

| Sample Name | SL-001-SA5DS-SS-0.0-0.5 | SL-002-SA5DS-SS-0.0-0.5 | SL-002-SA5DS-SB-1.8-2.8 | SL-004-SA5DS-SS-0.0-0.5 | SL-005-SA5DS-SS-0.0-0.5 | SL-005-SA5DS-SB-1.0-2.0 | SL-006-SA5DS-SS-0.0-0.5 |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Sample Date | 09/26/2011 | 09/26/2011 | 11/14/2011 | 09/27/2011 | 09/27/2011 | 11/09/2011 | 09/27/2011 |
| SDG | DE253 | DE253 | DE286 | DE256 | DE256 | DE283 | DE283 |
| Start Depth | 0 | 0 | 1.8 | 0 | 0 | 1 | 0 |
| End Depth | 0.5 | 0.5 | 2.8 | 0.5 | 0.5 | 2 | 0.5 |
| Chemical Name | Unit | | | | | | |
| Nitrate | mg/kg | -- | -- | -- | -- | 3 | -- |
| Fluoride | mg/kg | 4.6 J Q | 1.4 J Q | 1.2 J Q | 2.0 J Q | 1.3 J Q | 1.1 UJ Q |
| Cyanide | mg/kg | -- | -- | -- | -- | 0.52 U | -- |
| Aluminum | mg/kg | 12200 | 17600 | 18000 | 14300 | 14500 | 17000 |
| Iron | mg/kg | 22900 | 25100 | 24900 J Q | 26100 | 21800 | 23300 |
| Lead | mg/kg | 40.1 J A | 24.2 J A | 6.38 J Q, A | 15 | 11.9 | 14.8 J Q, E |
| Lithium | mg/kg | 16.2 | 20 | 23.3 | 20.1 | 19.4 | 19.5 |
| Magnesium | mg/kg | 5630 | 5310 | 5800 | 5060 | 5140 | 5010 |
| Manganese | mg/kg | 305 | 385 | 331 | 289 | 268 | 278 |
| Mercury | mg/kg | 0.0133 J Z | 0.0222 J Z | 0.106 U | 0.0103 J Z | 0.0074 J Z | 0.0144 J Z |
| Molybdenum | mg/kg | 0.757 J Q | 0.747 J Q | 0.493 | 0.414 | 0.366 | 0.484 J Q, E |
| Nickel | mg/kg | 14.0 J Q, A | 15.8 J Q, A | 12.2 J Q, A | 9.66 | 10.2 | 12.5 J Q, E |
| Potassium | mg/kg | 1760 | 4290 | 2830 J Q | 2490 | 2260 | 3110 |
| Silver | mg/kg | 0.0372 J Q, Z | 0.0472 J Q, Z | 0.0381 J Z | 0.0252 J Z | 0.0236 J Z | 0.0259 J Q, E, Z |
| Sodium | mg/kg | 124 | 101 | 85.6 J Z | 93.6 J Z | 91.1 J Z | 98.3 J Z |
| Strontium | mg/kg | 22 | 29.6 | 23.9 | 20.1 J E | 20.9 J E | 26.5 |
| Thallium | mg/kg | 0.172 J Q | 0.219 J Q | 0.206 | 0.157 | 0.15 | 0.238 J Q, E |
| Tin | mg/kg | 10.1 U B | 10.0 U B | 10.6 U B | 10.1 U B | 10.1 U B | 10.6 U B |
| Titanium | mg/kg | 1240 | 1230 | 997 | 1110 | 999 | 924 |
| Antimony | mg/kg | 0.436 J Q | 0.309 J Q | 0.180 J Q, Z | 0.105 J Q, Z | 0.112 J Q, Z | 0.203 J FD, Q, E, Z |
| Arsenic | mg/kg | 7.36 J Q | 6.53 J Q | 4.92 J Q | 5.22 | 4.67 | 5.80 J Q, E |
| Beryllium | mg/kg | 0.401 | 0.482 | 0.529 | 0.416 | 0.424 | 0.698 J E, Q |
| Barium | mg/kg | 69.4 J A | 105 J A | 87.8 J E, A | 54.3 | 51.4 | 81.2 J E |
| Boron | mg/kg | 7.49 | 10.9 | 11 | 10.5 | 9.43 | 7.62 |
| Cadmium | mg/kg | 0.294 J Q | 0.345 J Q | 0.214 | 0.16 | 0.161 | 0.233 J Q, E |
| Chromium | mg/kg | 54.1 J A | 48.8 J A | 34.5 J Q, A | 34.4 | 32.9 | 42.0 J Q, E |
| Cobalt | mg/kg | 7.42 | 7.83 | 8.13 J A | 5.83 | 6.46 | 6.69 J E |
| Copper | mg/kg | 7.37 J Q | 11.0 J Q | 7.03 | 5.54 | 5.55 | 7.68 J Q, E |
| Vanadium | mg/kg | 98.1 J A | 84.4 J A | 58.3 J A | 58.4 | 56.9 | 69.8 J Q, E |
| Zinc | mg/kg | 72.7 J A | 75.9 J A | 47.3 | 53.9 | 50.5 | 60.5 J Q, E |
| Zirconium | mg/kg | 12.5 | 6.76 | 8.84 | 5.39 | 3.56 J Z | 8.03 |
| Calcium | mg/kg | 5160 | 5460 | 4180 | 3540 J E | 3540 J E | 3670 |
| Phosphorus | mg/kg | 878 | 825 | 615 | 715 | 808 | 731 |
| Selenium | mg/kg | 0.257 J Q, Z | 0.294 J Q, Z | 0.143 J Z | 0.350 J Z | 0.244 J Z | 0.290 J E, Z |
| Chromium VI | mg/kg | 1.0 U | 1.0 U | 1.1 | 0.97 J Z | 0.92 J Z | 1.1 UJ FD |
| Perchlorate (314.0) | ug/kg | 30.2 U | 30.6 U | 32.1 U | 30.5 U | 30.5 U | 33.4 U |
| Perchlorate (6850) | ug/kg | -- | -- | -- | -- | -- | -- |
| Percent Moisture | % | 0.67 | 2.1 | 6.6 | 1.7 | 1.5 | 10.3 |
| pH | pH unit | 6.04 | 7.04 | 7.27 | 5.96 | 6.03 | 6.27 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A8
Inorganics-Validated Data
HSA-5DS

| Sample Name | | SL-007-SA5DS-SS-0.0-0.5 | SL-008-SA5DS-SS-0.0-0.5 | SL-009-SA5DS-SS-0.0-0.5 | SL-010-SA5DS-SS-0.0-0.5 | SL-010-SA5DS-SB-2.0-3.0 | SL-013-SA5DS-SS-0.0-0.5 | SL-013-SA5DS-SB-4.0-5.0 |
|---------------------|---------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Sample Date | | 09/28/2011 | 09/28/2011 | 09/28/2011 | 09/28/2011 | 11/08/2011 | 09/28/2011 | 10/18/2011 |
| SDG | | DE257 | DE257 | DE257 | DE257 | DE282 | DE257 | DE271 |
| Start Depth | | 0 | 0 | 0 | 0 | 2 | 0 | 4 |
| End Depth | | 0.5 | 0.5 | 0.5 | 0.5 | 3 | 0.5 | 5 |
| Chemical Name | Unit | | | | | | | |
| Nitrate | mg/kg | -- | -- | -- | -- | 3.6 | -- | -- |
| Fluoride | mg/kg | 1.0 UJ Q | 1.1 J Q | 1.0 UJ Q | 1.0 UJ Q | 1.6 J Q | 0.93 J Q, Z | 2.2 J E, Q |
| Cyanide | mg/kg | -- | -- | -- | -- | 0.54 U | -- | -- |
| Aluminum | mg/kg | 17200 | 11700 | 17500 | 16800 | 16100 | 17600 | 23300 |
| Iron | mg/kg | 22700 | 17900 | 21900 | 22100 | 24400 | 21300 | 25000 |
| Lead | mg/kg | 14.2 J Q | 5.33 J Q | 14.8 J Q | 18.9 J Q | 5.17 J E | 14.2 J Q | 7.64 J Q, E |
| Lithium | mg/kg | 16.3 | 25.1 | 15.6 | 16.7 | 17.8 | 17.2 | 23.2 |
| Magnesium | mg/kg | 4860 | 4490 | 4660 | 4590 | 5660 | 4330 | 5430 |
| Manganese | mg/kg | 257 | 258 | 282 | 298 | 164 | 294 | 281 |
| Mercury | mg/kg | 0.0981 U F | 0.0979 U | 0.0983 U F | 0.0947 U F | 0.0091 J Z | 0.0997 U F | 0.111 U |
| Molybdenum | mg/kg | 0.705 J Q | 0.439 J Q | 0.696 J Q | 0.792 J Q | 0.196 J Q, E | 0.839 J Q | 0.585 J Q, E |
| Nickel | mg/kg | 12.7 J Q | 12.0 J Q | 13.4 J Q | 15.9 J Q | 10.4 J Q, E | 14.0 J Q | 16.7 J E, Q |
| Potassium | mg/kg | 2500 | 2850 | 2680 | 2660 | 1210 | 3170 | 1790 |
| Silver | mg/kg | 0.0242 J Q, Z | 0.0787 J Q, Z | 0.0309 J Q, Z | 0.0320 J Q, Z | 0.0165 J Q, E, Z | 0.0405 J Q, Z | 0.0267 J Q, Z |
| Sodium | mg/kg | 87.7 J Z | 69.5 J Z | 88.4 J Z | 91.2 J Z | 123 | 85.1 J Z | 102 J Z |
| Strontium | mg/kg | 24.5 | 10.8 | 26.8 | 24.9 | 19.8 | 25.1 | 25.4 |
| Thallium | mg/kg | 0.184 J Q | 0.284 J Q | 0.216 J Q | 0.248 J Q | 0.101 J Q, E, Z | 0.210 J Q | 0.272 J Q |
| Tin | mg/kg | 10.1 U B | 9.99 U B | 10.2 U B | 10.0 U B | 10.9 U B | 10.1 U B | 10.8 U B |
| Titanium | mg/kg | 1180 | 1110 | 1160 | 1200 | 1050 | 1200 | 1090 |
| Antimony | mg/kg | 0.271 J Q | 0.105 J Q, Z | 0.294 J Q | 0.307 J Q | 0.160 J Q, E, Z | 0.229 J Q | 0.128 J Q, Z |
| Arsenic | mg/kg | 6.01 J Q | 4.51 J Q | 6.31 J Q | 7.13 J Q | 6.23 J Q, E | 5.71 J Q | 6.34 J Q, E |
| Beryllium | mg/kg | 0.643 | 0.523 | 0.694 | 0.766 | 0.469 J E, Q | 0.739 | 0.896 J Q, E |
| Barium | mg/kg | 79.1 | 97.4 | 90.8 | 101 | 38.2 J E | 93.1 | 92.1 J E |
| Boron | mg/kg | 8.27 | 4.38 J Z | 7.25 | 7.3 | 5.84 | 7.27 | 5.39 U |
| Cadmium | mg/kg | 0.203 J Q | 0.125 J Q | 0.221 J Q | 0.297 J Q | 0.0665 J Q, E, Z | 0.240 J Q | 0.143 J Q |
| Chromium | mg/kg | 37.6 J Q | 16.6 J Q | 38.3 J Q | 46.2 J Q | 36.8 J Q, E | 37.9 J Q | 45.8 J Q, E |
| Cobalt | mg/kg | 6.77 J Q | 6.13 J Q | 7.48 J Q | 9.03 J Q | 3.85 J E | 7.23 J Q | 9.22 J Q |
| Copper | mg/kg | 7.44 J Q | 7.88 J Q | 8.34 J Q | 9.76 J Q | 3.98 J Q, E | 8.80 J Q | 8.96 J Q, E |
| Vanadium | mg/kg | 64.8 | 34.9 | 65.4 | 77 | 66.2 J E | 63.5 | 78.1 J Q, E |
| Zinc | mg/kg | 57.8 | 72.7 | 61.2 | 73.5 | 42.9 J E | 61.9 | 60 |
| Zirconium | mg/kg | 6.09 | 0.970 J Z | 5.85 | 6.14 | 15 | 3.72 J Z | 7.64 |
| Calcium | mg/kg | 3100 | 2820 | 3230 | 3450 | 3440 | 3010 | 3120 |
| Phosphorus | mg/kg | 594 | 340 | 586 | 660 | 661 | 585 | 491 |
| Selenium | mg/kg | 0.204 J Z | 0.0809 J Z | 0.222 J Z | 0.252 J Z | 0.203 J E, Z | 0.217 J Z | 0.304 J Q, Z |
| Chromium VI | mg/kg | 1.1 | 0.48 J Z | 0.68 J Z | 0.21 J Z | 0.47 J Z | 0.97 U | 0.52 J Z |
| Perchlorate (314.0) | ug/kg | 30.5 U | 30.6 U | 30.5 U | 30.4 U | 33.4 U | 30.7 U | 34.0 U |
| Perchlorate (6850) | ug/kg | -- | 5.1 U | -- | -- | -- | -- | -- |
| Percent Moisture | % | 1.5 | 1.9 | 1.5 | 1.4 | 10.3 | 2.2 | 11.7 |
| pH | pH unit | 6.2 | 6.33 | 5.96 | 6.05 | 7.06 | 5.85 | 7.67 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-014-SA5DS-SS-0.0-0.5 | SL-015-SA5DS-SS-0.0-0.5 | SL-015-SA5DS-SB-3.5-4.5 | SL-016-SA5DS-SS-0.0-0.5 | SL-016-SA5DS-SB-4.0-5.0 | SL-017-SA5DS-SS-0.0-0.5 | SL-019-SA5DS-SS-0.0-0.5 |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Sample Date | 09/28/2011 | 09/28/2011 | 10/18/2011 | 09/28/2011 | 10/19/2011 | 09/28/2011 | 09/27/2011 |
| SDG | DE257 | DE257 | DE271 | DE257 | DE272 | DE257 | DE256 |
| Start Depth | 0 | 0 | 3.5 | 0 | 4 | 0 | 0 |
| End Depth | 0.5 | 0.5 | 4.5 | 0.5 | 5 | 0.5 | 0.5 |
| Chemical Name | Unit | | | | | | |
| Nitrate | mg/kg | -- | -- | -- | -- | -- | -- |
| Fluoride | mg/kg | 1.0 U | 1.0 U | 1.5 J E, Q | 1.0 U | 2.5 | 1.3 J Q |
| Cyanide | mg/kg | -- | -- | -- | -- | -- | -- |
| Aluminum | mg/kg | 18200 | 17700 | 18800 | 17600 | 21500 | 16600 |
| Iron | mg/kg | 22400 | 22500 | 23800 | 22400 | 27000 | 22300 |
| Lead | mg/kg | 11.9 J Q | 11.6 J Q | 7.22 J Q, E | 13.3 J Q | 5.59 J E, Q, A | 30.0 J Q |
| Lithium | mg/kg | 18.3 | 17.6 | 20.4 | 17 | 19.9 | 17.2 |
| Magnesium | mg/kg | 4840 | 4560 | 5530 | 4630 | 5280 | 4760 |
| Manganese | mg/kg | 306 | 273 | 239 | 309 | 303 | 273 |
| Mercury | mg/kg | 0.101 U F | 0.0472 J Z | 0.107 U | 0.102 U | 0.104 U | 0.0978 U F |
| Molybdenum | mg/kg | 0.685 J Q | 0.779 J Q | 0.498 J Q, E | 0.726 J Q | 0.538 | 0.808 J Q |
| Nickel | mg/kg | 11.6 J Q | 15.5 J Q | 14.6 J E, Q | 15.7 J Q | 12.6 J Q, A | 17.8 J Q |
| Potassium | mg/kg | 2730 | 3100 | 2080 | 3510 | 1690 | 2390 |
| Silver | mg/kg | 0.0258 J Q, Z | 0.0297 J Q, Z | 0.0200 J Q, Z | 0.0328 J Q, Z | 0.0268 J Z | 0.0461 J Q, Z |
| Sodium | mg/kg | 93.6 J Z | 84.7 J Z | 109 | 80.5 J Z | 110 | 97.7 J Z |
| Strontium | mg/kg | 26.7 | 25.2 | 25.6 | 27.1 | 27.5 | 30.7 |
| Thallium | mg/kg | 0.186 J Q | 0.233 J Q | 0.226 J Q | 0.245 J Q | 0.222 | 0.245 J Q |
| Tin | mg/kg | 9.95 U B | 9.87 U B | 10.5 U B | 10.3 U B | 10.8 U B | 9.97 U B |
| Titanium | mg/kg | 1210 | 1220 | 1040 | 1220 | 1480 | 1140 |
| Antimony | mg/kg | 0.242 J Q | 0.305 J Q | 0.150 J Q, Z | 0.287 J Q | 0.215 U J B, Q | 0.328 J Q |
| Arsenic | mg/kg | 4.58 J Q | 6.25 J Q | 5.91 J Q, E | 5.99 J Q | 5.58 J E, Q | 6.84 J Q |
| Beryllium | mg/kg | 0.584 | 0.732 | 0.774 J Q, E | 0.768 | 0.712 | 0.812 |
| Barium | mg/kg | 76.9 | 101 | 90.8 J E | 104 | 65.0 J A | 104 |
| Boron | mg/kg | 7.05 | 7.07 | 5.27 U | 7.67 | 2.00 J Z | 8.34 |
| Cadmium | mg/kg | 0.210 J Q | 0.279 J Q | 0.151 J Q | 0.286 J Q | 0.119 | 0.338 J Q |
| Chromium | mg/kg | 31.3 J Q | 39.8 J Q | 41.8 J Q, E | 38.1 J Q | 36.8 J Q, A | 43.4 J Q |
| Cobalt | mg/kg | 5.97 J Q | 8.50 J Q | 9.72 J Q | 8.95 J Q | 6.94 J A | 10.6 J Q |
| Copper | mg/kg | 7.35 J Q | 9.03 J Q | 8.23 J Q, E | 9.83 J Q | 6.80 J Q | 10.5 J Q |
| Vanadium | mg/kg | 53.2 | 71.2 | 72.2 J Q, E | 66.9 | 66.2 J A | 78.8 |
| Zinc | mg/kg | 51.4 | 65.7 | 60.2 | 65.4 | 50.7 | 80 |
| Zirconium | mg/kg | 2.65 J Z | 5.38 | 6.73 | 4.97 J Z | 13 | 6.1 |
| Calcium | mg/kg | 3290 | 3290 | 3190 | 3460 | 3090 | 4170 |
| Phosphorus | mg/kg | 717 | 643 | 550 | 642 | 432 J Q, E | 706 |
| Selenium | mg/kg | 0.216 J Z | 0.241 J Z | 0.303 J Q, Z | 0.220 J Z | 0.154 J Z | 0.253 J Z |
| Chromium VI | mg/kg | 0.53 J Z | 1 | 2.1 | 0.73 J Z | 0.56 J Z | 1.4 |
| Perchlorate (314.0) | ug/kg | 30.5 U | 30.8 U | 33.2 U | 683 | 32.6 U | 30.5 U |
| Perchlorate (6850) | ug/kg | -- | 5.1 U | -- | -- | -- | -- |
| Percent Moisture | % | 1.5 | 2.6 | 9.6 | 4.9 | 8.1 | 1.7 |
| pH | pH unit | 5.66 | 6.1 | 6.76 | 5.87 | 7 | 6.27 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A8
Inorganics-Validated Data
HSA-5DS

