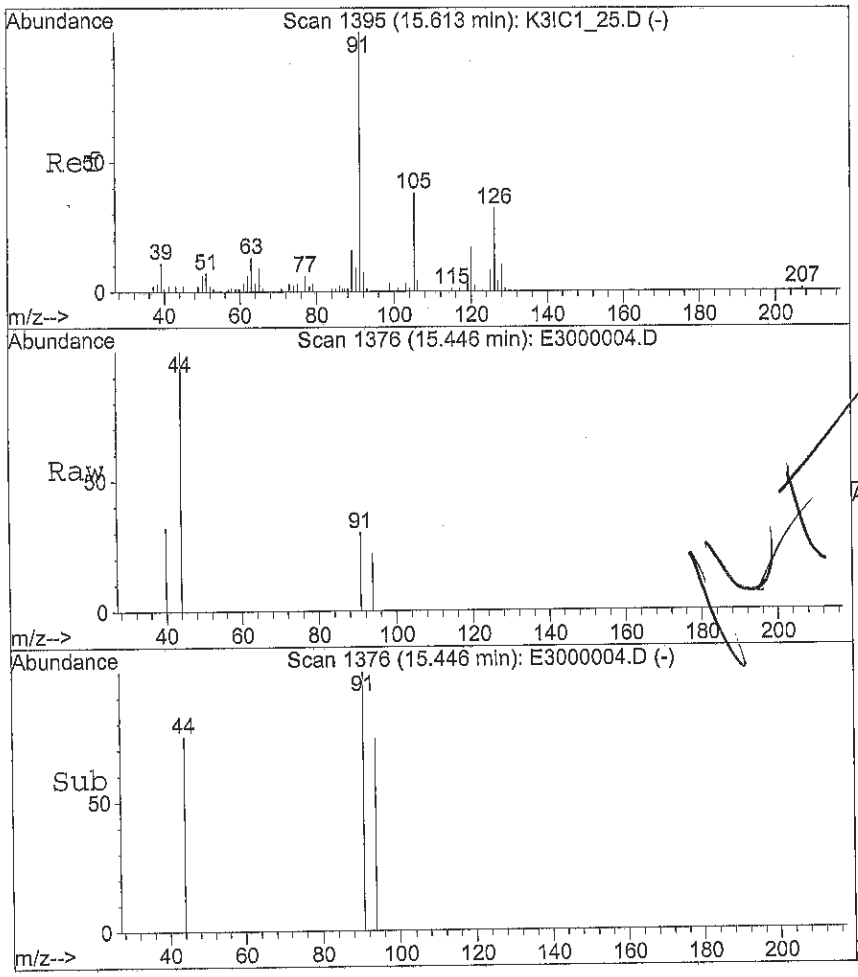


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 91 Resp: 666

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

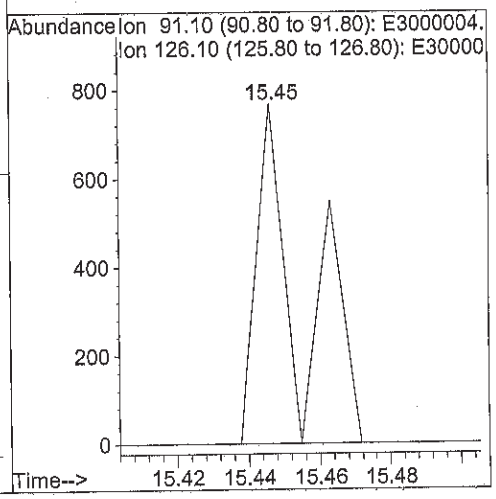


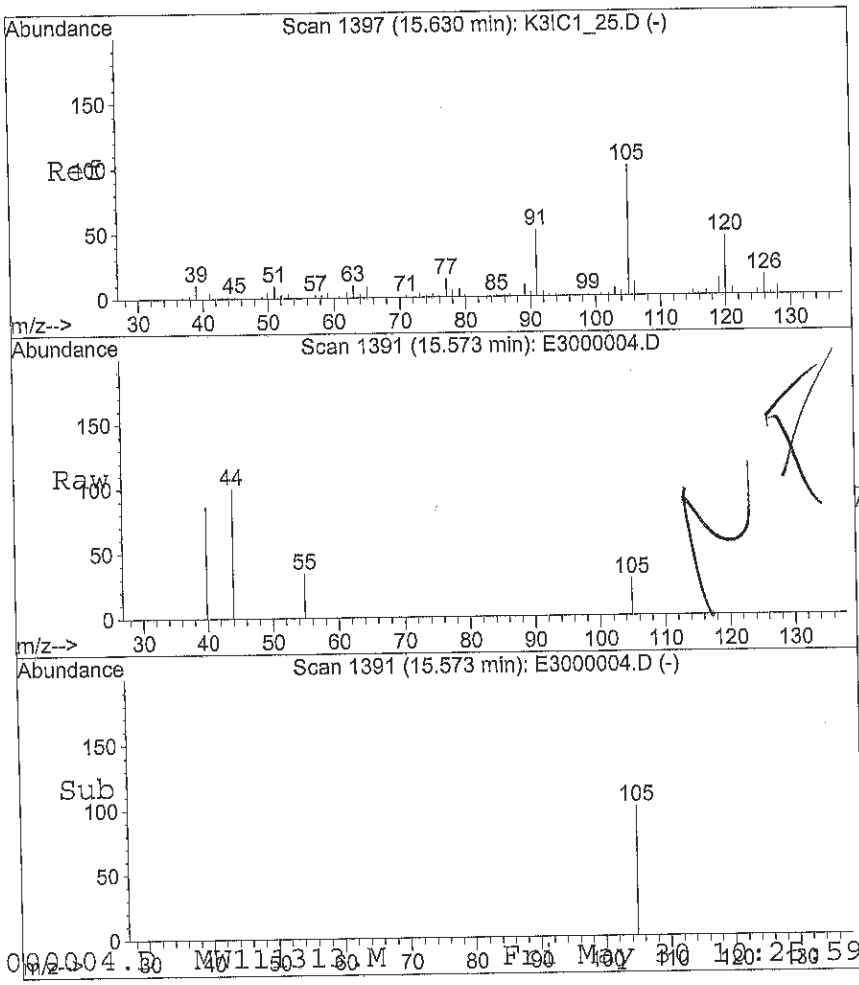


#63
2-Chlorotoluene
Concen: 0.04 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.17 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion: 91 Resp: 666

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

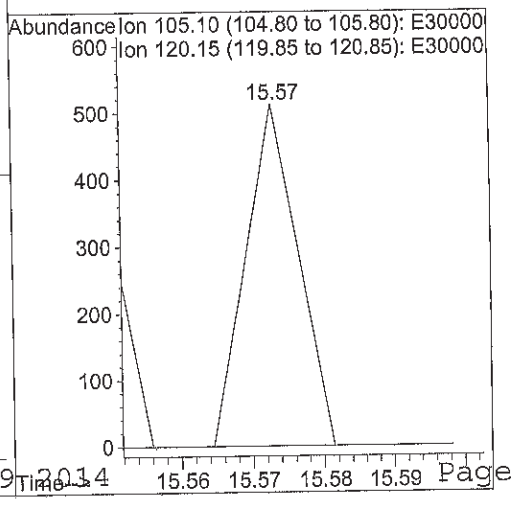


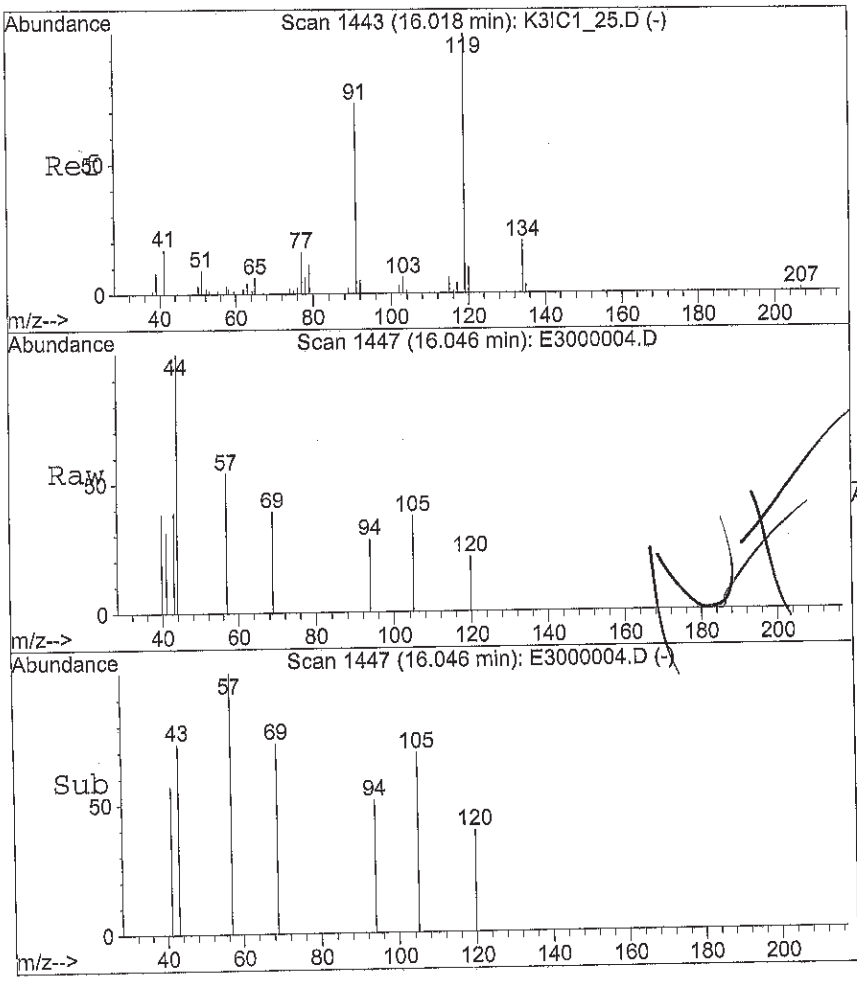


#64
1,3,5-Trimethylbenzene
Concen: 0.01 ug/L
RT: 15.57 min Scan# 1391
Delta R.T. -0.06 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:105 Resp: 259

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

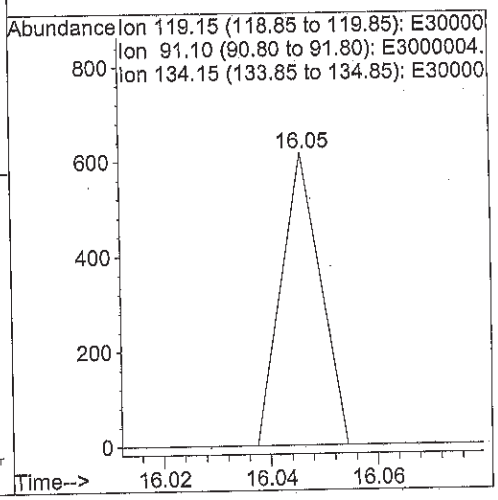


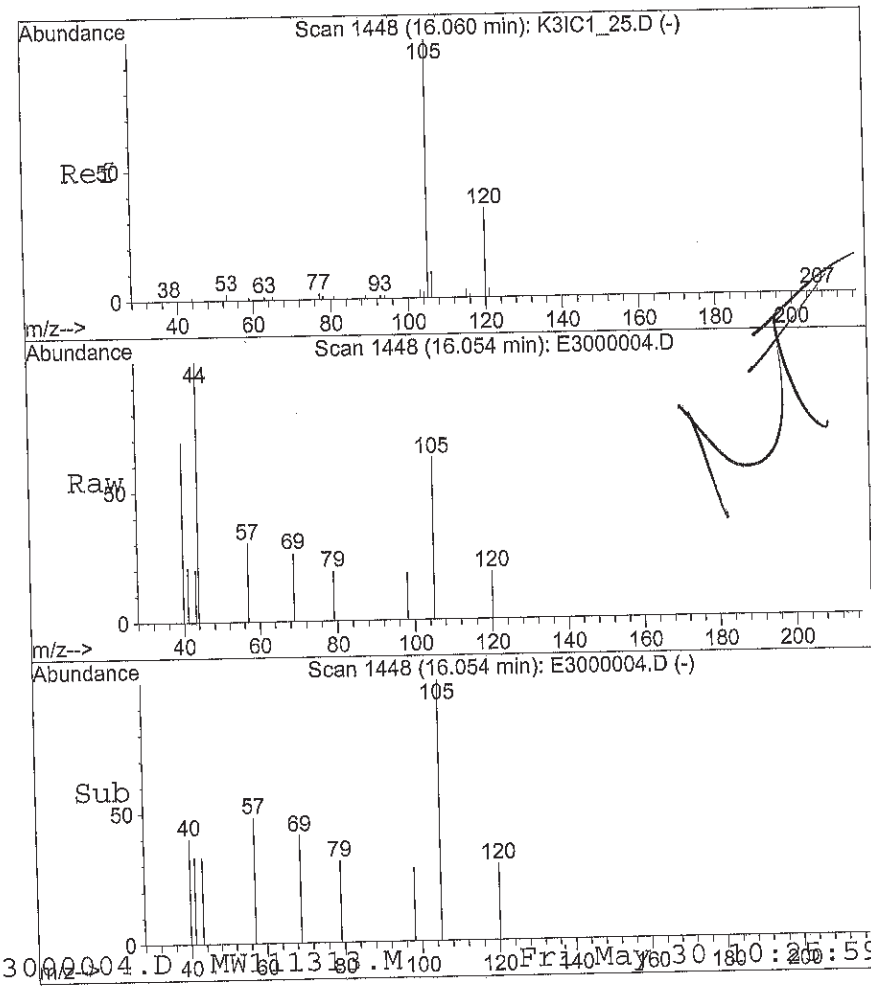


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. 0.03 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:119 Resp: 312

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

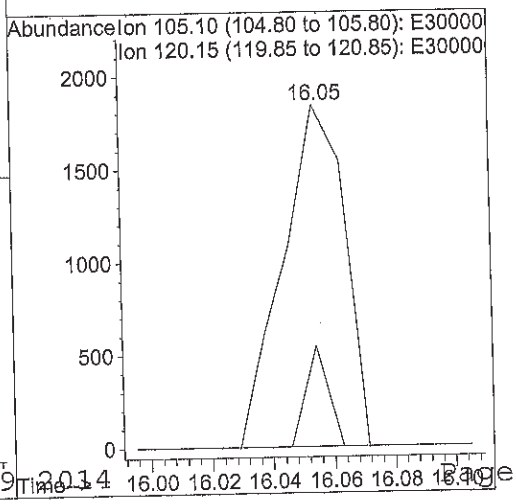


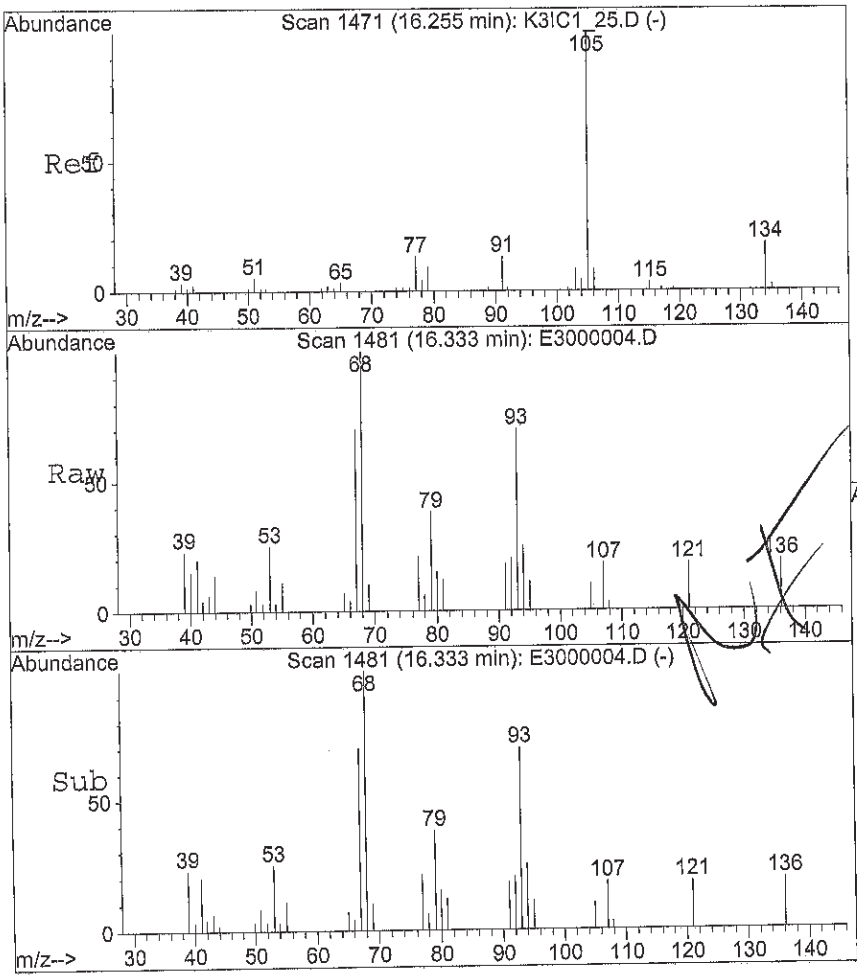


#67
1,2,4-Trimethylbenzene
Concen: 0.14 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:105 Resp: 2579

Ion	Ratio	Lower	Upper
105	100		
120	10.7	33.8	50.8#

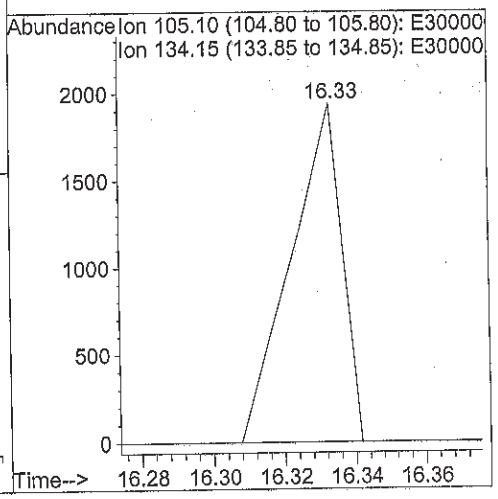


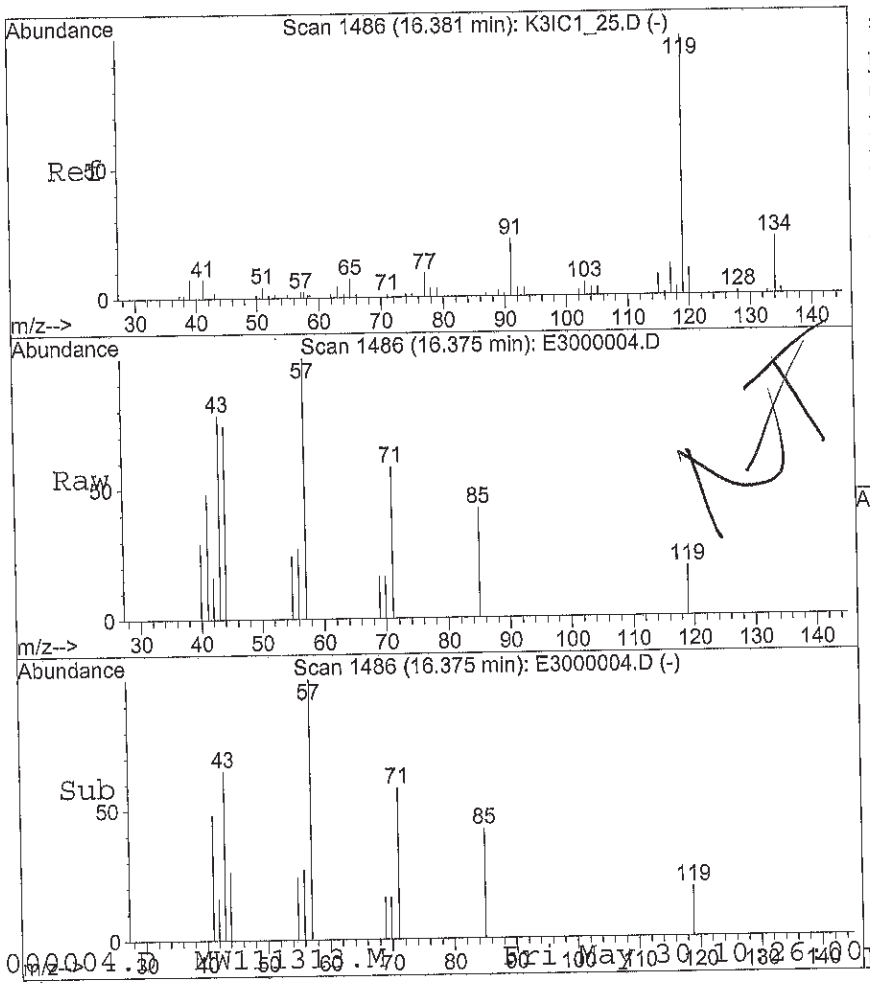


#68
sec-Butylbenzene
Concen: 0.08 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:105 Resp: 1916

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

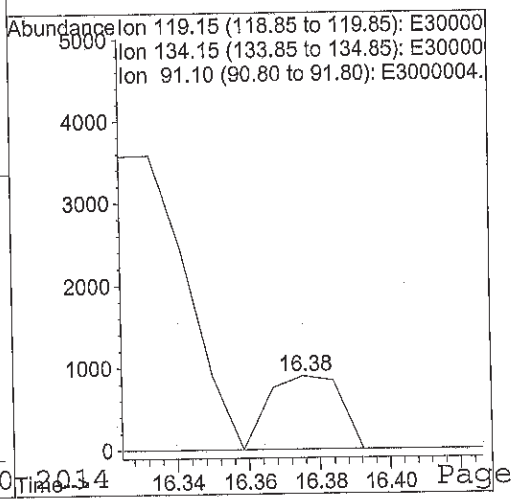




#69
p-Isopropyltoluene
Concen: 0.06 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E3000004.D
Acq: 30 May 2014 9:51 am

Tgt Ion:119 Resp: 1254

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000004.D Vial: 3
Acq On : 30 May 2014 9:51 am Operator: DN
Sample : 3E43001-03 Inst : GC/MS Ins
Misc : 100cc SVL-846-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 10:25 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1575066	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1285620	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	708804	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	460483	11.24 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.92%		
3) Chloroform-d (SU6)	9.18	84	698348	11.88 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 95.04%		
4) Methylene Chloride-d2 (SU5	7.07	86	402830	11.73 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.84%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	437810	15.64 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 125.12%#		
6) Benzene-d6 (SU7)	9.92	84	1347638	10.90 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.20%		
8) Toluene-d8 (SU3)	12.20	98	1443837	11.84 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.72%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	724001	14.38 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.04%		

Target Compounds Qvalue

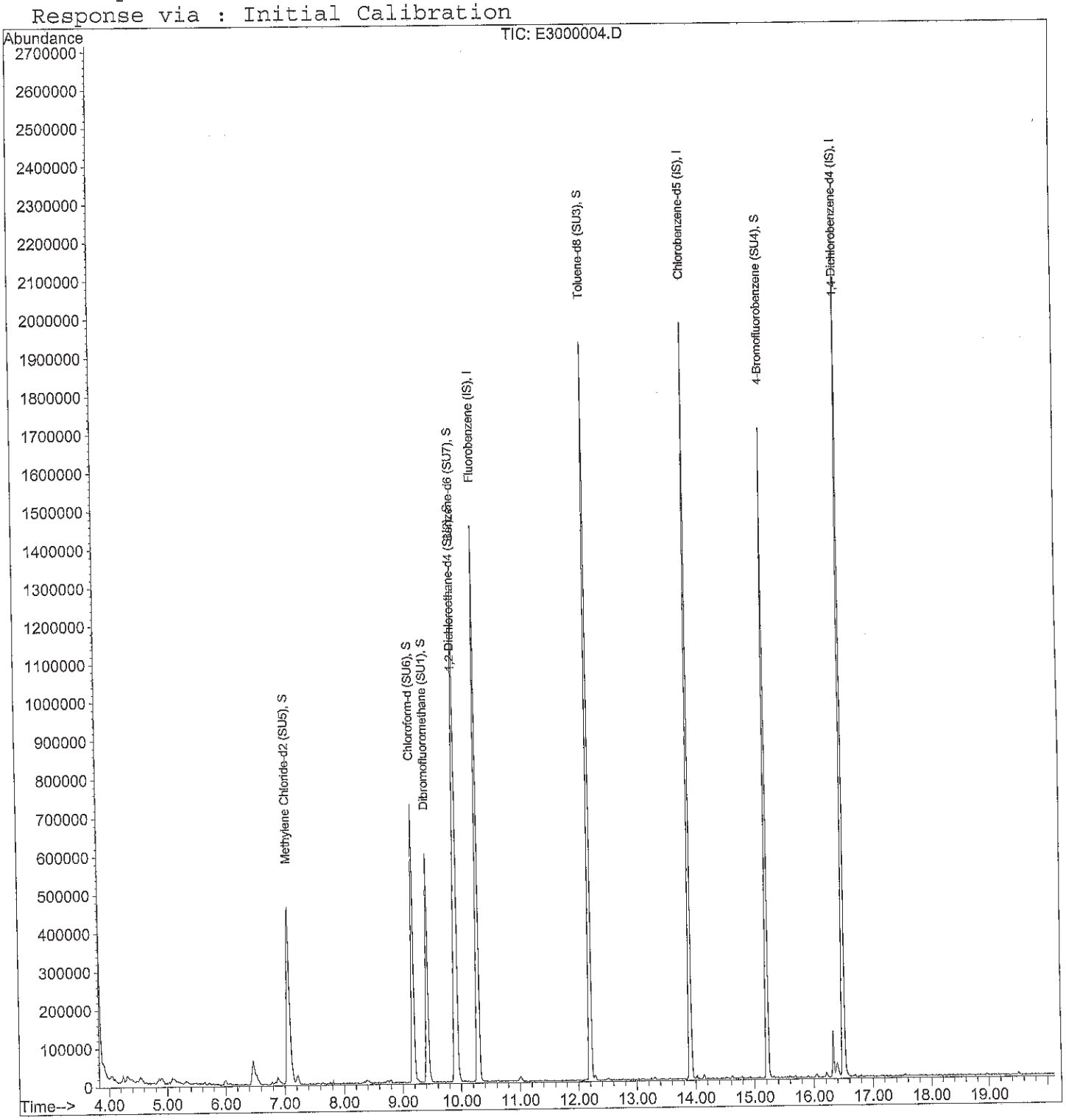
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000004.D
Acq On : 30 May 2014 9:51 am
Sample : 3E43001-03
Misc : 100cc SVL-846-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 10:25 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000005.D
Acq On : 30 May 2014 10:24 am
Sample : 3E43001-04
Misc : 100cc SVL-546-SA5D-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: May 30 11:11 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1495954	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1233484	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	698417	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	438969	11.76 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 94.08%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	425375	11.99 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 95.92%		
39) Toluene-d8 (SU3)	12.20	98	1374561	11.95 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 95.60%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	706585	14.01 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 112.08%		

Target Compounds					Qvalue
4) Chloromethane	4.39	50	1704	-0.54 ug/L #	75
6) Bromomethane	5.08	96	9816	4.19 ug/L #	48
7) Chloroethane	5.22	64	2180	2.44 ug/L #	32
8) (F11) Trichlorofluorometha	5.64	101	295	0.07 ug/L #	16
11) Acetone	6.45	58	2214	179.93 ug/L #	1
12) (IPA) Leak Check Compound	6.48	45	186642	1038.28 ug/L	83
13) Carbon disulfide	6.85	76	28970	2.33 ug/L	97
14) Methylene Chloride	7.08	84	6218	1.51 ug/L #	9
15) (TBA) tert-Butanol	6.97	59	280	1.10 ug/L #	77
24) Chloroform	9.22	83	1678	0.21 ug/L #	1
25) (ETBE) 2-ethoxy 2-methyl p	8.54	59	1541	0.14 ug/L #	44
31) Benzene	9.98	78	6329	0.45 ug/L #	66
32) 1,2-Dichloroethane	9.92	62	5828	1.17 ug/L #	1
35) Dibromomethane	11.37	93	311	0.12 ug/L #	5
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	8014	3.26 ug/L #	100
41) Toluene	12.28	91	8622	0.51 ug/L	88
46) 2-Hexanone	12.84	43	638	0.24 ug/L #	37
51) Ethylbenzene	14.14	91	5494	0.29 ug/L	89
52) m,p-Xylenes	14.14	106	2438	0.36 ug/L	98
53) o-Xylene	14.61	106	352	0.05 ug/L #	1
54) Styrene	14.62	104	2677	-0.59 ug/L #	58
56) Isopropylbenzene	15.21	105	984	0.05 ug/L #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000005.D Vial: 4
Acq On : 30 May 2014 10:24 am Operator: DN
Sample : 3E43001-04 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 11:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

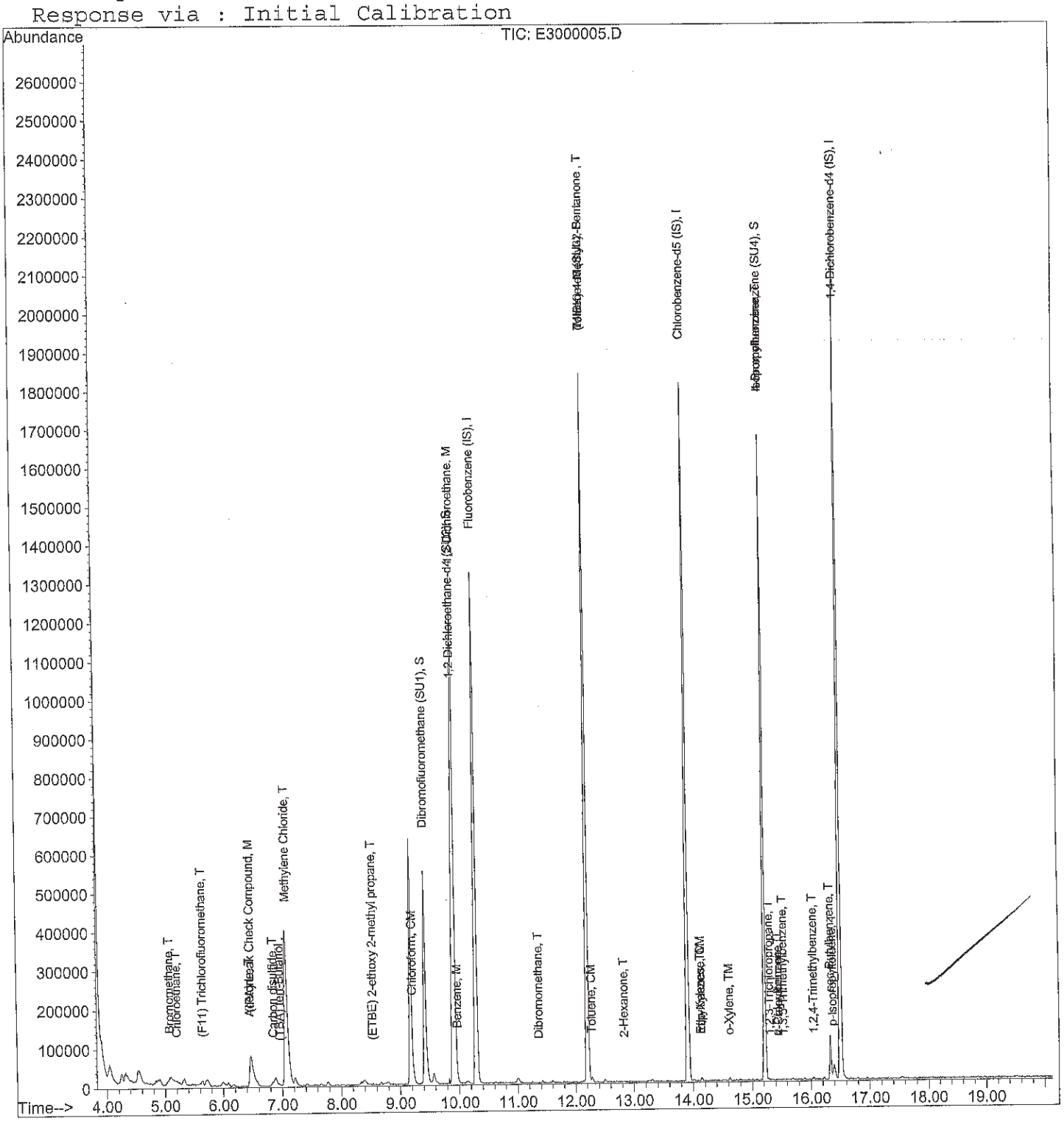
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
57) 1,2,3-Trichloropropane	15.30	75	298	0.06 ~~ug/L~~ # 8M	36
62) n-Propylbenzene	15.45	91	296	0.01 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.45	91	296	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.54	105	347	0.02 ~~ug/L~~ #	31
67) 1,2,4-Trimethylbenzene	16.05	105	1073	0.06 ~~ug/L~~ #	81
68) sec-Butylbenzene	16.33	105	1612	0.07 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.37	119	384	0.02 ~~ug/L~~ #	52

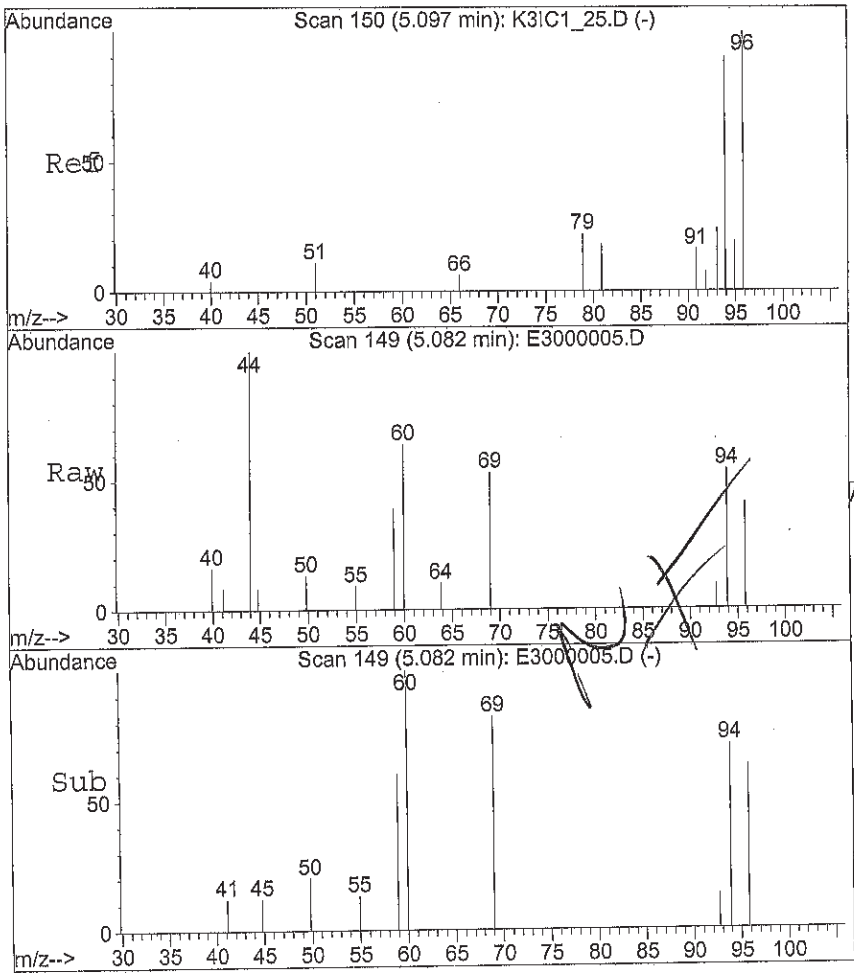
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000005.D Vial: 4
Acq On : 30 May 2014 10:24 am Operator: DN
Sample : 3E43001-04 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 11:11 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

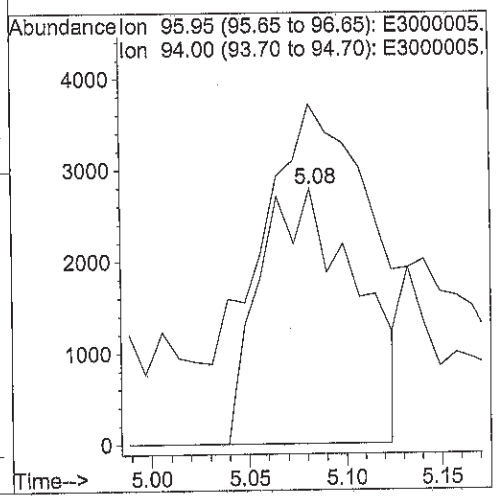


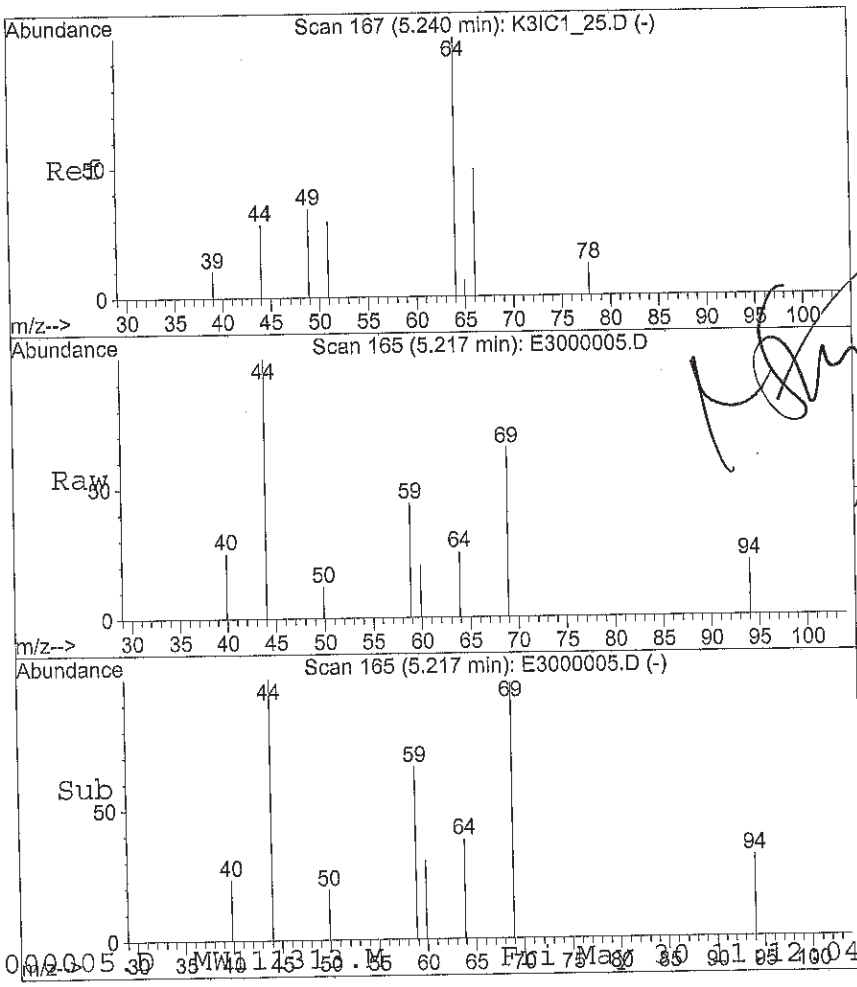


#6
Bromomethane
Concen: 4.19 ug/L
RT: 5.08 min Scan# 149
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 96 Resp: 9816

Ion	Ratio	Lower	Upper
96	100		
94	185.8	101.0	151.4#

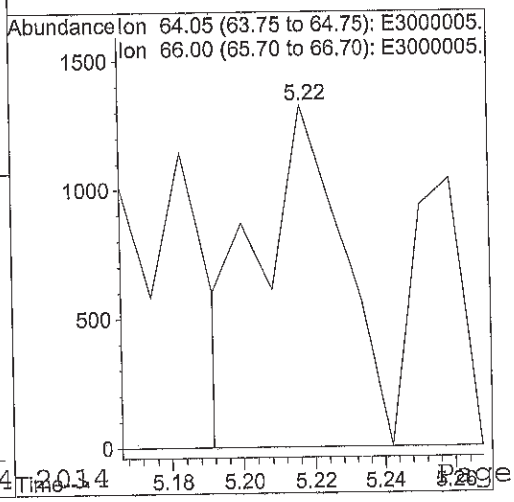


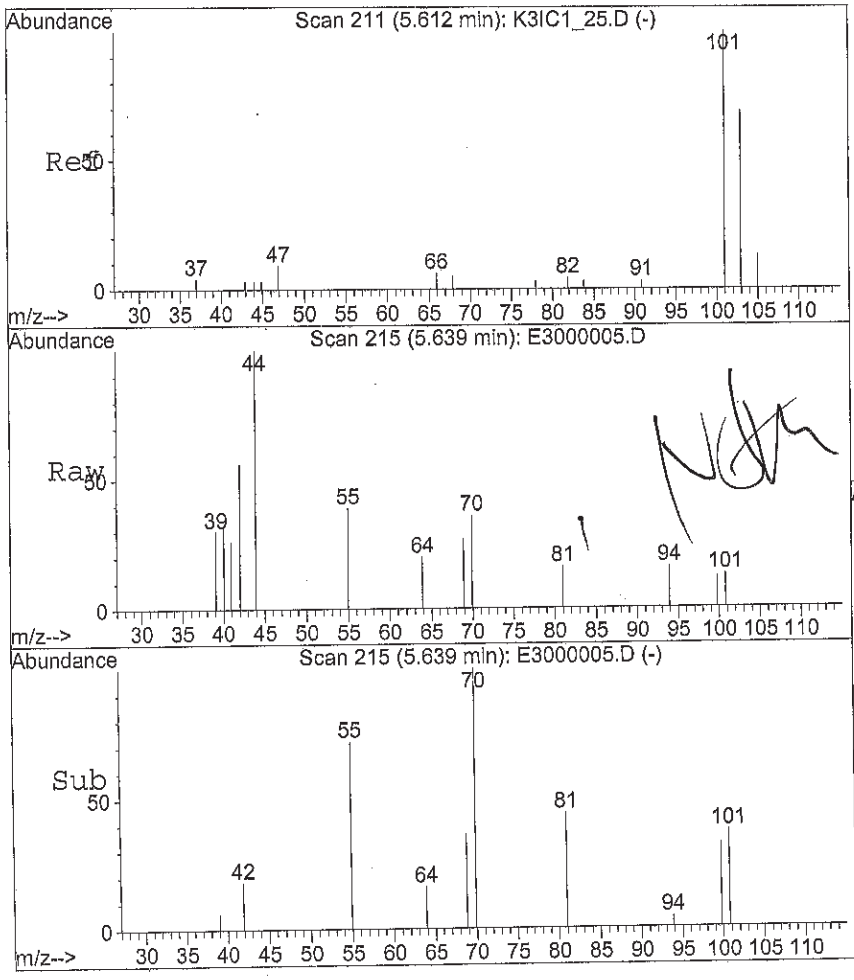


#7
Chloroethane
Concen: 2.44 ug/L
RT: 5.22 min Scan# 165
Delta R.T. -0.02 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 64 Resp: 2180

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

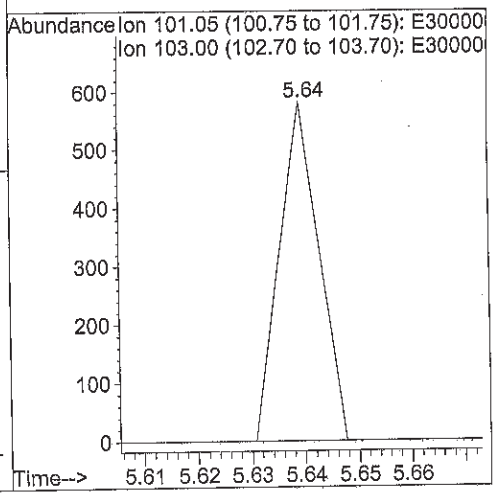


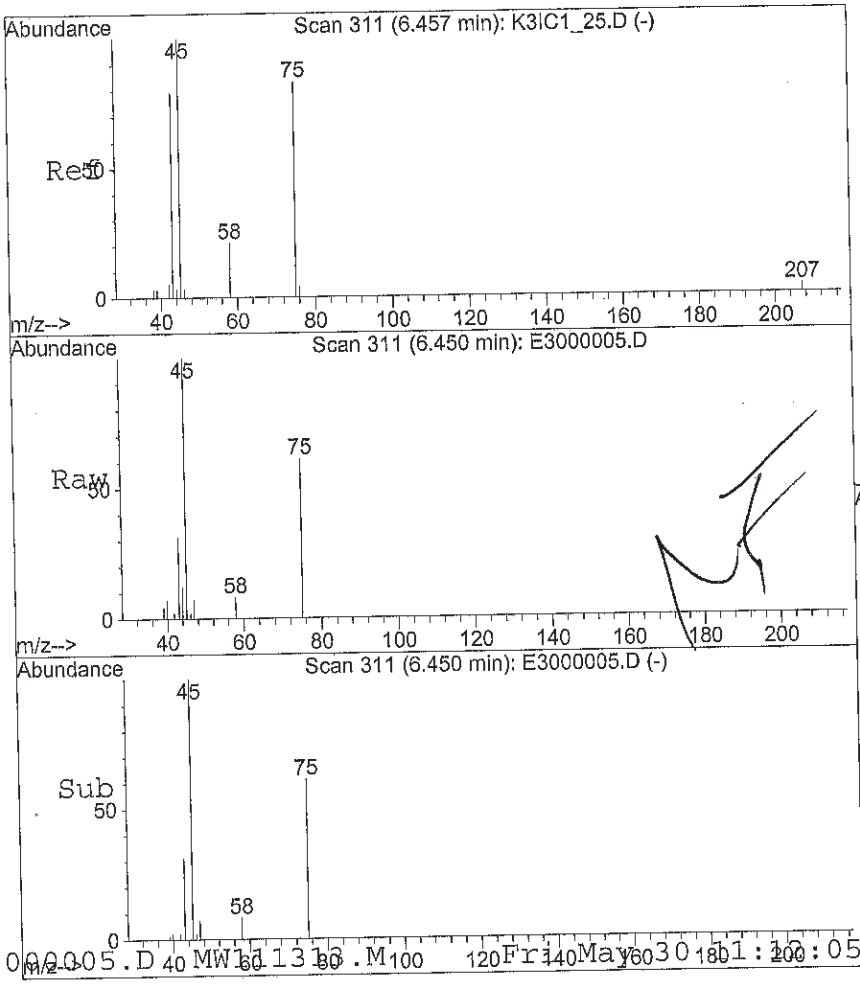


#8
(F11) Trichlorofluoromethane
Concen: 0.07 ug/L
RT: 5.64 min Scan# 215
Delta R.T. 0.03 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:101 Resp: 295

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

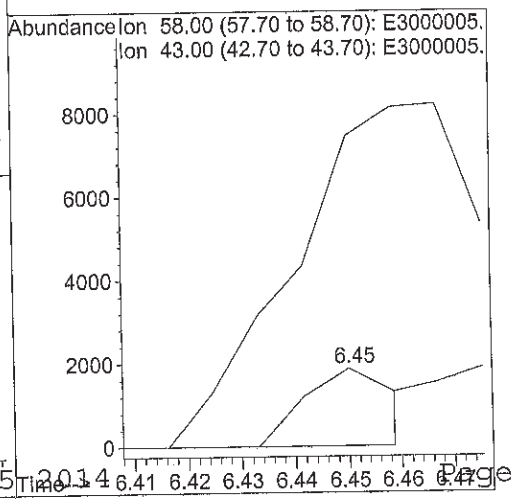


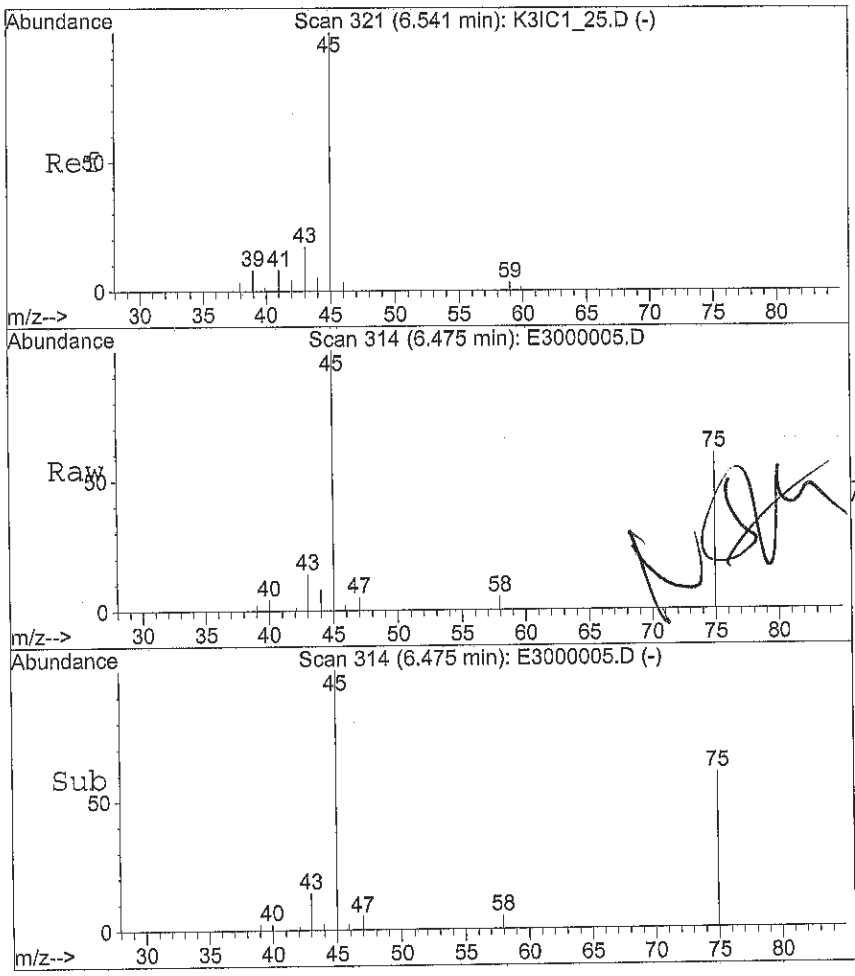


#11
Acetone
Concen: 179.93 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 58 Resp: 2214

Ion	Ratio	Lower	Upper
58	100		
43	0.0	360.9	541.3#

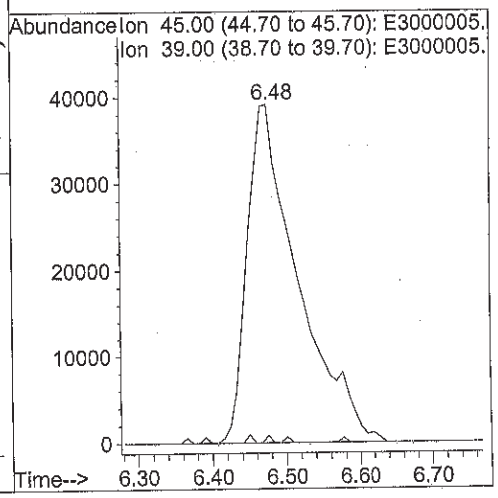


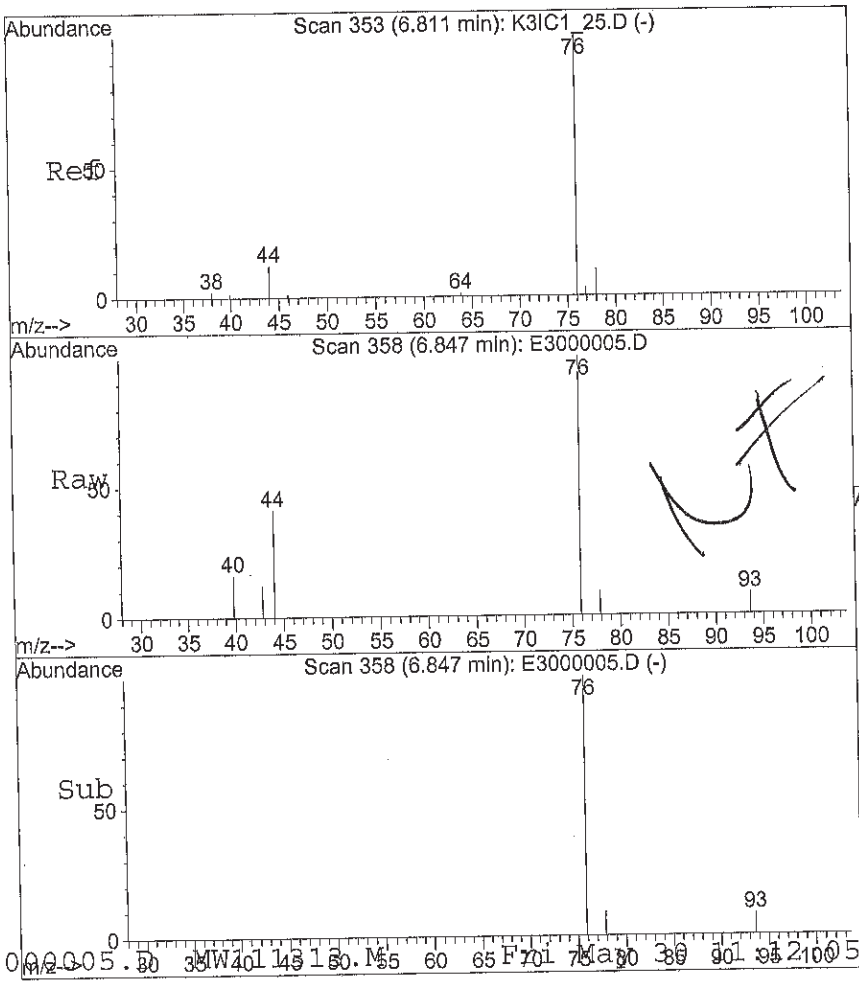


#12
(IPA) Leak Check Compound
Concen: 1038.28 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.07 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 45 Resp: 186642

Ion	Ratio	Lower	Upper
45	100		
39	0.2	4.9	7.3#

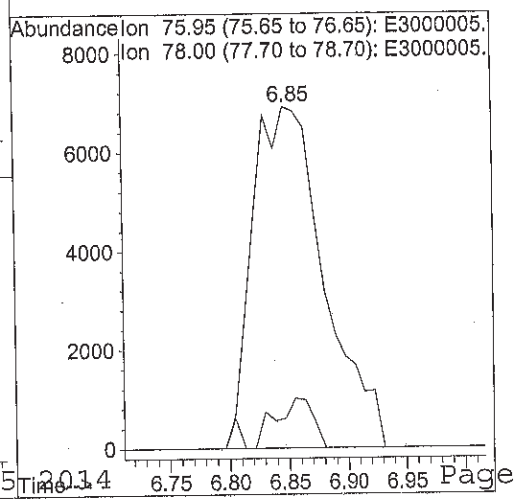


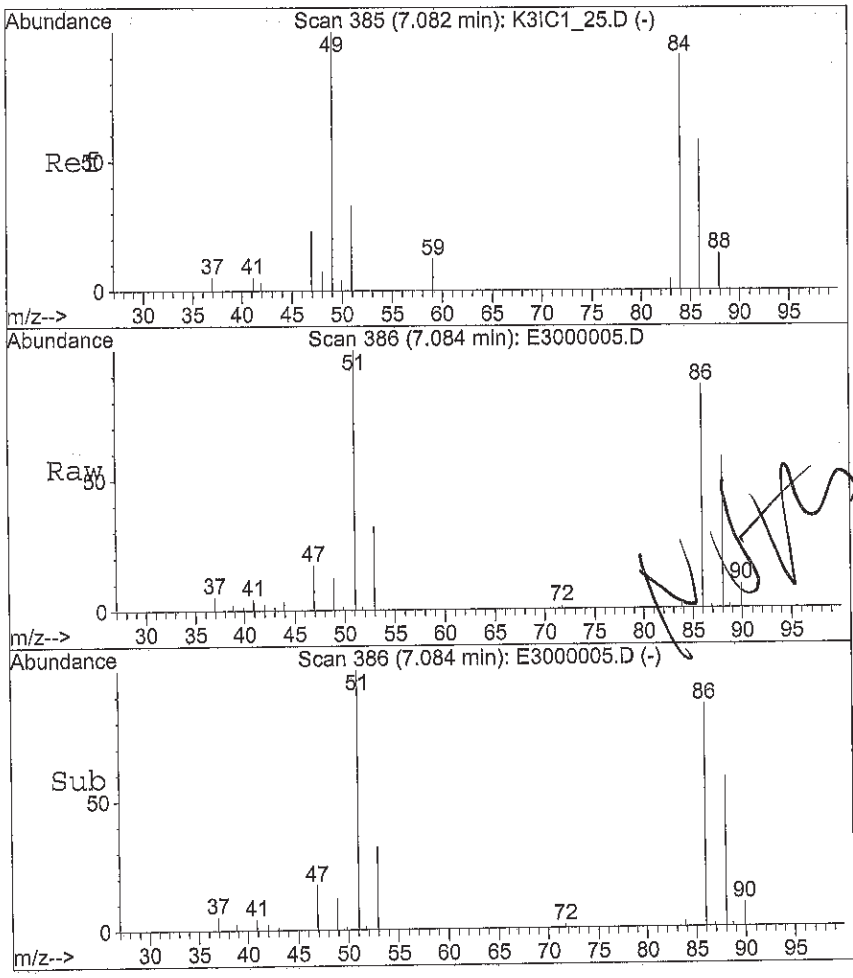


#13
Carbon disulfide
Concen: 2.33 ug/L
RT: 6.85 min Scan# 358
Delta R.T. 0.04 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 76 Resp: 28970

Ion	Ratio	Lower	Upper
76	100		
78	7.6	7.0	10.4

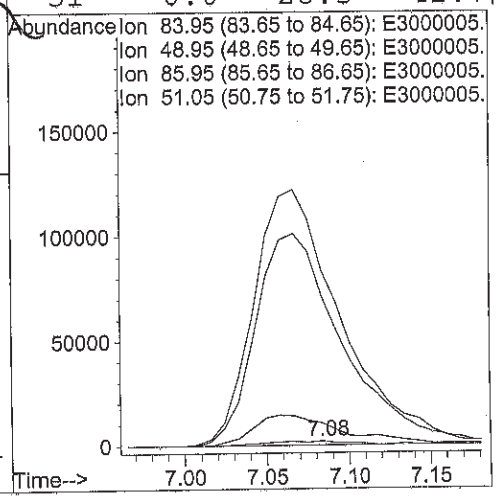


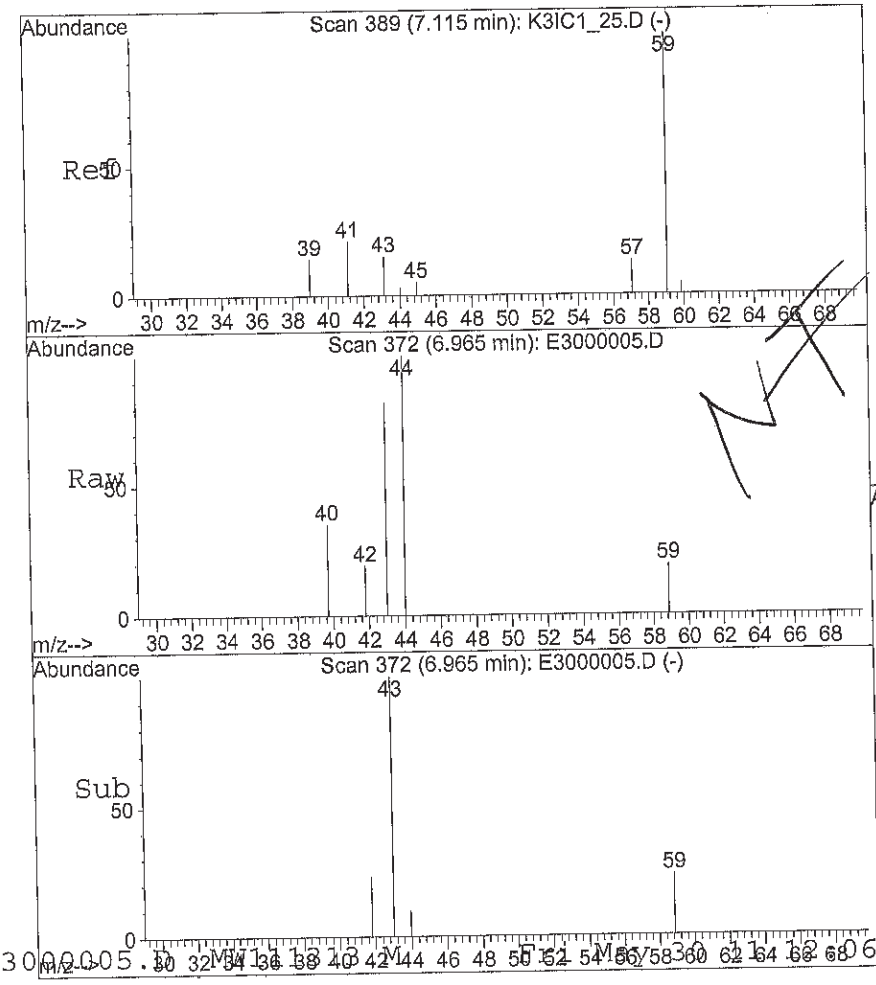


#14
Methylene Chloride
Concen: 1.51 ug/L
RT: 7.08 min Scan# 386
Delta R.T. 0.00 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 84 Resp: 6218

Ion	Ratio	Lower	Upper
84	100		
49	0.0	89.8	134.6#
86	0.0	51.1	76.7#
51	0.0	28.5	42.7#

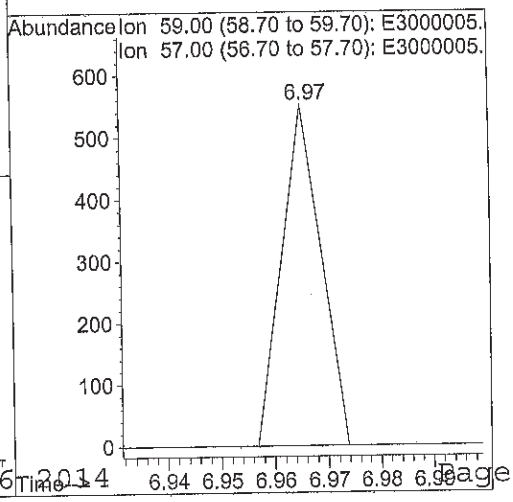


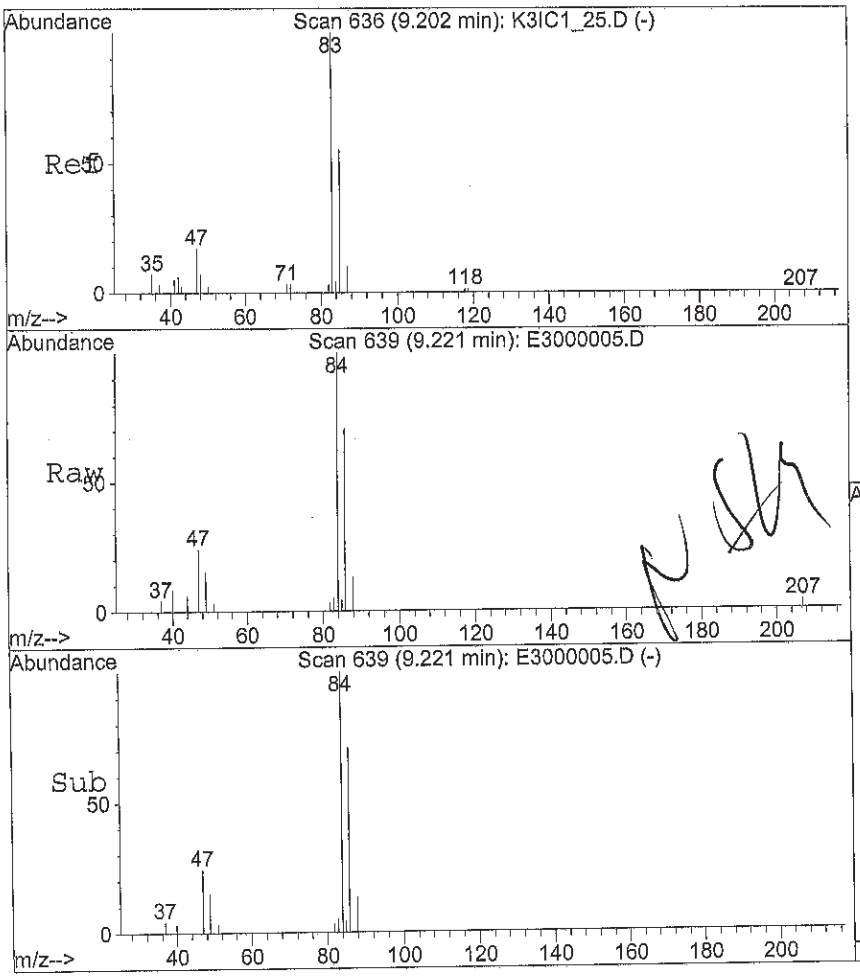


#15
(TBA) tert-Butanol
Concen: 1.10 ug/L
RT: 6.97 min Scan# 372
Delta R.T. -0.15 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 59 Resp: 280

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

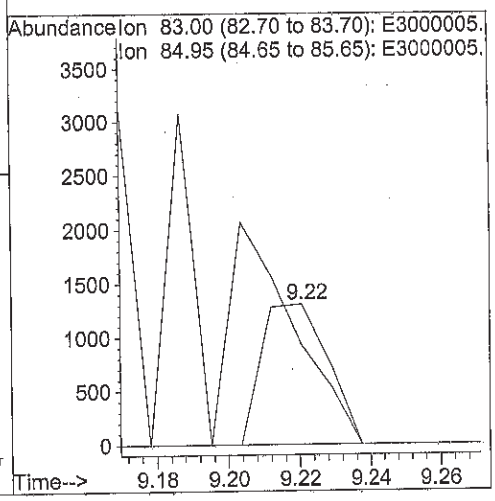


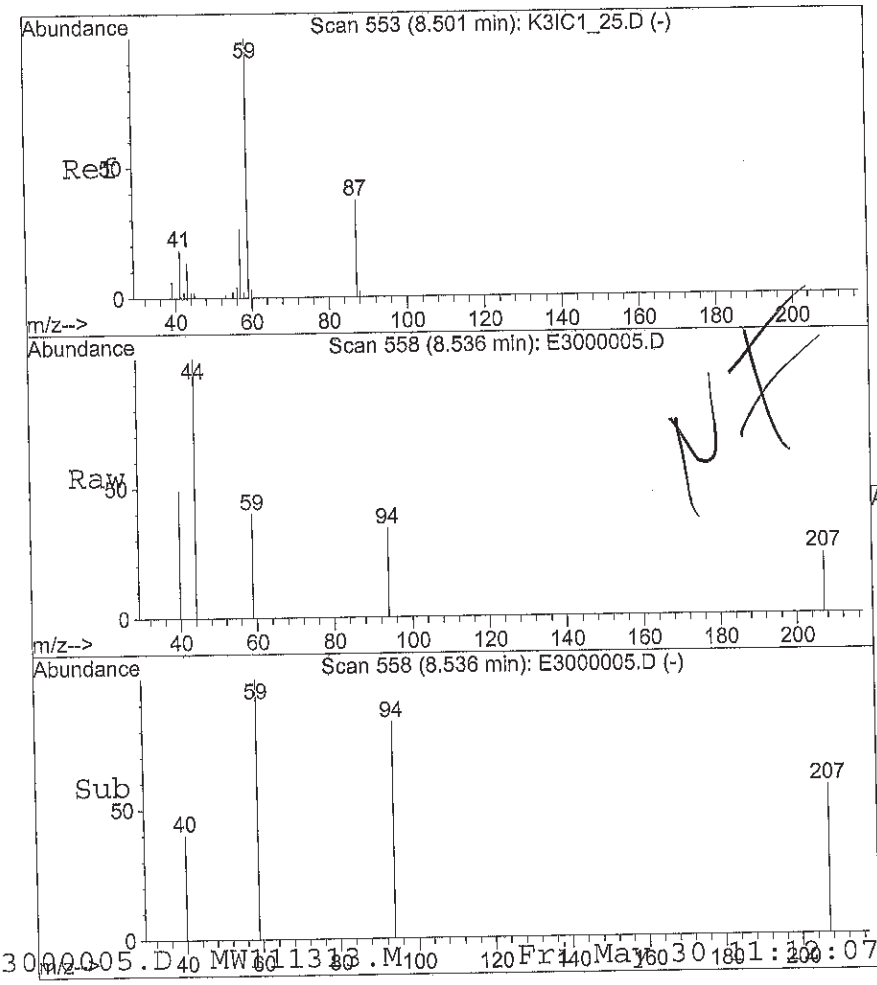


#24
Chloroform
Concen: 0.21 ug/L
RT: 9.22 min Scan# 639
Delta R.T. 0.02 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 83 Resp: 1678

Ion	Ratio	Lower	Upper
83	100		
85	153.5	51.8	77.6#

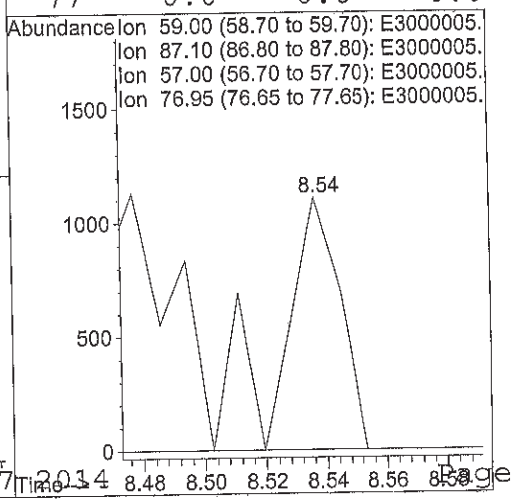


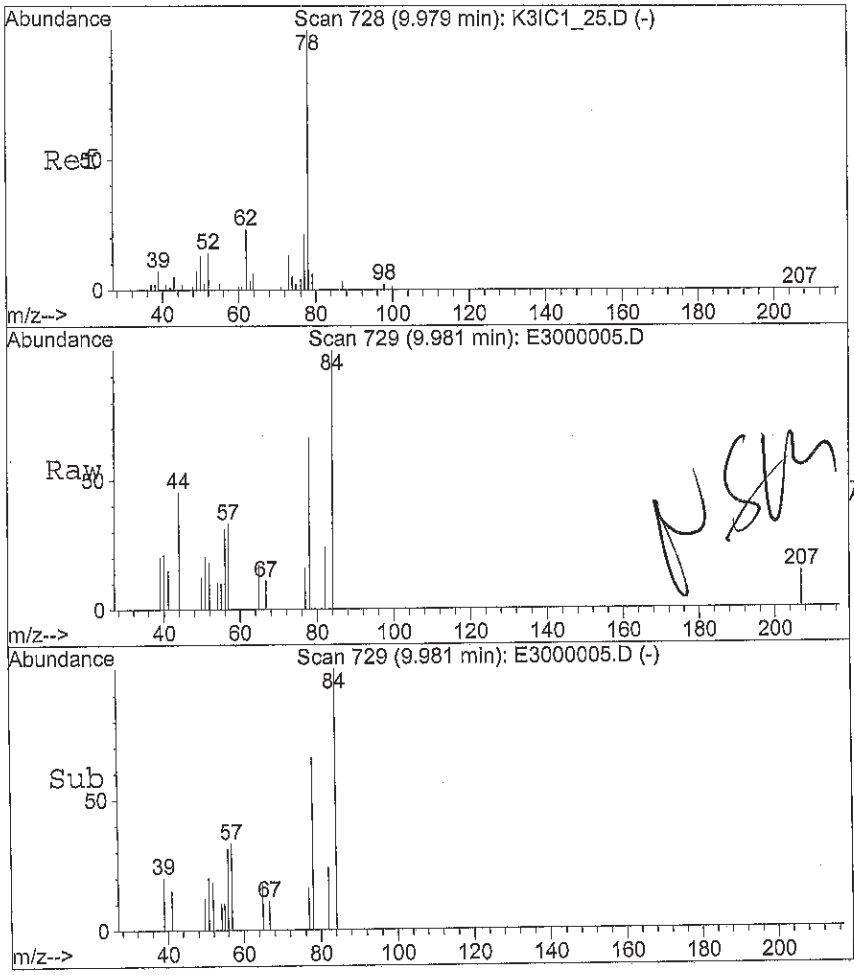


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.14 ug/L
RT: 8.54 min Scan# 558
Delta R.T. 0.04 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 59 Resp: 1541

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

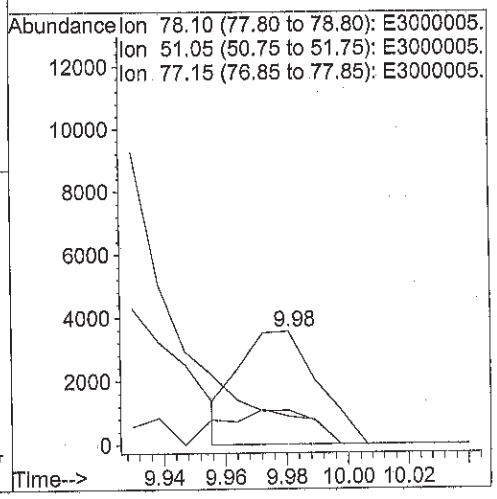


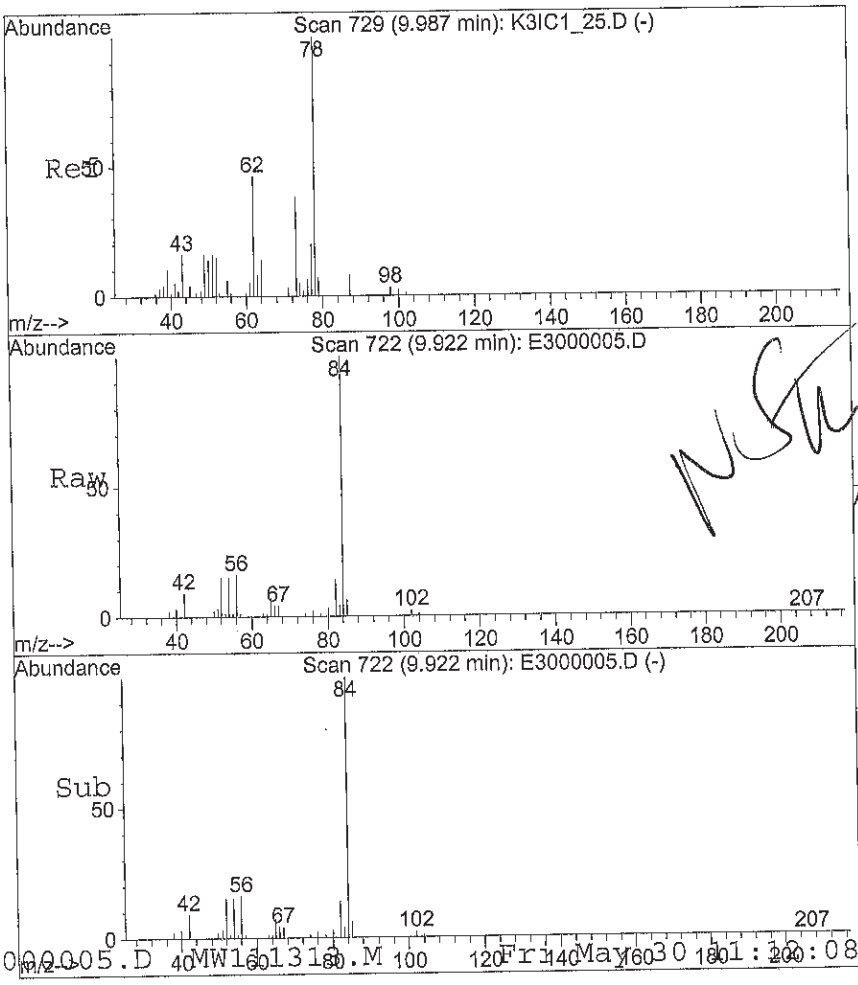


#31
Benzene
Concen: 0.45 ug/L
RT: 9.98 min Scan# 729
Delta R.T. 0.00 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 78 Resp: 6329

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	34.0	16.6	24.8#

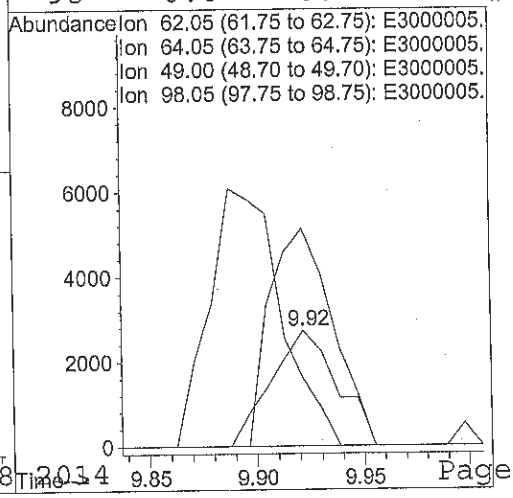


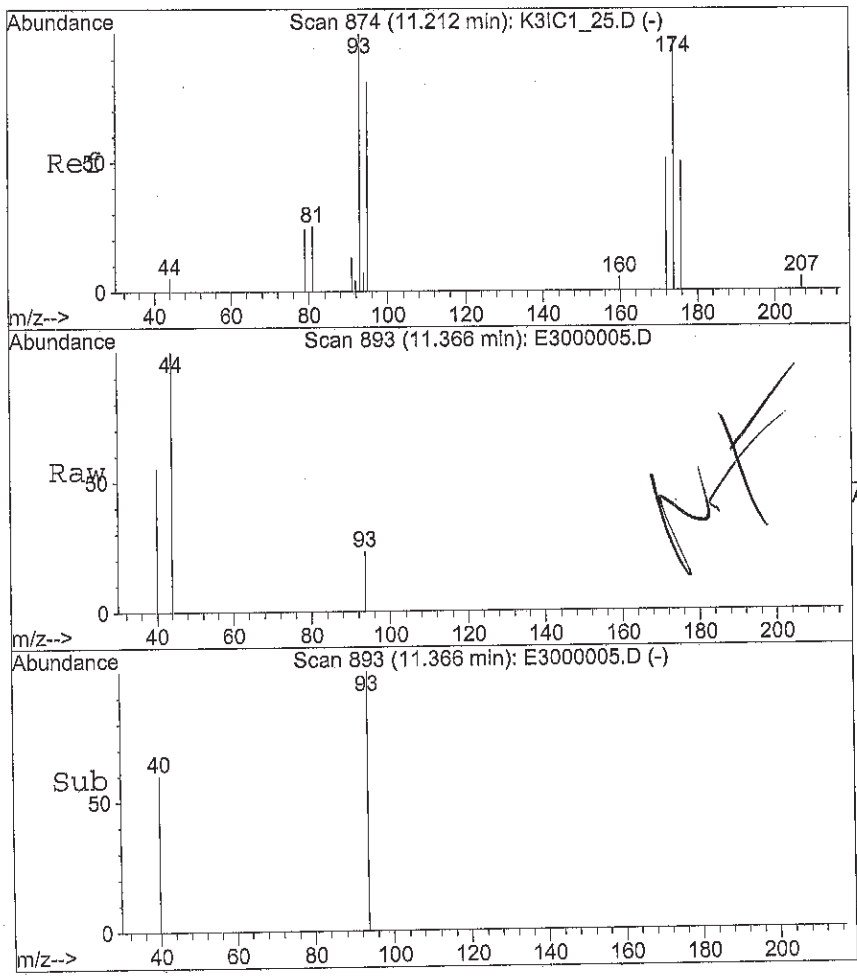


#32
1,2-Dichloroethane
Concen: 1.17 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.07 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 62 Resp: 5828

Ion	Ratio	Lower	Upper
62	100		
64	179.8	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

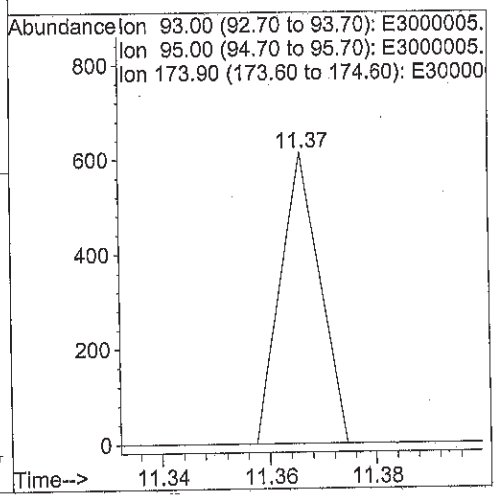


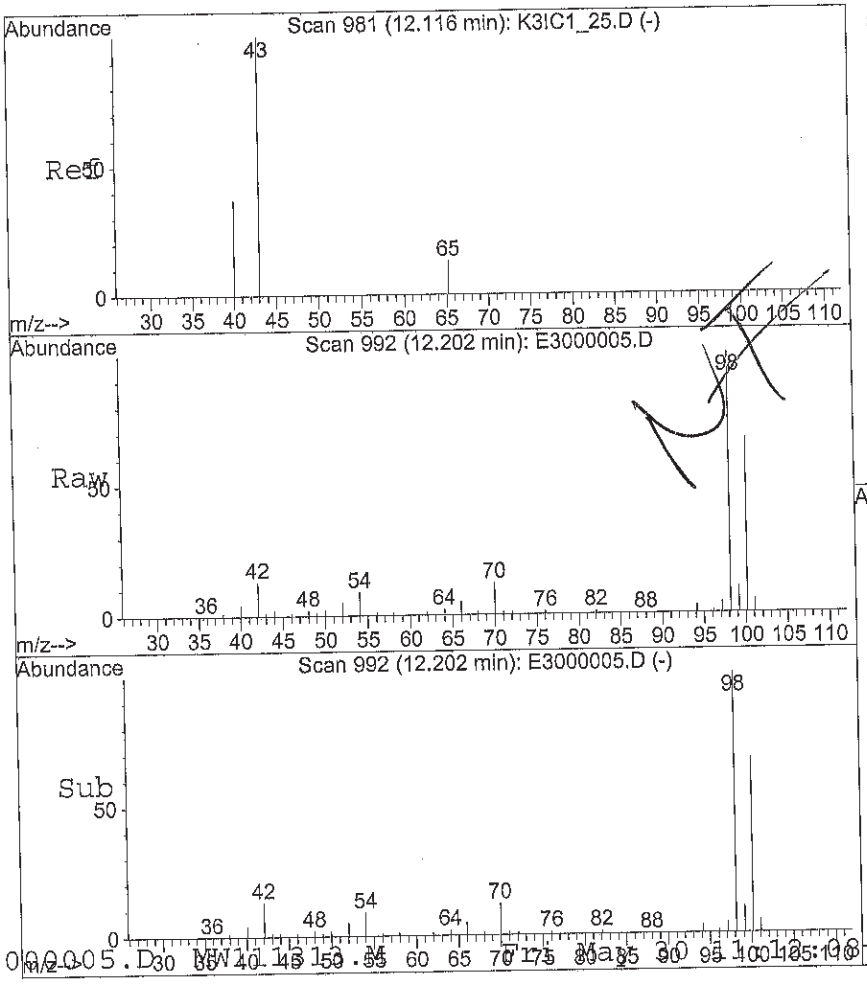


#35
Dibromomethane
Concen: 0.12 ug/L
RT: 11.37 min Scan# 893
Delta R.T. 0.15 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 93 Resp: 311

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

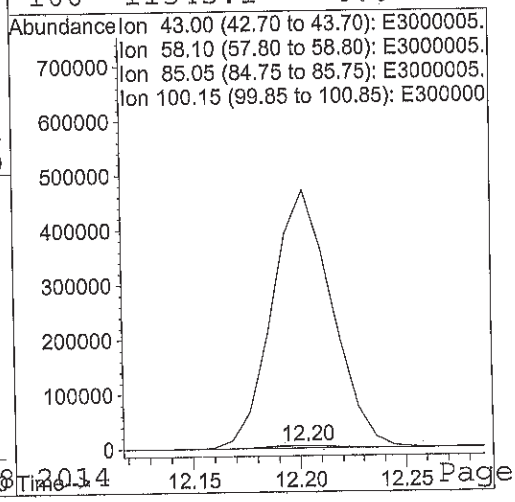


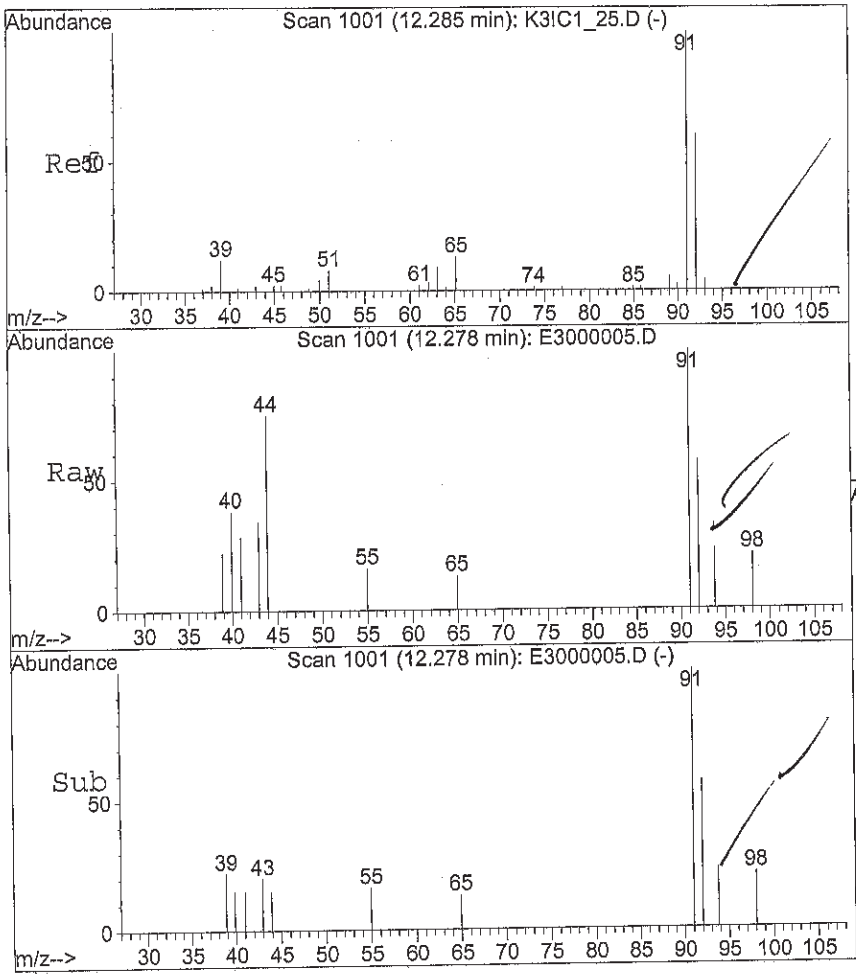


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.26 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 43 Resp: 8014

Ion	Ratio	Lower	Upper
43	100		
58	128.3	0.0	0.0#
85	0.0	0.0	0.0
100	11545.1	0.0	0.0#

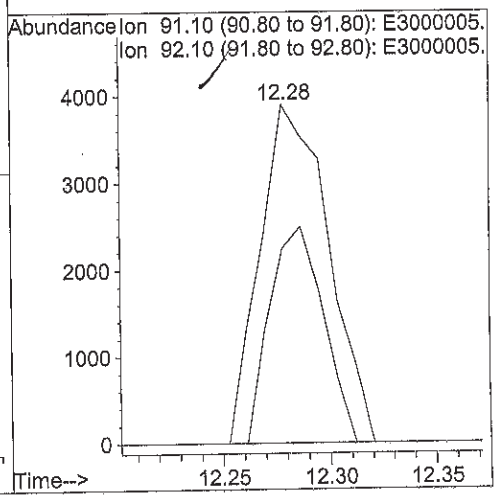


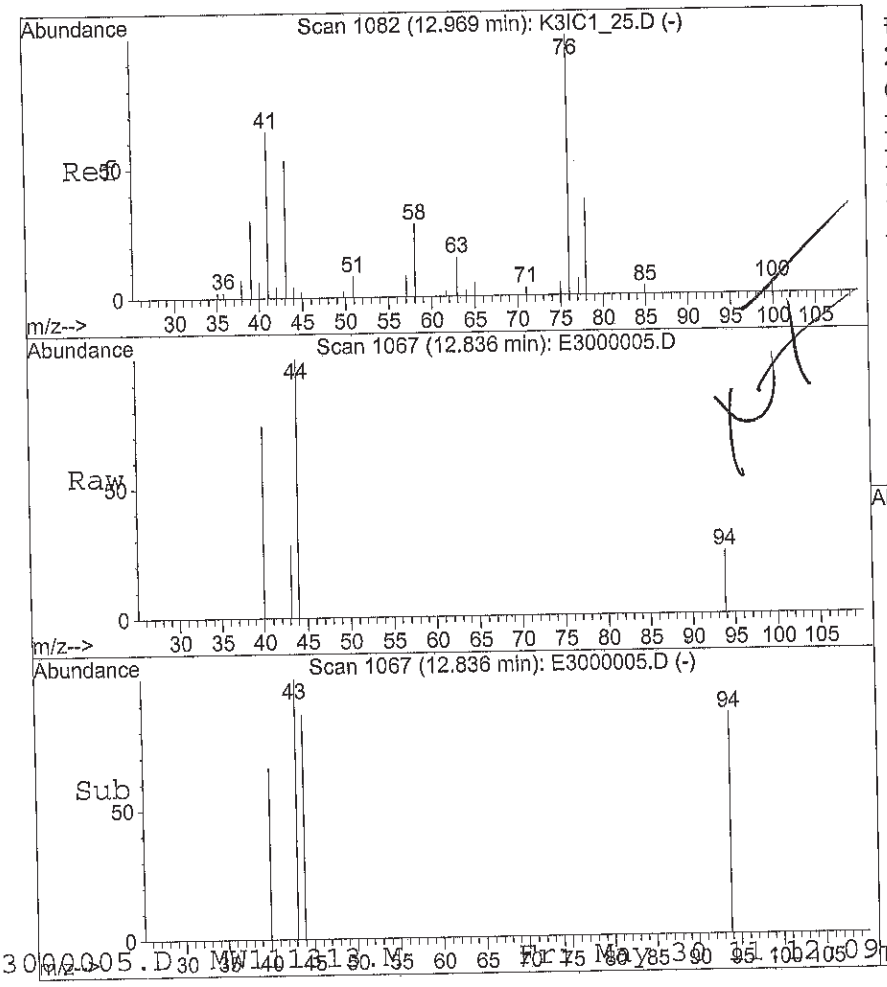


#41
Toluene
Concen: 0.51 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 91 Resp: 8622

Ion	Ratio	Lower	Upper
91	100		
92	50.0	47.4	71.0

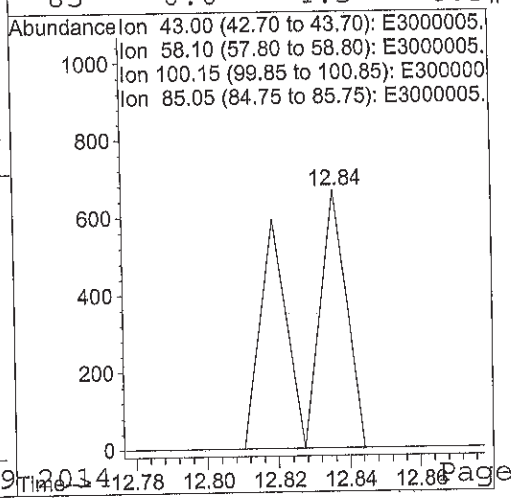


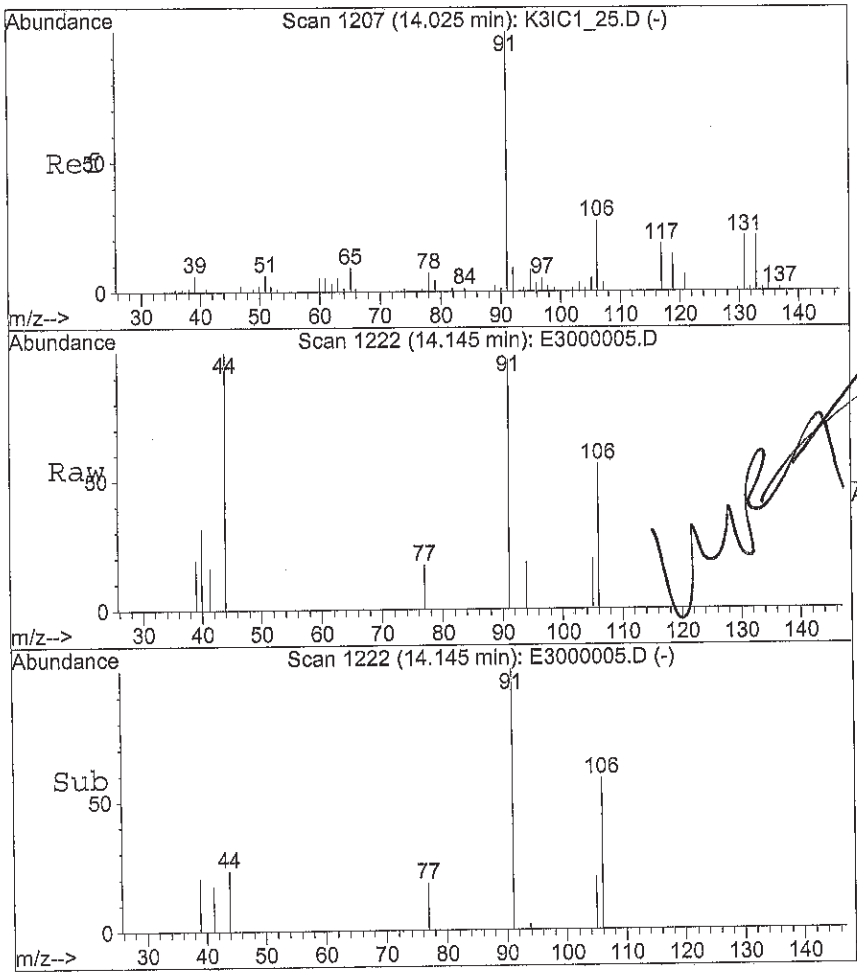


#46
2-Hexanone
Concen: 0.24 ug/L
RT: 12.84 min Scan# 1067
Delta R.T. -0.13 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 43 Resp: 638

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

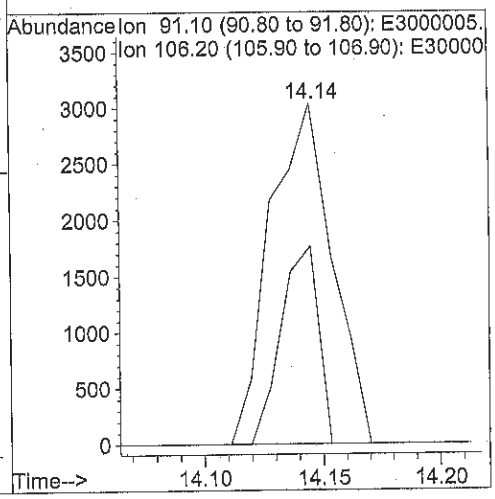


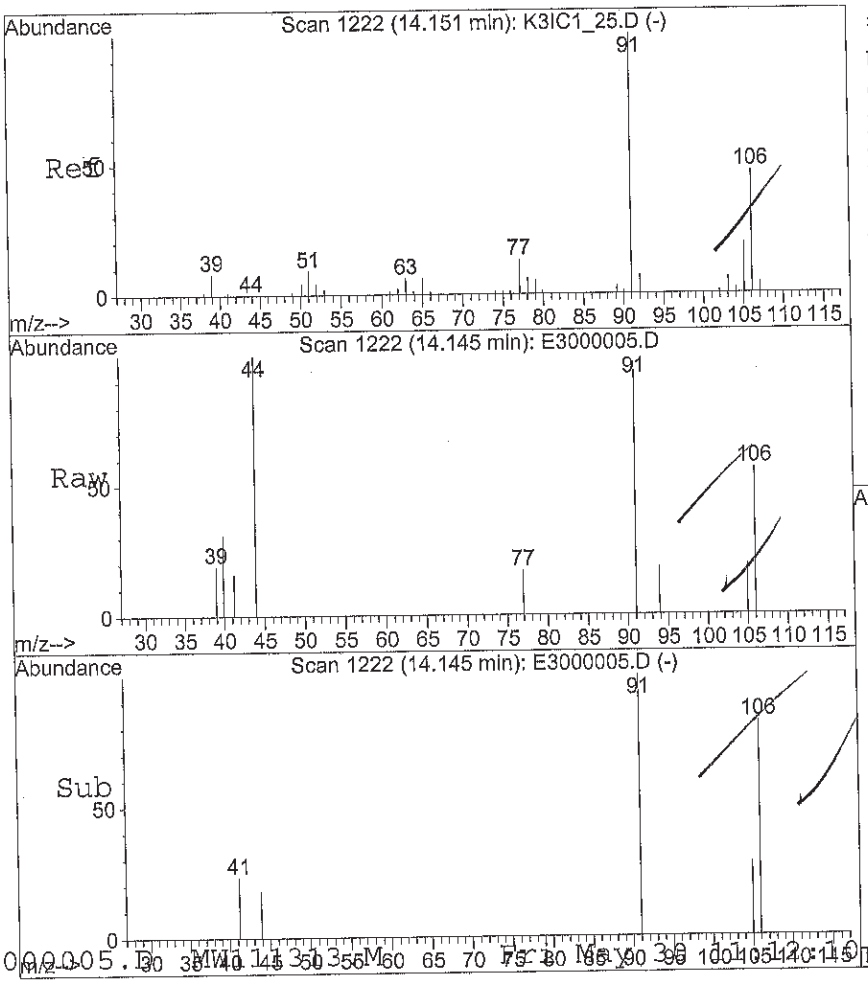


#51
Ethylbenzene
Concen: 0.29 ug/L
RT: 14.14 min Scan# 1222
Delta R.T. 0.12 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 91 Resp: 5494

Ion	Ratio	Lower	Upper
91	100		
106	35.1	23.5	35.3

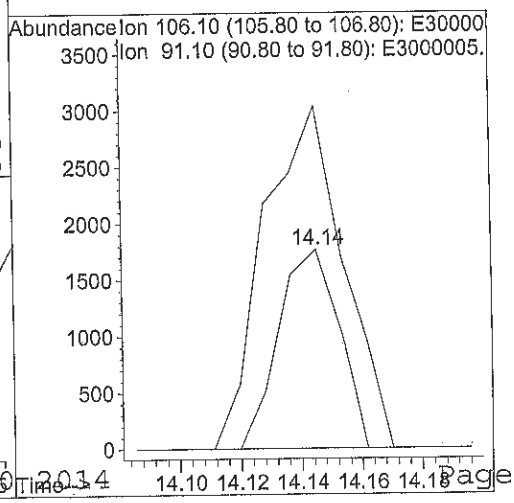


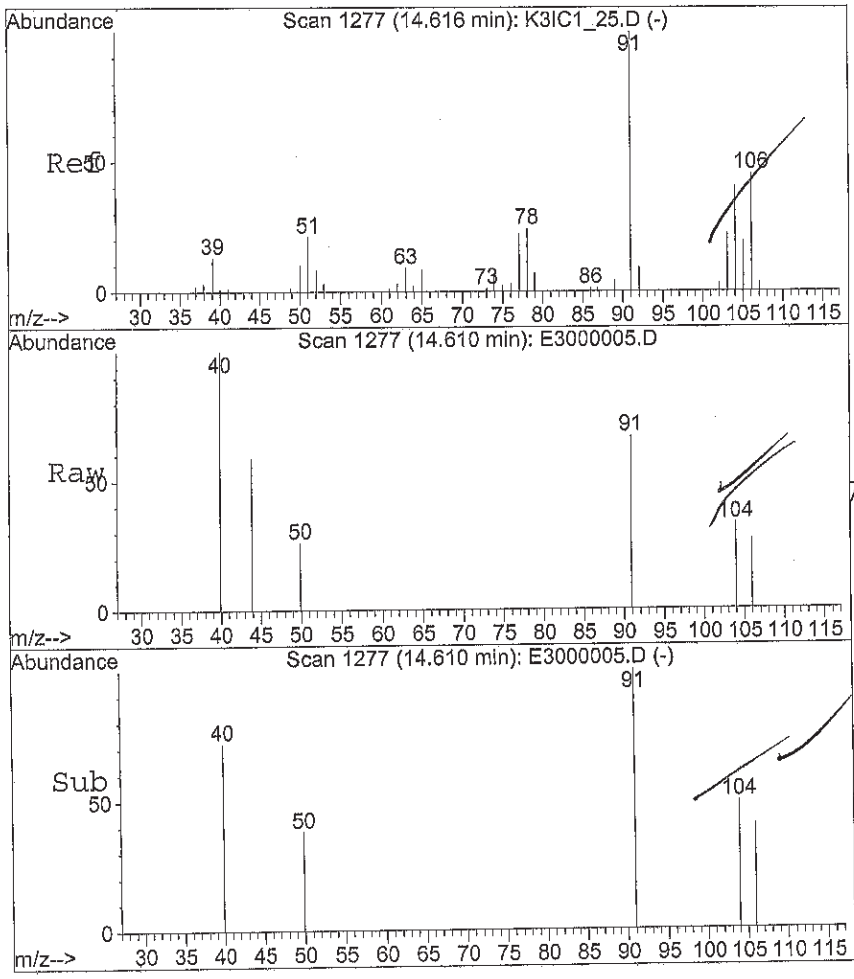


#52
m,p-Xylenes
Concen: 0.36 ug/L
RT: 14.14 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:106 Resp: 2438

Ion	Ratio	Lower	Upper
106	100		
91	225.3	177.1	265.7

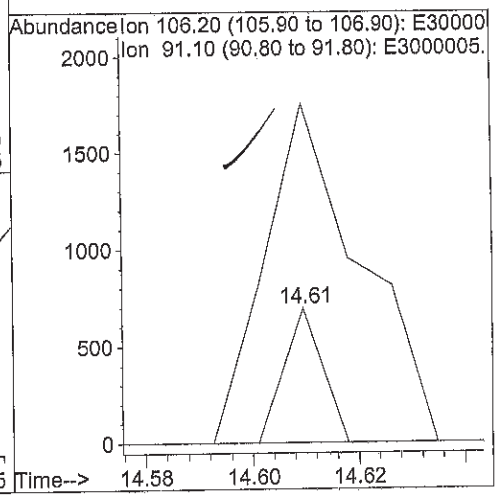


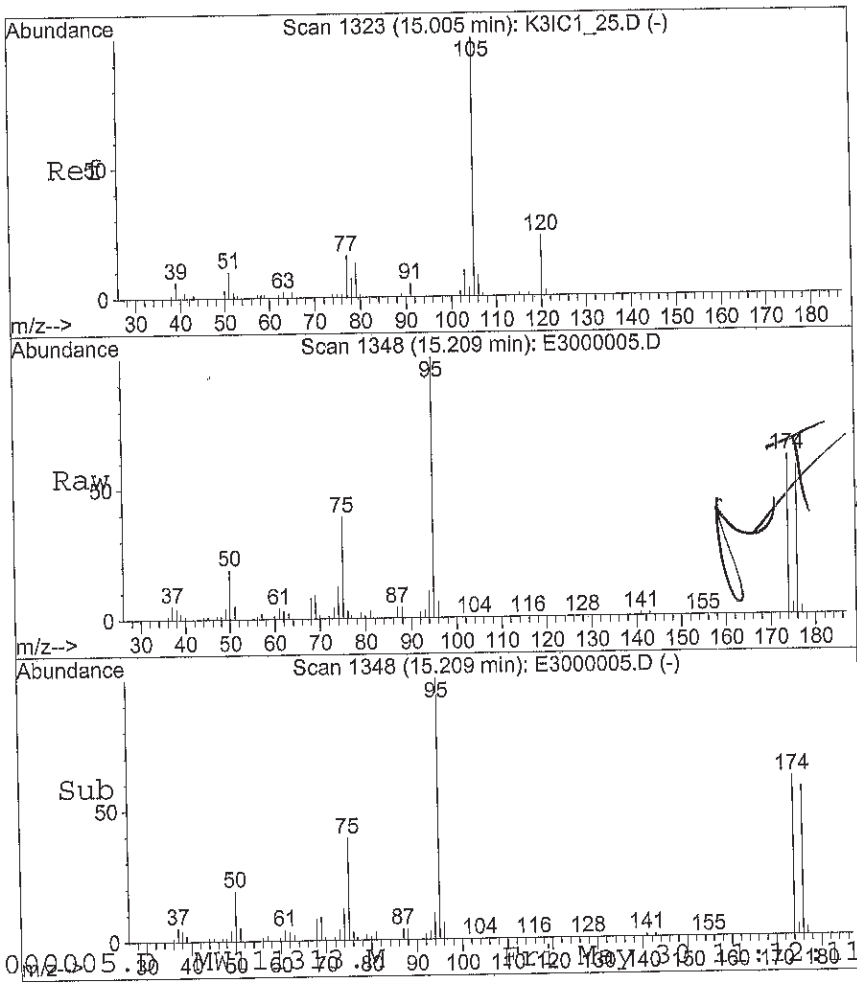


#53
o-Xylene
Concen: 0.05 ug/L
RT: 14.61 min Scan# 1277
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:106 Resp: 352

Ion	Ratio	Lower	Upper
106	100		
91	622.2	179.0	268.6#

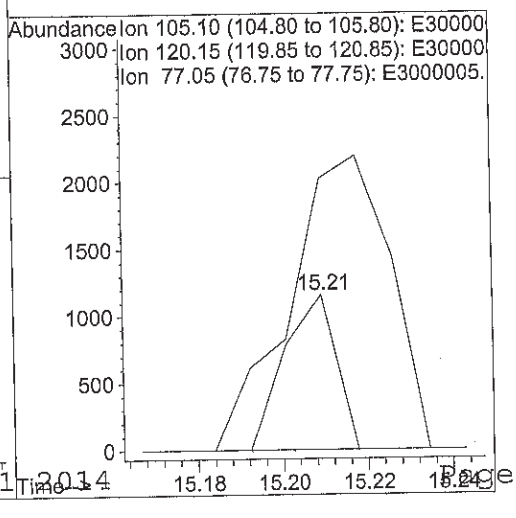


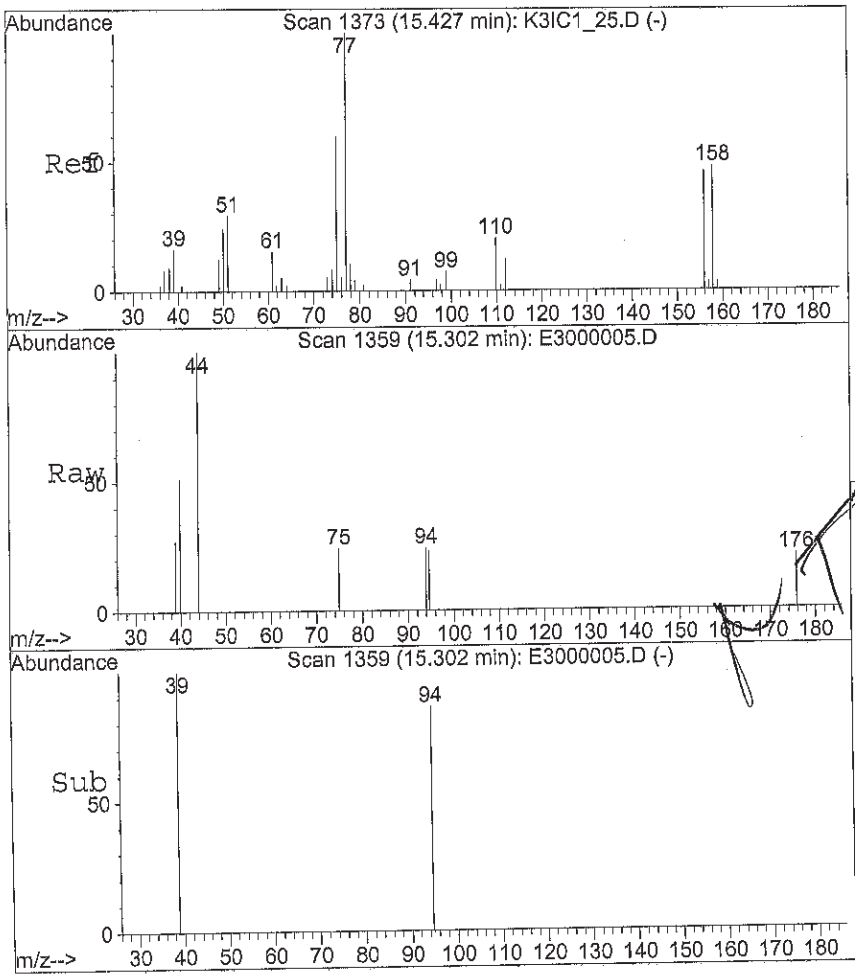


#56
Isopropylbenzene
Concen: 0.05 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. 0.20 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:105 Resp: 984

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	366.1	13.1	19.7#

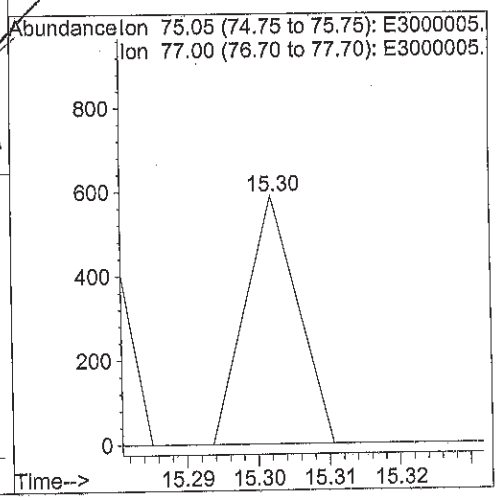


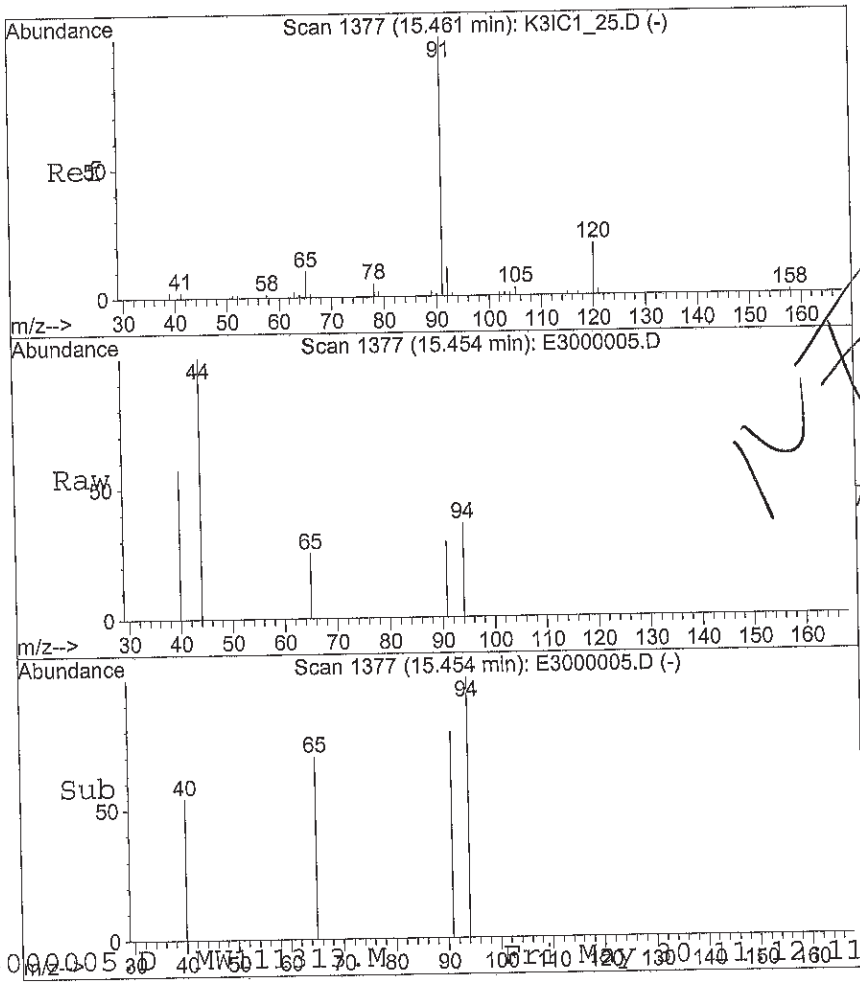


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.30 min Scan# 1359
Delta R.T. -0.12 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 75 Resp: 298

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

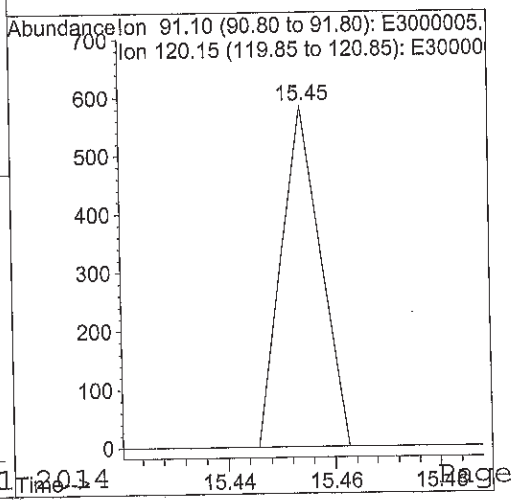


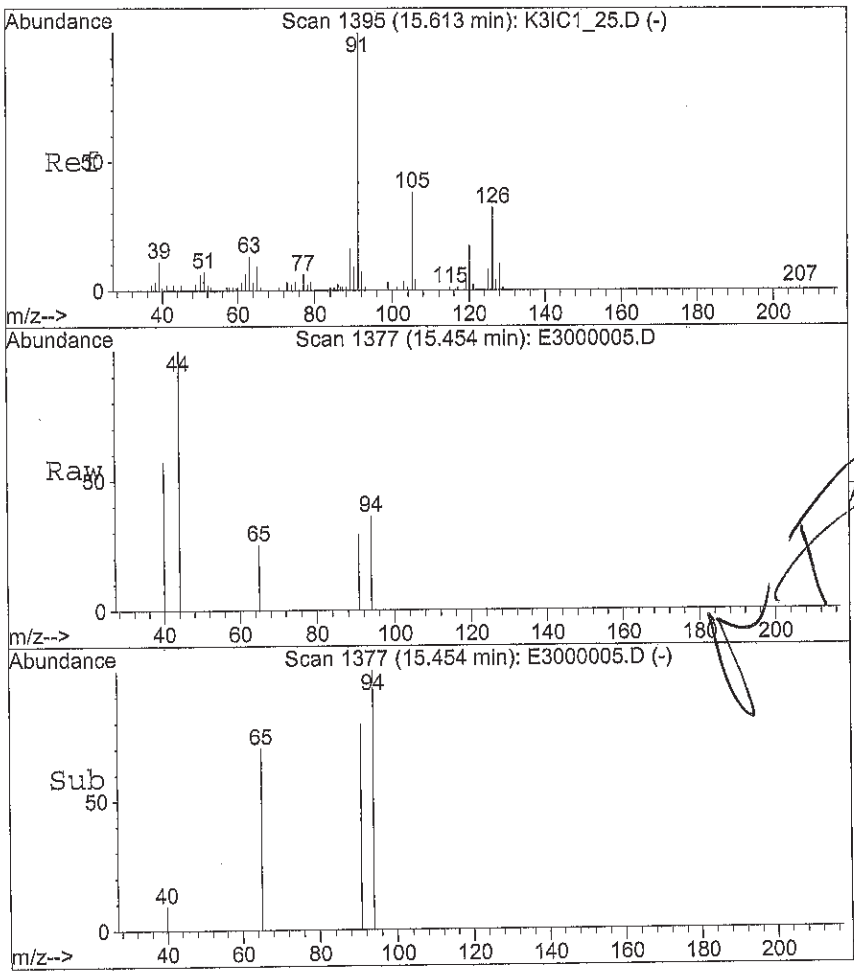


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 91 Resp: 296

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

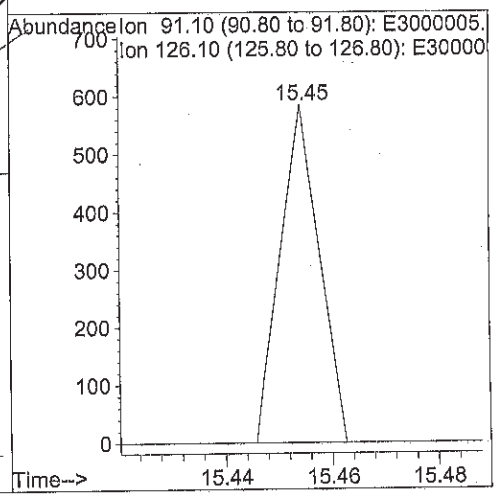


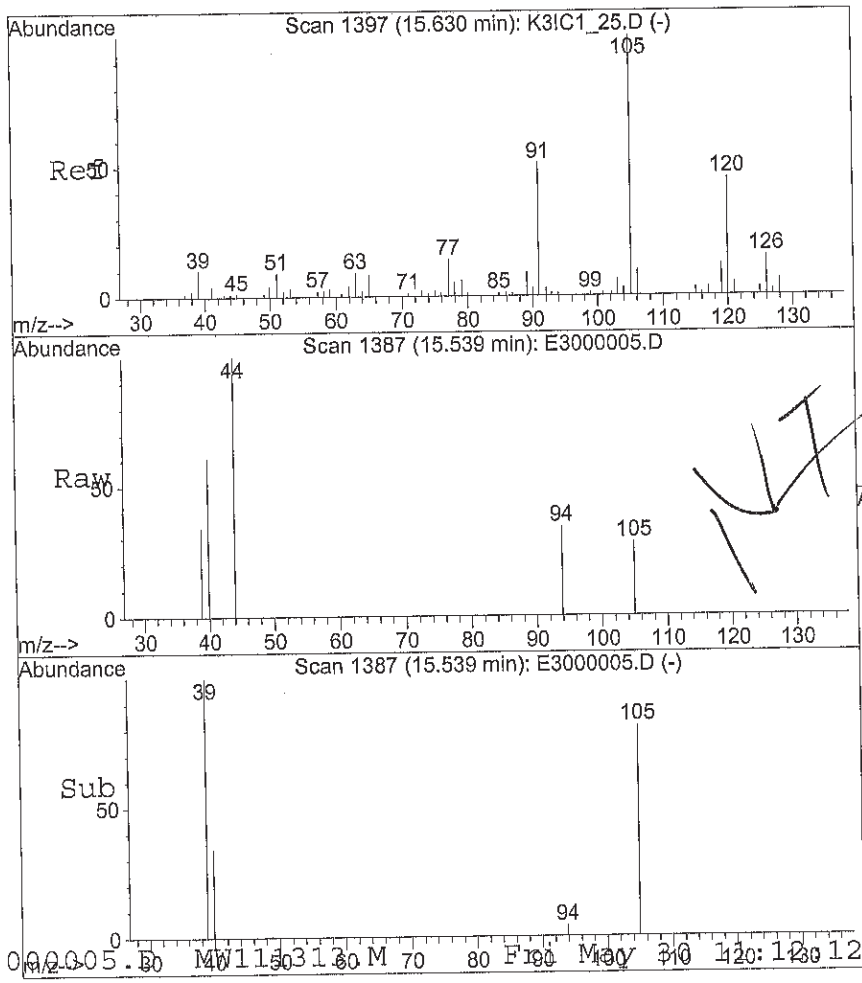


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.45 min Scan# 1377
Delta R.T. -0.16 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion: 91 Resp: 296

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

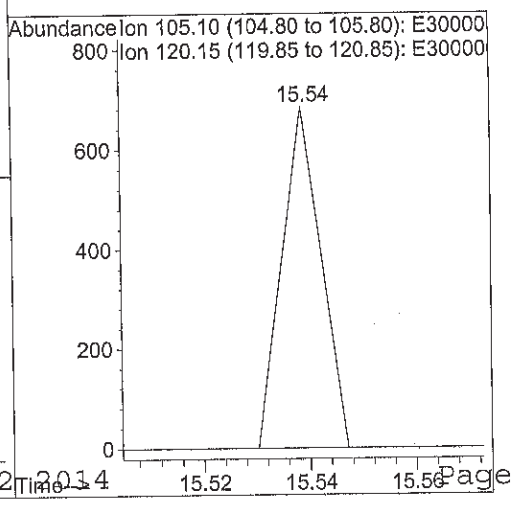


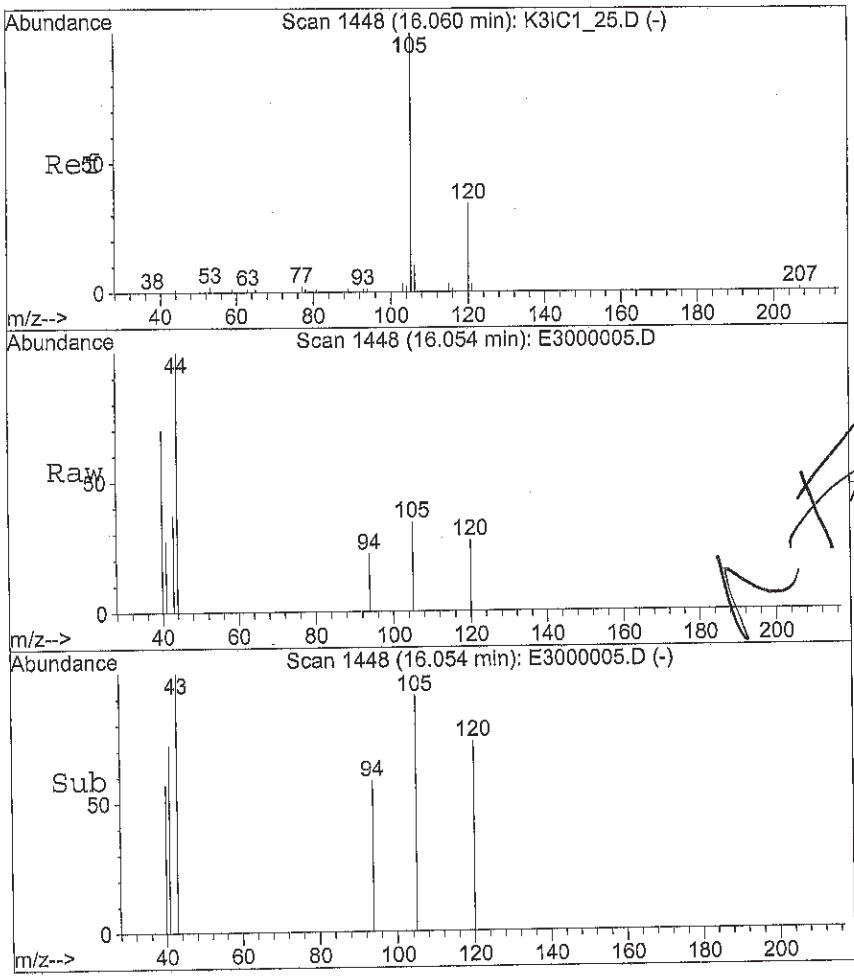


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.54 min Scan# 1387
Delta R.T. -0.09 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:105 Resp: 347

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

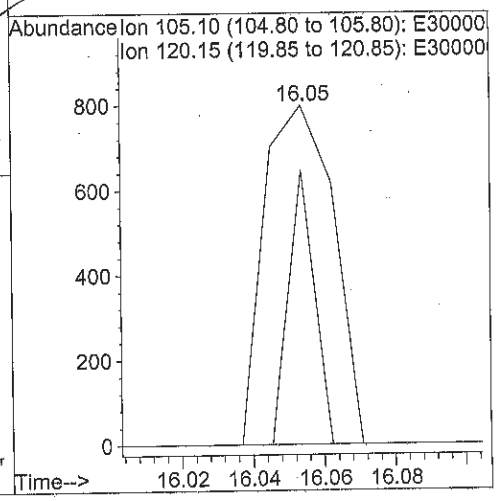


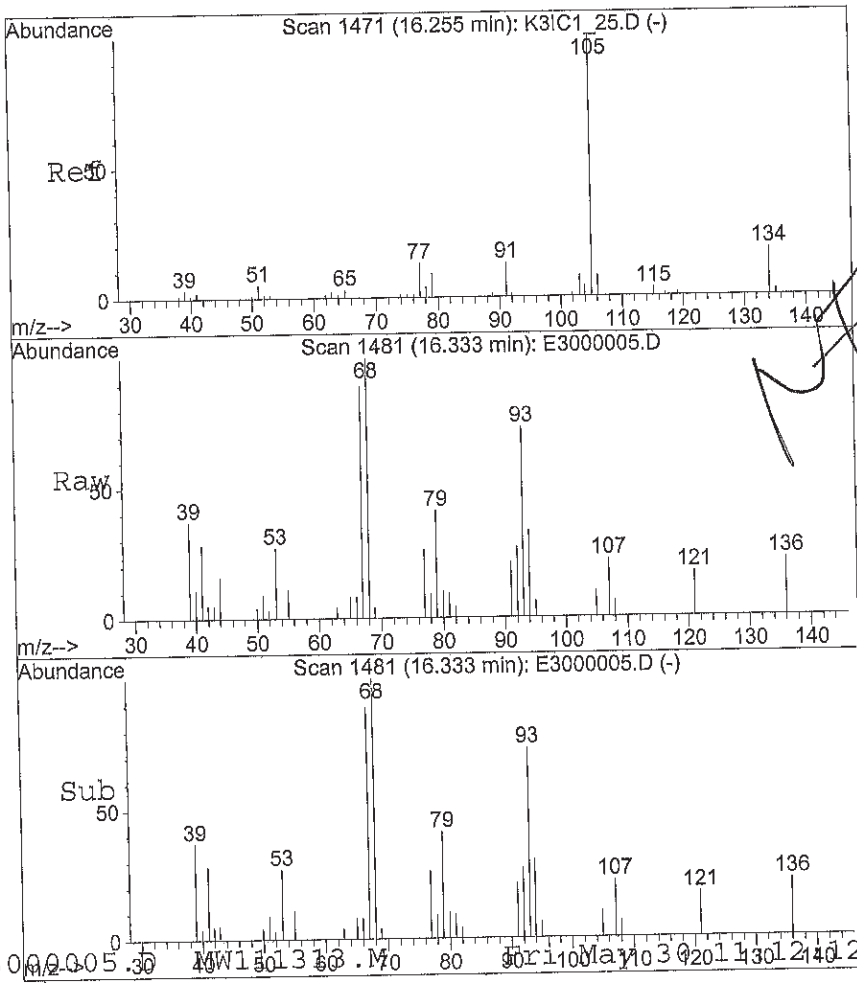


#67
1,2,4-Trimethylbenzene
Concen: 0.06 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:105 Resp: 1073

Ion	Ratio	Lower	Upper
105	100		
120	30.5	33.8	50.8#

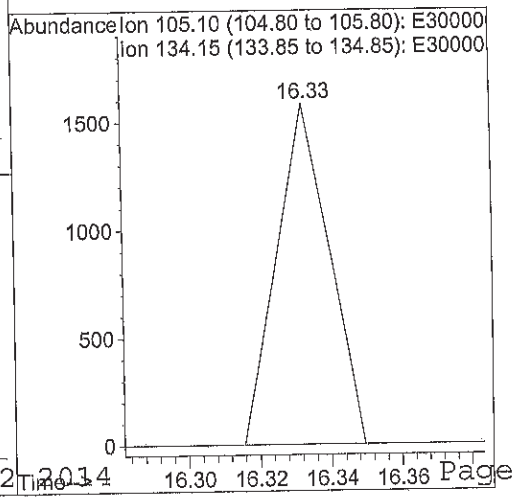


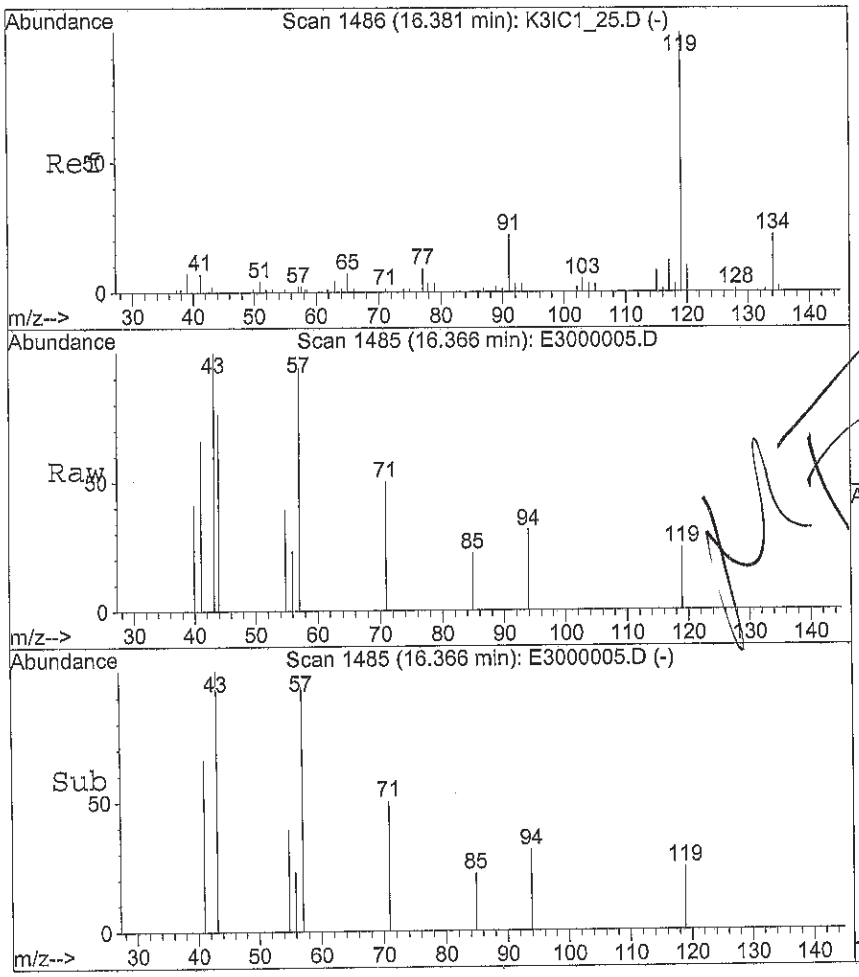


#68
sec-Butylbenzene
Concen: 0.07 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:105 Resp: 1612

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

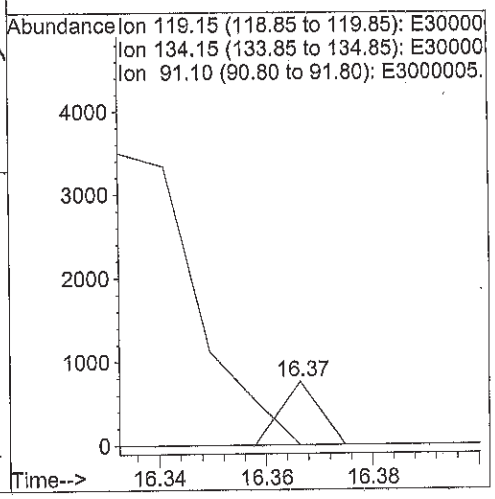




#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: E3000005.D
Acq: 30 May 2014 10:24 am

Tgt Ion:119 Resp: 384

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000005.D Vial: 4
Acq On : 30 May 2014 10:24 am Operator: DN
Sample : 3E43001-04 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 11:15 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1495954	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1232506	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	698417	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	438969	11.28 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.24%	
3) Chloroform-d (SU6)	9.18	84	670807	12.02 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery =	96.16%	
4) Methylene Chloride-d2 (SU5	7.07	86	371338	11.38 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery =	91.04%	
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	425375	16.00 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	128.00%#	
6) Benzene-d6 (SU7)	9.92	84	1306381	11.13 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery =	89.04%	
8) Toluene-d8 (SU3)	12.20	98	1374561	11.76 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	94.08%	
9) 4-Bromofluorobenzene (SU4)	15.22	95	706585	14.64 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	117.12%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

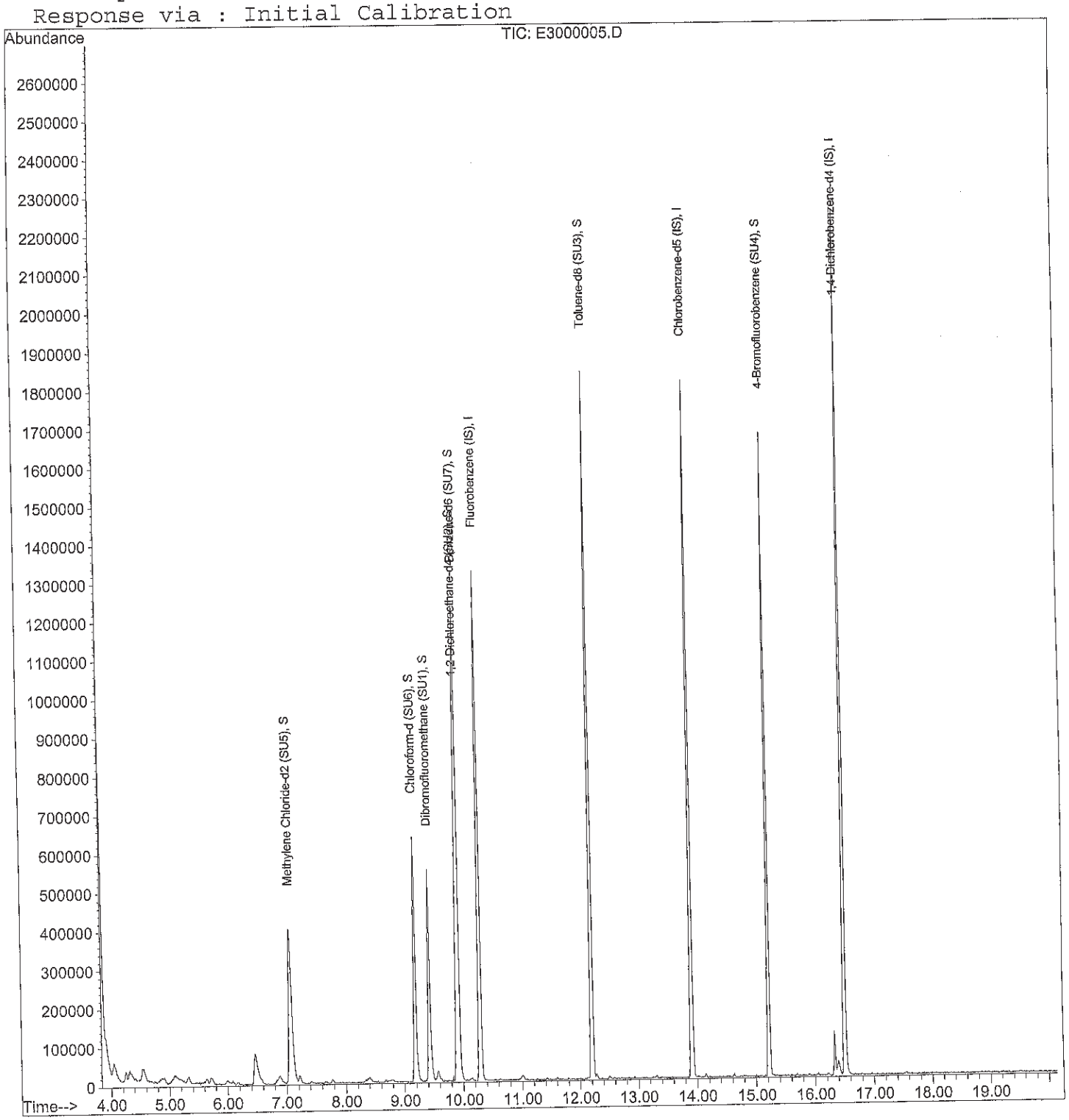
Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000005.D
Acq On : 30 May 2014 10:24 am
Sample : 3E43001-04
Misc : 100cc SVL-546-SA5D-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: May 30 11:15 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000006.D
Acq On : 30 May 2014 10:57 am
Sample : 3E43001-05
Misc : 100cc SVL-546-SA5D-SV-16.0-17.0
MS Integration Params: rteint.p
Quant Time: May 30 11:25 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1452575	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1211623	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	685597	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	427901	11.81 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.48%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	418781	12.16 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.28%		
39) Toluene-d8 (SU3)	12.20	98	1334547	11.81 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.48%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	692829	13.98 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.84%		

Target Compounds					Qvalue
4) Chloromethane	4.40	50	2957	-0.01 ~~ug/L~~ #	41
6) Bromomethane	5.10	96	2303	-0.34 ~~ug/L~~ #	1
7) Chloroethane	5.23	64	690	1.26 ~~ug/L~~ #	32
11) Acetone	6.46	58	5771	5.32 ~~ug/L~~	69
12) (IPA) Leak Check Compound	6.48	45	178720	1023.90 ~~ug/L~~ #	82
13) Carbon disulfide	6.84	76	1745	0.14 ~~ug/L~~ #	79
14) Methylene Chloride	7.05	84	6556	1.64 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.91	59	840	3.39 ~~ug/L~~	77
24) Chloroform	9.22	83	819	0.11 ~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.44	59	275	0.03 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.91	75	902	0.16 ~~ug/L~~ #	1
31) Benzene	9.96	78	1802	0.13 ~~ug/L~~ #	74
32) 1,2-Dichloroethane	9.91	62	5761	1.19 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.14	43	273	0.11 ~~ug/L~~ #	100
41) Toluene	12.29	91	3643	0.22 ug/L # 0.00446	88
46) 2-Hexanone	13.06	43	265	0.10 ~~ug/L~~ #	37
51) Ethylbenzene	14.14	91	3316	0.18 ~~ug/L~~	90
52) m,p-Xylenes	14.14	106	1630	0.24 ug/L 0.00448	89
54) Styrene	14.62	104	2376	-0.62 ~~ug/L~~ #	46
56) Isopropylbenzene	15.22	105	628	0.03 ~~ug/L~~ #	1
62) n-Propylbenzene	15.46	91	268	0.01 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.46	91	268	0.02 ~~ug/L~~ #	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000006.D Vial: 5
Acq On : 30 May 2014 10:57 am Operator: DN
Sample : 3E43001-05 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-16.0-17.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 11:25 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	420	0.02 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.33	105	1452	0.06 ug/L #	62
69) p-Isopropyltoluene	16.38	119	855	0.05 ug/L #	52

(#) = qualifier out of range (m) = manual integration

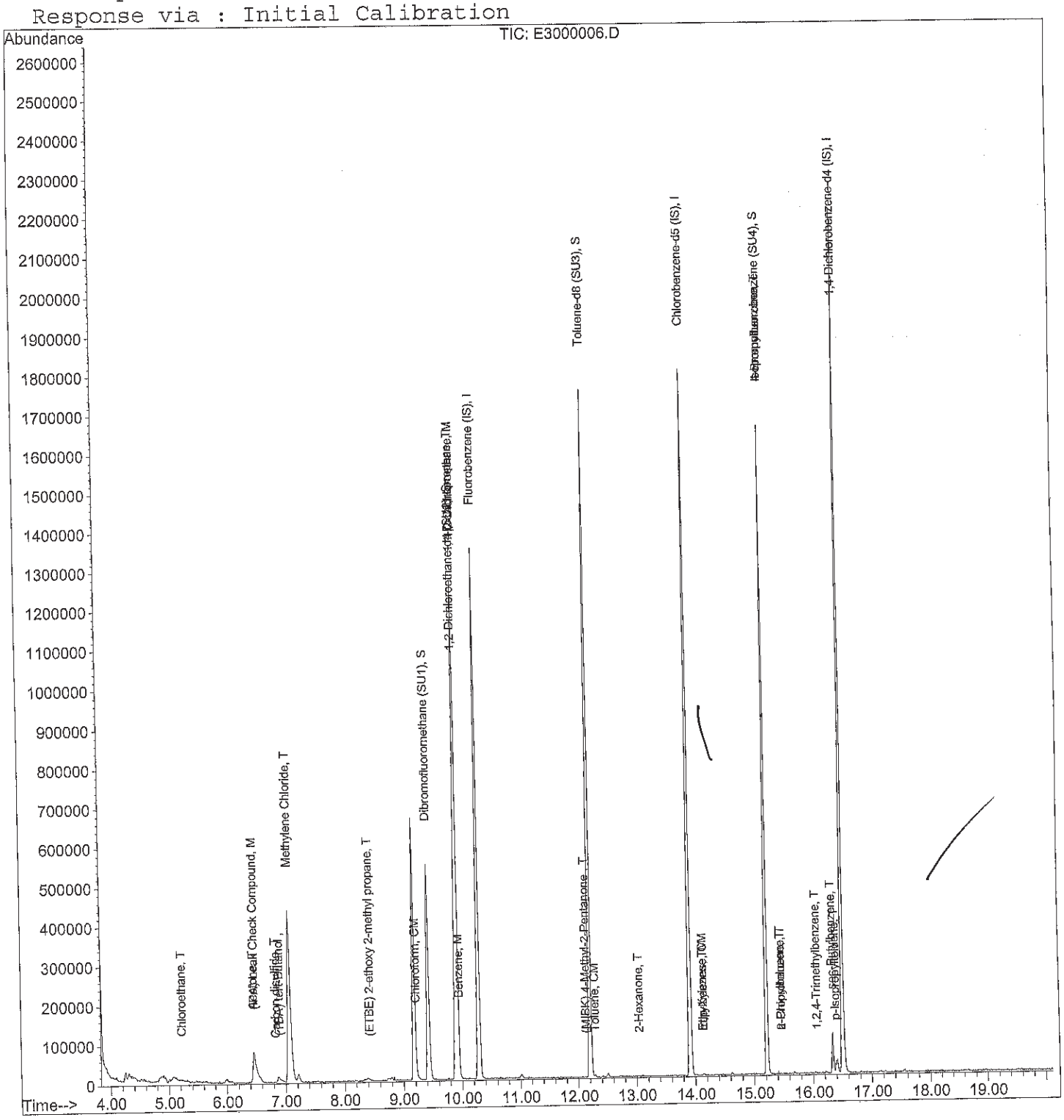
Quantitation Report

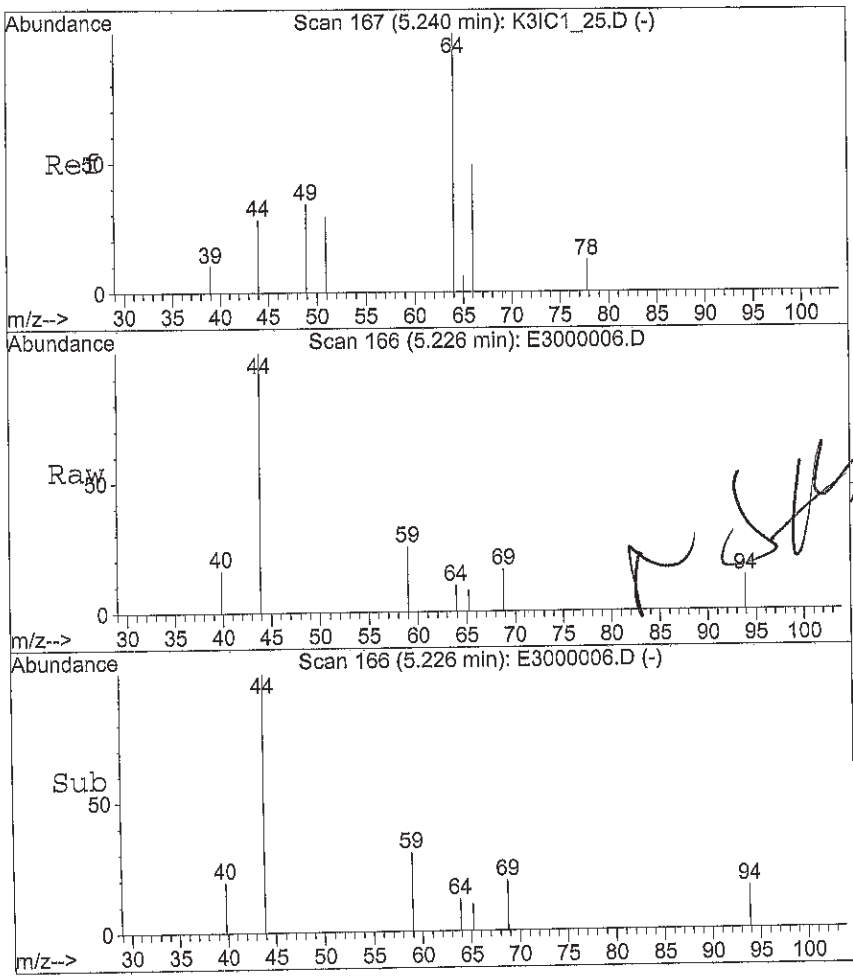
Data File : C:\HPCHEM\1\DATA\053014L3\E3000006.D
Acq On : 30 May 2014 10:57 am
Sample : 3E43001-05
Misc : 100cc SVL-546-SA5D-SV-16.0-17.0
MS Integration Params: rteint.p
Quant Time: May 30 11:25 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

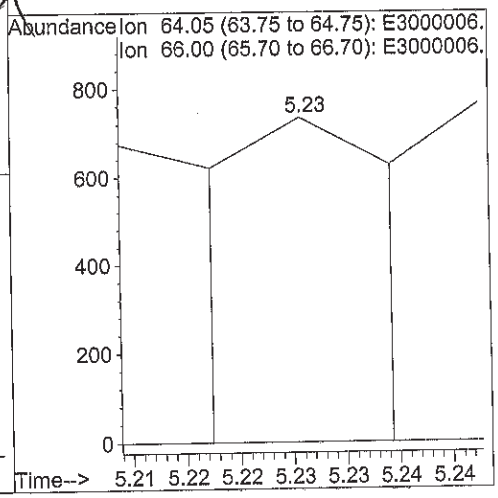


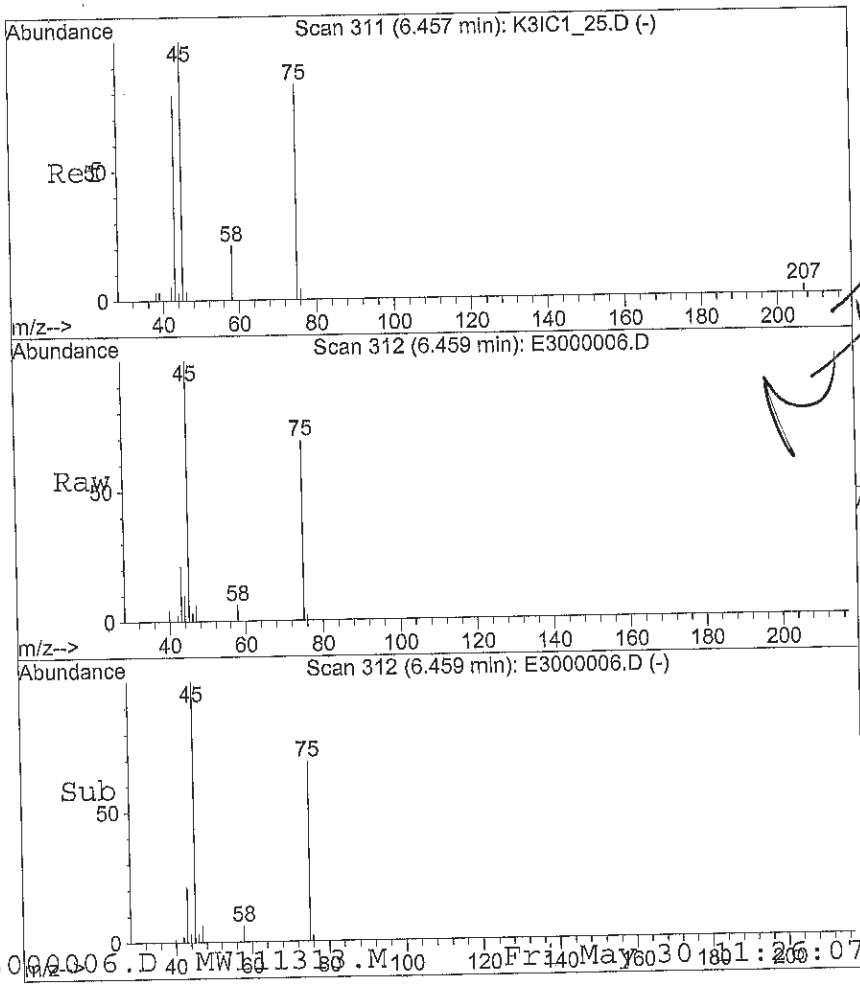


#7
Chloroethane
Concen: 1.26 ug/L
RT: 5.23 min Scan# 166
Delta R.T. -0.01 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 64 Resp: 690

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

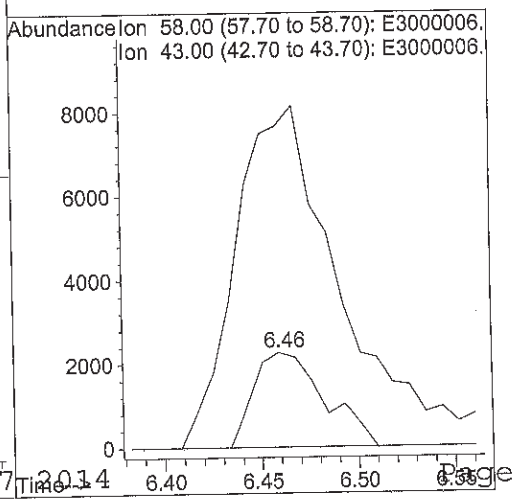


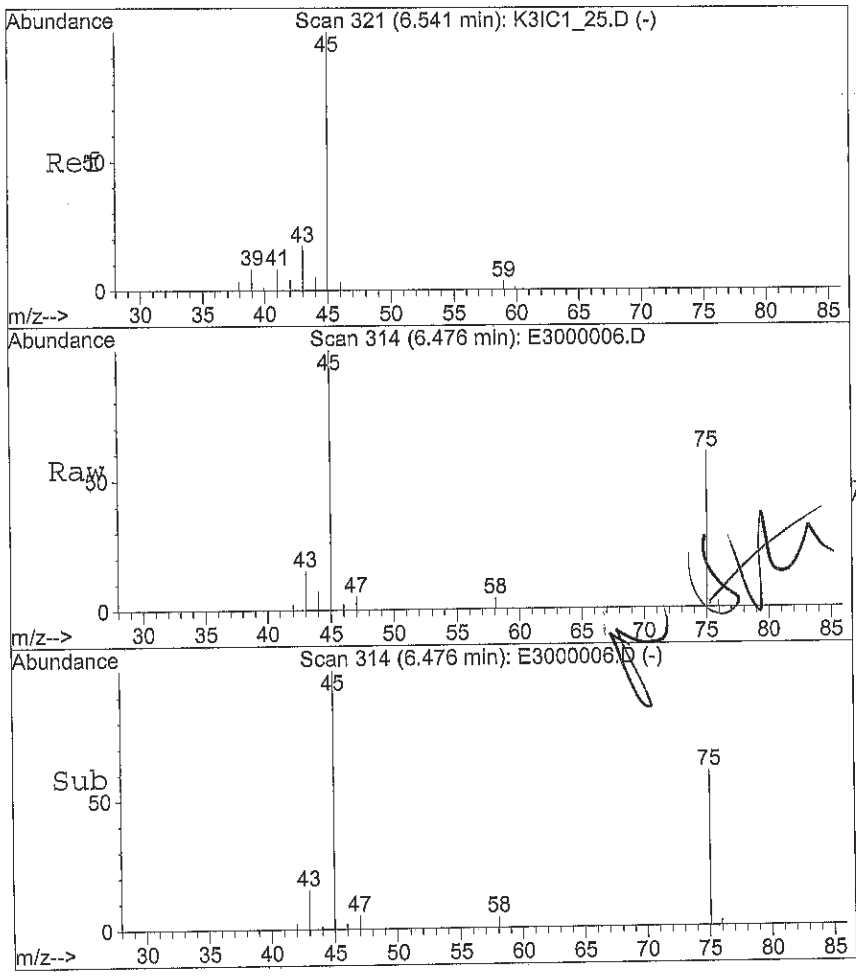


#11
Acetone
Concen: 5.32 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 58 Resp: 5771

Ion	Ratio	Lower	Upper
58	100		
43	531.6	360.9	541.3

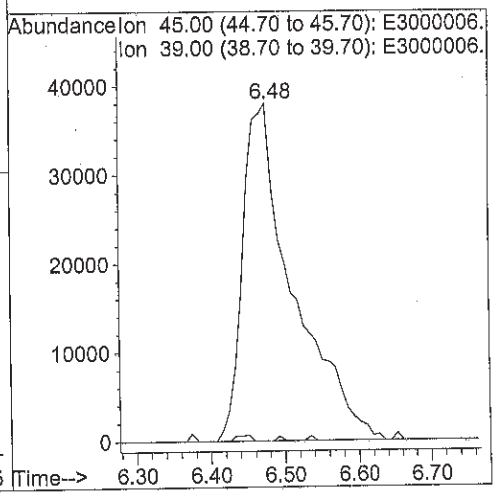


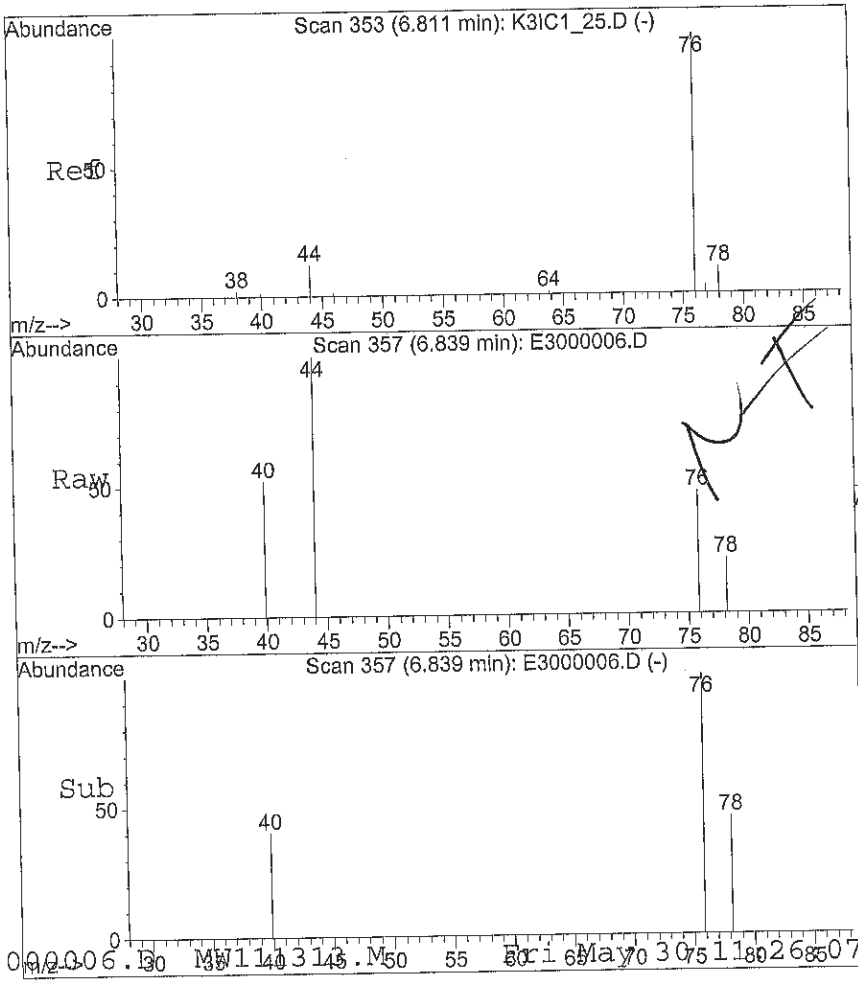


#12
(IPA) Leak Check Compound
Concen: 1023.90 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.07 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 45 Resp: 178720

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

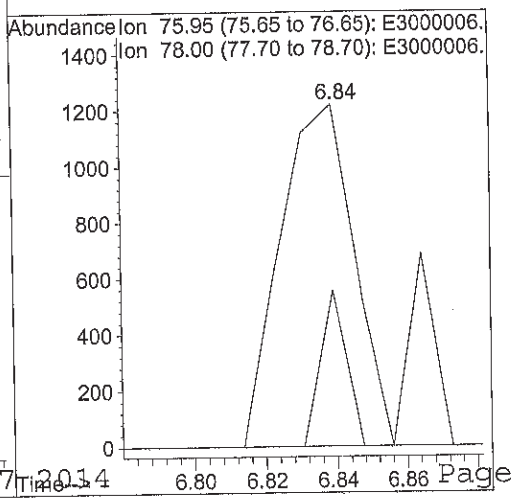


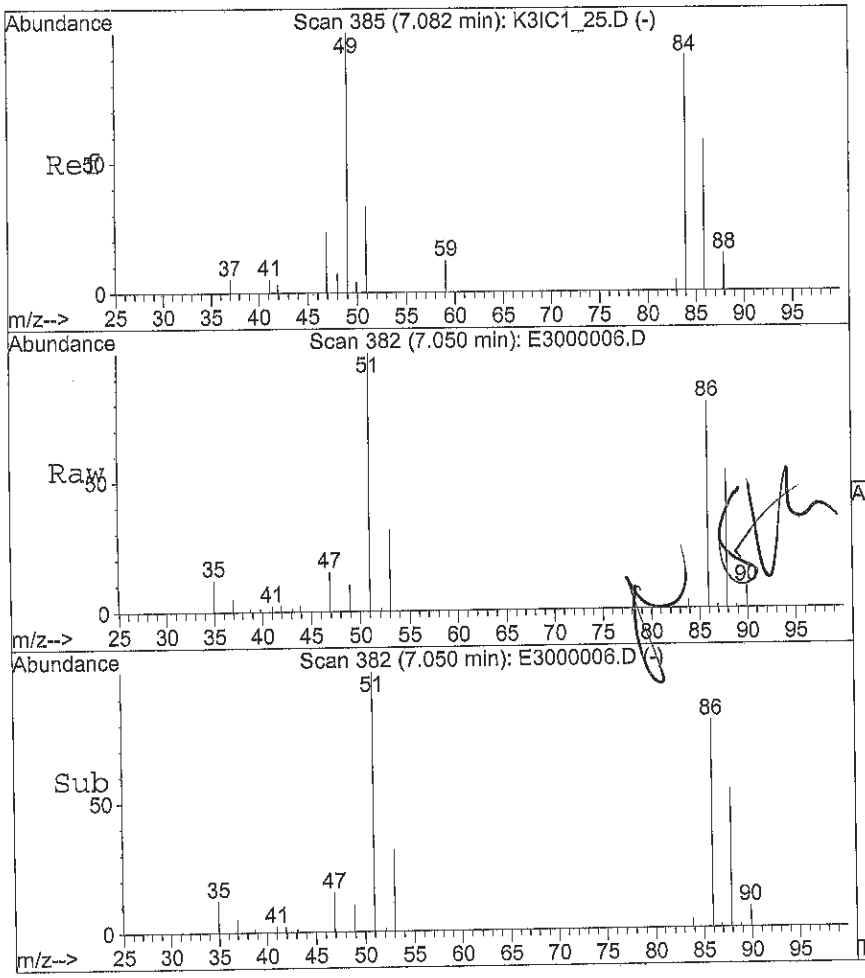


#13
Carbon disulfide
Concen: 0.14 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 76 Resp: 1745

Ion	Ratio	Lower	Upper
76	100		
78	16.1	7.0	10.4#

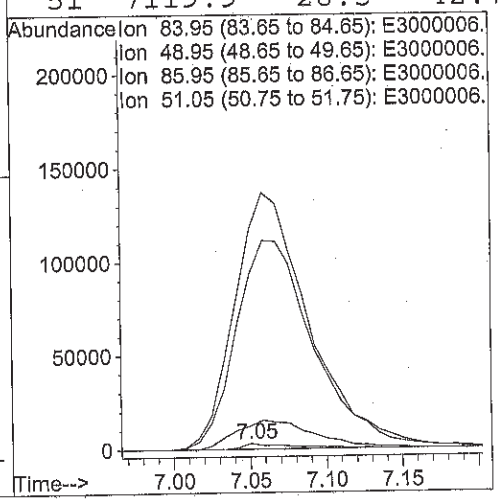


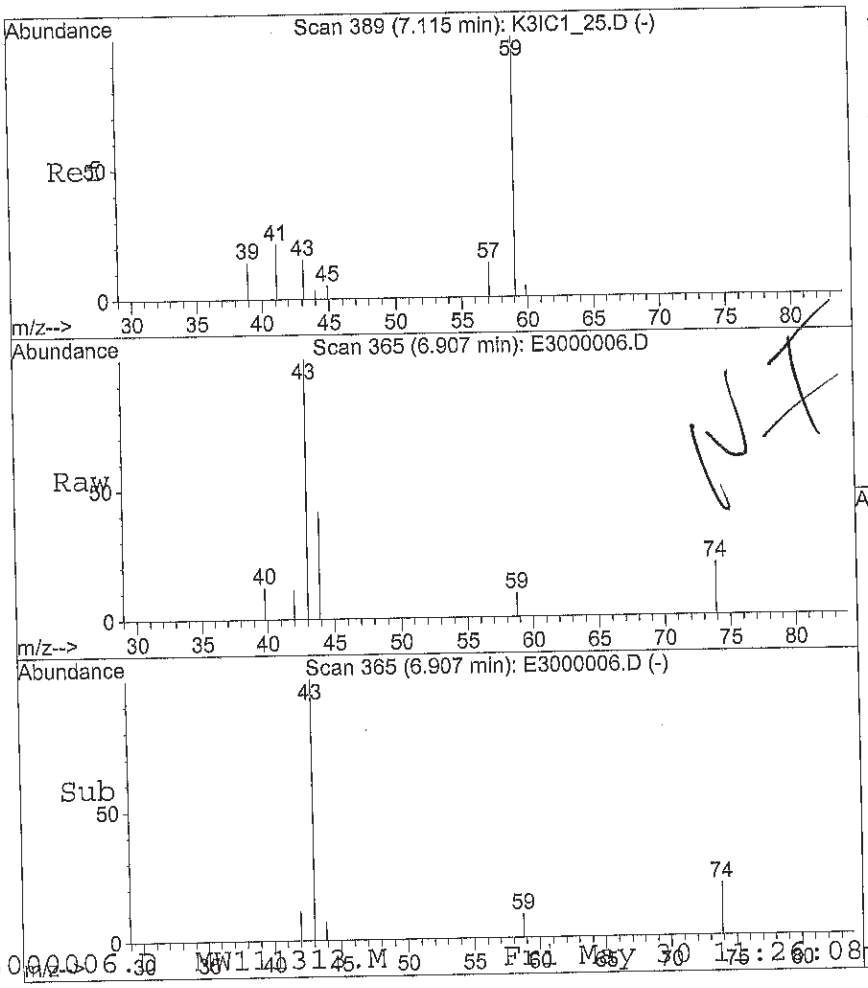


#14
Methylene Chloride
Concen: 1.64 ug/L
RT: 7.05 min Scan# 382
Delta R.T. -0.03 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 84 Resp: 6556

Ion	Ratio	Lower	Upper
84	100		
49	825.3	89.8	134.6#
86	6035.2	51.1	76.7#
51	7119.9	28.5	42.7#

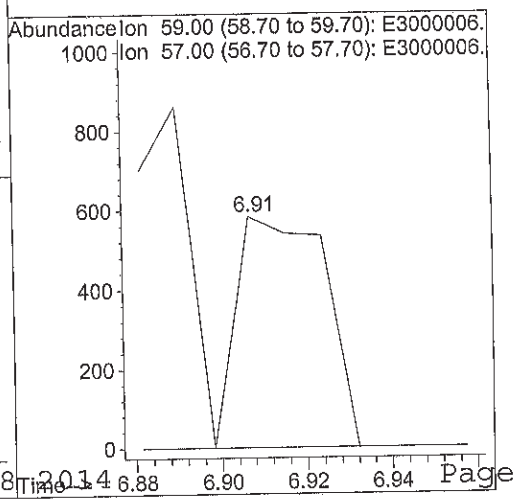


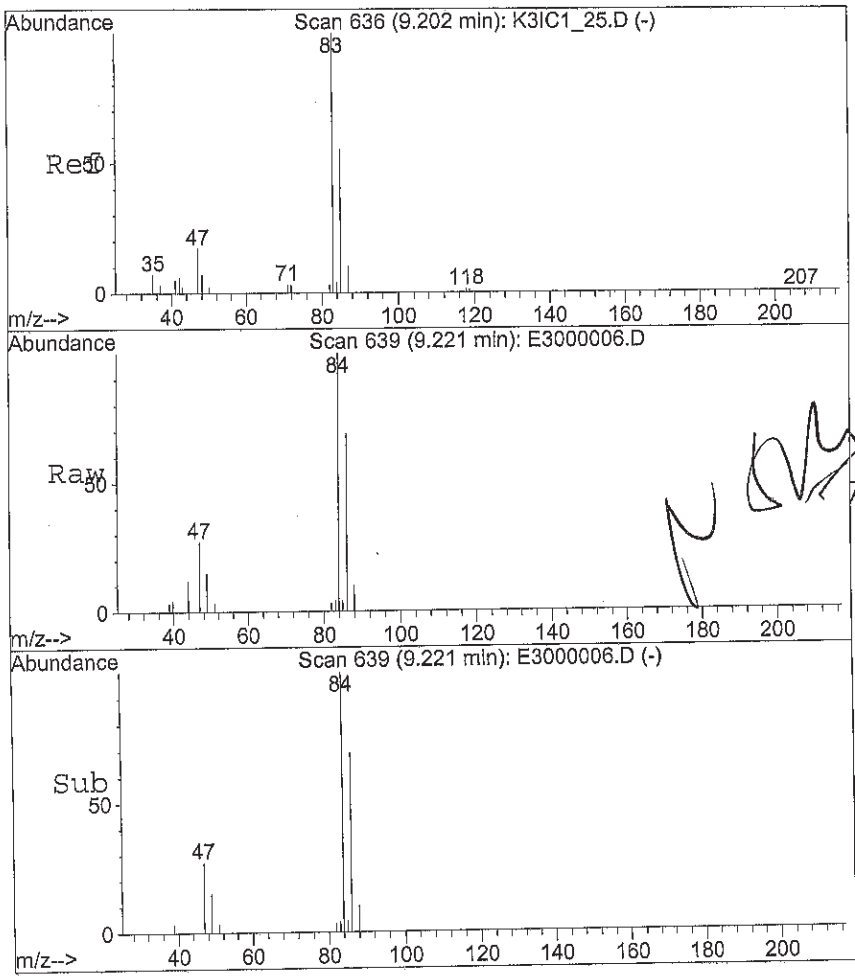


#15
(TBA) tert-Butanol
Concen: 3.39 ug/L
RT: 6.91 min Scan# 365
Delta R.T. -0.21 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 59 Resp: 840

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

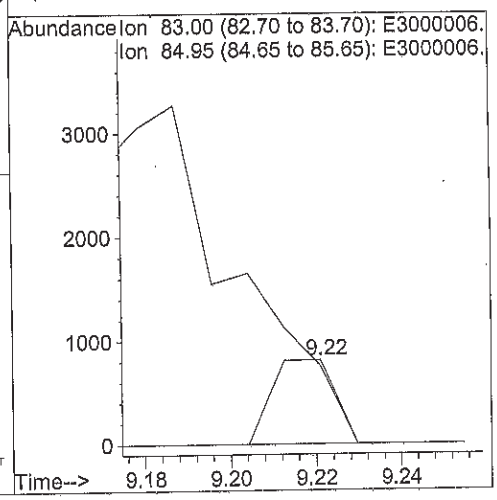


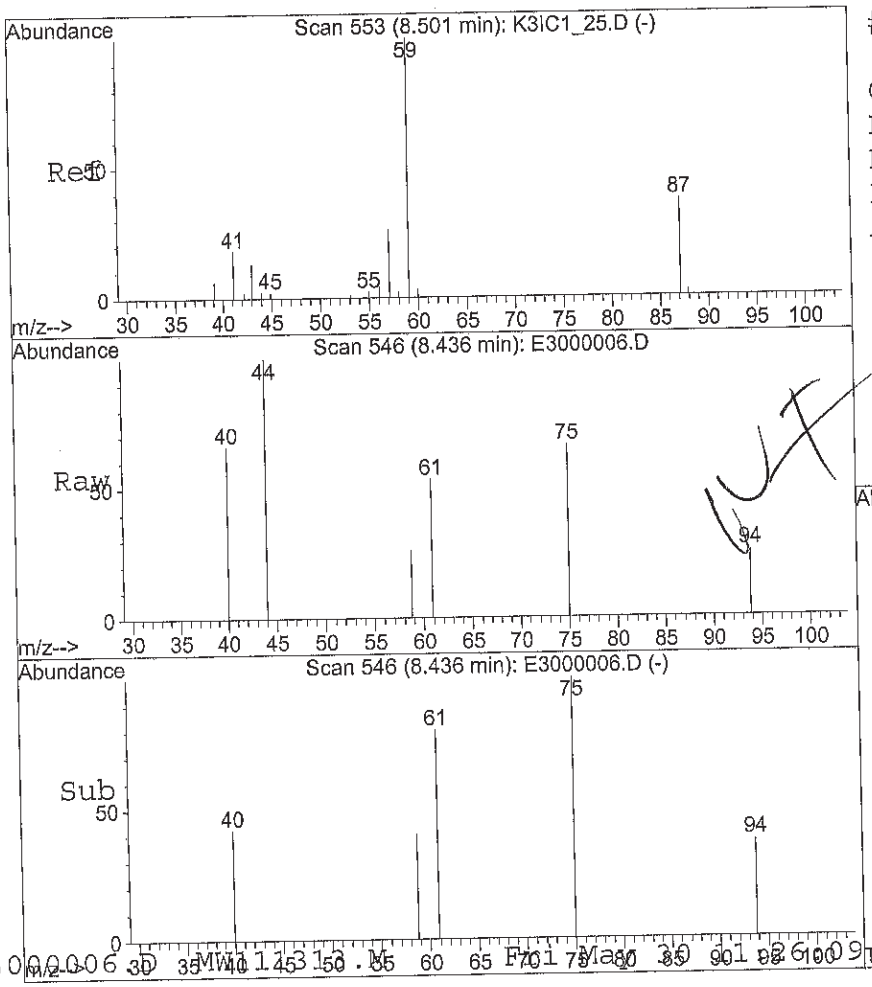


#24
Chloroform
Concen: 0.11 ug/L
RT: 9.22 min Scan# 639
Delta R.T. 0.02 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 83 Resp: 819

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

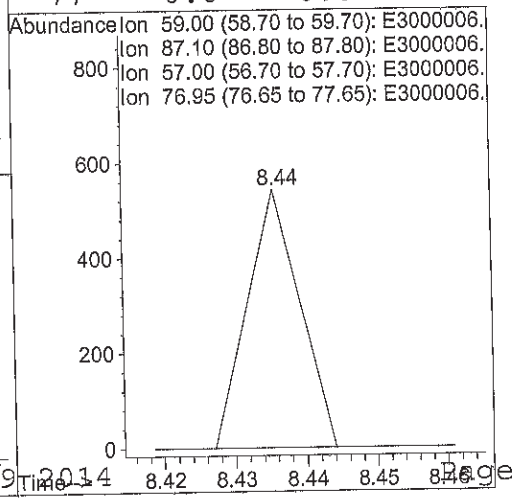


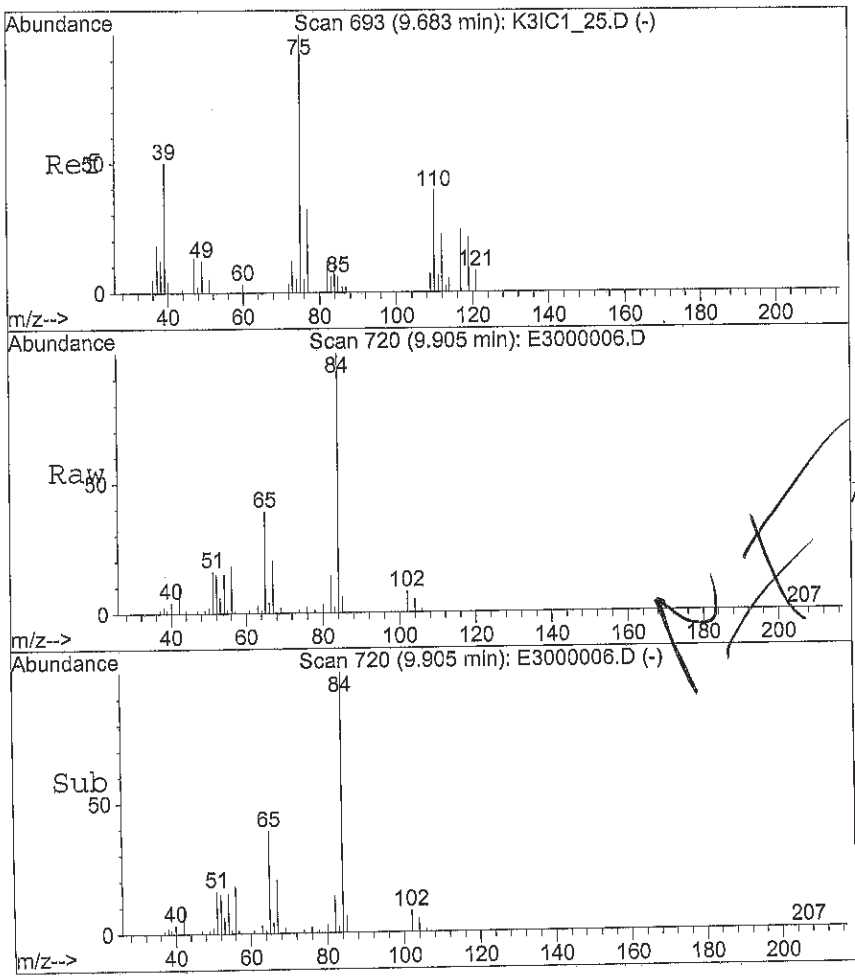


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.44 min Scan# 546
Delta R.T. -0.07 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 59 Resp: 275

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

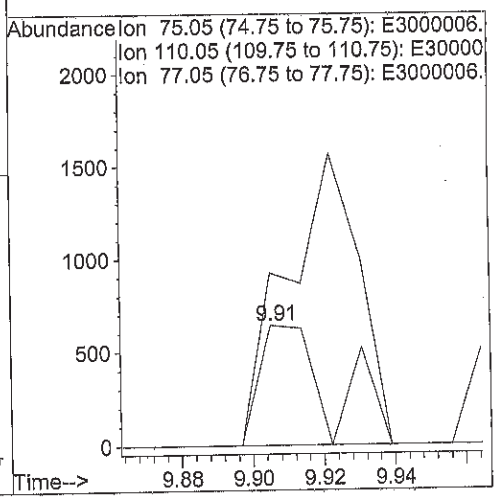


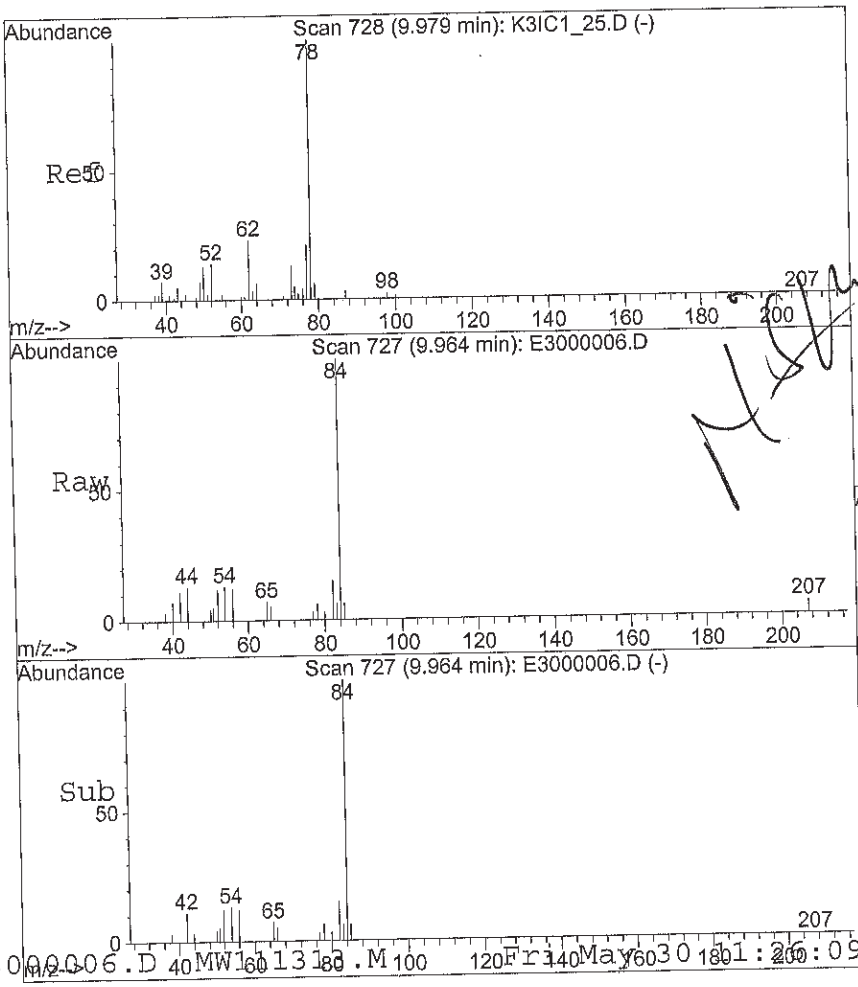


#29
1,1-Dichloropropene
Concen: 0.16 ug/L
RT: 9.91 min Scan# 720
Delta R.T. 0.22 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 75 Resp: 902

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	244.0	25.0	37.4#

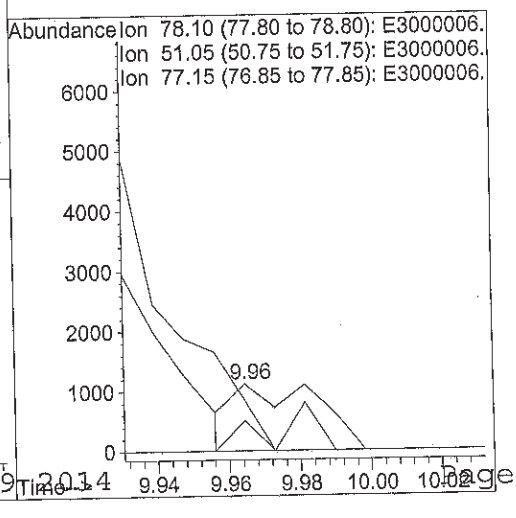


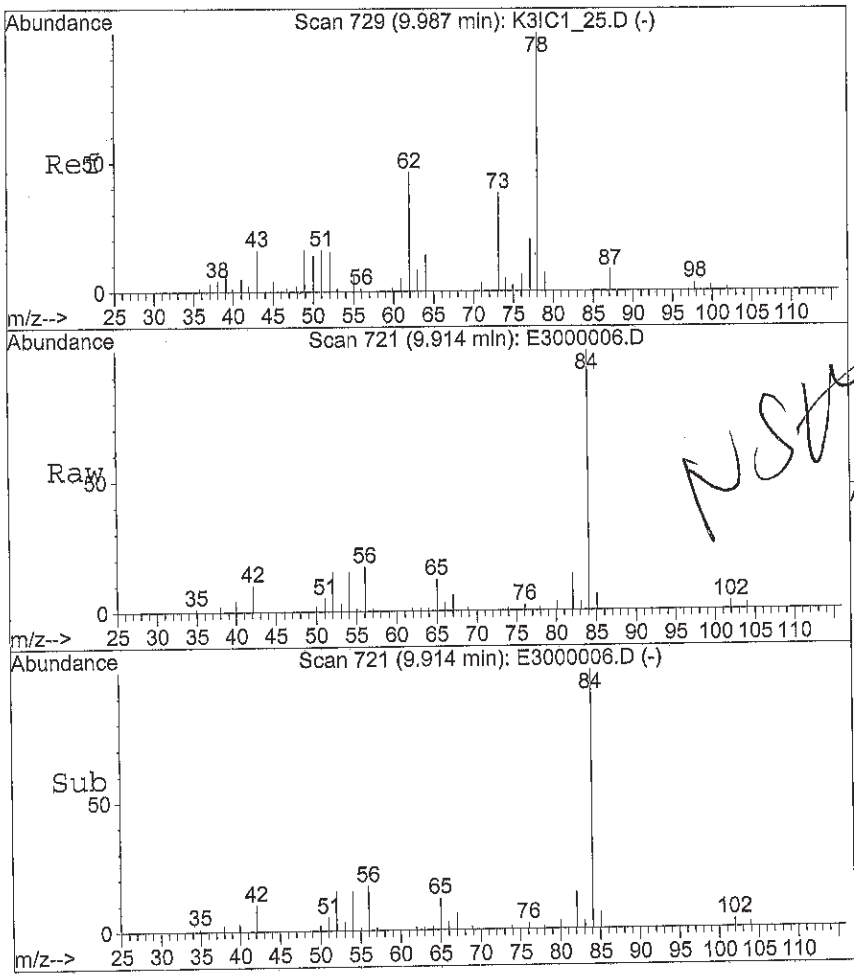


#31
Benzene
Concen: 0.13 ug/L
RT: 9.96 min Scan# 727
Delta R.T. -0.01 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 78 Resp: 1802

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	14.2	16.6	24.8#

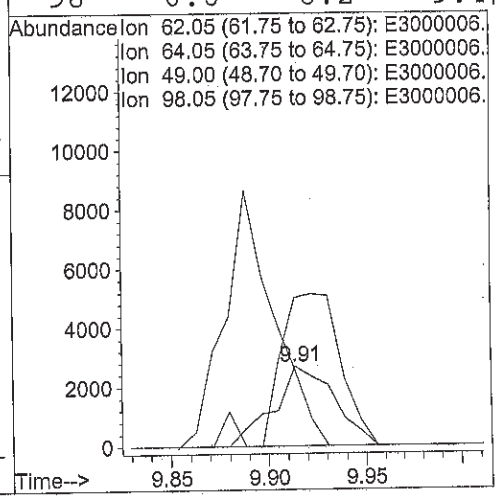


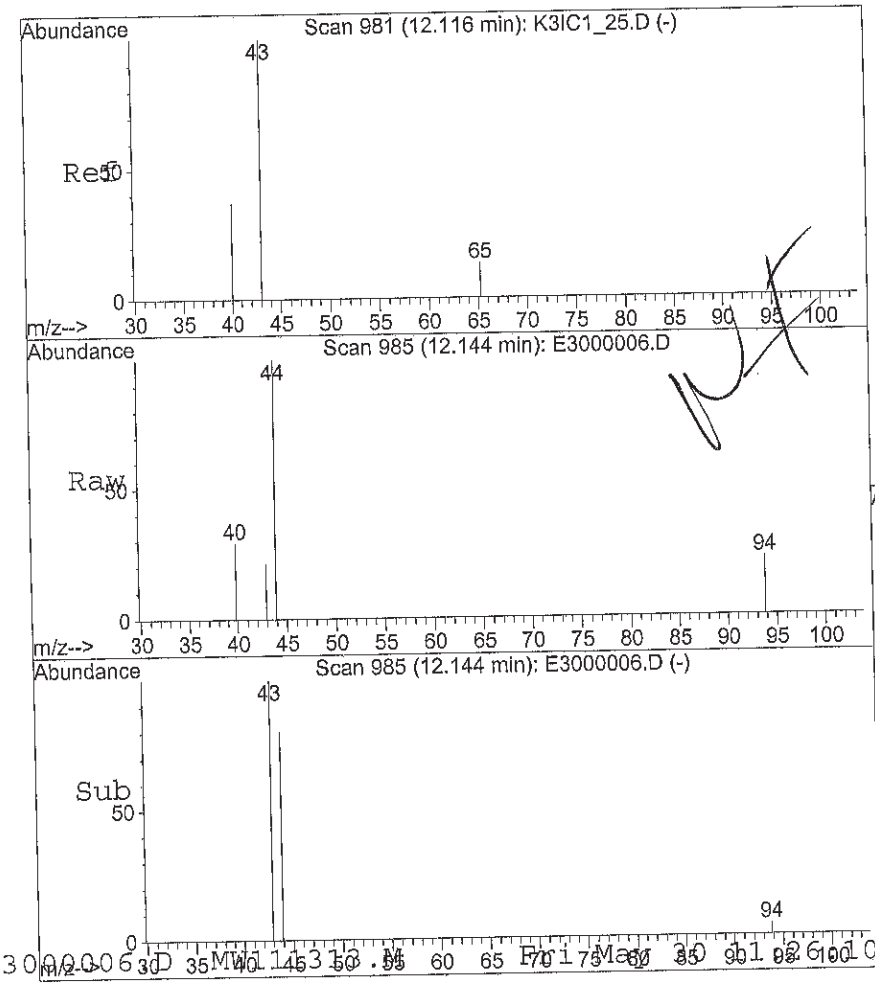


#32
1,2-Dichloroethane
Concen: 1.19 ug/L
RT: 9.91 min Scan# 721
Delta R.T. -0.07 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 62 Resp: 5761

Ion	Ratio	Lower	Upper
62	100		
64	196.3	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

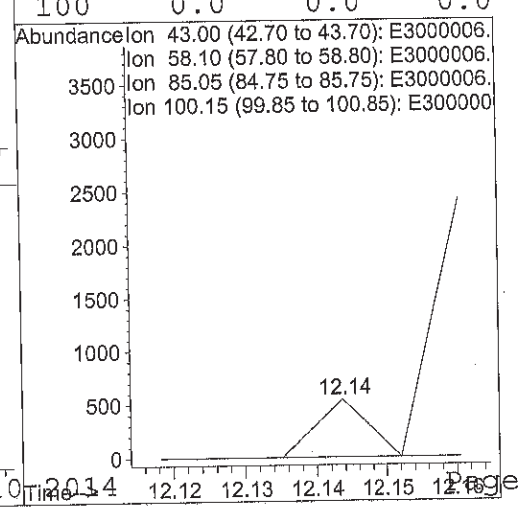


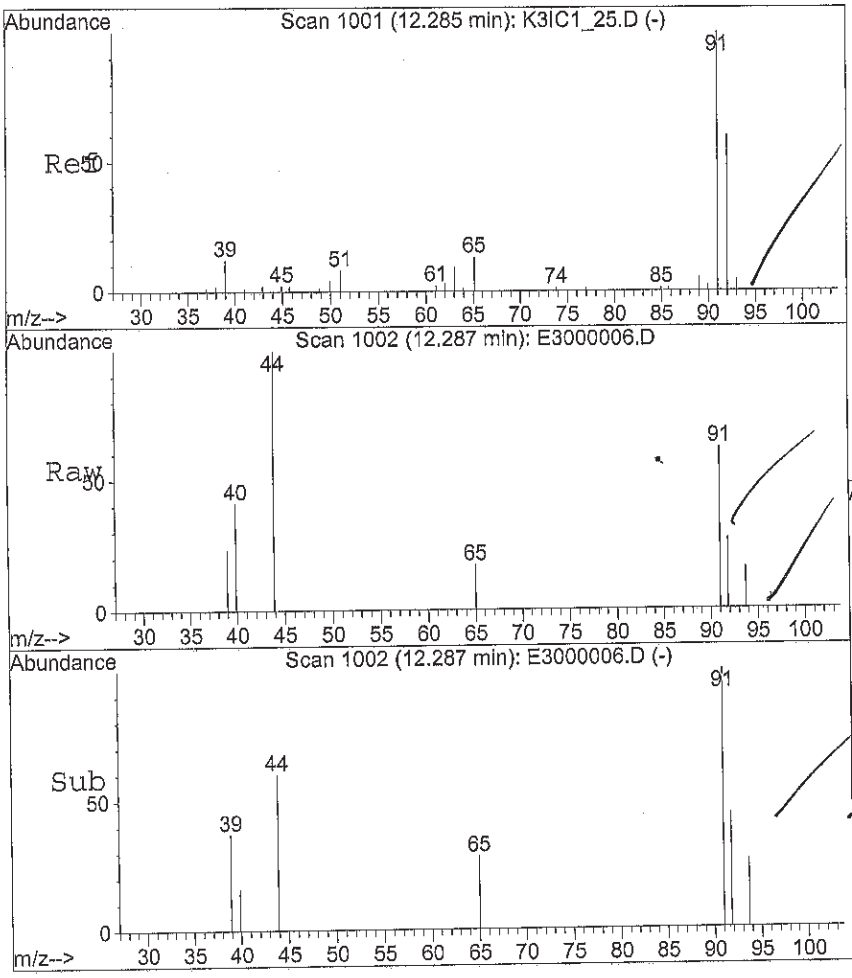


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.11 ug/L
RT: 12.14 min Scan# 985
Delta R.T. 0.03 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 43 Resp: 273

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

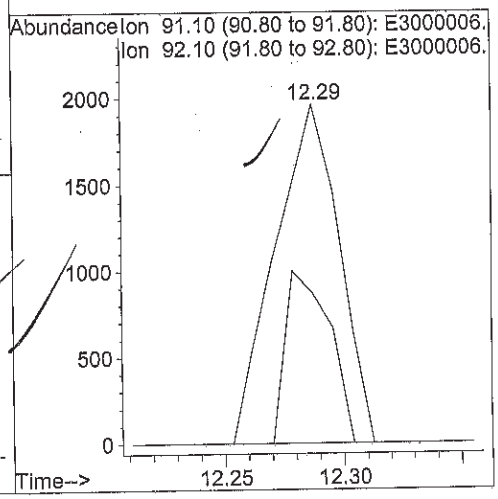


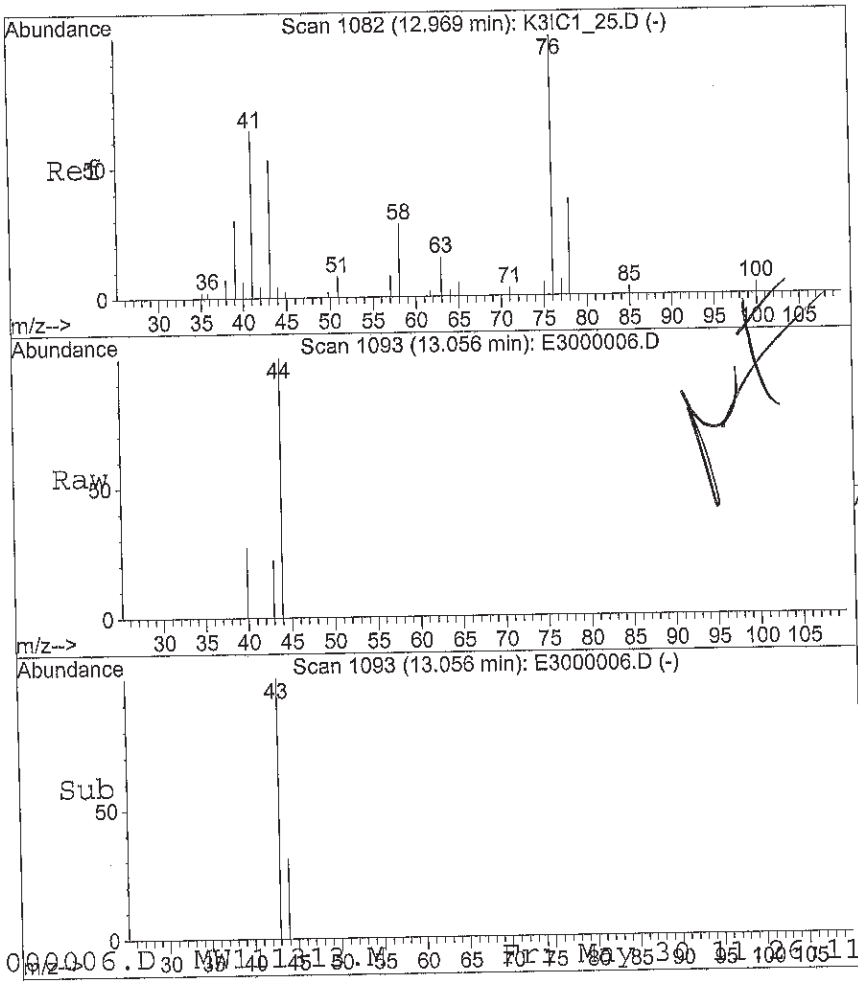


#41
Toluene
Concen: 0.22 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 91 Resp: 3643

Ion	Ratio	Lower	Upper
91	100		
92	35.2	47.4	71.0#

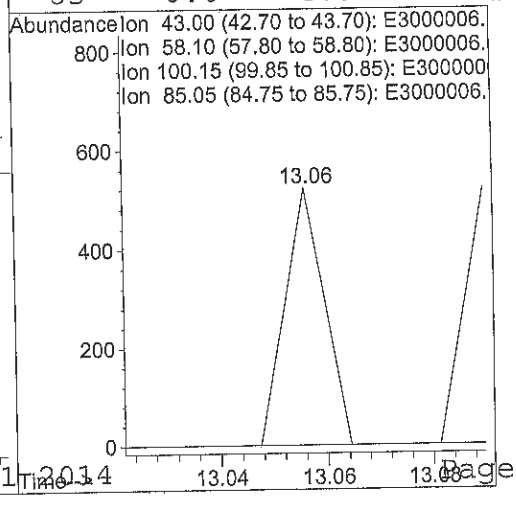


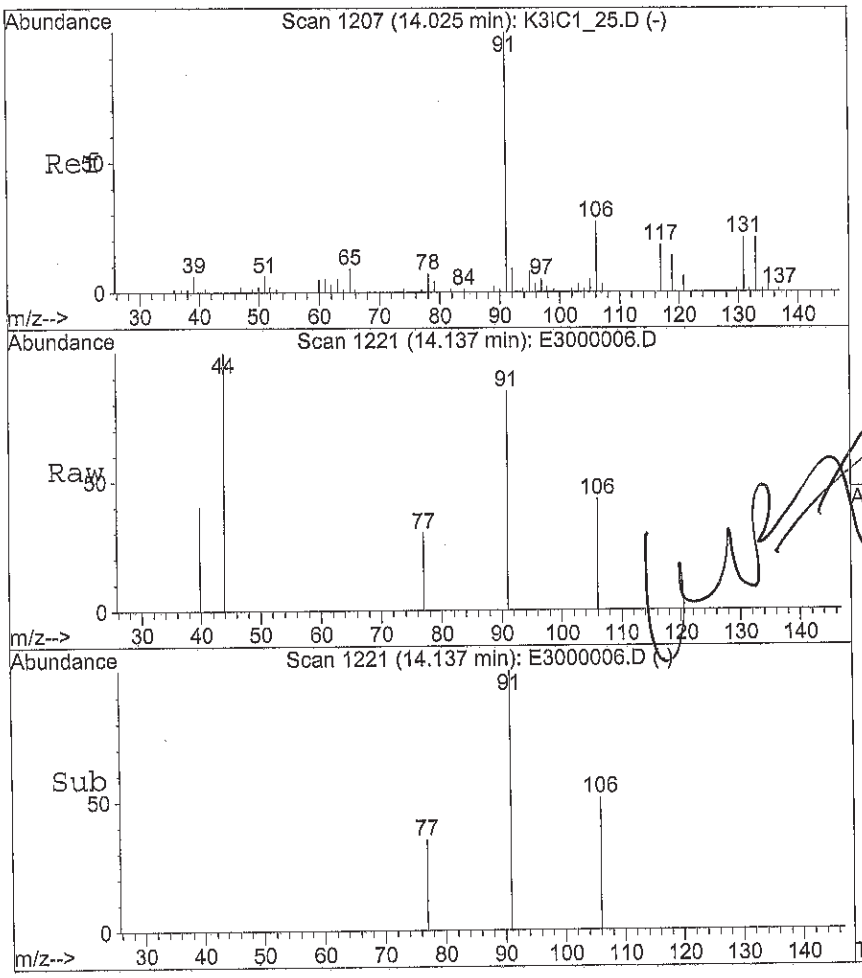


#46
2-Hexanone
Concen: 0.10 ug/L
RT: 13.06 min Scan# 1093
Delta R.T. 0.09 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 43 Resp: 265

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

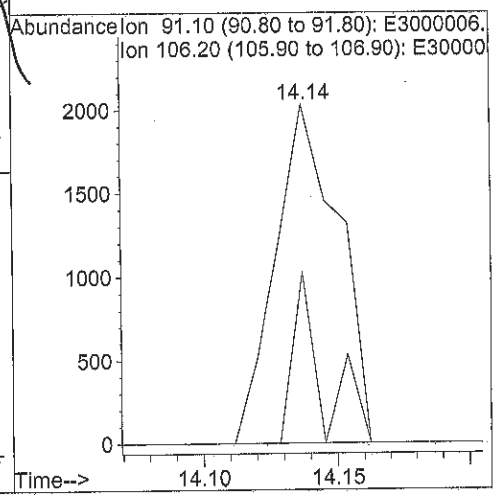


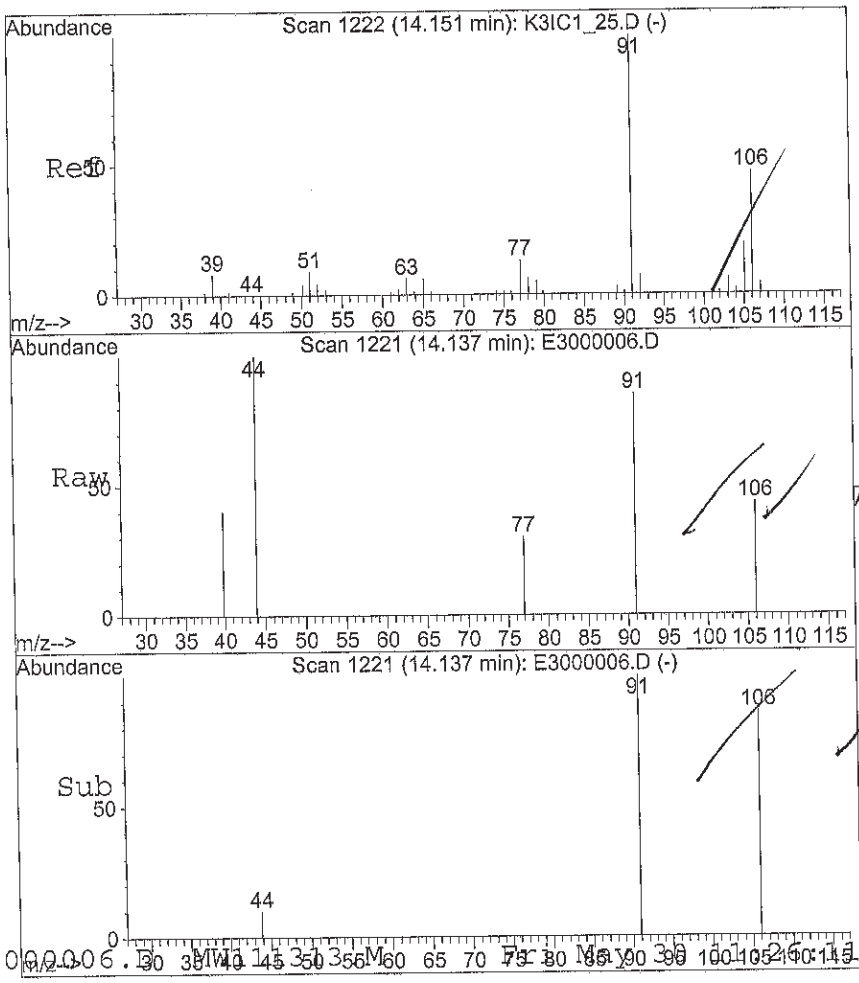


#51
Ethylbenzene
Concen: 0.18 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. 0.11 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 91 Resp: 3316

Ion	Ratio	Lower	Upper
91	100		
106	23.9	23.5	35.3

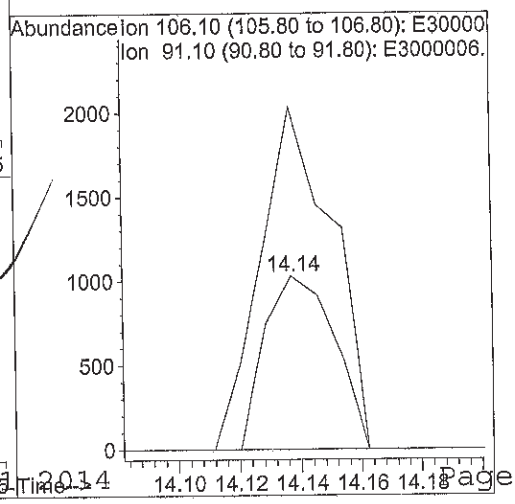


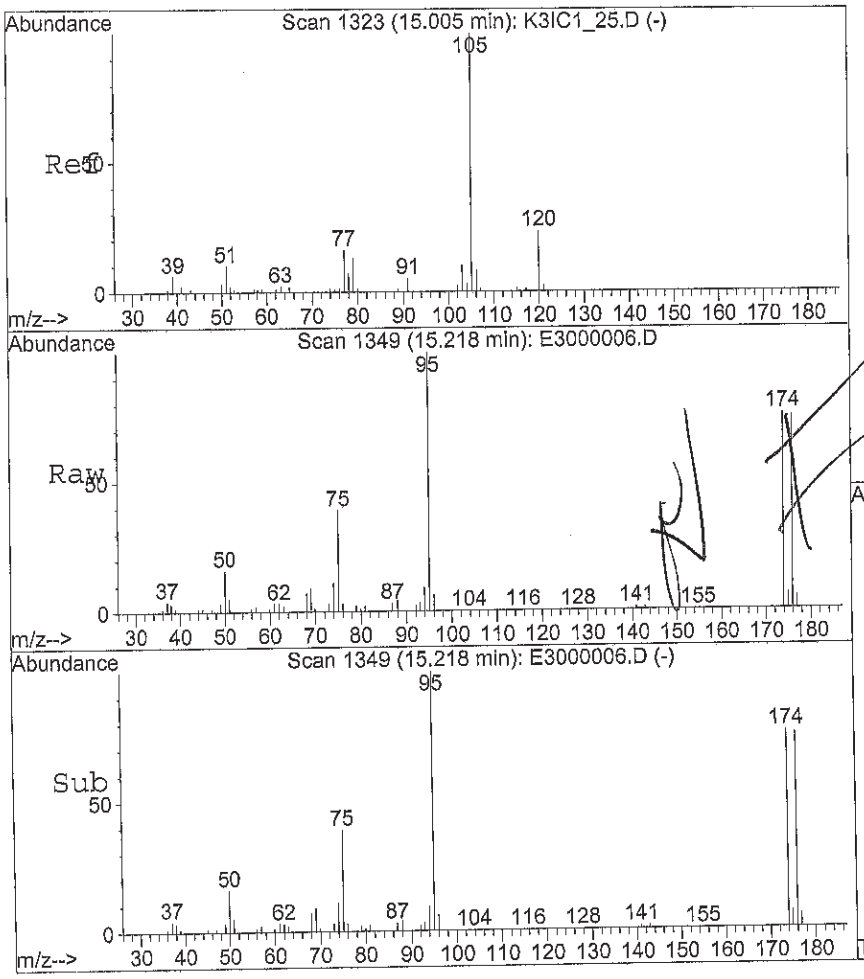


#52
m,p-Xylenes
Concen: 0.24 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion:106 Resp: 1630

Ion	Ratio	Lower	Upper
106	100		
91	203.4	177.1	265.7

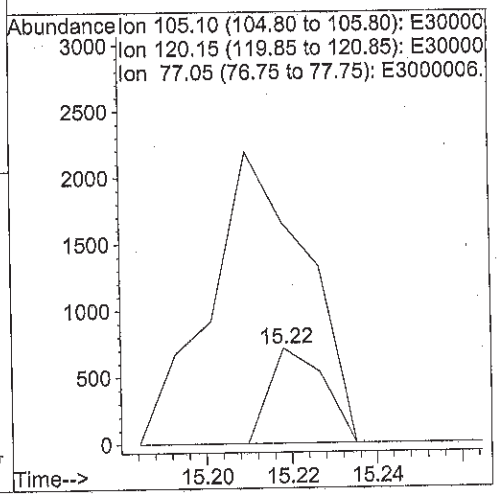


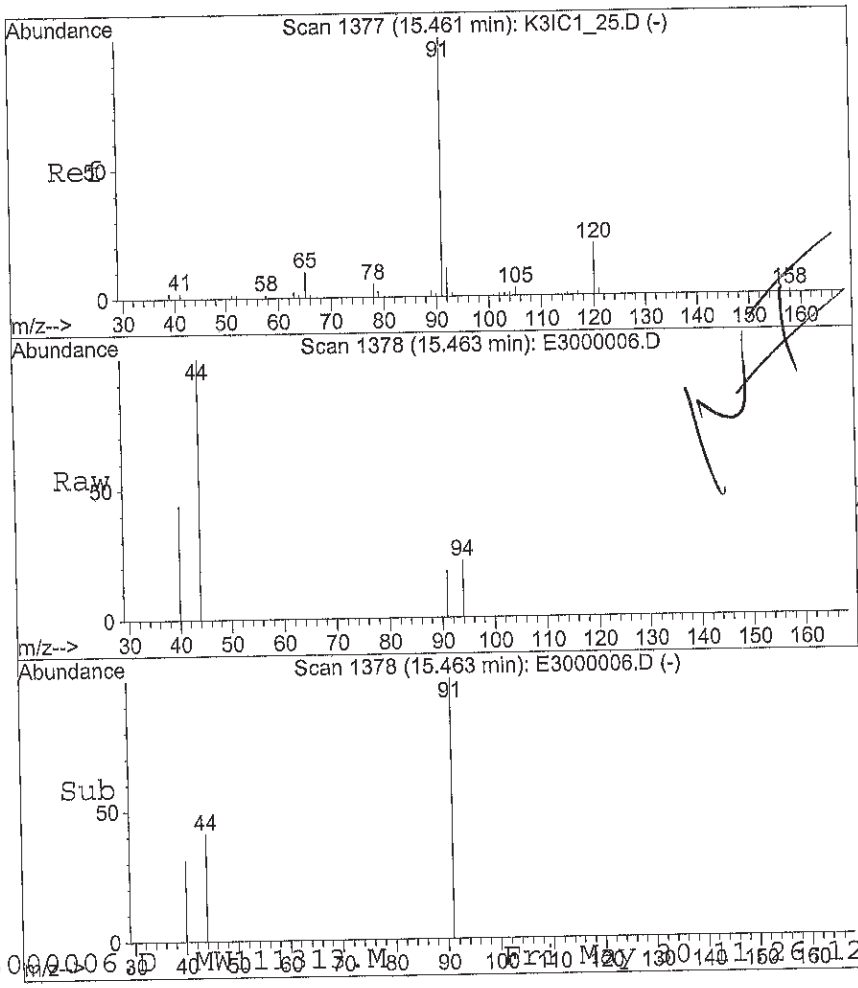


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion:105 Resp: 628

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	545.7	13.1	19.7#

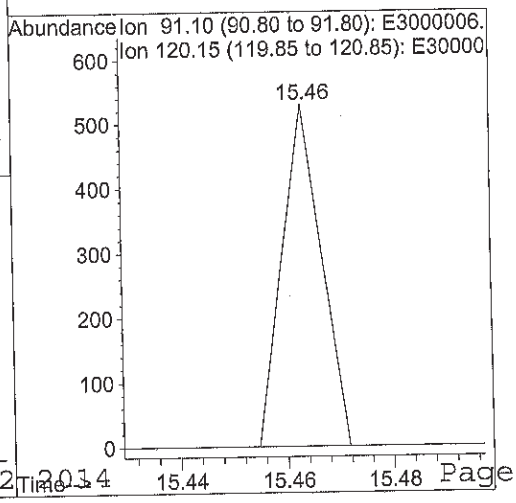


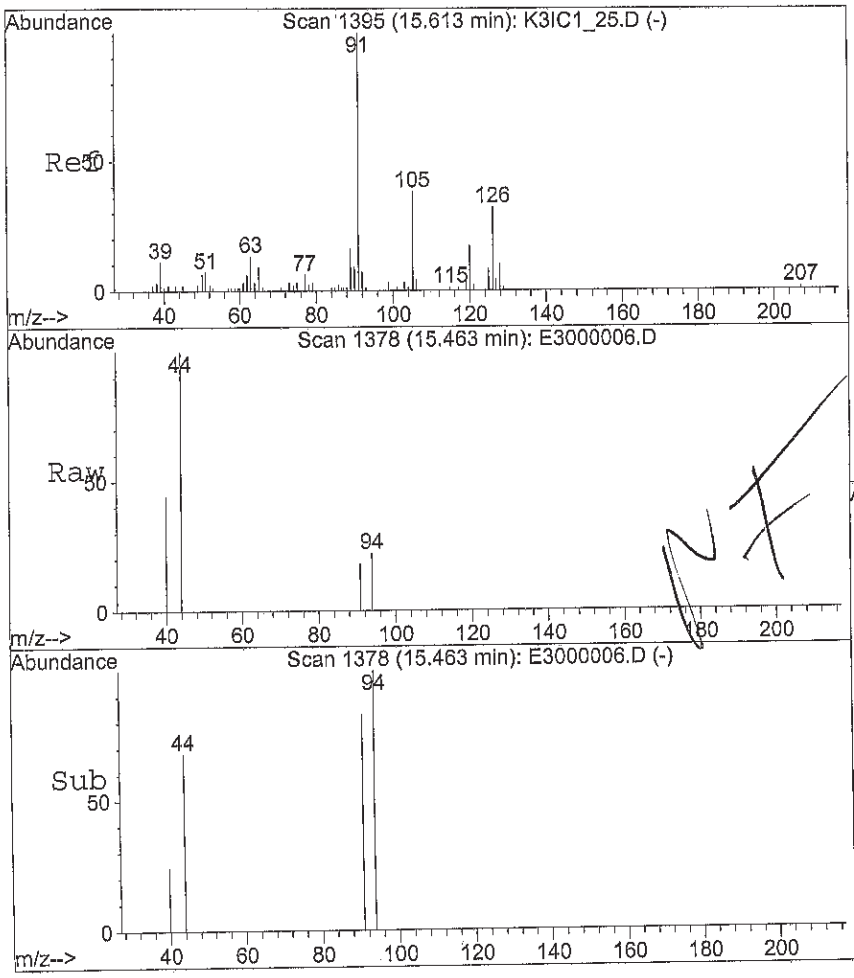


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 91 Resp: 268

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

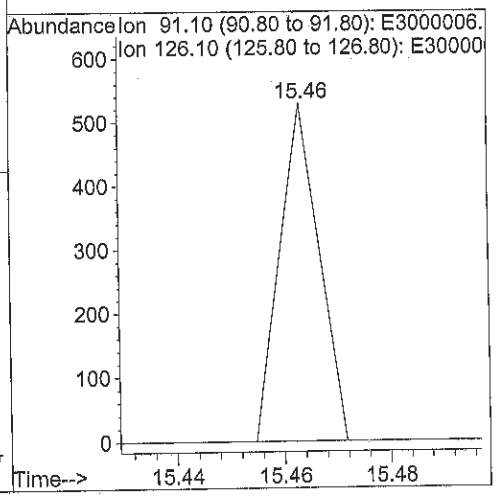


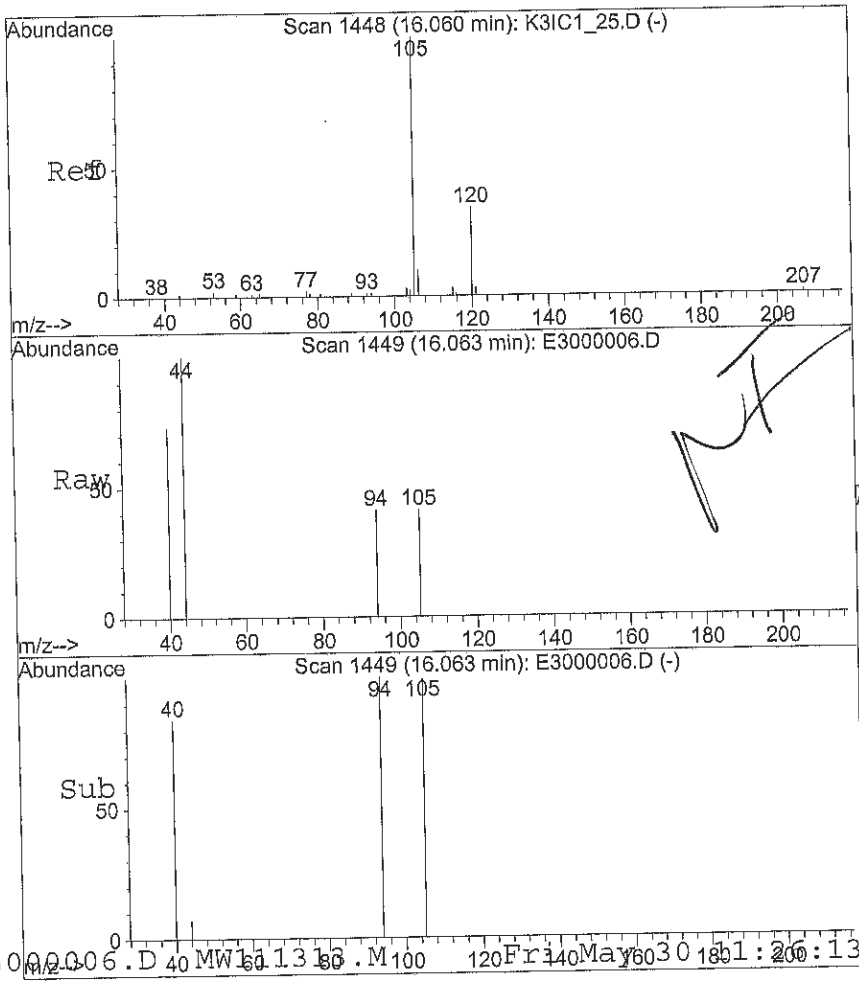


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. -0.15 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion: 91 Resp: 268

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

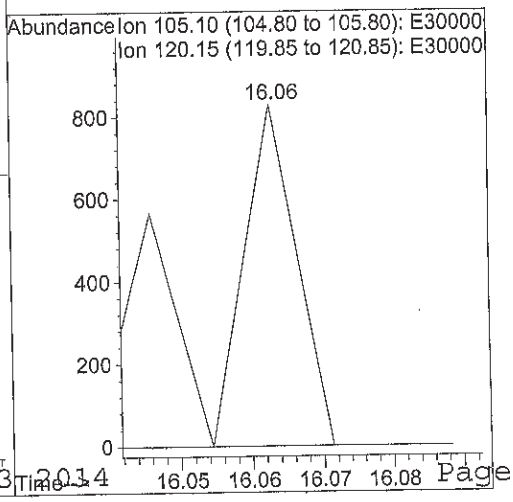


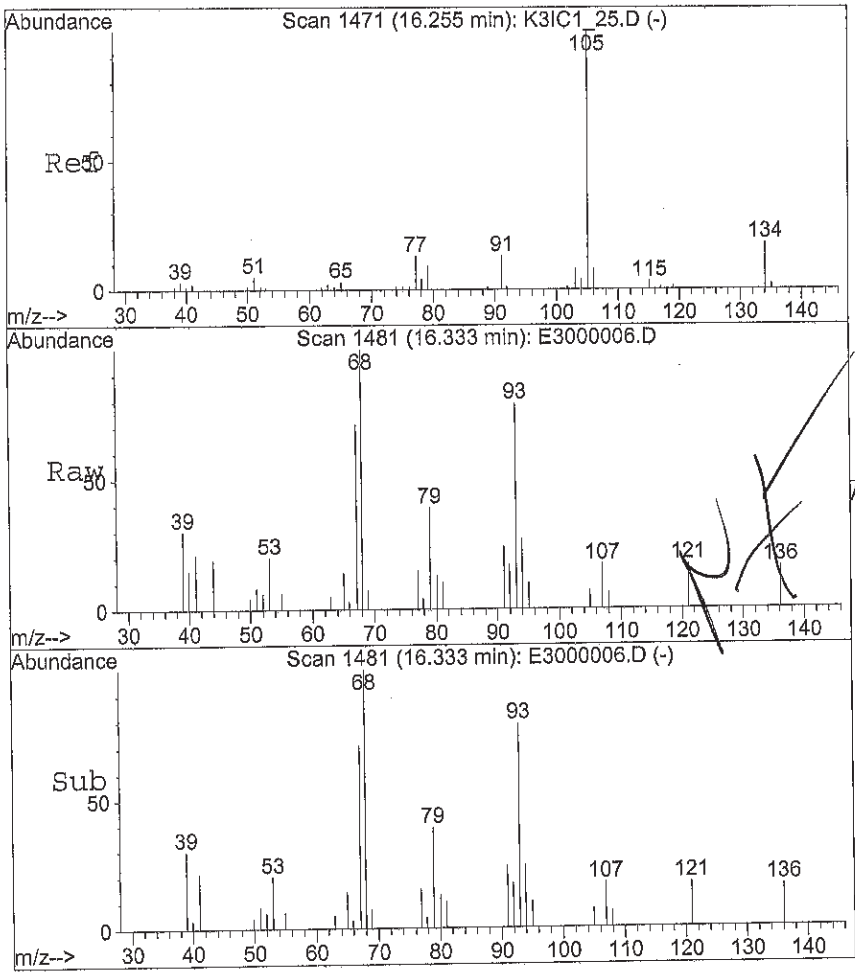


#67
1,2,4-Trimethylbenzene
Concen: 0.02 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion:105 Resp: 420

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

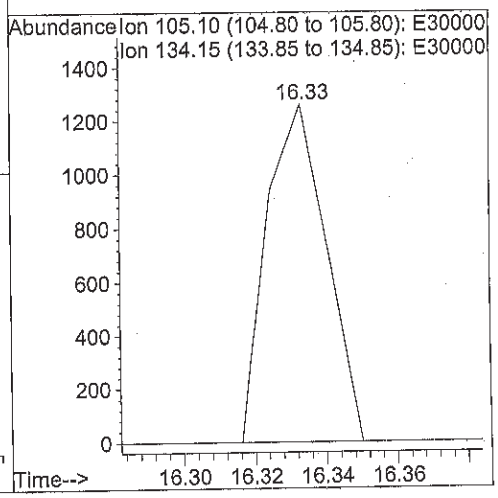


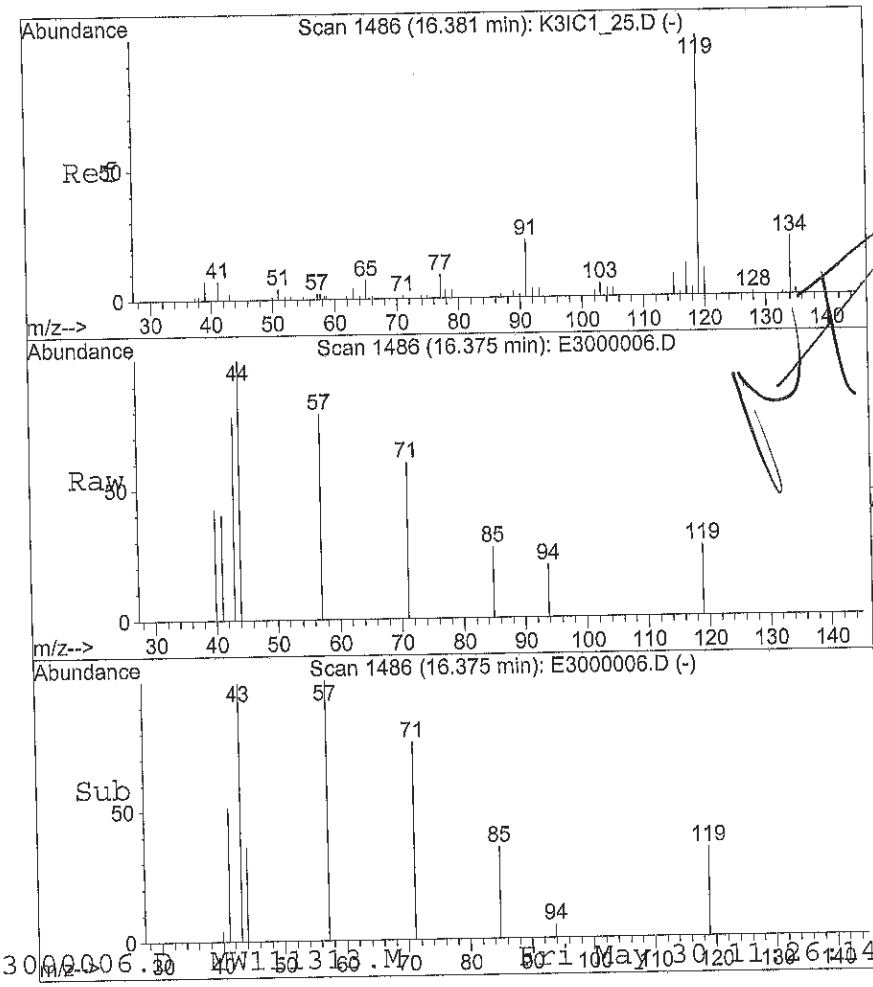


#68
sec-Butylbenzene
Concen: 0.06 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion:105 Resp: 1452

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

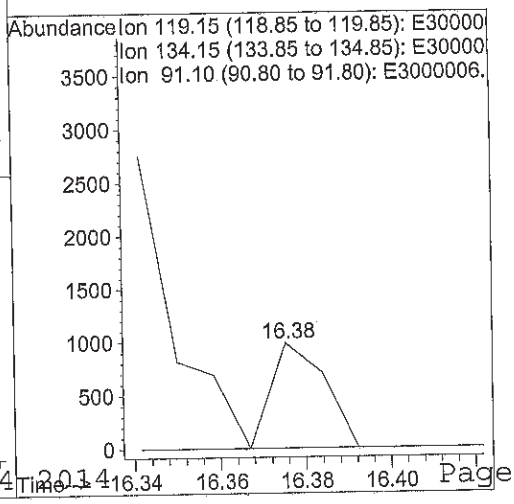




#69
p-Isopropyltoluene
Concen: 0.05 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E3000006.D
Acq: 30 May 2014 10:57 am

Tgt Ion:119 Resp: 855

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000006.D Vial: 5
Acq On : 30 May 2014 10:57 am Operator: DN
Sample : 3E43001-05 Inst : GC/MS Ins
Misc : 100cc SVL-546-SA5D-SV-16.0-17.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 11:23 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1452575	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1211623	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	685597	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	427901	11.33 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.64%		
3) Chloroform-d (SU6)	9.18	84	682972	12.60 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.80%		
4) Methylene Chloride-d2 (SU5	7.06	86	395667	12.49 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 99.92%		
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	418781	16.22 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 129.76%#		
6) Benzene-d6 (SU7)	9.92	84	1311107	11.50 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.00%		
8) Toluene-d8 (SU3)	12.20	98	1334547	11.61 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.88%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	692829	14.60 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 116.80%		

Target Compounds Qvalue

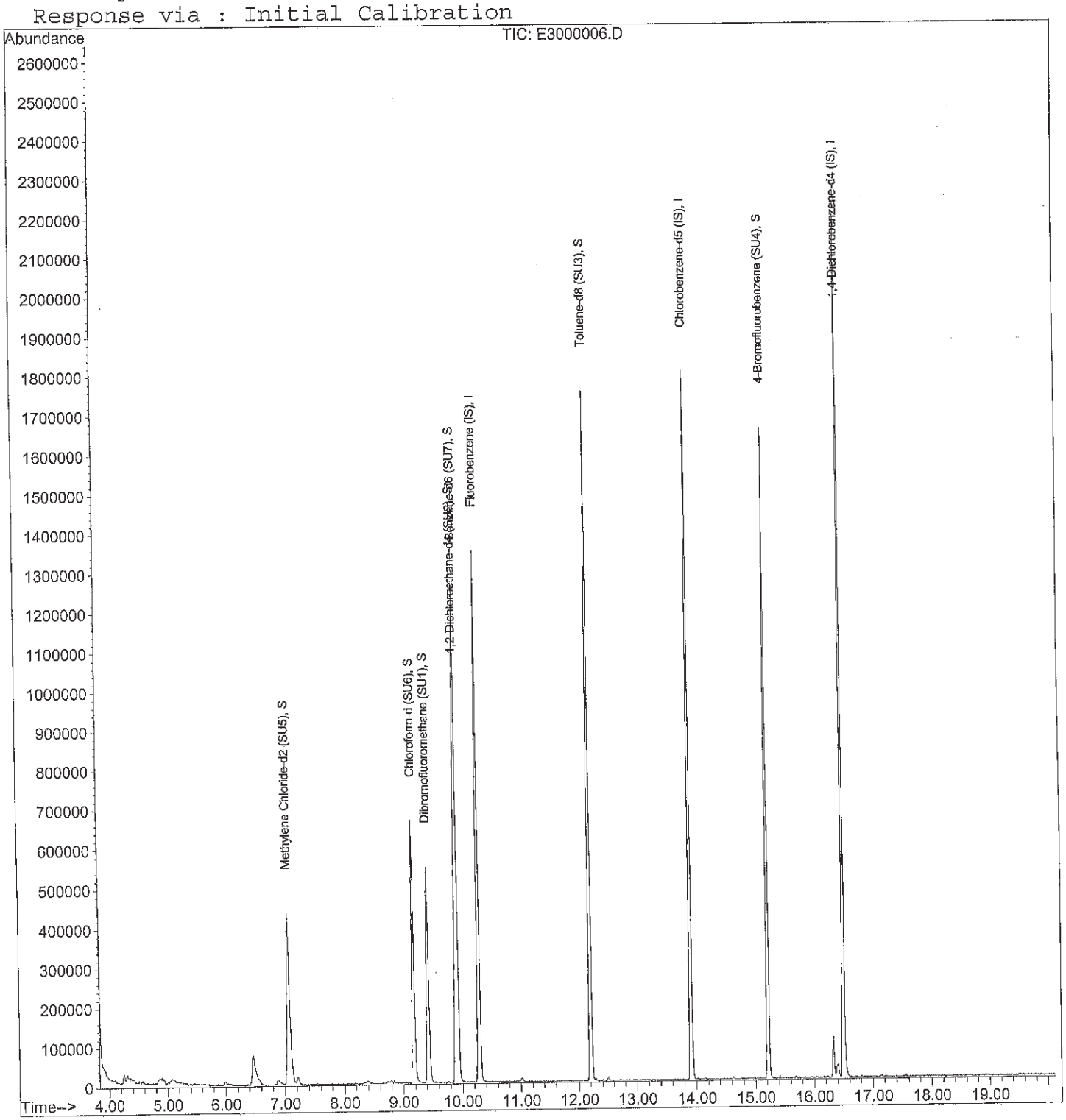
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000006.D
Acq On : 30 May 2014 10:57 am
Sample : 3E43001-05
Misc : 100cc SVL-546-SA5D-SV-16.0-17.0
MS Integration Params: rteint.p
Quant Time: May 30 11:23 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000007.D
Acq On : 30 May 2014 11:29 am
Sample : 3E43001-06
Misc : 100cc SVL-550-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 12:03 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1576971	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1289023	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	706098	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	450027	11.44 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	91.52%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	421759	11.28 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.24%	
39) Toluene-d8 (SU3)	12.20	98	1414113	11.76 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	94.08%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	719694	13.65 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	109.20%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.07	85	275	0.07 ug/L #	44
4) Chloromethane	4.38	50	649	-0.98 ug/L #	41
6) Bromomethane	5.08	96	5199	1.22 ug/L #	76
7) Chloroethane	5.18	64	741	1.25 ug/L	88
11) Acetone	6.46	58	6115	5.06 ug/L	90
12) (IPA) Leak Check Compound	6.47	45	194125	1024.43 ug/L #	83
13) Carbon disulfide	6.84	76	2078	0.16 ug/L #	76
14) Methylene Chloride	7.06	84	6428	1.48 ug/L #	1
15) (TBA) tert-Butanol	6.89	59	2382	8.86 ug/L #	77
24) Chloroform	9.20	83	750	0.09 ug/L #	1
25) (ETBE) 2-ethoxy 2-methyl p	8.32	59	1120	0.10 ug/L #	44
29) 1,1-Dichloropropene	9.92	75	653	0.11 ug/L #	1
31) Benzene	9.93	78	10112	0.68 ug/L #	78
32) 1,2-Dichloroethane	9.93	62	6579	1.25 ug/L #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	7205	2.80 ug/L #	100
41) Toluene	12.28	91	3473	0.20 ug/L	85
46) 2-Hexanone	12.92	43	2767	0.98 ug/L #	37
51) Ethylbenzene	14.02	91	2618	0.13 ug/L	45
52) m,p-Xylenes	14.13	106	2707	0.38 ug/L	88
53) o-Xylene	14.62	106	294	0.04 ug/L #	1
54) Styrene	14.62	104	1794	-0.70 ug/L #	64
56) Isopropylbenzene	15.00	105	265	0.01 ug/L #	55

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000007.D
Acq On : 30 May 2014 11:29 am
Sample : 3E43001-06
Misc : 100cc SVL-550-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 12:03 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

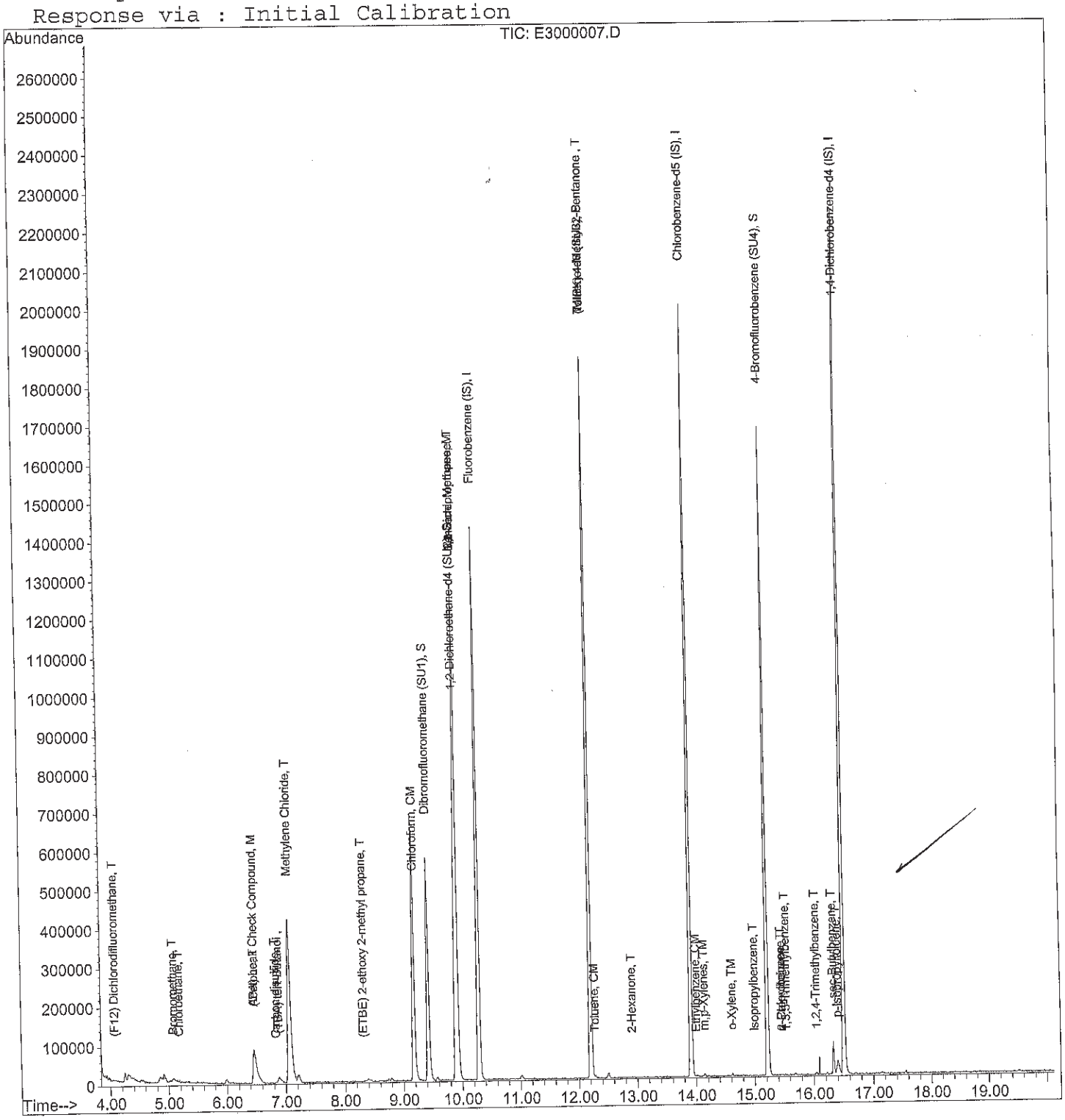
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
62) n-Propylbenzene	15.45	91	731	0.03	~~ug/L~~	#	56
63) 2-Chlorotoluene	15.45	91	731	0.04	~~ug/L~~	#	45
64) 1,3,5-Trimethylbenzene	15.54	105	814	0.05	~~ug/L~~	#	31
67) 1,2,4-Trimethylbenzene	16.05	105	1564	0.09	~~ug/L~~	#	33
68) sec-Butylbenzene	16.33	105	775	0.03	~~ug/L~~	#	62
69) p-Isopropyltoluene	16.39	119	801	0.04	~~ug/L~~	#	65

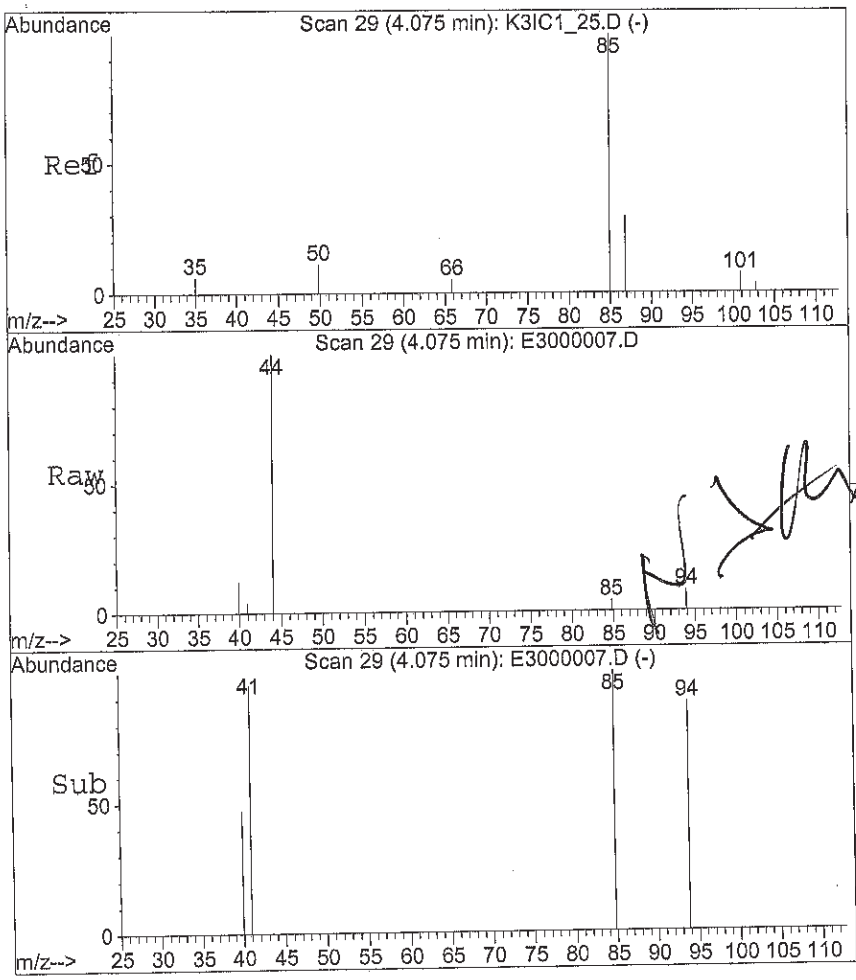
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000007.D Vial: 6
Acq On : 30 May 2014 11:29 am Operator: DN
Sample : 3E43001-06 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 12:03 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

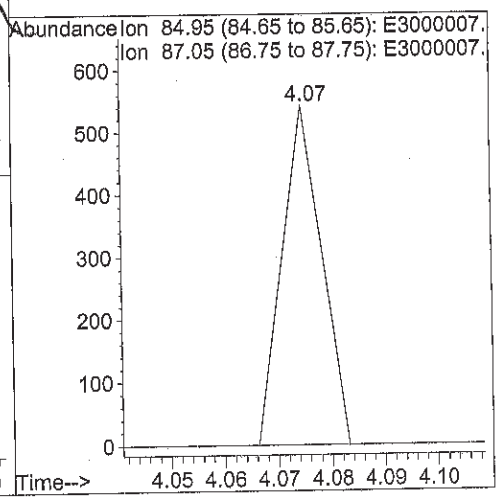


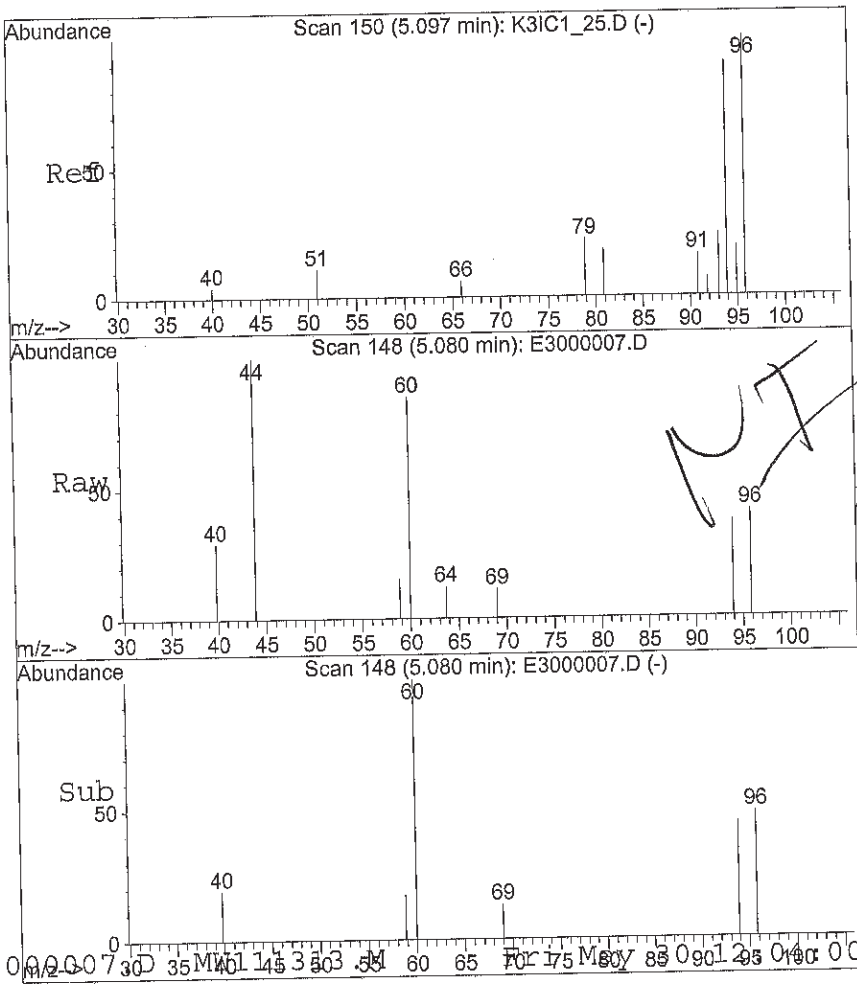


#3
(F12) Dichlorodifluoromethane
Concen: 0.07 ug/L
RT: 4.07 min Scan# 29
Delta R.T. 0.00 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 85 Resp: 275

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

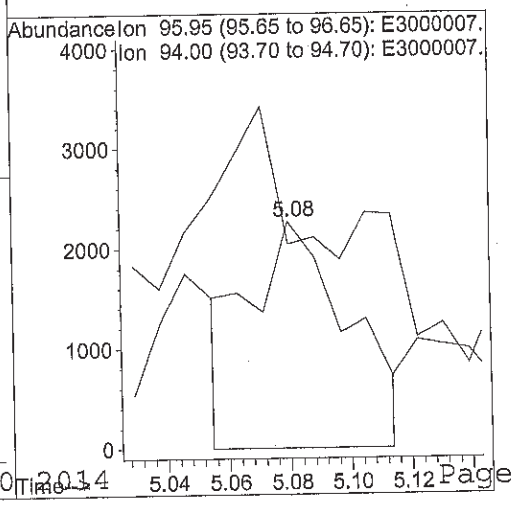


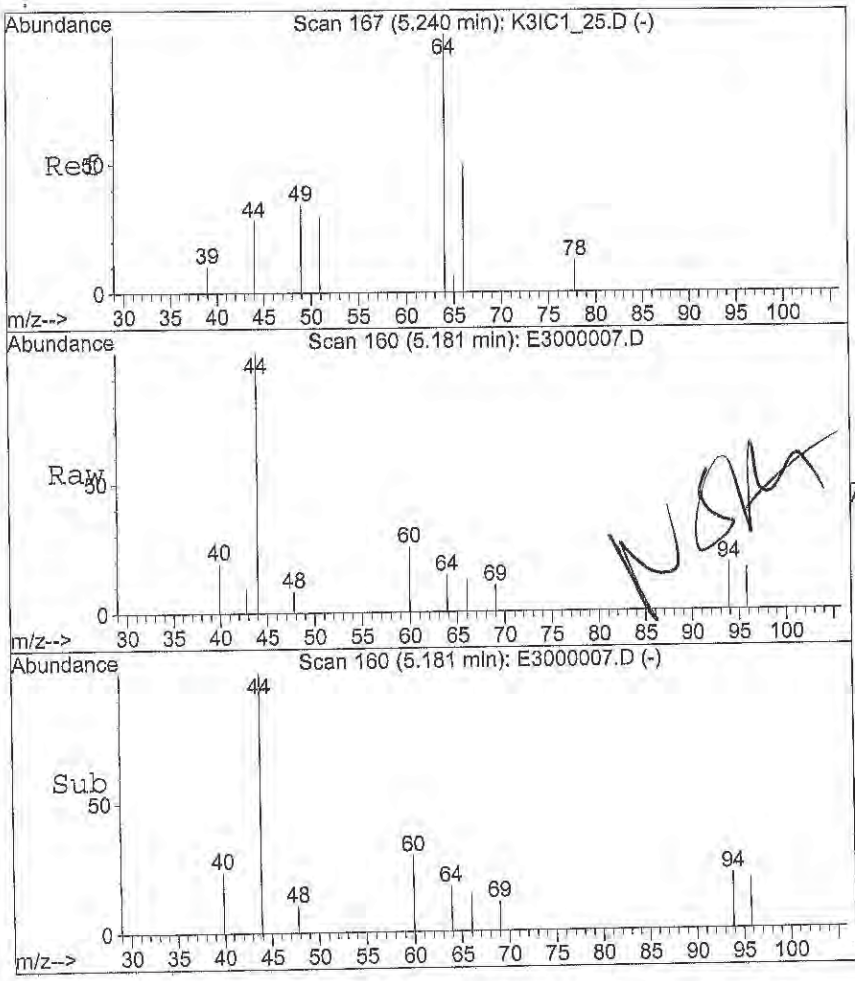


#6
Bromomethane
Concen: 1.22 ug/L
RT: 5.08 min Scan# 148
Delta R.T. -0.02 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 96 Resp: 5199

Ion	Ratio	Lower	Upper
96	100		
94	153.2	101.0	151.4#

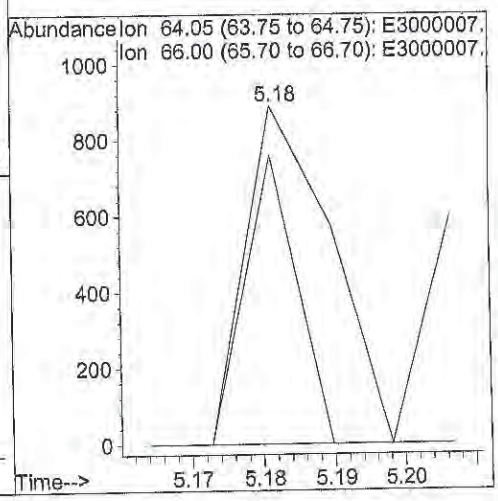


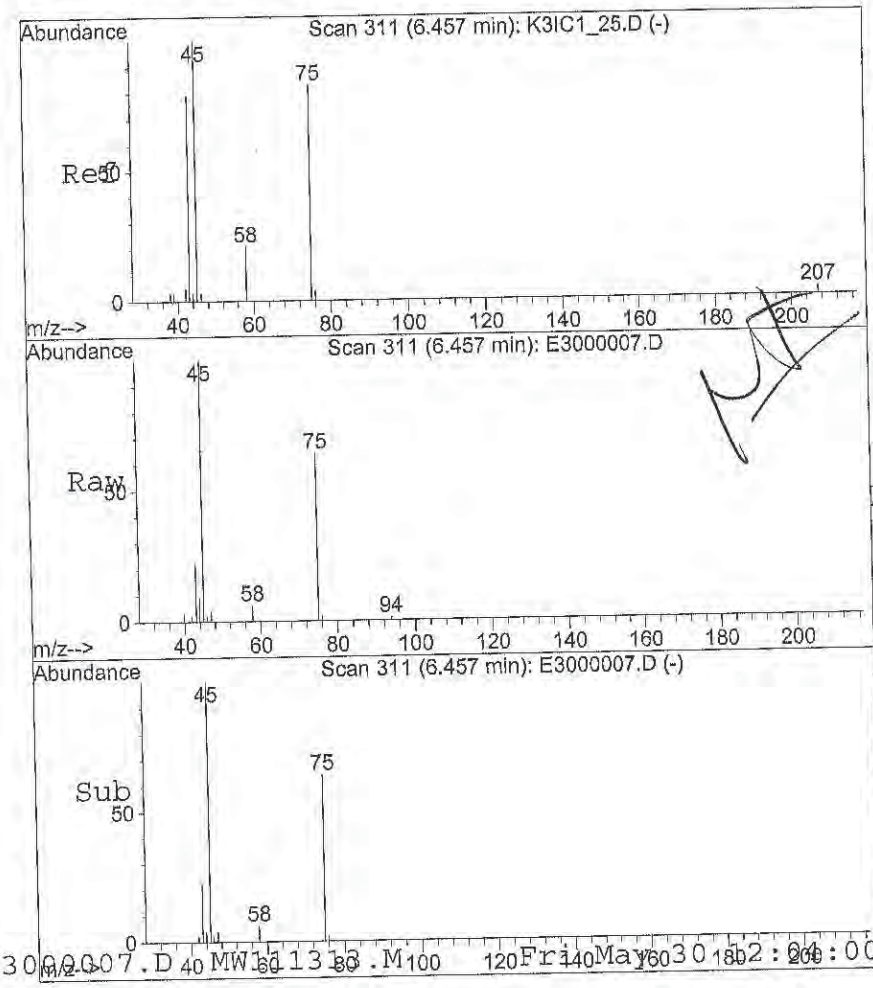


#7
Chloroethane
Concen: 1.25 ug/L
RT: 5.18 min Scan# 160
Delta R.T. -0.06 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 64 Resp: 741

Ion	Ratio	Lower	Upper
64	100		
66	51.8	35.4	53.0

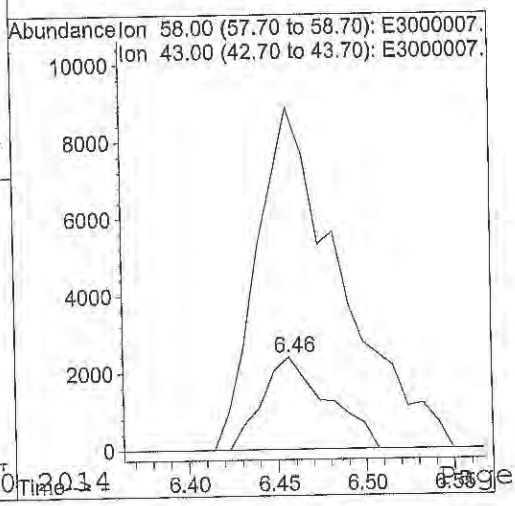


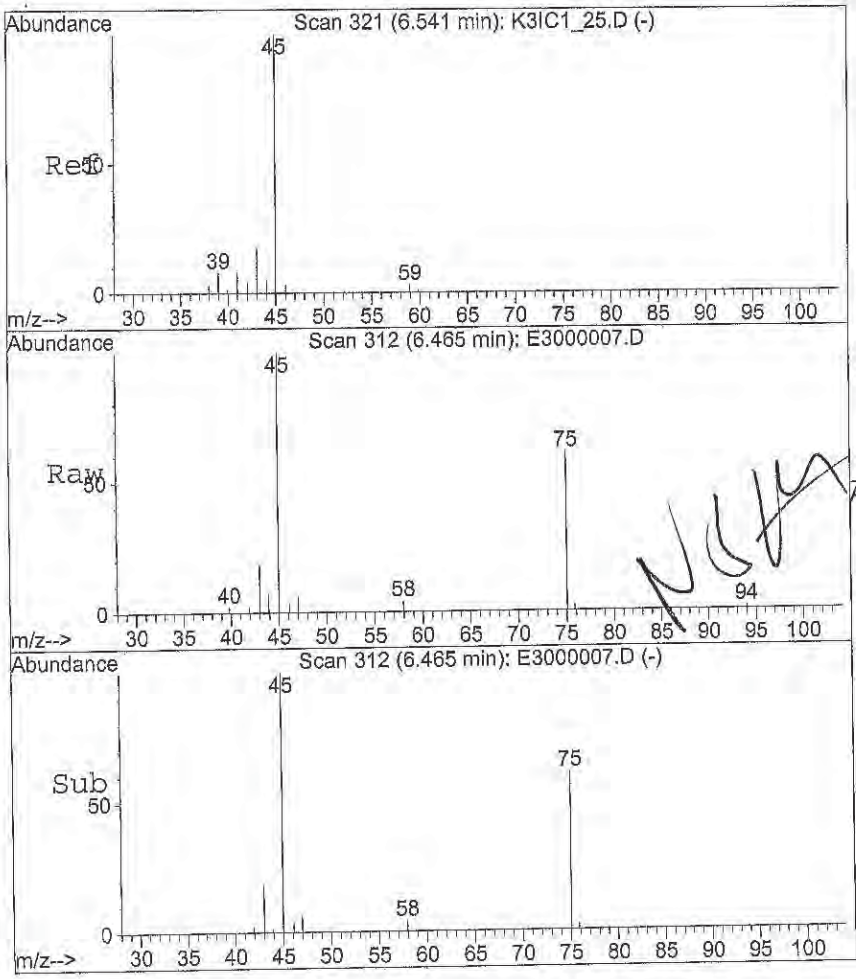


#11
Acetone
Concen: 5.06 ug/L
RT: 6.46 min Scan# 311
Delta R.T. 0.00 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 58 Resp: 6115

Ion	Ratio	Lower	Upper
58	100		
43	477.6	360.9	541.3

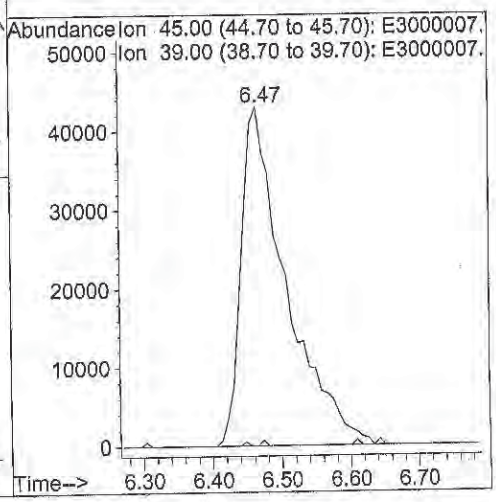


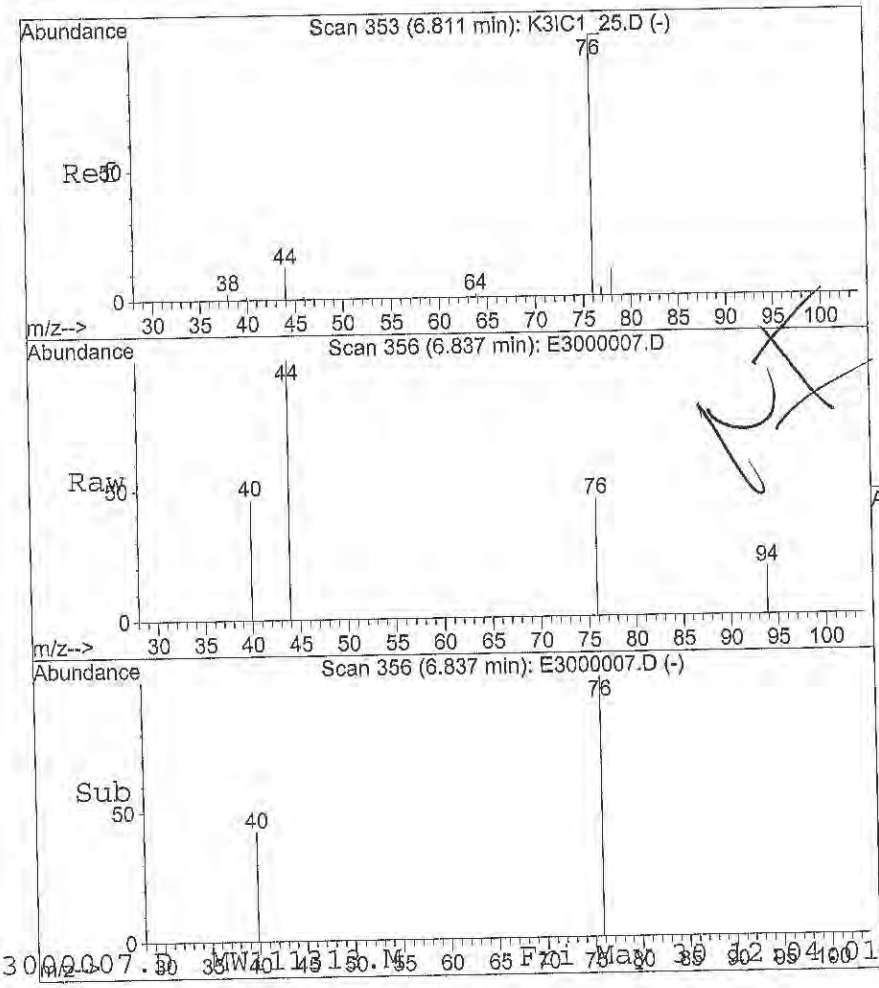


#12
(IPA) Leak Check Compound
Concen: 1024.43 ug/L
RT: 6.47 min Scan# 312
Delta R.T. -0.08 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 45 Resp: 194125

Ion	Ratio	Lower	Upper
45	100		
39	0.2	4.9	7.3#

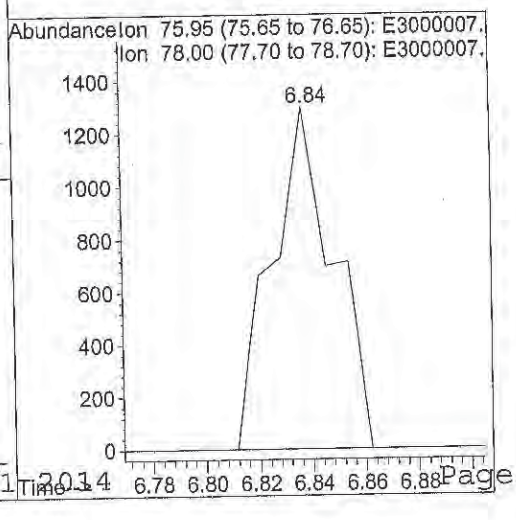


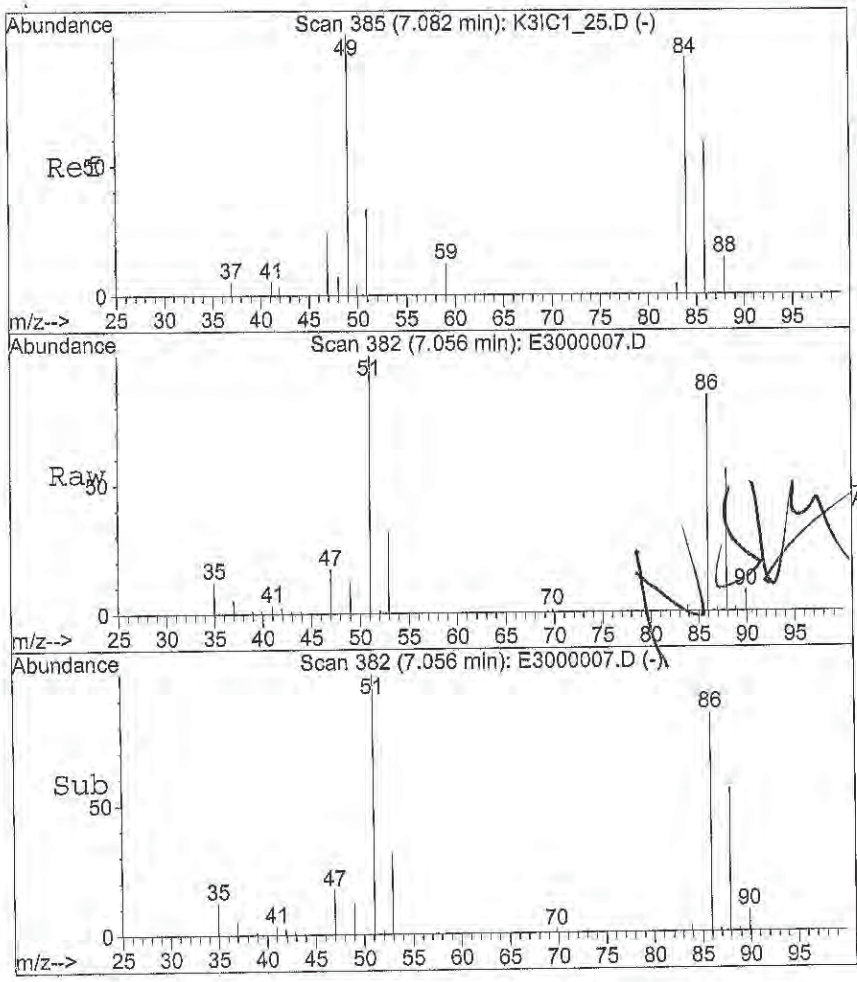


#13
Carbon disulfide
Concen: 0.16 ug/L
RT: 6.84 min Scan# 356
Delta R.T. 0.03 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 76 Resp: 2078

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

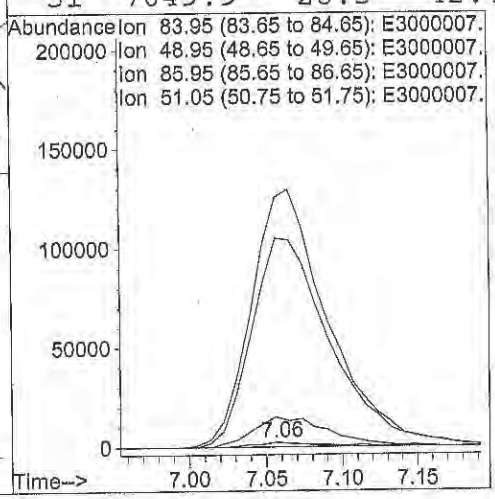


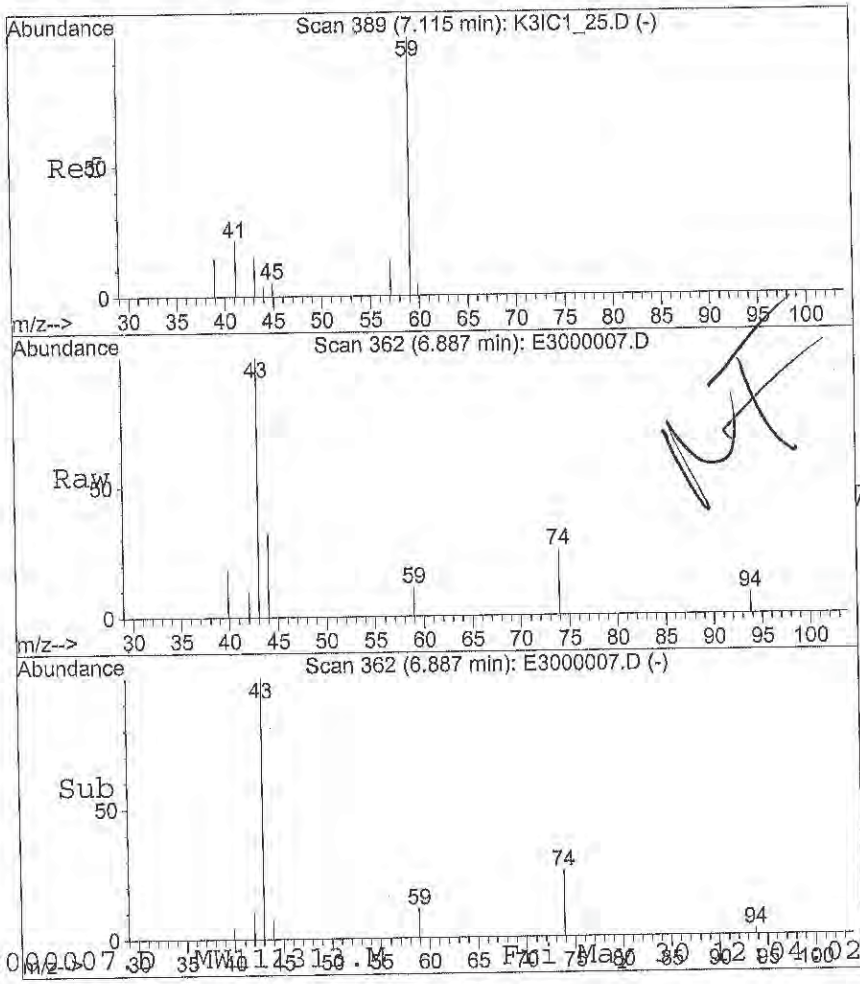


#14
Methylene Chloride
Concen: 1.48 ug/L
RT: 7.06 min Scan# 382
Delta R.T. -0.03 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 84 Resp: 6428

Ion	Ratio	Lower	Upper
84	100		
49	794.8	89.8	134.6#
86	5882.7	51.1	76.7#
51	7049.9	28.5	42.7#

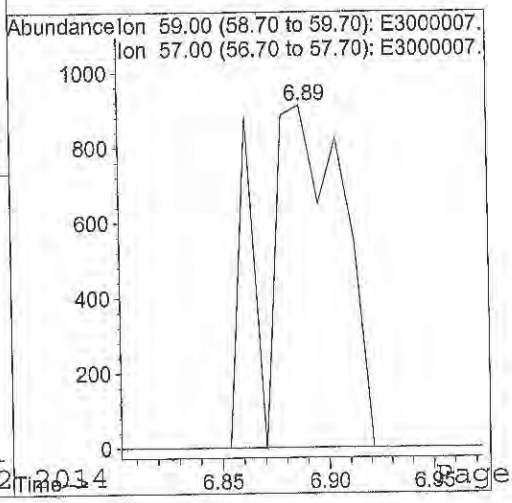


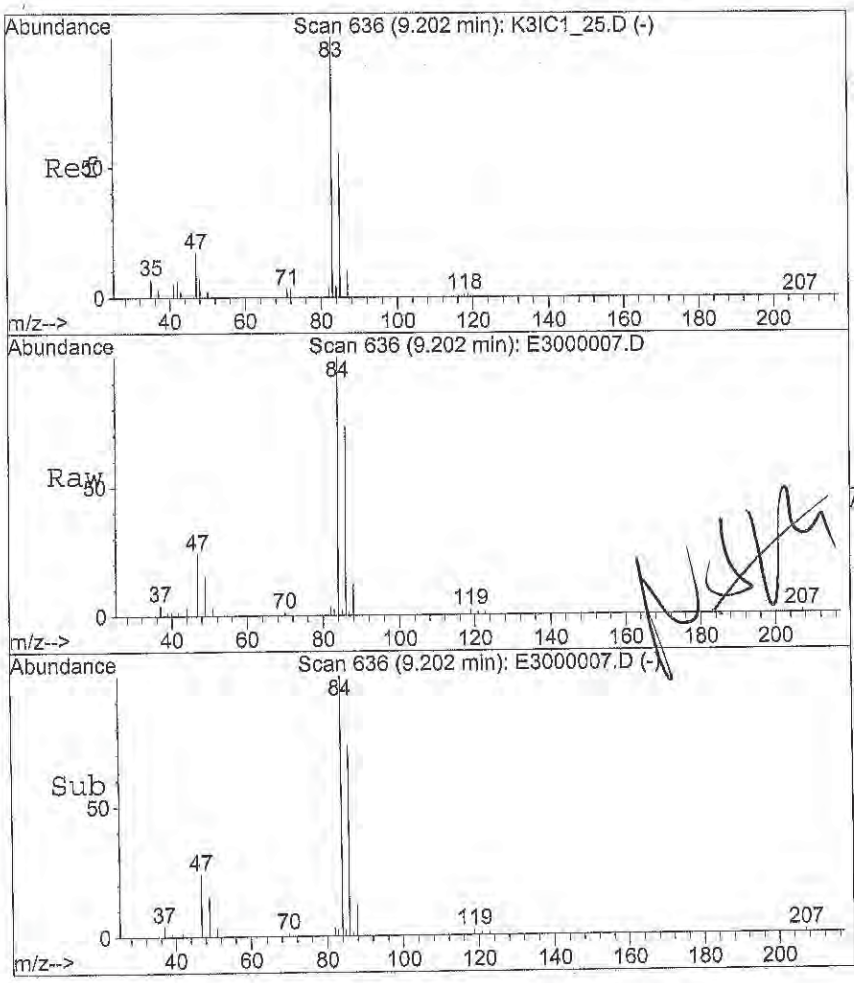


#15
(TBA) tert-Butanol
Concen: 8.86 ug/L
RT: 6.89 min Scan# 362
Delta R.T. -0.23 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 59 Resp: 2382

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

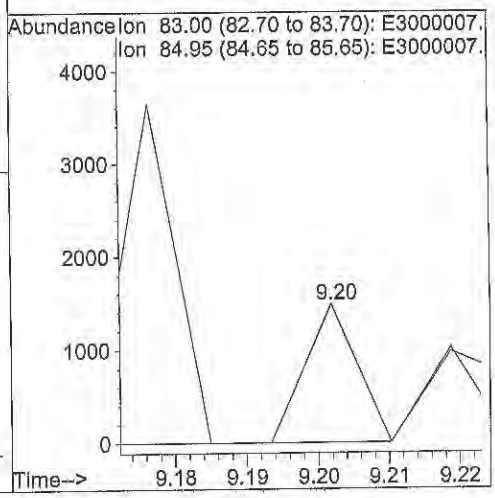


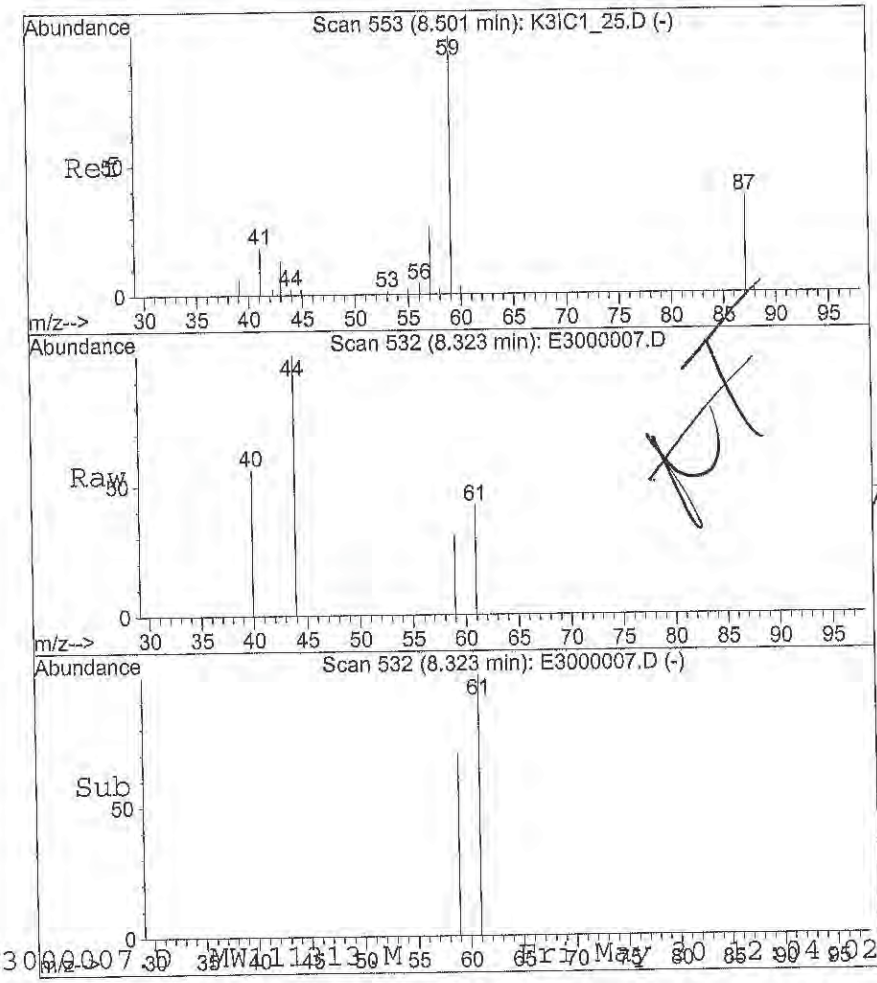


#24
Chloroform
Concen: 0.09 ug/L
RT: 9.20 min Scan# 636
Delta R.T. 0.00 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 83 Resp: 750

Ion	Ratio	Lower	Upper
83	100		
85	169.2	51.8	77.6#

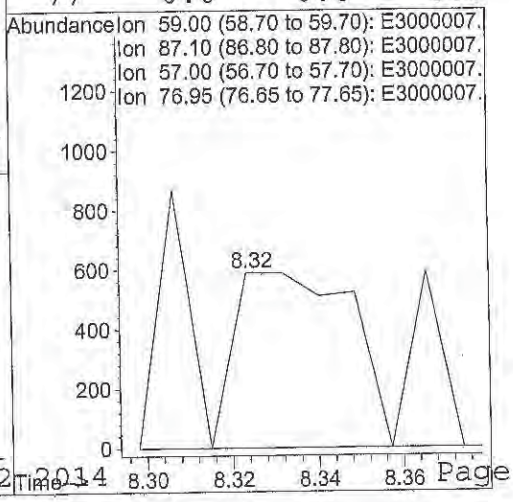


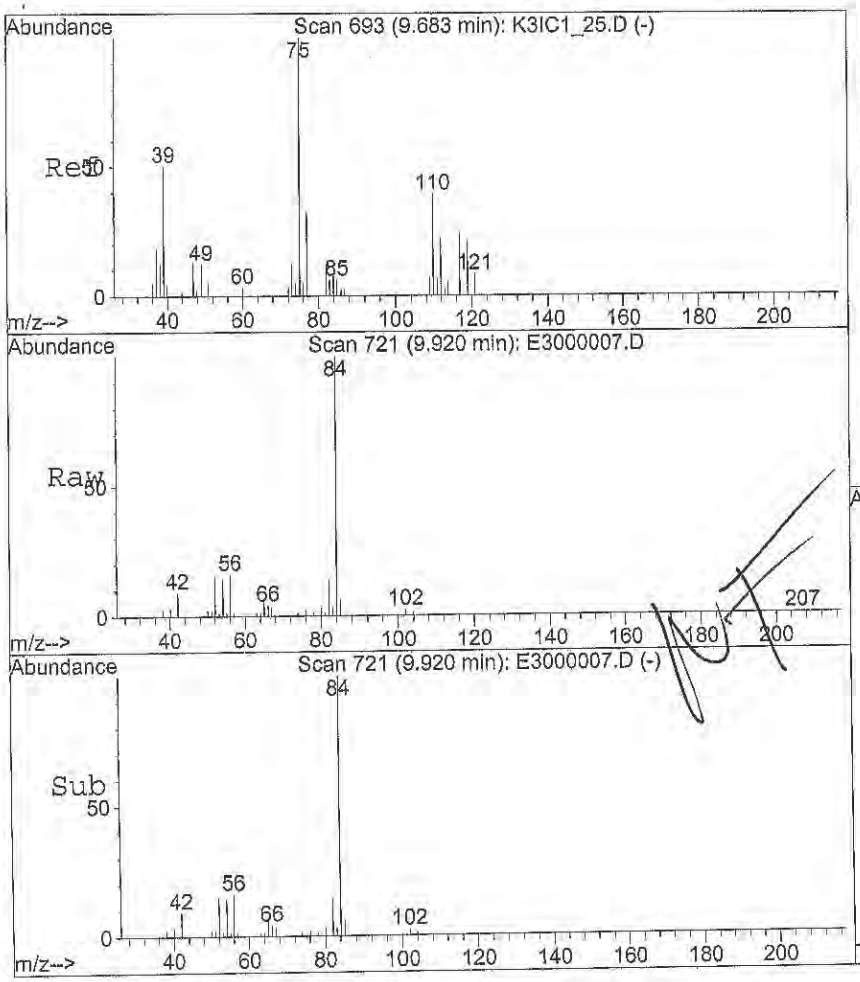


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.10 ug/L
RT: 8.32 min Scan# 532
Delta R.T. -0.18 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 59 Resp: 1120

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

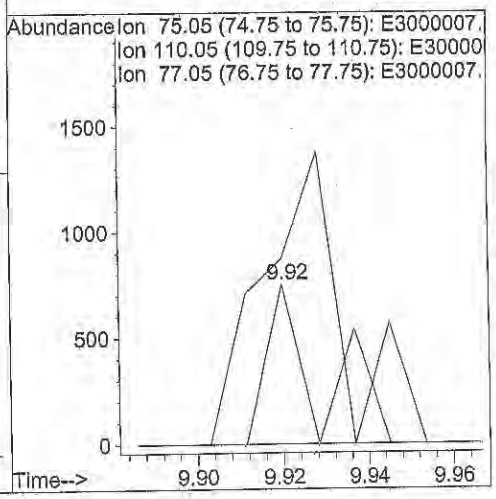


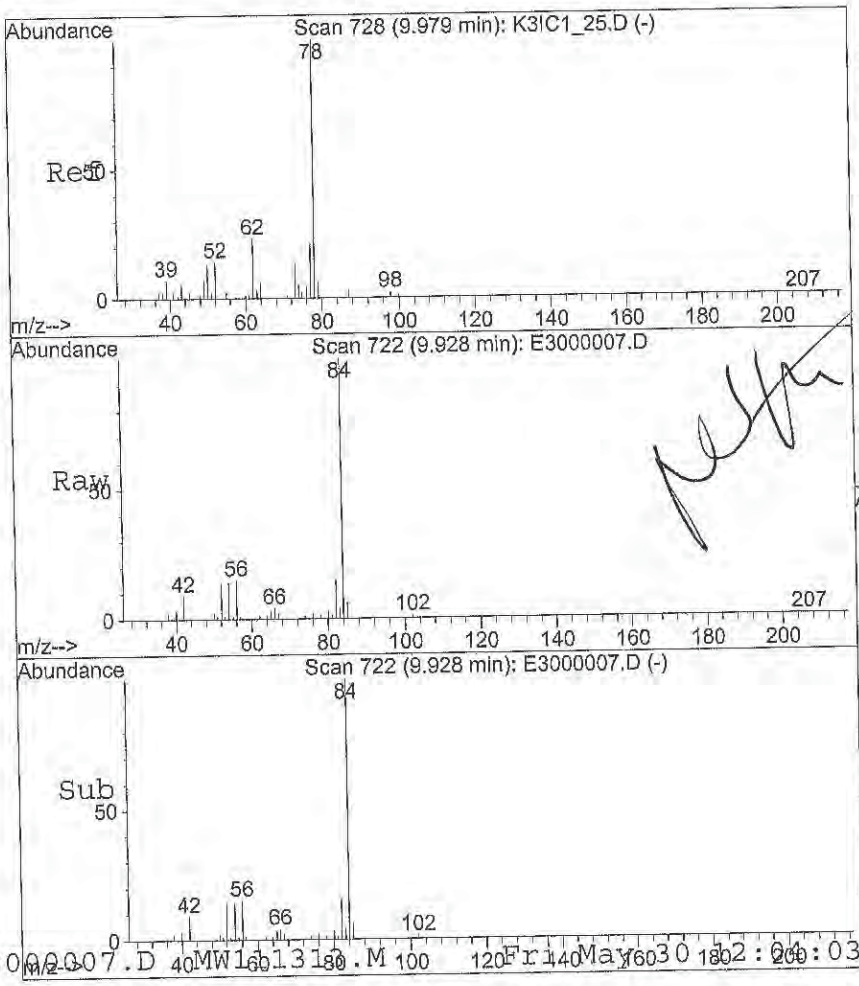


#29
1,1-Dichloropropene
Concen: 0.11 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 75 Resp: 653

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	229.2	25.0	37.4#

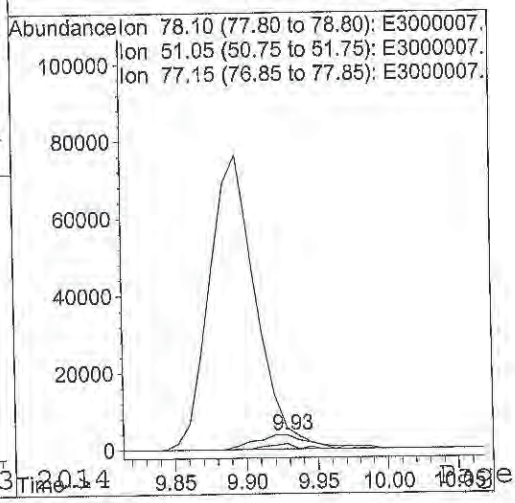


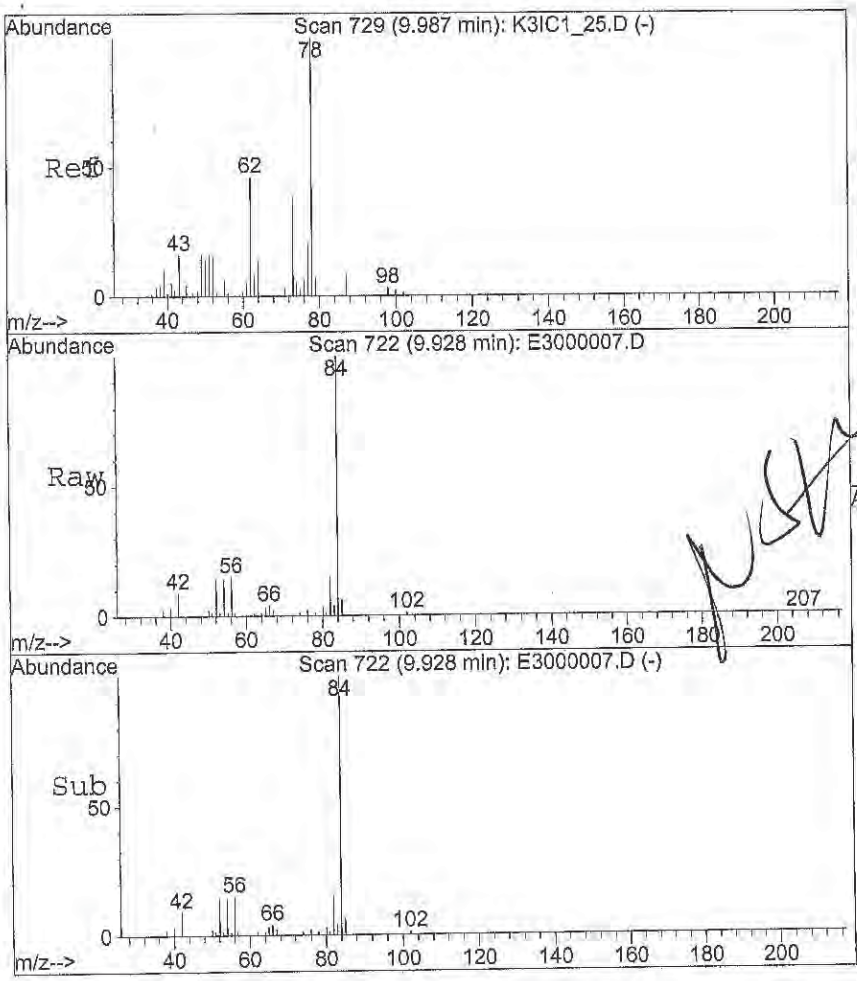


#31
Benzene
Concen: 0.68 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.05 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 78 Resp: 10112

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	17.7	16.6	24.8

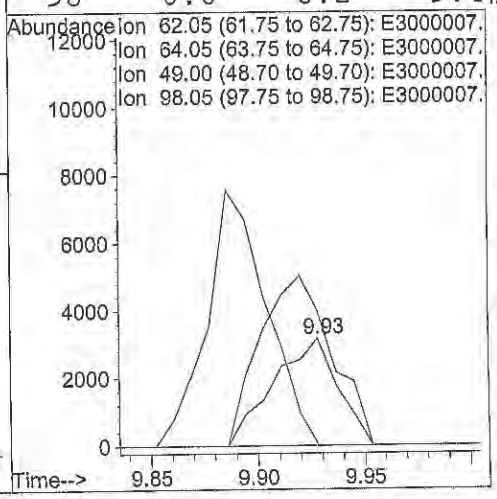


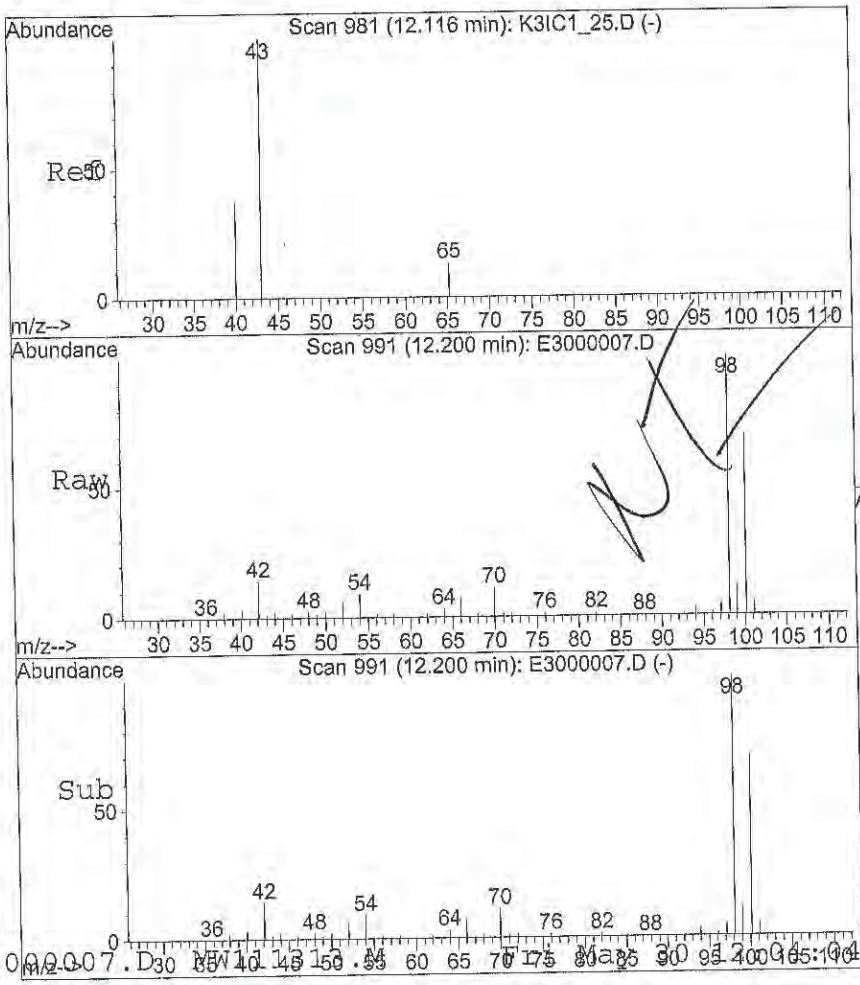


#32
1,2-Dichloroethane
Concen: 1.25 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 62 Resp: 6579

Ion	Ratio	Lower	Upper
62	100		
64	177.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

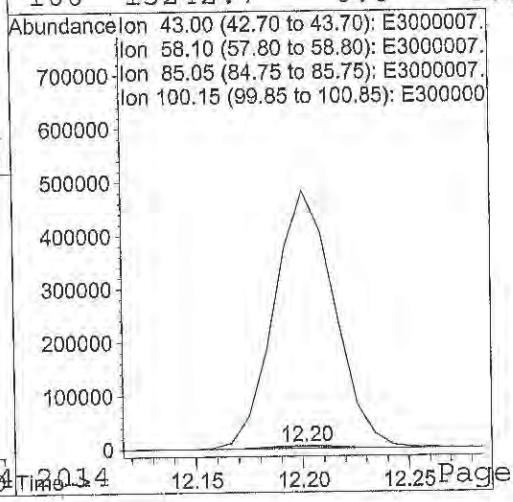


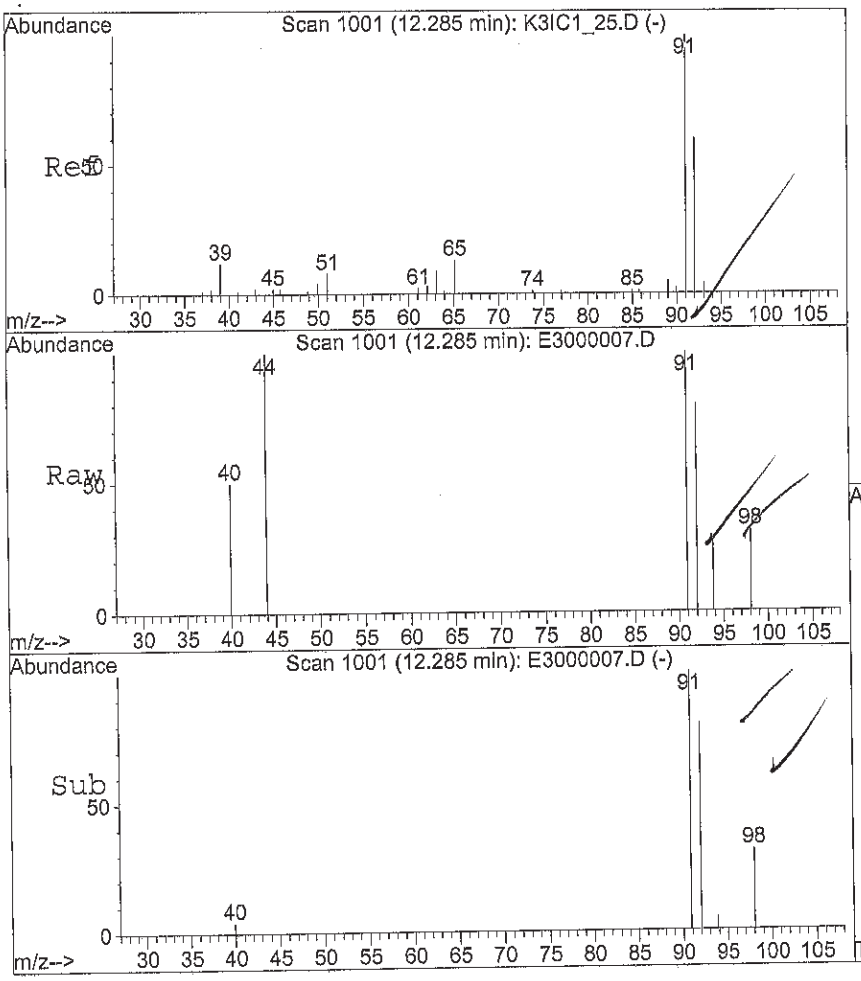


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.80 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 43 Resp: 7205

Ion	Ratio	Lower	Upper
43	100		
58	155.8	0.0	0.0#
85	0.0	0.0	0.0
100	13242.7	0.0	0.0#

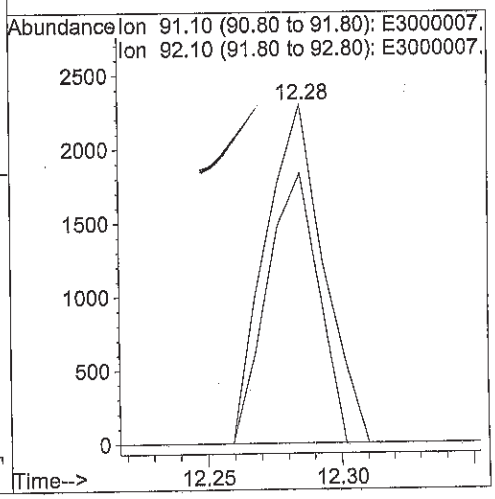


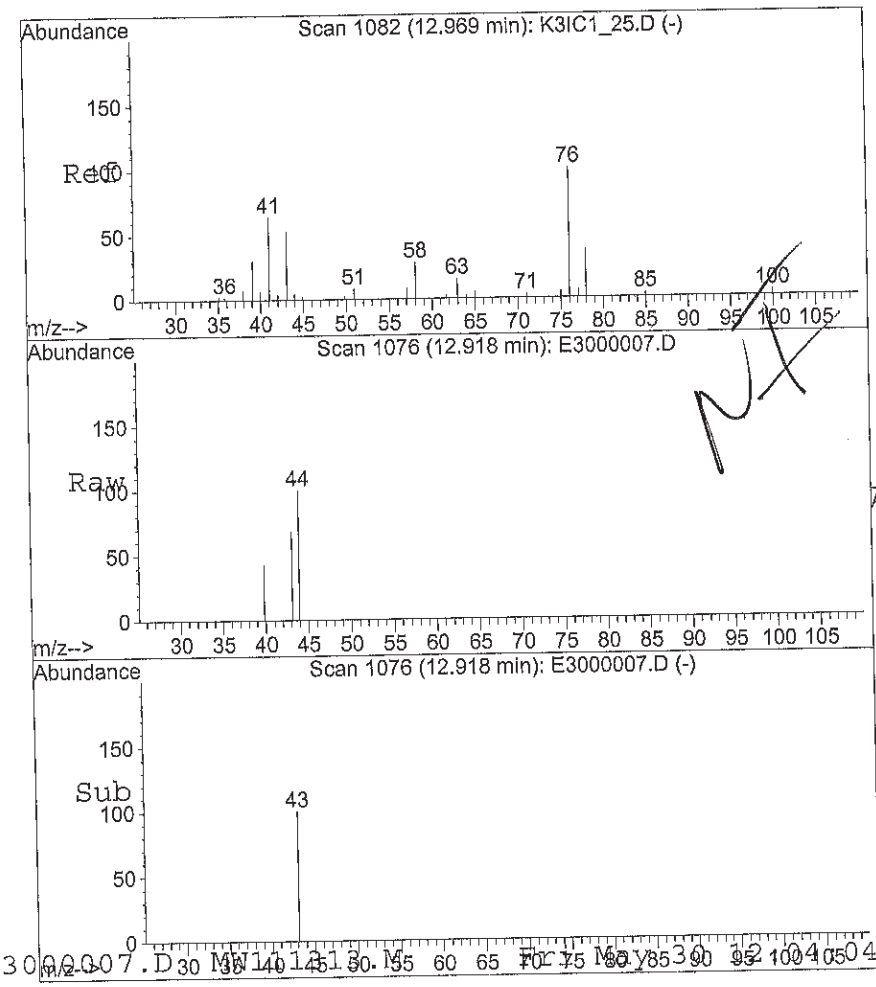


#41
Toluene
Concen: 0.20 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. 0.00 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 91 Resp: 3473

Ion	Ratio	Lower	Upper
91	100		
92	70.6	47.4	71.0

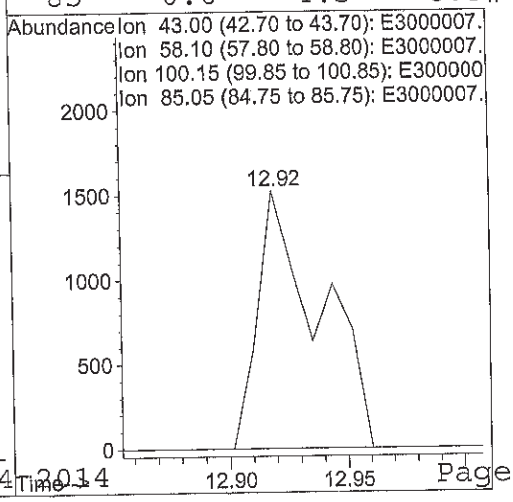


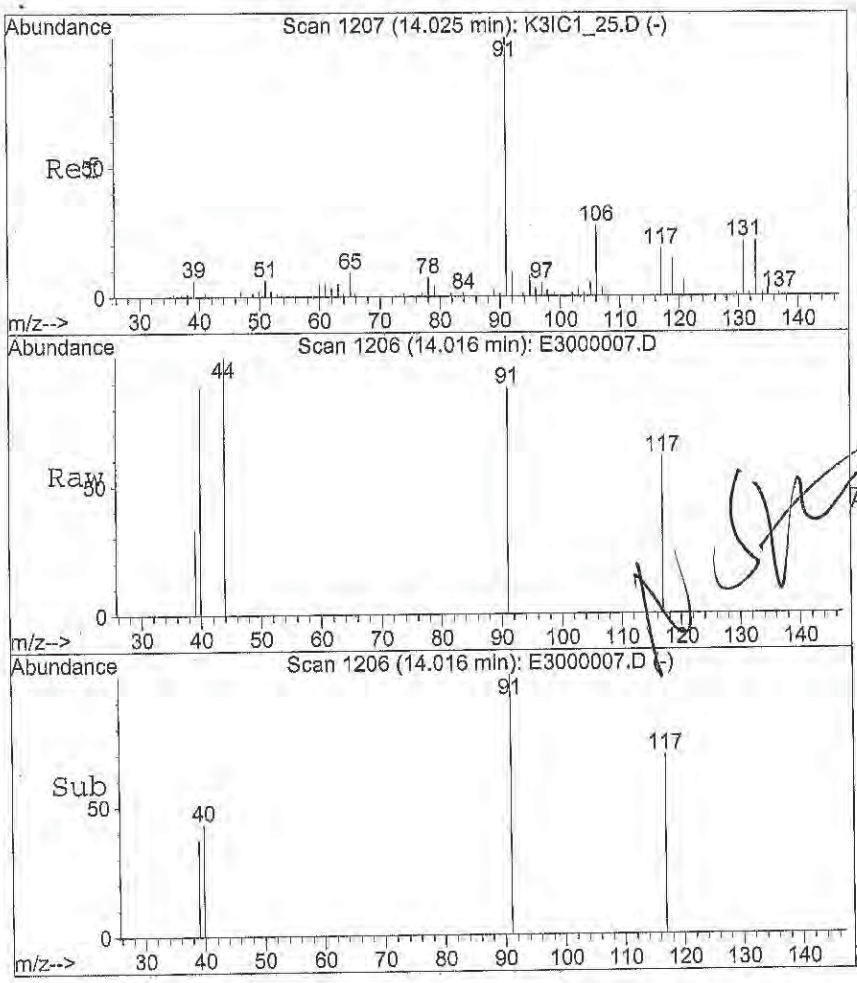


#46
2-Hexanone
Concen: 0.98 ug/L
RT: 12.92 min Scan# 1076
Delta R.T. -0.05 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 43 Resp: 2767

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

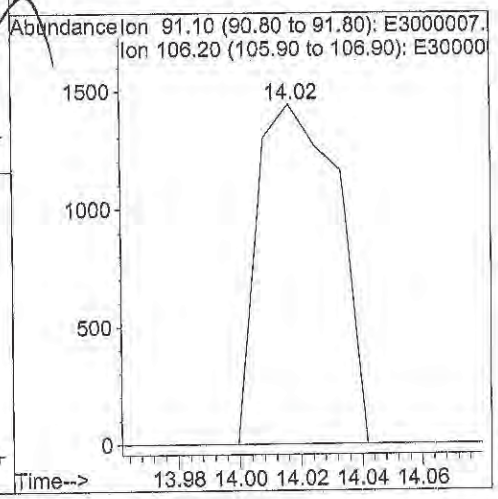


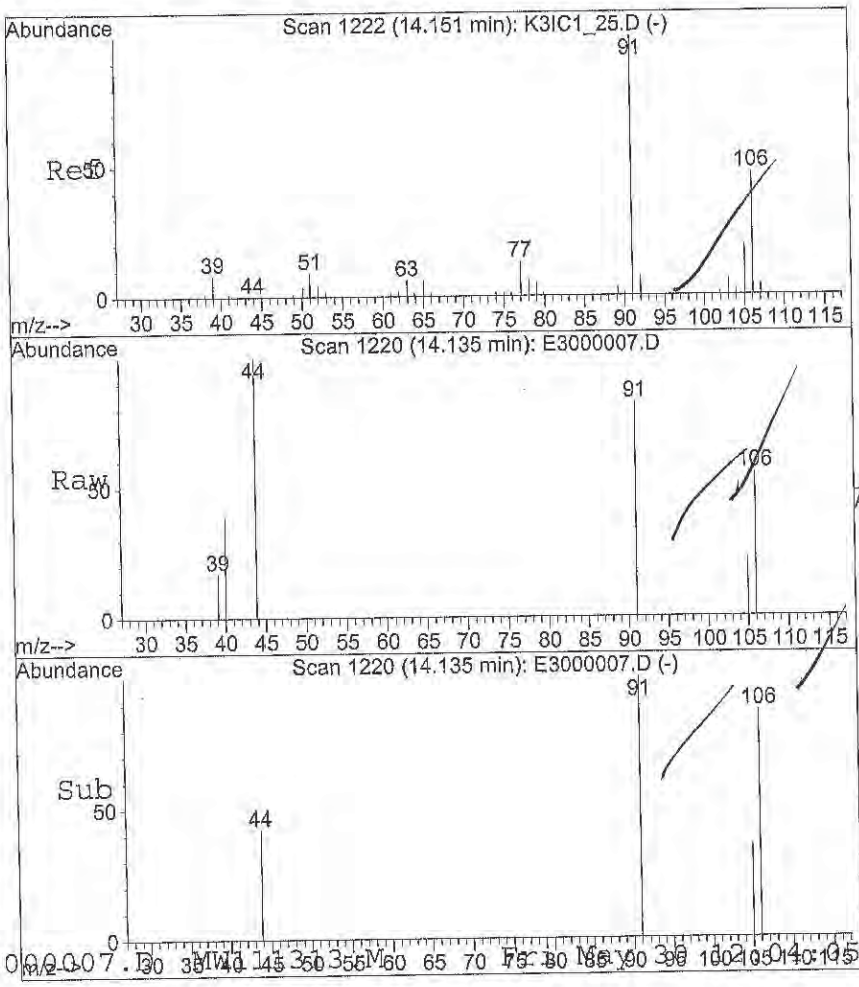


#51
Ethylbenzene
Concen: 0.13 ug/L
RT: 14.02 min Scan# 1206
Delta R.T. -0.01 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 91 Resp: 2618

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

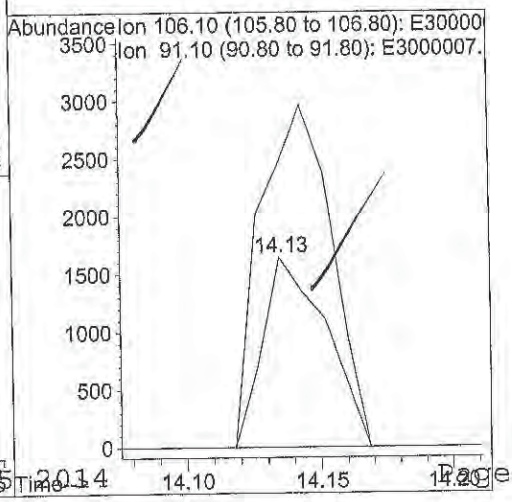


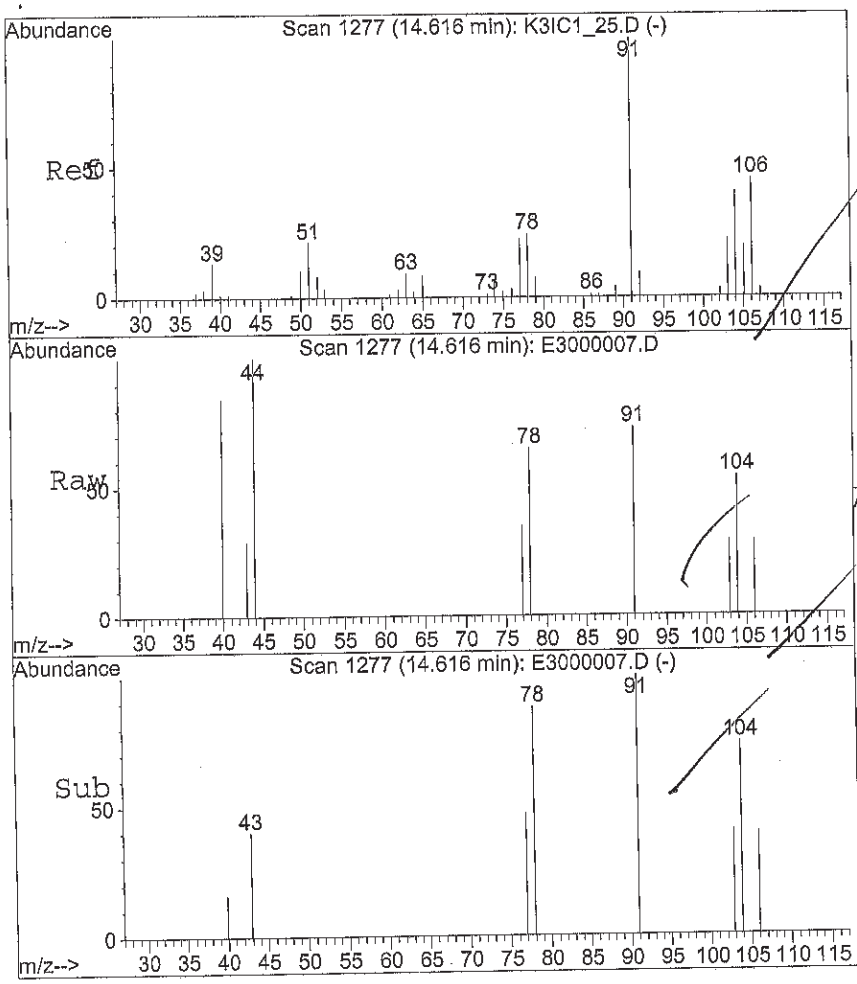


#52
m,p-Xylenes
Concen: 0.38 ug/L
RT: 14.13 min Scan# 1220
Delta R.T. -0.02 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion:106 Resp: 2707

Ion	Ratio	Lower	Upper
106	100		
91	201.8	177.1	265.7

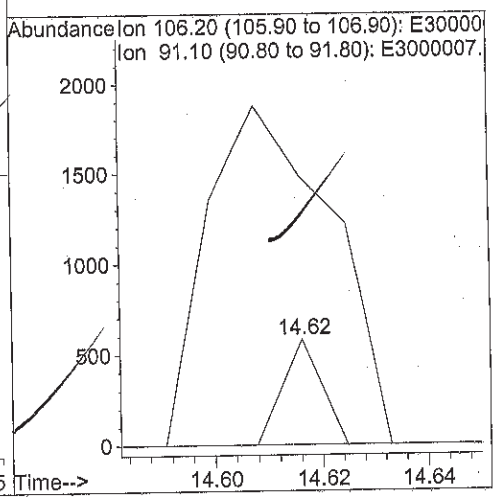


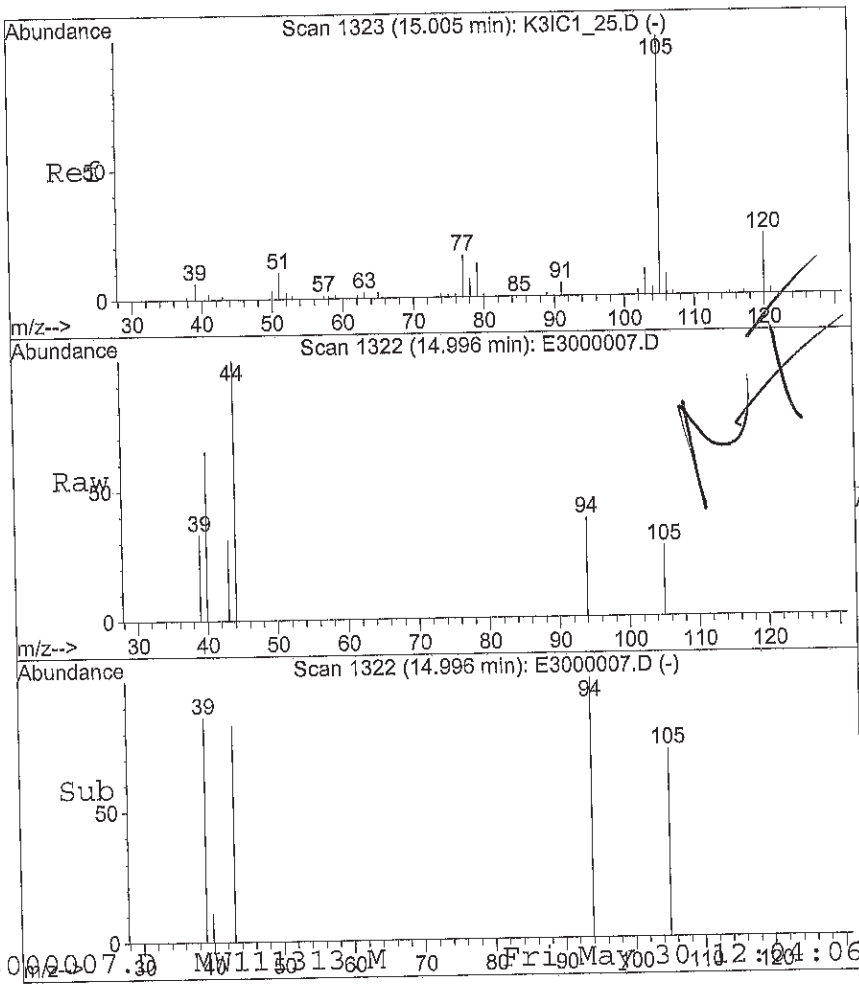


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. 0.00 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion:106 Resp: 294

Ion	Ratio	Lower	Upper
106	100		
91	1022.1	179.0	268.6#

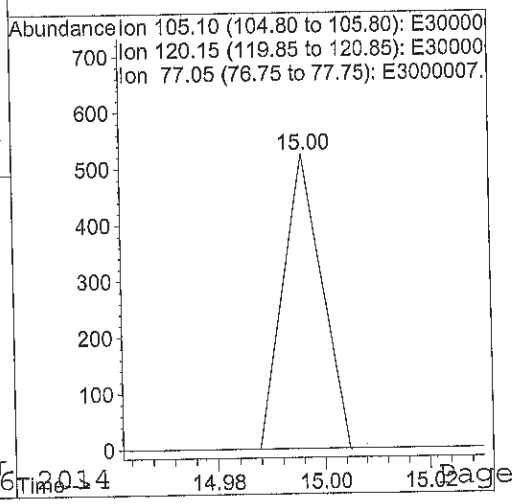


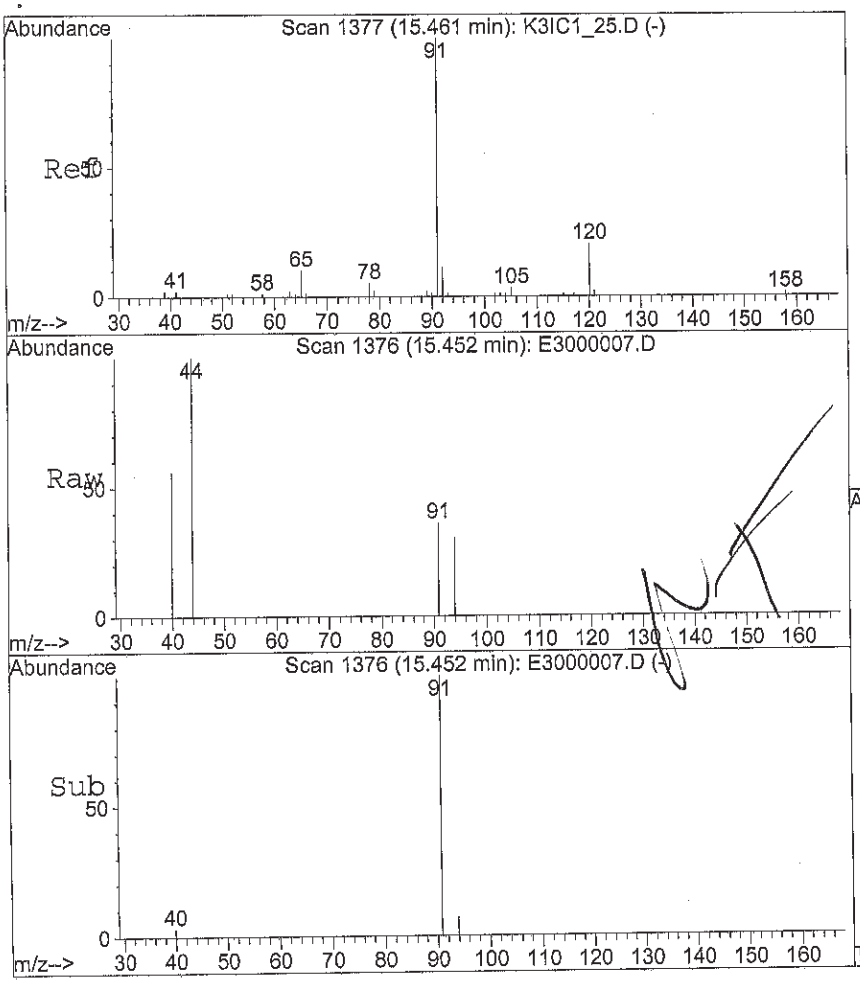


#56
Isopropylbenzene
Concen: 0.01 ug/L
RT: 15.00 min Scan# 1322
Delta R.T. -0.01 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion:105 Resp: 265

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

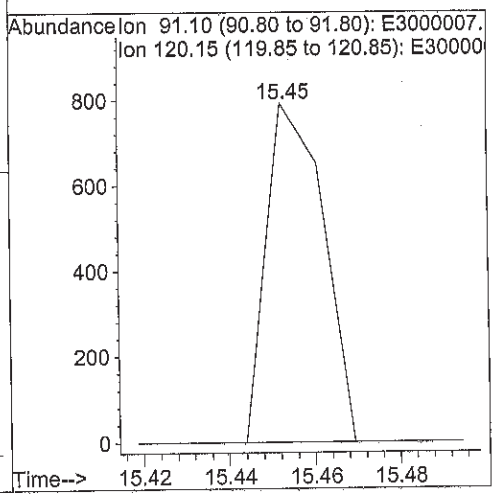


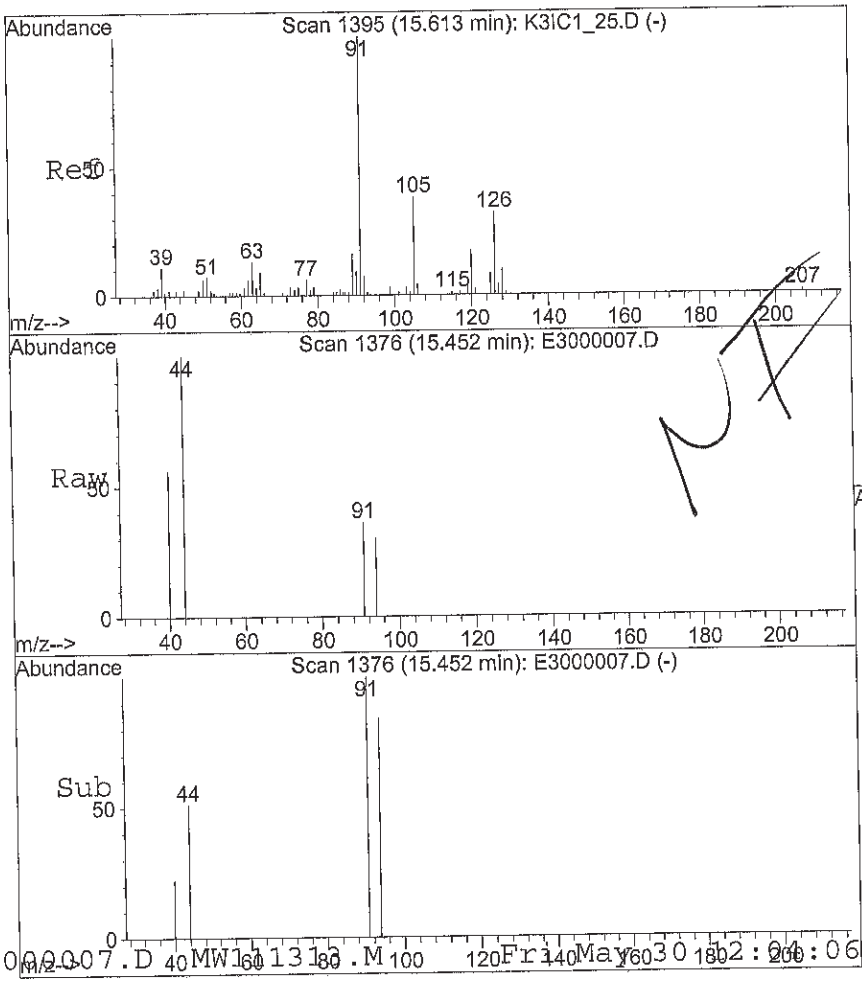


#62
n-Propylbenzene
Concen: 0.03 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 91 Resp: 731

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

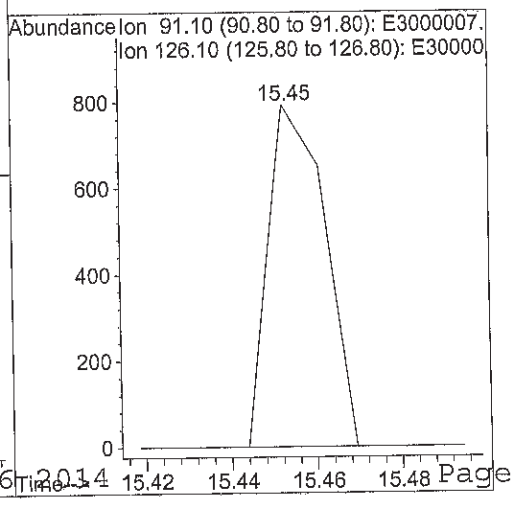


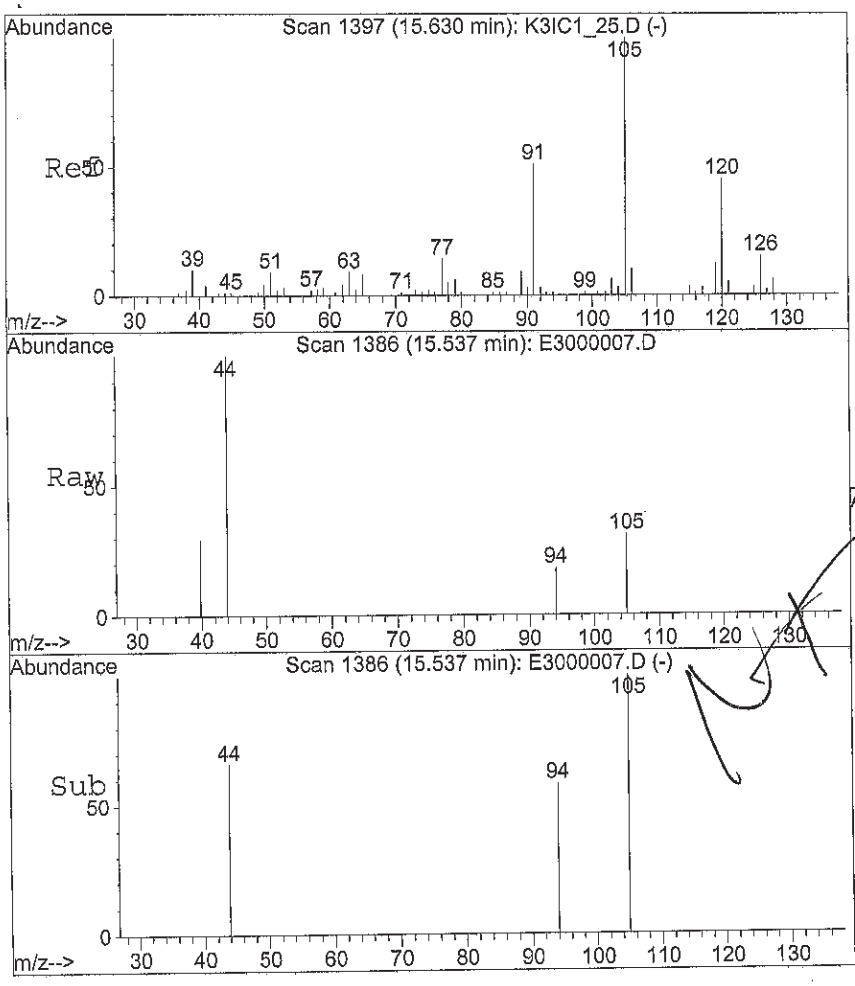


#63
2-Chlorotoluene
Concen: 0.04 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.16 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion: 91 Resp: 731

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

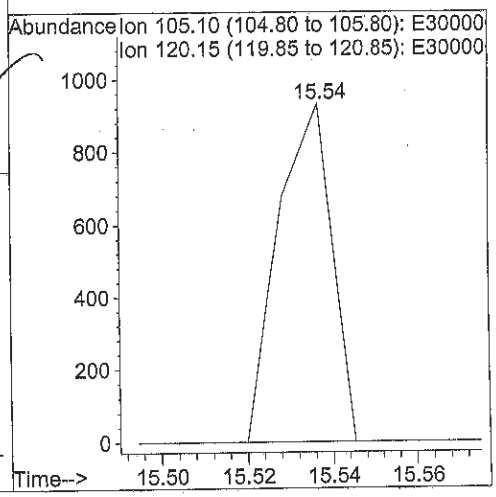


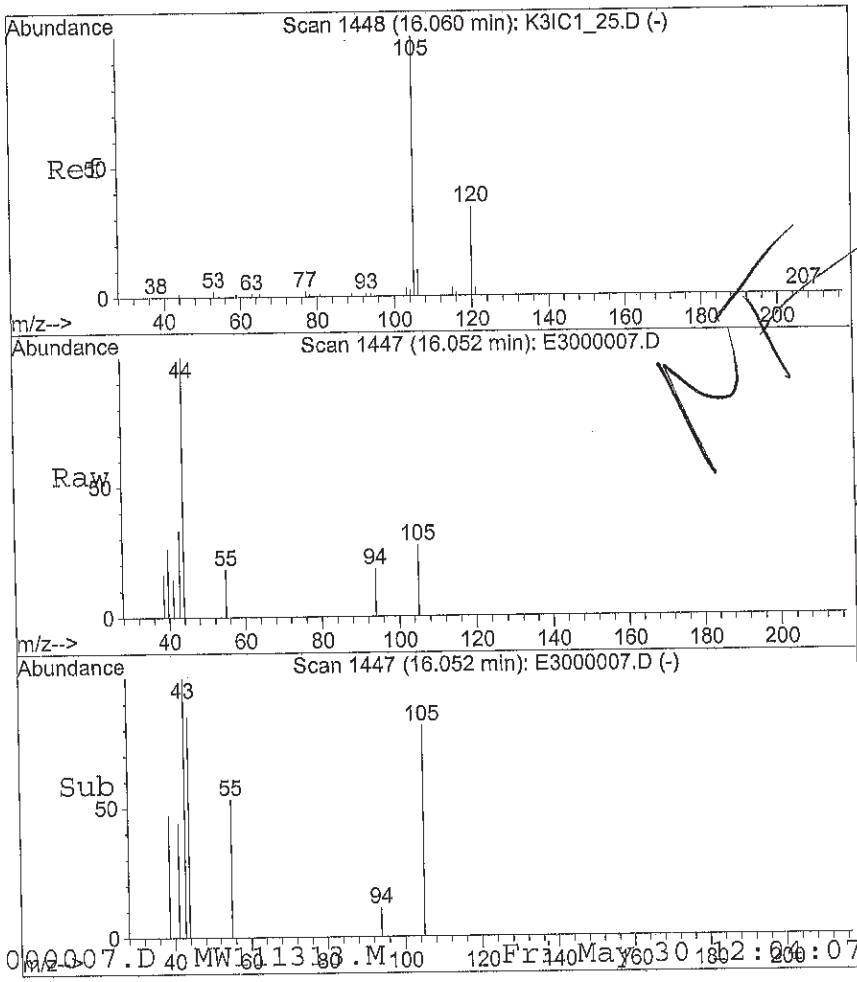


#64
1,3,5-Trimethylbenzene
Concen: 0.05 ug/L
RT: 15.54 min Scan# 1386
Delta R.T. -0.09 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion:105 Resp: 814

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

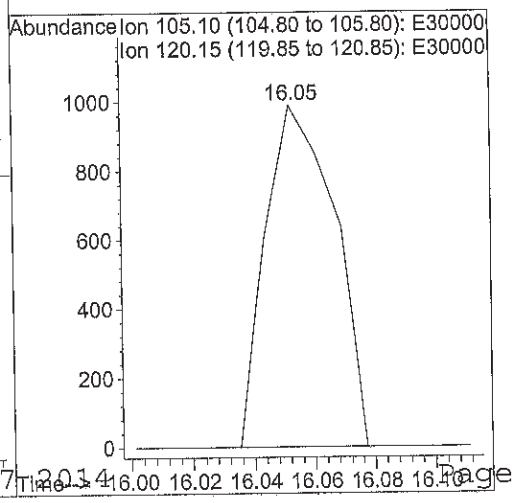


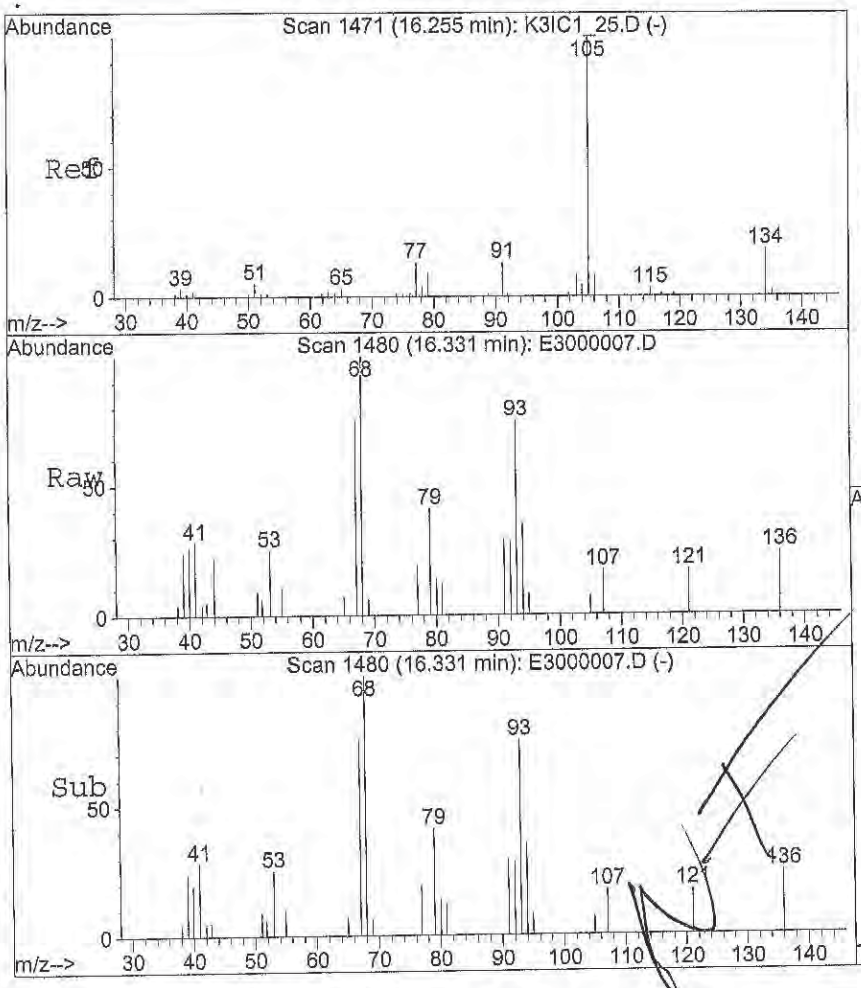


#67
1,2,4-Trimethylbenzene
Concen: 0.09 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion:105 Resp: 1564

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

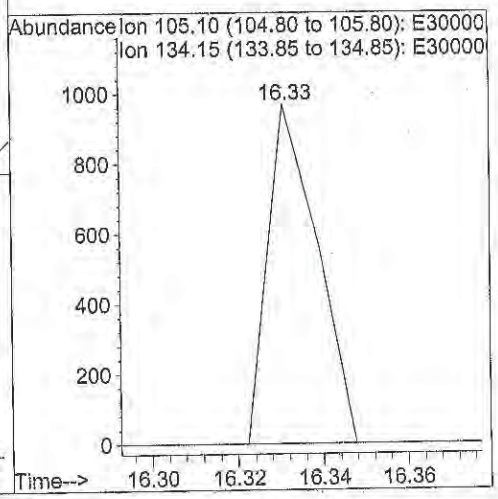


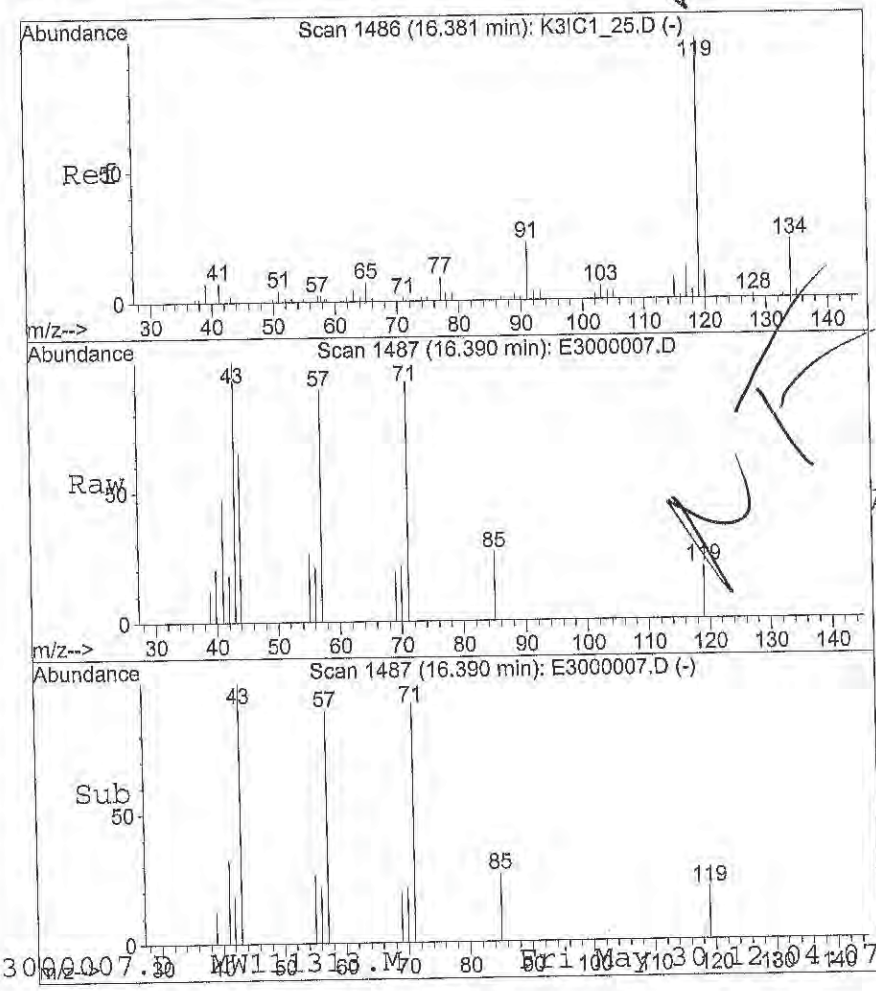


#68
sec-Butylbenzene
Concen: 0.03 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion:105 Resp: 775

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

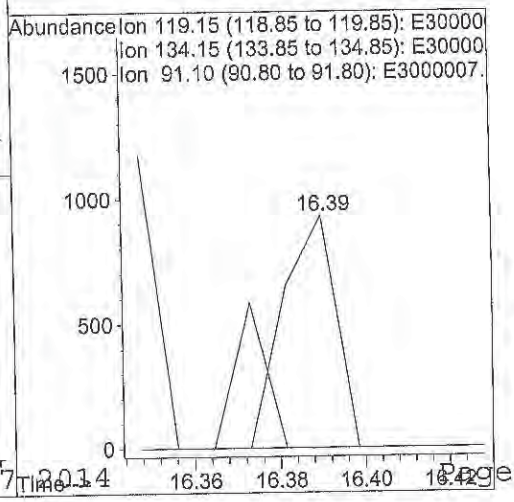




#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.39 min Scan# 1487
Delta R.T. 0.01 min
Lab File: E3000007.D
Acq: 30 May 2014 11:29 am

Tgt Ion:119 Resp: 801

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	37.1	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000007.D Vial: 6
Acq On : 30 May 2014 11:29 am Operator: DN
Sample : 3E43001-06 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 12:06 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1576971	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1287440	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	706098	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	450027	10.97 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.76%		
3) Chloroform-d (SU6)	9.18	84	667213	11.34 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.72%		
4) Methylene Chloride-d2 (SU5	7.06	86	378142	10.99 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.92%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	421759	15.05 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 120.40%		
6) Benzene-d6 (SU7)	9.92	84	1312187	10.60 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 84.80%		
8) Toluene-d8 (SU3)	12.20	98	1414113	11.58 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.64%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	719694	14.27 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 114.16%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

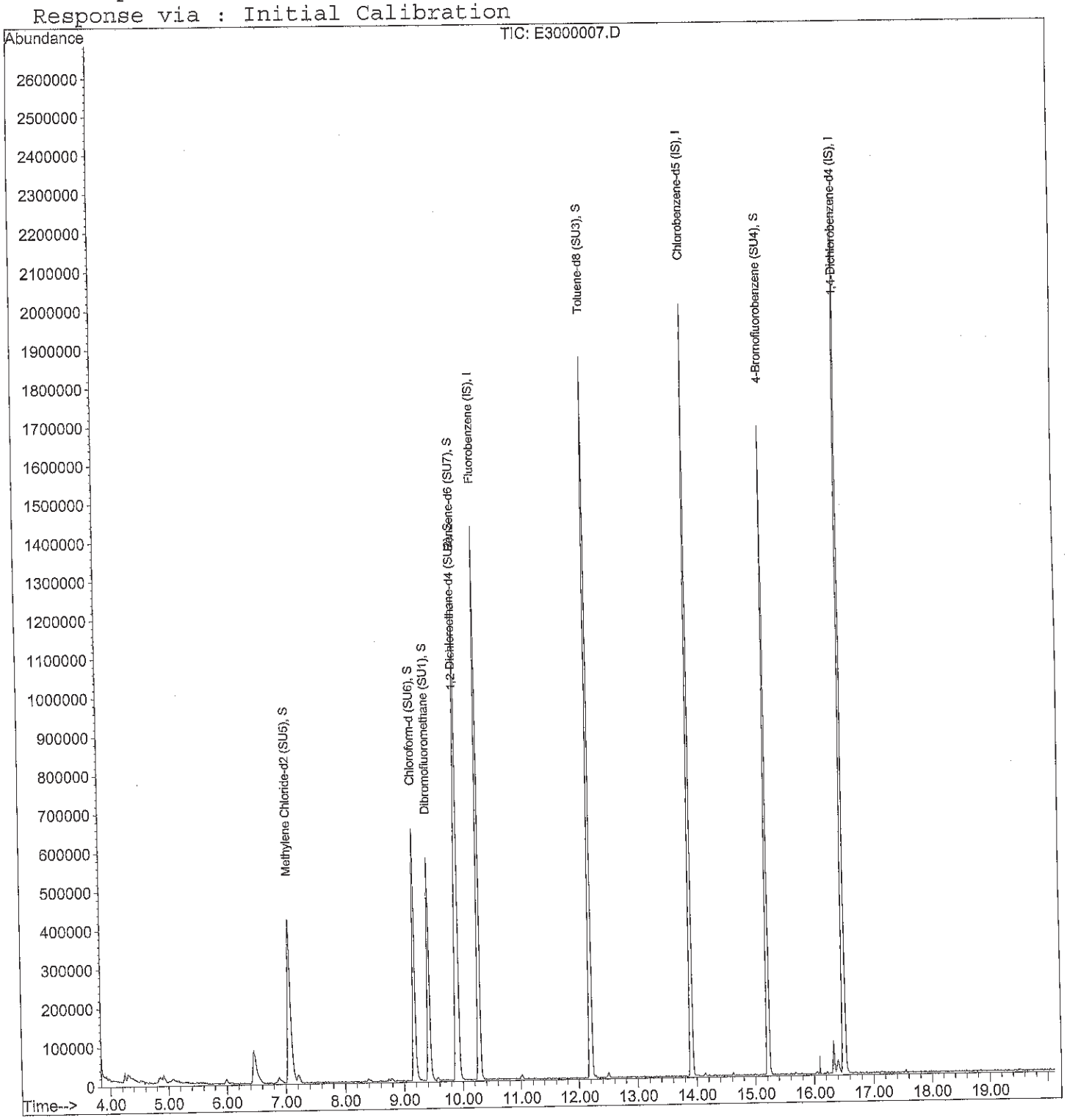
Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000007.D
Acq On : 30 May 2014 11:29 am
Sample : 3E43001-06
Misc : 100cc SVL-550-SA5D-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: May 30 12:06 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000008.D
Acq On : 30 May 2014 12:00 pm
Sample : 3E43001-07
Misc : 100cc SVL-550-SA5D-SV-11.0-12.0
MS Integration Params: rteint.p
Quant Time: May 30 12:37 19114

Vial: 7
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1378002	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1166367	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	644664	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	400617	11.66 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	93.28%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	388772	11.90 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.20%	
39) Toluene-d8 (SU3)	12.20	98	1237843	11.38 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	91.04%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	660165	13.84 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	110.72%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	260	0.08 ~~ug/L~~ #	44
4) Chloromethane	4.40	50	3865	0.45 ~~ug/L~~ #	60
6) Bromomethane	5.06	96	10477	5.13 ~~ug/L~~	91
7) Chloroethane	5.22	64	596	1.21 ~~ug/L~~ #	32
8) (F11) Trichlorofluorometha	5.62	101	347	0.09 ~~ug/L~~ #	16
11) Acetone	6.46	58	6146	6.68 ~~ug/L~~	99
12) (IPA) Leak Check Compound	6.47	45	231178	1396.11 ~~ug/L~~ #	82
13) Carbon disulfide	6.84	76	17829	1.56 ~~ug/L~~	100
14) Methylene Chloride	7.07	84	5767	1.52 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.94	59	306	1.30 ~~ug/L~~ #	77
24) Chloroform	9.21	83	1028	0.14 ~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.49	59	2419	0.24 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.57	75	574	0.11 ~~ug/L~~ #	1
31) Benzene	9.97	78	8345	0.64 ~~ug/L~~ #	80
32) 1,2-Dichloroethane	9.92	62	5894	1.28 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	8201	3.52 ~~ug/L~~ #	100
41) Toluene	12.28	91	22320	1.40 ug/L 0.028	93
46) 2-Hexanone	12.99	43	294	0.12 ~~ug/L~~ #	37
51) Ethylbenzene	14.02	91	7894	0.44 ug/L #0.0088	72
52) m,p-Xylenes	14.14	106	9611	1.50 ug/L ~~0.003~~	87 0.03
53) o-Xylene	14.62	106	2719	0.43 ug/L 0.0086	73
54) Styrene	14.63	104	2387	-0.61 ~~ug/L~~ #	69

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000008.D Vial: 7
Acq On : 30 May 2014 12:00 pm Operator: DN
Sample : 3E43001-07 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 12:37 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
56) Isopropylbenzene	15.21	105	968	0.06 ~~ug/L~~ #	1
62) n-Propylbenzene	15.47	91	1736	0.07 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.47	91	1736	0.11 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	2375	0.15 ~~ug/L~~ #	69
67) 1,2,4-Trimethylbenzene	16.05	105	5315	0.32 ~~ug/L~~ #	78
68) sec-Butylbenzene	16.33	105	340	0.02 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.37	119	667	0.04 ~~ug/L~~ #	52

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000008.D Vial: 7
Acq On : 30 May 2014 12:00 pm Operator: DN
Sample : 3E43001-07 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 12:37 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
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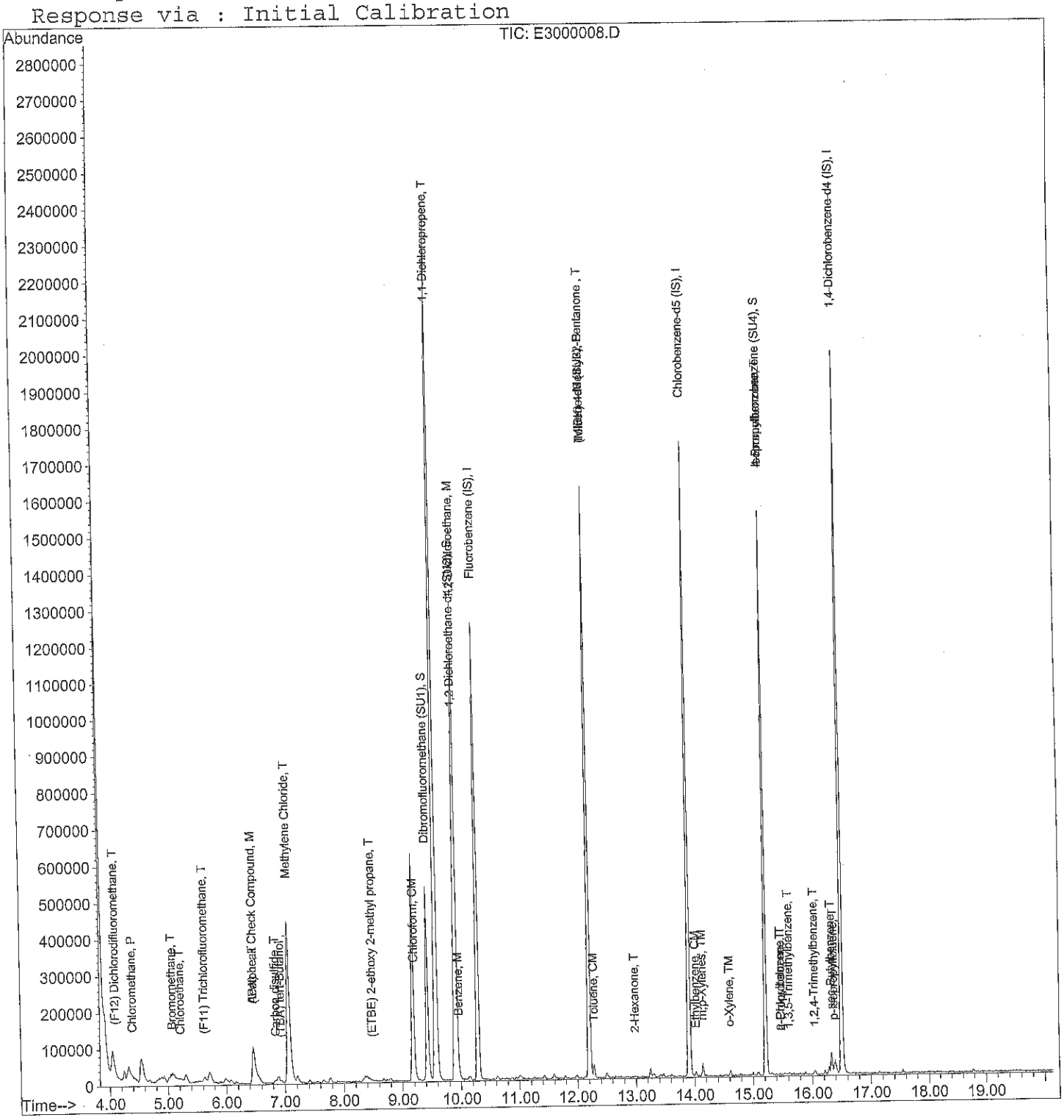
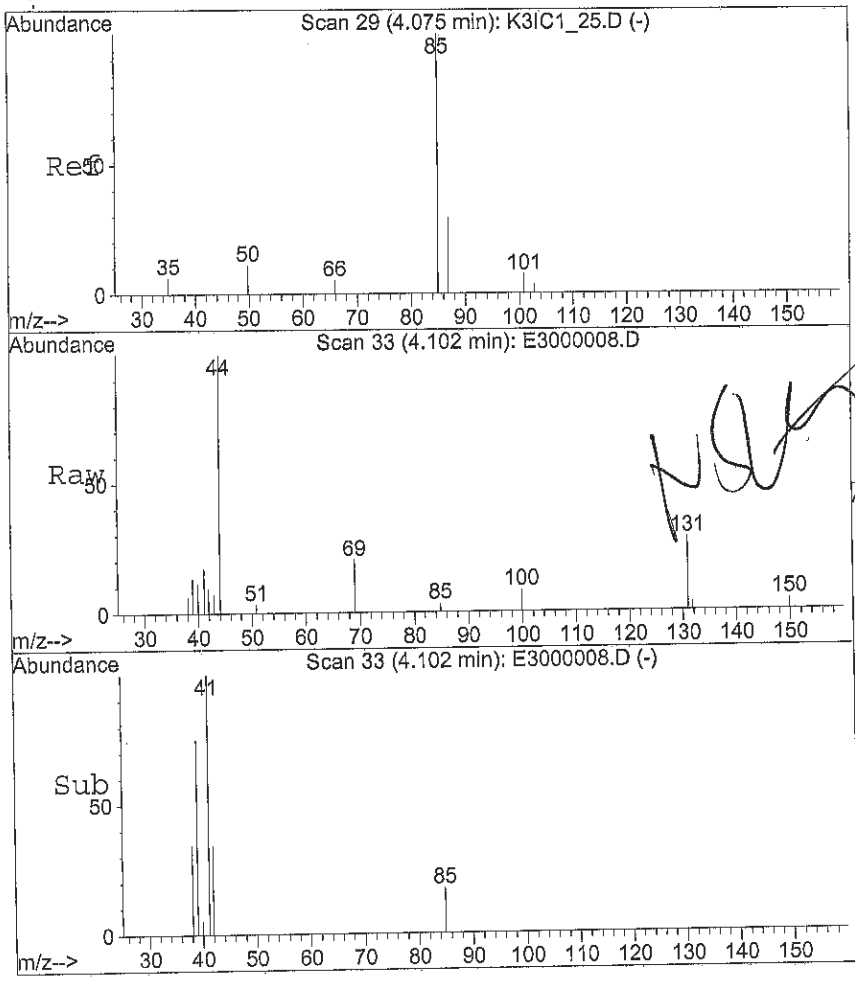
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

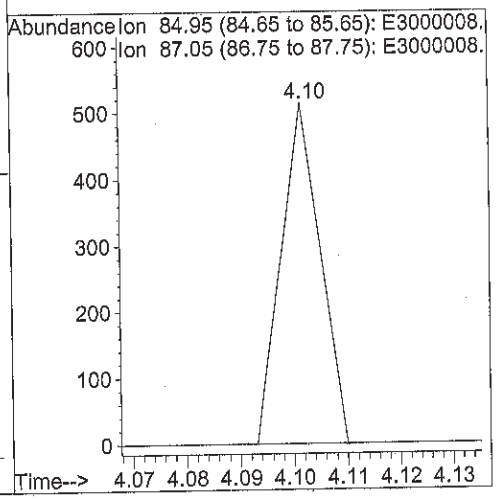


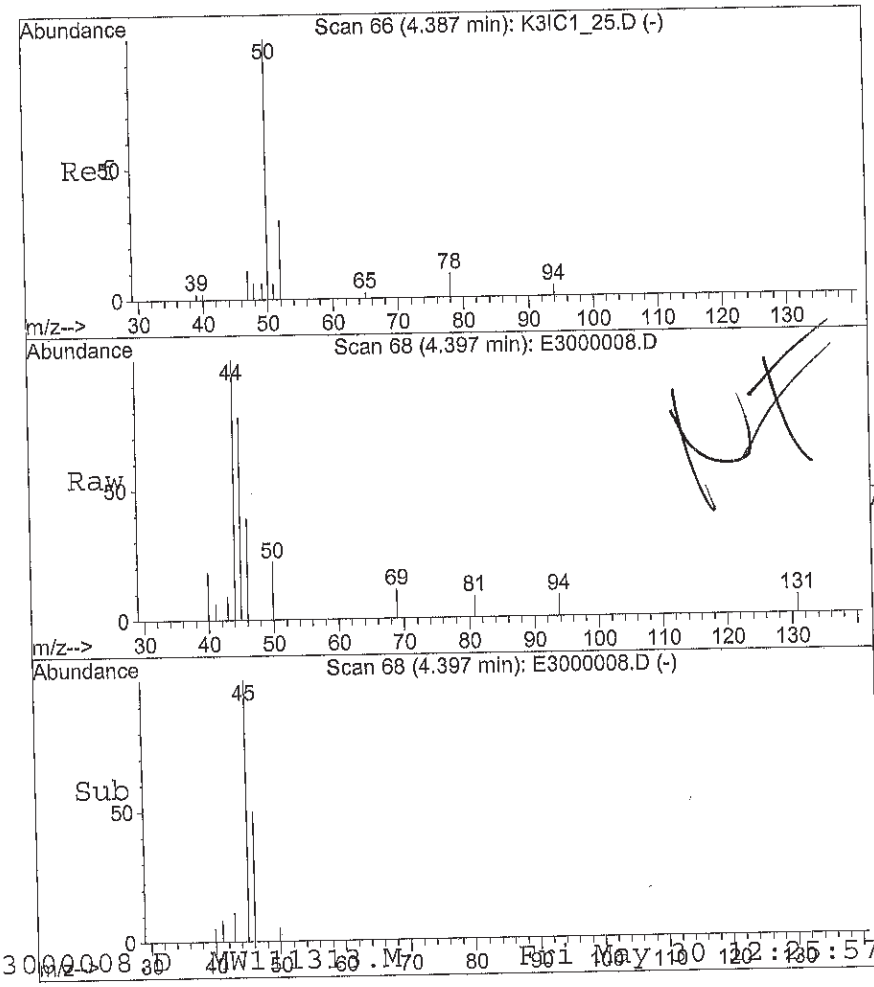


#3
(F12) Dichlorodifluoromethane
Concen: 0.08 ug/L
RT: 4.10 min Scan# 33
Delta R.T. 0.03 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 85 Resp: 260

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

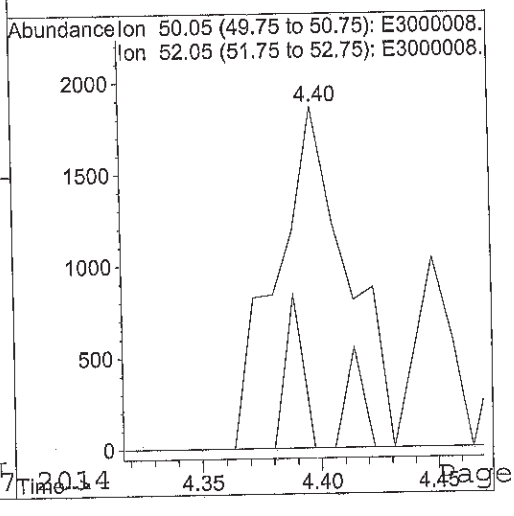


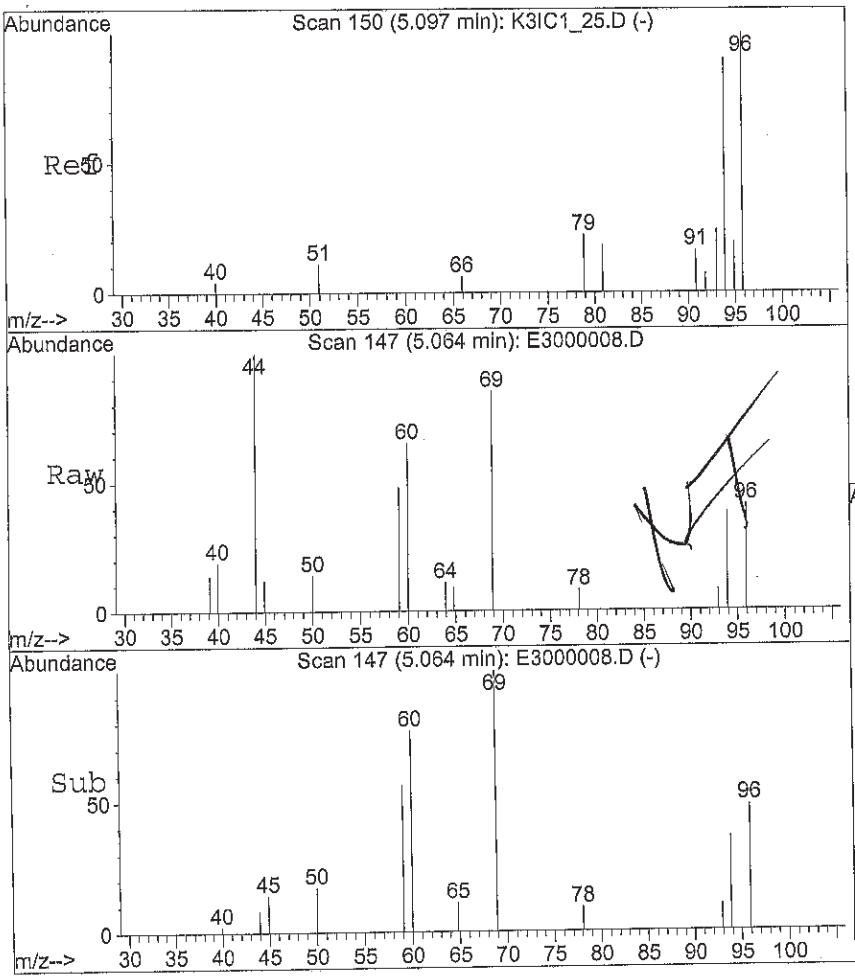


#4
Chloromethane
Concen: 0.45 ug/L
RT: 4.40 min Scan# 68
Delta R.T. 0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 50 Resp: 3865

Ion	Ratio	Lower	Upper
50	100		
52	11.0	26.9	40.3#

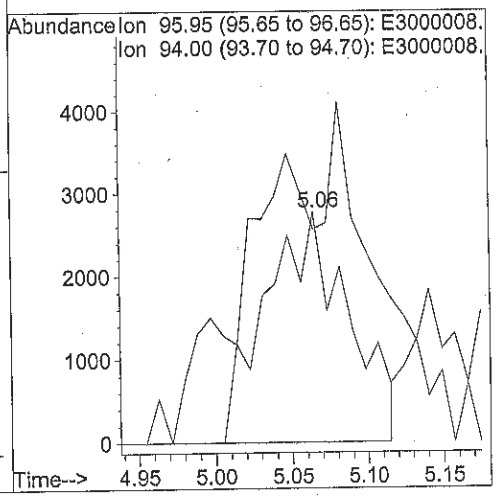


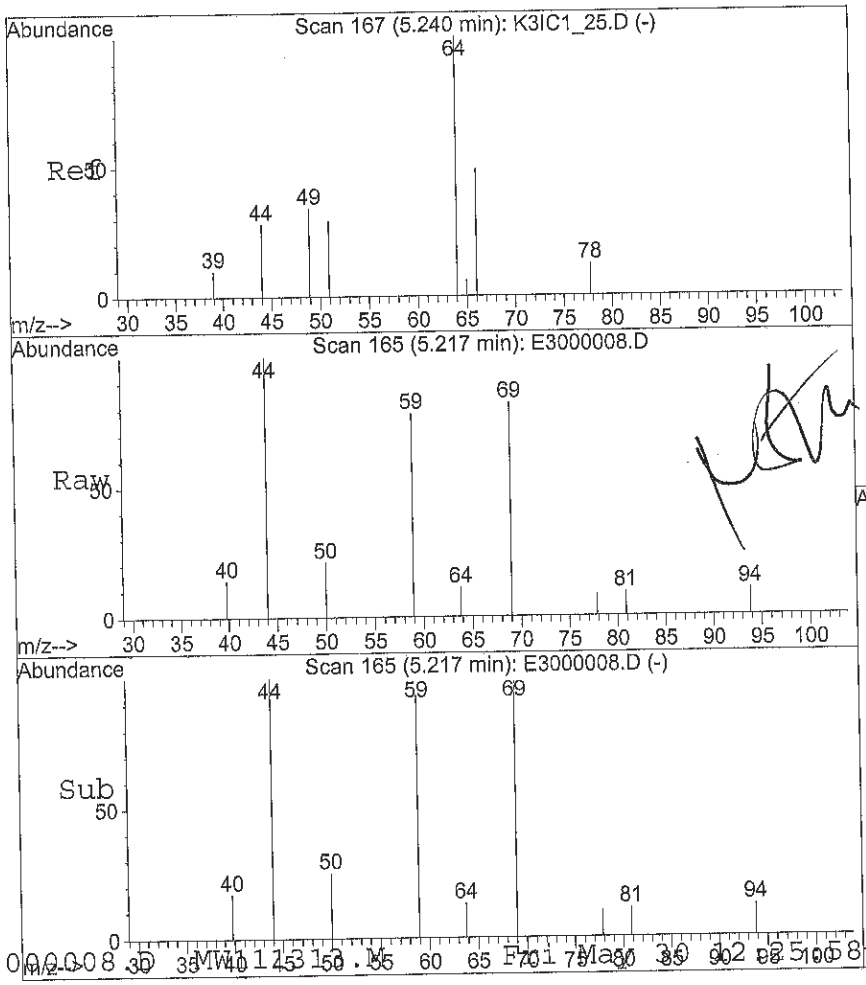


#6
Bromomethane
Concen: 5.13 ug/L
RT: 5.06 min Scan# 147
Delta R.T. -0.03 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 96 Resp: 10477

Ion	Ratio	Lower	Upper
96	100		
94	115.8	101.0	151.4

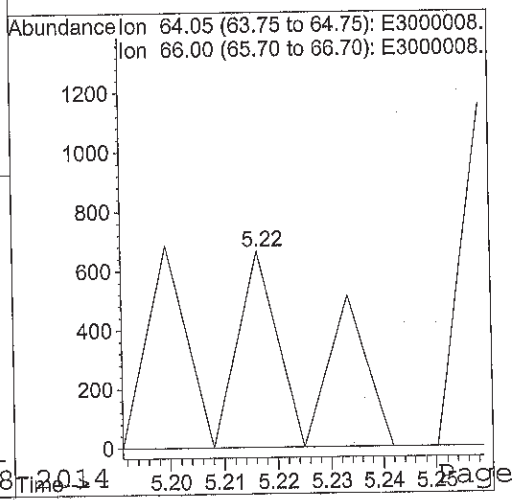


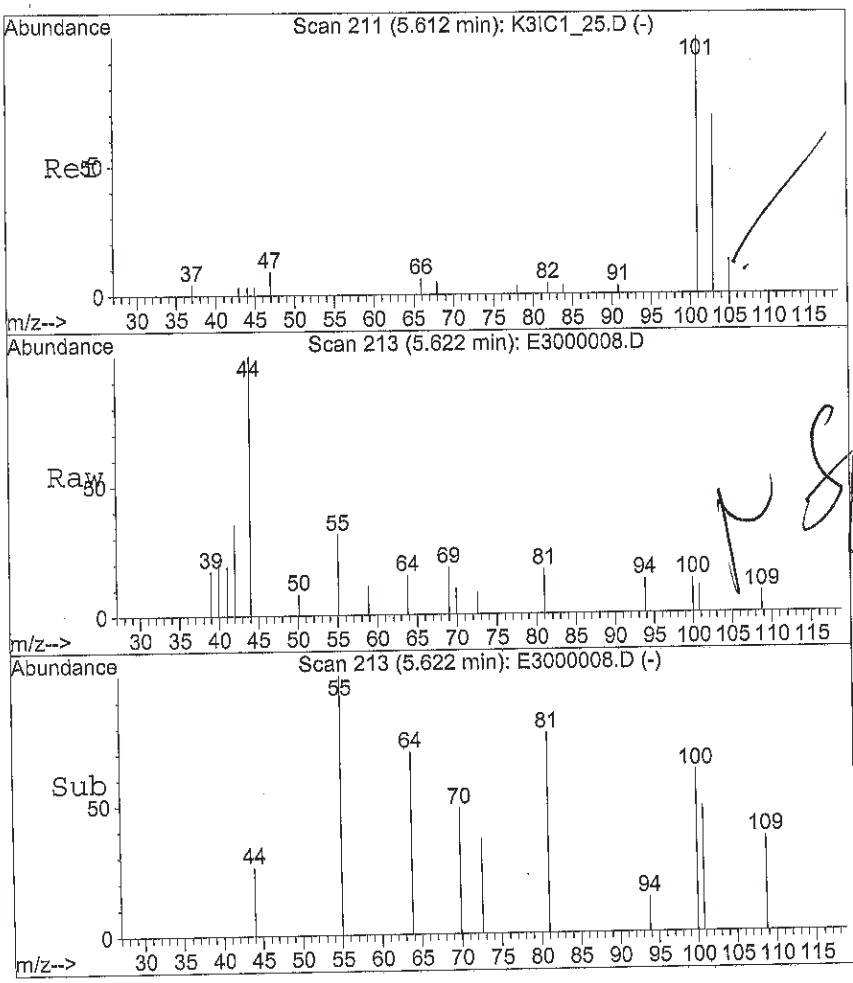


#7
Chloroethane
Concen: 1.21 ug/L
RT: 5.22 min Scan# 165
Delta R.T. -0.02 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 64 Resp: 596

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

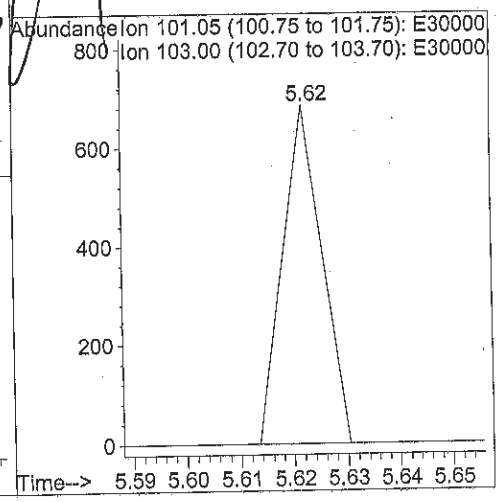


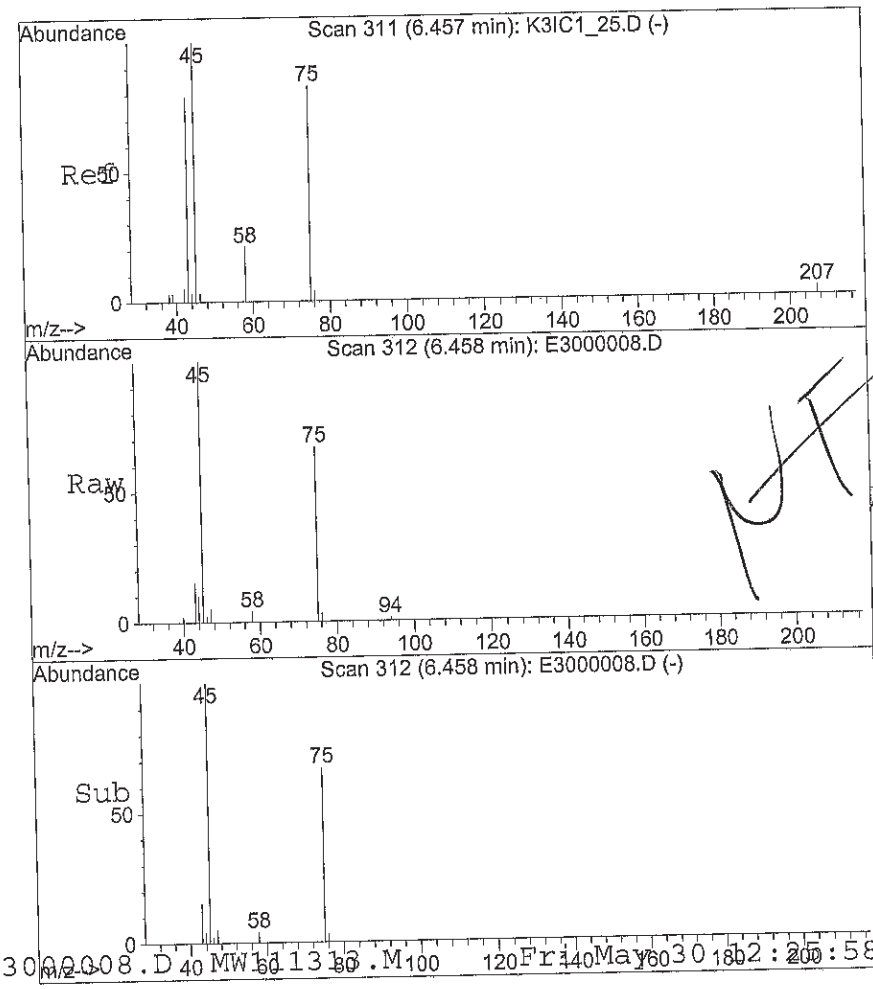


#8
(F11) Trichlorofluoromethane
Concen: 0.09 ug/L
RT: 5.62 min Scan# 213
Delta R.T. 0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:101 Resp: 347

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

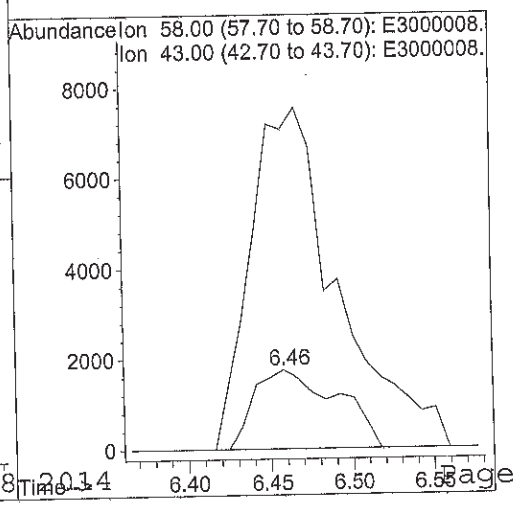


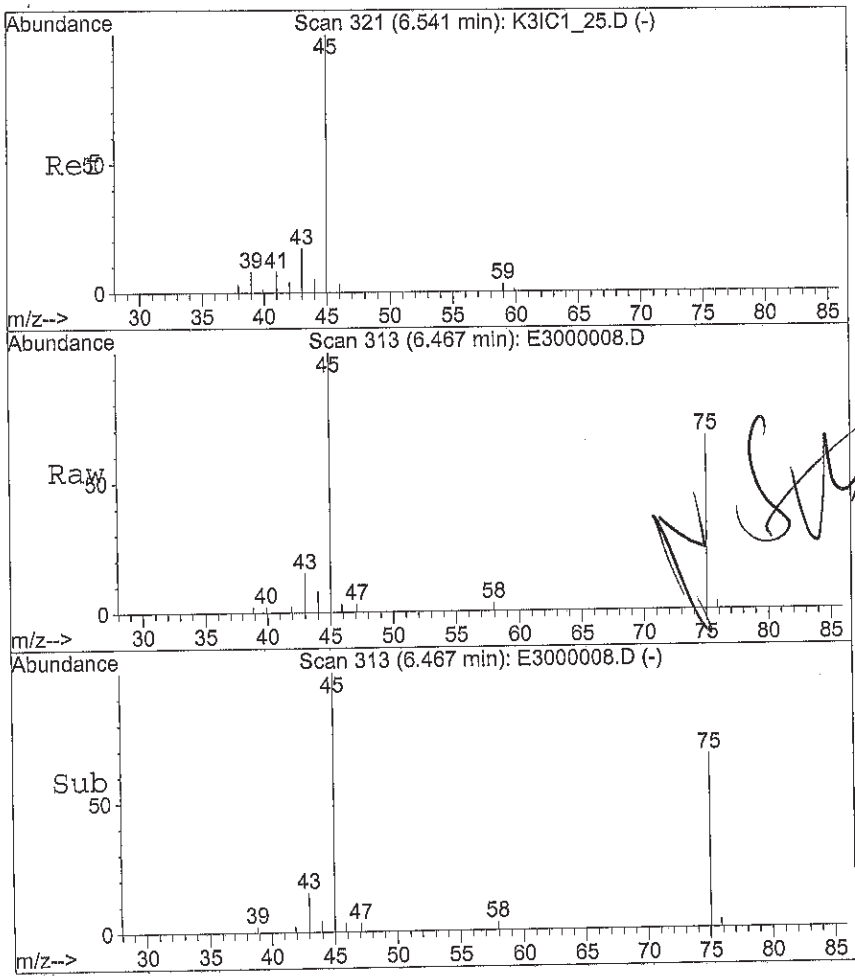


#11
Acetone
Concen: 6.68 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 58 Resp: 6146

Ion	Ratio	Lower	Upper
58	100		
43	454.6	360.9	541.3

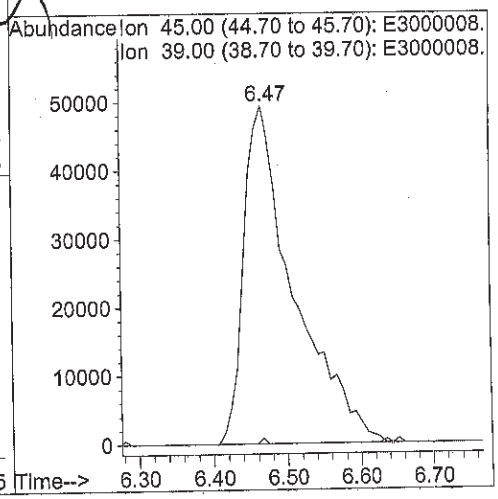


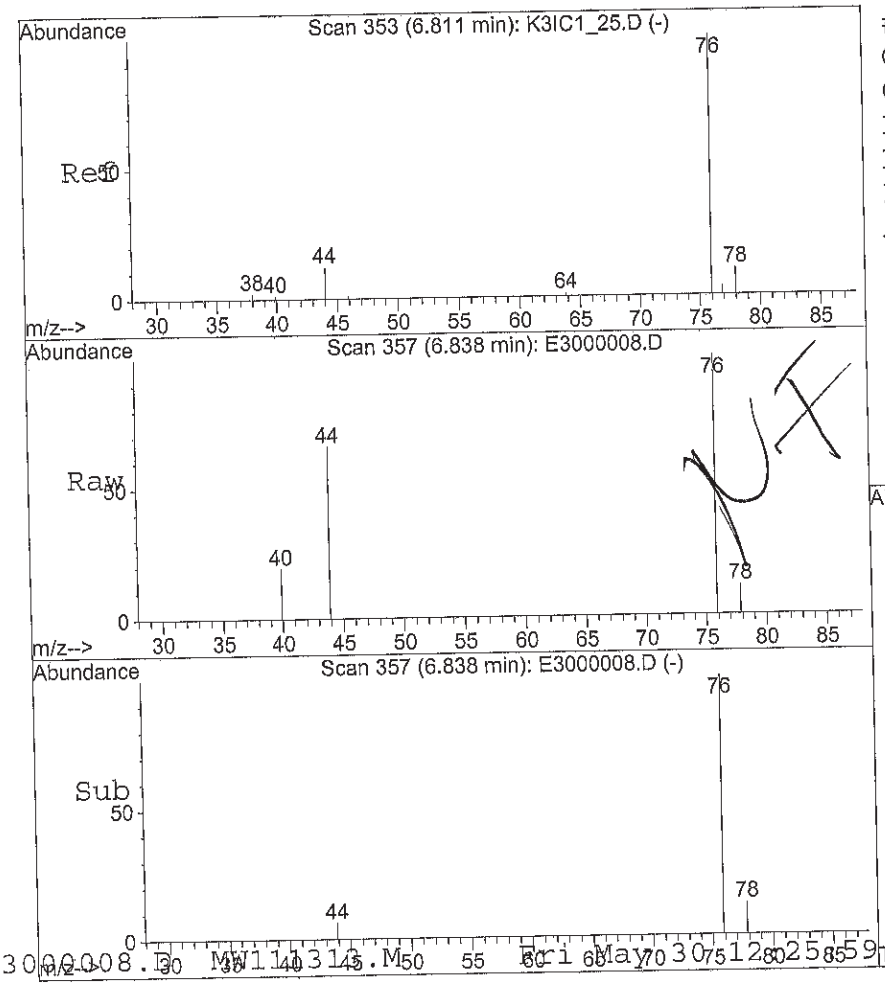


#12
(IPA) Leak Check Compound
Concen: 1396.11 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 45 Resp: 231178

Ion	Ratio	Lower	Upper
45	100		
39	0.2	4.9	7.3#

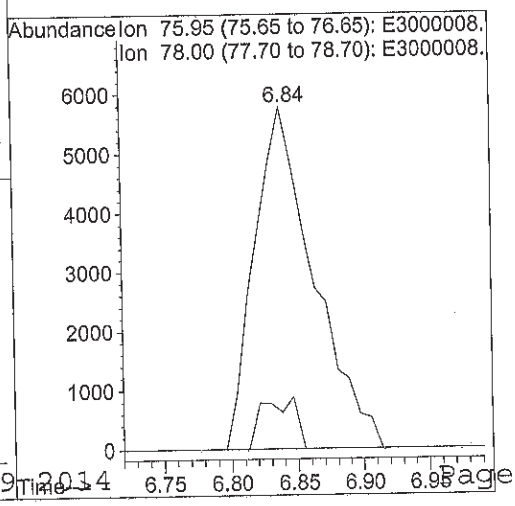


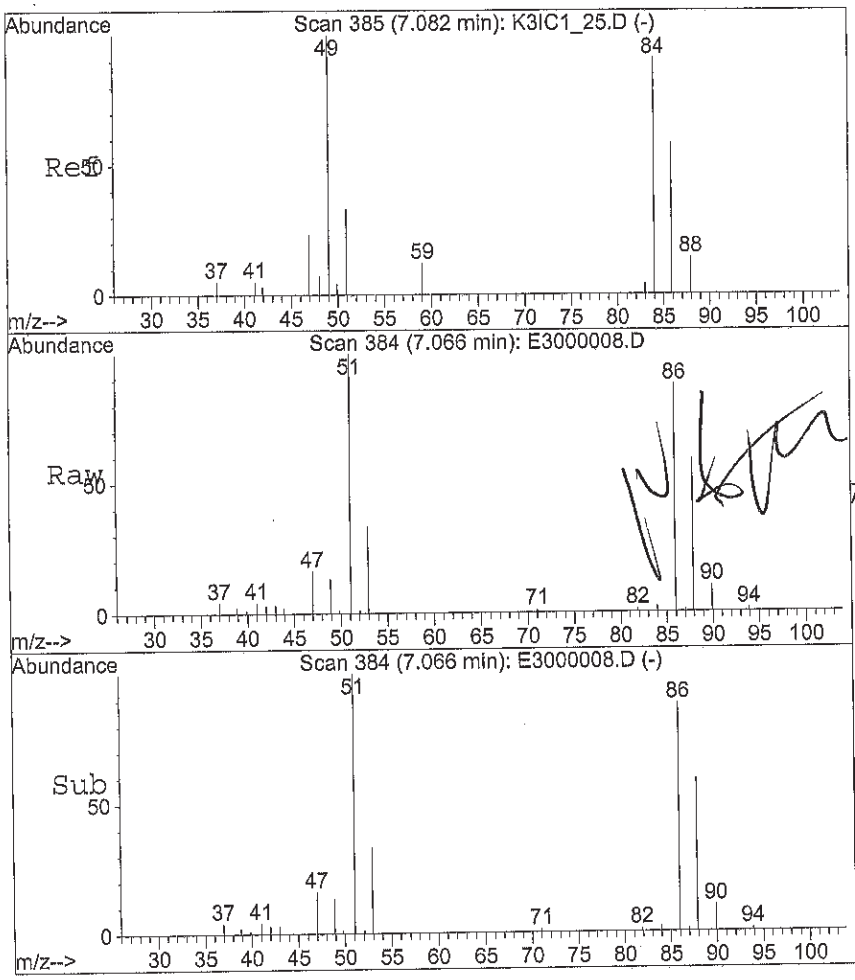


#13
Carbon disulfide
Concen: 1.56 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 76 Resp: 17829

Ion	Ratio	Lower	Upper
76	100		
78	8.6	7.0	10.4

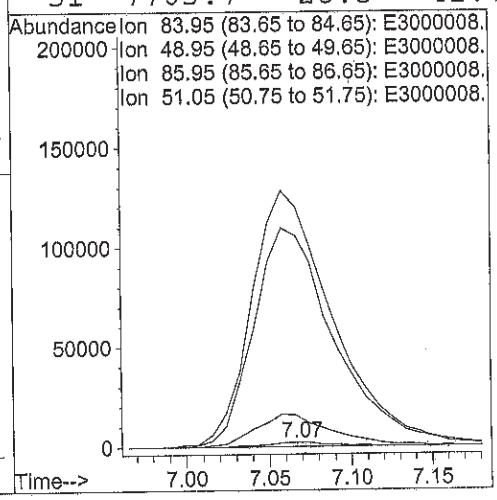


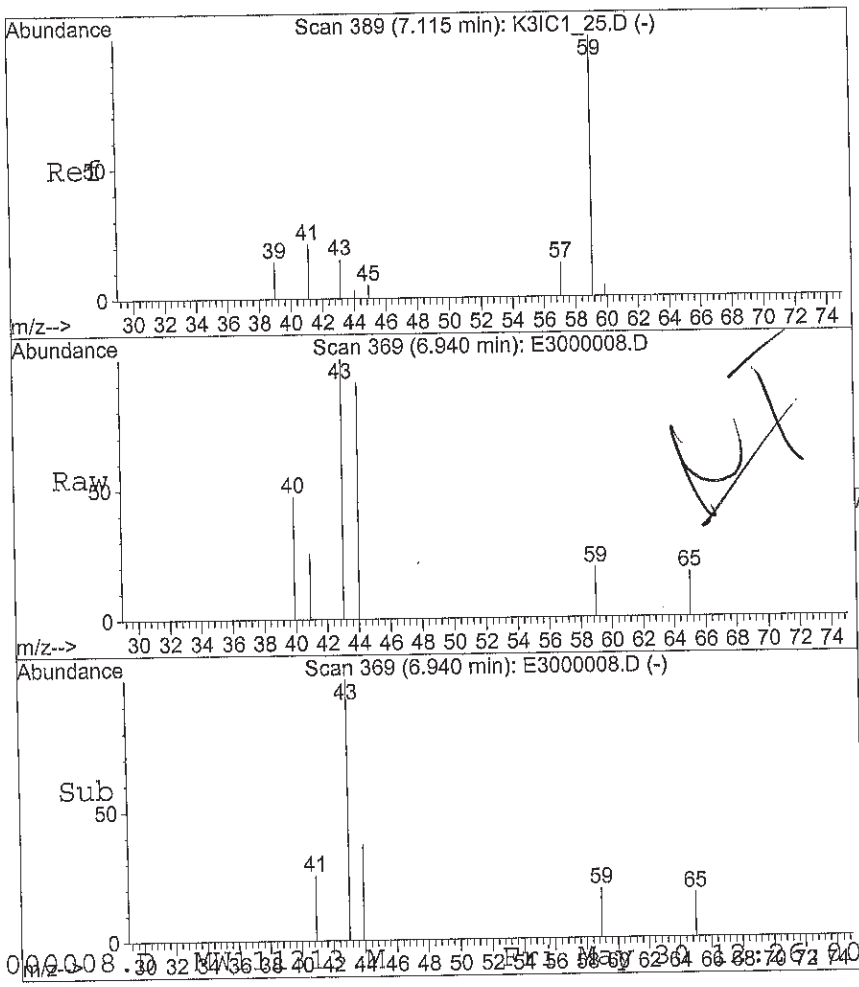


#14
Methylene Chloride
Concen: 1.52 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.02 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 84 Resp: 5767

Ion	Ratio	Lower	Upper
84	100		
49	896.2	89.8	134.6#
86	6528.4	51.1	76.7#
51	7703.7	28.5	42.7#

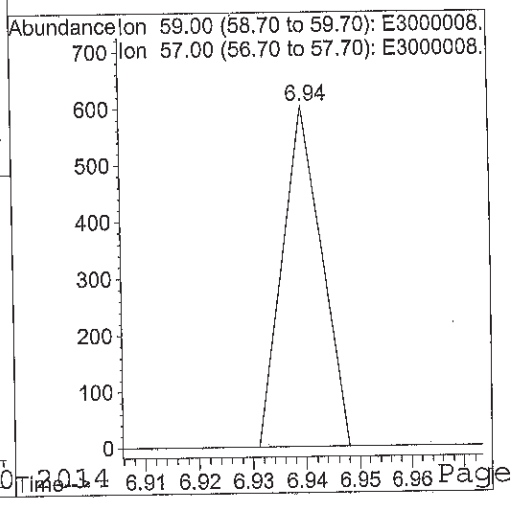


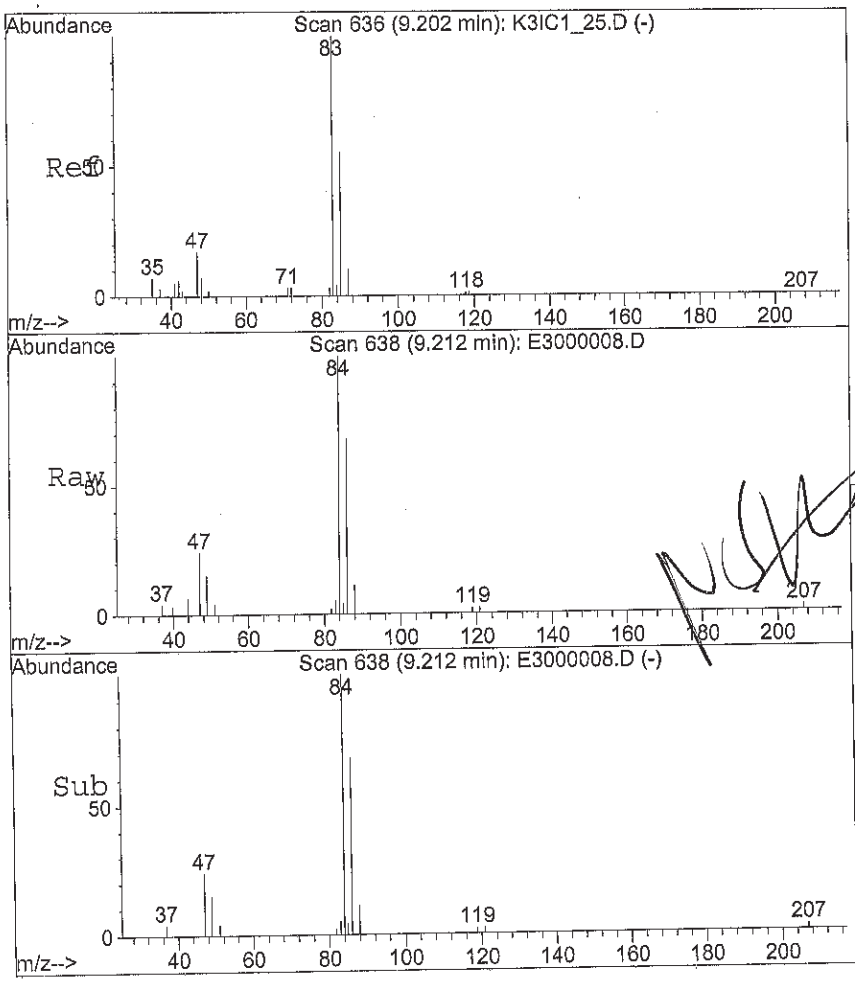


#15
(TBA) tert-Butanol
Concen: 1.30 ug/L
RT: 6.94 min Scan# 369
Delta R.T. -0.18 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 59 Resp: 306

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

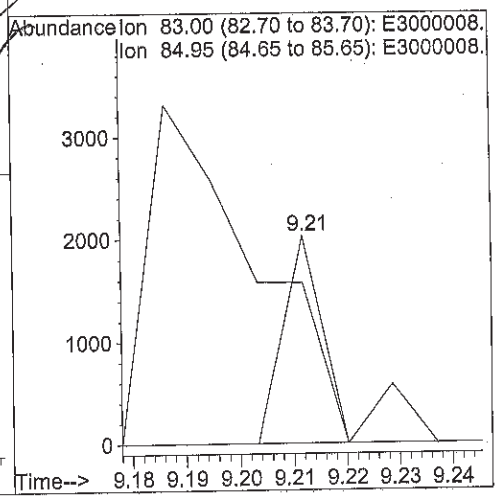


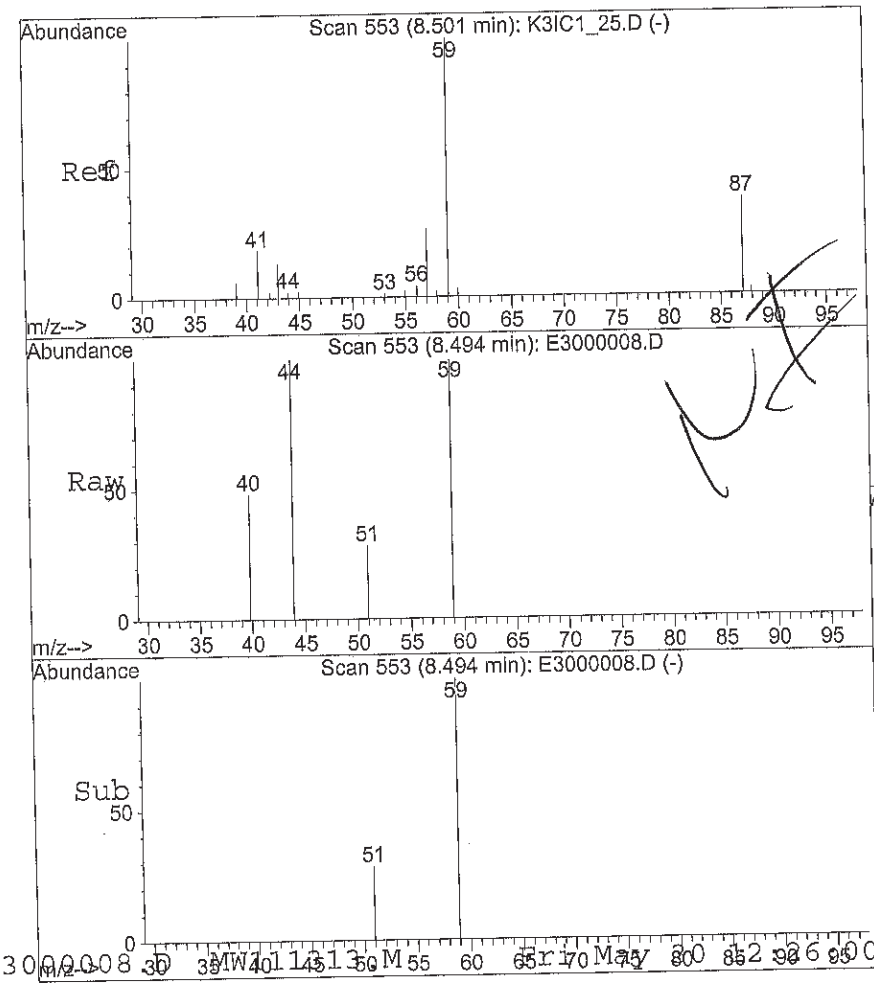


#24
Chloroform
Concen: 0.14 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 83 Resp: 1028

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

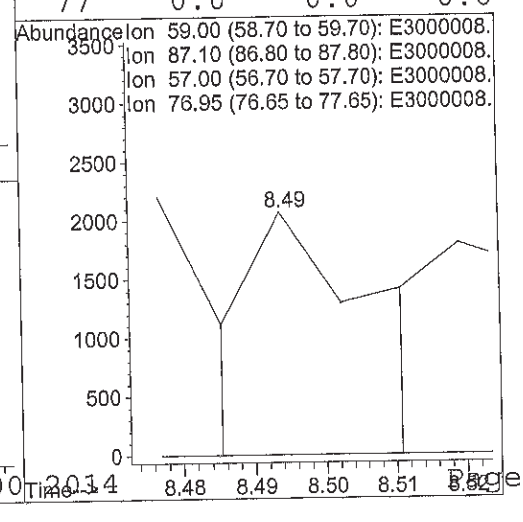


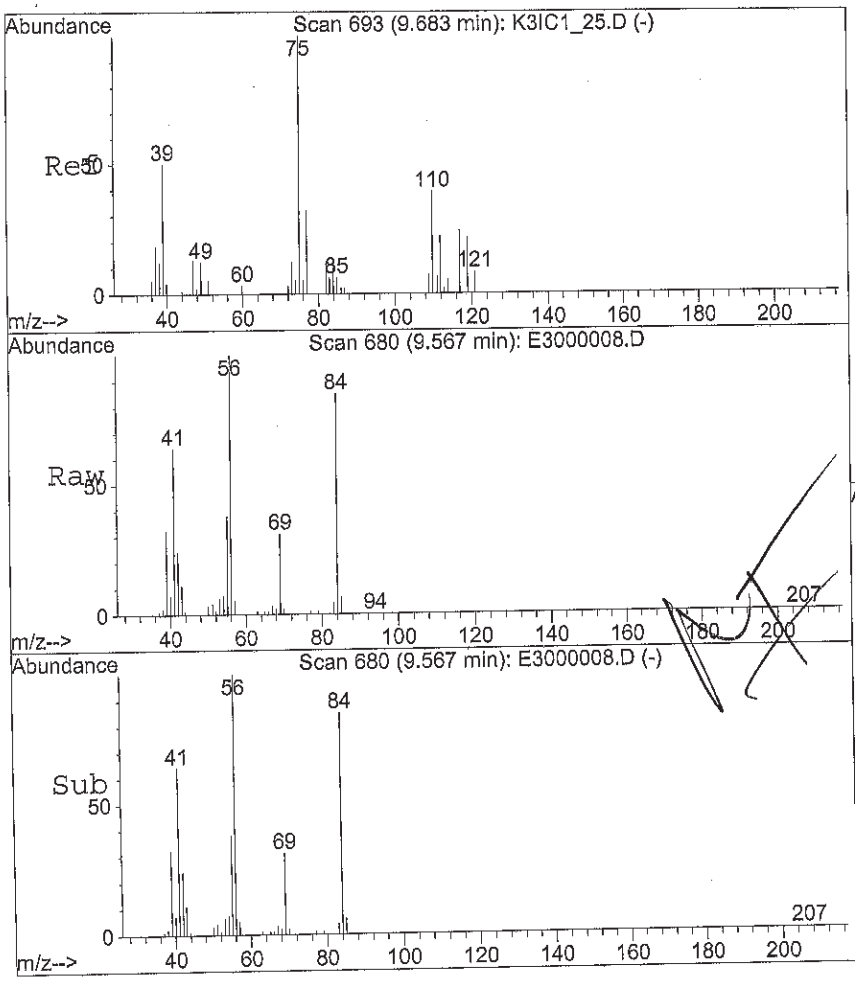


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.24 ug/L
RT: 8.49 min Scan# 553
Delta R.T. -0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 59 Resp: 2419

