# Analytical and Quality Control Report

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Report Date: December 29, 2006

Work Order: 6111718

Project Name: HELSTF Phase III Soil Sampling
Project Number: 7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 109300 | HLSF-0085-SB-037-(10.0-11.0) | soil | 2006-11-14 | 08:40 | 2006-11-15 |
| 109301 | HLSF-0085-SB-037-(20.0-21.0) | soil | 2006-11-14 | 09:05 | 2006-11-15 |
| 109302 | HLSF-0085-SB-037-(30.0-31.0) | soil | 2006-11-14 | 09:30 | 2006-11-15 |
| 109303 | HLSF-0085-SB-037-(40.0-41.0) | soil | 2006-11-14 | 09:50 | 2006-11-15 |
| 109304 | HLSF-0085-SB-037-(49.0-50.0) | soil | 2006-11-14 | 10:20 | 2006-11-15 |
| 109305 | HLSF-0085-SB-039-(10.0-11.0) | soil | 2006-11-14 | 12:50 | 2006-11-15 |
| 109306 | HLSF-0085-SB-039-(20.0-21.0) | soil | 2006-11-14 | 13:05 | 2006-11-15 |
| 109307 | HLSF-0085-SB-039-(30.0-31.0) | soil | 2006-11-14 | 13:30 | 2006-11-15 |
| 109308 | HLSF-0085-SB-039-(40.0-41.0) | soil | 2006-11-14 | 13:50 | 2006-11-15 |
| 109309 | HLSF-0085-SB-039-(49.0-50.0) | soil | 2006-11-14 | 14:10 | 2006-11-15 |
| 109310 | HLSF-0085-SB-038-(10.0-11.0) | soil | 2006-11-14 | 15:40 | 2006-11-15 |
| 109311 | HLSF-0085-SB-038-(20.0-21.0) | soil | 2006-11-14 | 15:55 | 2006-11-15 |
| 109312 | HLSF-0085-SB-038-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |
| 109313 | HLSF-0085-SB-138-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Analytical Report

**Sample: 109300 - HLSF-0085-SB-037-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Total Silver | | <0.0500 | | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | | mg/Kg | 1 | 2.00 |
| Total Barium | | **33.0** | | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | | mg/Kg | 1 | 0.100 |
| Total Chromium | | **3.27** | | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | | mg/Kg | 1 | 0.0400 |
| Total Lead | | **3.52** | | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | | mg/Kg | 1 | 1.00 |

**Sample: 109301 - HLSF-0085-SB-037-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Total Silver | | <0.0500 | | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | | mg/Kg | 1 | 2.00 |
| Total Barium | | **106** | | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | | mg/Kg | 1 | 0.100 |
| Total Chromium | | **12.0** | | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | | mg/Kg | 1 | 0.0400 |
| Total Lead | | **20.0** | | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | | mg/Kg | 1 | 1.00 |

**Sample: 109302 - HLSF-0085-SB-037-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Total Silver | | <0.0500 | | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | | mg/Kg | 1 | 2.00 |
| Total Barium | | **64.8** | | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | | mg/Kg | 1 | 0.100 |
| Total Chromium | | **7.17** | | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | | mg/Kg | 1 | 0.0400 |
| Total Lead | | **11.9** | | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | | mg/Kg | 1 | 1.00 |

**Sample: 109303 - HLSF-0085-SB-037-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Total Silver | | <0.0500 | | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | **4.02** | | mg/Kg | 1 | 2.00 |
| Total Barium | | **44.3** | | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | | mg/Kg | 1 | 0.100 |
| Total Chromium | | **5.60** | | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | | mg/Kg | 1 | 0.0400 |
| Total Lead | | **10.6** | | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | | mg/Kg | 1 | 1.00 |

**Sample: 109304 - HLSF-0085-SB-037-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Total Silver | | <0.0500 | | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | **7.13** | | mg/Kg | 1 | 2.00 |
| Total Barium | | **29.5** | | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | | mg/Kg | 1 | 0.100 |
| Total Chromium | | **11.3** | | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | | mg/Kg | 1 | 0.0400 |
| Total Lead | | **20.2** | | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | | mg/Kg | 1 | 1.00 |

**Sample: 109305 - HLSF-0085-SB-039-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Total Silver | | <0.0500 | | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | | mg/Kg | 1 | 2.00 |
| Total Barium | | **38.4** | | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | | mg/Kg | 1 | 0.100 |
| Total Chromium | | **3.97** | | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | | mg/Kg | 1 | 0.0400 |
| Total Lead | | **4.13** | | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | | mg/Kg | 1 | 1.00 |

**Sample: 109306 - HLSF-0085-SB-039-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Total Silver | | <0.0500 | | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | | mg/Kg | 1 | 2.00 |
| Total Barium | | **102** | | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | | mg/Kg | 1 | 0.100 |
| Total Chromium | | **8.37** | | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | | mg/Kg | 1 | 0.0400 |
| Total Lead | | **12.8** | | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | | mg/Kg | 1 | 1.00 |

**Sample: 109307 - HLSF-0085-SB-039-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

*continued . . .*

*sample 109307 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Silver | | <0.0500 | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | mg/Kg | 1 | 2.00 |
| Total Barium | | **77.0** | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | mg/Kg | 1 | 0.100 |
| Total Chromium | | **12.0** | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | mg/Kg | 1 | 0.0400 |
| Total Lead | | **18.5** | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | mg/Kg | 1 | 1.00 |

**Sample: 109308 - HLSF-0085-SB-039-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Silver | | <0.0500 | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | mg/Kg | 1 | 2.00 |
| Total Barium | | **27.4** | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | mg/Kg | 1 | 0.100 |
| Total Chromium | | **4.63** | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | mg/Kg | 1 | 0.0400 |
| Total Lead | | **10.2** | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | mg/Kg | 1 | 1.00 |

**Sample: 109309 - HLSF-0085-SB-039-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Silver | | <0.0500 | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | mg/Kg | 1 | 2.00 |
| Total Barium | | **29.1** | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | mg/Kg | 1 | 0.100 |

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*sample 109309 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Chromium | | **4.99** | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | mg/Kg | 1 | 0.0400 |
| Total Lead | | **11.0** | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | mg/Kg | 1 | 1.00 |

**Sample: 109310 - HLSF-0085-SB-038-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32302 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Silver | | <0.0500 | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | mg/Kg | 1 | 2.00 |
| Total Barium | | **37.9** | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | mg/Kg | 1 | 0.100 |
| Total Chromium | | **4.32** | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | mg/Kg | 1 | 0.0400 |
| Total Lead | | **3.61** | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | mg/Kg | 1 | 1.00 |

**Sample: 109311 - HLSF-0085-SB-038-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32302 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Silver | | <0.0500 | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | **4.52** | mg/Kg | 1 | 2.00 |
| Total Barium | | **116** | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | mg/Kg | 1 | 0.100 |
| Total Chromium | | **11.6** | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | mg/Kg | 1 | 0.0400 |
| Total Lead | | **20.6** | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | mg/Kg | 1 | 1.00 |

**Sample: 109312 - HLSF-0085-SB-038-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32302 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Silver | | <0.0500 | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | <2.00 | mg/Kg | 1 | 2.00 |
| Total Barium | | **78.2** | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | mg/Kg | 1 | 0.100 |
| Total Chromium | | **7.55** | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | mg/Kg | 1 | 0.0400 |
| Total Lead | | **13.8** | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | mg/Kg | 1 | 1.00 |

**Sample: 109313 - HLSF-0085-SB-138-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Total 8 Metals | Analytical Method: | S 6010B | Prep Method: | S 3050B |
| QC Batch: | 32302 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | Sample Preparation: | 2006-11-27 | Prepared By: | TS |
| Analysis: | Total 8 Metals | Analytical Method: | S 7471A | Prep Method: | N/A |
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | Sample Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | Result | RL Units | Dilution | RL |
|---|---|---|---|---|---|
| Total Silver | | <0.0500 | mg/Kg | 1 | 0.0500 |
| Total Arsenic | | **3.31** | mg/Kg | 1 | 2.00 |
| Total Barium | | **63.0** | mg/Kg | 1 | 1.00 |
| Total Cadmium | | <0.100 | mg/Kg | 1 | 0.100 |
| Total Chromium | | **8.83** | mg/Kg | 1 | 0.500 |
| Total Mercury | | <0.0400 | mg/Kg | 1 | 0.0400 |
| Total Lead | | **15.6** | mg/Kg | 1 | 1.00 |
| Total Selenium | | <1.00 | mg/Kg | 1 | 1.00 |

**Method Blank (1)** QC Batch: 32301

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | QC Preparation: | 2006-11-27 | Prepared By: | TS |

| Parameter | Flag | Result | MDL Units | RL |
|---|---|---|---|---|
| Total Silver | | <0.00444 | mg/Kg | 0.05 |
| Total Arsenic | | <0.228 | mg/Kg | 2 |
| Total Barium | | <0.0601 | mg/Kg | 1 |

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*method blank continued . . .*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Total Cadmium | | <0.00794 | mg/Kg | 0.1 |
| Total Chromium | | <0.0125 | mg/Kg | 0.5 |
| Total Lead | | <0.367 | mg/Kg | 1 |
| Total Selenium | | <0.0767 | mg/Kg | 1 |

**Method Blank (1)** QC Batch: 32302

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32302 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | QC Preparation: | 2006-11-27 | Prepared By: | TS |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Total Silver | | <0.00444 | mg/Kg | 0.05 |
| Total Arsenic | | <0.228 | mg/Kg | 2 |
| Total Barium | | <0.0601 | mg/Kg | 1 |
| Total Cadmium | | <0.00794 | mg/Kg | 0.1 |
| Total Chromium | | <0.0125 | mg/Kg | 0.5 |
| Total Lead | | <0.367 | mg/Kg | 1 |
| Total Selenium | | <0.0767 | mg/Kg | 1 |

**Method Blank (1)** QC Batch: 32351

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32351 | Date Analyzed: | 2006-11-29 | Analyzed By: | TS |
| Prep Batch: | 28171 | QC Preparation: | 2006-11-29 | Prepared By: | TS |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Total Mercury | | <0.00299 | mg/Kg | 0.04 |

**Laboratory Control Spike (LCS-1)**

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32301 | Date Analyzed: | 2006-11-28 | Analyzed By: | RR |
| Prep Batch: | 28106 | QC Preparation: | 2006-11-27 | Prepared By: | TS |

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Total Silver | 11.7 | mg/Kg | 1 | 12.5 | <0.00444 | 94 | 85 - 113 |
| Total Arsenic | 47.6 | mg/Kg | 1 | 50.0 | <0.228 | 95 | 85 - 111 |
| Total Barium | 89.7 | mg/Kg | 1 | 100 | <0.0601 | 90 | 85 - 103 |
| Total Cadmium | 23.5 | mg/Kg | 1 | 25.0 | <0.00794 | 94 | 85 - 115 |
| Total Chromium | 9.78 | mg/Kg | 1 | 10.0 | <0.0125 | 98 | 85 - 115 |
| Total Lead | 48.7 | mg/Kg | 1 | 50.0 | <0.367 | 97 | 85 - 115 |
| Total Selenium | 43.1 | mg/Kg | 1 | 50.0 | <0.0767 | 86 | 75 - 125 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Silver | 11.7 | mg/Kg | 1 | 12.5 | <0.00444 | 94 | 85 - 113 | 0 | 20 |
| Total Arsenic | 48.6 | mg/Kg | 1 | 50.0 | <0.228 | 97 | 85 - 111 | 2 | 20 |
| Total Barium | 88.8 | mg/Kg | 1 | 100 | <0.0601 | 89 | 85 - 103 | 1 | 20 |
| Total Cadmium | 23.9 | mg/Kg | 1 | 25.0 | <0.00794 | 96 | 85 - 115 | 2 | 20 |
| Total Chromium | 9.83 | mg/Kg | 1 | 10.0 | <0.0125 | 98 | 85 - 115 | 0 | 20 |
| Total Lead | 45.9 | mg/Kg | 1 | 50.0 | <0.367 | 92 | 85 - 115 | 6 | 20 |
| Total Selenium | 43.6 | mg/Kg | 1 | 50.0 | <0.0767 | 87 | 75 - 125 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 32302 Date Analyzed: 2006-11-28 Analyzed By: RR
Prep Batch: 28106 QC Preparation: 2006-11-27 Prepared By: TS