| Sample Name | | SL-019-SA5DS-SB-2.0-3.0 | SL-020-SA5DS-SS-0.0-0.5 | SL-021-SA5DS-SS-0.0-0.5 | SL-021-SA5DS-SB-2.0-3.0 | SL-022-SA5DS-SS-0.0-0.5 | SL-022-SA5DS-SB-4.0-5.0 | SL-023-SA5DS-SS-0.0-0.5 |
|---------------------|---------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Sample Date | | 11/08/2011 | 09/27/2011 | 09/27/2011 | 11/09/2011 | 09/27/2011 | 11/09/2011 | 09/27/2011 |
| SDG | | DE282 | DE256 | DE256 | DE283 | DE256 | DE283 | DE256 |
| Start Depth | | 2 | 0 | 0 | 2 | 0 | 4 | 0 |
| End Depth | | 3 | 0.5 | 0.5 | 3 | 0.5 | 5 | 0.5 |
| Chemical Name | Unit | | | | | | | |
| Nitrate | mg/kg | 3.2 | -- | -- | -- | -- | -- | -- |
| Fluoride | mg/kg | 2.1 J Q | 1.8 J Q | 1.5 J Q | 1.2 J Q | 1.0 UJ Q | 1.6 J Q | 1.7 J Q |
| Cyanide | mg/kg | 0.54 U | -- | -- | -- | -- | -- | -- |
| Aluminum | mg/kg | 17700 | 15300 | 15600 | 15100 | 16100 | 18900 | 15000 |
| Iron | mg/kg | 26200 | 21400 | 21000 | 27800 | 22800 | 26600 | 22000 |
| Lead | mg/kg | 4.57 J E | 12.4 | 8.71 | 4.61 J Q, E | 9.99 | 5.91 J Q, E | 12.3 |
| Lithium | mg/kg | 17.8 | 18.3 | 17.7 | 13 | 20.2 | 24 | 20.5 |
| Magnesium | mg/kg | 5850 | 4930 | 5000 | 3710 | 5050 | 5850 | 5540 |
| Manganese | mg/kg | 238 | 281 | 399 | 3560 | 306 | 289 | 267 |
| Mercury | mg/kg | 0.106 U | 0.0088 J Z | 0.0115 J Z | 0.0157 J Z | 0.0193 J Z | 0.104 U | 0.0118 J Z |
| Molybdenum | mg/kg | 0.218 J Q, E | 0.438 | 0.365 | 0.647 J Q, E | 0.457 | 0.438 J Q, E | 0.38 |
| Nickel | mg/kg | 9.74 J Q, E | 10.1 | 10.4 | 14.0 J Q, E | 10.8 | 13.9 J Q, E | 10.2 |
| Potassium | mg/kg | 1160 | 2670 | 2370 | 1290 | 3490 | 1680 | 1770 |
| Silver | mg/kg | 0.104 UJ E | 0.0708 J Z | 0.0207 J Z | 0.0161 J Q, E, Z | 0.0204 J Z | 0.0210 J Q, E, Z | 0.0152 J Z |
| Sodium | mg/kg | 117 | 88.1 J Z | 91.3 J Z | 95.0 J Z | 83.9 J Z | 115 | 98.7 J Z |
| Strontium | mg/kg | 20.7 | 21.4 J E | 23.6 J E | 22.3 | 23.1 J E | 23.9 | 21.9 J E |
| Thallium | mg/kg | 0.124 J Q, E | 0.149 | 0.167 | 0.150 J Q, E | 0.146 | 0.211 J Q, E | 0.129 |
| Tin | mg/kg | 10.7 U B | 9.94 U B | 9.87 U B | 10.5 U B | 10.1 U B | 10.3 U B | 10.1 U B |
| Titanium | mg/kg | 1030 | 1100 | 1030 | 880 | 812 | 985 | 750 |
| Antimony | mg/kg | 0.0982 J Q, E, Z | 0.107 J Q, Z | 0.100 J Q, Z | 0.127 J Q, E, Z | 0.108 J Q, Z | 0.116 J Q, E, Z | 0.111 J Q, Z |
| Arsenic | mg/kg | 5.83 J Q, E | 4.58 | 4.61 | 8.02 J Q, E | 4.4 | 5.75 J Q, E | 4.68 |
| Beryllium | mg/kg | 0.534 J E, Q | 0.441 | 0.452 | 0.846 J E, Q | 0.43 | 0.649 J E, Q | 0.426 |
| Barium | mg/kg | 47.4 J E | 65 | 79.4 | 104 J E | 64.3 | 67.3 J E | 55.1 |
| Boron | mg/kg | 6.03 | 9.48 | 9.65 | 7.74 | 10.3 | 6.35 | 10.1 |
| Cadmium | mg/kg | 0.0667 J Q, E, Z | 0.166 | 0.163 | 0.182 J Q, E | 0.195 | 0.135 J Q, E | 0.148 |
| Chromium | mg/kg | 36.3 J Q, E | 31.2 | 33.3 | 32.7 J Q, E | 31.7 | 40.8 J Q, E | 32.8 |
| Cobalt | mg/kg | 4.49 J E | 6.28 | 5.61 | 4.92 J E | 6.79 | 6.57 J E | 6.25 |
| Copper | mg/kg | 3.83 J Q, E | 6.2 | 5.4 | 3.89 J Q, E | 6.34 | 6.95 J Q, E | 5.31 |
| Vanadium | mg/kg | 64.3 J E | 54.8 | 55.2 | 68.1 J Q, E | 55.3 | 71.1 J Q, E | 57.6 |
| Zinc | mg/kg | 44.0 J E | 50 | 46.9 | 37.3 J Q, E | 50.3 | 52.4 J Q, E | 48.4 |
| Zirconium | mg/kg | 13.5 | 6.66 | 4.06 J Z | 11.8 | 5.84 | 9.73 | 5.94 |
| Calcium | mg/kg | 3250 | 3440 J E | 3510 J E | 2690 | 3560 J E | 3360 | 3610 J E |
| Phosphorus | mg/kg | 536 | 715 | 740 | 553 | 715 | 478 | 582 |
| Selenium | mg/kg | 0.124 J E, Z | 0.190 J Z | 0.170 J Z | 0.103 J E, Z | 0.217 J Z | 0.209 J E, Z | 0.259 J Z |
| Chromium VI | mg/kg | 0.64 J Z | 1.7 | 0.65 J Z | 0.62 J Z | 0.56 J Z | 0.55 J Z | 1.0 U |
| Perchlorate (314.0) | ug/kg | 32.5 U | 30.4 U | 30.5 U | 32.7 U | 30.5 U | 31.8 U | 30.6 U |
| Perchlorate (6850) | ug/kg | -- | -- | -- | -- | -- | -- | -- |
| Percent Moisture | % | 7.6 | 1.4 | 1.6 | 8.3 | 1.8 | 5.7 | 1.9 |
| pH | pH unit | 6.12 | 5.99 | 6.14 | 6.45 | 6.05 | 6.5 | 6.09 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-024-SA5DS-SS-0.0-0.5 | SL-025-SA5DS-SS-0.0-0.5 | SL-026-SA5DS-SS-0.0-0.5 | SL-026-SA5DS-SB-4.0-5.0 | SL-026-SA5DS-SB-9.0-10.0 | SL-027-SA5DS-SS-0.0-0.5 | SL-028-SA5DS-SS-0.0-0.5 |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|
| Sample Date | 09/27/2011 | 09/27/2011 | 09/26/2011 | 10/20/2011 | 10/20/2011 | 09/26/2011 | 09/26/2011 |
| SDG | DE256 | DE256 | DE253 | DE273 | DE273 | DE253 | DE253 |
| Start Depth | 0 | 0 | 0 | 4 | 9 | 0 | 0 |
| End Depth | 0.5 | 0.5 | 0.5 | 5 | 10 | 0.5 | 0.5 |
| Chemical Name | Unit | | | | | | |
| Nitrate | mg/kg | -- | -- | -- | -- | -- | -- |
| Fluoride | mg/kg | 1.0 UJ Q | 1.4 J Q | 1.0 UJ Q | 6.7 J Q | 9.1 J Q | 0.99 UJ Q |
| Cyanide | mg/kg | -- | -- | -- | -- | -- | -- |
| Aluminum | mg/kg | 11800 | 13500 | 9970 | 20700 J E | 30100 J E | 15800 |
| Iron | mg/kg | 19200 | 21500 | 18300 | 28500 | 37300 | 27200 |
| Lead | mg/kg | 8.9 | 9.22 | 12.1 J A | 6.65 J Q, A | 9.82 J Q, A | 10.1 J A |
| Lithium | mg/kg | 19.1 | 18.8 | 13.8 | 40 | 52.9 | 30.5 |
| Magnesium | mg/kg | 5160 | 5700 | 4310 | 8240 | 10500 | 7140 |
| Manganese | mg/kg | 281 | 329 | 227 | 323 | 250 | 317 |
| Mercury | mg/kg | 0.0098 J Z | 0.0098 J Z | 0.0973 U | 0.108 U | 0.109 U B | 0.0988 U |
| Molybdenum | mg/kg | 0.313 | 0.341 | 0.404 J Q | 0.303 | 0.165 | 0.413 J Q |
| Nickel | mg/kg | 9.27 | 9.08 | 20.0 J Q, A | 14.4 J A | 22.5 J A | 20.6 J Q, A |
| Potassium | mg/kg | 2320 | 1470 | 2570 | 4200 J Q | 6250 J Q | 3940 |
| Silver | mg/kg | 0.0169 J Z | 0.0162 J Z | 0.0205 J Q, Z | 0.109 U | 0.0195 J Z | 0.161 J Q |
| Sodium | mg/kg | 111 | 98.2 J Z | 199 | 164 | 209 | 146 |
| Strontium | mg/kg | 20.5 J E | 21.3 J E | 30.7 | 23.1 | 31.9 | 21.6 |
| Thallium | mg/kg | 0.112 | 0.102 | 0.186 J Q | 0.269 | 0.395 | 0.367 J Q |
| Tin | mg/kg | 10.1 U B | 10.1 U B | 9.85 U B | 10.8 U B | 11.0 U B | 9.83 U B |
| Titanium | mg/kg | 1090 | 1210 | 1100 | 1380 | 1590 | 1260 |
| Antimony | mg/kg | 0.119 J Q, Z | 0.133 J Q, Z | 0.102 J Q, Z | 0.217 UJ Q | 0.0880 J Q, Z | 0.194 J Q, Z |
| Arsenic | mg/kg | 4.53 | 5.88 | 3.27 J Q | 4.73 J Q | 6.86 J Q | 5.79 J Q |
| Beryllium | mg/kg | 0.389 | 0.418 | 0.275 | 0.578 J Q | 0.762 J Q | 0.44 |
| Barium | mg/kg | 42.5 | 61.2 | 101 J A | 70.5 | 103 | 128 J A |
| Boron | mg/kg | 8.87 | 9.52 | 5.5 | 13.4 | 17.5 | 9.43 |
| Cadmium | mg/kg | 0.156 | 0.134 | 0.152 J Q | 0.0890 J Z | 0.108 J Z | 0.354 J Q |
| Chromium | mg/kg | 31.2 | 32.7 | 24.8 J A | 27.9 J Q, A | 35.9 J Q, A | 44.5 J A |
| Cobalt | mg/kg | 5.49 | 6.29 | 6.3 | 8.63 J A | 8.11 J A | 10.7 |
| Copper | mg/kg | 4.43 | 3.69 | 11.9 J Q | 10.8 J A | 20.6 J A | 14.1 J Q |
| Vanadium | mg/kg | 56.4 | 61.6 | 63.9 J A | 56.7 J A | 67.2 J A | 95.0 J A |
| Zinc | mg/kg | 43.2 | 45.9 | 58.8 J A | 67.9 | 98.9 | 104 J A |
| Zirconium | mg/kg | 9.18 | 11 | 4.92 U B | 7.39 | 7.92 | 7.02 |
| Calcium | mg/kg | 4600 J E | 4700 J E | 3460 | 5730 | 6120 | 8000 |
| Phosphorus | mg/kg | 838 | 721 | 472 | 588 | 613 | 655 |
| Selenium | mg/kg | 0.170 J Z | 0.188 J Z | 0.154 J Q, Z | 0.206 J Z | 0.344 J Z | 0.282 J Q, Z |
| Chromium VI | mg/kg | 0.67 J Z | 0.86 J Z | 0.34 J Z | 1.1 U | 1.1 U | 1.0 U |
| Perchlorate (314.0) | ug/kg | 30.5 U | 30.6 U | 30.4 U | 32.6 U | 32.9 U | 30.4 U |
| Perchlorate (6850) | ug/kg | -- | -- | -- | 5.4 U | -- | -- |
| Percent Moisture | % | 1.6 | 2 | 1.4 | 8 | 8.9 | 1.2 |
| pH | pH unit | 6.65 | 6.48 | 6.84 | 8.2 | 7.13 | 7.41 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A8
Inorganics-Validated Data
HSA-5DS