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

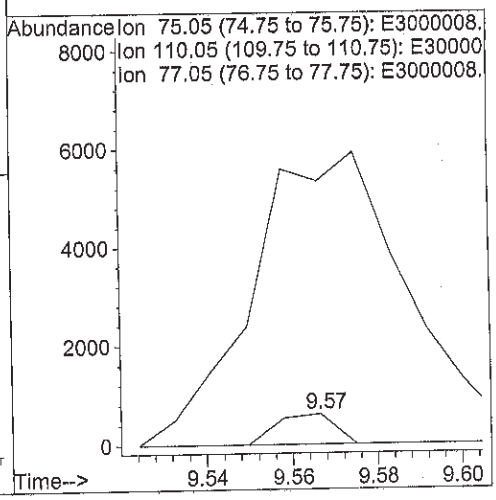


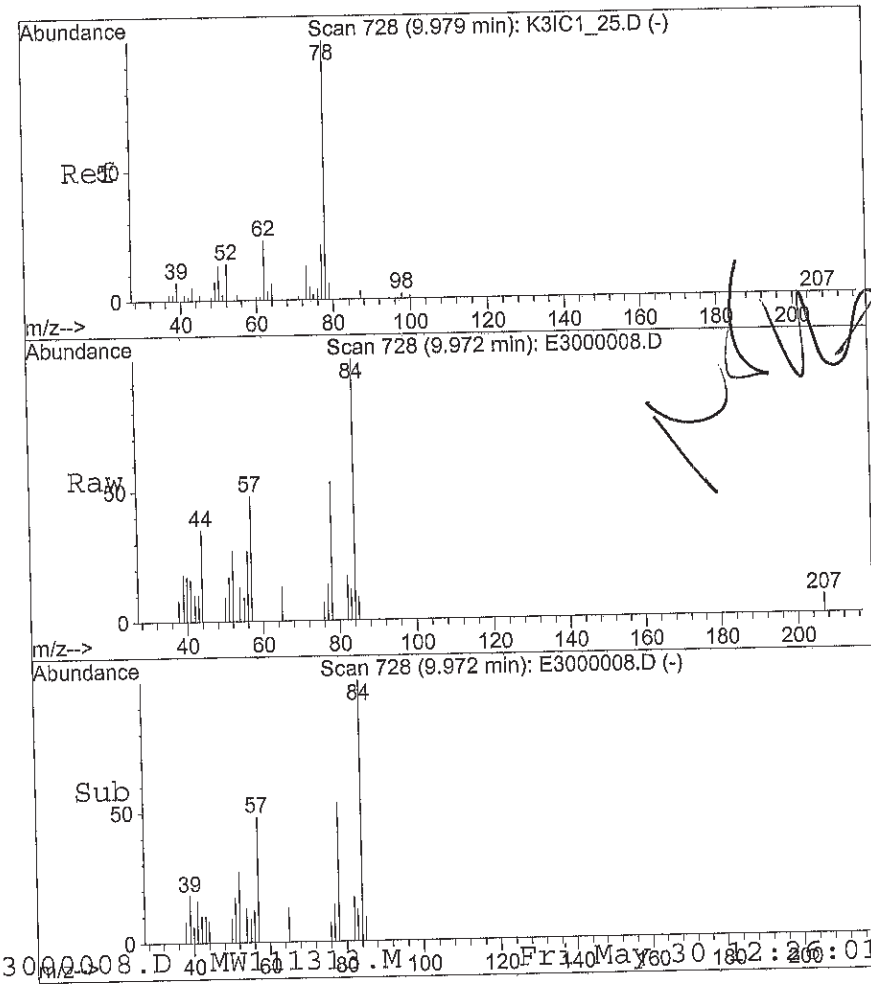


#29
1,1-Dichloropropene
Concen: 0.11 ug/L
RT: 9.57 min Scan# 680
Delta R.T. -0.12 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 75 Resp: 574

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	2577.4	25.0	37.4#

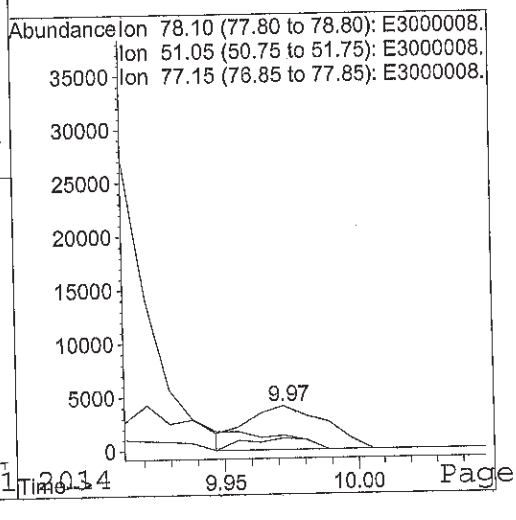


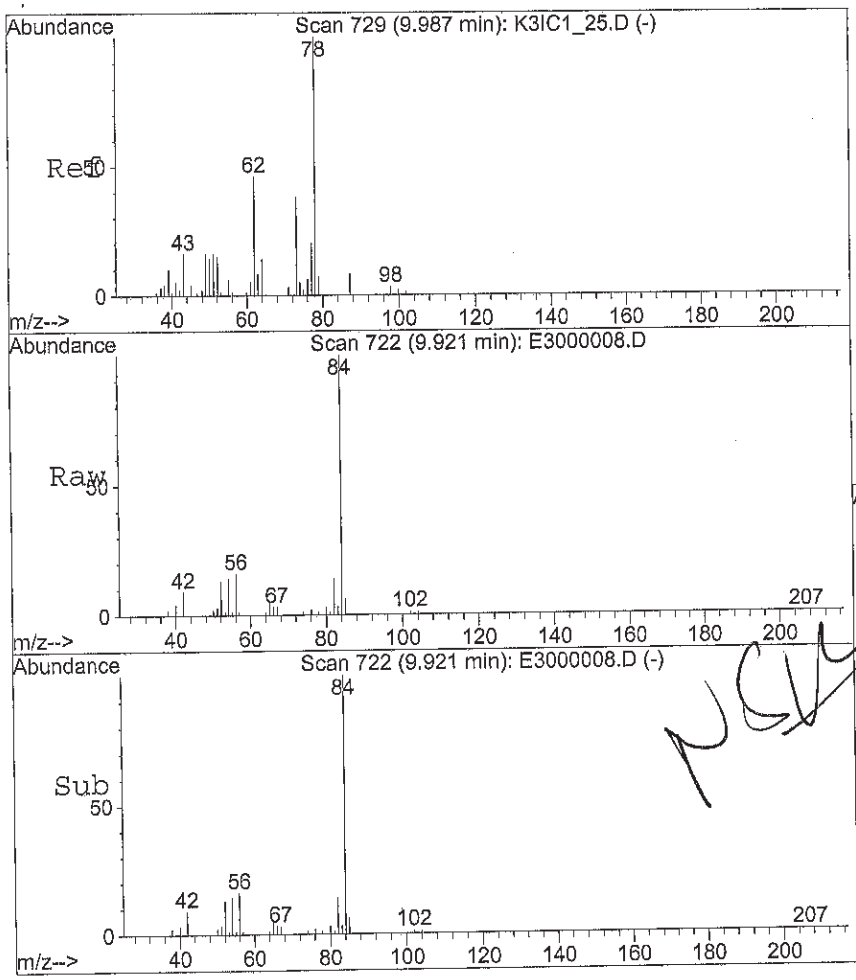


#31
Benzene
Concen: 0.64 ug/L
RT: 9.97 min Scan# 728
Delta R.T. -0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 78 Resp: 8345

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	22.0	16.6	24.8

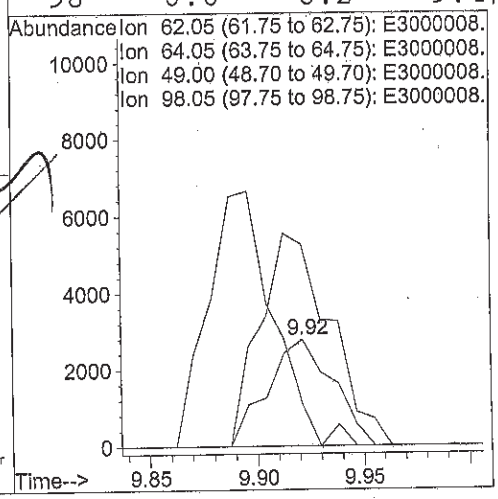


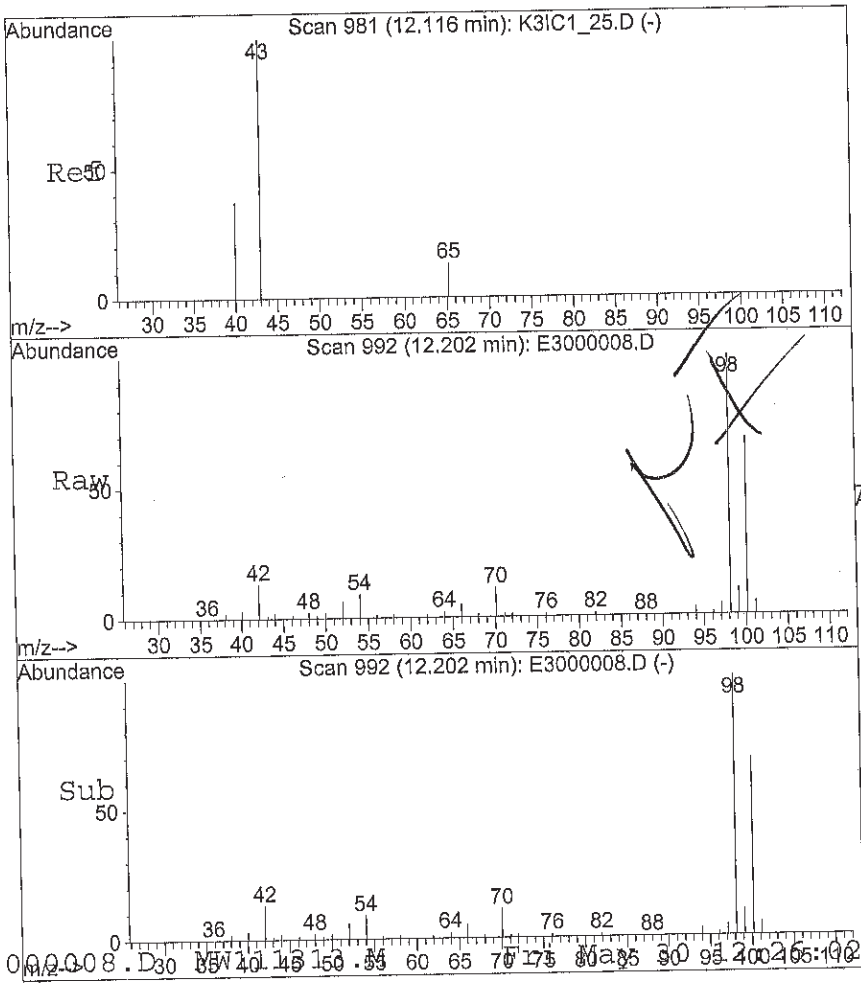


#32
1,2-Dichloroethane
Concen: 1.28 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.07 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 62 Resp: 5894

Ion	Ratio	Lower	Upper
62	100		
64	214.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

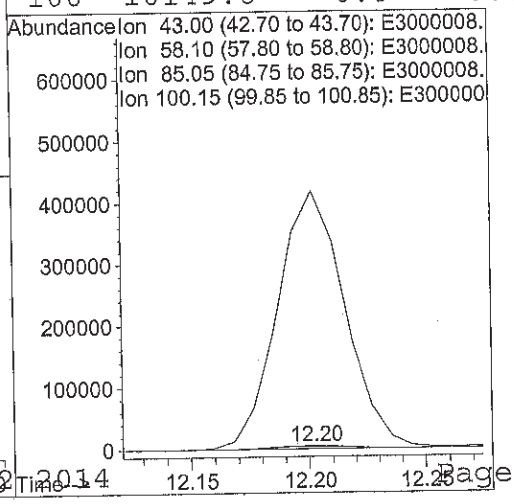


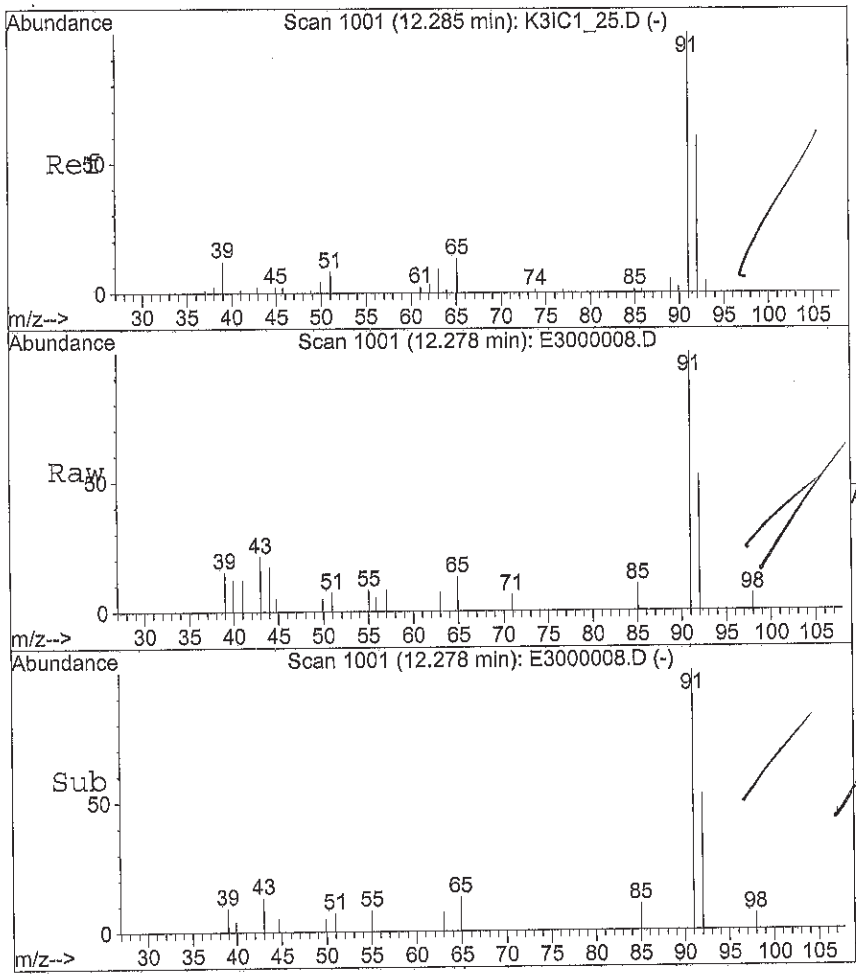


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.52 ug/L
RT: 12.20 min Scan# 992
Delta R.T. 0.09 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 43 Resp: 8201

Ion	Ratio	Lower	Upper
43	100		
58	126.7	0.0	0.0#
85	0.0	0.0	0.0
100	10149.8	0.0	0.0#

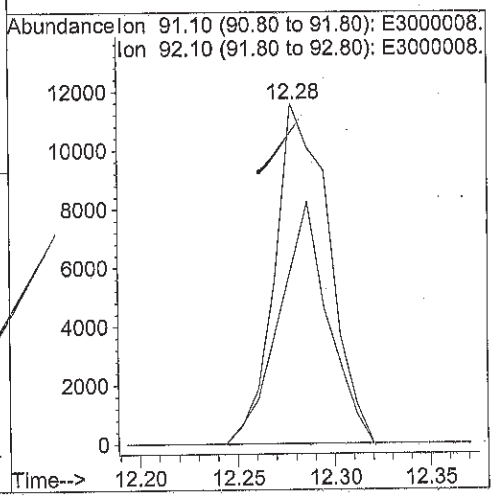


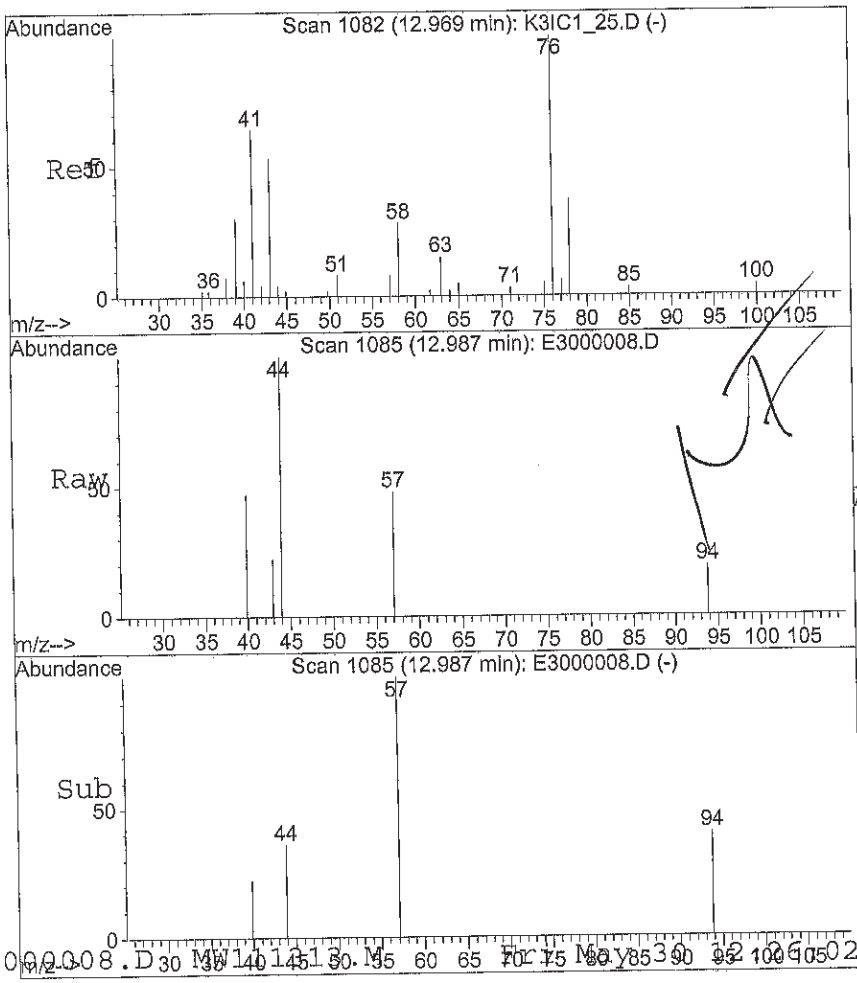


#41
Toluene
Concen: 1.40 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 91 Resp: 22320

Ion	Ratio	Lower	Upper
91	100		
92	64.7	47.4	71.0

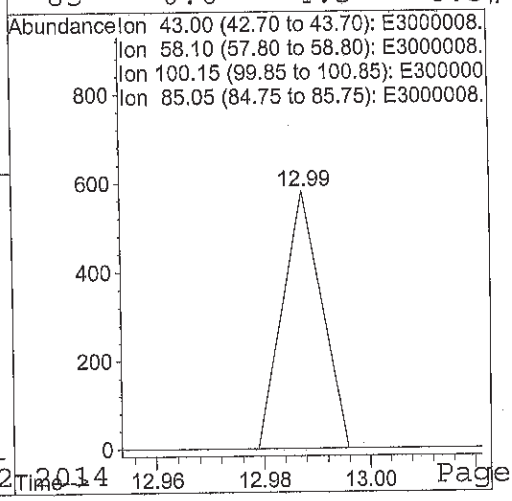


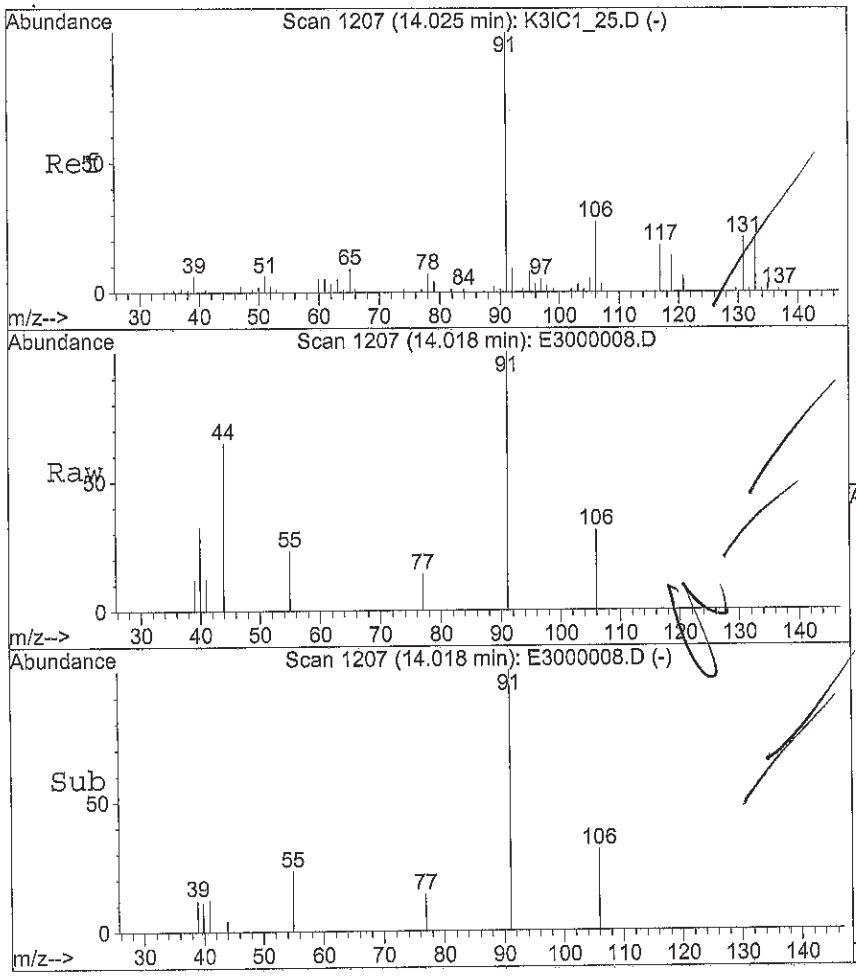


#46
2-Hexanone
Concen: 0.12 ug/L
RT: 12.99 min Scan# 1085
Delta R.T. 0.02 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 43 Resp: 294

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

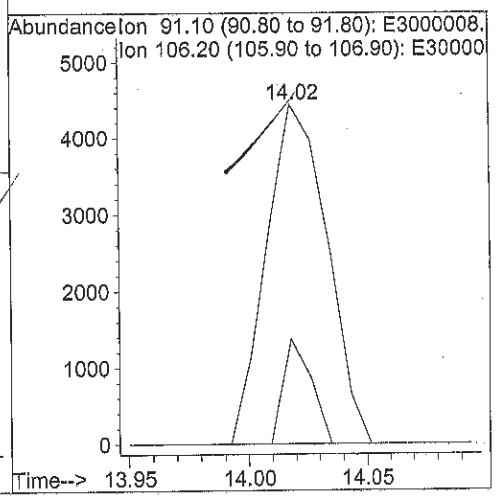


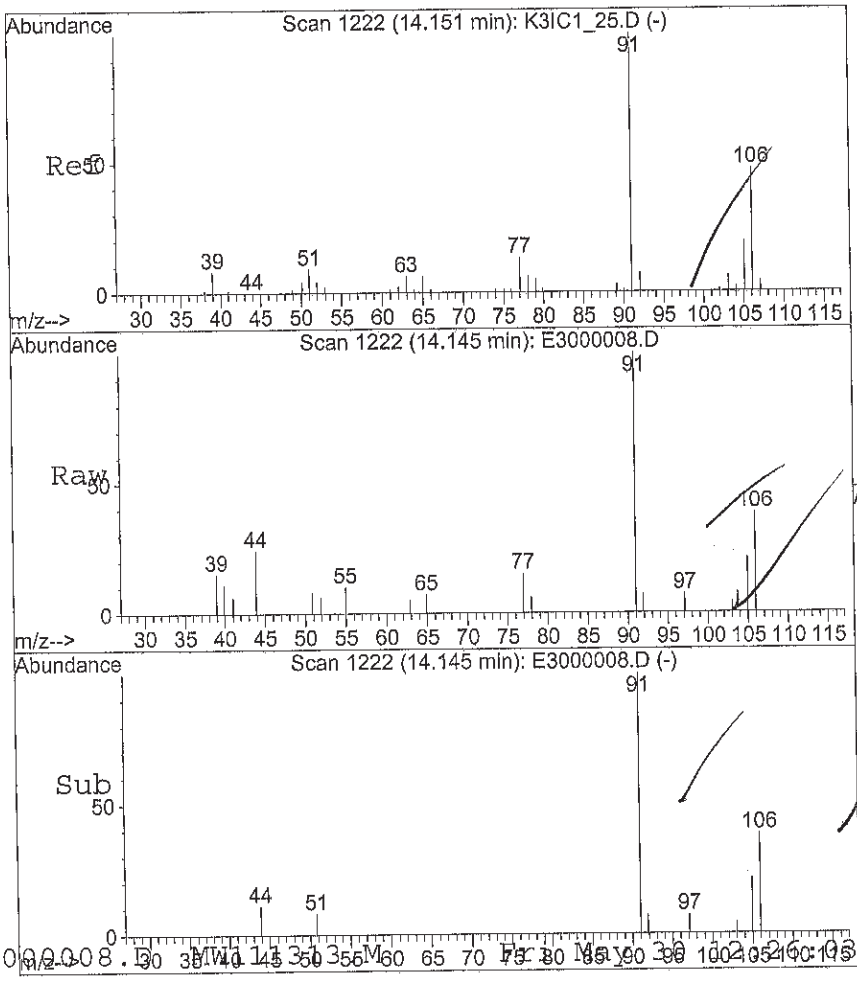


#51
Ethylbenzene
Concen: 0.44 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 91 Resp: 7894

Ion	Ratio	Lower	Upper
91	100		
106	14.3	23.5	35.3#

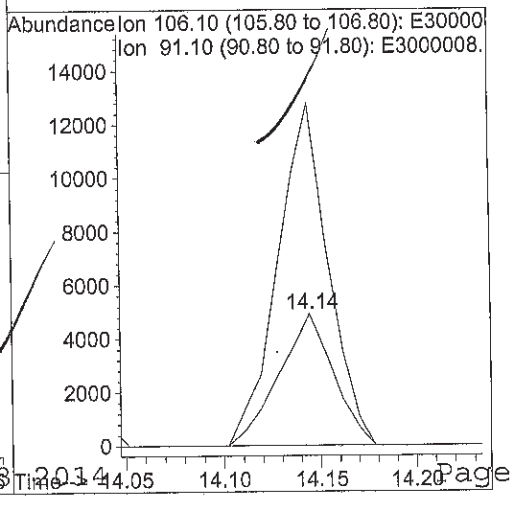


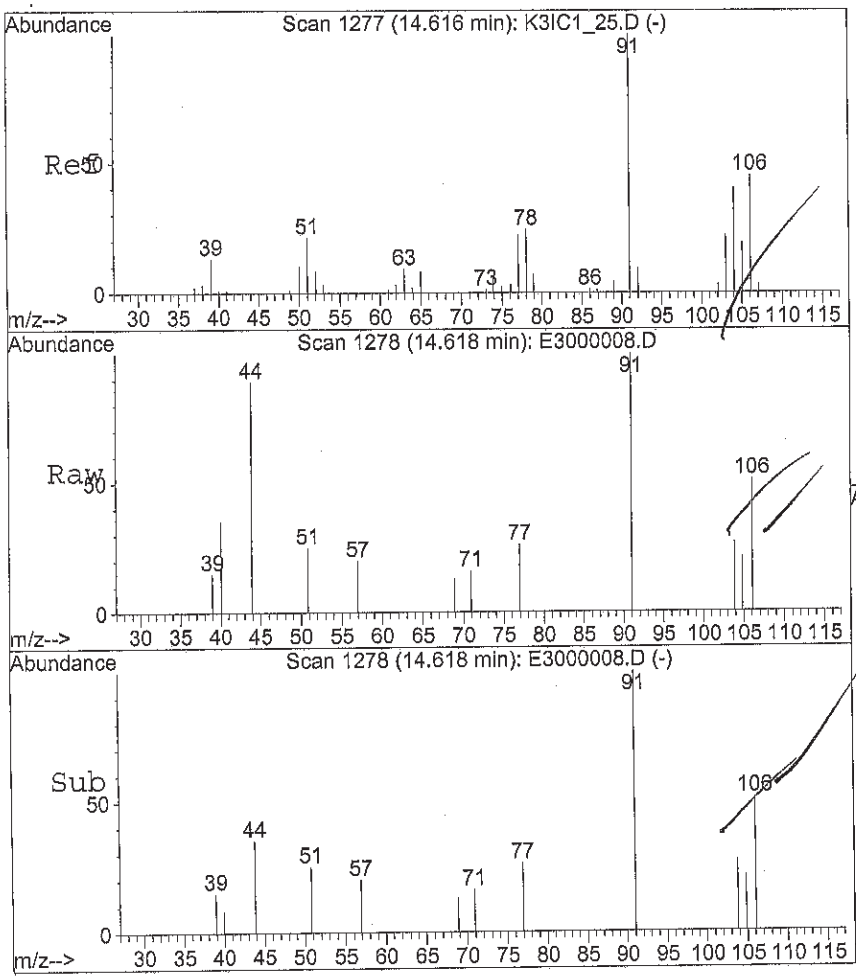


#52
m,p-Xylenes
Concen: 1.50 ug/L
RT: 14.14 min Scan# 1222
Delta R.T. -0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:106 Resp: 9611

Ion	Ratio	Lower	Upper
106	100		
91	241.6	177.1	265.7

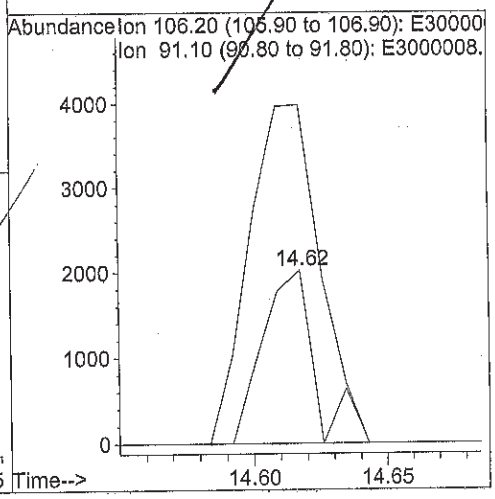


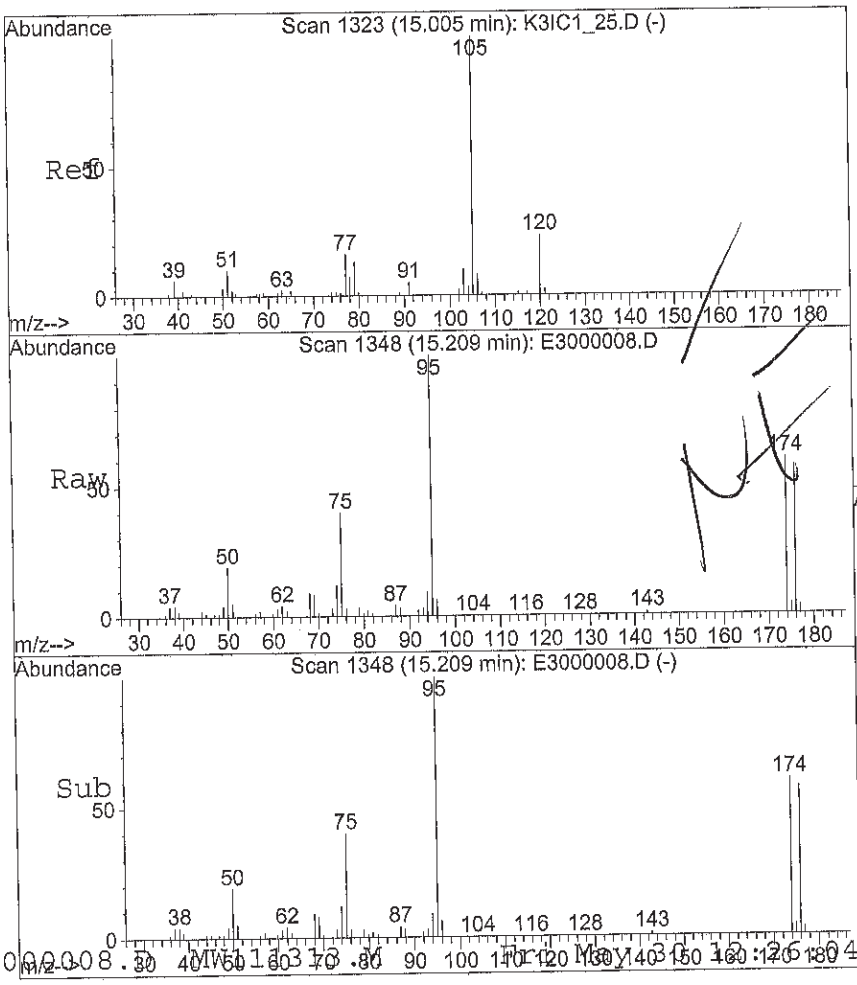


#53
o-Xylene
Concen: 0.43 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.00 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:106 Resp: 2719

Ion	Ratio	Lower	Upper
106	100		
91	267.2	179.0	268.6

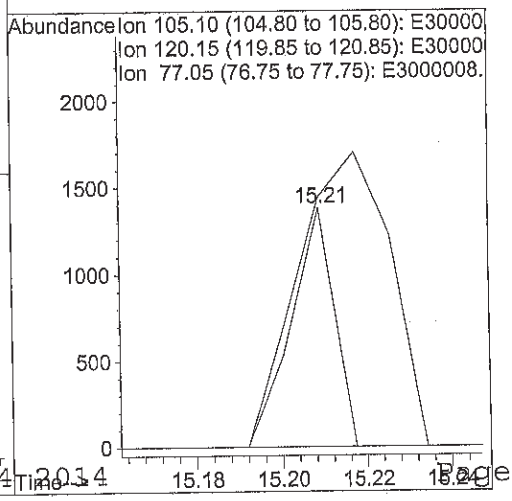


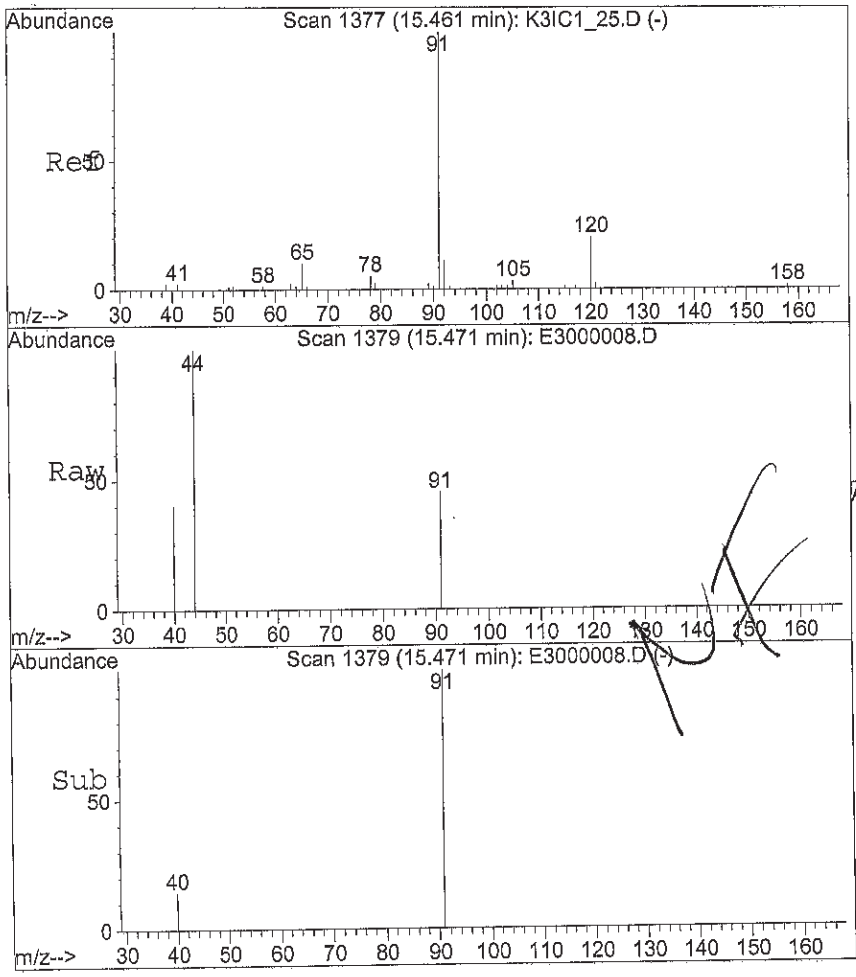


#56
Isopropylbenzene
Concen: 0.06 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. 0.20 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:105 Resp: 968

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	264.9	13.1	19.7#

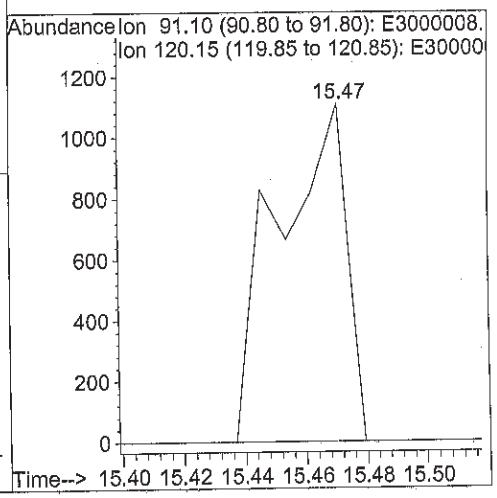


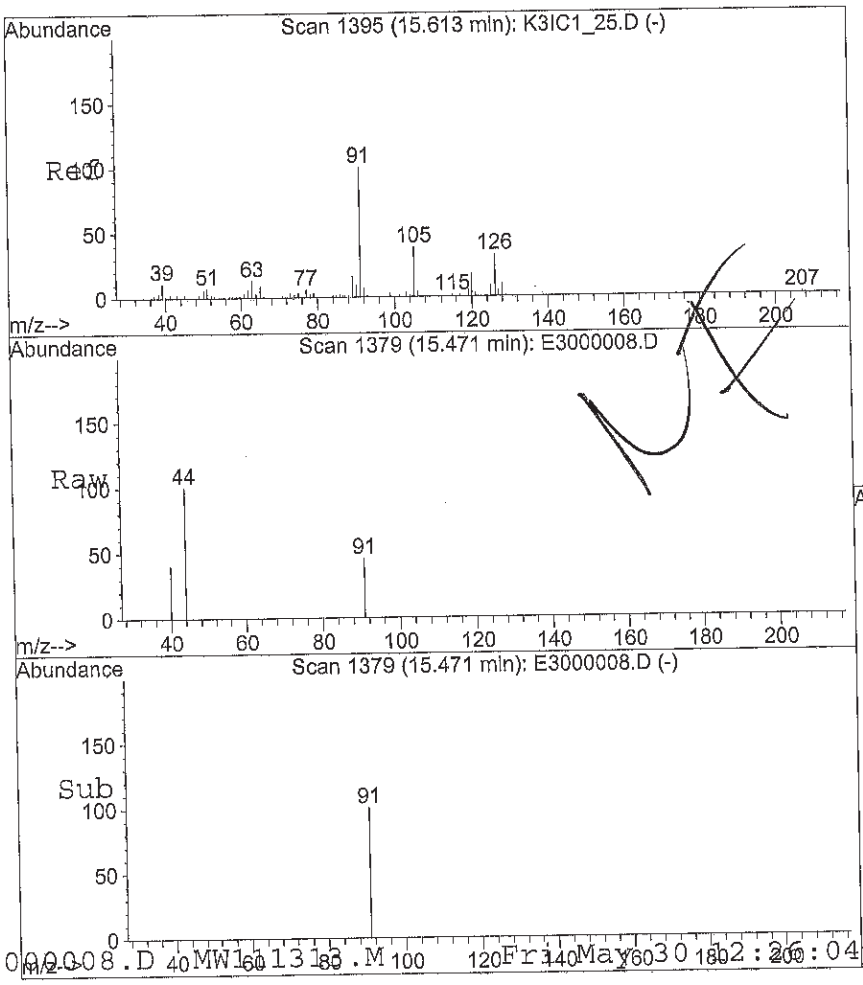


#62
n-Propylbenzene
Concen: 0.07 ug/L
RT: 15.47 min Scan# 1379
Delta R.T. 0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 91 Resp: 1736

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

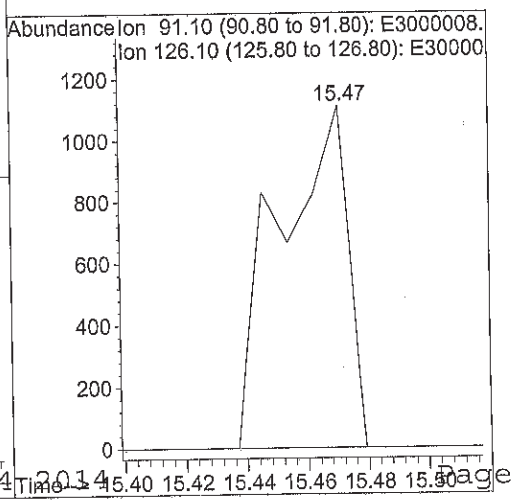


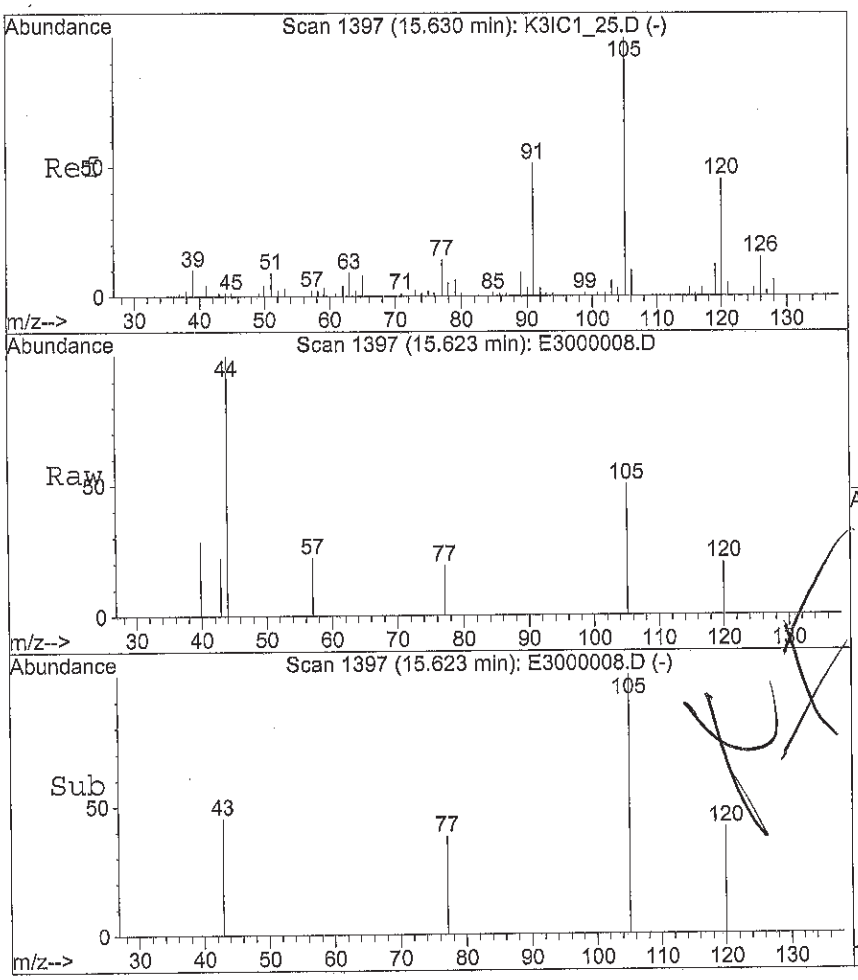


#63
2-Chlorotoluene
Concen: 0.11 ug/L
RT: 15.47 min Scan# 1379
Delta R.T. -0.14 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion: 91 Resp: 1736

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

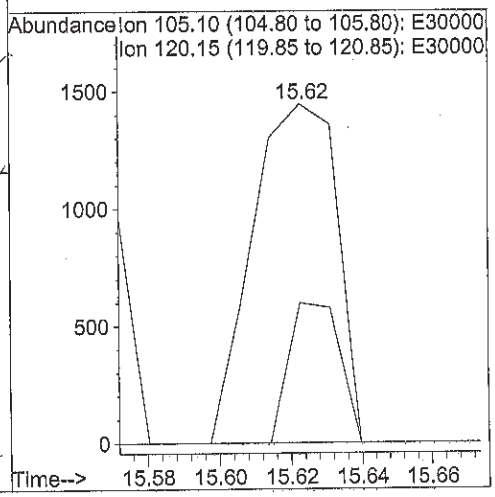


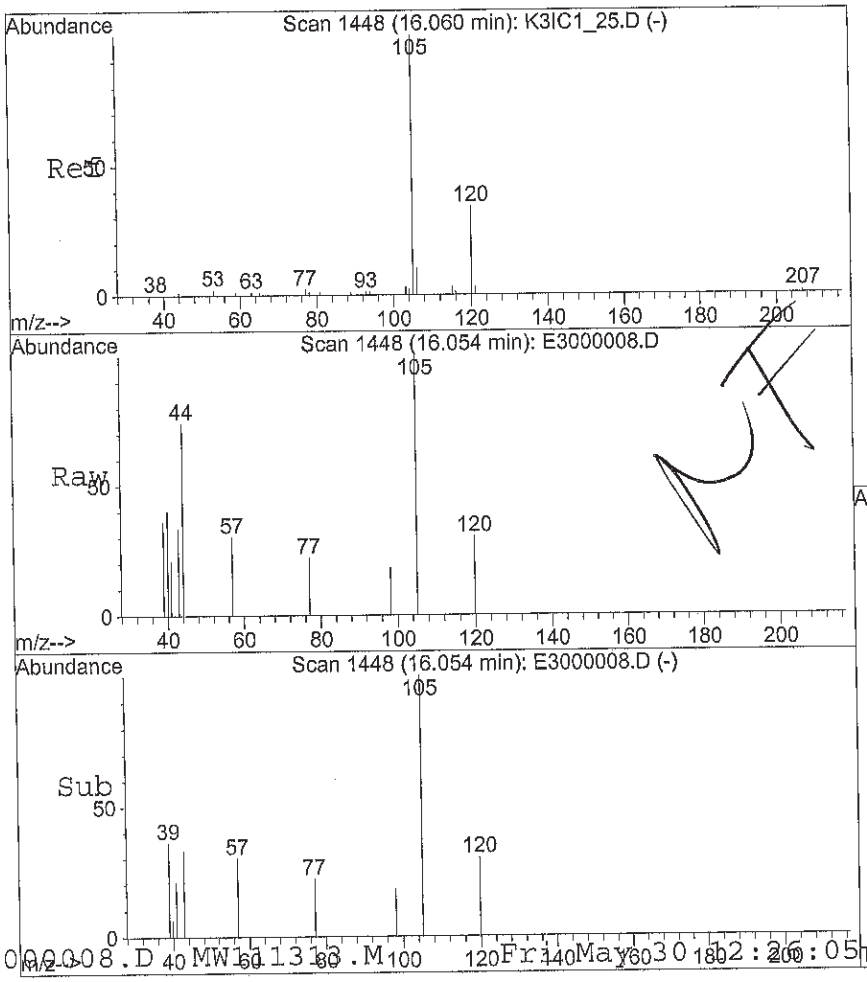


#64
1,3,5-Trimethylbenzene
Concen: 0.15 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:105 Resp: 2375

Ion	Ratio	Lower	Upper
105	100		
120	25.1	36.4	54.6#

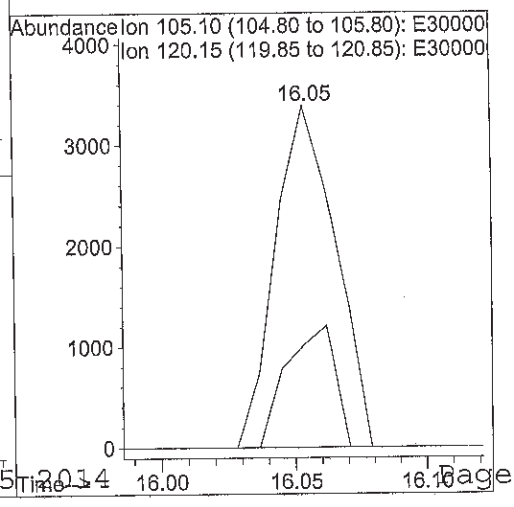


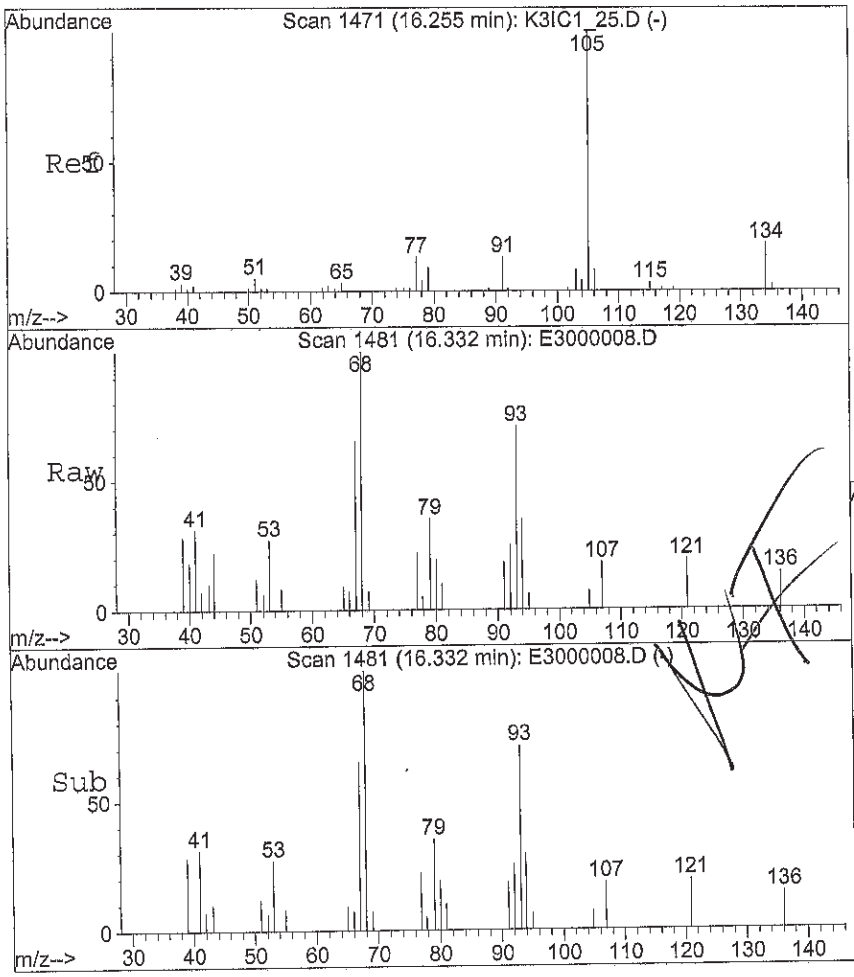


#67
1,2,4-Trimethylbenzene
Concen: 0.32 ug/L
RT: 16.05 min Scan# 1448
Delta R.T. -0.01 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:105 Resp: 5315

Ion	Ratio	Lower	Upper
105	100		
120	28.6	33.8	50.8#

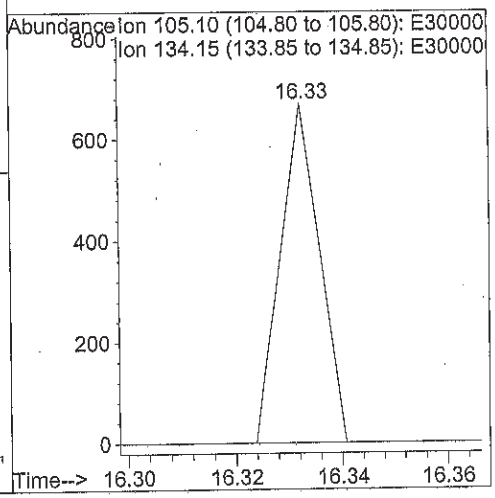


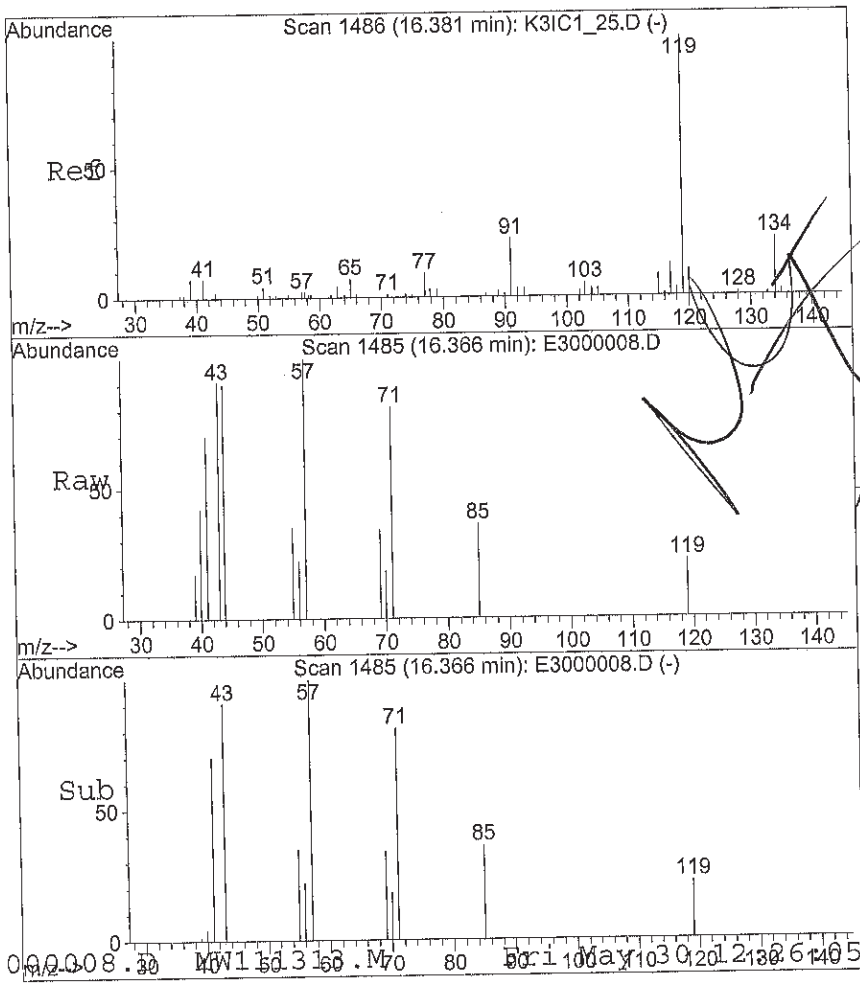


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:105 Resp: 340

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

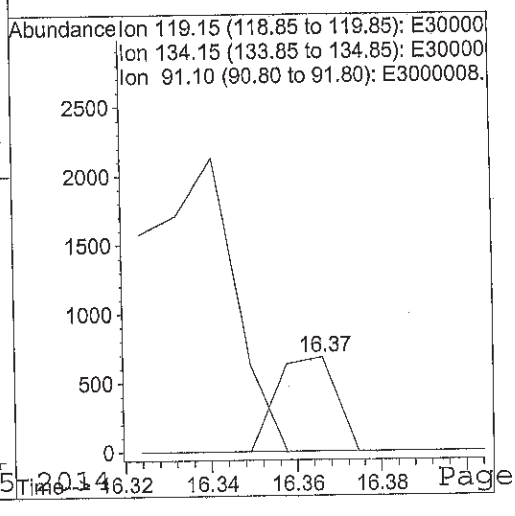




#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.02 min
Lab File: E3000008.D
Acq: 30 May 2014 12:00 pm

Tgt Ion:119 Resp: 667

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000008.D Vial: 7
Acq On : 30 May 2014 12:00 pm Operator: DN
Sample : 3E43001-07 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 12:24 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1378002	12.50	ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1165964	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	644664	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	400617	11.18	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.44%			
3) Chloroform-d (SU6)	9.18	84	653095	12.70	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 101.60%			
4) Methylene Chloride-d2 (SU5	7.06	86	376491	12.53	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.24%			
5) 1,2-Dichloroethane-d4 (SU2	9.90	65	388772	15.87	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 126.96%#			
6) Benzene-d6 (SU7)	9.92	84	1263518	11.68	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.44%			
8) Toluene-d8 (SU3)	12.20	98	1237843	11.19	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.52%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	660165	14.46	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.68%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

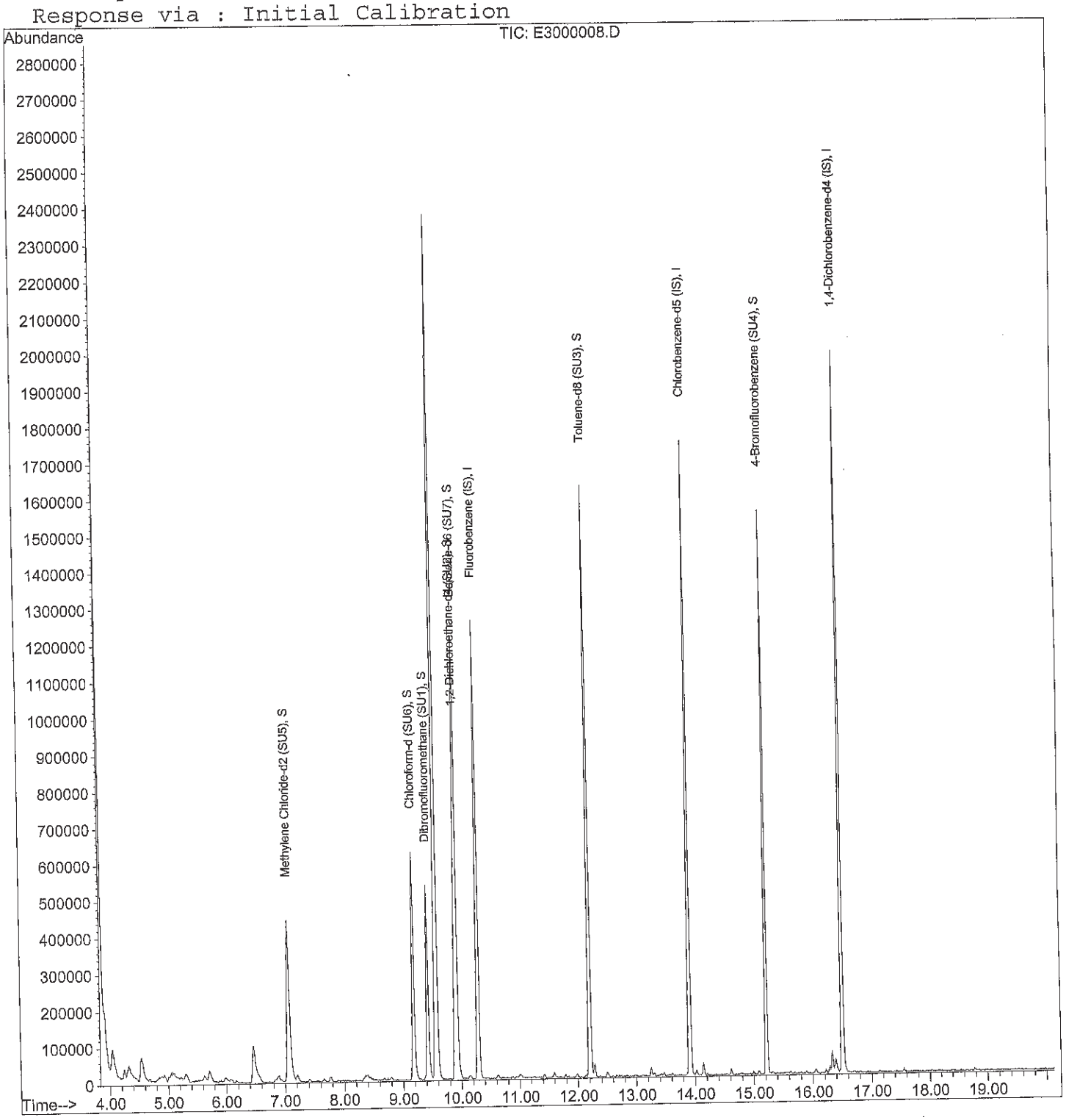
Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000008.D
Acq On : 30 May 2014 12:00 pm
Sample : 3E43001-07
Misc : 100cc SVL-550-SA5D-SV-11.0-12.0
MS Integration Params: rteint.p
Quant Time: May 30 12:24 19114

Vial: 7
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000009.D
Acq On : 30 May 2014 12:33 pm
Sample : 3E43001-08
Misc : 100cc SVL-550-SA5D-SV-17.0-18.0
MS Integration Params: rteint.p
Quant Time: May 30 12:57 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1467890	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1213356	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	667526	12.50 ug/L	0.00
System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	422085	11.53 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	92.24%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	407848	11.72 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	93.76%	
39) Toluene-d8 (SU3)	12.20	98	1314718	11.62 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	92.96%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	684383	13.79 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery =	110.32%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	277	0.08 ~~ug/L~~ #SM	44
4) Chloromethane	4.45	50	1555	-0.59 ug/L	97
6) Bromomethane	5.05	96	8663	3.59 ~~ug/L~~ #	69
7) Chloroethane	5.22	64	1584	1.98 ~~ug/L~~ #	32
11) Acetone	6.46	58	4693	3.19 ~~ug/L~~ #	65
12) (IPA) Leak Check Compound	6.47	45	231246	1311.01 ~~ug/L~~ #m	82
13) Carbon disulfide	6.83	76	1947	0.16 ~~ug/L~~ #	87
14) Methylene Chloride	7.06	84	6231	1.55 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.88	59	1645	6.57 ~~ug/L~~ #	77
24) Chloroform	9.21	83	601	0.08 ~~ug/L~~ #SM	18
25) (ETBE) 2-ethoxy 2-methyl p	8.48	59	854	0.08 ~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.92	75	268	0.05 ~~ug/L~~ #	1
31) Benzene	9.96	78	1871	0.14 ~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.93	62	6297	1.29 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	6553	2.71 ~~ug/L~~ #	100
41) Toluene	12.28	91	9401	0.57 ug/L 0.014	87
46) 2-Hexanone	12.94	43	1143	0.43 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	5698	0.30 ug/L # 0.006	79
52) m,p-Xylenes	14.14	106	7684	1.15 ug/L 0.023	85
53) o-Xylene	14.63	106	1413	0.21 ug/L # 0.0042	5
54) Styrene	14.63	104	2068	-0.65 ~~ug/L~~ #	61
56) Isopropylbenzene	15.22	105	1435	0.08 ~~ug/L~~ #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000009.D Vial: 8
Acq On : 30 May 2014 12:33 pm Operator: DN
Sample : 3E43001-08 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-17.0-18.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 12:57 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

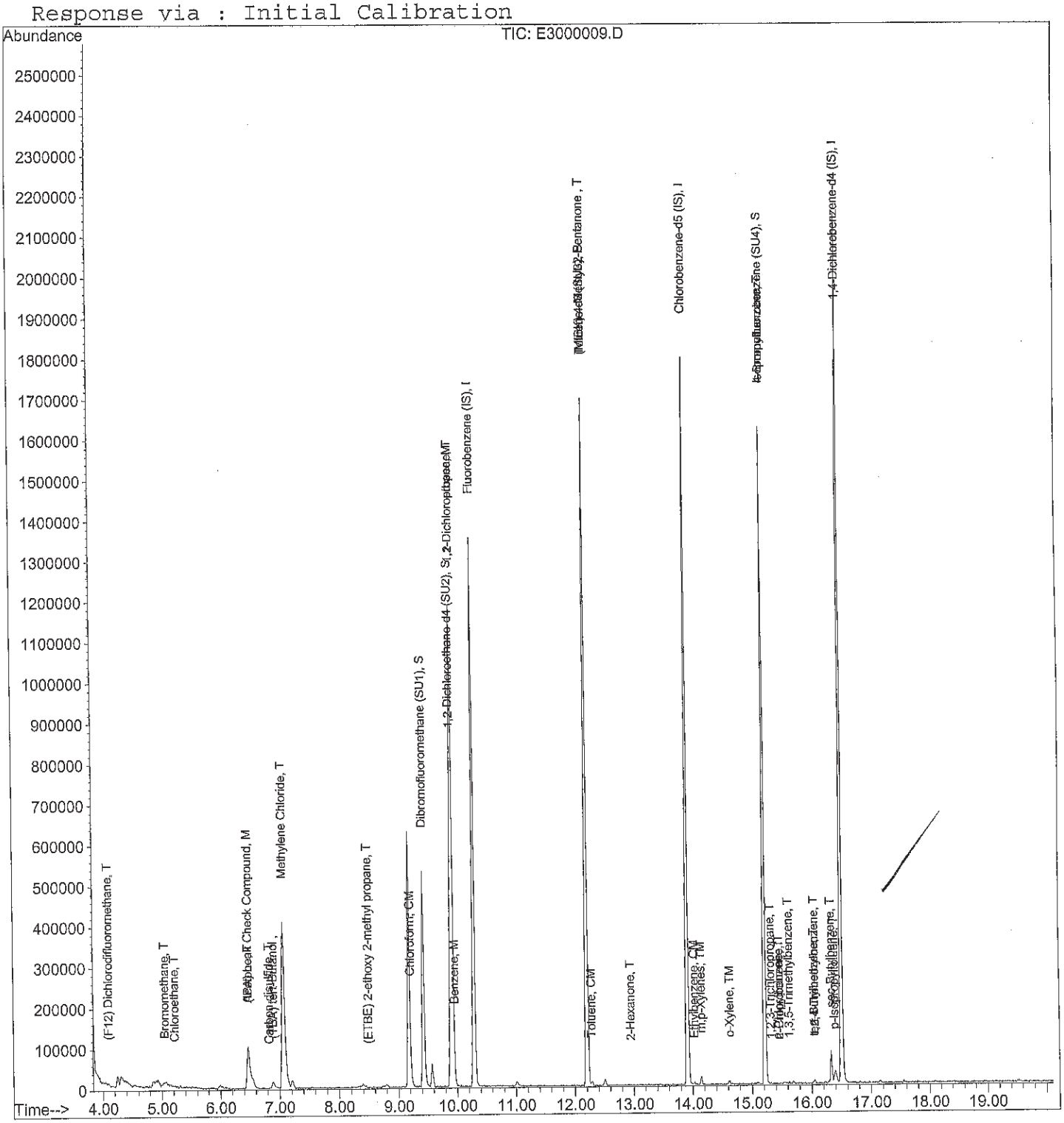
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
57) 1,2,3-Trichloropropane	15.32	75	279	0.06	~~ug/L~~ # ug	36
62) n-Propylbenzene	15.46	91	770	0.03	~~ug/L~~ #	56
63) 2-Chlorotoluene	15.46	91	770	0.05	~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	1658	0.10	~~ug/L~~ #	67
66) tert-Butylbenzene	16.05	119	370	0.03	~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.06	105	4271	0.25	~~ug/L~~ #	82
68) sec-Butylbenzene	16.33	105	475	0.02	~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1417	0.08	~~ug/L~~ #	52

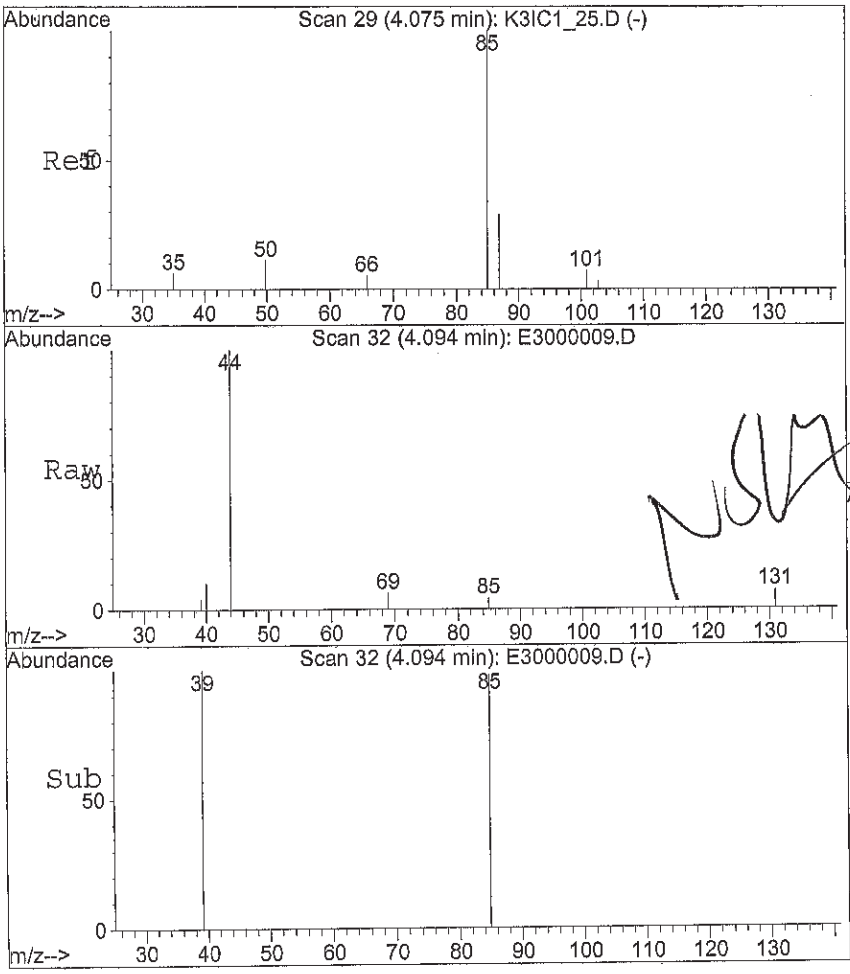
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000009.D Vial: 8
Acq On : 30 May 2014 12:33 pm Operator: DN
Sample : 3E43001-08 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-17.0-18.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 12:57 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

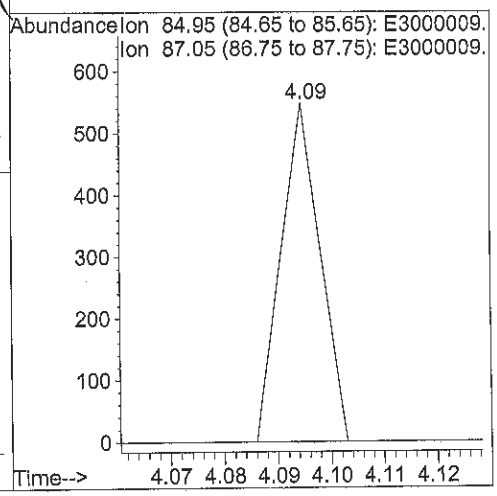


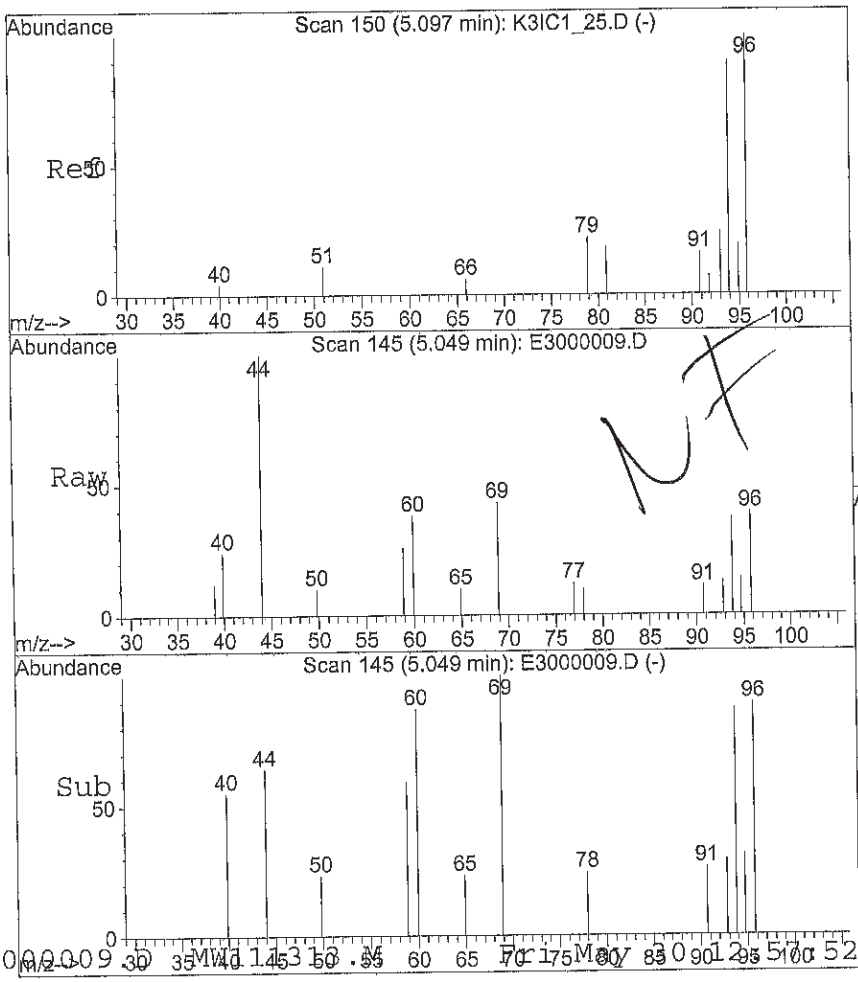


#3
(F12) Dichlorodifluoromethane
Concen: 0.08 ug/L
RT: 4.09 min Scan# 32
Delta R.T. 0.02 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 85 Resp: 277

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

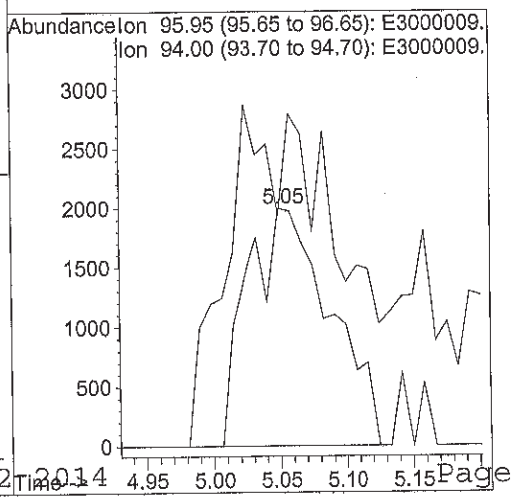


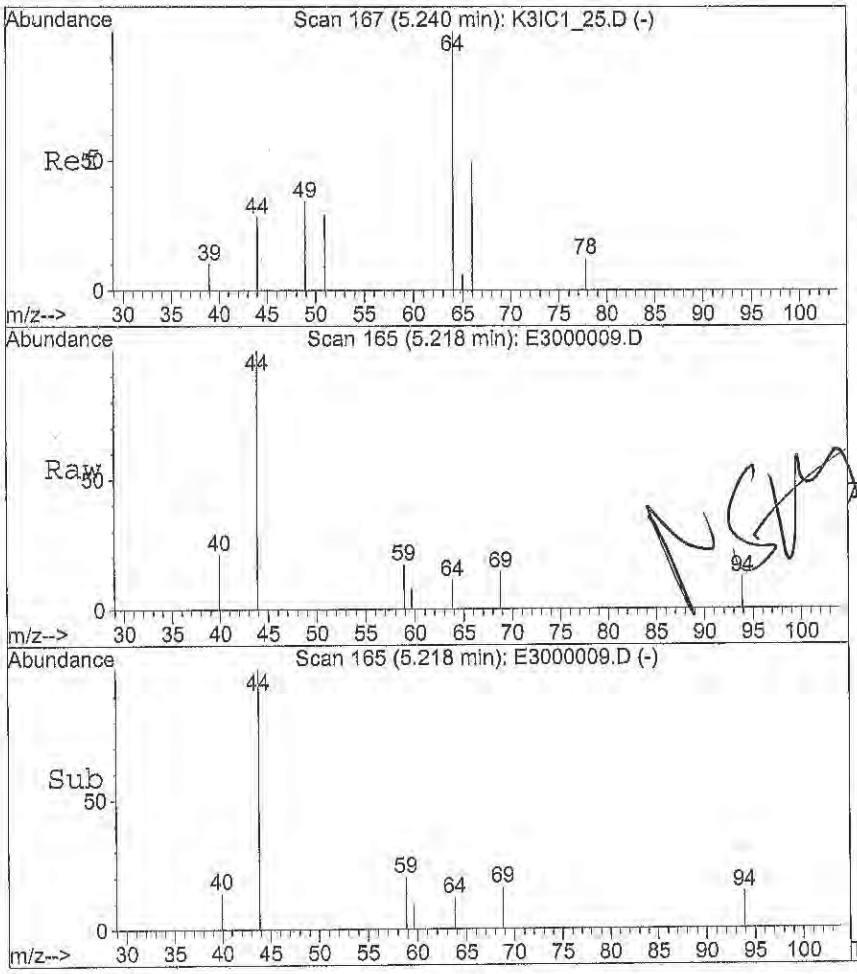


#6
Bromomethane
Concen: 3.59 ug/L
RT: 5.05 min Scan# 145
Delta R.T. -0.05 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 96 Resp: 8663

Ion	Ratio	Lower	Upper
96	100		
94	90.4	101.0	151.4#

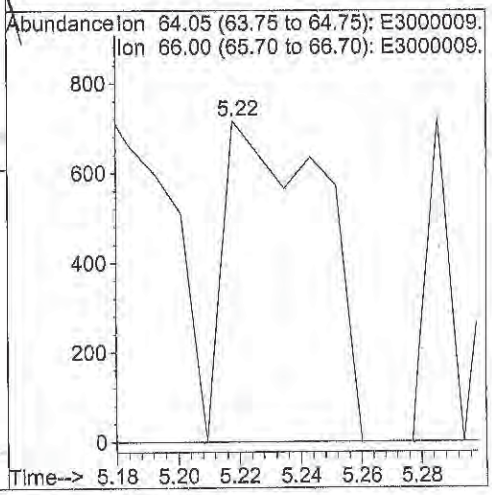


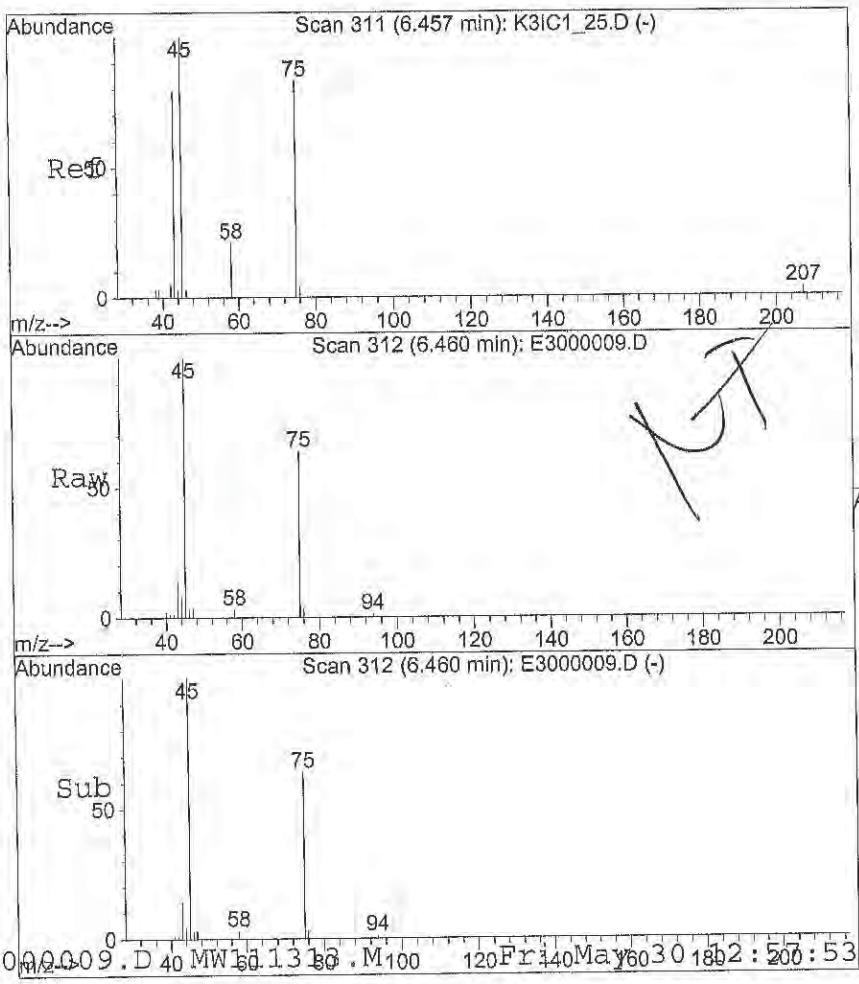


#7
Chloroethane
Concen: 1.98 ug/L
RT: 5.22 min Scan# 165
Delta R.T. -0.02 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 64 Resp: 1584

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

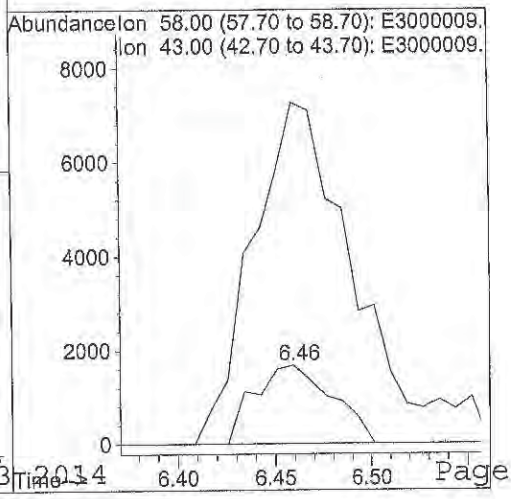


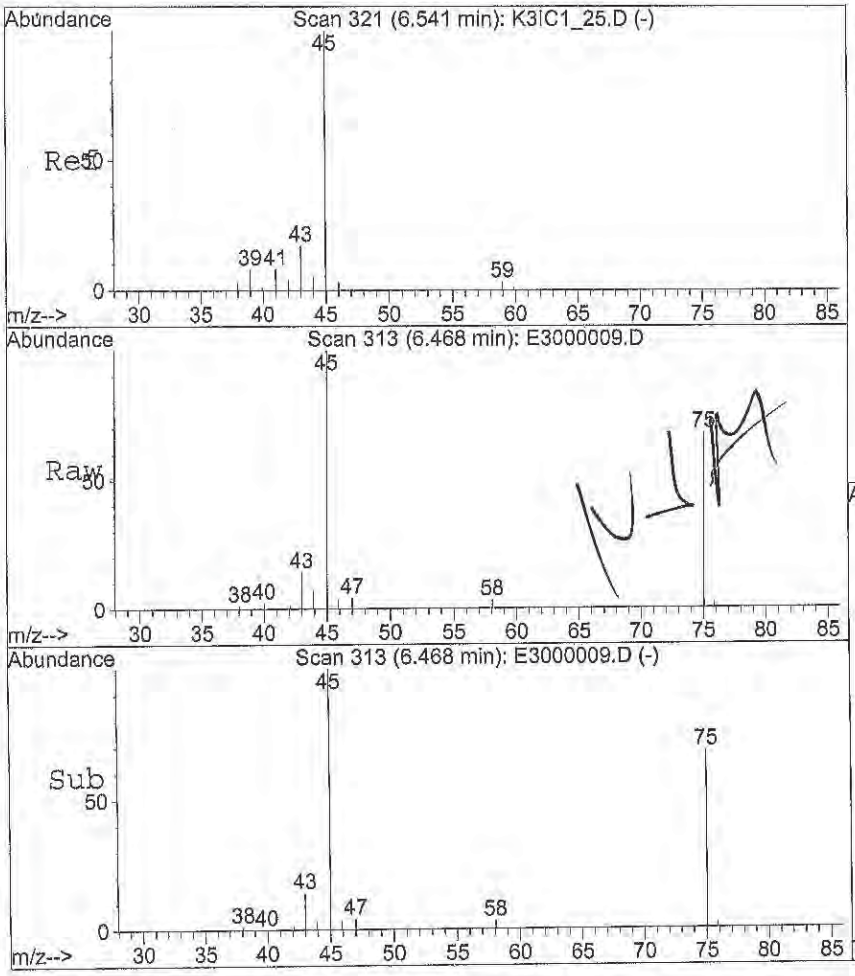


#11
Acetone
Concen: 3.19 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.00 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 58 Resp: 4693

Ion	Ratio	Lower	Upper
58	100		
43	541.5	360.9	541.3#

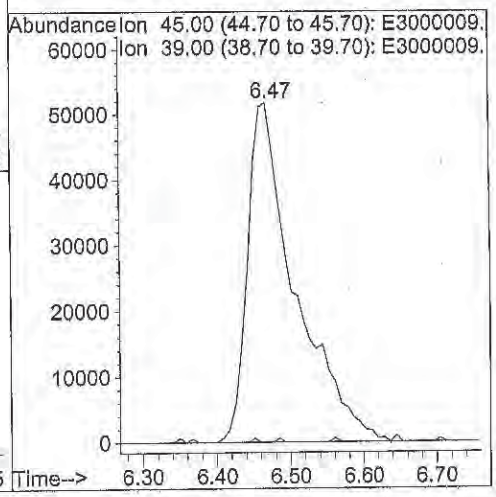


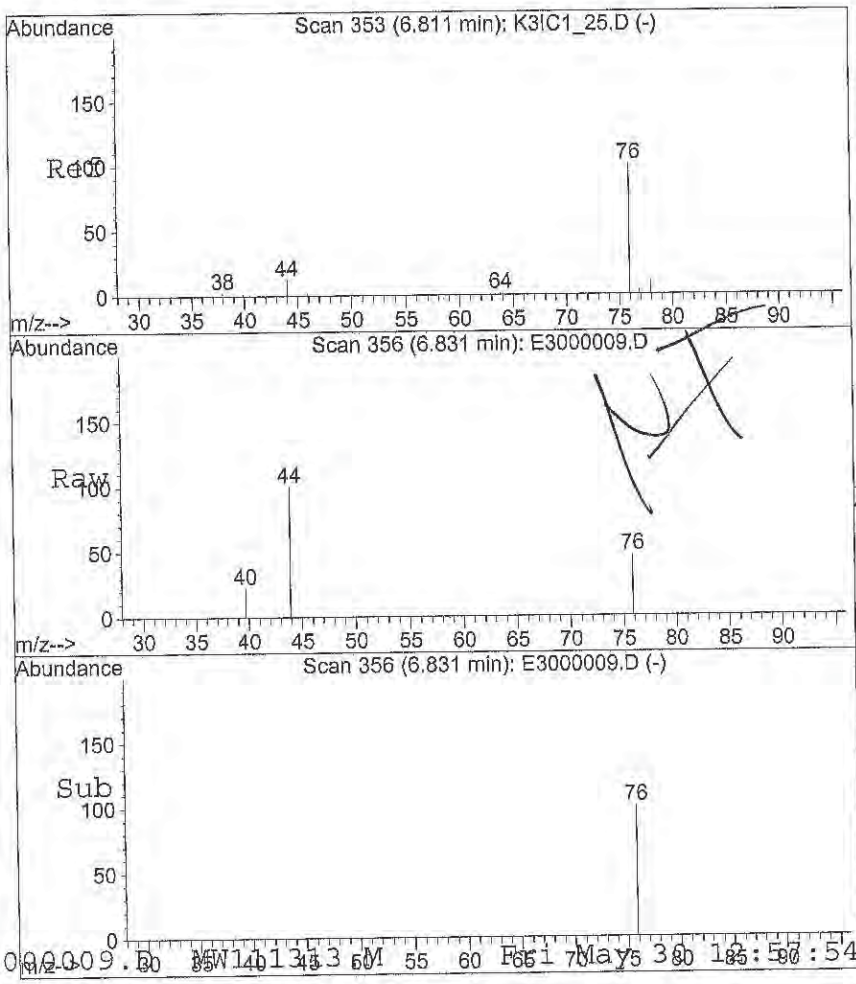


#12
(IPA) Leak Check Compound
Concen: 1311.01 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 45 Resp: 231246

Ion	Ratio	Lower	Upper
45	100		
39	0.1	4.9	7.3#

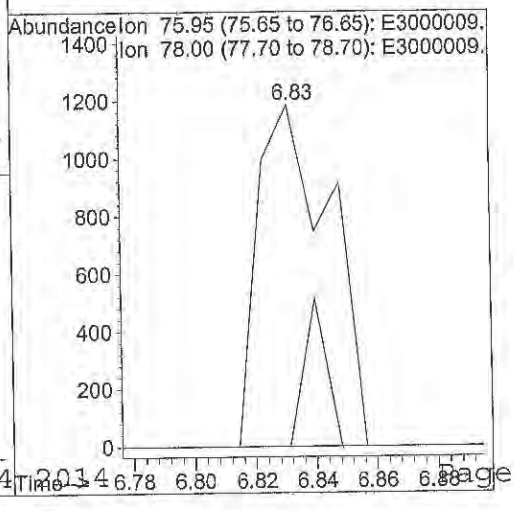


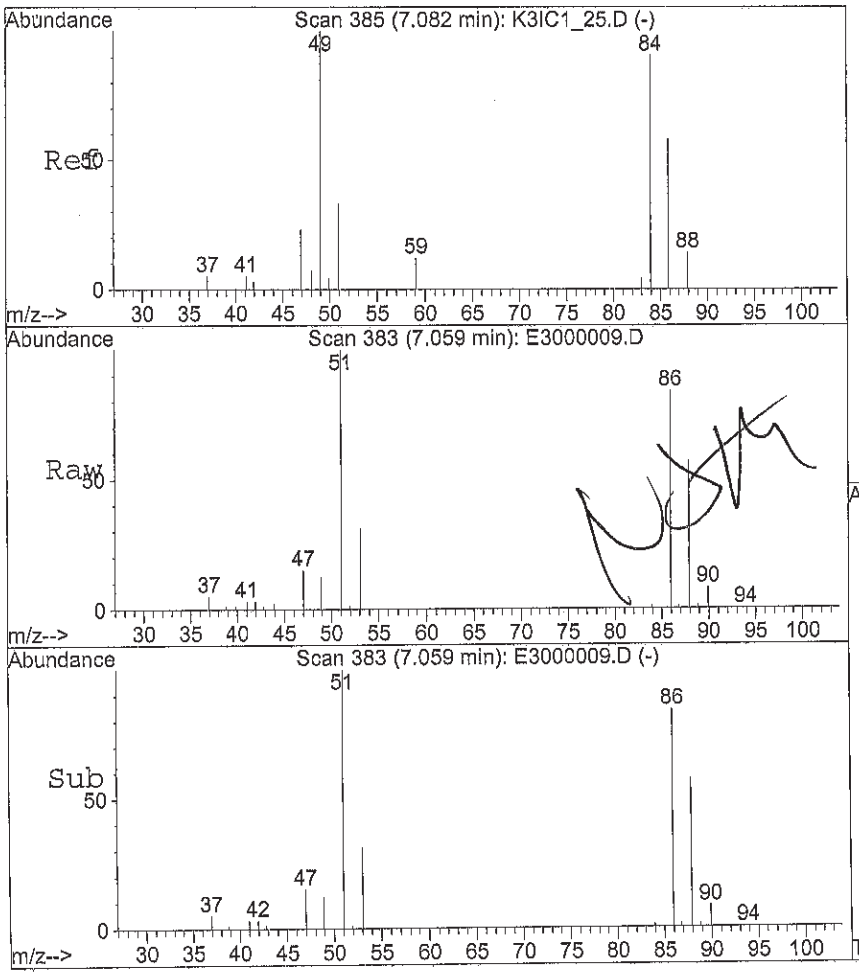


#13
Carbon disulfide
Concen: 0.16 ug/L
RT: 6.83 min Scan# 356
Delta R.T. 0.02 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 76 Resp: 1947

Ion	Ratio	Lower	Upper
76	100		
78	13.3	7.0	10.4#

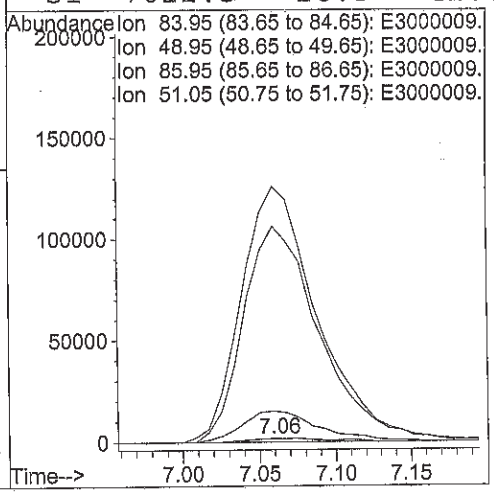


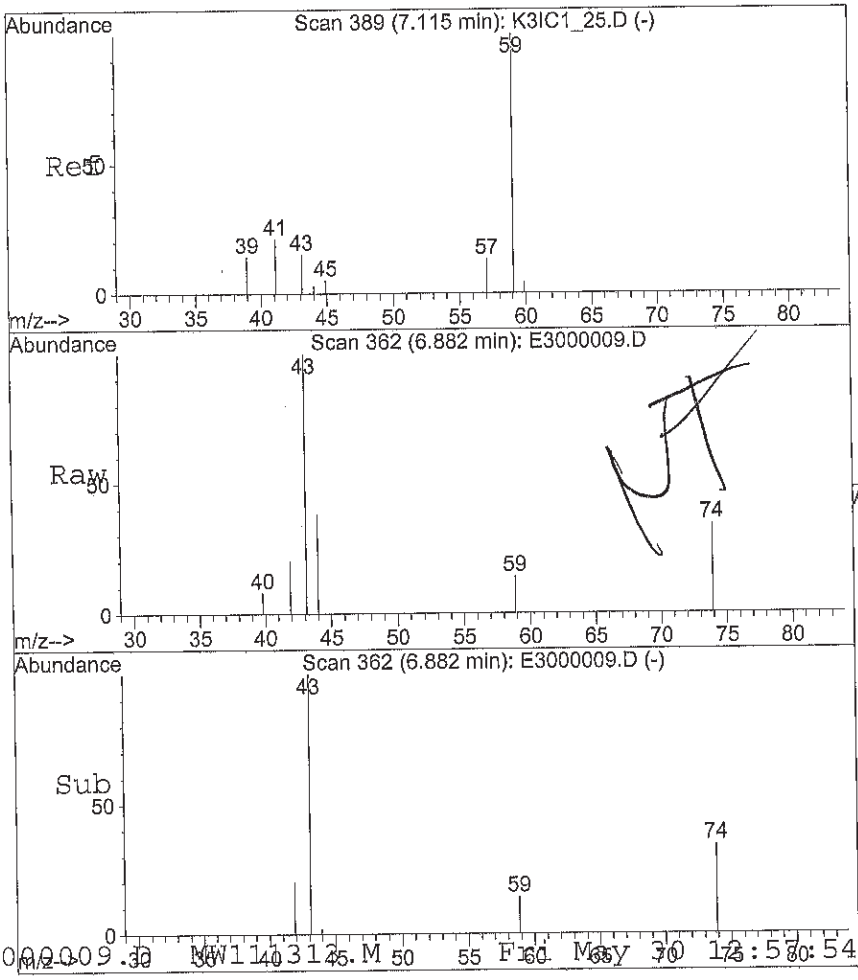


#14
Methylene Chloride
Concen: 1.55 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 84 Resp: 6231

Ion	Ratio	Lower	Upper
84	100		
49	839.2	89.8	134.6#
86	5910.7	51.1	76.7#
51	7022.5	28.5	42.7#

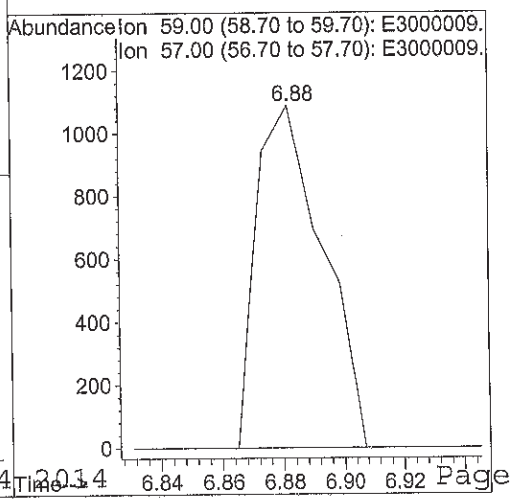


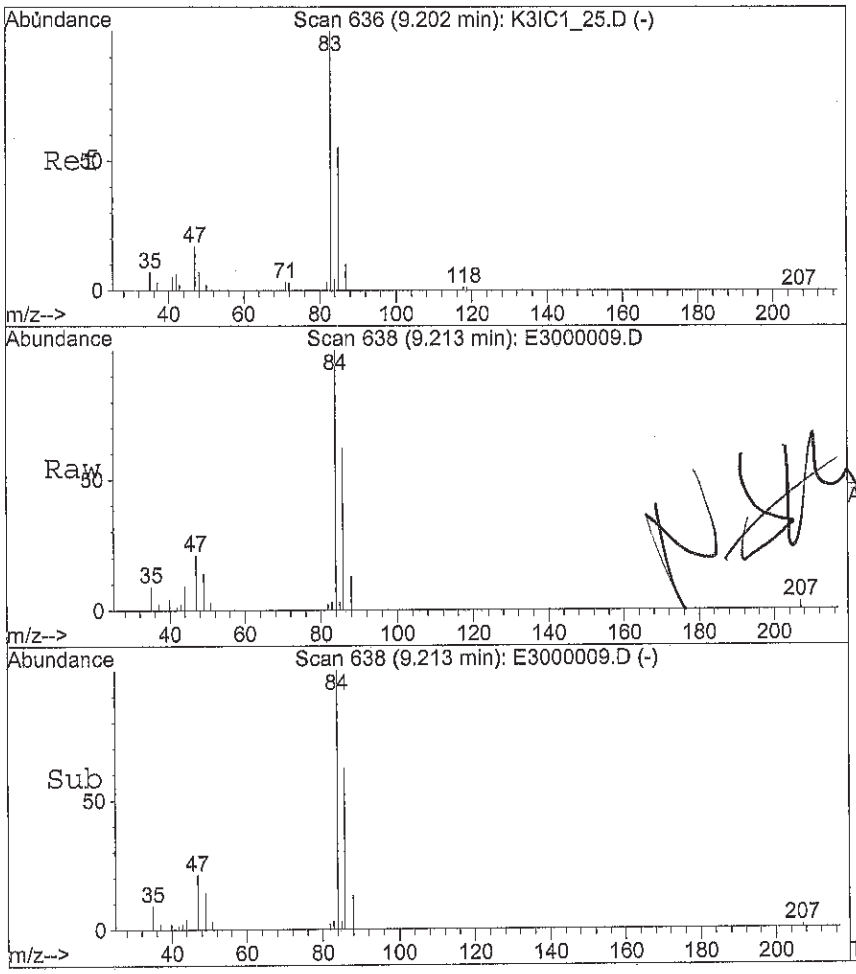


#15
(TBA) tert-Butanol
Concen: 6.57 ug/L
RT: 6.88 min Scan# 362
Delta R.T. -0.23 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 59 Resp: 1645

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

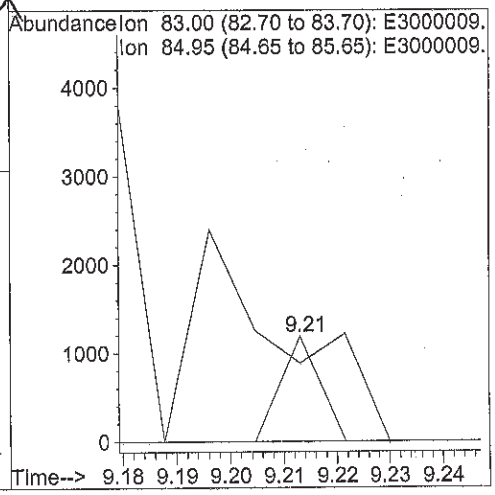


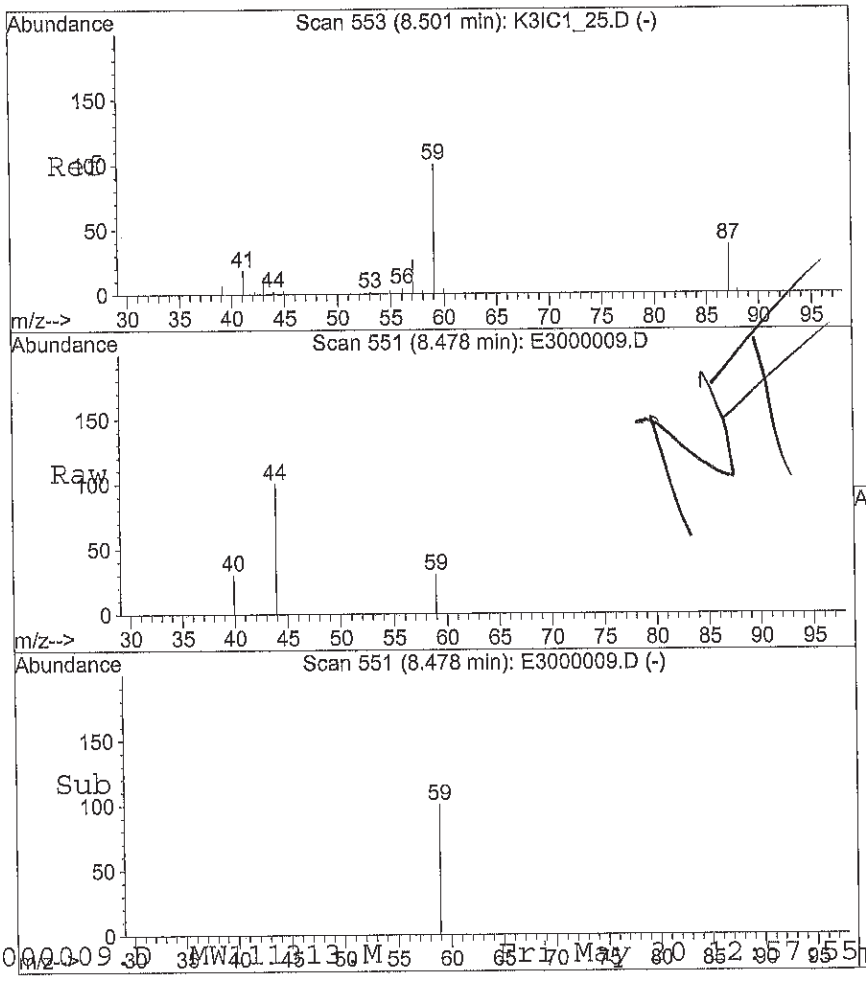


#24
Chloroform
Concen: 0.08 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 83 Resp: 601

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

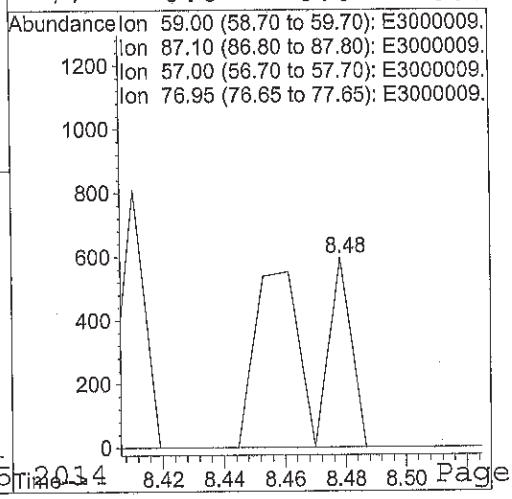


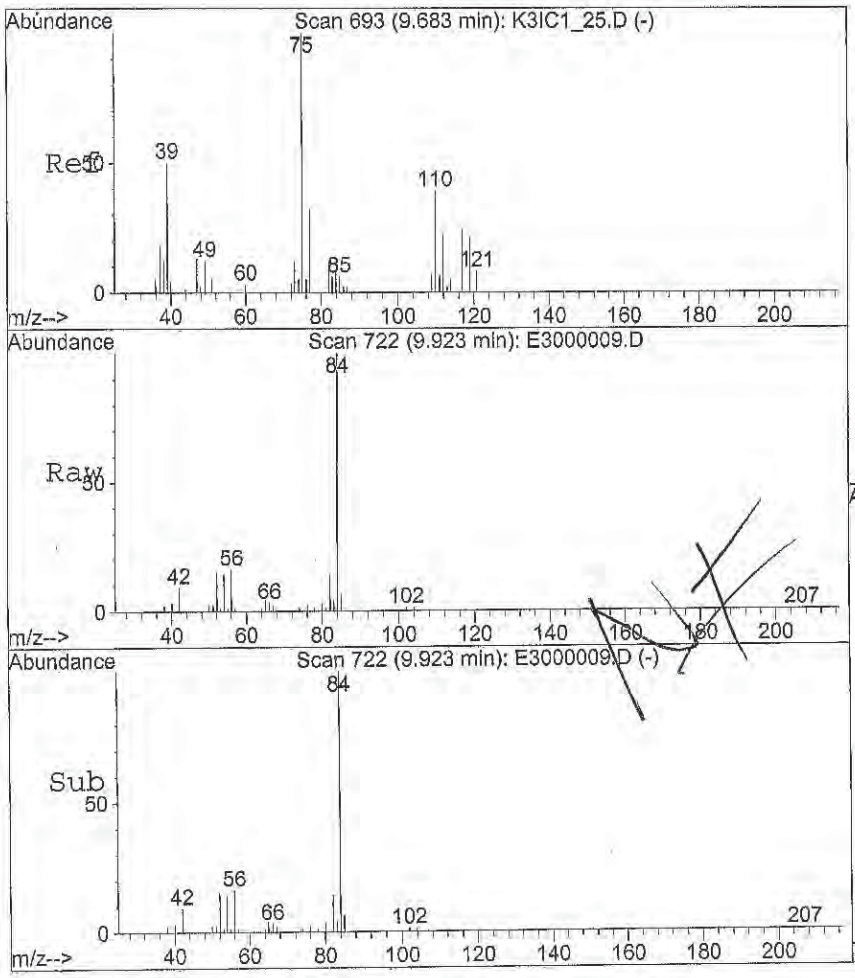


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.08 ug/L
RT: 8.48 min Scan# 551
Delta R.T. -0.02 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 59 Resp: 854

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

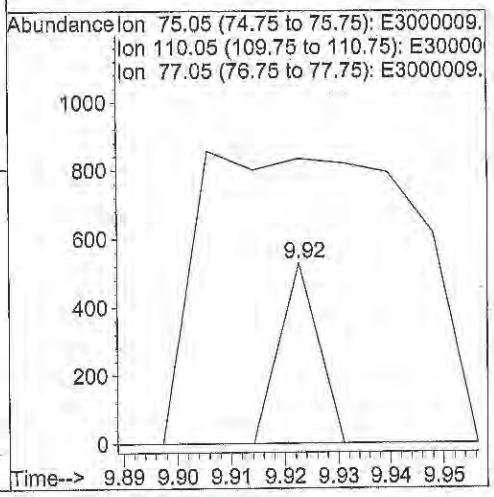


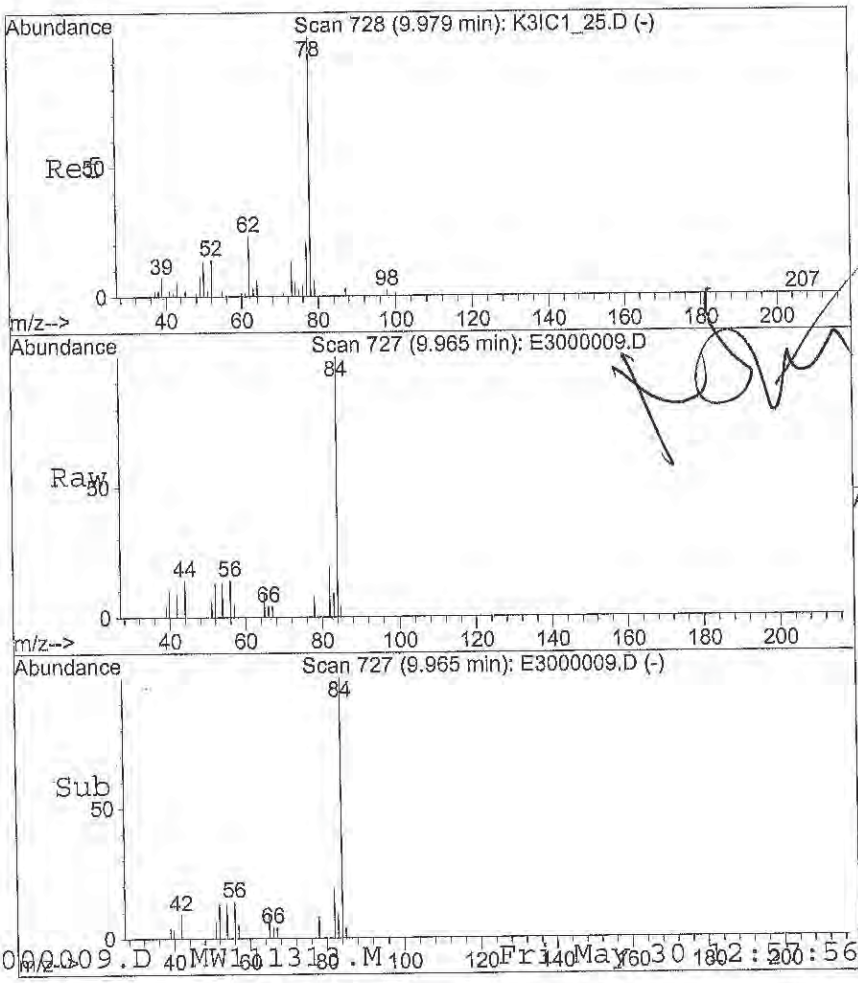


#29
1,1-Dichloropropene
Concen: 0.05 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 75 Resp: 268

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	892.2	25.0	37.4#

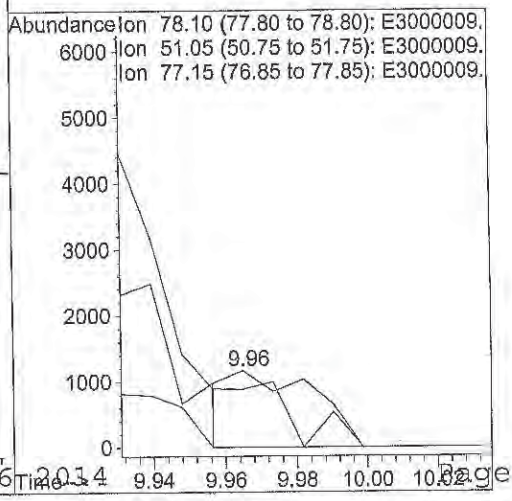


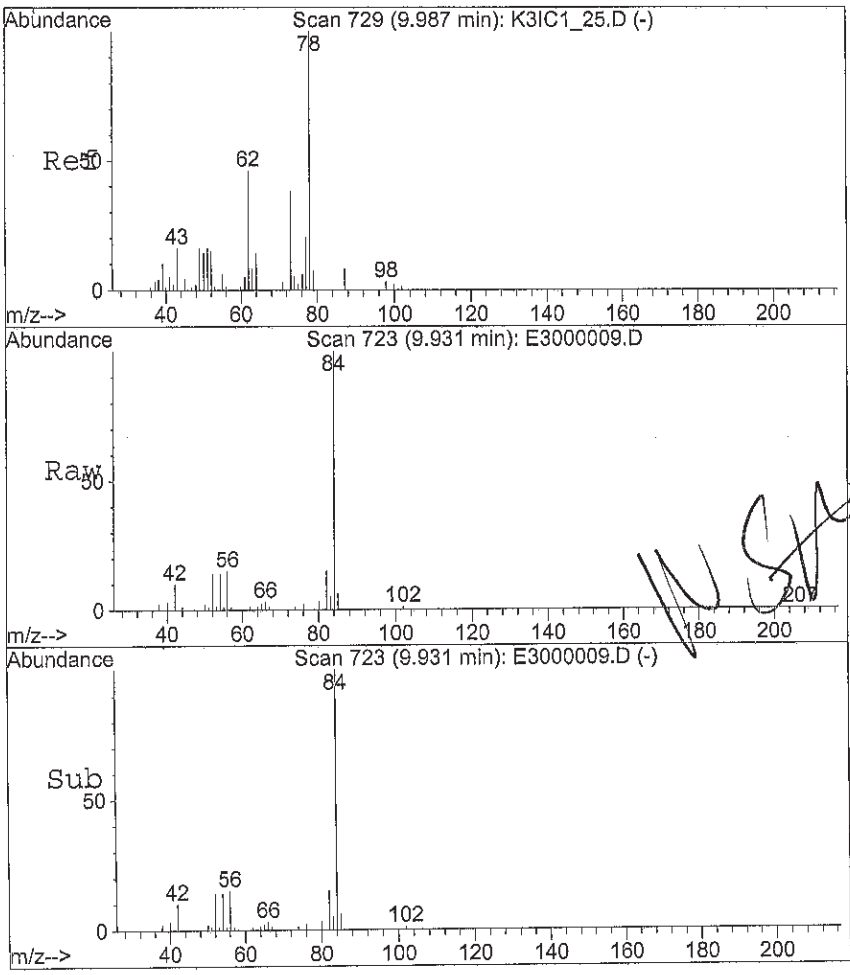


#31
Benzene
Concen: 0.14 ug/L
RT: 9.96 min Scan# 727
Delta R.T. -0.01 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 78 Resp: 1871

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

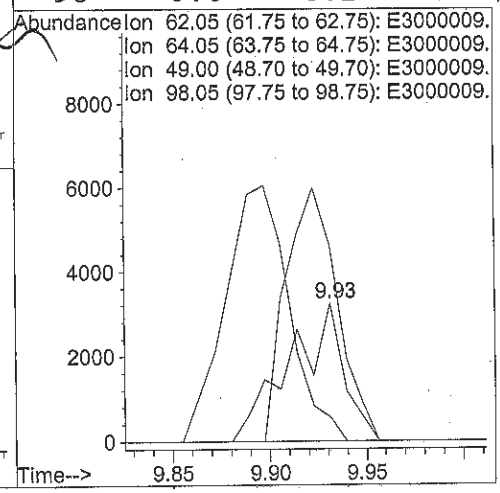


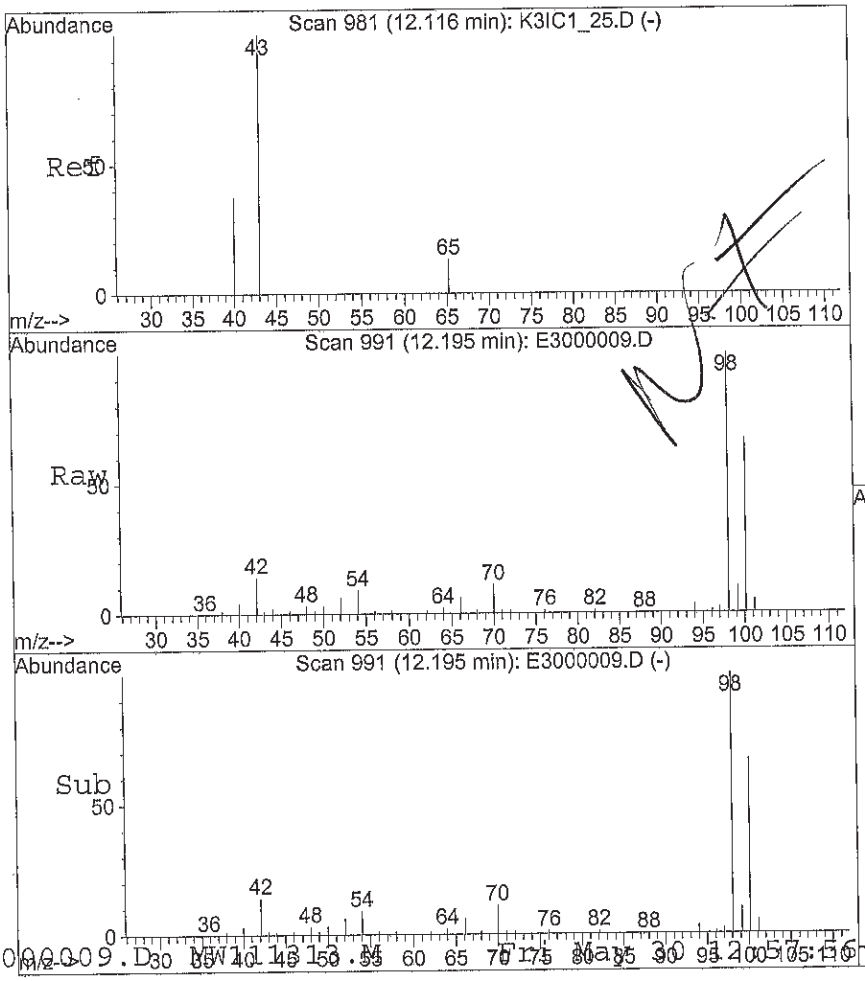


#32
1,2-Dichloroethane
Concen: 1.29 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.06 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 62 Resp: 6297

Ion	Ratio	Lower	Upper
62	100		
64	174.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

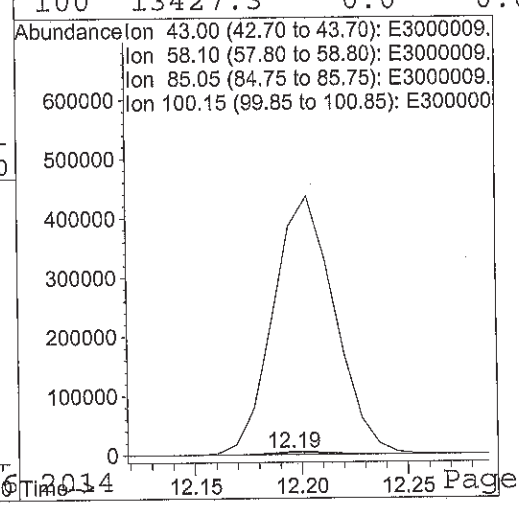


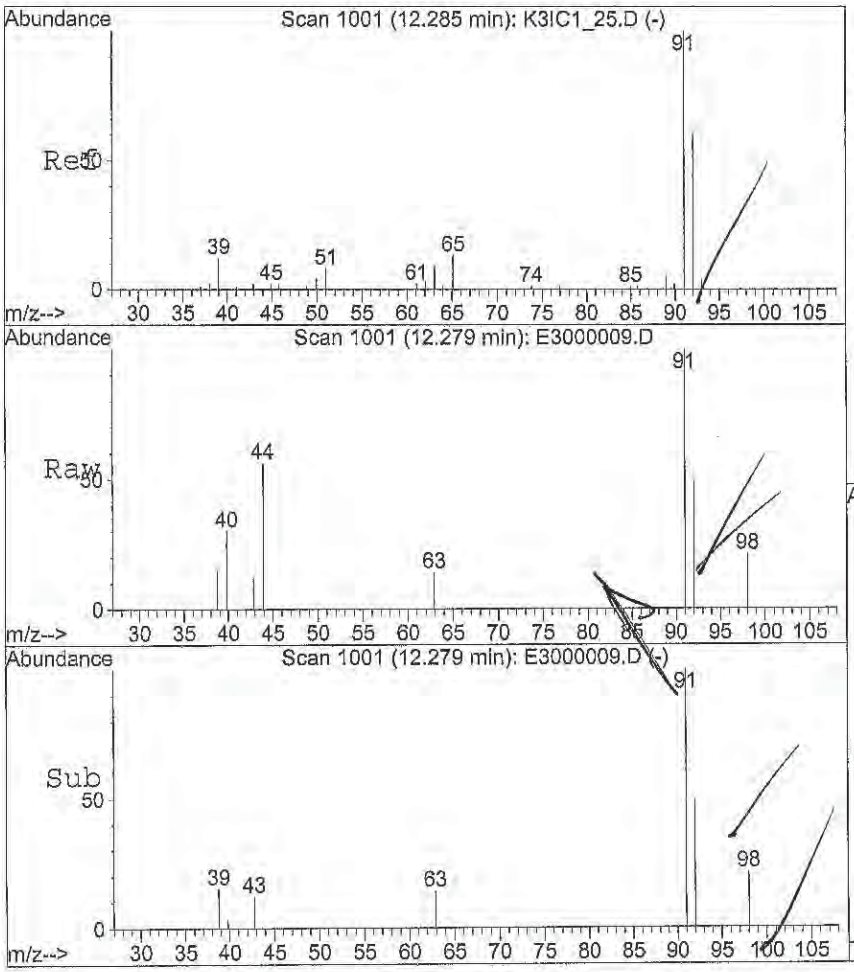


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 2.71 ug/L
RT: 12.19 min Scan# 991
Delta R.T. 0.08 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 43 Resp: 6553

Ion	Ratio	Lower	Upper
43	100		
58	139.4	0.0	0.0#
85	0.0	0.0	0.0
100	13427.3	0.0	0.0#

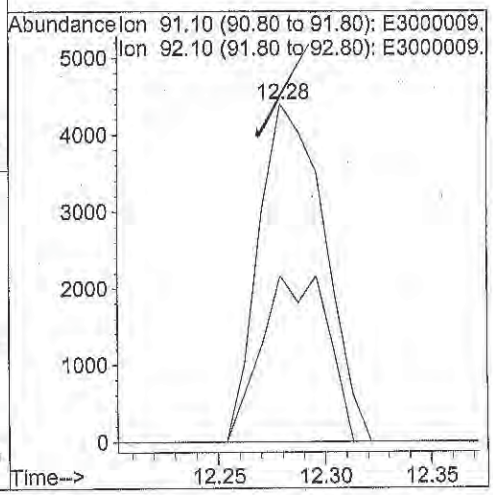


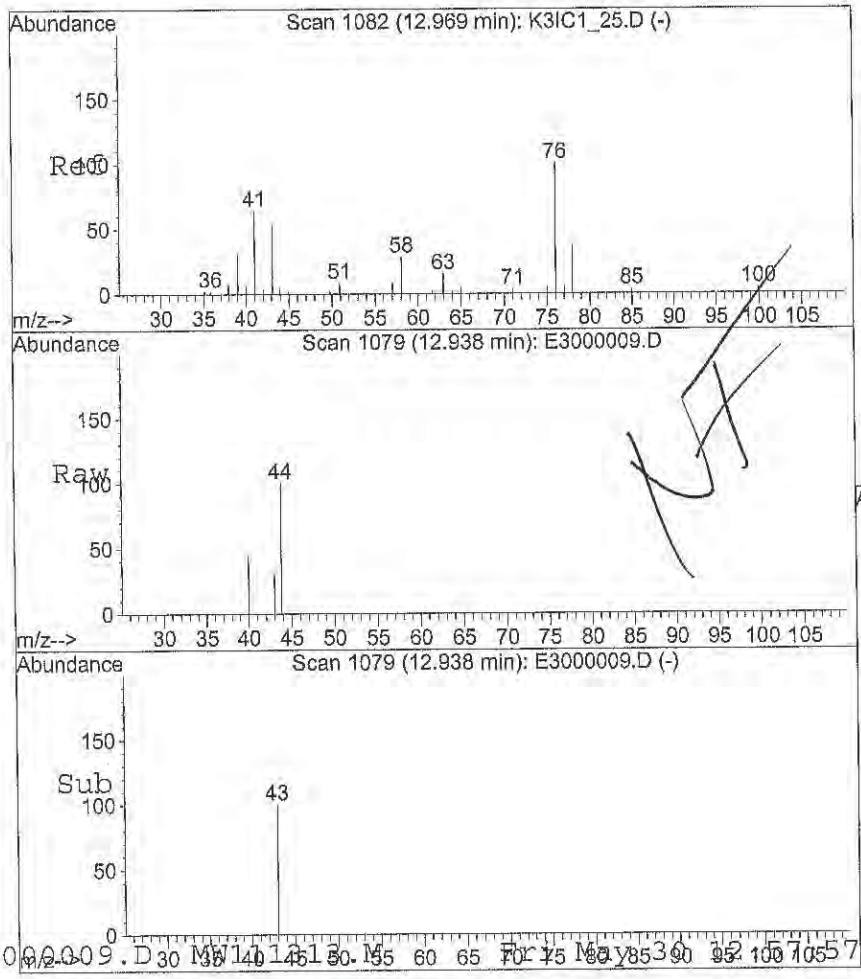


#41
Toluene
Concen: 0.57 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.01 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 91 Resp: 9401

Ion	Ratio	Lower	Upper
91	100		
92	49.4	47.4	71.0

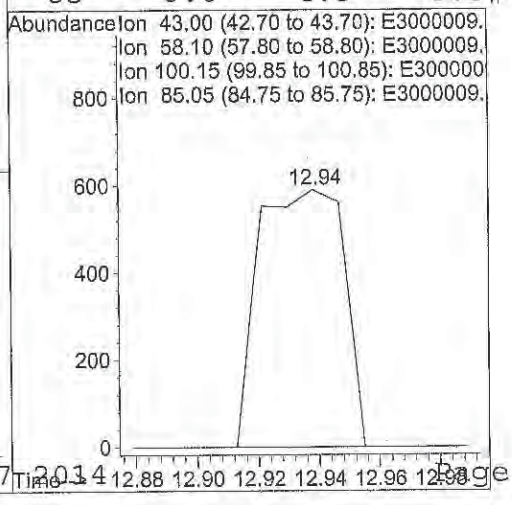


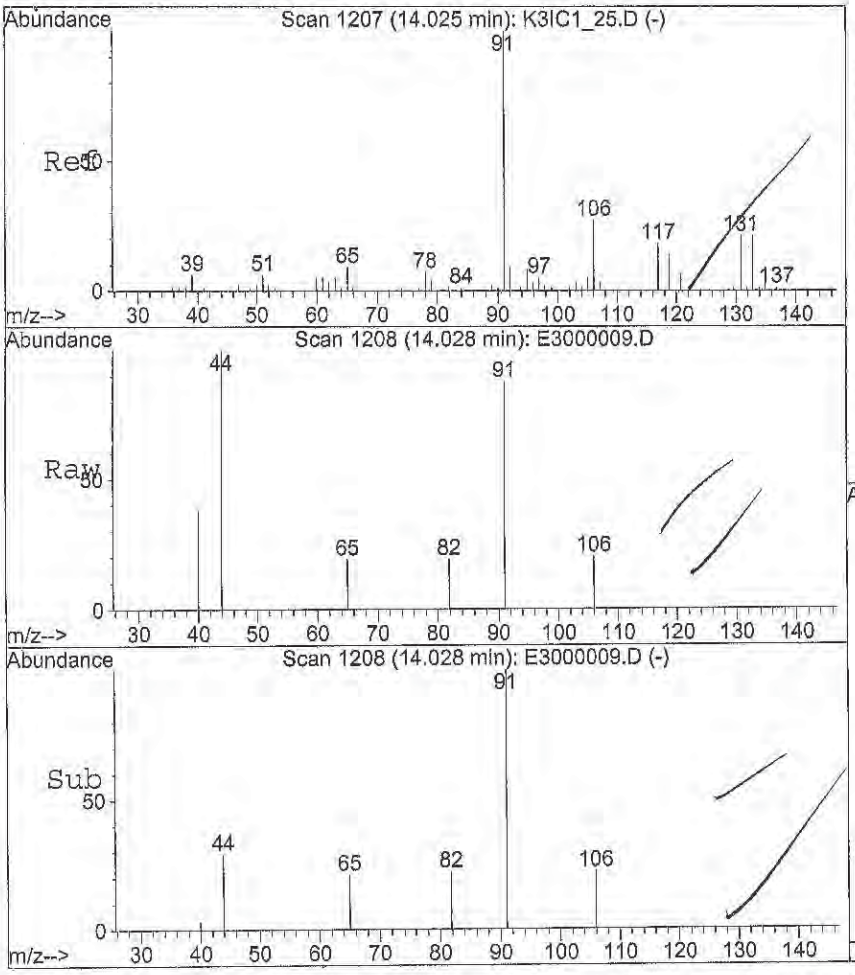


#46
2-Hexanone
Concen: 0.43 ug/L
RT: 12.94 min Scan# 1079
Delta R.T. -0.03 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 43 Resp: 1143

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

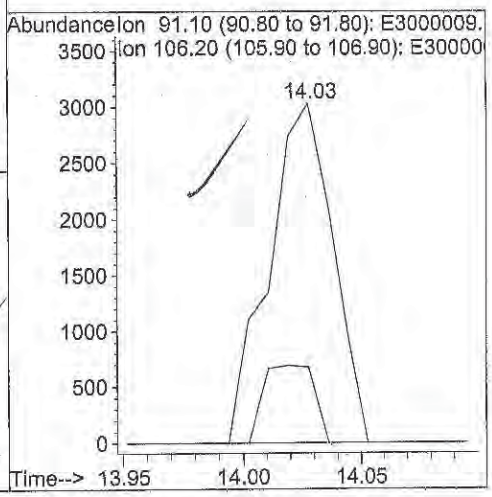


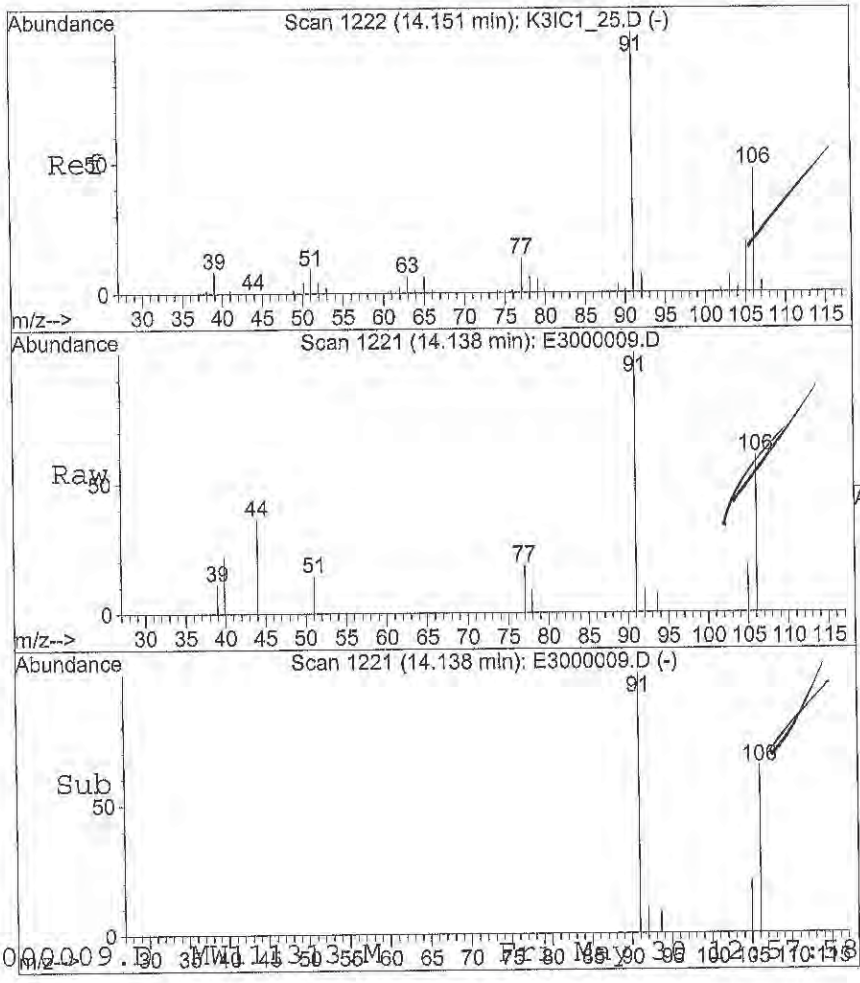


#51
Ethylbenzene
Concen: 0.30 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.00 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 91 Resp: 5698

Ion	Ratio	Lower	Upper
91	100		
106	18.0	23.5	35.3#

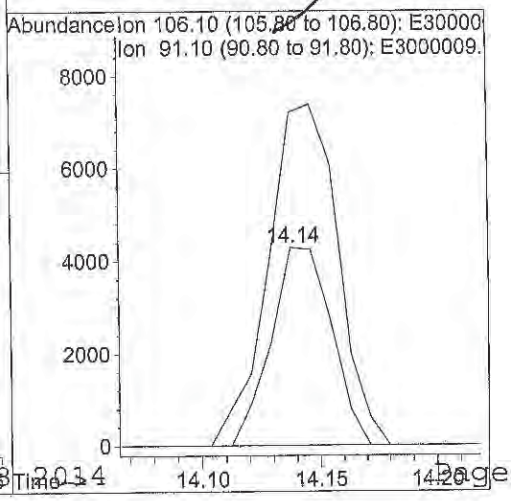


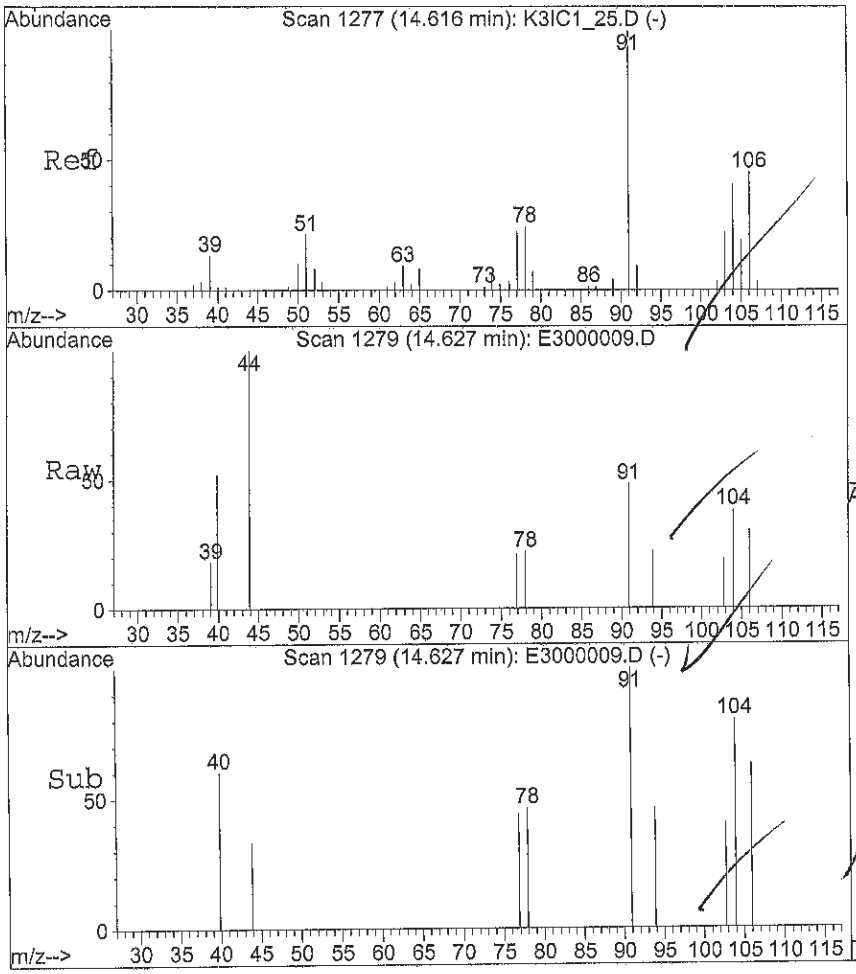


#52
m,p-Xylenes
Concen: 1.15 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:106 Resp: 7684

Ion	Ratio	Lower	Upper
106	100		
91	197.1	177.1	265.7

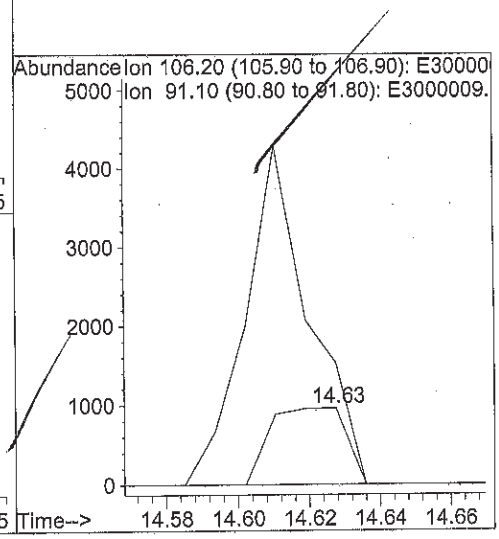


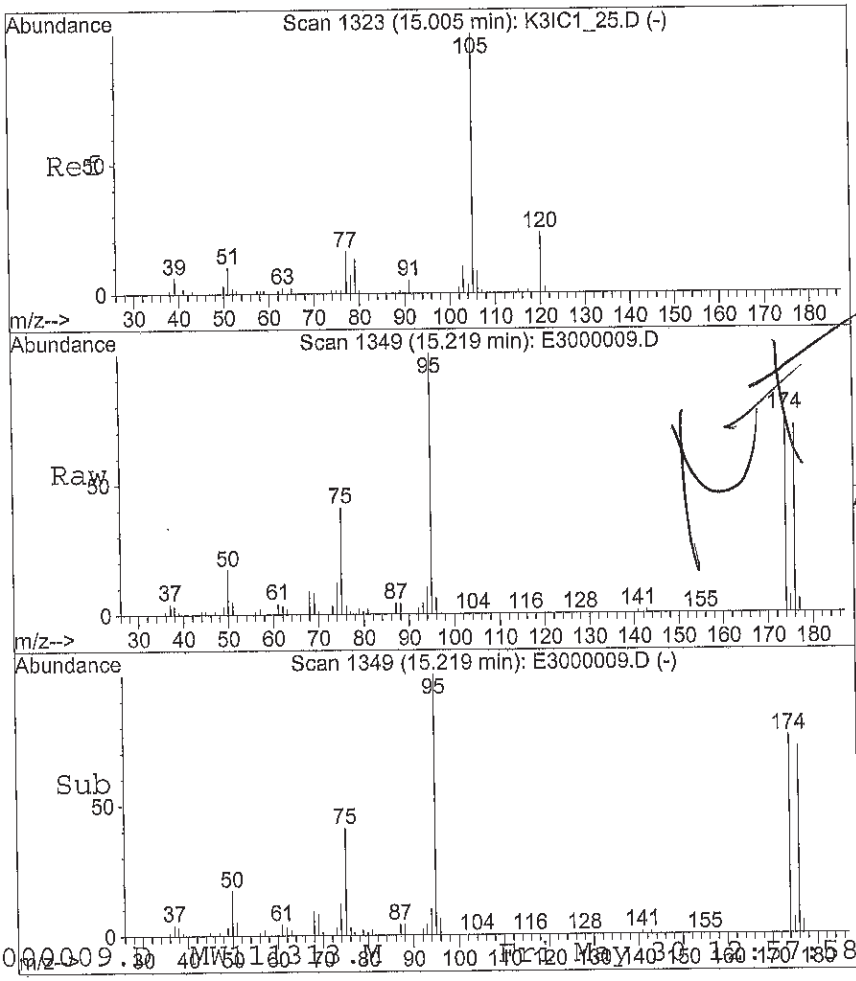


#53
o-Xylene
Concen: 0.21 ug/L
RT: 14.63 min Scan# 1279
Delta R.T. 0.01 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:106 Resp: 1413

Ion	Ratio	Lower	Upper
106	100		
91	378.2	179.0	268.6#

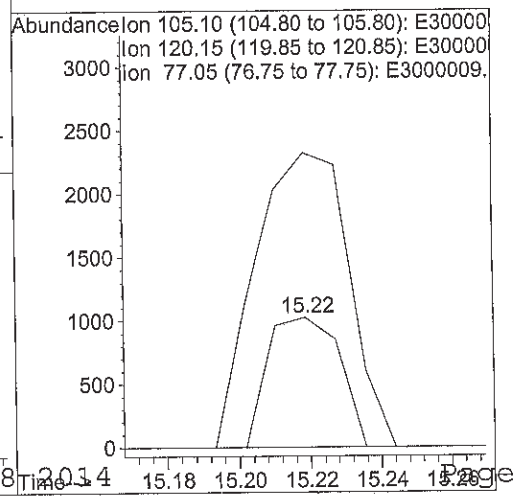


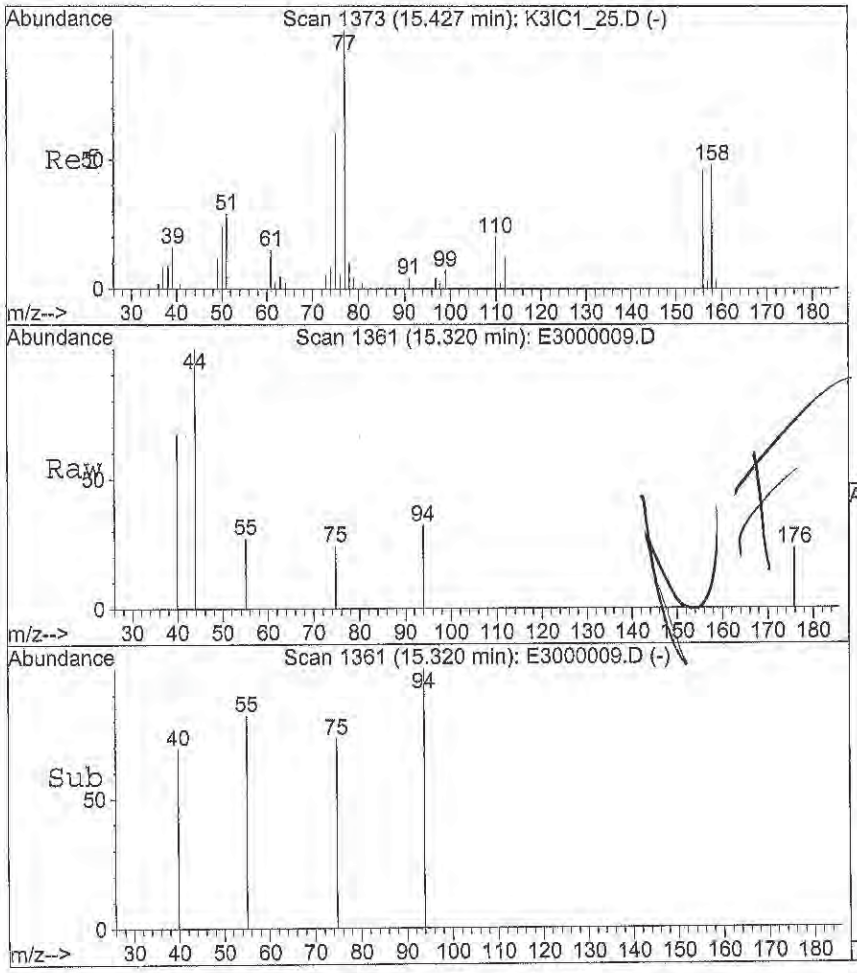


#56
Isopropylbenzene
Concen: 0.08 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. 0.21 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:105 Resp: 1435

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	294.4	13.1	19.7#

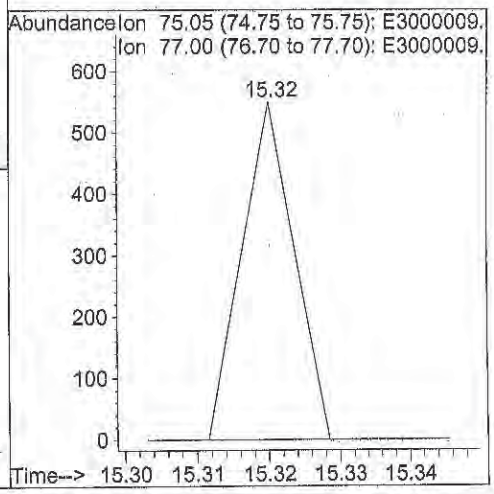


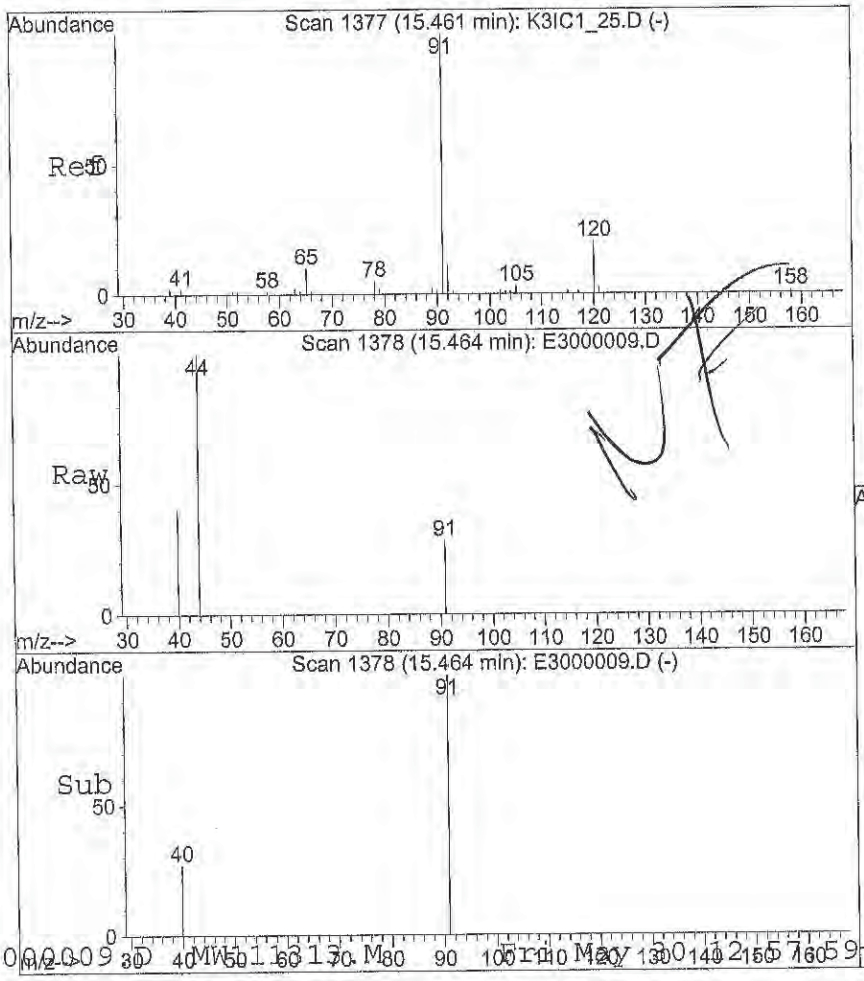


#57
1,2,3-Trichloropropane
Concen: 0.06 ug/L
RT: 15.32 min Scan# 1361
Delta R.T. -0.11 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 75 Resp: 279

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

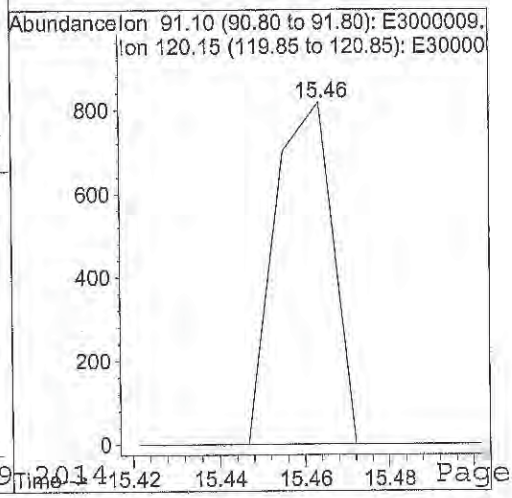


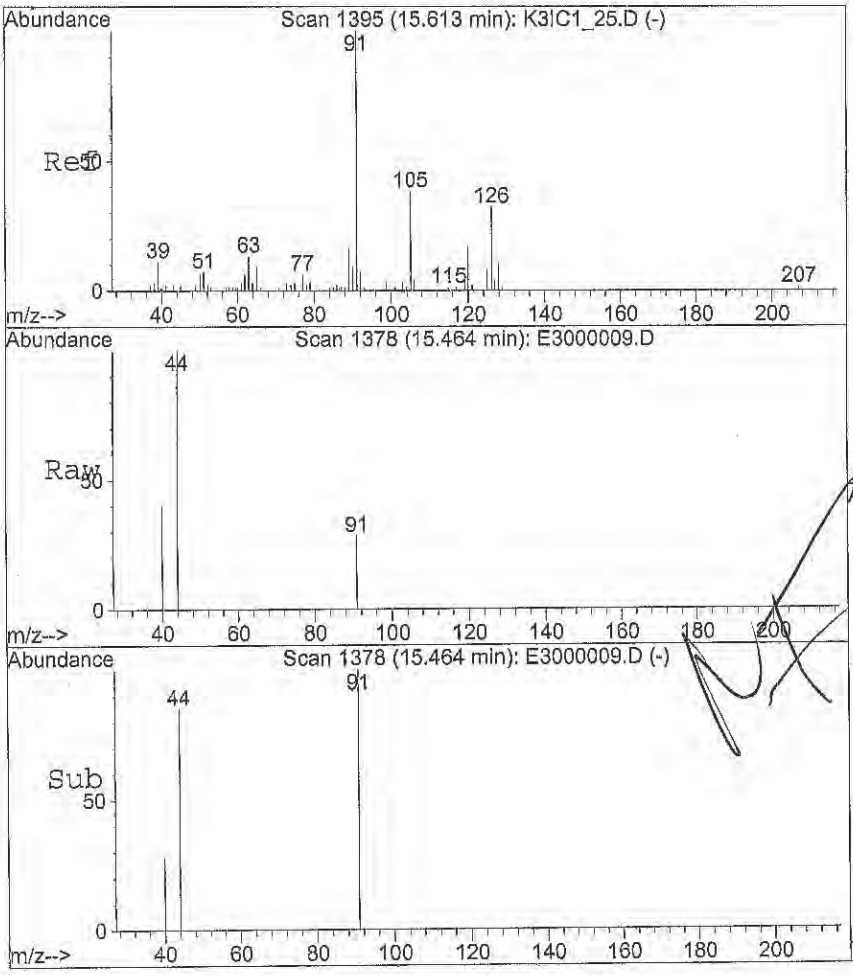


#62
n-Propylbenzene
Concen: 0.03 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. 0.00 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 91 Resp: 770

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

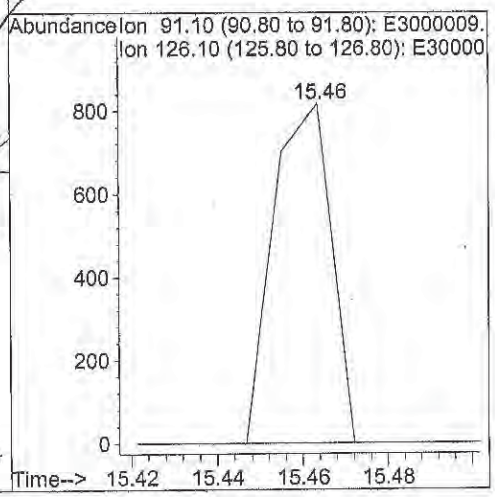


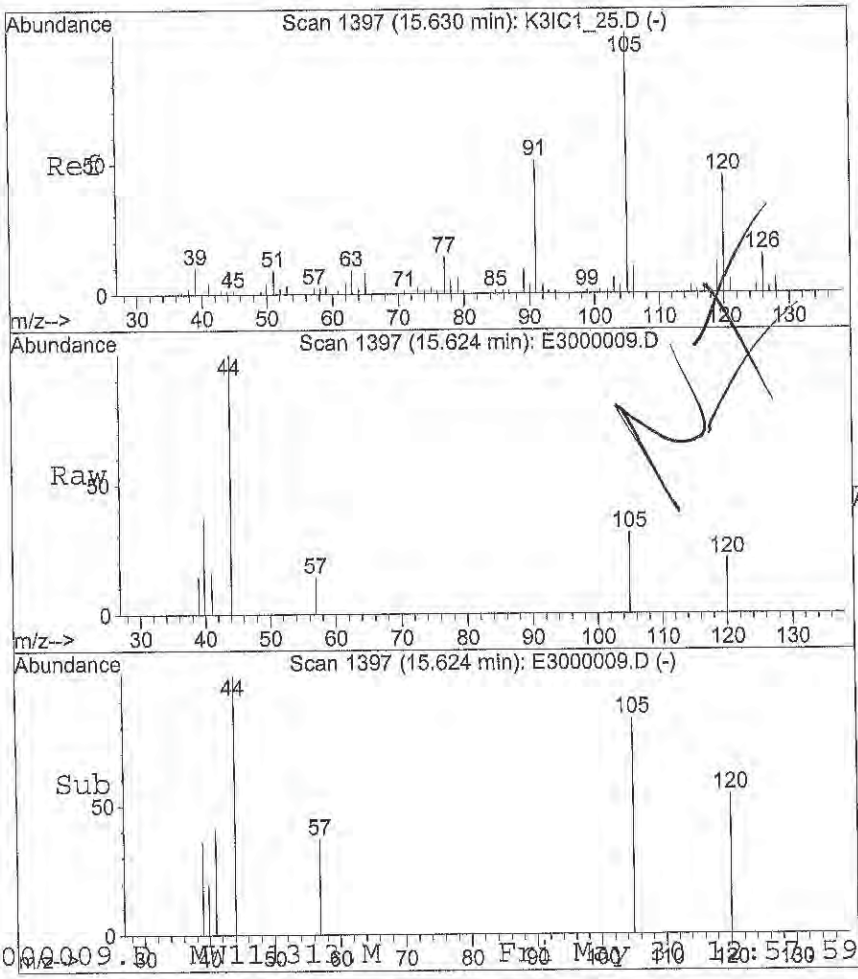


#63
2-Chlorotoluene
Concen: 0.05 ug/L
RT: 15.46 min Scan# 1378
Delta R.T. -0.15 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion: 91 Resp: 770

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

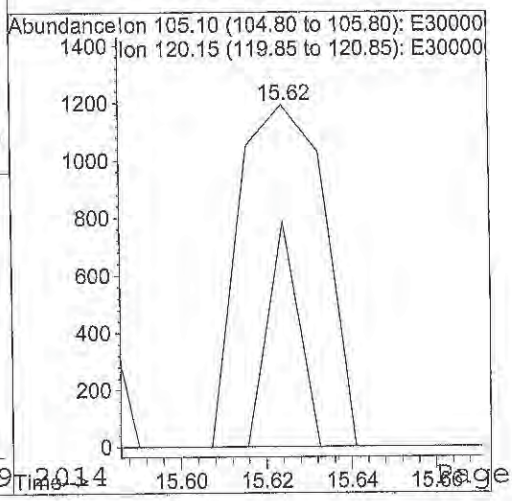


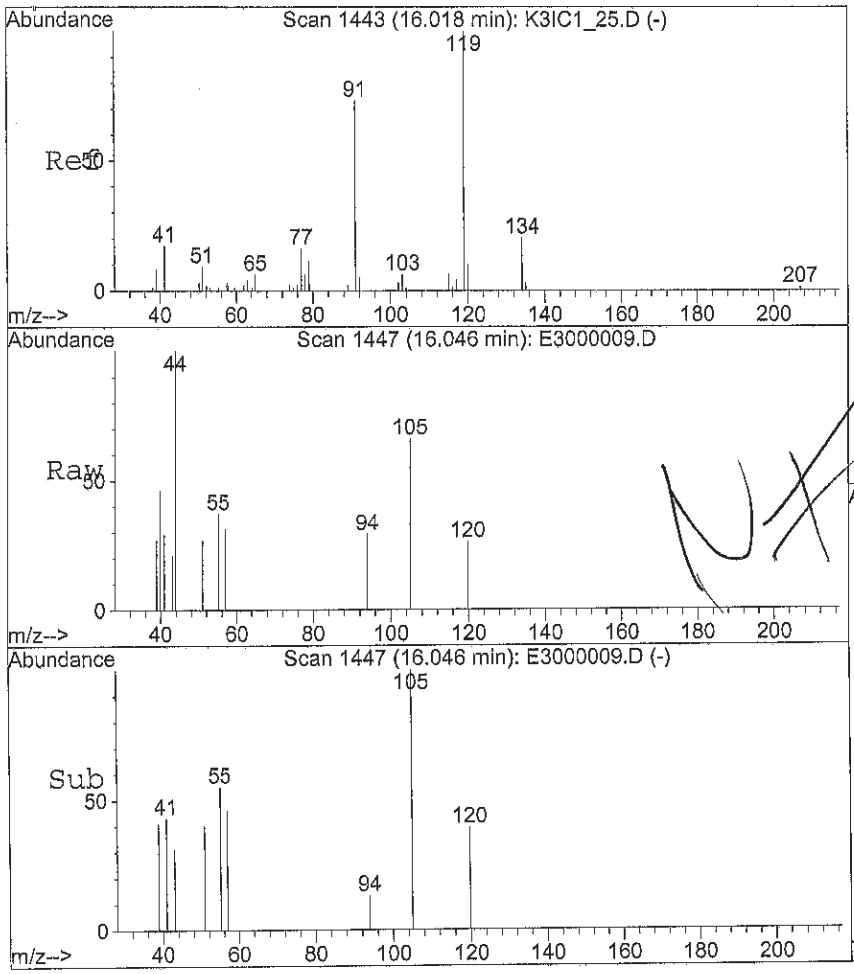


#64
1,3,5-Trimethylbenzene
Concen: 0.10 ug/L
RT: 15.62 min Scan# 1397
Delta R.T. -0.01 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:105 Resp: 1658

Ion	Ratio	Lower	Upper
105	100		
120	24.0	36.4	54.6#

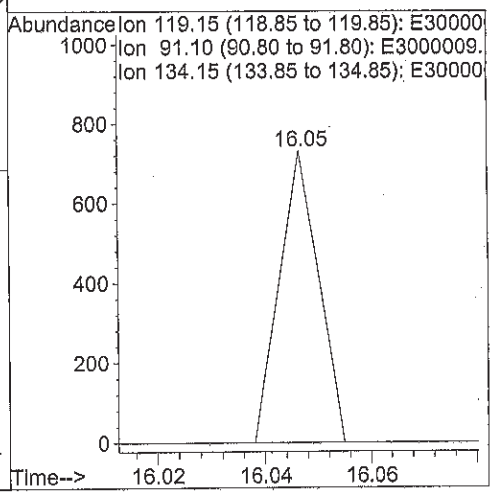


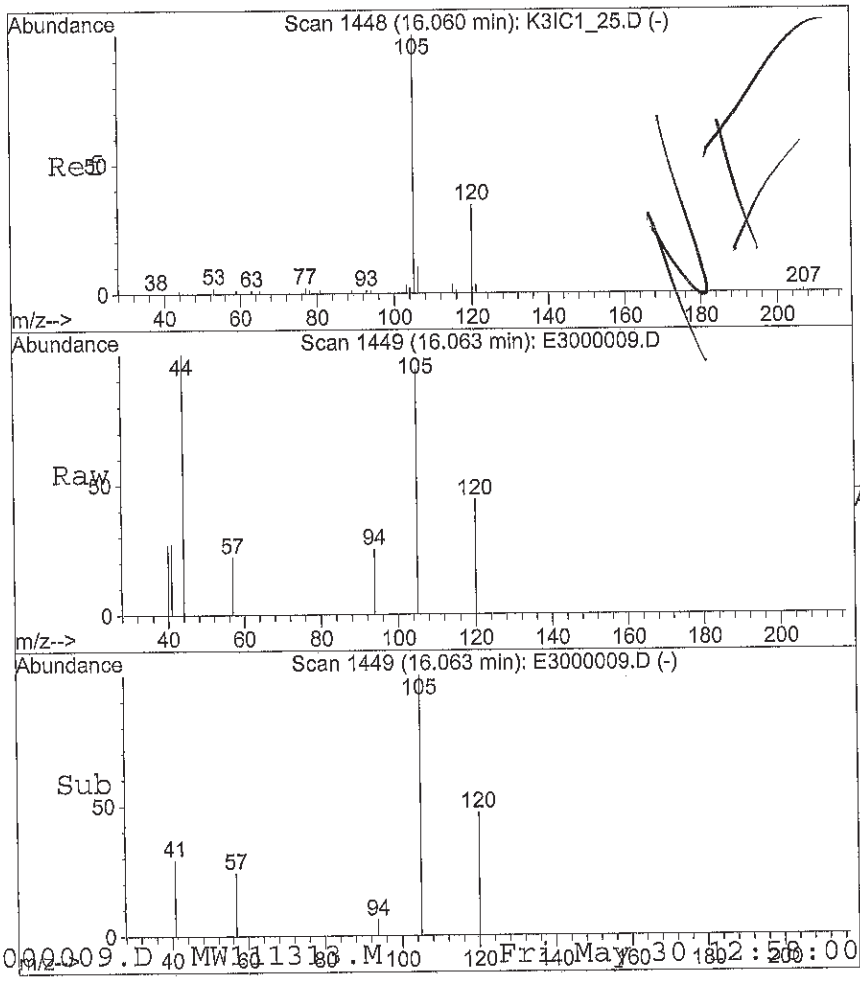


#66
tert-Butylbenzene
Concen: 0.03 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. 0.03 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:119 Resp: 370

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

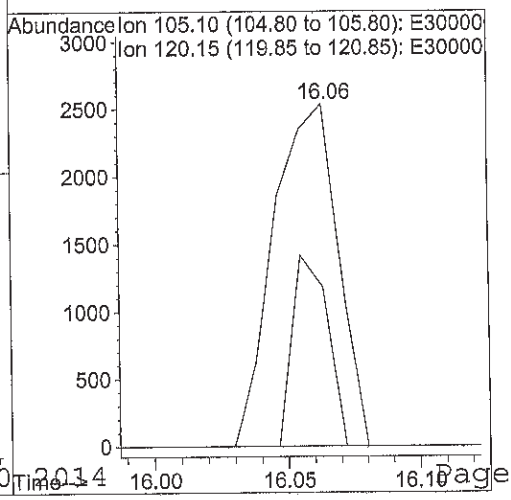


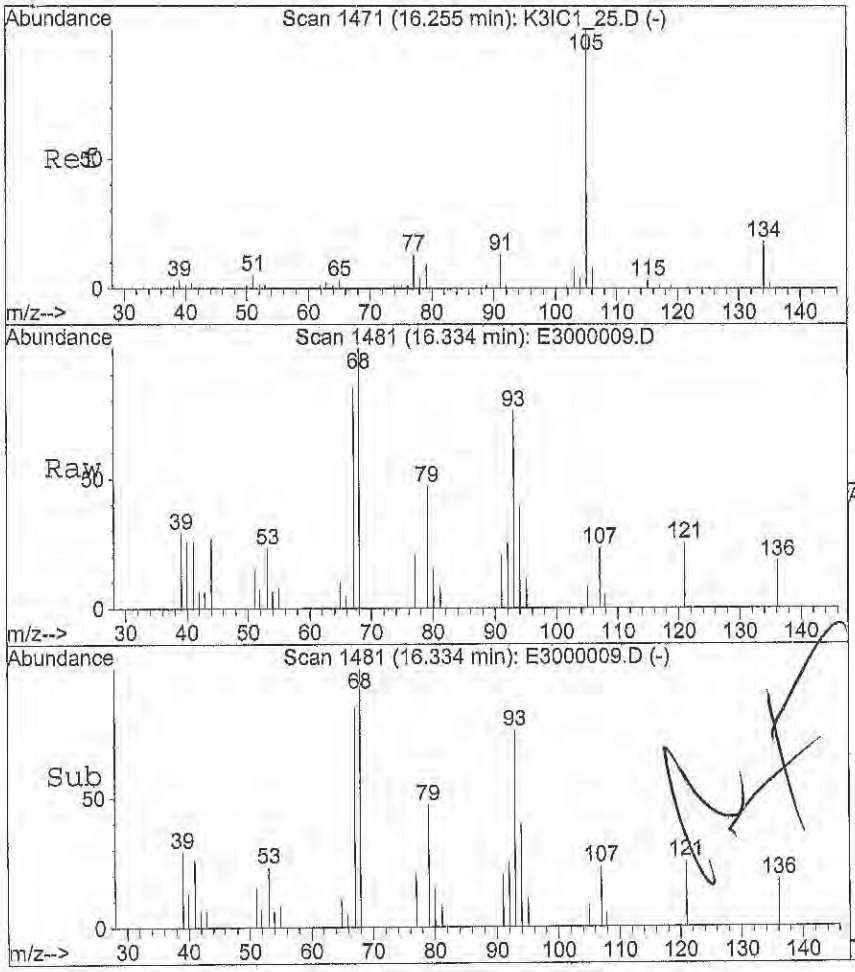


#67
1,2,4-Trimethylbenzene
Concen: 0.25 ug/L
RT: 16.06 min Scan# 1449
Delta R.T. 0.00 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:105 Resp: 4271

Ion	Ratio	Lower	Upper
105	100		
120	30.8	33.8	50.8#

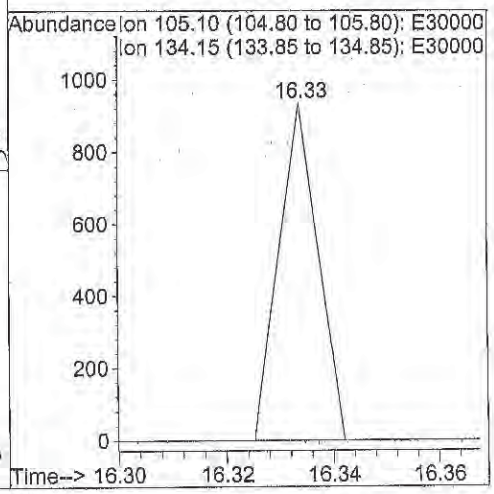


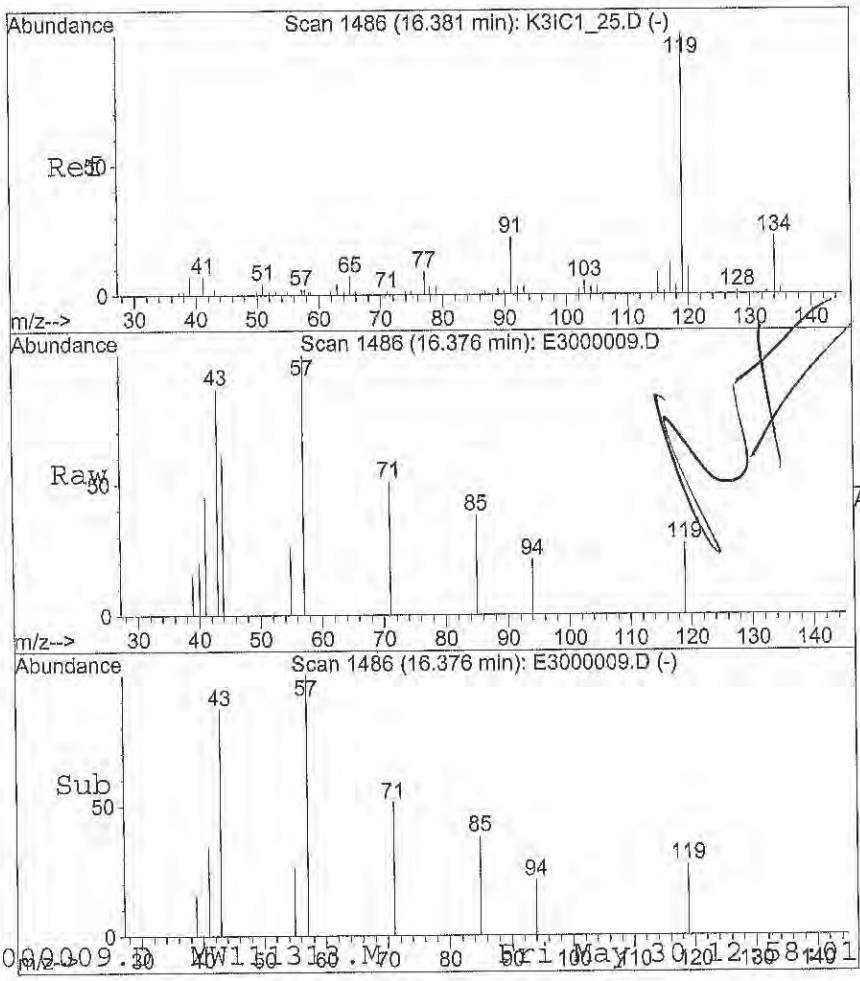


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.33 min Scan# 1481
Delta R.T. 0.08 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:105 Resp: 475

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

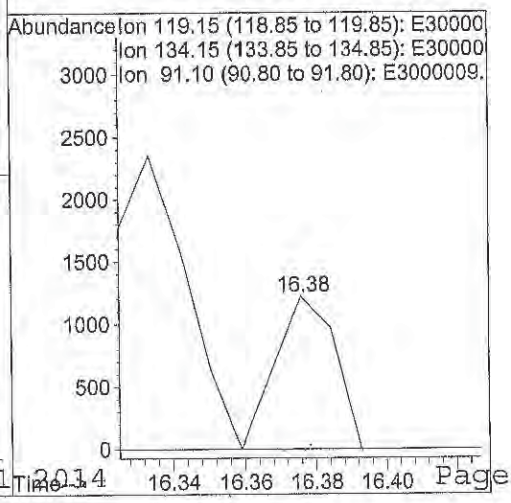




#69
p-Isopropyltoluene
Concen: 0.08 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.01 min
Lab File: E3000009.D
Acq: 30 May 2014 12:33 pm

Tgt Ion:119 Resp: 1417

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000009.D Vial: 8
Acq On : 30 May 2014 12:33 pm Operator: DN
Sample : 3E43001-08 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-17.0-18.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 13:23 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1467890	12.50	ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1213058	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	667526	12.50	ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	422085	11.06	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.48%			
3) Chloroform-d (SU6)	9.18	84	656505	11.99	ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 95.92%			
4) Methylene Chloride-d2 (SU5	7.06	86	368298	11.50	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.00%			
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	407848	15.63	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 125.04%#			
6) Benzene-d6 (SU7)	9.92	84	1270900	11.03	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 88.24%			
8) Toluene-d8 (SU3)	12.20	98	1314718	11.42	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.36%			
9) 4-Bromofluorobenzene (SU4)	15.22	95	684383	14.40	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.20%			

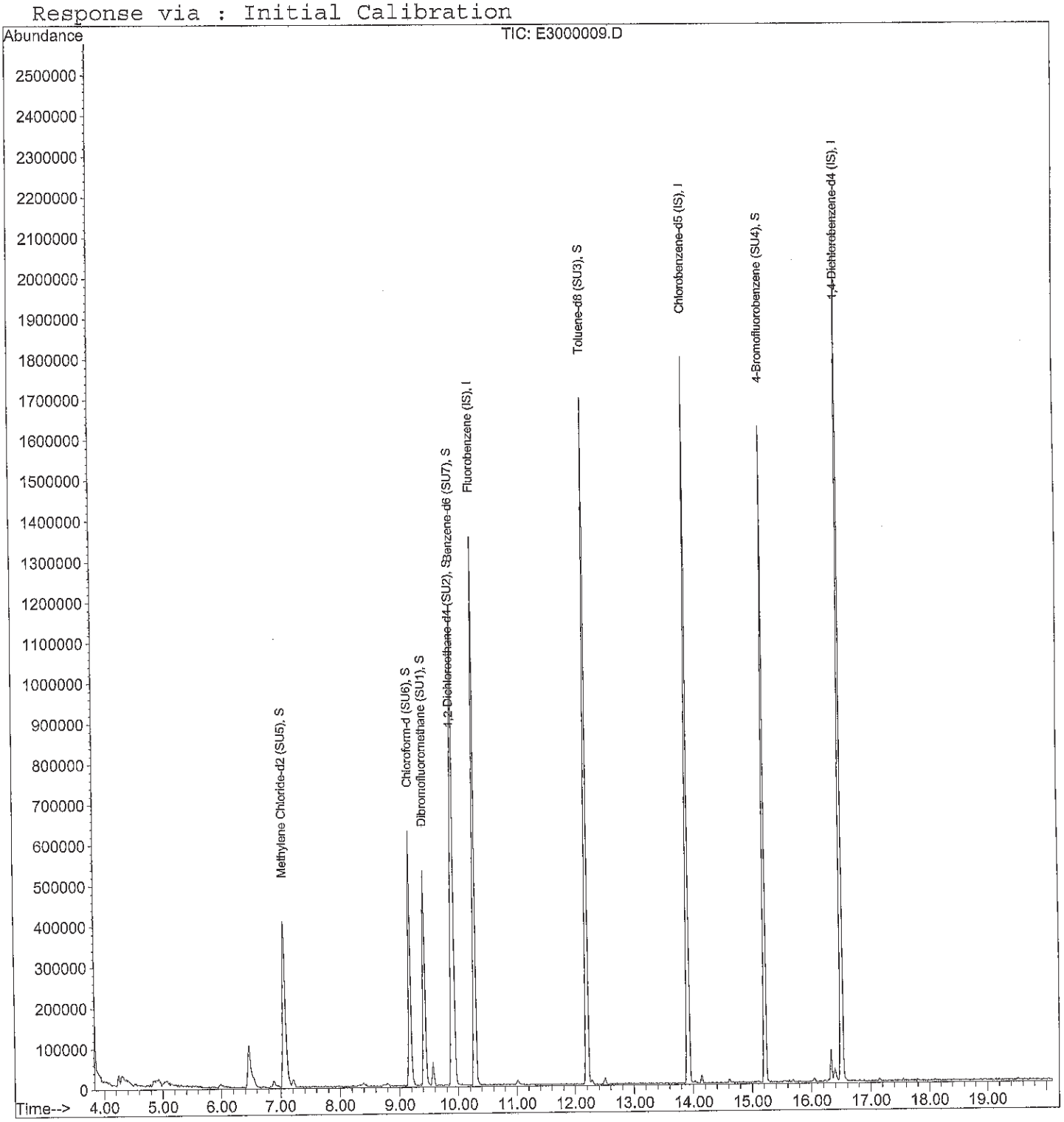
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000009.D Vial: 8
Acq On : 30 May 2014 12:33 pm Operator: DN
Sample : 3E43001-08 Inst : GC/MS Ins
Misc : 100cc SVL-550-SA5D-SV-17.0-18.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 13:23 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000010.D Vial: 1
Acq On : 30 May 2014 1:01 pm Operator: DN
Sample : 3E43001-09 Inst : GC/MS Ins
Misc : 100cc FB-053014 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 13:28 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1340657	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1141105	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	627627	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	395584	11.83 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 94.64%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	388115	12.21 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 97.68%		
39) Toluene-d8 (SU3)	12.20	98	1197814	11.25 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 90.00%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	638434	13.68 ug/L	0.00
Spiked Amount 12.500 Range 75 - 125			Recovery = 109.44%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.08	85	645	0.20 ~~ug/L~~ #	44
4) Chloromethane	4.39	50	1620	-0.50 ~~ug/L~~ #	41
6) Bromomethane	5.07	96	1983	-0.43 ~~ug/L~~ #	1
7) Chloroethane	5.23	64	643	1.26 ~~ug/L~~ #	32
11) Acetone	6.47	58	4313	3.25 ~~ug/L~~	76
12) (IPA) Leak Check Compound	6.47	45	179145	1112.02 ~~ug/L~~ #	83
13) Carbon disulfide	6.84	76	266	0.02 ~~ug/L~~ #	76
14) Methylene Chloride	7.06	84	5417	1.47 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.88	59	402	1.76 ~~ug/L~~ #	77
24) Chloroform	9.22	83	1901	0.27 ~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.31	59	346	0.04 ug/L #	44
31) Benzene	9.92	78	10486	0.83 ug/L #	74
32) 1,2-Dichloroethane	9.92	62	5658	1.27 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.19	43	8037	3.53 ~~ug/L~~ #	100
41) Toluene	12.29	91	9061	0.58 ug/L 0.0116	95
46) 2-Hexanone	13.10	43	2524	1.01 ~~ug/L~~ #	37
51) Ethylbenzene	14.15	91	4697	0.27 ~~ug/L~~	93
52) m,p-Xylenes	14.14	106	1852	0.29 ug/L 0.0058	80
53) o-Xylene	14.61	106	307	0.05 ~~ug/L~~ # 0.001	1
54) Styrene	14.63	104	2435	-0.60 ~~ug/L~~ #	86
56) Isopropylbenzene	15.01	105	303	0.02 ~~ug/L~~ #	55
62) n-Propylbenzene	15.46	91	1121	0.04 ~~ug/L~~ #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000010.D Vial: 1
Acq On : 30 May 2014 1:01 pm Operator: DN
Sample : 3E43001-09 Inst : GC/MS Ins
Misc : 100cc FB-053014 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 13:28 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

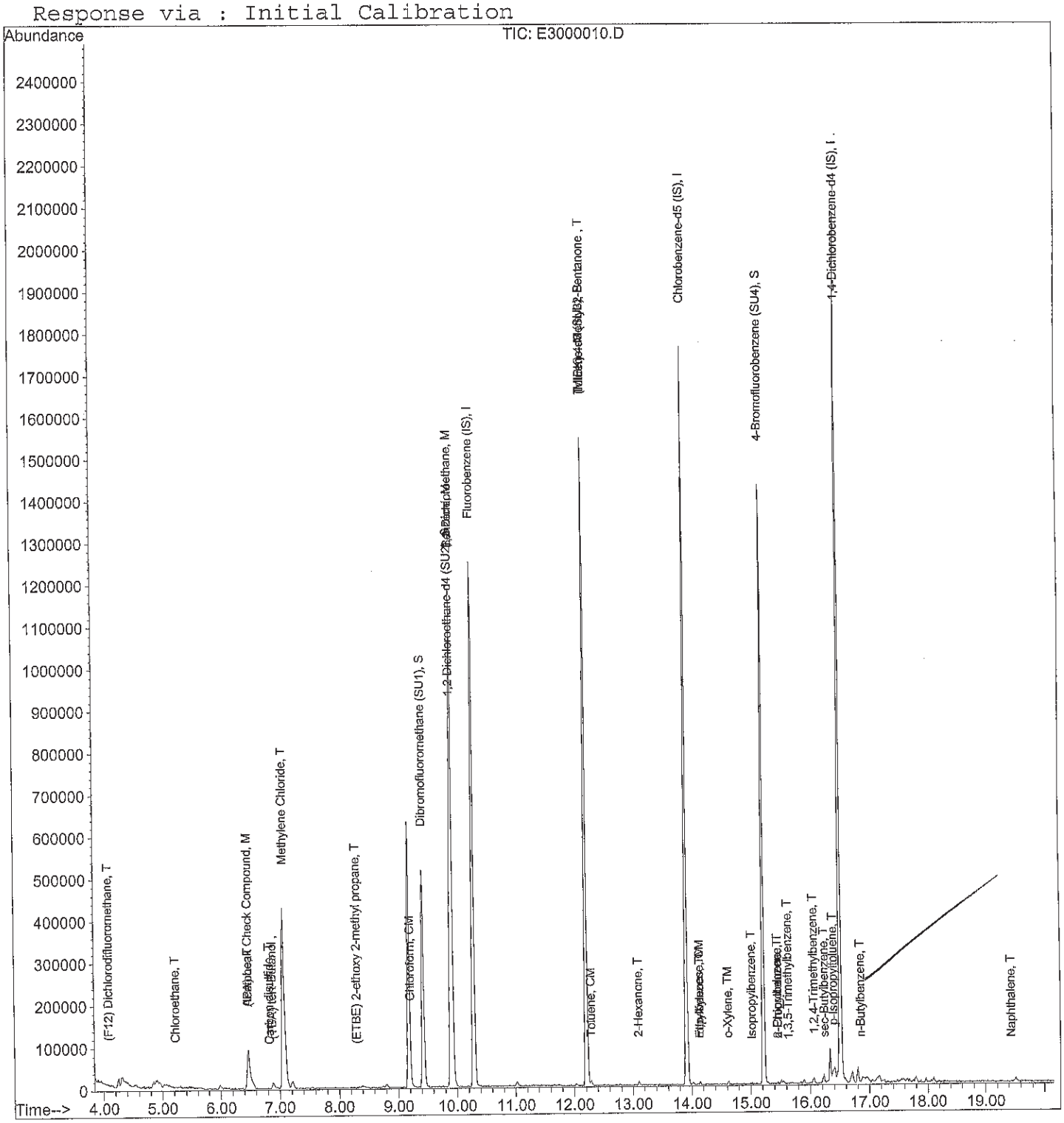
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
63) 2-Chlorotoluene	15.46	91	1121	0.07 ~~ug/L #~~	45
64) 1,3,5-Trimethylbenzene	15.62	105	856	0.05 ~~ug/L #~~	31
67) 1,2,4-Trimethylbenzene	16.06	105	6701	0.41 ~~ug/L~~	92
68) sec-Butylbenzene	16.25	105	346	0.02 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	11244	0.66 ~~ug/L~~	98
72) n-Butylbenzene	16.85	91	386	0.02 ~~ug/L #~~	30
77) Naphthalene	19.45	128	2759	0.22 ~~ug/L~~	100

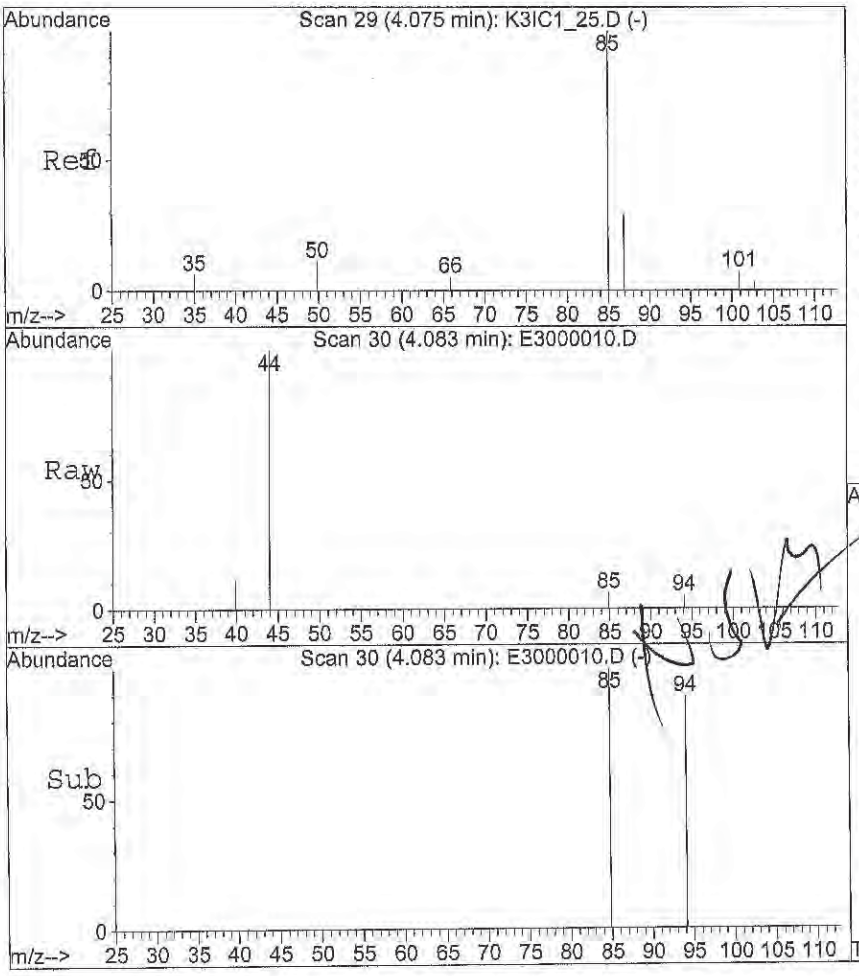
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000010.D Vial: 1
Acq On : 30 May 2014 1:01 pm Operator: DN
Sample : 3E43001-09 Inst : GC/MS Ins
Misc : 100cc FB-053014 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 13:28 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

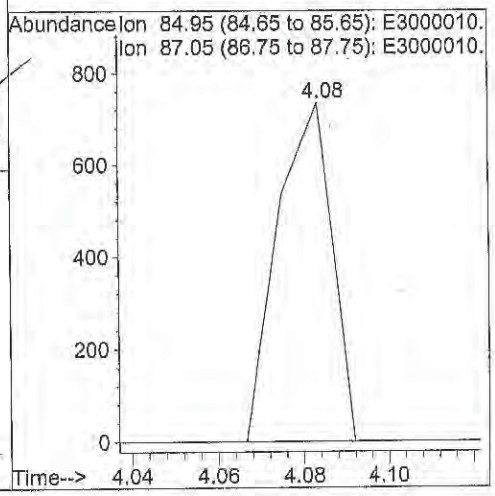


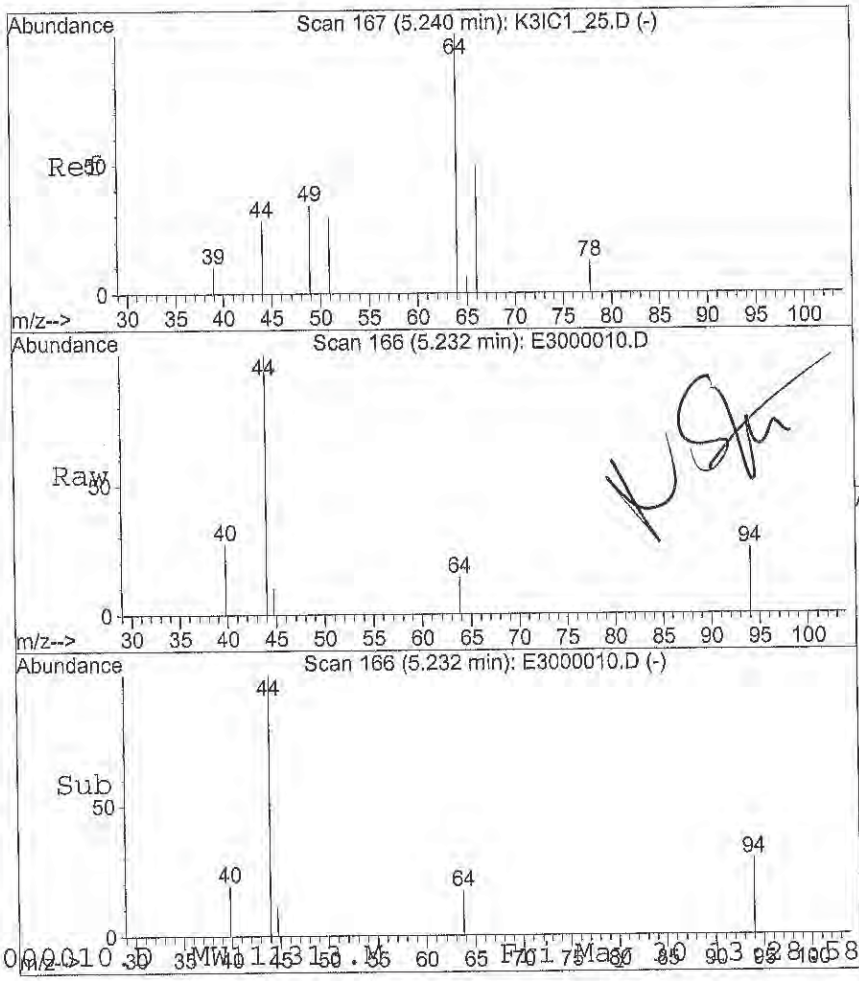


#3
(F12) Dichlorodifluoromethane
Concen: 0.20 ug/L
RT: 4.08 min Scan# 30
Delta R.T. 0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 85 Resp: 645

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

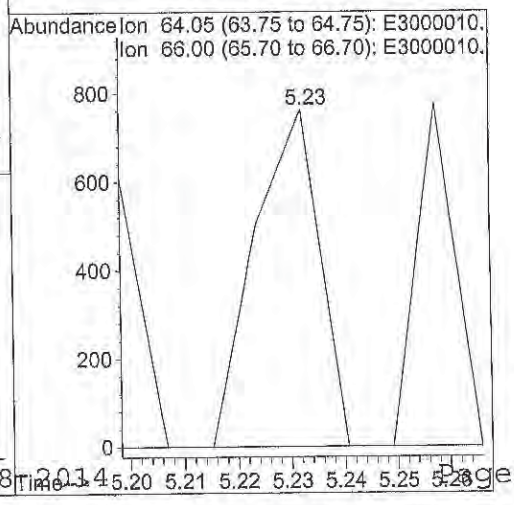


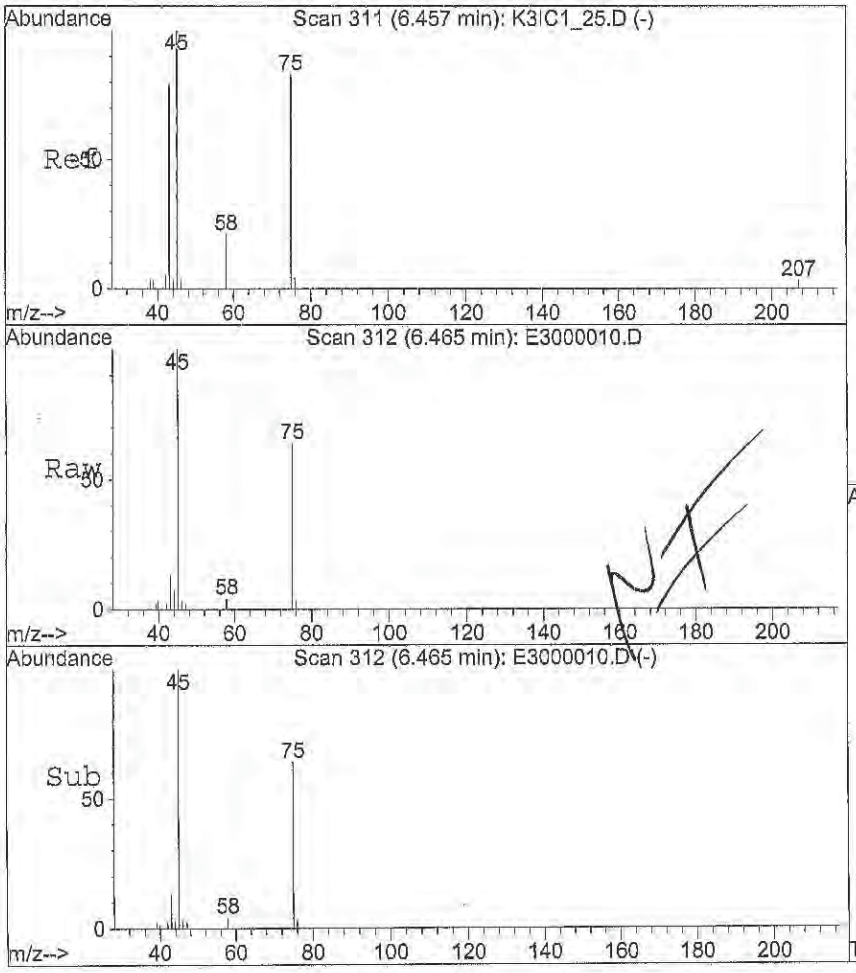


#7
Chloroethane
Concen: 1.26 ug/L
RT: 5.23 min Scan# 166
Delta R.T. -0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 64 Resp: 643

Ion	Ratio	Lower	Upper
64	100		
66	0.0	35.4	53.0#

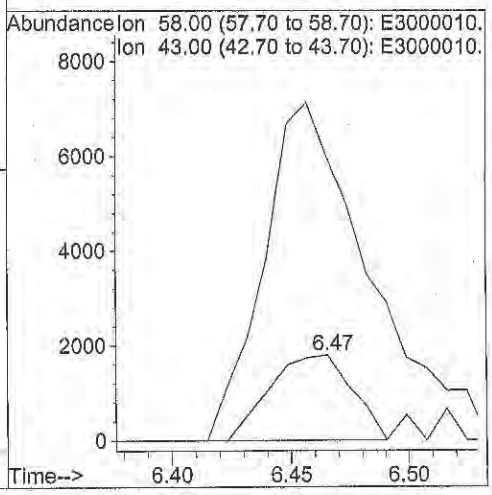


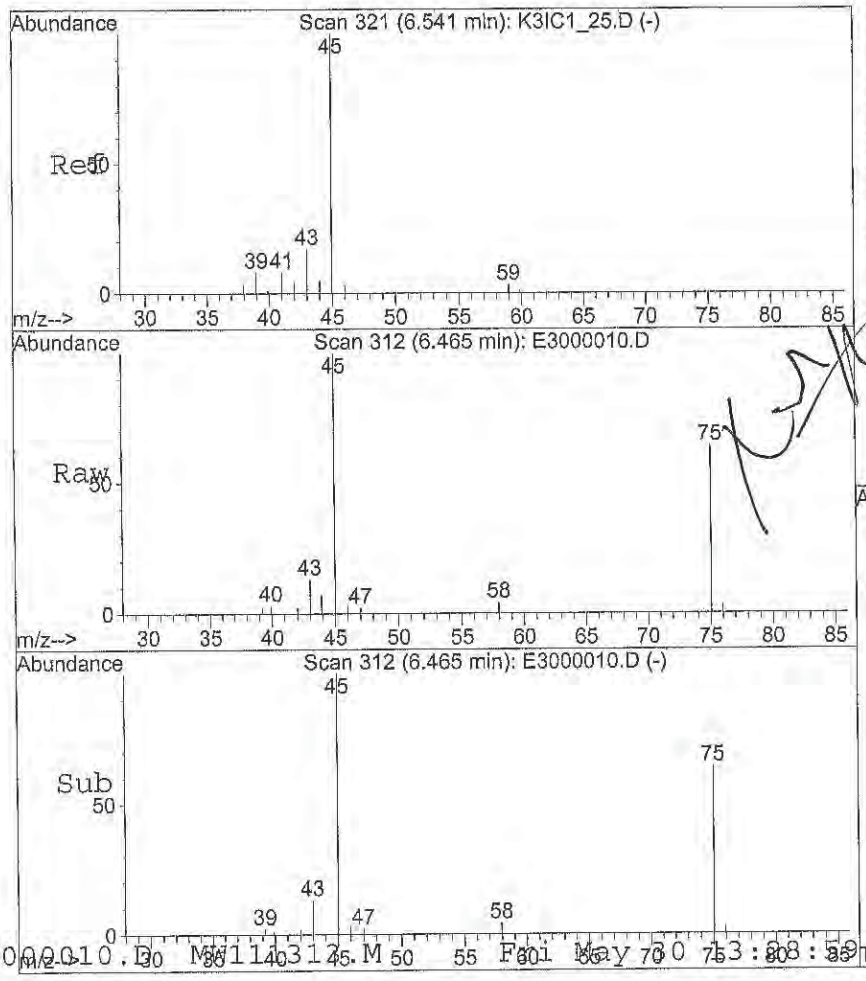


#11
Acetone
Concen: 3.25 ug/L
RT: 6.47 min Scan# 312
Delta R.T. 0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 58 Resp: 4313

Ion	Ratio	Lower	Upper
58	100		
43	512.8	360.9	541.3

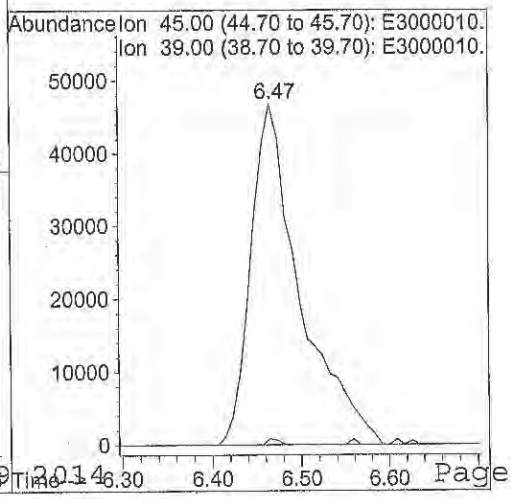


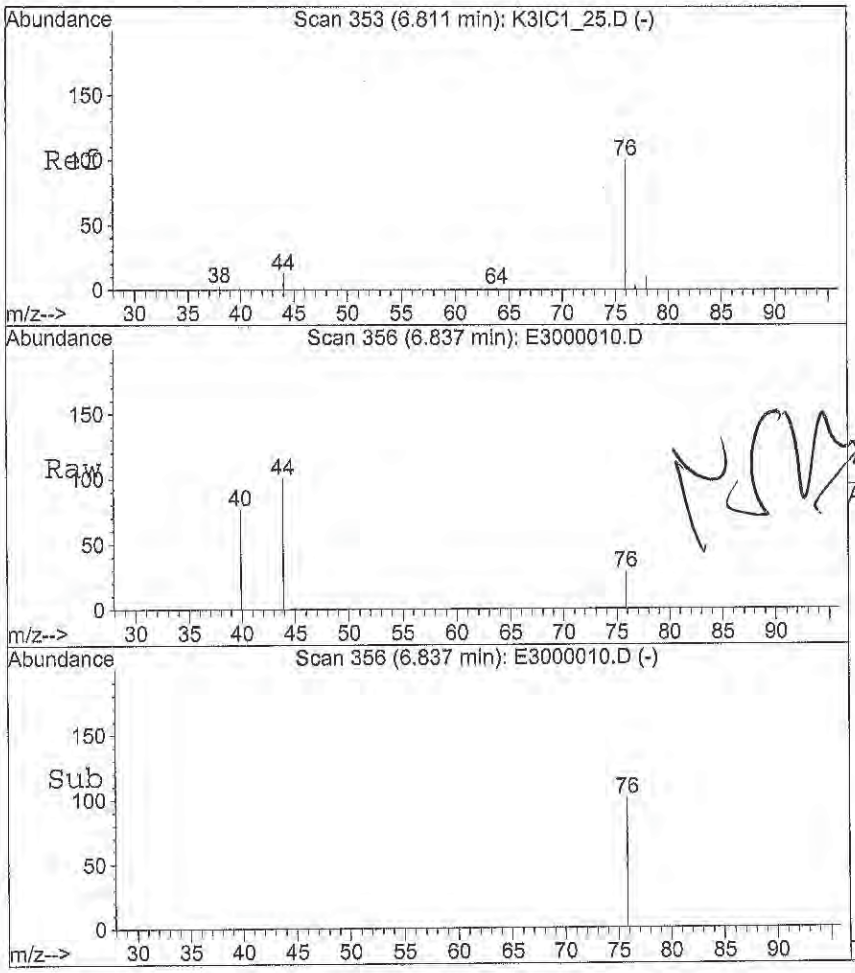


#12
(IPA) Leak Check Compound
Concen: 1112.02 ug/L
RT: 6.47 min Scan# 312
Delta R.T. -0.08 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 45 Resp: 179145

Ion	Ratio	Lower	Upper
45	100		
39	0.4	4.9	7.3#

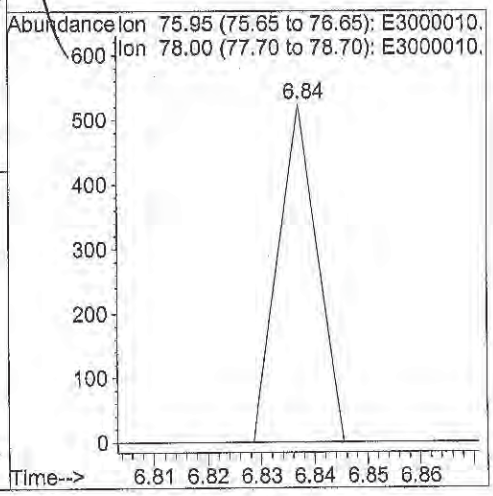


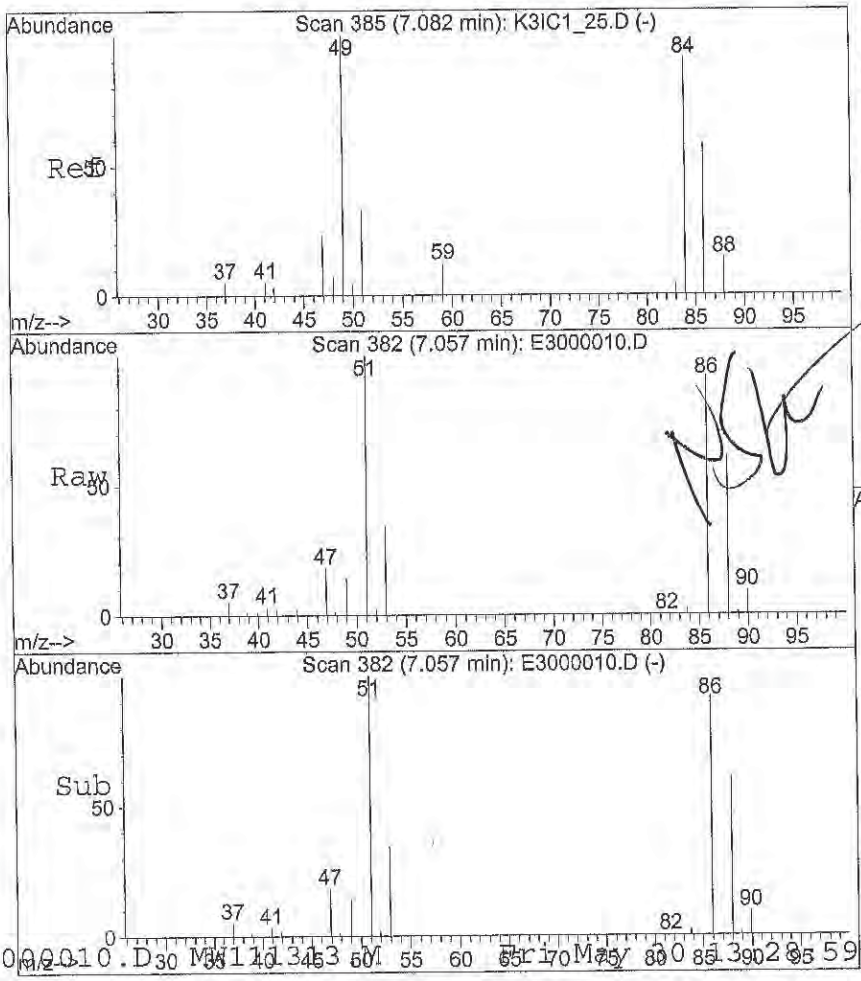


#13
Carbon disulfide
Concen: 0.02 ug/L
RT: 6.84 min Scan# 356
Delta R.T. 0.03 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 76 Resp: 266

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

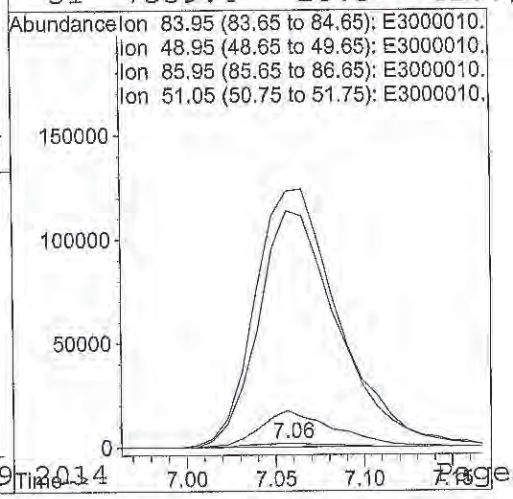


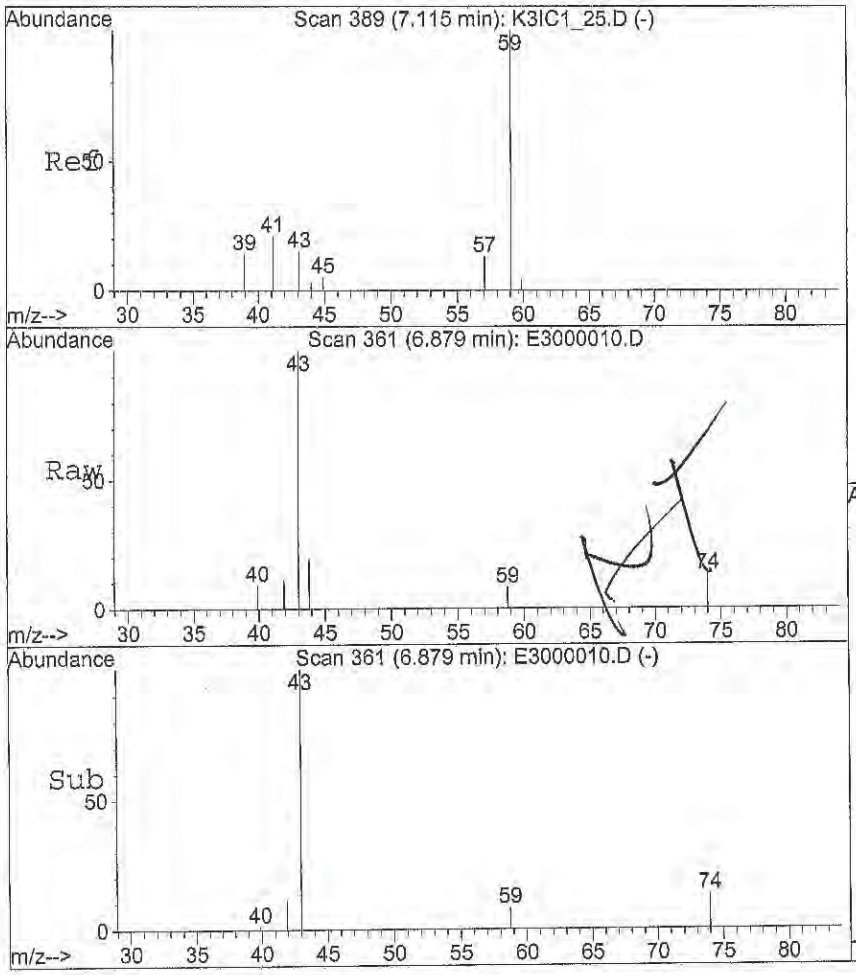


#14
Methylene Chloride
Concen: 1.47 ug/L
RT: 7.06 min Scan# 382
Delta R.T. -0.02 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 84 Resp: 5417

Ion	Ratio	Lower	Upper
84	100		
49	932.4	89.8	134.6#
86	6624.4	51.1	76.7#
51	7559.4	28.5	42.7#

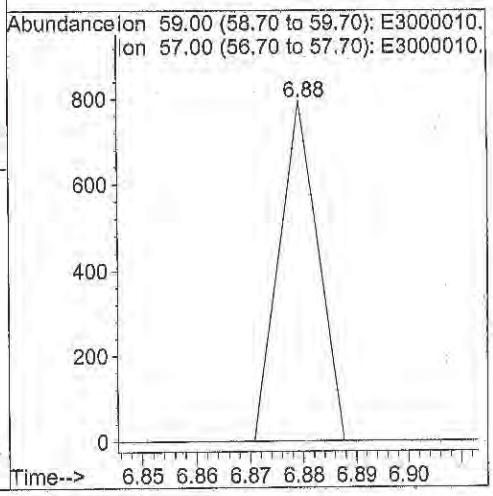


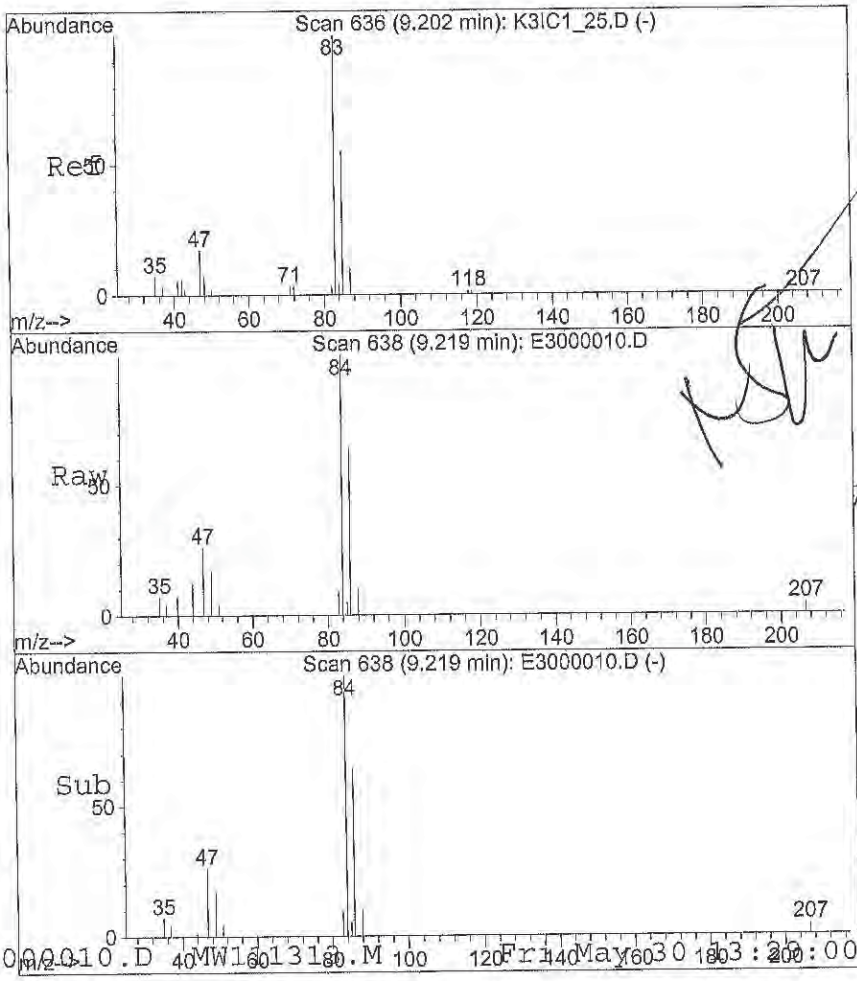


#15
(TBA) tert-Butanol
Concen: 1.76 ug/L
RT: 6.88 min Scan# 361
Delta R.T. -0.24 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 59 Resp: 402

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

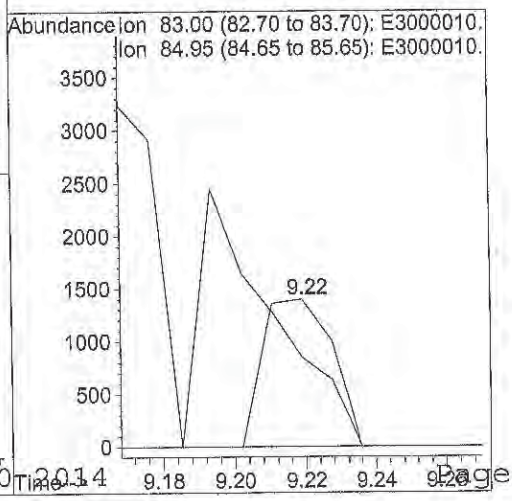


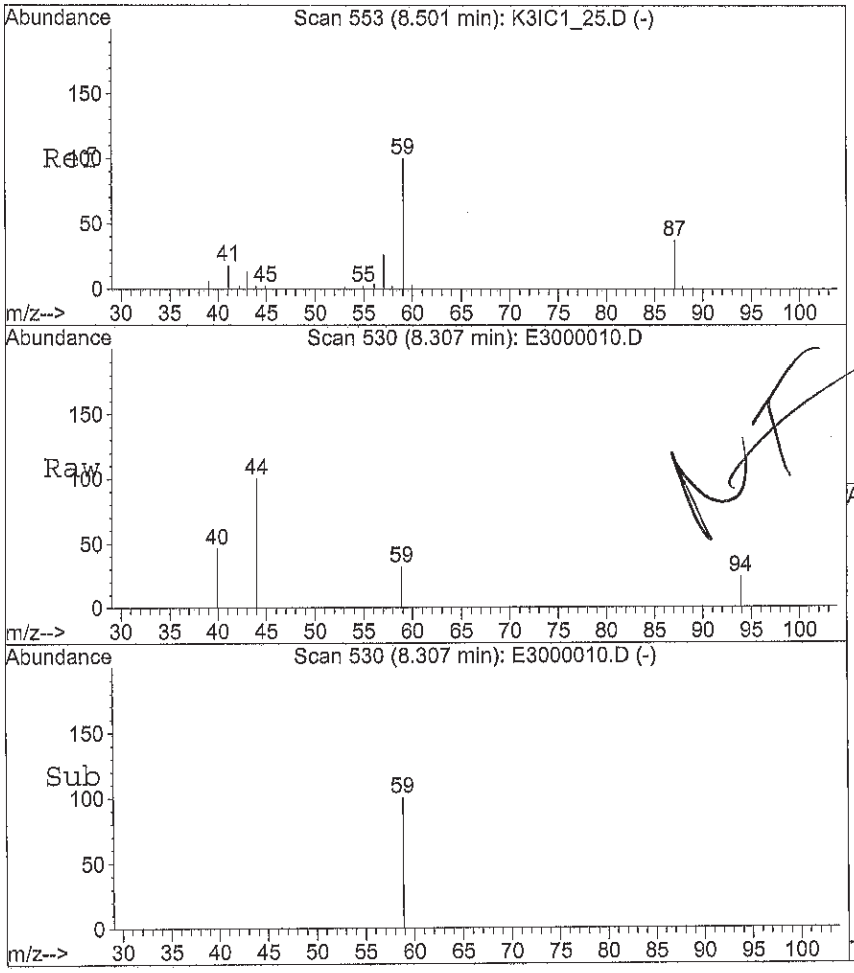


#24
Chloroform
Concen: 0.27 ug/L
RT: 9.22 min Scan# 638
Delta R.T. 0.02 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 83 Resp: 1901

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

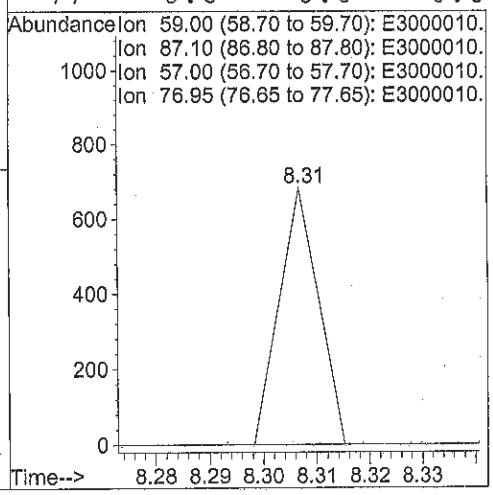


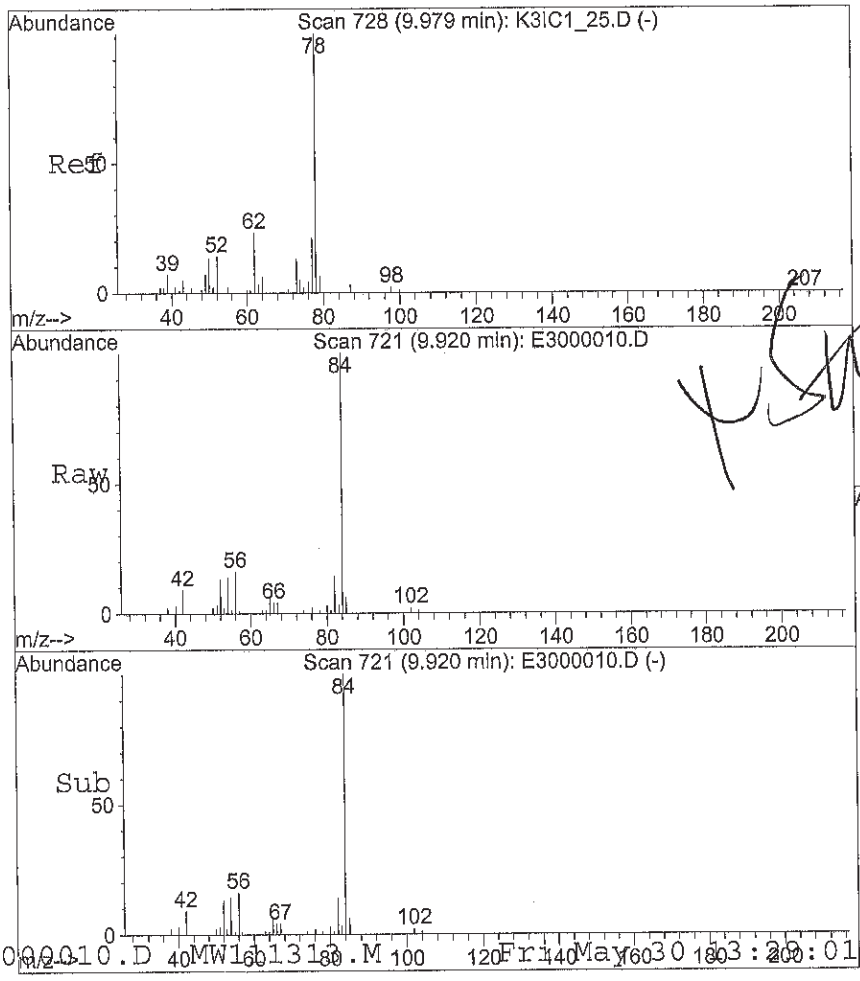


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.04 ug/L
RT: 8.31 min Scan# 530
Delta R.T. -0.19 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 59 Resp: 346

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

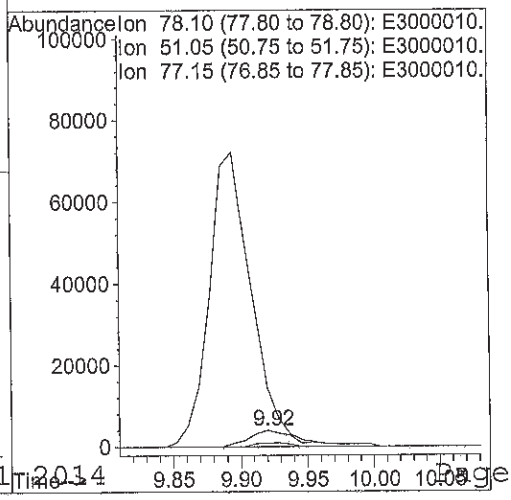


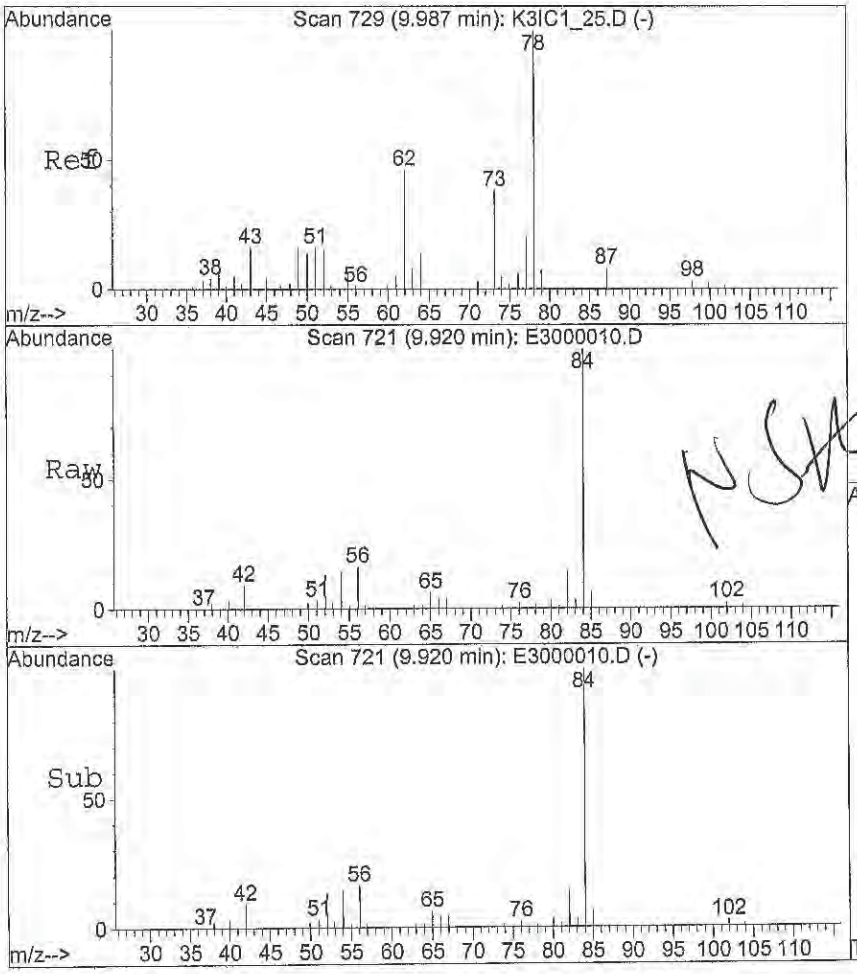


#31
Benzene
Concen: 0.83 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.06 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 78 Resp: 10486

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	14.3	16.6	24.8#

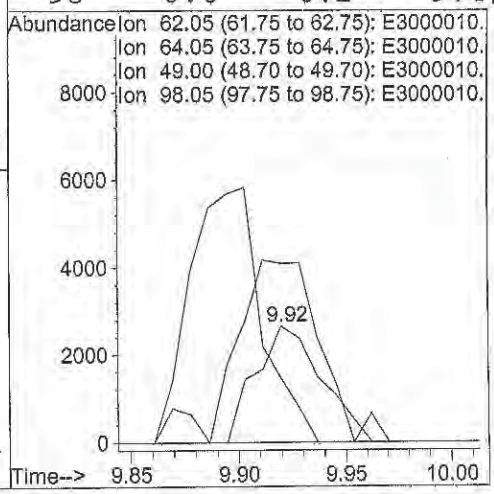


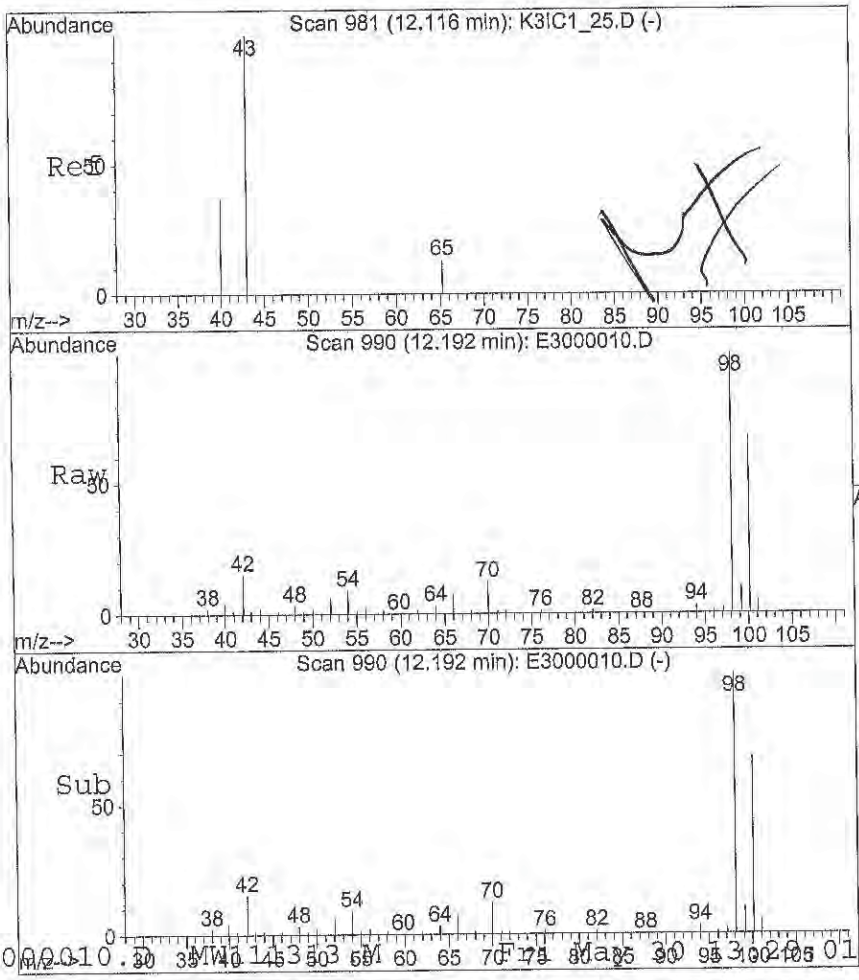


#32
1,2-Dichloroethane
Concen: 1.27 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 62 Resp: 5658

Ion	Ratio	Lower	Upper
62	100		
64	203.4	28.0	42.0#
49	237.5	28.5	42.7#
98	0.0	6.2	9.4#

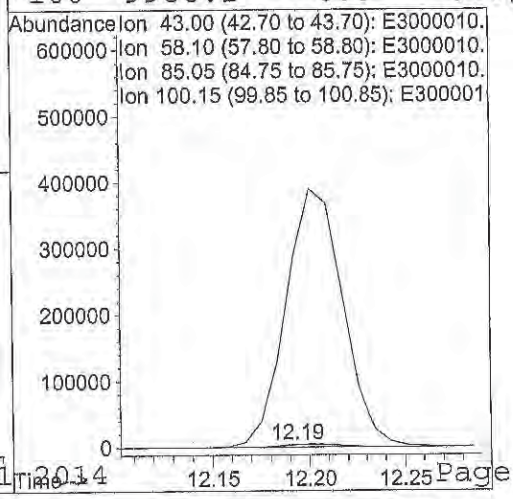


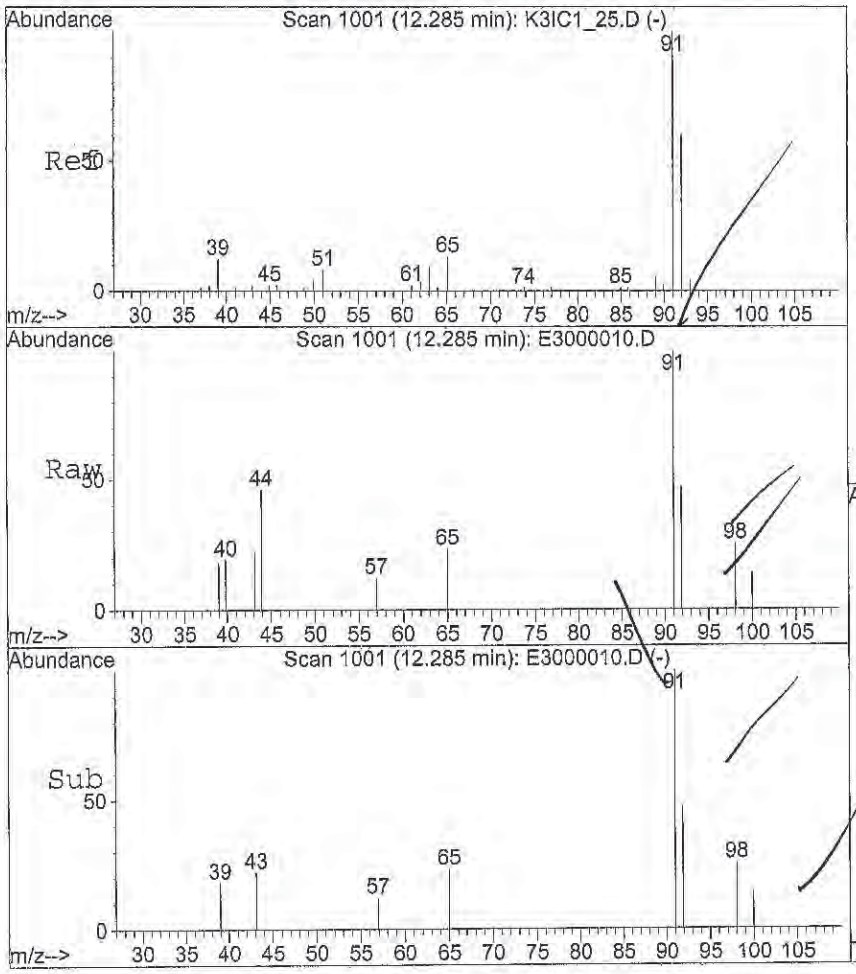


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 3.53 ug/L
RT: 12.19 min Scan# 990
Delta R.T. 0.08 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 43 Resp: 8037

Ion	Ratio	Lower	Upper
43	100		
58	101.3	0.0	0.0#
85	0.0	0.0	0.0
100	9986.1	0.0	0.0#

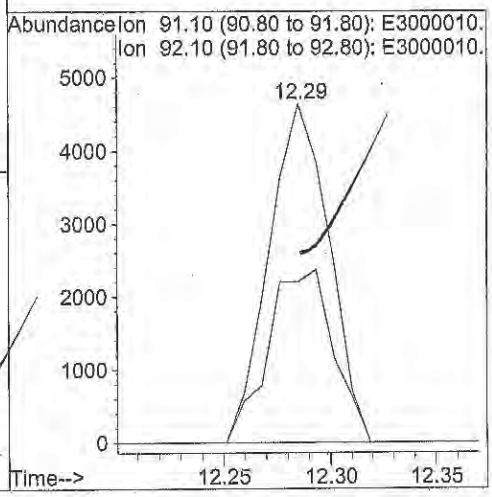


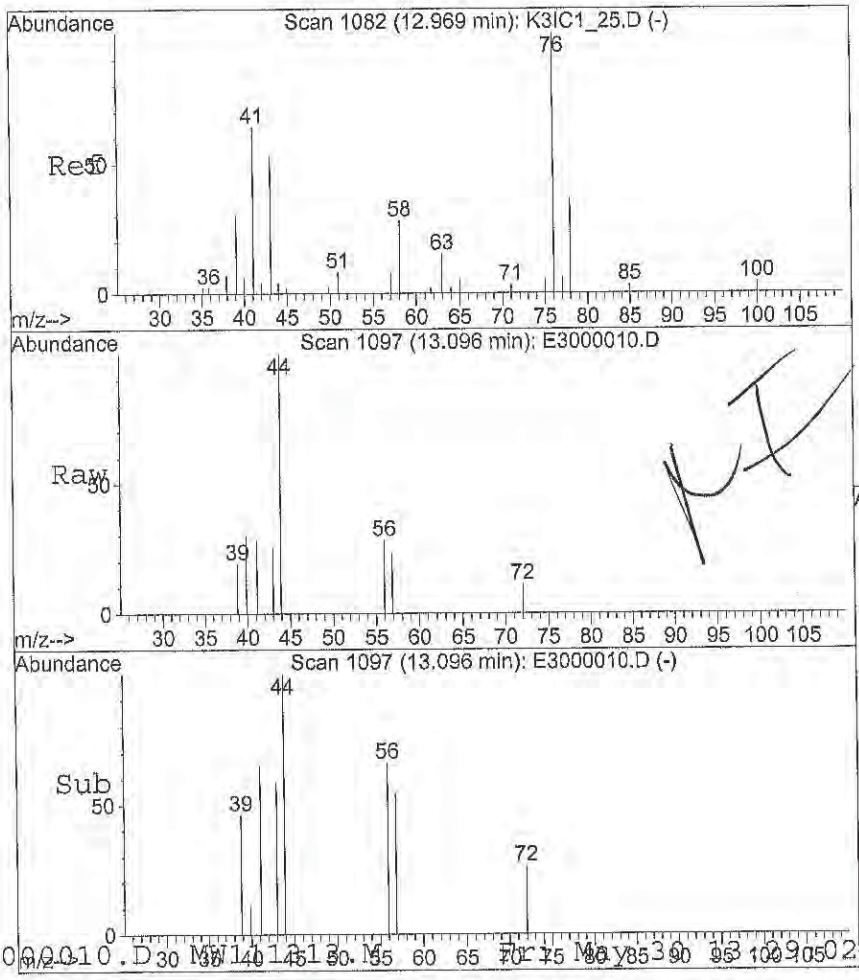


#41
Toluene
Concen: 0.58 ug/L
RT: 12.29 min Scan# 1001
Delta R.T. 0.00 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 91 Resp: 9061

Ion	Ratio	Lower	Upper
91	100		
92	55.3	47.4	71.0

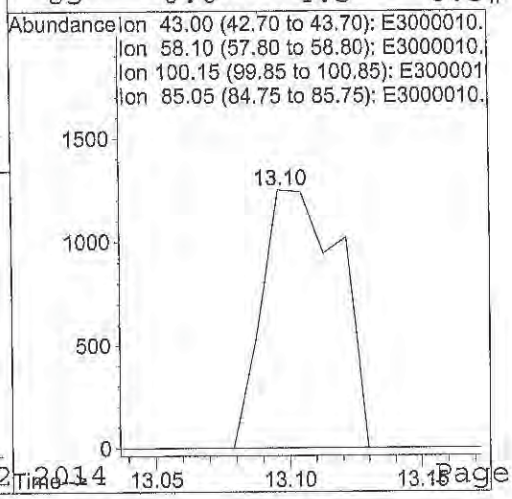


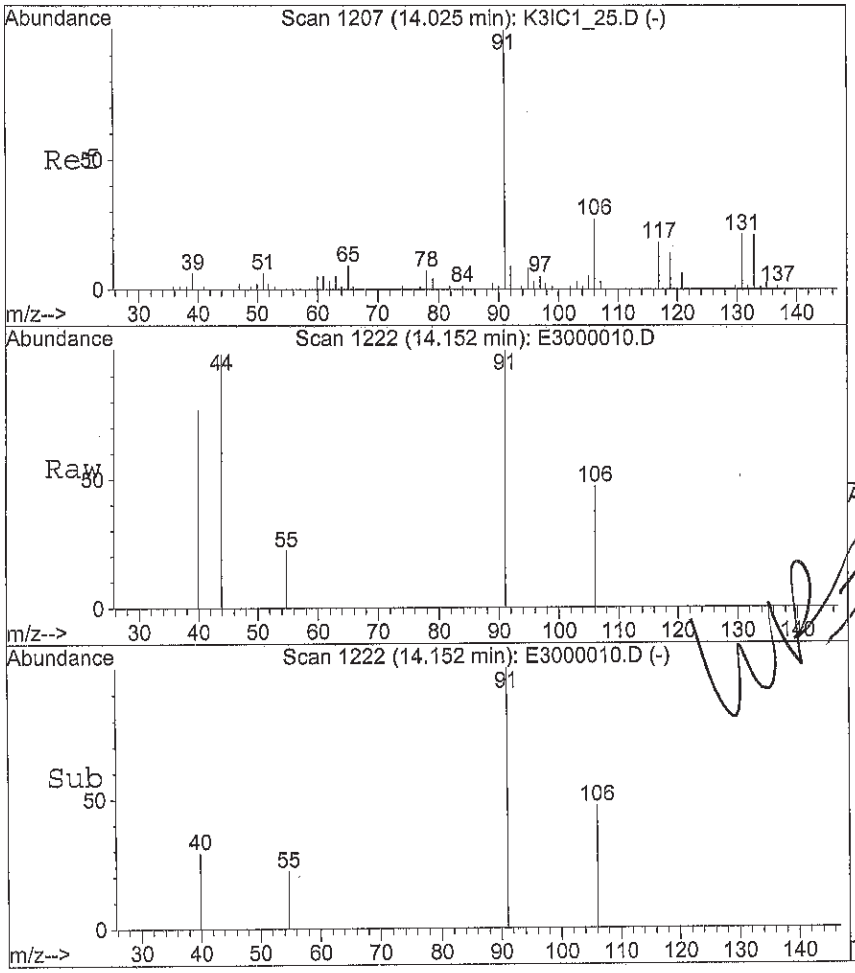


#46
2-Hexanone
Concen: 1.01 ug/L
RT: 13.10 min Scan# 1097
Delta R.T. 0.13 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 43 Resp: 2524

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

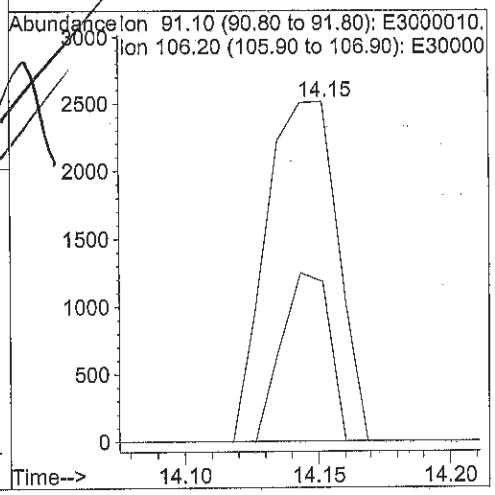


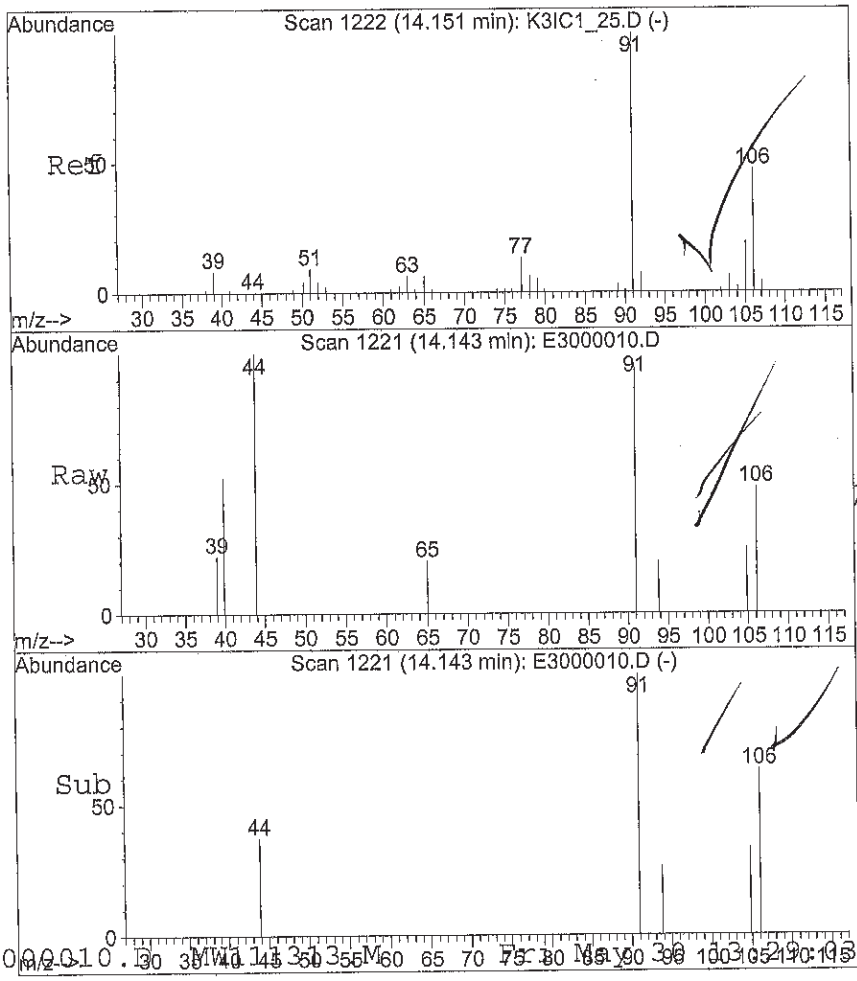


#51
Ethylbenzene
Concen: 0.27 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. 0.13 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 91 Resp: 4697

Ion	Ratio	Lower	Upper
91	100		
106	33.3	23.5	35.3

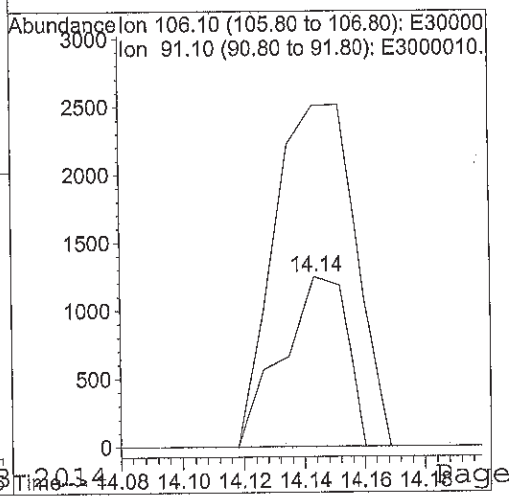


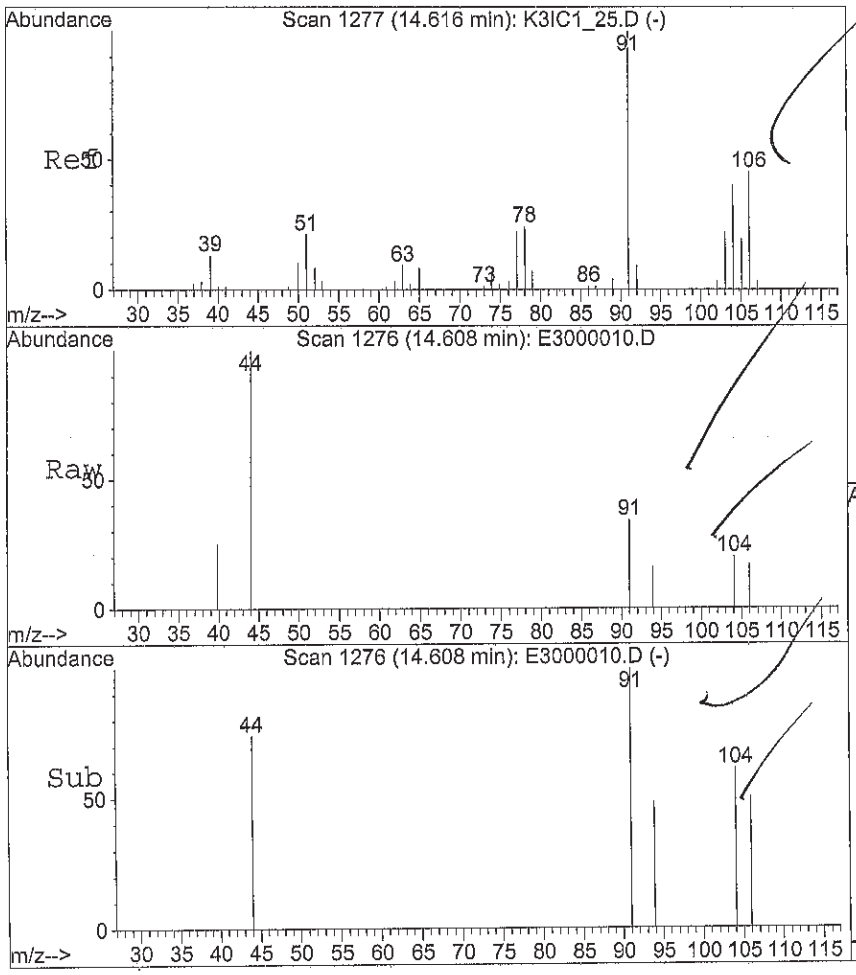


#52
m,p-Xylenes
Concen: 0.29 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:106 Resp: 1852

Ion	Ratio	Lower	Upper
106	100		
91	253.6	177.1	265.7

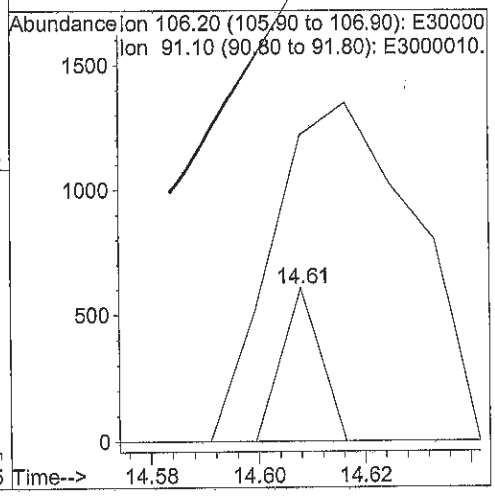


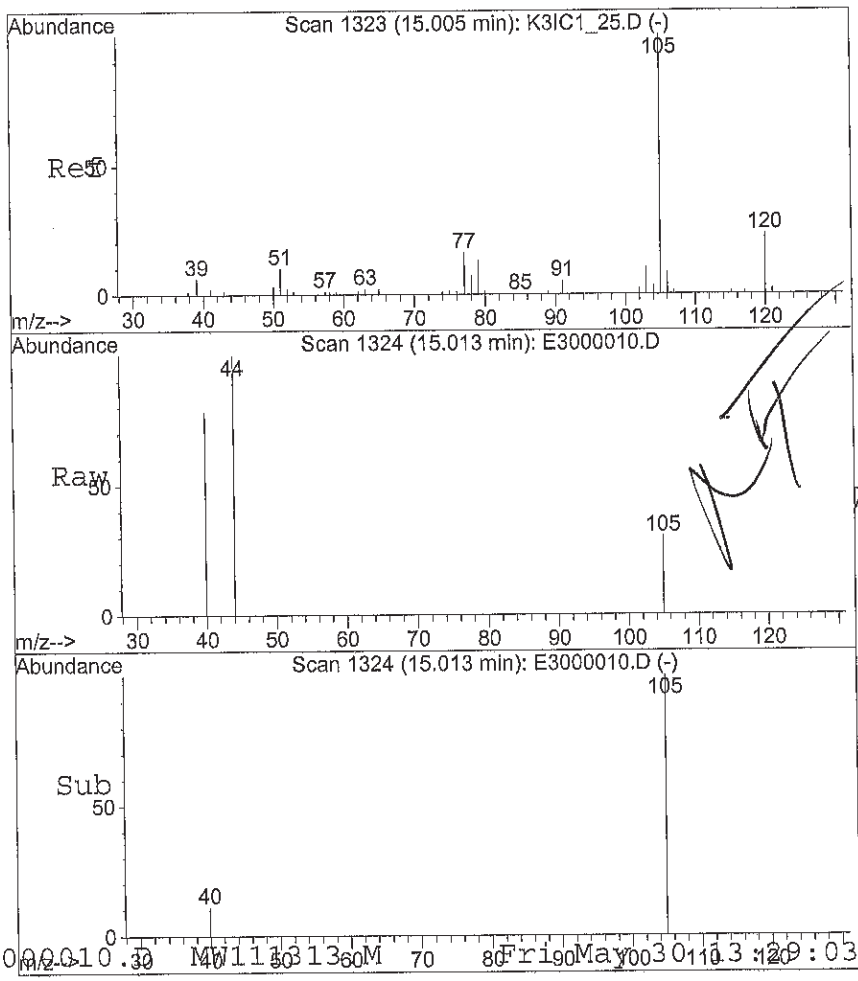


#53
o-Xylene
Concen: 0.05 ug/L
RT: 14.61 min Scan# 1276
Delta R.T. -0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:106 Resp: 307

Ion	Ratio	Lower	Upper
106	100		
91	811.1	179.0	268.6#

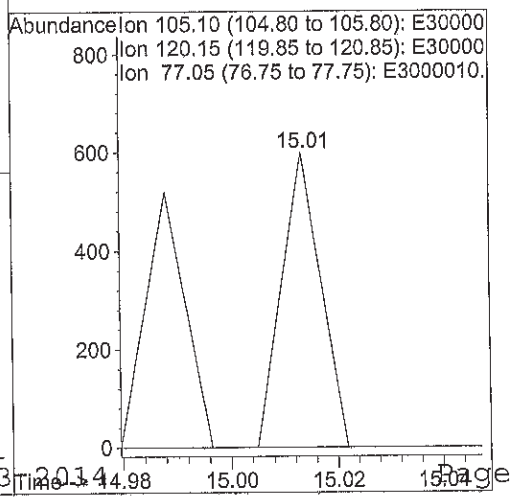


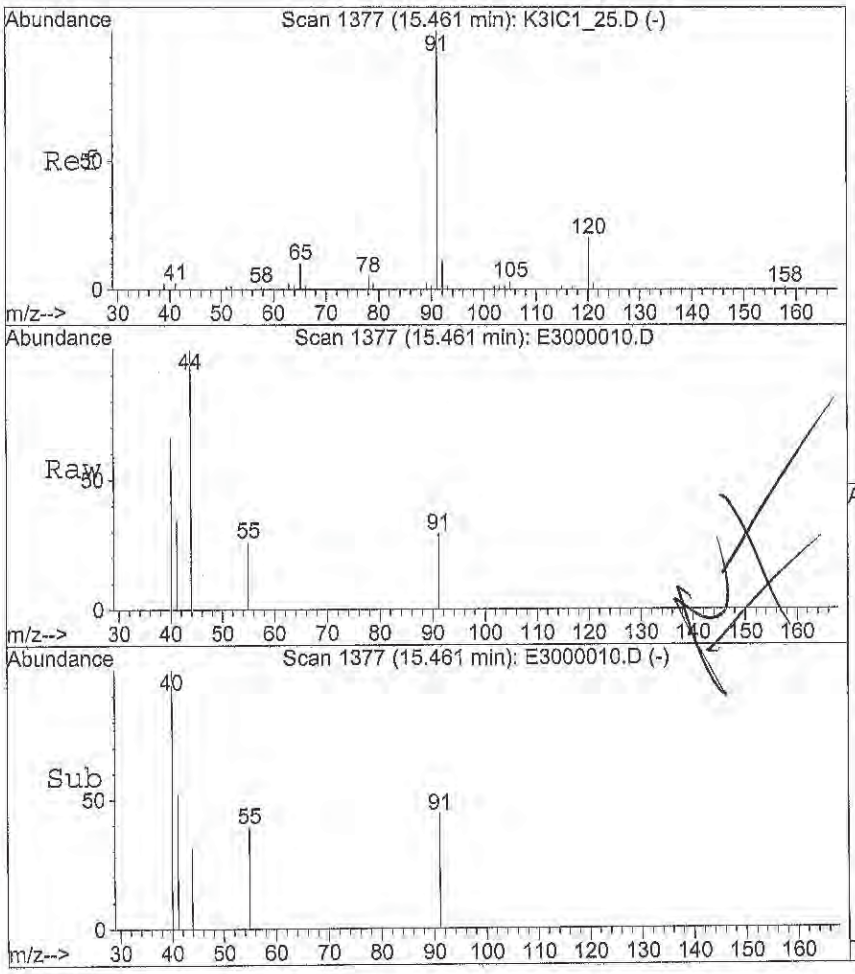


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.01 min Scan# 1324
Delta R.T. 0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:105 Resp: 303

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

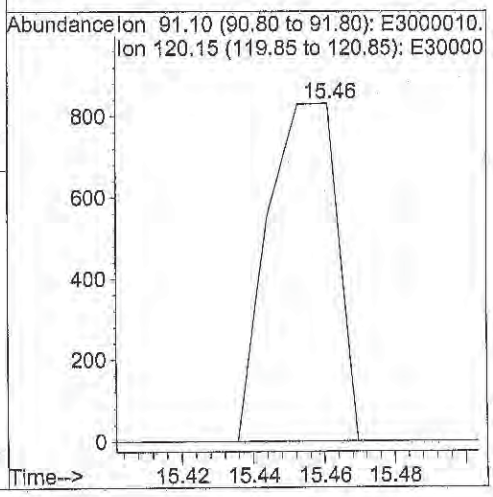


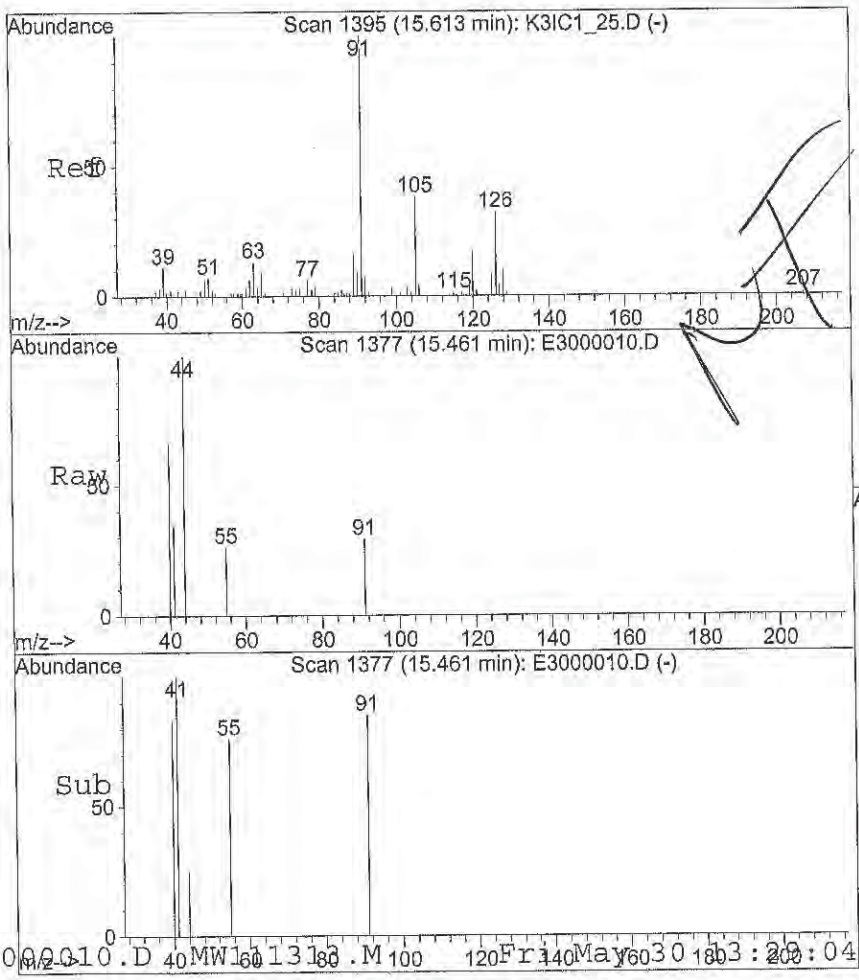


#62
n-Propylbenzene
Concen: 0.04 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. 0.00 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 91 Resp: 1121

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

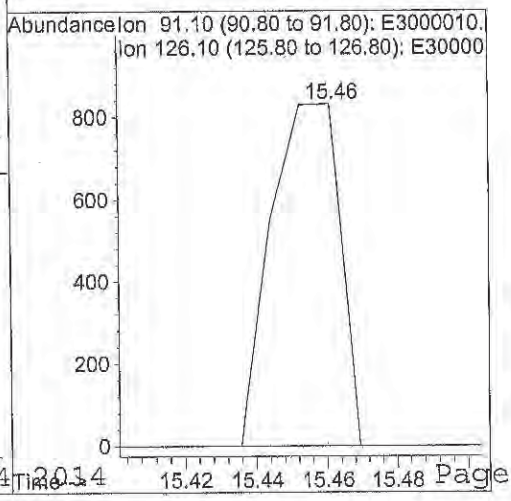


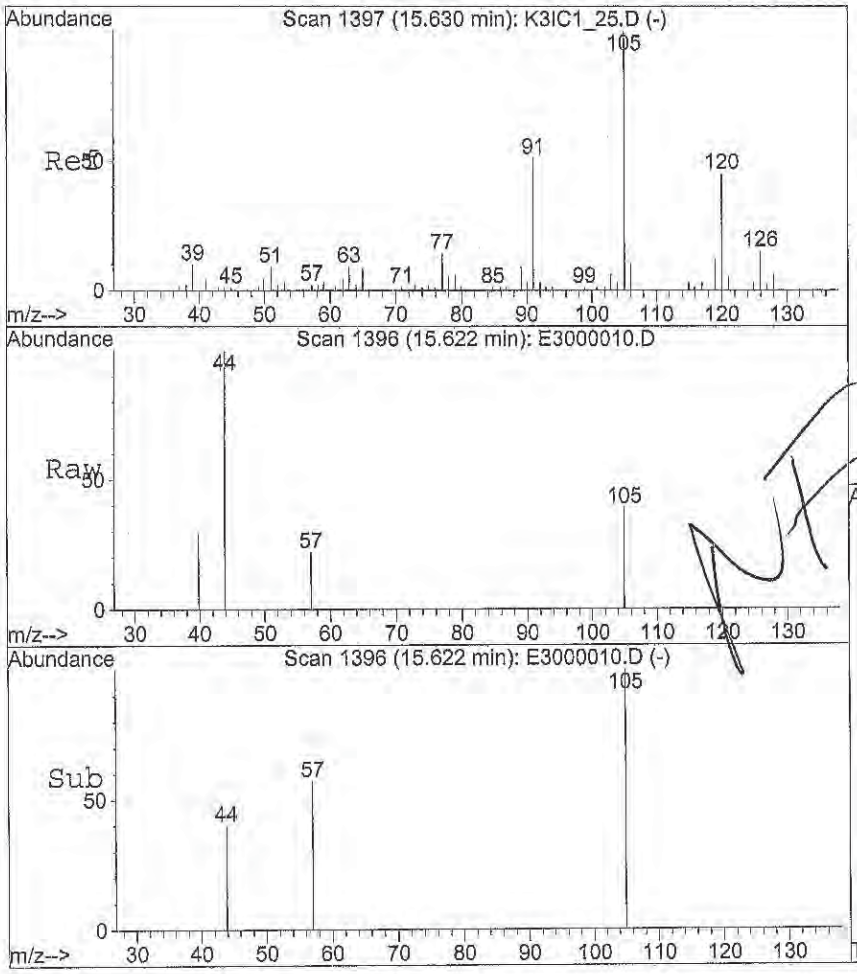


#63
2-Chlorotoluene
Concen: 0.07 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.15 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 91 Resp: 1121

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

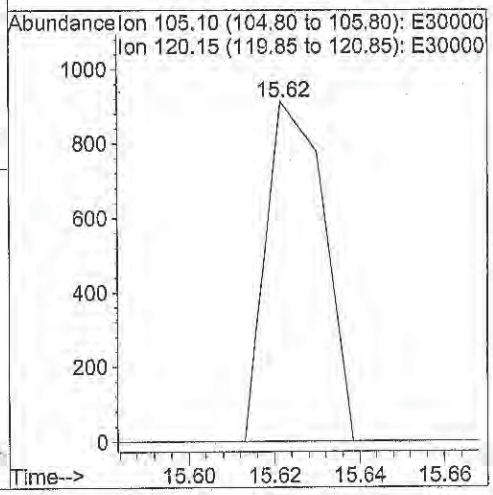


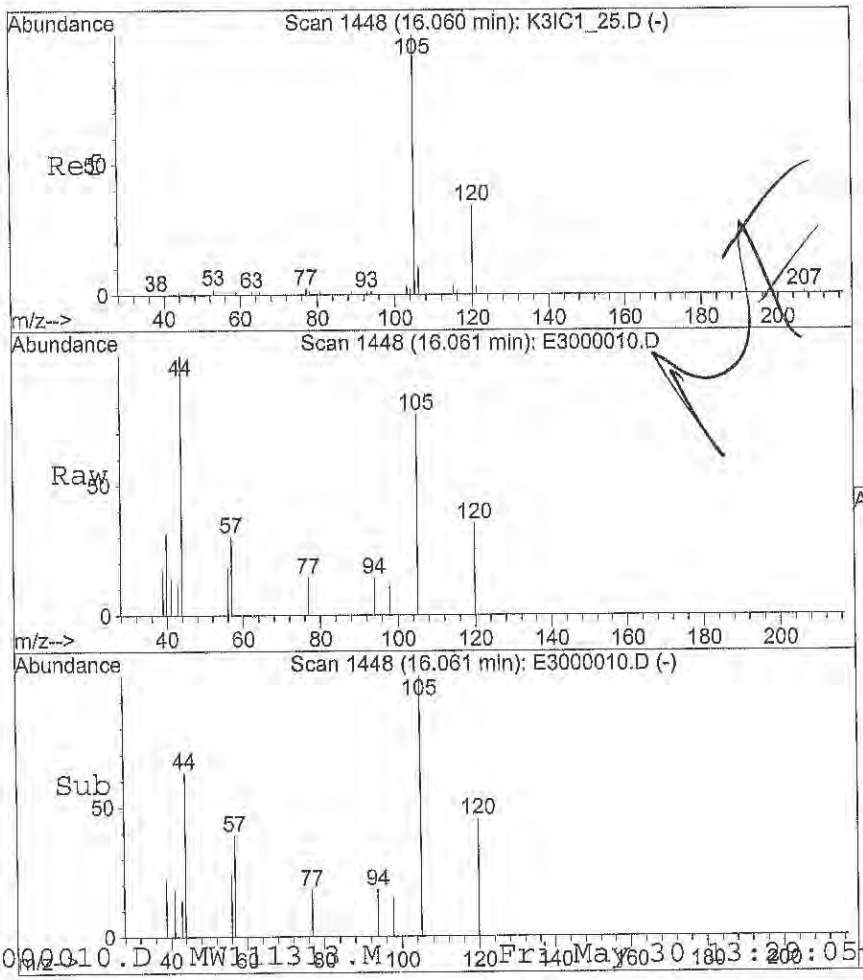


#64
1,3,5-Trimethylbenzene
Concen: 0.05 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:105 Resp: 856

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

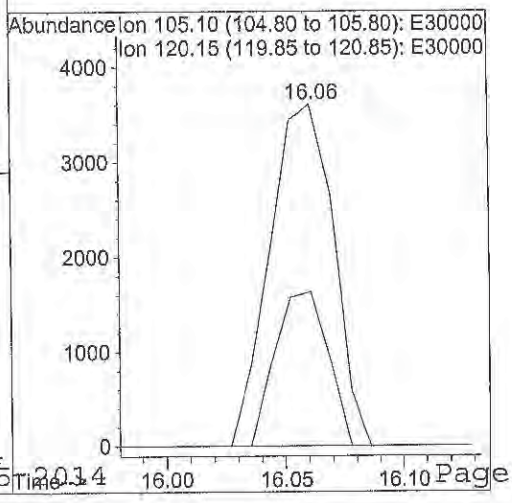


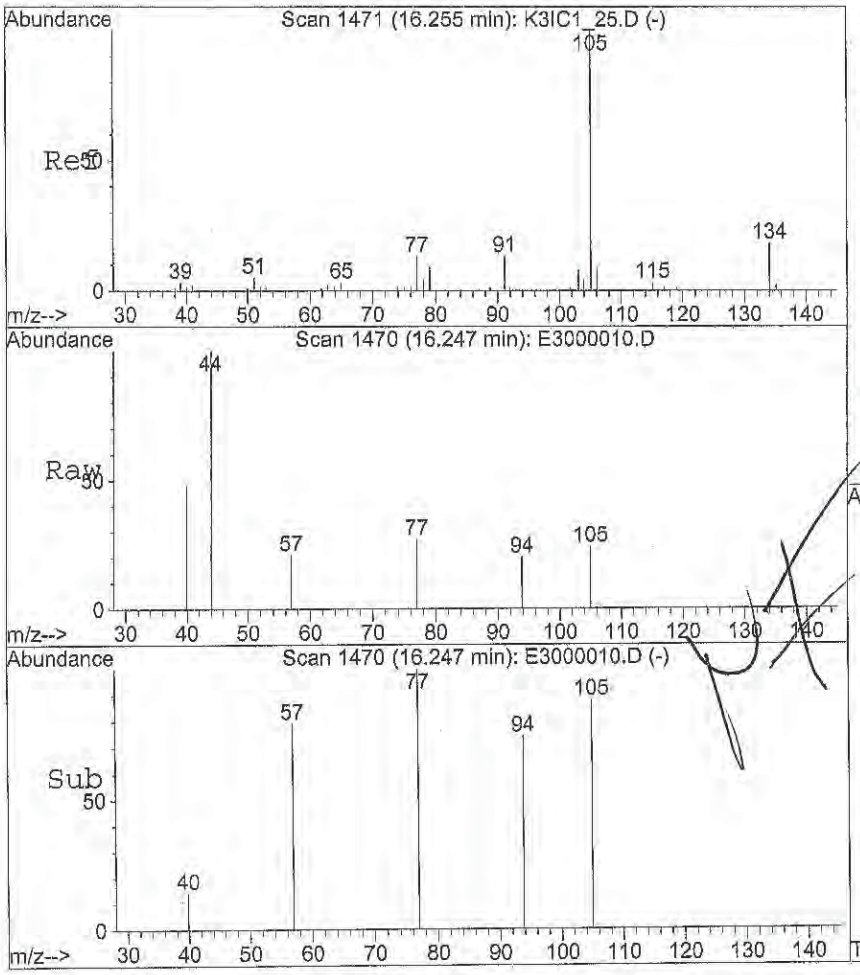


#67
1,2,4-Trimethylbenzene
Concen: 0.41 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.00 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:105 Resp: 6701

Ion	Ratio	Lower	Upper
105	100		
120	37.5	33.8	50.8

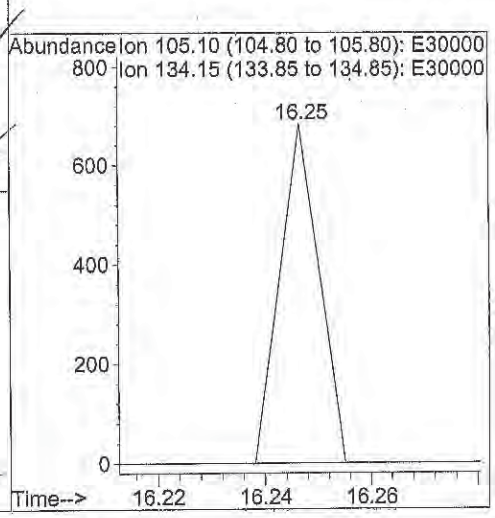


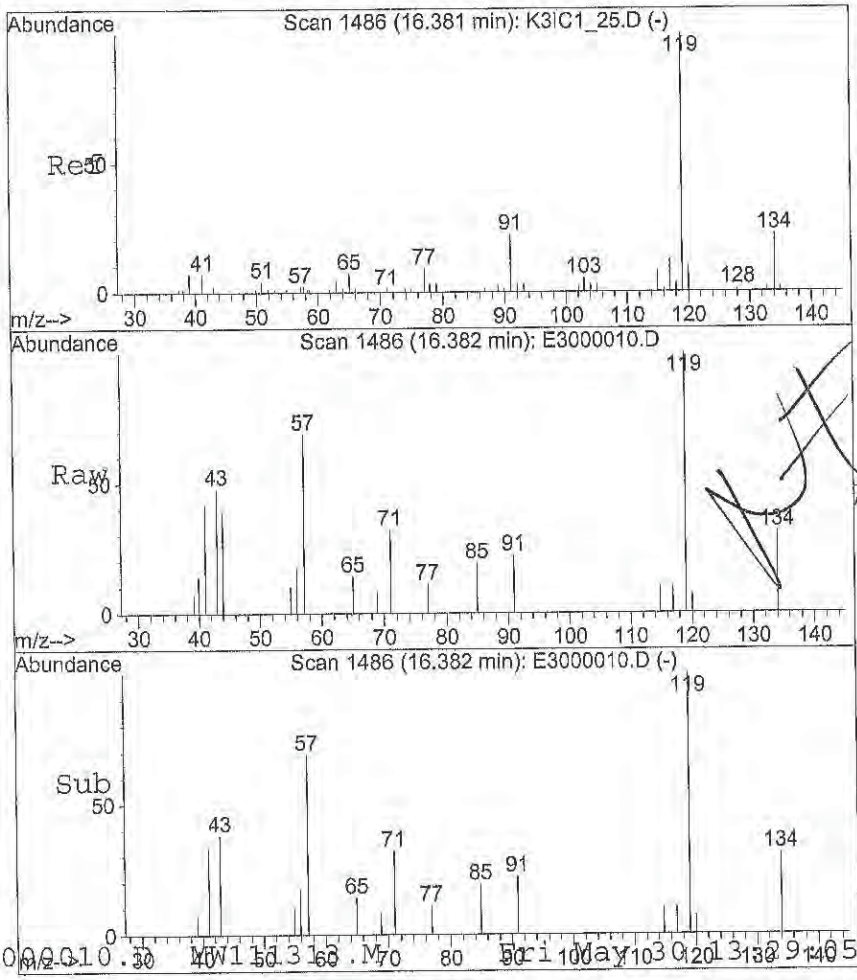


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.25 min Scan# 1470
Delta R.T. -0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:105 Resp: 346

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

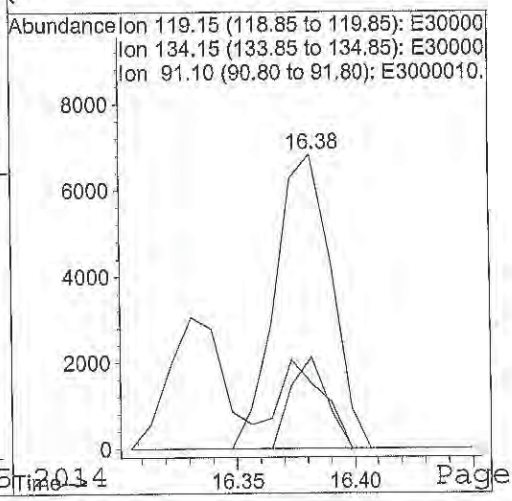


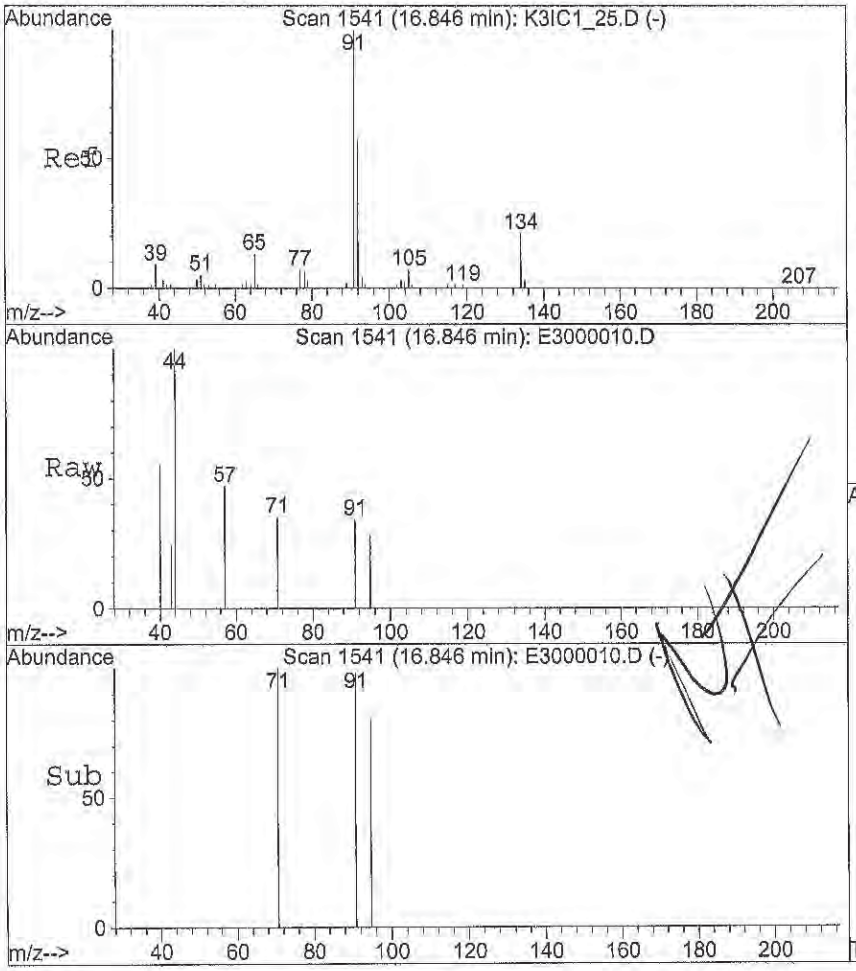


#69
p-Isopropyltoluene
Concen: 0.66 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. 0.00 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:119 Resp: 11244

Ion	Ratio	Lower	Upper
119	100		
134	20.0	17.4	26.2
91	24.0	19.6	29.4

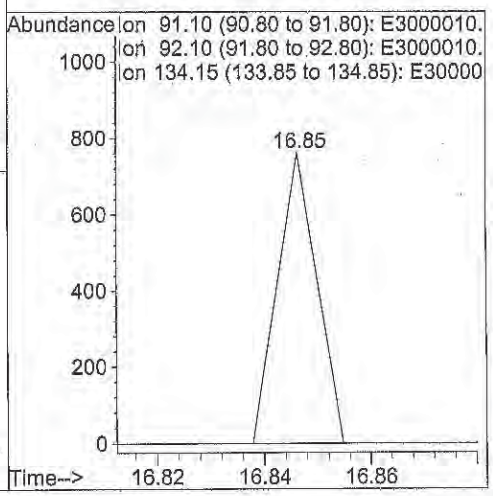


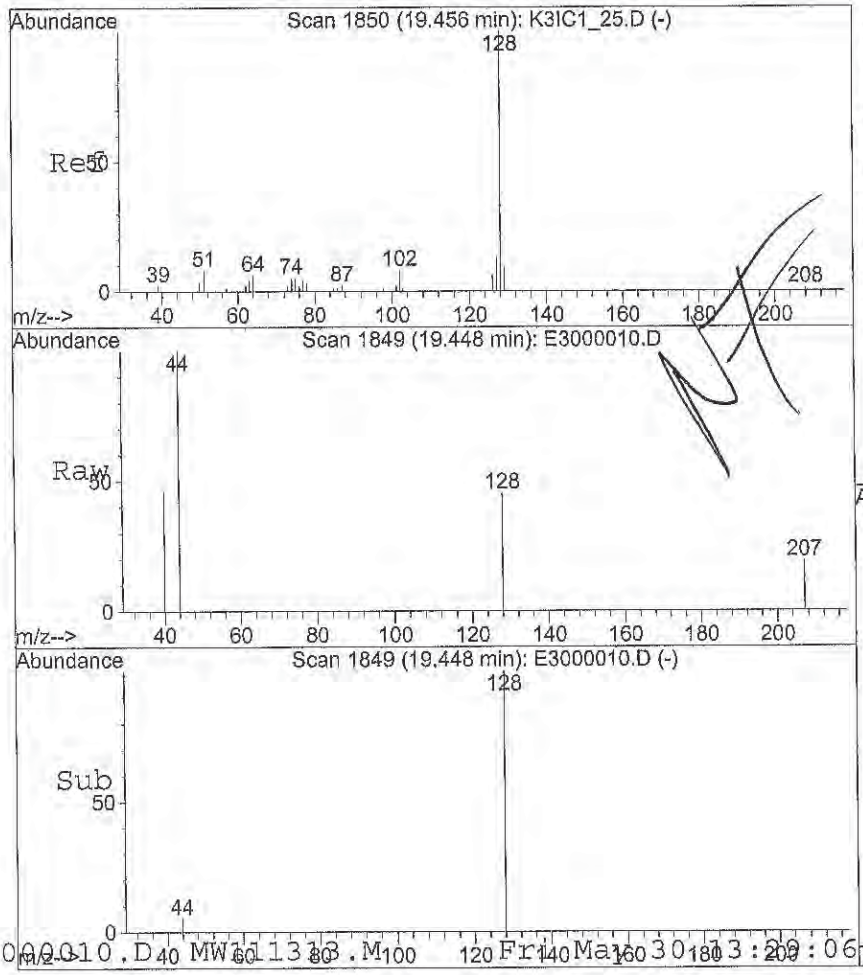


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.85 min Scan# 1541
Delta R.T. 0.00 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion: 91 Resp: 386

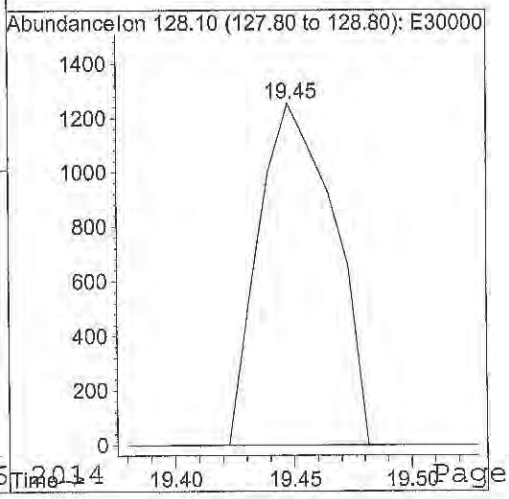
Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#





#77
Naphthalene
Concen: 0.22 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: E3000010.D
Acq: 30 May 2014 1:01 pm

Tgt Ion:128 Resp: 2759



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E3000010.D Vial: 1
Acq On : 30 May 2014 1:01 pm Operator: DN
Sample : 3E43001-09 Inst : GC/MS Ins
Misc : 100cc FB-053014 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 13:24 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.28	96	1340657	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1139225	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	627627	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	395584	11.35 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.80%		
3) Chloroform-d (SU6)	9.18	84	608644	12.17 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 97.36%		
4) Methylene Chloride-d2 (SU5	7.06	86	358842	12.27 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 98.16%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	388115	16.29 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 130.32%#		
6) Benzene-d6 (SU7)	9.92	84	1192268	11.33 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 90.64%		
8) Toluene-d8 (SU3)	12.20	98	1197814	11.08 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.64%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	638434	14.31 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 114.48%		

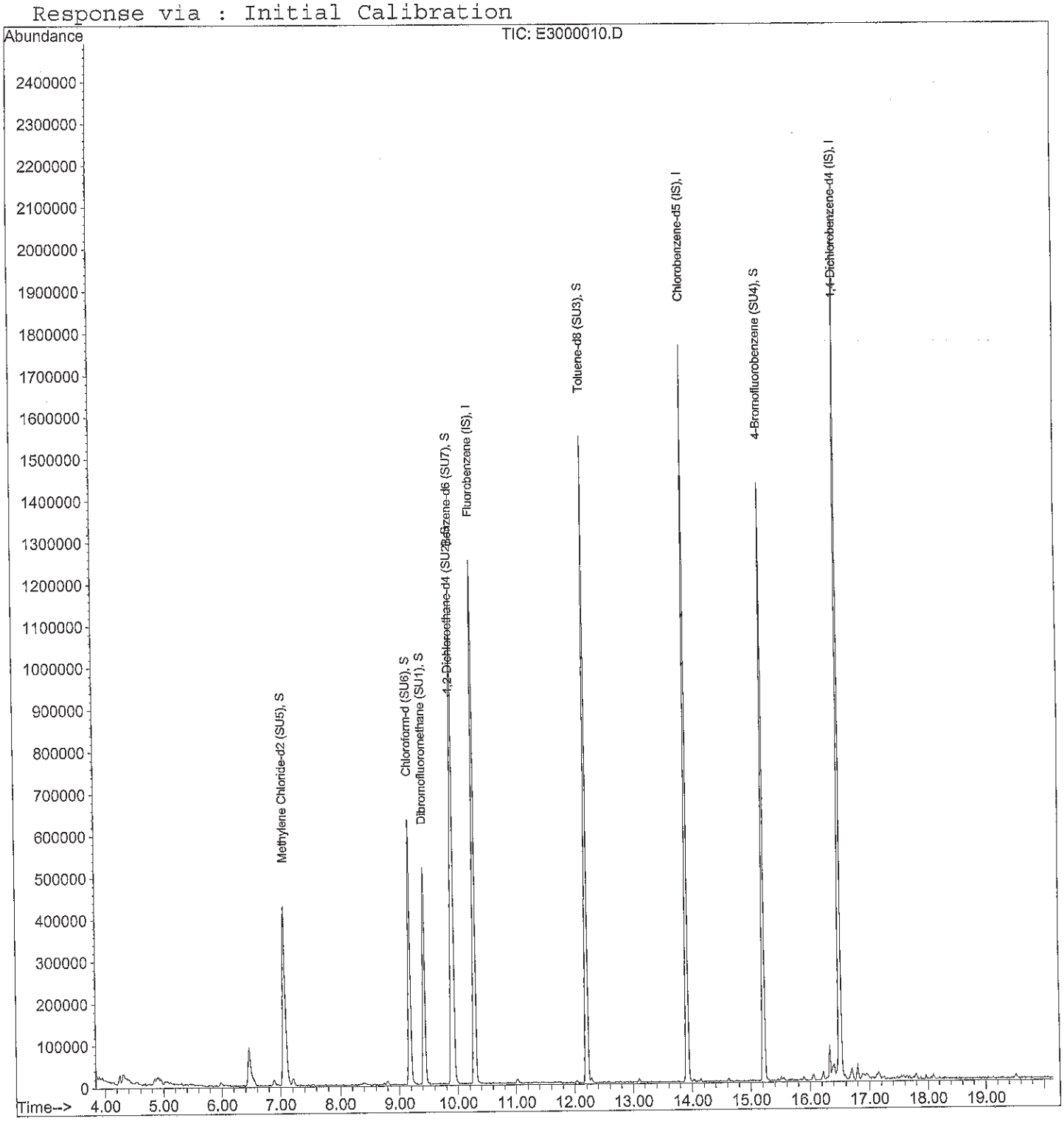
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E3000010.D Vial: 1
Acq On : 30 May 2014 1:01 pm Operator: DN
Sample : 3E43001-09 Inst : GC/MS Ins
Misc : 100cc FB-053014 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: May 30 13:24 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS02.D
Vial: 9
Acq On : 30 May 2014 1:30 pm
Operator: DN
Sample : 34E3001-BSD1
Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS
Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 13:55 19114
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1547770	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1115262	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	545884	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	427871	11.08 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.64%		
28) 1,2-Dichloroethane-d4 (SU2	9.91	65	414240	11.29 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.32%		
39) Toluene-d8 (SU3)	12.21	98	1303218	12.53 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.24%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	573471	12.57 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.56%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	51958	1.37 ug/L	98
4) Chloromethane	4.47	50	34881	1.22 ug/L	81
5) Vinyl Chloride	4.60	62	31442	1.15 ug/L	85
6) Bromomethane	5.16	96	22295	1.13 ug/L	92
7) Chloroethane	5.29	64	14926	1.24 ug/L	82
8) (F11) Trichlorofluorometha	5.67	101	64263	1.51 ug/L	99
9) (F113) 1,1,2-Trichloro-tri	6.37	151	34826	1.14 ug/L	90
10) 1,1-Dichloroethene	6.44	96	49097	1.34 ug/L	93
11) Acetone	6.45	58	19157	3.33 ug/L	95
12) (IPA) Leak Check Compound	6.54	45	44451	23.90 ug/L #	64
13) Carbon disulfide	6.86	76	162219	1.26 ug/L	97
14) Methylene Chloride	7.11	84	51208	1.20 ug/L	92
15) (TBA) tert-Butanol	7.09	59	1367	0.52 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	64574	0.74 ug/L	97
17) trans-1,2-Dichloroethene	7.49	96	49070	1.18 ug/L	92
18) 1,1-Dichloroethane	8.08	63	90038	1.29 ug/L	94
19) cis-1,2-Dichloroethene	8.84	96	57490	1.19 ug/L	86
21) (MEK) 2-Butanone	8.81	72	4012	0.92 ug/L #	30
22) (DIPE) Diisopropyl Ether	8.02	45	149690	1.24 ug/L	98
23) Bromochloromethane	9.17	128	22085	1.07 ug/L #	80
24) Chloroform	9.22	83	93029	1.15 ug/L	94
25) (ETBE) 2-ethoxy 2-methyl p	8.50	59	94086	0.84 ug/L #	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS02.D Vial: 9
Acq On : 30 May 2014 1:30 pm Operator: DN
Sample : 34E3001-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 13:55 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26) 1,1,1-Trichloroethane	10.29	97	78827	1.23 ug/L	93
27) (TAME) tert-Amyl methyl et	10.01	73	85885	0.88 ug/L	99
29) 1,1-Dichloropropene	9.69	75	65700	1.10 ug/L	95
30) Carbon Tetrachloride	13.89	117	54620	1.05 ug/L	100
31) Benzene	9.99	78	174066	1.19 ug/L	93
32) 1,2-Dichloroethane	10.00	62	59858	1.16 ug/L #	93
33) Trichloroethene	10.74	130	54283	1.15 ug/L	98
34) 1,2-Dichloropropane	11.05	63	44741	1.29 ug/L	90
35) Dibromomethane	11.21	93	31273	1.15 ug/L	94
36) Bromodichloromethane	11.35	83	53874	0.98 ug/L	94
37) cis-1,3-Dichloropropene	11.87	75	51233	0.86 ug/L	96
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	8955	0.40 ug/L #	100
41) Toluene	12.29	91	184519	1.21 ug/L	98
42) trans-1,3-Dichloropropene	12.52	75	39676	0.79 ug/L	80
43) 1,1,2-Trichloroethane	12.75	83	33386	1.22 ug/L	92
44) Tetrachloroethene	12.95	164	60174	1.13 ug/L	97
45) 1,3-Dichloropropane	12.96	76	61226	1.17 ug/L	98
46) 2-Hexanone	12.97	43	26669	1.09 ug/L	94
47) Dibromochloromethane	13.25	129	43263	1.10 ug/L	96
48) 1,2-Dibromoethane	13.43	107	44627	1.26 ug/L	97
49) Chlorobenzene	13.95	112	126242	1.23 ug/L	97
50) 1,1,1,2-Tetrachloroethane	14.02	131	40683	1.12 ug/L	96
51) Ethylbenzene	14.03	91	217884	1.26 ug/L	97
52) m,p-Xylenes	14.15	106	158955	2.59 ug/L	96
53) o-Xylene	14.62	106	75293	1.24 ug/L	99
54) Styrene	14.63	104	120583	1.37 ug/L	98
55) Bromoform	14.91	173	23433	1.05 ug/L #	94
56) Isopropylbenzene	15.01	105	205551	1.24 ug/L	100
57) 1,2,3-Trichloropropane	15.42	75	47399	1.04 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	46264	1.18 ug/L	100
61) Bromobenzene	15.44	156	55744	1.30 ug/L	89
62) n-Propylbenzene	15.46	91	259066	1.17 ug/L	99
63) 2-Chlorotoluene	15.62	91	170422	1.25 ug/L	95
64) 1,3,5-Trimethylbenzene	15.62	105	165405	1.22 ug/L	99
65) 4-Chlorotoluene	15.73	91	161000	1.28 ug/L	100
66) tert-Butylbenzene	16.01	119	138206	1.19 ug/L	94
67) 1,2,4-Trimethylbenzene	16.06	105	172772	1.22 ug/L	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS02.D Vial: 9
Acq On : 30 May 2014 1:30 pm Operator: DN
Sample : 34E3001-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 13:55 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

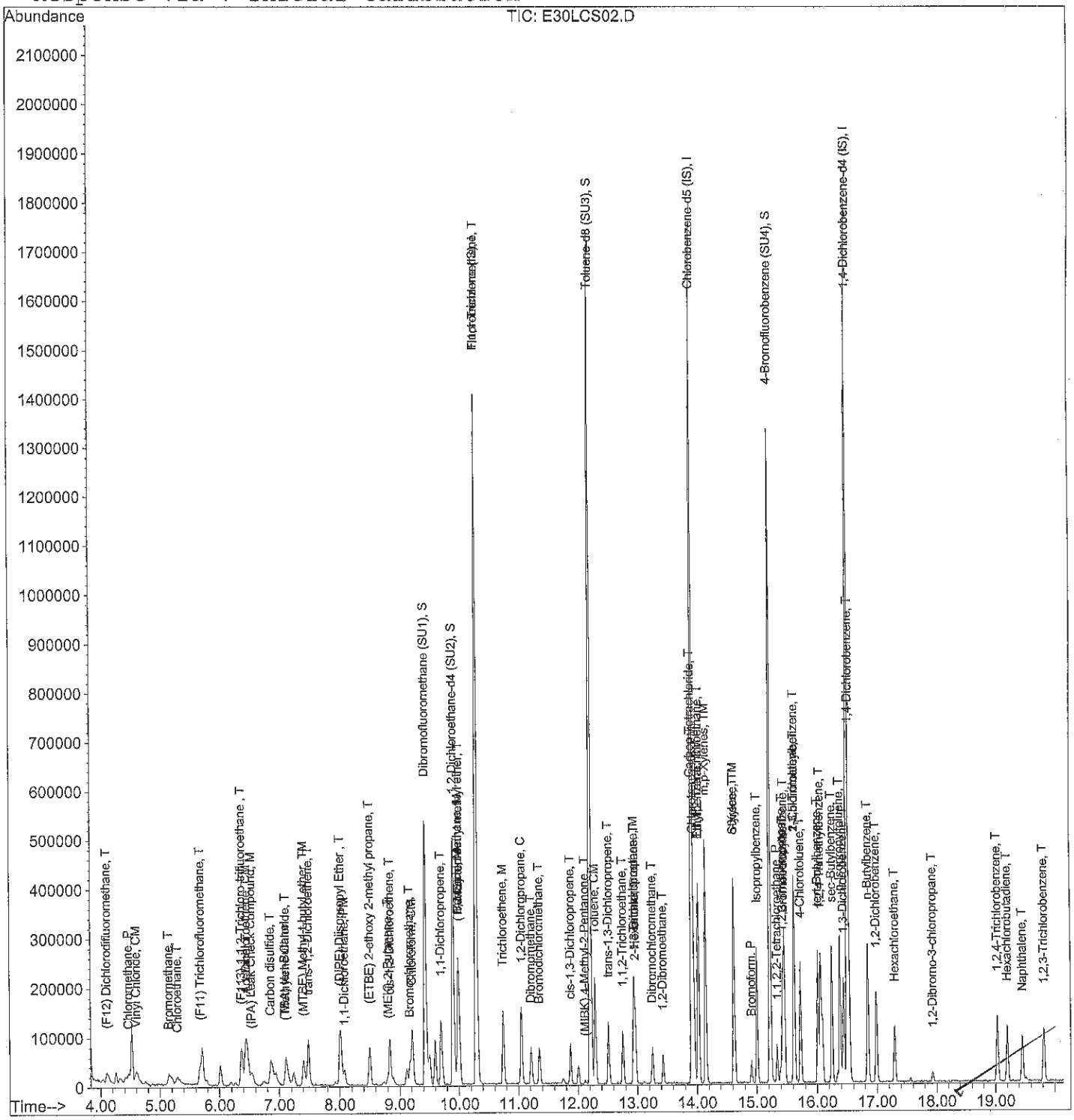
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) sec-Butylbenzene	16.25	105	227066	1.24 ug/L	100
69) p-Isopropyltoluene	16.38	119	177851	1.19 ug/L	96
70) 1,3-Dichlorobenzene	16.44	146	99954	1.24 ug/L	99
71) 1,4-Dichlorobenzene	16.54	146	104443	1.29 ug/L	97
72) n-Butylbenzene	16.85	91	190626	1.22 ug/L	99
73) 1,2-Dichlorobenzene	16.99	146	94385	1.31 ug/L	97
74) 1,2-Dibromo-3-chloropropan	17.93	75	5758	0.99 ug/L #	68
75) 1,2,4-Trichlorobenzene	19.04	180	58683	1.21 ug/L	98
76) Hexachlorobutadiene	19.21	225	29845	1.36 ug/L	95
77) Naphthalene	19.45	128	113589	1.05 ug/L	100
78) Hexachloroethane	17.30	201	17704	1.12 ug/L	92
79) 1,2,3-Trichlorobenzene	19.81	180	51450	1.11 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053014L3\E30LCS02.D Vial: 9
Acq On : 30 May 2014 1:30 pm Operator: DN
Sample : 34E3001-BSD1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 13:55 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



ENVIRONMENTAL SUPPORT TECHNOLOGIES

16510 Aston St. Irvine, CA 92606
Tel (949) 679-9500 Fax (949) 679-9501

www.est-inc.com

SOIL GAS SURVEY
SANTA SUSANA FIELD LABORATORY:
DEPARTMENT OF ENERGY
5800 WOOLSEY CANYON ROAD
CANOGA PARK, CA

LEVEL IV DATA PACKAGE

MWH AMERICAS
2121 NORTH CALIFORNIA BLVD.
SUITE 600
WALNUT CREEK, CA

EST2754
June 2, 2014

ENVIRONMENTAL SUPPORT TECHNOLOGIES

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13 Raw Data for Analyzed Samples Including Chromatograms, Quantitation Reports and Spectra

CHAIN-OF-CUSTODY

CHAIN-OF-CUSTODY RECORD

Environmental Support Technologies
16510 Aston St., Irvine, CA 92606 · Tel (949) 679-9500 · Fax (949) 679-9501

Client: MWH Americas
Address: 250 North Madison Avenue
Pasadena, Ca
Project Manager: Sarah Von Raesfield

Sampler Name: Mike Marello
EST Project#: EST2754
Site Location: SSFL
Phone: ( )

Page: of
Custody Seals:
Email:

Turnaround Time:
(Check one)

Normal:

Rush: X

Sample Receipt

Intact: Yes: X No:

On Ice: Yes: No: X N/A

Custody Seals: Yes: No: X

N/A (Received on Site):

Sample Name	Sample Matrix	Container Type	# of Container	Sampling Date	Sampling Time	Preservative Type	Purge Volume (ml)	Vacuum (inches of H_2O)	8260B VOC's						Special Instructions
Equipment Blank	Air	Glass Bulb	1	6/2/2014	1125	Surr			X						Bulb # 9
SVL-528-SA8-SV-5.0-6.0	Air	Glass Bulb	1	6/2/2014	908	Surr			X						Bulb # 7
SVL-528-SA8-SV-11.0-12.0	Air	Glass Bulb	1	6/2/2014	935	Surr			X						Bulb # 6
SVL-528-SA8-SV-18.5-19.5	Air	Glass Bulb	1	6/2/2014	958	Surr			X						Bulb # 12
SVL-505-SA5C-SV-5.0-6.0	Air	Glass Bulb	1	6/2/2014	1052	Surr			X						Bulb # 10
SVL-505-SA5C-SV-10.0-11.0	Air	Glass Bulb	1	6/2/2014	1124	Surr			X						Bulb # 3
SVL-805-SA5C-SV-10.0-11.0	Air	Glass Bulb	1	6/2/2014	1124	Surr			X						Bulb # 1
SVL-505-SA5C-SV-15.0-16.0	Air	Glass Bulb	1	6/2/2014	1159	Surr			X						Bulb # 11
FB-060214	Air	Glass Bulb	1	6/2/2014	1331	Surr			X						Bulb # 2

Relinquished by: (Signature)	Date/Time: 06/02/14	Received by:	Date/Time:
Relinquished by: (Signature)	Date/Time:	Received by:	Date/Time:

SAMPLE RESULTS WITH ANALYSIS AND EXTRACTIONS PREPARATION DATES

June 17, 2014

Sarah Von Raesfield
MWH Americas, Inc.
250 No. Madison Avenue
Pasadena, CA 91107

RE: Santa Susana Field Laboratory, Canoga Park

Enclosed are the results of analyses for soil gas samples received by Environmental Support Technologies laboratory on 06/02/14 16:05. The analyses were performed according to the prescribed method as outlined by EPA 8260B. A shut in test was performed, leak test was performed, equipment blank was run, and selected purge volume was 3PV. If you have any questions concerning this report, please feel free to contact Project Manager.

Sincerely,

Ashley Flores

Ashley Flores
Project Manager

Environmental Support Technologies laboratories are certified by the California Department of Health Services (CDHS), Environmental Laboratory Accreditation Program (ELAP) No's. 2772, 2773, and 2767.

16510 Aston Street, Irvine, California 92606
Telephone: (949) 679-9500 Fax: (949) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Analyzed
Equipment Blank	3F40201-01	Air	02-Jun-14 11:25	02-Jun-14 11:46
SVL-528-SA8-SV-5.0-6.0	3F40201-02	Air	02-Jun-14 09:08	02-Jun-14 12:16
SVL-528-SA8-SV-11.0-12.0	3F40201-03	Air	02-Jun-14 09:35	02-Jun-14 13:21
SVL-528-SA8-SV-18.5-19.5	3F40201-04	Air	02-Jun-14 09:58	02-Jun-14 13:50
SVL-505-SA5C-SV-5.0-6.0	3F40201-05	Air	02-Jun-14 10:52	02-Jun-14 14:21
SVL-505-SA5C-SV-10.0-11.0	3F40201-06	Air	02-Jun-14 11:24	02-Jun-14 14:50
SVL-805-SA5C-SV-10.0-11.0	3F40201-07	Air	02-Jun-14 11:24	02-Jun-14 15:19
SVL-505-SA5C-SV-15.0-16.0	3F40201-08	Air	02-Jun-14 11:59	02-Jun-14 15:49
FB-060214	3F40201-09	Air	02-Jun-14 13:31	02-Jun-14 16:18

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Telephone: (949) 679-9500 Fax: (949) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Equipment Blank (3F40201-01) Air Sampled: 06/02/14 11:25 Analyzed: 06/02/14 11:46									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*90.1 %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*90.4 %*		*75-2S5*	"	"	"	"	
gurro: ateD1-6romofluorobenzene		*97.B %*		*75-2S5*	"	"	"	"	
gurro: ateD6enzene-dC		*22S %*		*70-210*	"	"	"	"	
gurro: ateDMhloroform-d		*204 %*		*70-210*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*20C%*		*70-210*	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-528-SA8-SV-5.0-6.0 (3F40201-02) Air Sampled: 06/02/14 09:08 Analyzed: 06/02/14 12:16									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*9S.5 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*90.1 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD1-6romofluorobenzene		*92.S %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD6enzene-dC		*92.C%*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*91.9 %*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*92.0 %*		*70-210*	*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-528-SA8-SV-11.0-12.0 (3F40201-03) Air Sampled: 06/02/14 09:35 Analyzed: 06/02/14 13:21									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	**0.011**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*222 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*B9.0 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD1-6romofluorobenzene		*207 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD6enzene-dC		*9S.C%*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*91.1 %*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*B9.B %*		*70-210*	*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-528-SA8-SV-18.5-19.5 (3F40201-04) Air Sampled: 06/02/14 09:58 Analyzed: 06/02/14 13:50									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*99.5 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*90.C%*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateD1-6romofluorobenzene		*94.1 %*	*75-2S5*		*"*	*"*	*"*	*"*	
gurro: ateD6enzene-dC		*92.1 %*	*70-210*		*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*221 %*	*70-210*		*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*B5.0 %*	*70-210*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-505-SA5C-SV-5.0-6.0 (3F40201-05) Air Sampled: 06/02/14 10:52 Analyzed: 06/02/14 14:21									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0090**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*B5.9 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*92.C%*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD1-6romofluorobenzene		*225 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD6enzene-dC		*202 %*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*20B%*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*94.2 %*		*70-210*	*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-505-SA5C-SV-10.0-11.0 (3F40201-06) Air Sampled: 06/02/14 11:24 Analyzed: 06/02/14 14:50									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	**0.017**	0.020	"	"	"	"	"	"	J
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*20B %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*B9.B %*		*75-2S5*	"	"	"	"	
gurro: ateD1-6romofluorobenzene		*9B.C%*		*75-2S5*	"	"	"	"	
gurro: ateD6enzene-dC		*9S.7 %*		*70-210*	"	"	"	"	
gurro: ateDMhloroform-d		*99.1 %*		*70-210*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*B7.C%*		*70-210*	"	"	"	"	

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Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-805-SA5C-SV-10.0-11.0 (3F40201-07) Air Sampled: 06/02/14 11:24 Analyzed: 06/02/14 15:19									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0076**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*20C%*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateDToluene-dB		*92.0 %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD1-6romofluorobenzene		*95.S %*		*75-2S5*	*"*	*"*	*"*	*"*	
gurro: ateD6enzene-dC		*94.5 %*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateDMhloroform-d		*94.0 %*		*70-210*	*"*	*"*	*"*	*"*	
gurro: ateD3 ethylene chloride-dS		*BCC%*		*70-210*	*"*	*"*	*"*	*"*	

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Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL-505-SA5C-SV-15.0-16.0 (3F40201-08) Air Sampled: 06/02/14 11:59 Analyzed: 06/02/14 15:49									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**0.0054**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*92.0 %*		*75-2S5*	"	"	"	"	
gurro: ateDToluene-dB		*B9.B %*		*75-2S5*	"	"	"	"	
gurro: ateD1-6romofluorobenzene		*20B %*		*75-2S5*	"	"	"	"	
gurro: ateD6enzene-dC		*20S %*		*70-210*	"	"	"	"	
gurro: ateDMhloroform-d		*22C%*		*70-210*	"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*91.S %*		*70-210*	"	"	"	"	

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Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
FB-060214 (3F40201-09) Air Sampled: 06/02/14 13:31 Analyzed: 06/02/14 16:18									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0201	06/02/14	06/02/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
gurro: ateD8 ibromofluoromethane		*99.4 %*	*75-2S5*		"	"	"	"	
gurro: ateDToluene-dB		*BC.4 %*	*75-2S5*		"	"	"	"	
gurro: ateD1-6romofluorobenzene		*BS.S %*	*75-2S5*		"	"	"	"	
gurro: ateD6enzene-dC		*99.1 %*	*70-210*		"	"	"	"	
gurro: ateDMhloroform-d		*B7.0 %*	*70-210*		"	"	"	"	
gurro: ateD3 ethylene chloride-dS		*94.1 %*	*70-210*		"	"	"	"	

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Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F0201 - Volatiles										
Blank (34F0201-BLK1)				Prepared & Analyzed: 06/02/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l							
1,1,1-Trichloroethane	ND	0.020	"							
1,1,2,2-Tetrachloroethane	ND	0.020	"							
1,1,2-Trichloro-trifluoroethane	ND	0.020	"							
1,1,2-Trichloroethane	ND	0.020	"							
1,1-Dichloroethane	ND	0.020	"							
1,1-Dichloroethene	ND	0.020	"							
1,2-Dichloroethane	ND	0.020	"							
Benzene	ND	0.020	"							
cis-1,2-Dichloroethene	ND	0.020	"							
Carbon tetrachloride	ND	0.020	"							
Chloroethane	ND	0.020	"							
Chloroform	ND	0.020	"							
Dichlorodifluoromethane	ND	0.020	"							
Ethylbenzene	ND	0.020	"							
Methylene Chloride	ND	0.020	"							
ortho-Xylene	ND	0.020	"							
meta- and para-Xylenes	ND	0.020	"							
trans-1,2-Dichloroethene	ND	0.020	"							
Tetrachloroethene	ND	0.020	"							
Toluene	ND	0.020	"							
Trichloroethene	ND	0.020	"							
Trichlorofluoromethane	ND	0.020	"							
Vinyl Chloride	ND	0.020	"							
gurro: ateD8 ibromofluoromethane	*S.4C*		*"*	*S.50*		*91.5*	*75-2S5*			
gurro: ateDToluene-dB	*S.41*		*"*	*S.50*		*94.7*	*75-2S5*			
gurro: ateD1-6romofluorobenzene	*S.C7*		*"*	*S.50*		*207*	*75-2S5*			
gurro: ateD6enzene-dC	*S.2C*		*"*	*S.50*		*BC.C*	*70-210*			
gurro: ateDMhloroform-d	*S.79*		*"*	*S.50*		*22S*	*70-210*			
gurro: ateD3 ethylene chloride-dS	*S.00*		*"*	*S.50*		*B0.2*	*70-210*			

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Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F0201 - Volatiles										
LCS (34F0201-BS1)				Prepared & Analyzed: 06/02/14						
1,1,1,2-Tetrachloroethane	1.41	0.020	ug/l	1.25		113	75-136			
1,1,1-Trichloroethane	1.14	0.020	"	1.25		91.2	73-134			
1,1,2,2-Tetrachloroethane	1.64	0.020	"	1.25		131	56-149			
1,1,2-Trichloro-trifluoroethane	1.22	0.020	"	1.25		97.6	83-125			
1,1,2-Trichloroethane	1.17	0.020	"	1.25		93.6	67-137			
1,1-Dichloroethane	1.26	0.020	"	1.25		101	80-121			
1,1-Dichloroethene	1.30	0.020	"	1.25		104	73-137			
1,2-Dichloroethane	1.11	0.020	"	1.25		88.8	75-131			
Benzene	1.00	0.020	"	1.25		80.0	79-118			
cis-1,2-Dichloroethene	1.04	0.020	"	1.25		83.2	85-116			QL-L
Carbon tetrachloride	1.26	0.020	"	1.25		101	74-143			
Chloroethane	1.22	0.020	"	1.25		97.6	60-137			
Chloroform	1.30	0.020	"	1.25		104	82-140			
Dichlorodifluoromethane	1.40	0.020	"	1.25		112	47-129			
Ethylbenzene	1.35	0.020	"	1.25		108	83-125			
Methylene Chloride	1.11	0.020	"	1.25		88.8	81-126			
ortho-Xylene	1.24	0.020	"	1.25		99.2	85-115			
meta- and para-Xylenes	2.27	0.020	"	2.50		90.8	83-115			
trans-1,2-Dichloroethene	1.12	0.020	"	1.25		89.6	72-133			
Tetrachloroethene	1.16	0.020	"	1.25		92.8	60-144			
Toluene	1.08	0.020	"	1.25		86.4	70-115			
Trichloroethene	1.11	0.020	"	1.25		88.8	68-132			
Trichlorofluoromethane	1.36	0.020	"	1.25		109	62-144			
Vinyl Chloride	1.19	0.020	"	1.25		95.2	66-137			
gurro: ateD8 ibromofluoromethane	*24.2*		*"*	*2S.5*		*205*	*75-2S5*			
gurro: ateDToluene-dB	*24.5*		*"*	*2S.5*		*20B*	*75-2S5*			
gurro: ateD1-6romofluorobenzene	*2S.4*		*"*	*2S.5*		*9B.S*	*75-2S5*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F0201 - Volatiles										
LCS Dup (34F0201-BSD1)				Prepared & Analyzed: 06/02/14						
1,1,1,2-Tetrachloroethane	0.150	0.020	ug/l	0.125		120	75-136	162	20	QR-04
1,1,1-Trichloroethane	0.170	0.020	"	0.125		136	73-134	148	20	QR-04
1,1,2,2-Tetrachloroethane	0.220	0.020	"	0.125		176	56-149	153	20	QR-04
1,1,2-Trichloro-trifluoroethane	0.0800	0.020	"	0.125		64.0	83-125	175	20	QR-04
1,1,2-Trichloroethane	0.190	0.020	"	0.125		152	67-137	144	20	QR-04
1,1-Dichloroethane	0.0900	0.020	"	0.125		72.0	80-121	173	20	QR-04
1,1-Dichloroethene	0.130	0.020	"	0.125		104	73-137	164	20	QR-04
1,2-Dichloroethane	0.170	0.020	"	0.125		136	75-131	147	20	QR-04
Benzene	0.140	0.020	"	0.125		112	79-118	151	20	QR-04
cis-1,2-Dichloroethene	0.120	0.020	"	0.125		96.0	85-116	159	20	QR-04
Carbon tetrachloride	0.110	0.020	"	0.125		88.0	74-143	168	20	QR-04
Chloroethane	0.140	0.020	"	0.125		112	60-137	159	20	QR-04
Chloroform	0.150	0.020	"	0.125		120	82-140	159	20	QR-04
Dichlorodifluoromethane	0.160	0.020	"	0.125		128	47-129	159	20	QR-04
Ethylbenzene	0.170	0.020	"	0.125		136	83-125	155	20	QR-04
Methylene Chloride	0.150	0.020	"	0.125		120	81-126	152	20	QR-04
ortho-Xylene	0.180	0.020	"	0.125		144	85-115	149	20	QR-04
meta- and para-Xylenes	0.290	0.020	"	0.250		116	83-115	155	20	QR-04
trans-1,2-Dichloroethene	0.120	0.020	"	0.125		96.0	72-133	161	20	QR-04
Tetrachloroethene	0.140	0.020	"	0.125		112	60-144	157	20	QR-04
Toluene	0.180	0.020	"	0.125		144	70-115	143	20	QR-04
Trichloroethene	0.160	0.020	"	0.125		128	68-132	150	20	QR-04
Trichlorofluoromethane	0.110	0.020	"	0.125		88.0	62-144	170	20	QR-04
Vinyl Chloride	0.140	0.020	"	0.125		112	66-137	158	20	QR-04
gurro: ateD8 ibromofluoromethane	*20.1*		*"*	*2S.5*		*B4.S*	*75-2S5*			
gurro: ateDToluene-dB	*2S.C*		*"*	*2S.5*		*202*	*75-2S5*			
gurro: ateD1-6romofluorobenzene	*20.4*		*"*	*2S.5*		*BS.S*	*75-2S5*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:33

Volatile Organic Compounds - Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F0201 - Volatiles										
Duplicate (34F0201-DUP1)		**Source: 3F40201-02**		Prepared & Analyzed: 06/02/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l		ND				50	
1,1,1-Trichloroethane	ND	0.020	"		ND				50	
1,1,2,2-Tetrachloroethane	ND	0.020	"		ND				50	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"		ND				50	
1,1,2-Trichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethene	ND	0.020	"		ND				50	
1,2-Dichloroethane	ND	0.020	"		ND				50	
Benzene	ND	0.020	"		ND				50	
cis-1,2-Dichloroethene	ND	0.020	"		ND				50	
Carbon tetrachloride	ND	0.020	"		ND				50	
Chloroethane	ND	0.020	"		ND				50	
Chloroform	ND	0.020	"		ND				50	
Dichlorodifluoromethane	ND	0.020	"		ND				50	
Ethylbenzene	ND	0.020	"		ND				50	
Methylene Chloride	ND	0.020	"		ND				50	
ortho-Xylene	ND	0.020	"		ND				50	
meta- and para-Xylenes	ND	0.020	"		ND				50	
trans-1,2-Dichloroethene	ND	0.020	"		ND				50	
Tetrachloroethene	ND	0.020	"		ND				50	
Toluene	ND	0.020	"		ND				50	
Trichloroethene	ND	0.020	"		ND				50	
Trichlorofluoromethane	ND	0.020	"		ND				50	
Vinyl Chloride	ND	0.020	"		ND				50	
gurro: ateD8 ibromofluoromethane	*S.1C*		*"*	*S.50*		*9B.C*	*75-2S5*			
gurro: ateDToluene-dB	*S.S2*		*"*	*S.50*		*BB.S*	*75-2S5*			
gurro: ateD1-6romofluorobenzene	*S.4C*		*"*	*S.50*		*91.C*	*75-2S5*			
gurro: ateD6enzene-dC	*S.27*		*"*	*S.50*		*BC.C*	*70-210*			
gurro: ateDMhloroform-d	*S.B5*		*"*	*S.50*		*221*	*70-210*			
gurro: ateD3 ethylene chloride-dS	*S.0C*		*"*	*S.50*		*BS.S*	*70-210*			

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Notes and Definitions

QR-04	The RPD result for this analyte in the sample exceeded the QC control limits; however, the RPD for other analytes were within the QC control limits.
QL-L	Laboratory Control Sample recovery was below method control limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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SUMMARY OF INITIAL CALIBRATION

Rerun sample @ 5ppb @ Most.

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:24:09 2013
Response via : Initial Calibration

Calibration Files
1 =K3IC00_1.D 2 =K3IC0_25.D 3 =K07LCS01.D
4 =K3IC1_25.D 5 =K3IC02_5.D 6 =K3IC12_5.D

		Compound	1	2	3	4	5	6	Avg	%RSD	
1)	I	Fluorobenzene (IS)	----------ISTD----------								
2)	S	Dibromofluoromethan	0.311	0.300	0.318	0.319	0.312	0.311	0.312	2.10	
3)	T	(F12) Dichlorodiflu	0.320	0.284	0.302	0.292	0.321	0.321	0.307	5.36	
4)	P	Chloromethane	0.422	0.302	0.293	0.219	0.221	0.212	0.278	29.02	Linear
5)	CM	Vinyl Chloride	0.276	0.224	0.211	0.207	0.207	0.199	0.221	12.88	
6)	T	Bromomethane	0.338	0.225	0.179	0.162	0.150	0.139	0.199	37.55	Linear
7)	T	Chloroethane	0.030	0.106	0.066	0.102	0.098	0.089	0.082	35.53	Quadratic
8)	T	(F11) Trichlorofluo	0.379	0.365	0.327	0.337	0.323	0.326	0.343	6.87	
9)	T	(F113) 1,1,2-Trichl	0.291	0.221	0.227	0.267	0.239	0.229	0.246	11.15	
10)	CM	1,1-Dichloroethene	0.277	0.287	0.322	0.307	0.291	0.286	0.295	5.61	
11)	T	Acetone	0.267	0.136	0.115	0.061	0.051	0.016	0.108	82.94	Quadratic
12)	M	(IPA) Leak Check Co	0.012	0.022	0.014	0.013	0.014	0.016	0.015	27.59	
13)	T	Carbon disulfide	1.178	1.037	1.080	1.042	0.958	0.941	1.039	8.28	
14)	T	Methylene Chloride	0.418	0.313	0.349	0.339	0.327	0.314	0.343	11.47	
15)		(TBA) tert-Butanol	0.022	0.019	0.027	0.022	0.018	0.020	0.021	16.39	
16)	TM	(MTBE) Methyl-t-but	0.789	0.678	0.760	0.729	0.655	0.638	0.708	8.56	
17)	T	trans-1,2-Dichloroe	0.331	0.360	0.342	0.357	0.310	0.318	0.336	6.07	
18)	PM	1,1-Dichloroethane	0.582	0.580	0.586	0.585	0.521	0.518	0.562	5.90	
19)	T	cis-1,2-Dichloroeth	0.442	0.415	0.416	0.387	0.339	0.345	0.390	10.66	
20)	T	2,2-Dichloropropane	0.561	0.489	0.520	0.497	0.440	0.435	0.490	9.80	
21)	T	(MEK) 2-Butanone	0.036	0.041	0.042	0.021	0.440	0.435	0.035	26.97	Not in use.
22)	T	(DIPE) Diisopropyl	1.055	1.006	1.006	1.025	0.901	0.867	0.977	7.64	
23)	T	Bromochloromethane	0.110	0.155	0.185	0.189	0.182	0.184	0.167	18.39	
24)	CM	Chloroform	0.723	0.654	0.684	0.676	0.594	0.598	0.655	7.70	
25)	T	(ETBE) 2-ethoxy 2-m	1.034	0.874	0.941	0.927	0.821	0.823	0.903	9.00	
26)	T	1,1,1-Trichloroetha	0.516	0.540	0.535	0.523	0.496	0.488	0.517	4.07	
27)	T	(TAME) tert-Amyl me	1.000	0.749	0.821	0.764	0.701	0.680	0.786	14.75	
28)	S	1,2-Dichloroethane-	0.309	0.278	0.303	0.299	0.296	0.293	0.296	3.50	
29)	T	1,1-Dichloropropene	0.547	0.492	0.502	0.489	0.439	0.427	0.482	9.13	
30)	T	Carbon Tetrachlorid	0.401	0.388	0.449	0.460	0.412	0.416	0.421	6.66	
31)	M	Benzene	1.374	1.155	1.267	1.217	1.042	1.008	1.177	11.75	
32)	M	1,2-Dichloroethane	0.501	0.382	0.445	0.419	0.385	0.365	0.416	12.20	
33)	M	Trichloroethene	0.480	0.355	0.386	0.399	0.336	0.324	0.380	14.87	
34)	C	1,2-Dichloropropane	0.298	0.297	0.277	0.290	0.264	0.258	0.281	6.17	
35)	T	Dibromomethane	0.207	0.209	0.227	0.244	0.215	0.216	0.220	6.33	
36)	T	Bromodichloromethan	0.459	0.407	0.479	0.446	0.428	0.433	0.442	5.69	
37)	T	cis-1,3-Dichloropro	0.508	0.451	0.526	0.493	0.447	0.467	0.482	6.63	
38)	I	Chlorobenzene-d5 (IS)	----------ISTD----------								
39)	S	Toluene-d8 (SU3)	1.209	1.139	1.193	1.149	1.157	1.149	1.166	2.42	
40)	T	(MIBK) 4-Methyl-2-P	0.545	0.324	0.388	0.078	0.072	0.088	0.249	79.95	Not in use.
41)	CM	Toluene	2.231	1.790	1.660	1.584	1.518	1.441	1.704	16.71	

42)	T	trans-1,3-Dichlorop	0.601	0.493	0.586	0.607	0.528	0.560	0.563	7.97	
43)	T	1,1,2-Trichloroetha	0.310	0.285	0.355	0.328	0.286	0.281	0.308	9.58	
44)	M	Tetrachloroethene	0.462	0.392	0.677	0.635	0.590	0.281	0.551	21.81	LINEAR
45)	T	1,3-Dichloropropane	0.710	0.578	0.592	0.569	0.532	0.529	0.585	11.33	
46)	T	2-Hexanone	0.333	0.186	0.340	0.266	0.333	0.182	0.273	27.20	
47)	T	Dibromochloromethan	0.426	0.363	0.496	0.458	0.432	0.459	0.439	10.18	
48)	T	1,2-Dibromoethane	0.412	0.355	0.430	0.402	0.394	0.396	0.398	6.27	
49)	PM	Chlorobenzene	1.366	1.154	1.110	1.134	1.086	1.043	1.149	9.84	
50)	T	1,1,1,2-Tetrachloro	0.449	0.384	0.437	0.407	0.388	0.387	0.409	6.91	
51)	CM	Ethylbenzene	2.333	2.080	1.968	1.851	1.736	1.654	1.937	12.77	
52)	TM	m,p-Xylenes	0.809	0.711	0.727	0.669	0.615	0.602	0.689	11.20	
53)	TM	o-Xylene	0.867	0.664	0.674	0.671	0.615	0.594	0.681	14.25	
54)	T	Styrene	1.563	1.015	1.078	1.049	0.973	0.934	1.102	21.01	LINEAR
55)	P	Bromoform	0.237	0.199	0.286	0.259	0.238	0.276	0.249	12.69	
56)	T	Isopropylbenzene	2.188	1.855	1.900	1.811	1.764	1.674	1.865	9.44	
57)	T	1,2,3-Trichloroprop	0.505	0.491	0.593	0.516	0.480	0.472	0.509	8.58	
58)	S	4-Bromofluorobenzen	0.518	0.507	0.527	0.511	0.510	0.495	0.511	2.08	
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------								
60)	P	1,1,2,2-Tetrachloro	1.020	0.822	1.013	0.870	0.774	0.905	0.901	11.13	
61)	T	Bromobenzene	1.079	1.003	1.043	0.946	0.914	0.907	0.982	7.20	
62)	T	n-Propylbenzene	6.721	5.112	5.219	4.601	4.392	4.279	5.054	17.82	
63)	T	2-Chlorotoluene	3.644	2.948	3.362	3.044	2.868	2.805	3.112	10.48	
64)	T	1,3,5-Trimethylbenz	3.612	3.208	3.247	3.017	2.832	2.775	3.115	9.93	
65)	T	4-Chlorotoluene	3.315	2.950	2.942	2.812	2.597	2.623	2.873	9.19	
66)	T	tert-Butylbenzene	2.817	2.666	3.007	2.633	2.430	2.371	2.654	8.96	
67)	T	1,2,4-Trimethylbenz	3.774	3.331	3.421	3.050	2.968	2.953	3.250	9.91	
68)	T	sec-Butylbenzene	4.837	3.956	4.522	4.187	3.865	3.852	4.203	9.54	
69)	T	p-Isopropyltoluene	3.974	3.475	3.582	3.347	3.061	3.060	3.417	10.13	
70)	T	1,3-Dichlorobenzene	2.120	1.740	1.888	1.871	1.734	1.744	1.850	8.06	
71)	T	1,4-Dichlorobenzene	2.120	1.740	1.974	1.864	1.658	1.729	1.847	9.43	
72)	T	n-Butylbenzene	4.391	3.645	3.644	3.397	3.264	3.192	3.589	12.14	
73)	T	1,2-Dichlorobenzene	1.716	1.534	1.764	1.657	1.614	1.583	1.645	5.20	
74)	T	1,2-Dibromo-3-chlor	0.082	0.104	0.111	0.148	0.133	0.146	0.121	21.61	LINEAR
75)	T	1,2,4-Trichlorobenz	1.184	1.091	1.244	1.074	1.050	1.044	1.115	7.28	
76)	T	Hexachlorobutadiene	0.297	0.477	0.596	0.481	0.499	0.507	0.476	20.56	LINEAR
77)	T	Naphthalene	2.690	2.294	3.052	2.312	2.176	2.294	2.470	13.55	
78)	T	Hexachloroethane	0.306	0.301	0.391	0.362	0.374	0.435	0.361	14.24	
79)	T	1,2,3-Trichlorobenz	1.346	0.926	1.173	0.993	0.940	0.968	1.058	15.82	

(#) = Out of Range

MW111313.M Wed Nov 13 19:25:18 2013

CONTINUING CALIBRATION VERIFICATION

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02CCV01.D
Acq On : 2 Jun 2014 9:44 am
Sample : 1.25/2.5/12.5 ug/L 8260B std
Misc : 20mL 8260 CCV
MS Integration Params: rteint.p
Quant Time: Jun 2 10:11 19114

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1322161	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1006129	12.50	ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	478810	12.50	ug/L	0.00
System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	432735	13.12	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 104.96%						
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	444517	14.18	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 113.44%						
39) Toluene-d8 (SU3)	12.21	98	1184054	12.62	ug/L	0.00
Spiked Amount 12.500 Range 75 - 125 Recovery = 100.96%						
58) 4-Bromofluorobenzene (SU4)	15.21	95	515541	12.53	ug/L	-0.01
Spiked Amount 12.500 Range 75 - 125 Recovery = 100.24%						

Target Compounds						Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	41462	1.28	ug/L	98
4) Chloromethane	4.46	50	32049	1.32	ug/L	88
5) Vinyl Chloride	4.60	62	28962	1.24	ug/L	73
6) Bromomethane	5.12	96	22089	1.34	ug/L	98
7) Chloroethane	5.25	64	12507	1.22	ug/L	97
8) (F11) Trichlorofluorometha	5.64	101	42596	1.17	ug/L	99
9) (F113) 1,1,2-Trichloro-tri	6.34	151	33334	1.28	ug/L	98
10) 1,1-Dichloroethene	6.43	96	40138	1.29	ug/L	45
11) Acetone	6.47	58	22408	5.76	ug/L #	3
12) (IPA) Leak Check Compound	6.51	45	115919	72.96	ug/L	86
13) Carbon disulfide	6.85	76	134795	1.23	ug/L #	89
14) Methylene Chloride	7.11	84	38556	1.06	ug/L #	33
15) (TBA) tert-Butanol	7.10	59	9118	4.04	ug/L	100
16) (MTBE) Methyl-t-butyl ethe	7.41	73	121655	1.62	ug/L #	85
17) trans-1,2-Dichloroethene	7.48	96	39567	1.11	ug/L #	51
18) 1,1-Dichloroethane	8.06	63	69362	1.17	ug/L	92
19) cis-1,2-Dichloroethene	8.83	96	42606	1.03	ug/L #	69
20) 2,2-Dichloropropane	8.84	77	2505	0.05	ug/L #	1
21) (MEK) 2-Butanone	8.79	72	7716	2.08	ug/L #	7
22) (DIPE) Diisopropyl Ether	8.01	45	140220	1.36	ug/L #	87
23) Bromochloromethane	9.17	128	16277	0.92	ug/L #	45
24) Chloroform	9.21	83	91005	1.31	ug/L	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02CCV01.D Vial: 9
Acq On : 2 Jun 2014 9:44 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 10:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25)	(ETBE) 2-ethoxy 2-methyl p	8.50	59	119430	1.25 ug/L #	91
26)	1,1,1-Trichloroethane	9.50	97	72643	1.33 ug/L	95
27)	(TAME) tert-Amyl methyl et	10.00	73	105684	1.27 ug/L #	90
29)	1,1-Dichloropropene	9.69	75	79599	1.56 ug/L #	89
30)	Carbon Tetrachloride	9.71	117	51277	1.15 ug/L	92
31)	Benzene	9.98	78	140305	1.13 ug/L #	85
32)	1,2-Dichloroethane	9.99	62	61336	1.39 ug/L	90
33)	Trichloroethene	10.74	130	48134	1.20 ug/L	86
34)	1,2-Dichloropropane	11.05	63	39819	1.34 ug/L #	35
35)	Dibromomethane	11.21	93	38230	1.65 ug/L #	81
36)	Bromodichloromethane	11.34	83	78426	1.68 ug/L	99
37)	cis-1,3-Dichloropropene	11.87	75	58918	1.16 ug/L #	56
40)	(MIBK) 4-Methyl-2-Pentanon	12.11	43	31693	1.58 ug/L #	100
41)	Toluene	12.28	91	148228	1.08 ug/L	92
42)	trans-1,3-Dichloropropene	12.50	75	58055	1.28 ug/L #	52
43)	1,1,2-Trichloroethane	12.75	83	30078	1.22 ug/L #	69
44)	Tetrachloroethene	12.93	164	55074	1.14 ug/L	88
45)	1,3-Dichloropropane	12.96	76	55505	1.18 ug/L	97
46)	2-Hexanone	12.97	43	73499	3.34 ug/L #	80
47)	Dibromochloromethane	13.25	129	55062	1.56 ug/L #	93
48)	1,2-Dibromoethane	13.42	107	48417	1.51 ug/L	93
49)	Chlorobenzene	13.95	112	104356	1.13 ug/L #	72
50)	1,1,1,2-Tetrachloroethane	14.01	131	46491	1.41 ug/L #	89
51)	Ethylbenzene	14.02	91	203547	1.31 ug/L	95
52)	m,p-Xylenes	14.14	106	120300	2.17 ug/L #	39
53)	o-Xylene	14.61	106	60908	1.11 ug/L #	38
54)	Styrene	14.62	104	99925	1.25 ug/L #	65
55)	Bromoform	14.91	173	34871	1.74 ug/L #	87
56)	Isopropylbenzene	15.00	105	209343	1.39 ug/L #	86
57)	1,2,3-Trichloropropane	15.42	75	85782	2.09 ug/L #	1
60)	1,1,2,2-Tetrachloroethane	15.33	83	57358	1.66 ug/L	99
61)	Bromobenzene	15.43	156	44206	1.18 ug/L #	66
62)	n-Propylbenzene	15.46	91	283313	1.46 ug/L #	86
63)	2-Chlorotoluene	15.61	91	197758	1.66 ug/L #	82
64)	1,3,5-Trimethylbenzene	15.62	105	183888	1.54 ug/L #	83
65)	4-Chlorotoluene	15.72	91	181549	1.65 ug/L #	87
66)	tert-Butylbenzene	16.02	119	147696	1.45 ug/L #	71

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02CCV01.D Vial: 9
Acq On : 2 Jun 2014 9:44 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 10:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

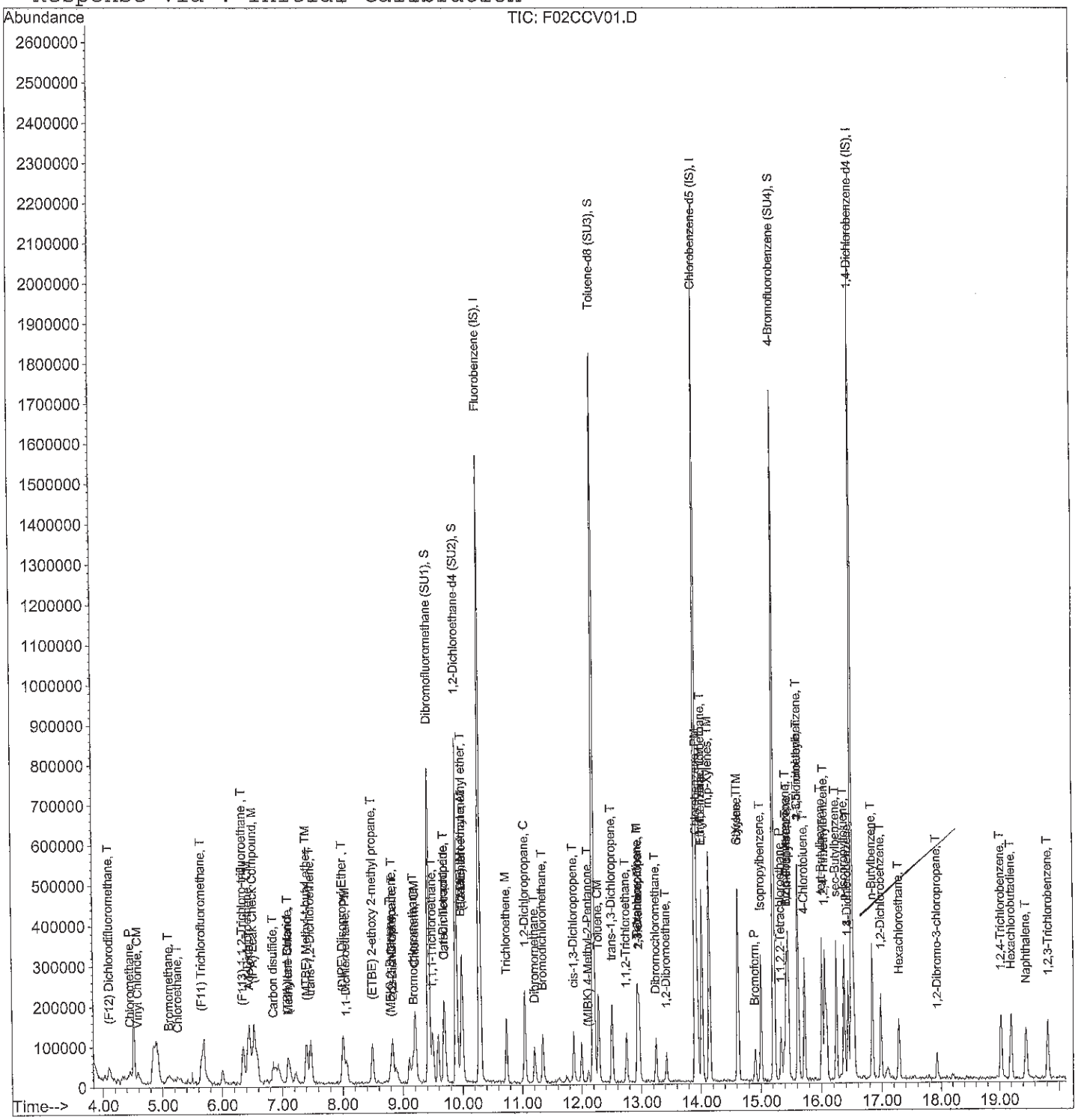
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	189633	1.52 ug/L #	79
68) sec-Butylbenzene	16.24	105	217939	1.35 ug/L #	91
69) p-Isopropyltoluene	16.38	119	184285	1.41 ug/L #	82
70) 1,3-Dichlorobenzene	16.44	146	78542	1.11 ug/L #	91
71) 1,4-Dichlorobenzene	16.44	146	78542	1.11 ug/L	93
72) n-Butylbenzene	16.84	91	207019	1.51 ug/L #	90
73) 1,2-Dichlorobenzene	16.99	146	72773	1.16 ug/L #	90
74) 1,2-Dibromo-3-chloropropan	17.93	75	22479	4.08 ug/L #	68
75) 1,2,4-Trichlorobenzene	19.03	180	53414	1.25 ug/L #	94
76) Hexachlorobutadiene	19.19	225	34896	1.81 ug/L	95
77) Naphthalene	19.44	128	121607	1.29 ug/L	100
78) Hexachloroethane	17.29	201	18600	1.34 ug/L #	81
79) 1,2,3-Trichlorobenzene	19.82	180	46296	1.14 ug/L #	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02CCV01.D Vial: 9
Acq On : 2 Jun 2014 9:44 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 10:11 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02CCV01.D Vial: 9
Acq On : 2 Jun 2014 9:44 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene (IS)	12.500	12.500	0.0	100	0.00
2	S	Dibromofluoromethane (SU1)	12.500	13.121	-5.0	102	0.00
3	T	(F12) Dichlorodifluorometha	1.250	1.279	-2.3	107	0.04
4	P	Chloromethane	1.250	1.324	-5.9	110	0.07
5	CM	Vinyl Chloride	1.250	1.241	0.7	105	0.04
6	T	Bromomethane	1.250	1.341	-7.3	103	0.02
7	T	Chloroethane	1.250	1.217	2.6	93	0.01
8	T	(F11) Trichlorofluoromethan	1.250	1.174	6.1	95	0.03
9	T	(F113) 1,1,2-Trichloro-trif	1.250	1.282	-2.6	94	0.01
10	CM	1,1-Dichloroethene	1.250	1.287	-3.0	98	0.03
11	T	Acetone	1.250	5.765	-361.2#	275	0.01
12	M	(IPA) Leak Check Compound	62.500	72.962	-16.7	125	-0.03
13	T	Carbon disulfide	1.250	1.226	1.9	97	0.04
14	T	Methylene Chloride	1.250	1.062	15.0	86	0.03
15		(TBA) tert-Butanol	12.500	4.043	67.7#	31	-0.02
16	TM	(MTBE) Methyl-t-butyl ether	2.500	1.624	35.0#	63	0.00
17	T	trans-1,2-Dichloroethene	1.250	1.112	11.0	83	0.01
18	PM	1,1-Dichloroethane	1.250	1.167	6.6	89	0.00
19	T	cis-1,2-Dichloroethene	1.250	1.032	17.4	83	0.00
20	T	2,2-Dichloropropane	1.250	0.048	96.2#	4	0.01
21	T	(MEK) 2-Butanone	1.250	2.076	-66.1#	141	0.00
22	T	(DIPE) Diisopropyl Ether	1.250	1.357	-8.6	103	0.00
23	T	Bromochloromethane	1.250	0.920	26.4	65	0.02
24	CM	Chloroform	1.250	1.314	-5.1	101	0.00
25	T	(ETBE) 2-ethoxy 2-methyl pr	1.250	1.250	0.0	97	0.00
26	T	1,1,1-Trichloroethane	1.250	1.330	-6.4	105	0.01
27	T	(TAME) tert-Amyl methyl eth	1.250	1.271	-1.7	104	0.00
28	S	1,2-Dichloroethane-d4 (SU2)	12.500	14.182	-13.5	112	0.00
29	T	1,1-Dichloropropene	1.250	1.560	-24.8	123	0.00
30	T	Carbon Tetrachloride	1.250	1.152	7.8	84	0.00
31	M	Benzene	1.250	1.127	9.8	87	0.00
32	M	1,2-Dichloroethane	1.250	1.394	-11.5	110	0.00
33	M	Trichloroethene	1.250	1.198	4.2	91	0.00
34	C	1,2-Dichloropropane	1.250	1.341	-7.3	103	0.00
35	T	Dibromomethane	1.250	1.645	-31.6#	118	0.00
36	T	Bromodichloromethane	1.250	1.677	-34.2#	132	0.00
37	T	cis-1,3-Dichloropropene	1.250	1.156	7.5	90	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02CCV01.D Vial: 9
Acq On : 2 Jun 2014 9:44 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
38	I	Chlorobenzene-d5 (IS)	12.500	12.500	0.0	97	-0.01
39	S	Toluene-d8 (SU3)	12.500	12.618	-0.9	100	0.00
40	T	(MIBK) 4-Methyl-2-Pentanone	1.250	1.578	-26.2	391	0.00
41	CM	Toluene	1.250	1.081	13.5	91	0.00
42	T	trans-1,3-Dichloropropene	1.250	1.282	-2.6	93	-0.01
43	T	1,1,2-Trichloroethane	1.250	1.215	2.8	89	0.00
44	M	Tetrachloroethene	1.250	1.143	8.6	84	-0.01
45	T	1,3-Dichloropropane	1.250	1.179	5.7	94	-0.01
46	T	2-Hexanone	1.250	3.340	-167.2#	267	0.00
47	T	Dibromochloromethane	1.250	1.558	-24.6	116	-0.01
48	T	1,2-Dibromoethane	1.250	1.510	-20.8	116	-0.01
49	PM	Chlorobenzene	1.250	1.129	9.7	89	-0.01
50	T	1,1,1,2-Tetrachloroethane	1.250	1.414	-13.1	110	-0.01
51	CM	Ethylbenzene	1.250	1.305	-4.4	106	0.00
52	TM	m,p-Xylenes	2.500	2.170	13.2	87	-0.01
53	TM	o-Xylene	1.250	1.111	11.1	88	0.00
54	T	Styrene	1.250	1.248	0.2	92	-0.01
55	P	Bromoform	1.250	1.738	-39.0#	130	0.00
56	T	Isopropylbenzene	1.250	1.394	-11.5	112	0.00
57	T	1,2,3-Trichloropropane	1.250	2.092	-67.4#	161	0.00
58	S	4-Bromofluorobenzene (SU4)	12.500	12.528	-0.2	98	-0.01
59	I	1,4-Dichlorobenzene-d4 (IS)	12.500	12.500	0.0	95	0.00
60	P	1,1,2,2-Tetrachloroethane	1.250	1.663	-33.0#	131	-0.01
61	T	Bromobenzene	1.250	1.175	6.0	93	-0.01
62	T	n-Propylbenzene	1.250	1.463	-17.0	123	0.00
63	T	2-Chlorotoluene	1.250	1.659	-32.7#	129	0.00
64	T	1,3,5-Trimethylbenzene	1.250	1.541	-23.3	121	-0.01
65	T	4-Chlorotoluene	1.250	1.650	-32.0#	129	-0.01
66	T	tert-Butylbenzene	1.250	1.453	-16.2	112	0.00
67	T	1,2,4-Trimethylbenzene	1.250	1.523	-21.8	124	0.00
68	T	sec-Butylbenzene	1.250	1.354	-8.3	104	-0.01
69	T	p-Isopropyltoluene	1.250	1.408	-12.6	110	0.00
70	T	1,3-Dichlorobenzene	1.250	1.109	11.3	84	-0.01
71	T	1,4-Dichlorobenzene	1.250	1.110	11.2	84	-0.10
72	T	n-Butylbenzene	1.250	1.506	-20.5	121	0.00
73	T	1,2-Dichlorobenzene	1.250	1.155	7.6	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02CCV01.D Vial: 9
Acq On : 2 Jun 2014 9:44 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
74	T	1,2-Dibromo-3-chloropropane	1.250	4.081	-226.5#	302	0.00
75	T	1,2,4-Trichlorobenzene	1.250	1.251	-0.1	99	0.00
76	T	Hexachlorobutadiene	1.250	1.809	-44.7#	145	-0.01
77	T	Naphthalene	1.250	1.286	-2.9	105	-0.01
78	T	Hexachloroethane	1.250	1.344	-7.5	102	-0.01
79	T	1,2,3-Trichlorobenzene	1.250	1.143	8.6	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SUMMARY OF INTERNAL STANDARDS

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\060214L3\F02BFB01.D
Tune Time : 2 Jun 14 6:12 am

Daily Calibration File : C:\HPCHEM\1\DATA\013014L3\A30CCV01.D

						(PFB) 1590180	(CLBD 1163370	(1,4- 587649
File	Sample	Surrogate Recovery %				Internal Standard Responses		
F0200001.D	3F40201-	90	100	90	98	959959	899548	456072
F0200002.D	3F40201-	92	89	90	91	1361744	1270833	624007
F0200003.D	34F0201-	99	89	88	95	1396912	1285052	641852
F0200004.D	3F40201-	111	118	89	107	1277102	1204182	617289
F0200005.D	3F40201-	100	94	91	93	1249356	1155970	626548
F0200006.D	3F40201-	86	123	92	115	1187680	1116841	592053
F0200007.D	3F40201-	108	109	90	99	1178685	1115191	566657
F0200008.D	3F40201-	106	101	91	95	1193768	1078807	575670
F0200009.D	3F40201-	91	132	90	108	1125891	1087623	587531
F0200010.D	3F40201-	99	97	86	82	1105700	1086224	590283
F02BLK01.D	34F0201-	94	93	94	107	1631767	1469972	712180
F02LCS01.D	34F0201-	105	123	108	98	1340147	1028974	463879
F02LCS02.D	34F0201-	83	100	101	82	1321855	1048189	478089

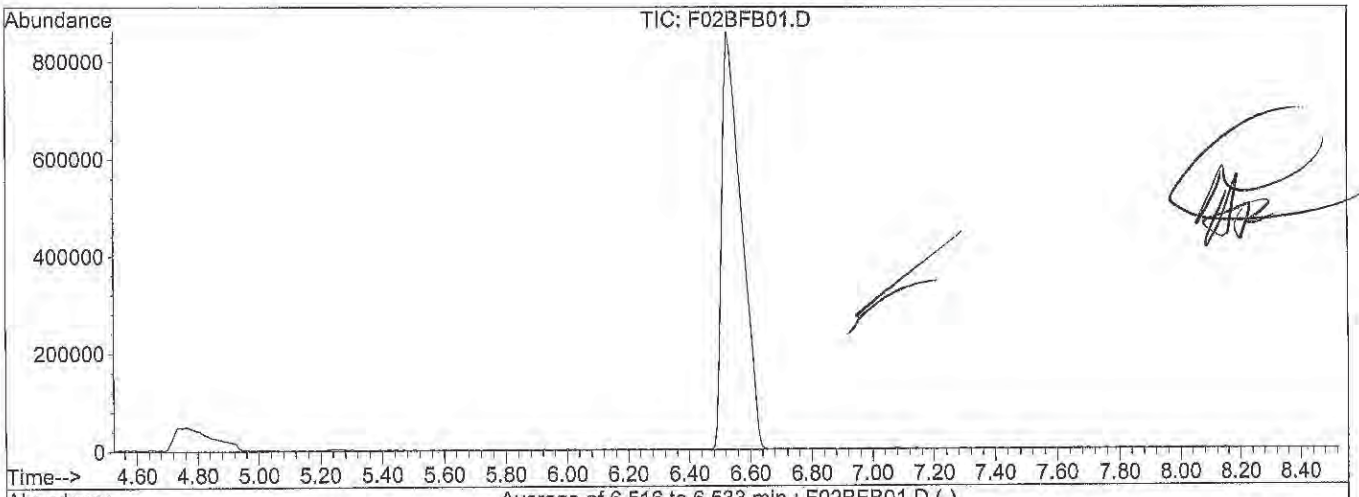
t - fails 12hr time check * - fails criteria

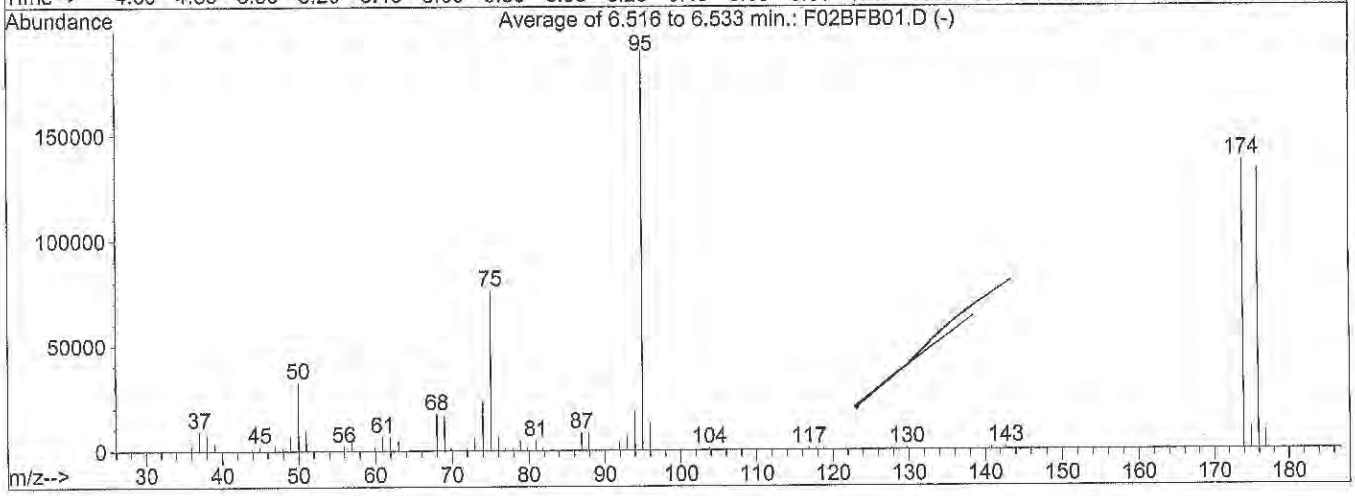
Created: Sun Jun 08 11:48:13 2014 GC
MS Ins

Summary of Instrument Tuning

BFB

Data File : C:\HPCHEM\1\DATA\060214L3\F02BFB01.D Vial: 1
Acq On : 2 Jun 2014 6:12 am Operator: DN
Sample : 50 ng BFB tune Inst : GC/MS Ins
Misc : 12HRS SYSTEM BFB TUNING Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN





AutoFind: Scans 319, 320, 321; Background Corrected with Scan 312

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	32368	PASS
75	95	30	60	40.2	76179	PASS
95	95	100	100	100.0	189675	PASS
96	95	5	9	6.8	12932	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.4	137253	PASS
175	174	5	9	7.5	10262	PASS
176	174	95	101	96.4	132253	PASS
177	176	5	9	6.4	8471	PASS

F02BFB01.D MW111313.M Mon Jun 02 06:53:38 2014

INJECTION LOG

Injection Log

Directory: c:\hpchem\1\data\060214l3

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	11	f0200001.d	10.	3F40201-01	100cc Equipment Blank	2 Jun 14 11:46
2	1	f0200002.d	10.	3F40201-02	100cc SVL-528-SA8-SV-5.0-6.0	2 Jun 14 12:16
3	2	f0200003.d	10.	34F0201-DUP1	100cc SVL-528-SA8-SV-5.0-6.0	2 Jun 14 12:51
4	3	f0200004.d	10.	3F40201-03	100cc SVL-528-SA8-SV-11.0-12.0	2 Jun 14 13:21
5	4	f0200005.d	10.	3F40201-04	100cc SVL-528-SA8-SV-18.5-19.5	2 Jun 14 13:50
6	5	f0200006.d	10.	3F40201-05	100cc SVL-505-SA5C-SV-5.0-6.0	2 Jun 14 14:21
7	6	f0200007.d	10.	3F40201-06	100cc SVL-505-SA5C-SV-10.0-11.0	2 Jun 14 14:50
8	7	f0200008.d	10.	3F40201-07	100cc SVL-805-SA5C-SV-10.0-11.0	2 Jun 14 15:19
9	8	f0200009.d	10.	3F40201-08	100cc SVL-505-SA5C-SV-15.0-16.0	2 Jun 14 15:49
10	1	f0200010.d	10.	3F40201-09	100cc FB-060214	2 Jun 14 16:18
11	1	f02bfb01.d	1.	50 ng BFB tune	12HRS SYSTEM BFB TUNING	2 Jun 14 06:12
12	11	f02blk01.d	10.	34F0201-BLK1	100cc AMBIENT AIR/H20	2 Jun 14 11:15
13	9	f02ccv01.d	1.	1.25/2.5/12.5 ug/L 8260B std	20mL 8260 CCV	2 Jun 14 09:44
14	10	f02lcs01.d	1.	34F0201-BS1	20cc 1.25/2.5/12.5 ug/L LCS	2 Jun 14 10:14
15	9	f02lcs02.d	1.	34F0201-BSD1	20cc 0.1/0.2/1.0 ug/L LCS	2 Jun 14 17:46

03 Jun 14 06:06

SAMPLE LOG SHEET

Environmental Support Technologies, Inc.
SOIL GAS - FIELD ANALYSIS
Sample Log Sheet

Date:_06/02/2014_____
Analyst:_____DN_____
Lab ID:_____# 3_____
Batch Number:_34F0201_____
Project Number:_EST2754___

EPA Method:_8260B CHHSLS 0.02 RL GILAN AIR5 PUMP
Initial Calibration:_MW111313.MTH FLOW RATE @ 200mL/min
Cal Std Lot No.:__4D14009_____
LCS Std Lot No.:_4D14008_____ Glass Bulb Bake @
IS/SS Lot No.:___4D14001_____ 130 degree for 30 min

MWH SSFL , CA

File No.	Port No.	Sample Lab No.	Sample ID	Amount	Dilution Factor	Bulb Surr added	Time Sample Loaded	Time Sample Analyzed	Glass Bulb #	PID READING
F402BFB1	1	50uL BFB1	12HRS TUNING	1uL	1x	PASS	@	612		
CCV1	9	1.25/2.5/12.5 CCV1	8260 STARDARD	20mL	1x	930	931	942		
BS1	9	34F0201-BS1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	955	956	1014		
BLK1	1	34F0201-BLK1	METHOD BLANK	100cc	1x	1100	1101	1115		
1	2	3F40201-01	EQUIPMENT BLANK	100cc	1x	1125	1126	1146	9	0.0
2	1	3F40201-02	SVL-528-SA8-SV-5.0-6.0	100cc	1x	908	909	1216	7	2.1
3	2	34F0201-DUP1	SVL-528-SA8-SV-5.0-6.0	100cc	1x	908	909	1251	7	2.1
4	3	3F40201-03	SVL-528-SA8-SV-11.0-12.0	100cc	1x	935	936	1321	6	3.5
5	4	3F40201-04	SVL-528-SA8-SV-18.5-19.5	100cc	1x	958	989	1350	12	6
6	5	3F40201-05	SVL-505-SA5C-SV-5.0-6.0	100cc	1x	1052	1053	1421	10	0.7
7	6	3F40201-06	SVL-505-SA5C-SV-10.0-11.0	100cc	1x	1124	1125	1450	3	1.6
8	7	3F40201-07	SVL-805-SA5C-SV-10.0-11.0	100cc	1x	1124	1125	1519	1	1.6
9	8	3F40201-08	SVL-505-SA5C-SV-15.0-16.0	100cc	1x	1159	1200	1549	11	2.2
10	1	3F40201-09	FB-060214	100cc	1x	1331	1332	1618	2	0.0
BSD1	9	34F0201-BSD1	8260 0.1/0.2/1.0 ug/L LCS	20mL	1x	1730	1731	1746		

CASE NARRATIVE

LABORATORY CASE NARRATIVE
(EPA 8260B)

SDG: 34F0201
DATE: June 02, 2014
PROJECT No.: EST2754

Nine (9) Glass Bulb soil vapor samples were analyzed on June 02, 2014, by EPA Method Analysis performed using a gas chromatograph/mass spectrometer (GC/MS).

Sample Preservation and Holding Times

Samples were preserved according to the method recommendation, unless otherwise noted on the chain-of-custody (COC) and /or the sample log sheet. Holding times were met, unless otherwise noted in the report with data qualifiers.

QA/QC Criteria

All quality objective criteria were met, except as noted in the report with data qualifiers.

Samples Analysis

No anomalies were observes during analysis of the samples.

COMMENTS:

Results that fall between the MDL and RL are 'J' flagged.

Adjusted values corrected for significant figure correction (10X) and sample volume (5X).

RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION DUPLICATE SAMPLE

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200003.D
Acq On : 2 Jun 2014 12:51 pm
Sample : 34F0201-DUP1
Misc : 100cc SVL-528-SA8-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 2 13:17 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1396912	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1285052	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	641852	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	429432m	12.32 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	98.56%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	367900m	11.11 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	88.88%	
39) Toluene-d8 (SU3)	12.20	98	1321563	11.03 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	88.24%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	621191m	11.82 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	94.56%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	523	0.15 ~~ug/L~~ #	44
4) Chloromethane	4.39	50	2238	-0.27 ~~ug/L~~ #	41
5) Vinyl Chloride	4.43	62	557	0.23 ~~ug/L~~ #	1
6) Bromomethane	5.22	96	661	-1.35 ~~ug/L~~	83
7) Chloroethane	5.17	64	1632	2.09 ~~ug/L~~	98
8) (F11) Trichlorofluorometha	5.65	101	262	0.07 ~~ug/L~~ #	16
9) (F113) 1,1,2-Trichloro-tri	6.34	151	278	0.10 ~~ug/L~~ #	19
10) 1,1-Dichloroethene	6.18	96	271	0.08 ~~ug/L~~ #	1
11) Acetone	6.47	58	6921	8.09 ~~ug/L~~ #	1
12) (IPA) Leak Check Compound	6.48	45	53007	315.78 ~~ug/L~~ #	90
13) Carbon disulfide	6.83	76	2925	0.25 ~~ug/L~~ #	76
14) Methylene Chloride	7.08	84	1887	0.49 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	7.11	59	299	1.25 ~~ug/L~~ #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	595	0.08 ~~ug/L~~ #	55
17) trans-1,2-Dichloroethene	7.46	96	283	0.08 ~~ug/L~~ #	1
18) 1,1-Dichloroethane	7.99	63	328	0.05 ~~ug/L~~ #	1
20) 2,2-Dichloropropane	8.88	77	266	0.05 ~~ug/L~~ #	36
21) (MEK) 2-Butanone	8.79	72	309	0.79 ~~ug/L~~ #	1
22) (DIPE) Diisopropyl Ether	8.22	45	305	0.03 ~~ug/L~~ #	48
23) Bromochloromethane	9.17	128	310	0.17 ~~ug/L~~ #	1
24) Chloroform	9.20	83	3340	0.46 ~~ug/L~~ #	78
25) (ETBE) 2-ethoxy 2-methyl p	8.72	59	319	0.03 ~~ug/L~~ #	44

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200003.D Vial: 2
Acq On : 2 Jun 2014 12:51 pm Operator: DN
Sample : 34F0201-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 13:17 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

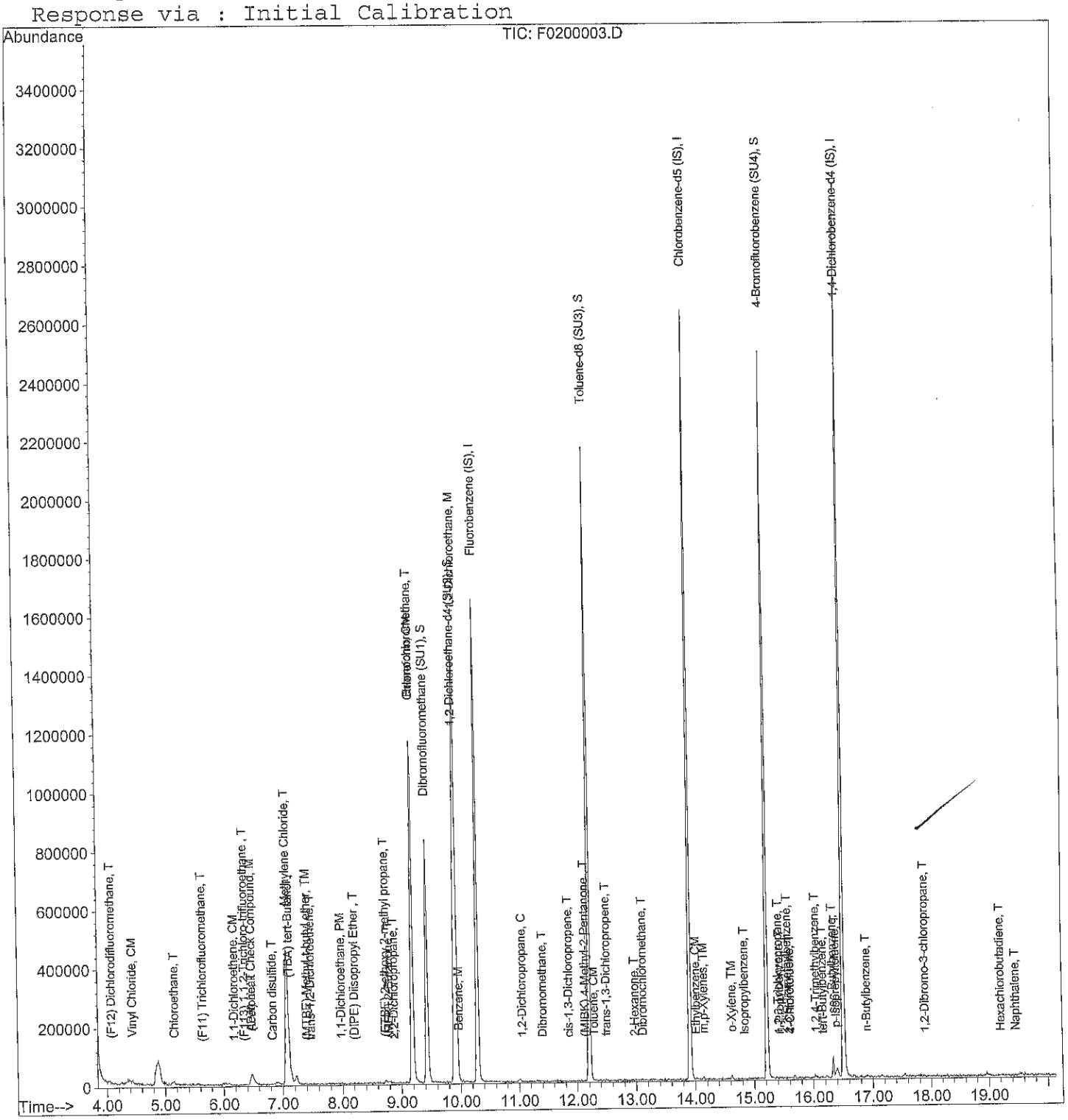
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) Benzene	9.98	78	1177	0.09 ~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.91	62	11006	2.37 ~~ug/L~~ #	1
34) 1,2-Dichloropropane	11.06	63	439	0.14 ~~ug/L~~ #	38
35) Dibromomethane	11.41	93	884	0.36 ~~ug/L~~ #	5
37) cis-1,3-Dichloropropene	11.86	75	396	0.07 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.13	43	435	0.17 ~~ug/L~~ #	100
41) Toluene	12.28	91	2379	0.14 ug/L # 0.0028	8
42) trans-1,3-Dichloropropene	12.51	75	305	0.05 ~~ug/L~~ #	30
46) 2-Hexanone	12.97	43	476	0.17 ~~ug/L~~ #	37
47) Dibromochloromethane	13.12	129	280	0.06 ~~ug/L~~ #	21
51) Ethylbenzene	14.02	91	546	0.03 ~~ug/L~~ #	45
52) m,p-Xylenes	14.14	106	974	0.14 ug/L # 0.0028	81
53) o-Xylene	14.62	106	444	0.06 ~~ug/L~~ #	10 0.012
54) Styrene	14.63	104	1990	-0.68 ~~ug/L~~ #	84
56) Isopropylbenzene	14.84	105	343	0.02 ~~ug/L~~ #	55
57) 1,2,3-Trichloropropane	15.41	75	259	0.05 ~~ug/L~~ #	36
62) n-Propylbenzene	15.45	91	1489	0.06 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.61	91	299	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.56	105	665	0.04 ~~ug/L~~ #	31
65) 4-Chlorotoluene	15.62	91	353	0.02 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.17	119	283	0.02 ~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.05	105	2267	0.14 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.33	105	472	0.02 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1382	0.08 ~~ug/L~~ #	52
72) n-Butylbenzene	16.91	91	263	0.01 ~~ug/L~~ #	30
74) 1,2-Dibromo-3-chloropropan	17.90	75	364	1.37 ~~ug/L~~ #	6
76) Hexachlorobutadiene	19.20	225	299	0.26 ~~ug/L~~ #	18
77) Naphthalene	19.45	128	670	0.05 ~~ug/L~~	100

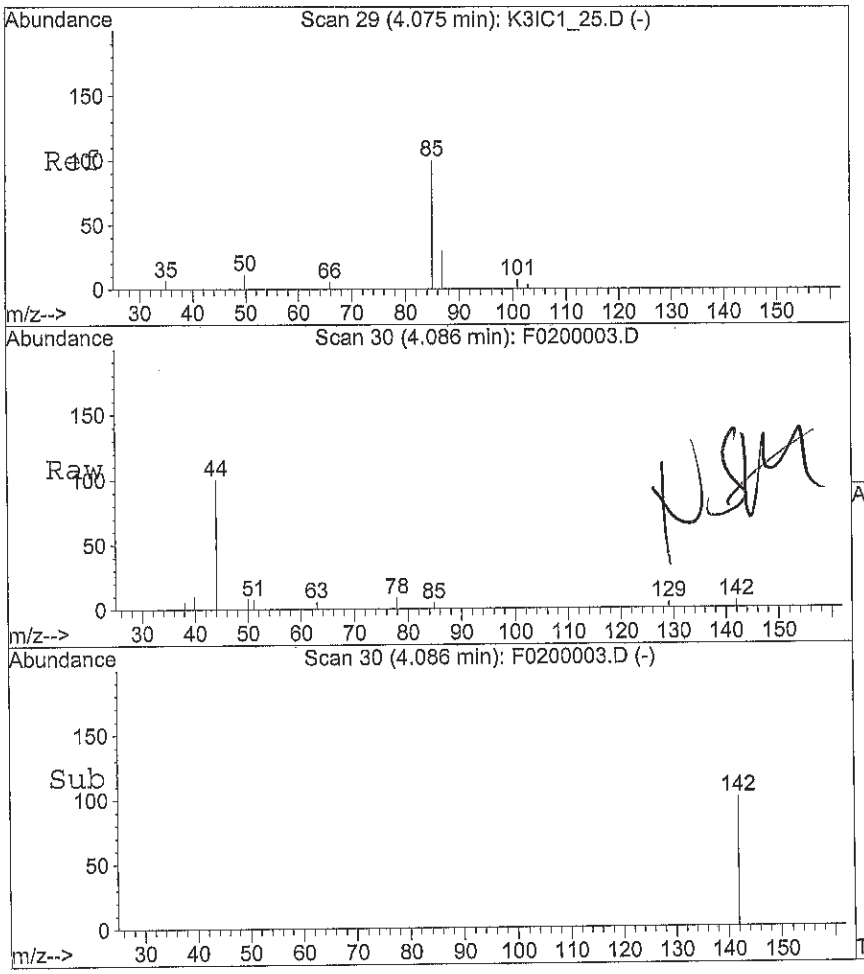
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200003.D Vial: 2
Acq On : 2 Jun 2014 12:51 pm Operator: DN
Sample : 34F0201-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 13:17 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

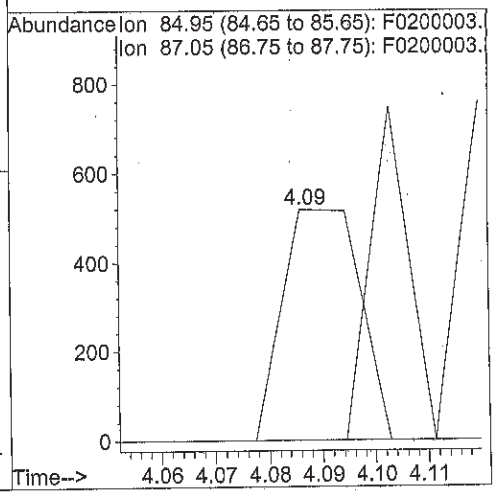


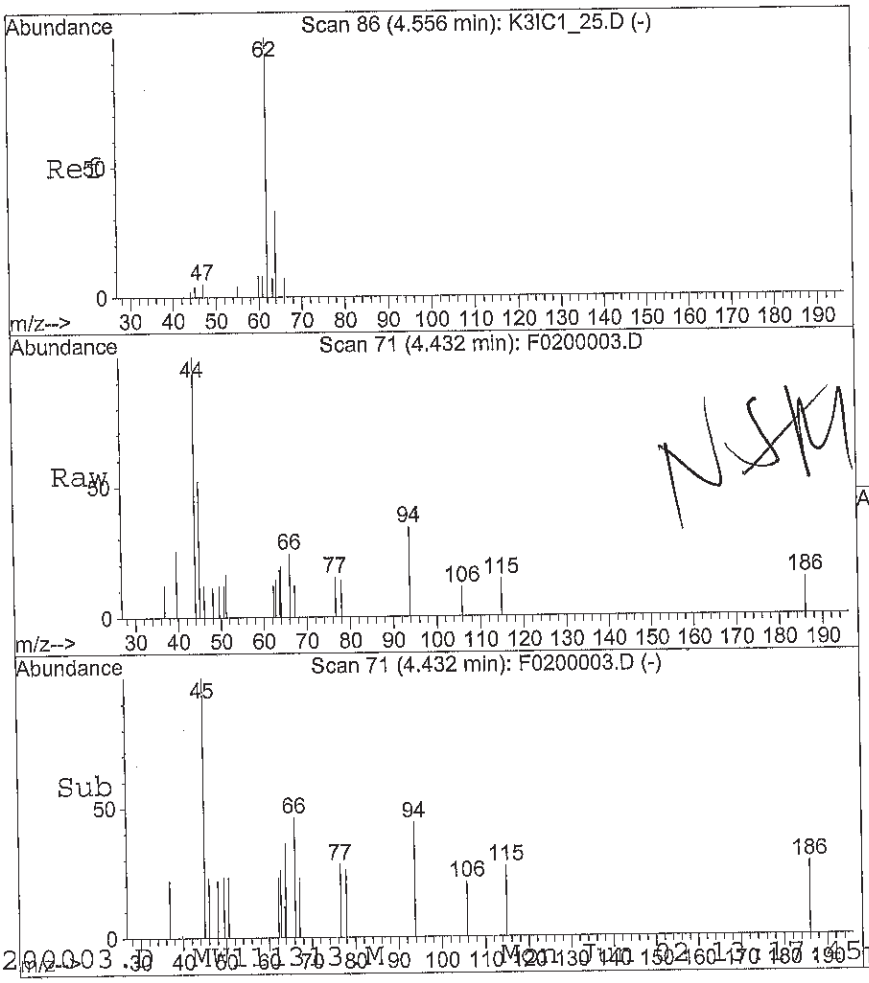


#3
(F12) Dichlorodifluoromethane
Concen: 0.15 ug/L
RT: 4.09 min Scan# 30
Delta R.T. 0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 85 Resp: 523

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

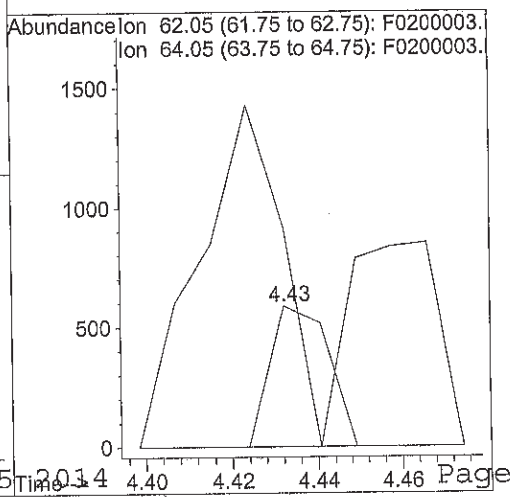


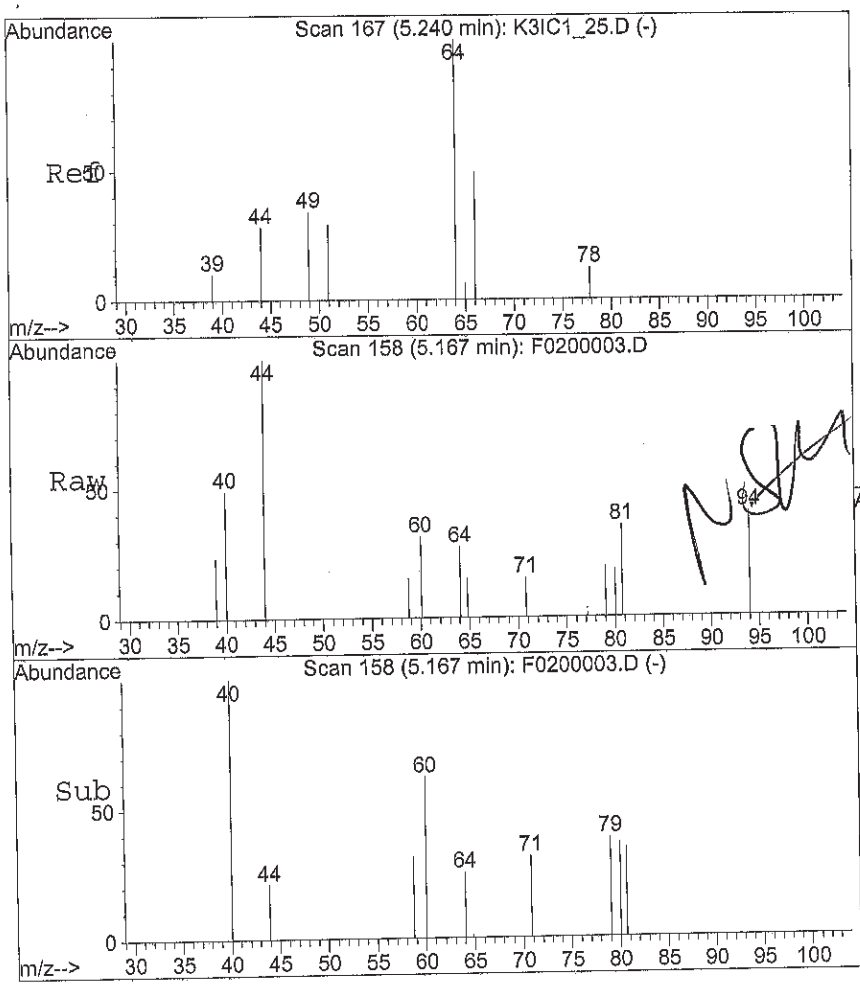


#5
Vinyl Chloride
Concen: 0.23 ug/L
RT: 4.43 min Scan# 71
Delta R.T. -0.12 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 62 Resp: 557

Ion	Ratio	Lower	Upper
62	100		
64	345.4	25.6	38.4#

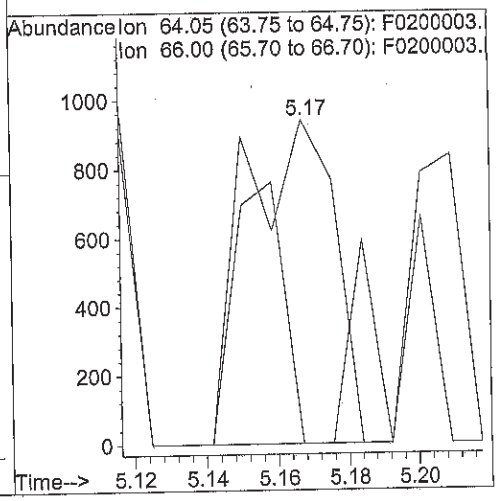


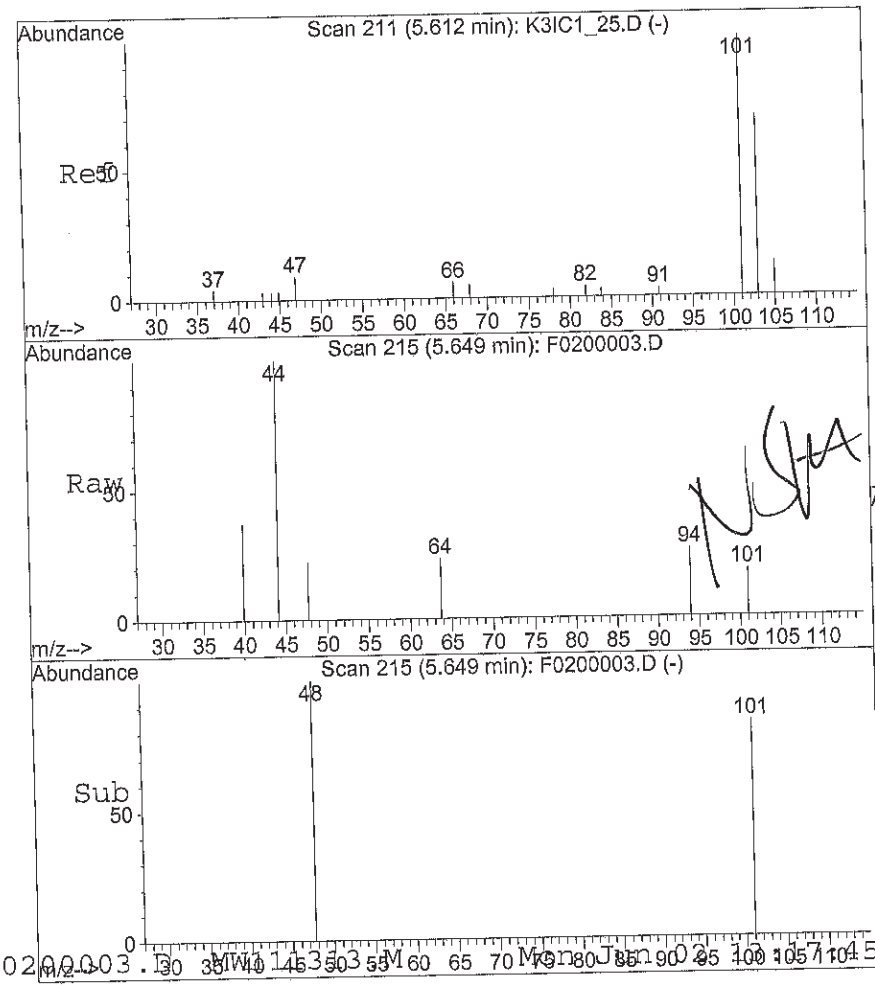


#7
Chloroethane
Concen: 2.09 ug/L
RT: 5.17 min Scan# 158
Delta R.T. -0.07 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 64 Resp: 1632

Ion	Ratio	Lower	Upper
64	100		
66	45.2	35.4	53.0

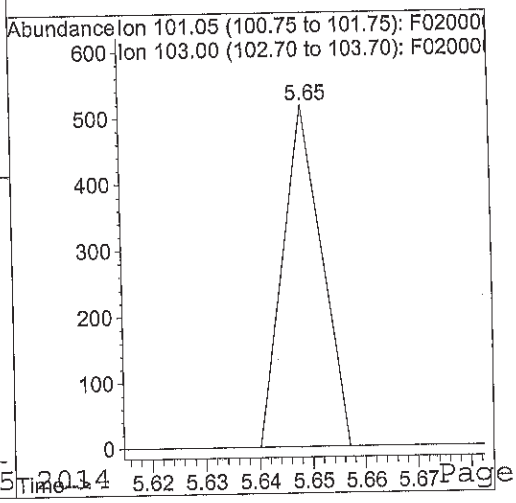


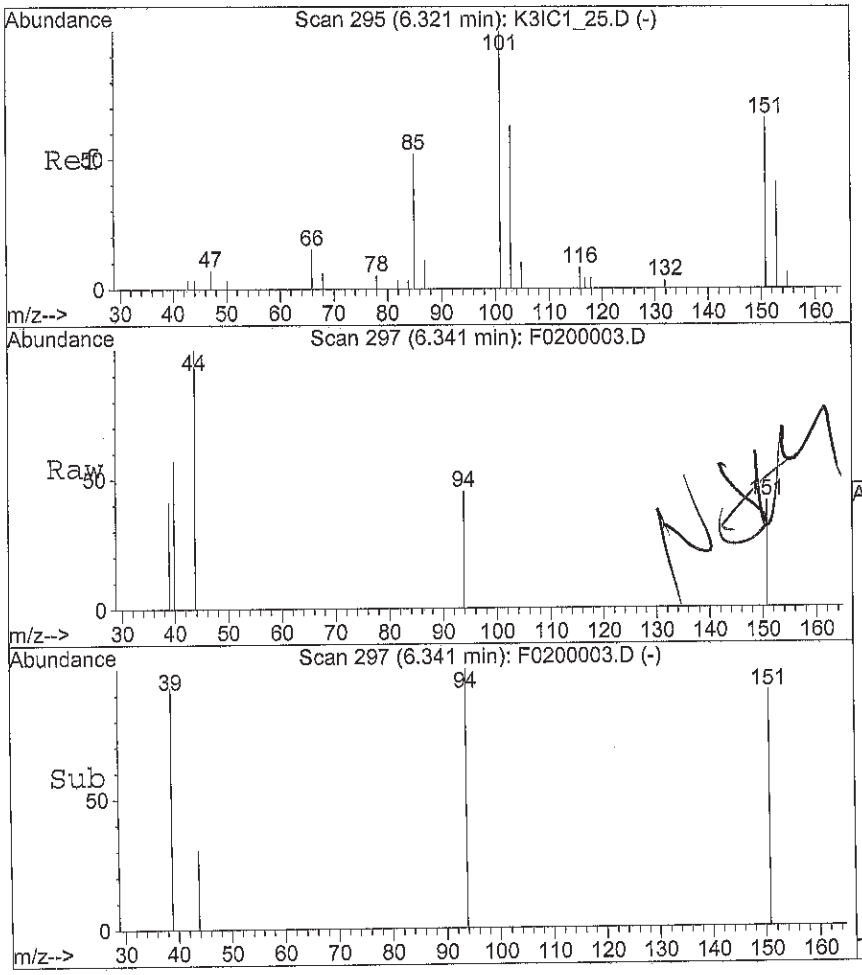


#8
(F11) Trichlorofluoromethane
Concen: 0.07 ug/L
RT: 5.65 min Scan# 215
Delta R.T. 0.04 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:101 Resp: 262

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

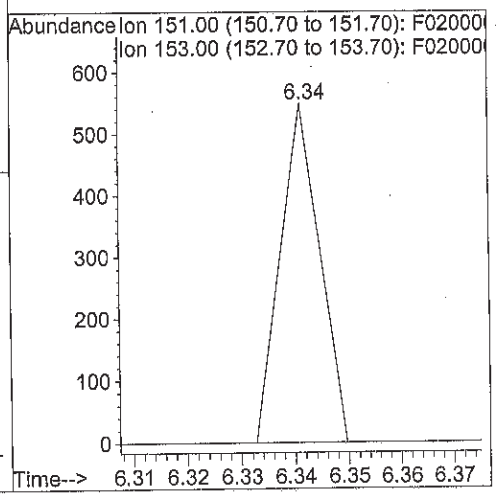


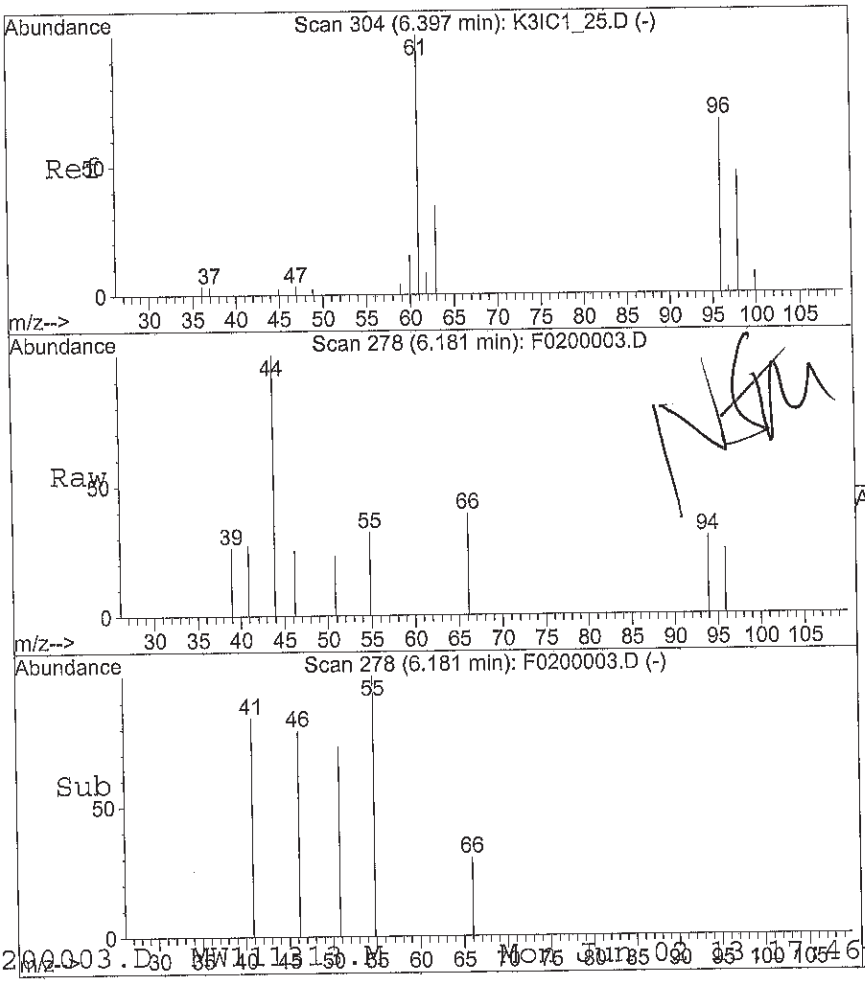


#9
(F113) 1,1,2-Trichloro-trifluor
Concen: 0.10 ug/L
RT: 6.34 min Scan# 297
Delta R.T. 0.02 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:151 Resp: 278

Ion	Ratio	Lower	Upper
151	100		
153	0.0	49.6	74.4#

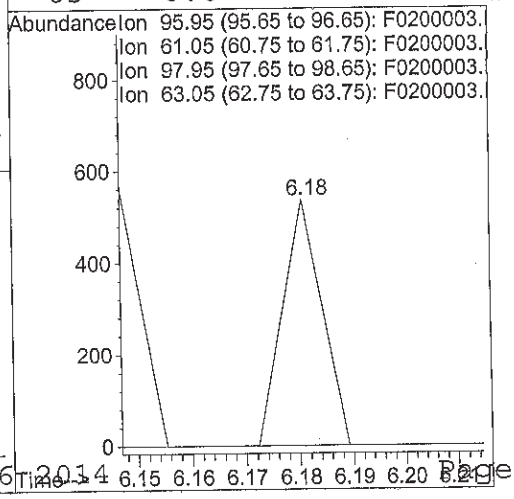


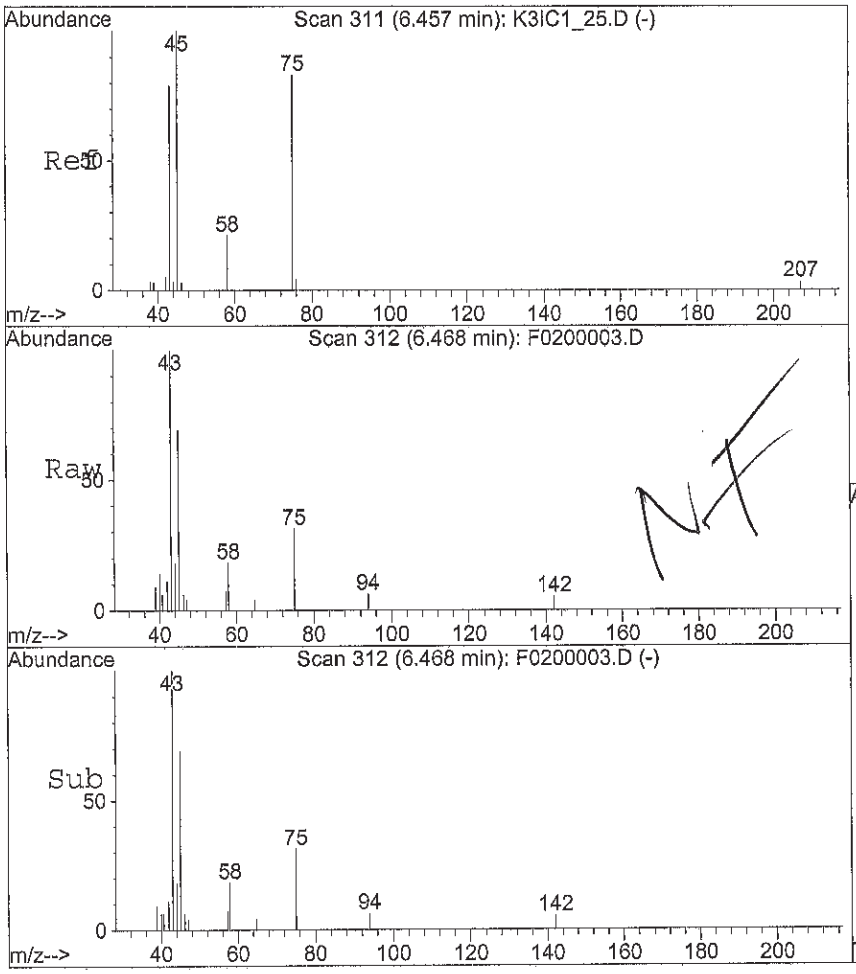


#10
1,1-Dichloroethene
Concen: 0.08 ug/L
RT: 6.18 min Scan# 278
Delta R.T. -0.22 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 96 Resp: 271

Ion	Ratio	Lower	Upper
96	100		
61	0.0	130.0	195.0#
98	0.0	56.2	84.4#
63	0.0	41.5	62.3#

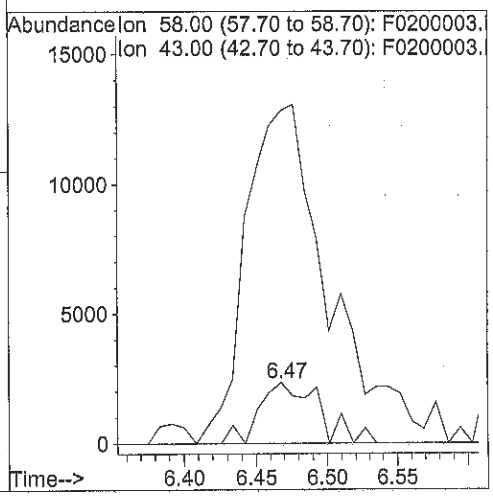


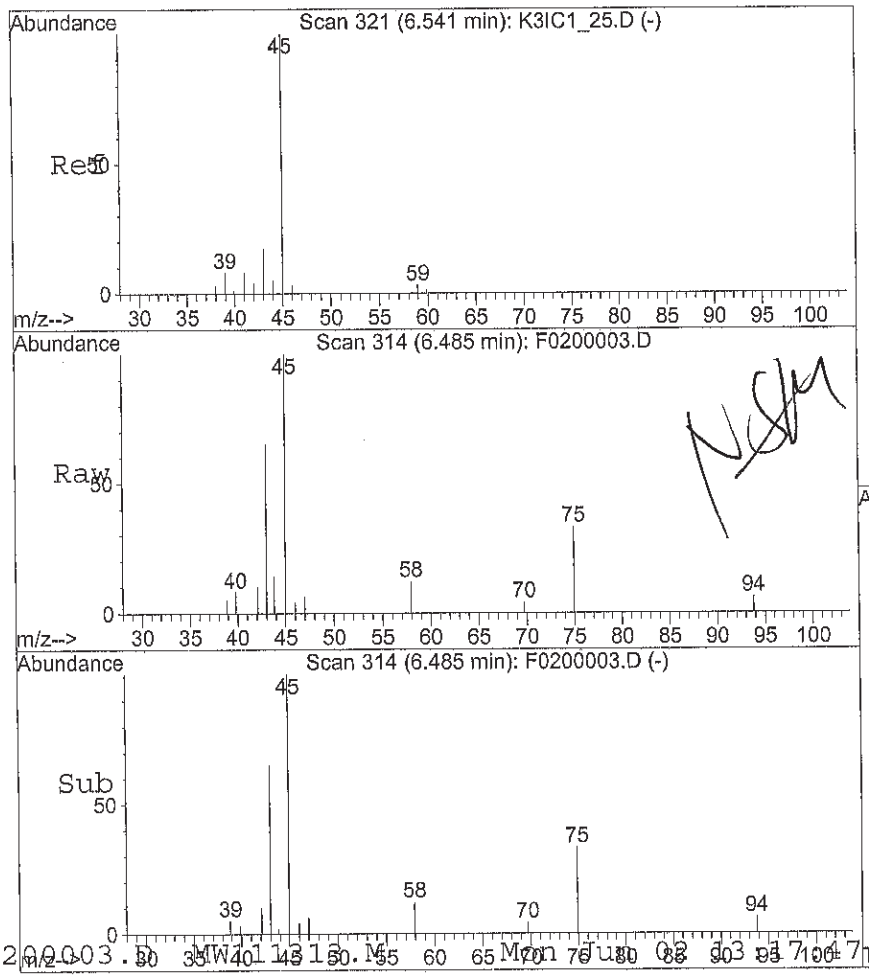


#11
Acetone
Concen: 8.09 ug/L
RT: 6.47 min Scan# 312
Delta R.T. 0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 58 Resp: 6921

Ion	Ratio	Lower	Upper
58	100		
43	757.8	360.9	541.3#

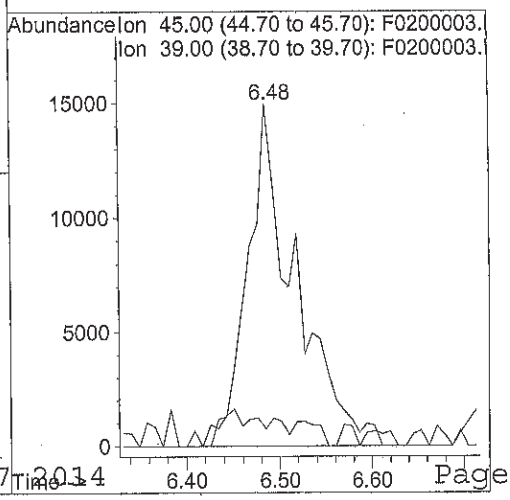


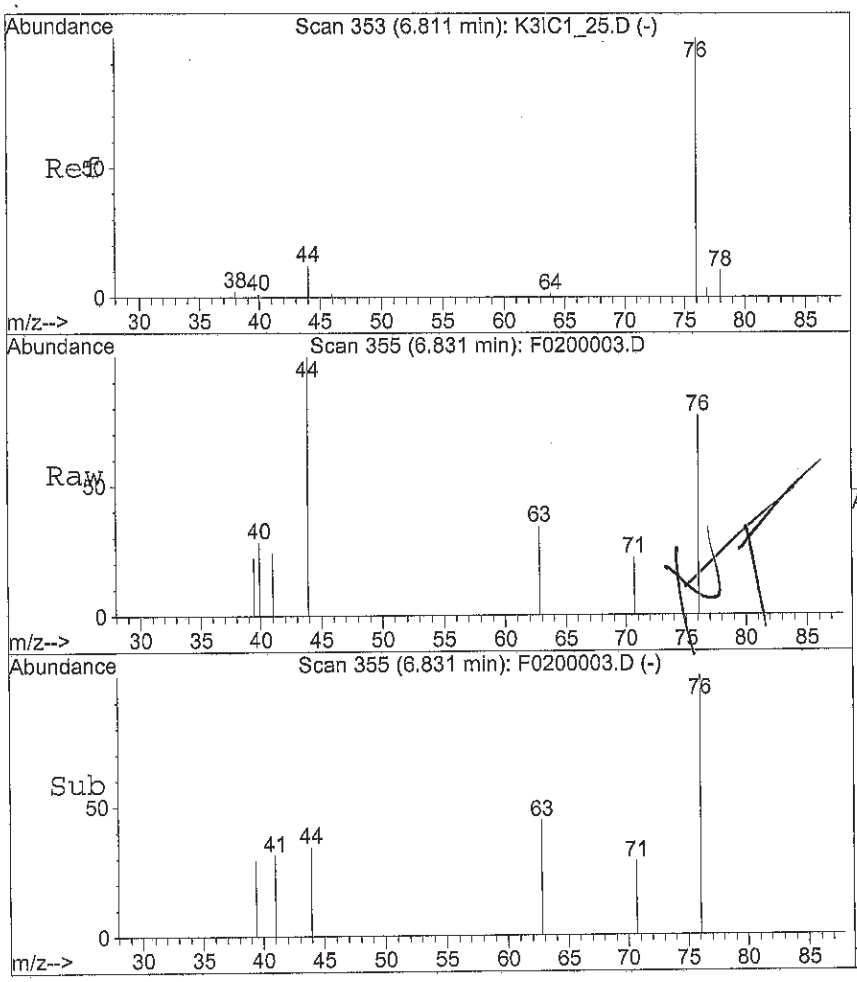


#12
(IPA) Leak Check Compound
Concen: 315.78 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.06 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 45 Resp: 53007

Ion	Ratio	Lower	Upper
45	100		
39	2.7	4.9	7.3#

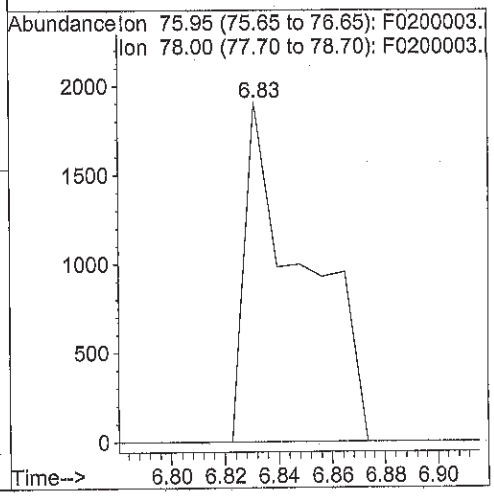


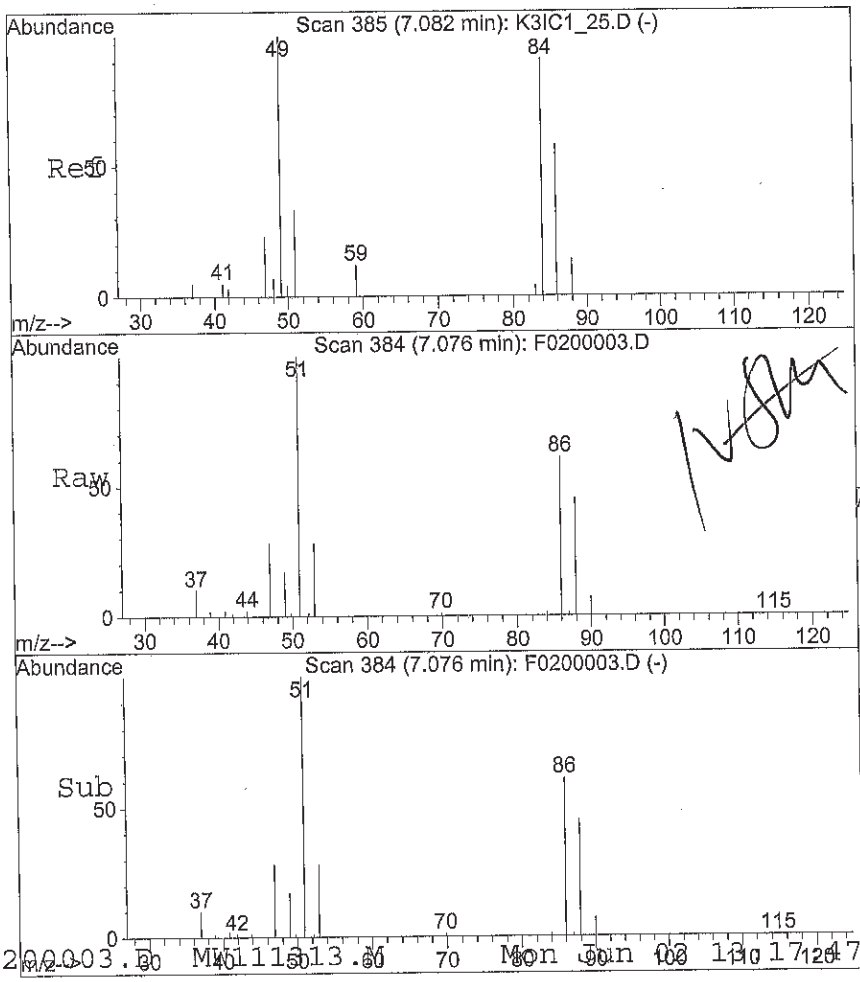


#13
Carbon disulfide
Concen: 0.25 ug/L
RT: 6.83 min Scan# 355
Delta R.T. 0.02 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 76 Resp: 2925

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

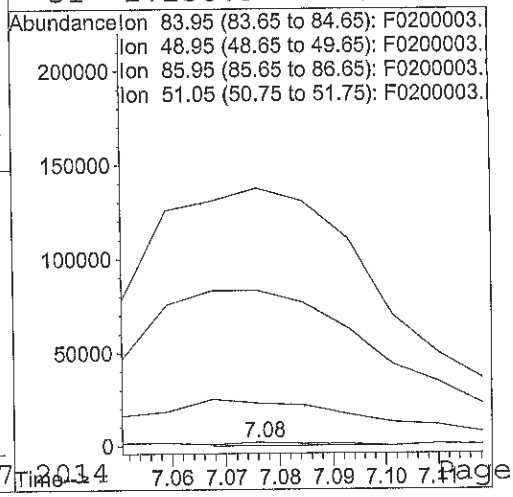


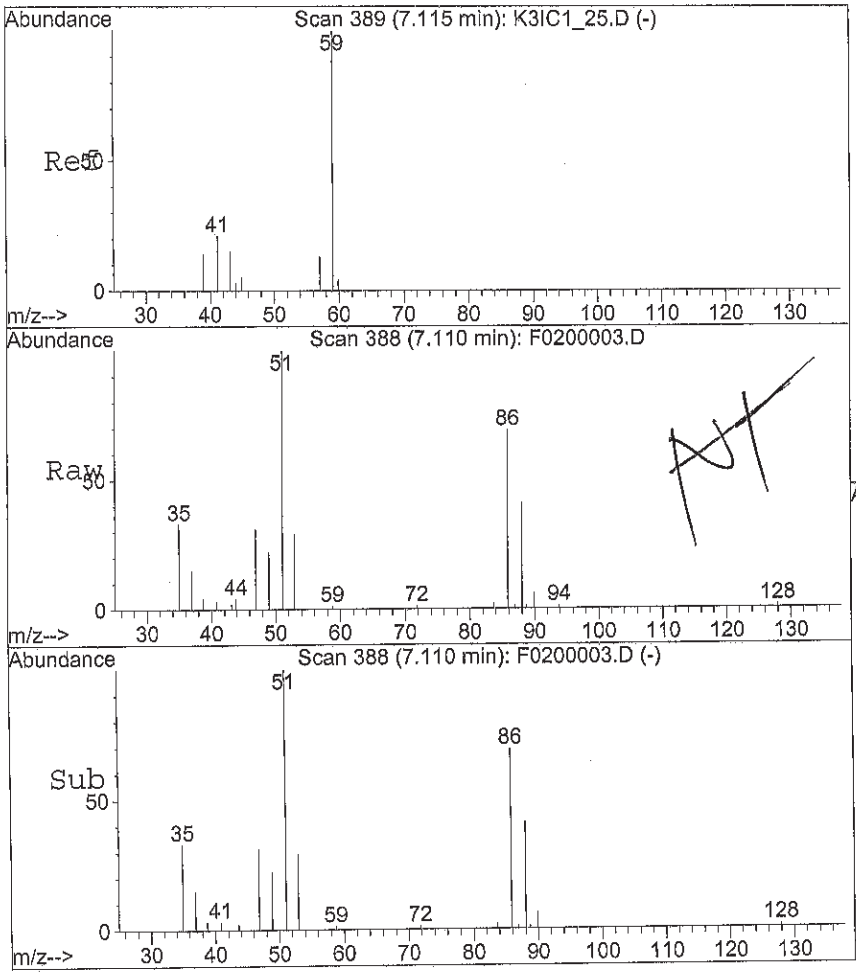


#14
Methylene Chloride
Concen: 0.49 ug/L
RT: 7.08 min Scan# 384
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 84 Resp: 1887

Ion	Ratio	Lower	Upper
84	100		
49	4810.4	89.8	134.6#
86	16594.7	51.1	76.7#
51	27238.9	28.5	42.7#

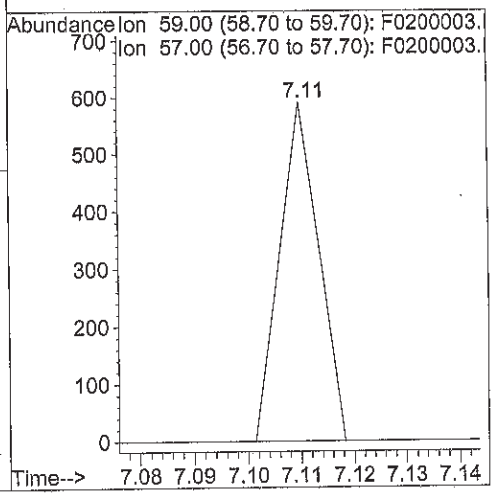


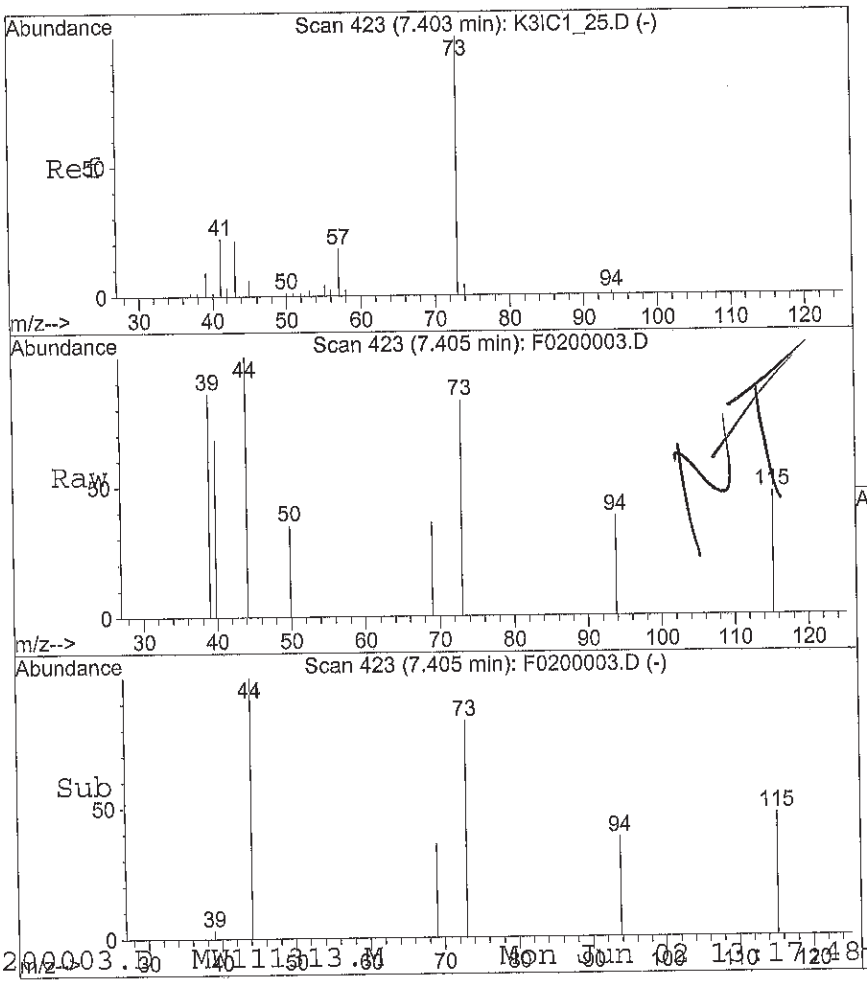


#15
(TBA) tert-Butanol
Concen: 1.25 ug/L
RT: 7.11 min Scan# 388
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 59 Resp: 299

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

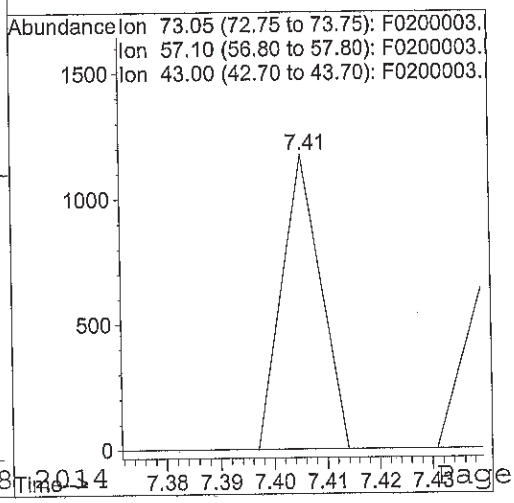


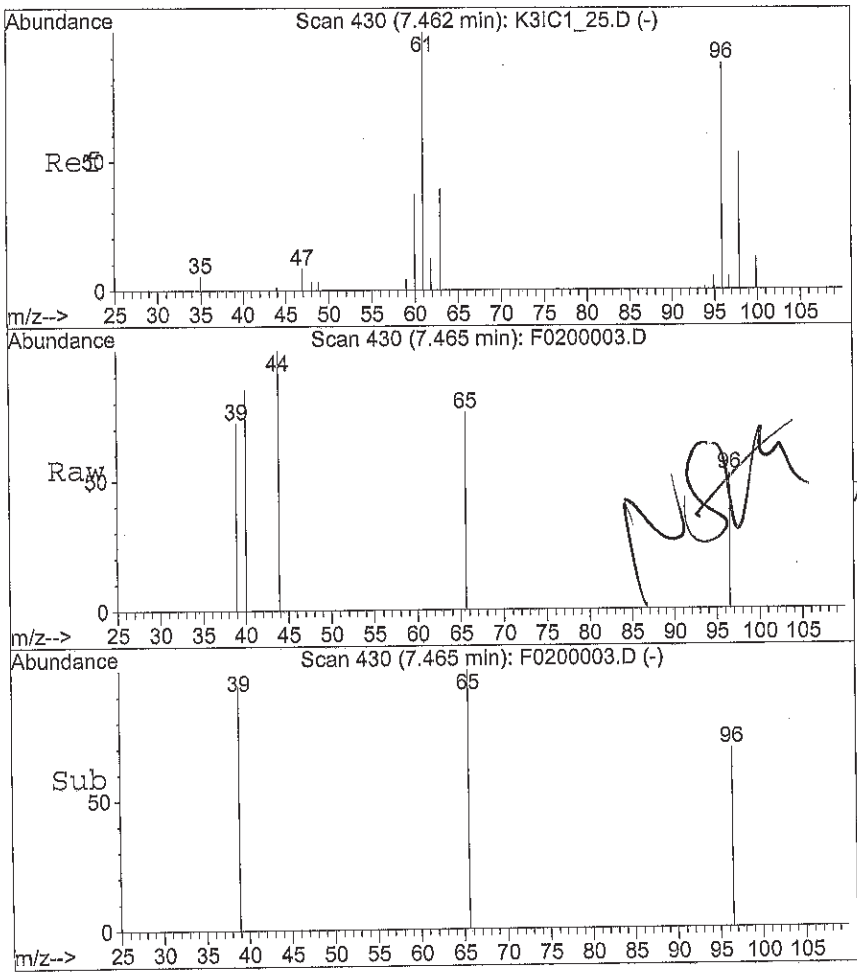


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.08 ug/L
RT: 7.41 min Scan# 423
Delta R.T. 0.00 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 73 Resp: 595

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	0.0	18.4	27.6#

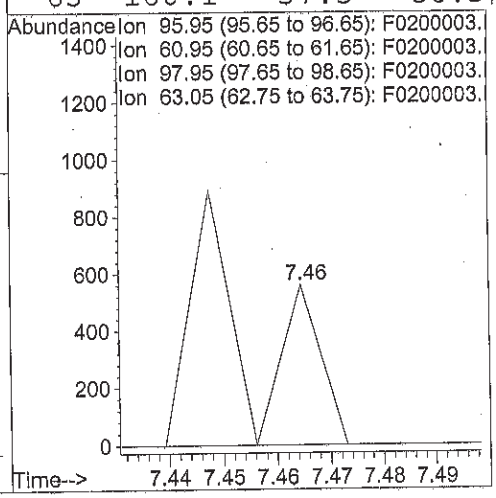


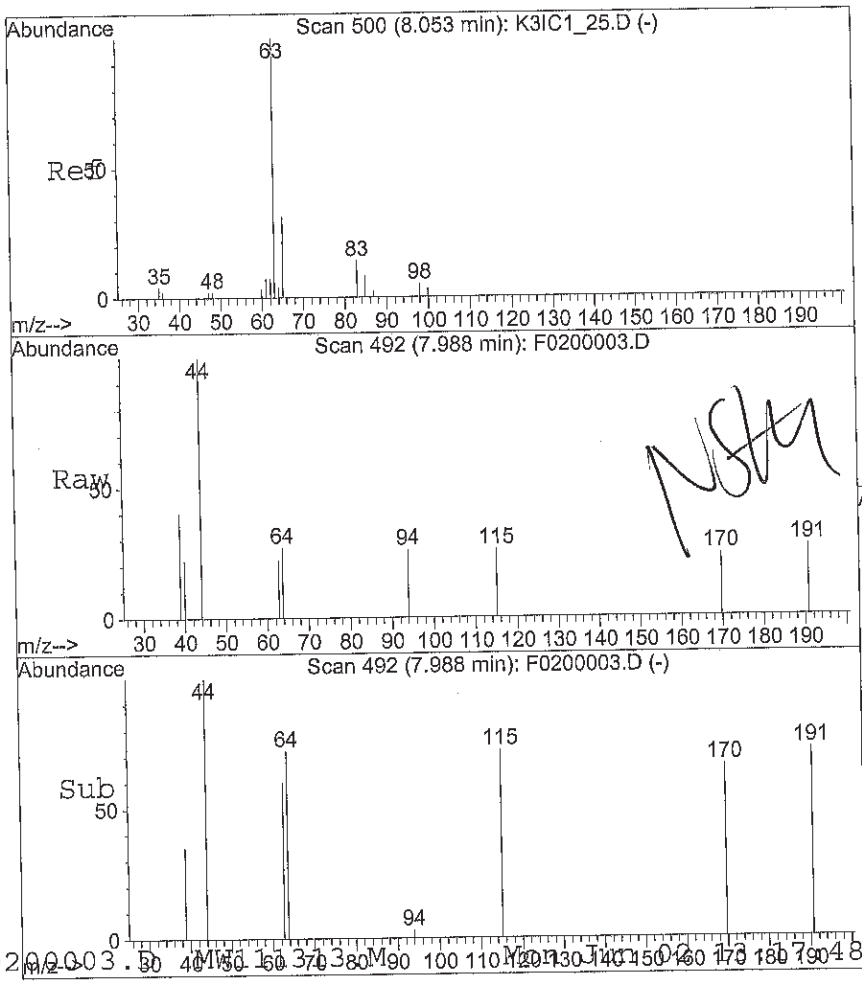


#17
trans-1,2-Dichloroethene
Concen: 0.08 ug/L
RT: 7.46 min Scan# 430
Delta R.T. 0.00 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 96 Resp: 283

Ion	Ratio	Lower	Upper
96	100		
61	0.0	104.2	156.2#
98	0.0	50.2	75.4#
63	160.1	37.5	56.3#

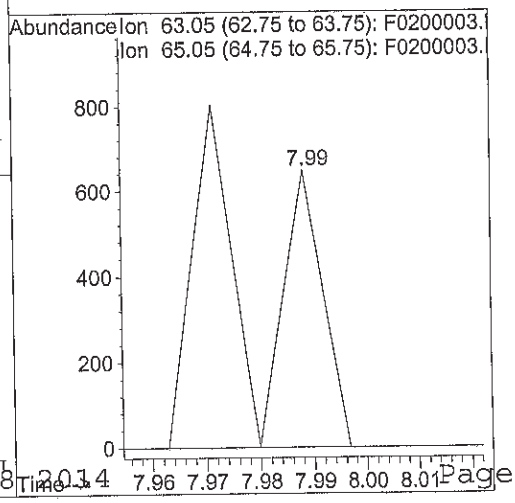


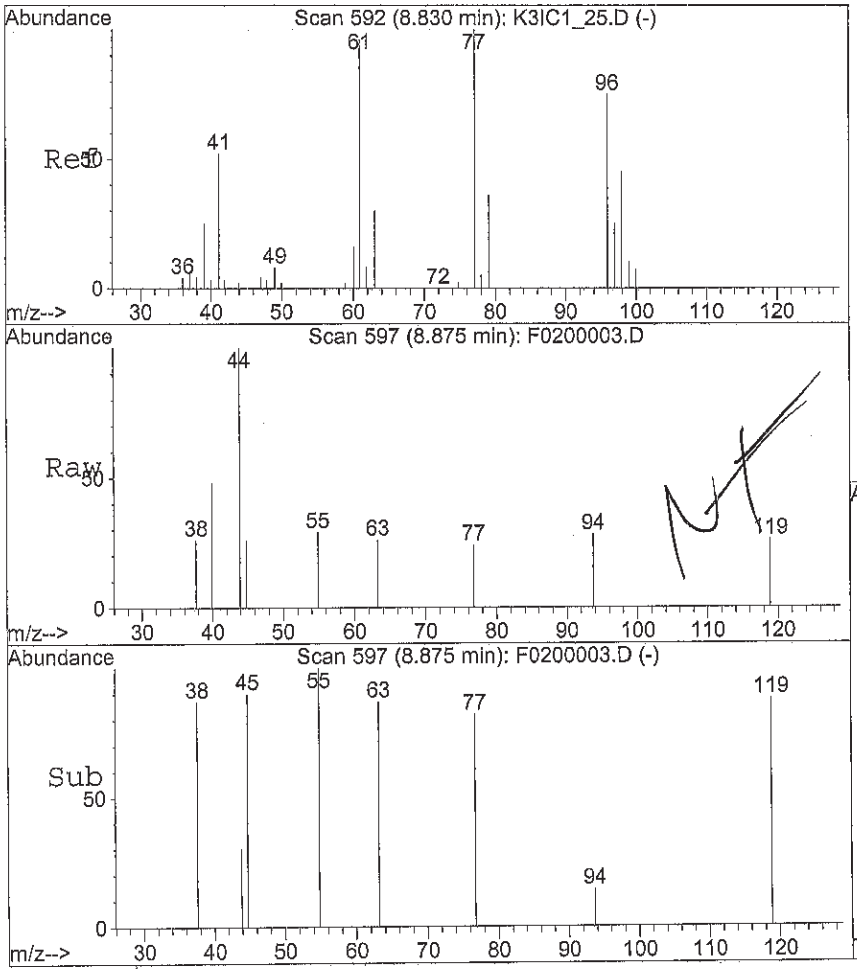


#18
1,1-Dichloroethane
Concen: 0.05 ug/L
RT: 7.99 min Scan# 492
Delta R.T. -0.06 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 63 Resp: 328

Ion	Ratio	Lower	Upper
63	100		
65	124.1	25.8	38.8#

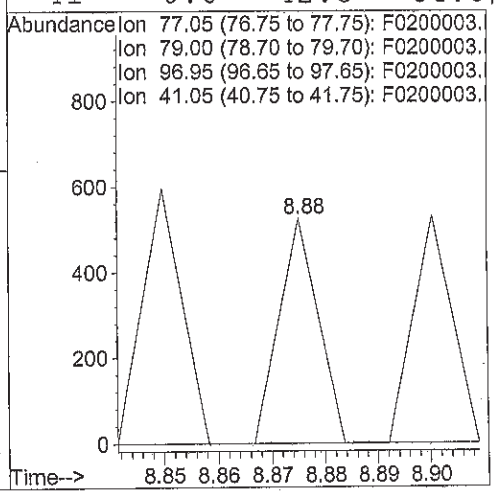


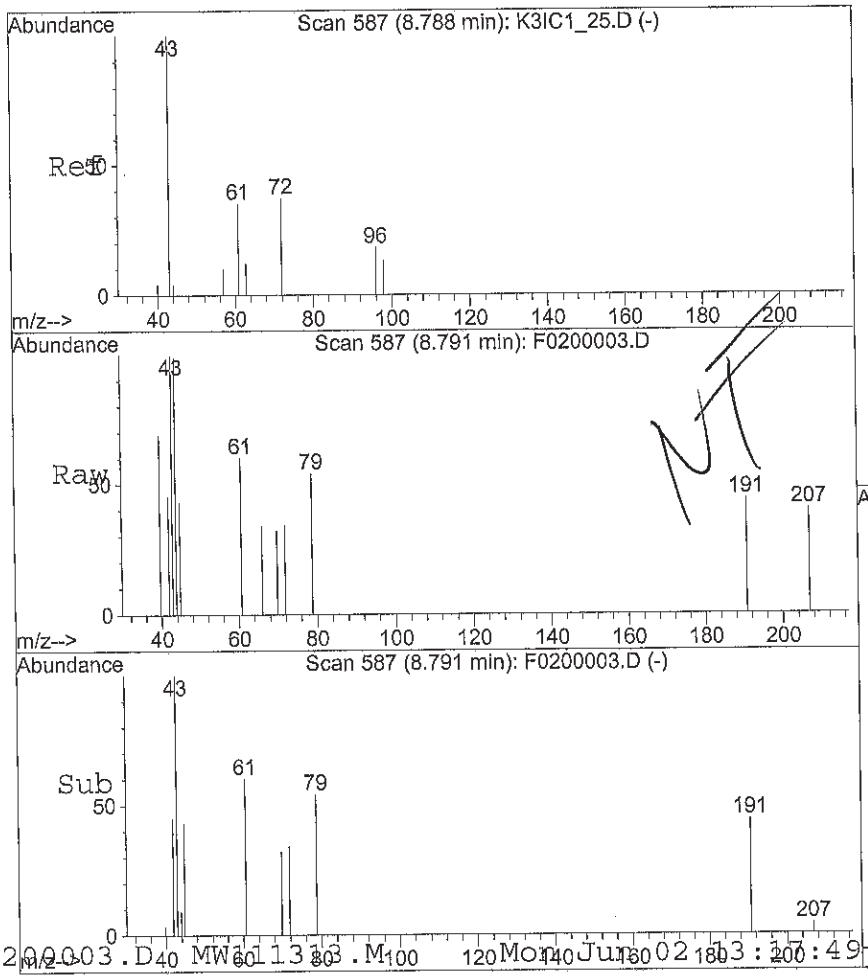


#20
2,2-Dichloropropane
Concen: 0.05 ug/L
RT: 8.88 min Scan# 597
Delta R.T. 0.05 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 77 Resp: 266

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

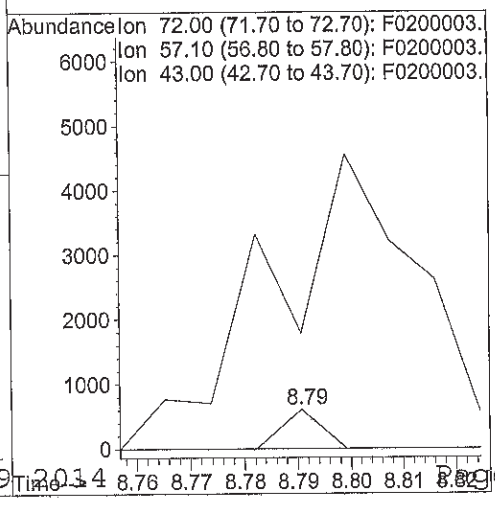


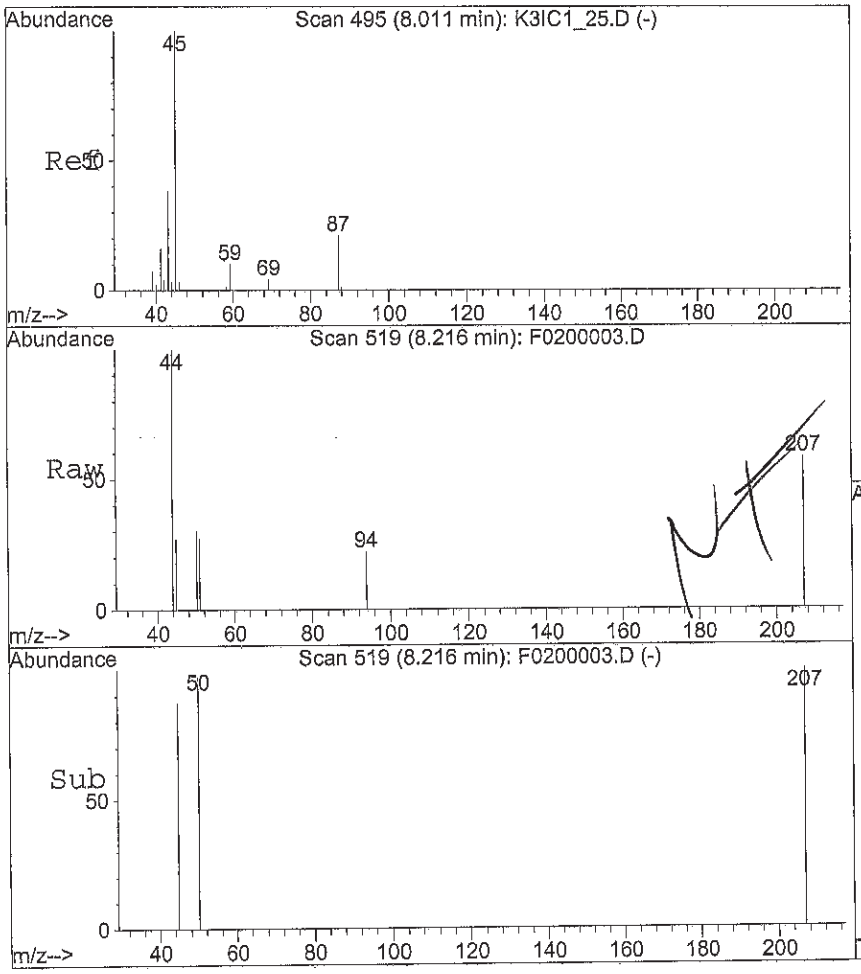


#21
(MEK) 2-Butanone
Concen: 0.79 ug/L
RT: 8.79 min Scan# 587
Delta R.T. 0.00 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 72 Resp: 309

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	3239.8	314.2	471.2#

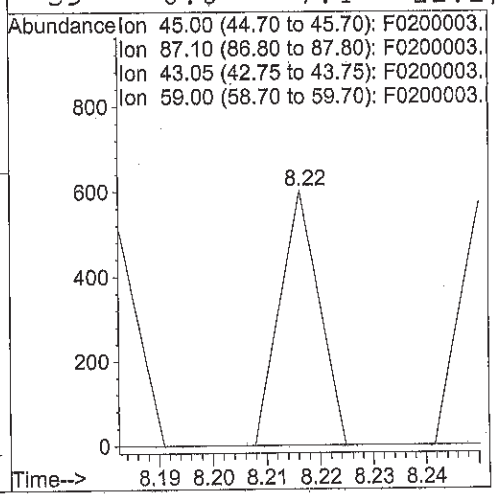


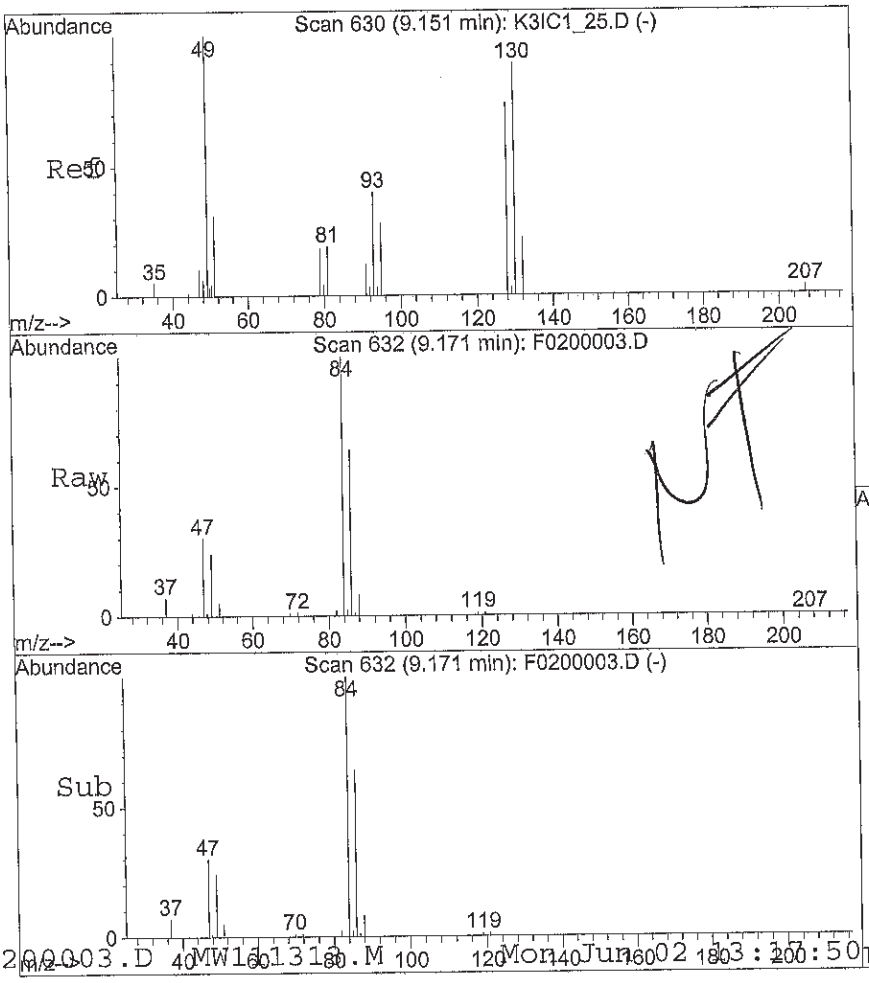


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 8.22 min Scan# 519
Delta R.T. 0.21 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 45 Resp: 305

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

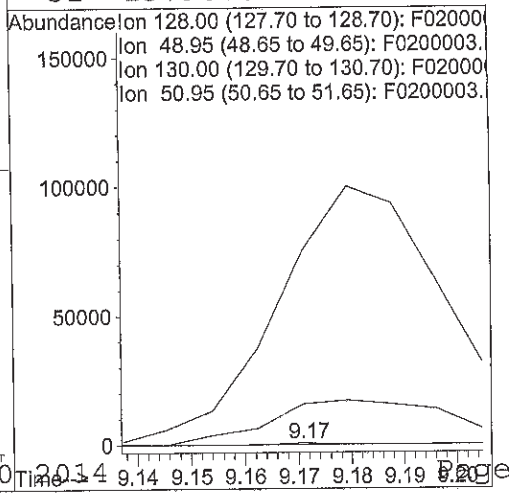


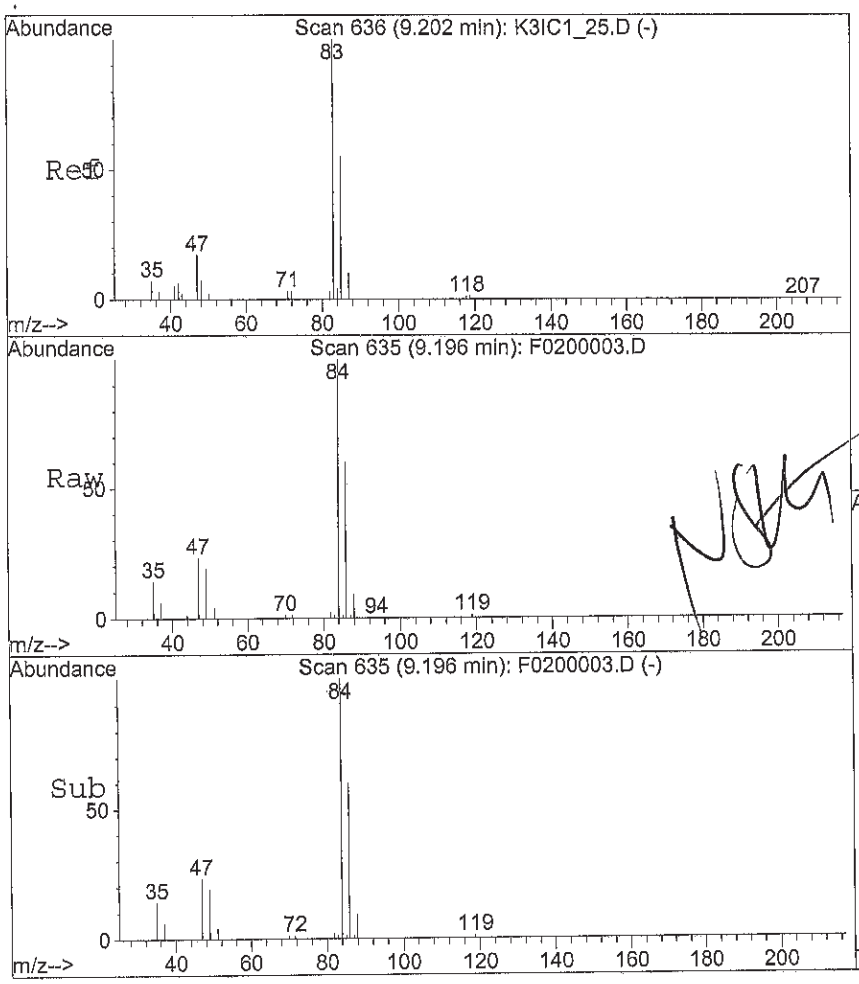


#23
Bromochloromethane
Concen: 0.17 ug/L
RT: 9.17 min Scan# 632
Delta R.T. 0.02 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:128 Resp: 310

Ion	Ratio	Lower	Upper
128	100		
49	72744.5	117.4	176.0#
130	0.0	111.0	166.6#
51	13790.6	48.0	72.0#

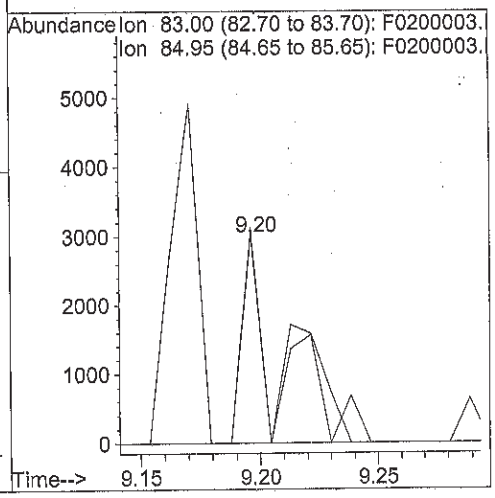


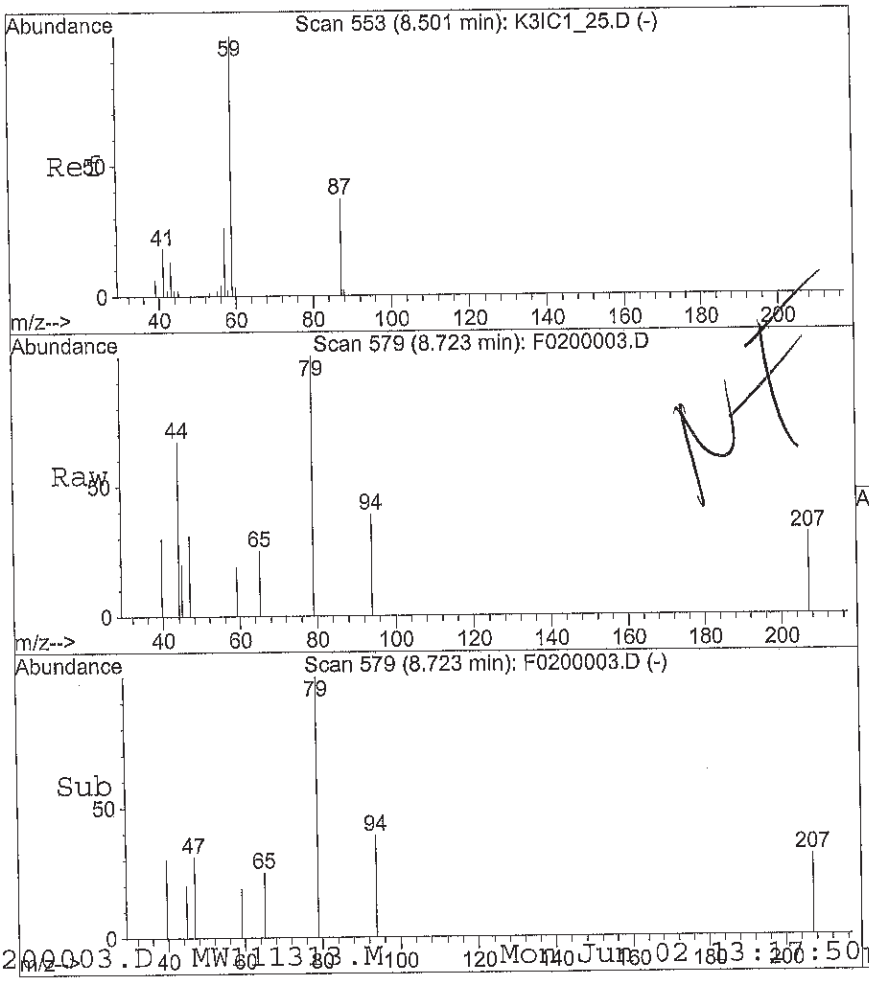


#24
Chloroform
Concen: 0.46 ug/L
RT: 9.20 min Scan# 635
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 83 Resp: 3340

Ion	Ratio	Lower	Upper
83	100		
85	47.3	51.8	77.6#

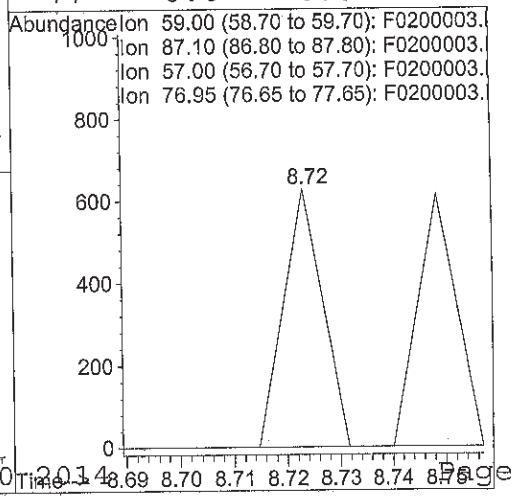


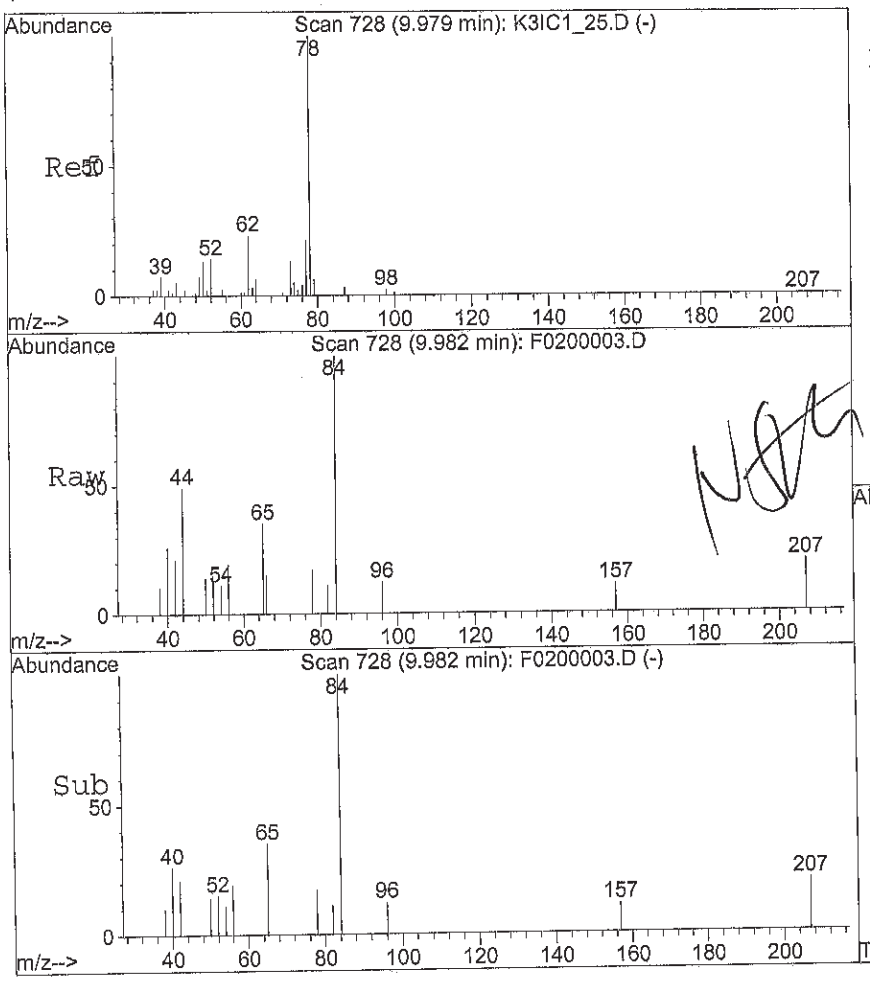


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.72 min Scan# 579
Delta R.T. 0.22 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 59 Resp: 319

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

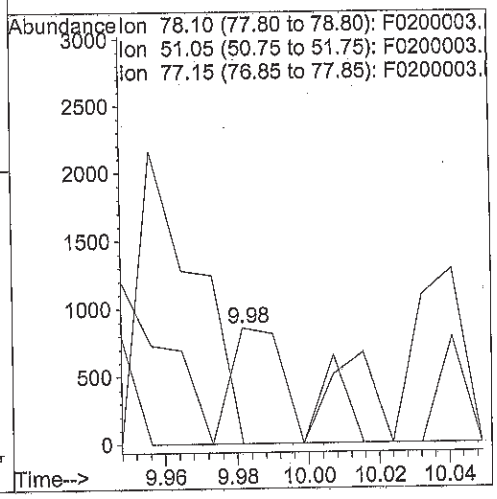


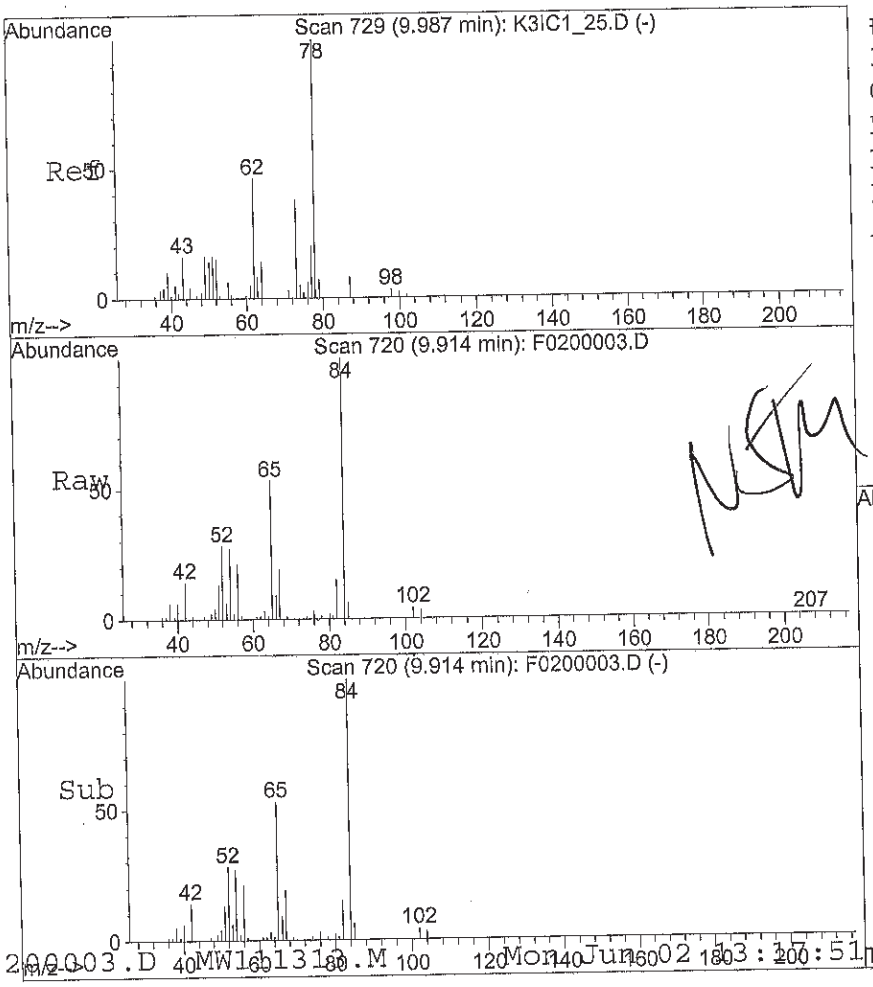


#31
Benzene
Concen: 0.09 ug/L
RT: 9.98 min Scan# 728
Delta R.T. 0.00 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 78 Resp: 1177

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

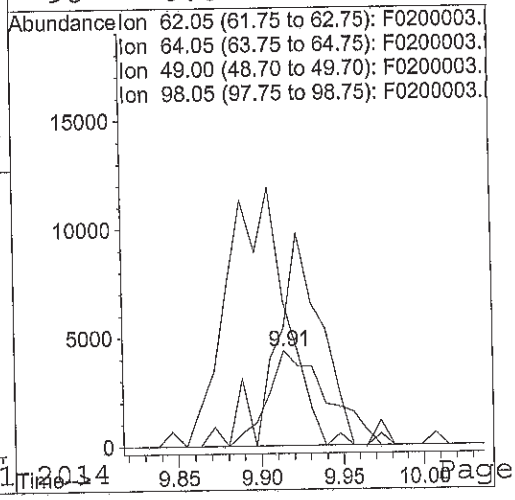


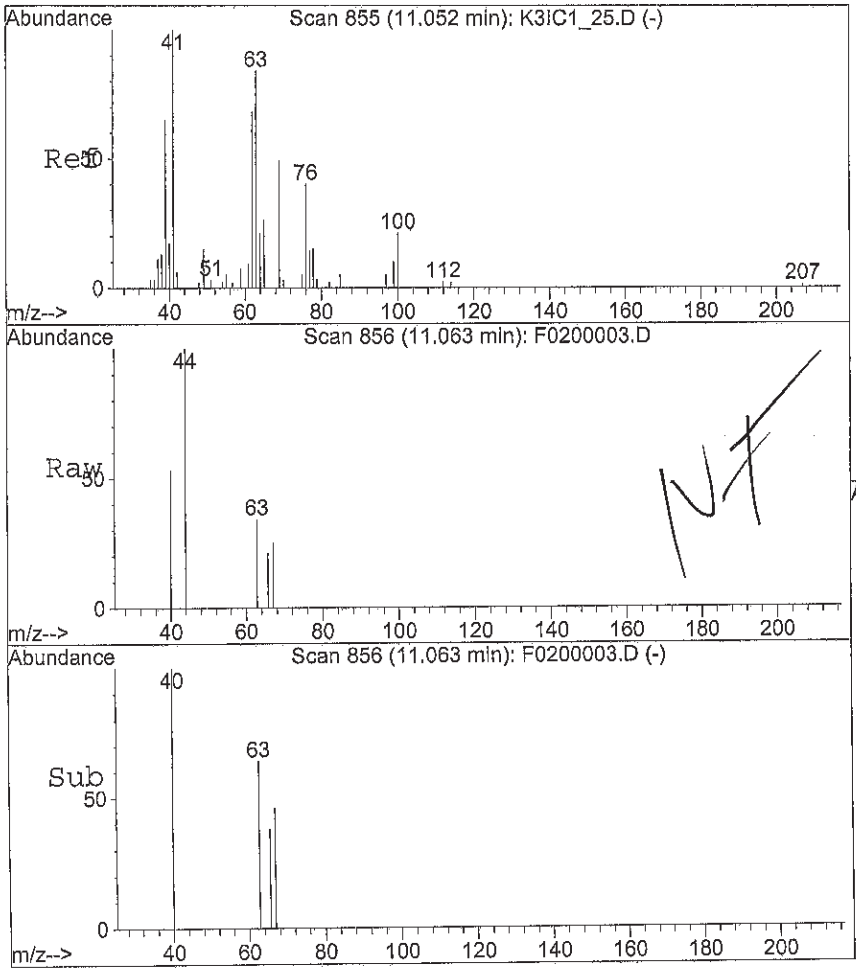


#32
1,2-Dichloroethane
Concen: 2.37 ug/L
RT: 9.91 min Scan# 720
Delta R.T. -0.07 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 62 Resp: 11006

Ion	Ratio	Lower	Upper
62	100		
64	172.3	28.0	42.0#
49	266.9	28.5	42.7#
98	0.0	6.2	9.4#

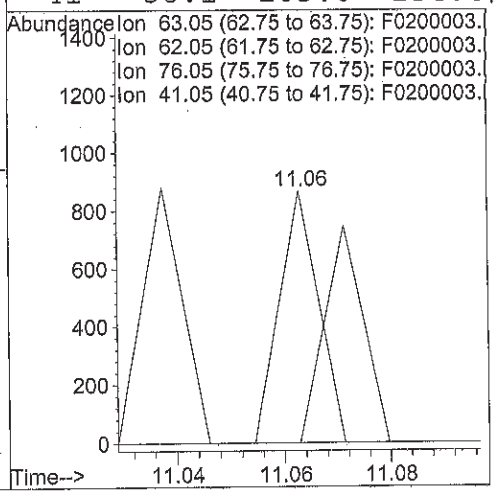


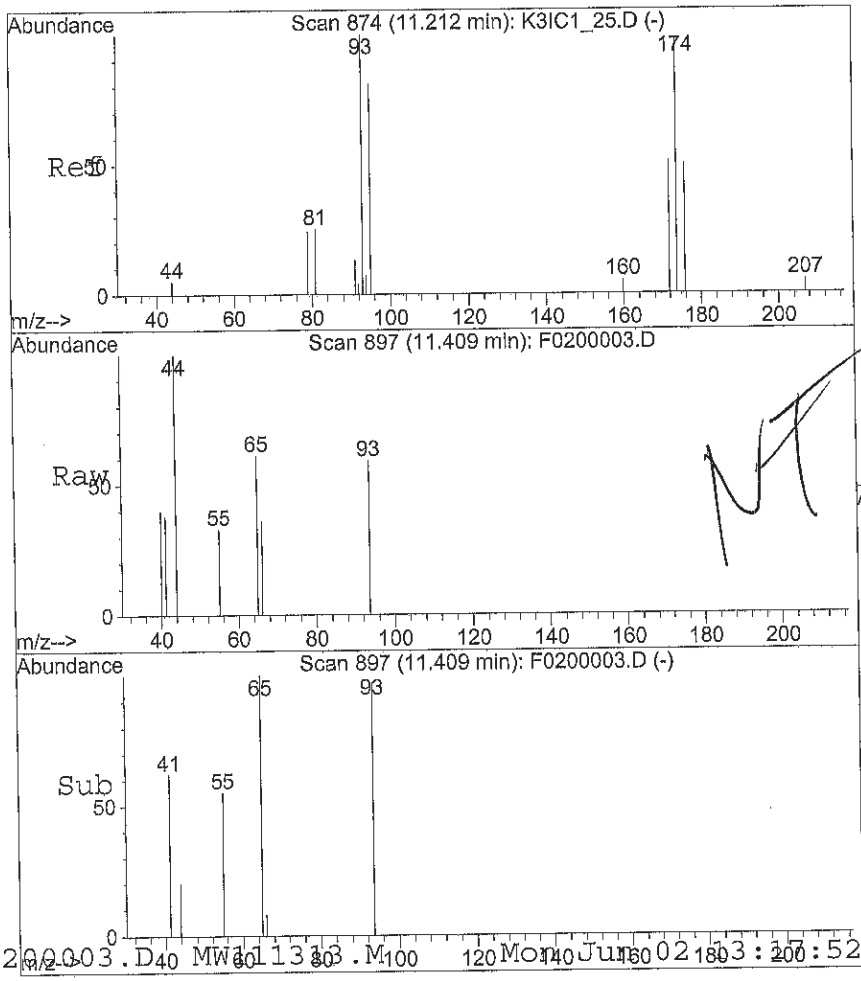


#34
1,2-Dichloropropane
Concen: 0.14 ug/L
RT: 11.06 min Scan# 856
Delta R.T. 0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 63 Resp: 439

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	86.1	103.0	154.6#

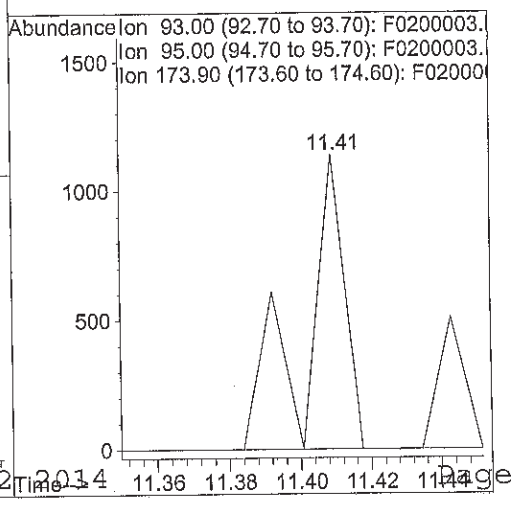


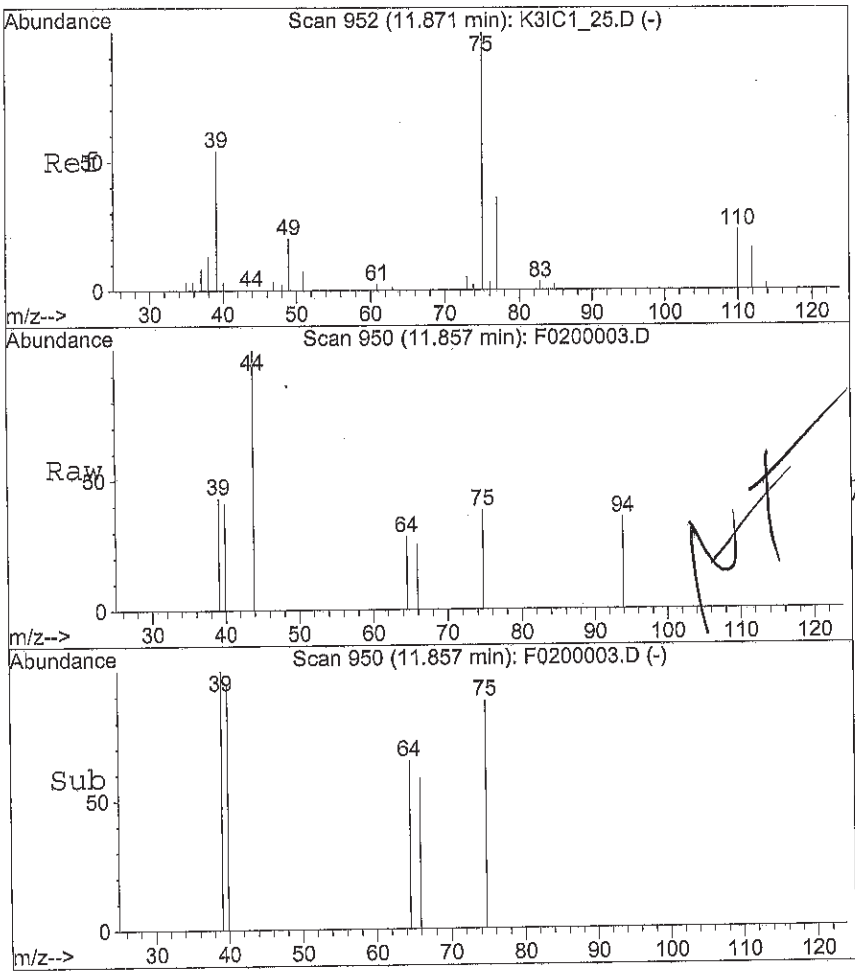


#35
Dibromomethane
Concen: 0.36 ug/L
RT: 11.41 min Scan# 897
Delta R.T. 0.20 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 93 Resp: 884

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

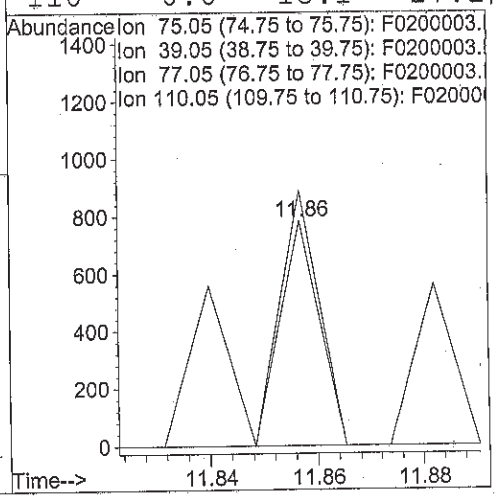


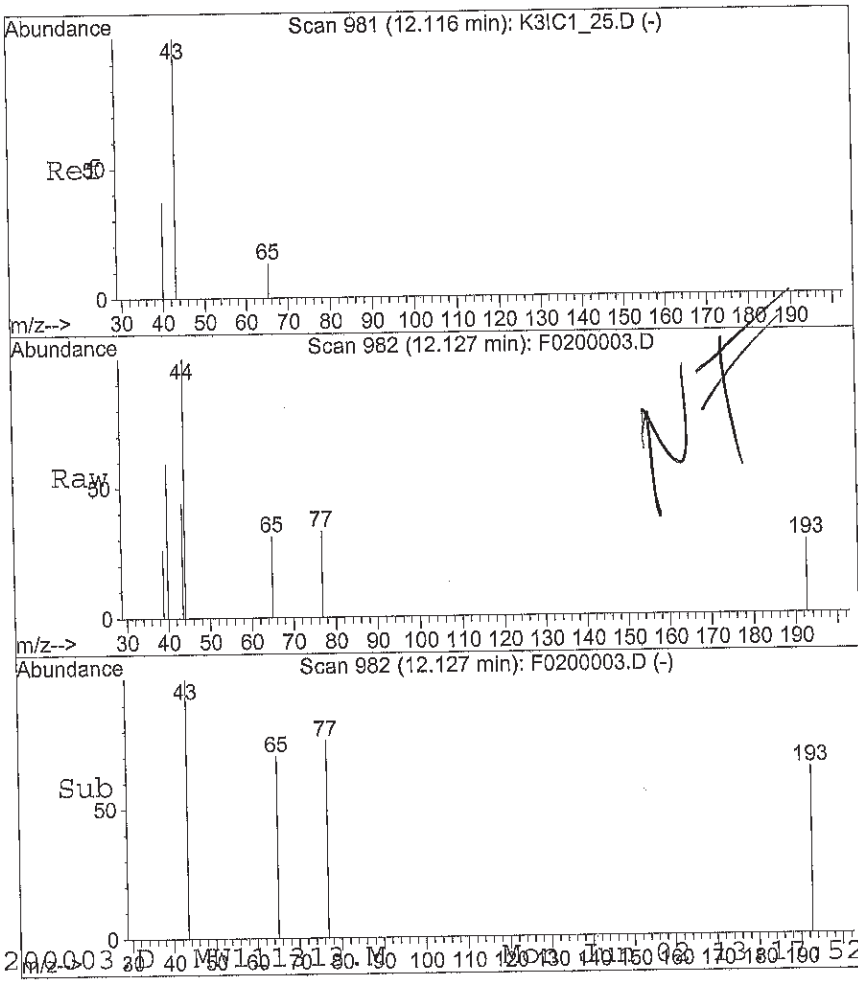


#37
cis-1,3-Dichloropropene
Concen: 0.07 ug/L
RT: 11.86 min Scan# 950
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 75 Resp: 396

Ion	Ratio	Lower	Upper
75	100		
39	185.1	40.7	61.1#
77	0.0	28.8	43.2#
110	0.0	18.1	27.1#

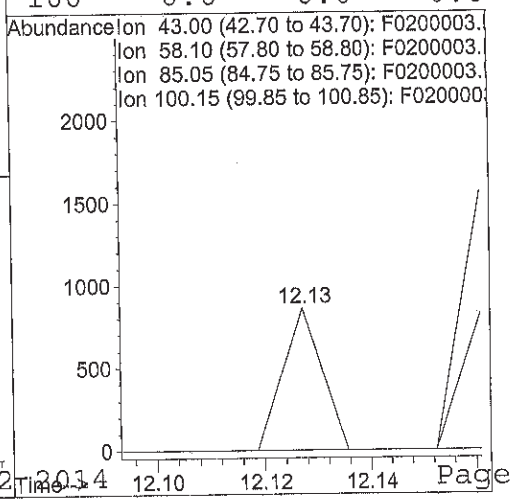


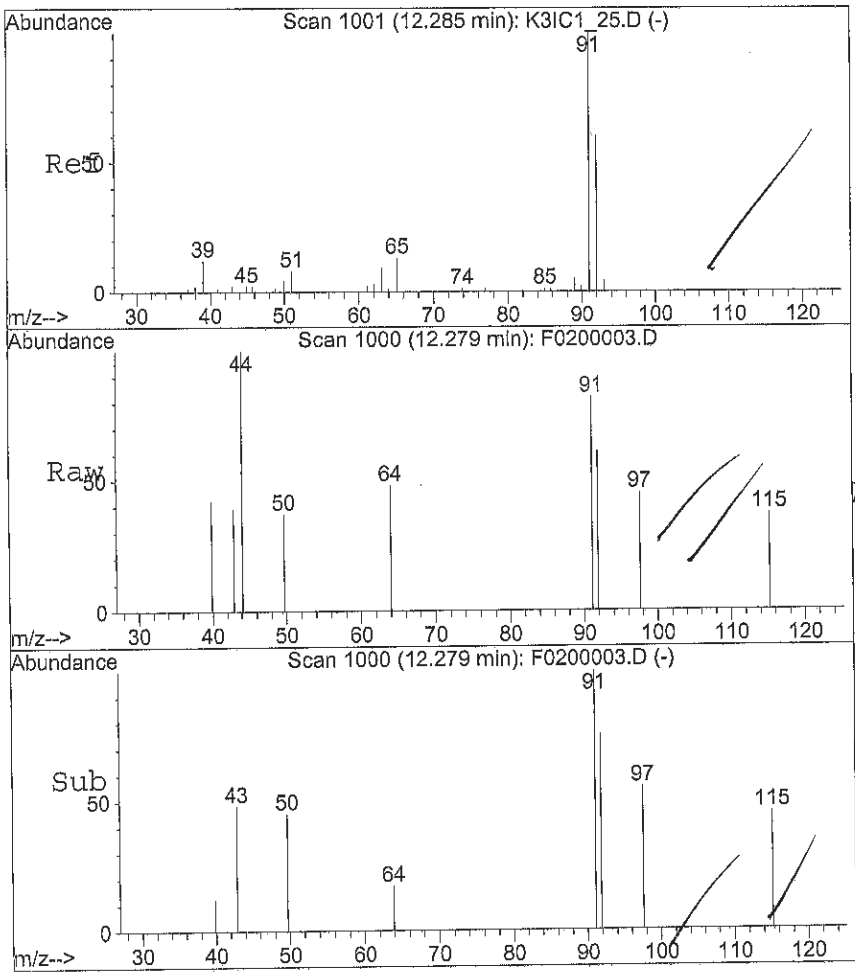


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.17 ug/L
RT: 12.13 min Scan# 982
Delta R.T. 0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 43 Resp: 435

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

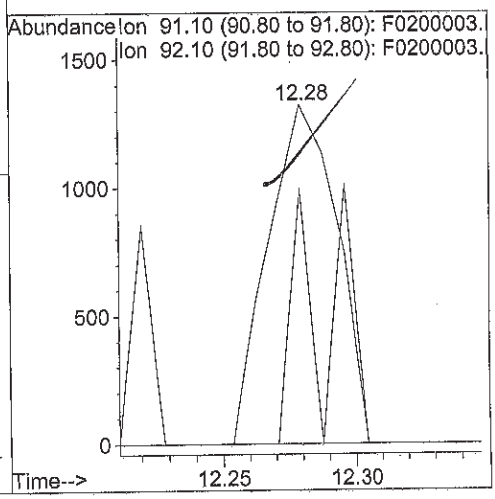


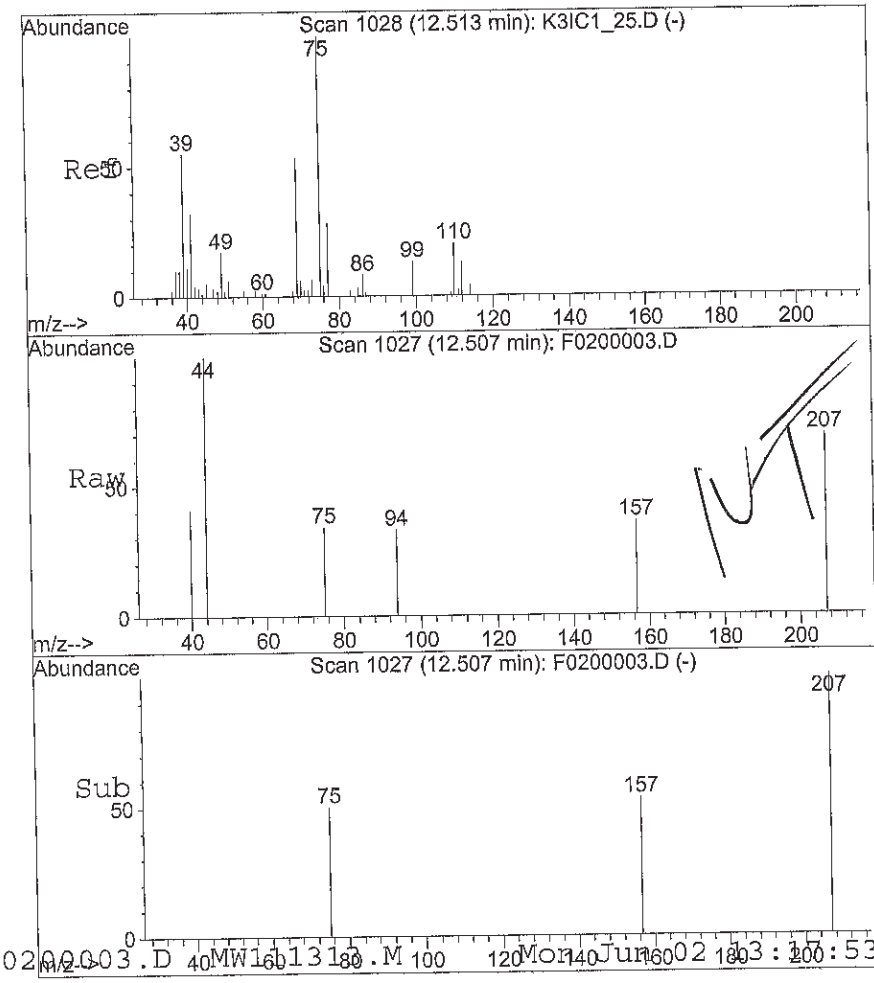


#41
Toluene
Concen: 0.14 ug/L
RT: 12.28 min Scan# 1000
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 91 Resp: 2379

Ion	Ratio	Lower	Upper
91	100		
92	42.8	47.4	71.0#

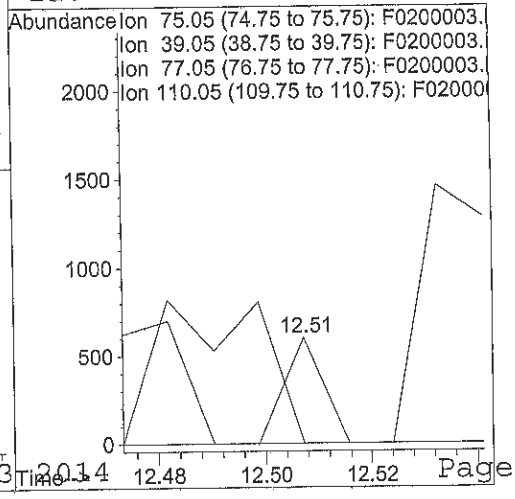


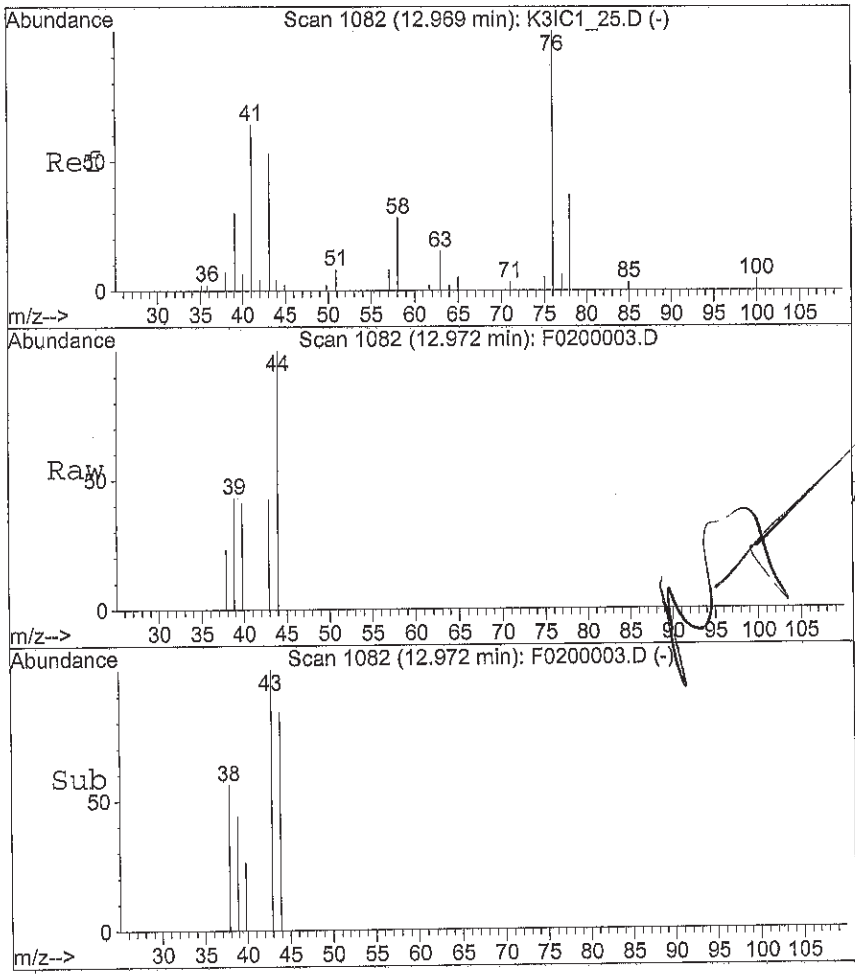


#42
trans-1,3-Dichloropropene
Concen: 0.05 ug/L
RT: 12.51 min Scan# 1027
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 75 Resp: 305

Ion	Ratio	Lower	Upper
75	100		
39	0.0	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

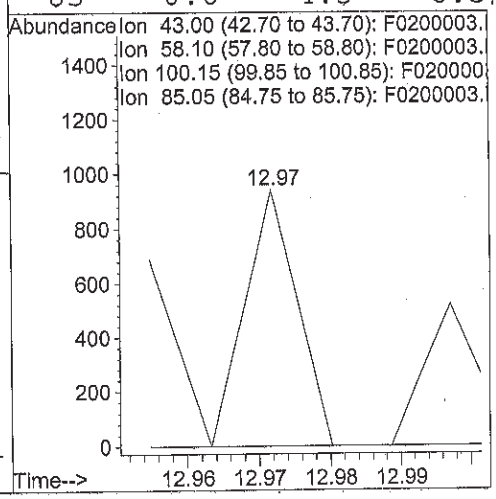


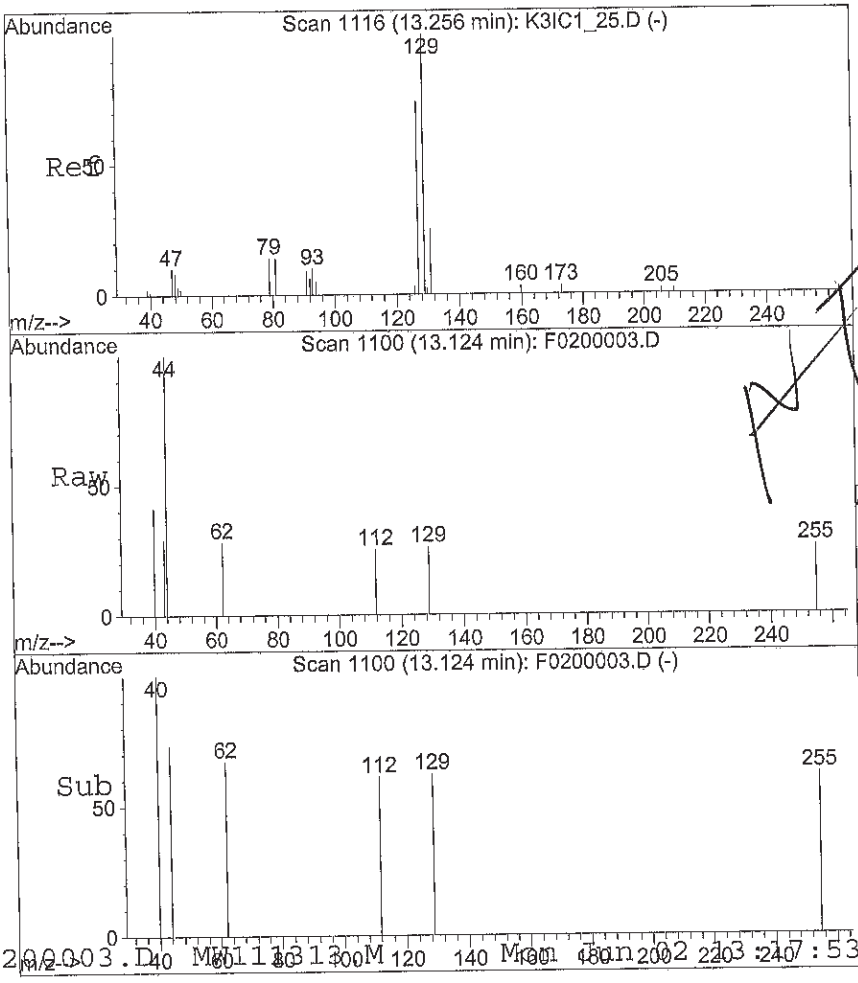


#46
2-Hexanone
Concen: 0.17 ug/L
RT: 12.97 min Scan# 1082
Delta R.T. 0.00 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 43 Resp: 476

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

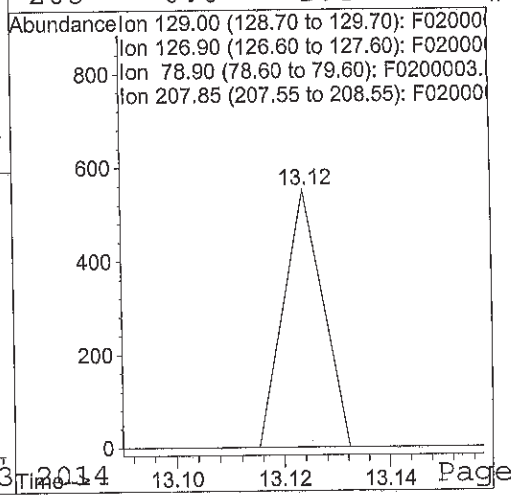


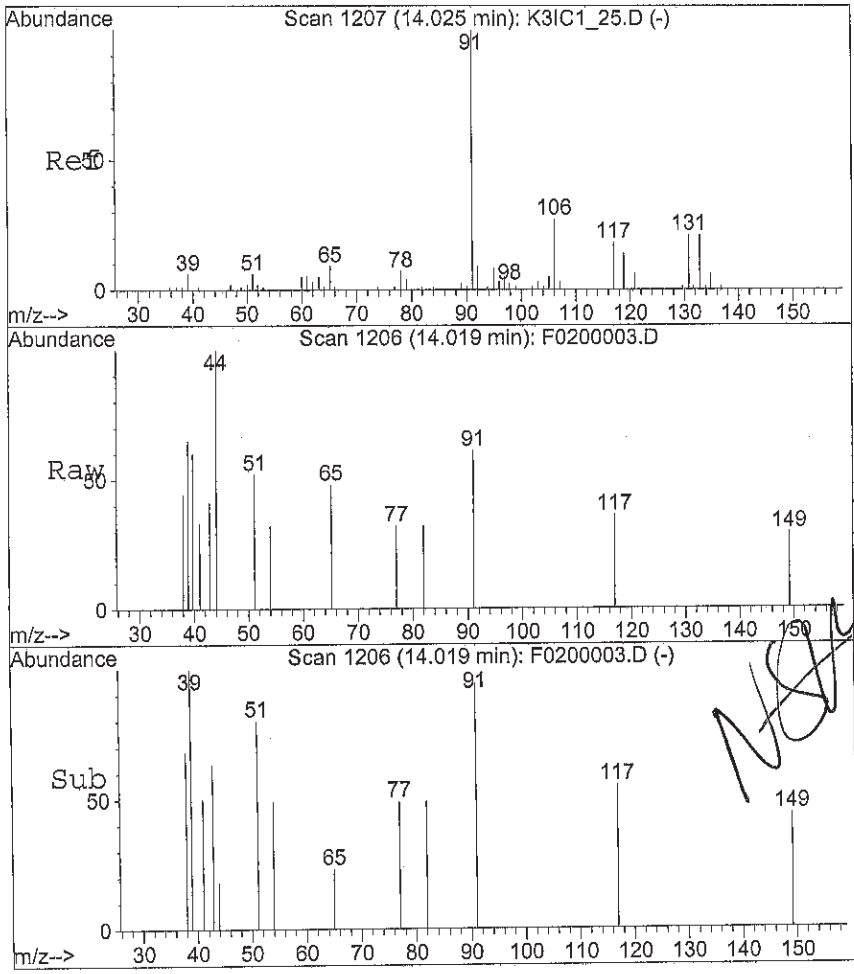


#47
Dibromochloromethane
Concen: 0.06 ug/L
RT: 13.12 min Scan# 1100
Delta R.T. -0.13 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:129 Resp: 280

Ion	Ratio	Lower	Upper
129	100		
127	0.0	61.6	92.4#
79	0.0	10.7	16.1#
208	0.0	1.4	2.0#

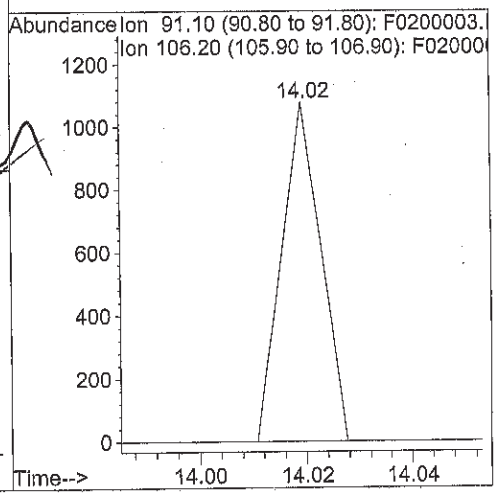


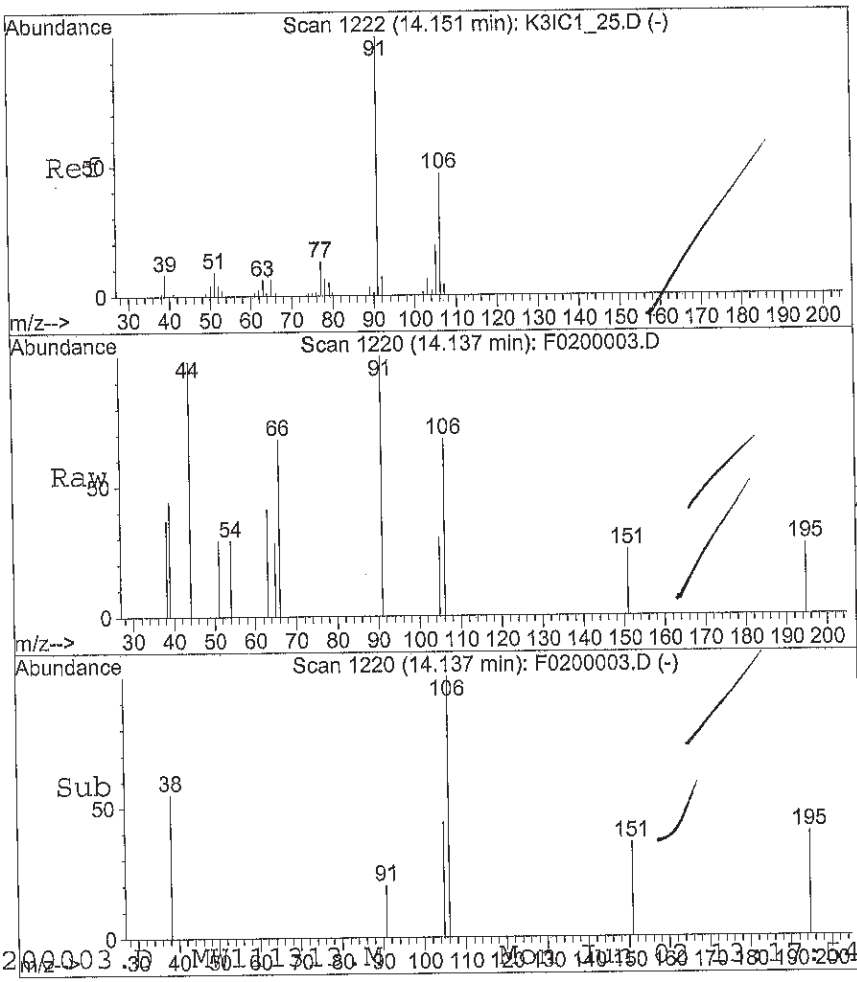


#51
Ethylbenzene
Concen: 0.03 ug/L
RT: 14.02 min Scan# 1206
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 91 Resp: 546

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

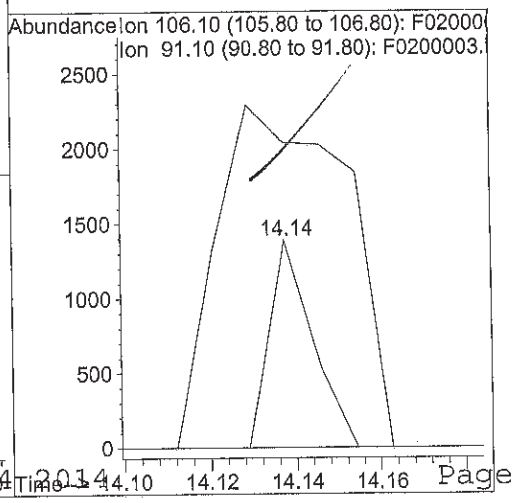


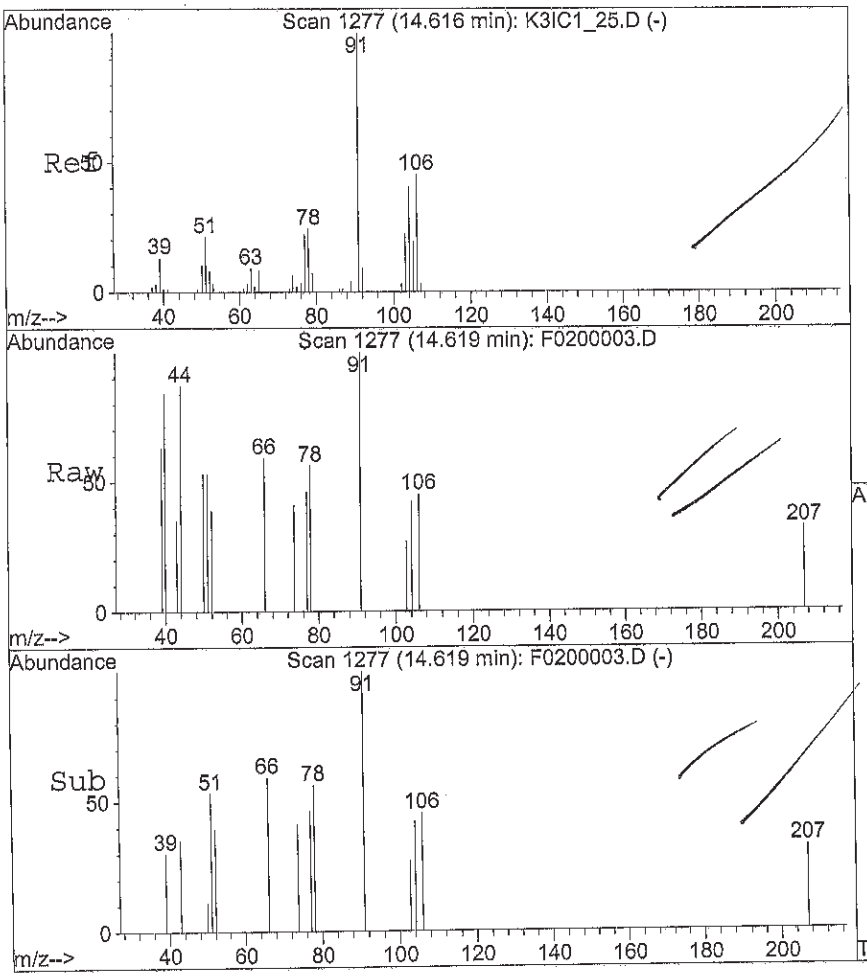


#52
m,p-Xylenes
Concen: 0.14 ug/L
RT: 14.14 min Scan# 1220
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:106 Resp: 974

Ion	Ratio	Lower	Upper
106	100		
91	495.4	177.1	265.7#

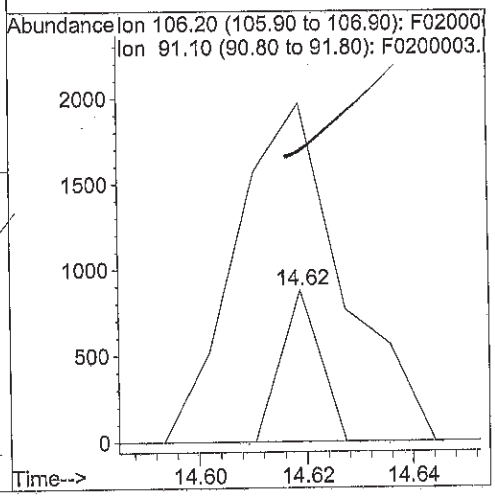


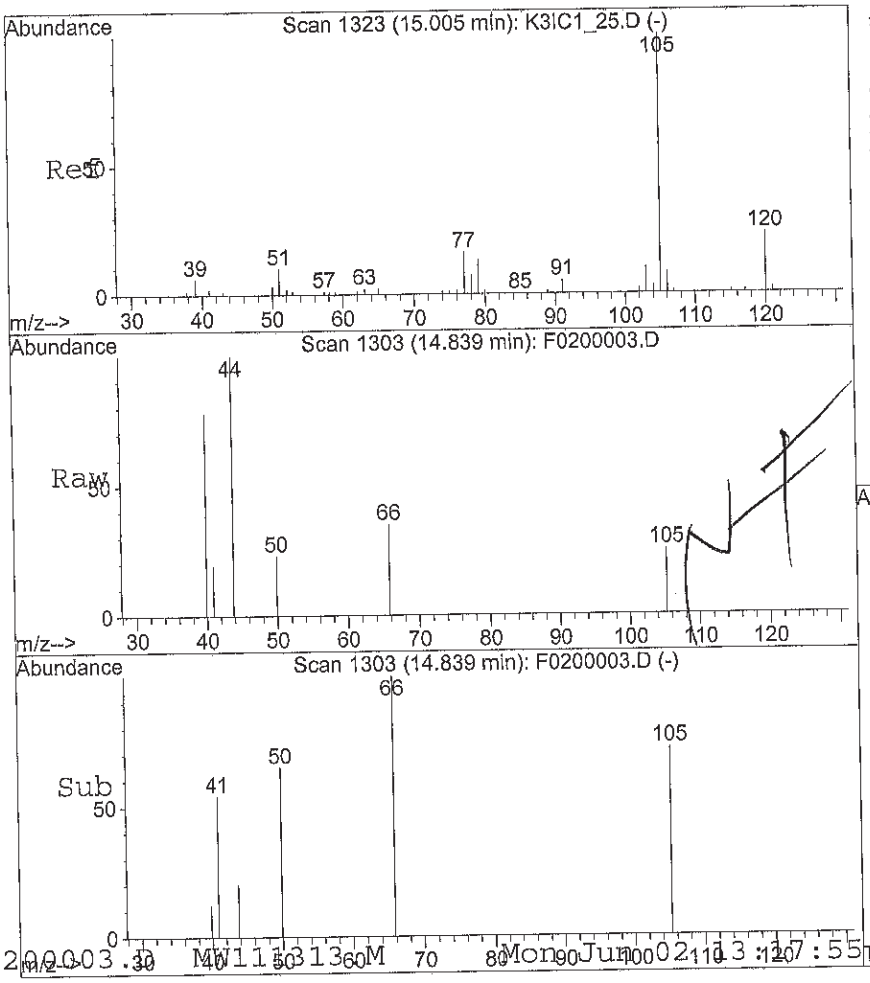


#53
o-Xylene
Concen: 0.06 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. 0.00 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:106 Resp: 444

Ion	Ratio	Lower	Upper
106	100		
91	614.0	179.0	268.6#

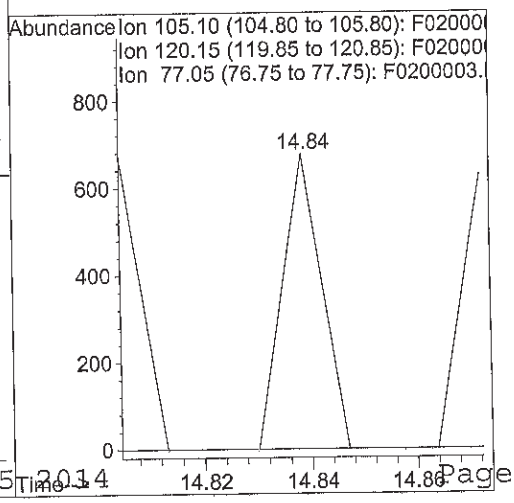


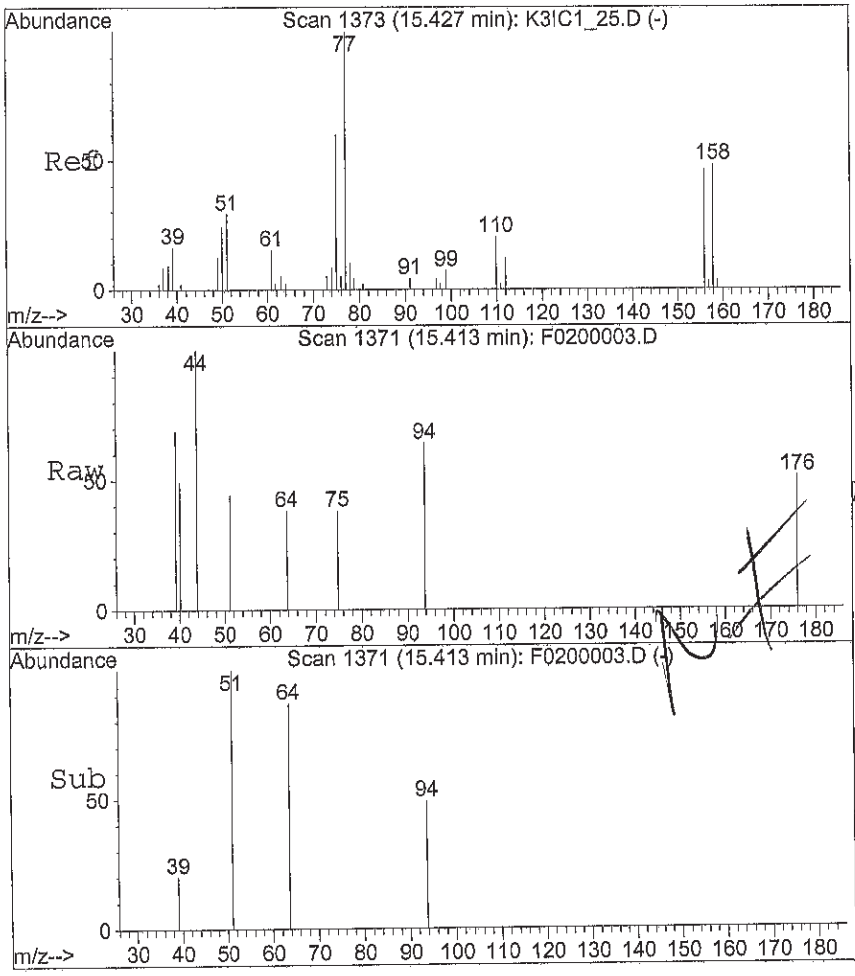


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 14.84 min Scan# 1303
Delta R.T. -0.17 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:105 Resp: 343

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

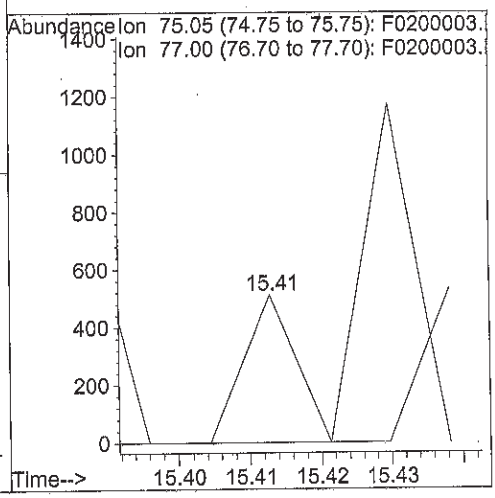


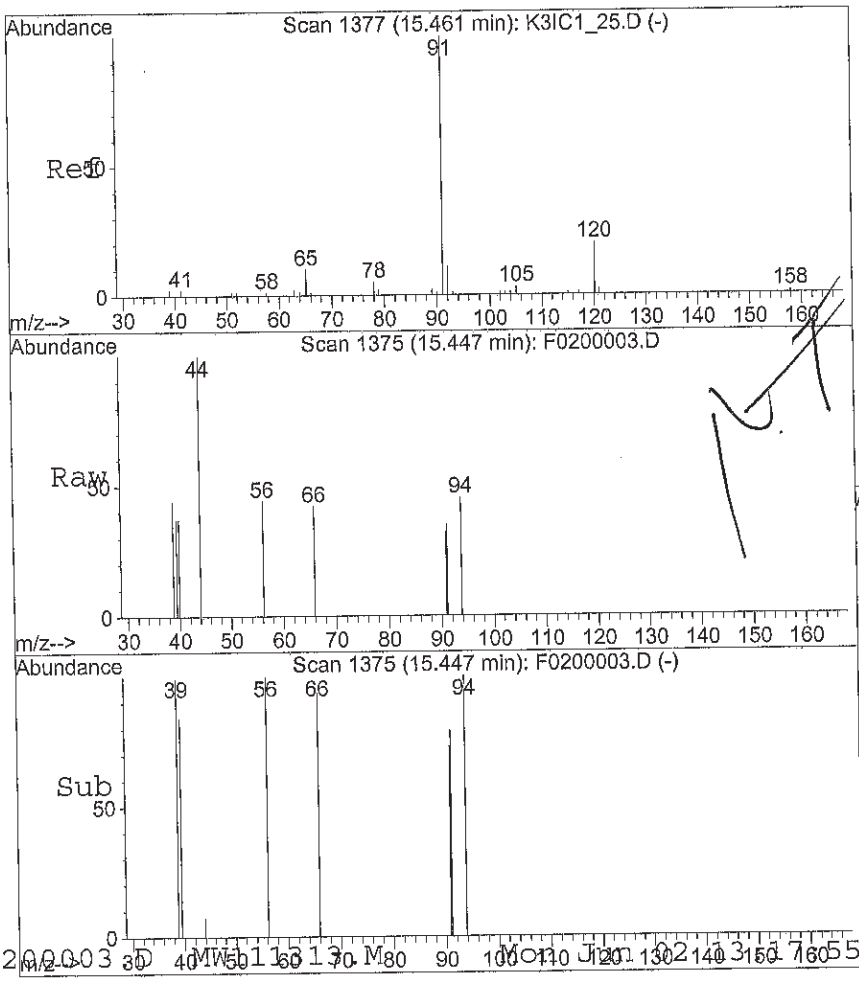


#57
1,2,3-Trichloropropane
Concen: 0.05 ug/L
RT: 15.41 min Scan# 1371
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 75 Resp: 259

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

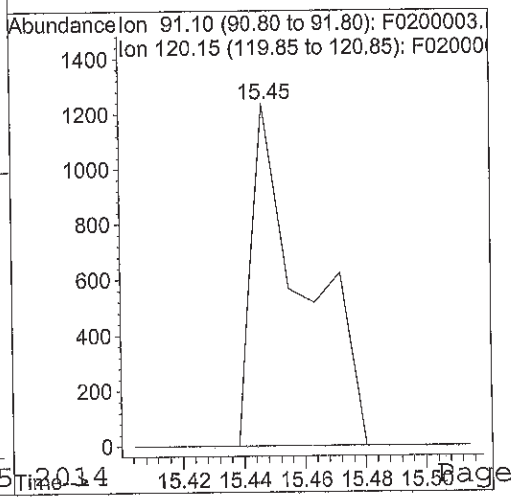


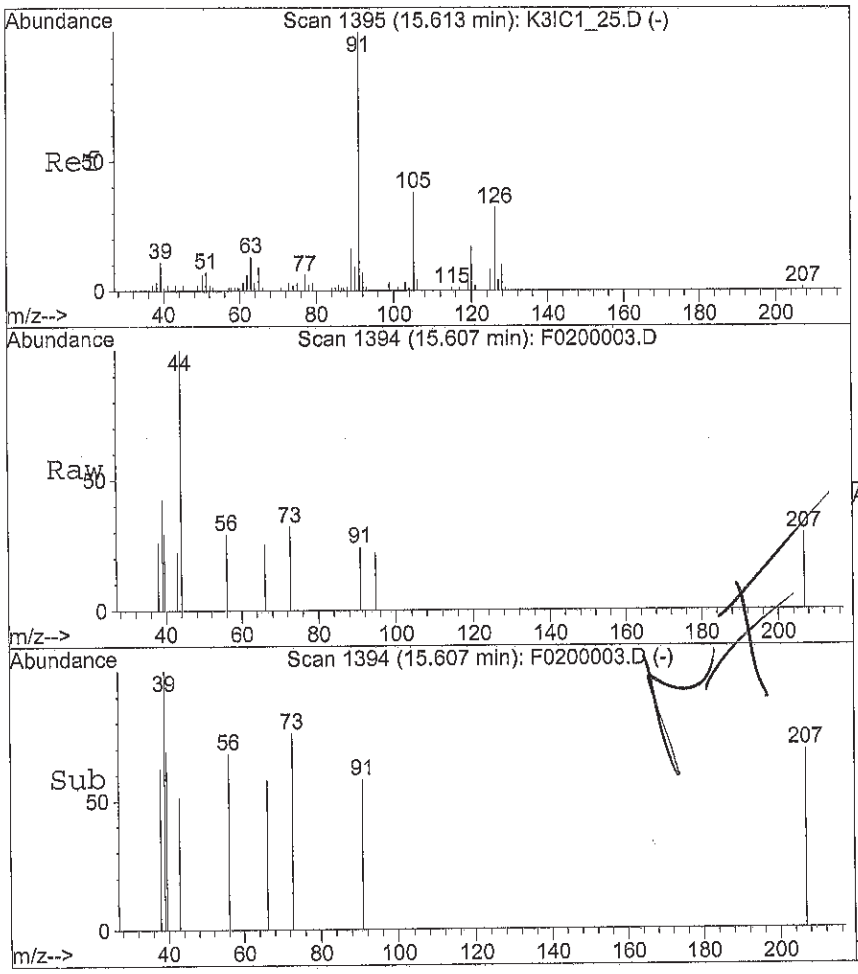


#62
n-Propylbenzene
Concen: 0.06 ug/L
RT: 15.45 min Scan# 1375
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 91 Resp: 1489

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

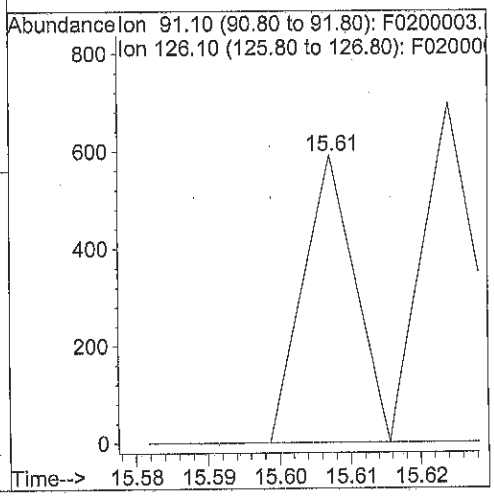


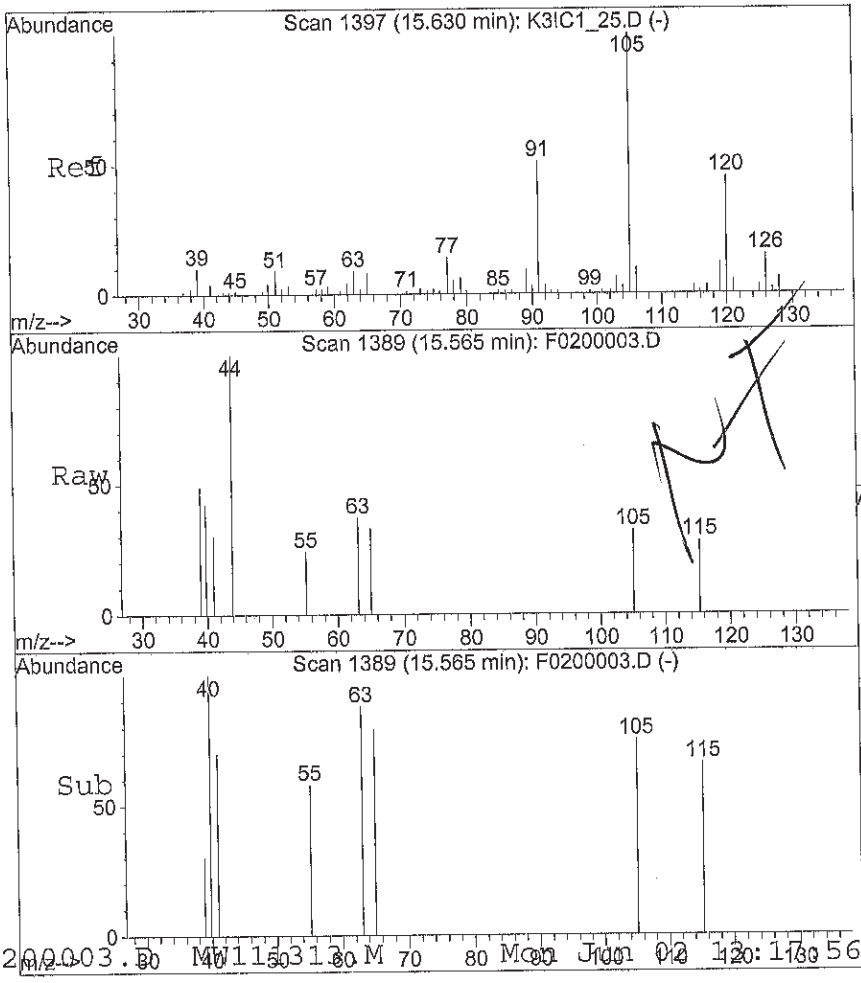


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.61 min Scan# 1394
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 91 Resp: 299

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

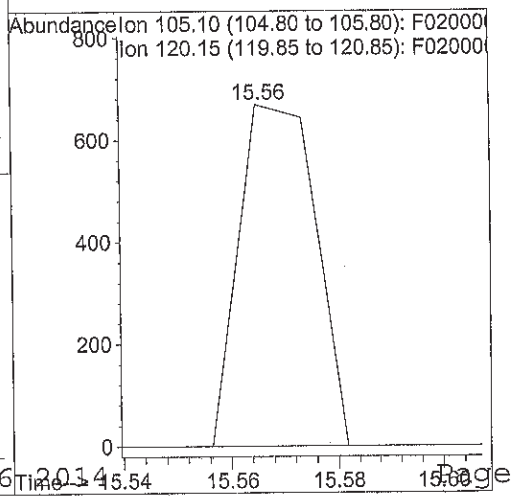


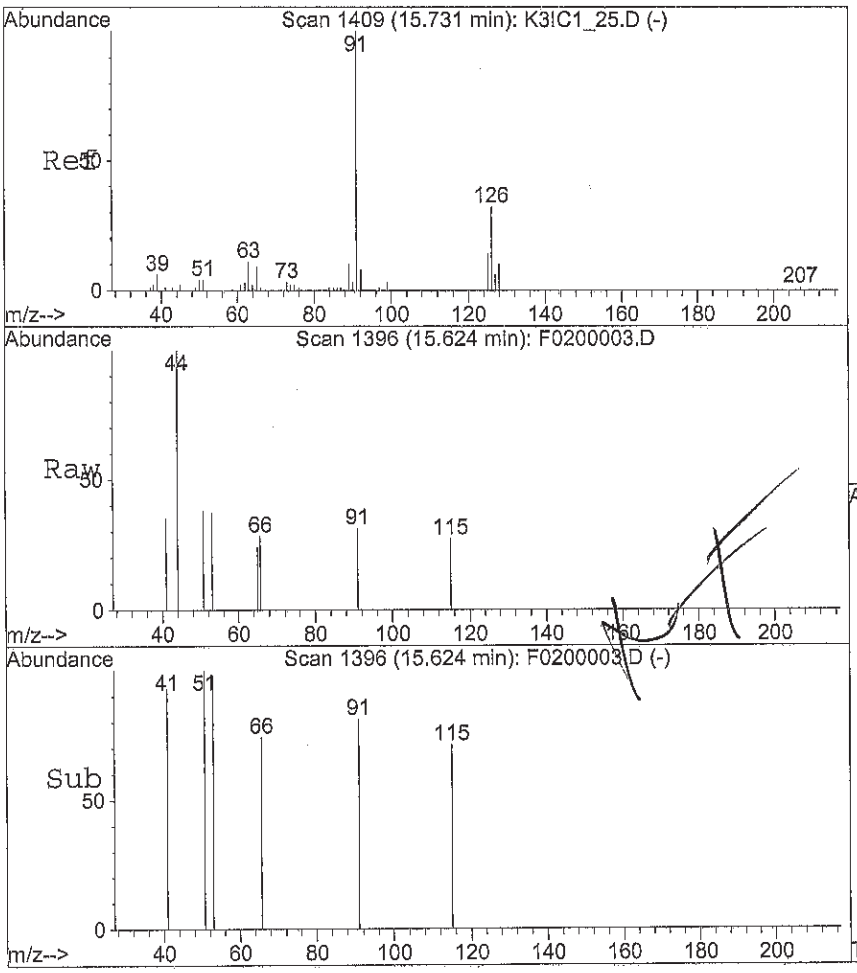


#64
1,3,5-Trimethylbenzene
Concen: 0.04 ug/L
RT: 15.56 min Scan# 1389
Delta R.T. -0.06 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:105 Resp: 665

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

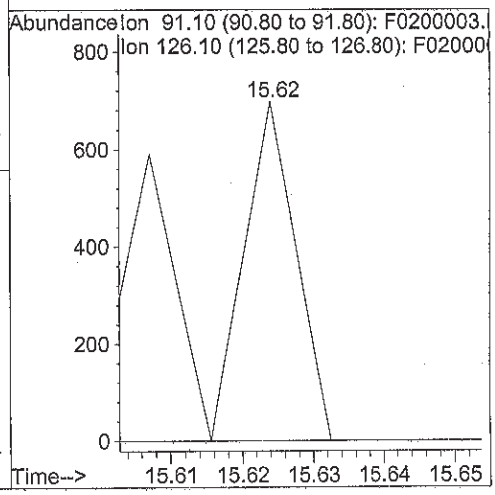


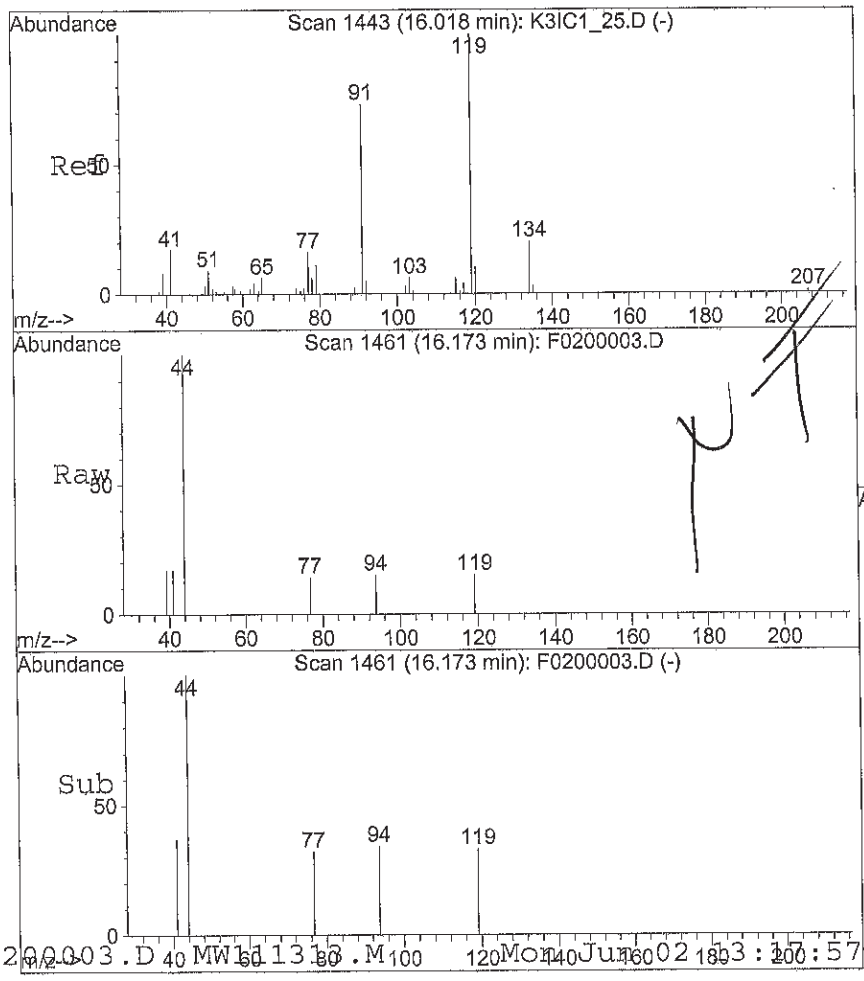


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.11 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 91 Resp: 353

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

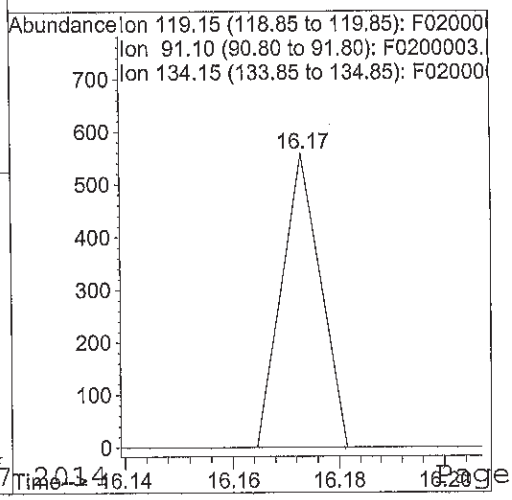


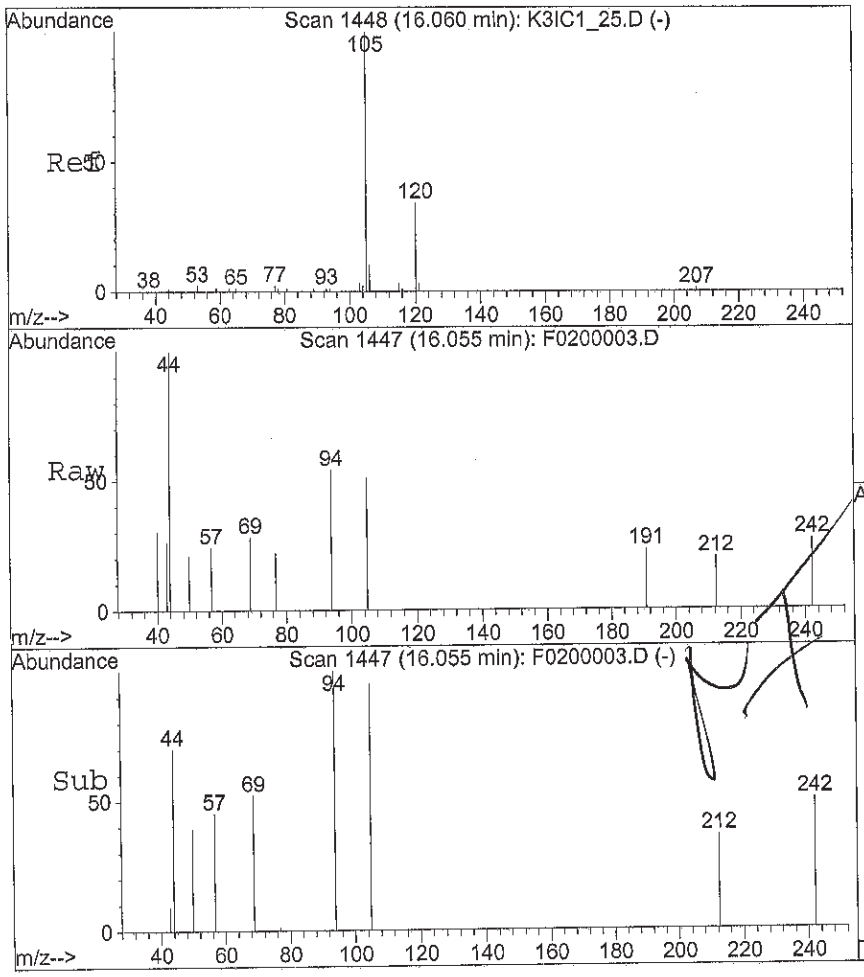


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.17 min Scan# 1461
Delta R.T. 0.15 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:119 Resp: 283

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

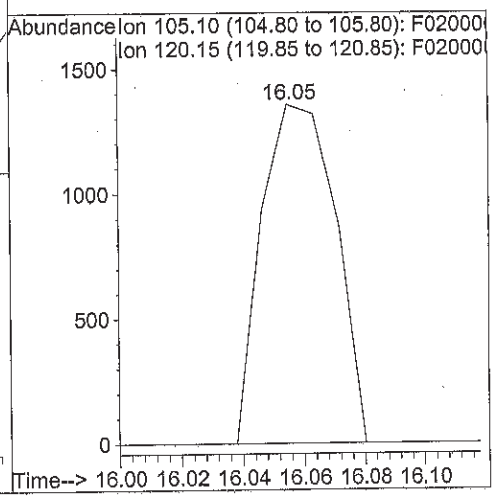


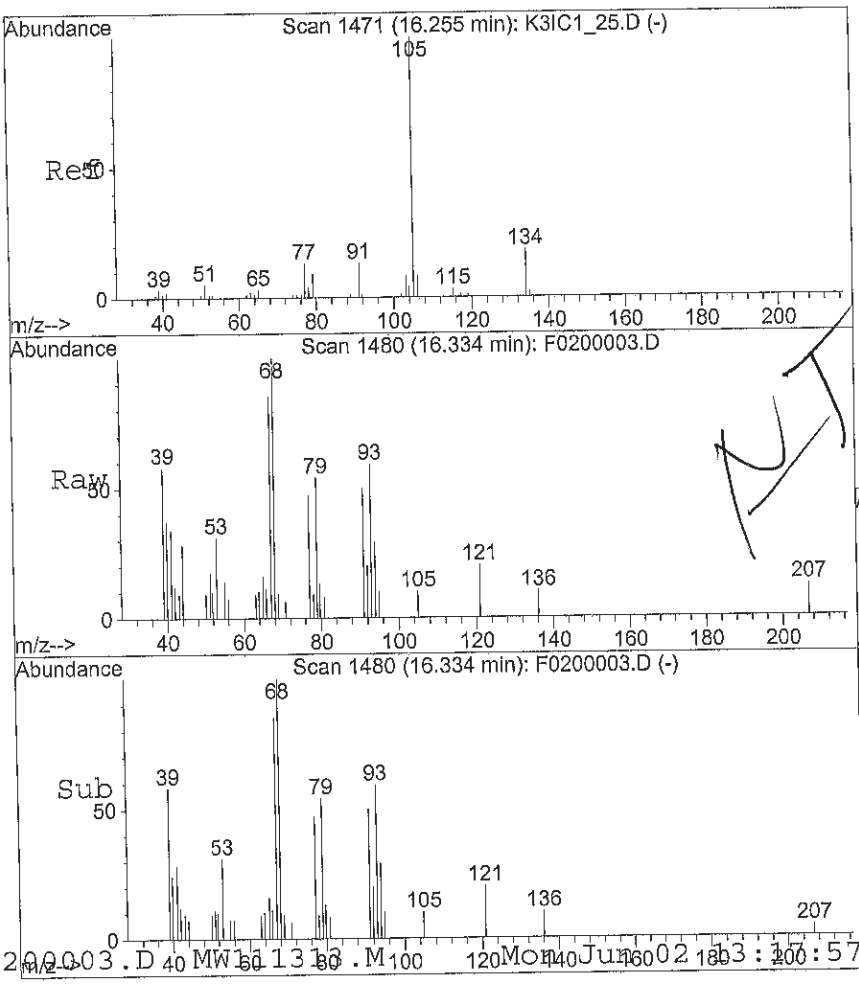


#67
1,2,4-Trimethylbenzene
Concen: 0.14 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:105 Resp: 2267

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

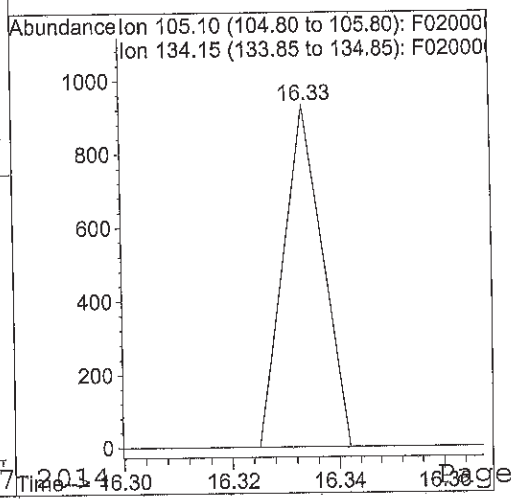


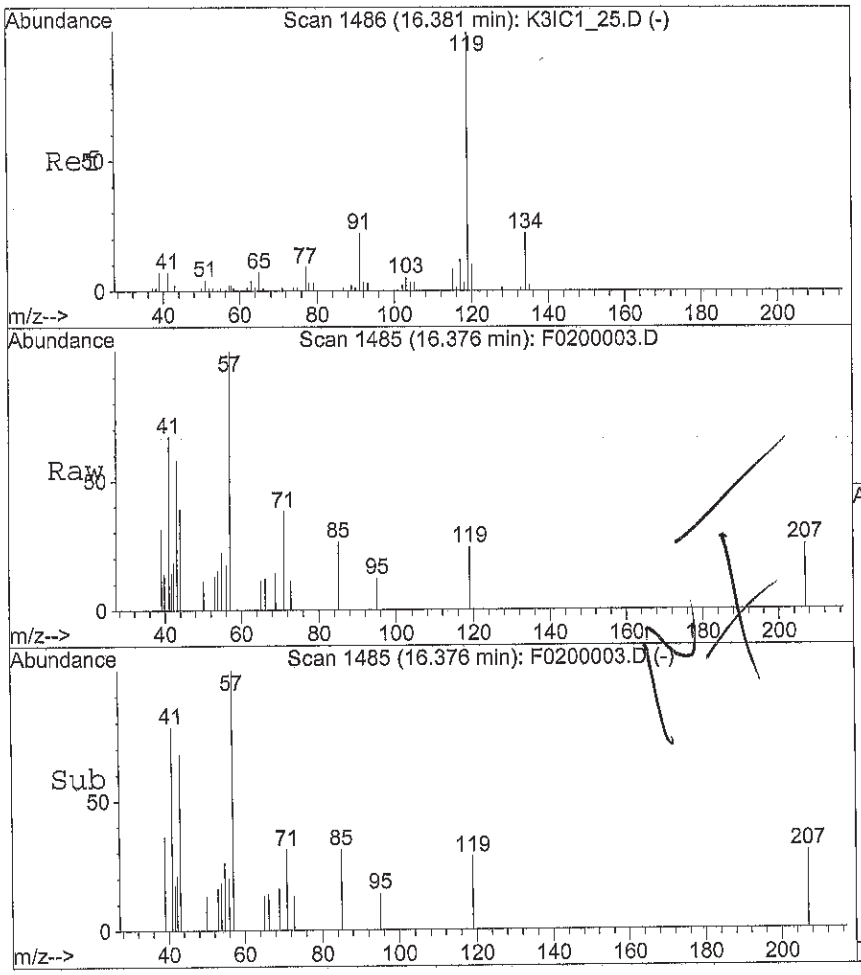


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:105 Resp: 472

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

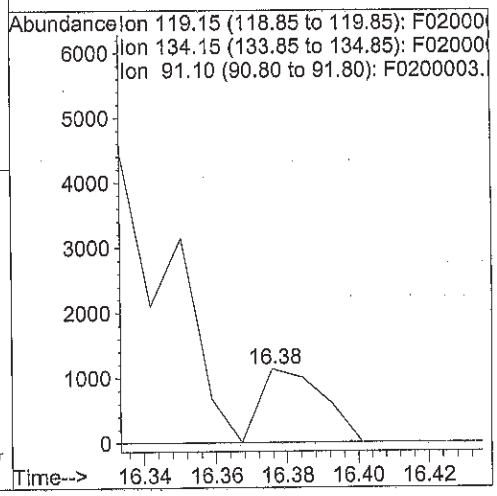


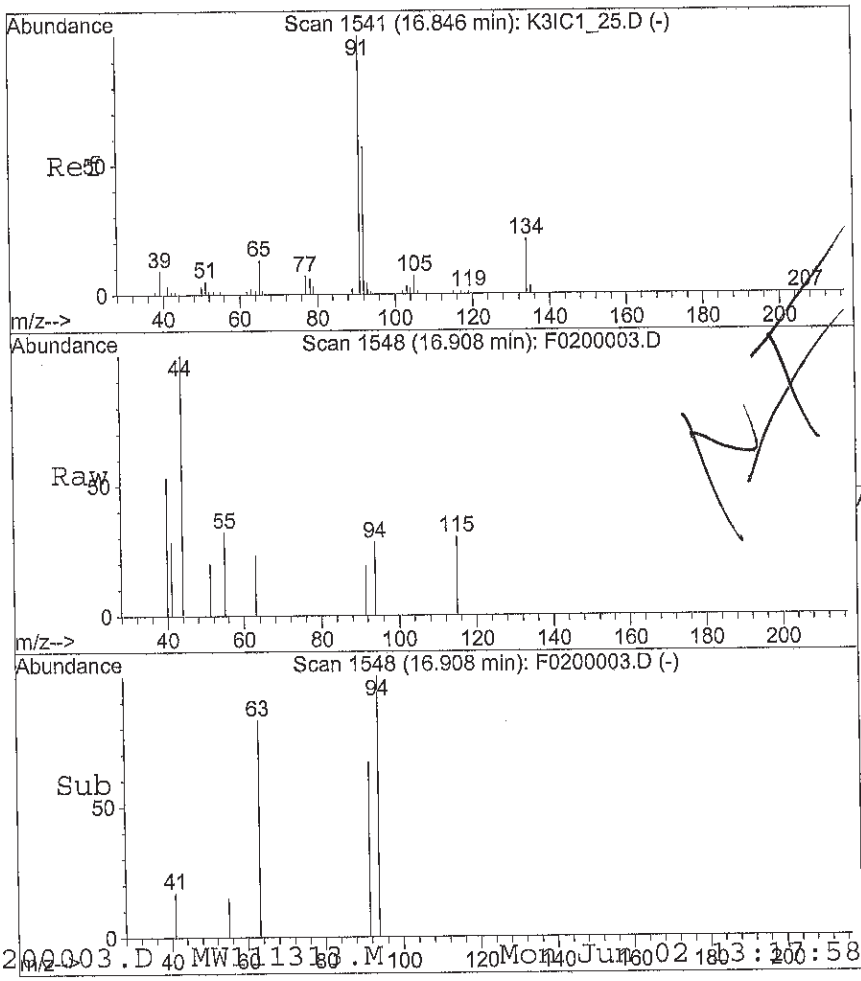


#69
p-Isopropyltoluene
Concen: 0.08 ug/L
RT: 16.38 min Scan# 1485
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:119 Resp: 1382

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

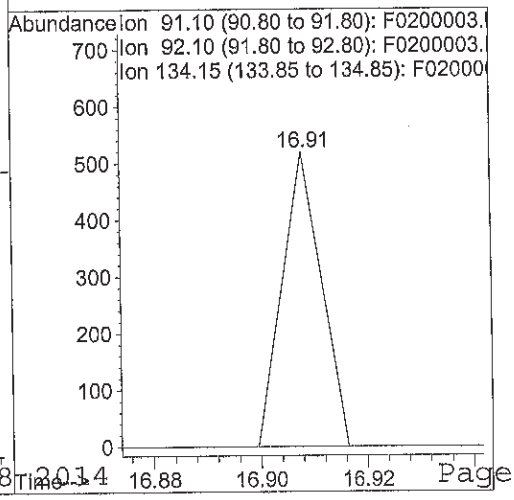


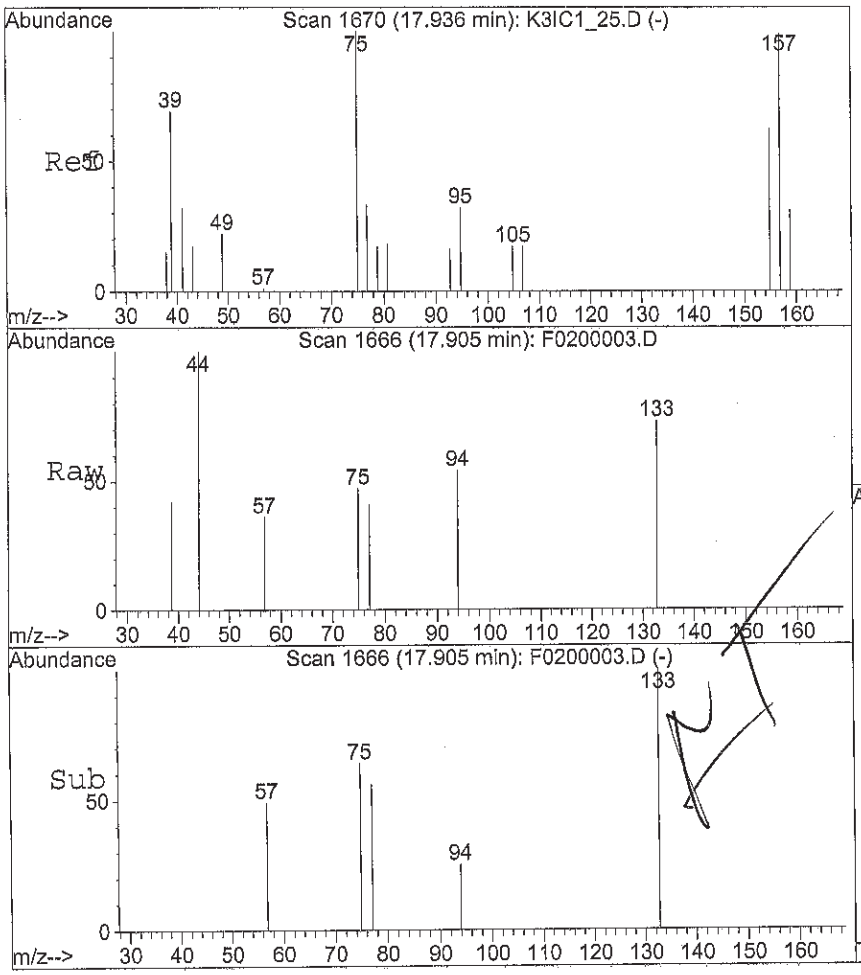


#72
n-Butylbenzene
Concen: 0.01 ug/L
RT: 16.91 min Scan# 1548
Delta R.T. 0.06 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 91 Resp: 263

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

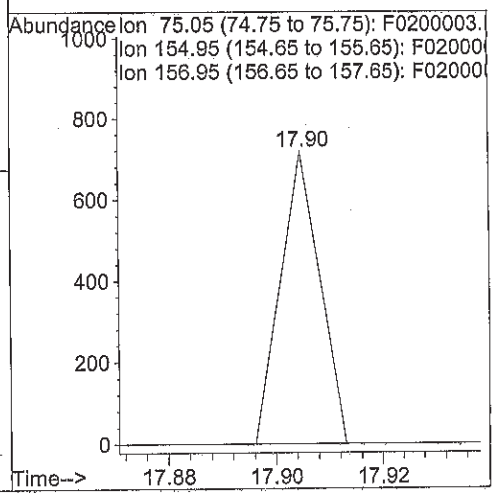


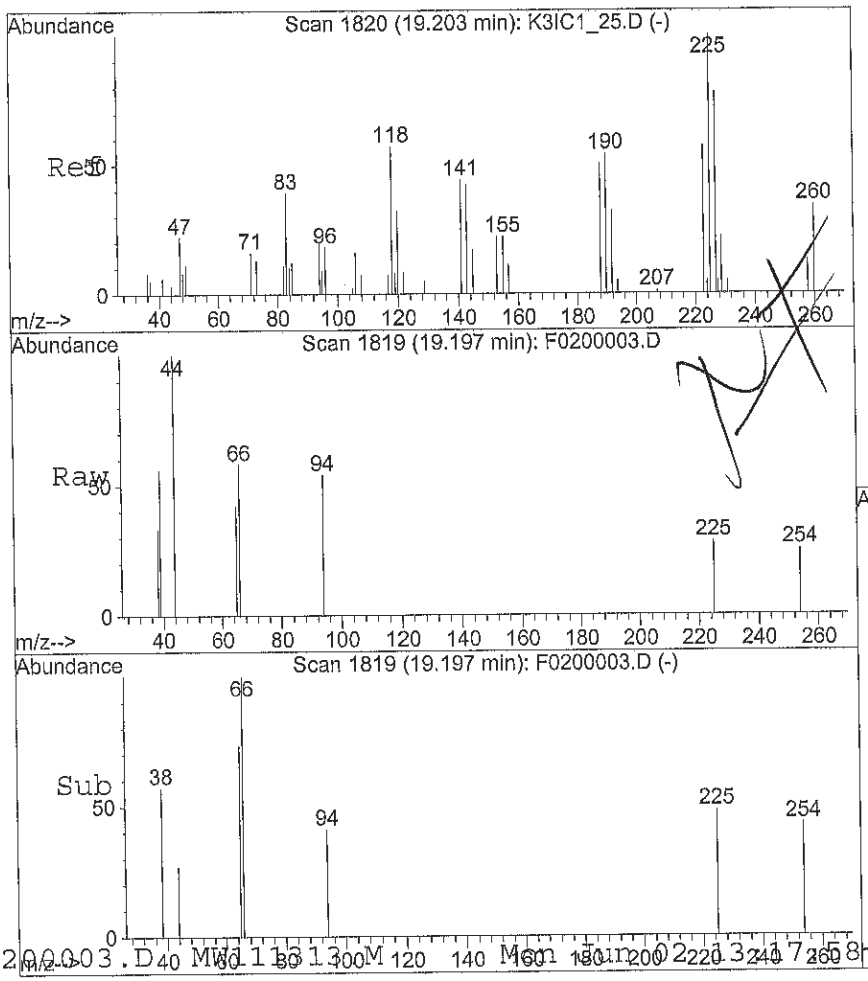


#74
1,2-Dibromo-3-chloropropane
Concen: 1.37 ug/L
RT: 17.90 min Scan# 1666
Delta R.T. -0.03 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion: 75 Resp: 364

Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#

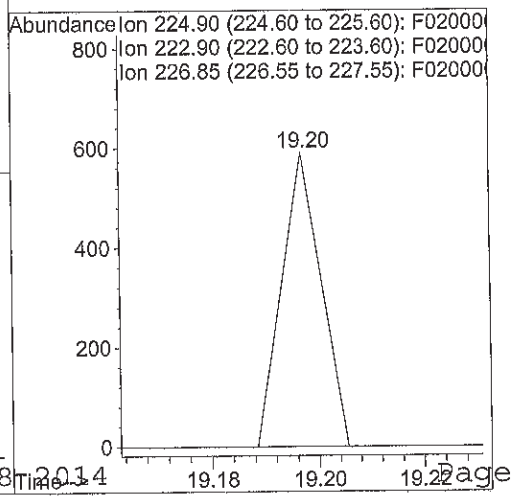


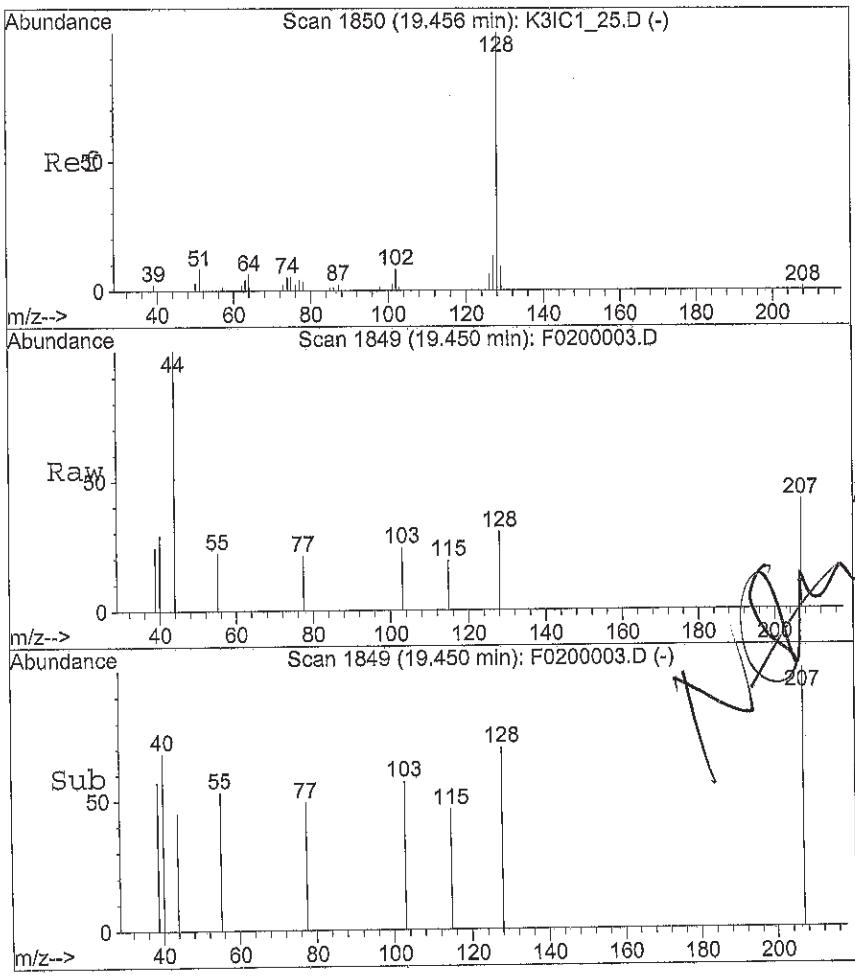


#76
Hexachlorobutadiene
Concen: 0.26 ug/L
RT: 19.20 min Scan# 1819
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:225 Resp: 299

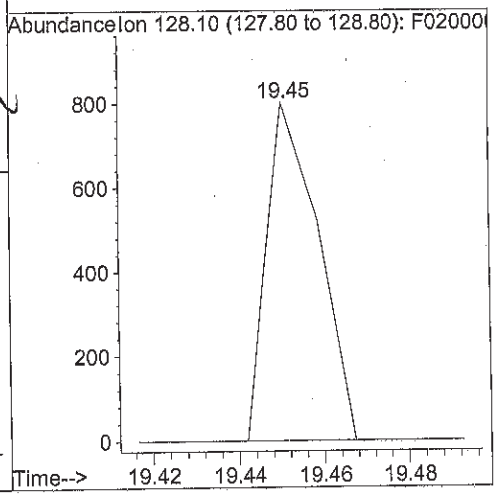
Ion	Ratio	Lower	Upper
225	100		
223	0.0	52.0	78.0#
227	0.0	50.6	75.8#





#77
Naphthalene
Concen: 0.05 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: F0200003.D
Acq: 2 Jun 2014 12:51 pm

Tgt Ion:128 Resp: 670



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200003.D Vial: 2
Acq On : 2 Jun 2014 12:51 pm Operator: DN
Sample : 34F0201-DUP1 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:30 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1396912	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1285027	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	641852	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	429432m	11.82 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.56%		
3) Chloroform-d (SU6)	9.18	84	743878m	14.27 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 114.16%		
4) Methylene Chloride-d2 (SU5	7.07	86	313142	10.28 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 82.24%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	367900m	14.82 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 118.56%		
6) Benzene-d6 (SU7)	9.93	84	1187305	10.83 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.64%		
8) Toluene-d8 (SU3)	12.20	98	1321563	10.84 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.72%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	621191m	12.34 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.72%		

Target Compounds Qvalue

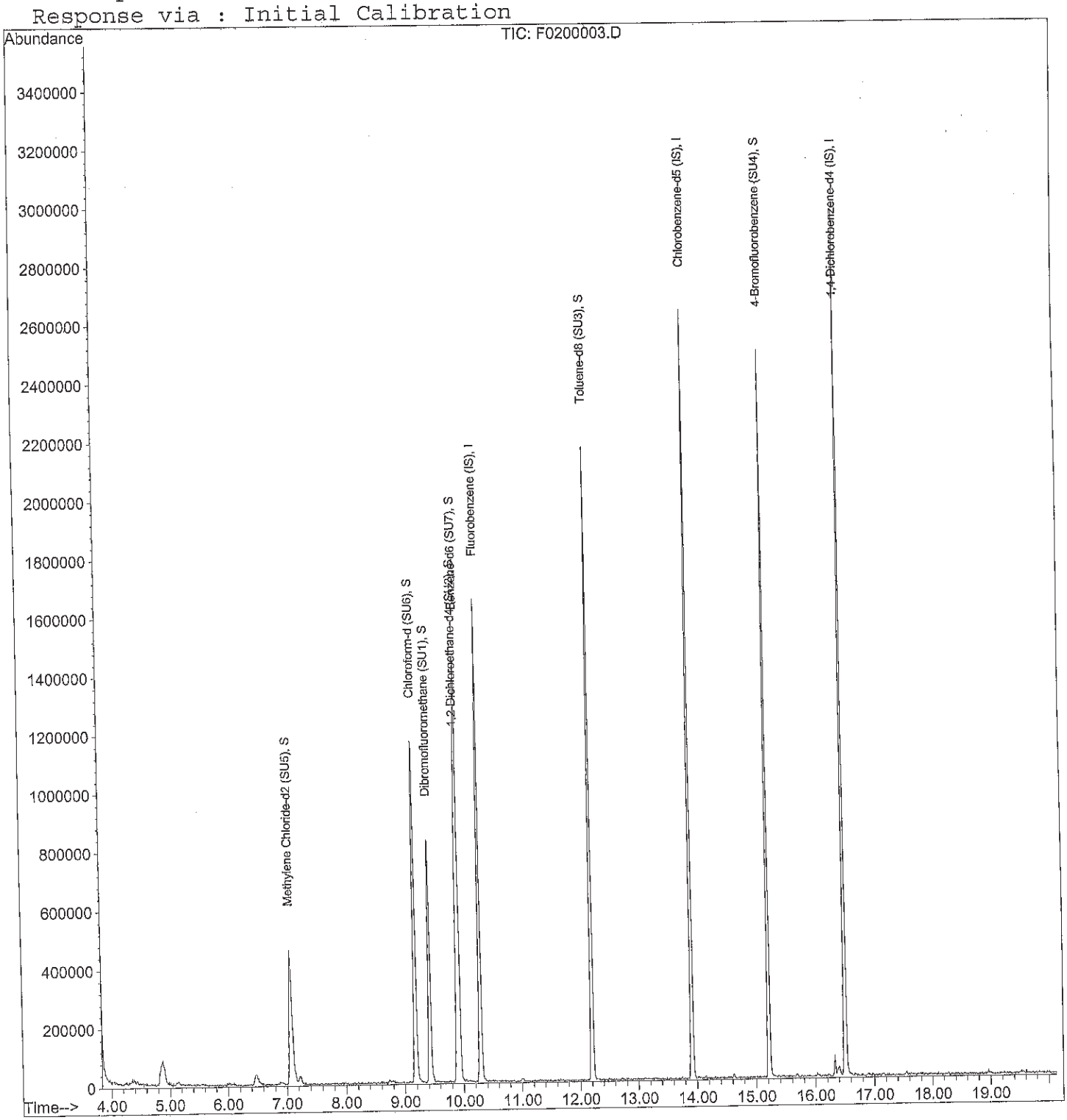
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200003.D
Acq On : 2 Jun 2014 12:51 pm
Sample : 34F0201-DUP1
Misc : 100cc SVL-528-SA8-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 3 7:30 19114

Vial: 2
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION LABORATORY CONTROL SAMPLES

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS01.D
Acq On : 2 Jun 2014 10:14 am
Sample : 34F0201-BS1
Misc : 20cc 1.25/2.5/12.5 ug/L LCS
MS Integration Params: rteint.p
Quant Time: Jun 2 10:41 19114

Vial: 10
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1340147	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1028974	12.50 ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	463879	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	437130	13.08 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	= 104.64%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	487198	15.34 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	= 122.72%	
39) Toluene-d8 (SU3)	12.21	98	1292115	13.46 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	= 107.68%	
58) 4-Bromofluorobenzene (SU4)	15.21	95	516854	12.28 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery	= 98.24%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	45929	1.40 ug/L	99
4) Chloromethane	4.45	50	31266	1.27 ug/L	100
5) Vinyl Chloride	4.60	62	28150	1.19 ug/L	71
6) Bromomethane	5.09	96	22764	1.37 ug/L	86
7) Chloroethane	5.25	64	12654	1.22 ug/L	98
8) (F11) Trichlorofluorometha	5.65	101	50063	1.36 ug/L	90
9) (F113) 1,1,2-Trichloro-tri	6.35	151	32181	1.22 ug/L	92
10) 1,1-Dichloroethene	6.42	96	41125	1.30 ug/L #	41
11) Acetone	6.46	58	20671	4.79 ug/L #	1
12) (IPA) Leak Check Compound	6.51	45	105227	65.34 ug/L	81
13) Carbon disulfide	6.85	76	136636	1.23 ug/L	96
14) Methylene Chloride	7.10	84	41022	1.11 ug/L #	72
15) (TBA) tert-Butanol	7.09	59	12464	5.45 ug/L #	88
16) (MTBE) Methyl-t-butyl ethe	7.40	73	146504	1.93 ug/L #	85
17) trans-1,2-Dichloroethene	7.47	96	40551	1.12 ug/L #	62
18) 1,1-Dichloroethane	8.06	63	75861	1.26 ug/L	94
19) cis-1,2-Dichloroethene	8.82	96	43644	1.04 ug/L	62
20) 2,2-Dichloropropane	8.84	77	5657	0.11 ug/L #	57
21) (MEK) 2-Butanone	8.80	72	7611	2.02 ug/L #	1
22) (DIPE) Diisopropyl Ether	8.01	45	149374	1.43 ug/L #	86
23) Bromochloromethane	9.17	128	17900	1.00 ug/L #	56
24) Chloroform	9.21	83	90933	1.30 ug/L	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS01.D Vial: 10
Acq On : 2 Jun 2014 10:14 am Operator: DN
Sample : 34F0201-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 10:41 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.49	59	125347	1.29 ug/L #	94
26) 1,1,1-Trichloroethane	9.50	97	62896	1.14 ug/L	94
27) (TAME) tert-Amyl methyl et	10.00	73	102348	1.21 ug/L #	87
29) 1,1-Dichloropropene	9.69	75	73517	1.42 ug/L #	89
30) Carbon Tetrachloride	9.71	117	56683	1.26 ug/L	99
31) Benzene	9.98	78	126210	1.00 ug/L #	72
32) 1,2-Dichloroethane	9.98	62	49627	1.11 ug/L	87
33) Trichloroethene	10.74	130	45164	1.11 ug/L #	85
34) 1,2-Dichloropropane	11.04	63	38791	1.29 ug/L #	24
35) Dibromomethane	11.21	93	34904	1.48 ug/L #	85
36) Bromodichloromethane	11.34	83	85295	1.80 ug/L	94
37) cis-1,3-Dichloropropene	11.87	75	63224	1.22 ug/L #	65
40) (MIBK) 4-Methyl-2-Pentanon	12.11	43	33918	1.65 ug/L #	100
41) Toluene	12.28	91	150872	1.08 ug/L	95
42) trans-1,3-Dichloropropene	12.50	75	55172	1.19 ug/L #	44
43) 1,1,2-Trichloroethane	12.76	83	29517	1.17 ug/L #	77
44) Tetrachloroethene	12.93	164	57314	1.16 ug/L	88
45) 1,3-Dichloropropane	12.96	76	60999	1.27 ug/L	91
46) 2-Hexanone	12.97	43	69329	3.08 ug/L #	86
47) Dibromochloromethane	13.25	129	58532	1.62 ug/L #	93
48) 1,2-Dibromoethane	13.42	107	46118	1.41 ug/L	99
49) Chlorobenzene	13.95	112	104019	1.10 ug/L #	78
50) 1,1,1,2-Tetrachloroethane	14.02	131	47326	1.41 ug/L	93
51) Ethylbenzene	14.02	91	214794	1.35 ug/L	90
52) m,p-Xylenes	14.15	106	128730	2.27 ug/L #	60
53) o-Xylene	14.61	106	69500	1.24 ug/L	23
54) Styrene	14.62	104	93689	1.14 ug/L #	66
55) Bromoform	14.91	173	34403	1.68 ug/L #	85
56) Isopropylbenzene	15.00	105	216128	1.41 ug/L #	87
57) 1,2,3-Trichloropropane	15.42	75	69629	1.66 ug/L	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	54778	1.64 ug/L	94
61) Bromobenzene	15.43	156	41304	1.13 ug/L #	49
62) n-Propylbenzene	15.46	91	282058	1.50 ug/L #	91
63) 2-Chlorotoluene	15.61	91	192969	1.67 ug/L #	83
64) 1,3,5-Trimethylbenzene	15.62	105	189115	1.64 ug/L #	81
65) 4-Chlorotoluene	15.72	91	184419	1.73 ug/L #	84
66) tert-Butylbenzene	16.01	119	144033	1.46 ug/L #	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS01.D Vial: 10
Acq On : 2 Jun 2014 10:14 am Operator: DN
Sample : 34F0201-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 10:41 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

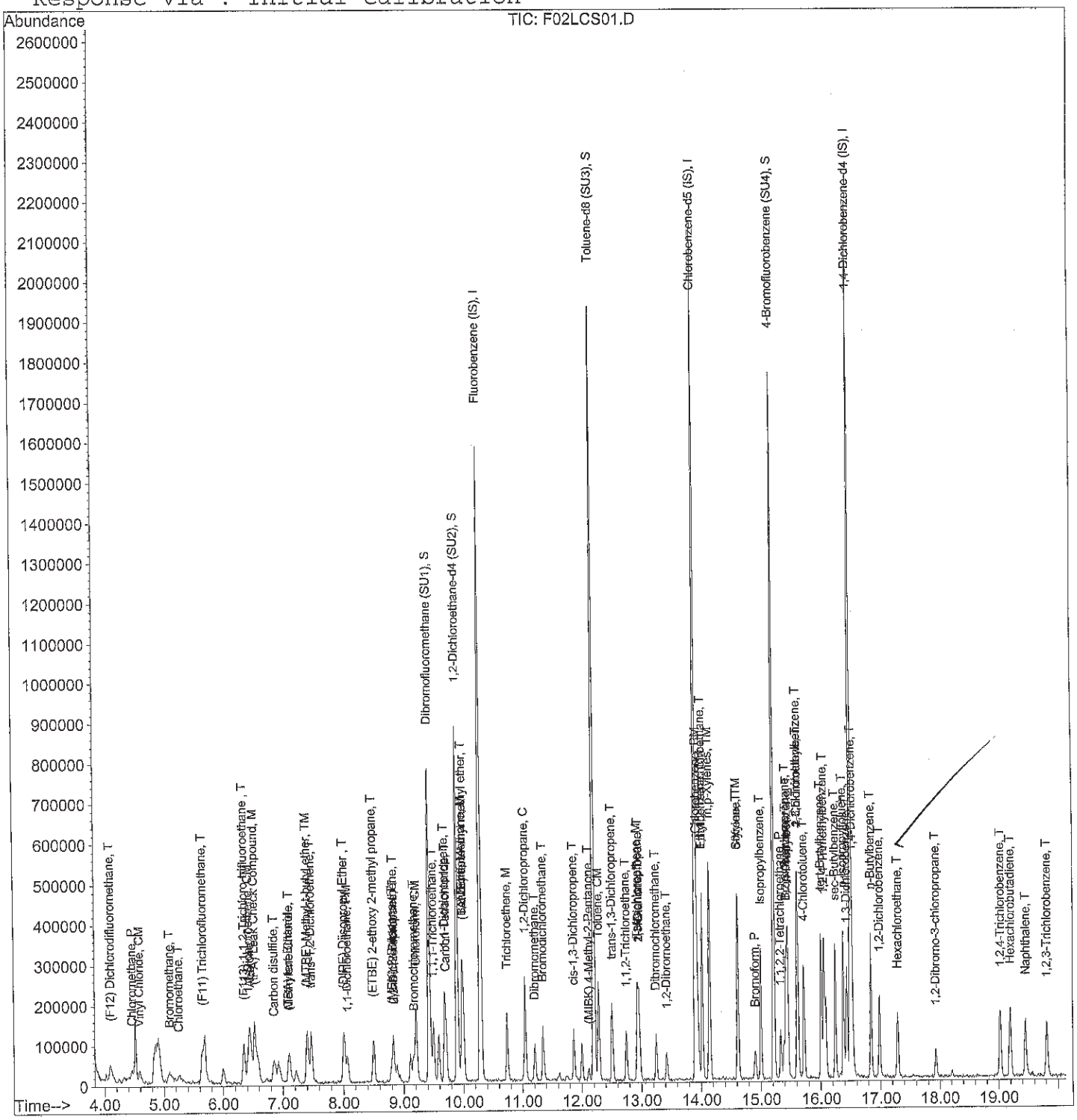
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	197996	1.64 ug/L #	82
68) sec-Butylbenzene	16.24	105	227794	1.46 ug/L	93
69) p-Isopropyltoluene	16.38	119	188141	1.48 ug/L #	82
70) 1,3-Dichlorobenzene	16.44	146	86616	1.26 ug/L #	88
71) 1,4-Dichlorobenzene	16.54	146	85497	1.25 ug/L	93
72) n-Butylbenzene	16.84	91	213432	1.60 ug/L #	90
73) 1,2-Dichlorobenzene	16.99	146	70156	1.15 ug/L #	85
74) 1,2-Dibromo-3-chloropropan	17.92	75	23697	4.43 ug/L #	70
75) 1,2,4-Trichlorobenzene	19.03	180	51291	1.24 ug/L #	95
76) Hexachlorobutadiene	19.20	225	35809	1.92 ug/L	88
77) Naphthalene	19.45	128	128510	1.40 ug/L	100
78) Hexachloroethane	17.29	201	15511	1.16 ug/L #	66
79) 1,2,3-Trichlorobenzene	19.81	180	46260	1.18 ug/L #	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS01.D Vial: 10
Acq On : 2 Jun 2014 10:14 am Operator: DN
Sample : 34F0201-BS1 Inst : GC/MS Ins
Misc : 20cc 1.25/2.5/12.5 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 10:41 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



RAW DATA FOR QC SAMPLES AND INITIAL CALIBRATION BLANK

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02BLK01.D
Acq On : 2 Jun 2014 11:15 am
Sample : 34F0201-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: Jun 2 12:33 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1631767	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1469972	12.50 ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	712180	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	480490m	11.81 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 94.48%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	447803m	11.58 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.64%		
39) Toluene-d8 (SU3)	12.20	98	1604817	11.71 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 93.68%		
58) 4-Bromofluorobenzene (SU4)	15.21	95	803898m	13.37 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.96%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	3.87	85	431	0.11 ~~ug/L~~ # NSM	44
4) Chloromethane	4.42	50	2833	-0.19 ~~ug/L~~	93
5) Vinyl Chloride	4.48	62	356	0.12 ~~ug/L~~ #	1
6) Bromomethane	5.12	96	1265	-1.07 ~~ug/L~~ #	18
7) Chloroethane	5.20	64	2426	2.47 ~~ug/L~~	90
8) (F11) Trichlorofluorometha	5.50	101	391	0.09 ~~ug/L~~ #	16
11) Acetone	6.48	58	5279	3.30 ~~ug/L~~ # NT	1
12) (IPA) Leak Check Compound	6.53	45	6298	32.12 ~~ug/L~~ # NSM	57
13) Carbon disulfide	6.74	76	366	0.03 ~~ug/L~~ # NSM	76
14) Methylene Chloride	7.08	84	3885	0.87 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	7.09	59	263	0.94 ~~ug/L~~ #	77
16) (MTBE) Methyl-t-butyl ethe	7.44	73	294	0.03 ~~ug/L~~ #	55
18) 1,1-Dichloroethane	8.13	63	259	0.04 ~~ug/L~~ #	1
19) cis-1,2-Dichloroethene	8.60	96	295	0.06 ~~ug/L~~ #	3
20) 2,2-Dichloropropane	8.89	77	406	0.06 ~~ug/L~~ # NSM	48
22) (DIPE) Diisopropyl Ether	8.18	45	345	0.03 ~~ug/L~~ #	48
23) Bromochloromethane	9.04	128	265	0.12 ~~ug/L~~ #	1
24) Chloroform	9.20	83	3903	0.46 ~~ug/L~~ #	18
29) 1,1-Dichloropropene	9.92	75	615	0.10 ~~ug/L~~ #	1
30) Carbon Tetrachloride	9.55	117	266	0.05 ~~ug/L~~ #	2
31) Benzene	9.92	78	13039	0.85 ~~ug/L~~ #	67
32) 1,2-Dichloroethane	9.92	62	12933	2.38 ~~ug/L~~ #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02BLK01.D
Acq On : 2 Jun 2014 11:15 am
Sample : 34F0201-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: Jun 2 12:33 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

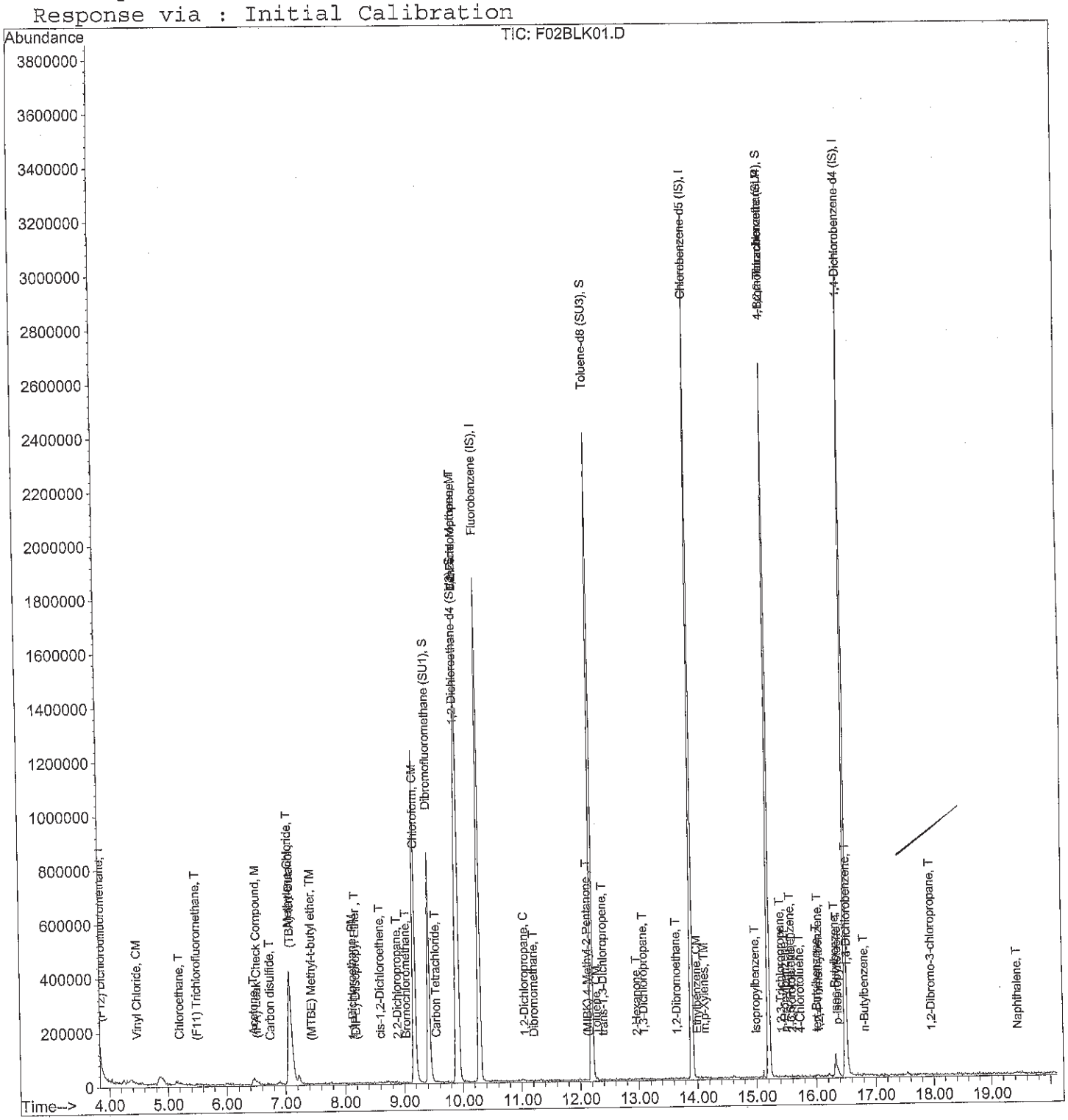
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) 1,2-Dichloropropane	11.05	63	610	0.17 ~~ug/L~~ # NSM	25
35) Dibromomethane	11.21	93	297	0.10 ug/L #	19
40) (MIBK) 4-Methyl-2-Pentanon	12.14	43	568	0.19 ~~ug/L~~ #	100
41) Toluene	12.28	91	1411	0.07 ug/L # 0.0014	1
42) trans-1,3-Dichloropropene	12.41	75	270	0.04 ~~ug/L~~ # NSM	1
45) 1,3-Dichloropropane	13.08	76	267	0.04 ~~ug/L~~ #	41
46) 2-Hexanone	12.97	43	1763	0.55 ~~ug/L~~ #	37
48) 1,2-Dibromoethane	13.66	107	262	0.06 ~~ug/L~~ #	3
51) Ethylbenzene	14.00	91	1311	0.06 ~~ug/L~~ #	45
52) m,p-Xylenes	14.12	106	359	0.04 ~~ug/L~~ #	63
54) Styrene	14.61	104	2037	-0.70 ~~ug/L~~ # NSM	63
56) Isopropylbenzene	15.00	105	316	0.01 ~~ug/L~~ #	55
57) 1,2,3-Trichloropropane	15.42	75	310	0.05 ~~ug/L~~ #	1
60) 1,1,2,2-Tetrachloroethane	15.20	83	260	0.05 ~~ug/L~~ #	18
62) n-Propylbenzene	15.49	91	270	0.01 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.62	91	339	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.59	105	270	0.02 ~~ug/L~~ # NSM	31
65) 4-Chlorotoluene	15.74	91	267	0.02 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.01	119	296	0.02 ~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.06	105	982	0.05 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.34	105	780	0.03 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	1146	0.06 ~~ug/L~~ # NSM	1
70) 1,3-Dichlorobenzene	16.54	146	590	0.06 ~~ug/L~~ #	24
71) 1,4-Dichlorobenzene	16.54	146	590	0.06 ug/L #	22
72) n-Butylbenzene	16.82	91	374	0.02 ~~ug/L~~ #	30
74) 1,2-Dibromo-3-chloropropan	17.97	75	268	1.21 ~~ug/L~~ #	6
77) Naphthalene	19.45	128	1281	0.09 ~~ug/L~~	100

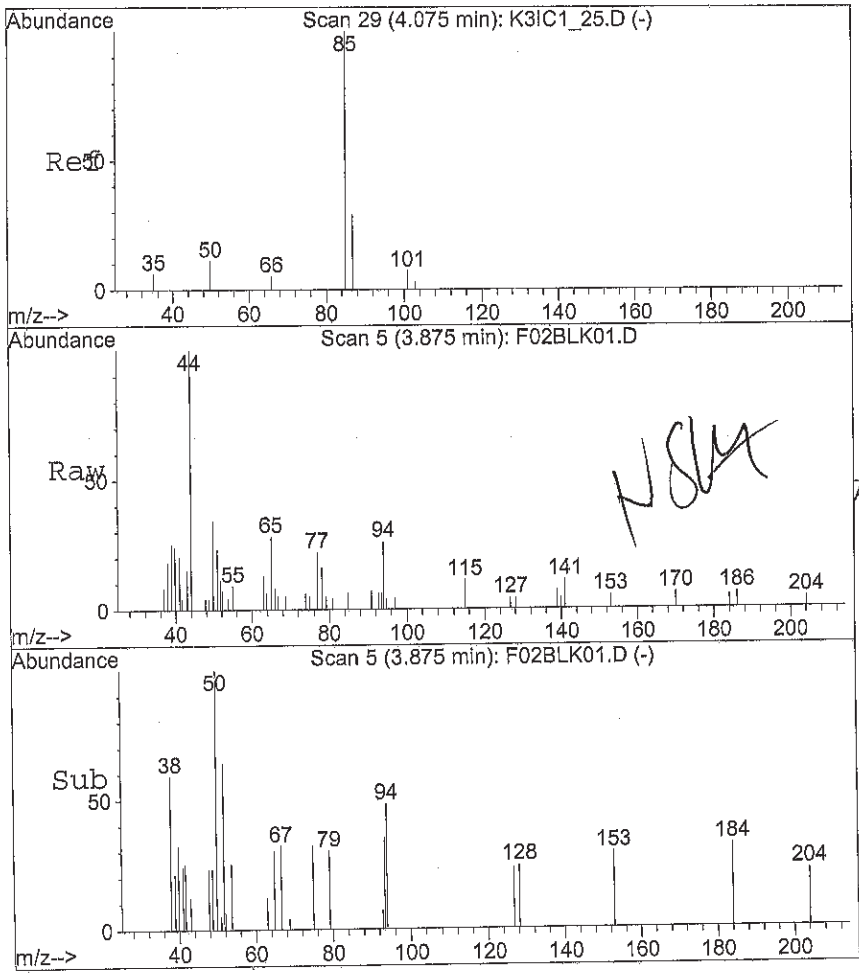
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02BLK01.D Vial: 11
Acq On : 2 Jun 2014 11:15 am Operator: DN
Sample : 34F0201-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 12:33 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

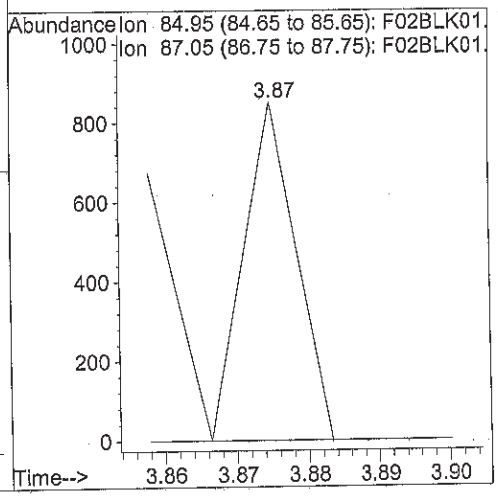


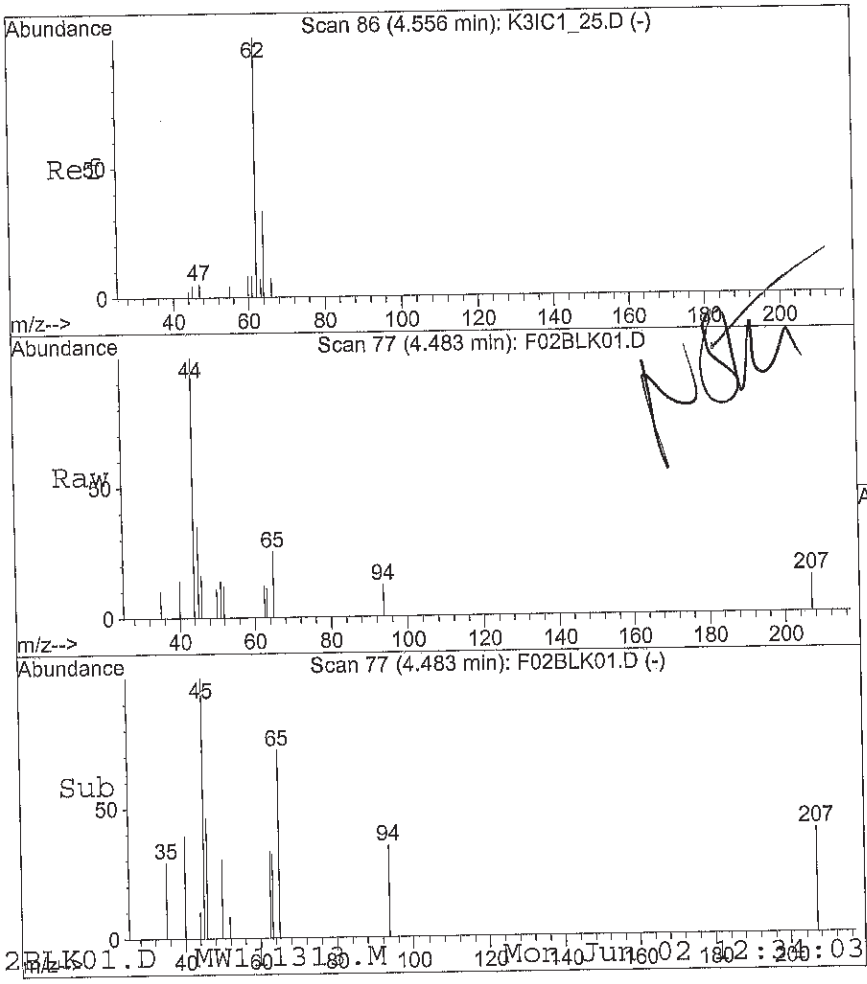


#3
(F12) Dichlorodifluoromethane
Concen: 0.11 ug/L
RT: 3.87 min Scan# 5
Delta R.T. -0.20 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 85 Resp: 431

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

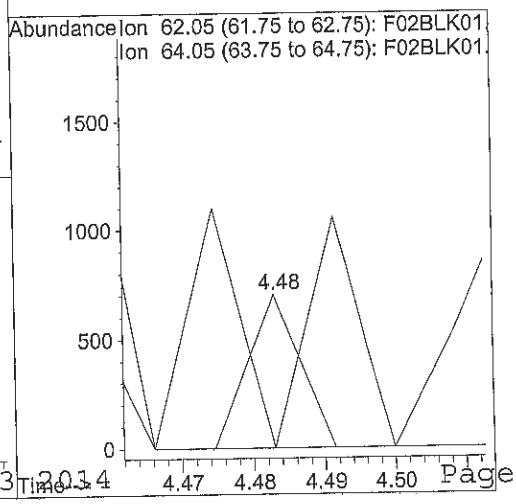


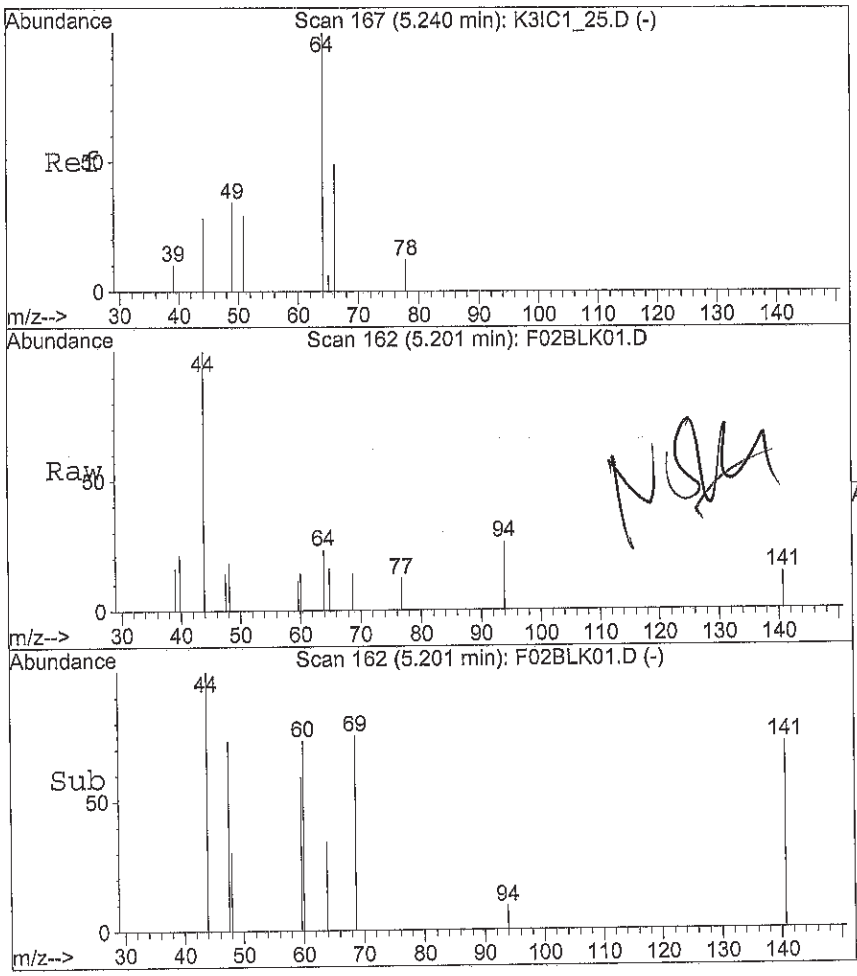


#5
Vinyl Chloride
Concen: 0.12 ug/L
RT: 4.48 min Scan# 77
Delta R.T. -0.07 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 62 Resp: 356

Ion	Ratio	Lower	Upper
62	100		
64	150.0	25.6	38.4#

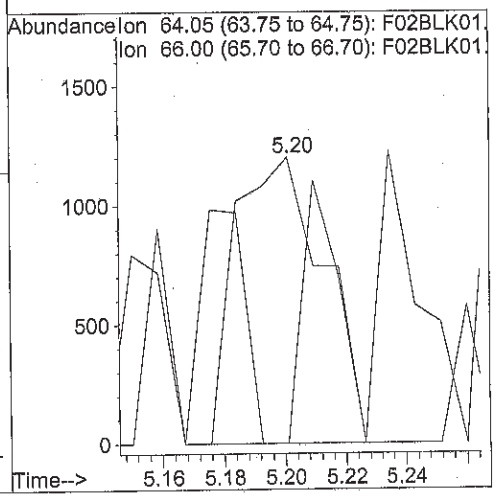


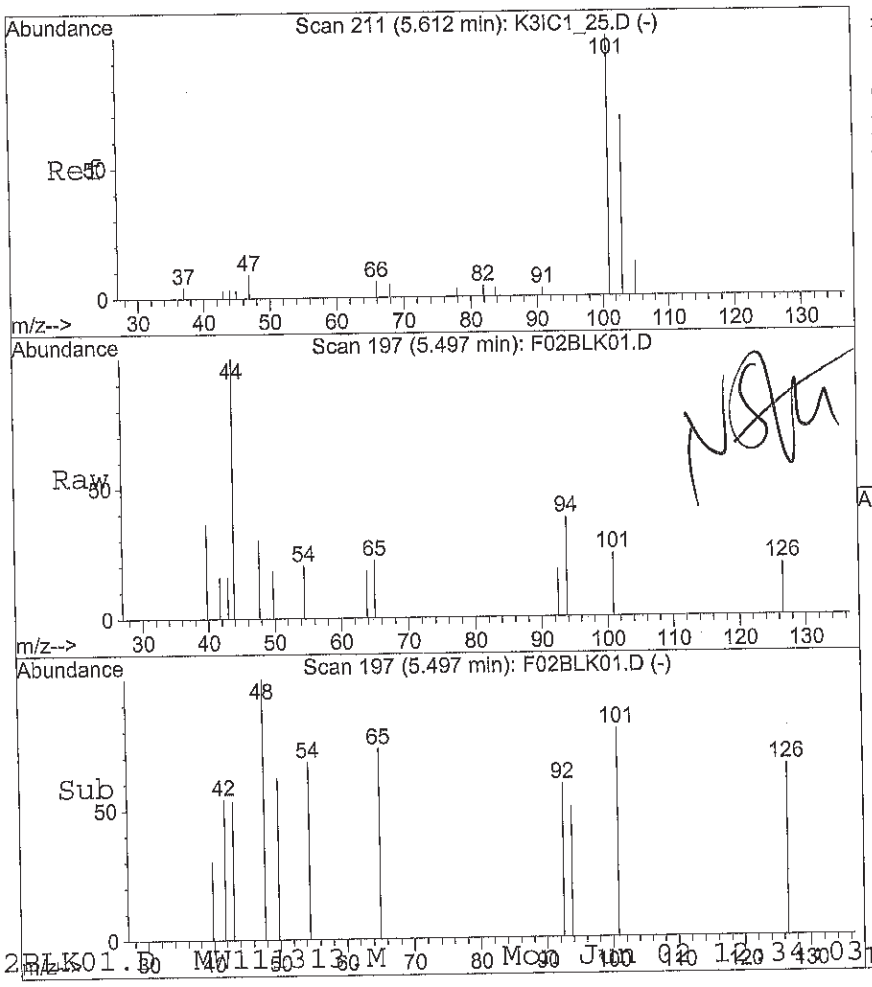


#7
Chloroethane
Concen: 2.47 ug/L
RT: 5.20 min Scan# 162
Delta R.T. -0.04 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 64 Resp: 2426

Ion	Ratio	Lower	Upper
64	100		
66	37.6	35.4	53.0

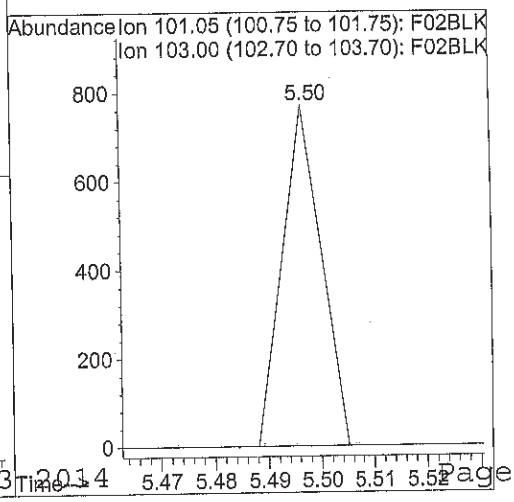


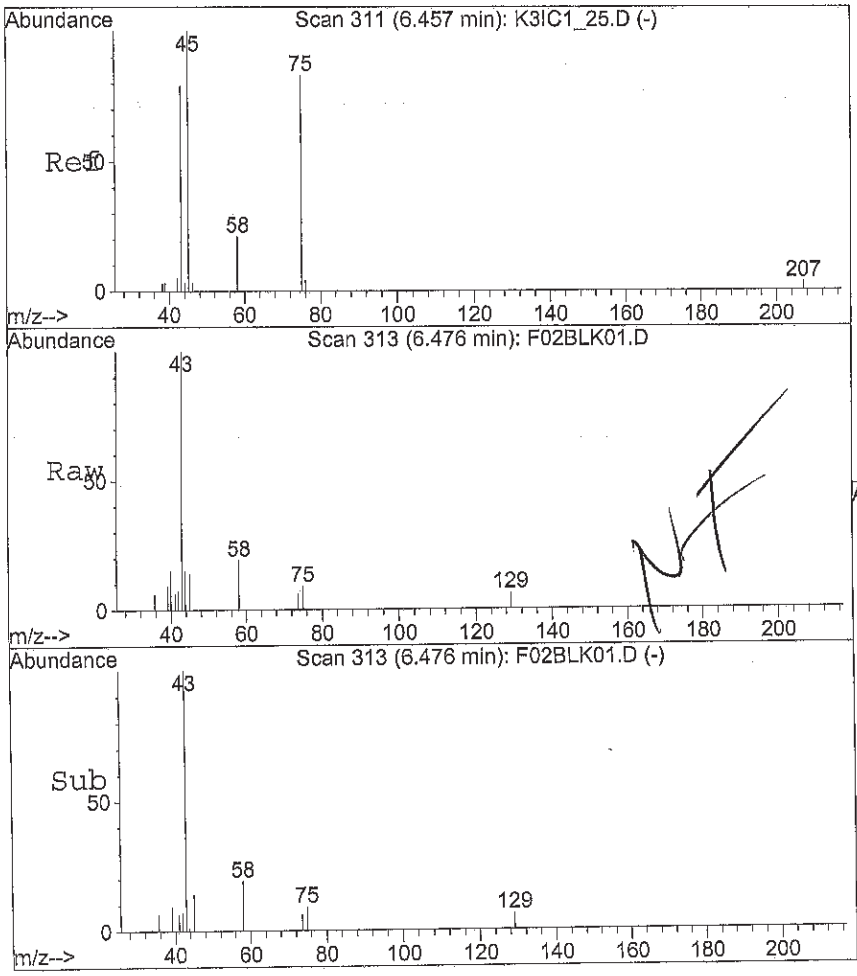


#8
(F11) Trichlorofluoromethane
Concen: 0.09 ug/L
RT: 5.50 min Scan# 197
Delta R.T. -0.12 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:101 Resp: 391

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

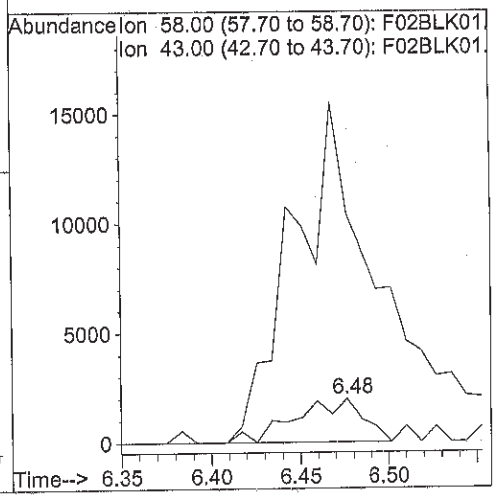


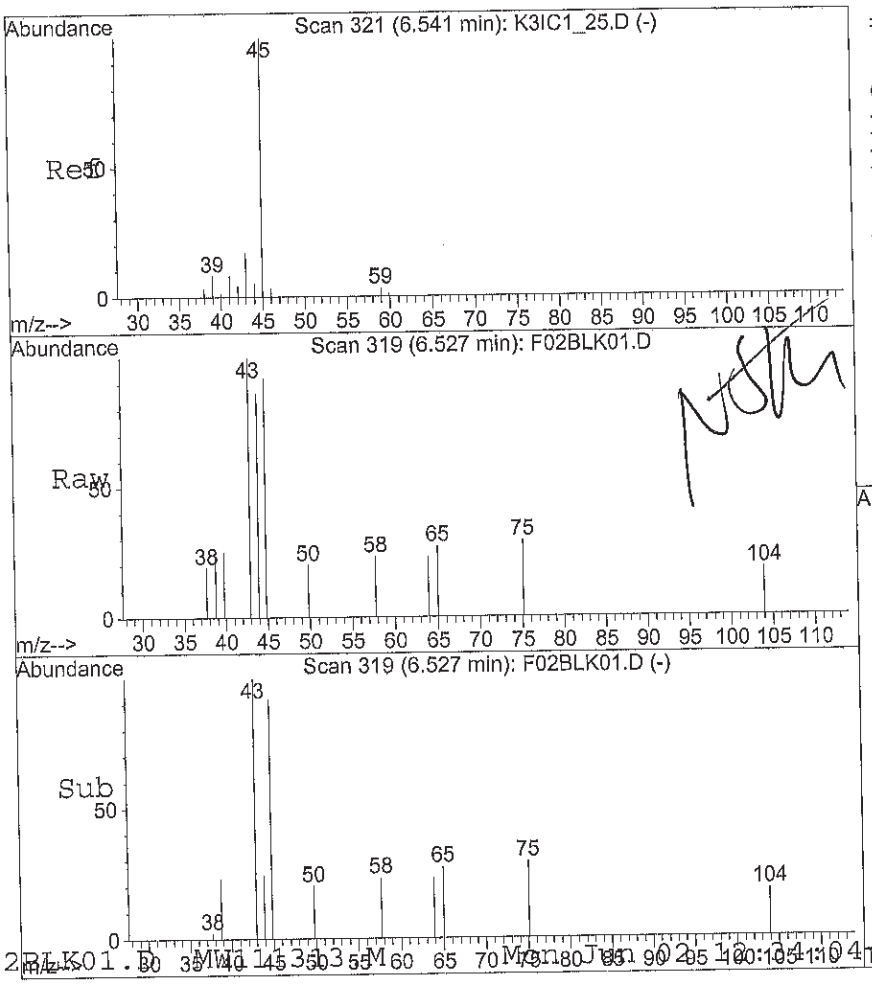


#11
Acetone
Concen: 3.30 ug/L
RT: 6.48 min Scan# 313
Delta R.T. 0.02 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 58 Resp: 5279

Ion	Ratio	Lower	Upper
58	100		
43	1012.3	360.9	541.3#

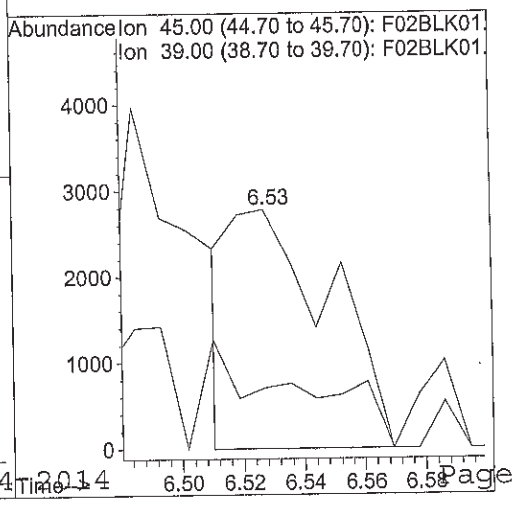


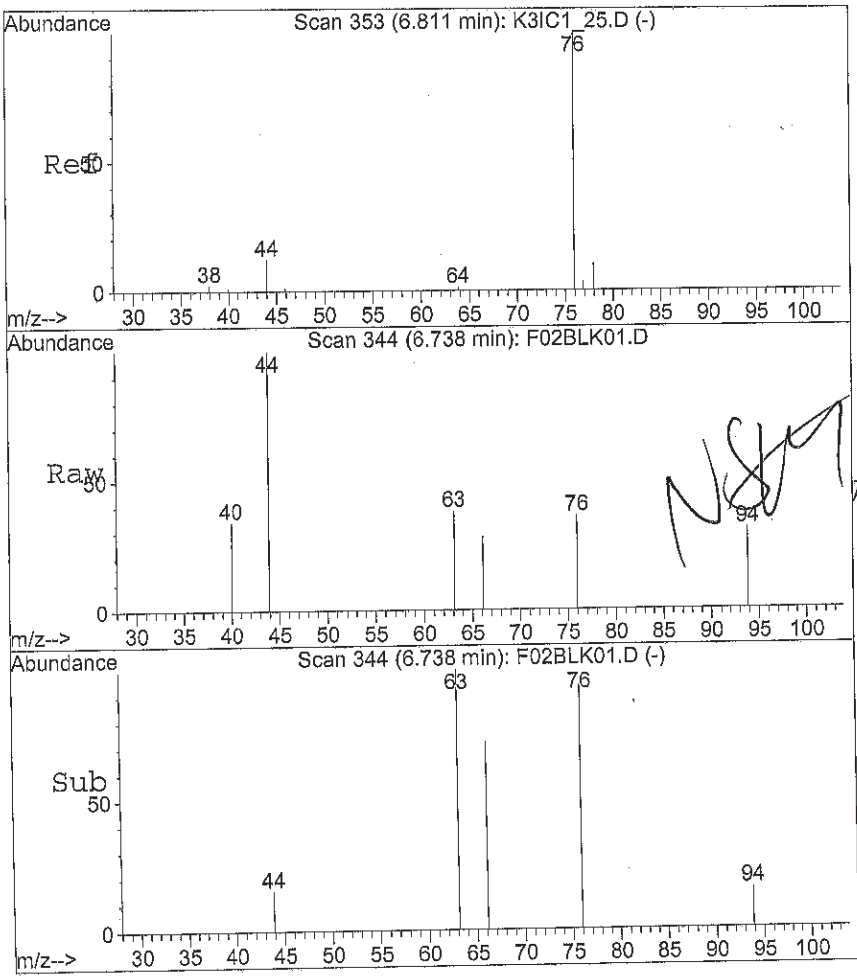


#12
(IPA) Leak Check Compound
Concen: 32.12 ug/L
RT: 6.53 min Scan# 319
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 45 Resp: 6298

Ion	Ratio	Lower	Upper
45	100		
39	20.6	4.9	7.3#

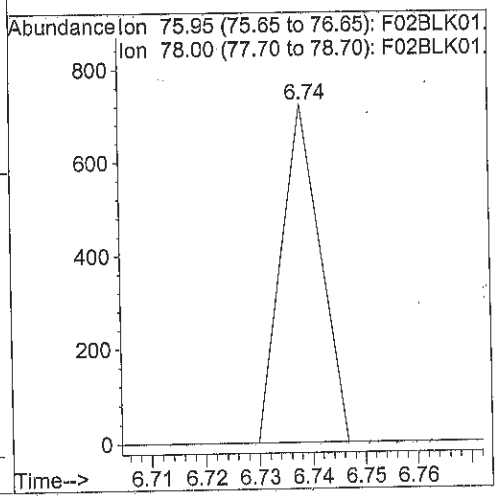


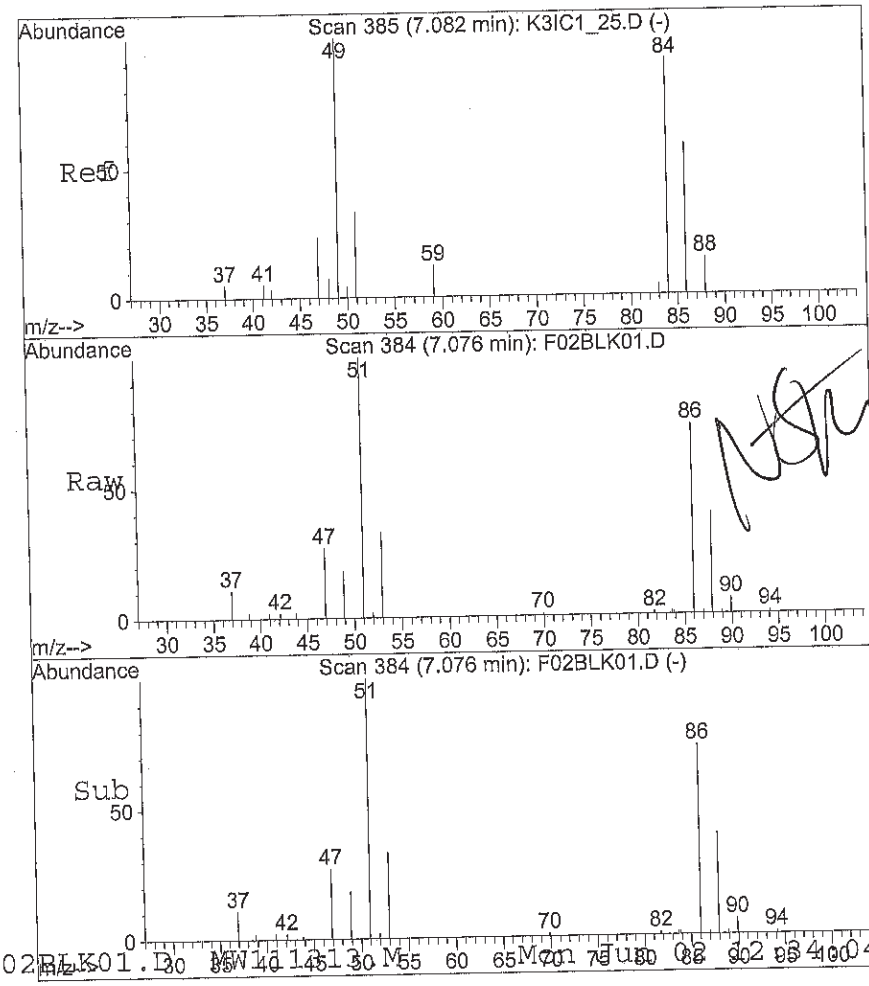


#13
Carbon disulfide
Concen: 0.03 ug/L
RT: 6.74 min Scan# 344
Delta R.T. -0.07 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 76 Resp: 366

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

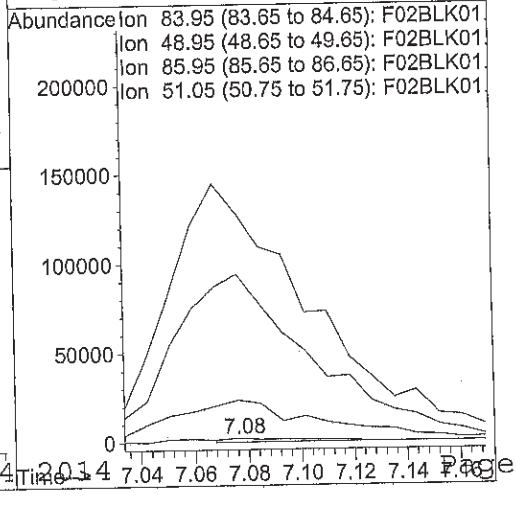


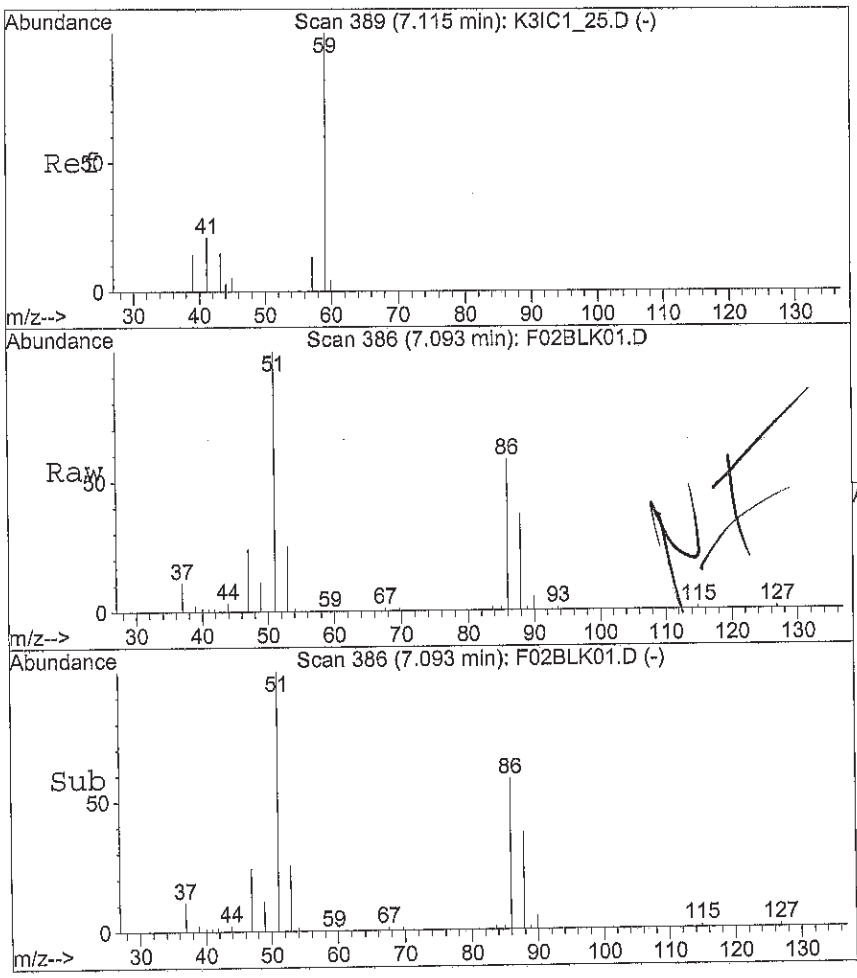


#14
Methylene Chloride
Concen: 0.87 ug/L
RT: 7.08 min Scan# 384
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 84 Resp: 3885

Ion	Ratio	Lower	Upper
84	100		
49	2500.3	89.8	134.6#
86	9168.7	51.1	76.7#
51	14452.0	28.5	42.7#

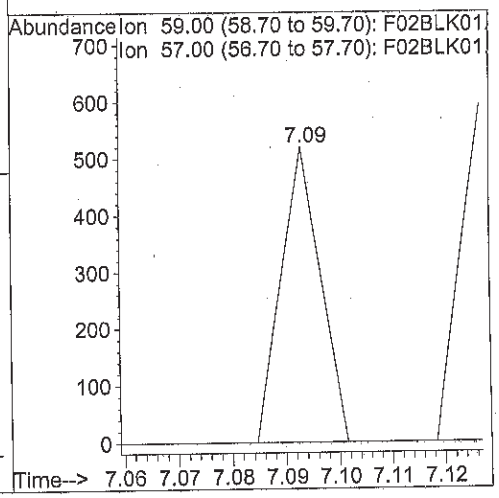


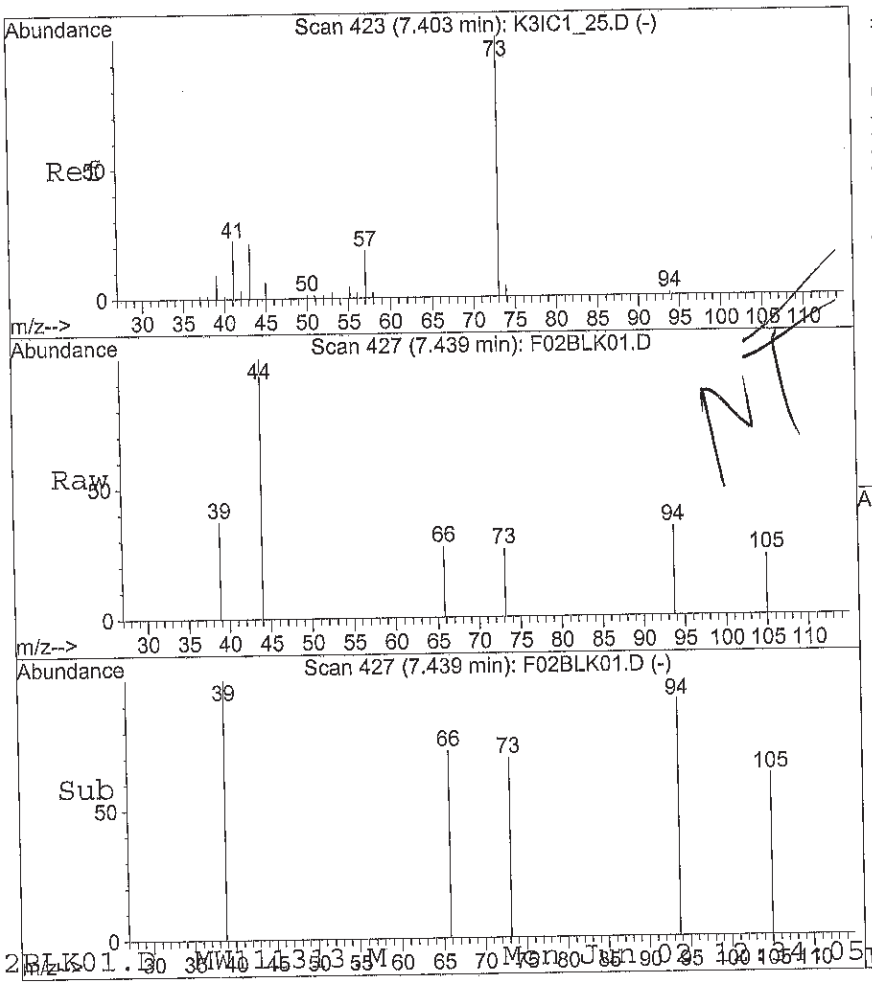


#15
(TBA) tert-Butanol
Concen: 0.94 ug/L
RT: 7.09 min Scan# 386
Delta R.T. -0.02 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 59 Resp: 263

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

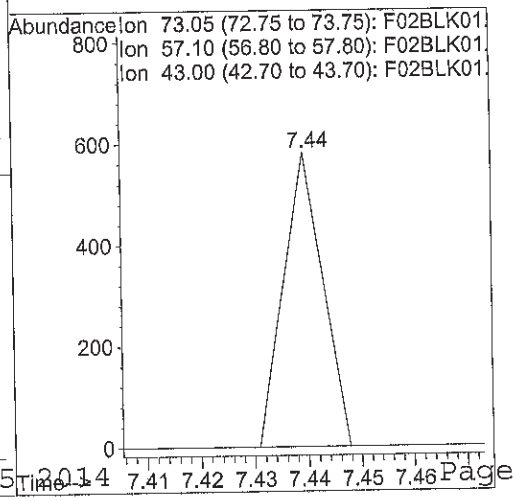


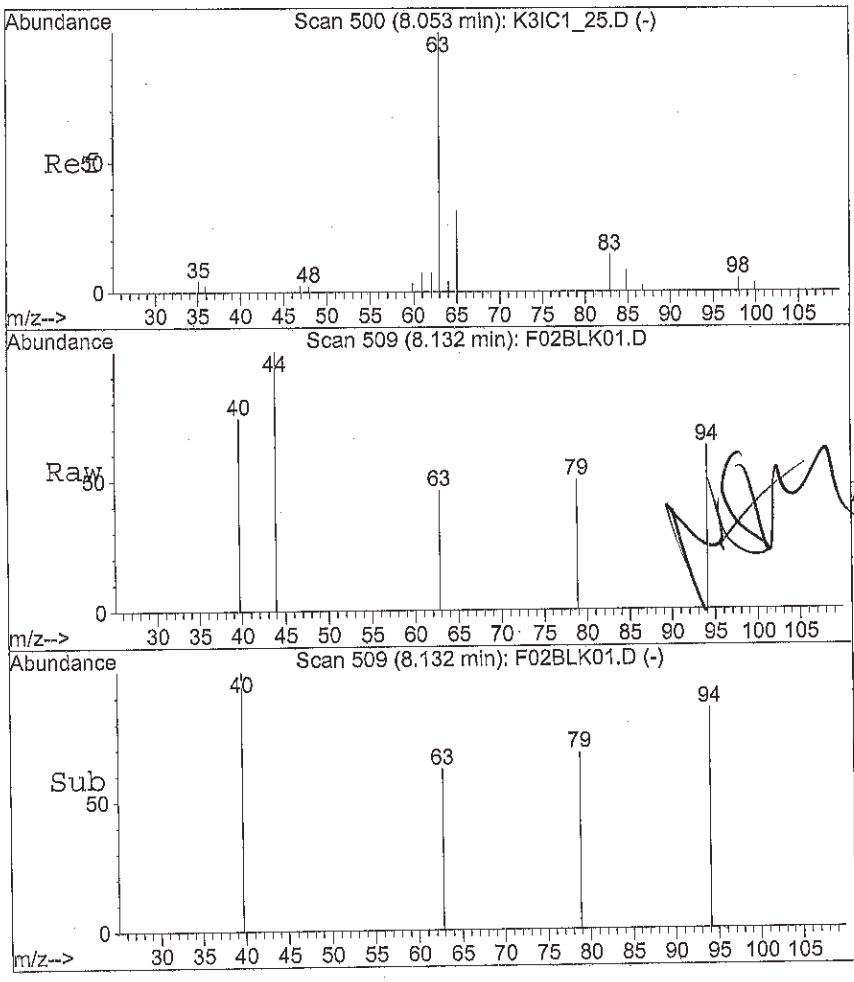


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.03 ug/L
RT: 7.44 min Scan# 427
Delta R.T. 0.04 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 73 Resp: 294

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	0.0	18.4	27.6#

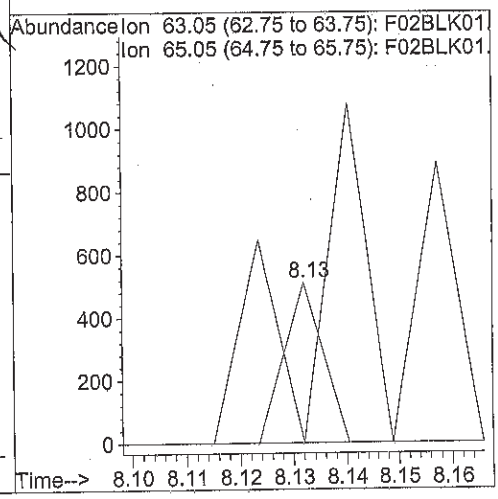


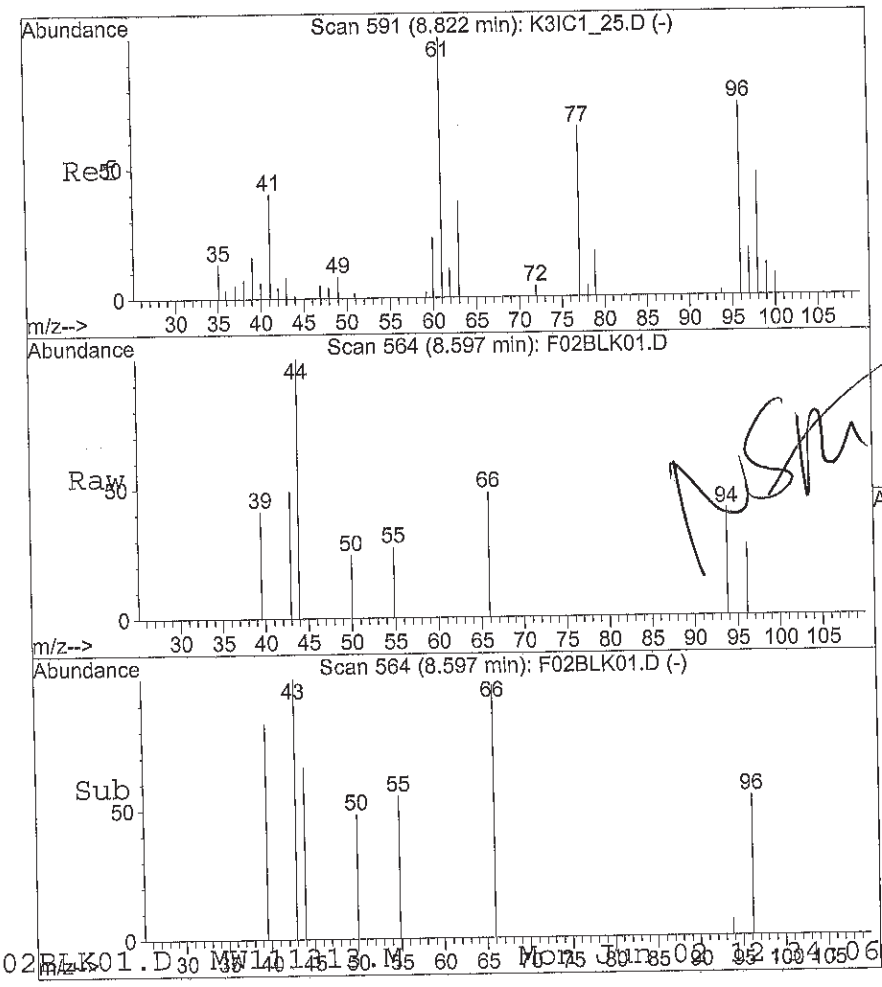


#18
1,1-Dichloroethane
Concen: 0.04 ug/L
RT: 8.13 min Scan# 509
Delta R.T. 0.08 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 63 Resp: 259

Ion	Ratio	Lower	Upper
63	100		
65	511.2	25.8	38.8#

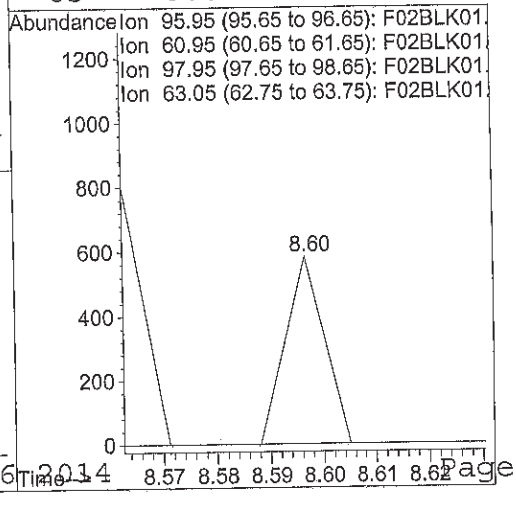


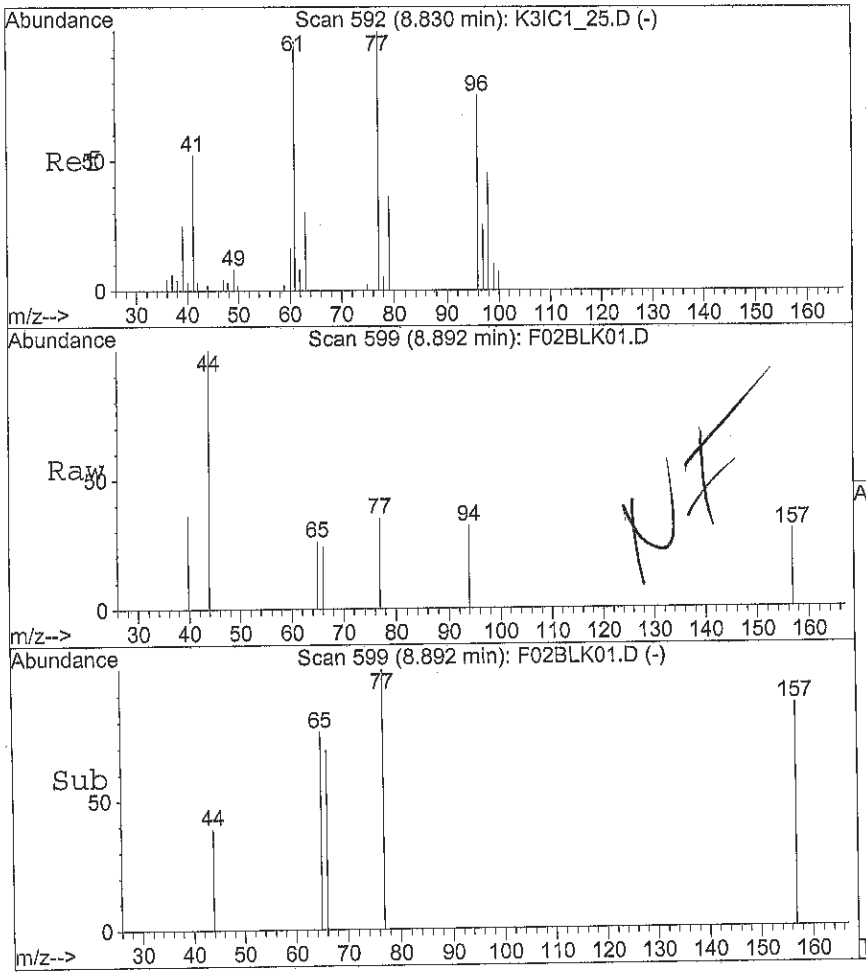


#19
cis-1,2-Dichloroethene
Concen: 0.06 ug/L
RT: 8.60 min Scan# 564
Delta R.T. -0.23 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 96 Resp: 295

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

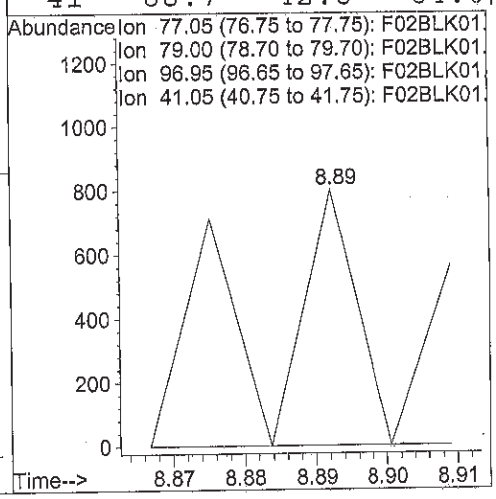


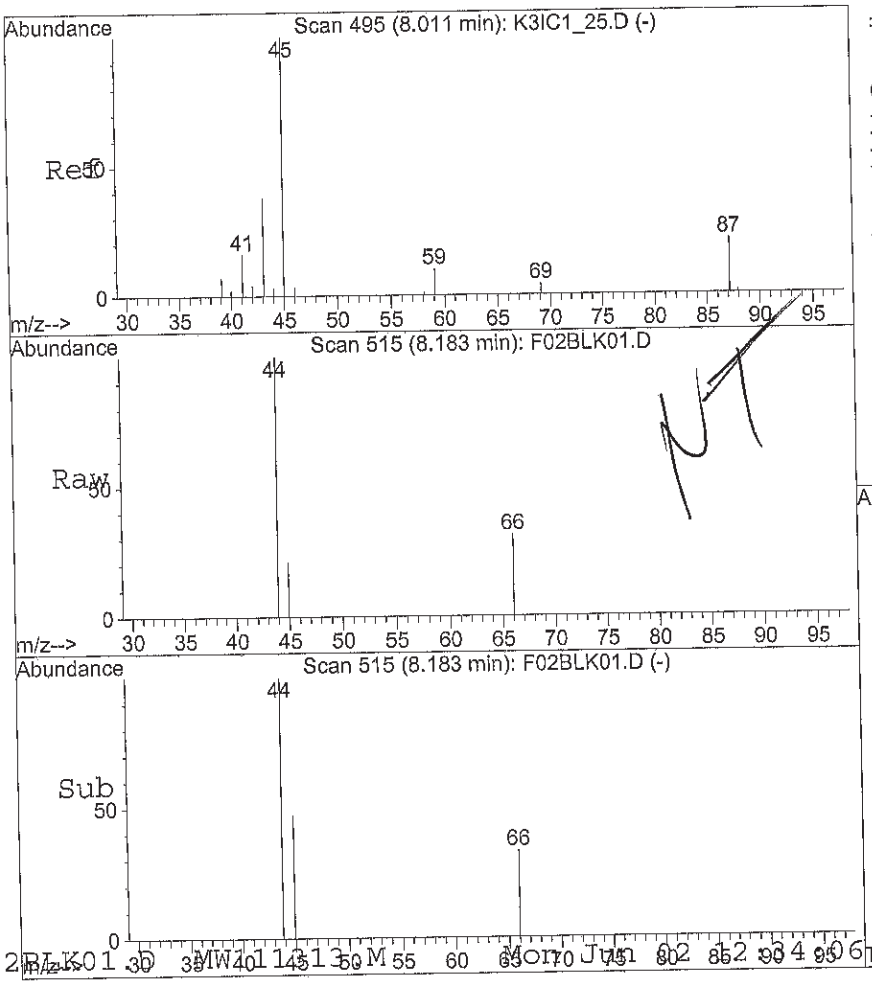


#20
2,2-Dichloropropane
Concen: 0.06 ug/L
RT: 8.89 min Scan# 599
Delta R.T. 0.06 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 77 Resp: 406

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	88.7	42.6	64.0#

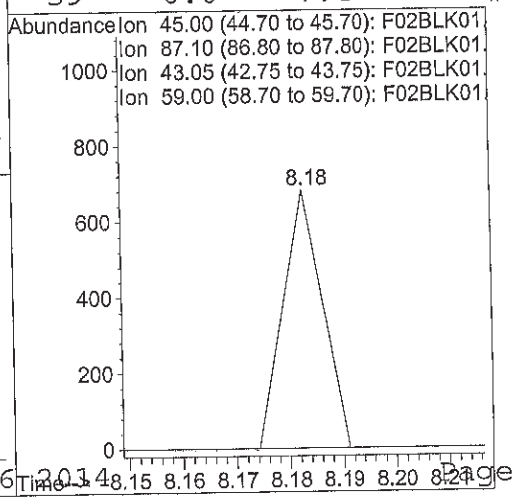


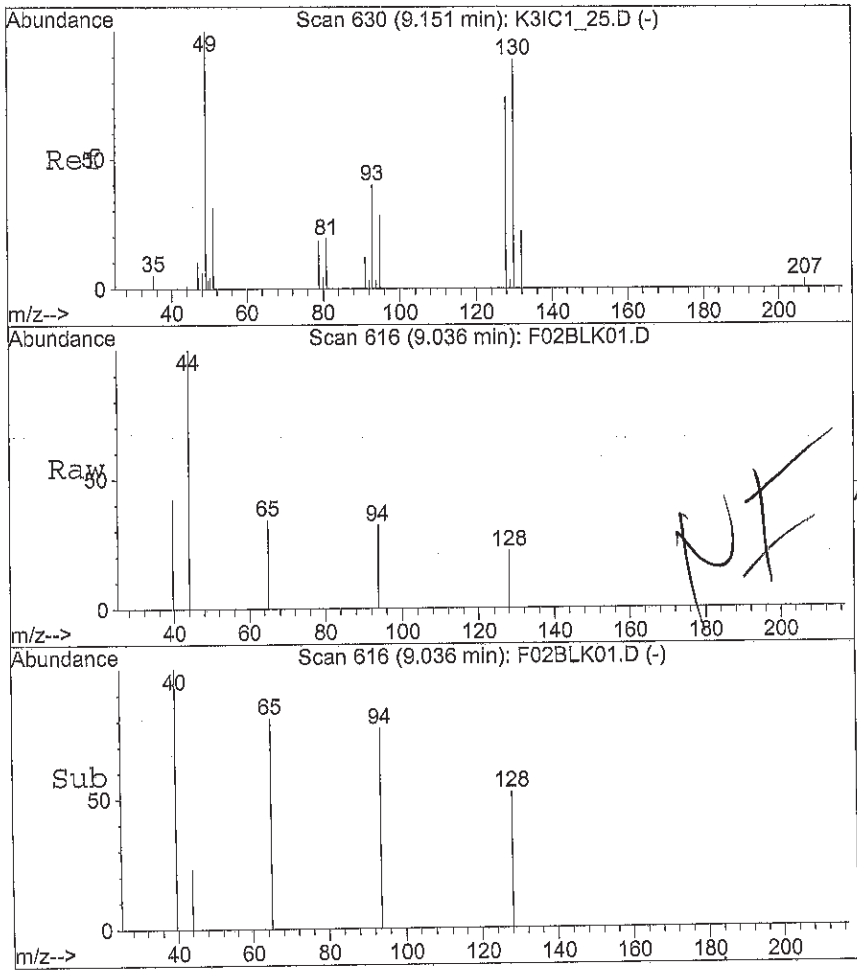


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 8.18 min Scan# 515
Delta R.T. 0.17 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 45 Resp: 345

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

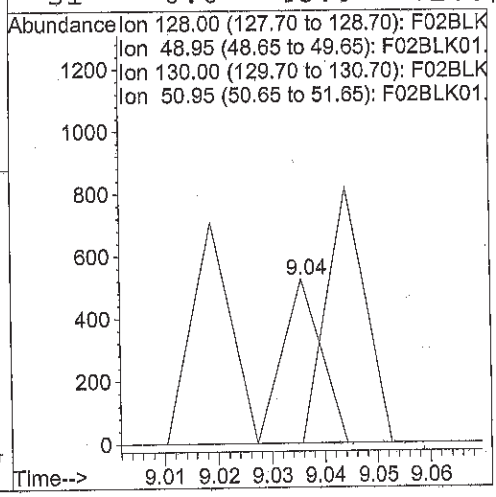


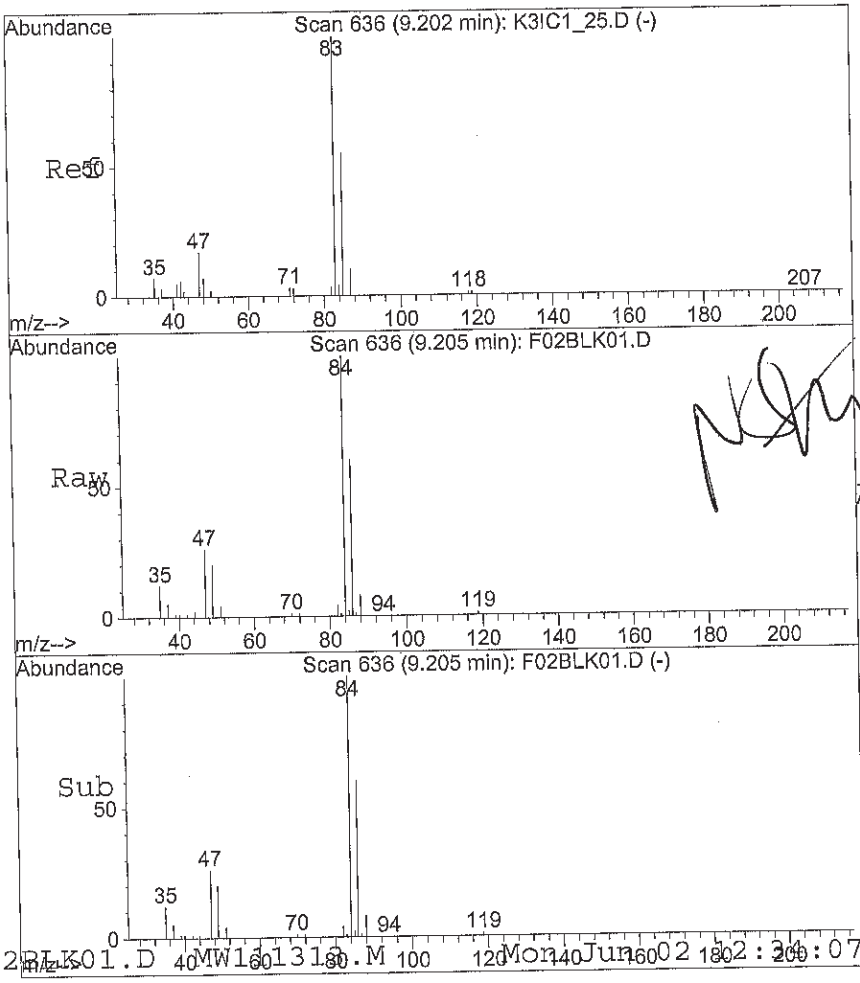


#23
Bromochloromethane
Concen: 0.12 ug/L
RT: 9.04 min Scan# 616
Delta R.T. -0.12 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:128 Resp: 265

Ion	Ratio	Lower	Upper
128	100		
49	0.0	117.4	176.0#
130	0.0	111.0	166.6#
51	0.0	48.0	72.0#

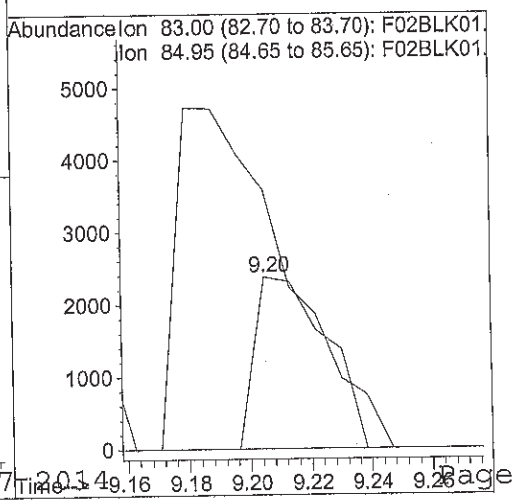


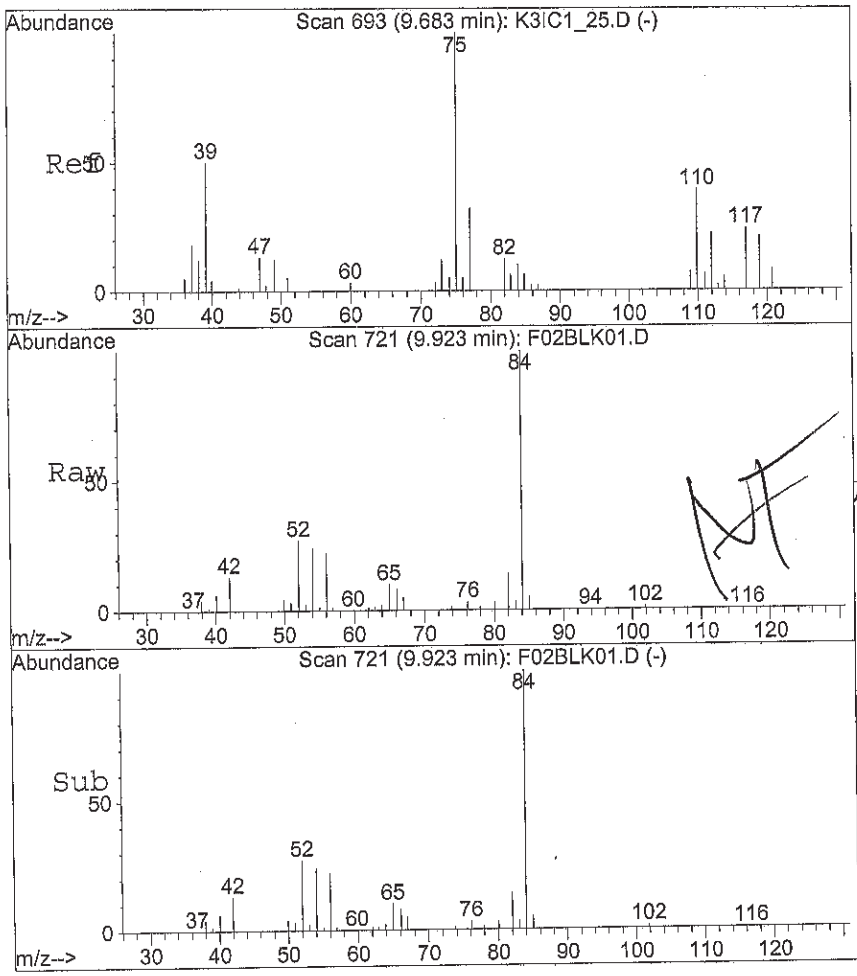


#24
Chloroform
Concen: 0.46 ug/L
RT: 9.20 min Scan# 636
Delta R.T. 0.00 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 83 Resp: 3903

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

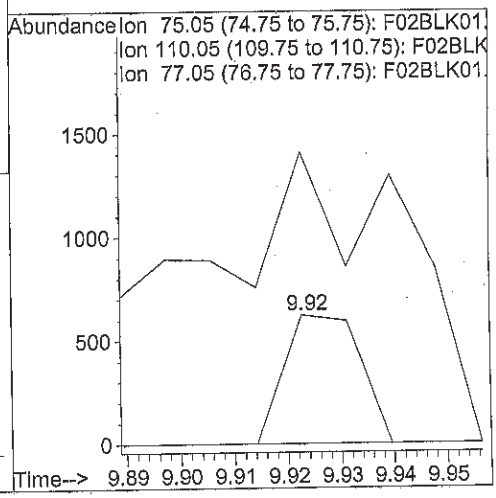


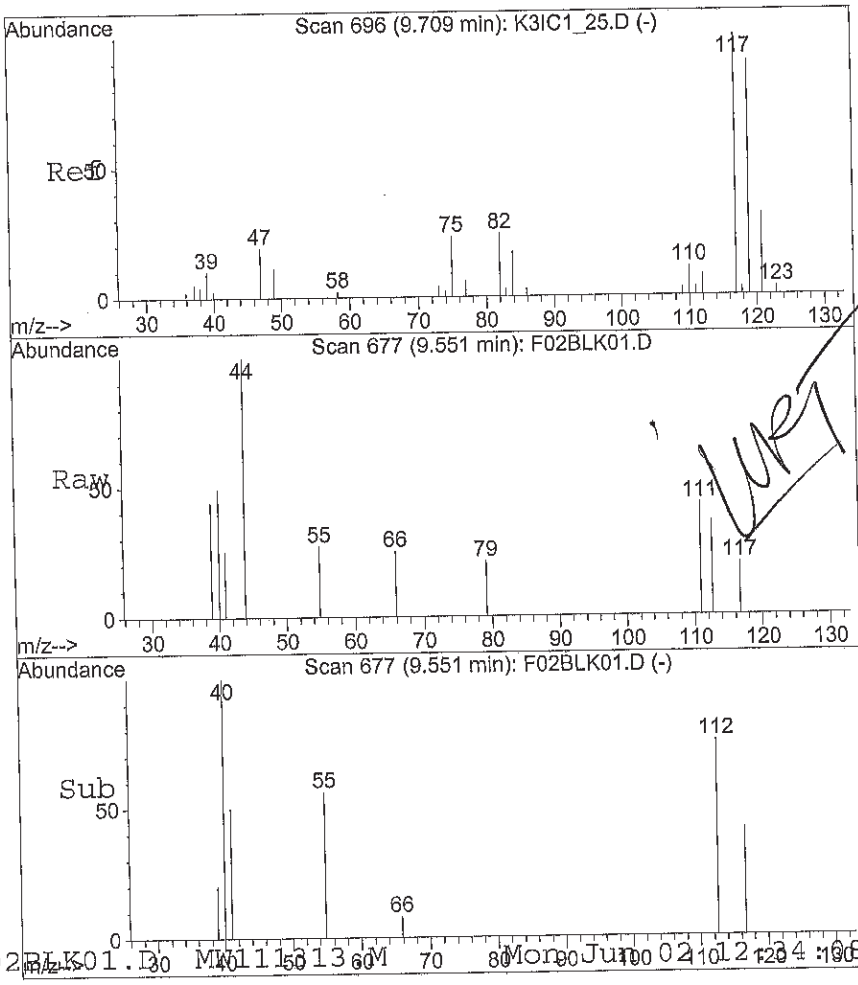


#29
1,1-Dichloropropene
Concen: 0.10 ug/L
RT: 9.92 min Scan# 721
Delta R.T. 0.24 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 75 Resp: 615

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	631.4	25.0	37.4#

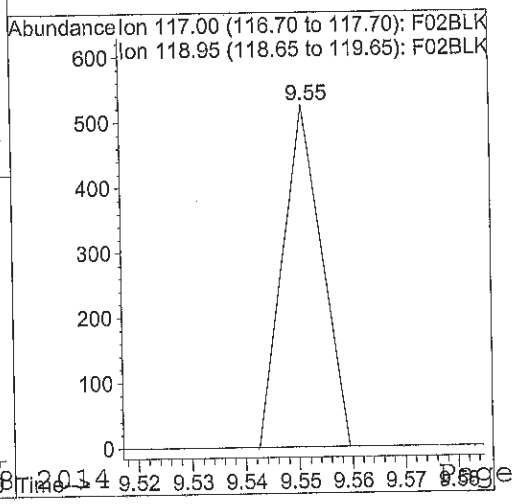


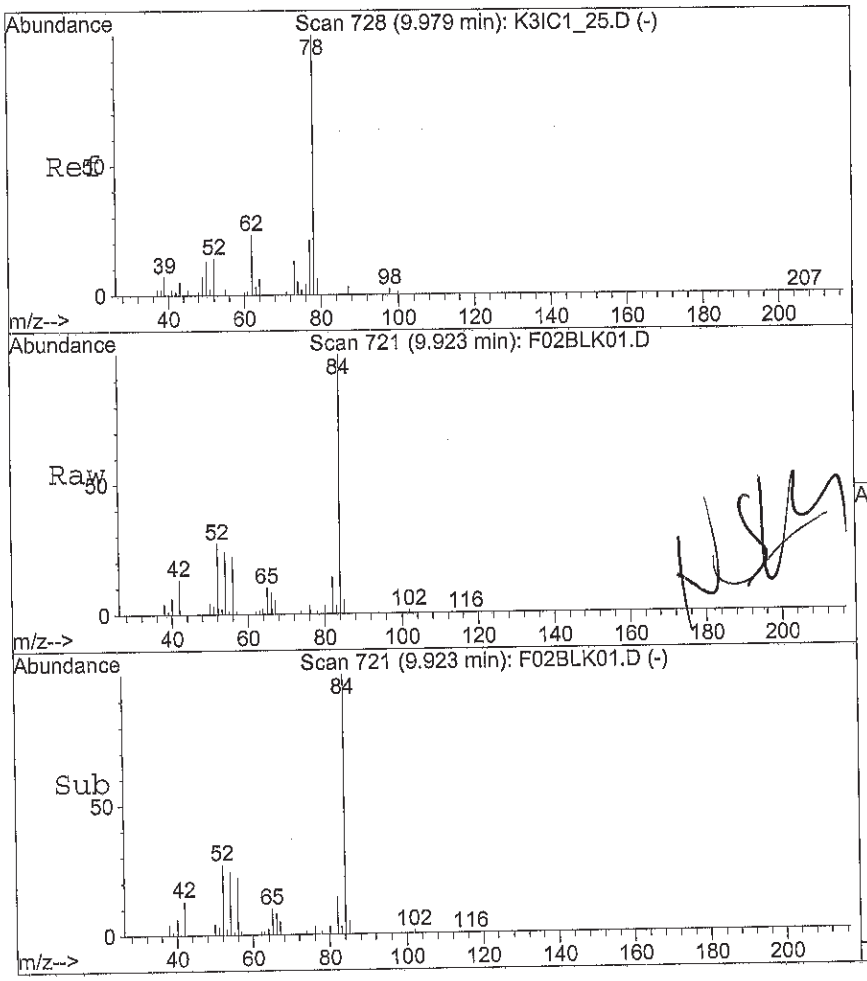


#30
Carbon Tetrachloride
Concen: 0.05 ug/L
RT: 9.55 min Scan# 677
Delta R.T. -0.16 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:117 Resp: 266

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.8	113.8#

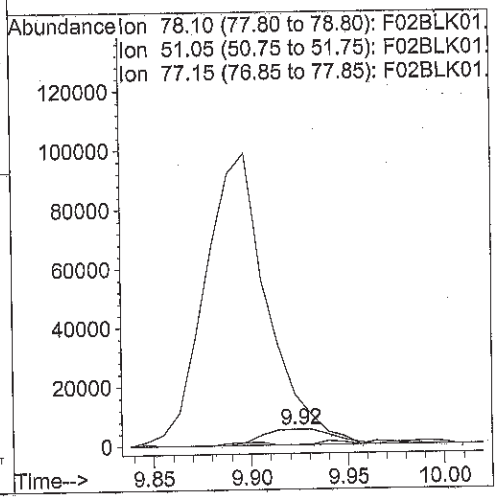


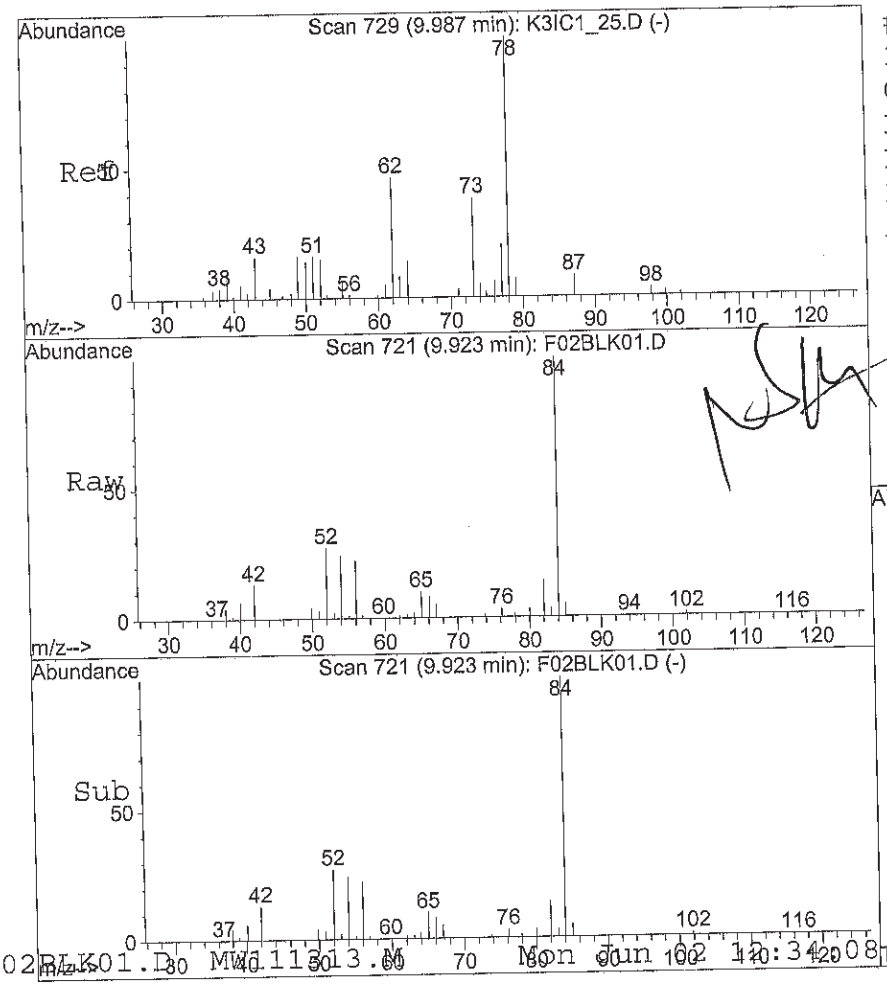


#31
Benzene
Concen: 0.85 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.06 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 78 Resp: 13039

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	8.3	16.6	24.8#

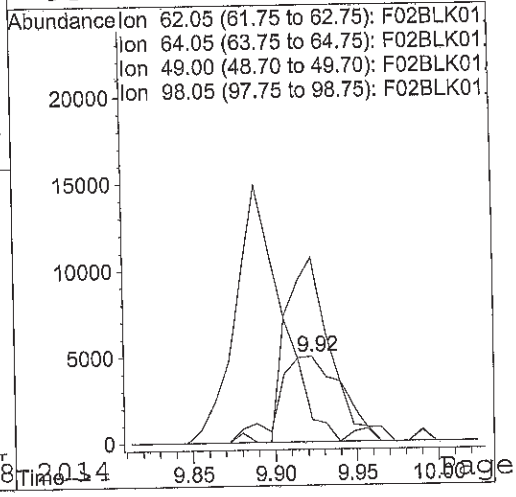


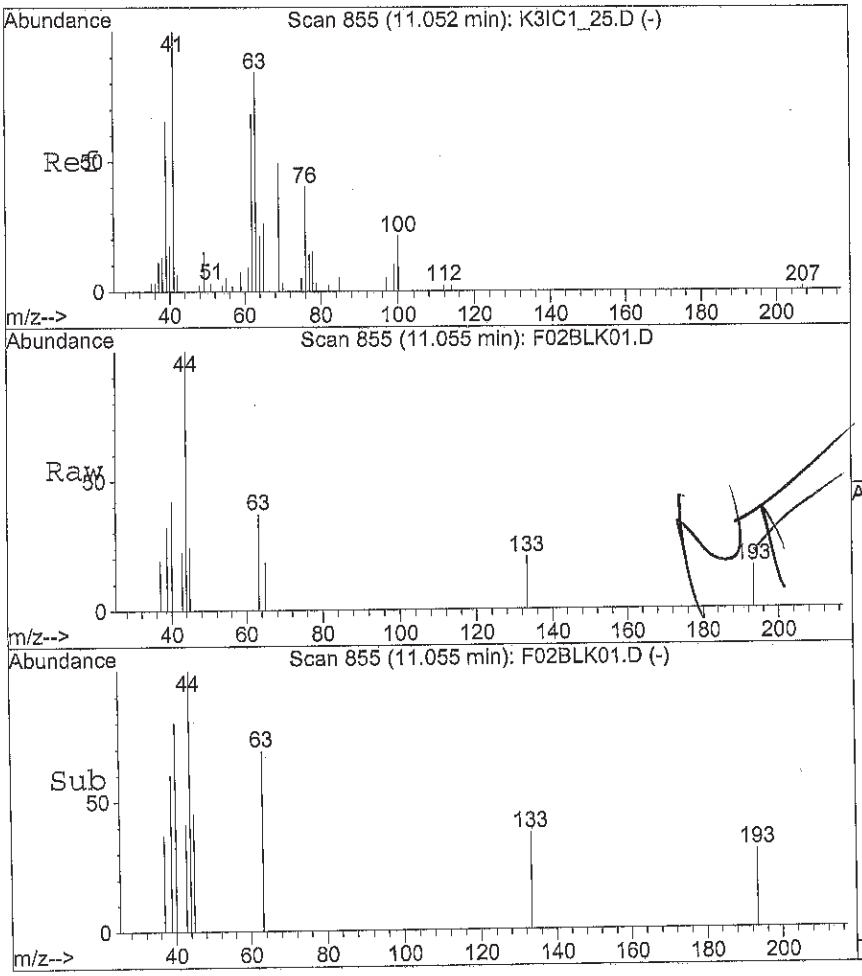


#32
1,2-Dichloroethane
Concen: 2.38 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.06 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 62 Resp: 12933

Ion	Ratio	Lower	Upper
62	100		
64	160.2	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

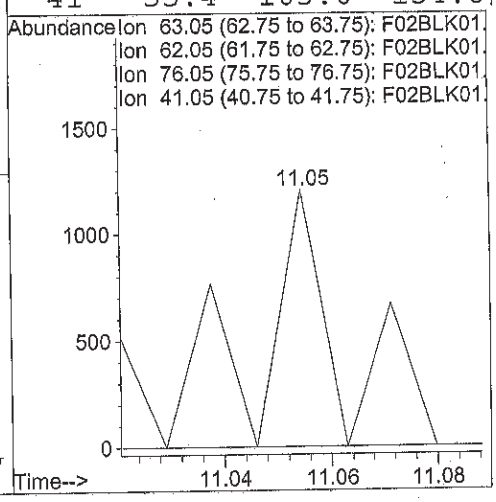


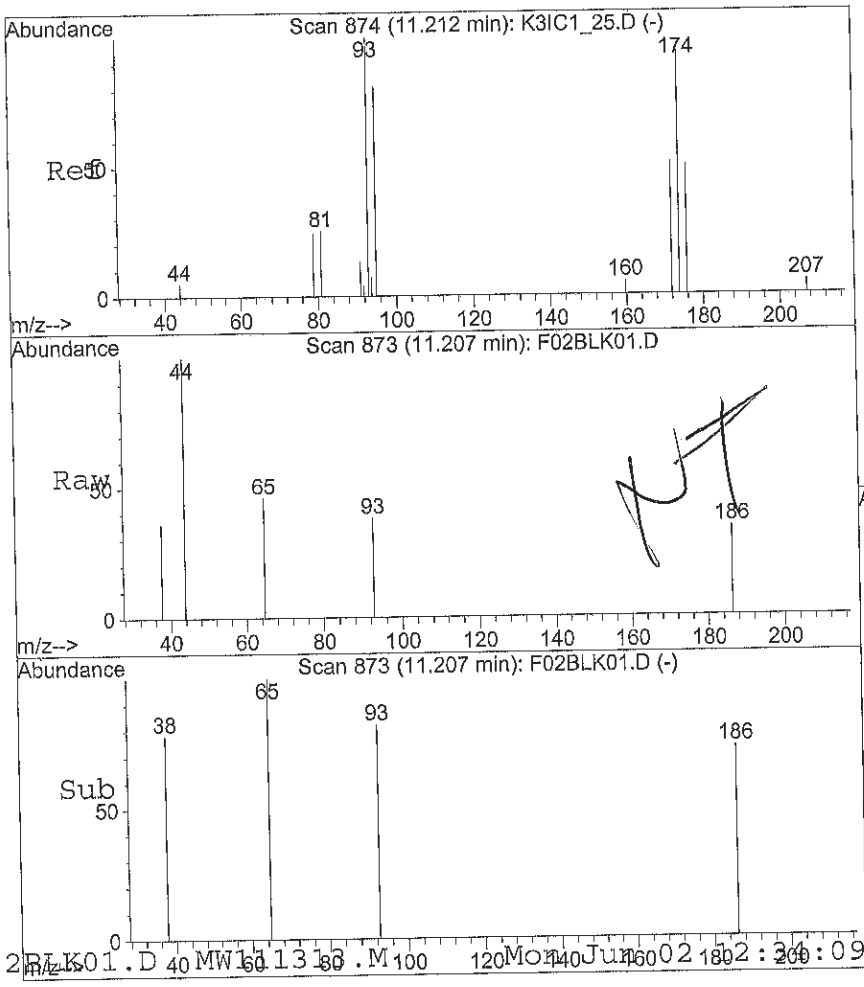


#34
1,2-Dichloropropane
Concen: 0.17 ug/L
RT: 11.05 min Scan# 855
Delta R.T. 0.00 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 63 Resp: 610

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	55.4	103.0	154.6#

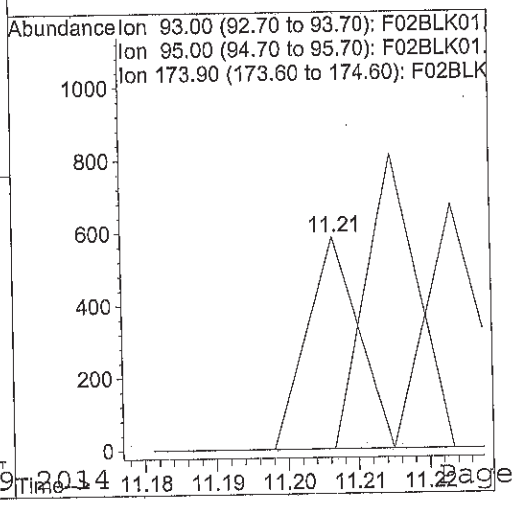


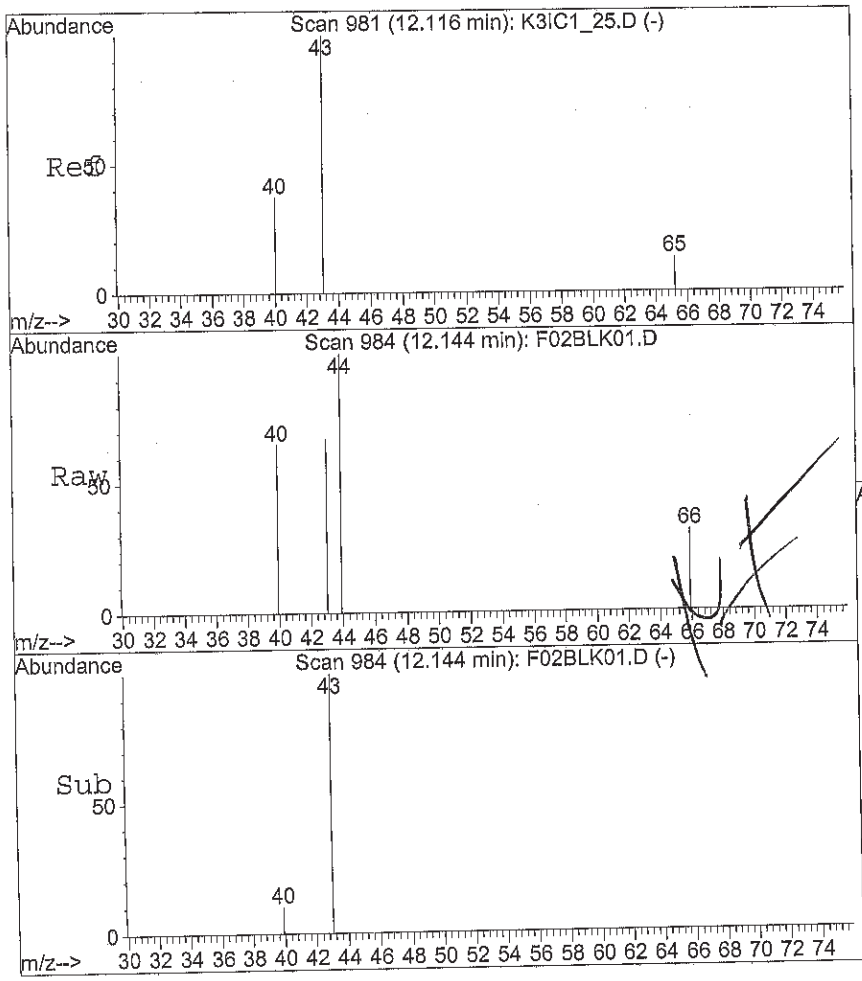


#35
Dibromomethane
Concen: 0.10 ug/L
RT: 11.21 min Scan# 873
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 93 Resp: 297

Ion	Ratio	Lower	Upper
93	100		
95	138.4	66.2	99.2#
174	0.0	75.5	113.3#

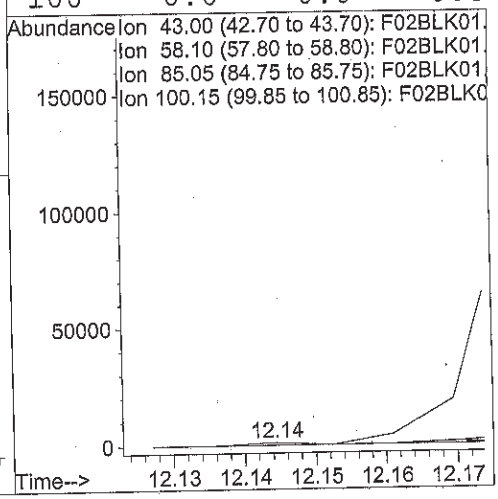


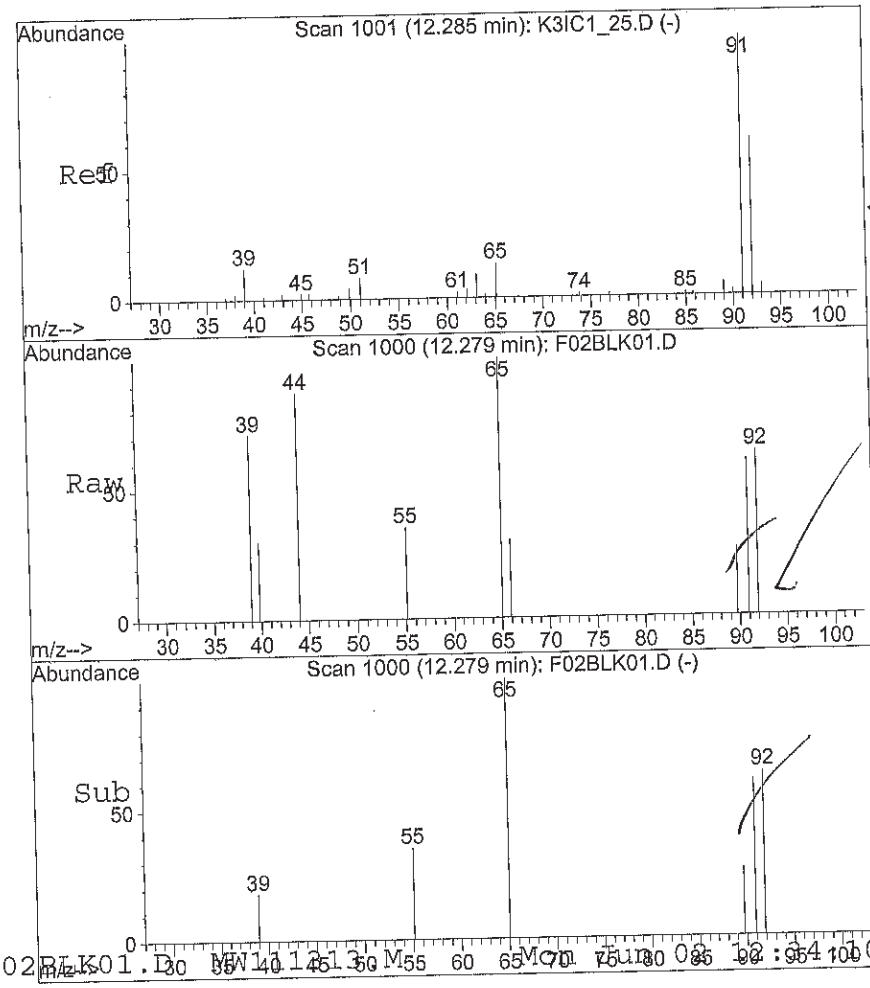


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.19 ug/L
RT: 12.14 min Scan# 984
Delta R.T. 0.03 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 43 Resp: 568

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

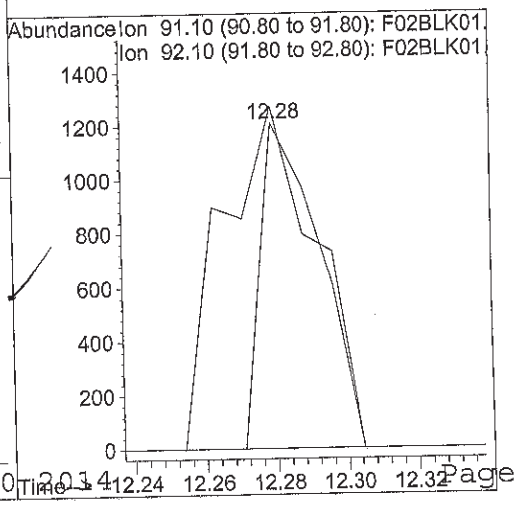


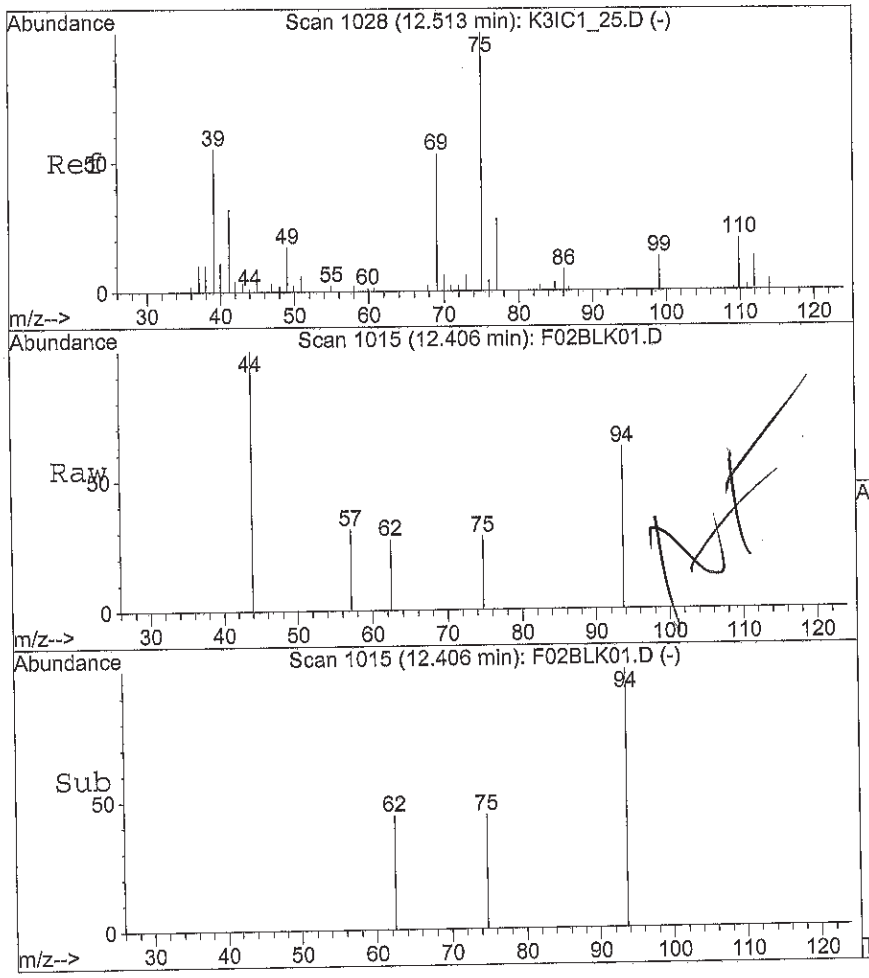


#41
Toluene
Concen: 0.07 ug/L
RT: 12.28 min Scan# 1000
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 91 Resp: 1411

Ion	Ratio	Lower	Upper
91	100		
92	163.1	47.4	71.0#

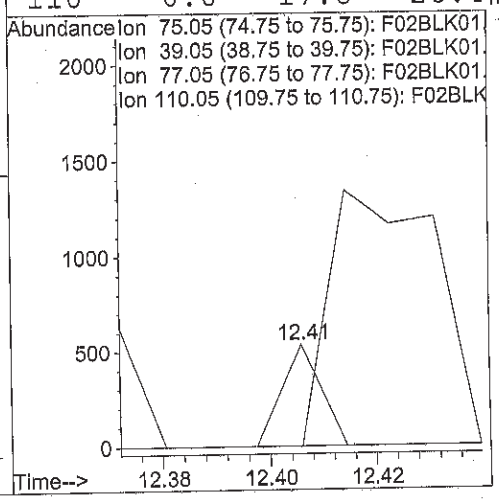


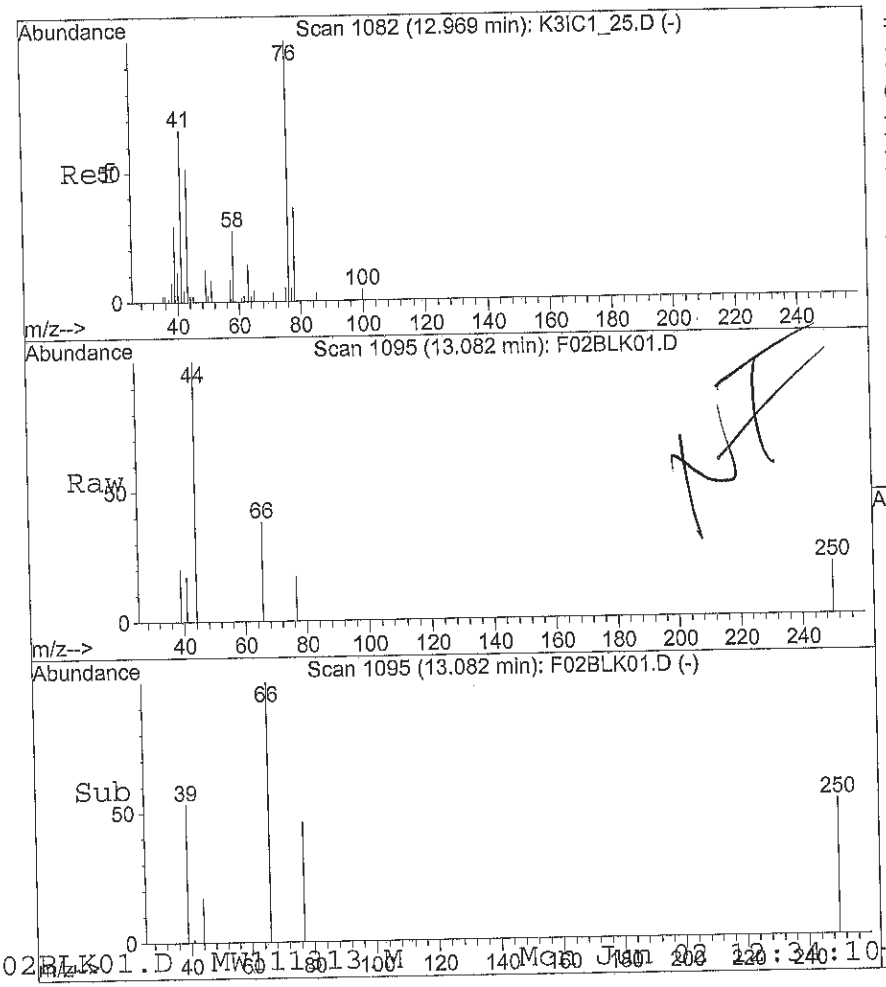


#42
trans-1,3-Dichloropropene
Concen: 0.04 ug/L
RT: 12.41 min Scan# 1015
Delta R.T. -0.11 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 75 Resp: 270

Ion	Ratio	Lower	Upper
75	100		
39	823.7	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

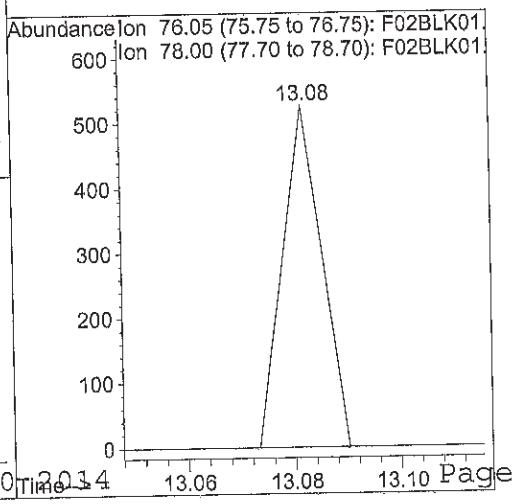


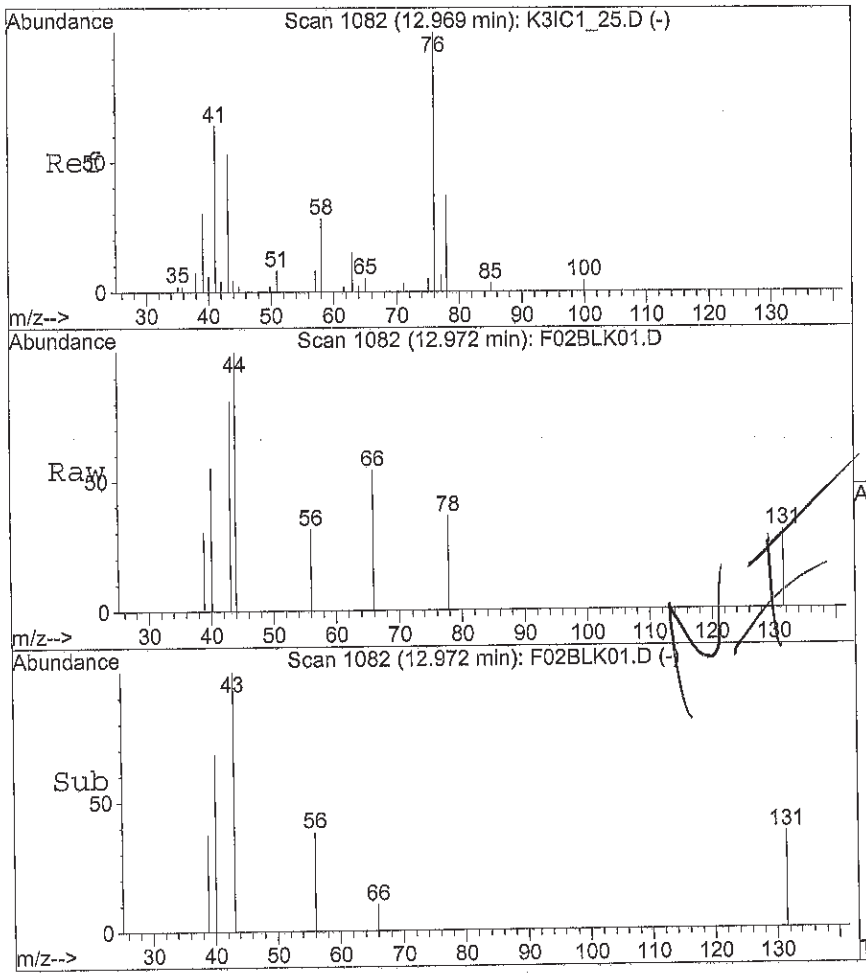


#45
1,3-Dichloropropane
Concen: 0.04 ug/L
RT: 13.08 min Scan# 1095
Delta R.T. 0.11 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 76 Resp: 267

Ion	Ratio	Lower	Upper
76	100		
78	0.0	26.9	40.3#

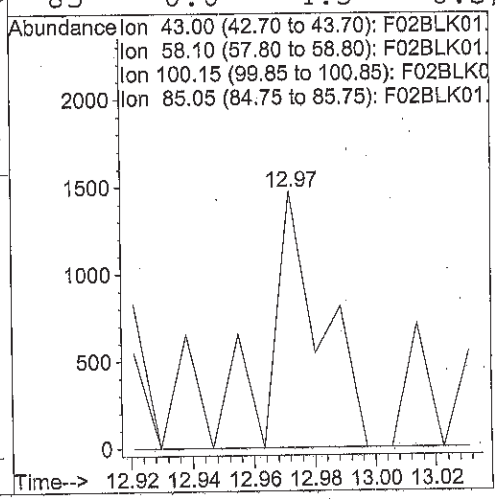


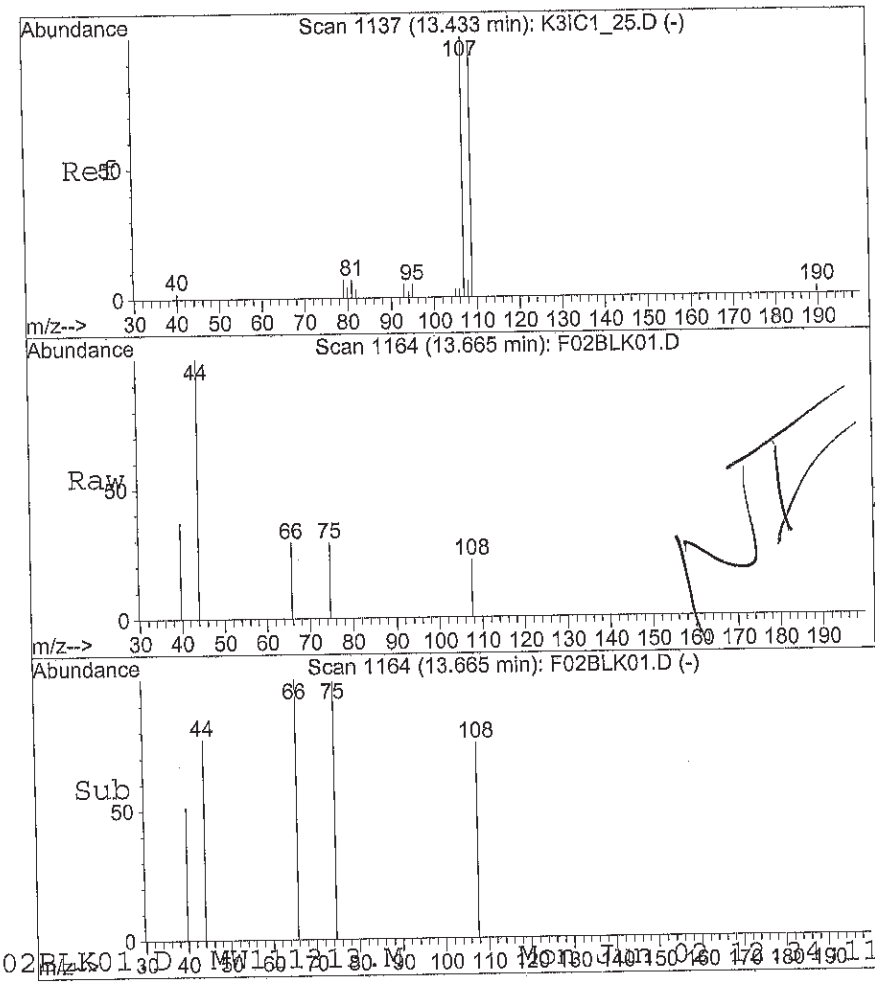


#46
2-Hexanone
Concen: 0.55 ug/L
RT: 12.97 min Scan# 1082
Delta R.T. 0.00 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 43 Resp: 1763

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

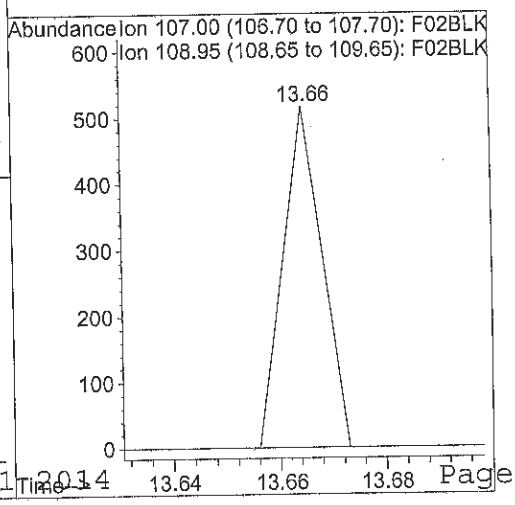


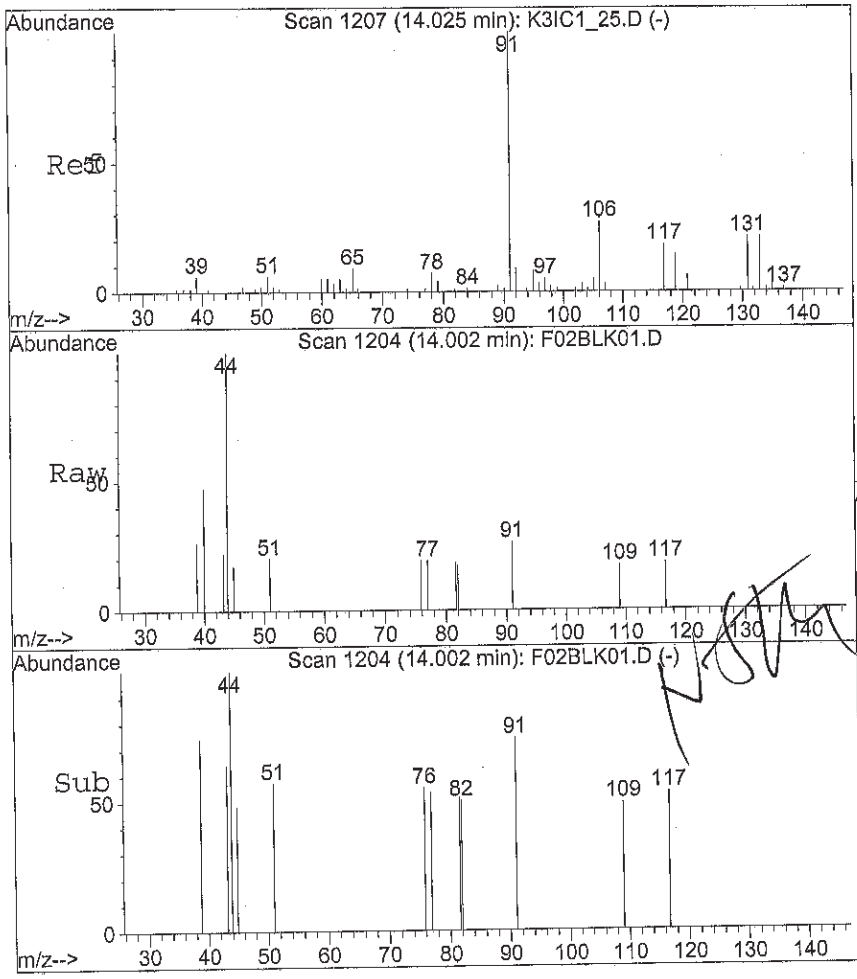


#48
1,2-Dibromoethane
Concen: 0.06 ug/L
RT: 13.66 min Scan# 1164
Delta R.T. 0.23 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:107 Resp: 262

Ion	Ratio	Lower	Upper
107	100		
109	0.0	74.4	111.6#

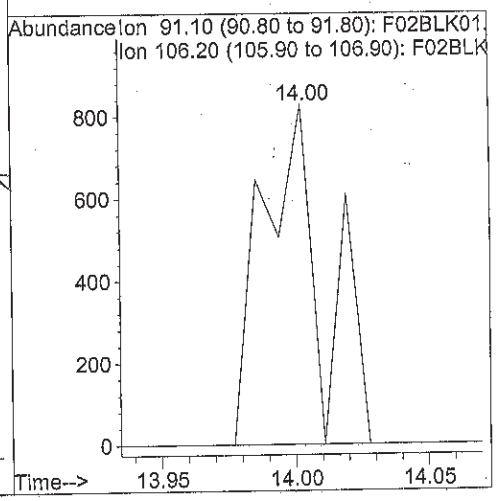


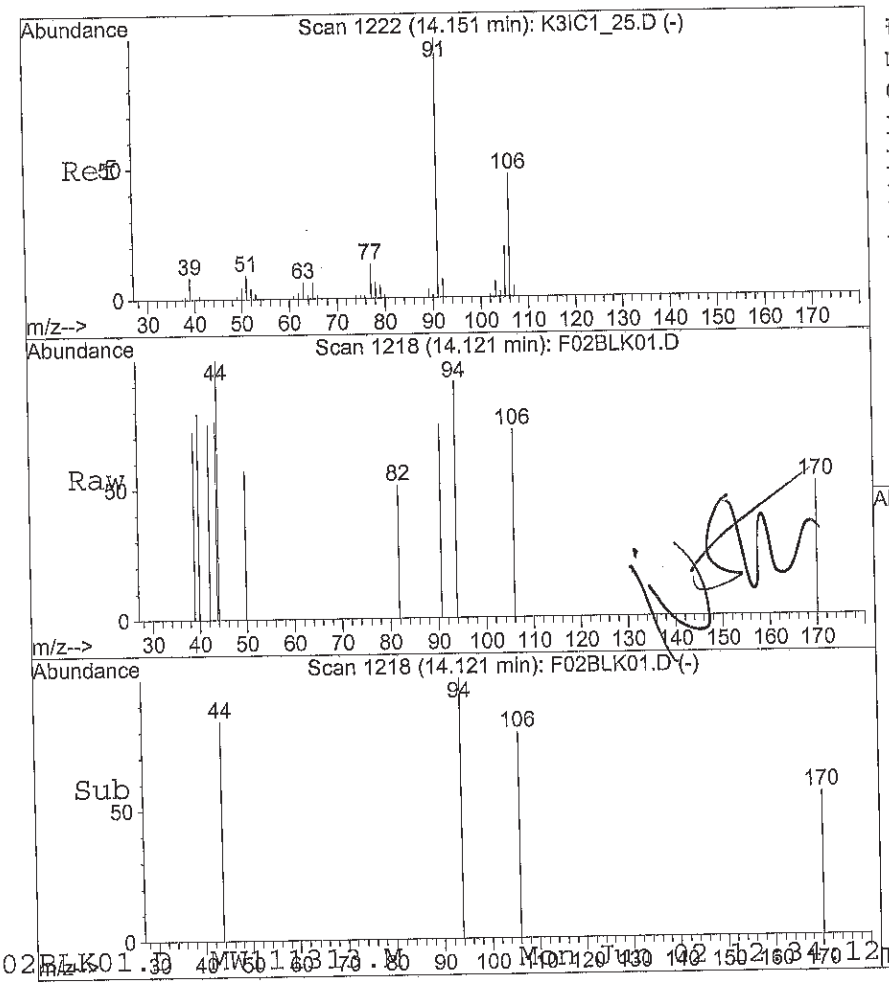


#51
Ethylbenzene
Concen: 0.06 ug/L
RT: 14.00 min Scan# 1204
Delta R.T. -0.02 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 91 Resp: 1311

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

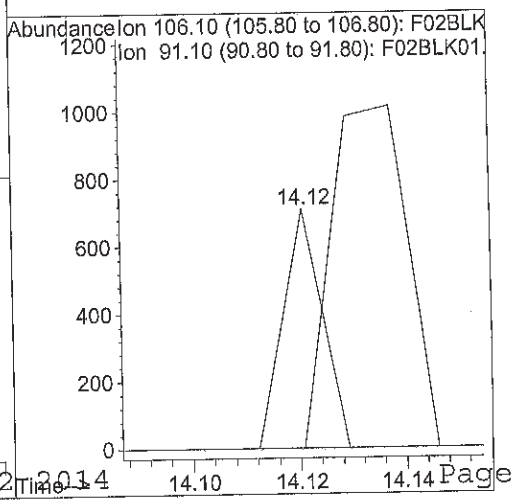


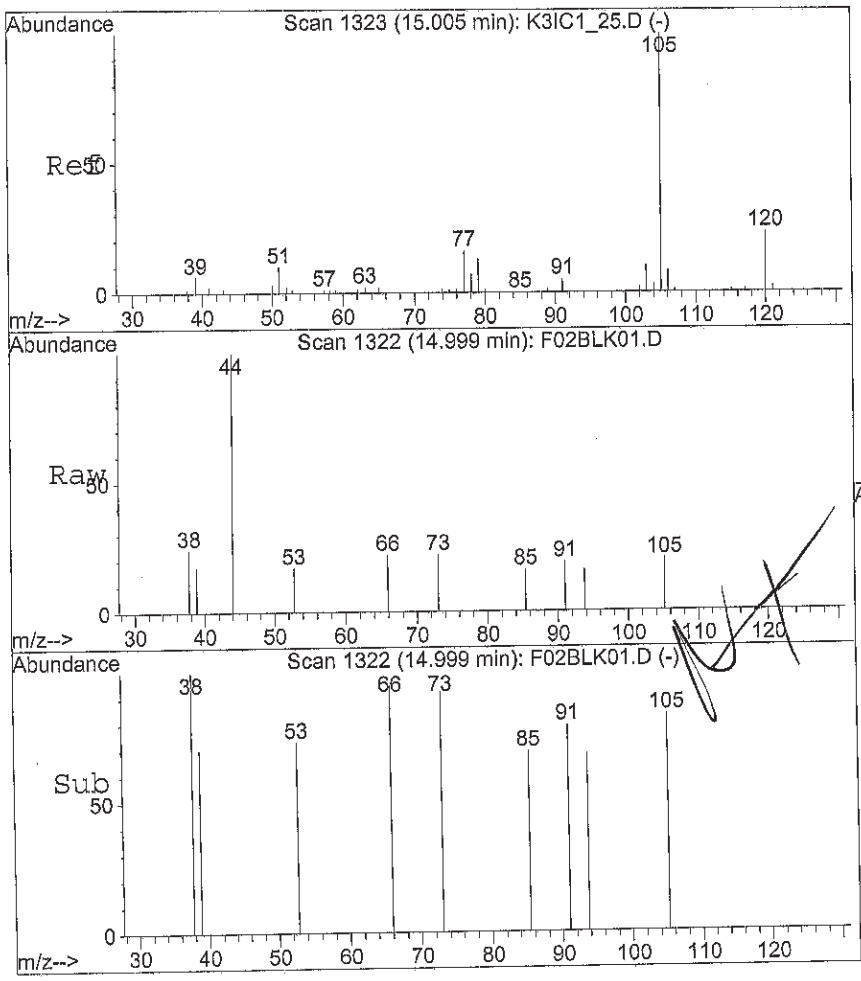


#52
m,p-Xylenes
Concen: 0.04 ug/L
RT: 14.12 min Scan# 1218
Delta R.T. -0.03 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:106 Resp: 359

Ion	Ratio	Lower	Upper
106	100		
91	281.9	177.1	265.7#

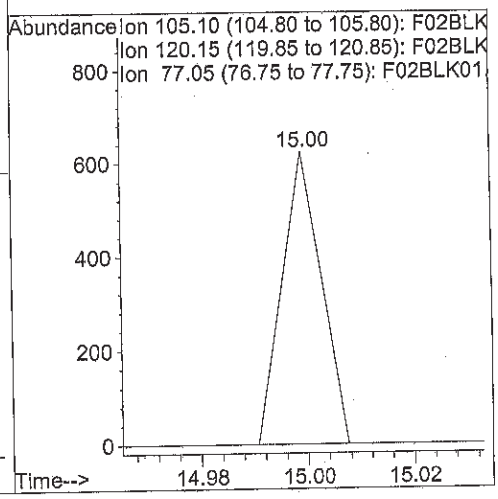


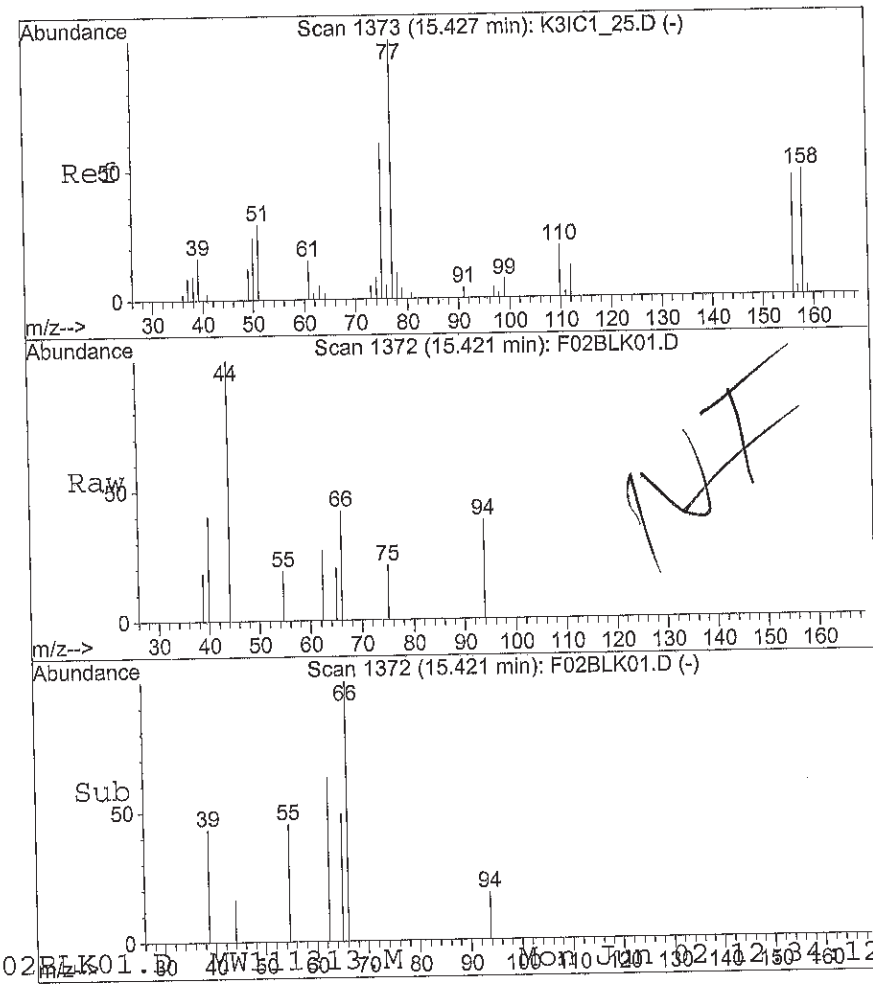


#56
Isopropylbenzene
Concen: 0.01 ug/L
RT: 15.00 min Scan# 1322
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:105 Resp: 316

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

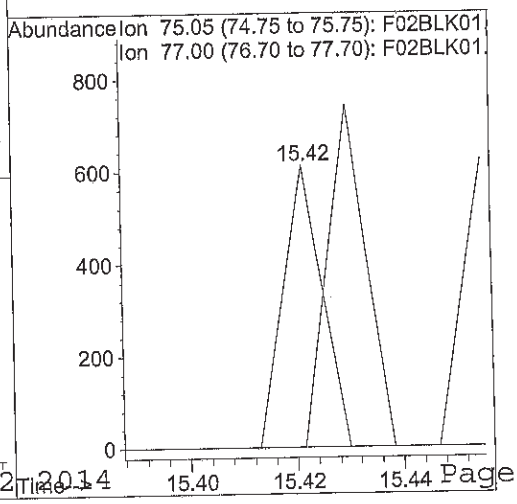


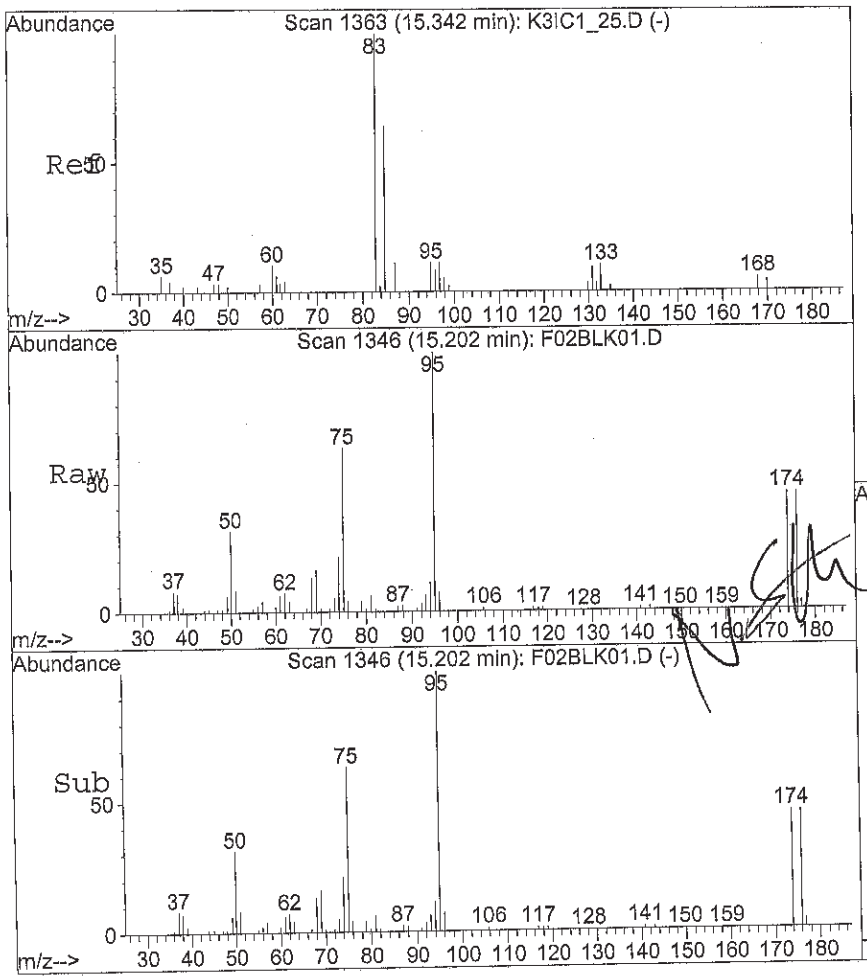


#57
1,2,3-Trichloropropane
Concen: 0.05 ug/L
RT: 15.42 min Scan# 1372
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 75 Resp: 310

Ion	Ratio	Lower	Upper
75	100		
77	121.3	31.2	46.8#

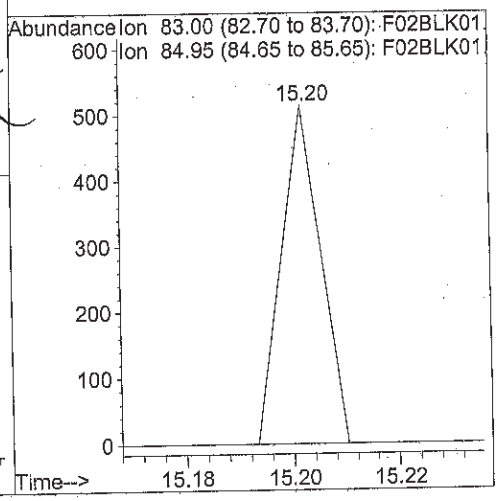


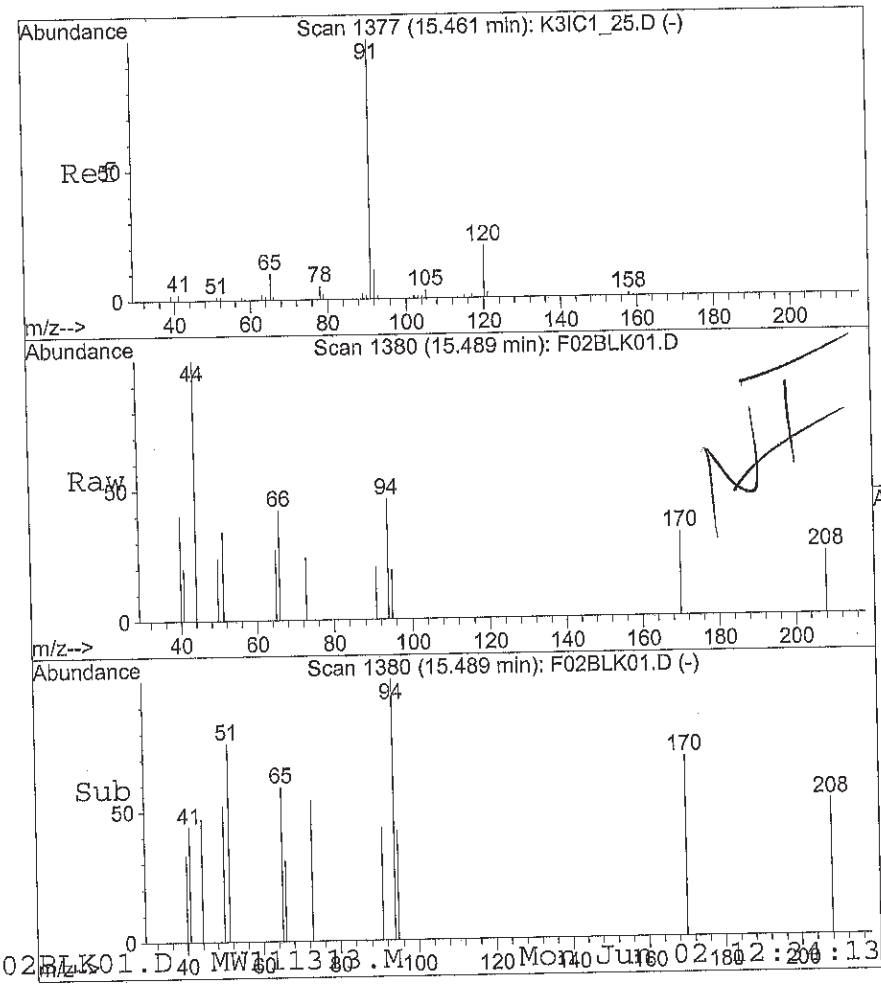


#60
1,1,2,2-Tetrachloroethane
Concen: 0.05 ug/L
RT: 15.20 min Scan# 1346
Delta R.T. -0.14 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 83 Resp: 260

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

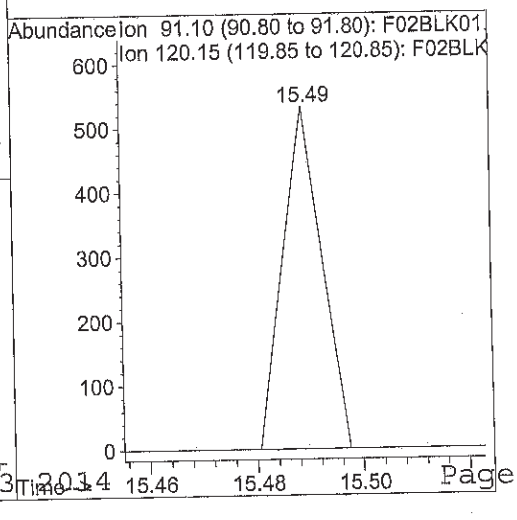


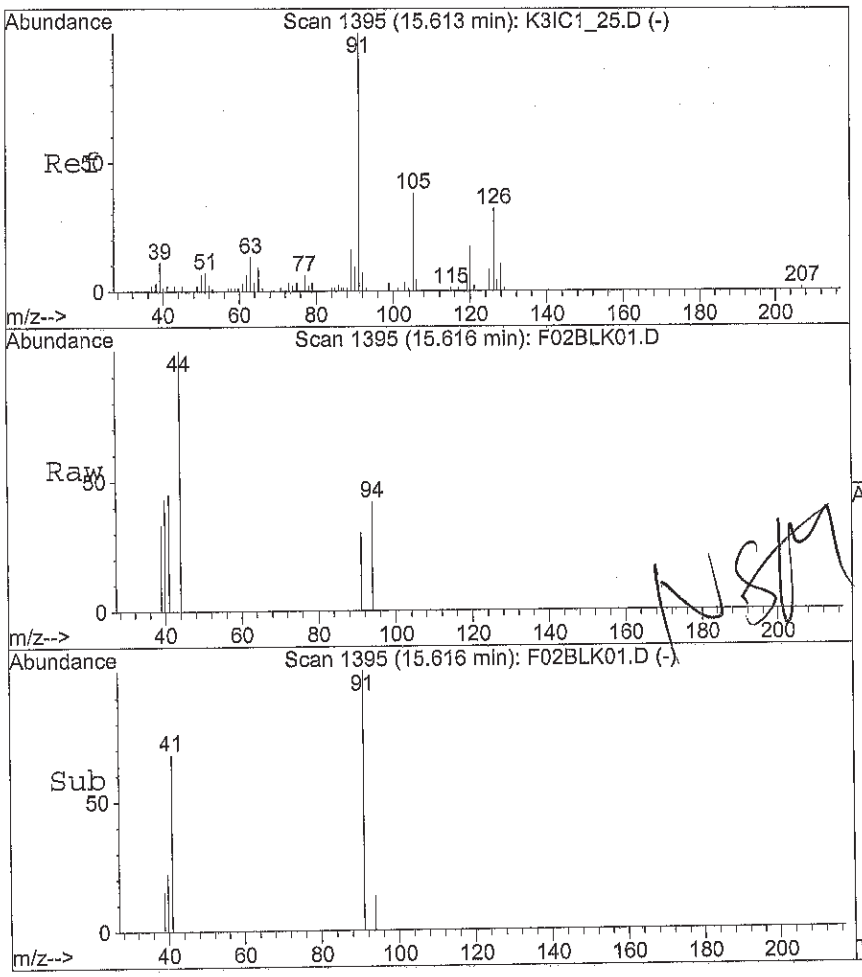


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.49 min Scan# 1380
Delta R.T. 0.03 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 91 Resp: 270

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

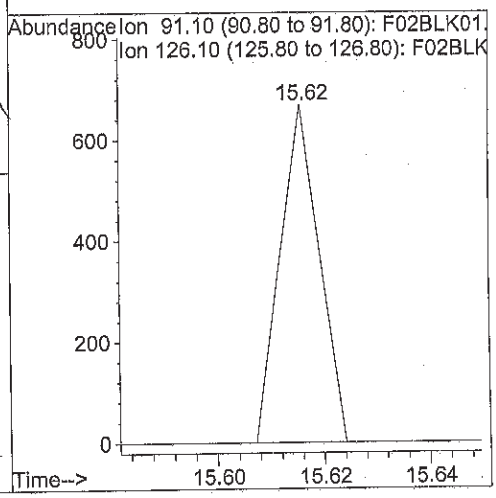


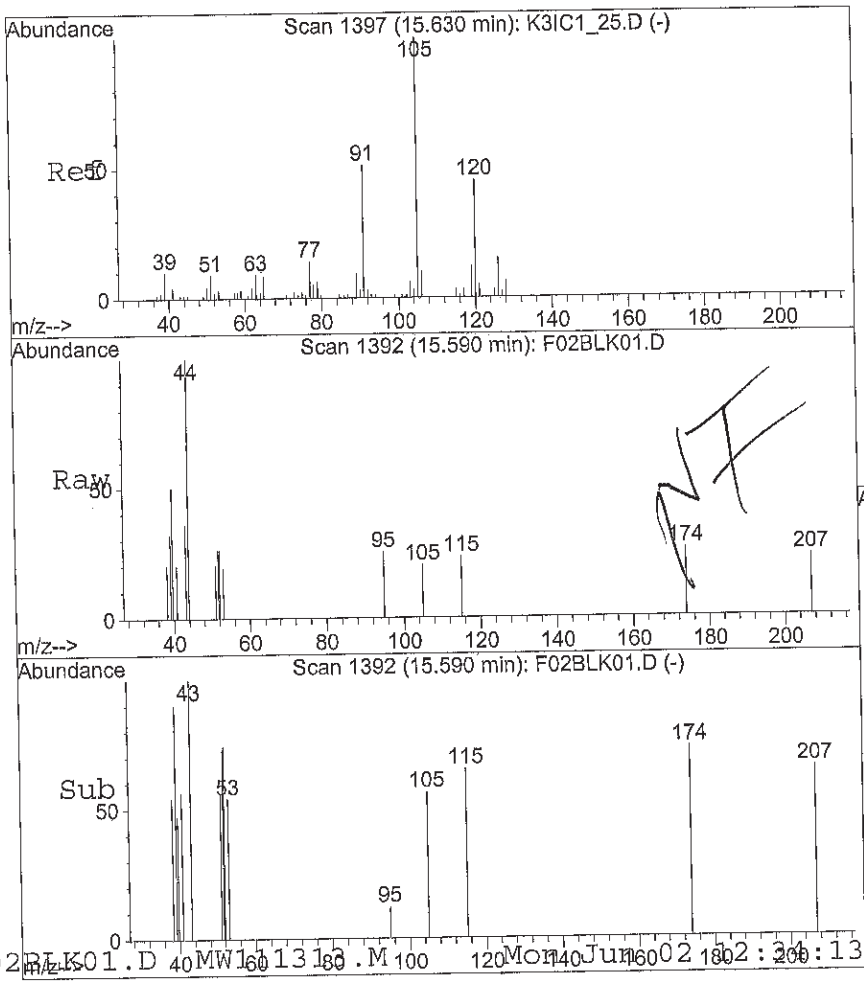


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1395
Delta R.T. 0.00 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 91 Resp: 339

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

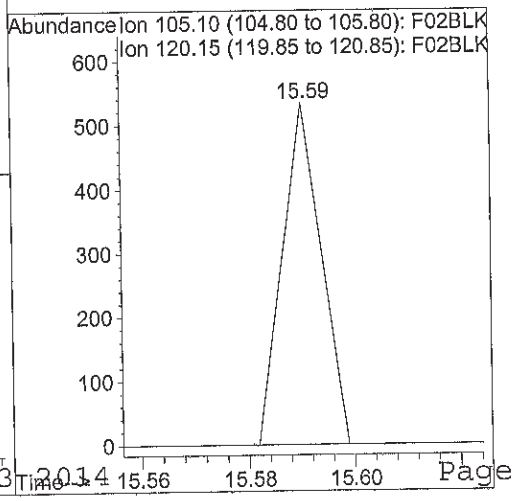


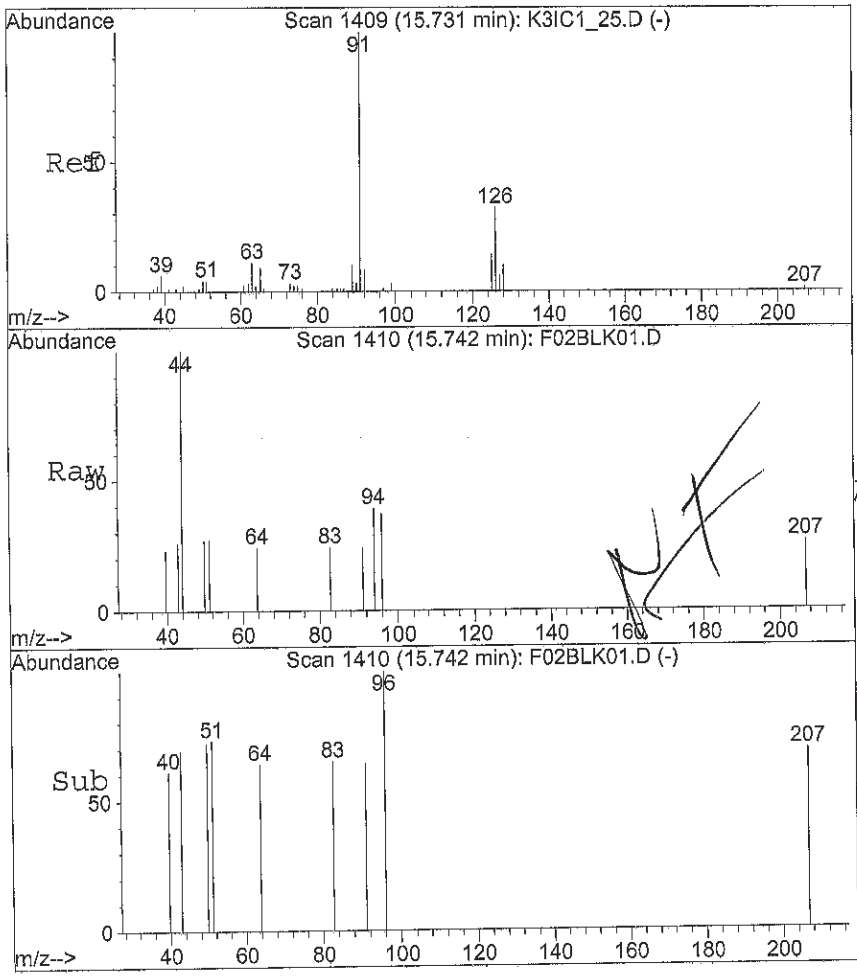


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.59 min Scan# 1392
Delta R.T. -0.04 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:105 Resp: 270

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

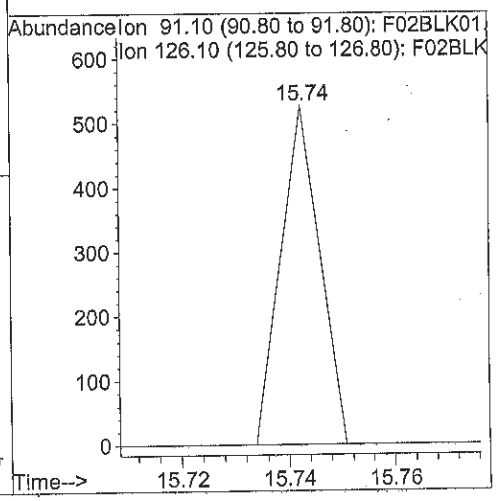


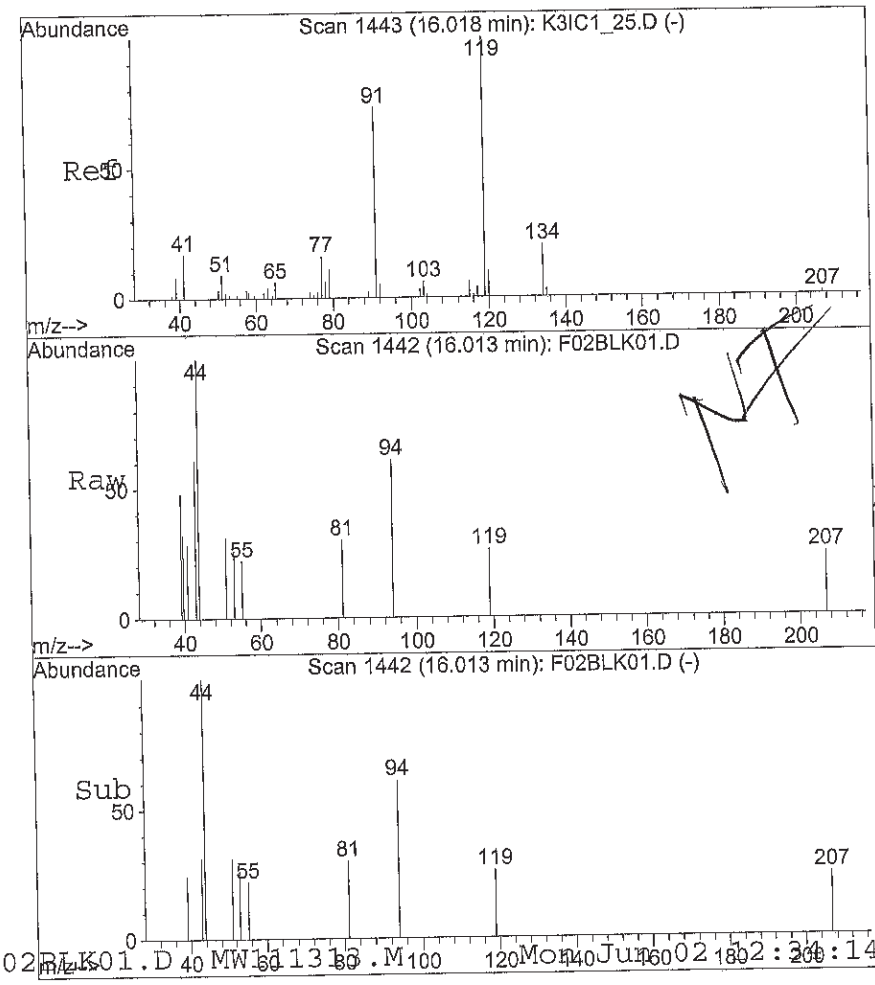


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.74 min Scan# 1410
Delta R.T. 0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 91 Resp: 267

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

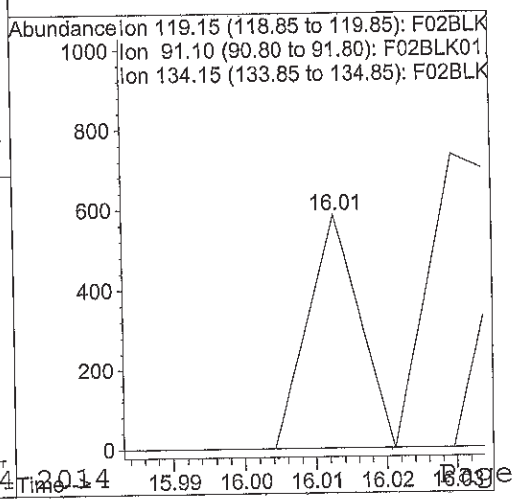


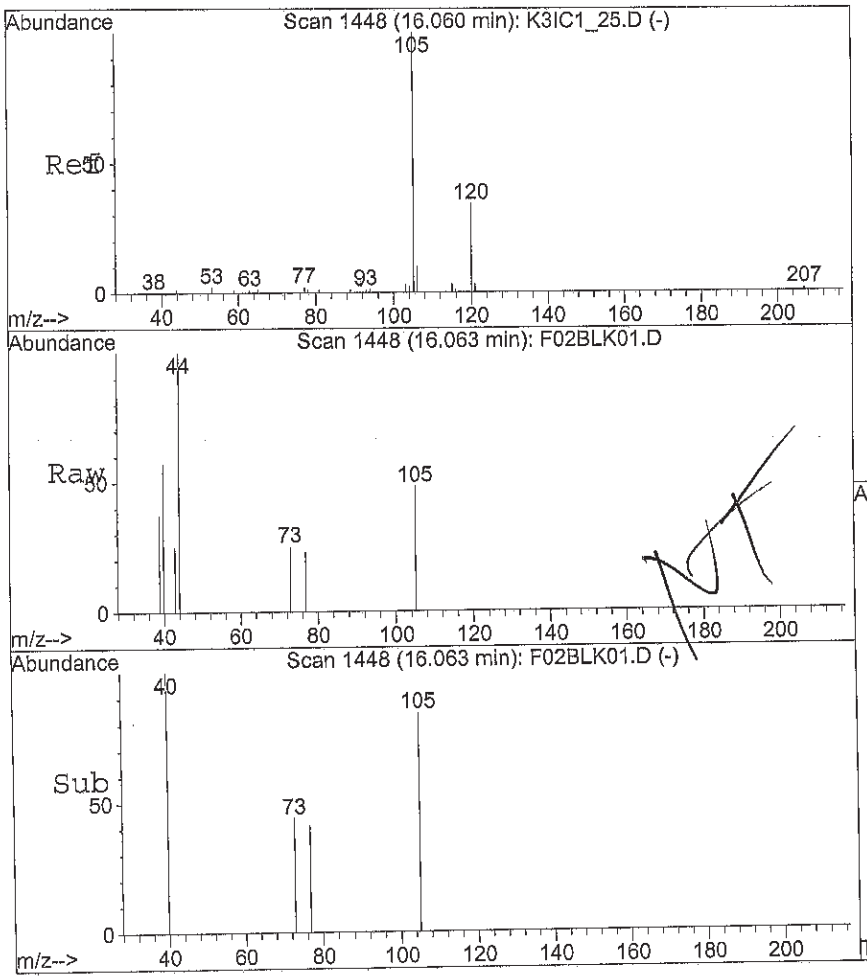


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.01 min Scan# 1442
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:119 Resp: 296

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

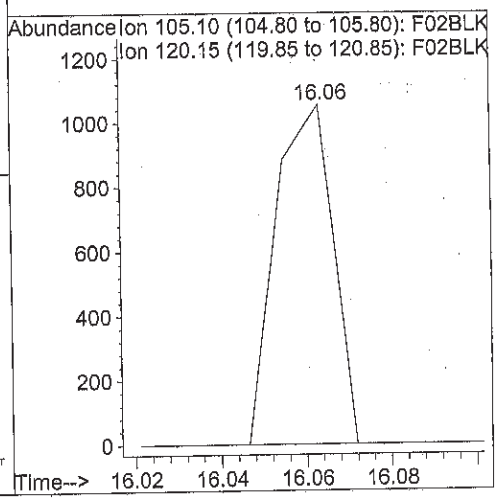


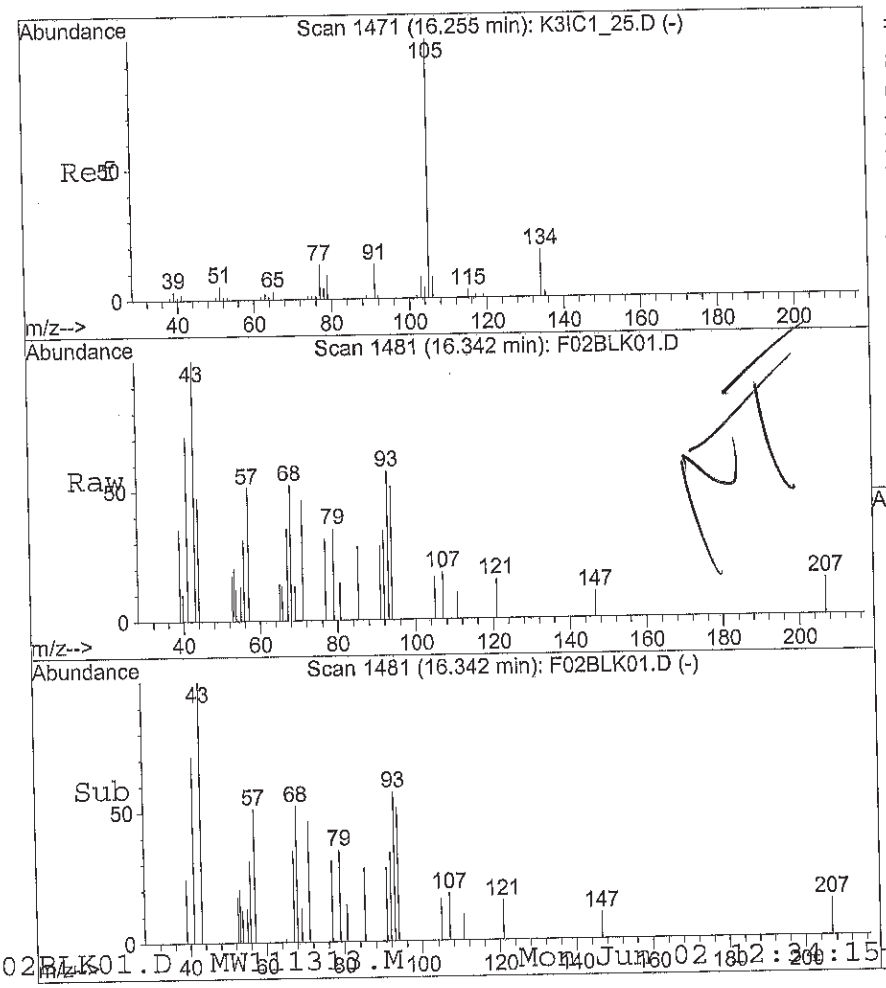


#67
1,2,4-Trimethylbenzene
Concen: 0.05 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.00 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:105 Resp: 982

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

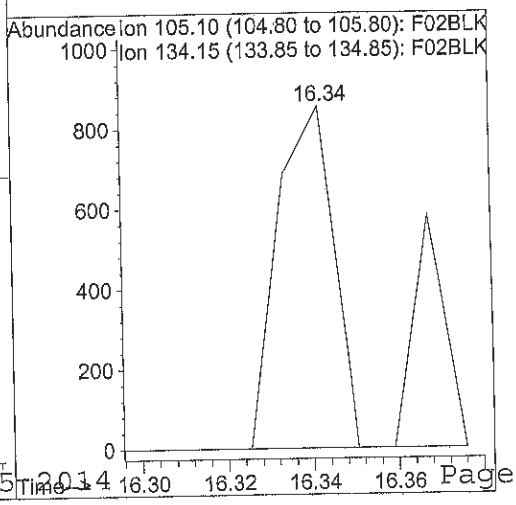


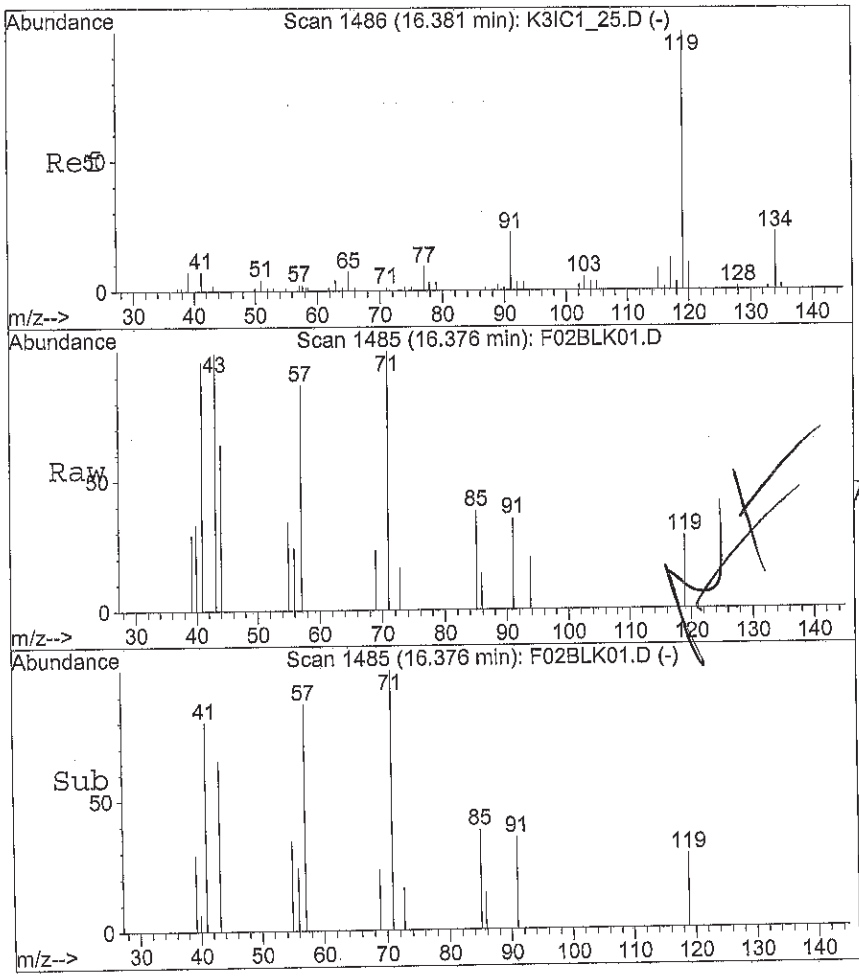


#68
sec-Butylbenzene
Concen: 0.03 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.09 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:105 Resp: 780

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

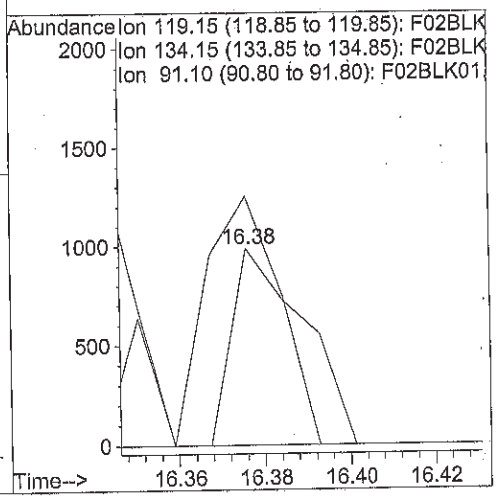


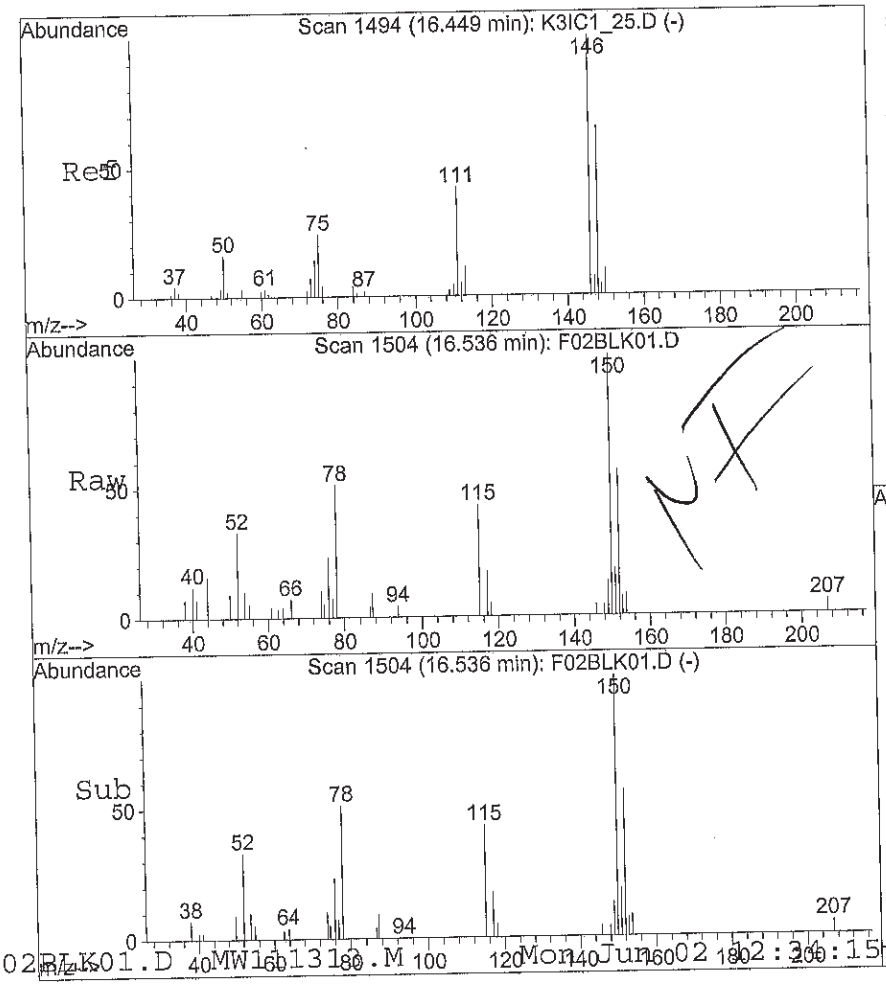


#69
p-Isopropyltoluene
Concen: 0.06 ug/L
RT: 16.38 min Scan# 1485
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:119 Resp: 1146

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	130.5	19.6	29.4#

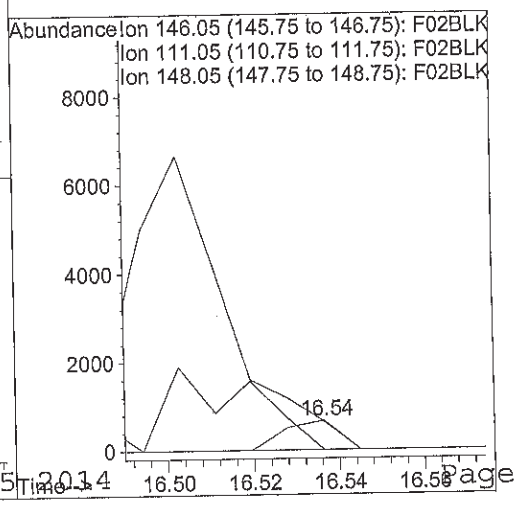


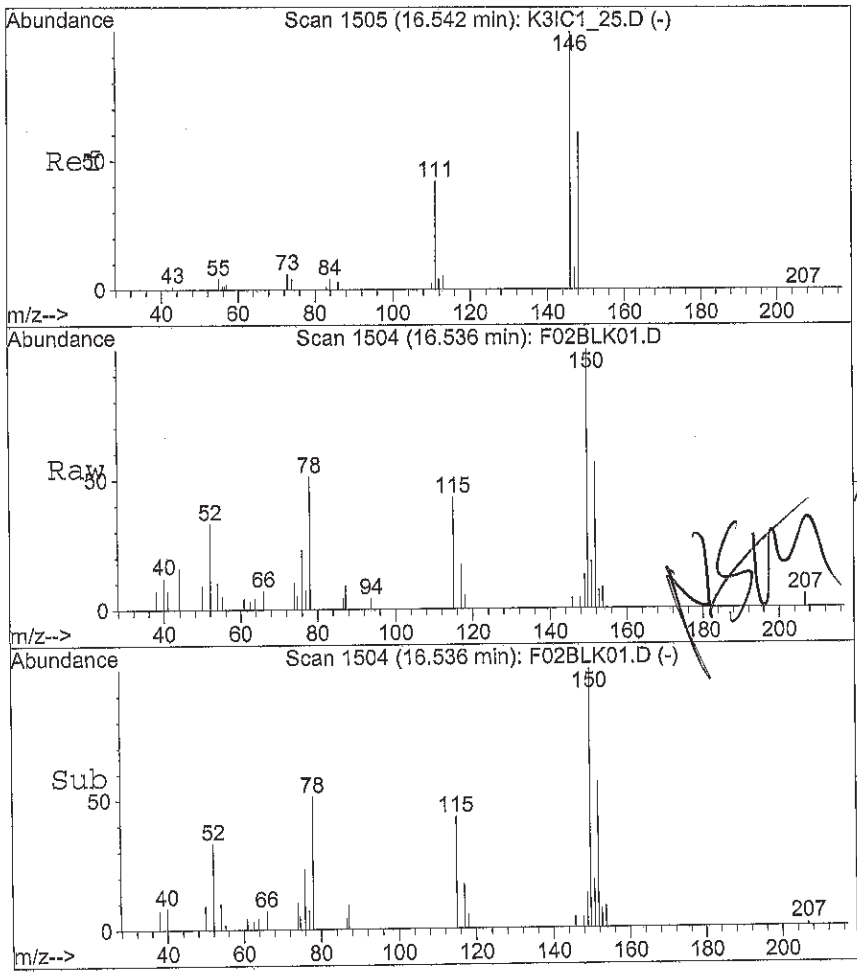


#70
1,3-Dichlorobenzene
Concen: 0.06 ug/L
RT: 16.54 min Scan# 1504
Delta R.T. 0.09 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:146 Resp: 590

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.2	51.4#
148	0.0	50.9	76.3#

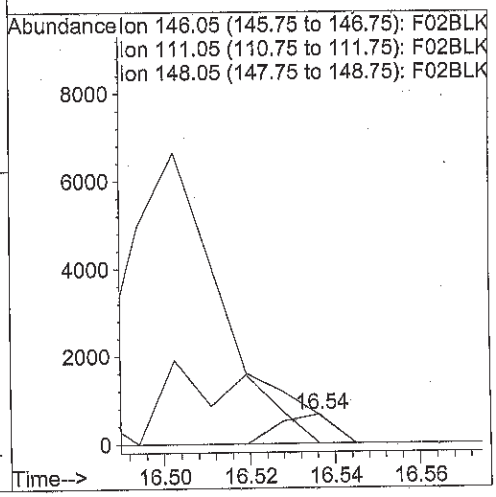


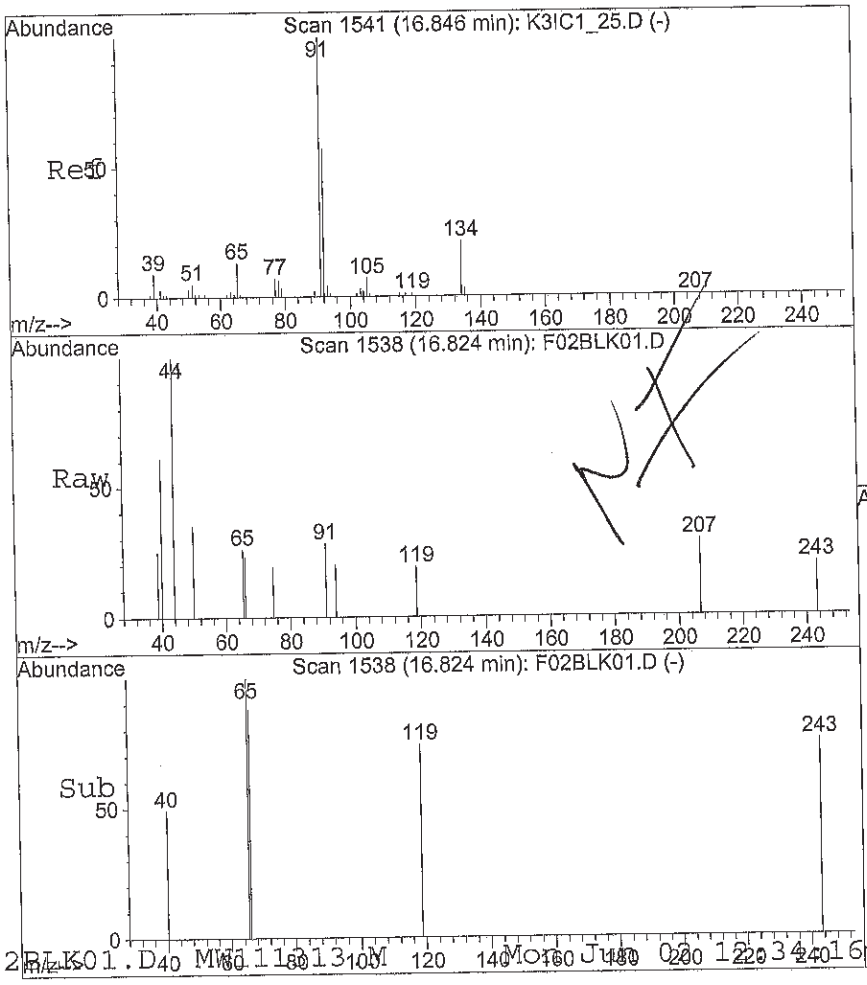


#71
1,4-Dichlorobenzene
Concen: 0.06 ug/L
RT: 16.54 min Scan# 1504
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:146 Resp: 590

Ion	Ratio	Lower	Upper
146	100		
111	0.0	37.6	56.4#
148	0.0	52.6	78.8#

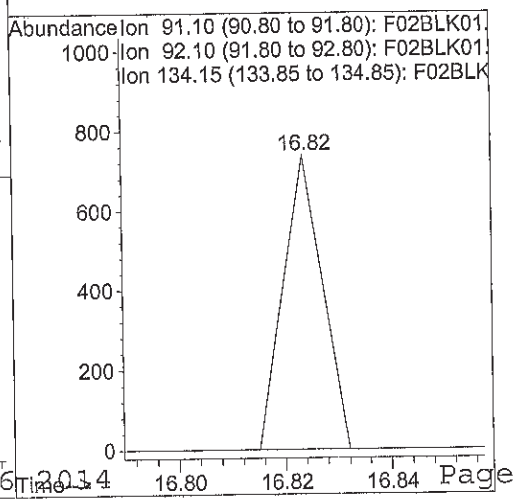


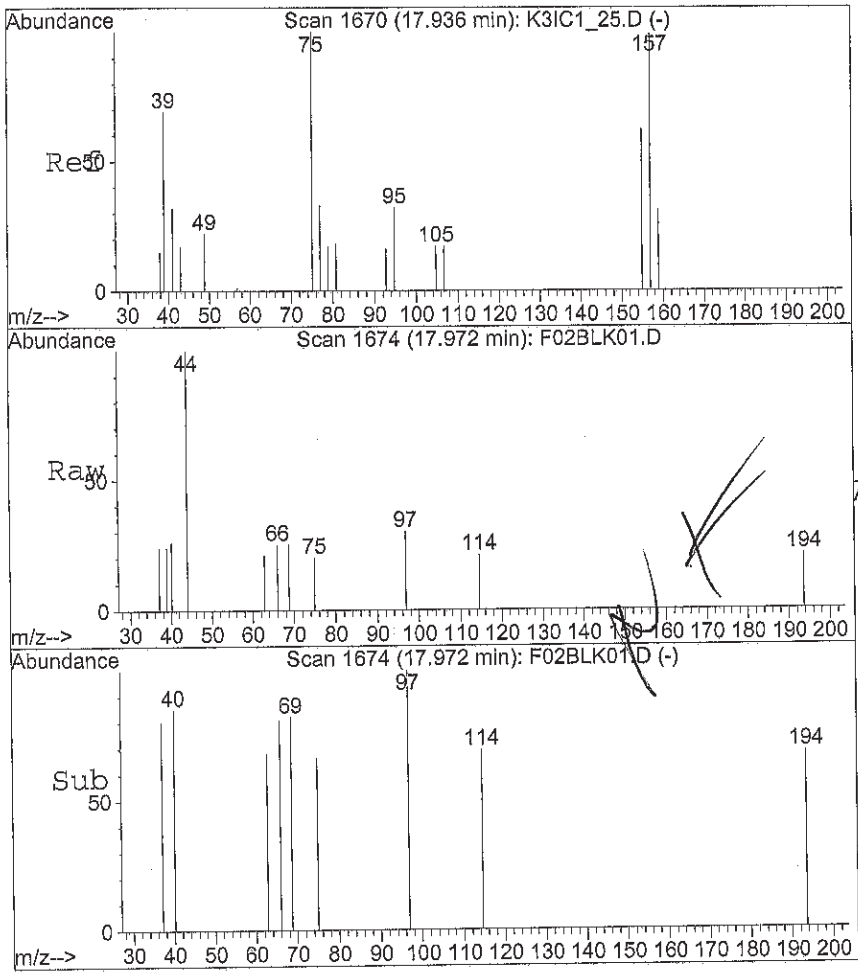


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.82 min Scan# 1538
Delta R.T. -0.02 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 91 Resp: 374

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

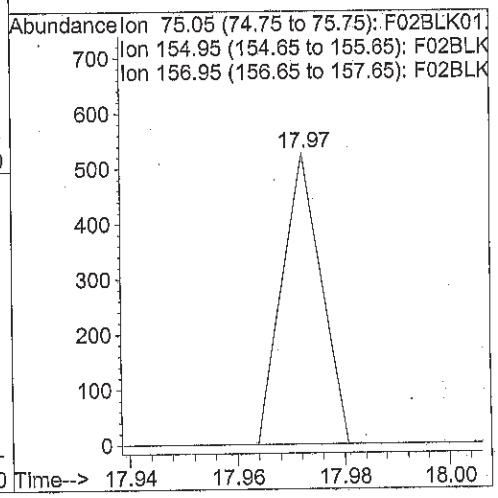


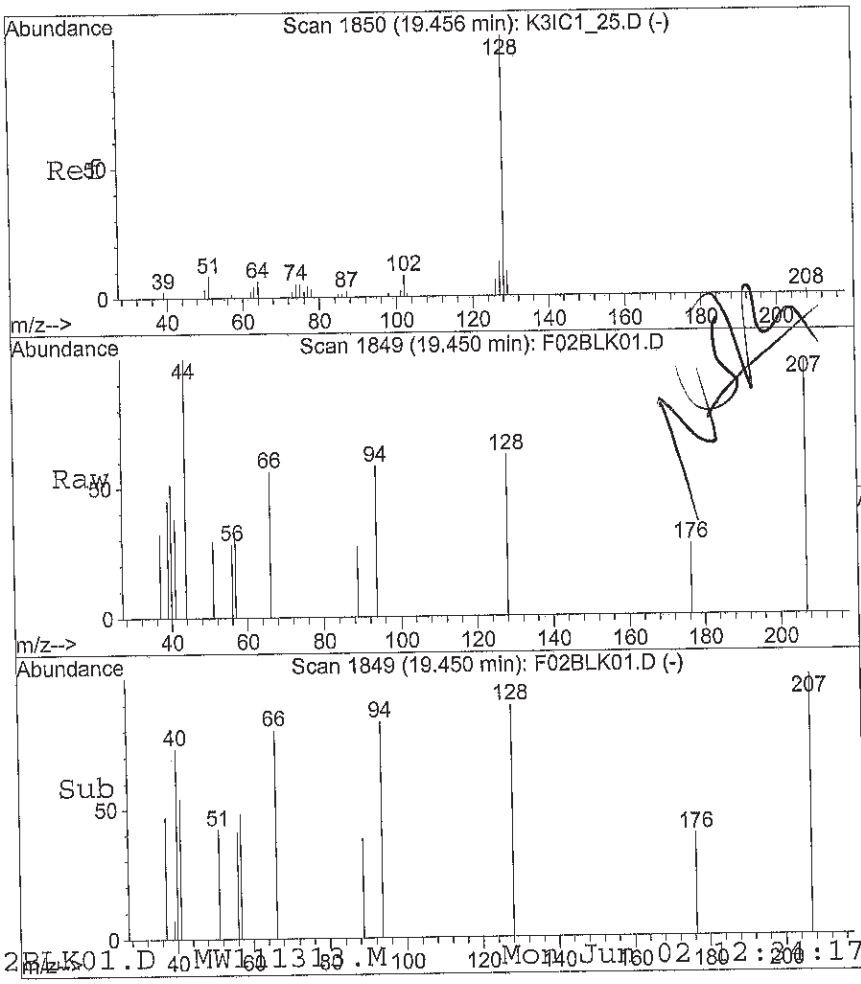


#74
1,2-Dibromo-3-chloropropane
Concen: 1.21 ug/L
RT: 17.97 min Scan# 1674
Delta R.T. 0.04 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion: 75 Resp: 268

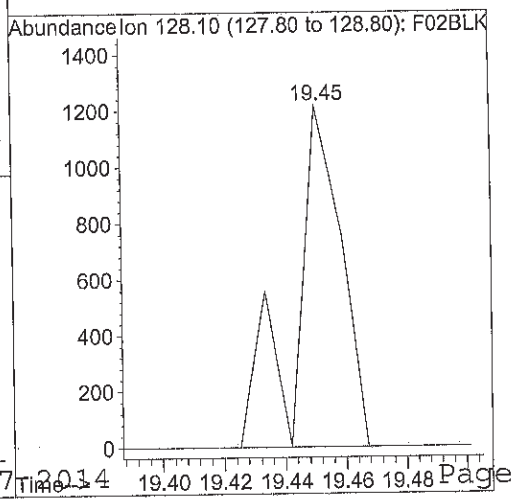
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.09 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: F02BLK01.D
Acq: 2 Jun 2014 11:15 am

Tgt Ion:128 Resp: 1281



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02BLK01.D Vial: 11
Acq On : 2 Jun 2014 11:15 am Operator: DN
Sample : 34F0201-BLK1 Inst : GC/MS Ins
Misc : 100cc AMBIENT AIR/H20 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:27 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1631767	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.91	117	1469938	12.50 ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	712180	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	480490m	11.32 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.56%		
3) Chloroform-d (SU6)	9.18	84	849749m	13.96 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery = 111.68%		
4) Methylene Chloride-d2 (SU5	7.08	86	356203	10.01 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 80.08%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	447803m	15.44 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 123.52%		
6) Benzene-d6 (SU7)	9.92	84	1385164	10.82 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.56%		
8) Toluene-d8 (SU3)	12.20	98	1604817	11.51 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.08%		
9) 4-Bromofluorobenzene (SU4)	15.21	95	803898m	13.96 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.68%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

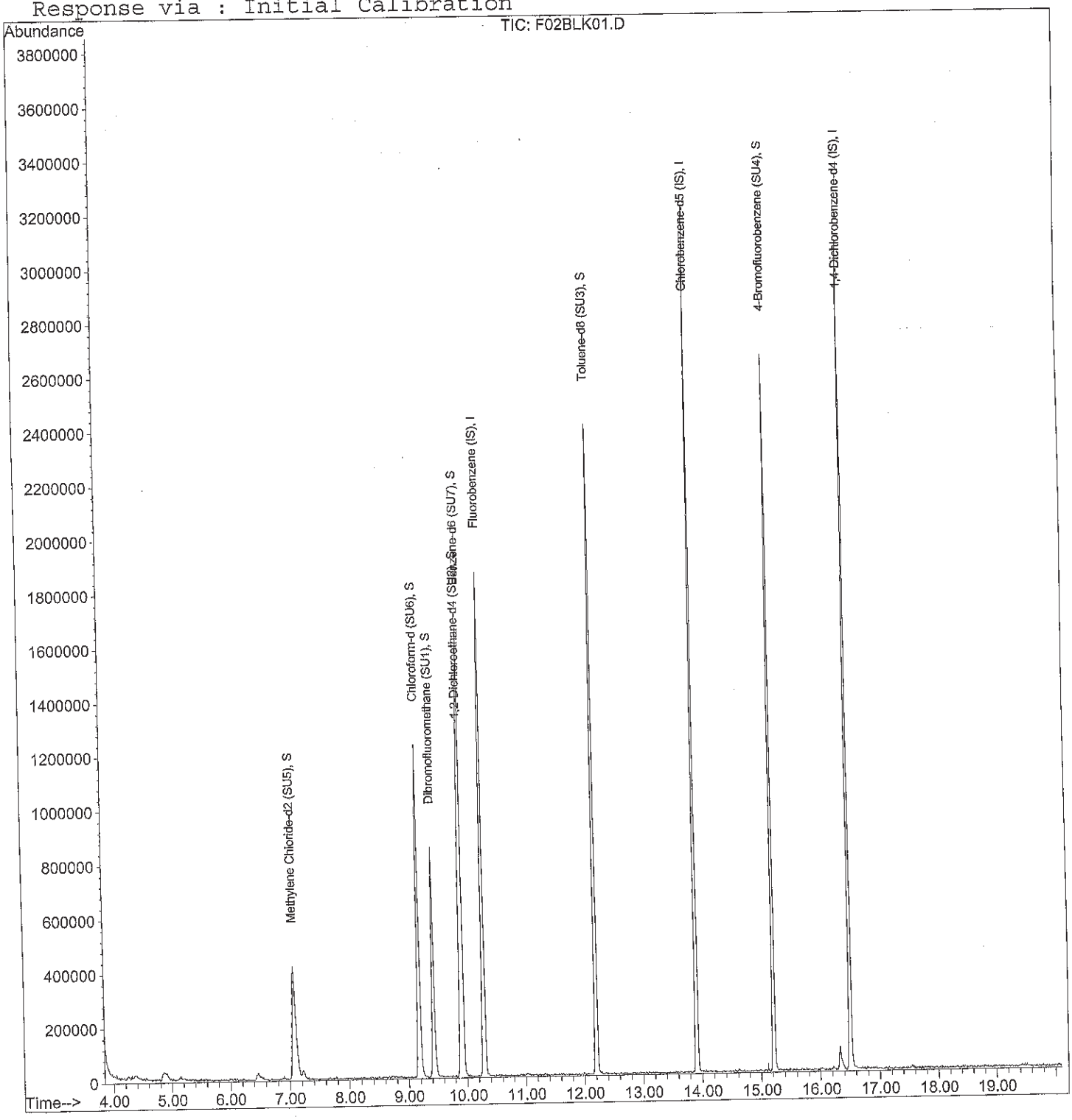
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02BLK01.D
Acq On : 2 Jun 2014 11:15 am
Sample : 34F0201-BLK1
Misc : 100cc AMBIENT AIR/H20
MS Integration Params: rteint.p
Quant Time: Jun 3 7:27 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



RAW DATA FOR ANALYZED SAMPLES INCLUDING CHROMATOGRAMS, QUANTITATION REPORTS AND SPECTRA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200001.D
Acq On : 2 Jun 2014 11:46 am
Sample : 3F40201-01
Misc : 100cc Equipment Blank
MS Integration Params: rteint.p
Quant Time: Jun 2 12:47 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	959959	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	899548	12.50 ug/L	-0.01
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	456072	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	270540m	11.30 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.40%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	285346m	12.54 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.32%		
39) Toluene-d8 (SU3)	12.20	98	947418	11.29 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.32%		
58) 4-Bromofluorobenzene (SU4)	15.21	95	449683m	12.22 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.76%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	3.87	85	270	0.11 ~~ug/L~~ # SM	44
4) Chloromethane	4.39	50	3448	0.92 ~~ug/L~~ #	54
5) Vinyl Chloride	4.40	62	289	0.17 ~~ug/L~~ #	43
6) Bromomethane	5.14	96	2397	0.49 ~~ug/L~~	89
7) Chloroethane	5.22	64	699	1.56 ~~ug/L~~	91
8) (F11) Trichlorofluorometha	5.71	101	281	0.11 ~~ug/L~~ # SM	16
10) 1,1-Dichloroethene	6.18	96	283	0.12 ~~ug/L~~ #	34
11) Acetone	6.46	58	6749	14.29 ~~ug/L~~ #	1
12) (IPA) Leak Check Compound	6.55	45	2677	23.21 ~~ug/L~~ # SM	1
13) Carbon disulfide	6.87	76	297	0.04 ~~ug/L~~ # SM	76
14) Methylene Chloride	7.06	84	7916	3.00 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.93	59	1307	7.98 ~~ug/L~~ #	77
16) (MTBE) Methyl-t-butyl ethe	7.40	73	270	0.05 ~~ug/L~~ #	1
17) trans-1,2-Dichloroethene	7.43	96	254	0.10 ~~ug/L~~ #	4
18) 1,1-Dichloroethane	8.09	63	270	0.06 ~~ug/L~~ #	42
19) cis-1,2-Dichloroethene	8.65	96	257	0.09 ~~ug/L~~ # SM	3
20) 2,2-Dichloropropane	8.78	77	407	0.11 ~~ug/L~~ #	1
22) (DIPE) Diisopropyl Ether	7.82	45	282	0.04 ~~ug/L~~ #	1
23) Bromochloromethane	9.00	128	355	0.28 ~~ug/L~~ #	1
24) Chloroform	9.19	83	1062	0.21 ~~ug/L~~ #	18
29) 1,1-Dichloropropene	9.85	75	294	0.08 ~~ug/L~~ #	41
31) Benzene	9.95	78	3108	0.34 ~~ug/L~~ #	57

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200001.D Vial: 11
Acq On : 2 Jun 2014 11:46 am Operator: DN
Sample : 3F40201-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 12:47 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	9.92	62	13541	4.24 ug/L # NSM	1
34) 1,2-Dichloropropane	11.06	63	300	0.14 ug/L #	2
35) Dibromomethane	11.01	93	272	0.16 ug/L #	5
36) Bromodichloromethane	11.13	83	263	0.08 ug/L #	21
40) (MIBK) 4-Methyl-2-Pentanon	12.10	43	288	0.16 ug/L #	100
41) Toluene	12.28	91	342	0.03 ug/L # 0.0006	1
42) trans-1,3-Dichloropropene	12.50	75	256	0.06 ug/L # NSM	1
45) 1,3-Dichloropropane	12.92	76	539	0.13 ug/L #	70
46) 2-Hexanone	12.97	43	1526	0.78 ug/L #	37
51) Ethylbenzene	14.00	91	1606	0.12 ug/L #	45
54) Styrene	14.62	104	597	-0.79 ug/L #	58
56) Isopropylbenzene	15.21	105	1562	0.12 ug/L #	1
57) 1,2,3-Trichloropropane	15.35	75	284	0.08 ug/L # NSM	36
60) 1,1,2,2-Tetrachloroethane	15.19	83	253	0.08 ug/L #	18
62) n-Propylbenzene	15.39	91	267	0.01 ug/L #	56
63) 2-Chlorotoluene	15.39	91	267	0.02 ug/L #	45
64) 1,3,5-Trimethylbenzene	15.62	105	264	0.02 ug/L #	18
65) 4-Chlorotoluene	15.96	91	339	0.03 ug/L #	44
68) sec-Butylbenzene	16.31	105	283	0.02 ug/L # NSM	62
69) p-Isopropyltoluene	16.37	119	266	0.02 ug/L #	1
70) 1,3-Dichlorobenzene	16.50	146	307	0.05 ug/L #	1
71) 1,4-Dichlorobenzene	16.50	146	307	0.05 ug/L #	1
72) n-Butylbenzene	16.87	91	283	0.02 ug/L #	30
73) 1,2-Dichlorobenzene	17.13	146	254	0.04 ug/L #	24
74) 1,2-Dibromo-3-chloropropan	18.16	75	374	1.59 ug/L #	6

(#) = qualifier out of range (m) = manual integration

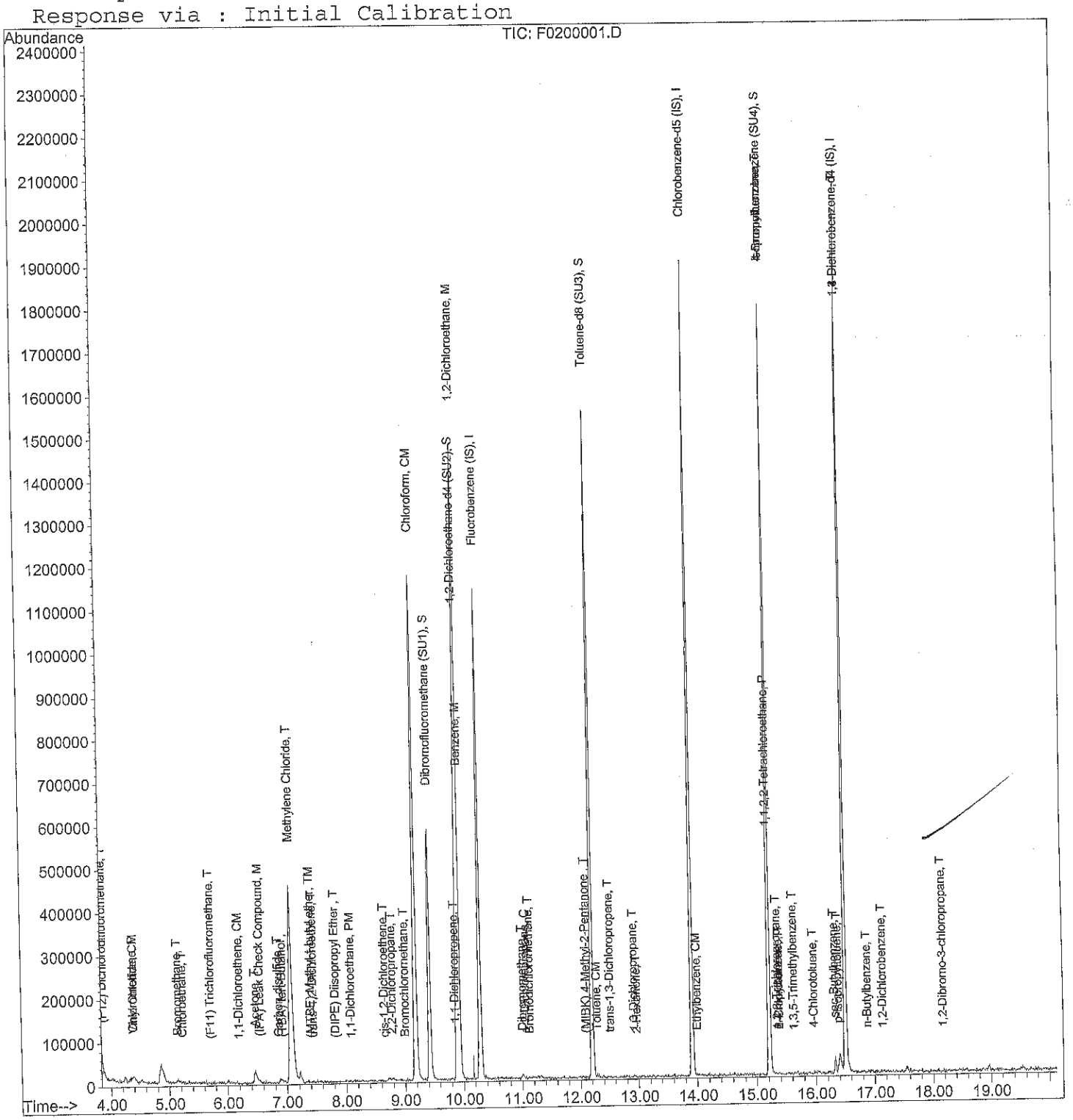
Quantitation Report

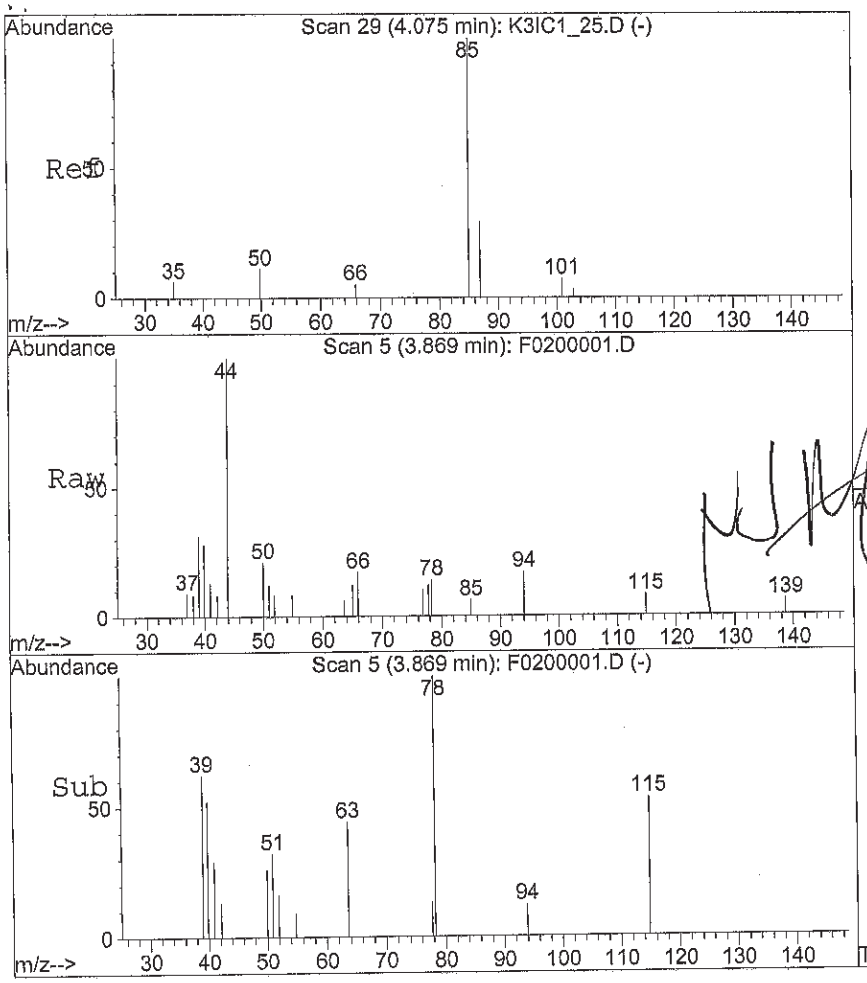
Data File : C:\HPCHEM\1\DATA\060214L3\F0200001.D
Acq On : 2 Jun 2014 11:46 am
Sample : 3F40201-01
Misc : 100cc Equipment Blank
MS Integration Params: rteint.p
Quant Time: Jun 2 12:47 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

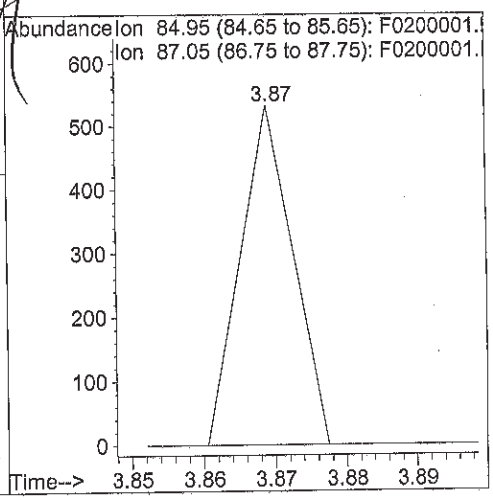


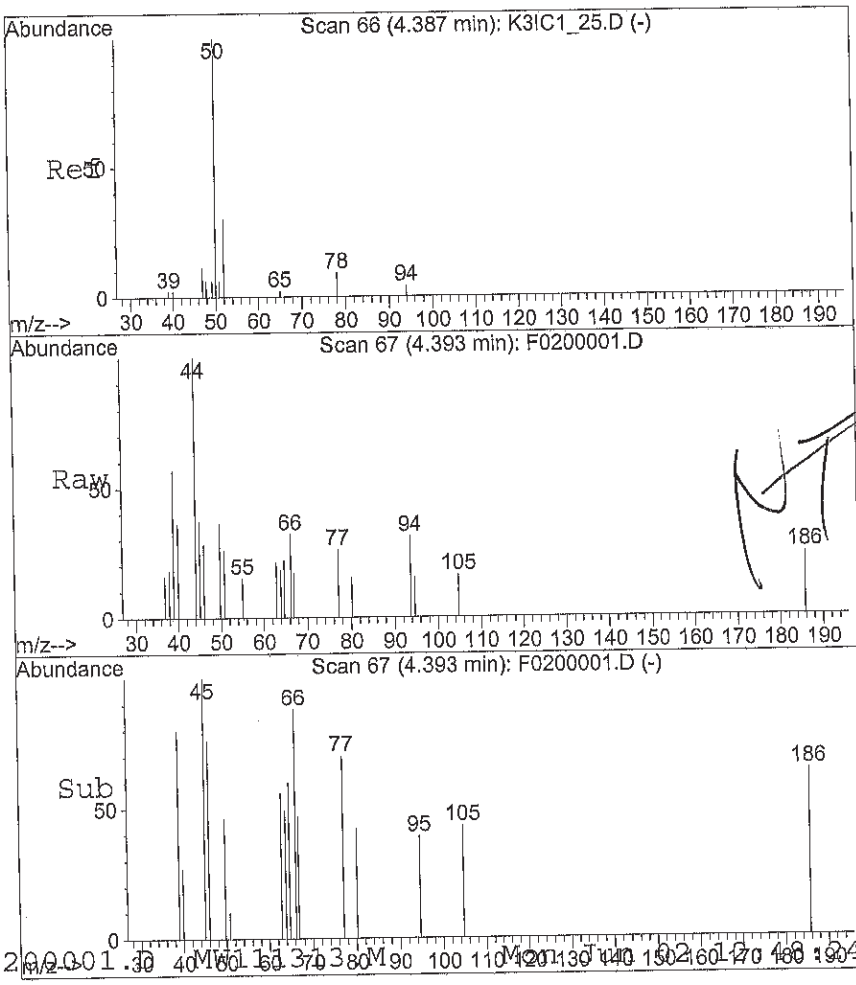


#3
(F12) Dichlorodifluoromethane
Concen: 0.11 ug/L
RT: 3.87 min Scan# 5
Delta R.T. -0.21 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 85 Resp: 270

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

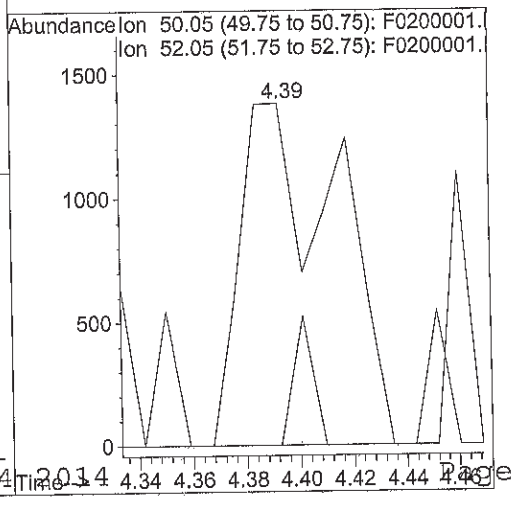


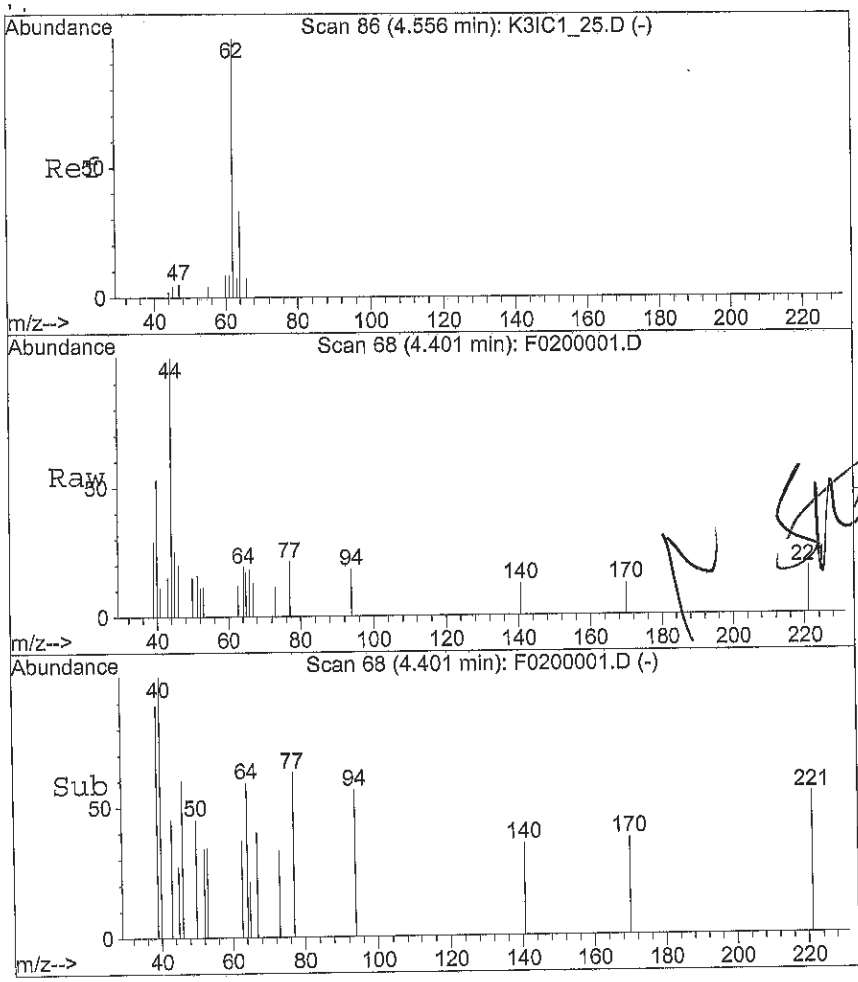


#4
Chloromethane
Concen: 0.92 ug/L
RT: 4.39 min Scan# 67
Delta R.T. 0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 50 Resp: 3448

Ion	Ratio	Lower	Upper
50	100		
52	7.7	26.9	40.3#

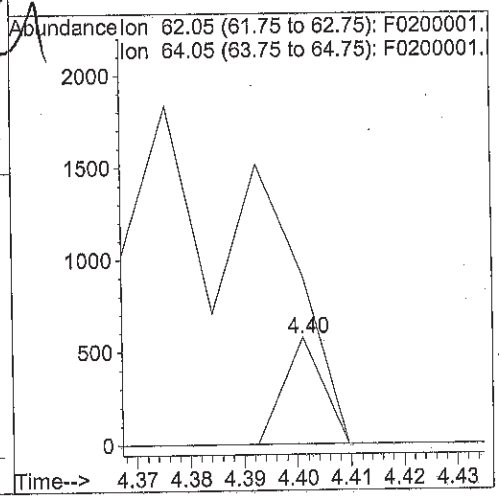


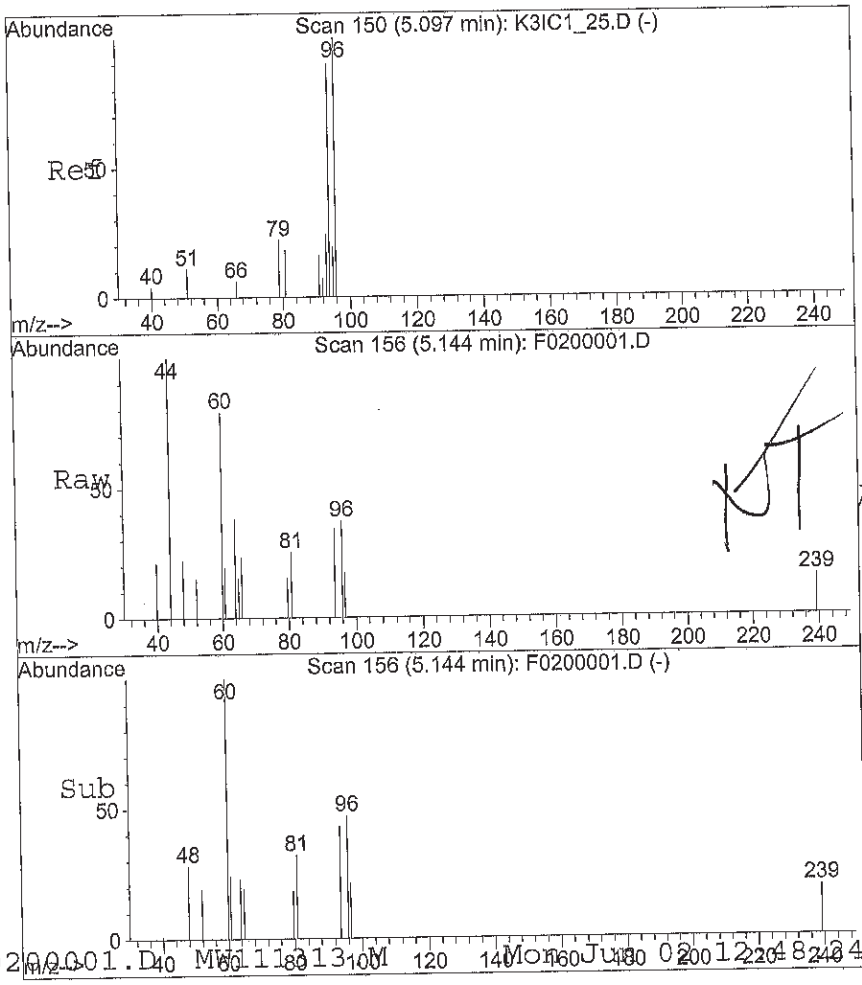


#5
Vinyl Chloride
Concen: 0.17 ug/L
RT: 4.40 min Scan# 68
Delta R.T. -0.15 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 62 Resp: 289

Ion	Ratio	Lower	Upper
62	100		
64	0.0	25.6	38.4#

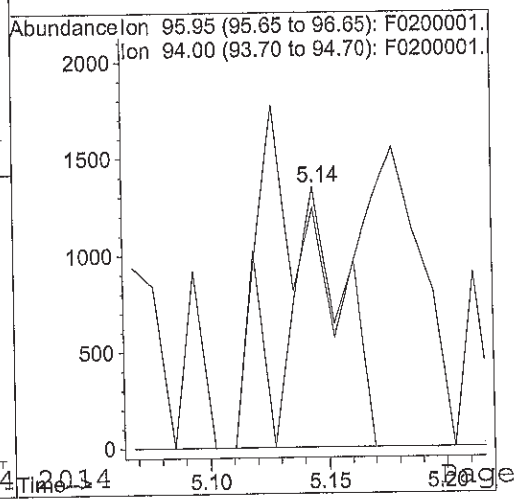


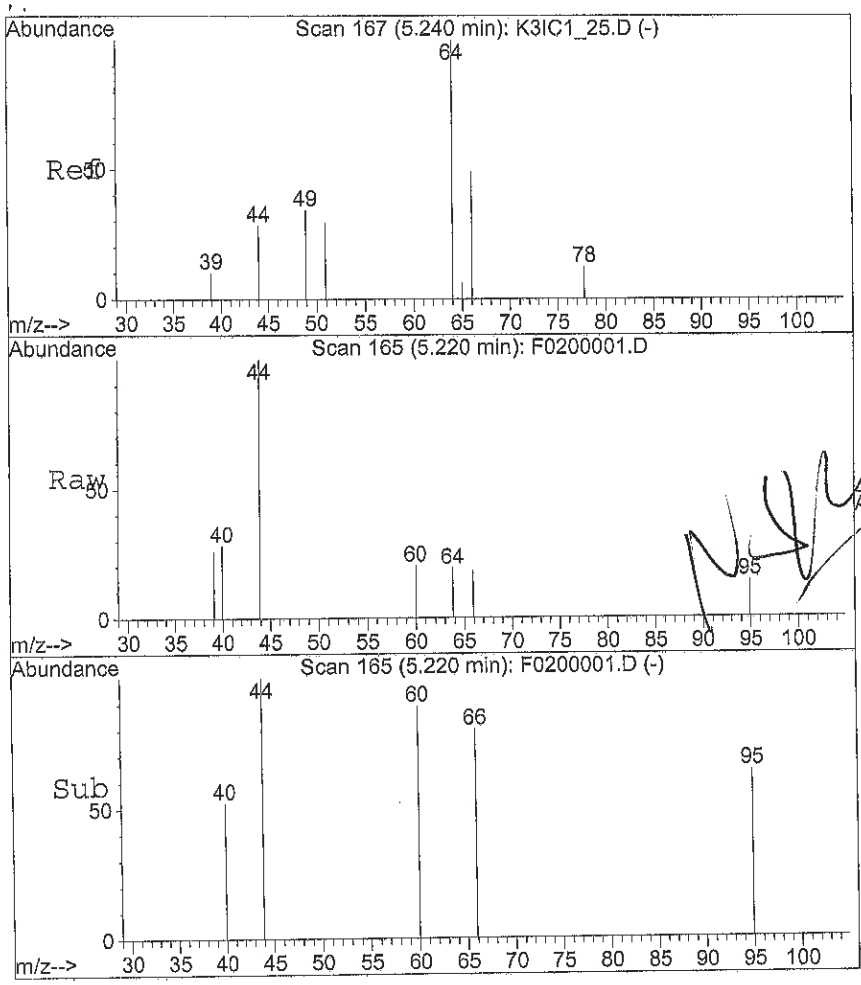


#6
Bromomethane
Concen: 0.49 ug/L
RT: 5.14 min Scan# 156
Delta R.T. 0.05 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 96 Resp: 2397

Ion	Ratio	Lower	Upper
96	100		
94	113.2	101.0	151.4

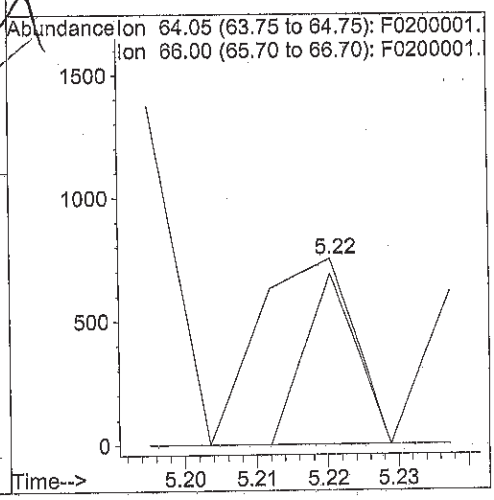


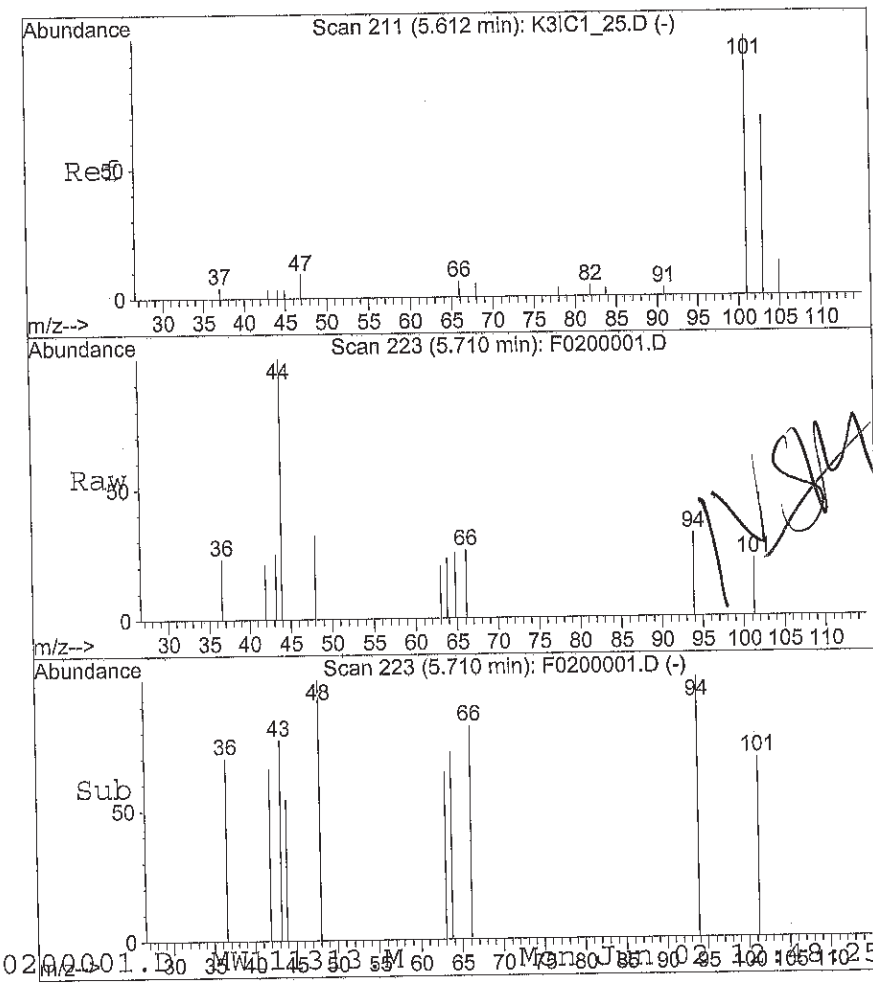


#7
Chloroethane
Concen: 1.56 ug/L
RT: 5.22 min Scan# 165
Delta R.T. -0.02 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 64 Resp: 699

Ion	Ratio	Lower	Upper
64	100		
66	49.8	35.4	53.0

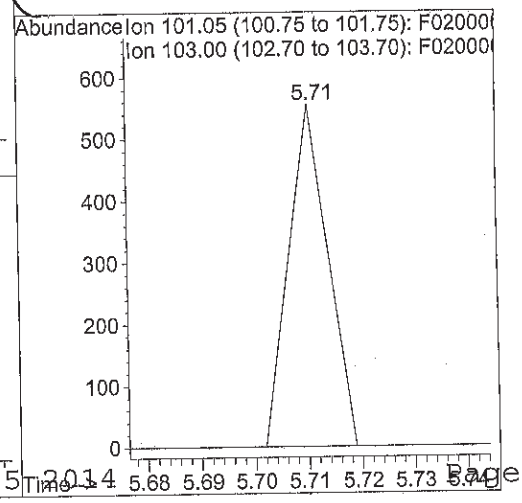


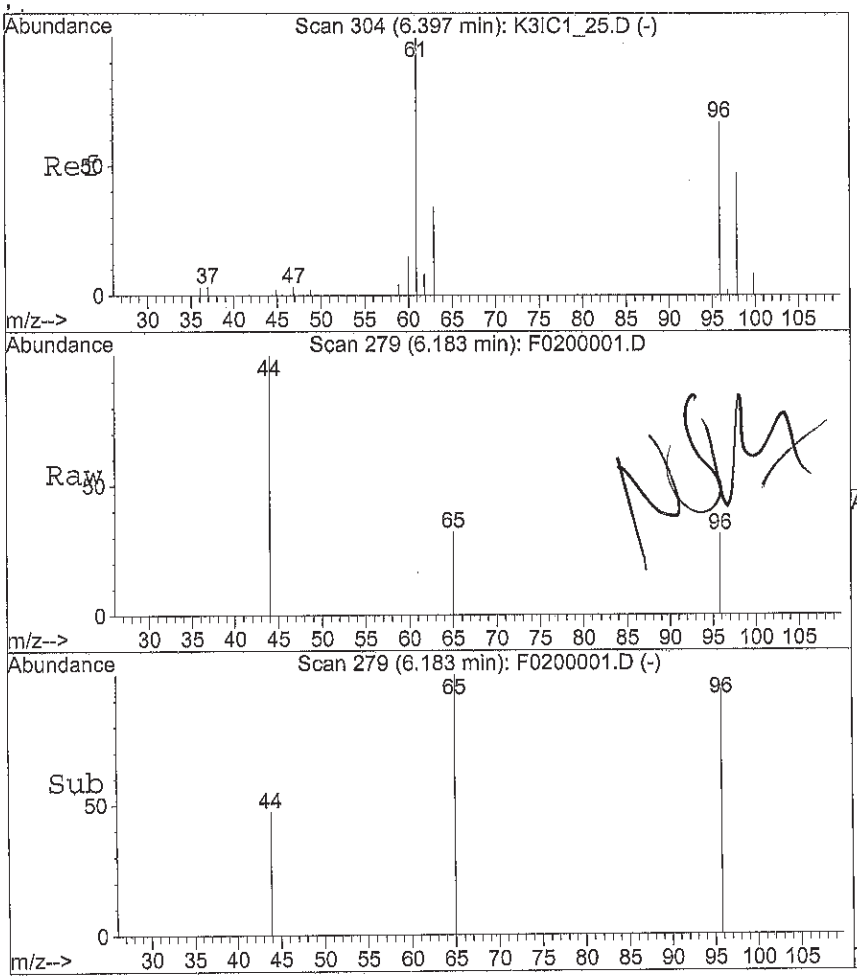


#8
(F11) Trichlorofluoromethane
Concen: 0.11 ug/L
RT: 5.71 min Scan# 223
Delta R.T. 0.10 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:101 Resp: 281

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

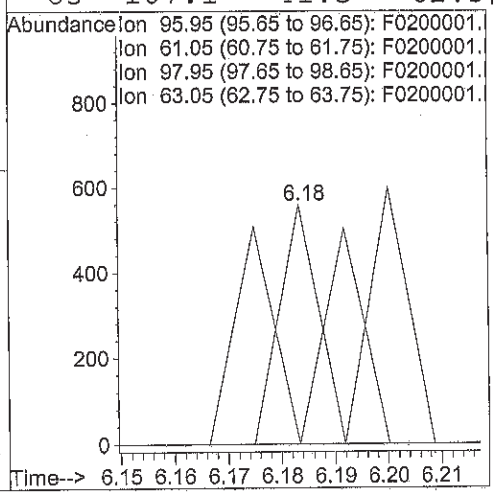


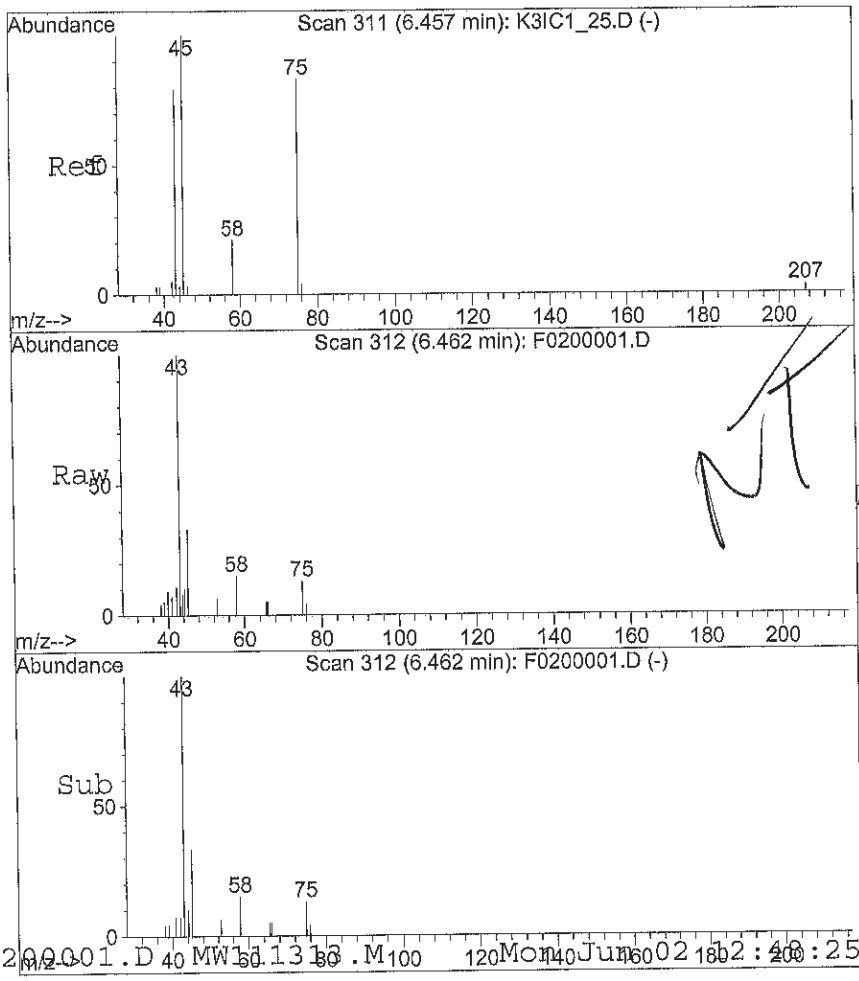


#10
1,1-Dichloroethene
Concen: 0.12 ug/L
RT: 6.18 min Scan# 279
Delta R.T. -0.21 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 96 Resp: 283

Ion	Ratio	Lower	Upper
96	100		
61	90.1	130.0	195.0#
98	0.0	56.2	84.4#
63	107.1	41.5	62.3#

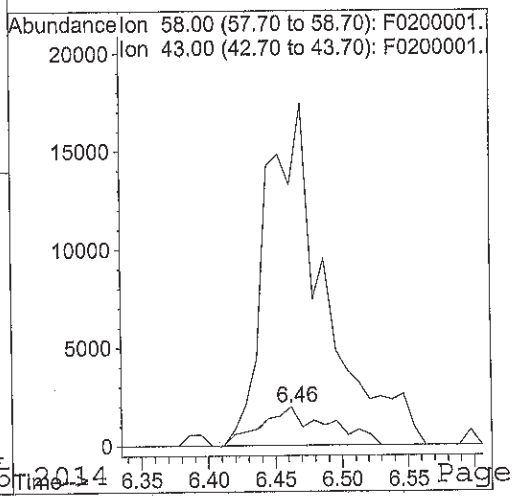


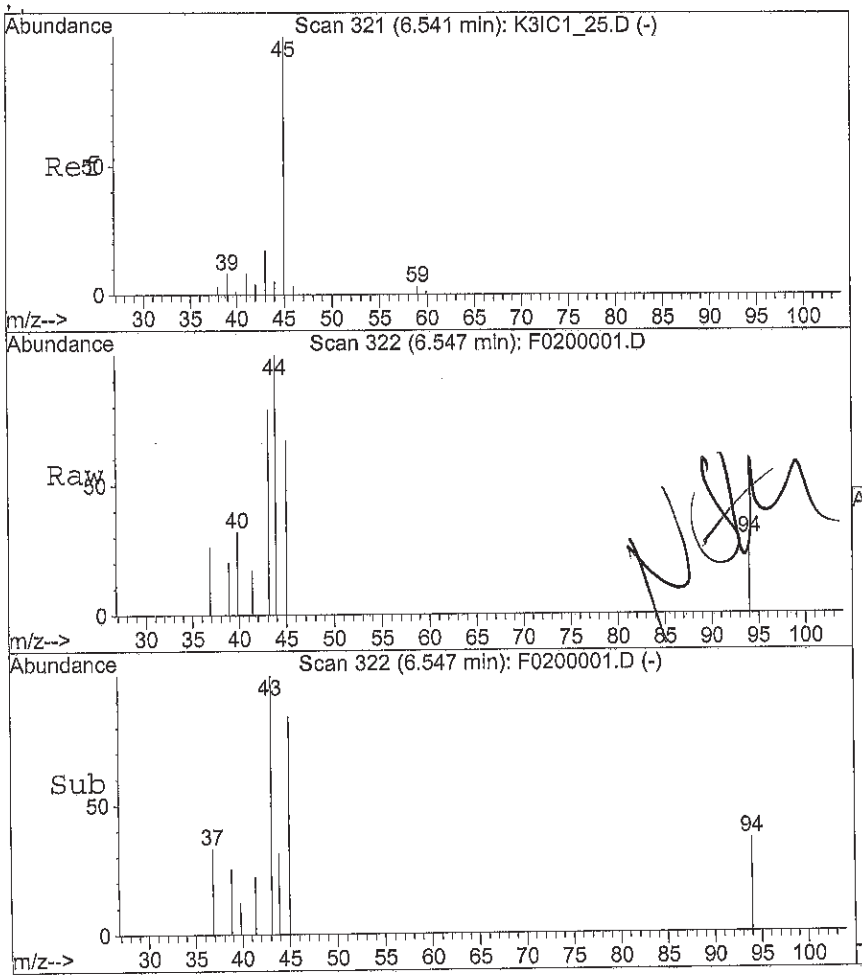


#11
Acetone
Concen: 14.29 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 58 Resp: 6749

Ion	Ratio	Lower	Upper
58	100		
43	800.8	360.9	541.3#

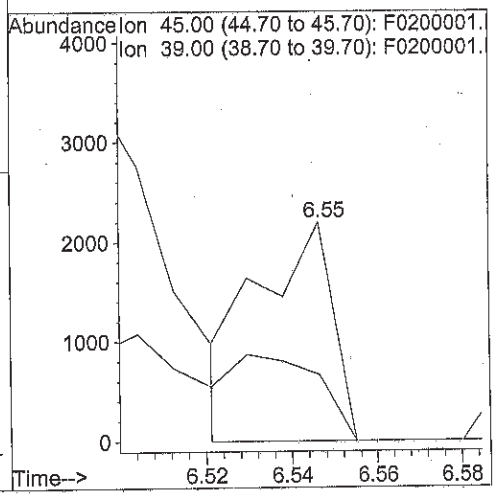


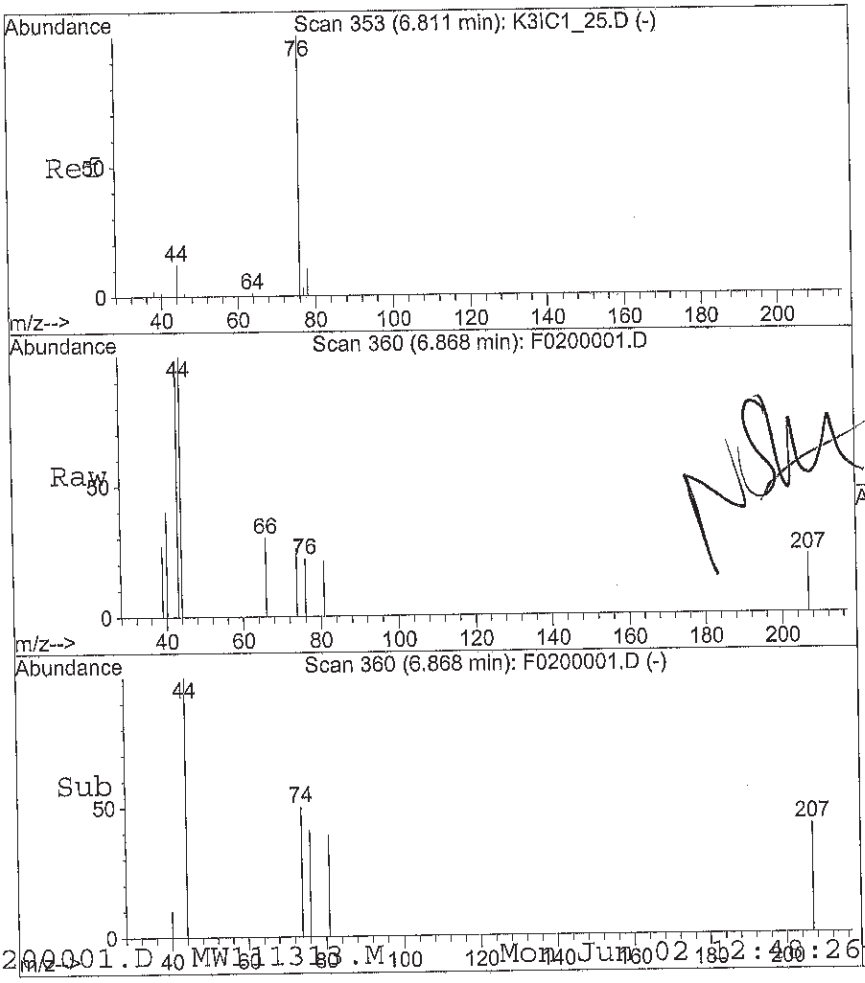


#12
(IPA) Leak Check Compound
Concen: 23.21 ug/L
RT: 6.55 min Scan# 322
Delta R.T. 0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 45 Resp: 2677

Ion	Ratio	Lower	Upper
45	100		
39	43.9	4.9	7.3#

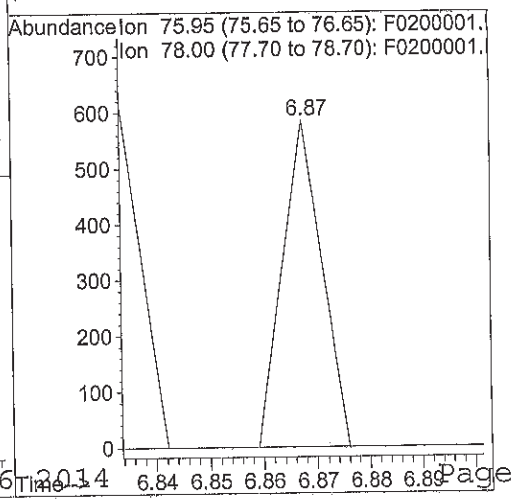


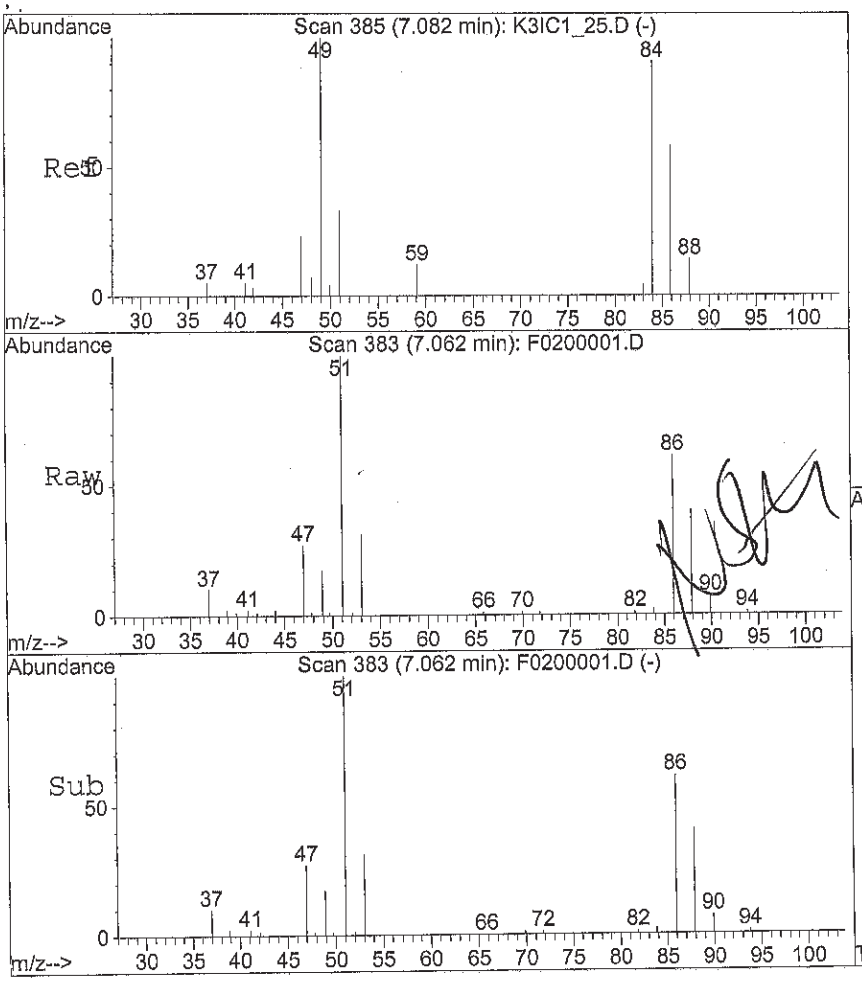


#13
Carbon disulfide
Concen: 0.04 ug/L
RT: 6.87 min Scan# 360
Delta R.T. 0.06 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 76 Resp: 297

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.0	10.4#

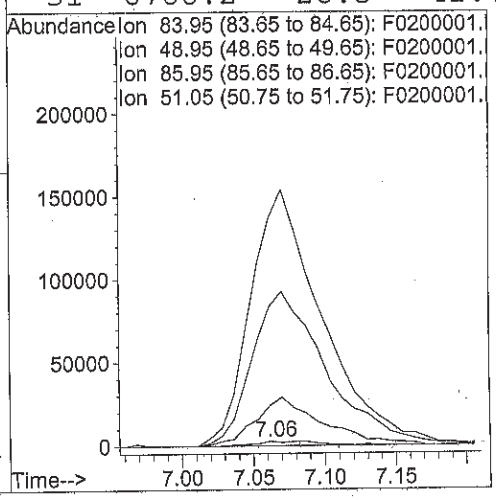


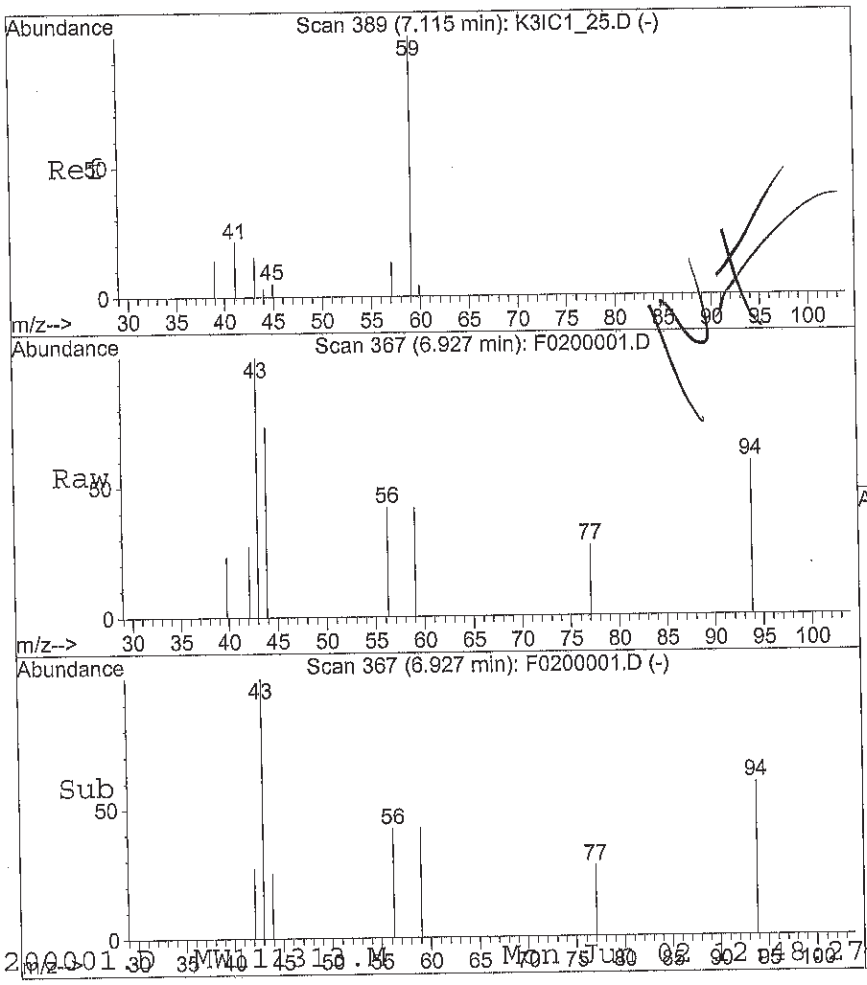


#14
Methylene Chloride
Concen: 3.00 ug/L
RT: 7.06 min Scan# 383
Delta R.T. -0.02 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 84 Resp: 7916

