# WHITE STREET LANDFILL
# GREENSBORO, NORTH CAROLINA
# PHASE I POST CLOSURE MONITORING
# DECEMBER 2008 SAMPLING EVENT

S&ME Project No. 1584-98-081

Prepared For:
**The City of Greensboro**

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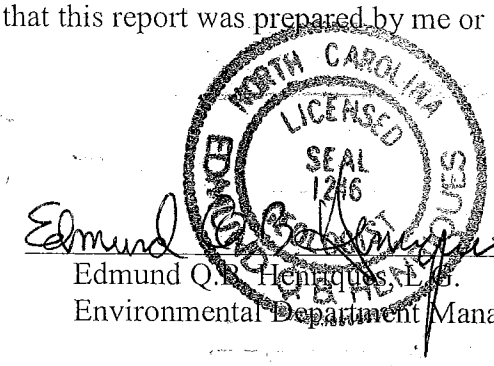
February 5, 2009

I hereby certify this 5th day of February 2009, that this report was prepared by me or under my direct supervision.

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# 1. EXECUTIVE SUMMARY

Five monitoring wells and four stream locations at the White Street Landfill were sampled between December 4 and 5, 2008. Five wells (I-1, I-2, I-3, I-4, and MW-13) comprise the groundwater monitoring system for the closed Phase I portion of the White Street Landfill. Monitoring well MW-13 serves as a background well for both the Phase I and the Phase II areas. The sampling was conducted according to North Carolina Solid Waste Management Guidelines. Samples were analyzed by a North Carolina certified laboratory. The samples collected from the Phase I area wells were submitted for analysis using the North Carolina Appendix I organic constituents and eight RCRA Metals for detection monitoring. Samples for well MW-13, shared by Phase I and Phase II, were submitted for analysis of the North Carolina Appendix I parameter suite. Samples from surface water locations SW-2, SW-3, SW-4 and SW-5 were analyzed for federal Appendix I monitoring constituents. Phase I shares the four surface water monitoring locations with Phase II and Phase III.

Results from the five Phase I monitoring wells indicate the following detected volatile organic compounds, exceeded their corresponding NCAC 2L groundwater quality standards.

- Volatile organic compound vinyl chloride was reported at estimated "J" flagged value in well I-3. Base on our understanding of current NCDENR, Solid Waste Section guidance, the estimated concentration represents an exceedance of the NCAC 2L groundwater quality standard for vinyl chloride currently set at 0.015 µg/L.
- The reported benzene concentration from I-1 of 1.1 µg/L exceeded the NCAC 2L groundwater quality standard of 1 µg/L for benzene.
- Volatile organic compound 1,4-dichlorobenzene was detected in the groundwater samples collected from monitoring wells I-1, I-2, I-3, and I-4 at concentrations of 3.5 µg/L, 1.8 µg/L, 4.0 µg/L, and 3.5 µg/L respectively. Each of these reported concentrations exceed the 1.4 µg/L NCAC 2L groundwater quality standard for 1,4-dichlorobenzene.

Results from the five Phase I monitoring wells indicate the following detected inorganic constituents exceeded their corresponding NCAC 2L groundwater quality standard.

- Chromium was detected in monitor well I-4 at a concentration of 86.1 µg/L. This detection exceeded the NCAC 2L standard of 50 µg/L for chromium.
- Lead was detected in monitor well I-4 at a concentration of 17.8 µg/L. This detection exceeded the NCAC 2L standard of 15 µg/L.

Well I-4 was very turbid during sampling and it appeared that the well was submerged below water during a prior rain event; therefore, the metals detected during this event may not be entirely representative of local groundwater. Well I-4 should be redeveloped prior to the next monitoring event.

The following summarizes the surface water sample results.

- Appendix I volatile organic compounds acetone and chloroform were detected at one or more surface water sample locations; however, there are no corresponding 15A NCAC 2B Standards for these constituents. The laboratory reported acetone as a common laboratory contaminant. Chloroform was detected solely at SW-3, which is immediately down stream of the waste water treatment plant and upstream of Phase I.
- Inorganic constituents copper was detected at surface water sample locations SW-2 at a concentration greater than their corresponding North Carolina 15A NCAC 2B standards. Surface water sample SW-2 is up-gradient of Phase I and does not reflect conditions associated with Phase I.
- Inorganic constituent silver was estimated at concentrations greater than the corresponding North Carolina 15A NCAC 2B standard at surface water sample locations SW-5. Silver was not detected at location SW-4 representing stream quality proximal to Phase I. Since location SW-5 is further down stream and potentially affected by other sources, the detected silver concentration is not thought to stem from Phase I.

## 2. INTRODUCTION

White Street Landfill is a Solid Waste Management Facility (SWMF) located at the north end of White Street in northeastern Greensboro. S&ME, Inc. (S&ME) was contracted by the City of Greensboro to complete this Phase I water quality monitoring event. Phase I of the landfill is covered by Solid Waste Permit #41-03. **Figure 1** is a map showing the monitor well locations. One upgradient and four down-gradient monitoring wells located along the perimeter of the closed Phase I disposal area were sampled. Four surface water samples were collected from North Buffalo Creek and one of its tributaries in the vicinity of the White Street facility. Phase I shares the surface water sampling locations with adjacent Phase II and Phase III.

The samples collected from Phase I wells I-1, I-2, I-3, and I-4 were analyzed for Appendix I volatile organic constituents and the eight RCRA metals. Since well MW-13 is shared by Phase I and Phase II, the samples collected from MW-13 were analyzed using the federal Appendix I assessment monitoring list. This report discusses the field procedures, summarizes the field measurements and analytical results for the December 2008 water quality monitoring event.

## 3. SCOPE OF WORK

To complete the scope of work, S&ME completed the following tasks:

- Sampled five monitoring wells and four surface water locations at the White Street landfill SWMF.
- Obtained field values for pH, temperature, dissolved oxygen (DO), turbidity, oxidation-reduction potential (ORP), and conductivity at each sample location.
- Depth to water measurements were collected during well purging to monitor drawdown.
- Had the samples I-1, I-2, I-3, and I-4 analyzed for Appendix I organic constituents

and 8-RCRA metals by a North Carolina certified laboratory, using State approved methods.

- Had the sample MW-13 analyzed for Appendix I constituents by a North Carolina certified laboratory, using State approved methods (e.g., MW-13 is also part of Phase II, which has different analytical requirements).
- Had the samples SW-2, SW-3, SW-4, and SW-5 analyzed for Appendix I constituents by a North Carolina certified laboratory, using State approved methods.
- Calculated groundwater flow directions at the Phase I area monitoring well locations.
- Prepared and submitted this Groundwater Monitoring Report to the City of Greensboro and the State.

# 4. METHODS EMPLOYED

## 4.1 Monitoring Well Sampling

Phase I groundwater monitoring well sampling took place on December 5, 2008. The monitoring well locations are shown on **Figure 1**. A representative from S&ME opened each well and measured the static water level from the top edge of the PVC casing in the wells. The total well depth sounding data reported for the sampling events completed during September 1997 and May 1998 were used to determine the volume of water in wells I-1, I-2, I-3, I-4, and MW-13; where dedicated MicroPurgeTM pumps had been previously installed. These data are summarized in **Table 1**.

In accordance with the facility's approved Water Quality Monitoring Plan, each well was purged using the dedicated MicroPurge™ pumps using compressed air. At each well, the purge rate and the drawdown of the water table were monitored as an indicator of how much stress the purging placed on the aquifer. The purge rates were calculated by recording the time required to fill a graduated cylinder. The purging flow rate varied but was approximately 100 milliliters/minute (ml/min.). During purging, the depth to water was periodically monitored and recorded on the groundwater sampling field data sheets. The field data sheets are included in **Appendix I**.

It is our opinion that the observed drawdowns were generally minor during purging; therefore, the stresses placed on the aquifer should have been minor. The observed drawdown data also suggests that the purging rates should have been low enough such that recharge water should not have been overly agitated, reducing the potential for colloids to be drawn into the well bore.

The purge water from each of these wells was monitored for pH, temperature, DO, turbidity, ORP, and conductivity. A sample was collected when the changes in those readings fluctuated no more than 10 percent. The field data collected during sampling was recorded on the groundwater sampling field data sheets. **Table 2** summarizes the results of the field data.

Groundwater samples were collected from dedicated Teflon tubing at each of the pumped

wells. Immediately upon collection, each sample was placed in laboratory supplied containers, packed on ice, and placed under chain-of custody. The sampling technician wore nitrile gloves that were changed between wells to reduce the possibility of cross contamination. After collection, the groundwater samples were packed on ice and placed under chain-of custody.

All Phase I monitoring well samples (I-1, I-2, I-3, and I-4) were analyzed for Appendix I volatile organic constituents and the eight RCRA metals. Monitor well MW-13 was analyzed for Appendix I constituents since it is shared with Phase II as a background groundwater quality monitoring well for both Phase I and Phase II. Analyses were conducted by Environmental Conservation Laboratories; a North Carolina certified laboratory. Laboratory analytical data is attached in **Appendix II.** The NCDENR Environmental Monitoring Reporting Form is attached as **Appendix III**.

As noted in the field sampling data sheets, well I-2 and I-4 both exhibited relatively high turbidity during sampling, despite the stabilization of parameters. Visual observations suggest that well I-4 was submerged below water during a prior storm event. As such, inorganic constituent concentrations at these well may not be solely representative of groundwater.

### 4.2 Stream Sampling

Surface water sampling took place on December 4, 2008. Three stream samples (SW-3, SW-4, and SW-5) were collected from North Buffalo Creek, which flows along the northwestern side of the White Street Landfill. Surface water sample SW-2 was collected from a tributary of North Buffalo Creek. The locations are shown in **Figure 2**. SW-2 was collected from a southern tributary of North Buffalo Creek just before it joins the main creek west of the landfill entrance. SW-3 was collected downstream of the North Buffalo Wastewater Treatment Plant outfall and upstream of the landfill. SW-4 was collected downstream of the landfill at a USGS gauging station located on North Buffalo Creek about three-quarters of a mile north of the landfill. SW-5 was collected from North Buffalo Creek immediately downstream of the Phase I and II landfill disposal areas.

The surface water samples were collected by immersing laboratory supplied containers in the water to be sampled. After collection, the surface water samples were packed on ice and placed under chain-of-custody. All stream samples were analyzed for Appendix I inorganic and volatile organic constituents by Environmental Conservation Laboratories; a North Carolina certified laboratory.

## 5. RESULTS

### 5.1 Groundwater Analytical Results

The results of the laboratory analyses for Appendix I volatile organic constituents and the eight RCRA metals in the closed Phase I area groundwater monitoring well samples are summarized in **Tables 3** and **4** and the complete laboratory report is included in **Appendix II**. Wells I-1, I-2, I-3, I-4, and MW-13 monitor the closed Phase I area. The following summarizes the groundwater sample analyses.

- Volatile organic compound vinyl chloride was reported at estimated "J" flagged values in well I-3. Base on our understanding of current NCDENR, Solid Waste Section guidance, the estimated concentration represents an exceedance of the NCAC 2L groundwater quality standard for vinyl chloride currently set at 0.015 µg/L.
- Volatile organic compound benzene was detected solely at monitoring wells I-1 and I-3. However only the reported concentration from I-1 of 1.1 µg/L exceeded the NCAC 2L groundwater quality standard of 1 µg/L for benzene.
- Volatile organic compound 1,4-dichlorobenzene was detected in the groundwater samples collected from monitoring wells I-1, I-2, I-3, and I-4 at concentrations of 3.5 µg/L, 1.8 µg/L, 4.0 µg/L, and 3.5 µg/L respectively. Each of these reported concentrations exceed the 1.4 µg/L NCAC 2L groundwater quality standard for 1,4-dichlorobenzene.
- Volatile organic compounds acetone, chlorobenzene, 1,1-dichloroethane, 1,1-dichloroethene, cis 1,2-dichloroethene, 1,2-dichlorobenzene, and methylene chloride were detected at quantified or estimated concentrations in one or more of the wells. However the reported concentrations of these compounds were below their corresponding NCAC 2L groundwater quality standard. The volatile organic compound acetone was noted in the Laboratory analytical report as being a common laboratory contaminant.
- Inorganic constituents barium, silver, vanadium, and zinc were detected in one or more of the groundwater monitoring wells during this water quality monitoring event; however, the detected concentrations were less than the corresponding NCAC 2L groundwater quality or Groundwater Protection Standards.
- Chromium was detected in monitor well I-4 at a concentration of 86.1 µg/L. This detection exceeds the NCAC 2L standard of 50 µg/L for chromium.
- Lead was detected in monitor well I-2 at an estimated concentration of 2.9 µg/L. Lead was detected in monitor well I-4 at a concentration of 17.8 µg/L. Only the detected concentration at monitor well I-4 exceeded the NCAC 2L standard of 15 µg/L.

Well I-4 was very turbid during sampling and it appeared that the well was submerged below water during a prior rain event; therefore, the metals detected during this event may not be entirely representative of local groundwater. Well I-4 should be redeveloped prior to the next monitoring event

## 5.2 Groundwater Flow Direction

The static water levels in the Phase I monitoring wells were measured between December 3 and 5, 2009. The depth to the water table ranged from 2.58 to 22.11 feet below the top of well casing on these dates. Groundwater and well casing elevation data are presented in **Table 1.** A groundwater contour map constructed using the data collected during this monitoring event is presented as **Figure 1**. The groundwater elevation data collected during this monitoring event indicates that the groundwater beneath Phase I generally flows toward the west and northwest, toward Buffalo Creek. This is generally consistent with the results from previous monitoring events.

### 5.3 Surface Water

The results of the laboratory analyses for the Appendix I constituents in the surface water samples are summarized in **Tables 5** and **6.** The complete laboratory reports are included in **Appendix II**. The following summarizes the surface water sample analyses.