| Sample Name | | SL-028-SA5DS-SB-1.9-2.9 | SL-029-SA5DS-SS-0.0-0.5 | SL-029-SA5DS-SB-3.5-4.5 | SL-030-SA5DS-SS-0.0-0.5 | SL-031-SA5DS-SS-0.0-0.5 | SL-031-SA5DS-SB-4.0-5.0 | SL-031-SA5DS-SB-9.0-10.0 |
|---------------------|---------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Sample Date | | 11/11/2011 | 09/26/2011 | 11/11/2011 | 09/26/2011 | 09/26/2011 | 11/14/2011 | 11/14/2011 |
| SDG | | DE285 | DE253 | DE285 | DE253 | DE253 | DE286 | DE286 |
| Start Depth | | 1.9 | 0 | 3.5 | 0 | 0 | 4 | 9 |
| End Depth | | 2.9 | 0.5 | 4.5 | 0.5 | 0.5 | 5 | 10 |
| Chemical Name | Unit | | | | | | | |
| Nitrate | mg/kg | -- | -- | -- | -- | -- | -- | -- |
| Fluoride | mg/kg | 6.5 | 2.6 J Q | 3.3 | 1.2 J Q | 1.6 J Q | 6.2 J Q | 3.6 J Q |
| Cyanide | mg/kg | -- | -- | -- | -- | -- | -- | -- |
| Aluminum | mg/kg | 18600 | 29200 | 26800 | 26100 | 29200 | 31100 | 28900 |
| Iron | mg/kg | 28500 | 36900 | 36000 | 34100 | 39000 | 38200 J Q | 44600 J Q |
| Lead | mg/kg | 8.11 | 15.7 J A | 9.21 | 17.8 J A | 32.3 J A | 8.91 J Q, A | 8.86 J Q, A |
| Lithium | mg/kg | 33.6 | 55.1 | 47.1 | 47.1 | 45.2 | 39.9 | 44.7 |
| Magnesium | mg/kg | 7990 | 10200 | 10400 | 9090 | 9660 | 9430 | 10700 |
| Manganese | mg/kg | 313 J E | 345 | 293 J E | 377 | 361 | 364 | 285 |
| Mercury | mg/kg | 0.107 U | 0.0076 J Z | 0.105 U | 0.0145 J Z | 0.0130 J Z | 0.108 U | 0.106 U |
| Molybdenum | mg/kg | 0.105 U B | 0.514 J Q | 0.108 U B | 0.651 J Q | 0.664 J Q | 0.371 | 0.108 U B |
| Nickel | mg/kg | 15 | 29.2 J Q, A | 21.4 | 34.2 J Q, A | 28.6 J Q, A | 21.9 J Q, A | 21.4 J Q, A |
| Potassium | mg/kg | 2910 J Q | 5730 | 5010 J Q | 7340 | 6660 | 4740 J Q | 5150 J Q |
| Silver | mg/kg | 0.105 U | 0.0472 J Q, Z | 0.0265 J Z | 0.0488 J Q, Z | 0.0554 J Q, Z | 0.0233 J Z | 0.0466 J Z |
| Sodium | mg/kg | 163 J E | 161 | 150 J E | 146 | 135 | 194 | 198 |
| Strontium | mg/kg | 17.7 | 28.8 | 28.9 | 35.9 | 34.5 | 36 | 36.7 |
| Thallium | mg/kg | 0.276 | 0.539 J Q | 0.381 | 0.616 J Q | 0.526 J Q | 0.41 | 0.407 |
| Tin | mg/kg | 22 | 10.2 U B | 10.5 U B | 10.1 U B | 10.4 U B | 10.9 U B | 10.7 U B |
| Titanium | mg/kg | 1040 | 1700 | 1340 | 1670 | 1710 | 1540 | 1410 |
| Antimony | mg/kg | 0.210 U | 0.343 J Q | 0.0902 J Z | 0.182 J Q, Z | 0.341 J Q | 0.104 J Q, Z | 0.217 U J Q |
| Arsenic | mg/kg | 4.26 | 8.36 J Q | 4.67 | 9.83 J Q | 8.83 J Q | 5.80 J Q | 5.35 J Q |
| Beryllium | mg/kg | 0.539 | 0.635 | 0.719 | 0.576 | 0.693 | 0.815 | 0.762 |
| Barium | mg/kg | 57.5 | 143 J A | 98.2 | 180 J A | 151 J A | 124 J E, A | 114 J E, A |
| Boron | mg/kg | 4.58 J Z | 13.5 | 6.61 | 17.3 | 14 | 17.5 | 20 |
| Cadmium | mg/kg | 0.0832 J Z | 0.252 J Q | 0.143 | 0.283 J Q | 0.268 J Q | 0.159 | 0.174 |
| Chromium | mg/kg | 32.4 | 58.8 J A | 31.3 | 68.5 J A | 55.5 J A | 33.0 J Q, A | 31.3 J Q, A |
| Cobalt | mg/kg | 11.2 | 14 | 8.82 | 16.8 | 14 | 11.2 J A | 11.4 J A |
| Copper | mg/kg | 10.4 | 22.4 J Q | 16.3 | 25.6 J Q | 24.8 J Q | 16.7 | 19 |
| Vanadium | mg/kg | 57.5 | 118 J A | 59.8 | 136 J A | 111 J A | 65.5 J A | 59.4 J A |
| Zinc | mg/kg | 62 | 116 J A | 80.5 | 138 J A | 138 J A | 75.7 | 82.6 |
| Zirconium | mg/kg | 7.45 | 4.39 J Z | 8.4 | 3.54 J Z | 5.13 J Z | 9.12 | 7.69 |
| Calcium | mg/kg | 4660 | 6510 | 6840 | 8470 | 6570 | 5480 | 6370 |
| Phosphorus | mg/kg | 555 | 503 | 552 | 677 | 528 | 310 | 503 |
| Selenium | mg/kg | 0.202 J Z | 0.412 J Q | 0.215 J Z | 0.483 J Q | 0.510 J Q | 0.294 J Z | 0.269 J Z |
| Chromium VI | mg/kg | 1.1 U | 1.4 | 0.28 J Z | 1.0 U | 0.38 J Z | 0.49 J Z | 0.36 J Z |
| Perchlorate (314.0) | ug/kg | 32.4 U | 31.1 U | 32.7 U | 30.7 U | 31.1 U | 33.4 U | 33.5 U |
| Perchlorate (6850) | ug/kg | 4.1 J L, Z | -- | -- | -- | -- | -- | -- |
| Percent Moisture | % | 7.4 | 3.4 | 8.3 | 2.2 | 3.4 | 10.3 | 10.4 |
| pH | pH unit | 5.9 | 6.9 | 6.84 | 7.08 | 6.96 | 7.29 | 7.32 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-032-SA5DS-SS-0.0-0.5 | SL-033-SA5DS-SS-0.0-0.5 | SL-033-SA5DS-SB-2.0-3.0 | SL-034-SA5DS-SS-0.0-0.5 | SL-034-SA5DS-SB-4.0-5.0 | SL-034-SA5DS-SB-9.0-10.0 | SL-036-SA5DS-SB-4.0-5.0 |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
| Sample Date | 09/26/2011 | 09/28/2011 | 10/17/2011 | 09/28/2011 | 10/17/2011 | 10/17/2011 | 10/14/2011 |
| SDG | DE253 | DE257 | DE270 | DE257 | DE270 | DE270 | DE269 |
| Start Depth | 0 | 0 | 2 | 0 | 4 | 9 | 4 |
| End Depth | 0.5 | 0.5 | 3 | 0.5 | 5 | 10 | 5 |
| Chemical Name | Unit | | | | | | |
| Nitrate | mg/kg | -- | -- | -- | -- | -- | -- |
| Fluoride | mg/kg | 1.2 J Q | 3.1 | 4.5 J Q | 1.4 | 4.9 J Q | 2.3 |
| Cyanide | mg/kg | -- | -- | -- | -- | -- | -- |
| Aluminum | mg/kg | 26500 | 30500 | 34000 | 31900 | 34200 | 27200 |
| Iron | mg/kg | 33500 | 34900 | 33600 | 37400 | 36000 | 33700 J E |
| Lead | mg/kg | 15.3 J A | 12.4 J Q | 8.15 J Q | 12.4 J Q | 11.0 J Q | 12.6 J Q |
| Lithium | mg/kg | 40.6 | 31.2 | 35 | 31.6 | 31.2 | 40.4 |
| Magnesium | mg/kg | 8580 | 8030 | 8290 | 8840 | 8730 | 9470 |
| Manganese | mg/kg | 371 | 344 | 306 | 370 | 367 | 304 |
| Mercury | mg/kg | 0.101 U | 0.100 U | 0.111 U | 0.103 U | 0.110 U | 0.109 U |
| Molybdenum | mg/kg | 0.794 J Q | 0.646 J Q | 0.357 | 0.548 J Q | 0.326 | 0.239 J Z |
| Nickel | mg/kg | 26.2 J Q, A | 28.7 J Q | 19.3 J E, Q | 27.8 J Q | 26.2 J E, Q | 25.5 J E, Q |
| Potassium | mg/kg | 6450 | 4150 | 3630 | 4980 | 4010 | 4670 |
| Silver | mg/kg | 0.0435 J Q, Z | 0.0371 J Q, Z | 0.0183 J Z | 0.0485 J Q, Z | 0.0230 J FD, Z | 0.275 U |
| Sodium | mg/kg | 136 | 109 | 159 | 100 J Z | 132 | 238 |
| Strontium | mg/kg | 51.6 | 65.3 | 58.5 | 40.3 | 47.1 | 42 |
| Thallium | mg/kg | 0.474 J Q | 0.448 J Q | 0.302 | 0.432 J Q | 0.441 | 0.391 |
| Tin | mg/kg | 10.2 U B | 10.4 U B | 11.2 U B | 10.3 U B | 11.4 U B | 11.0 U B |
| Titanium | mg/kg | 1520 | 1380 | 1740 | 1540 | 1820 | 1870 |
| Antimony | mg/kg | 0.317 J Q | 0.340 J Q | 0.224 UJ B, Q | 0.392 J Q | 0.223 UJ FD, B, Q | 0.550 UJ Q |
| Arsenic | mg/kg | 8.40 J Q | 8.25 J Q | 5.25 J E, Q | 7.40 J Q | 6.85 J E, Q | 7.79 J E, Q |
| Beryllium | mg/kg | 0.621 | 1.13 | 0.808 | 1.16 | 0.879 | 0.87 |
| Barium | mg/kg | 146 J A | 130 | 124 | 182 | 162 | 104 |
| Boron | mg/kg | 15.9 | 13 | 3.70 J Z | 15.5 | 4.91 J Z | 3.84 J Z |
| Cadmium | mg/kg | 0.282 J Q | 0.304 J Q | 0.137 | 0.304 J Q | 0.162 | 0.136 J Z |
| Chromium | mg/kg | 47.7 J A | 42.4 J Q | 36.7 | 40.0 J Q | 48.2 | 43.2 |
| Cobalt | mg/kg | 12.6 | 15.0 J Q | 15.7 | 13.9 J Q | 15.5 | 25.6 |
| Copper | mg/kg | 20.1 J Q | 20.5 J Q | 17.2 | 21.6 J Q | 21.3 | 22.9 |
| Vanadium | mg/kg | 97.5 J A | 84.7 | 68.4 J E | 79 | 99.3 J E | 87.2 J E |
| Zinc | mg/kg | 101 J A | 97.6 | 70.6 | 102 | 91.9 | 91.1 |
| Zirconium | mg/kg | 2.88 J Z | 3.67 J Z | 5.18 J Z | 4.78 J Z | 5.12 J Z | 4.89 J Z |
| Calcium | mg/kg | 15900 | 29800 | 19600 J E | 9210 | 9770 J E | 8610 J E |
| Phosphorus | mg/kg | 571 | 437 | 347 J Q | 511 | 258 J Q | 646 J Q |
| Selenium | mg/kg | 0.515 J Q | 0.194 J Z | 0.257 J Z | 0.272 J Z | 0.220 J FD, Z | 0.165 J Z |
| Chromium VI | mg/kg | 0.37 J Z | 1.1 U | 1.1 U | 1.0 UJ FD | 1.2 U | 0.25 J Z |
| Perchlorate (314.0) | ug/kg | 30.7 U | 31.4 U | 34.2 U | 31.3 U | 34.2 U | 34.0 U |
| Perchlorate (6850) | ug/kg | -- | -- | -- | -- | -- | -- |
| Percent Moisture | % | 2.2 | 4.5 | 12.4 | 4 | 12.2 | 11.8 |
| pH | pH unit | 7.3 | 7.59 | 8.31 | 7.61 | 8.26 | 8.57 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A8
 Inorganics-Validated Data
 HSA-5DS

| Sample Name | SL-036-SA5DS-SB-9.0-10.0 | SL-037-SA5DS-SB-4.0-5.0 | SL-037-SA5DS-SB-9.0-10.0 | SL-038-SA5DS-SS-0.0-0.5 | SL-038-SA5DS-SB-4.0-5.0 | SL-038-SA5DS-SB-9.0-10.0 | SL-039-SA5DS-SB-3.0-4.0 | |
|---------------------|--------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|----------------|
| Sample Date | 10/14/2011 | 10/14/2011 | 10/14/2011 | 09/27/2011 | 10/14/2011 | 10/14/2011 | 10/17/2011 | |
| SDG | DE269 | DE269 | DE269 | DE256 | DE269 | DE269 | DE270 | |
| Start Depth | 9 | 4 | 9 | 0 | 4 | 9 | 3 | |
| End Depth | 10 | 5 | 10 | 0.5 | 5 | 10 | 4 | |
| Chemical Name | Unit | | | | | | | |
| Nitrate | mg/kg | -- | -- | -- | -- | -- | -- | |
| Fluoride | mg/kg | 3.9 | 4.7 | 11.8 | 2.1 J Q | 3.6 | 2.9 | 1.5 J Q |
| Cyanide | mg/kg | -- | -- | -- | -- | -- | -- | -- |
| Aluminum | mg/kg | 31400 | 36300 | 40000 | 21900 | 23200 | 23500 | 28100 |
| Iron | mg/kg | 32600 J E | 35200 J E | 40800 J E | 25900 | 27200 J E | 27100 J E | 30900 |
| Lead | mg/kg | 10.6 J Q, A | 11.3 J Q, A | 13.9 J Q, A | 8.57 | 8.01 J Q, A | 8.06 J Q, A | 10.1 J Q |
| Lithium | mg/kg | 30.9 | 31.4 | 37.5 | 24.3 | 28.9 | 23.3 | 38.6 |
| Magnesium | mg/kg | 6960 | 8110 | 10200 | 6260 | 6980 | 5830 | 8820 |
| Manganese | mg/kg | 366 | 468 | 277 | 337 | 328 | 363 | 227 |
| Mercury | mg/kg | 0.109 U | 0.112 U | 0.112 U | 0.0877 J Z | 0.105 U | 0.104 U | 0.104 U |
| Molybdenum | mg/kg | 0.517 | 0.524 | 0.872 | 0.41 | 0.443 | 0.53 | 0.235 |
| Nickel | mg/kg | 20.5 J A | 23.4 J A | 30.5 J A | 14.6 | 17.9 J A | 18.8 J A | 24.3 J E, Q |
| Potassium | mg/kg | 3050 J Q | 3700 J Q | 4230 J Q | 5520 | 3760 J Q | 2800 J Q | 4320 |
| Silver | mg/kg | 0.0257 J Z | 0.0479 J Z | 0.0232 J Z | 0.0234 J Z | 0.0220 J Z | 0.0413 J Z | 0.0229 J Z |
| Sodium | mg/kg | 130 | 166 | 240 | 85.8 J Z | 135 | 120 | 145 |
| Strontium | mg/kg | 51.6 | 66.2 | 65.8 | 41.1 J E | 60.3 | 38 | 91 |
| Thallium | mg/kg | 0.398 | 0.482 | 0.594 | 0.269 | 0.305 | 0.303 | 0.391 |
| Tin | mg/kg | 11.1 U B | 11.4 U B | 11.5 U B | 9.88 U B | 10.7 U B | 10.7 U B | 10.5 U B |
| Titanium | mg/kg | 1650 | 1620 | 1570 | 1200 | 1300 | 1340 | 1480 |
| Antimony | mg/kg | 0.201 J Q, Z | 0.308 J Q | 0.378 J Q | 0.122 J Q, Z | 0.188 J Q, Z | 0.221 J Q | 0.208 U J B, Q |
| Arsenic | mg/kg | 7.22 | 6.69 | 8.96 | 4.65 | 5.74 | 6.82 | 4.97 J E, Q |
| Beryllium | mg/kg | 0.929 | 1.01 | 1.27 | 0.58 | 0.688 | 0.794 | 0.769 |
| Barium | mg/kg | 150 J A | 179 J A | 199 J A | 92 | 116 J A | 117 J A | 143 |
| Boron | mg/kg | 5.53 U | 5.93 | 7.06 | 13.6 | 5.35 U | 5.34 U | 4.03 J Z |
| Cadmium | mg/kg | 0.172 | 0.155 | 0.0708 J Z | 0.237 | 0.194 | 0.146 | 0.131 |
| Chromium | mg/kg | 36.9 J A | 38.9 J A | 47.6 J A | 29.8 | 33.6 J A | 40.4 J A | 44.7 |
| Cobalt | mg/kg | 13.4 J A | 12.8 J A | 17.6 J A | 8.3 | 10.6 J A | 10.0 J A | 15 |
| Copper | mg/kg | 16.7 J A | 17.2 J A | 25.8 J A | 11.6 | 13.1 J A | 10.6 J A | 19.2 |
| Vanadium | mg/kg | 77.1 J Q, A | 77.7 J Q, A | 96.5 J Q, A | 53.6 | 65.0 J Q, A | 72.6 J Q, A | 78.6 J E |
| Zinc | mg/kg | 77.1 | 84.3 | 109 | 61.1 | 68.8 | 64.9 | 90 |
| Zirconium | mg/kg | 5.63 | 4.87 J Z | 4.87 J Z | 4.84 J Z | 4.26 J Z | 6.16 | 4.05 J Z |
| Calcium | mg/kg | 18600 | 14200 | 8540 | 14300 J E | 34600 | 7550 | 25000 J E |
| Phosphorus | mg/kg | 192 | 152 | 240 | 586 | 573 | 440 | 469 J Q |
| Selenium | mg/kg | 0.175 J Z | 0.142 J Z | 0.172 J Z | 0.292 J Z | 0.199 J Z | 0.122 J Z | 0.294 J Z |
| Chromium VI | mg/kg | 1.1 U | 0.31 J Z | 1.2 U | 1.0 U | 0.24 J Z | 0.23 J Z | 1.1 U |
| Perchlorate (314.0) | ug/kg | 34.5 U | 34.5 U | 35.5 U | 30.8 U | 32.8 U | 32.4 U | 32.8 U |
| Perchlorate (6850) | ug/kg | -- | -- | -- | -- | -- | -- | 5.5 U |
| Percent Moisture | % | 13.1 | 13.1 | 15.4 | 2.7 | 8.4 | 7.3 | 8.6 |
| pH | pH unit | 8.39 | 8.29 | 8.3 | 7.55 | 8.42 | 8.41 | 8.59 |