Ion	Ratio	Lower	Upper
84	100		
49	1179.4	89.8	134.6#
86	4221.8	51.1	76.7#
51	6788.2	28.5	42.7#

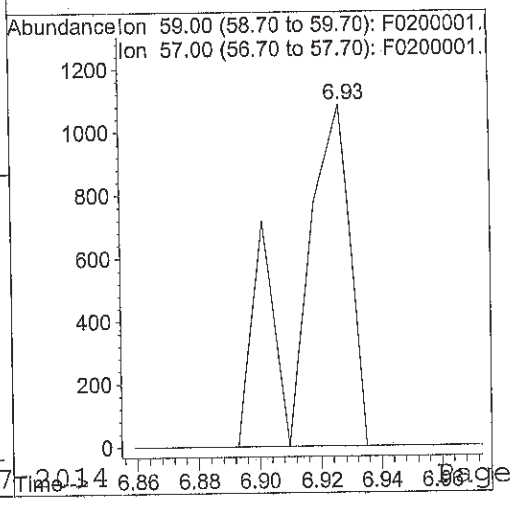


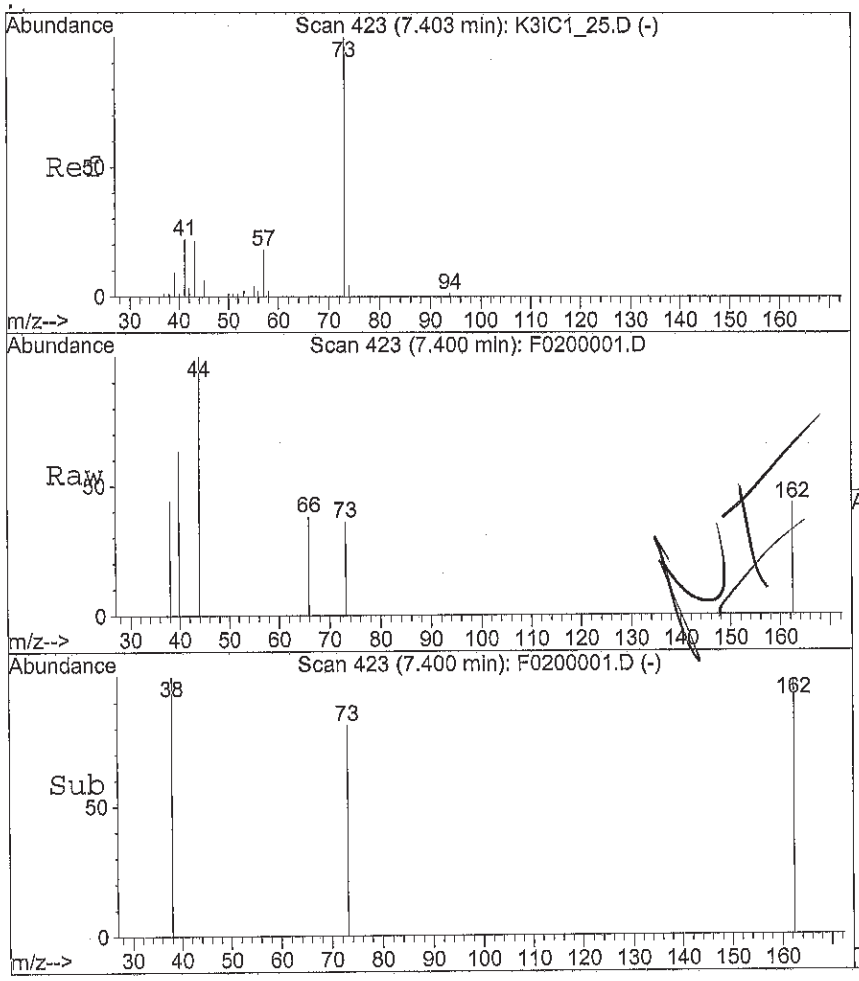


#15
(TBA) tert-Butanol
Concen: 7.98 ug/L
RT: 6.93 min Scan# 367
Delta R.T. -0.19 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 59 Resp: 1307

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

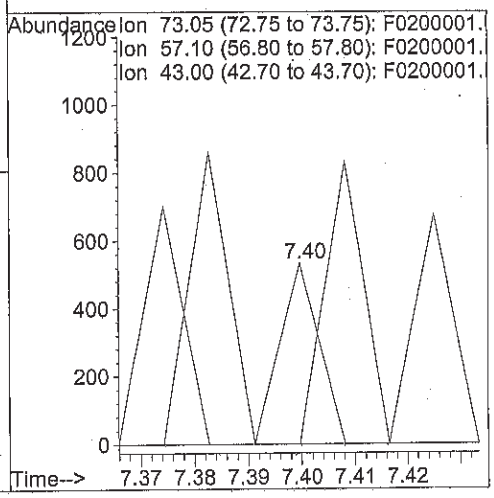


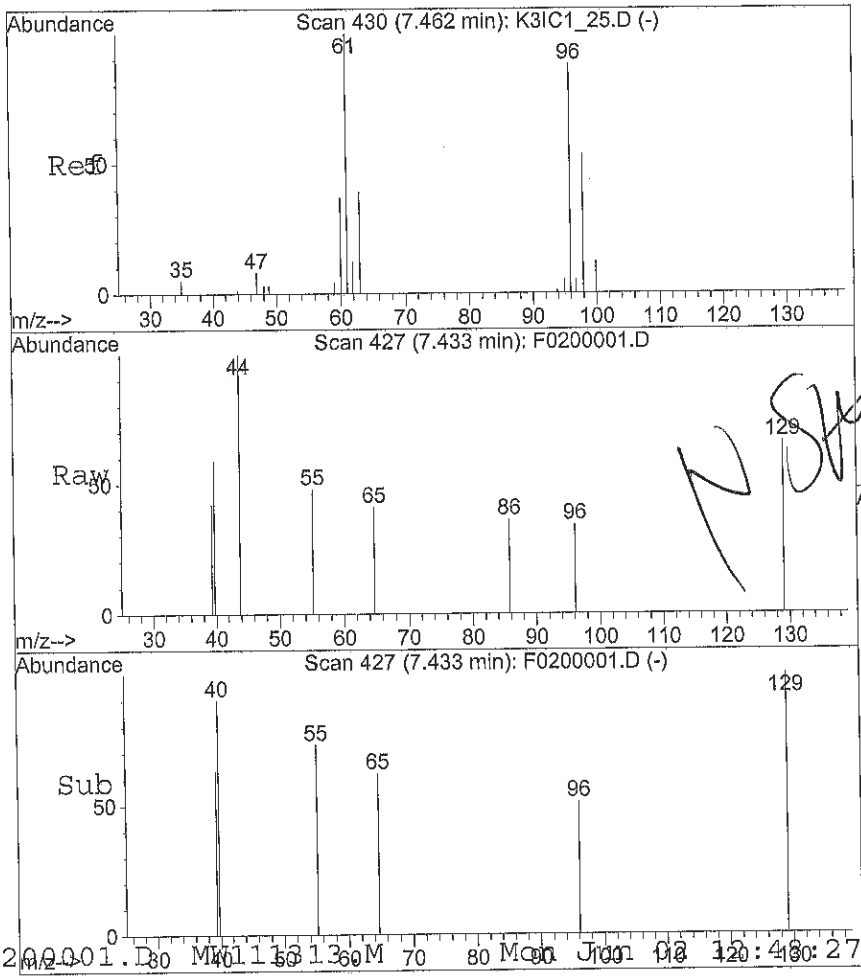


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.05 ug/L
RT: 7.40 min Scan# 423
Delta R.T. -0.00 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 73 Resp: 270

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	283.3	18.4	27.6#

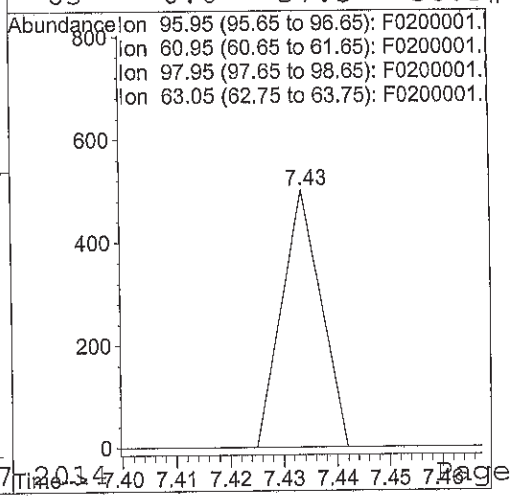


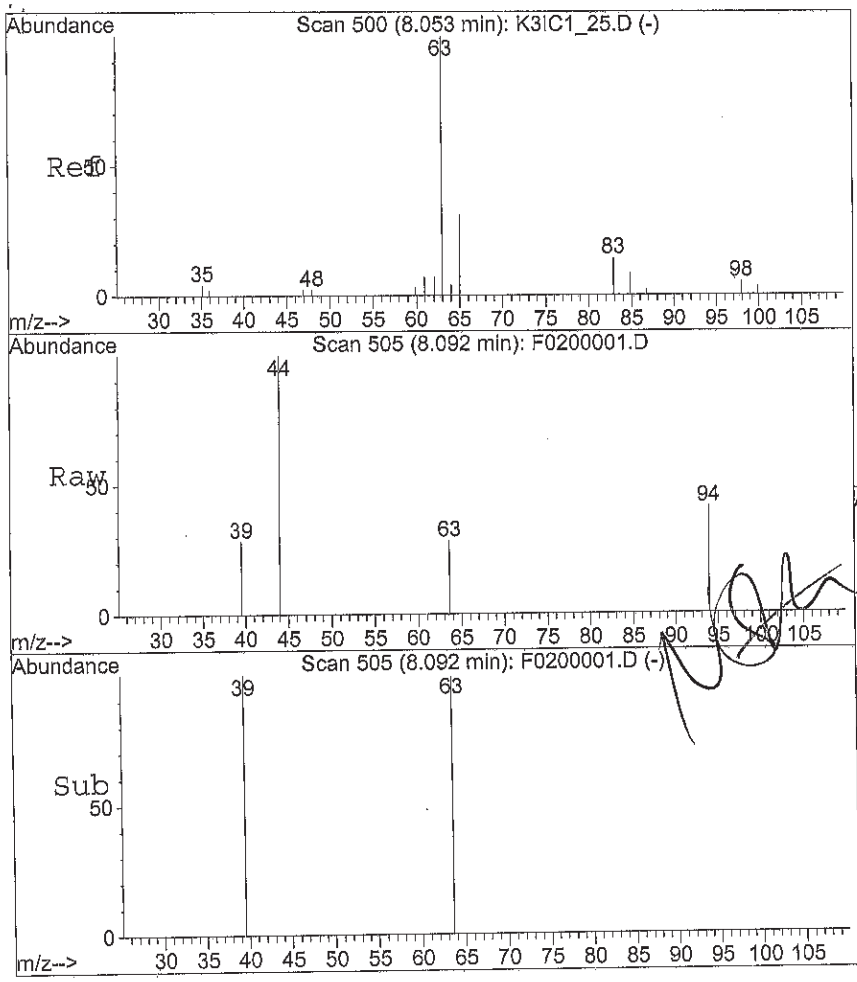


#17
trans-1,2-Dichloroethene
Concen: 0.10 ug/L
RT: 7.43 min Scan# 427
Delta R.T. -0.03 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 96 Resp: 254

Ion	Ratio	Lower	Upper
96	100		
61	0.0	104.2	156.2#
98	0.0	50.2	75.4#
63	0.0	37.5	56.3#

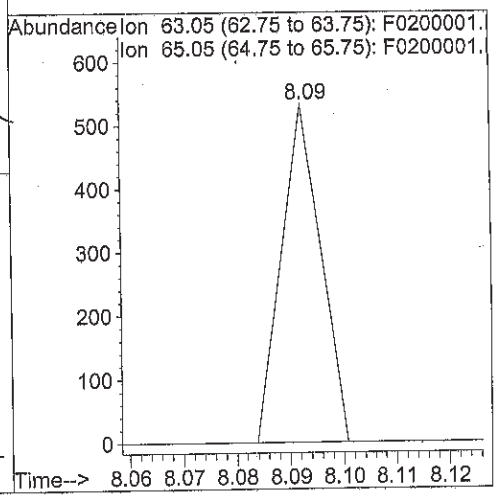


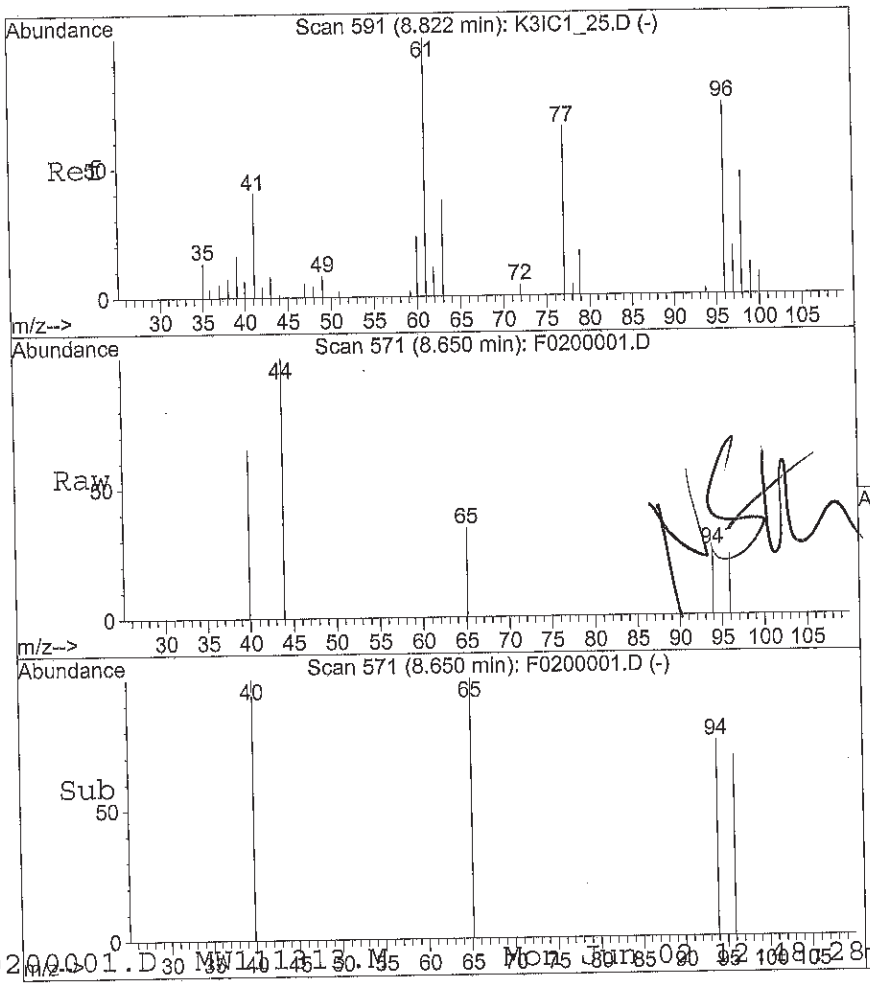


#18
1,1-Dichloroethane
Concen: 0.06 ug/L
RT: 8.09 min Scan# 505
Delta R.T. 0.04 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 63 Resp: 270

Ion	Ratio	Lower	Upper
63	100		
65	0.0	25.8	38.8#

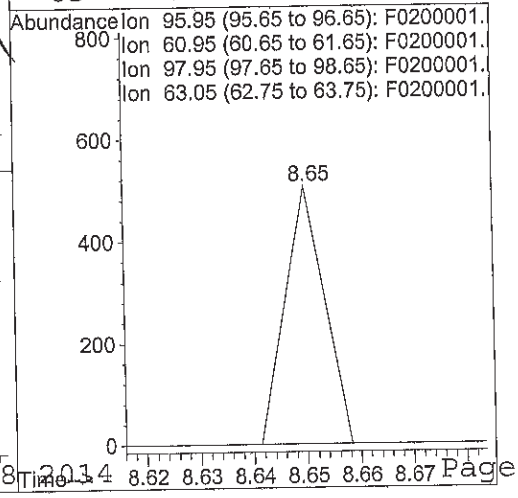


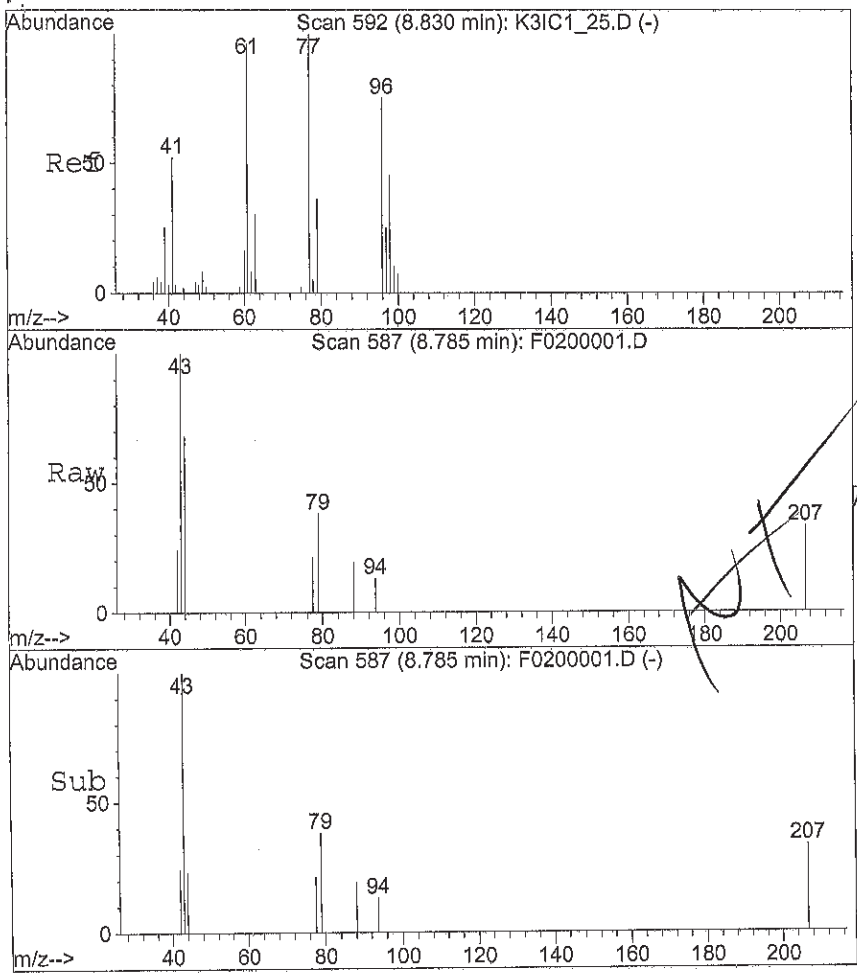


#19
cis-1,2-Dichloroethene
Concen: 0.09 ug/L
RT: 8.65 min Scan# 571
Delta R.T. -0.17 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 96 Resp: 257

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

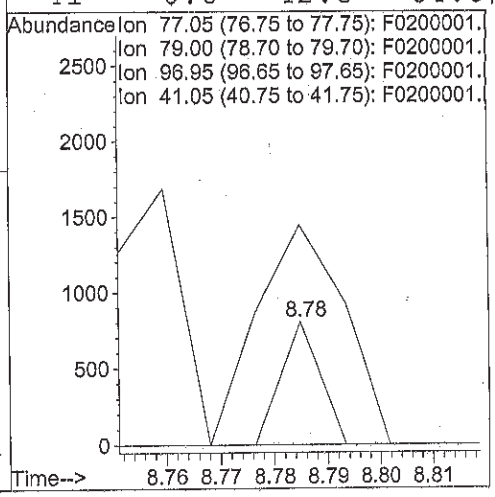


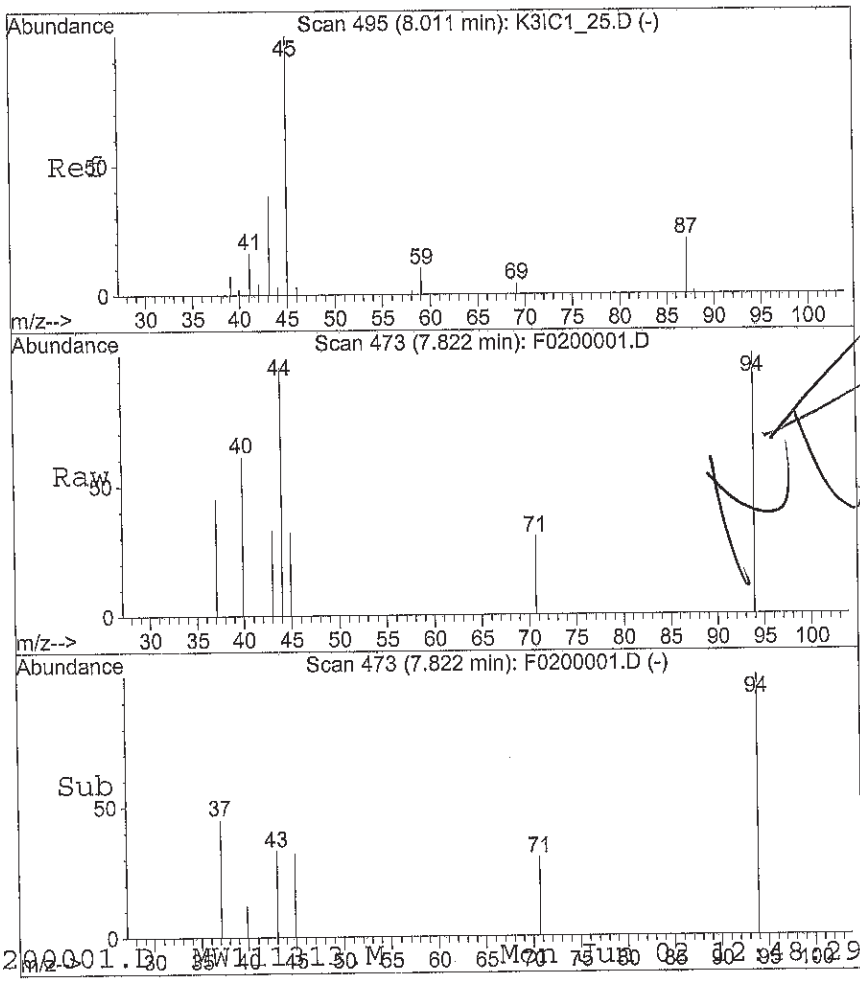


#20
2,2-Dichloropropane
Concen: 0.11 ug/L
RT: 8.78 min Scan# 587
Delta R.T. -0.05 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 77 Resp: 407

Ion	Ratio	Lower	Upper
77	100		
79	402.5	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

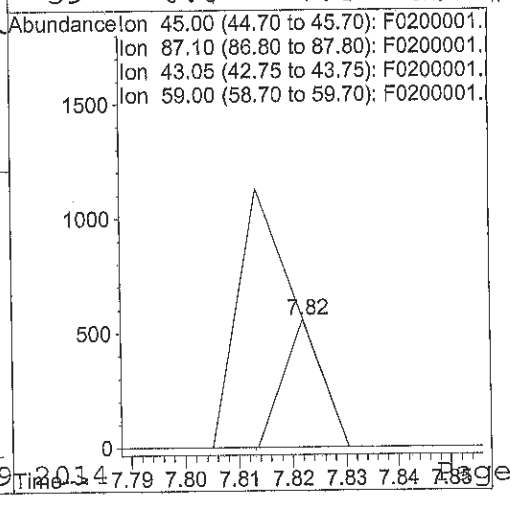


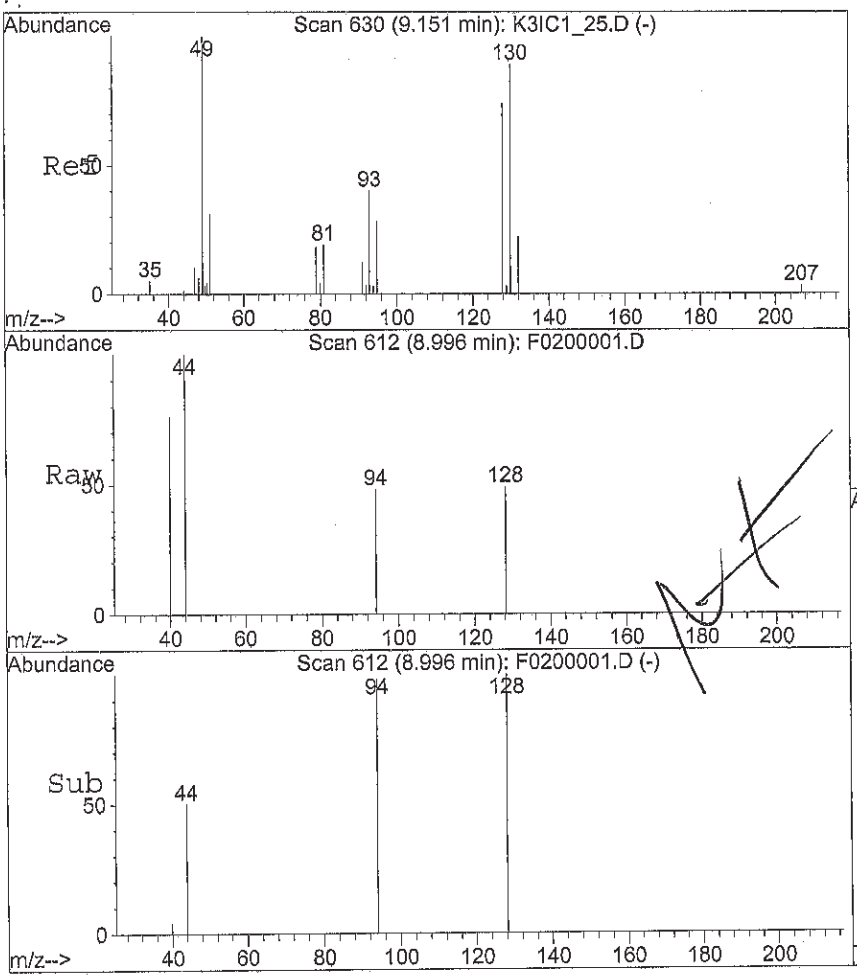


#22
(DIPE) Diisopropyl Ether
Concen: 0.04 ug/L
RT: 7.82 min Scan# 473
Delta R.T. -0.19 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 45 Resp: 282

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	304.3	30.5	45.7#
59	0.0	7.4	11.2#

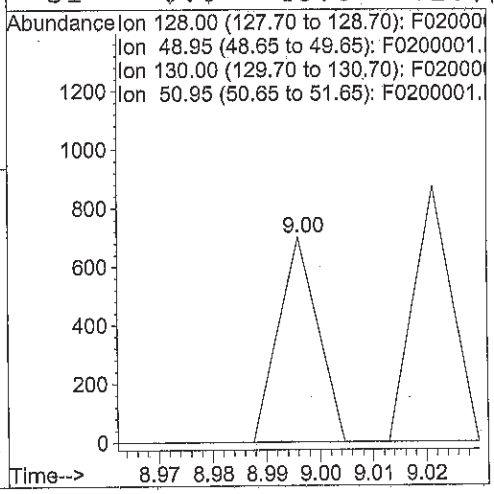


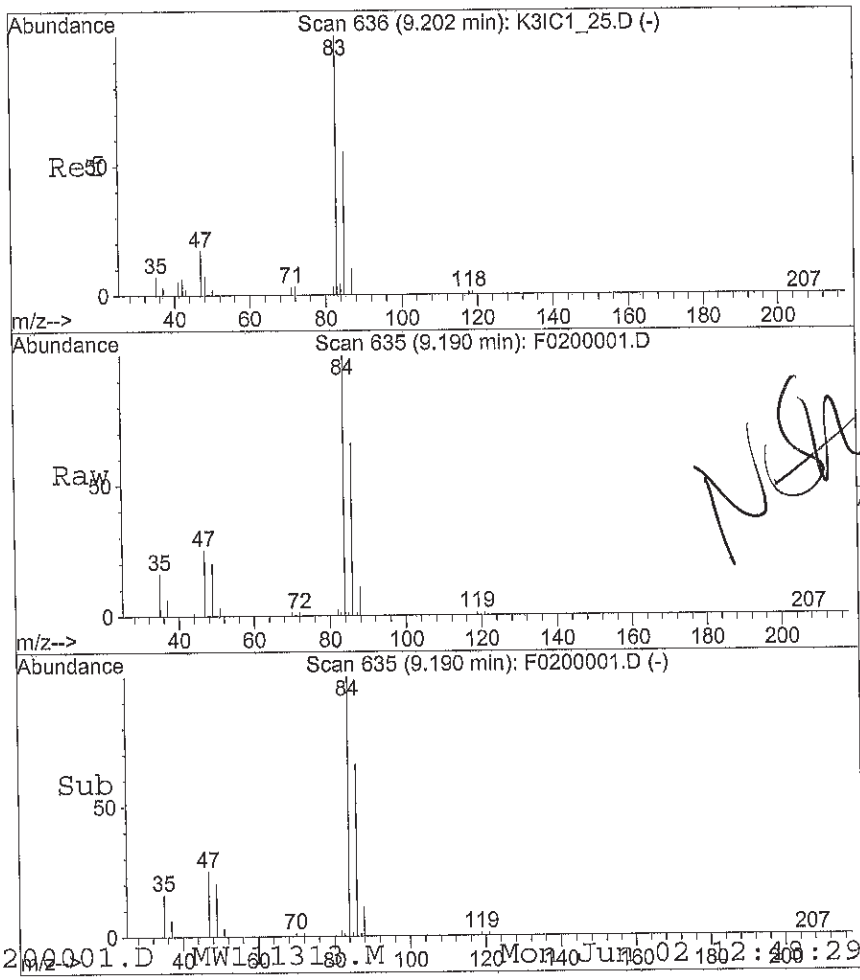


#23
Bromochloromethane
Concen: 0.28 ug/L
RT: 9.00 min Scan# 612
Delta R.T. -0.15 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:128 Resp: 355

Ion	Ratio	Lower	Upper
128	100		
49	0.0	117.4	176.0#
130	0.0	111.0	166.6#
51	0.0	48.0	72.0#

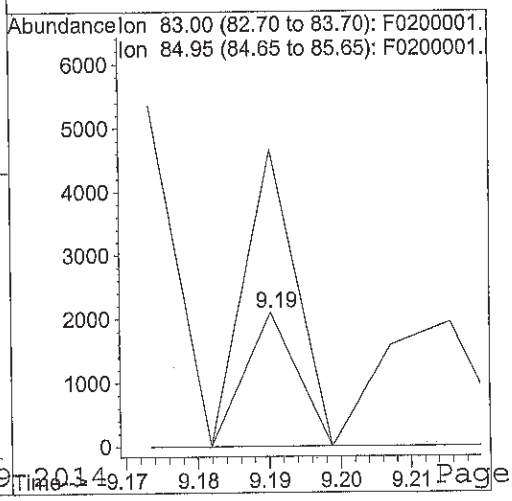


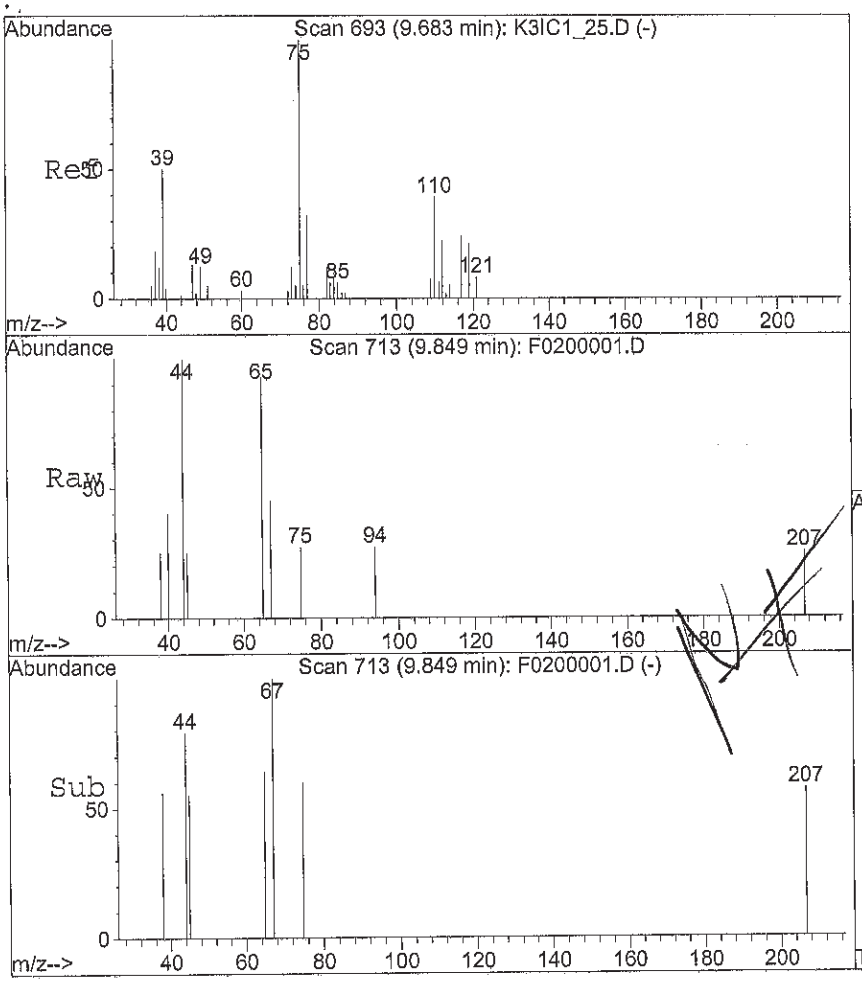


#24
Chloroform
Concen: 0.21 ug/L
RT: 9.19 min Scan# 635
Delta R.T. -0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 83 Resp: 1062

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

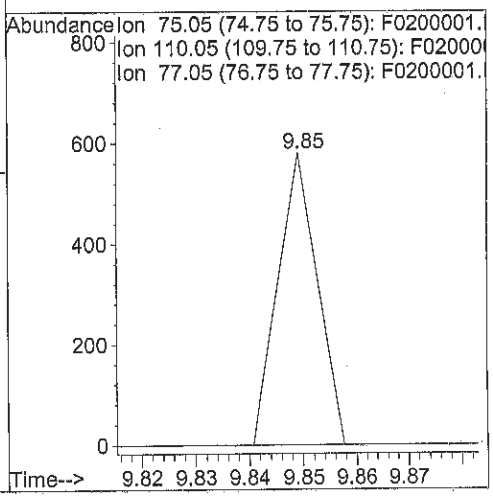


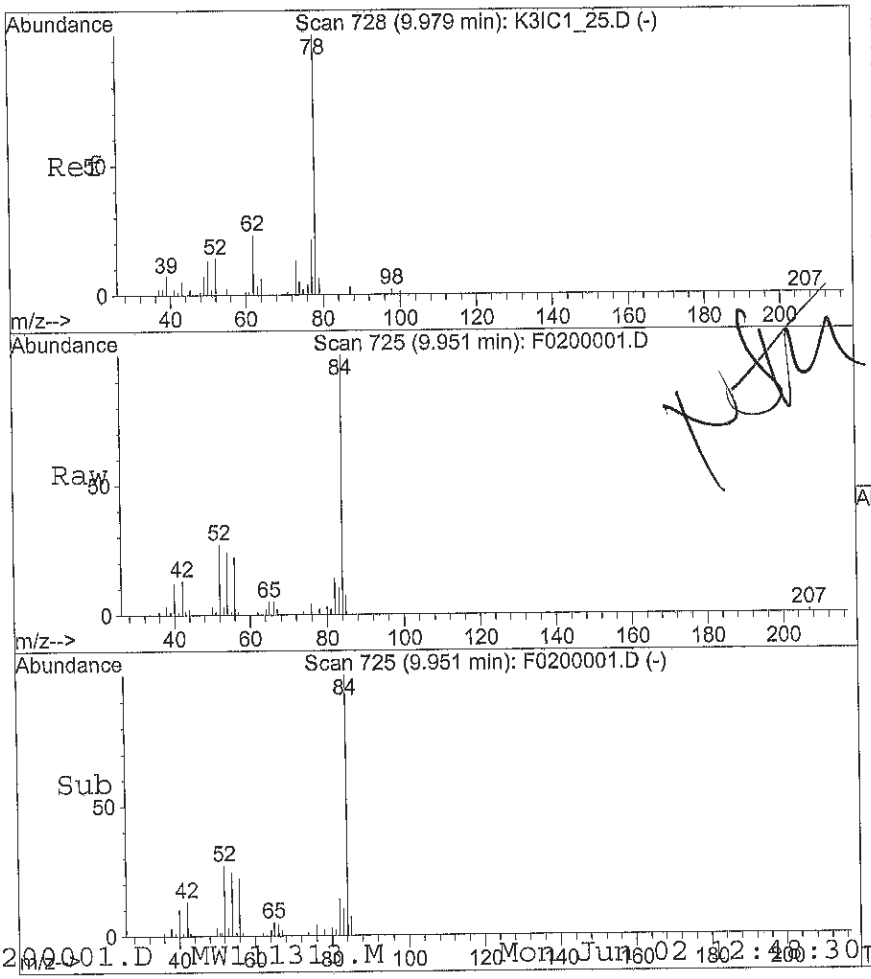


#29
1,1-Dichloropropene
Concen: 0.08 ug/L
RT: 9.85 min Scan# 713
Delta R.T. 0.17 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 75 Resp: 294

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	0.0	25.0	37.4#

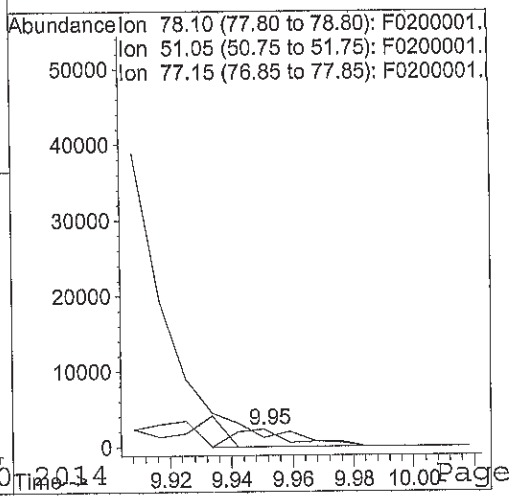


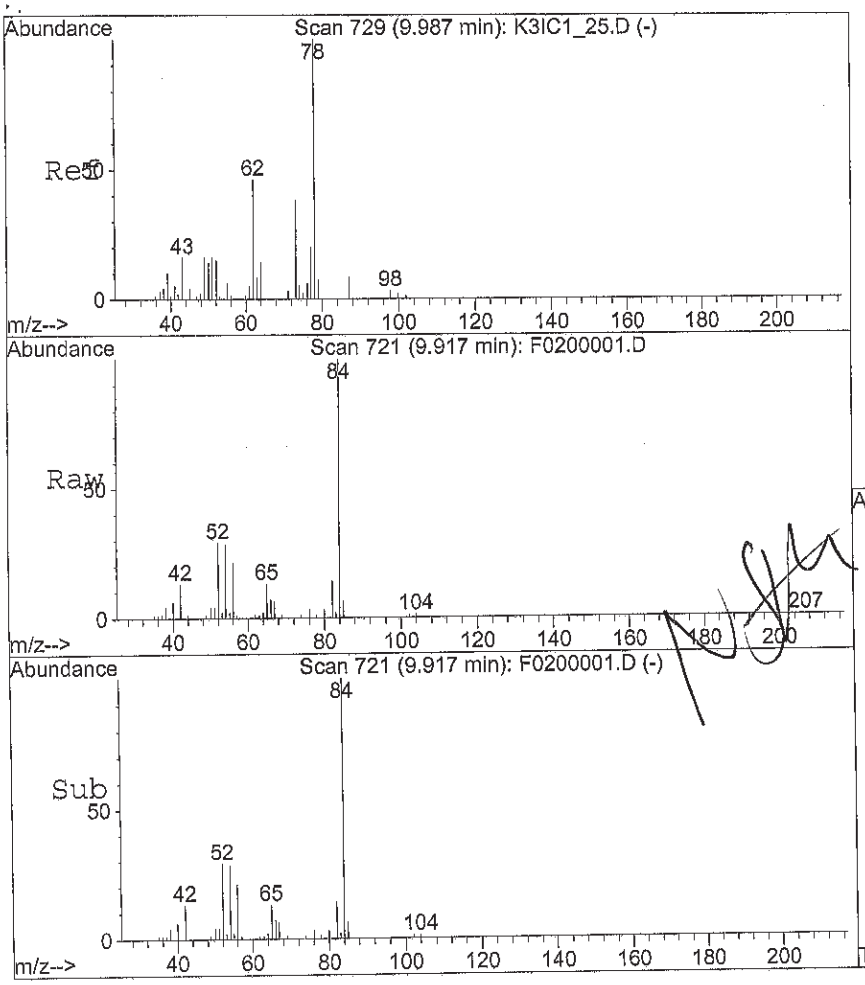


#31
Benzene
Concen: 0.34 ug/L
RT: 9.95 min Scan# 725
Delta R.T. -0.03 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 78 Resp: 3108

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

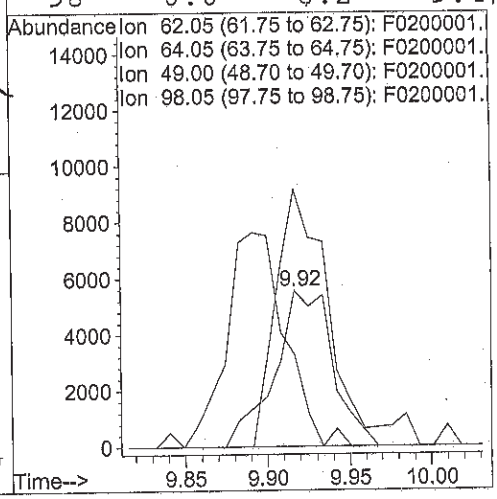


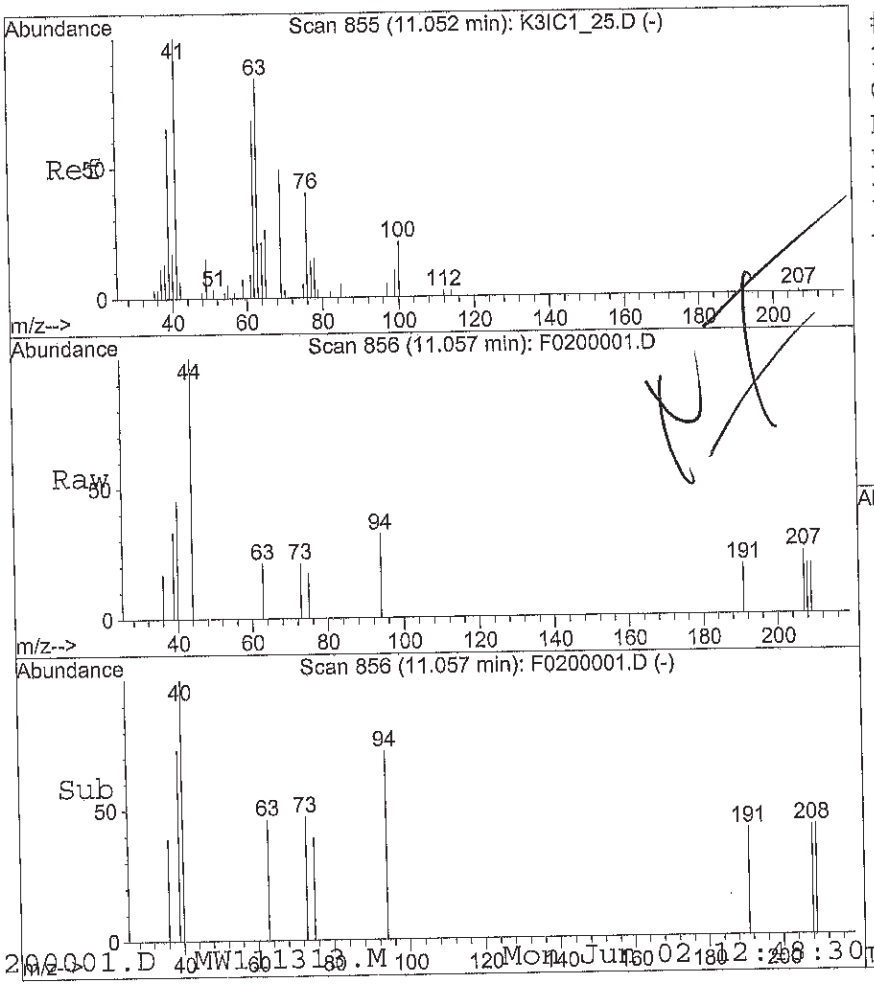


#32
1,2-Dichloroethane
Concen: 4.24 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 62 Resp: 13541

Ion	Ratio	Lower	Upper
62	100		
64	146.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

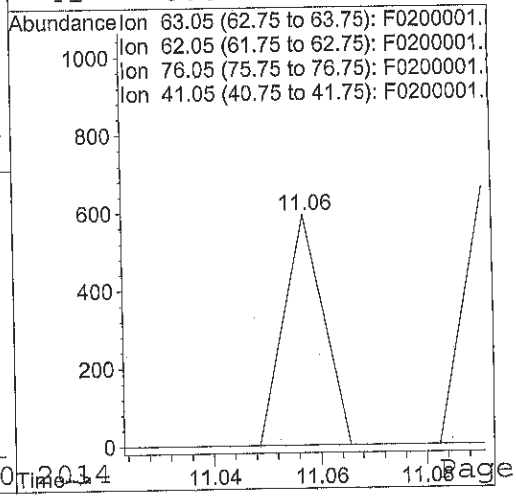


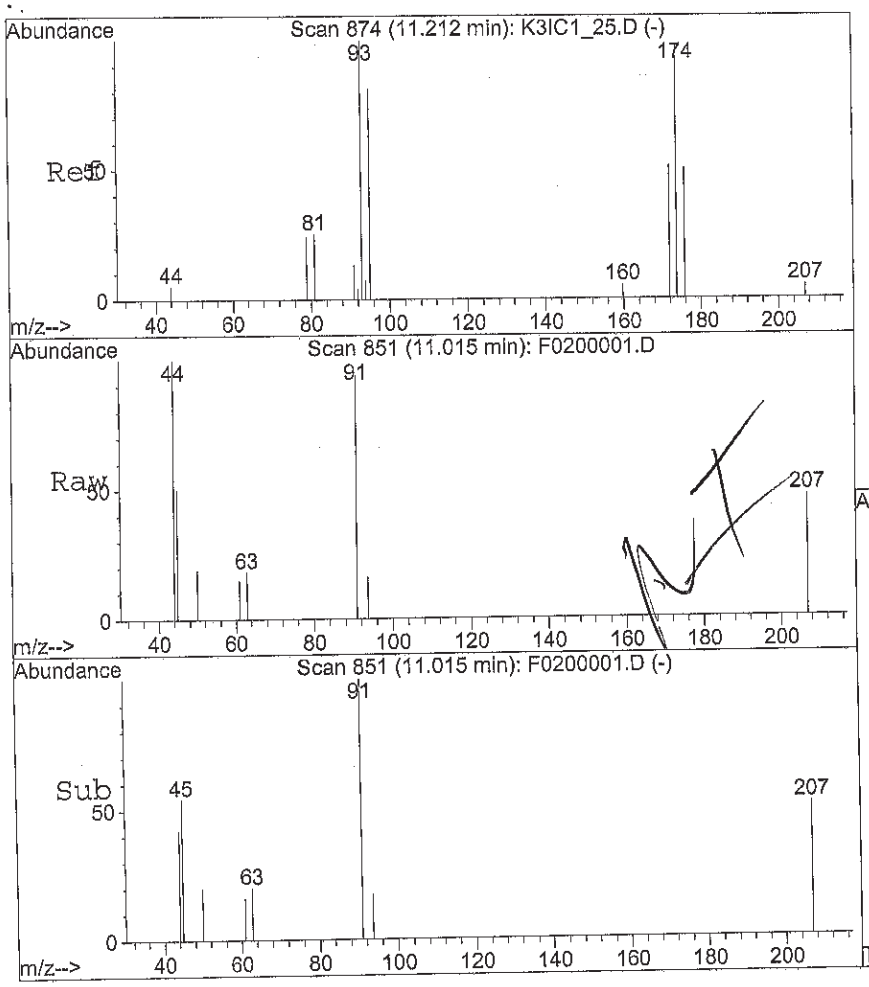


#34
1,2-Dichloropropane
Concen: 0.14 ug/L
RT: 11.06 min Scan# 856
Delta R.T. 0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 63 Resp: 300

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

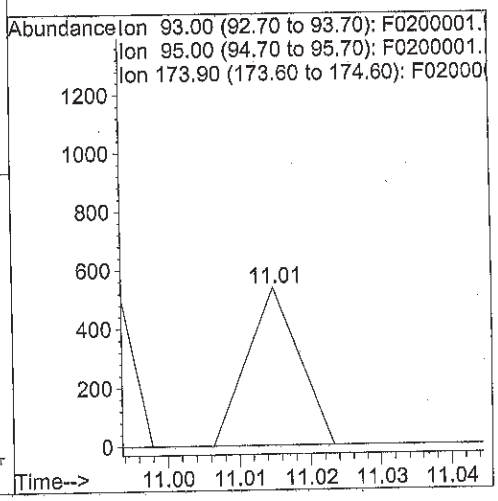


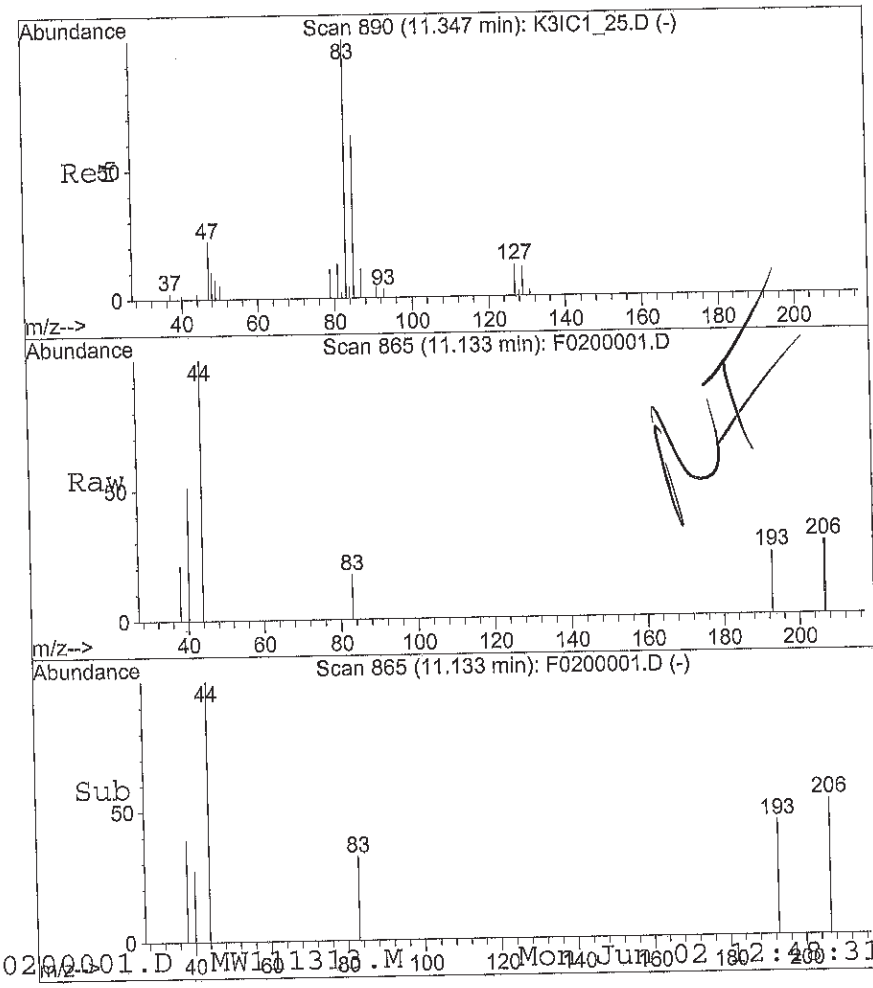


#35
Dibromomethane
Concen: 0.16 ug/L
RT: 11.01 min Scan# 851
Delta R.T. -0.20 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 93 Resp: 272

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

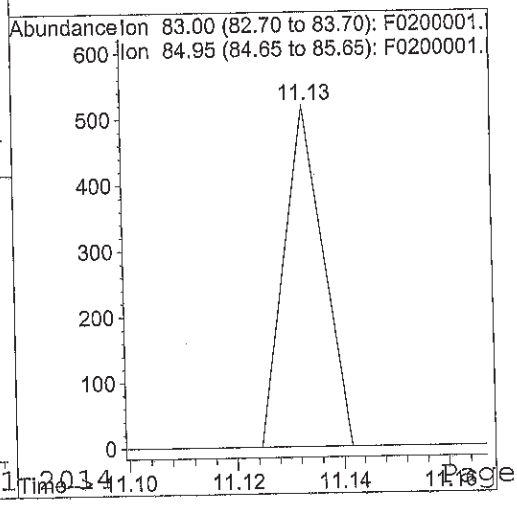


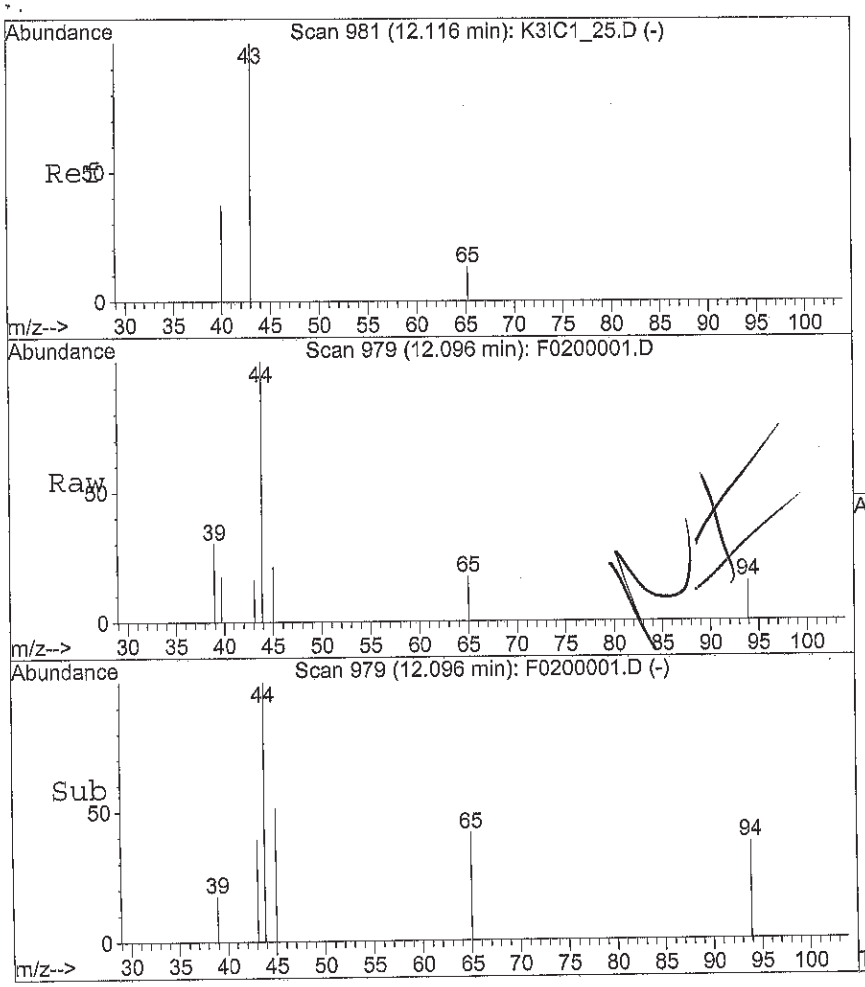


#36
Bromodichloromethane
Concen: 0.08 ug/L
RT: 11.13 min Scan# 865
Delta R.T. -0.21 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 83 Resp: 263

Ion	Ratio	Lower	Upper
83	100		
85	0.0	48.2	72.2#

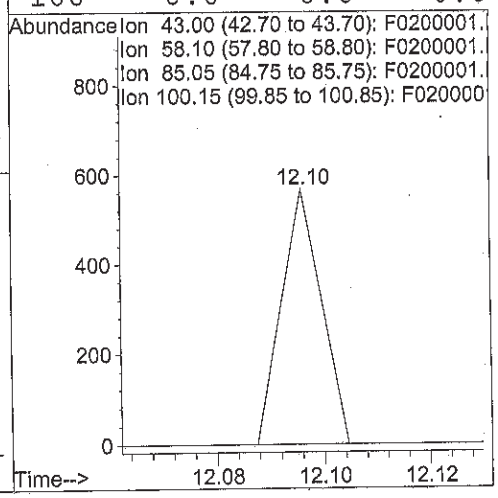


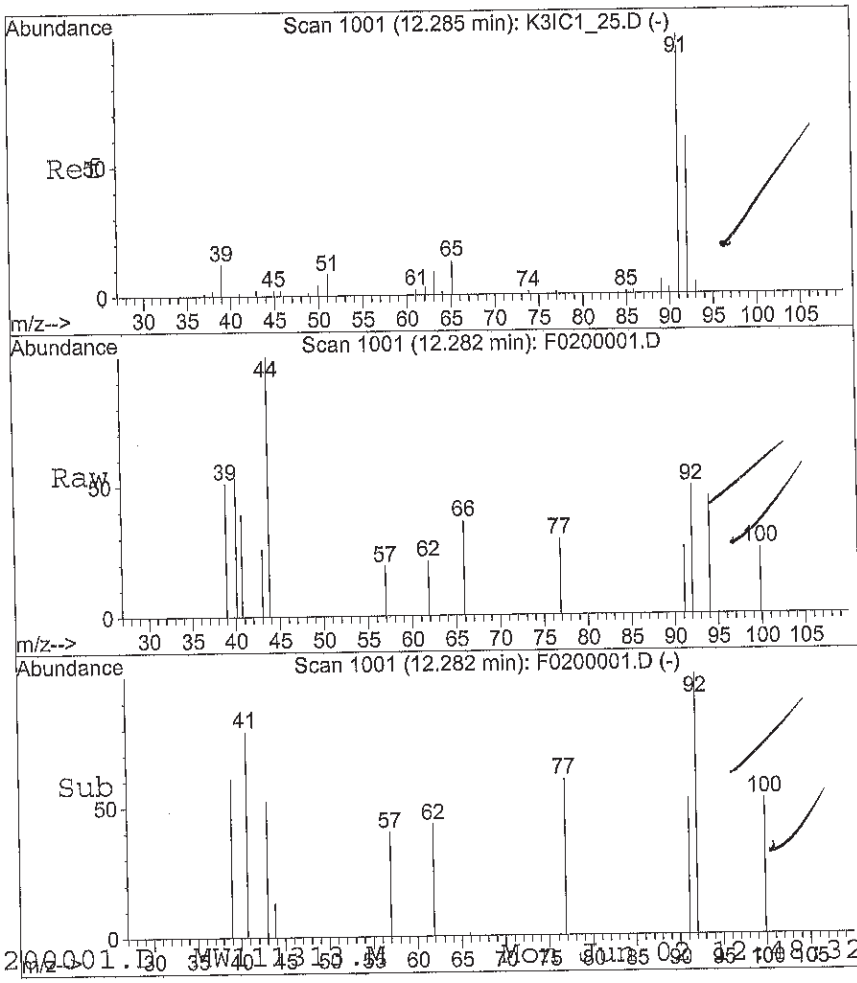


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.16 ug/L
RT: 12.10 min Scan# 979
Delta R.T. -0.02 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 43 Resp: 288

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

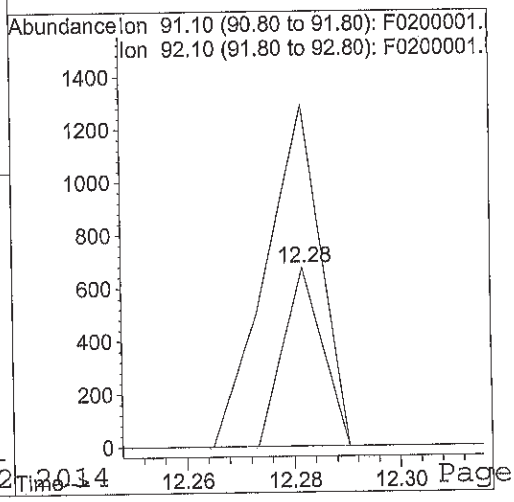


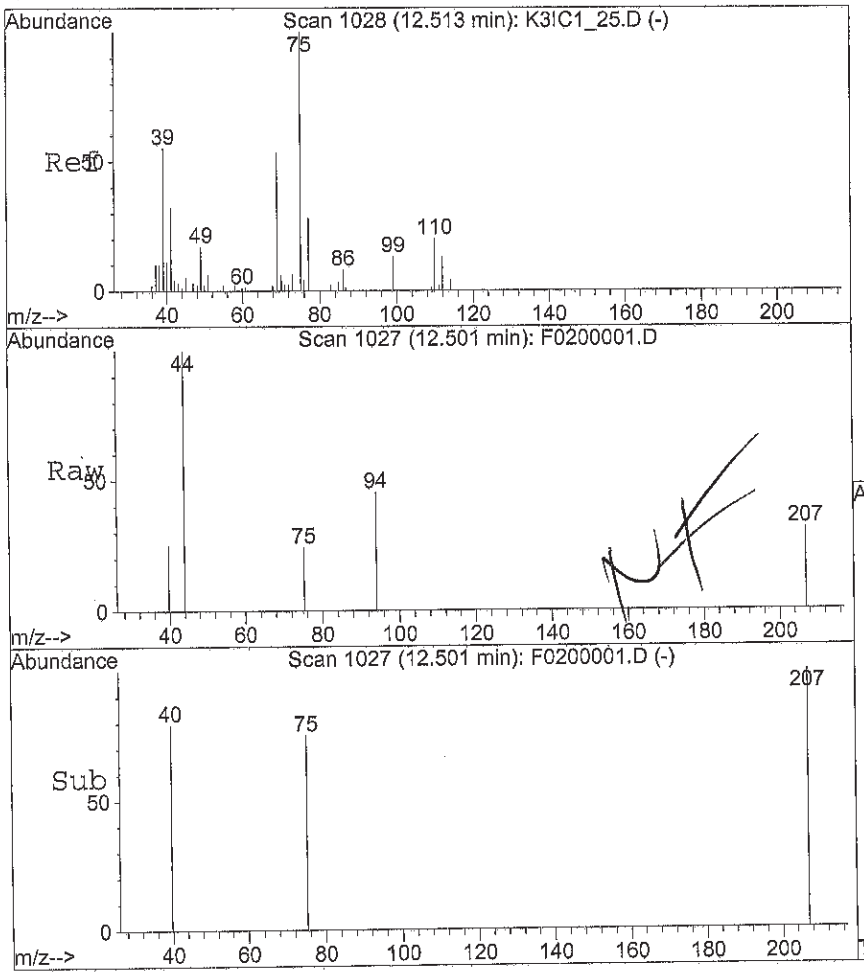


#41
Toluene
Concen: 0.03 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 91 Resp: 342

Ion	Ratio	Lower	Upper
91	100		
92	266.7	47.4	71.0#

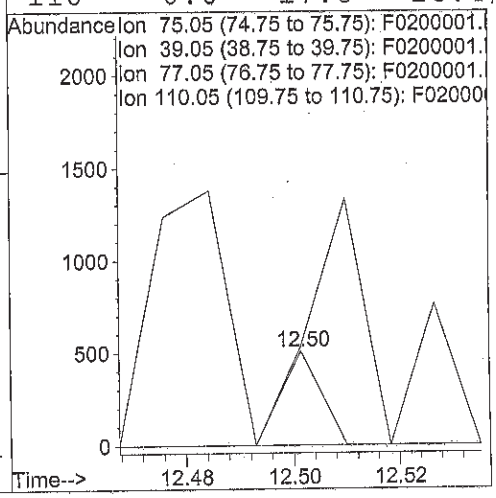


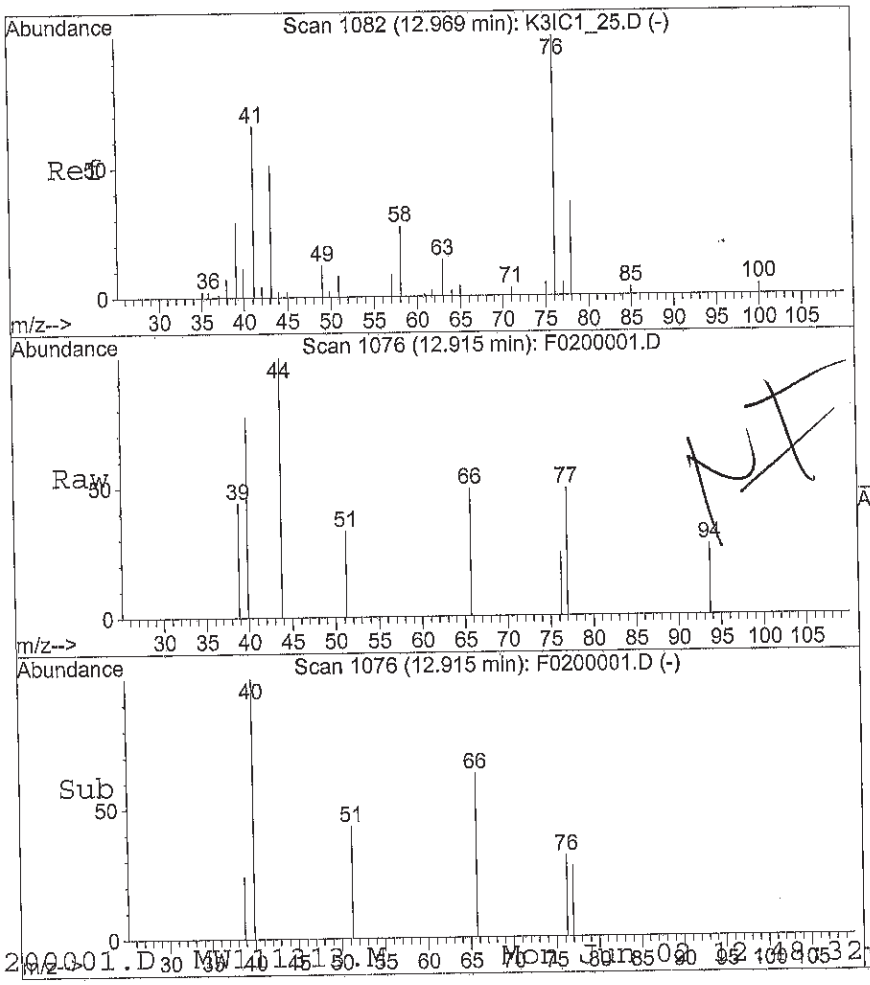


#42
trans-1,3-Dichloropropene
Concen: 0.06 ug/L
RT: 12.50 min Scan# 1027
Delta R.T. -0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 75 Resp: 256

Ion	Ratio	Lower	Upper
75	100		
39	519.9	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

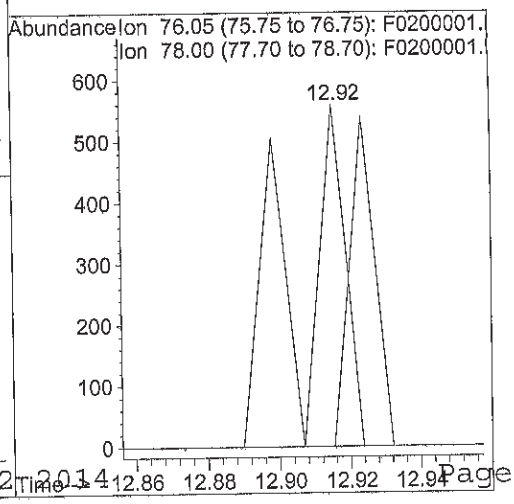


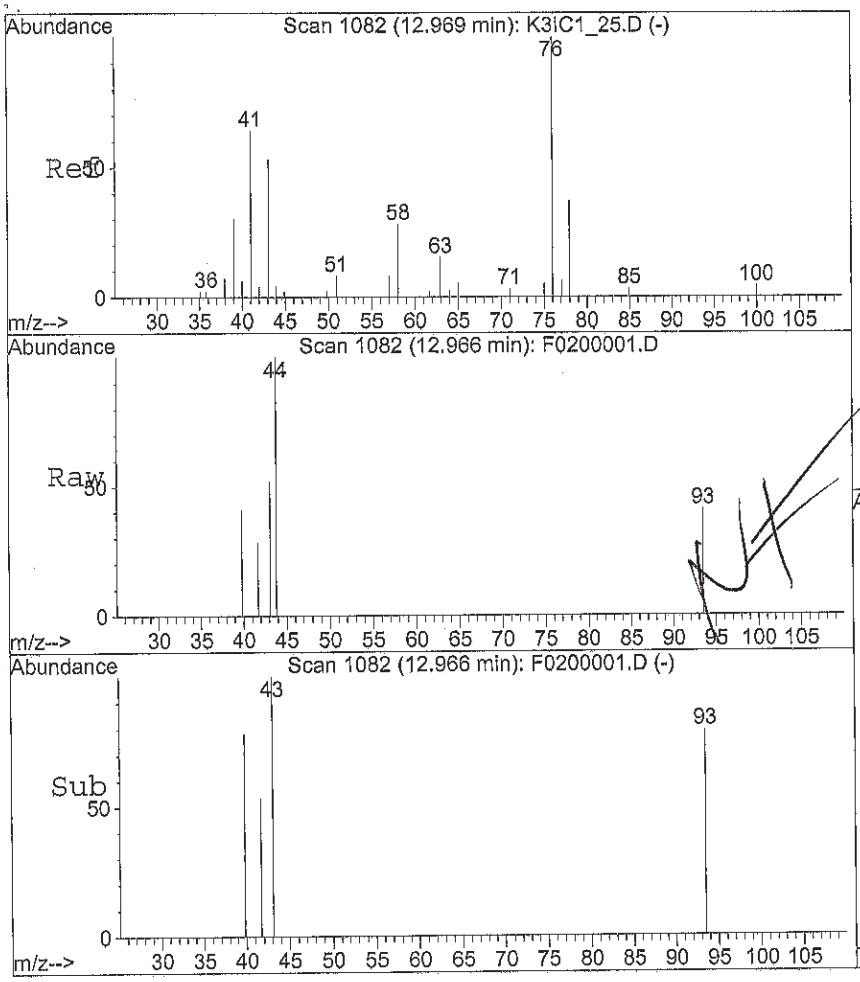


#45
1,3-Dichloropropane
Concen: 0.13 ug/L
RT: 12.92 min Scan# 1076
Delta R.T. -0.05 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 76 Resp: 539

Ion	Ratio	Lower	Upper
76	100		
78	50.6	26.9	40.3#

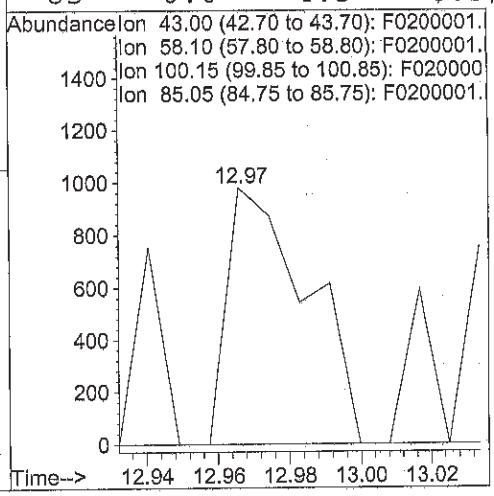


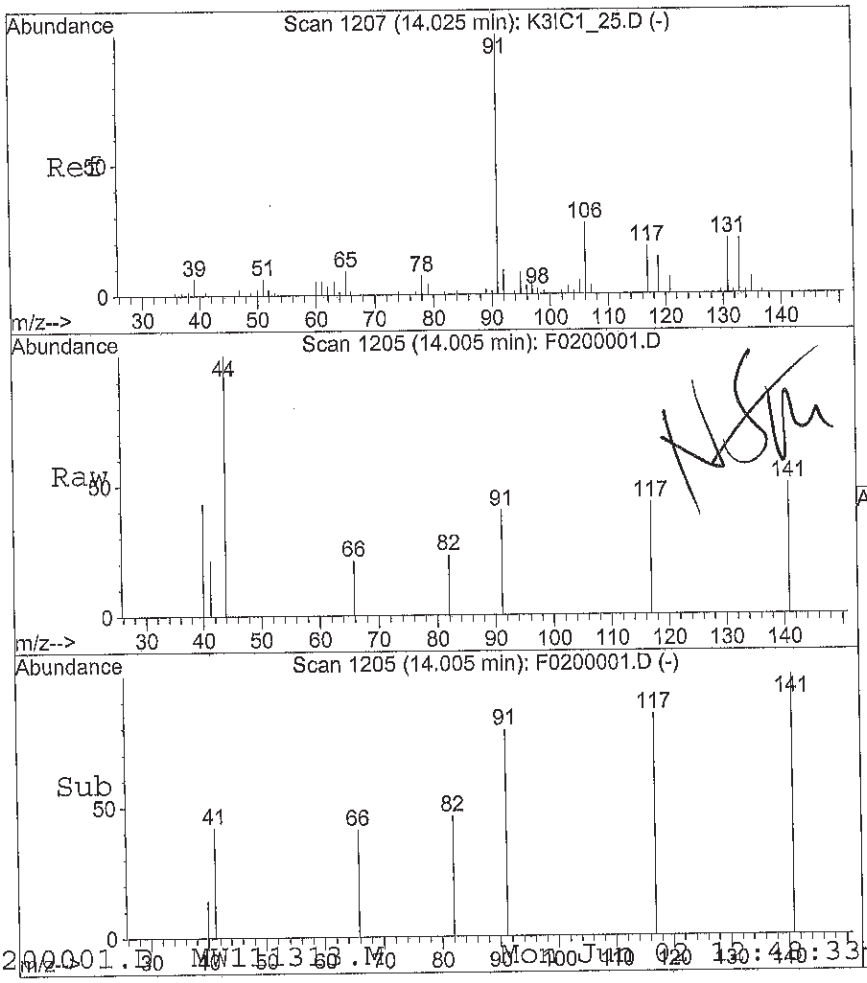


#46
2-Hexanone
Concen: 0.78 ug/L
RT: 12.97 min Scan# 1082
Delta R.T. -0.00 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 43 Resp: 1526

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

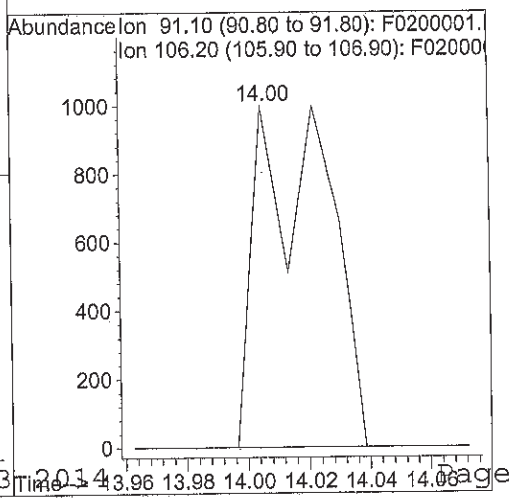


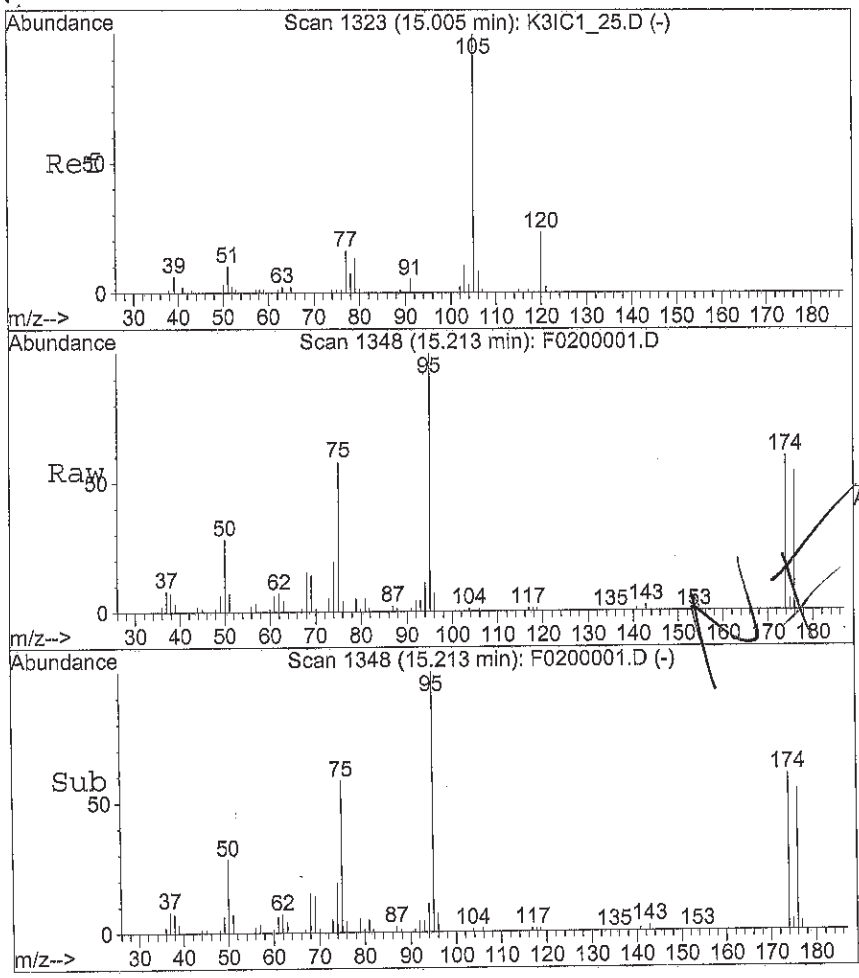


#51
Ethylbenzene
Concen: 0.12 ug/L
RT: 14.00 min Scan# 1205
Delta R.T. -0.02 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 91 Resp: 1606

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

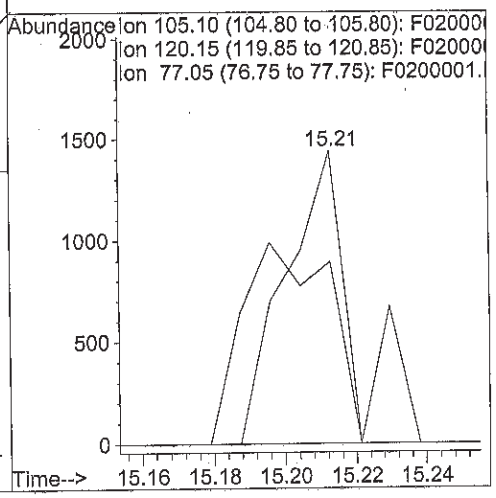


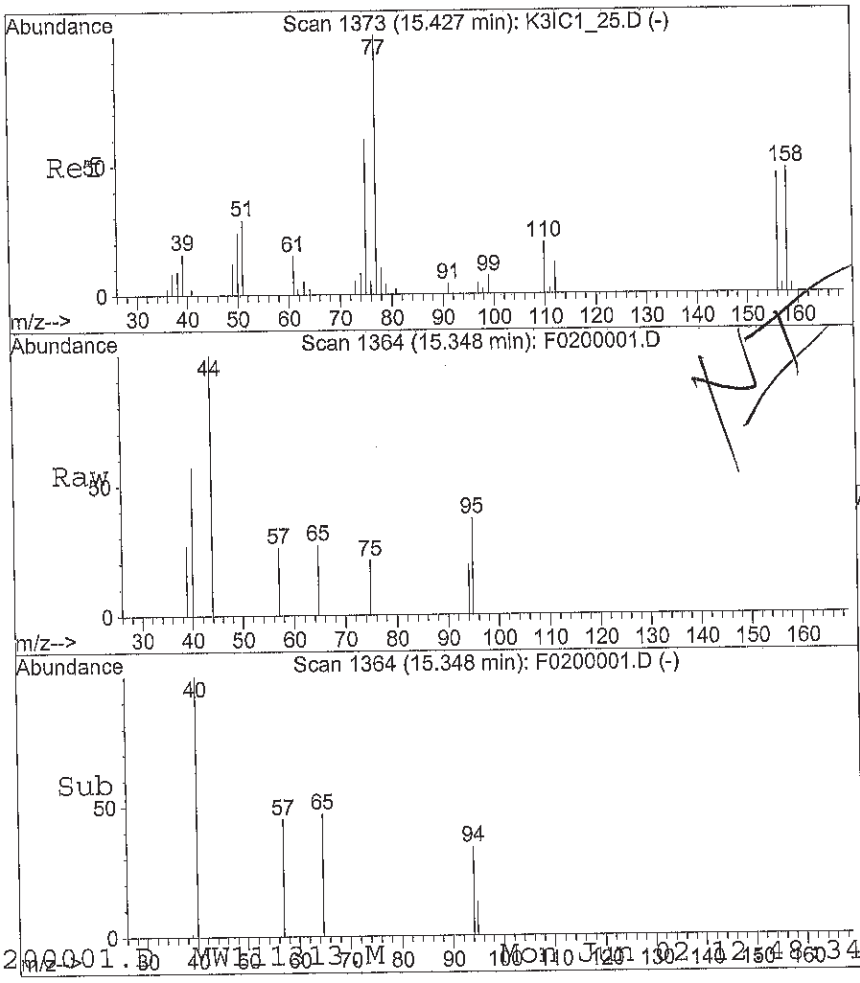


#56
Isopropylbenzene
Concen: 0.12 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. 0.21 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:105 Resp: 1562

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	128.8	13.1	19.7#

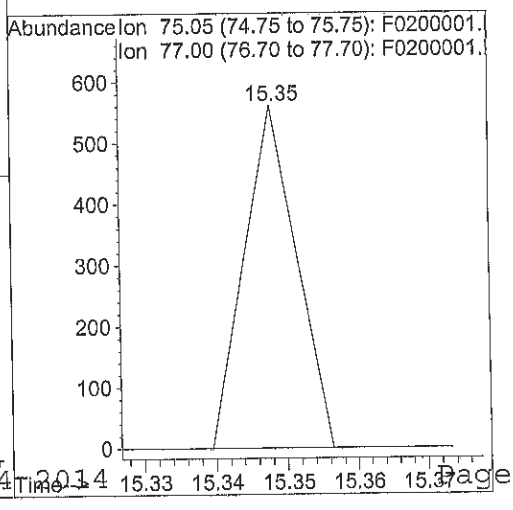


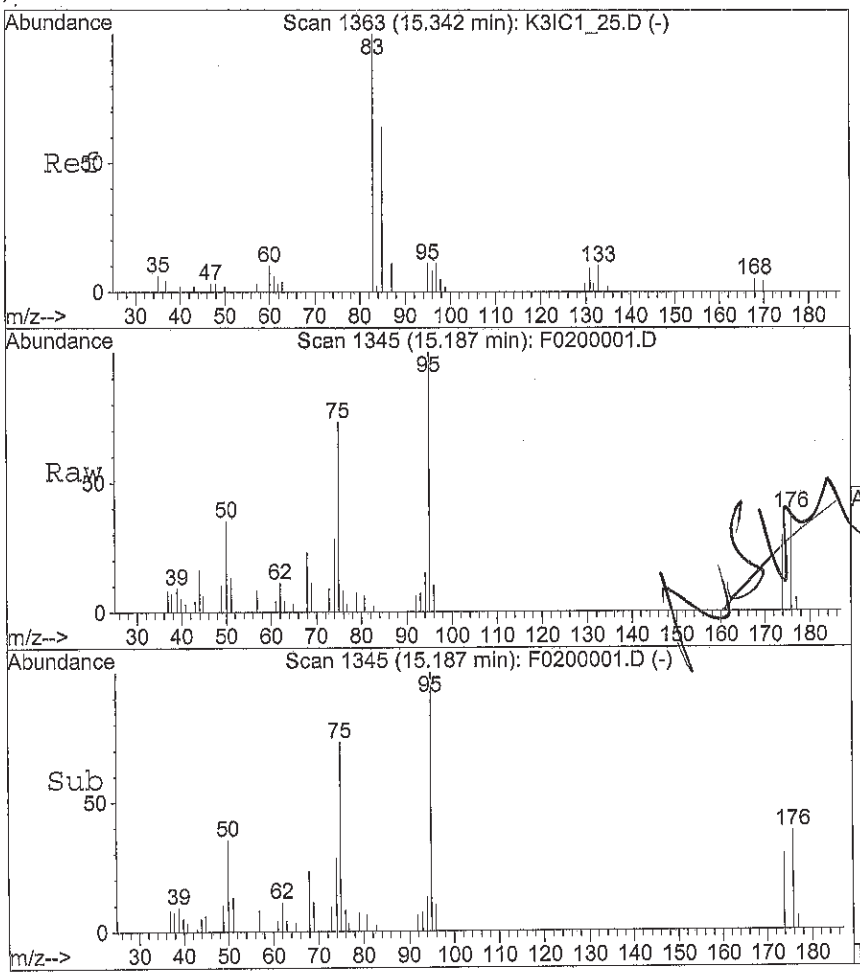


#57
1,2,3-Trichloropropane
Concen: 0.08 ug/L
RT: 15.35 min Scan# 1364
Delta R.T. -0.08 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 75 Resp: 284

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

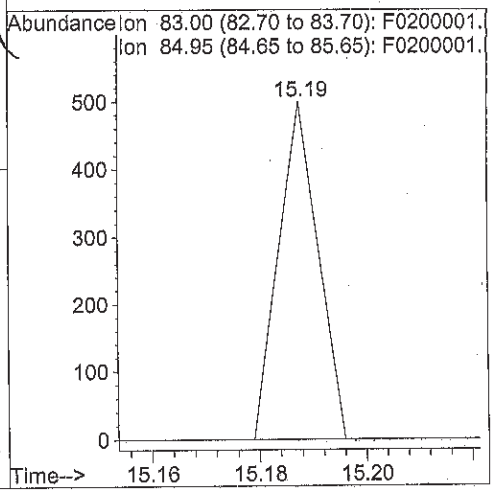


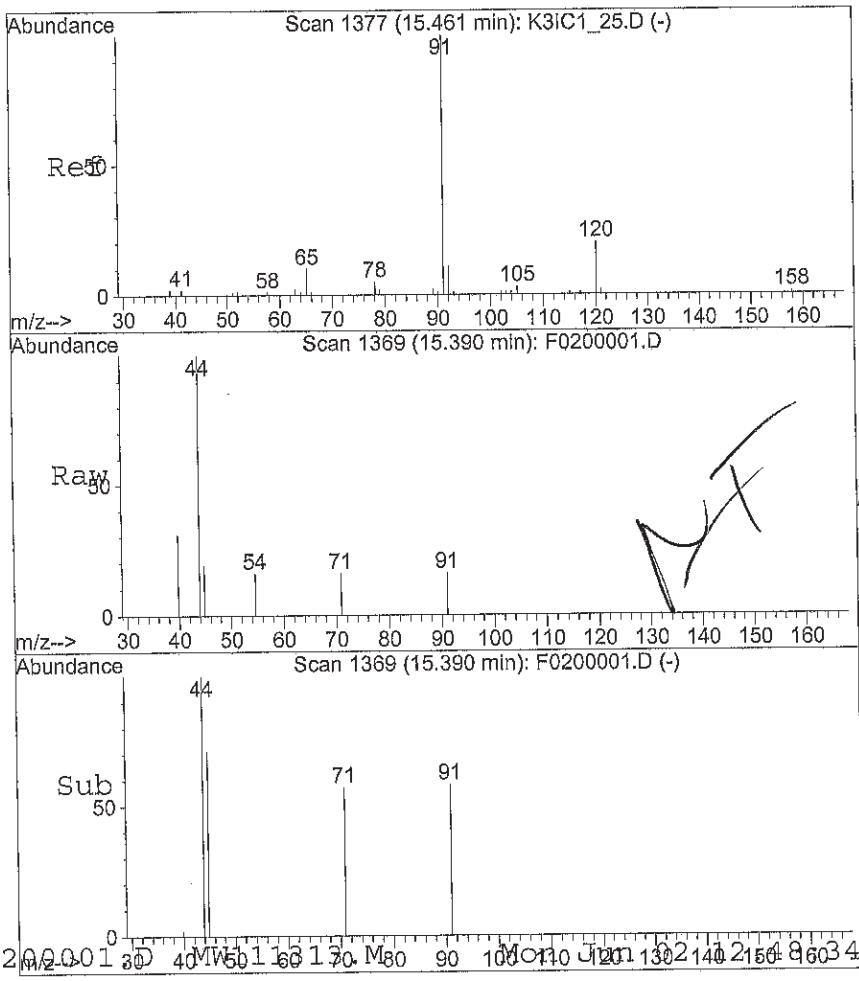


#60
1,1,2,2-Tetrachloroethane
Concen: 0.08 ug/L
RT: 15.19 min Scan# 1345
Delta R.T. -0.15 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 83 Resp: 253

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

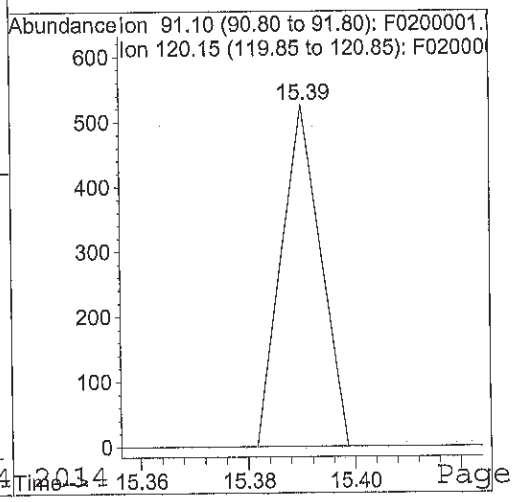


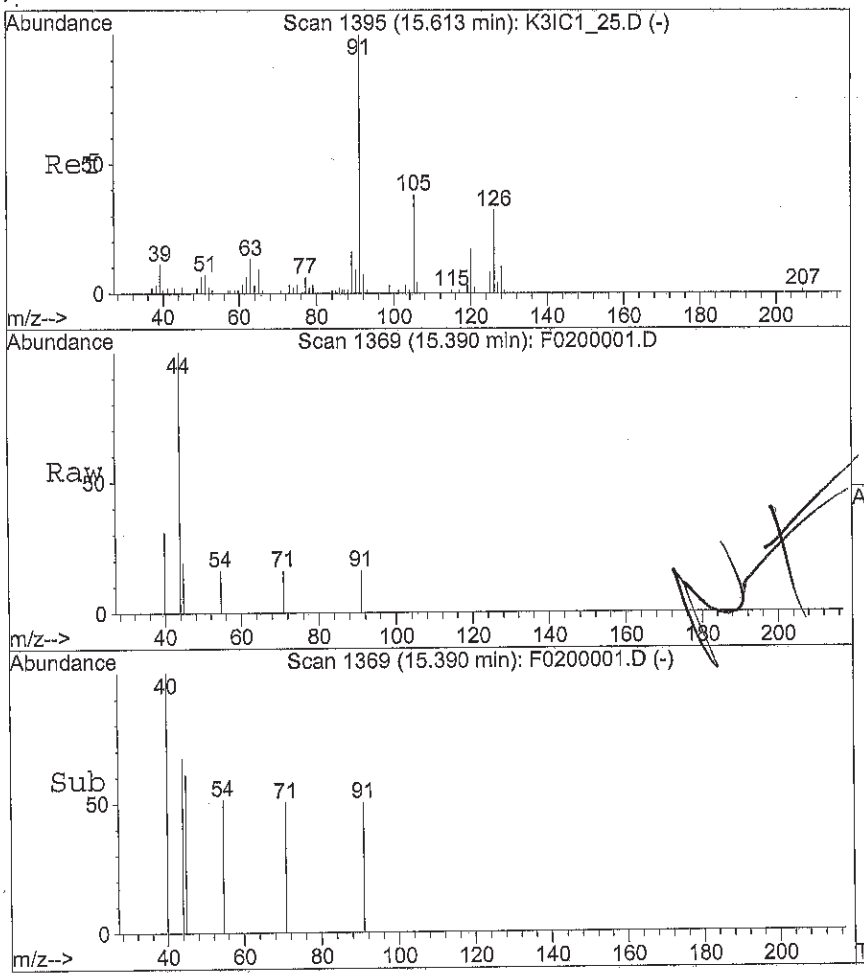


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.39 min Scan# 1369
Delta R.T. -0.07 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 91 Resp: 267

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

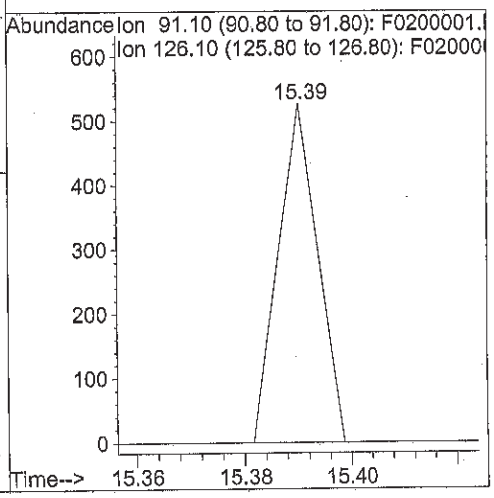


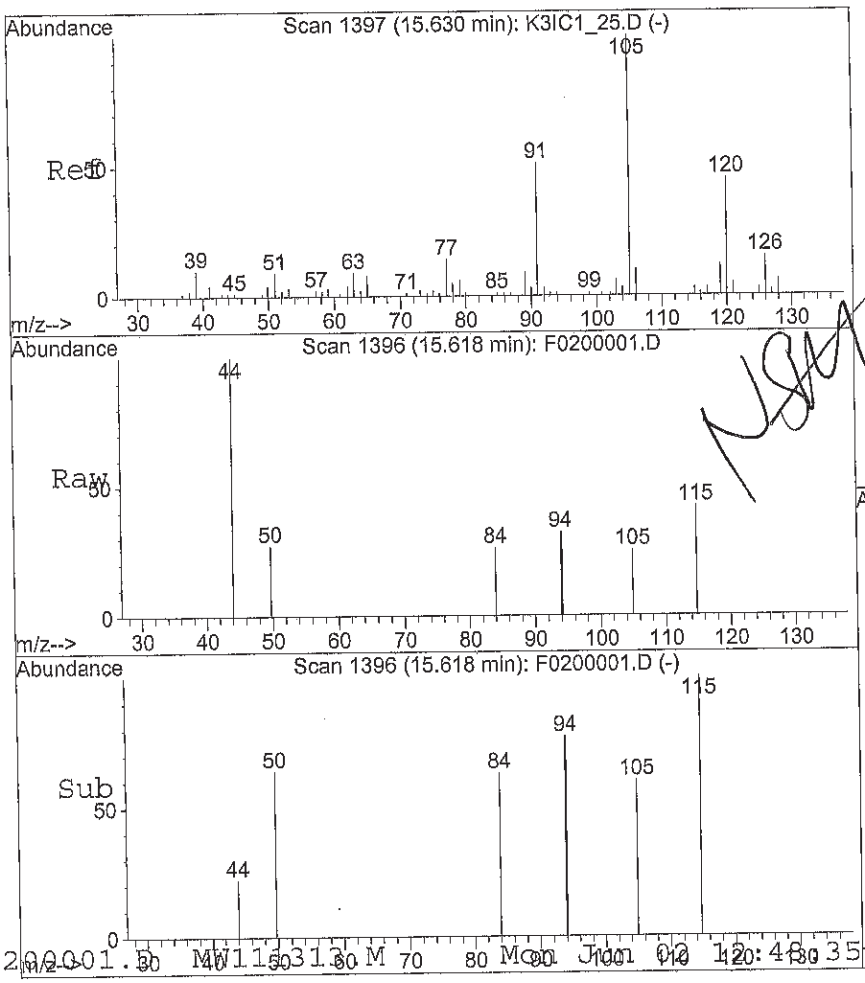


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.39 min Scan# 1369
Delta R.T. -0.22 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 91 Resp: 267

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

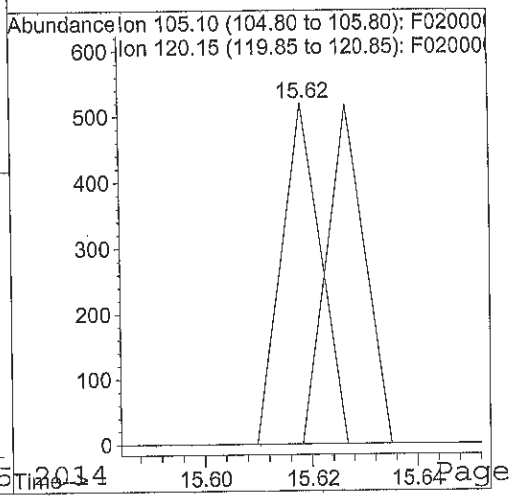


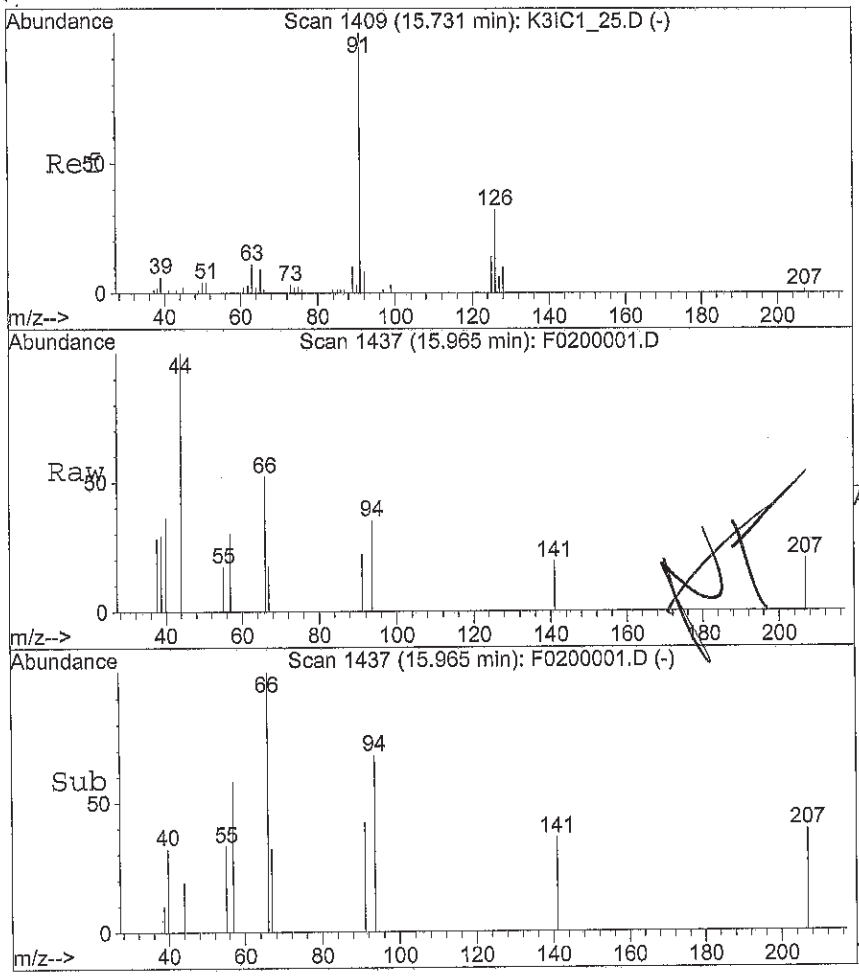


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:105 Resp: 264

Ion	Ratio	Lower	Upper
105	100		
120	99.2	36.4	54.6#

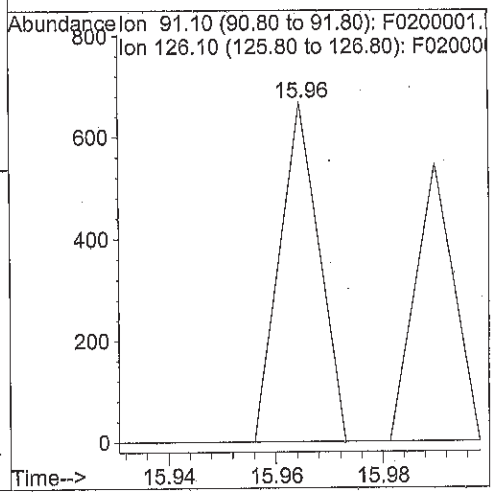


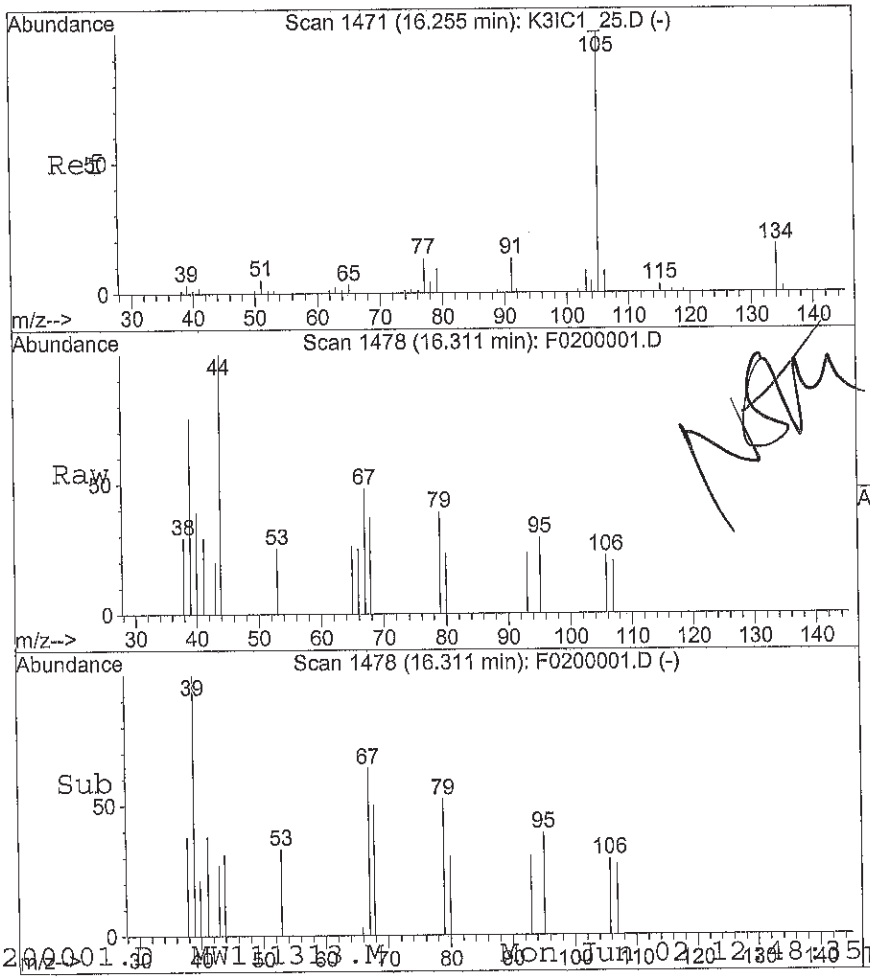


#65
4-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.96 min Scan# 1437
Delta R.T. 0.23 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 91 Resp: 339

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

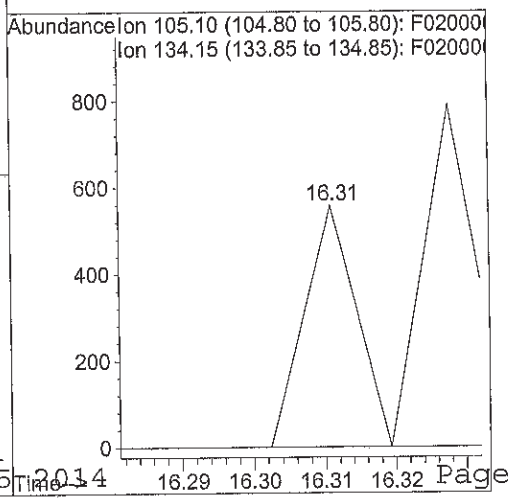


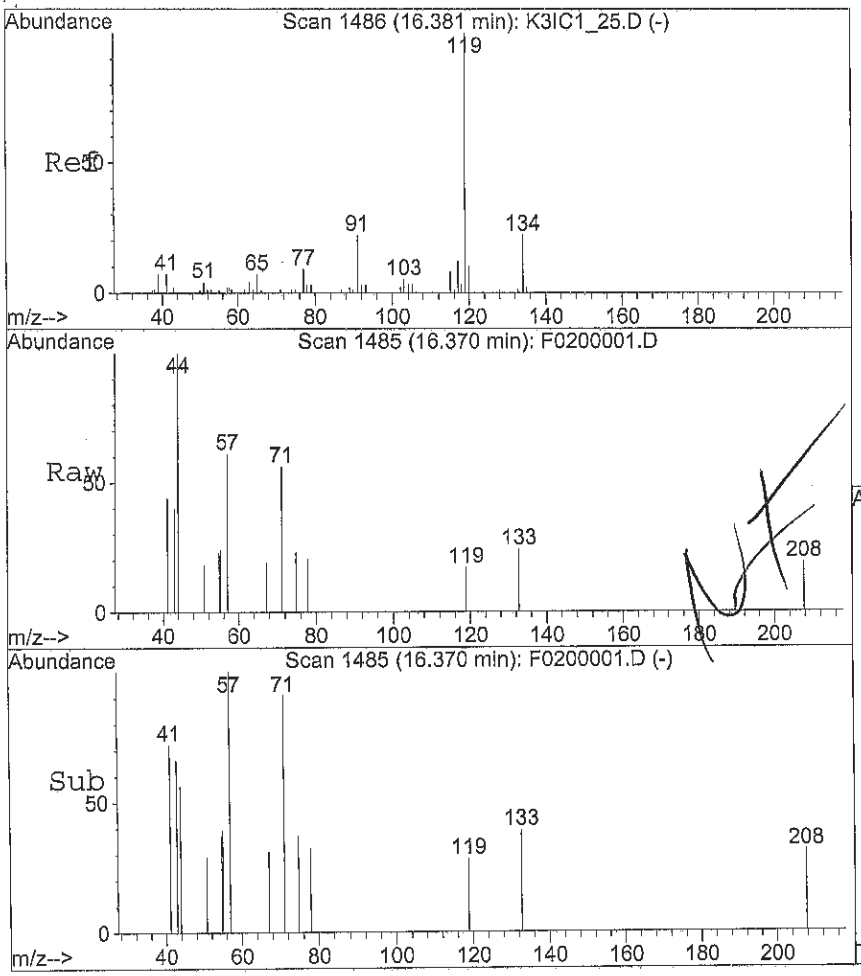


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.31 min Scan# 1478
Delta R.T. 0.06 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:105 Resp: 283

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

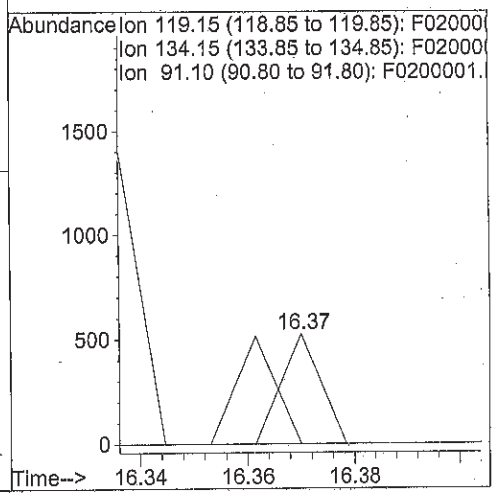


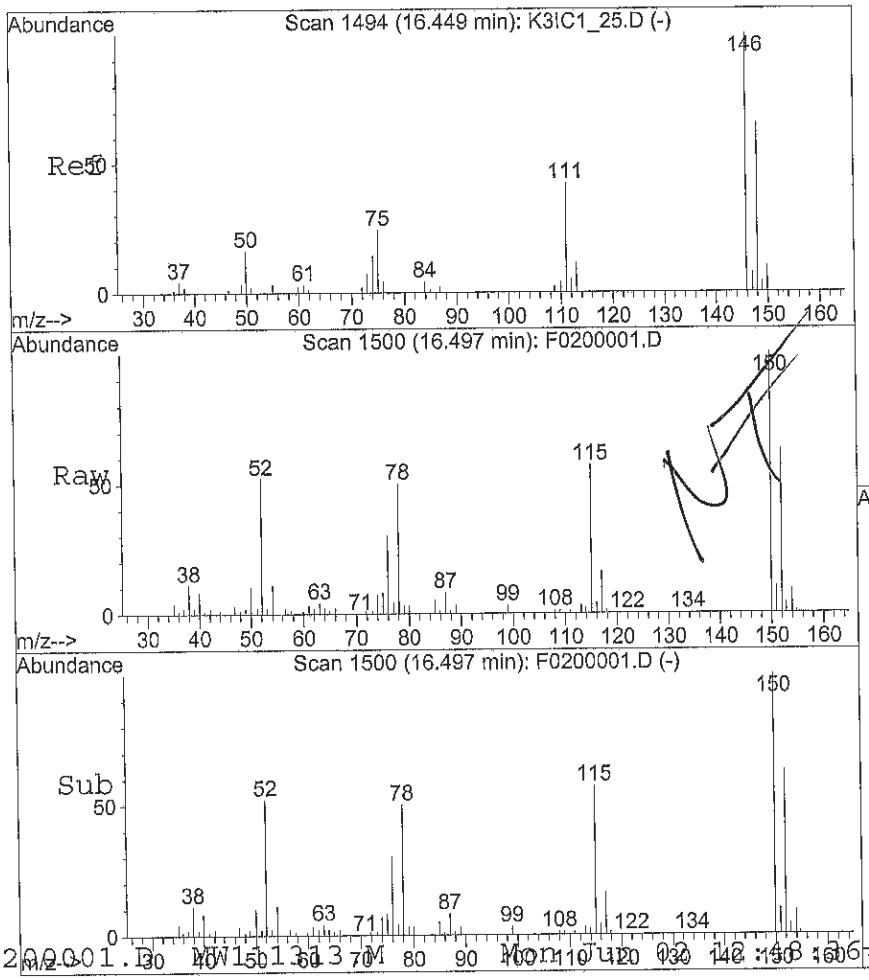


#69
p-Isopropyltoluene
Concen: 0.02 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:119 Resp: 266

Ion	Ratio	Lower	Upper
119	100		
134	97.7	17.4	26.2#
91	0.0	19.6	29.4#

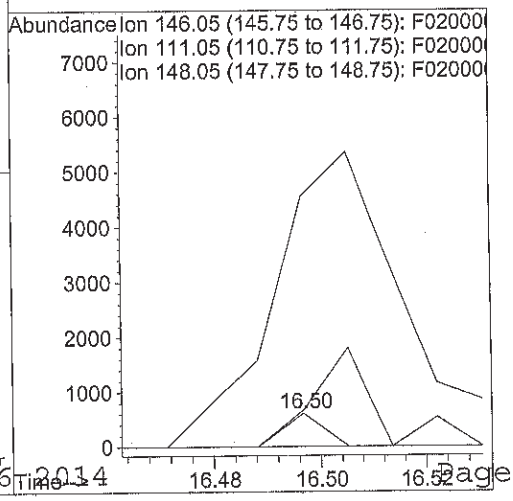


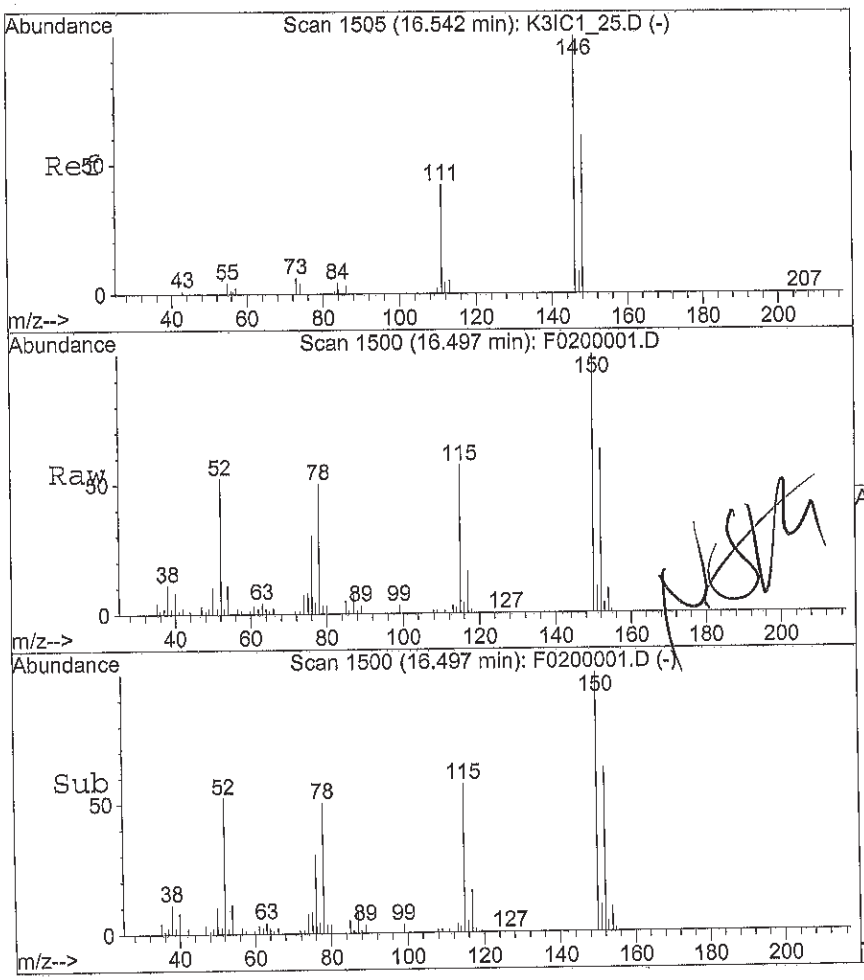


#70
1,3-Dichlorobenzene
Concen: 0.05 ug/L
RT: 16.50 min Scan# 1500
Delta R.T. 0.05 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:146 Resp: 307

Ion	Ratio	Lower	Upper
146	100		
111	2899.0	34.2	51.4#
148	495.4	50.9	76.3#

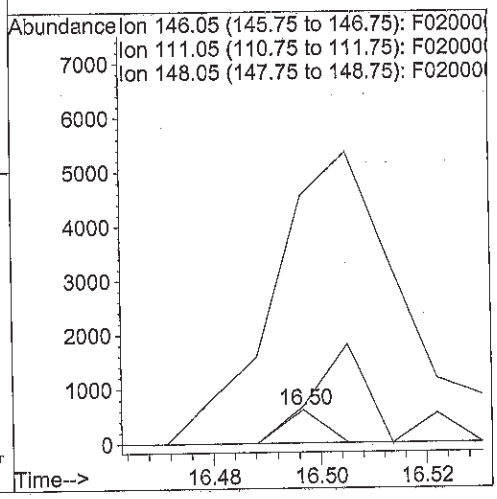


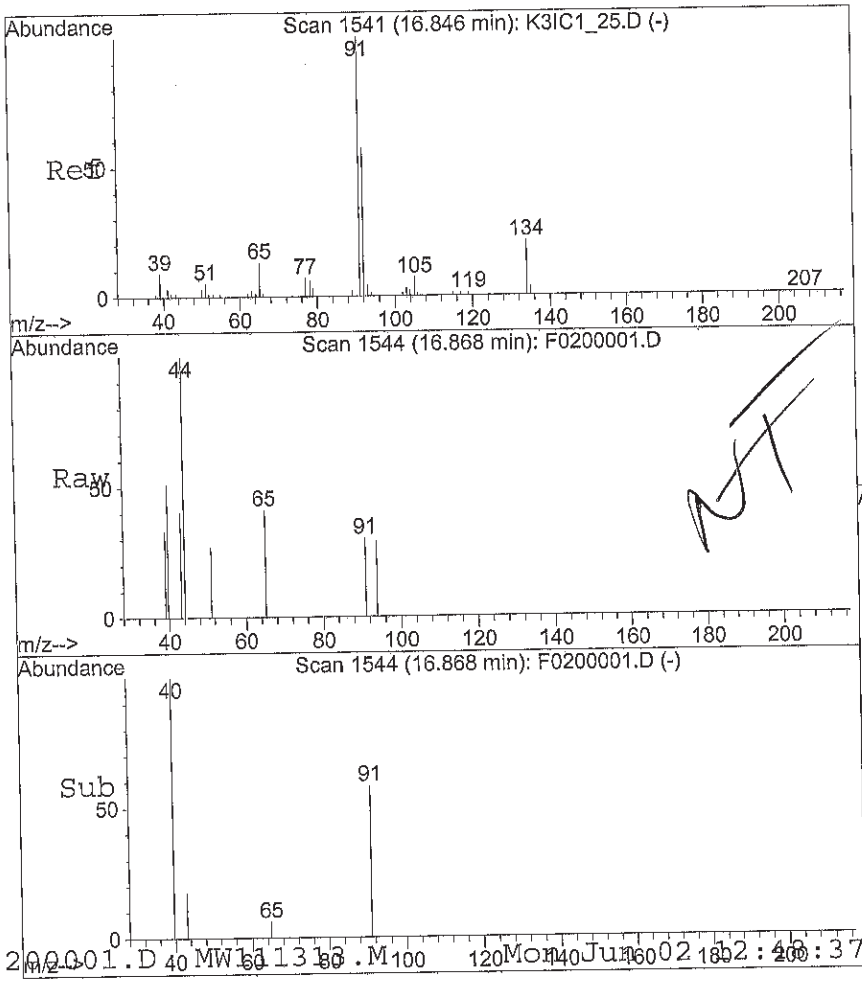


#71
1,4-Dichlorobenzene
Concen: 0.05 ug/L
RT: 16.50 min Scan# 1500
Delta R.T. -0.05 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:146 Resp: 307

Ion	Ratio	Lower	Upper
146	100		
111	2899.0	37.6	56.4#
148	495.4	52.6	78.8#

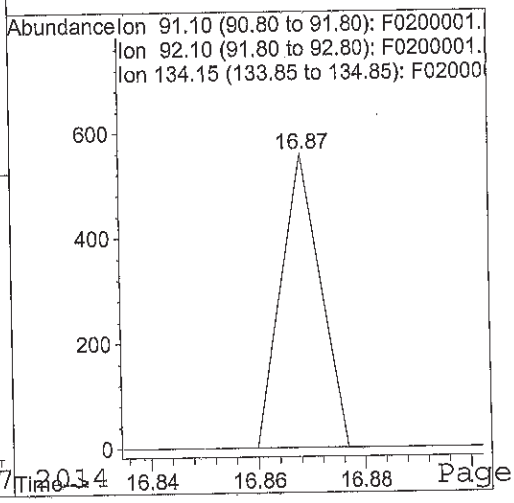


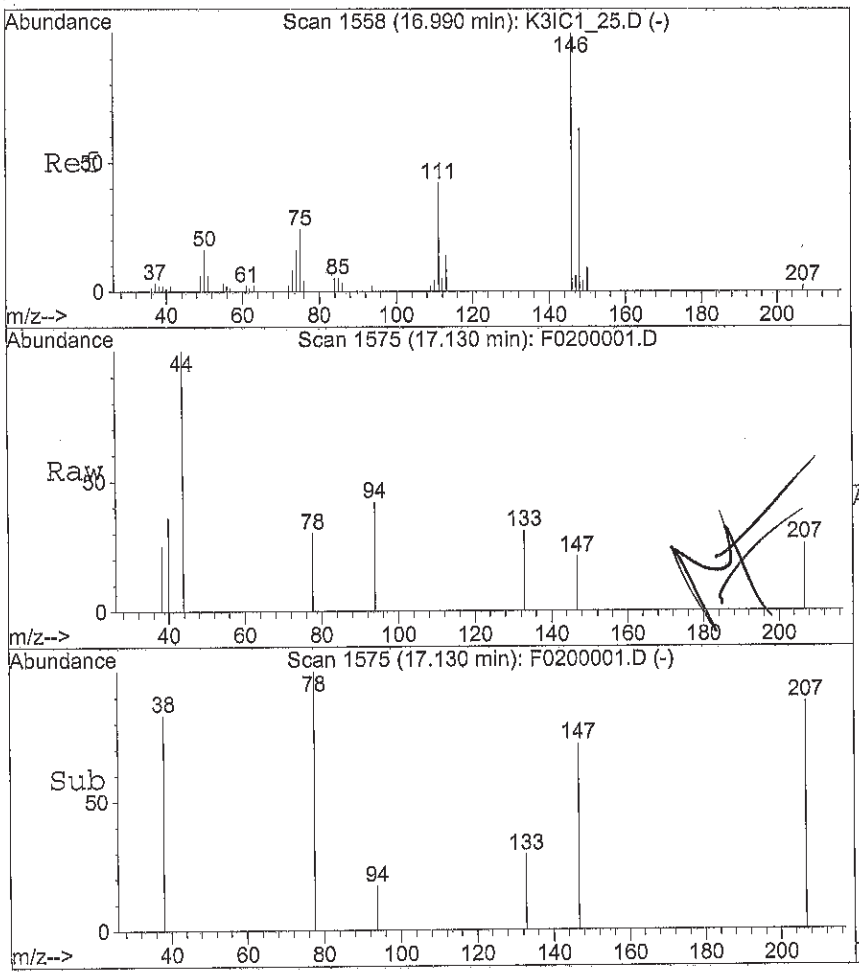


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.87 min Scan# 1544
Delta R.T. 0.02 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 91 Resp: 283

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

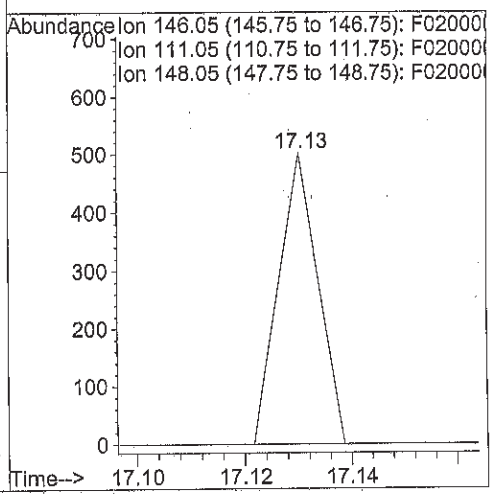


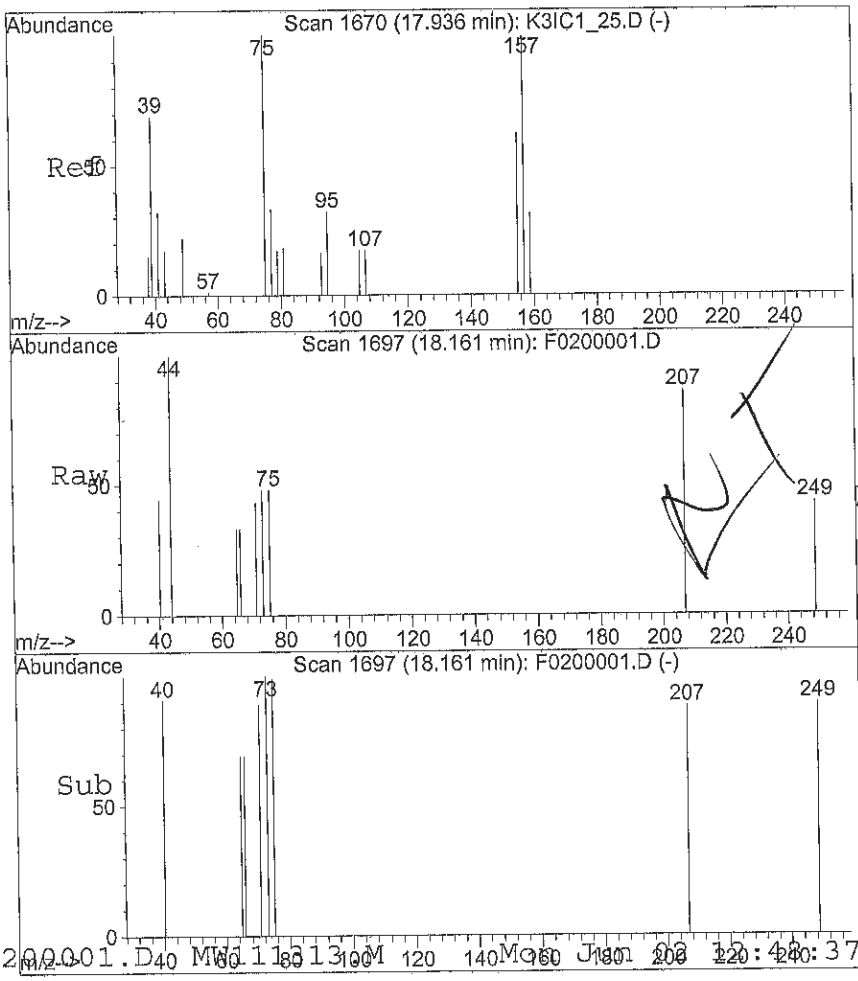


#73
1,2-Dichlorobenzene
Concen: 0.04 ug/L
RT: 17.13 min Scan# 1575
Delta R.T. 0.14 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion:146 Resp: 254

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.7	52.1#
148	0.0	51.7	77.5#

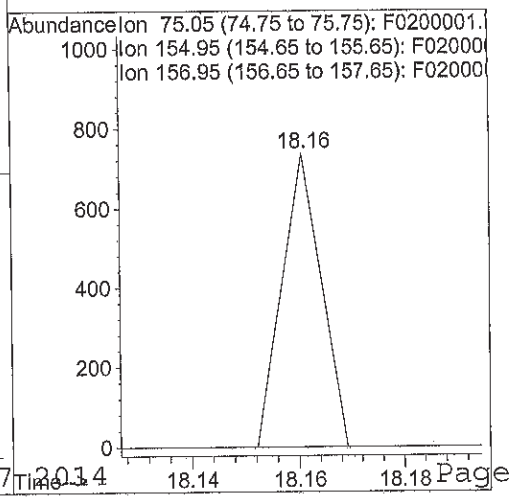




#74
1,2-Dibromo-3-chloropropane
Concen: 1.59 ug/L
RT: 18.16 min Scan# 1697
Delta R.T. 0.23 min
Lab File: F0200001.D
Acq: 2 Jun 2014 11:46 am

Tgt Ion: 75 Resp: 374

Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200001.D Vial: 11
Acq On : 2 Jun 2014 11:46 am Operator: DN
Sample : 3F40201-01 Inst : GC/MS Ins
Misc : 100cc Equipment Blank Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:23 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	959959	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	899548	12.50	ug/L	-0.02
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	456072	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	270525m	10.84	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.72%			
3) Chloroform-d (SU6)	9.17	84	462180m	12.90	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 103.20%			
4) Methylene Chloride-d2 (SU5	7.07	86	277877m	13.27	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 106.16%			
5) 1,2-Dichloroethane-d4 (SU2	9.88	65	227984m	13.36	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.88%			
6) Benzene-d6 (SU7)	9.93	84	1056734m	14.03	ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 112.24%			
8) Toluene-d8 (SU3)	12.20	98	947418	11.10	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.80%			
9) 4-Bromofluorobenzene (SU4)	15.21	95	392355m	11.14	ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.12%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

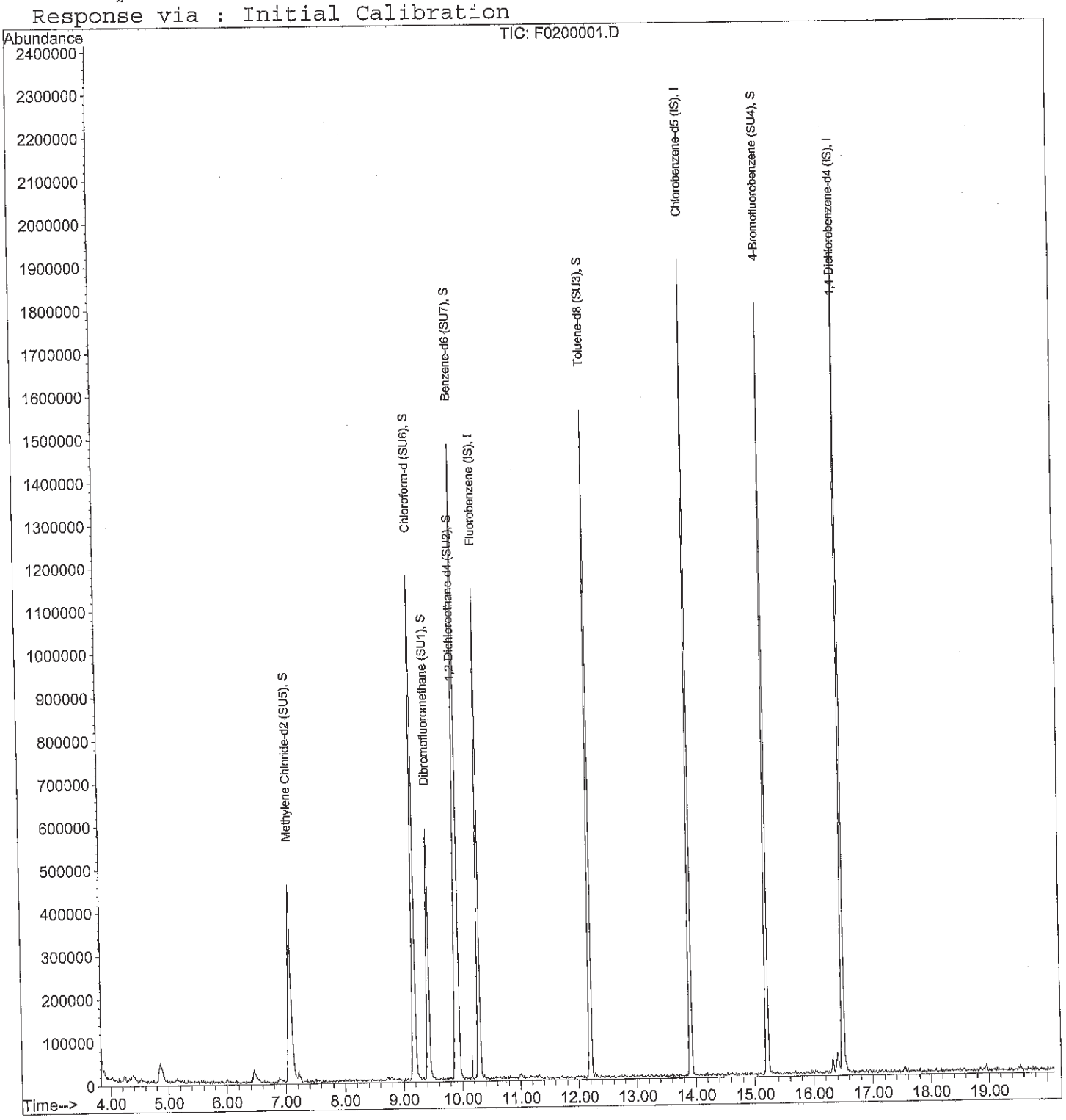
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200001.D
Acq On : 2 Jun 2014 11:46 am
Sample : 3F40201-01
Misc : 100cc Equipment Blank
MS Integration Params: rteint.p
Quant Time: Jun 3 7:23 19114

Vial: 11
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200002.D
Acq On : 2 Jun 2014 12:16 pm
Sample : 3F40201-02
Misc : 100cc SVL-528-SA8-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 2 12:57 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1361744	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1270833	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	624007	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.42	113	392551m	11.56 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 92.48%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	357991m	11.09 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.72%		
39) Toluene-d8 (SU3)	12.20	98	1339609	11.30 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.40%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	592792m	11.40 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.20%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	1657	0.50 ~~ug/L~~ # NSM	44
4) Chloromethane	4.39	50	5008	0.97 ~~ug/L~~ #	77
5) Vinyl Chloride	4.41	62	313	0.13 ~~ug/L~~ #	1
6) Bromomethane	5.14	96	709	-1.30 ~~ug/L~~ #	43
7) Chloroethane	5.20	64	1791	2.27 ~~ug/L~~	97
8) (F11) Trichlorofluorometha	5.66	101	263	0.07 ~~ug/L~~ #	52
11) Acetone	6.48	58	6358	7.27 ~~ug/L~~ # NT	1
12) (IPA) Leak Check Compound	6.49	45	46799	286.00 ~~ug/L~~ # SM	87
13) Carbon disulfide	6.86	76	2687	0.24 ~~ug/L~~ #	84
14) Methylene Chloride	7.08	84	4498	1.20 ~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.90	59	1358	5.85 ~~ug/L~~ # NT	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	275	0.04 ~~ug/L~~ # NSM	1
17) trans-1,2-Dichloroethene	7.62	96	313	0.09 ~~ug/L~~ #	4
18) 1,1-Dichloroethane	8.04	63	264	0.04 ~~ug/L~~ #	42
19) cis-1,2-Dichloroethene	8.98	96	296	0.07 ~~ug/L~~ #	3
20) 2,2-Dichloropropane	8.75	77	851	0.16 ~~ug/L~~ #	1
21) (MEK) 2-Butanone	8.80	72	272	0.71 ~~ug/L~~ #	1
22) (DIPE) Diisopropyl Ether	7.92	45	410	0.04 ~~ug/L~~ #	56
24) Chloroform	9.20	83	1955	0.27 ~~ug/L~~ #	1
25) (ETBE) 2-ethoxy 2-methyl p	8.44	59	286	0.03 ~~ug/L~~ #	1
30) Carbon Tetrachloride	9.66	117	266	0.06 ug/L 0.0012	99
31) Benzene	9.93	78	13109	1.02 ~~ug/L~~ # NSM	70

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200002.D
Acq On : 2 Jun 2014 12:16 pm
Sample : 3F40201-02
Misc : 100cc SVL-528-SA8-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 2 12:57 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

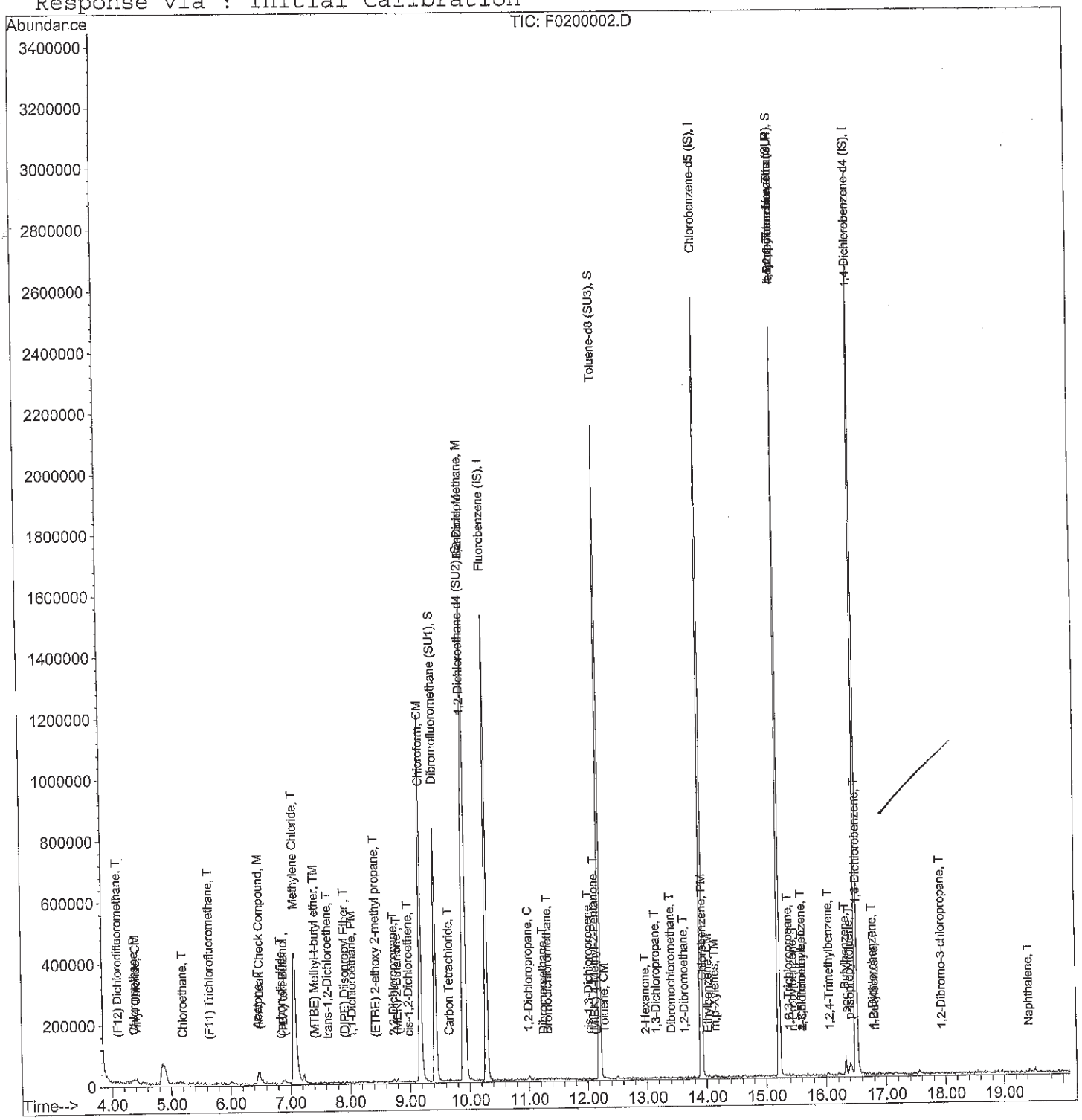
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	9.92	62	11263	2.48 ~~ug/L~~ # NSM	1
34) 1,2-Dichloropropane	11.01	63	316	0.10 ~~ug/L~~ #	2
35) Dibromomethane	11.26	93	349	0.15 ~~ug/L~~ #	5
36) Bromodichloromethane	11.32	83	558	0.12 ~~ug/L~~ #	21
37) cis-1,3-Dichloropropene	12.02	75	309	0.06 ~~ug/L~~ #	36
40) (MIBK) 4-Methyl-2-Pentanon	12.14	43	608	0.24 ~~ug/L~~ #	100
41) Toluene	12.29	91	2610	0.15 ug/L # 0.005	66
45) 1,3-Dichloropropane	13.16	76	270	0.05 ~~ug/L~~ # KM	41
46) 2-Hexanone	12.99	43	396	0.14 ~~ug/L~~ #	76
47) Dibromochloromethane	13.40	129	256	0.06 ~~ug/L~~ #	21
48) 1,2-Dibromoethane	13.62	107	255	0.06 ~~ug/L~~ #	3
49) Chlorobenzene	13.95	112	257	0.02 ~~ug/L~~ #	28
51) Ethylbenzene	14.03	91	2572	0.13 ~~ug/L~~ # SM	45
52) m,p-Xylenes	14.14	106	632	0.09 ug/L # 0.0018	1
54) Styrene	14.63	104	2276	-0.64 ~~ug/L~~ # KM	48
56) Isopropylbenzene	15.23	105	3222	0.17 ~~ug/L~~ #	1
57) 1,2,3-Trichloropropane	15.38	75	1018	0.20 ~~ug/L~~ #	36
60) 1,1,2,2-Tetrachloroethane	15.21	83	929	0.21 ~~ug/L~~ #	57
62) n-Propylbenzene	15.46	91	394	0.02 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.61	91	462	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.61	105	271	0.02 ~~ug/L~~ #	31
65) 4-Chlorotoluene	15.61	91	462	0.03 ~~ug/L~~ # NSM	44
67) 1,2,4-Trimethylbenzene	16.06	105	728	0.04 ~~ug/L~~ #	82
68) sec-Butylbenzene	16.33	105	781	0.04 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.39	119	1205	0.07 ~~ug/L~~ #	77
70) 1,3-Dichlorobenzene	16.54	146	254	0.03 ~~ug/L~~ #	1
71) 1,4-Dichlorobenzene	16.54	146	254	0.03 ~~ug/L~~ #	1
72) n-Butylbenzene	16.81	91	576	0.03 ~~ug/L~~ #	30
73) 1,2-Dichlorobenzene	16.78	146	257	0.03 ~~ug/L~~ #	24
74) 1,2-Dibromo-3-chloropropan	17.94	75	262	1.25 ~~ug/L~~ #	6
77) Naphthalene	19.44	128	285	0.02 ~~ug/L~~	100

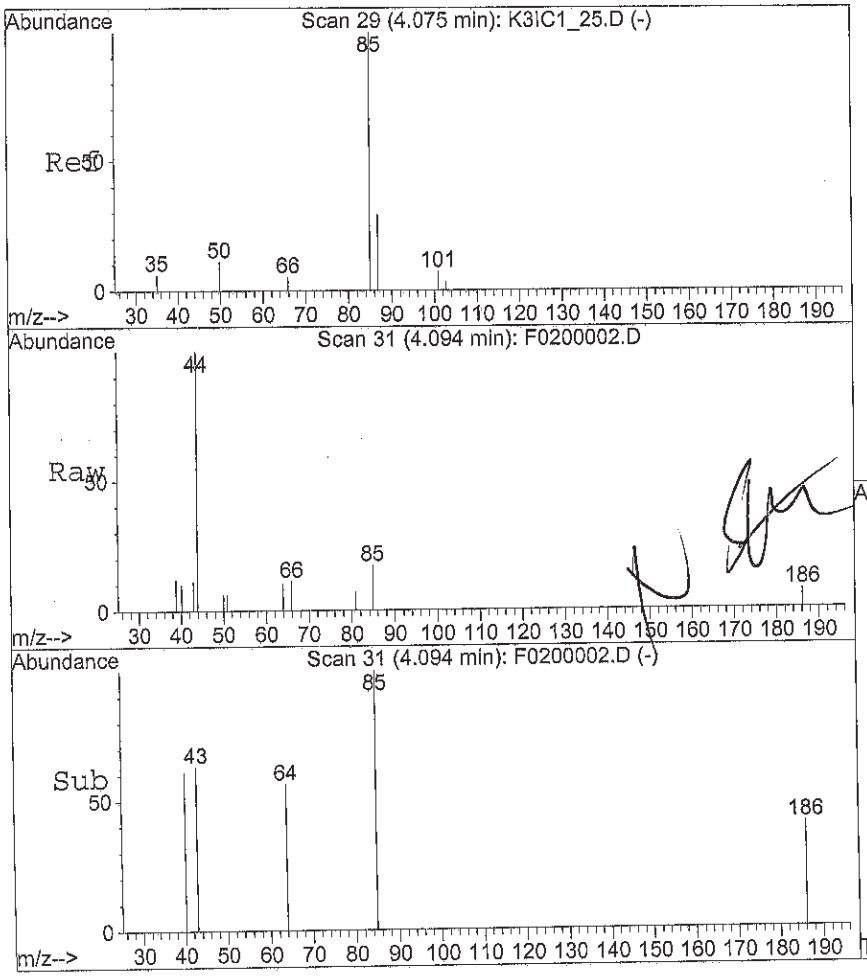
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200002.D Vial: 1
Acq On : 2 Jun 2014 12:16 pm Operator: DN
Sample : 3F40201-02 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 12:57 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

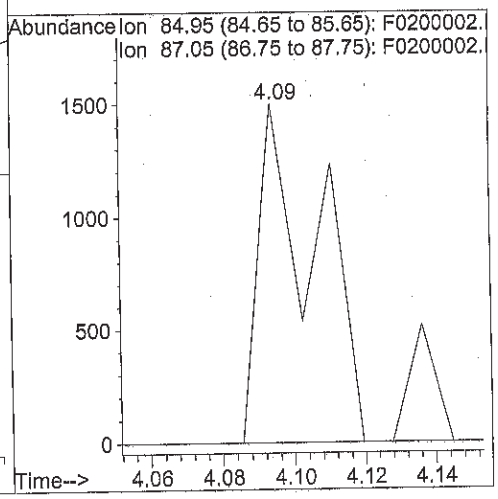


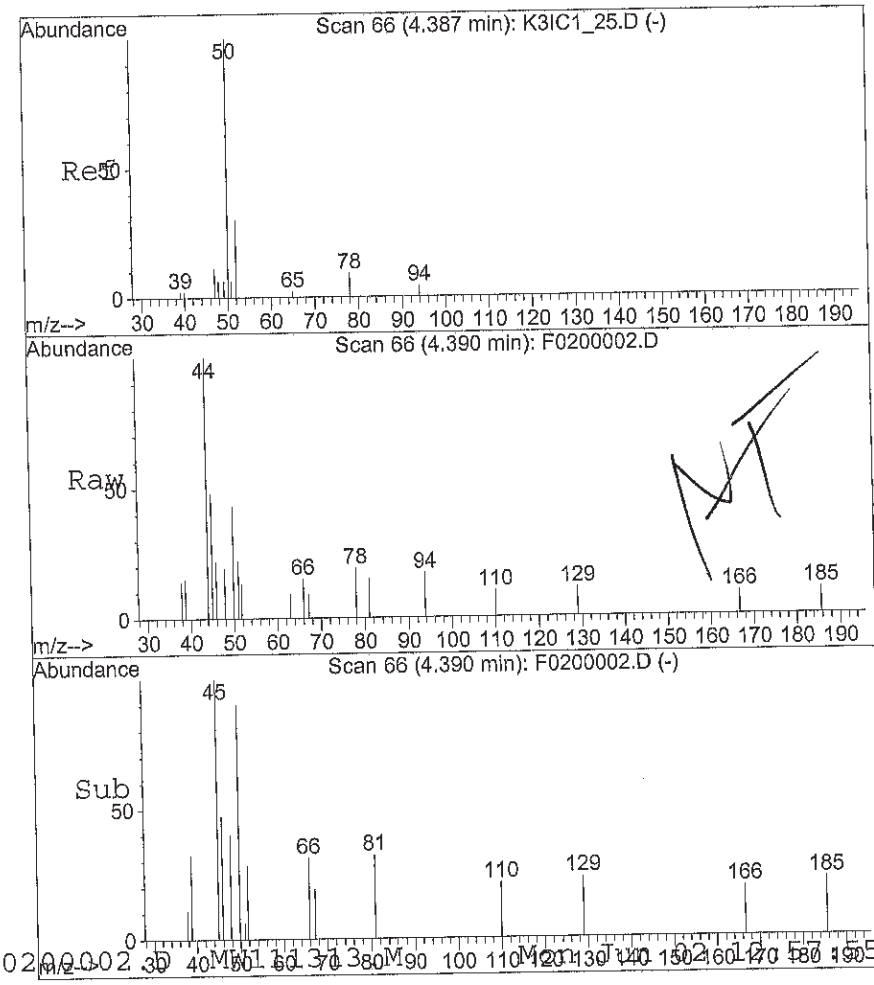


#3
(F12) Dichlorodifluoromethane
Concen: 0.50 ug/L
RT: 4.09 min Scan# 31
Delta R.T. 0.02 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 85 Resp: 1657

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

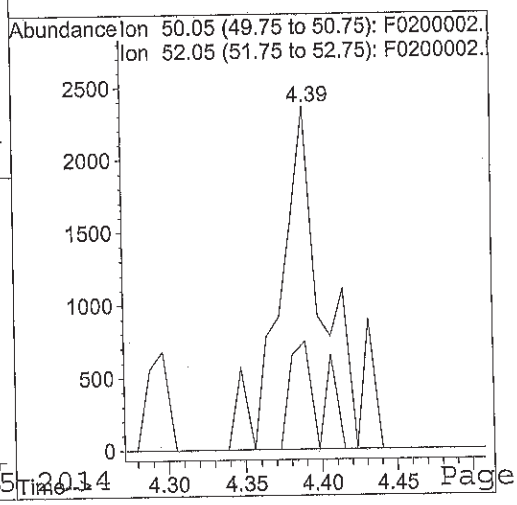


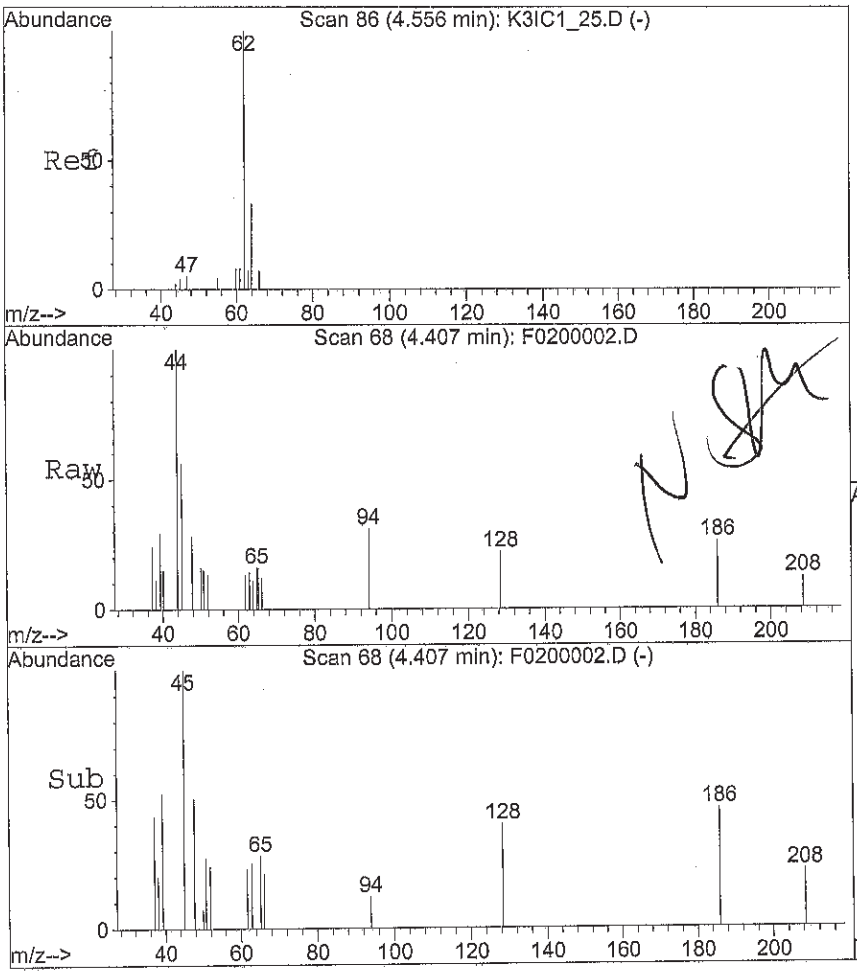


#4
Chloromethane
Concen: 0.97 ug/L
RT: 4.39 min Scan# 66
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 50 Resp: 5008

Ion	Ratio	Lower	Upper
50	100		
52	20.6	26.9	40.3#

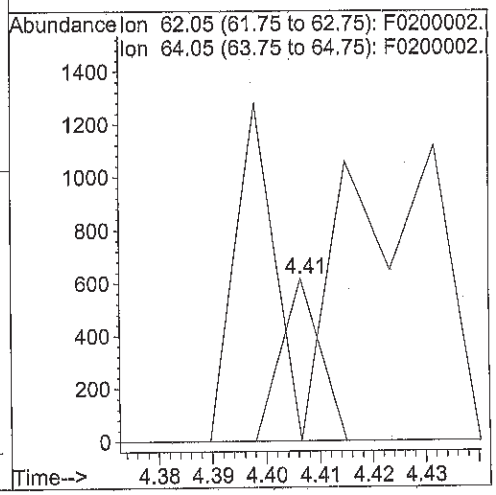


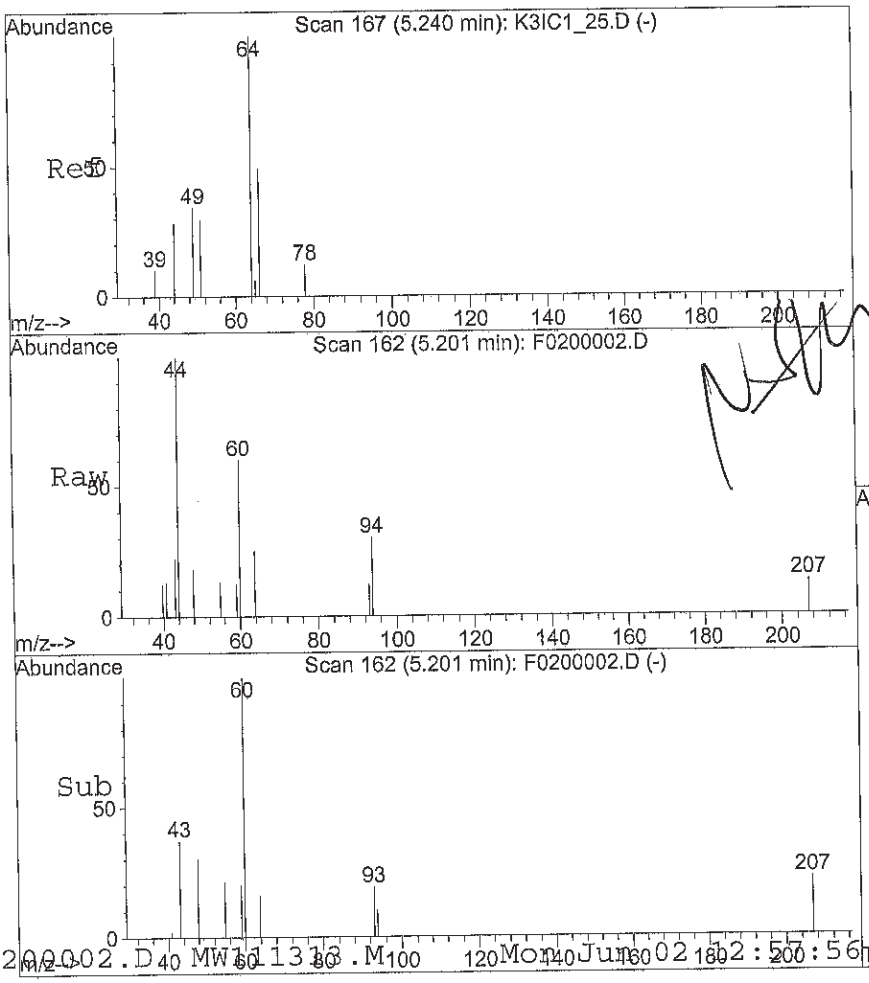


#5
Vinyl Chloride
Concen: 0.13 ug/L
RT: 4.41 min Scan# 68
Delta R.T. -0.15 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 62 Resp: 313

Ion	Ratio	Lower	Upper
62	100		
64	207.0	25.6	38.4#

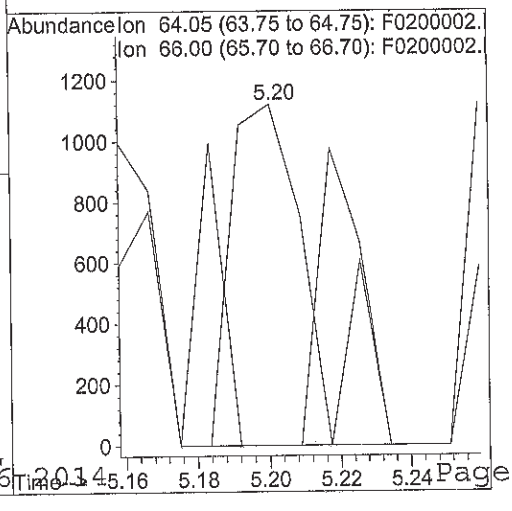


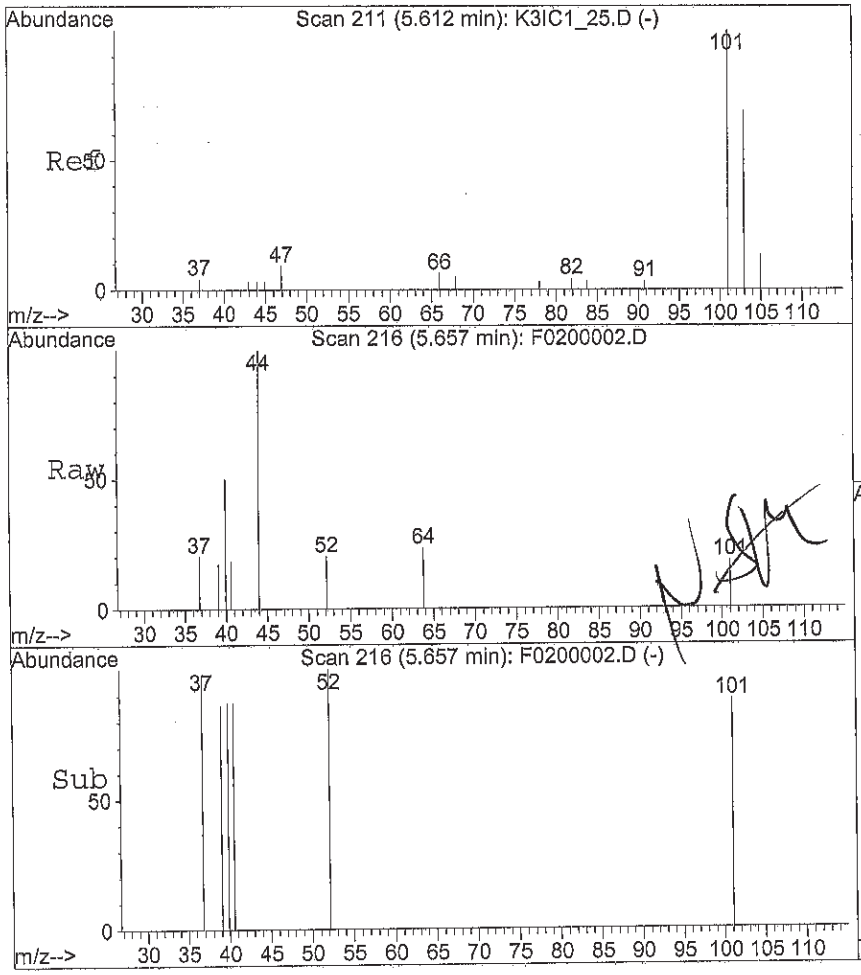


#7
Chloroethane
Concen: 2.27 ug/L
RT: 5.20 min Scan# 162
Delta R.T. -0.04 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 64 Resp: 1791

Ion	Ratio	Lower	Upper
64	100		
66	46.3	35.4	53.0

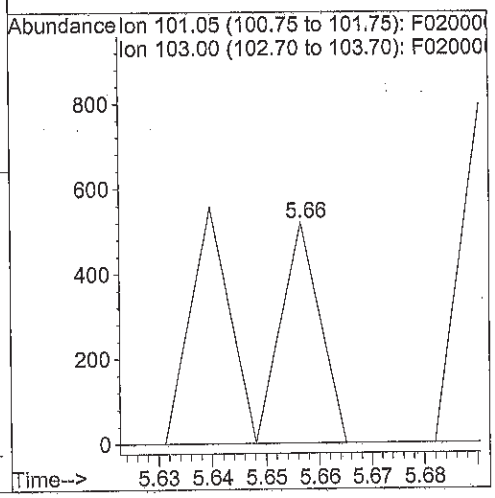


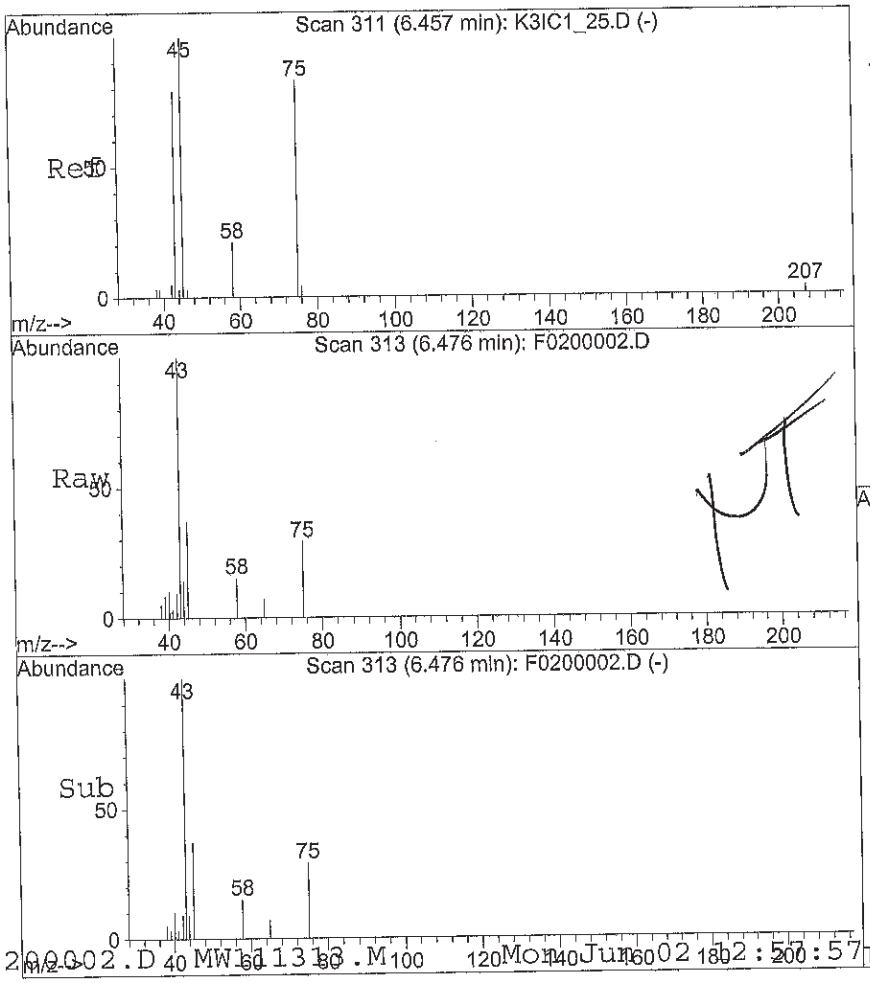


#8
(F11) Trichlorofluoromethane
Concen: 0.07 ug/L
RT: 5.66 min Scan# 216
Delta R.T. 0.04 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:101 Resp: 263

Ion	Ratio	Lower	Upper
101	100		
103	107.2	54.5	81.7#

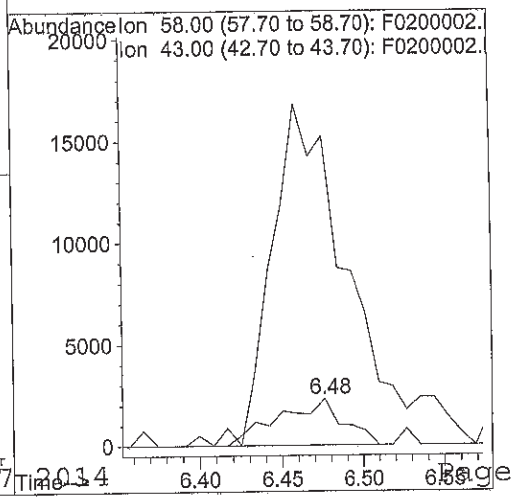


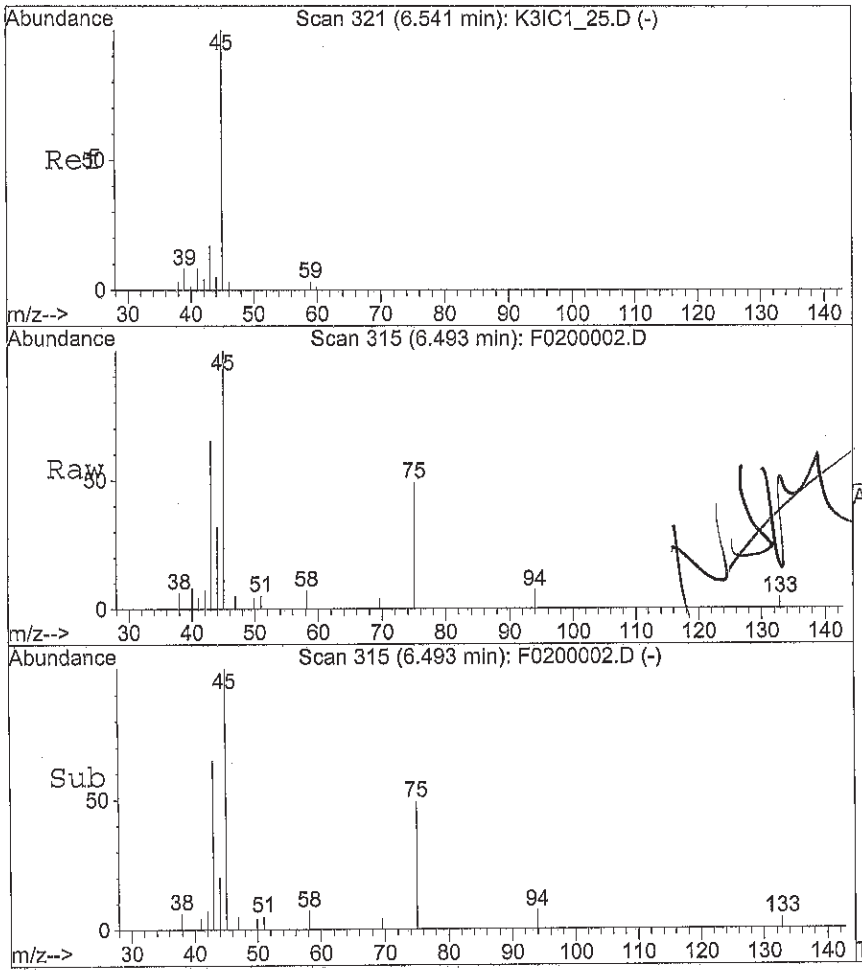


#11
Acetone
Concen: 7.27 ug/L
RT: 6.48 min Scan# 313
Delta R.T. 0.02 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 58 Resp: 6358

Ion	Ratio	Lower	Upper
58	100		
43	881.8	360.9	541.3#

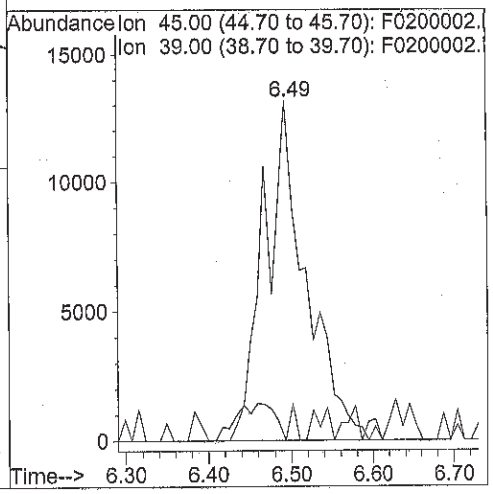


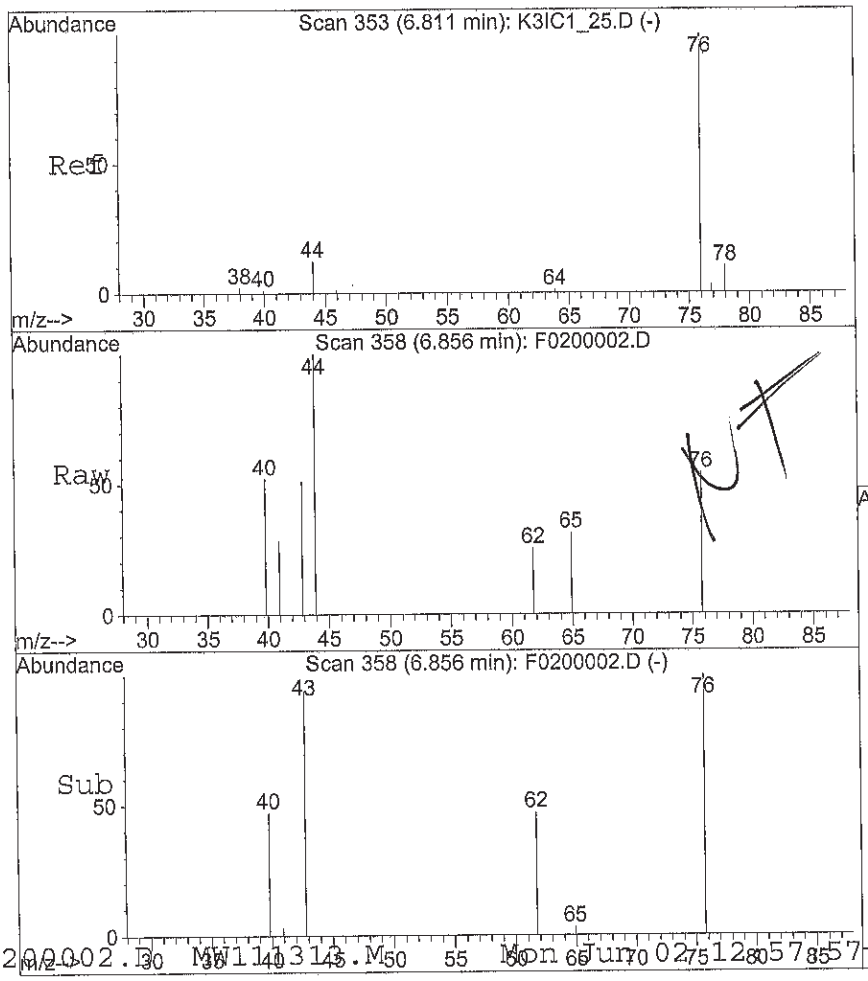


#12
(IPA) Leak Check Compound
Concen: 286.00 ug/L
RT: 6.49 min Scan# 315
Delta R.T. -0.05 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 45 Resp: 46799

Ion	Ratio	Lower	Upper
45	100		
39	1.5	4.9	7.3#

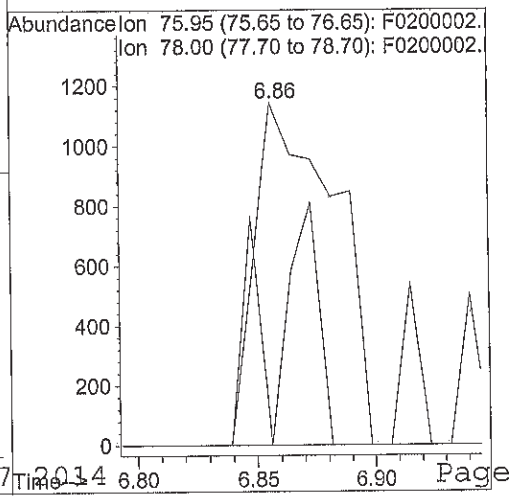


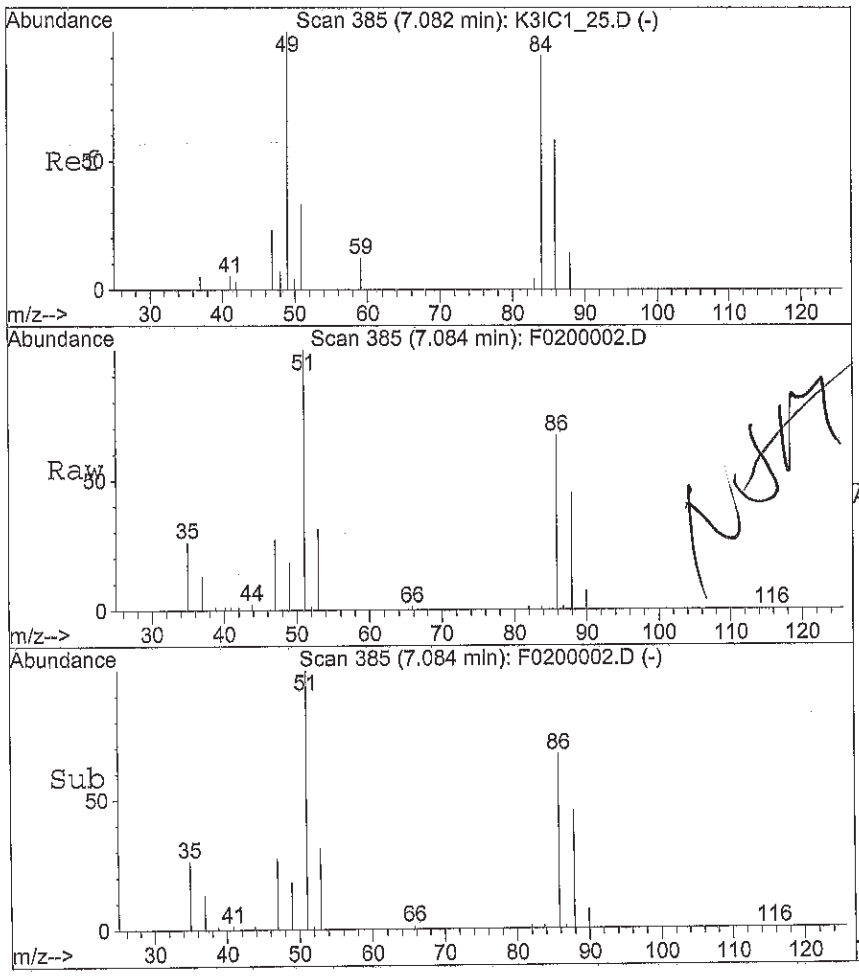


#13
Carbon disulfide
Concen: 0.24 ug/L
RT: 6.86 min Scan# 358
Delta R.T. 0.04 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 76 Resp: 2687

Ion	Ratio	Lower	Upper
76	100		
78	14.4	7.0	10.4#

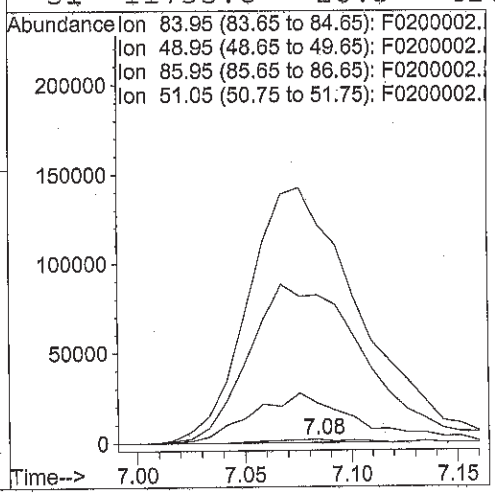


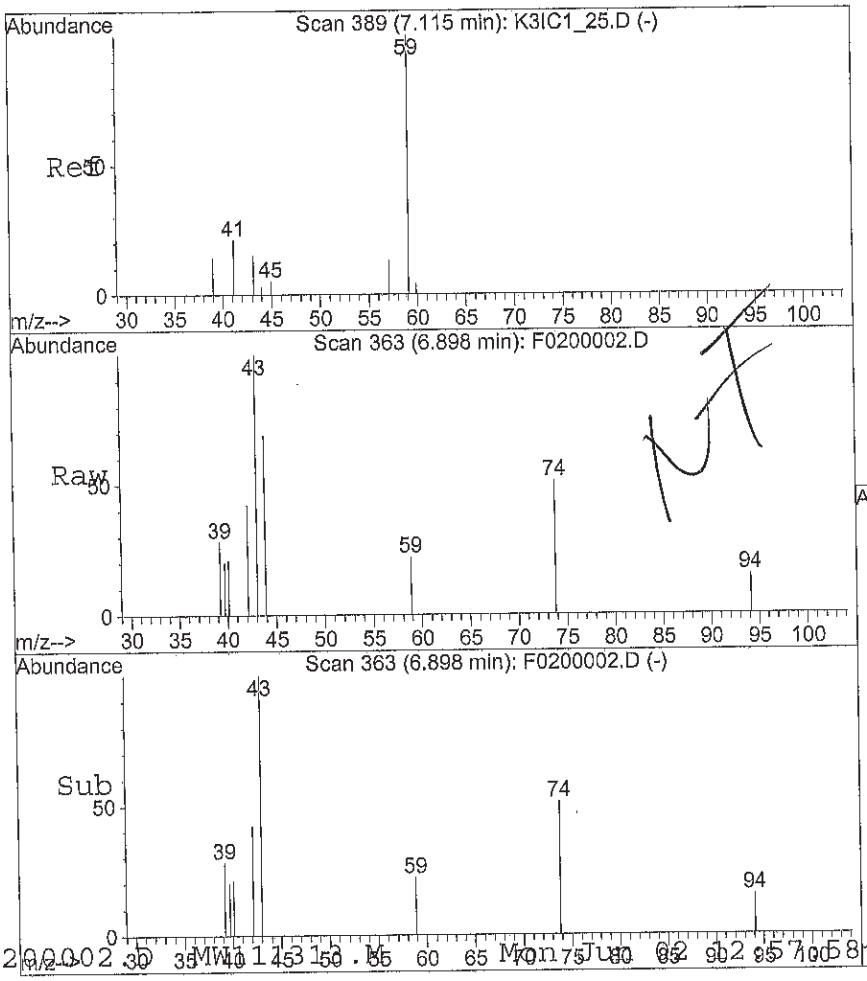


#14
Methylene Chloride
Concen: 1.20 ug/L
RT: 7.08 min Scan# 385
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 84 Resp: 4498

Ion	Ratio	Lower	Upper
84	100		
49	2077.6	89.8	134.6#
86	7515.3	51.1	76.7#
51	11735.8	28.5	42.7#

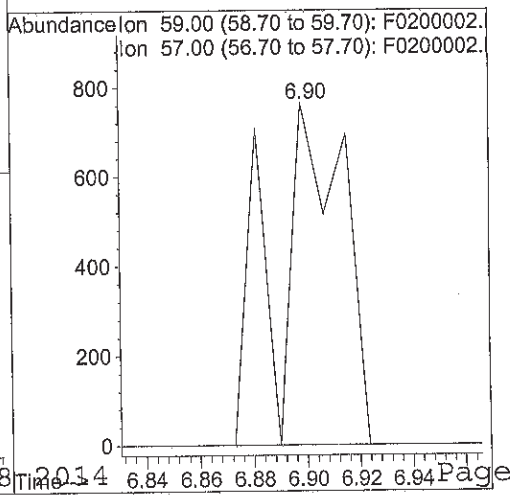


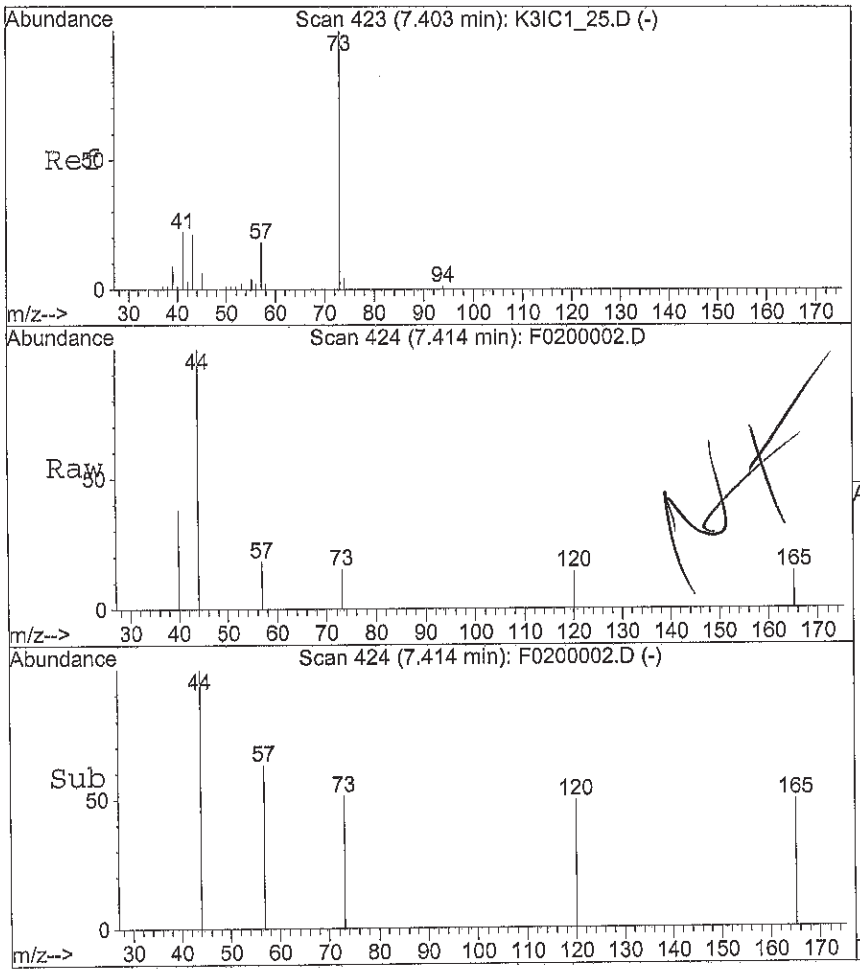


#15
(TBA) tert-Butanol
Concen: 5.85 ug/L
RT: 6.90 min Scan# 363
Delta R.T. -0.22 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 59 Resp: 1358

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

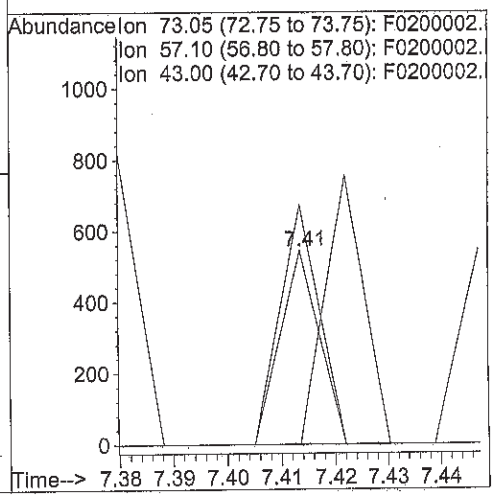


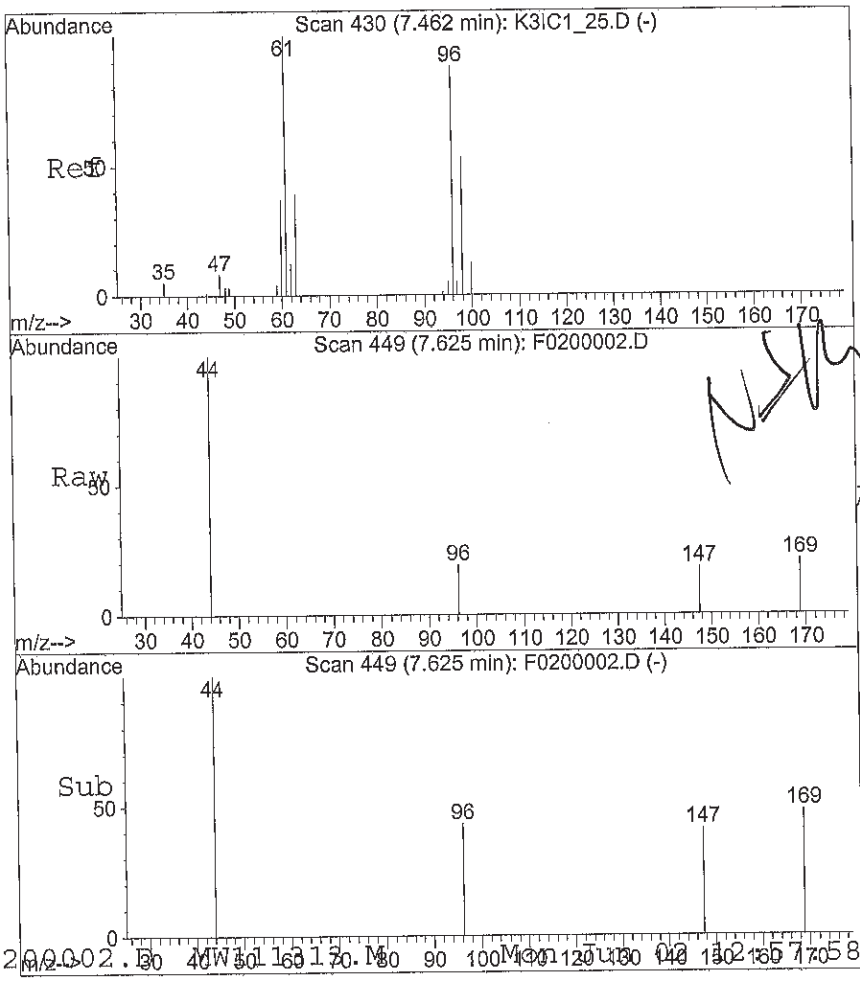


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.04 ug/L
RT: 7.41 min Scan# 424
Delta R.T. 0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 73 Resp: 275

Ion	Ratio	Lower	Upper
73	100		
57	124.4	15.8	23.8#
43	139.6	18.4	27.6#

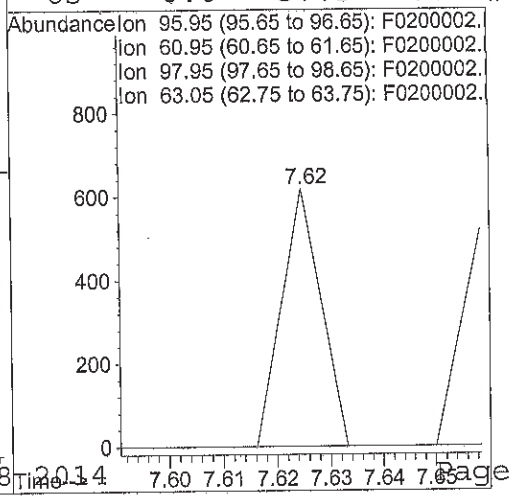


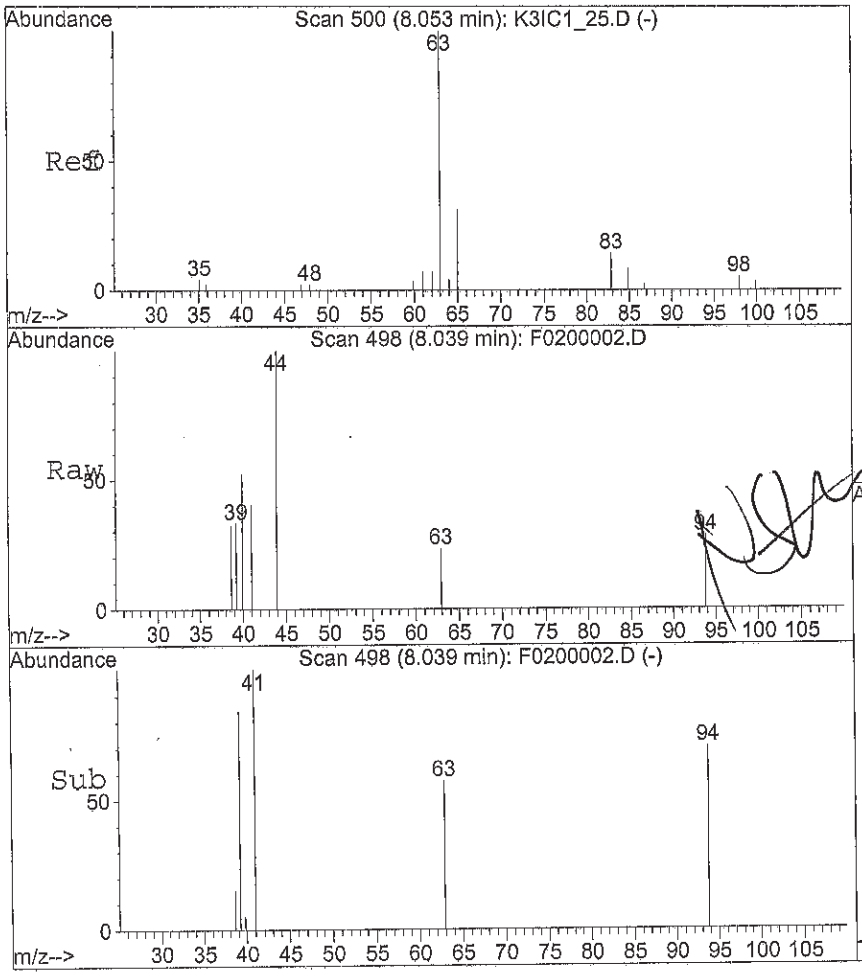


#17
trans-1,2-Dichloroethene
Concen: 0.09 ug/L
RT: 7.62 min Scan# 449
Delta R.T. 0.16 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 96 Resp: 313

Ion	Ratio	Lower	Upper
96	100		
61	0.0	104.2	156.2#
98	0.0	50.2	75.4#
63	0.0	37.5	56.3#

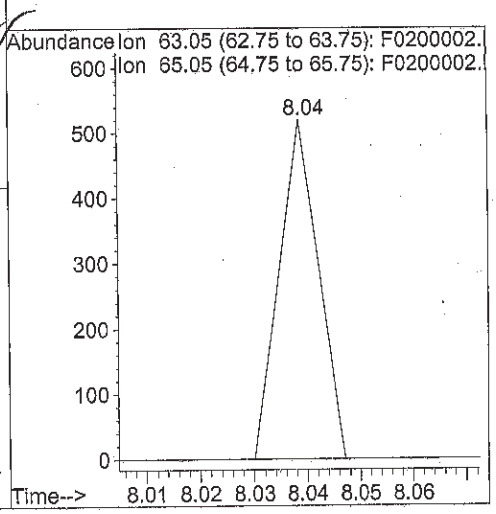


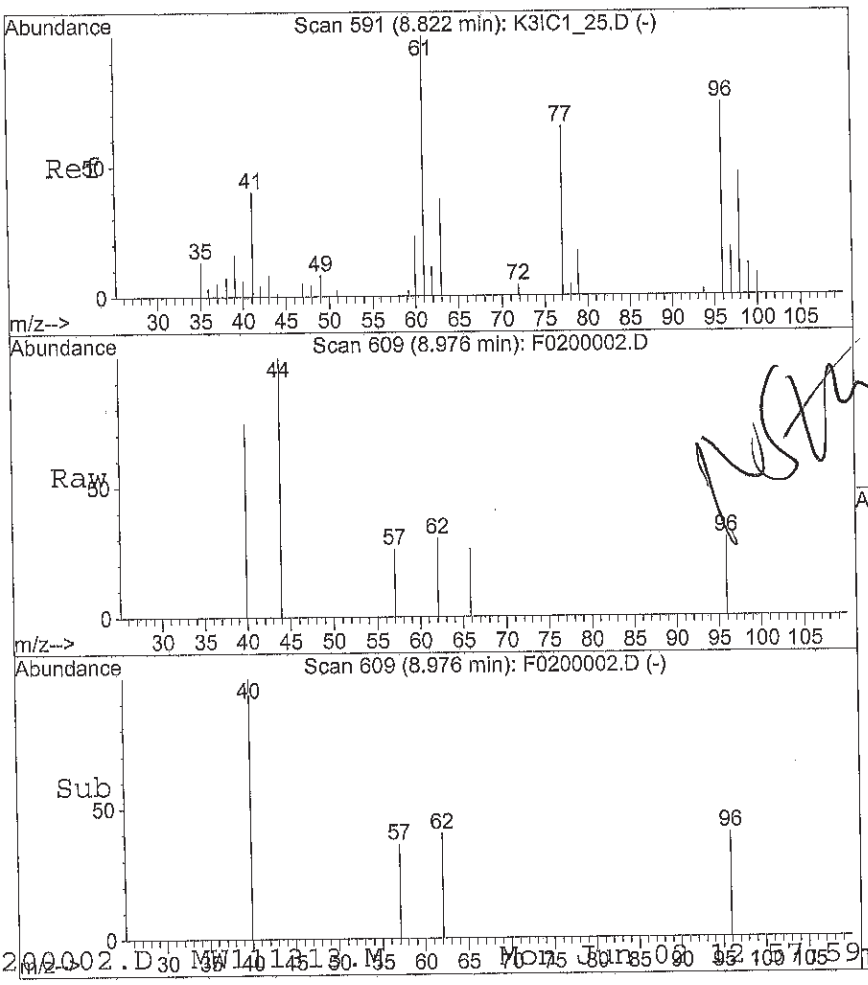


#18
1,1-Dichloroethane
Concen: 0.04 ug/L
RT: 8.04 min Scan# 498
Delta R.T. -0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 63 Resp: 264

Ion	Ratio	Lower	Upper
63	100		
65	0.0	25.8	38.8#

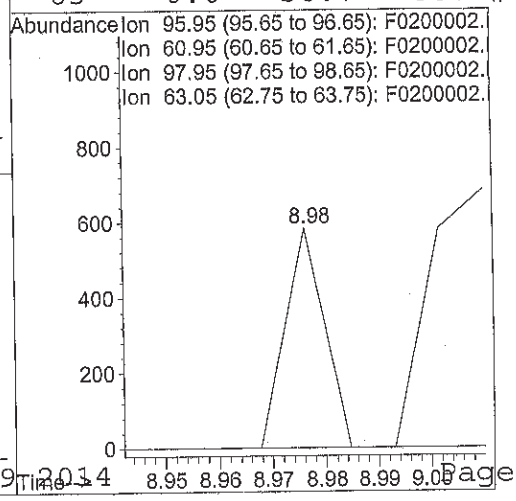


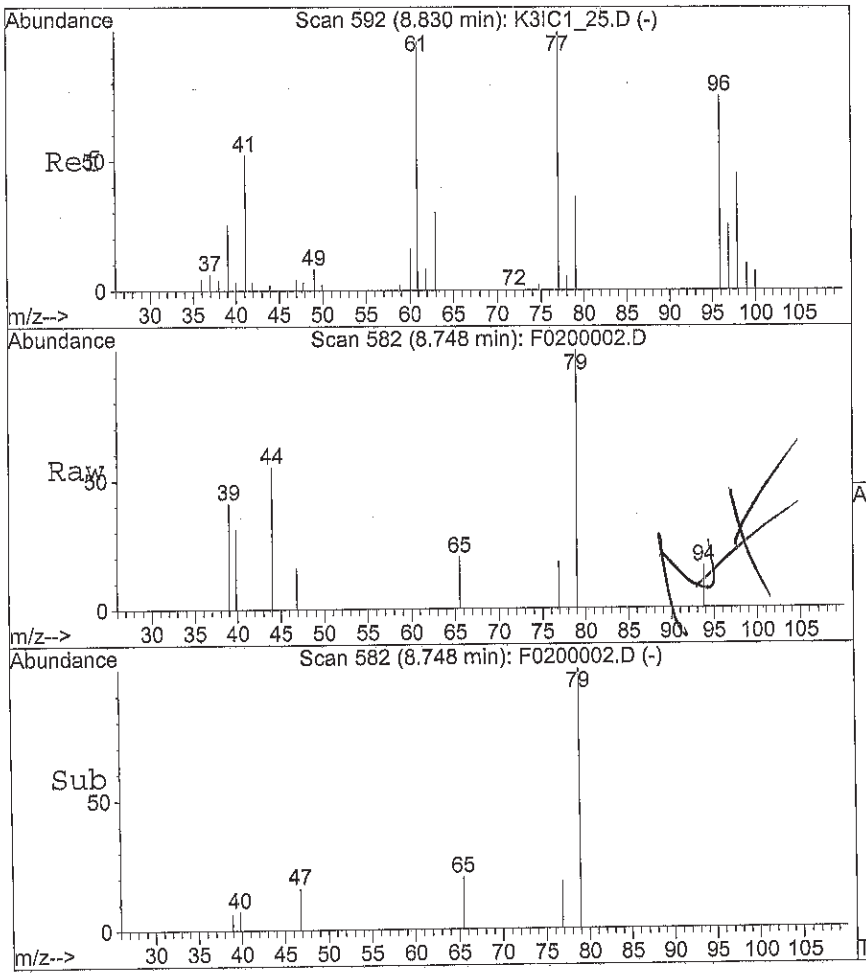


#19
cis-1,2-Dichloroethene
Concen: 0.07 ug/L
RT: 8.98 min Scan# 609
Delta R.T. 0.15 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 96 Resp: 296

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

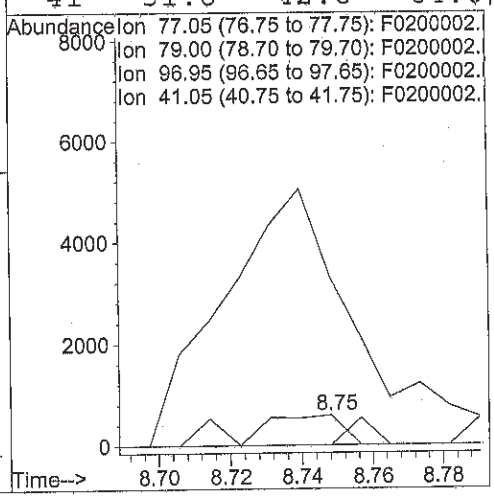


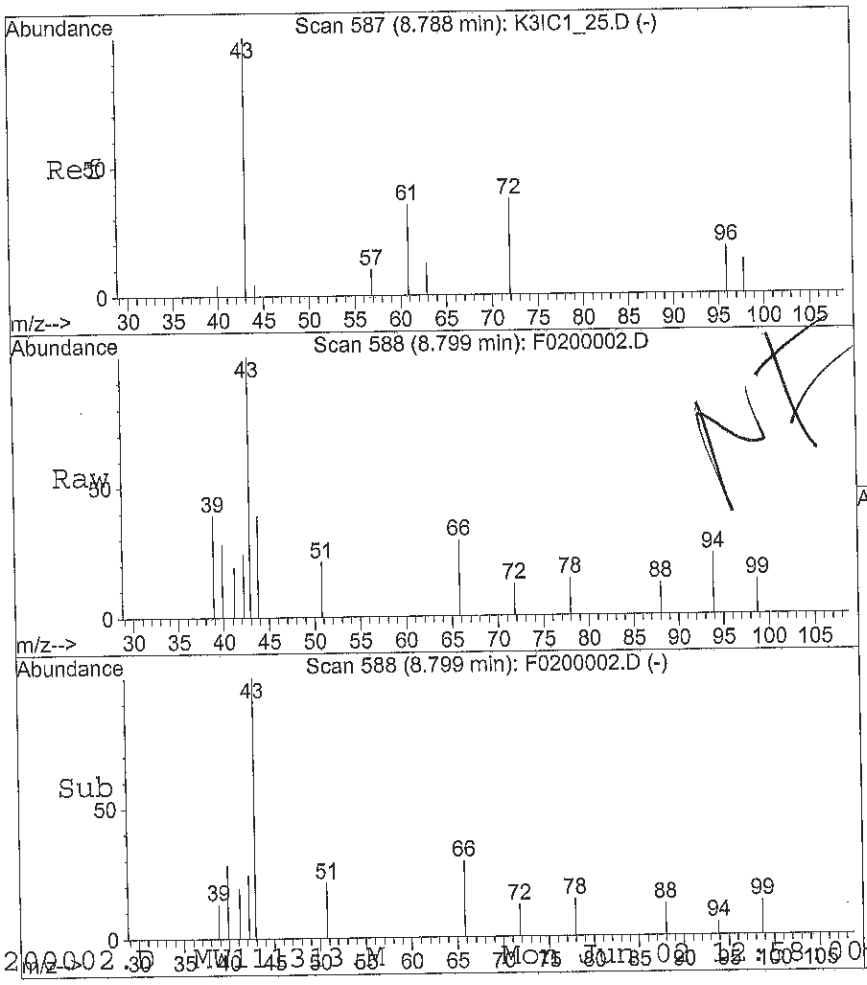


#20
2,2-Dichloropropane
Concen: 0.16 ug/L
RT: 8.75 min Scan# 582
Delta R.T. -0.08 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 77 Resp: 851

Ion	Ratio	Lower	Upper
77	100		
79	1538.0	26.6	40.0#
97	0.0	18.9	28.3#
41	31.8	42.6	64.0#

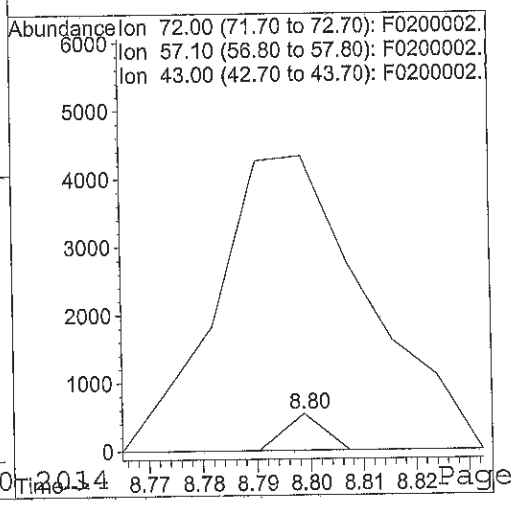


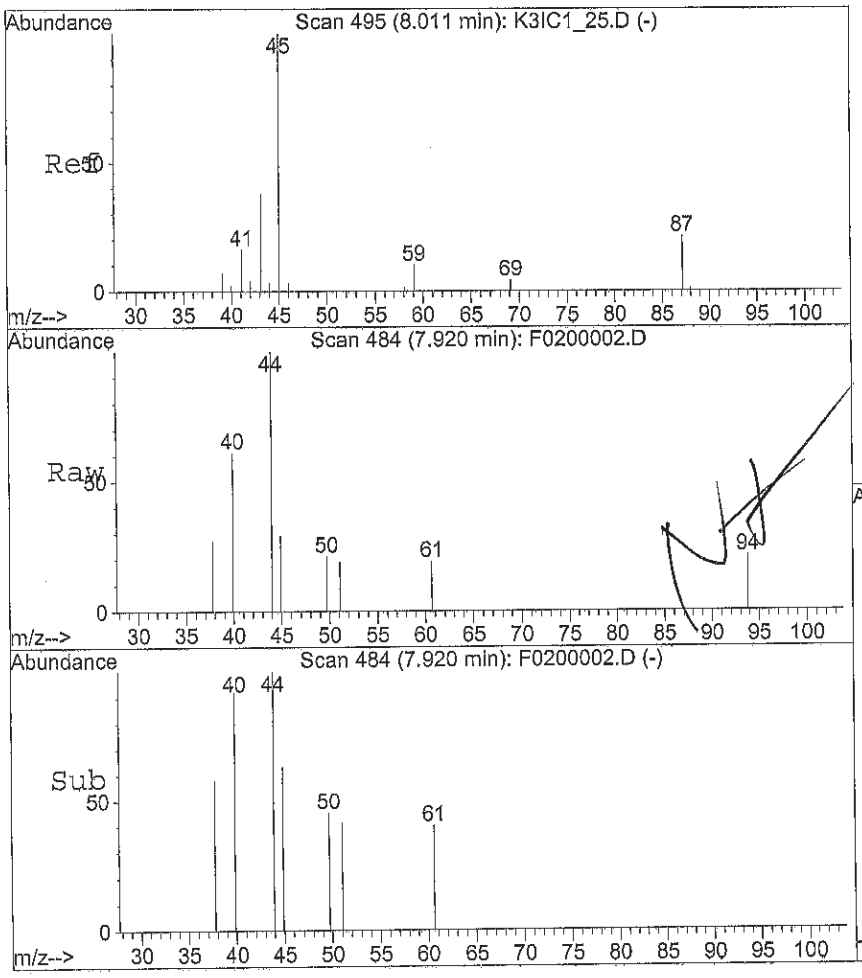


#21
(MEK) 2-Butanone
Concen: 0.71 ug/L
RT: 8.80 min Scan# 588
Delta R.T. 0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 72 Resp: 272

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	3122.4	314.2	471.2#

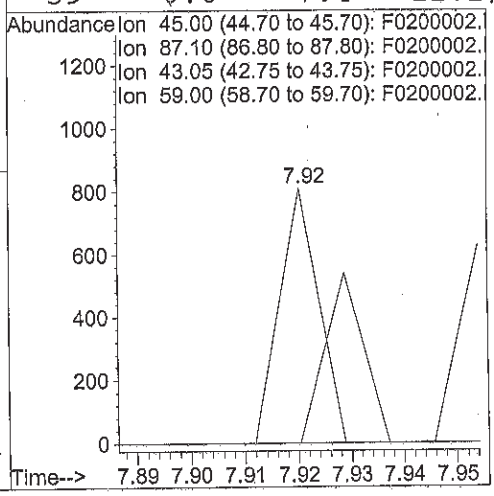


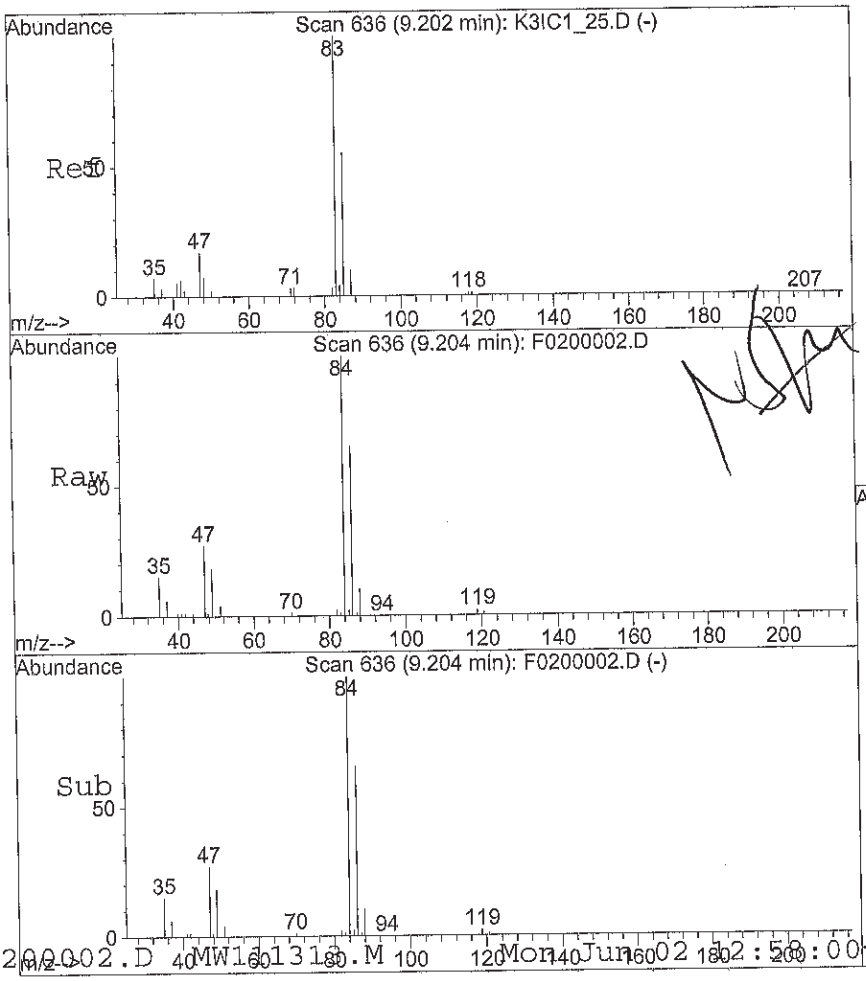


#22
(DIPE) Diisopropyl Ether
Concen: 0.04 ug/L
RT: 7.92 min Scan# 484
Delta R.T. -0.09 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 45 Resp: 410

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	66.6	30.5	45.7#
59	0.0	7.4	11.2#

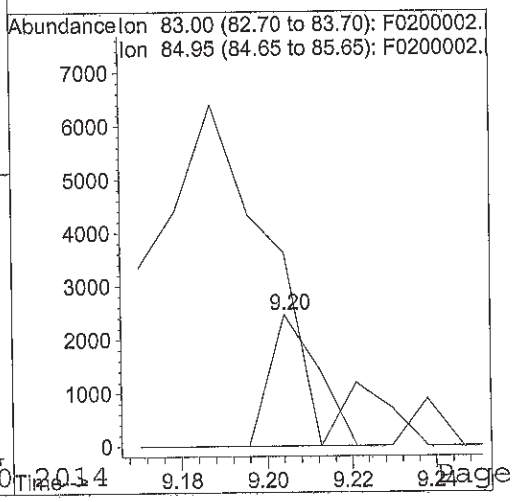


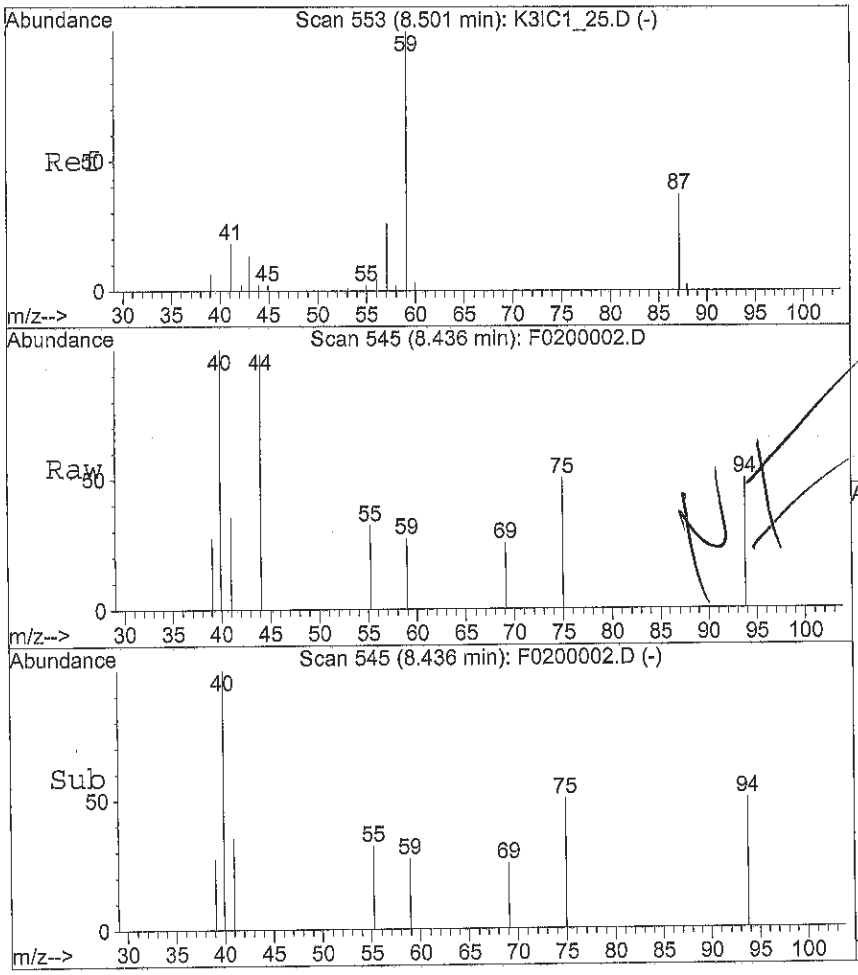


#24
Chloroform
Concen: 0.27 ug/L
RT: 9.20 min Scan# 636
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 83 Resp: 1955

Ion	Ratio	Lower	Upper
83	100		
85	621.9	51.8	77.6#

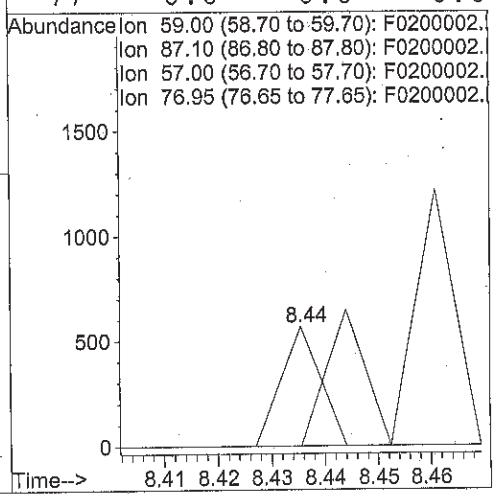


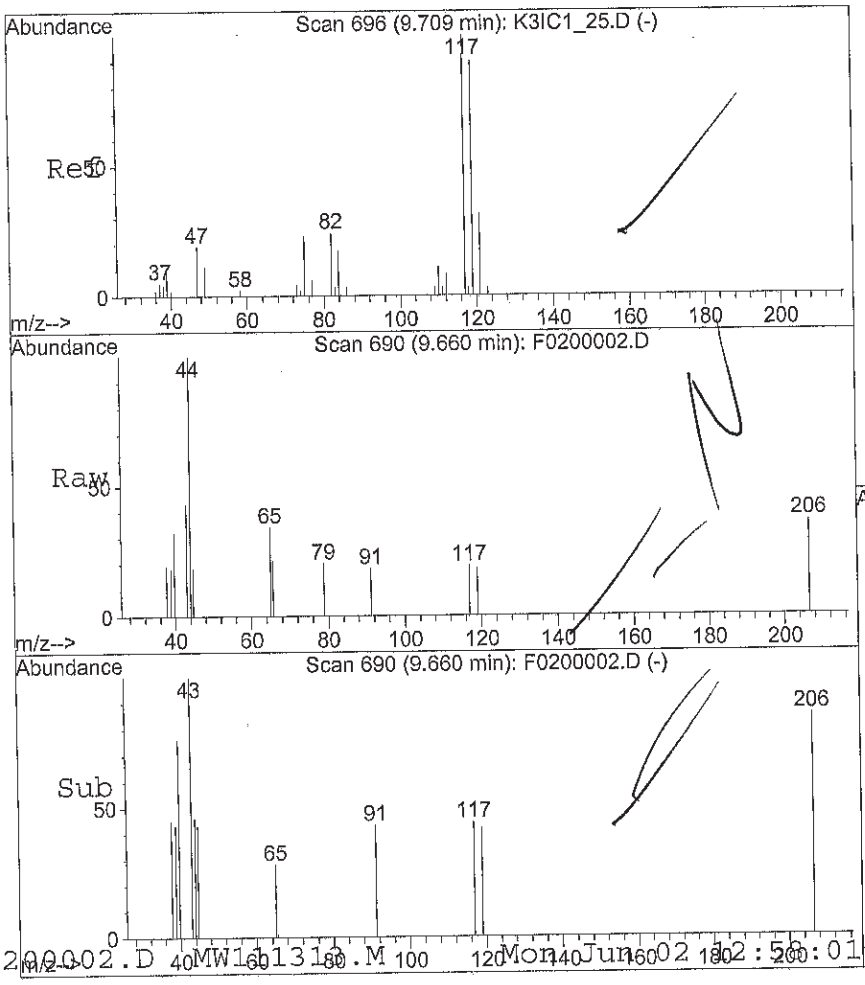


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.03 ug/L
RT: 8.44 min Scan# 545
Delta R.T. -0.07 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 59 Resp: 286

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	114.3	19.8	29.6#
77	0.0	0.0	0.0

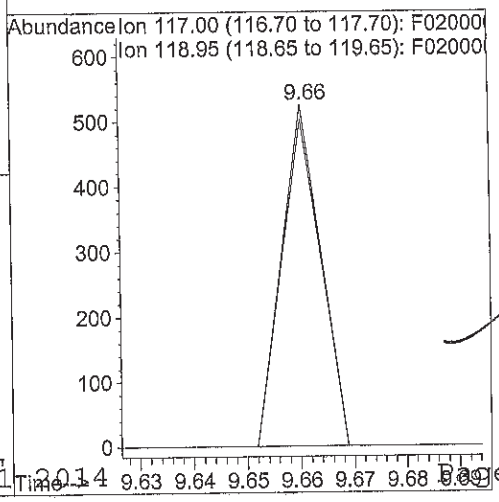


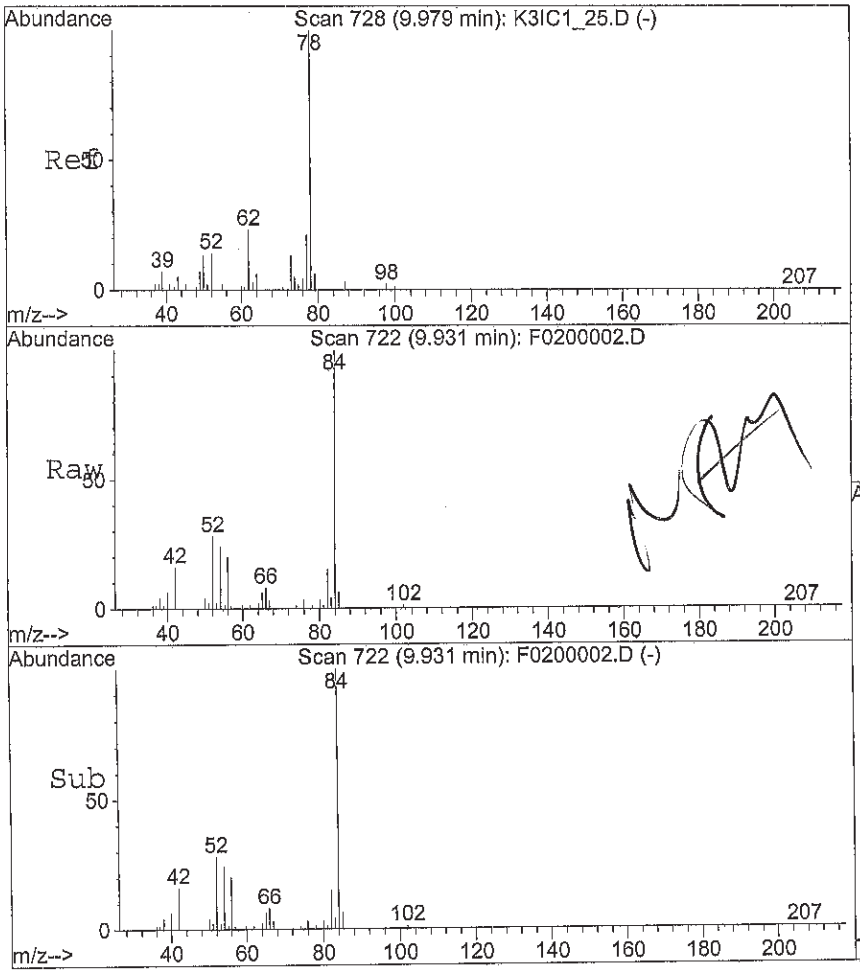


#30
Carbon Tetrachloride
Concen: 0.06 ug/L
RT: 9.66 min Scan# 690
Delta R.T. -0.05 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:117 Resp: 266

Ion	Ratio	Lower	Upper
117	100		
119	95.9	75.8	113.8

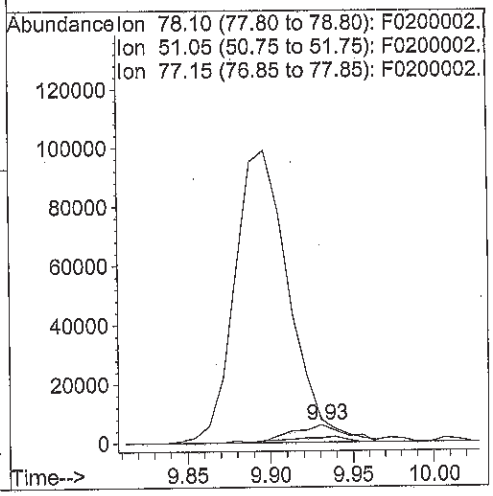


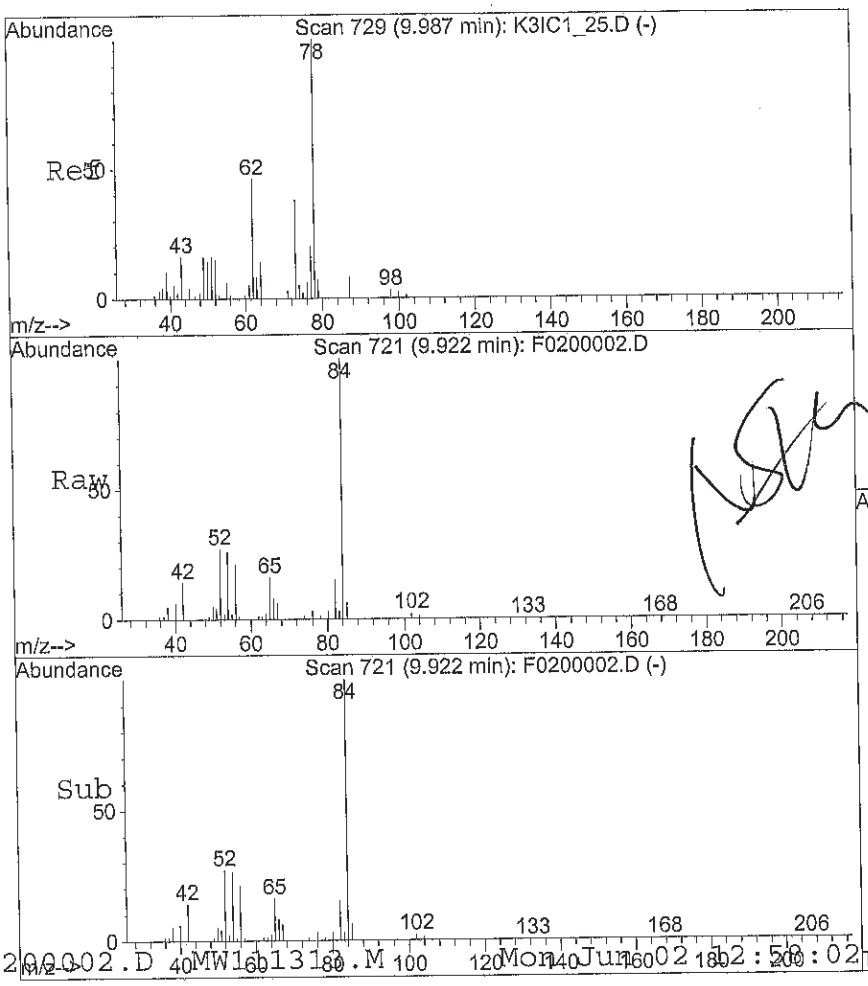


#31
Benzene
Concen: 1.02 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.05 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 78 Resp: 13109

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	30.7	16.6	24.8#

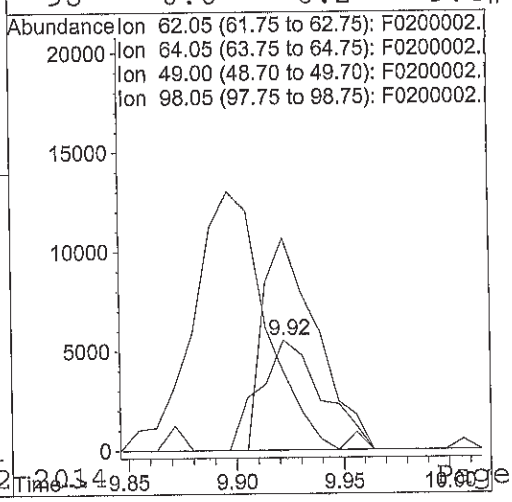


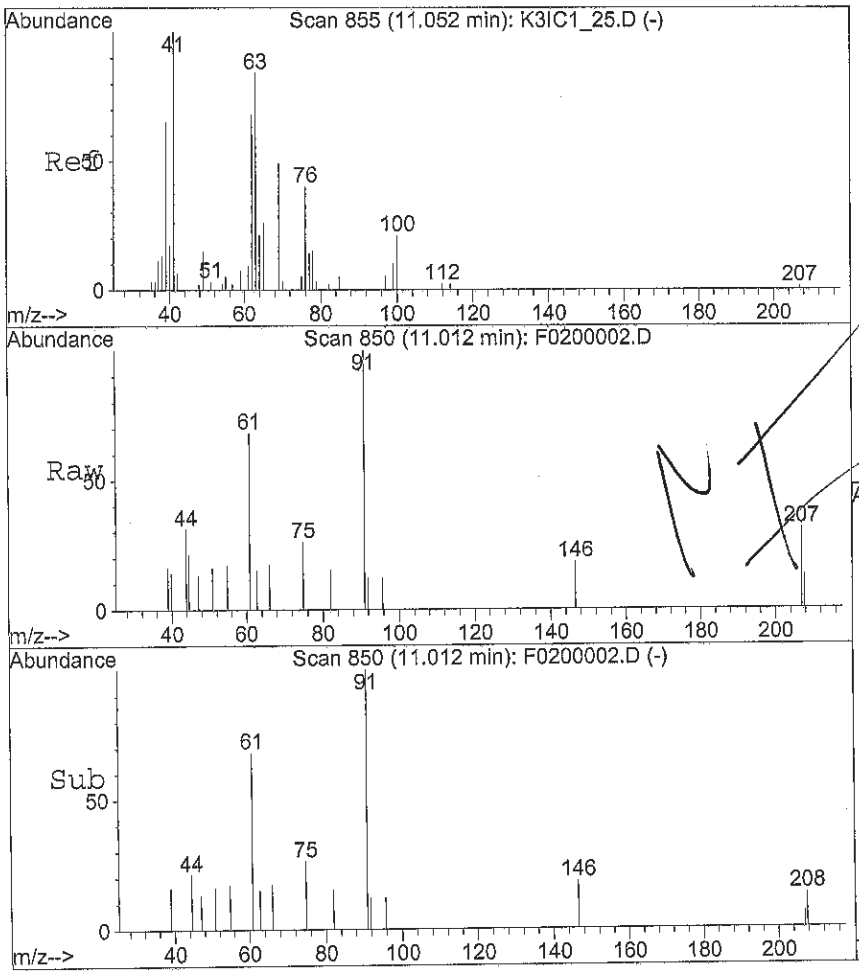


#32
1,2-Dichloroethane
Concen: 2.48 ug/L
RT: 9.92 min Scan# 721
Delta R.T. -0.07 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 62 Resp: 11263

Ion	Ratio	Lower	Upper
62	100		
64	166.7	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

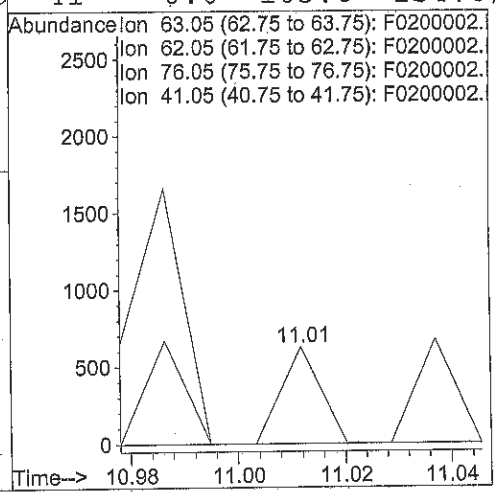


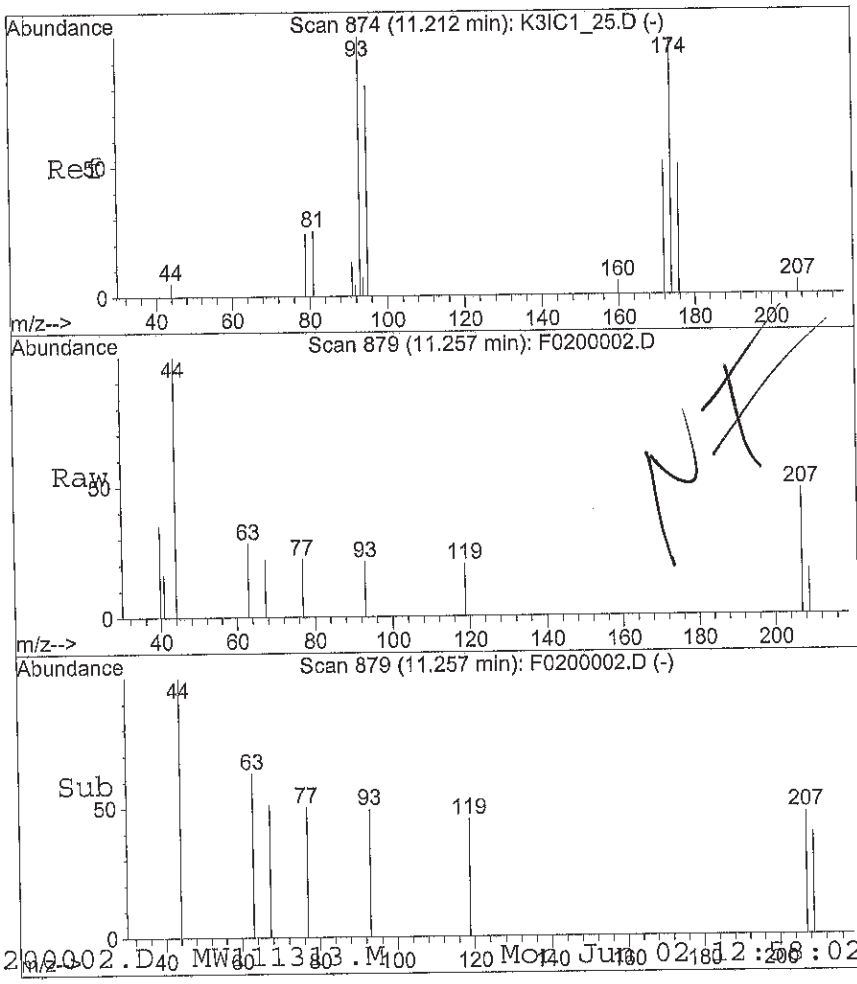


#34
1,2-Dichloropropane
Concen: 0.10 ug/L
RT: 11.01 min Scan# 850
Delta R.T. -0.04 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 63 Resp: 316

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

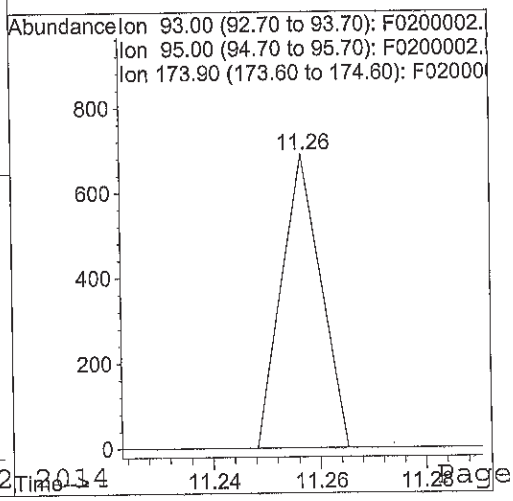


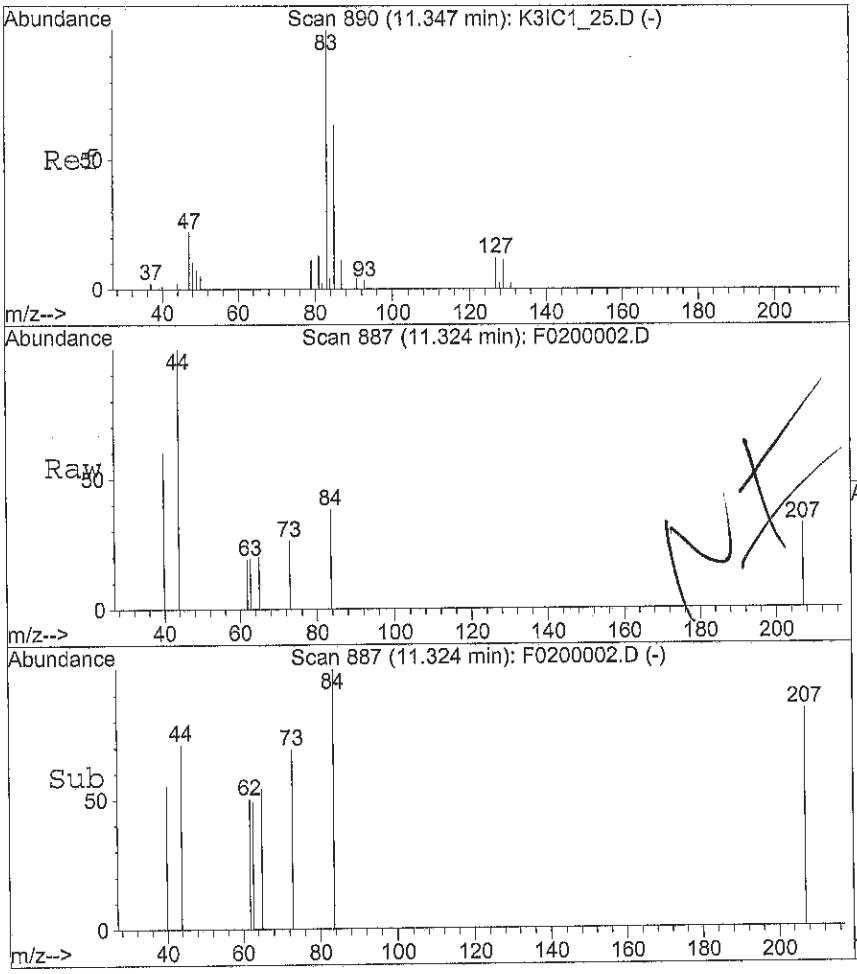


#35
Dibromomethane
Concen: 0.15 ug/L
RT: 11.26 min Scan# 879
Delta R.T. 0.04 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 93 Resp: 349

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

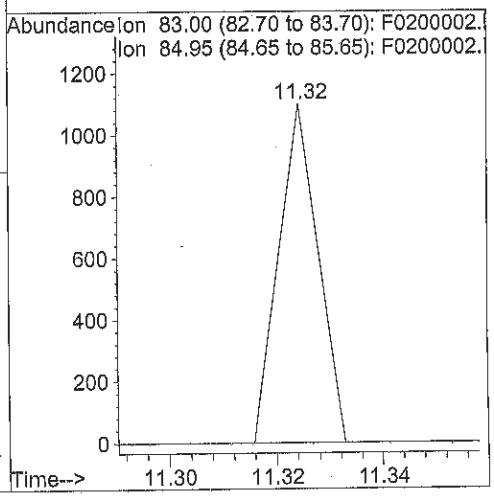


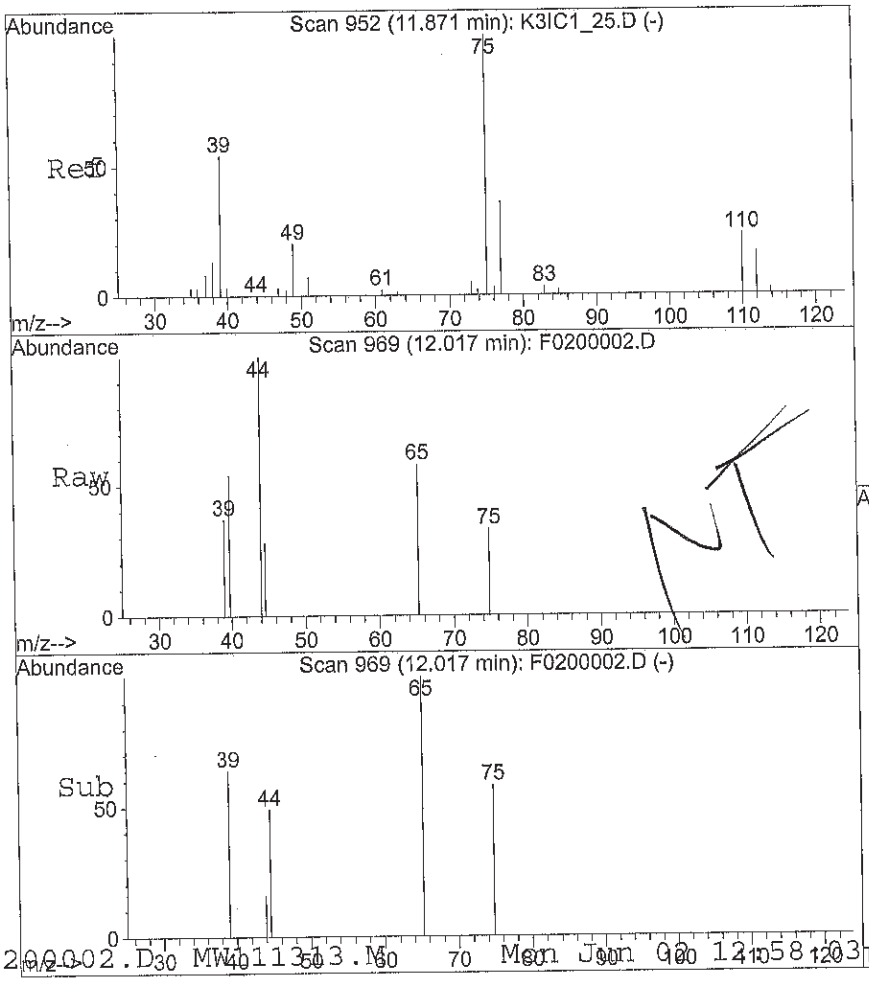


#36
Bromodichloromethane
Concen: 0.12 ug/L
RT: 11.32 min Scan# 887
Delta R.T. -0.02 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 83 Resp: 558

Ion	Ratio	Lower	Upper
83	100		
85	0.0	48.2	72.2#

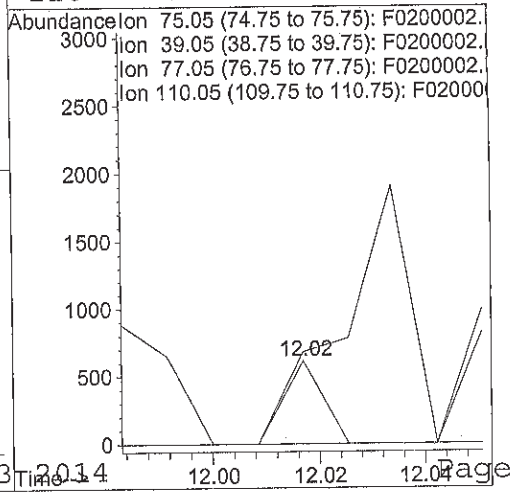


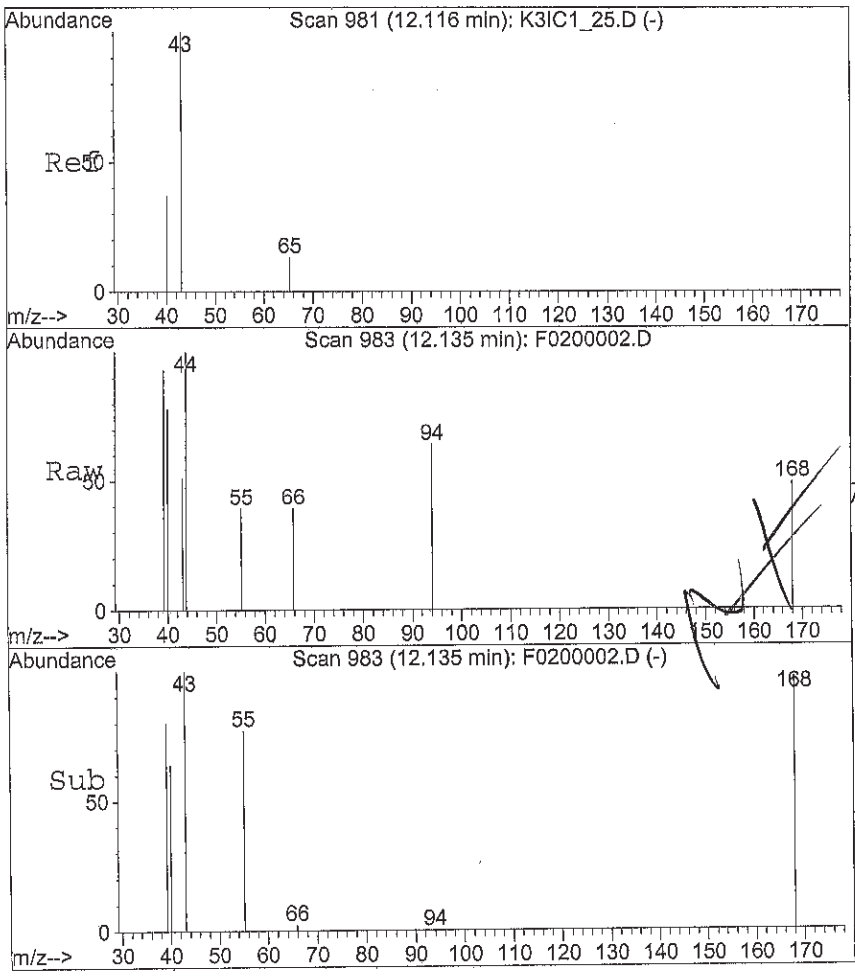


#37
cis-1,3-Dichloropropene
Concen: 0.06 ug/L
RT: 12.02 min Scan# 969
Delta R.T. 0.15 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 75 Resp: 309

Ion	Ratio	Lower	Upper
75	100		
39	0.0	40.7	61.1#
77	0.0	28.8	43.2#
110	0.0	18.1	27.1#

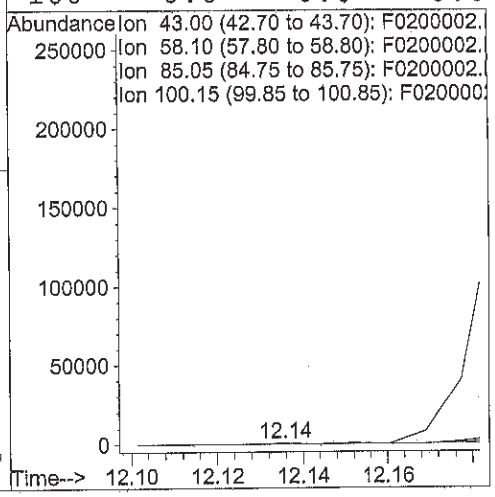


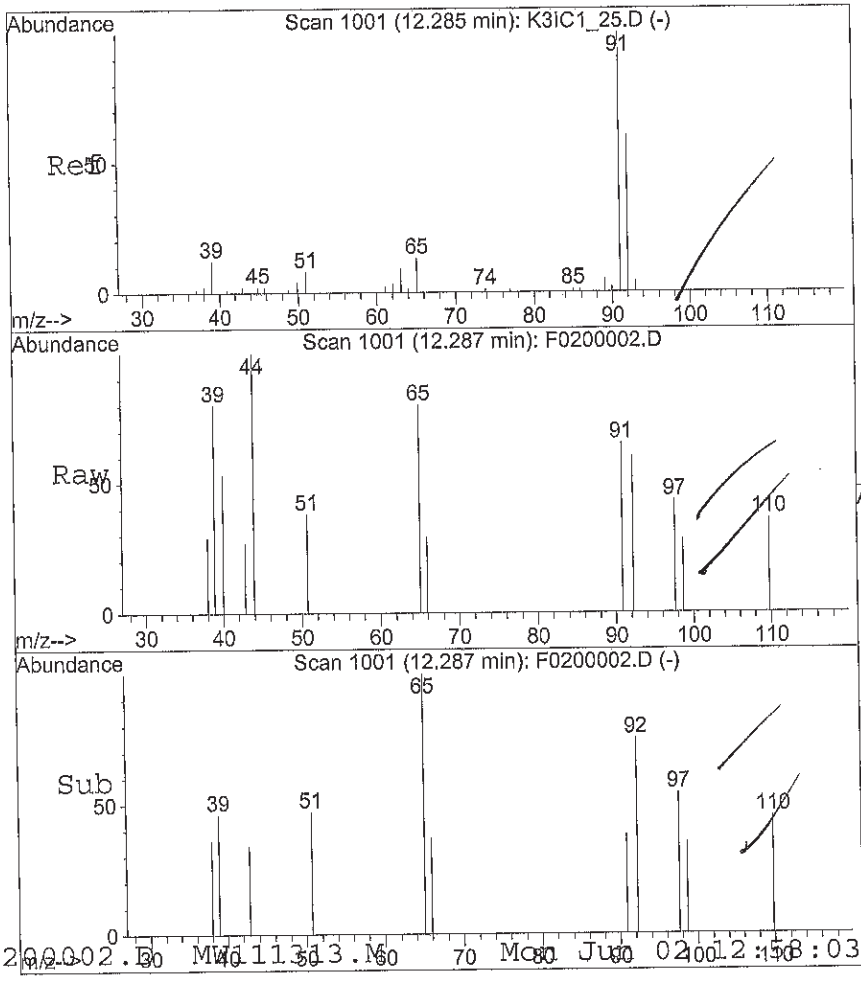


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.24 ug/L
RT: 12.14 min Scan# 983
Delta R.T. 0.02 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 43 Resp: 608

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

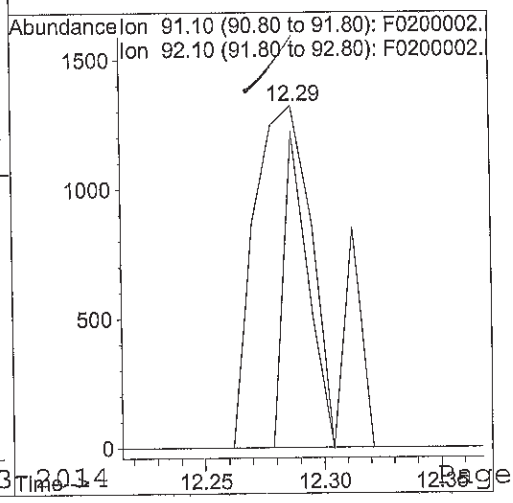


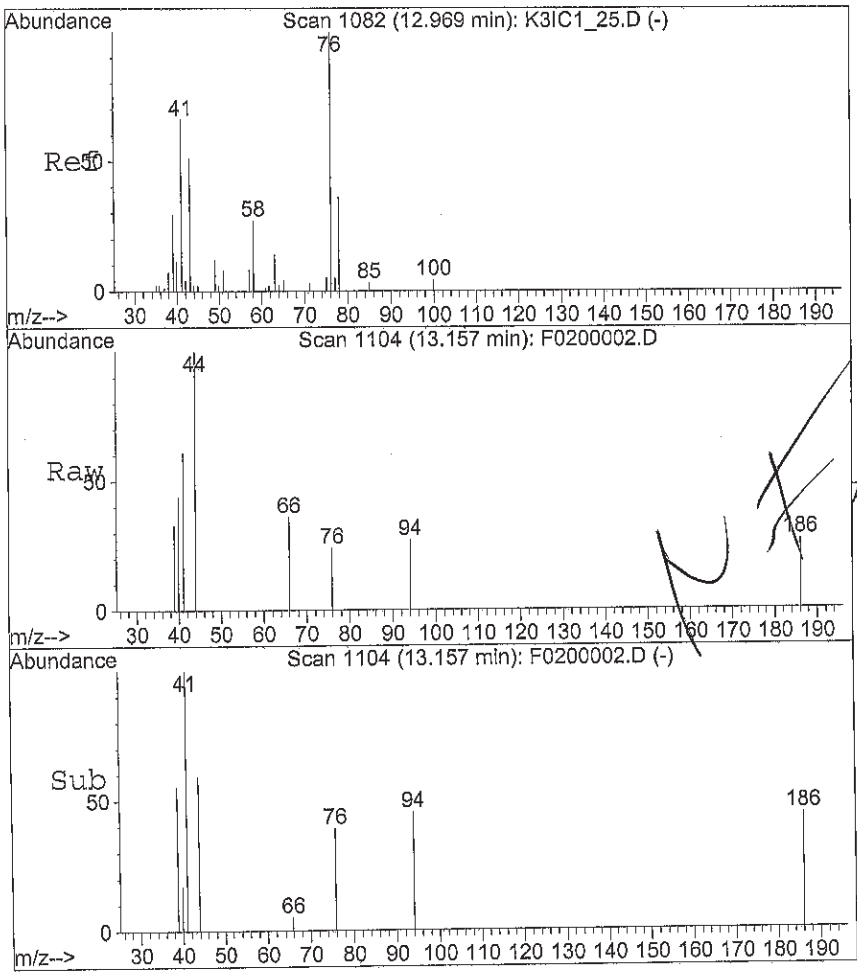


#41
Toluene
Concen: 0.15 ug/L
RT: 12.29 min Scan# 1001
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 91 Resp: 2610

Ion	Ratio	Lower	Upper
91	100		
92	33.5	47.4	71.0#

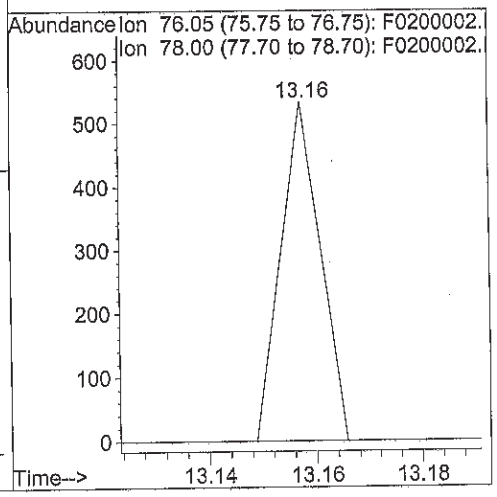


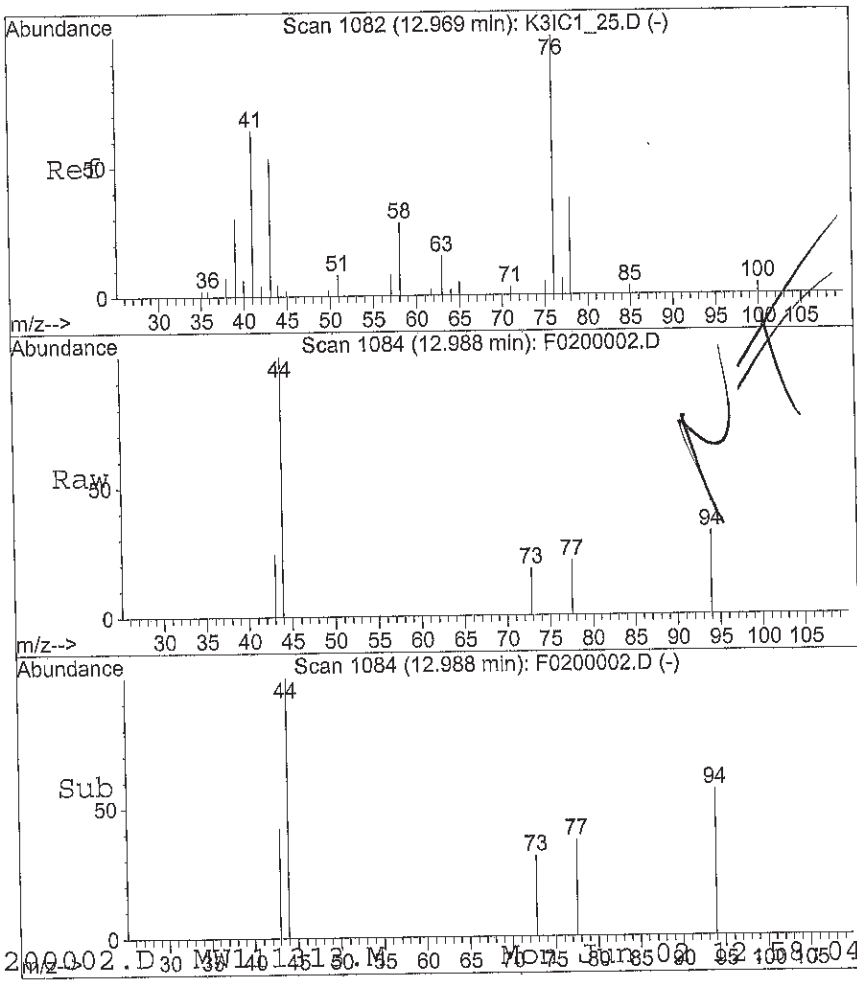


#45
1,3-Dichloropropane
Concen: 0.05 ug/L
RT: 13.16 min Scan# 1104
Delta R.T. 0.19 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 76 Resp: 270

Ion	Ratio	Lower	Upper
76	100		
78	0.0	26.9	40.3#

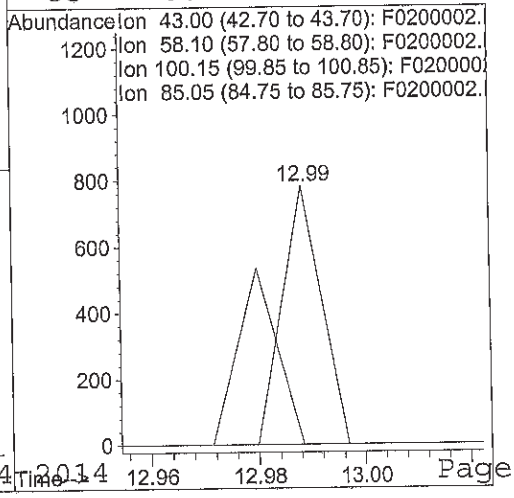


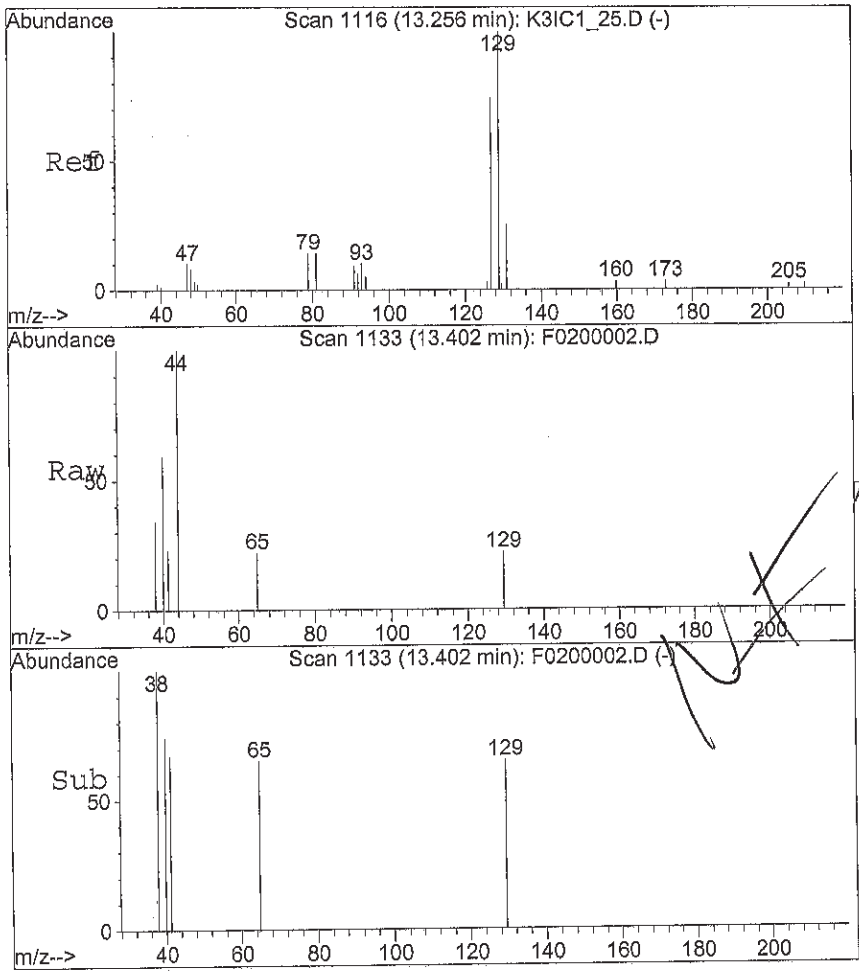


#46
2-Hexanone
Concen: 0.14 ug/L
RT: 12.99 min Scan# 1084
Delta R.T. 0.02 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 43 Resp: 396

Ion	Ratio	Lower	Upper
43	100		
58	68.4	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

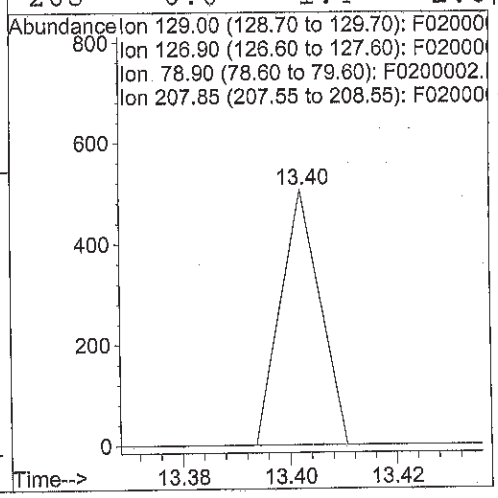


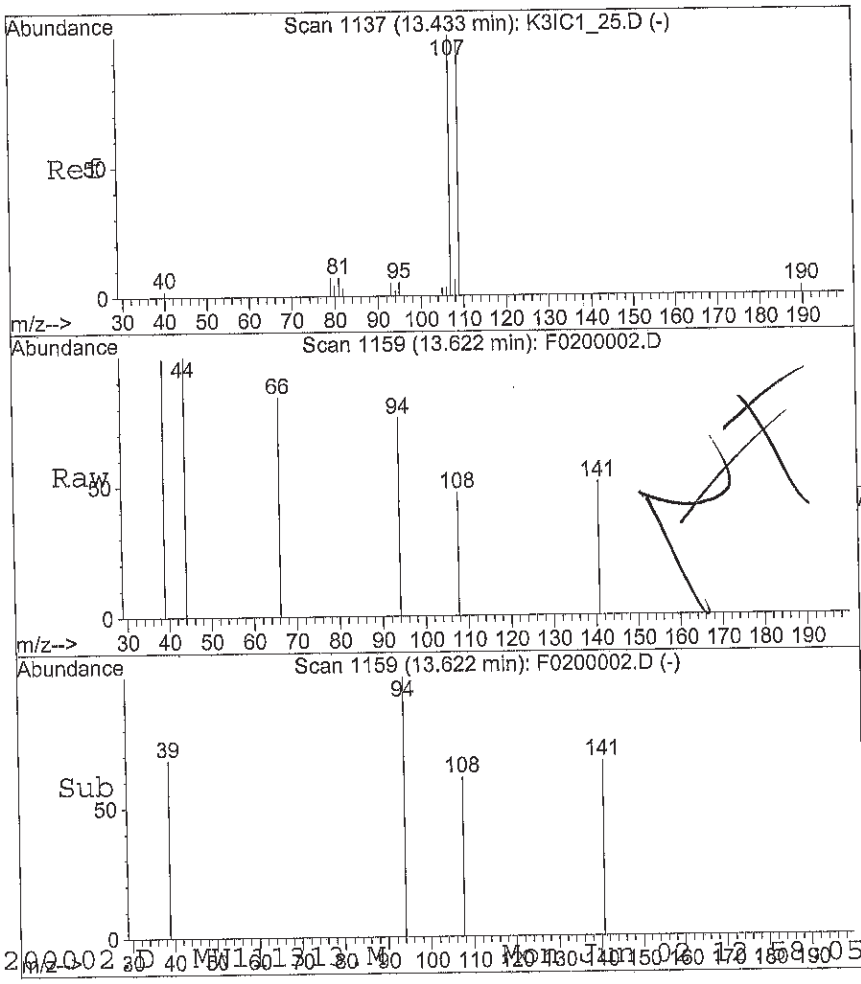


#47
Dibromochloromethane
Concen: 0.06 ug/L
RT: 13.40 min Scan# 1133
Delta R.T. 0.15 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:129 Resp: 256

Ion	Ratio	Lower	Upper
129	100		
127	0.0	61.6	92.4#
79	0.0	10.7	16.1#
208	0.0	1.4	2.0#

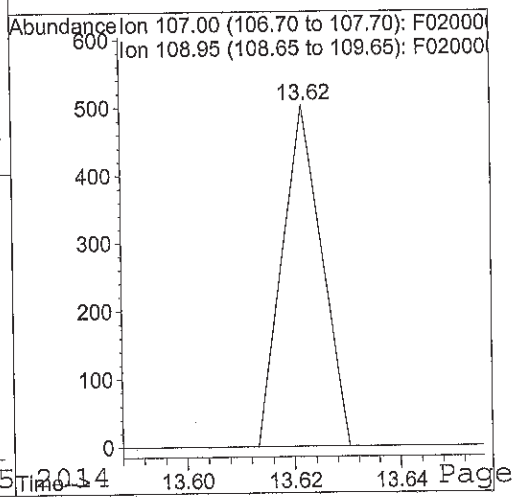


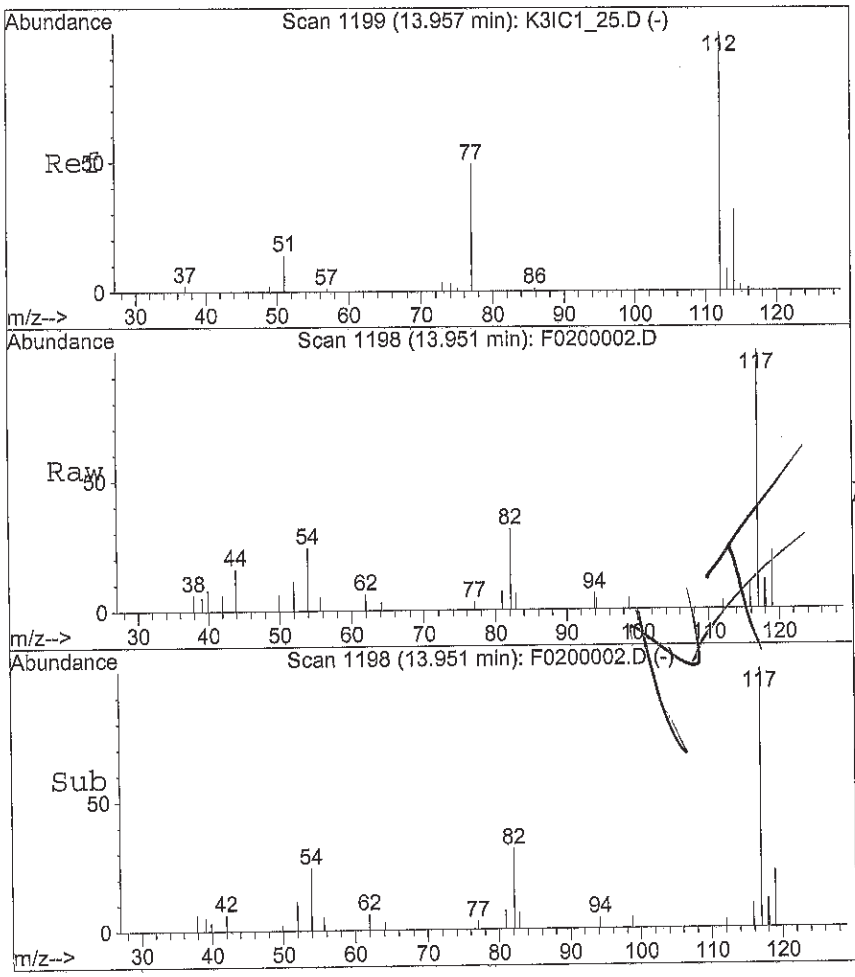


#48
1,2-Dibromoethane
Concen: 0.06 ug/L
RT: 13.62 min Scan# 1159
Delta R.T. 0.19 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:107 Resp: 255

Ion	Ratio	Lower	Upper
107	100		
109	0.0	74.4	111.6#

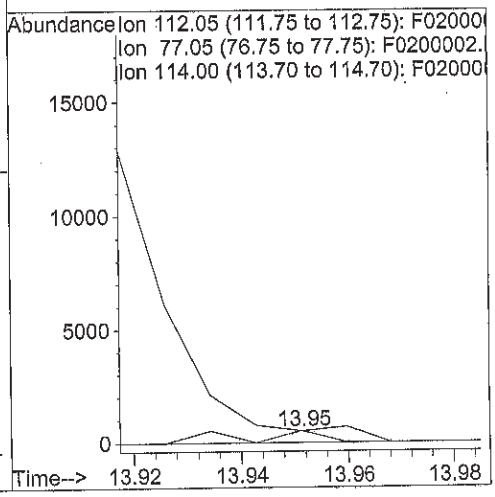


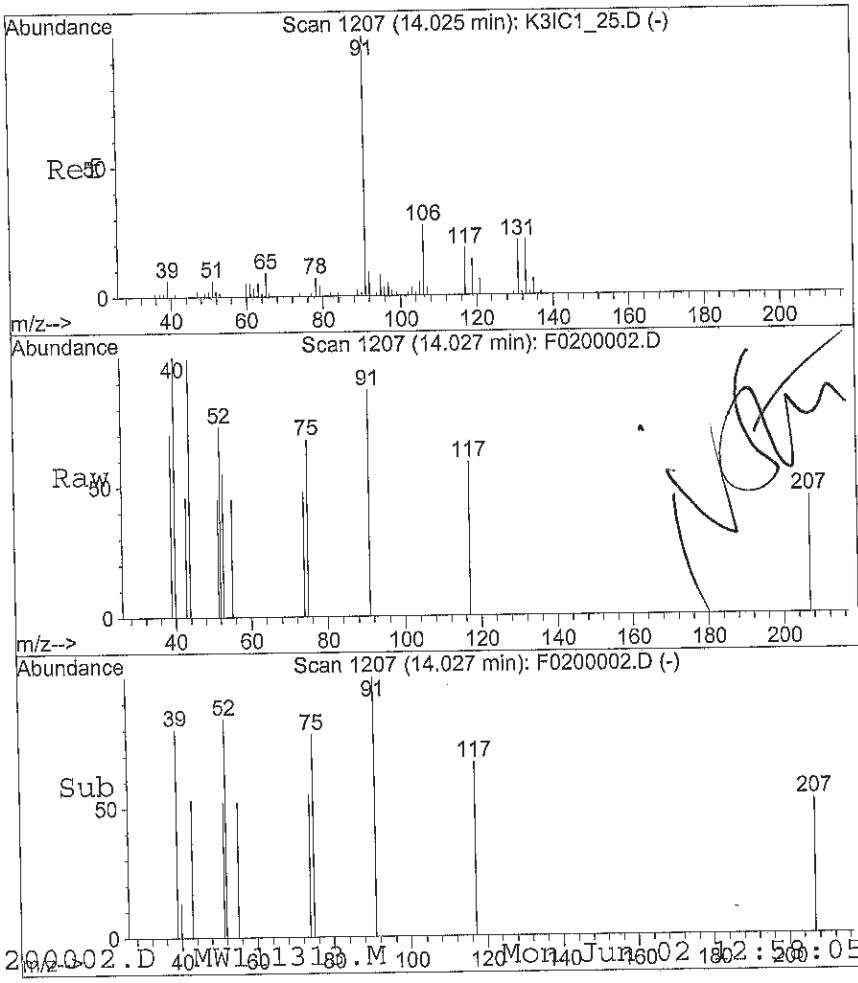


#49
Chlorobenzene
Concen: 0.02 ug/L
RT: 13.95 min Scan# 1198
Delta R.T. -0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:112 Resp: 257

Ion	Ratio	Lower	Upper
112	100		
77	0.0	48.2	72.4#
114	0.0	24.4	36.6#

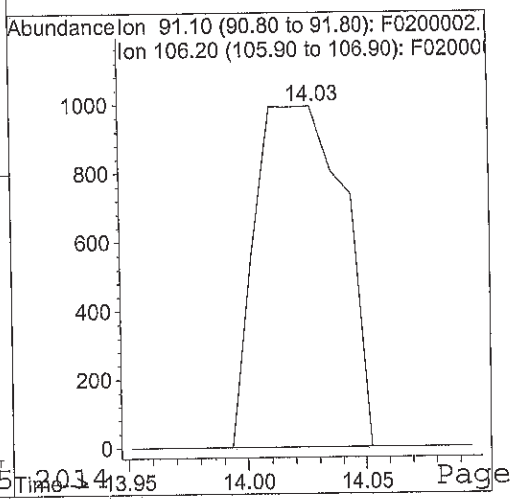


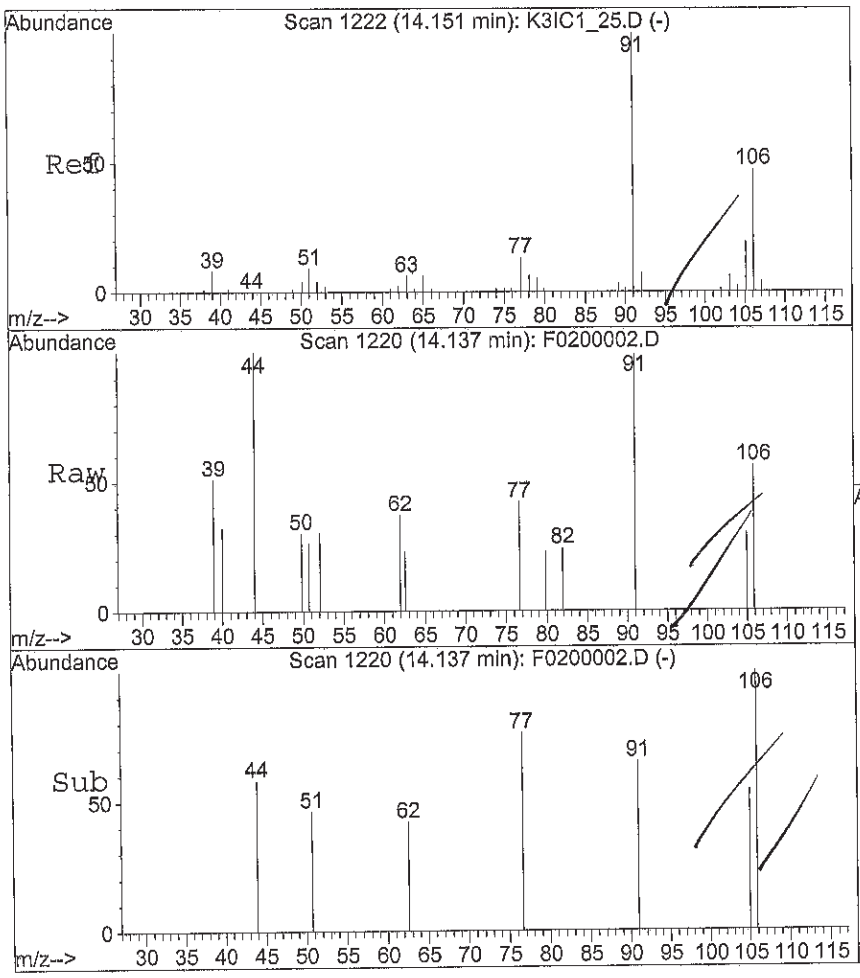


#51
Ethylbenzene
Concen: 0.13 ug/L
RT: 14.03 min Scan# 1207
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 91 Resp: 2572

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

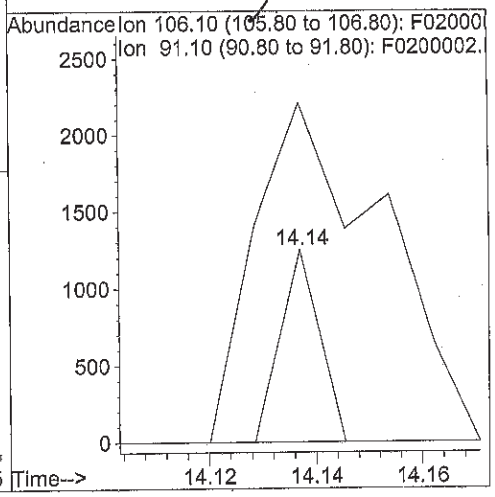


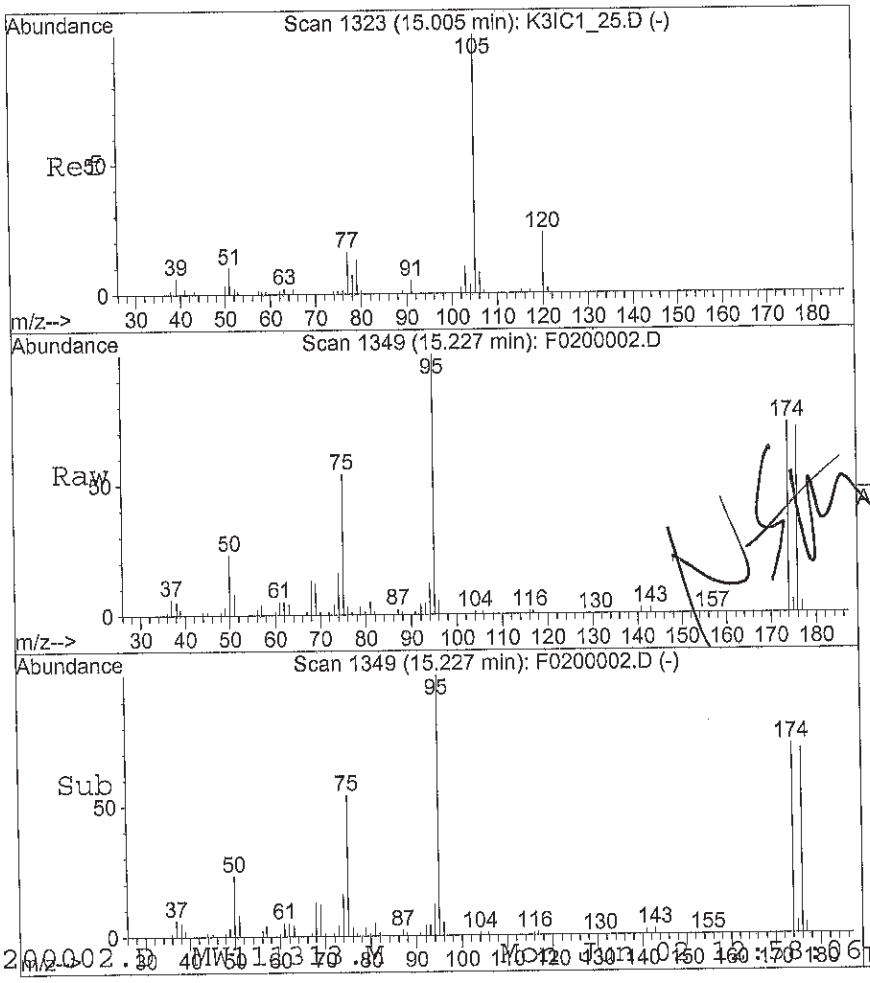


#52
m,p-Xylenes
Concen: 0.09 ug/L
RT: 14.14 min Scan# 1220
Delta R.T. -0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:106 Resp: 632

Ion	Ratio	Lower	Upper
106	100		
91	581.3	177.1	265.7#

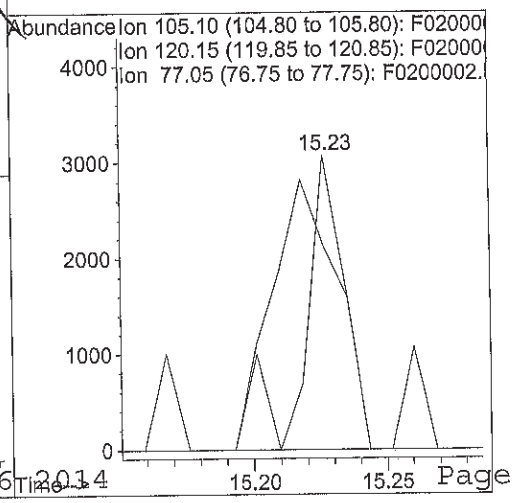


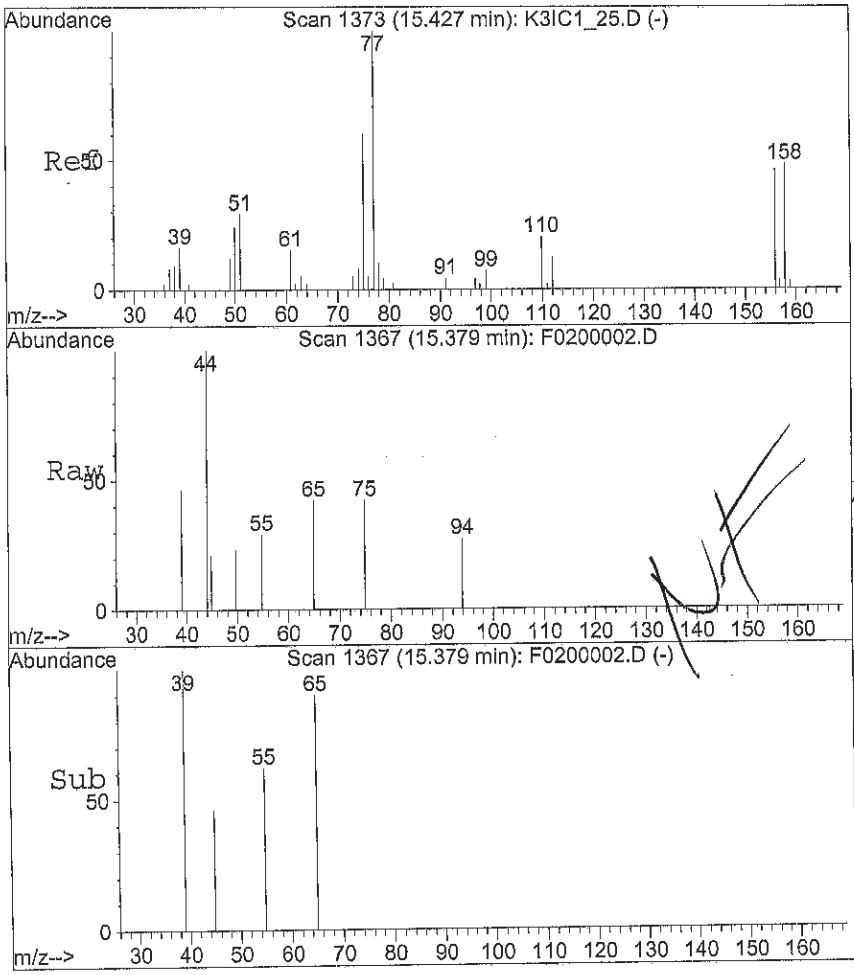


#56
Isopropylbenzene
Concen: 0.17 ug/L
RT: 15.23 min Scan# 1349
Delta R.T. 0.22 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:105 Resp: 3222

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	149.5	13.1	19.7#

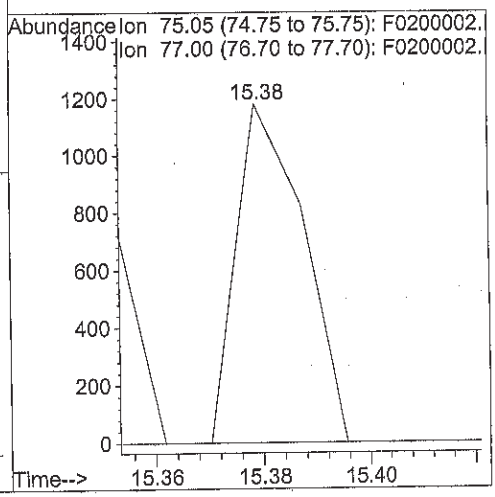


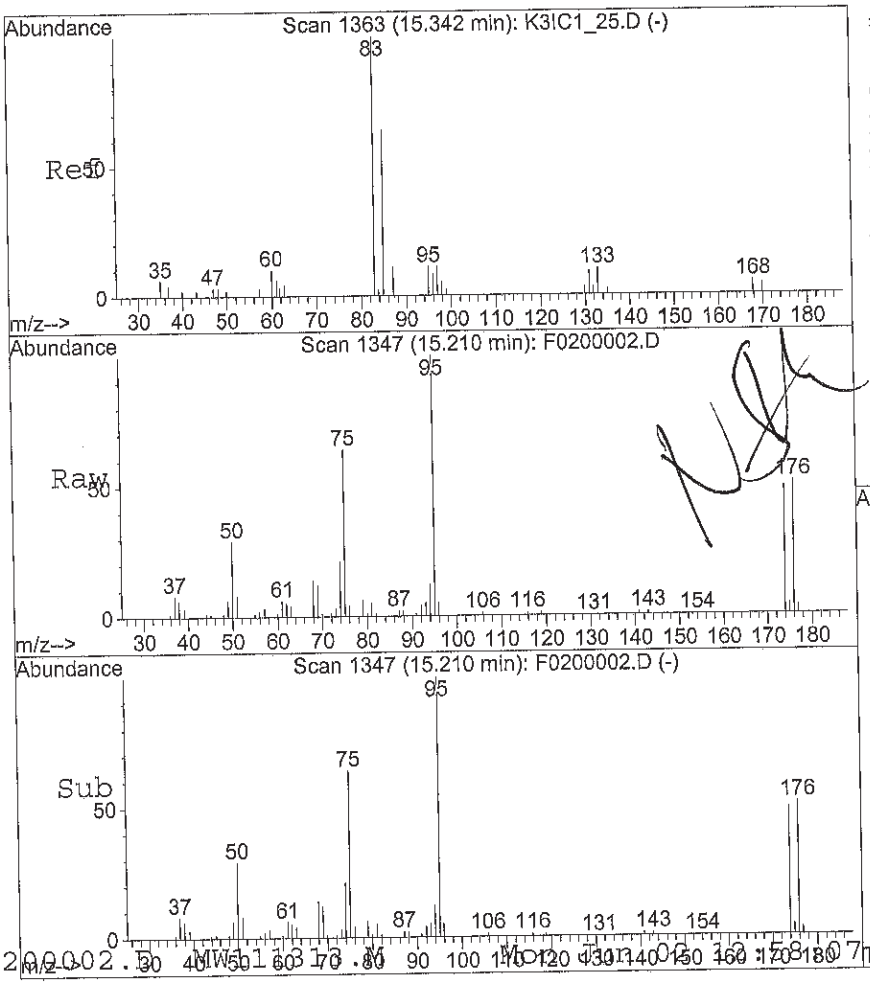


#57
1,2,3-Trichloropropane
Concen: 0.20 ug/L
RT: 15.38 min Scan# 1367
Delta R.T. -0.05 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 75 Resp: 1018

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

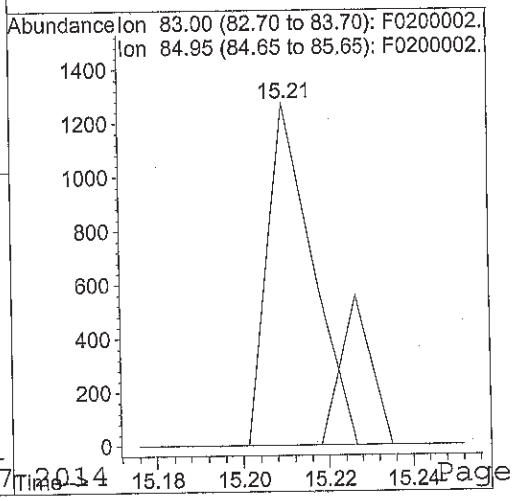


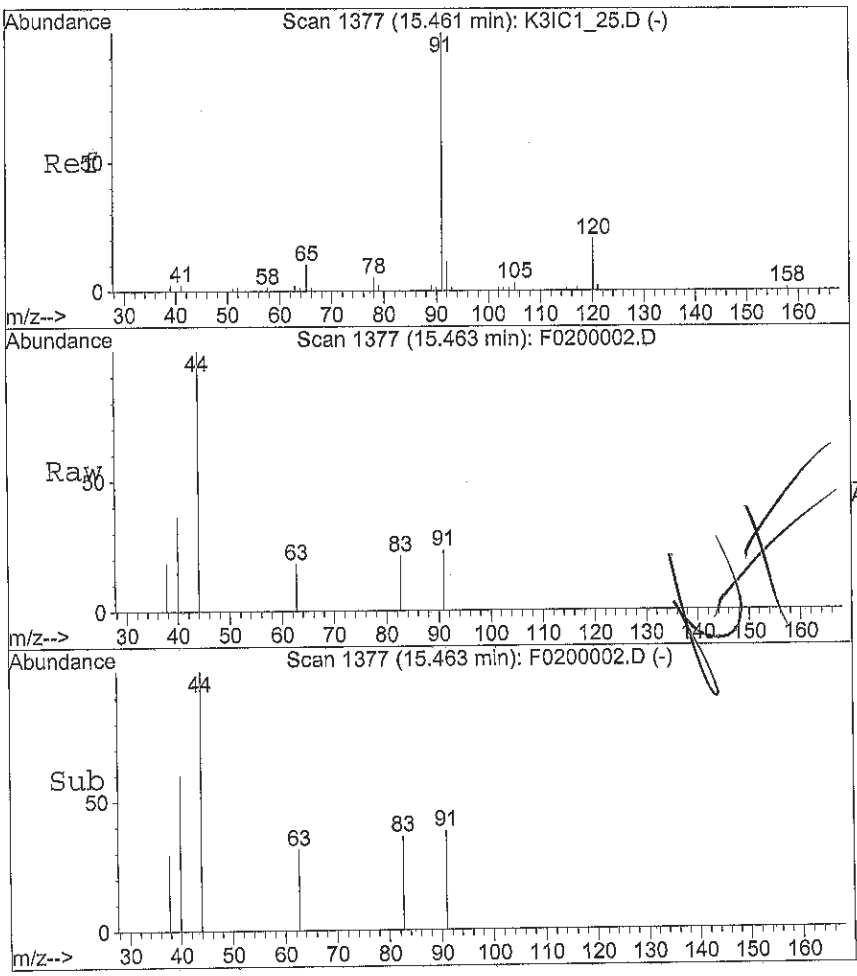


#60
1,1,2,2-Tetrachloroethane
Concen: 0.21 ug/L
RT: 15.21 min Scan# 1347
Delta R.T. -0.13 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 83 Resp: 929

Ion	Ratio	Lower	Upper
83	100		
85	30.4	51.2	76.8#

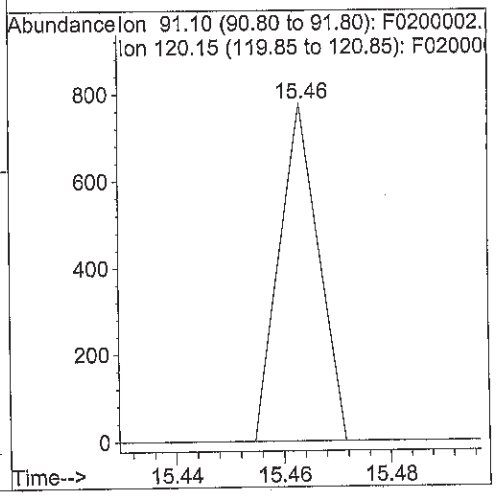


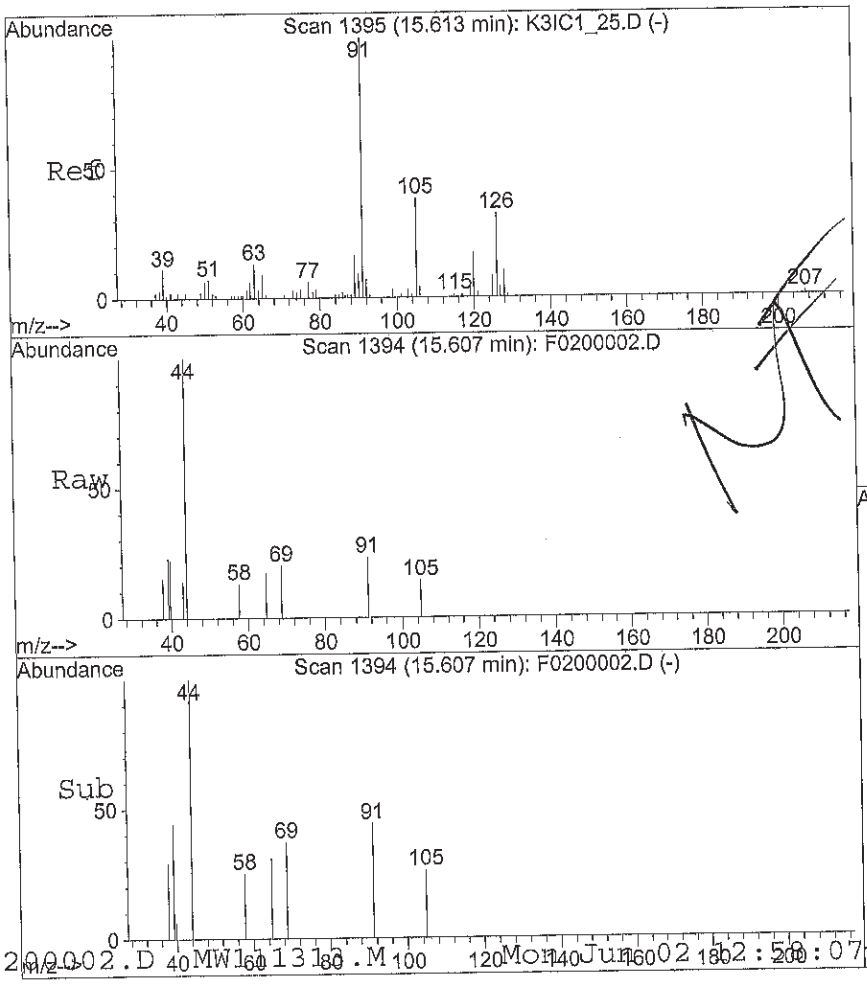


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 91 Resp: 394

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

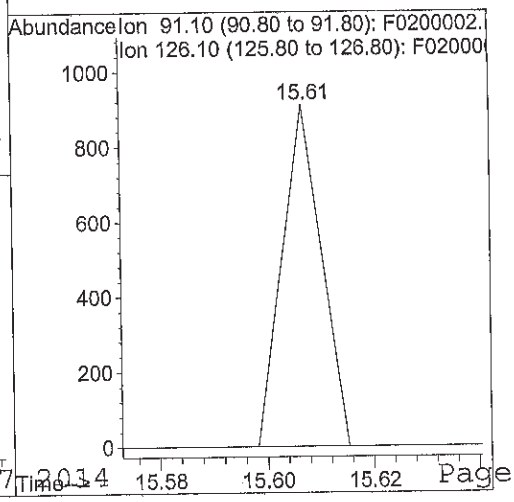


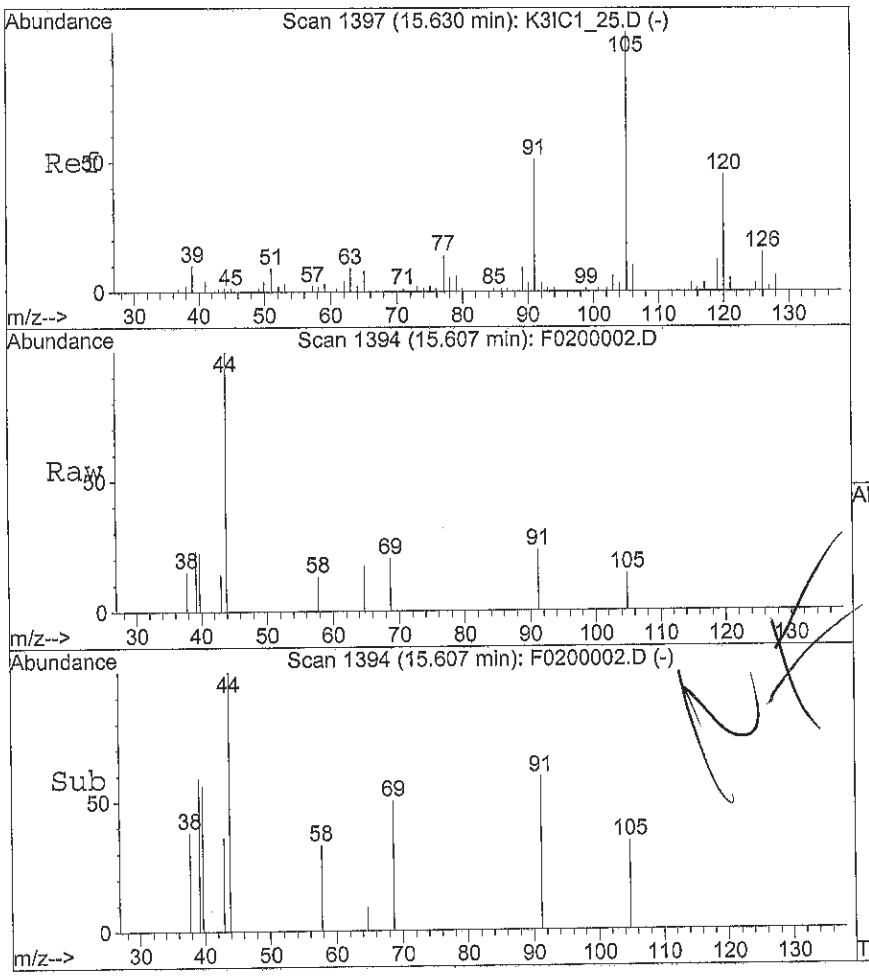


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.61 min Scan# 1394
Delta R.T. -0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 91 Resp: 462

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

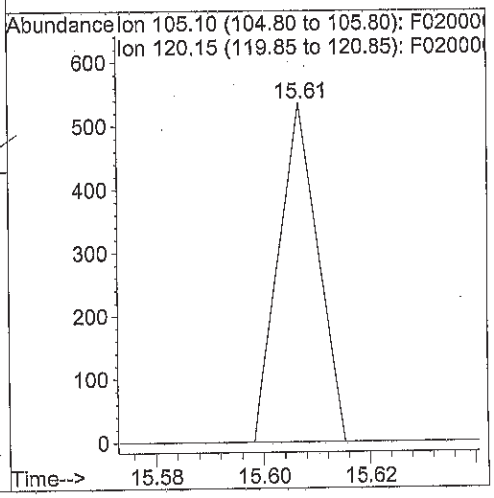


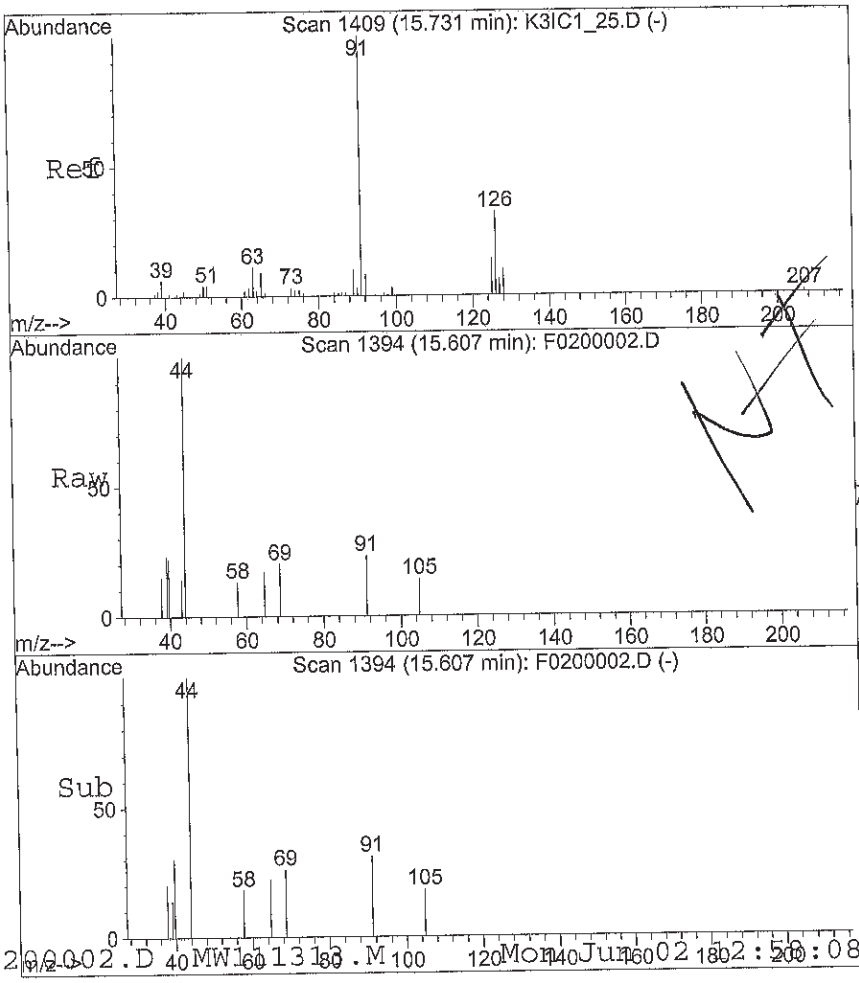


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.61 min Scan# 1394
Delta R.T. -0.02 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:105 Resp: 271

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

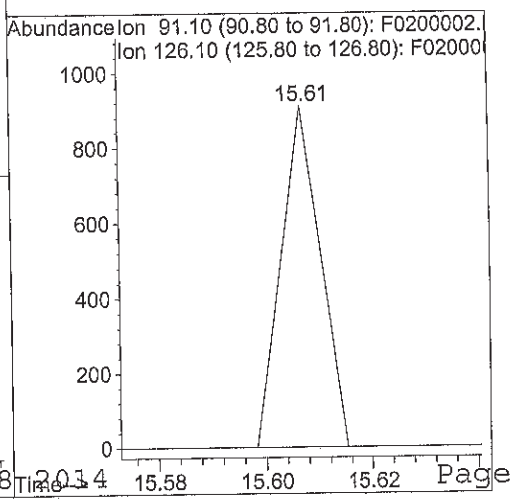


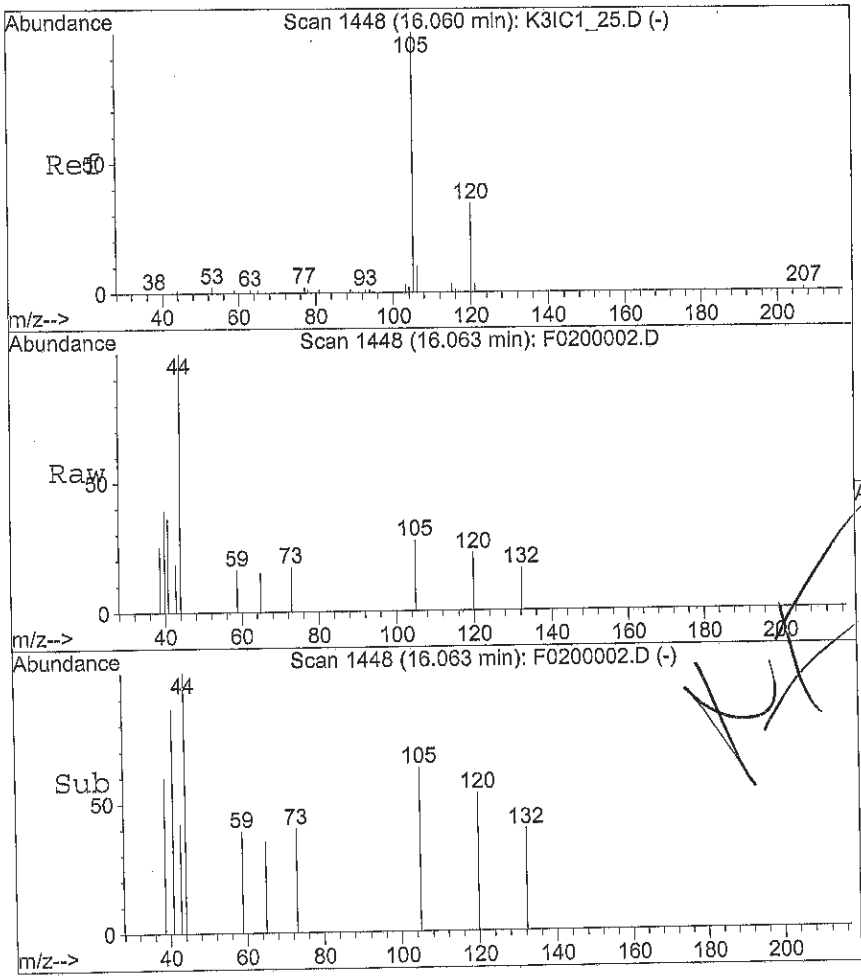


#65
4-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.61 min Scan# 1394
Delta R.T. -0.12 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 91 Resp: 462

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

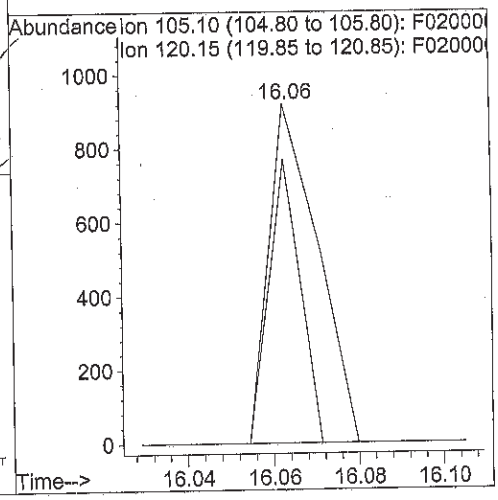


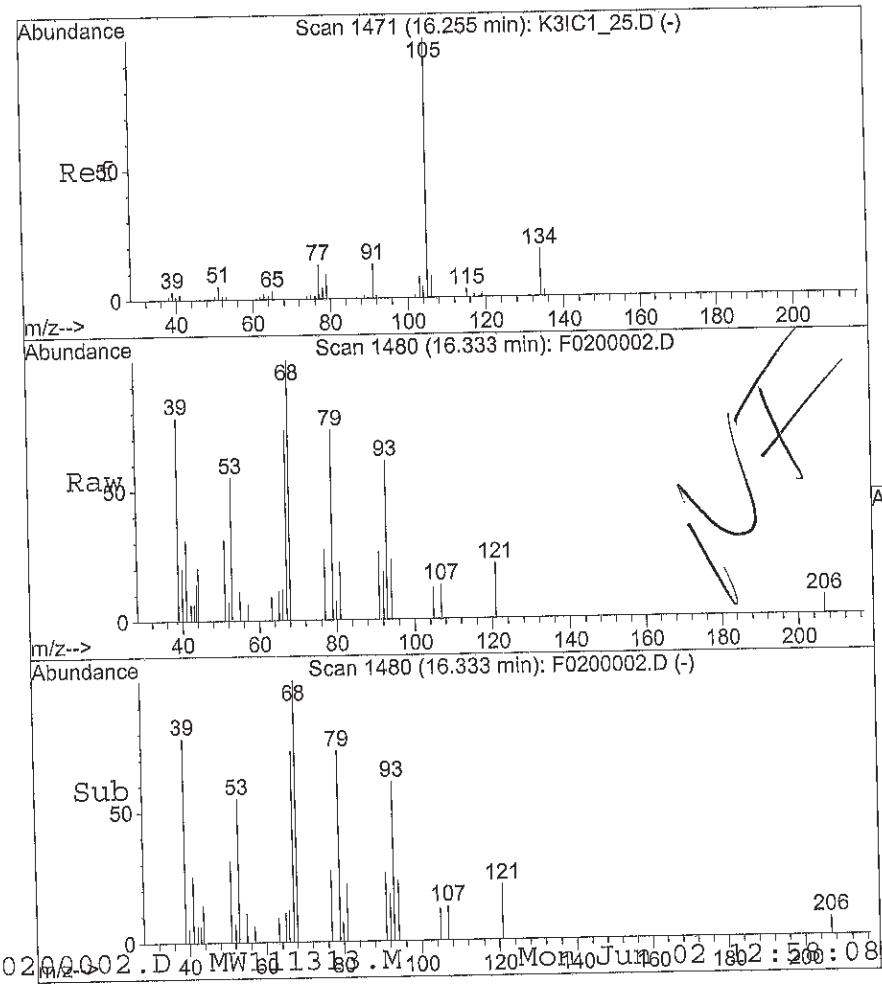


#67
1,2,4-Trimethylbenzene
Concen: 0.04 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:105 Resp: 728

Ion	Ratio	Lower	Upper
105	100		
120	53.4	33.8	50.8#

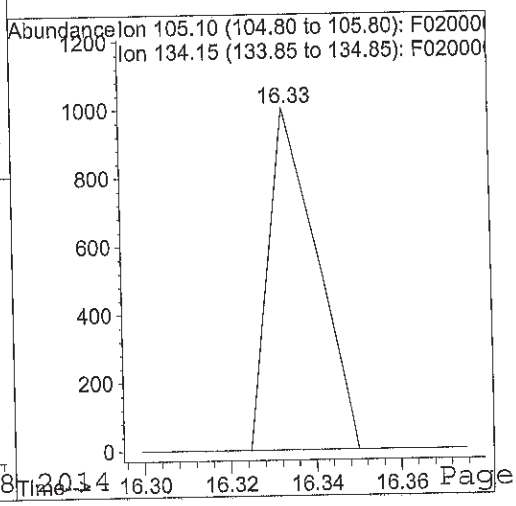


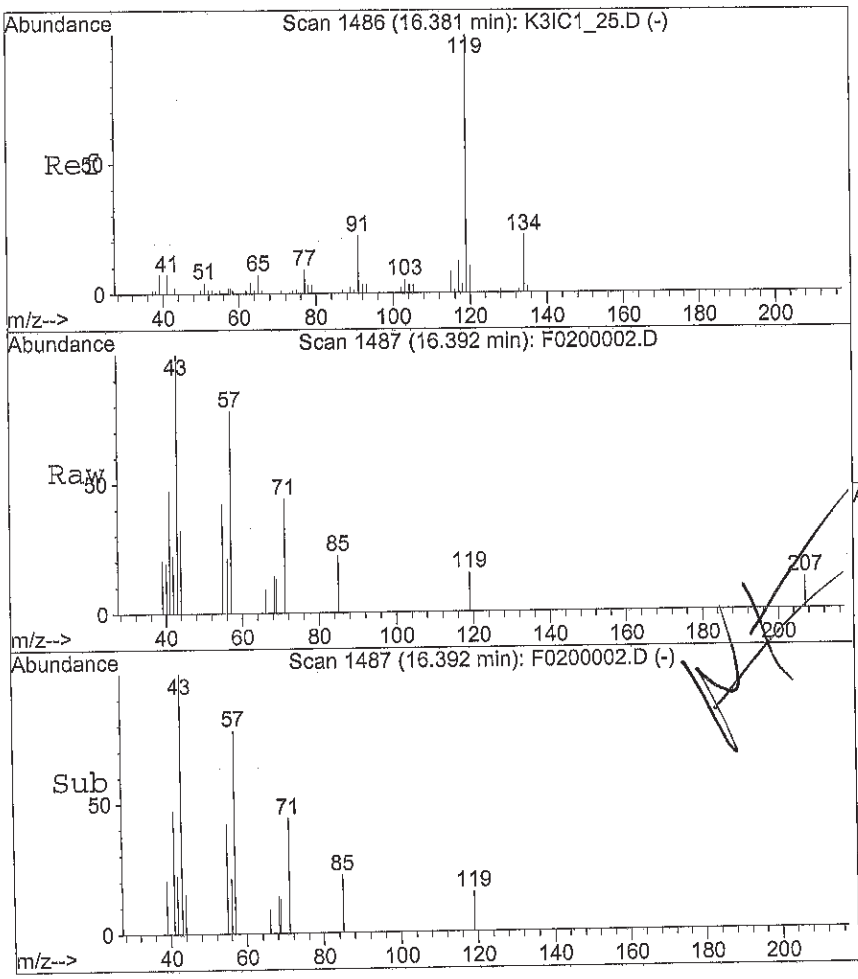


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:105 Resp: 781

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

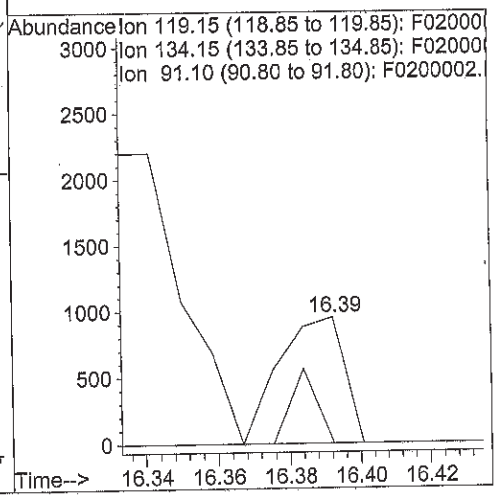


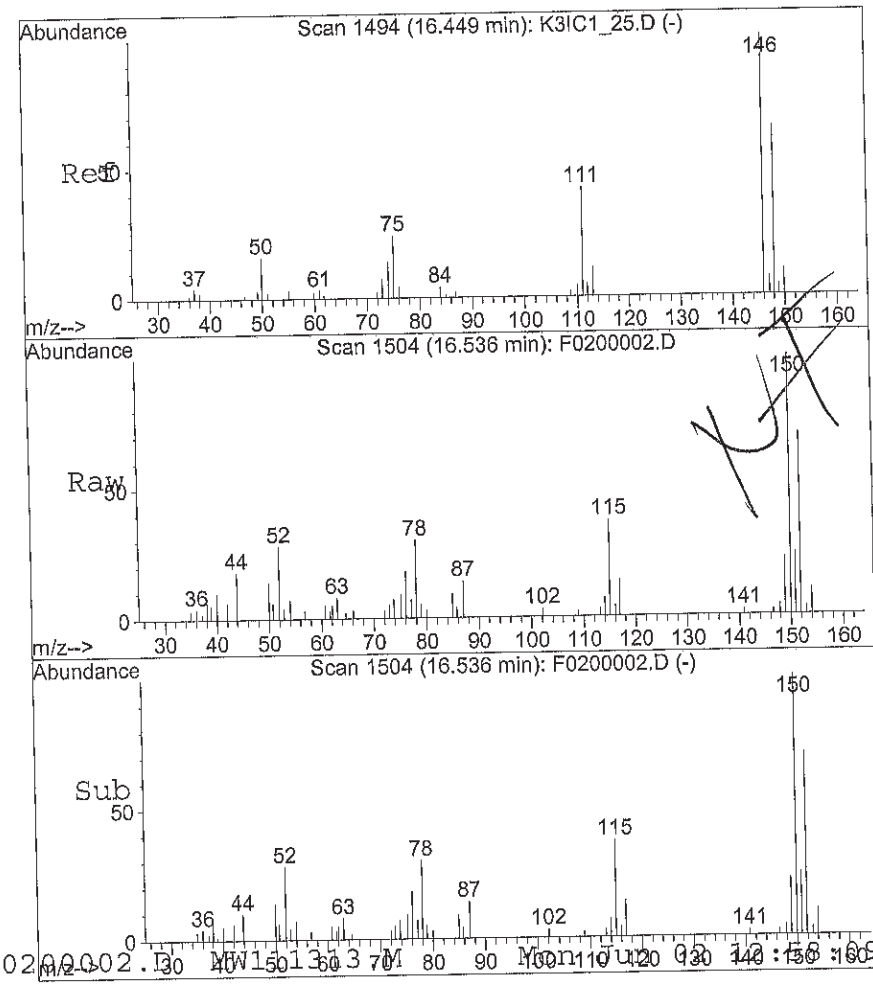


#69
p-Isopropyltoluene
Concen: 0.07 ug/L
RT: 16.39 min Scan# 1487
Delta R.T. 0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:119 Resp: 1205

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	23.4	19.6	29.4

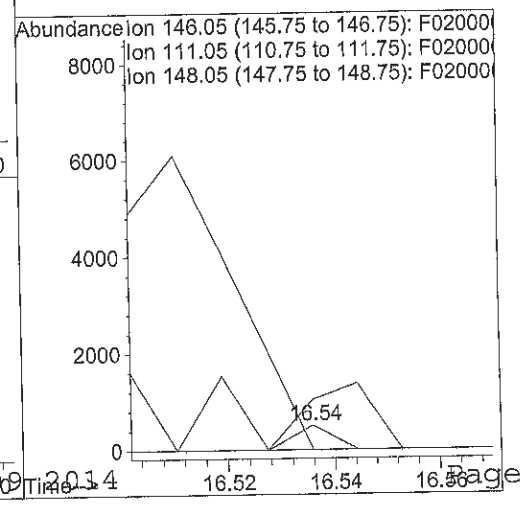


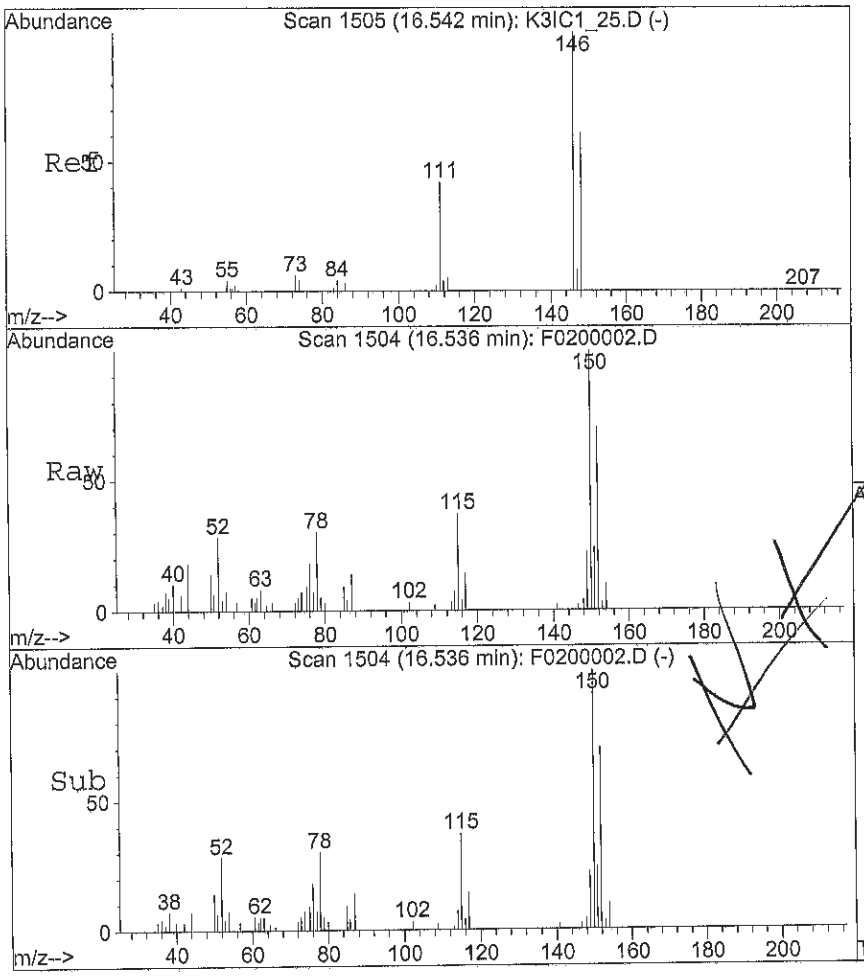


#70
1,3-Dichlorobenzene
Concen: 0.03 ug/L
RT: 16.54 min Scan# 1504
Delta R.T. 0.09 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:146 Resp: 254

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.2	51.4#
148	480.7	50.9	76.3#

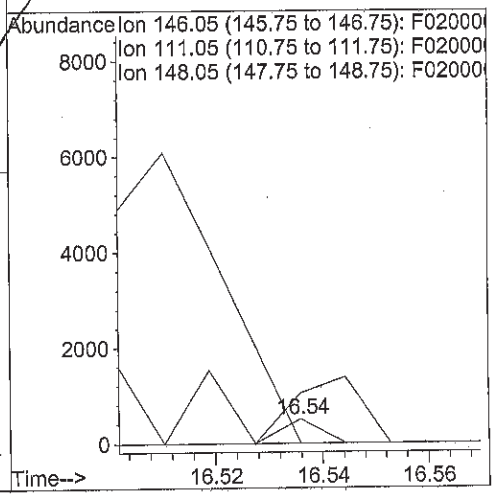


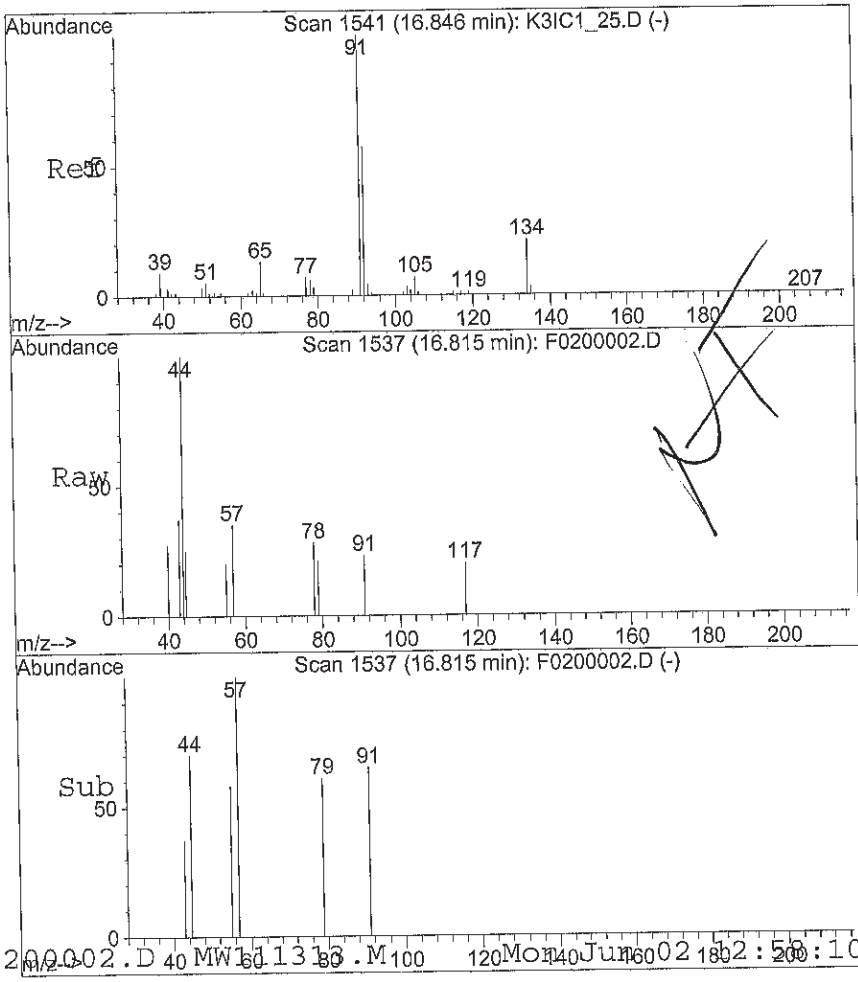


#71
1,4-Dichlorobenzene
Concen: 0.03 ug/L
RT: 16.54 min Scan# 1504
Delta R.T. -0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:146 Resp: 254

Ion	Ratio	Lower	Upper
146	100		
111	0.0	37.6	56.4#
148	480.7	52.6	78.8#

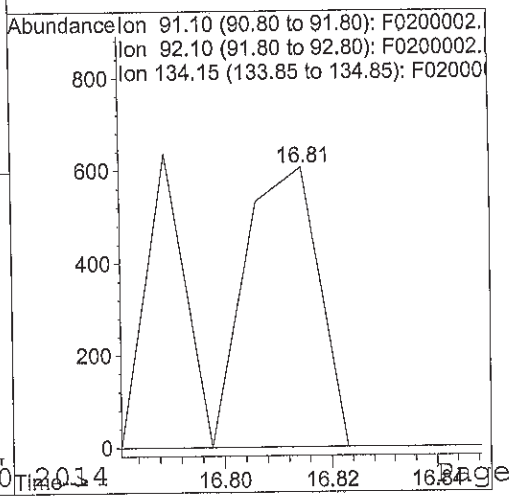


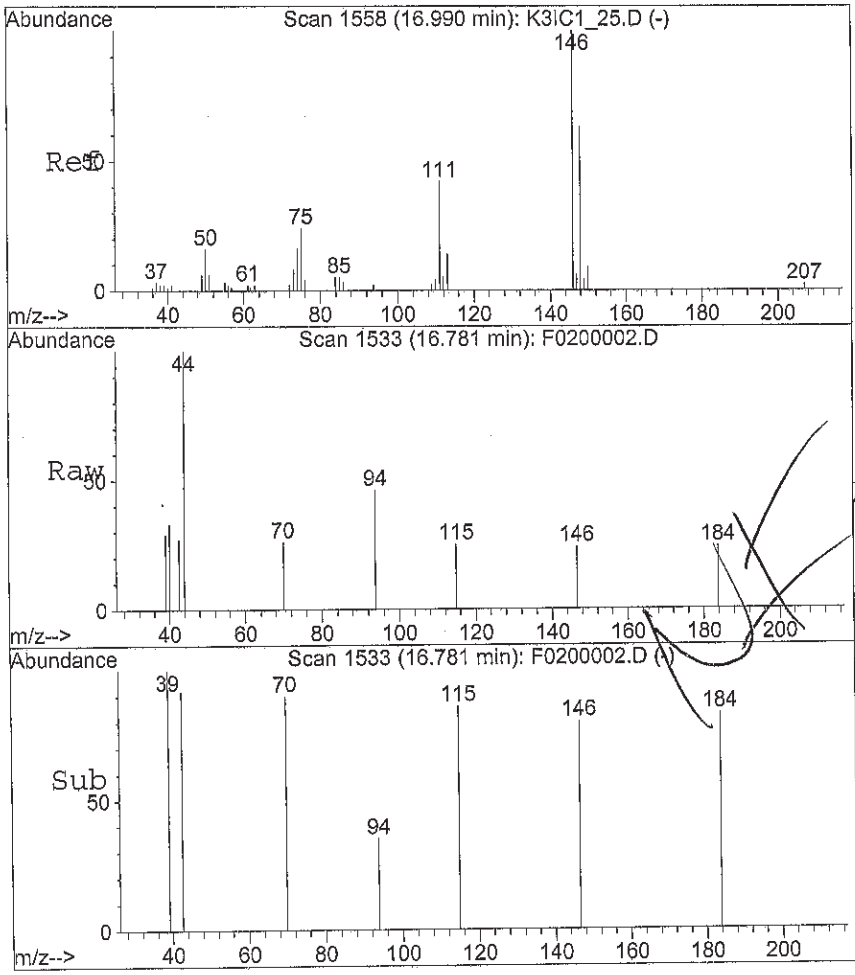


#72
n-Butylbenzene
Concen: 0.03 ug/L
RT: 16.81 min Scan# 1537
Delta R.T. -0.03 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 91 Resp: 576

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

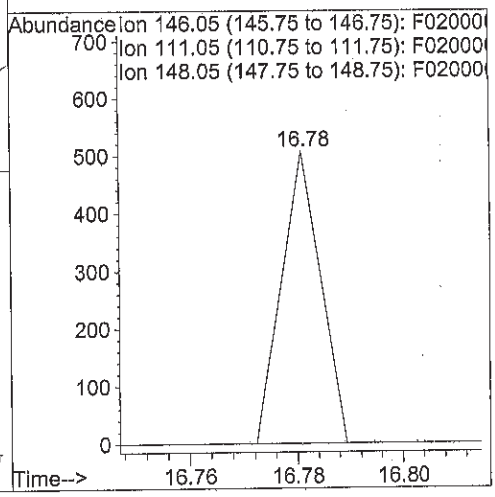


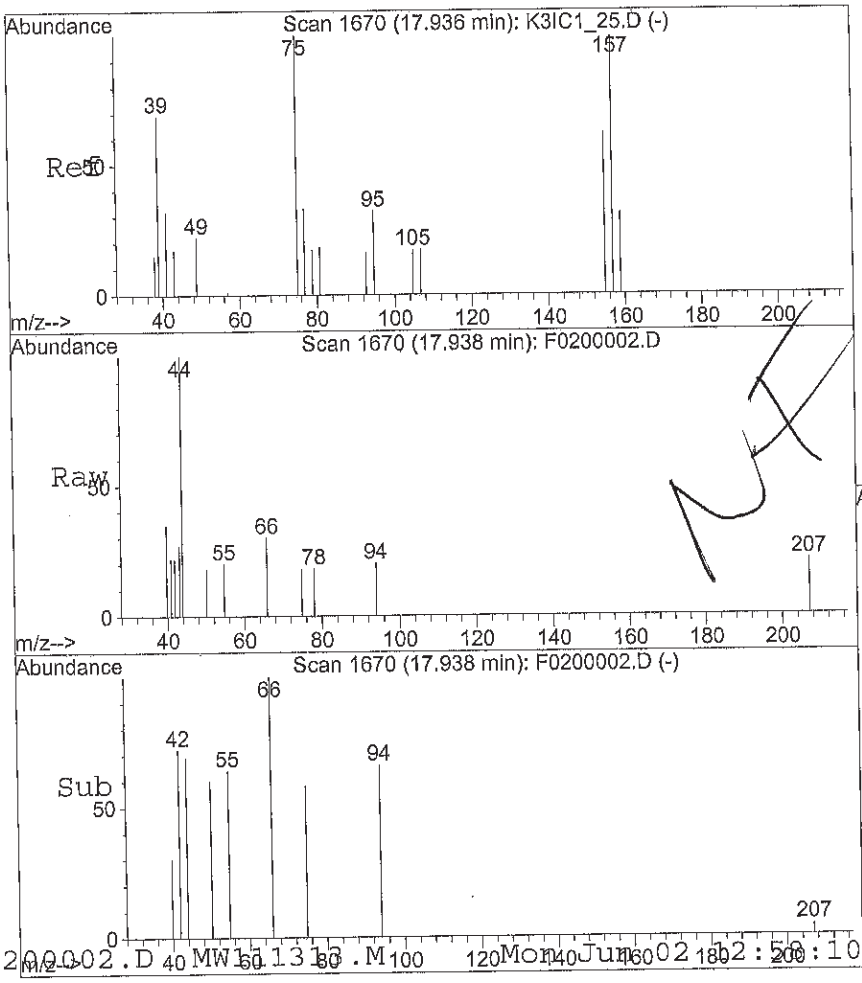


#73
1,2-Dichlorobenzene
Concen: 0.03 ug/L
RT: 16.78 min Scan# 1533
Delta R.T. -0.21 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:146 Resp: 257

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.7	52.1#
148	0.0	51.7	77.5#

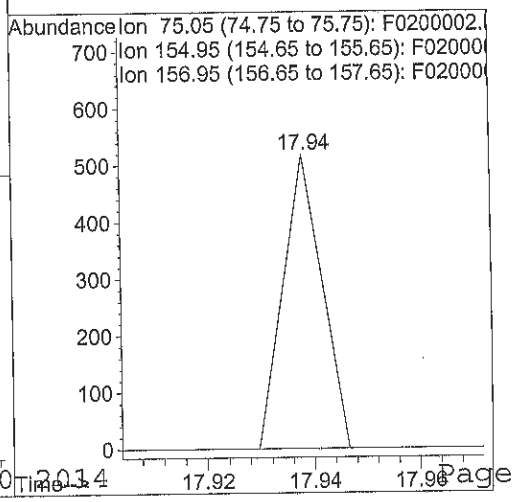


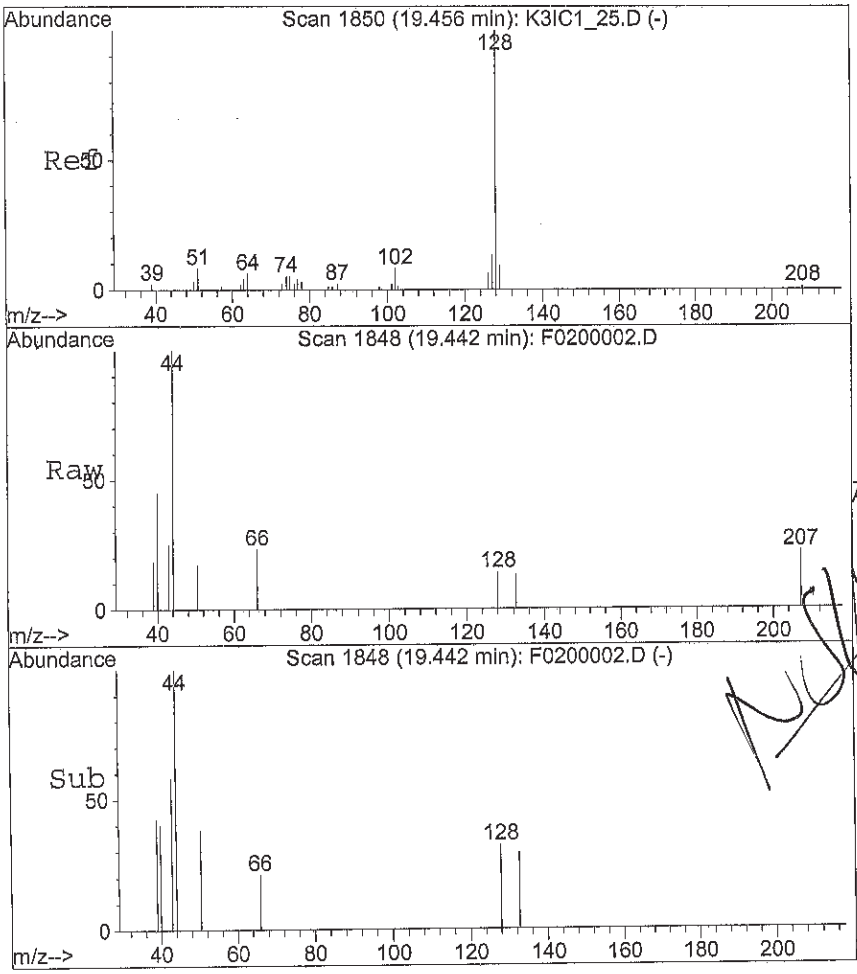


#74
1,2-Dibromo-3-chloropropane
Concen: 1.25 ug/L
RT: 17.94 min Scan# 1670
Delta R.T. 0.00 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion: 75 Resp: 262

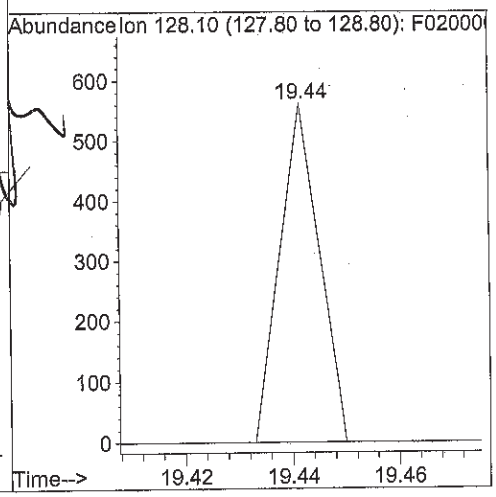
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.44 min Scan# 1848
Delta R.T. -0.01 min
Lab File: F0200002.D
Acq: 2 Jun 2014 12:16 pm

Tgt Ion:128 Resp: 285



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200002.D Vial: 1
Acq On : 2 Jun 2014 12:16 pm Operator: DN
Sample : 3F40201-02 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:29 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1361744	12.50 ug/L	-0.03
7) Chlorobenzene-d5 (IS)	13.92	117	1269802	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	624007	12.50 ug/L	-0.01

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	392573m	11.09 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	88.72%	
3) Chloroform-d (SU6)	9.19	84	602544m	11.86 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery =	94.88%	
4) Methylene Chloride-d2 (SU5	7.07	86	338037	11.38 ug/L	-0.01
Spiked Amount 12.500	Range 70 - 140		Recovery =	91.04%	
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	357991m	14.79 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	118.32%	
6) Benzene-d6 (SU7)	9.92	84	1223508	11.45 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery =	91.60%	
8) Toluene-d8 (SU3)	12.20	98	1339609	11.12 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	88.96%	
9) 4-Bromofluorobenzene (SU4)	15.22	95	592792m	11.92 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.36%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

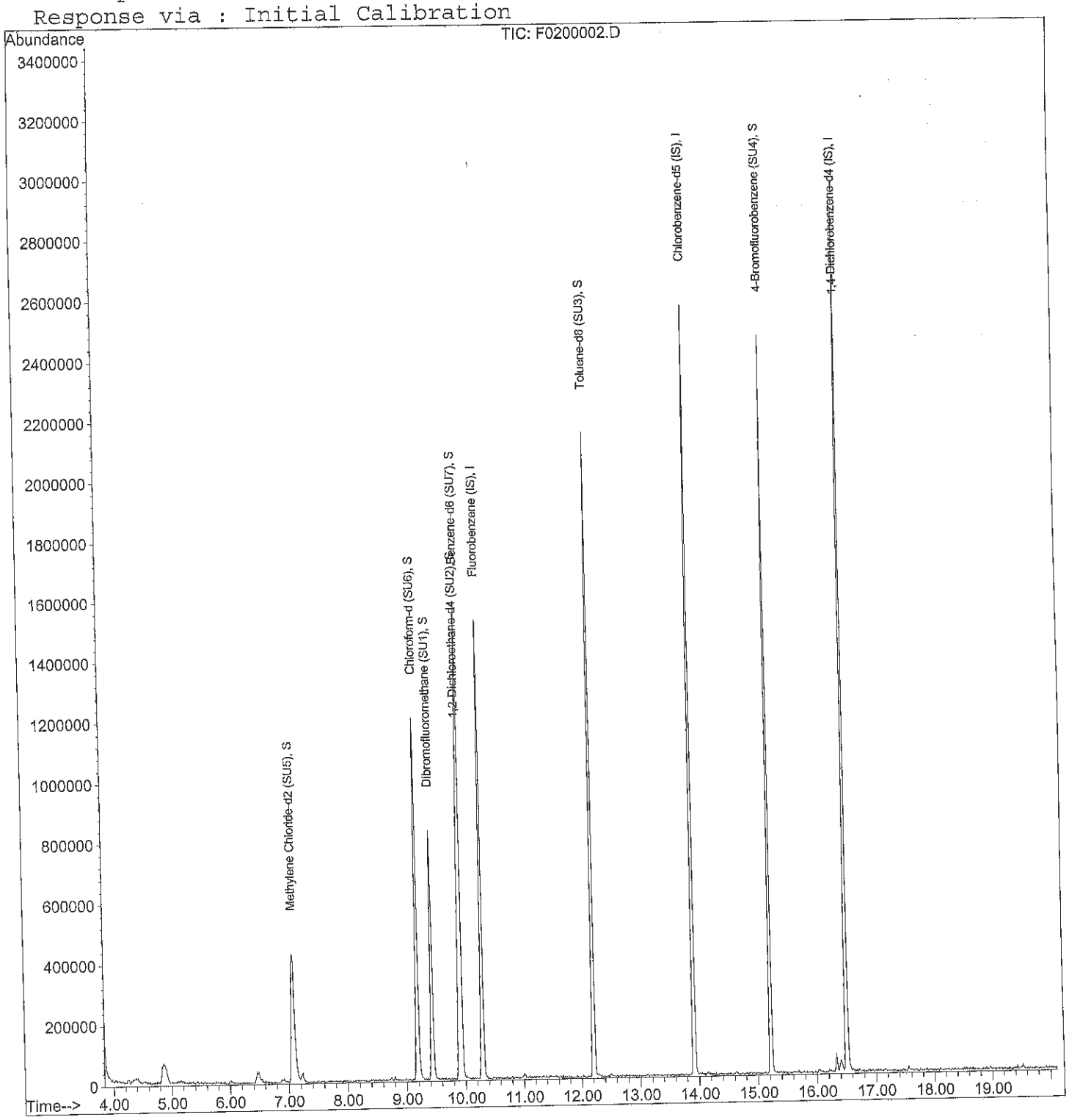
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200002.D
Acq On : 2 Jun 2014 12:16 pm
Sample : 3F40201-02
Misc : 100cc SVL-528-SA8-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 3 7:29 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200004.D
Acq On : 2 Jun 2014 1:21 pm
Sample : 3F40201-03
Misc : 100cc SVL-528-SA8-SV-11.0-12.0
MS Integration Params: rteint.p
Quant Time: Jun 2 13:44 19114

Vial: 3
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1277102	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.91	117	1204182	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	617289	12.50	ug/L	0.00

System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	443521m	13.92	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	=	111.36%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	444869m	14.69	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	=	117.52%	
39) Toluene-d8 (SU3)	12.21	98	1249266	11.12	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	=	88.96%	
58) 4-Bromofluorobenzene (SU4)	15.21	95	658626m	13.37	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	=	106.96%	

Target Compounds						Qvalue
3) (F12) Dichlorodifluorometh	4.12	85	890	0.28	~~ug/L~~ # NSM	44
4) Chloromethane	4.43	50	1438	-0.55	~~ug/L~~	94
5) Vinyl Chloride	4.45	62	314	0.14	~~ug/L~~ #	1
6) Bromomethane	5.11	96	4359	1.33	~~ug/L~~	81
7) Chloroethane	5.16	64	1770	2.35	~~ug/L~~	90
10) 1,1-Dichloroethene	6.49	96	379	0.13	~~ug/L~~ #	1
11) Acetone	6.46	58	5730	6.76	~~ug/L~~ # T	1
12) (IPA) Leak Check Compound	6.49	45	104307	679.69	~~ug/L~~ NSM	82
13) Carbon disulfide	6.84	76	14548	1.37	~~ug/L~~ #	81
14) Methylene Chloride	7.08	84	4061	1.16	~~ug/L~~ #	1
15) (TBA) tert-Butanol	6.95	59	302	1.39	~~ug/L~~ #	77
16) (MTBE) Methyl-t-butyl ethe	7.39	73	270	0.04	~~ug/L~~ #	1
18) 1,1-Dichloroethane	8.10	63	271	0.05	~~ug/L~~ #	1
20) 2,2-Dichloropropane	8.81	77	395	0.08	~~ug/L~~ #	36
21) (MEK) 2-Butanone	8.80	72	330	0.92	~~ug/L~~ # NSM	1
22) (DIPE) Diisopropyl Ether	8.06	45	258	0.03	~~ug/L~~ #	48
24) Chloroform	9.23	83	2471	0.37	~~ug/L~~ #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.44	59	356	0.04	~~ug/L~~ #	44
26) 1,1,1-Trichloroethane	9.35	97	293	0.06	~~ug/L~~ # NSM	23
29) 1,1-Dichloropropene	9.71	75	272	0.06	~~ug/L~~ #	6
31) Benzene	9.99	78	633	0.05	~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.93	62	12568	2.96	~~ug/L~~ #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200004.D Vial: 3
Acq On : 2 Jun 2014 1:21 pm Operator: DN
Sample : 3F40201-03 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 13:44 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

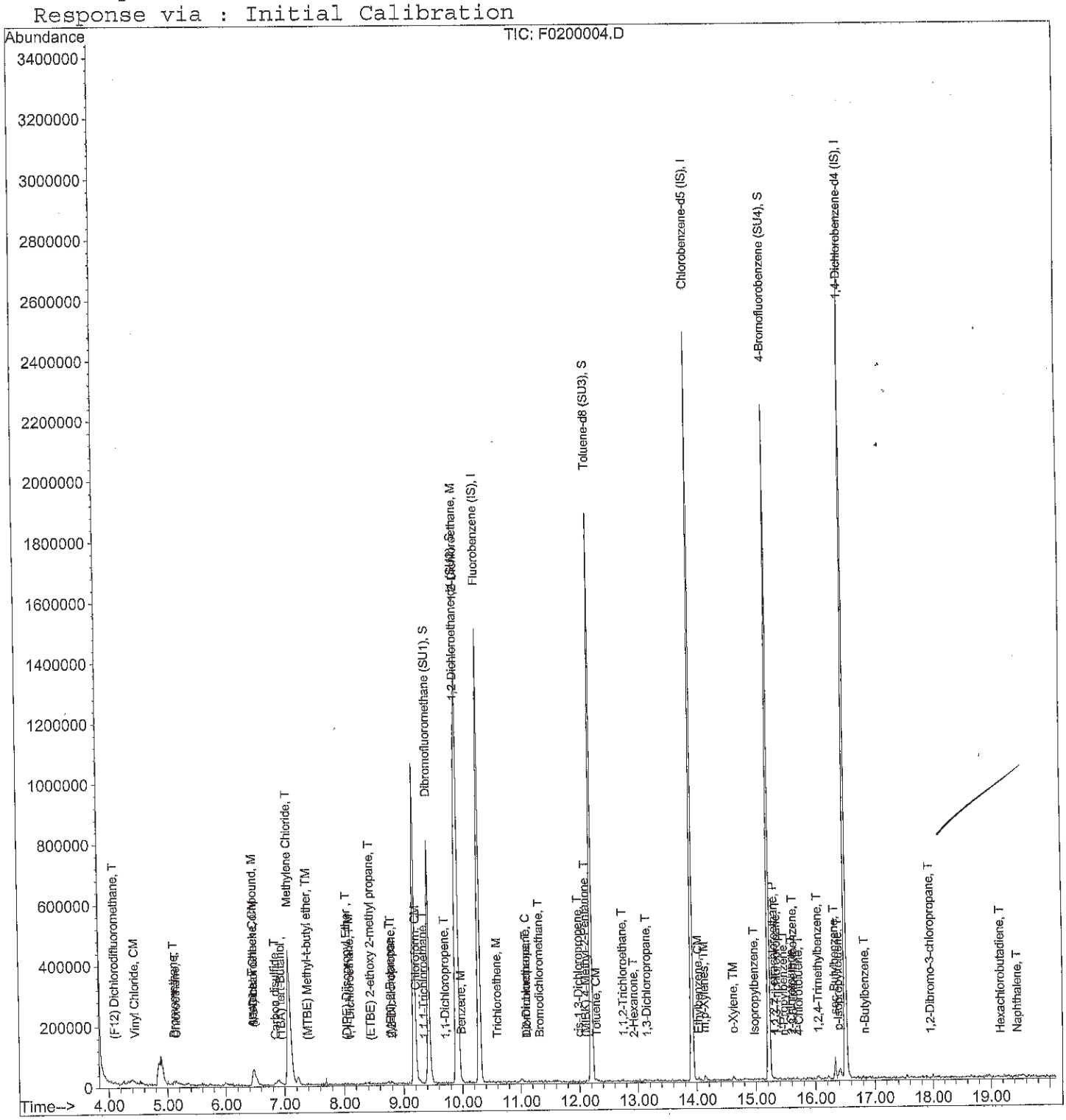
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) Trichloroethene	10.59	130	259	0.07 ~~ug/L~~ #	4
34) 1,2-Dichloropropane	11.09	63	398	0.14 ~~ug/L~~ #	52
35) Dibromomethane	11.09	93	358	0.16 ~~ug/L~~ #	5
36) Bromodichloromethane	11.34	83	254	0.06 ~~ug/L~~ #	21
37) cis-1,3-Dichloropropene	12.00	75	264	0.05 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.11	43	1090	0.45 ~~ug/L~~ #	100
41) Toluene	12.30	91	6415	0.39 ~~ug/L~~ #	62
43) 1,1,2-Trichloroethane	12.75	83	368	0.12 ~~ug/L~~ #	10
45) 1,3-Dichloropropane	13.16	76	275	0.05 ~~ug/L~~ #	41
46) 2-Hexanone	12.93	43	313	0.12 ~~ug/L~~ #	37
51) Ethylbenzene	14.03	91	2741	0.15 ~~ug/L~~ #	45
52) m,p-Xylenes	14.14	106	3584	0.54 ug/L 0.0148	79
53) o-Xylene	14.63	106	259	0.04 ug/L # 0.0008	1
54) Styrene	14.61	104	1223	-0.75 ~~ug/L~~ #	1
56) Isopropylbenzene	14.98	105	303	0.02 ~~ug/L~~ #	1
57) 1,2,3-Trichloropropane	15.36	75	821	0.17 ~~ug/L~~ #	37
60) 1,1,2,2-Tetrachloroethane	15.31	83	323	0.07 ~~ug/L~~ #	18
62) n-Propylbenzene	15.46	91	958	0.04 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.60	91	281	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.63	105	1099	0.07 ~~ug/L~~ #	68
65) 4-Chlorotoluene	15.73	91	287	0.02 ~~ug/L~~ #	44
67) 1,2,4-Trimethylbenzene	16.05	105	1977	0.12 ~~ug/L~~ #	67
68) sec-Butylbenzene	16.34	105	1008	0.05 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.38	119	465	0.03 ~~ug/L~~ #	52
72) n-Butylbenzene	16.83	91	281	0.02 ~~ug/L~~ #	30
74) 1,2-Dibromo-3-chloropropan	17.95	75	270	1.26 ~~ug/L~~ #	6
76) Hexachlorobutadiene	19.15	225	254	0.24 ~~ug/L~~ #	18
77) Naphthalene	19.45	128	269	0.02 ~~ug/L~~	100

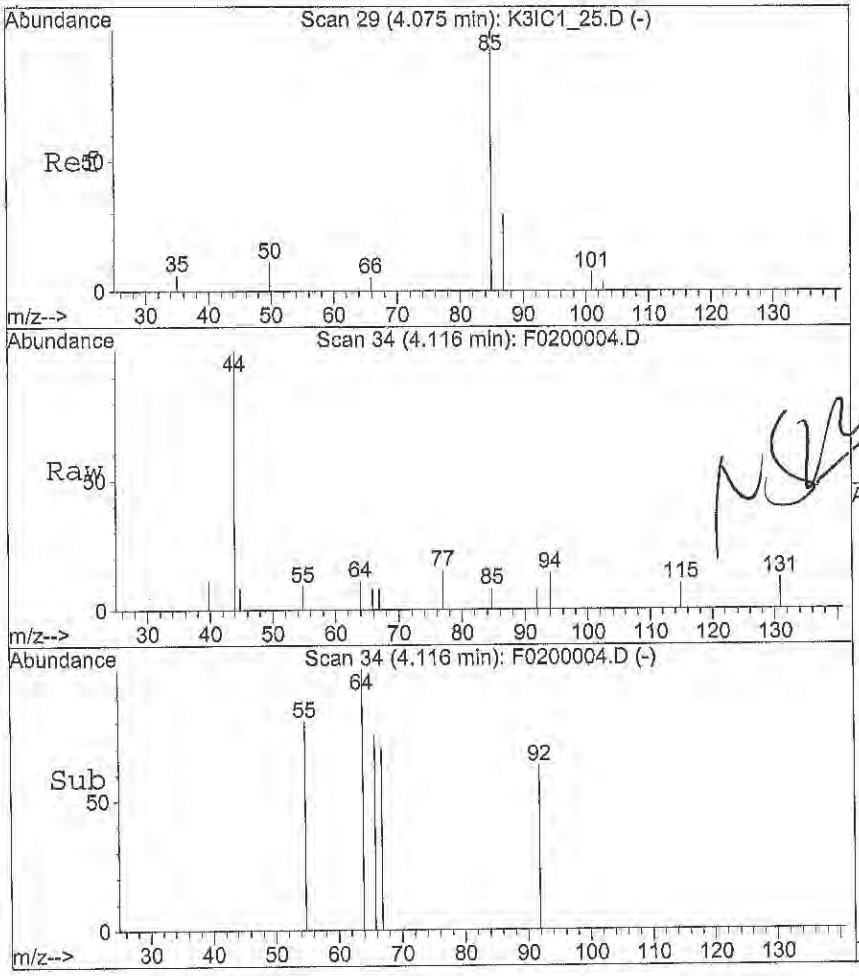
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200004.D Vial: 3
Acq On : 2 Jun 2014 1:21 pm Operator: DN
Sample : 3F40201-03 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 13:44 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

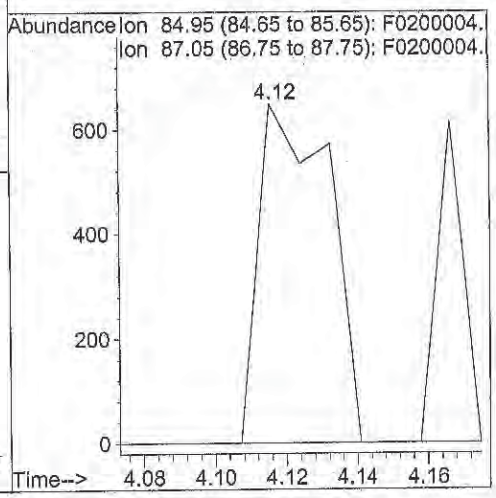


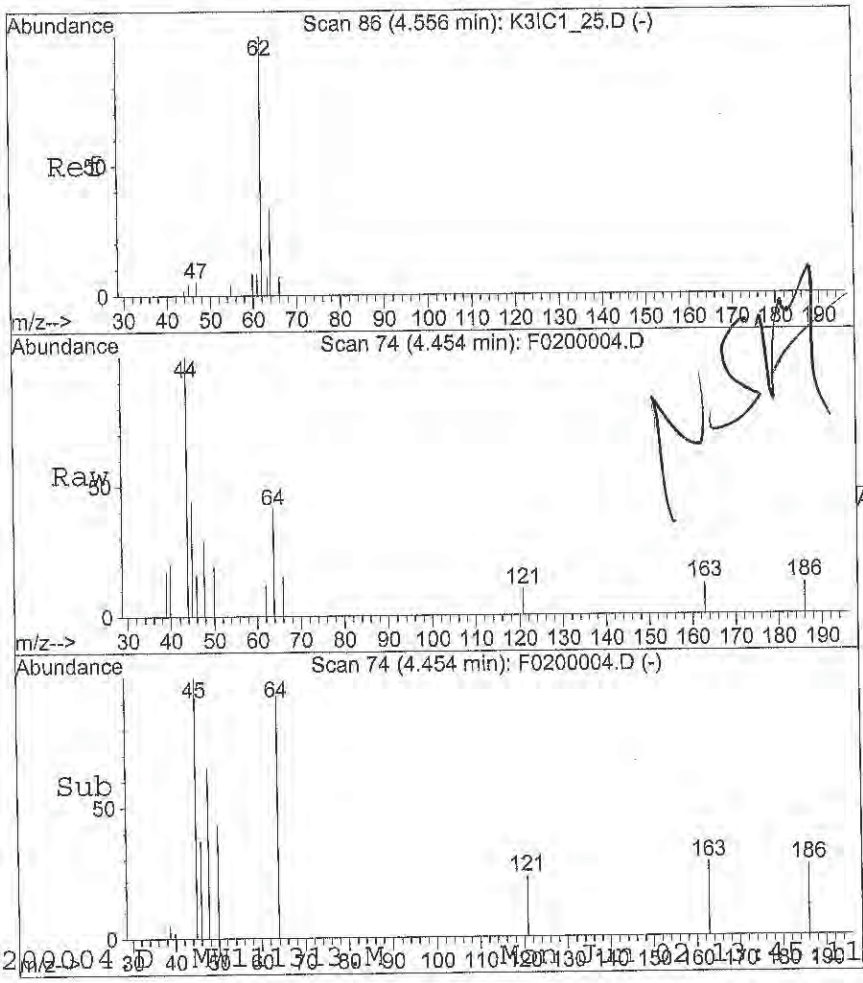


#3
(F12) Dichlorodifluoromethane
Concen: 0.28 ug/L
RT: 4.12 min Scan# 34
Delta R.T. 0.04 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 85 Resp: 890

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

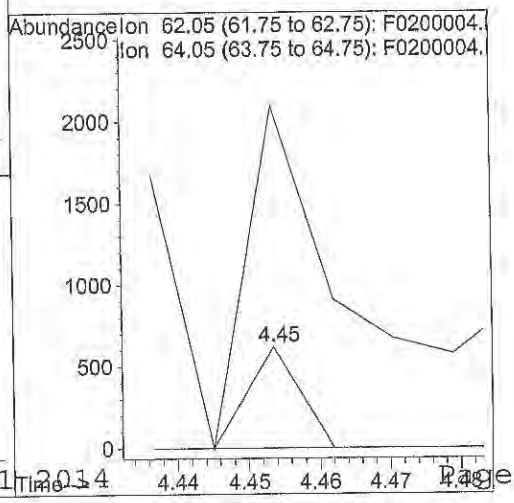


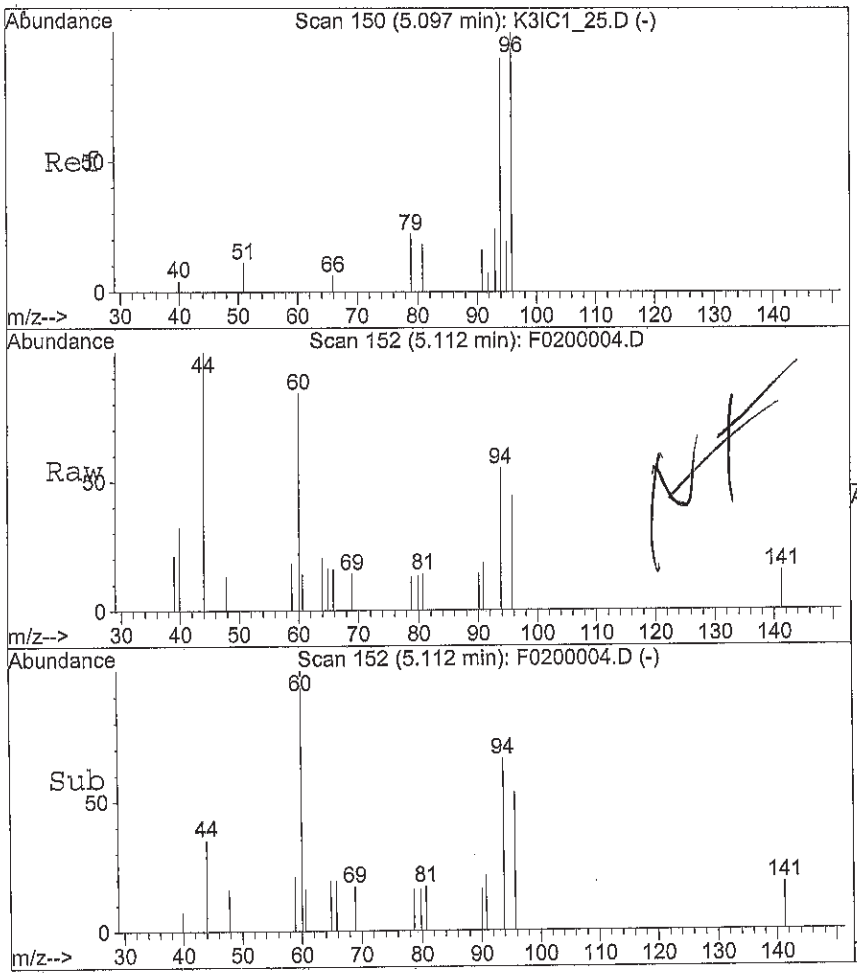


#5
Vinyl Chloride
Concen: 0.14 ug/L
RT: 4.45 min Scan# 74
Delta R.T. -0.10 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 62 Resp: 314

Ion	Ratio	Lower	Upper
62	100		
64	1093.3	25.6	38.4#

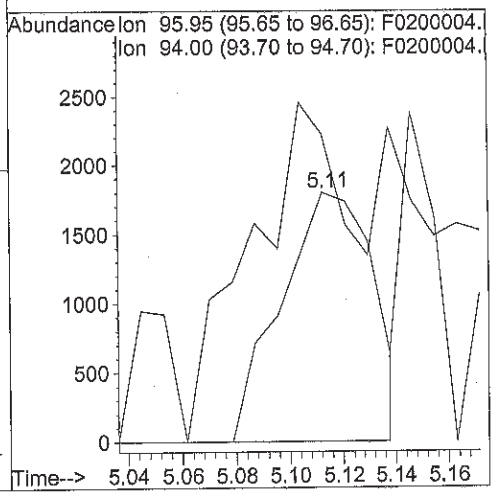


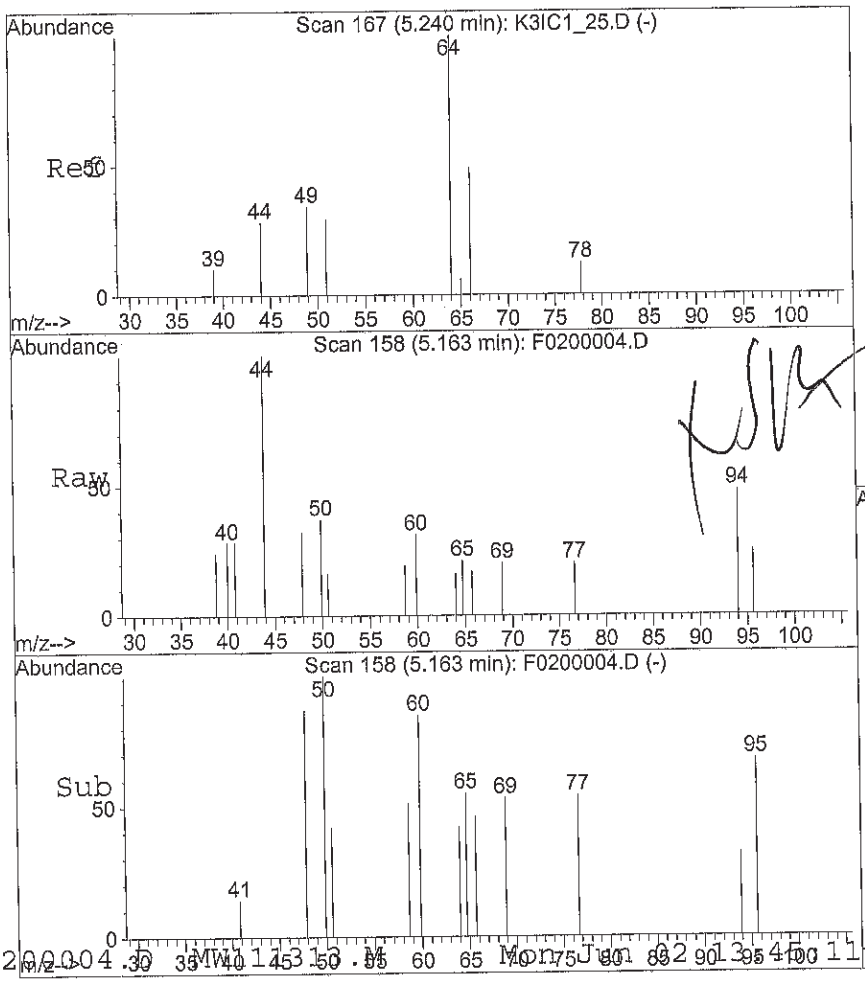


#6
Bromomethane
Concen: 1.33 ug/L
RT: 5.11 min Scan# 152
Delta R.T. 0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 96 Resp: 4359

Ion	Ratio	Lower	Upper
96	100		
94	148.2	101.0	151.4

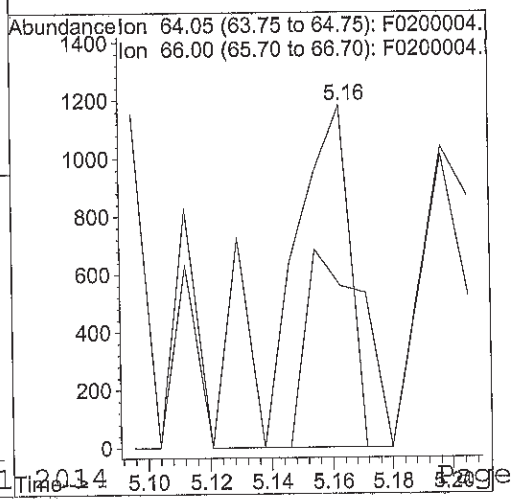


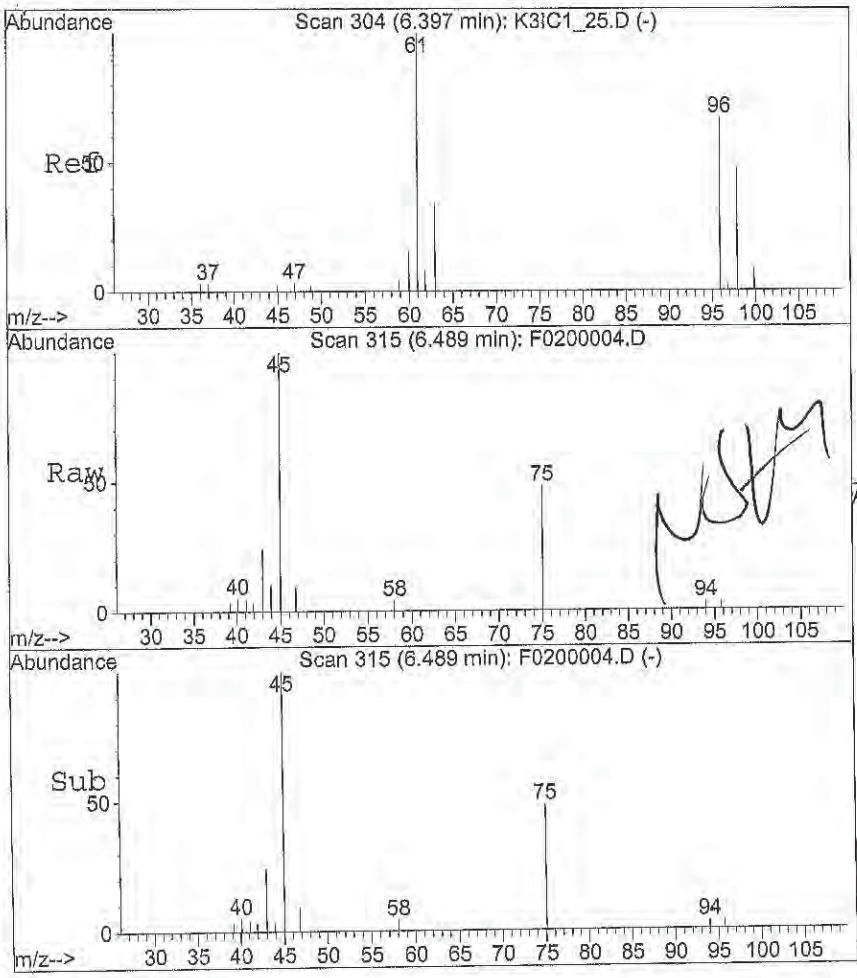


#7
Chloroethane
Concen: 2.35 ug/L
RT: 5.16 min Scan# 158
Delta R.T. -0.08 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 64 Resp: 1770

Ion	Ratio	Lower	Upper
64	100		
66	50.8	35.4	53.0

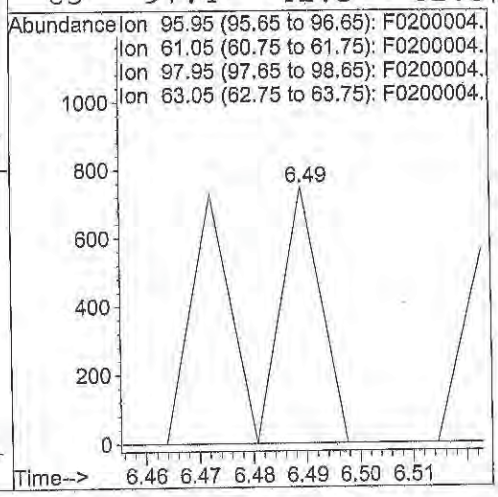


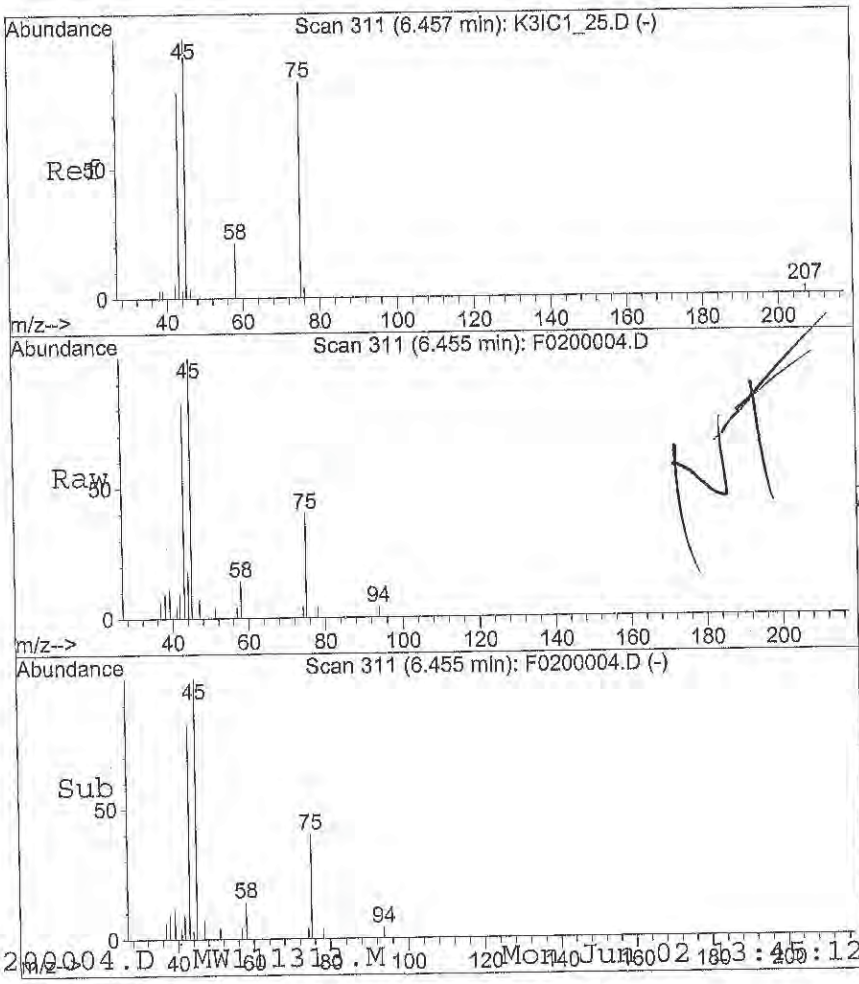


#10
1,1-Dichloroethene
Concen: 0.13 ug/L
RT: 6.49 min Scan# 315
Delta R.T. 0.09 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 96 Resp: 379

Ion	Ratio	Lower	Upper
96	100		
61	0.0	130.0	195.0#
98	0.0	56.2	84.4#
63	97.4	41.5	62.3#

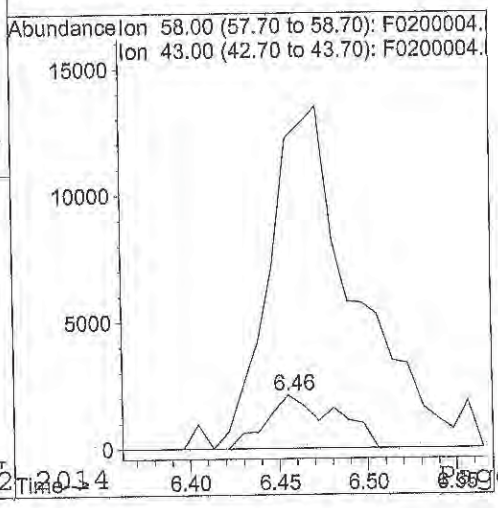


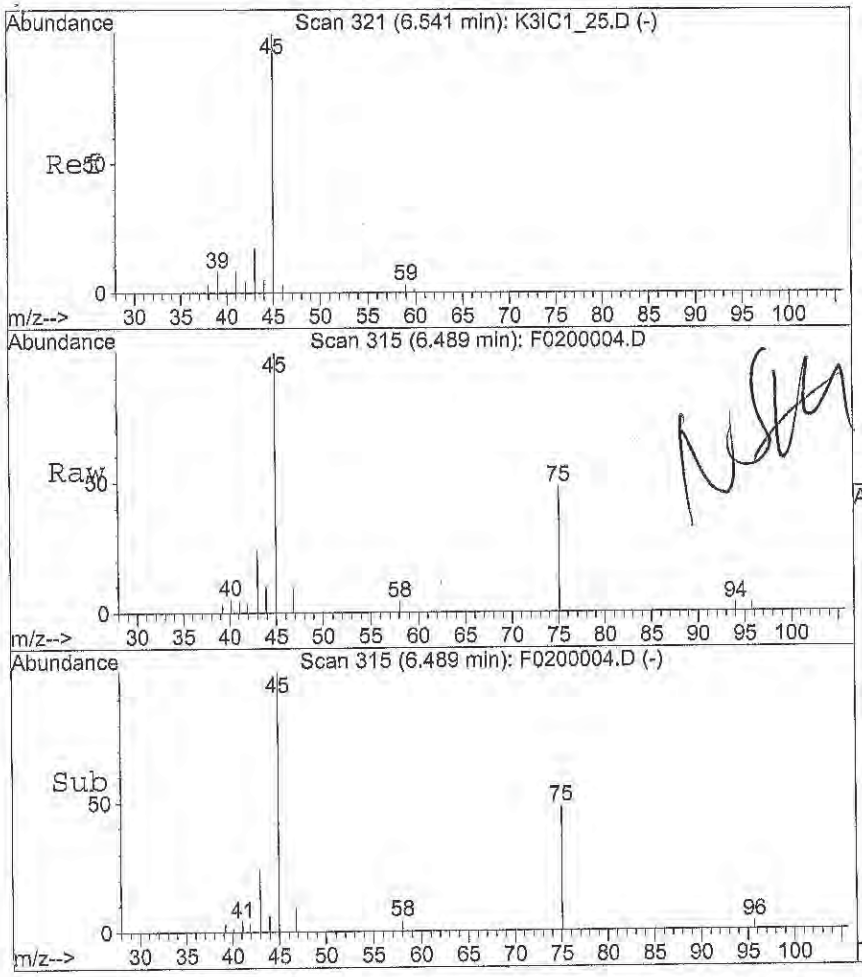


#11
Acetone
Concen: 6.76 ug/L
RT: 6.46 min Scan# 311
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 58 Resp: 5730

Ion	Ratio	Lower	Upper
58	100		
43	815.3	360.9	541.3#

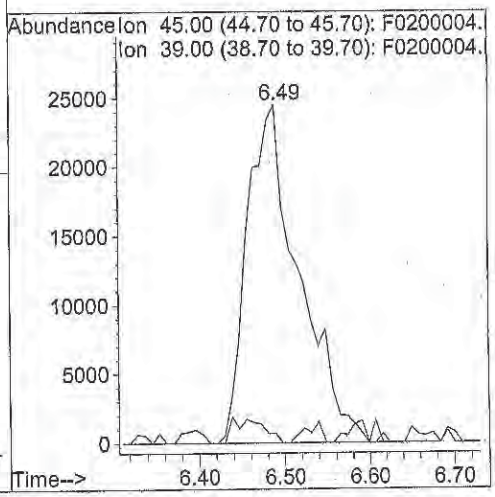


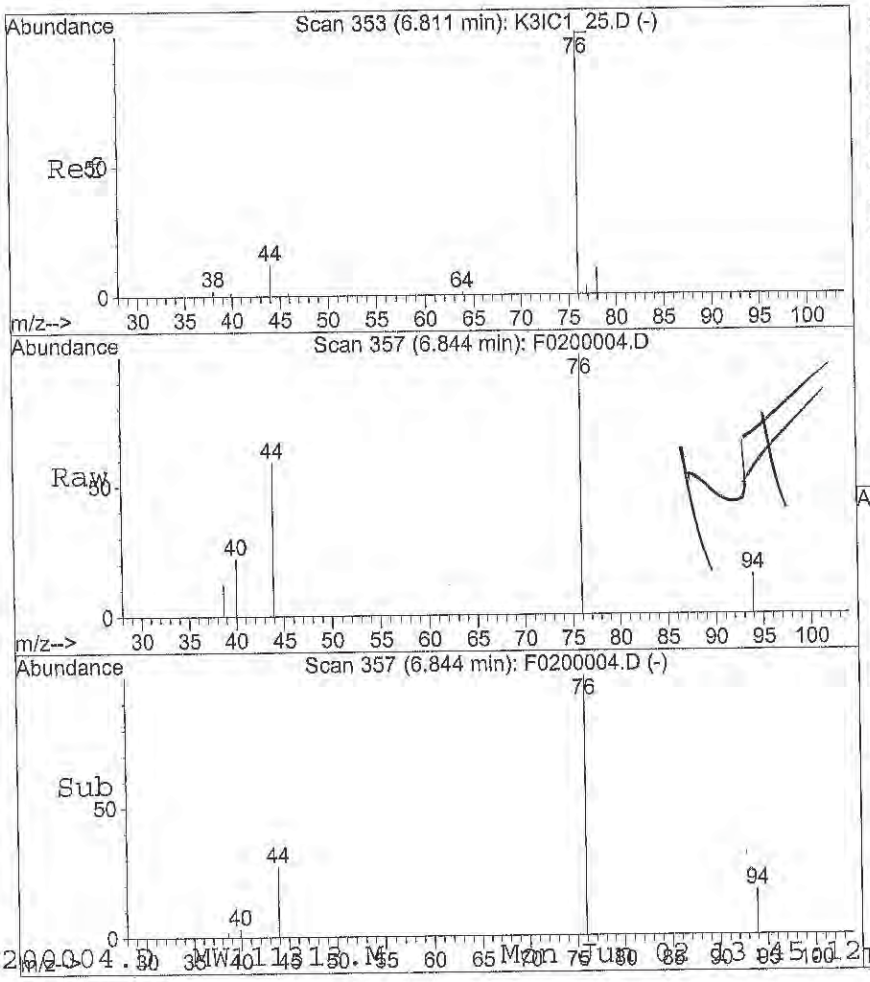


#12
(IPA) Leak Check Compound
Concen: 679.69 ug/L
RT: 6.49 min Scan# 315
Delta R.T. -0.05 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 45 Resp: 104307

Ion	Ratio	Lower	Upper
45	100		
39	0.0	4.9	7.3#

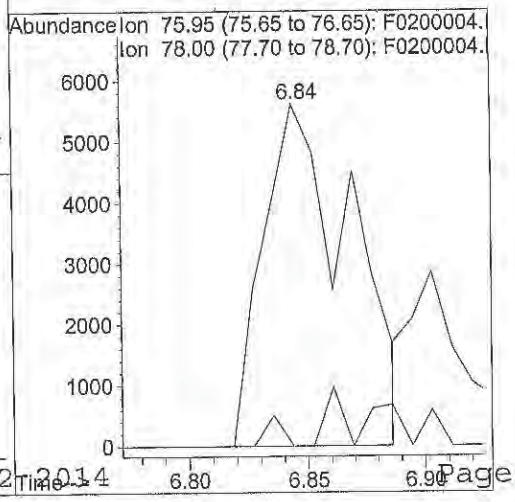


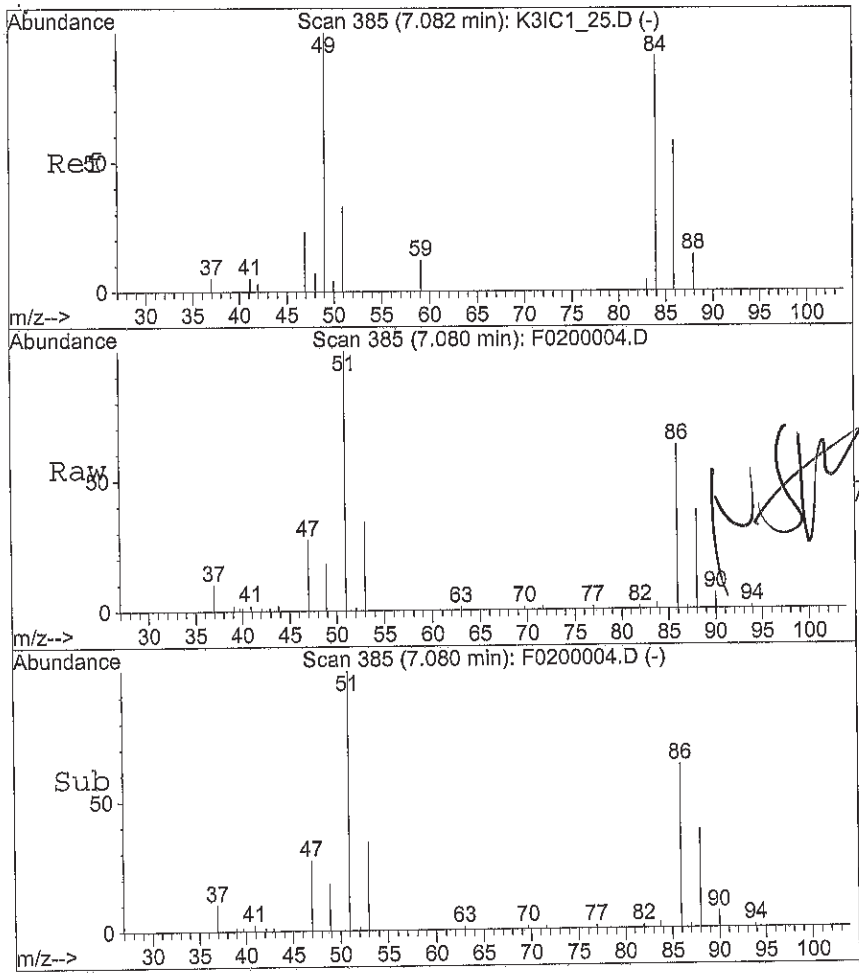


#13
Carbon disulfide
Concen: 1.37 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 76 Resp: 14548

Ion	Ratio	Lower	Upper
76	100		
78	1.8	7.0	10.4#

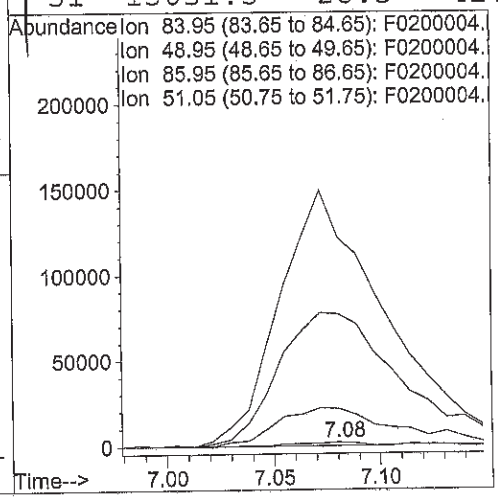


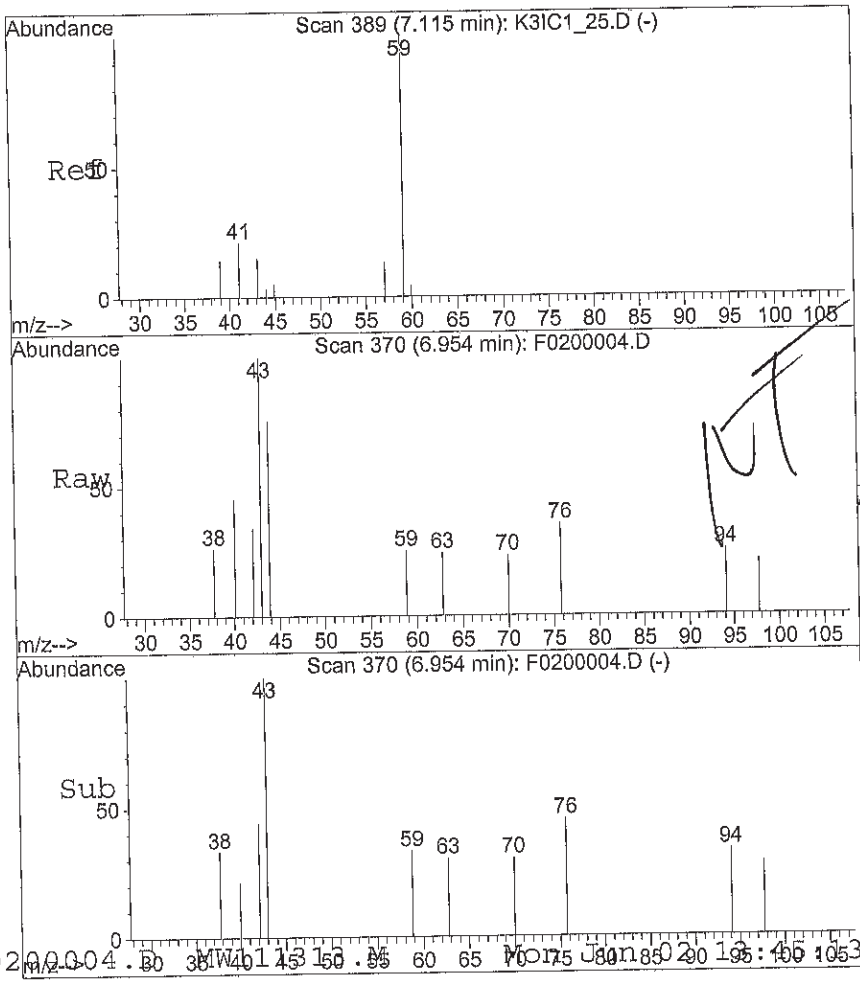


#14
Methylene Chloride
Concen: 1.16 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 84 Resp: 4061

Ion	Ratio	Lower	Upper
84	100		
49	2145.2	89.8	134.6#
86	7700.5	51.1	76.7#
51	13051.5	28.5	42.7#

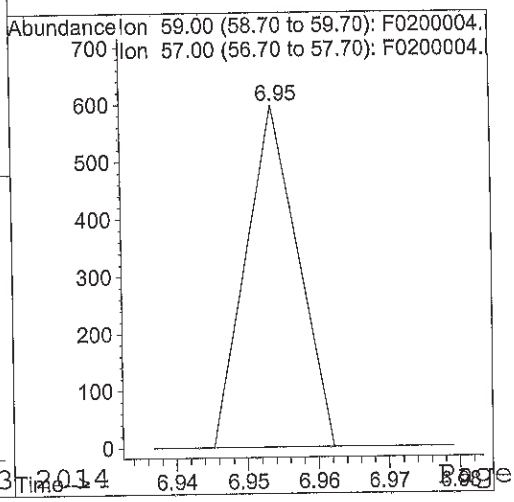


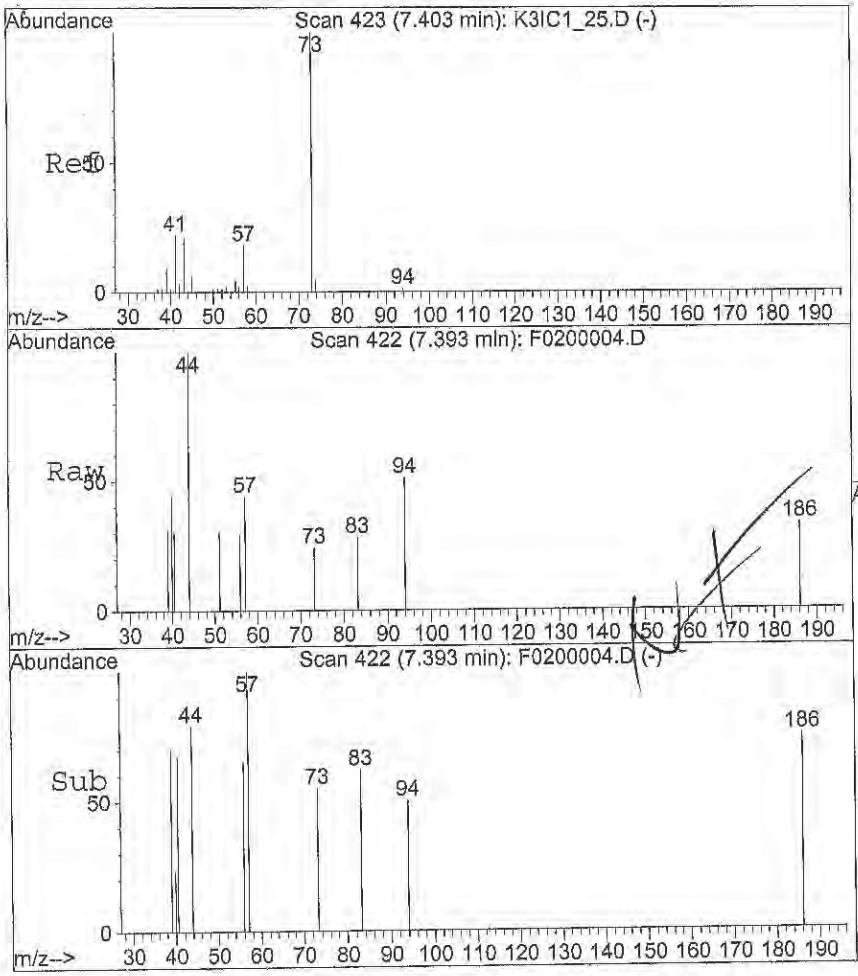


#15
(TBA) tert-Butanol
Concen: 1.39 ug/L
RT: 6.95 min Scan# 370
Delta R.T. -0.16 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 59 Resp: 302

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

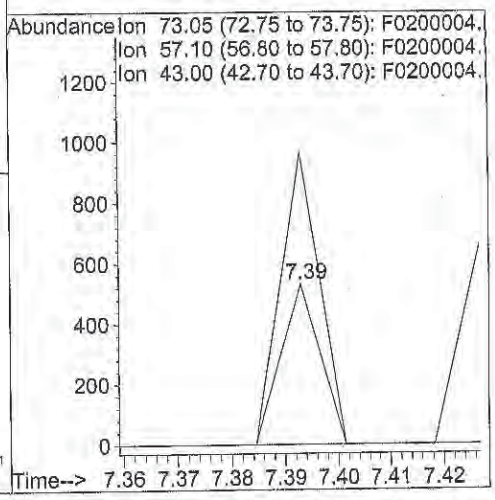


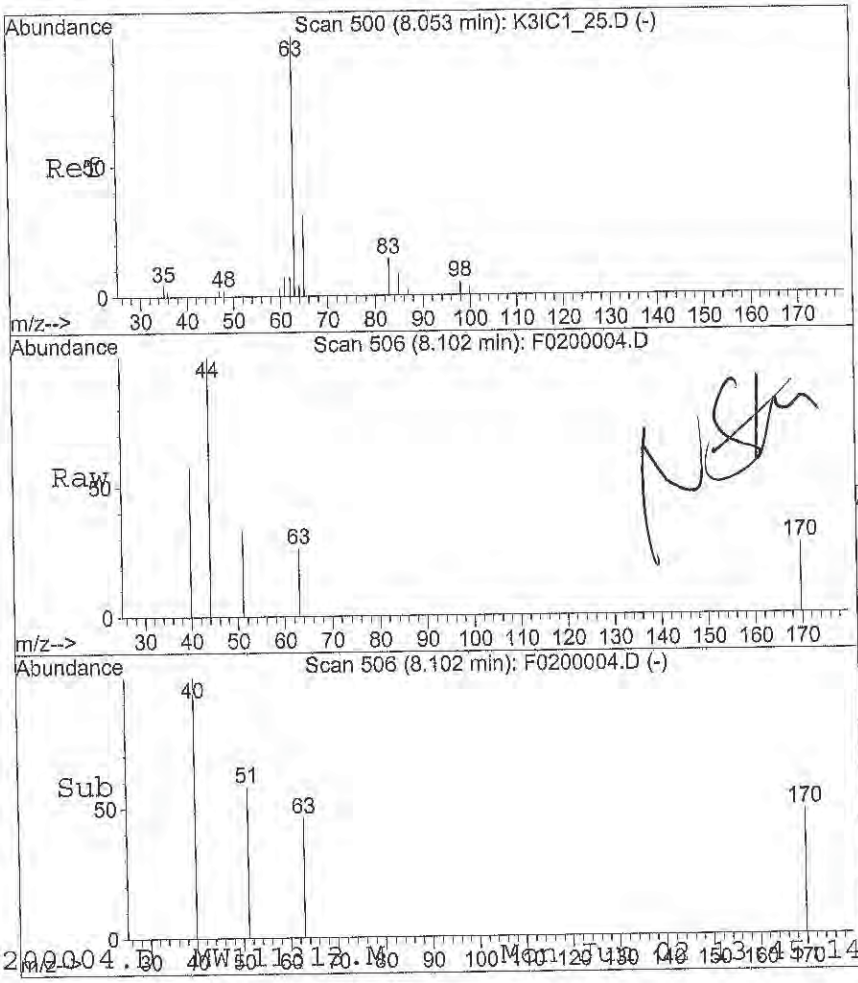


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.04 ug/L
RT: 7.39 min Scan# 422
Delta R.T. -0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 73 Resp: 270

Ion	Ratio	Lower	Upper
73	100		
57	181.1	15.8	23.8#
43	0.0	18.4	27.6#

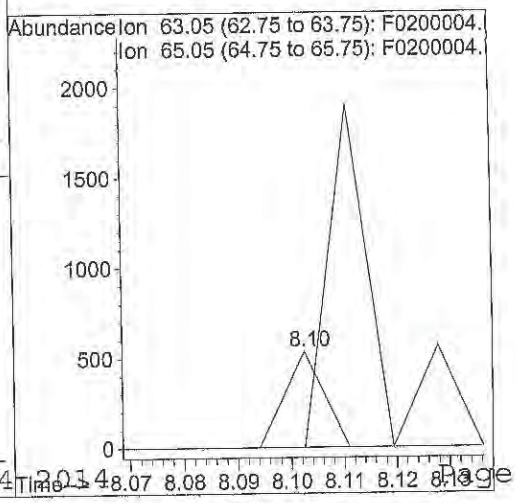


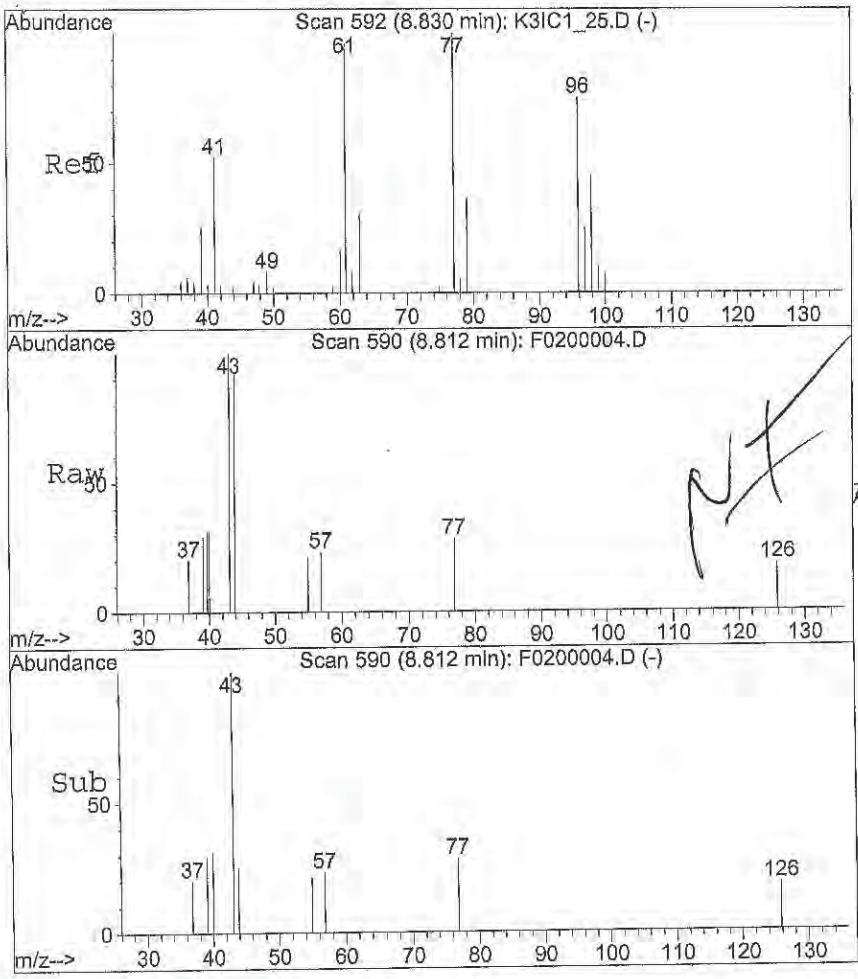


#18
1,1-Dichloroethane
Concen: 0.05 ug/L
RT: 8.10 min Scan# 506
Delta R.T. 0.05 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 63 Resp: 271