- Appendix I volatile organic compounds acetone and chloroform were detected at one or more surface water sample locations; however, there are no corresponding 15A NCAC 2B Standards for these constituents. The laboratory reported acetone as a common laboratory contaminant. Chloroform was detected solely at SW-3, which is immediately down stream of the waste water treatment plant and upstream of Phase I.
- Inorganic constituents copper was detected at surface water sample locations SW-2. at a concentration greater than their corresponding North Carolina 15A NCAC 2B standards. Surface water sample SW-2 is up-gradient of Phase I and does not reflect conditions associated with Phase I.
- Inorganic constituent silver was estimated at concentrations greater than the corresponding North Carolina 15A NCAC 2B standard at surface water sample locations SW-5. Silver was not detected at location SW-4 representing stream quality proximal to Phase I. Since location SW-5 is further down stream and potentially affected by other sources, the detected silver concentration is not thought to stem from Phase I.
- Inorganic constituents barium, cobalt, and vanadium were all detected at estimated concentrations. However, none of these constituents currently has a corresponding 15A NCAC 2B standard.
- Inorganic constituents chromium, nickel, and zinc were all detected or estimated at concentrations below their corresponding 15A NCAC 2B standards.

### 5.4 Quality Assurance

The monitoring wells in Phase I were sampled using dedicated micro-purge pumps. Therefore, no equipment rinse samples were collected for analysis for data quality control. Trip blank samples accompanied the sample bottles from the time they left the laboratory until they returned. The trip blank samples were analyzed for Appendix I volatile organic constituents. No volatile organic constituents were present in the trip blank samples at detectable levels. Laboratory QC samples were analyzed for all constituents included in this sampling event. The results of the trip blank and laboratory QC sample analyses are included in **Appendix II**.

## 6. REFERENCES

Fetter, C. W., 1988, Applied Hydrogeology, New York; Macmillian Publishing Company, 1988, 592 pp.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental

Management Commission Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

# TABLES

# TABLE 1
# GROUNDWATER ELEVATION DATA SUMMARY (12/08)
# PHASE I - WHITE STREET LANDFILL
# GREENSBORO, NORTH CAROLINA
# S&ME PROJECT NO. 1584-98-081

| Well No. | Elevation TOC (feet) | Depth of Well (feet) | Static Water Levels | | | |
|---|---|---|---|---|---|---|
| | | | May 2008 | | December 2008 | |
| | | | DTGW (feet) | Elevation (feet) | DTGW (feet) | Elevation (feet) |
| I-1 | 776.11 | 23.36 | 6.61 | 769.50 | 9.53 | 766.58 |
| I-2 | 768.58 | 23.13 | 4.60 | 763.98 | 5.01 | 763.57 |
| I-3 | 764.65 | 24 22 | 11.63 | 753.02 | 13.61 | 751.04 |
| I-4 | 759.83 | 14.57 | 2.20 | 757.63 | 2.58 | 757.25 |
| MW-13 | 741.30 | 33.78 | 18.28 | 723.02 | 22.11 | 719.19 |

*TOC = Top of Casing. Elevations determined by survey: HDR Engineering, Inc.*
*Depth of well data as reported by BPA Environmental & Engineering, Inc.*
*DTGW = Depth to Groundwater*
*Elevation = calculated groundwater elevation*

TABLE 2
GROUNDWATER & SURFACE WATER FIELD DATA SUMMARY (12/08)
PHASE I - WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

**Location: I-1**

| Time | Date | Temp-C | Temp-F | pH | SpC-mS/cm | ORP-mV | DO-mg/L | Turbidity-NTU | Depth to Water-feet |
|---|---|---|---|---|---|---|---|---|---|
| 1145 | 5-Dec-08 | 12.36 | 54.248 | 6.01 | 2.84 | 44 | 2.06 | 5.36 | 9.64 |
| 1150 | 5-Dec-08 | 12.11 | 53.798 | 5.99 | 2.80 | 40 | 2.07 | 3.13 | 9.68 |
| 1155 | 5-Dec-08 | 11.89 | 53.402 | 5.9 | 2.65 | 27 | 1.88 | 4.18 | 9.71 |
| 1200 | 5-Dec-08 | 11.67 | 53.006 | 5.81 | 2.53 | -6 | 1.2 | 5.62 | 9.65 |
| 1205 | 5-Dec-08 | 11.64 | 52.952 | 5.8 | 2.51 | -25 | 0.97 | 3.14 | 9.59 |
| 1210 | 5-Dec-08 | 11.68 | 53.024 | 5.8 | 2.50 | -43 | 0.81 | 5.40 | 9.61 |
| 1215 | 5-Dec-08 | 11.7 | 53.06 | 5.79 | 2.50 | -52 | 0.76 | 4.52 | 9.58 |
| 1220 | 5-Dec-08 | 11.67 | 53.006 | 5.8 | 2.50 | -57 | 0.71 | 4.58 | 9.57 |
| 1225 | 5-Dec-08 | 11.64 | 52.952 | 5.8 | 2.49 | -59 | 0.7 | 4.57 | |

**Location: I-2**

| Time | Date | Temp-C | Temp-F | pH | SpC-mS/cm | ORP-mV | DO-mg/L | Turbidity-NTU | Depth to Water-feet |
|---|---|---|---|---|---|---|---|---|---|
| 1255 | 5-Dec-08 | 12.81 | 55.058 | 6.52 | 2.24 | -124 | 1.76 | 108 | 5.79 |
| 1300 | 5-Dec-08 | 12.68 | 54.824 | 6.53 | 1.83 | -141 | 0.78 | 129 | 5.89 |
| 1305 | 5-Dec-08 | 12.7 | 54.86 | 6.54 | 1.74 | -139 | 0.71 | 135 | 6.05 |
| 1310 | 5-Dec-08 | 12.46 | 54.428 | 6.57 | 1.64 | -129 | 0.78 | 141 | 6.01 |
| 1315 | 5-Dec-08 | 12.12 | 53.816 | 6.57 | 1.65 | -129 | 0.89 | 219 | 5.98 |
| 1320 | 5-Dec-08 | 12.12 | 53.816 | 6.61 | 1.53 | -151 | 0.75 | 243 | 6.00 |
| 1325 | 5-Dec-08 | 12.02 | 53.636 | 6.62 | 1.47 | -154 | 0.76 | 180 | 5.97 |
| 1330 | 5-Dec-08 | 11.98 | 53.564 | 6.63 | 1.42 | -158 | 0.7 | 170 | 5.95 |
| 1335 | 5-Dec-08 | 12.02 | 53.636 | 6.63 | 1.41 | -160 | 0.69 | 164 | -- |

**Location: I-3**

| Time | Date | Temp-C | Temp-F | pH | SpC-mS/cm | ORP-mV | DO-mg/L | Turbidity-NTU | Depth to Water-feet |
|---|---|---|---|---|---|---|---|---|---|
| 1400 | 5-Dec-08 | 13.12 | 55.616 | 6.56 | 3.25 | -98 | 1.91 | 11.04 | 13.82 |
| 1405 | 5-Dec-08 | 12.68 | 54.824 | 6.55 | 3.35 | -117 | 1.66 | 14.02 | 13.73 |
| 1410 | 5-Dec-08 | 12.47 | 54.446 | 6.51 | 3.42 | -134 | 1.25 | 8.42 | 13.79 |
| 1415 | 5-Dec-08 | 12.5 | 54.5 | 6.51 | 3.45 | -142 | 1.07 | 7.11 | 13.75 |
| 1420 | 5-Dec-08 | 12.45 | 54.41 | 6.51 | 3.47 | -149 | 0.9 | 8.55 | 13.74 |
| 1425 | 5-Dec-08 | 12.52 | 54.536 | 6.5 | 3.48 | -157 | 0.7 | 12.55 | -- |
| 1430 | 5-Dec-08 | 12.51 | 54.518 | 6.5 | 3.46 | -159 | 0.67 | 15.32 | -- |
| 1435 | 5-Dec-08 | 12.46 | 54.428 | 6.5 | 3.47 | -160 | 0.65 | 15.61 | -- |

**Location: I-4**

| Time | Date | Temp-C | Temp-F | pH | SpC-mS/cm | ORP-mV | DO-mg/L | Turbidity-NTU | Depth to Water-feet |
|---|---|---|---|---|---|---|---|---|---|
| 1505 | 5-Dec-08 | 13.2 | 55.76 | 7 | 2.61 | -112 | 1.29 | 45.2 | 3.49 |
| 1510 | 5-Dec-08 | 11.85 | 53.33 | 7.03 | 2.56 | -157 | 0.36 | 161 | 3.47 |
| 1515 | 5-Dec-08 | 11.25 | 52.25 | 7.03 | 2.44 | -168 | 0.27 | 226.0 | 3.48 |
| 1520 | 5-Dec-08 | 10.9 | 51.62 | 7.04 | 2.33 | -178 | 0.2 | 235.0 | 3.49 |
| 1525 | 5-Dec-08 | 10.95 | 51.71 | 7.05 | 2.27 | -183 | 0.17 | 286 | -- |
| 1530 | 5-Dec-08 | 10.97 | 51.746 | 7.05 | 2.23 | -188 | 0.16 | 209 | -- |
| 1535 | 5-Dec-08 | 11.06 | 51.908 | 7.06 | 2.19 | -192 | 0.14 | 252.0 | -- |
| 1540 | 5-Dec-08 | 11.03 | 51.854 | 7.07 | 2.19 | -198 | 0.12 | 293.0 | -- |
| 1545 | 5-Dec-08 | 11.04 | 51.872 | 7.07 | 2.2 | -201 | 0.12 | 279 | -- |
| 1550 | 5-Dec-08 | 11.01 | 51.818 | 7.07 | 2.2 | -202 | 0.11 | 277 | -- |

**Location: MW-13**

| Time | Date | Temp-C | Temp-F | pH | SpC-mS/cm | ORP-mV | DO-mg/L | Turbidity-NTU | Depth to Water-feet |
|---|---|---|---|---|---|---|---|---|---|
| 0905 | 3-Dec-08 | 8.38 | 47.084 | 6.42 | 0.496 | 69 | 2.29 | 15.86 | 22.91 |
| 0910 | 3-Dec-08 | 8.45 | 47.21 | 6.5 | 0.521 | 50 | 2.07 | 7.55 | 23.03 |
| 0915 | 3-Dec-08 | 9.27 | 48.686 | 6.58 | 0.529 | 40 | 2 | 6.98 | 23.29 |
| 0920 | 3-Dec-08 | 9.21 | 48.578 | 6.61 | 0.535 | 35 | 1.97 | 6.56 | 23.53 |
| 0925 | 3-Dec-08 | 9.07 | 48.326 | 6.62 | 0.534 | 33 | 2.01 | 6.18 | 23.70 |

**TABLE 3**
**GROUNDWATER ANALYTICAL RESULTS SUMMARY (12/08)**
**APPENDIX I - VOLATILE ORGANIC COMPOUNDS**
**PHASE I - WHITE STREET LANDFILL**
**GREENSBORO, NORTH CAROLINA**
**S&ME PROJECT NO. 1584-98-081**

| Compound | Sample Locations | | | | | NC SWSL | NCAC 2L stds. |
|---|---|---|---|---|---|---|---|
| | I-1 | I-2 | I-3 | I-4 | MW-13 | | |
| Vinyl Chloride | ND | ND | **0.67 J** | ND | ND | 1 | 0.015 |
| Acetone | **7.1 J** | **6.4 J** | **5.6 J** | **6.1 J** | ND | 100 | 700 |
| Benzene | **1.1** | ND | **0.51 J** | ND | ND | 1 | 1 |
| 1,1-Dichloroethane | **1.6 J** | ND | **3.2 J** | ND | ND | 5 | 70 |
| 1,1-Dichloroethene | ND | ND | **0.56 J** | ND | ND | 5 | 7 |
| cis 1,2-dichloroethene | **1.6 J** | ND | **1.3 J** | ND | ND | 5 | 70 |
| Chlorobenzene | **1.8 J** | **1.8 J** | **12** | **5.6** | ND | 3 | 50 |
| 1,4-Dichlorobenzene | **3.5** | **1.8** | **4** | **3.5** | ND | 1 | 1.4 |
| 1,2-Dichlorobenzene | ND | ND | **0.75 J** | ND | ND | 5 | 24 |
| Methylene chloride | **0.63 J** | ND | ND | ND | ND | 1 | 4.6 |

***reported concentrations =*** ***micrograms per liter (ug/L)***
***NC SWSL =*** ***North Carolina Solid Waste Section Limit***
***ND =*** ***Analyte not detected***
***NCAC 2L stds. =*** ***15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater***
***J =*** ***Parameters are estimated values between the detection limit and the NC SWSL.***
***Yellow highlights indicate a measurement higher than the NC SWSL***
***Orange highlights indicate a measurement higher than 2L standards.***

# TABLE 4
# GROUNDWATER ANALYTICAL RESULTS SUMMARY (12/08)
# 8-RCRA METALS
# PHASE I - WHITE STREET LANDFILL
# GREENSBORO, NORTH CAROLINA
# S&ME PROJECT NO. 1584-98-081

| Constituent | Sample Locations | | | | | NC SWSL | NCAC 2L stds. | NCGWP stds. |
|---|---|---|---|---|---|---|---|---|
| | I-1 | I-2 | I-3 | I-4 | MW-13 | | | |
| Barium | 162 | 375 | 180 | 812 | 127 | 100 | 2000 | |
| Chromium | ND | ND | ND | 86.1 | ND | 10 | 50 | |
| Lead | ND | 2.9 J | ND | 17.8 | ND | 10 | 15 | |
| Silver | ND | ND | 2.7 J | ND | ND | 10 | 17.5 | |
| Vanadium | ND | ND | ND | ND | 2.3 J | 25 | ns | 3.5 |
| Zinc | ND | ND | ND | ND | 7.8 J | 10 | 1050 | |

*all concentrations reported in micrograms per liter (ug/L)*

*ND =* *Analyte not detected*

*NA =* *Constituent not analyzed for (not on 8-RCRA metal list)*

*NC SWSL =* *North Carolina Solid Waste Section Limit*

*NCAC 2L stds. =* *15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater*

*ns =* *no standard listed according to NCAC 2L*

*J =* *Parameters are estimated values between the detection limit and the NC SWSL.*

*Yellow highlights indicate a measurement higher than the NC SWSL.*

*Orange highlights indicate a measurement higher than 2L standards.*

*Blue highlights indicate a measurement higher than the North Caolina Groundwater Protection Standard*