U - Compound not detected above the reporting limit
 J - Result is an estimated value
 R - Result is rejected

| Sample Name | | SL-040-SA5DS-SS-0.0-0.5 | SL-040-SA5DS-SB-4.0-5.0 | SL-040-SA5DS-SB-9.0-10.0 |
|---------------------|---------|-------------------------|-------------------------|--------------------------|
| Sample Date | | 09/28/2011 | 10/20/2011 | 10/20/2011 |
| SDG | | DE257 | DE273 | DE273 |
| Start Depth | | 0 | 4 | 9 |
| End Depth | | 0.5 | 5 | 10 |
| Chemical Name | Unit | | | |
| Nitrate | mg/kg | -- | -- | -- |
| Fluoride | mg/kg | 2.5 | 25.0 J Q | 17.1 J Q |
| Cyanide | mg/kg | -- | -- | -- |
| Aluminum | mg/kg | 18000 | 31000 J E | 23800 J E |
| Iron | mg/kg | 22500 | 33900 | 31200 |
| Lead | mg/kg | 14.1 J Q | 8.46 J Q, A | 7.86 J Q, A |
| Lithium | mg/kg | 17.7 | 31.3 | 30.1 |
| Magnesium | mg/kg | 4710 | 7700 | 7470 |
| Manganese | mg/kg | 369 | 295 | 339 |
| Mercury | mg/kg | 0.100 U | 0.108 U | 0.106 U B |
| Molybdenum | mg/kg | 0.762 J Q | 0.606 | 0.471 |
| Nickel | mg/kg | 17.7 J Q | 19.5 J A | 19.3 J A |
| Potassium | mg/kg | 4120 | 3930 J Q | 2760 J Q |
| Silver | mg/kg | 0.0289 J Q, Z | 0.0407 J Z | 0.0203 J Z |
| Sodium | mg/kg | 83.6 J Z | 903 | 848 |
| Strontium | mg/kg | 25.8 | 34.3 | 28.2 |
| Thallium | mg/kg | 0.273 J Q | 0.353 | 0.28 |
| Tin | mg/kg | 10.0 U B | 10.8 U B | 10.5 U B |
| Titanium | mg/kg | 1270 | 1330 | 1240 |
| Antimony | mg/kg | 0.258 J Q | 0.0827 J Q, Z | 0.215 U J Q |
| Arsenic | mg/kg | 5.98 J Q | 6.45 J Q | 6.47 J Q |
| Beryllium | mg/kg | 0.757 | 0.852 J Q | 0.729 J Q |
| Barium | mg/kg | 117 | 107 | 90.8 |
| Boron | mg/kg | 8.35 | 12.2 | 9.92 |
| Cadmium | mg/kg | 0.217 J Q | 0.0595 J Z | 0.108 U |
| Chromium | mg/kg | 33.2 J Q | 36.9 J Q, A | 39.9 J Q, A |
| Cobalt | mg/kg | 9.83 J Q | 10.5 J A | 10.7 J A |
| Copper | mg/kg | 10.9 J Q | 12.8 J A | 10.4 J A |
| Vanadium | mg/kg | 62.3 | 70.5 J A | 67.5 J A |
| Zinc | mg/kg | 61.2 | 69.5 | 62.7 |
| Zirconium | mg/kg | 3.49 J Z | 8.67 | 8.22 |
| Calcium | mg/kg | 3090 | 3610 | 3970 |
| Phosphorus | mg/kg | 360 | 372 | 467 |
| Selenium | mg/kg | 0.188 J Z | 0.112 J Z | 0.164 J Z |
| Chromium VI | mg/kg | 0.99 U | 3.2 | 1.1 U |
| Perchlorate (314.0) | ug/kg | 30.4 U | 32.7 U | 32.3 U |
| Perchlorate (6850) | ug/kg | 2.3 J Z | -- | -- |
| Percent Moisture | % | 1.3 | 8.3 | 7 |
| pH | pH unit | 6.27 | 8.05 | 7.35 |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A3
Misc. Organics-Validated Data
HSA-5DS

| Sample Name | | SL-005-SA5DS-SB-1.0-2.0 | SL-010-SA5DS-SB-2.0-3.0 | SL-019-SA5DS-SB-2.0-3.0 |
|----------------------------|-------|-------------------------|-------------------------|-------------------------|
| Sample Date | | 11/09/2011 | 11/08/2011 | 11/08/2011 |
| SDG | | DE283 | DE282 | DE282 |
| Start Depth | | 1 | 2 | 2 |
| End Depth | | 2 | 3 | 3 |
| Chemical Name | Unit | | | |
| Ethanol | ug/kg | 530 U | 560 U | 540 U |
| Methanol | ug/kg | 530 U | 560 U | 540 U |
| 2-Propanol | ug/kg | 530 U | 560 U | 540 U |
| Ethylene Glycol | mg/kg | 11 U | 11 U | 11 U |
| Diethylene Glycol | mg/kg | 11 U | 11 U | 11 U |
| Propylene glycol | mg/kg | 11 U | 11 U | 11 U |
| o-Terphenyl | mg/kg | 3.7 U | 3.9 U | 3.8 U |
| m-Terphenyl | mg/kg | 3.7 U | 3.9 U | 3.8 U |
| p-Terphenyl | mg/kg | 3.7 U | 3.9 U | 3.8 U |
| Formaldehyde | ug/kg | 1600 U | 1700 U | 1600 U |
| 2,6-Dinitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| 2,4,6-Trinitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| RDX | ug/kg | 130 U | 130 U | 120 U |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| HMX | ug/kg | 320 U | 330 U | 310 U |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| Tetryl | ug/kg | 130 U | 130 U | 120 U |
| Nitroglycerin | ug/kg | 2500 U | 2700 U | 2500 U |
| 2,6-Diamino-4-nitrotoluene | ug/kg | 250 U | 270 U | 250 U |
| 2,4-Diamino-6-nitrotoluene | ug/kg | 250 U | 270 U | 250 U |
| PETN | ug/kg | 2500 U | 2700 U | 2500 U |
| 2-Nitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| 3-Nitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| 1,3,5-Trinitrobenzene | ug/kg | 130 U | 130 U | 120 U |
| 4-Nitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| 2,4-Dinitrotoluene | ug/kg | 130 U | 130 U | 120 U |
| Nitrobenzene | ug/kg | 130 U | 130 U | 120 U |
| m-Dinitrobenzene | ug/kg | 130 U | 130 U | 120 U |

U - Compound not detected above the reporting limit

J - Result is an estimated value

R - Result is rejected

| Sample Name | SL-001-SA5DS-SS-0.0-0.5 | SL-002-SA5DS-SS-0.0-0.5 | SL-002-SA5DS-SB-1.8-2.8 | SL-004-SA5DS-SS-0.0-0.5 | SL-005-SA5DS-SS-0.0-0.5 | SL-005-SA5DS-SB-1.0-2.0 | SL-006-SA5DS-SS-0.0-0.5 | |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------|
| Sample Date | 09/26/2011 | 09/26/2011 | 11/14/2011 | 09/27/2011 | 09/27/2011 | 11/09/2011 | 09/27/2011 | |
| SDG | DX142 | DX142 | DX155 | DX143 | DX143 | DX154 | DX154 | |
| Start Depth | 0 | 0 | 1.8 | 0 | 0 | 1 | 0 | |
| End Depth | 0.5 | 0.5 | 2.8 | 0.5 | 0.5 | 2 | 0.5 | |
| Chemical Name | Unit | | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 0.987 U | 0.0574 J Z | 0.0477 J Z | 0.148 J Z | 0.115 J Z | 0.0258 J Z | 0.0534 J Z |
| 1,2,3,7,8,9-HxCDD | ng/kg | 0.789 J Z | 0.655 J Z | 0.410 J Z | 0.802 J Z | 0.957 J Z | 0.424 J Z | 1.32 J Z |
| OCDD | ng/kg | 135 J FD | 54.8 | 4.74 J Z | 69.4 | 41.3 | 6.06 J Z | 38.5 |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 13.6 | 6.48 | 5.21 U B | 7.3 | 4.04 J Z | 5.26 U B | 4.09 J Z |
| OCDF | ng/kg | 5.49 J Z | 2.64 J Z | 10.4 U B | 3.08 J Z | 1.59 J Z | 10.5 U B | 1.87 J Z |
| 1,2,3,4,7,8-HxCDD | ng/kg | 0.286 J Z | 0.154 J Z | 5.21 U B | 0.224 J Z | 0.193 J Z | 5.26 U B | 5.52 U B |
| 1,2,3,7,8-PeCDD | ng/kg | 0.246 J Z | 0.152 J Z | 0.0570 J Z | 0.412 J Z | 0.369 J Z | 5.26 U B | 0.185 J Z |
| 2,3,7,8-TCDF | ng/kg | 0.510 J Z | 0.642 J Z | 0.0565 J Z | 0.339 J Z | 0.133 J Z | 0.0475 J Z | 0.124 J FD, Z |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 0.221 J Z | 4.93 U B | 5.21 U B | 4.86 U B | 4.97 U B | 5.26 U B | 5.52 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 1.31 J Z | 1.09 J Z | 5.21 U B | 0.944 J Z | 0.691 J Z | 5.26 U B | 5.52 UJ B, FD |
| 1,2,3,7,8-PeCDF | ng/kg | 1.23 J FD, Z | 0.473 J Z | 5.21 U B | 0.371 J Z | 0.429 J Z | 5.26 U B | 0.293 J Z |
| 1,2,3,6,7,8-HxCDF | ng/kg | 0.419 J Z | 0.224 J Z | 5.21 U B | 0.350 J Z | 0.277 J Z | 5.26 U B | 0.215 J Z |
| 1,2,3,6,7,8-HxCDD | ng/kg | 0.734 J Z | 0.529 J Z | 0.204 J Z | 0.749 J Z | 0.747 J Z | 0.257 J Z | 0.903 J Z |
| 2,3,4,6,7,8-HxCDF | ng/kg | 0.314 J Z | 0.401 J Z | 5.21 U B | 0.373 J Z | 4.97 U B | 5.26 U B | 5.52 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 2.62 J Z | 1.39 J Z | 5.21 U B | 1.37 J Z | 0.908 J Z | 5.26 U B | 0.950 J Z |
| 1,2,3,4,7,8-HxCDF | ng/kg | 0.260 J FD, Z | 0.480 J Z | 5.21 U | 0.345 J Z | 0.312 J Z | 5.26 U B | 0.353 J Z |
| 1,2,3,7,8,9-HxCDF | ng/kg | 0.120 J Z | 0.459 J Z | 0.354 J Z | 0.259 J Z | 0.298 J Z | 5.26 U B | 0.501 J Z |
| Aroclor 1260 | ug/kg | 7.7 | 5.6 | 1.8 U | 0.67 J Z | 1.7 U | 1.8 U | 1.9 UJ FD |
| Aroclor 1254 | ug/kg | 8 | 4.3 | 1.5 J S, Z | 0.51 J Z | 1.7 U | 1.8 U | 1.8 J FD, Z, *# |
| Aroclor 1268 | ug/kg | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U |
| Aroclor 1221 | ug/kg | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U |
| Aroclor 5460 | ug/kg | 2.4 J FD, Z | 3.3 J Z | 3.5 UJ E | 1.2 J Z | 3.4 U | 3.5 U | 1.7 J Z, C |
| Aroclor 1232 | ug/kg | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U |
| Aroclor 5442 | ug/kg | 3.3 U | 3.4 U | 3.5 UJ E | 3.4 U | 3.4 U | 3.5 U | 3.7 U |
| Aroclor 1248 | ug/kg | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U |
| Aroclor 1016 | ug/kg | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U |
| Aroclor 1262 | ug/kg | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U |
| Aroclor 1242 | ug/kg | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U |
| Aroclor 5432 | ug/kg | 3.3 U | 3.4 U | 3.5 UJ E | 3.4 U | 3.4 U | 3.5 U | 3.7 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A10
PCBs and Dioxins-Validated Data
HSA-5DS