Ion	Ratio	Lower	Upper
63	100		
65	460.5	25.8	38.8#

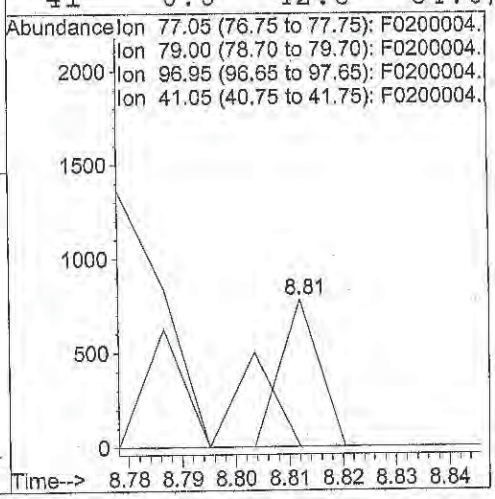


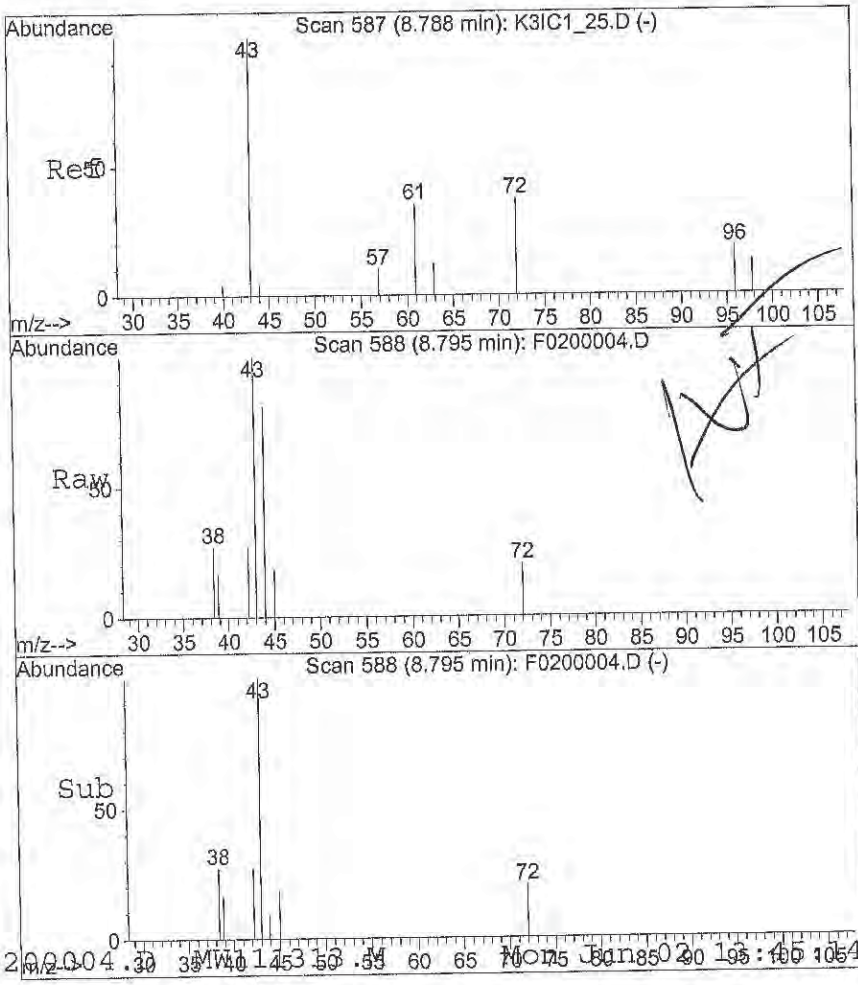


#20
2,2-Dichloropropane
Concen: 0.08 ug/L
RT: 8.81 min Scan# 590
Delta R.T. -0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 77 Resp: 395

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

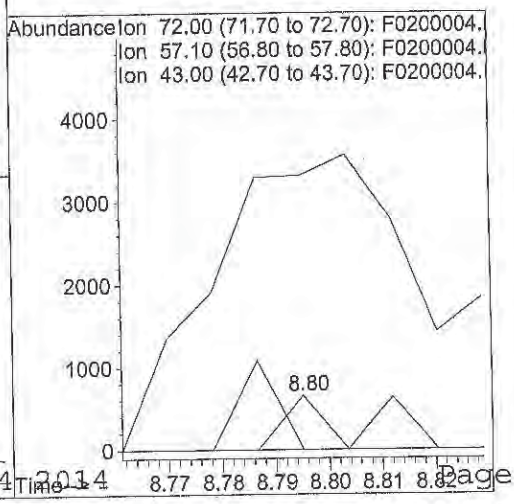


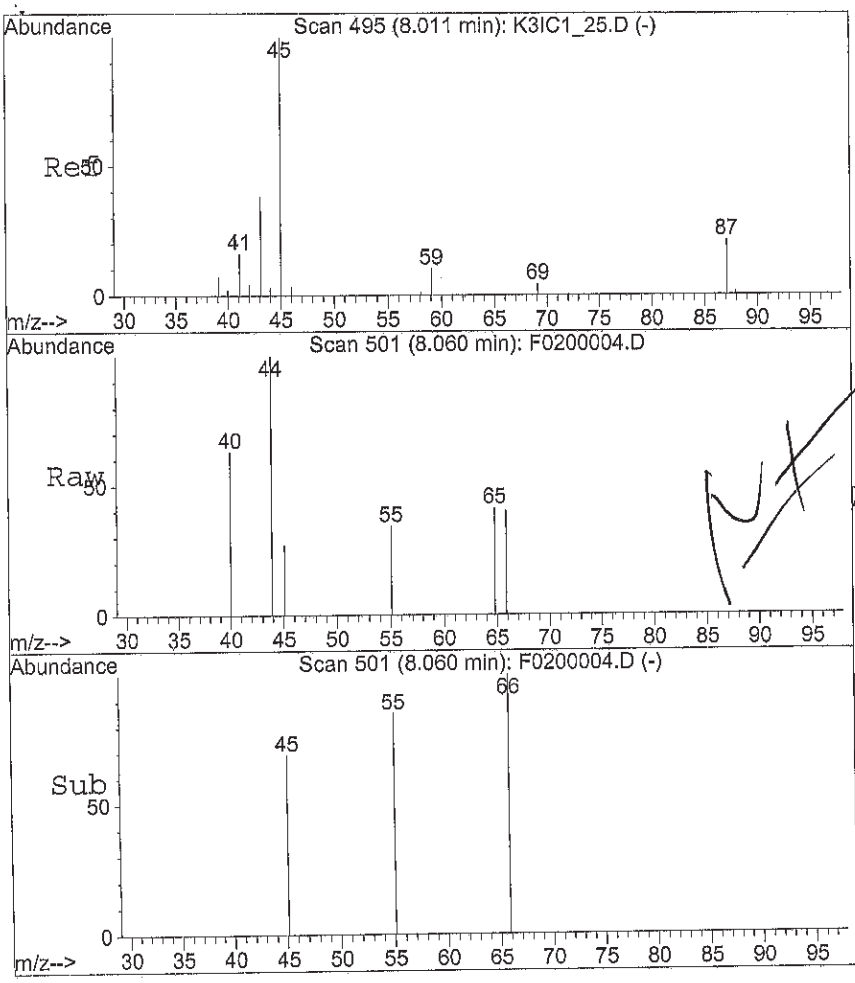


#21
(MEK) 2-Butanone
Concen: 0.92 ug/L
RT: 8.80 min Scan# 588
Delta R.T. 0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 72 Resp: 330

Ion	Ratio	Lower	Upper
72	100		
57	97.3	17.5	26.3#
43	3076.7	314.2	471.2#

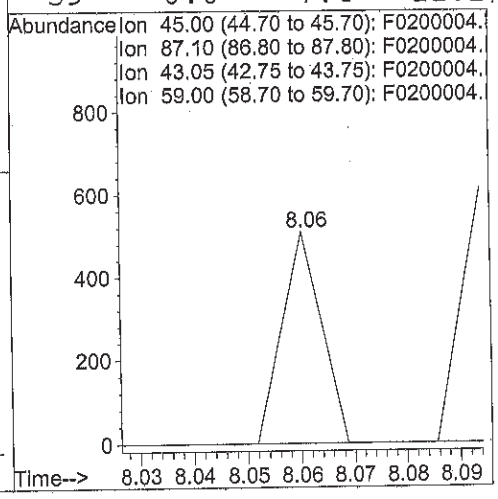


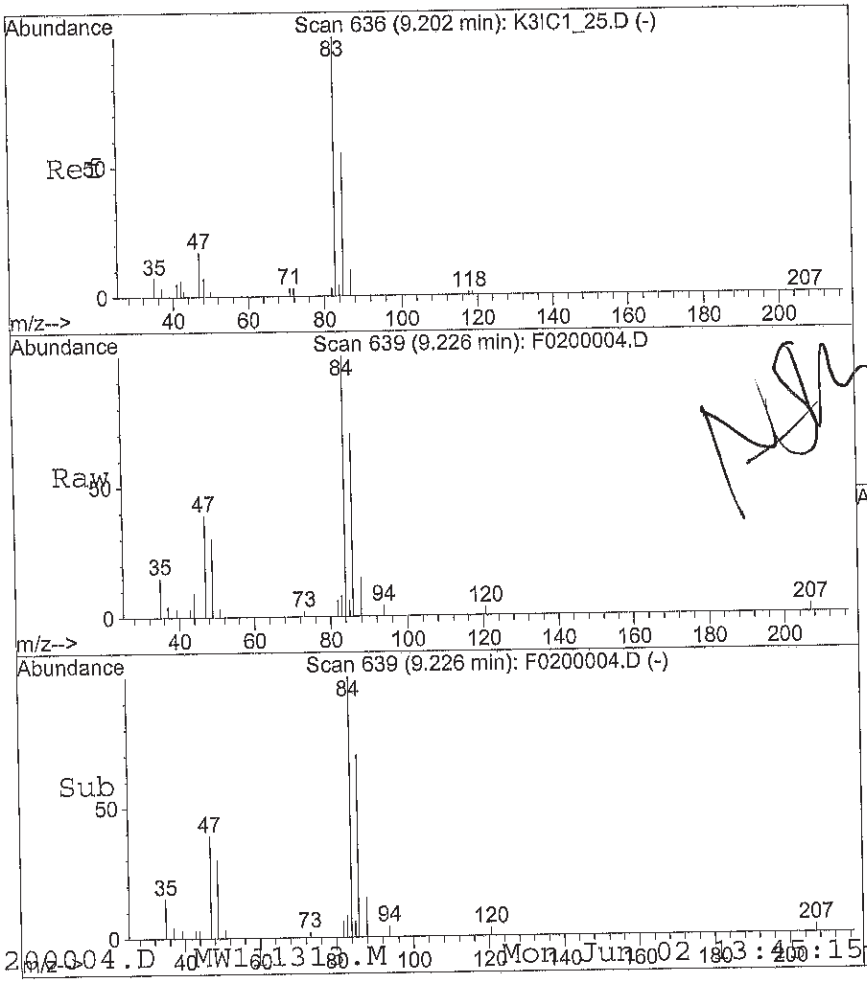


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 8.06 min Scan# 501
Delta R.T. 0.05 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 45 Resp: 258

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

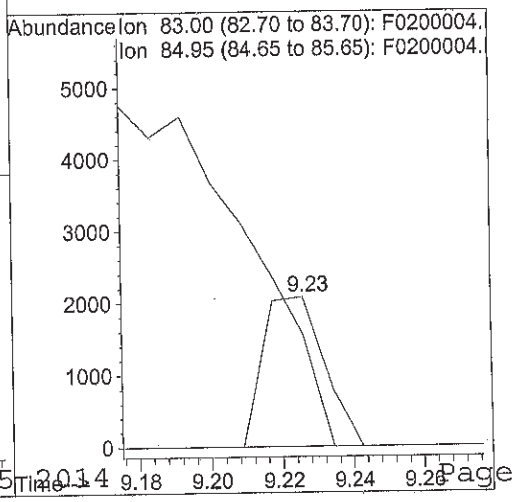


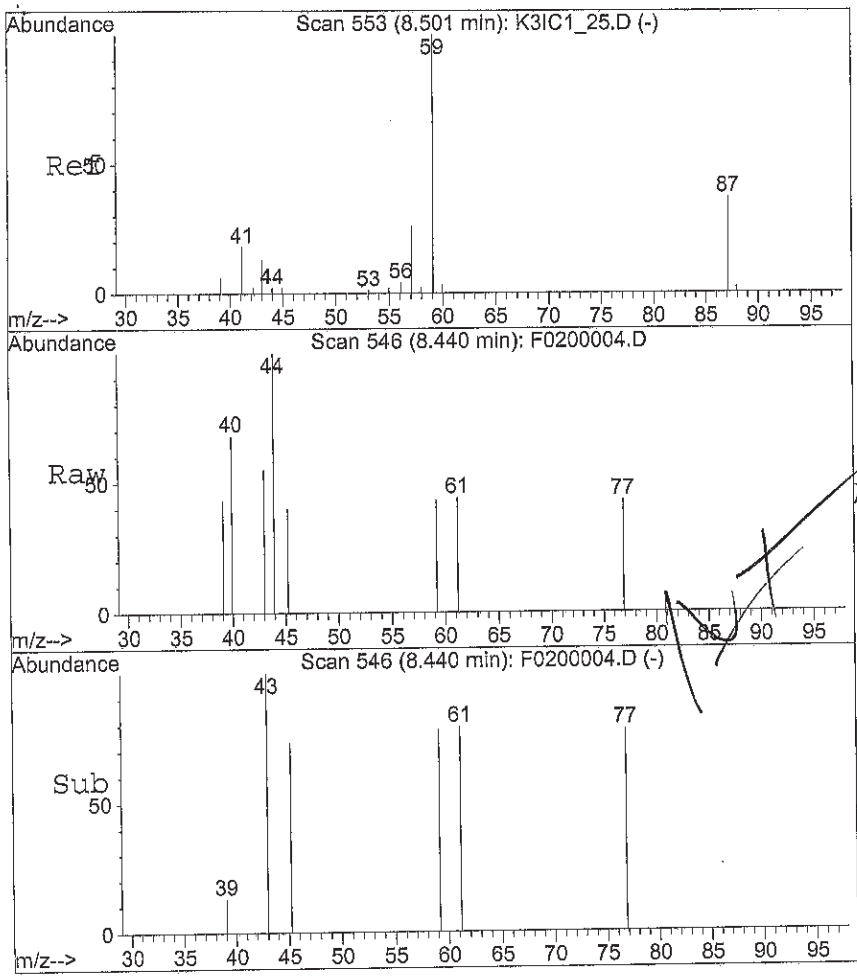


#24
Chloroform
Concen: 0.37 ug/L
RT: 9.23 min Scan# 639
Delta R.T. 0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 83 Resp: 2471

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

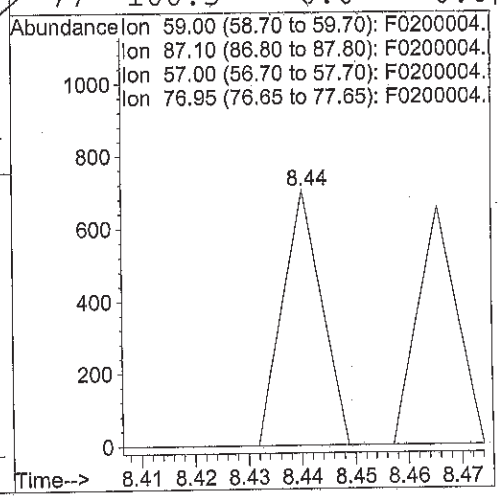


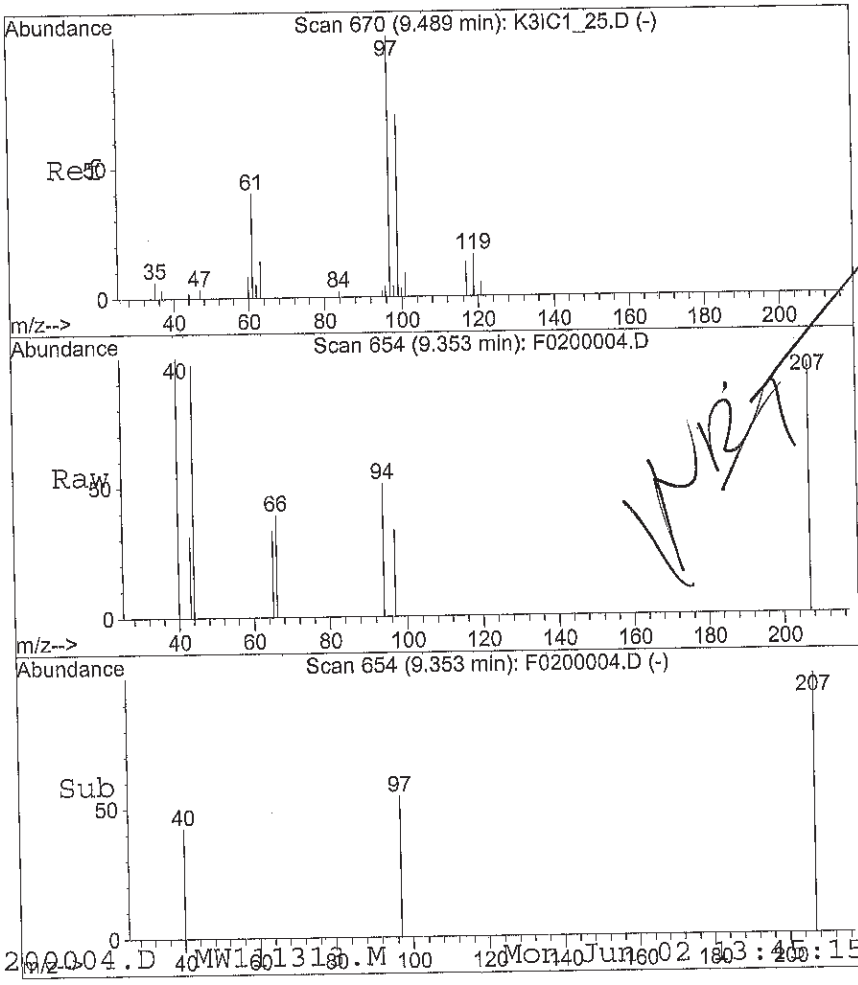


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.04 ug/L
RT: 8.44 min Scan# 546
Delta R.T. -0.06 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 59 Resp: 356

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	100.3	0.0	0.0#

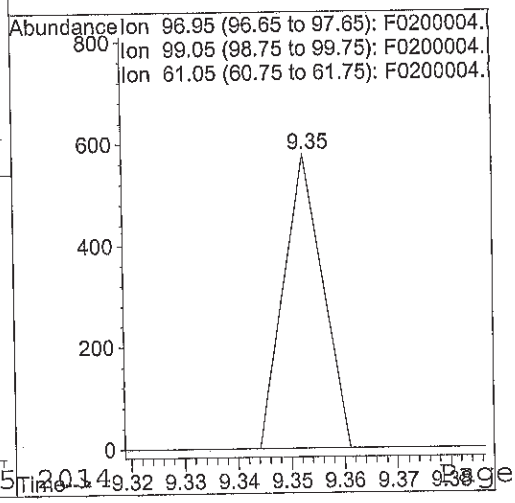


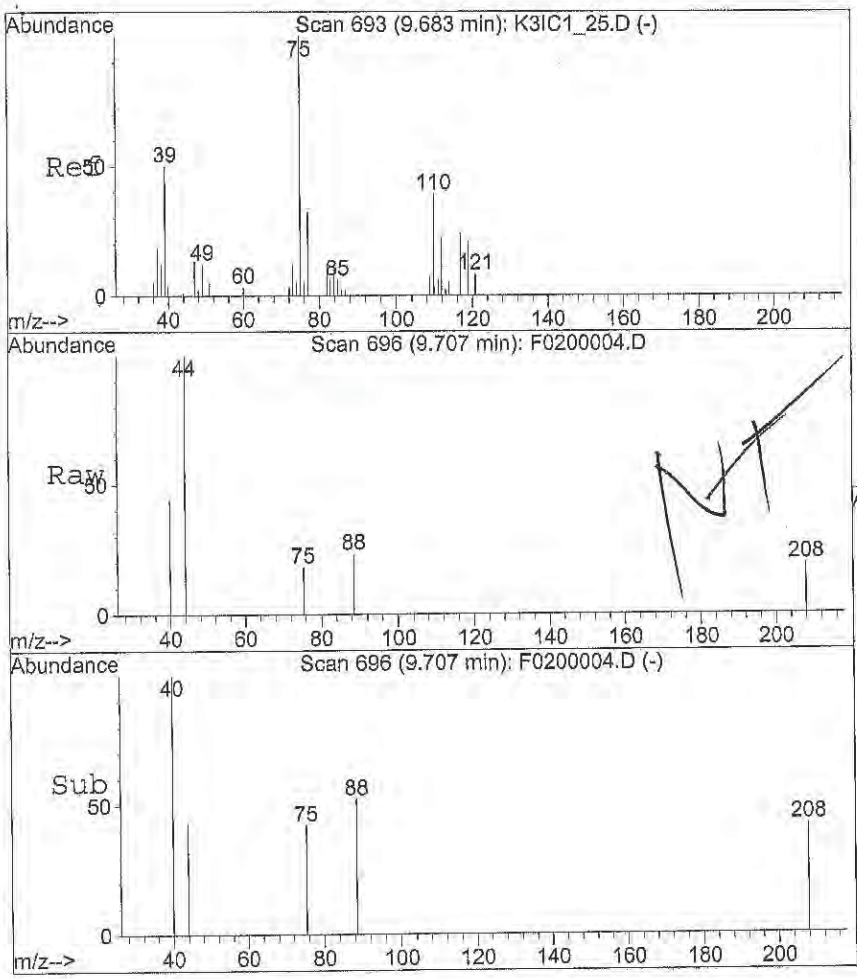


#26
1,1,1-Trichloroethane
Concen: 0.06 ug/L
RT: 9.35 min Scan# 654
Delta R.T. -0.14 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 97 Resp: 293

Ion	Ratio	Lower	Upper
97	100		
99	0.0	54.7	82.1#
61	0.0	32.3	48.5#

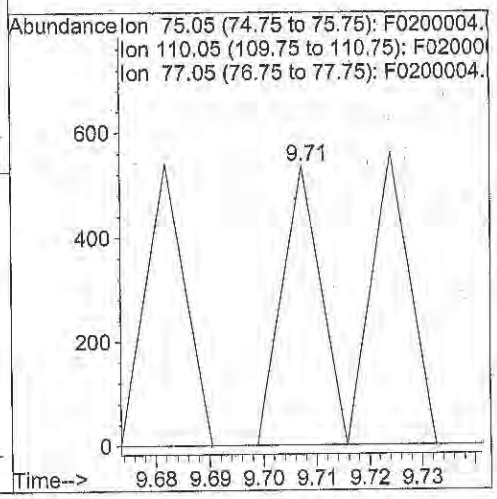


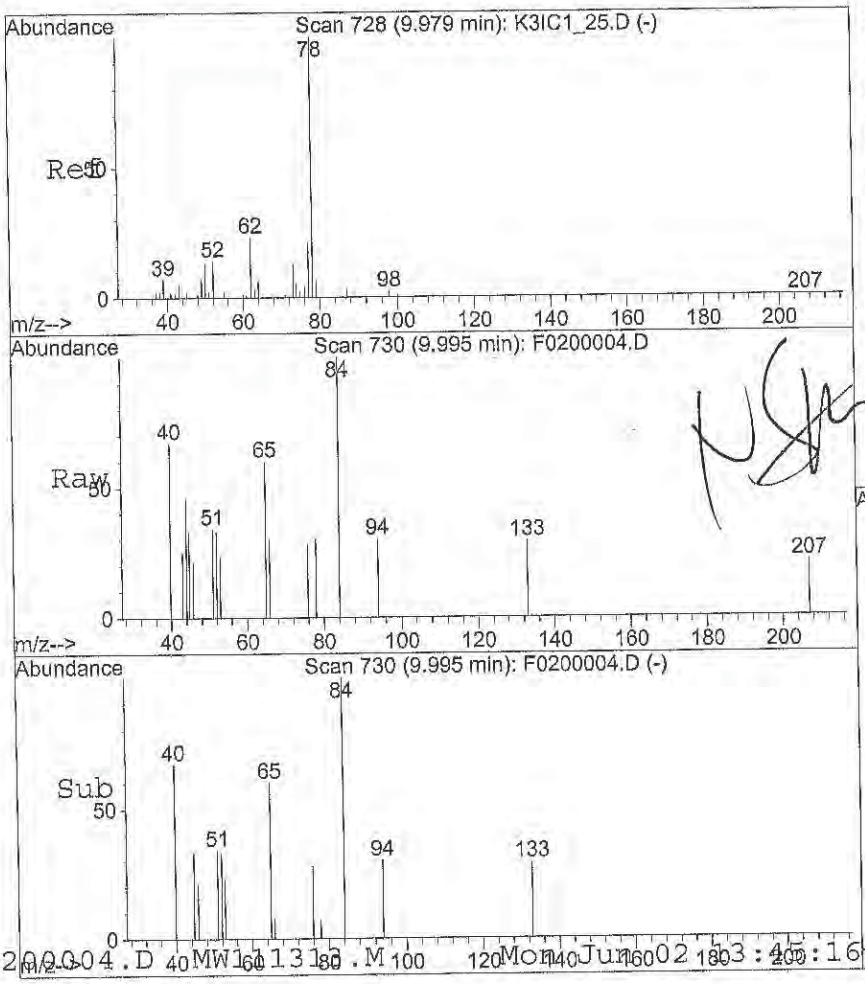


#29
1,1-Dichloropropene
Concen: 0.06 ug/L
RT: 9.71 min Scan# 696
Delta R.T. 0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 75 Resp: 272

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	104.4	25.0	37.4#

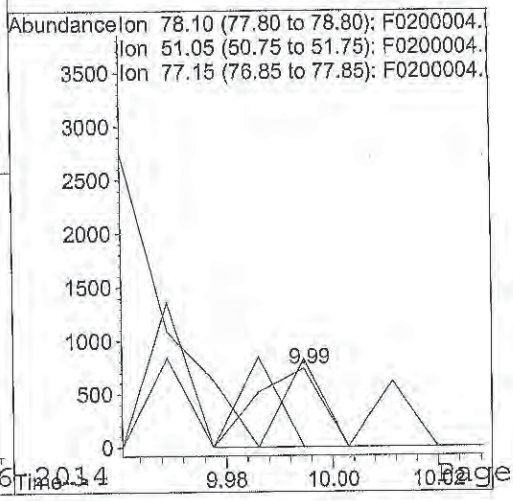


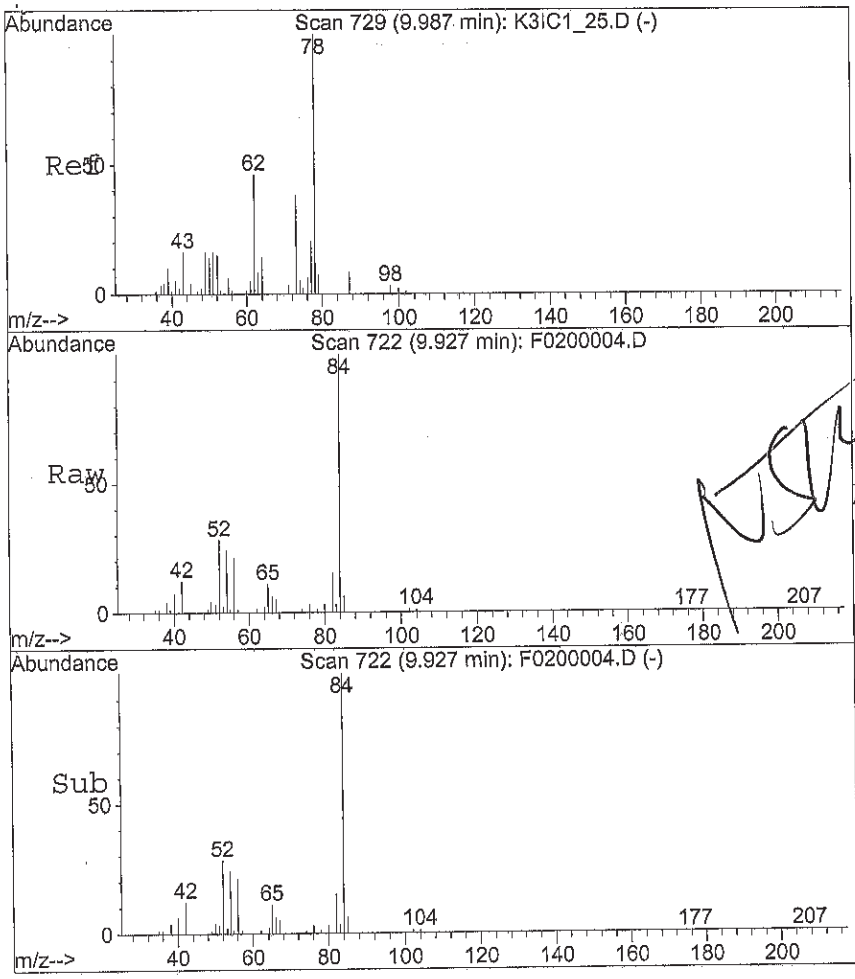


#31
Benzene
Concen: 0.05 ug/L
RT: 9.99 min Scan# 730
Delta R.T. 0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 78 Resp: 633

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

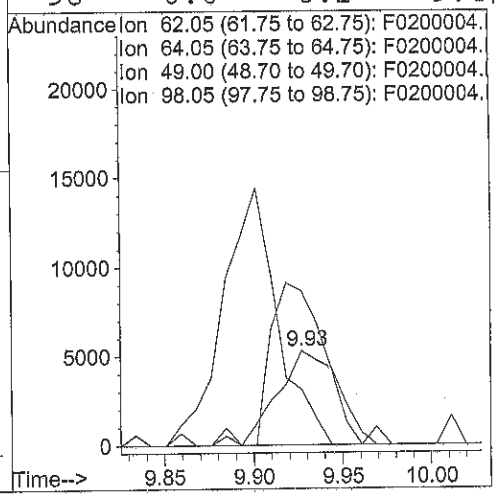


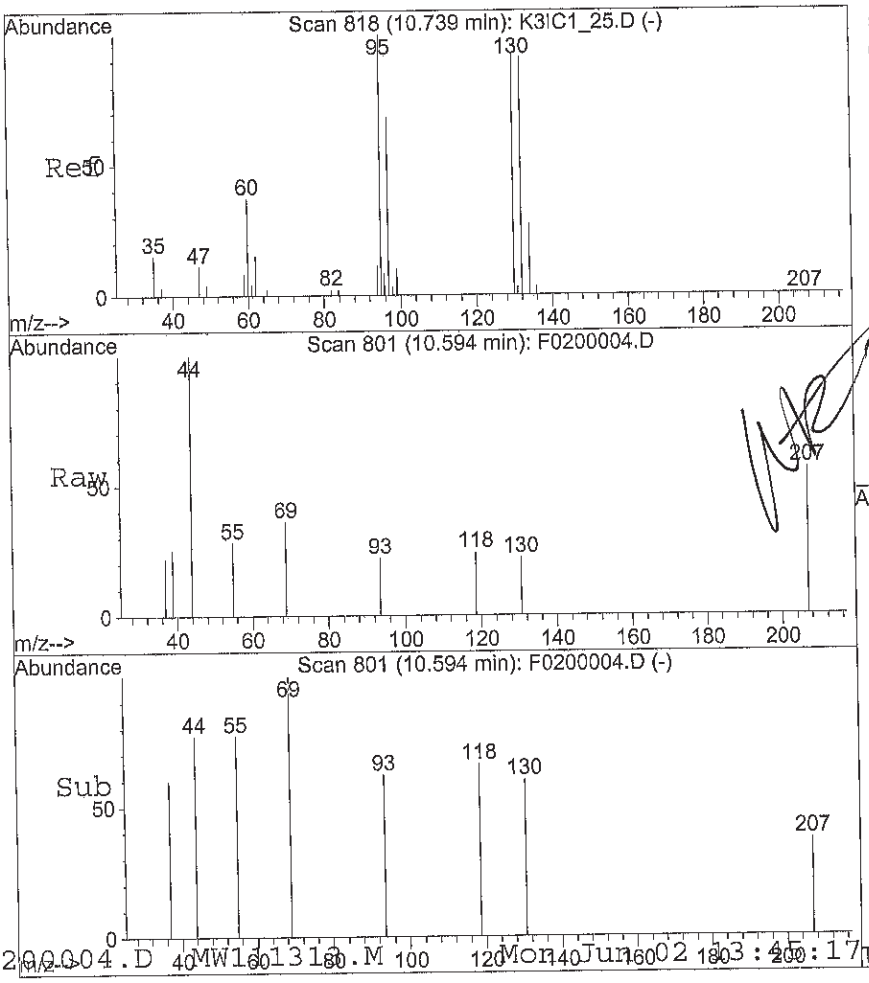


#32
1,2-Dichloroethane
Concen: 2.96 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 62 Resp: 12568

Ion	Ratio	Lower	Upper
62	100		
64	155.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

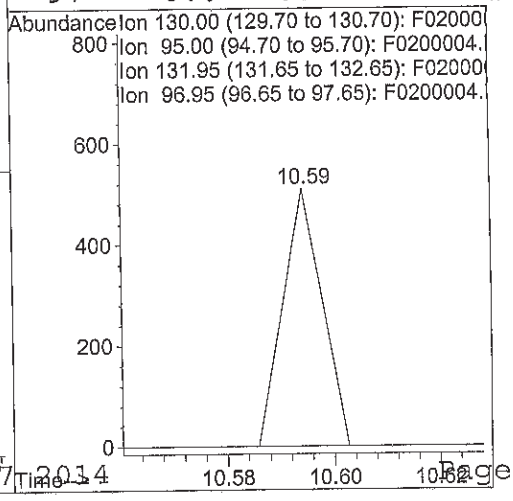


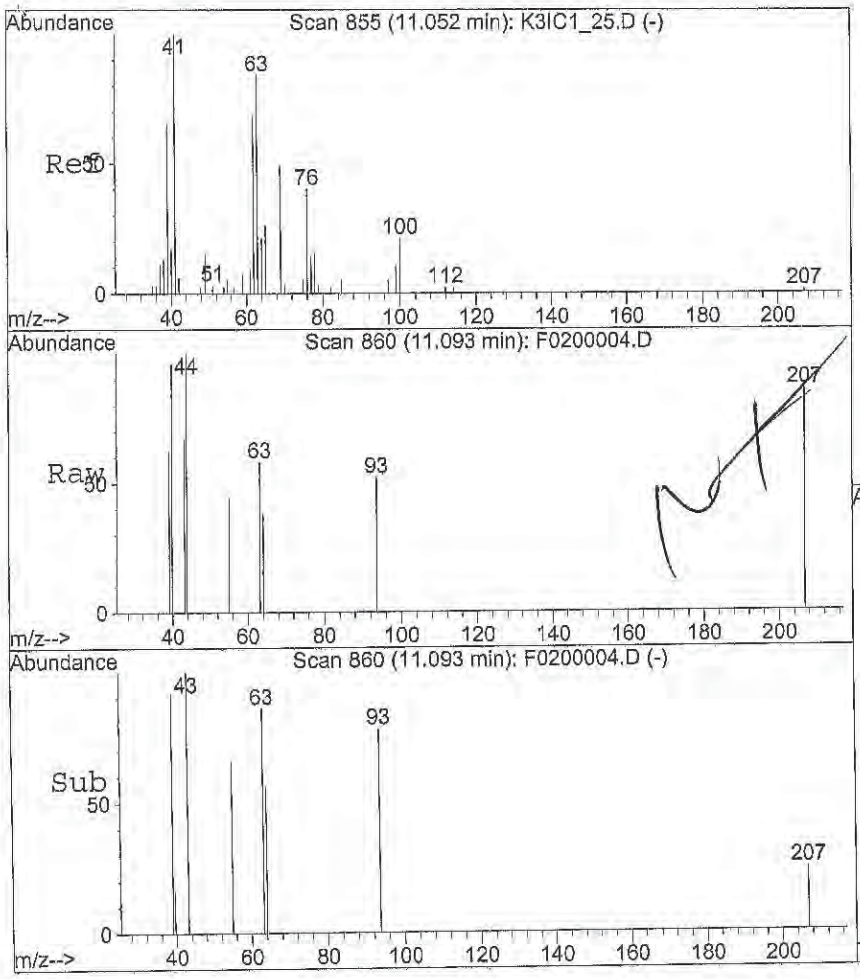


#33
Trichloroethene
Concen: 0.07 ug/L
RT: 10.59 min Scan# 801
Delta R.T. -0.14 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:130 Resp: 259

Ion	Ratio	Lower	Upper
130	100		
95	0.0	82.8	124.2#
132	0.0	77.4	116.2#
97	0.0	53.8	80.6#

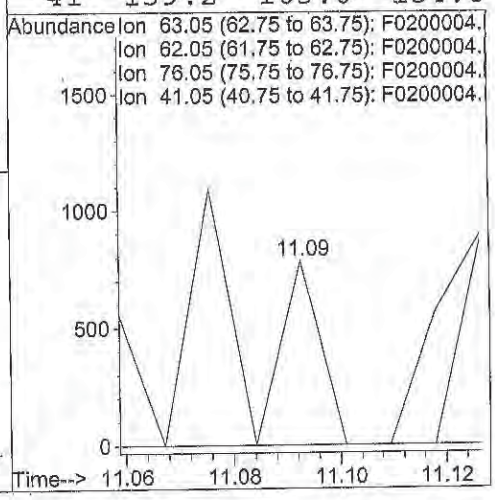


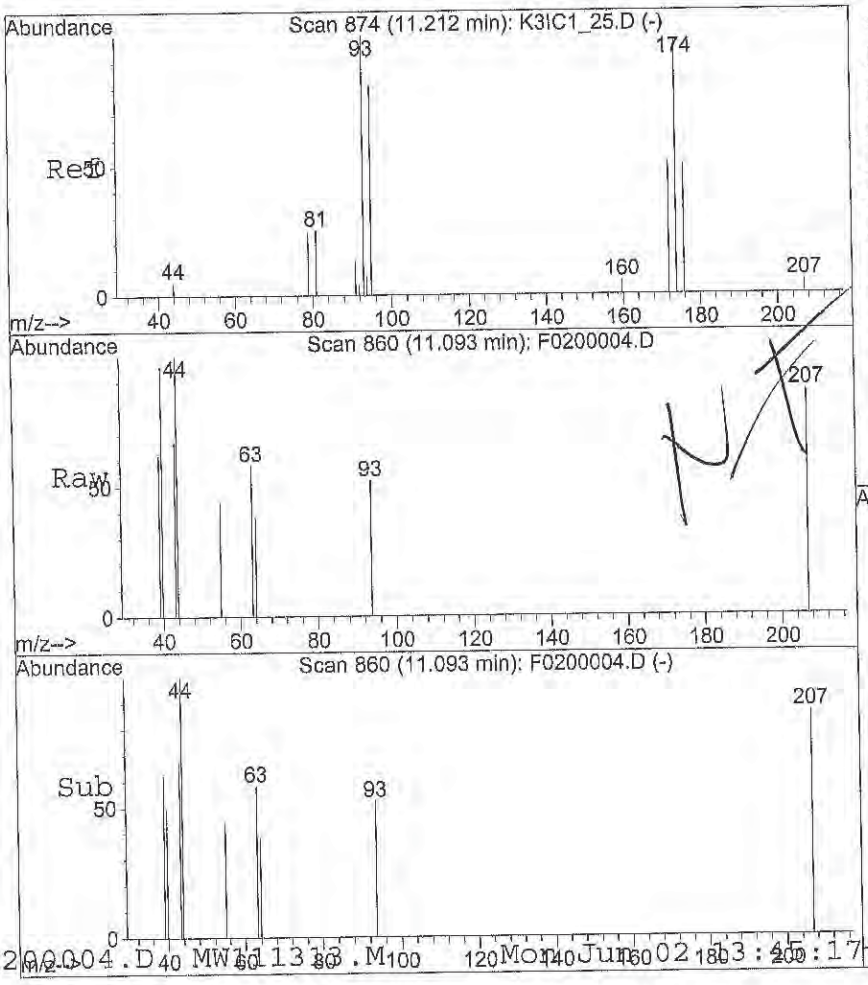


#34
1,2-Dichloropropane
Concen: 0.14 ug/L
RT: 11.09 min Scan# 860
Delta R.T. 0.04 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 63 Resp: 398

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	139.2	103.0	154.6

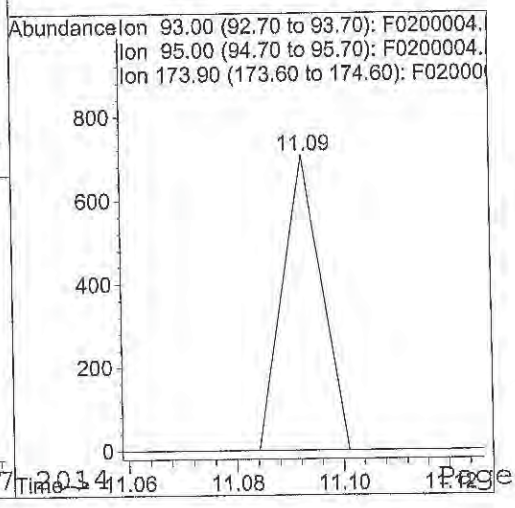


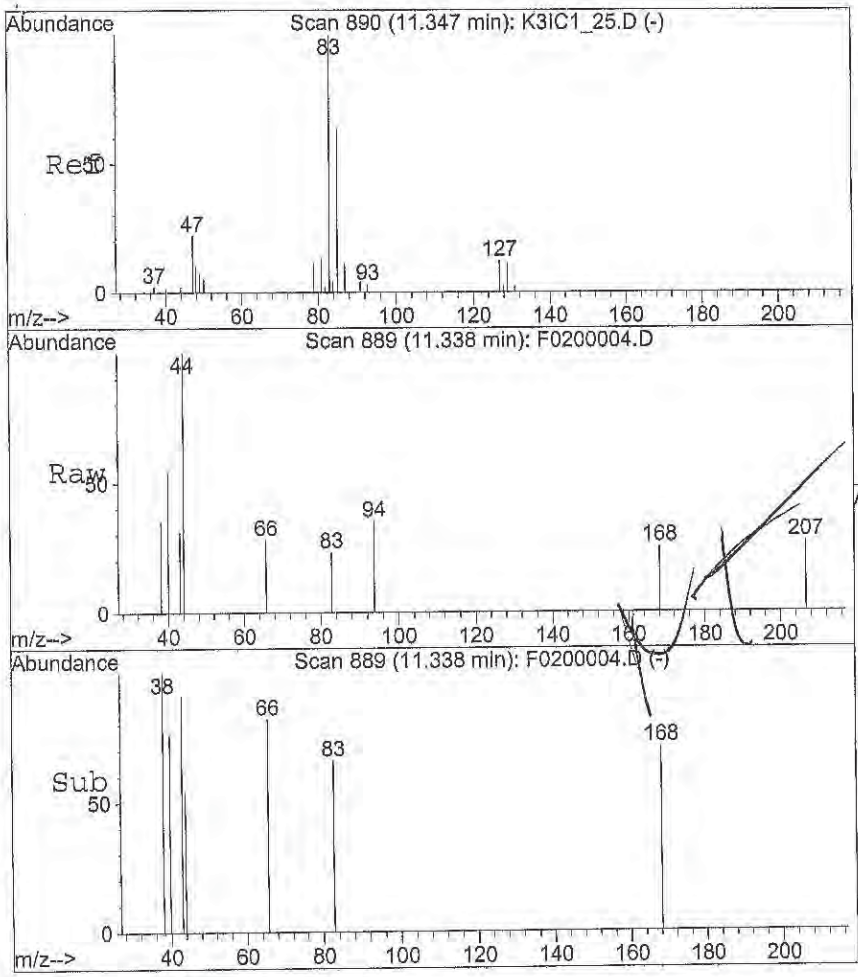


#35
Dibromomethane
Concen: 0.16 ug/L
RT: 11.09 min Scan# 860
Delta R.T. -0.12 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 93 Resp: 358

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

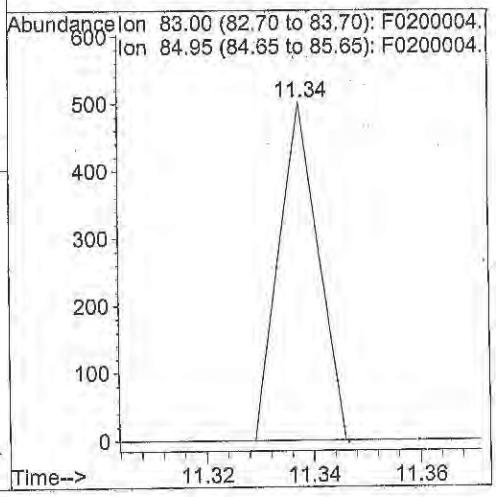


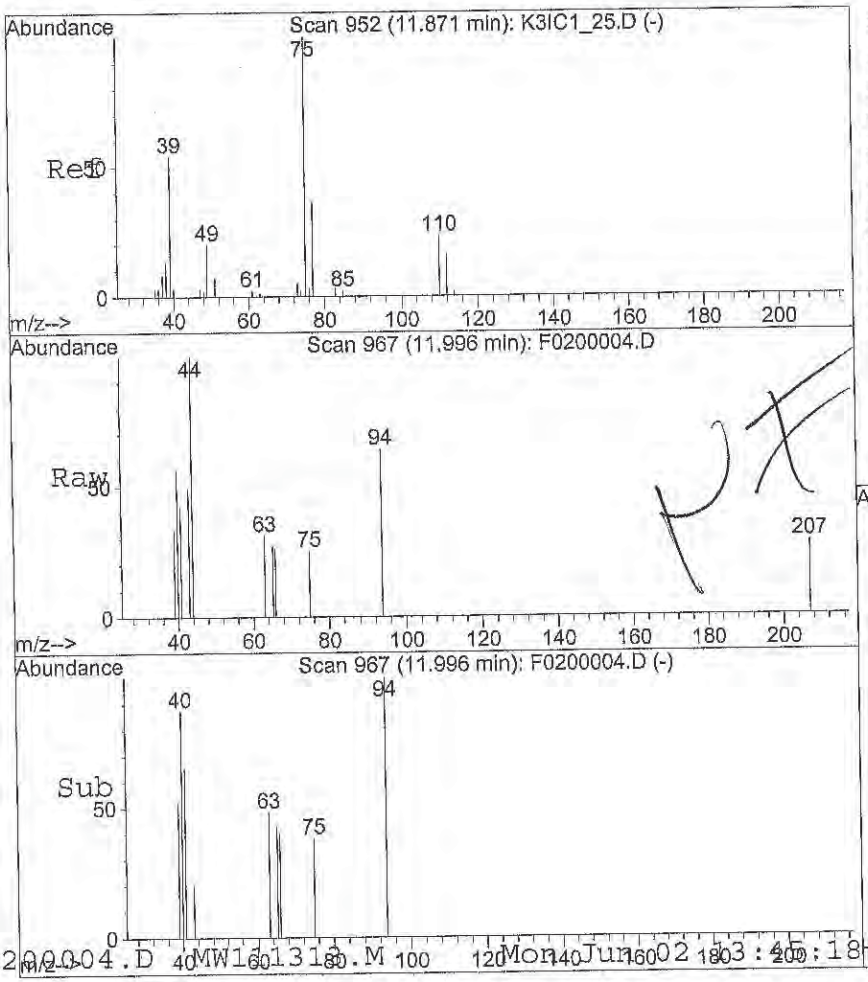


#36
Bromodichloromethane
Concen: 0.06 ug/L
RT: 11.34 min Scan# 889
Delta R.T. -0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 83 Resp: 254

Ion	Ratio	Lower	Upper
83	100		
85	0.0	48.2	72.2#

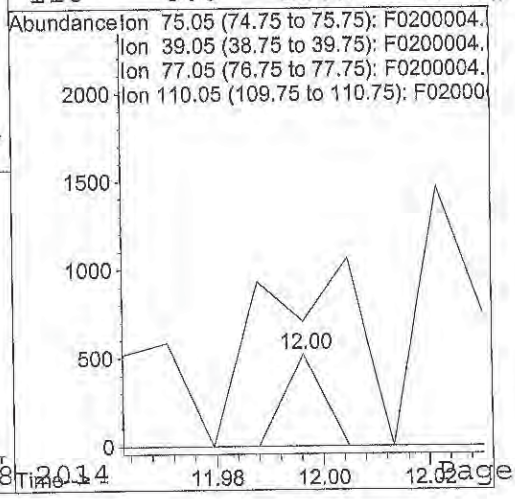


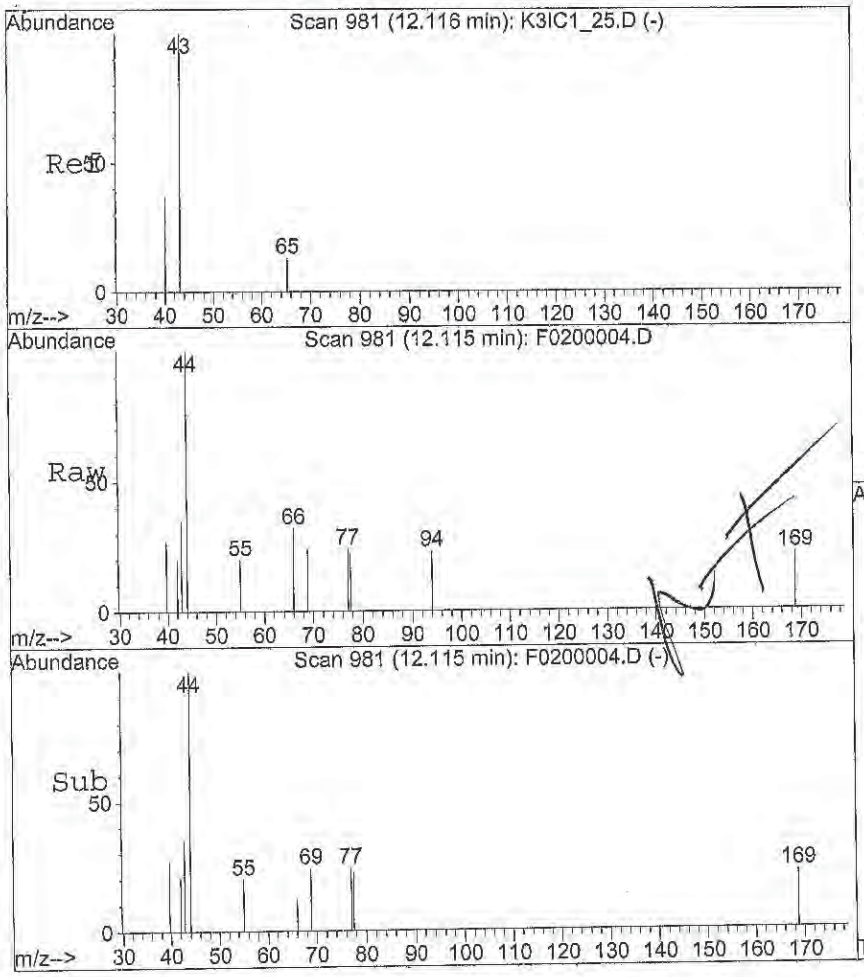


#37
cis-1,3-Dichloropropene
Concen: 0.05 ug/L
RT: 12.00 min Scan# 967
Delta R.T. 0.13 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 75 Resp: 264

Ion	Ratio	Lower	Upper
75	100		
39	517.8	40.7	61.1#
77	0.0	28.8	43.2#
110	0.0	18.1	27.1#

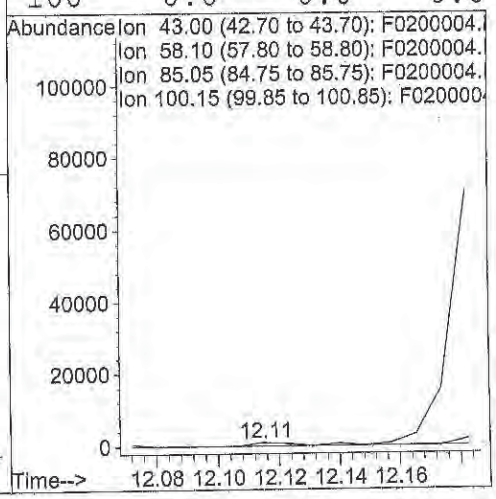


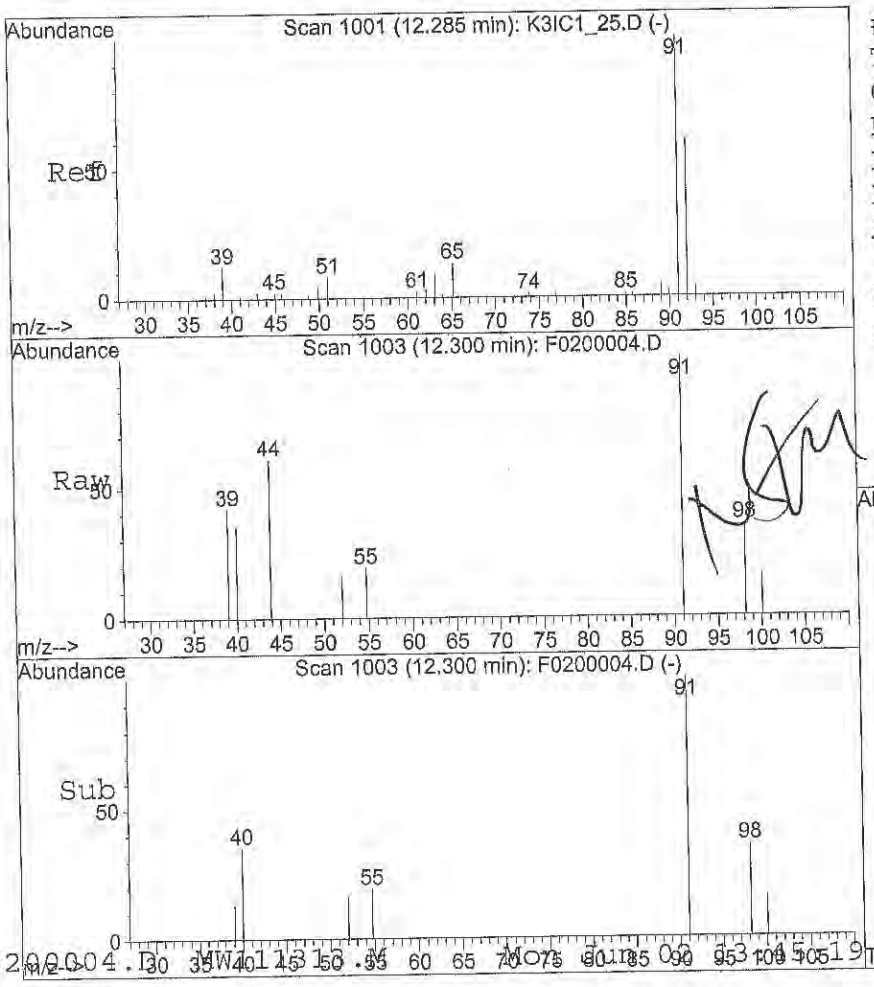


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.45 ug/L
RT: 12.11 min Scan# 981
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 43 Resp: 1090

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

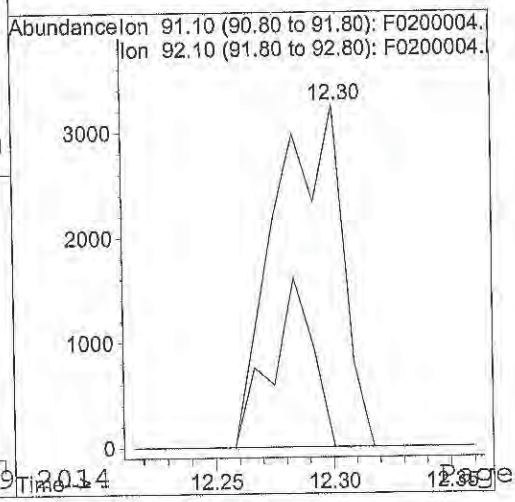


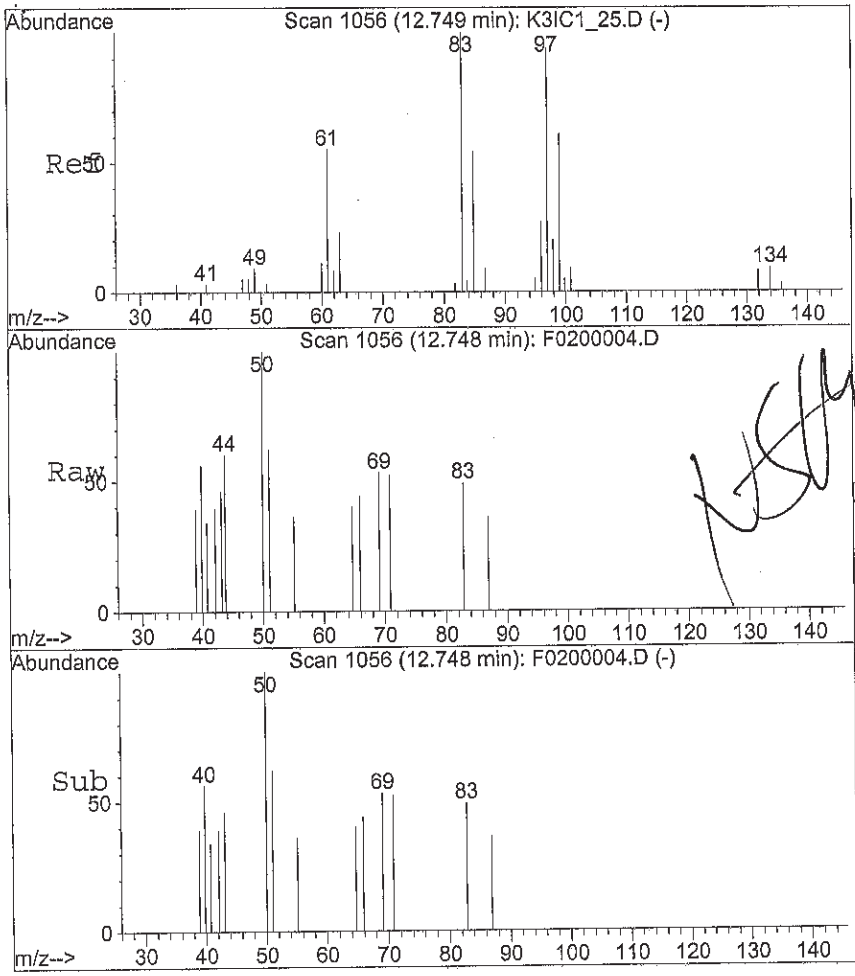


#41
Toluene
Concen: 0.39 ug/L
RT: 12.30 min Scan# 1003
Delta R.T. 0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 91 Resp: 6415

Ion	Ratio	Lower	Upper
91	100		
92	30.7	47.4	71.0#

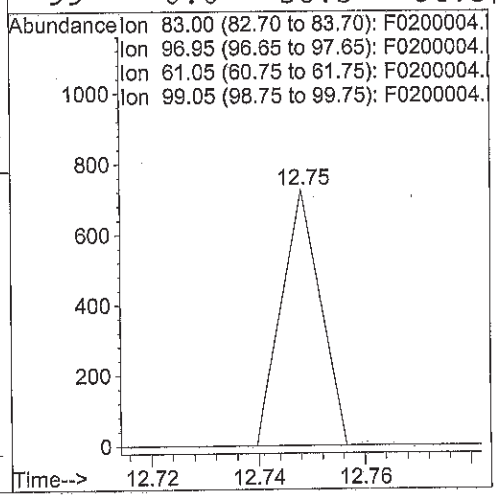


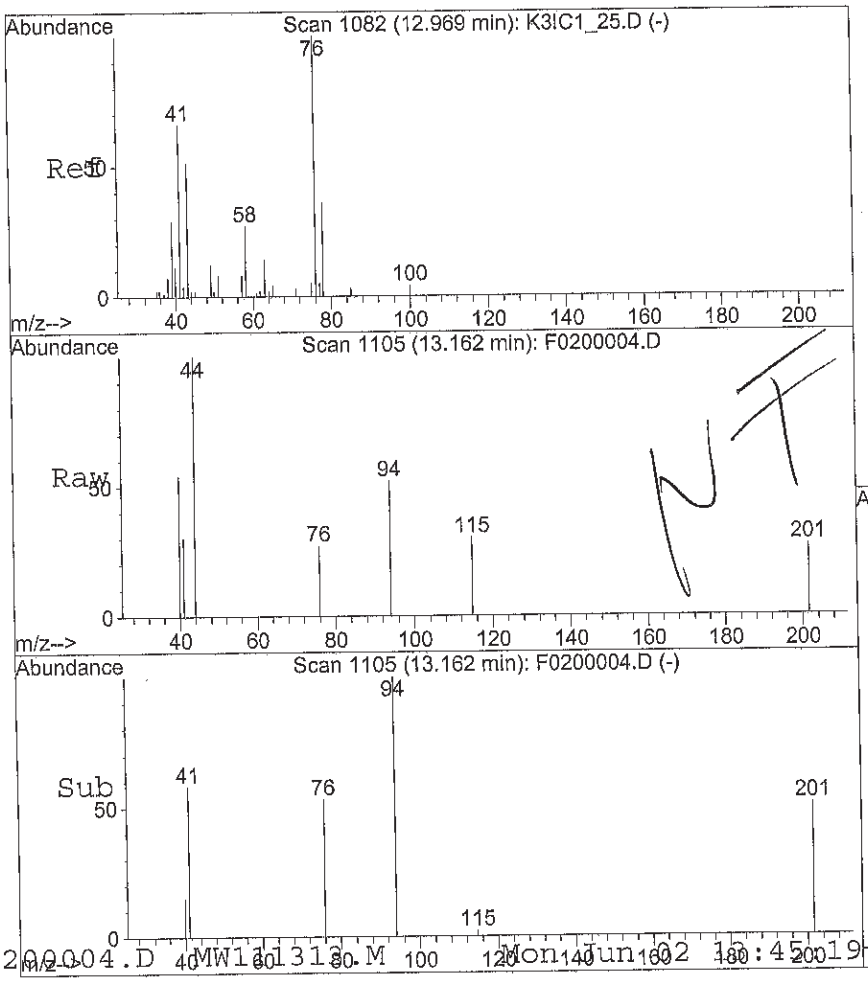


#43
1,1,2-Trichloroethane
Concen: 0.12 ug/L
RT: 12.75 min Scan# 1056
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 83 Resp: 368

Ion	Ratio	Lower	Upper
83	100		
97	0.0	79.4	119.0#
61	0.0	47.4	71.2#
99	0.0	56.3	84.5#

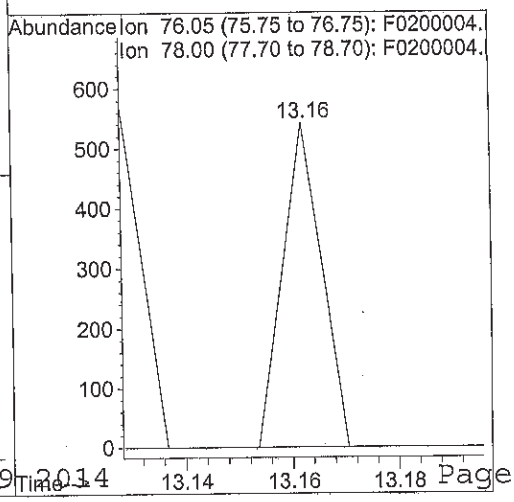


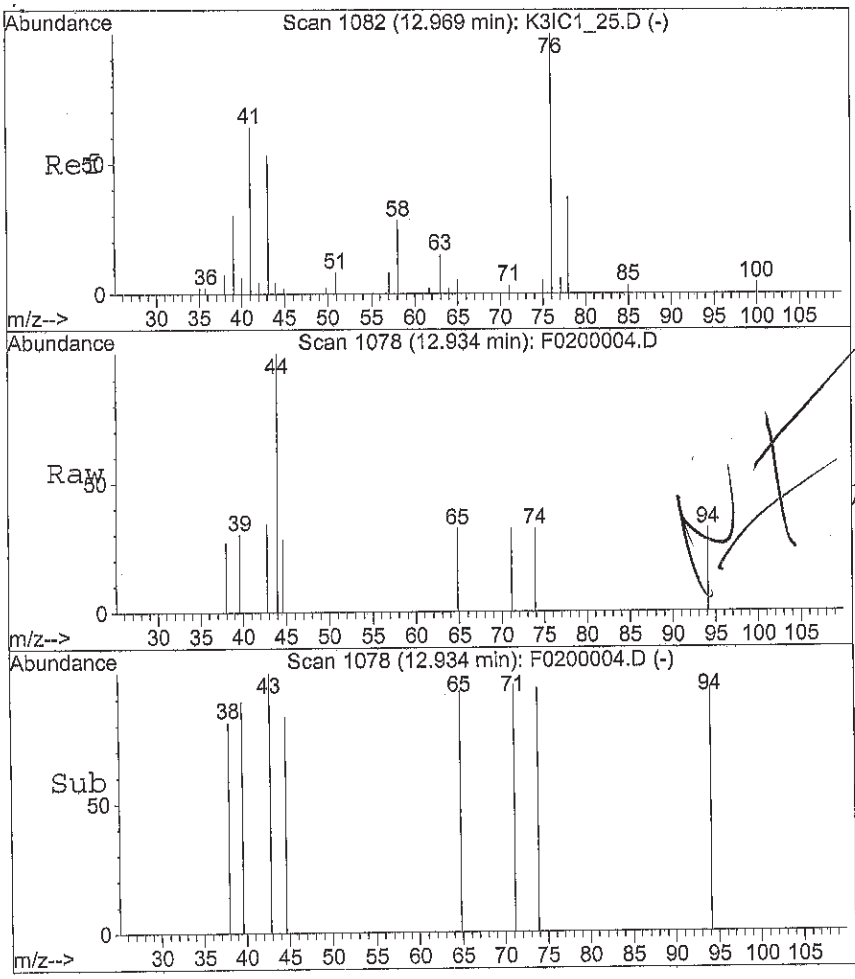


#45
1,3-Dichloropropane
Concen: 0.05 ug/L
RT: 13.16 min Scan# 1105
Delta R.T. 0.19 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 76 Resp: 275

Ion	Ratio	Lower	Upper
76	100		
78	0.0	26.9	40.3#

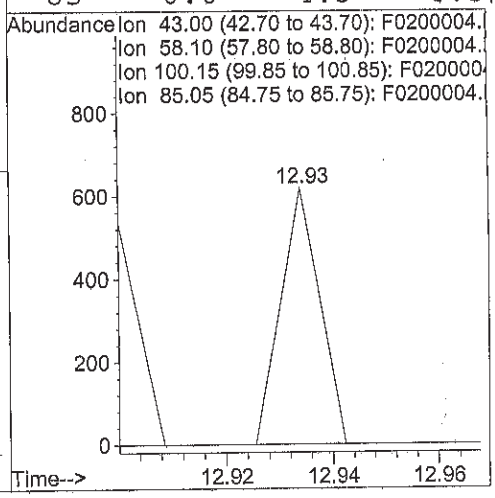


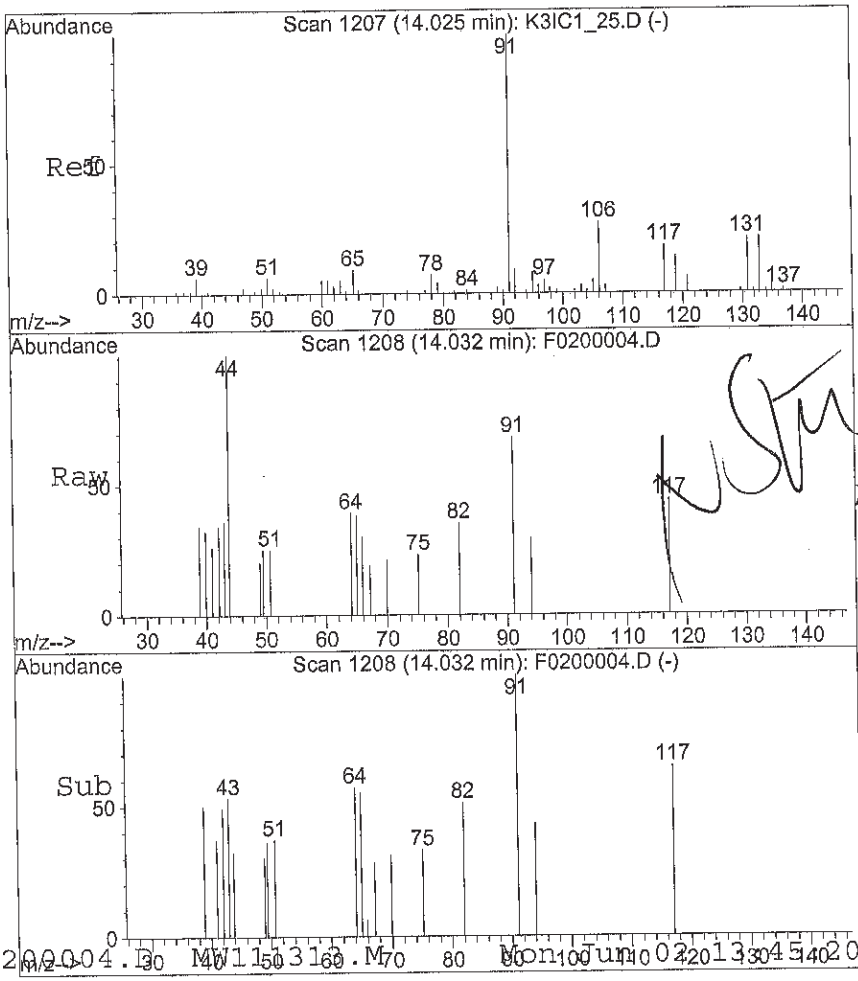


#46
2-Hexanone
Concen: 0.12 ug/L
RT: 12.93 min Scan# 1078
Delta R.T. -0.03 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 43 Resp: 313

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

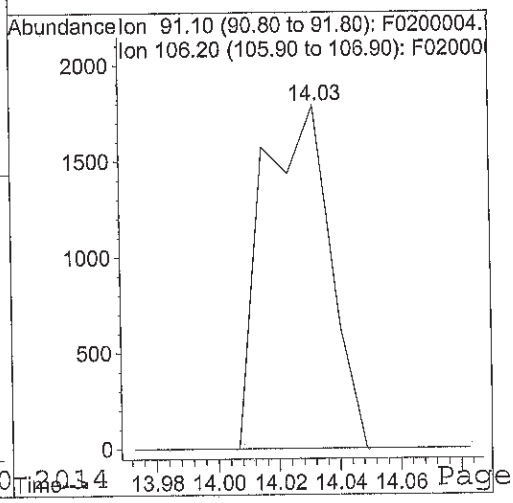


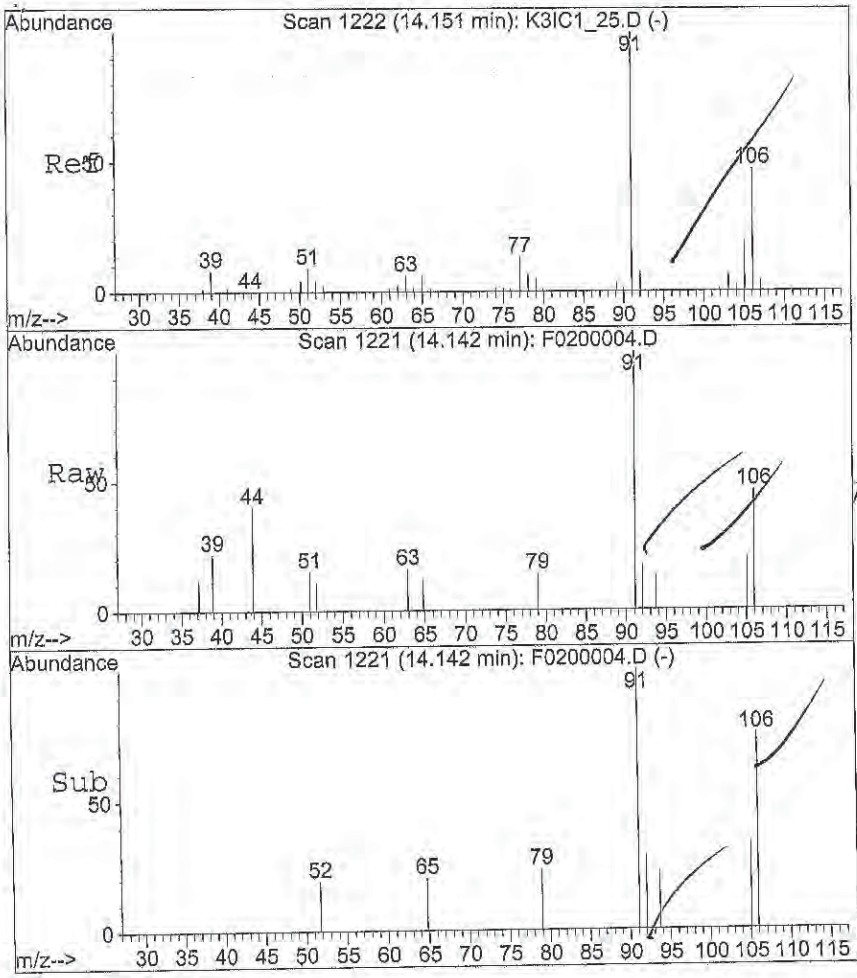


#51
Ethylbenzene
Concen: 0.15 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 91 Resp: 2741

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

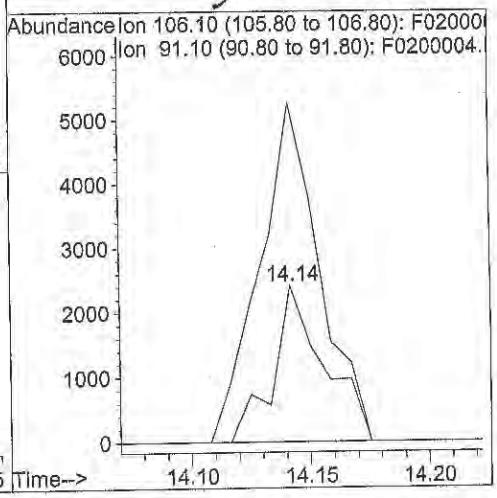


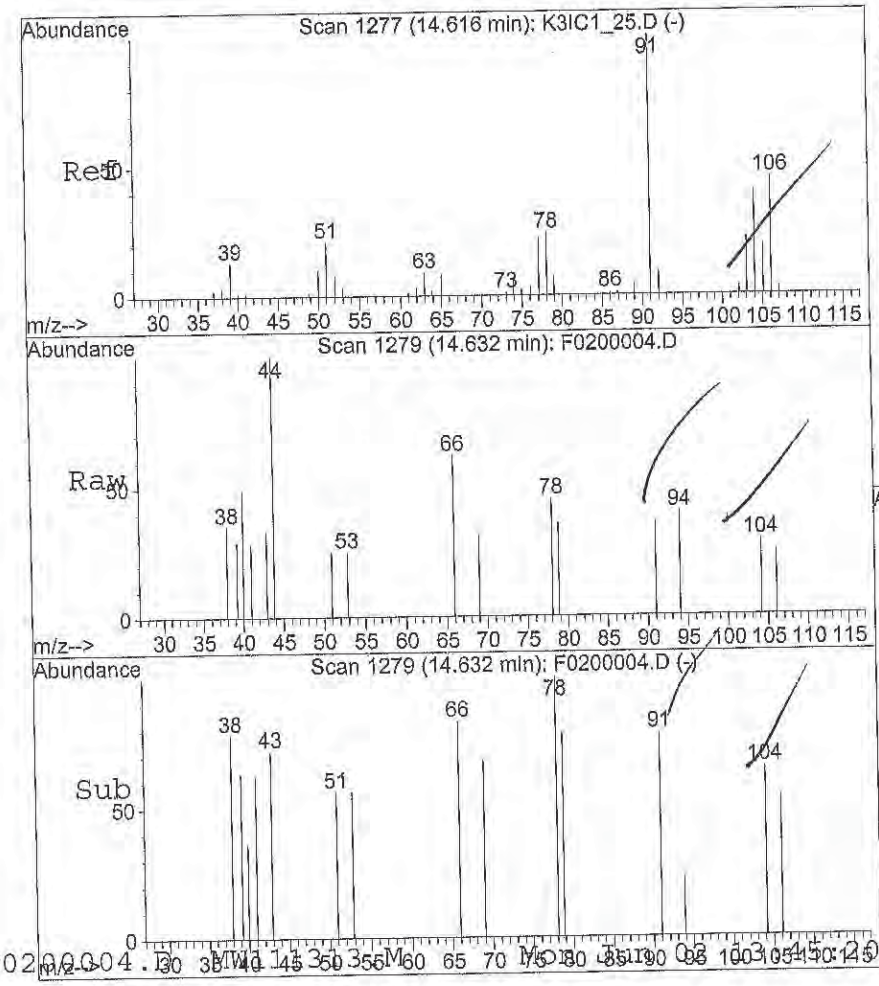


#52
m,p-Xylenes
Concen: 0.54 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:106 Resp: 3584

Ion	Ratio	Lower	Upper
106	100		
91	254.9	177.1	265.7

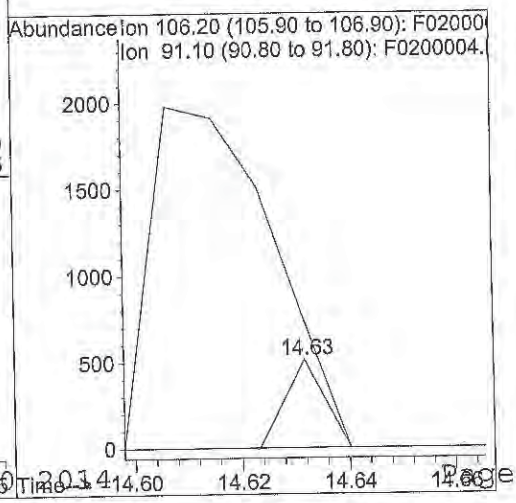


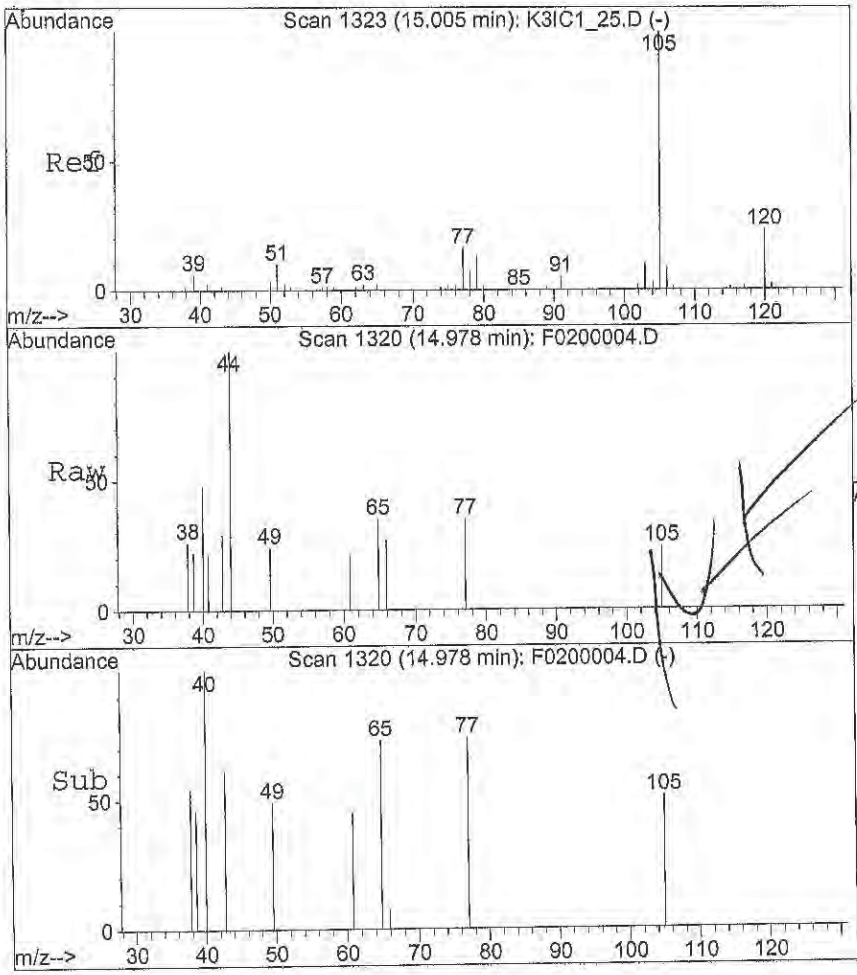


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.63 min Scan# 1279
Delta R.T. 0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:106 Resp: 259

Ion	Ratio	Lower	Upper
106	100		
91	0.0	179.0	268.6#

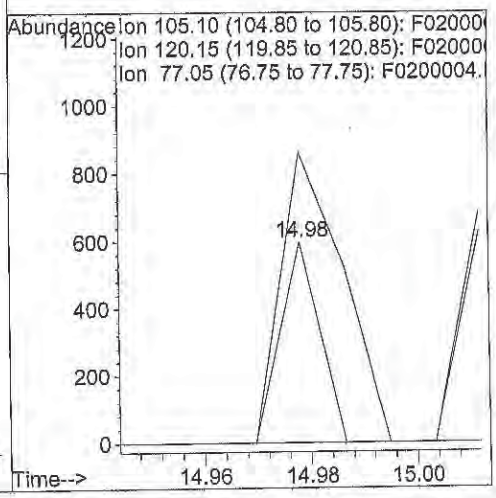


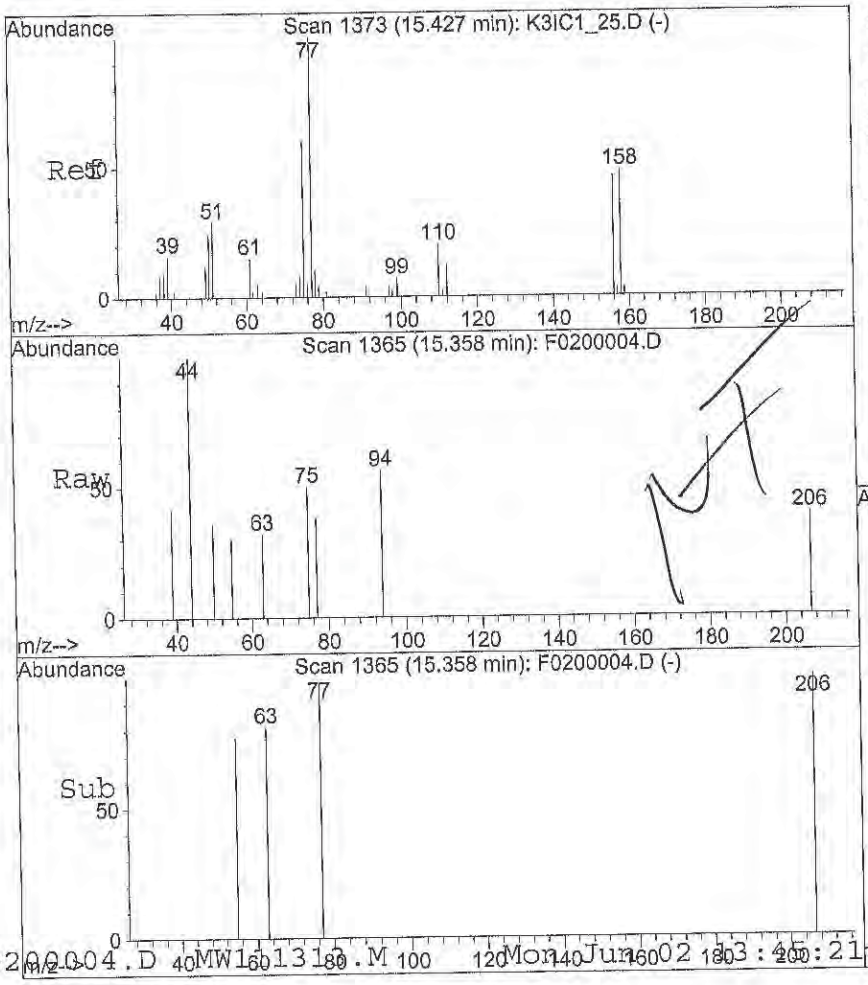


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 14.98 min Scan# 1320
Delta R.T. -0.03 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:105 Resp: 303

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	231.0	13.1	19.7#

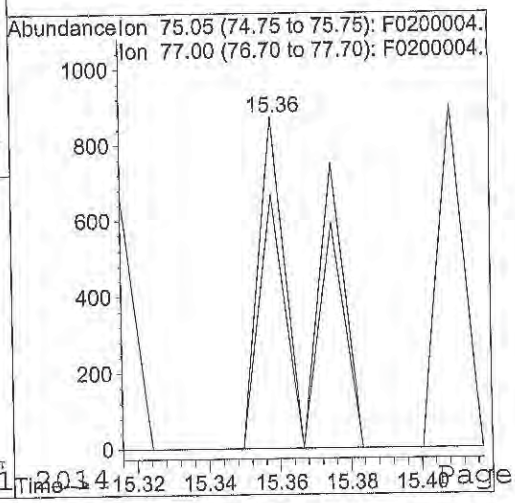


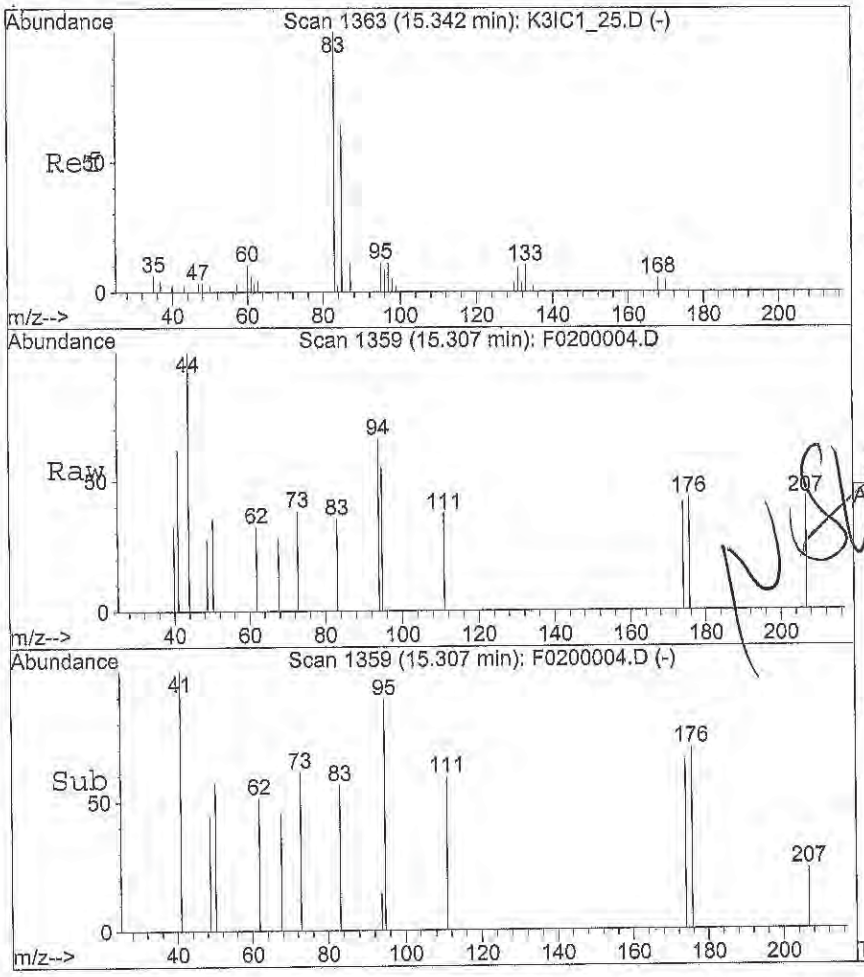


#57
1,2,3-Trichloropropane
Concen: 0.17 ug/L
RT: 15.36 min Scan# 1365
Delta R.T. -0.07 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 75 Resp: 821

Ion	Ratio	Lower	Upper
75	100		
77	77.5	31.2	46.8#

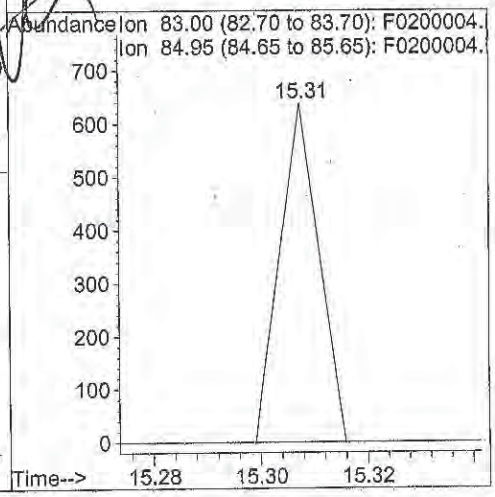


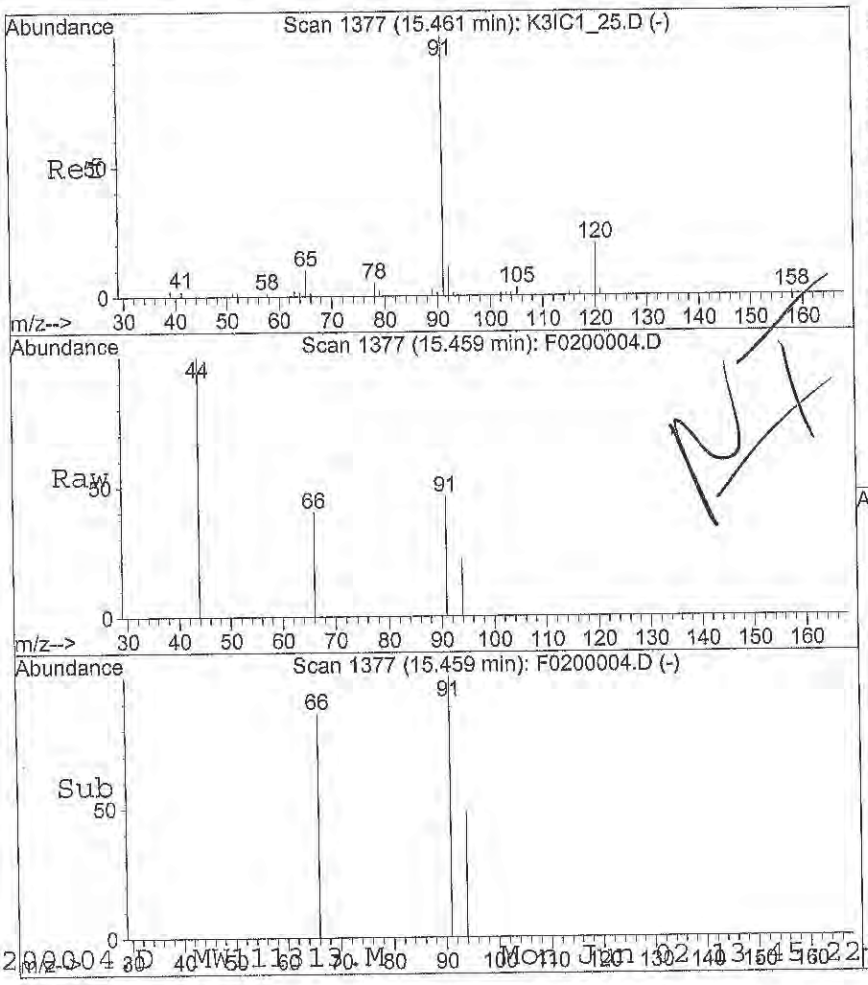


#60
1,1,2,2-Tetrachloroethane
Concen: 0.07 ug/L
RT: 15.31 min Scan# 1359
Delta R.T. -0.03 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 83 Resp: 323

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

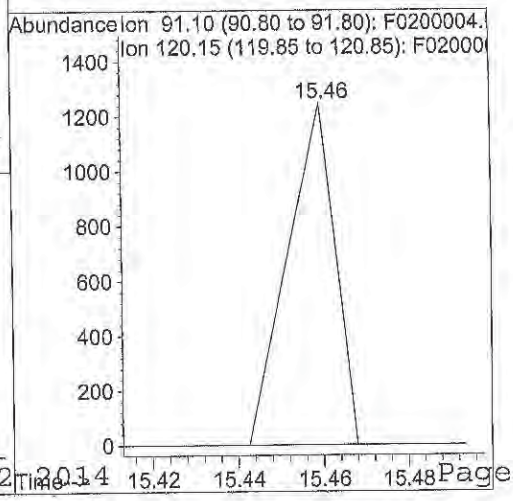


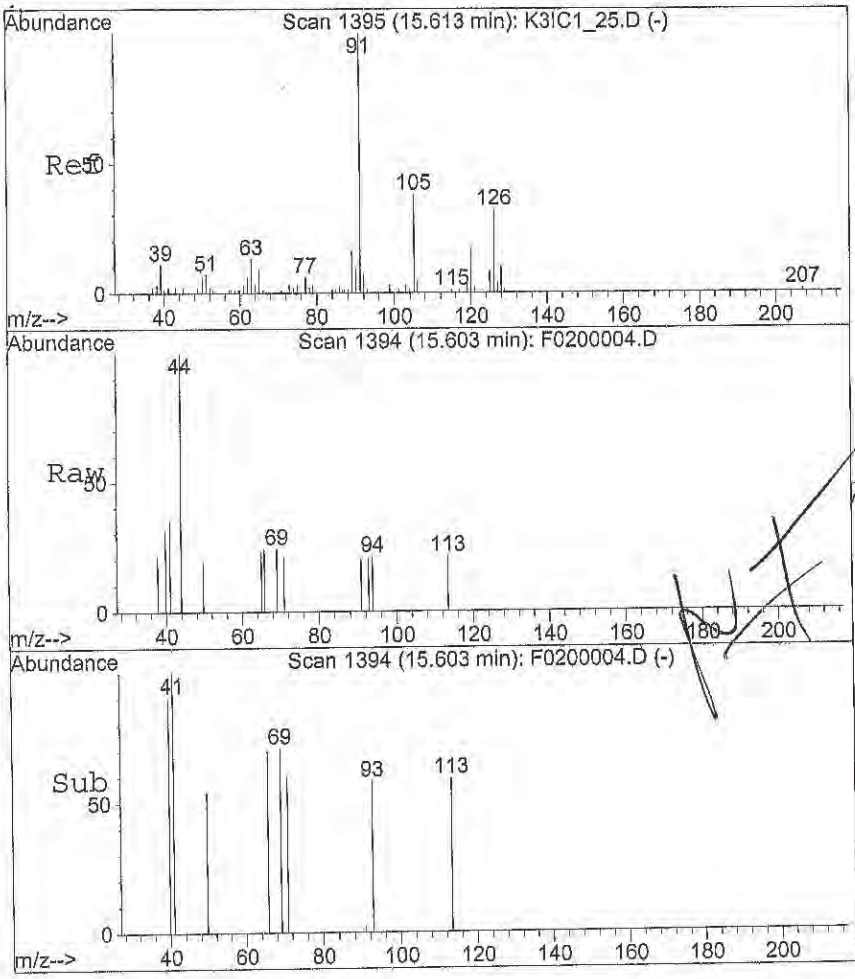


#62
n-Propylbenzene
Concen: 0.04 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 91 Resp: 958

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

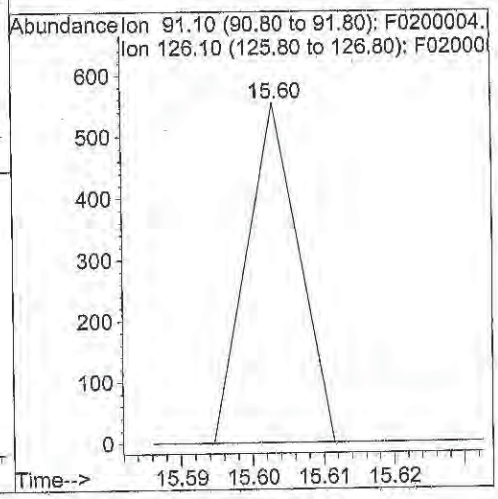


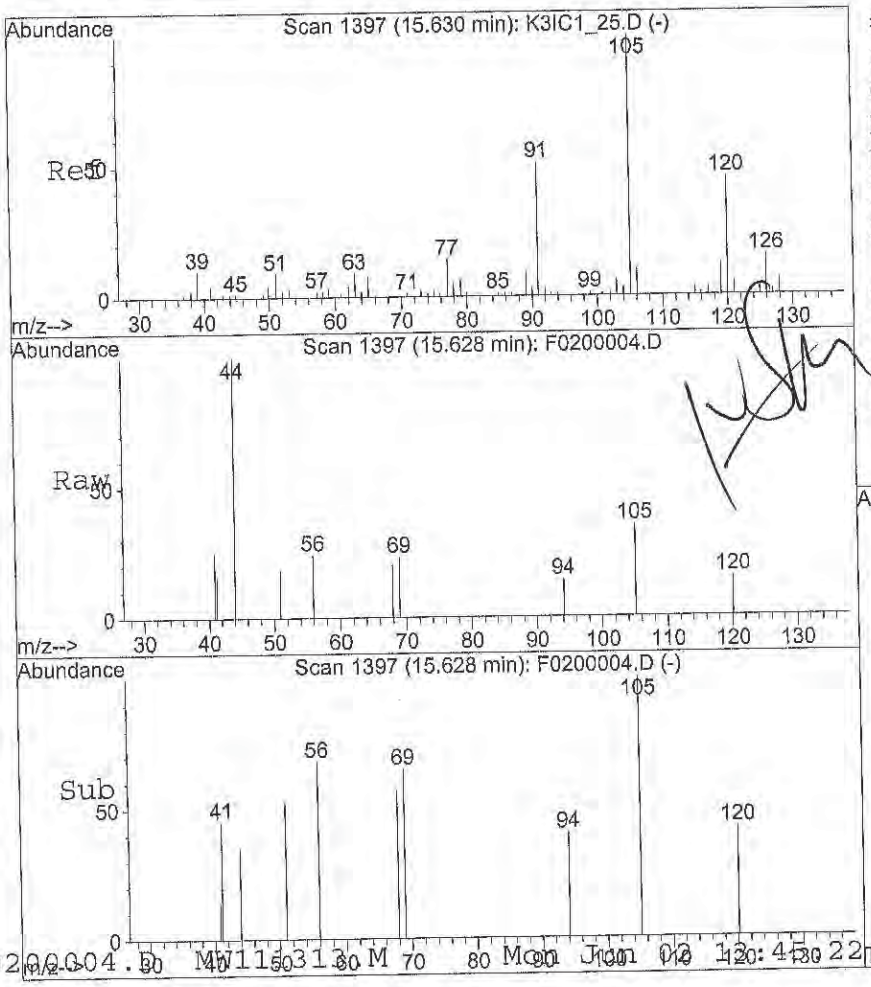


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 91 Resp: 281

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

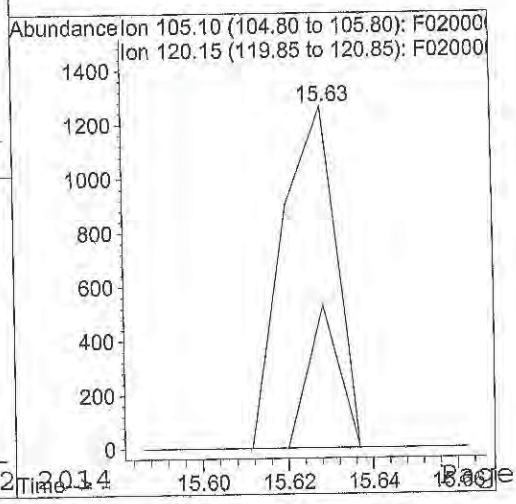


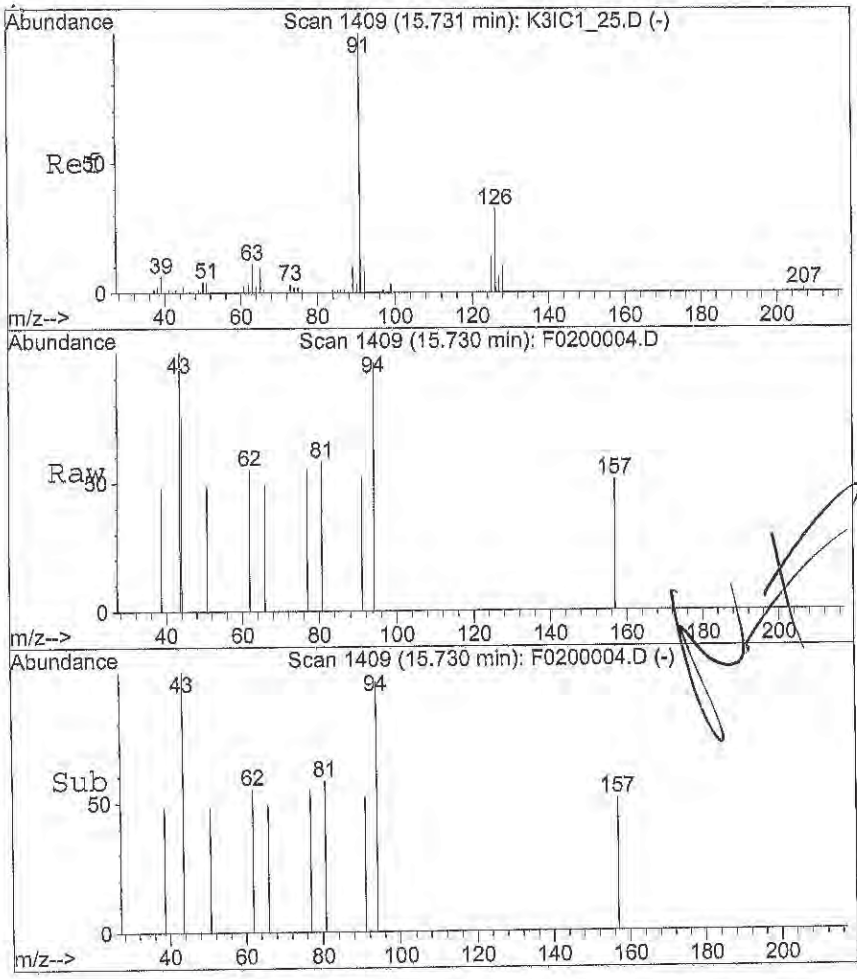


#64
1,3,5-Trimethylbenzene
Concen: 0.07 ug/L
RT: 15.63 min Scan# 1397
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:105 Resp: 1099

Ion	Ratio	Lower	Upper
105	100		
120	24.3	36.4	54.6#

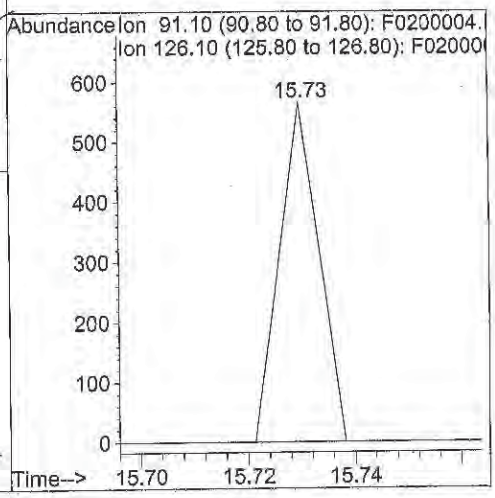


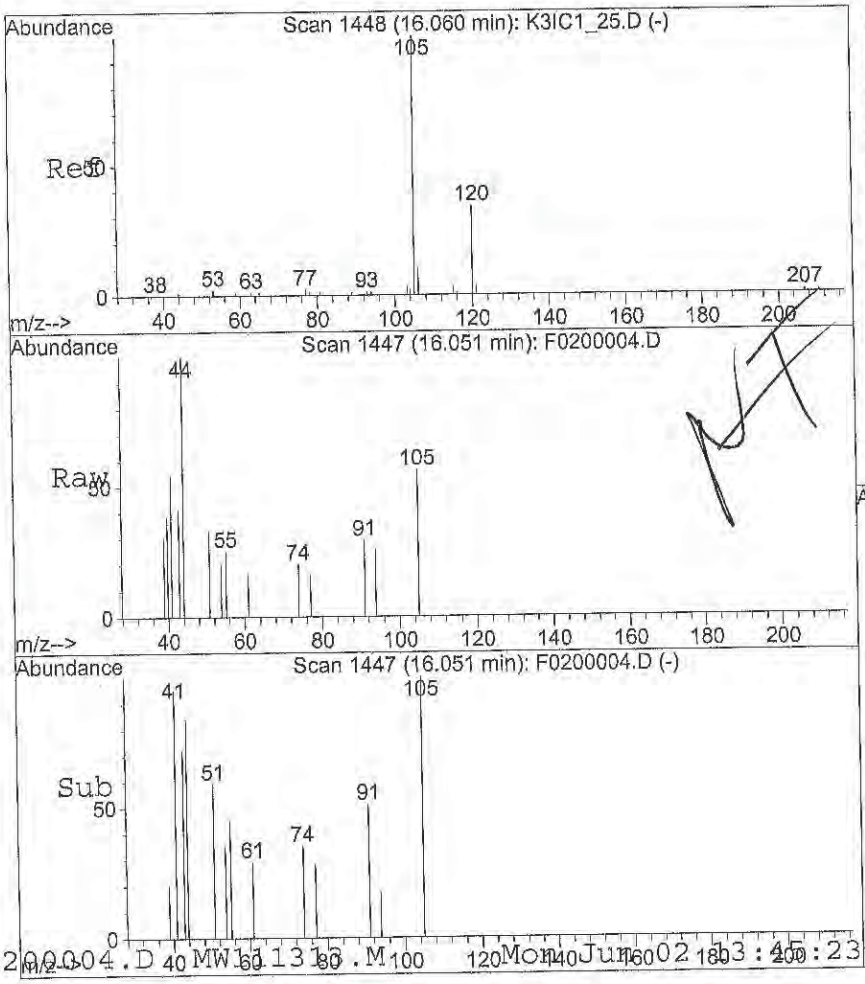


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.73 min Scan# 1409
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 91 Resp: 287

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

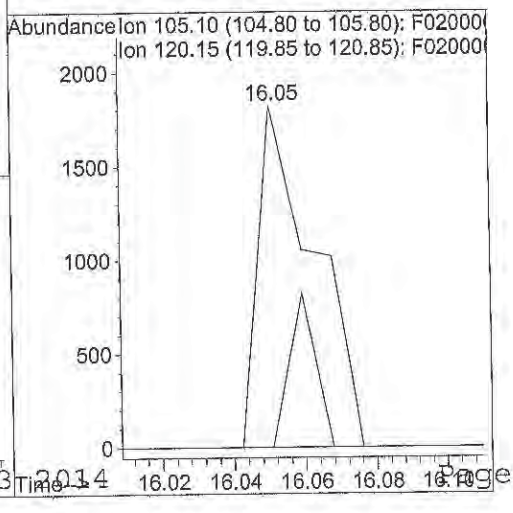


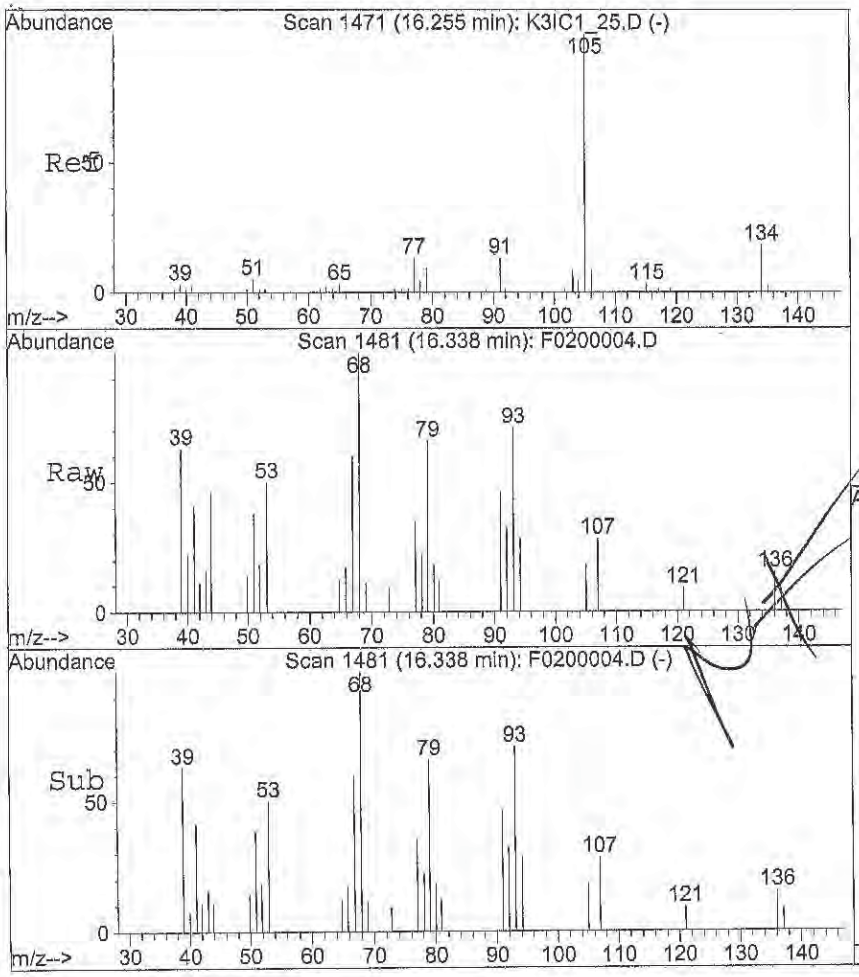


#67
1,2,4-Trimethylbenzene
Concen: 0.12 ug/L
RT: 16.05 min Scan# 1447
Delta R.T. -0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:105 Resp: 1977

Ion	Ratio	Lower	Upper
105	100		
120	21.1	33.8	50.8#

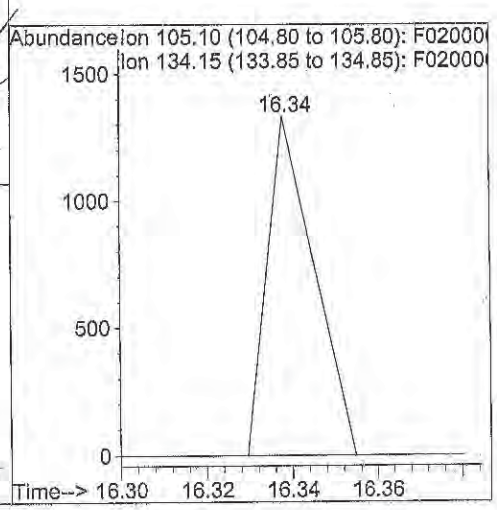


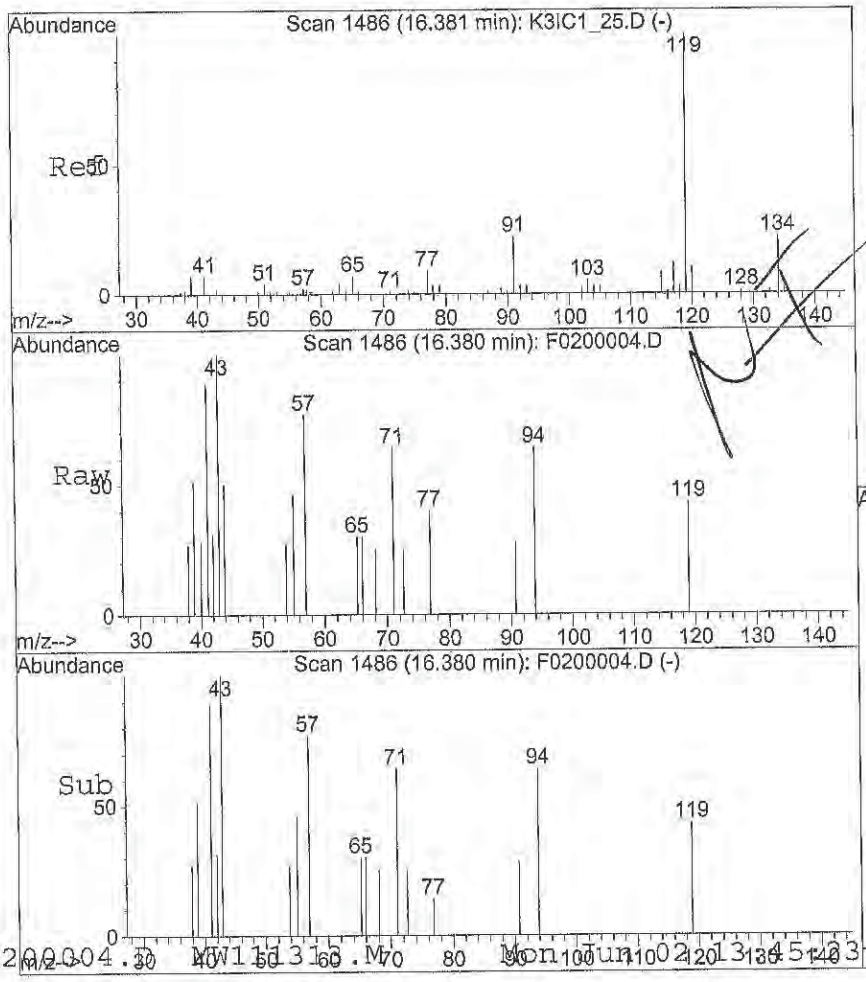


#68
sec-Butylbenzene
Concen: 0.05 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.08 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:105 Resp: 1008

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

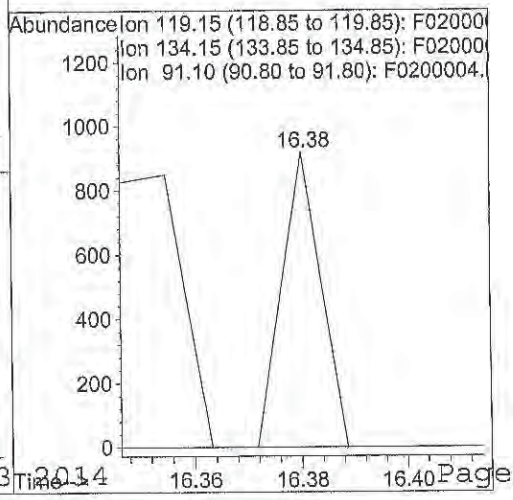


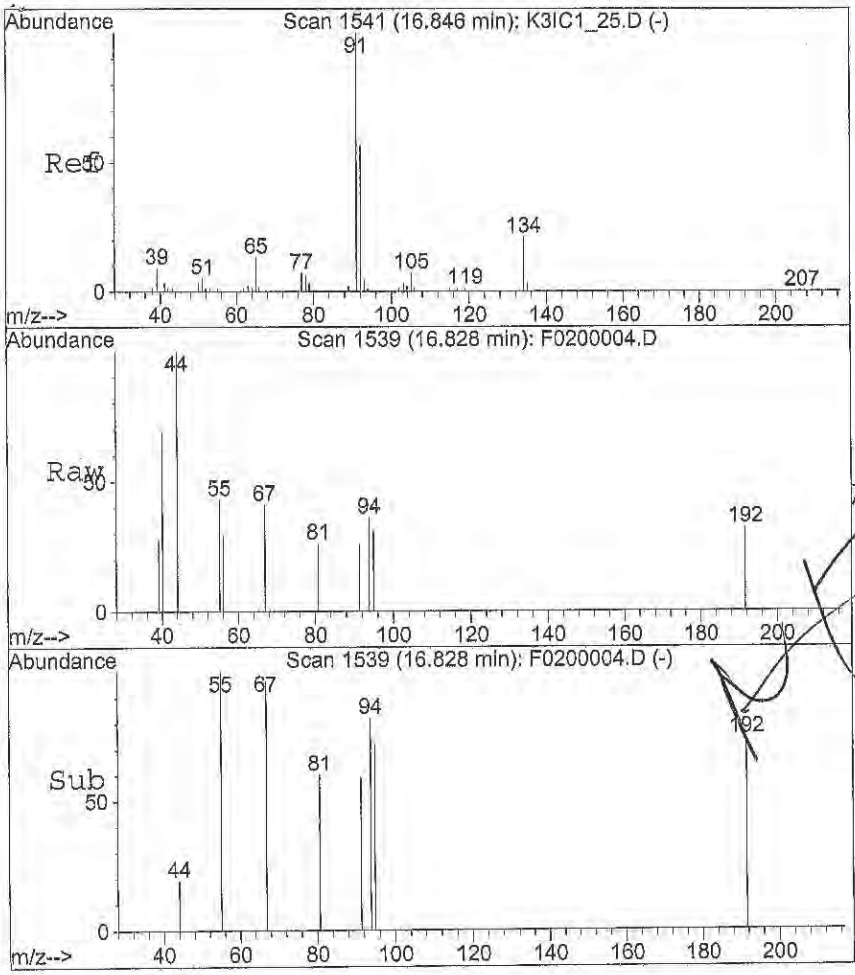


#69
p-Isopropyltoluene
Concen: 0.03 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. -0.00 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:119 Resp: 465

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

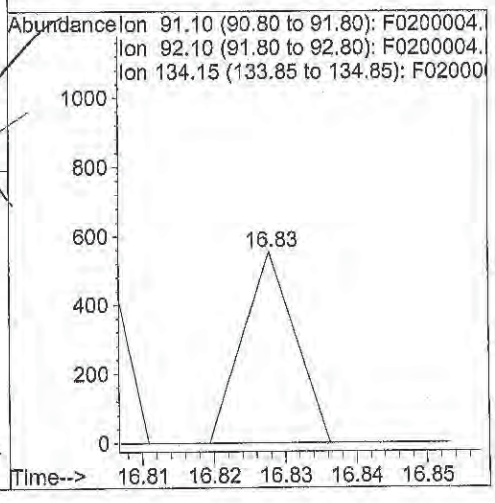


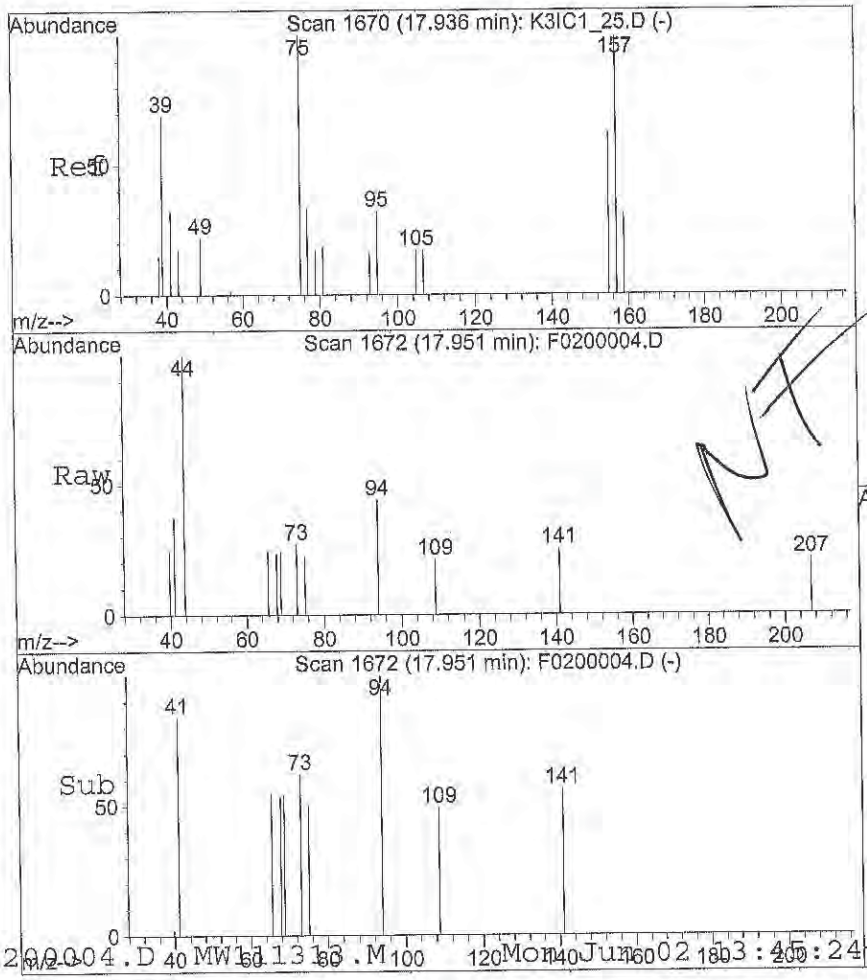


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.83 min Scan# 1539
Delta R.T. -0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 91 Resp: 281

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

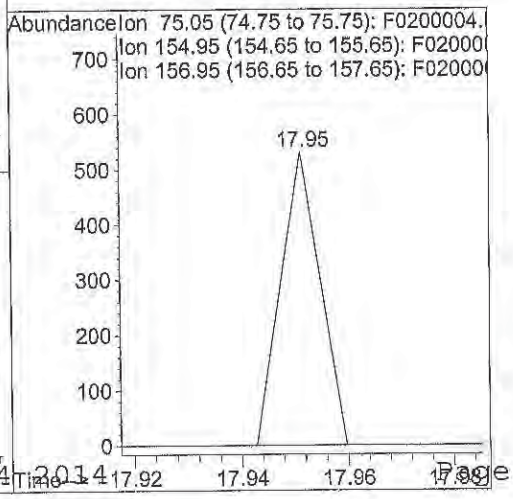


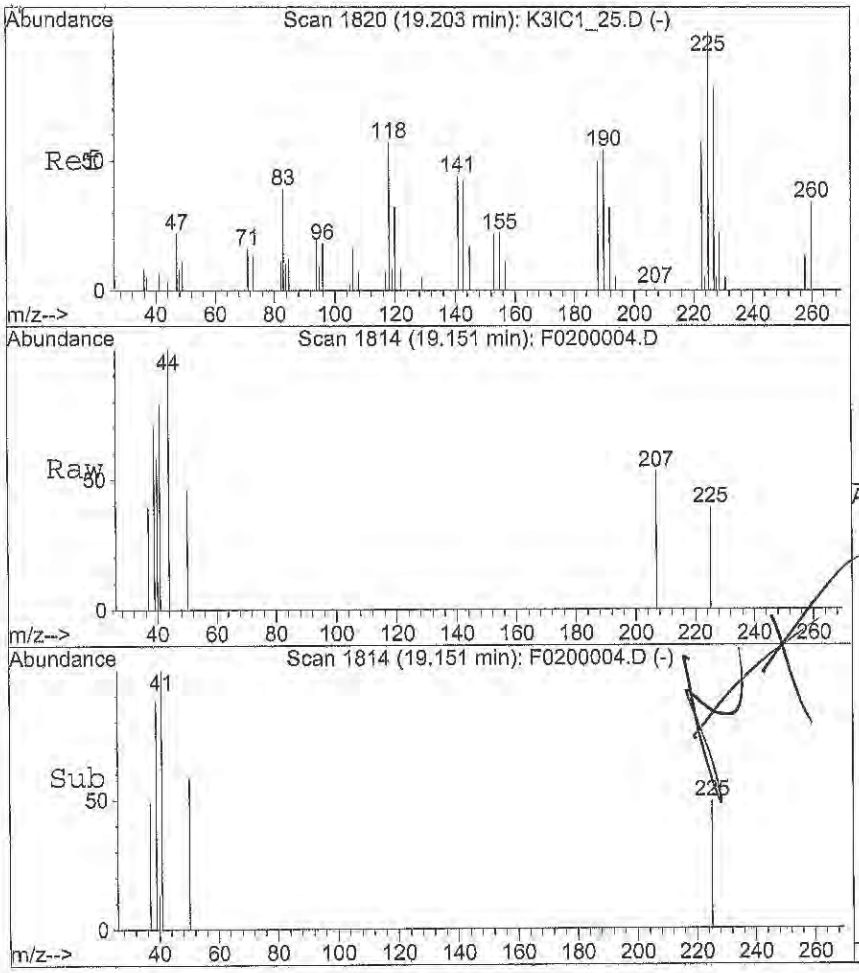


#74
1,2-Dibromo-3-chloropropane
Concen: 1.26 ug/L
RT: 17.95 min Scan# 1672
Delta R.T. 0.02 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion: 75 Resp: 270

Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#

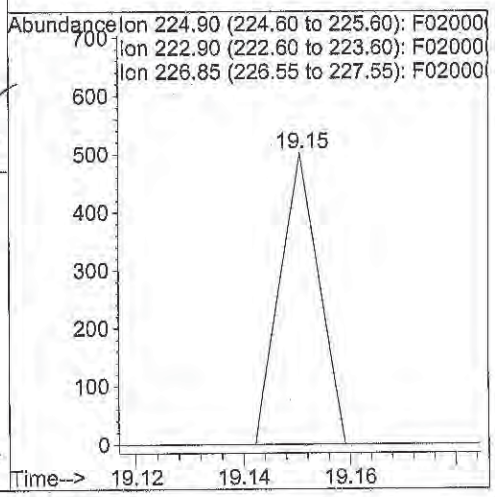


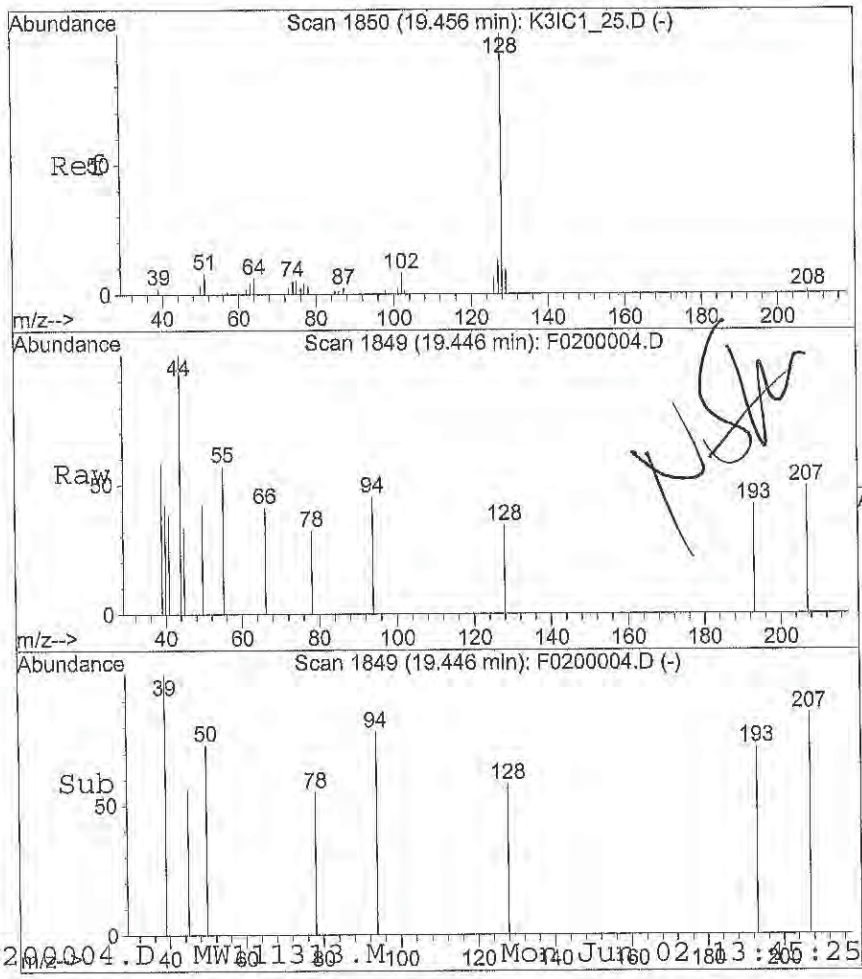


#76
Hexachlorobutadiene
Concen: 0.24 ug/L
RT: 19.15 min Scan# 1814
Delta R.T. -0.05 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:225 Resp: 254

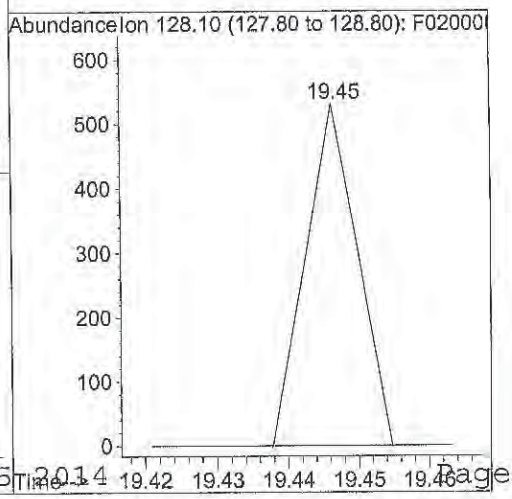
Ion	Ratio	Lower	Upper
225	100		
223	0.0	52.0	78.0#
227	0.0	50.6	75.8#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.45 min Scan# 1849
Delta R.T. -0.01 min
Lab File: F0200004.D
Acq: 2 Jun 2014 1:21 pm

Tgt Ion:128 Resp: 269



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200004.D Vial: 3
Acq On : 2 Jun 2014 1:21 pm Operator: DN
Sample : 3F40201-03 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:36 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1277102	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.91	117	1204182	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	617289	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	443521m	13.35	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 106.80%			
3) Chloroform-d (SU6)	9.18	84	562313m	11.80	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.40%			
4) Methylene Chloride-d2 (SU5	7.07	86	312718	11.23	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 89.84%			
5) 1,2-Dichloroethane-d4 (SU2	9.88	65	235446m	10.37	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 82.96%			
6) Benzene-d6 (SU7)	9.93	84	1160099	11.58	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.64%			
8) Toluene-d8 (SU3)	12.21	98	1249266	10.94	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.52%			
9) 4-Bromofluorobenzene (SU4)	15.21	95	659396m	13.98	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 111.84%			

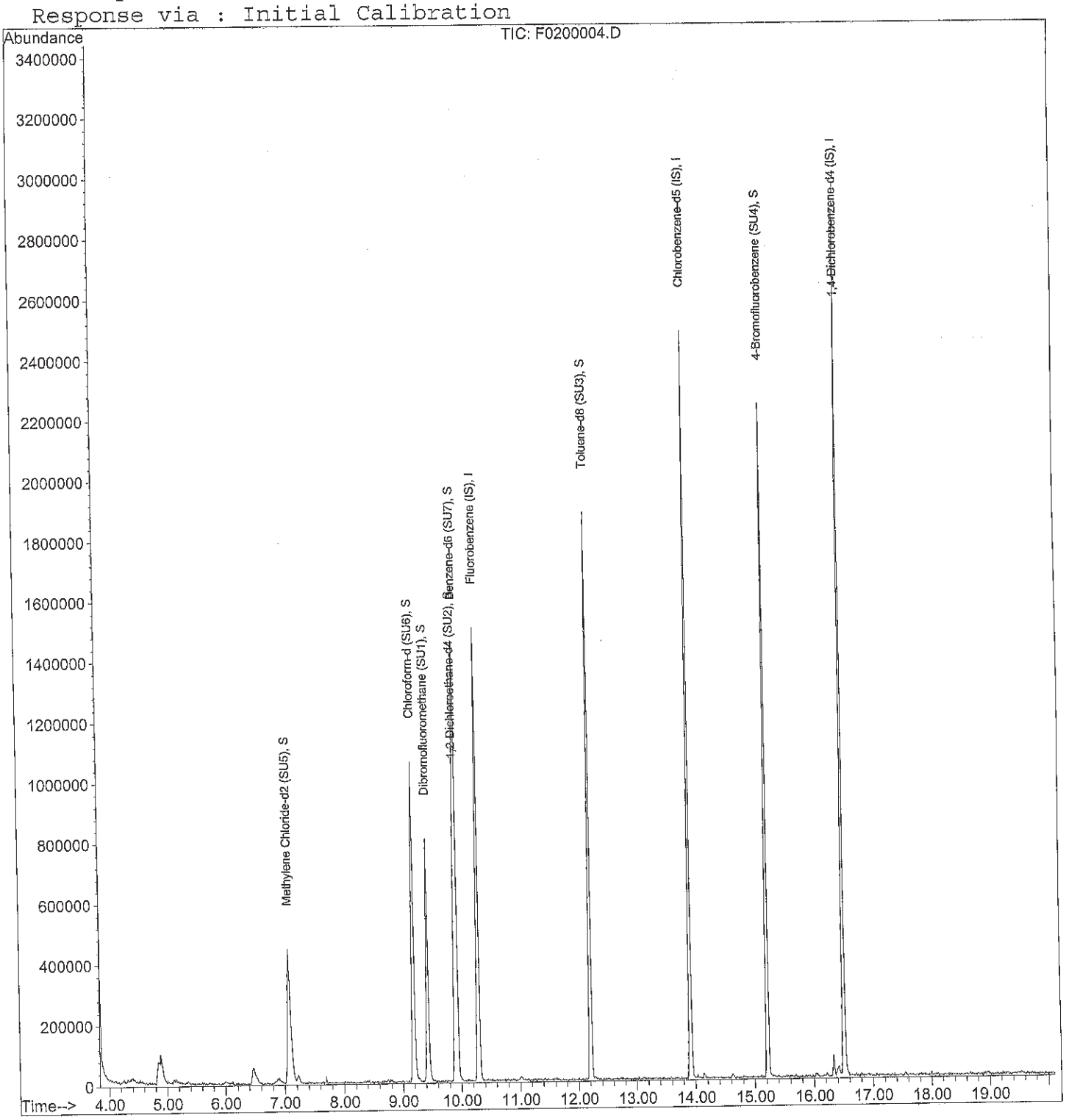
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200004.D Vial: 3
Acq On : 2 Jun 2014 1:21 pm Operator: DN
Sample : 3F40201-03 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-11.0-12.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:36 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200005.D
Acq On : 2 Jun 2014 1:50 pm
Sample : 3F40201-04
Misc : 100cc SVL-528-SA8-SV-18.5-19.5
MS Integration Params: rteint.p
Quant Time: Jun 2 14:18 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AK

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1249356	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1155970	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.50	152	626548	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	387681m	12.44 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	99.52%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	347766m	11.74 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	93.92%	
39) Toluene-d8 (SU3)	12.20	98	1220977	11.32 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.56%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	552359m	11.68 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	93.44%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	337	0.11 ~~ug/L #~~ NM	44
4) Chloromethane	4.39	50	3615	0.50 ~~ug/L #~~	64
5) Vinyl Chloride	4.51	62	276	0.13 ~~ug/L #~~	1
6) Bromomethane	5.11	96	3887	1.05 ~~ug/L #~~	1
7) Chloroethane	5.35	64	836	1.49 ~~ug/L~~	88
10) 1,1-Dichloroethene	6.54	96	297	0.10 ~~ug/L #~~	25
11) Acetone	6.47	58	7582	11.35 ~~ug/L #~~ NT	53
12) (IPA) Leak Check Compound	6.49	45	122248	814.29 ~~ug/L #~~ SM	93
13) Carbon disulfide	6.84	76	1405	0.14 ~~ug/L #~~	49
14) Methylene Chloride	7.07	84	4172	1.22 ~~ug/L #~~	1
15) (TBA) tert-Butanol	6.93	59	938	4.40 ~~ug/L #~~ NT	25
16) (MTBE) Methyl-t-butyl ethe	7.21	73	323	0.05 ~~ug/L #~~ NM	1
18) 1,1-Dichloroethane	8.05	63	282	0.05 ~~ug/L #~~	1
19) cis-1,2-Dichloroethene	8.75	96	264	0.07 ~~ug/L #~~	48
20) 2,2-Dichloropropane	8.83	77	367	0.07 ~~ug/L #~~	36
21) (MEK) 2-Butanone	8.79	72	396	1.13 ~~ug/L #~~ NM	1
22) (DIPE) Diisopropyl Ether	8.10	45	328	0.03 ~~ug/L #~~	1
24) Chloroform	9.21	83	3380	0.52 ~~ug/L #~~	51
25) (ETBE) 2-ethoxy 2-methyl p	8.50	59	264	0.03 ~~ug/L #~~	44
29) 1,1-Dichloropropene	9.92	75	664	0.14 ~~ug/L #~~	1
31) Benzene	9.92	78	12822	1.09 ~~ug/L #~~	79
32) 1,2-Dichloroethane	9.93	62	12662	3.04 ~~ug/L #~~	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200005.D Vial: 4
Acq On : 2 Jun 2014 1:50 pm Operator: DN
Sample : 3F40201-04 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-18.5-19.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 14:18 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

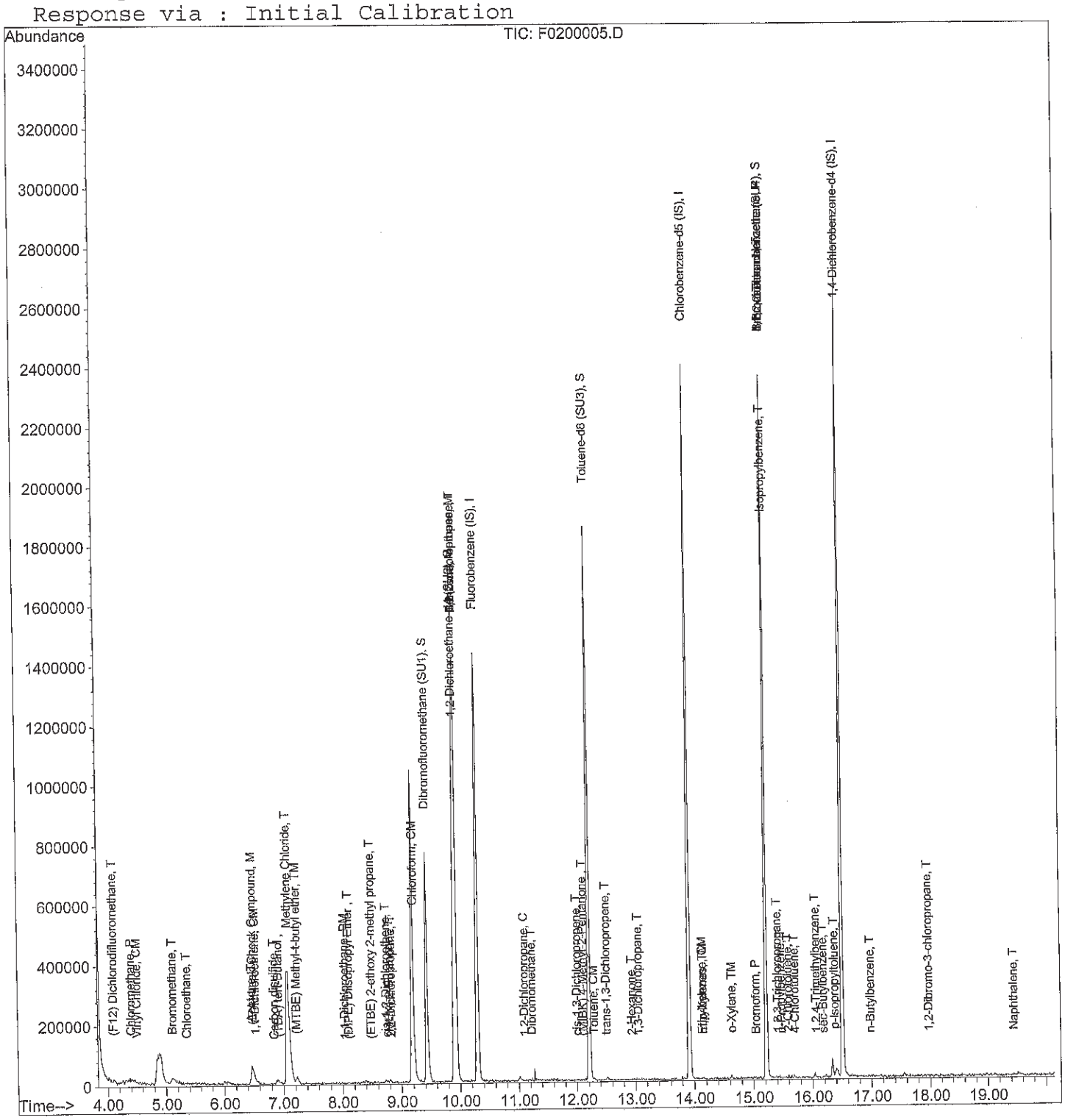
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) 1,2-Dichloropropane	11.09	63	299	0.11 ~~ug/L~~ # NSM	39
35) Dibromomethane	11.22	93	268	0.12 ~~ug/L~~ #	5
37) cis-1,3-Dichloropropene	12.00	75	273	0.06 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.10	43	504	0.22 ~~ug/L~~ #	100
41) Toluene	12.29	91	1541	0.10 ug/L #0.0025	4
42) trans-1,3-Dichloropropene	12.49	75	259	0.05 ~~ug/L~~ # NMI	1
45) 1,3-Dichloropropane	13.06	76	257	0.05 ~~ug/L~~ #	1
46) 2-Hexanone	12.95	43	417	0.16 ~~ug/L~~ #	64
51) Ethylbenzene	14.13	91	2396	0.13 ~~ug/L~~ WPE	95
52) m,p-Xylenes	14.15	106	1456	0.23 ug/L @.0046	65
53) o-Xylene	14.64	106	258	0.04 ~~ug/L~~ NSM	72
54) Styrene	14.63	104	2536	-0.59 ~~ug/L~~ #	80
55) Bromoform	15.05	173	273	0.12 ~~ug/L~~ #	42
56) Isopropylbenzene	15.24	105	1646	0.10 ~~ug/L~~ #	1
57) 1,2,3-Trichloropropane	15.41	75	391	0.08 ~~ug/L~~ # NSM	36
60) 1,1,2,2-Tetrachloroethane	15.22	83	475	0.11 ~~ug/L~~ # NSM	18
61) Bromobenzene	15.22	156	397	0.08 ~~ug/L~~ #	1
62) n-Propylbenzene	15.47	91	470	0.02 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.60	91	561	0.04 ~~ug/L~~ #	45
65) 4-Chlorotoluene	15.71	91	606	0.04 ~~ug/L~~ #	44
67) 1,2,4-Trimethylbenzene	16.07	105	516	0.03 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.19	105	271	0.01 ~~ug/L~~ # NSM	62
69) p-Isopropyltoluene	16.37	119	438	0.03 ~~ug/L~~ #	52
72) n-Butylbenzene	16.98	91	307	0.02 ~~ug/L~~ #	30
74) 1,2-Dibromo-3-chloropropan	17.97	75	334	1.34 ~~ug/L~~ #	6
77) Naphthalene	19.45	128	257	0.02 ~~ug/L~~	100

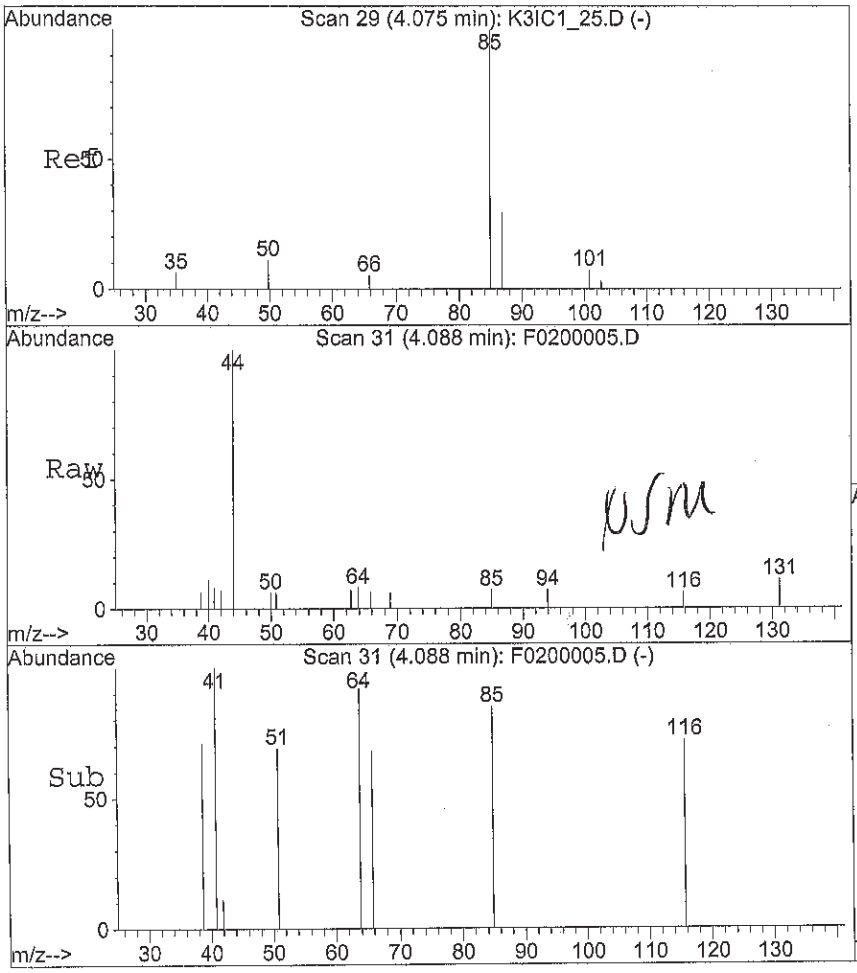
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200005.D Vial: 4
Acq On : 2 Jun 2014 1:50 pm Operator: DN
Sample : 3F40201-04 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-18.5-19.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 14:18 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



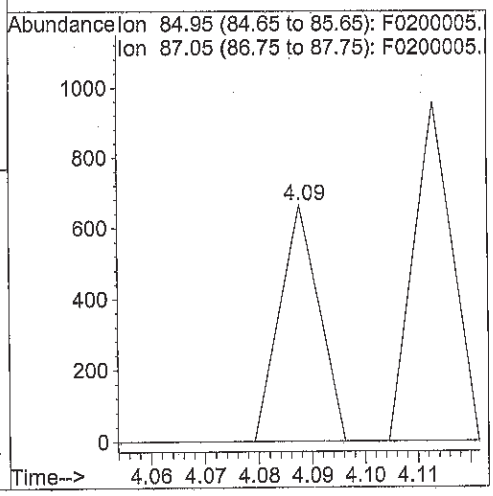


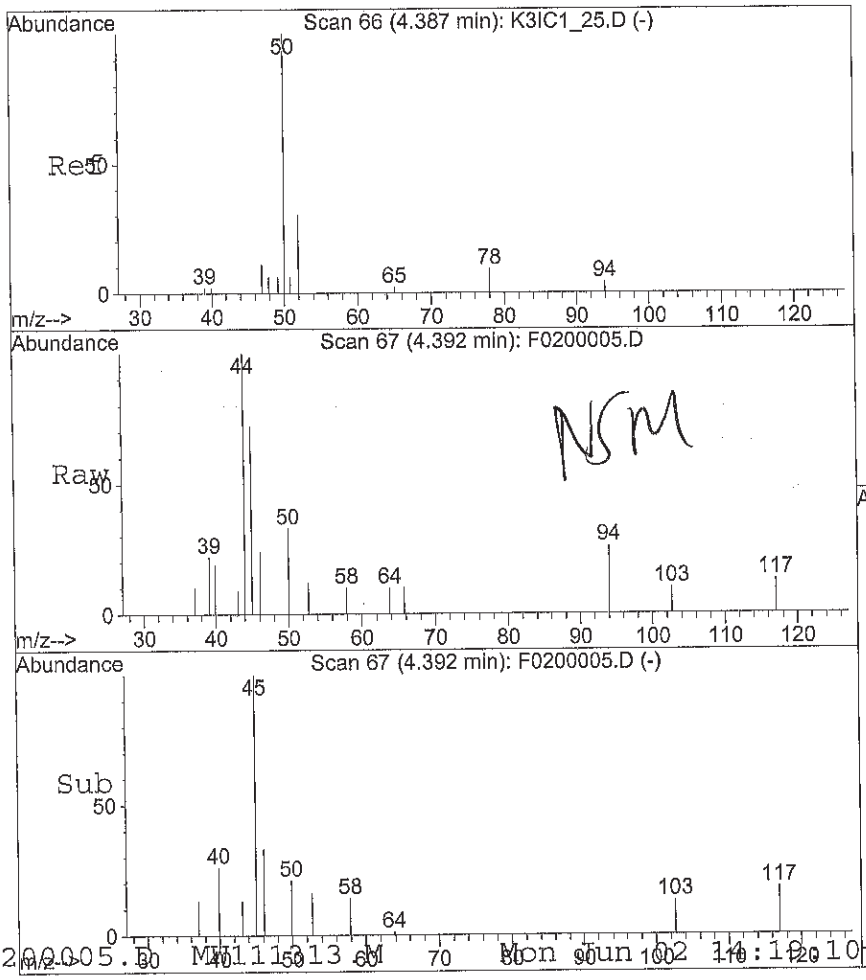
NSM

#3
(F12) Dichlorodifluoromethane
Concen: 0.11 ug/L
RT: 4.09 min Scan# 31
Delta R.T. 0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 85 Resp: 337

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#



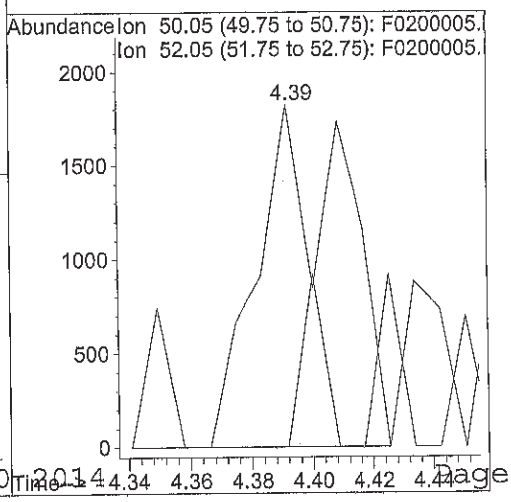


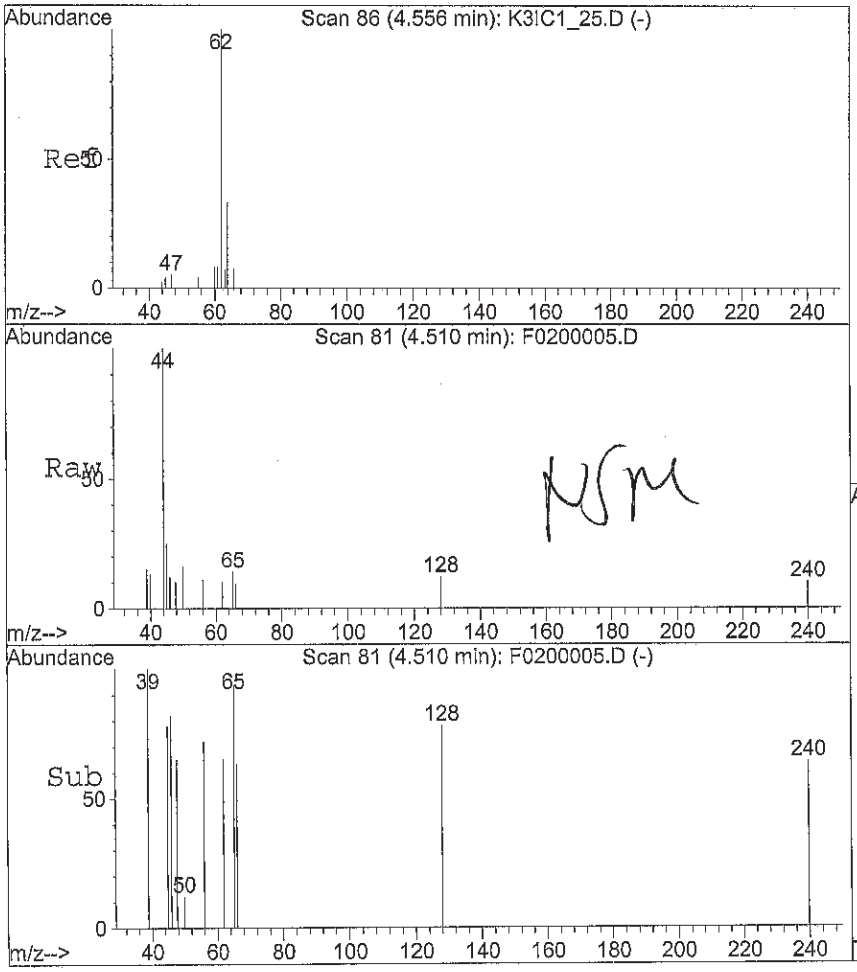
NSM

#4
Chloromethane
Concen: 0.50 ug/L
RT: 4.39 min Scan# 67
Delta R.T. 0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 50 Resp: 3615

Ion	Ratio	Lower	Upper
50	100		
52	12.9	26.9	40.3#

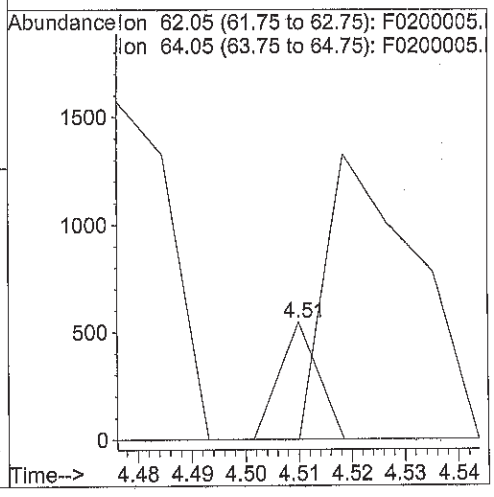


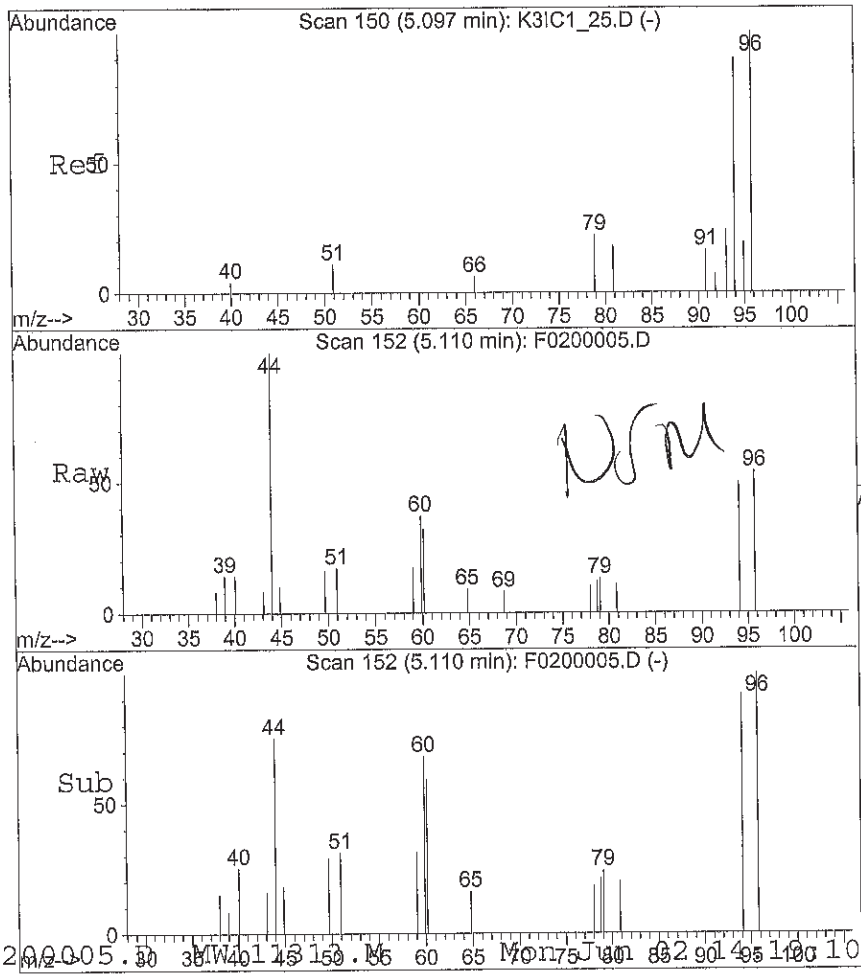


#5
Vinyl Chloride
Concen: 0.13 ug/L
RT: 4.51 min Scan# 81
Delta R.T. -0.05 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 62 Resp: 276

Ion	Ratio	Lower	Upper
62	100		
64	570.7	25.6	38.4#

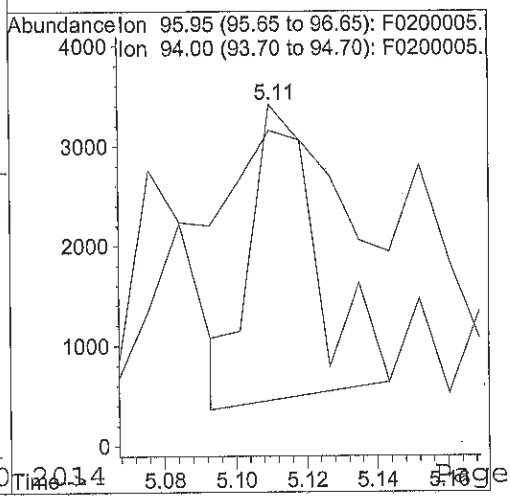


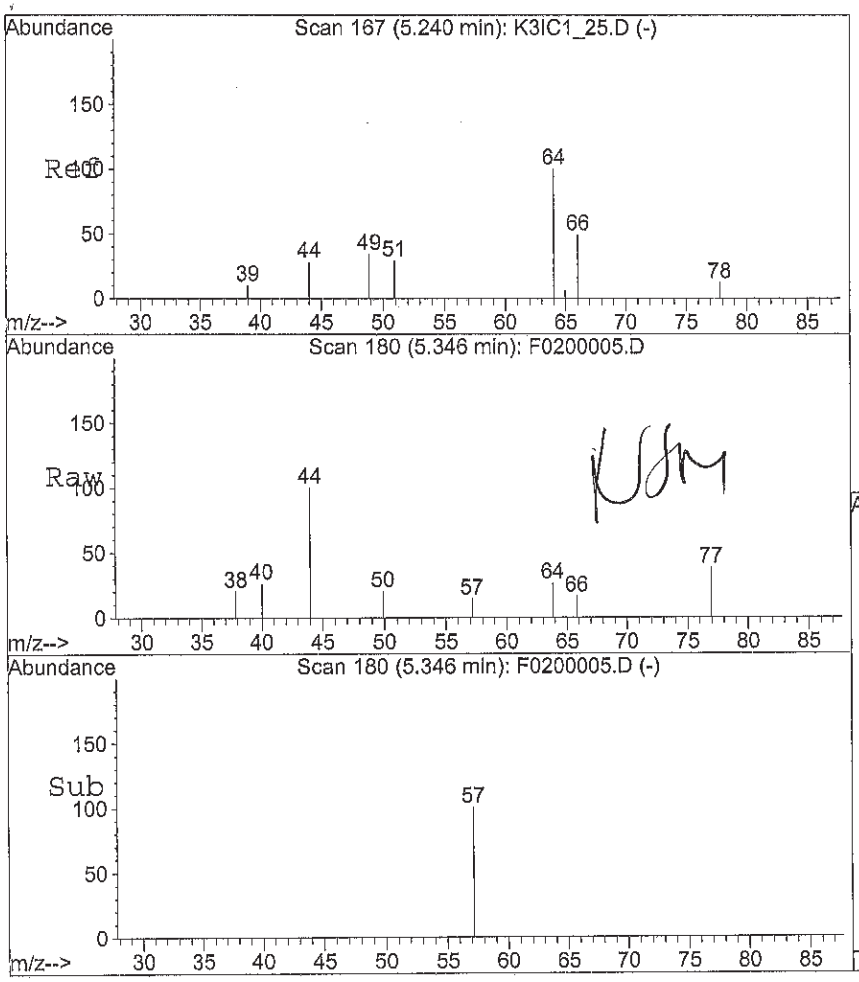


#6
Bromomethane
Concen: 1.05 ug/L
RT: 5.11 min Scan# 152
Delta R.T. 0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 96 Resp: 3887

Ion	Ratio	Lower	Upper
96	100		
94	335.3	101.0	151.4#

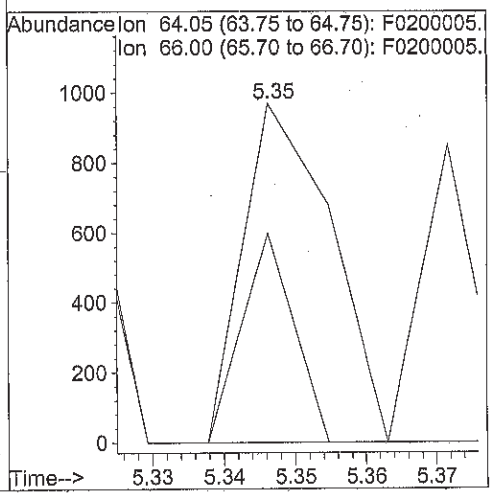


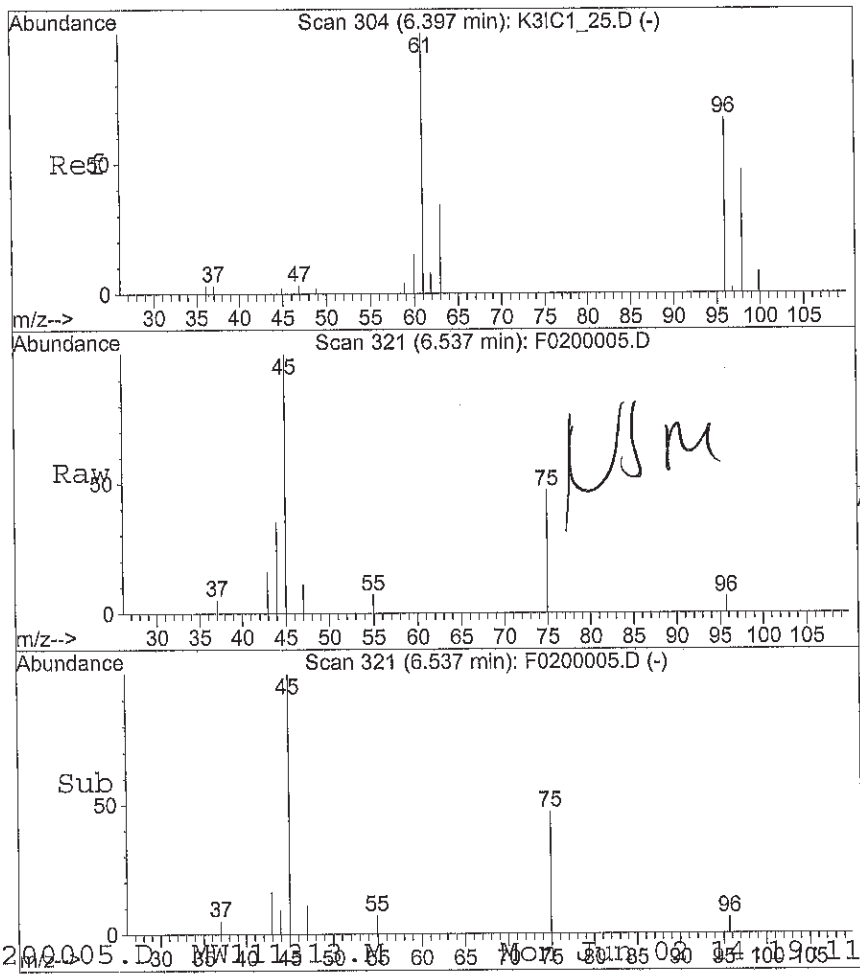


#7
Chloroethane
Concen: 1.49 ug/L
RT: 5.35 min Scan# 180
Delta R.T. 0.11 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 64 Resp: 836

Ion	Ratio	Lower	Upper
64	100		
66	36.2	35.4	53.0

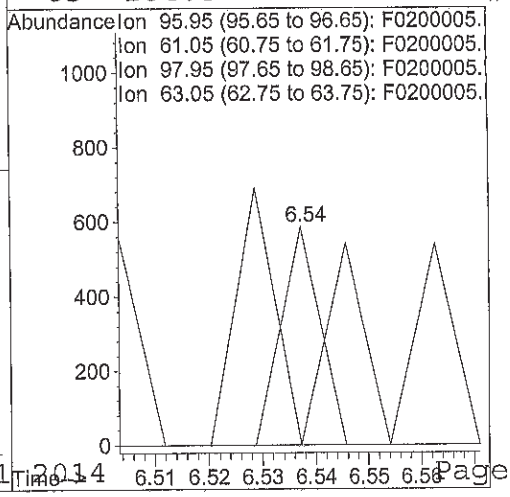


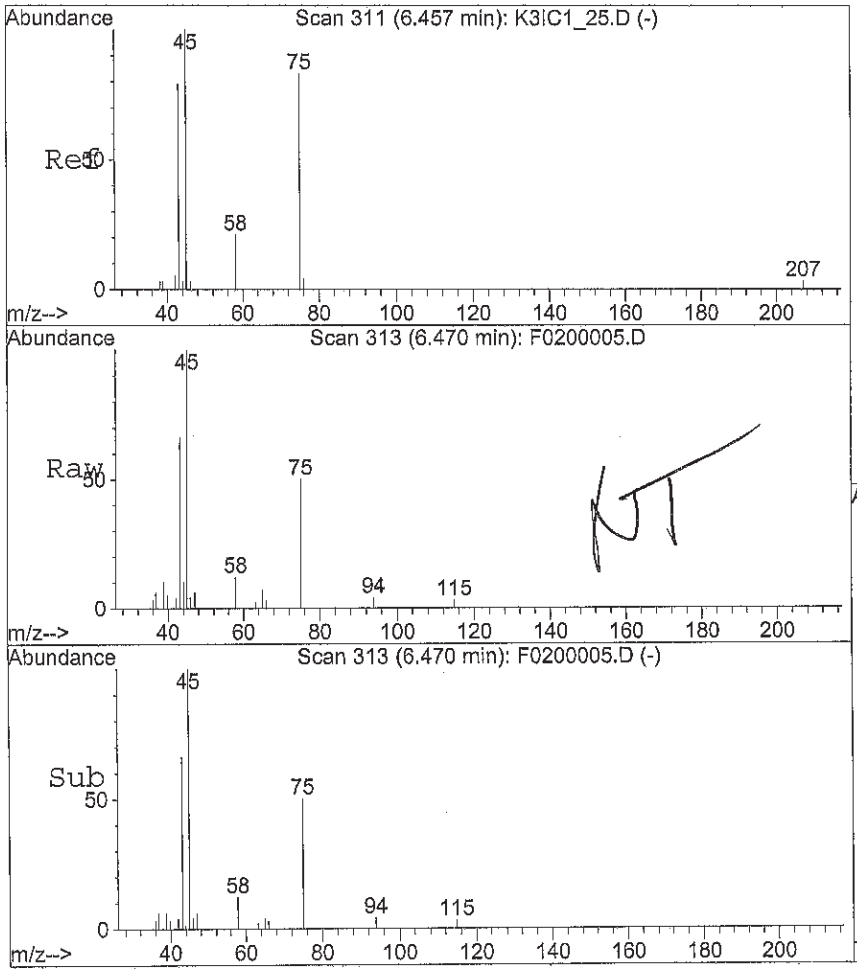


#10
1,1-Dichloroethene
Concen: 0.10 ug/L
RT: 6.54 min Scan# 321
Delta R.T. 0.14 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 96 Resp: 297

Ion	Ratio	Lower	Upper
96	100		
61	117.8	130.0	195.0#
98	0.0	56.2	84.4#
63	184.5	41.5	62.3#

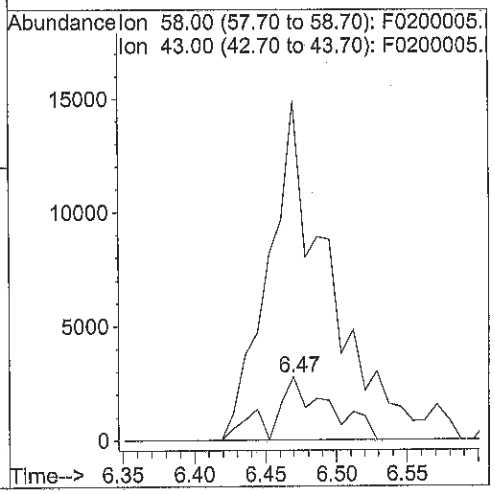


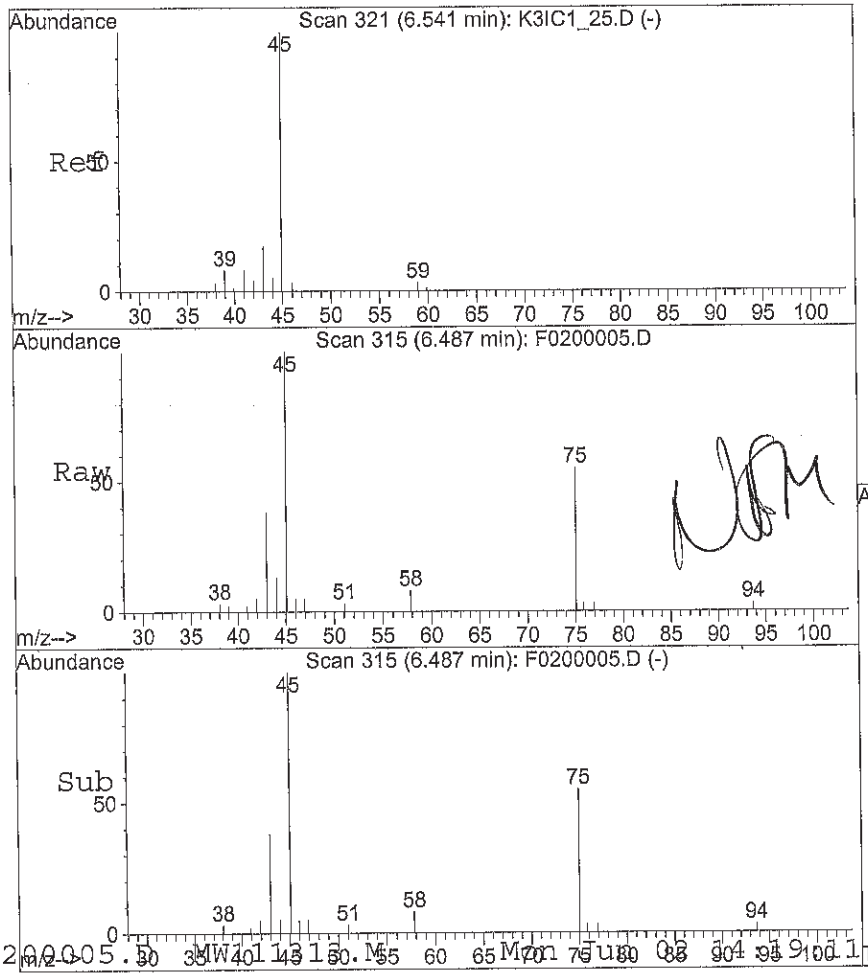


#11
Acetone
Concen: 11.35 ug/L
RT: 6.47 min Scan# 313
Delta R.T. 0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 58 Resp: 7582

Ion	Ratio	Lower	Upper
58	100		
43	572.8	360.9	541.3#

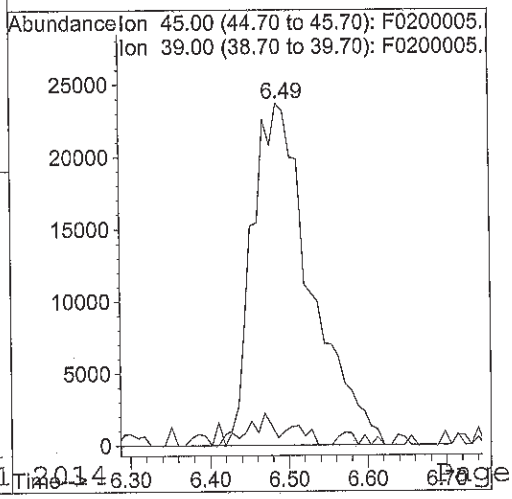


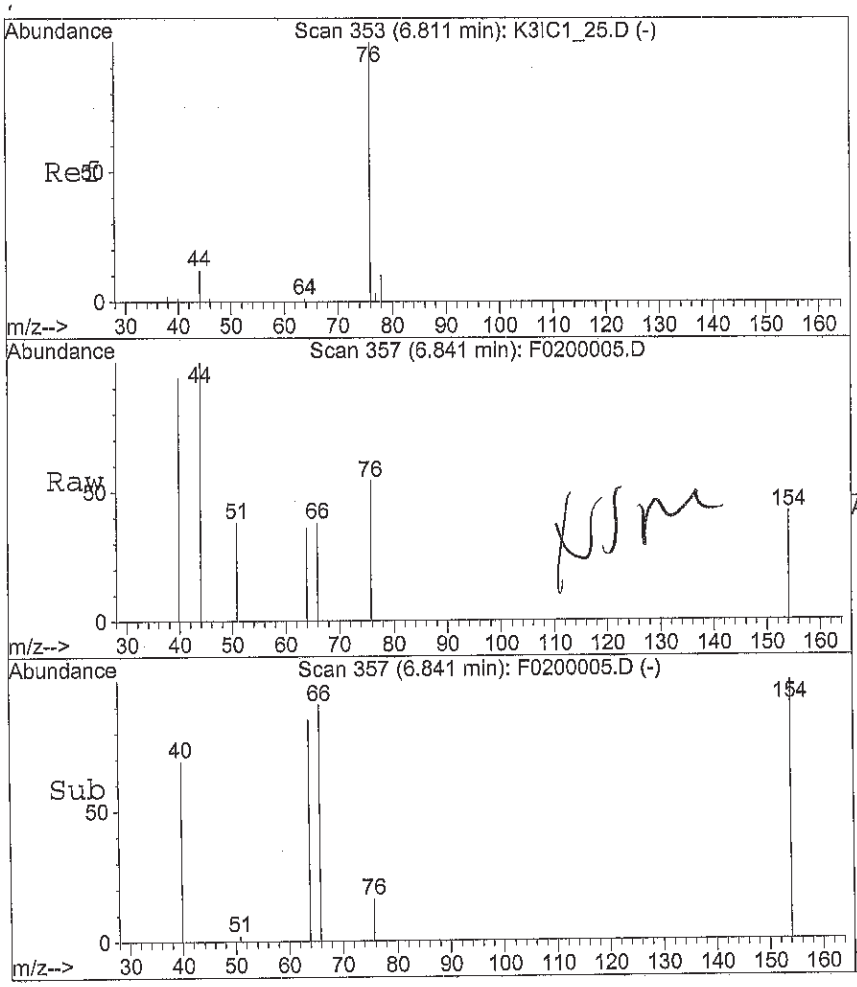


#12
(IPA) Leak Check Compound
Concen: 814.29 ug/L
RT: 6.49 min Scan# 315
Delta R.T. -0.05 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 45 Resp: 122248

Ion	Ratio	Lower	Upper
45	100		
39	3.7	4.9	7.3#

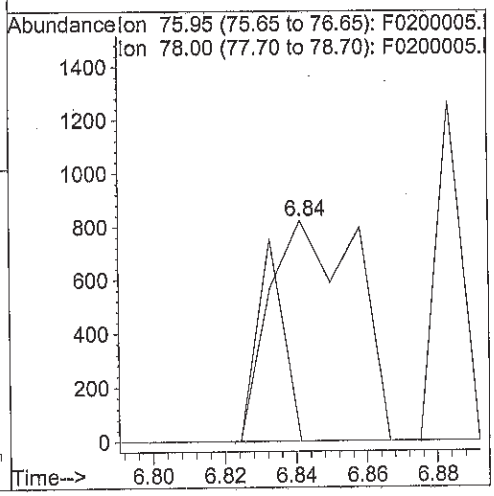


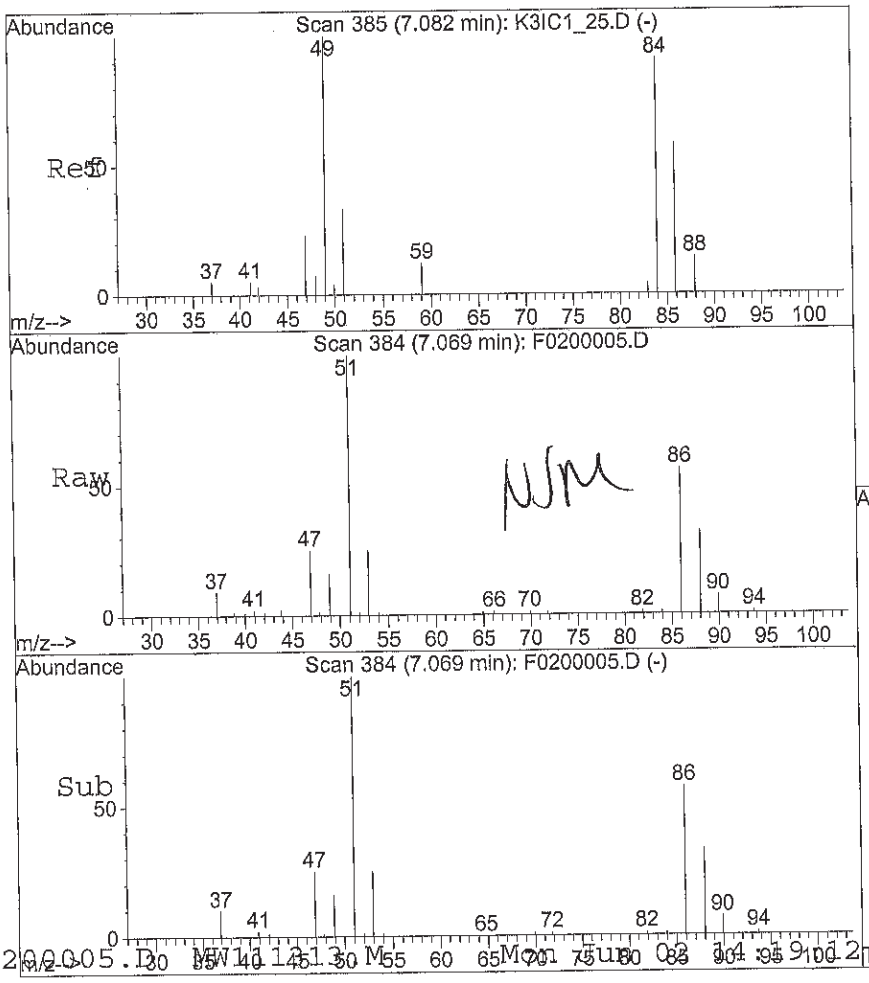


#13
Carbon disulfide
Concen: 0.14 ug/L
RT: 6.84 min Scan# 357
Delta R.T. 0.03 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 76 Resp: 1405

Ion	Ratio	Lower	Upper
76	100		
78	27.1	7.0	10.4#

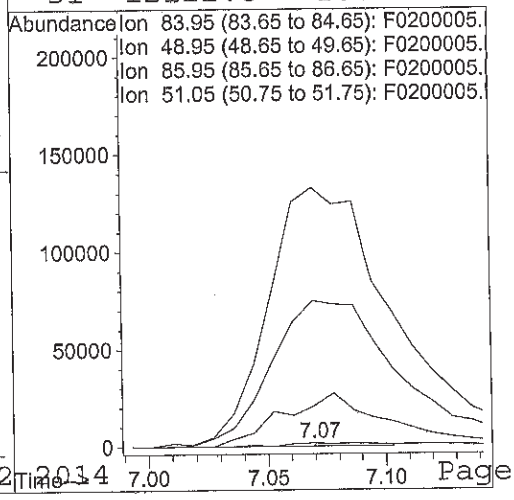


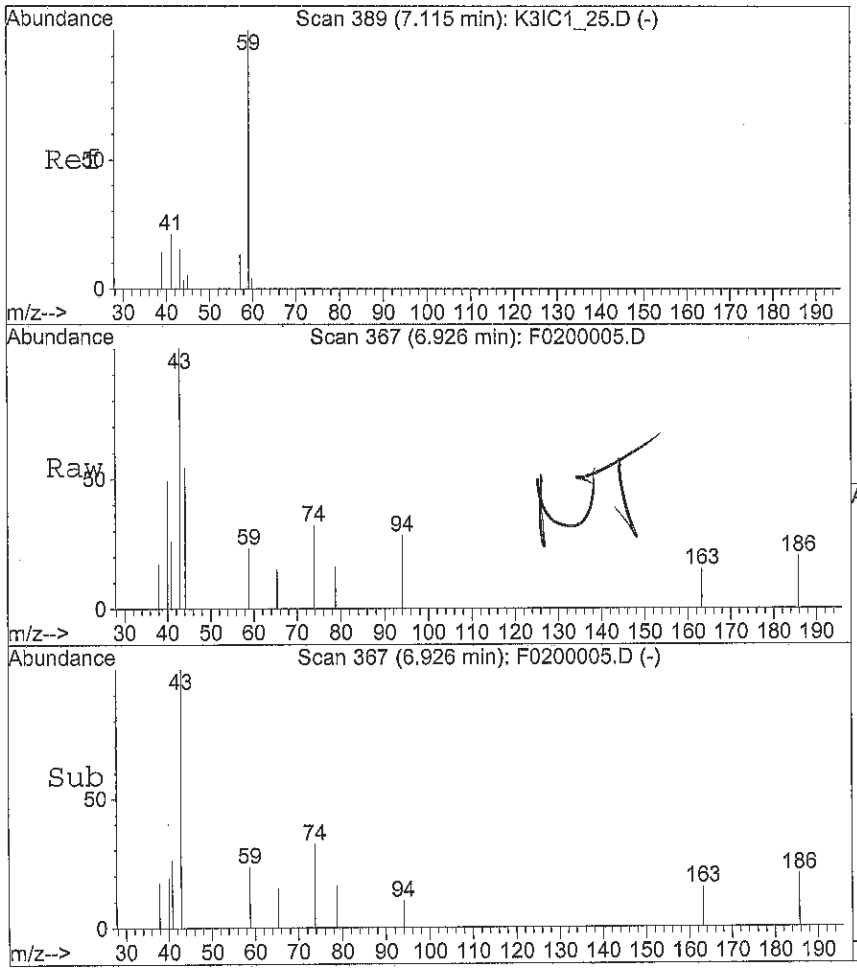


#14
Methylene Chloride
Concen: 1.22 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 84 Resp: 4172

Ion	Ratio	Lower	Upper
84	100		
49	2072.1	89.8	134.6#
86	6941.9	51.1	76.7#
51	12122.8	28.5	42.7#

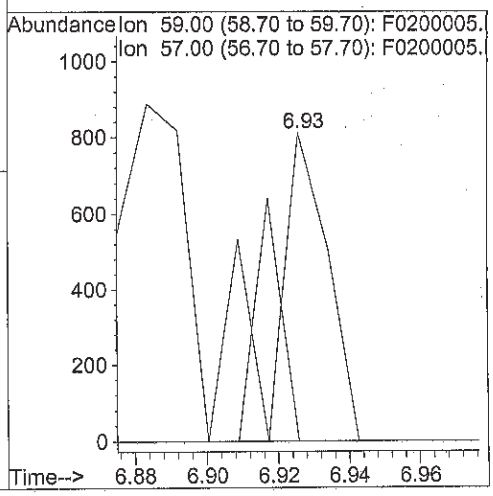


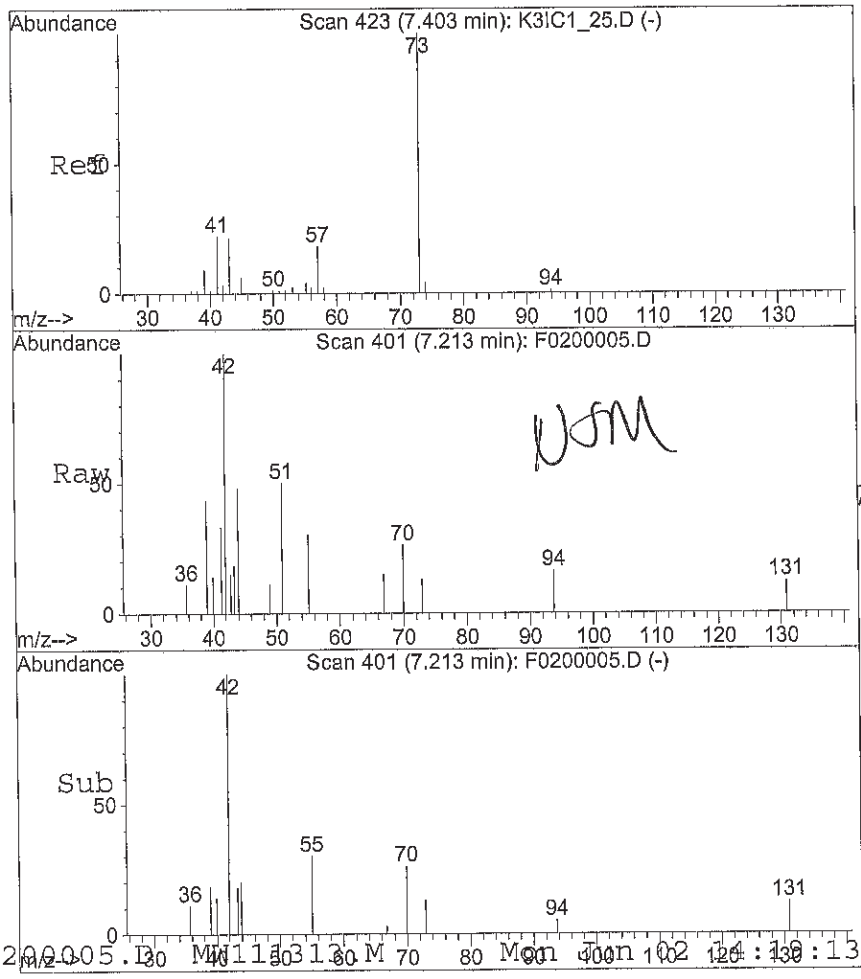


#15
(TBA) tert-Butanol
Concen: 4.40 ug/L
RT: 6.93 min Scan# 367
Delta R.T. -0.19 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 59 Resp: 938

Ion	Ratio	Lower	Upper
59	100		
57	34.5	6.4	9.6#

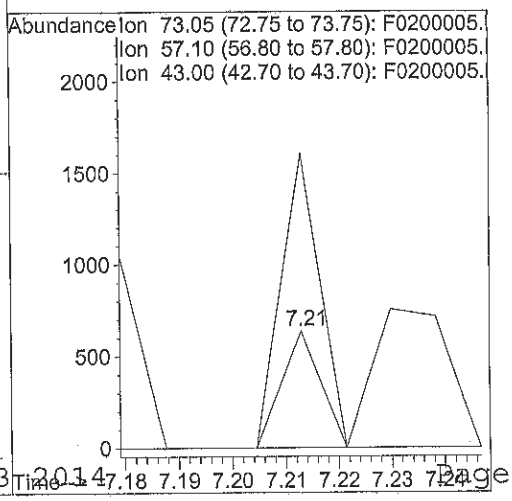


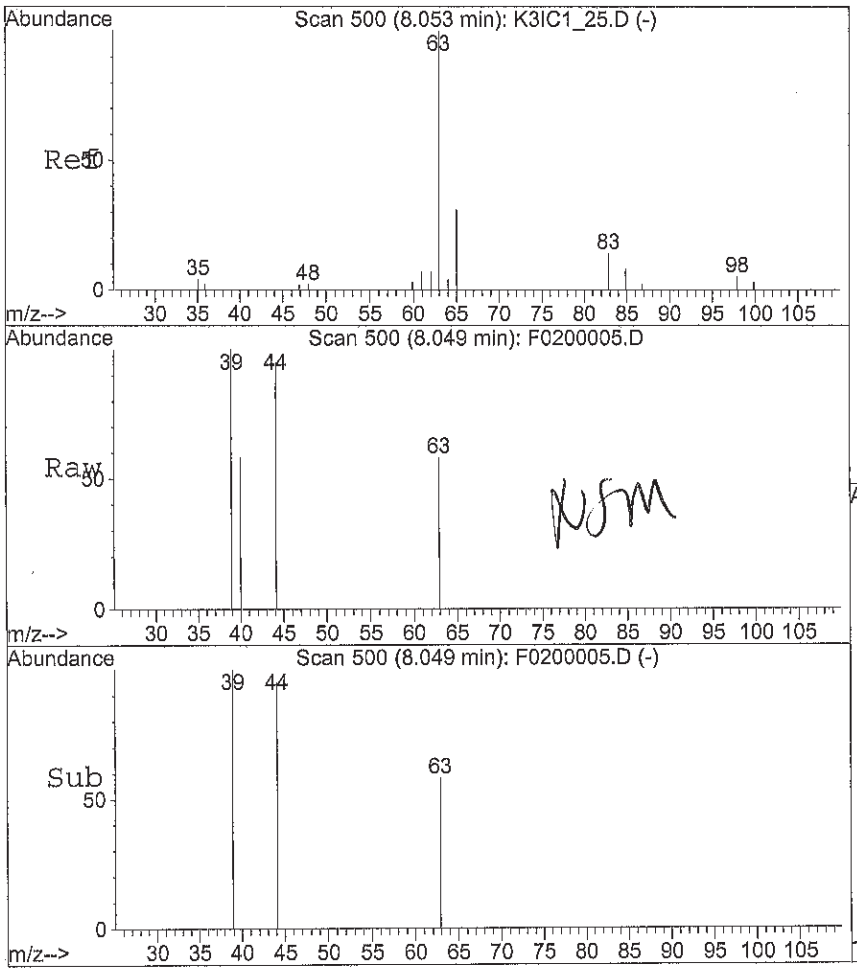


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.05 ug/L
RT: 7.21 min Scan# 401
Delta R.T. -0.19 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 73 Resp: 323

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	481.7	18.4	27.6#

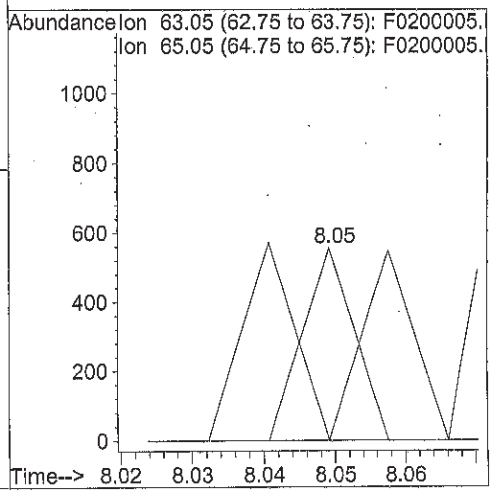


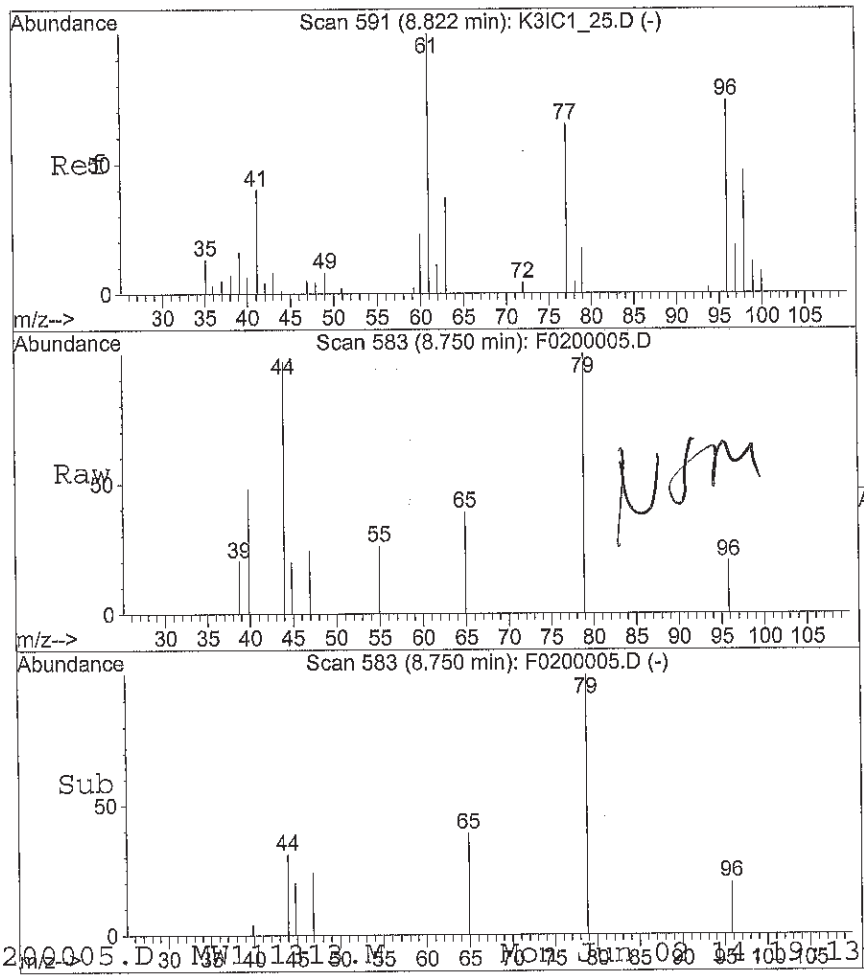


#18
1,1-Dichloroethane
Concen: 0.05 ug/L
RT: 8.05 min Scan# 500
Delta R.T. -0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 63 Resp: 282

Ion	Ratio	Lower	Upper
63	100		
65	201.1	25.8	38.8#

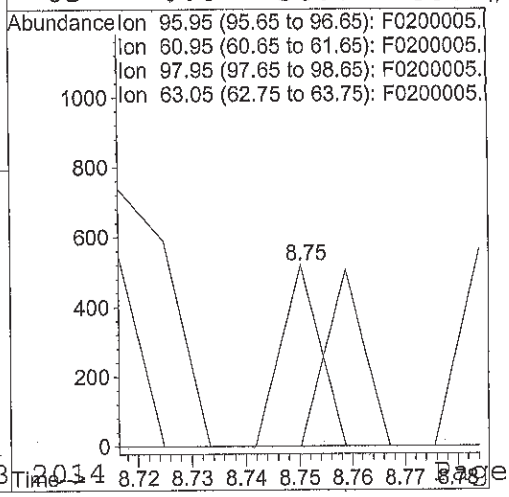


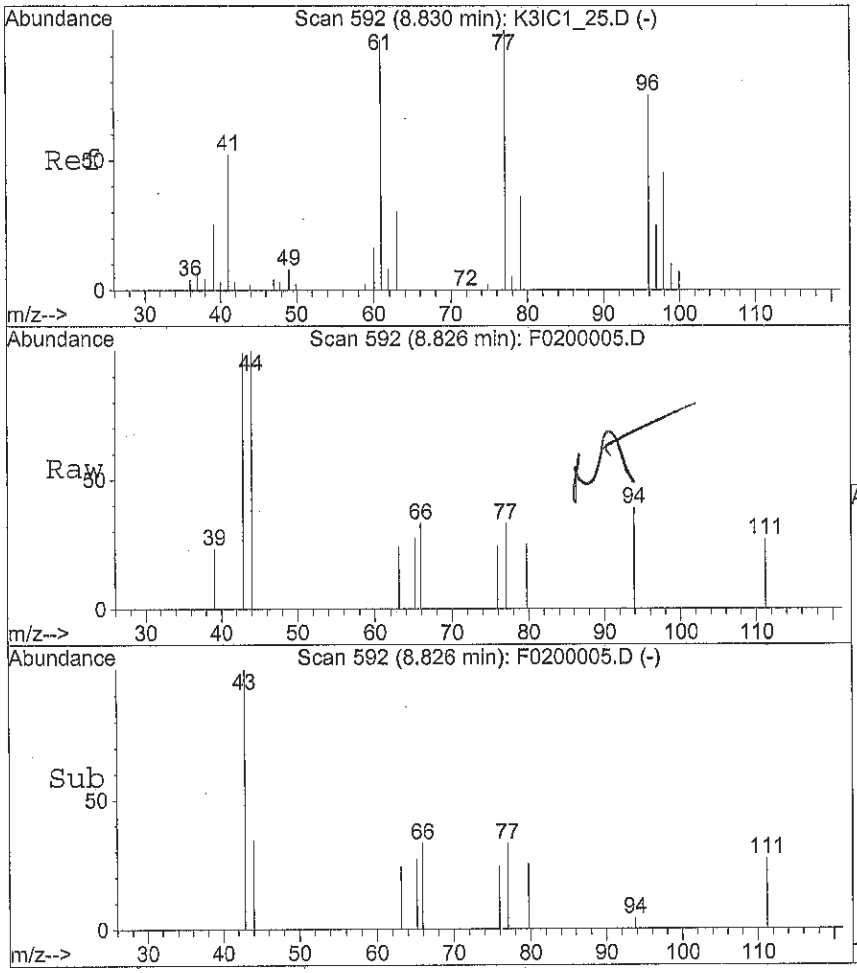


#19
cis-1,2-Dichloroethene
Concen: 0.07 ug/L
RT: 8.75 min Scan# 583
Delta R.T. -0.07 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 96 Resp: 264

Ion	Ratio	Lower	Upper
96	100		
61	97.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

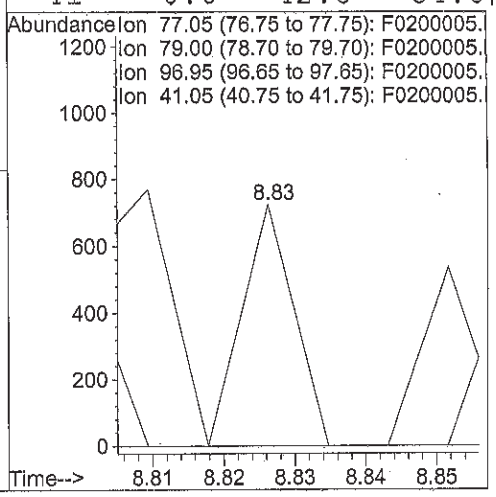


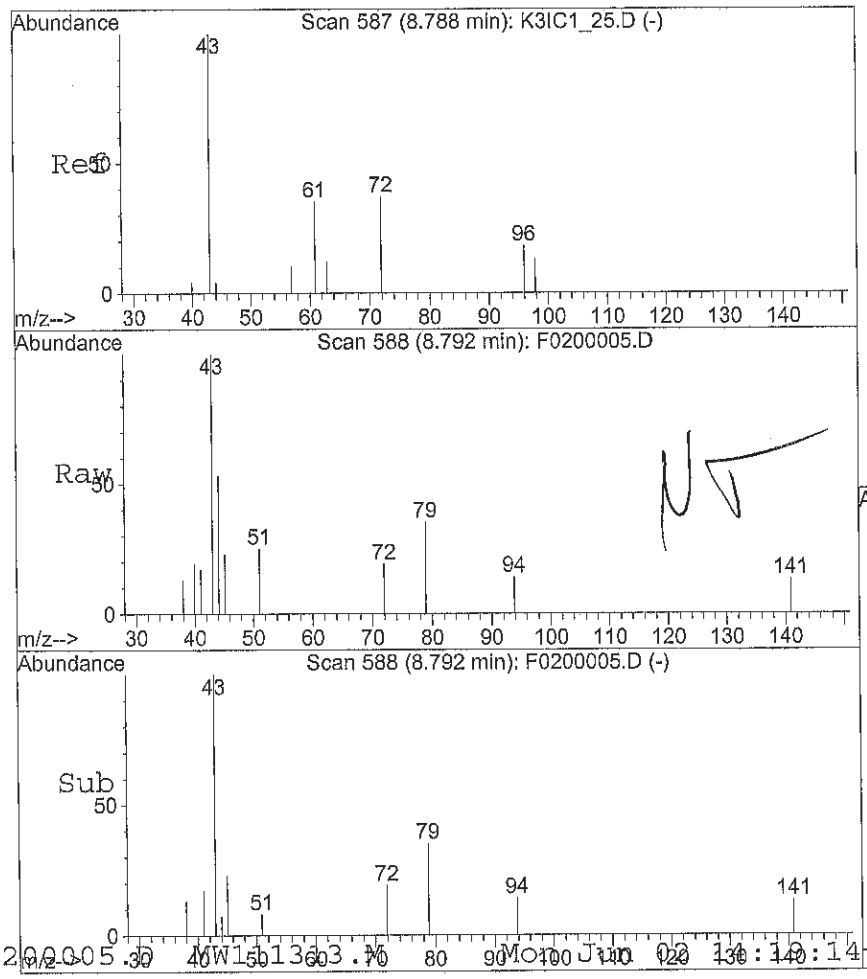


#20
2,2-Dichloropropane
Concen: 0.07 ug/L
RT: 8.83 min Scan# 592
Delta R.T. -0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 77 Resp: 367

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

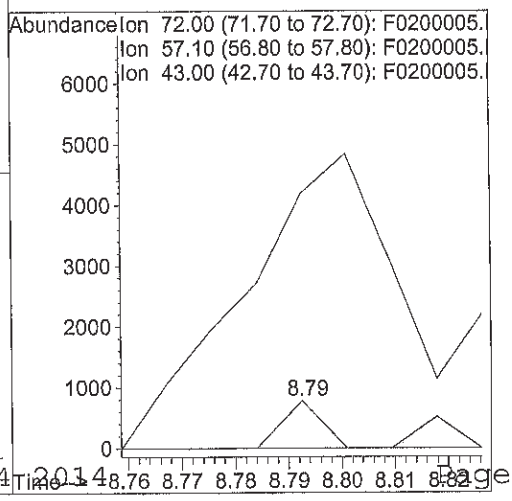


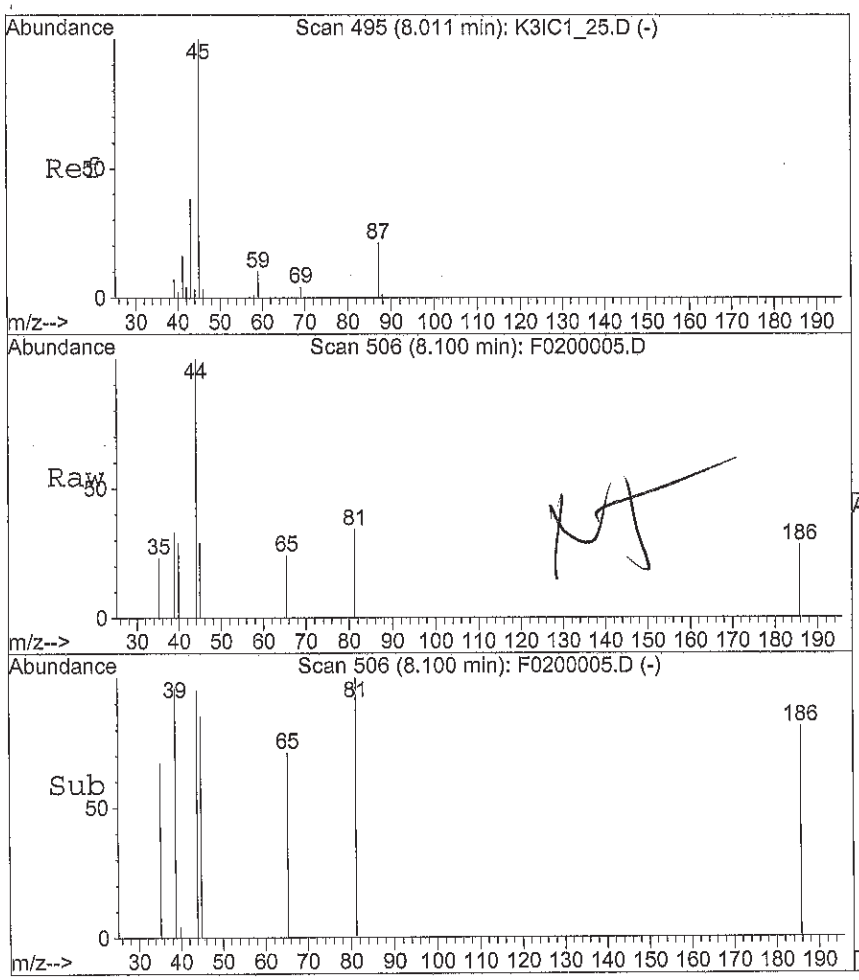


#21
(MEK) 2-Butanone
Concen: 1.13 ug/L
RT: 8.79 min Scan# 588
Delta R.T. 0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 72 Resp: 396

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	2774.7	314.2	471.2#

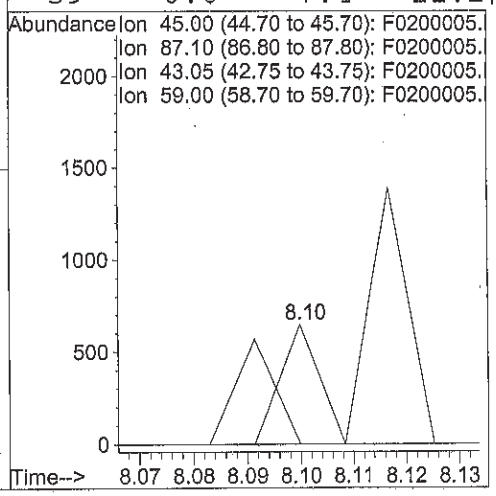


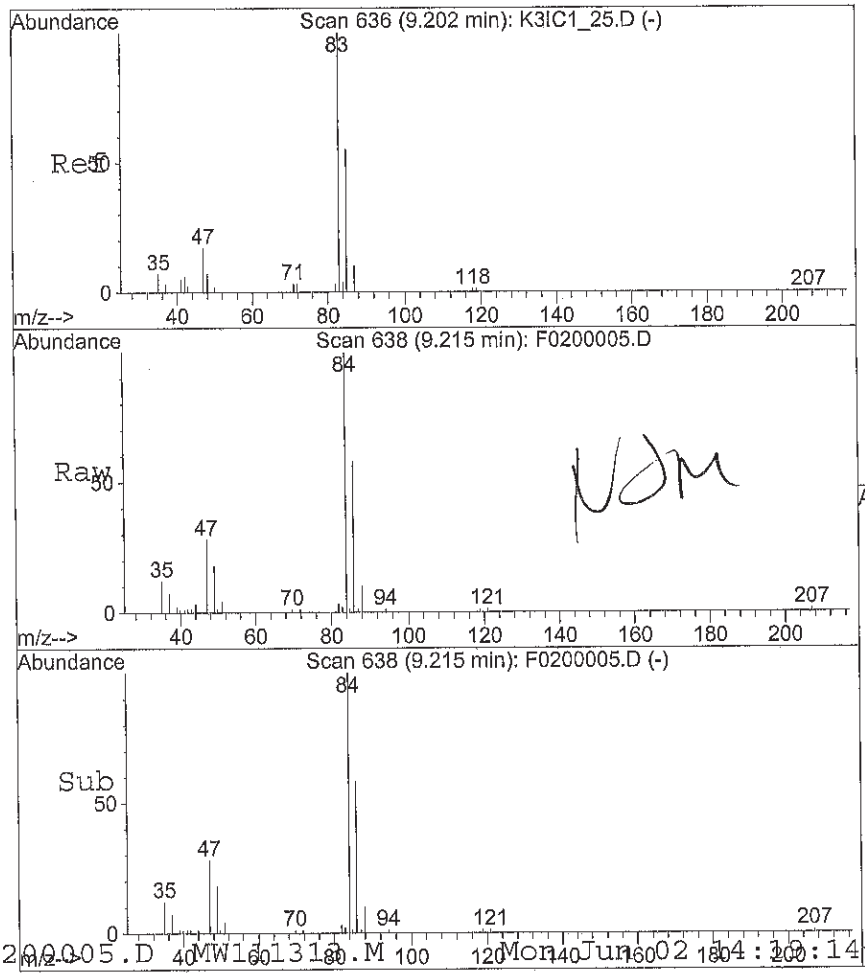


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 8.10 min Scan# 506
Delta R.T. 0.09 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 45 Resp: 328

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	302.4	30.5	45.7#
59	0.0	7.4	11.2#

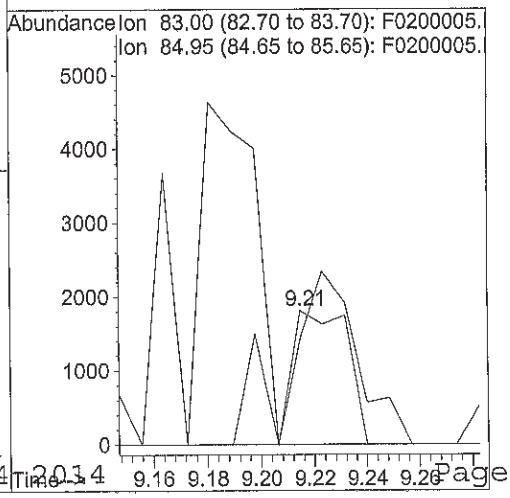


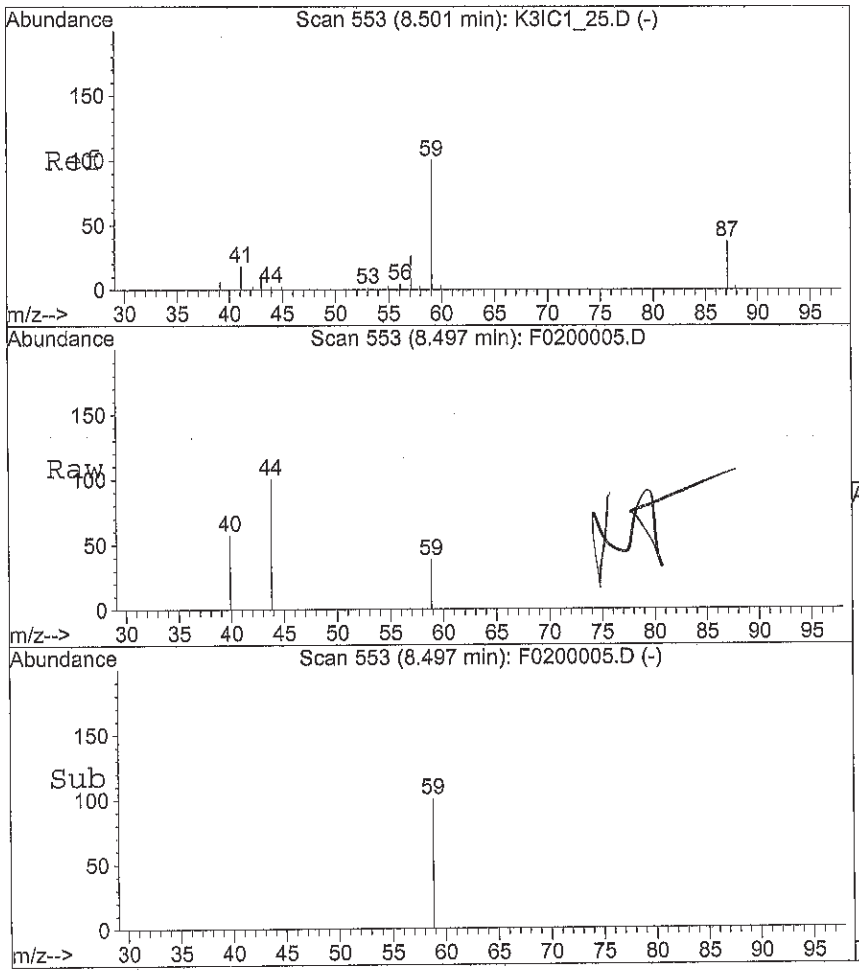


#24
Chloroform
Concen: 0.52 ug/L
RT: 9.21 min Scan# 638
Delta R.T. 0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 83 Resp: 3380

Ion	Ratio	Lower	Upper
83	100		
85	103.4	51.8	77.6#

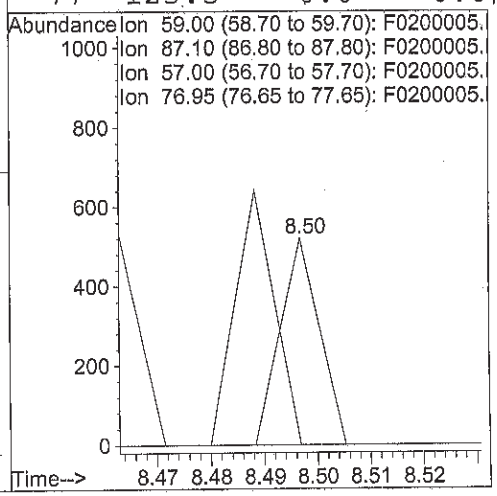


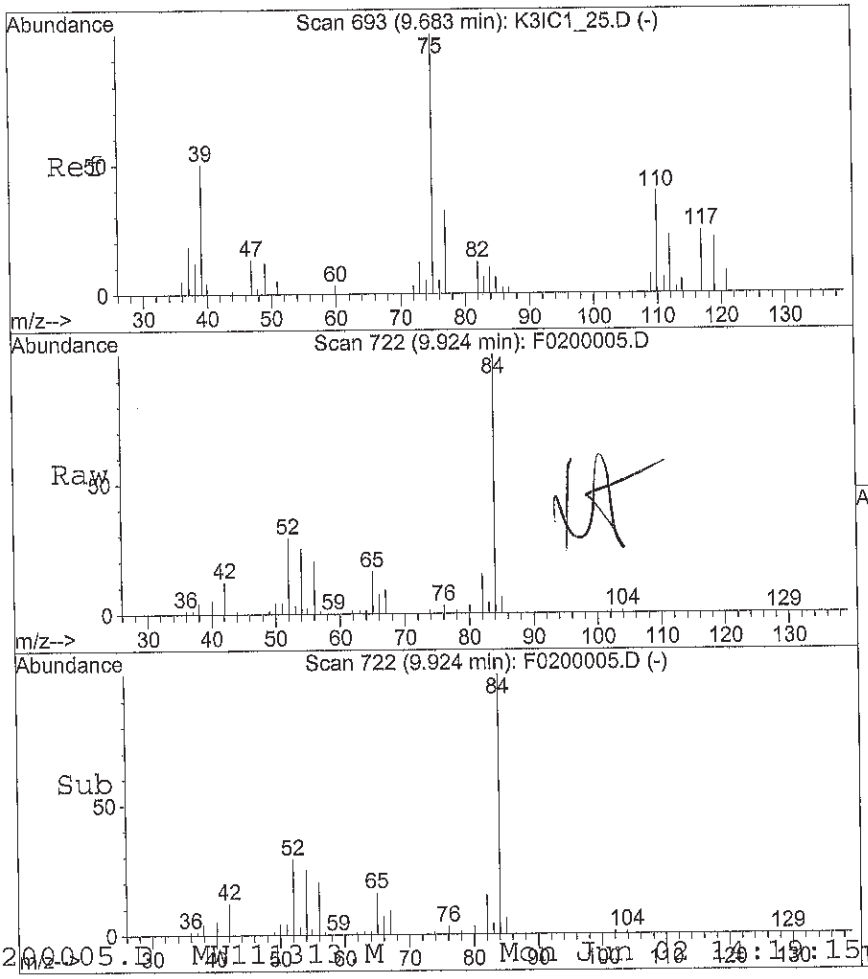


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.50 min Scan# 553
Delta R.T. -0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 59 Resp: 264

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	123.5	0.0	0.0#

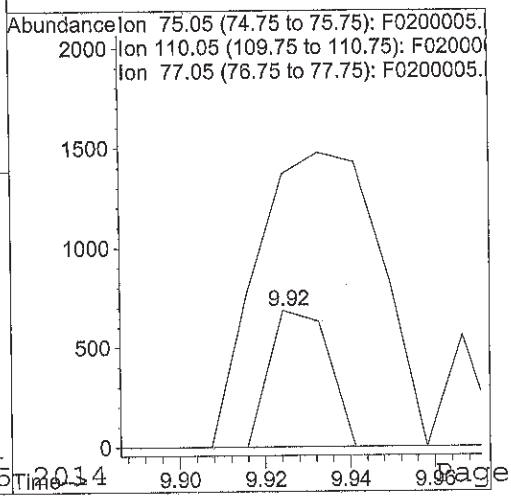


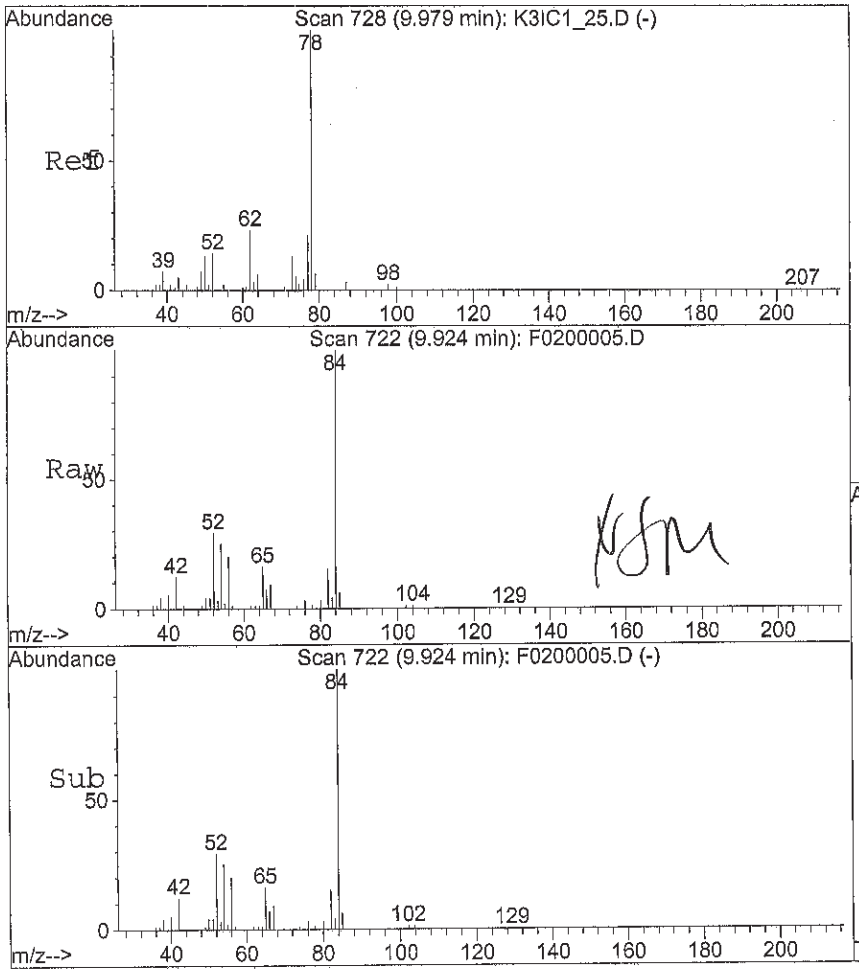


#29
1,1-Dichloropropene
Concen: 0.14 ug/L
RT: 9.92 min Scan# 722
Delta R.T. 0.24 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 75 Resp: 664

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	447.6	25.0	37.4#

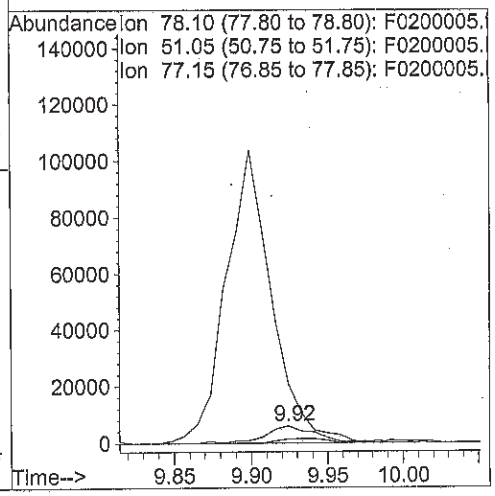


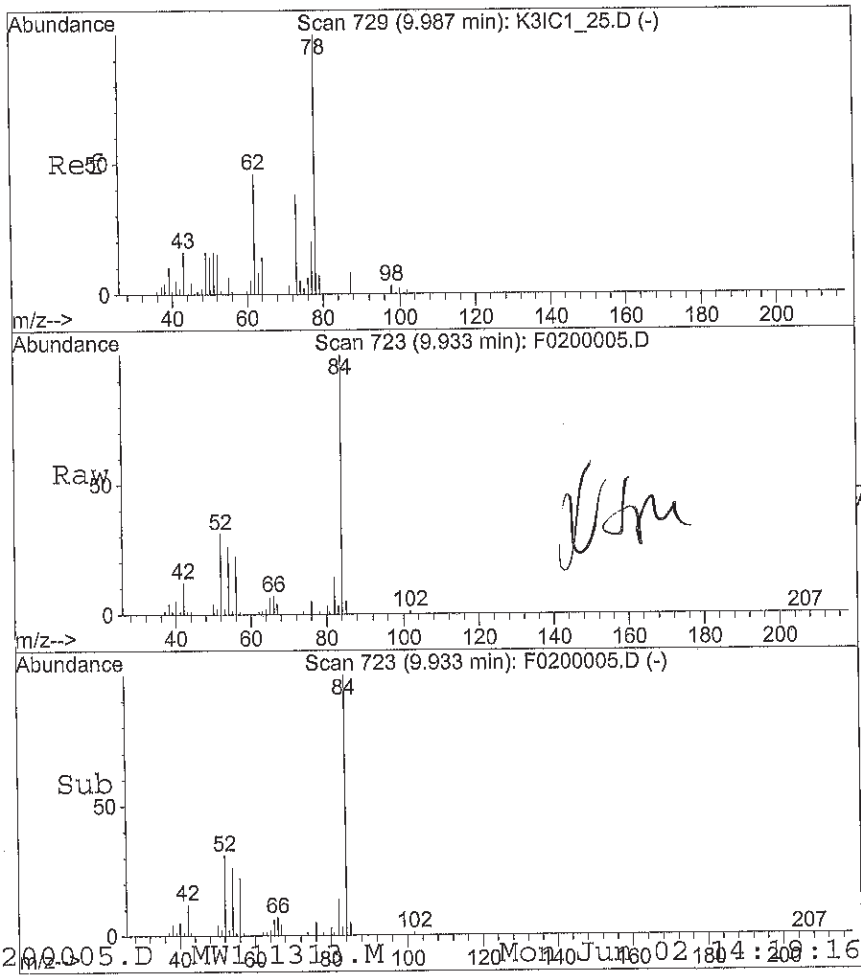


#31
Benzene
Concen: 1.09 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.05 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 78 Resp: 12822

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	23.2	16.6	24.8

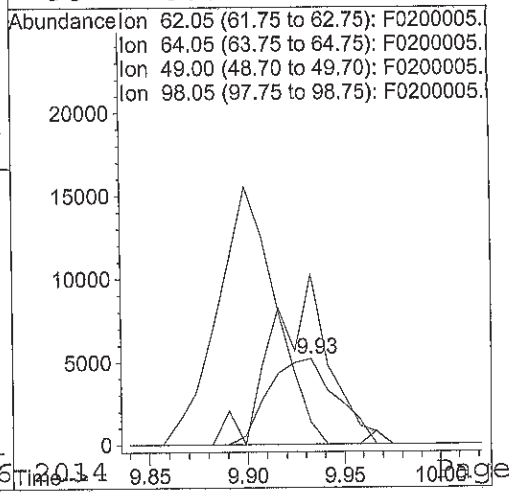


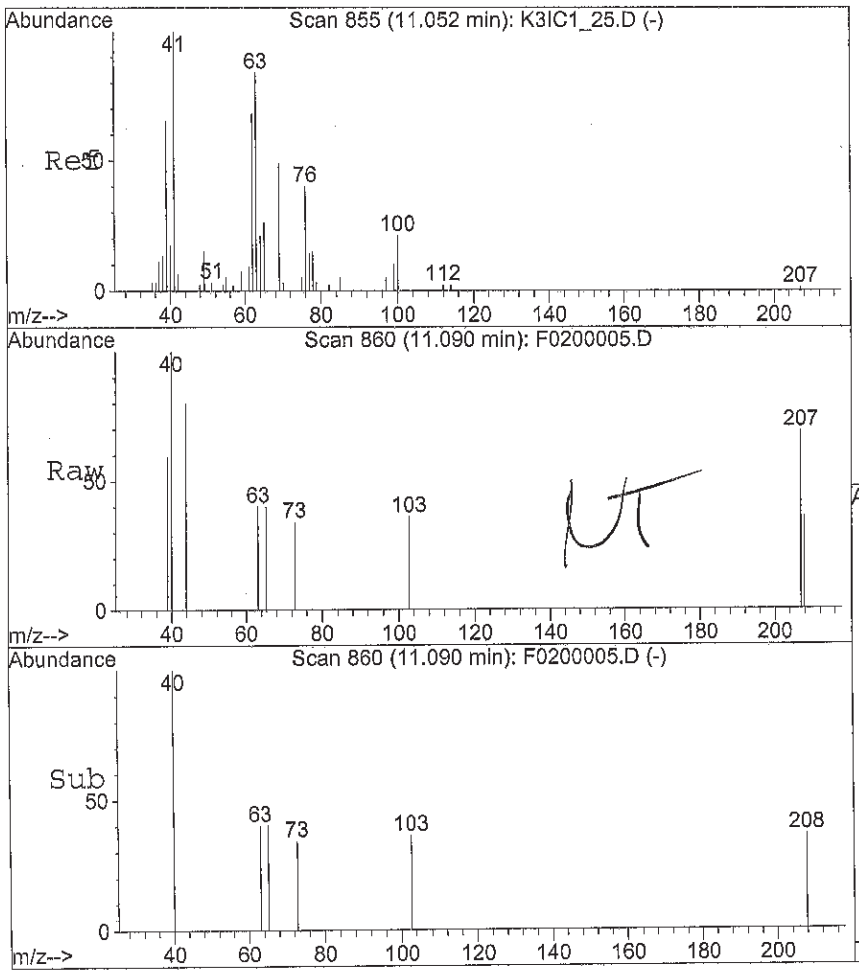


#32
1,2-Dichloroethane
Concen: 3.04 ug/L
RT: 9.93 min Scan# 723
Delta R.T. -0.05 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 62 Resp: 12662

Ion	Ratio	Lower	Upper
62	100		
64	162.7	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

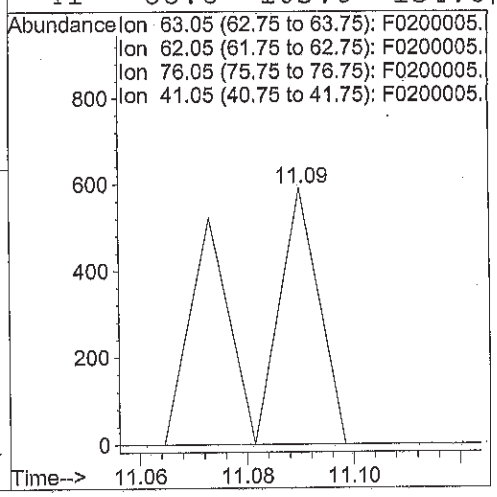


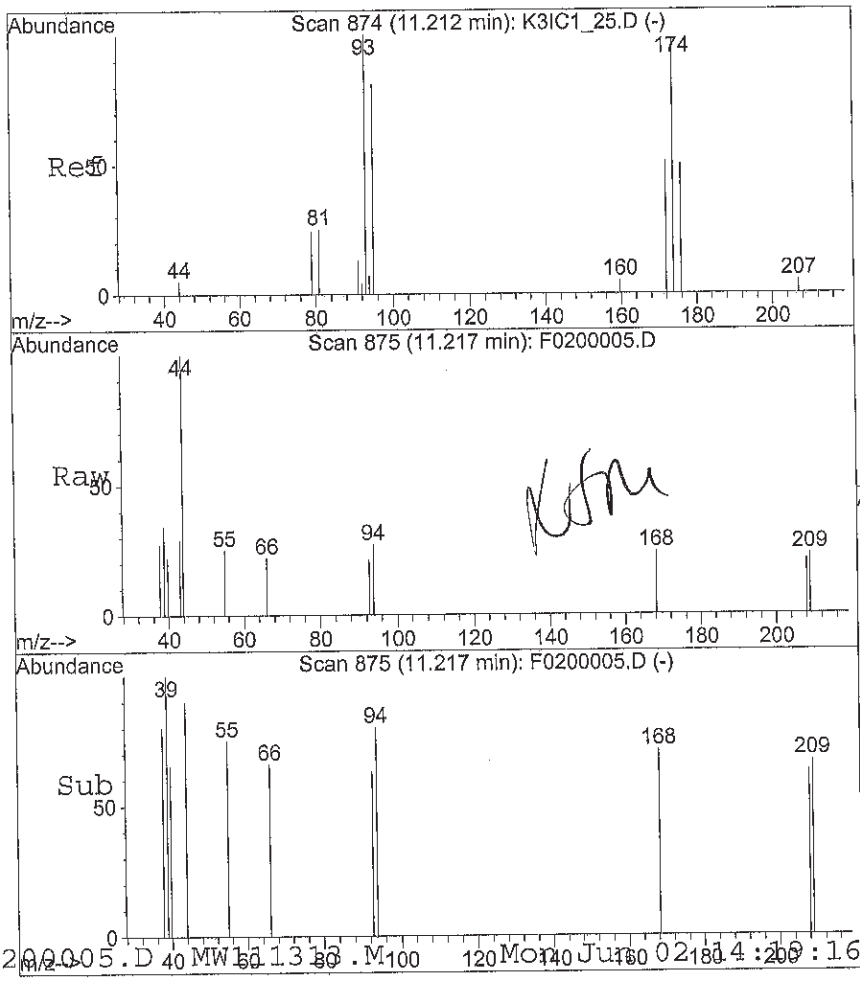


#34
1,2-Dichloropropane
Concen: 0.11 ug/L
RT: 11.09 min Scan# 860
Delta R.T. 0.04 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 63 Resp: 299

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	88.6	103.0	154.6#

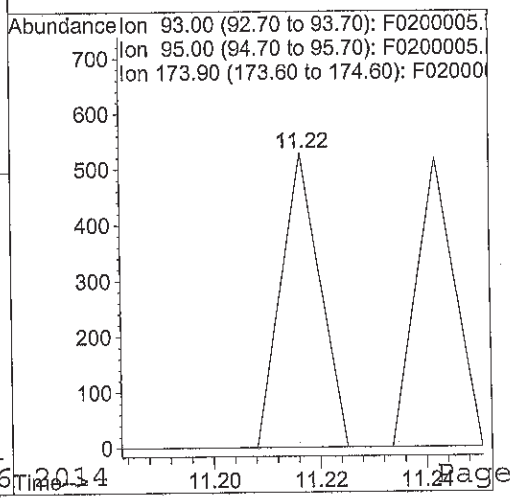


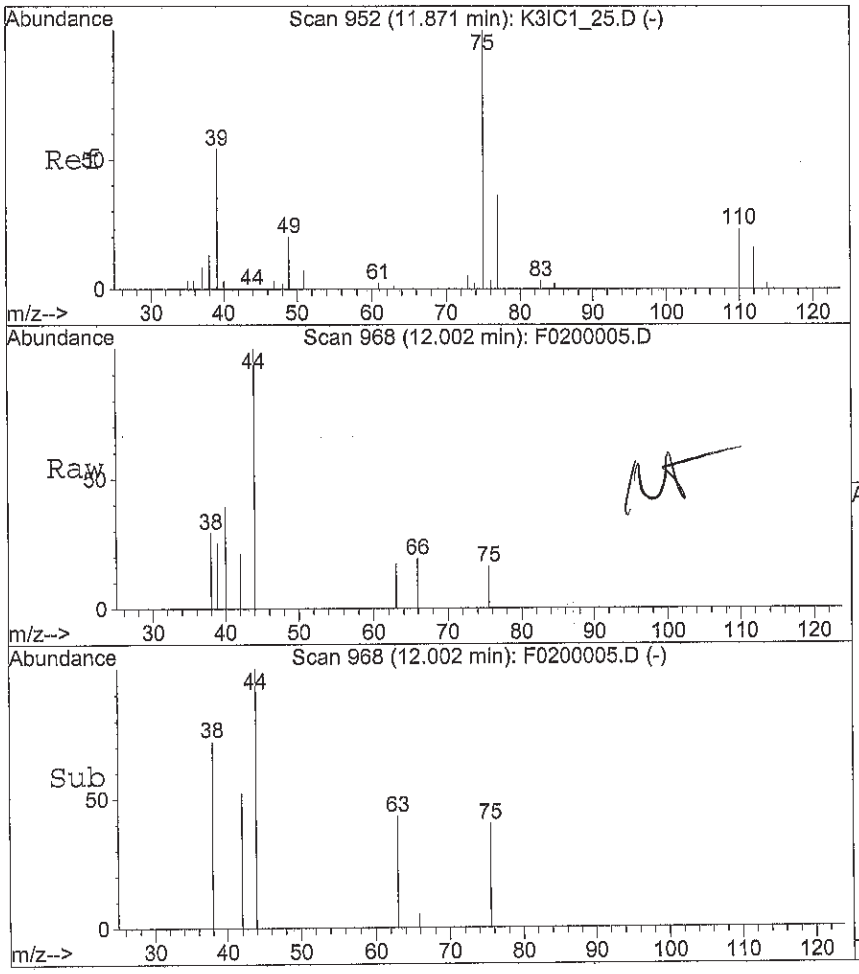


#35
Dibromomethane
Concen: 0.12 ug/L
RT: 11.22 min Scan# 875
Delta R.T. 0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 93 Resp: 268

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

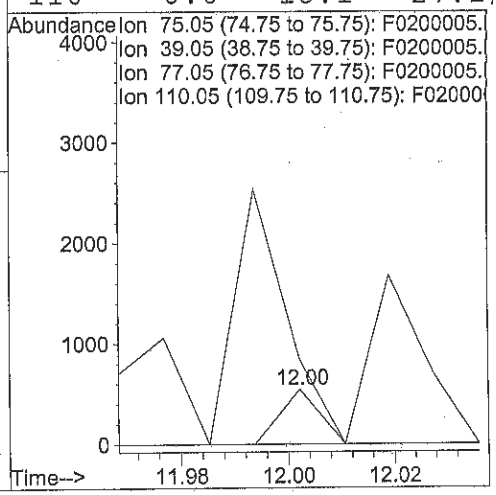


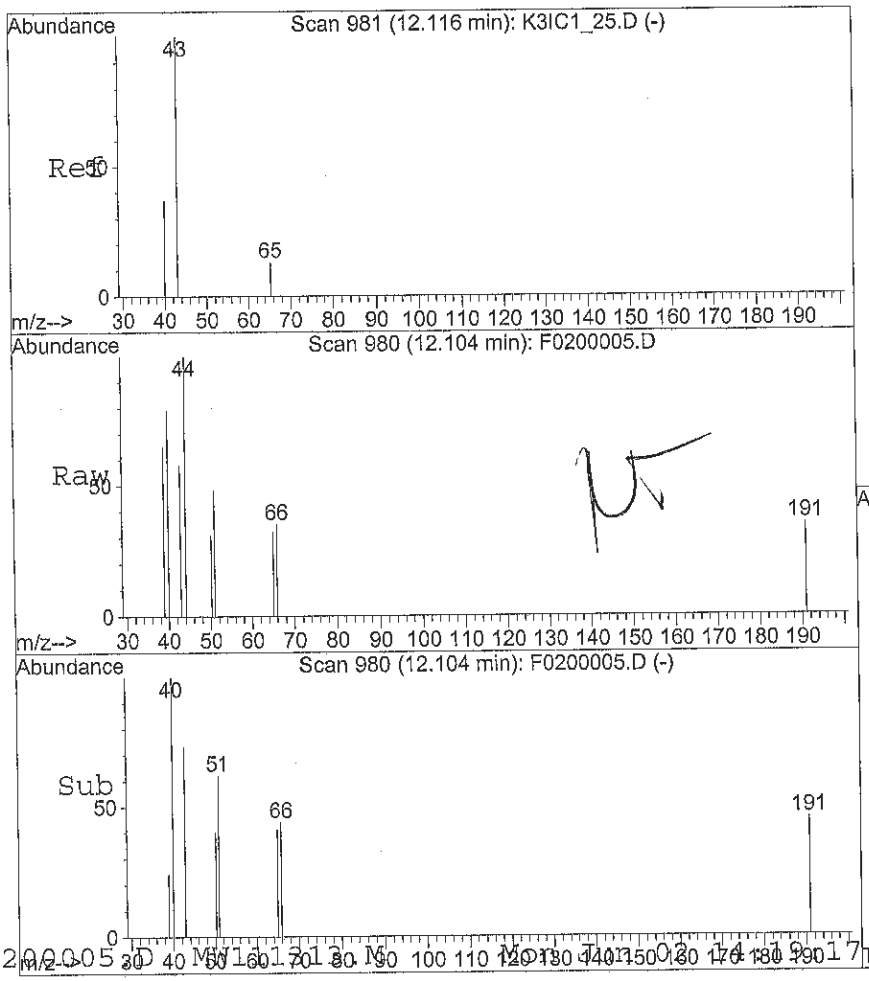


#37
cis-1,3-Dichloropropene
Concen: 0.06 ug/L
RT: 12.00 min Scan# 968
Delta R.T. 0.13 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 75 Resp: 273

Ion	Ratio	Lower	Upper
75	100		
39	953.5	40.7	61.1#
77	0.0	28.8	43.2#
110	0.0	18.1	27.1#

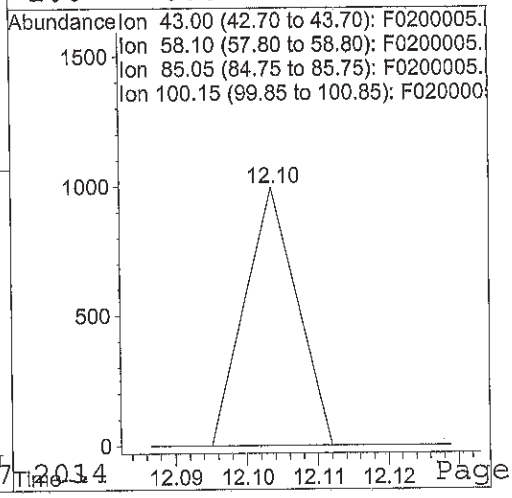


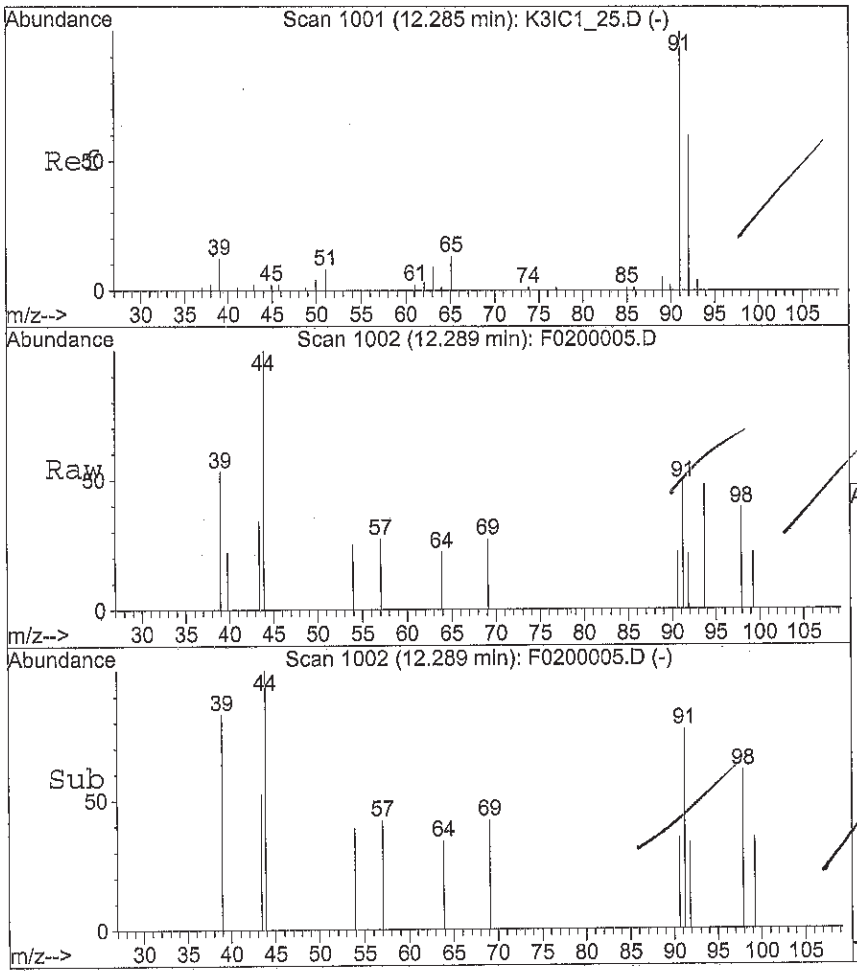


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.22 ug/L
RT: 12.10 min Scan# 980
Delta R.T. -0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 43 Resp: 504

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

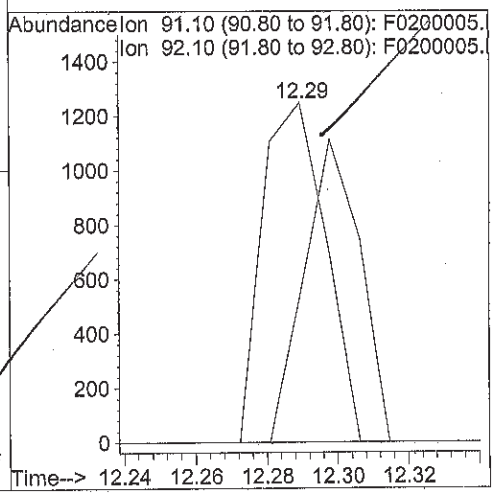


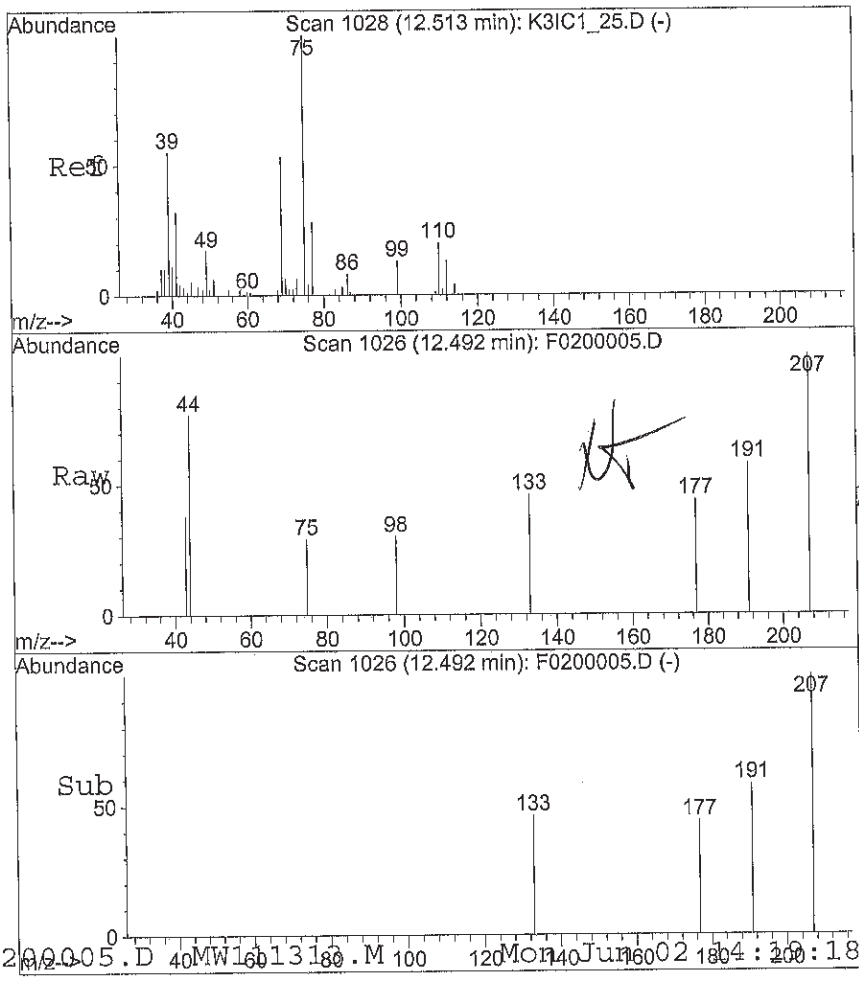


#41
Toluene
Concen: 0.10 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 91 Resp: 1541

Ion	Ratio	Lower	Upper
91	100		
92	78.7	47.4	71.0#

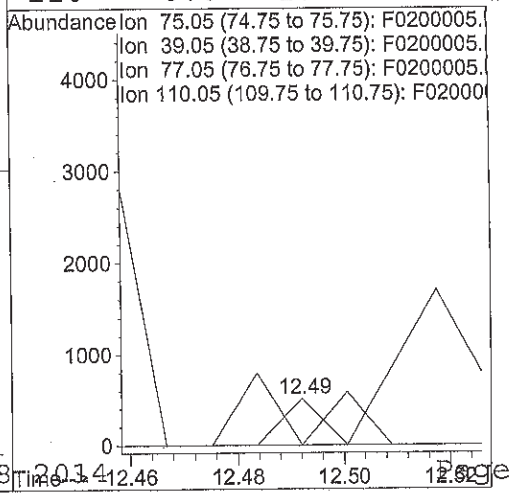


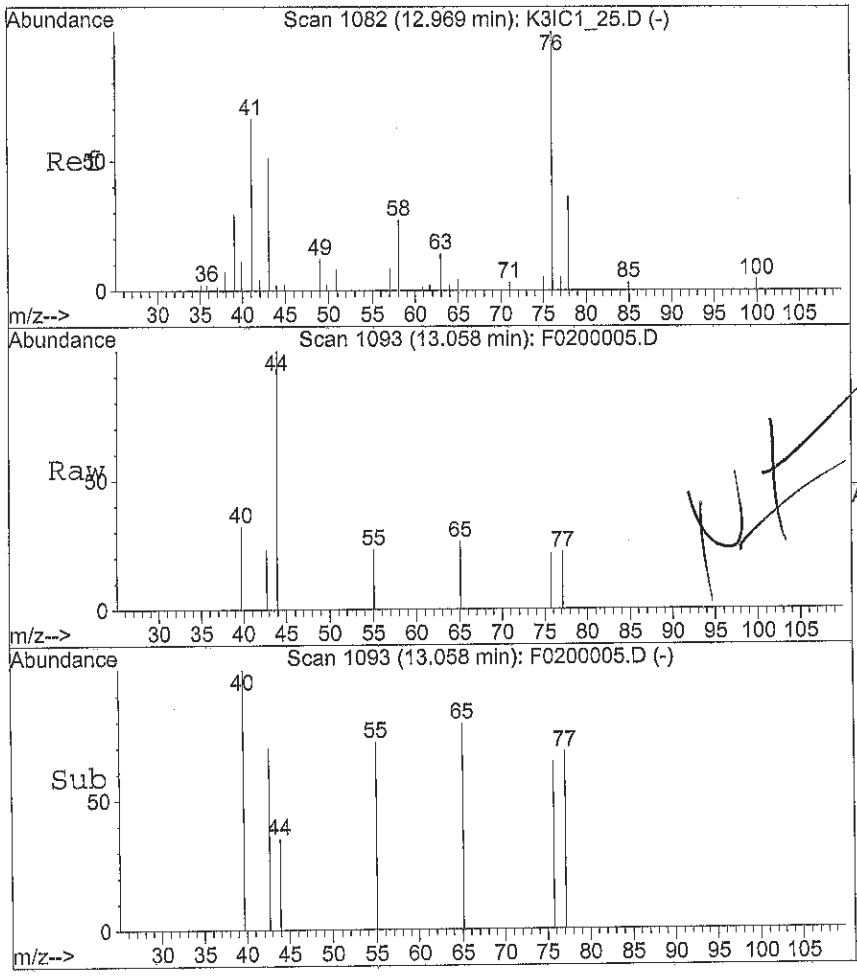


#42
trans-1,3-Dichloropropene
Concen: 0.05 ug/L
RT: 12.49 min Scan# 1026
Delta R.T. -0.02 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 75 Resp: 259

Ion	Ratio	Lower	Upper
75	100		
39	155.2	53.6	80.4#
77	113.5	25.4	38.2#
110	0.0	17.6	26.4#

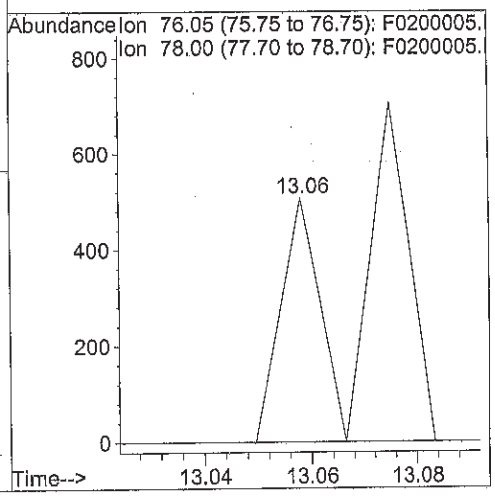


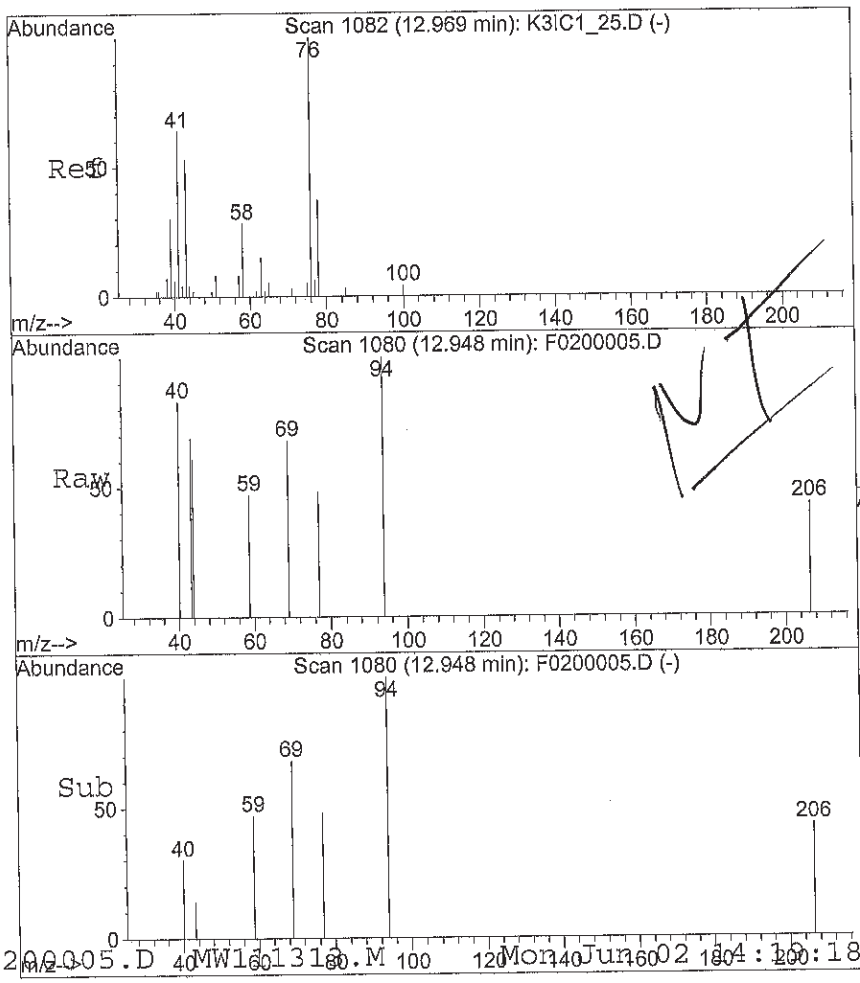


#45
1,3-Dichloropropane
Concen: 0.05 ug/L
RT: 13.06 min Scan# 1093
Delta R.T. 0.09 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 76 Resp: 257

Ion	Ratio	Lower	Upper
76	100		
78	139.3	26.9	40.3#

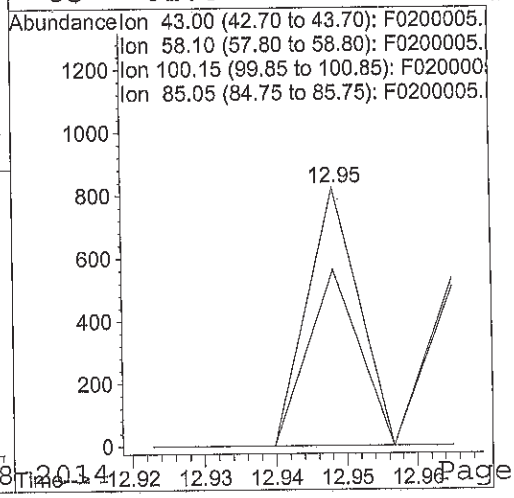


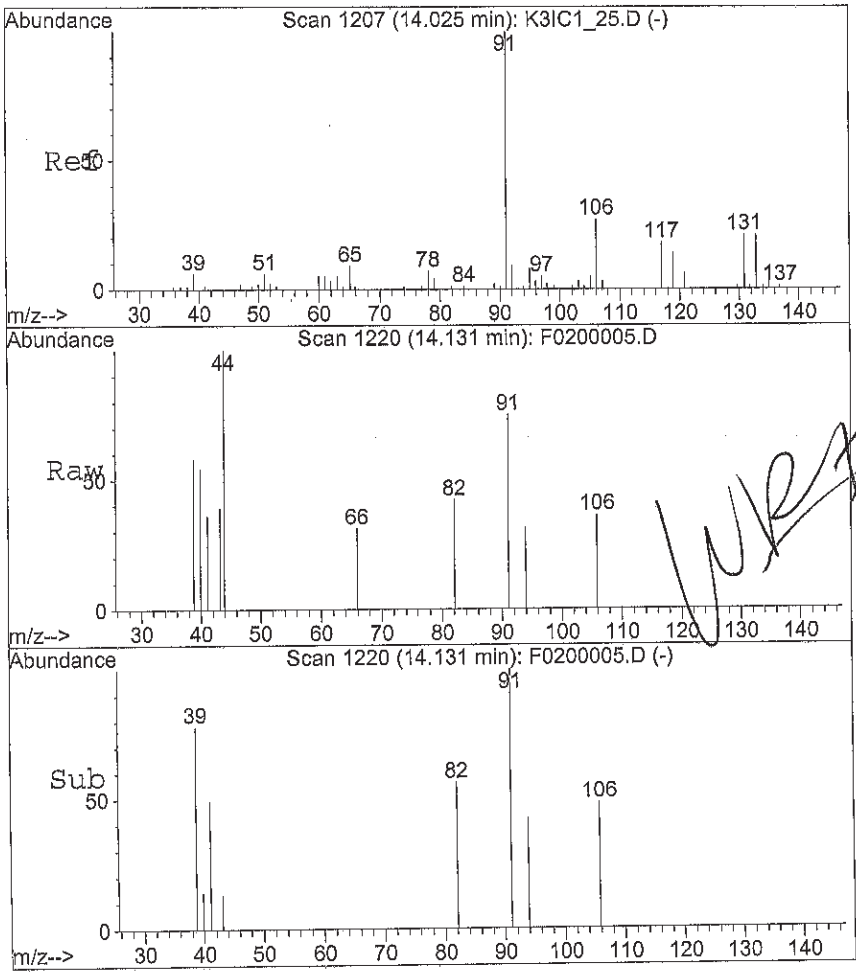


#46
2-Hexanone
Concen: 0.16 ug/L
RT: 12.95 min Scan# 1080
Delta R.T. -0.02 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 43 Resp: 417

Ion	Ratio	Lower	Upper
43	100		
58	68.3	40.9	61.3#
100	0.0	5.5	8.3#
85	61.6	4.3	6.5#

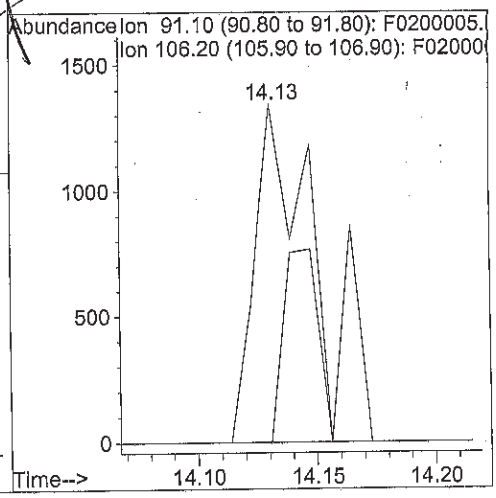


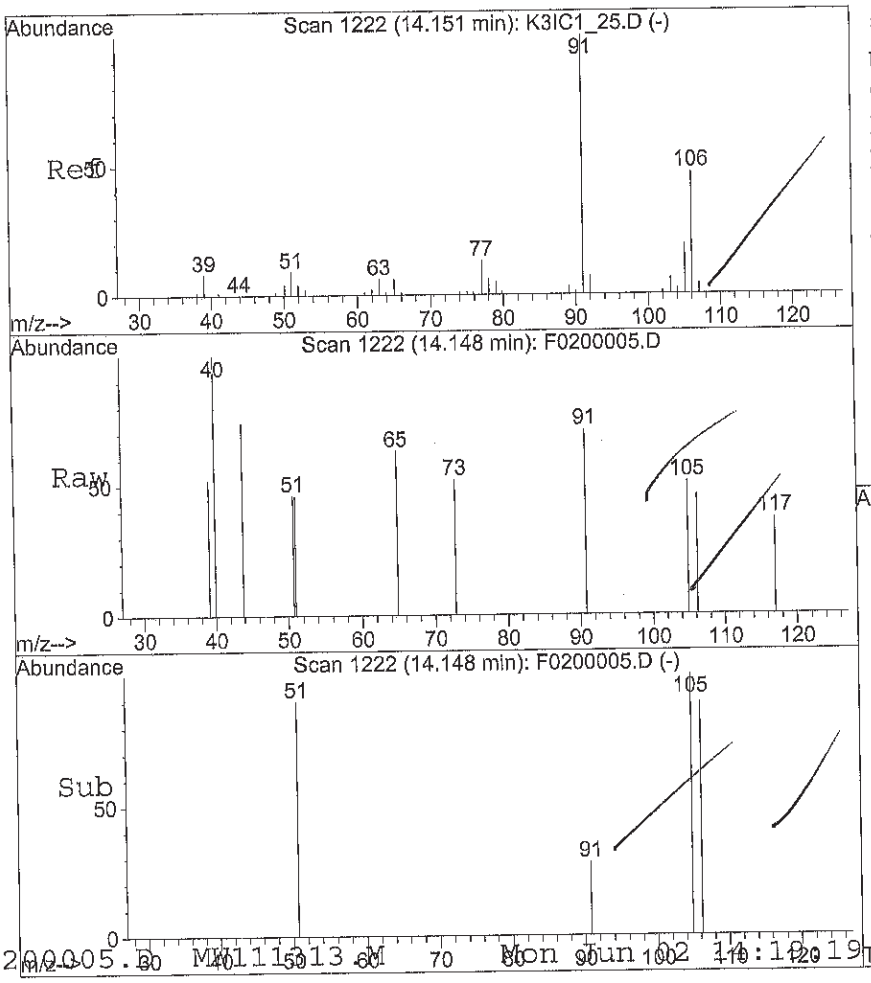


#51
Ethylbenzene
Concen: 0.13 ug/L
RT: 14.13 min Scan# 1220
Delta R.T. 0.11 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 91 Resp: 2396

Ion	Ratio	Lower	Upper
91	100		
106	32.1	23.5	35.3

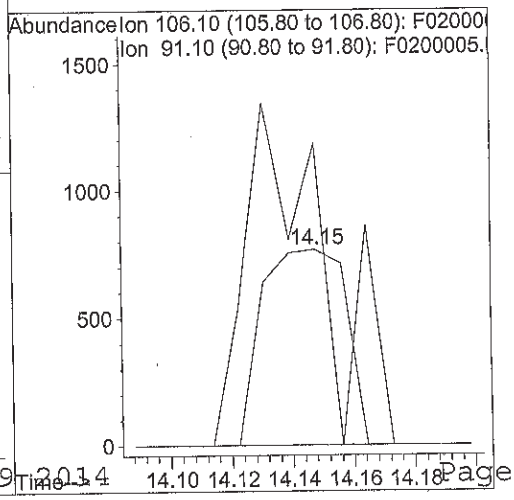


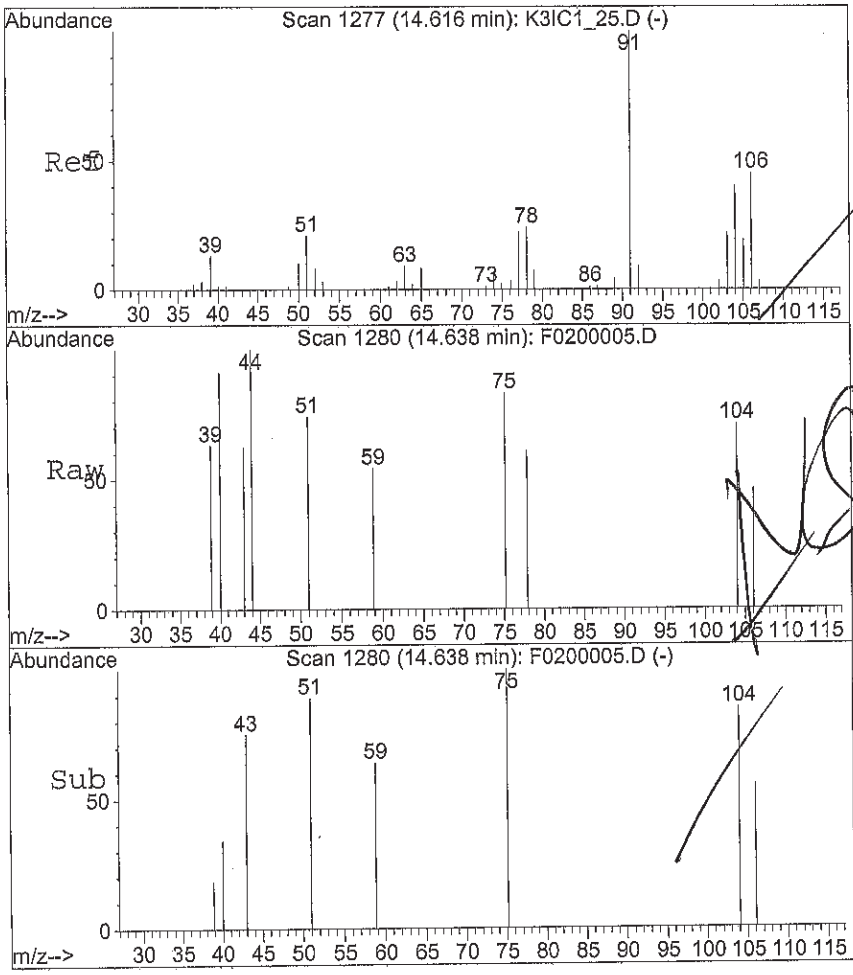


#52
m,p-Xylenes
Concen: 0.23 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:106 Resp: 1456

Ion	Ratio	Lower	Upper
106	100		
91	164.6	177.1	265.7#

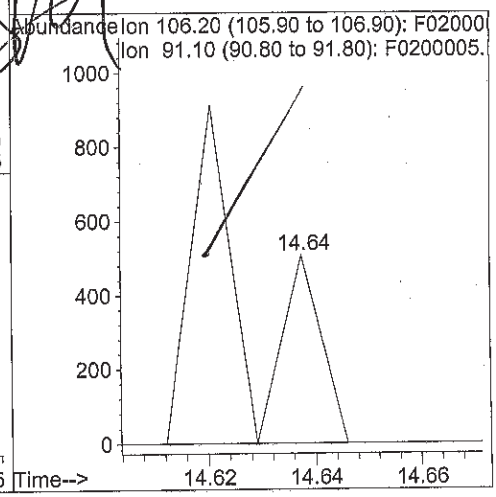


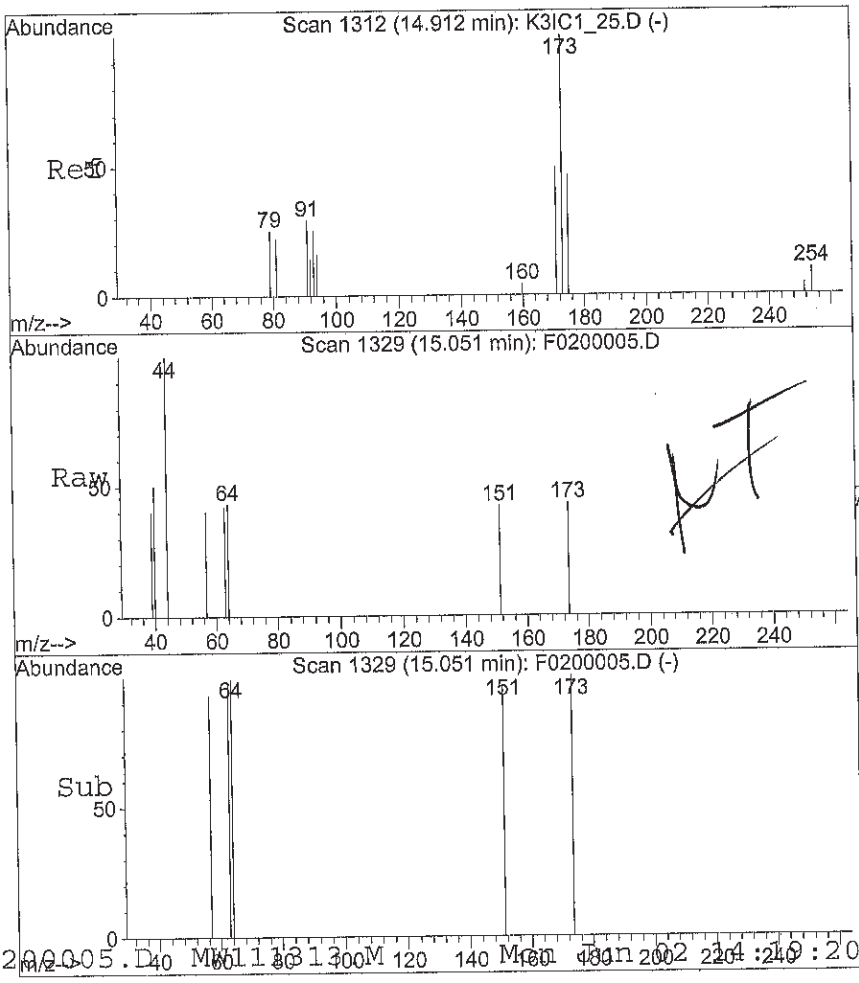


#53
o-Xylene
Concen: 0.04 ug/L
RT: 14.64 min Scan# 1280
Delta R.T. 0.02 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:106 Resp: 258

Ion	Ratio	Lower	Upper
106	100		
91	179.1	179.0	268.6

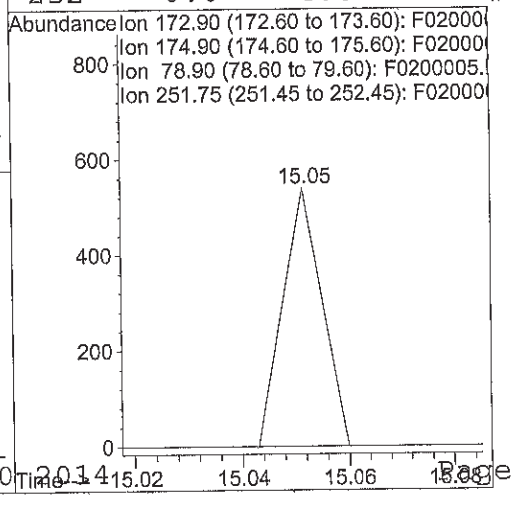


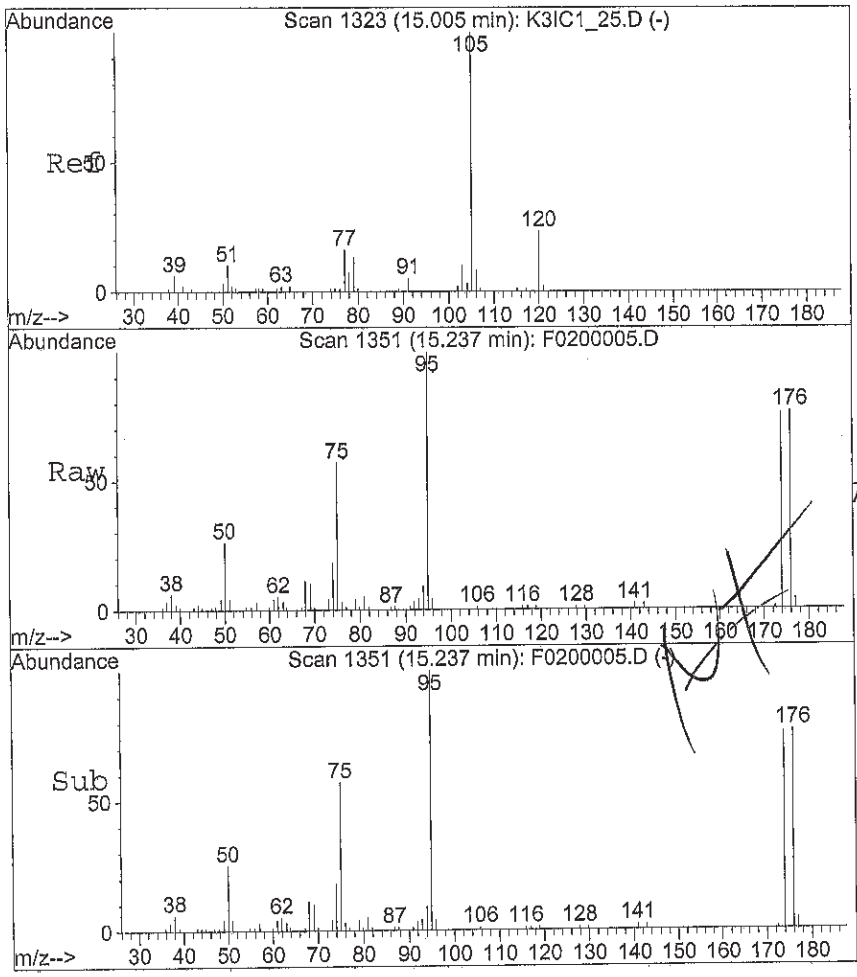


#55
Bromoform
Concen: 0.12 ug/L
RT: 15.05 min Scan# 1329
Delta R.T. 0.14 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:173 Resp: 273

Ion	Ratio	Lower	Upper
173	100		
175	0.0	35.8	53.6#
79	0.0	18.9	28.3#
252	0.0	4.6	6.8#

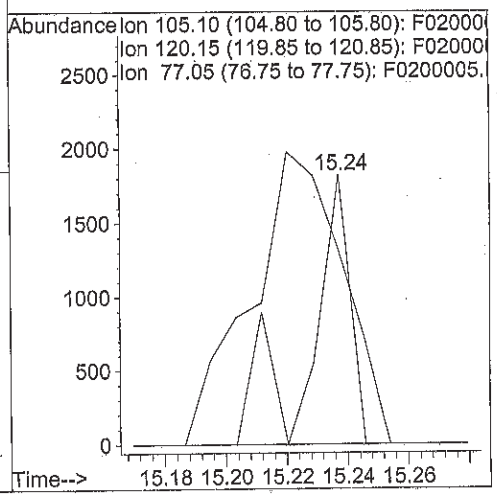


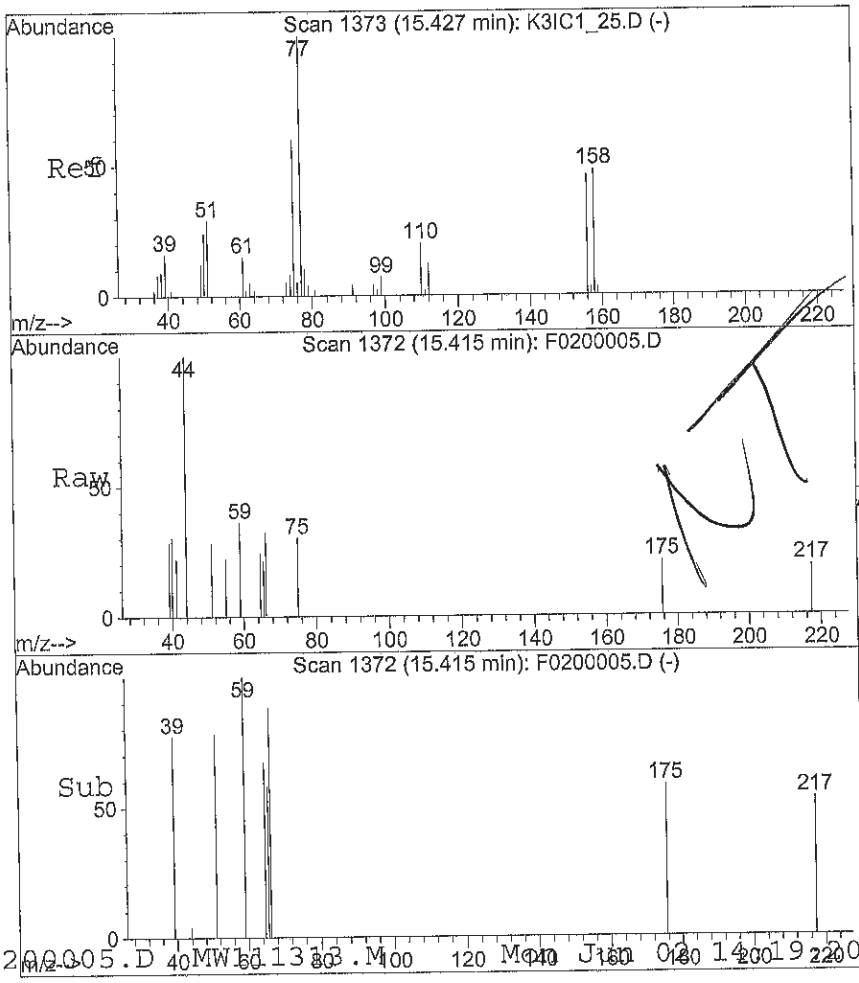


#56
Isopropylbenzene
Concen: 0.10 ug/L
RT: 15.24 min Scan# 1351
Delta R.T. 0.23 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:105 Resp: 1646

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	251.8	13.1	19.7#

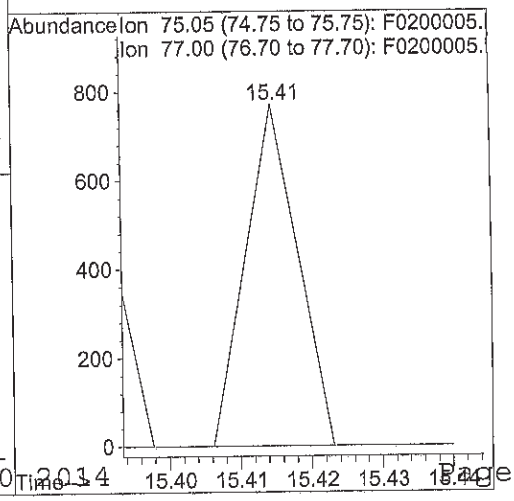


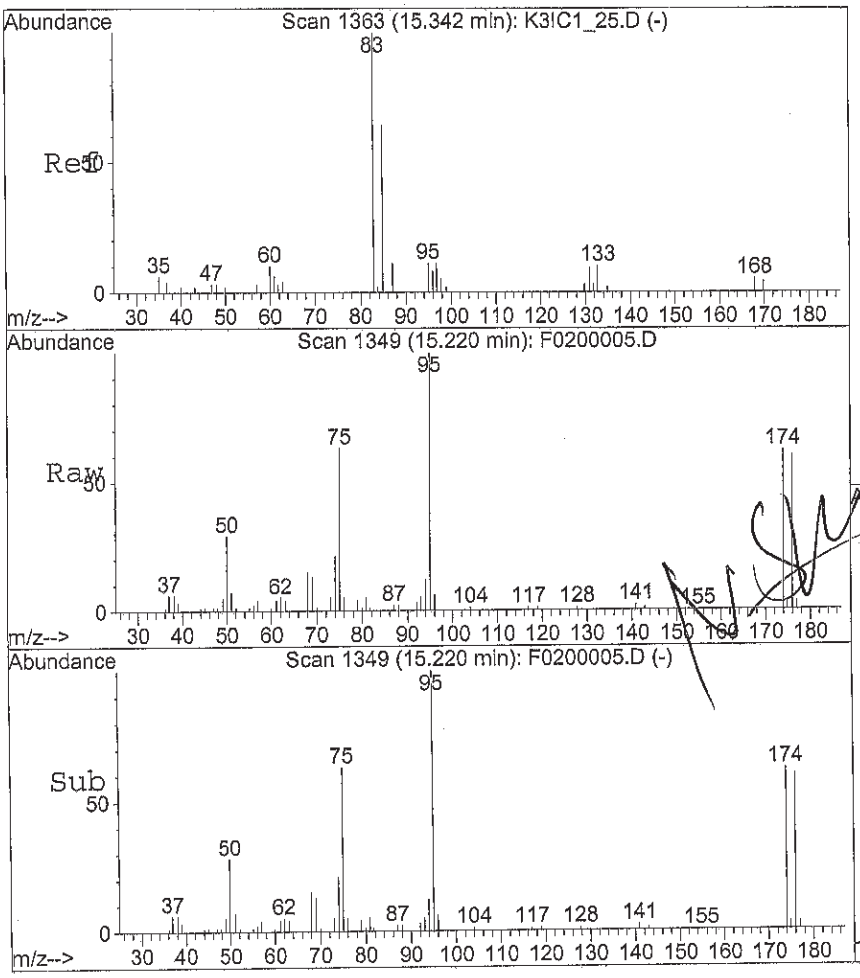


#57
1,2,3-Trichloropropane
Concen: 0.08 ug/L
RT: 15.41 min Scan# 1372
Delta R.T. -0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 75 Resp: 391

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

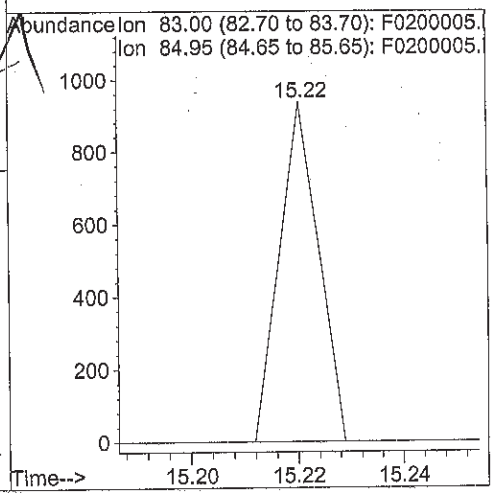


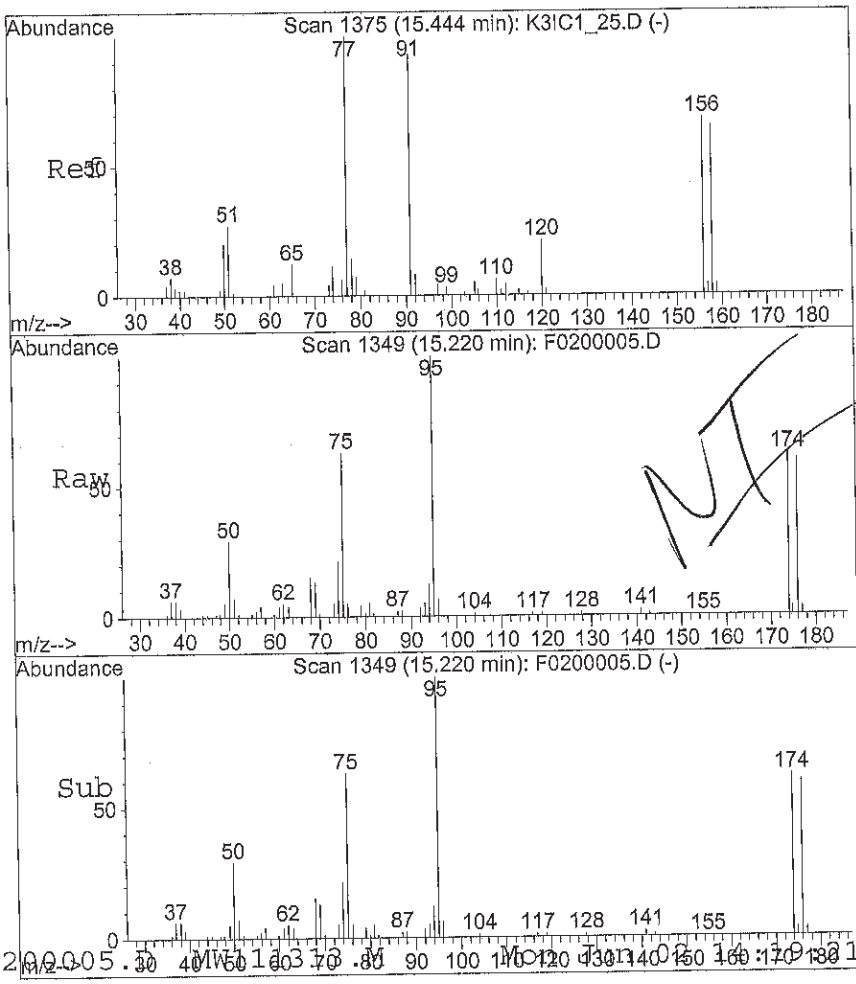


#60
1,1,2,2-Tetrachloroethane
Concen: 0.11 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. -0.12 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 83 Resp: 475

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

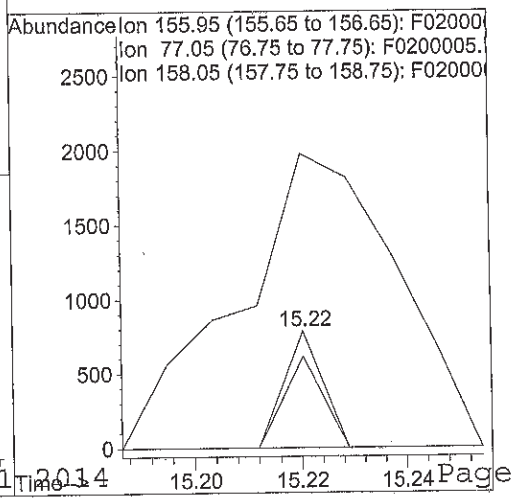


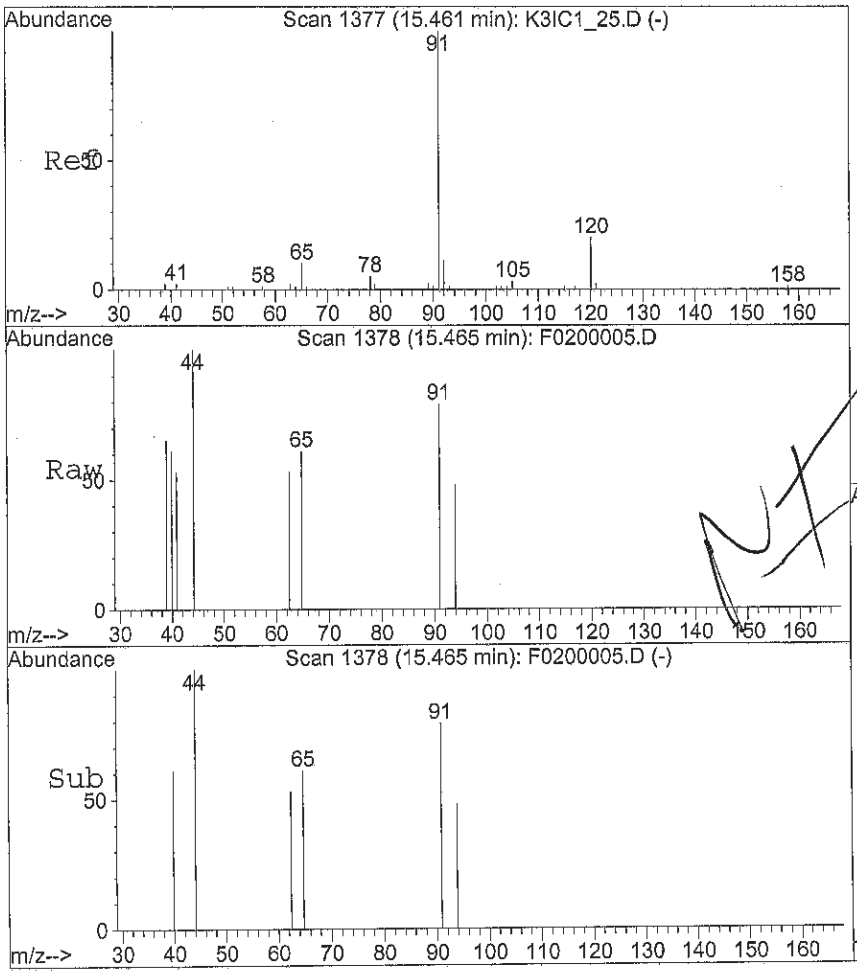


#61
Bromobenzene
Concen: 0.08 ug/L
RT: 15.22 min Scan# 1349
Delta R.T. -0.22 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:156 Resp: 397

Ion	Ratio	Lower	Upper
156	100		
77	1044.1	171.3	256.9#
158	78.3	80.3	120.5#

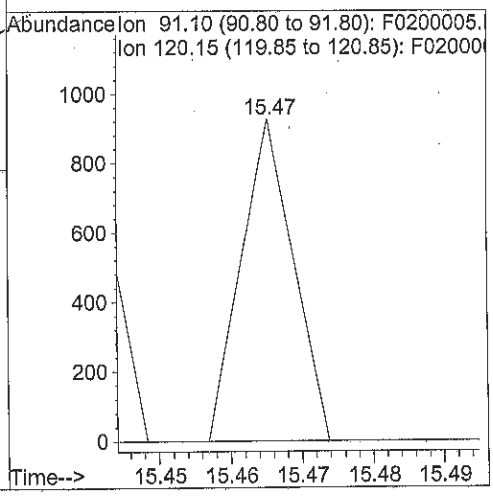


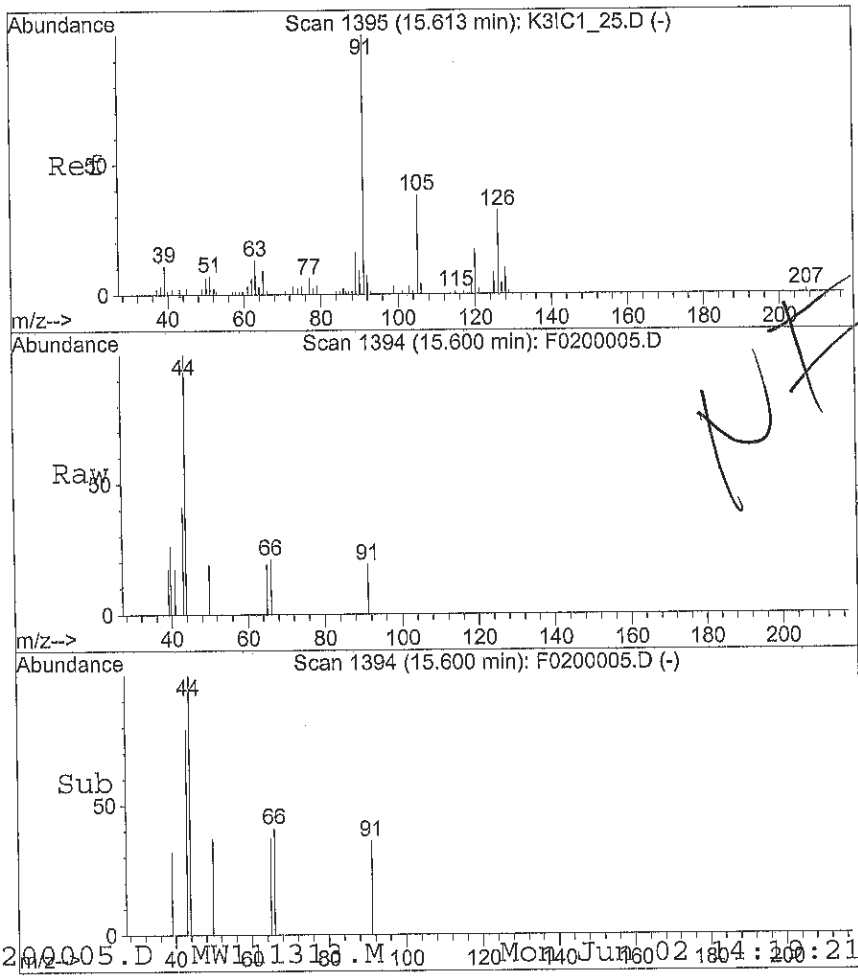


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.47 min Scan# 1378
Delta R.T. 0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 91 Resp: 470

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

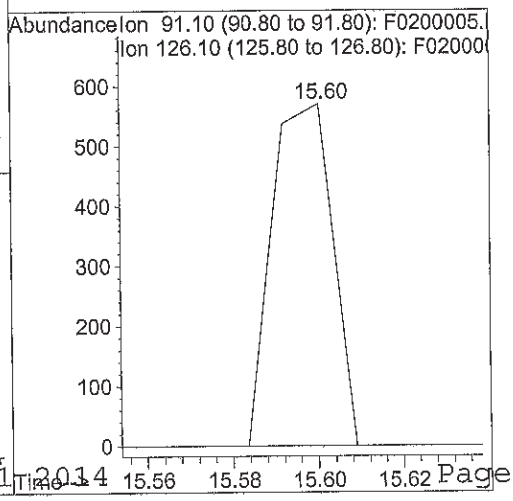


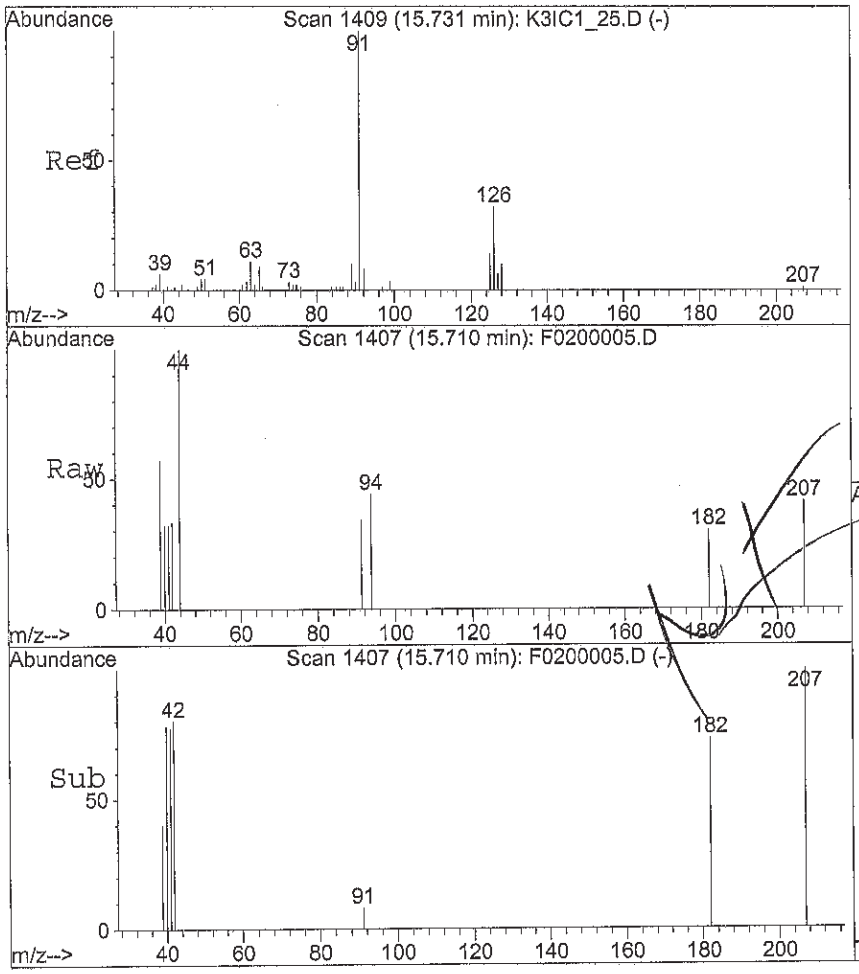


#63
2-Chlorotoluene
Concen: 0.04 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 91 Resp: 561

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

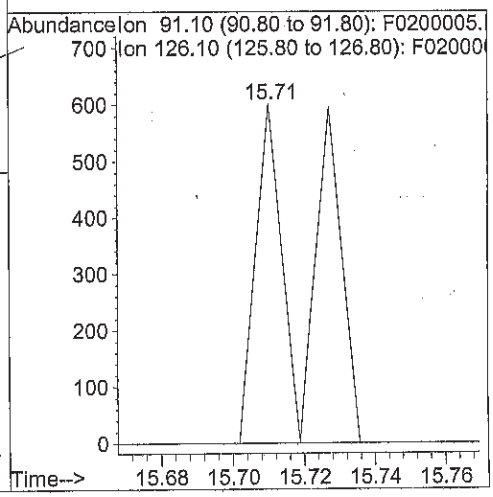


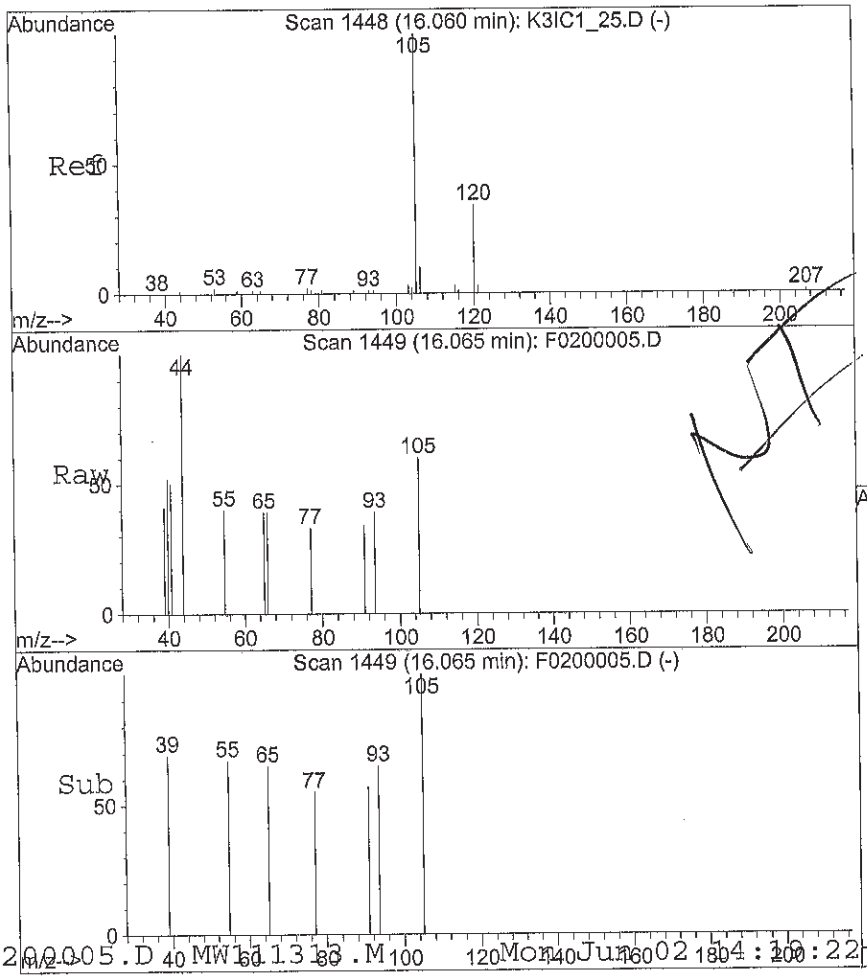


#65
4-Chlorotoluene
Concen: 0.04 ug/L
RT: 15.71 min Scan# 1407
Delta R.T. -0.02 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 91 Resp: 606

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

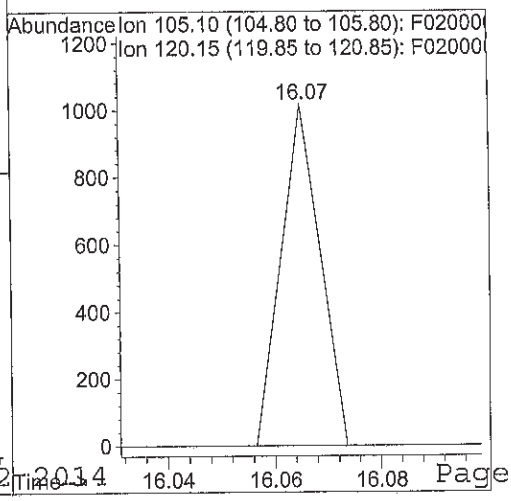


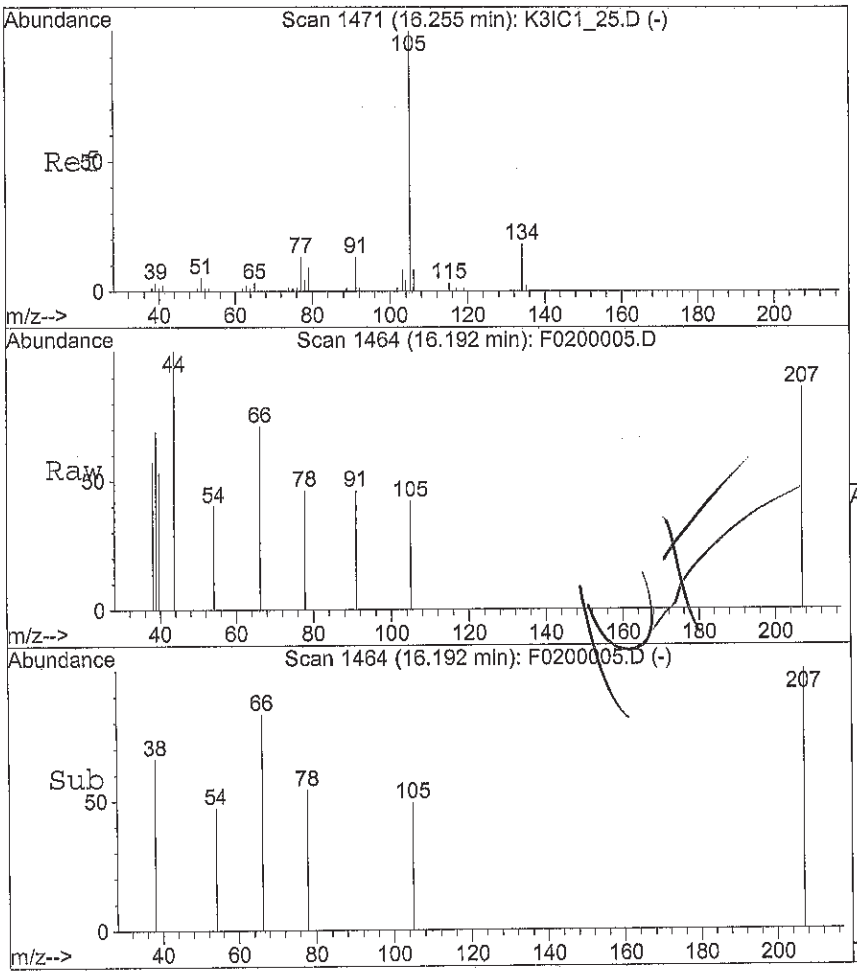


#67
1,2,4-Trimethylbenzene
Concen: 0.03 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:105 Resp: 516

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

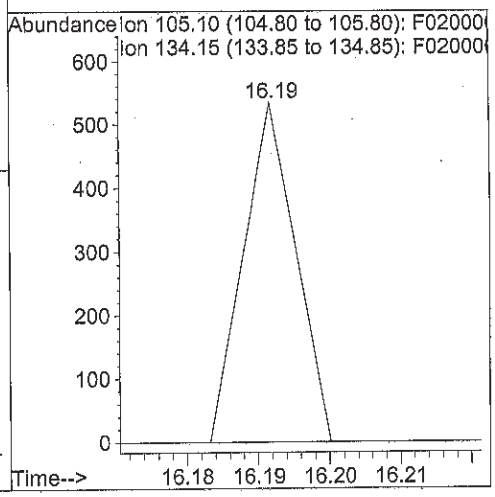


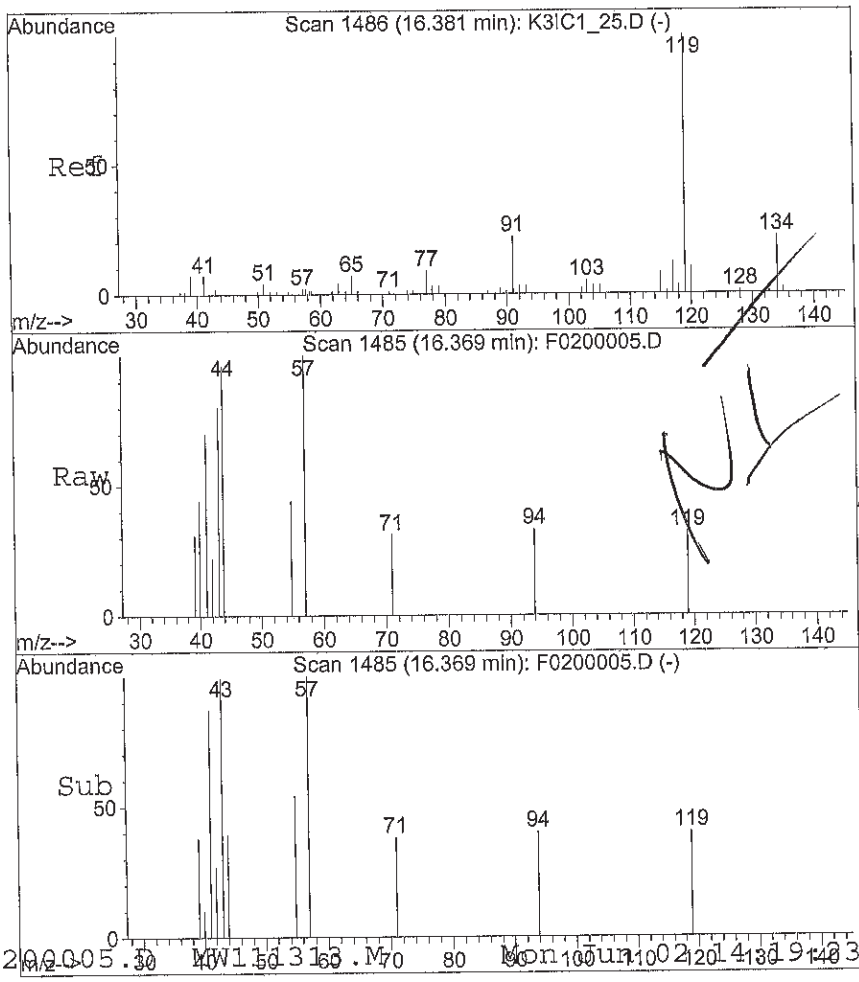


#68
sec-Butylbenzene
Concen: 0.01 ug/L
RT: 16.19 min Scan# 1464
Delta R.T. -0.06 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:105 Resp: 271

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

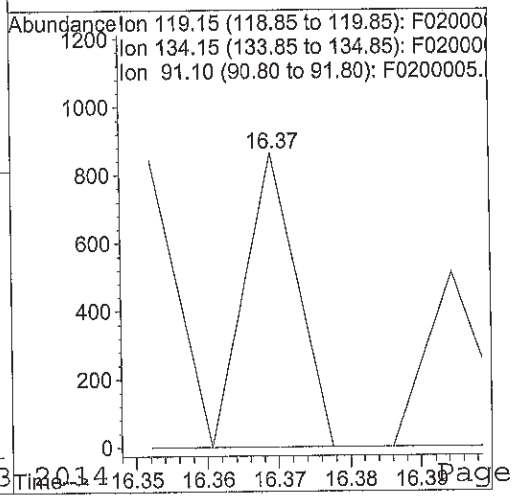


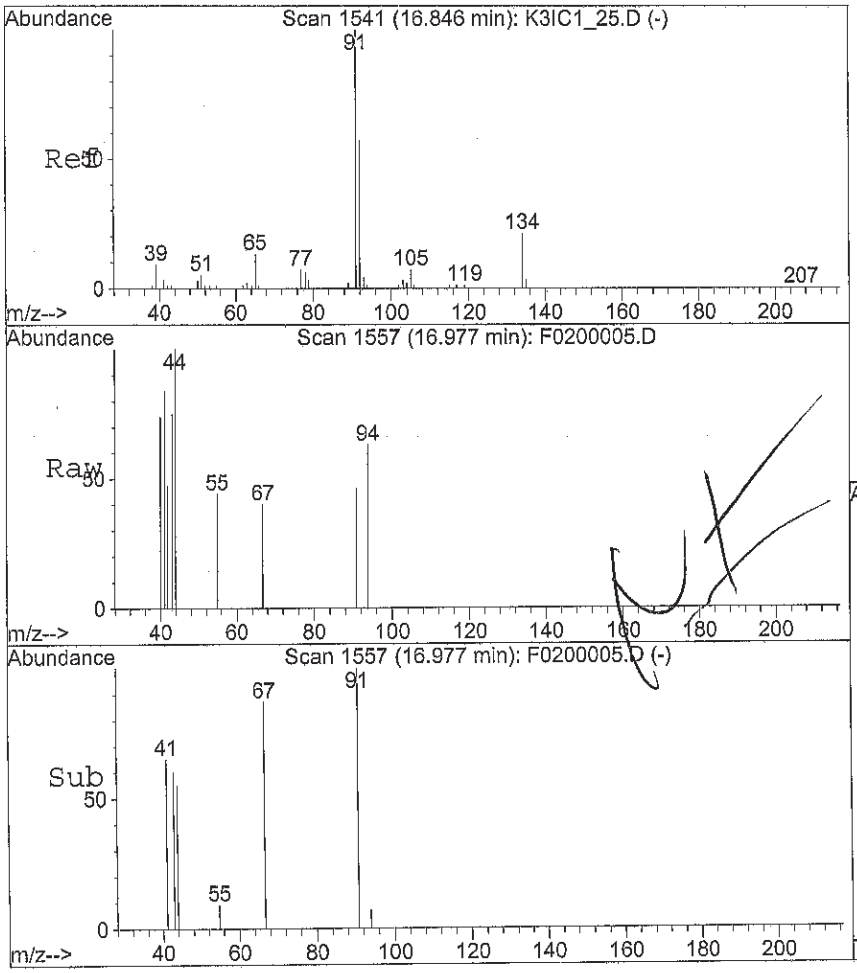


#69
p-Isopropyltoluene
Concen: 0.03 ug/L
RT: 16.37 min Scan# 1485
Delta R.T. -0.01 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:119 Resp: 438

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	0.0	19.6	29.4#

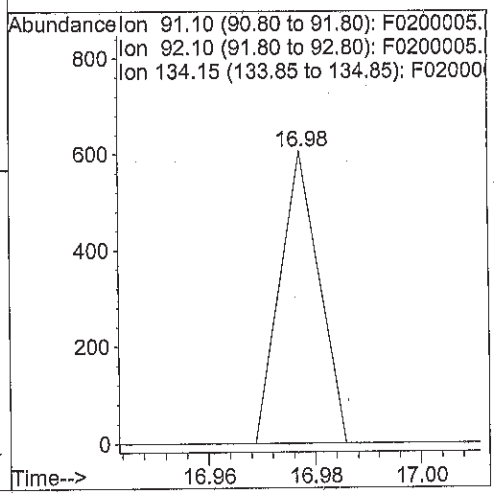


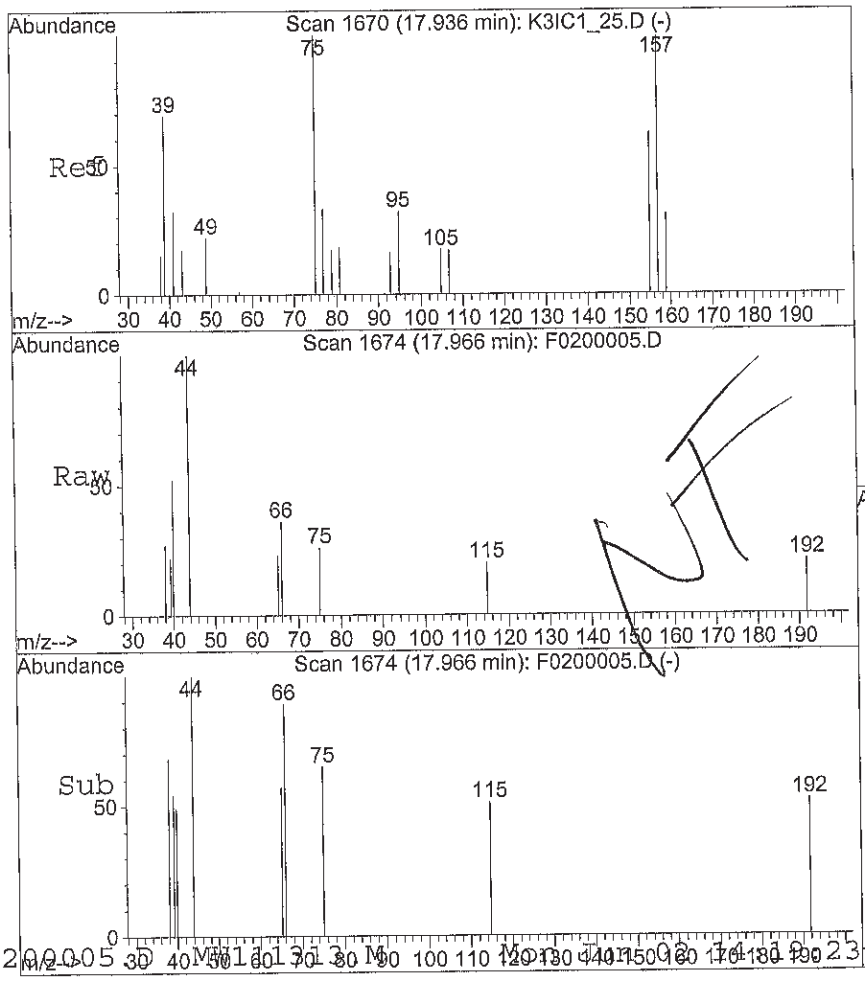


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.98 min Scan# 1557
Delta R.T. 0.13 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 91 Resp: 307

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

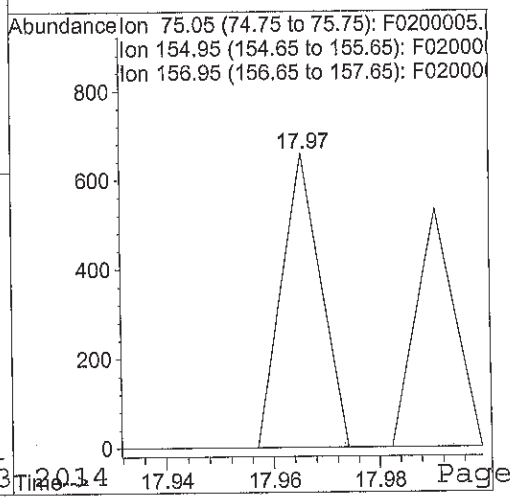


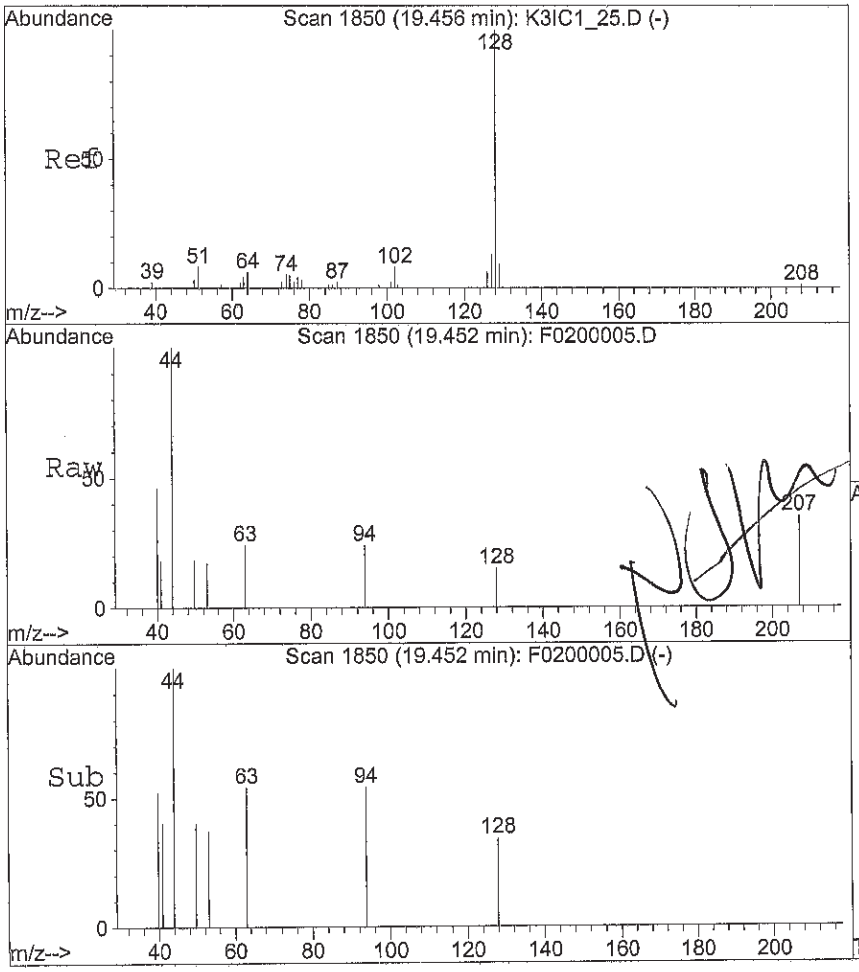


#74
1,2-Dibromo-3-chloropropane
Concen: 1.34 ug/L
RT: 17.97 min Scan# 1674
Delta R.T. 0.03 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion: 75 Resp: 334

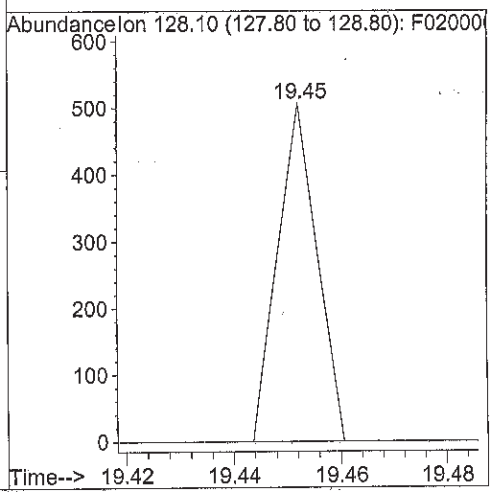
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.45 min Scan# 1850
Delta R.T. -0.00 min
Lab File: F0200005.D
Acq: 2 Jun 2014 1:50 pm

Tgt Ion:128 Resp: 257



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200005.D Vial: 4
Acq On : 2 Jun 2014 1:50 pm Operator: DN
Sample : 3F40201-04 Inst : GC/MS Ins
Misc : 100cc SVL-528-SA8-SV-18.5-19.5 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:38 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1249356	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1155970	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.50	152	626548	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	387681m	11.93 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	95.44%	
3) Chloroform-d (SU6)	9.19	84	666217m	14.29 ug/L	-0.00
Spiked Amount 12.500	Range 70 - 140		Recovery =	114.32%	
4) Methylene Chloride-d2 (SU5	7.07	86	289616	10.63 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery =	85.04%	
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	349457m	15.74 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	125.92%#	
6) Benzene-d6 (SU7)	9.92	84	1120886	11.43 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery =	91.44%	
8) Toluene-d8 (SU3)	12.20	98	1220977	11.13 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	89.04%	
9) 4-Bromofluorobenzene (SU4)	15.22	95	552716m	12.21 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	97.68%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

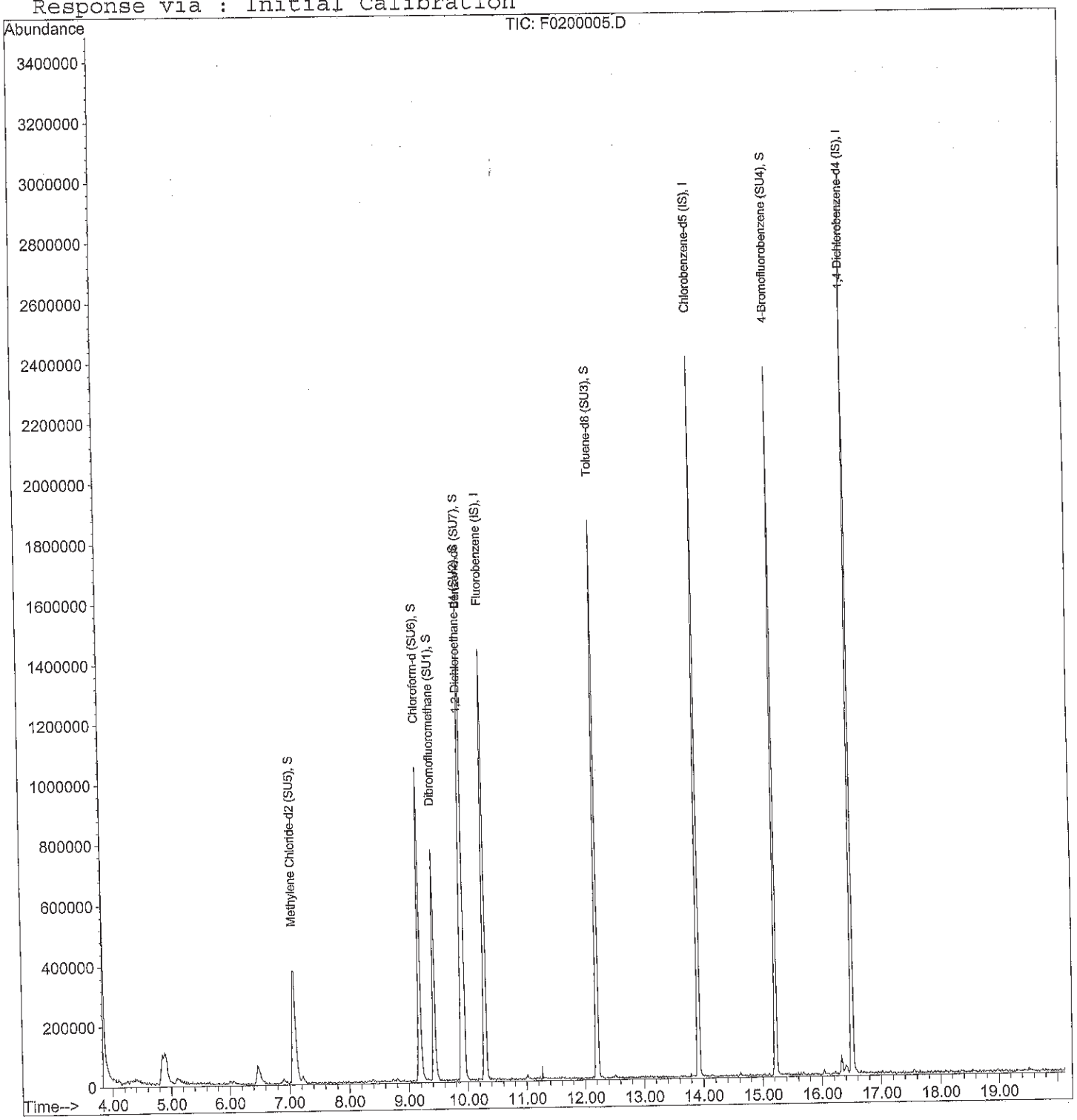
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200005.D
Acq On : 2 Jun 2014 1:50 pm
Sample : 3F40201-04
Misc : 100cc SVL-528-SA8-SV-18.5-19.5
MS Integration Params: rteint.p
Quant Time: Jun 3 7:38 19114

Vial: 4
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200006.D
Acq On : 2 Jun 2014 2:21 pm
Sample : 3F40201-05
Misc : 100cc SVL-505-SA5C-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 2 15:24 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1187680	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1116841	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	592053	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	318116m	10.74 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 85.92%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	434004m	15.41 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 123.28%		
39) Toluene-d8 (SU3)	12.21	98	1192475	11.45 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 91.60%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	657296m	14.39 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 115.12%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.12	85	340	0.12 ug/L #	44
4) Chloromethane	4.51	50	2094	-0.17 ug/L	95
5) Vinyl Chloride	4.56	62	260	0.12 ug/L #	1
6) Bromomethane	5.10	96	1344	-0.75 ug/L #	71
7) Chloroethane	5.24	64	814	1.51 ug/L	90
11) Acetone	6.45	58	2931	1.24 ug/L #	1
12) (IPA) Leak Check Compound	6.52	45	36243	253.95 ug/L #	82
13) Carbon disulfide	6.85	76	21407	2.17 ug/L	96
14) Methylene Chloride	7.07	84	5777	1.77 ug/L #	1
15) (TBA) tert-Butanol	6.96	59	853	4.21 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.25	73	277	0.04 ug/L #	1
18) 1,1-Dichloroethane	8.01	63	353	0.07 ug/L #	1
19) cis-1,2-Dichloroethene	8.63	96	322	0.09 ug/L #	3
20) 2,2-Dichloropropane	8.80	77	341	0.07 ug/L #	1
22) (DIPE) Diisopropyl Ether	8.01	45	359	0.04 ug/L #	1
23) Bromochloromethane	9.21	128	543	0.34 ug/L #	1
24) Chloroform	9.21	83	708	0.11 ug/L #	18
25) (ETBE) 2-ethoxy 2-methyl p	8.36	59	291	0.03 ug/L #	44
29) 1,1-Dichloropropene	9.64	75	268	0.06 ug/L #	41
30) Carbon Tetrachloride	9.51	117	265	0.07 ug/L #	2
31) Benzene	9.97	78	2517	0.23 ug/L #	57
32) 1,2-Dichloroethane	9.93	62	12493	3.16 ug/L #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200006.D
Acq On : 2 Jun 2014 2:21 pm
Sample : 3F40201-05
Misc : 100cc SVL-505-SA5C-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 2 15:24 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

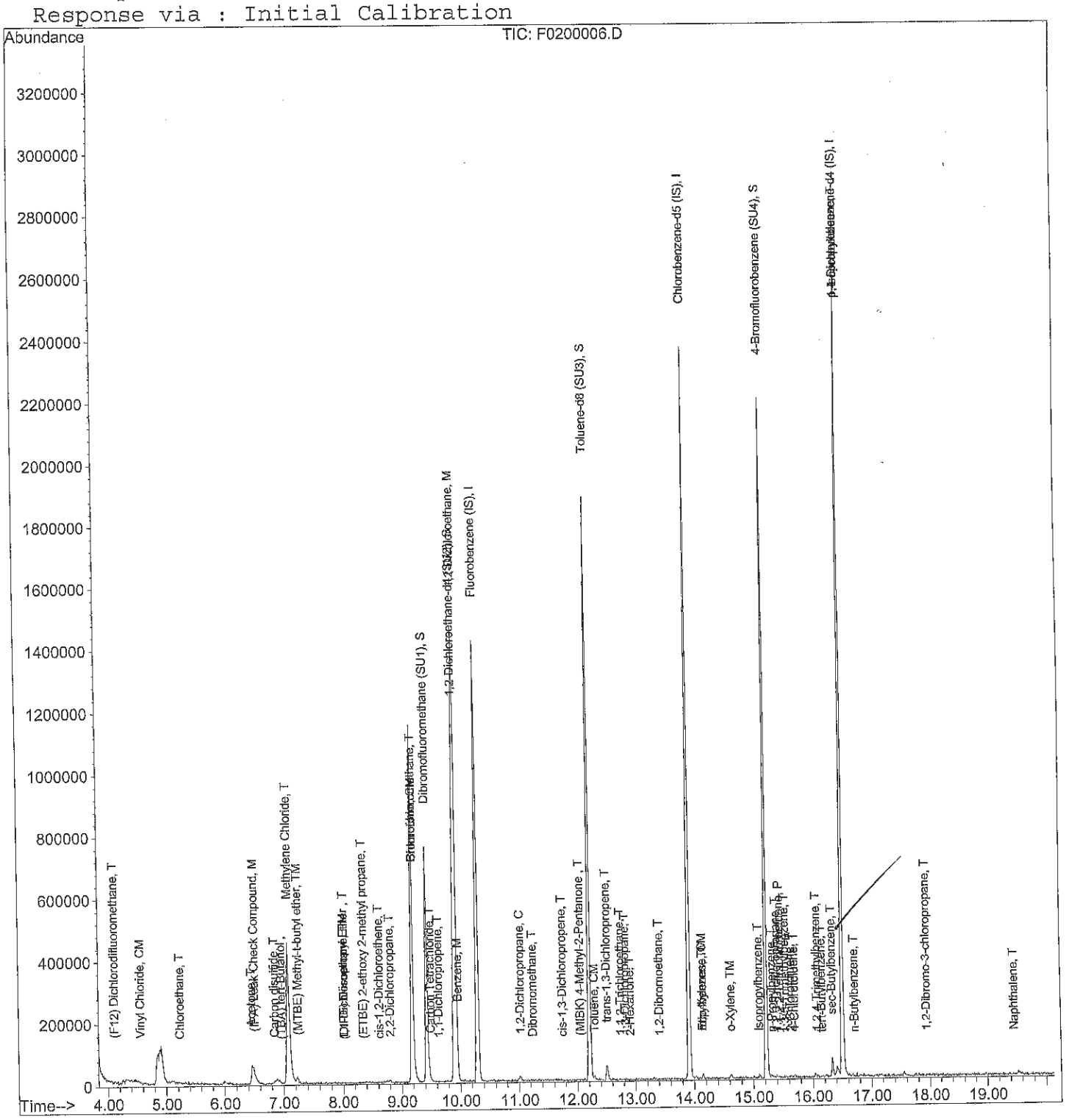
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) 1,2-Dichloropropane	11.03	63	590	0.22 ~~ug/L~~ # NM	46
35) Dibromomethane	11.25	93	295	0.14 ~~ug/L~~ #	5
37) cis-1,3-Dichloropropene	11.75	75	281	0.06 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.05	43	560	0.25 ~~ug/L~~ #	100
41) Toluene	12.28	91	6909	0.45 ug/L # 0.009	80
42) trans-1,3-Dichloropropene	12.50	75	945	0.19 ~~ug/L~~ # NM	38
43) 1,1,2-Trichloroethane	12.74	83	265	0.10 ~~ug/L~~ #	10
45) 1,3-Dichloropropane	12.83	76	255	0.05 ~~ug/L~~ #	41
46) 2-Hexanone	12.92	43	328	0.13 ~~ug/L~~ #	37
48) 1,2-Dibromoethane	13.40	107	340	0.10 ~~ug/L~~ #	3
51) Ethylbenzene	14.15	91	8571	0.50 ~~ug/L~~	90
52) m,p-Xylenes	14.14	106	2067	0.34 ug/L # 0.0068	1
53) o-Xylene	14.62	106	763	0.13 ug/L # 0.0026	1
54) Styrene	14.62	104	1243	-0.73 ~~ug/L~~ # NM	8
56) Isopropylbenzene	15.11	105	332	0.02 ~~ug/L~~ #	55
57) 1,2,3-Trichloropropane	15.39	75	402	0.09 ~~ug/L~~ #	36
60) 1,1,2,2-Tetrachloroethane	15.45	83	388	0.09 ~~ug/L~~ #	18
62) n-Propylbenzene	15.32	91	270	0.01 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.63	91	368	0.02 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.55	105	1346	0.09 ~~ug/L~~ # NM	61
65) 4-Chlorotoluene	15.70	91	585	0.04 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.14	119	269	0.02 ~~ug/L~~ #	1
67) 1,2,4-Trimethylbenzene	16.07	105	2425	0.16 ~~ug/L~~ #	59
68) sec-Butylbenzene	16.33	105	1598	0.08 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.51	119	1944	0.12 ~~ug/L~~ #	1
72) n-Butylbenzene	16.71	91	281	0.02 ~~ug/L~~ #	55
74) 1,2-Dibromo-3-chloropropan	17.94	75	281	1.30 ~~ug/L~~ #	6
77) Naphthalene	19.46	128	257	0.02 ~~ug/L~~	100

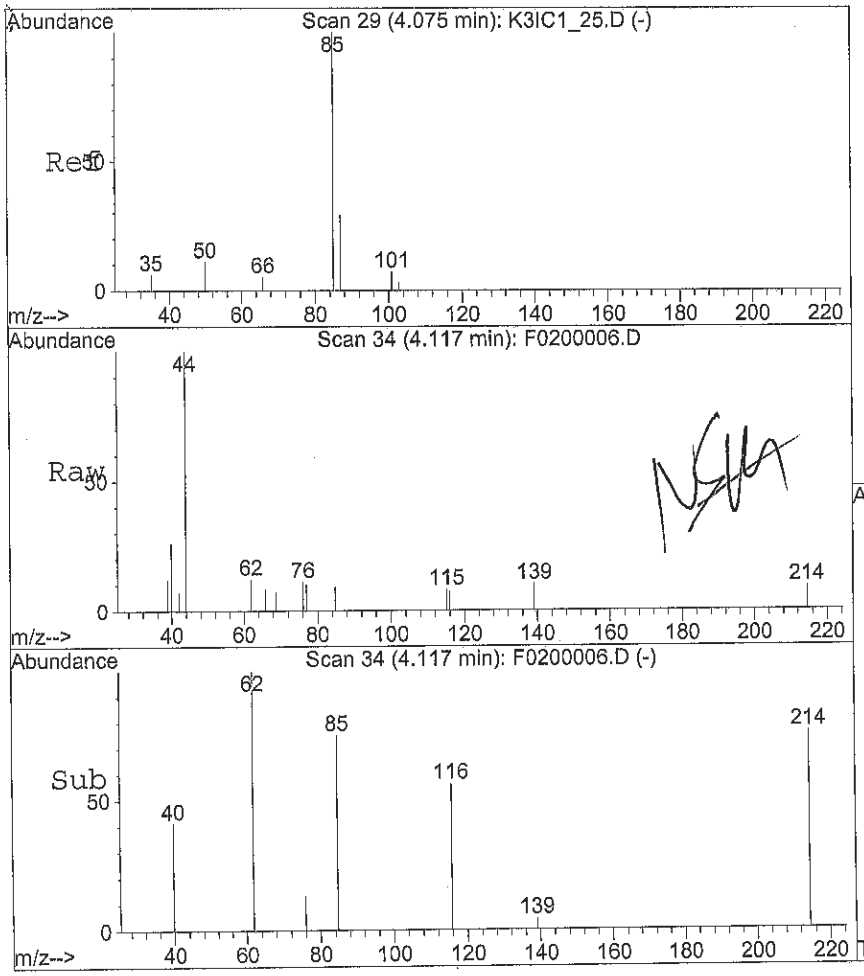
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200006.D Vial: 5
Acq On : 2 Jun 2014 2:21 pm Operator: DN
Sample : 3F40201-05 Inst : GC/MS Ins
Misc : 100cc SVL-505-SA5C-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 15:24 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

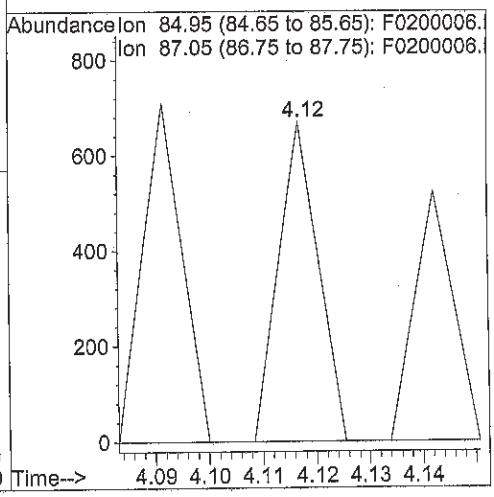


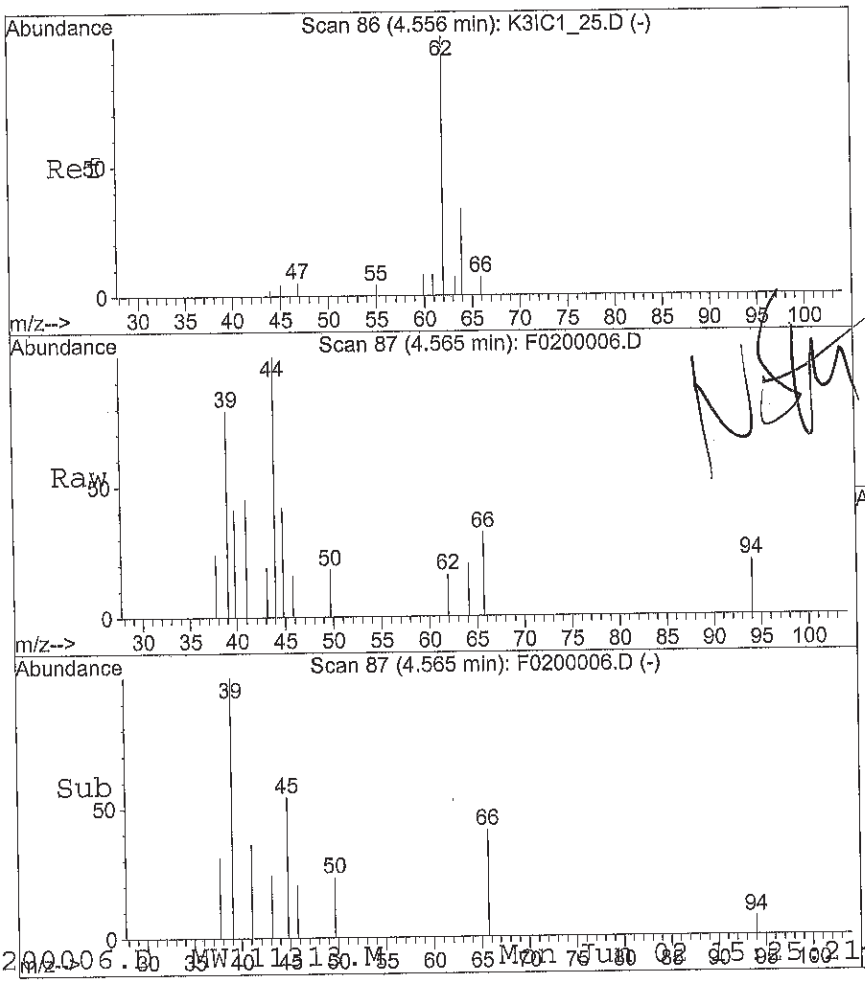


#3
(F12) Dichlorodifluoromethane
Concen: 0.12 ug/L
RT: 4.12 min Scan# 34
Delta R.T. 0.04 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 85 Resp: 340

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

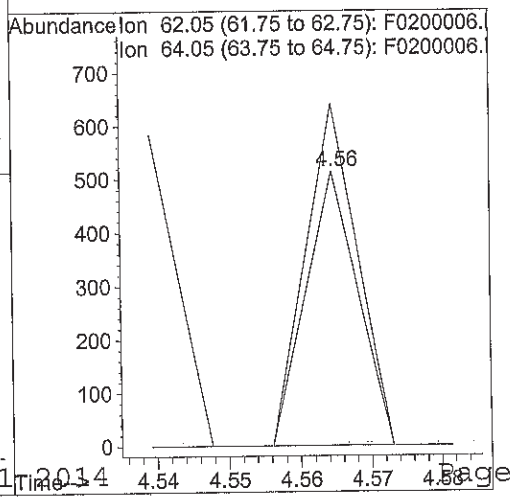


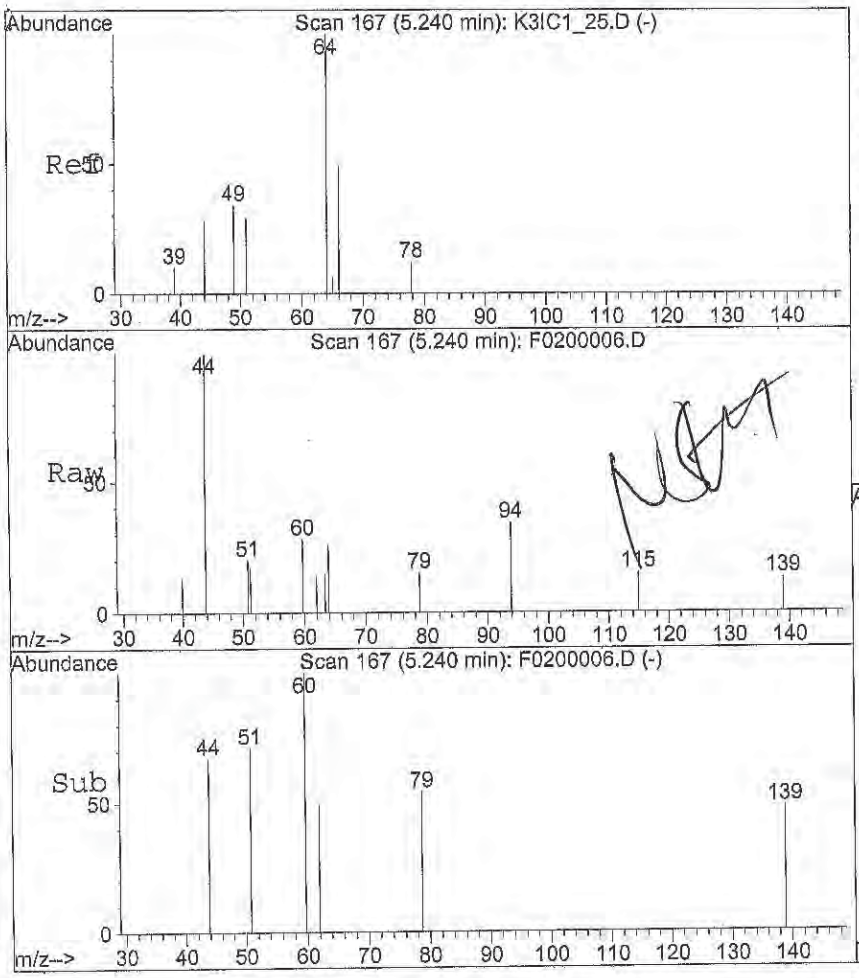


#5
Vinyl Chloride
Concen: 0.12 ug/L
RT: 4.56 min Scan# 87
Delta R.T. 0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 62 Resp: 260

Ion	Ratio	Lower	Upper
62	100		
64	124.6	25.6	38.4#

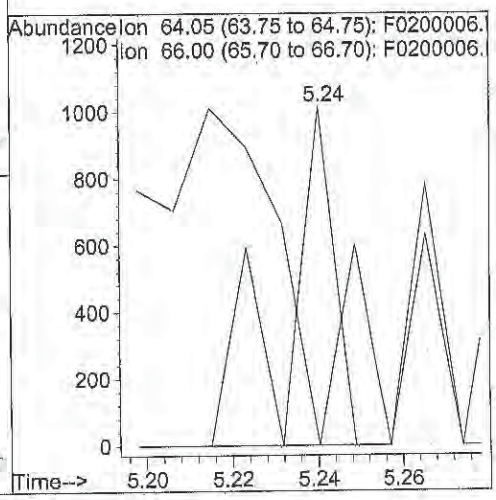


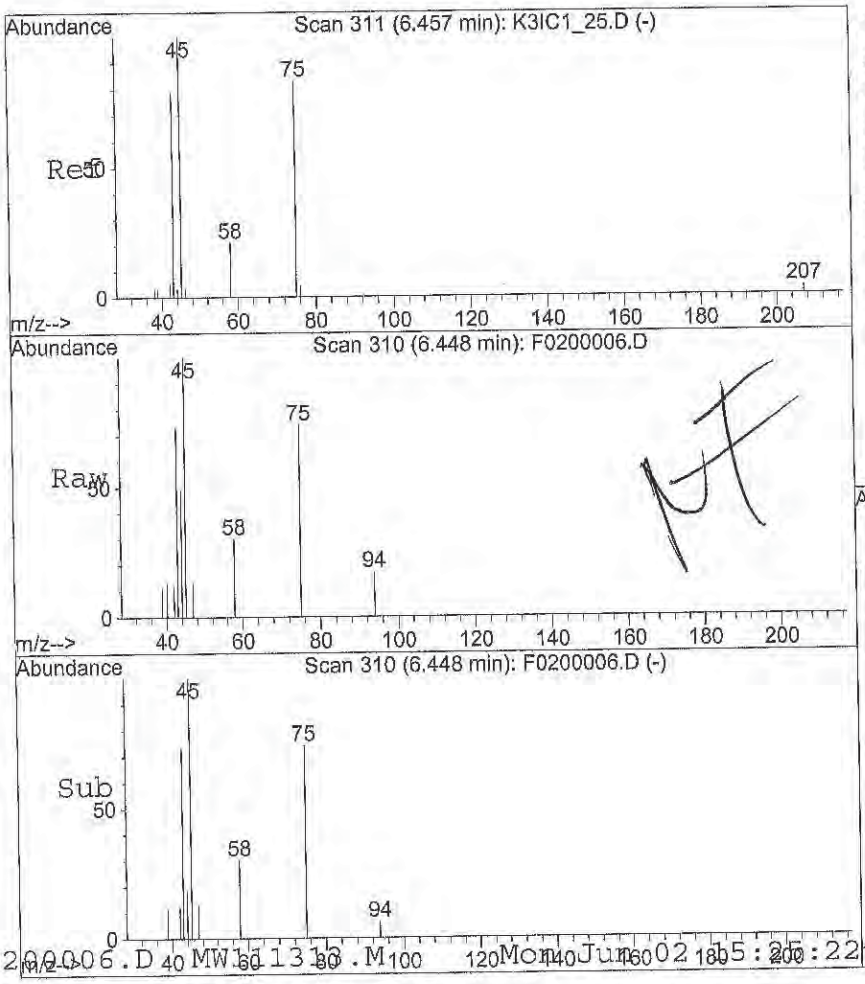


#7
Chloroethane
Concen: 1.51 ug/L
RT: 5.24 min Scan# 167
Delta R.T. 0.00 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 64 Resp: 814

Ion	Ratio	Lower	Upper
64	100		
66	37.5	35.4	53.0

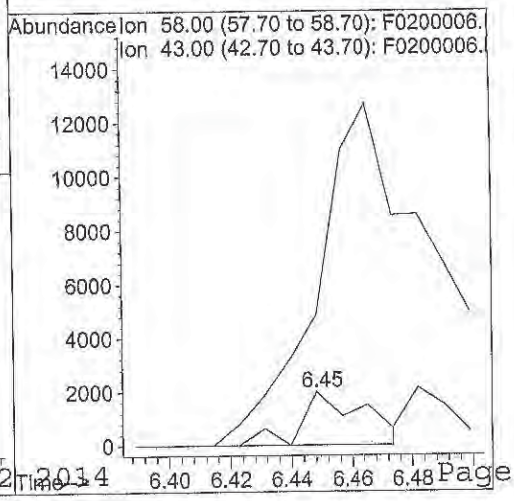


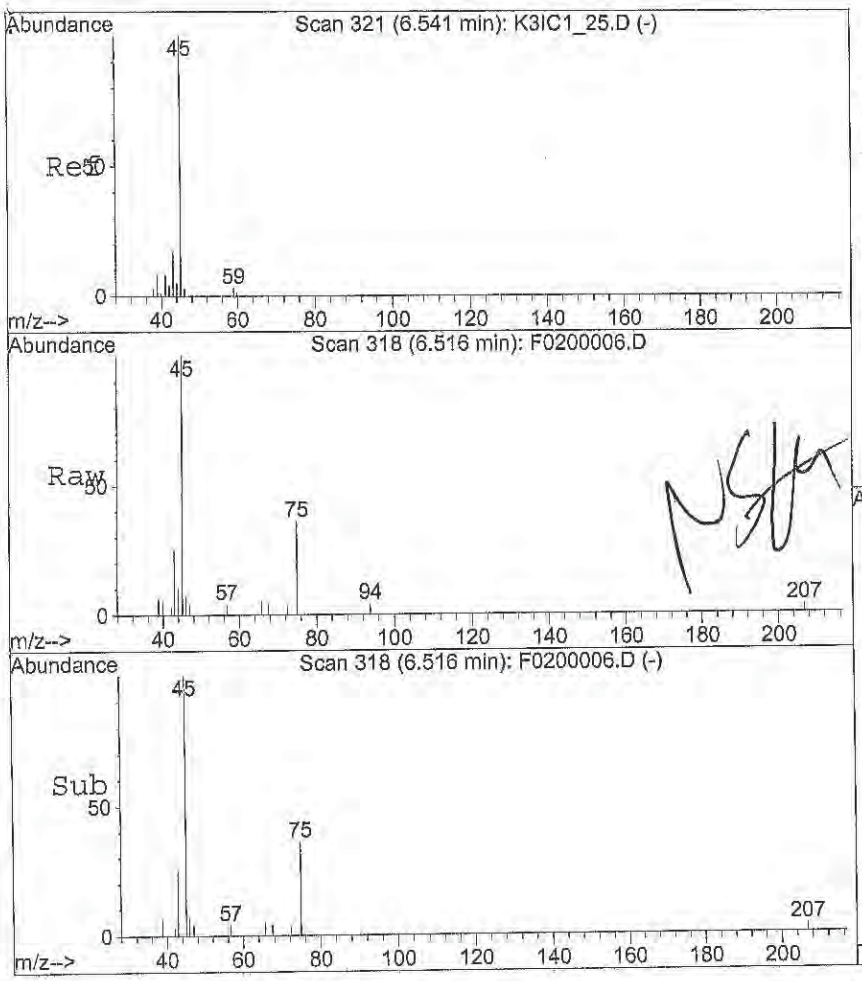


#11
Acetone
Concen: 1.24 ug/L
RT: 6.45 min Scan# 310
Delta R.T. -0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 58 Resp: 2931

Ion	Ratio	Lower	Upper
58	100		
43	0.0	360.9	541.3#

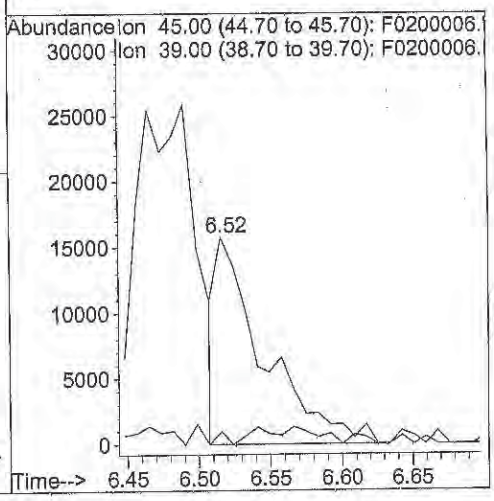


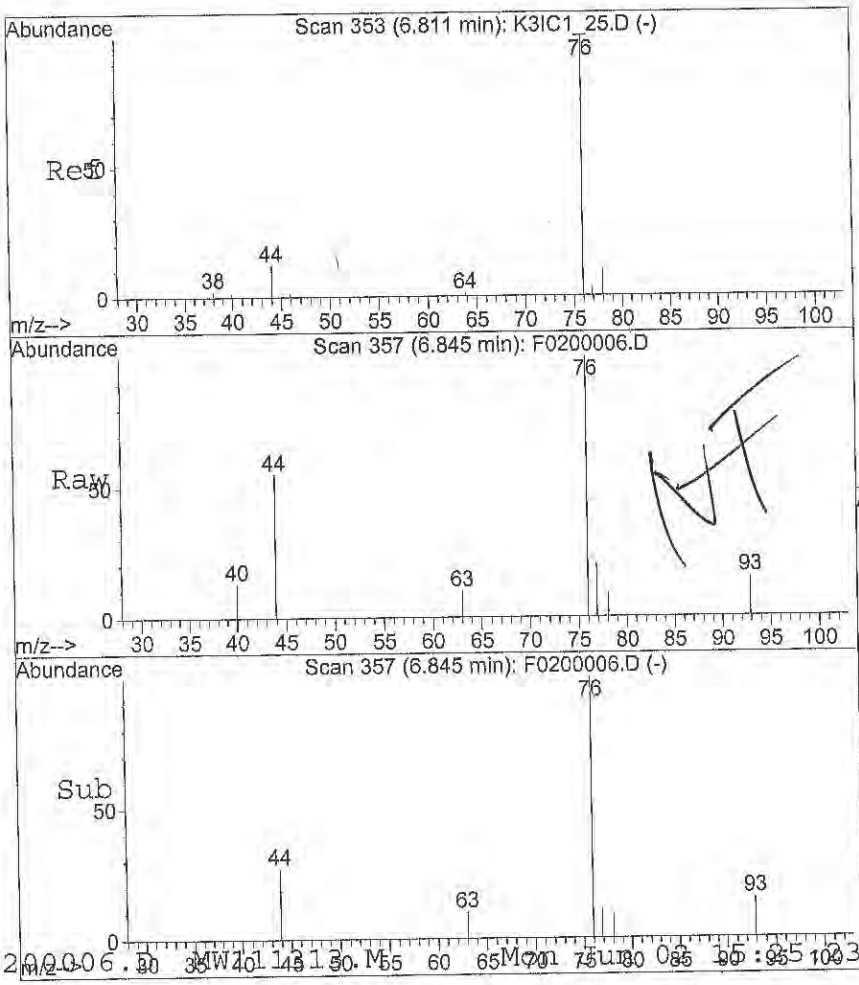


#12
(IPA) Leak Check Compound
Concen: 253.95 ug/L
RT: 6.52 min Scan# 318
Delta R.T. -0.03 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 45 Resp: 36243

Ion	Ratio	Lower	Upper
45	100		
39	0.0	4.9	7.3#

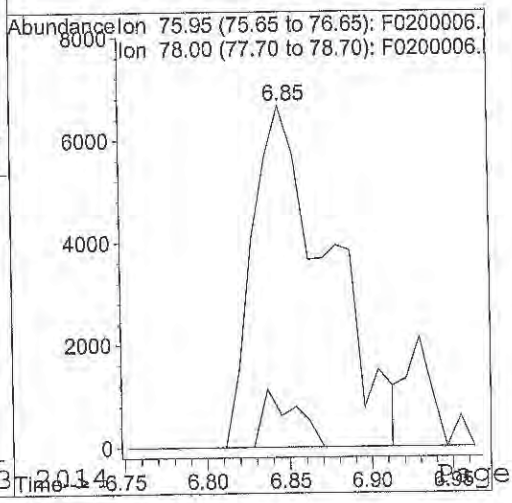


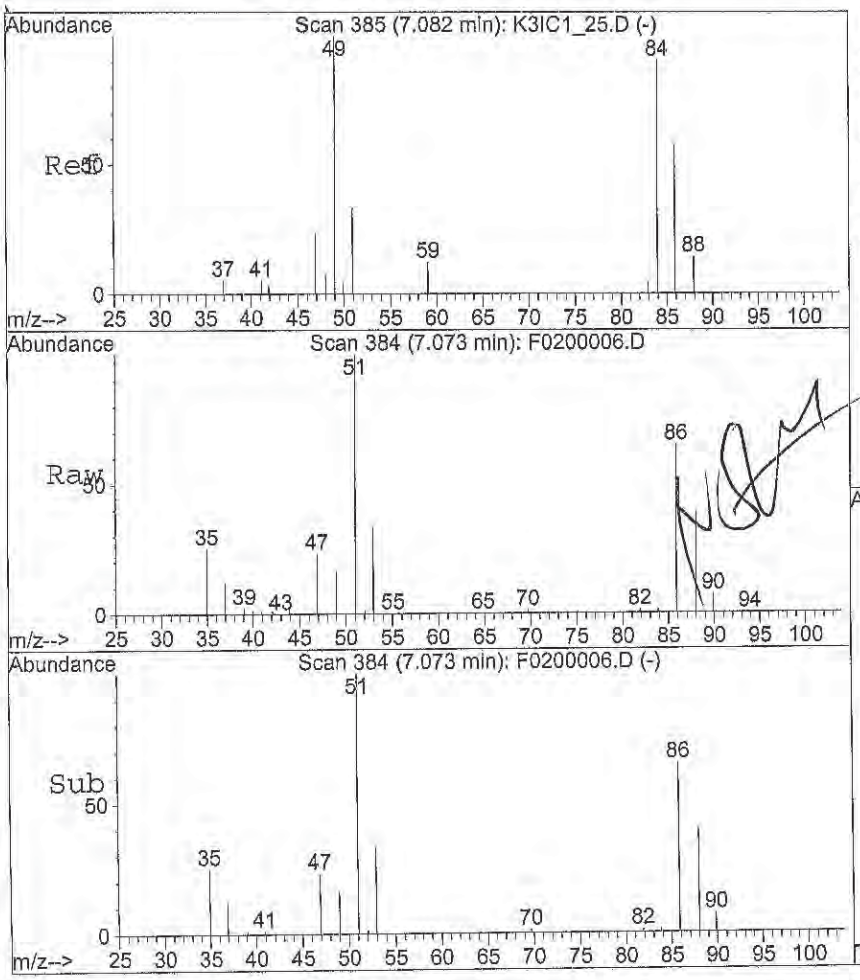


#13
Carbon disulfide
Concen: 2.17 ug/L
RT: 6.85 min Scan# 357
Delta R.T. 0.03 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 76 Resp: 21407

Ion	Ratio	Lower	Upper
76	100		
78	7.2	7.0	10.4

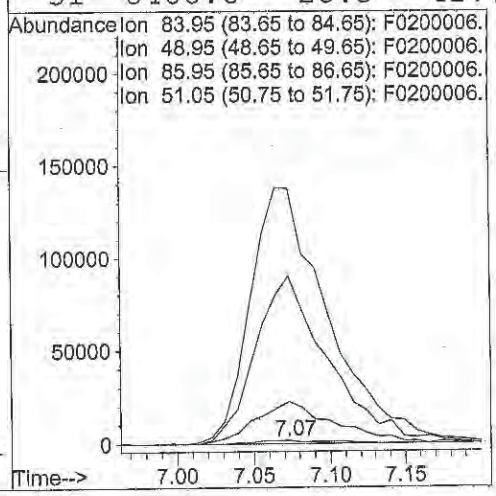


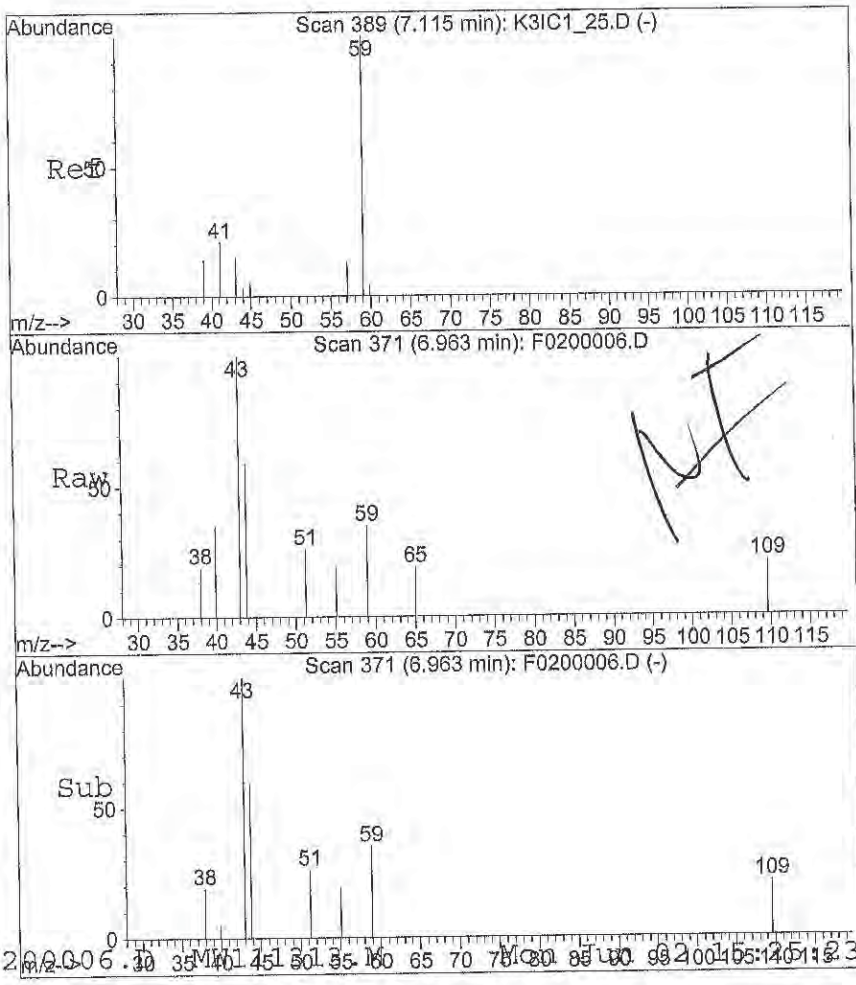


#14
Methylene Chloride
Concen: 1.77 ug/L
RT: 7.07 min Scan# 384
Delta R.T. -0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 84 Resp: 5777

Ion	Ratio	Lower	Upper
84	100		
49	1371.2	89.8	134.6#
86	5219.5	51.1	76.7#
51	8466.6	28.5	42.7#

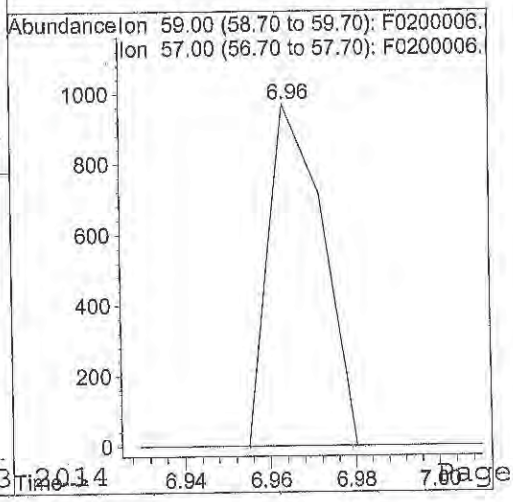


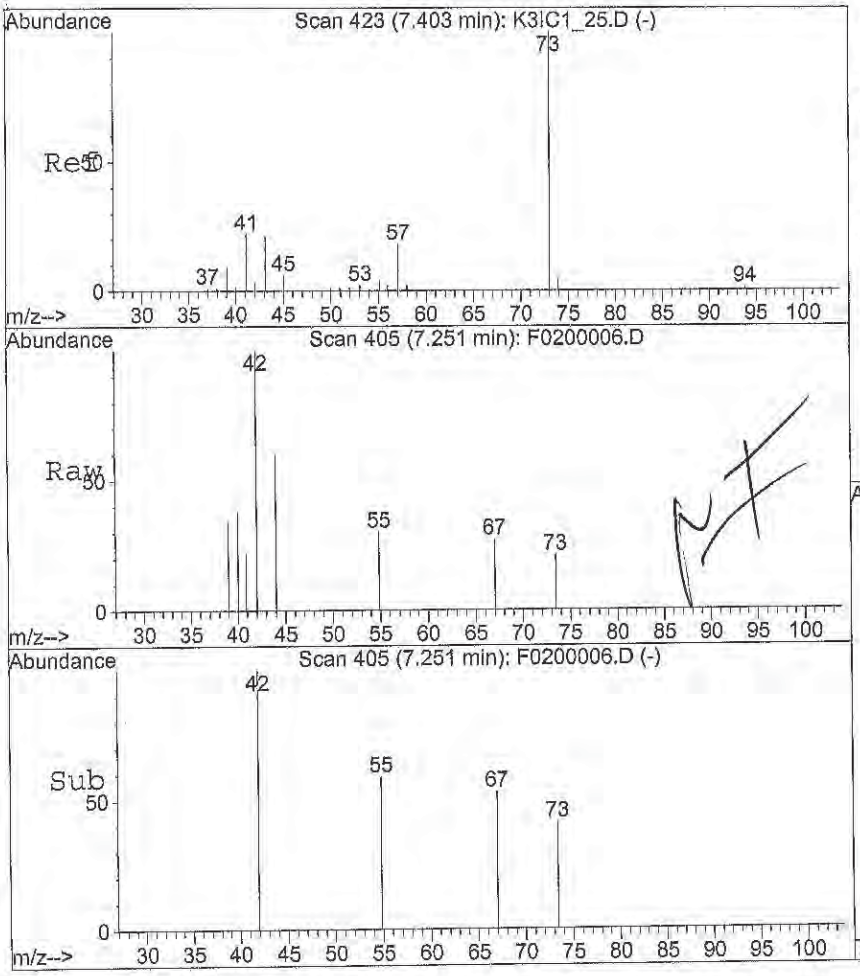


#15
(TBA) tert-Butanol
Concen: 4.21 ug/L
RT: 6.96 min Scan# 371
Delta R.T. -0.15 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 59 Resp: 853

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

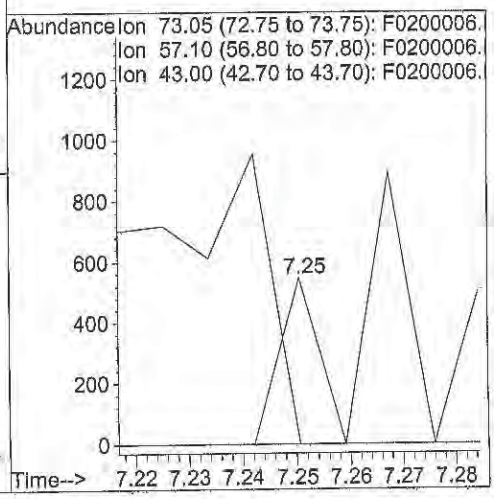


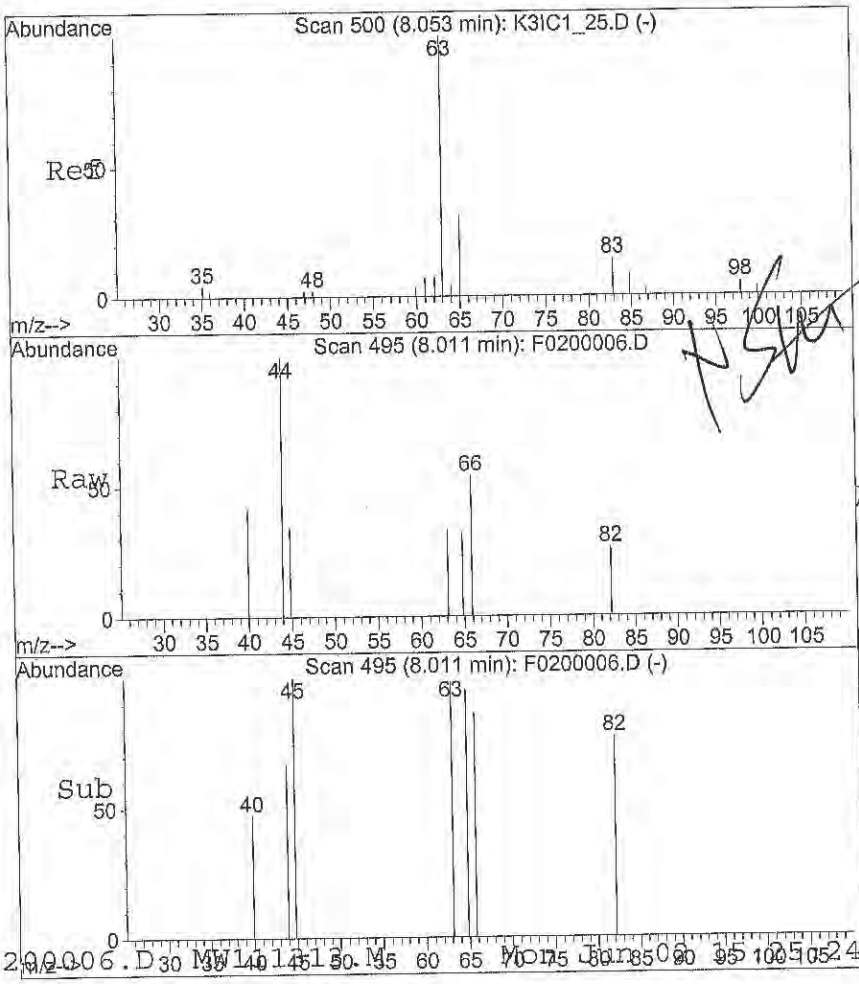


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.04 ug/L
RT: 7.25 min Scan# 405
Delta R.T. -0.15 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 73 Resp: 277

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	546.9	18.4	27.6#

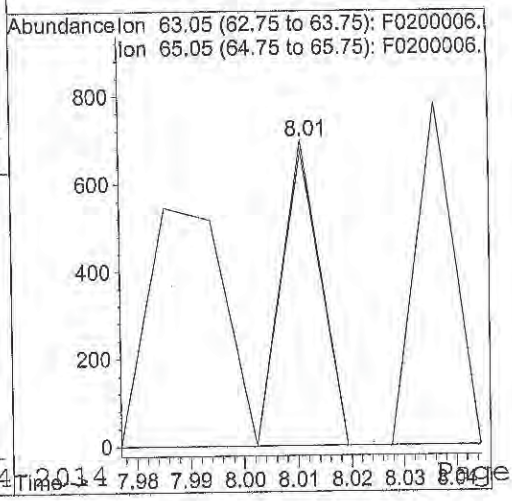


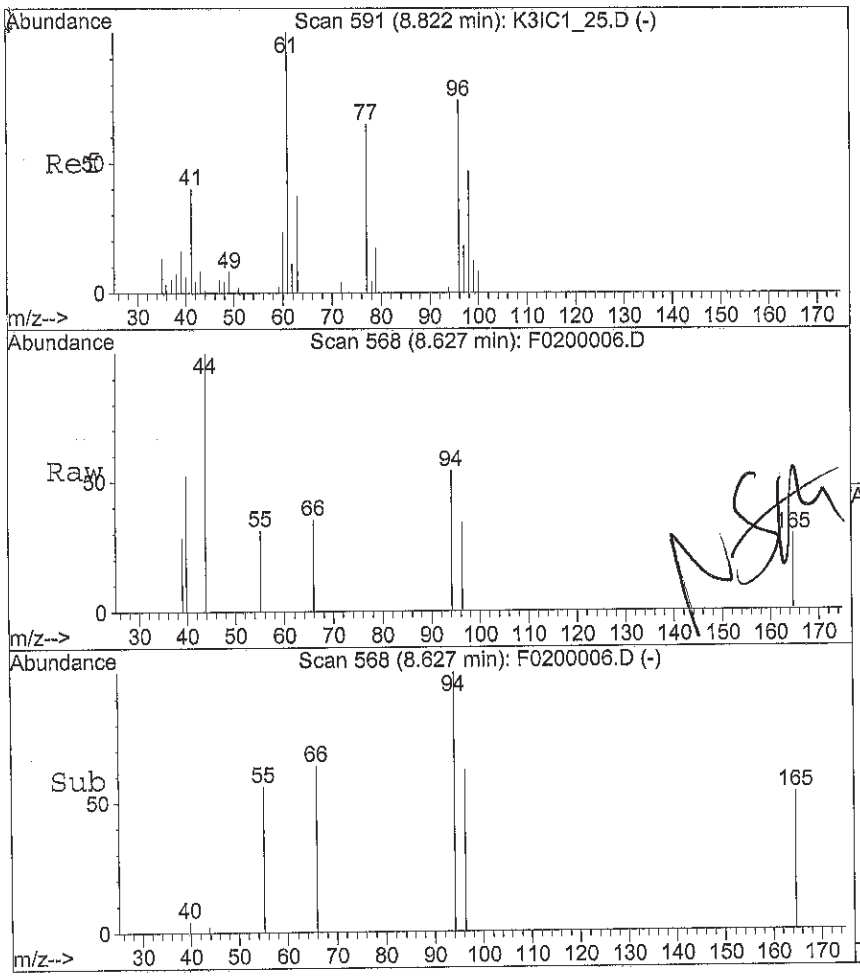


#18
1,1-Dichloroethane
Concen: 0.07 ug/L
RT: 8.01 min Scan# 495
Delta R.T. -0.04 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 63 Resp: 353

Ion	Ratio	Lower	Upper
63	100		
65	96.6	25.8	38.8#

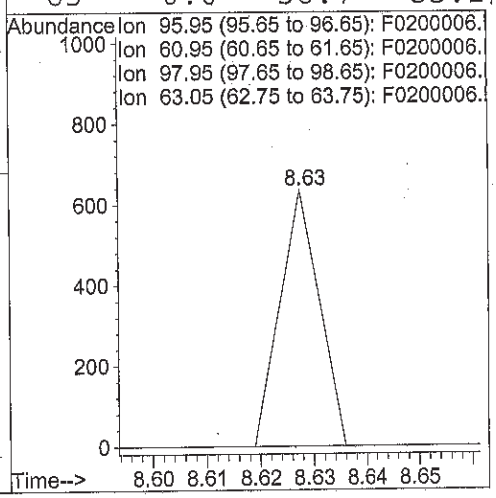


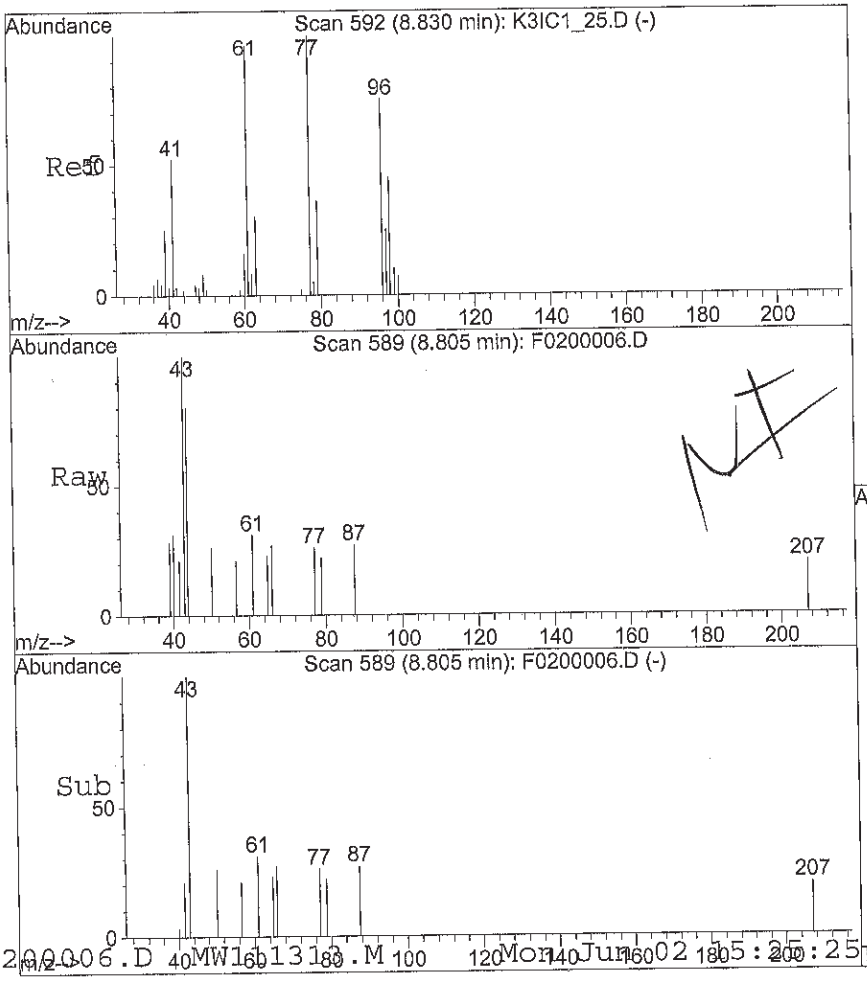


#19
cis-1,2-Dichloroethene
Concen: 0.09 ug/L
RT: 8.63 min Scan# 568
Delta R.T. -0.19 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 96 Resp: 322

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

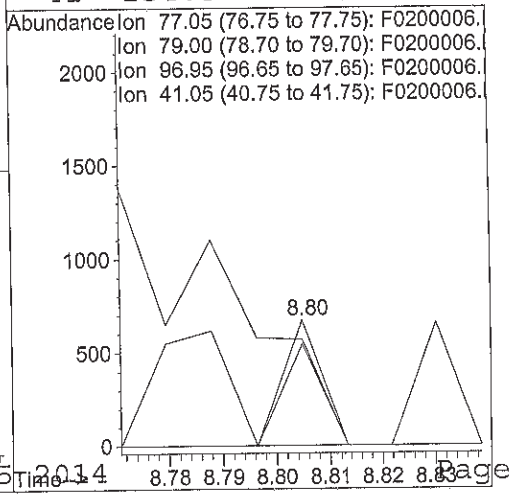


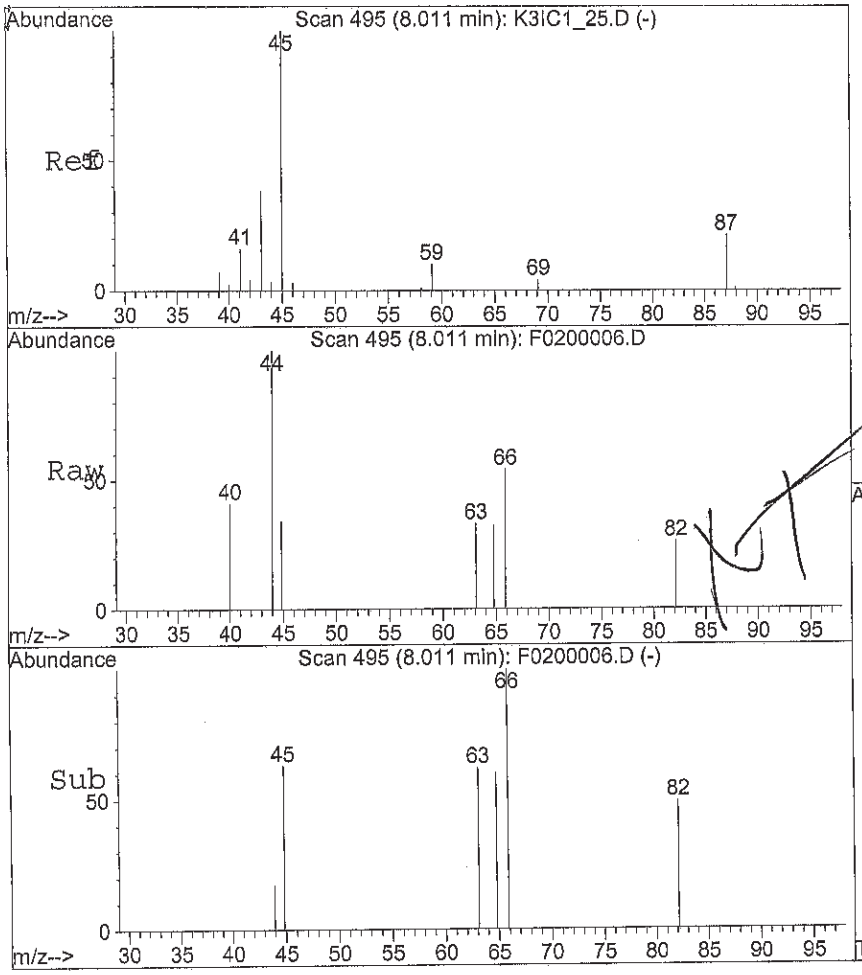


#20
2,2-Dichloropropane
Concen: 0.07 ug/L
RT: 8.80 min Scan# 589
Delta R.T. -0.03 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 77 Resp: 341

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	254.5	42.6	64.0#

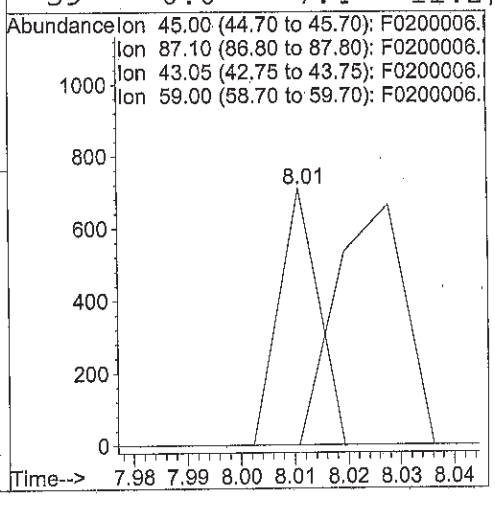


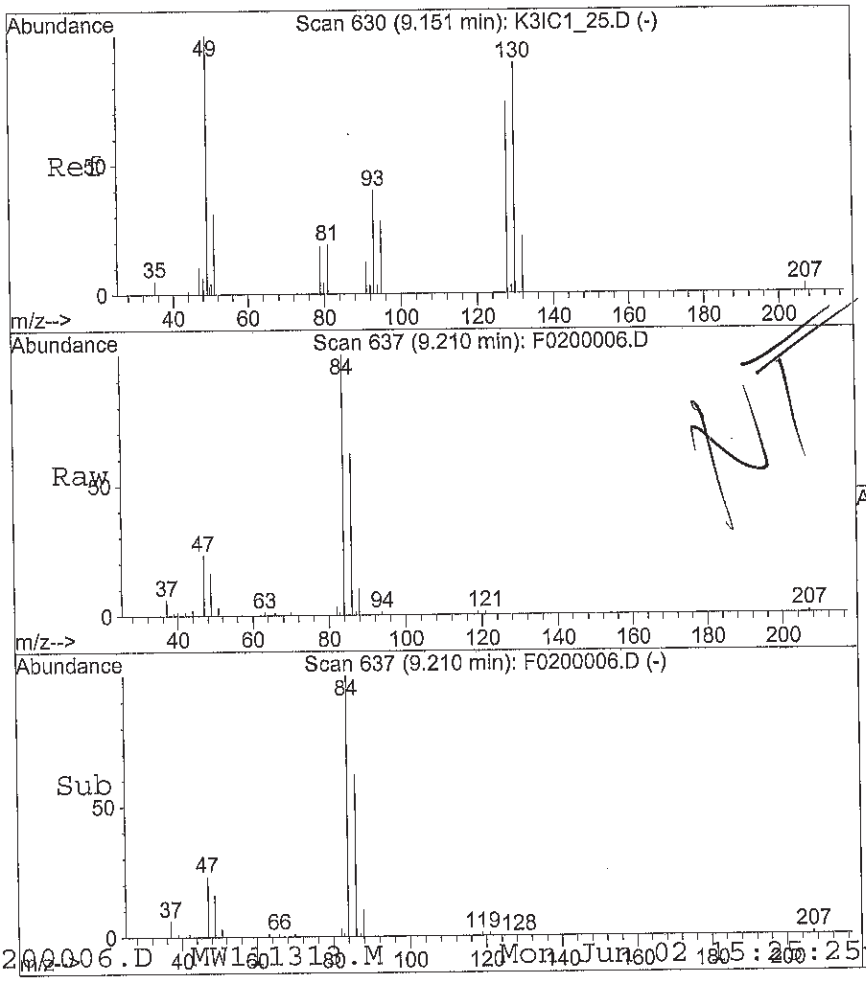


#22
(DIPE) Diisopropyl Ether
Concen: 0.04 ug/L
RT: 8.01 min Scan# 495
Delta R.T. 0.00 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 45 Resp: 359

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	169.1	30.5	45.7#
59	0.0	7.4	11.2#

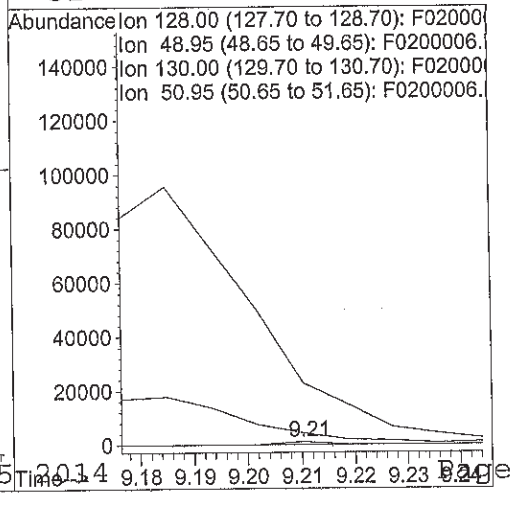


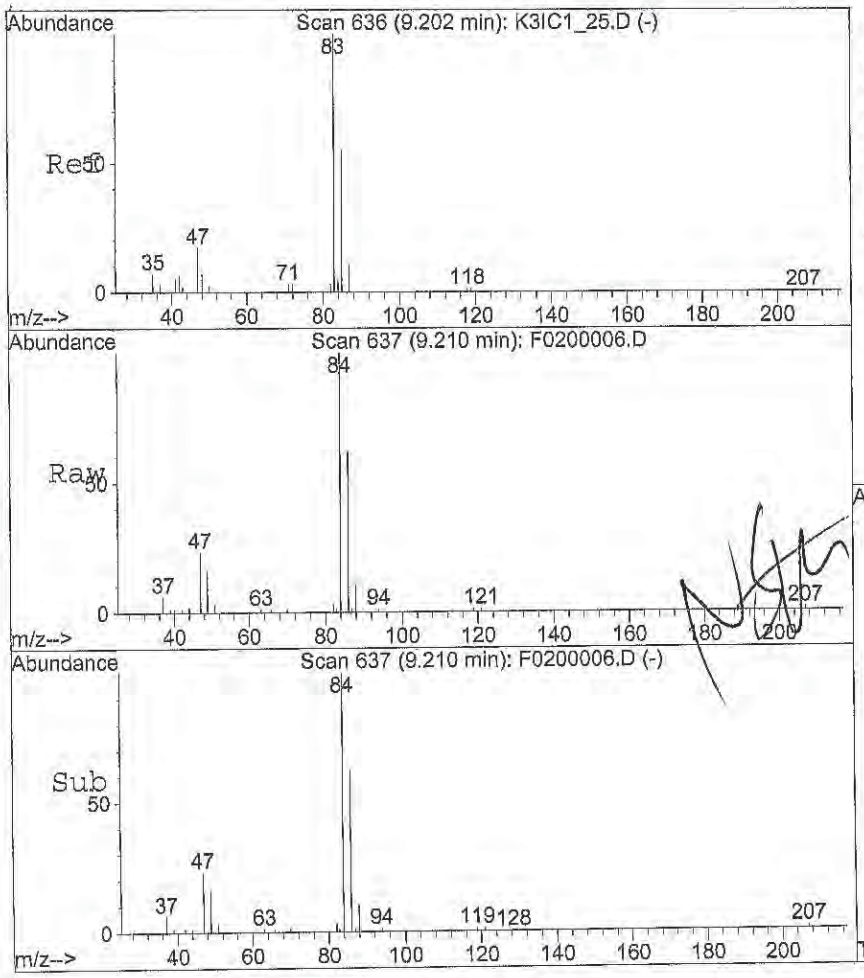


#23
Bromochloromethane
Concen: 0.34 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.06 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:128 Resp: 543

Ion	Ratio	Lower	Upper
128	100		
49	0.0	117.4	176.0#
130	0.0	111.0	166.6#
51	0.0	48.0	72.0#

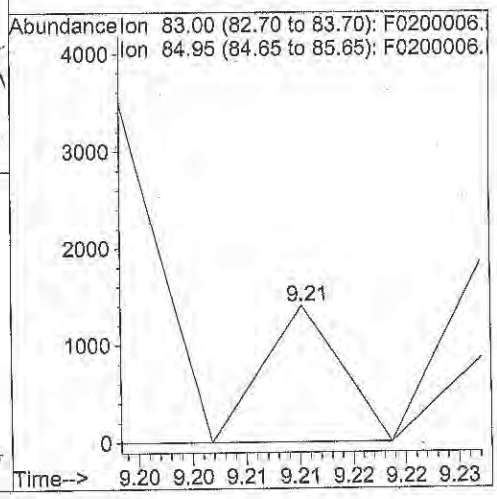


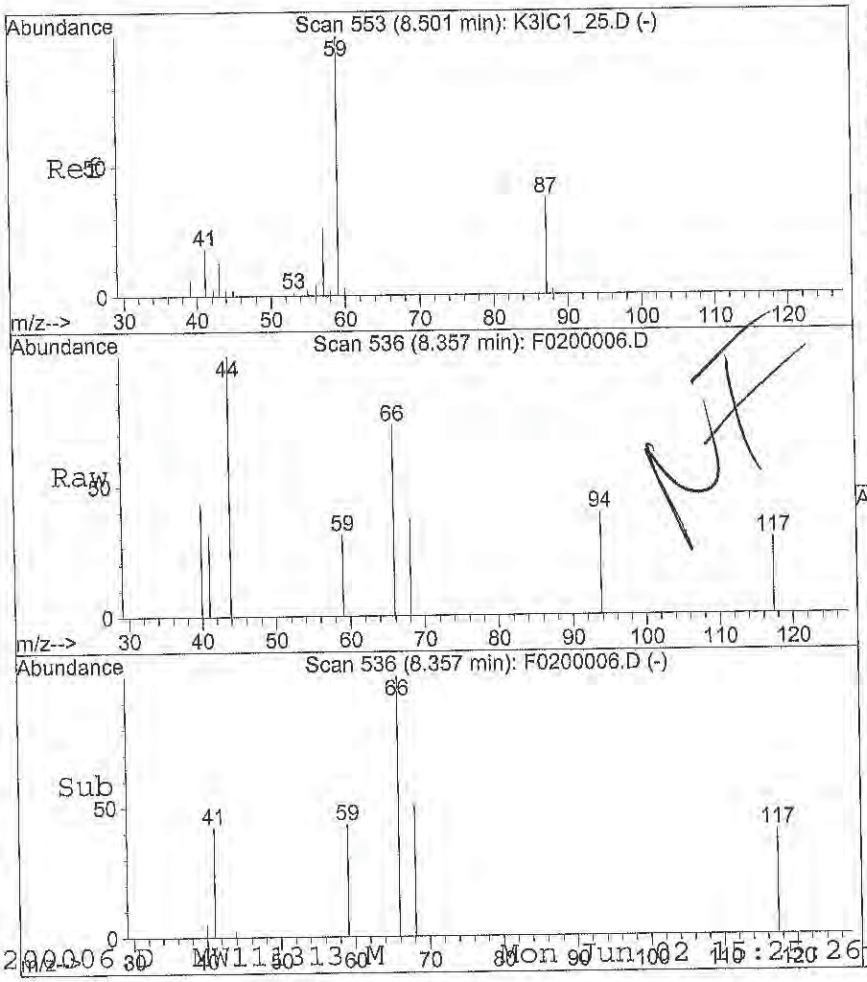


#24
Chloroform
Concen: 0.11 ug/L
RT: 9.21 min Scan# 637
Delta R.T. 0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 83 Resp: 708

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

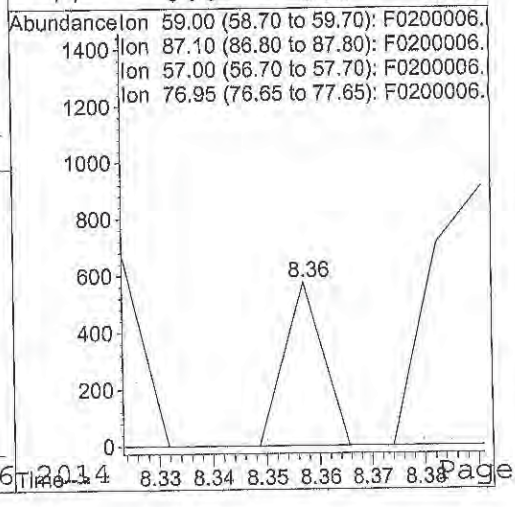


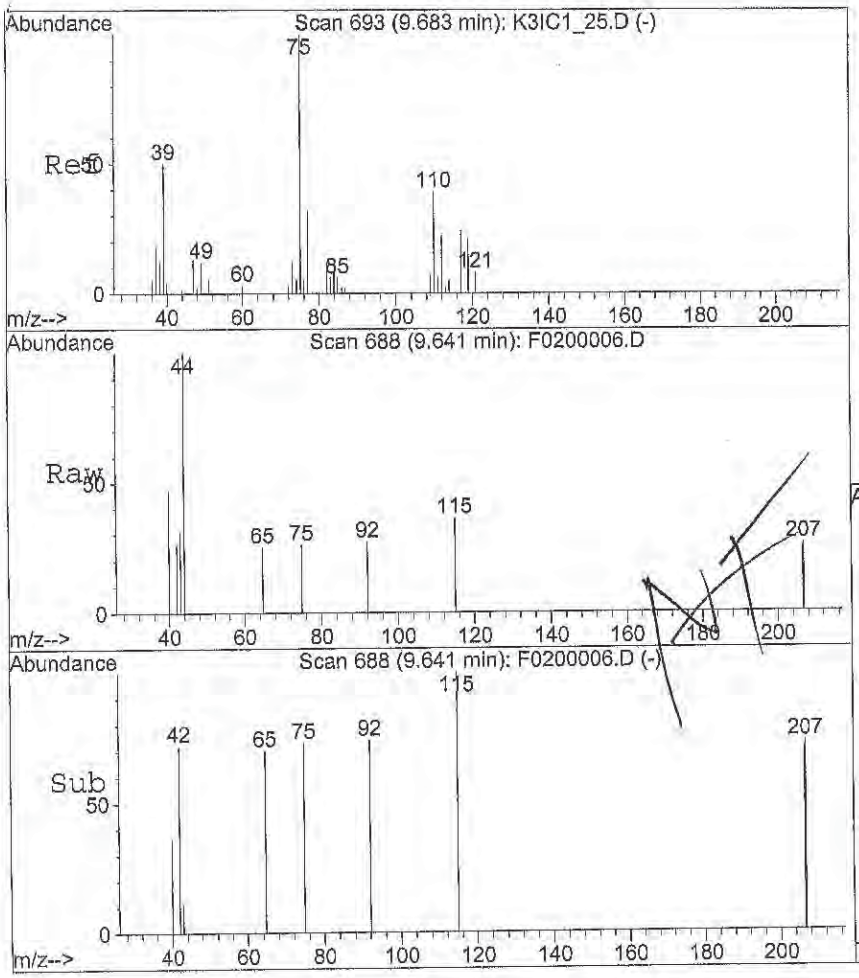


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.36 min Scan# 536
Delta R.T. -0.14 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 59 Resp: 291