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Total Silver | 11.8 | mg/Kg | 1 | 12.5 | <0.00444 | 94 | 85 - 113 |
| Total Arsenic | 45.4 | mg/Kg | 1 | 50.0 | <0.228 | 91 | 85 - 111 |
| Total Barium | 94.2 | mg/Kg | 1 | 100 | <0.0601 | 94 | 85 - 103 |
| Total Cadmium | 22.5 | mg/Kg | 1 | 25.0 | <0.00794 | 90 | 85 - 115 |
| Total Chromium | 10.6 | mg/Kg | 1 | 10.0 | <0.0125 | 106 | 85 - 115 |
| Total Lead | 44.4 | mg/Kg | 1 | 50.0 | <0.367 | 89 | 85 - 115 |
| Total Selenium | 42.1 | mg/Kg | 1 | 50.0 | <0.0767 | 84 | 75 - 125 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Silver | 11.5 | mg/Kg | 1 | 12.5 | <0.00444 | 92 | 85 - 113 | 3 | 20 |
| Total Arsenic | 44.1 | mg/Kg | 1 | 50.0 | <0.228 | 88 | 85 - 111 | 3 | 20 |
| Total Barium | 94.5 | mg/Kg | 1 | 100 | <0.0601 | 94 | 85 - 103 | 0 | 20 |
| Total Cadmium | 23.1 | mg/Kg | 1 | 25.0 | <0.00794 | 92 | 85 - 115 | 3 | 20 |
| Total Chromium | 10.4 | mg/Kg | 1 | 10.0 | <0.0125 | 104 | 85 - 115 | 2 | 20 |
| Total Lead | 44.3 | mg/Kg | 1 | 50.0 | <0.367 | 89 | 85 - 115 | 0 | 20 |
| Total Selenium | 42.3 | mg/Kg | 1 | 50.0 | <0.0767 | 85 | 75 - 125 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 32351 Date Analyzed: 2006-11-29 Analyzed By: TS
Prep Batch: 28171 QC Preparation: 2006-11-29 Prepared By: TS

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Total Mercury | 0.497 | mg/Kg | 1 | 0.500 | <0.00299 | 99 | 85.2 - 118 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

*continued . . .*

*control spikes continued ...*

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
| Total Mercury | 0.518 | mg/Kg | 1 | 0.500 | <0.00299 | 104 | 85.2 - 118 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 109300

QC Batch: 32301 Date Analyzed: 2006-11-28 Analyzed By: RR
Prep Batch: 28106 QC Preparation: 2006-11-27 Prepared By: TS

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Total Silver | 10.3 | mg/Kg | 1 | 12.5 | <0.00444 | 82 | 78.1 - 115 |
| Total Arsenic | 44.3 | mg/Kg | 1 | 50.0 | <0.228 | 89 | 75 - 114 |
| Total Barium | 123 | mg/Kg | 1 | 100 | 33 | 90 | 75.7 - 123 |
| Total Cadmium | 19.5 | mg/Kg | 1 | 25.0 | <0.00794 | 78 | 75 - 112 |
| Total Chromium | 12.1 | mg/Kg | 1 | 10.0 | 3.27 | 88 | 75 - 125 |
| Total Lead | 46.9 | mg/Kg | 1 | 50.0 | 3.52 | 87 | 75 - 125 |
| Total Selenium | 40.3 | mg/Kg | 1 | 50.0 | <0.0767 | 81 | 75 - 117 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Silver | 10.5 | mg/Kg | 1 | 0.00 | <0.00444 | 84 | 78.1 - 115 | 2 | 20 |
| Total Arsenic | 46.5 | mg/Kg | 1 | 0.00 | <0.228 | 93 | 75 - 114 | 5 | 20 |
| Total Barium | 120 | mg/Kg | 1 | 0.00 | 33 | 87 | 75.7 - 123 | 2 | 20 |
| Total Cadmium | 21.0 | mg/Kg | 1 | 0.00 | <0.00794 | 84 | 75 - 112 | 7 | 20 |
| Total Chromium | 12.7 | mg/Kg | 1 | 0.00 | 3.27 | 94 | 75 - 125 | 5 | 20 |
| Total Lead | 42.1 | mg/Kg | 1 | 0.00 | 3.52 | 77 | 75 - 125 | 11 | 20 |
| Total Selenium | 42.0 | mg/Kg | 1 | 0.00 | <0.0767 | 84 | 75 - 117 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 109310

QC Batch: 32302 Date Analyzed: 2006-11-28 Analyzed By: RR
Prep Batch: 28106 QC Preparation: 2006-11-27 Prepared By: TS

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Total Silver | 11.2 | mg/Kg | 1 | 12.5 | <0.00444 | 90 | 78.1 - 115 |
| Total Arsenic | 42.7 | mg/Kg | 1 | 50.0 | <0.228 | 85 | 75 - 114 |
| Total Barium | 126 | mg/Kg | 1 | 100 | 37.9 | 88 | 75.7 - 123 |
| Total Cadmium | 23.5 | mg/Kg | 1 | 25.0 | <0.00794 | 94 | 75 - 112 |
| Total Chromium | 13.8 | mg/Kg | 1 | 10.0 | 4.32 | 95 | 75 - 125 |
| Total Lead | 44.7 | mg/Kg | 1 | 50.0 | 3.61 | 82 | 75 - 125 |
| Total Selenium | 41.8 | mg/Kg | 1 | 50.0 | <0.0767 | 84 | 75 - 117 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Silver | 11.6 | mg/Kg | 1 | 0.00 | <0.00444 | 93 | 78.1 - 115 | 4 | 20 |
| Total Arsenic | 43.7 | mg/Kg | 1 | 0.00 | <0.228 | 87 | 75 - 114 | 2 | 20 |
| Total Barium | 130 | mg/Kg | 1 | 0.00 | 37.9 | 92 | 75.7 - 123 | 3 | 20 |
| Total Cadmium | 23.6 | mg/Kg | 1 | 0.00 | <0.00794 | 94 | 75 - 112 | 0 | 20 |
| Total Chromium | 12.7 | mg/Kg | 1 | 0.00 | 4.32 | 84 | 75 - 125 | 8 | 20 |
| Total Lead | 46.1 | mg/Kg | 1 | 0.00 | 3.61 | 85 | 75 - 125 | 3 | 20 |
| Total Selenium | 42.3 | mg/Kg | 1 | 0.00 | <0.0767 | 85 | 75 - 117 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 109302

QC Batch: 32351 Date Analyzed: 2006-11-29 Analyzed By: TS
Prep Batch: 28171 QC Preparation: 2006-11-29 Prepared By: TS

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Total Mercury | 0.473 | mg/Kg | 1 | 0.500 | 0.00667 | 93 | 77.6 - 124 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Mercury | 0.461 | mg/Kg | 1 | 0.00 | 0.00667 | 91 | 77.6 - 124 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-2)** Spiked Sample: 109312

QC Batch: 32351 Date Analyzed: 2006-11-29 Analyzed By: TS
Prep Batch: 28171 QC Preparation: 2006-11-29 Prepared By: TS

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Total Mercury | 0.446 | mg/Kg | 1 | 0.500 | 0.00678 | 88 | 77.6 - 124 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Mercury | 0.470 | mg/Kg | 1 | 0.00 | 0.00678 | 93 | 77.6 - 124 | 5 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Standard (ICV-1)**

QC Batch: 32301 Date Analyzed: 2006-11-28 Analyzed By: RR

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Silver | | mg/Kg | 0.125 | 0.128 | 102 | 90 - 110 | 2006-11-28 |

*continued . . .*

*standard continued . . .*

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Arsenic | | mg/Kg | 1.00 | 1.04 | 104 | 95 - 105 | 2006-11-28 |
| Total Barium | | mg/Kg | 1.00 | 0.993 | 99 | 95 - 105 | 2006-11-28 |
| Total Cadmium | | mg/Kg | 1.00 | 1.02 | 102 | 95 - 105 | 2006-11-28 |
| Total Chromium | | mg/Kg | 1.00 | 1.01 | 101 | 90 - 110 | 2006-11-28 |
| Total Lead | | mg/Kg | 1.00 | 1.02 | 102 | 90 - 110 | 2006-11-28 |
| Total Selenium | | mg/Kg | 1.00 | 1.04 | 104 | 90 - 110 | 2006-11-28 |

**Standard (CCV-1)**

QC Batch: 32301 Date Analyzed: 2006-11-28 Analyzed By: RR

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Silver | | mg/Kg | 0.125 | 0.132 | 106 | 90 - 110 | 2006-11-28 |
| Total Arsenic | | mg/Kg | 1.00 | 1.06 | 106 | 90 - 110 | 2006-11-28 |
| Total Barium | | mg/Kg | 1.00 | 1.05 | 105 | 90 - 110 | 2006-11-28 |
| Total Cadmium | | mg/Kg | 1.00 | 1.05 | 105 | 90 - 110 | 2006-11-28 |
| Total Chromium | | mg/Kg | 1.00 | 1.04 | 104 | 90 - 110 | 2006-11-28 |
| Total Lead | | mg/Kg | 1.00 | 1.05 | 105 | 90 - 110 | 2006-11-28 |
| Total Selenium | | mg/Kg | 1.00 | 1.07 | 107 | 90 - 110 | 2006-11-28 |

**Standard (ICV-1)**

QC Batch: 32302 Date Analyzed: 2006-11-28 Analyzed By: RR

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Silver | | mg/Kg | 0.125 | 0.128 | 102 | 90 - 110 | 2006-11-28 |
| Total Arsenic | | mg/Kg | 1.00 | 1.04 | 104 | 95 - 105 | 2006-11-28 |
| Total Barium | | mg/Kg | 1.00 | 0.993 | 99 | 95 - 105 | 2006-11-28 |
| Total Cadmium | | mg/Kg | 1.00 | 1.02 | 102 | 95 - 105 | 2006-11-28 |
| Total Chromium | | mg/Kg | 1.00 | 1.01 | 101 | 90 - 110 | 2006-11-28 |
| Total Lead | | mg/Kg | 1.00 | 1.02 | 102 | 90 - 110 | 2006-11-28 |
| Total Selenium | | mg/Kg | 1.00 | 1.04 | 104 | 90 - 110 | 2006-11-28 |

**Standard (CCV-1)**

QC Batch: 32302 Date Analyzed: 2006-11-28 Analyzed By: RR

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Silver | | mg/Kg | 0.125 | 0.128 | 102 | 90 - 110 | 2006-11-28 |
| Total Arsenic | | mg/Kg | 1.00 | 0.973 | 97 | 90 - 110 | 2006-11-28 |
| Total Barium | | mg/Kg | 1.00 | 0.916 | 92 | 90 - 110 | 2006-11-28 |
| Total Cadmium | | mg/Kg | 1.00 | 0.976 | 98 | 90 - 110 | 2006-11-28 |

*continued . . .*

*standard continued . . .*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Chromium | | mg/Kg | 1.00 | 0.989 | 99 | 90 - 110 | 2006-11-28 |
| Total Lead | | mg/Kg | 1.00 | 0.924 | 92 | 90 - 110 | 2006-11-28 |
| Total Selenium | | mg/Kg | 1.00 | 0.919 | 92 | 90 - 110 | 2006-11-28 |

**Standard (ICV-1)**

QC Batch: 32351 Date Analyzed: 2006-11-29 Analyzed By: TS

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Mercury | | mg/L | 0.00500 | 0.00509 | 102 | 90 - 110 | 2006-11-29 |

**Standard (CCV-1)**

QC Batch: 32351 Date Analyzed: 2006-11-29 Analyzed By: TS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Total Mercury | | mg/L | 0.00500 | 0.00451 | 90 | 80 - 120 | 2006-11-29 |

# Analytical and Quality Control Report

William Little
WTS
P.O. Box 363
Building 126 3RD Floor
WSMR, NM, 88002

Report Date: December 29, 2006

Work Order: 6111718

Project Name: HELSTF Phase III Soil Sampling
Project Number: 7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 109300 | HLSF-0085-SB-037-(10.0-11.0) | soil | 2006-11-14 | 08:40 | 2006-11-15 |
| 109301 | HLSF-0085-SB-037-(20.0-21.0) | soil | 2006-11-14 | 09:05 | 2006-11-15 |
| 109302 | HLSF-0085-SB-037-(30.0-31.0) | soil | 2006-11-14 | 09:30 | 2006-11-15 |
| 109303 | HLSF-0085-SB-037-(40.0-41.0) | soil | 2006-11-14 | 09:50 | 2006-11-15 |
| 109304 | HLSF-0085-SB-037-(49.0-50.0) | soil | 2006-11-14 | 10:20 | 2006-11-15 |
| 109305 | HLSF-0085-SB-039-(10.0-11.0) | soil | 2006-11-14 | 12:50 | 2006-11-15 |
| 109306 | HLSF-0085-SB-039-(20.0-21.0) | soil | 2006-11-14 | 13:05 | 2006-11-15 |
| 109307 | HLSF-0085-SB-039-(30.0-31.0) | soil | 2006-11-14 | 13:30 | 2006-11-15 |
| 109308 | HLSF-0085-SB-039-(40.0-41.0) | soil | 2006-11-14 | 13:50 | 2006-11-15 |
| 109309 | HLSF-0085-SB-039-(49.0-50.0) | soil | 2006-11-14 | 14:10 | 2006-11-15 |
| 109310 | HLSF-0085-SB-038-(10.0-11.0) | soil | 2006-11-14 | 15:40 | 2006-11-15 |
| 109311 | HLSF-0085-SB-038-(20.0-21.0) | soil | 2006-11-14 | 15:55 | 2006-11-15 |
| 109312 | HLSF-0085-SB-038-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |
| 109313 | HLSF-0085-SB-138-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Analytical Report

**Sample: 109300 - HLSF-0085-SB-037-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.17 | mg/Kg | 1 | 2.67 | 44 | 8.6 - 115 |
| Phenol-d5 | | 0.810 | mg/Kg | 1 | 2.67 | 30 | 6.3 - 124 |
| Nitrobenzene-d5 | | 0.900 | mg/Kg | 1 | 2.67 | 34 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.52 | mg/Kg | 1 | 2.67 | 57 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.86 | mg/Kg | 1 | 2.67 | 70 | 13.8 - 123 |
| Terphenyl-d14 | | 2.14 | mg/Kg | 1 | 2.67 | 80 | 30.8 - 134 |