# TABLE 5
# SURFACE WATER ANALYTICAL RESULTS SUMMARY (12/08)
# APPENDIX I - VOLATILE ORGANIC COMPOUNDS
# PHASE I - WHITE STREET LANDFILL
# GREENSBORO, NORTH CAROLINA
# S&ME PROJECT NO. 1584-98-081

| Compound | Sample Locations | | | | 15A NCAC 2B Standards* | NC SWSL |
|---|---|---|---|---|---|---|
| | SW-2 | SW-3 | SW-4 | SW-5 | | |
| Acetone | 7.9 J | 9.1 J | 7.6 J | 7.8 J | ns | 100 |
| Chloroform | ND | 0.58 J | ND | ND | ns | 5 |

*NC SWSL = North Carolina Solid Waste Section Limit*
*ND = Parameter not detected*
** = Title 15A NCAC 2B Standards for Class B, C surface water*
*J = Parameters are estimated values between the detection limit and the NC SWSL.*
*ns = Title 15A NCAC 2B provides no established standard for these constituents*
*Yellow highlights indicate a measurement higher than the NC SWSL.*
*Orange highlights indicate a measurement higher than 2B standards.*

# TABLE 6
# SURFACE WATER ANALYTICAL RESULTS SUMMARY (12/08)
# APPENDIX I - METALS
# PHASE I - WHITE STREET LANDFILL
# GREENSBORO, NORTH CAROLINA
# S&ME PROJECT NO. 1584-98-081

| Compound | Sample Locations | | | | 15A NCAC 2B | NC SWSL |
|---|---|---|---|---|---|---|
| | SW-2 | SW-3 | SW-4 | SW-5 | Standards* | (µg/l) |
| Barium | 35.9 J | 21.8 J | 27.0 J | 27.0 J | ns | 100 |
| Chromium | ND | 2.3 J | ND | 1.4 J | 50 | 10 |
| Cobalt | 1.1 J | ND | ND | 2.9 J | ns | 10 |
| Copper | 20.5 | 4.6 J | 4.3 J | 6.4 J | 7 | 10 |
| Nickel | ND | 4.3 J | 3.8 J | 3.2 J | 88 | 50 |
| Silver | ND | ND | ND | 2.8 J | 0.06 | 10 |
| Vanadium | ND | ND | ND | 2.5 J | ns | 25 |
| Zinc | 22.4 | 47.9 | 35.3 | 34.6 | 50 | 10 |

*NC SWSL = North Carolina Solid Waste Section Limit*
*ND = Parameter not detected*
** = Title 15A NCAC 2B Standards for Class B, C surface water*
*J = Parameters are estimated values between the detection limit and the NC SWSL.*
*ns = Title 15A NCAC 2B provides no established standard for these constituents*
*Yellow highlights indicate a measurement higher than the NC SWSL.*
*Orange highlights indicate a measurement higher than 2B standards.*

# FIGURES

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**TABLE 1**
**GROUNDWATER ELEVATION DATA SUMMARY (12/08)**
**PHASE I - WHITE STREET LANDFILL**
**GREENSBORO, NORTH CAROLINA**
**S&ME PROJECT NO. 1584-98-081**

| Well No. | Elevation TOC (feet) | Depth of Well (feet) | Static Water Levels | | | |
|---|---|---|---|---|---|---|
| | | | May 2008 | | December 2008 | |
| | | | DTGW (feet) | Elevation (feet) | DTGW (feet) | Elevation (feet) |
| I-1 | 776.11 | 23.36 | 6.61 | 769.50 | 9.53 | 766.58 |
| I-2 | 768.58 | 23.13 | 4.60 | 763.98 | 5.01 | 763.57 |
| I-3 | 764.65 | 24.22 | 11.63 | 753.02 | 13.61 | 751.04 |
| I-4 | 759.83 | 14.57 | 2.20 | 757.63 | 2.58 | 757.25 |
| MW-13 | 741.30 | 33.78 | 18.28 | 723.02 | 22.11 | 719.19 |

*TOC = Top of Casing. Elevations determined by survey: HDR Engineering, Inc.*
*Depth of well data as reported by BPA Environmental & Engineering, Inc.*
*DTGW = Depth to Groundwater*
*Elevation = calculated groundwater elevation*

LEGEND:
- (2) SURFACE WATER SAMPLING POINT
- MONITORING WELL LOCATION
- (723.02) GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER CONTOUR LINE

(1) AT US 29 BRIDGE (APPROXIMATELY 1 MILE WEST)
BELOW NORTH BUFFALO CREEK WASTE WATER DISCHARGE (APPROXIMATELY 1000' WEST)
(2) WHITE STREET
(3)
(4) AT USGS GAGING STATION BRIDGE ON RANKIN MILL ROAD (APPROXIMATELY 800' EAST)
(5)
NORTH BUFFALO CREEK
I-1 (766.58)
I-2 (763.57)
I-3 (751.04)
I-4 (757.25)
I-5
MW-13 (719.19)
MW-14
II-1
II-2
II-3
II-4
II-5
II-6
II-7
II-8
II-9
II-10
II-11
II-12
YARD WASTE AND COMPOSTING AREA

# GROUNDWATER FLOW MAP
# PHASE I
## WHITE STREET LANDFILL
## GREENSBORO, NORTH CAROLINA

SCALE: AS SHOWN
JOB NO: 1584-98-081
DRAWN BY: RDM
CHECKED BY: LSE
DATE: JANUARY 2009
FIGURE NO. 1

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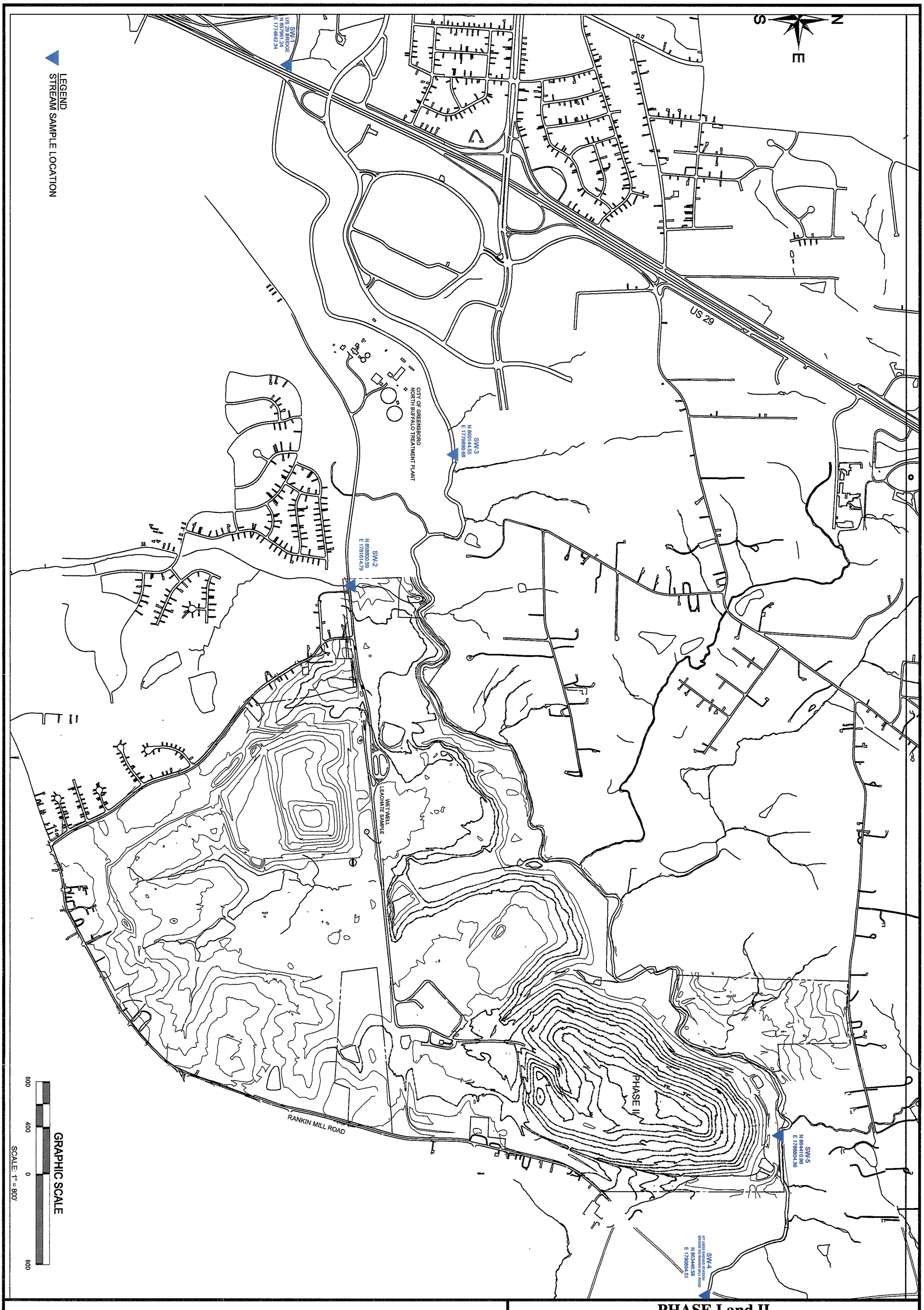


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# PHASE I and II
# SURFACE WATER SAMPLING LOCATIONS
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA

| SCALE: | DRAWN BY: | CHECKED BY: |
|---|---|---|
| AS SHOWN | DSB/RDM | LE |
| JOB NO. | DATE: | FIGURE NO. |
| 1584-98-081 | DECEMBER 2007 | 2 |

# APPENDIX I

## Groundwater Sampling Field Data Sheets

# GROUNDWATER SAMPLING FIELD DATA

Location: White Street Landfill
Purge Date: 12/5/08
Project No.: 1584-98-081
Purge Time:
Source Well: I-1
Sample Date: 12/5/08
Locked? (Yes) No
Sample Time: 1230
(PVC) Steel Stainless
Weather: CLEAR / SUNNY
Sampled By: GWS
Air Temp: 45°

## Water Level and Well Data

Depth to water from measuring point: 9.53 feet
Depth to well bottom from measuring point: feet
Height of water column: feet
Measuring Point: TOC

## Well Purging and Sample Collection

Purge Method: PUMP
Sample Method: PUMP

**Sample Collection Time**
Start: 1225 Stop: 1230

**Purge Time**
Purge Rate: 100 mliter/min
Start: 1140 Stop: 1225
control settings: 3 on 27 off @ 24 PSI cycles:
changes? duration:

Volume of Water in well
2" well (volume = 0.163 x h)
4" well (volume = 0.651 x h)

Volume of water removed: 5.5 gallon (liters)

Was well purged dry: Yes (No)

## Field Analyses

* *Stabilization Parameters*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | 1145 | 1150 | 1155 | 1200 | 1205 | 1210 | 1215 | 1220 | 1225 |
| Temp | 12.36 | 12.11 | 11.89 | 11.67 | 11.64 | 11.68 | 11.70 | 11.67 | 11.64 |
| pH | 6.01 | 5.99 | 5.90 | 5.81 | 5.80 | 5.80 | 5.79 | 5.80 | 5.80 |
| Conductivity | 2.84 | 2.80 | 2.65 | 2.53 | 2.51 | 2.50 | 2.50 | 2.50 | 2.49 |
| ORP* | 44 | 40 | 27 | -6 | -25 | -43 | -52 | -57 | -59 |
| D.O.* | 2.06 | 2.07 | 1.88 | 1.20 | .97 | .81 | .76 | .71 | .70 |
| Turbidity* | 5.36 | 3.13 | 4.18 | 5.62 | 3.14 | 5.40 | 4.52 | 4.58 | 4.57 |
| Water Level | 9.64 | 9.68 | 9.71 | 9.65 | 9.59 | 9.61 | 9.58 | 9.57 | |

# GROUNDWATER SAMPLING FIELD DATA

Location: White Street Landfill | Purge Date: 12/5/08

Project No.: 1584-98-081 | Purge Time:

Source Well: I-2 | Sample Date: 12/5/08

Locked? (Yes) No | Sample Time:

(PVC) Steel Stainless | Weather: SUNNY / CLEAR

Sampled By: GWS | Air Temp: 45°

## Water Level and Well Data

Depth to water from measuring point: 5.01 feet

Depth to well bottom from measuring point: feet

Height of water column: feet

Measuring Point: TOC

## Well Purging and Sample Collection

Purge Method: PUMP

Sample Method: PUMP

**Sample Collection Time** — Start: 1335 Stop: 1340

**Purge Time** — Start: 1250 Stop: 1335

Purge Rate: 100 milliter/min

control settings: 2.3 ON 27.7 OFF @ 23 PSI

changes?

cycles

duration

Volume of Water in well

2" well (volume = 0.163 x h)

4" well (volume = 0.651 x h)

Volume of water removed: 5.5 gallon (liters)

Was well purged dry: Yes (No)

## Field Analyses

* Stabilization Parameters

* (WATER IS MILKY)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | 1255 | 1300 | 1305 | 1310 | 1315 | 1320 | 1325 | 1330 | 1335 |
| Temp | 12.81 | 12.68 | 12.70 | 12.46 | 12.12 | 12.12 | 12.02 | 11.98 | 12.02 |
| pH | 6.52 | 6.53 | 6.54 | 6.57 | 6.57 | 6.61 | 6.62 | 6.63 | 6.63 |
| Conductivity | 2.24 | 1.83 | 1.74 | 1.64 | 1.65 | 1.53 | 1.47 | 1.42 | 1.41 |
| ORP* | -124 | -141 | -139 | -129 | -129 | -151 | -154 | -158 | -160 |
| D.O.* | 1.76 | .78 | .71 | .78 | .89 | .75 | .76 | .70 | .69 |
| *Turbidity* | 108 | 129 | 135 | 141 | 219 | 243 | 180 | 170 | 164 |
| Water Level | 5.79 | 5.89 | 6.08 | 6.01 | 5.98 | 6.00 | 5.97 | 5.95 | |



NOTE: NEED TO RAISE WELL CASING & COVER

# GROUNDWATER SAMPLING FIELD DATA

Location: White Street Landfill | Purge Date: 12/5/08

Project No.: 1584-98-081 | Purge Time:

Source Well: I-3 | Sample Date: 12/5/08

Locked? (Yes) No | Sample Time: 1440

(PVC) Steel Stainless | Weather: SUNNY/CLEAR

Sampled By: GWS | Air Temp: 48°

## Water Level and Well Data

Depth to water from measuring point: 13.61 feet

Depth to well bottom from measuring point: feet

Height of water column: feet

Measuring Point: TOC

## Well Purging and Sample Collection

Purge Method: PUMP

Sample Method: PUMP

**Sample Collection Time**: Start 1435 Stop 1440

**Purge Time**: Start 1355 Stop 1435

Purge Rate: 100 mliter/min

control settings: 2.5 on 27.5 off @ 18 PSI

changes?

cycles

duration

Volume of Water in well

2" well (volume = 0.163 x h)

4" well (volume = 0.651 x h)

Volume of water removed: 5 gallon (liters)

Was well purged dry: Yes (No)

## Field Analyses

* *Stabilization Parameters*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Time | 1400 | 1405 | 1410 | 1415 | 1420 | 1425 | 1430 | 1435 |
| Temp | 13.12 | 12.68 | 12.47 | 12.50 | 12.45 | 12.52 | 12.51 | 12.46 |
| pH | 6.56 | 6.55 | 6.51 | 6.51 | 6.51 | 6.50 | 6.50 | 6.50 |
| Conductivity | 3.25 | 3.35 | 3.42 | 3.45 | 3.47 | 3.48 | 3.46 | 3.47 |
| ORP* | -98 | -117 | -134 | -142 | -149 | -157 | -159 | -160 |
| D.O.* | 1.91 | 1.66 | 1.25 | 1.07 | .90 | .70 | .67 | .65 |
| Turbidity* | 11.04 | 14.02 | 8.42 | 7.11 | 8.55 | 12.55 | 15.32 | 15.61 |
| Water Level | 13.82 | 13.79 | 13.79 | 13.75 | 13.74 | — | — | — |

# GROUNDWATER SAMPLING FIELD DATA

Location: White Street Landfill | Purge Date: 12/5/08

Project No.: 1584-98-081 | Purge Time:

Source Well: I-4 | Sample Date: 12/5/08

Locked? (Yes) No | Sample Time: 1555

(PVC) Steel Stainless | Weather: SUNNY/CLEAR

Sampled By: [redacted] GWS | Air Temp: 48°

## Water Level and Well Data

Depth to water from measuring point: 2.58 feet

Depth to well bottom from measuring point: feet

Height of water column: feet

Measuring Point: TOC

## Well Purging and Sample Collection

Purge Method: Pump

Sample Method: Pump

**Sample Collection Time** — Start: 1540 Stop: 1555

**Purge Time** — Start: 1500 Stop: 1550

Purge Rate: 100 ml liter/min

control settings: 2 on 28 off @ 13 PSI

changes?

cycles

duration

Volume of Water in well

2" well (volume = 0.163 x h)

4" well (volume = 0.651 x h)

Volume of water removed: 6 gallon (liters)

Was well purged dry: Yes (No)

## Field Analyses

NOTE: WELL CASING & COVER HAVE BEEN UNDER WATER (VERY MUDDY

* *Stabilization Parameters*

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Time | 1505 | 1510 | 1515 | 1520 | 1525 | 1530 | 1535 | 1540 | 1545 | 1550 |
| Temp | 13.20 | 11.85 | 11.25 | 10.90 | 10.95 | 10.87 | 11.06 | 11.03 | 11.04 | 11.01 |
| pH | 7.00 | 7.03 | 7.03 | 7.04 | 7.05 | 7.05 | 7.06 | 7.07 | 7.07 | 7.07 |
| Conductivity | 2.61 | 2.56 | 2.44 | 2.33 | 2.27 | 2.23 | 2.19 | 2.19 | 2.20 | 2.20 |
| ORP* | -112 | -157 | -168 | -178 | -183 | -188 | -192 | -198 | -201 | -202 |
| D.O.* | 1.29 | .36 | .27 | .20 | .17 | .16 | .14 | .12 | .12 | .11 |
| Turbidity* | 45.2 | 161 | 226 | 235 | 286 | 209 | 252 | 293 | 279 | 277 |
| Water Level | 3.49 | 3.47 | 3.48 | 3.49 | | | | | | |

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# SURFACE WATER SAMPLING FIELD DATA

SITE NAME: White Street Landfill  Date: 12/4/08

S&ME PROJECT NO. 1584-98-081  Time : 1225

SAMPLE LOCATION: SW-1  Weather: SUNNY/CLEAR

SAMPLED BY: GNS

## ***FIELD ANALYSES***

Temperature 7.0°C

Specific Conductance 25.5 m S/m

pH 7.83

Physical Appearance and Odor CLEAR/NONE

**Comments/Observations:**

Samplers Initials: [illegible]

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# SURFACE WATER SAMPLING FIELD DATA

SITE NAME: White Street Landfill  Date: 12/4/08

S&ME PROJECT NO. 1584-98-081  Time : 1135

SAMPLE LOCATION: SW-2  Weather: SUNNY/CLEAR

SAMPLED BY: _____

## *FIELD ANALYSES*

Temperature 7.0°c

Specific Conductance 31.6 mS/m

pH 7.82

Physical Appearance and Odor CLEAR/ NONE

**Comments/Observations:**

Samplers Initials: AP

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# SURFACE WATER SAMPLING FIELD DATA

SITE NAME: White Street Landfill  Date: 12/4/08

S&ME PROJECT NO. 1584-98-081  Time : 1200

SAMPLE LOCATION: SW-3  Weather: SUNNY / CLEAR

SAMPLED BY: GWS

## *FIELD ANALYSES*

Temperature 11.3°C

Specific Conductance 32.6 m S/m

pH 7.56

Physical Appearance and Odor

**Comments/Observations:**

Samplers Initials: [signature]

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# SURFACE WATER SAMPLING FIELD DATA

SITE NAME: White Street Landfill  Date: 12/4/08

S&ME PROJECT NO. 1584-98-081  Time : 1355

SAMPLE LOCATION: SW-4  Weather: P/cloudy

SAMPLED BY: GWS

## ***FIELD ANALYSES***

Temperature 9.5°C

Specific Conductance 31.1 mS/m

pH 7.85

Physical Appearance and Odor CLEAR/NONE

**Comments/Observations:**

Samplers Initials: AS

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# SURFACE WATER SAMPLING FIELD DATA

SITE NAME: White Street Landfill  Date: 12/4/08

S&ME PROJECT NO. 1584-98-081  Time : 1100

SAMPLE LOCATION: SW-5  Weather: SUNNY / CLEAR

SAMPLED BY: GWS

## *FIELD ANALYSES*

Temperature 8.8°C

Specific Conductance 29.1 m S/m

pH 7.98

Physical Appearance and Odor CLEAR / NONE

**Comments/Observations:**

Samplers Initials: GS

# GROUNDWATER SAMPLING FIELD DATA

Location: White Street Landfill | Purge Date: 12/3/08

Project No.: 1584-98-081 | Purge Time:

Source Well: MW-13 | Sample Date: 12/3/08

Locked? (Yes) No | Sample Time: 1025

(PVC) Steel Stainless | Weather: CLEAR/COLD

Sampled By: GWS | Air Temp: 30°

## Water Level and Well Data

Depth to water from measuring point: 22.11 feet

Depth to well bottom from measuring point: feet

Height of water column: feet

Measuring Point: TOC

## Well Purging and Sample Collection

Purge Method: Pump

Sample Method: PUMP

**Sample Collection Time** — Start: 0925 Stop: 1025

**Purge Time** — Start: 0900 Stop: 0925

Purge Rate: 100 mliter/min

control settings: 3.5 on 26.5 off @ 17% cycles:

changes? duration:

Volume of Water in well

2" well (volume = 0.163 x h):

4" well (volume = 0.651 x h):

Volume of water removed: 8 gallon (liters)

Was well purged dry: Yes (No)

## Field Analyses

* *Stabilization Parameters*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Time | 0905 | 0910 | 0915 | 0920 | 0925 | | | |
| Temp | 8.38 | 8.45 | 9.27 | 9.21 | 9.07 | | | |
| pH | 6.42 | 6.50 | 6.58 | 6.61 | 6.62 | | | |
| Conductivity | .496 | .521 | .529 | .535 | .534 | | | |
| ORP* | 69 | 50 | 40 | 35 | 33 | | | |
| D.O.* | 2.29 | 2.07 | 2.00 | 1.97 | 2.01 | | | |
| Turbidity* | 15.86 | 7.55 | 6.98 | 6.56 | 6.18 | | | |
| Water Level | 22.91 | 23.03 | 23.29 | 23.53 | 23.70 | | | |

# APPENDIX II

## Laboratory Analytical Reports

**Environmental Conservation Laboratories, Inc.**
**102-A Woodwinds Industrial Court**
**Cary NC, 27511**
**Phone: 919.467.3090 FAX: 919.467.3515**

**www.encolabs.com**

Thursday, December 18, 2008

S&ME, Inc. (SM004)

Attn: Edmund Henriques

3718 Old Battleground Rd.

Greensboro, NC 27410

**RE: Laboratory Results for**
**Project Number: [none], Project Name/Desc: White Street Landfill AppI Monitoring Wells**
**ENCO Workorder: C811840**

Dear Edmund Henriques,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Saturday, December 6, 2008.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 74.

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**PROJECT NARRATIVE**

Date: December 18, 2008

Client: S&ME, Inc.

Project #: White Street Landfill App I Monitoring Wells

Lab ID: C11840

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by Environmental Conservation Laboratories, Inc. will be discussed in the QC Remarks section below.

Quality Control Samples

VGCMS Acetone was found in samples 4112 MW-21, MW-22, MW-23, MW-24, SW-1, SW-2, SW-3, SW-4 and SW-5. Although the analyte was not detected in the method blank, Acetone has been found to be a common laboratory contaminant.

Other Comments

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative. Should there be any questions regarding this package, please feel free to contact the undersigned for additional information.

Released By:
Environmental Conservation Laboratories, Inc.

Chuck Smith
Project Manager

## SAMPLE SUMMARY/LABORATORY CHRONICLE

| Client ID: | 4112 MW-15 | Lab ID: C811840-01 | Sampled: 12/03/08 16:00 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/01/09 | 12/08/08 | 09:59 | 12/11/2008 14:08 |
| EPA 6020 | 06/01/09 | 12/08/08 | 13:33 | 12/12/2008 10:29 |
| EPA 8260B | 12/17/08 | 12/09/08 | 09:20 | 12/9/2008 20:40 |

| Client ID: | 4112 MW-16 | Lab ID: C811840-02 | Sampled: 12/03/08 15:05 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/01/09 | 12/08/08 | 10:03 | 12/16/2008 14:47 |
| EPA 6020 | 06/01/09 | 12/08/08 | 13:33 | 12/12/2008 10:32 |
| EPA 8260B | 12/17/08 | 12/09/08 | 09:20 | 12/9/2008 21:09 |

| Client ID: | 4112 MW-17 | Lab ID: C811840-03 | Sampled: 12/05/08 09:15 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 15:23 |
| EPA 6020 | 06/03/09 | 12/08/08 | 13:33 | 12/12/2008 10:36 |
| EPA 8260B | 12/19/08 | 12/09/08 | 09:20 | 12/9/2008 21:38 |

| Client ID: | 4112 MW-18 | Lab ID: C811840-04 | Sampled: 12/03/08 11:40 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/01/09 | 12/08/08 | 10:03 | 12/16/2008 15:31 |
| EPA 6020 | 06/01/09 | 12/08/08 | 13:33 | 12/12/2008 10:46 |
| EPA 8260B | 12/17/08 | 12/09/08 | 09:20 | 12/9/2008 22:08 |

| Client ID: | 4112 MW-19 | Lab ID: C811840-05 | Sampled: 12/03/08 17:00 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/01/09 | 12/08/08 | 10:03 | 12/16/2008 15:38 |
| EPA 6020 | 06/01/09 | 12/08/08 | 13:33 | 12/12/2008 10:50 |
| EPA 8260B | 12/17/08 | 12/09/08 | 09:20 | 12/9/2008 22:37 |

| Client ID: | 4112 MW-20 | Lab ID: C811840-06 | Sampled: 12/04/08 15:35 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/02/09 | 12/08/08 | 10:03 | 12/16/2008 15:45 |
| EPA 6020 | 06/02/09 | 12/08/08 | 13:33 | 12/12/2008 10:53 |
| EPA 8260B | 12/18/08 | 12/09/08 | 14:04 | 12/10/2008 04:26 |

| Client ID: | 4112 MW-21 | Lab ID: C811840-07 | Sampled: 12/05/08 09:05 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 15:52 |
| EPA 6020 | 06/03/09 | 12/08/08 | 13:33 | 12/12/2008 10:57 |
| EPA 8260B | 12/19/08 | 12/09/08 | 14:04 | 12/10/2008 04:55 |

| Client ID: | 4112 MW-22 | Lab ID: C811840-08 | Sampled: 12/05/08 09:15 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 16:22 |
| EPA 6020 | 06/03/09 | 12/08/08 | 13:33 | 12/12/2008 11:00 |
| EPA 8260B | 12/19/08 | 12/09/08 | 14:04 | 12/10/2008 05:25 |

| Client ID: | 4112 MW-23 | Lab ID: C811840-09 | Sampled: 12/05/08 09:25 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 16:30 |
| EPA 6020 | 06/03/09 | 12/08/08 | 13:33 | 12/12/2008 11:04 |
| EPA 8260B | 12/19/08 | 12/09/08 | 14:04 | 12/10/2008 05:54 |

| Client ID: | 4112 MW-24 | Lab ID: C811840-10 | Sampled: 12/05/08 09:35 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 16:37 |
| EPA 6020 | 06/03/09 | 12/08/08 | 13:33 | 12/12/2008 11:07 |
| EPA 8260B | 12/19/08 | 12/09/08 | 14:04 | 12/10/2008 06:23 |

| Client ID: | 4112 MW-25B | Lab ID: C811840-11 | Sampled: 12/05/08 08:10 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 16:44 |
| EPA 6020 | 06/03/09 | 12/08/08 | 13:33 | 12/12/2008 11:11 |
| EPA 8260B | 12/19/08 | 12/09/08 | 14:04 | 12/10/2008 06:52 |