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

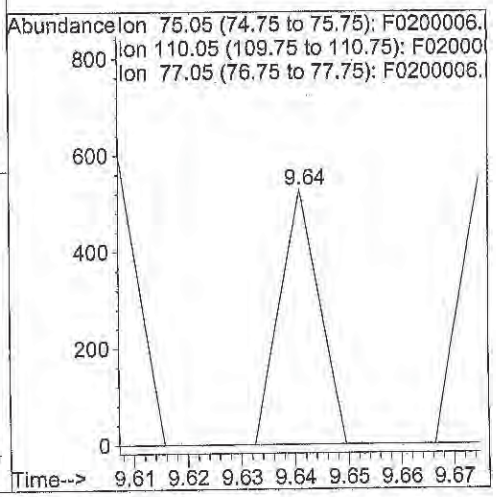


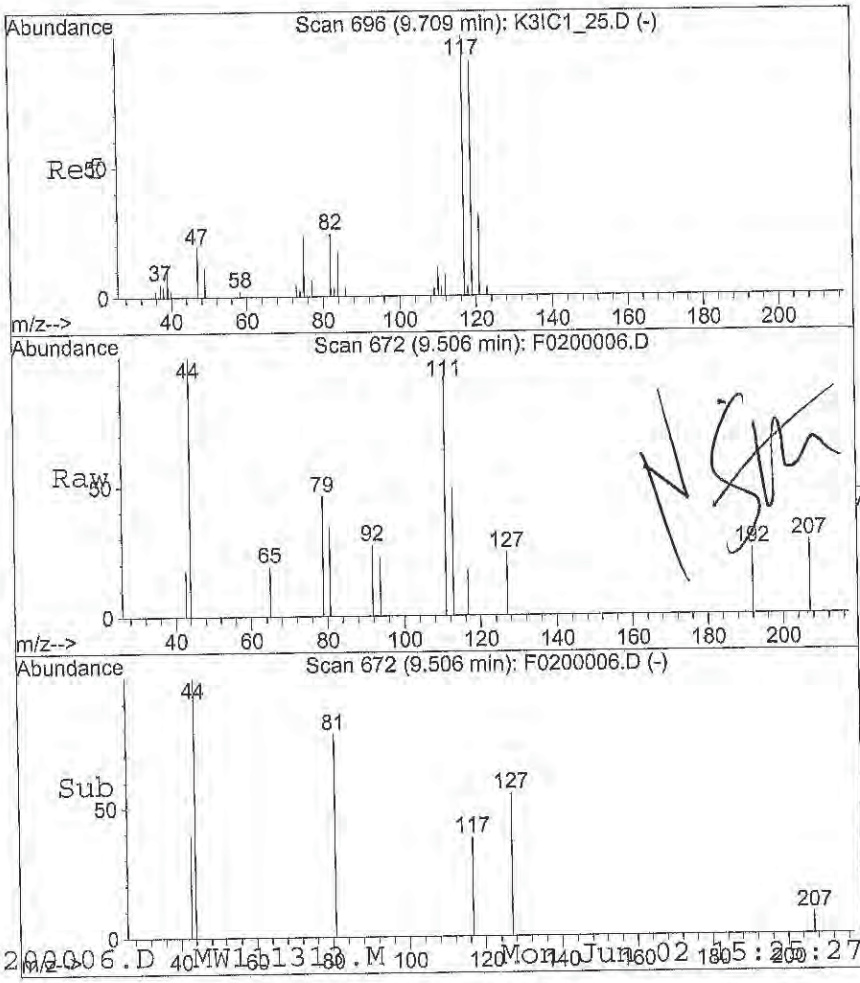


#29
1,1-Dichloropropene
Concen: 0.06 ug/L
RT: 9.64 min Scan# 688
Delta R.T. -0.04 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 75 Resp: 268

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	0.0	25.0	37.4#

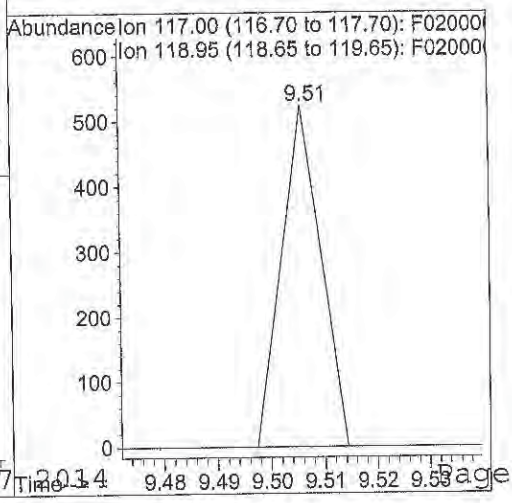


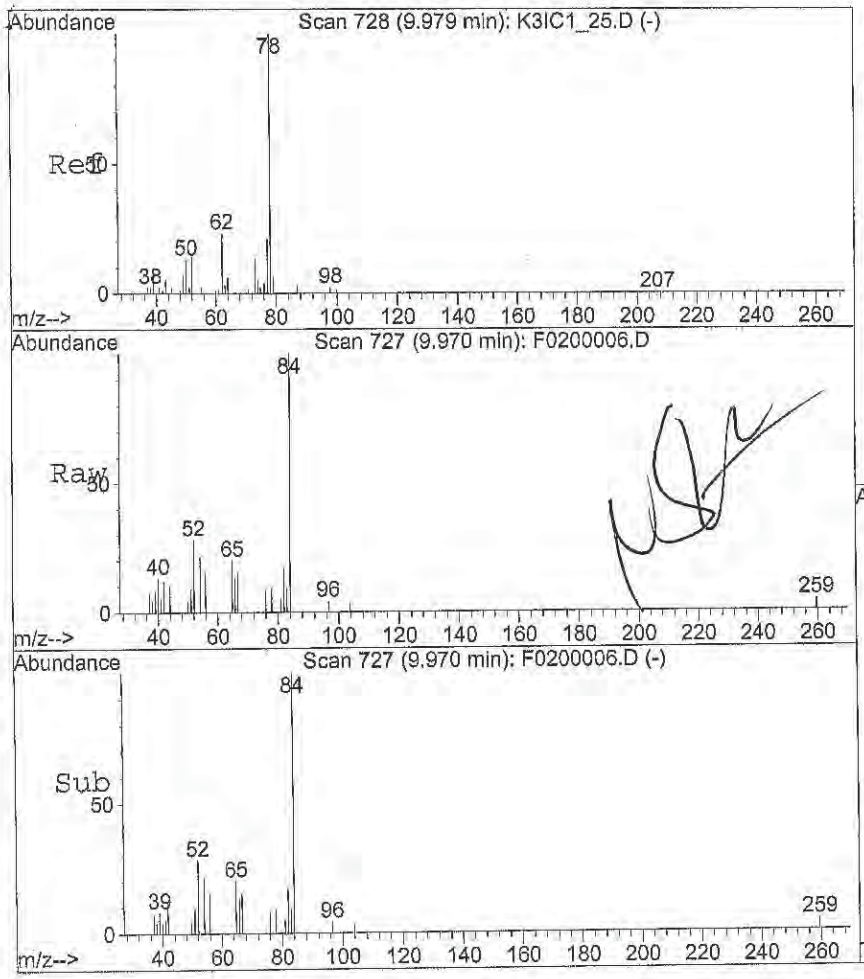


#30
Carbon Tetrachloride
Concen: 0.07 ug/L
RT: 9.51 min Scan# 672
Delta R.T. -0.20 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:117 Resp: 265

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.8	113.8#

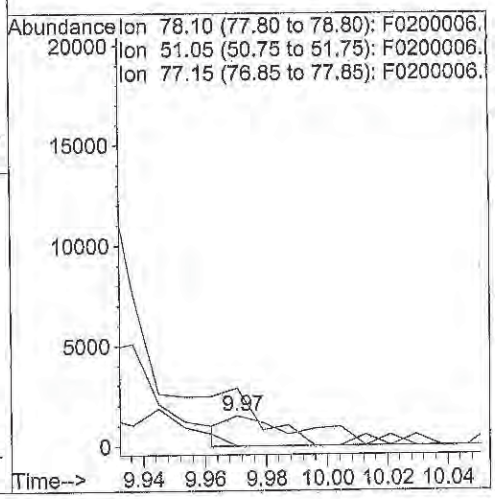


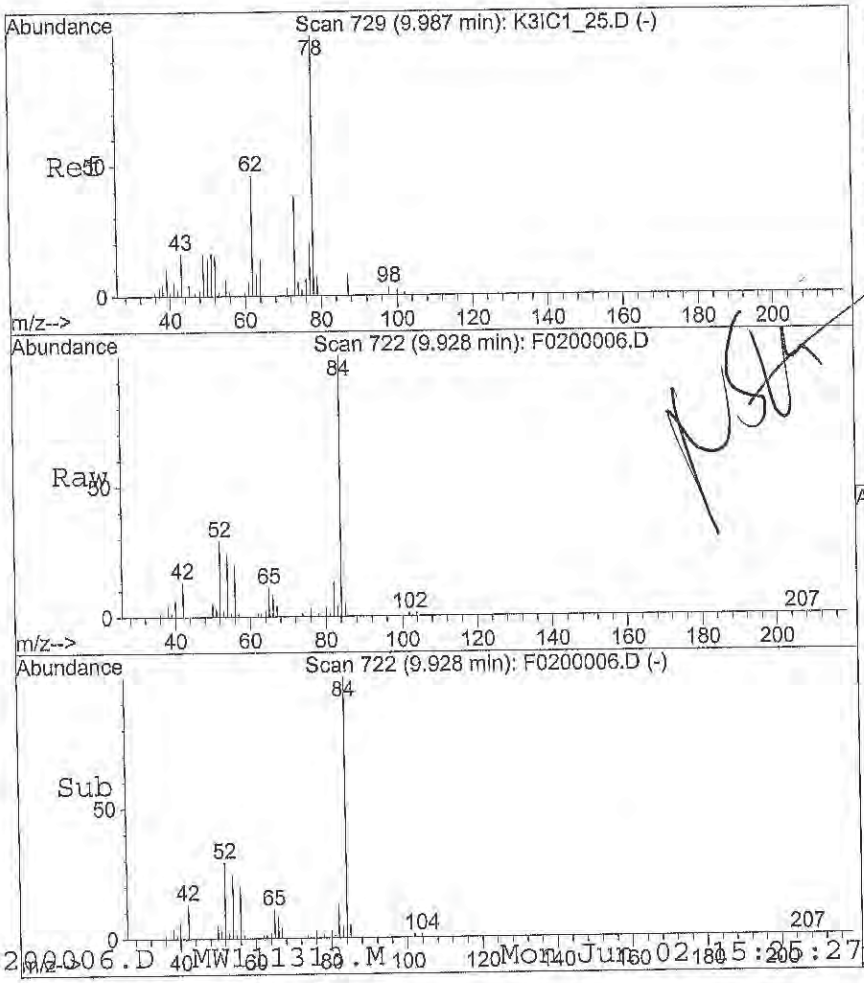


#31
Benzene
Concen: 0.23 ug/L
RT: 9.97 min Scan# 727
Delta R.T. -0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 78 Resp: 2517

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

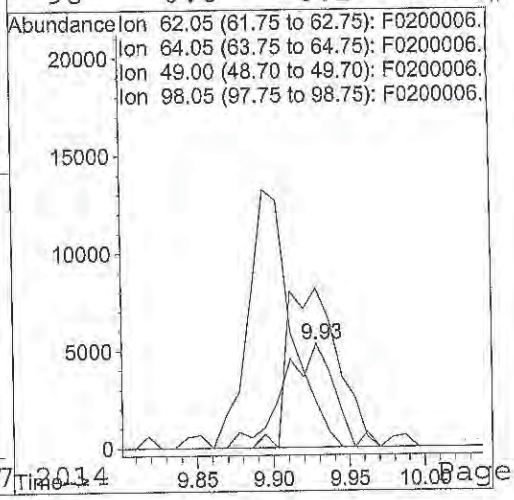


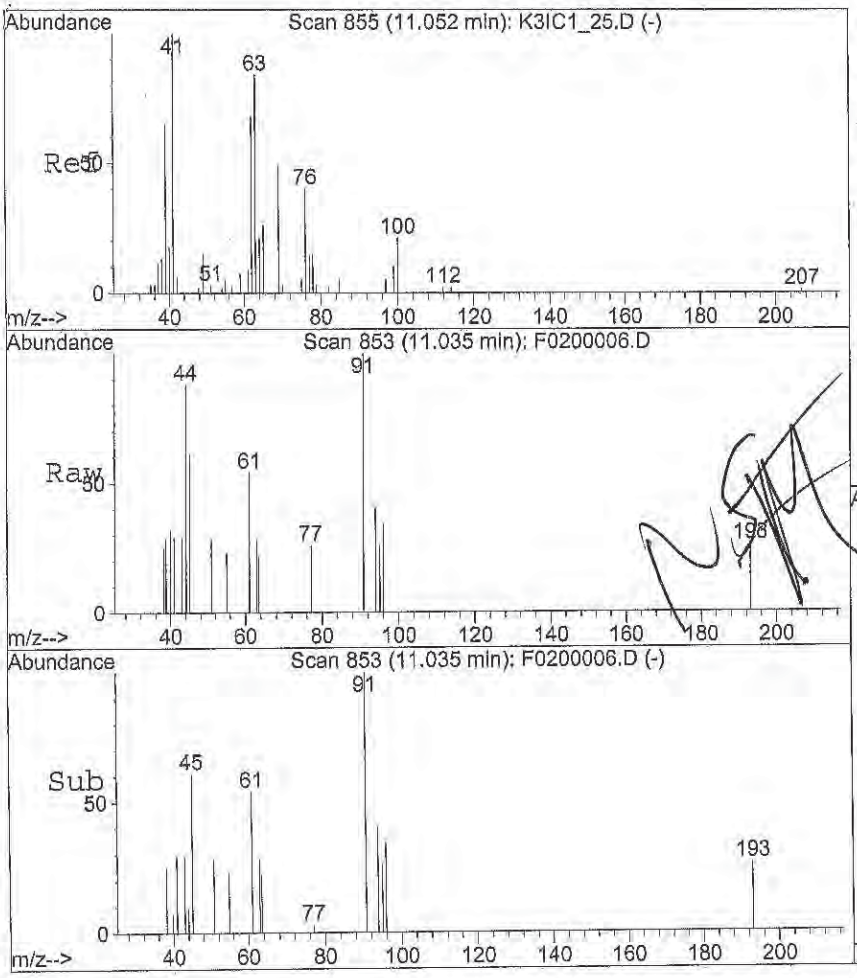


#32
1,2-Dichloroethane
Concen: 3.16 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 62 Resp: 12493

Ion	Ratio	Lower	Upper
62	100		
64	148.4	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

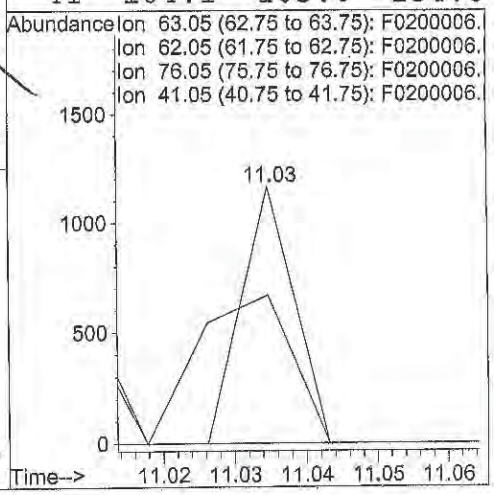


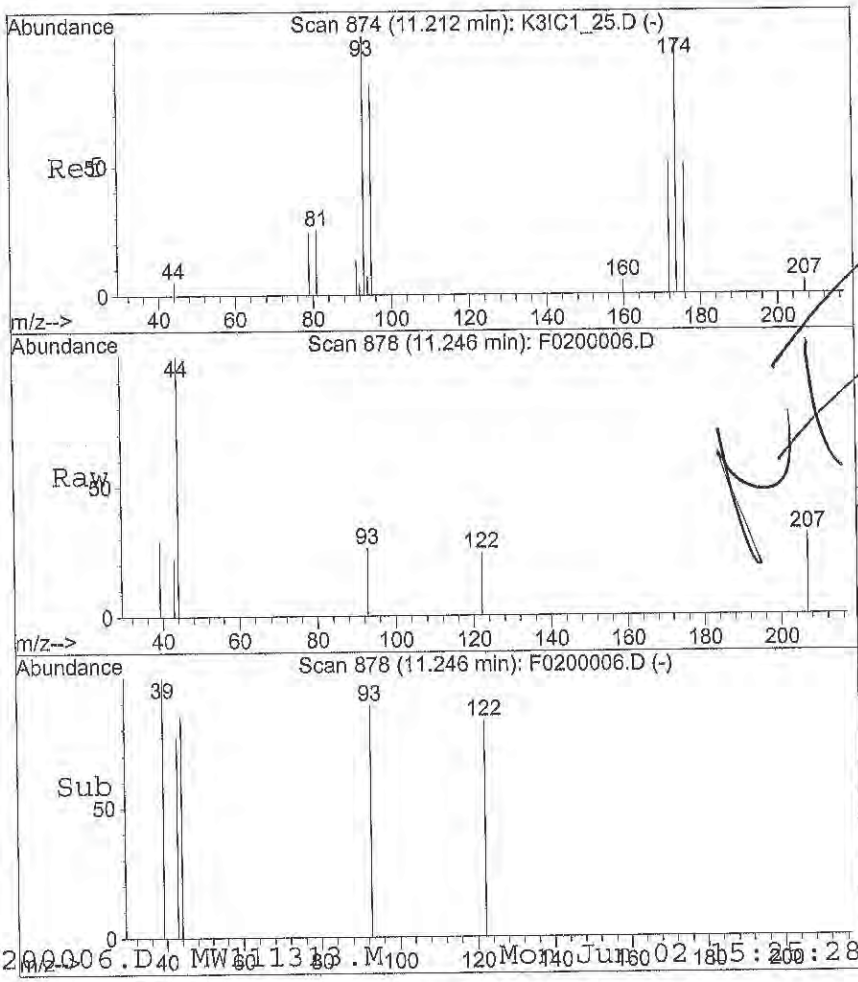


#34
1,2-Dichloropropane
Concen: 0.22 ug/L
RT: 11.03 min Scan# 853
Delta R.T. -0.02 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 63 Resp: 590

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	104.1	103.0	154.6

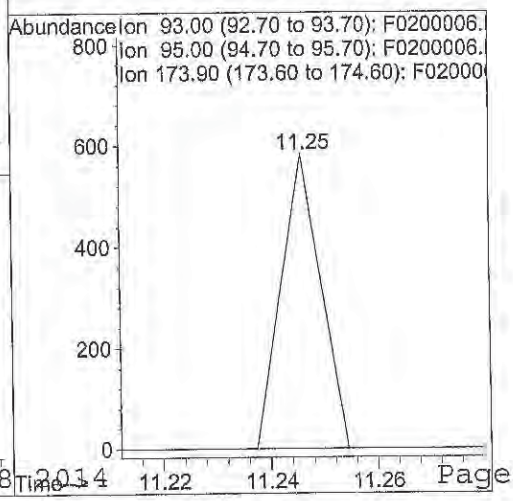


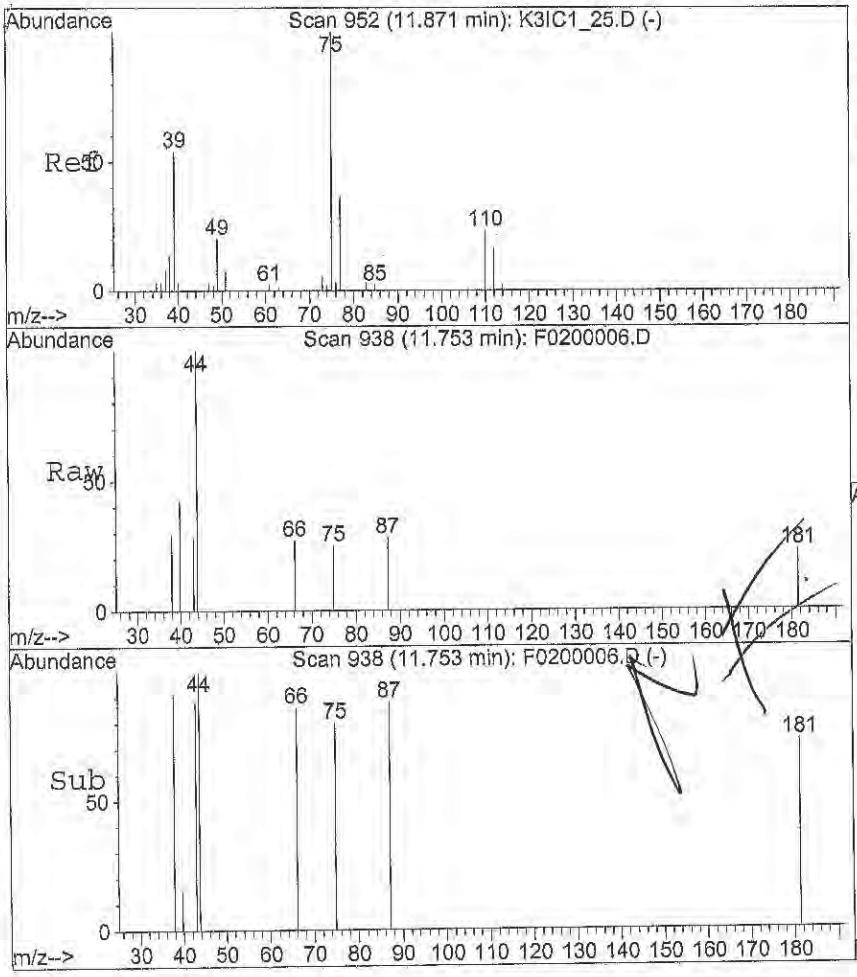


#35
Dibromomethane
Concen: 0.14 ug/L
RT: 11.25 min Scan# 878
Delta R.T. 0.03 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 93 Resp: 295

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

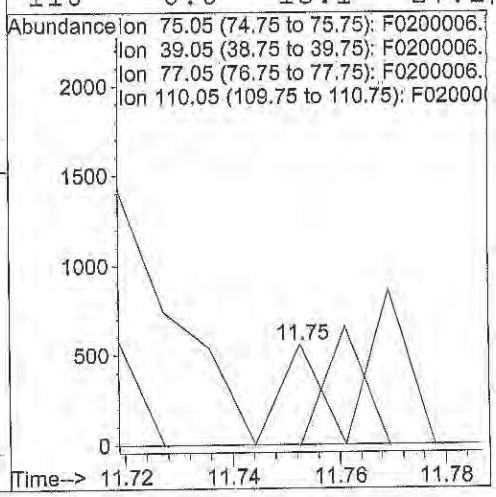


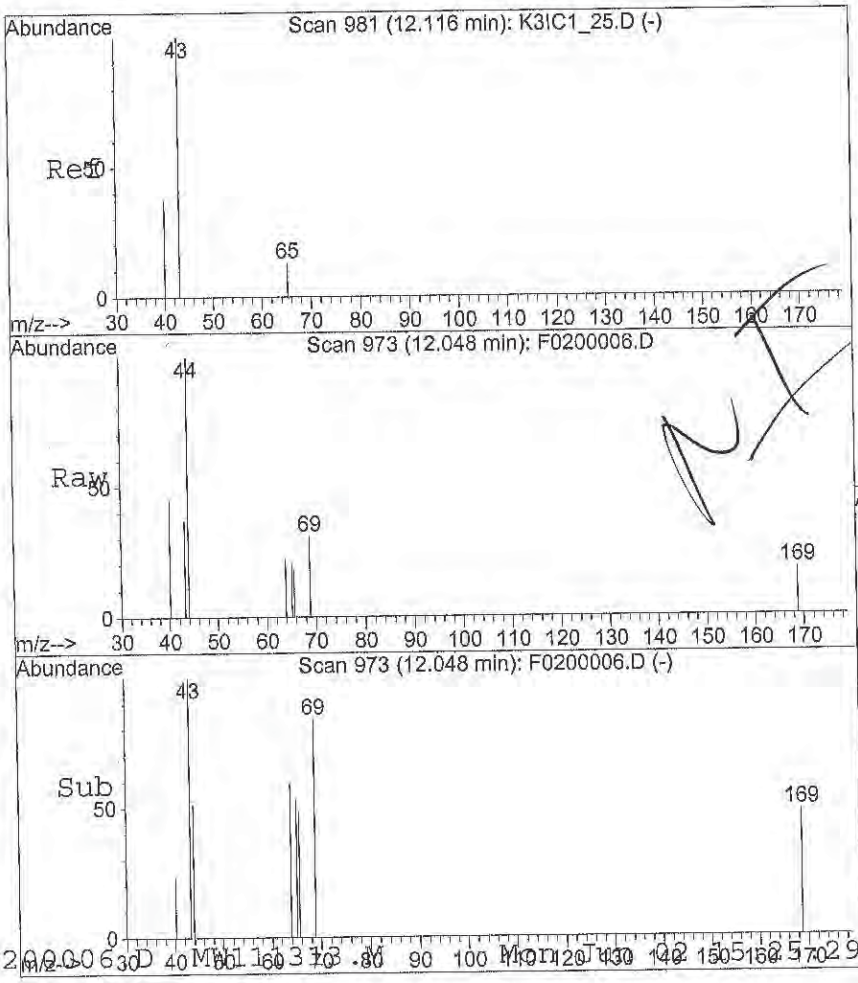


#37
cis-1,3-Dichloropropene
Concen: 0.06 ug/L
RT: 11.75 min Scan# 938
Delta R.T. -0.12 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 75 Resp: 281

Ion	Ratio	Lower	Upper
75	100		
39	117.8	40.7	61.1#
77	155.2	28.8	43.2#
110	0.0	18.1	27.1#

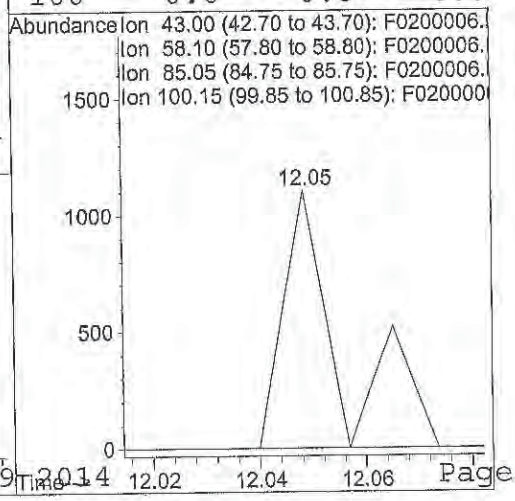


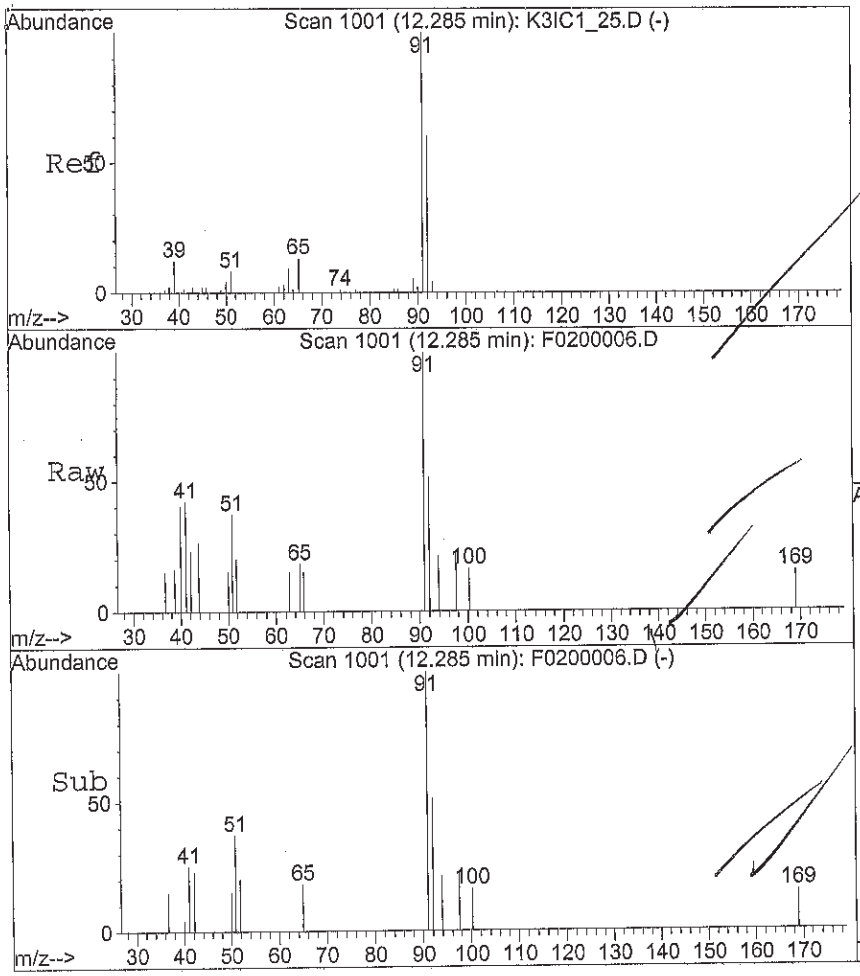


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.25 ug/L
RT: 12.05 min Scan# 973
Delta R.T. -0.07 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 43 Resp: 560

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

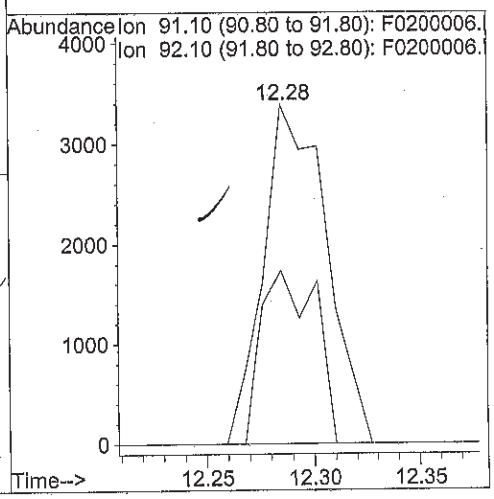


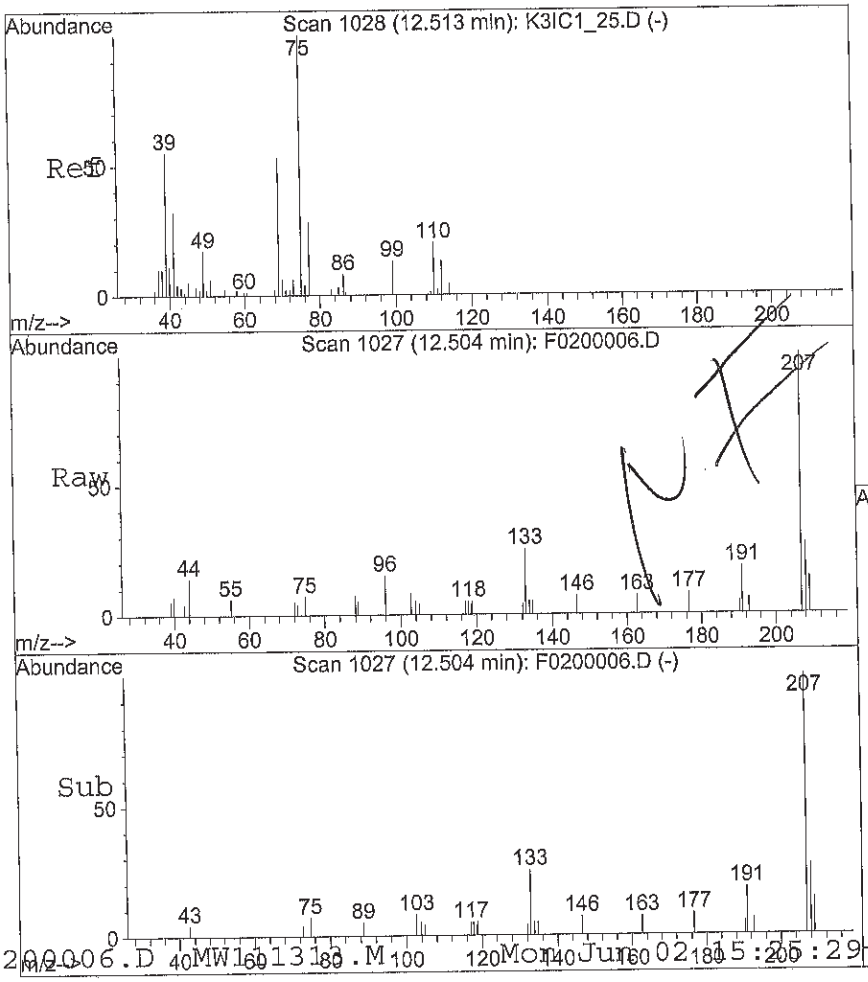


#41
Toluene
Concen: 0.45 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. 0.00 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 91 Resp: 6909

Ion	Ratio	Lower	Upper
91	100		
92	44.1	47.4	71.0#

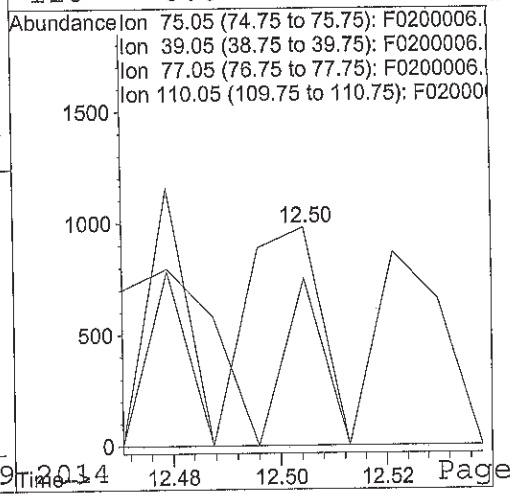


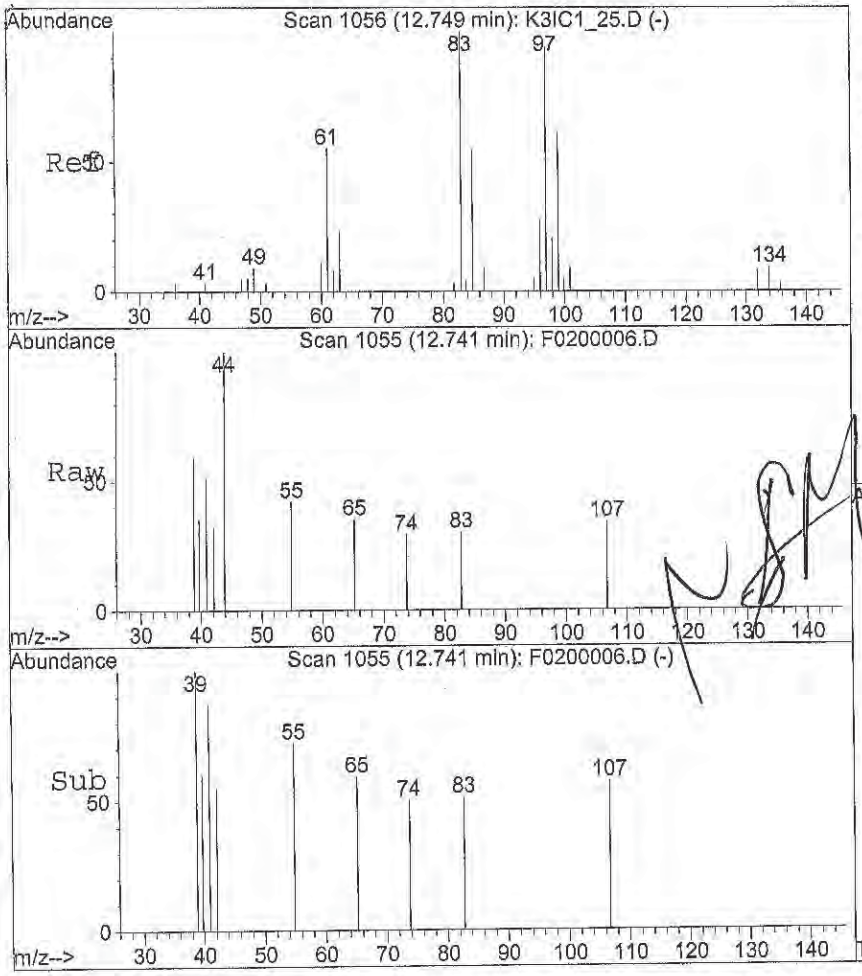


#42
trans-1,3-Dichloropropene
Concen: 0.19 ug/L
RT: 12.50 min Scan# 1027
Delta R.T. -0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 75 Resp: 945

Ion	Ratio	Lower	Upper
75	100		
39	122.1	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

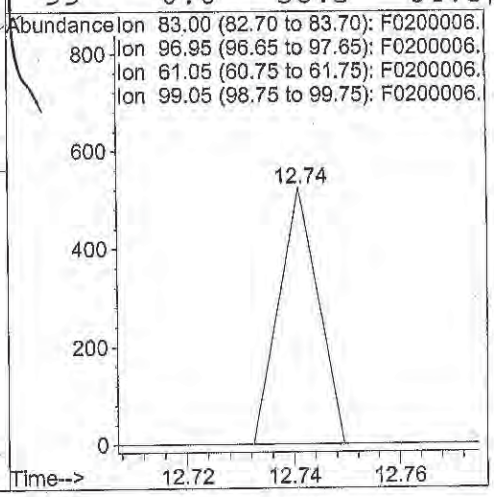


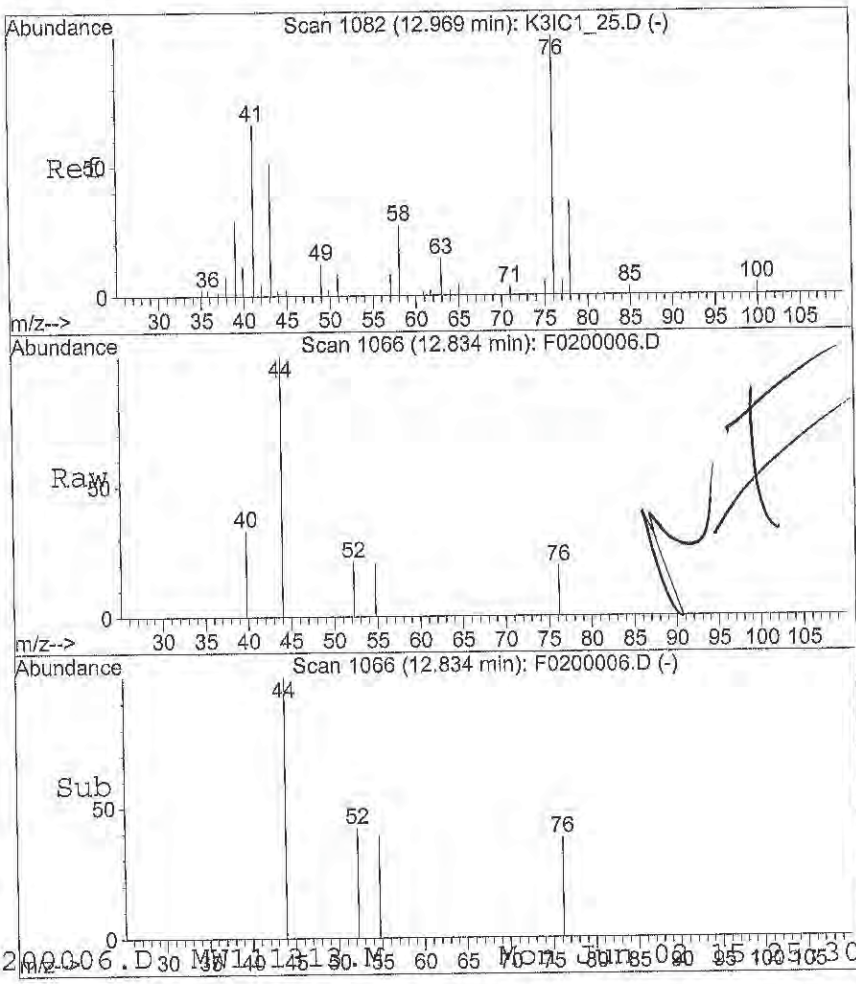


#43
1,1,2-Trichloroethane
Concen: 0.10 ug/L
RT: 12.74 min Scan# 1055
Delta R.T. -0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 83 Resp: 265

Ion	Ratio	Lower	Upper
83	100		
97	0.0	79.4	119.0#
61	0.0	47.4	71.2#
99	0.0	56.3	84.5#

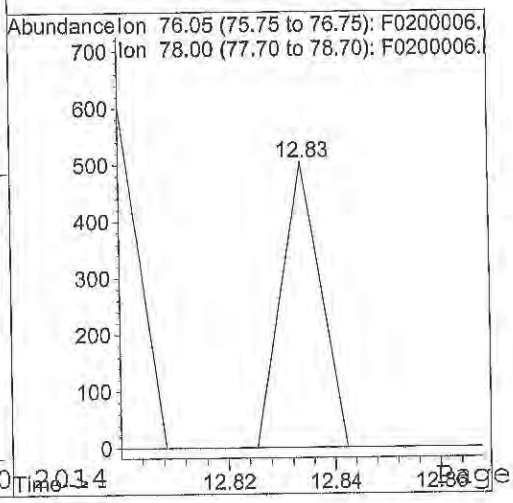


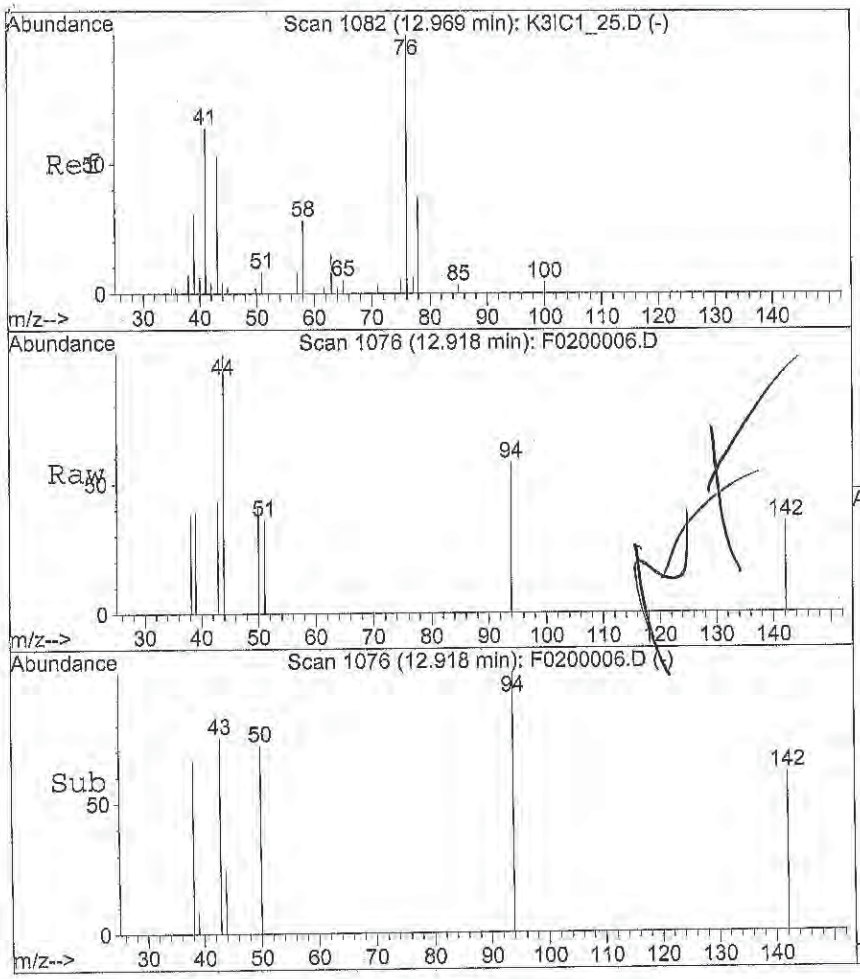


#45
1,3-Dichloropropane
Concen: 0.05 ug/L
RT: 12.83 min Scan# 1066
Delta R.T. -0.14 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 76 Resp: 255

Ion	Ratio	Lower	Upper
76	100		
78	0.0	26.9	40.3#

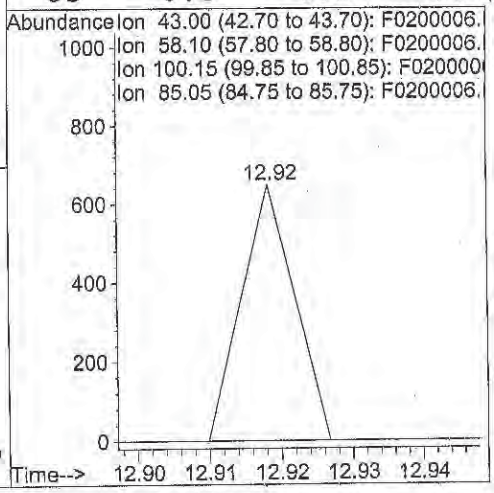


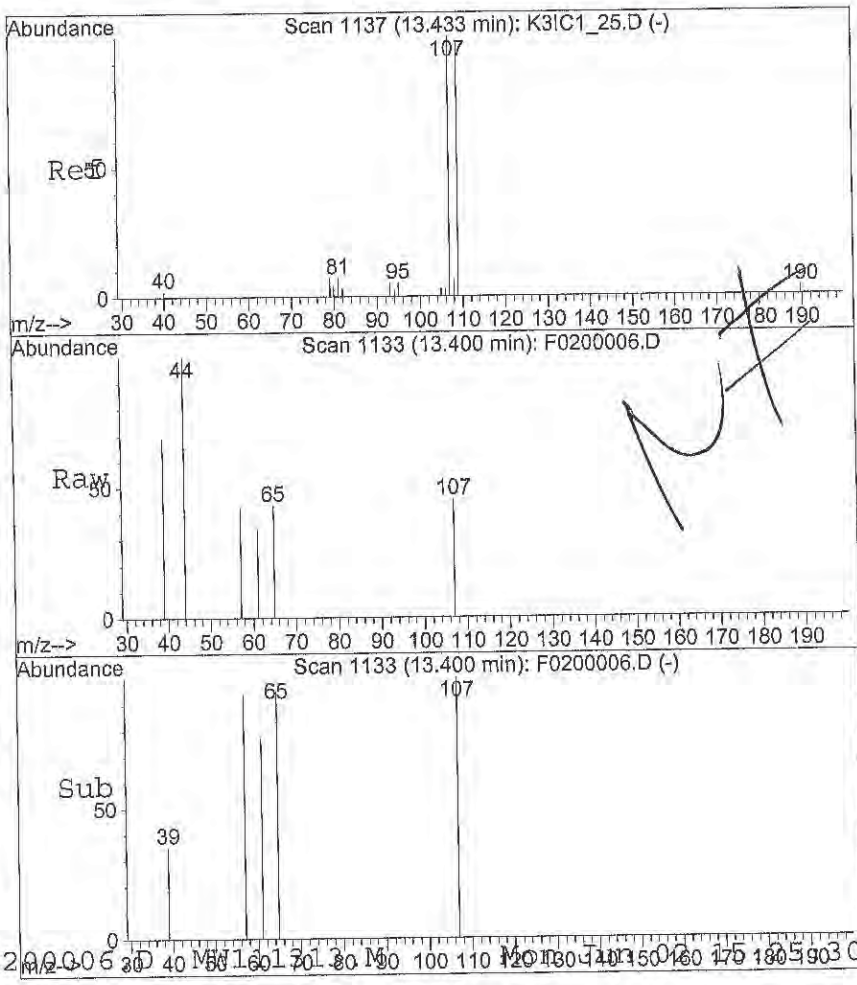


#46
2-Hexanone
Concen: 0.13 ug/L
RT: 12.92 min Scan# 1076
Delta R.T. -0.05 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 43 Resp: 328

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

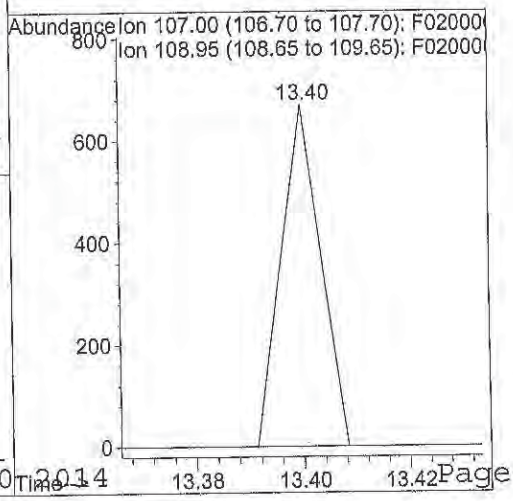


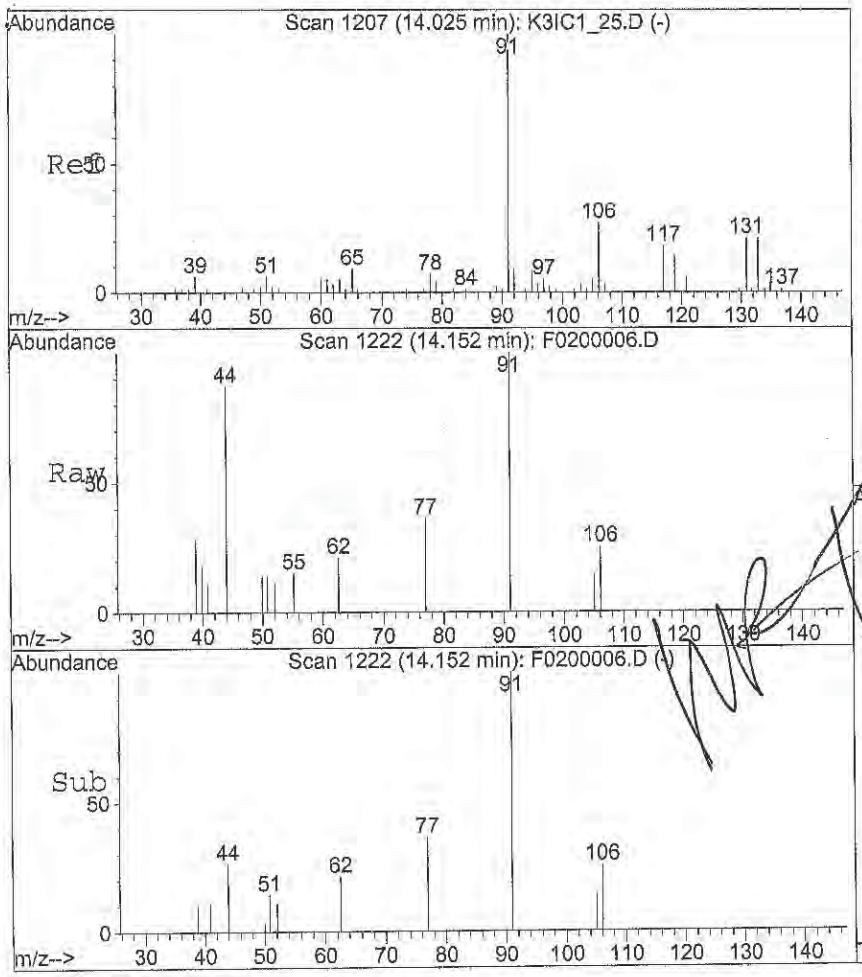


#48
1,2-Dibromoethane
Concen: 0.10 ug/L
RT: 13.40 min Scan# 1133
Delta R.T. -0.03 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:107 Resp: 340

Ion	Ratio	Lower	Upper
107	100		
109	0.0	74.4	111.6#

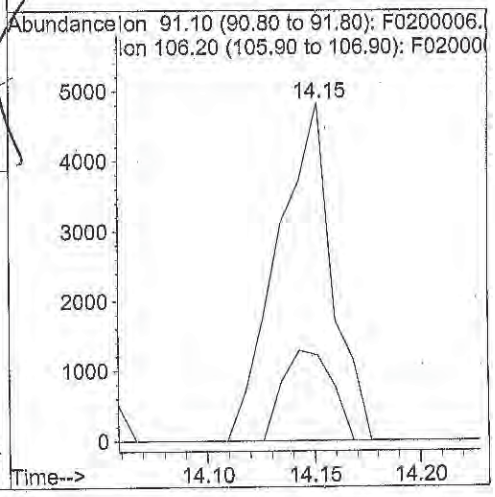


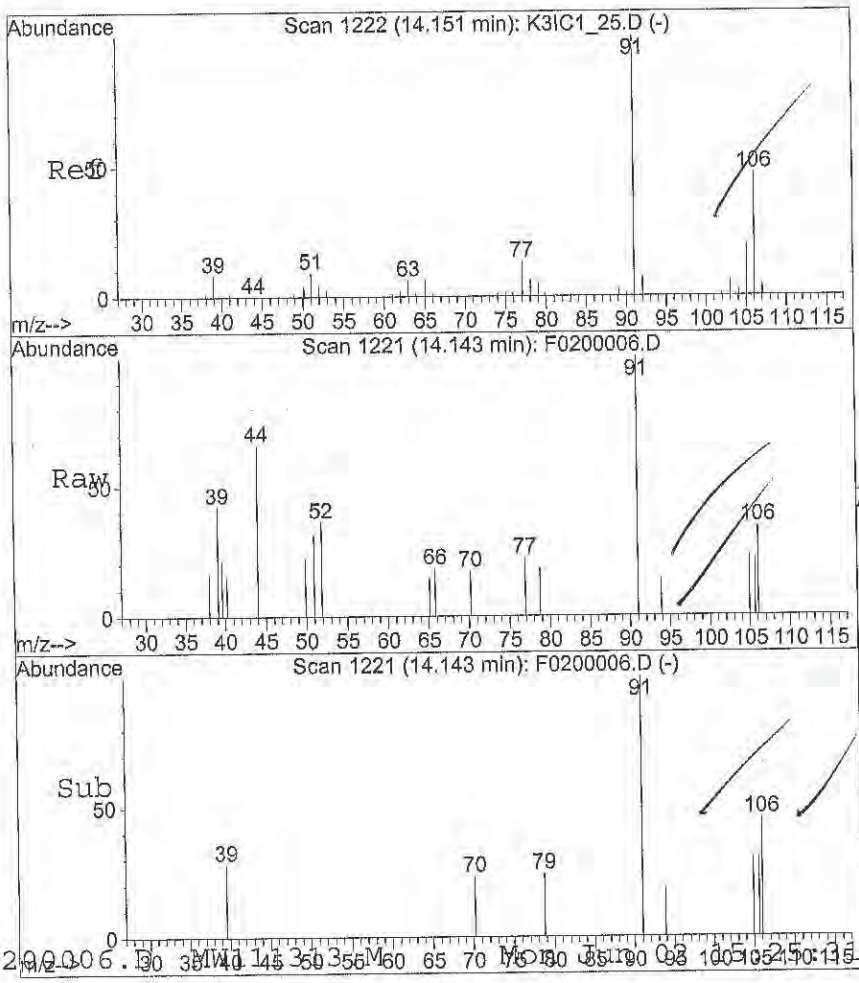


#51
Ethylbenzene
Concen: 0.50 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. 0.13 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 91 Resp: 8571

Ion	Ratio	Lower	Upper
91	100		
106	24.1	23.5	35.3

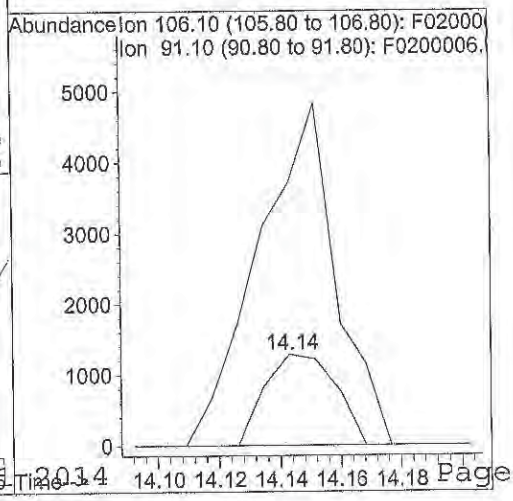


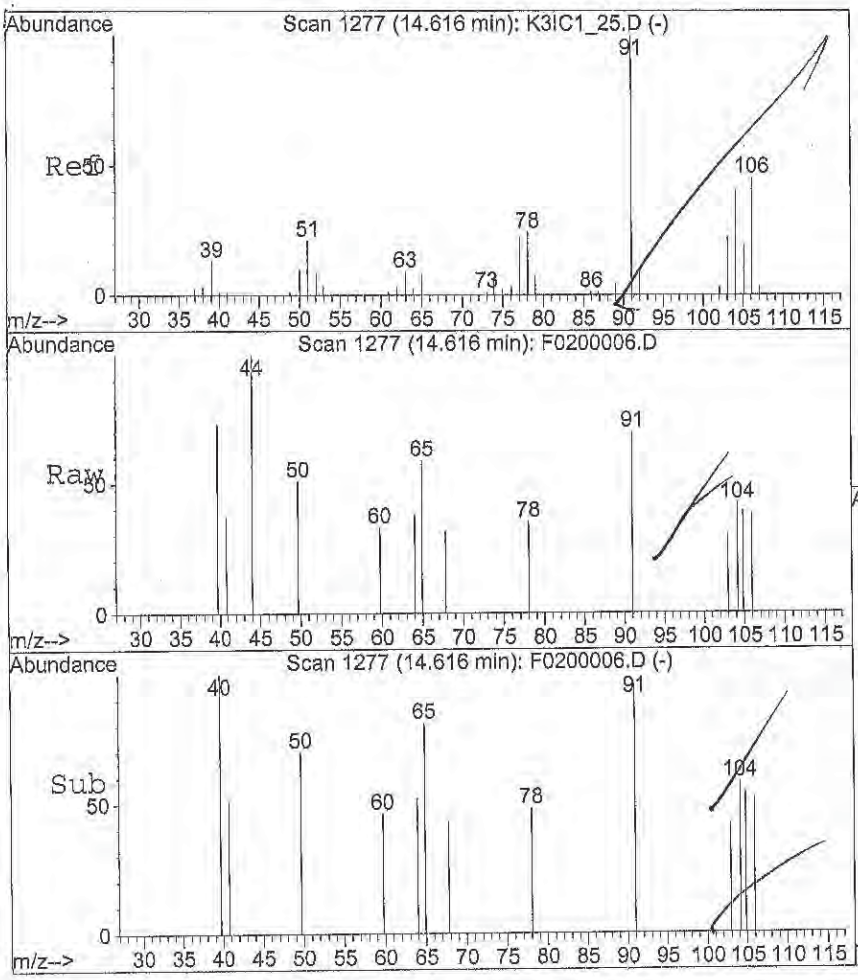


#52
m,p-Xylenes
Concen: 0.34 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:106 Resp: 2067

Ion	Ratio	Lower	Upper
106	100		
91	414.7	177.1	265.7#

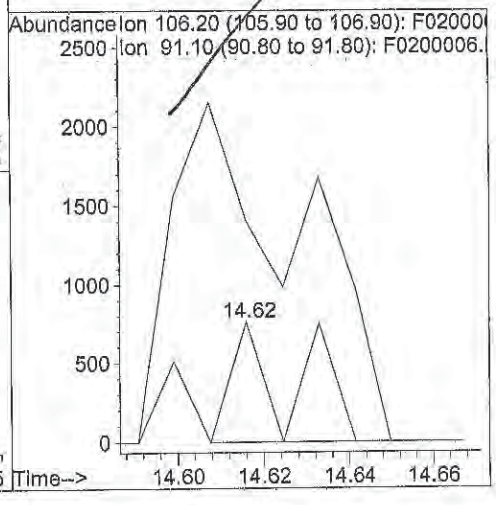


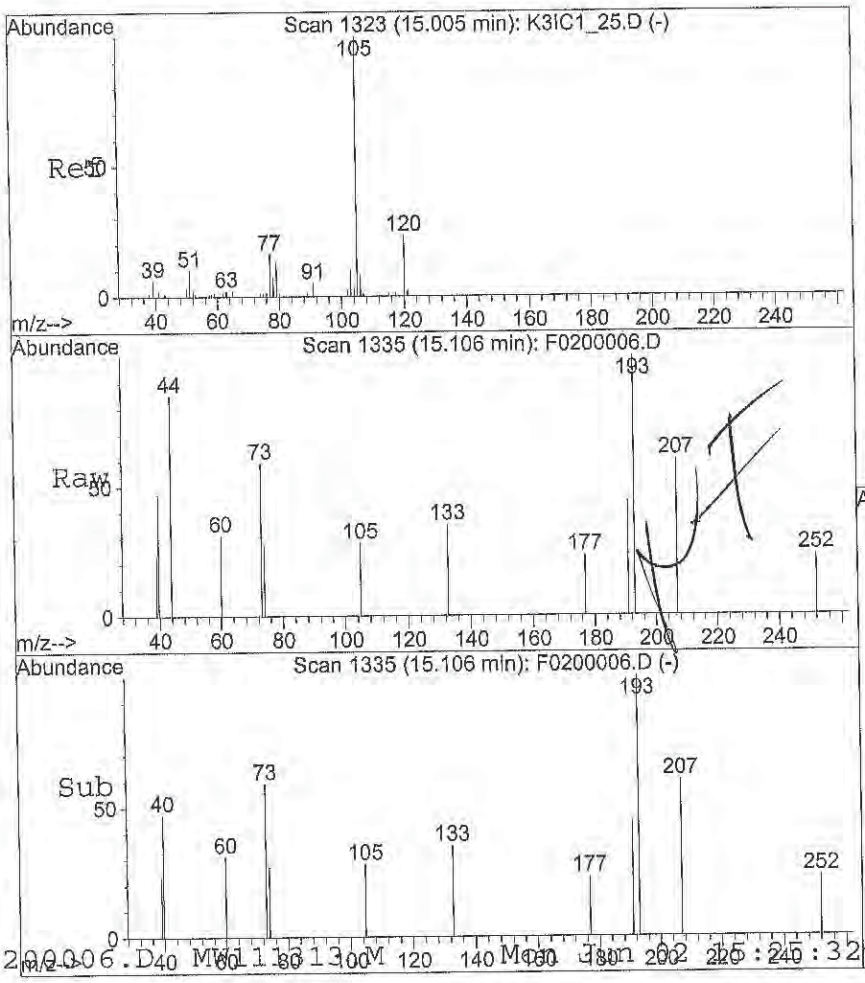


#53
o-Xylene
Concen: 0.13 ug/L
RT: 14.62 min Scan# 1277
Delta R.T. 0.00 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:106 Resp: 763

Ion	Ratio	Lower	Upper
106	100		
91	580.9	179.0	268.6#

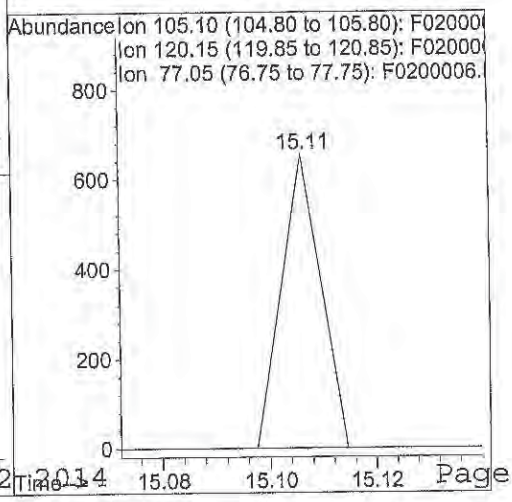


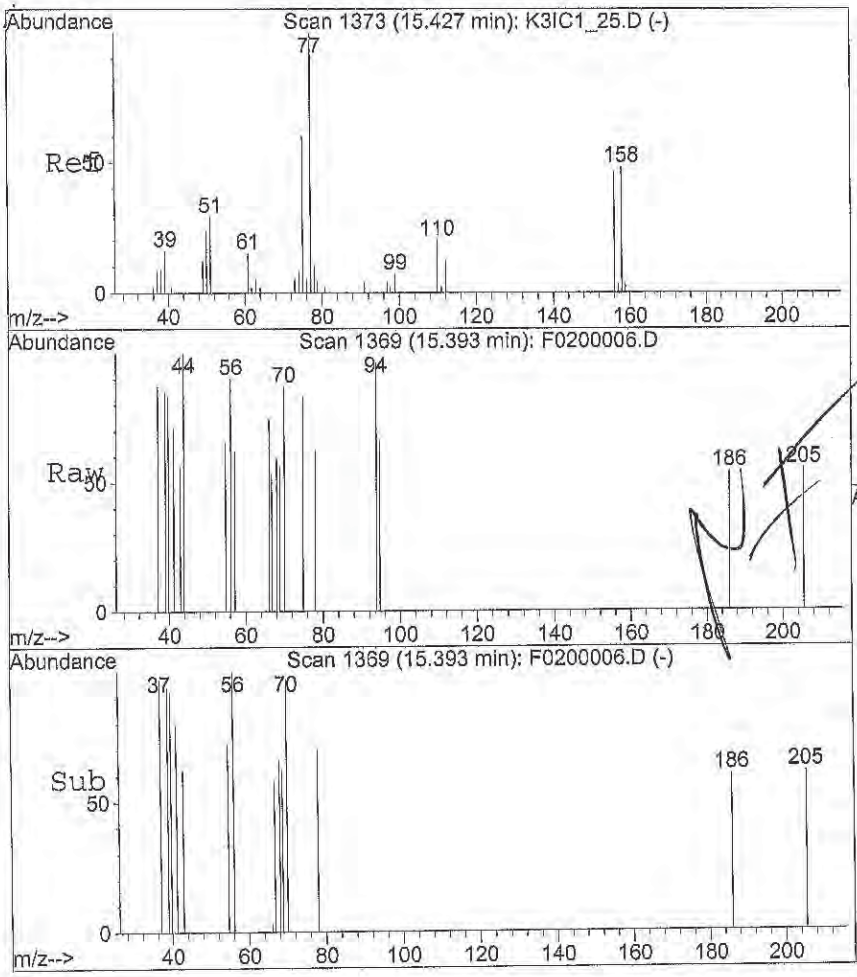


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.11 min Scan# 1335
Delta R.T. 0.10 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:105 Resp: 332

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

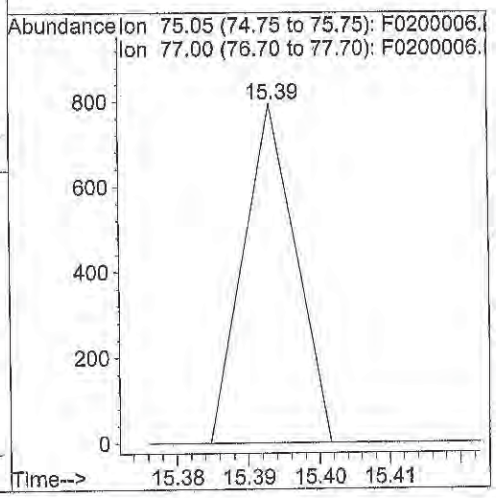


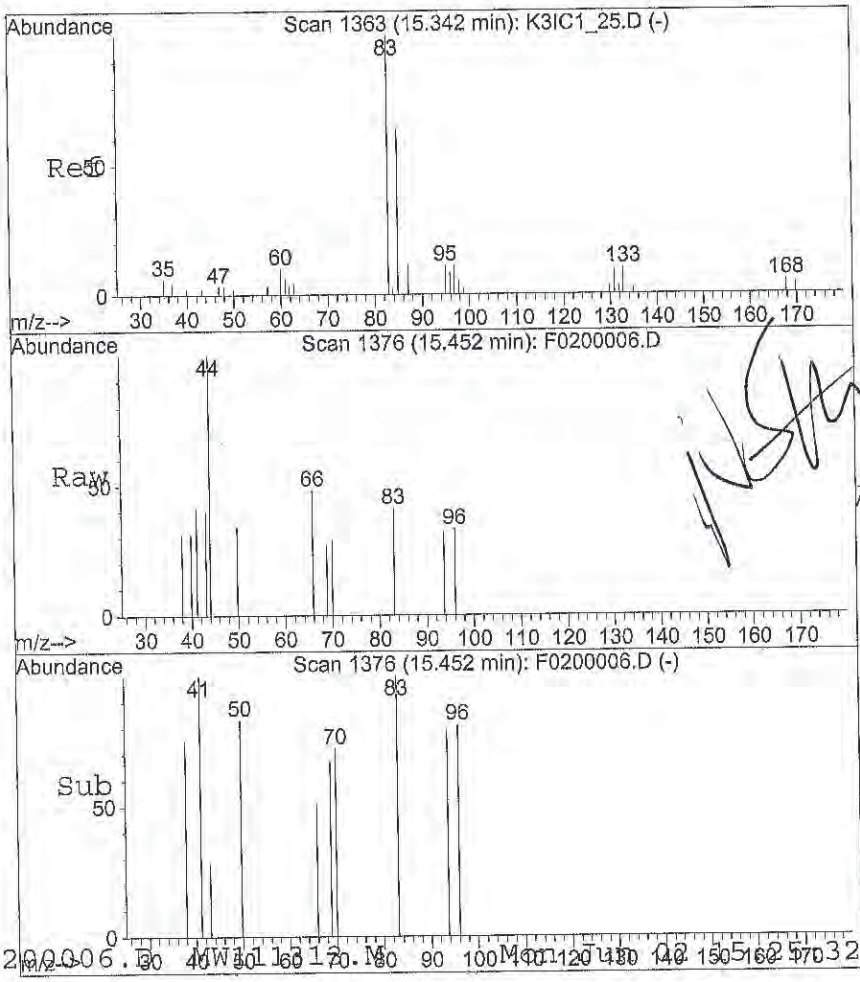


#57
1,2,3-Trichloropropane
Concen: 0.09 ug/L
RT: 15.39 min Scan# 1369
Delta R.T. -0.03 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 75 Resp: 402

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

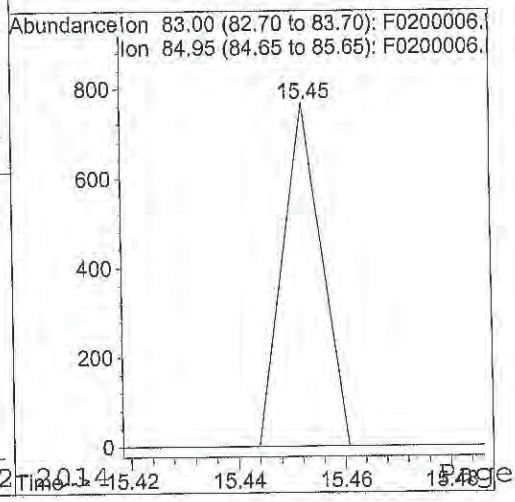


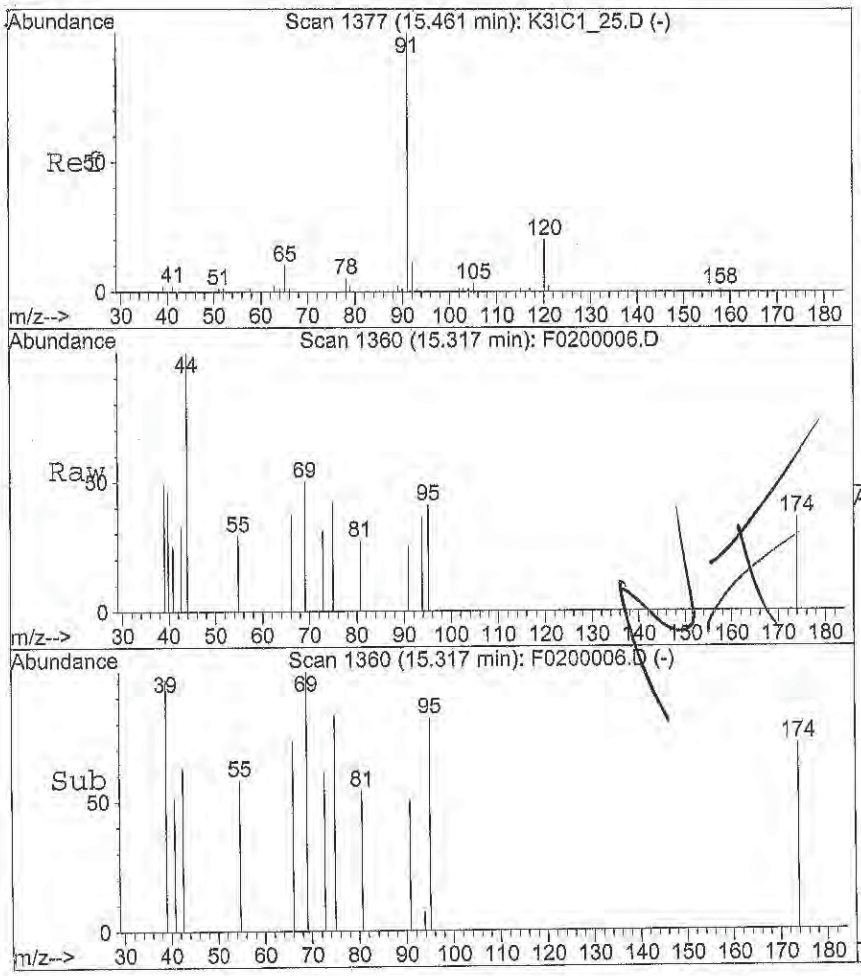


#60
1,1,2,2-Tetrachloroethane
Concen: 0.09 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. 0.11 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 83 Resp: 388

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

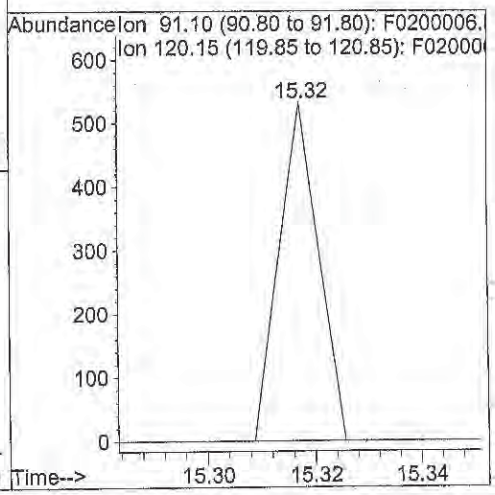


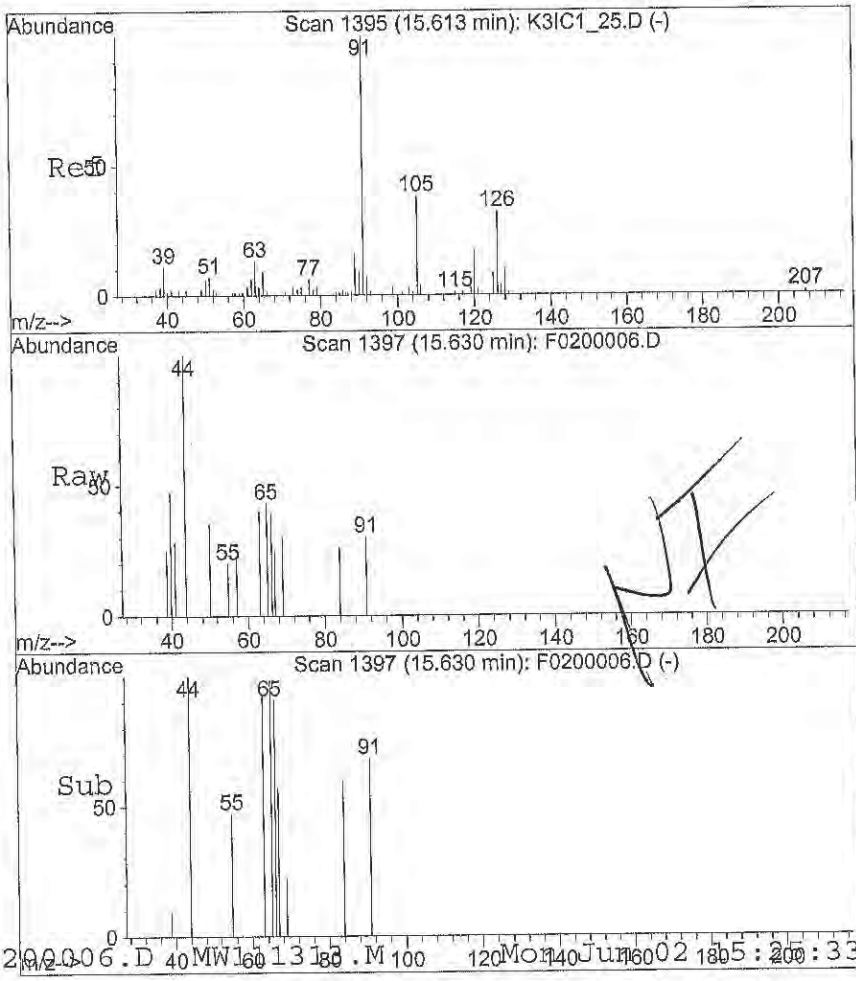


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.32 min Scan# 1360
Delta R.T. -0.14 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 91 Resp: 270

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

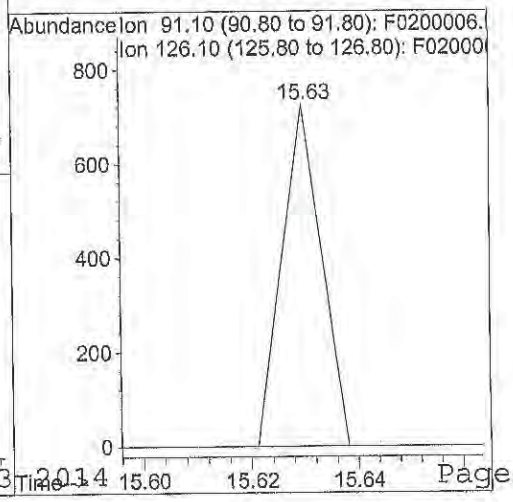


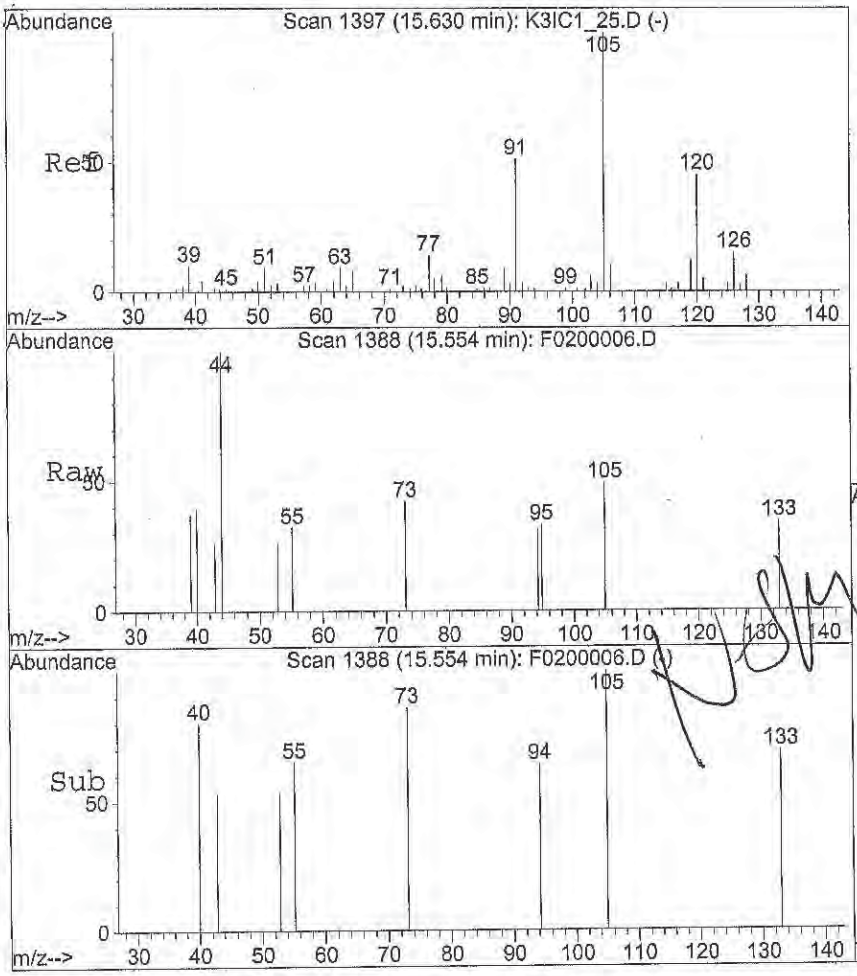


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.63 min Scan# 1397
Delta R.T. 0.02 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 91 Resp: 368

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

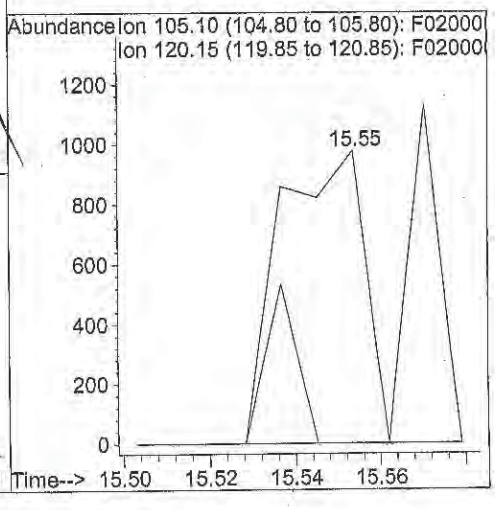


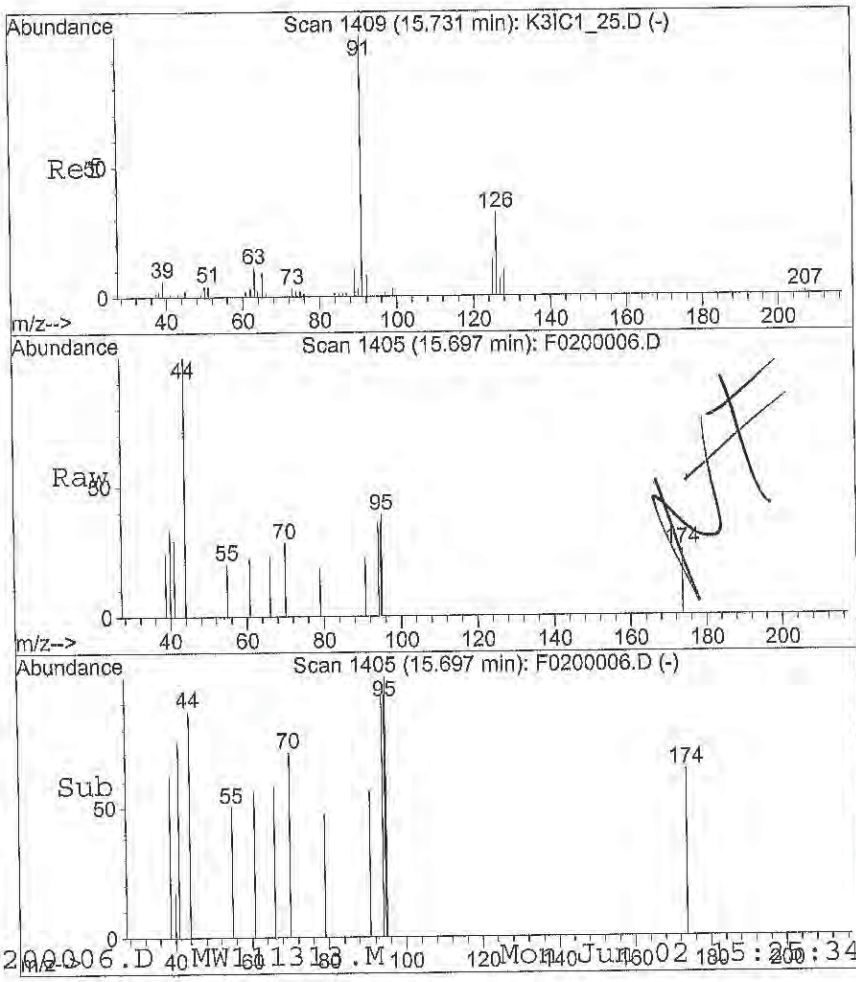


#64
1,3,5-Trimethylbenzene
Concen: 0.09 ug/L
RT: 15.55 min Scan# 1388
Delta R.T. -0.08 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:105 Resp: 1346

Ion	Ratio	Lower	Upper
105	100		
120	20.1	36.4	54.6#

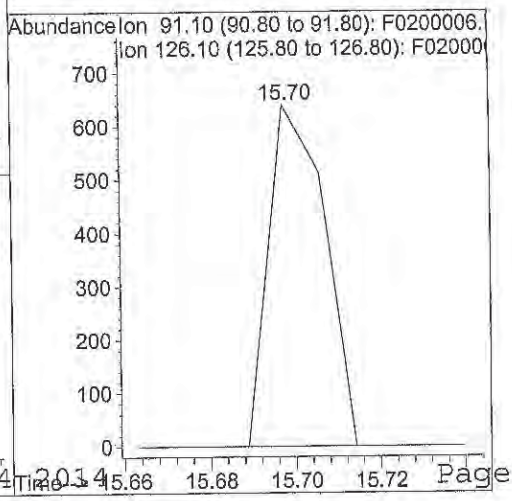


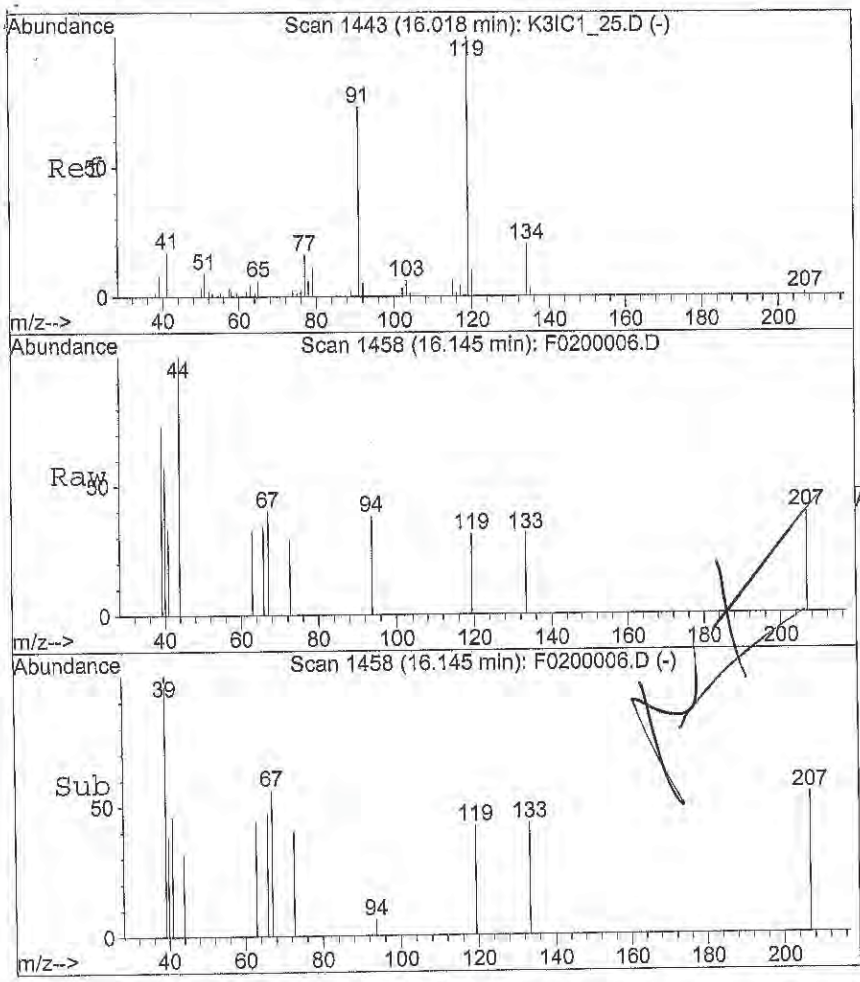


#65
4-Chlorotoluene
Concen: 0.04 ug/L
RT: 15.70 min Scan# 1405
Delta R.T. -0.03 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 91 Resp: 585

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

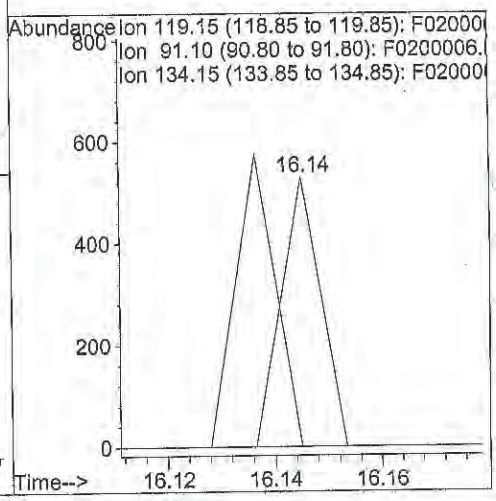


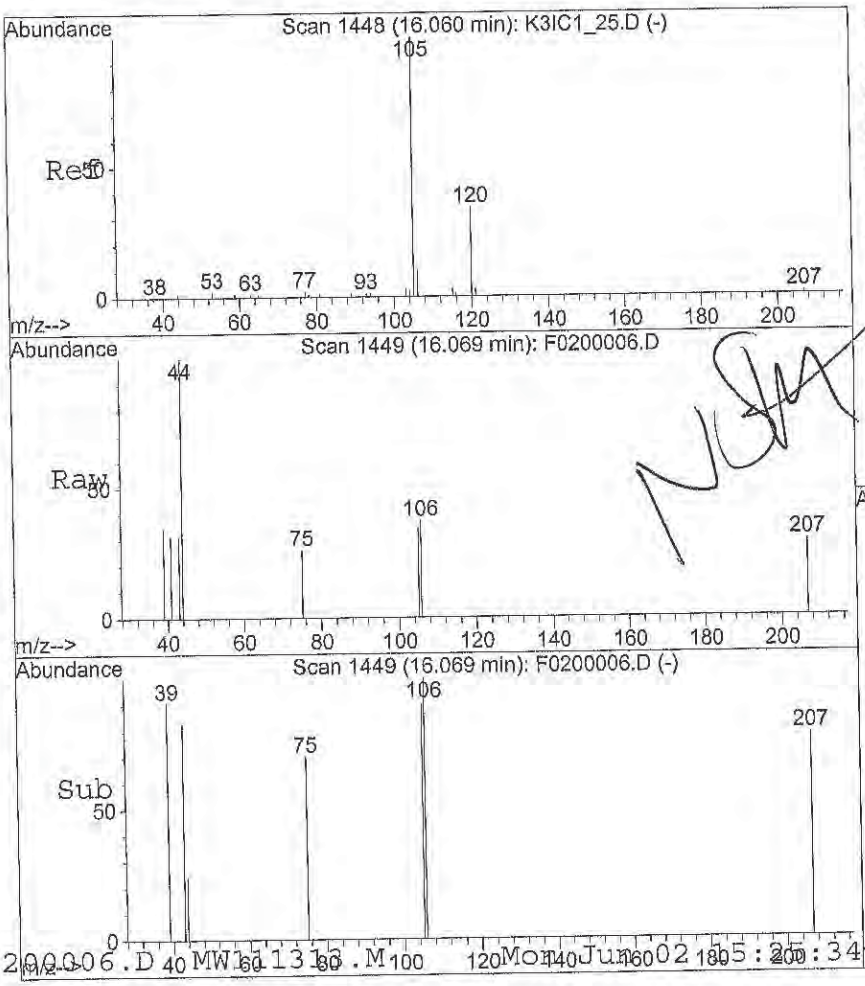


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 16.14 min Scan# 1458
Delta R.T. 0.13 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:119 Resp: 269

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	108.2	16.1	24.1#

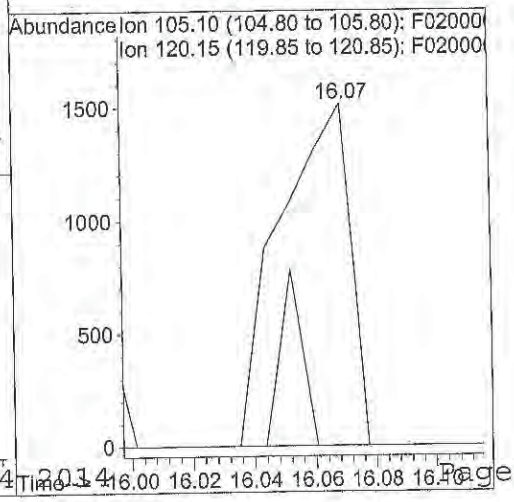


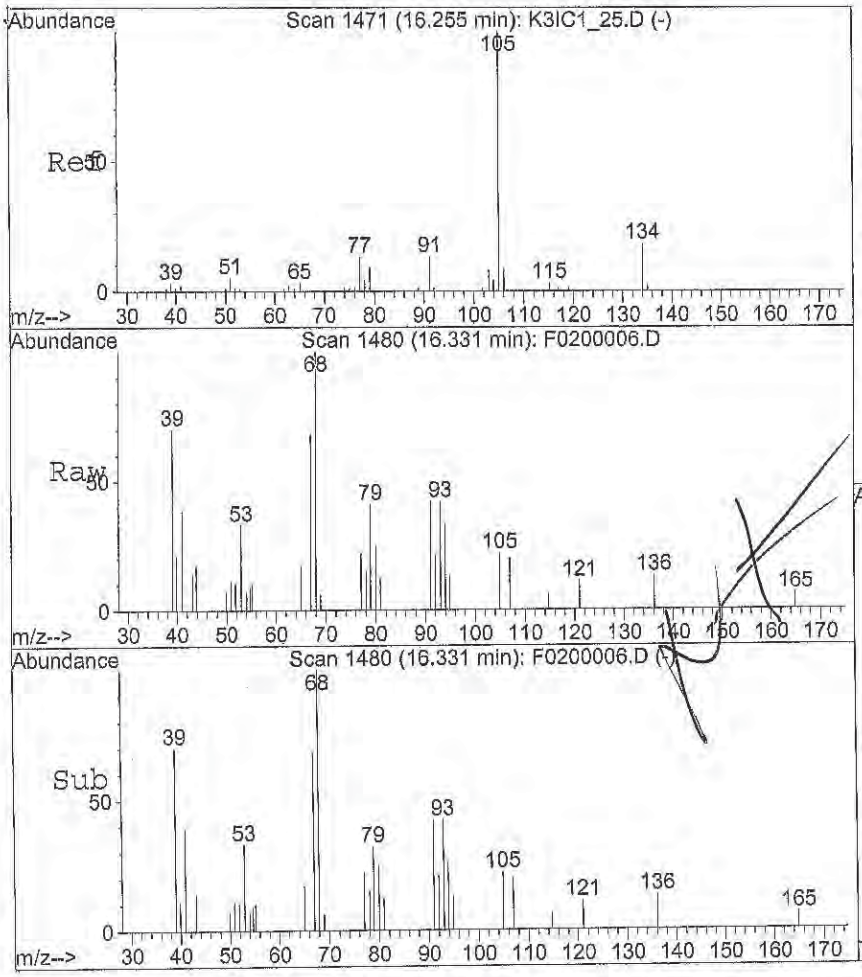


#67
1,2,4-Trimethylbenzene
Concen: 0.16 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:105 Resp: 2425

Ion	Ratio	Lower	Upper
105	100		
120	16.3	33.8	50.8#

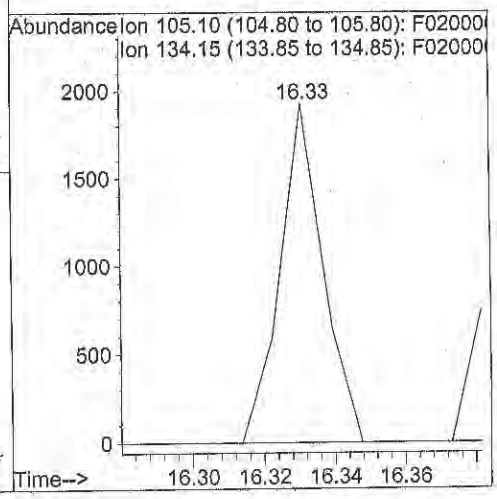


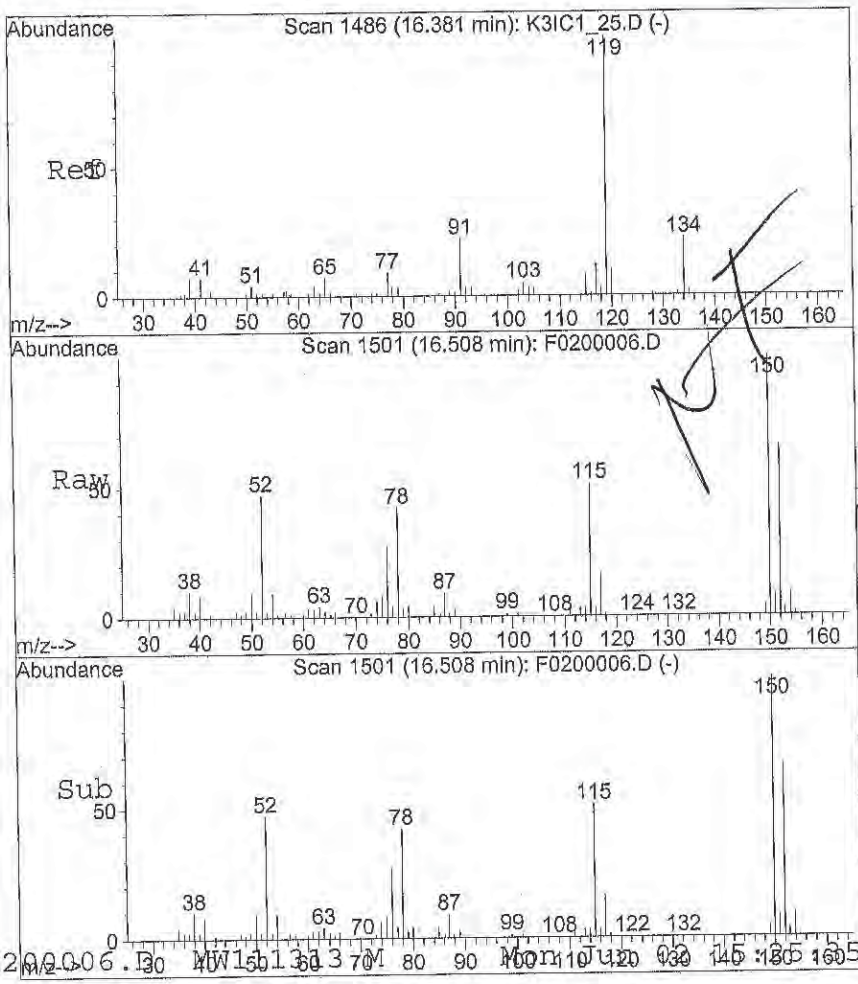


#68
sec-Butylbenzene
Concen: 0.08 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.08 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:105 Resp: 1598

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

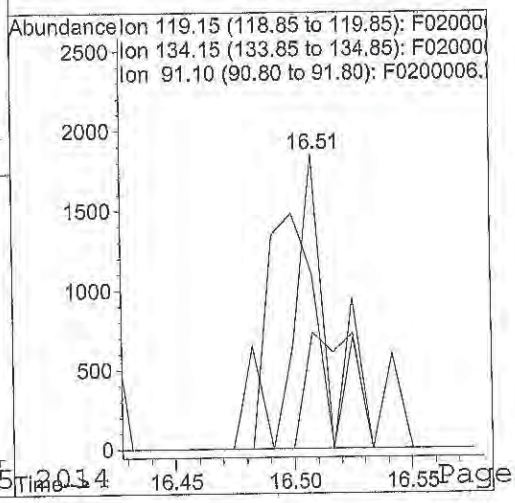


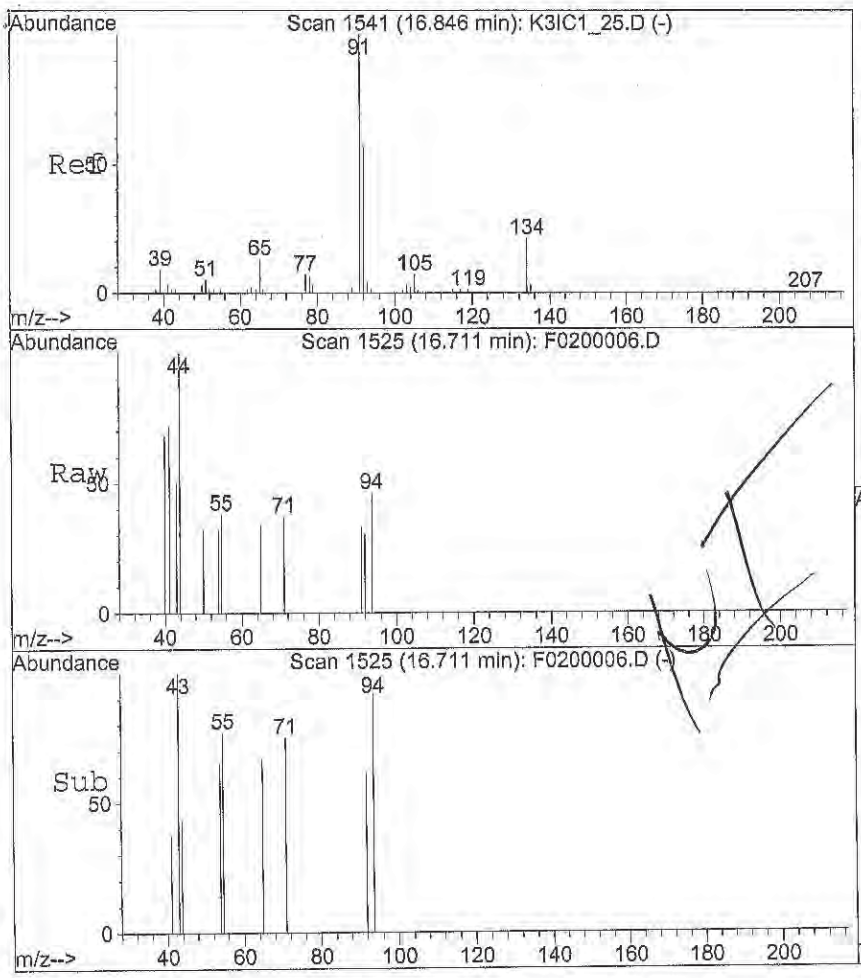


#69
p-Isopropyltoluene
Concen: 0.12 ug/L
RT: 16.51 min Scan# 1501
Delta R.T. 0.13 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:119 Resp: 1944

Ion	Ratio	Lower	Upper
119	100		
134	53.9	17.4	26.2#
91	102.3	19.6	29.4#

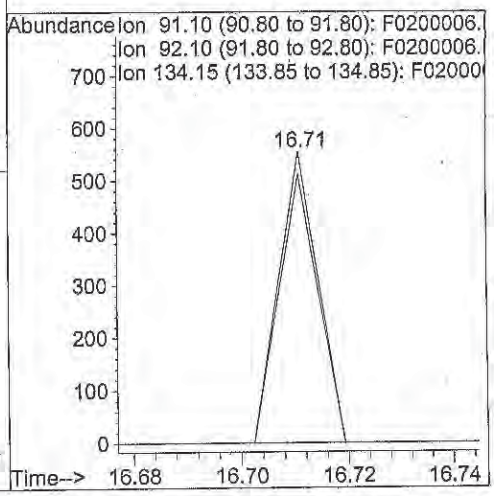


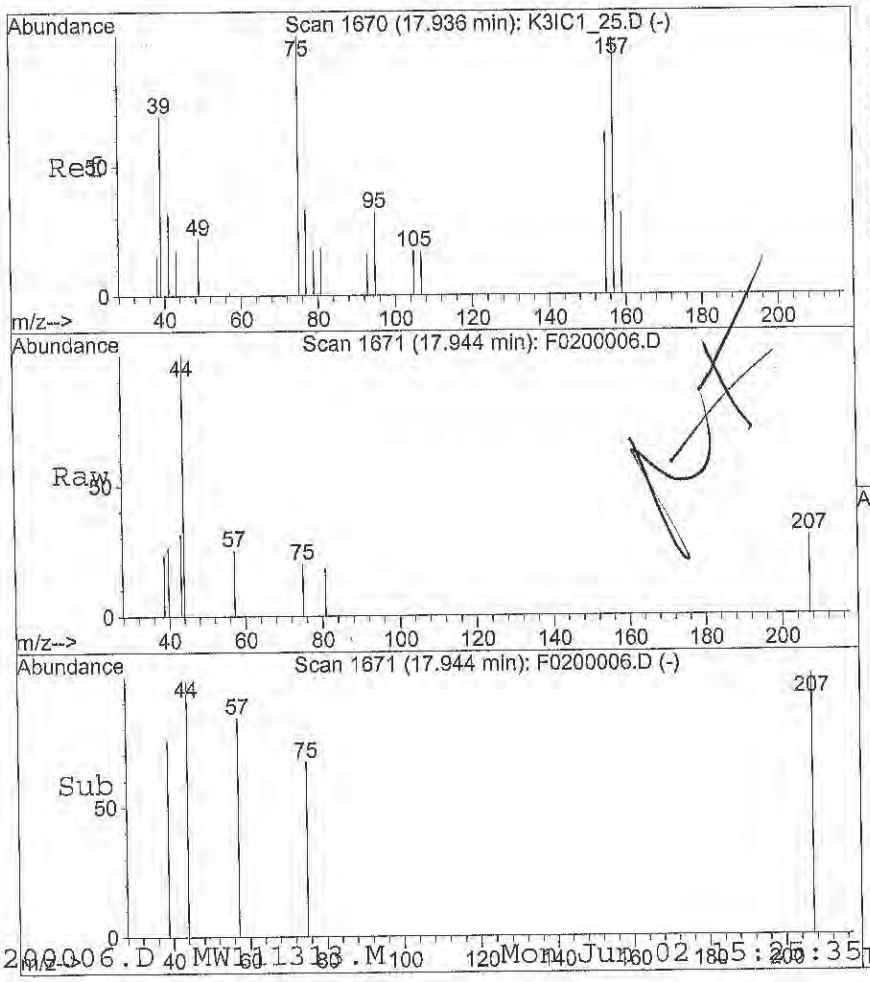


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.71 min Scan# 1525
Delta R.T. -0.14 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 91 Resp: 281

Ion	Ratio	Lower	Upper
91	100		
92	92.2	47.0	70.4#
134	0.0	18.1	27.1#

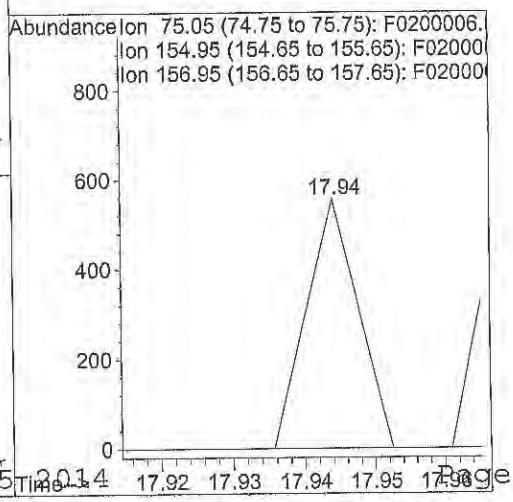


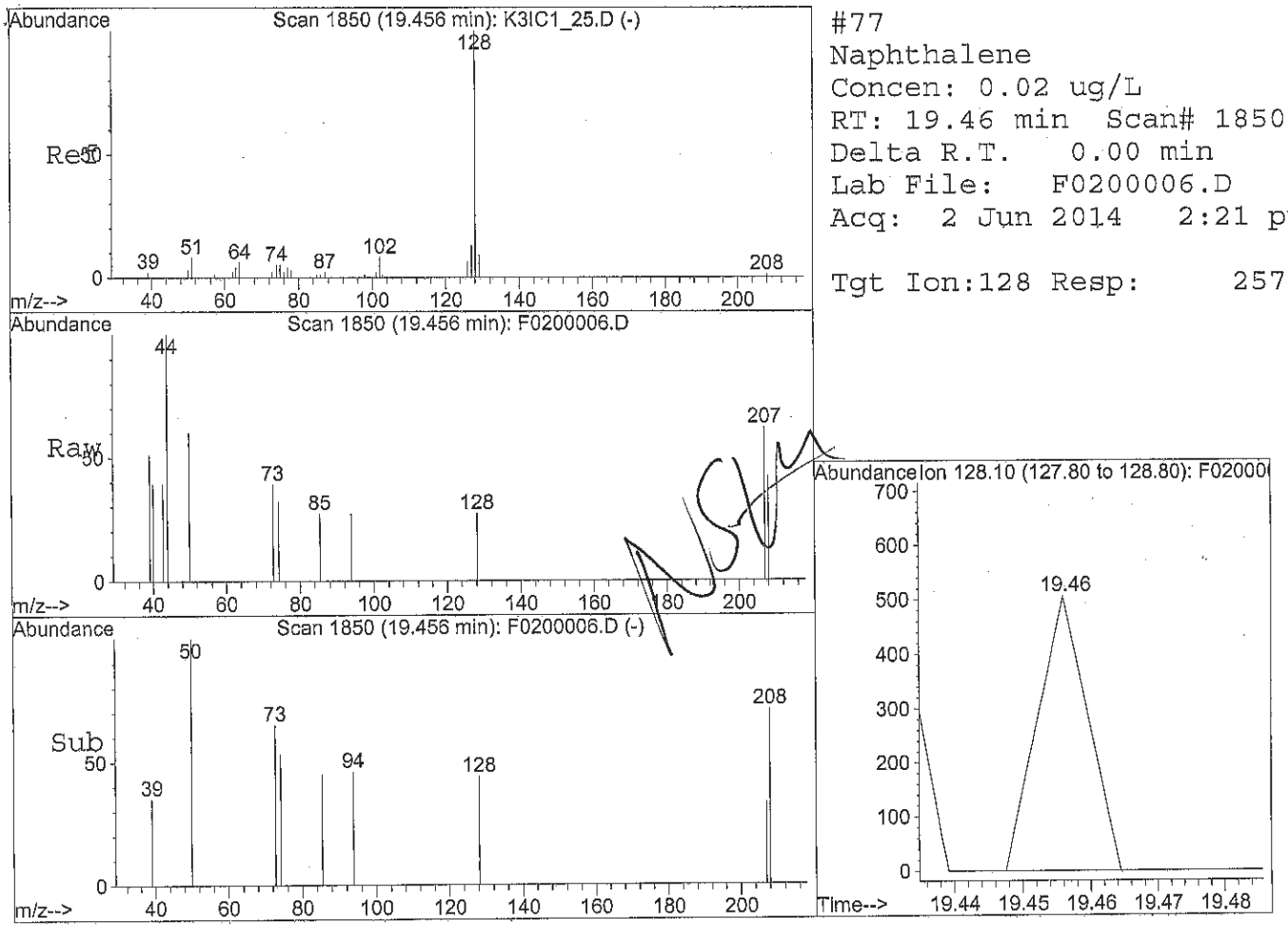


#74
1,2-Dibromo-3-chloropropane
Concen: 1.30 ug/L
RT: 17.94 min Scan# 1671
Delta R.T. 0.01 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion: 75 Resp: 281

Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.02 ug/L
RT: 19.46 min Scan# 1850
Delta R.T. 0.00 min
Lab File: F0200006.D
Acq: 2 Jun 2014 2:21 pm

Tgt Ion:128 Resp: 257

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200006.D Vial: 5
Acq On : 2 Jun 2014 2:21 pm Operator: DN
Sample : 3F40201-05 Inst : GC/MS Ins
Misc : 100cc SVL-505-SA5C-SV-5.0-6.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:39 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1187680	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1116815	12.50 ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	592053	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	421792m	13.66 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 109.28%		
3) Chloroform-d (SU6)	9.18	84	599764m	13.53 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 108.24%		
4) Methylene Chloride-d2 (SU5	7.07	86	301532	11.64 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.12%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	235924m	11.18 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.44%		
6) Benzene-d6 (SU7)	9.93	84	1171771	12.57 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 100.56%		
8) Toluene-d8 (SU3)	12.21	98	1192475	11.25 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.00%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	657296m	15.03 ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 120.24%		

Target Compounds Qvalue

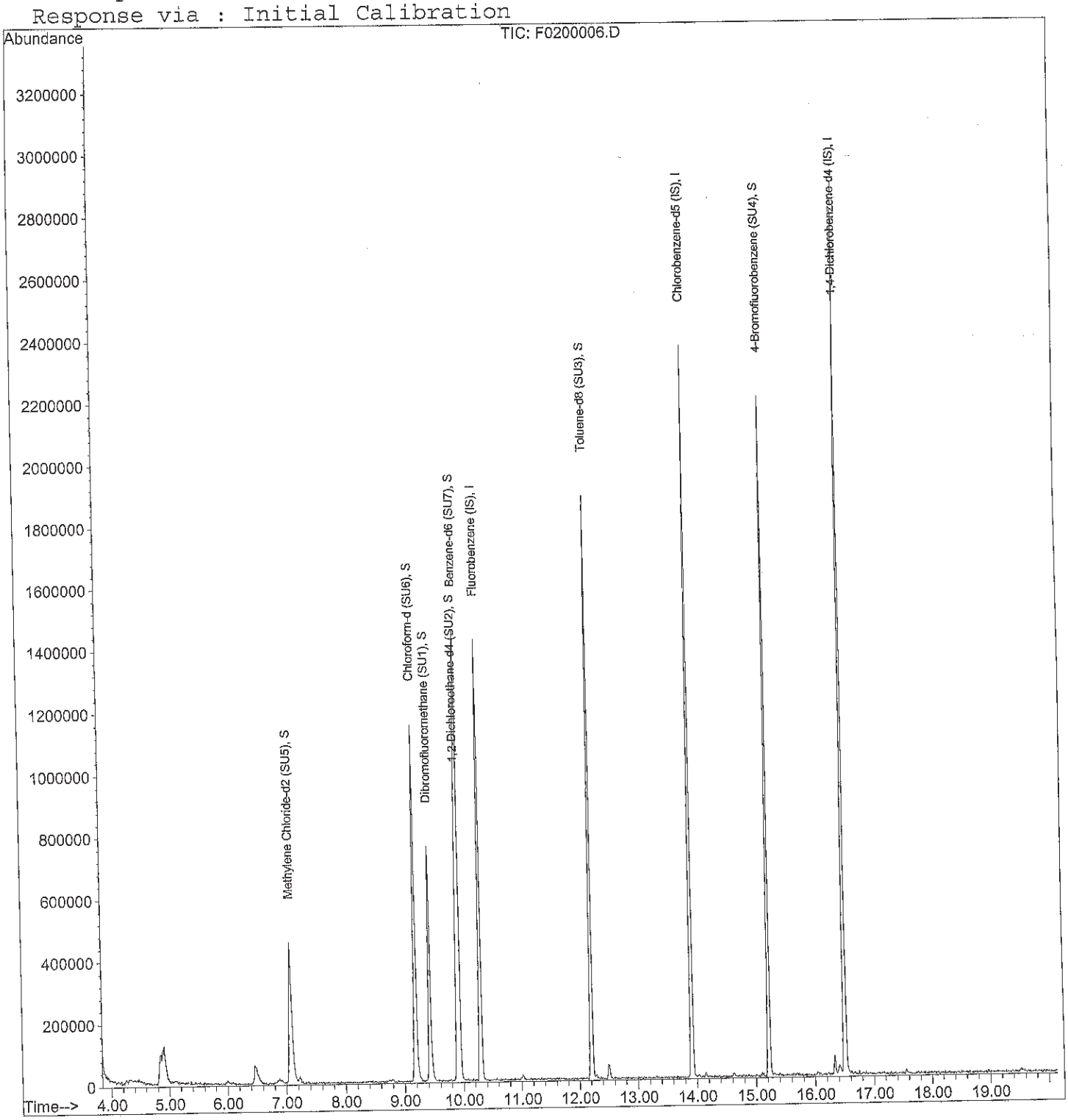
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200006.D
Acq On : 2 Jun 2014 2:21 pm
Sample : 3F40201-05
Misc : 100cc SVL-505-SA5C-SV-5.0-6.0
MS Integration Params: rteint.p
Quant Time: Jun 3 7:39 19114

Vial: 5
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200007.D
Acq On : 2 Jun 2014 2:50 pm
Sample : 3F40201-06
Misc : 100cc SVL-505-SA5C-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: Jun 2 15:42 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1178685	12.50	ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1115191	12.50	ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	566657	12.50	ug/L	0.00

System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	9.43	113	398228m	13.54	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 108.32%			
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	381892m	13.67	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 109.36%			
39) Toluene-d8 (SU3)	12.21	98	1167505	11.22	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.76%			
58) 4-Bromofluorobenzene (SU4)	15.22	95	562049m	12.32	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.56%			

Target Compounds						Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	2461	0.85	ug/L # 0.017	76
4) Chloromethane	4.38	50	1497	-0.46	~~ug/L~~ NSM	92
5) Vinyl Chloride	4.40	62	347	0.17	~~ug/L~~ #	24
6) Bromomethane	5.09	96	2458	0.12	~~ug/L~~ #	19
7) Chloroethane	5.31	64	1780	2.50	~~ug/L~~	97
8) (F11) Trichlorofluorometha	5.60	101	254	0.08	~~ug/L~~ #	46
10) 1,1-Dichloroethene	6.18	96	287	0.10	~~ug/L~~ #	1
11) Acetone	6.45	58	4266	4.34	~~ug/L~~ #	1
12) (IPA) Leak Check Compound	6.54	45	22773	160.79	~~ug/L~~ # NSM	87
13) Carbon disulfide	6.83	76	5853	0.60	~~ug/L~~ #	91
14) Methylene Chloride	7.08	84	6500	2.01	~~ug/L~~ # NSM	1
15) (TBA) tert-Butanol	7.15	59	264	1.31	~~ug/L~~ #	1
16) (MTBE) Methyl-t-butyl ethe	7.40	73	582	0.09	~~ug/L~~ # NSM	42
17) trans-1,2-Dichloroethene	7.58	96	331	0.10	~~ug/L~~ #	1
18) 1,1-Dichloroethane	8.06	63	312	0.06	~~ug/L~~ #	42
19) cis-1,2-Dichloroethene	8.86	96	310	0.08	~~ug/L~~ #	3
20) 2,2-Dichloropropane	8.79	77	736	0.16	~~ug/L~~ #	2
22) (DIPE) Diisopropyl Ether	7.91	45	287	0.03	~~ug/L~~ # NSM	21
23) Bromochloromethane	9.12	128	426	0.27	~~ug/L~~ #	1
24) Chloroform	9.20	83	3862	0.63	~~ug/L~~ #	64
25) (ETBE) 2-ethoxy 2-methyl p	8.37	59	944	0.11	~~ug/L~~ #	44
29) 1,1-Dichloropropene	9.78	75	297	0.07	~~ug/L~~ #	41

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200007.D Vial: 6
Acq On : 2 Jun 2014 2:50 pm Operator: DN
Sample : 3F40201-06 Inst : GC/MS Ins
Misc : 100cc SVL-505-SA5C-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 15:42 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

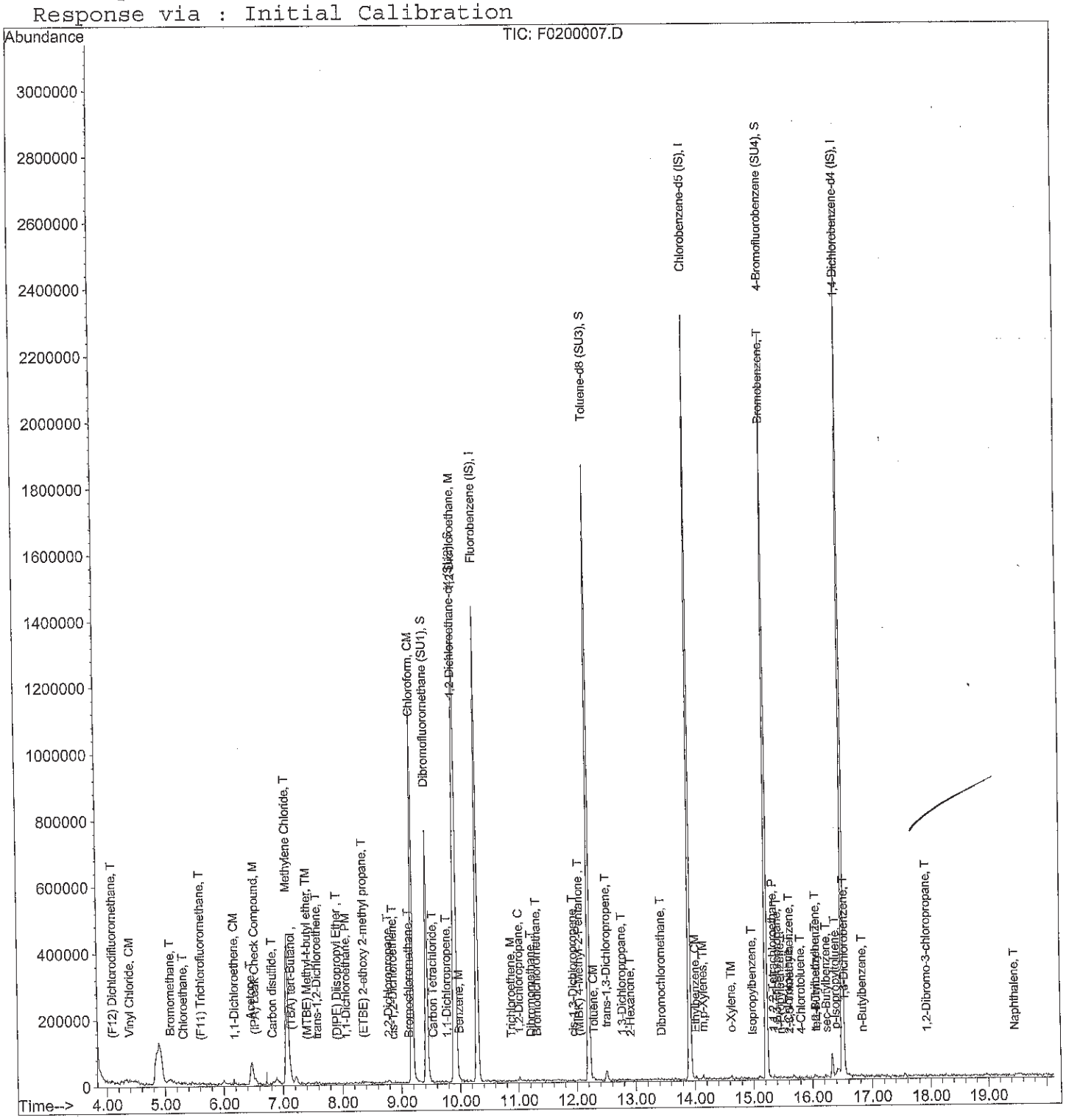
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Carbon Tetrachloride	9.54	117	439	0.11 ~~ug/L~~ #	2
31) Benzene	9.99	78	862	0.08 ~~ug/L~~ #	57
32) 1,2-Dichloroethane	9.93	62	12462	3.18 ~~ug/L~~ #	1
33) Trichloroethene	10.88	130	305	0.09 ~~ug/L~~ #	4
34) 1,2-Dichloropropane	11.02	63	659	0.25 ~~ug/L~~ #	2
35) Dibromomethane	11.21	93	369	0.18 ~~ug/L~~ #	5
36) Bromodichloromethane	11.33	83	574	0.14 ~~ug/L~~ #	21
37) cis-1,3-Dichloropropene	11.95	75	256	0.06 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.04	43	392	0.18 ~~ug/L~~ #	100
41) Toluene	12.28	91	2946	0.19 ug/L #	80
42) trans-1,3-Dichloropropene	12.52	75	649	0.13 ~~ug/L~~ #	72
45) 1,3-Dichloropropane	12.76	76	289	0.06 ~~ug/L~~ #	1
46) 2-Hexanone	12.92	43	1121	0.46 ~~ug/L~~ #	37
47) Dibromochloromethane	13.45	129	289	0.07 ~~ug/L~~ #	1
51) Ethylbenzene	14.02	91	2441	0.14 ~~ug/L~~ #	45
52) m,p-Xylenes	14.15	106	1090	0.18 ug/L #	61
53) o-Xylene	14.62	106	557	0.09 ug/L #	40
54) Styrene	14.63	104	2596	-0.57 ~~ug/L~~ #	60
56) Isopropylbenzene	14.99	105	276	0.02 ~~ug/L~~ #	1
57) 1,2,3-Trichloropropane	15.42	75	325	0.07 ~~ug/L~~ #	1
60) 1,1,2,2-Tetrachloroethane	15.35	83	377	0.09 ~~ug/L~~ #	18
61) Bromobenzene	15.20	156	349	0.08 ~~ug/L~~ #	1
62) n-Propylbenzene	15.48	91	915	0.04 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.60	91	368	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.62	105	629	0.04 ~~ug/L~~	96
65) 4-Chlorotoluene	15.80	91	368	0.03 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.07	119	358	0.03 ~~ug/L~~ #	14
67) 1,2,4-Trimethylbenzene	16.07	105	2155	0.15 ~~ug/L~~ #	77
68) sec-Butylbenzene	16.24	105	309	0.02 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.39	119	1371	0.09 ~~ug/L~~ #	73
70) 1,3-Dichlorobenzene	16.55	146	387	0.05 ~~ug/L~~ #	24
71) 1,4-Dichlorobenzene	16.55	146	387	0.05 ~~ug/L~~ #	22
72) n-Butylbenzene	16.84	91	1590	0.10 ~~ug/L~~ #	30
74) 1,2-Dibromo-3-chloropropan	17.94	75	305	1.35 ~~ug/L~~ #	6
77) Naphthalene	19.46	128	286	0.03 ~~ug/L~~	100

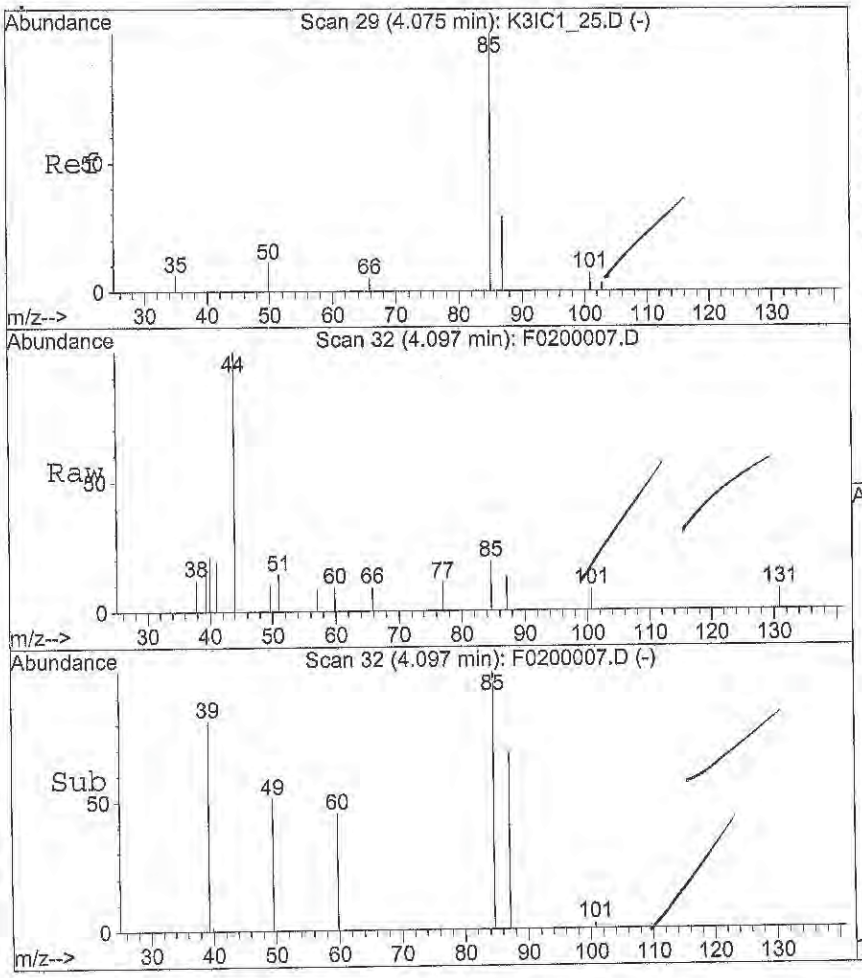
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200007.D Vial: 6
Acq On : 2 Jun 2014 2:50 pm Operator: DN
Sample : 3F40201-06 Inst : GC/MS Ins
Misc : 100cc SVL-505-SA5C-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 15:42 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

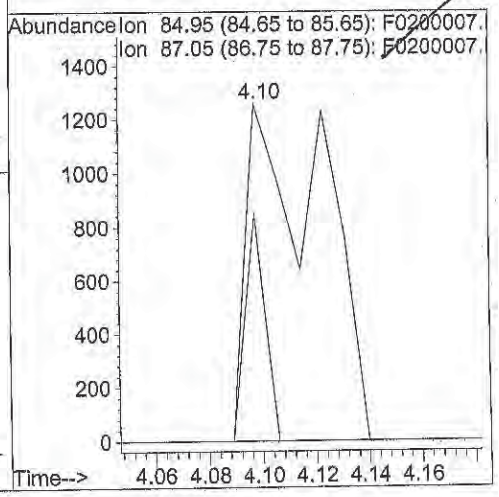


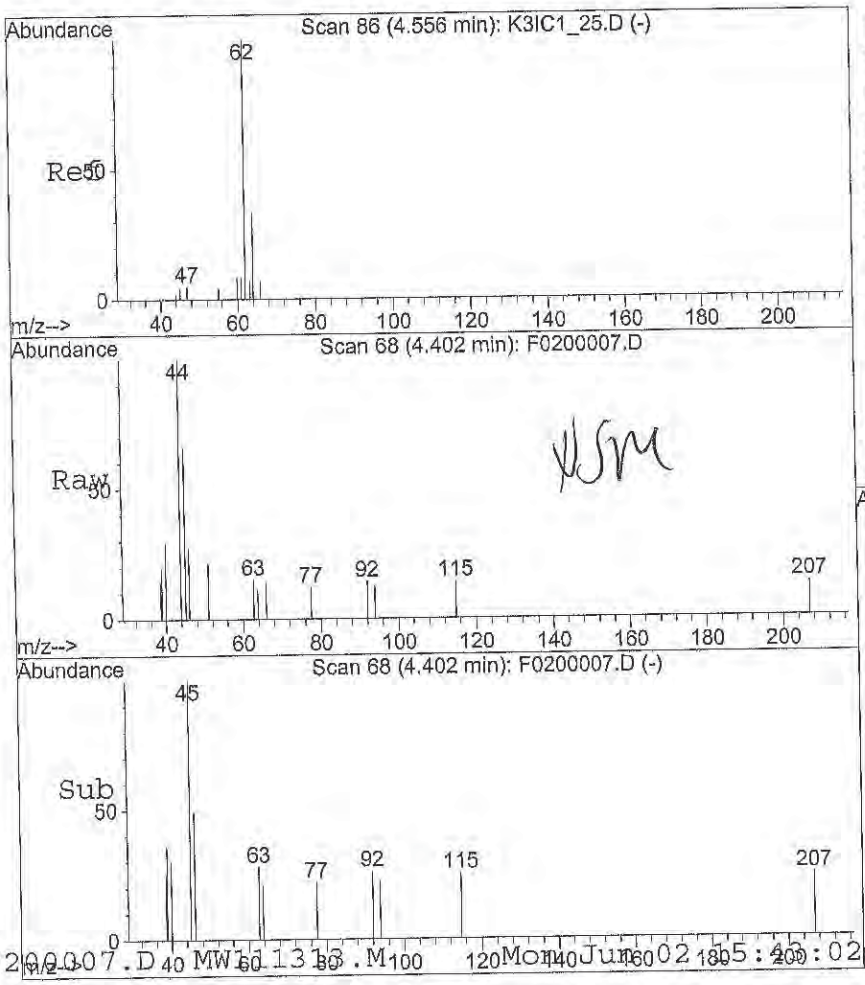


#3
(F12) Dichlorodifluoromethane
Concen: 0.85 ug/L
RT: 4.10 min Scan# 32
Delta R.T. 0.02 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 85 Resp: 2461

Ion	Ratio	Lower	Upper
85	100		
87	17.5	24.6	37.0#

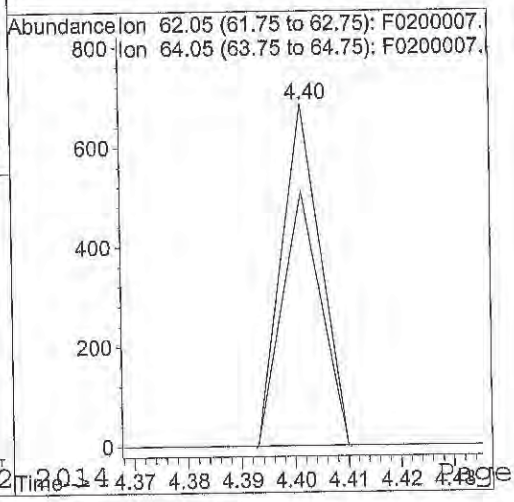


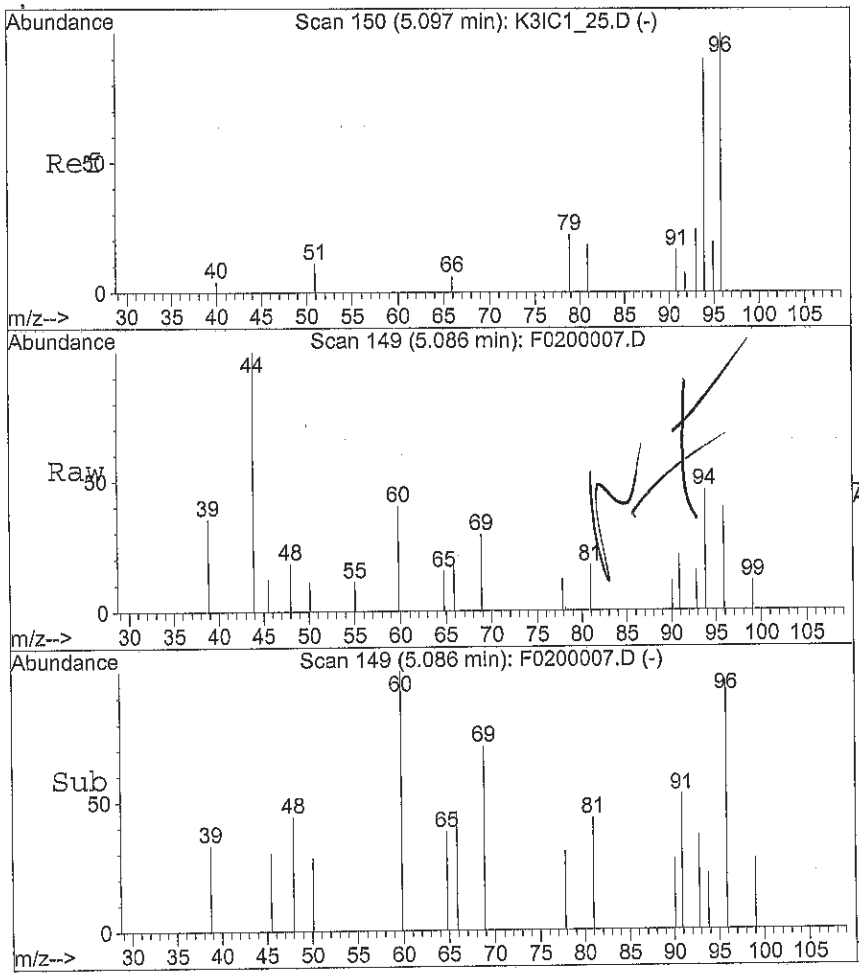


#5
Vinyl Chloride
Concen: 0.17 ug/L
RT: 4.40 min Scan# 68
Delta R.T. -0.15 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 62 Resp: 347

Ion	Ratio	Lower	Upper
62	100		
64	74.4	25.6	38.4#

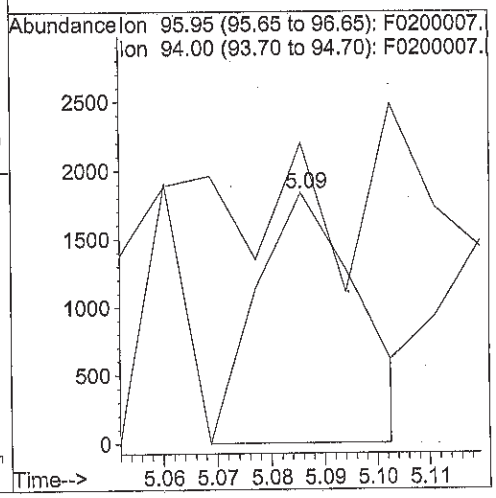


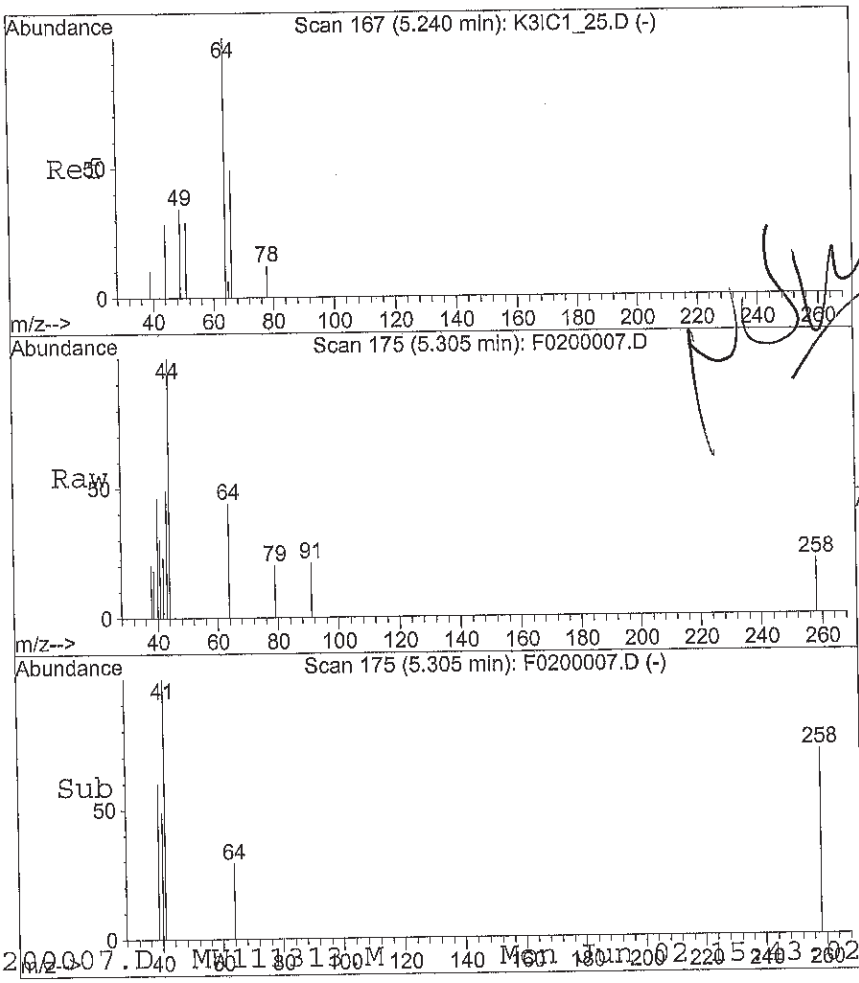


#6
Bromomethane
Concen: 0.12 ug/L
RT: 5.09 min Scan# 149
Delta R.T. -0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 96 Resp: 2458

Ion	Ratio	Lower	Upper
96	100		
94	33.6	101.0	151.4#

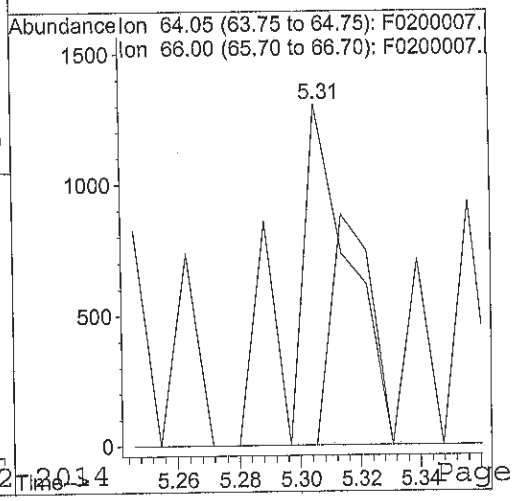


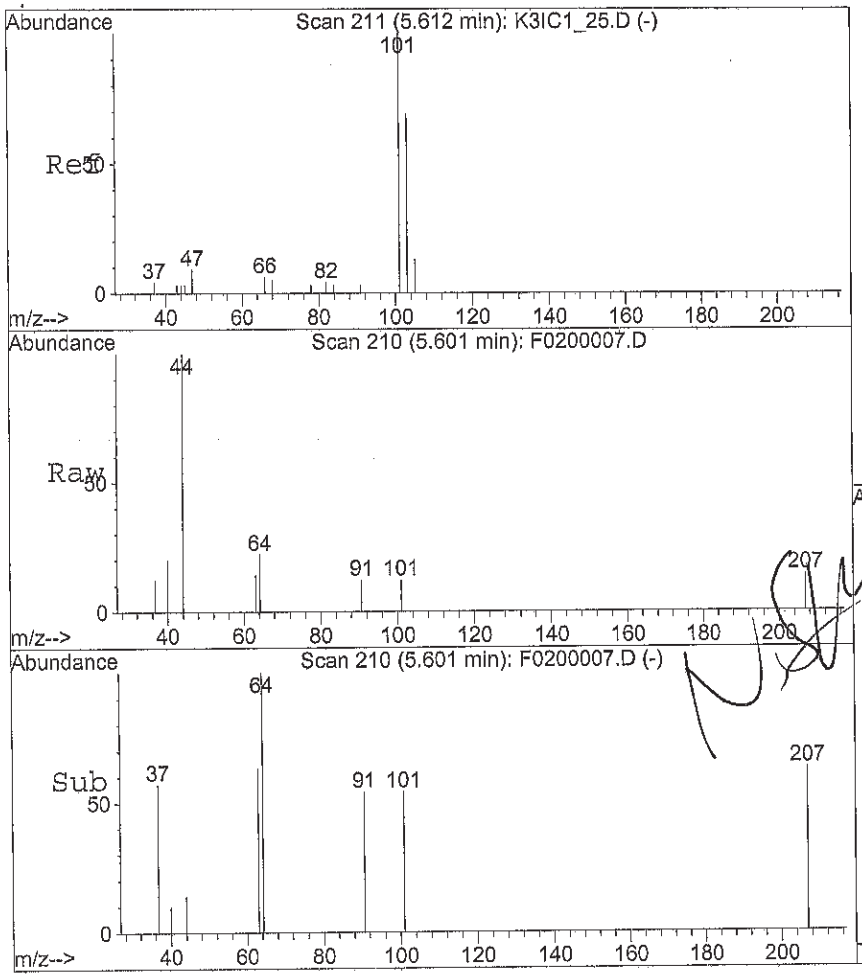


#7
Chloroethane
Concen: 2.50 ug/L
RT: 5.31 min Scan# 175
Delta R.T. 0.07 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 64 Resp: 1780

Ion	Ratio	Lower	Upper
64	100		
66	46.2	35.4	53.0

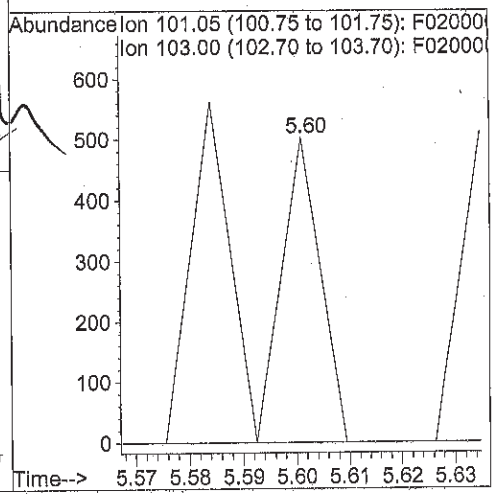


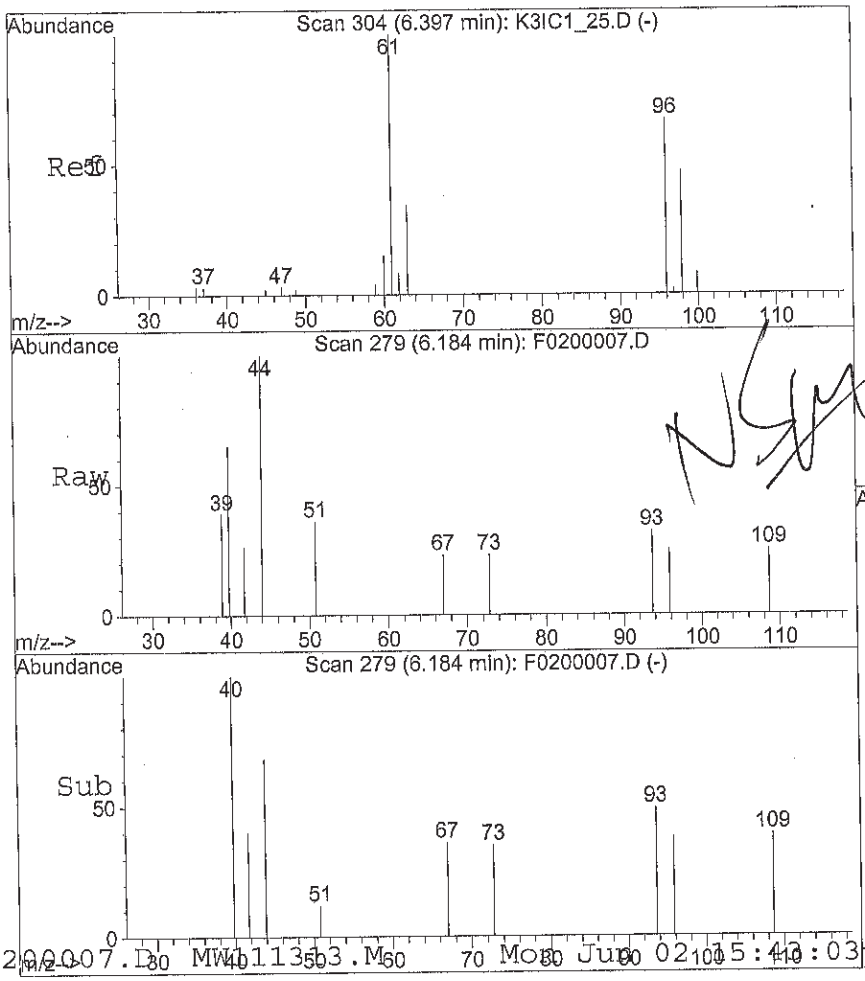


#8
(F11) Trichlorofluoromethane
Concen: 0.08 ug/L
RT: 5.60 min Scan# 210
Delta R.T. -0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:101 Resp: 254

Ion	Ratio	Lower	Upper
101	100		
103	111.8	54.5	81.7#

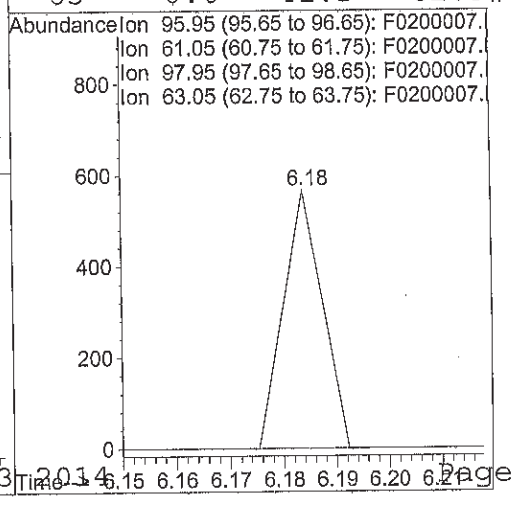


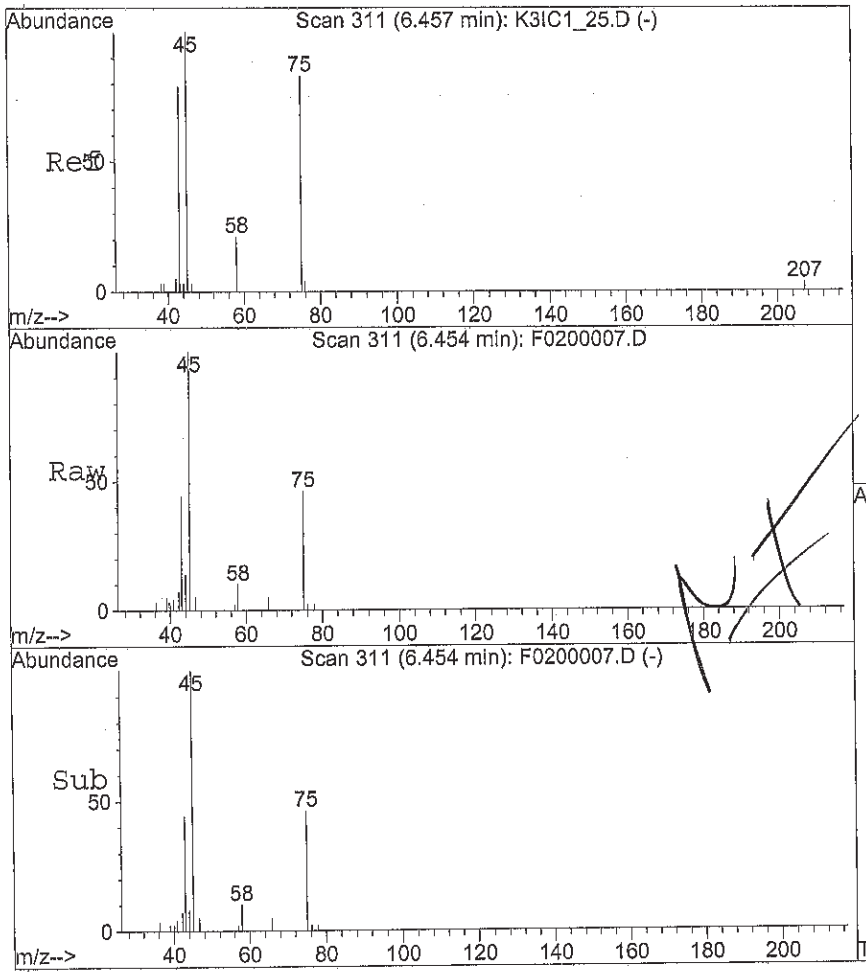


#10
1,1-Dichloroethene
Concen: 0.10 ug/L
RT: 6.18 min Scan# 279
Delta R.T. -0.21 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 96 Resp: 287

Ion	Ratio	Lower	Upper
96	100		
61	0.0	130.0	195.0#
98	0.0	56.2	84.4#
63	0.0	41.5	62.3#

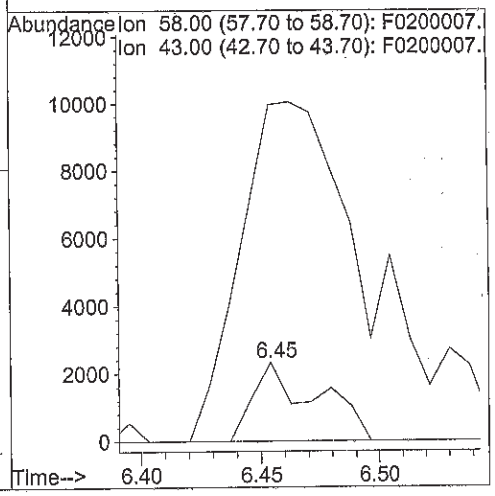


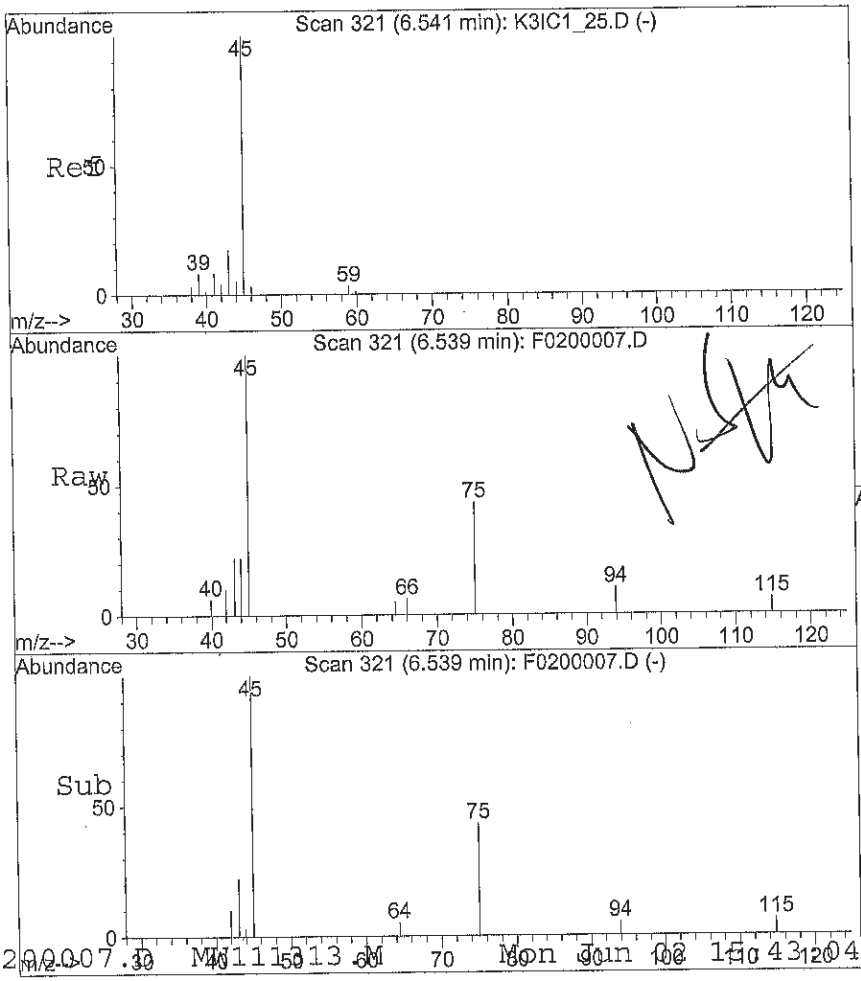


#11
Acetone
Concen: 4.34 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 58 Resp: 4266

Ion	Ratio	Lower	Upper
58	100		
43	937.8	360.9	541.3#

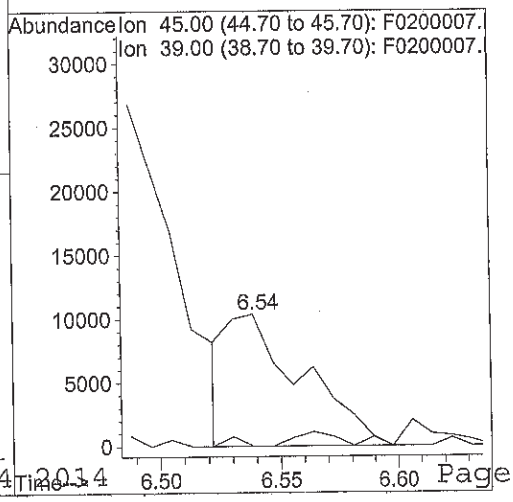


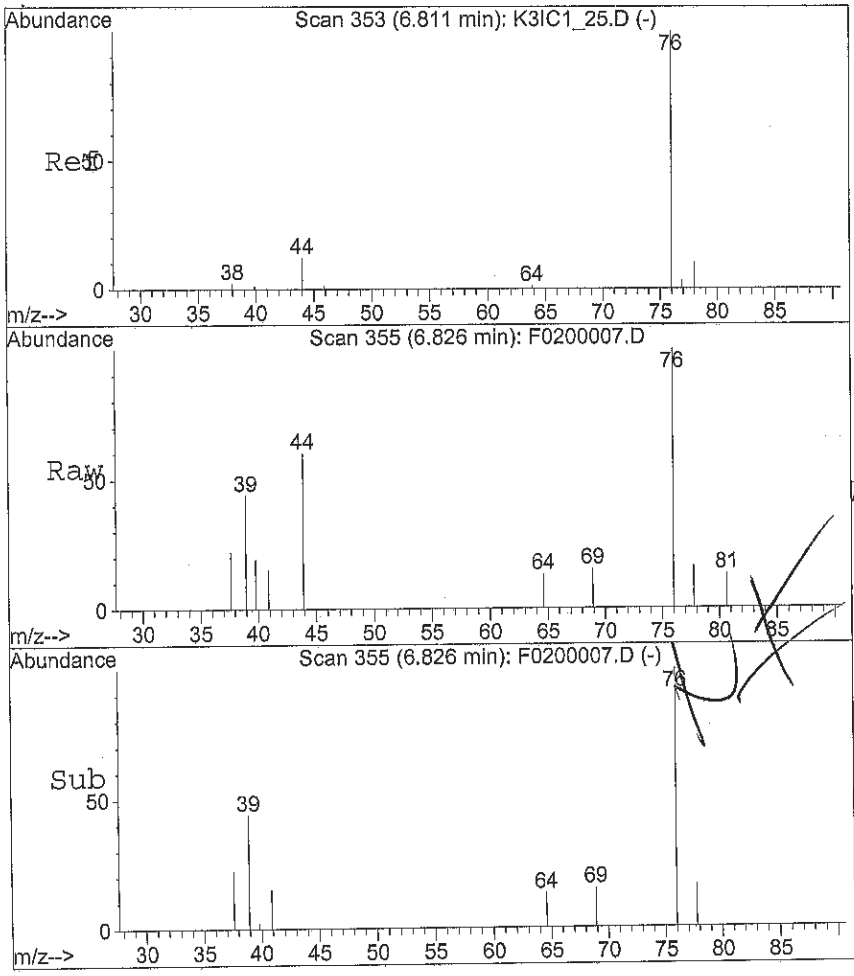


#12
(IPA) Leak Check Compound
Concen: 160.79 ug/L
RT: 6.54 min Scan# 321
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 45 Resp: 22773

Ion	Ratio	Lower	Upper
45	100		
39	1.7	4.9	7.3#

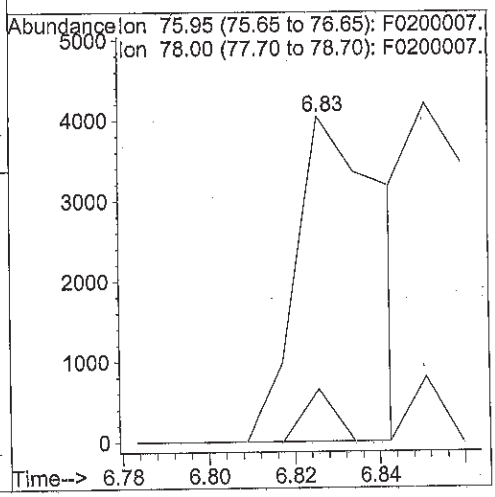


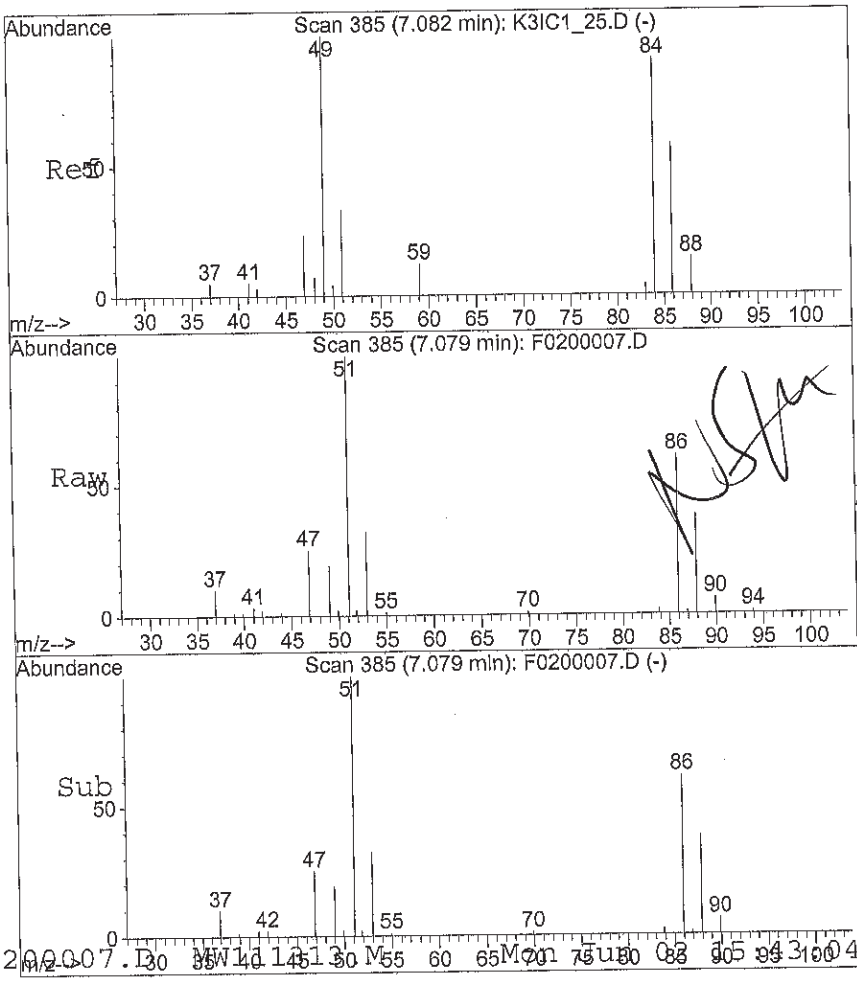


#13
Carbon disulfide
Concen: 0.60 ug/L
RT: 6.83 min Scan# 355
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 76 Resp: 5853

Ion	Ratio	Lower	Upper
76	100		
78	5.6	7.0	10.4#

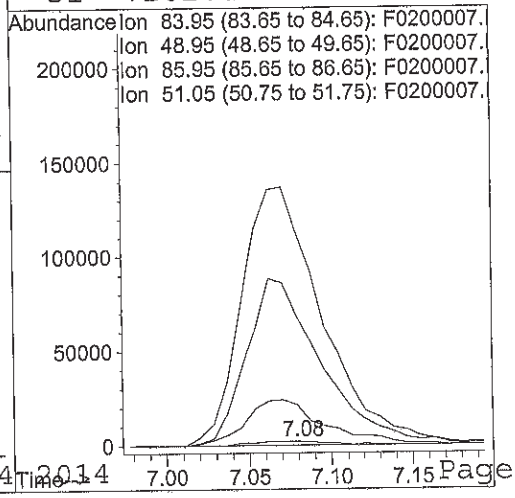


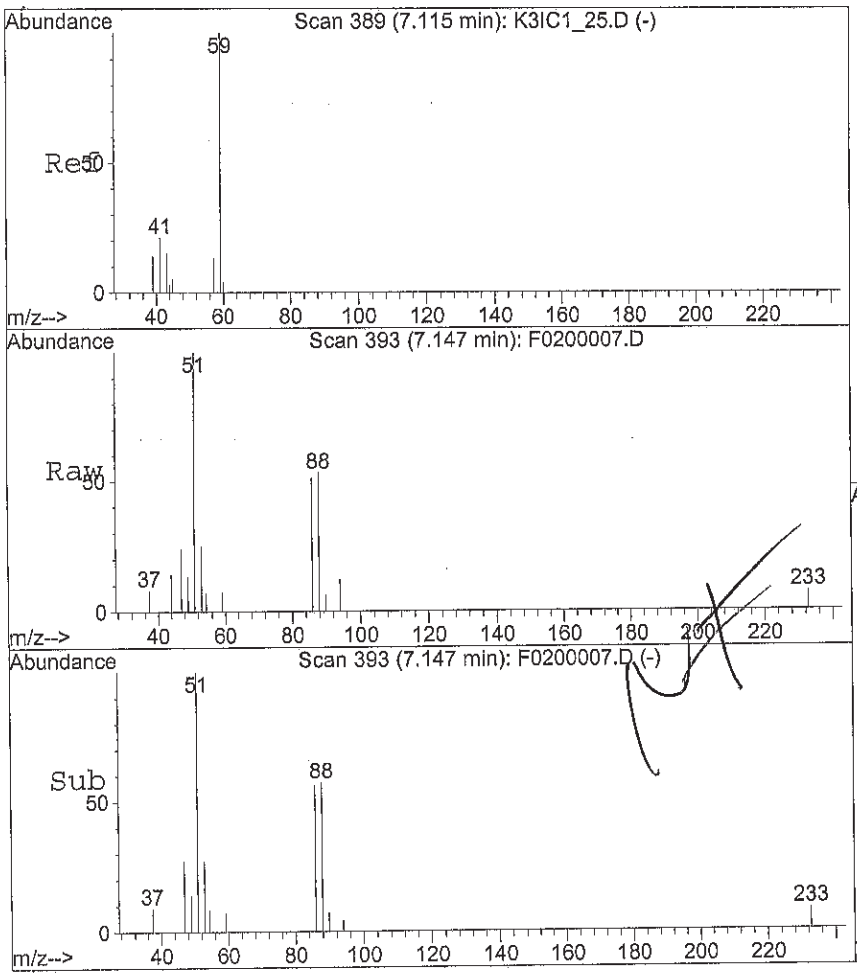


#14
Methylene Chloride
Concen: 2.01 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 84 Resp: 6500

Ion	Ratio	Lower	Upper
84	100		
49	1231.9	89.8	134.6#
86	4336.4	51.1	76.7#
51	7202.4	28.5	42.7#

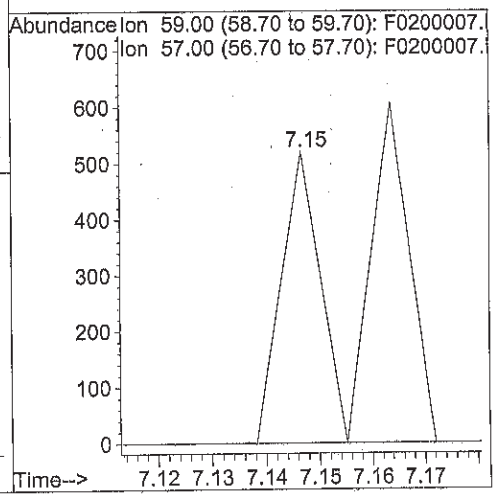


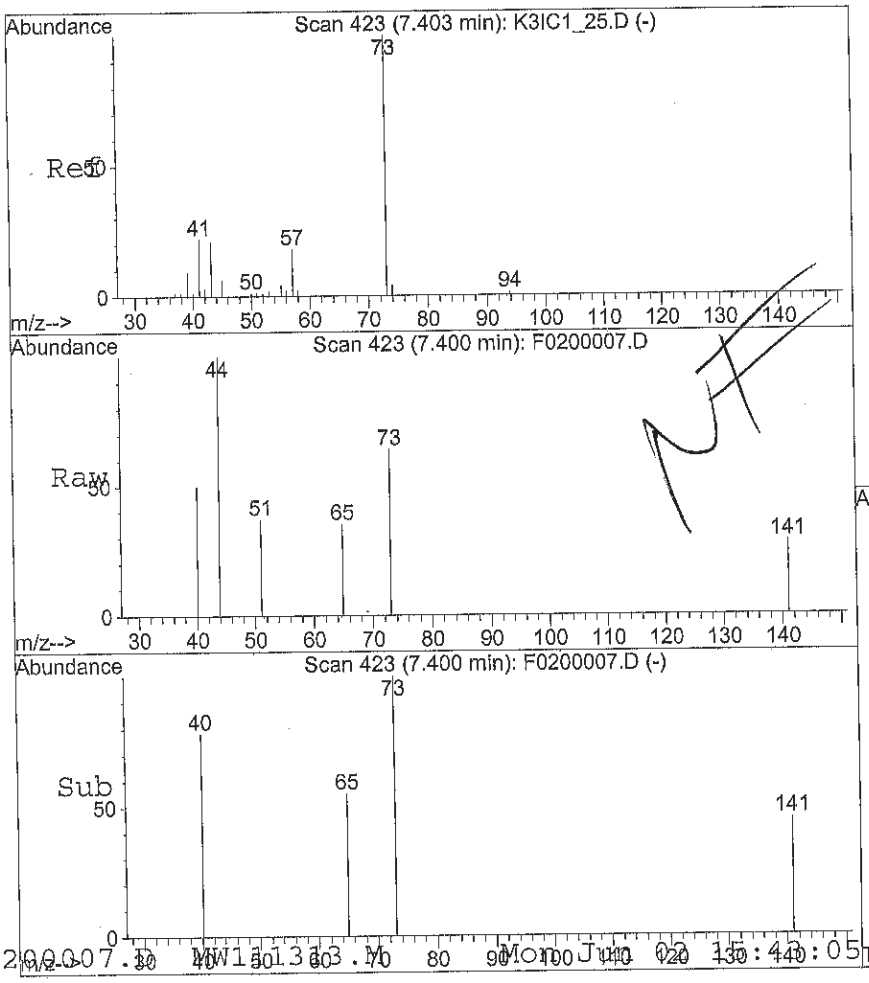


#15
(TBA) tert-Butanol
Concen: 1.31 ug/L
RT: 7.15 min Scan# 393
Delta R.T. 0.03 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 59 Resp: 264

Ion	Ratio	Lower	Upper
59	100		
57	116.3	6.4	9.6#

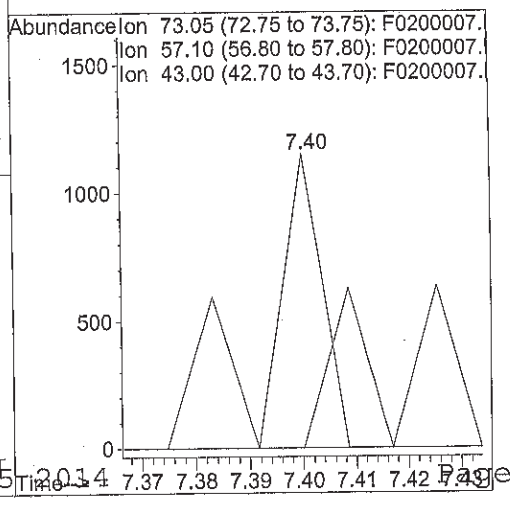


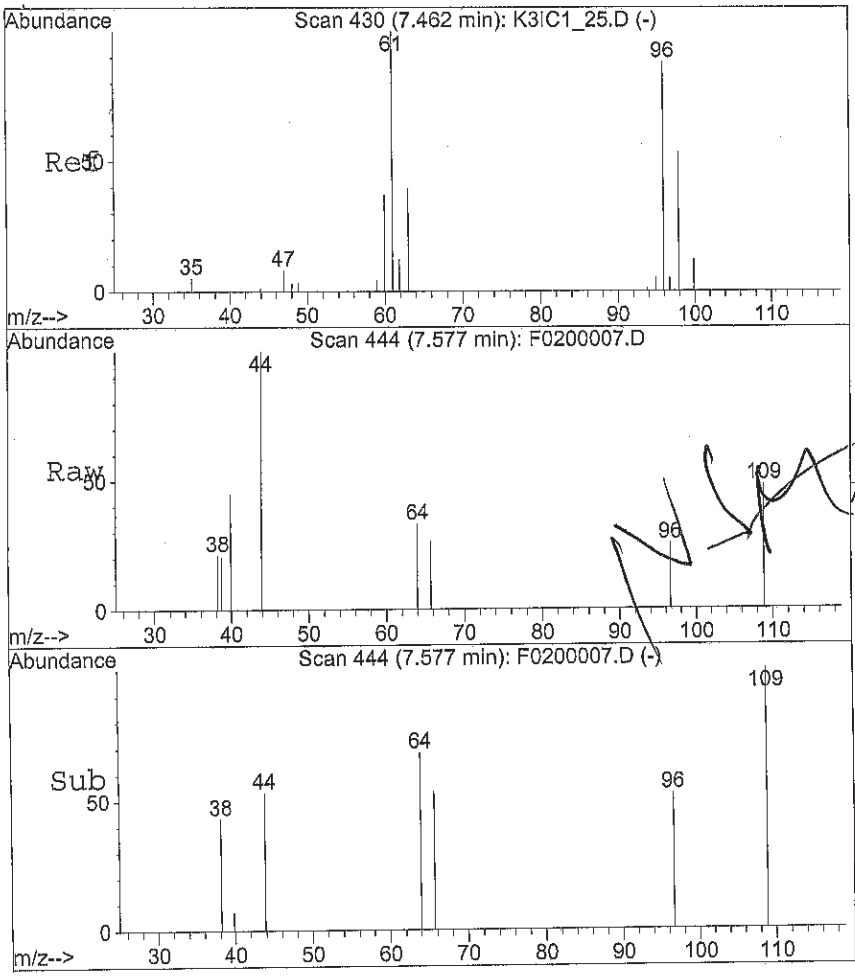


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.09 ug/L
RT: 7.40 min Scan# 423
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 73 Resp: 582

Ion	Ratio	Lower	Upper
73	100		
57	51.9	15.8	23.8#
43	0.0	18.4	27.6#

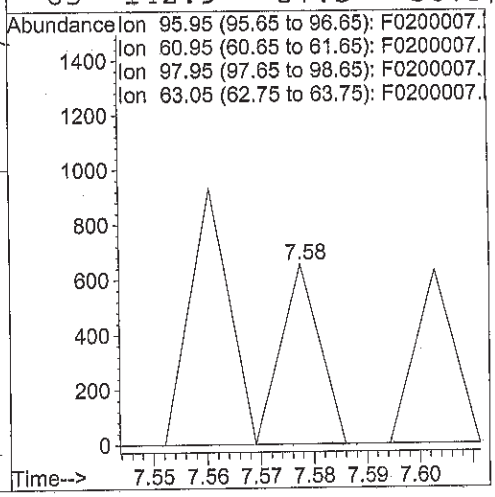


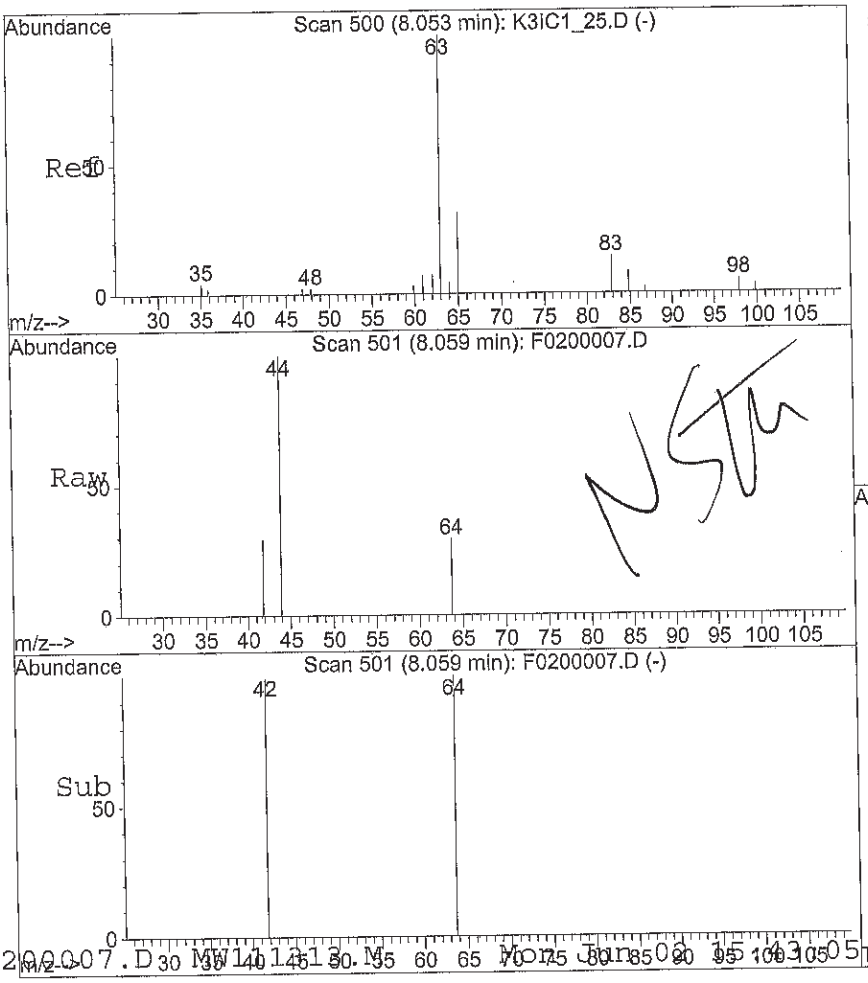


#17
trans-1,2-Dichloroethene
Concen: 0.10 ug/L
RT: 7.58 min Scan# 444
Delta R.T. 0.12 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 96 Resp: 331

Ion	Ratio	Lower	Upper
96	100		
61	0.0	104.2	156.2#
98	0.0	50.2	75.4#
63	142.9	37.5	56.3#

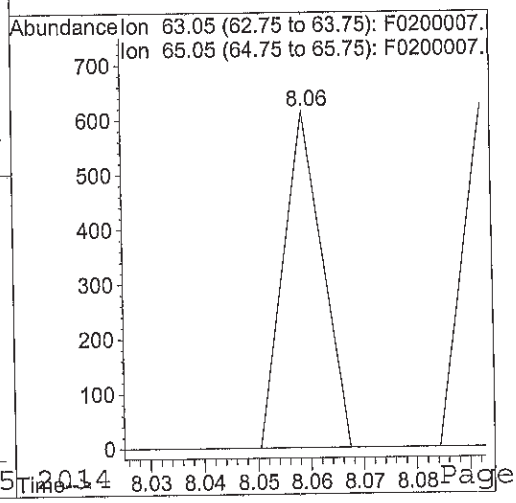


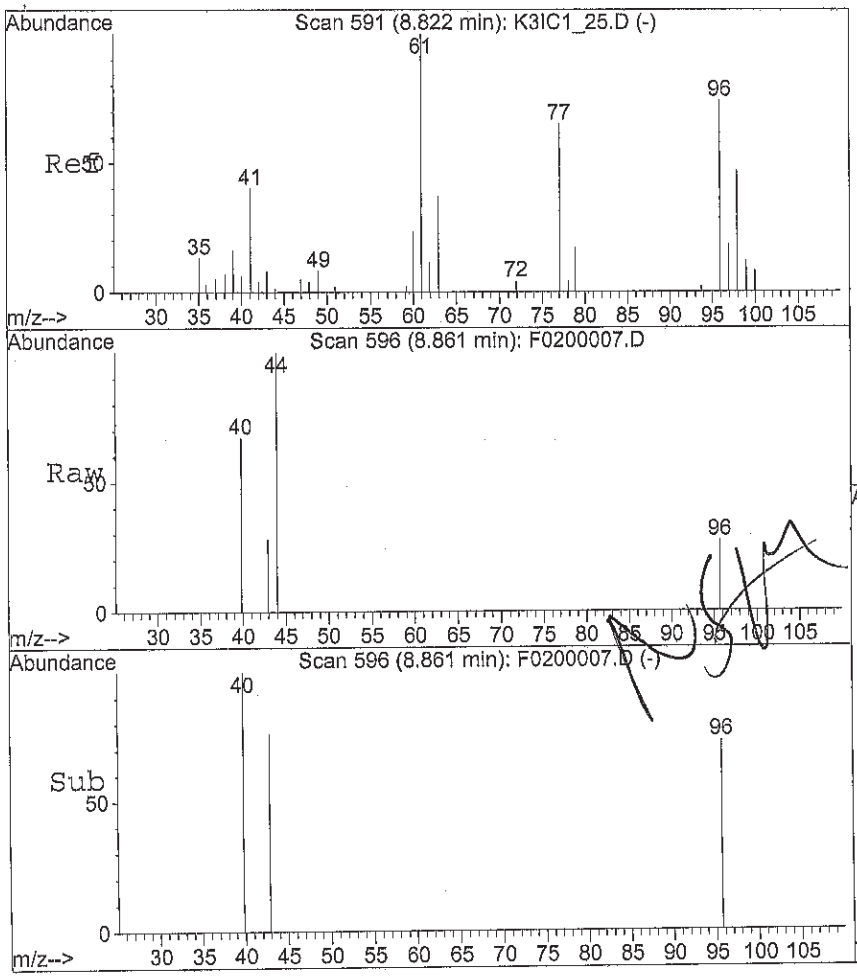


#18
1,1-Dichloroethane
Concen: 0.06 ug/L
RT: 8.06 min Scan# 501
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 63 Resp: 312

Ion	Ratio	Lower	Upper
63	100		
65	0.0	25.8	38.8#

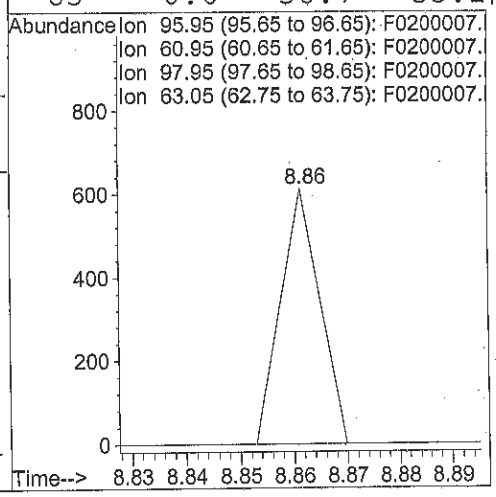


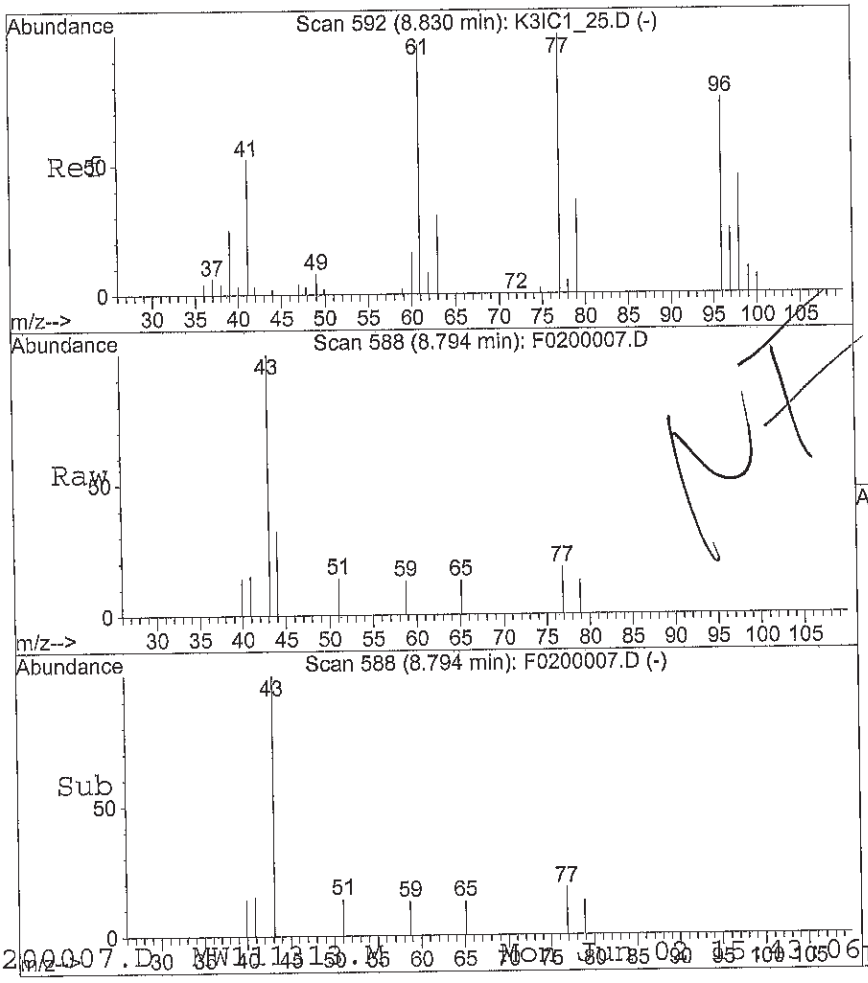


#19
cis-1,2-Dichloroethene
Concen: 0.08 ug/L
RT: 8.86 min Scan# 596
Delta R.T. 0.04 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 96 Resp: 310

Ion	Ratio	Lower	Upper
96	100		
61	0.0	110.3	165.5#
98	0.0	49.8	74.6#
63	0.0	36.7	55.1#

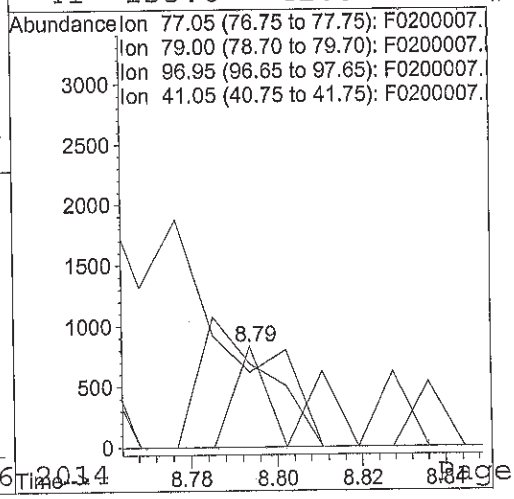


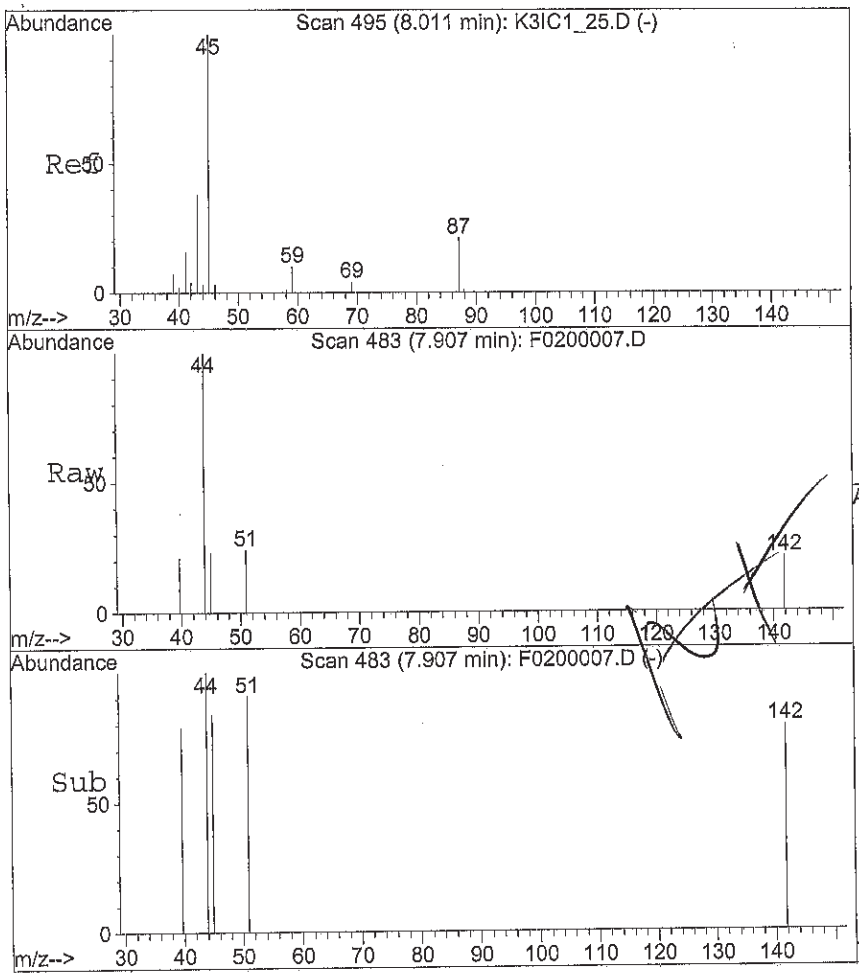


#20
2,2-Dichloropropane
Concen: 0.16 ug/L
RT: 8.79 min Scan# 588
Delta R.T. -0.04 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 77 Resp: 736

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	155.6	42.6	64.0#

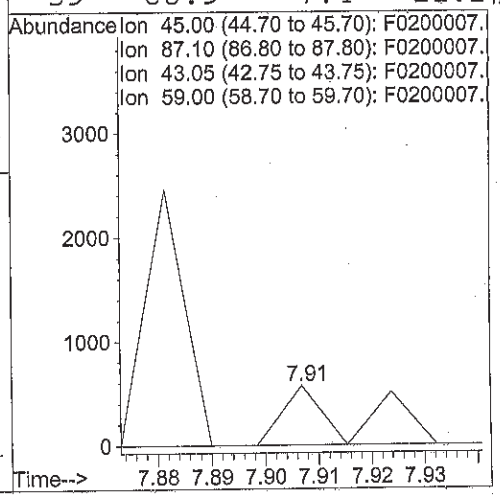


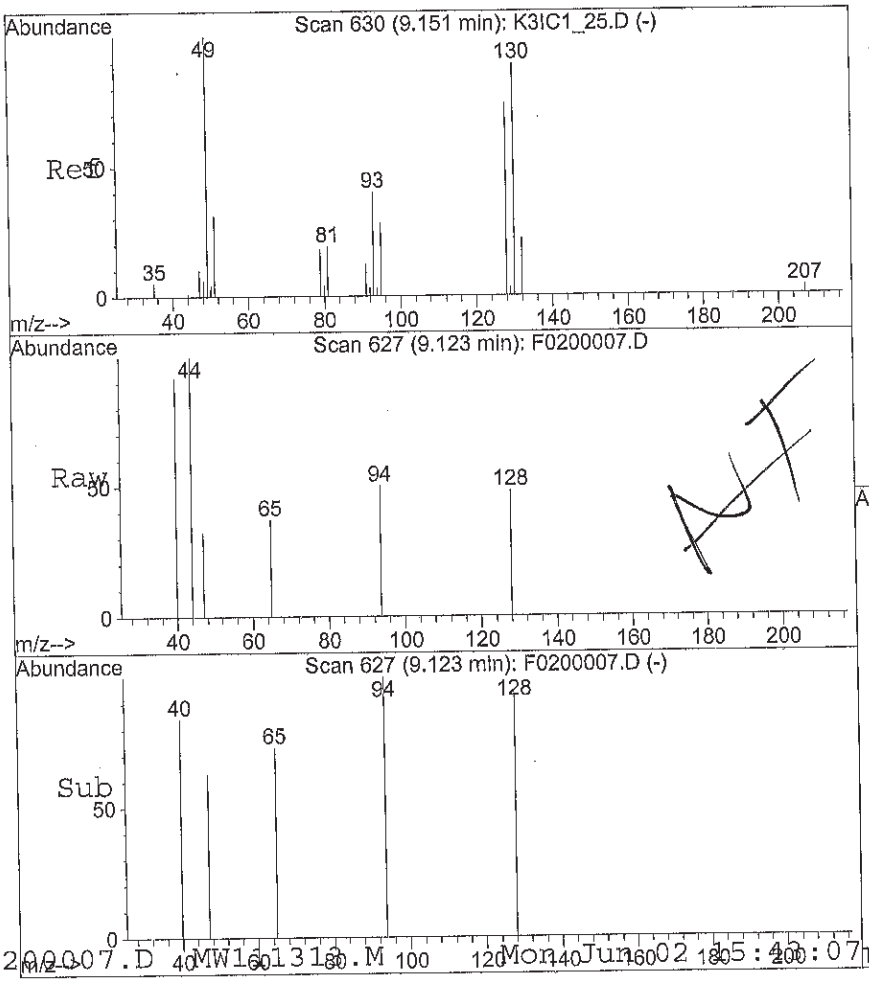


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 7.91 min Scan# 483
Delta R.T. -0.10 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 45 Resp: 287

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	88.9	7.4	11.2#

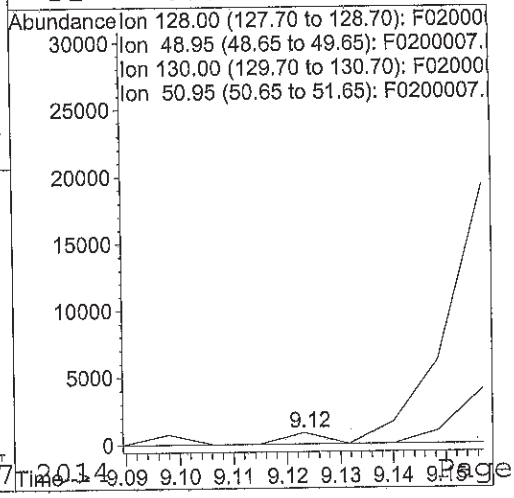


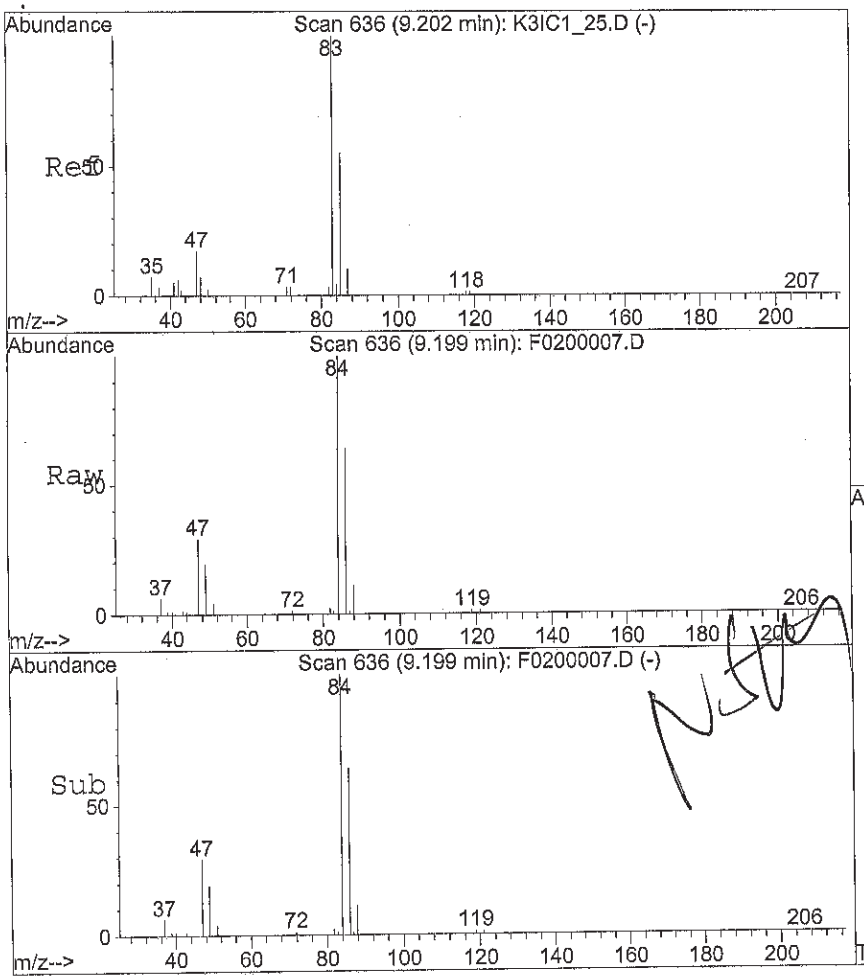


#23
Bromochloromethane
Concen: 0.27 ug/L
RT: 9.12 min Scan# 627
Delta R.T. -0.03 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:128 Resp: 426

Ion	Ratio	Lower	Upper
128	100		
49	0.0	117.4	176.0#
130	0.0	111.0	166.6#
51	0.0	48.0	72.0#

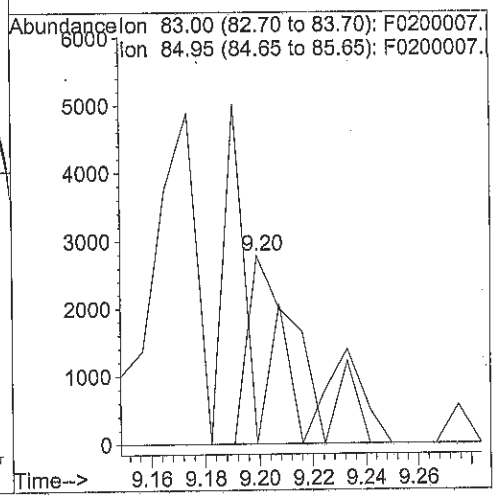


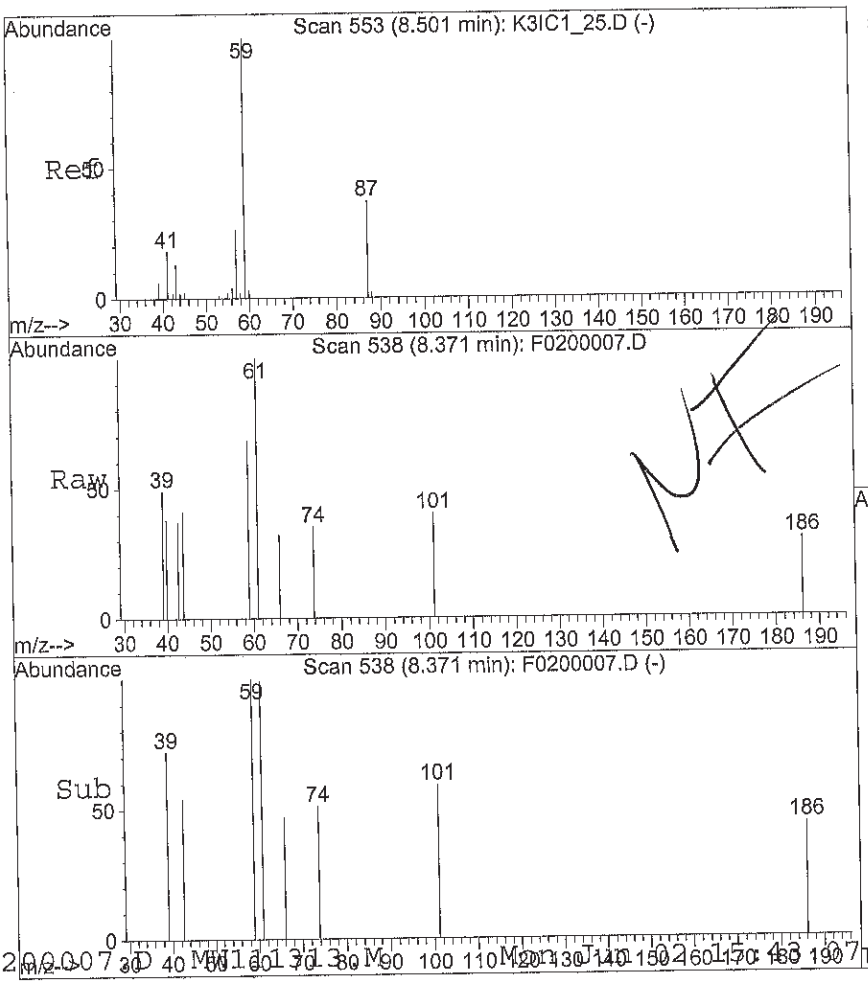


#24
Chloroform
Concen: 0.63 ug/L
RT: 9.20 min Scan# 636
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 83 Resp: 3862

Ion	Ratio	Lower	Upper
83	100		
85	92.7	51.8	77.6#

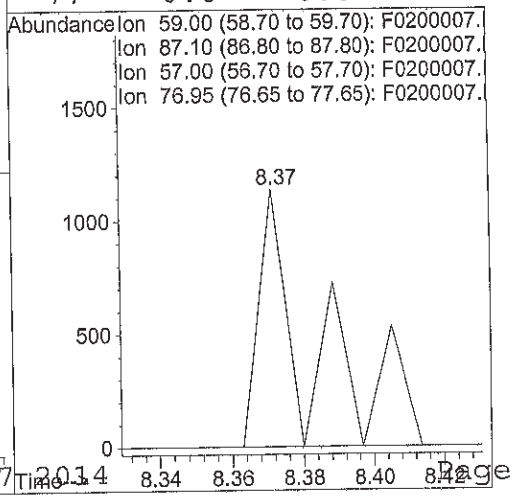


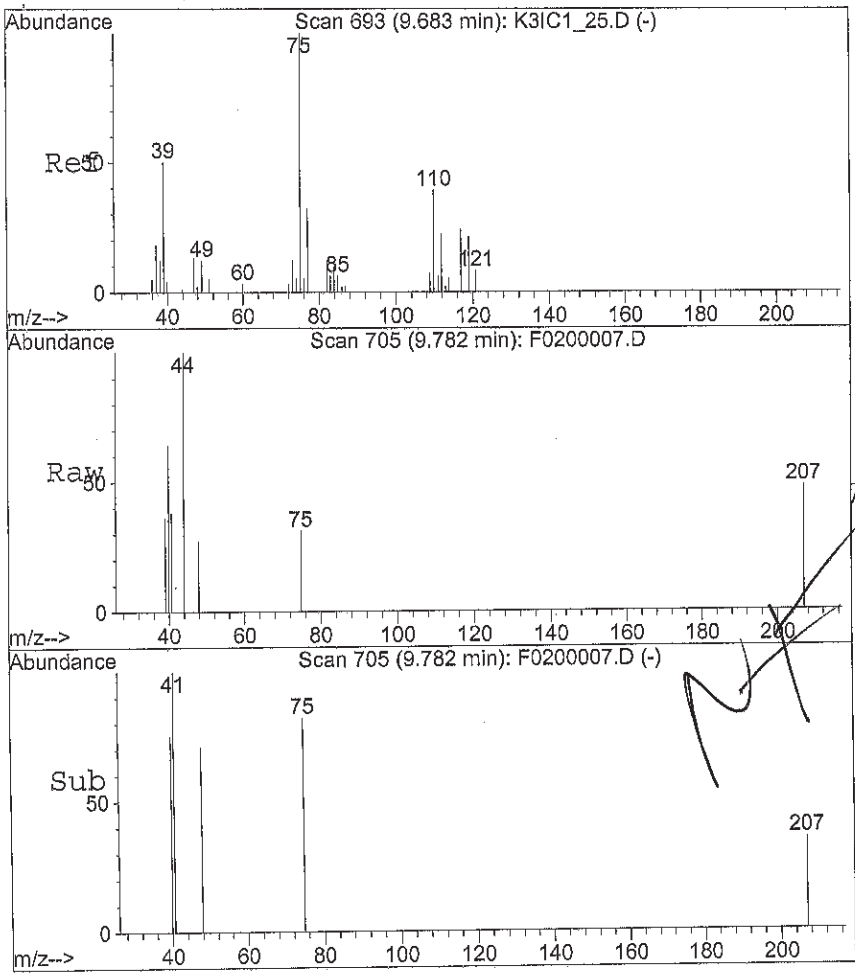


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.11 ug/L
RT: 8.37 min Scan# 538
Delta R.T. -0.13 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 59 Resp: 944

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

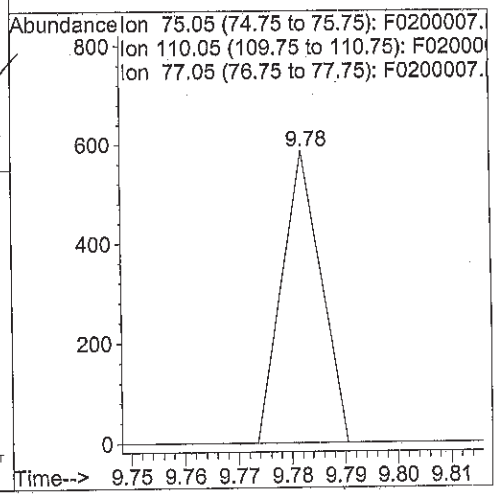


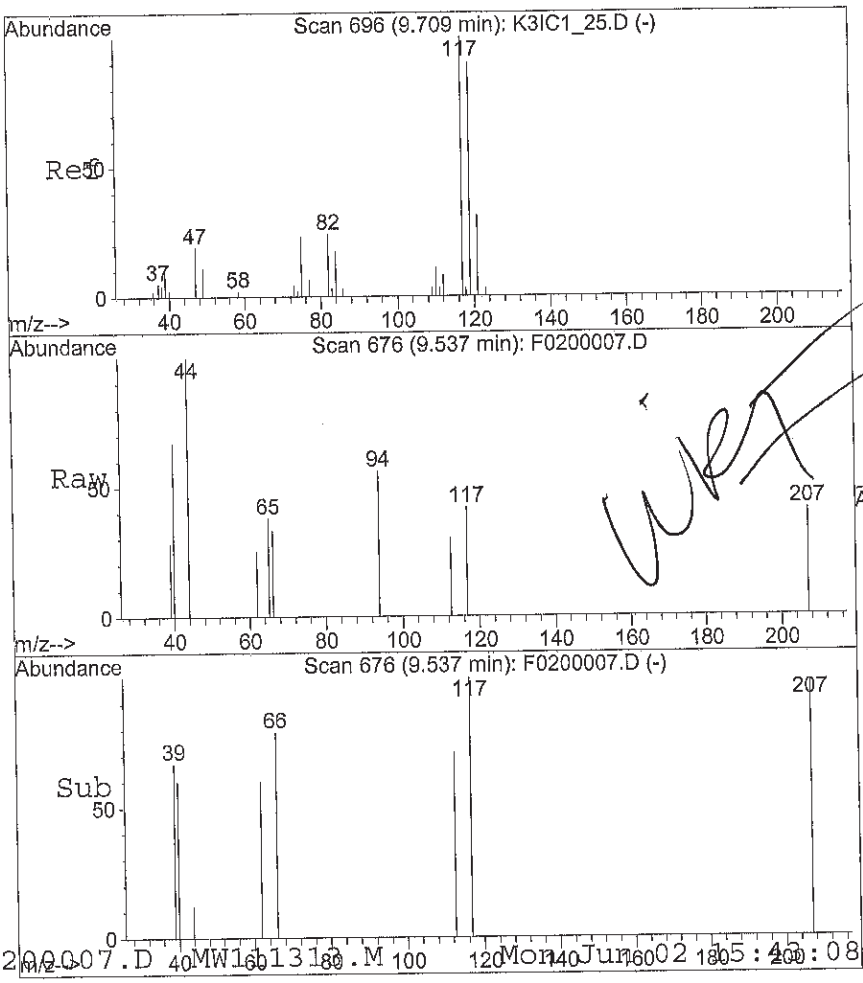


#29
1,1-Dichloropropene
Concen: 0.07 ug/L
RT: 9.78 min Scan# 705
Delta R.T. 0.10 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 75 Resp: 297

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	0.0	25.0	37.4#

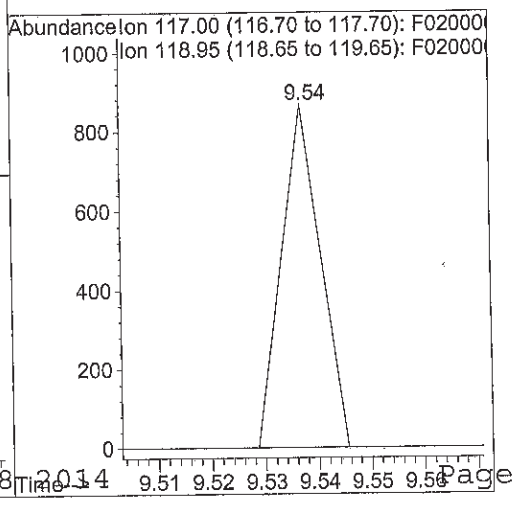


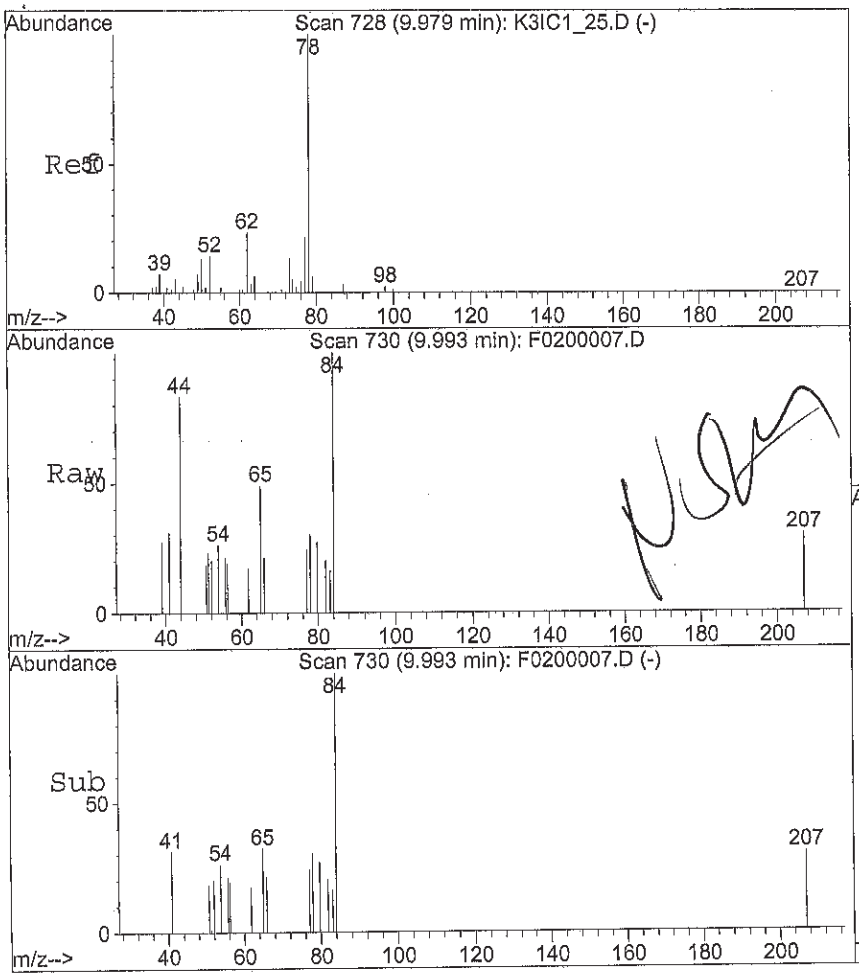


#30
Carbon Tetrachloride
Concen: 0.11 ug/L
RT: 9.54 min Scan# 676
Delta R.T. -0.17 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:117 Resp: 439

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.8	113.8#

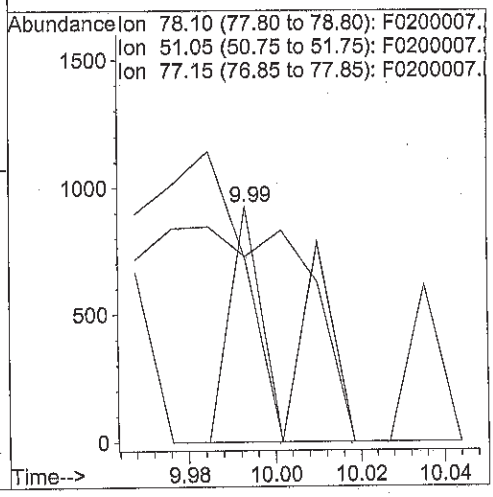


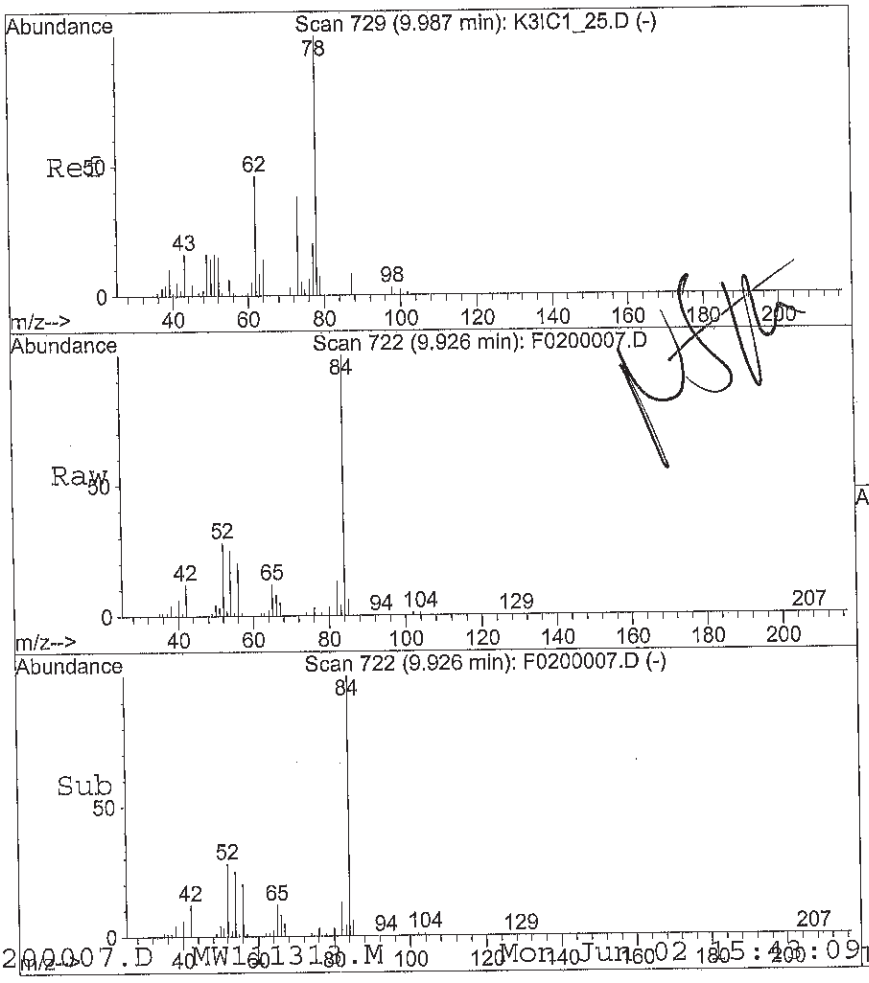


#31
Benzene
Concen: 0.08 ug/L
RT: 9.99 min Scan# 730
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 78 Resp: 862

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	0.0	16.6	24.8#

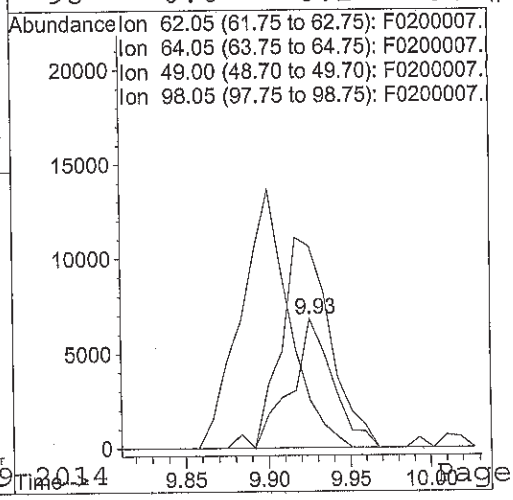


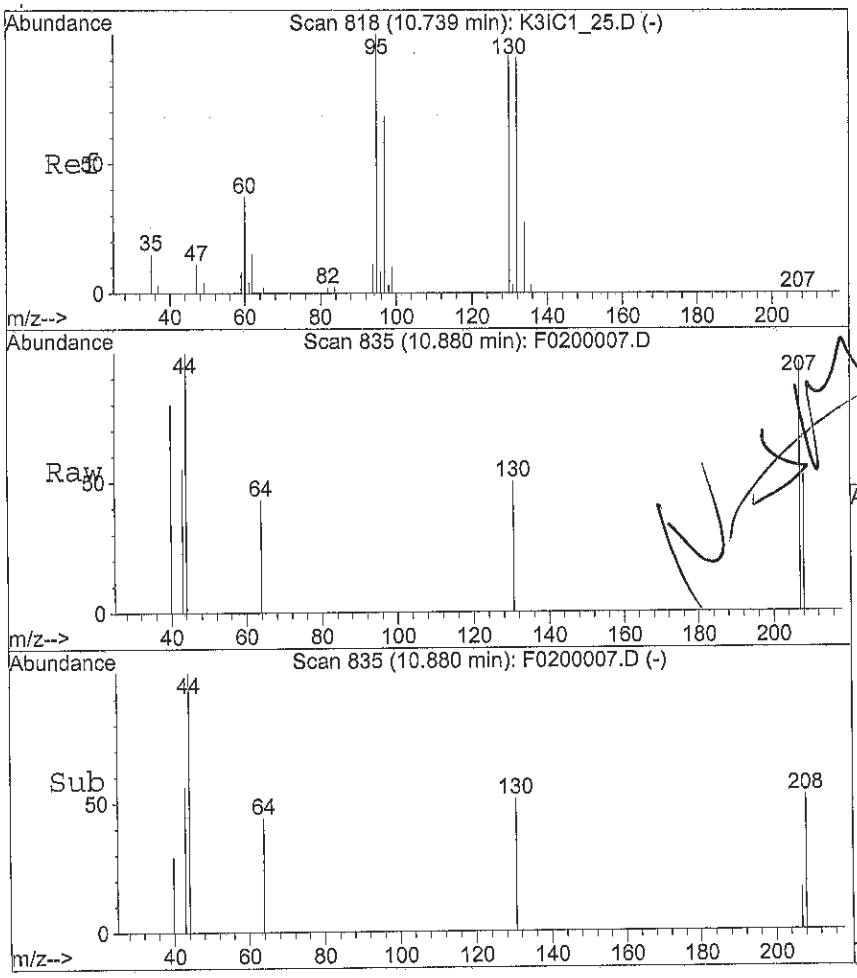


#32
1,2-Dichloroethane
Concen: 3.18 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 62 Resp: 12462

Ion	Ratio	Lower	Upper
62	100		
64	183.7	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

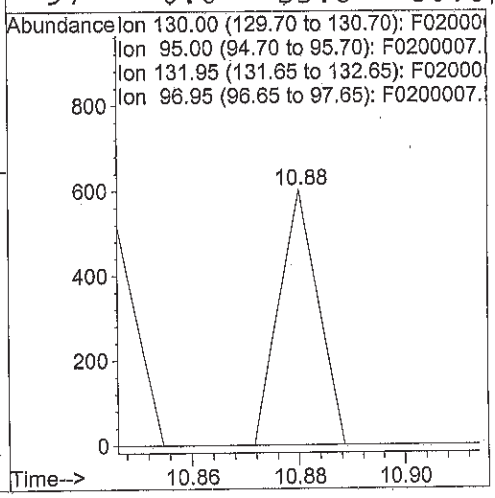


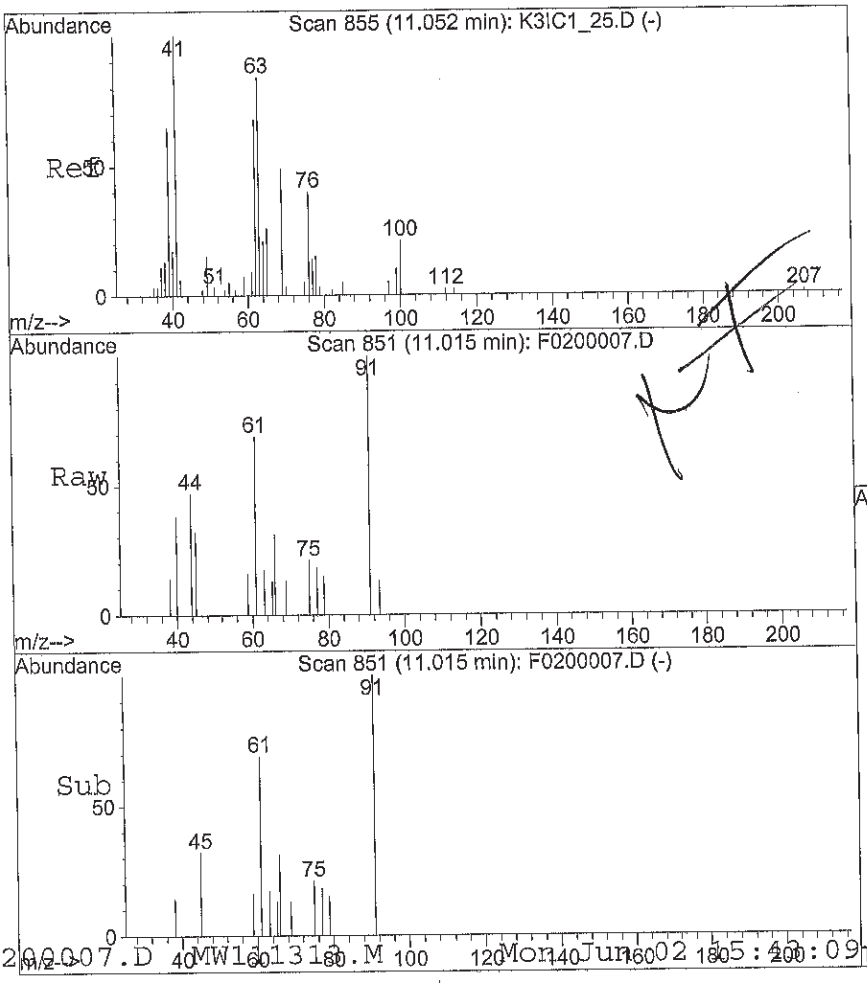


#33
Trichloroethene
Concen: 0.09 ug/L
RT: 10.88 min Scan# 835
Delta R.T. 0.14 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:130 Resp: 305

Ion	Ratio	Lower	Upper
130	100		
95	0.0	82.8	124.2#
132	0.0	77.4	116.2#
97	0.0	53.8	80.6#

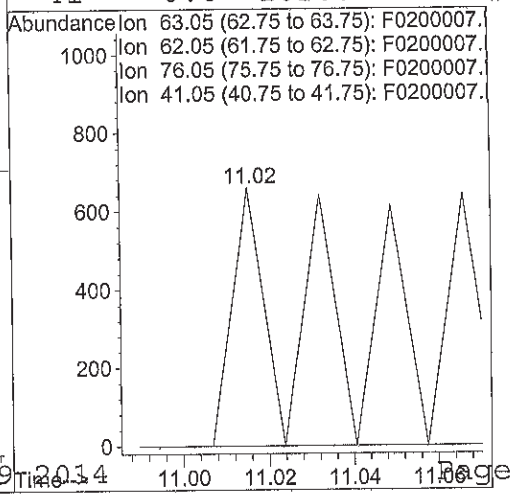


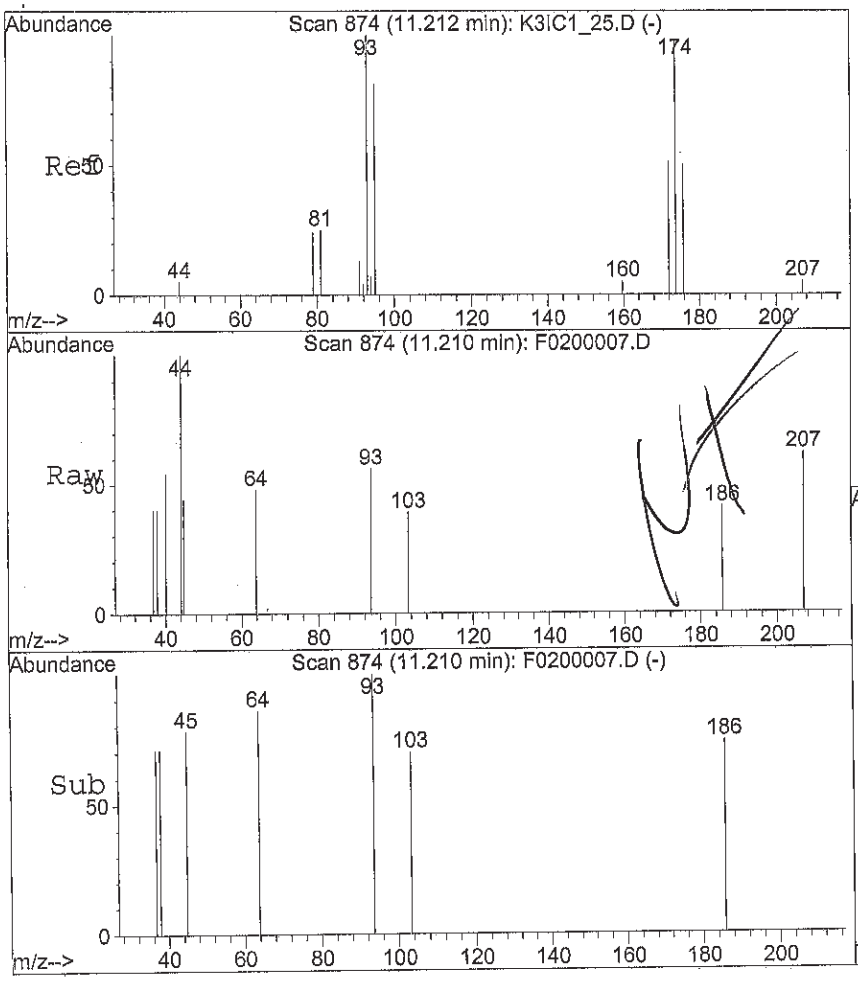


#34
1,2-Dichloropropane
Concen: 0.25 ug/L
RT: 11.02 min Scan# 851
Delta R.T. -0.04 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 63 Resp: 659

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

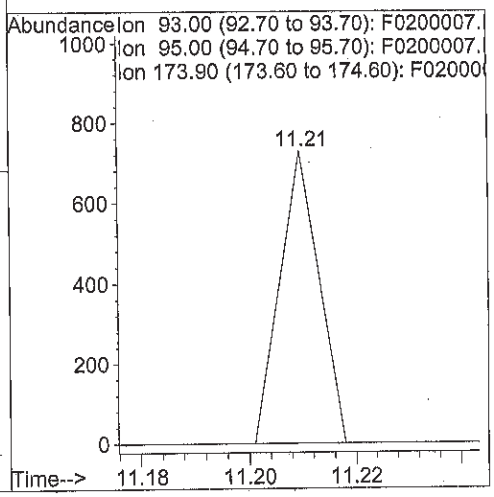


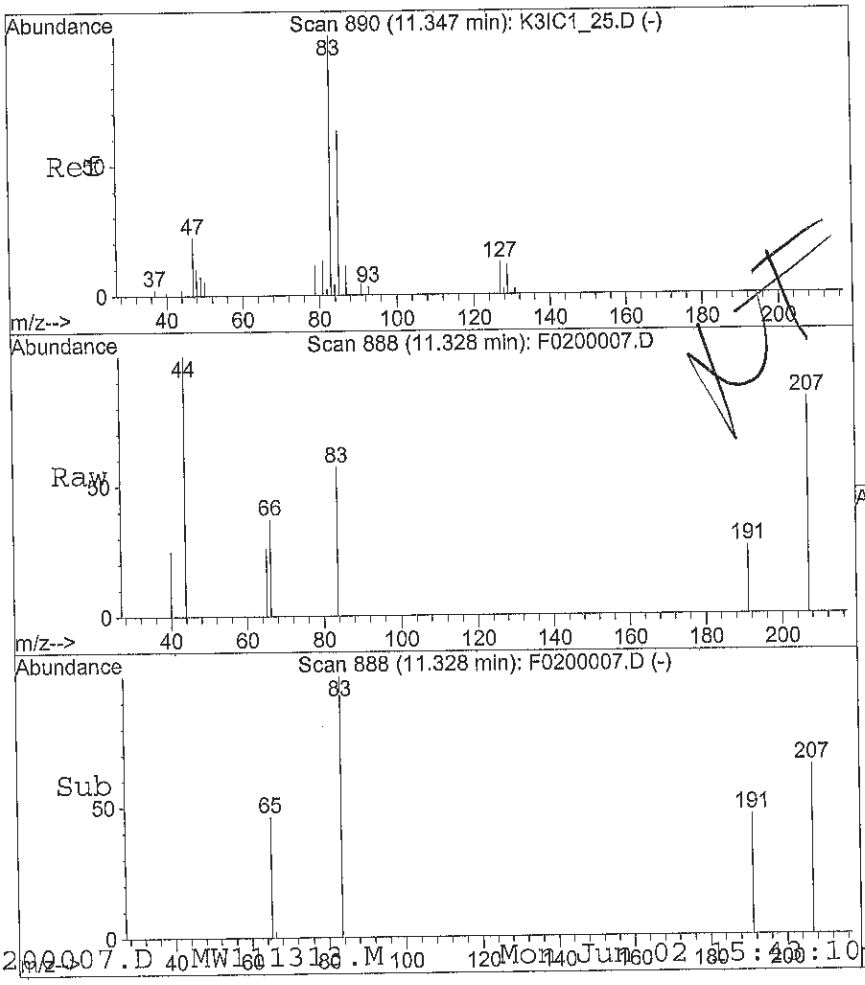


#35
Dibromomethane
Concen: 0.18 ug/L
RT: 11.21 min Scan# 874
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 93 Resp: 369

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

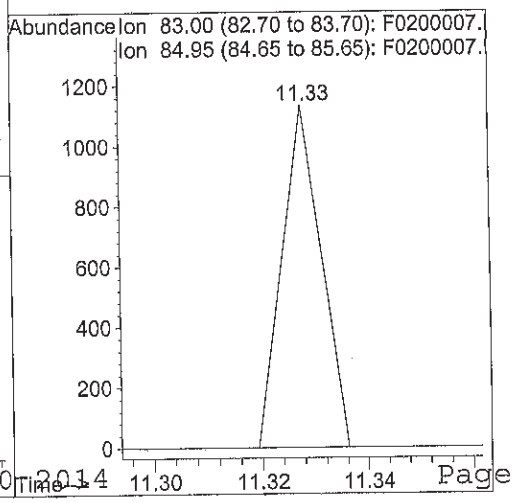


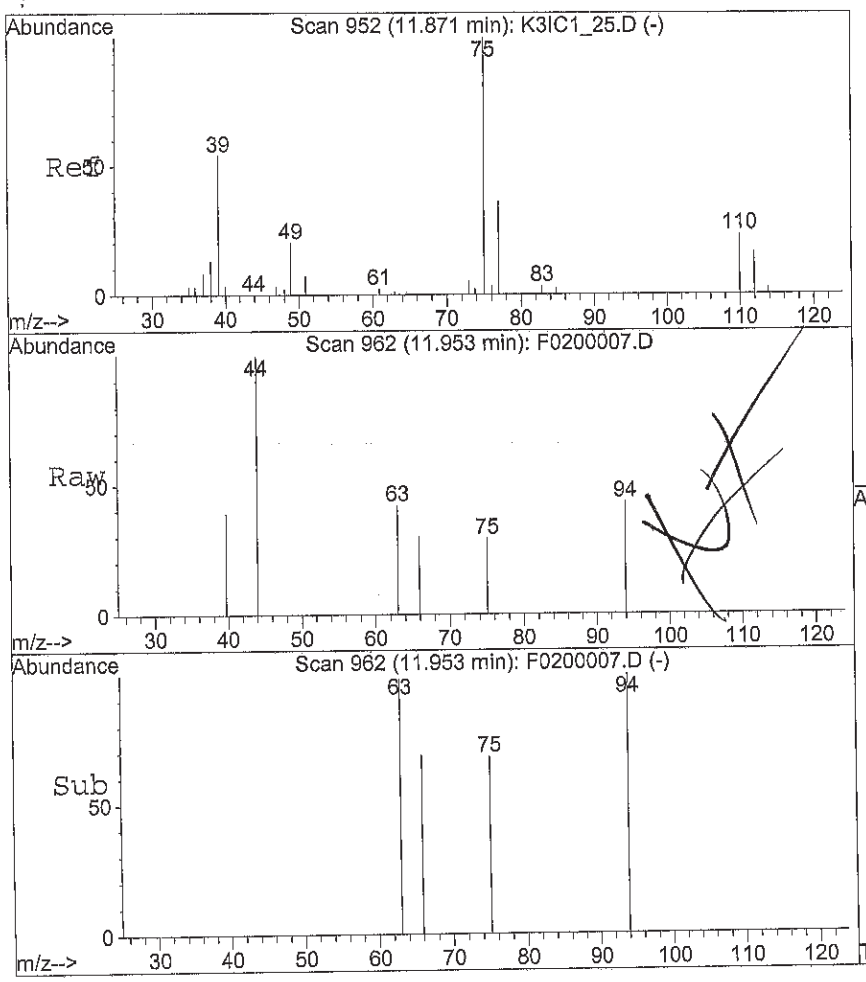


#36
Bromodichloromethane
Concen: 0.14 ug/L
RT: 11.33 min Scan# 888
Delta R.T. -0.02 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 83 Resp: 574

Ion	Ratio	Lower	Upper
83	100		
85	0.0	48.2	72.2#

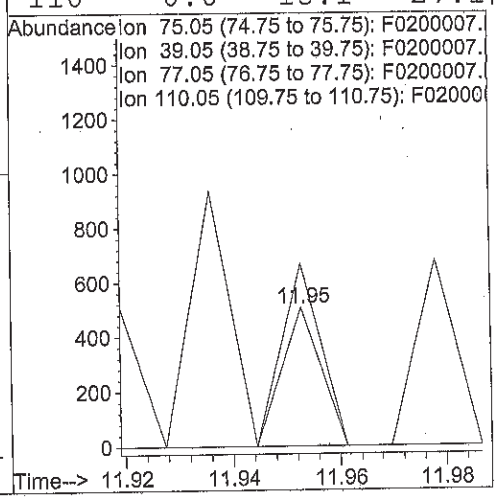


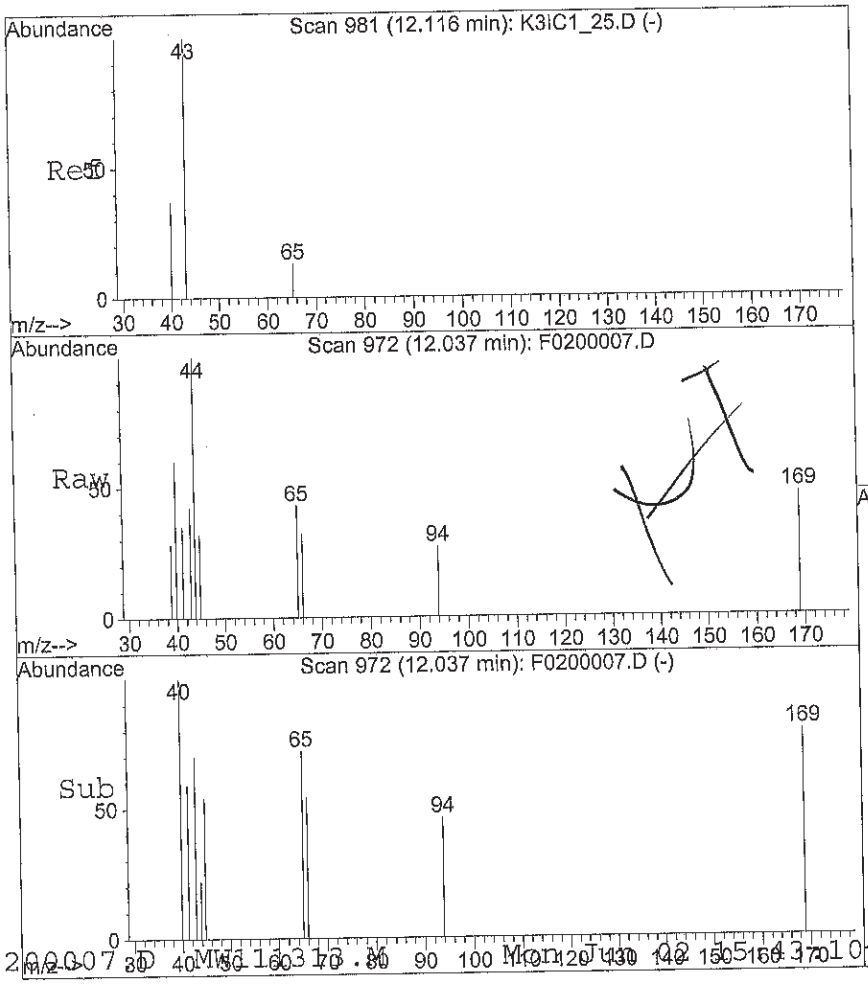


#37
cis-1,3-Dichloropropene
Concen: 0.06 ug/L
RT: 11.95 min Scan# 962
Delta R.T. 0.08 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 75 Resp: 256

Ion	Ratio	Lower	Upper
75	100		
39	132.4	40.7	61.1#
77	286.7	28.8	43.2#
110	0.0	18.1	27.1#

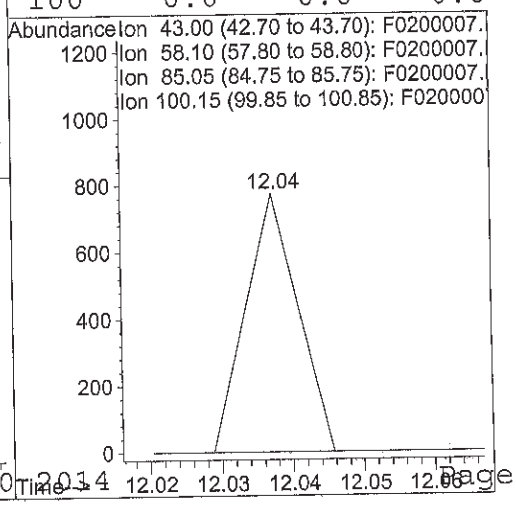


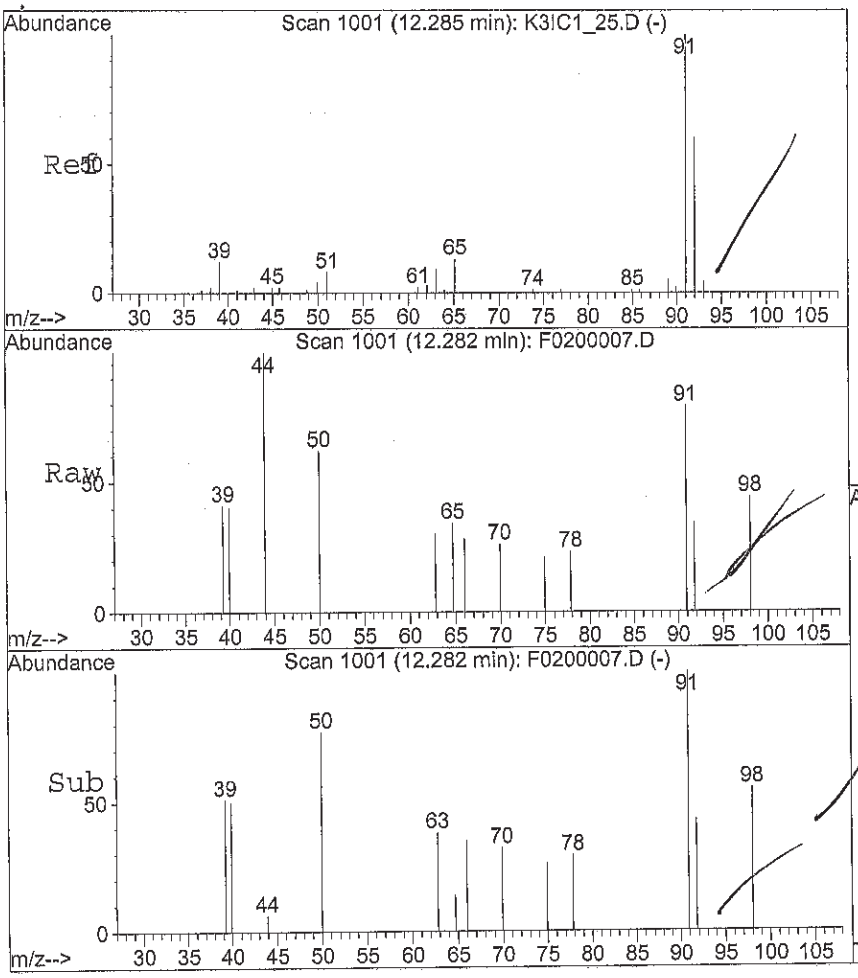


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.18 ug/L
RT: 12.04 min Scan# 972
Delta R.T. -0.08 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 43 Resp: 392

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

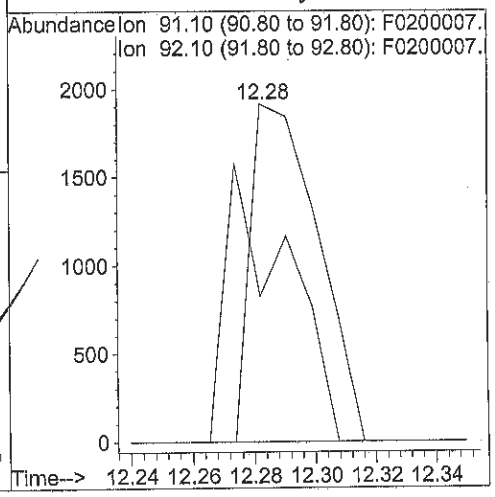


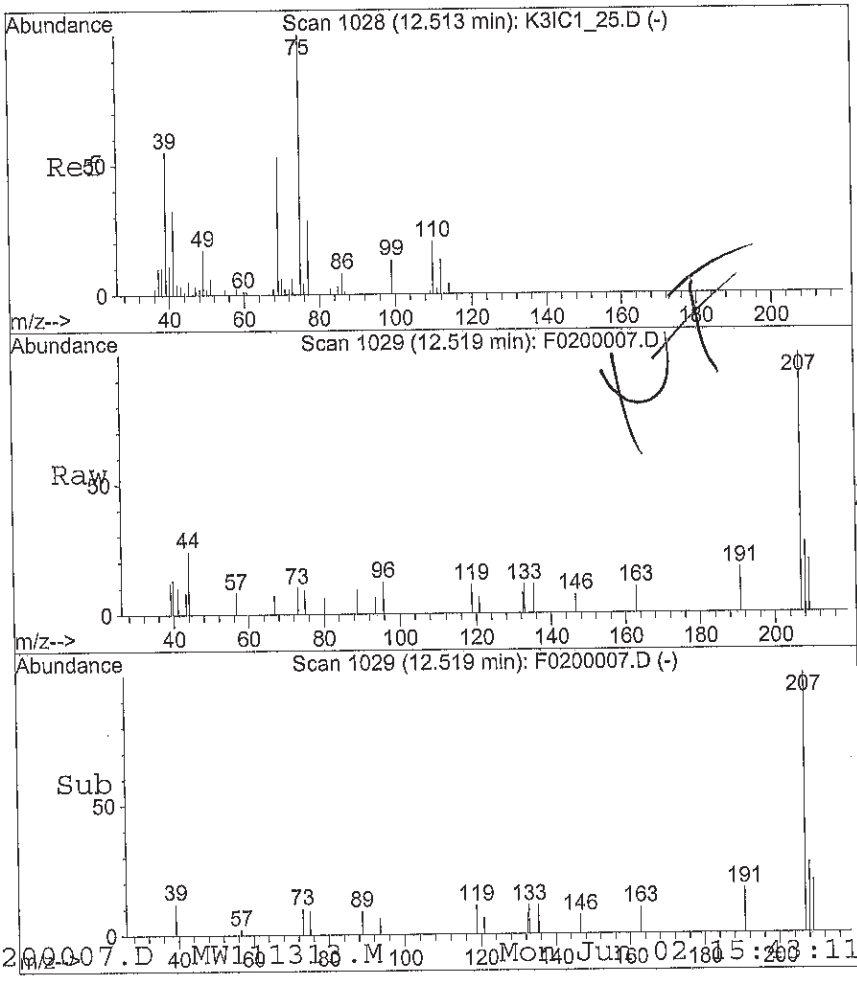


#41
Toluene
Concen: 0.19 ug/L
RT: 12.28 min Scan# 1001
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 91 Resp: 2946

Ion	Ratio	Lower	Upper
91	100		
92	74.4	47.4	71.0#

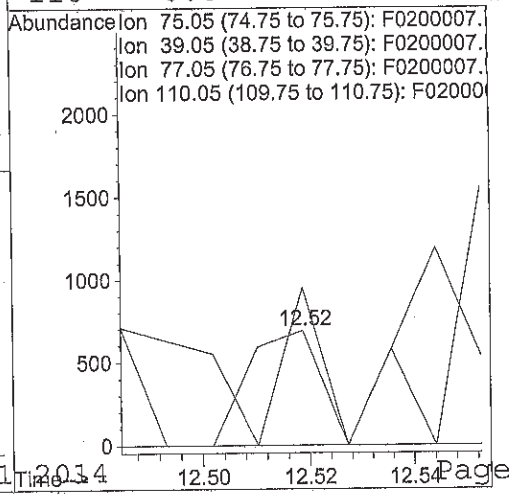


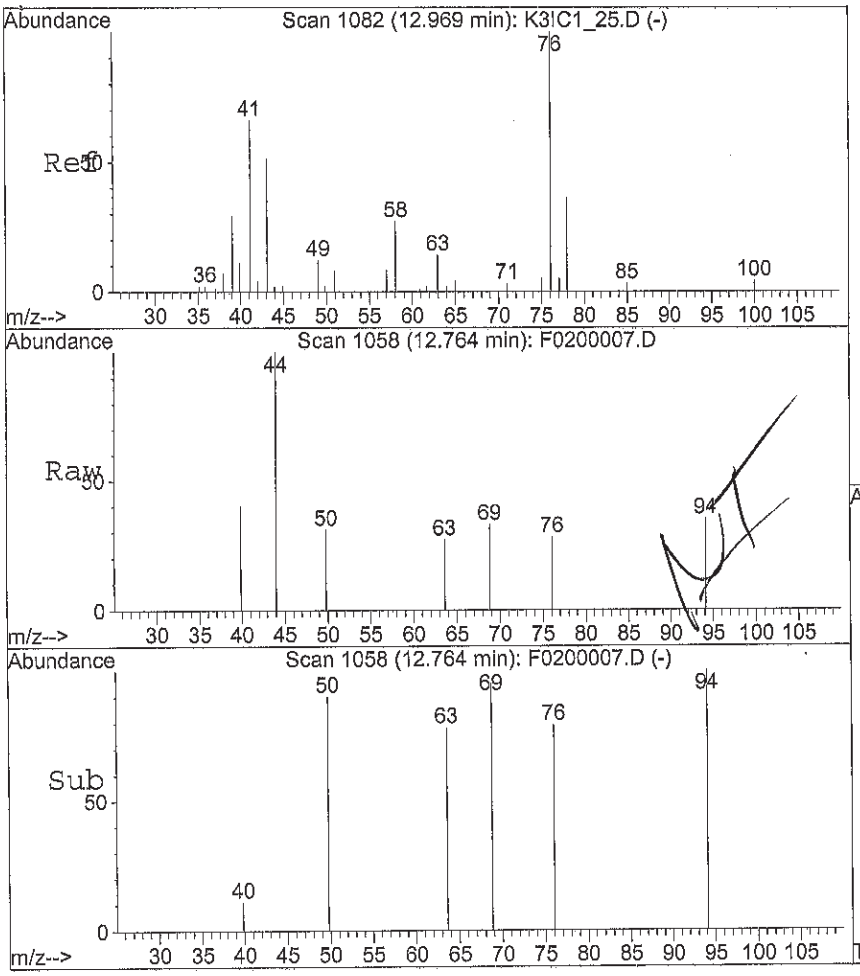


#42
trans-1,3-Dichloropropene
Concen: 0.13 ug/L
RT: 12.52 min Scan# 1029
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 75 Resp: 649

Ion	Ratio	Lower	Upper
75	100		
39	74.1	53.6	80.4
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

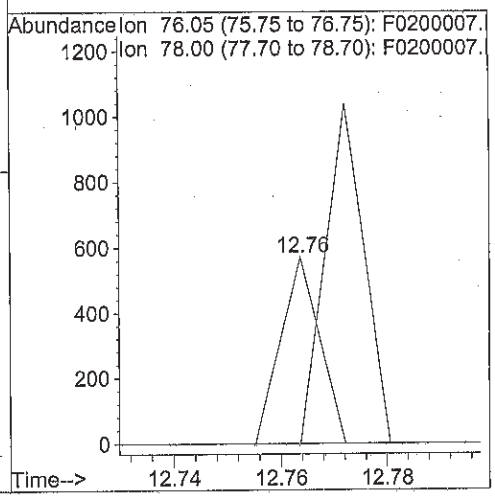


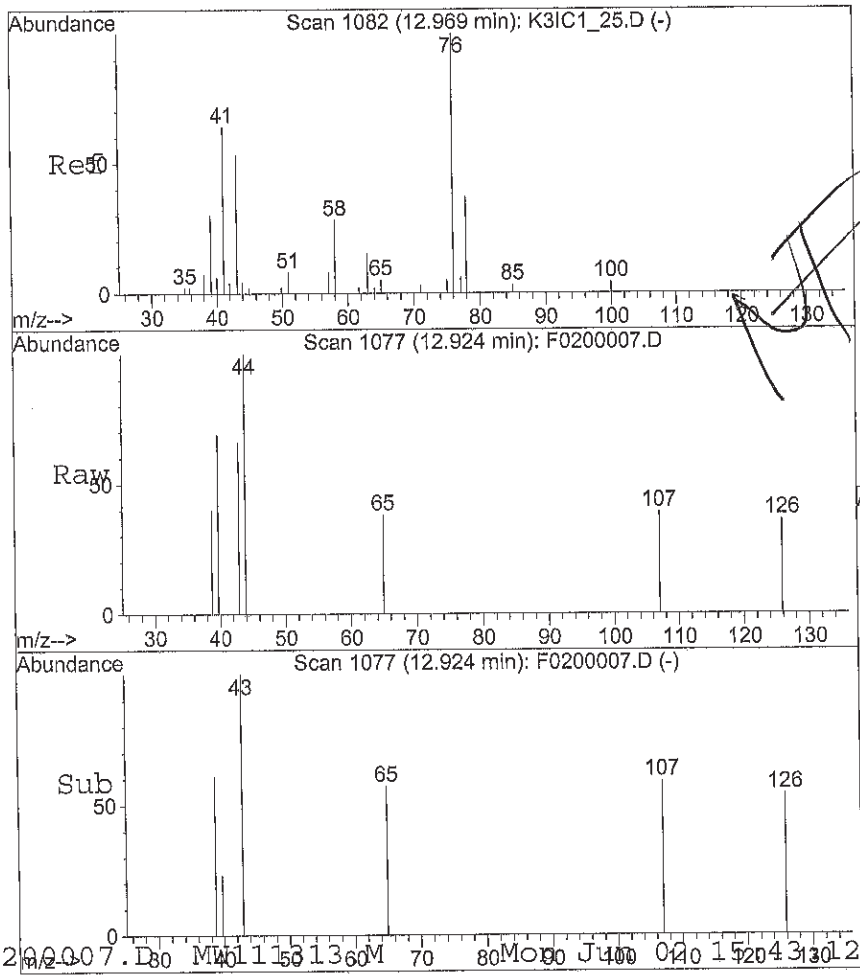


#45
1,3-Dichloropropane
Concen: 0.06 ug/L
RT: 12.76 min Scan# 1058
Delta R.T. -0.21 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 76 Resp: 289

Ion	Ratio	Lower	Upper
76	100		
78	182.0	26.9	40.3#

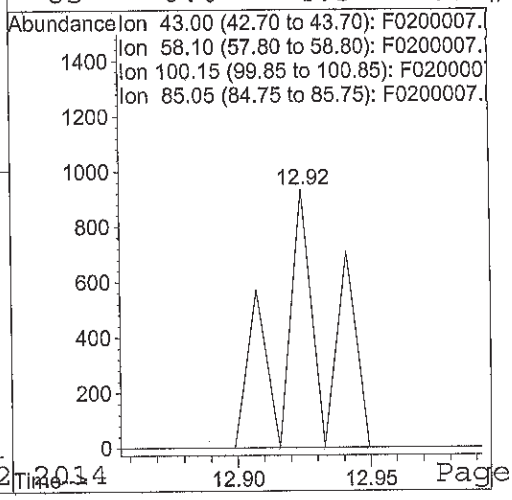


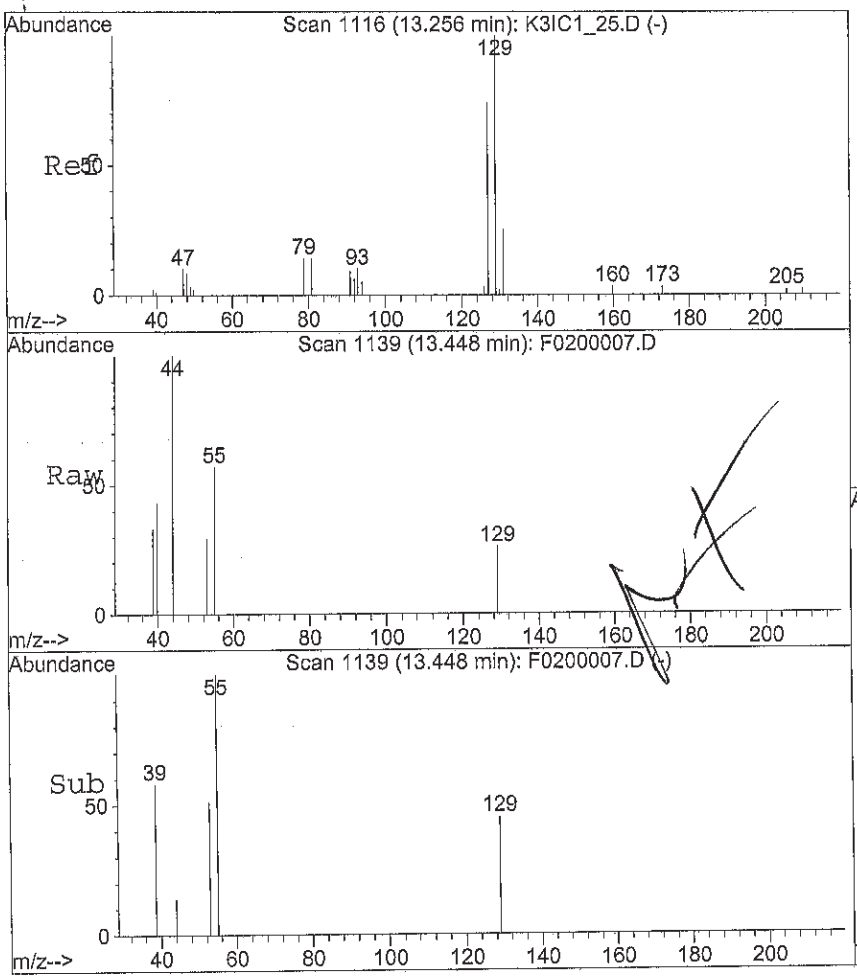


#46
2-Hexanone
Concen: 0.46 ug/L
RT: 12.92 min Scan# 1077
Delta R.T. -0.04 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 43 Resp: 1121

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

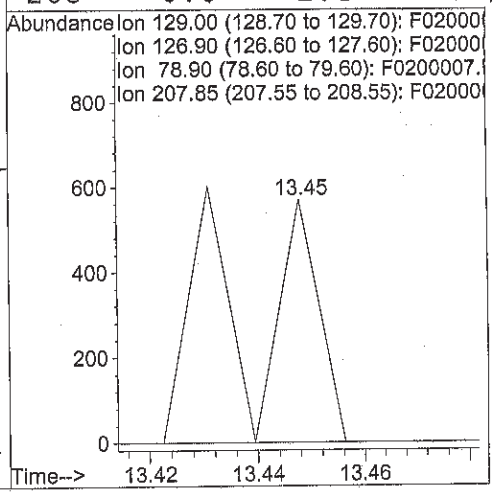


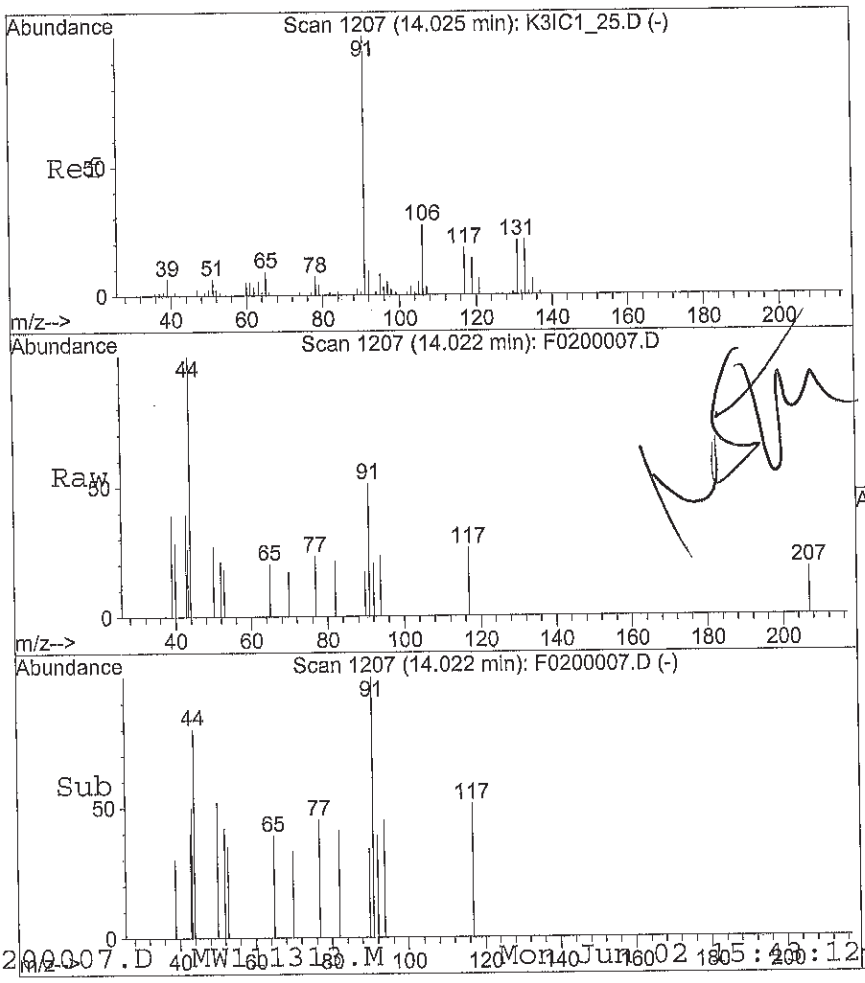


#47
Dibromochloromethane
Concen: 0.07 ug/L
RT: 13.45 min Scan# 1139
Delta R.T. 0.19 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:129 Resp: 289

Ion	Ratio	Lower	Upper
129	100		
127	0.0	61.6	92.4#
79	105.5	10.7	16.1#
208	0.0	1.4	2.0#

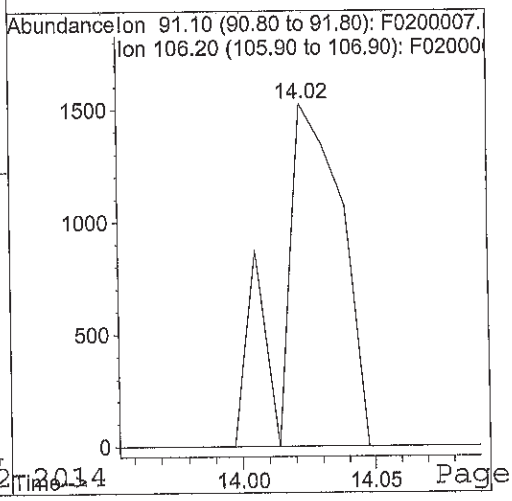


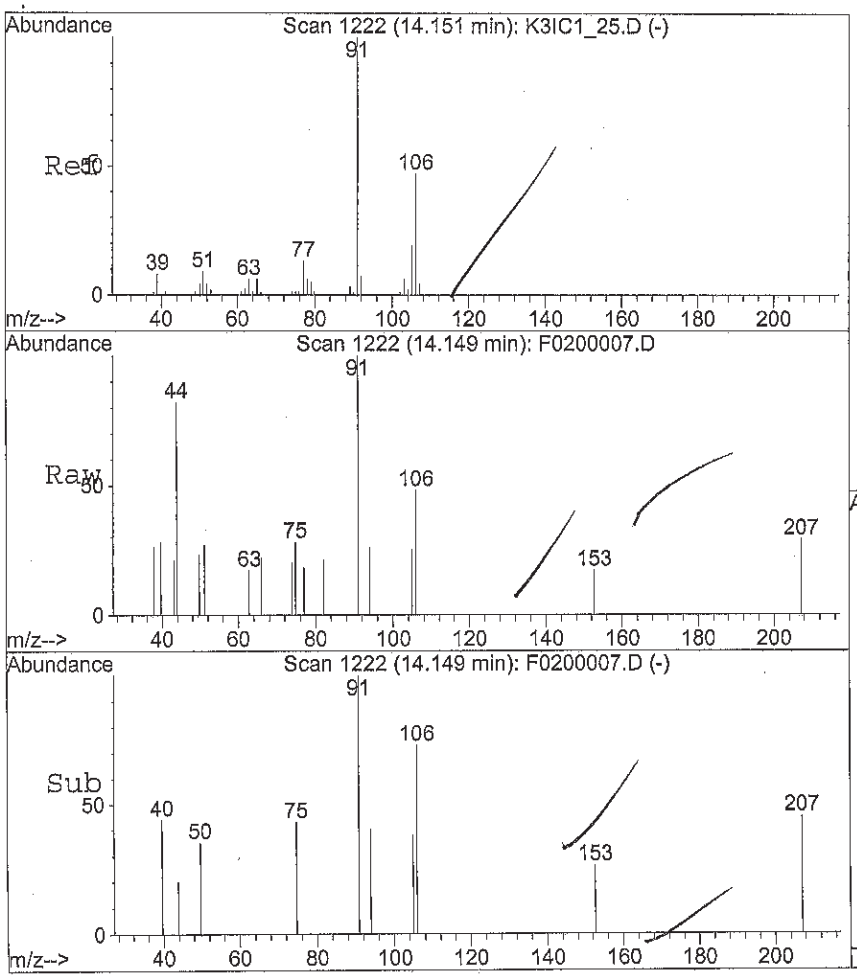


#51
Ethylbenzene
Concen: 0.14 ug/L
RT: 14.02 min Scan# 1207
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 91 Resp: 2441

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

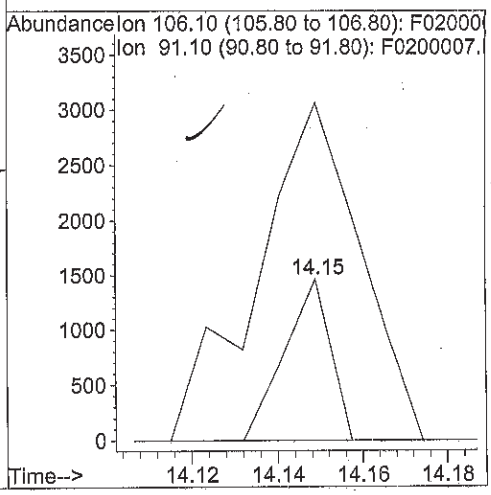


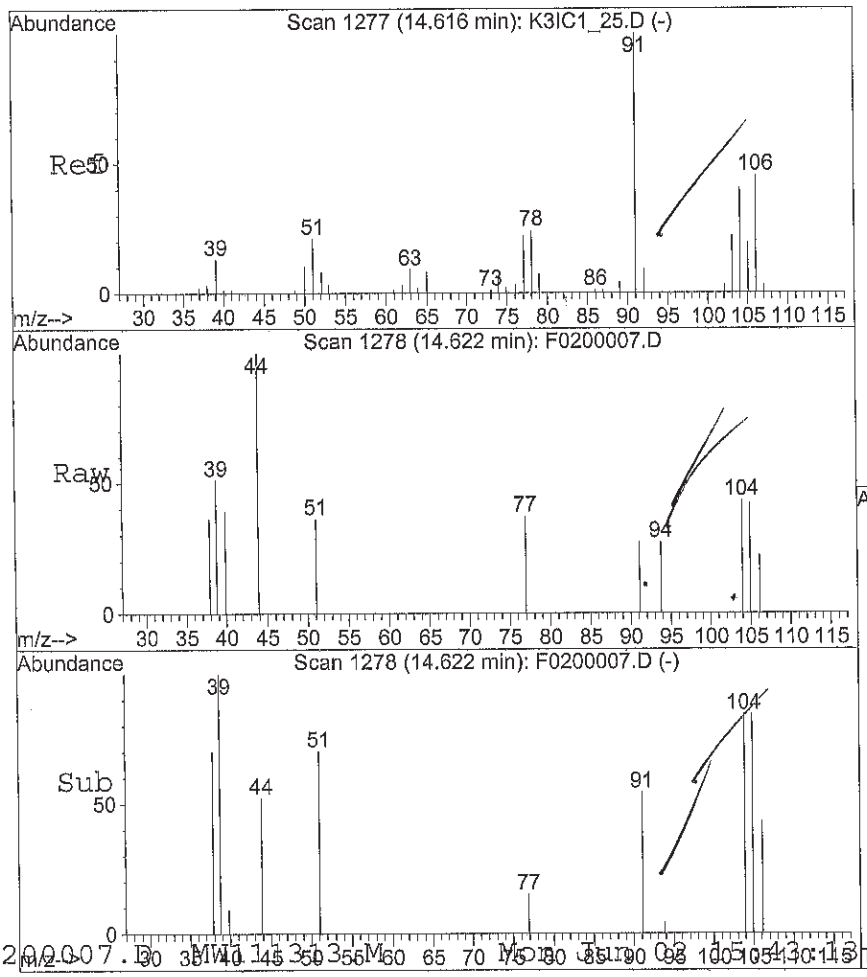


#52
m,p-Xylenes
Concen: 0.18 ug/L
RT: 14.15 min Scan# 1222
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:106 Resp: 1090

Ion	Ratio	Lower	Upper
106	100		
91	473.0	177.1	265.7#

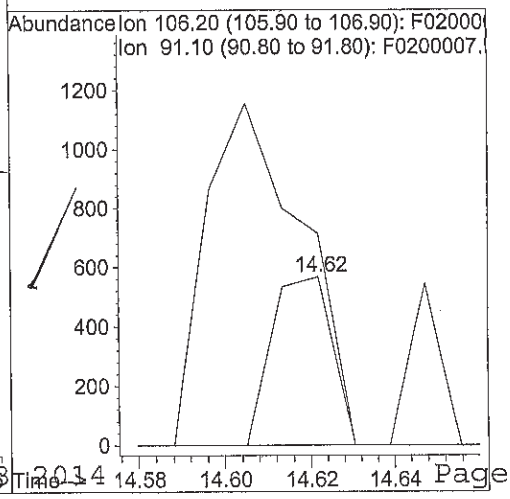


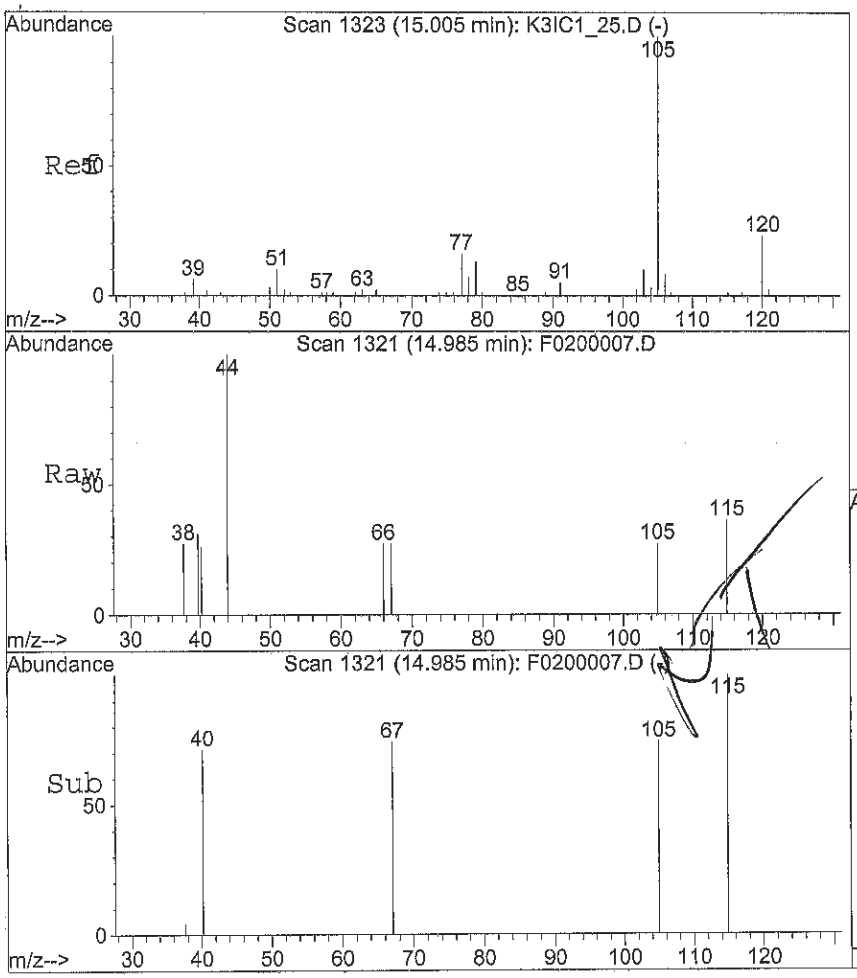


#53
o-Xylene
Concen: 0.09 ug/L
RT: 14.62 min Scan# 1278
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:106 Resp: 557

Ion	Ratio	Lower	Upper
106	100		
91	321.4	179.0	268.6#

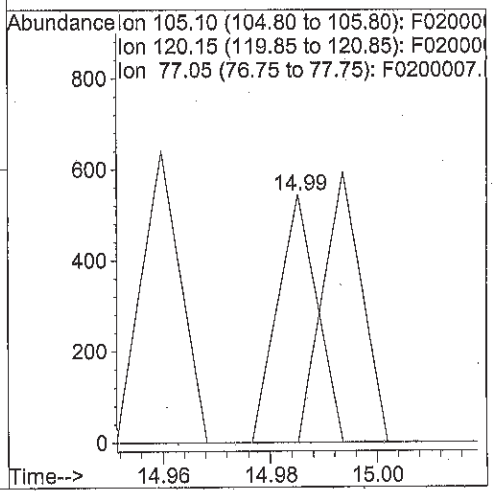


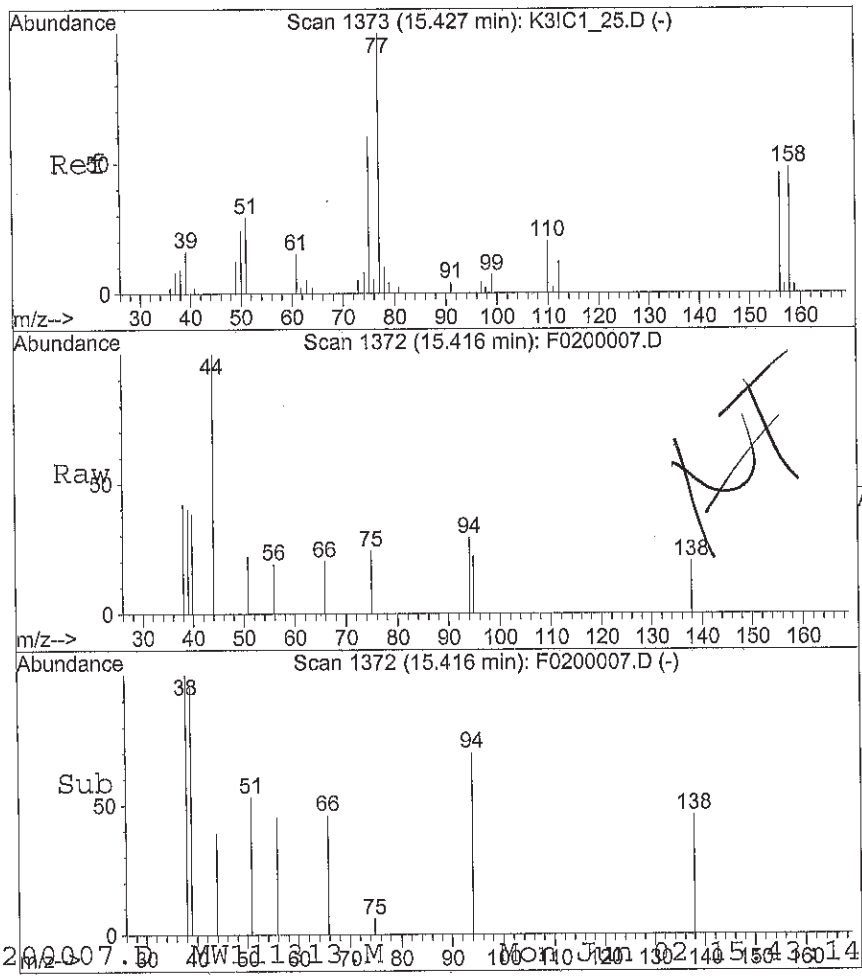


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 14.99 min Scan# 1321
Delta R.T. -0.02 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:105 Resp: 276

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	109.1	13.1	19.7#

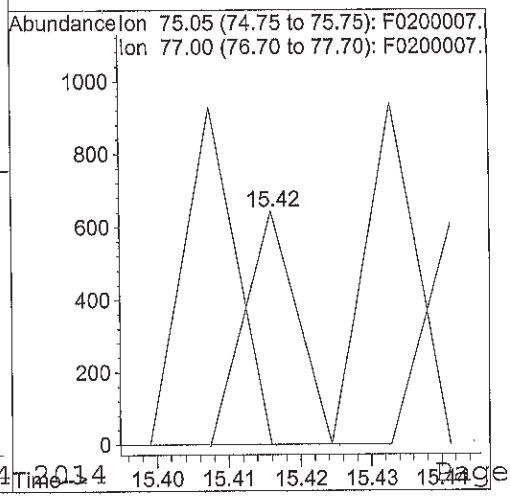


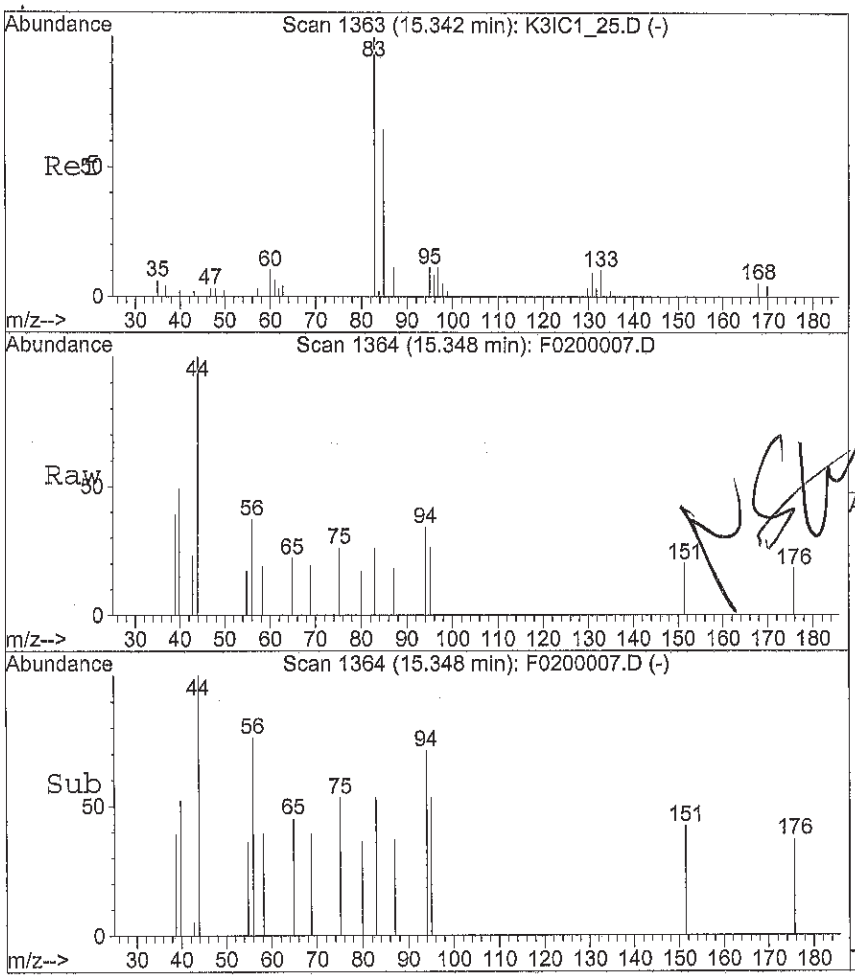


#57
1,2,3-Trichloropropane
Concen: 0.07 ug/L
RT: 15.42 min Scan# 1372
Delta R.T. -0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 75 Resp: 325

Ion	Ratio	Lower	Upper
75	100		
77	144.6	31.2	46.8#

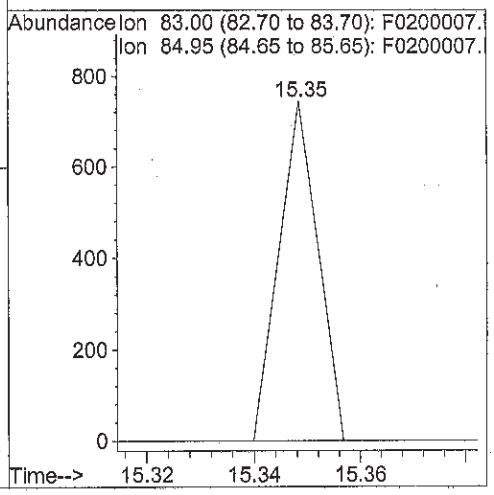


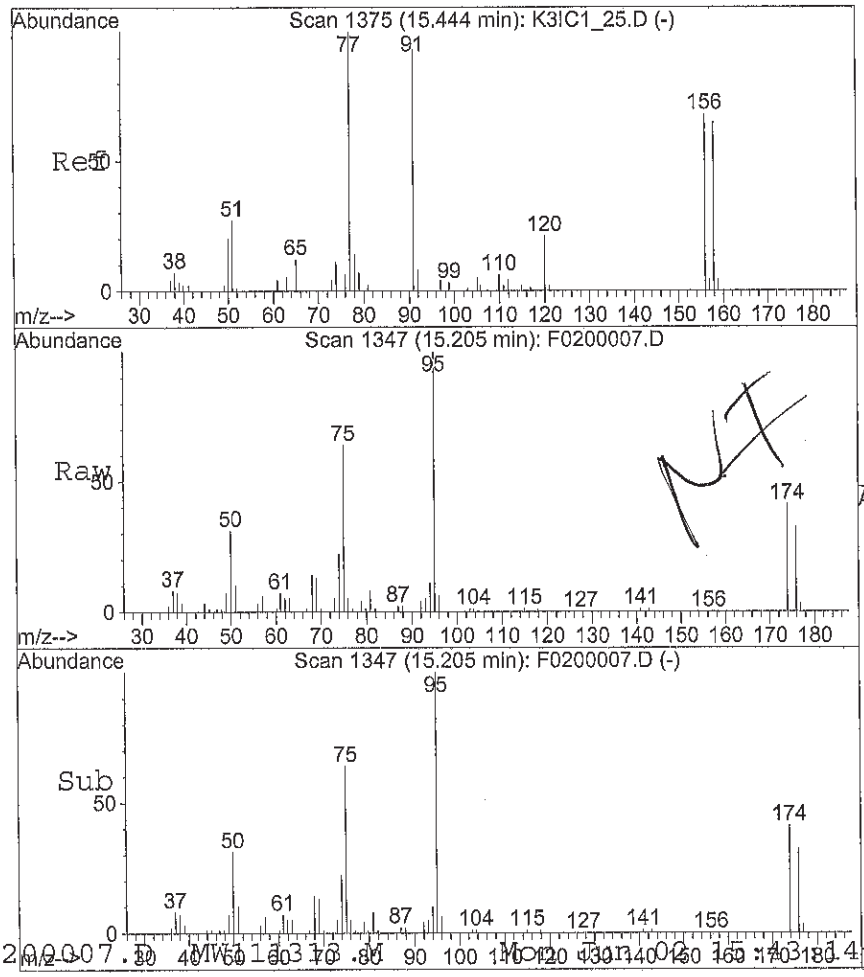


#60
1,1,2,2-Tetrachloroethane
Concen: 0.09 ug/L
RT: 15.35 min Scan# 1364
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 83 Resp: 377

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

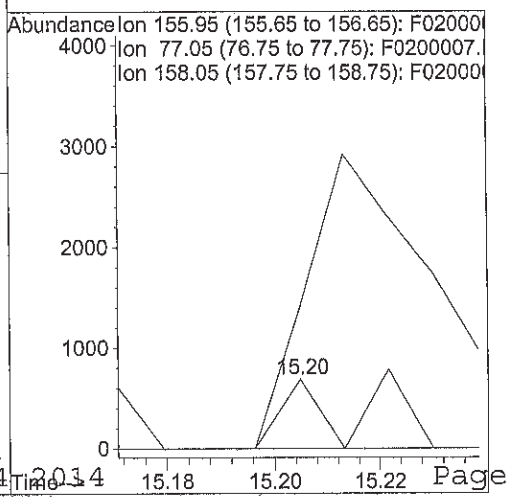


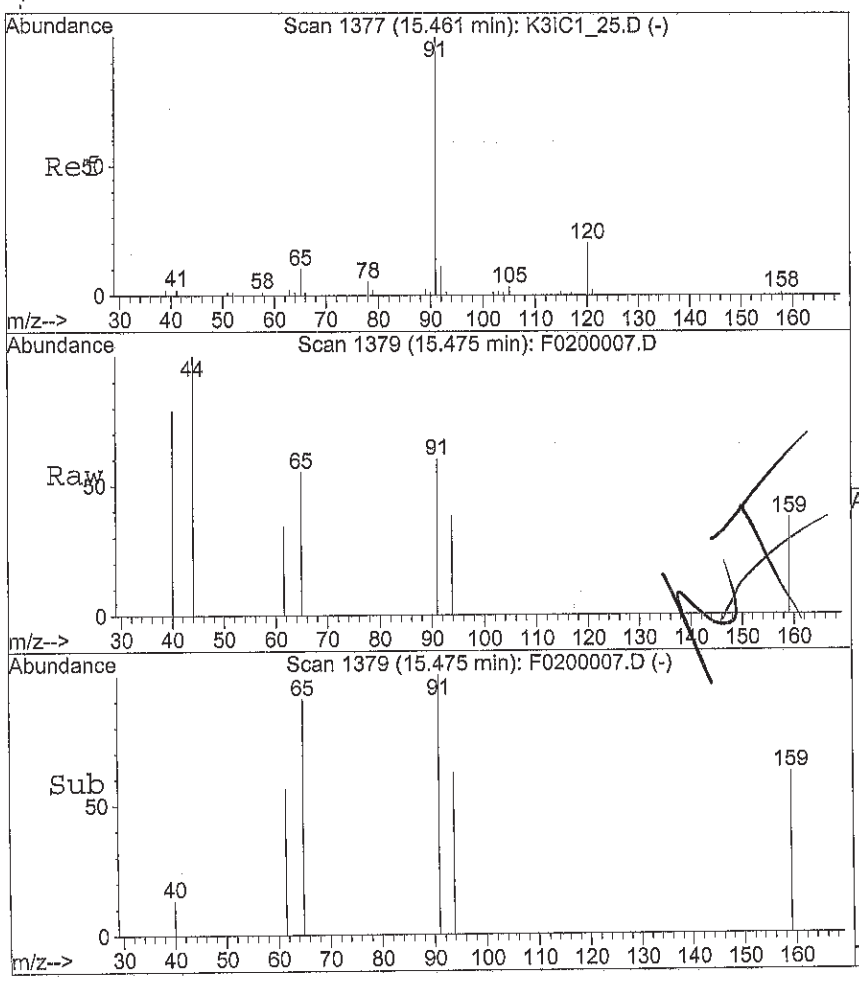


#61
Bromobenzene
Concen: 0.08 ug/L
RT: 15.20 min Scan# 1347
Delta R.T. -0.24 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:156 Resp: 349

Ion	Ratio	Lower	Upper
156	100		
77	1359.6	171.3	256.9#
158	114.0	80.3	120.5

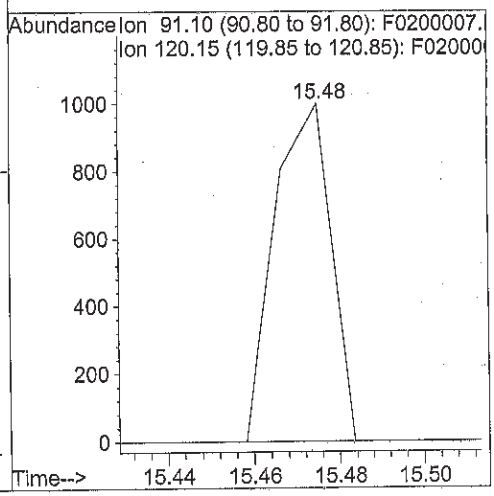


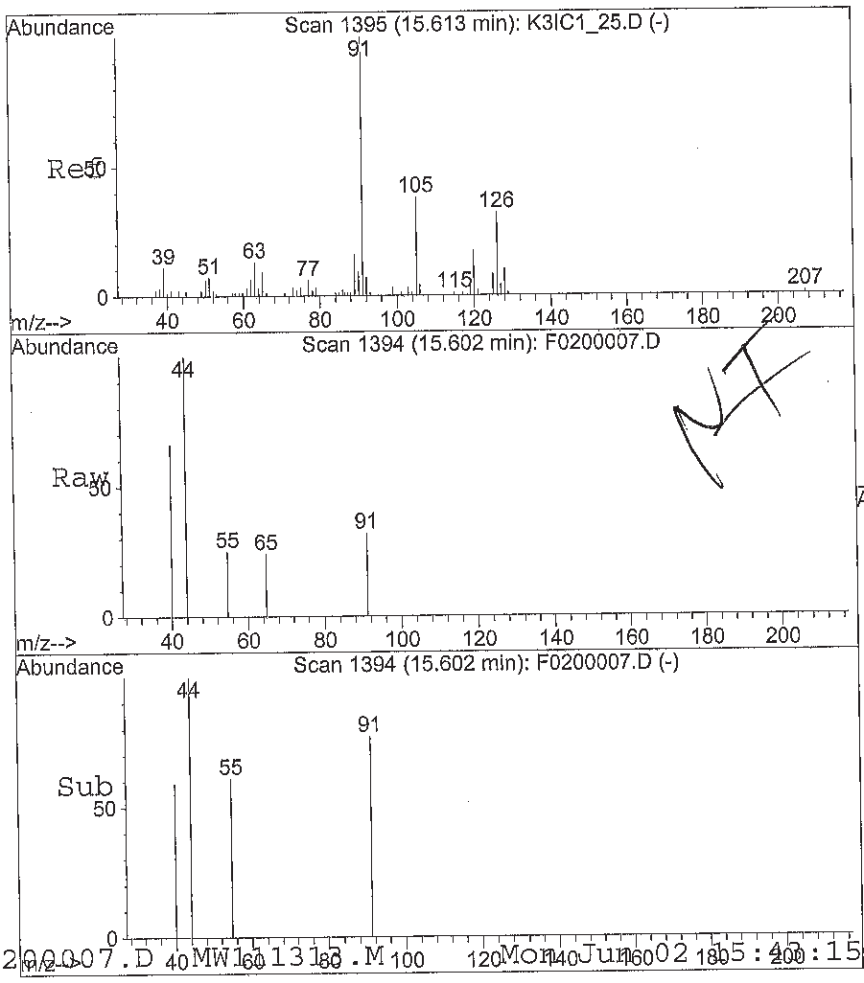


#62
n-Propylbenzene
Concen: 0.04 ug/L
RT: 15.48 min Scan# 1379
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 91 Resp: 915

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

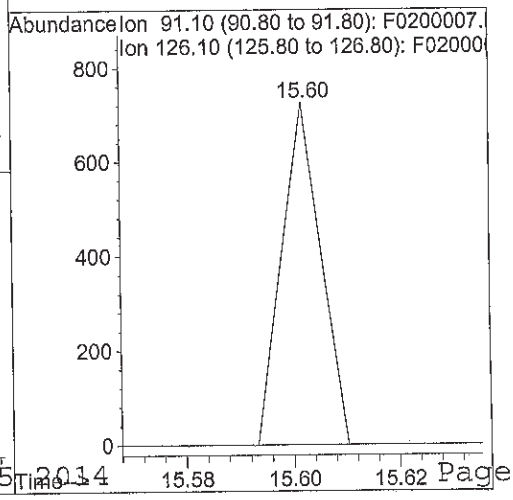


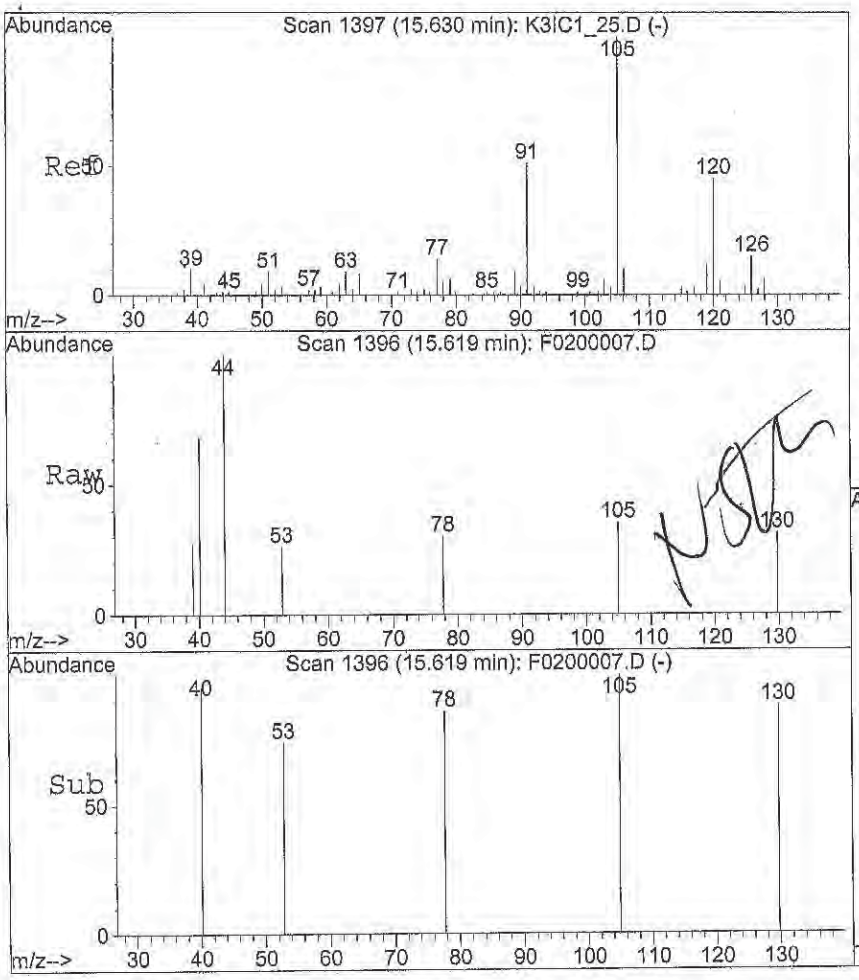


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.60 min Scan# 1394
Delta R.T. -0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 91 Resp: 368

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

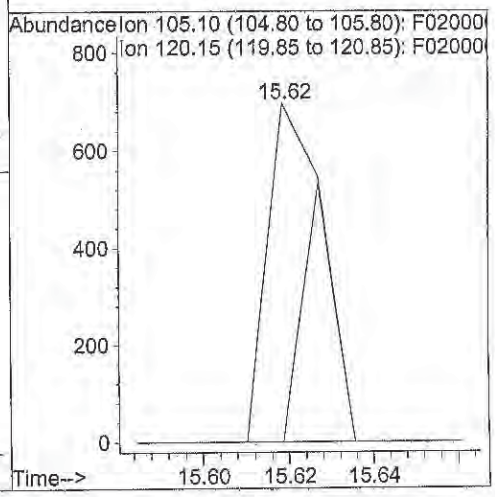


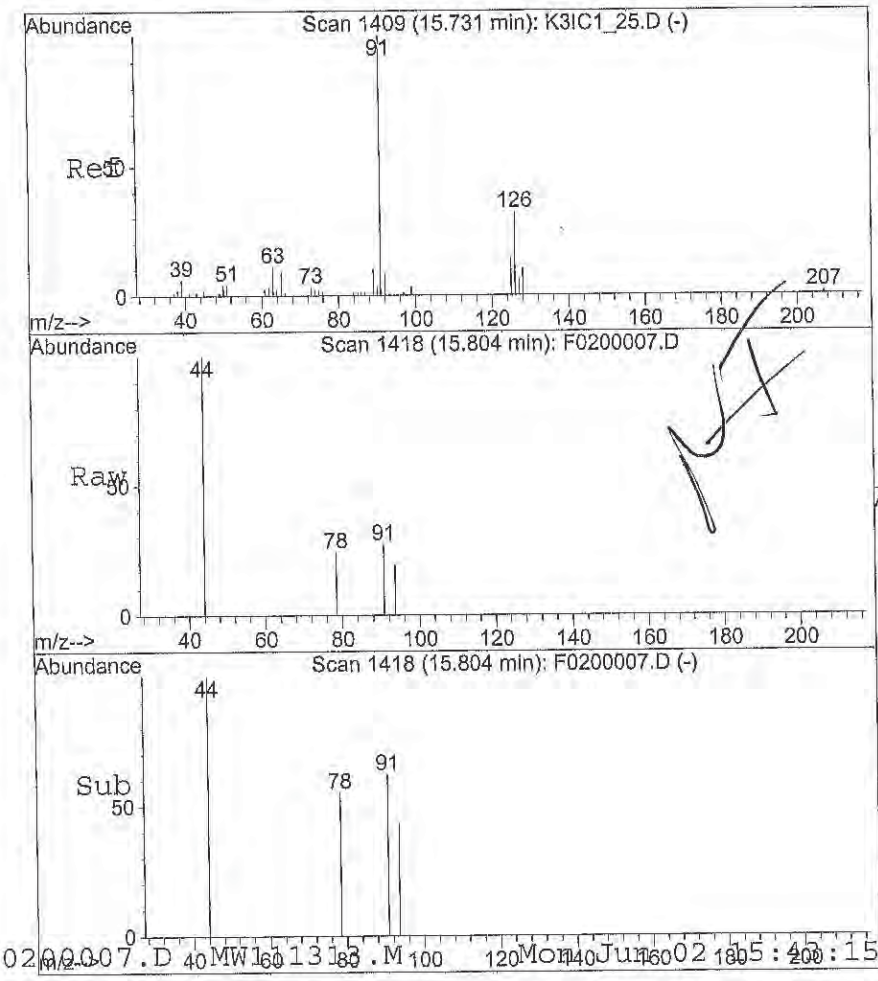


#64
1,3,5-Trimethylbenzene
Concen: 0.04 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:105 Resp: 629

Ion	Ratio	Lower	Upper
105	100		
120	42.8	36.4	54.6

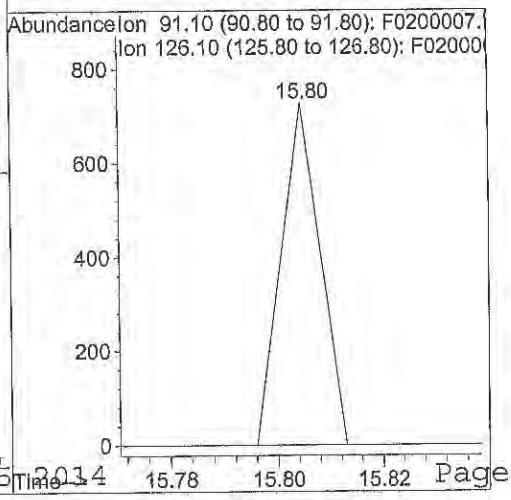


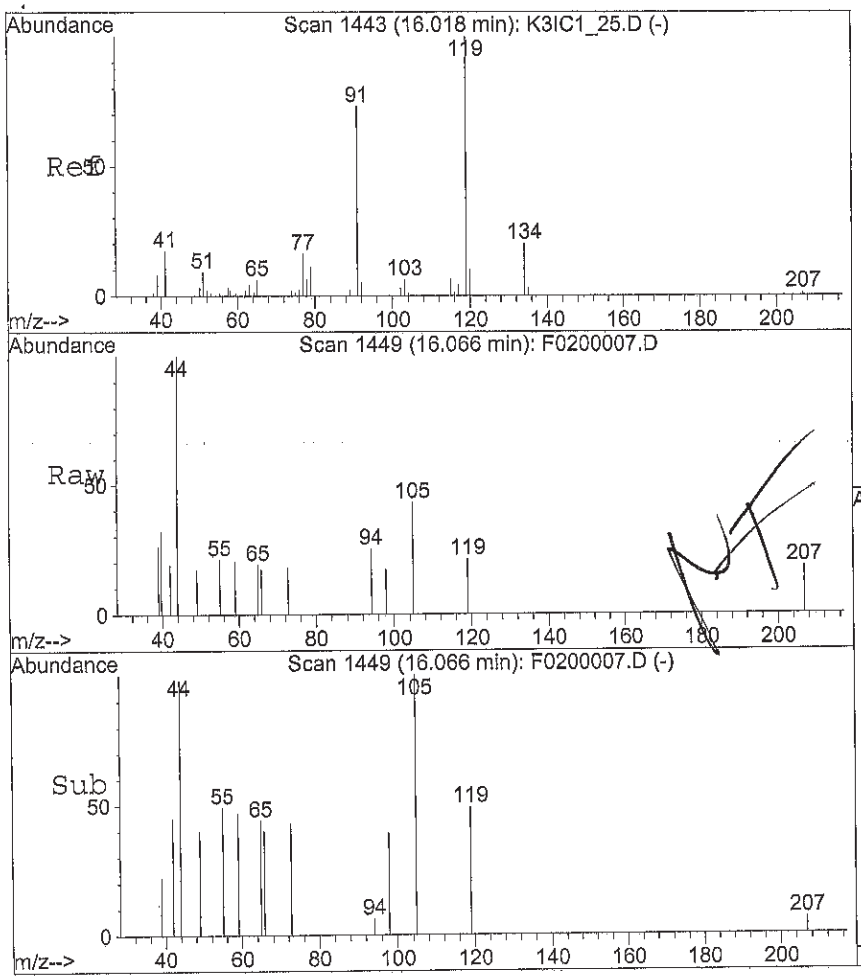


#65
4-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.80 min Scan# 1418
Delta R.T. 0.07 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 91 Resp: 368

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

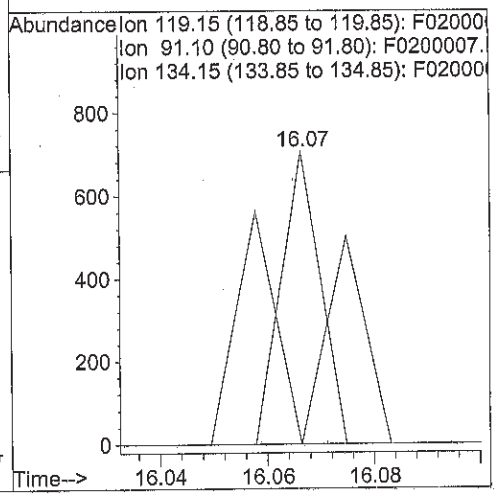


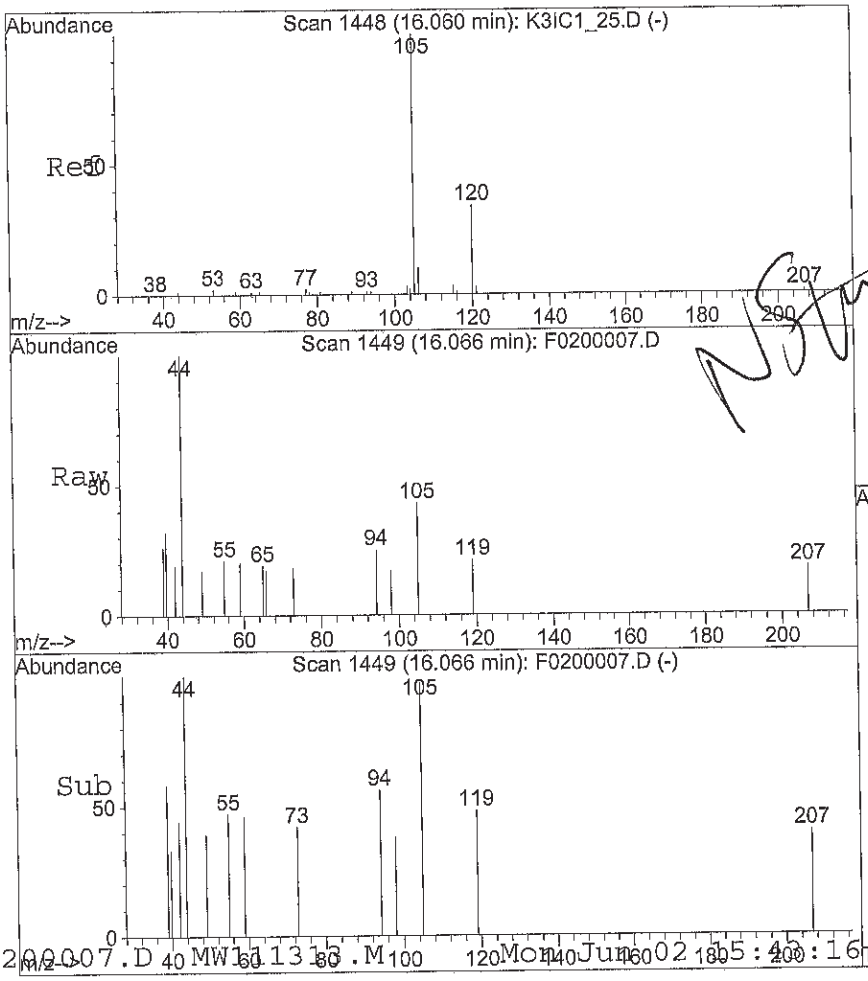


#66
tert-Butylbenzene
Concen: 0.03 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.05 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:119 Resp: 358

Ion	Ratio	Lower	Upper
119	100		
91	150.8	56.3	84.5#
134	0.0	16.1	24.1#

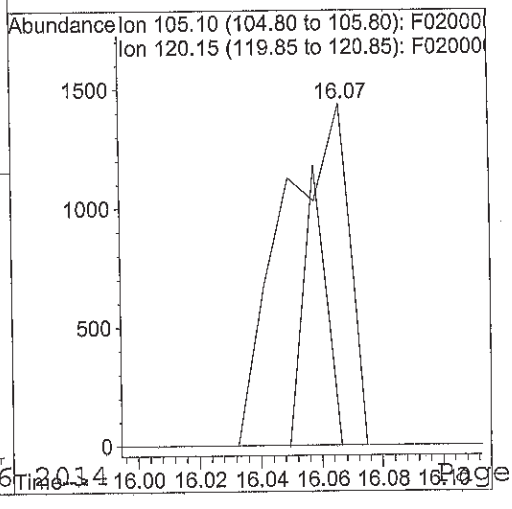


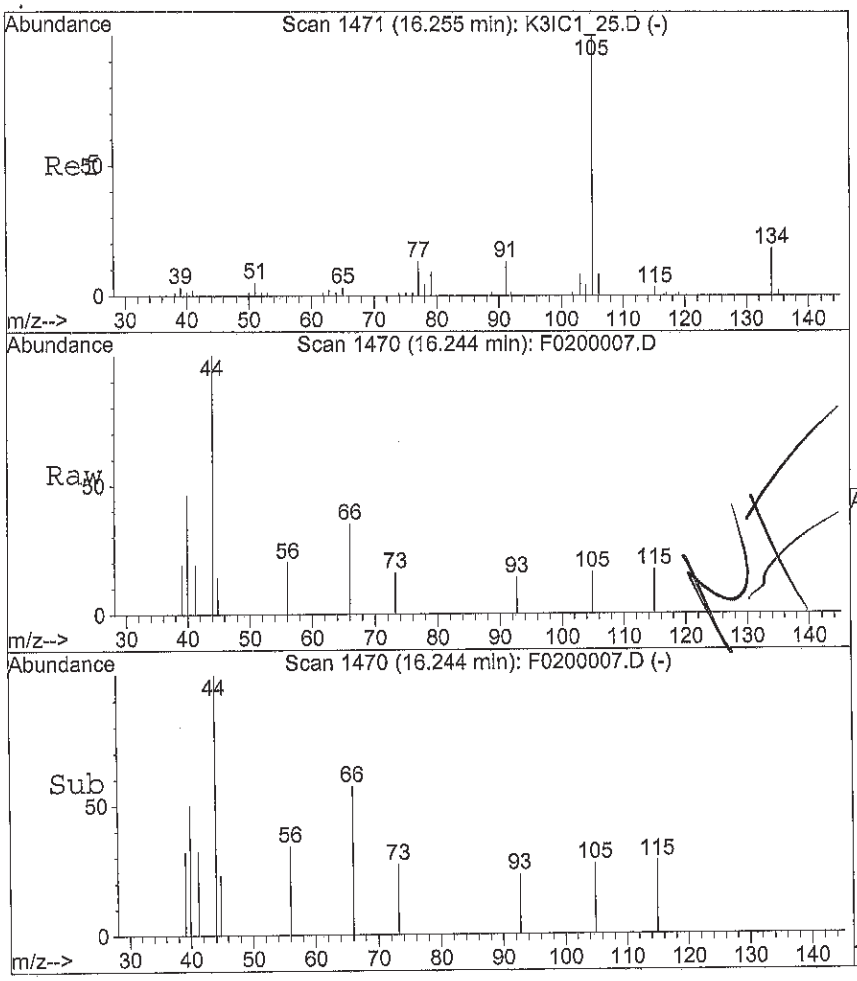


#67
1,2,4-Trimethylbenzene
Concen: 0.15 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:105 Resp: 2155

Ion	Ratio	Lower	Upper
105	100		
120	27.7	33.8	50.8#

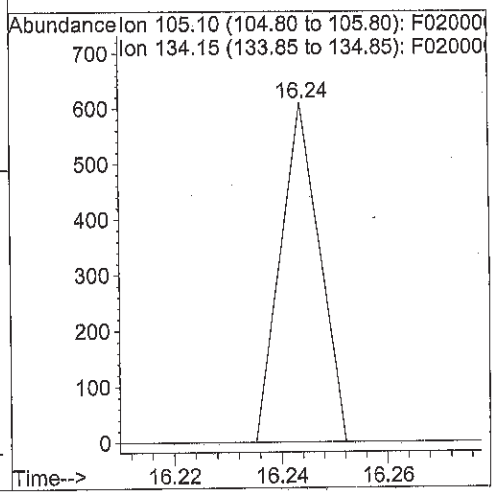


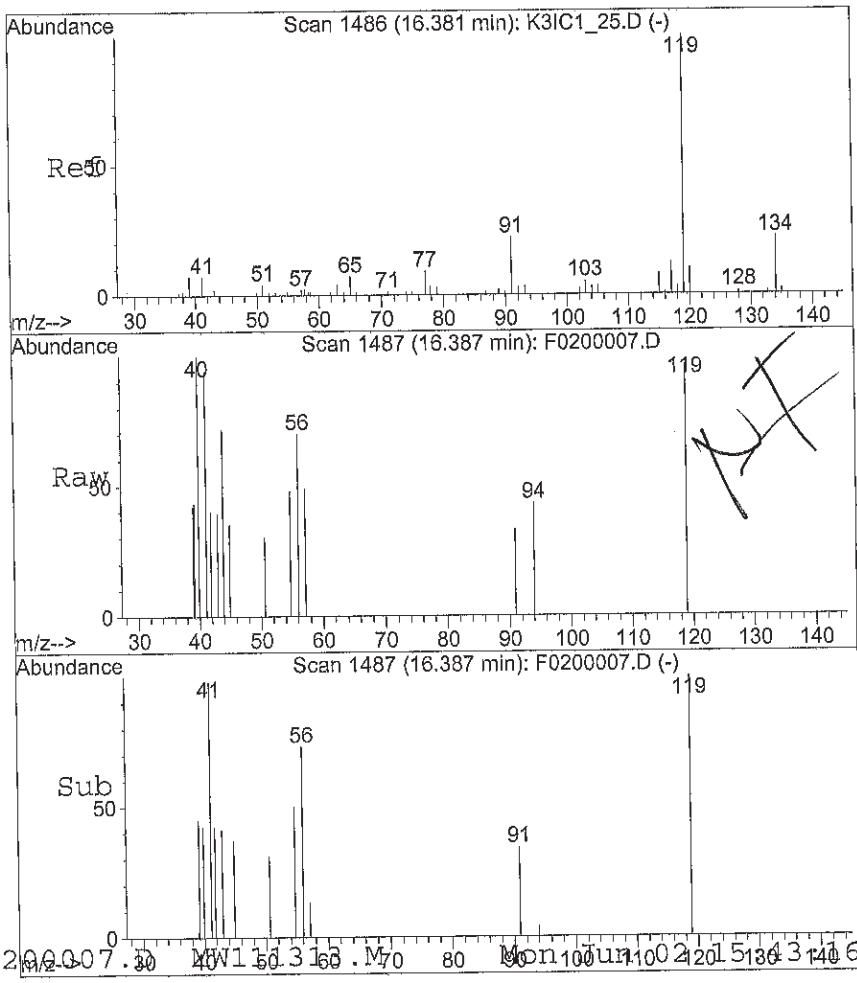


#68
sec-Butylbenzene
Concen: 0.02 ug/L
RT: 16.24 min Scan# 1470
Delta R.T. -0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:105 Resp: 309

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

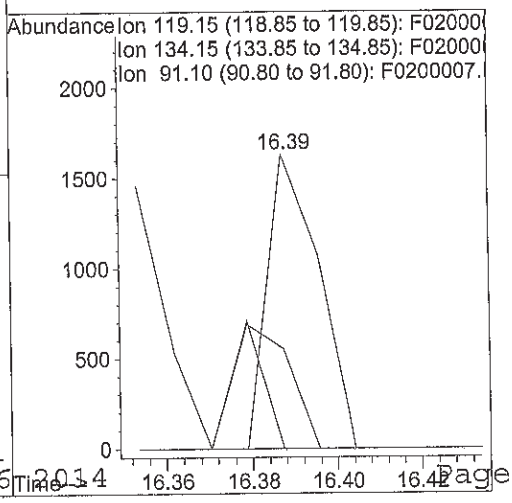


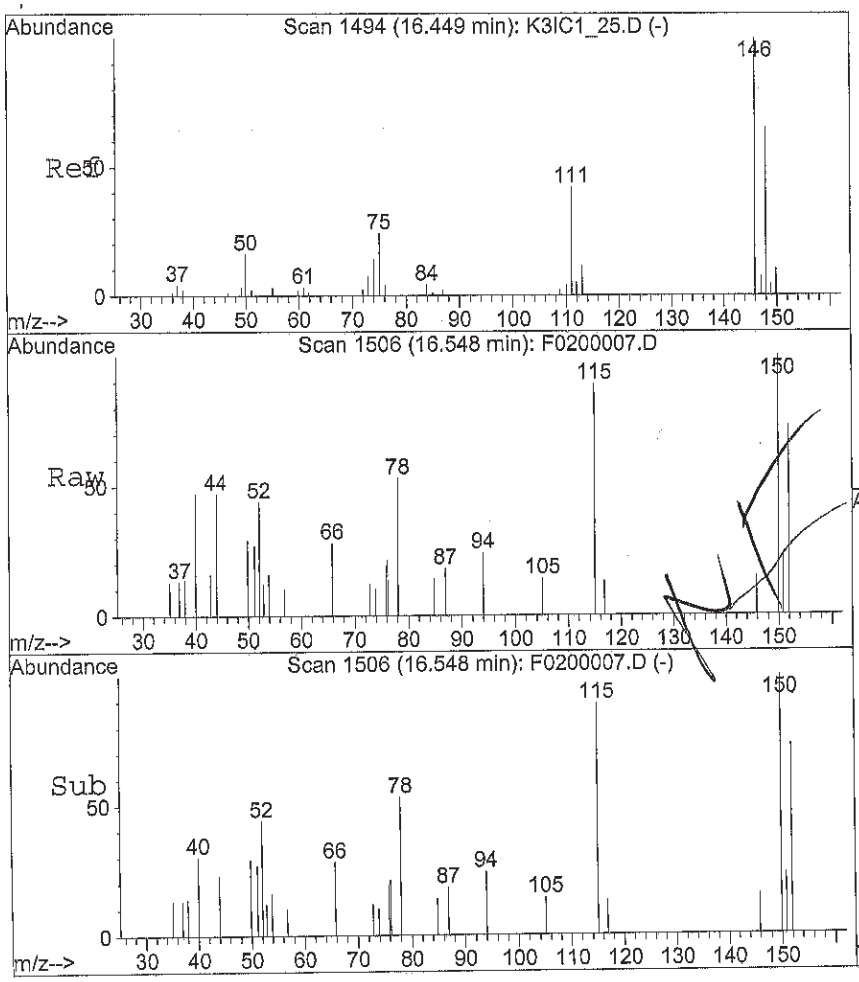


#69
p-Isopropyltoluene
Concen: 0.09 ug/L
RT: 16.39 min Scan# 1487
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:119 Resp: 1371

Ion	Ratio	Lower	Upper
119	100		
134	26.2	17.4	26.2#
91	46.0	19.6	29.4#

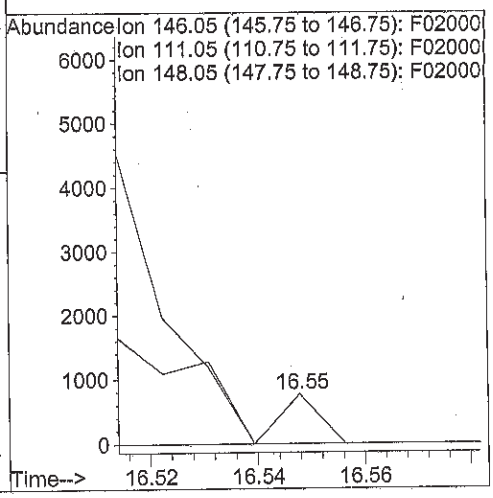


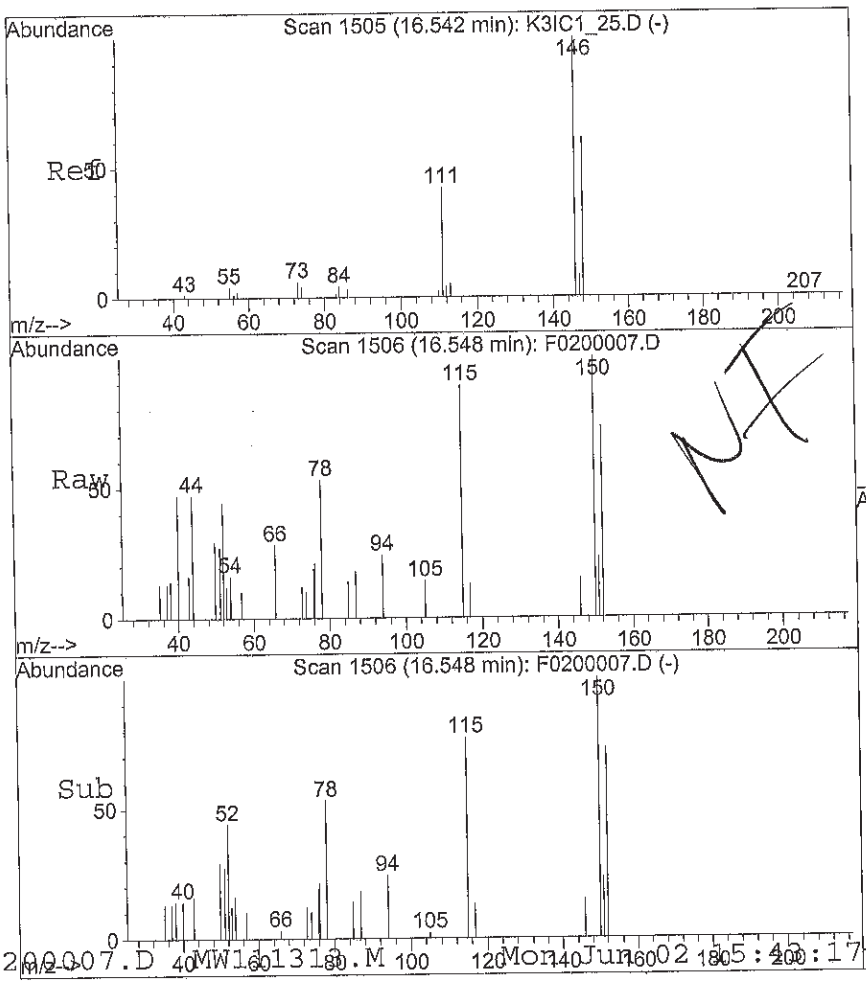


#70
1,3-Dichlorobenzene
Concen: 0.05 ug/L
RT: 16.55 min Scan# 1506
Delta R.T. 0.10 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:146 Resp: 387

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.2	51.4#
148	0.0	50.9	76.3#

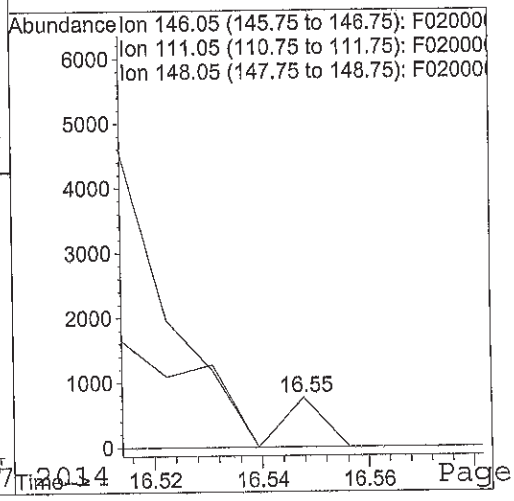


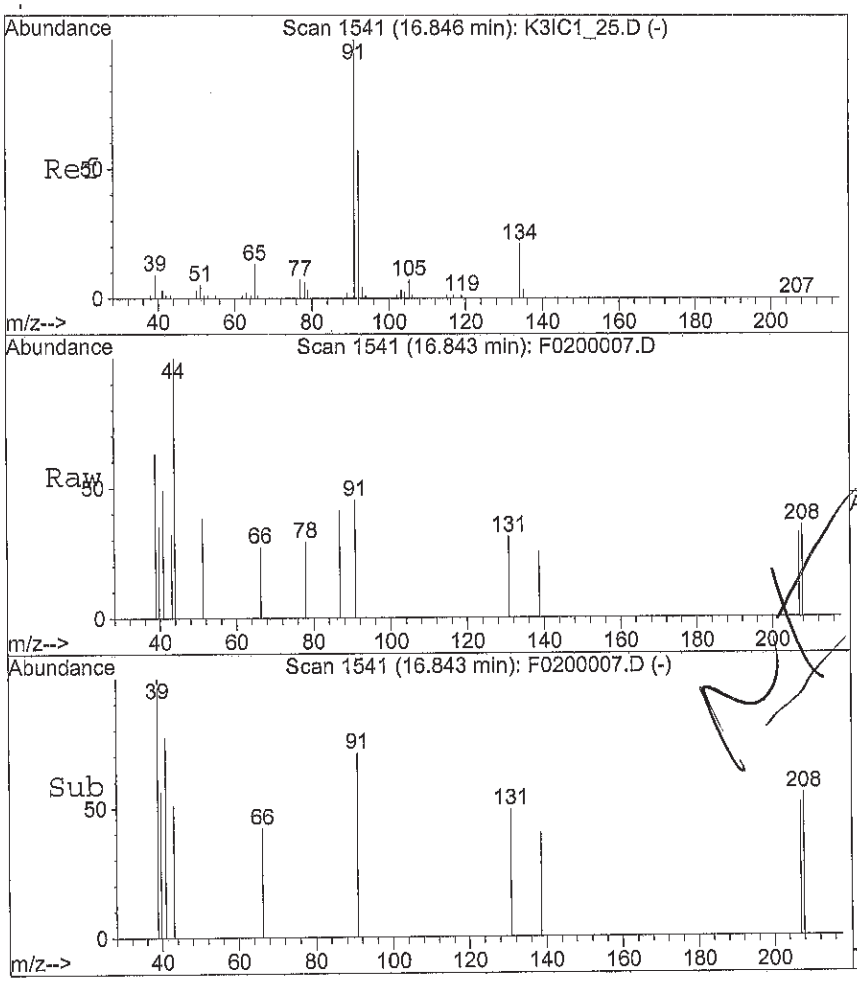


#71
1,4-Dichlorobenzene
Concen: 0.05 ug/L
RT: 16.55 min Scan# 1506
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:146 Resp: 387

Ion	Ratio	Lower	Upper
146	100		
111	0.0	37.6	56.4#
148	0.0	52.6	78.8#

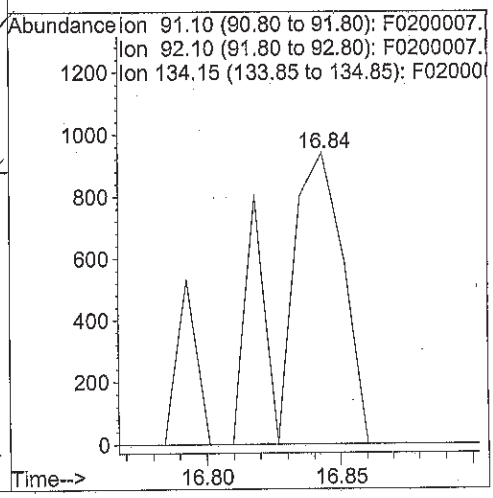


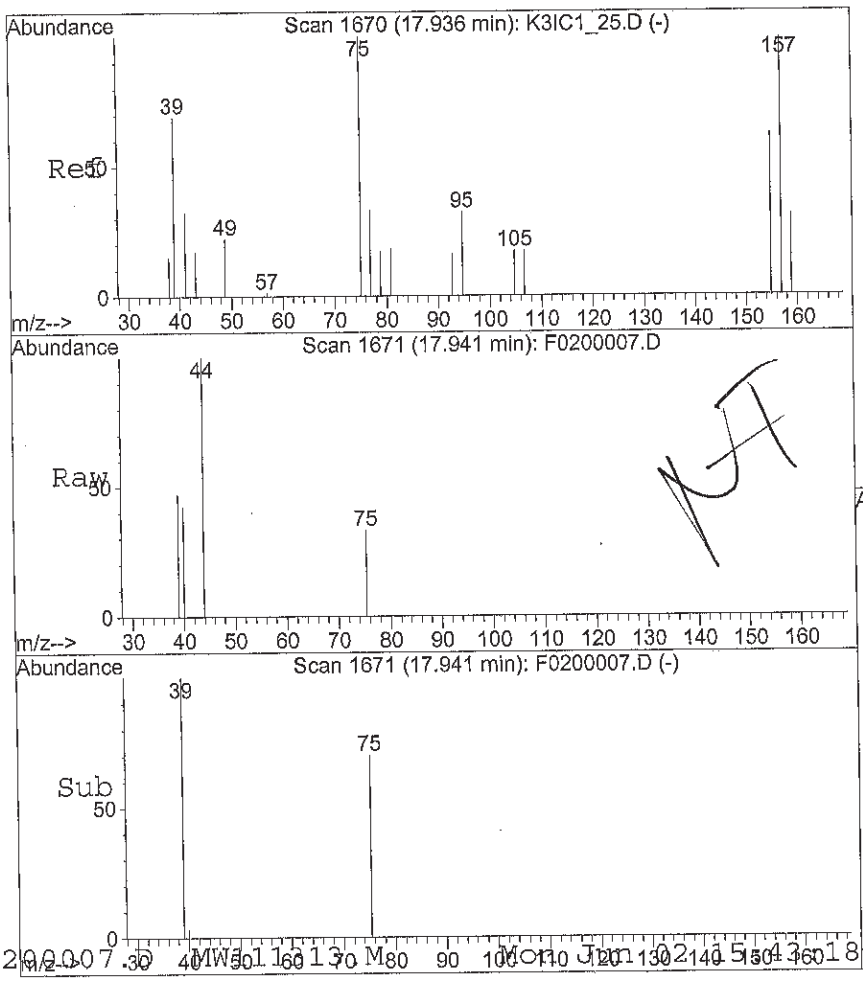


#72
n-Butylbenzene
Concen: 0.10 ug/L
RT: 16.84 min Scan# 1541
Delta R.T. -0.00 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 91 Resp: 1590

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

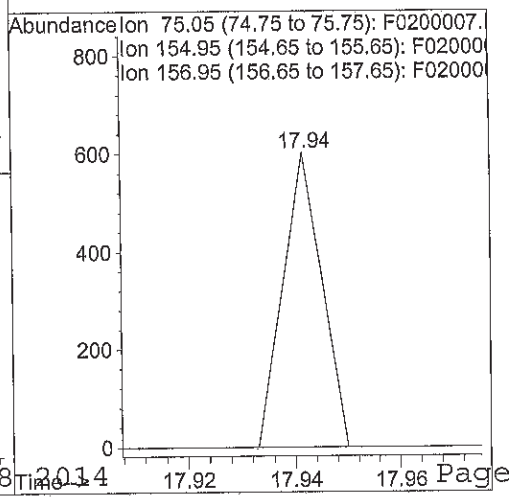


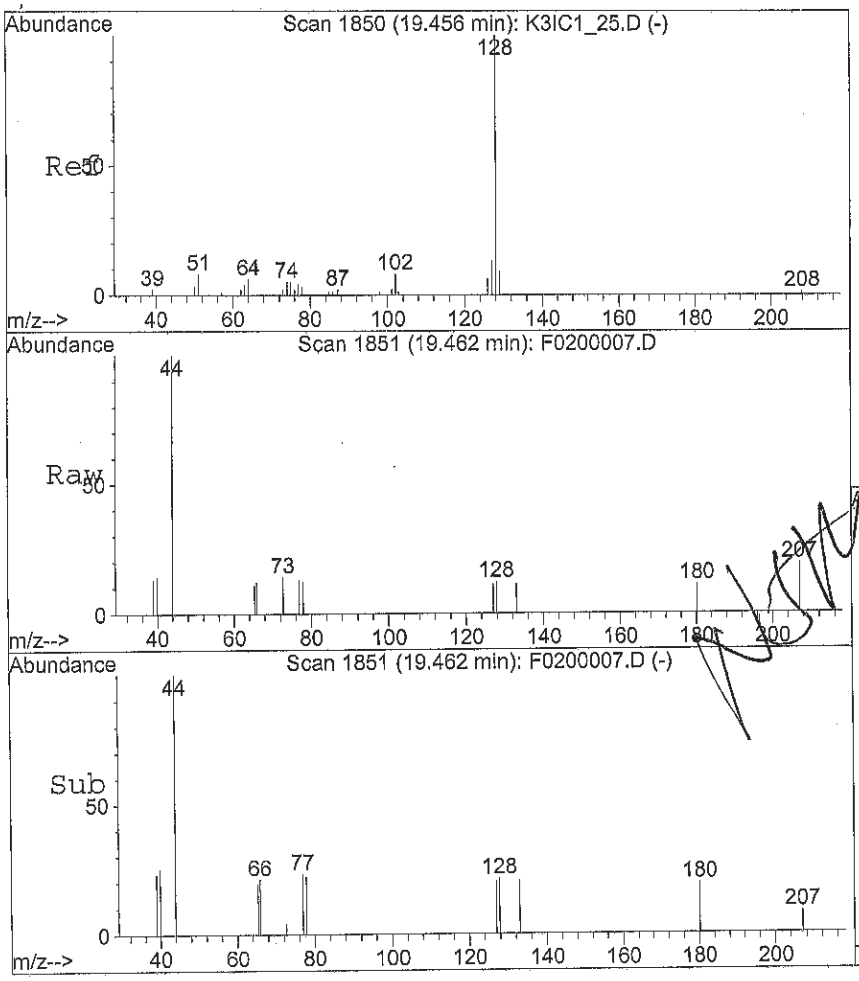


#74
1,2-Dibromo-3-chloropropane
Concen: 1.35 ug/L
RT: 17.94 min Scan# 1671
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion: 75 Resp: 305

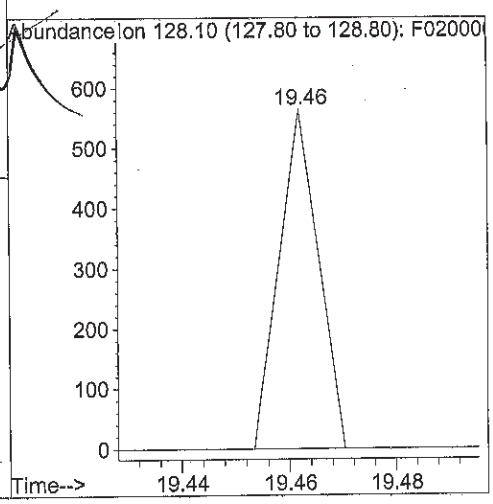
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.03 ug/L
RT: 19.46 min Scan# 1851
Delta R.T. 0.01 min
Lab File: F0200007.D
Acq: 2 Jun 2014 2:50 pm

Tgt Ion:128 Resp: 286



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200007.D Vial: 6
Acq On : 2 Jun 2014 2:50 pm Operator: DN
Sample : 3F40201-06 Inst : GC/MS Ins
Misc : 100cc SVL-505-SA5C-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:41 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1178685	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1115191	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	566657	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	398239m	12.99 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 103.92%		
3) Chloroform-d (SU6)	9.18	84	546131m	12.42 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 99.36%		
4) Methylene Chloride-d2 (SU5	7.06	86	281581	10.95 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 87.60%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	381892m	18.23 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 145.84%#		
6) Benzene-d6 (SU7)	9.93	84	1072166	11.59 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 92.72%		
8) Toluene-d8 (SU3)	12.21	98	1167505	11.03 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.24%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	562049m	12.87 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 102.96%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

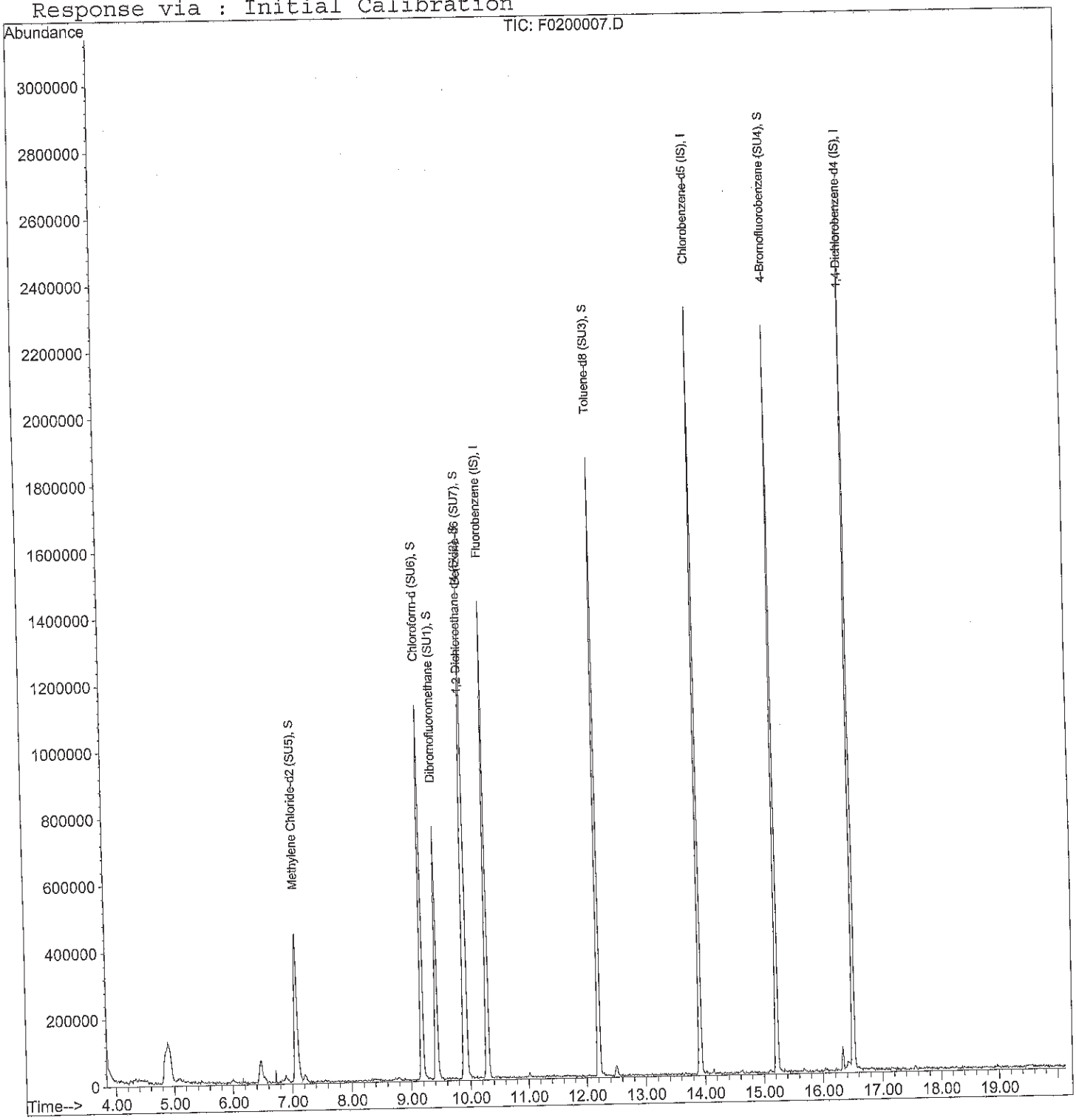
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200007.D
Acq On : 2 Jun 2014 2:50 pm
Sample : 3F40201-06
Misc : 100cc SVL-505-SA5C-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: Jun 3 7:41 19114

Vial: 6
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200008.D
Acq On : 2 Jun 2014 3:19 pm
Sample : 3F40201-07
Misc : 100cc SVL-805-SA5C-SV-10.0-11.0
MS Integration Params: rteint.p
Quant Time: Jun 2 15:55 19114

Vial: 7
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1193768	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1078807	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	575670	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.43	113	396044m	13.30 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	= 106.40%	
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	356497m	12.60 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	= 100.80%	
39) Toluene-d8 (SU3)	12.21	98	1144505	11.37 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	= 90.96%	
58) 4-Bromofluorobenzene (SU4)	15.22	95	525064m	11.90 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery	= 95.20%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.10	85	600	0.20 ~~ug/L #~~ KSM	44
4) Chloromethane	4.51	50	1126	-0.66 ~~ug/L~~	93
5) Vinyl Chloride	4.49	62	394	0.19 ug/L #	43
6) Bromomethane	5.09	96	5536	2.44 ~~ug/L #~~	47
7) Chloroethane	5.31	64	1559	2.26 ug/L	100
8) (F11) Trichlorofluorometha	5.64	101	544	0.17 ~~ug/L #~~	16
11) Acetone	6.46	58	5514	7.13 ~~ug/L #~~	1
12) (IPA) Leak Check Compound	6.47	45	139869	975.05 ~~ug/L #~~ KSM	88
13) Carbon disulfide	6.83	76	12553	1.26 ~~ug/L #~~	82
14) Methylene Chloride	7.08	84	7146	2.18 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.16	59	262	1.29 ~~ug/L #~~	77
16) (MTBE) Methyl-t-butyl ethe	7.42	73	607	0.09 ~~ug/L #~~ KSM	55
18) 1,1-Dichloroethane	7.91	63	343	0.06 ~~ug/L #~~	42
20) 2,2-Dichloropropane	8.82	77	294	0.06 ~~ug/L #~~	1
22) (DIPE) Diisopropyl Ether	8.08	45	320	0.03 ~~ug/L #~~	48
24) Chloroform	9.22	83	2741	0.44 ~~ug/L #~~	18
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	301	0.03 ~~ug/L #~~ KSM	44
26) 1,1,1-Trichloroethane	9.66	97	261	0.05 ~~ug/L #~~	1
29) 1,1-Dichloropropene	9.64	75	263	0.06 ~~ug/L #~~	1
30) Carbon Tetrachloride	9.71	117	346	0.09 ~~ug/L #~~	2
31) Benzene	9.98	78	1078	0.10 ~~ug/L #~~	57
32) 1,2-Dichloroethane	9.97	62	433	0.11 ~~ug/L #~~	43

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200008.D Vial: 7
Acq On : 2 Jun 2014 3:19 pm Operator: DN
Sample : 3F40201-07 Inst : GC/MS Ins
Misc : 100cc SVL-805-SA5C-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 15:55 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

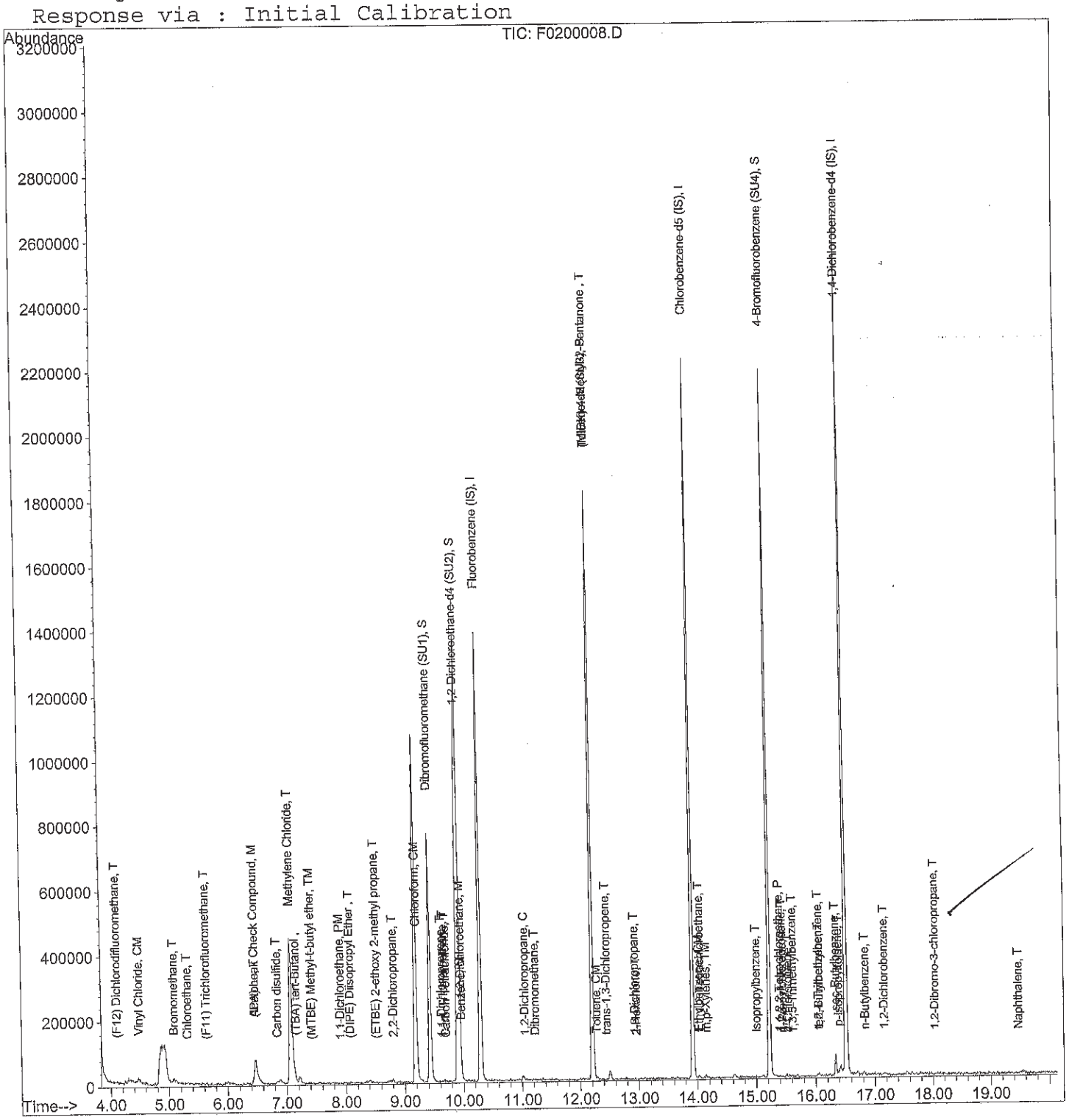
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) 1,2-Dichloropropane	11.06	63	302	0.11 ~~ug/L~~ #	2
35) Dibromomethane	11.22	93	371	0.18 ~~ug/L~~ #	5
40) (MIBK) 4-Methyl-2-Pentanon	12.20	43	11349	5.27 ~~ug/L~~ #	100
41) Toluene	12.29	91	5602	0.38 ug/L #	82
42) trans-1,3-Dichloropropene	12.45	75	254	0.05 ~~ug/L~~ #	4
45) 1,3-Dichloropropane	12.94	76	262	0.05 ~~ug/L~~ #	41
46) 2-Hexanone	12.96	43	1457	0.62 ~~ug/L~~ #	37
50) 1,1,1,2-Tetrachloroethane	14.06	131	274	0.08 ~~ug/L~~ #	6
51) Ethylbenzene	14.03	91	2351	0.14 ~~ug/L~~ #	74
52) m,p-Xylenes	14.16	106	1332	0.22 ug/L #	28
54) Styrene	14.62	104	1712	-0.67 ~~ug/L~~ #	50
56) Isopropylbenzene	15.01	105	479	0.03 ~~ug/L~~ #	55
57) 1,2,3-Trichloropropane	15.45	75	686	0.16 ~~ug/L~~ #	36
60) 1,1,2,2-Tetrachloroethane	15.40	83	265	0.06 ~~ug/L~~ #	18
62) n-Propylbenzene	15.46	91	286	0.01 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.53	91	376	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.63	105	777	0.05 ~~ug/L~~ #	31
65) 4-Chlorotoluene	15.53	91	376	0.03 ~~ug/L~~ #	44
66) tert-Butylbenzene	16.06	119	333	0.03 ~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.07	105	2154	0.14 ~~ug/L~~ #	79
68) sec-Butylbenzene	16.33	105	938	0.05 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.39	119	3549	0.23 ~~ug/L~~ #	60
72) n-Butylbenzene	16.84	91	254	0.02 ~~ug/L~~ #	30
73) 1,2-Dichlorobenzene	17.16	146	317	0.04 ~~ug/L~~ #	24
74) 1,2-Dibromo-3-chloropropan	18.03	75	306	1.34 ~~ug/L~~ #	6
77) Naphthalene	19.47	128	439	0.04 ~~ug/L~~	100

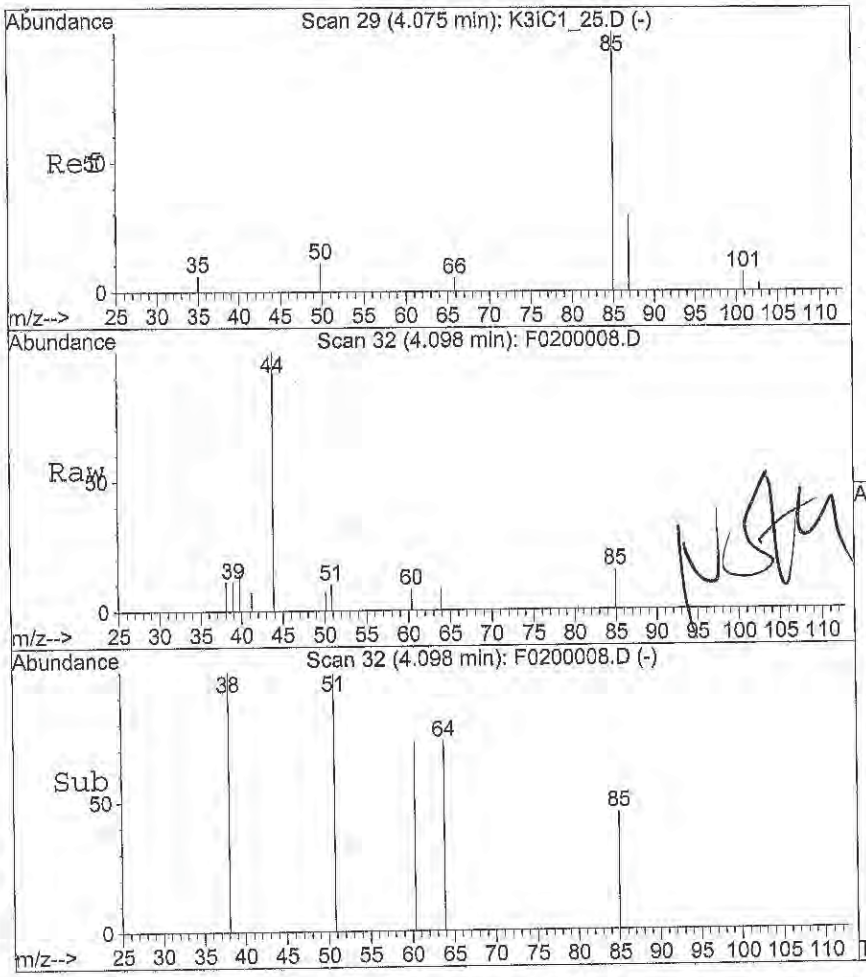
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200008.D Vial: 7
Acq On : 2 Jun 2014 3:19 pm Operator: DN
Sample : 3F40201-07 Inst : GC/MS Ins
Misc : 100cc SVL-805-SA5C-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 15:55 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

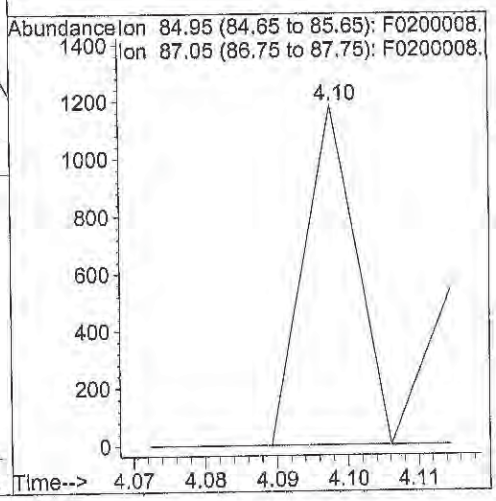


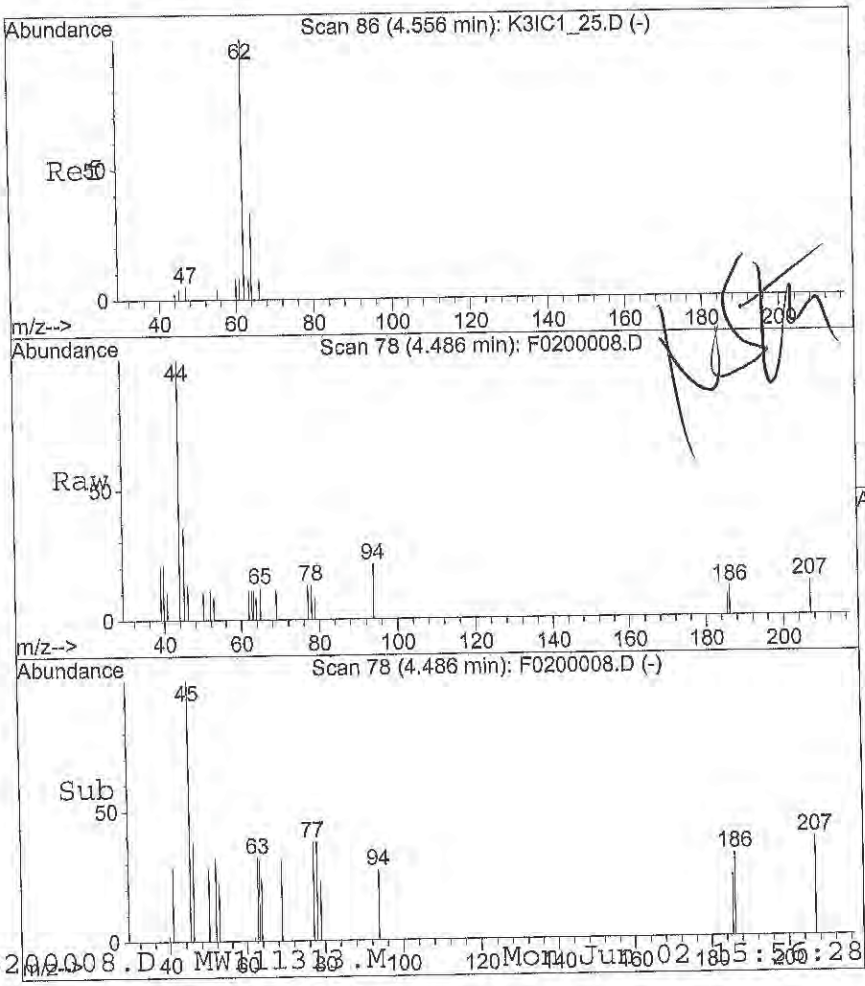


#3
(F12) Dichlorodifluoromethane
Concen: 0.20 ug/L
RT: 4.10 min Scan# 32
Delta R.T. 0.02 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 85 Resp: 600

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

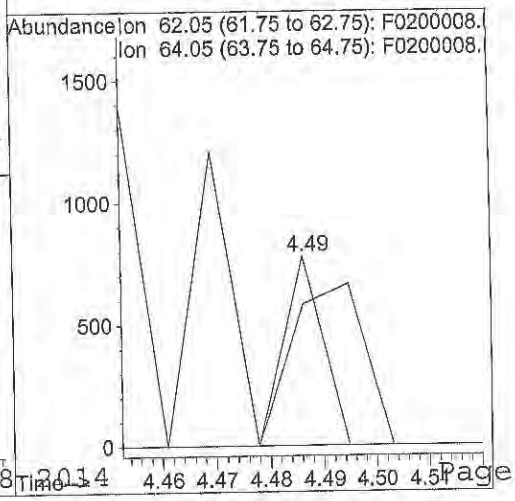


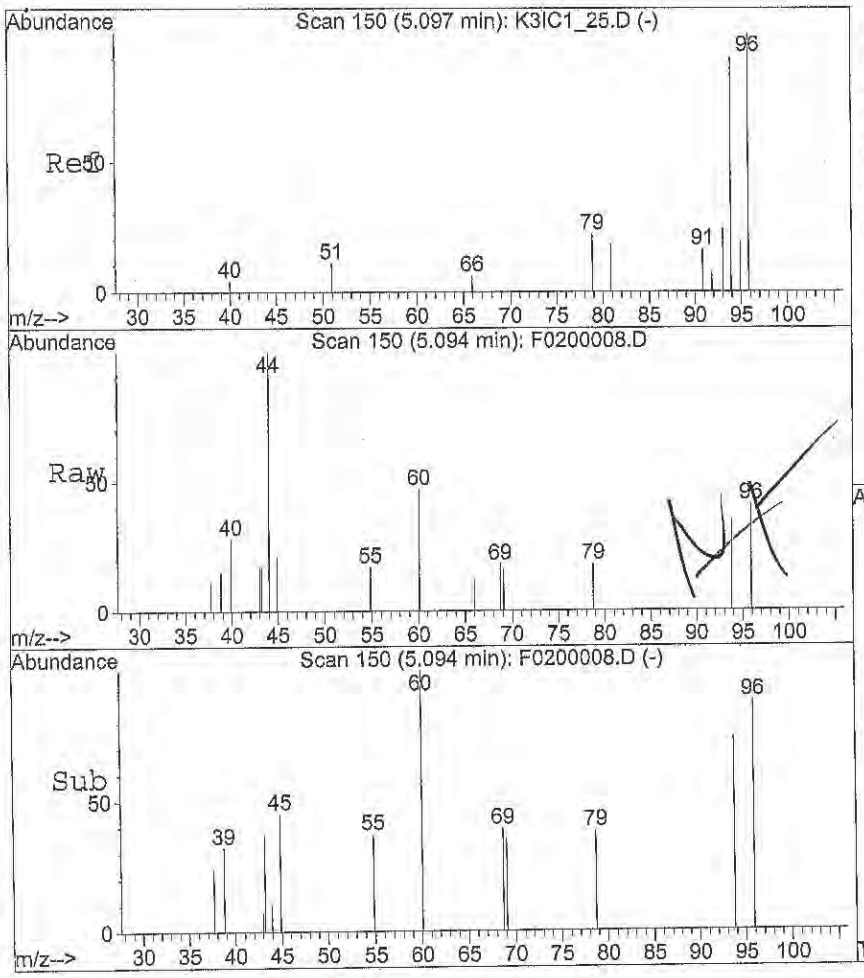


#5
Vinyl Chloride
Concen: 0.19 ug/L
RT: 4.49 min Scan# 78
Delta R.T. -0.07 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 62 Resp: 394

Ion	Ratio	Lower	Upper
62	100		
64	0.0	25.6	38.4#

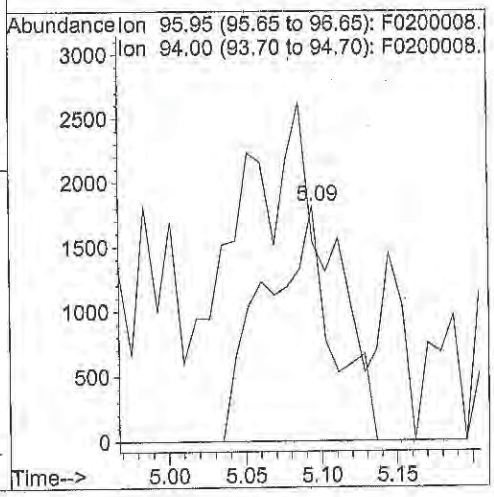


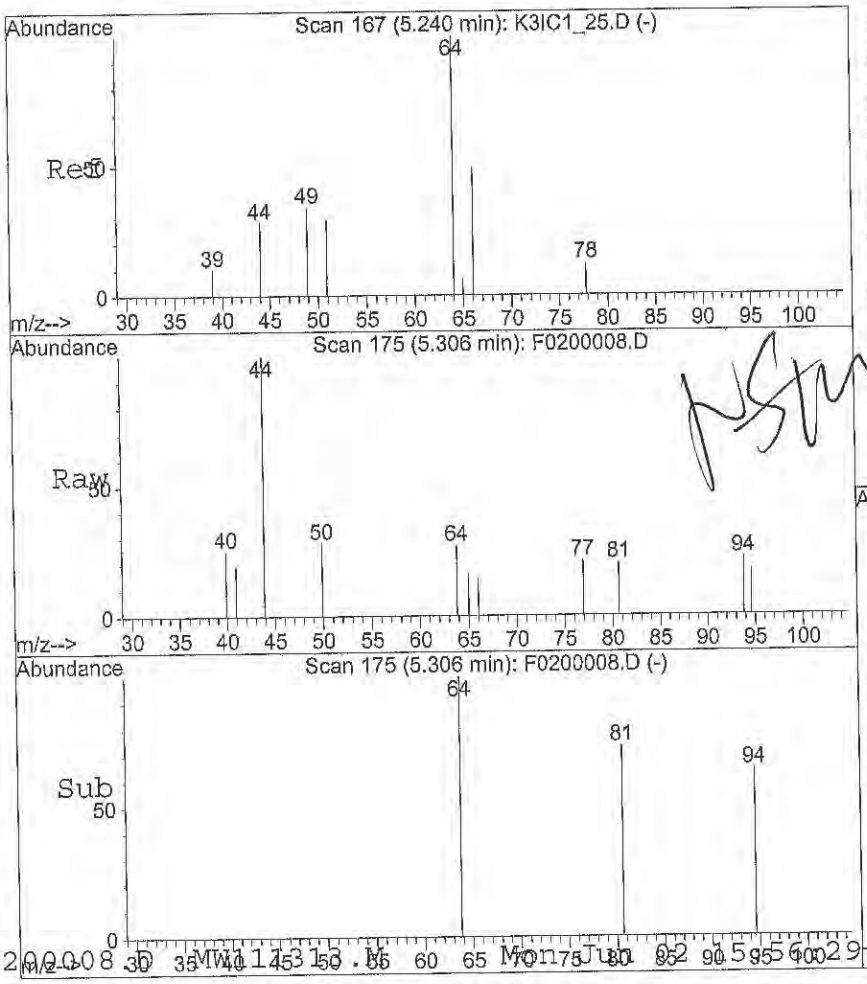


#6
Bromomethane
Concen: 2.44 ug/L
RT: 5.09 min Scan# 150
Delta R.T. -0.00 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 96 Resp: 5536

Ion	Ratio	Lower	Upper
96	100		
94	65.6	101.0	151.4#

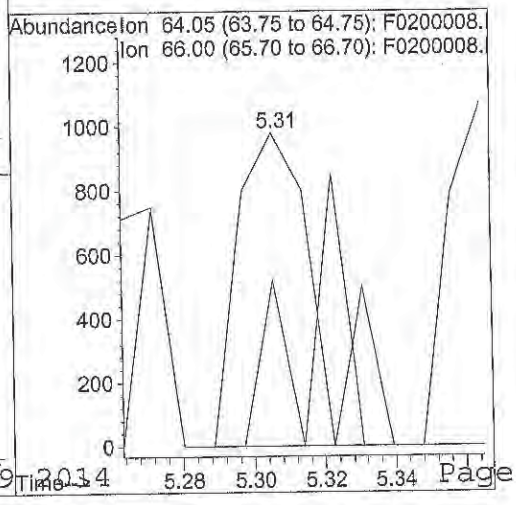


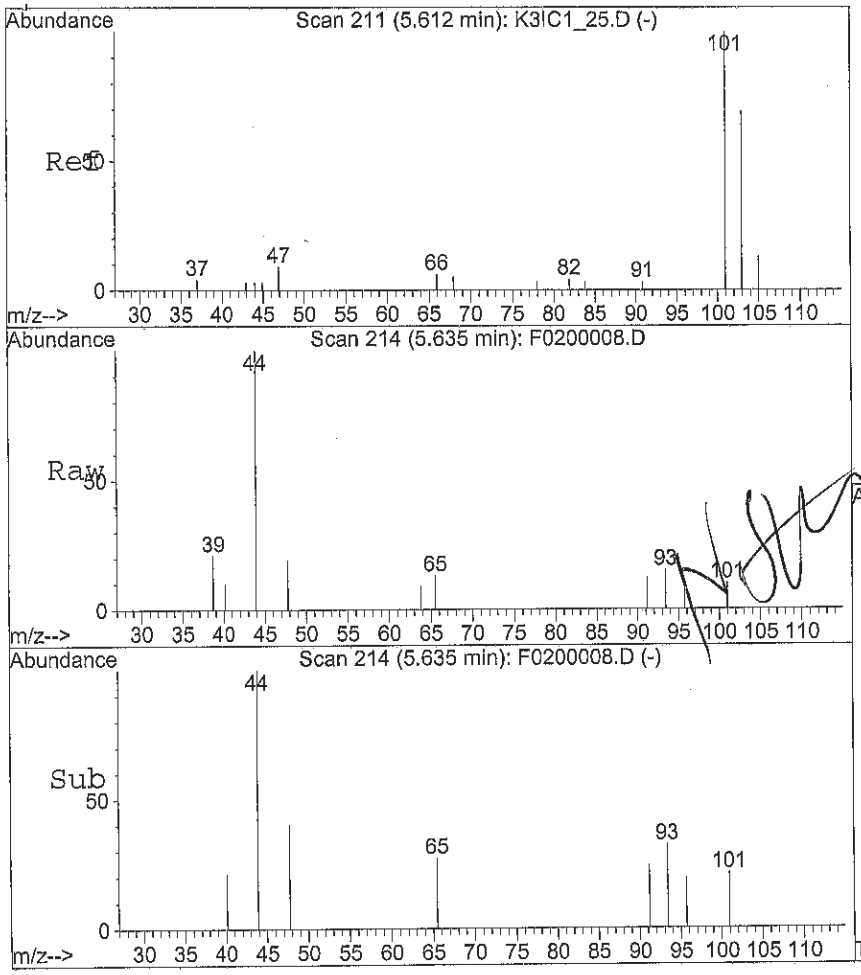


#7
Chloroethane
Concen: 2.26 ug/L
RT: 5.31 min Scan# 175
Delta R.T. 0.07 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 64 Resp: 1559

Ion	Ratio	Lower	Upper
64	100		
66	44.5	35.4	53.0

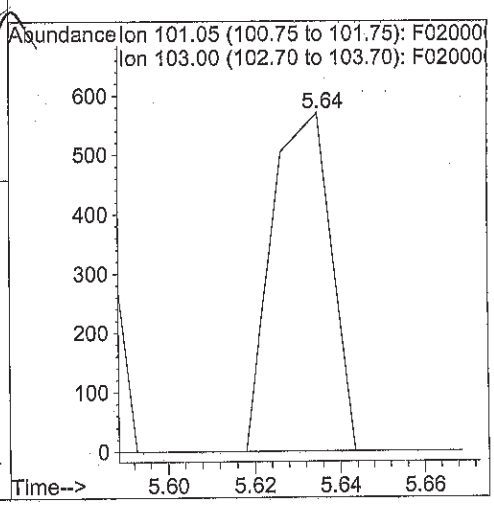


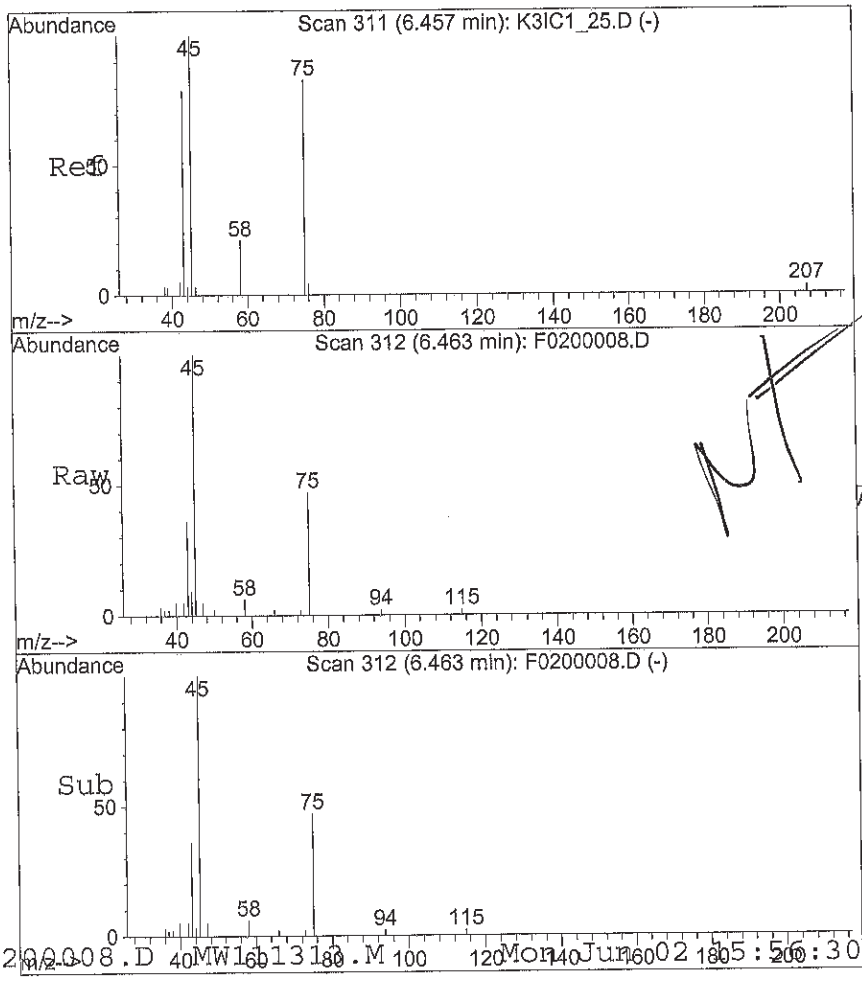


#8
(F11) Trichlorofluoromethane
Concen: 0.17 ug/L
RT: 5.64 min Scan# 214
Delta R.T. 0.02 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:101 Resp: 544

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

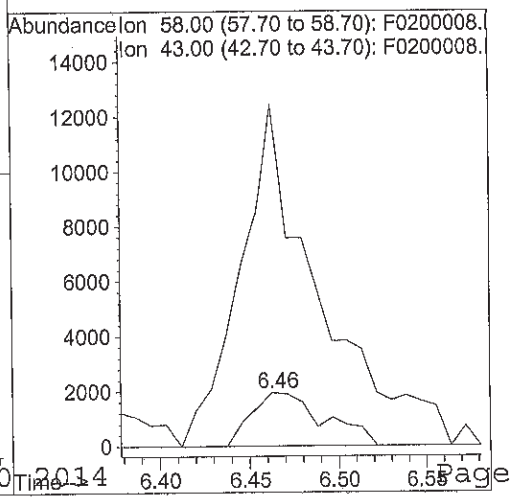


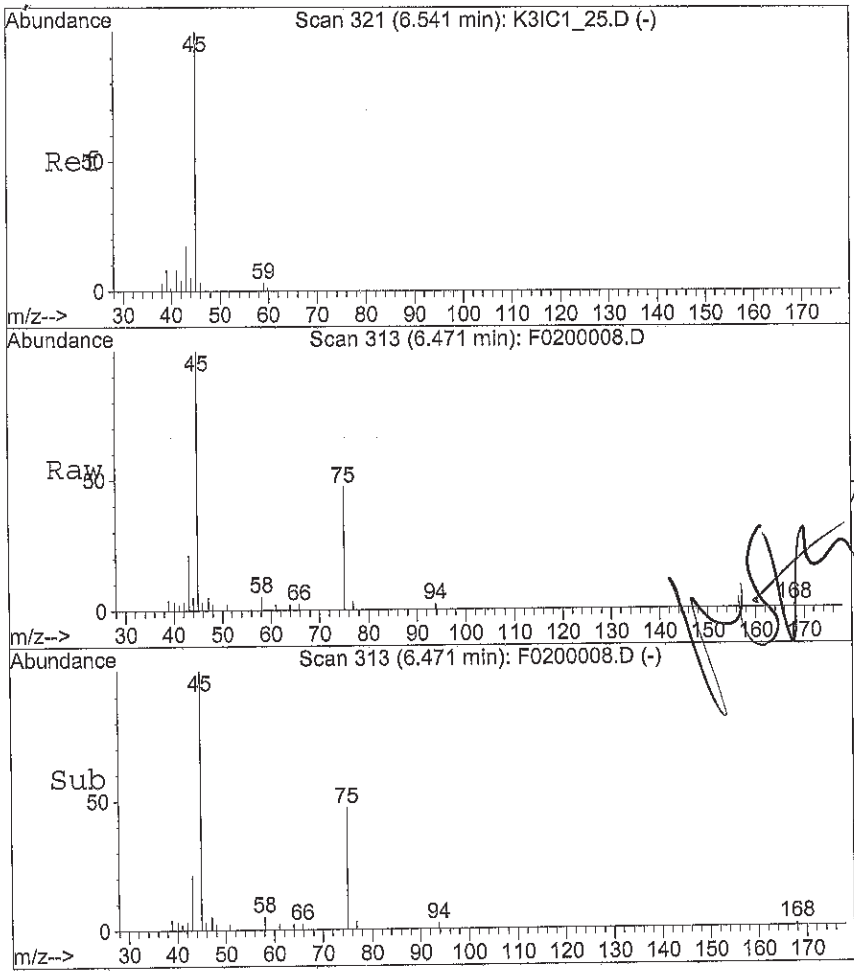


#11
Acetone
Concen: 7.13 ug/L
RT: 6.46 min Scan# 312
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 58 Resp: 5514

Ion	Ratio	Lower	Upper
58	100		
43	706.3	360.9	541.3#

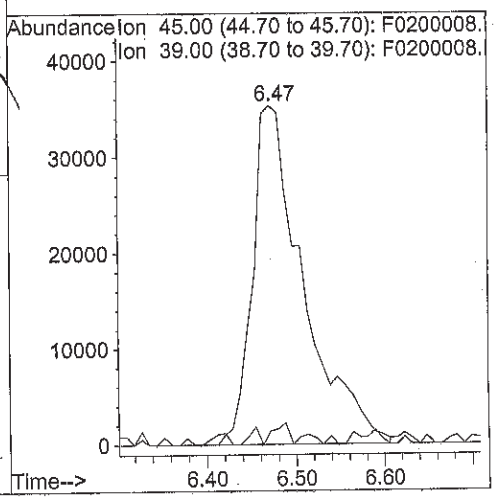


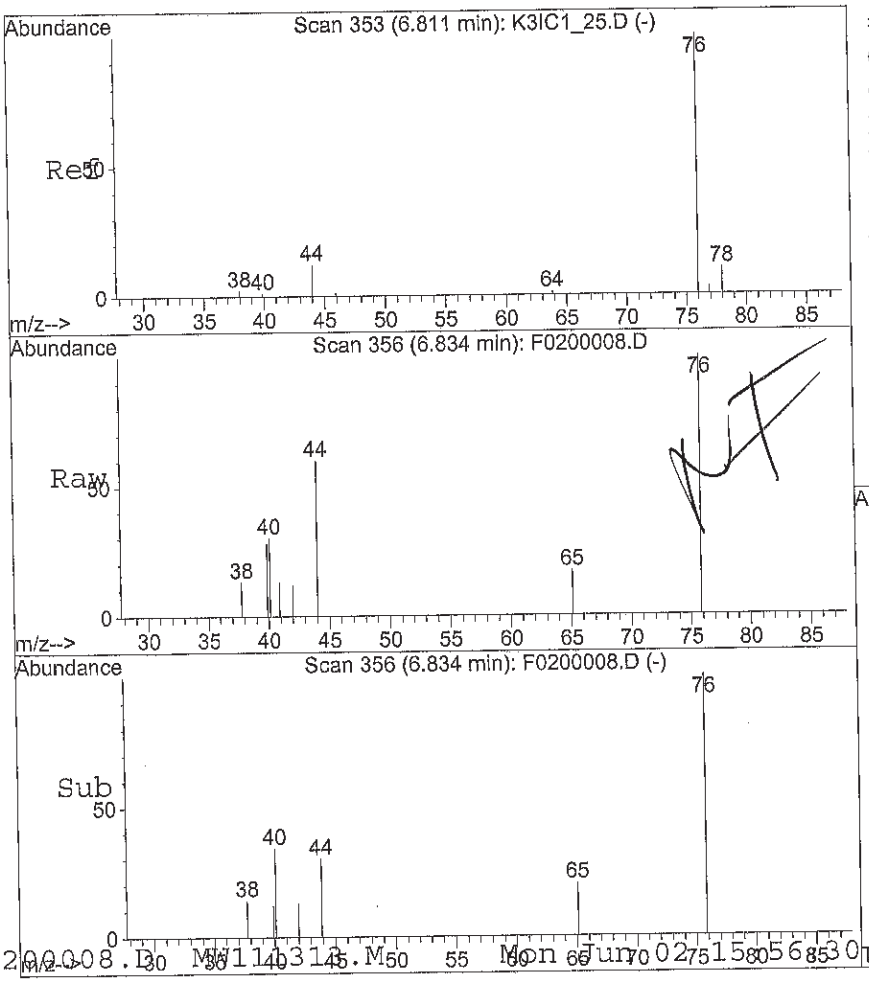


#12
(IPA) Leak Check Compound
Concen: 975.05 ug/L
RT: 6.47 min Scan# 313
Delta R.T. -0.07 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 45 Resp: 139869

Ion	Ratio	Lower	Upper
45	100		
39	2.2	4.9	7.3#

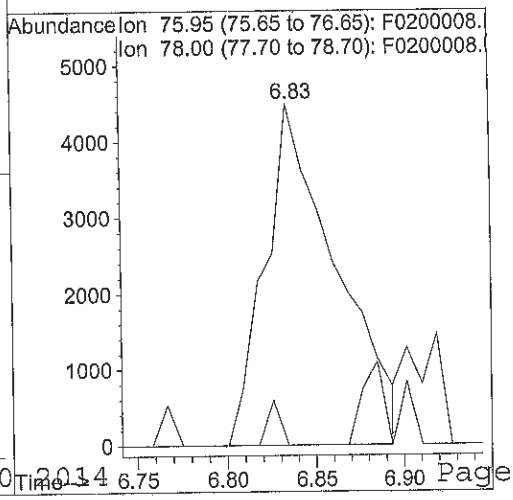


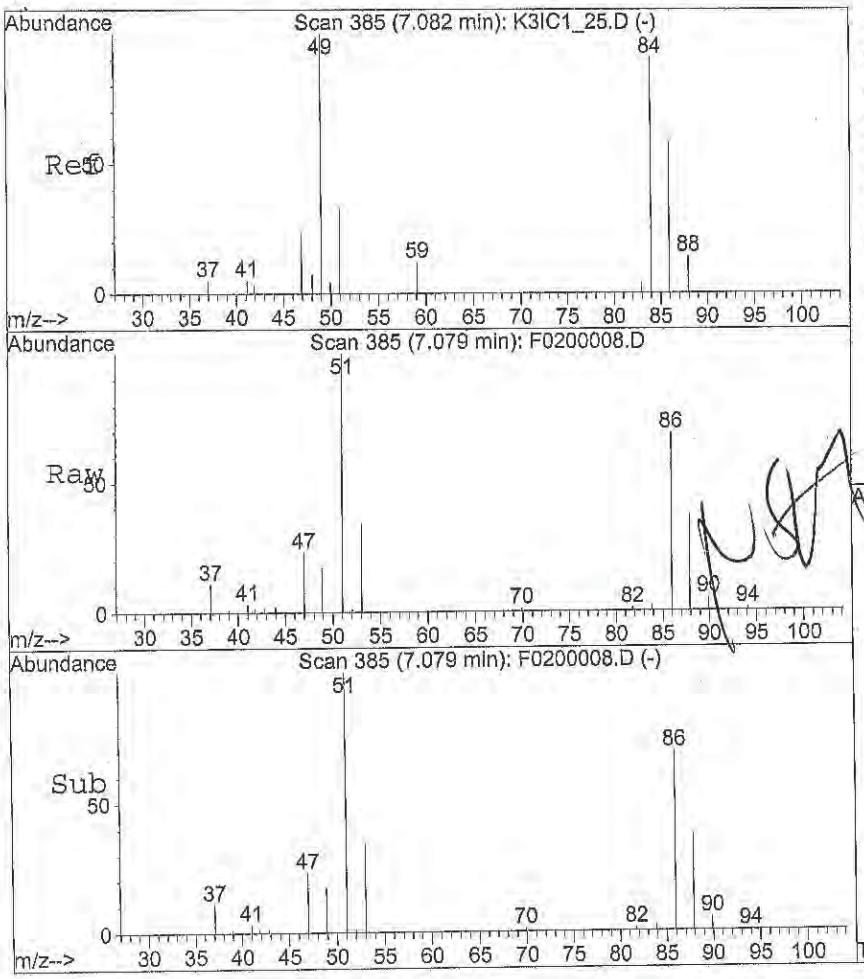


#13
Carbon disulfide
Concen: 1.26 ug/L
RT: 6.83 min Scan# 356
Delta R.T. 0.02 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 76 Resp: 12553

Ion	Ratio	Lower	Upper
76	100		
78	2.4	7.0	10.4#

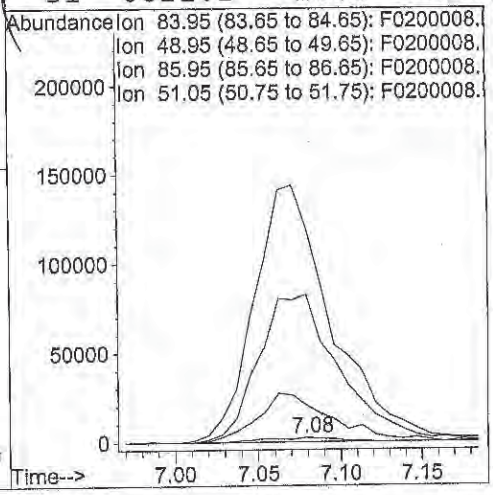


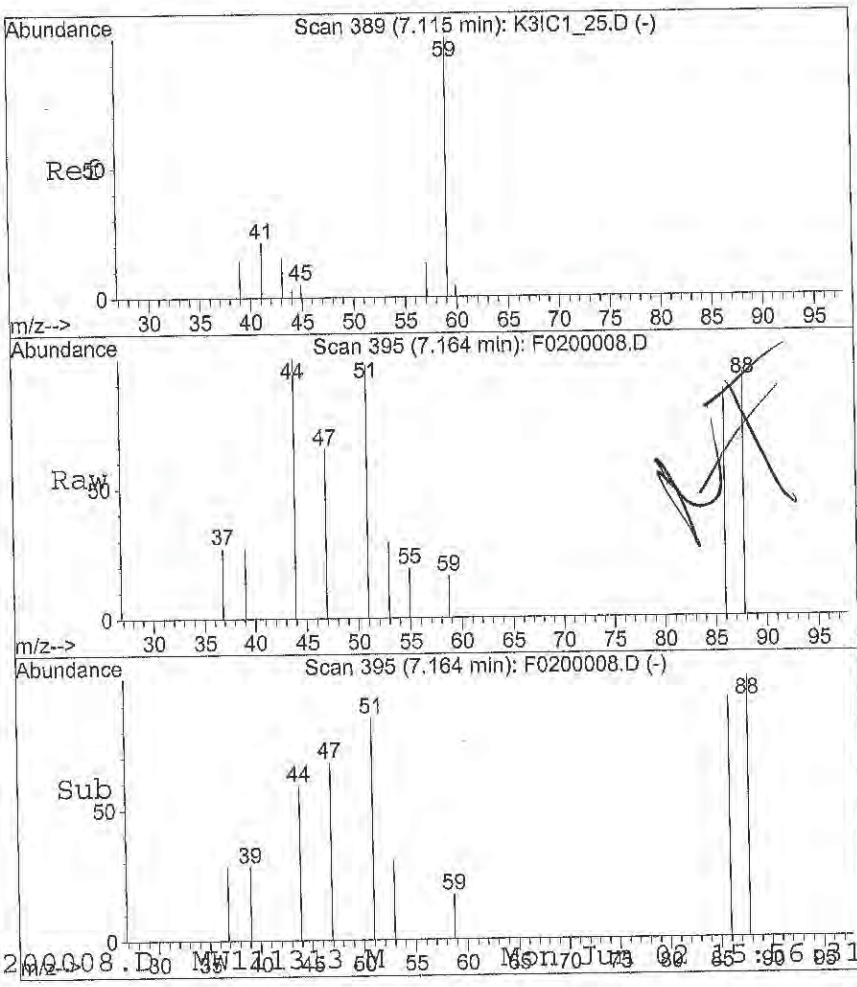


#14
Methylene Chloride
Concen: 2.18 ug/L
RT: 7.08 min Scan# 385
Delta R.T. -0.00 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 84 Resp: 7146

Ion	Ratio	Lower	Upper
84	100		
49	1186.8	89.8	134.6#
86	3955.7	51.1	76.7#
51	6621.2	28.5	42.7#

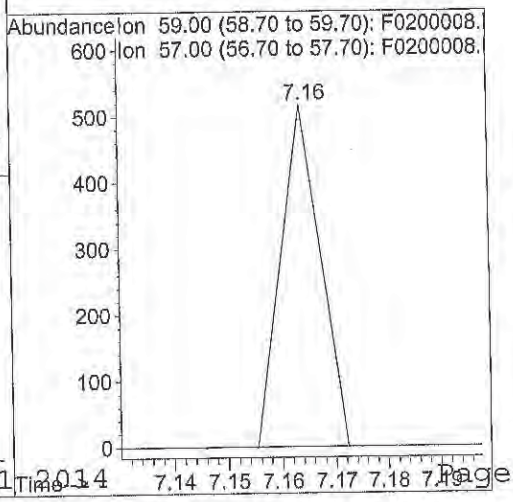


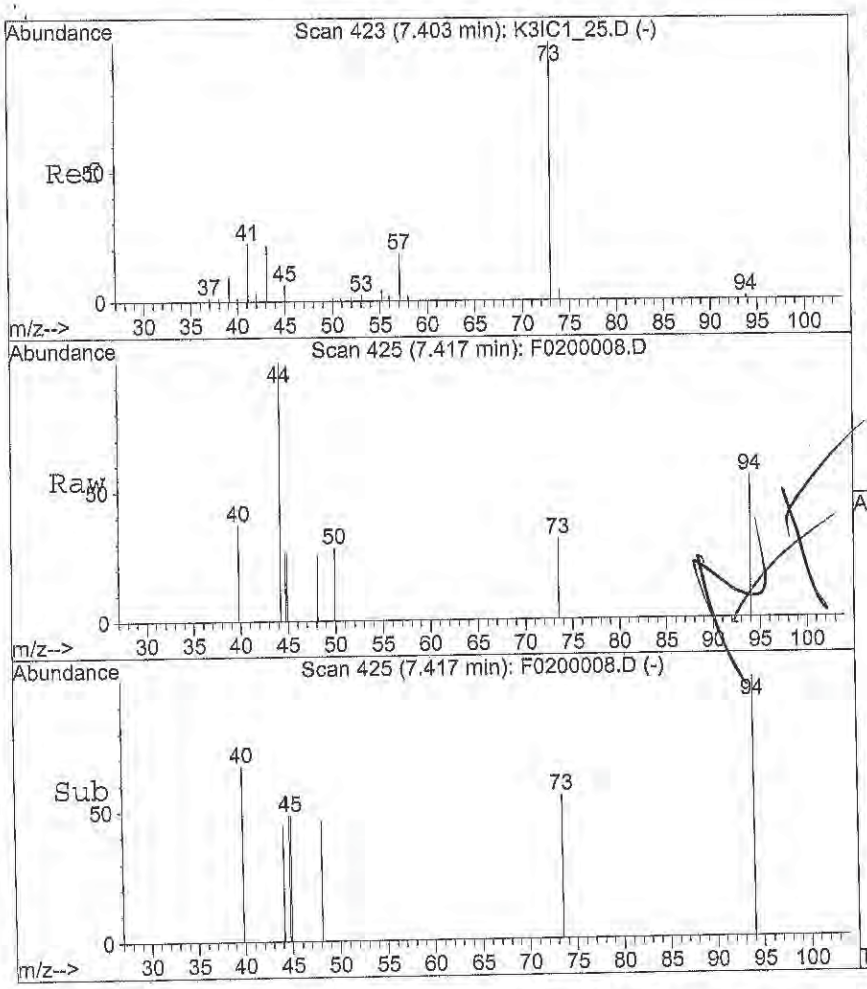


#15
(TBA) tert-Butanol
Concen: 1.29 ug/L
RT: 7.16 min Scan# 395
Delta R.T. 0.05 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 59 Resp: 262

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

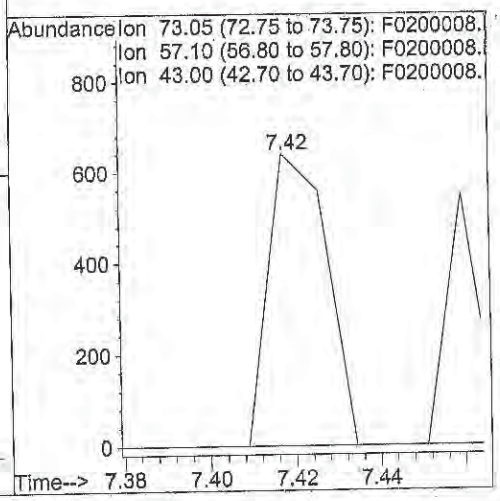


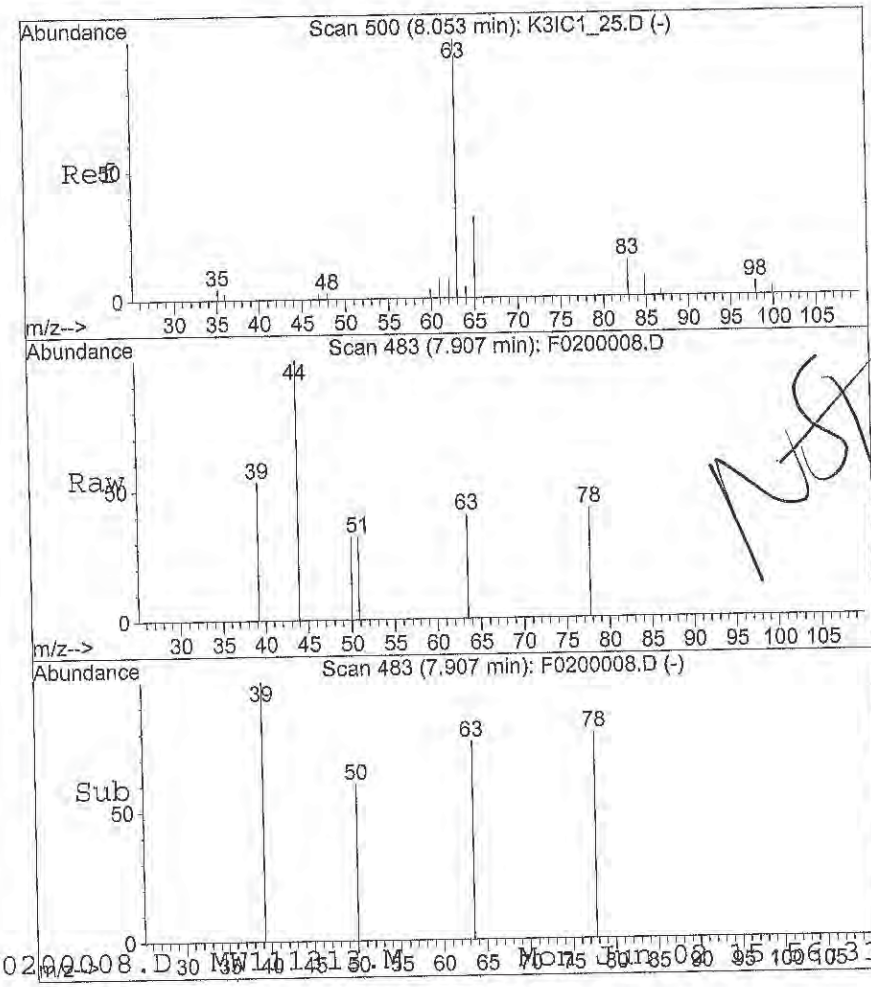


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.09 ug/L
RT: 7.42 min Scan# 425
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 73 Resp: 607

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	0.0	18.4	27.6#

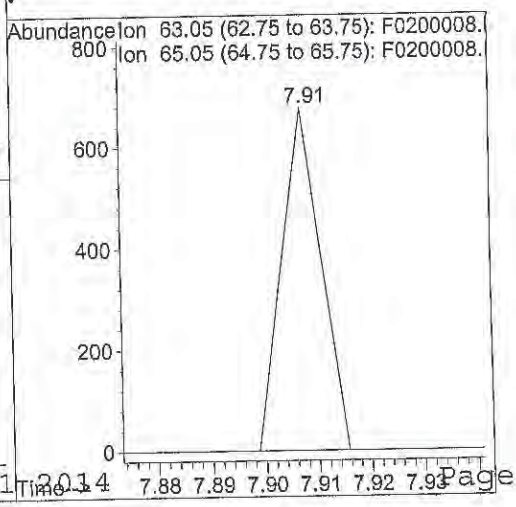


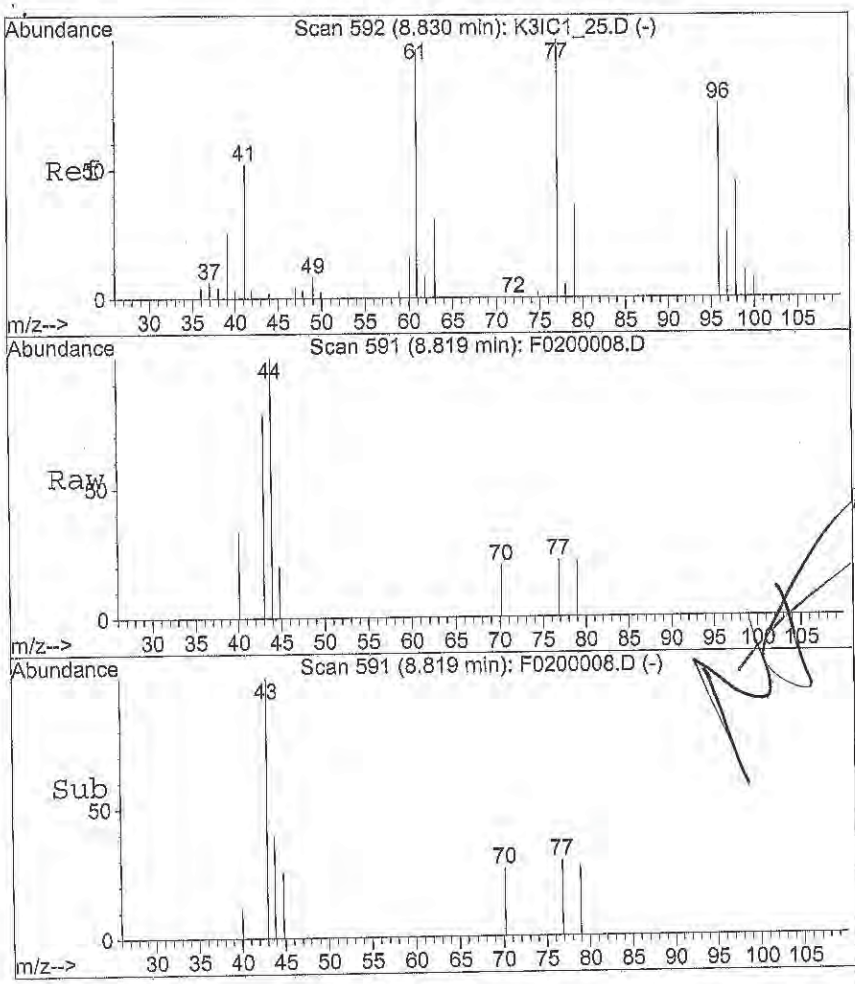


#18
1,1-Dichloroethane
Concen: 0.06 ug/L
RT: 7.91 min Scan# 483
Delta R.T. -0.15 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 63 Resp: 343