**Sample: 109301 - HLSF-0085-SB-037-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.20 | mg/Kg | 1 | 2.67 | 45 | 8.6 - 115 |
| Phenol-d5 | | 1.47 | mg/Kg | 1 | 2.67 | 55 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.96 | mg/Kg | 1 | 2.67 | 73 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 2.56 | mg/Kg | 1 | 2.67 | 96 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 2.31 | mg/Kg | 1 | 2.67 | 86 | 13.8 - 123 |
| Terphenyl-d14 | | 2.90 | mg/Kg | 1 | 2.67 | 109 | 30.8 - 134 |

**Sample: 109302 - HLSF-0085-SB-037-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 0.990 | mg/Kg | 1 | 2.67 | 37 | 8.6 - 115 |
| Phenol-d5 | | 0.760 | mg/Kg | 1 | 2.67 | 28 | 6.3 - 124 |
| Nitrobenzene-d5 | | 0.810 | mg/Kg | 1 | 2.67 | 30 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.29 | mg/Kg | 1 | 2.67 | 48 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.40 | mg/Kg | 1 | 2.67 | 52 | 13.8 - 123 |
| Terphenyl-d14 | | 1.68 | mg/Kg | 1 | 2.67 | 63 | 30.8 - 134 |

**Sample: 109303 - HLSF-0085-SB-037-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 0.960 | mg/Kg | 1 | 2.67 | 36 | 8.6 - 115 |
| Phenol-d5 | | 0.670 | mg/Kg | 1 | 2.67 | 25 | 6.3 - 124 |
| Nitrobenzene-d5 | | 0.840 | mg/Kg | 1 | 2.67 | 31 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.20 | mg/Kg | 1 | 2.67 | 45 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.23 | mg/Kg | 1 | 2.67 | 46 | 13.8 - 123 |
| Terphenyl-d14 | | 1.36 | mg/Kg | 1 | 2.67 | 51 | 30.8 - 134 |

**Sample: 109304 - HLSF-0085-SB-037-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 0.870 | mg/Kg | 1 | 2.67 | 32 | 8.6 - 115 |
| Phenol-d5 | | 0.900 | mg/Kg | 1 | 2.67 | 34 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.11 | mg/Kg | 1 | 2.67 | 42 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.19 | mg/Kg | 1 | 2.67 | 44 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.18 | mg/Kg | 1 | 2.67 | 44 | 13.8 - 123 |
| Terphenyl-d14 | | 1.72 | mg/Kg | 1 | 2.67 | 64 | 30.8 - 134 |

**Sample: 109305 - HLSF-0085-SB-039-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 0.800 | mg/Kg | 1 | 2.67 | 30 | 8.6 - 115 |
| Phenol-d5 | | 0.890 | mg/Kg | 1 | 2.67 | 33 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.11 | mg/Kg | 1 | 2.67 | 42 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.61 | mg/Kg | 1 | 2.67 | 60 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.68 | mg/Kg | 1 | 2.67 | 63 | 13.8 - 123 |
| Terphenyl-d14 | | 1.88 | mg/Kg | 1 | 2.67 | 70 | 30.8 - 134 |

**Sample: 109306 - HLSF-0085-SB-039-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.00 | mg/Kg | 1 | 2.67 | 37 | 8.6 - 115 |
| Phenol-d5 | | 1.16 | mg/Kg | 1 | 2.67 | 43 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.26 | mg/Kg | 1 | 2.67 | 47 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.84 | mg/Kg | 1 | 2.67 | 69 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 2.07 | mg/Kg | 1 | 2.67 | 78 | 13.8 - 123 |
| Terphenyl-d14 | | 2.29 | mg/Kg | 1 | 2.67 | 86 | 30.8 - 134 |

**Sample: 109307 - HLSF-0085-SB-039-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 0.990 | mg/Kg | 1 | 2.67 | 37 | 8.6 - 115 |

*continued...*

*sample continued . . .*

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Phenol-d5 | | 0.700 | mg/Kg | 1 | 2.67 | 26 | 6.3 - 124 |
| Nitrobenzene-d5 | | 0.800 | mg/Kg | 1 | 2.67 | 30 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.38 | mg/Kg | 1 | 2.67 | 52 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.91 | mg/Kg | 1 | 2.67 | 72 | 13.8 - 123 |
| Terphenyl-d14 | | 2.47 | mg/Kg | 1 | 2.67 | 92 | 30.8 - 134 |

**Sample: 109308 - HLSF-0085-SB-039-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.14 | mg/Kg | 1 | 2.67 | 43 | 8.6 - 115 |
| Phenol-d5 | | 1.18 | mg/Kg | 1 | 2.67 | 44 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.42 | mg/Kg | 1 | 2.67 | 53 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.97 | mg/Kg | 1 | 2.67 | 74 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 2.44 | mg/Kg | 1 | 2.67 | 91 | 13.8 - 123 |
| Terphenyl-d14 | | 2.70 | mg/Kg | 1 | 2.67 | 101 | 30.8 - 134 |

**Sample: 109309 - HLSF-0085-SB-039-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.24 | mg/Kg | 1 | 2.67 | 46 | 8.6 - 115 |
| Phenol-d5 | | 1.39 | mg/Kg | 1 | 2.67 | 52 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.73 | mg/Kg | 1 | 2.67 | 65 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 2.29 | mg/Kg | 1 | 2.67 | 86 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 2.43 | mg/Kg | 1 | 2.67 | 91 | 13.8 - 123 |
| Terphenyl-d14 | | 2.61 | mg/Kg | 1 | 2.67 | 98 | 30.8 - 134 |

**Sample: 109310 - HLSF-0085-SB-038-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.08 | mg/Kg | 1 | 2.67 | 40 | 8.6 - 115 |
| Phenol-d5 | | 1.06 | mg/Kg | 1 | 2.67 | 40 | 6.3 - 124 |
| Nitrobenzene-d5 | | 0.940 | mg/Kg | 1 | 2.67 | 35 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.51 | mg/Kg | 1 | 2.67 | 56 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.90 | mg/Kg | 1 | 2.67 | 71 | 13.8 - 123 |
| Terphenyl-d14 | | 2.33 | mg/Kg | 1 | 2.67 | 87 | 30.8 - 134 |

**Sample: 109311 - HLSF-0085-SB-038-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.06 | mg/Kg | 1 | 2.67 | 40 | 8.6 - 115 |
| Phenol-d5 | | 1.16 | mg/Kg | 1 | 2.67 | 43 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.46 | mg/Kg | 1 | 2.67 | 55 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.98 | mg/Kg | 1 | 2.67 | 74 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 2.10 | mg/Kg | 1 | 2.67 | 79 | 13.8 - 123 |
| Terphenyl-d14 | | 2.51 | mg/Kg | 1 | 2.67 | 94 | 30.8 - 134 |

**Sample: 109312 - HLSF-0085-SB-038-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.02 | mg/Kg | 1 | 2.67 | 38 | 8.6 - 115 |

*continued...*

*sample continued . . .*

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Phenol-d5 | | 1.12 | mg/Kg | 1 | 2.67 | 42 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.49 | mg/Kg | 1 | 2.67 | 56 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 2.05 | mg/Kg | 1 | 2.67 | 77 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.94 | mg/Kg | 1 | 2.67 | 73 | 13.8 - 123 |
| Terphenyl-d14 | | 2.38 | mg/Kg | 1 | 2.67 | 89 | 30.8 - 134 |

**Sample: 109313 - HLSF-0085-SB-138-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Semivolatiles WTS | Analytical Method: | S 8270C | Prep Method: | S 3550 |
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | Sample Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.250 | mg/Kg | 1 | 0.250 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 0.760 | mg/Kg | 1 | 2.67 | 28 | 8.6 - 115 |
| Phenol-d5 | | 0.940 | mg/Kg | 1 | 2.67 | 35 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.12 | mg/Kg | 1 | 2.67 | 42 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.66 | mg/Kg | 1 | 2.67 | 62 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.99 | mg/Kg | 1 | 2.67 | 74 | 13.8 - 123 |
| Terphenyl-d14 | | 2.39 | mg/Kg | 1 | 2.67 | 90 | 30.8 - 134 |

**Method Blank (1)** QC Batch: 32634

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | QC Preparation: | 2006-11-28 | Prepared By: | DS |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| 2-Butoxy Ethanol | | <0.150 | mg/Kg | 0.25 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 1.06 | mg/Kg | 1 | 2.67 | 40 | 8.6 - 115 |
| Phenol-d5 | | 1.06 | mg/Kg | 1 | 2.67 | 40 | 6.3 - 124 |
| Nitrobenzene-d5 | | 1.27 | mg/Kg | 1 | 2.67 | 48 | 11.3 - 116 |
| 2-Fluorobiphenyl | | 1.89 | mg/Kg | 1 | 2.67 | 71 | 14.6 - 122 |
| 2,4,6-Tribromophenol | | 1.51 | mg/Kg | 1 | 2.67 | 56 | 13.8 - 123 |
| Terphenyl-d14 | | 2.65 | mg/Kg | 1 | 2.67 | 99 | 30.8 - 134 |

**Laboratory Control Spike (LCS-1)**

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32634 | Date Analyzed: | 2006-12-02 | Analyzed By: | DS |
| Prep Batch: | 28398 | QC Preparation: | 2006-11-28 | Prepared By: | DS |

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Phenol | 1.32 | mg/Kg | 1 | 2.67 | <0.0602 | 49 | 10 - 125.6 |
| 2-Chlorophenol | 1.47 | mg/Kg | 1 | 2.67 | <0.0923 | 55 | 10 - 144 |
| 1,4-Dichlorobenzene (para) | 1.68 | mg/Kg | 1 | 2.67 | <0.0303 | 63 | 10 - 172 |
| n-Nitrosodi-n-propylamine | 0.498 | mg/Kg | 1 | 2.67 | <0.0480 | 19 | 10 - 203 |
| 1,2,4-Trichlorobenzene | 1.68 | mg/Kg | 1 | 2.67 | <0.0297 | 63 | 10 - 176 |
| 4-Chloro-3-methylphenol | 1.07 | mg/Kg | 1 | 2.67 | <0.0474 | 40 | 10 - 168 |
| Acenaphthene | 1.88 | mg/Kg | 1 | 2.67 | <0.0745 | 70 | 10 - 215 |
| 4-Nitrophenol | 0.726 | mg/Kg | 1 | 2.67 | <0.169 | 27 | 10 - 160 |
| 2,4-Dinitrotoluene | 1.96 | mg/Kg | 1 | 2.67 | <0.0609 | 73 | 10 - 226 |
| Pentachlorophenol | 1.26 | mg/Kg | 1 | 2.67 | <0.151 | 47 | 10 - 187 |
| Pyrene | 2.74 | mg/Kg | 1 | 2.67 | <0.151 | 103 | 10 - 248 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 1.08 | mg/Kg | 1 | 2.67 | <0.0602 | 40 | 10 - 125.6 | 20 | 20 |
| 2-Chlorophenol | 1.28 | mg/Kg | 1 | 2.67 | <0.0923 | 48 | 10 - 144 | 14 | 20 |
| 1,4-Dichlorobenzene (para) | 1.51 | mg/Kg | 1 | 2.67 | <0.0303 | 56 | 10 - 172 | 11 | 20 |
| n-Nitrosodi-n-propylamine | 0.475 | mg/Kg | 1 | 2.67 | <0.0480 | 18 | 10 - 203 | 5 | 20 |
| 1,2,4-Trichlorobenzene | 1.57 | mg/Kg | 1 | 2.67 | <0.0297 | 59 | 10 - 176 | 7 | 20 |
| 4-Chloro-3-methylphenol | 0.933 | mg/Kg | 1 | 2.67 | <0.0474 | 35 | 10 - 168 | 14 | 20 |
| Acenaphthene | 1.69 | mg/Kg | 1 | 2.67 | <0.0745 | 63 | 10 - 215 | 11 | 20 |
| 4-Nitrophenol | 0.699 | mg/Kg | 1 | 2.67 | <0.169 | 26 | 10 - 160 | 4 | 20 |
| 2,4-Dinitrotoluene | 1.74 | mg/Kg | 1 | 2.67 | <0.0609 | 65 | 10 - 226 | 12 | 20 |
| Pentachlorophenol | 1.26 | mg/Kg | 1 | 2.67 | <0.151 | 47 | 10 - 187 | 0 | 20 |
| Pyrene | 2.53 | mg/Kg | 1 | 2.67 | <0.151 | 95 | 10 - 248 | 8 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | 1.28 | 1.01 | mg/Kg | 1 | 2.67 | 48 | 38 | 10 - 130.2 |
| Phenol-d5 | 1.42 | 1.23 | mg/Kg | 1 | 2.67 | 53 | 46 | 10 - 133.4 |
| Nitrobenzene-d5 | 1.67 | 1.56 | mg/Kg | 1 | 2.67 | 62 | 58 | 21 - 130.5 |
| 2-Fluorobiphenyl | 2.21 | 2.02 | mg/Kg | 1 | 2.67 | 83 | 76 | 22 - 129.2 |
| 2,4,6-Tribromophenol | 2.61 | 2.01 | mg/Kg | 1 | 2.67 | 98 | 75 | 41 - 149 |
| Terphenyl-d14 | 3.32 | 3.06 | mg/Kg | 1 | 2.67 | 124 | 115 | 44.1 - 161 |