| Client ID: | 4112 SW-1 | Lab ID: C811840-12 | Sampled: 12/04/08 12:25 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/02/09 | 12/08/08 | 10:03 | 12/16/2008 16:51 |
| EPA 6020 | 06/02/09 | 12/08/08 | 13:33 | 12/12/2008 11:14 |
| EPA 8260B | 12/18/08 | 12/09/08 | 14:04 | 12/10/2008 07:21 |

| Client ID: | 4112 SW-2 | Lab ID: C811840-13 | Sampled: 12/04/08 11:35 | Received: 12/06/08 10:00 |
|---|---|---|---|---|
| **Parameter** | **Hold Date/Time(s)** | **Prep Date/Time(s)** | | **Analysis Date/Time(s)** |
| EPA 6010B | 06/02/09 | 12/08/08 | 10:03 | 12/16/2008 16:59 |
| EPA 6020 | 06/02/09 | 12/08/08 | 13:37 | 12/12/2008 11:56 |
| EPA 8260B | 12/18/08 | 12/09/08 | 14:04 | 12/10/2008 07:50 |

| Client ID: | 4112 SW-3 | Lab ID: | C811840-14 | Sampled: | 12/04/08 12:00 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 06/02/09 | 12/08/08 10:03 | 12/16/2008 17:06 |
| EPA 6020 | 06/02/09 | 12/08/08 13:37 | 12/12/2008 12:26 |
| EPA 8260B | 12/18/08 | 12/09/08 14:04 | 12/10/2008 08:19 |

| Client ID: | 4103 SW-4 | Lab ID: | C811840-15 | Sampled: | 12/04/08 13:55 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 06/02/09 | 12/08/08 10:03 | 12/16/2008 17:13 |
| EPA 6020 | 06/02/09 | 12/08/08 13:37 | 12/12/2008 12:30 |
| EPA 8260B | 12/18/08 | 12/09/08 14:04 | 12/10/2008 08:48 |

| Client ID: | 4103 SW-5 | Lab ID: | C811840-16 | Sampled: | 12/04/08 11:00 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 06/02/09 | 12/08/08 10:03 | 12/16/2008 17:20 |
| EPA 6020 | 06/02/09 | 12/08/08 13:37 | 12/12/2008 12:33 |
| EPA 8260B | 12/18/08 | 12/09/08 14:04 | 12/10/2008 09:17 |

| Client ID: | 4112 DUPLICATE-III | Lab ID: | C811840-17 | Sampled: | 12/04/08 07:00 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 06/02/09 | 12/08/08 10:03 | 12/16/2008 17:27 |
| EPA 6020 | 06/02/09 | 12/08/08 13:37 | 12/12/2008 12:37 |
| EPA 8260B | 12/18/08 | 12/09/08 14:04 | 12/10/2008 09:46 |

| Client ID: | 4112 Trip Blank#3 | Lab ID: | C811840-18 | Sampled: | 12/04/08 07:00 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 8260B | 12/18/08 | 12/09/08 14:04 | 12/10/2008 10:16 |

## NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

**Client ID:** 4112 MW-15 **Lab ID:** C811840-01

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Barium | 28.6 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |

**Client ID:** 4112 MW-16 **Lab ID:** C811840-02

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Barium | 163 | | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chromium | 1.7 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Cobalt | 1.6 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 7.80 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 6.9 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Zinc | 13.8 | | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

**Client ID:** 4112 MW-17 **Lab ID:** C811840-03

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Barium | 49.3 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chromium | 2.0 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 2.3 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Vanadium | 2.6 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |

**Client ID:** 4112 MW-18 **Lab ID:** C811840-04

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Barium | 28.1 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Cobalt | 9.1 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 3.1 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |

**Client ID:** 4112 MW-19 **Lab ID:** C811840-05

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Barium | 31.0 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chromium | 1.2 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Cobalt | 1.2 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 2.80 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 3.0 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Silver | 2.1 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 3.6 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |
| Zinc | 7.5 | J | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

**Client ID:** 4112 MW-20 **Lab ID:** C811840-06

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Barium | 63.6 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Cobalt | 3.0 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 3.60 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 5.4 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Silver | 2.9 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 6.0 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |

**Client ID:** 4112 MW-21 **Lab ID:** C811840-07

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 8.6 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Arsenic | 3.6 | J | 1 | 2.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4112 MW-21 | | | | Lab ID: | C811840-07 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Barium | 30.1 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chromium | 3.2 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Cobalt | 2.2 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 2.30 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 3.1 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Silver | 2.2 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 2.3 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |
| Zinc | 5.2 | J | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4112 MW-22 | | | | Lab ID: | C811840-08 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 9.6 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 78.5 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Cobalt | 1.4 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 2.4 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Silver | 2.0 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Zinc | 3.9 | J | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4112 MW-23 | | | | Lab ID: | C811840-09 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 11 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 61.4 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Nickel | 1.8 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |

| Client ID: | 4112 MW-24 | | | | Lab ID: | C811840-10 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 7.7 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 444 | | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Cobalt | 4.3 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 9.20 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 3.7 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Silver | 3.8 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 2.0 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |
| Zinc | 9.0 | J | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4112 MW-25B | | | | Lab ID: | C811840-11 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Barium | 12.4 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chromium | 3.0 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 3.7 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |

| Client ID: | 4112 SW-1 | | | | Lab ID: | C811840-12 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 9.4 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Arsenic | 3.3 | J | 1 | 2.8 | 10.0 | 10 | ug/L | EPA 6010B | |
| Barium | 40.6 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chromium | 3.1 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Cobalt | 1.1 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 3.60 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 2.3 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Zinc | 15.1 | | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4112 SW-2 | | | | Lab ID: | C811840-13 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 7.9 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 35.9 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Cobalt | 1.1 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 20.5 | | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Zinc | 22.4 | | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4112 SW-3 | | | | Lab ID: | C811840-14 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 9.1 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 21.8 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chloroform | 0.58 | J | 1 | 0.20 | 1.0 | 5 | ug/L | EPA 8260B | |
| Chromium | 2.3 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 4.60 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 4.3 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Zinc | 47.9 | | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4103 SW-4 | | | | Lab ID: | C811840-15 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 7.6 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 27.0 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Copper | 4.30 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 3.8 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Zinc | 35.3 | | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4103 SW-5 | | | | Lab ID: | C811840-16 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Acetone | 7.8 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 27.0 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chromium | 1.4 | J | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Cobalt | 2.9 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 6.40 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 3.2 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Silver | 2.8 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 2.5 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |
| Zinc | 34.6 | | 1 | 3.8 | 10.0 | 10 | ug/L | EPA 6010B | |

| Client ID: | 4112 DUPLICATE-III | | | | Lab ID: | C811840-17 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | **Results** | **Flag** | **DF** | **MDL** | **MRL** | **NC SWSL** | **Units** | **Method** | **Notes** |
| Antimony | 1.38 | J | 1 | 0.68 | 2.00 | 6 | ug/L | EPA 6020 | |
| Arsenic | 2.8 | J | 1 | 2.8 | 10.0 | 10 | ug/L | EPA 6010B | |
| Barium | 63.2 | J | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Cobalt | 2.3 | J | 1 | 1.1 | 10.0 | 10 | ug/L | EPA 6010B | |
| Copper | 2.50 | J | 1 | 1.60 | 10.0 | 10 | ug/L | EPA 6010B | |
| Nickel | 4.8 | J | 1 | 1.8 | 10.0 | 50 | ug/L | EPA 6010B | |
| Silver | 2.0 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vanadium | 5.5 | J | 1 | 1.4 | 10.0 | 25 | ug/L | EPA 6010B | |

**Description:** 4112 SW-2
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-13
**Sampled:** 12/04/08 11:35
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 1,4-Dichlorobenzene [106-46-7] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/10/08 07:50 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/10/08 07:50 | JKG | |
| **Acetone [67-64-1] ^** | **7.9** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Chlorobenzene [108-90-7] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/10/08 07:50 | JKG | |

**Description:** 4112 SW-2
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-13
**Sampled:** 12/04/08 11:35
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/10/08 07:50 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 07:50 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *50* | *1* | *50.0* | *100 %* | *51-122* | *8L09027* | *EPA 8260B* | *12/10/08 07:50* | *JKG* | |
| *Dibromofluoromethane* | *52* | *1* | *50.0* | *104 %* | *68-117* | *8L09027* | *EPA 8260B* | *12/10/08 07:50* | *JKG* | |
| *Toluene-d8* | *49* | *1* | *50.0* | *99 %* | *69-110* | *8L09027* | *EPA 8260B* | *12/10/08 07:50* | *JKG* | |

**Description:** 4112 SW-2
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-13
**Sampled:** 12/04/08 11:35
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony [7440-36-0] ^ | 0.68 | U | ug/L | 1 | 0.68 | 2.00 | 6 | EPA 6020 | 12/12/08 11:56 | VLO | |
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |
| **Barium [7440-39-3] ^** | **35.9** | J | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Beryllium [7440-41-7] ^ | 0.10 | U | ug/L | 1 | 0.10 | 1.00 | 1 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Chromium [7440-47-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |
| **Cobalt [7440-48-4] ^** | **1.1** | J | ug/L | 1 | 1.1 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |
| **Copper [7440-50-8] ^** | **20.5** | | ug/L | 1 | 1.60 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Lead [7439-92-1] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Nickel [7440-02-0] ^ | 1.8 | U | ug/L | 1 | 1.8 | 10.0 | 50 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Silver [7440-22-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |
| Thallium [7440-28-0] ^ | 0.036 | U | ug/L | 1 | 0.036 | 1.00 | 5.5 | EPA 6020 | 12/12/08 11:56 | VLO | |
| Vanadium [7440-62-2] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10.0 | 25 | EPA 6010B | 12/16/08 16:59 | JDH | |
| **Zinc [7440-66-6] ^** | **22.4** | | ug/L | 1 | 3.8 | 10.0 | 10 | EPA 6010B | 12/16/08 16:59 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** 4112 SW-3
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-14
**Sampled:** 12/04/08 12:00
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 1,4-Dichlorobenzene [106-46-7] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/10/08 08:19 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/10/08 08:19 | JKG | |
| **Acetone [67-64-1] ^** | **9.1** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Chlorobenzene [108-90-7] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/10/08 08:19 | JKG | |
| **Chloroform [67-66-3] ^** | **0.58** | J | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/10/08 08:19 | JKG | |

**Description:** 4112 SW-3
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-14
**Sampled:** 12/04/08 12:00
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/10/08 08:19 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 08:19 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *51* | *1* | *50.0* | *102 %* | *51-122* | *8L09027* | *EPA 8260B* | *12/10/08 08:19* | *JKG* | |
| *Dibromofluoromethane* | *52* | *1* | *50.0* | *104 %* | *68-117* | *8L09027* | *EPA 8260B* | *12/10/08 08:19* | *JKG* | |
| *Toluene-d8* | *49* | *1* | *50.0* | *99 %* | *69-110* | *8L09027* | *EPA 8260B* | *12/10/08 08:19* | *JKG* | |

**Description:** 4112 SW-3
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-14
**Sampled:** 12/04/08 12:00
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony [7440-36-0] ^ | 0.68 | U | ug/L | 1 | 0.68 | 2.00 | 6 | EPA 6020 | 12/12/08 12:26 | VLO | |
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |
| **Barium [7440-39-3] ^** | **21.8** | J | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 17:06 | JDH | |
| Beryllium [7440-41-7] ^ | 0.10 | U | ug/L | 1 | 0.10 | 1.00 | 1 | EPA 6010B | 12/16/08 17:06 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 17:06 | JDH | |
| **Chromium [7440-47-3] ^** | **2.3** | J | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |
| Cobalt [7440-48-4] ^ | 1.1 | U | ug/L | 1 | 1.1 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |
| **Copper [7440-50-8] ^** | **4.60** | J | ug/L | 1 | 1.60 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |
| Lead [7439-92-1] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |
| **Nickel [7440-02-0] ^** | **4.3** | J | ug/L | 1 | 1.8 | 10.0 | 50 | EPA 6010B | 12/16/08 17:06 | JDH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |
| Silver [7440-22-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |
| Thallium [7440-28-0] ^ | 0.036 | U | ug/L | 1 | 0.036 | 1.00 | 5.5 | EPA 6020 | 12/12/08 12:26 | VLO | |
| Vanadium [7440-62-2] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10.0 | 25 | EPA 6010B | 12/16/08 17:06 | JDH | |
| **Zinc [7440-66-6] ^** | **47.9** | | ug/L | 1 | 3.8 | 10.0 | 10 | EPA 6010B | 12/16/08 17:06 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** 4103 SW-4
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-15
**Sampled:** 12/04/08 13:55
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 1,4-Dichlorobenzene [106-46-7] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/10/08 08:48 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/10/08 08:48 | JKG | |
| **Acetone [67-64-1] ^** | **7.6** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Chlorobenzene [108-90-7] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/10/08 08:48 | JKG | |

**Description:** 4103 SW-4
**Matrix:** Ground Water
**Project:** White Street Landfill Appl Monitoring Wells

**Lab Sample ID:** C811840-15
**Sampled:** 12/04/08 13:55
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/10/08 08:48 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 08:48 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *52* | *1* | *50.0* | *104 %* | *51-122* | *8L09027* | *EPA 8260B* | *12/10/08 08:48* | *JKG* | |
| *Dibromofluoromethane* | *53* | *1* | *50.0* | *106 %* | *68-117* | *8L09027* | *EPA 8260B* | *12/10/08 08:48* | *JKG* | |
| *Toluene-d8* | *48* | *1* | *50.0* | *96 %* | *69-110* | *8L09027* | *EPA 8260B* | *12/10/08 08:48* | *JKG* | |