Ion	Ratio	Lower	Upper
63	100		
65	0.0	25.8	38.8#

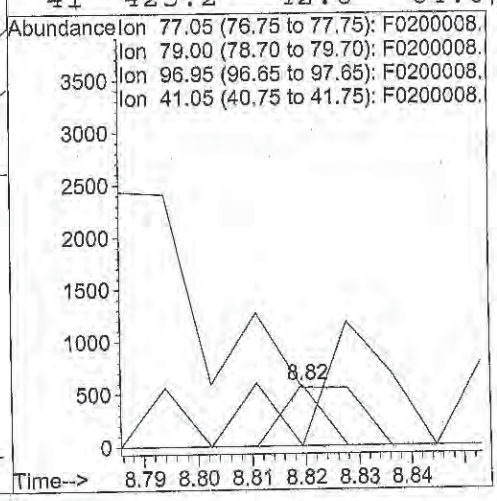


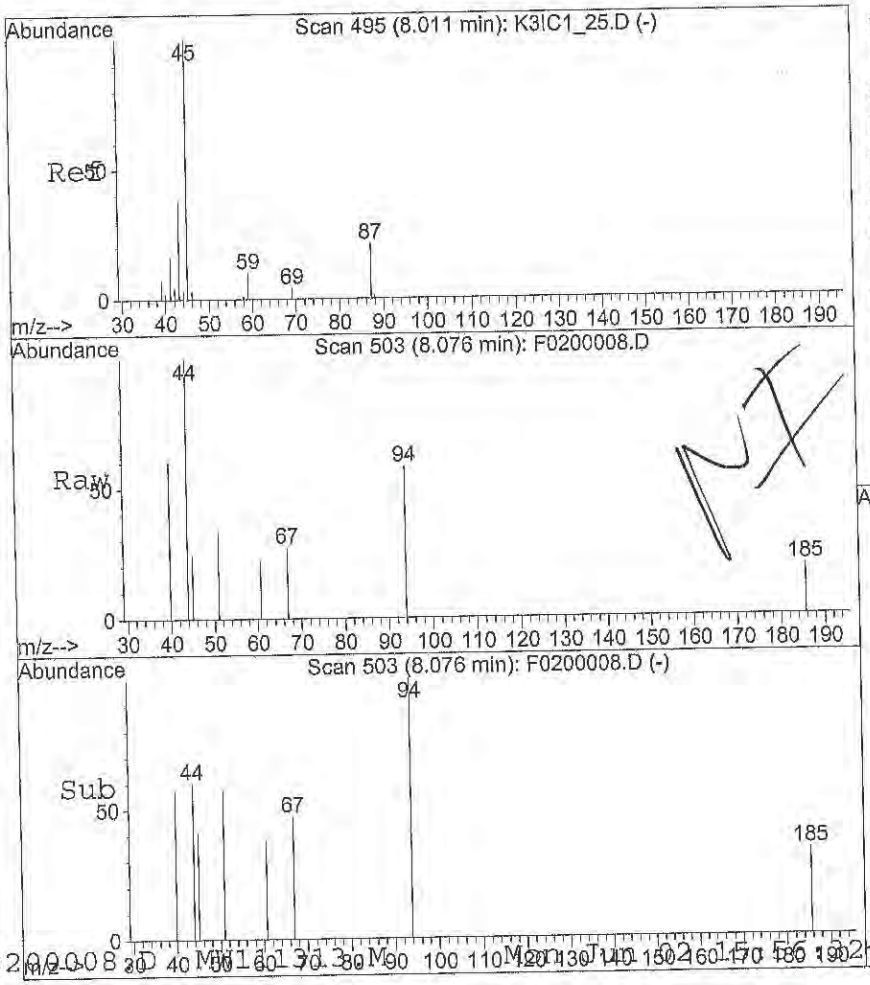


#20
2,2-Dichloropropane
Concen: 0.06 ug/L
RT: 8.82 min Scan# 591
Delta R.T. -0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 77 Resp: 294

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	425.2	42.6	64.0#

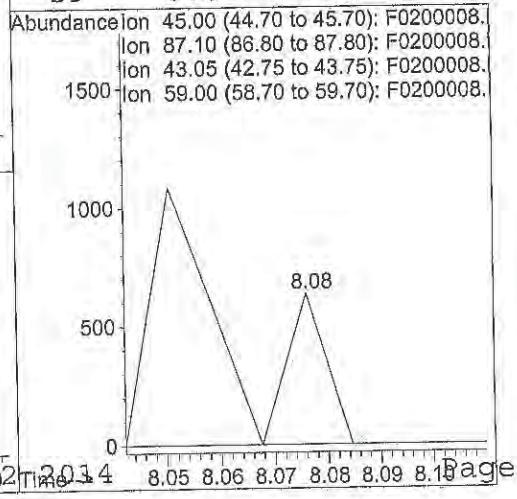


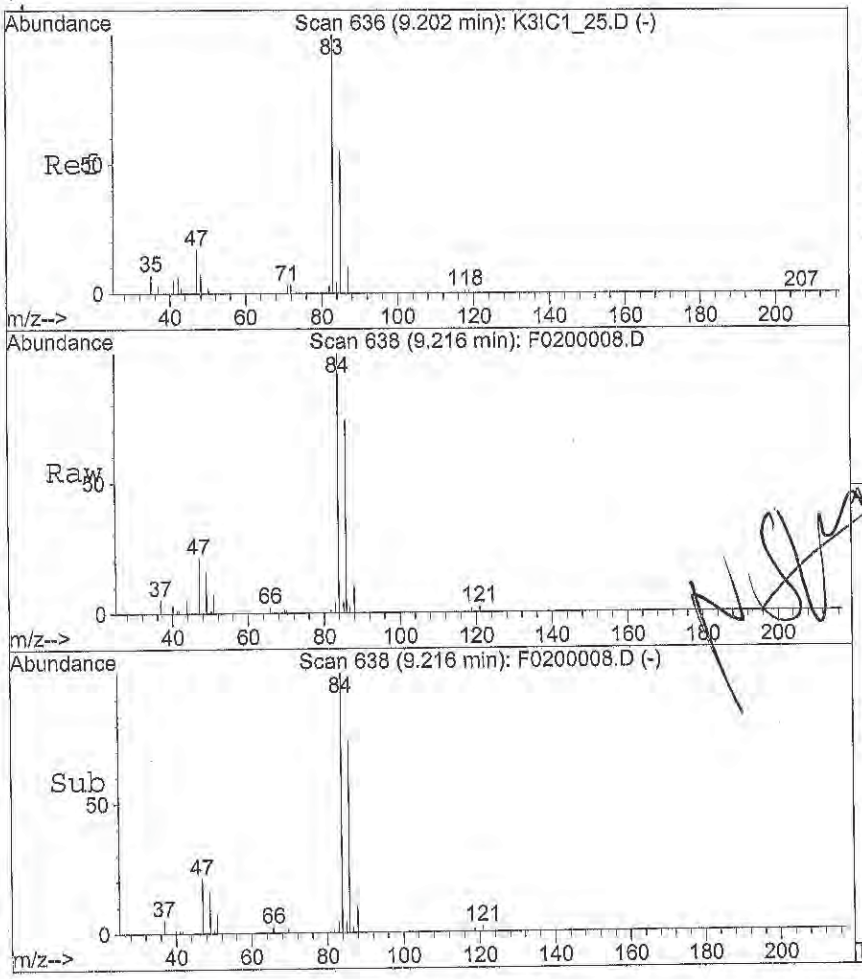


#22
(DIPE) Diisopropyl Ether
Concen: 0.03 ug/L
RT: 8.08 min Scan# 503
Delta R.T. 0.07 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 45 Resp: 320

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

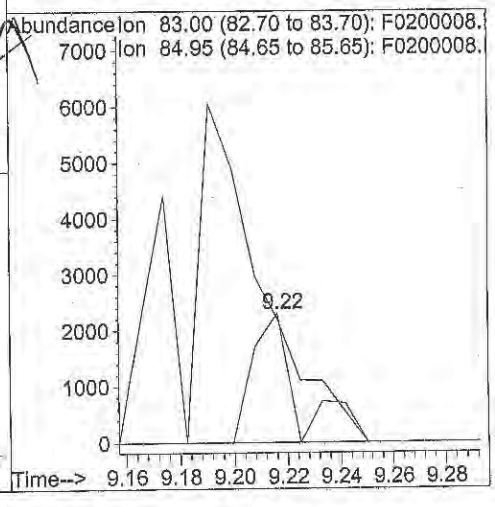


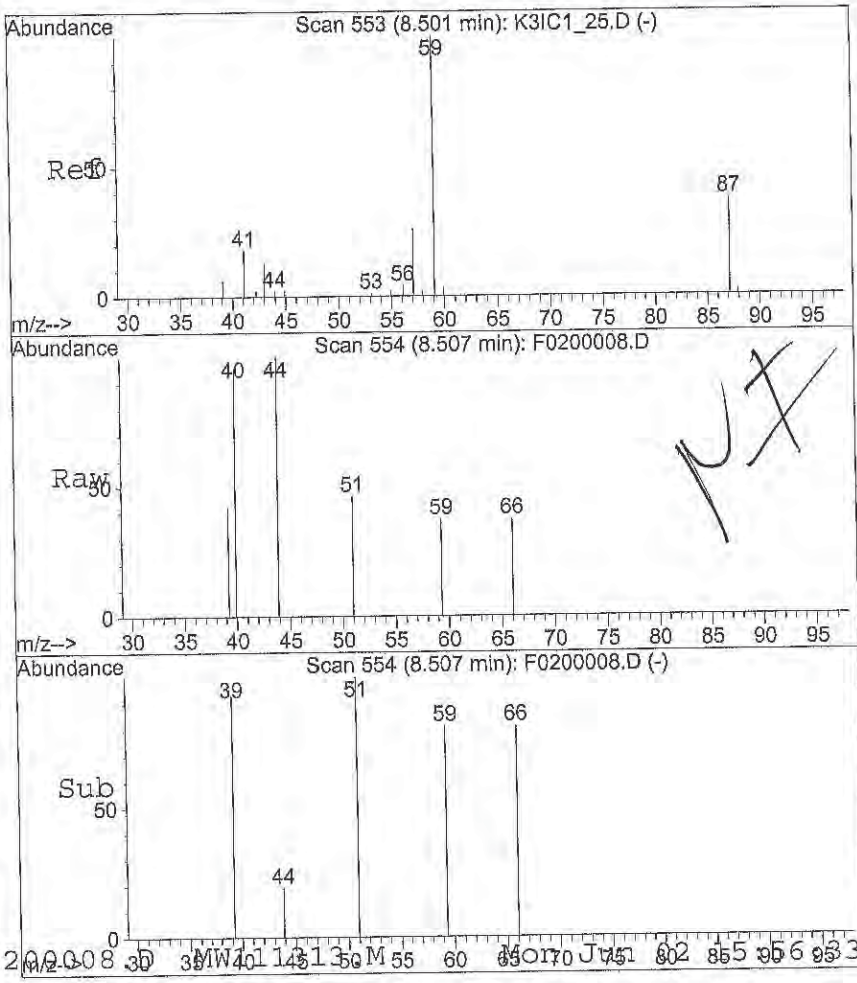


#24
Chloroform
Concen: 0.44 ug/L
RT: 9.22 min Scan# 638
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 83 Resp: 2741

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.8	77.6#

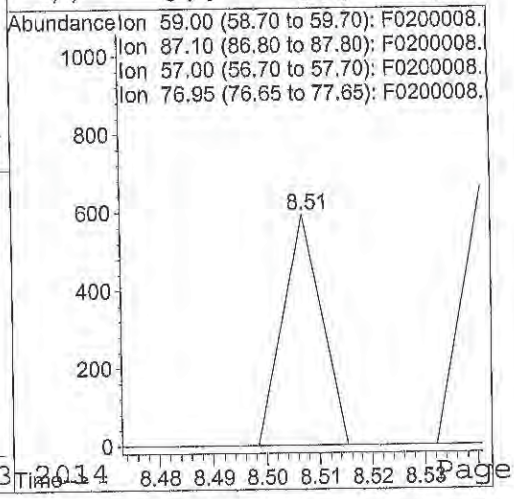


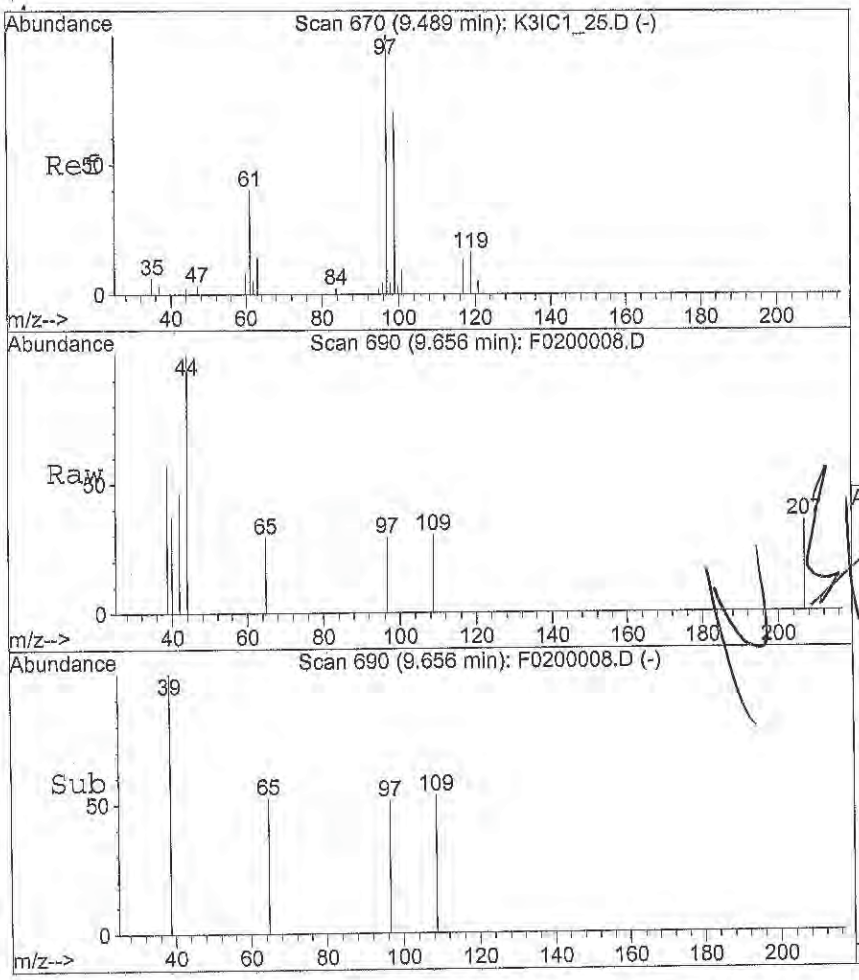


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.03 ug/L
RT: 8.51 min Scan# 554
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 59 Resp: 301

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	0.0	0.0	0.0

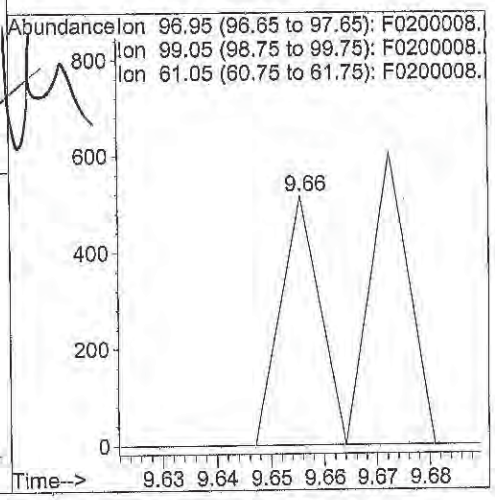


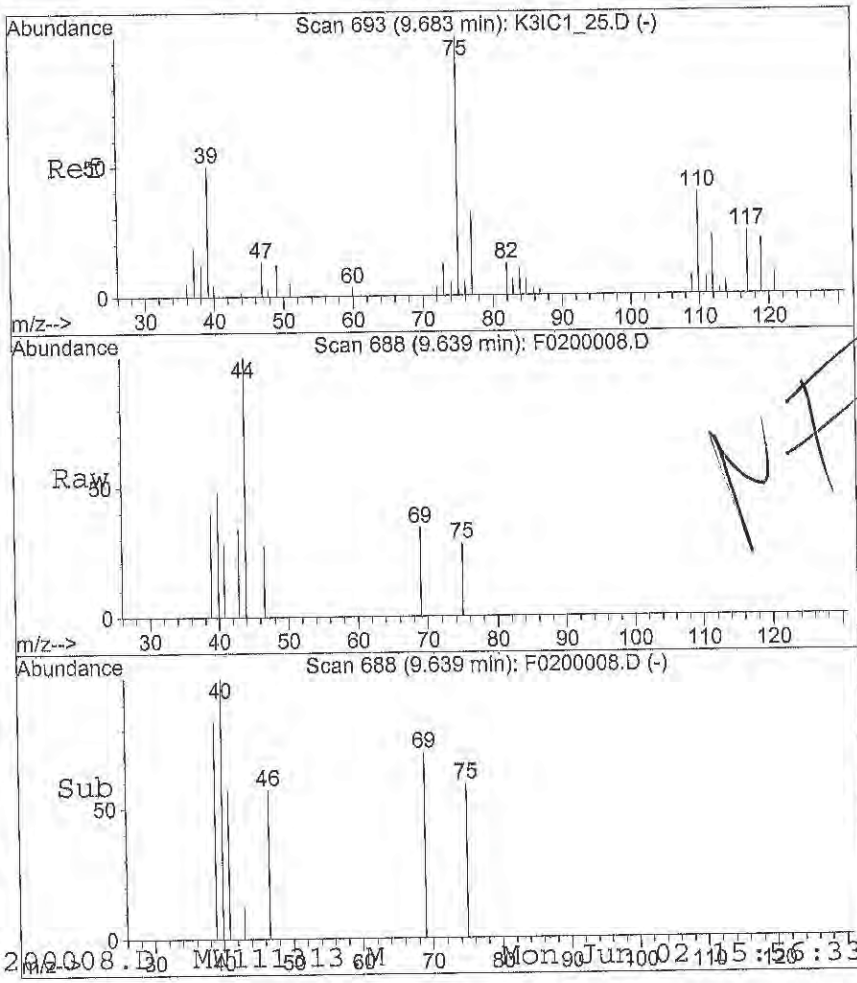


#26
1,1,1-Trichloroethane
Concen: 0.05 ug/L
RT: 9.66 min Scan# 690
Delta R.T. 0.17 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 97 Resp: 261

Ion	Ratio	Lower	Upper
97	100		
99	0.0	54.7	82.1#
61	117.6	32.3	48.5#

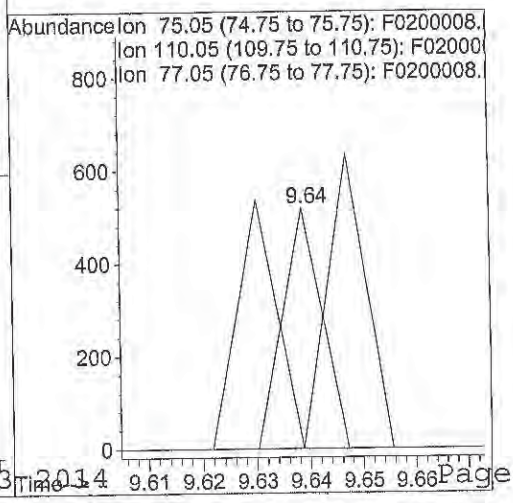


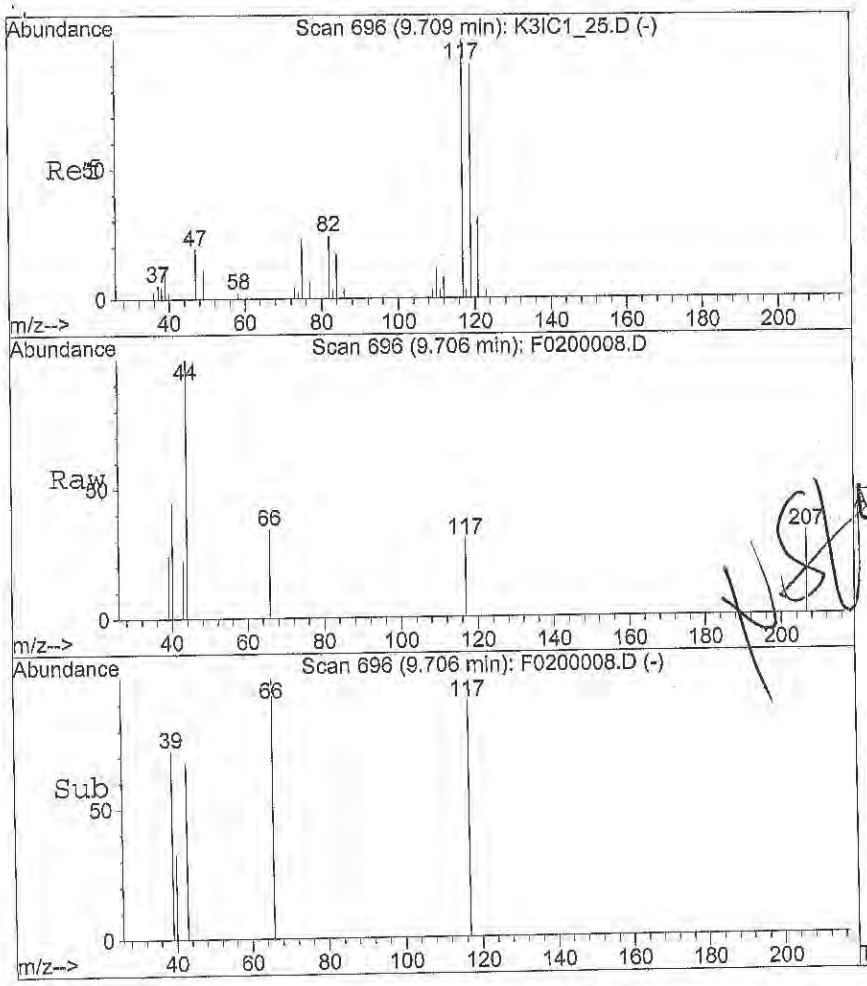


#29
1,1-Dichloropropene
Concen: 0.06 ug/L
RT: 9.64 min Scan# 688
Delta R.T. -0.04 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 75 Resp: 263

Ion	Ratio	Lower	Upper
75	100		
110	103.4	29.0	43.6#
77	122.4	25.0	37.4#

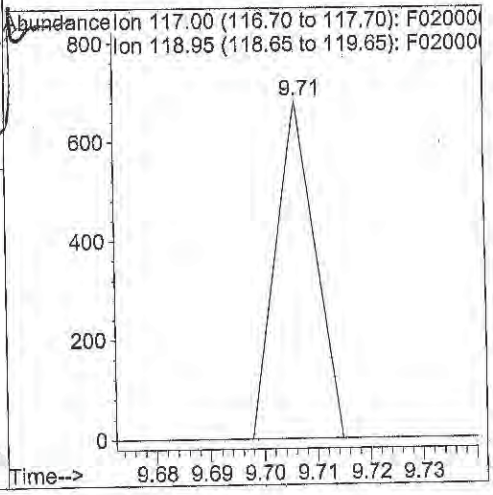


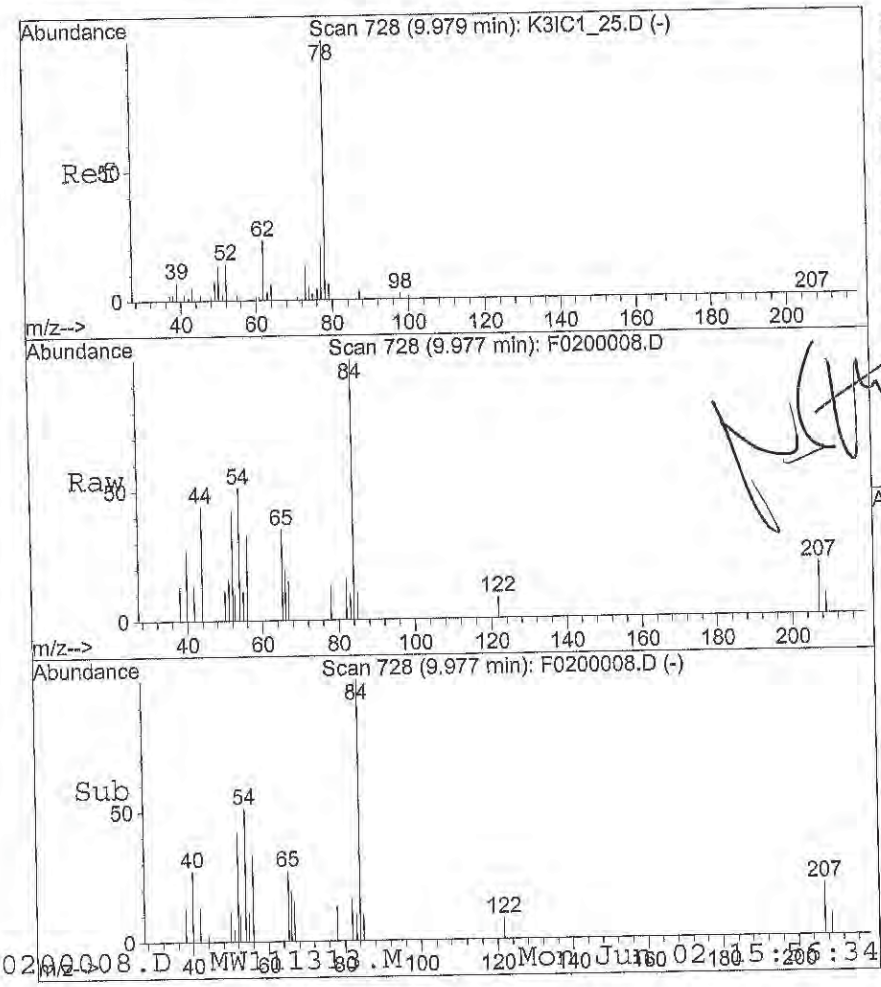


#30
Carbon Tetrachloride
Concen: 0.09 ug/L
RT: 9.71 min Scan# 696
Delta R.T. -0.00 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:117 Resp: 346

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.8	113.8#

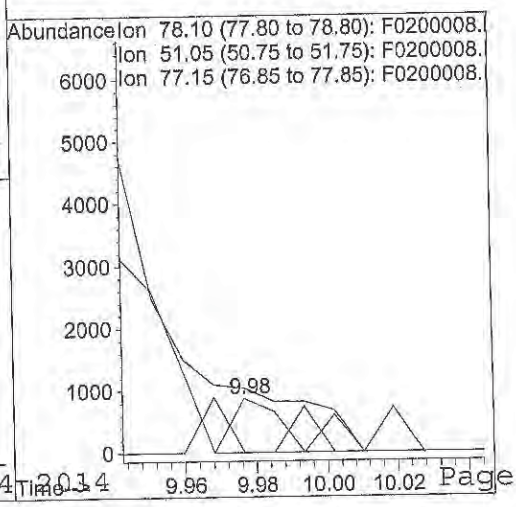


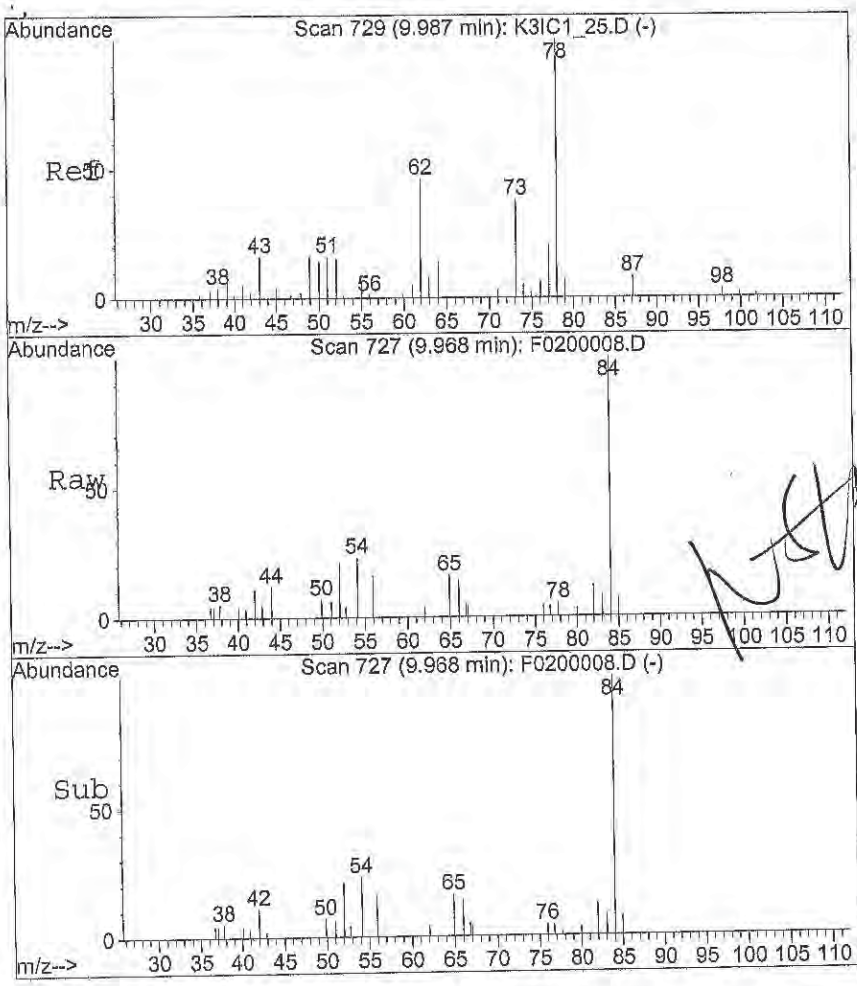


#31
Benzene
Concen: 0.10 ug/L
RT: 9.98 min Scan# 728
Delta R.T. -0.00 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 78 Resp: 1078

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	41.9	16.6	24.8#

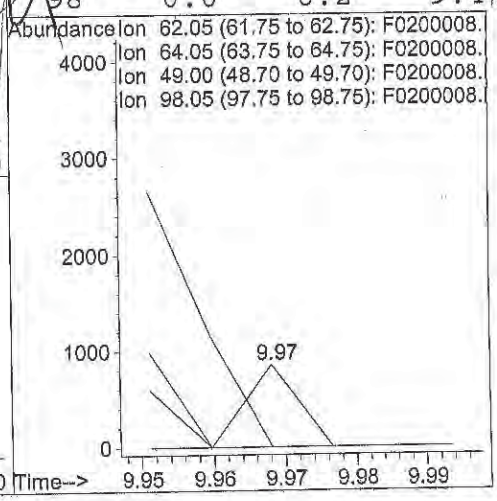


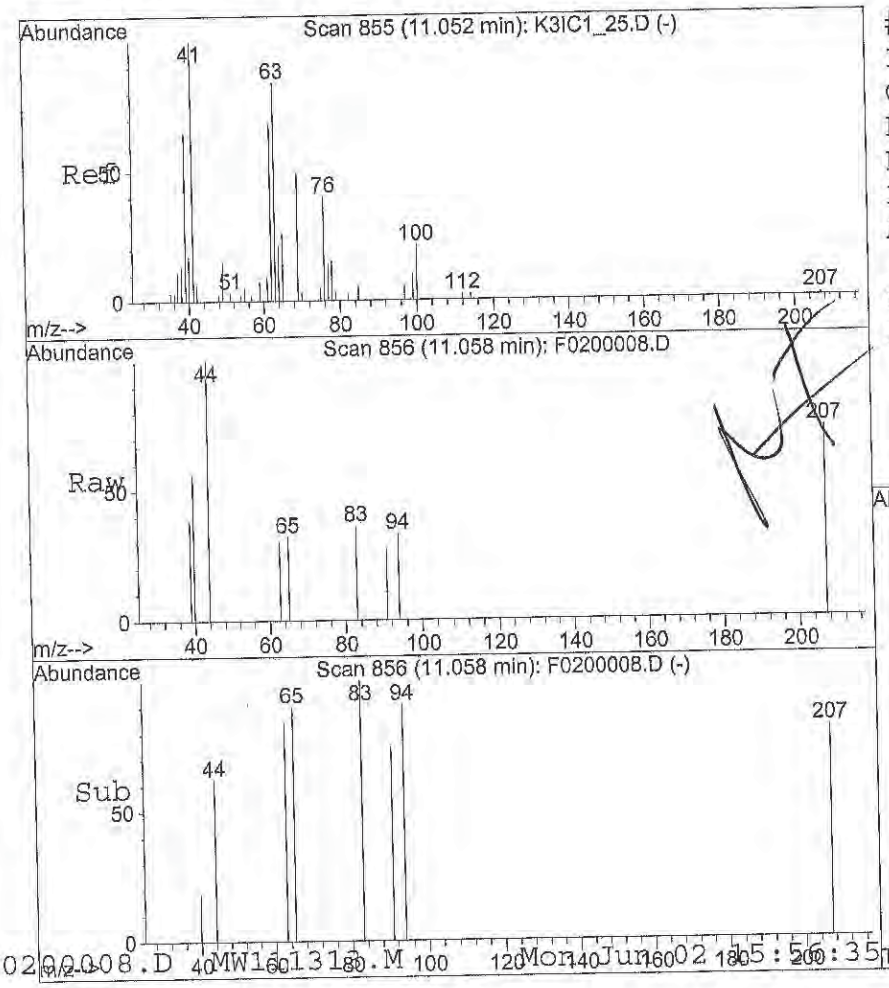


#32
1,2-Dichloroethane
Concen: 0.11 ug/L
RT: 9.97 min Scan# 727
Delta R.T. -0.02 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 62 Resp: 433

Ion	Ratio	Lower	Upper
62	100		
64	0.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

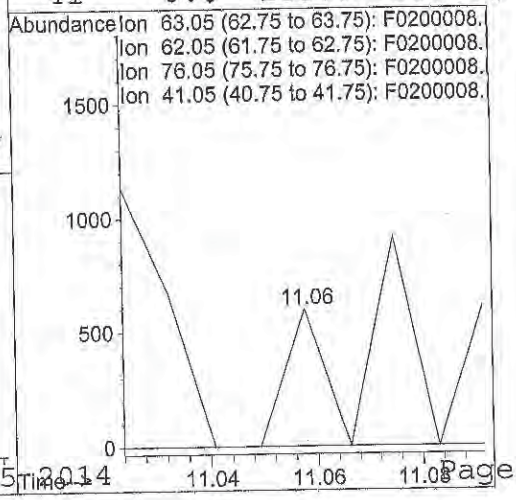


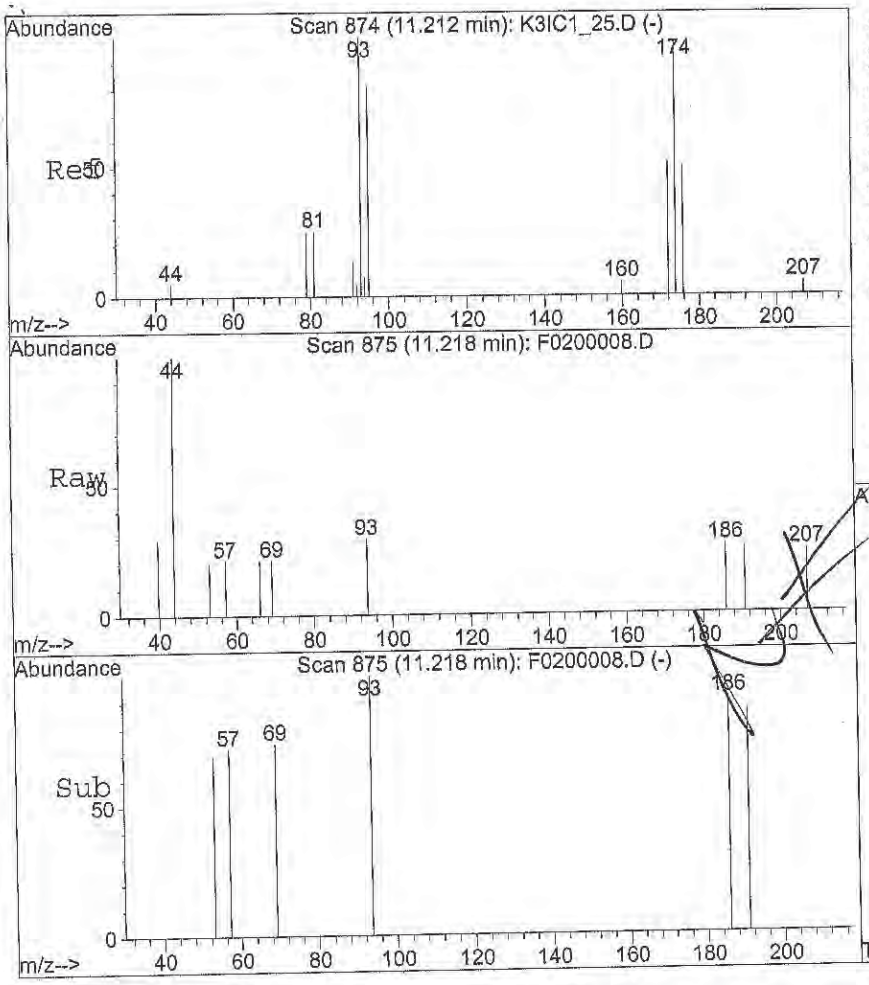


#34
1,2-Dichloropropane
Concen: 0.11 ug/L
RT: 11.06 min Scan# 856
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 63 Resp: 302

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

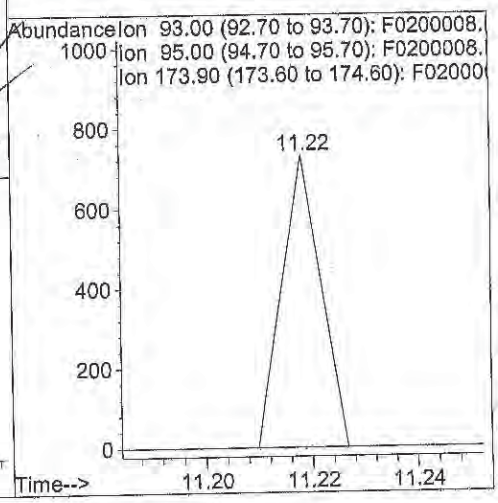


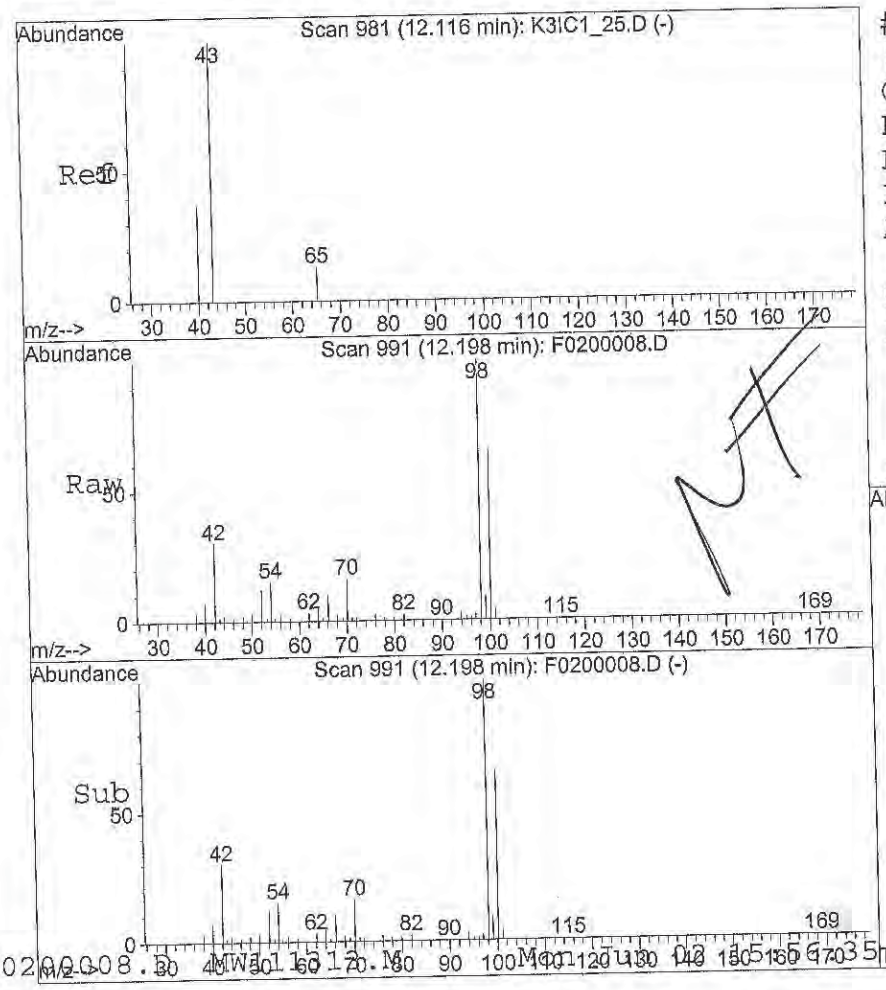


#35
Dibromomethane
Concen: 0.18 ug/L
RT: 11.22 min Scan# 875
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 93 Resp: 371

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

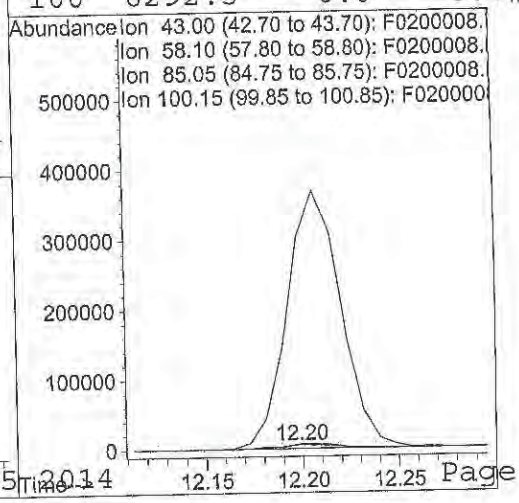


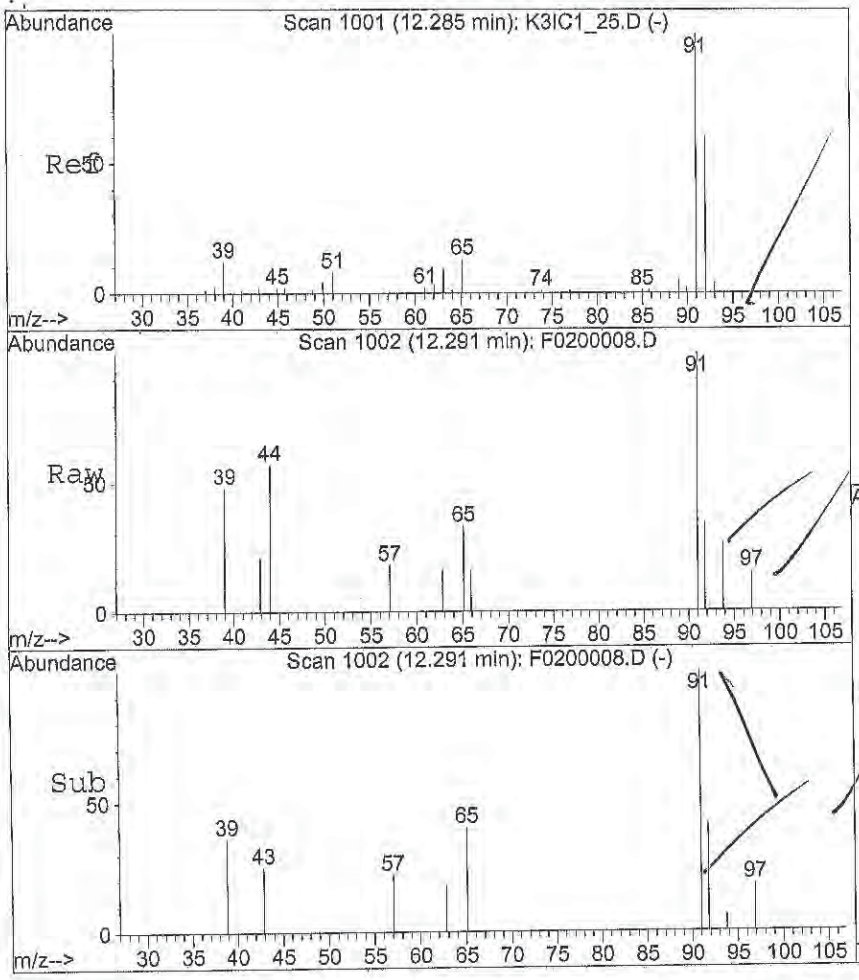


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 5.27 ug/L
RT: 12.20 min Scan# 991
Delta R.T. 0.08 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 43 Resp: 11349

Ion	Ratio	Lower	Upper
43	100		
58	111.1	0.0	0.0#
85	6.2	0.0	0.0#
100	6292.3	0.0	0.0#

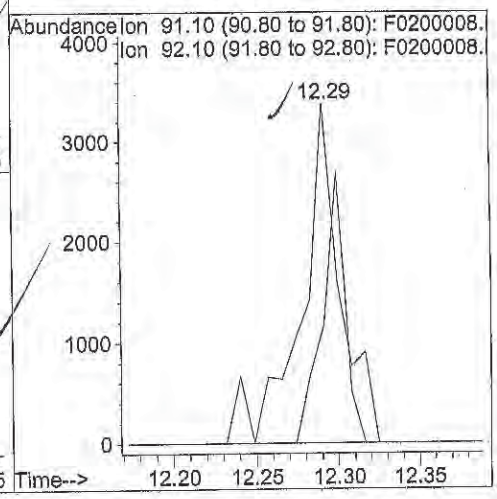


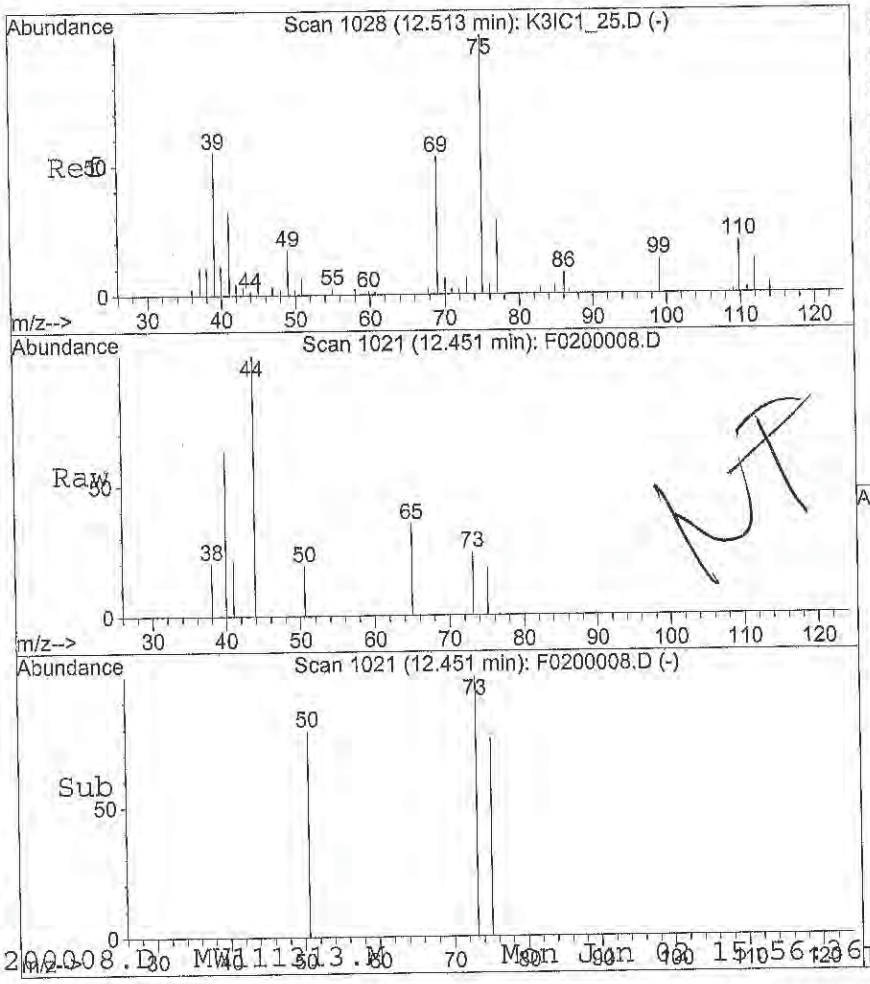


#41
Toluene
Concen: 0.38 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 91 Resp: 5602

Ion	Ratio	Lower	Upper
91	100		
92	45.4	47.4	71.0#

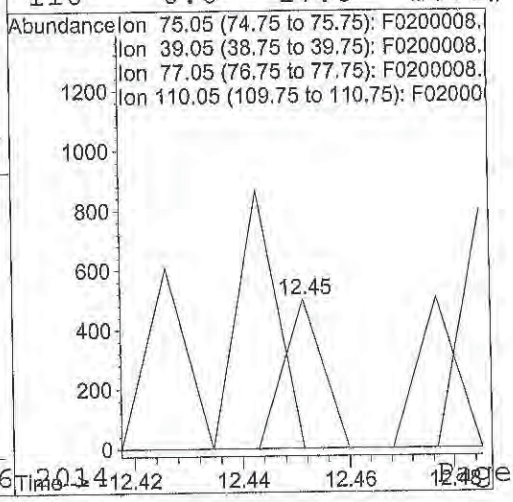


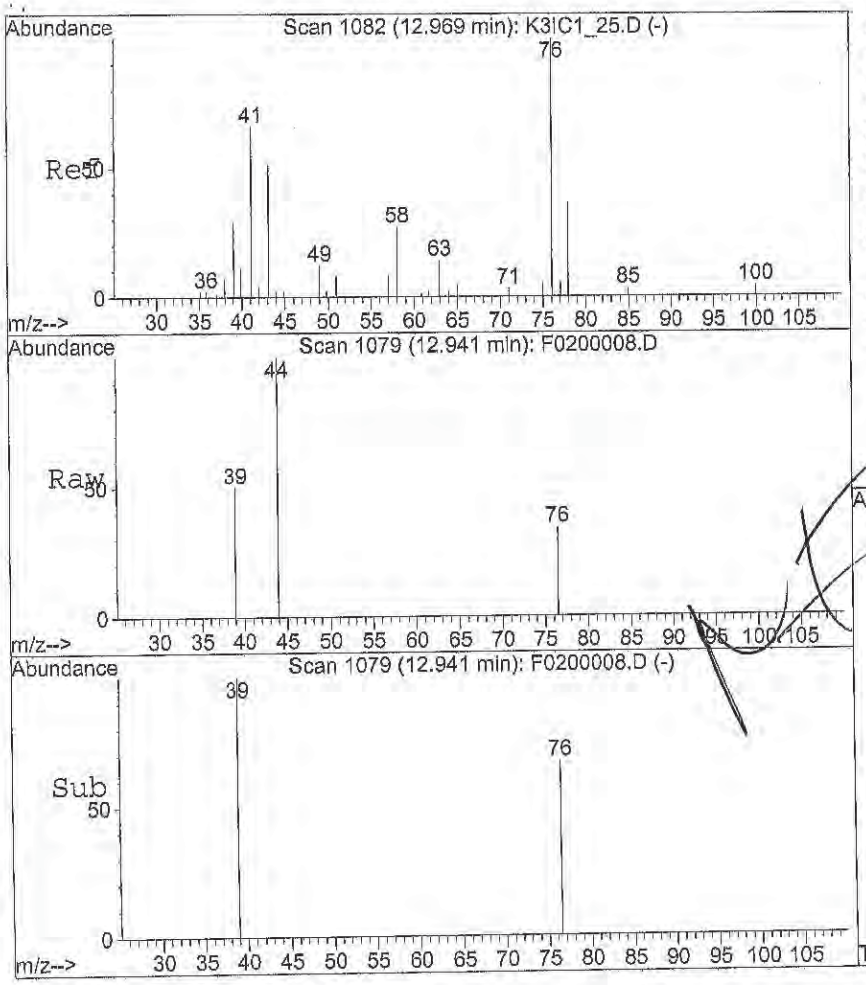


#42
trans-1,3-Dichloropropene
Concen: 0.05 ug/L
RT: 12.45 min Scan# 1021
Delta R.T. -0.06 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 75 Resp: 254

Ion	Ratio	Lower	Upper
75	100		
39	172.4	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

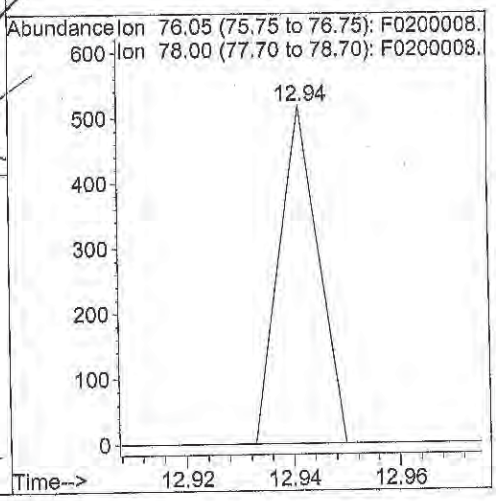


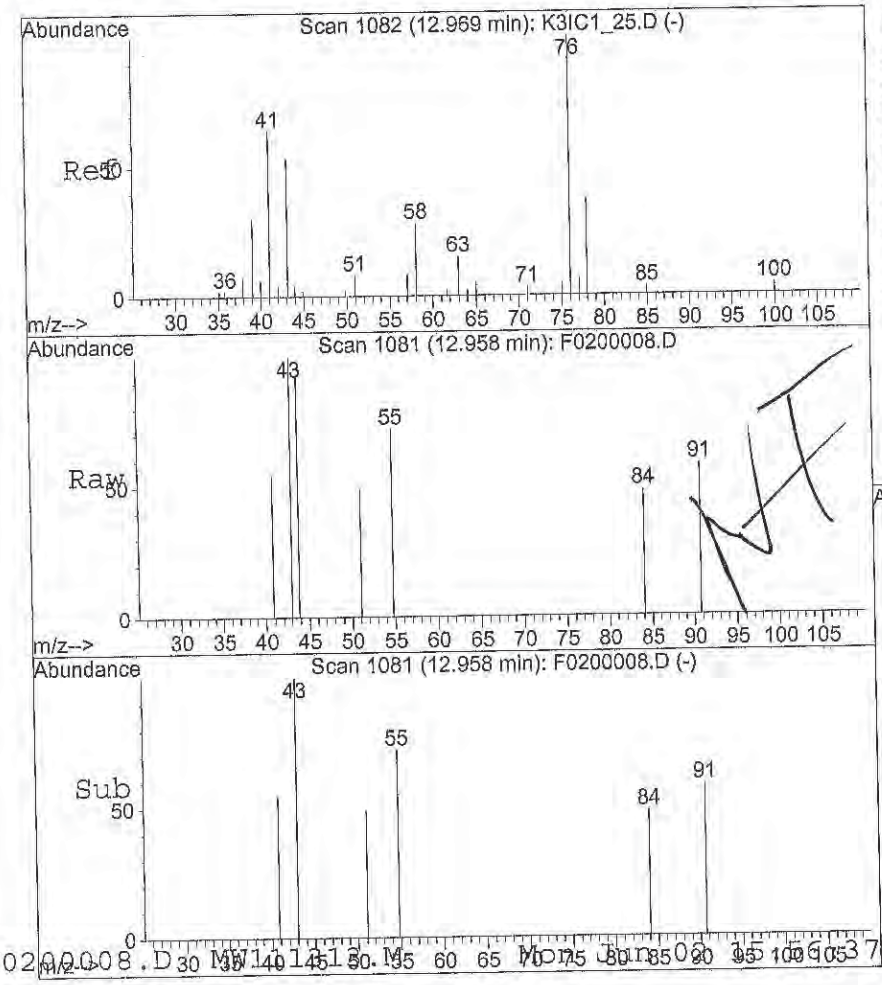


#45
1,3-Dichloropropane
Concen: 0.05 ug/L
RT: 12.94 min Scan# 1079
Delta R.T. -0.03 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 76 Resp: 262

Ion	Ratio	Lower	Upper
76	100		
78	0.0	26.9	40.3#

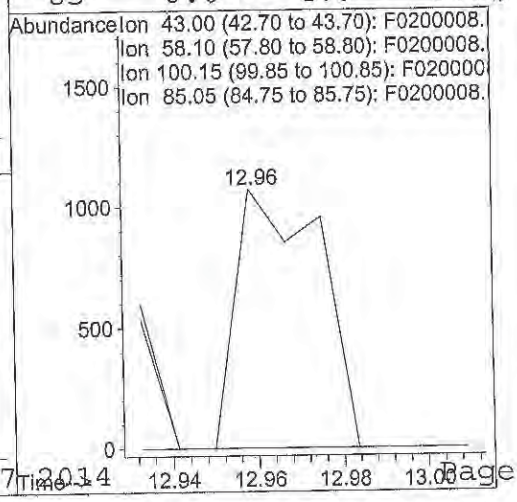


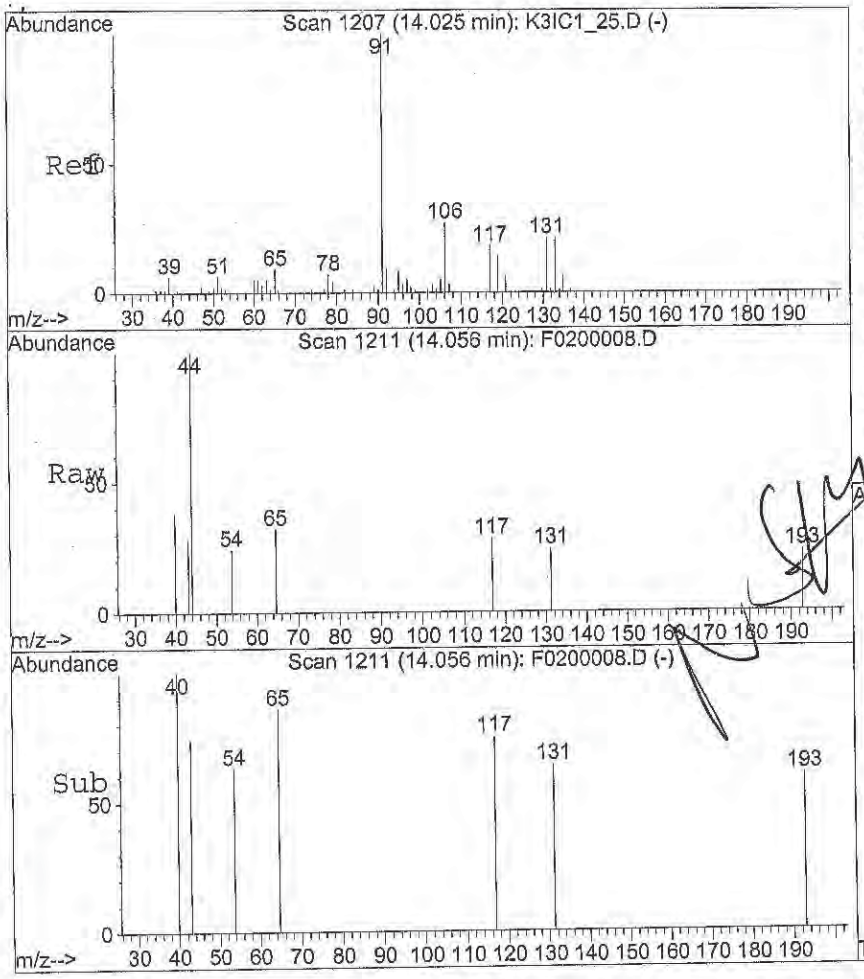


#46
2-Hexanone
Concen: 0.62 ug/L
RT: 12.96 min Scan# 1081
Delta R.T. -0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 43 Resp: 1457

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

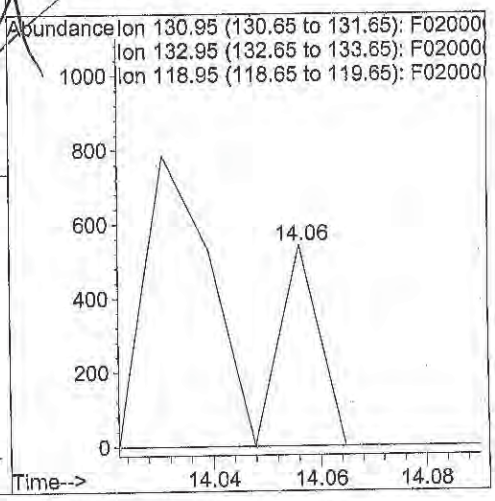


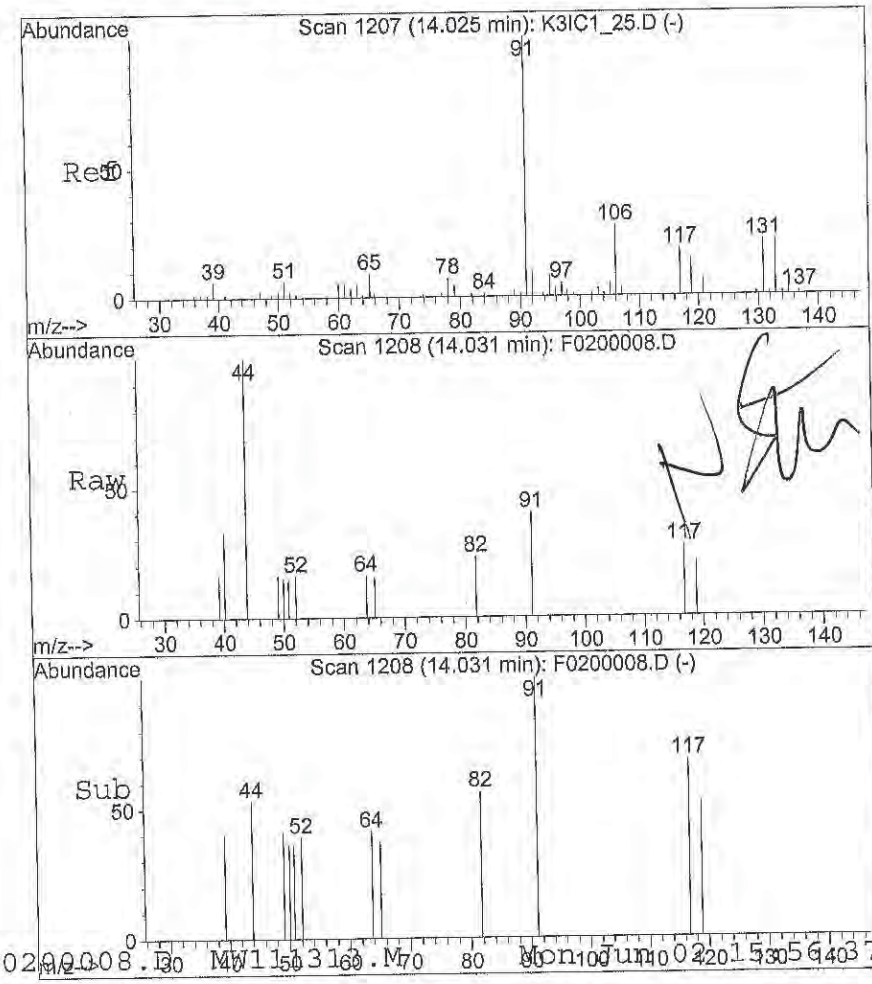


#50
1,1,1,2-Tetrachloroethane
Concen: 0.08 ug/L
RT: 14.06 min Scan# 1211
Delta R.T. 0.03 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:131 Resp: 274

Ion	Ratio	Lower	Upper
131	100		
133	0.0	80.6	120.8#
119	0.0	56.1	84.1#

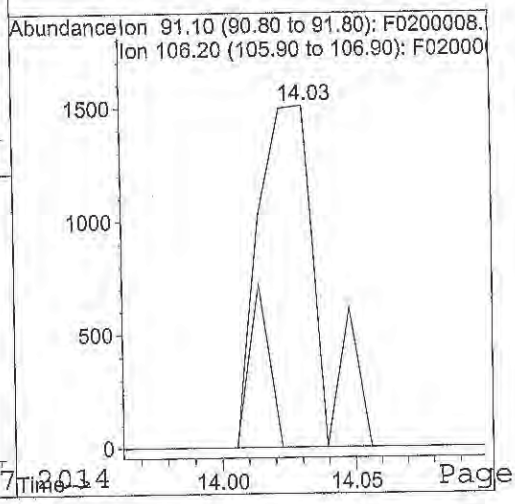


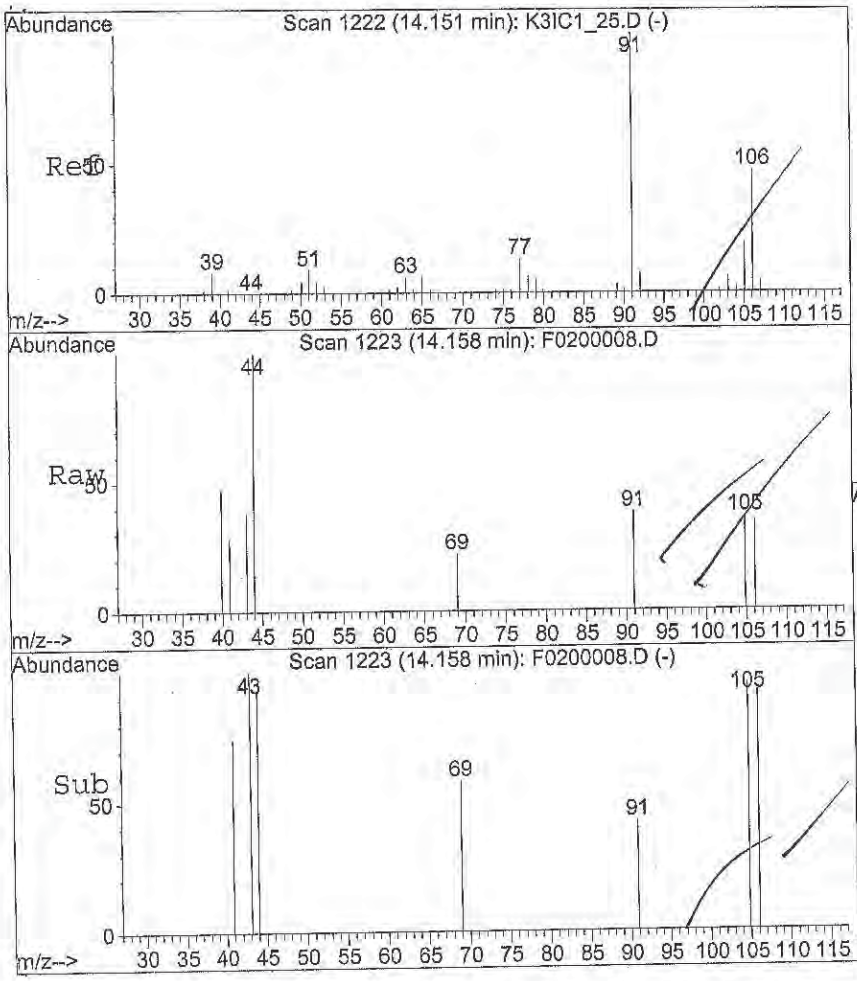


#51
Ethylbenzene
Concen: 0.14 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 91 Resp: 2351

Ion	Ratio	Lower	Upper
91	100		
106	15.6	23.5	35.3#

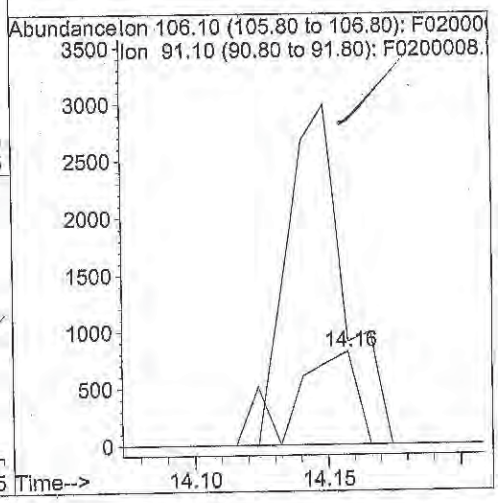


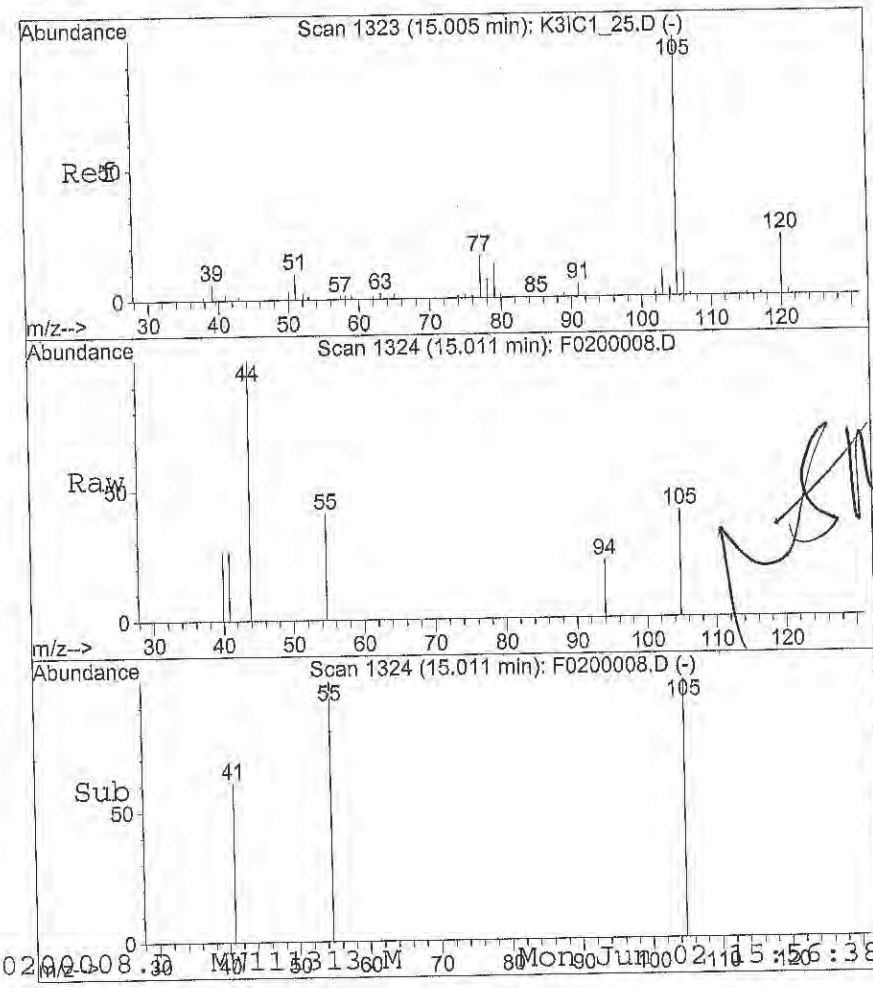


#52
m,p-Xylenes
Concen: 0.22 ug/L
RT: 14.16 min Scan# 1223
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:106 Resp: 1332

Ion	Ratio	Lower	Upper
106	100		
91	337.2	177.1	265.7#

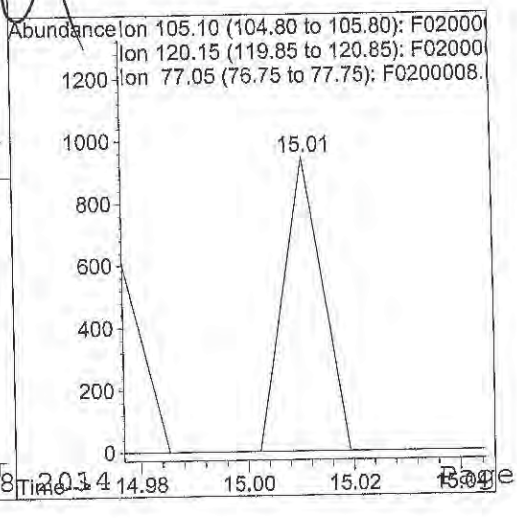


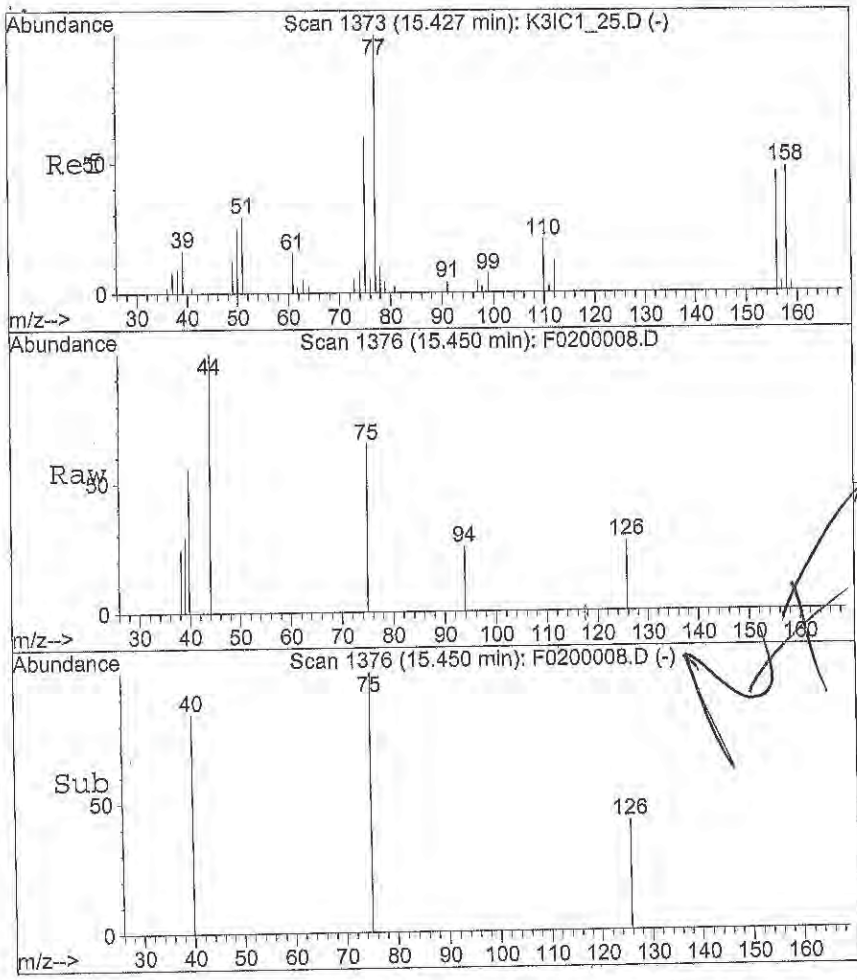


#56
Isopropylbenzene
Concen: 0.03 ug/L
RT: 15.01 min Scan# 1324
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:105 Resp: 479

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	0.0	13.1	19.7#

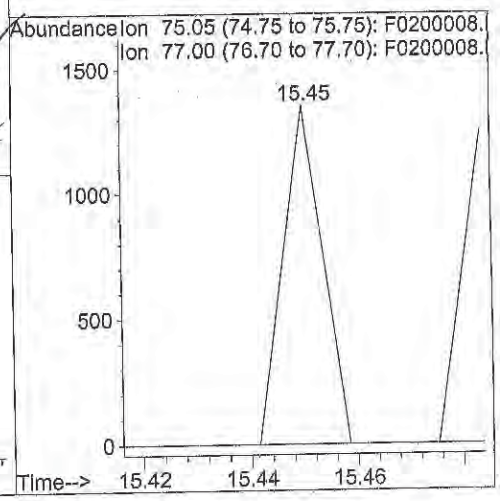


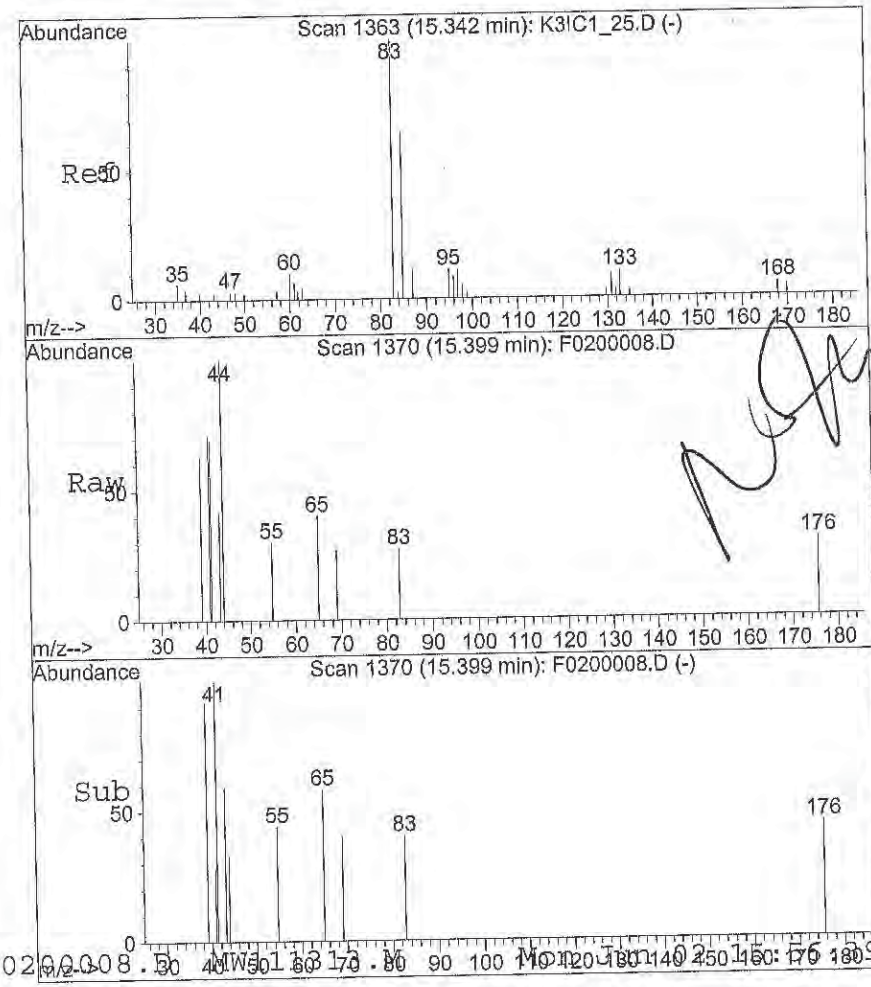


#57
1,2,3-Trichloropropane
Concen: 0.16 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. 0.02 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 75 Resp: 686

Ion	Ratio	Lower	Upper
75	100		
77	0.0	31.2	46.8#

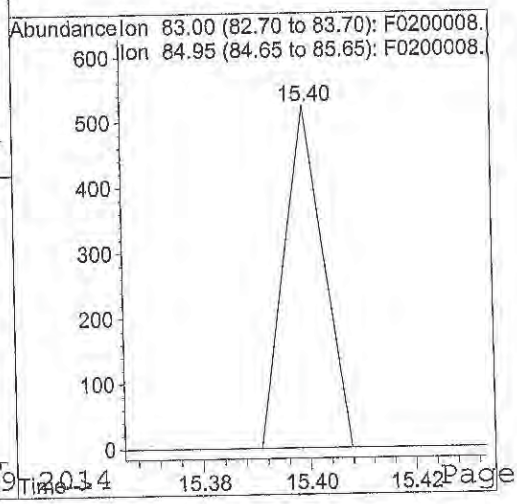


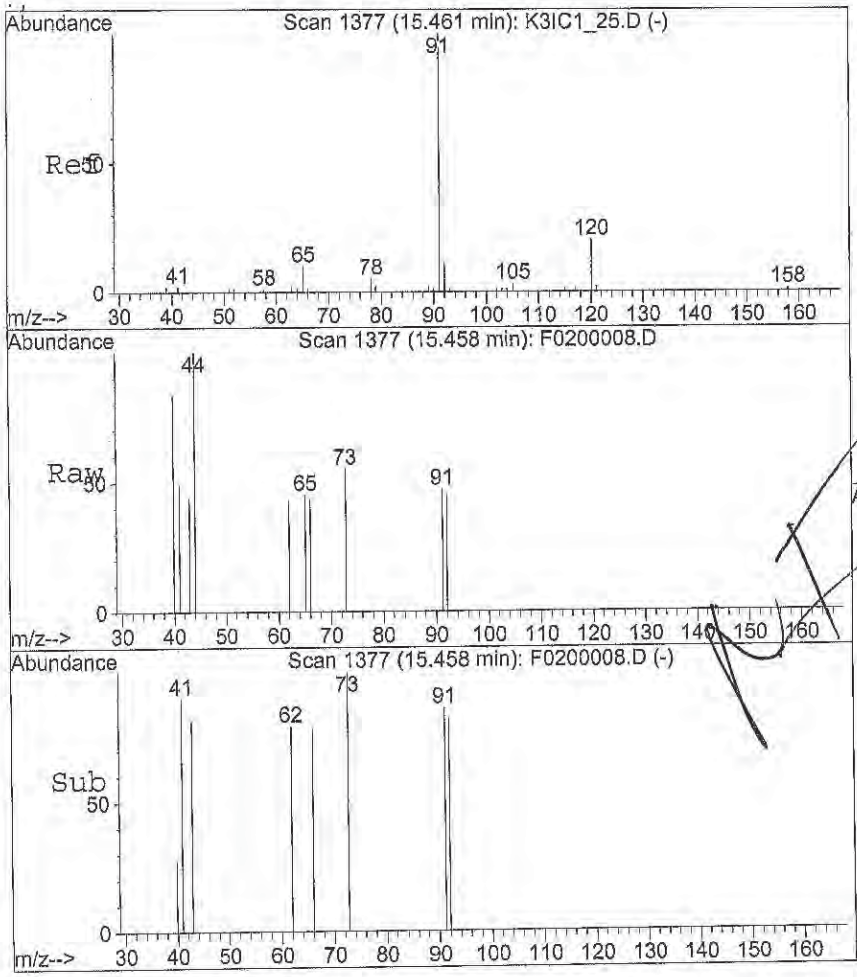


#60
1,1,2,2-Tetrachloroethane
Concen: 0.06 ug/L
RT: 15.40 min Scan# 1370
Delta R.T. 0.06 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 83 Resp: 265

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

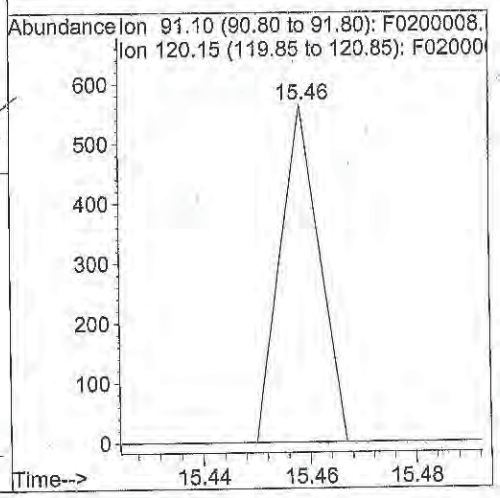


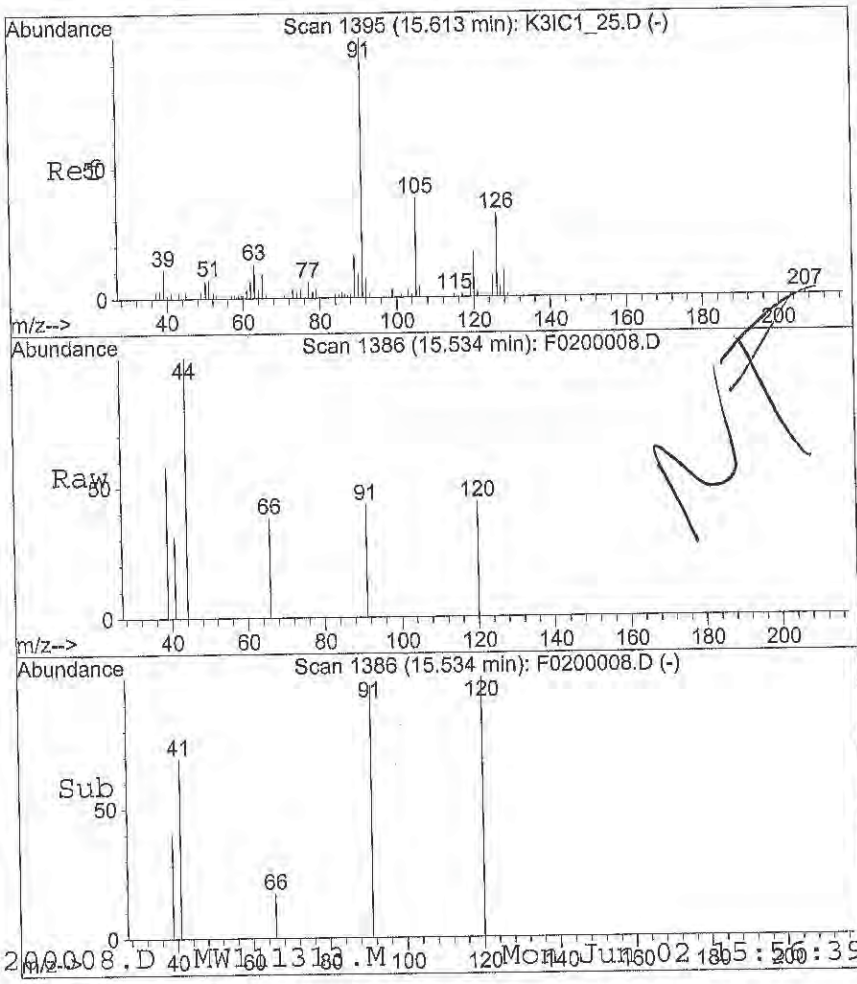


#62
n-Propylbenzene
Concen: 0.01 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. -0.00 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 91 Resp: 286

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

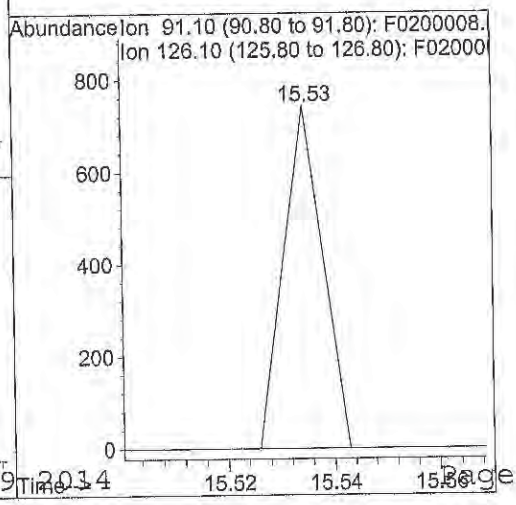


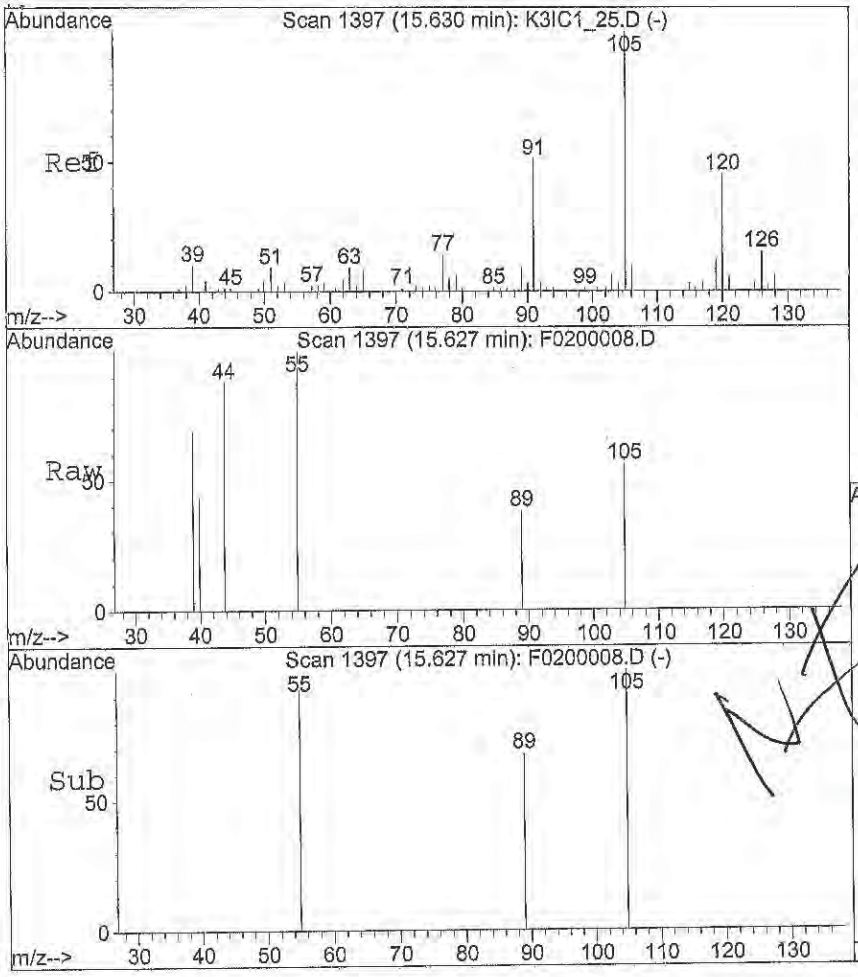


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.53 min Scan# 1386
Delta R.T. -0.08 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 91 Resp: 376

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

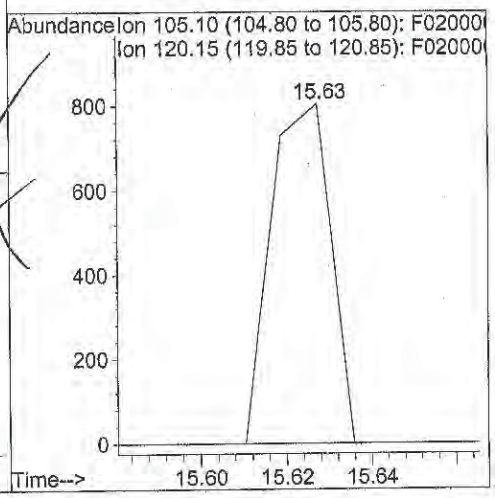


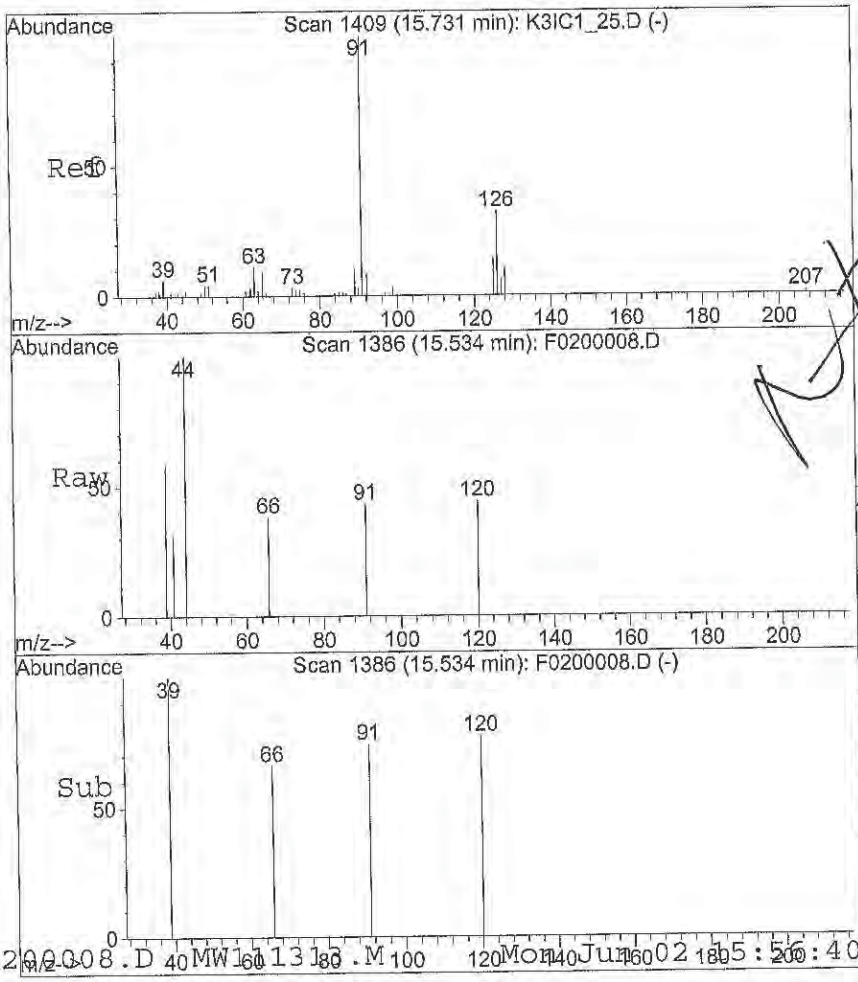


#64
1,3,5-Trimethylbenzene
Concen: 0.05 ug/L
RT: 15.63 min Scan# 1397
Delta R.T. -0.00 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:105 Resp: 777

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

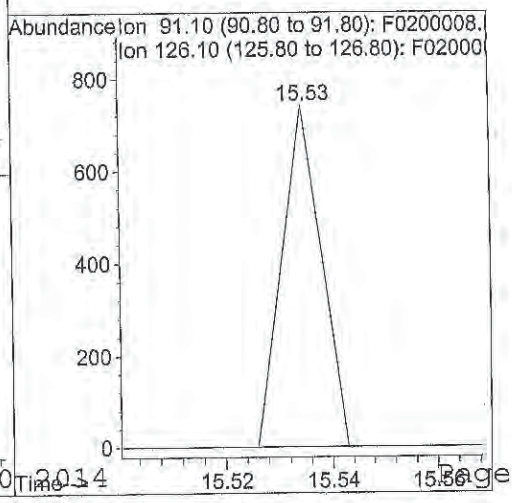


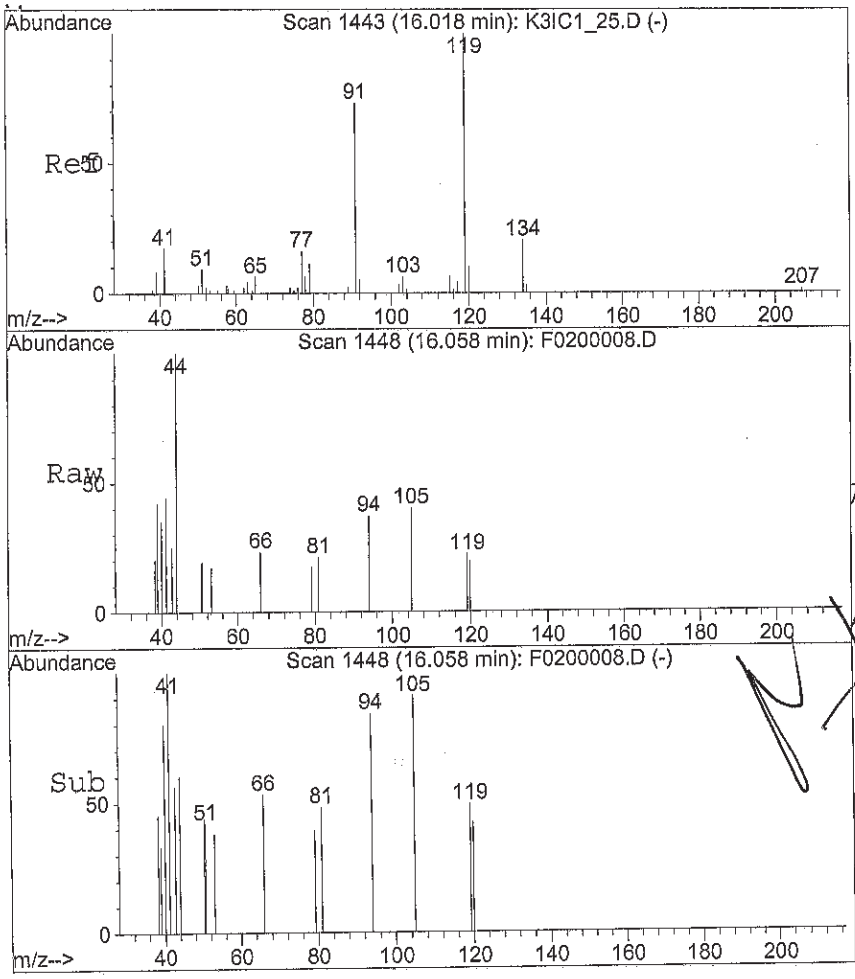


#65
4-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.53 min Scan# 1386
Delta R.T. -0.20 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 91 Resp: 376

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

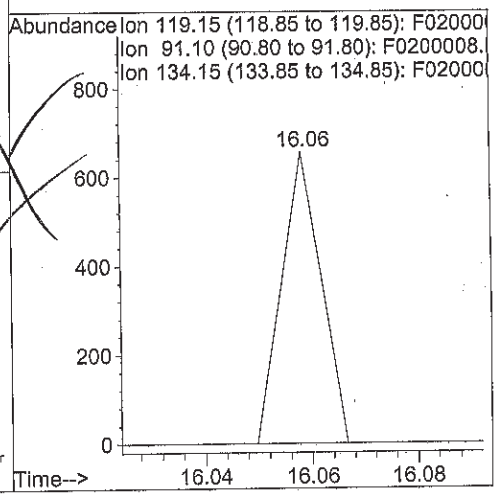


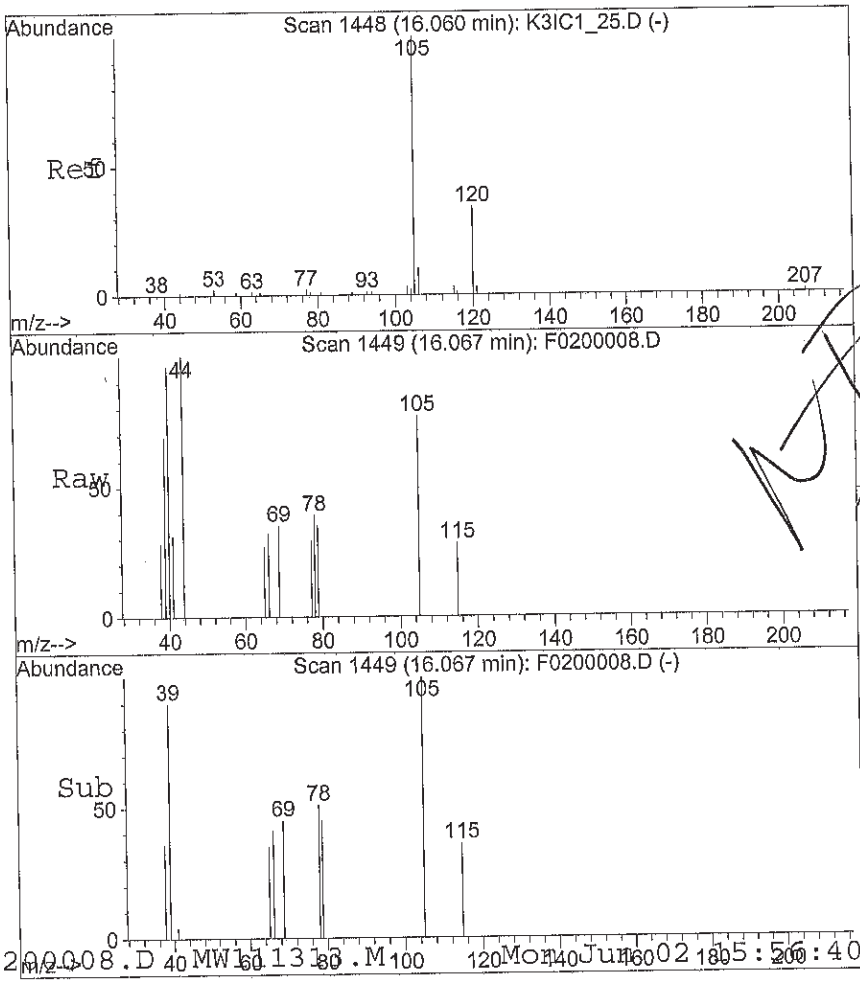


#66
tert-Butylbenzene
Concen: 0.03 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.04 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:119 Resp: 333

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

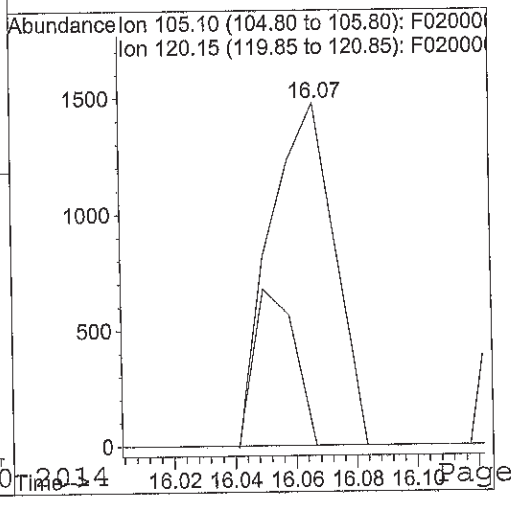


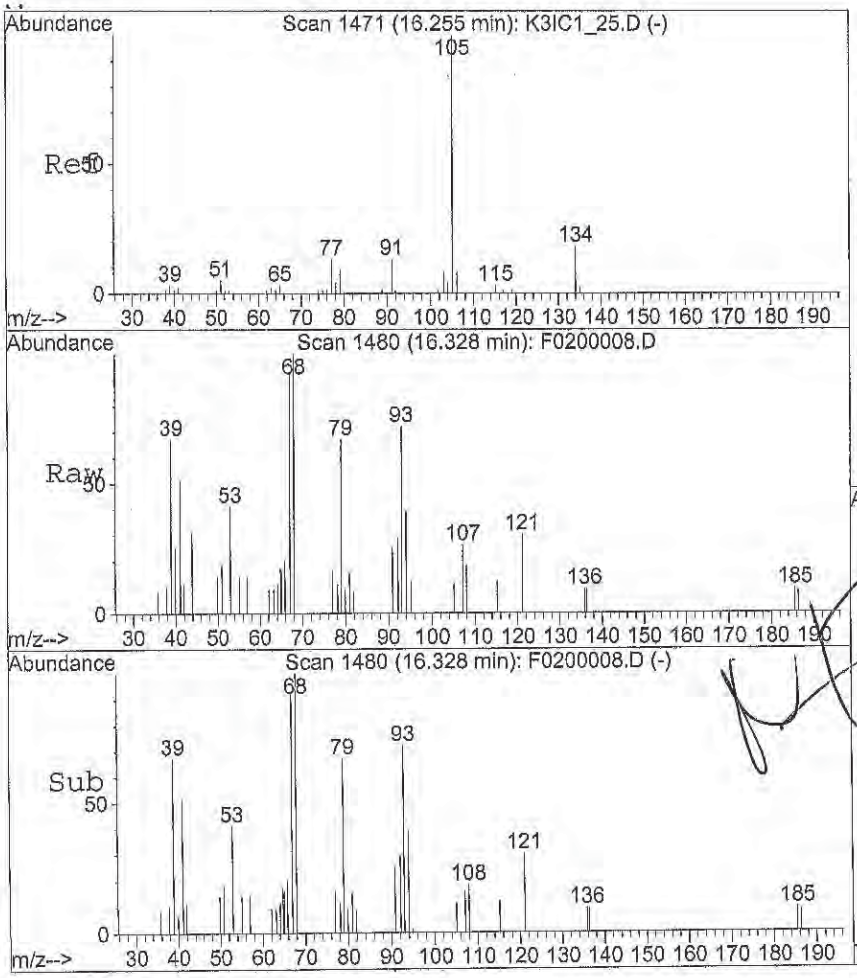


#67
1,2,4-Trimethylbenzene
Concen: 0.14 ug/L
RT: 16.07 min Scan# 1449
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:105 Resp: 2154

Ion	Ratio	Lower	Upper
105	100		
120	29.2	33.8	50.8#

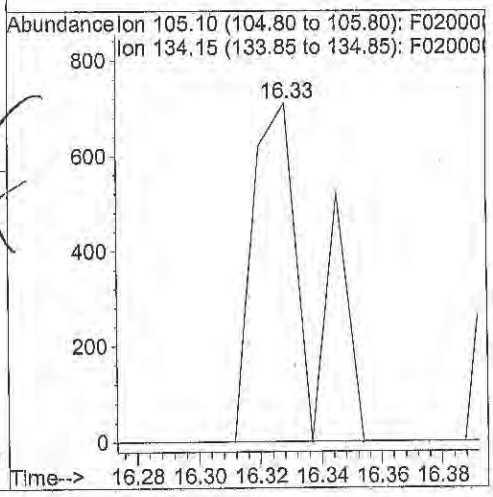


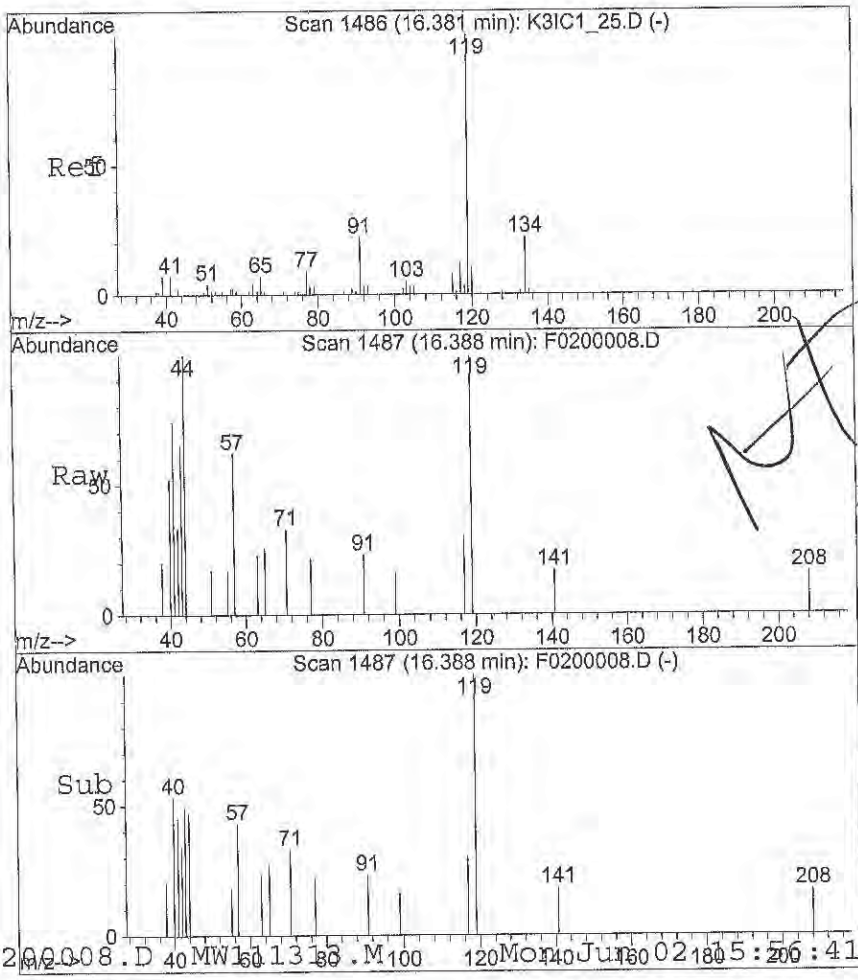


#68
sec-Butylbenzene
Concen: 0.05 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.07 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:105 Resp: 938

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

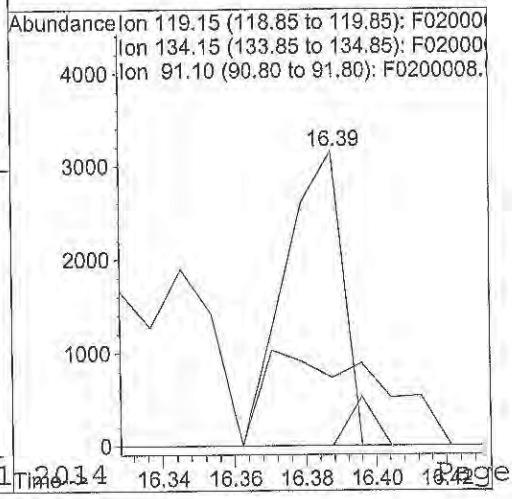


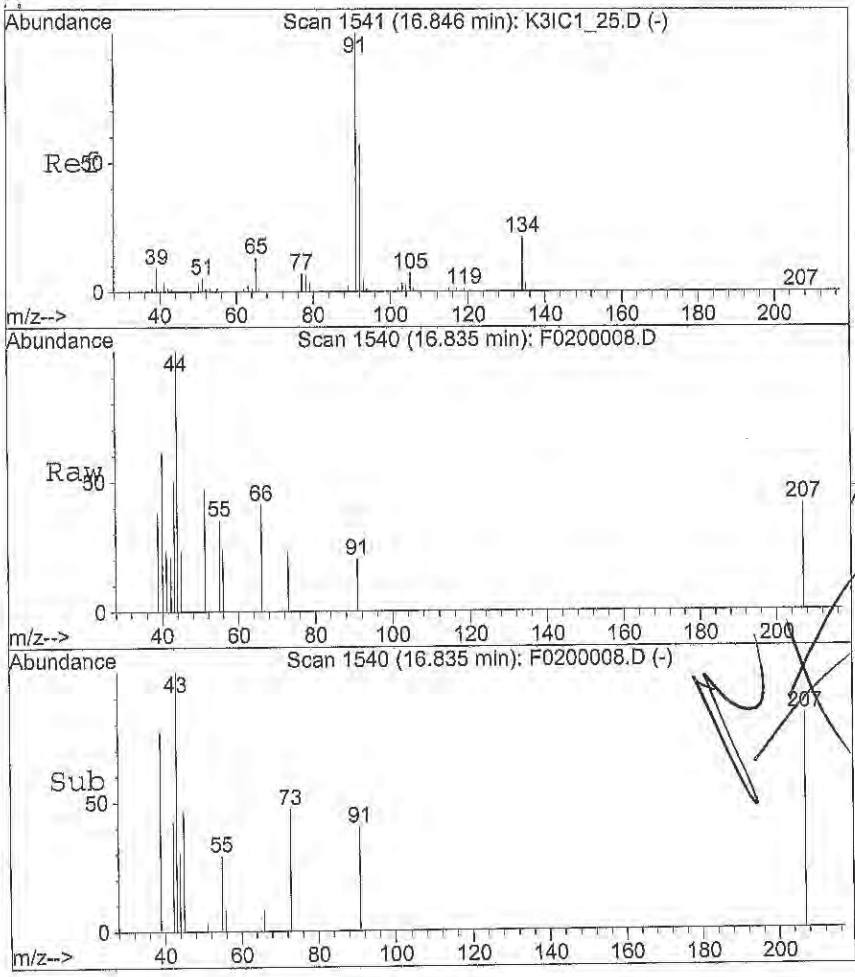


#69
p-Isopropyltoluene
Concen: 0.23 ug/L
RT: 16.39 min Scan# 1487
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:119 Resp: 3549

Ion	Ratio	Lower	Upper
119	100		
134	7.6	17.4	26.2#
91	0.0	19.6	29.4#

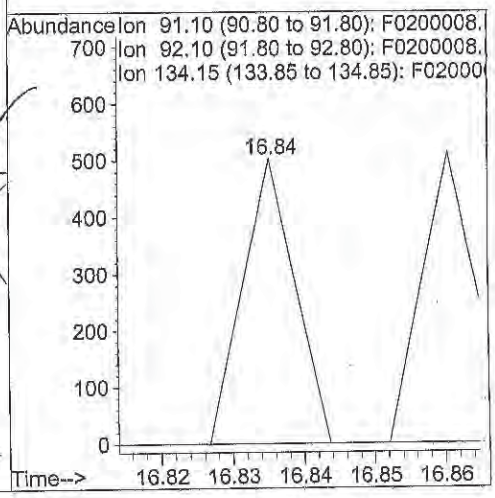


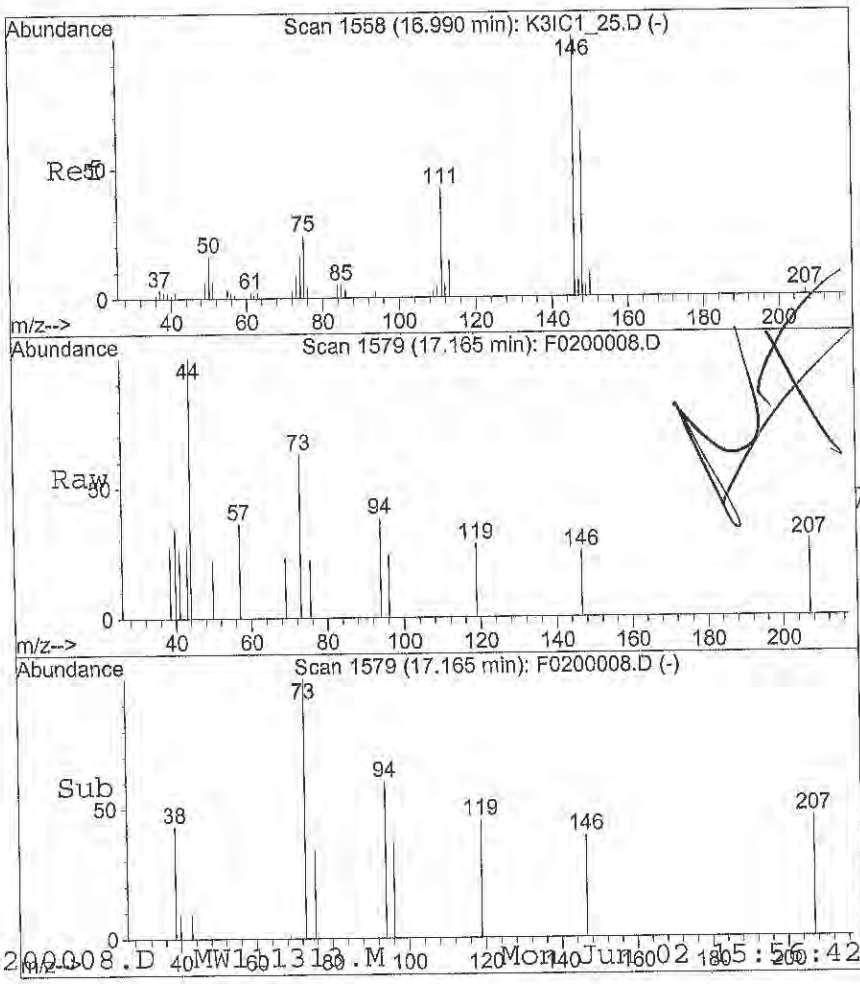


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.84 min Scan# 1540
Delta R.T. -0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 91 Resp: 254

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

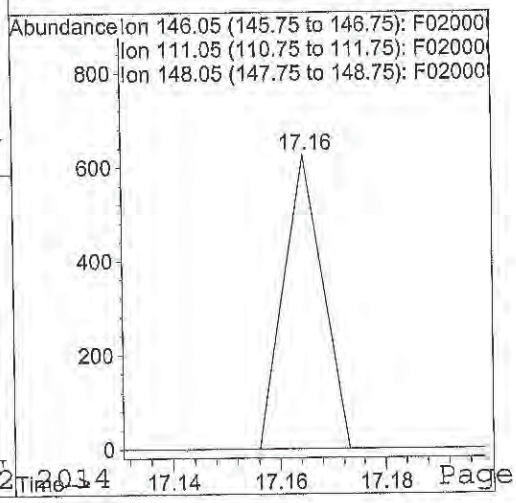


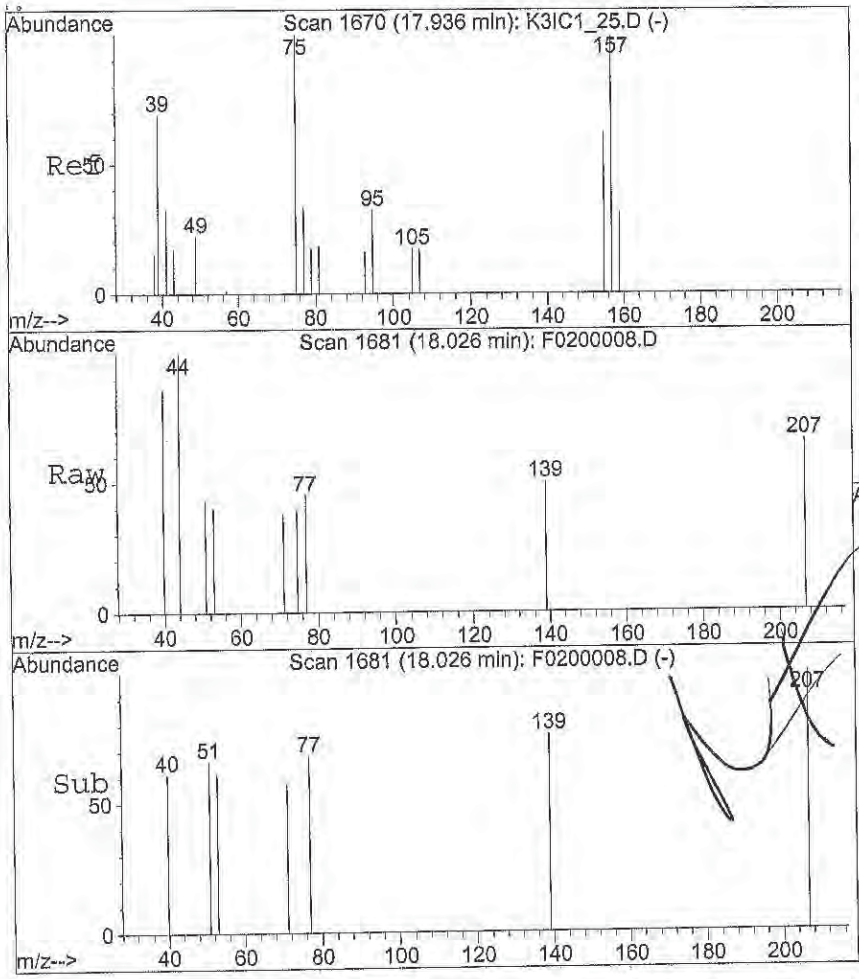


#73
1,2-Dichlorobenzene
Concen: 0.04 ug/L
RT: 17.16 min Scan# 1579
Delta R.T. 0.18 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:146 Resp: 317

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.7	52.1#
148	0.0	51.7	77.5#

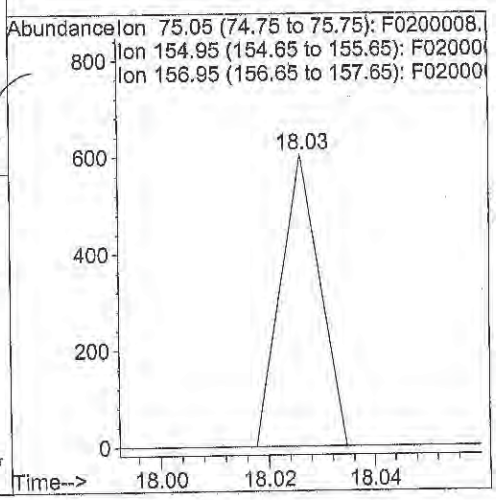


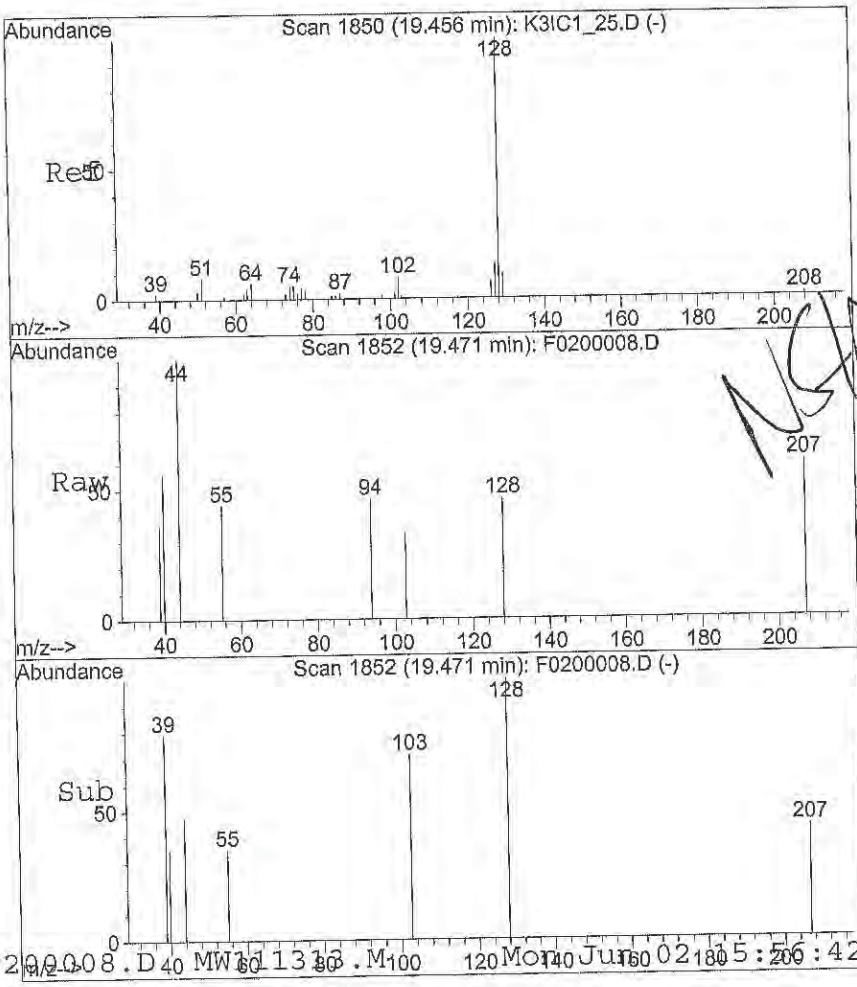


#74
1,2-Dibromo-3-chloropropane
Concen: 1.34 ug/L
RT: 18.03 min Scan# 1681
Delta R.T. 0.09 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion: 75 Resp: 306

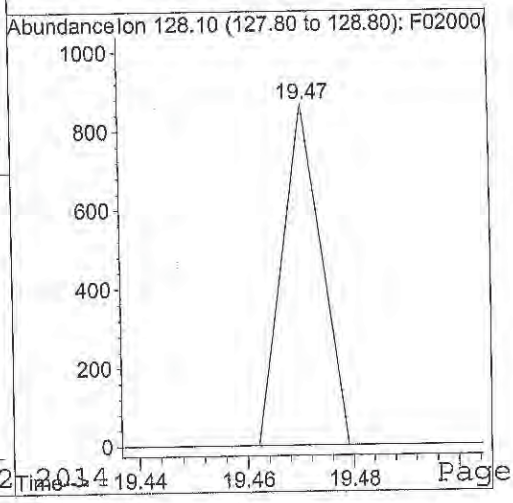
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.04 ug/L
RT: 19.47 min Scan# 1852
Delta R.T. 0.01 min
Lab File: F0200008.D
Acq: 2 Jun 2014 3:19 pm

Tgt Ion:128 Resp: 439



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200008.D Vial: 7
Acq On : 2 Jun 2014 3:19 pm Operator: DN
Sample : 3F40201-07 Inst : GC/MS Ins
Misc : 100cc SVL-805-SA5C-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:41 19114 Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1193768	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1078807	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	575670	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	396044m	12.76 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 102.08%		
3) Chloroform-d (SU6)	9.18	84	517834m	11.63 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.04%		
4) Methylene Chloride-d2 (SU5	7.08	86	281905	10.83 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.64%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	356497m	16.80 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 134.40%#		
6) Benzene-d6 (SU7)	9.93	84	1094931	11.69 ug/L	-0.03
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.52%		
8) Toluene-d8 (SU3)	12.21	98	1144505	11.18 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.44%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	525113m	12.43 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 99.44%		

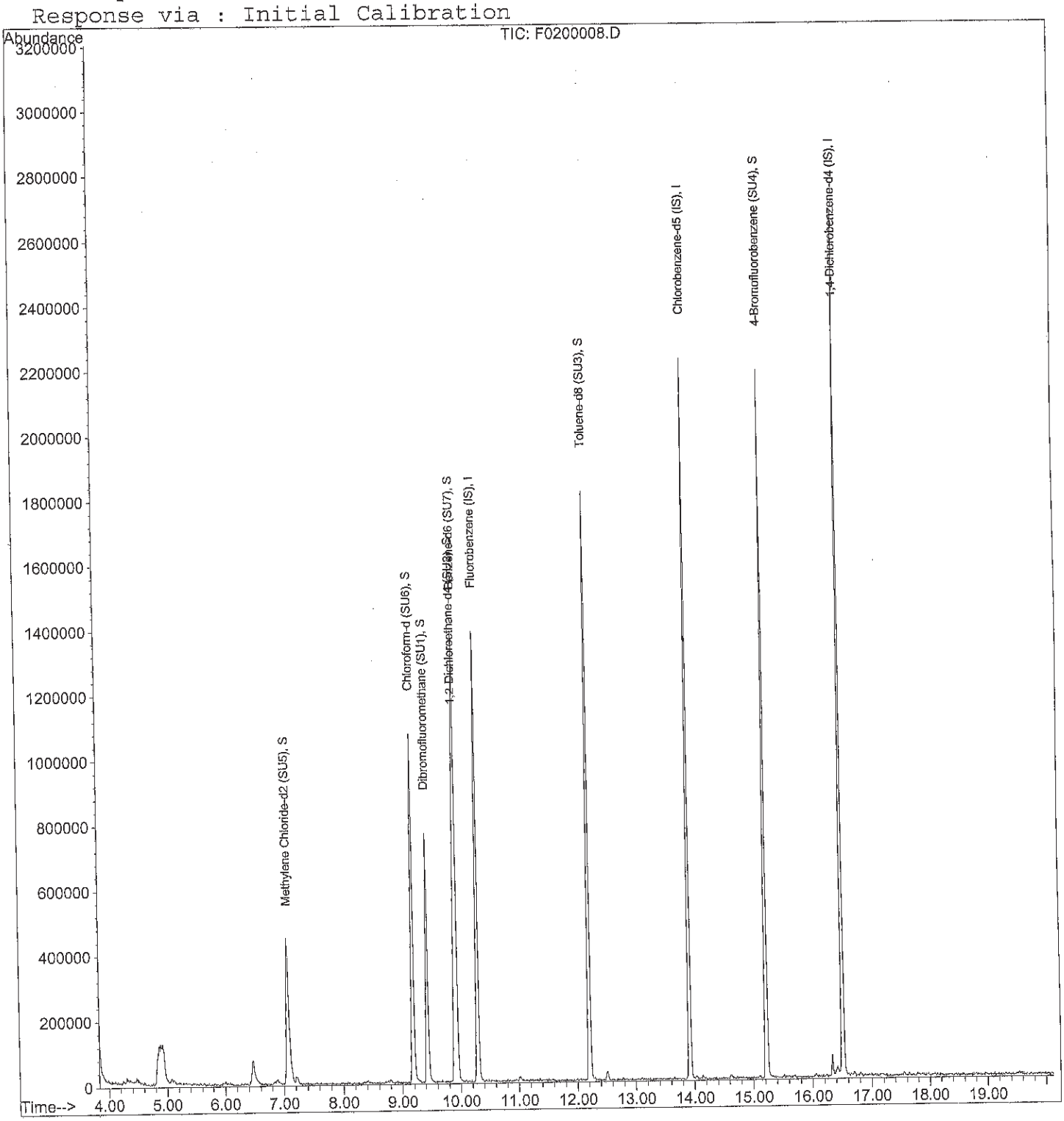
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200008.D Vial: 7
Acq On : 2 Jun 2014 3:19 pm Operator: DN
Sample : 3F40201-07 Inst : GC/MS Ins
Misc : 100cc SVL-805-SA5C-SV-10.0-11.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 3 7:41 19114 Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200009.D
Acq On : 2 Jun 2014 3:49 pm
Sample : 3F40201-08
Misc : 100cc SVL-505-SA5C-SV-15.0-16.0
MS Integration Params: rteint.p
Quant Time: Jun 2 16:17 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1125891	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1087623	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	587531	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	319239m	11.37 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 90.96%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	439713m	16.47 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 131.76%#		
39) Toluene-d8 (SU3)	12.21	98	1138471	11.22 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 89.76%		
58) 4-Bromofluorobenzene (SU4)	15.23	95	603264m	13.56 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 108.48%		

Target Compounds

					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	385	0.14 ~~ug/L #~~	44
4) Chloromethane	4.37	50	3224	0.49 ~~ug/L #~~	58
5) Vinyl Chloride	4.52	62	312	0.16 ~~ug/L #~~	43
6) Bromomethane	5.23	96	836	-1.10 ~~ug/L~~	79
7) Chloroethane	5.37	64	2778	3.66 ~~ug/L~~	95
8) (F11) Trichlorofluorometha	5.50	101	279	0.09 ~~ug/L #~~	16
10) 1,1-Dichloroethene	6.57	96	281	0.11 ~~ug/L #~~	56
11) Acetone	6.48	58	4442	5.24 ~~ug/L #~~	1
12) (IPA) Leak Check Compound	6.47	45	201316	1488.01 ~~ug/L #~~	88
13) Carbon disulfide	6.84	76	15374	1.64 ~~ug/L #~~	83
14) Methylene Chloride	7.07	84	6603	2.14 ~~ug/L #~~	1
15) (TBA) tert-Butanol	7.13	59	977	5.09 ~~ug/L #~~	77
16) (MTBE) Methyl-t-butyl ethe	7.50	73	285	0.04 ~~ug/L #~~	1
18) 1,1-Dichloroethane	8.02	63	700	0.14 ~~ug/L #~~	79
20) 2,2-Dichloropropane	8.86	77	257	0.06 ~~ug/L #~~	1
22) (DIPE) Diisopropyl Ether	8.01	45	603	0.07 ~~ug/L #~~	78
23) Bromochloromethane	9.00	128	304	0.20 ~~ug/L #~~	1
24) Chloroform	9.20	83	633	0.11 ~~ug/L #~~	1
25) (ETBE) 2-ethoxy 2-methyl p	8.50	59	1085	0.13 ~~ug/L #~~	44
29) 1,1-Dichloropropene	9.59	75	320	0.07 ~~ug/L #~~	20
31) Benzene	9.98	78	754	0.07 ~~ug/L #~~	1
32) 1,2-Dichloroethane	9.93	62	11753	3.14 ~~ug/L #~~	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200009.D Vial: 8
Acq On : 2 Jun 2014 3:49 pm Operator: DN
Sample : 3F40201-08 Inst : GC/MS Ins
Misc : 100cc SVL-505-SA5C-SV-15.0-16.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 16:17 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

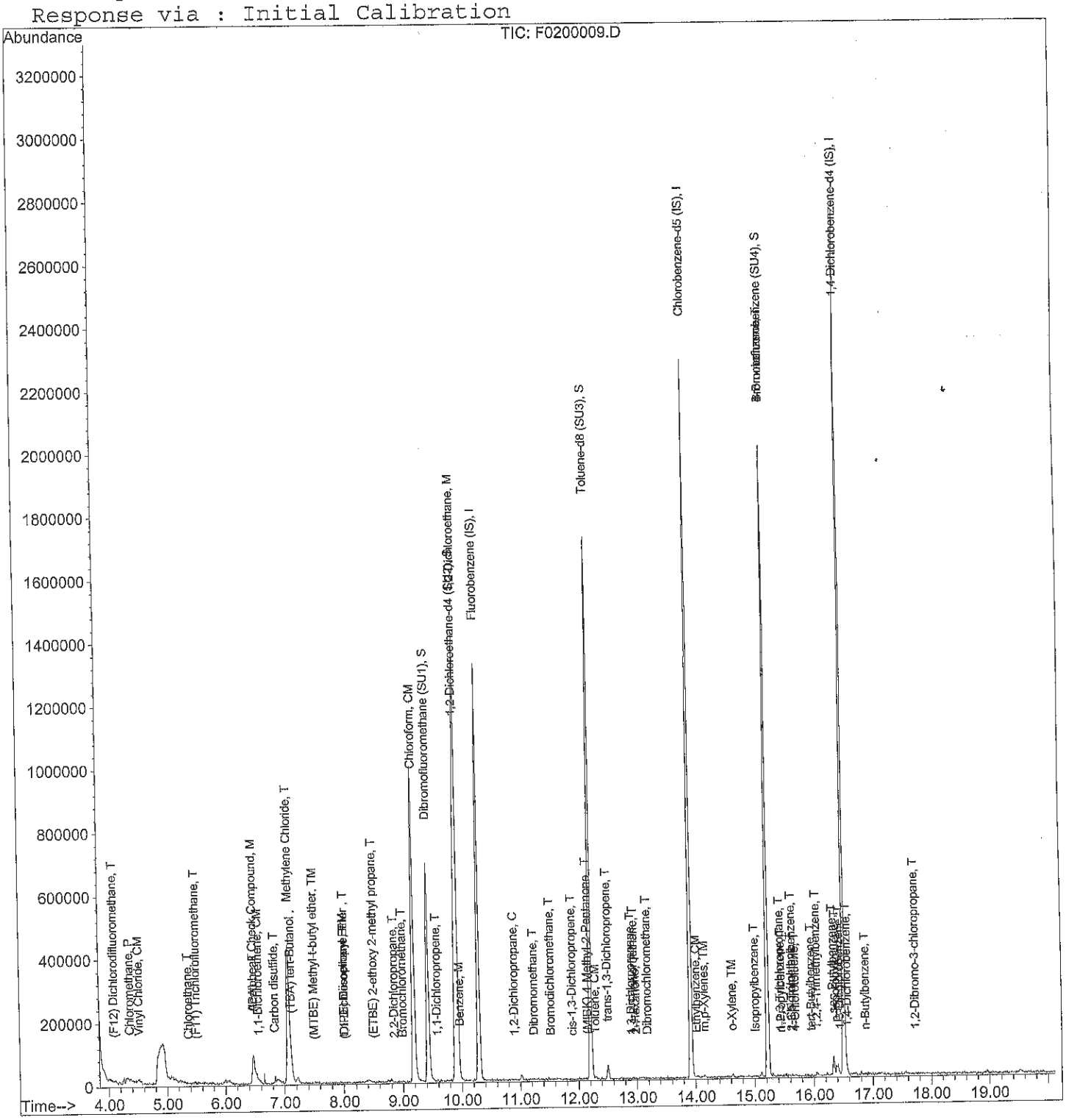
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) 1,2-Dichloropropane	10.91	63	362	0.14 ~~ug/L #~~	2
35) Dibromomethane	11.24	93	395	0.20 ~~ug/L~~ #	5
36) Bromodichloromethane	11.53	83	264	0.07 ~~ug/L~~ #	21
37) cis-1,3-Dichloropropene	11.91	75	300	0.07 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.15	43	860	0.40 ~~ug/L #~~	100
41) Toluene	12.29	91	4013	0.27 ug/L 0.0254	98
42) trans-1,3-Dichloropropene	12.50	75	1049	0.21 ~~ug/L #~~	67
43) 1,1,2-Trichloroethane	12.95	83	254	0.09 ~~ug/L #~~	10
45) 1,3-Dichloropropane	12.90	76	294	0.06 ~~ug/L #~~	1
46) 2-Hexanone	12.98	43	281	0.12 ~~ug/L~~ #	37
47) Dibromochloromethane	13.19	129	316	0.08 ~~ug/L #~~	21
51) Ethylbenzene	14.02	91	2743	0.16 ~~ug/L #~~	45
52) m,p-Xylenes	14.14	106	349	0.06 ug/L # 0.0012	1
53) o-Xylene	14.63	106	273	0.05 ug/L # 0.001	1
54) Styrene	14.63	104	2045	-0.63 ~~ug/L #~~	62
56) Isopropylbenzene	15.01	105	292	0.02 ~~ug/L #~~	1
57) 1,2,3-Trichloropropane	15.44	75	819	0.18 ~~ug/L~~	100
61) Bromobenzene	15.22	156	351	0.08 ~~ug/L #~~	1
62) n-Propylbenzene	15.46	91	452	0.02 ~~ug/L #~~	56
63) 2-Chlorotoluene	15.61	91	264	0.02 ~~ug/L #~~	45
64) 1,3,5-Trimethylbenzene	15.62	105	647	0.04 ~~ug/L~~	94
65) 4-Chlorotoluene	15.70	91	314	0.02 ~~ug/L~~ #	44
66) tert-Butylbenzene	15.97	119	257	0.02 ~~ug/L~~ #	24
67) 1,2,4-Trimethylbenzene	16.06	105	3161	0.21 ~~ug/L #~~	54
68) sec-Butylbenzene	16.34	105	724	0.04 ~~ug/L #~~	62
69) p-Isopropyltoluene	16.38	119	2577	0.16 ~~ug/L~~ #	71
70) 1,3-Dichlorobenzene	16.45	146	266	0.03 ~~ug/L~~ #	24
71) 1,4-Dichlorobenzene	16.58	146	334	0.04 ~~ug/L~~ #	22
72) n-Butylbenzene	16.89	91	384	0.02 ~~ug/L #~~	30
74) 1,2-Dibromo-3-chloropropan	17.73	75	387	1.45 ~~ug/L~~ #	6

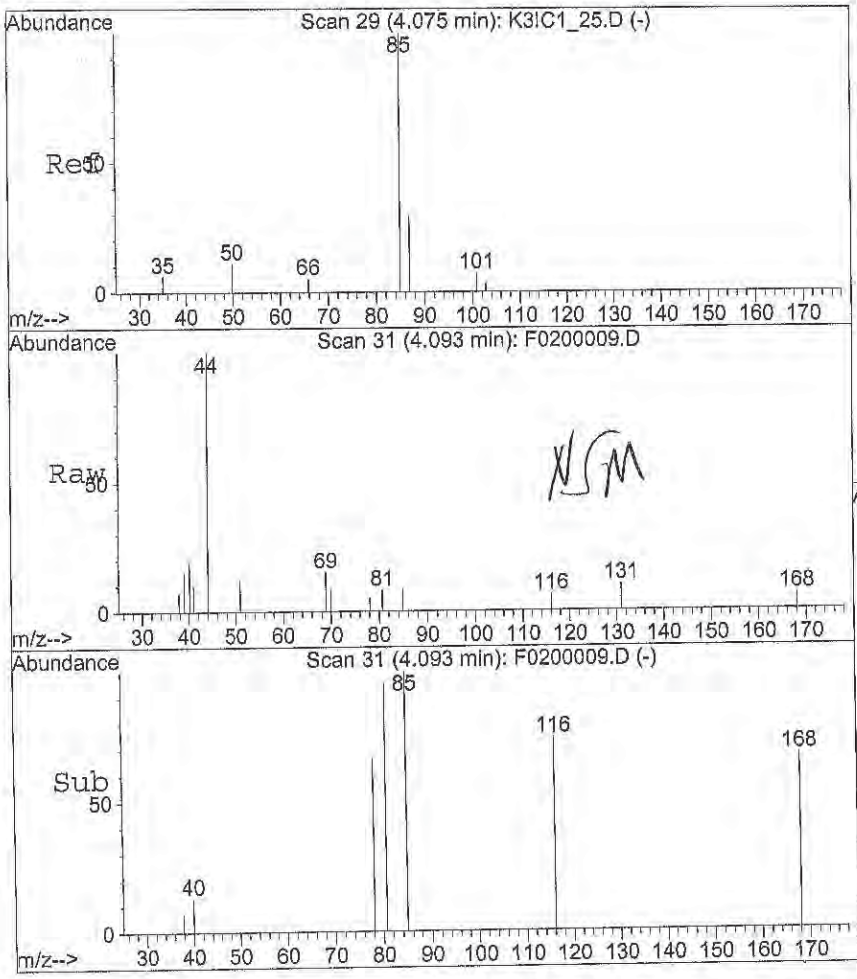
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200009.D Vial: 8
Acq On : 2 Jun 2014 3:49 pm Operator: DN
Sample : 3F40201-08 Inst : GC/MS Ins
Misc : 100cc SVL-505-SA5C-SV-15.0-16.0 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 16:17 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

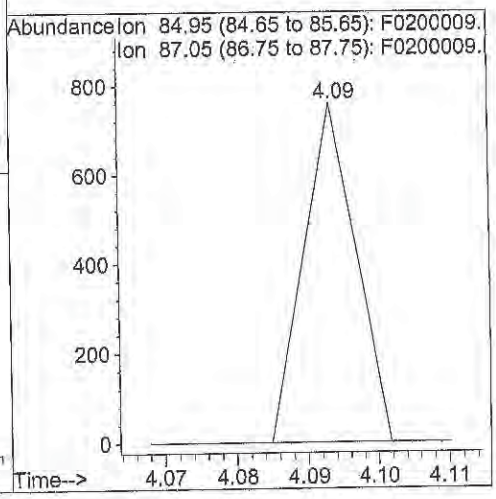


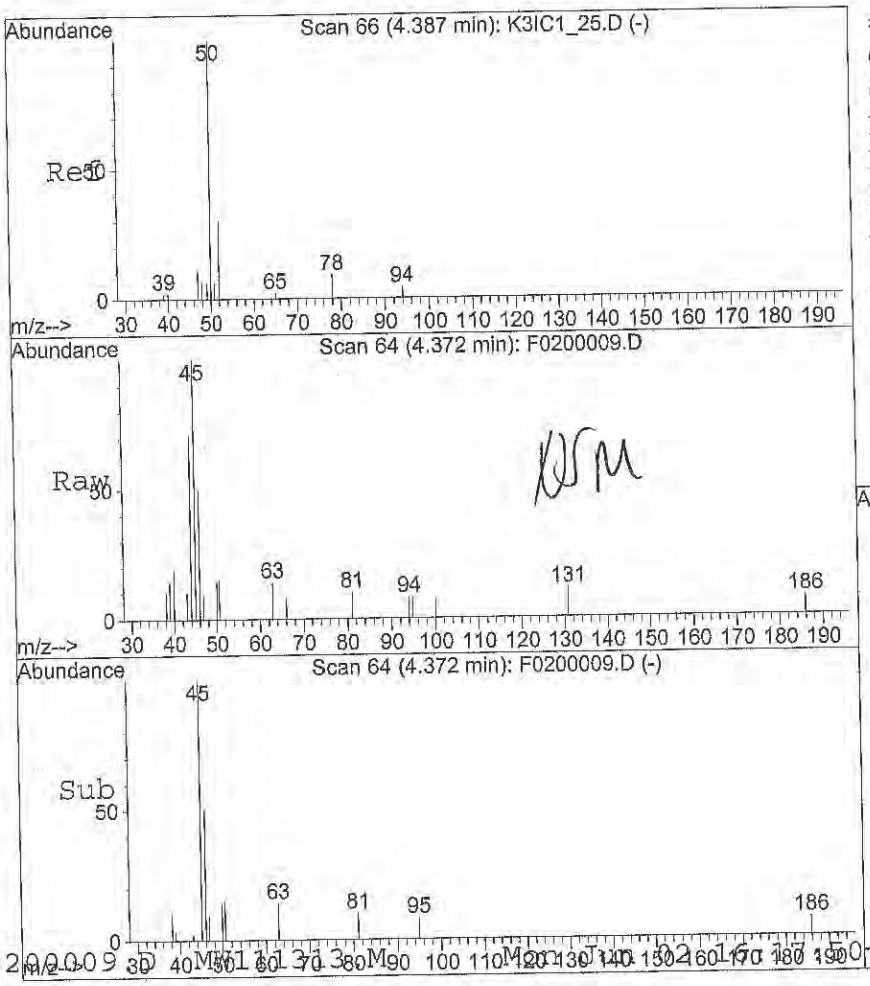


#3
(F12) Dichlorodifluoromethane
Concen: 0.14 ug/L
RT: 4.09 min Scan# 31
Delta R.T. 0.02 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 85 Resp: 385

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

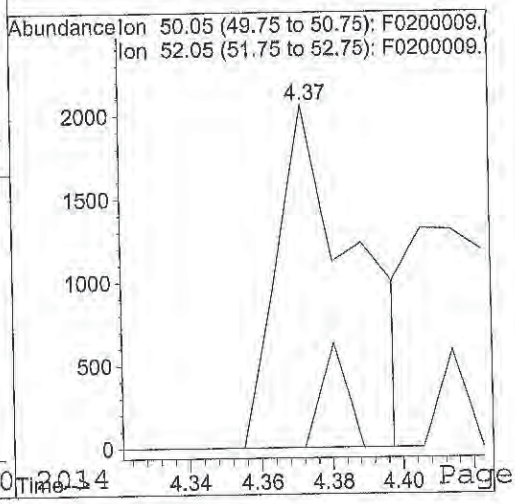


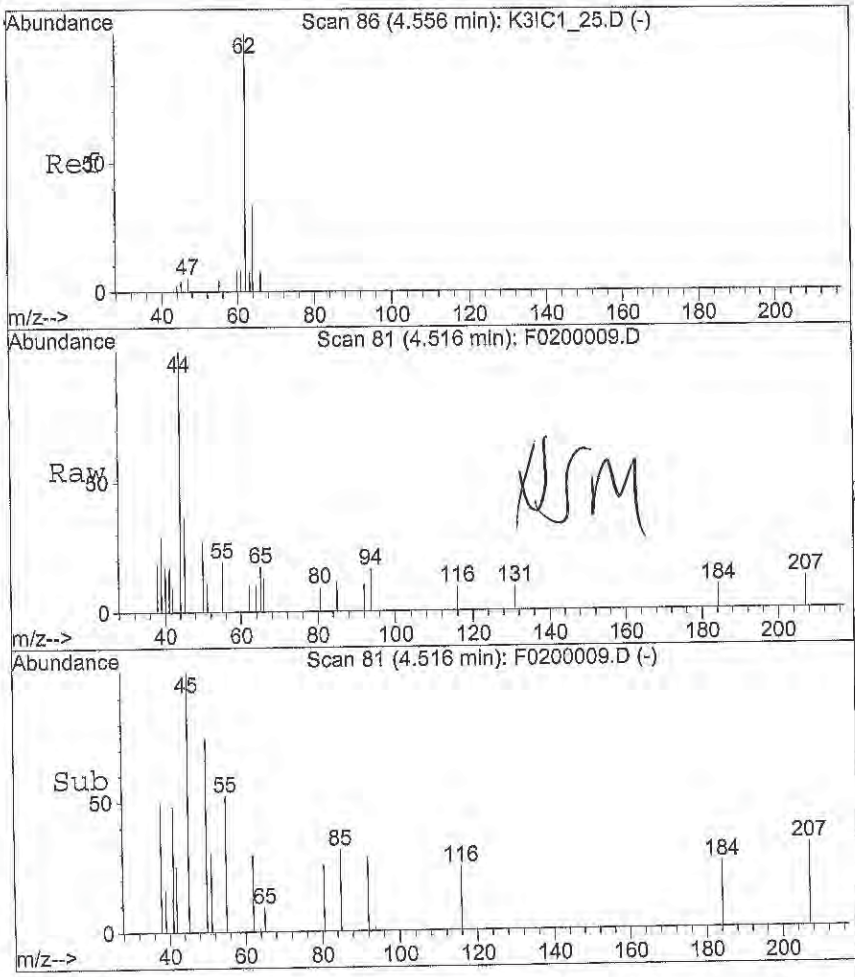


#4
Chloromethane
Concen: 0.49 ug/L
RT: 4.37 min Scan# 64
Delta R.T. -0.02 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 50 Resp: 3224

Ion	Ratio	Lower	Upper
50	100		
52	9.9	26.9	40.3#

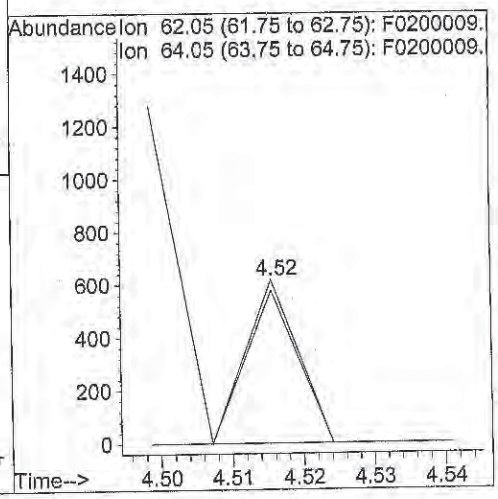


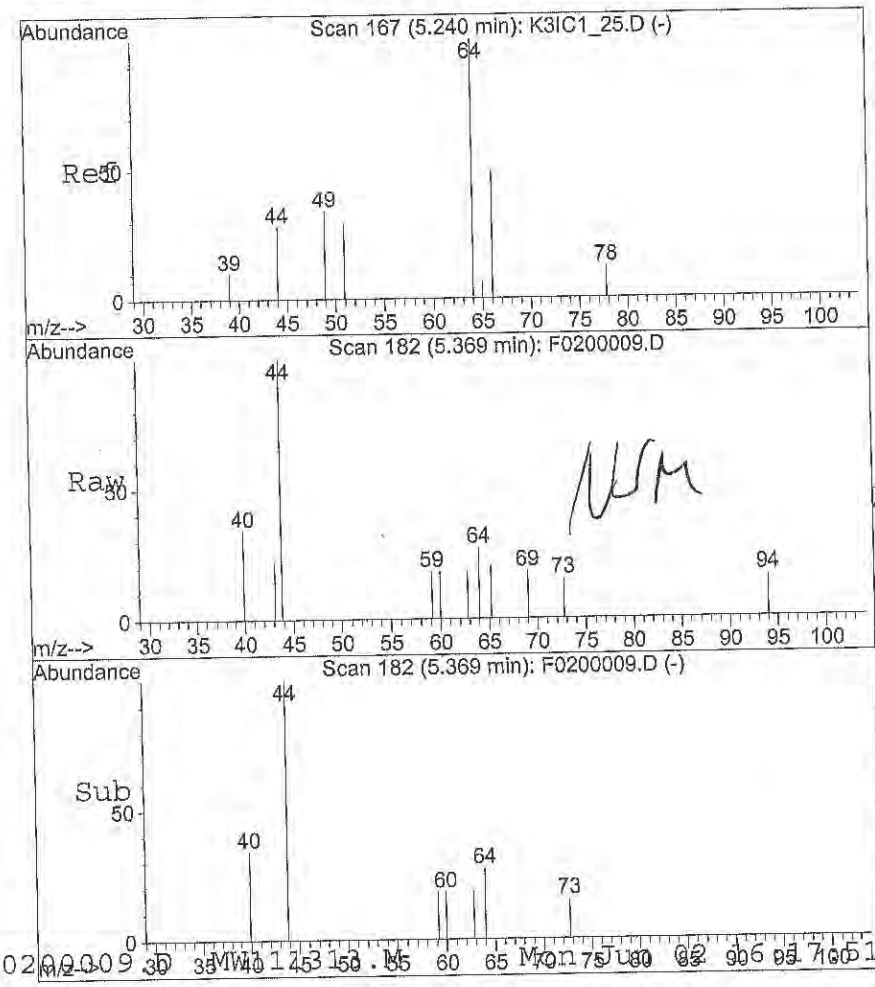


#5
Vinyl Chloride
Concen: 0.16 ug/L
RT: 4.52 min Scan# 81
Delta R.T. -0.04 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 62 Resp: 312

Ion	Ratio	Lower	Upper
62	100		
64	0.0	25.6	38.4#

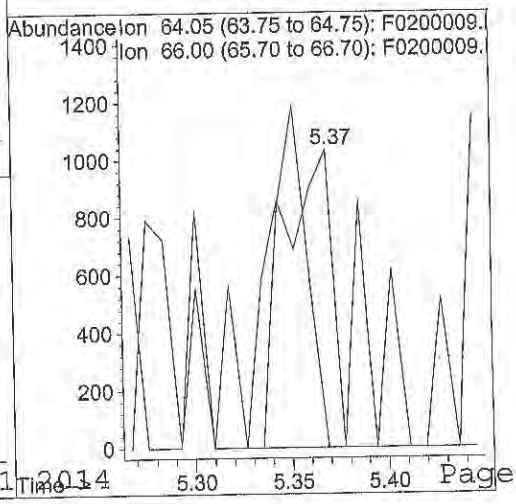


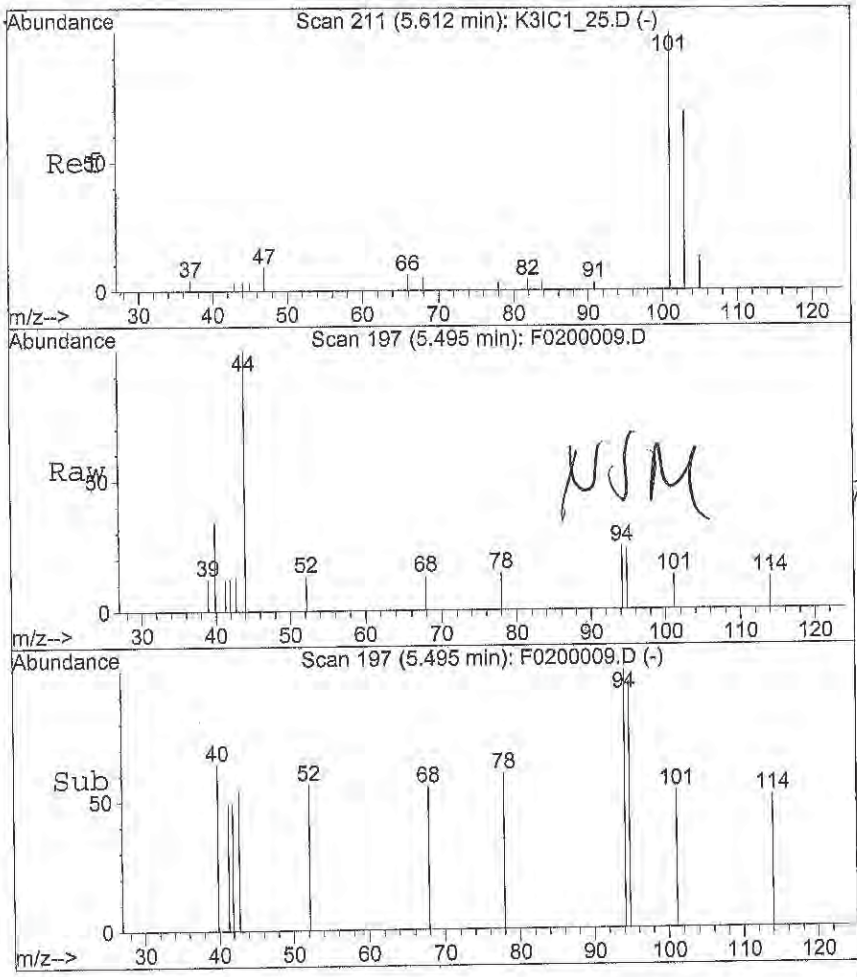


#7
Chloroethane
Concen: 3.66 ug/L
RT: 5.37 min Scan# 182
Delta R.T. 0.13 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 64 Resp: 2778

Ion	Ratio	Lower	Upper
64	100		
66	47.3	35.4	53.0

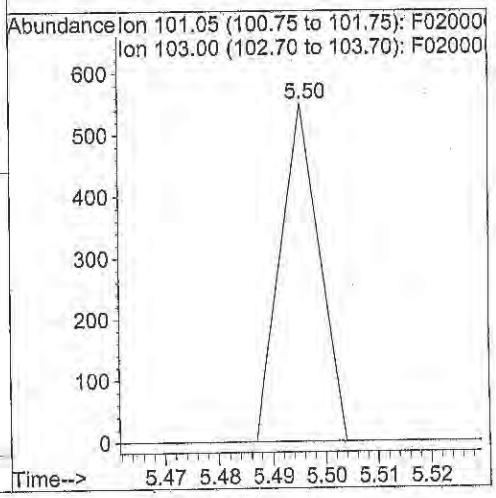


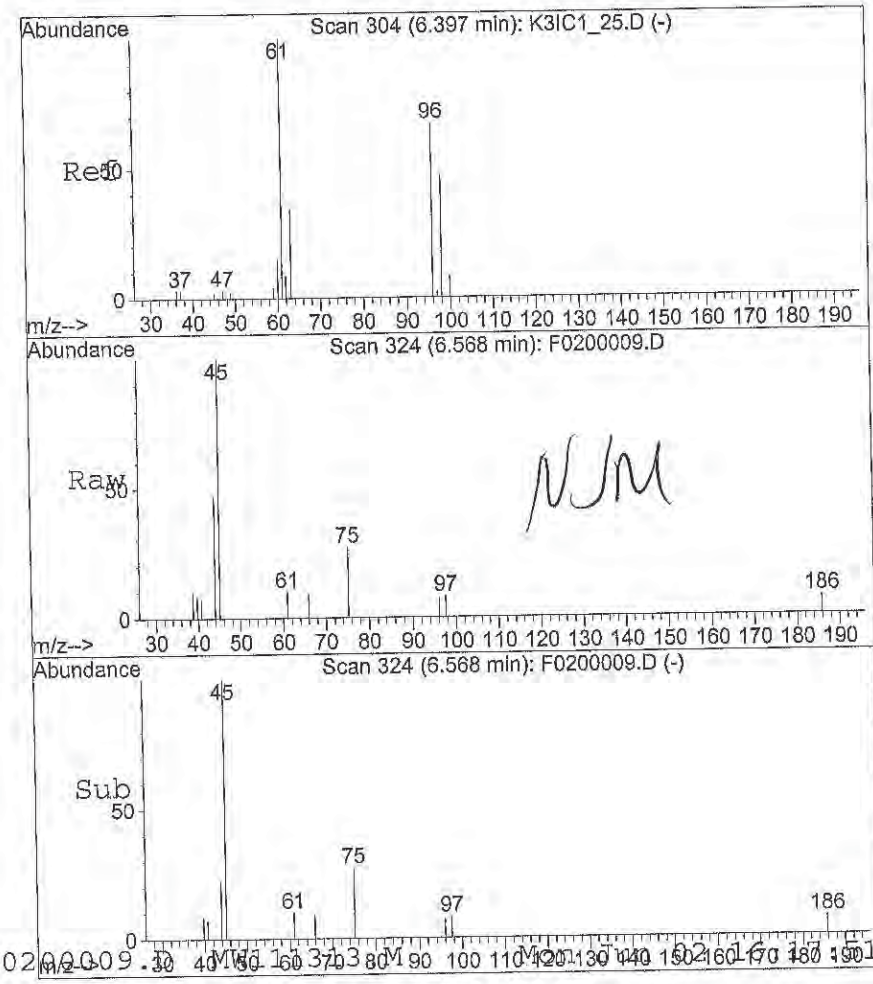


#8
(F11) Trichlorofluoromethane
Concen: 0.09 ug/L
RT: 5.50 min Scan# 197
Delta R.T. -0.12 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:101 Resp: 279

Ion	Ratio	Lower	Upper
101	100		
103	0.0	54.5	81.7#

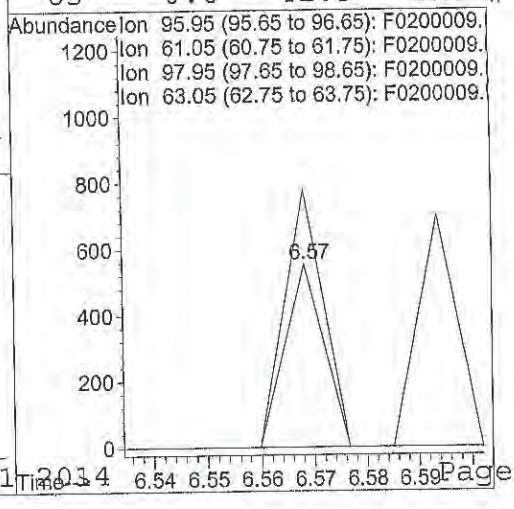


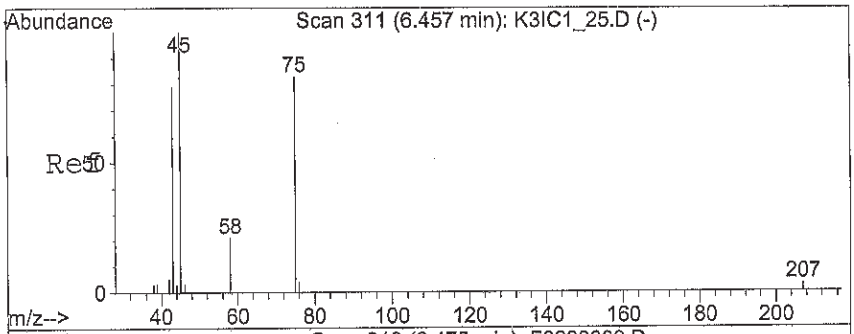


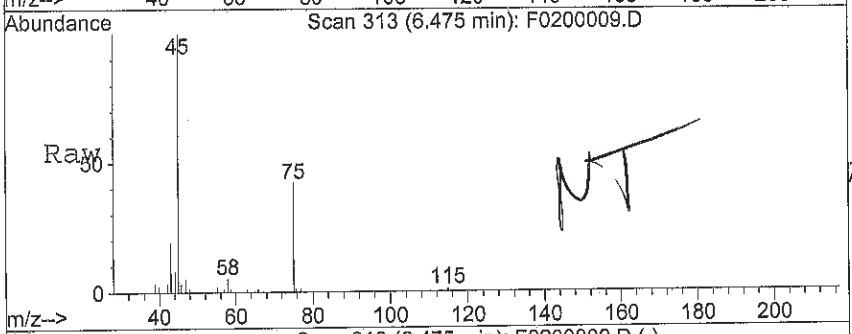
#10
1,1-Dichloroethene
Concen: 0.11 ug/L
RT: 6.57 min Scan# 324
Delta R.T. 0.17 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

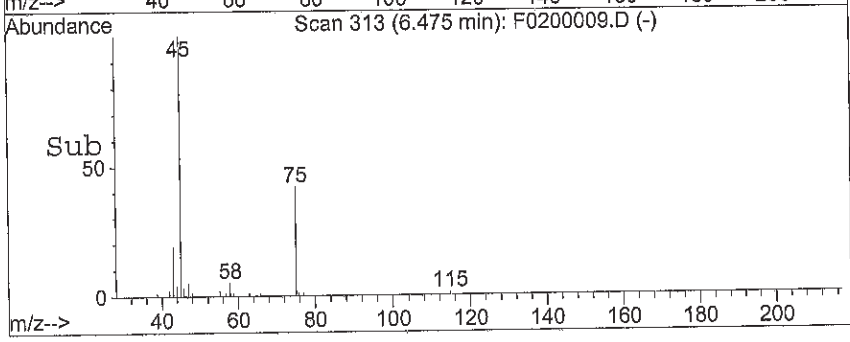
Tgt Ion: 96 Resp: 281

Ion	Ratio	Lower	Upper
96	100		
61	140.6	130.0	195.0
98	0.0	56.2	84.4#
63	0.0	41.5	62.3#





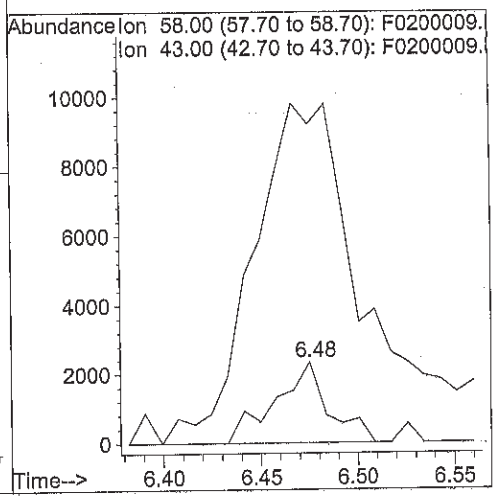


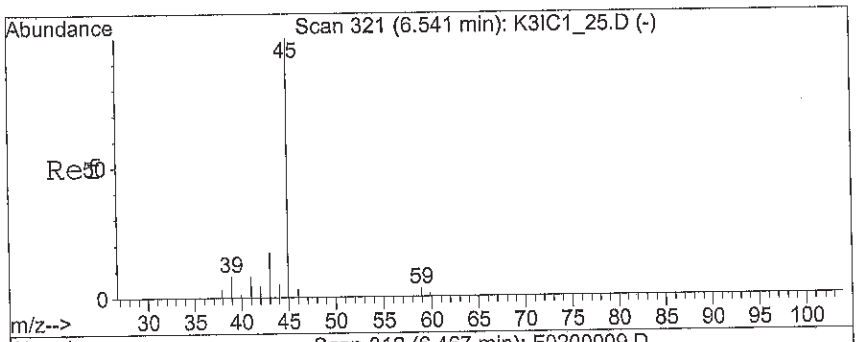


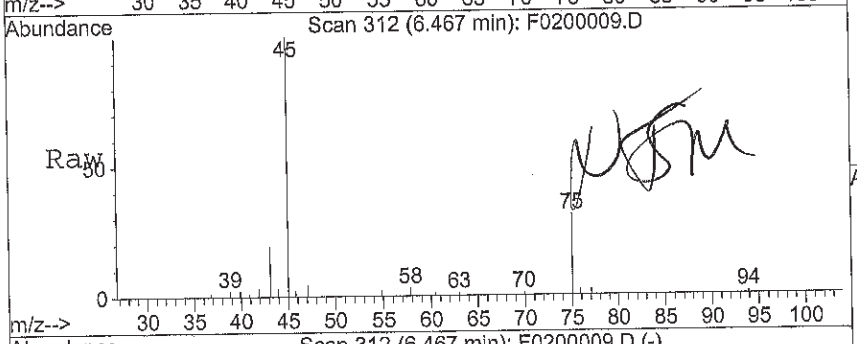
#11
Acetone
Concen: 5.24 ug/L
RT: 6.48 min Scan# 313
Delta R.T. 0.02 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

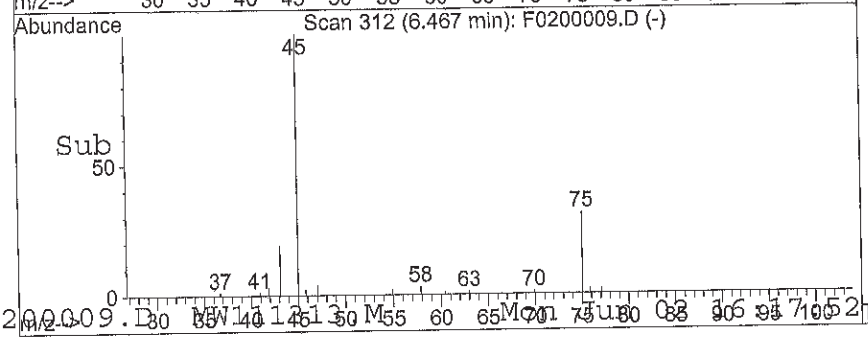
Tgt Ion: 58 Resp: 4442

Ion	Ratio	Lower	Upper
58	100		
43	894.4	360.9	541.3#





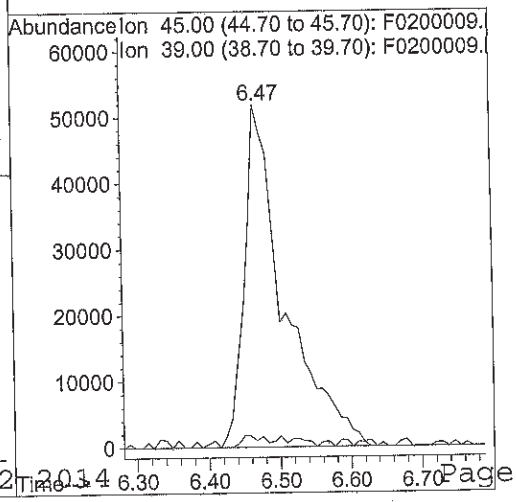


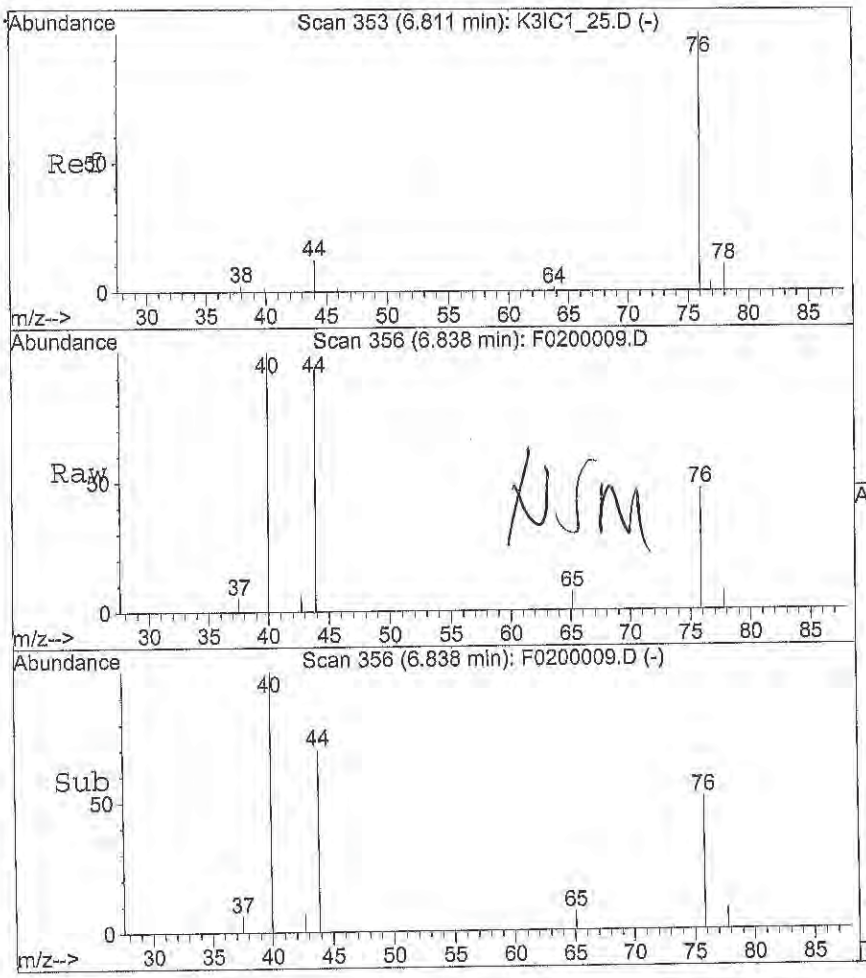


#12
(IPA) Leak Check Compound
Concen: 1488.01 ug/L
RT: 6.47 min Scan# 312
Delta R.T. -0.07 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 45 Resp: 201316

Ion	Ratio	Lower	Upper
45	100		
39	2.1	4.9	7.3#

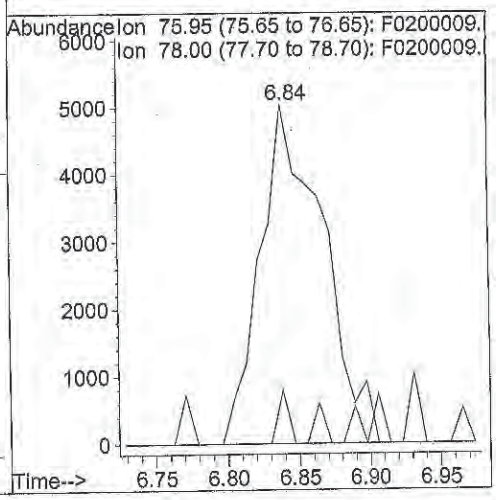


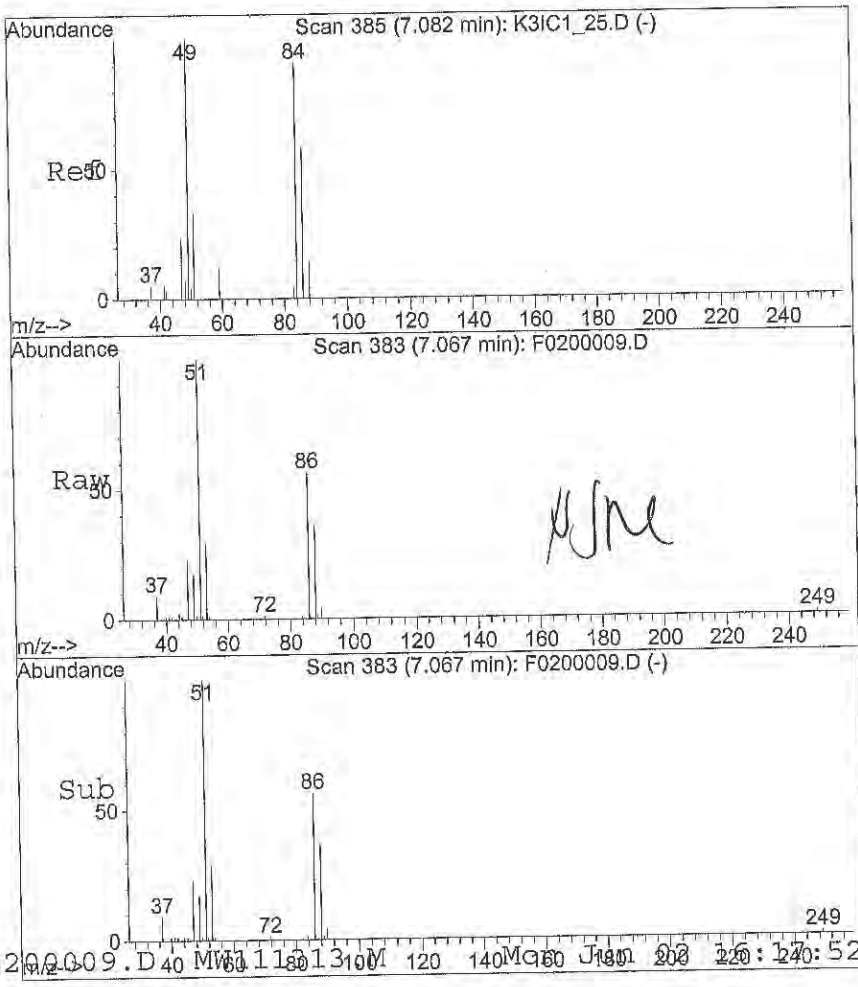


#13
Carbon disulfide
Concen: 1.64 ug/L
RT: 6.84 min Scan# 356
Delta R.T. 0.03 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 76 Resp: 15374

Ion	Ratio	Lower	Upper
76	100		
78	2.6	7.0	10.4#

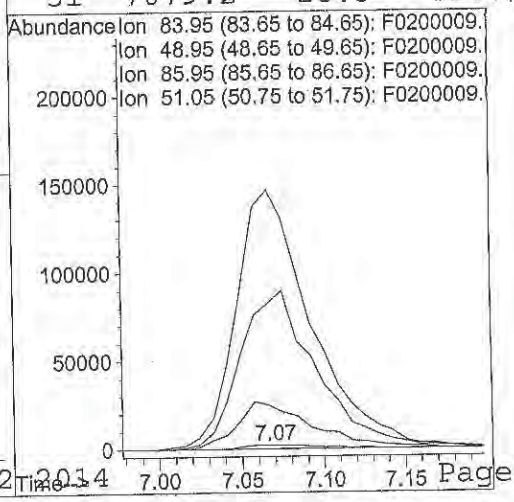


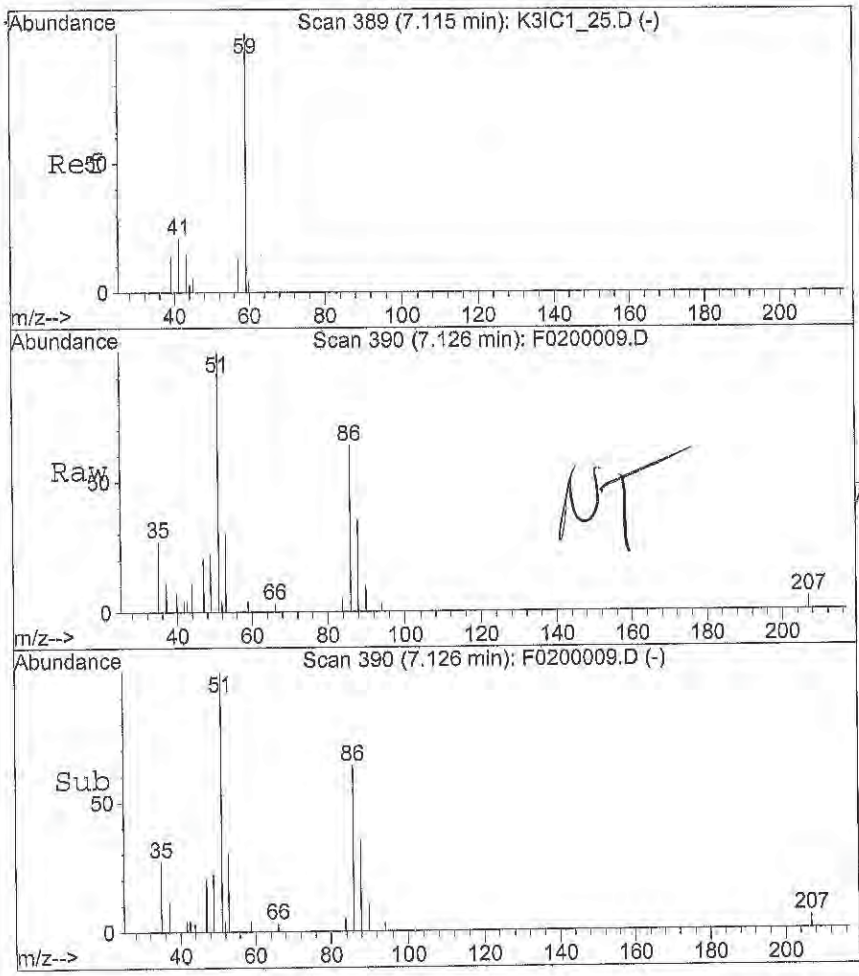


#14
Methylene Chloride
Concen: 2.14 ug/L
RT: 7.07 min Scan# 383
Delta R.T. -0.02 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 84 Resp: 6603

Ion	Ratio	Lower	Upper
84	100		
49	1297.7	89.8	134.6#
86	4387.0	51.1	76.7#
51	7079.2	28.5	42.7#

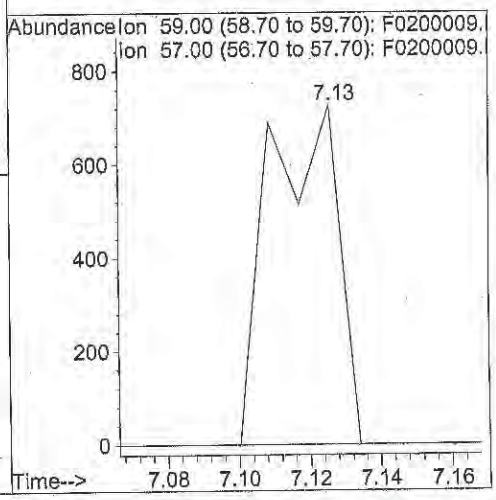


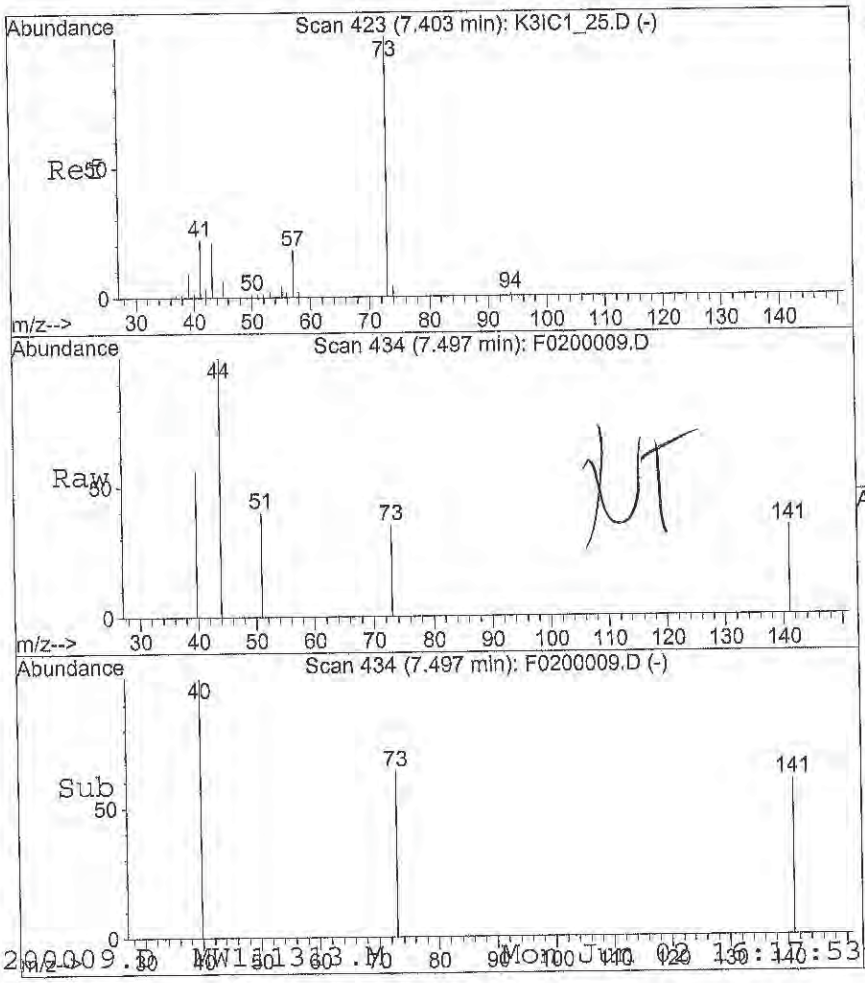


#15
(TBA) tert-Butanol
Concen: 5.09 ug/L
RT: 7.13 min Scan# 390
Delta R.T. 0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 59 Resp: 977

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

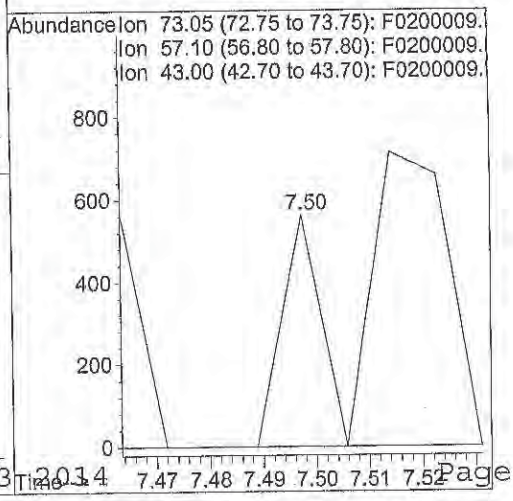


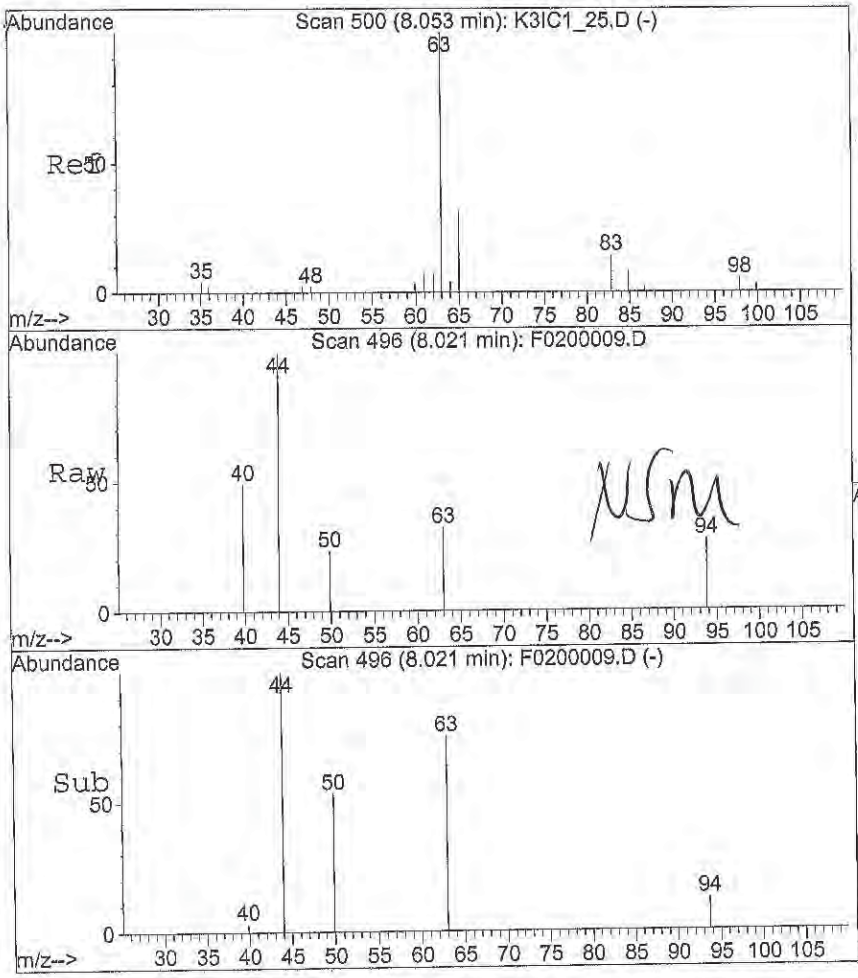


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.04 ug/L
RT: 7.50 min Scan# 434
Delta R.T. 0.09 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 73 Resp: 285

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	243.9	18.4	27.6#

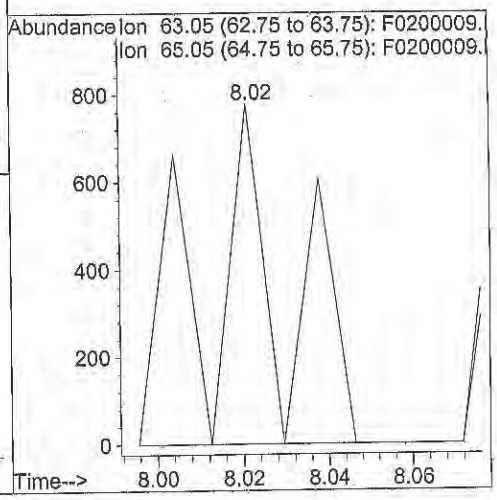


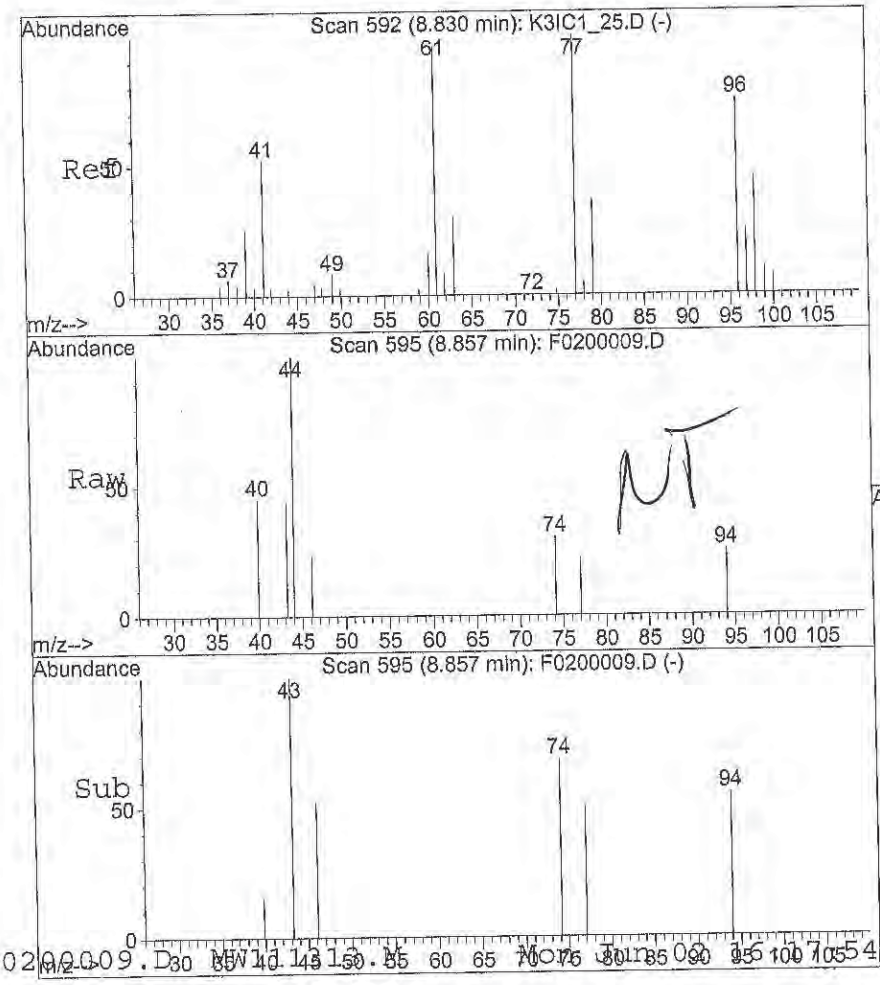


#18
1,1-Dichloroethane
Concen: 0.14 ug/L
RT: 8.02 min Scan# 496
Delta R.T. -0.03 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 63 Resp: 700

Ion	Ratio	Lower	Upper
63	100		
65	43.9	25.8	38.8#

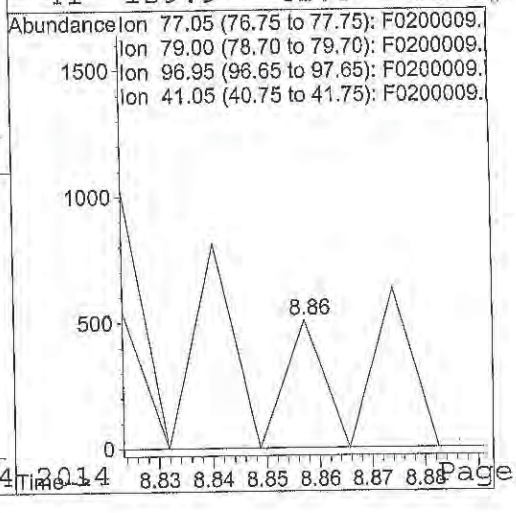


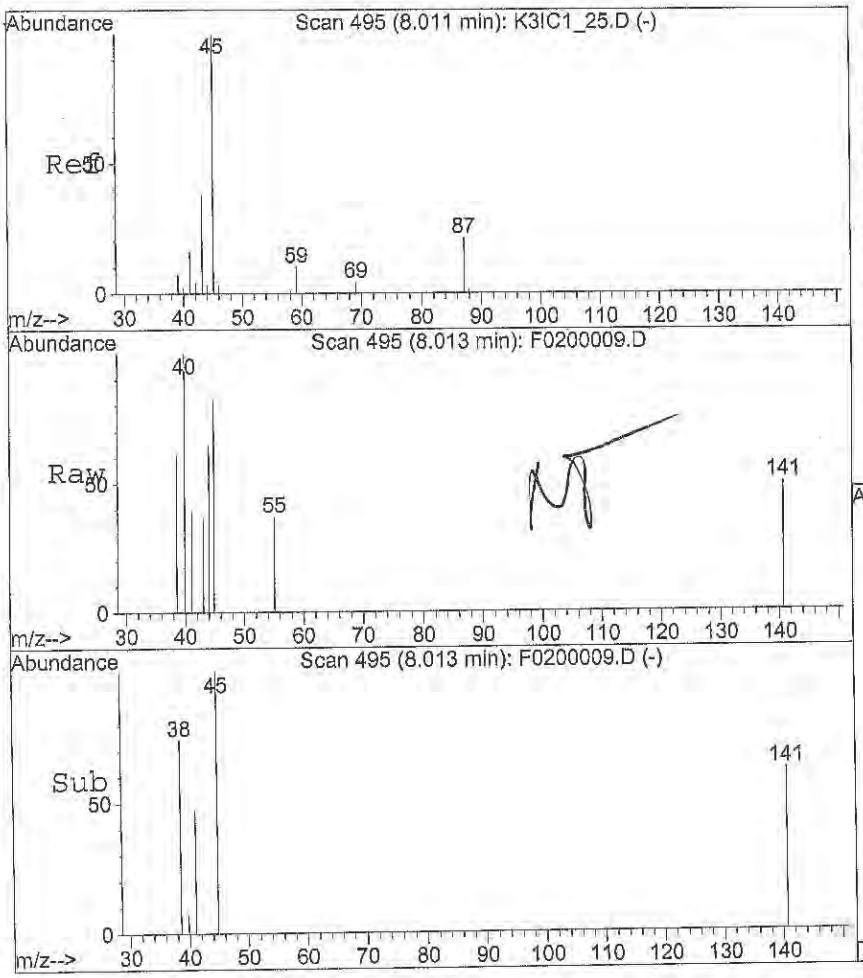


#20
2,2-Dichloropropane
Concen: 0.06 ug/L
RT: 8.86 min Scan# 595
Delta R.T. 0.03 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 77 Resp: 257

Ion	Ratio	Lower	Upper
77	100		
79	0.0	26.6	40.0#
97	0.0	18.9	28.3#
41	159.9	42.6	64.0#

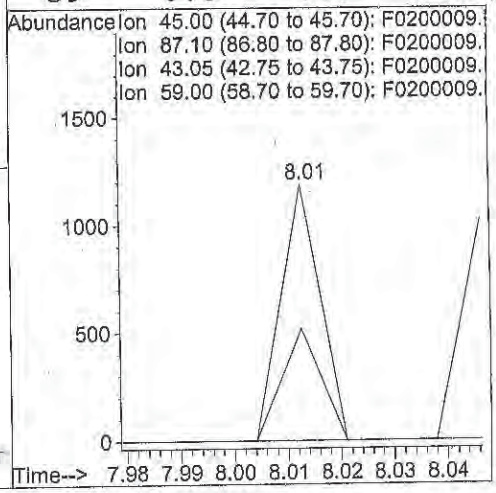


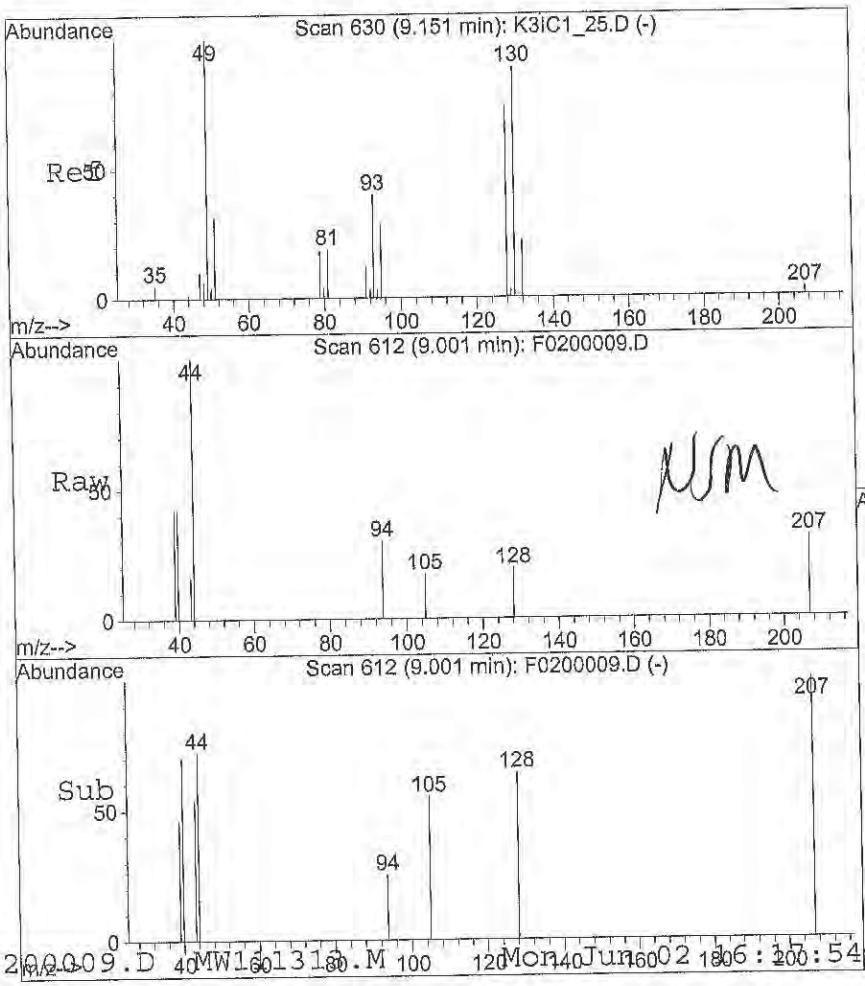


#22
(DIPE) Diisopropyl Ether
Concen: 0.07 ug/L
RT: 8.01 min Scan# 495
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 45 Resp: 603

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	43.4	30.5	45.7
59	0.0	7.4	11.2#

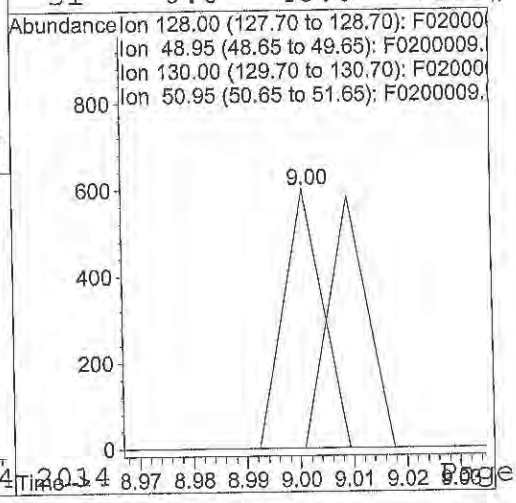


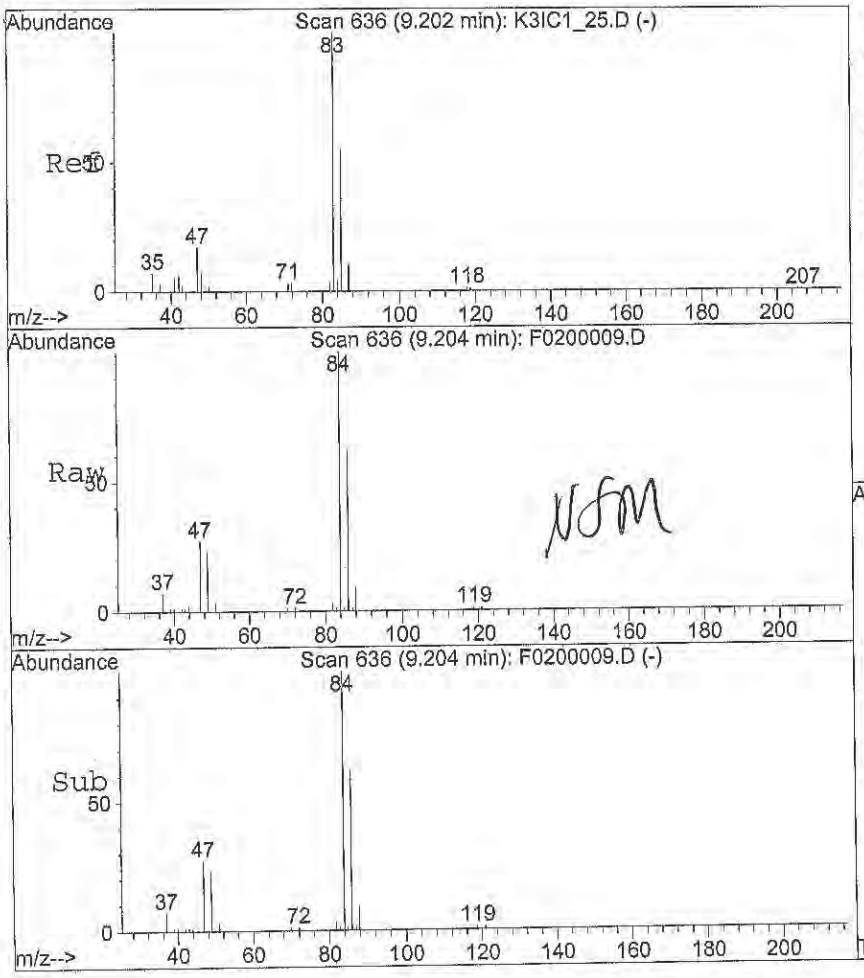


#23
Bromochloromethane
Concen: 0.20 ug/L
RT: 9.00 min Scan# 612
Delta R.T. -0.15 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:128 Resp: 304

Ion	Ratio	Lower	Upper
128	100		
49	0.0	117.4	176.0#
130	0.0	111.0	166.6#
51	0.0	48.0	72.0#

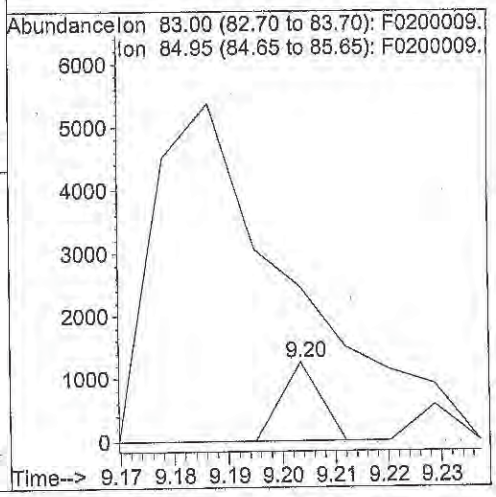


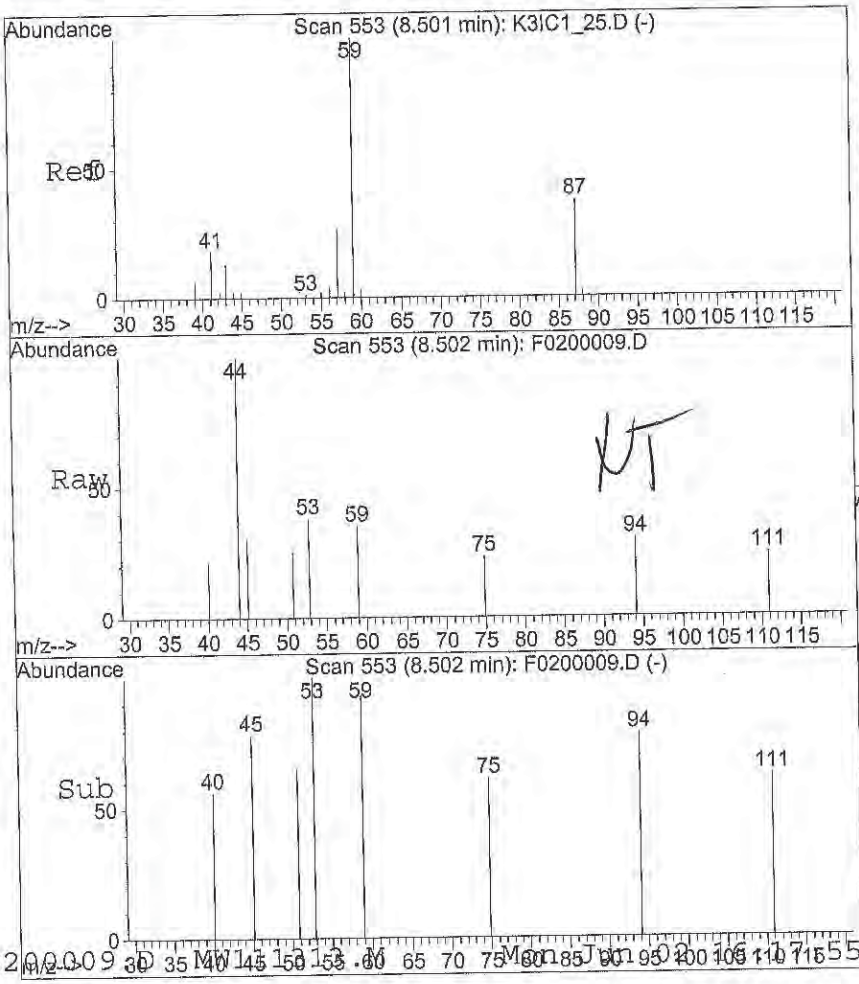


#24
Chloroform
Concen: 0.11 ug/L
RT: 9.20 min Scan# 636
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 83 Resp: 633

Ion	Ratio	Lower	Upper
83	100		
85	1808.7	51.8	77.6#

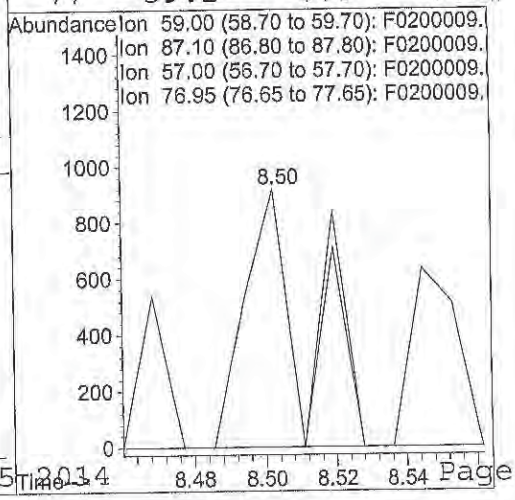


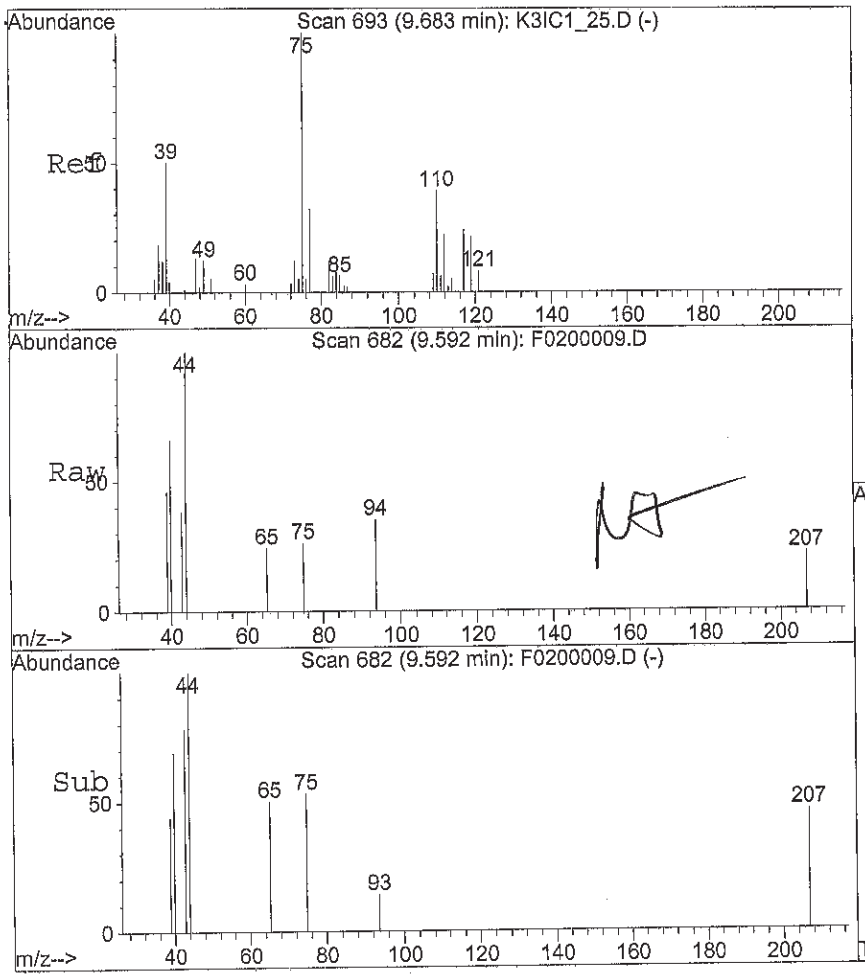


#25
(ETBE) 2-ethoxy 2-methyl propan
Concen: 0.13 ug/L
RT: 8.50 min Scan# 553
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 59 Resp: 1085

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	39.2	0.0	0.0#

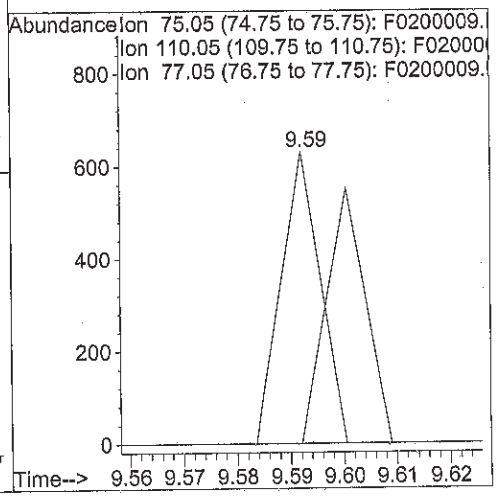


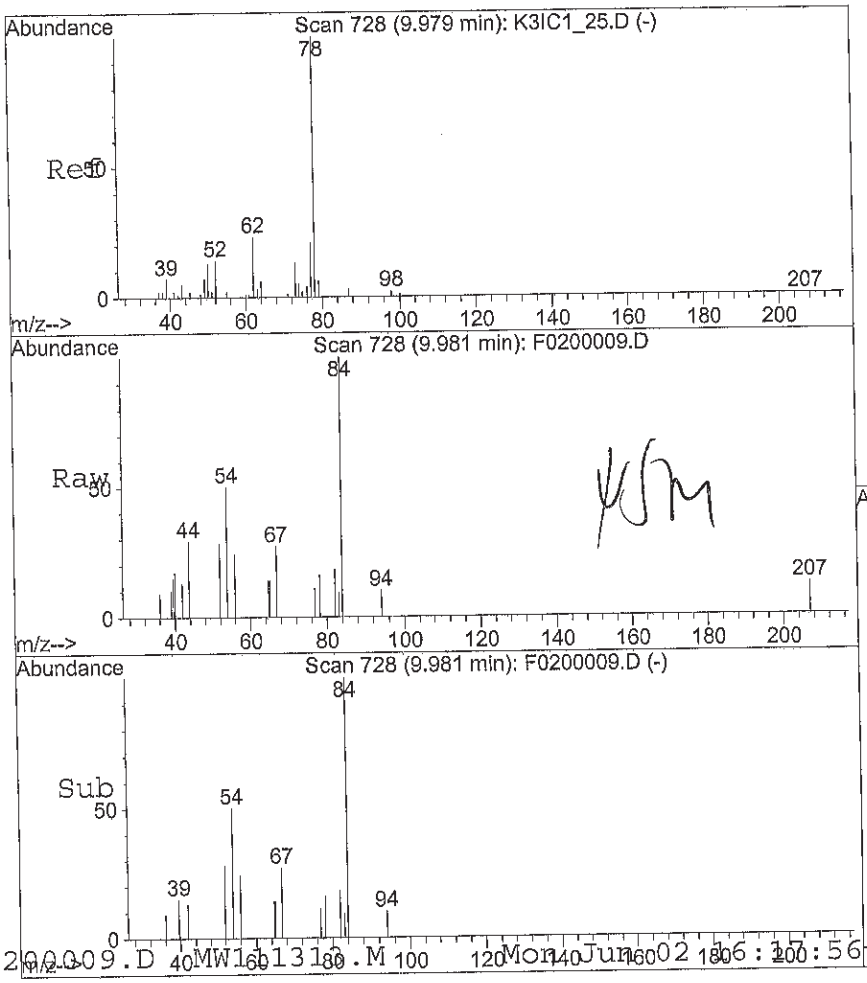


#29
1,1-Dichloropropene
Concen: 0.07 ug/L
RT: 9.59 min Scan# 682
Delta R.T. -0.09 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 75 Resp: 320

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	87.5	25.0	37.4#

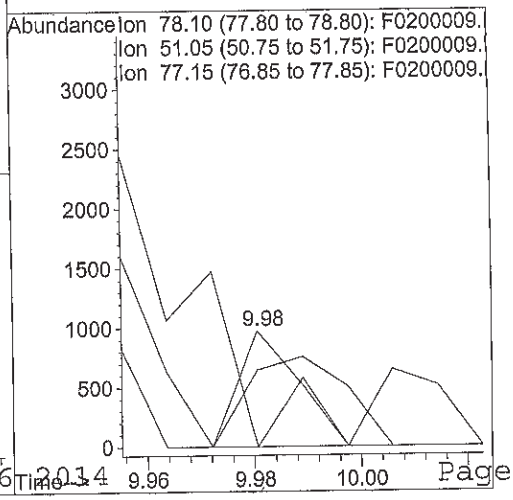


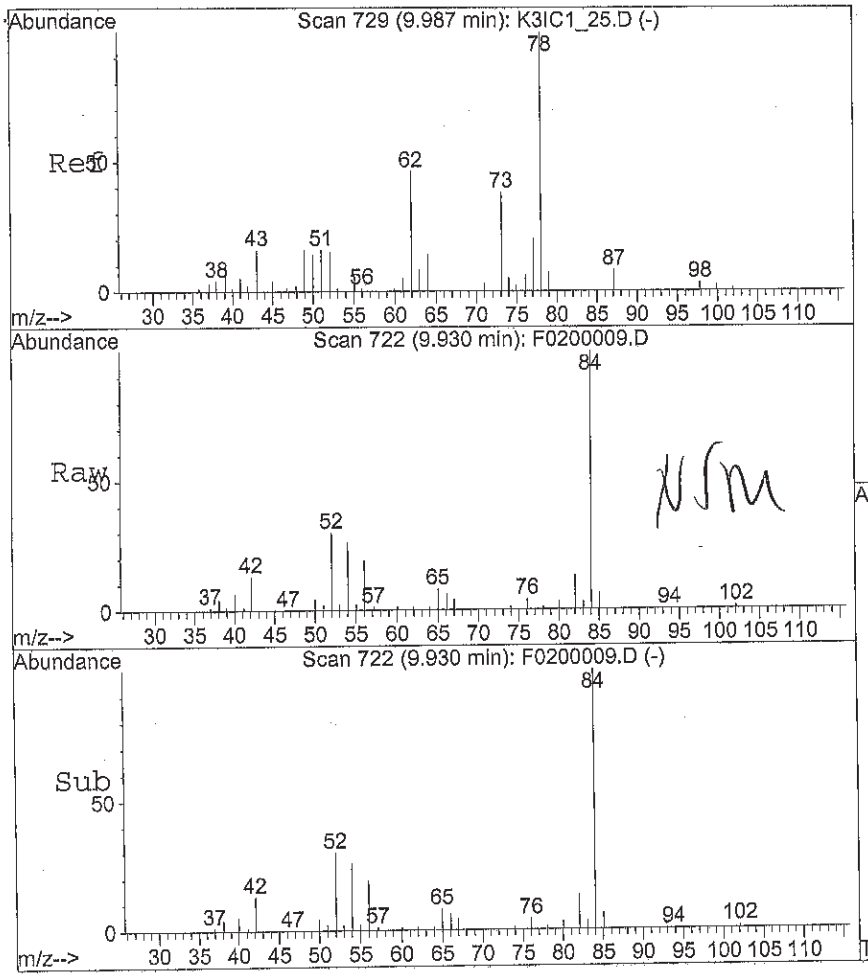


#31
Benzene
Concen: 0.07 ug/L
RT: 9.98 min Scan# 728
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 78 Resp: 754

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	127.9	16.6	24.8#

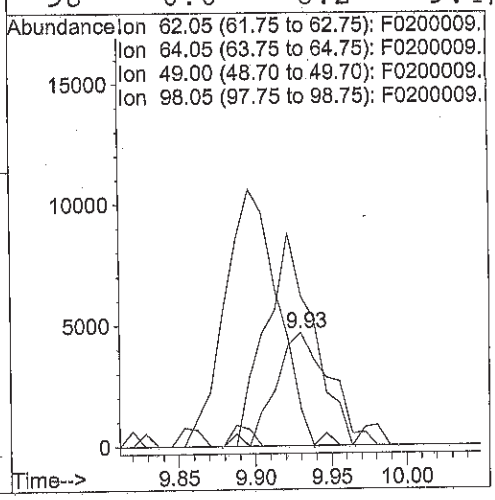


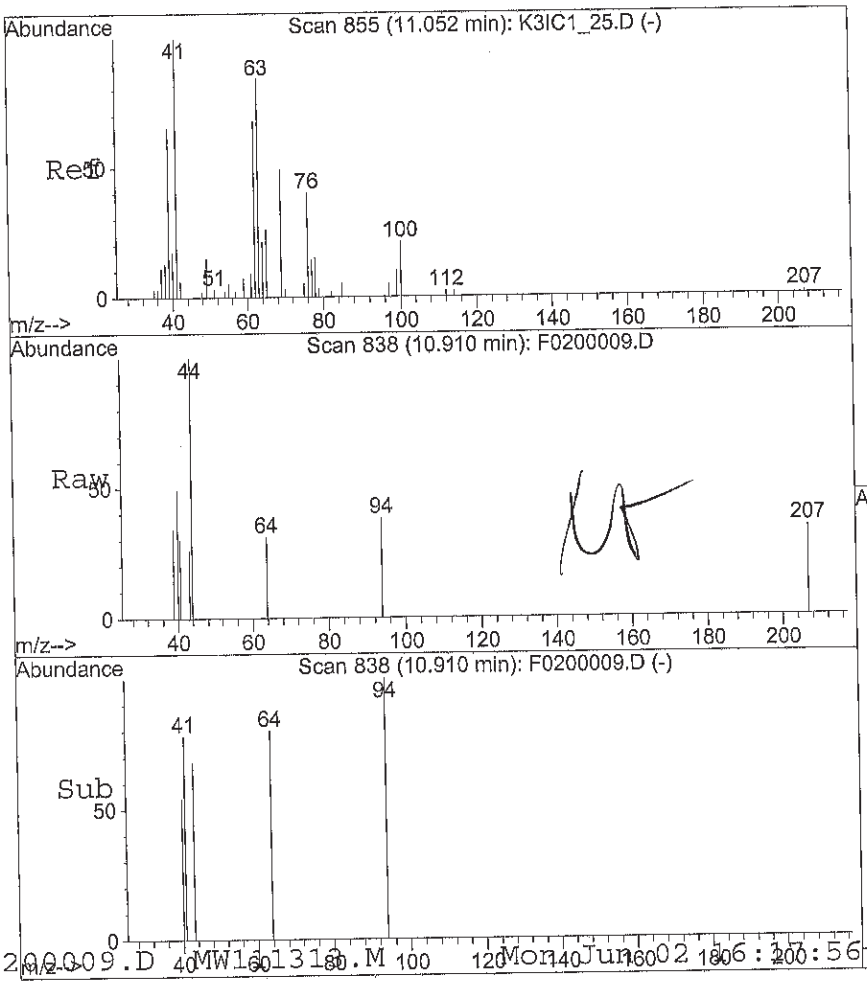


#32
1,2-Dichloroethane
Concen: 3.14 ug/L
RT: 9.93 min Scan# 722
Delta R.T. -0.06 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 62 Resp: 11753

Ion	Ratio	Lower	Upper
62	100		
64	167.5	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

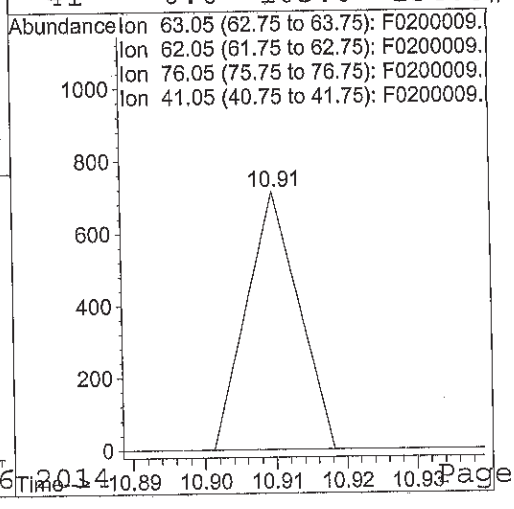


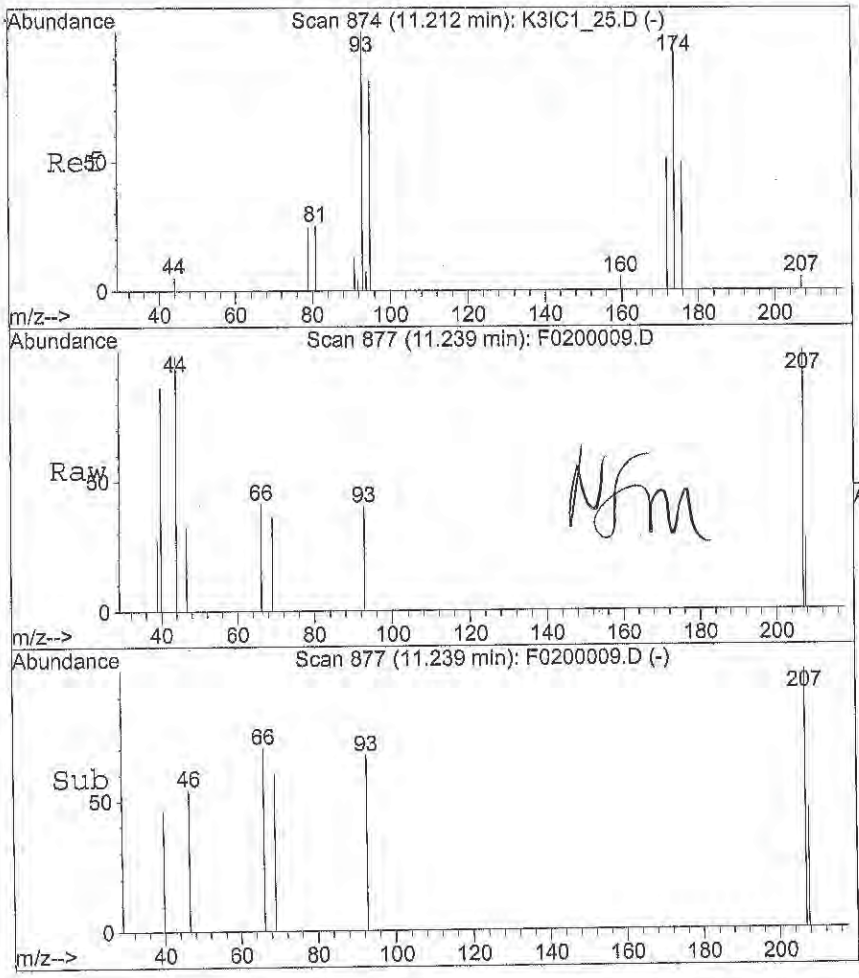


#34
1,2-Dichloropropane
Concen: 0.14 ug/L
RT: 10.91 min Scan# 838
Delta R.T. -0.14 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 63 Resp: 362

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	0.0	103.0	154.6#

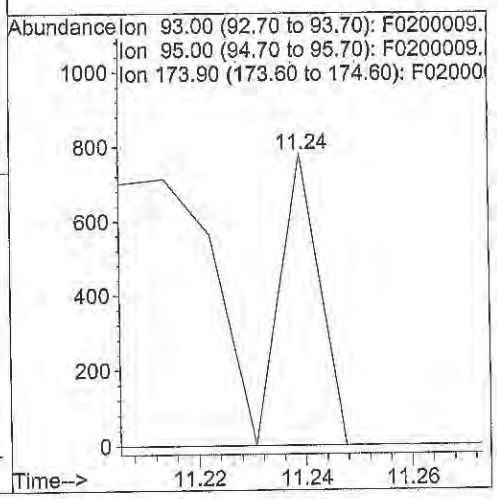


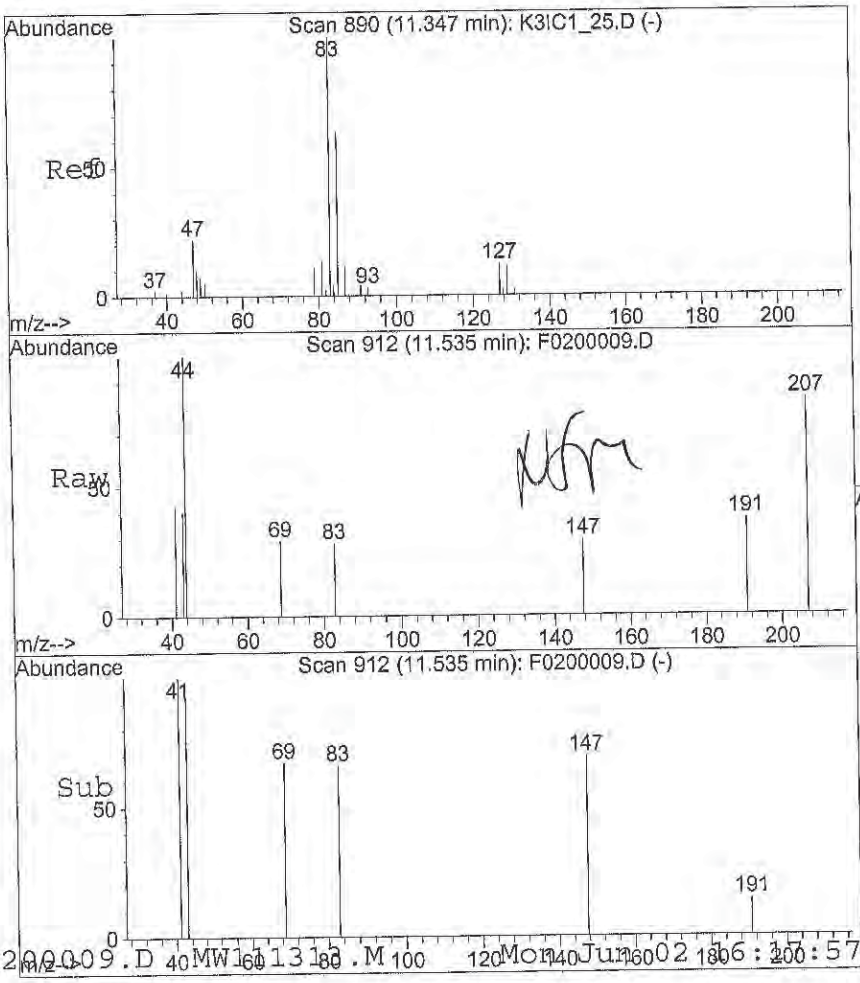


#35
Dibromomethane
Concen: 0.20 ug/L
RT: 11.24 min Scan# 877
Delta R.T. 0.03 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 93 Resp: 395

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

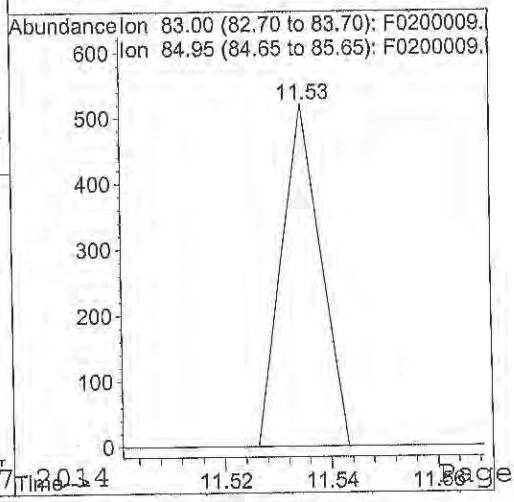


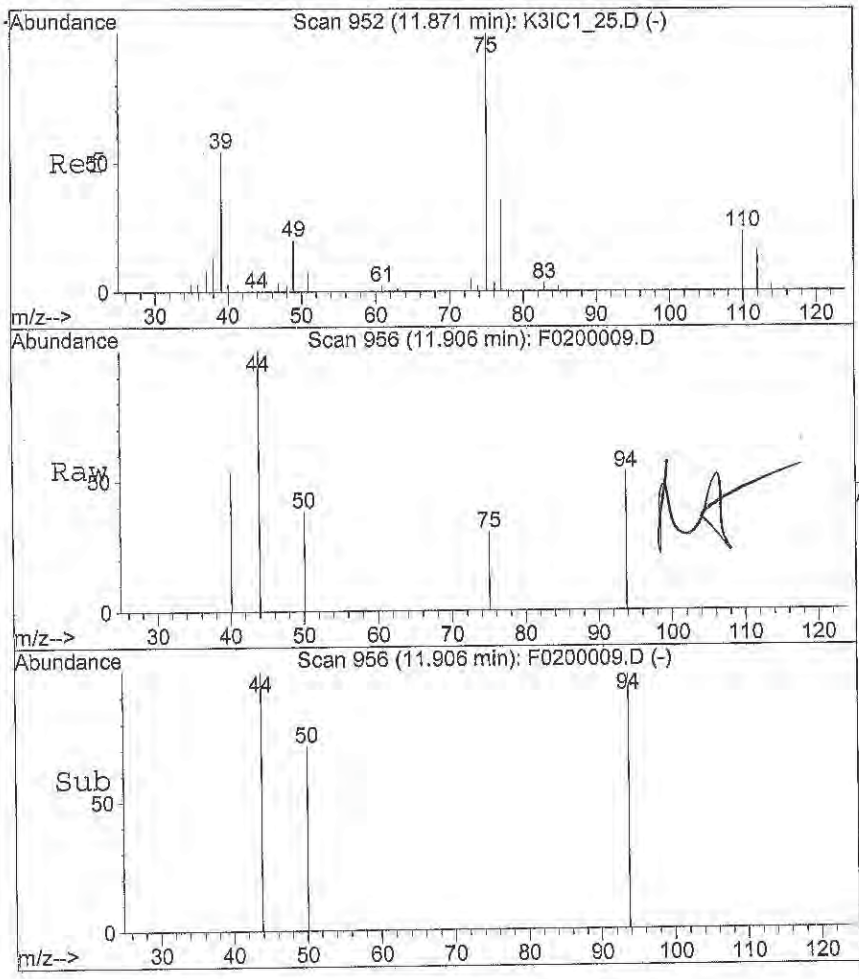


#36
Bromodichloromethane
Concen: 0.07 ug/L
RT: 11.53 min Scan# 912
Delta R.T. 0.19 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 83 Resp: 264

Ion	Ratio	Lower	Upper
83	100		
85	0.0	48.2	72.2#

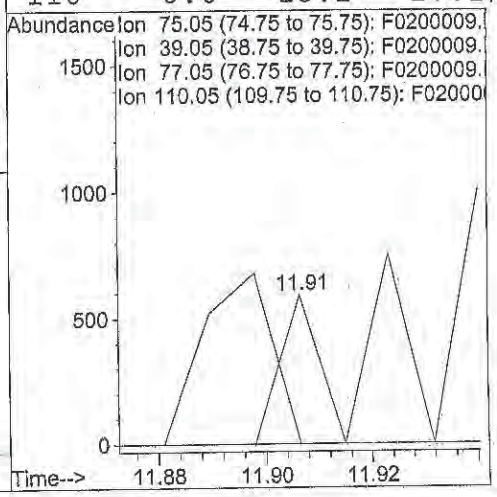


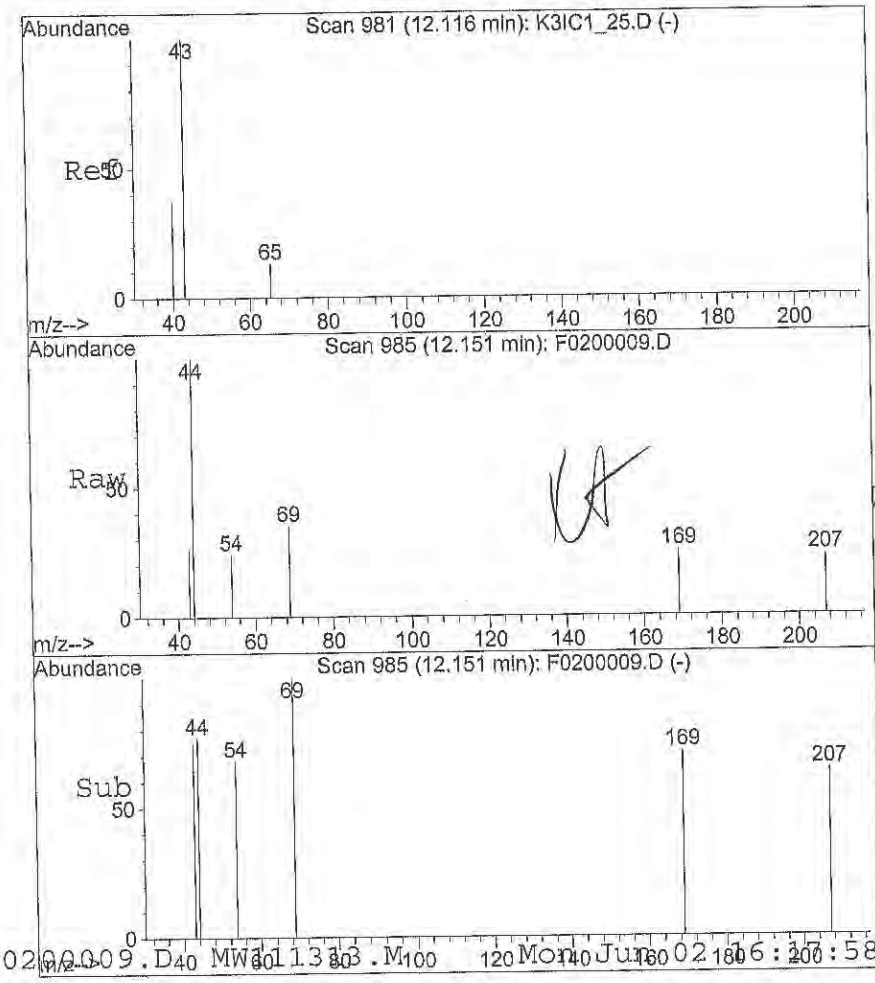


#37
cis-1,3-Dichloropropene
Concen: 0.07 ug/L
RT: 11.91 min Scan# 956
Delta R.T. 0.04 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 75 Resp: 300

Ion	Ratio	Lower	Upper
75	100		
39	202.3	40.7	61.1#
77	0.0	28.8	43.2#
110	0.0	18.1	27.1#

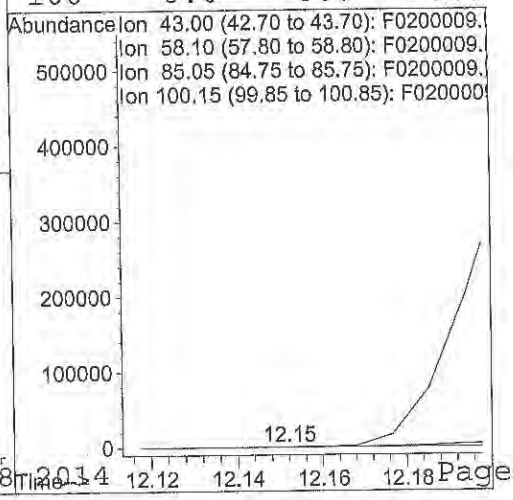


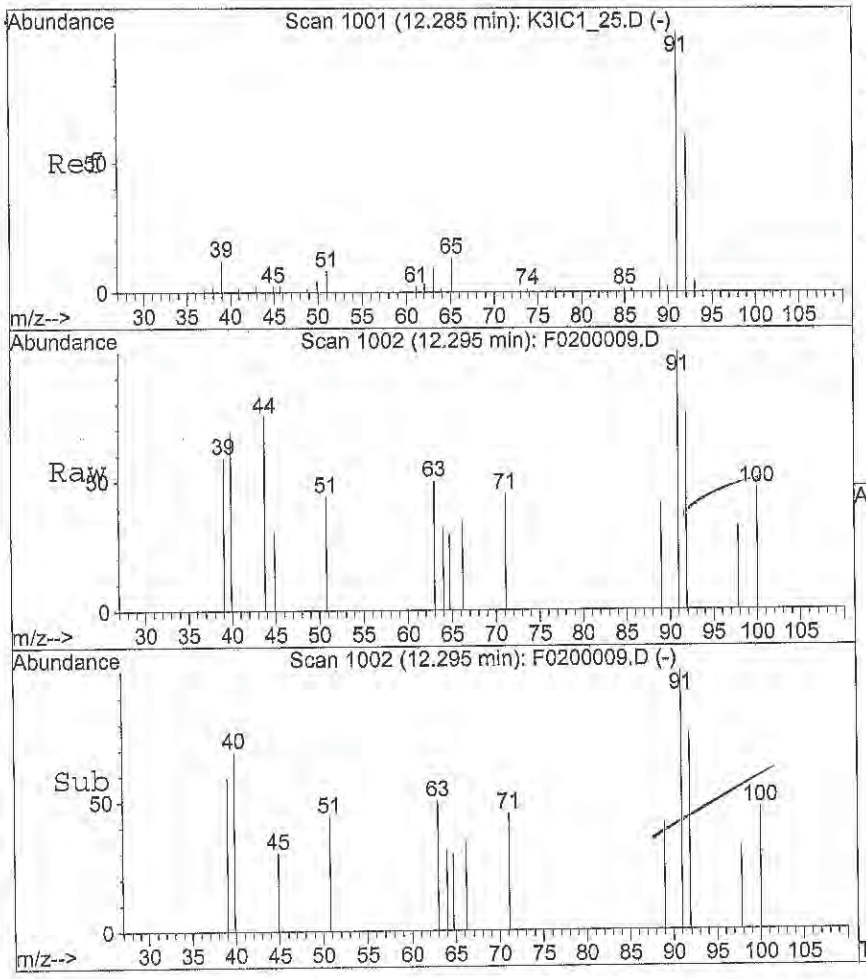


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.40 ug/L
RT: 12.15 min Scan# 985
Delta R.T. 0.04 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 43 Resp: 860

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

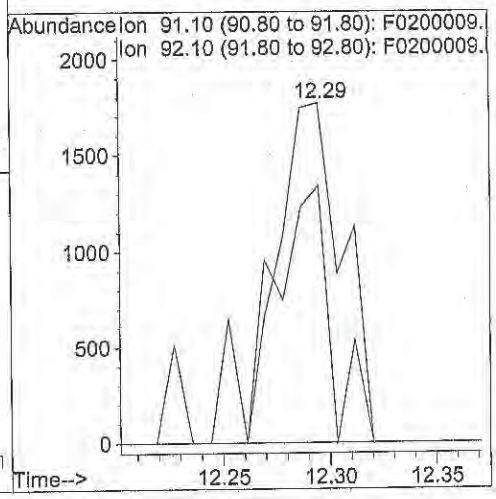


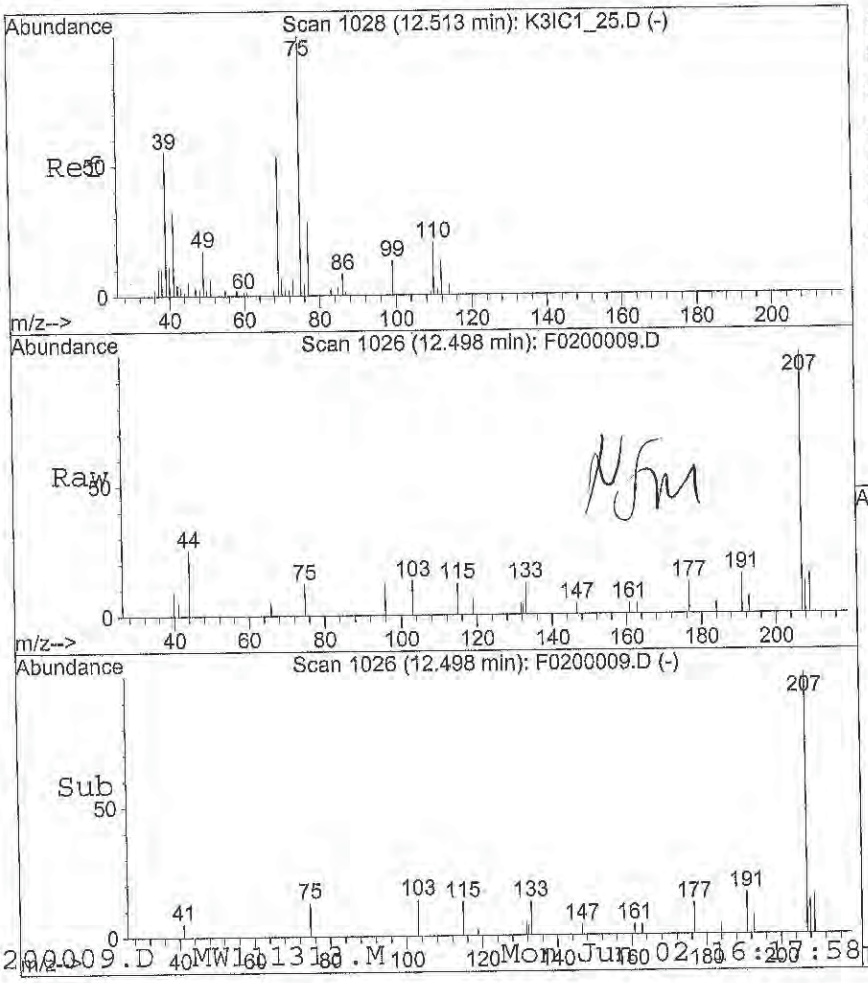


#41
Toluene
Concen: 0.27 ug/L
RT: 12.29 min Scan# 1002
Delta R.T. 0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 91 Resp: 4013

Ion	Ratio	Lower	Upper
91	100		
92	60.8	47.4	71.0

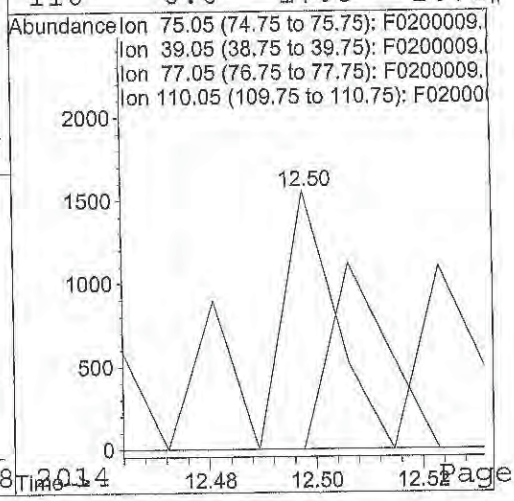


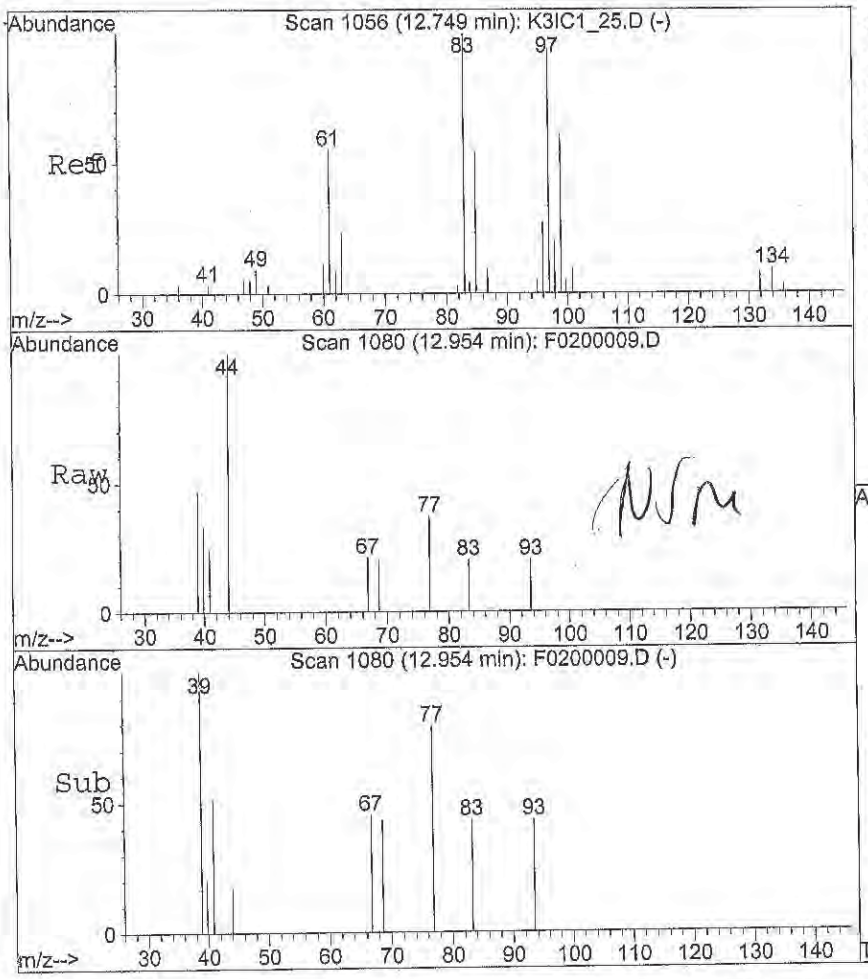


#42
trans-1,3-Dichloropropene
Concen: 0.21 ug/L
RT: 12.50 min Scan# 1026
Delta R.T. -0.02 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 75 Resp: 1049

Ion	Ratio	Lower	Upper
75	100		
39	80.6	53.6	80.4#
77	0.0	25.4	38.2#
110	0.0	17.6	26.4#

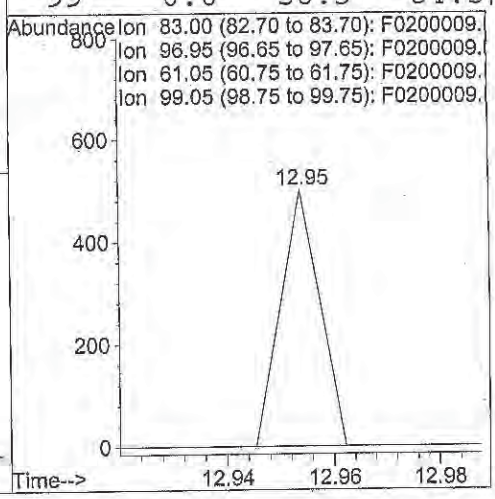


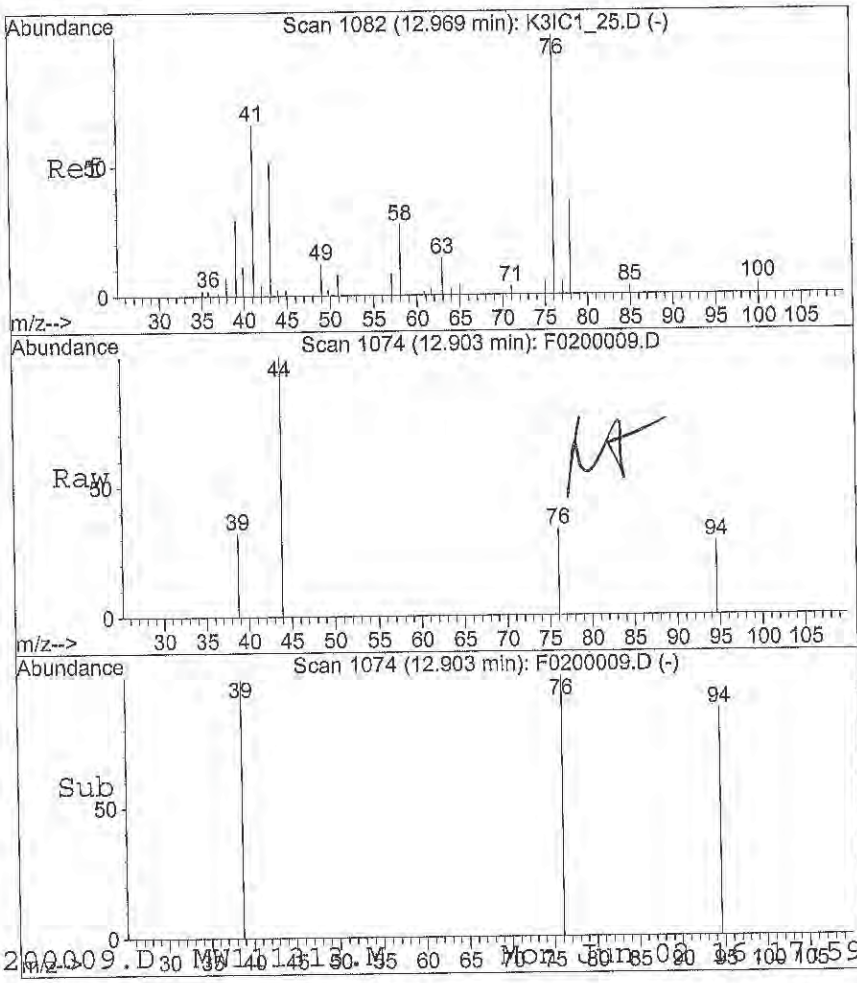


#43
1,1,2-Trichloroethane
Concen: 0.09 ug/L
RT: 12.95 min Scan# 1080
Delta R.T. 0.20 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 83 Resp: 254

Ion	Ratio	Lower	Upper
83	100		
97	0.0	79.4	119.0#
61	0.0	47.4	71.2#
99	0.0	56.3	84.5#

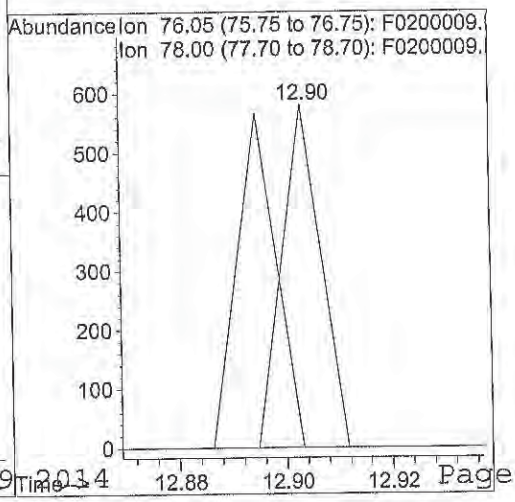


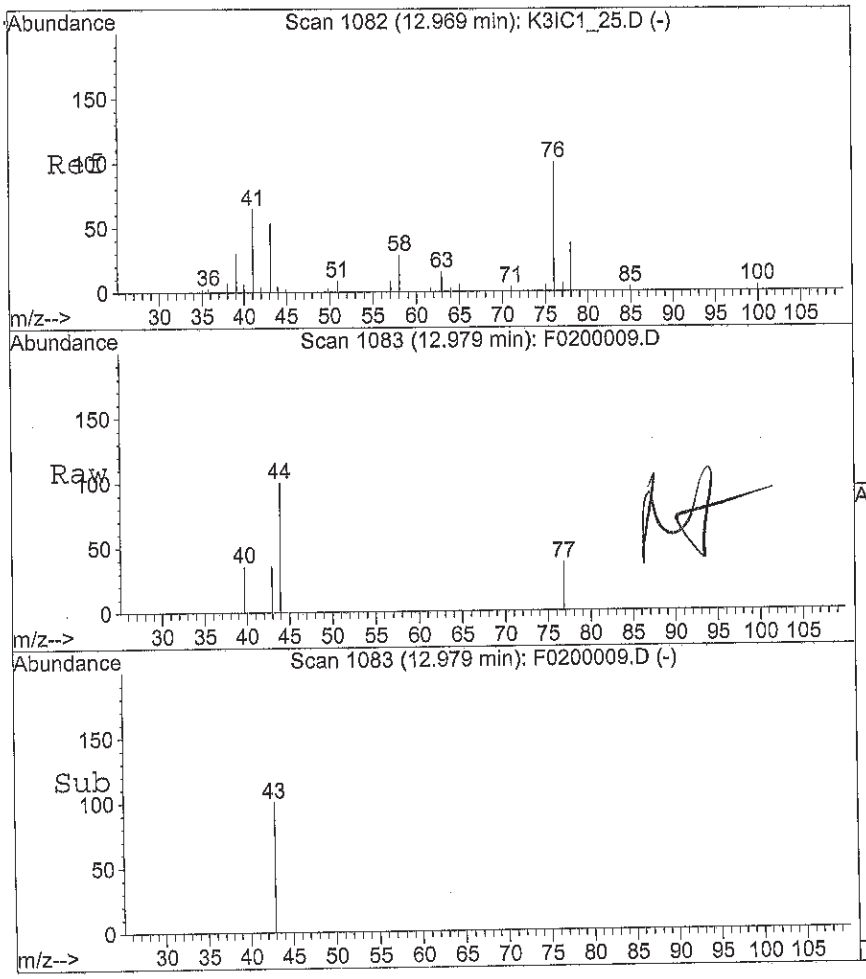


#45
1,3-Dichloropropane
Concen: 0.06 ug/L
RT: 12.90 min Scan# 1074
Delta R.T. -0.07 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 76 Resp: 294

Ion	Ratio	Lower	Upper
76	100		
78	97.3	26.9	40.3#

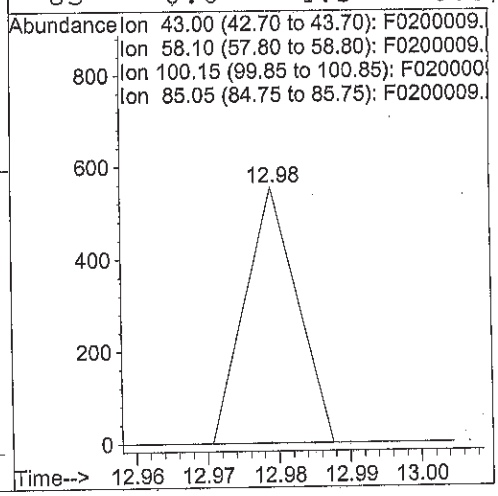


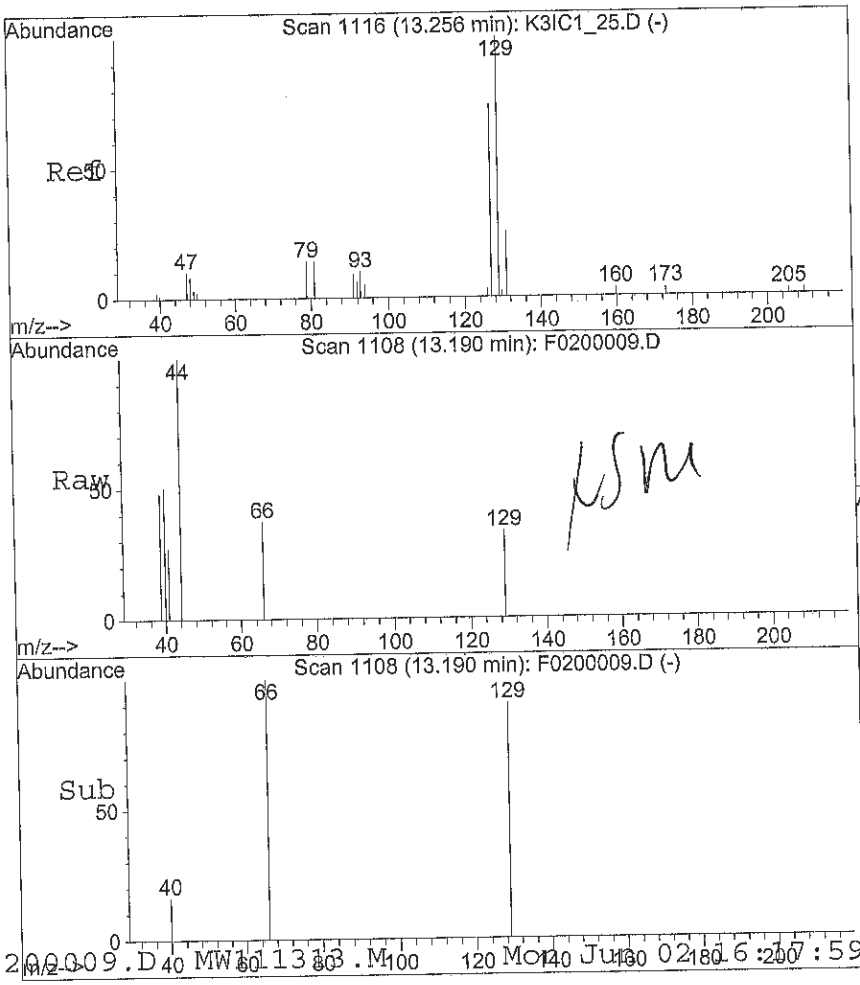


#46
2-Hexanone
Concen: 0.12 ug/L
RT: 12.98 min Scan# 1083
Delta R.T. 0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 43 Resp: 281

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

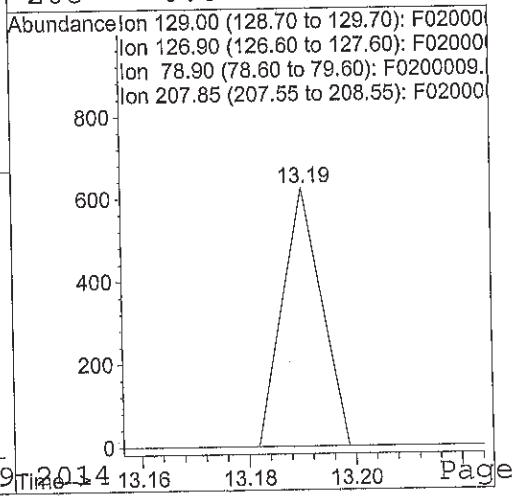


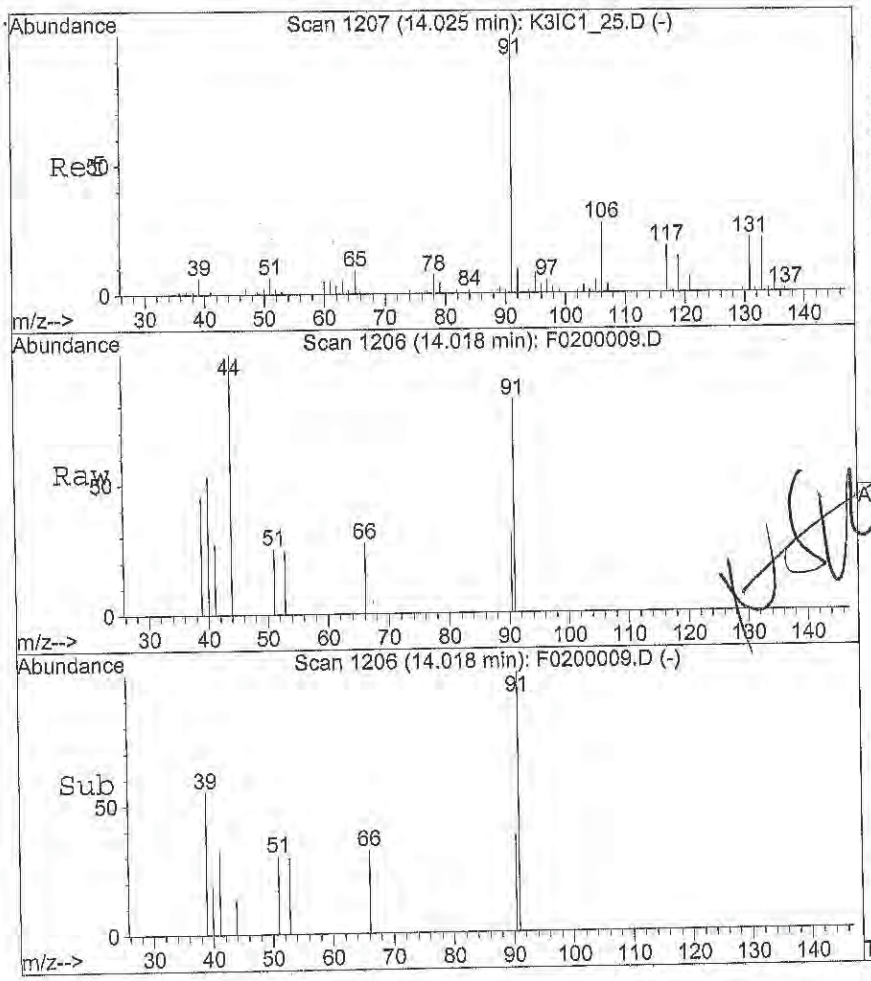


#47
Dibromochloromethane
Concen: 0.08 ug/L
RT: 13.19 min Scan# 1108
Delta R.T. -0.07 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:129 Resp: 316

Ion	Ratio	Lower	Upper
129	100		
127	0.0	61.6	92.4#
79	0.0	10.7	16.1#
208	0.0	1.4	2.0#

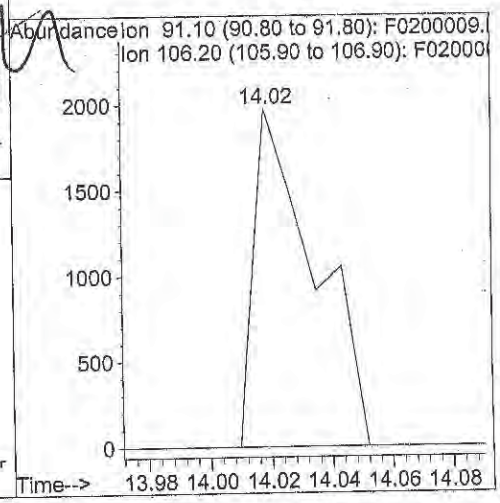


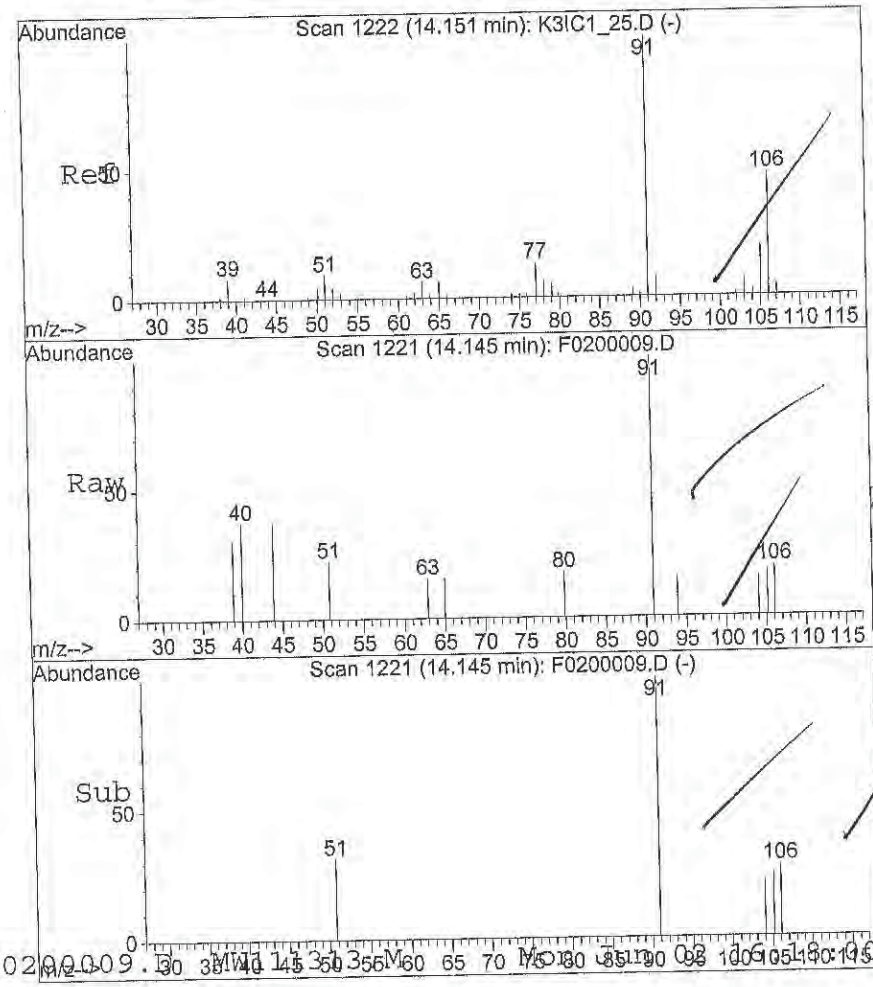


#51
Ethylbenzene
Concen: 0.16 ug/L
RT: 14.02 min Scan# 1206
Delta R.T. -0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 91 Resp: 2743

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

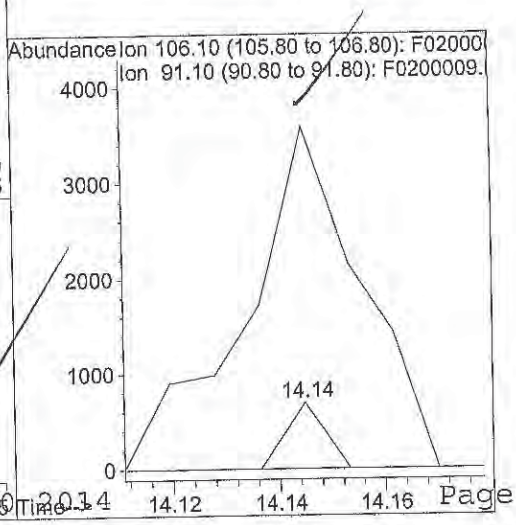


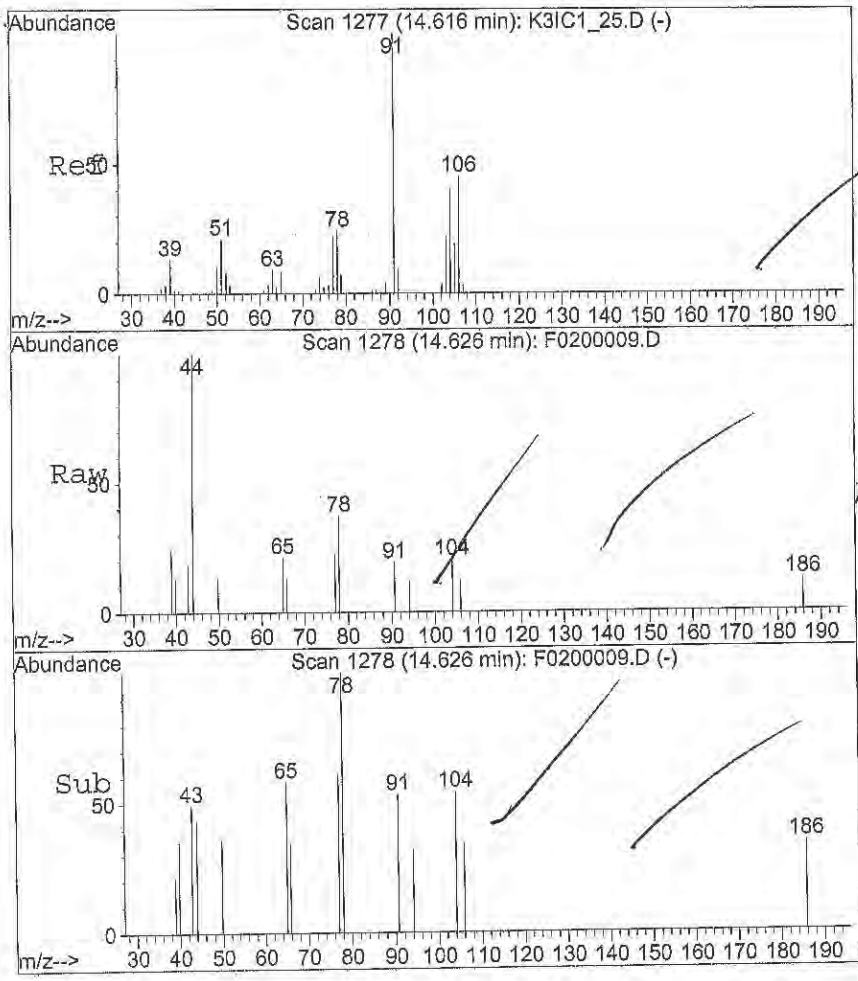


#52
m,p-Xylenes
Concen: 0.06 ug/L
RT: 14.14 min Scan# 1221
Delta R.T. -0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:106 Resp: 349

Ion	Ratio	Lower	Upper
106	100		
91	1563.0	177.1	265.7#

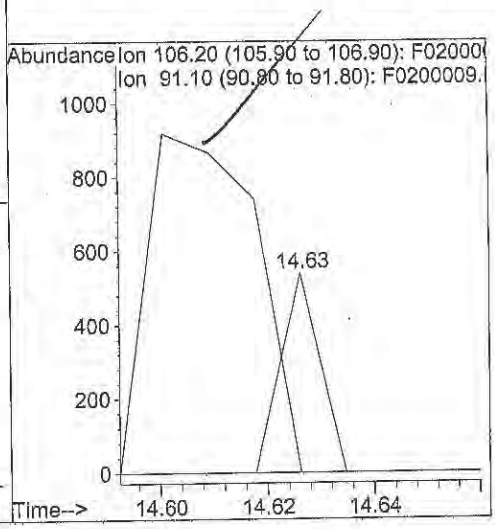


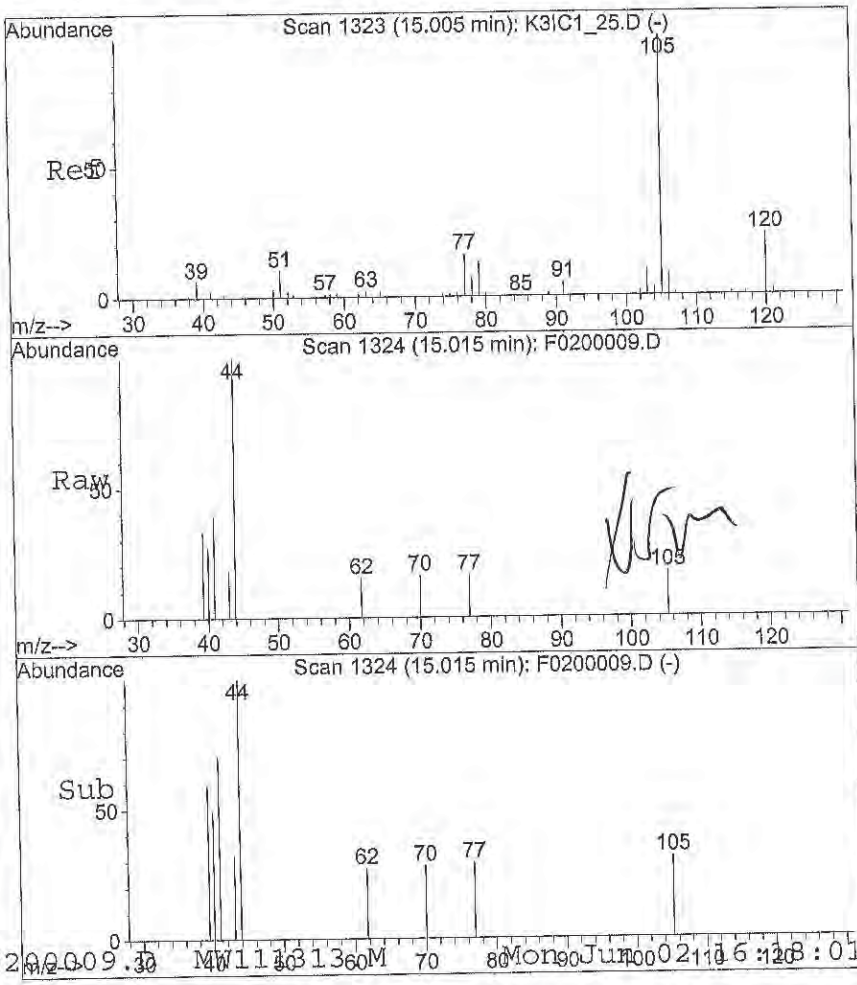


#53
o-Xylene
Concen: 0.05 ug/L
RT: 14.63 min Scan# 1278
Delta R.T. 0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:106 Resp: 273

Ion	Ratio	Lower	Upper
106	100		
91	0.0	179.0	268.6#

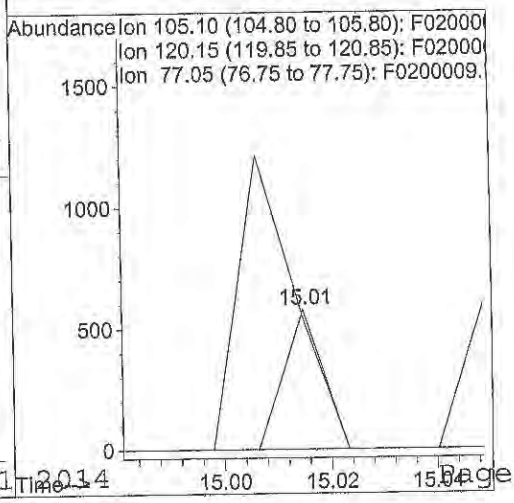


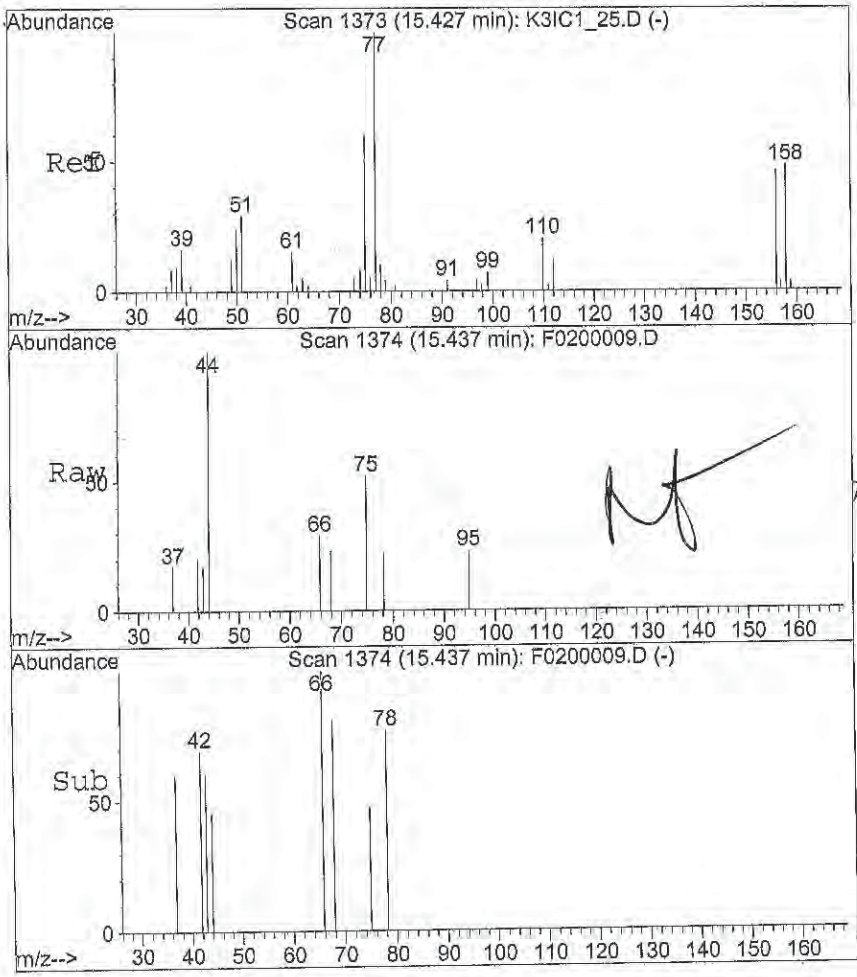


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 15.01 min Scan# 1324
Delta R.T. 0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:105 Resp: 292

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	304.5	13.1	19.7#

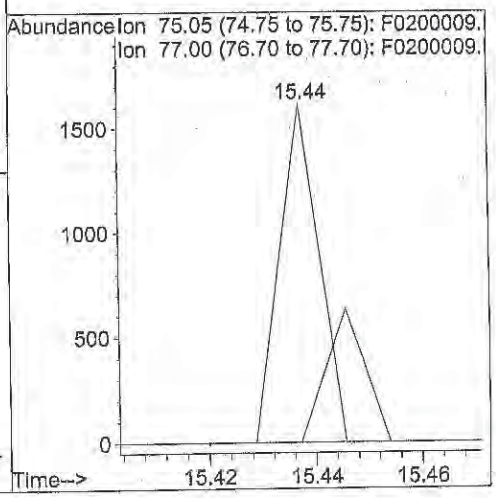


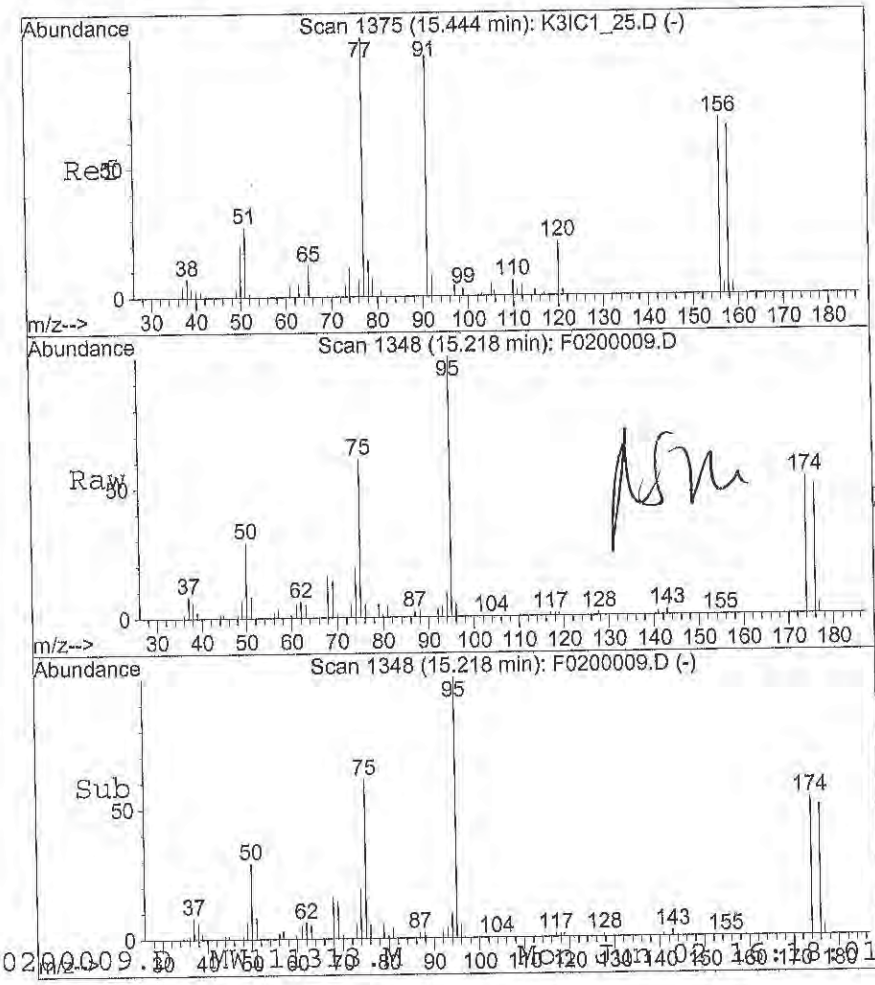


#57
1,2,3-Trichloropropane
Concen: 0.18 ug/L
RT: 15.44 min Scan# 1374
Delta R.T. 0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 75 Resp: 819

Ion	Ratio	Lower	Upper
75	100		
77	39.1	31.2	46.8

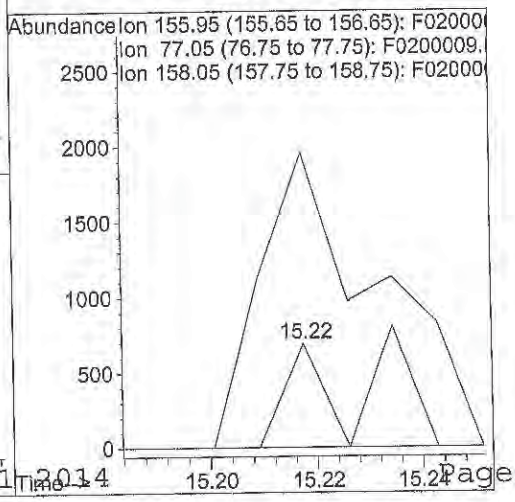


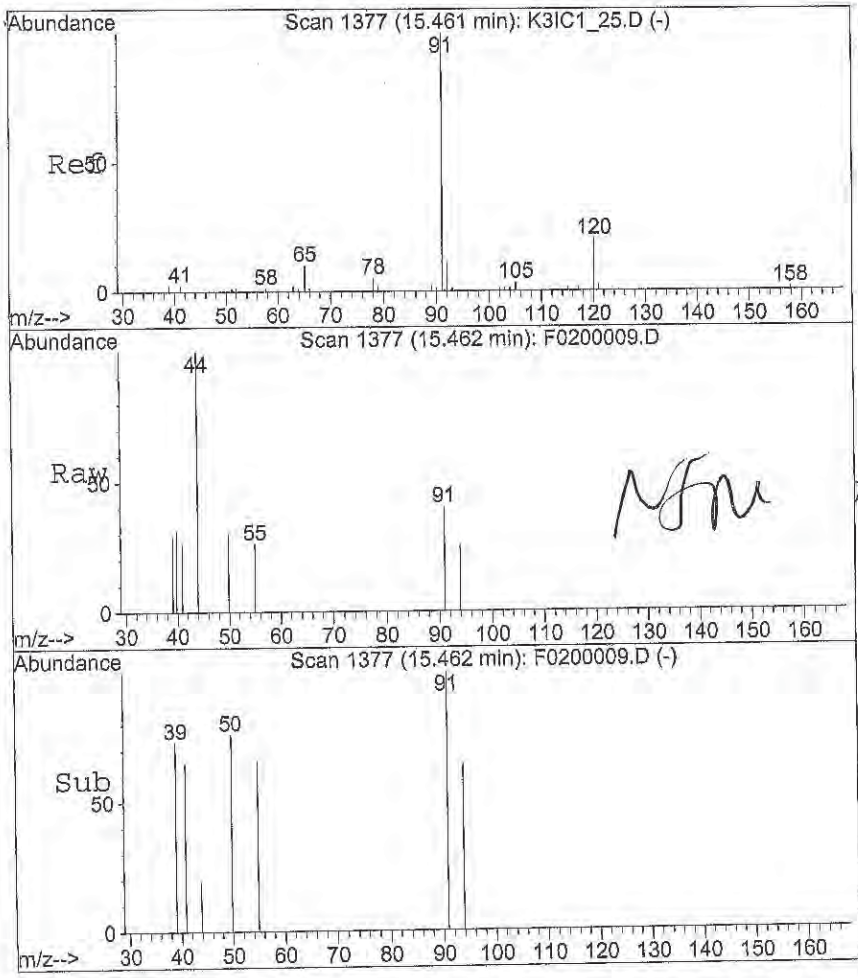


#61
Bromobenzene
Concen: 0.08 ug/L
RT: 15.22 min Scan# 1348
Delta R.T. -0.23 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:156 Resp: 351

Ion	Ratio	Lower	Upper
156	100		
77	868.9	171.3	256.9#
158	116.5	80.3	120.5

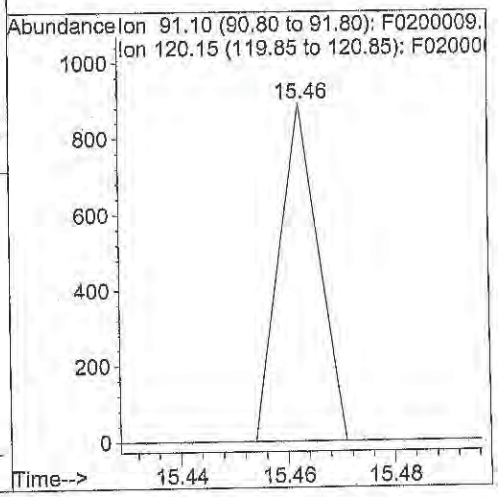


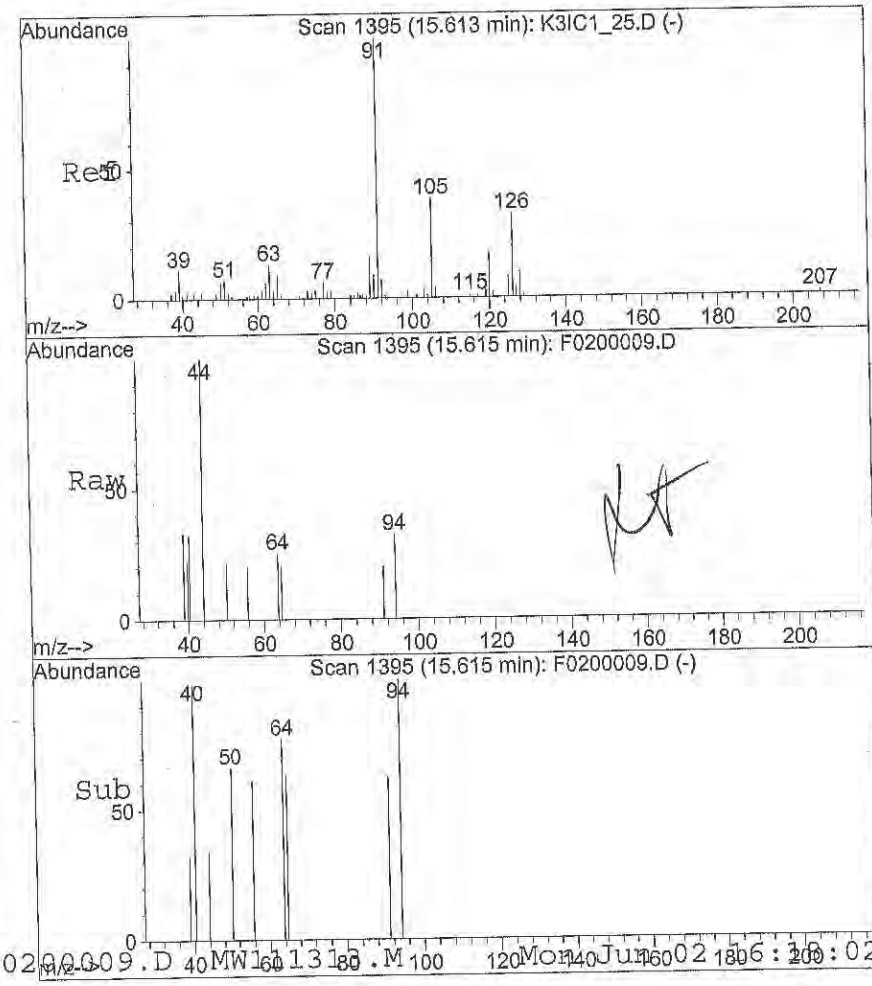


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.46 min Scan# 1377
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 91 Resp: 452

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

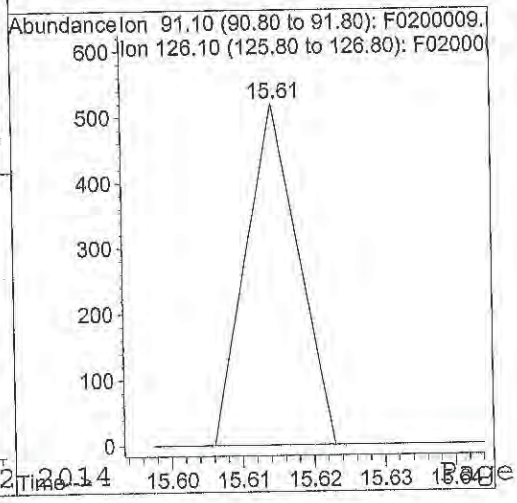


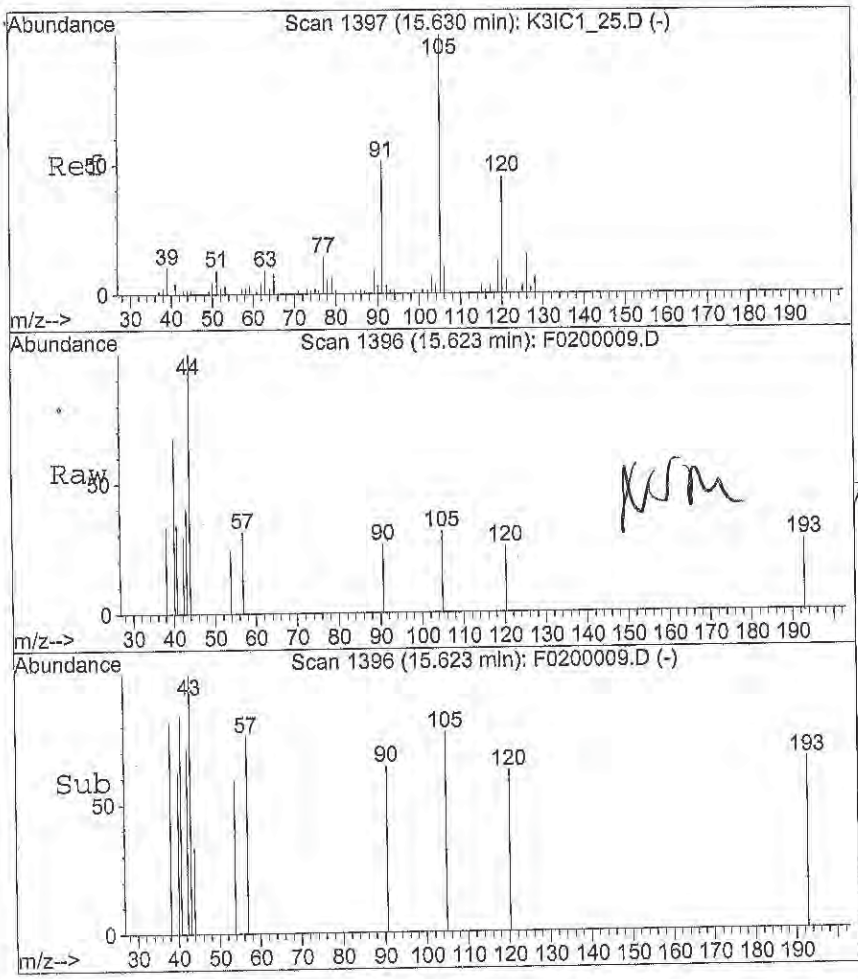


#63
2-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.61 min Scan# 1395
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 91 Resp: 264

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

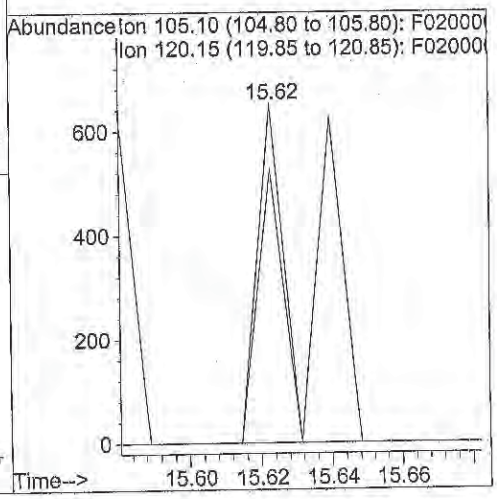


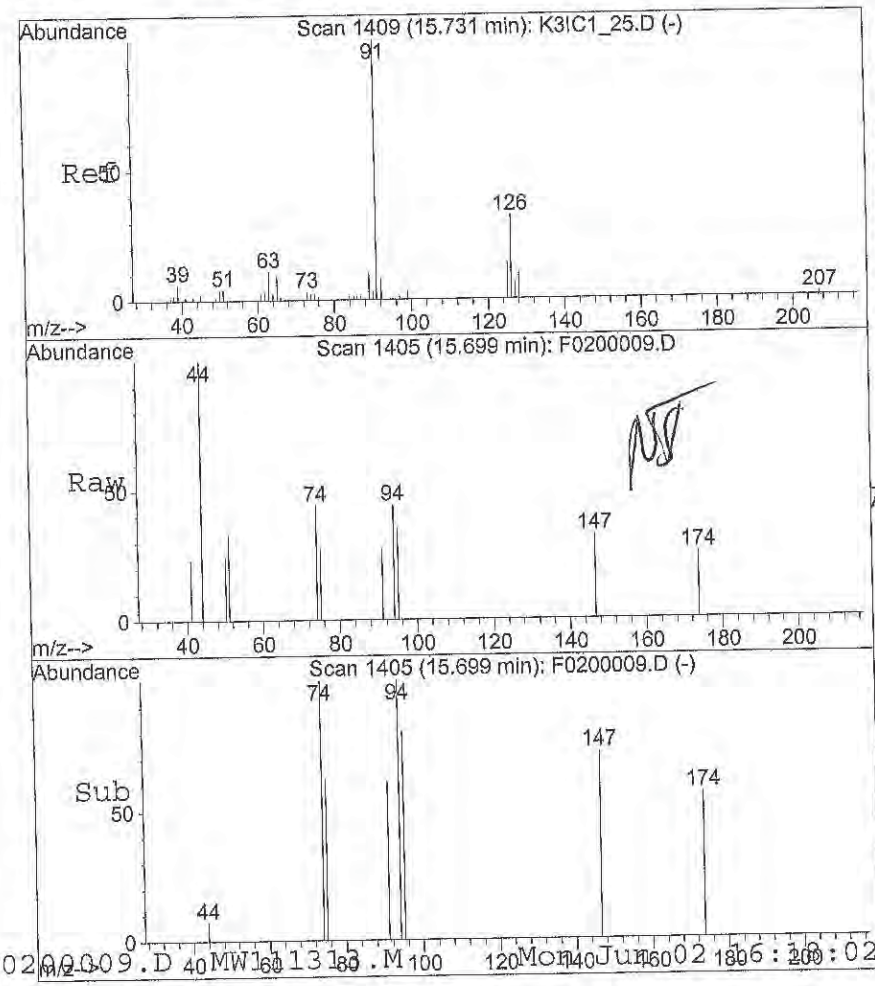


#64
1,3,5-Trimethylbenzene
Concen: 0.04 ug/L
RT: 15.62 min Scan# 1396
Delta R.T. -0.01 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:105 Resp: 647

Ion	Ratio	Lower	Upper
105	100		
120	41.4	36.4	54.6

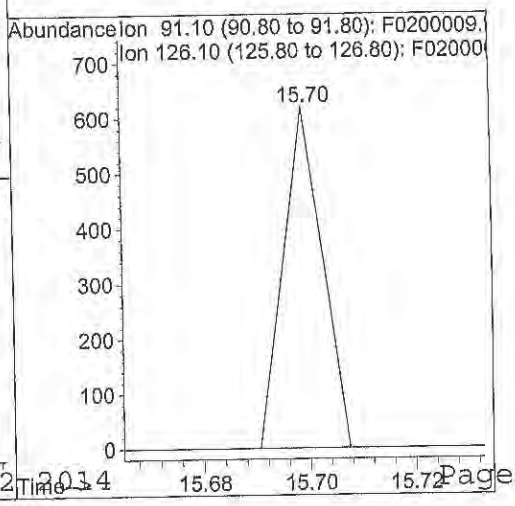


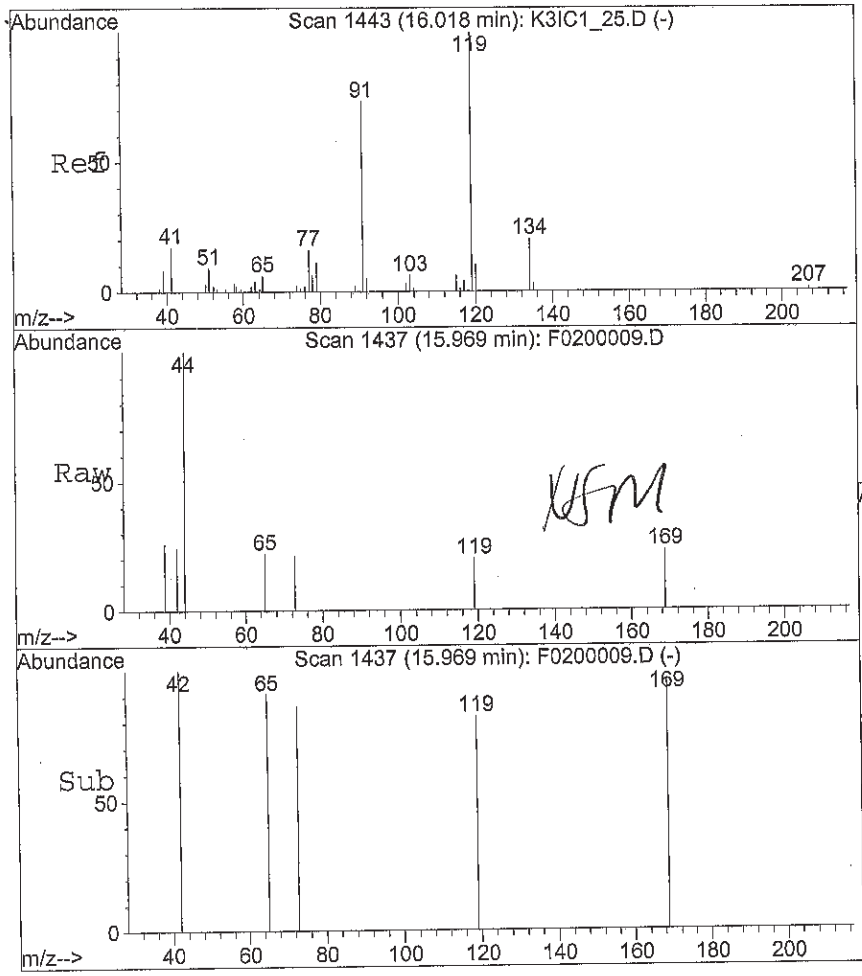


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.70 min Scan# 1405
Delta R.T. -0.03 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 91 Resp: 314

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

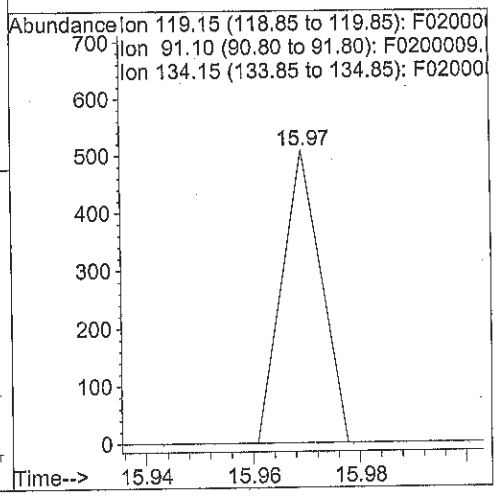


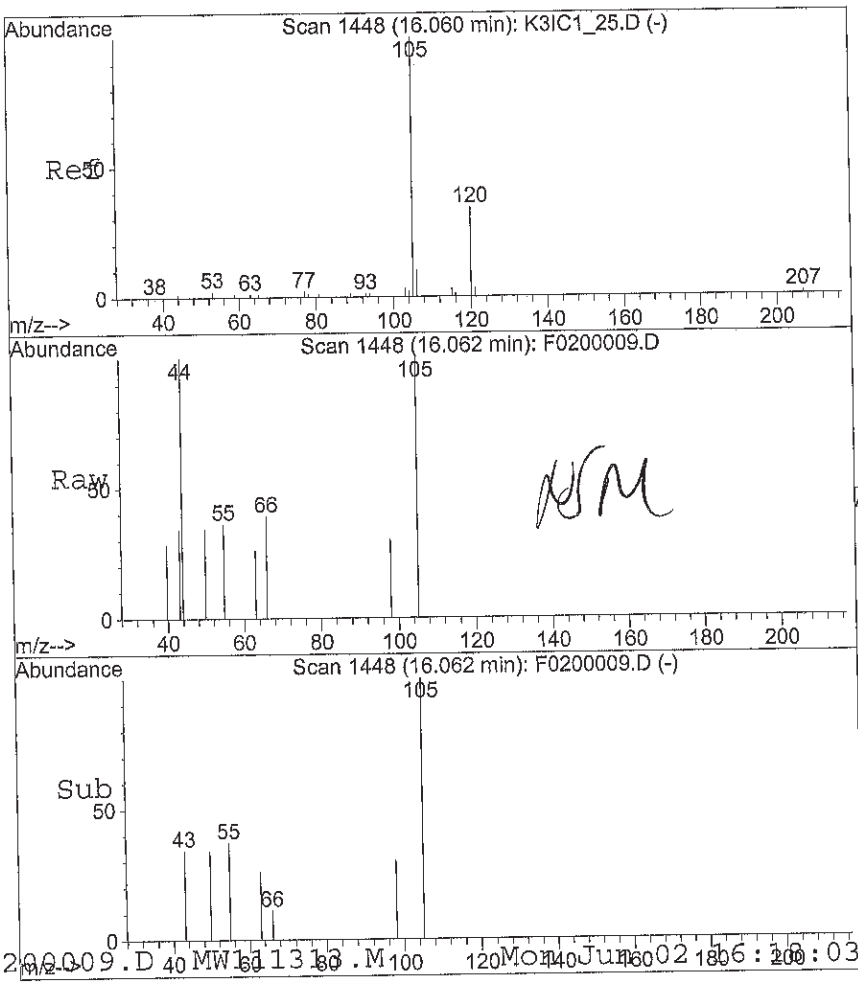


#66
tert-Butylbenzene
Concen: 0.02 ug/L
RT: 15.97 min Scan# 1437
Delta R.T. -0.05 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:119 Resp: 257

Ion	Ratio	Lower	Upper
119	100		
91	0.0	56.3	84.5#
134	0.0	16.1	24.1#

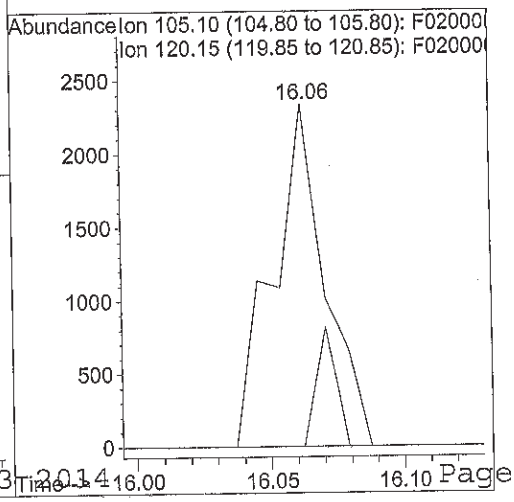


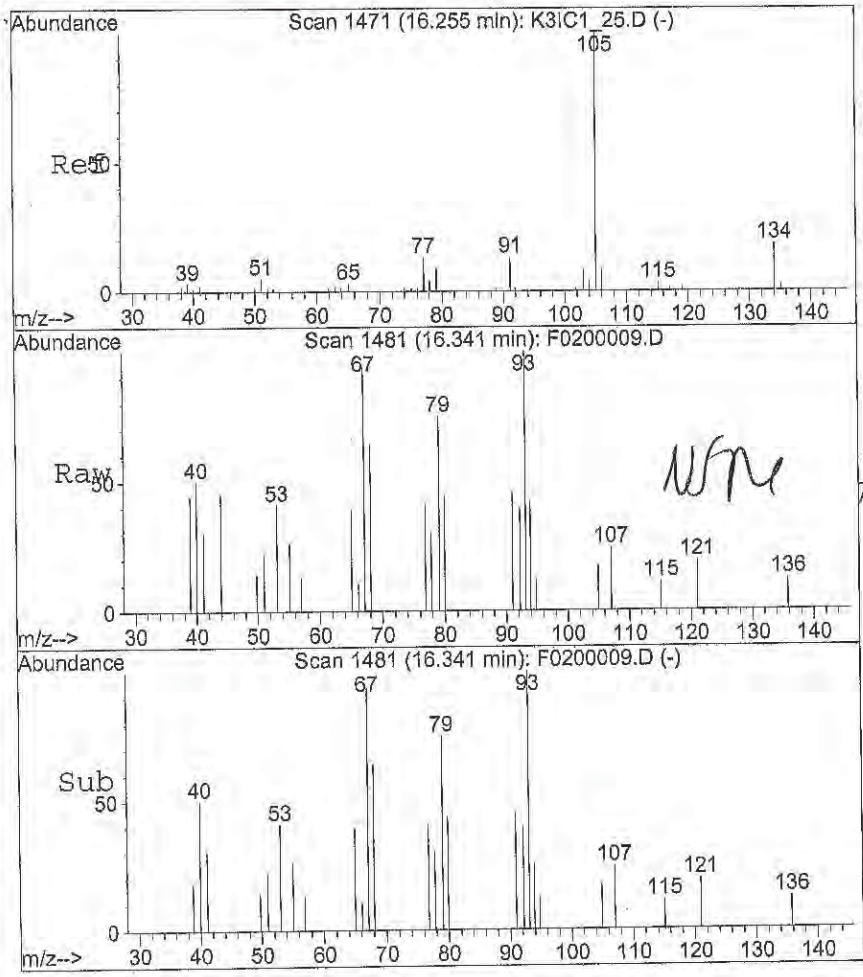


#67
1,2,4-Trimethylbenzene
Concen: 0.21 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:105 Resp: 3161

Ion	Ratio	Lower	Upper
105	100		
120	13.1	33.8	50.8#

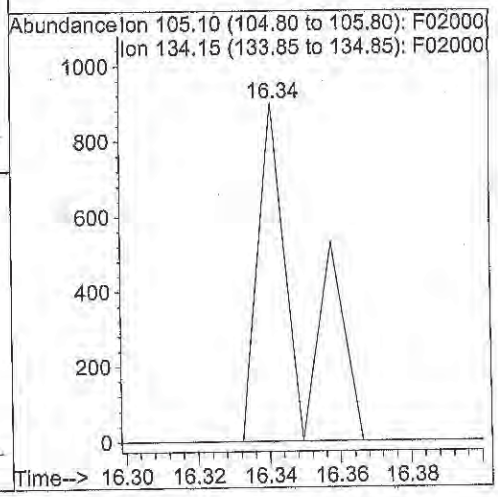


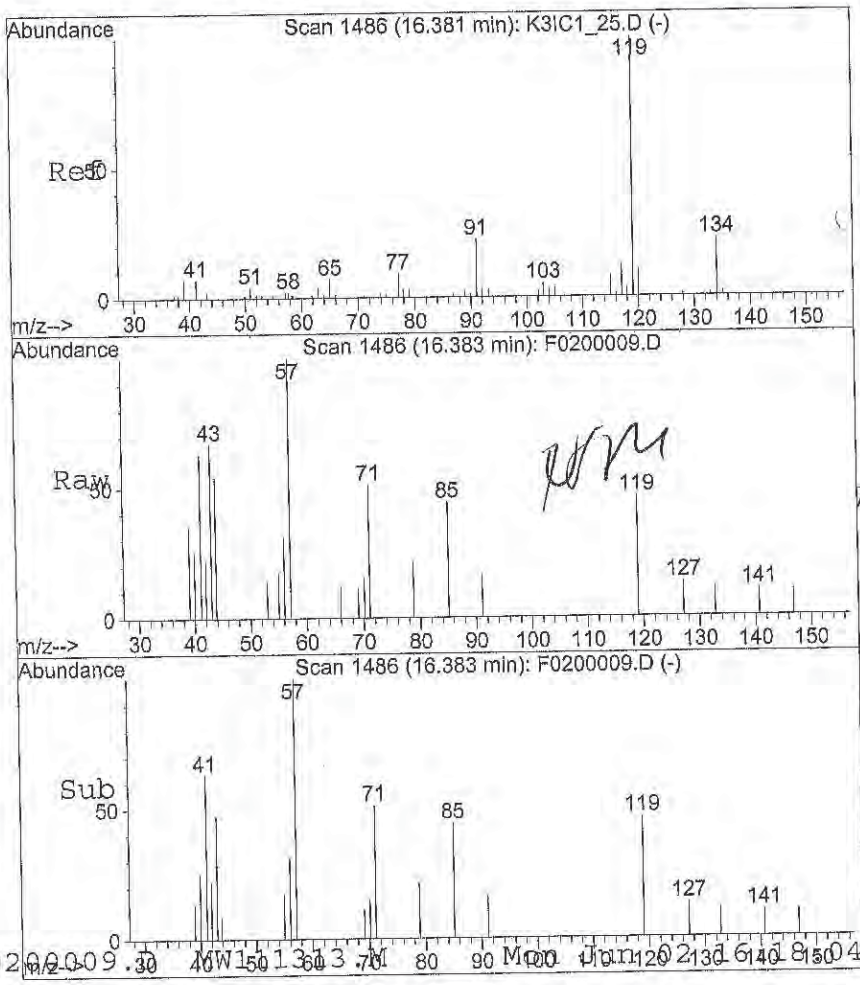


#68
sec-Butylbenzene
Concen: 0.04 ug/L
RT: 16.34 min Scan# 1481
Delta R.T. 0.09 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:105 Resp: 724

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

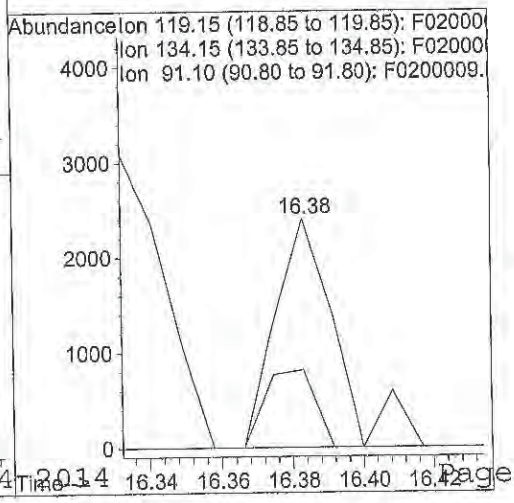


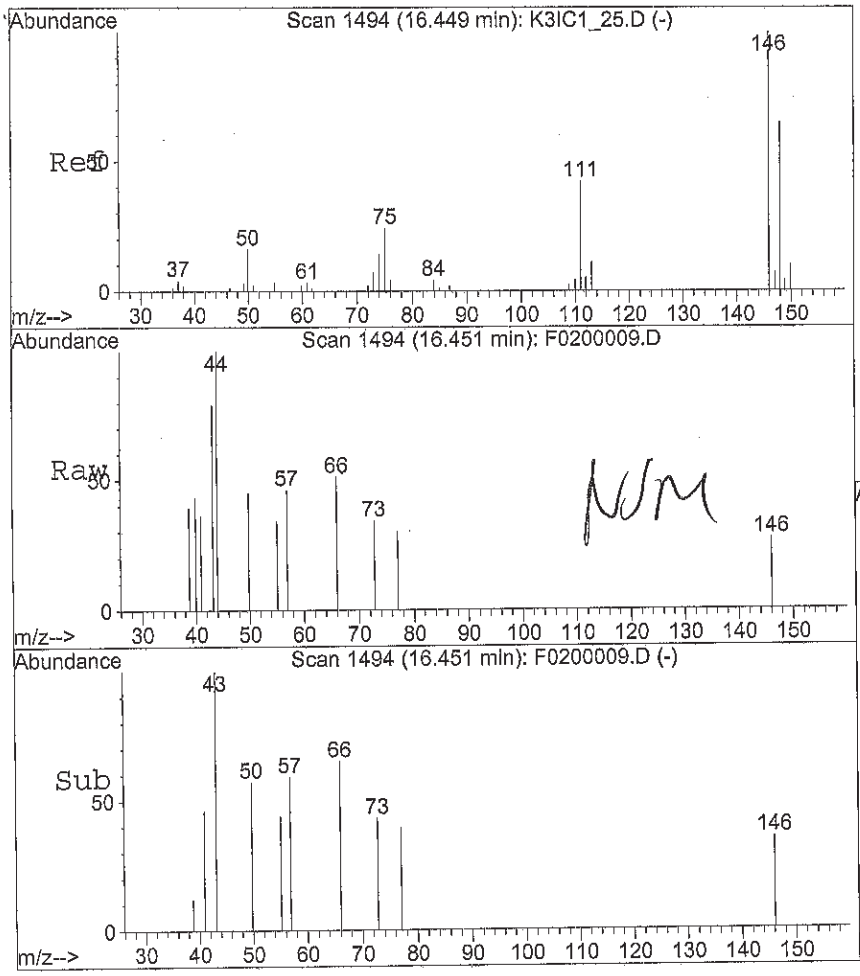


#69
p-Isopropyltoluene
Concen: 0.16 ug/L
RT: 16.38 min Scan# 1486
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:119 Resp: 2577

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	31.1	19.6	29.4#

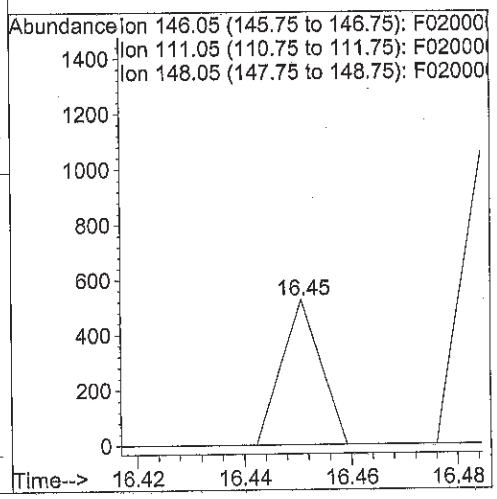


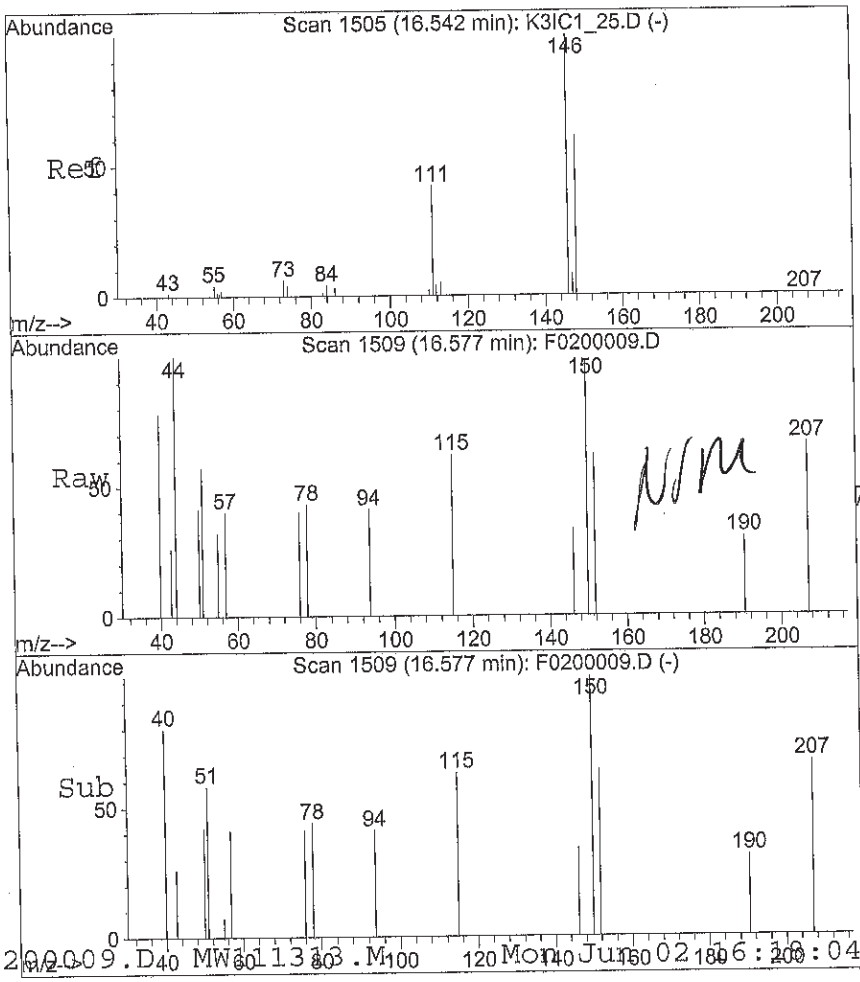


#70
1,3-Dichlorobenzene
Concen: 0.03 ug/L
RT: 16.45 min Scan# 1494
Delta R.T. 0.00 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:146 Resp: 266

Ion	Ratio	Lower	Upper
146	100		
111	0.0	34.2	51.4#
148	0.0	50.9	76.3#

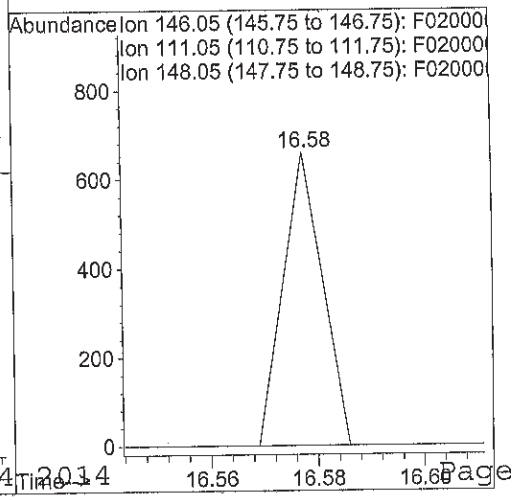


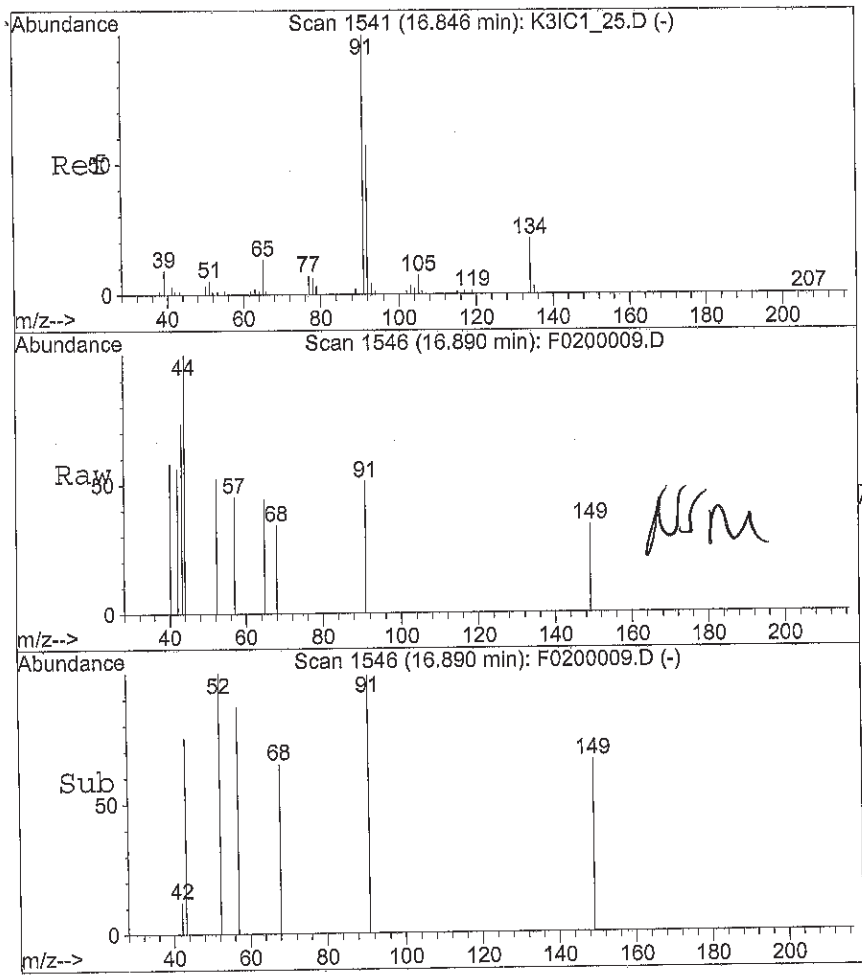


#71
1,4-Dichlorobenzene
Concen: 0.04 ug/L
RT: 16.58 min Scan# 1509
Delta R.T. 0.04 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion:146 Resp: 334

Ion	Ratio	Lower	Upper
146	100		
111	0.0	37.6	56.4#
148	0.0	52.6	78.8#

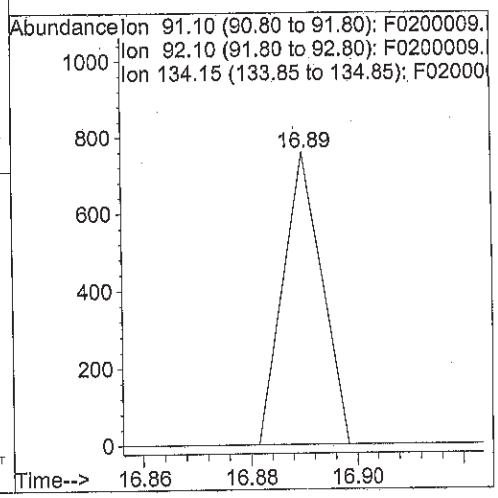


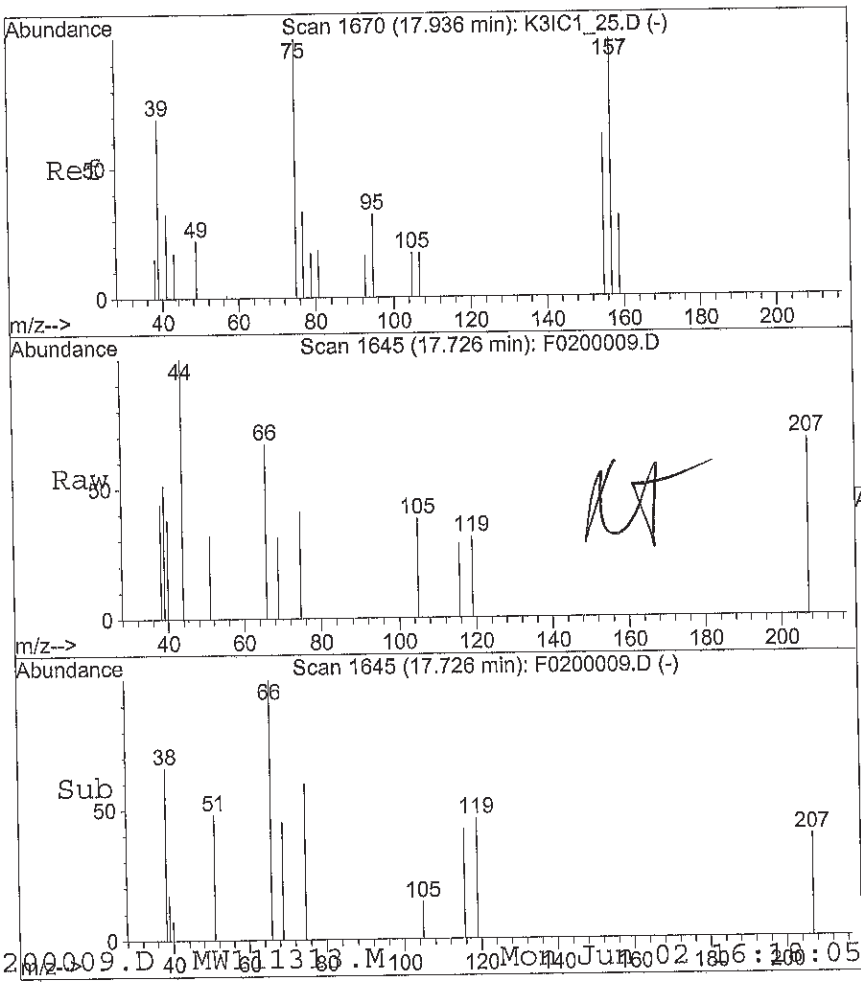


#72
n-Butylbenzene
Concen: 0.02 ug/L
RT: 16.89 min Scan# 1546
Delta R.T. 0.04 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 91 Resp: 384

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

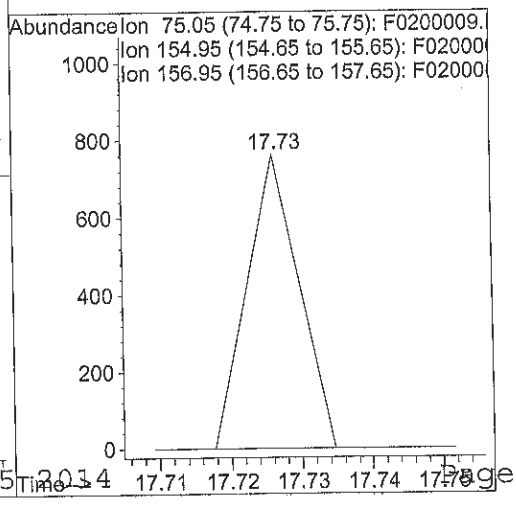




#74
1,2-Dibromo-3-chloropropane
Concen: 1.45 ug/L
RT: 17.73 min Scan# 1645
Delta R.T. -0.21 min
Lab File: F0200009.D
Acq: 2 Jun 2014 3:49 pm

Tgt Ion: 75 Resp: 387

Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200009.D
Acq On : 2 Jun 2014 3:49 pm
Sample : 3F40201-08
Misc : 100cc SVL-505-SA5C-SV-15.0-16.0
MS Integration Params: rteint.p
Quant Time: Jun 3 7:42 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	10.29	96	1125891	12.50	ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1087598	12.50	ug/L	-0.01
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	587531	12.50	ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.42	113	319251m	10.90	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 87.20%			
3) Chloroform-d (SU6)	9.19	84	609405m	14.51	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 116.08%			
4) Methylene Chloride-d2 (SU5	7.07	86	289162	11.78	ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 94.24%			
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	246515m	12.32	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 98.56%			
6) Benzene-d6 (SU7)	9.93	84	1128209	12.77	ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 102.16%			
8) Toluene-d8 (SU3)	12.21	98	1138471	11.03	ug/L	-0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 88.24%			
9) 4-Bromofluorobenzene (SU4)	15.23	95	603136m	14.16	ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 113.28%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

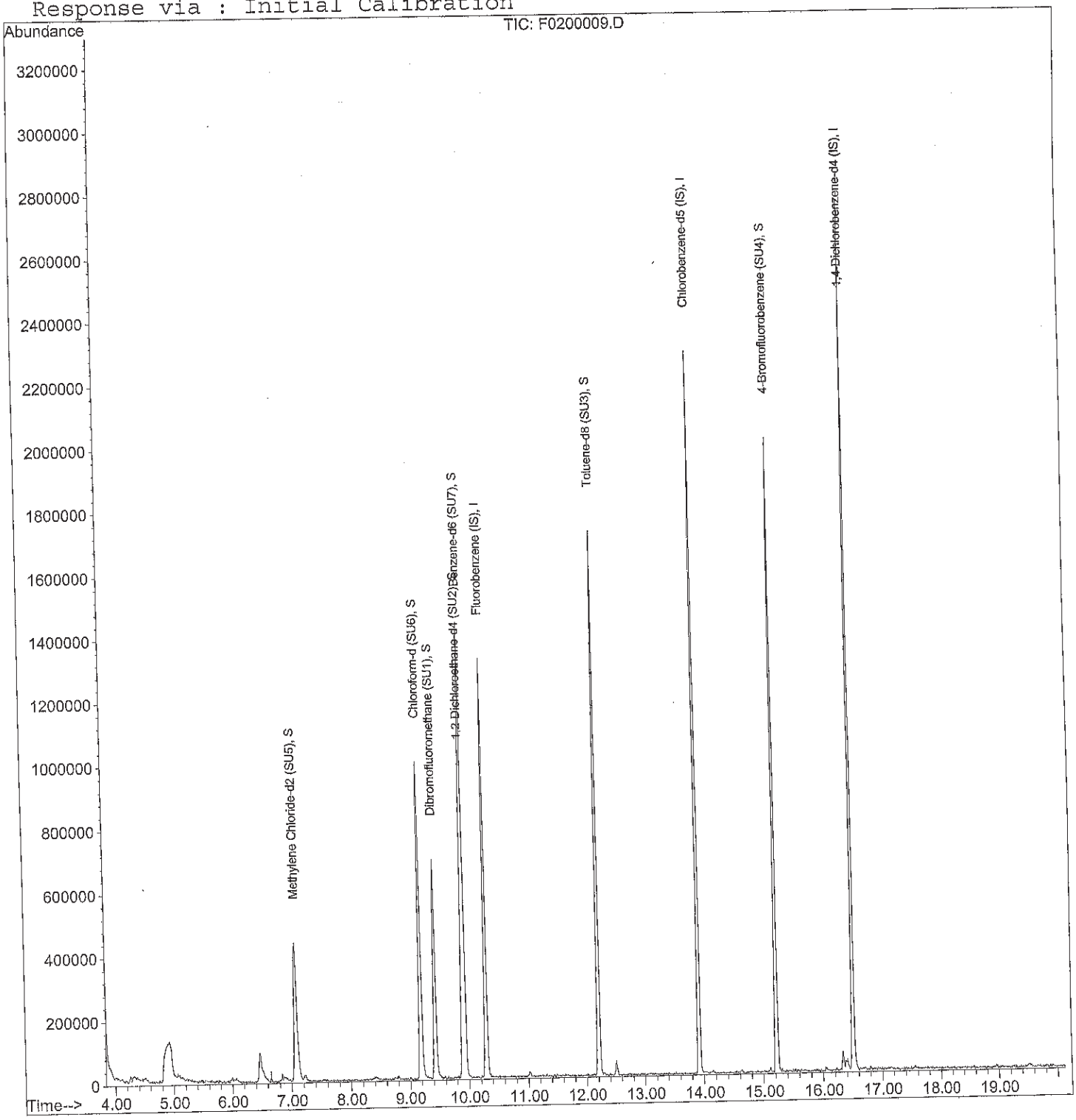
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200009.D
Acq On : 2 Jun 2014 3:49 pm
Sample : 3F40201-08
Misc : 100cc SVL-505-SA5C-SV-15.0-16.0
MS Integration Params: rteint.p
Quant Time: Jun 3 7:42 19114

Vial: 8
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200010.D
Acq On : 2 Jun 2014 4:18 pm
Sample : 3F40201-09
Misc : 100cc FB-060214
MS Integration Params: rteint.p
Quant Time: Jun 2 17:09 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AF

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1105700	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1086224	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	590283	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	342143m	12.41 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 99.28%		
28) 1,2-Dichloroethane-d4 (SU2	9.89	65	318784m	12.16 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 97.28%		
39) Toluene-d8 (SU3)	12.21	98	1093189	10.79 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 86.32%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	456512m	10.28 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 82.24%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.09	85	281	0.10 ~~ug/L~~	44
4) Chloromethane	4.54	50	797	-0.79 ~~ug/L~~	99
5) Vinyl Chloride	4.59	62	312	0.16 ~~ug/L~~ #	1
6) Bromomethane	5.14	96	366	-1.48 ~~ug/L~~	80
7) Chloroethane	5.35	64	1470	2.28 ~~ug/L~~	96
8) (F11) Trichlorofluorometha	5.62	101	439	0.14 ~~ug/L~~	98
10) 1,1-Dichloroethene	6.22	96	255	0.10 ~~ug/L~~ #	1
11) Acetone	6.45	58	3776	3.78 ~~ug/L~~ #	1
12) (IPA) Leak Check Compound	6.48	45	169105	1272.75 ~~ug/L~~ #	85
13) Carbon disulfide	6.75	76	388	0.04 ~~ug/L~~ #	1
14) Methylene Chloride	7.10	84	1828	0.60 ~~ug/L~~ #	9
15) (TBA) tert-Butanol	6.96	59	283	1.50 ~~ug/L~~ #	77
16) (MTBE) Methyl-t-butyl ethe	7.54	73	319	0.05 ~~ug/L~~ #	55
18) 1,1-Dichloroethane	8.01	63	310	0.06 ~~ug/L~~ #	1
20) 2,2-Dichloropropane	8.84	77	636	0.15 ~~ug/L~~ #	39
21) (MEK) 2-Butanone	8.81	72	398	1.28 ~~ug/L~~ #	1
22) (DIPE) Diisopropyl Ether	8.05	45	407	0.05 ~~ug/L~~ #	48
23) Bromochloromethane	9.23	128	275	0.19 ~~ug/L~~ #	1
24) Chloroform	9.22	83	1997	0.34 ~~ug/L~~ #	37
25) (ETBE) 2-ethoxy 2-methyl p	8.67	59	289	0.04 ~~ug/L~~ #	44
27) (TAME) tert-Amyl methyl et	9.90	73	1089	0.16 ~~ug/L~~ #	48
29) 1,1-Dichloropropene	9.86	75	412	0.10 ~~ug/L~~ #	41

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200010.D
Acq On : 2 Jun 2014 4:18 pm
Sample : 3F40201-09
Misc : 100cc FB-060214
MS Integration Params: rteint.p
Quant Time: Jun 2 17:09 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

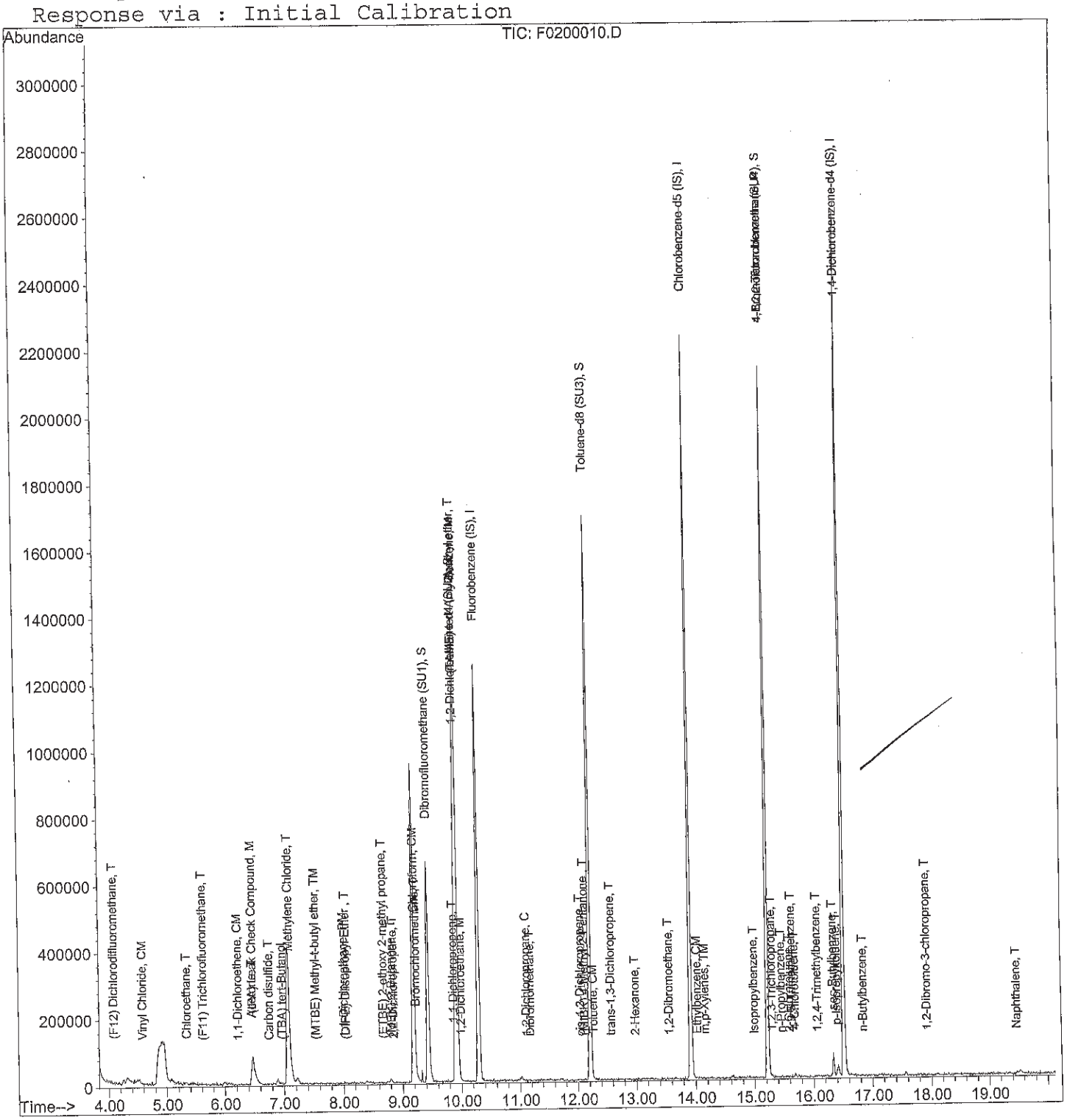
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) Benzene	9.92	78	9790	0.94 ~~ug/L~~ # NSM	65
32) 1,2-Dichloroethane	10.00	62	363	0.10 ~~ug/L~~ #	43
34) 1,2-Dichloropropane	11.12	63	272	0.11 ~~ug/L~~ #	50
35) Dibromomethane	11.18	93	409	0.21 ~~ug/L~~ #	5
37) cis-1,3-Dichloropropene	12.05	75	285	0.07 ~~ug/L~~ #	1
40) (MIBK) 4-Methyl-2-Pentanon	12.11	43	650	0.30 ~~ug/L~~ # NSM	100
41) Toluene	12.27	91	2249	0.15 ~~ug/L~~ #	61
42) trans-1,3-Dichloropropene	12.58	75	647	0.13 ~~ug/L~~ #	74
46) 2-Hexanone	12.99	43	270	0.11 ~~ug/L~~ #	37
48) 1,2-Dibromoethane	13.57	107	261	0.08 ~~ug/L~~ #	3
51) Ethylbenzene	14.03	91	1668	0.10 ~~ug/L~~ #	45
52) m,p-Xylenes	14.16	106	348	0.06 ug/L # 0.0012	1
54) Styrene	14.63	104	1245	-0.73 ug/L #	1
56) Isopropylbenzene	14.99	105	281	0.02 ug/L # NSM	1
57) 1,2,3-Trichloropropane	15.30	75	1346	0.30 ~~ug/L~~	94
60) 1,1,2,2-Tetrachloroethane	15.21	83	419	0.10 ~~ug/L~~ #	18
62) n-Propylbenzene	15.45	91	384	0.02 ~~ug/L~~ #	56
63) 2-Chlorotoluene	15.59	91	375	0.03 ~~ug/L~~ #	45
64) 1,3,5-Trimethylbenzene	15.63	105	308	0.02 ~~ug/L~~ #	31
65) 4-Chlorotoluene	15.69	91	288	0.02 ~~ug/L~~ # NSM	44
67) 1,2,4-Trimethylbenzene	16.06	105	1190	0.08 ~~ug/L~~ #	33
68) sec-Butylbenzene	16.33	105	551	0.03 ~~ug/L~~ #	62
69) p-Isopropyltoluene	16.39	119	656	0.04 ~~ug/L~~ #	32
72) n-Butylbenzene	16.85	91	253	0.01 ~~ug/L~~ #	30
74) 1,2-Dibromo-3-chloropropan	17.93	75	588	1.74 ~~ug/L~~ #	6
77) Naphthalene	19.46	128	413	0.04 ~~ug/L~~	100

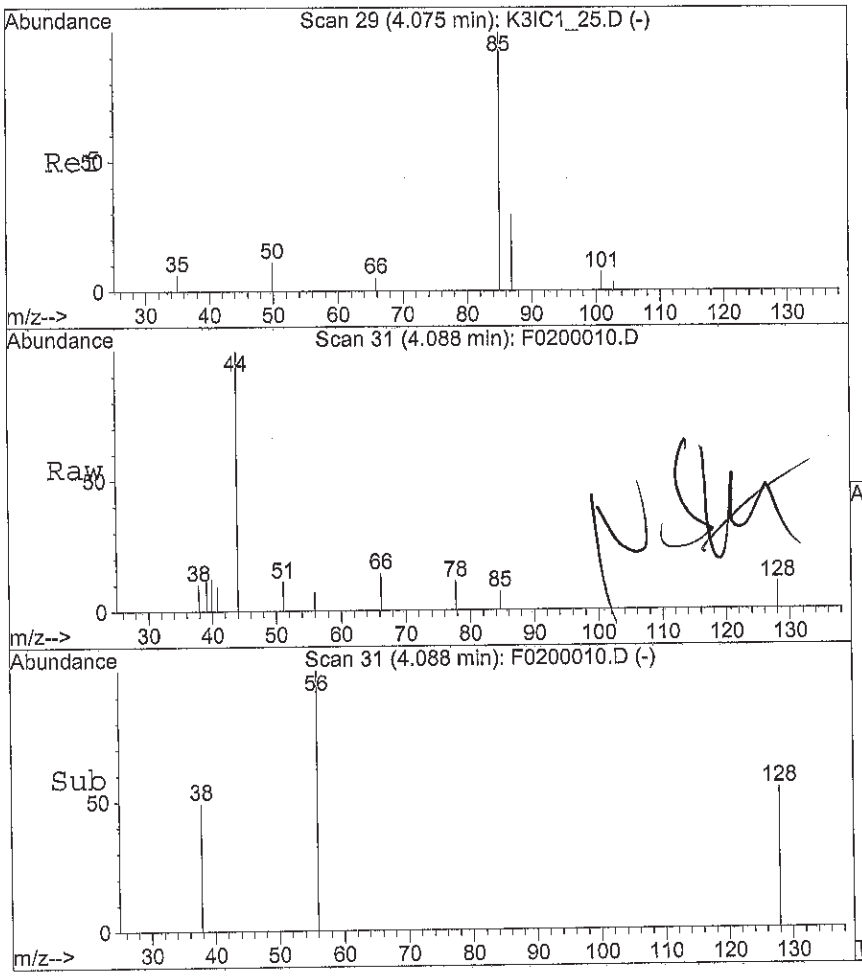
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200010.D Vial: 1
Acq On : 2 Jun 2014 4:18 pm Operator: DN
Sample : 3F40201-09 Inst : GC/MS Ins
Misc : 100cc FB-060214 Multiplr: 10.00
MS Integration Params: rteint.p
Quant Time: Jun 2 17:09 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration

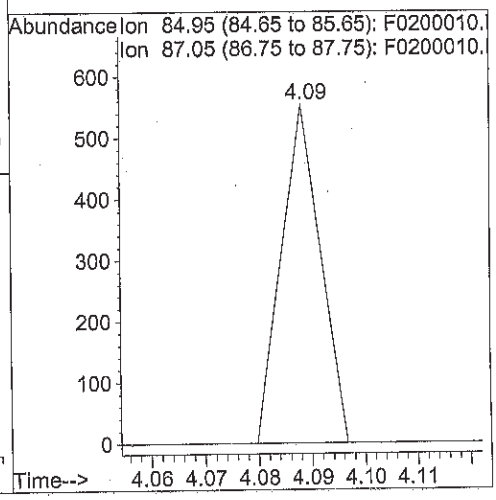


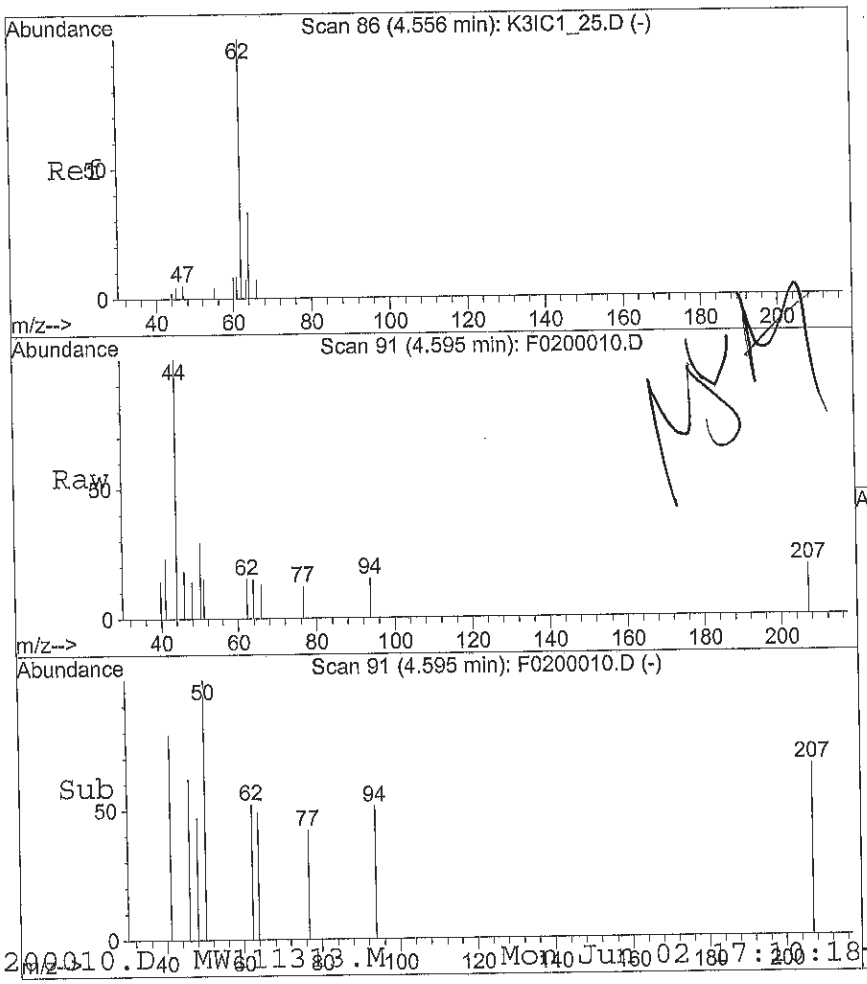


#3
(F12) Dichlorodifluoromethane
Concen: 0.10 ug/L
RT: 4.09 min Scan# 31
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 85 Resp: 281

Ion	Ratio	Lower	Upper
85	100		
87	0.0	24.6	37.0#

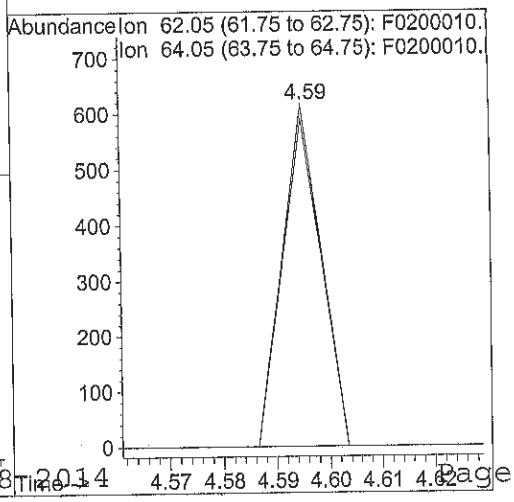


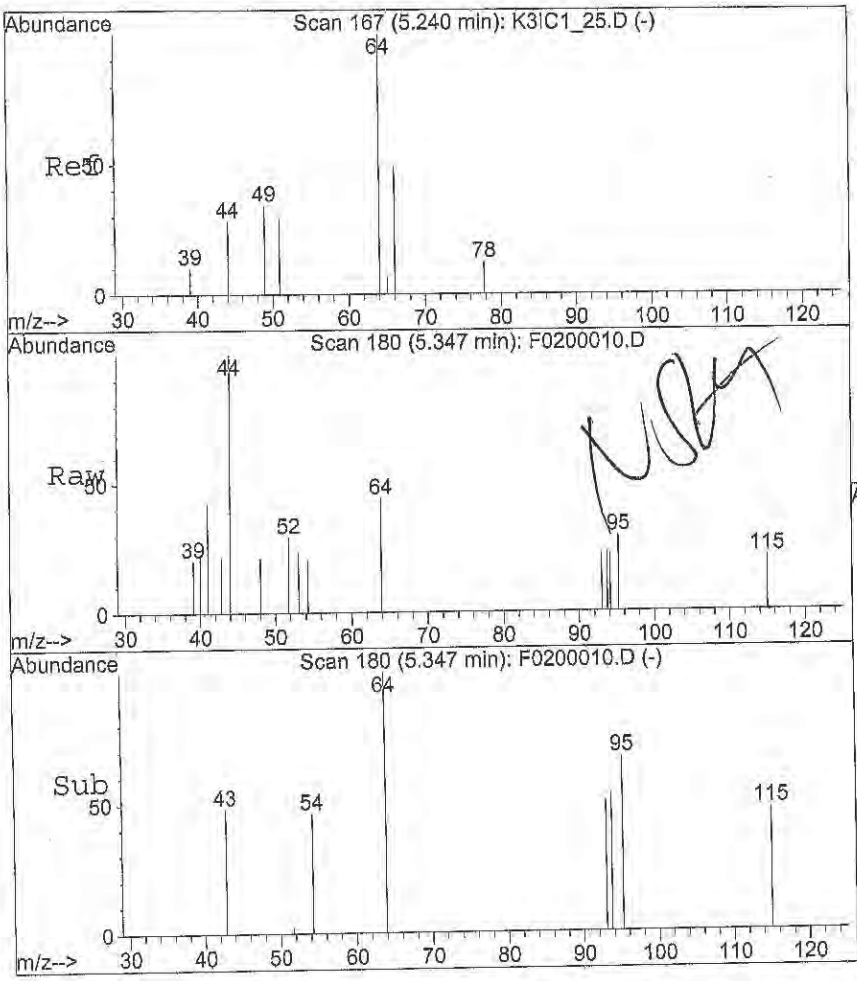


#5
Vinyl Chloride
Concen: 0.16 ug/L
RT: 4.59 min Scan# 91
Delta R.T. 0.04 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 62 Resp: 312

Ion	Ratio	Lower	Upper
62	100		
64	95.8	25.6	38.4#

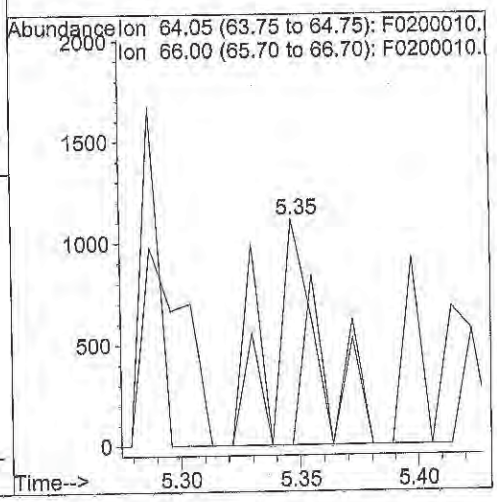


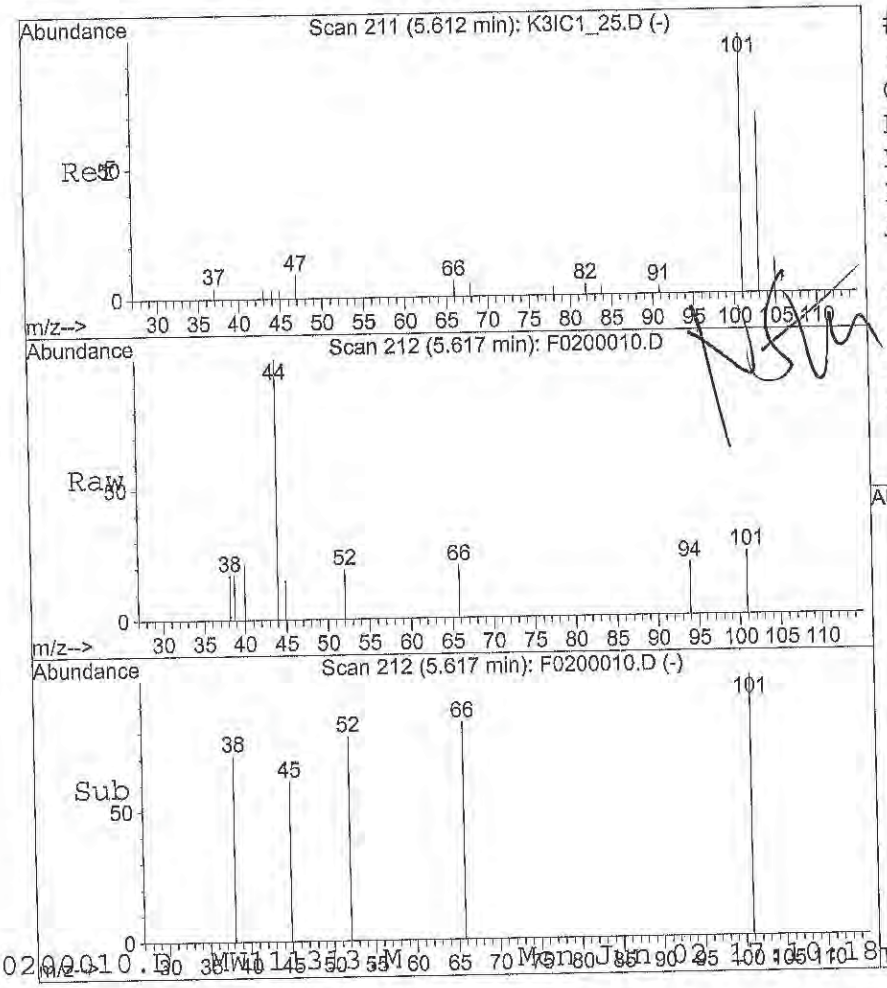


#7
Chloroethane
Concen: 2.28 ug/L
RT: 5.35 min Scan# 180
Delta R.T. 0.11 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 64 Resp: 1470

Ion	Ratio	Lower	Upper
64	100		
66	47.1	35.4	53.0

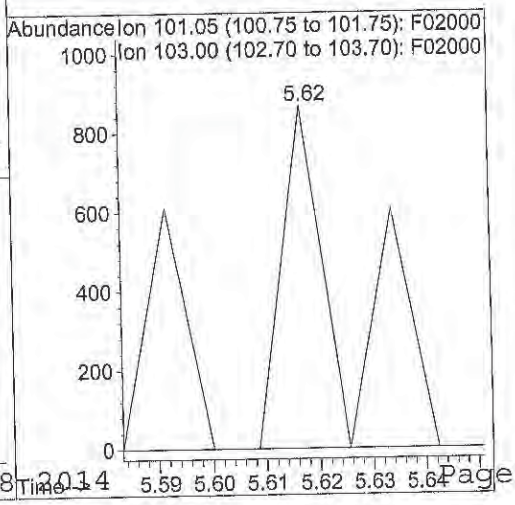


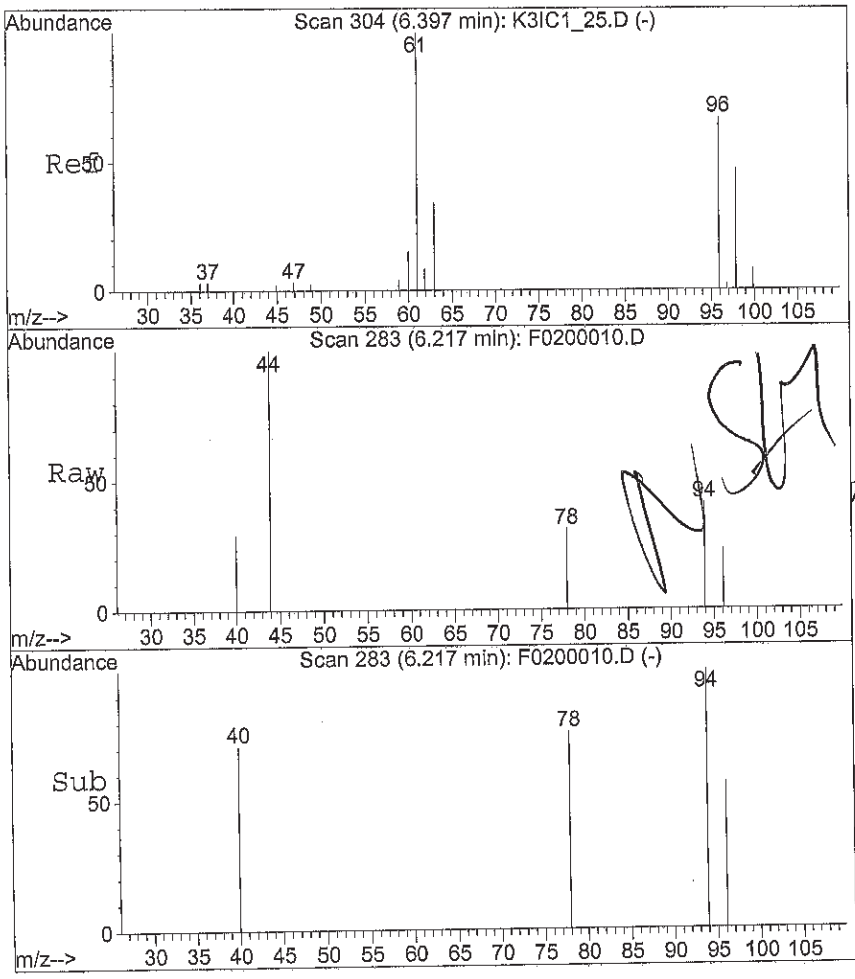


#8
(F11) Trichlorofluoromethane
Concen: 0.14 ug/L
RT: 5.62 min Scan# 212
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:101 Resp: 439

Ion	Ratio	Lower	Upper
101	100		
103	69.9	54.5	81.7

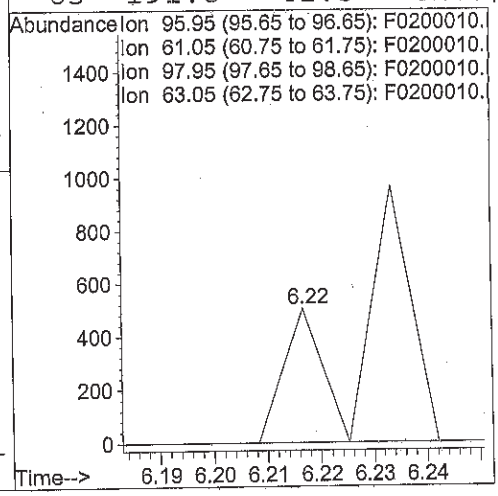


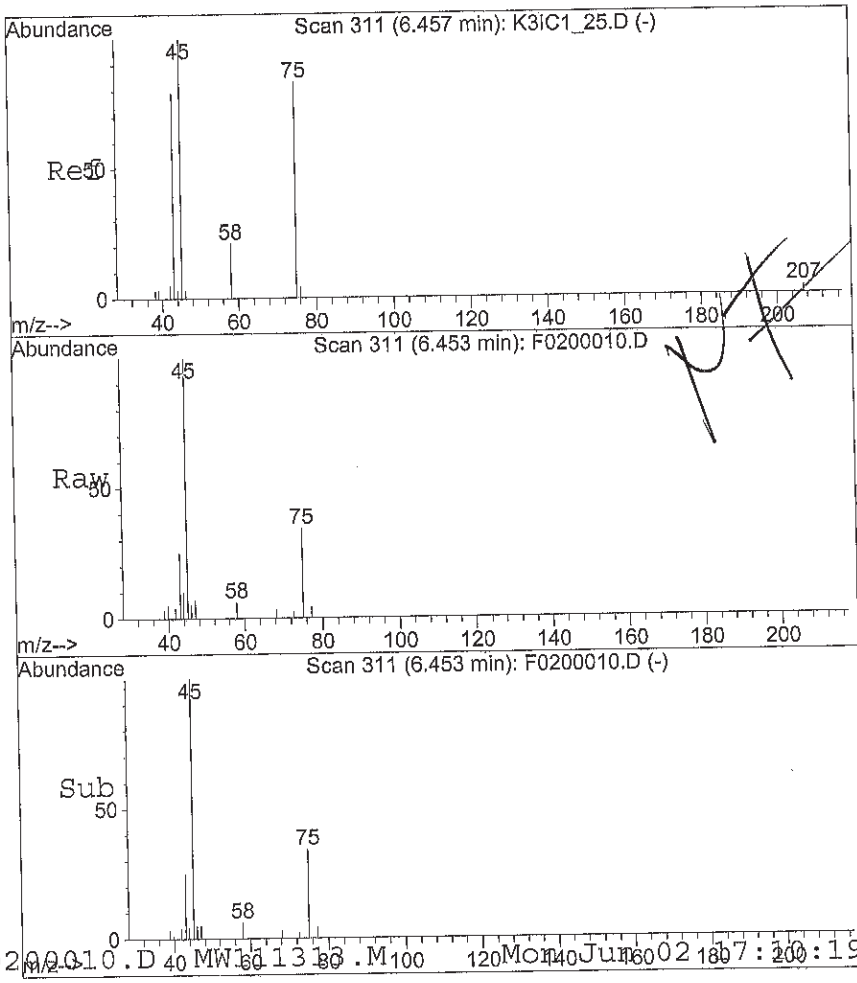


#10
1,1-Dichloroethene
Concen: 0.10 ug/L
RT: 6.22 min Scan# 283
Delta R.T. -0.18 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 96 Resp: 255

Ion	Ratio	Lower	Upper
96	100		
61	0.0	130.0	195.0#
98	0.0	56.2	84.4#
63	191.8	41.5	62.3#

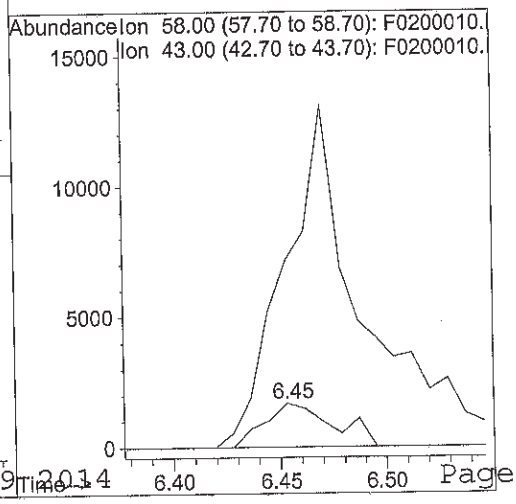


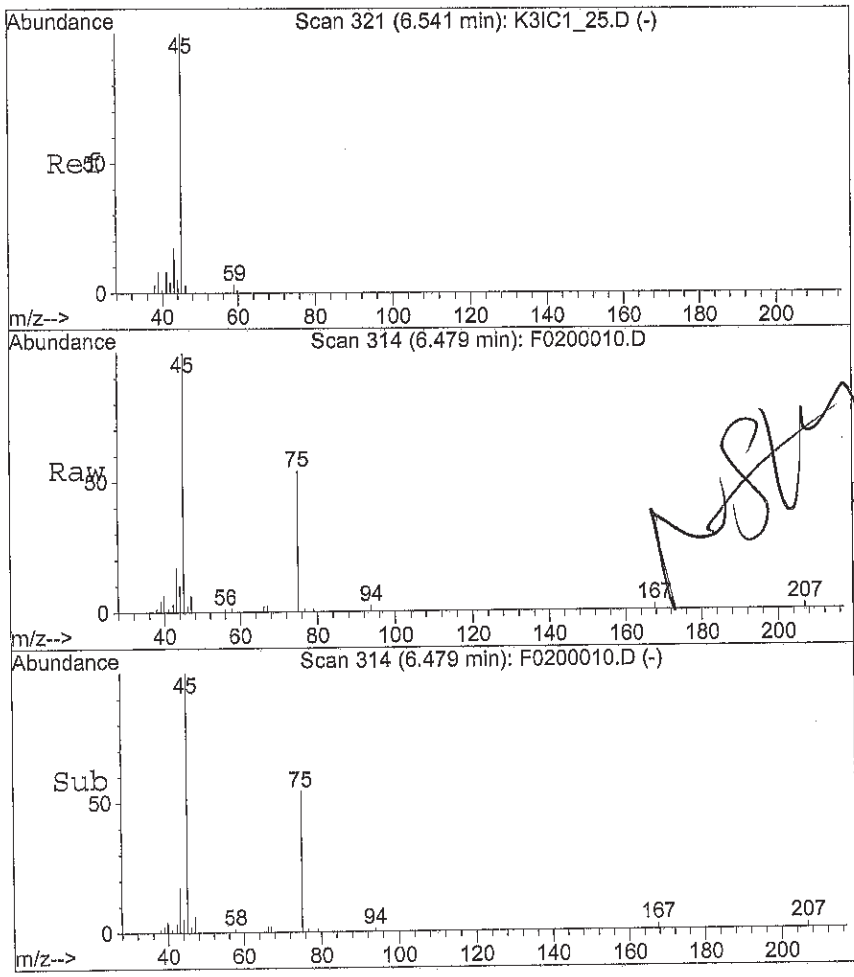


#11
Acetone
Concen: 3.78 ug/L
RT: 6.45 min Scan# 311
Delta R.T. -0.00 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 58 Resp: 3776

Ion	Ratio	Lower	Upper
58	100		
43	885.9	360.9	541.3#

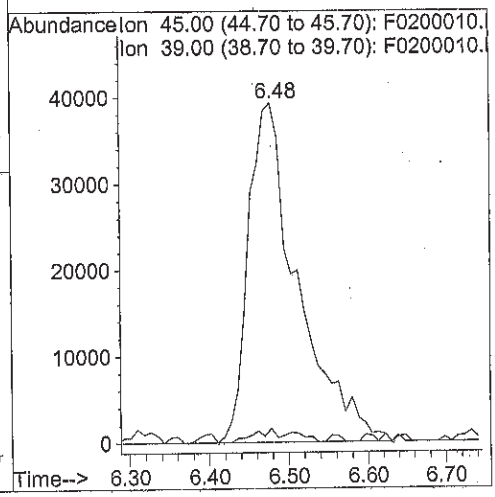


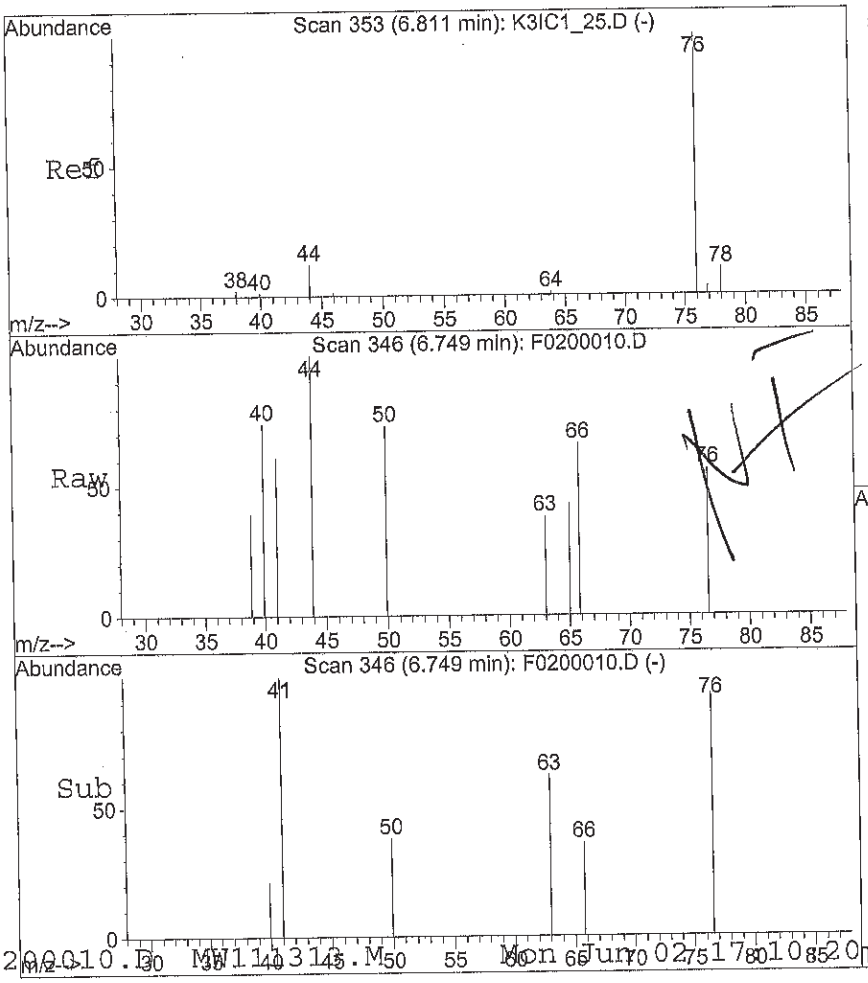


#12
(IPA) Leak Check Compound
Concen: 1272.75 ug/L
RT: 6.48 min Scan# 314
Delta R.T. -0.06 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 45 Resp: 169105

Ion	Ratio	Lower	Upper
45	100		
39	1.2	4.9	7.3#

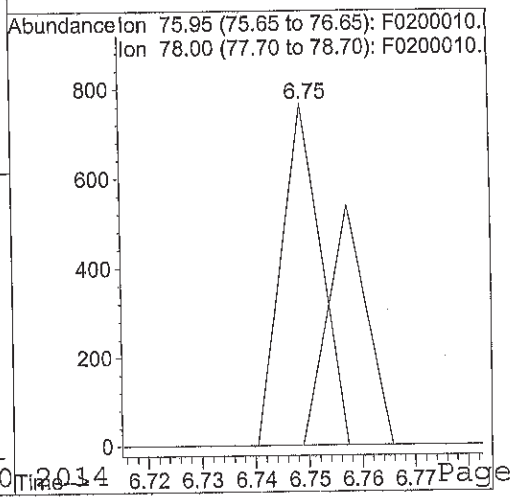


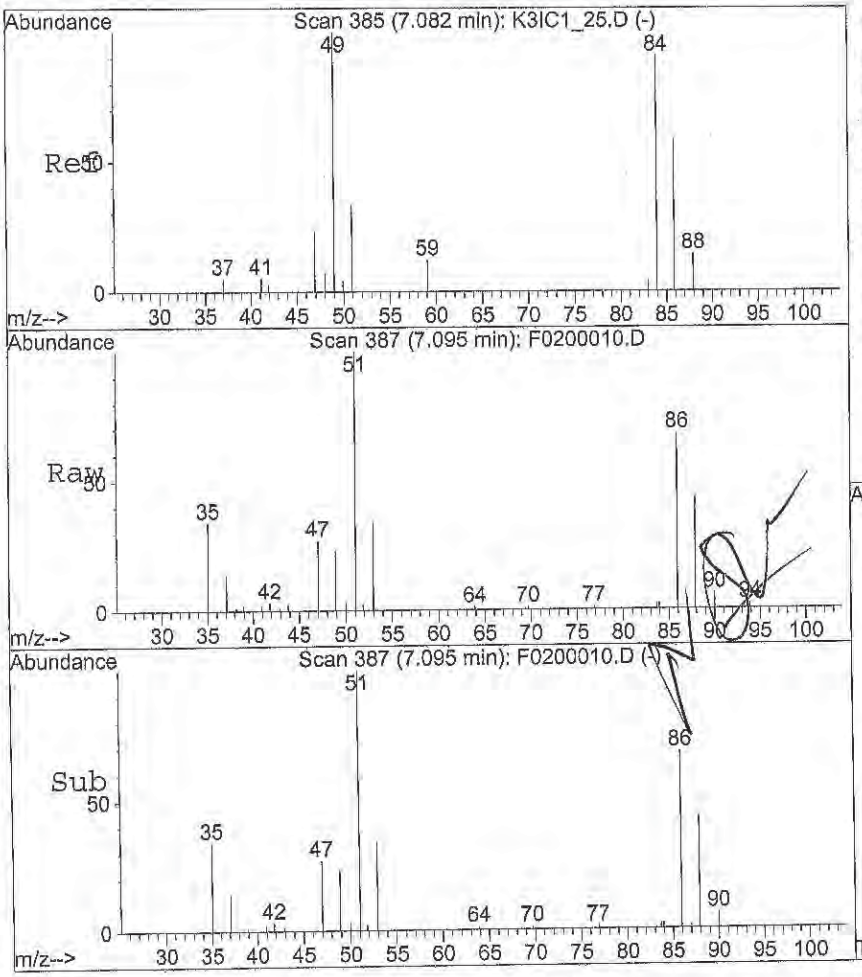


#13
Carbon disulfide
Concen: 0.04 ug/L
RT: 6.75 min Scan# 346
Delta R.T. -0.06 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 76 Resp: 388

Ion	Ratio	Lower	Upper
76	100		
78	70.4	7.0	10.4#

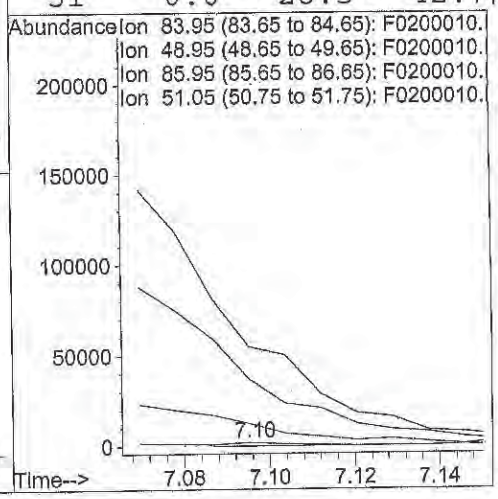


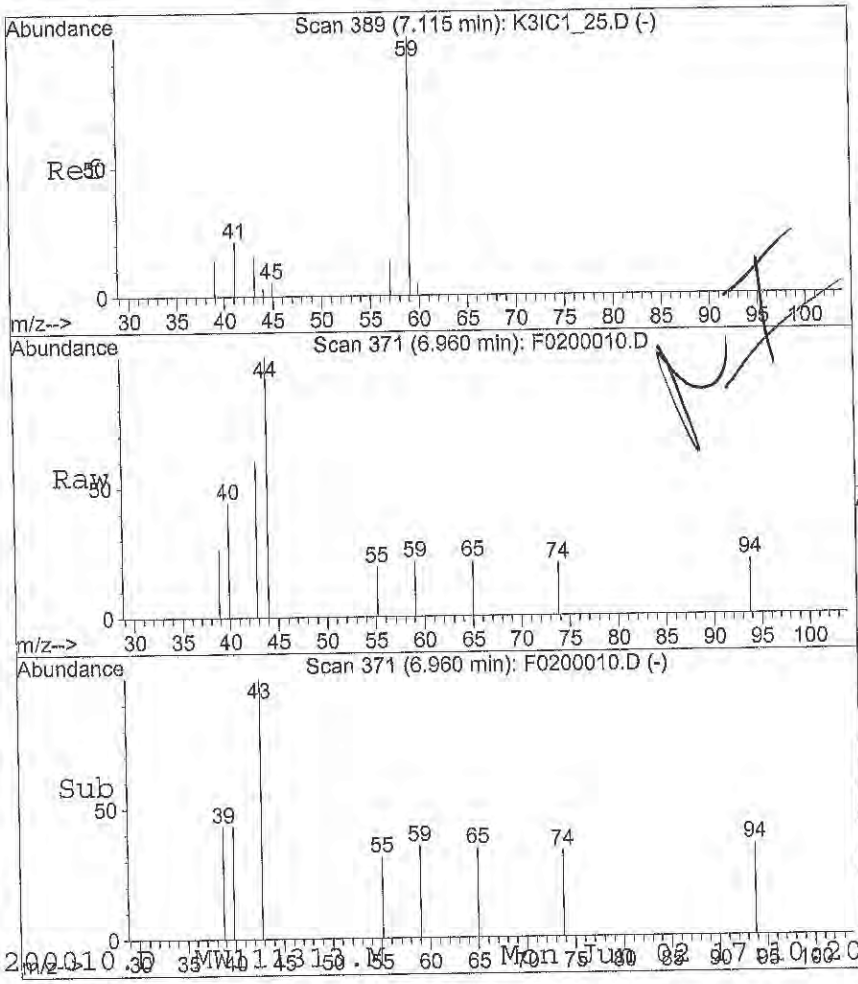


#14
Methylene Chloride
Concen: 0.60 ug/L
RT: 7.10 min Scan# 387
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 84 Resp: 1828

Ion	Ratio	Lower	Upper
84	100		
49	0.0	89.8	134.6#
86	0.0	51.1	76.7#
51	0.0	28.5	42.7#

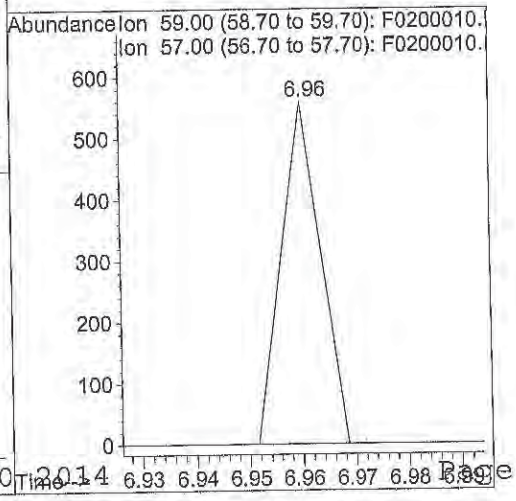


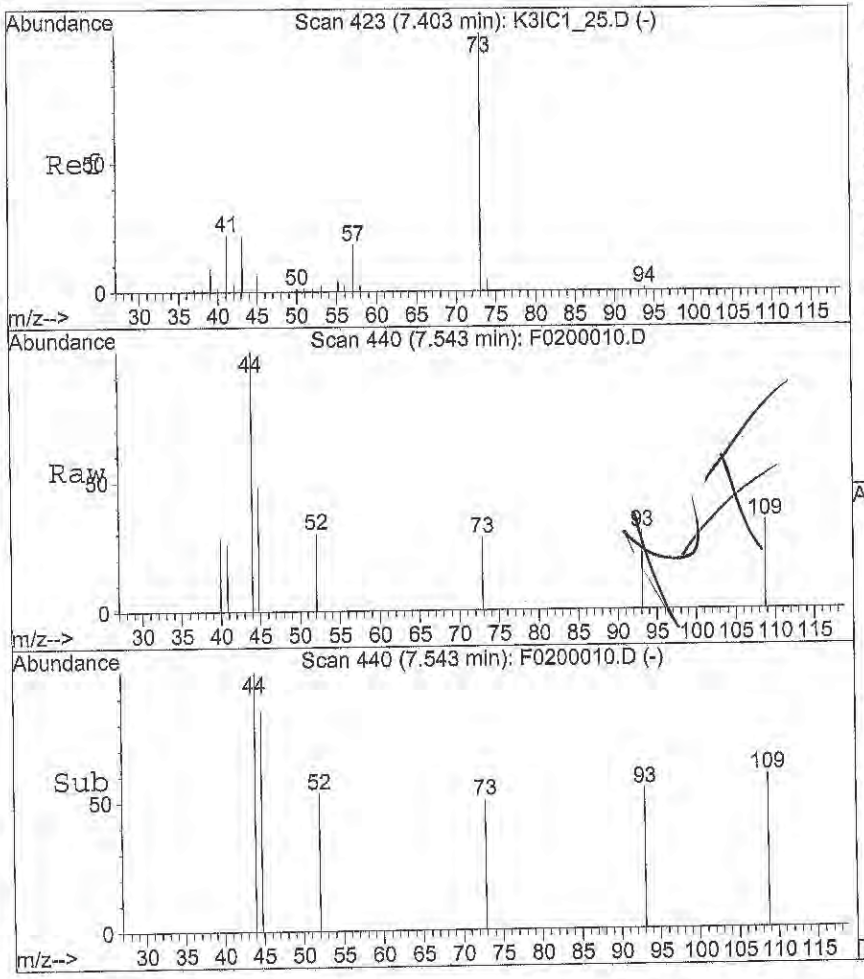


#15
(TBA) tert-Butanol
Concen: 1.50 ug/L
RT: 6.96 min Scan# 371
Delta R.T. -0.16 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 59 Resp: 283

Ion	Ratio	Lower	Upper
59	100		
57	0.0	6.4	9.6#

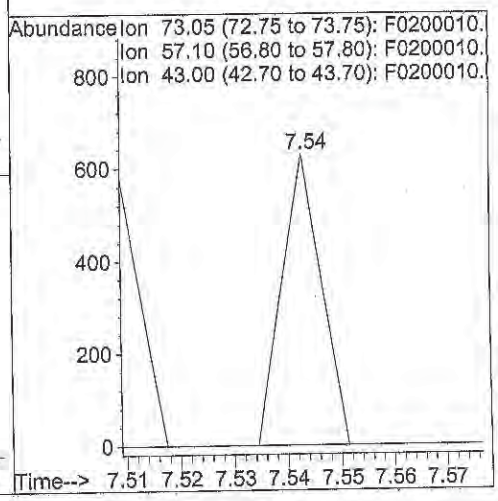


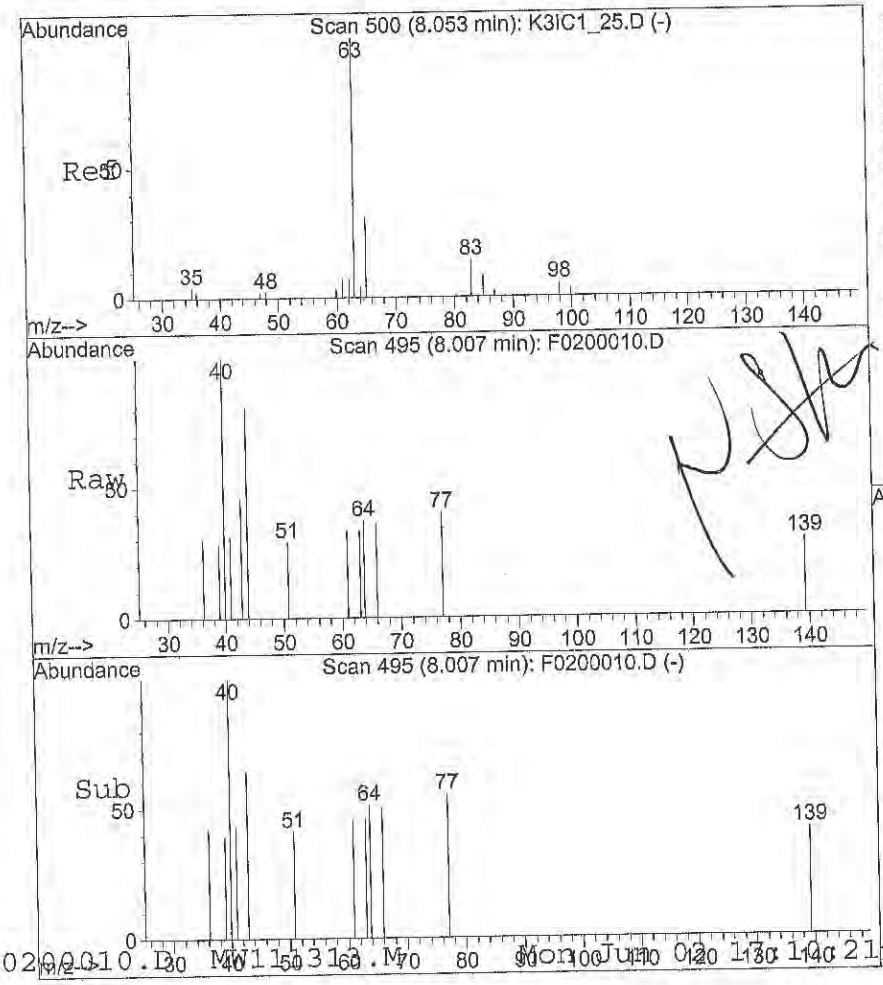


#16
(MTBE) Methyl-t-butyl ether
Concen: 0.05 ug/L
RT: 7.54 min Scan# 440
Delta R.T. 0.14 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 73 Resp: 319

Ion	Ratio	Lower	Upper
73	100		
57	0.0	15.8	23.8#
43	0.0	18.4	27.6#

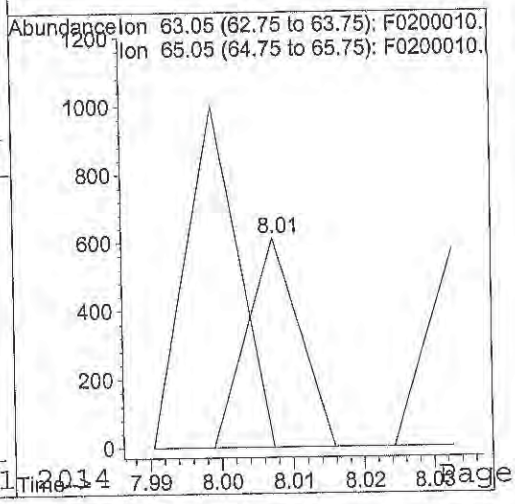


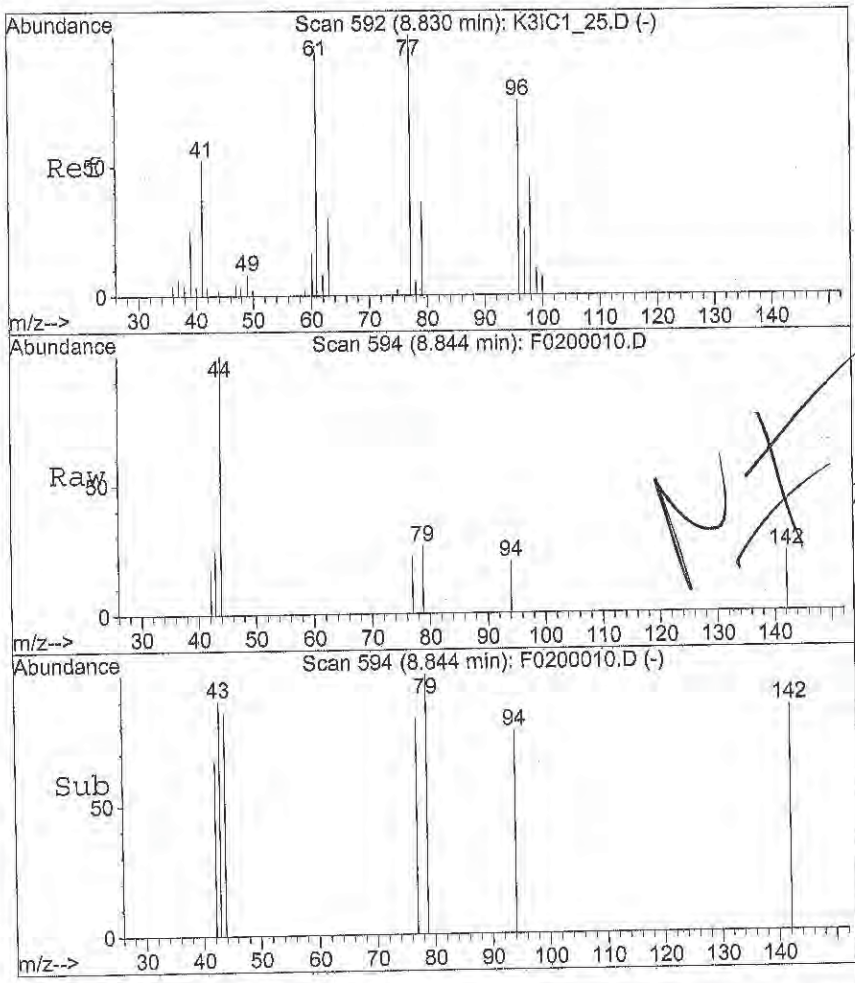


#18
1,1-Dichloroethane
Concen: 0.06 ug/L
RT: 8.01 min Scan# 495
Delta R.T. -0.05 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 63 Resp: 310

Ion	Ratio	Lower	Upper
63	100		
65	163.5	25.8	38.8#

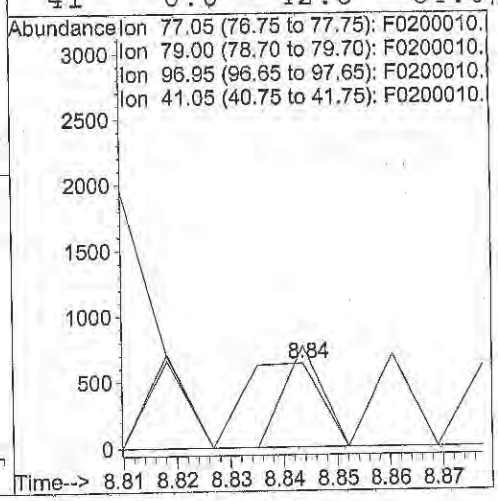


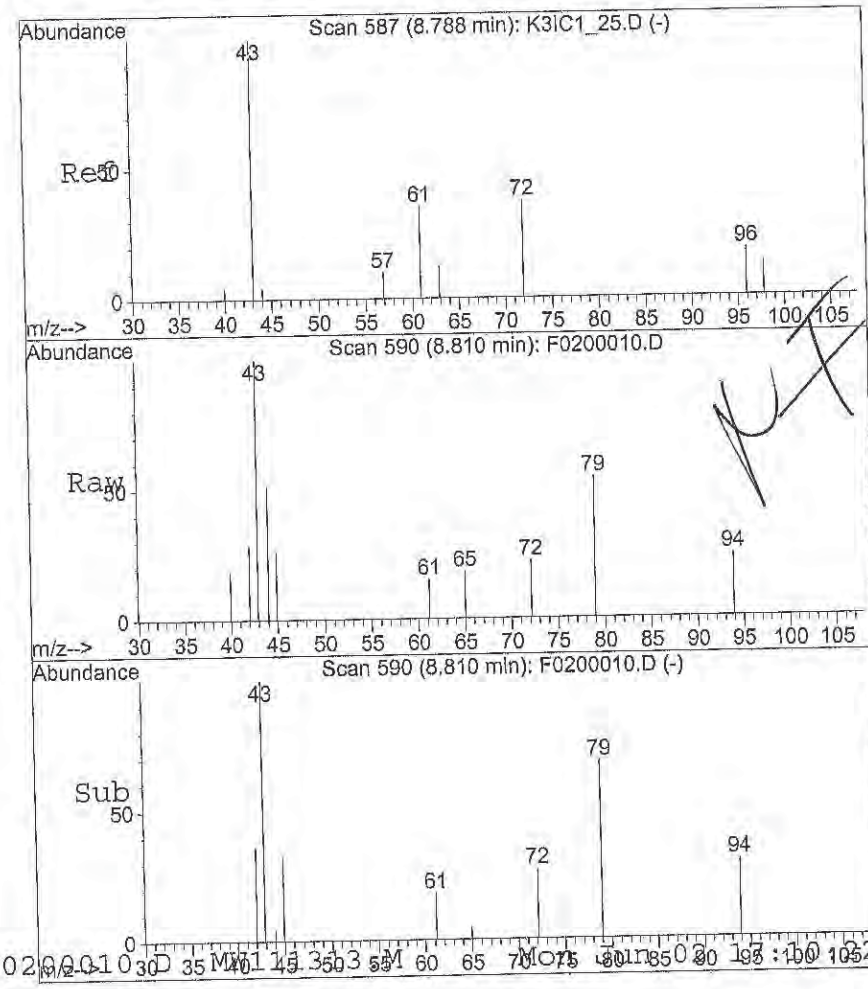


#20
2,2-Dichloropropane
Concen: 0.15 ug/L
RT: 8.84 min Scan# 594
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 77 Resp: 636

Ion	Ratio	Lower	Upper
77	100		
79	60.7	26.6	40.0#
97	0.0	18.9	28.3#
41	0.0	42.6	64.0#