**Matrix Spike (MS-1)** Spiked Sample: 109313

QC Batch: 32634 Date Analyzed: 2006-12-02 Analyzed By: DS
Prep Batch: 28398 QC Preparation: 2006-11-28 Prepared By: DS

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Phenol | 1.37 | mg/Kg | 1 | 2.67 | <0.0602 | 51 | 10 - 109 |
| 2-Chlorophenol | 1.60 | mg/Kg | 1 | 2.67 | <0.0923 | 60 | 10 - 130 |
| 1,4-Dichlorobenzene (para) | 1.89 | mg/Kg | 1 | 2.67 | <0.0303 | 71 | 10 - 124 |
| n-Nitrosodi-n-propylamine | 1.69 | mg/Kg | 1 | 2.67 | <0.0480 | 63 | 10 - 172 |
| 1,2,4-Trichlorobenzene | 1.98 | mg/Kg | 1 | 2.67 | <0.0297 | 74 | 10 - 136 |
| 4-Chloro-3-methylphenol | 1.37 | mg/Kg | 1 | 2.67 | <0.0474 | 51 | 10 - 121 |

*continued . . .*

*matrix spikes continued . . .*

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 2.03 | mg/Kg | 1 | 2.67 | <0.0745 | 76 | 10 - 158 |
| 4-Nitrophenol | 1.22 | mg/Kg | 1 | 2.67 | <0.169 | 46 | 10 - 84 |
| 2,4-Dinitrotoluene | 2.18 | mg/Kg | 1 | 2.67 | <0.0609 | 82 | 10 - 126 |
| Pentachlorophenol | 1.09 | mg/Kg | 1 | 2.67 | <0.151 | 41 | 10 - 143 |
| Pyrene | 2.29 | mg/Kg | 1 | 2.67 | <0.151 | 86 | 10 - 174 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 1.41 | mg/Kg | 1 | 2.67 | <0.0602 | 53 | 10 - 109 | 3 | 20 |
| 2-Chlorophenol | 1.61 | mg/Kg | 1 | 2.67 | <0.0923 | 60 | 10 - 130 | 1 | 20 |
| 1,4-Dichlorobenzene (para) | 1.87 | mg/Kg | 1 | 2.67 | <0.0303 | 70 | 10 - 124 | 1 | 20 |
| n-Nitrosodi-n-propylamine | 1.74 | mg/Kg | 1 | 2.67 | <0.0480 | 65 | 10 - 172 | 3 | 20 |
| 1,2,4-Trichlorobenzene | 1.98 | mg/Kg | 1 | 2.67 | <0.0297 | 74 | 10 - 136 | 0 | 20 |
| 4-Chloro-3-methylphenol | 1.41 | mg/Kg | 1 | 2.67 | <0.0474 | 53 | 10 - 121 | 3 | 20 |
| Acenaphthene | 2.00 | mg/Kg | 1 | 2.67 | <0.0745 | 75 | 10 - 158 | 2 | 20 |
| 4-Nitrophenol | 1.20 | mg/Kg | 1 | 2.67 | <0.169 | 45 | 10 - 84 | 2 | 20 |
| 2,4-Dinitrotoluene | 2.14 | mg/Kg | 1 | 2.67 | <0.0609 | 80 | 10 - 126 | 2 | 20 |
| Pentachlorophenol | 1.12 | mg/Kg | 1 | 2.67 | <0.151 | 42 | 10 - 143 | 3 | 20 |
| Pyrene | 2.29 | mg/Kg | 1 | 2.67 | <0.151 | 86 | 10 - 174 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | 1.25 | 1.32 | mg/Kg | 1 | 2.67 | 47 | 49 | 10 - 98.6 |
| Phenol-d5 | 1.37 | 1.35 | mg/Kg | 1 | 2.67 | 51 | 50 | 10 - 103 |
| Nitrobenzene-d5 | 1.92 | 1.92 | mg/Kg | 1 | 2.67 | 72 | 72 | 24 - 93.4 |
| 2-Fluorobiphenyl | 2.10 | 2.06 | mg/Kg | 1 | 2.67 | 79 | 77 | 13.1 - 102 |
| 2,4,6-Tribromophenol | 2.18 | 2.22 | mg/Kg | 1 | 2.67 | 82 | 83 | 21.5 - 112 |
| Terphenyl-d14 | 2.44 | 2.45 | mg/Kg | 1 | 2.67 | 91 | 92 | 24.3 - 121 |

**Standard (CCV-1)**

QC Batch: 32634 Date Analyzed: 2006-12-02 Analyzed By: DS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Phenol | | mg/Kg | 60.0 | 50.5 | 84 | 80 - 120 | 2006-12-02 |
| 1,4-Dichlorobenzene (para) | | mg/Kg | 60.0 | 60.3 | 100 | 80 - 120 | 2006-12-02 |
| 2-Nitrophenol | | mg/Kg | 60.0 | 54.2 | 90 | 80 - 120 | 2006-12-02 |
| 2,4-Dichlorophenol | | mg/Kg | 60.0 | 49.0 | 82 | 80 - 120 | 2006-12-02 |
| Hexachlorobutadiene | | mg/Kg | 60.0 | 71.7 | 120 | 80 - 120 | 2006-12-02 |
| 4-Chloro-3-methylphenol | | mg/Kg | 60.0 | 54.1 | 90 | 80 - 120 | 2006-12-02 |
| 2,4,6-Trichlorophenol | | mg/Kg | 60.0 | 60.6 | 101 | 80 - 120 | 2006-12-02 |
| Acenaphthene | | mg/Kg | 60.0 | 61.6 | 103 | 80 - 120 | 2006-12-02 |
| Diphenylamine | | mg/Kg | 60.0 | 60.1 | 100 | 80 - 120 | 2006-12-02 |
| Pentachlorophenol | | mg/Kg | 60.0 | 63.2 | 105 | 80 - 120 | 2006-12-02 |
| Fluoranthene | | mg/Kg | 60.0 | 61.0 | 102 | 80 - 120 | 2006-12-02 |

*continued . . .*

*standard continued . . .*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Di-n-octylphthalate | | mg/Kg | 60.0 | 59.4 | 99 | 80 - 120 | 2006-12-02 |
| Benzo(a)pyrene | | mg/Kg | 60.0 | 61.1 | 102 | 80 - 120 | 2006-12-02 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | | 52.4 | mg/Kg | 1 | 60.0 | 87 | 80 - 120 |
| Phenol-d5 | | 50.4 | mg/Kg | 1 | 60.0 | 84 | 80 - 120 |
| Nitrobenzene-d5 | | 57.0 | mg/Kg | 1 | 60.0 | 95 | 80 - 120 |
| 2-Fluorobiphenyl | | 58.0 | mg/Kg | 1 | 60.0 | 97 | 80 - 120 |
| 2,4,6-Tribromophenol | [1] | 80.1 | mg/Kg | 1 | 60.0 | 134 | 80 - 120 |
| Terphenyl-d14 | | 68.0 | mg/Kg | 1 | 60.0 | 113 | 80 - 120 |

**Standard (CCV-2)**

QC Batch: 32634 Date Analyzed: 2006-12-02 Analyzed By: DS

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Phenol | | mg/Kg | 60.0 | 49.1 | 82 | 80 - 120 | 2006-12-02 |
| 1,4-Dichlorobenzene (para) | | mg/Kg | 60.0 | 60.8 | 101 | 80 - 120 | 2006-12-02 |
| 2-Nitrophenol | | mg/Kg | 60.0 | 56.2 | 94 | 80 - 120 | 2006-12-02 |
| 2,4-Dichlorophenol | | mg/Kg | 60.0 | 54.6 | 91 | 80 - 120 | 2006-12-02 |
| Hexachlorobutadiene | | mg/Kg | 60.0 | 66.6 | 111 | 80 - 120 | 2006-12-02 |
| 4-Chloro-3-methylphenol | | mg/Kg | 60.0 | 61.4 | 102 | 80 - 120 | 2006-12-02 |
| 2,4,6-Trichlorophenol | | mg/Kg | 60.0 | 59.7 | 100 | 80 - 120 | 2006-12-02 |
| Acenaphthene | | mg/Kg | 60.0 | 60.4 | 101 | 80 - 120 | 2006-12-02 |
| Diphenylamine | | mg/Kg | 60.0 | 61.1 | 102 | 80 - 120 | 2006-12-02 |
| Pentachlorophenol | | mg/Kg | 60.0 | 67.0 | 112 | 80 - 120 | 2006-12-02 |
| Fluoranthene | | mg/Kg | 60.0 | 61.7 | 103 | 80 - 120 | 2006-12-02 |
| Di-n-octylphthalate | | mg/Kg | 60.0 | 60.7 | 101 | 80 - 120 | 2006-12-02 |
| Benzo(a)pyrene | | mg/Kg | 60.0 | 61.0 | 102 | 80 - 120 | 2006-12-02 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | [2] | 47.5 | mg/Kg | 1 | 60.0 | 79 | 80 - 120 |
| Phenol-d5 | [3] | 46.1 | mg/Kg | 1 | 60.0 | 77 | 80 - 120 |
| Nitrobenzene-d5 | | 57.1 | mg/Kg | 1 | 60.0 | 95 | 80 - 120 |
| 2-Fluorobiphenyl | | 56.3 | mg/Kg | 1 | 60.0 | 94 | 80 - 120 |
| 2,4,6-Tribromophenol | [4] | 76.3 | mg/Kg | 1 | 60.0 | 127 | 80 - 120 |
| Terphenyl-d14 | | 68.2 | mg/Kg | 1 | 60.0 | 114 | 80 - 120 |

[1] 2,4,6-Tribromophenol outside of control limits on CCV(ICV). CCV(ICV) component average is 99.4% which is within acceptable range. This is acceptable by Method 8000.

[2] 2-Fluorophenol outside of control limits on CCV(ICV). CCV(ICV) component average is 99.3% which is within acceptable range. This is acceptable by Method 8000.

[3] Phenol-d5 outside of control limits on CCV(ICV). CCV(ICV) component average is 99.3% which is within acceptable range. This is acceptable by Method 8000.

[4] 2,4,6-Tribromophenol outside of control limits on CCV(ICV). CCV(ICV) component average is 99.3% which is within acceptable range. This is acceptable by Method 8000.

# Analytical and Quality Control Report

William Little
WTS
P.O. Box 363
Building 126 3RD Floor
WSMR, NM, 88002

Report Date: December 29, 2006

Work Order: 6111718

Project Name: HELSTF Phase III Soil Sampling
Project Number: 7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 109300 | HLSF-0085-SB-037-(10.0-11.0) | soil | 2006-11-14 | 08:40 | 2006-11-15 |
| 109301 | HLSF-0085-SB-037-(20.0-21.0) | soil | 2006-11-14 | 09:05 | 2006-11-15 |
| 109302 | HLSF-0085-SB-037-(30.0-31.0) | soil | 2006-11-14 | 09:30 | 2006-11-15 |
| 109303 | HLSF-0085-SB-037-(40.0-41.0) | soil | 2006-11-14 | 09:50 | 2006-11-15 |
| 109304 | HLSF-0085-SB-037-(49.0-50.0) | soil | 2006-11-14 | 10:20 | 2006-11-15 |
| 109305 | HLSF-0085-SB-039-(10.0-11.0) | soil | 2006-11-14 | 12:50 | 2006-11-15 |
| 109306 | HLSF-0085-SB-039-(20.0-21.0) | soil | 2006-11-14 | 13:05 | 2006-11-15 |
| 109307 | HLSF-0085-SB-039-(30.0-31.0) | soil | 2006-11-14 | 13:30 | 2006-11-15 |
| 109308 | HLSF-0085-SB-039-(40.0-41.0) | soil | 2006-11-14 | 13:50 | 2006-11-15 |
| 109309 | HLSF-0085-SB-039-(49.0-50.0) | soil | 2006-11-14 | 14:10 | 2006-11-15 |
| 109310 | HLSF-0085-SB-038-(10.0-11.0) | soil | 2006-11-14 | 15:40 | 2006-11-15 |
| 109311 | HLSF-0085-SB-038-(20.0-21.0) | soil | 2006-11-14 | 15:55 | 2006-11-15 |
| 109312 | HLSF-0085-SB-038-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |
| 109313 | HLSF-0085-SB-138-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |
| 109314 | HLSF-0085-TB-594 | water | 2006-11-14 | 08:30 | 2006-11-15 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 36 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Analytical Report

**Sample: 109300 - HLSF-0085-SB-037-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109300 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 485 | µg/Kg | 1 | 500 | 97 | 42 - 129 |
| Toluene-d8 | | 515 | µg/Kg | 1 | 500 | 103 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 540 | µg/Kg | 1 | 500 | 108 | 78 - 120 |