**Description:** 4103 SW-4
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-15
**Sampled:** 12/04/08 13:55
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony [7440-36-0] ^ | 0.68 | U | ug/L | 1 | 0.68 | 2.00 | 6 | EPA 6020 | 12/12/08 12:30 | VLO | |
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |
| **Barium [7440-39-3] ^** | **27.0** | J | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Beryllium [7440-41-7] ^ | 0.10 | U | ug/L | 1 | 0.10 | 1.00 | 1 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Chromium [7440-47-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Cobalt [7440-48-4] ^ | 1.1 | U | ug/L | 1 | 1.1 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |
| **Copper [7440-50-8] ^** | **4.30** | J | ug/L | 1 | 1.60 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Lead [7439-92-1] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |
| **Nickel [7440-02-0] ^** | **3.8** | J | ug/L | 1 | 1.8 | 10.0 | 50 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Silver [7440-22-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |
| Thallium [7440-28-0] ^ | 0.036 | U | ug/L | 1 | 0.036 | 1.00 | 5.5 | EPA 6020 | 12/12/08 12:30 | VLO | |
| Vanadium [7440-62-2] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10.0 | 25 | EPA 6010B | 12/16/08 17:13 | JDH | |
| **Zinc [7440-66-6] ^** | **35.3** | | ug/L | 1 | 3.8 | 10.0 | 10 | EPA 6010B | 12/16/08 17:13 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** 4103 SW-5
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-16
**Sampled:** 12/04/08 11:00
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 1,4-Dichlorobenzene [106-46-7] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/10/08 09:17 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/10/08 09:17 | JKG | |
| **Acetone [67-64-1] ^** | **7.8** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Chlorobenzene [108-90-7] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/10/08 09:17 | JKG | |

**Description:** 4103 SW-5
**Matrix:** Ground Water
**Project:** White Street Landfill Appl Monitoring Wells

**Lab Sample ID:** C811840-16
**Sampled:** 12/04/08 11:00
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/10/08 09:17 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 09:17 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *51* | *1* | *50.0* | *102 %* | *51-122* | *8L09027* | *EPA 8260B* | *12/10/08 09:17* | *JKG* | |
| *Dibromofluoromethane* | *52* | *1* | *50.0* | *104 %* | *68-117* | *8L09027* | *EPA 8260B* | *12/10/08 09:17* | *JKG* | |
| *Toluene-d8* | *49* | *1* | *50.0* | *98 %* | *69-110* | *8L09027* | *EPA 8260B* | *12/10/08 09:17* | *JKG* | |

**Description:** 4103 SW-5
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Monitoring Wells

**Lab Sample ID:** C811840-16
**Sampled:** 12/04/08 11:00
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811840

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony [7440-36-0] ^ | 0.68 | U | ug/L | 1 | 0.68 | 2.00 | 6 | EPA 6020 | 12/12/08 12:33 | VLO | |
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |
| **Barium [7440-39-3] ^** | **27.0** | J | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 17:20 | JDH | |
| Beryllium [7440-41-7] ^ | 0.10 | U | ug/L | 1 | 0.10 | 1.00 | 1 | EPA 6010B | 12/16/08 17:20 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 17:20 | JDH | |
| **Chromium [7440-47-3] ^** | **1.4** | J | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |
| **Cobalt [7440-48-4] ^** | **2.9** | J | ug/L | 1 | 1.1 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |
| **Copper [7440-50-8] ^** | **6.40** | J | ug/L | 1 | 1.60 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |
| Lead [7439-92-1] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |
| **Nickel [7440-02-0] ^** | **3.2** | J | ug/L | 1 | 1.8 | 10.0 | 50 | EPA 6010B | 12/16/08 17:20 | JDH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |
| **Silver [7440-22-4] ^** | **2.8** | J | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |
| Thallium [7440-28-0] ^ | 0.036 | U | ug/L | 1 | 0.036 | 1.00 | 5.5 | EPA 6020 | 12/12/08 12:33 | VLO | |
| **Vanadium [7440-62-2] ^** | **2.5** | J | ug/L | 1 | 1.4 | 10.0 | 25 | EPA 6010B | 12/16/08 17:20 | JDH | |
| **Zinc [7440-66-6] ^** | **34.6** | | ug/L | 1 | 3.8 | 10.0 | 10 | EPA 6010B | 12/16/08 17:20 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L09010 - EPA 5030B_MS*

**Blank (8L09010-BLK1)** Prepared: 12/09/2008 09:16 Analyzed: 12/09/2008 12:51

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.34 | U | 1.0 | ug/L | | | | | | | |
| Vinyl chloride | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 0.49 | U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| Acetone | 1.5 | U | 5.0 | ug/L | | | | | | | |
| Iodomethane | 0.52 | U | 2.0 | ug/L | | | | | | | |
| Carbon disulfide | 0.54 | U | 5.0 | ug/L | | | | | | | |
| Methylene chloride | 0.53 | U | 2.0 | ug/L | | | | | | | |
| Acrylonitrile | 2.1 | U | 5.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 0.34 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 0.98 | U | 2.0 | ug/L | | | | | | | |
| 2-Butanone | 1.0 | U | 5.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| Bromochloromethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chloroform | 0.20 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 0.65 | U | 1.0 | ug/L | | | | | | | |
| Benzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| **Trichloroethene** | **0.55** | **J** | 1.0 | ug/L | | | | | | | QB-01 |
| 1,2-Dichloropropane | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 1.1 | U | 5.0 | ug/L | | | | | | | |
| Toluene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Tetrachloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| 2-Hexanone | 0.69 | U | 5.0 | ug/L | | | | | | | |
| Dibromochloromethane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.40 | U | 1.0 | ug/L | | | | | | | |
| Ethylbenzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Styrene | 0.26 | U | 1.0 | ug/L | | | | | | | |
| Bromoform | 0.71 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 0.54 | U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.48 | U | 1.0 | ug/L | | | | | | | |
| Xylenes (Total) | 0.40 | U | 1.0 | ug/L | | | | | | | |
| *Surrogate: Dibromofluoromethane* | *48* | | | *ug/L* | *50.0* | | *95* | *68-117* | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L09010 - EPA 5030B_MS*

**Blank (8L09010-BLK1) Continued** Prepared: 12/09/2008 09:16 Analyzed: 12/09/2008 12:51

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: Toluene-d8* | *48* | | | *ug/L* | *50.0* | | *96* | *69-110* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *49* | | | *ug/L* | *50.0* | | *98* | *51-122* | | | |

**LCS (8L09010-BS1)** Prepared: 12/09/2008 09:16 Analyzed: 12/09/2008 13:20

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 18 | | 1.0 | ug/L | 20.0 | | 88 | 75-133 | | | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | | 88 | 81-134 | | | |
| Trichloroethene | 19 | B | 1.0 | ug/L | 20.0 | | 95 | 75-115 | | | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | | 92 | 71-118 | | | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | | 99 | 83-117 | | | |

**Matrix Spike (8L09010-MS1)** Prepared: 12/09/2008 09:16 Analyzed: 12/09/2008 13:49

**Source: C813461-06**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.24 U | 91 | 75-133 | | | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | 0.20 U | 89 | 81-134 | | | |
| Trichloroethene | 19 | B | 1.0 | ug/L | 20.0 | 0.54 | 94 | 75-115 | | | |
| Toluene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 94 | 71-118 | | | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 102 | 83-117 | | | |

**Matrix Spike Dup (8L09010-MSD1)** Prepared: 12/09/2008 09:16 Analyzed: 12/09/2008 14:21

**Source: C813461-06**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.24 U | 90 | 75-133 | 0.8 | 20 | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | 0.20 U | 90 | 81-134 | 1 | 17 | |
| Trichloroethene | 20 | B | 1.0 | ug/L | 20.0 | 0.54 | 96 | 75-115 | 3 | 18 | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | 0.27 U | 92 | 71-118 | 2 | 17 | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 100 | 83-117 | 2 | 16 | |

*Batch 8L09027 - EPA 5030B_MS*

**Blank (8L09027-BLK1)** Prepared: 12/09/2008 14:04 Analyzed: 12/10/2008 01:03

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.34 | U | 1.0 | ug/L | | | | | | | |
| Vinyl chloride | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 0.49 | U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| Acetone | 1.5 | U | 5.0 | ug/L | | | | | | | |
| Iodomethane | 0.52 | U | 2.0 | ug/L | | | | | | | |
| Carbon disulfide | 0.54 | U | 5.0 | ug/L | | | | | | | |
| Methylene chloride | 0.53 | U | 2.0 | ug/L | | | | | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L09027 - EPA 5030B_MS*

**Blank (8L09027-BLK1) Continued** Prepared: 12/09/2008 14:04 Analyzed: 12/10/2008 01:03

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acrylonitrile | 2.1 | U | 5.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 0.34 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 0.98 | U | 2.0 | ug/L | | | | | | | |
| 2-Butanone | 1.0 | U | 5.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| Bromochloromethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chloroform | 0.20 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 0.65 | U | 1.0 | ug/L | | | | | | | |
| Benzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Trichloroethene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloropropane | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 1.1 | U | 5.0 | ug/L | | | | | | | |
| Toluene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Tetrachloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| 2-Hexanone | 0.69 | U | 5.0 | ug/L | | | | | | | |
| Dibromochloromethane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.40 | U | 1.0 | ug/L | | | | | | | |
| Ethylbenzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Styrene | 0.26 | U | 1.0 | ug/L | | | | | | | |
| Bromoform | 0.71 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 0.54 | U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.48 | U | 1.0 | ug/L | | | | | | | |
| Xylenes (Total) | 0.40 | U | 1.0 | ug/L | | | | | | | |
| *Surrogate: Dibromofluoromethane* | *50* | | | *ug/L* | *50.0* | | *99* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *48* | | | *ug/L* | *50.0* | | *96* | *69-110* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *50* | | | *ug/L* | *50.0* | | *100* | *51-122* | | | |

**LCS (8L09027-BS1)** Prepared: 12/09/2008 14:04 Analyzed: 12/10/2008 01:32

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 18 | | 1.0 | ug/L | 20.0 | | 92 | 75-133 | | | |
| Benzene | 17 | | 1.0 | ug/L | 20.0 | | 87 | 81-134 | | | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | | 92 | 75-115 | | | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | | 90 | 71-118 | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L09027 - EPA 5030B_MS*

**LCS (8L09027-BS1) Continued** Prepared: 12/09/2008 14:04 Analyzed: 12/10/2008 01:32

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | | 97 | 83-117 | | | |

**Matrix Spike (8L09027-MS1)** Prepared: 12/09/2008 14:04 Analyzed: 12/10/2008 02:01

**Source: C813461-07**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 19 | | 1.0 | ug/L | 20.0 | 0.24 U | 93 | 75-133 | | | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | 0.20 U | 91 | 81-134 | | | |
| Trichloroethene | 19 | | 1.0 | ug/L | 20.0 | 0.38 U | 95 | 75-115 | | | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | 0.27 U | 92 | 71-118 | | | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 98 | 83-117 | | | |

**Matrix Spike Dup (8L09027-MSD1)** Prepared: 12/09/2008 14:04 Analyzed: 12/10/2008 02:30

**Source: C813461-07**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.24 U | 91 | 75-133 | 1 | 20 | |
| Benzene | 17 | | 1.0 | ug/L | 20.0 | 0.20 U | 86 | 81-134 | 6 | 17 | |
| Trichloroethene | 19 | | 1.0 | ug/L | 20.0 | 0.38 U | 94 | 75-115 | 1 | 18 | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | 0.27 U | 91 | 71-118 | 0.9 | 17 | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 98 | 83-117 | 0.8 | 16 | |

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08013 - EPA 3005A*

**Blank (8L08013-BLK1)** Prepared: 12/08/2008 09:59 Analyzed: 12/11/2008 13:26

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.8 | U | 10.0 | ug/L | | | | | | | |
| Barium | 1.00 | U | 10.0 | ug/L | | | | | | | |
| Beryllium | 0.10 | U | 1.00 | ug/L | | | | | | | |
| Cadmium | 0.36 | U | 1.00 | ug/L | | | | | | | |
| **Chromium** | **1.4** | **J** | 10.0 | ug/L | | | | | | | |
| Cobalt | 1.1 | U | 10.0 | ug/L | | | | | | | |
| Copper | 1.60 | U | 10.0 | ug/L | | | | | | | |
| Lead | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Nickel | 1.8 | U | 10.0 | ug/L | | | | | | | |
| Selenium | 2.7 | U | 10.0 | ug/L | | | | | | | |
| Silver | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Vanadium | 1.4 | U | 10.0 | ug/L | | | | | | | |
| Zinc | 3.8 | U | 10.0 | ug/L | | | | | | | |

**Blank (8L08013-BLK2)** Prepared: 12/08/2008 09:59 Analyzed: 12/12/2008 08:22

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.8 | U | 10.0 | ug/L | | | | | | | |
| Barium | 1.00 | U | 10.0 | ug/L | | | | | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08013 - EPA 3005A*

**Blank (8L08013-BLK2) Continued** Prepared: 12/08/2008 09:59 Analyzed: 12/12/2008 08:22

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Beryllium | 0.10 | U | 1.00 | ug/L | | | | | | | |
| Cadmium | 0.36 | U | 1.00 | ug/L | | | | | | | |
| Chromium | 1.0 | U | 10.0 | ug/L | | | | | | | |
| Cobalt | 1.1 | U | 10.0 | ug/L | | | | | | | |
| **Copper** | **4.30** | **J** | 10.0 | ug/L | | | | | | | |
| Lead | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Nickel | 1.8 | U | 10.0 | ug/L | | | | | | | |
| Selenium | 2.7 | U | 10.0 | ug/L | | | | | | | |
| Silver | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Vanadium | 1.4 | U | 10.0 | ug/L | | | | | | | |
| Zinc | 3.8 | U | 10.0 | ug/L | | | | | | | |

**LCS (8L08013-BS1)** Prepared: 12/08/2008 09:59 Analyzed: 12/11/2008 13:33

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 508 | | 10.0 | ug/L | 500 | | 102 | 82-117 | | | |
| Barium | 509 | | 10.0 | ug/L | 500 | | 102 | 72-125 | | | |
| Beryllium | 259 | | 1.00 | ug/L | 250 | | 104 | 75-121 | | | |
| Cadmium | 261 | | 1.00 | ug/L | 250 | | 104 | 72-120 | | | |
| Chromium | 508 | B | 10.0 | ug/L | 500 | | 102 | 78-119 | | | |
| Cobalt | 509 | | 10.0 | ug/L | 500 | | 102 | 76-117 | | | |
| Copper | 253 | B | 10.0 | ug/L | 250 | | 101 | 80-117 | | | |
| Lead | 501 | | 10.0 | ug/L | 500 | | 100 | 72-121 | | | |
| Nickel | 510 | | 10.0 | ug/L | 500 | | 102 | 78-116 | | | |
| Selenium | 510 | | 10.0 | ug/L | 500 | | 102 | 82-127 | | | |
| Silver | 48.9 | | 10.0 | ug/L | 50.0 | | 98 | 80-128 | | | |
| Vanadium | 243 | | 10.0 | ug/L | 250 | | 97 | 78-117 | | | |
| Zinc | 521 | | 10.0 | ug/L | 500 | | 104 | 80-120 | | | |