| Sample Name | SL-007-SA5DS-SS-0.0-0.5 | SL-008-SA5DS-SS-0.0-0.5 | SL-009-SA5DS-SS-0.0-0.5 | SL-010-SA5DS-SS-0.0-0.5 | SL-010-SA5DS-SB-2.0-3.0 | SL-013-SA5DS-SS-0.0-0.5 | SL-013-SA5DS-SB-4.0-5.0 | |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------|
| Sample Date | 09/28/2011 | 09/28/2011 | 09/28/2011 | 09/28/2011 | 11/08/2011 | 09/28/2011 | 10/18/2011 | |
| SDG | DX144 | DX144 | DX144 | DX144 | DX154 | DX144 | DX149 | |
| Start Depth | 0 | 0 | 0 | 0 | 2 | 0 | 4 | |
| End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 3 | 0.5 | 5 | |
| Chemical Name | Unit | | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 0.993 U | 0.0433 J Z | 1.01 U | 0.0545 J Z | 0.0274 J Z | 1.00 U | 1.10 U |
| 1,2,3,7,8,9-HxCDD | ng/kg | 1.23 J Z | 0.509 J Z | 0.746 J Z | 1.32 J Z | 0.237 J Z | 0.822 J Z | 5.48 U B |
| OCDD | ng/kg | 44.9 | 38.8 | 45.4 | 52.9 | 1.92 J Z | 19.6 | 11.0 U B |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 3.83 J Z | 3.58 J Z | 4.23 J Z | 4.60 J Z | 5.54 U B | 1.78 J Z | 5.48 U B |
| OCDF | ng/kg | 2.20 J Z | 1.53 J Z | 2.43 J Z | 1.93 J Z | 11.1 U B | 0.890 J Z | 11.0 U B |
| 1,2,3,4,7,8-HxCDD | ng/kg | 4.97 U | 0.102 J Z | 0.0814 J Z | 0.102 J Z | 0.0300 J Z | 0.0821 J Z | 5.48 U B |
| 1,2,3,7,8-PeCDD | ng/kg | 0.136 J Z | 0.0916 J Z | 0.142 J Z | 0.186 J Z | 5.54 U | 0.195 J Z | 5.48 U B |
| 2,3,7,8-TCDF | ng/kg | 0.121 J Z | 0.137 J Z | 0.196 J Z | 0.226 J Z | 1.11 U | 0.0930 J Z | 0.0307 J Z |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 4.97 U B | 4.90 U B | 5.05 U B | 5.02 U B | 5.54 U B | 5.02 U B | 5.48 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 0.291 J Z | 4.90 U B | 5.05 U | 5.02 U B | 5.54 U B | 0.290 J Z | 5.48 U B |
| 1,2,3,7,8-PeCDF | ng/kg | 4.97 U B | 0.130 J Z | 0.183 J Z | 0.333 J Z | 0.0832 J Z | 0.306 J Z | 5.48 U B |
| 1,2,3,6,7,8-HxCDF | ng/kg | 4.97 U B | 4.90 U B | 5.05 U B | 5.02 U B | 5.54 U B | 5.02 U B | 5.48 U B |
| 1,2,3,6,7,8-HxCDD | ng/kg | 0.934 J Z | 0.416 J Z | 0.571 J Z | 0.994 J Z | 0.184 J Z | 0.632 J Z | 0.0758 J Z |
| 2,3,4,6,7,8-HxCDF | ng/kg | 0.180 J Z | 0.194 J Z | 0.202 J Z | 0.215 J Z | 5.54 U B | 0.0908 J Z | 5.48 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 0.809 J Z | 0.676 J Z | 0.958 J Z | 0.834 J Z | 5.54 U B | 5.02 U B | 5.48 U B |
| 1,2,3,4,7,8-HxCDF | ng/kg | 4.97 U B | 0.221 J Z | 5.05 U B | 0.323 J Z | 5.54 U B | 5.02 U B | 5.48 U B |
| 1,2,3,7,8,9-HxCDF | ng/kg | 0.671 J Z | 0.228 J Z | 0.483 J Z | 0.825 J Z | 0.222 J Z | 0.316 J Z | 5.48 U B |
| Aroclor 1260 | ug/kg | 1.5 J Z | 1.7 U | 1.8 J S | 1.2 J Z | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 1254 | ug/kg | 1.2 J Z | 1.6 J Z | 2.0 J S | 2 | 1.9 U | 1.2 J S, Z | 1.9 U |
| Aroclor 1268 | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 1221 | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 5460 | ug/kg | 3.3 | 3.1 J Z | 3.5 J S | 3.1 J Z | 3.7 U | 1.9 J S, Z | 3.7 U |
| Aroclor 1232 | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 5442 | ug/kg | 3.3 U | 3.3 U | 3.4 U | 3.3 U | 3.7 U | 3.4 U | 3.7 U |
| Aroclor 1248 | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 1016 | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 1262 | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 1242 | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.9 U |
| Aroclor 5432 | ug/kg | 3.3 U | 3.3 U | 3.4 U | 3.3 U | 3.7 U | 3.4 U | 3.7 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-014-SA5DS-SS-0.0-0.5 | SL-015-SA5DS-SS-0.0-0.5 | SL-015-SA5DS-SB-3.5-4.5 | SL-016-SA5DS-SS-0.0-0.5 | SL-016-SA5DS-SB-4.0-5.0 | SL-017-SA5DS-SS-0.0-0.5 | SL-019-SA5DS-SS-0.0-0.5 | |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------|
| Sample Date | 09/28/2011 | 09/28/2011 | 10/18/2011 | 09/28/2011 | 10/19/2011 | 09/28/2011 | 09/27/2011 | |
| SDG | DX144 | DX144 | DX149 | DX144 | DX150 | DX144 | DX143 | |
| Start Depth | 0 | 0 | 3.5 | 0 | 4 | 0 | 0 | |
| End Depth | 0.5 | 0.5 | 4.5 | 0.5 | 5 | 0.5 | 0.5 | |
| Chemical Name | Unit | | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 0.967 U | 1.01 U | 0.0480 J Z | 1.03 U | 1.08 U | 0.0586 J Z | 1.00 U |
| 1,2,3,7,8,9-HxCDD | ng/kg | 0.984 J Z | 0.834 J Z | 0.264 J Z | 0.787 J Z | 5.42 U B | 1.06 J Z | 0.929 J Z |
| OCDD | ng/kg | 146 | 34.3 | 2.44 J Z | 40.7 | 10.8 U B | 71.4 | 34.3 |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 6.74 | 2.73 J Z | 5.44 U B | 3.72 J Z | 5.42 U B | 7.14 | 3.67 J Z |
| OCDF | ng/kg | 2.71 J Z | 1.16 J Z | 10.9 U B | 1.78 J Z | 10.8 U B | 2.56 J Z | 1.48 J Z |
| 1,2,3,4,7,8-HxCDD | ng/kg | 0.0886 J Z | 0.127 J Z | 5.44 U B | 0.0651 J Z | 5.42 U B | 0.136 J Z | 0.0878 J Z |
| 1,2,3,7,8-PeCDD | ng/kg | 0.234 J Z | 0.170 J Z | 5.44 U B | 0.159 J Z | 5.42 U B | 0.208 J Z | 0.115 J Z |
| 2,3,7,8-TCDF | ng/kg | 0.162 J Z | 0.0574 J Z | 0.0938 J Z | 0.132 J Z | 0.0249 J Z | 0.589 J Z | 0.176 J Z |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 4.83 U B | 5.03 U | 5.44 U B | 5.17 U B | 5.42 U | 5.06 U B | 5.02 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 0.431 J Z | 5.03 U B | 5.44 U B | 5.17 U B | 5.42 U B | 1.11 J Z | 5.02 U B |
| 1,2,3,7,8-PeCDF | ng/kg | 0.294 J Z | 0.188 J Z | 0.193 J Z | 0.165 J Z | 5.42 U B | 0.295 J Z | 0.231 J Z |
| 1,2,3,6,7,8-HxCDF | ng/kg | 0.215 J Z | 5.03 U B | 0.117 J Z | 5.17 U B | 5.42 U B | 0.278 J Z | 0.142 J Z |
| 1,2,3,6,7,8-HxCDD | ng/kg | 0.994 J Z | 0.514 J Z | 0.199 J Z | 0.584 J Z | 5.42 U B | 1.02 J Z | 0.633 J Z |
| 2,3,4,6,7,8-HxCDF | ng/kg | 0.205 J Z | 0.126 J Z | 5.44 U B | 0.148 J Z | 5.42 U B | 0.341 J Z | 5.02 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 1.14 J Z | 5.03 U B | 5.44 U B | 0.771 J Z | 5.42 U B | 1.42 J Z | 0.730 J Z |
| 1,2,3,4,7,8-HxCDF | ng/kg | 0.283 J Z | 5.03 U | 5.44 U B | 0.258 J Z | 0.0316 J Z | 0.464 J Z | 0.364 J Z |
| 1,2,3,7,8,9-HxCDF | ng/kg | 0.507 J Z | 0.521 J Z | 5.44 U B | 0.565 J Z | 5.42 U B | 0.500 J Z | 0.504 J Z |
| Aroclor 1260 | ug/kg | 0.92 J Z | 1.7 U | 1.9 U | 2.2 J S | 1.8 U | 9.3 J S | 0.52 J Z |
| Aroclor 1254 | ug/kg | 0.92 J Z | 3.5 J S | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 1268 | ug/kg | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 1221 | ug/kg | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 5460 | ug/kg | 2.4 J Z | 1.5 J S, Z | 3.6 U | 2.9 J S, Z | 3.6 U | 5.9 J S | 3.3 U |
| Aroclor 1232 | ug/kg | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 5442 | ug/kg | 3.3 U | 3.4 U | 3.6 U | 3.5 U | 3.6 U | 3.4 U | 3.3 U |
| Aroclor 1248 | ug/kg | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 1016 | ug/kg | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 1262 | ug/kg | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 1242 | ug/kg | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| Aroclor 5432 | ug/kg | 3.3 U | 3.4 U | 3.6 U | 3.5 U | 3.6 U | 3.4 U | 3.3 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A10
PCBs and Dioxins-Validated Data
HSA-5DS

| Sample Name | SL-019-SA5DS-SB-2.0-3.0 | SL-020-SA5DS-SS-0.0-0.5 | SL-021-SA5DS-SS-0.0-0.5 | SL-021-SA5DS-SB-2.0-3.0 | SL-022-SA5DS-SS-0.0-0.5 | SL-022-SA5DS-SB-4.0-5.0 | SL-023-SA5DS-SS-0.0-0.5 | |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------|
| Sample Date | 11/08/2011 | 09/27/2011 | 09/27/2011 | 11/09/2011 | 09/27/2011 | 11/09/2011 | 09/27/2011 | |
| SDG | DX154 | DX143 | DX143 | DX154 | DX143 | DX154 | DX143 | |
| Start Depth | 2 | 0 | 0 | 2 | 0 | 4 | 0 | |
| End Depth | 3 | 0.5 | 0.5 | 3 | 0.5 | 5 | 0.5 | |
| Chemical Name | Unit | | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 1.08 U | 1.00 U | 0.0407 J Z | 1.05 U | 0.997 U | 1.04 U | 0.994 U |
| 1,2,3,7,8,9-HxCDD | ng/kg | 0.0841 J Z | 0.958 J Z | 0.785 J Z | 0.144 J Z | 0.947 J Z | 0.154 J Z | 0.524 J Z |
| OCDD | ng/kg | 10.8 U B | 72.6 | 26.2 | 2.31 J Z | 83 | 10.4 U B | 35.2 |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 5.38 U B | 5.45 | 2.37 J Z | 5.24 U B | 5.45 | 5.21 U B | 3.76 J Z |
| OCDF | ng/kg | 10.8 U B | 2.43 J Z | 1.11 J Z | 10.5 U B | 2.47 J Z | 10.4 U B | 1.73 J Z |
| 1,2,3,4,7,8-HxCDD | ng/kg | 0.0219 J Z | 0.0998 J Z | 0.0334 J Z | 5.24 U | 0.126 J Z | 5.21 U B | 0.100 J Z |
| 1,2,3,7,8-PeCDD | ng/kg | 0.0273 J Z | 0.144 J Z | 0.113 J Z | 5.24 U | 0.134 J Z | 5.21 U B | 0.130 J Z |
| 2,3,7,8-TCDF | ng/kg | 1.08 U B | 0.218 J Z | 0.143 J Z | 1.05 U | 0.247 J Z | 0.0278 J Z | 0.193 J Z |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 5.38 U B | 5.02 U B | 4.93 U B | 5.24 U B | 0.189 J Z | 5.21 U B | 4.97 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 5.38 U B | 5.02 U B | 0.260 J Z | 5.24 U B | 4.99 U B | 5.21 U B | 0.228 J Z |
| 1,2,3,7,8-PeCDF | ng/kg | 5.38 U B | 0.187 J Z | 0.148 J Z | 5.24 U B | 0.169 J Z | 5.21 U B | 0.248 J Z |
| 1,2,3,6,7,8-HxCDF | ng/kg | 5.38 U B | 0.212 J Z | 4.93 U B | 5.24 U B | 0.208 J Z | 5.21 U B | 0.167 J Z |
| 1,2,3,6,7,8-HxCDD | ng/kg | 5.38 U B | 0.777 J Z | 0.622 J Z | 5.24 U B | 0.721 J Z | 0.122 J Z | 0.462 J Z |
| 2,3,4,6,7,8-HxCDF | ng/kg | 5.38 U B | 5.02 U B | 4.93 U B | 5.24 U B | 4.99 U B | 5.21 U B | 4.97 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 5.38 U B | 1.14 J Z | 4.93 U B | 5.24 U B | 1.30 J Z | 5.21 U B | 0.770 J Z |
| 1,2,3,4,7,8-HxCDF | ng/kg | 5.38 U B | 5.02 U B | 4.93 U B | 5.24 U B | 0.323 J Z | 5.21 U B | 0.255 J Z |
| 1,2,3,7,8,9-HxCDF | ng/kg | 5.38 U B | 0.330 J Z | 0.400 J Z | 5.24 U B | 0.413 J Z | 5.21 U B | 0.295 J Z |
| Aroclor 1260 | ug/kg | 1.8 U | 0.87 J Z | 0.71 J Z | 1.9 U | 0.97 J S, Z | 1.8 U | 0.75 J S, Z |
| Aroclor 1254 | ug/kg | 1.8 U | 1.2 J Z | 0.89 J Z | 1.9 U | 1.2 J S, Z | 1.8 U | 0.64 J S, Z |
| Aroclor 1268 | ug/kg | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.7 U |
| Aroclor 1221 | ug/kg | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.7 U |
| Aroclor 5460 | ug/kg | 3.6 U | 2.0 J Z | 1.6 J Z | 3.6 U | 2.0 J S, Z | 3.5 U | 1.6 J S, Z |
| Aroclor 1232 | ug/kg | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.7 U |
| Aroclor 5442 | ug/kg | 3.6 U | 3.3 U | 3.3 U | 3.6 U | 3.4 U | 3.5 U | 3.4 U |
| Aroclor 1248 | ug/kg | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.7 U |
| Aroclor 1016 | ug/kg | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.7 U |
| Aroclor 1262 | ug/kg | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.7 U |
| Aroclor 1242 | ug/kg | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.7 U |
| Aroclor 5432 | ug/kg | 3.6 U | 3.3 U | 3.3 U | 3.6 U | 3.4 U | 3.5 U | 3.4 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-024-SA5DS-SS-0.0-0.5 | SL-025-SA5DS-SS-0.0-0.5 | SL-026-SA5DS-SS-0.0-0.5 | SL-026-SA5DS-SB-4.0-5.0 | SL-026-SA5DS-SB-9.0-10.0 | SL-027-SA5DS-SS-0.0-0.5 | SL-028-SA5DS-SS-0.0-0.5 | |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-----------|
| Sample Date | 09/27/2011 | 09/27/2011 | 09/26/2011 | 10/20/2011 | 10/20/2011 | 09/26/2011 | 09/26/2011 | |
| SDG | DX143 | DX143 | DX142 | DX150 | DX150 | DX142 | DX142 | |
| Start Depth | 0 | 0 | 0 | 4 | 9 | 0 | 0 | |
| End Depth | 0.5 | 0.5 | 0.5 | 5 | 10 | 0.5 | 0.5 | |
| Chemical Name | Unit | | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 1.01 U | 0.0797 J Z | 9.85 U | 1.05 U | 0.0537 J Z | 0.973 U | 0.971 U |
| 1,2,3,7,8,9-HxCDD | ng/kg | 0.347 J Z | 0.355 J Z | 49.2 U | 5.27 U B | 5.40 U B | 0.249 J Z | 0.320 J Z |
| OCDD | ng/kg | 39 | 35.4 | 49.6 J Z | 3.60 J Z | 10.8 U B | 55 | 57.5 |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 3.77 J Z | 3.66 J Z | 6.83 J Z | 5.27 U B | 5.40 U B | 9.15 | 7.1 |
| OCDF | ng/kg | 2.18 J Z | 1.39 J Z | 8.98 J Z | 10.5 U B | 10.8 U B | 2.01 J Z | 3.00 J Z |
| 1,2,3,4,7,8-HxCDD | ng/kg | 0.134 J Z | 0.142 J Z | 49.2 U | 5.27 U B | 5.40 U | 4.87 U | 0.301 J Z |
| 1,2,3,7,8-PeCDD | ng/kg | 0.169 J Z | 0.227 J Z | 49.2 U | 5.27 U | 5.40 U B | 4.87 U | 0.188 J Z |
| 2,3,7,8-TCDF | ng/kg | 0.223 J Z | 0.458 J Z | 1.10 J Z | 0.0251 J Z | 0.0563 J Z | 0.108 J Z | 0.788 J Z |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 5.04 U B | 4.92 U B | 4.10 J Z | 5.27 U B | 5.40 U B | 0.597 J Z | 0.156 J Z |
| 2,3,4,7,8-PeCDF | ng/kg | 0.338 J Z | 0.773 J Z | 9.93 J Z | 5.27 U B | 5.40 U | 0.427 J Z | 0.855 J Z |
| 1,2,3,7,8-PeCDF | ng/kg | 0.227 J Z | 0.329 J Z | 3.87 J Z | 5.27 U B | 5.40 U B | 0.190 J Z | 0.179 J Z |
| 1,2,3,6,7,8-HxCDF | ng/kg | 0.123 J Z | 0.234 J Z | 3.91 J Z | 5.27 U B | 5.40 U B | 4.87 U | 0.461 J Z |
| 1,2,3,6,7,8-HxCDD | ng/kg | 0.313 J Z | 0.359 J Z | 0.485 J Z | 5.27 U B | 5.40 U B | 0.356 J Z | 0.451 J Z |
| 2,3,4,6,7,8-HxCDF | ng/kg | 5.04 U B | 4.92 U B | 4.40 J Z | 5.27 U B | 5.40 U B | 0.372 J Z | 0.470 J Z |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 0.824 J Z | 0.771 J Z | 5.02 J Z | 5.27 U B | 5.40 U B | 0.893 J Z | 1.78 J Z |
| 1,2,3,4,7,8-HxCDF | ng/kg | 5.04 U B | 0.589 J Z | 11.3 J Z | 0.0647 J Z | 0.0689 J Z | 0.256 J Z | 0.594 J Z |
| 1,2,3,7,8,9-HxCDF | ng/kg | 5.04 U B | 0.219 J Z | 3.86 J Z | 5.27 U B | 5.40 U B | 0.272 J Z | 0.109 J Z |
| Aroclor 1260 | ug/kg | 1.7 U | 3.3 | 170 U | 1.8 U | 1.9 U | 1.7 U | 0.98 J Z |
| Aroclor 1254 | ug/kg | 0.89 J Z | 5 | 1500 | 0.65 J L, Z | 1.8 J L, Z | 1.7 U | 1.9 |
| Aroclor 1268 | ug/kg | 1.7 U | 1.7 U | 170 U | 1.8 U | 1.9 U | 1.7 U | 1.7 U |
| Aroclor 1221 | ug/kg | 1.7 U | 1.7 U | 170 U | 1.8 U | 1.9 U | 1.7 U | 1.7 U |
| Aroclor 5460 | ug/kg | 1.3 J Z | 1.3 J Z | 330 U | 3.6 UJ E | 3.6 UJ E | 3.3 U | 3.3 U |
| Aroclor 1232 | ug/kg | 1.7 U | 1.7 U | 170 U | 1.8 U | 1.9 U | 1.7 U | 1.7 U |
| Aroclor 5442 | ug/kg | 3.3 U | 3.3 U | 330 U | 3.6 UJ E | 3.6 UJ E | 3.3 U | 3.3 U |
| Aroclor 1248 | ug/kg | 1.7 U | 1.7 U | 170 U | 1.8 U | 1.9 U | 1.7 U | 1.7 U |
| Aroclor 1016 | ug/kg | 1.7 U | 1.7 U | 170 U | 1.8 U | 1.9 U | 1.7 U | 1.7 U |
| Aroclor 1262 | ug/kg | 1.7 U | 1.7 U | 170 U | 1.8 U | 1.9 U | 1.7 U | 1.7 U |
| Aroclor 1242 | ug/kg | 1.7 U | 1.7 U | 170 U | 1.8 U | 1.9 U | 1.7 U | 1.7 U |
| Aroclor 5432 | ug/kg | 3.3 U | 3.3 U | 330 U | 3.6 UJ E | 3.6 UJ E | 3.3 U | 3.3 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A10
PCBs and Dioxins-Validated Data
HSA-5DS