**Sample: 109301 - HLSF-0085-SB-037-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109301 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109301 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 488 | µg/Kg | 1 | 500 | 98 | 42 - 129 |
| Toluene-d8 | | 519 | µg/Kg | 1 | 500 | 104 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 536 | µg/Kg | 1 | 500 | 107 | 78 - 120 |

**Sample: 109302 - HLSF-0085-SB-037-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |

*continued . . .*

*sample 109302 continued . . .*

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Methylene chloride | B | <50.0 | | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | B | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Toluene | B | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109302 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 484 | µg/Kg | 1 | 500 | 97 | 42 - 129 |
| Toluene-d8 | | 514 | µg/Kg | 1 | 500 | 103 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 535 | µg/Kg | 1 | 500 | 107 | 78 - 120 |

**Sample: 109303 - HLSF-0085-SB-037-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109303 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 486 | µg/Kg | 1 | 500 | 97 | 42 - 129 |
| Toluene-d8 | | 516 | µg/Kg | 1 | 500 | 103 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 536 | µg/Kg | 1 | 500 | 107 | 78 - 120 |

**Sample: 109304 - HLSF-0085-SB-037-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109304 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Toluene | B | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 510 | µg/Kg | 1 | 500 | 102 | 42 - 129 |
| Toluene-d8 | | 527 | µg/Kg | 1 | 500 | 105 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 523 | µg/Kg | 1 | 500 | 105 | 78 - 120 |

**Sample: 109305 - HLSF-0085-SB-039-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109305 continued . . .*

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 500 | µg/Kg | 1 | 500 | 100 | 42 - 129 |
| Toluene-d8 | | 530 | µg/Kg | 1 | 500 | 106 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 523 | µg/Kg | 1 | 500 | 105 | 78 - 120 |

**Sample: 109306 - HLSF-0085-SB-039-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Dichlorodifluoromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | | µg/kg | 1 | 200 |
| 1,4-Dioxane | | <500 | | µg/kg | 1 | 500 |
| Chloromethane (methyl chloride) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Vinyl Chloride | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | | µg/Kg | 1 | 50.0 |

*continued . . .*

*sample 109306 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | B | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | B | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | B | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109306 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 510 | µg/Kg | 1 | 500 | 102 | 42 - 129 |
| Toluene-d8 | | 529 | µg/Kg | 1 | 500 | 106 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 519 | µg/Kg | 1 | 500 | 104 | 78 - 120 |

**Sample: 109307 - HLSF-0085-SB-039-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | B | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | B | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109307 continued . . .*

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | | µg/Kg | 1 | 50.0 |

*continued . . .*

*sample 109307 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 481 | µg/Kg | 1 | 500 | 96 | 42 - 129 |
| Toluene-d8 | | 515 | µg/Kg | 1 | 500 | 103 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 527 | µg/Kg | 1 | 500 | 105 | 78 - 120 |

**Sample: 109308 - HLSF-0085-SB-039-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109308 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 482 | µg/Kg | 1 | 500 | 96 | 42 - 129 |
| Toluene-d8 | | 514 | µg/Kg | 1 | 500 | 103 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 528 | µg/Kg | 1 | 500 | 106 | 78 - 120 |

**Sample: 109309 - HLSF-0085-SB-039-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109309 continued . . .*

| Parameter | Flag | Result | RL Units | Dilution | RL |
|---|---|---|---|---|---|
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 505 | µg/Kg | 1 | 500 | 101 | 42 - 129 |
| Toluene-d8 | | 524 | µg/Kg | 1 | 500 | 105 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 531 | µg/Kg | 1 | 500 | 106 | 78 - 120 |

**Sample: 109310 - HLSF-0085-SB-038-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | Result | RL Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109310 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109310 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 498 | µg/Kg | 1 | 500 | 100 | 42 - 129 |
| Toluene-d8 | | 525 | µg/Kg | 1 | 500 | 105 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 524 | µg/Kg | 1 | 500 | 105 | 78 - 120 |

**Sample: 109311 - HLSF-0085-SB-038-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |

*continued . . .*

*sample 109311 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | B | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | B | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | B | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109311 continued . . .*

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| n-Butylbenzene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 497 | µg/Kg | 1 | 500 | 99 | 42 - 129 |
| Toluene-d8 | | 527 | µg/Kg | 1 | 500 | 105 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 526 | µg/Kg | 1 | 500 | 105 | 78 - 120 |

**Sample: 109312 - HLSF-0085-SB-038-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | Result | RL | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Dichlorodifluoromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | | µg/kg | 1 | 200 |
| Chloromethane (methyl chloride) | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | | µg/kg | 1 | 500 |
| Vinyl Chloride | | <10.0 | | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109312 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Toluene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 499 | µg/Kg | 1 | 500 | 100 | 42 - 129 |

*continued . . .*

*sample continued . . .*

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Toluene-d8 | | 530 | µg/Kg | 1 | 500 | 106 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 517 | µg/Kg | 1 | 500 | 103 | 78 - 120 |

**Sample: 109313 - HLSF-0085-SB-138-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 5030B |
| QC Batch: | 32280 | Date Analyzed: | 2006-11-21 | Analyzed By: | JG |
| Prep Batch: | 28111 | Sample Preparation: | 2006-11-21 | Prepared By: | JG |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Bromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Tert-butyl Alcohol | | <200 | µg/kg | 1 | 200 |
| Dichlorodifluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dioxane | | <500 | µg/kg | 1 | 500 |
| Chloromethane (methyl chloride) | | <10.0 | µg/Kg | 1 | 10.0 |
| Vinyl Chloride | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromomethane (methyl bromide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Chloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichlorofluoromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Acetone | | <100 | µg/Kg | 1 | 100 |
| Iodomethane (methyl iodide) | | <50.0 | µg/Kg | 1 | 50.0 |
| Carbon Disulfide | | <10.0 | µg/Kg | 1 | 10.0 |
| Acrylonitrile | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Butanone (MEK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | | <50.0 | µg/Kg | 1 | 50.0 |
| 2-Hexanone | | <50.0 | µg/Kg | 1 | 50.0 |
| trans 1,4-Dichloro-2-butene | | <100 | µg/Kg | 1 | 100 |
| 1,1-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| Methylene chloride | *B* | <50.0 | µg/Kg | 1 | 50.0 |
| MTBE | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,2-Dichloroethene | *B* | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| cis-1,2-Dichloroethene | | <10.0 | µg/Kg | 1 | 10.0 |
| 2,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloroethane (EDC) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chloroform | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| Benzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Carbon Tetrachloride | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Trichloroethene (TCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromomethane (methylene bromide) | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromodichloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chloroethyl vinyl ether | | <50.0 | µg/Kg | 1 | 50.0 |
| cis-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |
| trans-1,3-Dichloropropene | | <10.0 | µg/Kg | 1 | 10.0 |

*continued . . .*

*sample 109313 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Toluene | B | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2-Trichloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Dibromochloromethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromoethane (EDB) | | <10.0 | µg/Kg | 1 | 10.0 |
| Tetrachloroethene (PCE) | | <10.0 | µg/Kg | 1 | 10.0 |
| Chlorobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,1,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| Ethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| m,p-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromoform | | <10.0 | µg/Kg | 1 | 10.0 |
| Styrene | | <10.0 | µg/Kg | 1 | 10.0 |
| o-Xylene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,1,2,2-Tetrachloroethane | | <10.0 | µg/Kg | 1 | 10.0 |
| 2-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,3-Trichloropropane | | <10.0 | µg/Kg | 1 | 10.0 |
| Isopropylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| Bromobenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Propylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3,5-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| tert-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2,4-Trimethylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,4-Dichlorobenzene (para) | | <10.0 | µg/Kg | 1 | 10.0 |
| sec-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,3-Dichlorobenzene (meta) | | <10.0 | µg/Kg | 1 | 10.0 |
| p-Isopropyltoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 4-Chlorotoluene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dichlorobenzene (ortho) | | <10.0 | µg/Kg | 1 | 10.0 |
| n-Butylbenzene | | <10.0 | µg/Kg | 1 | 10.0 |
| 1,2-Dibromo-3-chloropropane | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,3-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| 1,2,4-Trichlorobenzene | | <50.0 | µg/Kg | 1 | 50.0 |
| Naphthalene | | <50.0 | µg/Kg | 1 | 50.0 |
| Hexachlorobutadiene | | <50.0 | µg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 502 | µg/Kg | 1 | 500 | 100 | 42 - 129 |
| Toluene-d8 | | 530 | µg/Kg | 1 | 500 | 106 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 525 | µg/Kg | 1 | 500 | 105 | 78 - 120 |

**Sample: 109314 - HLSF-0085-TB-594**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | Volatiles WTS | Analytical Method: | S 8260B | Prep Method: | S 3510C |
| QC Batch: | 32087 | Date Analyzed: | 2006-11-18 | Analyzed By: | JG |
| Prep Batch: | 27956 | Sample Preparation: | 2006-11-18 | Prepared By: | JG |

| Parameter | Flag | Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Bromochloromethane | | <1.00 | µg/L | 1 | 1.00 |
| Dichlorodifluoromethane | | <1.00 | µg/L | 1 | 1.00 |
| Chloromethane (methyl chloride) | | <1.00 | µg/L | 1 | 1.00 |
| Vinyl Chloride | | <1.00 | µg/L | 1 | 1.00 |
| Bromomethane (methyl bromide) | | <5.00 | µg/L | 1 | 5.00 |
| Chloroethane | | <1.00 | µg/L | 1 | 1.00 |
| Trichlorofluoromethane | | <1.00 | µg/L | 1 | 1.00 |
| Acetone | | **16.3** | µg/L | 1 | 10.0 |
| Iodomethane (methyl iodide) | | <5.00 | µg/L | 1 | 5.00 |
| Carbon Disulfide | | <1.00 | µg/L | 1 | 1.00 |
| Acrylonitrile | | <1.00 | µg/L | 1 | 1.00 |
| 2-Butanone (MEK) | | <5.00 | µg/L | 1 | 5.00 |
| 4-Methyl-2-pentanone (MIBK) | | <5.00 | µg/L | 1 | 5.00 |
| 2-Hexanone | | <5.00 | µg/L | 1 | 5.00 |
| trans 1,4-Dichloro-2-butene | | <10.0 | µg/L | 1 | 10.0 |
| 1,1-Dichloroethene | | <1.00 | µg/L | 1 | 1.00 |
| Methylene chloride | *B* | <5.00 | µg/L | 1 | 5.00 |
| MTBE | | <1.00 | µg/L | 1 | 1.00 |
| trans-1,2-Dichloroethene | | <1.00 | µg/L | 1 | 1.00 |
| 1,1-Dichloroethane | | <1.00 | µg/L | 1 | 1.00 |
| cis-1,2-Dichloroethene | | <1.00 | µg/L | 1 | 1.00 |
| 2,2-Dichloropropane | | <1.00 | µg/L | 1 | 1.00 |
| 1,2-Dichloroethane (EDC) | | <1.00 | µg/L | 1 | 1.00 |
| Chloroform | *B* | <1.00 | µg/L | 1 | 1.00 |
| 1,1,1-Trichloroethane | | <1.00 | µg/L | 1 | 1.00 |
| 1,1-Dichloropropene | | <1.00 | µg/L | 1 | 1.00 |
| Benzene | | <1.00 | µg/L | 1 | 1.00 |
| Carbon Tetrachloride | | <1.00 | µg/L | 1 | 1.00 |
| 1,2-Dichloropropane | | <1.00 | µg/L | 1 | 1.00 |
| Trichloroethene (TCE) | | <1.00 | µg/L | 1 | 1.00 |
| Dibromomethane (methylene bromide) | | <1.00 | µg/L | 1 | 1.00 |
| Bromodichloromethane | | <1.00 | µg/L | 1 | 1.00 |
| 2-Chloroethyl vinyl ether | | <5.00 | µg/L | 1 | 5.00 |
| cis-1,3-Dichloropropene | | <1.00 | µg/L | 1 | 1.00 |
| trans-1,3-Dichloropropene | | <1.00 | µg/L | 1 | 1.00 |
| Toluene | *B* | <1.00 | µg/L | 1 | 1.00 |
| 1,1,2-Trichloroethane | | <1.00 | µg/L | 1 | 1.00 |
| 1,3-Dichloropropane | | <1.00 | µg/L | 1 | 1.00 |
| Dibromochloromethane | | <1.00 | µg/L | 1 | 1.00 |
| 1,2-Dibromoethane (EDB) | | <1.00 | µg/L | 1 | 1.00 |
| Tetrachloroethene (PCE) | | <1.00 | µg/L | 1 | 1.00 |
| Chlorobenzene | | <1.00 | µg/L | 1 | 1.00 |
| 1,1,1,2-Tetrachloroethane | | <1.00 | µg/L | 1 | 1.00 |
| Ethylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| m,p-Xylene | | <1.00 | µg/L | 1 | 1.00 |
| Bromoform | | <1.00 | µg/L | 1 | 1.00 |
| Styrene | | <1.00 | µg/L | 1 | 1.00 |
| o-Xylene | | <1.00 | µg/L | 1 | 1.00 |
| 1,1,2,2-Tetrachloroethane | | <1.00 | µg/L | 1 | 1.00 |
| 2-Chlorotoluene | | <1.00 | µg/L | 1 | 1.00 |
| 1,2,3-Trichloropropane | | <1.00 | µg/L | 1 | 1.00 |