**Matrix Spike (8L08013-MS1)** Prepared: 12/08/2008 09:59 Analyzed: 12/11/2008 13:49

**Source: C813144-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 507 | | 10.0 | ug/L | 500 | 2.8 U | 101 | 64-126 | | | |
| Barium | 530 | | 10.0 | ug/L | 500 | 33.0 | 99 | 74-119 | | | |
| Beryllium | 258 | | 1.00 | ug/L | 250 | 0.10 U | 103 | 70-131 | | | |
| Cadmium | 250 | | 1.00 | ug/L | 250 | 0.36 U | 100 | 68-121 | | | |
| Chromium | 498 | B | 10.0 | ug/L | 500 | 1.0 U | 100 | 73-120 | | | |
| Cobalt | 500 | | 10.0 | ug/L | 500 | 1.1 U | 100 | 76-120 | | | |
| Copper | 250 | B | 10.0 | ug/L | 250 | 1.60 U | 100 | 75-123 | | | |
| Lead | 483 | | 10.0 | ug/L | 500 | 1.9 U | 97 | 68-126 | | | |
| Nickel | 496 | | 10.0 | ug/L | 500 | 1.8 U | 99 | 64-126 | | | |
| Selenium | 510 | | 10.0 | ug/L | 500 | 2.7 U | 102 | 65-129 | | | |
| Silver | 47.8 | | 10.0 | ug/L | 50.0 | 1.9 U | 96 | 69-121 | | | |
| Vanadium | 244 | | 10.0 | ug/L | 250 | 1.4 U | 98 | 71-130 | | | |
| Zinc | 502 | | 10.0 | ug/L | 500 | 3.8 U | 100 | 63-131 | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08013 - EPA 3005A*

**Matrix Spike Dup (8L08013-MSD1)** Prepared: 12/08/2008 09:59 Analyzed: 12/11/2008 13:57

**Source: C813144-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 508 | | 10.0 | ug/L | 500 | 2.8 U | 102 | 64-126 | 0.2 | 12 | |
| Barium | 530 | | 10.0 | ug/L | 500 | 33.0 | 99 | 74-119 | 0.08 | 11 | |
| Beryllium | 259 | | 1.00 | ug/L | 250 | 0.10 U | 103 | 70-131 | 0.08 | 21 | |
| Cadmium | 251 | | 1.00 | ug/L | 250 | 0.36 U | 100 | 68-121 | 0.2 | 12 | |
| Chromium | 498 | B | 10.0 | ug/L | 500 | 1.0 U | 100 | 73-120 | 0 | 10 | |
| Cobalt | 499 | | 10.0 | ug/L | 500 | 1.1 U | 100 | 76-120 | 0.2 | 17 | |
| Copper | 250 | B | 10.0 | ug/L | 250 | 1.60 U | 100 | 75-123 | 0.2 | 16 | |
| Lead | 486 | | 10.0 | ug/L | 500 | 1.9 U | 97 | 68-126 | 0.6 | 19 | |
| Nickel | 497 | | 10.0 | ug/L | 500 | 1.8 U | 99 | 64-126 | 0.2 | 12 | |
| Selenium | 505 | | 10.0 | ug/L | 500 | 2.7 U | 101 | 65-129 | 1 | 10 | |
| Silver | 47.8 | | 10.0 | ug/L | 50.0 | 1.9 U | 96 | 69-121 | 0 | 12 | |
| Vanadium | 245 | | 10.0 | ug/L | 250 | 1.4 U | 98 | 71-130 | 0.1 | 16 | |
| Zinc | 502 | | 10.0 | ug/L | 500 | 3.8 U | 100 | 63-131 | 0.1 | 24 | |

*Batch 8L08014 - EPA 3005A*

**Blank (8L08014-BLK1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 14:58

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.8 | U | 10.0 | ug/L | | | | | | | |
| Barium | 1.00 | U | 10.0 | ug/L | | | | | | | |
| Beryllium | 0.10 | U | 1.00 | ug/L | | | | | | | |
| Cadmium | 0.36 | U | 1.00 | ug/L | | | | | | | |
| Chromium | 1.0 | U | 10.0 | ug/L | | | | | | | |
| Cobalt | 1.1 | U | 10.0 | ug/L | | | | | | | |
| Copper | 1.60 | U | 10.0 | ug/L | | | | | | | |
| Lead | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Nickel | 1.8 | U | 10.0 | ug/L | | | | | | | |
| Selenium | 2.7 | U | 10.0 | ug/L | | | | | | | |
| Silver | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Vanadium | 1.4 | U | 10.0 | ug/L | | | | | | | |
| Zinc | 3.8 | U | 10.0 | ug/L | | | | | | | |

**LCS (8L08014-BS1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 14:38

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 528 | | 10.0 | ug/L | 500 | | 106 | 82-117 | | | |
| Barium | 521 | | 10.0 | ug/L | 500 | | 104 | 72-125 | | | |
| Beryllium | 267 | | 1.00 | ug/L | 250 | | 107 | 75-121 | | | |
| Cadmium | 270 | | 1.00 | ug/L | 250 | | 108 | 72-120 | | | |
| Chromium | 517 | | 10.0 | ug/L | 500 | | 103 | 78-119 | | | |
| Cobalt | 510 | | 10.0 | ug/L | 500 | | 102 | 76-117 | | | |
| Copper | 256 | | 10.0 | ug/L | 250 | | 102 | 80-117 | | | |
| Lead | 518 | | 10.0 | ug/L | 500 | | 104 | 72-121 | | | |
| Nickel | 535 | | 10.0 | ug/L | 500 | | 107 | 78-116 | | | |
| Selenium | 525 | | 10.0 | ug/L | 500 | | 105 | 82-127 | | | |
| Silver | 46.8 | | 10.0 | ug/L | 50.0 | | 94 | 80-128 | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08014 - EPA 3005A*

**LCS (8L08014-BS1) Continued** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 14:38

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vanadium | 249 | | 10.0 | ug/L | 250 | | 100 | 78-117 | | | |
| Zinc | 530 | | 10.0 | ug/L | 500 | | 106 | 80-120 | | | |

**Matrix Spike (8L08014-MS1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 15:05

**Source: C811840-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 542 | | 10.0 | ug/L | 500 | 2.8 U | 108 | 64-126 | | | |
| Barium | 696 | | 10.0 | ug/L | 500 | 163 | 107 | 74-119 | | | |
| Beryllium | 274 | | 1.00 | ug/L | 250 | 0.10 U | 110 | 70-131 | | | |
| Cadmium | 274 | | 1.00 | ug/L | 250 | 0.36 U | 110 | 68-121 | | | |
| Chromium | 527 | | 10.0 | ug/L | 500 | 1.7 | 105 | 73-120 | | | |
| Cobalt | 525 | | 10.0 | ug/L | 500 | 1.6 | 105 | 76-120 | | | |
| Copper | 270 | | 10.0 | ug/L | 250 | 7.80 | 105 | 75-123 | | | |
| Lead | 530 | | 10.0 | ug/L | 500 | 1.9 U | 106 | 68-126 | | | |
| Nickel | 553 | | 10.0 | ug/L | 500 | 6.9 | 109 | 64-126 | | | |
| Selenium | 539 | | 10.0 | ug/L | 500 | 2.7 U | 108 | 65-129 | | | |
| Silver | 52.2 | | 10.0 | ug/L | 50.0 | 1.9 U | 104 | 69-121 | | | |
| Vanadium | 258 | | 10.0 | ug/L | 250 | 1.4 U | 103 | 71-130 | | | |
| Zinc | 550 | | 10.0 | ug/L | 500 | 13.8 | 107 | 63-131 | | | |

**Matrix Spike Dup (8L08014-MSD1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 15:12

**Source: C811840-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 540 | | 10.0 | ug/L | 500 | 2.8 U | 108 | 64-126 | 0.3 | 12 | |
| Barium | 699 | | 10.0 | ug/L | 500 | 163 | 107 | 74-119 | 0.3 | 11 | |
| Beryllium | 274 | | 1.00 | ug/L | 250 | 0.10 U | 109 | 70-131 | 0.3 | 21 | |
| Cadmium | 273 | | 1.00 | ug/L | 250 | 0.36 U | 109 | 68-121 | 0.5 | 12 | |
| Chromium | 523 | | 10.0 | ug/L | 500 | 1.7 | 104 | 73-120 | 0.9 | 10 | |
| Cobalt | 521 | | 10.0 | ug/L | 500 | 1.6 | 104 | 76-120 | 0.7 | 17 | |
| Copper | 270 | | 10.0 | ug/L | 250 | 7.80 | 105 | 75-123 | 0 | 16 | |
| Lead | 524 | | 10.0 | ug/L | 500 | 1.9 U | 105 | 68-126 | 1 | 19 | |
| Nickel | 548 | | 10.0 | ug/L | 500 | 6.9 | 108 | 64-126 | 1 | 12 | |
| Selenium | 539 | | 10.0 | ug/L | 500 | 2.7 U | 108 | 65-129 | 0.02 | 10 | |
| Silver | 51.7 | | 10.0 | ug/L | 50.0 | 1.9 U | 103 | 69-121 | 1 | 12 | |
| Vanadium | 256 | | 10.0 | ug/L | 250 | 1.4 U | 103 | 71-130 | 0.5 | 16 | |
| Zinc | 543 | | 10.0 | ug/L | 500 | 13.8 | 106 | 63-131 | 1 | 24 | |

*Batch 8L08021 - EPA 3005A*

**Blank (8L08021-BLK1)** Prepared: 12/08/2008 13:33 Analyzed: 12/12/2008 10:05

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.68 | U | 2.00 | ug/L | | | | | | | |
| Thallium | 0.036 | U | 1.00 | ug/L | | | | | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08021 - EPA 3005A*

**LCS (8L08021-BS1)** Prepared: 12/08/2008 13:33 Analyzed: 12/12/2008 10:08

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 23.6 | | 2.00 | ug/L | 25.0 | | 94 | 85-115 | | | |
| Thallium | 23.9 | | 1.00 | ug/L | 25.0 | | 96 | 85-115 | | | |

**Matrix Spike (8L08021-MS1)** Prepared: 12/08/2008 13:33 Analyzed: 12/12/2008 10:15

**Source: C813144-05**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 21.9 | | 2.00 | ug/L | 25.0 | 0.68 U | 88 | 85-115 | | | |
| Thallium | 22.7 | | 1.00 | ug/L | 25.0 | 0.036 U | 91 | 85-115 | | | |

**Matrix Spike Dup (8L08021-MSD1)** Prepared: 12/08/2008 13:33 Analyzed: 12/12/2008 10:18

**Source: C813144-05**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 22.3 | | 2.00 | ug/L | 25.0 | 0.68 U | 89 | 85-115 | 2 | 20 | |
| Thallium | 23.7 | | 1.00 | ug/L | 25.0 | 0.036 U | 95 | 85-115 | 4 | 20 | |

**Post Spike (8L08021-PS1)** Prepared: 12/08/2008 13:33 Analyzed: 12/12/2008 10:22

**Source: C813144-05**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.02 | | 0.002 | mg/L | 0.0250 | 0.0002 | 93 | 75-125 | | | |
| Thallium | 0.026 | | 0.001 | mg/L | 0.0250 | -0.0009 | 106 | 75-125 | | | |

*Batch 8L08022 - EPA 3005A*

**Blank (8L08022-BLK1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 11:49

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.68 | U | 2.00 | ug/L | | | | | | | |
| Thallium | 0.036 | U | 1.00 | ug/L | | | | | | | |

**LCS (8L08022-BS1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 11:52

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 23.6 | | 2.00 | ug/L | 25.0 | | 94 | 85-115 | | | |
| Thallium | 23.5 | | 1.00 | ug/L | 25.0 | | 94 | 85-115 | | | |

**Matrix Spike (8L08022-MS1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 11:59

**Source: C811840-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.2 | | 2.00 | ug/L | 25.0 | 0.68 U | 97 | 85-115 | | | |
| Thallium | 23.4 | | 1.00 | ug/L | 25.0 | 0.036 U | 94 | 85-115 | | | |

**Matrix Spike Dup (8L08022-MSD1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 12:16

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08022 - EPA 3005A*

**Matrix Spike Dup (8L08022-MSD1) Continued** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 12:16

**Source: C811840-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.5 | | 2.00 | ug/L | 25.0 | 0.68 U | 98 | 85-115 | 1 | 20 | |
| Thallium | 24.1 | | 1.00 | ug/L | 25.0 | 0.036 U | 96 | 85-115 | 3 | 20 | |

**Post Spike (8L08022-PS1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 12:19

**Source: C811840-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.02 | | 0.002 | mg/L | 0.0250 | 0.0001 | 96 | 75-125 | | | |
| Thallium | 0.026 | | 0.001 | mg/L | 0.0250 | -0.001 | 110 | 75-125 | | | |

## FLAGS/NOTES AND DEFINITIONS

| | |
|---|---|
| B | The analyte was detected in the associated method blank. |
| D | The sample was analyzed at dilution. |
| J | The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable. |
| U | The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable. |
| E | The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate. |
| MRL | Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content. |
| QB-01 | The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation. |

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

Page 1 of 2

Requested Analysis

Requested Turnaround Time

___ Standard

___ Expedited

Due

Lab Workorder

C811840

| | | | | | | | | | | | | | | | | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4112 MW-[illegible] | 12/3/08 | 1600 | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW-[illegible] | 12/3/08 | 1505 | G | [illegible] | 4 | | X | | | | | | | | |
| | 4112 MW-[illegible] | 12/5/08 | [illegible] | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW-[illegible] | 12/3/08 | 1140 | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW-[illegible] | 12/3/08 | 1700 | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW-[illegible] | 12/4/08 | 1535 | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW 21 | 12/5/08 | [illegible] | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW 22 | 12/5/08 | [illegible] | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW 23 | 12/5/08 | [illegible] | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW-[illegible] | 12/5/08 | [illegible] | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW 25 | | | G | [illegible] | 4 | X | X | | | | | | | | |
| | 4112 MW-25B | 12/5/08 | [illegible] | G | [illegible] | 4 | X | X | | | | | | | | |

Total # of Containers

JWL 10/22

C-587

X Acceptable Unacceptable

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

Page 2 of 2

Requested Turnaround Times

Standard

Expedited

Due / /

Lab Workorder C811840

| | | | | | | | | | | | | | | | | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4112 SW 1 | 12/4/08 | 1225 | G | SW | 4 | X | X | | | | | | | | |
| | 4112 SW 2 | 12/4/08 | 1135 | G | SW | 4 | X | X | | | | | | | | |
| | 4112 SW 3 | 12/4/08 | 1200 | G | SW | 4 | X | X | | | | | | | | |
| | 4112 SW 4 | 12/4/08 | 1355 | G | SW | 4 | X | X | | | | | | | | |
| | 4112 SW 5 | 12/4/08 | 1100 | G | SW | 4 | X | X | | | | | | | | |
| | 4112 DUPLICATE III | 12/4/08 | 0700 | G | WA | 4 | X | X | | | | | | | | |
| | 4112 Trip Blank 2 | | | | WA | 2 | X | | | | | | | | | |

Totals of Containers

JWC 10/22

C-587

X Acceptable Unacceptable

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ENVIRONMENTAL CONSERVATION LABORATORIES, INC.