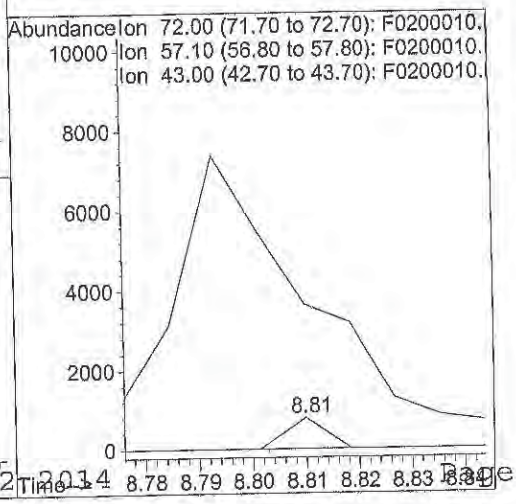


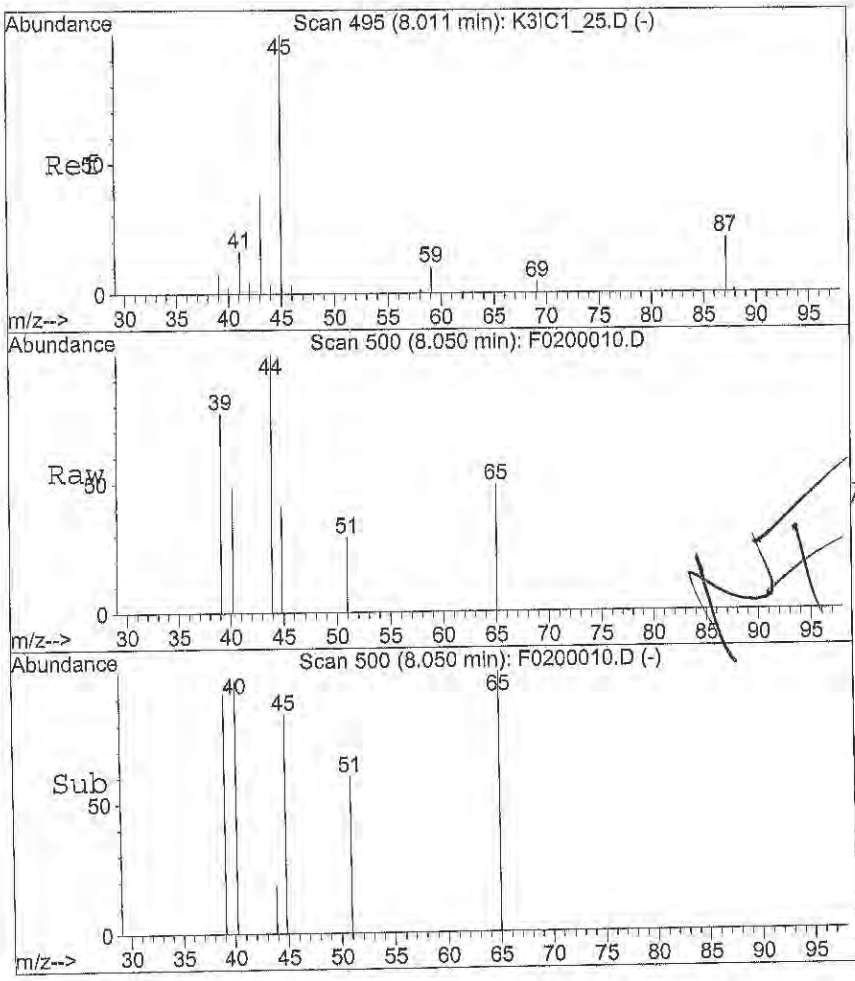


#21
(MEK) 2-Butanone
Concen: 1.28 ug/L
RT: 8.81 min Scan# 590
Delta R.T. 0.02 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 72 Resp: 398

Ion	Ratio	Lower	Upper
72	100		
57	0.0	17.5	26.3#
43	3428.4	314.2	471.2#

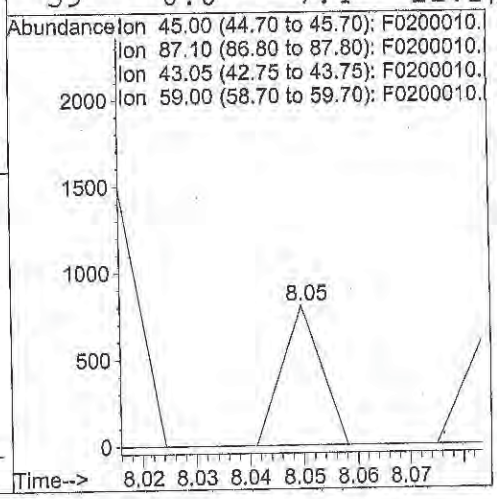


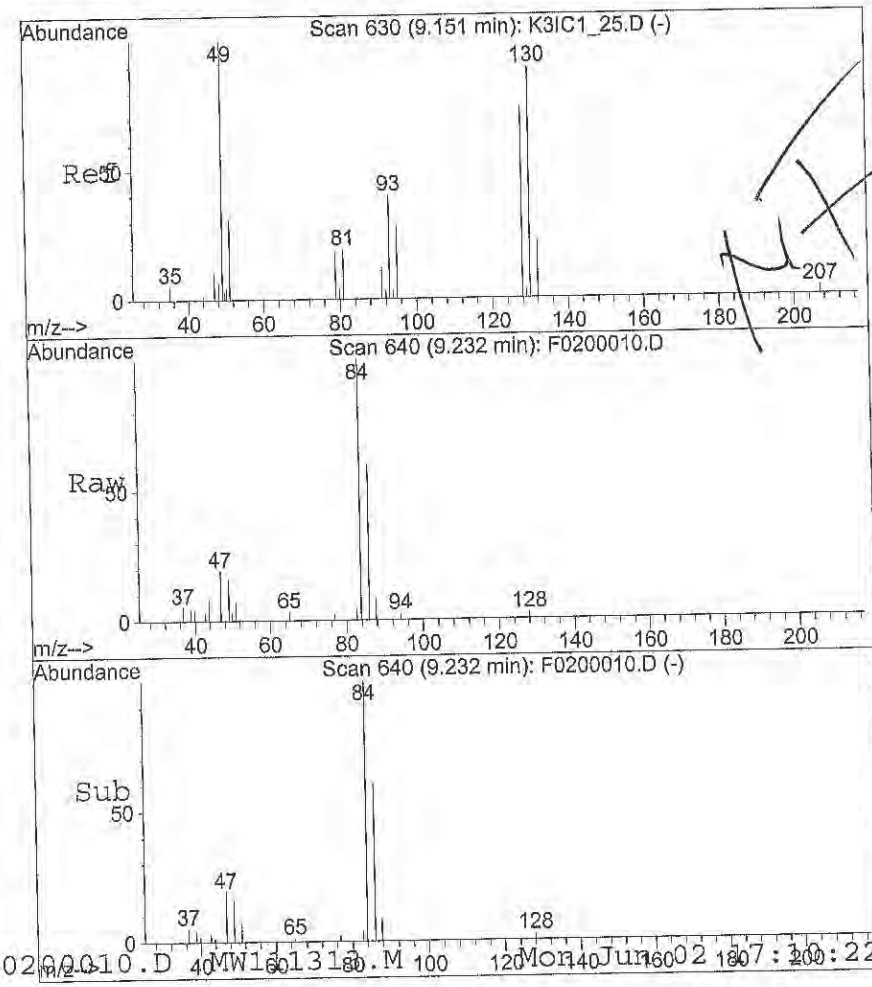


#22
(DIPE) Diisopropyl Ether
Concen: 0.05 ug/L
RT: 8.05 min Scan# 500
Delta R.T. 0.04 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 45 Resp: 407

Ion	Ratio	Lower	Upper
45	100		
87	0.0	17.0	25.6#
43	0.0	30.5	45.7#
59	0.0	7.4	11.2#

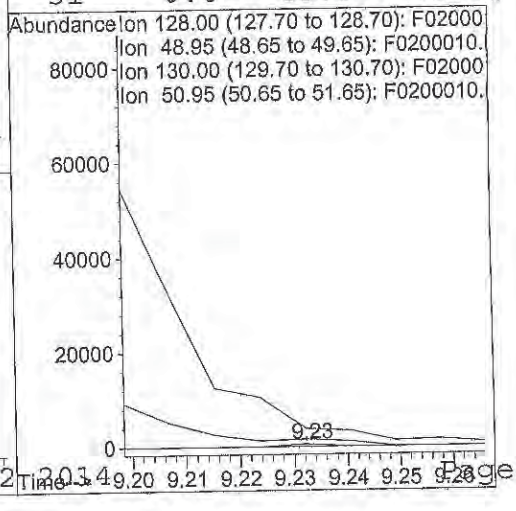


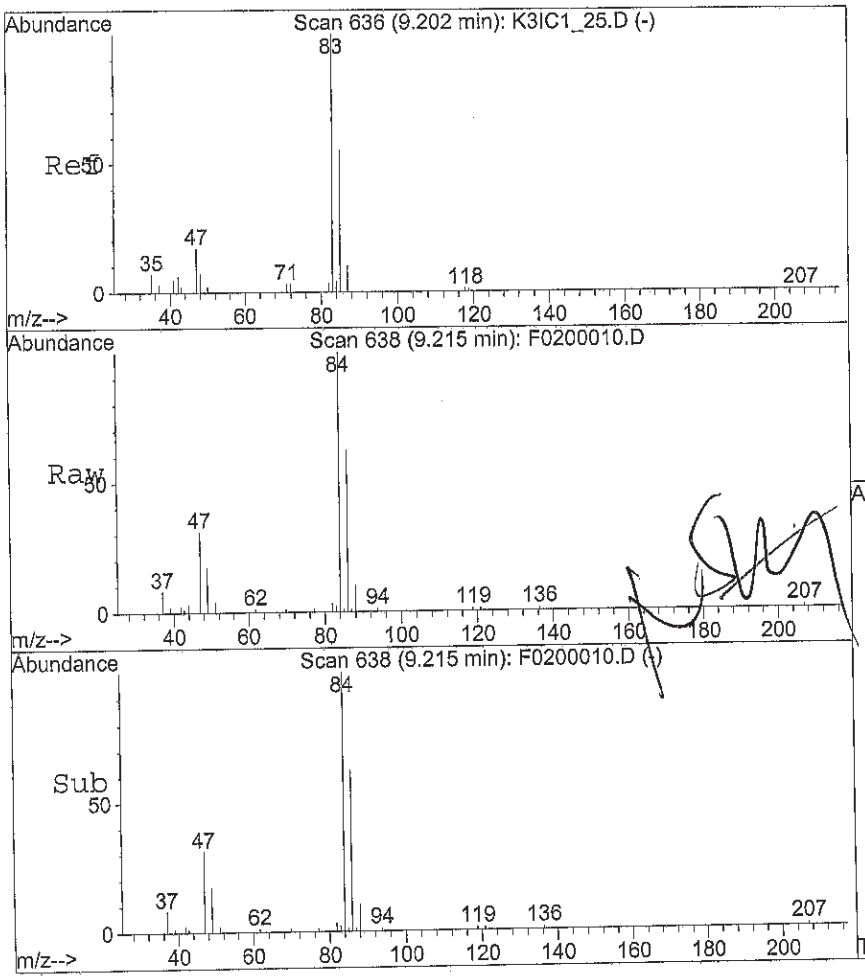


#23
Bromochloromethane
Concen: 0.19 ug/L
RT: 9.23 min Scan# 640
Delta R.T. 0.08 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:128 Resp: 275

Ion	Ratio	Lower	Upper
128	100		
49	0.0	117.4	176.0#
130	0.0	111.0	166.6#
51	0.0	48.0	72.0#

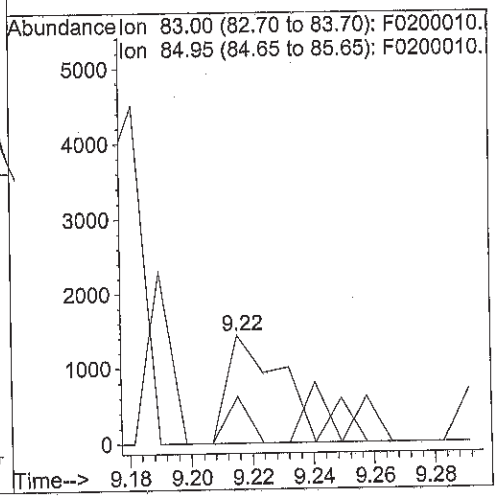


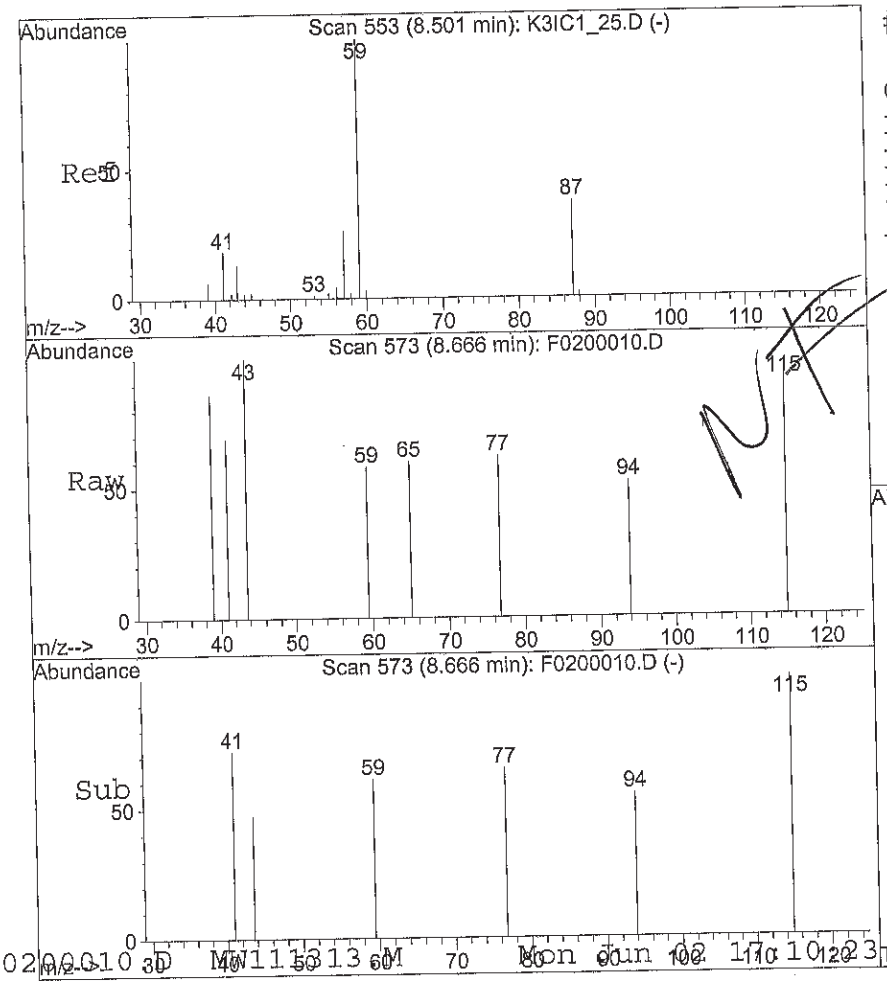


#24
Chloroform
Concen: 0.34 ug/L
RT: 9.22 min Scan# 638
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 83 Resp: 1997

Ion	Ratio	Lower	Upper
83	100		
85	15.5	51.8	77.6#

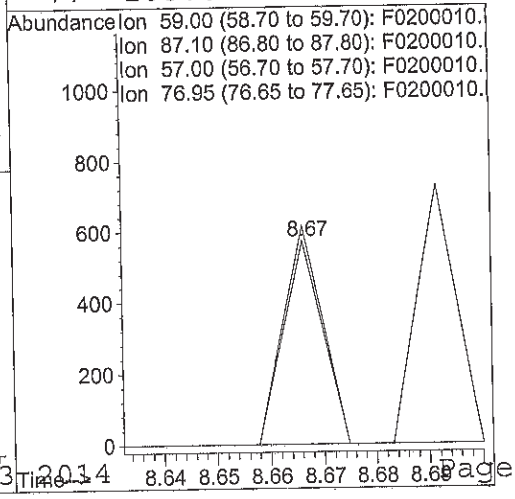


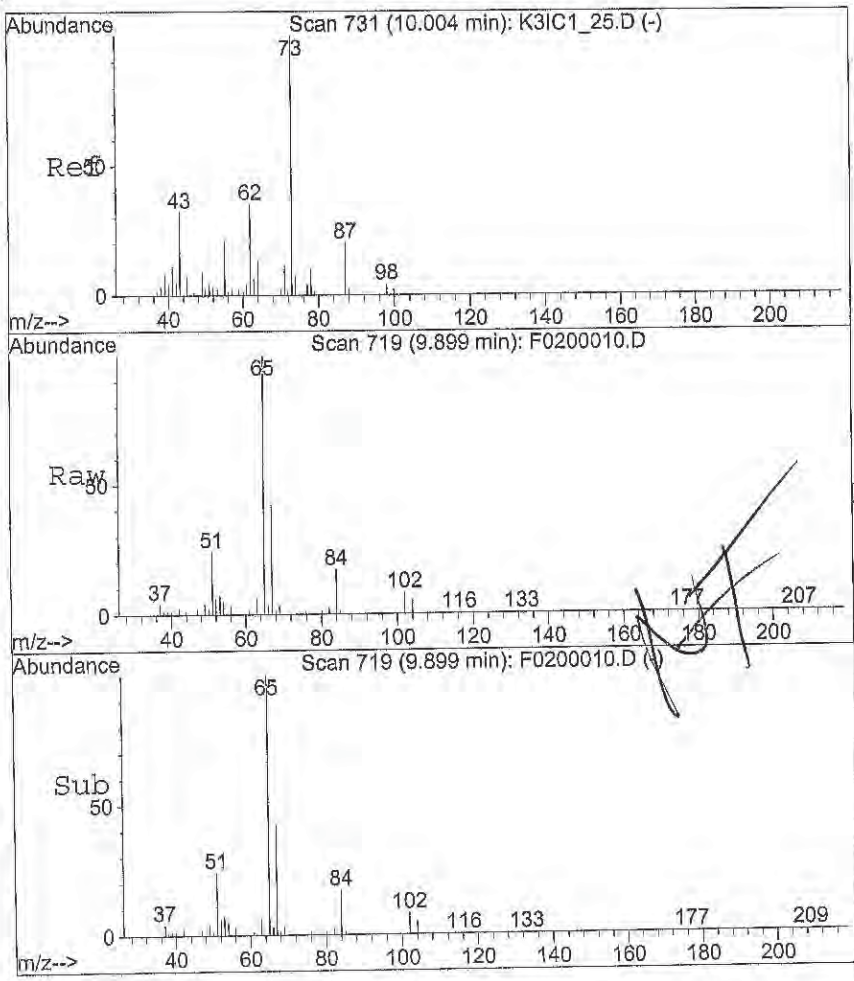


#25
(ETBE) 2-ethoxy 2-methyl propar
Concen: 0.04 ug/L
RT: 8.67 min Scan# 573
Delta R.T. 0.17 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 59 Resp: 289

Ion	Ratio	Lower	Upper
59	100		
87	0.0	27.8	41.8#
57	0.0	19.8	29.6#
77	108.0	0.0	0.0#

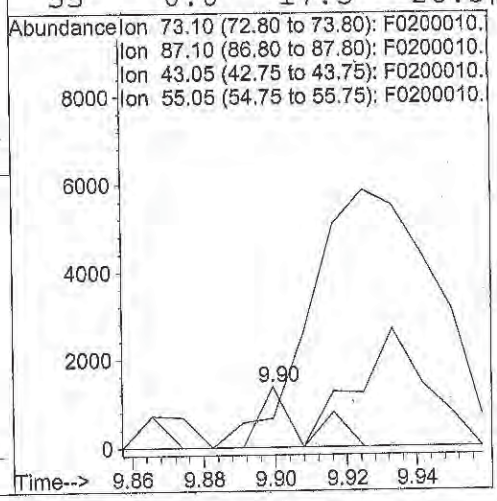


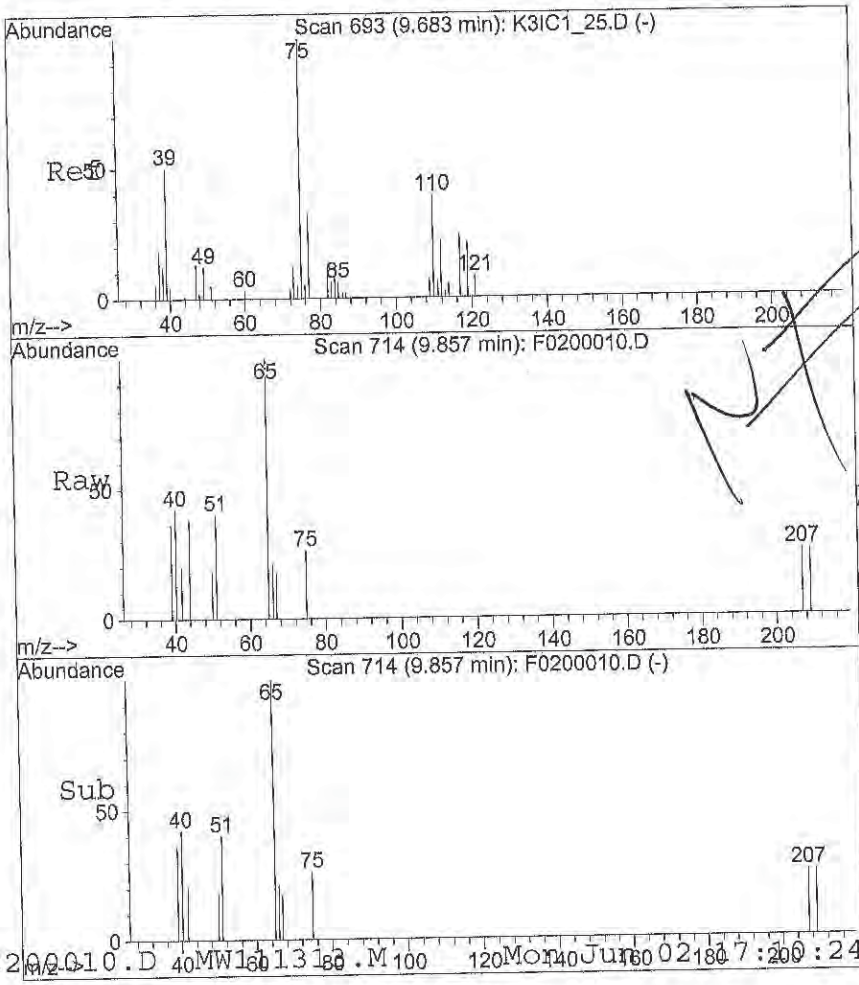


#27
(TAME) tert-Amyl methyl ether
Concen: 0.16 ug/L
RT: 9.90 min Scan# 719
Delta R.T. -0.10 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 73 Resp: 1089

Ion	Ratio	Lower	Upper
73	100		
87	0.0	19.4	29.0#
43	0.0	27.0	40.6#
55	0.0	17.5	26.3#

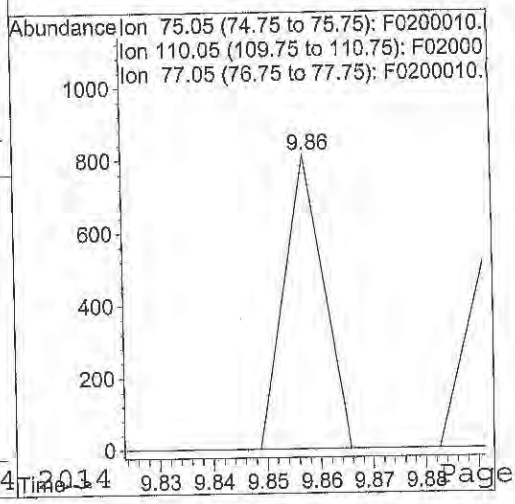


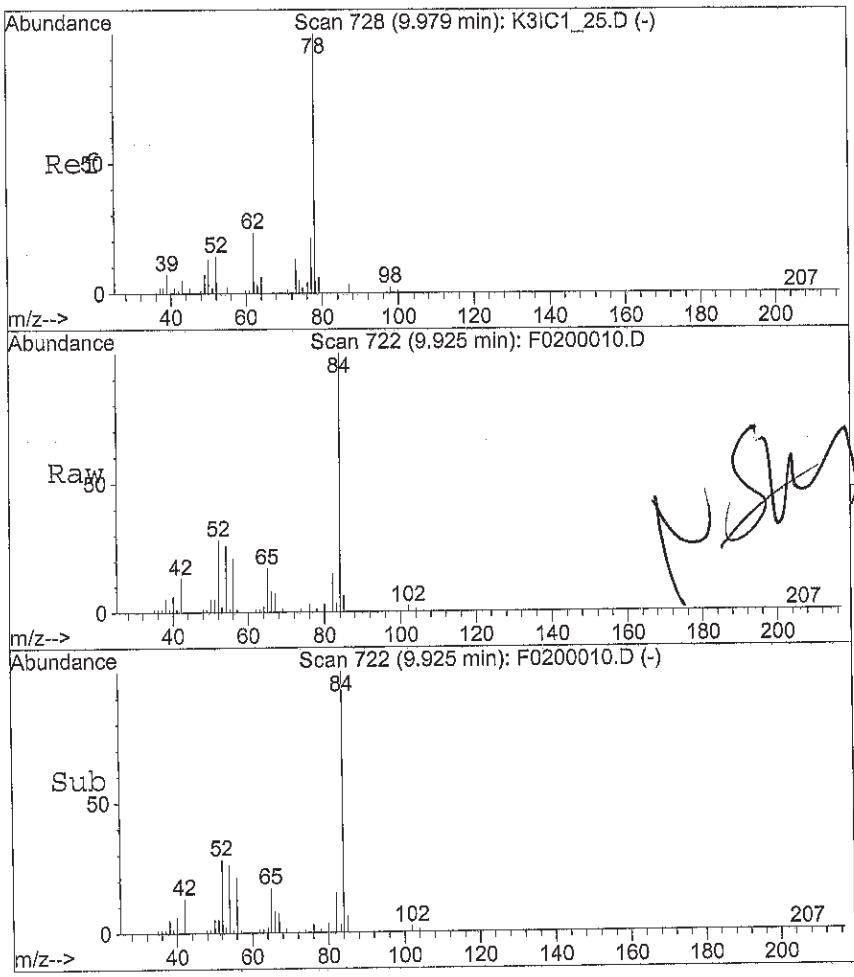


#29
1,1-Dichloropropene
Concen: 0.10 ug/L
RT: 9.86 min Scan# 714
Delta R.T. 0.17 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 75 Resp: 412

Ion	Ratio	Lower	Upper
75	100		
110	0.0	29.0	43.6#
77	0.0	25.0	37.4#

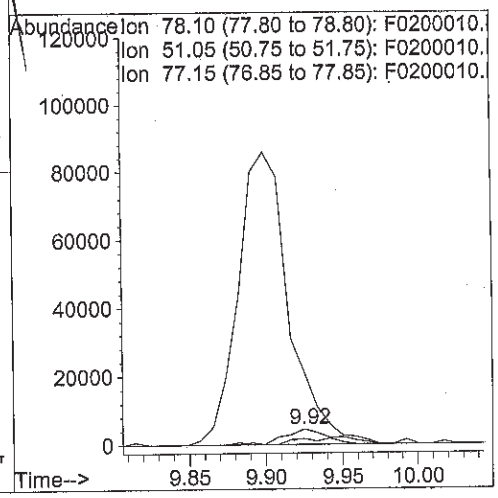


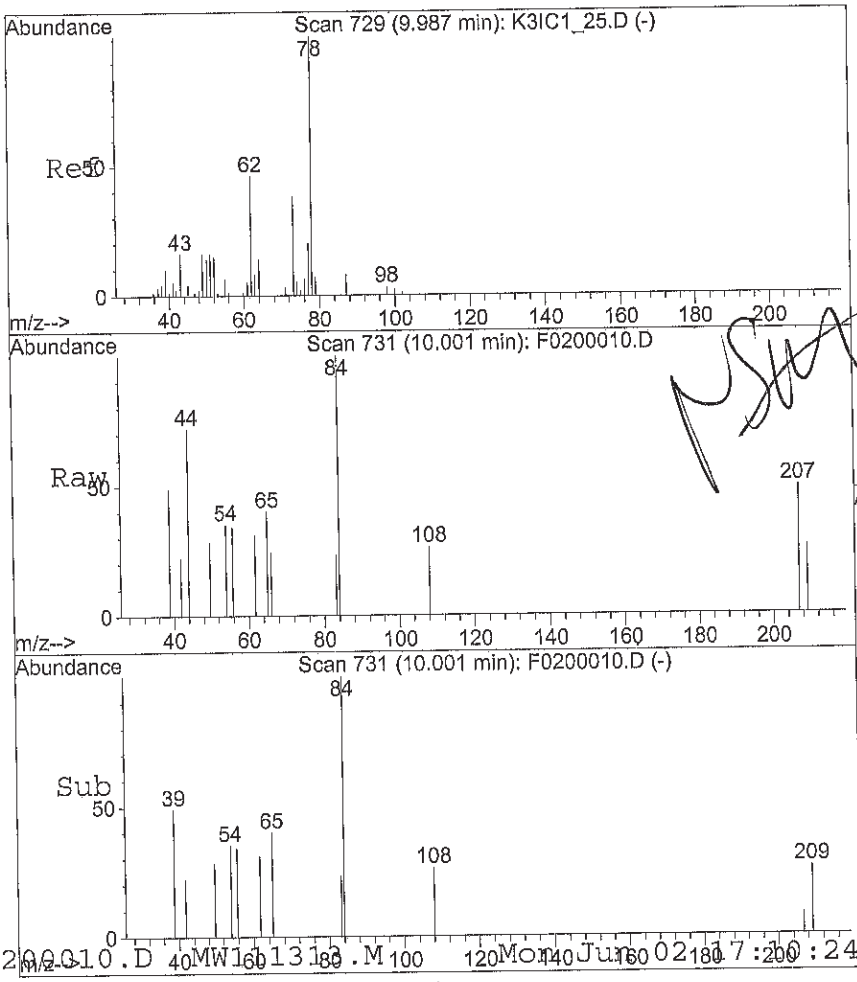


#31
Benzene
Concen: 0.94 ug/L
RT: 9.92 min Scan# 722
Delta R.T. -0.05 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 78 Resp: 9790

Ion	Ratio	Lower	Upper
78	100		
51	0.0	14.2	21.2#
77	34.8	16.6	24.8#

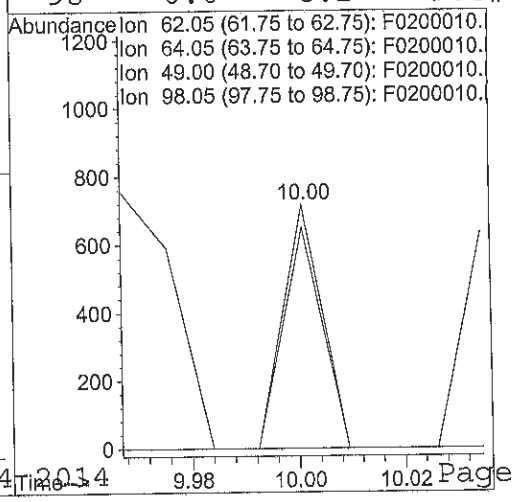


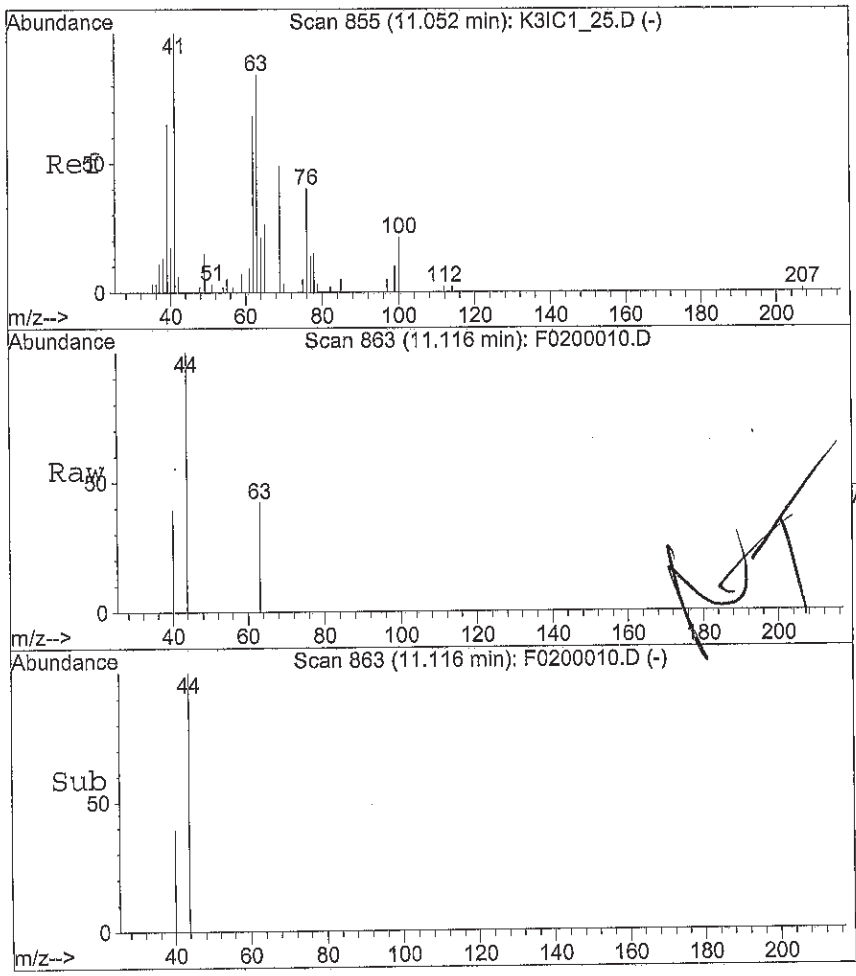


#32
1,2-Dichloroethane
Concen: 0.10 ug/L
RT: 10.00 min Scan# 731
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 62 Resp: 363

Ion	Ratio	Lower	Upper
62	100		
64	0.0	28.0	42.0#
49	0.0	28.5	42.7#
98	0.0	6.2	9.4#

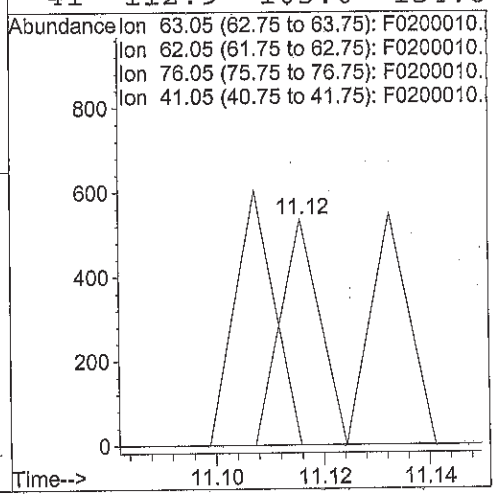


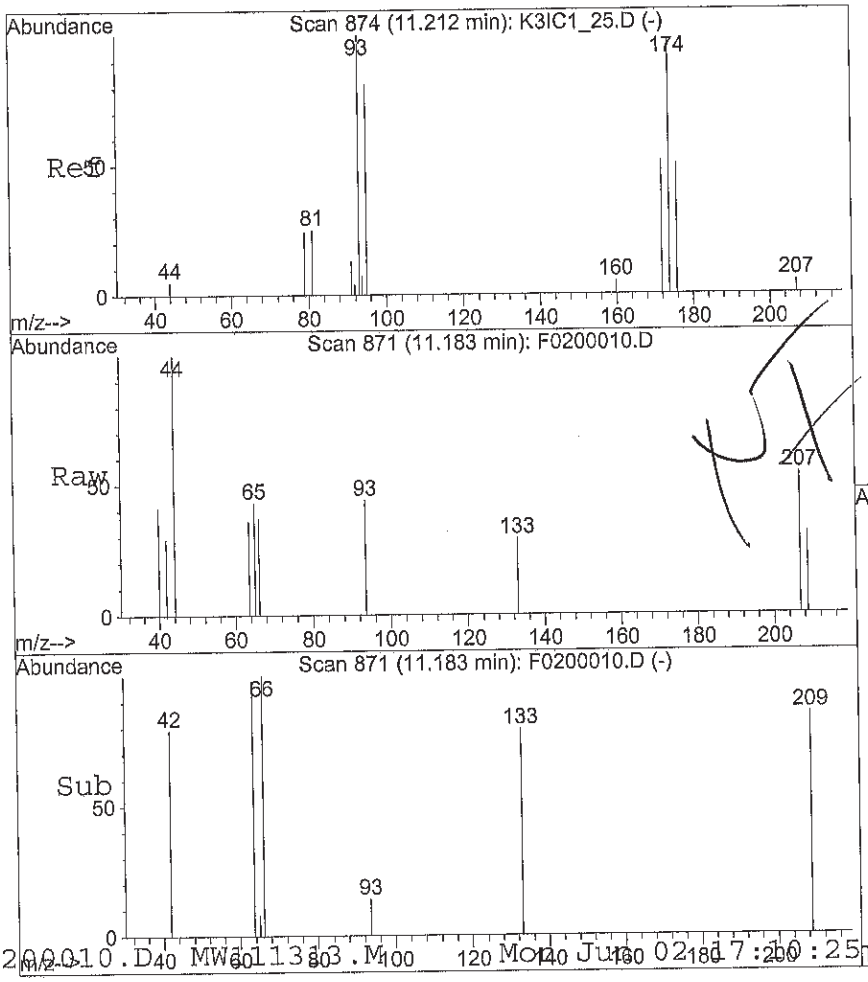


#34
1,2-Dichloropropane
Concen: 0.11 ug/L
RT: 11.12 min Scan# 863
Delta R.T. 0.06 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 63 Resp: 272

Ion	Ratio	Lower	Upper
63	100		
62	0.0	67.4	101.2#
76	0.0	40.3	60.5#
41	112.9	103.0	154.6

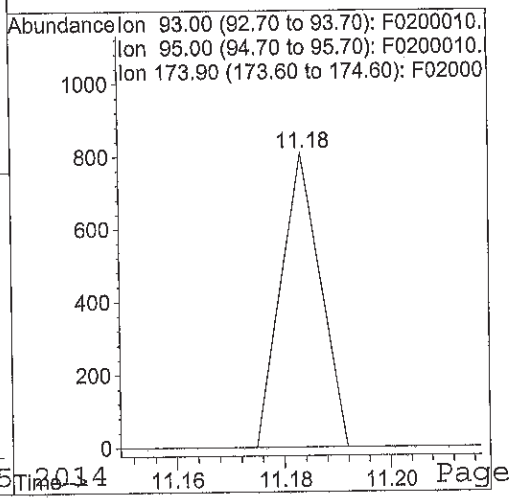


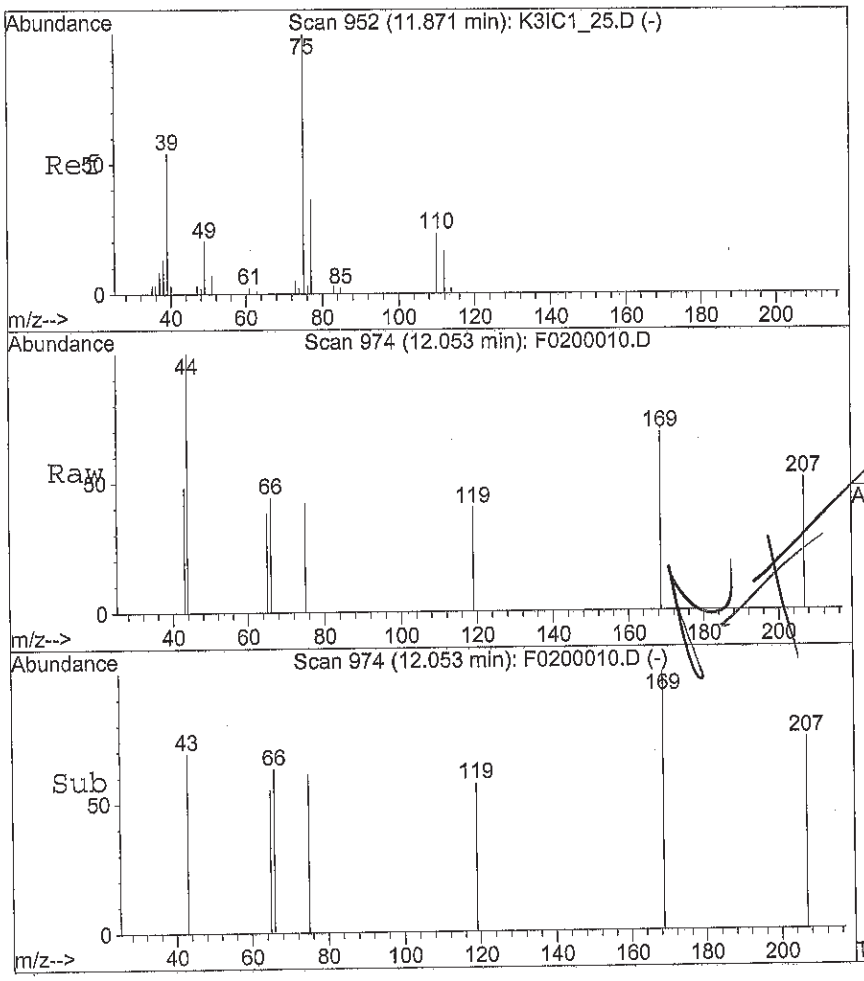


#35
Dibromomethane
Concen: 0.21 ug/L
RT: 11.18 min Scan# 871
Delta R.T. -0.03 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 93 Resp: 409

Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.2	99.2#
174	0.0	75.5	113.3#

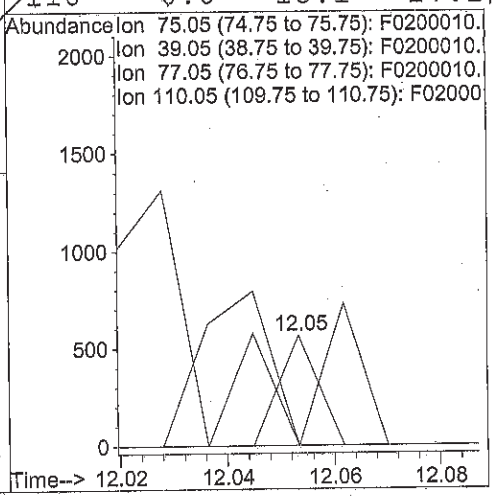


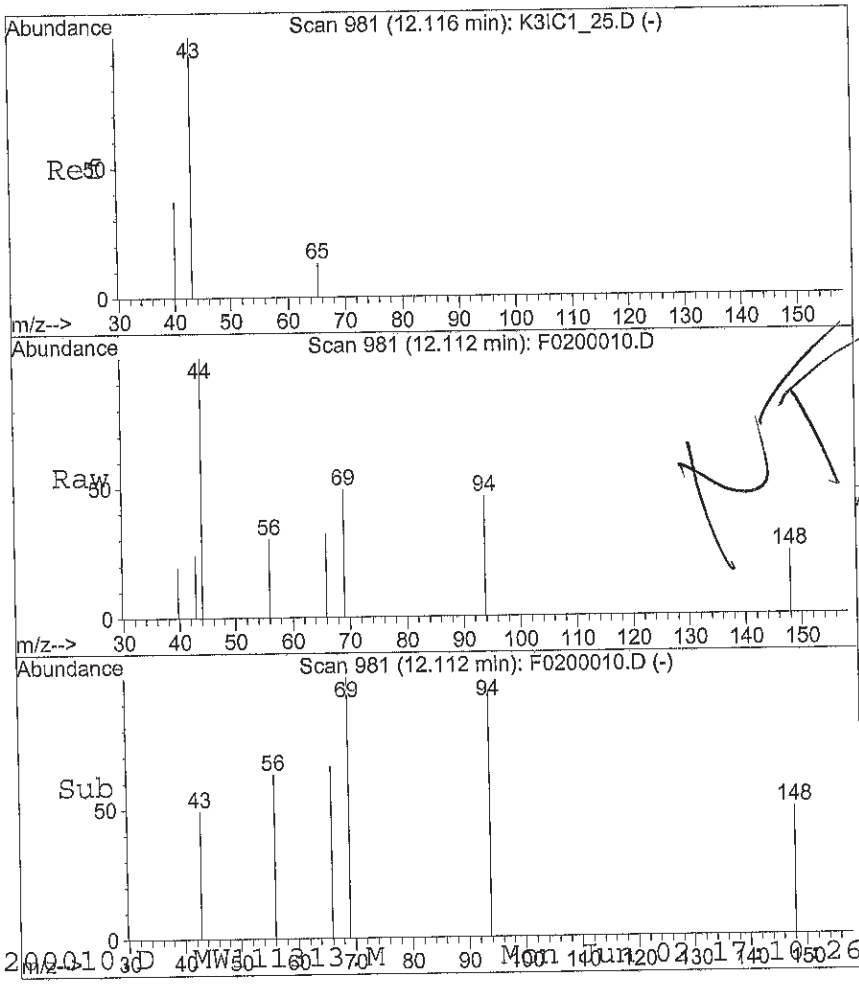


#37
cis-1,3-Dichloropropene
Concen: 0.07 ug/L
RT: 12.05 min Scan# 974
Delta R.T. 0.18 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 75 Resp: 285

Ion	Ratio	Lower	Upper
75	100		
39	129.1	40.7	61.1#
77	251.9	28.8	43.2#
110	0.0	18.1	27.1#

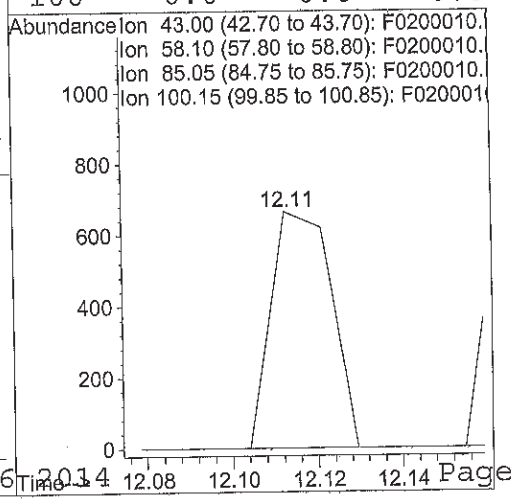


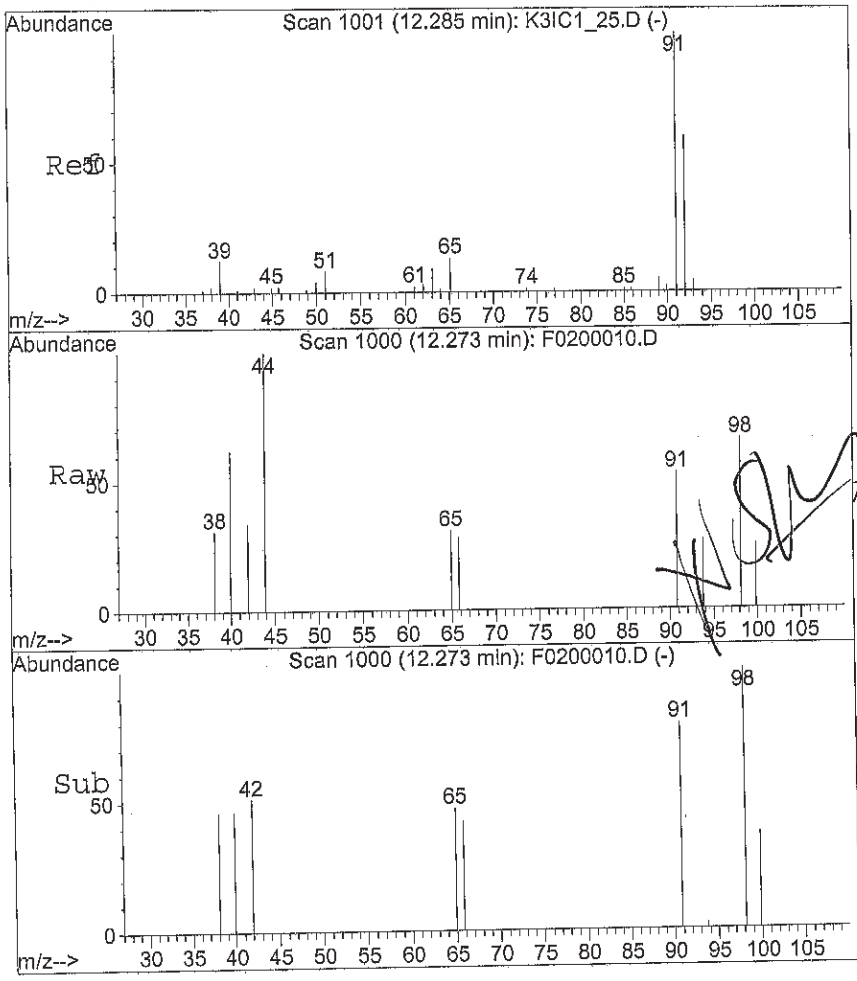


#40
(MIBK) 4-Methyl-2-Pentanone
Concen: 0.30 ug/L
RT: 12.11 min Scan# 981
Delta R.T. -0.00 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 43 Resp: 650

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	0.0	0.0	0.0
100	0.0	0.0	0.0

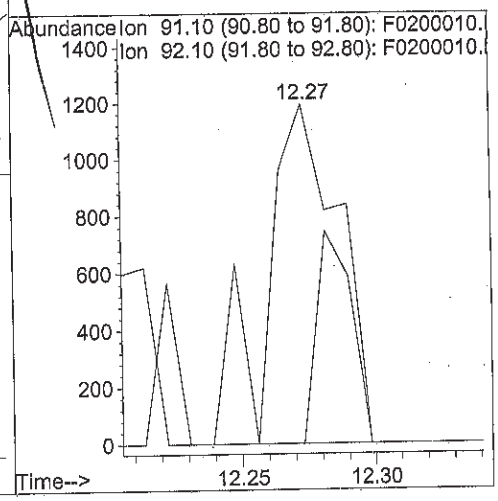


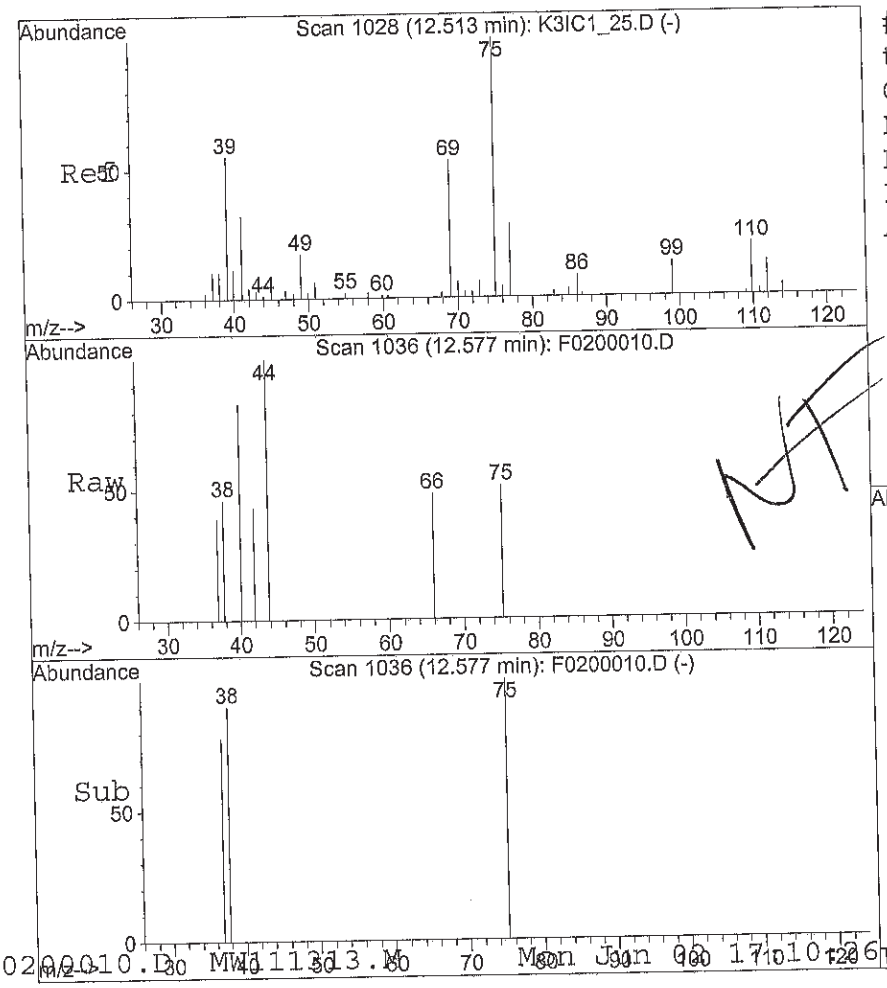


#41
Toluene
Concen: 0.15 ug/L
RT: 12.27 min Scan# 1000
Delta R.T. -0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 91 Resp: 2249

Ion	Ratio	Lower	Upper
91	100		
92	30.0	47.4	71.0#

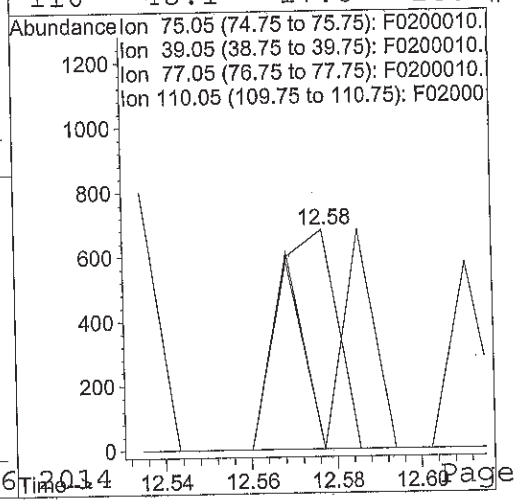


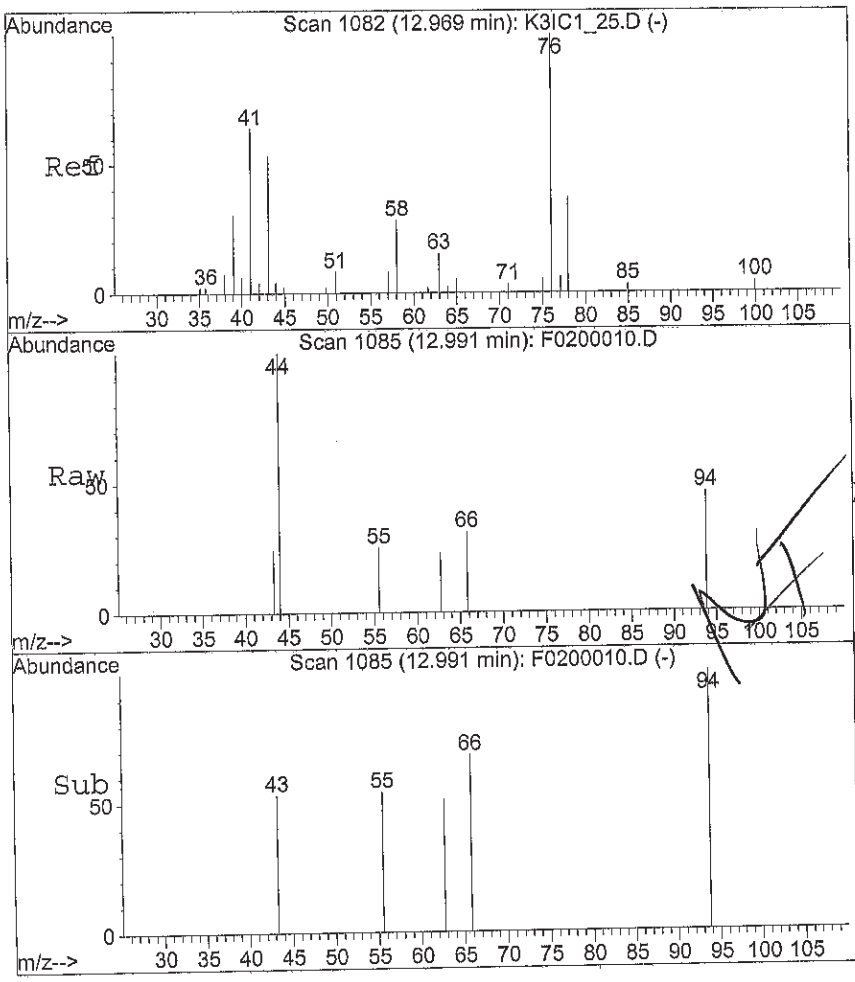


#42
trans-1,3-Dichloropropene
Concen: 0.13 ug/L
RT: 12.58 min Scan# 1036
Delta R.T. 0.06 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 75 Resp: 647

Ion	Ratio	Lower	Upper
75	100		
39	53.3	53.6	80.4#
77	45.6	25.4	38.2#
110	48.1	17.6	26.4#

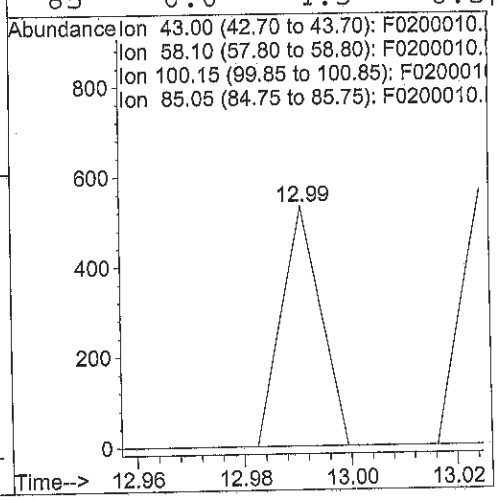


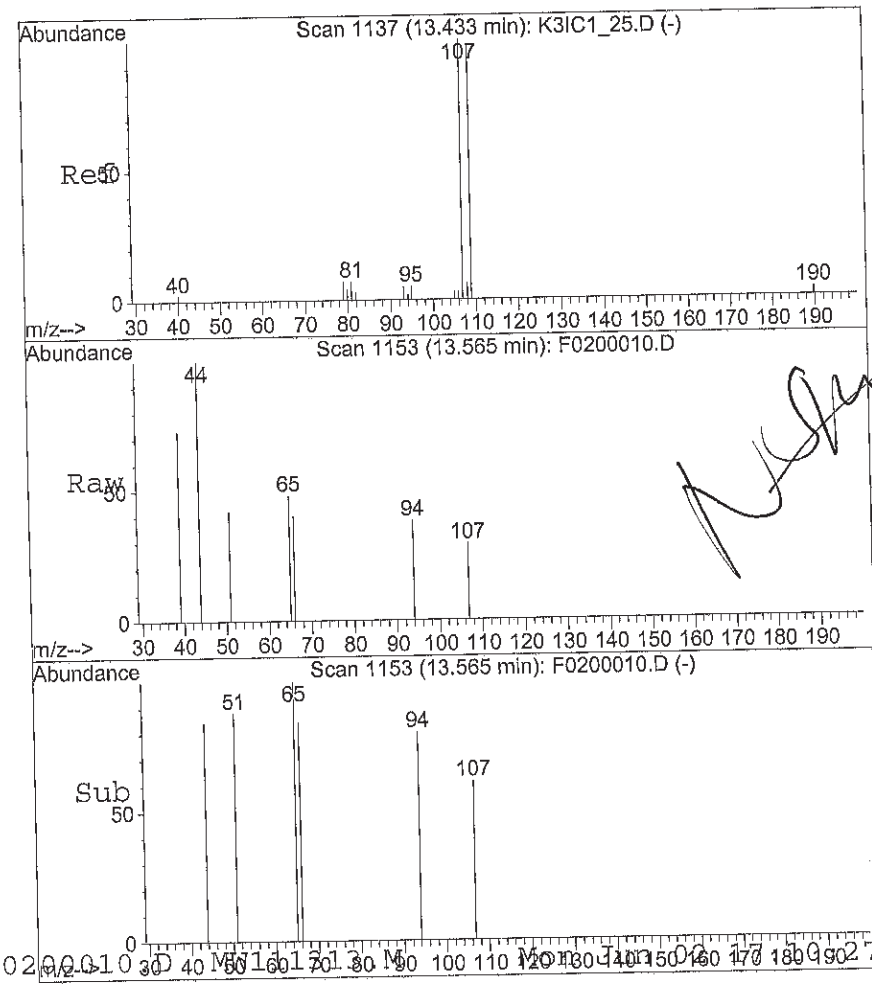


#46
2-Hexanone
Concen: 0.11 ug/L
RT: 12.99 min Scan# 1085
Delta R.T. 0.02 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 43 Resp: 270

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.9	61.3#
100	0.0	5.5	8.3#
85	0.0	4.3	6.5#

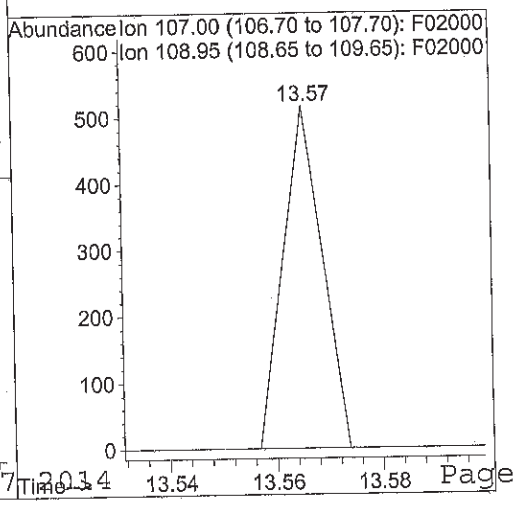


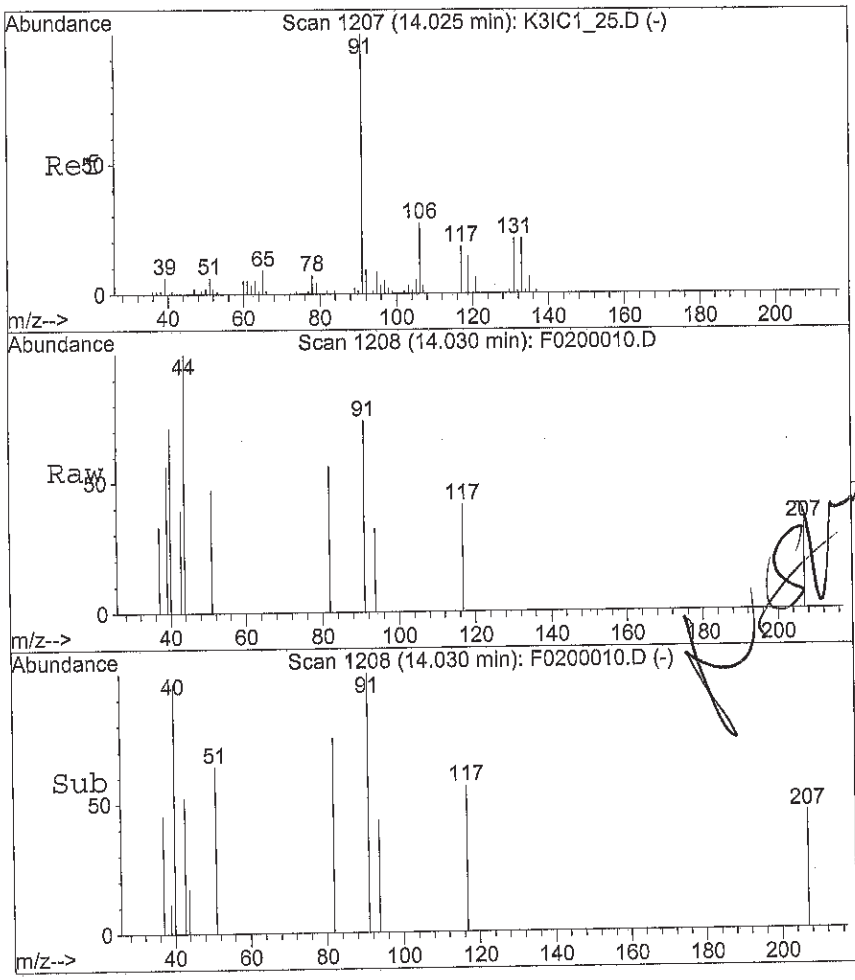


#48
1,2-Dibromoethane
Concen: 0.08 ug/L
RT: 13.57 min Scan# 1153
Delta R.T. 0.13 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:107 Resp: 261

Ion	Ratio	Lower	Upper
107	100		
109	0.0	74.4	111.6#

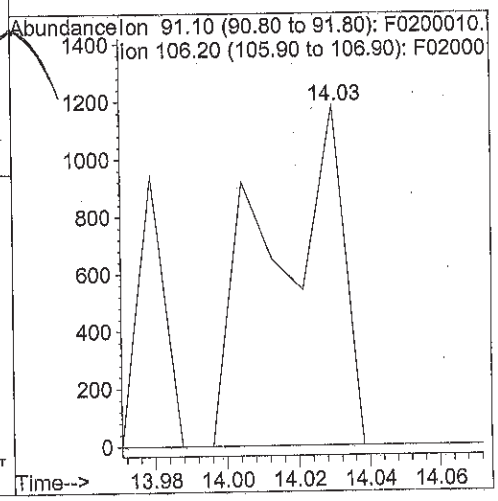


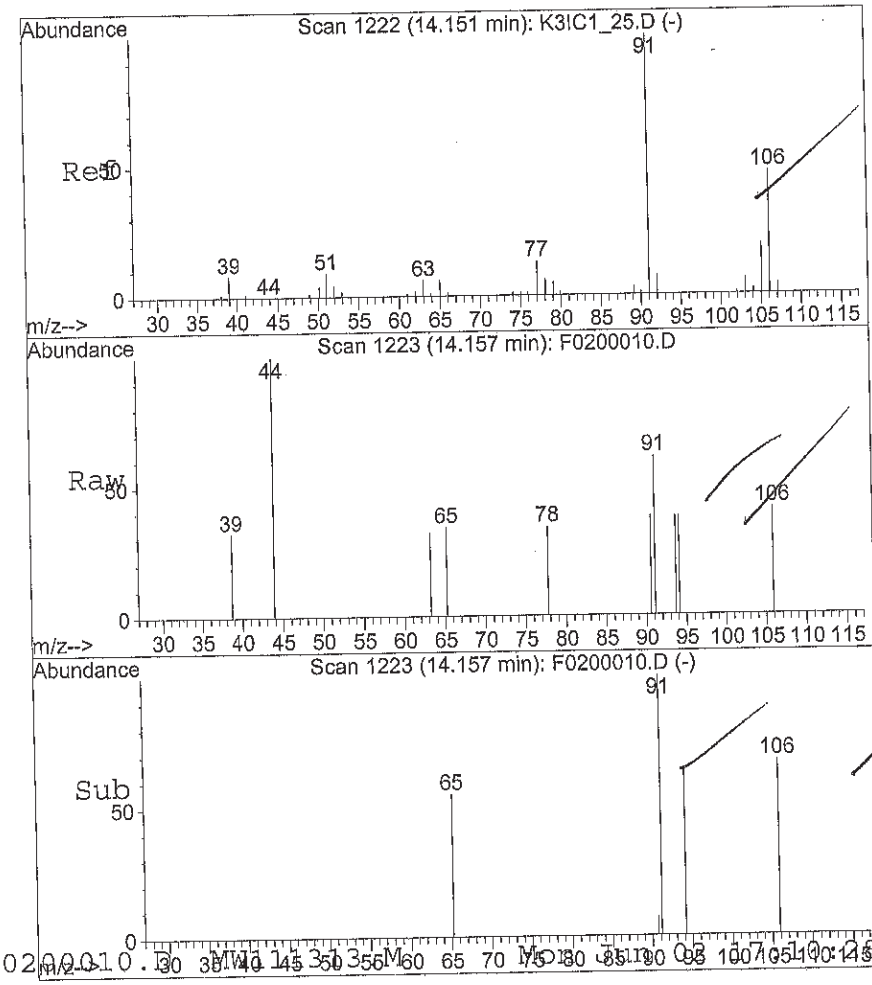


#51
Ethylbenzene
Concen: 0.10 ug/L
RT: 14.03 min Scan# 1208
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 91 Resp: 1668

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.5	35.3#

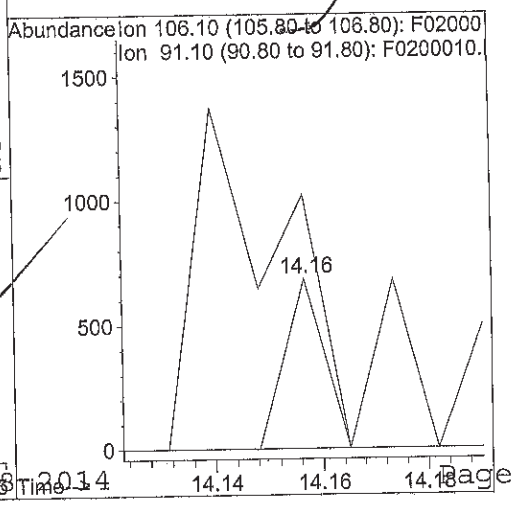


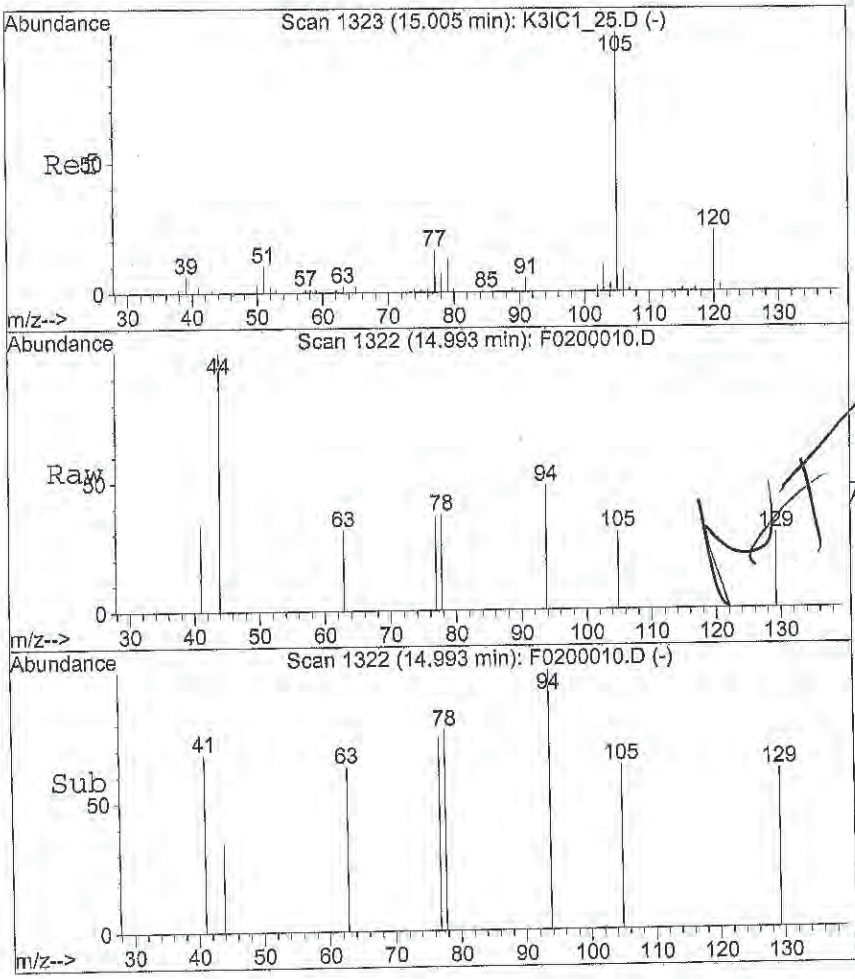


#52
m,p-Xylenes
Concen: 0.06 ug/L
RT: 14.16 min Scan# 1223
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:106 Resp: 348

Ion	Ratio	Lower	Upper
106	100		
91	614.9	177.1	265.7#

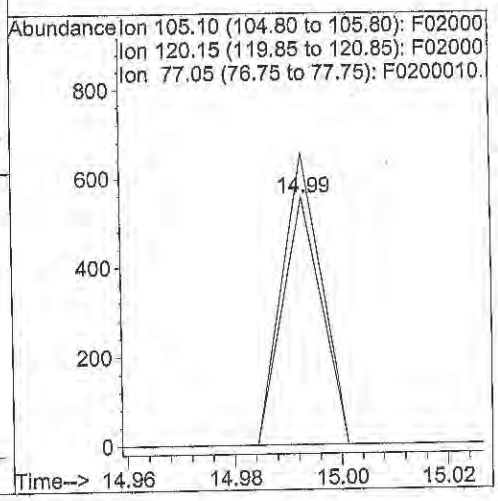


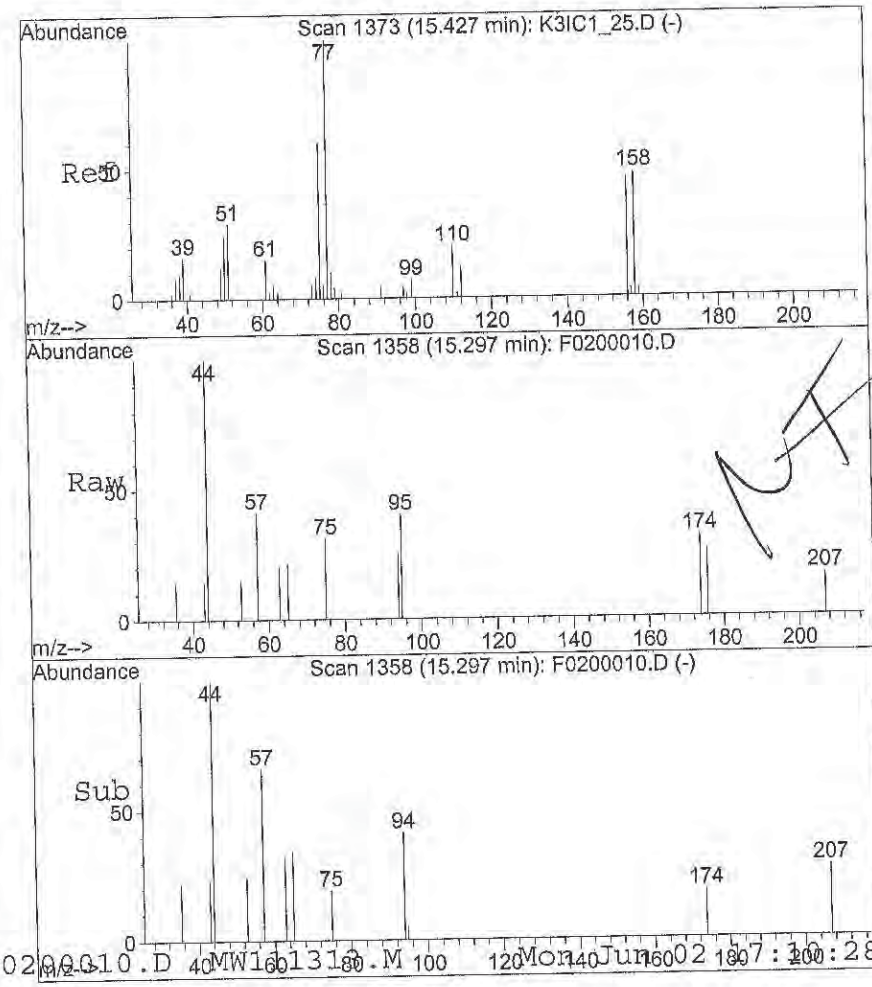


#56
Isopropylbenzene
Concen: 0.02 ug/L
RT: 14.99 min Scan# 1322
Delta R.T. -0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:105 Resp: 281

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.3	28.9#
77	118.1	13.1	19.7#

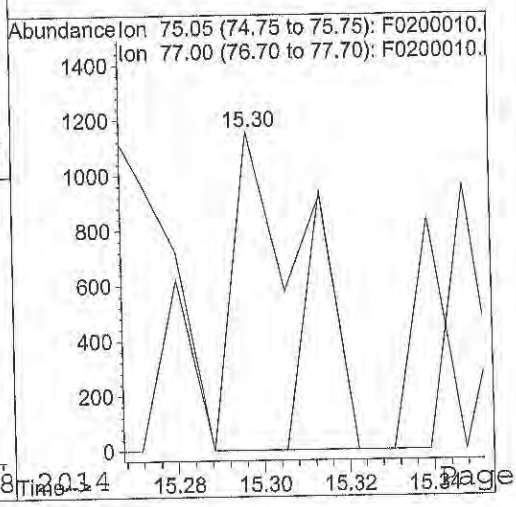


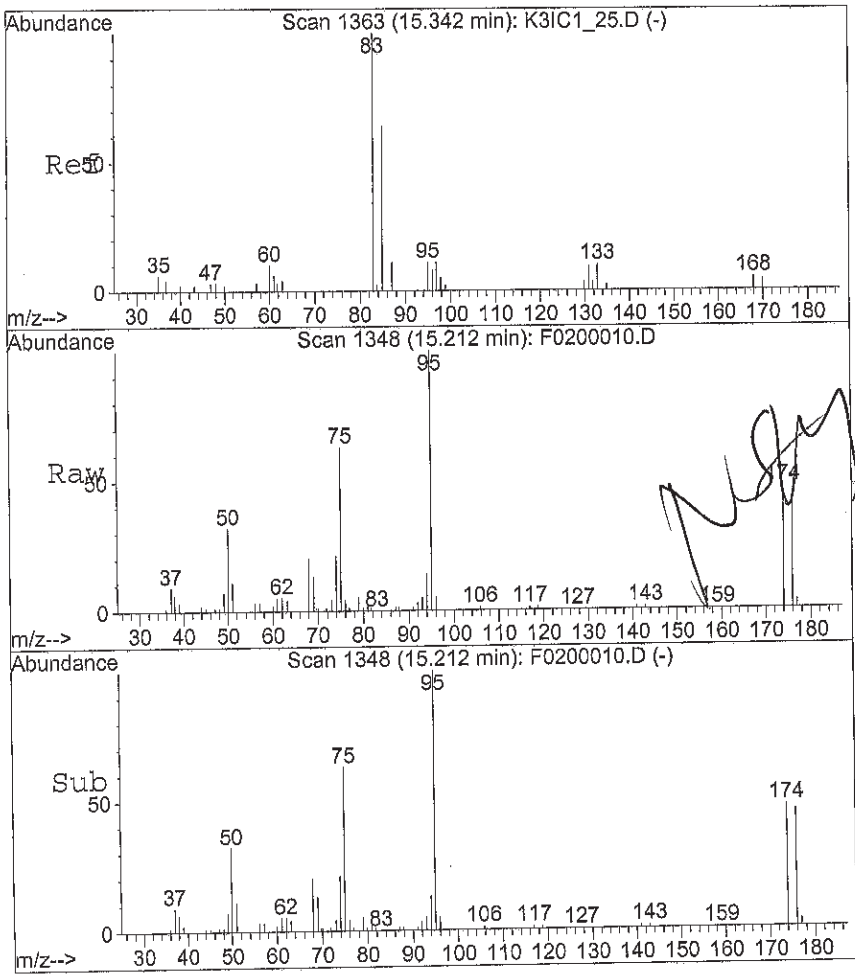


#57
1,2,3-Trichloropropane
Concen: 0.30 ug/L
RT: 15.30 min Scan# 1358
Delta R.T. -0.13 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 75 Resp: 1346

Ion	Ratio	Lower	Upper
75	100		
77	35.4	31.2	46.8

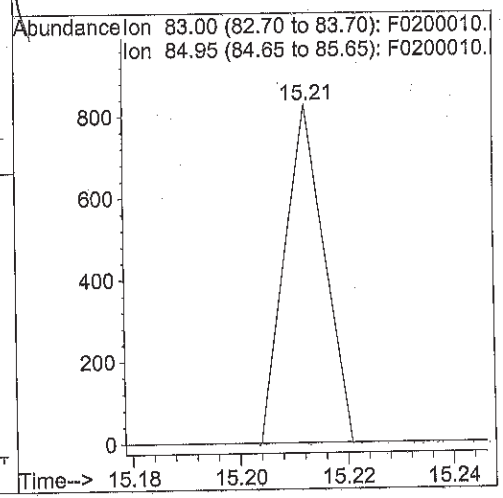


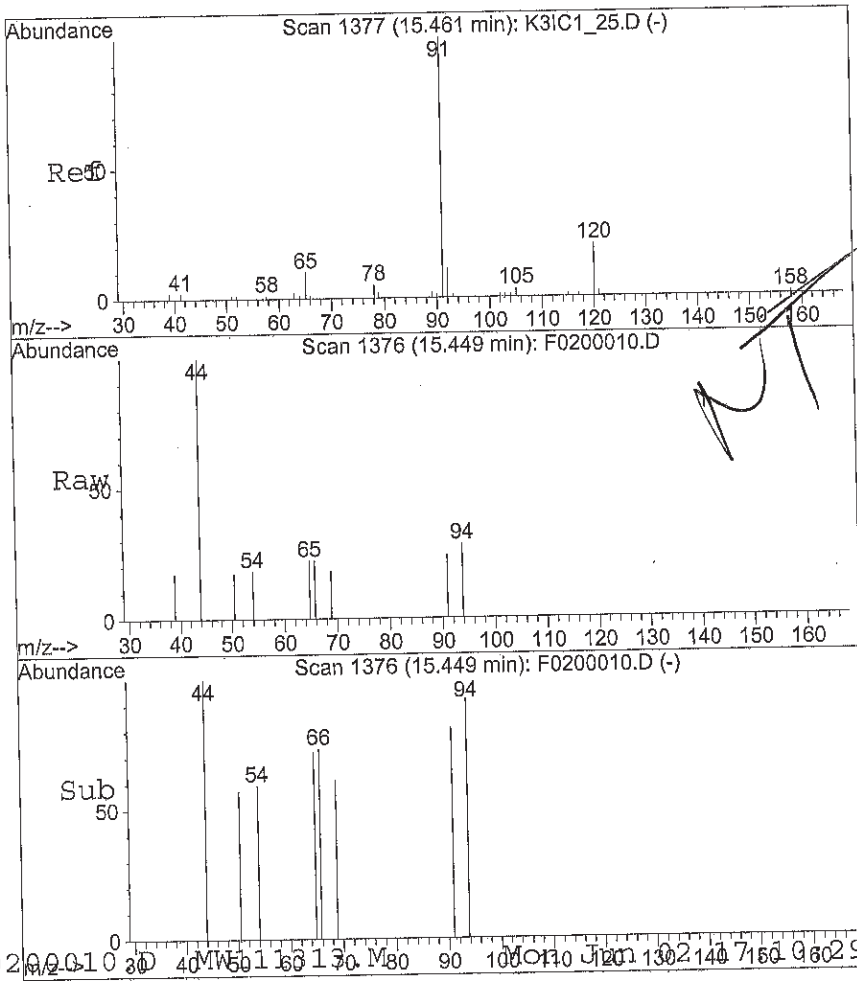


#60
1,1,2,2-Tetrachloroethane
Concen: 0.10 ug/L
RT: 15.21 min Scan# 1348
Delta R.T. -0.13 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 83 Resp: 419

Ion	Ratio	Lower	Upper
83	100		
85	0.0	51.2	76.8#

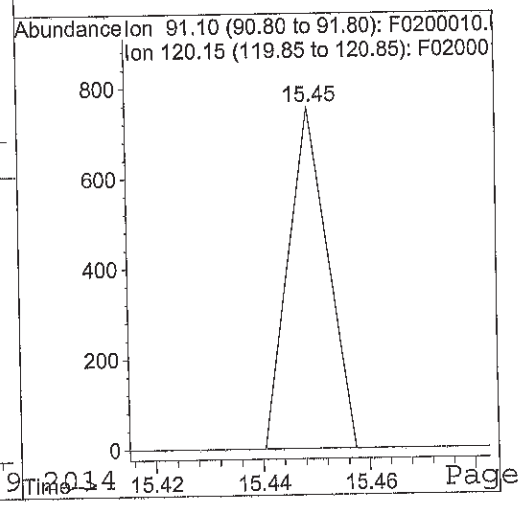


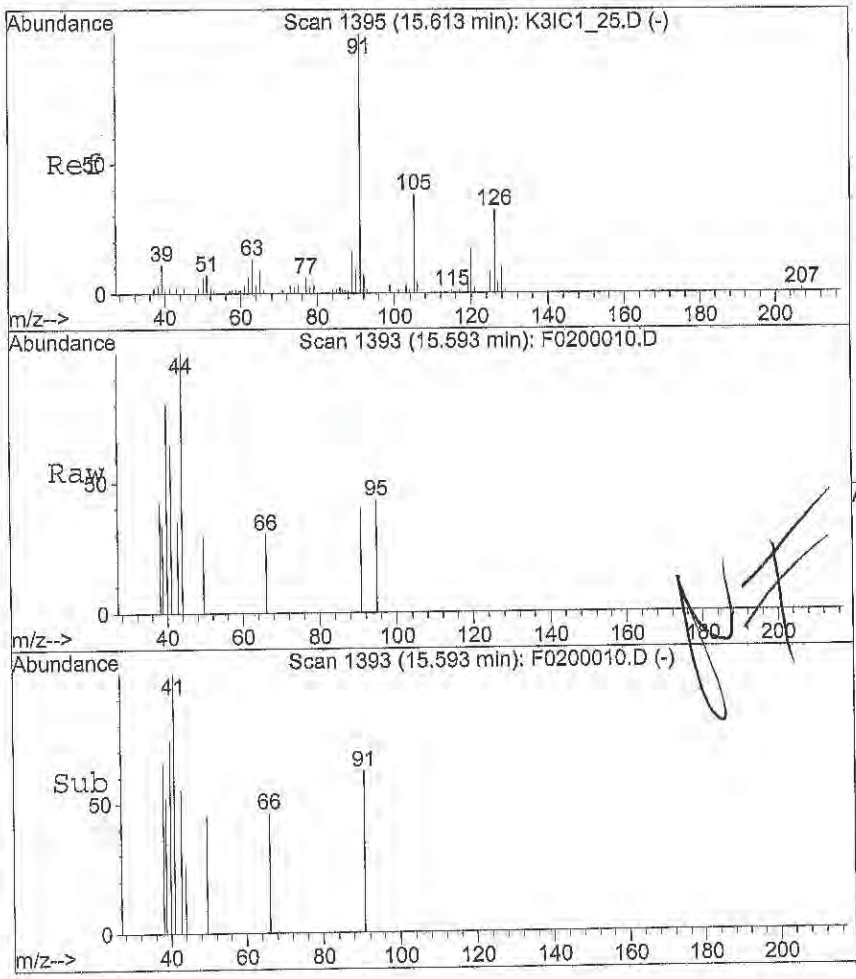


#62
n-Propylbenzene
Concen: 0.02 ug/L
RT: 15.45 min Scan# 1376
Delta R.T. -0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 91 Resp: 384

Ion	Ratio	Lower	Upper
91	100		
120	0.0	16.1	24.1#

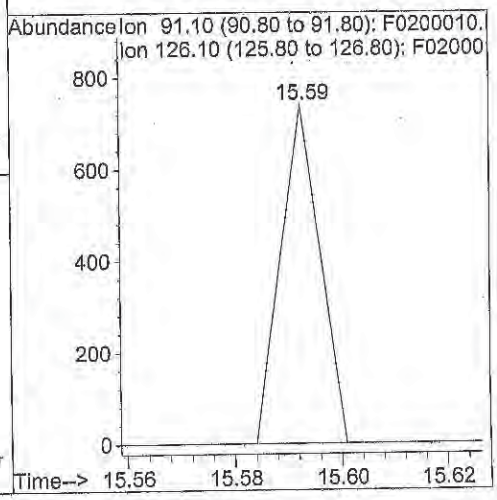


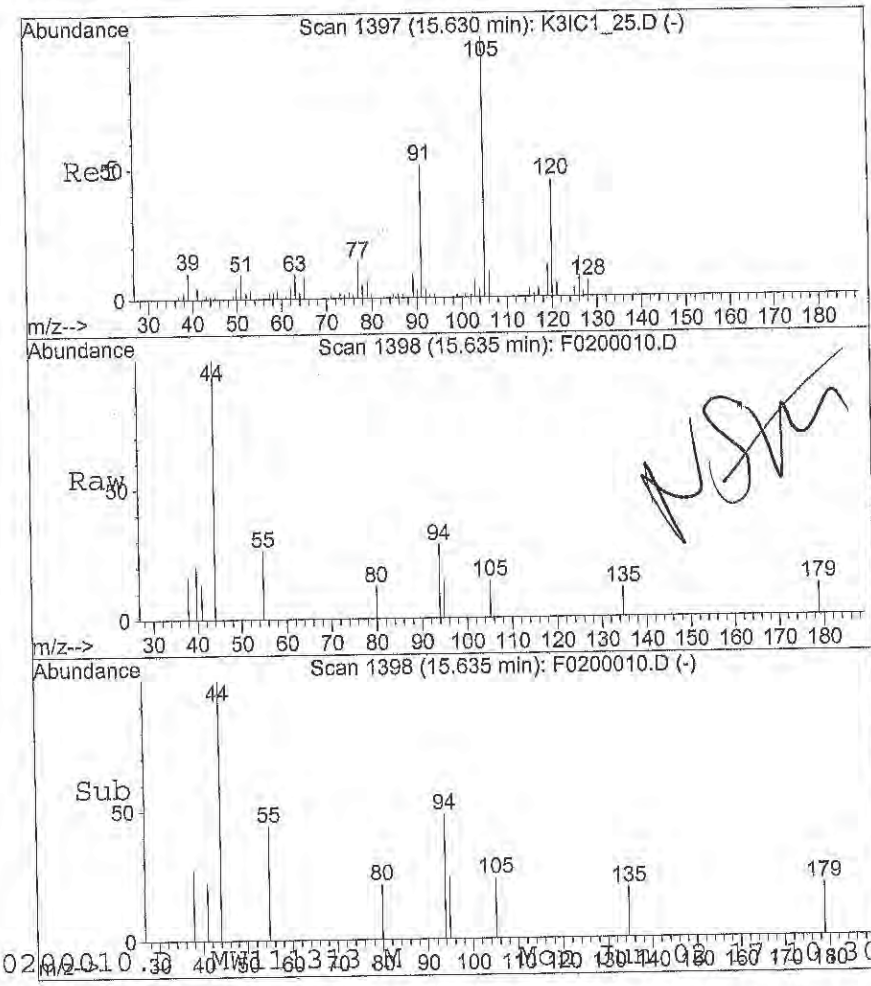


#63
2-Chlorotoluene
Concen: 0.03 ug/L
RT: 15.59 min Scan# 1393
Delta R.T. -0.02 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 91 Resp: 375

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.0	36.0#

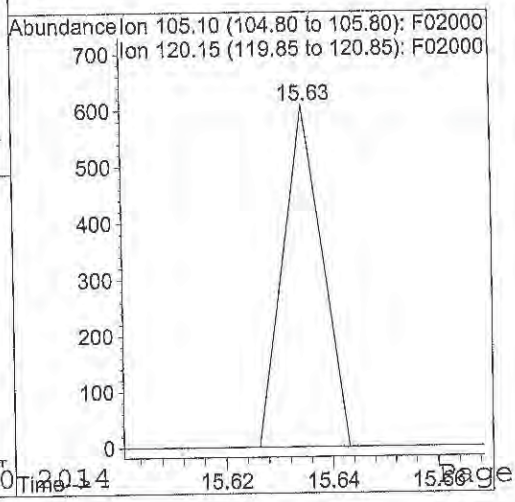


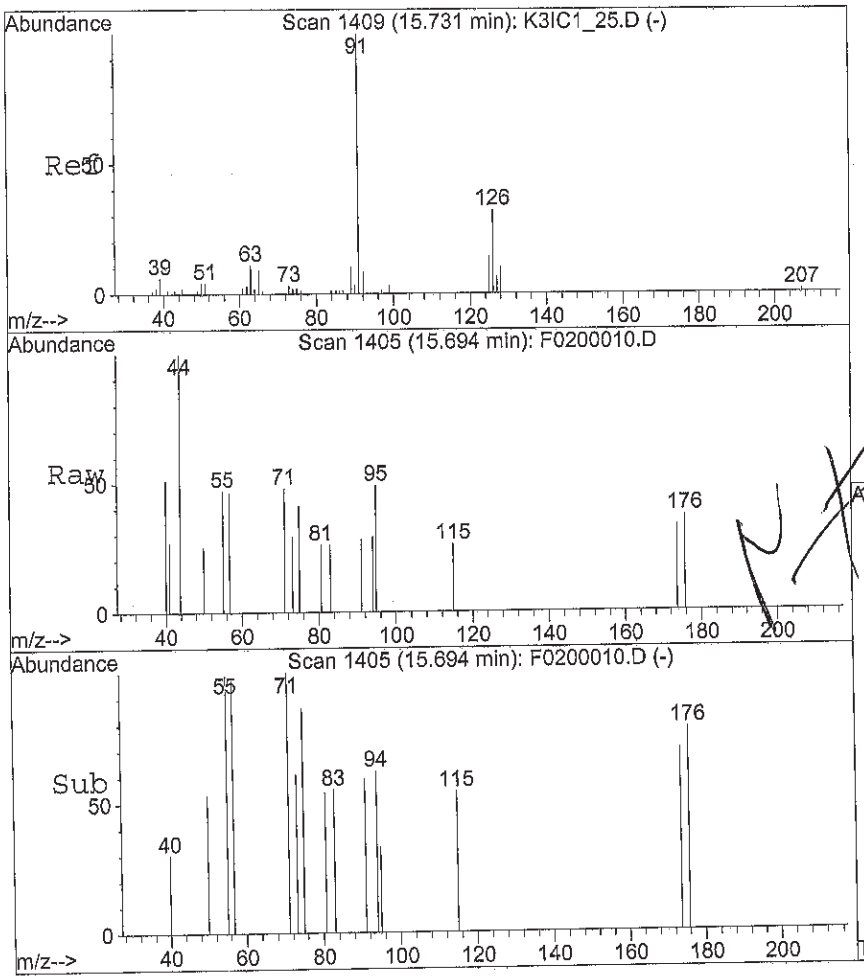


#64
1,3,5-Trimethylbenzene
Concen: 0.02 ug/L
RT: 15.63 min Scan# 1398
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:105 Resp: 308

Ion	Ratio	Lower	Upper
105	100		
120	0.0	36.4	54.6#

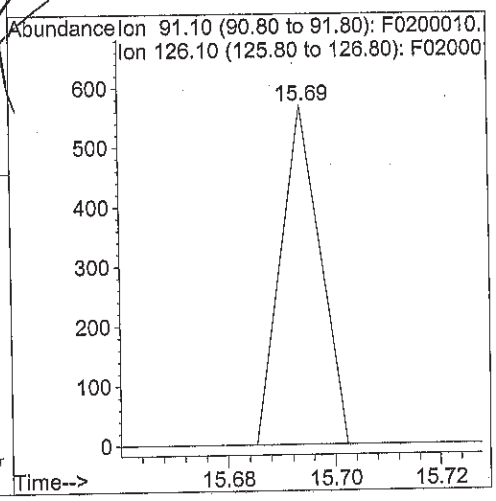


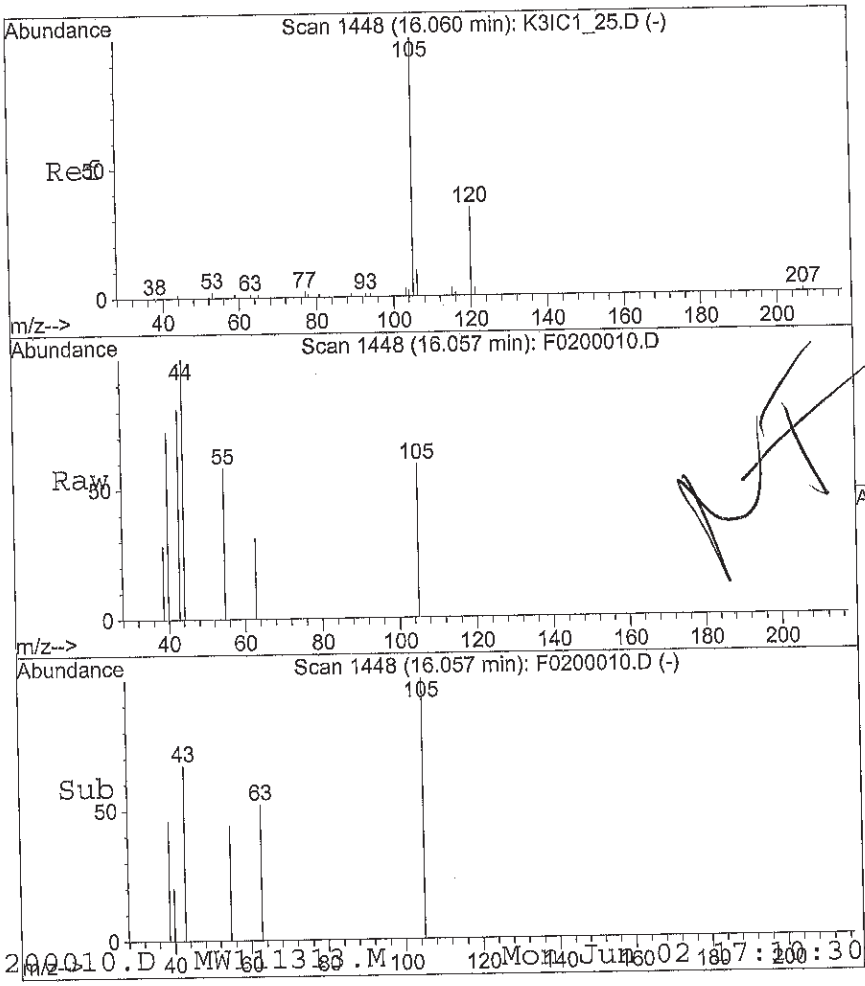


#65
4-Chlorotoluene
Concen: 0.02 ug/L
RT: 15.69 min Scan# 1405
Delta R.T. -0.04 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 91 Resp: 288

Ion	Ratio	Lower	Upper
91	100		
126	0.0	24.6	36.8#

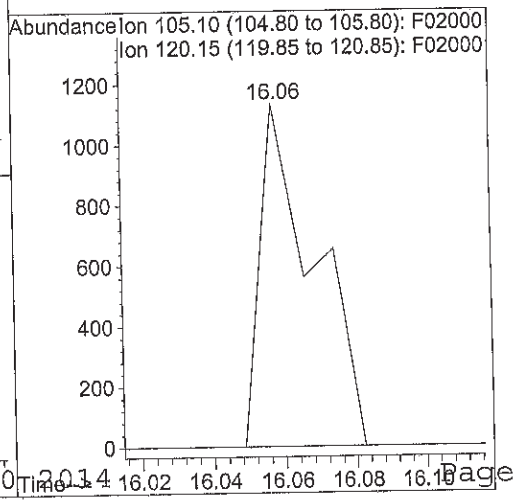


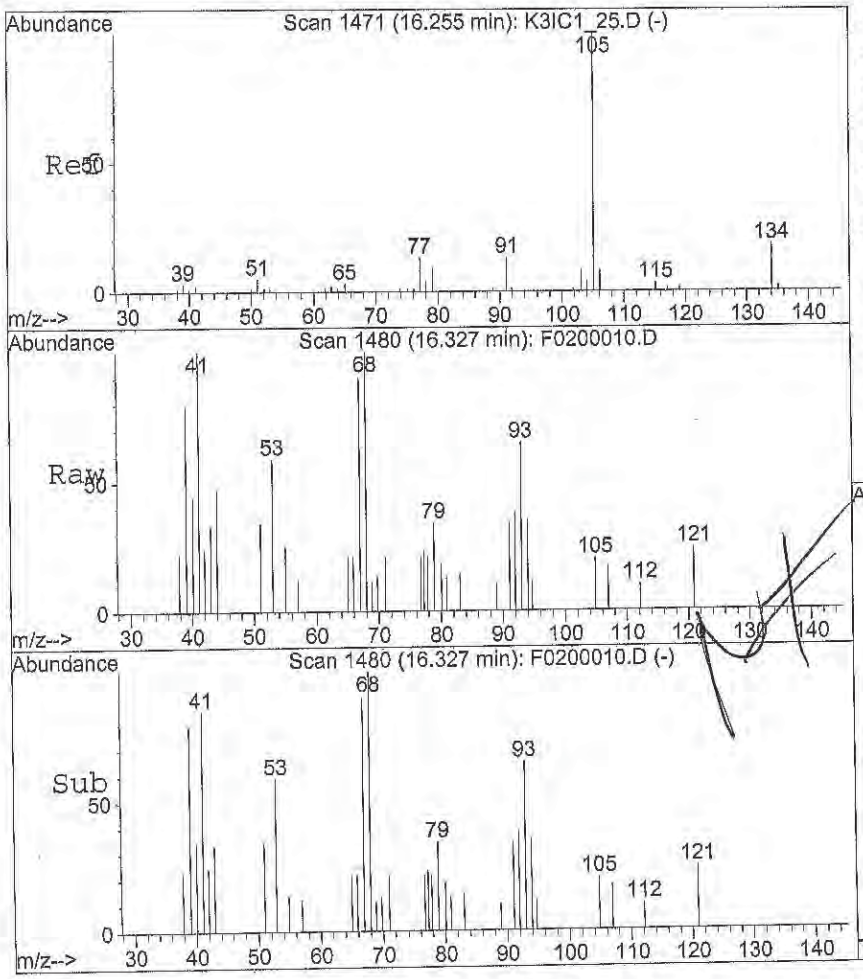


#67
1,2,4-Trimethylbenzene
Concen: 0.08 ug/L
RT: 16.06 min Scan# 1448
Delta R.T. -0.00 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:105 Resp: 1190

Ion	Ratio	Lower	Upper
105	100		
120	0.0	33.8	50.8#

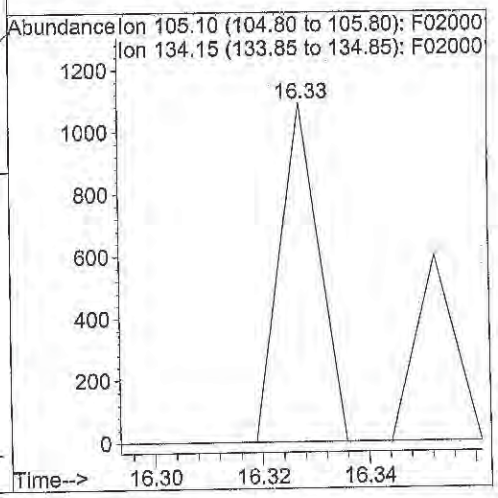


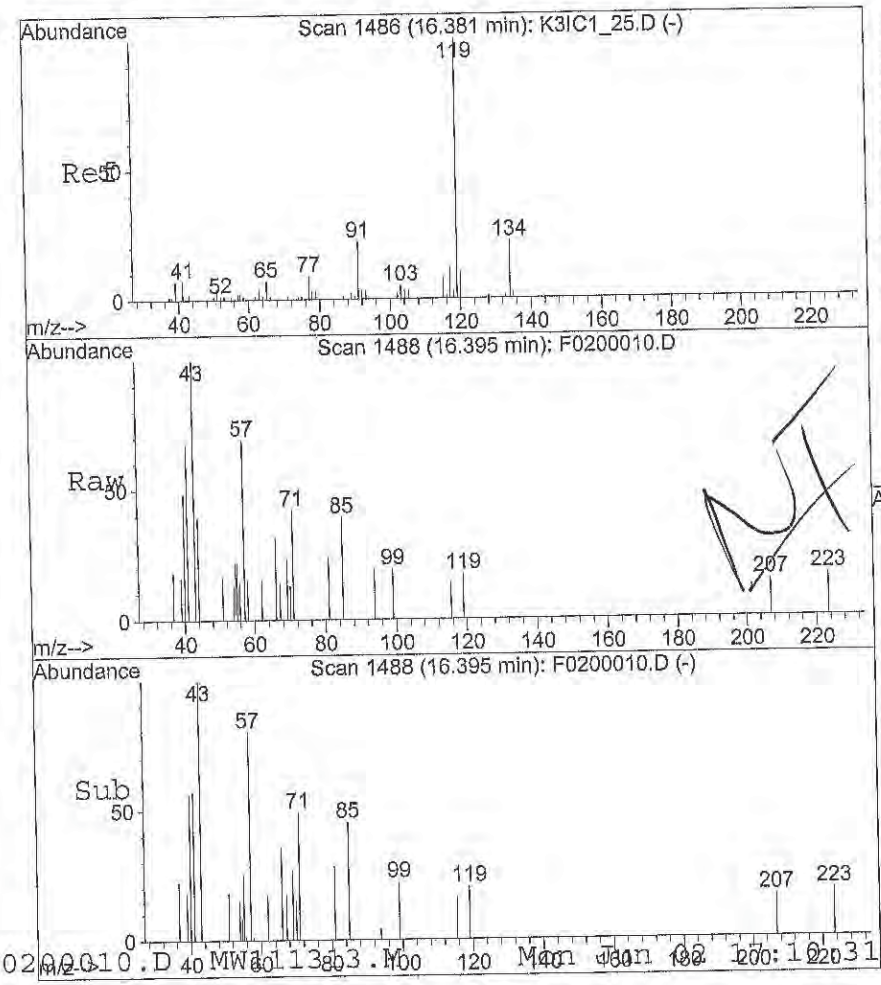


#68
sec-Butylbenzene
Concen: 0.03 ug/L
RT: 16.33 min Scan# 1480
Delta R.T. 0.07 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:105 Resp: 551

Ion	Ratio	Lower	Upper
105	100		
134	0.0	13.0	19.6#

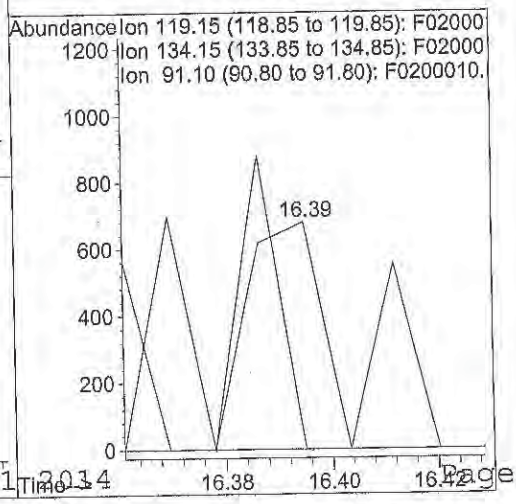


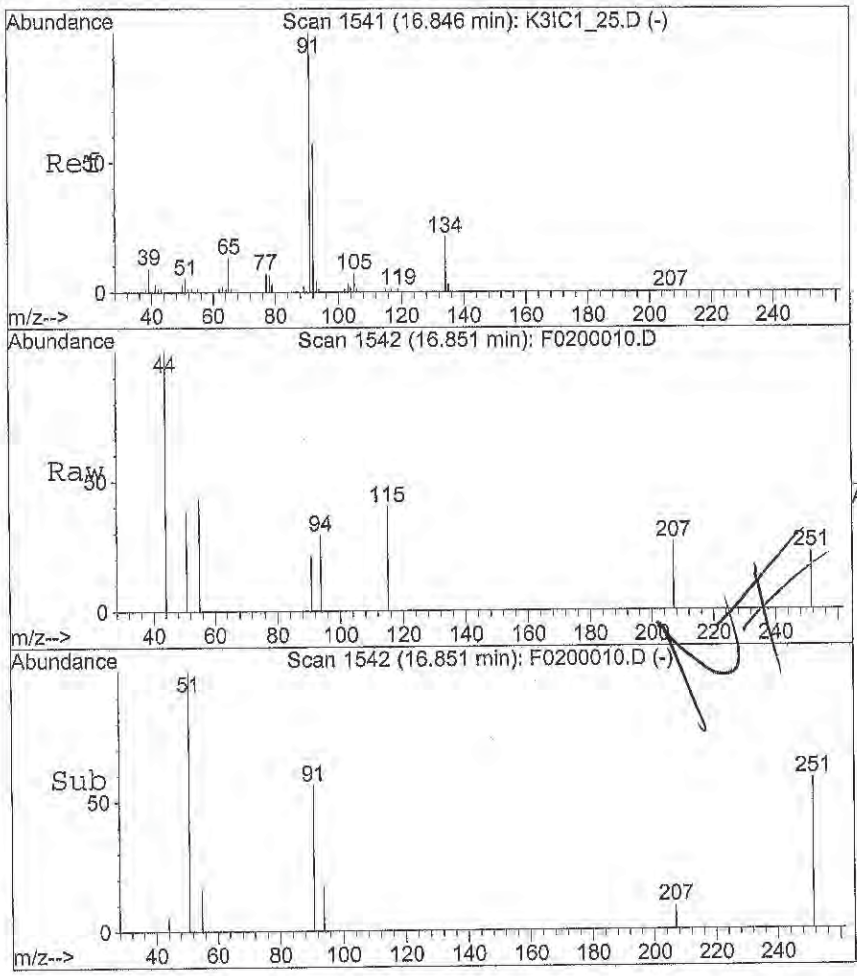


#69
p-Isopropyltoluene
Concen: 0.04 ug/L
RT: 16.39 min Scan# 1488
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:119 Resp: 656

Ion	Ratio	Lower	Upper
119	100		
134	0.0	17.4	26.2#
91	68.1	19.6	29.4#

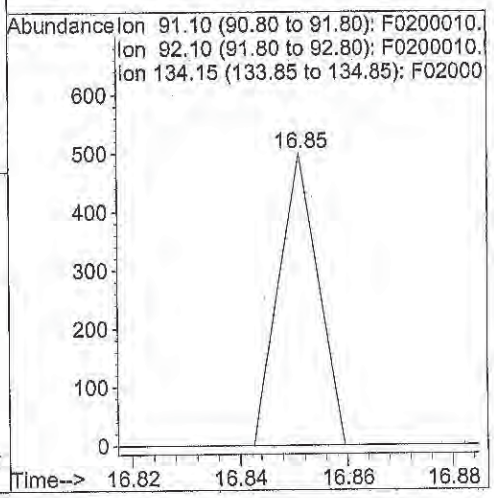


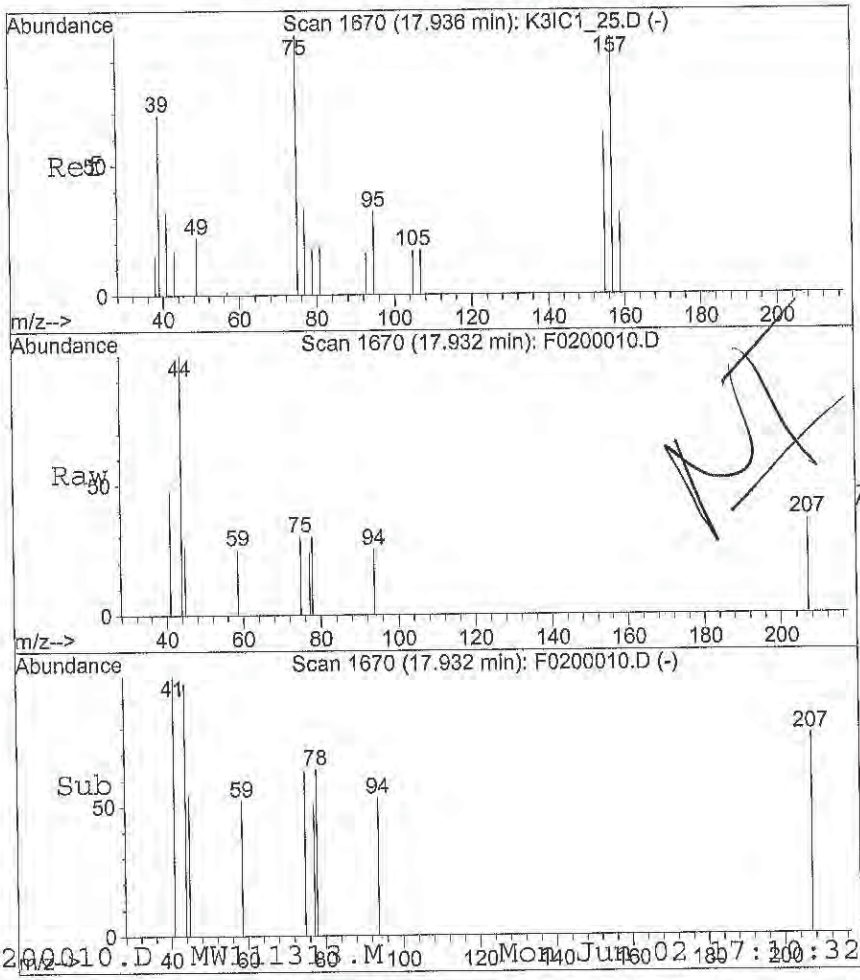


#72
n-Butylbenzene
Concen: 0.01 ug/L
RT: 16.85 min Scan# 1542
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 91 Resp: 253

Ion	Ratio	Lower	Upper
91	100		
92	0.0	47.0	70.4#
134	0.0	18.1	27.1#

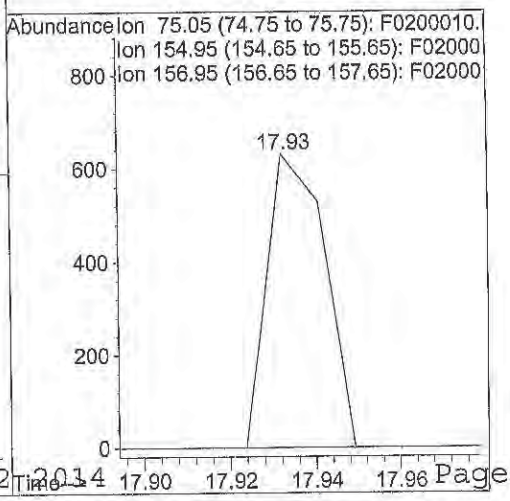


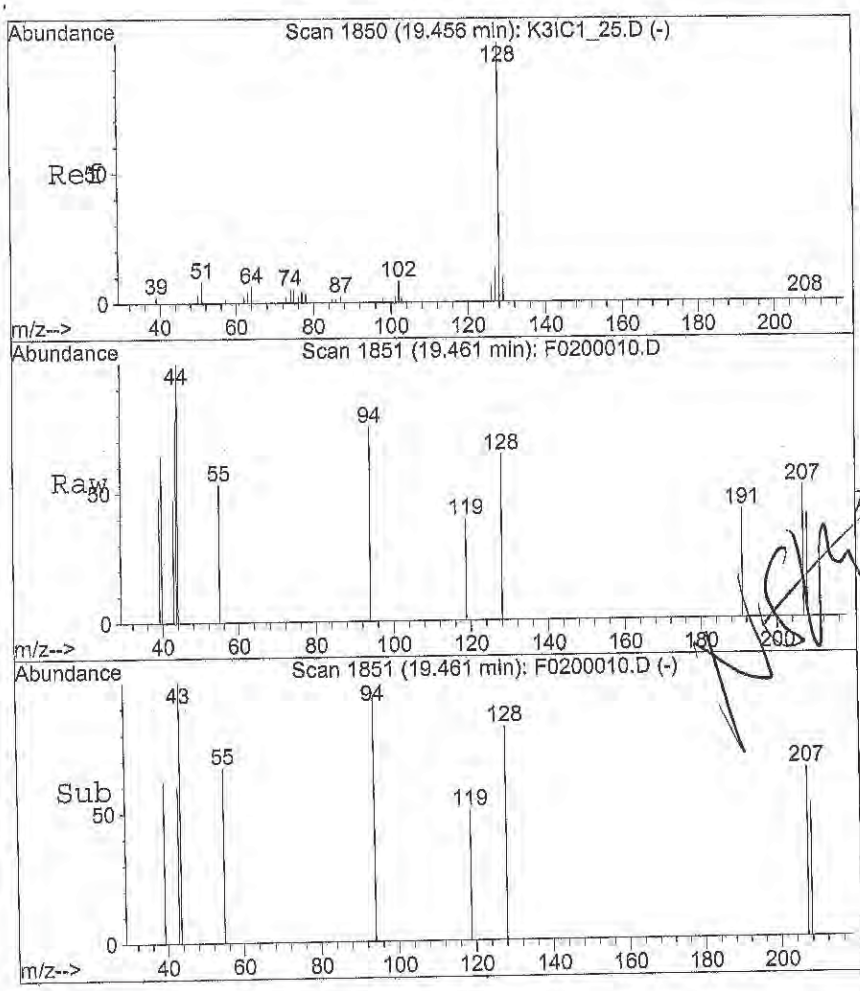


#74
1,2-Dibromo-3-chloropropane
Concen: 1.74 ug/L
RT: 17.93 min Scan# 1670
Delta R.T. -0.00 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion: 75 Resp: 588

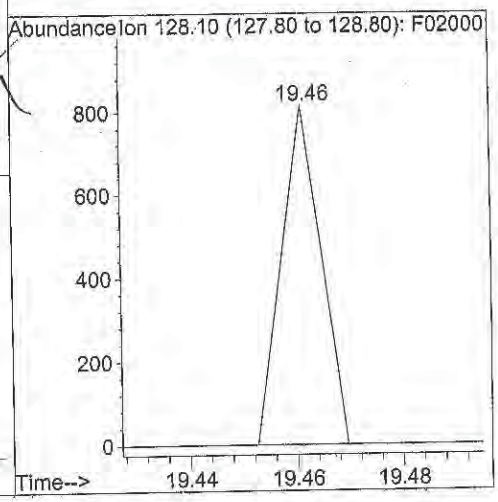
Ion	Ratio	Lower	Upper
75	100		
155	0.0	59.2	88.8#
157	0.0	77.0	115.6#





#77
Naphthalene
Concen: 0.04 ug/L
RT: 19.46 min Scan# 1851
Delta R.T. 0.01 min
Lab File: F0200010.D
Acq: 2 Jun 2014 4:18 pm

Tgt Ion:128 Resp: 413



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F0200010.D
Acq On : 2 Jun 2014 4:18 pm
Sample : 3F40201-09
Misc : 100cc FB-060214
MS Integration Params: rteint.p
Quant Time: Jun 3 7:44 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00
Quant Results File: SS072713.RES

Quant Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1105700	12.50 ug/L	-0.02
7) Chlorobenzene-d5 (IS)	13.92	117	1086224	12.50 ug/L	0.00
10) 1,4-Dichlorobenzene-d4 (IS	16.51	152	590283	12.50 ug/L	0.00

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	9.43	113	342143m	11.90 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 95.20%		
3) Chloroform-d (SU6)	9.18	84	448608m	10.87 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 86.96%		
4) Methylene Chloride-d2 (SU5	7.07	86	281595	11.68 ug/L	0.00
Spiked Amount 12.500	Range 70 - 140		Recovery = 93.44%		
5) 1,2-Dichloroethane-d4 (SU2	9.89	65	318784m	16.22 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 129.76%#		
6) Benzene-d6 (SU7)	9.93	84	1077454	12.42 ug/L	-0.02
Spiked Amount 12.500	Range 70 - 140		Recovery = 99.36%		
8) Toluene-d8 (SU3)	12.21	98	1093189	10.61 ug/L	-0.02
Spiked Amount 12.500	Range 75 - 125		Recovery = 84.88%		
9) 4-Bromofluorobenzene (SU4)	15.22	95	456435m	10.73 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 85.84%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

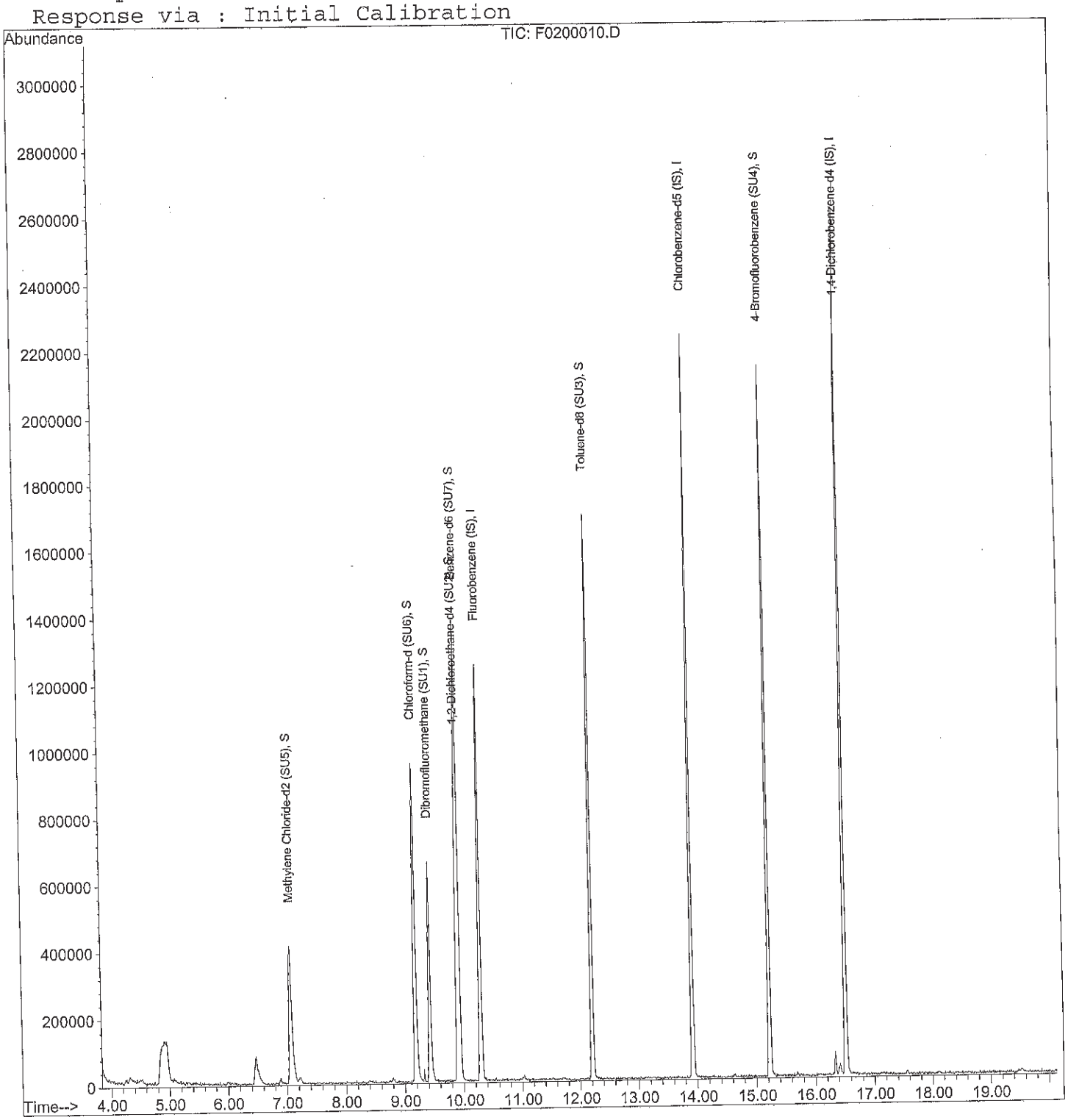
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F0200010.D
Acq On : 2 Jun 2014 4:18 pm
Sample : 3F40201-09
Misc : 100cc FB-060214
MS Integration Params: rteint.p
Quant Time: Jun 3 7:44 19114

Vial: 1
Operator: DN
Inst : GC/MS Ins
Multiplr: 10.00

Quant Results File: SS072713.RES

Method : C:\HPCHEM\1\METHODS\SS072713.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL SSSF 07/27/13 DN
Last Update : Mon Nov 18 10:31:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS02.D Vial: 9
Acq On : 2 Jun 2014 5:46 pm Operator: DN
Sample : 34F0201-BSD1 Inst : GC/MS Ins
Misc : 20cc 0.1/0.2/1.0 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 6:13 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AP

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1321855	12.50 ug/L	0.00
38) Chlorobenzene-d5 (IS)	13.92	117	1048189	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	478089	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.44	113	342923	10.40 ug/L	0.01
Spiked Amount 12.500	Range 75 - 125		Recovery = 83.20%		
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	390671	12.47 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 99.76%		
39) Toluene-d8 (SU3)	12.21	98	1233643	12.62 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 100.96%		
58) 4-Bromofluorobenzene (SU4)	15.22	95	440296	10.27 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery = 82.16%		

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	5170	0.16 ug/L	44
4) Chloromethane	4.44	50	5670	0.13 ug/L	100
5) Vinyl Chloride	4.60	62	3197	0.14 ug/L	65
6) Bromomethane	5.20	96	4673	0.14 ug/L	94
7) Chloroethane	5.19	64	751	0.14 ug/L	89
8) (F11) Trichlorofluorometha	5.65	101	3952	0.11 ug/L	99
9) (F113) 1,1,2-Trichloro-tri	6.37	151	2146	0.08 ug/L	89
10) 1,1-Dichloroethene	6.44	96	4141	0.13 ug/L	51
11) Acetone	6.46	58	10569	1.73 ug/L #	1
12) (IPA) Leak Check Compound	6.53	45	181808	114.46 ug/L #	87
13) Carbon disulfide	6.87	76	13357	0.12 ug/L	96
14) Methylene Chloride	7.13	84	5276	0.15 ug/L #	19
15) (TBA) tert-Butanol	7.09	59	271	0.12 ug/L #	1
16) (MTBE) Methyl-t-butyl ethe	7.41	73	10869	0.15 ug/L #	60
17) trans-1,2-Dichloroethene	7.47	96	4395	0.12 ug/L	83
18) 1,1-Dichloroethane	8.08	63	5402	0.09 ug/L #	7
19) cis-1,2-Dichloroethene	8.84	96	4848	0.12 ug/L	78
20) 2,2-Dichloropropane	8.81	77	379	0.01 ug/L #	1
21) (MEK) 2-Butanone	8.79	72	294	0.08 ug/L #	1
22) (DIPE) Diisopropyl Ether	8.01	45	20173	0.20 ug/L #	67
23) Bromochloromethane	9.17	128	2016	0.11 ug/L #	46
24) Chloroform	9.21	83	10260	0.15 ug/L	80

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS02.D Vial: 9
Acq On : 2 Jun 2014 5:46 pm Operator: DN
Sample : 34F0201-BSD1 Inst : GC/MS Ins
Misc : 20cc 0.1/0.2/1.0 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 6:13 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.49	59	14611	0.15 ug/L #	64
26) 1,1,1-Trichloroethane	9.51	97	9166	0.17 ug/L	91
27) (TAME) tert-Amyl methyl et	10.00	73	14322	0.17 ug/L #	71
29) 1,1-Dichloropropene	9.69	75	11429	0.22 ug/L	90
30) Carbon Tetrachloride	9.71	117	4719	0.11 ug/L	64
31) Benzene	9.98	78	17942	0.14 ug/L #	52
32) 1,2-Dichloroethane	9.99	62	7344	0.17 ug/L	92
33) Trichloroethene	10.75	130	6570	0.16 ug/L #	72
34) 1,2-Dichloropropane	11.05	63	7416	0.25 ug/L #	34
35) Dibromomethane	11.22	93	4597	0.20 ug/L #	80
36) Bromodichloromethane	11.35	83	9316	0.20 ug/L #	62
37) cis-1,3-Dichloropropene	11.87	75	4745	0.09 ug/L #	32
40) (MIBK) 4-Methyl-2-Pentanon	12.11	43	3136	0.15 ug/L #	100
41) Toluene	12.29	91	25121	0.18 ug/L	86
42) trans-1,3-Dichloropropene	12.52	75	4471	0.09 ug/L #	1
43) 1,1,2-Trichloroethane	12.76	83	4820	0.19 ug/L #	70
44) Tetrachloroethene	12.94	164	6655	0.14 ug/L	92
45) 1,3-Dichloropropane	12.98	76	9586	0.20 ug/L	93
46) 2-Hexanone	12.98	43	10077	0.44 ug/L #	87
47) Dibromochloromethane	13.25	129	7849	0.21 ug/L #	83
48) 1,2-Dibromoethane	13.43	107	8628	0.26 ug/L	86
49) Chlorobenzene	13.96	112	16230	0.17 ug/L	97
50) 1,1,1,2-Tetrachloroethane	14.02	131	5272	0.15 ug/L #	53
51) Ethylbenzene	14.02	91	27553	0.17 ug/L	90
52) m,p-Xylenes	14.16	106	16513	0.29 ug/L #	42
53) o-Xylene	14.62	106	10096	0.18 ug/L	83
54) Styrene	14.63	104	13026	0.08 ug/L #	51
55) Bromoform	14.91	173	4159	0.20 ug/L #	73
56) Isopropylbenzene	15.01	105	28706	0.18 ug/L #	81
57) 1,2,3-Trichloropropane	15.42	75	12938	0.30 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.33	83	7458	0.22 ug/L	90
61) Bromobenzene	15.43	156	7362	0.20 ug/L #	77
62) n-Propylbenzene	15.46	91	35001	0.18 ug/L	93
63) 2-Chlorotoluene	15.61	91	27855	0.23 ug/L	92
64) 1,3,5-Trimethylbenzene	15.63	105	23579	0.20 ug/L	93
65) 4-Chlorotoluene	15.72	91	24881	0.23 ug/L	92
66) tert-Butylbenzene	16.02	119	18622	0.18 ug/L #	50

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS02.D
Acq On : 2 Jun 2014 5:46 pm
Sample : 34F0201-BSD1
Misc : 20cc 0.1/0.2/1.0 ug/L LCS
MS Integration Params: rteint.p
Quant Time: Jun 3 6:13 19114

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

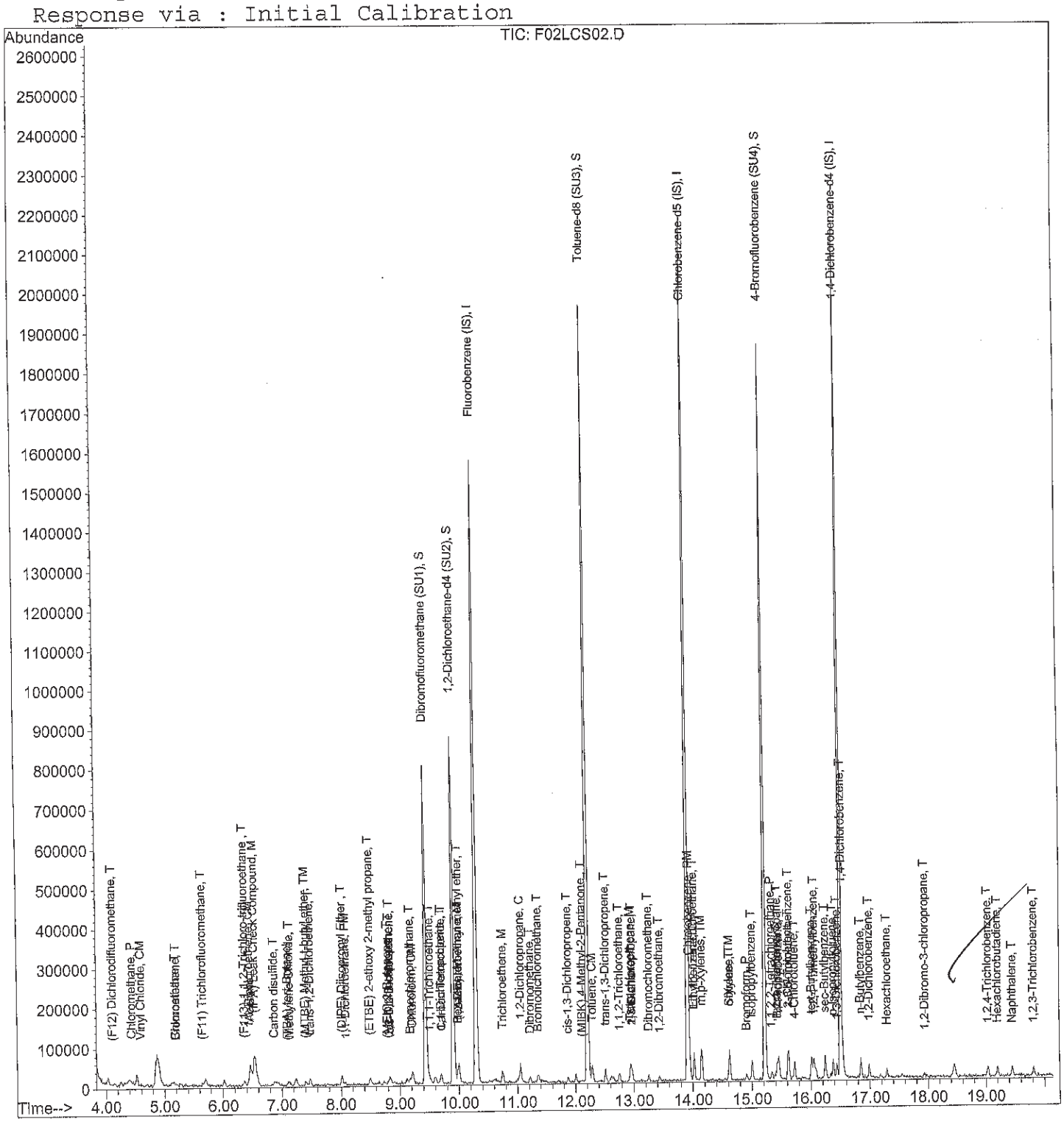
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.06	105	25285	0.20 ug/L	89
68) sec-Butylbenzene	16.24	105	30195	0.19 ug/L #	91
69) p-Isopropyltoluene	16.38	119	27942	0.21 ug/L	92
70) 1,3-Dichlorobenzene	16.45	146	9722	0.14 ug/L #	76
71) 1,4-Dichlorobenzene	16.54	146	12785	0.18 ug/L #	57
72) n-Butylbenzene	16.84	91	24244	0.18 ug/L	92
73) 1,2-Dichlorobenzene	17.00	146	11592	0.18 ug/L #	84
74) 1,2-Dibromo-3-chloropropan	17.94	75	2119	0.47 ug/L #	45
75) 1,2,4-Trichlorobenzene	19.03	180	8134	0.19 ug/L #	82
76) Hexachlorobutadiene	19.19	225	5083	0.28 ug/L #	74
77) Naphthalene	19.45	128	18607	0.20 ug/L	100
78) Hexachloroethane	17.29	201	1366	0.10 ug/L #	79
79) 1,2,3-Trichlorobenzene	19.82	180	7695	0.19 ug/L #	70

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060214L3\F02LCS02.D Vial: 9
Acq On : 2 Jun 2014 5:46 pm Operator: DN
Sample : 34F0201-BSD1 Inst : GC/MS Ins
Misc : 20cc 0.1/0.2/1.0 ug/L LCS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 6:13 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



ENVIRONMENTAL SUPPORT TECHNOLOGIES

16510 Aston St. Irvine, CA 92606
Tel (949) 679-9500 Fax (949) 679-9501

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SANTA SUSANA FIELD LABORATORY:
DEPARTMENT OF ENERGY
5800 WOOLSEY CANYON ROAD
CANOGA PARK, CA

LEVEL IV DATA PACKAGE

MWH AMERICAS
2121 NORTH CALIFORNIA BLVD.
SUITE 600
WALNUT CREEK, CA

EST2754
June 3, 2014

ENVIRONMENTAL SUPPORT TECHNOLOGIES

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CHAIN-OF-CUSTODY

CHAIN-OF-CUSTODY RECORD

Environmental Support Technologies
16510 Aston St., Irvine, CA 92606 · Tel (949) 679-9500 · Fax (949) 679-9501

Client: MWH Americas
Address: 250 North Madison Avenue
Pasadena, Ca
Project Manager: Sarah Von Raesfield

Sampler Name: Mike Marello
EST Project#: EST2754
Site Location: SSFL
Phone: ( )

Page: of
Custody Seals:
Email:

Turnaround Time: (Check one)
Normal:
Rush: X

Sample Receipt
Intact: Yes: X No:
On Ice: Yes: No: X N/A
Custody Seals: Yes: No: X
N/A (Received on Site):

Sample Name	Sample Matrix	Container Type	# of Container	Sampling Date	Sampling Time	Preservative Type	Purge Volume (ml)	Vacuum (inches of H_2O)	8260B VOC's						Special Instructions
Equipment Blank	Air	Glass Bulb	1	6/3/2014	750	Surr			X						Bulb # 3
SVL-503-SA8-SV-4.5-5.5	Air	Glass Bulb	1	6/3/2014	755	Surr			X						Bulb # 11
SVL-534-SA8-SV-6.0-7.0	Air	Glass Bulb	1	6/3/2014	834	Surr			X						Bulb # 6
SVL-834-SA8-SV-6.0-7.0	Air	Glass Bulb	1	6/3/2014	834	Surr			X						Bulb # 12
SVL-507-SA5C-SV-5.0-6.0	Air	Glass Bulb	1	6/3/2014	915	Surr			X						Bulb # 2
SVL-507-SA5C-SV-10.5-11.5	Air	Glass Bulb	1	6/3/2014	941	Surr			X						Bulb # 13
SVL-508-SA5C-SV-8.25-9.25	Air	Glass Bulb	1	6/3/2014	1014	Surr			X						Bulb # 1
SVL-535-SA5C-SV-5.0-6.0	Air	Glass Bulb	1	6/3/2014	1059	Surr			X						Bulb # 10
SVL-535-SA5C-SV-10.0-11.0	Air	Glass Bulb	1	6/3/2014	1122	Surr			X						Bulb # 7
SVL-535-SA5C-SV-15.0-16.0	Air	Glass Bulb	1	6/3/2014	1150	Surr			X						Bulb # 4
SVL-543-SA5C-SV-5.0-6.0	Air	Glass Bulb	1	6/3/2014	1256	Surr			X						Bulb # 5
SVL-543-SA5C-SV-11.0-12.0	Air	Glass Bulb	1	6/3/2014	1315	Surr			X						Bulb # 9
FB-060314	Air	Glass Bulb	1	6/3/2014	1338	Surr			X						Bulb # 8

Relinquished by: (Signature) Date/Time: 06/03/14 Received by: Date/Time:

Relinquished by: (Signature) Date/Time: Received by: Date/Time:

SAMPLE RESULTS WITH ANALYSIS AND EXTRACTIONS PREPARATION DATES

June 17, 2014

Sarah Von Raesfield
MWH Americas, Inc.
250 No. Madison Avenue
Pasadena, CA 91107

RE: Santa Susana Field Laboratory, Canoga Park

Enclosed are the results of analyses for soil gas samples received by Environmental Support Technologies laboratory on 06/03/14 15:15. The analyses were performed according to the prescribed method as outlined by EPA 8260B. A shut in test was performed, leak test was performed, equipment blank was run, and selected purge volume was 3PV. If you have any questions concerning this report, please feel free to contact Project Manager.

Sincerely,

Ashley Flores

Ashley Flores
Project Manager

Environmental Support Technologies laboratories are certified by the California Department of Health Services (CDHS), Environmental Laboratory Accreditation Program (ELAP) No's. 2772, 2773, and 2767.

16510 Aston Street, Irvine, California 92606
Telephone: (949) 679-9500 Fax: (949) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Analyzed
Equipment Blank	3F40301-01	Air	03-Jun-14 07:50	03-Jun-14 08:00
SVL-503-SA8-SV-4.5-5.5	3F40301-02	Air	03-Jun-14 07:55	03-Jun-14 08:29
SVL-534-SA8-SV-6.0-7.0	3F40301-03	Air	03-Jun-14 08:34	03-Jun-14 09:29
SVL-834-SA8-SV-6.0-7.0	3F40301-04	Air	03-Jun-14 08:34	03-Jun-14 09:59
SVL-507-SA5C-SV-5.0-6.0	3F40301-05	Air	03-Jun-14 09:15	03-Jun-14 10:27
SVL-507-SA5C-SV-10.5-11.5	3F40301-06	Air	03-Jun-14 09:41	03-Jun-14 10:56
SVL-508-SA5C-SV-8.28-9.25	3F40301-07	Air	03-Jun-14 10:14	03-Jun-14 11:25
SVL-535-SA5C-SV-5.0-6.0	3F40301-08	Air	03-Jun-14 10:59	03-Jun-14 11:54
SVL-535-SA5C-SV-10.0-11.0	3F40301-09	Air	03-Jun-14 11:22	03-Jun-14 12:27
SVL-535-SA5C-SV-15.0-16.0	3F40301-10	Air	03-Jun-14 11:50	03-Jun-14 12:56
SVL-543-SA5C-SV-5.0-6.0	3F40301-11	Air	03-Jun-14 12:56	03-Jun-14 13:25
SVL-543-SA5C-SV-11.0-12.0	3F40301-12	Air	03-Jun-14 13:15	03-Jun-14 13:54
FB-060314	3F40301-13	Air	03-Jun-14 13:38	03-Jun-14 14:23

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

16510 Aston Street, Irvine, California 92606
Telephone: (949) 679-9500 Fax: (949) 679-9501

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Equipment Blank (3F42327(271 Air Sampled: 2-)23)74 25:/ 2 Analyzed: 2-)23)74 29:22									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*98.4 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*95.4 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*89.0 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*116 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*79.8 %*	*70-140*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 230SA90SV04./ 0/ ./ (3F423270261 Air Sampled: 2-)23)74 25:/ / Analyzed: 2-)23)74 29:68									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
7XX0Trichloroethane	**2.77**	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
7XX0Trichloro0tri,luoroethane	**2./ 4**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
7X0Dichloroethene	**2.7-**	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	**2.44**	0.020	"	"	"	"	"	"	
Trichloro,luoromethane	**2.258**	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*91.4 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*117 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*90.2 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*87.0 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*86.4 %*	*70-140*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 340(8A90(SV0- .20(5.2 (3F423270(231 Air Sampled: 2-)23)74 29:34 Analyzed: 2-)23)74 28:68									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*98.1 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*92.7 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*107 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*88.0 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*87.8 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*77.5 %*	*70-140*		*"*	*"*	*"*	*"*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0934 0SA90SV0- .205.2 (3F423270241 Air Sampled: 2-)23)74 29:34 Analyzed: 2-)23)74 28:/ 8									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*87.0 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*89.0 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*85.7 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*96.7 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*114 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*84.1 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 250SA/ C0SV0/ .20- .2 (3F423270 2/ 1 Air Sampled: 2-)23)74 28:7/ Analyzed: 2-)23)74 72:65									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**2.22/ 6**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*98.4 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*87.6 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.5 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*91.0 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*87.0 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*81.1 %*	*70-140*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 2508A/ C08V072./ 077./ (3F423270 2- 1 Air Sampled: 2-)23)74 28:47 Analyzed: 2-)23)74 72:/ -									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*94.4 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*89.9 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.2 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*92.1 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*91.2 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*79.0 %*	*70-140*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 290SA/ C0SV09.690 8.6/ (3F423270251 Air Sampled: 2-)23)74 72:74 Analyzed: 2-)23)74 77:6/									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta0and para0f ylenes	**2.274**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**2.277**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*112 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*99.0 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.9 %*		*75-125*	"	"	"	"	
Surrogate: Benzene-d6		*77.5 %*		*70-140*	"	"	"	"	
Surrogate: Chloroform-d		*106 %*		*70-140*	"	"	"	"	
Surrogate: Methylene chloride-d2		*65.5 %*		*70-140*	"	"	"	"	*S-GC*

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 3/ 0SA/ C0SV0/ .20- .2 (3F423270291 Air Sampled: 2-)23)74 72:/ 8 Analyzed: 2-)23)74 77:/ 4									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**2.277**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*86.6 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*86.0 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.4 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*88.2 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*106 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*76.2 %*	*70-140*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 3/ 0SA/ C0SV072.2077.2 (3F42327028 1 Air Sampled: 2-)23)74 77:66 Analyzed: 2-)23)74 76:65									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**2.22/ -**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*89.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*91.0 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*95.7 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*91.7 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*111 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*76.6 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 3/ 0SA/ C0SV07/ .207- .2 (3F423270721 Air Sampled: 2-)23)74 77:/ 2 Analyzed: 2-)23)74 76:/ -									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta0and para0f ylenes	**2.272**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**2.2252**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*87.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*91.4 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*85.3 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*93.5 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*86.1 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*77.9 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 430SA/ C0SV0/ .20- .2 (3F423270771 Air Sampled: 2-)23)74 76:/ - Analyzed: 2-)23)74 73:6/									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**2.22- 2**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta0and para0f ylenes	**2.2289**	0.020	"	"	"	"	"	"	J
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**2.228-**	0.020	"	"	"	"	"	"	J
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*90.5 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*112 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*103 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*109 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*95.8 %*	*70-140*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVL0/ 430SA/ C0SV077.2076.2 (3F423270761 Air Sampled: 2-)23)74 73:7/ Analyzed: 2-)23)74 73:/ 4									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloro-trifluoroethane	ND	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	**2.2249**	0.020	"	"	"	"	"	"	J
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	**2.272**	0.020	"	"	"	"	"	"	J
Trichloroethene	**2.23/**	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*87.8 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*86.3 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*98.7 %*	*75-125*		*"*	*"*	*"*	*"*	
Surrogate: Benzene-d6		*99.4 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Chloroform-d		*83.3 %*	*70-140*		*"*	*"*	*"*	*"*	
Surrogate: Methylene chloride-d2		*95.8 %*	*70-140*		*"*	*"*	*"*	*"*	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
FB02- 2374 (3F423270731 Air Sampled: 2-)23)74 73:39 Analyzed: 2-)23)74 74:63									
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l	1	34F0301	06/03/14	06/03/14	EPA 8260B	
1,1,1-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.020	"	"	"	"	"	"	
7XX0Trichloro0tri,luoroethane	**2.26/**	0.020	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.020	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.020	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.020	"	"	"	"	"	"	
Benzene	ND	0.020	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.020	"	"	"	"	"	"	
Chloroethane	ND	0.020	"	"	"	"	"	"	
Chloroform	ND	0.020	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.020	"	"	"	"	"	"	
Ethylbenzene	ND	0.020	"	"	"	"	"	"	
Methylene Chloride	ND	0.020	"	"	"	"	"	"	
ortho-Xylene	ND	0.020	"	"	"	"	"	"	
meta- and para-Xylenes	ND	0.020	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.020	"	"	"	"	"	"	
Tetrachloroethene	ND	0.020	"	"	"	"	"	"	
Toluene	ND	0.020	"	"	"	"	"	"	
Trichloroethene	ND	0.020	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.020	"	"	"	"	"	"	
Vinyl Chloride	ND	0.020	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*87.8 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*112 %*	*75-125*		"	"	"	"	
Surrogate: Benzene-d6		*101 %*	*70-140*		"	"	"	"	
Surrogate: Chloroform-d		*107 %*	*70-140*		"	"	"	"	
Surrogate: Methylene chloride-d2		*93.0 %*	*70-140*		"	"	"	"	

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds 0 Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F2327 0 Volatiles										
Blank (34F23270BLK71				Prepared & Analyzed: 06/03/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l							
1,1,1-Trichloroethane	ND	0.020	"							
1,1,2,2-Tetrachloroethane	ND	0.020	"							
1,1,2-Trichloro-trifluoroethane	ND	0.020	"							
1,1,2-Trichloroethane	ND	0.020	"							
1,1-Dichloroethane	ND	0.020	"							
1,1-Dichloroethene	ND	0.020	"							
1,2-Dichloroethane	ND	0.020	"							
Benzene	ND	0.020	"							
cis-1,2-Dichloroethene	ND	0.020	"							
Carbon tetrachloride	ND	0.020	"							
Chloroethane	ND	0.020	"							
Chloroform	ND	0.020	"							
Dichlorodifluoromethane	ND	0.020	"							
Ethylbenzene	ND	0.020	"							
Methylene Chloride	ND	0.020	"							
ortho-Xylene	ND	0.020	"							
meta- and para-Xylenes	ND	0.020	"							
trans-1,2-Dichloroethene	ND	0.020	"							
Tetrachloroethene	ND	0.020	"							
Toluene	ND	0.020	"							
Trichloroethene	ND	0.020	"							
Trichlorofluoromethane	ND	0.020	"							
Vinyl Chloride	ND	0.020	"							
Surrogate: Dibromofluoromethane	*2.47*		*"*	*2.50*		*98.7*	*75-125*			
Surrogate: Toluene-d8	*2.27*		*"*	*2.50*		*90.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.93*		*"*	*2.50*		*117*	*75-125*			
Surrogate: Benzene-d6	*2.12*		*"*	*2.50*		*84.6*	*70-140*			
Surrogate: Chloroform-d	*2.81*		*"*	*2.50*		*113*	*70-140*			
Surrogate: Methylene chloride-d2	*1.98*		*"*	*2.50*		*79.1*	*70-140*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds 0 Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F2327 0 Volatiles										
LCS (34F23270BS71				Prepared & Analyzed: 06/03/14						
1,1,1,2-Tetrachloroethane	1.32	0.020	ug/l	1.25		106	75-136			
1,1,1-Trichloroethane	1.05	0.020	"	1.25		84.0	73-134			
1,1,2,2-Tetrachloroethane	1.63	0.020	"	1.25		130	56-149			
1,1,2-Trichloro-trifluoroethane	1.19	0.020	"	1.25		95.2	83-125			
1,1,2-Trichloroethane	1.23	0.020	"	1.25		98.4	67-137			
1,1-Dichloroethane	1.23	0.020	"	1.25		98.4	80-121			
1,1-Dichloroethene	1.19	0.020	"	1.25		95.2	73-137			
1,2-Dichloroethane	1.36	0.020	"	1.25		109	75-131			
Benzene	1.04	0.020	"	1.25		83.2	79-118			
cis-1,2-Dichloroethene	1.12	0.020	"	1.25		89.6	85-116			
Carbon tetrachloride	1.39	0.020	"	1.25		111	74-143			
Chloroethane	1.28	0.020	"	1.25		102	60-137			
Chloroform	1.15	0.020	"	1.25		92.0	82-140			
Dichlorodifluoromethane	1.28	0.020	"	1.25		102	47-129			
Ethylbenzene	1.29	0.020	"	1.25		103	83-125			
Methylene Chloride	1.07	0.020	"	1.25		85.6	81-126			
ortho-Xylene	1.26	0.020	"	1.25		101	85-115			
meta- and para-Xylenes	2.40	0.020	"	2.50		96.0	83-115			
trans-1,2-Dichloroethene	1.09	0.020	"	1.25		87.2	72-133			
Tetrachloroethene	0.980	0.020	"	1.25		78.4	60-144			
Toluene	0.960	0.020	"	1.25		76.8	70-115			
Trichloroethene	1.09	0.020	"	1.25		87.2	68-132			
Trichlorofluoromethane	1.04	0.020	"	1.25		83.2	62-144			
Vinyl Chloride	1.23	0.020	"	1.25		98.4	66-137			
Surrogate: Dibromofluoromethane	*12.2*		*"*	*12.5*		*97.4*	*75-125*			
Surrogate: Toluene-d8	*12.9*		*"*	*12.5*		*103*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*12.3*		*"*	*12.5*		*98.1*	*75-125*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds 0 Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F2327 0 Volatiles										
LCS Dup (34F23270BSD71				Prepared & Analyzed: 06/03/14						
1,1,1,2-Tetrachloroethane	1.34	0.020	ug/l	1.25		107	75-136	1.50	20	
1,1,1-Trichloroethane	1.33	0.020	"	1.25		106	73-134	23.5	20	QR-04
1,1,2,2-Tetrachloroethane	1.02	0.020	"	1.25		81.6	56-149	46.0	20	QR-04
1,1,2-Trichloro-trifluoroethane	1.09	0.020	"	1.25		87.2	83-125	8.77	20	
1,1,2-Trichloroethane	1.12	0.020	"	1.25		89.6	67-137	9.36	20	
1,1-Dichloroethane	1.23	0.020	"	1.25		98.4	80-121	0.00	20	
1,1-Dichloroethene	1.30	0.020	"	1.25		104	73-137	8.84	20	
1,2-Dichloroethane	1.17	0.020	"	1.25		93.6	75-131	15.0	20	
Benzene	1.05	0.020	"	1.25		84.0	79-118	0.957	20	
cis-1,2-Dichloroethene	1.14	0.020	"	1.25		91.2	85-116	1.77	20	
Carbon tetrachloride	1.11	0.020	"	1.25		88.8	74-143	22.4	20	QR-04
Chloroethane	1.23	0.020	"	1.25		98.4	60-137	3.98	20	
Chloroform	1.29	0.020	"	1.25		103	82-140	11.5	20	
Dichlorodifluoromethane	1.41	0.020	"	1.25		113	47-129	9.67	20	
Ethylbenzene	1.25	0.020	"	1.25		100	83-125	3.15	20	
Methylene Chloride	1.31	0.020	"	1.25		105	81-126	20.2	20	QR-04
ortho-Xylene	1.34	0.020	"	1.25		107	85-115	6.15	20	QR-04
meta- and para-Xylenes	2.23	0.020	"	2.50		89.2	83-115	7.34	20	
trans-1,2-Dichloroethene	1.07	0.020	"	1.25		85.6	72-133	1.85	20	
Tetrachloroethene	1.08	0.020	"	1.25		86.4	60-144	9.71	20	
Toluene	1.01	0.020	"	1.25		80.8	70-115	5.08	20	
Trichloroethene	1.07	0.020	"	1.25		85.6	68-132	1.85	20	
Trichlorofluoromethane	1.42	0.020	"	1.25		114	62-144	30.9	20	QR-04
Vinyl Chloride	1.34	0.020	"	1.25		107	66-137	8.56	20	
Surrogate: Dibromofluoromethane	*13.0*		*"*	*12.5*		*104*	*75-125*			
Surrogate: Toluene-d8	*12.6*		*"*	*12.5*		*101*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*12.4*		*"*	*12.5*		*99.4*	*75-125*			

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MWH Americas, Inc. 250 No. Madison Avenue Pasadena, CA 91107	Project: Santa Susana Field Laboratory, Canoga Park Project Number: EST2754 Project Manager: Sarah Von Raesfield	**Reported:** 17-Jun-14 08:54

Volatile Organic Compounds 0 Quality Control

Environmental Support Technologies

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 34F2327 0 Volatiles										
Duplicate (34F23270DUP71		**Source: 3F4232702 6**		Prepared & Analyzed: 06/03/14						
1,1,1,2-Tetrachloroethane	ND	0.020	ug/l		ND				50	
1,1,1-Trichloroethane	0.0876	0.020	"		0.111			23.7	50	
1,1,2,2-Tetrachloroethane	ND	0.020	"		ND				50	
1,1,2-Trichloro-trifluoroethane	0.496	0.020	"		0.543			8.97	50	
1,1,2-Trichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethane	ND	0.020	"		ND				50	
1,1-Dichloroethene	0.138	0.020	"		0.164			17.1	50	
1,2-Dichloroethane	ND	0.020	"		ND				50	
Benzene	ND	0.020	"		ND				50	
cis-1,2-Dichloroethene	ND	0.020	"		ND				50	
Carbon tetrachloride	ND	0.020	"		ND				50	
Chloroethane	ND	0.020	"		ND				50	
Chloroform	ND	0.020	"		ND				50	
Dichlorodifluoromethane	ND	0.020	"		ND				50	
Ethylbenzene	ND	0.020	"		ND				50	
Methylene Chloride	ND	0.020	"		ND				50	
ortho-Xylene	ND	0.020	"		ND				50	
meta- and para-Xylenes	ND	0.020	"		ND				50	
trans-1,2-Dichloroethene	ND	0.020	"		ND				50	
Tetrachloroethene	ND	0.020	"		ND				50	
Toluene	ND	0.020	"		ND				50	
Trichloroethene	0.352	0.020	"		0.439			21.9	50	
Trichlorofluoromethane	0.0668	0.020	"		0.0786			16.2	50	
Vinyl Chloride	ND	0.020	"		ND				50	
Surrogate: Dibromofluoromethane	*2.63*		*"*	*2.50*		*105*	*75-125*			
Surrogate: Toluene-d8	*2.30*		*"*	*2.50*		*91.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.09*		*"*	*2.50*		*83.6*	*75-125*			
Surrogate: Benzene-d6	*2.33*		*"*	*2.50*		*93.2*	*70-140*			
Surrogate: Chloroform-d	*2.55*		*"*	*2.50*		*102*	*70-140*			
Surrogate: Methylene chloride-d2	*2.06*		*"*	*2.50*		*82.2*	*70-140*			

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Notes and De,initions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates.
QR-04	The RPD result for this analyte in the sample exceeded the QC control limits; however, the RPD for other analytes were within the QC control limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SUMMARY OF INITIAL CALIBRATION

Rerun sample @ 5ppb @ Most.

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:24:09 2013
Response via : Initial Calibration

Calibration Files
1 =K3IC00_1.D 2 =K3IC0_25.D 3 =K07LCS01.D
4 =K3IC1_25.D 5 =K3IC02_5.D 6 =K3IC12_5.D

		Compound	1	2	3	4	5	6	Avg	%RSD	
1)	I	Fluorobenzene (IS)	----------ISTD----------								
2)	S	Dibromofluoromethan	0.311	0.300	0.318	0.319	0.312	0.311	0.312	2.10	
3)	T	(F12) Dichlorodiflu	0.320	0.284	0.302	0.292	0.321	0.321	0.307	5.36	
4)	P	Chloromethane	0.422	0.302	0.293	0.219	0.221	0.212	0.278	29.02	Linear
5)	CM	Vinyl Chloride	0.276	0.224	0.211	0.207	0.207	0.199	0.221	12.88	
6)	T	Bromomethane	0.338	0.225	0.179	0.162	0.150	0.139	0.199	37.55	Linear
7)	T	Chloroethane	0.030	0.106	0.066	0.102	0.098	0.089	0.082	35.53	Quadratic
8)	T	(F11) Trichlorofluo	0.379	0.365	0.327	0.337	0.323	0.326	0.343	6.87	
9)	T	(F113) 1,1,2-Trichl	0.291	0.221	0.227	0.267	0.239	0.229	0.246	11.15	
10)	CM	1,1-Dichloroethene	0.277	0.287	0.322	0.307	0.291	0.286	0.295	5.61	
11)	T	Acetone	0.267	0.136	0.115	0.061	0.051	0.016	0.108	82.94	Quadratic
12)	M	(IPA) Leak Check Co	0.012	0.022	0.014	0.013	0.014	0.016	0.015	27.59	
13)	T	Carbon disulfide	1.178	1.037	1.080	1.042	0.958	0.941	1.039	8.28	
14)	T	Methylene Chloride	0.418	0.313	0.349	0.339	0.327	0.314	0.343	11.47	
15)		(TBA) tert-Butanol	0.022	0.019	0.027	0.022	0.018	0.020	0.021	16.39	
16)	TM	(MTBE) Methyl-t-but	0.789	0.678	0.760	0.729	0.655	0.638	0.708	8.56	
17)	T	trans-1,2-Dichloroe	0.331	0.360	0.342	0.357	0.310	0.318	0.336	6.07	
18)	PM	1,1-Dichloroethane	0.582	0.580	0.586	0.585	0.521	0.518	0.562	5.90	
19)	T	cis-1,2-Dichloroeth	0.442	0.415	0.416	0.387	0.339	0.345	0.390	10.66	
20)	T	2,2-Dichloropropane	0.561	0.489	0.520	0.497	0.440	0.435	0.490	9.80	
21)	T	(MEK) 2-Butanone	0.036	0.041	0.042	0.021	0.440	0.435	0.035	26.97	Not in use.
22)	T	(DIPE) Diisopropyl	1.055	1.006	1.006	1.025	0.901	0.867	0.977	7.64	
23)	T	Bromochloromethane	0.110	0.155	0.185	0.189	0.182	0.184	0.167	18.39	
24)	CM	Chloroform	0.723	0.654	0.684	0.676	0.594	0.598	0.655	7.70	
25)	T	(ETBE) 2-ethoxy 2-m	1.034	0.874	0.941	0.927	0.821	0.823	0.903	9.00	
26)	T	1,1,1-Trichloroetha	0.516	0.540	0.535	0.523	0.496	0.488	0.517	4.07	
27)	T	(TAME) tert-Amyl me	1.000	0.749	0.821	0.764	0.701	0.680	0.786	14.75	
28)	S	1,2-Dichloroethane-	0.309	0.278	0.303	0.299	0.296	0.293	0.296	3.50	
29)	T	1,1-Dichloropropene	0.547	0.492	0.502	0.489	0.439	0.427	0.482	9.13	
30)	T	Carbon Tetrachlorid	0.401	0.388	0.449	0.460	0.412	0.416	0.421	6.66	
31)	M	Benzene	1.374	1.155	1.267	1.217	1.042	1.008	1.177	11.75	
32)	M	1,2-Dichloroethane	0.501	0.382	0.445	0.419	0.385	0.365	0.416	12.20	
33)	M	Trichloroethene	0.480	0.355	0.386	0.399	0.336	0.324	0.380	14.87	
34)	C	1,2-Dichloropropane	0.298	0.297	0.277	0.290	0.264	0.258	0.281	6.17	
35)	T	Dibromomethane	0.207	0.209	0.227	0.244	0.215	0.216	0.220	6.33	
36)	T	Bromodichloromethan	0.459	0.407	0.479	0.446	0.428	0.433	0.442	5.69	
37)	T	cis-1,3-Dichloropro	0.508	0.451	0.526	0.493	0.447	0.467	0.482	6.63	
38)	I	Chlorobenzene-d5 (IS)	----------ISTD----------								
39)	S	Toluene-d8 (SU3)	1.209	1.139	1.193	1.149	1.157	1.149	1.166	2.42	
40)	T	(MIBK) 4-Methyl-2-P	0.545	0.324	0.388	0.078	0.072	0.088	0.249	79.95	Not in use.
41)	CM	Toluene	2.231	1.790	1.660	1.584	1.518	1.441	1.704	16.71	

42)	T	trans-1,3-Dichlorop	0.601	0.493	0.586	0.607	0.528	0.560	0.563	7.97	
43)	T	1,1,2-Trichloroetha	0.310	0.285	0.355	0.328	0.286	0.281	0.308	9.58	
44)	M	Tetrachloroethene	0.462	0.392	0.677	0.635	0.590	0.281	0.551	21.81	LINEAR
45)	T	1,3-Dichloropropane	0.710	0.578	0.592	0.569	0.532	0.529	0.585	11.33	
46)	T	2-Hexanone	0.333	0.186	0.340	0.266	0.333	0.182	0.273	27.20	
47)	T	Dibromochloromethan	0.426	0.363	0.496	0.458	0.432	0.459	0.439	10.18	
48)	T	1,2-Dibromoethane	0.412	0.355	0.430	0.402	0.394	0.396	0.398	6.27	
49)	PM	Chlorobenzene	1.366	1.154	1.110	1.134	1.086	1.043	1.149	9.84	
50)	T	1,1,1,2-Tetrachloro	0.449	0.384	0.437	0.407	0.388	0.387	0.409	6.91	
51)	CM	Ethylbenzene	2.333	2.080	1.968	1.851	1.736	1.654	1.937	12.77	
52)	TM	m,p-Xylenes	0.809	0.711	0.727	0.669	0.615	0.602	0.689	11.20	
53)	TM	o-Xylene	0.867	0.664	0.674	0.671	0.615	0.594	0.681	14.25	
54)	T	Styrene	1.563	1.015	1.078	1.049	0.973	0.934	1.102	21.01	LINEAR
55)	P	Bromoform	0.237	0.199	0.286	0.259	0.238	0.276	0.249	12.69	
56)	T	Isopropylbenzene	2.188	1.855	1.900	1.811	1.764	1.674	1.865	9.44	
57)	T	1,2,3-Trichloroprop	0.505	0.491	0.593	0.516	0.480	0.472	0.509	8.58	
58)	S	4-Bromofluorobenzen	0.518	0.507	0.527	0.511	0.510	0.495	0.511	2.08	
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------								
60)	P	1,1,2,2-Tetrachloro	1.020	0.822	1.013	0.870	0.774	0.905	0.901	11.13	
61)	T	Bromobenzene	1.079	1.003	1.043	0.946	0.914	0.907	0.982	7.20	
62)	T	n-Propylbenzene	6.721	5.112	5.219	4.601	4.392	4.279	5.054	17.82	
63)	T	2-Chlorotoluene	3.644	2.948	3.362	3.044	2.868	2.805	3.112	10.48	
64)	T	1,3,5-Trimethylbenz	3.612	3.208	3.247	3.017	2.832	2.775	3.115	9.93	
65)	T	4-Chlorotoluene	3.315	2.950	2.942	2.812	2.597	2.623	2.873	9.19	
66)	T	tert-Butylbenzene	2.817	2.666	3.007	2.633	2.430	2.371	2.654	8.96	
67)	T	1,2,4-Trimethylbenz	3.774	3.331	3.421	3.050	2.968	2.953	3.250	9.91	
68)	T	sec-Butylbenzene	4.837	3.956	4.522	4.187	3.865	3.852	4.203	9.54	
69)	T	p-Isopropyltoluene	3.974	3.475	3.582	3.347	3.061	3.060	3.417	10.13	
70)	T	1,3-Dichlorobenzene	2.120	1.740	1.888	1.871	1.734	1.744	1.850	8.06	
71)	T	1,4-Dichlorobenzene	2.120	1.740	1.974	1.864	1.658	1.729	1.847	9.43	
72)	T	n-Butylbenzene	4.391	3.645	3.644	3.397	3.264	3.192	3.589	12.14	
73)	T	1,2-Dichlorobenzene	1.716	1.534	1.764	1.657	1.614	1.583	1.645	5.20	
74)	T	1,2-Dibromo-3-chlor	0.082	0.104	0.111	0.148	0.133	0.146	0.121	21.61	LINEAR
75)	T	1,2,4-Trichlorobenz	1.184	1.091	1.244	1.074	1.050	1.044	1.115	7.28	
76)	T	Hexachlorobutadiene	0.297	0.477	0.596	0.481	0.499	0.507	0.476	20.56	LINEAR
77)	T	Naphthalene	2.690	2.294	3.052	2.312	2.176	2.294	2.470	13.55	
78)	T	Hexachloroethane	0.306	0.301	0.391	0.362	0.374	0.435	0.361	14.24	
79)	T	1,2,3-Trichlorobenz	1.346	0.926	1.173	0.993	0.940	0.968	1.058	15.82	

(#) = Out of Range

MW111313.M Wed Nov 13 19:25:18 2013

CONTINUING CALIBRATION VERIFICATION

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060314L3\F03CCV01.D
Acq On : 3 Jun 2014 6:04 am
Sample : 1.25/2.5/12.5 ug/L 8260B std
Misc : 20mL 8260 CCV
MS Integration Params: rteint.p
Quant Time: Jun 3 8:11 19114

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

AR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	10.30	96	1318361	12.50 ug/L	0.01
38) Chlorobenzene-d5 (IS)	13.93	117	1010775	12.50 ug/L	0.00
59) 1,4-Dichlorobenzene-d4 (IS	16.51	152	479912	12.50 ug/L	0.00

System Monitoring Compounds					
2) Dibromofluoromethane (SU1)	9.44	113	372852	11.34 ug/L	0.02
Spiked Amount 12.500	Range 75 - 125		Recovery =	90.72%	
28) 1,2-Dichloroethane-d4 (SU2	9.90	65	331075	10.59 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	84.72%	
39) Toluene-d8 (SU3)	12.21	98	1226080	13.01 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	104.08%	
58) 4-Bromofluorobenzene (SU4)	15.23	95	483948	11.71 ug/L	0.00
Spiked Amount 12.500	Range 75 - 125		Recovery =	93.68%	

Target Compounds					Qvalue
3) (F12) Dichlorodifluorometh	4.11	85	41939	1.30 ug/L	86
4) Chloromethane	4.47	50	30741	1.27 ug/L	96
5) Vinyl Chloride	4.60	62	31485	1.35 ug/L	80
6) Bromomethane	5.13	96	22783	1.39 ug/L	62
7) Chloroethane	5.27	64	10852	1.07 ug/L	90
8) (F11) Trichlorofluorometha	5.66	101	37145	1.03 ug/L	96
9) (F113) 1,1,2-Trichloro-tri	6.36	151	34995	1.35 ug/L	93
10) 1,1-Dichloroethene	6.44	96	42509	1.37 ug/L #	38
11) Acetone	6.48	58	26778	-12.50 ug/L #	1
12) (IPA) Leak Check Compound	6.53	45	114877	72.51 ug/L	93
13) Carbon disulfide	6.87	76	130998	1.20 ug/L	98
14) Methylene Chloride	7.12	84	43909	1.21 ug/L #	72
15) (TBA) tert-Butanol	7.11	59	5445	2.42 ug/L #	77
16) (MTBE) Methyl-t-butyl ethe	7.41	73	100827	1.35 ug/L #	84
17) trans-1,2-Dichloroethene	7.48	96	35947	1.01 ug/L #	53
18) 1,1-Dichloroethane	8.08	63	72116	1.22 ug/L	99
19) cis-1,2-Dichloroethene	8.84	96	42031	1.02 ug/L #	65
20) 2,2-Dichloropropane	8.85	77	2756	0.05 ug/L #	49
21) (MEK) 2-Butanone	8.80	72	4894	1.32 ug/L #	1
22) (DIPE) Diisopropyl Ether	8.02	45	143122	1.39 ug/L #	86
23) Bromochloromethane	9.18	128	16644	0.94 ug/L #	51
24) Chloroform	9.22	83	75008	1.09 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060314L3\F03CCV01.D Vial: 9
Acq On : 3 Jun 2014 6:04 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 8:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) (ETBE) 2-ethoxy 2-methyl p	8.51	59	124926	1.31 ug/L #	87
26) 1,1,1-Trichloroethane	9.50	97	73964	1.36 ug/L	96
27) (TAME) tert-Amyl methyl et	10.02	73	96550	1.16 ug/L #	90
29) 1,1-Dichloropropene	9.70	75	83119	1.63 ug/L #	82
30) Carbon Tetrachloride	9.72	117	59121	1.33 ug/L	87
31) Benzene	9.99	78	142755	1.15 ug/L #	82
32) 1,2-Dichloroethane	10.00	62	52013	1.19 ug/L	88
33) Trichloroethene	10.75	130	45309	1.13 ug/L #	84
34) 1,2-Dichloropropane	11.06	63	34622	1.17 ug/L #	31
35) Dibromomethane	11.23	93	37045	1.60 ug/L	90
36) Bromodichloromethane	11.36	83	86396	1.85 ug/L	98
37) cis-1,3-Dichloropropene	11.88	75	65592	1.29 ug/L #	67
40) (MIBK) 4-Methyl-2-Pentanon	12.12	43	14197	0.70 ug/L #	100
41) Toluene	12.30	91	166096	1.21 ug/L	98
42) trans-1,3-Dichloropropene	12.52	75	59682	1.31 ug/L #	63
43) 1,1,2-Trichloroethane	12.76	83	30020	1.21 ug/L #	74
44) Tetrachloroethene	12.95	164	56440	1.17 ug/L	92
45) 1,3-Dichloropropane	12.97	76	58522	1.24 ug/L	97
46) 2-Hexanone	12.98	43	35784	1.62 ug/L #	96
47) Dibromochloromethane	13.26	129	59006	1.66 ug/L #	94
48) 1,2-Dibromoethane	13.44	107	46528	1.44 ug/L	97
49) Chlorobenzene	13.95	112	98088	1.06 ug/L #	68
50) 1,1,1,2-Tetrachloroethane	14.03	131	50633	1.53 ug/L	90
51) Ethylbenzene	14.03	91	206543	1.32 ug/L #	87
52) m,p-Xylenes	14.16	106	128926	2.32 ug/L #	62
53) o-Xylene	14.62	106	59300	1.08 ug/L #	45
54) Styrene	14.63	104	98920	1.23 ug/L #	75
55) Bromoform	14.92	173	34446	1.71 ug/L #	84
56) Isopropylbenzene	15.01	105	212905	1.41 ug/L #	88
57) 1,2,3-Trichloropropane	15.43	75	62762	1.52 ug/L #	1
60) 1,1,2,2-Tetrachloroethane	15.34	83	44214	1.28 ug/L	98
61) Bromobenzene	15.44	156	41448	1.10 ug/L #	60
62) n-Propylbenzene	15.47	91	259387	1.34 ug/L #	89
63) 2-Chlorotoluene	15.62	91	188681	1.58 ug/L #	81
64) 1,3,5-Trimethylbenzene	15.63	105	190755	1.59 ug/L #	78
65) 4-Chlorotoluene	15.73	91	182322	1.65 ug/L #	85
66) tert-Butylbenzene	16.02	119	137901	1.35 ug/L #	68

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060314L3\F03CCV01.D Vial: 9
Acq On : 3 Jun 2014 6:04 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 8:11 19114 Quant Results File: MW111313.RES

Quant Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration
DataAcq Meth : MW111313

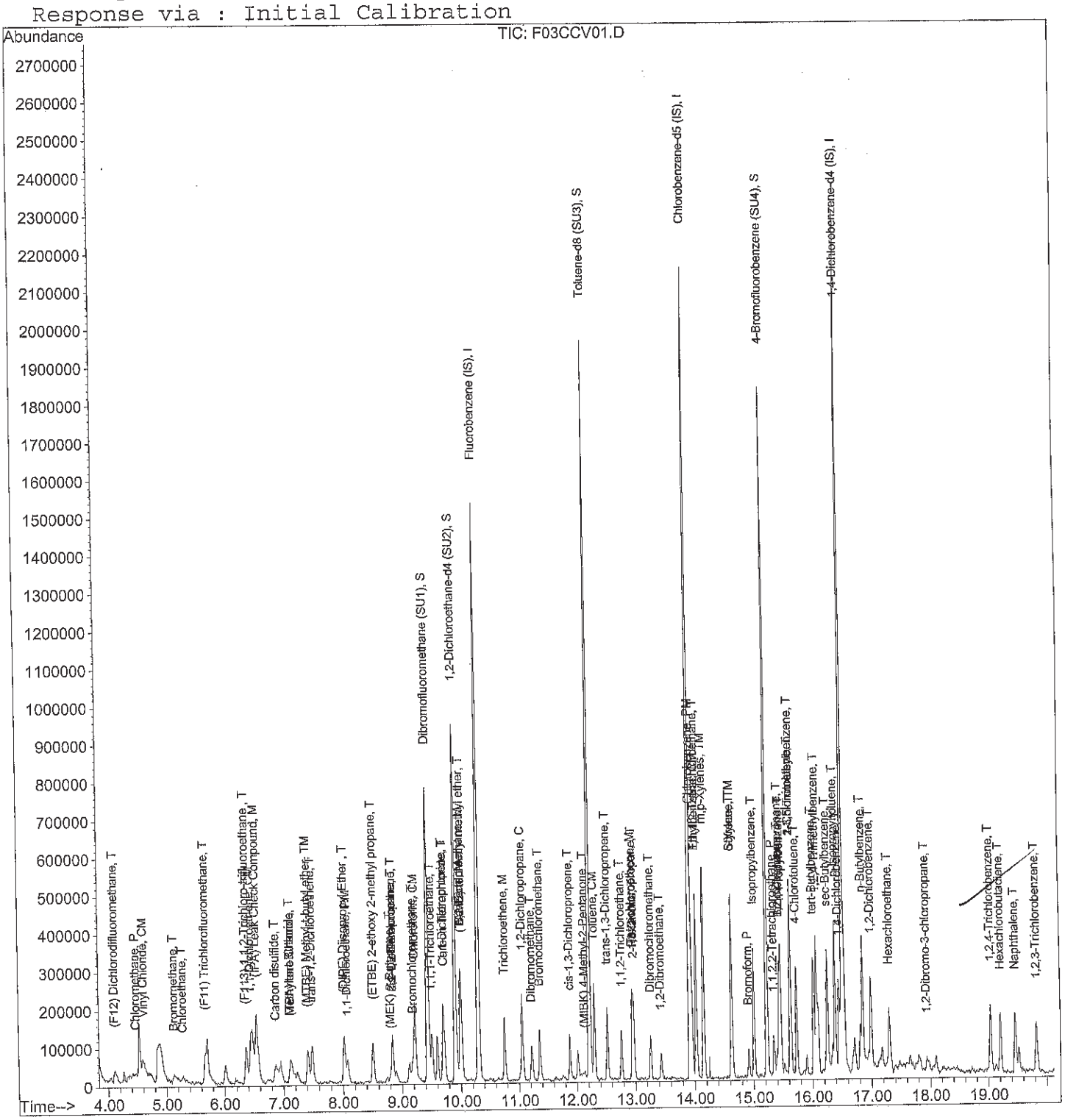
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67) 1,2,4-Trimethylbenzene	16.07	105	208343	1.67 ug/L #	84
68) sec-Butylbenzene	16.25	105	214514	1.33 ug/L #	92
69) p-Isopropyltoluene	16.39	119	202847	1.55 ug/L #	77
70) 1,3-Dichlorobenzene	16.45	146	88499	1.25 ug/L #	86
71) 1,4-Dichlorobenzene	16.45	146	88499	1.25 ug/L	87
72) n-Butylbenzene	16.85	91	209276	1.52 ug/L #	88
73) 1,2-Dichlorobenzene	16.99	146	73935	1.17 ug/L #	88
74) 1,2-Dibromo-3-chloropropan	17.94	75	11228	2.08 ug/L #	77
75) 1,2,4-Trichlorobenzene	19.04	180	51609	1.21 ug/L #	95
76) Hexachlorobutadiene	19.21	225	31481	1.63 ug/L	96
77) Naphthalene	19.46	128	150927	1.59 ug/L	100
78) Hexachloroethane	17.31	201	19141	1.38 ug/L	92
79) 1,2,3-Trichlorobenzene	19.82	180	45204	1.11 ug/L #	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060314L3\F03CCV01.D Vial: 9
Acq On : 3 Jun 2014 6:04 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 8:11 19114 Quant Results File: MW111313.RES

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060314L3\F03CCV01.D Vial: 9
Acq On : 3 Jun 2014 6:04 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene (IS)	12.500	12.500	0.0	99	0.01
2	S	Dibromofluoromethane (SU1)	12.500	11.338	9.3	88	0.02
3	T	(F12) Dichlorodifluorometha	1.250	1.297	-3.8	108	0.04
4	P	Chloromethane	1.250	1.269	-1.5	106	0.08
5	CM	Vinyl Chloride	1.250	1.353	-8.2	115	0.05
6	T	Bromomethane	1.250	1.393	-11.4	106	0.03
7	T	Chloroethane	1.250	1.067	14.6	80	0.03
8	T	(F11) Trichlorofluoromethan	1.250	1.027	17.8	83	0.05
9	T	(F113) 1,1,2-Trichloro-trif	1.250	1.350	-8.0	99	0.04
10	CM	1,1-Dichloroethene	1.250	1.366	-9.3	104	0.04
11	T	Acetone	1.250	-12.500	1100.0#	329	0.02
12	M	(IPA) Leak Check Compound	62.500	72.514	-16.0	124	-0.01
13	T	Carbon disulfide	1.250	1.195	4.4	95	0.06
14	T	Methylene Chloride	1.250	1.213	3.0	98	0.04
15		(TBA) tert-Butanol	12.500	2.422	80.6#	18	0.00
16	TM	(MTBE) Methyl-t-butyl ether	2.500	1.350	46.0#	52	0.00
17	T	trans-1,2-Dichloroethene	1.250	1.013	19.0	76	0.02
18	PM	1,1-Dichloroethane	1.250	1.217	2.6	93	0.03
19	T	cis-1,2-Dichloroethene	1.250	1.021	18.3	82	0.02
20	T	2,2-Dichloropropane	1.250	0.053	95.8#	4	0.02
21	T	(MEK) 2-Butanone	1.250	1.320	-5.6	90	0.01
22	T	(DIPE) Diisopropyl Ether	1.250	1.390	-11.2	105	0.00
23	T	Bromochloromethane	1.250	0.943	24.6	66	0.03
24	CM	Chloroform	1.250	1.086	13.1	84	0.02
25	T	(ETBE) 2-ethoxy 2-methyl pr	1.250	1.311	-4.9	102	0.00
26	T	1,1,1-Trichloroethane	1.250	1.358	-8.6	106	0.01
27	T	(TAME) tert-Amyl methyl eth	1.250	1.165	6.8	95	0.01
28	S	1,2-Dichloroethane-d4 (SU2)	12.500	10.593	15.3	83	0.00
29	T	1,1-Dichloropropene	1.250	1.634	-30.7#	128	0.02
30	T	Carbon Tetrachloride	1.250	1.332	-6.6	97	0.01
31	M	Benzene	1.250	1.150	8.0	88	0.01
32	M	1,2-Dichloroethane	1.250	1.185	5.2	94	0.01
33	M	Trichloroethene	1.250	1.131	9.5	86	0.01
34	C	1,2-Dichloropropane	1.250	1.169	6.5	90	0.00
35	T	Dibromomethane	1.250	1.599	-27.9	114	0.01
36	T	Bromodichloromethane	1.250	1.853	-48.2#	146	0.01
37	T	cis-1,3-Dichloropropene	1.250	1.290	-3.2	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060314L3\F03CCV01.D Vial: 9
Acq On : 3 Jun 2014 6:04 am Operator: DN
Sample : 1.25/2.5/12.5 ug/L 8260B std Inst : GC/MS Ins
Misc : 20mL 8260 CCV Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
38	I	Chlorobenzene-d5 (IS)	12.500	12.500	0.0	98	0.00
39	S	Toluene-d8 (SU3)	12.500	13.005	-4.0	103	0.00
40	T	(MIBK) 4-Methyl-2-Pentanone	1.250	0.704	43.7#	175	0.00
41	CM	Toluene	1.250	1.205	3.6	101	0.01
42	T	trans-1,3-Dichloropropene	1.250	1.312	-5.0	95	0.00
43	T	1,1,2-Trichloroethane	1.250	1.207	3.4	88	0.01
44	M	Tetrachloroethene	1.250	1.166	6.7	86	0.00
45	T	1,3-Dichloropropane	1.250	1.237	1.0	100	0.00
46	T	2-Hexanone	1.250	1.618	-29.4	130	0.01
47	T	Dibromochloromethane	1.250	1.662	-33.0#	125	0.00
48	T	1,2-Dibromoethane	1.250	1.445	-15.6	112	0.00
49	PM	Chlorobenzene	1.250	1.056	15.5	84	0.00
50	T	1,1,1,2-Tetrachloroethane	1.250	1.532	-22.6	120	0.00
51	CM	Ethylbenzene	1.250	1.319	-5.5	108	0.00
52	TM	m,p-Xylenes	2.500	2.315	7.4	93	0.00
53	TM	o-Xylene	1.250	1.077	13.8	85	0.00
54	T	Styrene	1.250	1.229	1.7	91	0.00
55	P	Bromoform	1.250	1.709	-36.7#	129	0.00
56	T	Isopropylbenzene	1.250	1.411	-12.9	114	0.00
57	T	1,2,3-Trichloropropane	1.250	1.524	-21.9	118	0.00
58	S	4-Bromofluorobenzene (SU4)	12.500	11.706	6.4	92	0.00
59	I	1,4-Dichlorobenzene-d4 (IS)	12.500	12.500	0.0	96	0.00
60	P	1,1,2,2-Tetrachloroethane	1.250	1.279	-2.3	101	0.00
61	T	Bromobenzene	1.250	1.100	12.0	87	0.00
62	T	n-Propylbenzene	1.250	1.337	-7.0	112	0.00
63	T	2-Chlorotoluene	1.250	1.579	-26.3	123	0.00
64	T	1,3,5-Trimethylbenzene	1.250	1.595	-27.6	126	0.00
65	T	4-Chlorotoluene	1.250	1.653	-32.2#	129	0.00
66	T	tert-Butylbenzene	1.250	1.353	-8.2	104	0.00
67	T	1,2,4-Trimethylbenzene	1.250	1.670	-33.6#	136	0.00
68	T	sec-Butylbenzene	1.250	1.329	-6.3	102	0.00
69	T	p-Isopropyltoluene	1.250	1.546	-23.7	121	0.00
70	T	1,3-Dichlorobenzene	1.250	1.246	0.3	94	0.00
71	T	1,4-Dichlorobenzene	1.250	1.248	0.2	95	-0.09
72	T	n-Butylbenzene	1.250	1.519	-21.5	123	0.00
73	T	1,2-Dichlorobenzene	1.250	1.171	6.3	89	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060314L3\F03CCV01.D
Acq On : 3 Jun 2014 6:04 am
Sample : 1.25/2.5/12.5 ug/L 8260B std
Misc : 20mL 8260 CCV
MS Integration Params: rteint.p

Vial: 9
Operator: DN
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN
Last Update : Wed Nov 13 19:38:32 2013
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
74	T	1,2-Dibromo-3-chloropropane	1.250	2.078	-66.2#	151	0.00
75	T	1,2,4-Trichlorobenzene	1.250	1.206	3.5	96	0.00
76	T	Hexachlorobutadiene	1.250	1.630	-30.4#	130	0.00
77	T	Naphthalene	1.250	1.592	-27.4	130	0.00
78	T	Hexachloroethane	1.250	1.379	-10.3	105	0.00
79	T	1,2,3-Trichlorobenzene	1.250	1.113	11.0	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SUMMARY OF INTERNAL STANDARDS

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\060314L3\F03BFB01.D
Tune Time : 3 Jun 14 5:46 am

Daily Calibration File : C:\HPCHEM\1\DATA\013014L3\A30CCV01.D

File	Sample	Surrogate Recovery %				Internal Standard Responses (PFB) 1590180	(CLBD 1163370	(1,4- 587649
F0300001.D	3F40301-	98	118	95	107	1206346	1091625	590337
F0300002.D	3F40301-	105	90	91	117	1131382	1087567	626278
F0300003.D	34F0301-	105	109	92	84	1163616	1107383	628920
F0300004.D	3F40301-	98	91	93	107	1303867	1159703	653946
F0300005.D	3F40301-	87	117	89	86	1163509	1155665	644534
F0300006.D	3F40301-	98	87	88	100	1272104	1236372	663356
F0300007.D	3F40301-	94	90	90	99	1218544	1157967	647693
F0300008.D	3F40301-	112	83	99	98	715293	594656	321641
F0300009.D	3F40301-	87	108	86	92	1772886	1763205	880477
F0300010.D	3F40301-	90	103	91	96	1313669	1264130	678991
F0300011.D	3F40301-	88	90	91	85	1210996	1140417	602028
F0300012.D	3F40301-	103	107	91	112	1277151	1208600	630216
F0300013.D	3F40301-	88	88	86	99	1269688	1232987	646113
F0300014.D	3F40301-	101	110	88	112	1252733	1213245	642740
F03BLK01.D	34F0301-	99	89	91	117	1332104	1266796	698370
F03LCS01.D	34F0301-	97	95	103	98	1293171	999567	441496
F03LCS02.D	34F0301-	104	83	101	99	1492408	1126848	541470

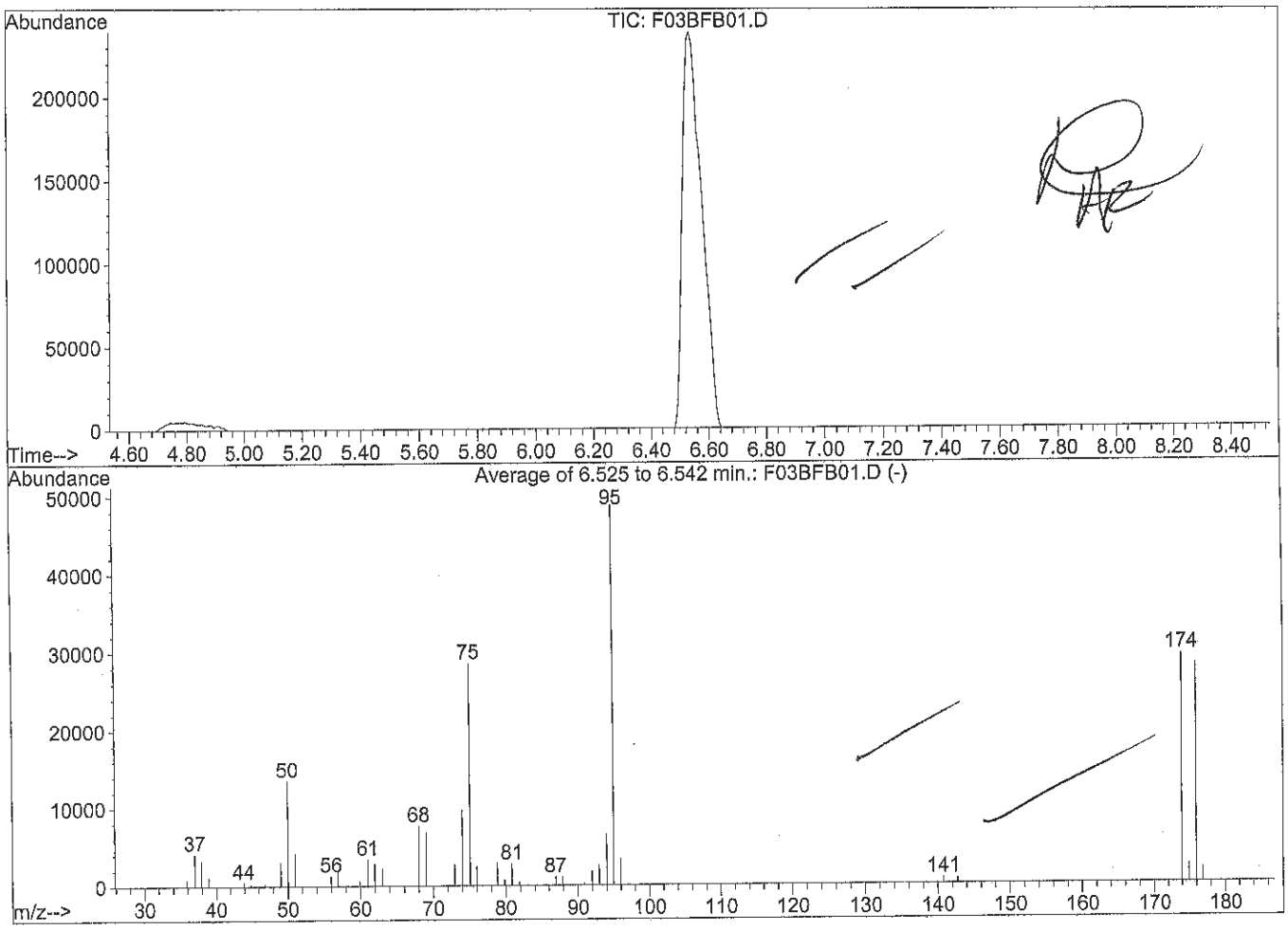
t - fails 12hr time check * - fails criteria

Created: Sun Jun 08 11:49:37 2014 GC
MS Ins

Summary of Instrument Tuning

BFB

Data File : C:\HPCHEM\1\DATA\060314L3\F03BFB01.D Vial: 1
Acq On : 3 Jun 2014 5:46 am Operator: DN
Sample : 50 ng BFB tune Inst : GC/MS Ins
Misc : 12HRS SYSTEM BFB TUNING Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\MW111313.M (RTE Integrator)
Title : 8260B GC/MS #3 ICAL 11/13/13 DN



AutoFind: Scans 320, 321, 322; Background Corrected with Scan 313

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.6	13466	PASS
75	95	30	60	58.6	28541	PASS
95	95	100	100	100.0	48744	PASS
96	95	5	9	6.7	3246	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	60.2	29320	PASS
175	174	5	9	7.8	2284	PASS
176	174	95	101	95.9	28123	PASS
177	176	5	9	6.6	1859	PASS

F03BFB01.D MW111313.M Tue Jun 03 05:55:20 2014

INJECTION LOG

Injection Log

Directory: c:\hpchem\1\data\060314l3

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	11	f0300001.d	10.	3F40301-01	100cc Equipment Blank	3 Jun 14 08:00
2	1	f0300002.d	10.	3F40301-02	100cc SVL-503-SA8-SV-4.5-5.5	3 Jun 14 08:29
3	2	f0300003.d	10.	34F0301-DUP1	100cc SVL-503-SA8-SV-4.5-5.5	3 Jun 14 08:59
4	3	f0300004.d	10.	3F40301-03	100cc SVL-534-SA8-SV-6.0-7.0	3 Jun 14 09:29
5	4	f0300005.d	10.	3F40301-04	100cc SVL-834-SA8-SV-6.0-7.0	3 Jun 14 09:59
6	5	f0300006.d	10.	3F40301-05	100cc SVL-507-SA5C-SV-6.0-7.0	3 Jun 14 10:27
7	6	f0300007.d	10.	3F40301-06	100cc SVL-507-SA5C-SV-10.5-11.5	3 Jun 14 10:56
8	7	f0300008.d	10.	3F40301-07	100cc SVL-508-SA5C-SV-8.25-9.25	3 Jun 14 11:25
9	8	f0300009.d	10.	3F40301-08	100cc SVL-535-SA5C-SV-5.0-6.0	3 Jun 14 11:54
10	1	f0300010.d	10.	3F40301-09	100cc SVL-535-SA5C-SV-10.0-11.0	3 Jun 14 12:27
11	2	f0300011.d	10.	3F40301-10	100cc SVL-535-SA5C-SV-15.0-16.0	3 Jun 14 12:56
12	3	f0300012.d	10.	3F40301-11	100cc SVL-543-SA5C-SV-5.0-6.0	3 Jun 14 13:25
13	4	f0300013.d	10.	3F40301-12	100cc SVL-543-SA5C-SV-11.0-12.0	3 Jun 14 13:54
14	5	f0300014.d	10.	3F40301-13	100cc FB-060314	3 Jun 14 14:23
15	1	f03bfb01.d	1.	50 ng BFB tune	12HRS SYSTEM BFB TUNING	3 Jun 14 05:46
16	11	f03blk01.d	10.	34F0301-BLK1	100cc AMBIENT AIR/H20	3 Jun 14 07:31
17	9	f03ccv01.d	1.	1.25/2.5/12.5 ug/L 8260B std	20mL 8260 CCV	3 Jun 14 06:04
18	10	f03lcs01.d	1.	34F0301-BS1	20cc 1.25/2.5/12.5 ug/L LCS	3 Jun 14 06:34
19	9	f03lcs02.d	1.	34F0301-BSD1	20cc 1.25/2.5/12.5 ug/L LCS	3 Jun 14 14:52

SAMPLE LOG SHEET

Environmental Support Technologies, Inc.
SOIL GAS - FIELD ANALYSIS
Sample Log Sheet

Date:_06/03/2014_____
Analyst:_____DN_____
Lab ID:_____# 3_____
Batch Number:_34F0301_____
Project Number:_EST2754___

EPA Method:_8260B CHHSLS 0.02 RL GILAN AIR5 PUMP
Initial Calibration:_MW111313.MTH FLOW RATE @ 200mL/min
Cal Std Lot No.:__4D14009_____
LCS Std Lot No.:_4D14008_____ Glass Bulb Bake @
IS/SS Lot No.:___4D14001_____ 130 degree for 30 min

MWH SSFL , CA

File No.	Port No.	Sample Lab No.	Sample ID	Amount	Dilution Factor	Bulb Surr added	Time Sample Loaded	Time Sample Analyzed	Glass Bulb #	PID READING
F403BFB1	1	50uL BFB1	12HRS TUNING	1uL	1x	PASS	@	546		
CCV1	9	1.25/2.5/12.5 CCV1	8260 STARDARD	20mL	1x	545	546	604		
BS1	9	34F0301-BS1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	615	616	634		
BLK1	1	34F0301-BLK1	METHOD BLANK	100cc	1x	715	716	731		
1	2	3F40301-01	EQUIPMENT BLANK	100cc	1x	750	751	800	3	0.0
2	1	3F40301-02	SVL-503-SA8-SV-4.5-5.5	100cc	1x	755	756	829	11	0.0
3	2	34F0301-DUP1	SVL-503-SA8-SV-4.5-5.5	100cc	1x	755	756	859	11	0.0
4	3	3F40301-03	SVL-534-SA8-SV-6.0-7.0	100cc	1x	834	835	929	6	0.0
5	4	3F40301-04	SVL-834-SA8-SV-6.0-7.0	100cc	1x	834	835	959	12	0.0
6	5	3F40301-05	SVL-507-SA5C-SV-5.0-6.0	100cc	1x	915	916	1027	2	0.7
7	6	3F40301-06	SVL-507-SA5C-SV-10.5-11.5	100cc	1x	941	942	1056	13	1.2
8	7	3F40301-07	SVL-508-SA5C-SV-8.25-9.25	100cc	1x	1014	1015	1125	1	0.6
9	8	3F40301-08	SVL-535-SA5C-SV-5.0-6.0	100cc	1x	1059	1100	1154	10	1.5
10	1	3F40301-09	SVL-535-SA5C-SV-10.0-11.0	100cc	1x	1122	1123	1227	7	2.1
11	2	3F40301-10	SVL-535-SA5C-SV-15.0-16.0	100cc	1x	1150	1151	1256	4	0.8
12	3	3F40301-11	SVL-543-SA5C-SV-5.0-6.0	100cc	1x	1256	1257	1325	5	1.7
13	4	3F40301-12	SVL-543-SA5C-SV-11.0-12.0	100cc	1x	1315	1316	1354	9	0.0
10	1	3F40301-13	FB-060314	100cc	1x	1338	1339	1423	8	0.0
BSD1	9	34F0301-BSD1	8260 1.25/2.5/12.5 ug/L LCS	20mL	1x	1435	1436	1452		

APPENDIX D

DATA USABILITY AND VALIDATION REPORTS

Data Usability Assessment Report, DOE Phase 3 Soil Vapors, Santa Susana Field Laboratory, Ventura County, California

Prepared for:

Department of Energy

September 2014

Prepared by:
MEC^X
12269 East Vassar Drive
Auroroa, Colorado 80014
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ATTACHMENTS

Appendix A Laboratory Data Summary Reports
Appendix B Data Validation Reports

ACRONYMS

%	Percent
%D	Percent Different
Calscience	Calscience Environmental Laboratories, Inc.
DOE	Department of Energy
DUA	Data Usability Assessment
EST	Environmental Support Technologies
FB	Field Blank
FD	Field duplicate
Lancaster	Eurofins' Lancaster Laboratories Environmental
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDL	Method Detection Limit
MEC^X	MEC^X, Inc.
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RL	Reporting Limit
RPD	Relative Percent Difference
SDG	Sample Delivery Group
SSFL	Santa Susana Field Laboratory
TA-Denver	TestAmerica Laboratories, Inc.
TIC	Tentatively Identified Compound
VOC	Volatile Organic Compounds

1. Introduction

The objective of this data usability assessment (DUA) report is to assess the quality of the analytical results of the soil vapor samples collected during the chemical sampling activities in Area IV for Department of Energy (DOE) at the Santa Susana Field Laboratory (SSFL) in Ventura County, California. Samples were collected and analyzed to provide additional characterization data. The data may also be used to support future activities such as feasibility studies, risk assessments, fate-and-transport modeling, and remedial actions.

Individual method requirements and guidelines from the Quality Assurance Project Plan, SSFL RFI Surficial Media Operable Unit, Revision 5, March 2013 (SSFL QAPP) were used in this assessment. The SSFL QAPP includes the quality assurance/quality control procedures to confirm the quality of field and laboratory data. This report is intended as a general data quality evaluation designed to summarize data issues and to provide an overall data usability assessment.

2. Analytical Data

This DUA report covers 177 soil vapor samples, 19 soil vapor field duplicate (FD) samples, 16 field/equipment blanks (FB), and 23 ambient blanks (AB) and 19 soil vapor split samples. The samples were collected between May 21, 2014 and June 30, 2014 and were reported in 31 sample delivery groups (SDG). Analyses were performed by the on-site mobile laboratory Environmental Support Technologies (EST), based in Santa Ana, California and off-site laboratories TestAmerica Laboratories, Inc.-Denver (TA-Denver) located in Arvada, Colorado, Calscience Environmental Laboratories (Calscience) located in Garden Grove, California, and Eurofins' Lancaster Laboratories Environmental (Lancaster), located in Lancaster, Pennsylvania. All samples were collected under chain-of-custody. Samples were delivered to the off-site laboratories via overnight carrier. Analyses performed are listed in Table 1.

TABLE 1: ANALYTICAL PARAMETERS BY LABORATORY

Parameter	Analysis Method	Lab Name
VOCs	8260B	EST
VOCs	TO-15	Calscience, Lancaster, TA-Denver

VOC = volatile organic compound

The chains-of-custody and case narratives associated with each SDG are included in the laboratory data summary reports provided in Appendix A.

All data was validated at Level V by MEC^X chemists, as specified in the SSFL QAPP. Validation included an assessment of:

- sample management - chain-of-custody documentation and sample receipt conditions;
- holding-time compliance;
- blanks – method, ambient blank, and field blank;
- laboratory control sample accuracy or laboratory control sample/laboratory control sample duplicate (LCS/LCSD) accuracy and precision;
- surrogate accuracy;
- laboratory duplicate precision;
- field duplicate precision;
- calibration;
- compound identification;
- compound quantification; and
- other method-specific criteria defined by the SSFL QAPP.

Data qualifiers were assigned according to the SSFL QAPP and qualified data were assigned reason code(s), which describe the reason for qualification. The qualifiers and reason codes are described in the data validation reports and were uploaded into the Boeing electronic

database. The data validation reports are provided in Appendix B. The data qualifiers listed in the SSFL QAPP are defined below:

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.
- J - Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- NJ - Analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.
- UJ - The analyte was not deemed above the reported sample quantitation limit; however, the reported quantitation limit is approximate.
- R – The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

3. Findings

3.1. Sample Preservation

The soil vapor samples did not require any physical or chemical preservation.

3.2. Holding Times

Analytical holding times were assessed against the criteria listed in Table 5-1 of the SSFL QAPP. The holding time was from the time of sampling to the start of the analysis. All samples were analyzed within the prescribed holding times. Bulb surrogates were added within 15 minutes of collection and all samples were analyzed within six hours of collection for samples analyzed on site. All samples collected in Summa canisters and analyzed at a fixed laboratory were analyzed within 30 days of collection. No data were qualified for holding time exceedances.

3.3. Calibration

Calibrations are established by the laboratory to ensure proper identification and quantitation of target compounds. Although Level V validation does not include the assessment of calibration data, calibration was reviewed as part of the soil vapor validation. Eight compounds had calibration outliers. Toluene was qualified in all samples analyzed on-site for an initial calibration outlier.

TABLE 2: CALIBRATION QUALIFICATION SUMMARY

			Number of Results Qualified as Estimated Nondetects or Estimated Detects	
Method	**Total Number of Samples**	**Total Number of Sample Results**	**UJ-Flag**	**J-Flag**
8260B – VOCs	127	3048	160	33
TO-15 - VOCs	50	1200	15	0

Approximately 4.9% of the results were qualified (208 of 4,248 results) as estimated detects or nondetects. Sample results that have been qualified as estimated due to calibration criteria are usable for project decisions; however, data users should consider the impact to any result that is qualified as estimated as it may contain a bias that should be accounted for during the decision-making process.

3.4. Method Blanks

Method blanks are used to monitor each preparation or analytical batch for contamination from glassware, reagents, and other potential sources of laboratory contamination. A method blank is an analyte-free matrix (ambient air for soil vapor samples) to which all reagents are added in the same amounts as are added to samples. The method blank is processed through the same analytical procedures, at the same time, as the site samples in the batch. At least one method blank is prepared for each analytical batch, containing a maximum of 20 site samples.

Blank qualifications were assigned using the SSFL QAPP 5× and 10× rules. Target compound detects less than or equal to 5× a blank detect and common laboratory contaminant compound detects less than or equal to 10× a blank detect were qualified as nondetected, "U." Nondetected results were reported at the reporting limit (RL) if the original detect was less than or equal to the RL or reported at the level of contamination if the original detect was greater than the RL.

Method blanks were analyzed at the required frequency and were generally free of contamination that would affect the sample results, with some exceptions as listed in Table 3.

TABLE 2: ANALYTICAL BLANK QUALIFICATION SUMMARY

Method	Total Number of Samples	Total Number of Sample Results	Number of Results Qualified as Nondetected or Estimated Nondetects
8260B – VOCs	127	3048	18
TO-15 - VOCs	50	1200	0

Approximately 0.4% of the results (18 of 4,248 results) were qualified as nondetected. The nature and level of qualifications for method blanks was considered acceptable and the data are usable.

3.5. Field Blanks and Ambient Blanks

Field blanks (air passed through the sampling equipment) and ambient air blanks are collected to monitor contamination from sources associated with field collection activities. Field blanks and ambient blanks are collected during each day of air sampling to assess the presence of potential contaminants in the ambient air or for breakthrough of ambient surface air into the sample train.

Qualifications were assigned using the SSFL QAPP 5× and 10× rules described in Section 3.4.

Field blanks and ambient blanks were collected and analyzed at the required frequency and were generally free of contamination that would affect the sample results, with some exceptions as listed in Table 4.

TABLE 3: FIELD BLANK AND AMBIENT BLANK QUALIFICATION SUMMARY

Method	Total Number of Samples	Total Number of Sample Results	Number of Results Qualified as Nondetected
8260B – VOCs	127	3048	12
TO-15 - VOCs	50	1200	133

Approximately 3.4% of the results (145 of 4,248 results) were qualified as nondetected. The qualification of these results as nondetect does not adversely affect the identification of site related contaminants.

For the air matrix TO-15 VOC analyses, approximately 11% of the results were qualified as nondetected. Detects in the ambient blanks were usually between the MDL and the RL as were the majority of the detects that were qualified as nondetected. Since the majority of VOCs detected in the ambient blanks were below the RLs, the resulting qualification of associated sample results as nondetect does not adversely affect the identification of site-related contaminants. The nature and level of qualifications for field and ambient blanks was considered acceptable and the data are usable.

3.6. Field Duplicate and Split Samples

A field duplicate, or collocated sample, is an independent sample collected immediately after the original sample, to the extent practicable. Field duplicates were collected at an approximate rate of 10% and are used to document sampling and analytical precision and representativeness. Precision is expressed in terms of the relative percent difference (RPD) between the parent (original) and field duplicate results. The RPD criterion is 50% for soil vapor samples. The RPD criterion is general applied only to common detects above the RL. Primary and field duplicate outliers are presented in Table 5.

The nature and level of qualifications for field duplicates was considered acceptable and the data are considered usable.

TABLE 4: PRIMARY/FIELD DUPLICATE PRECISION OUTLIER SUMMARY

Method	Total Number of Samples	Total Number of Sample Results	Total Number of RPD Outliers
8260B - VOCs	16	384	0
TO-15 – VOCs	3	72	1

Split samples are independent samples, collected as quickly as possible after the original sample, to the extent practicable. These samples are sent to a different off-site laboratory in order to check the performance of the primary laboratory. Split samples were collected at an approximate rate of 10%. Precision is expressed in terms of the RPD between the parent

(original) and split sample result. As an initial evaluation, an RPD criterion of 50% for soil vapor samples was used in assessing data usability. The comparability of the data was evaluated and outliers compared to look for trends in the accuracy and precision of reporting the data so that a bias or error is not laboratory dependent.

Split sample results with RPDs exceeding these criteria are not routinely qualified. The comparability between results reported by the split laboratories did not indicate overall greater than typical variability of the data and the data are considered usable. Primary and split sample outliers are presented in Table 6.

TABLE 5: PRIMARY/SPLIT DUPLICATE PRECISION OUTLIER SUMMARY

Method	Total Number of Samples	Total Number of Sample Results	Total Number of RPD Outliers
TO-15 – VOCs	19	456	3

3.7. Laboratory Duplicates

Laboratory duplicate samples are environmental samples analyzed in duplicate by the laboratory as an assessment of method precision. Laboratory duplicate samples were analyzed by the on-site mobile laboratory. Precision is expressed in terms of the RPD between the parent (original) and laboratory duplicate results. The RPD criterion is 25%. All laboratory duplicates met the QC criterion of 25% RPD with the exception of two results (0.1% of the 4,248 results) were qualified as estimated detects, “J,” for laboratory duplicate outliers.

3.8. Surrogates

Surrogates are organic analytes that behave similarly as the analytes of interest, or have been deuterated, but are not expected to occur naturally in the samples. They are spiked into the standards, field samples, and laboratory quality control samples prior to sample preparation. The surrogate recoveries provide additional information about the possible influence of the matrix on the accuracy of the measurements. All of the surrogates were recovered within the established control limits.

Overall, the nature and lack of qualifications for surrogate outliers was considered acceptable and the data are usable.

3.9. Laboratory Control Samples

LCSs are used to monitor method performance. An LCS is an analyte-free matrix (humidified laboratory grade ultrapure air) spiked with known amounts of analytes that come from a source different than that used for calibration standards. The LCS is processed through the same

preparation and analytical procedures, at the same time, as the site samples in the batch. At least one LCS or LCSD/LCSD pair is prepared for each analytical batch, containing a maximum of 20 samples. Accuracy and precision criteria are listed in Appendix D of the SSFL QAPP.

LCS/LCSDs were analyzed at the required frequency. Accuracy and precision limits were generally met, with some exceptions as listed in Table 7.

TABLE 7: LABORATORY CONTROL SAMPLE QUALIFICATION SUMMARY

			Number of Results Estimated for Recovery or Precision		Number of Results Rejectec
Method	**Total Number of Samples**	**Total Number of Results**	**J Flag**	**UJ Flag**	**R Flag**
8260B – VOCs	127	3048	3	206	0
To-15 VOCs	50	1200	7	0	0

No data were rejected for LCS/LCSD outliers.

Approximately 5.0% of the results were qualified (216 of 4,248 results) as estimated detects or nondetects. Sample results that have been qualified as estimated due to accuracy or precision criteria are usable for project decisions; however, data users should consider the impact to any result that is qualified as estimated as it may contain a bias that should be accounted for during the decision-making process.

Overall, the nature and level of qualifications for LCS/LCSD outliers was considered acceptable and the data are usable.

3.10. Tentatively Identified Compounds

Tentatively identified compound (TIC) were not evaluated in the soil vapor analysis.

3.11. Other

Toluene in one sample was reported above the calibration range due to limited sample volume which precluded a reanalysis of the sample. This results was qualified as an estimated detect, “J.”

3.12. Chain of Custody

All chain of custodies were reviewed in the data validation process. Although there were minor issues such as overwritten text and cross-outs without signatures and dates, none were sufficient to warrant qualification or rejection of the data. The chains-of-custody are provided in

the laboratory analytical data packages in Attachment A. The detailed review of all chain of custodies can be found in the Sample Handling Section of the Data Validation Reports found in Appendix B.

3.13. Overall Assessment

The final activity in the DUA is an assessment of whether the data met the data quality objectives. The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. Precision, accuracy, representativeness, completeness, comparability and sensitivity are addressed in the SSFL QAPP. The following summary highlights the data evaluation findings for the above defined event.

- Precision of the data was verified through the review of field and laboratory data quality indicators: field duplicate, laboratory duplicate, and LCS/LCSD RPDs. Precision was generally acceptable with the exception of several analytes which were qualified as estimated due to laboratory duplicate, FD, or LSC/LCSD RPD issues. Overall, 220 results out of 4,248 total results (5.2% percent) were qualified for precision exceptions.
- Accuracy of the data was verified through the review of the LCS/LSCD and surrogate standard recoveries, as well as the evaluation of the blank data. Accuracy was generally acceptable with the exception of some analytes being qualified as estimated detects and nondetects due to LCS/LCSD recovery outliers. Overall, 33 results out of 4,248 total results (0.8%) were qualified for accuracy exceptions. Analytical/field blank data were generally free of contamination with some analytes being qualified as non-detected. Overall, 177 results out of 4,248 total results (4.2%) were qualified for blank contamination.
- Representativeness of the data was verified through the samples' collection, storage, and verification of holding-time compliance. The laboratory did not note any issues related to sample collection or storage of the samples. All samples data were reported from analyses within the holding times listed in the SSFL QAPP.
- Comparability of the data was verified through the use of standard analytical procedures and standard units for reporting. Results obtained are comparable to industry standards as the collection and analytical techniques followed approved, documented procedures.
- Completeness is a measure of the number of valid measurements obtained in relation to the total number of measurements planned. Completeness is expressed as the percentage of valid or usable measurements compared to the planned measurements. Valid data are defined as all data that are not rejected for project use. The completeness goal of 90 percent was met for all analyte/methods, as indicated in Table 8. (Note: Table 8 does not include data rejected for duplicate analyses; it is the total number of validated results reported to the electronic database.) No soil vapor data were rejected.

TABLE 8: SITE COMPLETENESS SUMMARY

Method	Total Number of Samples	Total Number of Results	Results Qualified as Nondetected		Results Qualified as Estimated		Rejected Results		Completeness	
			Number	%	Number	%	Number	%	Number	%
8260B – VOCs	127	3048	400	13	38	1.2	0	0	1498	100
TO-15 - VOCs	50	1200	148	12	7	0.6	0	0	1836	100

4. References

MEC^{X}. 2013. *Quality Assurance Project Plan, SSFL RFI Surficial Media Operable Unit*, Revision 5, March.

U.S. Environmental Protection Agency (USEPA) 1984. *Guidelines Establishing Test Procedures for the Analysis of Pollutants*. Code of Federal Regulations. Title 40, Part 136, Appendix B. Government Printing Office. Washington, D.C. March.

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3E42701

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3E42701
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	12
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB-3E42701	3E42701-01	N/A	Soil Vapor	5/27/2014	8260B
SVL-502-SA5D-SV-5.0-6.0	3E42701-02	N/A	Soil Vapor	5/27/2014	8260B
SVL-802-SA5D-SV-5.0-6.0	3E42701-03	N/A	Soil Vapor	5/27/2014	8260B
SVL-502-SA5D-SV-13.0-14.0	3E42701-04	N/A	Soil Vapor	5/27/2014	8260B
SVL-502-SA5D-SV-18.0-19.0	3E42701-05	N/A	Soil Vapor	5/27/2014	8260B
SVL-513-SA5D-SV-5.0-6.0	3E42701-06	N/A	Soil Vapor	5/27/2014	8260B
SVL-513-SA5D-SV-10.0-11.0	3E42701-07	N/A	Soil Vapor	5/27/2014	8260B
SVL-513-SA5D-SV-15.5-16.5	3E42701-08	N/A	Soil Vapor	5/27/2014	8260B
SVL-512-SA5D-SV-5.0-6.0	3E42701-09	N/A	Soil Vapor	5/27/2014	8260B
SVL-512-SA5D-SV-11.0-12.0	3E42701-10	N/A	Soil Vapor	5/27/2014	8260B
SVL-512-SA5D-SV-16.75-17.75	3E42701-11	N/A	Soil Vapor	5/27/2014	8260B
FB-052714	3E42701-12	N/A	Soil Vapor	5/27/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3E42701 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 10, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The %D for 1,1,1-trichloroethane in the continuing calibration was 19.4%; therefore, results for 1,1,1-trichloroethane, all nondetects, were qualified as estimated, "UJ," in the samples. The %D exceeded 15% for 1,1,2-trichloroethane also; however, as the outlier was associated with a high recovery and the analyte was not detected in the samples, no further qualifications were applied. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had a detect for m,p-xylene reported at 0.0080(J) µg/L. Sample detects less than five times the method blank concentration were qualified as nondetected, "U," at the reporting limit if detected below the reporting limit, or at the level of contamination if detected at or above the reporting limit. The method blank had no other target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on SVL-502-SA5D-SV-5.0-6.0. RPDs were 24% for ethylbenzene, 20% for m,p-xylene, 19% for o-xylene, and 17% for toluene. No other detects were present in the parent or duplicate sample.

- Blank Spikes and Laboratory Control Samples: Recoveries affecting sample data were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining

compounds. RPDs were within the control limit of ≤20%, with the exception of RPDs of 64.0% and 23.9% for dichlorofluoromethane and tetrachloroethene, respectively. Sample results for both compounds were qualified as estimated, "J," for detects and "UJ," for nondetects.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-052714 was the field blank and EB-3E42701 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-502-SA5D-SV-5.0-6.0 and SVL-802-SA5D-SV-5.0-6.0 were identified as field duplicate samples. The samples had four common detects. RPDs were 22% for ethylbenzene, 32% for m,p-xylene, 40% for o-xylene, and 18% for toluene.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. Sample SVL-513-SA5D-SV-10.0-11.0 was analyzed and reported at a 20× dilution for a high concentration of 1,1,2-trichloro-1,2,2-trifluoroethane.

Validated Sample Result Forms: 3E42701

Analysis Method 8260B

Sample Name EB-3E42701 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-01 **Sample Date:** 5/27/2014 9:09:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-052714 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-12 **Sample Date:** 5/27/2014 2:00:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-502-SA5D-SV-13.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-04 **Sample Date:** 5/27/2014 9:09:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.0044	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	J	U	B, result changed from 0.011
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.011	0.02	0.0043	ug/L	J	J	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-502-SA5D-SV-18.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-05 **Sample Date:** 5/27/2014 9:42:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.054	0.02	0.016	ug/L			
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.004	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	J	U	B, result changed from 0.012
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.007	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-502-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-02 **Sample Date:** 5/27/2014 8:32:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.025	0.02	0.003	ug/L			
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.079	0.02	0.008	ug/L			
o-Xylene	95476	0.036	0.02	0.0089	ug/L			
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.12	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-512-SA5D-SV-11.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-10 **Sample Date:** 5/27/2014 1:03:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.099	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.071	0.02	0.008	ug/L			
o-Xylene	95476	0.018	0.02	0.0089	ug/L	J	J	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III

Analysis Method 8260B

Toluene	108883	0.16	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-512-SA5D-SV-16.75 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-11 **Sample Date:** 5/27/2014 1:34:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.026	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.015	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-512-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-09 **Sample Date:** 5/27/2014 12:32:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.11	0.02	0.012	ug/L			

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.01	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.041	0.02	0.008	ug/L			
o-Xylene	95476	0.014	0.02	0.0089	ug/L	J	J	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.035	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-513-SA5D-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-07 **Sample Date:** 5/27/2014 10:45:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.4	0.4	0.18	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.4	0.4	0.11	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.4	0.4	0.18	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	86	0.4	0.24	ug/L			
1,1,2-Trichloroethane	79005	0.4	0.4	0.13	ug/L	U	U	
1,1-Dichloroethane	75343	0.4	0.4	0.12	ug/L	U	U	
1,1-Dichloroethene	75354	0.4	0.4	0.14	ug/L	U	U	
1,2-Dichloroethane	107062	0.4	0.4	0.21	ug/L	U	U	
Benzene	71432	0.4	0.4	0.081	ug/L	U	U	
Carbon Tetrachloride	56235	0.4	0.4	0.23	ug/L	U	U	
Chloroethane	75003	0.4	0.4	0.32	ug/L	U	U	
Chloroform	67663	0.4	0.4	0.12	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.4	0.4	0.19	ug/L	U	U	
Dichlorodifluoromethane	75718	0.4	0.4	0.22	ug/L	U	UJ	*III
Ethylbenzene	100414	0.4	0.4	0.06	ug/L	U	U	
Methylene chloride	75092	0.4	0.4	0.21	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.4	0.4	0.16	ug/L	U	U	
o-Xylene	95476	0.4	0.4	0.18	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.12	0.4	0.11	ug/L	J	J	*III
Toluene	108883	0.088	0.4	0.085	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.4	0.4	0.078	ug/L	U	U	
Trichloroethene	79016	0.4	0.4	0.23	ug/L	U	U	
Trichlorofluoromethane	75694	0.4	0.4	0.11	ug/L	U	U	
Vinyl chloride	75014	0.4	0.4	0.2	ug/L	U	U	

Sample Name SVL-513-SA5D-SV-15.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-08 **Sample Date:** 5/27/2014 11:22:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.4	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.023	0.02	0.0072	ug/L			
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.0078	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L		U	B, RL=result
o-Xylene	95476	0.01	0.02	0.0089	ug/L	J	J	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.024	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-513-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-06 **Sample Date:** 5/27/2014 10:15:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.0072	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.023	0.023	0.008	ug/L		U	B, RL changed from 0.02
o-Xylene	95476	0.012	0.02	0.0089	ug/L	J	J	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.016	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-802-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42701-03 **Sample Date:** 5/27/2014 8:32:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.057	0.02	0.008	ug/L			
o-Xylene	95476	0.024	0.02	0.0089	ug/L			
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	UJ	*III
Toluene	108883	0.1	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3E42801

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3E42801
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	11
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB-3E42801	3E42801-01	N/A	Soil Vapor	5/27/2014	8260B
SVL-515-SA5D-SV-5.0-6.0	3E42801-02	N/A	Soil Vapor	5/28/2014	8260B
SVL-815-SA5D-SV-5.0-6.0	3E42801-03	N/A	Soil Vapor	5/28/2014	8260B
SVL-515-SA5D-SV-12.5-13.8	3E42801-04	N/A	Soil Vapor	5/28/2014	8260B
SVL-511-SA5D-SV-4.5-5.5	3E42801-05	N/A	Soil Vapor	5/28/2014	8260B
SVL-511-SA5D-SV-9.5-10.5	3E42801-06	N/A	Soil Vapor	5/28/2014	8260B
SVL-516-SA5D-SV-6.0-7.0	3E42801-07	N/A	Soil Vapor	5/28/2014	8260B
SVL-516-SA5D-SV-14.0-15.0	3E42801-08	N/A	Soil Vapor	5/28/2014	8260B
SVL-510-SA5D-SV-7.5-8.5	3E42801-09	N/A	Soil Vapor	5/28/2014	8260B
SVL-544-SA5D-SV-4.5-5.5	3E42801-10	N/A	Soil Vapor	5/28/2014	8260B
FB-052814	3E42801-11	N/A	Soil Vapor	5/28/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3E42801 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 10, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The continuing calibration %D exceeded 15% toluene, at -16.9%. As the outlier was associated with a high recovery, only sample detects for toluene were qualified as estimated, "J." The %Ds for chloroethane, 1,1,2-trichloroethane and 1,1,2,2-tetrachloroethane also exceeded 15%; however, as the outliers were associated with high recoveries and the analytes were not detected in the samples, no further qualifications were applied. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had a detect for toluene reported at 0.013(J) µg/L. Sample detects less than five times the method blank concentration were qualified as nondetected, "U," at the reporting limit. The method blank had no other target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on SVL-515-SA5D-SV-5.0-6.0. No reportable detects were present in the parent or duplicate sample.

- Blank Spikes and Laboratory Control Samples: Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds. RPDs were within the control limit of ≤20%, with the exception of the RPD of 40.5% for 1,1,2,2-tetrachloroethene.

Sample results for 1,1,2,2-tetrachloroethene, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-052814 was the field blank and EB-3E42801 was the equipment rinsate associated with the site samples in this SDG. The field blank had a reportable detect for 1,1,2-trichloro-1,2,2-trifluoroethane at 0.017(J) µg/L. Site sample detects less than five times the field blank concentration were qualified as nondetected, "U," at the level of contamination. The field QC samples had no other reportable detects.

    - Field Duplicates: Samples SVL-515-SA5D-SV-5.0-6.0 and SVL-815-SA5D-SV-5.0-6.0 were identified as field duplicate samples. Neither sample had reportable detects.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3E42801

Analysis Method 8260B

Sample Name EB-3E42801 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-01 **Sample Date:** 5/27/2014 9:42:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-052814 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-11 **Sample Date:** 5/28/2014 1:56:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.017	0.02	0.012	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.008
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-510-SA5D-SV-7.5-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-09 **Sample Date:** 5/28/2014 12:50:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.024	0.024	0.012	ug/L		U	F, RL changed from 0.02
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.0088

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-511-SA5D-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-05 **Sample Date:** 5/28/2014 9:46:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-511-SA5D-SV-9.5-1 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-06 **Sample Date:** 5/28/2014 10:19:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-515-SA5D-SV-12.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-04 **Sample Date:** 5/28/2014 8:57:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.0086	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.028	0.02	0.008	ug/L			
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Analysis Method 8260B

Toluene	108883	0.055	0.055	0.0043	ug/L		UJ	B, C, RL changed from 0.02
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-515-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-02 **Sample Date:** 5/28/2014 8:16:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.0052
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-516-SA5D-SV-14.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-08 **Sample Date:** 5/28/2014 11:26:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.024	0.024	0.012	ug/L		U	F, RL changed from 0.02

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.0046
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-516-SA5D-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-07 **Sample Date:** 5/28/2014 10:55:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-544-SA5D-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-10 **Sample Date:** 5/28/2014 1:25:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.019	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.052	0.02	0.008	ug/L			
o-Xylene	95476	0.029	0.02	0.0089	ug/L			
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.07	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-815-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42801-03 **Sample Date:** 5/28/2014 8:16:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	**U**	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	**U**	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	**U**	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	**U**	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	**U**	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	**U**	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	**U**	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	**U**	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	**U**	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	**U**	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	**U**	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	**U**	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	**U**	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	**U**	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	**UJ**	**B, C, result changed from 0.0074**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3E42901

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3E42901
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	12
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB-3E42901	3E42901-01	N/A	Soil Vapor	5/27/2014	8260B
SVL-544-SA5D-SV-10.0-11.0	3E42901-02	N/A	Soil Vapor	5/29/2014	8260B
SVL-844-SA5D-SV-10.0-11.0	3E42901-03	N/A	Soil Vapor	5/29/2014	8260B
SVL-530-SA5C-SV-6.5-7.5	3E42901-04	N/A	Soil Vapor	5/29/2014	8260B
SVL-519-SA5D-SV-8.5-9.5	3E42901-05	N/A	Soil Vapor	5/29/2014	8260B
SVL-526-SA5D-SV-7.5-8.5	3E42901-06	N/A	Soil Vapor	5/29/2014	8260B
SVL-530-SA5D-SV-5.0-6.0	3E42901-07	N/A	Soil Vapor	5/29/2014	8260B
SVL-531-SA5D-SV-5.0-6.0	3E42901-08	N/A	Soil Vapor	5/29/2014	8260B
SVL-539-SA5D-SV-4.5-5.5	3E42901-09	N/A	Soil Vapor	5/29/2014	8260B
SVL-539-SA5D-SV-8.5-9.5	3E42901-10	N/A	Soil Vapor	5/29/2014	8260B
SVL-572-SA5C-SV-6.8-7.8	3E42901-11	N/A	Soil Vapor	5/29/2014	8260B
FB-052914	3E42901-12	N/A	Soil Vapor	5/29/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3E42901 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 11, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene, all nondetects, were qualified as estimated, "UJ." The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. Continuing calibration %Ds for 1,1,2-trichloroethane and 1,1,2,2-tetrachloroethane exceeded 15%; however, as the outliers were associated with high recoveries and the analytes were not detected in the samples, no further qualifications were applied. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had a detect for toluene reported at 0.0118(J) µg/L. Sample detects less than five times the method blank concentration were qualified as nondetected, "U," at the reporting limit if detected below the reporting limit, or at the level of contamination if detected above. The method blank had no other target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on SVL-544-SA5D-SV-10.0-11.0. The analyses had three common reportable detects. RPDs were 1.3% for ethylbenzene, 19% for m,p-xylene, and 6.9% for o-xylene.

- Blank Spikes and Laboratory Control Samples: Recoveries affecting sample data were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds. RPDs were within the control limit of ≤20%, with the exception of RPDs for

1,1,1-trichloroethane of 21.2%, 1,1-dichloroethene of 23.4%, and 1,1,2,2-tetrachloroethane of 25.3%. Sample results for those compounds, all nondetects, were qualified as estimated, "J," for detects and "UJ," for nondetects.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-052914 was the field blank and EB-3E42901 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-544-SA5D-SV-10.0-11.0 and SVL-844-SA5D-SV-10.0-11.0 were identified as field duplicate samples. The samples had three common detects. RPDs were 14% for ethylbenzene, 25% for m,p-xylene, and 59% for o-xylene.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3E42901

Analysis Method 8260B

Sample Name EB-3E42901 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-01 **Sample Date:** 5/27/2014 10:45:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-052914 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-12 **Sample Date:** 5/29/2014 1:59:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

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1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-519-SA5D-SV-8.5-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-05 **Sample Date:** 5/29/2014 9:30:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	3	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.008	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.027	0.02	0.008	ug/L			
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.03	0.03	0.0043	ug/L		UJ	B, C, RL changed from 0.02

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-526-SA5D-SV-7.5-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-06 **Sample Date:** 5/29/2014 10:12:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.011	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.031	0.02	0.008	ug/L			
o-Xylene	95476	0.01	0.02	0.0089	ug/L	J	J	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.044	0.044	0.0043	ug/L		UJ	B, C, RL changed from 0.02
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-530-SA5C-SV-6.5-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-04 **Sample Date:** 5/29/2014 8:42:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

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1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-530-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-07 **Sample Date:** 5/29/2014 10:46:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

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Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-531-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-08 **Sample Date:** 5/29/2014 11:20:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-539-SA5D-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-09 **Sample Date:** 5/29/2014 12:29:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.0048
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-539-SA5D-SV-8.5-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-10 **Sample Date:** 5/29/2014 1:00:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.0052	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.014	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.0072
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-544-SA5D-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-02 **Sample Date:** 5/29/2014 7:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.015	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.06	0.02	0.008	ug/L			
o-Xylene	95476	0.024	0.02	0.0089	ug/L			
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.039	0.039	0.0043	ug/L		UJ	B, C, RL changed from 0.02
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-572-SA5C-SV-6.8-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-11 **Sample Date:** 5/29/2014 1:39:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.011
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-844-SA5D-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E42901-03 **Sample Date:** 5/29/2014 7:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.013	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.047	0.02	0.008	ug/L			
o-Xylene	95476	0.013	0.02	0.0089	ug/L	J	**J**	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.034	0.034	0.0043	ug/L		**UJ**	**B, C, RL changed from 0.02**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3E43001

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3E43001
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	9
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB-3E43001	3E43001-01	N/A	Soil Vapor	5/27/2014	8260B
SVL-546-SA5D-SV-5.0-6.0	3E43001-02	N/A	Soil Vapor	5/30/2014	8260B
SVL-846-SA5D-SV-5.0-6.0	3E43001-03	N/A	Soil Vapor	5/30/2014	8260B
SVL-546-SA5D-SV-10.0-11.0	3E43001-04	N/A	Soil Vapor	5/30/2014	8260B
SVL-546-SA5D-SV-16.0-17.0	3E43001-05	N/A	Soil Vapor	5/30/2014	8260B
SVL-550-SA5D-SV-5.0-6.0	3E43001-06	N/A	Soil Vapor	5/30/2014	8260B
SVL-550-SA5D-SV-11.0-12.0	3E43001-07	N/A	Soil Vapor	5/30/2014	8260B
SVL-550-SA5D-SV-17.0-18.0	3E43001-08	N/A	Soil Vapor	5/30/2014	8260B
FB-053014	3E43001-09	N/A	Soil Vapor	5/30/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3E43001 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 11, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. Continuing calibration %Ds for 1,1-dichloroethane and 1,1,1-trichloroethane exceeded 15% at 17.7% and 16.8%; therefore, sample results for both compounds, all nondetects, were qualified as estimated, "UJ." The %Ds for 1,1,2-trichloroethane, 1,1,2,2-tetrachloroethane, and trichlorofluoromethane also exceeded 15%; however, as the outliers were associated with high recoveries and the analytes were not detected in the samples, no further qualifications were applied. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had a detect for toluene reported at 0.0048(J) µg/L. Sample detects less than five times the method blank concentration were qualified as nondetected, "U," at the reporting limit. The method blank had no other target compound detects above the reporting limit. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on SVL-546-SA5D-SV-5.0-6.0. The analyses had one common reportable detect below the reporting limit for m,p-xylene, with an RPD of 21%.

- Blank Spikes and Laboratory Control Samples: Recoveries affecting sample data were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane,

trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds. RPDs were within the control limit of ≤20%, with the exception of the RPD for 1,1,2,2-tetrachloroethane, of 33.8%. Sample results for 1,1,2,2-tetrachloroethane, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-053014 was the field blank and EB-3E43001 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reportable detects.

    - Field Duplicates: Samples SVL-546-SA5D-SV-5.0-6.0 and SVL-846-SA5D-SV-5.0-6.0 were identified as field duplicate samples. The samples had a common detect below the reporting limit for m,p-xylene with an RPD of 7.2%.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3E43001

Analysis Method 8260B

Sample Name EB-3E43001 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-01 **Sample Date:** 5/27/2014 8:32:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-053014 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-09 **Sample Date:** 5/30/2014 11:09:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.012
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-546-SA5D-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-04 **Sample Date:** 5/30/2014 8:19:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.01

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-546-SA5D-SV-16.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-05 **Sample Date:** 5/30/2014 11:21:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.0044
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-546-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-02 **Sample Date:** 5/30/2014 7:46:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.011	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.013
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-550-SA5D-SV-11.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-07 **Sample Date:** 5/30/2014 10:07:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.0088	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.03	0.02	0.008	ug/L			
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Analysis Method 8260B

Toluene	108883	0.028	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-550-SA5D-SV-17.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-08 **Sample Date:** 5/30/2014 10:42:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.006	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.023	0.02	0.008	ug/L			
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.011
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-550-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-06 **Sample Date:** 5/30/2014 9:39:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-846-SA5D-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3E43001-03 **Sample Date:** 5/30/2014 7:46:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	C
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	C
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0094	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	B, C, result changed from 0.013
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F40201

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F40201
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	9
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F40201	3F40201-01	N/A	Soil Vapor	6/2/2014	8260B
SVL-528-SA8-SV-5.0-6.0	3F40201-02	N/A	Soil Vapor	6/2/2014	8260B
SVL-528-SA8-SV-11.0-12.0	3F40201-03	N/A	Soil Vapor	6/2/2014	8260B
SVL-528-SA8-SV-18.5-19.5	3F40201-04	N/A	Soil Vapor	6/2/2014	8260B
SVL-505-SA5C-SV-5.0-6.0	3F40201-05	N/A	Soil Vapor	6/2/2014	8260B
SVL-505-SA5C-SV-10.0-11.0	3F40201-06	N/A	Soil Vapor	6/2/2014	8260B
SVL-805-SA5C-SV-10.0-11.0	3F40201-07	N/A	Soil Vapor	6/2/2014	8260B
SVL-505-SA5C-SV-15.0-16.0	3F40201-08	N/A	Soil Vapor	6/2/2014	8260B
FB-060214	3F40201-09	N/A	Soil Vapor	6/2/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F40201 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 15, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The continuing calibration %D for cis-1,2-dichloroethene exceeded 15% at 17.4%; therefore, sample results for cis-1,2-dichloroethene, all nondetects, were qualified as estimated, "UJ." The %D for 1,1,2,2-tetrachloroethane also exceeded 15%; however, as the outlier was associated with a high recovery and the analyte was not detected in the samples, no further qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-528-SA8-SV-5.0-6.0. The analyses had no reported detects.

- Blank Spikes and Laboratory Control Samples: The laboratory analyzed two LCSs at two different spiking levels. Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of the following recoveries affecting sample data: 1,1,2-trichloro-1,2,2-trifluoroethane at 64.0%, 1,1-dichloroethane at 72.0%, toluene at 144%, and dichlorodifluoromethane at 128%. Sample results for 1,1,2-trichloro-1,2,2-trifluoroethane and 1,1-dichloroethane, all nondetects, were

qualified as estimated, "UJ." Sample detects for toluene and dichlorodifluoromethane were qualified as estimated, "J." Several other recoveries were above the control limits; however, as the analytes were not detected in the samples, no further qualifications were assigned.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-060214 was the field blank and EB-3F40201 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reportable detects.

    - Field Duplicates: Samples SVL-505-SA5C-SV-10.0-11.0 and SVL-805-SA5C-SV-10.0-11.0 were identified as field duplicate samples. Sample SVL-505-SA5C-SV-10.0-11.0 had a detect below the reporting limit for dichlorodifluoromethane, and SVL-805-SA5C-SV-10.0-11.0 had a detect below the reporting limit for toluene. The samples had no other reported detects.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F40201

Analysis Method 8260B

Sample Name EB_3F40201 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-01 **Sample Date:** 6/2/2014 11:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-060214 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-09 **Sample Date:** 6/2/2014 1:31:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-505-SA5C-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-06 **Sample Date:** 6/2/2014 11:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.017	0.02	0.011	ug/L	J	J	L
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

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trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-505-SA5C-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-08 **Sample Date:** 6/2/2014 11:59:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0054	0.02	0.0043	ug/L	J	J	C, L
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-505-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-05 **Sample Date:** 6/2/2014 10:52:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

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1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.009	0.02	0.0043	ug/L	J	J	C, L
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-528-SA8-SV-11.0-12 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-03 **Sample Date:** 6/2/2014 9:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.011	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Analysis Method 8260B

Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-528-SA8-SV-18.5-19 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-04 **Sample Date:** 6/2/2014 9:58:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-528-SA8-SV-5.0-6.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-02 **Sample Date:** 6/2/2014 9:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-805-SA5C-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40201-07 **Sample Date:** 6/2/2014 11:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	UJ	L
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	UJ	L
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.0076	0.02	0.0043	ug/L	J	**J**	**C, L**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F40301

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F40301
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	13
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F40301	3F40301-01	N/A	Soil Vapor	6/3/14 7:55 AM	8260B
SVL-503-SA8-SV-4.5-5.5	3F40301-02	N/A	Soil Vapor	6/3/14 7:55 AM	8260B
SVL-534-SA8-SV-6.0-7.0	3F40301-03	N/A	Soil Vapor	6/3/14 8:35 AM	8260B
SVL-834-SA8-SV-6.0-7.0	3F40301-04	N/A	Soil Vapor	6/3/14 8:35 AM	8260B
SVL-507-SA5C-SV-5.0-6.0	3F40301-05	N/A	Soil Vapor	6/3/14 9:15 AM	8260B
SVL-507-SA5C-SV-10.5-11.5	3F40301-06	N/A	Soil Vapor	6/3/14 9:41 AM	8260B
SVL-508-SA5C-SV-8.25-9.25	3F40301-07	N/A	Soil Vapor	6/3/14 10:14 AM	8260B
SVL-535-SA5C-SV-5.0-6.0	3F40301-08	N/A	Soil Vapor	6/3/14 10:59 AM	8260B
SVL-535-SA5C-SV-10.0-11.0	3F40301-09	N/A	Soil Vapor	6/3/14 11:22 AM	8260B
SVL-535-SA5C-SV-15.0-16.0	3F40301-10	N/A	Soil Vapor	6/3/14 11:50 AM	8260B
SVL-543-SA5C-SV-5.0-6.0	3F40301-11	N/A	Soil Vapor	6/3/14 12:56 PM	8260B
SVL-543-SA5C-SV-11.0-12.0	3F40301-12	N/A	Soil Vapor	6/3/14 1:15 PM	8260B
FB-060314	3F40301-13	N/A	Soil Vapor	6/3/14 1:38 PM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F40301 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 24, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995.

  The continuing calibration %Ds for cis-1,2-dichloroethene and trans-1,2-dichloroethene exceeded the control limit of ≤15%; therefore sample results for both compounds, all nondetects, were qualified as estimated, "UJ." The %D for 1,1,1,2-tetrachloroethane also exceeded 15%; however, as the outlier was associated with a high recovery and the analyte was not detected in the samples, no further qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-503-SA8-SV-4.5-5.5. RPDs for the five common detects were ≤25%.

- Blank Spikes and Laboratory Control Samples: Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of a recovery above the control limits for 1,1,2,2-tetrachloroethane in the LCS only. Qualifications were not applied unless recovery outliers occurred in both the LCS and LCSD. The following RPDs exceeded the control limit of ≤20%: 1,1,1-trichloroethane

(23.5%), 1,1,2,2-tetrachloroethane (46.0%), carbon tetrachloride (22.4%), methylene chloride (20.2%), and trichlorofluoromethane (30.9%). Sample results for the RPD outliers were qualified as estimated, "J," for detects, and "UJ," for nondetects.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-060314 was the field blank and EB-3F40301 was the equipment rinsate associated with the site samples in this SDG. The field blank had a detect for 1,1,2-trichloro-1,2,2-trifluoroethane below the reporting limit at 0.025 µg/L; however, the concentration was not sufficient to qualify the detect in site sample SVL-503-SA8-SV-4.5-5.5. The field QC samples had no other reported detects.

    - Field Duplicates: Samples SVL-534-SA5C-SV-6.0-7.0 and SVL-834-SA5C-SV-6.0-7.0 were identified as field duplicate samples. Neither sample had reported detects, and the pair was considered to be in reasonable agreement.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F40301

Analysis Method 8260B

Sample Name EB_3F40301 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-01 **Sample Date:** 6/3/2014 7:55:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-060314 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-13 **Sample Date:** 6/3/2014 1:38:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.025	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-503-SA8-SV-4.5-5.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-02 **Sample Date:** 6/3/2014 7:55:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.11	0.02	0.0054	ug/L		J	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.54	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.16	0.02	0.0072	ug/L			
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.44	0.02	0.012	ug/L			
Trichlorofluoromethane	75694	0.079	0.02	0.0053	ug/L		J	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-507-SA5C-SV-10.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-06 **Sample Date:** 6/3/2014 9:41:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-507-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-05 **Sample Date:** 6/3/2014 9:15:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0052	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-508-SA5C-SV-8.25- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-07 **Sample Date:** 6/3/2014 10:14:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.014	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Toluene	108883	0.011	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-534-SA8-SV-6.0-7.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-03 **Sample Date:** 6/3/2014 8:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-535-SA5C-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-09 **Sample Date:** 6/3/2014 11:22:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0056	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-535-SA5C-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-10 **Sample Date:** 6/3/2014 11:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.01	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.007	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-535-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-08 **Sample Date:** 6/3/2014 10:59:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.011	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-543-SA5C-SV-11.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-12 **Sample Date:** 6/3/2014 1:15:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III

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1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.0048	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.01	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.035	0.02	0.012	ug/L			
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-543-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-11 **Sample Date:** 6/3/2014 12:56:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.006	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III

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m-Xylene & p-Xylene	179601231	0.0098	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0096	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-834-SA8-SV-6.0-7.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40301-04 **Sample Date:** 6/3/2014 8:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	UJ	*III
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	*III
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	UJ	C
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	UJ	*III
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	UJ	C
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F40401

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F40401
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	13
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F40401	3F40401-01	N/A	Soil Vapor	6/2/2014	8260B
SVL-543-SA5C-SV-18.0-19.0	3F40401-02	N/A	Soil Vapor	6/4/2014	8260B
SVL-570-SA5C-SV-5.0-6.0	3F40401-03	N/A	Soil Vapor	6/4/2014	8260B
SVL-870-SA5C-SV-5.0-6.0	3F40401-04	N/A	Soil Vapor	6/4/2014	8260B
SVL-570-SA5C-SV-10.0-11.0	3F40401-05	N/A	Soil Vapor	6/4/2014	8260B
SVL-570-SA5C-SV-15.0-16.0	3F40401-06	N/A	Soil Vapor	6/4/2014	8260B
SVL-570-SA5C-SV-20.0-21.0	3F40401-07	N/A	Soil Vapor	6/4/2014	8260B
SVL-570-SA5C-SV-30.0-31.0	3F40401-08	N/A	Soil Vapor	6/4/2014	8260B
SVL-570-SA5C-SV-40.0-41.0	3F40401-09	N/A	Soil Vapor	6/4/2014	8260B
SVL-531-SA5B-SV-5.0-6.0	3F40401-10	N/A	Soil Vapor	6/4/2014	8260B
SVL-531-SA5B-SV-10.0-11.0	3F40401-11	N/A	Soil Vapor	6/4/2014	8260B
SVL-531-SA5B-SV-16.75-17.75	3F40401-12	N/A	Soil Vapor	6/4/2014	8260B
FB-060414	3F40401-13	N/A	Soil Vapor	6/4/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F40401 was listed on the COC as "Equipment Blank." Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The continuing calibration %D for 1,1,2,2-tetrachloroethane exceeded 15%; however, as the outlier was associated with a high recovery and the analyte was not detected in the samples, no further qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-543-SA5C-SV-18.0-19.0. RPDs for m,p-xylenes and trichloroethene were 10.5% and 12.6%, respectively. The analyses had no other reported detects.

- Blank Spikes and Laboratory Control Samples: Recoveries affecting sample data were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds. RPDs were within the control limit of ≤20%, with the exception of RPDs for 1,1,2,2-tetrachloroethane of 40.8% and chloroform of 20.8%. Sample results for those compounds, all nondetects, were qualified as estimated, "J," for detects and "UJ," for nondetects.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-060414 was the field blank and EB-3F40401 was the equipment rinsate associated with the site samples in this SDG. Toluene was detected in the field blank at 0.0048 µg/L. Site sample results for toluene, all less than five times the field blank concentration, were qualified as nondetected, "U," at the reporting limit. The field QC samples had no other reportable detects.

    - Field Duplicates: Samples SVL-570-SA5C-SV-5.0-6.0 and SVL-870-SA5C-SV-5.0-6.0 were identified as field duplicate samples. Neither sample had reported detects.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. Sample SVL-531-SA5B-SV-16.75-17.75 was analyzed at a 10× dilution for high concentrations of 1,1,2-trichloro-1,2,2-trifluoroethane and trichlorofluoromethane.

Validated Sample Result Forms: 3F40401

Analysis Method 8260B

Sample Name EB_3F40401 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-01 **Sample Date:** 6/2/2014 11:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-060414 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-13 **Sample Date:** 6/4/2014 1:44:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0048	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-531-SA5B-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-11 **Sample Date:** 6/4/2014 12:53:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.2	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	1.1	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-531-SA5B-SV-16.75 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-12 **Sample Date:** 6/4/2014 1:20:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.2	0.2	0.09	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.2	0.2	0.054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.2	0.2	0.089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	7.9	0.2	0.12	ug/L			
1,1,2-Trichloroethane	79005	0.2	0.2	0.063	ug/L	U	U	
1,1-Dichloroethane	75343	0.2	0.2	0.062	ug/L	U	U	
1,1-Dichloroethene	75354	0.2	0.2	0.072	ug/L	U	U	
1,2-Dichloroethane	107062	0.2	0.2	0.11	ug/L	U	U	
Benzene	71432	0.2	0.2	0.041	ug/L	U	U	
Carbon Tetrachloride	56235	0.2	0.2	0.12	ug/L	U	U	
Chloroethane	75003	0.2	0.2	0.16	ug/L	U	U	
Chloroform	67663	0.2	0.2	0.06	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.2	0.2	0.094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.2	0.2	0.11	ug/L	U	U	
Ethylbenzene	100414	0.2	0.2	0.03	ug/L	U	U	
Methylene chloride	75092	0.2	0.2	0.1	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.2	0.2	0.08	ug/L	U	U	
o-Xylene	95476	0.2	0.2	0.089	ug/L	U	U	
Tetrachloroethene	127184	0.2	0.2	0.053	ug/L	U	U	
Toluene	108883	0.2	0.2	0.043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.2	0.2	0.039	ug/L	U	U	
Trichloroethene	79016	0.2	0.2	0.12	ug/L	U	U	
Trichlorofluoromethane	75694	10	0.2	0.053	ug/L			
Vinyl chloride	75014	0.2	0.2	0.1	ug/L	U	U	

Sample Name SVL-531-SA5B-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-10 **Sample Date:** 6/4/2014 11:40:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.21	0.02	0.012	ug/L			
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	1.1	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-543-SA5C-SV-18.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-02 **Sample Date:** 6/4/2014 7:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.009	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Analysis Method 8260B

Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.016
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.19	0.02	0.012	ug/L			
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-570-SA5C-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-05 **Sample Date:** 6/4/2014 8:51:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.0054
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-570-SA5C-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-06 **Sample Date:** 6/4/2014 9:09:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.0052
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.017	0.02	0.0053	ug/L	J	J	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-570-SA5C-SV-20.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-07 **Sample Date:** 6/4/2014 9:29:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.0066
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-570-SA5C-SV-30.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-08 **Sample Date:** 6/4/2014 9:49:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.0084
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-570-SA5C-SV-40.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-09 **Sample Date:** 6/4/2014 10:10:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.0078
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-570-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-03 **Sample Date:** 6/4/2014 8:32:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-870-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40401-04 **Sample Date:** 6/4/2014 8:32:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F40501

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F40501
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	13
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F40501	3F40501-01	N/A	Soil Vapor	6/5/2014	8260B
SVL-554-SA5C-SV-5.0-6.0	3F40501-02	N/A	Soil Vapor	6/5/2014	8260B
SVL-554-SA5C-SV-13.0-14.0	3F40501-03	N/A	Soil Vapor	6/5/2014	8260B
SVL-518-SA5C-SV-5.0-6.0	3F40501-04	N/A	Soil Vapor	6/5/2014	8260B
SVL-518-SA5C-SV-10.5-11.5	3F40501-05	N/A	Soil Vapor	6/5/2014	8260B
SVL-528-SA5C-SV-5.5-6.5	3F40501-06	N/A	Soil Vapor	6/5/2014	8260B
SVL-828-SA5C-SV-5.5-6.5	3F40501-07	N/A	Soil Vapor	6/5/2014	8260B
SVL-516-SA5C-SV-5.0-6.0	3F40501-08	N/A	Soil Vapor	6/5/2014	8260B
SVL-516-SA5C-SV-11.0-12.0	3F40501-09	N/A	Soil Vapor	6/5/2014	8260B
SVL-552-SA5B-SV-5.3-6.3	3F40501-10	N/A	Soil Vapor	6/5/2014	8260B
SVL-555-SA5B-SV-7.2-8.2	3F40501-11	N/A	Soil Vapor	6/5/2014	8260B
SVL-525-SA5C-SV-5.0-6.0	3F40501-12	N/A	Soil Vapor	6/5/2014	8260B
FB-060514	3F40501-13	N/A	Soil Vapor	6/5/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F40501 was listed on the COC as "Equipment Blank." Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The continuing calibration %Ds for 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2-dichloroethane, carbon tetrachloride, and trichlorofluoromethane exceeded 15%; however, as the outliers were associated with high recoveries and the analytes were not detected in the samples, no further qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-554-SA5C-SV-5.0-6.0. The analyses had no reported detects.

- Blank Spikes and Laboratory Control Samples: Recoveries affecting sample data were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds. RPDs were within the control limit of ≤20%, with the exception of the RPD for 1,1,2,2-tetrachloroethane of 20.8%. Sample results for 1,1,2,2-tetrachloroethane, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-060514 was the field blank and EB-3F40501 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-528-SA5C-SV-5.5-6.5 and SVL-828-SA5C-SV-5.5-6.5 were identified as field duplicate samples. Both samples had a common detect for toluene below the reporting limit with an RPD of 0%. Sample SVL-828-SA5C-SV-5.5-6.5 also had a detect reported at the MDL for m,p-xylenes. The samples had no other reported detects.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F40501

Analysis Method 8260B

Sample Name EB_3F40501 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-01 **Sample Date:** 6/5/2014 11:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-060514 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-13 **Sample Date:** 6/5/2014 2:08:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-516-SA5C-SV-11.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-09 **Sample Date:** 6/5/2014 11:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-516-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-08 **Sample Date:** 6/5/2014 10:43:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-518-SA5C-SV-10.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-05 **Sample Date:** 6/5/2014 9:06:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.0036	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.008	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-518-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-04 **Sample Date:** 6/5/2014 8:41:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.014	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Toluene	108883	0.012	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-525-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-12 **Sample Date:** 6/5/2014 1:41:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.017	0.02	0.0094	ug/L	J	J	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.068	0.02	0.008	ug/L			
o-Xylene	95476	0.025	0.02	0.0089	ug/L			
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.04	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-528-SA5C-SV-5.5-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-06 **Sample Date:** 6/5/2014 10:02:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.005	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-552-SA5B-SV-5.3-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-10 **Sample Date:** 6/5/2014 11:53:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-554-SA5C-SV-13.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-03 **Sample Date:** 6/5/2014 7:58:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-554-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-02 **Sample Date:** 6/5/2014 7:39:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-555-SA5B-SV-7.2-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-11 **Sample Date:** 6/5/2014 1:02:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-828-SA5C-SV-5.5-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40501-07 **Sample Date:** 6/5/2014 10:02:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.008	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.005	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F40601

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F40601
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	12
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F40601	3F40601-01	N/A	Soil Vapor	6/6/2014	8260B
SVL-525-SA5C-SV-10.0-11.0	3F40601-02	N/A	Soil Vapor	6/6/2014	8260B
SVL-525-SA5C-SV-15.0-16.0	3F40601-03	N/A	Soil Vapor	6/6/2014	8260B
SVL-525-SA5C-SV-20.0-21.0	3F40601-04	N/A	Soil Vapor	6/6/2014	8260B
SVL-825-SA5C-SV-20.0-21.0	3F40601-05	N/A	Soil Vapor	6/6/2014	8260B
SVL-590-SA5B-SV-6.0-7.0	3F40601-06	N/A	Soil Vapor	6/6/2014	8260B
SVL-594-SA5B-SV-5.0-6.0	3F40601-07	N/A	Soil Vapor	6/6/2014	8260B
SVL-606-SA5B-SV-5.5-6.5	3F40601-08	N/A	Soil Vapor	6/6/2014	8260B
SVL-612-SA5B-SV-4.5-5.5	3F40601-09	N/A	Soil Vapor	6/6/2014	8260B
SVL-516-SA5C-SV-18.0-19.0	3F40601-10	N/A	Soil Vapor	6/6/2014	8260B
SVL-578-SA5B-SV-8.0-9.0	3F40601-11	N/A	Soil Vapor	6/6/2014	8260B
FB-060614	3F40601-12	N/A	Soil Vapor	6/6/2014	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 23, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.71%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995.

  The continuing calibration %Ds for 1,1,1,2-tetrachloroethane, ethylbenzene, and 1,1,2,2-, exceeded 15%; however, as the outliers were associated with high recoveries and the analytes were not detected in the samples, no qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-525-SA5C-SV-10.0-11.0. There were three common detects, all with RPDs ≤20%. Ethylbenzene was detected below the reporting limit in the parent sample only.

- Blank Spikes and Laboratory Control Samples: The LCS recovery for 1,1,2,2-tetrachloroethane was above the control limit; however, qualifications are only applied for recoveries outside the control limits in both the LCS and LCSD. The remaining recoveries affecting sample data were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds. RPDs were within the control limit of ≤20%, with the exception of the RPDs for 1,1,2,2-tetrachloroethane (51%) and 1,1,2-trichloroethane (25%). Sample

results for 1,1,2,2-tetrachloroethane and 1,1,2-trichloroethane, all nondetects, were qualified as estimated, “UJ.”.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-060614 was the field blank and EB_3F40601 was the equipment rinsate associated with the site samples in this SDG. Toluene was detected in FB-060614 at 0.0056 µg/L; therefore, toluene detected in all samples except SVL-525-SA5C-10.0-11.0 was qualified as nondetected, “U,” at the reporting limit if detected above the reporting limit or at the level of contamination if detected above. The detect was insufficient to qualify SVL-525-SA5C-10.0-11.0. The field QC samples had no other detects.

    - Field Duplicates: Samples SVL-525-SA5C-SV-20.0-21.0 and SVL-825-SA5C-SV-20.0-21.0 were identified as field duplicate samples. There were no reportable detects in these samples.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F40601

Analysis Method 8260B

Sample Name EB_3F40601 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-01 **Sample Date:** 6/6/2014 12:02:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-060614 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-12 **Sample Date:** 6/6/2014 12:49:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0056	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-516-SA5C-SV-18.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-10 **Sample Date:** 6/6/2014 12:02:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.021	0.02	0.0053	ug/L			
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.0046

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.034	0.02	0.012	ug/L			
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-525-SA5C-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-02 **Sample Date:** 6/6/2014 7:46:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.01	0.02	0.003	ug/L	J	J	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.089	0.02	0.008	ug/L			
o-Xylene	95476	0.029	0.02	0.0089	ug/L			
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.099	0.02	0.0043	ug/L		J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-525-SA5C-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-03 **Sample Date:** 6/6/2014 8:22:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.035	0.02	0.008	ug/L			
o-Xylene	95476	0.014	0.02	0.0089	ug/L	J	J	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.026	0.026	0.0043	ug/L		UJ	C, F, RL changed from 0.02
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-525-SA5C-SV-20.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-04 **Sample Date:** 6/6/2014 8:49:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Analysis Method 8260B

Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-578-SA5B-SV-8.0-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-11 **Sample Date:** 6/6/2014 12:30:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.016
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-590-SA5B-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-06 **Sample Date:** 6/6/2014 9:27:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0088	0.02	0.008	ug/L	J	J	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-594-SA5B-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-07 **Sample Date:** 6/6/2014 10:18:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-606-SA5B-SV-5.5-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-08 **Sample Date:** 6/6/2014 10:45:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	J	UJ	C, F, result changed from 0.005
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-612-SA5B-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-09 **Sample Date:** 6/6/2014 11:19:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-825-SA5C-SV-20.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40601-05 **Sample Date:** 6/6/2014 8:49:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	UJ	*III
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	**U**	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	**U**	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	**UJ**	**C**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F40901

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F40901
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	12
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F40901	3F40901-01	N/A	Soil Vapor	6/9/14 9:50 AM	8260B
SVL-553-SA5D-SV-4.5-5.5	3F40901-02	N/A	Soil Vapor	6/9/14 8:28 AM	8260B
SVL-853-SA5D-SV-4.5-5.5	3F40901-03	N/A	Soil Vapor	6/9/14 8:28 AM	8260B
SVL-553-SA5D-SV-9.0-10.0	3F40901-04	N/A	Soil Vapor	6/9/14 9:08 AM	8260B
SVL-553-SA5D-SV-14.0-15.0	3F40901-05	N/A	Soil Vapor	6/9/14 9:50 AM	8260B
SVL-553-SA5D-SV-19.0-20.0	3F40901-06	N/A	Soil Vapor	6/9/14 10:27 AM	8260B
SVL-584-SA5B-SV-5.0-6.0	3F40901-07	N/A	Soil Vapor	6/9/14 11:03 AM	8260B
SVL-584-SA5B-SV-10.0-11.0	3F40901-08	N/A	Soil Vapor	6/9/14 11:31 AM	8260B
SVL-584-SA5B-SV-15.0-16.0	3F40901-09	N/A	Soil Vapor	6/9/14 12:25 PM	8260B
SVL-584-SA5B-SV-20.0-21.0	3F40901-10	N/A	Soil Vapor	6/9/14 12:49 PM	8260B
SVL-556-SA5D-SV-4.5-5.5	3F40901-11	N/A	Soil Vapor	6/9/14 1:40 PM	8260B
FB-060914	3F40901-12	N/A	Soil Vapor	6/9/14 1:57 PM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F40901 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 24, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The continuing calibration %Ds for 1,1,1,2-tetrachloroethane and 1,1,2,2-tetrachloroethane exceeded 15%; however, as the outliers were associated with high recoveries and the analytes were not detected in the samples, no qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-553-SA5D-SV-4.5-5.5. The analyses had no reported detects.

- Blank Spikes and Laboratory Control Samples: Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of 121% for 1,1,2,2-tetrachloroethane in the LCSD only. Qualifications were not applied unless outliers occurred in both the LCS and LCSD. RPDs were within the control limit of ≤20%, with the exception of the RPDs for chloroform and dichlorodifluoromethane of 23.3% and 20.4%, respectively. Sample results for both compounds, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-060914 was the field blank and EB-3F40901 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-553-SA5D-SV-4.5-5.5 and SVL-853-SA5D-SV-4.5-5.5 were identified as field duplicate samples. The samples had no reported detects, and were considered to be in good agreement.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F40901

Analysis Method 8260B

Sample Name EB_3F40901 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-01 **Sample Date:** 6/9/2014 9:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-060914 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-12 **Sample Date:** 6/9/2014 1:57:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-553-SA5D-SV-14.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-05 **Sample Date:** 6/9/2014 9:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.037	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-553-SA5D-SV-19.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-06 **Sample Date:** 6/9/2014 10:27:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-553-SA5D-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-02 **Sample Date:** 6/9/2014 8:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

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1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-553-SA5D-SV-9.0-1 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-04 **Sample Date:** 6/9/2014 9:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.021	0.02	0.016	ug/L			
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Toluene	108883	0.011	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-556-SA5D-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-11 **Sample Date:** 6/9/2014 1:40:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0076	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-584-SA5B-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-08 **Sample Date:** 6/9/2014 11:31:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

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1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-584-SA5B-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-09 **Sample Date:** 6/9/2014 12:25:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

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Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-584-SA5B-SV-20.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-10 **Sample Date:** 6/9/2014 12:49:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.0054	0.02	0.0053	ug/L	J	J	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-584-SA5B-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-07 **Sample Date:** 6/9/2014 11:03:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-853-SA5D-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F40901-03 **Sample Date:** 6/9/2014 8:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	UJ	*III
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	*III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	**U**	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	**U**	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	**UJ**	**C**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F41001

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F41001
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	12
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F41001	3F41001-01	N/A	Soil Vapor	6/10/14 9:10 AM	8260B
SVL-515-SA5C-SV-5.0-6.0	3F41001-02	N/A	Soil Vapor	6/10/14 8:28 AM	8260B
SVL-815-SA5C-SV-5.0-6.0	3F41001-03	N/A	Soil Vapor	6/10/14 8:28 AM	8260B
SVL-515-SA5C-SV-12.5-13.5	3F41001-04	N/A	Soil Vapor	6/10/14 9:10 AM	8260B
SVL-561-SA5C-SV-5.5-6.0	3F41001-05	N/A	Soil Vapor	6/10/14 9:44 AM	8260B
SVL-537-SA5A-SV-4.5-5.5	3F41001-06	N/A	Soil Vapor	6/10/14 10:23 AM	8260B
SVL-540-SA5A-SV-4.5-5.5	3F41001-07	N/A	Soil Vapor	6/10/14 10:57 AM	8260B
SVL-540-SA5A-SV-8.5-9.5	3F41001-08	N/A	Soil Vapor	6/10/14 11:24 AM	8260B
SVL-543-SA5A-SV-5.0-6.0	3F41001-09	N/A	Soil Vapor	6/10/14 12:26 PM	8260B
SVL-546-SA5A-SV-6.0-7.0	3F41001-10	N/A	Soil Vapor	6/10/14 12:57 PM	8260B
SVL-547-SA5A-SV-6.0-7.0	3F41001-11	N/A	Soil Vapor	6/10/14 1:42 PM	8260B
FB-061014	3F41001-12	N/A	Soil Vapor	6/10/14 2:01 PM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F41001 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 24, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "UJ," for nondetects and, "J," for detects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The %D for 1,1,2,2-tetrachloroethane exceeded the control limit of ≤15%; however, as the outlier was associated with a high recovery, and the analyte was not detected in the associated samples, no qualification was assigned. Remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-515-SA5C-SV-5.0-6.0. The analyses had no reported detects.

- Blank Spikes and Laboratory Control Samples: The laboratory analyzed two LCSs at two different spiking levels. Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of the recovery of 32% for carbon tetrachloride. Sample results for carbon tetrachloride, all nondetects, were qualified as estimated, "UJ." Recoveries for 1,1,2,2-tetrachloroethane and m,p-xylenes were above the control limits; however, as the analytes were not detected in the samples, no further qualifications were assigned.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-061014 was the field blank and EB-3F41001 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-515-SA5C-SV-5.0-6.0 and SVL-815-SA5C-SV-5.0-6.0 were identified as field duplicate samples. The samples had no reported detects, and were considered to be in good agreement.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F41001

Analysis Method 8260B

Sample Name EB_3F41001 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-01 **Sample Date:** 6/10/2014 9:10:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-061014 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-12 **Sample Date:** 6/10/2014 2:01:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

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1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-515-SA5C-SV-12.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-04 **Sample Date:** 6/10/2014 9:10:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

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trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-515-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-02 **Sample Date:** 6/10/2014 8:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-537-SA5A-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-06 **Sample Date:** 6/10/2014 10:23:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

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1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-540-SA5A-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-07 **Sample Date:** 6/10/2014 10:57:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-540-SA5A-SV-8.5-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-08 **Sample Date:** 6/10/2014 11:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0058	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-543-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-09 **Sample Date:** 6/10/2014 12:26:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

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1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0062	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-546-SA5A-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-10 **Sample Date:** 6/10/2014 12:57:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-547-SA5A-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-11 **Sample Date:** 6/10/2014 1:42:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-561-SA5C-SV-5.5-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-05 **Sample Date:** 6/10/2014 9:44:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.012	0.02	0.0053	ug/L	J	J	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-815-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41001-03 **Sample Date:** 6/10/2014 8:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	**U**	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	**U**	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	**UJ**	**C**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F41101

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F41101
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	12
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F41101	3F41101-01	N/A	Soil Vapor	6/11/14 8:08 AM	8260B
SVL-557-SA5B-SV-4.5-5.5	3F41101-02	N/A	Soil Vapor	6/11/14 8:08 AM	8260B
SVL-857-SA5B-SV-4.5-5.5	3F41101-03	N/A	Soil Vapor	6/11/14 8:08 AM	8260B
SVL-567-SA5B-SV-4.5-5.5	3F41101-04	N/A	Soil Vapor	6/11/14 8:56 AM	8260B
SVL-579-SA5B-SV-6.5-7.5	3F41101-05	N/A	Soil Vapor	6/11/14 9:36 AM	8260B
SVL-593-SA5B-SV-5.0-6.0	3F41101-06	N/A	Soil Vapor	6/11/14 10:21 AM	8260B
SVL-577-SA5B-SV-5.2-6.2	3F41101-07	N/A	Soil Vapor	6/11/14 10:56 AM	8260B
SVL-568-SA5A-SV-6.0-7.0	3F41101-08	N/A	Soil Vapor	6/11/14 11:24 AM	8260B
SVL-570-SA5A-SV-7.0-8.0	3F41101-09	N/A	Soil Vapor	6/11/14 12:34 PM	8260B
SVL-582-SA5A-SV-5.0-6.0	3F41101-10	N/A	Soil Vapor	6/11/14 1:03 PM	8260B
SVL-592-SA5A-SV-5.0-6.0	3F41101-11	N/A	Soil Vapor	6/11/14 1:43 PM	8260B
FB-061114	3F41101-12	N/A	Soil Vapor	6/11/14 1:56 PM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F41101 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 24, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene, all nondetects, were qualified as estimated, "UJ." The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. The %D for 1,1,1,2-tetrachloroethane exceeded the control limit of ≤15%; however, as the outlier was associated with a high recovery, and the analyte was not detected in the associated samples, no qualification was assigned. Remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-557-SA5B-SV-4.5-5.5. The RPD for chloroethane exceeded the control limit of ≤25% at 42.4%; therefore, the sample result was qualified as estimated, "J." The analyses had no other reported detects.

- Blank Spikes and Laboratory Control Samples: Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of a recovery above the control limits for 1,1,2,2-tetrachloroethane in the LCSD only. Qualifications were not applied unless outliers occurred in both the LCS and LCSD. RPDs were within the control limit of ≤20%, with the exception of the RPDs for 1,1,2,2-

tetrachloroethane and trichlorotrifluoromethane of 33.0% and 23.9%, respectively. Sample results for both compounds, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-061114 was the field blank and EB-3F41101 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-557-SA5B-SV-4.5-5.5 and SVL-857-SA5B-SV-4.5-5.5 were identified as field duplicate samples. Sample SVL-557-SA5B-SV-4.5-5.5 had a detect above the reporting limit for chloroethane not present in the duplicate. The samples had no other reported detects.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F41101

Analysis Method 8260B

Sample Name EB_3F41101 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-01 **Sample Date:** 6/11/2014 8:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-061114 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-12 **Sample Date:** 6/11/2014 1:56:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-557-SA5B-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-02 **Sample Date:** 6/11/2014 8:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.048	0.02	0.016	ug/L		J	*III
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-567-SA5B-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-04 **Sample Date:** 6/11/2014 8:56:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.015	0.02	0.0054	ug/L	J	J	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-568-SA5A-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-08 **Sample Date:** 6/11/2014 11:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-570-SA5A-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-09 **Sample Date:** 6/11/2014 12:34:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-577-SA5B-SV-5.2-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-07 **Sample Date:** 6/11/2014 10:56:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-579-SA5B-SV-6.5-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-05 **Sample Date:** 6/11/2014 9:36:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-582-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-10 **Sample Date:** 6/11/2014 1:03:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-592-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-11 **Sample Date:** 6/11/2014 1:43:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-593-SA5B-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-06 **Sample Date:** 6/11/2014 10:21:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III

Analysis Method 8260B

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-857-SA5B-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41101-03 **Sample Date:** 6/11/2014 8:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	

Analysis Method 8260B

m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	UJ	*III
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F41201

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F41201
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	9
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F41201	3F41201-01	N/A	Soil Vapor	6/12/14 10:36 AM	8260B
SVL-626-SA5A-SV-5.5-6.5	3F41201-02	N/A	Soil Vapor	6/12/14 7:48 AM	8260B
SVL-926-SA5A-SV-5.5-6.5	3F41201-03	N/A	Soil Vapor	6/12/14 7:48 AM	8260B
SVL-528-SA6-SV-5.5-6.5	3F41201-04	N/A	Soil Vapor	6/12/14 8:38 AM	8260B
SVL-515-SA6-SV-7.9-8.9	3F41201-05	N/A	Soil Vapor	6/12/14 9:28 AM	8260B
SVL-509-SA6-SV-5.0-6.0	3F41201-06	N/A	Soil Vapor	6/12/14 10:04 AM	8260B
SVL-509-SA6-SV-10.0-11.0	3F41201-07	N/A	Soil Vapor	6/12/14 10:36 AM	8260B
SVL-509-SA6-SV-15.0-16.0	3F41201-08	N/A	Soil Vapor	6/12/14 11:07 AM	8260B
FB-061214	3F41201-09	N/A	Soil Vapor	6/12/14 12:30 PM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F41201 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 24, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "J," for detects, and "UJ," for nondetects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995.

  The continuing calibration %D exceeded the control limit of ≤15% for dichlorodifluoromethane, at 15.7%; therefore, results for dichlorodifluoromethane were qualified as estimated, "J," for detects, and "UJ," for nondetects. The %D for trichlorofluoromethane exceeded the control limit with a high recovery, at -17.1%; therefore, sample detects for trichlorofluoromethane were qualified as estimated, "J." The %D for 1,1,1,2-tetrachloroethane also exceeded 15%; however, as the outlier was associated with a high recovery and the analyte was not detected in the samples, no further qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-626-SA5A-SV-5.5-6.5. The analyses had no reported detects.

- Blank Spikes and Laboratory Control Samples: Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of a recovery above the control limits for 1,1,2,2-tetrachloroethane in the LCS only.

Qualifications were not applied unless outliers occurred in both the LCS and LCSD. RPDs were within the control limit of ≤20%, with the exception of the RPD for 1,1,2,2-tetrachloroethane of 45.3%. Sample results for 1,1,2,2-tetrachloroethane, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-061214 was the field blank and EB-3F41201 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-626-SA5A-SV-5.5-6.5 and SVL-926-SA5A-SV-5.5-6.5 were identified as field duplicate samples. Sample SVL-926-SA5A-SV-5.5-6.5 had a detect below the reporting limit for dichlorodifluoromethane not present in the parent sample. The samples had no other reported detects. The pair was considered to be in reasonable agreement.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. Sample SVL-509-SA6-SV-15.0-16.0 was analyzed at a 5× dilution for a high concentration of trichlorofluoromethane.

Validated Sample Result Forms: 3F41201

Analysis Method 8260B

Sample Name EB_3F41201 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-01 **Sample Date:** 6/12/2014 10:36:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-061214 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-09 **Sample Date:** 6/12/2014 12:30:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-509-SA6-SV-10.0-11 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-07 **Sample Date:** 6/12/2014 10:36:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.041	0.02	0.0054	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0066	0.02	0.0043	ug/L	J	J	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	2.9	2.9	0.0053	ug/L		UJ	C, RL changed from 0.02
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-509-SA6-SV-15.0-16 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-08 **Sample Date:** 6/12/2014 11:07:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.1	0.1	0.045	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.062	0.1	0.027	ug/L	J	J	
1,1,2,2-Tetrachloroethane	79345	0.1	0.1	0.045	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.1	0.1	0.059	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.1	0.1	0.031	ug/L	U	U	
1,1-Dichloroethane	75343	0.1	0.1	0.031	ug/L	U	U	
1,1-Dichloroethene	75354	0.1	0.1	0.036	ug/L	U	U	
1,2-Dichloroethane	107062	0.1	0.1	0.053	ug/L	U	U	
Benzene	71432	0.1	0.1	0.02	ug/L	U	U	
Carbon Tetrachloride	56235	0.1	0.1	0.058	ug/L	U	U	
Chloroethane	75003	0.1	0.1	0.08	ug/L	U	U	
Chloroform	67663	0.1	0.1	0.03	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.1	0.1	0.047	ug/L	U	U	
Dichlorodifluoromethane	75718	0.1	0.1	0.055	ug/L	U	UJ	C
Ethylbenzene	100414	0.1	0.1	0.015	ug/L	U	U	
Methylene chloride	75092	0.1	0.1	0.052	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.1	0.1	0.04	ug/L	U	U	
o-Xylene	95476	0.1	0.1	0.044	ug/L	U	U	
Tetrachloroethene	127184	0.1	0.1	0.027	ug/L	U	U	
Toluene	108883	0.1	0.1	0.021	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.1	0.1	0.019	ug/L	U	U	
Trichloroethene	79016	0.1	0.1	0.058	ug/L	U	U	
Trichlorofluoromethane	75694	4.5	4.5	0.027	ug/L		UJ	C, RL changed from 0.1
Vinyl chloride	75014	0.1	0.1	0.051	ug/L	U	U	

Sample Name SVL-509-SA6-SV-5.0-6.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-06 **Sample Date:** 6/12/2014 10:04:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.031	0.02	0.0054	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	1.1	1.1	0.0053	ug/L		UJ	C, RL changed from 0.02
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-515-SA6-SV-7.9-8.9 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-05 **Sample Date:** 6/12/2014 9:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-528-SA6-SV-5.5-6.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-04 **Sample Date:** 6/12/2014 8:38:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-626-SA5A-SV-5.5-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-02 **Sample Date:** 6/12/2014 7:48:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-926-SA5A-SV-5.5-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41201-03 **Sample Date:** 6/12/2014 7:48:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.011	0.02	0.011	ug/L	J	J	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	**UJ**	**C**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F41301

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F41301
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	8
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F41301	3F41301-01	N/A	Soil Vapor	6/13/14 8:59 AM	8260B
SVL-525-SA5B-SV-8.0-9.0	3F41301-02	N/A	Soil Vapor	6/13/14 8:35 AM	8260B
SVL-825-SA5B-SV-8.0-9.0	3F41301-03	N/A	Soil Vapor	6/13/14 8:35 AM	8260B
SVL-525-SA5B-SV-13.0-14.0	3F41301-04	N/A	Soil Vapor	6/13/14 8:59 AM	8260B
SVL-561-SA5B-SV-9.0-10.0	3F41301-05	N/A	Soil Vapor	6/13/14 9:35 AM	8260B
SVL-562-SA5B-SV-8.0-9.0	3F41301-06	N/A	Soil Vapor	6/13/14 10:05 AM	8260B
SVL-549-SA5C-SV-6.0-7.0	3F41301-07	N/A	Soil Vapor	6/13/14 10:34 AM	8260B
FB-061314	3F41301-08	N/A	Soil Vapor	6/13/14 11:08 AM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F41301 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 24, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene were qualified as estimated, "J," for detects, and "UJ," for nondetects. The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995.

  The continuing calibration %D exceeded the control limit of ≤15% for dichlorodifluoromethane, at 17.8%; therefore, results for dichlorodifluoromethane were qualified as estimated, "J," for detects, and "UJ," for nondetects. The %Ds for 1,1,2,2-tetrachloroethane and 1,1,2-trichloro-1,2,2-trifluoroethane exceeded 15%; however, as the outliers were associated with high recoveries and the analytes were not detected in the samples, no further qualifications were assigned. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-525-SA5B-SV-8.0-9.0. The RPDs were ≤25% for 1,1,1-trichloroethane and trichlorotrifluoroethane, but exceeded the control limit at 41.8% for dichlorodifluoromethane. The parent sample result for dichlorodifluoromethane was qualified as estimated, "J."

- Blank Spikes and Laboratory Control Samples: Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and

vinyl chloride and within 80-120% for the remaining compounds, with the exception of a recovery above the control limits for 1,1,2,2-tetrachloroethane in the LCS only. Qualifications were not applied unless outliers occurred in both the LCS and LCSD. RPDs were within the control limit of ≤20%, with the exception of the RPD for 1,1,2,2-tetrachloroethane of 45.2%. Sample results for 1,1,2,2-tetrachloroethane, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-061314 was the field blank and EB-3F41301 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-525-SA5B-SV-8.0-9.0 and SVL-825-SA5B-SV-8.0-9.0 were identified as field duplicate samples. The samples had common detects for 1,1,1-trichloroethane and trichlorotrifluoroethane with RPDs of 29% and 12%, respectively. Sample SVL-525-SA5B-SV-8.0-9.0 had a detect below the reporting limit for dichlorodifluoromethane not present in the parent sample. The samples had no other reported detects. The pair was considered to be in reasonable agreement.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F41301

Analysis Method 8260B

Sample Name EB_3F41301 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-01 **Sample Date:** 6/13/2014 8:59:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-061314 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-08 **Sample Date:** 6/13/2014 11:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-525-SA5B-SV-13.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-04 **Sample Date:** 6/13/2014 8:59:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.057	0.02	0.0054	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.03	0.02	0.012	ug/L			
Trichlorofluoromethane	75694	2.7	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-525-SA5B-SV-8.0-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-02 **Sample Date:** 6/13/2014 8:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.071	0.02	0.0054	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.014	0.02	0.011	ug/L	J	J	C, *III
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	2.7	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-549-SA5C-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-07 **Sample Date:** 6/13/2014 10:34:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.014	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.036	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-561-SA5B-SV-9.0-1 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-05 **Sample Date:** 6/13/2014 9:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Analysis Method 8260B

Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.023	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-562-SA5B-SV-8.0-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-06 **Sample Date:** 6/13/2014 10:05:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.021	0.02	0.016	ug/L			
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	UJ	C
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.0064	0.02	0.0043	ug/L	J	J	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-825-SA5B-SV-8.0-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41301-03 **Sample Date:** 6/13/2014 8:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.053	0.02	0.0054	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	**U**	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	**U**	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	**U**	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	**U**	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	**U**	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	**U**	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	**U**	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	**U**	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	**UJ**	**C**
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	**U**	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	**U**	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	**U**	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	**U**	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	**UJ**	**C**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	2.4	0.02	0.0053	ug/L			
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F41801

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F41801
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	10
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F41801	3F41801-01	N/A	Soil Vapor	6/18/14 10:20 AM	8260B
SVL-580-SA5B-SV-7.0-8.0	3F41801-02	N/A	Soil Vapor	6/18/14 8:09 AM	8260B
SVL-880-SA5B-SV-7.0-8.0	3F41801-03	N/A	Soil Vapor	6/18/14 8:09 AM	8260B
SVL-599-SA5B-SV-8.0-9.0	3F41801-04	N/A	Soil Vapor	6/18/14 9:10 AM	8260B
SVL-513-SA5C-SV-5.0-6.0	3F41801-05	N/A	Soil Vapor	6/18/14 10:20 AM	8260B
SVL-511-SA5C-SV-7.0-8.0	3F41801-06	N/A	Soil Vapor	6/18/14 11:08 AM	8260B
SVL-511-SA5C-SV-13.0-14.0	3F41801-07	N/A	Soil Vapor	6/18/14 11:53 AM	8260B
SVL-529-SA8-SV-4.5-5.5	3F41801-08	N/A	Soil Vapor	6/18/14 12:57 PM	8260B
SVL-529-SA8-SV-8.5-9.5	3F41801-09	N/A	Soil Vapor	6/18/14 1:34 PM	8260B
FB-061814	3F41801-10	N/A	Soil Vapor	6/18/14 1:42 PM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F41801 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 24, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene, all nondetects, were qualified as estimated, "UJ." The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995. All continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-580-SA5B-SV-7.0-8.0. The analyses had no reported detects.

- Blank Spikes and Laboratory Control Samples: The laboratory analyzed two LCSs at two different spiking levels. Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of the recovery of 64% for carbon tetrachloride. Sample results for carbon tetrachloride, all nondetects, were qualified as estimated, "UJ." Recoveries for 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,1,1-trichloroethane, and 1,1,2-trichloroethane were above the control limits; however, as the analytes were not detected in the samples, no further qualifications were assigned.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC

data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks: Sample FB-061814 was the field blank and EB-3F41801 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

- Field Duplicates: Samples SVL-580-SA5B-SV-7.0-8.0 and SVL-880-SA5B-SV-7.0-8.0 were identified as field duplicate samples. The samples had no reported detects, and the pair was considered to be in good agreement.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F41801

Analysis Method 8260B

Sample Name EB_3F41801 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-01 **Sample Date:** 6/18/2014 10:20:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-061814 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-10 **Sample Date:** 6/18/2014 1:42:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

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1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-511-SA5C-SV-13.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-07 **Sample Date:** 6/18/2014 11:53:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.0098	0.02	0.0053	ug/L	J	J	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-511-SA5C-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-06 **Sample Date:** 6/18/2014 11:08:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-513-SA5C-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-05 **Sample Date:** 6/18/2014 10:20:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

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1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-529-SA8-SV-4.5-5.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-08 **Sample Date:** 6/18/2014 12:57:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

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Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-529-SA8-SV-8.5-9.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-09 **Sample Date:** 6/18/2014 1:34:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-580-SA5B-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-02 **Sample Date:** 6/18/2014 8:09:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-599-SA5B-SV-8.0-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-04 **Sample Date:** 6/18/2014 9:10:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	

Analysis Method 8260B

Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-880-SA5B-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41801-03 **Sample Date:** 6/18/2014 8:09:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	UJ	L
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	U	
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 3F41901

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	3F41901
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	8
No. of Reanalyses/Dilutions:	0
Laboratory:	Environmental Support Technologies

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
EB_3F41901	3F41901-01	N/A	Soil Vapor	6/19/14 11:35 AM	8260B
SVL-543-SA8-SV-6.25-7.25	3F41901-02	N/A	Soil Vapor	6/19/14 8:34 AM	8260B
SVL-843-SA8-SV-6.25-7.25	3F41901-03	N/A	Soil Vapor	6/19/14 8:34 AM	8260B
SVL-531-SA8-SV-4.5-5.5	3F41901-04	N/A	Soil Vapor	6/19/14 9:28 AM	8260B
SVL-545-SA8-SV-6.75-7.25	3F41901-05	N/A	Soil Vapor	6/19/14 10:37 AM	8260B
SVL-502-SA8-SV-4.45-5.45	3F41901-06	N/A	Soil Vapor	6/19/14 11:09 AM	8260B
SVL-543-SA6-SV-7.5-8.5	3F41901-07	N/A	Soil Vapor	6/19/14 11:35 AM	8260B
FB-061914	3F41901-08	N/A	Soil Vapor	6/19/14 11:41 AM	8260B

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. Sample EB_3F41901 was listed on the COC as “Equipment Blank.” Field sampling personnel verbally requested EST to revise equipment blank ID. The COC was appropriately signed and dated as relinquished by field personnel; however, the COC was not signed and dated as received by the laboratory. Custody seals were not utilized, as the mobile laboratory was located at the field site.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 25, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. Surrogates were added within 15 minutes of collection and the samples were analyzed within six hours of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.

- Calibration: The %RSD for toluene exceeded the control limit at 16.7%; therefore, the results for toluene, all nondetects, were qualified as estimated, "UJ." The remaining initial calibration %RSDs were ≤15% or the correlation coefficients ≥0.995.

  The continuing calibration %D exceeded the control limit of ≤15% for m,p-xylenes, at 16.6%; therefore, results for m,p-xylenes were qualified as estimated, "J," for detects, and "UJ," for nondetects. All remaining continuing calibration %Ds were ≤15%.

- Blanks: The ambient air method blank had no reported target compound detects. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.

- Surrogate Recovery: Recoveries were within the control limits of 75-125%.

- Laboratory Duplicate: A laboratory duplicate analysis was performed on sample SVL-543-SA8-SV-6.25-7.25. The analyses had no reported detects.

- Blank Spikes and Laboratory Control Samples: Recoveries were within 70-130% for chloroethane, dichlorodifluoromethane, trichlorofluoromethane, trichlorotrifluoroethane, and vinyl chloride and within 80-120% for the remaining compounds, with the exception of a recovery above the control limits for 1,1,2,2-tetrachloroethane in the LCS only. Qualifications were not applied unless outliers occurred in both the LCS and LCSD. RPDs were within the control limit of ≤20%, with the exception of the RPD for 1,1,2,2-tetrachloroethane of 35.0%. Sample results for 1,1,2,2-tetrachloroethane, all nondetects, were qualified as estimated, "UJ."

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Sample FB-061914 was the field blank and EB-3F41901 was the equipment rinsate associated with the site samples in this SDG. The field QC samples had no reported detects.

    - Field Duplicates: Samples SVL-543-SA8-SV-6.25-7.25 and SVL-843-SA8-SV-6.25-7.25 were identified as field duplicate samples. The samples had no reported detects, and the pair was considered to be in good agreement.

- Internal Standards: Internal standard recoveries were within 50-200% of the continuing calibration and retention times were 0.80-1.20, relative to the continuing calibration.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit. None of the samples required dilution.

Validated Sample Result Forms: 3F41901

Analysis Method 8260B

Sample Name EB_3F41901 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-01 **Sample Date:** 6/19/2014 11:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	UJ	C
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name FB-061914 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-08 **Sample Date:** 6/19/2014 11:41:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	UJ	C
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-502-SA8-SV-4.45-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-06 **Sample Date:** 6/19/2014 11:09:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	UJ	C
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C

Analysis Method 8260B

trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.032	0.02	0.012	ug/L			
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-531-SA8-SV-4.5-5.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-04 **Sample Date:** 6/19/2014 9:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	UJ	C
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-543-SA6-SV-7.5-8.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-07 **Sample Date:** 6/19/2014 11:35:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	

Analysis Method 8260B

1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	UJ	C
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-543-SA8-SV-6.25-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-02 **Sample Date:** 6/19/2014 8:34:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	UJ	C
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	

Analysis Method 8260B

Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-545-SA8-SV-6.75-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-05 **Sample Date:** 6/19/2014 10:37:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	U	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	U	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	U	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	U	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	U	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	U	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	U	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	UJ	C
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	U	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	U	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	UJ	C
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	U	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	U	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	U	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	U	

Sample Name SVL-843-SA8-SV-6.25-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 3F41901-03 **Sample Date:** 6/19/2014 8:34:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.02	0.02	0.009	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.02	0.02	0.0054	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.02	0.02	0.0089	ug/L	U	UJ	*III
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.02	0.02	0.012	ug/L	U	U	

Analysis Method 8260B

1,1,2-Trichloroethane	79005	0.02	0.02	0.0063	ug/L	U	**U**	
1,1-Dichloroethane	75343	0.02	0.02	0.0062	ug/L	U	**U**	
1,1-Dichloroethene	75354	0.02	0.02	0.0072	ug/L	U	**U**	
1,2-Dichloroethane	107062	0.02	0.02	0.011	ug/L	U	**U**	
Benzene	71432	0.02	0.02	0.0041	ug/L	U	**U**	
Carbon Tetrachloride	56235	0.02	0.02	0.012	ug/L	U	**U**	
Chloroethane	75003	0.02	0.02	0.016	ug/L	U	**U**	
Chloroform	67663	0.02	0.02	0.006	ug/L	U	**U**	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.0094	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.02	0.02	0.011	ug/L	U	**U**	
Ethylbenzene	100414	0.02	0.02	0.003	ug/L	U	**U**	
Methylene chloride	75092	0.02	0.02	0.01	ug/L	U	**U**	
m-Xylene & p-Xylene	179601231	0.02	0.02	0.008	ug/L	U	**UJ**	**C**
o-Xylene	95476	0.02	0.02	0.0089	ug/L	U	**U**	
Tetrachloroethene	127184	0.02	0.02	0.0053	ug/L	U	**U**	
Toluene	108883	0.02	0.02	0.0043	ug/L	U	**UJ**	**C**
trans-1,2-Dichloroethene	156605	0.02	0.02	0.0039	ug/L	U	**U**	
Trichloroethene	79016	0.02	0.02	0.012	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.02	0.02	0.0053	ug/L	U	**U**	
Vinyl chloride	75014	0.02	0.02	0.01	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 14-05-1846

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	14-05-1846
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	2
No. of Reanalyses/Dilutions:	0
Laboratory:	Calscience

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-916-SA5B-SV-12.5-13.5	14051846-1	N/A	Soil Vapor	5/21/14 12:55 PM	TO-15
SVL-960-SA5B-SV-7.0-8.0	14051846-2	N/A	Soil Vapor	5/22/14 2:38 PM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. As the samples were transported directly to the laboratory, custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 15, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Calibration criteria were met. Initial calibration %RSDs were ≤30%. Continuing calibration %Ds were ≤30%.

- Blanks: Methylene chloride was detected in the method blank at 0.0020 µg/L; therefore, methylene chloride detected in the samples was qualified as nondetected, "U," at the reporting limit. There were no other detects in the method blank.

- Surrogate Recovery: Recoveries were within the laboratory-established control limits.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-052114 (1476964) was associated with SVL-916-SA5B-SV-12.5-13.5 and ambient blank FB-052214 (1476965) was associated with SVL-960-SA5B-SV-7.0-8.0. Ethylbenzene (0.00096 µg/L) and o-xylene (0.0018 µg/L) were detected in FB-052114; therefore, detects for these compounds in SVL-916-SA5B-SV-12.5-13.5 were qualified as nondetected, "U," at the levels of contamination. Dichlorodifluoromethane (0.0023 µg/L), ethylbenzene (0.0021

µg/L), toluene (0.0056 µg/L), trichlorofluoromethane (0.0012 µg/L), m,p-xylene (0.0060 µg/L), and o-xylene (0.0038 µg/L) were detected in FB-052214; therefore, detects for these compounds in SVL-960-SA5B-SV-7.0-8.0 were qualified as nondetected, "U," at the reporting limit if detected below the reporting limit or at the level of contamination if detected above.

- Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. The aliquots analyzed for 1,1,2,2-tetrachloroethane were concentrated by approximately 2×. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 14-05-1846

Analysis Method TO-15

Sample Name SVL-916-SA5B-SV-12.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14051846-1 **Sample Date:** 5/21/2014 12:55:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0014	0.0075	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00047	0.003	0.00047	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.001	0.0076	0.001	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0061	0.013	0.00059	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0011	0.003	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.00028	0.0022	0.00028	ug/L	U	U	
1,1-Dichloroethene	75354	0.00087	0.0022	0.00087	ug/L	U	U	
1,2-Dichloroethane	107062	0.00031	0.0022	0.00031	ug/L	U	U	
Benzene	71432	0.0003	0.0018	0.0003	ug/L	U	U	
Carbon Tetrachloride	56235	0.00043	0.0035	0.00043	ug/L	U	U	
Chloroethane	75003	0.0007	0.0015	0.0007	ug/L	U	U	
Chloroform	67663	0.00037	0.0027	0.00037	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00038	0.0022	0.00038	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00032	0.0027	0.00032	ug/L	U	U	
Ethylbenzene	100414	0.0038	0.0038	0.00069	ug/L		U	F, RL changed from 0.0024
Methylene chloride	75092	0.019	0.019	0.00095	ug/L	B,J	U	B, result changed from 0.002
m-Xylene & p-Xylene	179601231	0.017	0.0096	0.0016	ug/L			
o-Xylene	95476	0.0076	0.0076	0.00075	ug/L		U	F, RL changed from 0.0024
Tetrachloroethene	127184	0.025	0.0037	0.0005	ug/L			
Toluene	108883	0.0068	0.0021	0.00056	ug/L			
trans-1,2-Dichloroethene	156605	0.00055	0.0022	0.00055	ug/L	U	U	
Trichloroethene	79016	0.00041	0.003	0.00041	ug/L	U	U	
Trichlorofluoromethane	75694	0.0033	0.0062	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.00062	0.0014	0.00062	ug/L	U	U	

Sample Name SVL-960-SA5B-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14051846-2 **Sample Date:** 5/22/2014 2:38:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0013	0.0069	0.0013	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00043	0.0028	0.00043	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.00095	0.0069	0.00095	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0044	0.012	0.00054	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.001	0.0028	0.001	ug/L	U	U	
1,1-Dichloroethane	75343	0.00026	0.002	0.00026	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.0008	0.002	0.0008	ug/L	U	U	
1,2-Dichloroethane	107062	0.00028	0.002	0.00028	ug/L	U	U	
Benzene	71432	0.0019	0.0016	0.00027	ug/L			
Carbon Tetrachloride	56235	0.00039	0.0032	0.00039	ug/L	U	U	
Chloroethane	75003	0.00064	0.0013	0.00064	ug/L	U	U	
Chloroform	67663	0.00034	0.0025	0.00034	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00035	0.002	0.00035	ug/L	U	U	
Dichlorodifluoromethane	75718	0.004	0.004	0.0003	ug/L		U	F, RL changed from 0.0025
Ethylbenzene	100414	0.0059	0.0059	0.00064	ug/L		U	F, RL changed from 0.0022
Methylene chloride	75092	0.018	0.018	0.00087	ug/L	B,J	U	B, result changed from 0.0024
m-Xylene & p-Xylene	179601231	0.02	0.02	0.0015	ug/L		U	F, RL changed from 0.0088
o-Xylene	95476	0.011	0.011	0.00069	ug/L		U	F, RL changed from 0.0022
Tetrachloroethene	127184	0.0062	0.0034	0.00046	ug/L			
Toluene	108883	0.006	0.006	0.00051	ug/L		U	F, RL changed from 0.0019
trans-1,2-Dichloroethene	156605	0.00051	0.002	0.00051	ug/L	U	U	
Trichloroethene	79016	0.0043	0.0027	0.00038	ug/L			
Trichlorofluoromethane	75694	0.0057	0.0057	0.00097	ug/L	J	U	F, result changed from 0.0046
Vinyl chloride	75014	0.00057	0.0013	0.00057	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 14-06-0002

Prepared by

MEC^X
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Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	14-06-0002
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	3
No. of Reanalyses/Dilutions:	0
Laboratory:	Calscience

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-915-SA5D-SV-12.5-13.8	14060002-1	N/A	Soil Vapor	5/28/14 9:05 AM	TO-15
SVL-930-SA5C-SV-6.5-7.5	14060002-2	N/A	Soil Vapor	5/29/14 8:49 AM	TO-15
SVL-946-SA5D-SV-10.0-11.0	14060002-3	N/A	Soil Vapor	5/30/14 8:25 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COCs were appropriately signed and dated by field and laboratory personnel. Custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 15, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Calibration criteria were met. Initial calibration %RSDs were ≤30%. Continuing calibration %Ds were ≤30%.

- Blanks: Methylene chloride was detected in the method blank at 0.0021 µg/L; therefore, methylene chloride detected in the samples was qualified as nondetected, "U," at the reporting limit. There were no other detects in the method blank.

- Surrogate Recovery: Recoveries were within the laboratory-established control limits.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-052814 (3E42801) was associated with SVL-915-SA5D-SV-12.5-13.8, ambient blank FB-052914 (3E42901) was associated with SVL-930-SA5C-SV-6.5-7.5, and ambient blank FB-053014 (3E43001) was associated with SVL-946-SA5D-SV-10.0-11.0. Target compound 1,1,2-trichloro-1,2,2-trifluoroethane (0.017 µg/L) was detected in FB-052814; therefore, the detect for this compound in SVL-915-SA5D-SV-12.5-13.8 was qualified as nondetected,

"U," at the reporting limit. There were no other ambient blank detects affecting sample results.

- Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. The aliquots analyzed for 1,1,2,2-tetrachloroethane were concentrated by approximately 2×. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 14-06-0002

Analysis Method TO-15

Sample Name SVL-915-SA5D-SV-12.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060002-1 **Sample Date:** 5/28/2014 9:05:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0013	0.0069	0.0013	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00043	0.0027	0.00043	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.00095	0.0069	0.00095	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.011	0.011	0.00054	ug/L	J	U	F, result changed from 0.0044
1,1,2-Trichloroethane	79005	0.001	0.0027	0.001	ug/L	U	U	
1,1-Dichloroethane	75343	0.00026	0.002	0.00026	ug/L	U	U	
1,1-Dichloroethene	75354	0.00079	0.002	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.00028	0.002	0.00028	ug/L	U	U	
Benzene	71432	0.0027	0.0016	0.00027	ug/L			
Carbon Tetrachloride	56235	0.00039	0.0031	0.00039	ug/L	U	U	
Chloroethane	75003	0.00064	0.0013	0.00064	ug/L	U	U	
Chloroform	67663	0.00034	0.0024	0.00034	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00035	0.002	0.00035	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0029	0.0025	0.00029	ug/L			
Ethylbenzene	100414	0.01	0.0022	0.00063	ug/L			
Methylene chloride	75092	0.017	0.017	0.00086	ug/L	B,J	U	B, result changed from 0.0013
m-Xylene & p-Xylene	179601231	0.035	0.0087	0.0014	ug/L			
o-Xylene	95476	0.01	0.0022	0.00068	ug/L			
Tetrachloroethene	127184	0.00046	0.0034	0.00046	ug/L	U	U	
Toluene	108883	0.082	0.0019	0.00051	ug/L			
trans-1,2-Dichloroethene	156605	0.0005	0.002	0.0005	ug/L	U	U	
Trichloroethene	79016	0.00037	0.0027	0.00037	ug/L	U	U	
Trichlorofluoromethane	75694	0.0024	0.0056	0.00096	ug/L	J	J	
Vinyl chloride	75014	0.00057	0.0013	0.00057	ug/L	U	U	

Sample Name SVL-930-SA5C-SV-6.5-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060002-2 **Sample Date:** 5/29/2014 8:49:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0016	0.0088	0.0016	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00055	0.0035	0.00055	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0012	0.0089	0.0012	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.00069	0.015	0.00069	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0013	0.0035	0.0013	ug/L	U	U	
1,1-Dichloroethane	75343	0.00033	0.0026	0.00033	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.001	0.0026	0.001	ug/L	U	U	
1,2-Dichloroethane	107062	0.00036	0.0026	0.00036	ug/L	U	U	
Benzene	71432	0.00085	0.0021	0.00035	ug/L	J	J	
Carbon Tetrachloride	56235	0.0005	0.0041	0.0005	ug/L	U	U	
Chloroethane	75003	0.00082	0.0017	0.00082	ug/L	U	U	
Chloroform	67663	0.00044	0.0031	0.00044	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.026	0.0026	0.00045	ug/L			
Dichlorodifluoromethane	75718	0.00038	0.0032	0.00038	ug/L	U	U	
Ethylbenzene	100414	0.0037	0.0028	0.00081	ug/L			
Methylene chloride	75092	0.022	0.022	0.0011	ug/L	B,J	U	B, result changed from 0.0027
m-Xylene & p-Xylene	179601231	0.0054	0.011	0.0019	ug/L	J	J	
o-Xylene	95476	0.0024	0.0028	0.00088	ug/L	J	J	
Tetrachloroethene	127184	0.017	0.0044	0.00059	ug/L			
Toluene	108883	0.0037	0.0024	0.00065	ug/L			
trans-1,2-Dichloroethene	156605	0.00065	0.0026	0.00065	ug/L	U	U	
Trichloroethene	79016	0.084	0.0035	0.00048	ug/L			
Trichlorofluoromethane	75694	0.0012	0.0072	0.0012	ug/L	U	U	
Vinyl chloride	75014	0.00073	0.0016	0.00073	ug/L	U	U	

Sample Name SVL-946-SA5D-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060002-3 **Sample Date:** 5/30/2014 8:25:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0013	0.0069	0.0013	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00043	0.0027	0.00043	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.00095	0.0069	0.00095	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0032	0.011	0.00054	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.001	0.0027	0.001	ug/L	U	U	
1,1-Dichloroethane	75343	0.00026	0.002	0.00026	ug/L	U	U	
1,1-Dichloroethene	75354	0.00079	0.002	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.00028	0.002	0.00028	ug/L	U	U	
Benzene	71432	0.018	0.0016	0.00027	ug/L			
Carbon Tetrachloride	56235	0.0011	0.0031	0.00039	ug/L	J	J	
Chloroethane	75003	0.00064	0.0013	0.00064	ug/L	U	U	
Chloroform	67663	0.00034	0.0024	0.00034	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00035	0.002	0.00035	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0031	0.0025	0.00029	ug/L			
Ethylbenzene	100414	0.0031	0.0022	0.00063	ug/L			
Methylene chloride	75092	0.017	0.017	0.00086	ug/L	B,J	U	B, result changed from 0.0048
m-Xylene & p-Xylene	179601231	0.0075	0.0087	0.0014	ug/L	J	J	
o-Xylene	95476	0.0033	0.0022	0.00068	ug/L			
Tetrachloroethene	127184	0.00088	0.0034	0.00046	ug/L	J	J	
Toluene	108883	0.019	0.0019	0.00051	ug/L			

Analysis Method TO-15

trans-1,2-Dichloroethene	156605	0.0005	0.002	0.0005	ug/L	U	**U**
Trichloroethene	79016	0.00037	0.0027	0.00037	ug/L	U	**U**
Trichlorofluoromethane	75694	0.0068	0.0056	0.00096	ug/L		
Vinyl chloride	75014	0.00057	0.0013	0.00057	ug/L	U	**U**

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 14-06-0556

Prepared by

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I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	14-06-0556
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	5
No. of Reanalyses/Dilutions:	0
Laboratory:	Calscience

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-905-SA5C-SV-15.0-16.0	14060556-1	N/A	Soil Vapor	6/2/14 12:08 PM	TO-15
SVL-925-SA5C-SV-10.0-11.0	14060556-2	N/A	Soil Vapor	6/6/14 7:56 AM	TO-15
SVL-935-SA5C-SV-15.0-16.0	14060556-3	N/A	Soil Vapor	6/3/14 11:56 AM	TO-15
SVL-952-SA5B-SV-5.3-6.3	14060556-4	N/A	Soil Vapor	6/5/14 12:00 PM	TO-15
SVL-970-SA5C-SV-40.0-41.0	14060556-5	N/A	Soil Vapor	6/4/14 10:16 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. As the samples were delivered directly to the laboratory, custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 15, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Calibration criteria were met. Initial calibration %RSDs were ≤30%. Continuing calibration %Ds were ≤30%.

- Blanks: Methylene chloride was detected in the method blank at 0.0016 µg/L; therefore, methylene chloride detected in the samples was qualified as nondetected, "U," at the reporting limits. There were no other detects in the method blank.

- Surrogate Recovery: Recoveries were within the laboratory-established control limits.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blanks FB-060214 (3F40201), FB-060314 (3F40301), FB-060414 (3F40401), FB-060514 (3F40501), and FB-060614 (3F040601) were associated with the samples in this SDG. Target compound 1,1,2-trichloro-1,2,2-trifluoroethane (0.025 µg/L) was detected in FB-060314; therefore, the detect for this compound in associated sample SVL-935-SA5C-SV-15.0-16.0 was qualified as nondetected, "U," at the level of contamination. Toluene (0.0048 µg/L) was

detected in FB-060414; therefore, toluene detected in SVL-970-SA5C-SV-40.0-41.0 was qualified as nondetected, "U," at the level of contamination. There were no other ambient blank detects affecting sample results.

- Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. The aliquots analyzed for 1,1,2,2-tetrachloroethane were concentrated by approximately 2×. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 14-06-0556

Analysis Method TO-15

Sample Name SVL-905-SA5C-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060556-1 **Sample Date:** 6/2/2014 12:08:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0014	0.0076	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00047	0.003	0.00047	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.001	0.0076	0.001	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.00086	0.013	0.00059	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0011	0.003	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.00028	0.0022	0.00028	ug/L	U	U	
1,1-Dichloroethene	75354	0.00087	0.0022	0.00087	ug/L	U	U	
1,2-Dichloroethane	107062	0.00031	0.0022	0.00031	ug/L	U	U	
Benzene	71432	0.0021	0.0018	0.0003	ug/L			
Carbon Tetrachloride	56235	0.00043	0.0035	0.00043	ug/L	U	U	
Chloroethane	75003	0.0007	0.0015	0.0007	ug/L	U	U	
Chloroform	67663	0.00037	0.0027	0.00037	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00038	0.0022	0.00038	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0026	0.0027	0.00032	ug/L	J	J	
Ethylbenzene	100414	0.0031	0.0024	0.00069	ug/L			
Methylene chloride	75092	0.019	0.019	0.00095	ug/L	B,J	U	B, result changed from 0.002
m-Xylene & p-Xylene	179601231	0.01	0.0096	0.0016	ug/L			
o-Xylene	95476	0.0035	0.0024	0.00075	ug/L			
Tetrachloroethene	127184	0.00051	0.0037	0.0005	ug/L	J	J	
Toluene	108883	0.0069	0.0021	0.00056	ug/L			
trans-1,2-Dichloroethene	156605	0.00055	0.0022	0.00055	ug/L	U	U	
Trichloroethene	79016	0.00075	0.003	0.00041	ug/L	J	J	
Trichlorofluoromethane	75694	0.0016	0.0062	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.00062	0.0014	0.00062	ug/L	U	U	

Sample Name SVL-925-SA5C-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060556-2 **Sample Date:** 6/6/2014 7:56:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0015	0.0078	0.0015	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00049	0.0031	0.00049	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0011	0.0078	0.0011	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.00061	0.013	0.00061	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0011	0.0031	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.00029	0.0023	0.00029	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.0009	0.0023	0.0009	ug/L	U	U
1,2-Dichloroethane	107062	0.00032	0.0023	0.00032	ug/L	U	U
Benzene	71432	0.041	0.0018	0.00031	ug/L		
Carbon Tetrachloride	56235	0.00044	0.0036	0.00044	ug/L	U	U
Chloroethane	75003	0.00073	0.0015	0.00073	ug/L	U	U
Chloroform	67663	0.00039	0.0028	0.00039	ug/L	U	U
cis-1,2-Dichloroethene	156592	0.0058	0.0023	0.00039	ug/L		
Dichlorodifluoromethane	75718	0.00034	0.0028	0.00034	ug/L	U	U
Ethylbenzene	100414	0.028	0.0025	0.00072	ug/L		
Methylene chloride	75092	0.00098	0.02	0.00098	ug/L	U	U
m-Xylene & p-Xylene	179601231	0.29	0.0099	0.0017	ug/L		
o-Xylene	95476	0.1	0.0025	0.00077	ug/L		
Tetrachloroethene	127184	0.0031	0.0039	0.00052	ug/L	J	J
Toluene	108883	0.32	0.0021	0.00058	ug/L		
trans-1,2-Dichloroethene	156605	0.00058	0.0023	0.00058	ug/L	U	U
Trichloroethene	79016	0.0027	0.0031	0.00043	ug/L	J	J
Trichlorofluoromethane	75694	0.0011	0.0064	0.0011	ug/L	U	U
Vinyl chloride	75014	0.00065	0.0015	0.00065	ug/L	U	U

Sample Name SVL-935-SA5C-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060556-3 **Sample Date:** 6/3/2014 11:56:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0017	0.0089	0.0017	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.001	0.0035	0.00055	ug/L	J	J	
1,1,2,2-Tetrachloroethane	79345	0.0012	0.0089	0.0012	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.00069	ug/L		U	F, RL changed from 0.015
1,1,2-Trichloroethane	79005	0.0013	0.0035	0.0013	ug/L	U	U	
1,1-Dichloroethane	75343	0.00033	0.0026	0.00033	ug/L	U	U	
1,1-Dichloroethene	75354	0.001	0.0026	0.001	ug/L	U	U	
1,2-Dichloroethane	107062	0.00084	0.0026	0.00036	ug/L	J	J	
Benzene	71432	0.011	0.0021	0.00035	ug/L			
Carbon Tetrachloride	56235	0.0019	0.0041	0.0005	ug/L	J	J	
Chloroethane	75003	0.00082	0.0017	0.00082	ug/L	U	U	
Chloroform	67663	0.0021	0.0031	0.00044	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.00048	0.0026	0.00045	ug/L	J	J	
Dichlorodifluoromethane	75718	0.0034	0.0032	0.00038	ug/L			
Ethylbenzene	100414	0.0063	0.0028	0.00081	ug/L			
Methylene chloride	75092	0.022	0.022	0.0011	ug/L	B,J	U	B, result changed from 0.0035
m-Xylene & p-Xylene	179601231	0.02	0.011	0.0019	ug/L			
o-Xylene	95476	0.0071	0.0028	0.00088	ug/L			
Tetrachloroethene	127184	0.0085	0.0044	0.00059	ug/L			
Toluene	108883	0.017	0.0024	0.00065	ug/L			

Analysis Method TO-15

trans-1,2-Dichloroethene	156605	0.00065	0.0026	0.00065	ug/L	U	U	
Trichloroethene	79016	0.0018	0.0035	0.00048	ug/L	J	J	
Trichlorofluoromethane	75694	0.0062	0.0072	0.0012	ug/L	J	J	
Vinyl chloride	75014	0.00074	0.0016	0.00073	ug/L	J	J	

Sample Name SVL-952-SA5B-SV-5.3-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060556-4 **Sample Date:** 6/5/2014 12:00:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0013	0.0069	0.0013	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00043	0.0027	0.00043	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.00095	0.0069	0.00095	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.00054	0.011	0.00054	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.001	0.0027	0.001	ug/L	U	U	
1,1-Dichloroethane	75343	0.00026	0.002	0.00026	ug/L	U	U	
1,1-Dichloroethene	75354	0.00079	0.002	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.00028	0.002	0.00028	ug/L	U	U	
Benzene	71432	0.00027	0.0016	0.00027	ug/L	U	U	
Carbon Tetrachloride	56235	0.00039	0.0031	0.00039	ug/L	U	U	
Chloroethane	75003	0.00064	0.0013	0.00064	ug/L	U	U	
Chloroform	67663	0.0019	0.0024	0.00034	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.00035	0.002	0.00035	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0026	0.0025	0.00029	ug/L			
Ethylbenzene	100414	0.00063	0.0022	0.00063	ug/L	U	U	
Methylene chloride	75092	0.017	0.017	0.00086	ug/L	B,J	U	B, result changed from 0.0017
m-Xylene & p-Xylene	179601231	0.0014	0.0087	0.0014	ug/L	U	U	
o-Xylene	95476	0.00068	0.0022	0.00068	ug/L	U	U	
Tetrachloroethene	127184	0.0011	0.0034	0.00046	ug/L	J	J	
Toluene	108883	0.00082	0.0019	0.00051	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.0005	0.002	0.0005	ug/L	U	U	
Trichloroethene	79016	0.00037	0.0027	0.00037	ug/L	U	U	
Trichlorofluoromethane	75694	0.00096	0.0056	0.00096	ug/L	U	U	
Vinyl chloride	75014	0.00057	0.0013	0.00057	ug/L	U	U	

Sample Name SVL-970-SA5C-SV-40.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14060556-5 **Sample Date:** 6/4/2014 10:16:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0015	0.0082	0.0015	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0014	0.0033	0.00052	ug/L	J	J	
1,1,2,2-Tetrachloroethane	79345	0.0011	0.0082	0.0011	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0022	0.014	0.00065	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0029	0.0033	0.0012	ug/L	J	J	

Analysis Method TO-15

1,1-Dichloroethane	75343	0.0011	0.0024	0.00031	ug/L	J	**J**	
1,1-Dichloroethene	75354	0.00095	0.0024	0.00095	ug/L	U	**U**	
1,2-Dichloroethane	107062	0.0011	0.0024	0.00033	ug/L	J	**J**	
Benzene	71432	0.011	0.0019	0.00032	ug/L			
Carbon Tetrachloride	56235	0.0017	0.0038	0.00047	ug/L	J	**J**	
Chloroethane	75003	0.00076	0.0016	0.00076	ug/L	U	**U**	
Chloroform	67663	0.0018	0.0029	0.00041	ug/L	J	**J**	
cis-1,2-Dichloroethene	156592	0.00093	0.0024	0.00042	ug/L	J	**J**	
Dichlorodifluoromethane	75718	0.0036	0.003	0.00035	ug/L			
Ethylbenzene	100414	0.0064	0.0026	0.00075	ug/L			
Methylene chloride	75092	0.021	0.021	0.001	ug/L	B,J	**U**	**B, result changed from 0.0032**
m-Xylene & p-Xylene	179601231	0.02	0.01	0.0017	ug/L			
o-Xylene	95476	0.0085	0.0026	0.00081	ug/L			
Tetrachloroethene	127184	0.0027	0.0041	0.00055	ug/L	J	**J**	
Toluene	108883	0.011	0.011	0.00061	ug/L		**U**	**F, RL changed from 0.0023**
trans-1,2-Dichloroethene	156605	0.00075	0.0024	0.00061	ug/L	J	**J**	
Trichloroethene	79016	0.0018	0.0032	0.00045	ug/L	J	**J**	
Trichlorofluoromethane	75694	0.0019	0.0067	0.0012	ug/L	J	**J**	
Vinyl chloride	75014	0.0009	0.0015	0.00068	ug/L	J	**J**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 14-06-1132

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	14-06-1132
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	4
No. of Reanalyses/Dilutions:	0
Laboratory:	Calscience

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-915-SA5C-SV-12.5-13.5	14061132-1	N/A	Soil Vapor	6/10/14 9:16 AM	TO-15
SVL-925-SA5B-SV-13.0-14.0	14061132-2	N/A	Soil Vapor	6/13/14 9:05 AM	TO-15
SVL-953-SA5D-SV-9.0-10.0	14061132-3	N/A	Soil Vapor	6/9/14 9:14 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and/or laboratory personnel. As the samples were transported directly to the laboratory, custody seals were not utilized.

There were ID discrepancies for two of the samples, as the COC did not match the container label. The laboratory was instructed by S. Von Raesfeld of MWH to use the IDs on the COC.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 15, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Calibration criteria were met. Initial calibration %RSDs were ≤30%. Initial and continuing calibration %Ds were ≤30%.

- Blanks: Methylene chloride was detected in the method blank at 0.0017 µg/L; therefore, methylene chloride detected in the samples was qualified as nondetected, "U," at the reporting limits. There were no other detects in the method blank.

- Surrogate Recovery: Recoveries were within the laboratory-established control limits.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blanks FB-060914 (3F40901) was associated with SVL-953-SA5D-SV-9.0-10.0, FB1-061014 (1481734) was associated with SVL-915-SA5C-SV-12.5-13.5, and FB1-061314 (1482105) was associated with SVL-925-SA5B-SV-13.0-14.0. Results listed in the table below were qualified as nondetected, "U," at the reporting limit if detected below the reporting limit or at the

level of contamination if detected above. There were other detects in the ambient blanks, but these did not affect the sample results.

Ambient Blank	Analyte	Ambient Blank (µg/L)	Qualified Samples
FB1-061014	Toluene	0.0015	SVL-915-SA5C-SV-12.5-13.5
	Trichlorofluoromethane	0.0013	
	m,p-Xylene	0.0057	
	o-Xylene	0.0033	
FB1-061314	Dichlorodifluoromethane	0.0025	SVL-925-SA5B-SV-13.0-14.0
	m,p-Xylene	0.0013	
	Toluene	0.00077	

- Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. The aliquots analyzed for 1,1,2,2-tetrachloroethane were concentrated by approximately 2×. In order to report trichlorofluoromethane within the linear range of the calibration, the compound was reported from a 4.4× dilution. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 14-06-1132

Analysis Method TO-15

Sample Name SVL-915-SA5C-SV-12.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14061132-1 **Sample Date:** 6/10/2014 9:16:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0014	0.0073	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00045	0.0029	0.00045	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.00099	0.0072	0.00099	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.018	0.012	0.00057	ug/L			
1,1,2-Trichloroethane	79005	0.001	0.0029	0.001	ug/L	U	U	
1,1-Dichloroethane	75343	0.00027	0.0021	0.00027	ug/L	U	U	
1,1-Dichloroethene	75354	0.00083	0.0021	0.00083	ug/L	U	U	
1,2-Dichloroethane	107062	0.00029	0.0021	0.00029	ug/L	U	U	
Benzene	71432	0.00081	0.0017	0.00028	ug/L	J	J	
Carbon Tetrachloride	56235	0.00041	0.0033	0.00041	ug/L	U	U	
Chloroethane	75003	0.00067	0.0014	0.00067	ug/L	U	U	
Chloroform	67663	0.00035	0.0026	0.00035	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00036	0.0021	0.00036	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00031	0.0026	0.00031	ug/L	U	U	
Ethylbenzene	100414	0.00066	0.0023	0.00066	ug/L	U	U	
Methylene chloride	75092	0.018	0.018	0.0009	ug/L	B,J	U	B, result changed from 0.0016
m-Xylene & p-Xylene	179601231	0.0091	0.0091	0.0015	ug/L	J	U	F, result changed from 0.0022
o-Xylene	95476	0.0023	0.0023	0.00071	ug/L	J	U	F, result changed from 0.0012
Tetrachloroethene	127184	0.012	0.0036	0.00048	ug/L			
Toluene	108883	0.002	0.002	0.00053	ug/L	J	U	F, result changed from 0.0015
trans-1,2-Dichloroethene	156605	0.00053	0.0021	0.00053	ug/L	U	U	
Trichloroethene	79016	0.00039	0.0028	0.00039	ug/L	U	U	
Trichlorofluoromethane	75694	0.0059	0.0059	0.001	ug/L	J	U	F, result changed from 0.0019
Vinyl chloride	75014	0.0006	0.0013	0.0006	ug/L	U	U	

Sample Name SVL-925-SA5B-SV-13.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14061132-2 **Sample Date:** 6/13/2014 9:05:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0014	0.0074	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.076	0.0029	0.00046	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.001	0.0074	0.001	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0046	0.012	0.00058	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0011	0.0029	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.0022	0.0022	0.00028	ug/L			

Analysis Method TO-15

1,1-Dichloroethene	75354	0.00085	0.0021	0.00085	ug/L	U	U	
1,2-Dichloroethane	107062	0.0003	0.0022	0.0003	ug/L	U	U	
Benzene	71432	0.0028	0.0017	0.00029	ug/L			
Carbon Tetrachloride	56235	0.00042	0.0034	0.00042	ug/L	U	U	
Chloroethane	75003	0.00069	0.0014	0.00069	ug/L	U	U	
Chloroform	67663	0.00036	0.0026	0.00036	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00037	0.0021	0.00037	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0074	0.0074	0.00032	ug/L		U	F, RL changed from 0.0027
Ethylbenzene	100414	0.0027	0.0023	0.00068	ug/L			
Methylene chloride	75092	0.019	0.019	0.00093	ug/L	B,J	U	B, result changed from 0.0022
m-Xylene & p-Xylene	179601231	0.0094	0.0094	0.0016	ug/L	J	U	F, result changed from 0.0032
o-Xylene	95476	0.0011	0.0023	0.00073	ug/L	J	J	
Tetrachloroethene	127184	0.0067	0.0037	0.00049	ug/L			
Toluene	108883	0.002	0.002	0.00055	ug/L	J	U	F, result changed from 0.0018
trans-1,2-Dichloroethene	156605	0.00054	0.0021	0.00054	ug/L	U	U	
Trichloroethene	79016	0.044	0.0029	0.0004	ug/L			
Trichlorofluoromethane	75694	1.2	0.025	0.0042	ug/L			
Vinyl chloride	75014	0.00061	0.0014	0.00061	ug/L	U	U	

Sample Name SVL-953-SA5D-SV-9.0-1 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 14061132-3 **Sample Date:** 6/9/2014 9:14:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0013	0.0069	0.0013	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00043	0.0028	0.00043	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.00095	0.0069	0.00095	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.00054	0.012	0.00054	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.001	0.0028	0.001	ug/L	U	U	
1,1-Dichloroethane	75343	0.00026	0.002	0.00026	ug/L	U	U	
1,1-Dichloroethene	75354	0.0008	0.002	0.0008	ug/L	U	U	
1,2-Dichloroethane	107062	0.00028	0.002	0.00028	ug/L	U	U	
Benzene	71432	0.029	0.0016	0.00027	ug/L			
Carbon Tetrachloride	56235	0.00039	0.0032	0.00039	ug/L	U	U	
Chloroethane	75003	0.00064	0.0013	0.00064	ug/L	U	U	
Chloroform	67663	0.017	0.0025	0.00034	ug/L			
cis-1,2-Dichloroethene	156592	0.00035	0.002	0.00035	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0029	0.0025	0.0003	ug/L			
Ethylbenzene	100414	0.0045	0.0022	0.00064	ug/L			
Methylene chloride	75092	0.018	0.018	0.00087	ug/L	B,J	U	B, result changed from 0.0022
m-Xylene & p-Xylene	179601231	0.01	0.0088	0.0015	ug/L			
o-Xylene	95476	0.0049	0.0022	0.00069	ug/L			
Tetrachloroethene	127184	0.0037	0.0034	0.00046	ug/L			
Toluene	108883	0.023	0.0019	0.00051	ug/L			

Analysis Method TO-15

trans-1,2-Dichloroethene	156605	0.00051	0.002	0.00051	ug/L	U	**U**
Trichloroethene	79016	0.00038	0.0027	0.00038	ug/L	U	**U**
Trichlorofluoromethane	75694	0.0019	0.0057	0.00097	ug/L	J	**J**
Vinyl chloride	75014	0.00057	0.0013	0.00057	ug/L	U	**U**

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 280-56665-1

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	280-56665-1
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	2
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-1009-SA5A-SV-7.0-8.0	280-56665-1	N/A	Soil Vapor	6/12/14 1:20 PM	TO-15
SVL-909-SA5A-SV-25.0-26.0	280-56665-2	N/A	Soil Vapor	6/10/14 2:19 PM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. The laboratory receipt checklist was not completed; however, according to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The %D for 1,1-dichloroethene in the initial calibration verification exceeded the control limit at -30.8%; therefore, results for 1,1-dichloroethene, both nondetects, were qualified as estimated, "UJ," in the samples. The remaining initial calibration verification and continuing calibration %Ds were ≤30%.

- Blanks: The method blank had no reported detects.

- Surrogate Recovery: Recoveries were within the control limits of 70-130%.

- Blank Spikes and Laboratory Control Samples: The recoveries were within the control limits of 70-130%.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample in this SDG. Method accuracy was evaluated based on LCS results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blanks FB-061014 (3F41001) and FB-061214 (3F41201) were associated with the site samples in this SDG. The ambient blanks had no detects affecting sample results.

    - Field Duplicates: This SDG had no identified field duplicate samples.

- Internal Standards: The internal standards areas were within ±40% of the continuing calibration and the retention times were within ±20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms, retention times, and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 280-56665-1

Analysis Method TO-15

Sample Name SVL-1009-SA5A-SV-7.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56665-1 **Sample Date:** 6/12/2014 1:20:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0177	0.0153	0.00625	ug/L			
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.00218	0.0174	0.00217	ug/L	J	J	
o-Xylene	95476	0.00868	0.00868	0.00117	ug/L	U	U	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.00131	0.00754	0.000961	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	U	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-909-SA5A-SV-25.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56665-2 **Sample Date:** 6/10/2014 2:19:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	**UJ**	**C**
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	**U**	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	**U**	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	**U**	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	**U**	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	**U**	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.056	0.00989	0.00359	ug/L			
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	**U**	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	**U**	
m-Xylene & p-Xylene	179601231	0.00371	0.0174	0.00217	ug/L	J	**J**	
o-Xylene	95476	0.00195	0.00868	0.00117	ug/L	J	**J**	
Tetrachloroethene	127184	0.00337	0.0136	0.00173	ug/L	J	**J**	
Toluene	108883	0.00754	0.00754	0.000961	ug/L	U	**U**	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	**U**	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	**U**	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 280-56666-1

Prepared by

MEC^X
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Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	280-56666-1
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	2
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-928-SA6-SV-5.5-6.5	280-56666-1	N/A	Soil Vapor	6/12/14 8:48 AM	TO-15
SVL-967-SA5B-SV-4.5-5.5	280-56666-2	N/A	Soil Vapor	6/11/14 9:01 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. The laboratory receipt checklist was not completed; however, according to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The %D for 1,1-dichloroethene in the initial calibration verification exceeded the control limit at -30.8%; therefore, results for 1,1-dichloroethene, both nondetects, were qualified as estimated, "UJ," in the associated samples. The remaining initial calibration verification and continuing calibration %Ds were ≤30%.

- Blanks: The method blank had no reported detects.

- Surrogate Recovery: Recoveries were within the control limits of 70-130%.

- Blank Spikes and Laboratory Control Samples: The recoveries were within the control limits of 70-130%.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample in this SDG. Method accuracy was evaluated based on LCS results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blanks FB-061114 (3F41101) and FB-061214 (3F41201) were associated with the site samples in this SDG. The ambient blanks had no detects affecting sample results.

    - Field Duplicates: This SDG had no identified field duplicate samples.

- Internal Standards: The internal standards areas were within ±40% of the continuing calibration and the retention times were within ±20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms, retention times, and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 280-56666-1

Analysis Method TO-15

Sample Name SVL-928-SA6-SV-5.5-6.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56666-1 **Sample Date:** 6/12/2014 8:48:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0111	0.0153	0.00625	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.00278	0.0174	0.00217	ug/L	J	J	
o-Xylene	95476	0.00141	0.00868	0.00117	ug/L	J	J	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.00182	0.00754	0.000961	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	U	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-967-SA5B-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56666-2 **Sample Date:** 6/11/2014 9:01:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0104	0.00818	0.00177	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	**UJ**	**C**
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	**U**	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	**U**	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	**U**	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	**U**	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	**U**	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	**U**	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	**U**	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	**U**	
m-Xylene & p-Xylene	179601231	0.00229	0.0174	0.00217	ug/L	J	**J**	
o-Xylene	95476	0.00129	0.00868	0.00117	ug/L	J	**J**	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	**U**	
Toluene	108883	0.00189	0.00754	0.000961	ug/L	J	**J**	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	**U**	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	**U**	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 280-56667-1

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	280-56667-1
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	6
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-503-SA7-SV-12.0-13.0	280-56667-1	N/A	Soil Vapor	6/13/14 9:24 AM	TO-15
SVL-503-SA7-SV-7.0-8.0	280-56667-2	N/A	Soil Vapor	6/13/14 8:53 AM	TO-15
SVL-544-SA6-SV-10.0-11.0	280-56667-3	N/A	Soil Vapor	6/13/14 11:22 AM	TO-15
SVL-544-SA6-SV-5.0-6.0	280-56667-4	N/A	Soil Vapor	6/13/14 10:56 AM	TO-15
SVL-551-SA6-SV-4.5-5.5	280-56667-5	N/A	Soil Vapor	6/13/14 10:16 AM	TO-15
SVL-844-SA6-SV-10.0-11.0	280-56667-6	N/A	Soil Vapor	6/13/14 11:22 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. The laboratory receipt checklist was not completed; however, according to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The %D for 1,1-dichloroethene in the initial calibration verification exceeded the control limit at -30.8%; therefore, results for 1,1-dichloroethene, all nondetects, were qualified as estimated, "UJ," in the associated samples. The remaining initial calibration verification and continuing calibration %Ds were ≤30%.

- Blanks: The method blank had no reported detects.

- Surrogate Recovery: Recoveries were within the control limits of 70-130%.

- Blank Spikes and Laboratory Control Samples: The recoveries were within the control limits of 70-130%.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample in this SDG. Method accuracy was evaluated based on LCS results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-061314 (3F41301) was associated with the site samples in this SDG. The ambient blank had no detects affecting sample results.

- Field Duplicates: Samples SVL-544-SA6-SV-10.0-11.0 and SVL-844-SA6-SV-10.0-11.0 were identified as field duplicate samples. Neither sample had reported detects.

- Internal Standards: The internal standards areas were within ±40% of the continuing calibration and the retention times were within ±20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms, retention times, and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 280-56667-1

Analysis Method TO-15

Sample Name SVL-503-SA7-SV-12.0-13 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56667-1 **Sample Date:** 6/13/2014 9:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0174	0.0174	0.00217	ug/L	U	U	
o-Xylene	95476	0.00868	0.00868	0.00117	ug/L	U	U	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.00145	0.00754	0.000961	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	U	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-503-SA7-SV-7.0-8.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56667-2 **Sample Date:** 6/13/2014 8:53:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0174	0.0174	0.00217	ug/L	U	U	
o-Xylene	95476	0.00868	0.00868	0.00117	ug/L	U	U	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.00754	0.00754	0.000961	ug/L	U	U	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	U	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-544-SA6-SV-10.0-11 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56667-3 **Sample Date:** 6/13/2014 11:22:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0174	0.0174	0.00217	ug/L	U	U	
o-Xylene	95476	0.00868	0.00868	0.00117	ug/L	U	U	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.00754	0.00754	0.000961	ug/L	U	U	

trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	U	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-544-SA6-SV-5.0-6.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56667-4 **Sample Date:** 6/13/2014 10:56:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0174	0.0174	0.00217	ug/L	U	U	
o-Xylene	95476	0.00868	0.00868	0.00117	ug/L	U	U	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.00754	0.00754	0.000961	ug/L	U	U	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	U	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-551-SA6-SV-4.5-5.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56667-5 **Sample Date:** 6/13/2014 10:16:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	

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1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00871	0.00639	0.00126	ug/L			
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00256	0.00868	0.00137	ug/L	J	J	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0067	0.0174	0.00217	ug/L	J	J	
o-Xylene	95476	0.00277	0.00868	0.00117	ug/L	J	J	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.0112	0.00754	0.000961	ug/L			
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	U	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-844-SA6-SV-10.0-11 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56667-6 **Sample Date:** 6/13/2014 11:22:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	UJ	C
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0174	0.0174	0.00217	ug/L	U	U	
o-Xylene	95476	0.00868	0.00868	0.00117	ug/L	U	U	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	

Analysis Method TO-15

Toluene	108883	0.00754	0.00754	0.000961	ug/L	U	**U**
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	**U**
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	**U**
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	**U**
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	**U**

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 280-56908-1

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	280-56908-1
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	2
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
SVL-931-SA8-SV-4.5-5.5	280-56908-1	N/A	Soil Vapor	6/19/14 9:34 AM	TO-15
SVL-999-SA5B-SV-8.0-9.0	280-56908-2	N/A	Soil Vapor	6/18/14 9:18 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were not utilized.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 15, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The %D for 1,1-dichloroethene in the initial calibration verification associated with sample SVL-999-SA5B-SV-8.0-9.0 exceeded the control limit at -30.8%; therefore, the nondetected result for this compound was qualified as estimated, "UJ," in the associated sample. The remaining initial calibration verification and continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blanks.

- Surrogate Recovery: Recoveries were within the laboratory-established control limits.

- Blank Spikes and Laboratory Control Samples: The recoveries were within the laboratory control limits.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy was evaluated based on LCS results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blanks FB-061814 (3F41801), and FB-061914 (3F041901) were associated with the samples in this SDG. There were no detects in these samples.

    - Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 280-56908-1

Analysis Method TO-15

Sample Name SVL-931-SA8-SV-4.5-5.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56908-1 **Sample Date:** 6/19/2014 9:34:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	
1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	U	
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	U	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	U	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	U	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	U	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	U	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	U	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	U	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.00333	0.0174	0.00217	ug/L	J	J	
o-Xylene	95476	0.00189	0.00868	0.00117	ug/L	J	J	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	U	
Toluene	108883	0.00287	0.00754	0.000961	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	U	
Trichloroethene	79016	0.00476	0.0107	0.00282	ug/L	J	J	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	U	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	U	

Sample Name SVL-999-SA5B-SV-8.0-9. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 280-56908-2 **Sample Date:** 6/18/2014 9:18:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0137	0.0137	0.00103	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.00818	0.00818	0.00177	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0137	0.0137	0.00237	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0153	0.0153	0.00625	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0109	0.0109	0.00183	ug/L	U	U	
1,1-Dichloroethane	75343	0.00607	0.00607	0.00146	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.0159	0.0159	0.00143	ug/L	U	**UJ**	**C**
1,2-Dichloroethane	107062	0.0162	0.0162	0.00178	ug/L	U	**U**	
Benzene	71432	0.00639	0.00639	0.00126	ug/L	U	**U**	
Carbon Tetrachloride	56235	0.0252	0.0252	0.00201	ug/L	U	**U**	
Chloroethane	75003	0.0106	0.0106	0.00406	ug/L	U	**U**	
Chloroform	67663	0.00732	0.00732	0.00232	ug/L	U	**U**	
cis-1,2-Dichloroethene	156592	0.00793	0.00793	0.00176	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.00989	0.00989	0.00359	ug/L	U	**U**	
Ethylbenzene	100414	0.00868	0.00868	0.00137	ug/L	U	**U**	
Methylene chloride	75092	0.00695	0.00695	0.00125	ug/L	U	**U**	
m-Xylene & p-Xylene	179601231	0.0174	0.0174	0.00217	ug/L	U	**U**	
o-Xylene	95476	0.00868	0.00868	0.00117	ug/L	U	**U**	
Tetrachloroethene	127184	0.0136	0.0136	0.00173	ug/L	U	**U**	
Toluene	108883	0.00754	0.00754	0.000961	ug/L	U	**U**	
trans-1,2-Dichloroethene	156605	0.00793	0.00793	0.00198	ug/L	U	**U**	
Trichloroethene	79016	0.0107	0.0107	0.00282	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.0112	0.0112	0.00551	ug/L	U	**U**	
Vinyl chloride	75014	0.00511	0.00511	0.00153	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 1476964

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	1476964
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	8
No. of Reanalyses/Dilutions:	0
Laboratory:	Eurofins Lancaster Laboratories Env., LLC

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
FB-052114	7476663	N/A	Soil Vapor	5/21/14 4:07 PM	TO-15
SVL-503-SA5B-SV-7.0-8.0	7476664	N/A	Soil Vapor	5/21/14 3:50 PM	TO-15
SVL-512-SA5B-SV-6.75-7.75	7476665	N/A	Soil Vapor	5/21/14 11:11 AM	TO-15
SVL-516-SA5B-SV-12.5-13.5	7476666	N/A	Soil Vapor	5/21/14 12:47 PM	TO-15
SVL-516-SA5B-SV-6.0-7.0	7476667	N/A	Soil Vapor	5/21/14 12:23 PM	TO-15
SVL-526-SA5B-SV-12.5-13.5	7476668	N/A	Soil Vapor	5/21/14 9:57 AM	TO-15
SVL-526-SA5B-SV-5.0-6.0	7476669	N/A	Soil Vapor	5/21/14 9:15 AM	TO-15
SVL-530-SA5B-SV-6.75-7.75	7476670	N/A	Soil Vapor	5/21/14 2:31 PM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blanks.

- Surrogate Recovery: Surrogates were not utilized.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits. Target compound 1,1,1,2-tetrachloroethane was not spiked in the LCS/LCSD.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-052114 was associated with the samples in this SDG. Dichlorodifluoromethane (0.0025 µg/L), ethylbenzene (0.00096 µg/L), m,p-xylene (0.0028 µg/L), and o-xylene (0.0018 µg/L) were detected in FB-052114. Ethylbenzene, m,p-xylene, and o-xylene in samples SVL-512-SV-6.75-7.75 and SVL-516-SA5B-SV-6.0-7.0 were qualified as nondetected, “U,” at the reporting limit if detected below the reporting limit or at the level of contamination if detected above. Dichlorodifluoromethane in SVL-516-SA5B-6.0-7.0, SVL-516-SA5B-12.5-

13.5, SVL-526-SA5B-SV-5.0-6.0, SVL-526-SA5B-SV-12.5-13.5, and SVL-530-SA5B-SV-6.75-7.75 was qualified as nondetected, "U," at the reporting limit if detected below the reporting limit or at the level of contamination if detected above. Other site sample detects were too large to qualify. There were no other ambient blank detects affecting sample results.

- o Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

  In order to report the analytes within the linear range of the calibration, the following dilutions were performed.

Sample	Analyte	Dilution
SVL-526-SA5B-SV-12.5-13.5	Toluene	10×
	Trichlorofluoromethane	25×
	m,p-Xylene	10×
SVL-526-SA5B-5.0-6.0	Toluene	10×
	Trichlorofluoromethane	200×
	m,p-Xylene	10×
SVL-530-SA5B-SV-6.75-7.75	Trichlorofluoromethane	200×

Due to limited sample volume, sample SVL-503-SA5B-SV-7.0-8.0 could not be analyzed at a dilution, and toluene was reported above the linear range of the calibration. This result was qualified as estimated, "J."

Validated Sample Result Forms: 1476964

Analysis Method TO-15

Sample Name FB-052114 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476663 **Sample Date:** 5/21/2014 4:07:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0025	0.0049	0.00099	ug/L	J	J	
Ethylbenzene	100414	0.00096	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0028	0.0043	0.00087	ug/L	J	J	
o-Xylene	95476	0.0018	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	U	U	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	U	U	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-503-SA5B-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476664 **Sample Date:** 5/21/2014 3:50:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.055	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.05	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.17	0.0043	0.00087	ug/L			
o-Xylene	95476	0.058	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0027	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.28	0.0038	0.00075	ug/L	E	J	*III
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	U	U	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-512-SA5B-SV-6.75- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476665 **Sample Date:** 5/21/2014 11:11:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.002	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.024	0.0049	0.00099	ug/L			
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0041
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.012	0.012	0.00087	ug/L		U	F, RL changed from 0.0043
o-Xylene	95476	0.008	0.008	0.00087	ug/L		U	F, RL changed from 0.0043
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0025	0.0038	0.00075	ug/L	J	J	

trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.01	0.0056	0.0011	ug/L			
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-516-SA5B-SV-12.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476666 **Sample Date:** 5/21/2014 12:47:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00073	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0021
Ethylbenzene	100414	0.0056	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.00082	0.0035	0.00069	ug/L	J	J	
m-Xylene & p-Xylene	179601231	0.026	0.0043	0.00087	ug/L			
o-Xylene	95476	0.012	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.026	0.0068	0.0014	ug/L			
Toluene	108883	0.0078	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0016	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-516-SA5B-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476667 **Sample Date:** 5/21/2014 12:23:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00089	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0019
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.00089
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0067	0.0067	0.00087	ug/L		U	F, RL changed from 0.0043
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.004
Tetrachloroethene	127184	0.014	0.0068	0.0014	ug/L			
Toluene	108883	0.0026	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0016	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-526-SA5B-SV-12.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476668 **Sample Date:** 5/21/2014 9:57:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.041	0.0055	0.0011	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.018	0.015	0.0038	ug/L			
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.0048	0.004	0.00081	ug/L			
1,1-Dichloroethene	75354	0.0018	0.004	0.00079	ug/L	J	J	
1,2-Dichloroethane	107062	0.0011	0.004	0.00081	ug/L	J	J	
Benzene	71432	0.053	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.012	0.012	0.00099	ug/L		U	F, RL changed from 0.0049
Ethylbenzene	100414	0.1	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.00087	0.0035	0.00069	ug/L	J	J	
m-Xylene & p-Xylene	179601231	0.22	0.043	0.0087	ug/L			
o-Xylene	95476	0.14	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0096	0.0068	0.0014	ug/L			

Toluene	108883	0.32	0.038	0.0075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0021	0.0054	0.0011	ug/L	J	J	
Trichlorofluoromethane	75694	3.5	0.14	0.028	ug/L			
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-526-SA5B-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476669 **Sample Date:** 5/21/2014 9:15:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.036	0.0055	0.0011	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0066	0.015	0.0038	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.0012	0.004	0.00081	ug/L	J	J	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.022	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0011	0.0049	0.00098	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0035
Ethylbenzene	100414	0.087	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.23	0.043	0.0087	ug/L			
o-Xylene	95476	0.12	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0054	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.24	0.038	0.0075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.96	1.1	0.22	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-530-SA5B-SV-6.75- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476670 **Sample Date:** 5/21/2014 2:31:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0035	0.0055	0.0011	ug/L	J	J	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.11	0.015	0.0038	ug/L			

Analysis Method TO-15

1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	**U**	
1,1-Dichloroethane	75343	0.0022	0.004	0.00081	ug/L	J	**J**	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	**U**	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	**U**	
Benzene	71432	0.005	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	**U**	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	**U**	
Chloroform	67663	0.0012	0.0049	0.00098	ug/L	J	**J**	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	**U**	**F, result changed from 0.0025**
Ethylbenzene	100414	0.068	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	**U**	
m-Xylene & p-Xylene	179601231	0.23	0.0043	0.00087	ug/L			
o-Xylene	95476	0.081	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0028	0.0068	0.0014	ug/L	J	**J**	
Toluene	108883	0.18	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	**U**	
Trichloroethene	79016	0.002	0.0054	0.0011	ug/L	J	**J**	
Trichlorofluoromethane	75694	1.9	1.1	0.22	ug/L			
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 1476965

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	1476965
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	6
No. of Reanalyses/Dilutions:	0
Laboratory:	Eurofins Lancaster Laboratories Env., LLC

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
FB-052214	7476671	N/A	Soil Vapor	5/22/14 3:07 PM	TO-15
SVL-506-SA8-SV-7.0-8.0	7476672	N/A	Soil Vapor	5/22/14 10:05 AM	TO-15
SVL-515-SA8-SV-6.0-7.0	7476673	N/A	Soil Vapor	5/22/14 10:50 AM	TO-15
SVL-519-SA8-SV-7.0-8.0	7476674	N/A	Soil Vapor	5/22/14 8:49 AM	TO-15
SVL-560-SA5B-SV-7.0-8.0	7476675	N/A	Soil Vapor	5/22/14 2:30 PM	TO-15
SVL-562-SA5B-SV-5.0-6.0	7476676	N/A	Soil Vapor	5/22/14 12:09 PM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blanks.

- Surrogate Recovery: Surrogates were not utilized.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits. Target compound 1,1,1,2-tetrachloroethane was not spiked in the LCS/LCSD.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-052214 was associated with the samples in this SDG. Results listed in the table below were qualified as nondetected, “U,” at the reporting limit if detected below the reporting limit or at the level of contamination if detected above. Other site sample detects were too large to qualify. There were no other ambient blank detects affecting sample results.

Analyte	Ambient Blank (µg/L)	Qualified Samples
Dichlorodifluoromethane	0.0023	All samples
Ethylbenzene	0.0021	SVL-519-SA8-SV-7.0-8.0
Toluene	0.0056	All except SVL-515-SA8-SV-6.0-7.0
Trichlorofluoromethane	0.0012	SVL-560-SA5B-SV-7.0-8.0, SVL-562-SA5B-SV-5.0-6.0, SVL-506-SA8-SV-7.0-8.0
m,p-Xylene	0.0060	SVL-519-SA8-SV-7.0-8.0
o-Xylene	0.0038	SVL-560-SA5B-SV-7.0-8.0, SVL-519-SA8-SV-7.0-8.0

- Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 1476965

Analysis Method TO-15

Sample Name FB-052214 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476671 **Sample Date:** 5/22/2014 3:07:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0023	0.0049	0.00099	ug/L	J	J	
Ethylbenzene	100414	0.0021	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.006	0.0043	0.00087	ug/L			
o-Xylene	95476	0.0038	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0056	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0012	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-506-SA8-SV-7.0-8.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476672 **Sample Date:** 5/22/2014 10:05:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.002	0.0055	0.0011	ug/L	J	J	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0052	0.015	0.0038	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethene	75354	0.014	0.004	0.00079	ug/L			
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0017	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.009	0.0049	0.00098	ug/L			
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0019
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	U	U	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	U	U	
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	U	U	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0045	0.0045	0.00075	ug/L		U	F, RL changed from 0.0038
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.3	0.0054	0.0011	ug/L			
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0015
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-515-SA8-SV-6.0-7.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476673 **Sample Date:** 5/22/2014 10:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0014	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0021
Ethylbenzene	100414	0.014	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.062	0.0043	0.00087	ug/L			
o-Xylene	95476	0.024	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.033	0.0038	0.00075	ug/L			

trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	U	U	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-519-SA8-SV-7.0-8.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476674 **Sample Date:** 5/22/2014 8:49:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.0014	0.004	0.00079	ug/L	J	J	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0017	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0012	0.0049	0.00098	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.002
Ethylbenzene	100414	0.0059	0.0059	0.00087	ug/L		U	F, RL changed from 0.0043
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.025	0.025	0.00087	ug/L		U	F, RL changed from 0.0043
o-Xylene	95476	0.013	0.013	0.00087	ug/L		U	F, RL changed from 0.0043
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.015	0.015	0.00075	ug/L		U	F, RL changed from 0.0038
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	U	U	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-560-SA5B-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476675 **Sample Date:** 5/22/2014 2:30:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	

Analysis Method TO-15

1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00096	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.00098	0.0049	0.00098	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.002
Ethylbenzene	100414	0.0093	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.032	0.0043	0.00087	ug/L			
o-Xylene	95476	0.019	0.019	0.00087	ug/L		U	F, RL changed from 0.0043
Tetrachloroethene	127184	0.0064	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.0047	0.0047	0.00075	ug/L		U	F, RL changed from 0.0038
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0023	0.0054	0.0011	ug/L	J	J	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0023
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-562-SA5B-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476676 **Sample Date:** 5/22/2014 12:09:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0014	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0021
Ethylbenzene	100414	0.024	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.077	0.0043	0.00087	ug/L			
o-Xylene	95476	0.036	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0038	0.0068	0.0014	ug/L	J	J	

Analysis Method TO-15

Toluene	108883	0.022	0.022	0.00075	ug/L		U	F, RL changed from 0.0038
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0015
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 1476966

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	1476966
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	8
No. of Reanalyses/Dilutions:	0
Laboratory:	Eurofins Lancaster Laboratories Env., LLC

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
FB-052314	7476677	N/A	Soil Vapor	5/23/14 11:17 AM	TO-15
SVL-512-SA8-SV-8.0-9.0	7476678	N/A	Soil Vapor	5/23/14 9:34 AM	TO-15
SVL-517-SA8-SV-10.0-11.0	7476679	N/A	Soil Vapor	5/23/14 8:44 AM	TO-15
SVL-517-SA8-SV-15.5-16.5	7476680	N/A	Soil Vapor	5/23/14 9:02 AM	TO-15
SVL-517-SA8-SV-5.0-6.0	7476681	N/A	Soil Vapor	5/23/14 8:23 AM	TO-15
SVL-524-SA8-SV-10.5-11.5	7476682	N/A	Soil Vapor	5/23/14 10:59 AM	TO-15
SVL-524-SA8-SV-4.5-5.5	7476683	N/A	Soil Vapor	5/23/14 10:36 AM	TO-15
SVL-812-SA8-SV-8.0-9.0	7476684	N/A	Soil Vapor	5/23/14 8:44 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COCs were appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blanks.

- Surrogate Recovery: Surrogates were not utilized.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits. Target compound 1,1,1,2-tetrachloroethane was not spiked in the LCS/LCSD.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-052214 was associated with the samples in this SDG. Results listed in the table below were qualified as nondetected, “U,” at the reporting limit if detected below the reporting limit or at the level of contamination if detected above. Other site sample detects were too large to qualify. There were no other ambient blank detects affecting sample results.

Analyte	Ambient Blank (µg/L)	Qualified Samples
Dichlorodifluoromethane	0.0023	All samples
Methylene chloride	0.0016	All detects
Toluene	0.0057	SVL-517-SA8-SV-15.5-16.5, SVL-524-SA8-SV-10.5-11.5
Trichlorofluoromethane	0.0012	All samples
m,p-Xylene	0.0017	SVL-524-SA8-SV-10.5-11.5

- Field Duplicates: Samples SVL-512-SA8-SV-8.0-9.0 and SVL-812-SA8-SV-8.0-9.0 were identified as field duplicate samples. There were ten common detects above the reporting limit and one common detect below. All RPDs were ≤50%.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

  In order to report the analytes within the linear range of the calibration, the following dilutions were performed.

Sample	Analyte	Dilution
SVL-512-SA8-SV-8.0-9.8	Chloroform	10×
	Trichloroethene	10×
SVL-524-SA8-SV-4.5-5.5	Toluene	10×
	m,p-Xylene	10×
SVL-812-SA8-SV-8.0-9.0	Chloroform	10×
	Trichloroethene	10×

Validated Sample Result Forms: 1476966

Analysis Method TO-15

Sample Name FB-052314 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476677 **Sample Date:** 5/23/2014 11:17:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0023	0.0049	0.00099	ug/L	J	J	
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	U	U	
Methylene chloride	75092	0.0016	0.0035	0.00069	ug/L	J	J	
m-Xylene & p-Xylene	179601231	0.0017	0.0043	0.00087	ug/L	J	J	
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	U	U	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0057	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0012	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-512-SA8-SV-8.0-9.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476678 **Sample Date:** 5/23/2014 9:34:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.0096	0.004	0.00081	ug/L			

Analysis Method TO-15

1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0056	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.072	0.0063	0.0013	ug/L			
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.28	0.049	0.0098	ug/L			
cis-1,2-Dichloroethene	156592	0.0033	0.004	0.00079	ug/L	J	J	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0022
Ethylbenzene	100414	0.016	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.00085
m-Xylene & p-Xylene	179601231	0.063	0.0043	0.00087	ug/L			
o-Xylene	95476	0.023	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.057	0.0068	0.0014	ug/L			
Toluene	108883	0.043	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	1.6	0.054	0.011	ug/L			
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0016
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-517-SA8-SV-10.0-11 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476679 **Sample Date:** 5/23/2014 8:44:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.05	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0031	0.0049	0.00098	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0021
Ethylbenzene	100414	0.045	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.16	0.0043	0.00087	ug/L			
o-Xylene	95476	0.065	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0029	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.2	0.0038	0.00075	ug/L			

trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0013
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-517-SA8-SV-15.5-16 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476680 **Sample Date:** 5/23/2014 9:02:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0036	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0021
Ethylbenzene	100414	0.0052	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.019	0.0043	0.00087	ug/L			
o-Xylene	95476	0.01	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0068	0.0068	0.00075	ug/L		U	F, RL changed from 0.0038
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0012
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-517-SA8-SV-5.0-6.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476681 **Sample Date:** 5/23/2014 8:23:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	

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1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0056	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0022
Ethylbenzene	100414	0.018	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.0014
m-Xylene & p-Xylene	179601231	0.076	0.0043	0.00087	ug/L			
o-Xylene	95476	0.031	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.056	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0013
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-524-SA8-SV-10.5-11 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476682 **Sample Date:** 5/23/2014 10:59:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0052	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.002
Ethylbenzene	100414	0.001	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.001
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	U	U	
Tetrachloroethene	127184	0.0035	0.0068	0.0014	ug/L	J	J	

Toluene	108883	0.005	0.005	0.00075	ug/L		U	F, RL changed from 0.0038
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0027	0.0054	0.0011	ug/L	J	J	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0012
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-524-SA8-SV-4.5-5.5 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476683 **Sample Date:** 5/23/2014 10:36:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.061	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0016	0.0049	0.00098	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0025
Ethylbenzene	100414	0.048	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.0013
m-Xylene & p-Xylene	179601231	0.1	0.043	0.0087	ug/L			
o-Xylene	95476	0.076	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0043	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.14	0.038	0.0075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0015
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-812-SA8-SV-8.0-9.0 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7476684 **Sample Date:** 5/23/2014 8:44:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	

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1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.0088	0.004	0.00081	ug/L			
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0063	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.06	0.0063	0.0013	ug/L			
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.19	0.049	0.0098	ug/L			
cis-1,2-Dichloroethene	156592	0.003	0.004	0.00079	ug/L	J	J	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0022
Ethylbenzene	100414	0.011	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.0012
m-Xylene & p-Xylene	179601231	0.047	0.0043	0.00087	ug/L			
o-Xylene	95476	0.017	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.053	0.0068	0.0014	ug/L			
Toluene	108883	0.035	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	1.3	0.054	0.011	ug/L			
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0013
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 1481734

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	1481734
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	11
No. of Reanalyses/Dilutions:	0
Laboratory:	Eurofins Lancaster Laboratories Env., LLC

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
FB1-061014	7498161	N/A	Soil Vapor	6/10/14 2:59 PM	TO-15
SVL-504-SA5A-SV-10.0-11.0	7498162	N/A	Soil Vapor	6/10/14 8:51 AM	TO-15
SVL-504-SA5A-SV-15.0-16.0	7498163	N/A	Soil Vapor	6/10/14 9:12 AM	TO-15
SVL-504-SA5A-SV-20.0-21.0	7498164	N/A	Soil Vapor	6/10/14 9:54 AM	TO-15
SVL-504-SA5A-SV-25.0-26.0	7498165	N/A	Soil Vapor	6/10/14 10:56 AM	TO-15
SVL-504-SA5A-SV-5.0-6.0	7498166	N/A	Soil Vapor	6/10/14 8:24 AM	TO-15
SVL-509-SA5A-SV-10.0-11.0	7498167	N/A	Soil Vapor	6/10/14 12:04 PM	TO-15
SVL-509-SA5A-SV-15.0-16.0	7498168	N/A	Soil Vapor	6/10/14 12:39 PM	TO-15
SVL-509-SA5A-SV-20.0-21.0	7498169	N/A	Soil Vapor	6/10/14 1:03 PM	TO-15
SVL-509-SA5A-SV-25.0-26.0	7498170	N/A	Soil Vapor	6/10/14 2:19 PM	TO-15
SVL-509-SA5A-SV-5.0-6.0	7498171	N/A	Soil Vapor	6/10/14 11:30 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COCs were appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: The carbon tetrachloride %RSD was 34% on instrument 09464; therefore, the carbon tetrachloride results for samples SVL-504-SA5A-SV-5.0-6.0, SVL-504-SA5A-SV-10.0-11.0, SVL-504-SA5A-SV-15.0-16.0, SVL-504-SA5A-SV-20.0-21.0, and SVL-504-SA5A-SV-25.0-26.0, all nondetects, were qualified as estimated, "UJ." The remaining initial calibration %RSDs were ≤30%. The continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blanks.

- Surrogate Recovery: Surrogates were not utilized.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits. Target compound 1,1,1,2-tetrachloroethane was not spiked in the LCS/LCSD.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-061014 was associated with the samples in this SDG. Results listed in the table below were qualified as nondetected, "U," at the reporting limit if detected below the reporting limit or at the level of contamination if

detected above. Other site sample detects were too large to qualify. There were no other ambient blank detects affecting sample results.

Analyte	Ambient Blank (µg/L)	Qualified Samples
Dichlorodifluoromethane	0.0026	SVL-504-SA5A-SV-5.0-6.0, SVL-504-SA5A-SV-10.0-11.0, SVL-504-SA5A-SV-15.0-16.0, SVL-509-SA5A-SV-5.0-6.0
Ethylbenzene	0.0022	SVL-504-SA5A-SV-5.0-6.0, SVL-504-SA5A-SV-10.0-11.0, SVL-504-SA5A-SV-15.0-16.0, SVL-504-SA5A-SV-20.0-21.0, SVL-509-SA5A-SV-25.0-26.0
Methylene chloride	0.00095	SVL-509-SA5A-SV-15.0-16.0
Toluene	0.0015	SVL-504-SA5A-SV-10.0-11.0, SVL-509-SA5A-SV-5.0-6.0, SVL-509-SA5A-SV-25.0-26.0
Trichlorofluoromethane	0.0013	SVL-504-SA5A-SV-5.0-6.0, SVL-504-SA5A-SV-15.0-16.0, SVL-509-SA5A-SV-5.0-6.0, SVL-509-SA5A-SV-15.0-16.0, SVL-509-SA5A-SV-20.0-21.0, SVL-509-SA5A-SV-25.0-26.0
m,p-Xylene	0.0057	SVL-504-SA5A-SV-10.0-11.0, SVL-504-SA5A-SV-15.0-16.0, SVL-504-SA5A-SV-20.0-21.0, SVL-504-SA5A-SV-25.0-26.0, SVL-509-SA5A-SV-5.0-6.0, SVL-509-SA5A-SV-25.0-26.0
o-Xylene	0.0033	SVL-504-SA5A-SV-5.0-6.0, SVL-504-SA5A-SV-10.0-11.0, SVL-504-SA5A-SV-15.0-16.0, SVL-504-SA5A-SV-20.0-21.0, SVL-509-SA5A-SV-25.0-26.0

- Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Due to matrix interference or in order to report the analyte within the linear range of the calibration, the following dilutions were performed.

Sample	Analyte	Dilution	Reason
SVL-504-SA5A-SV-10.0-11.0	All analytes	2×	Matrix interference
SVL-504-SA5A-SV-15.0-16.0	All analytes	2×	Matrix interference
SVL-504-SA5A-SV-20.0-21.0	All analytes	2×	Matrix interference
SVL-504-SA5A-SV-25.0-26.0	All analytes	10×	Matrix interference
SVL-504-SA5A-SV-5.0-6.0	All Analytes	2×	Matrix interference
SVL-509-SA5A-SV-20.0-21.0	m,p-Xylene	10×	Linear range

Validated Sample Result Forms: 1481734

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Sample Name FB1-061014 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498161 **Sample Date:** 6/10/2014 2:59:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0026	0.0049	0.00099	ug/L	J	J	
Ethylbenzene	100414	0.0022	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.00095	0.0035	0.00069	ug/L	J	J	
m-Xylene & p-Xylene	179601231	0.0057	0.0043	0.00087	ug/L			
o-Xylene	95476	0.0033	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0015	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0013	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-504-SA5A-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498162 **Sample Date:** 6/10/2014 8:51:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.014	0.014	0.0027	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.011	0.011	0.0022	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.014	0.014	0.0027	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.031	0.031	0.0077	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.011	0.011	0.0022	ug/L	U	U	
1,1-Dichloroethane	75343	0.0081	0.0081	0.0016	ug/L	U	U	

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1,1-Dichloroethene	75354	0.0079	0.0079	0.0016	ug/L	U	U	
1,2-Dichloroethane	107062	0.0081	0.0081	0.0016	ug/L	U	U	
Benzene	71432	0.0018	0.0064	0.0013	ug/L	J	J	
Carbon Tetrachloride	56235	0.013	0.013	0.0025	ug/L	U	UJ	C
Chloroethane	75003	0.0053	0.0053	0.0011	ug/L	U	U	
Chloroform	67663	0.016	0.0098	0.002	ug/L			
cis-1,2-Dichloroethene	156592	0.0079	0.0079	0.0016	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0099	0.0099	0.002	ug/L	J	U	F, result changed from 0.0072
Ethylbenzene	100414	0.0087	0.0087	0.0017	ug/L	J	U	F, result changed from 0.0062
Methylene chloride	75092	0.0069	0.0069	0.0014	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.019	0.019	0.0017	ug/L		U	F, RL changed from 0.0087
o-Xylene	95476	0.011	0.011	0.0017	ug/L		U	F, RL changed from 0.0087
Tetrachloroethene	127184	0.031	0.014	0.0027	ug/L			
Toluene	108883	0.0075	0.0075	0.0015	ug/L	J	U	F, result changed from 0.0073
trans-1,2-Dichloroethene	156605	0.0079	0.0079	0.0016	ug/L	U	U	
Trichloroethene	79016	0.011	0.011	0.0021	ug/L	U	U	
Trichlorofluoromethane	75694	0.011	0.011	0.0022	ug/L	U	U	
Vinyl chloride	75014	0.0051	0.0051	0.001	ug/L	U	U	

Sample Name SVL-504-SA5A-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498163 **Sample Date:** 6/10/2014 9:12:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.014	0.014	0.0027	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.011	0.011	0.0022	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.014	0.014	0.0027	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.031	0.031	0.0077	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.011	0.011	0.0022	ug/L	U	U	
1,1-Dichloroethane	75343	0.0081	0.0081	0.0016	ug/L	U	U	
1,1-Dichloroethene	75354	0.0079	0.0079	0.0016	ug/L	U	U	
1,2-Dichloroethane	107062	0.0081	0.0081	0.0016	ug/L	U	U	
Benzene	71432	0.0056	0.0064	0.0013	ug/L	J	J	
Carbon Tetrachloride	56235	0.013	0.013	0.0025	ug/L	U	UJ	C
Chloroethane	75003	0.0053	0.0053	0.0011	ug/L	U	U	
Chloroform	67663	0.058	0.0098	0.002	ug/L			
cis-1,2-Dichloroethene	156592	0.0079	0.0079	0.0016	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0099	0.0099	0.002	ug/L	J	U	F, result changed from 0.0077
Ethylbenzene	100414	0.0087	0.0087	0.0017	ug/L	J	U	F, result changed from 0.0069
Methylene chloride	75092	0.0069	0.0069	0.0014	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.023	0.023	0.0017	ug/L		U	F, RL changed from 0.0087
o-Xylene	95476	0.011	0.011	0.0017	ug/L		U	F, RL changed from 0.0087
Tetrachloroethene	127184	0.027	0.014	0.0027	ug/L			
Toluene	108883	0.015	0.0075	0.0015	ug/L			

trans-1,2-Dichloroethene	156605	0.0079	0.0079	0.0016	ug/L	U	U	
Trichloroethene	79016	0.011	0.011	0.0021	ug/L	U	U	
Trichlorofluoromethane	75694	0.011	0.011	0.0022	ug/L	J	U	F, result changed from 0.0025
Vinyl chloride	75014	0.0051	0.0051	0.001	ug/L	U	U	

Sample Name SVL-504-SA5A-SV-20.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498164 **Sample Date:** 6/10/2014 9:54:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.014	0.014	0.0027	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.011	0.011	0.0022	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.014	0.014	0.0027	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.031	0.031	0.0077	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.011	0.011	0.0022	ug/L	U	U	
1,1-Dichloroethane	75343	0.0081	0.0081	0.0016	ug/L	U	U	
1,1-Dichloroethene	75354	0.0079	0.0079	0.0016	ug/L	U	U	
1,2-Dichloroethane	107062	0.0081	0.0081	0.0016	ug/L	U	U	
Benzene	71432	0.0044	0.0064	0.0013	ug/L	J	J	
Carbon Tetrachloride	56235	0.013	0.013	0.0025	ug/L	U	UJ	C
Chloroethane	75003	0.0053	0.0053	0.0011	ug/L	U	U	
Chloroform	67663	0.016	0.0098	0.002	ug/L			
cis-1,2-Dichloroethene	156592	0.0079	0.0079	0.0016	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0099	0.0099	0.002	ug/L	U	U	
Ethylbenzene	100414	0.0087	0.0087	0.0017	ug/L	J	U	F, result changed from 0.0056
Methylene chloride	75092	0.0069	0.0069	0.0014	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.015	0.015	0.0017	ug/L		U	F, RL changed from 0.0087
o-Xylene	95476	0.0087	0.0087	0.0017	ug/L	J	U	F, result changed from 0.0082
Tetrachloroethene	127184	0.024	0.014	0.0027	ug/L			
Toluene	108883	0.008	0.0075	0.0015	ug/L			
trans-1,2-Dichloroethene	156605	0.0079	0.0079	0.0016	ug/L	U	U	
Trichloroethene	79016	0.011	0.011	0.0021	ug/L	U	U	
Trichlorofluoromethane	75694	0.011	0.011	0.0022	ug/L	U	U	
Vinyl chloride	75014	0.0051	0.0051	0.001	ug/L	U	U	

Sample Name SVL-504-SA5A-SV-25.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498165 **Sample Date:** 6/10/2014 10:56:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.069	0.069	0.014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.055	0.055	0.011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.069	0.069	0.014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.15	0.15	0.038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.055	0.055	0.011	ug/L	U	U	

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1,1-Dichloroethane	75343	0.04	0.04	0.0081	ug/L	U	U	
1,1-Dichloroethene	75354	0.04	0.04	0.0079	ug/L	U	U	
1,2-Dichloroethane	107062	0.04	0.04	0.0081	ug/L	U	U	
Benzene	71432	0.014	0.032	0.0064	ug/L	J	J	
Carbon Tetrachloride	56235	0.063	0.063	0.013	ug/L	U	UJ	C
Chloroethane	75003	0.026	0.026	0.0053	ug/L	U	U	
Chloroform	67663	0.049	0.049	0.0098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.04	0.04	0.0079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.049	0.049	0.0099	ug/L	U	U	
Ethylbenzene	100414	0.043	0.043	0.0087	ug/L	U	U	
Methylene chloride	75092	0.035	0.035	0.0069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.043	0.043	0.0087	ug/L	J	U	F, result changed from 0.018
o-Xylene	95476	0.043	0.043	0.0087	ug/L	U	U	
Tetrachloroethene	127184	0.068	0.068	0.014	ug/L	U	U	
Toluene	108883	0.019	0.038	0.0075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.04	0.04	0.0079	ug/L	U	U	
Trichloroethene	79016	0.054	0.054	0.011	ug/L	U	U	
Trichlorofluoromethane	75694	0.056	0.056	0.011	ug/L	U	U	
Vinyl chloride	75014	0.026	0.026	0.0051	ug/L	U	U	

Sample Name SVL-504-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498166 **Sample Date:** 6/10/2014 8:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.014	0.014	0.0027	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.011	0.011	0.0022	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.014	0.014	0.0027	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.031	0.031	0.0077	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.011	0.011	0.0022	ug/L	U	U	
1,1-Dichloroethane	75343	0.0081	0.0081	0.0016	ug/L	U	U	
1,1-Dichloroethene	75354	0.0079	0.0079	0.0016	ug/L	U	U	
1,2-Dichloroethane	107062	0.0081	0.0081	0.0016	ug/L	U	U	
Benzene	71432	0.0068	0.0064	0.0013	ug/L			
Carbon Tetrachloride	56235	0.013	0.013	0.0025	ug/L	U	UJ	C
Chloroethane	75003	0.0053	0.0053	0.0011	ug/L	U	U	
Chloroform	67663	0.006	0.0098	0.002	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.0079	0.0079	0.0016	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0099	0.0099	0.002	ug/L	J	U	F, result changed from 0.0077
Ethylbenzene	100414	0.011	0.011	0.0017	ug/L		U	F, RL changed from 0.0087
Methylene chloride	75092	0.0069	0.0069	0.0014	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.034	0.0087	0.0017	ug/L			
o-Xylene	95476	0.016	0.016	0.0017	ug/L		U	F, RL changed from 0.0087
Tetrachloroethene	127184	0.032	0.014	0.0027	ug/L			

Toluene	108883	0.019	0.0075	0.0015	ug/L			
trans-1,2-Dichloroethene	156605	0.0079	0.0079	0.0016	ug/L	U	U	
Trichloroethene	79016	0.011	0.011	0.0021	ug/L	U	U	
Trichlorofluoromethane	75694	0.011	0.011	0.0022	ug/L	J	U	F, result changed from 0.0054
Vinyl chloride	75014	0.0051	0.0051	0.001	ug/L	U	U	

Sample Name SVL-509-SA5A-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498167 **Sample Date:** 6/10/2014 12:04:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.019	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.11	0.0049	0.00099	ug/L			
Ethylbenzene	100414	0.02	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.062	0.0043	0.00087	ug/L			
o-Xylene	95476	0.028	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0037	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.022	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.036	0.0054	0.0011	ug/L			
Trichlorofluoromethane	75694	0.027	0.0056	0.0011	ug/L			
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-509-SA5A-SV-15.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498168 **Sample Date:** 6/10/2014 12:39:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	

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1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.018	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.073	0.0049	0.00099	ug/L			
Ethylbenzene	100414	0.019	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.00088
m-Xylene & p-Xylene	179601231	0.058	0.0043	0.00087	ug/L			
o-Xylene	95476	0.027	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0029	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.022	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0011	0.0054	0.0011	ug/L	J	J	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0055
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-509-SA5A-SV-20.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498169 **Sample Date:** 6/10/2014 1:03:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0031	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.054	0.0049	0.00099	ug/L			
Ethylbenzene	100414	0.034	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.081	0.043	0.0087	ug/L			
o-Xylene	95476	0.07	0.0043	0.00087	ug/L			

Tetrachloroethene	127184	0.0043	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.0076	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.002
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-509-SA5A-SV-25.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498170 **Sample Date:** 6/10/2014 2:19:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00068	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.054	0.0049	0.00099	ug/L			
Ethylbenzene	100414	0.0044	0.0044	0.00087	ug/L		U	F, RL changed from 0.0043
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.012	0.012	0.00087	ug/L		U	F, RL changed from 0.0043
o-Xylene	95476	0.0073	0.0073	0.00087	ug/L		U	F, RL changed from 0.0043
Tetrachloroethene	127184	0.0041	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	J	U	F, result changed from 0.0022
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0015
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-509-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498171 **Sample Date:** 6/10/2014 11:30:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	

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1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	**U**	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	**U**	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	**U**	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	**U**	
1,2-Dichloroethane	107062	0.0037	0.004	0.00081	ug/L	J	**J**	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	**U**	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	**U**	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	**U**	
Chloroform	67663	0.0014	0.0049	0.00098	ug/L	J	**J**	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	**U**	
Dichlorodifluoromethane	75718	0.0085	0.0085	0.00099	ug/L		**U**	**F, RL changed from 0.0049**
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	U	**U**	
Methylene chloride	75092	0.012	0.0035	0.00069	ug/L			
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	**U**	**F, result changed from 0.0011**
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	U	**U**	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	**U**	
Toluene	108883	0.0055	0.0055	0.00075	ug/L		**U**	**F, RL changed from 0.0038**
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	**U**	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	**U**	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	**U**	**F, result changed from 0.0035**
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	**U**	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 1481735

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	1481735
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	12
No. of Reanalyses/Dilutions:	0
Laboratory:	Eurofins Lancaster Laboratories Env., LLC

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
FB1-061114	7498172	N/A	Soil Vapor	6/11/14 2:25 PM	TO-15
SVL-512-SA5A-SV-5.5-6.5	7498173	N/A	Soil Vapor	6/11/14 7:54 AM	TO-15
SVL-521-SA5A-SV-10.0-11.0	7498174	N/A	Soil Vapor	6/11/14 8:50 AM	TO-15
SVL-521-SA5A-SV-5.0-6.0	7498175	N/A	Soil Vapor	6/11/14 8:24 AM	TO-15
SVL-522-SA5A-SV-7.5-8.5	7498176	N/A	Soil Vapor	6/11/14 10:50 AM	TO-15
SVL-528-SA5A-SV-5.0-6.0	7498177	N/A	Soil Vapor	6/11/14 9:31 AM	TO-15
SVL-528-SA5A-SV-9.0-10.0	7498178	N/A	Soil Vapor	6/11/14 10:02 AM	TO-15
SVL-560-SA5A-SV-10.5-11.5	7498179	N/A	Soil Vapor	6/11/14 11:54 AM	TO-15
SVL-560-SA5A-SV-5.0-6.0	7498180	N/A	Soil Vapor	6/11/14 11:26 AM	TO-15
SVL-565-SA5A-SV-12.0-13.0	7498181	N/A	Soil Vapor	6/11/14 2:10 PM	TO-15
SVL-565-SA5A-SV-5.0-6.0	7498182	N/A	Soil Vapor	6/11/14 1:35 PM	TO-15
SVL-865-SA5A-SV-5.0-6.0	7498183	N/A	Soil Vapor	6/11/14 1:43 PM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COCs were appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: Initial calibration %RSDs were ≤30%. The continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blanks.

- Surrogate Recovery: Surrogates were not utilized.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits. Target compound 1,1,1,2-tetrachloroethane was not spiked in the LCS/LCSD.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB-061114 was associated with the samples in this SDG. Results listed in the table below were qualified as nondetected, “U,” at the reporting limit if detected below the reporting limit or at the level of contamination if detected above. Other site sample detects were too large to qualify. There were no other ambient blank detects affecting sample results.

Analyte	Ambient Blank (µg/L)	Qualified Samples
Dichlorodifluoromethane	0.0027	All detects
Methylene chloride	0.00077	All detects
Trichlorofluoromethane	0.0014	All detects
m,p-Xylene	0.00089	SVL-521-SA5A-10.0-11.0, SVL-560-SA5A-SV-5.0-6.0, SVL-560-SA5A-SV-10.5-11.5, SVL-565-SA5A-SV-12.0-13.0

- Field Duplicates: Samples SVL-565-SA5A-SV-5.0-6.0 and SVL-865-SA5A-SV-5.0-6.0 were identified as field duplicate samples. There was a common detect above the reporting limit for m,p-xylene with and RPD of 167%. 1,1-Dichloroethene, tetrachloroethene, and trichloroethene were detected well above the reporting limits in the parent sample only. Ethylbenzene and toluene were detected well above the reporting limit in the parent sample and were detected below the reporting limit in the duplicate sample, with RPDs of 188% and 101%. The parent and duplicate results for the aforementioned compounds were qualified as estimated, "UJ," for nondetects and, "J," for detects. There were three compounds detected below the reporting limit in the parent sample only. No qualifications were applied to these three compounds.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

  Due to matrix interference or in order to report the analyte within the linear range of the calibration, the following dilutions were performed.

Sample	Analyte	Dilution	Reason
SVL-528-SA5A-SV-5.0-6.0	All analytes	5×	Matrix interference
SVL-565-SA5A-SV-5.0-6.0	m,p-Xylene	10×	Linear range

Validated Sample Result Forms: 1481735

Analysis Method TO-15

Sample Name FB1-061114 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498172 **Sample Date:** 6/11/2014 2:25:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0027	0.0049	0.00099	ug/L	J	J	
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	U	U	
Methylene chloride	75092	0.00077	0.0035	0.00069	ug/L	J	J	
m-Xylene & p-Xylene	179601231	0.00089	0.0043	0.00087	ug/L	J	J	
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	U	U	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	U	U	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0014	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-512-SA5A-SV-5.5-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498173 **Sample Date:** 6/11/2014 7:54:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	

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1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0013	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.0027	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0086	0.0043	0.00087	ug/L			
o-Xylene	95476	0.0052	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.005	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.0031	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0019
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-521-SA5A-SV-10.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498174 **Sample Date:** 6/11/2014 8:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00066	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.00097	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.0017
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0033
o-Xylene	95476	0.0016	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.0014	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.005	0.0038	0.00075	ug/L			

trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0016
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-521-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498175 **Sample Date:** 6/11/2014 8:24:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.001	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0032
Ethylbenzene	100414	0.0024	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0061	0.0043	0.00087	ug/L			
o-Xylene	95476	0.0037	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.002	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.0015	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0017
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-522-SA5A-SV-7.5-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498176 **Sample Date:** 6/11/2014 10:50:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.0067	0.015	0.0038	ug/L	J	J	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	

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1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.0021	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0079	0.0043	0.00087	ug/L			
o-Xylene	95476	0.0047	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0043	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0018
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-528-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498177 **Sample Date:** 6/11/2014 9:31:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.034	0.034	0.0069	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.027	0.027	0.0055	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.034	0.034	0.0069	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.077	0.077	0.019	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.027	0.027	0.0055	ug/L	U	U	
1,1-Dichloroethane	75343	0.02	0.02	0.004	ug/L	U	U	
1,1-Dichloroethene	75354	0.02	0.02	0.004	ug/L	U	U	
1,2-Dichloroethane	107062	0.02	0.02	0.004	ug/L	U	U	
Benzene	71432	0.019	0.016	0.0032	ug/L			
Carbon Tetrachloride	56235	0.031	0.031	0.0063	ug/L	U	U	
Chloroethane	75003	0.013	0.013	0.0026	ug/L	U	U	
Chloroform	67663	0.024	0.024	0.0049	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.02	0.02	0.004	ug/L	U	U	
Dichlorodifluoromethane	75718	0.025	0.025	0.0049	ug/L	U	U	
Ethylbenzene	100414	0.0061	0.022	0.0043	ug/L	J	J	
Methylene chloride	75092	0.017	0.017	0.0035	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.016	0.022	0.0043	ug/L	J	J	
o-Xylene	95476	0.0075	0.022	0.0043	ug/L	J	J	
Tetrachloroethene	127184	0.034	0.034	0.0068	ug/L	U	U	

Toluene	108883	0.03	0.019	0.0038	ug/L			
trans-1,2-Dichloroethene	156605	0.02	0.02	0.004	ug/L	U	U	
Trichloroethene	79016	0.027	0.027	0.0054	ug/L	U	U	
Trichlorofluoromethane	75694	0.028	0.028	0.0056	ug/L	U	U	
Vinyl chloride	75014	0.013	0.013	0.0026	ug/L	U	U	

Sample Name SVL-528-SA5A-SV-9.0-1 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498178 **Sample Date:** 6/11/2014 10:02:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.049	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.0088	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.0011
m-Xylene & p-Xylene	179601231	0.02	0.0043	0.00087	ug/L			
o-Xylene	95476	0.01	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0044	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.053	0.0038	0.00075	ug/L			
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0021
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-560-SA5A-SV-10.5- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498179 **Sample Date:** 6/11/2014 11:54:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	

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1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0012	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.0011	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0029
o-Xylene	95476	0.002	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.0014	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.0013	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0014
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-560-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498180 **Sample Date:** 6/11/2014 11:26:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00082	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0025
Ethylbenzene	100414	0.0014	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0044	0.0044	0.00087	ug/L		U	F, RL changed from 0.0043
o-Xylene	95476	0.0029	0.0043	0.00087	ug/L	J	J	

Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.001	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0013
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-565-SA5A-SV-12.0- **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498181 **Sample Date:** 6/11/2014 2:10:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.003
Ethylbenzene	100414	0.0012	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0035
o-Xylene	95476	0.0022	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.00093	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0015
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-565-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498182 **Sample Date:** 6/11/2014 1:35:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	

1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.0018	0.004	0.00081	ug/L	J	J	
1,1-Dichloroethene	75354	0.011	0.004	0.00079	ug/L		J	*III
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00076	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.0034	0.004	0.00079	ug/L	J	J	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.041	0.0043	0.00087	ug/L		J	*III
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.064	0.043	0.0087	ug/L			
o-Xylene	95476	0.11	0.0043	0.00087	ug/L		J	*III
Tetrachloroethene	127184	0.16	0.0068	0.0014	ug/L		J	*III
Toluene	108883	0.0052	0.0038	0.00075	ug/L		J	*III
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.018	0.0054	0.0011	ug/L		J	*III
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0016
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-865-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7498183 **Sample Date:** 6/11/2014 1:43:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	UJ	*III
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0029
Ethylbenzene	100414	0.0015	0.0043	0.00087	ug/L	J	J	*III
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	

Analysis Method TO-15

m-Xylene & p-Xylene	179601231	0.0057	0.0043	0.00087	ug/L			
o-Xylene	95476	0.0033	0.0043	0.00087	ug/L	J	J	*III
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	UJ	*III
Toluene	108883	0.0017	0.0038	0.00075	ug/L	J	J	*III
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	UJ	*III
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0015
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 1482105

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	1482105
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	1
No. of Reanalyses/Dilutions:	0
Laboratory:	Eurofins Lancaster Laboratories Env., LLC

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
FB1-061314	7500233	N/A	Soil Vapor	6/13/14 10:28 AM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the sample was received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 16, 2014

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The sample was analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. The sample was analyzed within 24 hours of the BFB injection time.

- Calibration: The carbon tetrachloride %RSD was 34% on instrument 09464; therefore, the nondetected carbon tetrachloride result for the sample was qualified as estimated, "UJ." The remaining initial calibration %RSDs were ≤30%. The continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blank.

- Surrogate Recovery: Surrogates were not utilized.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits. Target compound 1,1,1,2-tetrachloroethane was not spiked in the LCS/LCSD.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: The sample in this SDG was identified as an ambient blank FB-061314. The following analytes were detected in this sample.

Analyte	FB-061314
Dichlorodifluoromethane	0.0025
Methylene chloride	0.0010
Toluene	0.00077
Trichlorofluoromethane	0.0013
m,p-Xylene	0.0013

  - Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatogram and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

Validated Sample Result Forms: 1482105

Analysis Method TO-15

Sample Name FB1-061314 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500233 **Sample Date:** 6/13/2014 10:28:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	UJ	C
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0025	0.0049	0.00099	ug/L	J	J	
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	U	U	
Methylene chloride	75092	0.001	0.0035	0.00069	ug/L	J	J	
m-Xylene & p-Xylene	179601231	0.0013	0.0043	0.00087	ug/L	J	J	
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	U	U	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.00077	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0013	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

DATA VALIDATION REPORT

Boeing SSFL RFI DOE Phase 3

SAMPLE DELIVERY GROUP: 1482106

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Boeing SSFL RFI DOE Phase 3
Contract Task Order:	1261.500D.01.001
Sample Delivery Group:	1482106
Project Manager:	Dixie Hambrick
Matrix:	Soil Vapor
QC Level:	V
No. of Samples:	8
No. of Reanalyses/Dilutions:	0
Laboratory:	Eurofins Lancaster Laboratories Env., LLC

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix Type*	*Collection Date*	*Method*
FB1-061214	7500234	N/A	Soil Vapor	6/12/14 2:10 PM	TO-15
SVL-595-SA5A-SV-5.0-6.0	7500235	N/A	Soil Vapor	6/12/14 9:16 AM	TO-15
SVL-609-SA5A-SV-7.0-8.0	7500236	N/A	Soil Vapor	6/12/14 1:20 PM	TO-15
SVL-616-SA5A-SV-6.5-7.5	7500237	N/A	Soil Vapor	6/12/14 10:03 AM	TO-15
SVL-618-SA5A-SV-5.0-6.0	7500238	N/A	Soil Vapor	6/12/14 11:01 AM	TO-15
SVL-619-SA5A-SV-4.5-5.5	7500239	N/A	Soil Vapor	6/12/14 10:33 AM	TO-15
SVL-622-SA5A-SV-6.0-7.0	7500240	N/A	Soil Vapor	6/12/14 11:25 AM	TO-15
SVL-629-SA5A-SV-7.0-8.0	7500241	N/A	Soil Vapor	6/12/14 12:01 PM	TO-15

II. Sample Management

No anomalies were observed regarding sample management. According to the case narrative for this SDG, the samples were received intact. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

T-I	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a compound with a CAS number and fit greater than 80%.	Not applicable
T-II	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents a class of compound but not of sufficient identification quality to represent a specific compound.	Not applicable
T-III	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. The tentative identification represents an unknown compound.	Not applicable
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD TO-15—Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks
Date Reviewed: July 16, 2014

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *Santa Susana Field Laboratory (SSFL) RCRA Facility Investigation, Surficial Media Operable Unit Quality Assurance Project Plan, Revision 5* (3/13), *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method TO-15*, and the *National Functional Guidelines for Superfund Organic Methods Data Review* (6/08).

- Holding Times: Analytical holding times were met. The samples were analyzed within 30 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 24 hours of the BFB injection time.

- Calibration: The carbon tetrachloride %RSD was 34% on instrument 09464; therefore, the carbon tetrachloride results for samples FB1-061214, SVL-55-SA5A-SV-5.0-6.0, SVL-609-SA5A-SV-7.0-8.0, SVL-616-SA5A-SV-6.5-7.5, SVL-618-SA5A-SV-5.0-6.0, and SVL-619-SA5A-SV-4.5-5.5, all nondetects, were qualified as estimated, "UJ." The remaining initial calibration %RSDs were ≤30%. The continuing calibration %Ds were ≤30%.

- Blanks: There were no detects in the method blanks.

- Surrogate Recovery: Surrogates were not utilized.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within the laboratory control limits. Target compound 1,1,1,2-tetrachloroethane was not spiked in the LCS/LCSD.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on a sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks: Ambient blank FB1-061214 was associated with the samples in this SDG. Results listed in the table below were qualified as nondetected, "U," at the reporting limit if detected below the reporting limit or at the level of contamination if

detected above. Other site sample detects were too large to qualify. There were no other ambient blank detects affecting sample results.

Analyte	Ambient Blank (µg/L)	Qualified Samples
Dichlorodifluoromethane	0.0024	All detects
Ethylbenzene	0.0011	All detects except SVL-622-SA5A-SV-6.0-7.0
Methylene chloride	0.0032	All detects except SVL-622-SA5A-SV-6.0-7.0
Toluene	0.0026	All detects except SVL-622-SA5A-SV-6.0-7.0
Trichlorofluoromethane	0.0012	All detects
m,p-Xylene	0.0041	All detects except SVL-622-SA5A-SV-6.0-7.0
o-Xylene	0.0021	All detects except SVL-622-SA5A-SV-6.0-7.0

- Field Duplicates: There were no field duplicate samples identified in this SDG.

- Internal Standards: The internal standards were acceptably recovered. The areas were within 40% of the continuing calibration and the retention times were within 20 seconds of the continuing calibration.

- Compound Identification: Review of the sample chromatograms and spectra indicated no problems with compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Any result reported between the MDL and the reporting limit was qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

  In order to report the analyte within the linear range of the calibration, toluene in SVL-622-SA5A-SV-6.0-7.0 was reported from a 10× dilution.

Validated Sample Result Forms: 1482106

Analysis Method TO-15

Sample Name FB1-061214 **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500234 **Sample Date:** 6/12/2014 2:10:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0056	0.0055	0.0011	ug/L			
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	UJ	C
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0024	0.0049	0.00099	ug/L	J	J	
Ethylbenzene	100414	0.0011	0.0043	0.00087	ug/L	J	J	
Methylene chloride	75092	0.0032	0.0035	0.00069	ug/L	J	J	
m-Xylene & p-Xylene	179601231	0.0041	0.0043	0.00087	ug/L	J	J	
o-Xylene	95476	0.0021	0.0043	0.00087	ug/L	J	J	
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0026	0.0038	0.00075	ug/L	J	J	
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0012	0.0056	0.0011	ug/L	J	J	
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-595-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500235 **Sample Date:** 6/12/2014 9:16:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	

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1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	UJ	C
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0025
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0012
Methylene chloride	75092	0.0049	0.0049	0.00069	ug/L		U	F, RL changed from 0.0035
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0029
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0015
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	J	U	F, result changed from 0.0035
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0013
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-609-SA5A-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500236 **Sample Date:** 6/12/2014 1:20:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.019	0.015	0.0038	ug/L			
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	UJ	C
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0012
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.0008
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0032
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0016
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	J	U	F, result changed from 0.001

trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0013
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-616-SA5A-SV-6.5-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500237 **Sample Date:** 6/12/2014 10:03:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0019	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	UJ	C
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0023
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0016
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.004
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0023
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	J	U	F, result changed from 0.0013
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0011
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-618-SA5A-SV-5.0-6. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500238 **Sample Date:** 6/12/2014 11:01:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	

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1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.0032	0.0032	0.00064	ug/L	U	U	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	UJ	C
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0012	0.0049	0.00098	ug/L	J	J	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	U	U	
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.00097
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.00074
m-Xylene & p-Xylene	179601231	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0022
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0012
Tetrachloroethene	127184	0.0027	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	J	U	F, result changed from 0.0015
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0014
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-619-SA5A-SV-4.5-5. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500239 **Sample Date:** 6/12/2014 10:33:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00085	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	UJ	C
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0022
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.002
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	U	U	
m-Xylene & p-Xylene	179601231	0.0047	0.0047	0.00087	ug/L		U	F, RL changed from 0.0043
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0028
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	

Toluene	108883	0.0038	0.0038	0.00075	ug/L	J	U	F, result changed from 0.0021
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0012
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-622-SA5A-SV-6.0-7. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500240 **Sample Date:** 6/12/2014 11:25:00 AM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	
1,1,2-Trichloroethane	79005	0.0015	0.0055	0.0011	ug/L	J	J	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.0029	0.004	0.00081	ug/L	J	J	
Benzene	71432	0.005	0.0032	0.00064	ug/L			
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0029
Ethylbenzene	100414	0.015	0.0043	0.00087	ug/L			
Methylene chloride	75092	0.081	0.0035	0.00069	ug/L			
m-Xylene & p-Xylene	179601231	0.024	0.0043	0.00087	ug/L			
o-Xylene	95476	0.012	0.0043	0.00087	ug/L			
Tetrachloroethene	127184	0.0031	0.0068	0.0014	ug/L	J	J	
Toluene	108883	0.17	0.038	0.0075	ug/L			
trans-1,2-Dichloroethene	156605	0.088	0.004	0.00079	ug/L			
Trichloroethene	79016	0.024	0.0054	0.0011	ug/L			
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0017
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	

Sample Name SVL-629-SA5A-SV-7.0-8. **Matrix Type:** Soil Vapor **Result Type:** Primary Result

Lab Sample Name: 7500241 **Sample Date:** 6/12/2014 12:01:00 PM **Validation Level:** V

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1,2-Tetrachloroethane	630206	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,1-Trichloroethane	71556	0.0055	0.0055	0.0011	ug/L	U	U	
1,1,2,2-Tetrachloroethane	79345	0.0069	0.0069	0.0014	ug/L	U	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	0.015	0.015	0.0038	ug/L	U	U	

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1,1,2-Trichloroethane	79005	0.0055	0.0055	0.0011	ug/L	U	U	
1,1-Dichloroethane	75343	0.004	0.004	0.00081	ug/L	U	U	
1,1-Dichloroethene	75354	0.004	0.004	0.00079	ug/L	U	U	
1,2-Dichloroethane	107062	0.004	0.004	0.00081	ug/L	U	U	
Benzene	71432	0.00067	0.0032	0.00064	ug/L	J	J	
Carbon Tetrachloride	56235	0.0063	0.0063	0.0013	ug/L	U	U	
Chloroethane	75003	0.0026	0.0026	0.00053	ug/L	U	U	
Chloroform	67663	0.0049	0.0049	0.00098	ug/L	U	U	
cis-1,2-Dichloroethene	156592	0.004	0.004	0.00079	ug/L	U	U	
Dichlorodifluoromethane	75718	0.0049	0.0049	0.00099	ug/L	J	U	F, result changed from 0.0029
Ethylbenzene	100414	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0021
Methylene chloride	75092	0.0035	0.0035	0.00069	ug/L	J	U	F, result changed from 0.00076
m-Xylene & p-Xylene	179601231	0.0059	0.0059	0.00087	ug/L		U	F, RL changed from 0.0043
o-Xylene	95476	0.0043	0.0043	0.00087	ug/L	J	U	F, result changed from 0.0034
Tetrachloroethene	127184	0.0068	0.0068	0.0014	ug/L	U	U	
Toluene	108883	0.0038	0.0038	0.00075	ug/L	J	U	F, result changed from 0.0029
trans-1,2-Dichloroethene	156605	0.004	0.004	0.00079	ug/L	U	U	
Trichloroethene	79016	0.0054	0.0054	0.0011	ug/L	U	U	
Trichlorofluoromethane	75694	0.0056	0.0056	0.0011	ug/L	J	U	F, result changed from 0.0015
Vinyl chloride	75014	0.0026	0.0026	0.00051	ug/L	U	U	