*continued . . .*

*sample 109314 continued ...*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Isopropylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| Bromobenzene | | <1.00 | µg/L | 1 | 1.00 |
| n-Propylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| 1,3,5-Trimethylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| tert-Butylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| 1,2,4-Trimethylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| 1,4-Dichlorobenzene (para) | | <1.00 | µg/L | 1 | 1.00 |
| sec-Butylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| 1,3-Dichlorobenzene (meta) | | <1.00 | µg/L | 1 | 1.00 |
| p-Isopropyltoluene | | <1.00 | µg/L | 1 | 1.00 |
| 4-Chlorotoluene | | <1.00 | µg/L | 1 | 1.00 |
| 1,2-Dichlorobenzene (ortho) | | <1.00 | µg/L | 1 | 1.00 |
| n-Butylbenzene | | <1.00 | µg/L | 1 | 1.00 |
| 1,2-Dibromo-3-chloropropane | | <5.00 | µg/L | 1 | 5.00 |
| 1,2,3-Trichlorobenzene | | <5.00 | µg/L | 1 | 5.00 |
| 1,2,4-Trichlorobenzene | | <5.00 | µg/L | 1 | 5.00 |
| Naphthalene | | <5.00 | µg/L | 1 | 5.00 |
| Hexachlorobutadiene | | <5.00 | µg/L | 1 | 5.00 |
| Isopropyl Alcohol | | **168** | µg/L | 1 | 5.00 |
| Tert-butyl Alcohol | | **12.5** | µg/L | 1 | 5.00 |
| 1,4-Dioxane | | <5.00 | µg/L | 1 | 5.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 50.5 | µg/L | 1 | 50.0 | 101 | 82.4 - 115 |
| Toluene-d8 | | 50.6 | µg/L | 1 | 50.0 | 101 | 89.7 - 108 |
| 4-Bromofluorobenzene (4-BFB) | | 46.1 | µg/L | 1 | 50.0 | 92 | 84.6 - 114 |

**Method Blank (1)** QC Batch: 32087

QC Batch: 32087 | Date Analyzed: 2006-11-18 | Analyzed By: JG
Prep Batch: 27956 | QC Preparation: 2006-11-18 | Prepared By: JG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Bromochloromethane | | <0.0699 | µg/L | 1 |
| Dichlorodifluoromethane | | <0.0598 | µg/L | 1 |
| Chloromethane (methyl chloride) | | <0.230 | µg/L | 1 |
| Vinyl Chloride | | <0.0902 | µg/L | 1 |
| Bromomethane (methyl bromide) | | <0.740 | µg/L | 5 |
| Chloroethane | | <0.195 | µg/L | 1 |
| Trichlorofluoromethane | | <0.160 | µg/L | 1 |
| Acetone | | <0.854 | µg/L | 10 |
| Iodomethane (methyl iodide) | | <0.112 | µg/L | 5 |
| Carbon Disulfide | | <0.0764 | µg/L | 1 |
| Acrylonitrile | | <0.184 | µg/L | 1 |
| 2-Butanone (MEK) | | <0.394 | µg/L | 5 |
| 4-Methyl-2-pentanone (MIBK) | | <0.484 | µg/L | 5 |

*continued ...*

*method blank continued . . .*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| 2-Hexanone | | <0.0975 | µg/L | 5 |
| trans 1,4-Dichloro-2-butene | | <0.420 | µg/L | 10 |
| 1,1-Dichloroethene | | <0.0736 | µg/L | 1 |
| Methylene chloride | | 1.14 | µg/L | 5 |
| MTBE | | <0.0504 | µg/L | 1 |
| trans-1,2-Dichloroethene | | <0.0598 | µg/L | 1 |
| 1,1-Dichloroethane | | <0.0299 | µg/L | 1 |
| cis-1,2-Dichloroethene | | <0.101 | µg/L | 1 |
| 2,2-Dichloropropane | | <0.0665 | µg/L | 1 |
| 1,2-Dichloroethane (EDC) | | <0.0557 | µg/L | 1 |
| Chloroform | | 0.0700 | µg/L | 1 |
| 1,1,1-Trichloroethane | | <0.0846 | µg/L | 1 |
| 1,1-Dichloropropene | | <0.0423 | µg/L | 1 |
| Benzene | | <0.0495 | µg/L | 1 |
| Carbon Tetrachloride | | <0.121 | µg/L | 1 |
| 1,2-Dichloropropane | | <0.0933 | µg/L | 1 |
| Trichloroethene (TCE) | | <0.0495 | µg/L | 1 |
| Dibromomethane (methylene bromide) | | <0.0640 | µg/L | 1 |
| Bromodichloromethane | | <0.0651 | µg/L | 1 |
| 2-Chloroethyl vinyl ether | | <0.0905 | µg/L | 5 |
| cis-1,3-Dichloropropene | | <0.0640 | µg/L | 1 |
| trans-1,3-Dichloropropene | | <0.0504 | µg/L | 1 |
| Toluene | | 0.130 | µg/L | 1 |
| 1,1,2-Trichloroethane | | <0.106 | µg/L | 1 |
| 1,3-Dichloropropane | | <0.0625 | µg/L | 1 |
| Dibromochloromethane | | <0.0791 | µg/L | 1 |
| 1,2-Dibromoethane (EDB) | | <0.0460 | µg/L | 1 |
| Tetrachloroethene (PCE) | | <0.0696 | µg/L | 1 |
| Chlorobenzene | | <0.0217 | µg/L | 1 |
| 1,1,1,2-Tetrachloroethane | | <0.125 | µg/L | 1 |
| Ethylbenzene | | <0.0566 | µg/L | 1 |
| m,p-Xylene | | <0.0363 | µg/L | 1 |
| Bromoform | | <0.0859 | µg/L | 1 |
| Styrene | | <0.0394 | µg/L | 1 |
| o-Xylene | | <0.0505 | µg/L | 1 |
| 1,1,2,2-Tetrachloroethane | | <0.0672 | µg/L | 1 |
| 2-Chlorotoluene | | <0.0283 | µg/L | 1 |
| 1,2,3-Trichloropropane | | <0.0679 | µg/L | 1 |
| Isopropylbenzene | | <0.0406 | µg/L | 1 |
| Bromobenzene | | <0.103 | µg/L | 1 |
| n-Propylbenzene | | <0.0423 | µg/L | 1 |
| 1,3,5-Trimethylbenzene | | <0.0557 | µg/L | 1 |
| tert-Butylbenzene | | <0.0770 | µg/L | 1 |
| 1,2,4-Trimethylbenzene | | <0.0336 | µg/L | 1 |
| 1,4-Dichlorobenzene (para) | | <0.0672 | µg/L | 1 |
| sec-Butylbenzene | | <0.0439 | µg/L | 1 |
| 1,3-Dichlorobenzene (meta) | | <0.0672 | µg/L | 1 |
| p-Isopropyltoluene | | <0.0513 | µg/L | 1 |
| 4-Chlorotoluene | | <0.0460 | µg/L | 1 |
| 1,2-Dichlorobenzene (ortho) | | <0.0629 | µg/L | 1 |

*continued . . .*

*method blank continued . . .*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| n-Butylbenzene | | <0.0400 | µg/L | 1 |
| 1,2-Dibromo-3-chloropropane | | <0.538 | µg/L | 5 |
| 1,2,3-Trichlorobenzene | | <0.504 | µg/L | 5 |
| 1,2,4-Trichlorobenzene | | <0.166 | µg/L | 5 |
| Naphthalene | | <0.417 | µg/L | 5 |
| Hexachlorobutadiene | | <0.176 | µg/L | 5 |
| Isopropyl Alcohol | | <5.00 | µg/L | 5 |
| Tert-butyl Alcohol | | <5.00 | µg/L | 5 |
| 1,4-Dioxane | | <5.00 | µg/L | 5 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 41.4 | µg/L | 1 | 50.0 | 83 | 82.4 - 115 |
| Toluene-d8 | | 51.3 | µg/L | 1 | 50.0 | 103 | 89.7 - 108 |
| 4-Bromofluorobenzene (4-BFB) | | 50.7 | µg/L | 1 | 50.0 | 101 | 84.6 - 114 |

**Method Blank (1)** QC Batch: 32280

QC Batch: 32280 Date Analyzed: 2006-11-21 Analyzed By: JG
Prep Batch: 28111 QC Preparation: 2006-11-21 Prepared By: JG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Bromochloromethane | | <0.825 | µg/Kg | 10 |
| Isopropyl Alcohol | | <85.5 | µg/kg | 200 |
| Tert-butyl Alcohol | | <88.1 | µg/kg | 200 |
| Dichlorodifluoromethane | | <0.889 | µg/Kg | 10 |
| Chloromethane (methyl chloride) | | <0.929 | µg/Kg | 10 |
| 1,4-Dioxane | | <176 | µg/kg | 500 |
| Vinyl Chloride | | <0.463 | µg/Kg | 10 |
| Bromomethane (methyl bromide) | | <1.71 | µg/Kg | 50 |
| Chloroethane | | <3.68 | µg/Kg | 10 |
| Trichlorofluoromethane | | <0.306 | µg/Kg | 10 |
| Acetone | | <1.70 | µg/Kg | 100 |
| Iodomethane (methyl iodide) | | <0.640 | µg/Kg | 50 |
| Carbon Disulfide | | <0.346 | µg/Kg | 10 |
| Acrylonitrile | | <1.51 | µg/Kg | 10 |
| 2-Butanone (MEK) | | <3.78 | µg/Kg | 50 |
| 4-Methyl-2-pentanone (MIBK) | | <7.86 | µg/Kg | 50 |
| 2-Hexanone | | <5.70 | µg/Kg | 50 |
| trans 1,4-Dichloro-2-butene | | <1.33 | µg/Kg | 100 |
| 1,1-Dichloroethene | | <0.639 | µg/Kg | 10 |
| Methylene chloride | | 17.4 | µg/Kg | 50 |
| MTBE | | <0.362 | µg/Kg | 10 |
| trans-1,2-Dichloroethene | | 0.490 | µg/Kg | 10 |
| 1,1-Dichloroethane | | <0.257 | µg/Kg | 10 |
| cis-1,2-Dichloroethene | | <0.627 | µg/Kg | 10 |
| 2,2-Dichloropropane | | <0.593 | µg/Kg | 10 |
| 1,2-Dichloroethane (EDC) | | <0.524 | µg/Kg | 10 |

*continued . . .*

*method blank continued . . .*

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Chloroform | | <0.440 | µg/Kg | 10 |
| 1,1,1-Trichloroethane | | <0.750 | µg/Kg | 10 |
| 1,1-Dichloropropene | | <0.622 | µg/Kg | 10 |
| Benzene | | <0.644 | µg/Kg | 10 |
| Carbon Tetrachloride | | <0.485 | µg/Kg | 10 |
| 1,2-Dichloropropane | | <0.547 | µg/Kg | 10 |
| Trichloroethene (TCE) | | <0.836 | µg/Kg | 10 |
| Dibromomethane (methylene bromide) | | <0.435 | µg/Kg | 10 |
| Bromodichloromethane | | <0.457 | µg/Kg | 10 |
| 2-Chloroethyl vinyl ether | | <0.547 | µg/Kg | 50 |
| cis-1,3-Dichloropropene | | <0.596 | µg/Kg | 10 |
| trans-1,3-Dichloropropene | | <0.561 | µg/Kg | 10 |
| Toluene | | 4.44 | µg/Kg | 10 |
| 1,1,2-Trichloroethane | | <3.25 | µg/Kg | 10 |
| 1,3-Dichloropropane | | <0.505 | µg/Kg | 10 |
| Dibromochloromethane | | <0.552 | µg/Kg | 10 |
| 1,2-Dibromoethane (EDB) | | <0.688 | µg/Kg | 10 |
| Tetrachloroethene (PCE) | | <0.826 | µg/Kg | 10 |
| Chlorobenzene | | <0.426 | µg/Kg | 10 |
| 1,1,1,2-Tetrachloroethane | | <0.289 | µg/Kg | 10 |
| Ethylbenzene | | <0.376 | µg/Kg | 10 |
| m,p-Xylene | | <0.714 | µg/Kg | 10 |
| Bromoform | | <0.426 | µg/Kg | 10 |
| Styrene | | <0.796 | µg/Kg | 10 |
| o-Xylene | | <0.679 | µg/Kg | 10 |
| 1,1,2,2-Tetrachloroethane | | <0.703 | µg/Kg | 10 |
| 2-Chlorotoluene | | <1.26 | µg/Kg | 10 |
| 1,2,3-Trichloropropane | | <0.504 | µg/Kg | 10 |
| Isopropylbenzene | | <1.30 | µg/Kg | 10 |
| Bromobenzene | | <0.480 | µg/Kg | 10 |
| n-Propylbenzene | | <0.421 | µg/Kg | 10 |
| 1,3,5-Trimethylbenzene | | <2.10 | µg/Kg | 10 |
| tert-Butylbenzene | | <0.410 | µg/Kg | 10 |
| 1,2,4-Trimethylbenzene | | <0.535 | µg/Kg | 10 |
| 1,4-Dichlorobenzene (para) | | <0.387 | µg/Kg | 10 |
| sec-Butylbenzene | | <0.632 | µg/Kg | 10 |
| 1,3-Dichlorobenzene (meta) | | <0.534 | µg/Kg | 10 |
| p-Isopropyltoluene | | <0.679 | µg/Kg | 10 |
| 4-Chlorotoluene | | <0.675 | µg/Kg | 10 |
| 1,2-Dichlorobenzene (ortho) | | <0.475 | µg/Kg | 10 |
| n-Butylbenzene | | <0.979 | µg/Kg | 10 |
| 1,2-Dibromo-3-chloropropane | | <0.883 | µg/Kg | 50 |
| 1,2,3-Trichlorobenzene | | <3.64 | µg/Kg | 50 |
| 1,2,4-Trichlorobenzene | | <2.28 | µg/Kg | 50 |
| Naphthalene | | <4.41 | µg/Kg | 50 |
| Hexachlorobutadiene | | <3.24 | µg/Kg | 50 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | 486 | µg/Kg | 1 | 500 | 97 | 42 - 129 |