| Sample Name | SL-028-SA5DS-SB-1.9-2.9 | SL-029-SA5DS-SS-0.0-0.5 | SL-029-SA5DS-SB-3.5-4.5 | SL-030-SA5DS-SS-0.0-0.5 | SL-031-SA5DS-SS-0.0-0.5 | SL-031-SA5DS-SB-4.0-5.0 | SL-031-SA5DS-SB-9.0-10.0 | |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|----------|
| Sample Date | 11/11/2011 | 09/26/2011 | 11/11/2011 | 09/26/2011 | 09/26/2011 | 11/14/2011 | 11/14/2011 | |
| SDG | DX155 | DX142 | DX155 | DX142 | DX142 | DX155 | DX155 | |
| Start Depth | 1.9 | 0 | 3.5 | 0 | 0 | 4 | 9 | |
| End Depth | 2.9 | 0.5 | 4.5 | 0.5 | 0.5 | 5 | 10 | |
| Chemical Name | Unit | | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 1.08 U | 0.998 U | 1.09 U | 1.01 U | 0.0792 J Z | 1.07 U | 1.11 U |
| 1,2,3,7,8,9-HxCDD | ng/kg | 0.138 J Z | 4.99 U B | 5.44 U B | 5.05 U B | 0.479 J Z | 0.174 J Z | 5.57 U B |
| OCDD | ng/kg | 5.55 J Z | 12.7 | 10.9 U B | 28.5 | 77.9 | 2.31 J Z | 2.45 J Z |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 5.40 U B | 1.51 J Z | 5.44 U B | 3.49 J Z | 8.56 | 5.36 U B | 5.57 U B |
| OCDF | ng/kg | 10.8 U B | 1.09 J Z | 10.9 U B | 1.79 J Z | 3.07 J Z | 10.7 U B | 11.1 U B |
| 1,2,3,4,7,8-HxCDD | ng/kg | 5.40 U B | 0.0913 J Z | 5.44 U B | 0.0932 J Z | 0.173 J Z | 5.36 U | 5.57 U B |
| 1,2,3,7,8-PeCDD | ng/kg | 0.176 J Z | 4.99 U | 5.44 U | 0.0762 J Z | 0.183 J Z | 0.101 J Z | 5.57 U |
| 2,3,7,8-TCDF | ng/kg | 0.242 J Z | 0.166 J Z | 1.09 U | 1.01 U B | 0.674 J Z | 1.07 U | 1.11 U |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 5.40 U B | 4.99 U | 5.44 U B | 5.05 U B | 0.145 J Z | 5.36 U B | 5.57 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 5.40 U B | 0.655 J Z | 5.44 U B | 5.05 U | 5.18 U B | 5.36 U B | 5.57 U B |
| 1,2,3,7,8-PeCDF | ng/kg | 0.262 J Z | 0.629 J Z | 5.44 U B | 5.05 U B | 0.294 J Z | 5.36 U B | 5.57 U B |
| 1,2,3,6,7,8-HxCDF | ng/kg | 5.40 U B | 0.336 J Z | 5.44 U B | 0.111 J Z | 0.170 J Z | 5.36 U B | 5.57 U B |
| 1,2,3,6,7,8-HxCDD | ng/kg | 5.40 U B | 4.99 U B | 5.44 U B | 5.05 U B | 0.504 J Z | 0.250 J Z | 5.57 U B |
| 2,3,4,6,7,8-HxCDF | ng/kg | 5.40 U B | 0.202 J Z | 5.44 U B | 5.05 U B | 0.176 J Z | 5.36 U B | 5.57 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 5.40 U B | 0.542 J Z | 5.44 U B | 0.797 J Z | 1.42 J Z | 5.36 U B | 5.57 U B |
| 1,2,3,4,7,8-HxCDF | ng/kg | 0.145 J Z | 0.605 J Z | 5.44 U B | 0.112 J Z | 0.162 J Z | 5.36 U B | 5.57 U B |
| 1,2,3,7,8,9-HxCDF | ng/kg | 5.40 U B | 0.122 J Z | 5.44 U B | 0.0578 J Z | 5.18 U | 5.36 U B | 5.57 U B |
| Aroclor 1260 | ug/kg | 0.95 J Z | 5 | 1.8 U | 1.3 J Z | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 1254 | ug/kg | 4.9 | 15 | 9.8 J S | 2.3 | 2.4 | 1.9 U | 1.9 U |
| Aroclor 1268 | ug/kg | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 1221 | ug/kg | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 5460 | ug/kg | 3.6 UJ E | 3.4 U | 3.6 UJ E | 3.4 U | 3.4 U | 3.7 UJ E | 3.7 UJ E |
| Aroclor 1232 | ug/kg | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 5442 | ug/kg | 3.6 UJ E | 3.4 U | 3.6 UJ E | 3.4 U | 3.4 U | 3.7 UJ E | 3.7 UJ E |
| Aroclor 1248 | ug/kg | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 1016 | ug/kg | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 1262 | ug/kg | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 1242 | ug/kg | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.9 U |
| Aroclor 5432 | ug/kg | 3.6 UJ E | 3.4 U | 3.6 UJ E | 3.4 U | 3.4 U | 3.7 UJ E | 3.7 UJ E |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-032-SA5DS-SS-0.0-0.5 | SL-033-SA5DS-SS-0.0-0.5 | SL-033-SA5DS-SB-2.0-3.0 | SL-034-SA5DS-SS-0.0-0.5 | SL-034-SA5DS-SB-4.0-5.0 | SL-034-SA5DS-SB-9.0-10.0 | SL-036-SA5DS-SB-4.0-5.0 | |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|------------|
| Sample Date | 09/26/2011 | 09/28/2011 | 10/17/2011 | 09/28/2011 | 10/17/2011 | 10/17/2011 | 10/14/2011 | |
| SDG | DX143 | DX144 | DX151 | DX146 | DX151 | DX151 | DX149 | |
| Start Depth | 0 | 0 | 2 | 0 | 4 | 9 | 4 | |
| End Depth | 0.5 | 0.5 | 3 | 0.5 | 5 | 10 | 5 | |
| Chemical Name | Unit | | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 1.02 U | 1.01 U | 1.14 U | 1.03 U | 1.10 UJ FD | 1.11 U | 0.0632 J Z |
| 1,2,3,7,8,9-HxCDD | ng/kg | 5.09 U B | 0.127 J Z | 5.70 U B | 0.133 J Z | 5.49 UJ B, FD | 5.55 U B | 5.73 U B |
| OCDD | ng/kg | 26.9 | 2.21 J Z | 11.4 U B | 9.33 J Q, Z | 11.0 U B | 11.1 U B | 11.5 U B |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 2.95 J Z | 0.444 J Z | 5.70 U B | 5.13 U B | 5.49 U B | 5.55 U B | 5.73 U B |
| OCDF | ng/kg | 1.27 J Z | 10.1 U B | 11.4 U B | 0.613 J Z | 11.0 U B | 11.1 U B | 11.5 U B |
| 1,2,3,4,7,8-HxCDD | ng/kg | 0.0950 J Z | 0.0425 J Z | 0.0241 J Z | 5.13 UJ FD | 5.49 UJ FD | 5.55 U | 5.73 U B |
| 1,2,3,7,8-PeCDD | ng/kg | 0.0740 J Z | 0.0490 J Z | 0.0393 J Z | 5.13 UJ FD | 5.49 UJ FD | 0.0265 J Z | 0.391 J Z |
| 2,3,7,8-TCDF | ng/kg | 0.197 J Z | 1.01 U | 1.14 U | 1.03 UJ FD | 1.10 U | 1.11 U | 0.0811 J Z |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 5.09 U B | 5.04 U B | 5.70 U B | 5.13 UJ B, FD | 5.49 UJ FD | 5.55 U B | 5.73 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 5.09 U B | 5.04 U B | 5.70 U B | 5.13 U B | 5.49 UJ B, FD | 5.55 U B | 0.357 J Z |
| 1,2,3,7,8-PeCDF | ng/kg | 0.325 J Z | 5.04 U B | 5.70 U B | 5.13 UJ B, FD | 5.49 UJ B, FD | 5.55 U B | 0.479 J Z |
| 1,2,3,6,7,8-HxCDF | ng/kg | 5.09 U B | 5.04 U B | 5.70 U B | 5.13 UJ B, FD | 5.49 UJ B, FD | 5.55 U B | 0.281 J Z |
| 1,2,3,6,7,8-HxCDD | ng/kg | 5.09 U B | 5.04 U B | 0.0230 J Z | 0.0828 J Z | 0.0442 J FD, Z | 0.0328 J Z | 0.197 J Z |
| 2,3,4,6,7,8-HxCDF | ng/kg | 5.09 U B | 0.0401 J Z | 5.70 U B | 5.13 UJ B, FD | 5.49 UJ B, FD | 5.55 U B | 5.73 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 5.09 U B | 5.04 U B | 5.70 U B | 5.13 UJ B, FD | 5.49 U B | 5.55 U B | 5.73 U B |
| 1,2,3,4,7,8-HxCDF | ng/kg | 0.326 J Z | 5.04 U B | 5.70 U B | 5.13 UJ B, FD | 5.49 UJ B, FD | 5.55 U B | 5.73 U B |
| 1,2,3,7,8,9-HxCDF | ng/kg | 5.09 U B | 0.112 J Z | 5.70 U B | 5.13 UJ B, FD | 5.49 U B | 5.55 U B | 5.73 U B |
| Aroclor 1260 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 1254 | ug/kg | 7.9 | 2.6 J S | 1.9 U | 1.8 UJ FD | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 1268 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 1221 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 5460 | ug/kg | 3.4 U | 3.4 U | 3.8 U | 3.4 U | 3.7 U | 3.7 U | 3.8 U |
| Aroclor 1232 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 5442 | ug/kg | 3.4 U | 3.4 U | 3.8 U | 3.4 U | 3.7 U | 3.7 U | 3.8 U |
| Aroclor 1248 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 1016 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 1262 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 1242 | ug/kg | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| Aroclor 5432 | ug/kg | 3.4 U | 3.4 U | 3.8 U | 3.4 U | 3.7 U | 3.7 U | 3.8 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