*continued . . .*

*method blank continued . . .*

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Toluene-d8 | | 518 | µg/Kg | 1 | 500 | 104 | 93 - 107 |
| 4-Bromofluorobenzene (4-BFB) | | 539 | µg/Kg | 1 | 500 | 108 | 78 - 120 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 32087 Date Analyzed: 2006-11-18 Analyzed By: JG
Prep Batch: 27956 QC Preparation: 2006-11-18 Prepared By: JG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 42.9 | µg/L | 1 | 50.0 | <0.0736 | 86 | 83.4 - 114 |
| Benzene | 48.2 | µg/L | 1 | 50.0 | <0.0495 | 96 | 83.5 - 115 |
| Trichloroethene (TCE) | 51.4 | µg/L | 1 | 50.0 | <0.0495 | 103 | 91.3 - 111 |
| Toluene | 48.2 | µg/L | 1 | 50.0 | <0.0736 | 96 | 82 - 110 |
| Chlorobenzene | 48.1 | µg/L | 1 | 50.0 | <0.0217 | 96 | 87.9 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 43.6 | µg/L | 1 | 50.0 | <0.0736 | 87 | 83.4 - 114 | 2 | 20 |
| Benzene | 48.7 | µg/L | 1 | 50.0 | <0.0495 | 97 | 83.5 - 115 | 1 | 20 |
| Trichloroethene (TCE) | 52.1 | µg/L | 1 | 50.0 | <0.0495 | 104 | 91.3 - 111 | 1 | 20 |
| Toluene | 48.7 | µg/L | 1 | 50.0 | <0.0736 | 97 | 82 - 110 | 1 | 20 |
| Chlorobenzene | 49.0 | µg/L | 1 | 50.0 | <0.0217 | 98 | 87.9 - 109 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 48.3 | 48.8 | µg/L | 1 | 50.0 | 97 | 98 | 82.4 - 115 |
| Toluene-d8 | 48.7 | 48.6 | µg/L | 1 | 50.0 | 97 | 97 | 89.7 - 108 |
| 4-Bromofluorobenzene (4-BFB) | 46.4 | 46.7 | µg/L | 1 | 50.0 | 93 | 93 | 84.6 - 114 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 32280 Date Analyzed: 2006-11-21 Analyzed By: JG
Prep Batch: 28111 QC Preparation: 2006-11-21 Prepared By: JG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 518 | µg/Kg | 1 | 500 | <0.639 | 104 | 76.9 - 114 |
| Benzene | 512 | µg/Kg | 1 | 500 | <0.644 | 102 | 79.7 - 113 |
| Trichloroethene (TCE) | 525 | µg/Kg | 1 | 500 | <0.836 | 105 | 84.2 - 119 |
| Toluene | 460 | µg/Kg | 1 | 500 | <1.12 | 92 | 82 - 110 |
| Chlorobenzene | 509 | µg/Kg | 1 | 500 | <0.426 | 102 | 85.9 - 110 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 516 | µg/Kg | 1 | 500 | <0.639 | 103 | 76.9 - 114 | 0 | 20 |
| Benzene | 516 | µg/Kg | 1 | 500 | <0.644 | 103 | 79.7 - 113 | 1 | 20 |
| Trichloroethene (TCE) | 537 | µg/Kg | 1 | 500 | <0.836 | 107 | 84.2 - 119 | 2 | 20 |
| Toluene | 474 | µg/Kg | 1 | 500 | <1.12 | 95 | 82 - 110 | 3 | 20 |
| Chlorobenzene | 520 | µg/Kg | 1 | 500 | <0.426 | 104 | 85.9 - 110 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 500 | 495 | µg/Kg | 1 | 500 | 100 | 99 | 87 - 108 |
| Toluene-d8 | 498 | 494 | µg/Kg | 1 | 500 | 100 | 99 | 92.3 - 106 |
| 4-Bromofluorobenzene (4-BFB) | 499 | 505 | µg/Kg | 1 | 500 | 100 | 101 | 83.4 - 117 |

**Matrix Spike (MS-1)** Spiked Sample: 109077

QC Batch: 32087
Prep Batch: 27956
Date Analyzed: 2006-11-18
QC Preparation: 2006-11-18
Analyzed By: JG
Prepared By: JG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 44.9 | µg/L | 1 | 50.0 | <0.0736 | 90 | 78.7 - 119 |
| Benzene | 49.8 | µg/L | 1 | 50.0 | <0.0495 | 100 | 75.8 - 125 |
| Trichloroethene (TCE) | 51.5 | µg/L | 1 | 50.0 | <0.0495 | 103 | 83.6 - 112 |
| Toluene | 49.6 | µg/L | 1 | 50.0 | <0.0736 | 99 | 81.6 - 115 |
| Chlorobenzene | 48.8 | µg/L | 1 | 50.0 | <0.0217 | 98 | 83.9 - 113 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 47.1 | µg/L | 1 | 50.0 | <0.0736 | 94 | 78.7 - 119 | 5 | 20 |
| Benzene | 51.3 | µg/L | 1 | 50.0 | <0.0495 | 103 | 75.8 - 125 | 3 | 20 |
| Trichloroethene (TCE) | 53.4 | µg/L | 1 | 50.0 | <0.0495 | 107 | 83.6 - 112 | 4 | 20 |
| Toluene | 51.1 | µg/L | 1 | 50.0 | <0.0736 | 102 | 81.6 - 115 | 3 | 20 |
| Chlorobenzene | 50.4 | µg/L | 1 | 50.0 | <0.0217 | 101 | 83.9 - 113 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 50.0 | 49.5 | µg/L | 1 | 50 | 100 | 99 | 86.6 - 114 |
| Toluene-d8 | 49.2 | 48.8 | µg/L | 1 | 50 | 98 | 98 | 91 - 109 |
| 4-Bromofluorobenzene (4-BFB) | 47.5 | 47.4 | µg/L | 1 | 50 | 95 | 95 | 87.2 - 113 |

**Matrix Spike (MS-1)** Spiked Sample: 109300

QC Batch: 32280
Prep Batch: 28111
Date Analyzed: 2006-11-21
QC Preparation: 2006-11-21
Analyzed By: JG
Prepared By: JG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 525 | µg/Kg | 1 | 500 | <0.639 | 105 | 76.1 - 115 |
| Benzene | 538 | µg/Kg | 1 | 500 | <0.644 | 108 | 82.1 - 110 |
| Trichloroethene (TCE) | 532 | µg/Kg | 1 | 500 | <0.836 | 106 | 75.5 - 129 |
| Toluene | 491 | µg/Kg | 1 | 500 | <1.12 | 98 | 82.3 - 108 |
| Chlorobenzene | 534 | µg/Kg | 1 | 500 | <0.426 | 107 | 84.1 - 111 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 518 | µg/Kg | 1 | 500 | <0.639 | 104 | 76.1 - 115 | 1 | 20 |
| Benzene | 531 | µg/Kg | 1 | 500 | <0.644 | 106 | 82.1 - 110 | 1 | 20 |
| Trichloroethene (TCE) | 527 | µg/Kg | 1 | 500 | <0.836 | 105 | 75.5 - 129 | 1 | 20 |
| Toluene | 485 | µg/Kg | 1 | 500 | <1.12 | 97 | 82.3 - 108 | 1 | 20 |
| Chlorobenzene | 527 | µg/Kg | 1 | 500 | <0.426 | 105 | 84.1 - 111 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 504 | 500 | µg/Kg | 1 | 500 | 101 | 100 | 87.9 - 105 |
| Toluene-d8 | 508 | 503 | µg/Kg | 1 | 500 | 102 | 101 | 90.2 - 109 |
| 4-Bromofluorobenzene (4-BFB) | 524 | 524 | µg/Kg | 1 | 500 | 105 | 105 | 82.9 - 116 |

**Standard (CCV-1)**

QC Batch: 32087 Date Analyzed: 2006-11-18 Analyzed By: JG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Vinyl Chloride | | µg/L | 50.0 | 42.4 | 85 | 80 - 120 | 2006-11-18 |
| 1,1-Dichloroethene | | µg/L | 50.0 | 44.1 | 88 | 80 - 120 | 2006-11-18 |
| Chloroform | | µg/L | 50.0 | 50.5 | 101 | 80 - 120 | 2006-11-18 |
| 1,2-Dichloropropane | | µg/L | 50.0 | 49.6 | 99 | 80 - 120 | 2006-11-18 |
| Toluene | | µg/L | 50.0 | 47.7 | 95 | 80 - 120 | 2006-11-18 |
| Chlorobenzene | | µg/L | 50.0 | 47.9 | 96 | 80 - 120 | 2006-11-18 |
| Ethylbenzene | | µg/L | 50.0 | 46.2 | 92 | 80 - 120 | 2006-11-18 |

**Standard (CCV-1)**

QC Batch: 32280 Date Analyzed: 2006-11-21 Analyzed By: JG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Vinyl Chloride | | µg/Kg | 50.0 | 48.6 | 97 | 80 - 120 | 2006-11-21 |
| 1,1-Dichloroethene | | µg/Kg | 50.0 | 52.6 | 105 | 80 - 120 | 2006-11-21 |
| Chloroform | | µg/Kg | 50.0 | 52.5 | 105 | 80 - 120 | 2006-11-21 |
| 1,2-Dichloropropane | | µg/Kg | 50.0 | 53.6 | 107 | 80 - 120 | 2006-11-21 |
| Toluene | | µg/Kg | 50.0 | 49.1 | 98 | 80 - 120 | 2006-11-21 |
| Chlorobenzene | | µg/Kg | 50.0 | 52.3 | 105 | 80 - 120 | 2006-11-21 |

*continued . . .*

*standard continued . . .*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Ethylbenzene | | µg/Kg | 50.0 | 54.1 | 108 | 80 - 120 | 2006-11-21 |

**Standard (CCV-2)**

QC Batch: 32280 Date Analyzed: 2006-11-21 Analyzed By: JG

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Vinyl Chloride | | µg/Kg | 50.0 | 50.7 | 101 | 80 - 120 | 2006-11-21 |
| 1,1-Dichloroethene | | µg/Kg | 50.0 | 51.3 | 103 | 80 - 120 | 2006-11-21 |
| Chloroform | | µg/Kg | 50.0 | 51.6 | 103 | 80 - 120 | 2006-11-21 |
| 1,2-Dichloropropane | | µg/Kg | 50.0 | 53.1 | 106 | 80 - 120 | 2006-11-21 |
| Toluene | | µg/Kg | 50.0 | 47.8 | 96 | 80 - 120 | 2006-11-21 |
| Chlorobenzene | | µg/Kg | 50.0 | 51.9 | 104 | 80 - 120 | 2006-11-21 |
| Ethylbenzene | | µg/Kg | 50.0 | 53.7 | 107 | 80 - 120 | 2006-11-21 |

# Analytical and Quality Control Report

William Little
WTS
P.O. Box 363
Building 126 3RD Floor
WSMR, NM, 88002

Report Date: December 29, 2006

Work Order: 6111718

Project Name: HELSTF Phase III Soil Sampling
Project Number: 7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 109300 | HLSF-0085-SB-037-(10.0-11.0) | soil | 2006-11-14 | 08:40 | 2006-11-15 |
| 109301 | HLSF-0085-SB-037-(20.0-21.0) | soil | 2006-11-14 | 09:05 | 2006-11-15 |
| 109302 | HLSF-0085-SB-037-(30.0-31.0) | soil | 2006-11-14 | 09:30 | 2006-11-15 |
| 109303 | HLSF-0085-SB-037-(40.0-41.0) | soil | 2006-11-14 | 09:50 | 2006-11-15 |
| 109304 | HLSF-0085-SB-037-(49.0-50.0) | soil | 2006-11-14 | 10:20 | 2006-11-15 |
| 109305 | HLSF-0085-SB-039-(10.0-11.0) | soil | 2006-11-14 | 12:50 | 2006-11-15 |
| 109306 | HLSF-0085-SB-039-(20.0-21.0) | soil | 2006-11-14 | 13:05 | 2006-11-15 |
| 109307 | HLSF-0085-SB-039-(30.0-31.0) | soil | 2006-11-14 | 13:30 | 2006-11-15 |
| 109308 | HLSF-0085-SB-039-(40.0-41.0) | soil | 2006-11-14 | 13:50 | 2006-11-15 |
| 109309 | HLSF-0085-SB-039-(49.0-50.0) | soil | 2006-11-14 | 14:10 | 2006-11-15 |
| 109310 | HLSF-0085-SB-038-(10.0-11.0) | soil | 2006-11-14 | 15:40 | 2006-11-15 |
| 109311 | HLSF-0085-SB-038-(20.0-21.0) | soil | 2006-11-14 | 15:55 | 2006-11-15 |
| 109312 | HLSF-0085-SB-038-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |
| 109313 | HLSF-0085-SB-138-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Analytical Report

**Sample: 109300 - HLSF-0085-SB-037-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.914 | mg/Kg | 1 | 1.00 | 91 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.990 | mg/Kg | 1 | 1.00 | 99 | 21.8 - 188 |

**Sample: 109301 - HLSF-0085-SB-037-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.850 | mg/Kg | 1 | 1.00 | 85 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.940 | mg/Kg | 1 | 1.00 | 94 | 21.8 - 188 |

**Sample: 109302 - HLSF-0085-SB-037-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.768 | mg/Kg | 1 | 1.00 | 77 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.836 | mg/Kg | 1 | 1.00 | 84 | 21.8 - 188 |

**Sample: 109303 - HLSF-0085-SB-037-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.871 | mg/Kg | 1 | 1.00 | 87 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.941 | mg/Kg | 1 | 1.00 | 94 | 21.8 - 188 |

**Sample: 109304 - HLSF-0085-SB-037-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.832 | mg/Kg | 1 | 1.00 | 83 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.894 | mg/Kg | 1 | 1.00 | 89 | 21.8 - 188 |

**Sample: 109305 - HLSF-0085-SB-039-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.853 | mg/Kg | 1 | 1.00 | 85 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.900 | mg/Kg | 1 | 1.00 | 90 | 21.8 - 188 |

**Sample: 109306 - HLSF-0085-SB-039-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.843 | mg/Kg | 1 | 1.00 | 84 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.896 | mg/Kg | 1 | 1.00 | 90 | 21.8 - 188 |

**Sample: 109307 - HLSF-0085-SB-039-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.856 | mg/Kg | 1 | 1.00 | 86 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.906 | mg/Kg | 1 | 1.00 | 91 | 21.8 - 188 |

**Sample: 109308 - HLSF-0085-SB-039-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.837 | mg/Kg | 1 | 1.00 | 84 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.910 | mg/Kg | 1 | 1.00 | 91 | 21.8 - 188 |

**Sample: 109309 - HLSF-0085-SB-039-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.755 | mg/Kg | 1 | 1.00 | 76 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.797 | mg/Kg | 1 | 1.00 | 80 | 21.8 - 188 |

**Sample: 109310 - HLSF-0085-SB-038-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.928 | mg/Kg | 1 | 1.00 | 93 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.980 | mg/Kg | 1 | 1.00 | 98 | 21.8 - 188 |

**Sample: 109311 - HLSF-0085-SB-038-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.825 | mg/Kg | 1 | 1.00 | 82 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.889 | mg/Kg | 1 | 1.00 | 89 | 21.8 - 188 |

**Sample: 109312 - HLSF-0085-SB-038-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.910 | mg/Kg | 1 | 1.00 | 91 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 0.977 | mg/Kg | 1 | 1.00 | 98 | 21.8 - 188 |

**Sample: 109313 - HLSF-0085-SB-138-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH GRO | Analytical Method: | S 8015B | Prep Method: | S 5035 |
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | Sample Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| GRO | | <1.00 | mg/Kg | 1 | 1.00 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.938 | mg/Kg | 1 | 1.00 | 94 | 1.5 - 182 |
| 4-Bromofluorobenzene (4-BFB) | | 1.03 | mg/Kg | 1 | 1.00 | 103 | 21.8 - 188 |

**Method Blank (1)** QC Batch: 32027

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | QC Preparation: | 2006-11-17 | Prepared By: | KB |

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| GRO | | 2.10 | mg/Kg | 1 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.878 | mg/Kg | 1 | 1.00 | 88 | 75.4 - 125 |
| 4-Bromofluorobenzene (4-BFB) | | 0.867 | mg/Kg | 1 | 1.00 | 87 | 60.8 - 113 |

**Laboratory Control Spike (LCS-1)**

| | | | | | |
|---|---|---|---|---|---|
| QC Batch: | 32027 | Date Analyzed: | 2006-11-17 | Analyzed By: | KB |
| Prep Batch: | 27900 | QC Preparation: | 2006-11-17 | Prepared By: | KB |

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| GRO | 9.26 | mg/Kg | 1 | 10.0 | <0.121 | 93 | 79.4 - 114 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| GRO | 8.98 | mg/Kg | 1 | 10.0 | <0.121 | 90 | 79.4 - 114 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.965 | 0.836 | mg/Kg | 1 | 1.00 | 96 | 84 | 75.6 - 120 |
| 4-Bromofluorobenzene (4-BFB) | 0.960 | 0.904 | mg/Kg | 1 | 1.00 | 96 | 90 | 77.4 - 117 |

**Matrix Spike (MS-1)** Spiked Sample: 109302

QC Batch: 32027
Prep Batch: 27900
Date Analyzed: 2006-11-17
QC Preparation: 2006-11-17
Analyzed By: KB
Prepared By: KB

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| GRO | 9.08 | mg/Kg | 1 | 10.0 | <0.121 | 91 | 36.4 - 166 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| GRO | 9.60 | mg/Kg | 1 | 10.0 | <0.121 | 96 | 36.4 - 166 | 6 | 19.6 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.898 | 0.920 | mg/Kg | 1 | 1 | 90 | 92 | 39.2 - 148 |
| 4-Bromofluorobenzene (4-BFB) | 1.06 | 1.07 | mg/Kg | 1 | 1 | 106 | 107 | 62.8 - 153 |

**Standard (ICV-1)**

QC Batch: 32027
Date Analyzed: 2006-11-17
Analyzed By: KB

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| GRO | | mg/Kg | 1.00 | 0.899 | 90 | 85 - 115 | 2006-11-17 |

**Standard (CCV-1)**

QC Batch: 32027
Date Analyzed: 2006-11-17
Analyzed By: KB

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| GRO | | mg/Kg | 1.00 | 0.915 | 92 | 85 - 115 | 2006-11-17 |

# Analytical and Quality Control Report

William Little
WTS
P.O. Box 363
Building 126 3RD Floor
WSMR, NM, 88002

Report Date: December 29, 2006

Work Order: 6111718

Project Name: HELSTF Phase III Soil Sampling
Project Number: 7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 109300 | HLSF-0085-SB-037-(10.0-11.0) | soil | 2006-11-14 | 08:40 | 2006-11-15 |
| 109301 | HLSF-0085-SB-037-(20.0-21.0) | soil | 2006-11-14 | 09:05 | 2006-11-15 |
| 109302 | HLSF-0085-SB-037-(30.0-31.0) | soil | 2006-11-14 | 09:30 | 2006-11-15 |
| 109303 | HLSF-0085-SB-037-(40.0-41.0) | soil | 2006-11-14 | 09:50 | 2006-11-15 |
| 109304 | HLSF-0085-SB-037-(49.0-50.0) | soil | 2006-11-14 | 10:20 | 2006-11-15 |
| 109305 | HLSF-0085-SB-039-(10.0-11.0) | soil | 2006-11-14 | 12:50 | 2006-11-15 |
| 109306 | HLSF-0085-SB-039-(20.0-21.0) | soil | 2006-11-14 | 13:05 | 2006-11-15 |
| 109307 | HLSF-0085-SB-039-(30.0-31.0) | soil | 2006-11-14 | 13:30 | 2006-11-15 |
| 109308 | HLSF-0085-SB-039-(40.0-41.0) | soil | 2006-11-14 | 13:50 | 2006-11-15 |
| 109309 | HLSF-0085-SB-039-(49.0-50.0) | soil | 2006-11-14 | 14:10 | 2006-11-15 |
| 109310 | HLSF-0085-SB-038-(10.0-11.0) | soil | 2006-11-14 | 15:40 | 2006-11-15 |
| 109311 | HLSF-0085-SB-038-(20.0-21.0) | soil | 2006-11-14 | 15:55 | 2006-11-15 |
| 109312 | HLSF-0085-SB-038-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |
| 109313 | HLSF-0085-SB-138-(30.0-32.0) | soil | 2006-11-14 | 16:20 | 2006-11-15 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Analytical Report

**Sample: 109300 - HLSF-0085-SB-037-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 166 | mg/Kg | 1 | 150 | 111 | 71 - 133.9 |

**Sample: 109301 - HLSF-0085-SB-037-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 167 | mg/Kg | 1 | 150 | 111 | 71 - 133.9 |

**Sample: 109302 - HLSF-0085-SB-037-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 162 | mg/Kg | 1 | 150 | 108 | 71 - 133.9 |

**Sample: 109303 - HLSF-0085-SB-037-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 179 | mg/Kg | 1 | 150 | 119 | 71 - 133.9 |

**Sample: 109304 - HLSF-0085-SB-037-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 186 | mg/Kg | 1 | 150 | 124 | 71 - 133.9 |

**Sample: 109305 - HLSF-0085-SB-039-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 177 | mg/Kg | 1 | 150 | 118 | 71 - 133.9 |

**Sample: 109306 - HLSF-0085-SB-039-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 184 | mg/Kg | 1 | 150 | 123 | 71 - 133.9 |

**Sample: 109307 - HLSF-0085-SB-039-(30.0-31.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 183 | mg/Kg | 1 | 150 | 122 | 71 - 133.9 |

**Sample: 109308 - HLSF-0085-SB-039-(40.0-41.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 170 | mg/Kg | 1 | 150 | 113 | 71 - 133.9 |

**Sample: 109309 - HLSF-0085-SB-039-(49.0-50.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 183 | mg/Kg | 1 | 150 | 122 | 71 - 133.9 |

**Sample: 109310 - HLSF-0085-SB-038-(10.0-11.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

*continued . . .*

*sample 109310 continued . . .*

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 187 | mg/Kg | 1 | 150 | 125 | 71 - 133.9 |

**Sample: 109311 - HLSF-0085-SB-038-(20.0-21.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 162 | mg/Kg | 1 | 150 | 108 | 71 - 133.9 |

**Sample: 109312 - HLSF-0085-SB-038-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 181 | mg/Kg | 1 | 150 | 121 | 71 - 133.9 |

**Sample: 109313 - HLSF-0085-SB-138-(30.0-32.0)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis: | TPH DRO | Analytical Method: | Mod. 8015B | Prep Method: | N/A |
| QC Batch: | 32051 | Date Analyzed: | 2006-11-20 | Analyzed By: | SP |
| Prep Batch: | 27921 | Sample Preparation: | 2006-11-17 | Prepared By: | SP |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| DRO | | <50.0 | mg/Kg | 1 | 50.0 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 180 | mg/Kg | 1 | 150 | 120 | 71 - 133.9 |

**Method Blank (1)** QC Batch: 32051

QC Batch: 32051 Date Analyzed: 2006-11-20 Analyzed By: SP
Prep Batch: 27921 QC Preparation: 2006-11-17 Prepared By: SP

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| DRO | | <7.28 | mg/Kg | 50 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| n-Triacontane | | 158 | mg/Kg | 1 | 150 | 105 | 71 - 133.9 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 32051 Date Analyzed: 2006-11-20 Analyzed By: SP
Prep Batch: 27921 QC Preparation: 2006-11-17 Prepared By: SP

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| DRO | 287 | mg/Kg | 1 | 250 | <7.28 | 115 | 67.7 - 129 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| DRO | 290 | mg/Kg | 1 | 250 | <7.28 | 116 | 67.7 - 129 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| n-Triacontane | 166 | 158 | mg/Kg | 1 | 150 | 111 | 105 | 71 - 133.9 |

**Matrix Spike (MS-1)** Spiked Sample: 109300

QC Batch: 32051 Date Analyzed: 2006-11-20 Analyzed By: SP
Prep Batch: 27921 QC Preparation: 2006-11-17 Prepared By: SP

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| DRO | 293 | mg/Kg | 1 | 250 | <7.28 | 117 | 38.4 - 150 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

*continued . . .*

*matrix spikes continued . . .*

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
| DRO | 276 | mg/Kg | 1 | 250 | <7.28 | 110 | 38.4 - 150 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| n-Triacontane | 175 | 164 | mg/Kg | 1 | 150 | 117 | 109 | 71 - 133.9 |

**Standard (ICV-1)**

QC Batch: 32051 Date Analyzed: 2006-11-20 Analyzed By: SP

| Param | Flag | Units | ICVs True Conc. | ICVs Found Conc. | ICVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| DRO | | mg/Kg | 250 | 275 | 110 | 85 - 115 | 2006-11-20 |

**Standard (CCV-1)**

QC Batch: 32051 Date Analyzed: 2006-11-20 Analyzed By: SP

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| DRO | | mg/Kg | 250 | 285 | 114 | 85 - 115 | 2006-11-20 |

**Standard (CCV-2)**

QC Batch: 32051 Date Analyzed: 2006-11-20 Analyzed By: SP

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| DRO | | mg/Kg | 250 | 284 | 114 | 85 - 115 | 2006-11-20 |