Appendix A10
PCBs and Dioxins-Validated Data
HSA-5DS

| Sample Name | SL-036-SA5DS-SB-9.0-10.0 | SL-037-SA5DS-SB-4.0-5.0 | SL-037-SA5DS-SB-9.0-10.0 | SL-038-SA5DS-SS-0.0-0.5 | SL-038-SA5DS-SB-4.0-5.0 | SL-038-SA5DS-SB-9.0-10.0 | SL-039-SA5DS-SB-3.0-4.0 |
|---------------------|--------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
| Sample Date | 10/14/2011 | 10/14/2011 | 10/14/2011 | 09/27/2011 | 10/14/2011 | 10/14/2011 | 10/17/2011 |
| SDG | DX149 | DX149 | DX149 | DX143 | DX149 | DX149 | DX151 |
| Start Depth | 9 | 4 | 9 | 0 | 4 | 9 | 3 |
| End Depth | 10 | 5 | 10 | 0.5 | 5 | 10 | 4 |
| Chemical Name | Unit | | | | | | |
| 2,3,7,8-TCDD | ng/kg | 1.13 U | 0.114 J Z | 1.17 U | 0.0367 J Z | 1.08 U | 1.08 U |
| 1,2,3,7,8,9-HxCDD | ng/kg | 0.690 J Z | 0.488 J Z | 5.83 U B | 0.633 J Z | 5.38 U B | 5.42 U B |
| OCDD | ng/kg | 11.3 U B | 11.5 U B | 11.7 U B | 23.9 | 10.8 U B | 10.8 U B |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 5.64 U B | 5.75 U B | 5.83 U B | 2.06 J Z | 5.38 U B | 5.42 U B |
| OCDF | ng/kg | 11.3 U B | 11.5 U B | 11.7 U B | 1.98 J Z | 10.8 U B | 10.8 U B |
| 1,2,3,4,7,8-HxCDD | ng/kg | 5.64 U B | 5.75 U B | 5.83 U B | 0.0632 J Z | 5.38 U B | 5.22 U |
| 1,2,3,7,8-PeCDD | ng/kg | 5.64 U B | 5.75 U B | 5.83 U | 0.161 J Z | 5.38 U | 5.22 U B |
| 2,3,7,8-TCDF | ng/kg | 0.0589 J Z | 0.0416 J Z | 1.17 U | 0.0661 J Z | 1.08 U | 1.08 U |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 5.64 U B | 5.75 U B | 5.83 U B | 5.09 U B | 5.38 U B | 5.22 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 5.64 U B | 0.285 J Z | 5.83 U B | 0.237 J Z | 5.38 U B | 5.22 U B |
| 1,2,3,7,8-PeCDF | ng/kg | 0.267 J Z | 0.301 J Z | 5.83 U B | 0.281 J Z | 5.38 U B | 5.22 U B |
| 1,2,3,6,7,8-HxCDF | ng/kg | 0.166 J Z | 5.75 U B | 5.83 U B | 0.132 J Z | 5.38 U B | 5.22 U B |
| 1,2,3,6,7,8-HxCDD | ng/kg | 0.286 J Z | 0.239 J Z | 5.83 U | 0.408 J Z | 5.38 U | 5.22 U |
| 2,3,4,6,7,8-HxCDF | ng/kg | 5.64 U B | 5.75 U B | 5.83 U B | 5.09 U B | 5.38 U | 5.22 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 5.64 U B | 5.75 U B | 5.83 U B | 0.685 J Z | 5.38 U B | 5.22 U B |
| 1,2,3,4,7,8-HxCDF | ng/kg | 5.64 U B | 5.75 U B | 5.83 U B | 0.297 J Z | 5.38 U | 5.22 U B |
| 1,2,3,7,8,9-HxCDF | ng/kg | 0.725 J Z | 0.657 J Z | 5.83 U B | 0.414 J Z | 5.38 U B | 5.22 U B |
| Aroclor 1260 | ug/kg | 2.0 UJ S | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 1254 | ug/kg | 2.0 UJ S | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 1268 | ug/kg | 2.0 UJ S | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 1221 | ug/kg | 2.0 UJ S, L | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 5460 | ug/kg | 3.8 UJ S | 3.8 U | 3.9 U | 3.4 U | 3.6 U | 3.6 U |
| Aroclor 1232 | ug/kg | 2.0 UJ S, L | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 5442 | ug/kg | 3.8 UJ S | 3.8 U | 3.9 U | 3.4 U | 3.6 U | 3.6 U |
| Aroclor 1248 | ug/kg | 2.0 UJ S | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 1016 | ug/kg | 2.0 UJ S, L | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 1262 | ug/kg | 2.0 UJ S | 2.0 U | 2.0 U | 1.7 U | 1.9 U | 1.8 U |
| Aroclor 1242 | ug/kg | 2.0 UJ S | 2.0 U | 2.0 U | 0.72 J Z | 1.9 U | 1.8 U |
| Aroclor 5432 | ug/kg | 3.8 UJ S | 3.8 U | 3.9 U | 3.4 U | 3.6 U | 3.6 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-040-SA5DS-SS-0.0-0.5 | SL-040-SA5DS-SB-4.0-5.0 | SL-040-SA5DS-SB-9.0-10.0 | |
|---------------------|-------------------------|-------------------------|--------------------------|------------|
| Sample Date | 09/28/2011 | 10/20/2011 | 10/20/2011 | |
| SDG | DX146 | DX150 | DX150 | |
| Start Depth | 0 | 4 | 9 | |
| End Depth | 0.5 | 5 | 10 | |
| Chemical Name | Unit | | | |
| 2,3,7,8-TCDD | ng/kg | 1.01 U | 1.08 U | 1.07 U |
| 1,2,3,7,8,9-HxCDD | ng/kg | 0.648 J Z | 5.40 U B | 5.34 U B |
| OCDD | ng/kg | 109 | 10.8 U B | 10.7 U B |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 10.8 | 5.40 U B | 5.34 U B |
| OCDF | ng/kg | 4.60 J Z | 10.8 U B | 10.7 U B |
| 1,2,3,4,7,8-HxCDD | ng/kg | 0.341 J Z | 5.40 U B | 5.34 U |
| 1,2,3,7,8-PeCDD | ng/kg | 5.06 U B | 5.40 U B | 5.34 U B |
| 2,3,7,8-TCDF | ng/kg | 0.186 J Z | 1.08 U | 1.07 U |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 0.128 J Z | 5.40 U B | 5.34 U B |
| 2,3,4,7,8-PeCDF | ng/kg | 5.06 U B | 5.40 U B | 5.34 U B |
| 1,2,3,7,8-PeCDF | ng/kg | 0.201 J Z | 5.40 U B | 5.34 U |
| 1,2,3,6,7,8-HxCDF | ng/kg | 5.06 U B | 5.40 U B | 5.34 U B |
| 1,2,3,6,7,8-HxCDD | ng/kg | 0.696 J Z | 5.40 U B | 5.34 U B |
| 2,3,4,6,7,8-HxCDF | ng/kg | 0.172 J Z | 5.40 U B | 5.34 U B |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 1.38 J Z | 5.40 U B | 5.34 U B |
| 1,2,3,4,7,8-HxCDF | ng/kg | 0.275 J Z | 0.0409 J Z | 0.0471 J Z |
| 1,2,3,7,8,9-HxCDF | ng/kg | 0.585 J Z | 5.40 U B | 5.34 U B |
| Aroclor 1260 | ug/kg | 1.5 J Z | 1.8 U | 1.8 U |
| Aroclor 1254 | ug/kg | 0.85 J Z | 1.8 U | 1.8 U |
| Aroclor 1268 | ug/kg | 1.7 U | 1.8 U | 1.8 U |
| Aroclor 1221 | ug/kg | 1.7 U | 1.8 U | 1.8 U |
| Aroclor 5460 | ug/kg | 2.9 J Z | 3.6 UJ E | 3.5 UJ E |
| Aroclor 1232 | ug/kg | 1.7 U | 1.8 U | 1.8 U |
| Aroclor 5442 | ug/kg | 3.3 U | 3.6 UJ E | 3.5 UJ E |
| Aroclor 1248 | ug/kg | 1.7 U | 1.8 U | 1.8 U |
| Aroclor 1016 | ug/kg | 1.7 U | 1.8 U | 1.8 U |
| Aroclor 1262 | ug/kg | 1.7 U | 1.8 U | 1.8 U |
| Aroclor 1242 | ug/kg | 1.7 U | 1.8 U | 1.8 U |
| Aroclor 5432 | ug/kg | 3.3 U | 3.6 UJ E | 3.5 UJ E |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-001-SA5DS-SS-0.0-0.5 | SL-002-SA5DS-SS-0.0-0.5 | SL-004-SA5DS-SS-0.0-0.5 | SL-005-SA5DS-SS-0.0-0.5 | SL-006-SA5DS-SS-0.0-0.5 | SL-007-SA5DS-SS-0.0-0.5 | SL-008-SA5DS-SS-0.0-0.5 | SL-009-SA5DS-SS-0.0-0.5 |
|----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Sample Date | 09/26/2011 | 09/26/2011 | 09/27/2011 | 09/27/2011 | 09/27/2011 | 09/28/2011 | 09/28/2011 | 09/28/2011 |
| SDG | DE253 | DE253 | DE256 | DE256 | DE256 | DE257 | DE257 | DE257 |
| Start Depth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Chemical Name | Unit | | | | | | | |
| Dichlorprop | ug/kg | 1.7 R Q | 1.7 U | 1.7 U | 1.7 U | -- | 1.7 U | 1.7 U |
| Dicamba | ug/kg | 1.2 R Q | 1.2 U | 1.2 U | 1.2 U | -- | 1.2 U | 1.2 U |
| 2,2-Dichlor-Propionic Acid | ug/kg | 9.1 R Q | 9.1 U | 9.2 U | 9.1 U | -- | 9.1 U | 9.1 U |
| Dinitrobutyl Phenol | ug/kg | 2.4 R Q, L | 2.4 R L | 2.4 U | 2.4 U | -- | 2.4 U | 2.4 U |
| MCPP | ug/kg | 250 R Q | 250 U | 250 U | 250 U | -- | 250 U | 250 U |
| 2,4,5-TP | ug/kg | 0.17 R Q | 0.17 U | 0.19 | 0.75 | -- | 0.25 U | 0.21 U |
| 2,4,5-T | ug/kg | 0.50 U | 0.17 U | 0.32 U | 0.17 U | -- | 0.59 U | 0.17 U |
| MCPA | ug/kg | 250 R Q | 250 U | 250 U | 250 U | -- | 250 U | 250 U |
| 2,4-D | ug/kg | 3.6 U | 3.7 U | 3.7 U | 3.7 U | -- | 3.6 U | 3.7 U |
| 2,4 DB | ug/kg | 2.0 R Q | 1.7 | 6.4 | 3.0 U | -- | 2.2 U | 2.4 U |
| Toxaphene | ug/kg | 13 U | 15 | 10 | 6.7 U | 7.2 U | 6.7 U | 6.7 U |
| Heptachlor Epoxide | ug/kg | 0.17 U | 0.18 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Endosulfan Sulfate | ug/kg | 0.34 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| Mirex | ug/kg | 0.34 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| Aldrin | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Alpha-BHC | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Beta-BHC | ug/kg | 0.17 U | 0.14 J Z | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Delta-BHC | ug/kg | 0.17 UJ FD | 0.052 J Z | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.038 J Z |
| Endosulfan II | ug/kg | 0.34 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| 4,4'-DDT | ug/kg | 1.2 | 2.4 | 0.86 | 0.35 U | 0.63 J S | 0.64 J S | 0.56 |
| Endrin Ketone | ug/kg | 0.34 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| Chlordane | ug/kg | 2.0 J FD, Z | 8 | 7.4 | 3.5 U | 3.8 J S | 1.9 J S, Z | 1.9 J Z |
| Gamma-BHC (Lindane) | ug/kg | 0.17 U | 0.040 J Z | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Dieldrin | ug/kg | 0.34 U | 0.48 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| Endrin | ug/kg | 0.34 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| Methoxychlor | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| 4,4'-DDD | ug/kg | 0.34 R Q | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| 4,4'-DDE | ug/kg | 0.52 | 2.8 | 0.35 U | 0.35 U | 1.0 J S | 0.78 J S | 0.53 |
| Endrin Aldehyde | ug/kg | 0.43 J Q | 0.49 | 0.50 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U |
| Heptachlor | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Endosulfan I | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-010-SA5DS-SS-0.0-0.5 | SL-013-SA5DS-SS-0.0-0.5 | SL-014-SA5DS-SS-0.0-0.5 | SL-015-SA5DS-SS-0.0-0.5 | SL-016-SA5DS-SS-0.0-0.5 | SL-017-SA5DS-SS-0.0-0.5 | SL-019-SA5DS-SS-0.0-0.5 | SL-020-SA5DS-SS-0.0-0.5 |
|----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Sample Date | 09/28/2011 | 09/28/2011 | 09/28/2011 | 09/28/2011 | 09/28/2011 | 09/28/2011 | 09/27/2011 | 09/27/2011 |
| SDG | DE257 | DE257 | DE257 | DE257 | DE257 | DE257 | DE256 | DE256 |
| Start Depth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Chemical Name | Unit | | | | | | | |
| Dichlorprop | ug/kg | 1.7 U | 1.7 U | 1.0 J Z | 1.7 U | 1.8 U | 1.7 U | 1.7 U |
| Dicamba | ug/kg | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.3 U | 1.2 U | 1.2 U |
| 2,2-Dichlor-Propionic Acid | ug/kg | 9.1 U | 9.1 U | 9.1 U | 9.2 U | 9.4 U | 9.1 U | 9.2 U |
| Dinitrobutyl Phenol | ug/kg | 2.4 U | 2.4 U | 2.4 U | 2.5 U | 2.5 U | 2.4 U | 2.4 U |
| MCPP | ug/kg | 250 U | 250 U | 250 U | 260 U | 260 U | 250 U | 250 U |
| 2,4,5-TP | ug/kg | 0.19 | 0.27 | 0.29 | 0.17 U | 0.18 U | 0.17 U | 0.26 |
| 2,4,5-T | ug/kg | 0.32 U | 0.85 U | 0.29 U | 0.48 U | 0.18 U | 0.17 U | 0.17 U |
| MCPA | ug/kg | 250 U | 250 U | 250 U | 260 U | 260 U | 250 U | 250 U |
| 2,4-D | ug/kg | 3.6 U | 3.7 U | 3.6 U | 3.7 U | 3.8 U | 3.6 U | 3.7 U |
| 2,4 DB | ug/kg | 56 U | 36 U | 18 U | 14 U | 8.9 U | 8.6 U | 1.7 U |
| Toxaphene | ug/kg | 6.7 U | 6.7 U | 6.7 U | 6.8 U | 6.9 U | 18 U J S | 6.7 U |
| Heptachlor Epoxide | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U J S | 0.17 U |
| Endosulfan Sulfate | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.35 U J S | 0.34 U |
| Mirex | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.35 U J S | 0.34 U |
| Aldrin | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U J S | 0.17 U |
| Alpha-BHC | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.076 J Z | 0.17 U J S | 0.17 U |
| Beta-BHC | ug/kg | 0.078 J Z | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U J S | 0.17 U |
| Delta-BHC | ug/kg | 0.061 J Z | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U J S | 0.17 U |
| Endosulfan II | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.35 U J S | 0.34 U |
| 4,4'-DDT | ug/kg | 0.63 | 0.35 U | 0.42 | 0.31 J Z | 0.59 | 2.9 J S | 0.34 U |
| Endrin Ketone | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.35 U J S | 0.34 U |
| Chlordane | ug/kg | 3.0 J Z | 1.7 J Z | 1.7 J Z | 1.8 J Z | 2.5 J Z | 4.4 J S | 3.4 U |
| Gamma-BHC (Lindane) | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U J S | 0.17 U |
| Dieldrin | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.35 U J S | 0.34 U |
| Endrin | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.35 U J S | 0.34 U |
| Methoxychlor | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U J S | 1.7 U |
| 4,4'-DDD | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.35 U J S | 0.34 U |
| 4,4'-DDE | ug/kg | 0.42 | 0.35 U | 0.35 | 0.24 J Z | 0.41 U | 2.2 J S | 0.23 J Z |
| Endrin Aldehyde | ug/kg | 0.34 U | 0.35 U | 0.34 U | 0.35 U | 0.36 U | 0.99 J S | 0.086 J Z |
| Heptachlor | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.077 J Z | 0.17 U J S | 0.17 U |
| Endosulfan I | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U J S | 0.17 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-021-SA5DS-SS-0.0-0.5 | SL-022-SA5DS-SS-0.0-0.5 | SL-023-SA5DS-SS-0.0-0.5 | SL-024-SA5DS-SS-0.0-0.5 | SL-025-SA5DS-SS-0.0-0.5 | SL-026-SA5DS-SS-0.0-0.5 | SL-027-SA5DS-SS-0.0-0.5 | SL-028-SA5DS-SS-0.0-0.5 |
|----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Sample Date | 09/27/2011 | 09/27/2011 | 09/27/2011 | 09/27/2011 | 09/27/2011 | 09/26/2011 | 09/26/2011 | 09/26/2011 |
| SDG | DE256 | DE256 | DE256 | DE256 | DE256 | DE253 | DE253 | DE253 |
| Start Depth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Chemical Name | Unit | | | | | | | |
| Dichlorprop | ug/kg | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| Dicamba | ug/kg | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| 2,2-Dichlor-Propionic Acid | ug/kg | 9.1 U | 9.2 U | 9.2 U | 9.1 U | 9.2 U | 9.1 U | 9.0 U |
| Dinitrobutyl Phenol | ug/kg | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 0.86 J L, Z | 2.4 R L |
| MCPP | ug/kg | 250 U | 250 U | 250 U | 250 U | 260 U | 250 U | 250 U |
| 2,4,5-TP | ug/kg | 0.13 J Z | 0.5 | 0.17 U | 0.41 | 0.78 | 0.17 U | 0.17 U |
| 2,4,5-T | ug/kg | 0.17 U | 0.20 U | 0.36 U | 1.9 | 0.17 U | 0.42 | 0.17 U |
| MCPA | ug/kg | 250 U | 250 U | 250 U | 250 U | 260 U | 250 U | 250 U |
| 2,4-D | ug/kg | 3.7 U | 4.2 | 3.7 U | 3.7 U | 3.7 U | 3.6 U | 3.6 U |
| 2,4 DB | ug/kg | 29 U | 8.8 | 3.2 U | 1.7 U | 1.8 U | 5.9 | 4.7 |
| Toxaphene | ug/kg | 2.6 J Z | 6.7 U | 6.7 UJ S | 6.7 U | 6.7 U | 1400 U | 50 U |
| Heptachlor Epoxide | ug/kg | 0.17 U | 0.17 U | 0.17 UJ S | 0.17 U | 0.17 U | 83 U | 0.84 U |
| Endosulfan Sulfate | ug/kg | 0.34 U | 0.34 U | 0.35 UJ S | 0.34 U | 0.35 U | 34 U | 1.7 U |
| Mirex | ug/kg | 0.34 U | 0.34 U | 0.35 UJ S | 0.34 U | 0.35 U | 34 U | 2.8 U |
| Aldrin | ug/kg | 0.17 U | 0.17 U | 0.17 UJ S | 0.17 U | 0.17 U | 17 U | 0.84 U |
| Alpha-BHC | ug/kg | 0.17 U | 0.17 U | 0.17 UJ S | 0.17 U | 0.17 U | 17 U | 0.84 U |
| Beta-BHC | ug/kg | 0.17 U | 0.17 U | 0.17 UJ S | 0.17 U | 0.079 J Z | 17 U | 0.84 U |
| Delta-BHC | ug/kg | 0.17 U | 0.046 J Z | 0.17 UJ S | 0.17 U | 0.17 U | 17 U | 0.84 U |
| Endosulfan II | ug/kg | 0.34 U | 0.34 U | 0.35 UJ S | 0.34 U | 0.35 U | 46 U | 1.7 U |
| 4,4'-DDT | ug/kg | 0.34 U | 0.77 | 0.38 J S | 0.34 U | 0.67 U | 170 U | 1.3 J Z |
| Endrin Ketone | ug/kg | 0.34 U | 0.097 J Z | 0.35 UJ S | 0.34 U | 0.35 U | 34 U | 1.7 U |
| Chlordane | ug/kg | 1.6 J Z | 5.8 | 1.8 J S, Z | 3.4 U | 2.5 J Z | 510 U | 17 U |
| Gamma-BHC (Lindane) | ug/kg | 0.17 U | 0.17 U | 0.17 UJ S | 0.17 U | 0.17 U | 17 U | 0.84 U |
| Dieldrin | ug/kg | 0.34 U | 0.34 U | 0.35 UJ S | 0.34 U | 0.35 U | 50 U | 1.7 U |
| Endrin | ug/kg | 0.34 U | 0.34 U | 0.35 UJ S | 0.34 U | 0.35 U | 59 U | 1.7 U |
| Methoxychlor | ug/kg | 1.7 U | 1.7 U | 1.7 UJ S | 1.7 U | 1.7 U | 170 U | 8.4 U |
| 4,4'-DDD | ug/kg | 0.34 U | 0.34 U | 0.35 UJ S | 0.34 U | 0.35 U | 34 U | 1.7 U |
| 4,4'-DDE | ug/kg | 0.34 U | 0.68 | 0.25 J S, Z | 0.34 U | 0.35 U | 270 U | 1.1 J Z |
| Endrin Aldehyde | ug/kg | 0.34 U | 0.34 U | 0.35 UJ S | 0.34 U | 0.35 U | 34 U | 1.7 U |
| Heptachlor | ug/kg | 0.17 U | 0.17 U | 0.17 UJ S | 0.17 U | 0.17 U | 17 U | 0.84 U |
| Endosulfan I | ug/kg | 0.21 U | 0.17 U | 0.17 UJ S | 0.17 U | 0.17 U | 17 U | 0.84 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-029-SA5DS-SS-0.0-0.5 | SL-030-SA5DS-SS-0.0-0.5 | SL-031-SA5DS-SS-0.0-0.5 | SL-032-SA5DS-SS-0.0-0.5 | SL-033-SA5DS-SS-0.0-0.5 | SL-034-SA5DS-SS-0.0-0.5 | SL-038-SA5DS-SS-0.0-0.5 | SL-040-SA5DS-SS-0.0-0.5 | |
|----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------|
| Sample Date | 09/26/2011 | 09/26/2011 | 09/26/2011 | 09/26/2011 | 09/28/2011 | 09/28/2011 | 09/27/2011 | 09/28/2011 | |
| SDG | DE253 | DE253 | DE253 | DE253 | DE257 | DE257 | DE256 | DE257 | |
| Start Depth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| Chemical Name | Unit | | | | | | | | |
| Dichlorprop | ug/kg | 1.8 U | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.6 J Z | 1.7 U |
| Dicamba | ug/kg | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 0.61 J Z | 1.2 U |
| 2,2-Dichlor-Propionic Acid | ug/kg | 9.3 U | 9.2 U | 9.3 U | 9.2 U | 9.4 U | 9.3 U | 9.2 U | 9.1 U |
| Dinitrobutyl Phenol | ug/kg | 2.5 R L | 2.5 R L | 2.5 R L | 2.5 R L | 2.5 U | 2.5 U | 2.5 R L | 2.4 U |
| MCPP | ug/kg | 260 U | 260 U | 260 U | 260 U | 260 U | 260 U | 260 U | 250 U |
| 2,4,5-TP | ug/kg | 0.18 U | 0.17 U | 0.18 U | 0.17 U | 0.18 U | 0.44 J FD, Q | 0.090 J Z | 0.62 |
| 2,4,5-T | ug/kg | 0.18 U | 0.17 U | 0.18 U | 0.15 J Z | 0.18 U | 0.18 U | 0.17 U | 0.17 U |
| MCPA | ug/kg | 260 U | 260 U | 260 U | 260 U | 260 U | 260 U | 870 | 250 U |
| 2,4-D | ug/kg | 3.7 U | 3.7 U | 3.7 U | 3.7 U | 3.7 U | 3.7 U | 3.7 U | 3.6 U |
| 2,4 DB | ug/kg | 1.7 J Z | 1.7 U | 3.2 | 1.7 | 1.8 U | 3.5 U | 100 U | 2.6 U |
| Toxaphene | ug/kg | 17 U | 42 U | 10 | 10 U | 6.9 U | 6.9 U | 6.7 U | 6.7 U |
| Heptachlor Epoxide | ug/kg | 0.53 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Endosulfan Sulfate | ug/kg | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U |
| Mirex | ug/kg | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U |
| Aldrin | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Alpha-BHC | ug/kg | 0.17 U | 0.090 J Z | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Beta-BHC | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 UJ FD | 0.17 U | 0.081 J Z |
| Delta-BHC | ug/kg | 0.35 | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Endosulfan II | ug/kg | 0.36 U | 0.4 | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U |
| 4,4'-DDT | ug/kg | 3.5 U | 0.60 U | 2.9 | 0.94 U | 0.35 U | 0.22 J FD, Z | 0.35 U | 0.34 U |
| Endrin Ketone | ug/kg | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U |
| Chlordane | ug/kg | 3.3 J Z | 3.4 J Z | 6.2 | 2.6 J Z | 3.5 U | 0.90 J FD, Z | 1.1 J Z | 3.4 U |
| Gamma-BHC (Lindane) | ug/kg | 0.17 U | 0.18 | 0.17 U | 0.057 J Z | 0.17 U | 0.038 J FD, Z | 0.17 U | 0.053 J Z |
| Dieldrin | ug/kg | 1.2 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U |
| Endrin | ug/kg | 0.45 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U |
| Methoxychlor | ug/kg | 1.7 U | 1.7 U | 1.7 U | 0.81 J Z | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| 4,4'-DDD | ug/kg | 0.35 U | 0.35 U | 0.42 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.34 U |
| 4,4'-DDE | ug/kg | 2.1 U | 0.86 | 2.2 | 1.2 | 0.35 U | 0.10 J FD, Z | 0.35 U | 0.34 U |
| Endrin Aldehyde | ug/kg | 0.53 U | 1.5 U | 0.73 | 0.46 | 0.35 U | 0.35 UJ FD | 0.35 U | 0.34 U |
| Heptachlor | ug/kg | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |
| Endosulfan I | ug/kg | 0.17 U | 0.089 J Z | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |

U - Compound not detected above the reporting limit
J - Result is an estimated value
R - Result is rejected

| Sample Name | SL-036-SA5DS-SB-4.0-5.0 | SL-036-SA5DS-SB-9.0-10.0 | SL-037-SA5DS-SB-4.0-5.0 | SL-037-SA5DS-SB-9.0-10.0 | SL-038-SA5DS-SS-0.0-0.5 | SL-038-SA5DS-SB-4.0-5.0 | SL-038-SA5DS-SB-9.0-10.0 | SL-039-SA5DS-SB-3.0-4.0 | SL-040-SA5DS-SS-0.0-0.5 | SL-040-SA5DS-SB-4.0-5.0 | SL-040-SA5DS-SB-9.0-10.0 |
|---|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Sample Date | 10/14/2011 | 10/14/2011 | 10/14/2011 | 10/14/2011 | 09/27/2011 | 10/14/2011 | 10/14/2011 | 10/17/2011 | 09/28/2011 | 10/20/2011 | 10/20/2011 |
| SDG | DE269 | DE269 | DE269 | DE269 | DE256 | DE269 | DE269 | DE270 | DE257 | DE273 | DE273 |
| Start Depth | 4 | 9 | 4 | 9 | 0 | 4 | 9 | 3 | 0 | 4 | 9 |
| End Depth | 5 | 10 | 5 | 10 | 0.5 | 5 | 10 | 4 | 0.5 | 5 | 10 |
| Chemical Name | Unit | | | | | | | | | | |
| N-Nitrosodimethylamine (1625C) | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| N-Nitrosodimethylamine (8270C SIM) | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| 2,4-Dinitrotoluene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Nitrobenzene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 1,4-Dichlorobenzene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 1,2,4-Trichlorobenzene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 1,3-Dichlorobenzene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Hexachlorobutadiene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 1,2-Dichlorobenzene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 4-Nitroaniline | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 4-Nitrophenol | ug/kg | 570 U | 570 U | 570 U | 580 U | 510 U | 540 U | 540 U | 500 U | 540 U | 540 U |
| 4-Bromophenyl Phenyl Ether | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 2,4-Dimethylphenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 4-Methylphenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 4-Chloroaniline | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 3,5-Dimethylphenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Phenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Bis(2-Chloroethyl) ether | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Bis(2-Chloroethoxy) methane | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Bis(2-Ethylhexyl) phthalate (8270C) | ug/kg | -- | -- | -- | 27 J Z | -- | -- | -- | -- | -- | -- |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg | 9.3 J Z | 21 U | 21 U | -- | 11 J Z | 7.1 J Z | 9.0 J Z | 19 U | 13 J Z | 8.3 J Z |
| Di-N-Octyl Phthalate | ug/kg | 20 U | 21 U | 21 U | 21 U | 19 U | 19 U | 19 U | 18 U | 19 U | 19 U |
| Hexachlorobenzene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Anthracene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| 2,4-Dichlorophenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 1,2-Diphenylhydrazine | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Pyrene (8270C) | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Pyrene (8270C SIM) | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 0.89 J Z | 1.8 U | 1.8 U | 1.8 U | 2.2 | 1.8 U |
| Dimethylphthalate | ug/kg | 20 U | 21 U | 21 U | 21 U | 19 U | 19 U | 19 U | 18 U | 19 U | 19 U |
| Dibenzofuran | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Benzo(g,h,i)perylene (8270C) | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Benzo(g,h,i)perylene (8270C SIM) | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Indeno(1,2,3-Cd)Pyrene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Benzo(b)fluoranthene (8270C) | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Benzo(b)fluoranthene (8270C SIM) | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 2 | 1.8 U | 1.8 U | 1.8 U | 6.7 | 1.8 U |
| Fluoranthene (8270C) | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Fluoranthene (8270C SIM) | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 0.92 J Z | 1.8 U | 1.8 U | 1.8 U | 2.3 | 1.8 U |
| Benzo(k)fluoranthene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Acenaphthylene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Chrysene (8270C) | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Chrysene (8270C SIM) | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 0.78 J Z | 1.8 U | 1.8 U | 1.9 | 1.8 U | 1.8 U |
| bis(2-Chloroisopropyl) ether | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Benzo(a)pyrene (8270C) | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Benzo(a)pyrene (8270C SIM) | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.2 J Z | 1.8 U | 1.8 U |
| 2,4-Dinitrophenol | ug/kg | 1100 U | 1100 U | 1100 U | 1200 U | 1000 U | 1100 U | 1100 U | 1000 U | 1100 U | 1100 U |
| 4,6-Dinitro-2-Methylphenol | ug/kg | 570 U | 570 U | 570 U | 580 U | 510 U | 540 U | 540 U | 500 U | 540 U | 540 U |
| Dibenzo(a,h)anthracene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Benzo(a)anthracene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 0.77 J Z | 1.8 U | 1.8 U |
| 4-Chloro-3-Methylphenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| N-Nitroso-Di-N-Propylamine | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Aniline | ug/kg | 570 U | 570 U | 570 U | 580 U | 510 U | 540 U | 540 U | 500 U | 540 U | 540 U |
| Benzoic Acid | ug/kg | 570 U | 570 U | 570 U | 580 U | 510 U | 540 U | 540 U | 500 U | 540 U | 540 U |
| Hexachloroethane | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 4-Chlorophenyl Phenylether | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Hexachlorocyclopentadiene | ug/kg | 570 U | 570 U | 570 U | 580 U | 510 U | 540 U | 540 U | 500 U | 540 U | 540 U |
| Isophorone | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Acenaphthene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Diethylphthalate | ug/kg | 20 U | 21 U | 21 U | 21 U | 19 U | 19 U | 19 U | 18 U | 19 U | 19 U |
| Di-n-Butylphthalate | ug/kg | 20 U | 21 U | 21 U | 21 U | 19 U | 19 U | 19 U | 18 U | 7.7 J Z | 7.7 J Z |
| Phenanthrene | ug/kg | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Phenanthrene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.5 J Z | 1.8 U | 1.8 U |
| Butylbenzylphthalate | ug/kg | 20 U | 21 U | 21 U | 21 U | 19 U | 19 U | 19 U | 8.8 J Z | 19 U | 19 U |
| N-Nitrosodiphenylamine | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Fluorene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Carbazole | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Pentachlorophenol | ug/kg | 570 U | 570 U | 570 U | 580 U | 510 U | 540 U | 540 U | 500 U | 540 U | 540 U |
| 2,4,6-Trichlorophenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 2-Nitroaniline | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 2-Nitrophenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 1-Methylnaphthalene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| Naphthalene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.4 J Z | 1.8 U | 1.8 U |
| 2-Methylnaphthalene | ug/kg | 1.9 U | 1.9 U | 1.9 U | 2.0 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| 2-Chloronaphthalene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 3,3'-Dichlorobenzidine | ug/kg | 380 U | 380 U | 380 U | 390 U | 340 U | 360 U | 360 U | 340 U | 360 U | 360 U |
| Benzidine | ug/kg | 3800 U | 3800 U | 3800 U | 3900 U | 3400 U | 3600 U | 3600 U | 3400 U | 3600 U | 3600 U |
| 2-Methylphenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 2-Chlorophenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 2,4,5-Trichlorophenol | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| 3-Nitroaniline | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |
| Benzyl Alcohol | ug/kg | 570 U | 570 U | 570 U | 580 U | 510 U | 540 U | 540 U | 500 U | 540 U | 540 U |
| 2,6-Dinitrotoluene | ug/kg | 190 U | 190 U | 190 U | 190 U | 170 U | 180 U | 180 U | 170 U | 180 U | 180 U |

| Sample Name | | SL-005-SA5DS-SB-1.0-2.0 | SL-010-SA5DS-SB-2.0-3.0 | SL-019-SA5DS-SB-2.0-3.0 |
|---------------|-------|-------------------------|-------------------------|-------------------------|
| Sample Date | | 11/09/2011 | 11/08/2011 | 11/08/2011 |
| SDG | | DE283 | DE282 | DE282 |
| Start Depth | | 1 | 2 | 2 |
| End Depth | | 2 | 3 | 3 |
| Chemical Name | Unit | | | |
| GRO (C5-C12) | mg/kg | 1.2 U | 2.2 U | 1.2 U |
| EFH (C12-C14) | mg/kg | 1.3 U | 1.3 U | 1.3 U |
| EFH (C15-C20) | mg/kg | 1.3 U | 1.3 U | 1.3 U |
| EFH (C21-C30) | mg/kg | 3.3 | 1.3 U | 1.2 J Z |
| EFH (C30-C40) | mg/kg | 8.5 | 1.6 | 5 |
| EFH (C8-C11) | mg/kg | 1.3 U | 1.3 U | 1.3 U |

U - Compound not detected above the reporting limit
 J - Result is an estimated value
 R - Result is rejected