# Sample preservation verification

☐ Cary ☐ Jacksonville ☐ Orlando

Work order: [illegible] Page: 1 of 1 Initials: CC2 Date: [illegible]

*A check mark (✓) in any space under the appropriate column heading for the selected sample indicates that the pH met the required pH.*
*An asterisk (*) in any space under the appropriate column heading for the selected sample indicates that the pH was adjusted in the lab as described in the comments column.*

| Sample No | Metals | TPH | Ammonia | COD | Cyanide | TOC | Hardness | TKN/TOV | Oil & grease | Phenolics | NOx | Extractables | Sulfide | FL-PRO | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| pH → | <2 | <2 | <2 | <2 | >12 | <2 | <2 | <2 | <2 | <2 | <2 | 5-9 | >9 | <2 | |
| 1 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |

| Reagent name | ID | Reagent name | ID | Reagent name | ID |
|---|---|---|---|---|---|
| 1 | | 3 | | 5 | |
| 2 | | 4 | | 6 | |

**Environmental Conservation Laboratories, Inc.**
**102-A Woodwinds Industrial Court**
**Cary NC, 27511**
**Phone: 919.467.3090 FAX: 919.467.3515**

**www.encolabs.com**

Thursday, December 18, 2008

S&ME, Inc. (SM004)

Attn: Edmund Henriques

3718 Old Battleground Rd.

Greensboro, NC 27410

**RE: Laboratory Results for**
**Project Number: [none], Project Name/Desc: White Street Landfill AppI Voa/RCRA Metals**
**ENCO Workorder: C811841**

Dear Edmund Henriques,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Saturday, December 6, 2008.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 25.

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**PROJECT NARRATIVE**

Date: December 18, 2008

Client: S&ME, Inc.

Project #: White Street Landfill App I Voas/RCRA Metals

Lab ID: C11841

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by Environmental Conservation Laboratories, Inc. will be discussed in the QC Remarks section below.

Quality Control Samples

VGCMS Acetone was found in samples 4103 I-1, I-2, I-3 and I-4. Although the analyte was not detected in the method blank, Acetone has been found to be a common laboratory contaminant.

Other Comments

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative. Should there be any questions regarding this package, please feel free to contact the undersigned for additional information.

Released By:
Environmental Conservation Laboratories, Inc.

Chuck Smith
Project Manager

## SAMPLE SUMMARY/LABORATORY CHRONICLE

| Client ID: | 4103 I-1 | Lab ID: | C811841-01 | Sampled: | 12/05/08 12:30 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 17:55 |
| EPA 7470A | 01/02/09 | 12/09/08 | 09:40 | 12/9/2008 14:37 |
| EPA 8260B | 12/19/08 | 12/10/08 | 08:48 | 12/10/2008 21:29 |

| Client ID: | 4103 I-2 | Lab ID: | C811841-02 | Sampled: | 12/05/08 13:40 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 18:02 |
| EPA 7470A | 01/02/09 | 12/09/08 | 09:40 | 12/9/2008 14:52 |
| EPA 8260B | 12/19/08 | 12/10/08 | 08:48 | 12/10/2008 21:58 |

| Client ID: | 4103 I-3 | Lab ID: | C811841-03 | Sampled: | 12/05/08 14:40 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 18:10 |
| EPA 7470A | 01/02/09 | 12/09/08 | 09:40 | 12/9/2008 14:55 |
| EPA 8260B | 12/19/08 | 12/10/08 | 14:57 | 12/11/2008 05:44 |

| Client ID: | 4103 I-4 | Lab ID: | C811841-04 | Sampled: | 12/05/08 15:55 | Received: | 12/06/08 10:00 |
|---|---|---|---|---|---|---|---|

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|
| EPA 6010B | 06/03/09 | 12/08/08 | 10:03 | 12/16/2008 18:17 |
| EPA 7470A | 01/02/09 | 12/09/08 | 09:40 | 12/9/2008 14:58 |
| EPA 8260B | 12/19/08 | 12/10/08 | 14:57 | 12/11/2008 06:13 |

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## NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

**Client ID:** 4103 I-1 **Lab ID:** C811841-01

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 1.6 | J | 1 | 0.33 | 1.0 | 5 | ug/L | EPA 8260B | |
| 1,4-Dichlorobenzene | 3.5 | | 1 | 0.38 | 1.0 | 1 | ug/L | EPA 8260B | |
| Acetone | 7.1 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 162 | | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Benzene | 1.1 | | 1 | 0.20 | 1.0 | 1 | ug/L | EPA 8260B | |
| Chlorobenzene | 1.8 | J | 1 | 0.27 | 1.0 | 3 | ug/L | EPA 8260B | |
| cis-1,2-Dichloroethene | 1.6 | J | 1 | 0.36 | 1.0 | 5 | ug/L | EPA 8260B | |
| Methylene chloride | 0.63 | J | 1 | 0.53 | 2.0 | 1 | ug/L | EPA 8260B | |

**Client ID:** 4103 I-2 **Lab ID:** C811841-02

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 1.8 | | 1 | 0.38 | 1.0 | 1 | ug/L | EPA 8260B | |
| Acetone | 6.4 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 375 | | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chlorobenzene | 1.8 | J | 1 | 0.27 | 1.0 | 3 | ug/L | EPA 8260B | |
| Lead | 2.9 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |

**Client ID:** 4103 I-3 **Lab ID:** C811841-03

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 3.2 | J | 1 | 0.33 | 1.0 | 5 | ug/L | EPA 8260B | |
| 1,1-Dichloroethene | 0.56 | J | 1 | 0.24 | 1.0 | 5 | ug/L | EPA 8260B | |
| 1,2-Dichlorobenzene | 0.75 | J | 1 | 0.27 | 1.0 | 5 | ug/L | EPA 8260B | |
| 1,4-Dichlorobenzene | 4.0 | | 1 | 0.38 | 1.0 | 1 | ug/L | EPA 8260B | |
| Acetone | 5.6 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 180 | | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Benzene | 0.51 | J | 1 | 0.20 | 1.0 | 1 | ug/L | EPA 8260B | |
| Chlorobenzene | 12 | | 1 | 0.27 | 1.0 | 3 | ug/L | EPA 8260B | |
| cis-1,2-Dichloroethene | 1.3 | J | 1 | 0.36 | 1.0 | 5 | ug/L | EPA 8260B | |
| Silver | 2.7 | J | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |
| Vinyl chloride | 0.67 | J | 1 | 0.30 | 1.0 | 1 | ug/L | EPA 8260B | |

**Client ID:** 4103 I-4 **Lab ID:** C811841-04

| Analyte | Results | Flag | DF | MDL | MRL | NC SWSL | Units | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 3.5 | | 1 | 0.38 | 1.0 | 1 | ug/L | EPA 8260B | |
| Acetone | 6.1 | J | 1 | 1.5 | 5.0 | 100 | ug/L | EPA 8260B | |
| Barium | 812 | | 1 | 1.00 | 10.0 | 100 | ug/L | EPA 6010B | |
| Chlorobenzene | 5.6 | | 1 | 0.27 | 1.0 | 3 | ug/L | EPA 8260B | |
| Chromium | 86.1 | | 1 | 1.0 | 10.0 | 10 | ug/L | EPA 6010B | |
| Lead | 17.8 | | 1 | 1.9 | 10.0 | 10 | ug/L | EPA 6010B | |

## ANALYTICAL RESULTS

**Description:** 4103 I-1
**Matrix:** Ground Water
**Project:** White Street Landfill Appl Voa/RCRA Metals

**Lab Sample ID:** C811841-01
**Sampled:** 12/05/08 12:30
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

### Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| **1,1-Dichloroethane [75-34-3] ^** | **1.6** | J | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| **1,4-Dichlorobenzene [106-46-7] ^** | **3.5** | | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/10/08 21:29 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/10/08 21:29 | JKG | |
| **Acetone [67-64-1] ^** | **7.1** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/10/08 21:29 | JKG | |
| **Benzene [71-43-2] ^** | **1.1** | | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| **Chlorobenzene [108-90-7] ^** | **1.8** | J | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| **cis-1,2-Dichloroethene [156-59-2] ^** | **1.6** | J | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/10/08 21:29 | JKG | |
| **Methylene chloride [75-09-2] ^** | **0.63** | J | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |

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**Description:** 4103 I-1
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-01
**Sampled:** 12/05/08 12:30
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/10/08 21:29 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 21:29 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *54* | *1* | *50.0* | *108 %* | *51-122* | *8L10004* | *EPA 8260B* | *12/10/08 21:29* | *JKG* | |
| *Dibromofluoromethane* | *52* | *1* | *50.0* | *103 %* | *68-117* | *8L10004* | *EPA 8260B* | *12/10/08 21:29* | *JKG* | |
| *Toluene-d8* | *48* | *1* | *50.0* | *97 %* | *69-110* | *8L10004* | *EPA 8260B* | *12/10/08 21:29* | *JKG* | |

**Description:** 4103 I-1
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-01
**Sampled:** 12/05/08 12:30
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 17:55 | JDH | |
| **Barium [7440-39-3] ^** | **162** | | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 17:55 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 17:55 | JDH | |
| Chromium [7440-47-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 17:55 | JDH | |
| Lead [7439-92-1] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:55 | JDH | |
| Mercury [7439-97-6] ^ | 0.11 | U | ug/L | 1 | 0.11 | 0.20 | 0.2 | EPA 7470A | 12/09/08 14:37 | NLH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 17:55 | JDH | |
| Silver [7440-22-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 17:55 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** 4103 I-2
**Matrix:** Ground Water
**Project:** White Street Landfill Appl Voa/RCRA Metals

**Lab Sample ID:** C811841-02
**Sampled:** 12/05/08 13:40
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| **1,4-Dichlorobenzene [106-46-7] ^** | **1.8** | | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/10/08 21:58 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/10/08 21:58 | JKG | |
| **Acetone [67-64-1] ^** | **6.4** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| **Chlorobenzene [108-90-7] ^** | **1.8** | J | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/10/08 21:58 | JKG | |

**Description:** 4103 I-2
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-02
**Sampled:** 12/05/08 13:40
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/10/08 21:58 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/10/08 21:58 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *52* | *1* | *50.0* | *105 %* | *51-122* | *8L10004* | *EPA 8260B* | *12/10/08 21:58* | *JKG* | |
| *Dibromofluoromethane* | *52* | *1* | *50.0* | *104 %* | *68-117* | *8L10004* | *EPA 8260B* | *12/10/08 21:58* | *JKG* | |
| *Toluene-d8* | *47* | *1* | *50.0* | *94 %* | *69-110* | *8L10004* | *EPA 8260B* | *12/10/08 21:58* | *JKG* | |

**Description:** 4103 I-2
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-02
**Sampled:** 12/05/08 13:40
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 18:02 | JDH | |
| **Barium [7440-39-3] ^** | **375** | | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 18:02 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 18:02 | JDH | |
| Chromium [7440-47-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 18:02 | JDH | |
| **Lead [7439-92-1] ^** | **2.9** | J | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 18:02 | JDH | |
| Mercury [7439-97-6] ^ | 0.11 | U | ug/L | 1 | 0.11 | 0.20 | 0.2 | EPA 7470A | 12/09/08 14:52 | NLH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 18:02 | JDH | |
| Silver [7440-22-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 18:02 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** 4103 I-3
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-03
**Sampled:** 12/05/08 14:40
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **1,1-Dichloroethane [75-34-3] ^** | **3.2** | J | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **1,1-Dichloroethene [75-35-4] ^** | **0.56** | J | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **1,2-Dichlorobenzene [95-50-1] ^** | **0.75** | J | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **1,4-Dichlorobenzene [106-46-7] ^** | **4.0** | | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/11/08 05:44 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **Acetone [67-64-1] ^** | **5.6** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **Benzene [71-43-2] ^** | **0.51** | J | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **Chlorobenzene [108-90-7] ^** | **12** | | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **cis-1,2-Dichloroethene [156-59-2] ^** | **1.3** | J | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/11/08 05:44 | JKG | |
| **Vinyl chloride [75-01-4] ^** | **0.67** | J | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/11/08 05:44 | JKG | |

**Description:** 4103 I-3
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-03
**Sampled:** 12/05/08 14:40
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/11/08 05:44 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *52* | *1* | *50.0* | *103 %* | *51-122* | *8L10024* | *EPA 8260B* | *12/11/08 05:44* | *JKG* | |
| *Dibromofluoromethane* | *51* | *1* | *50.0* | *102 %* | *68-117* | *8L10024* | *EPA 8260B* | *12/11/08 05:44* | *JKG* | |
| *Toluene-d8* | *48* | *1* | *50.0* | *95 %* | *69-110* | *8L10024* | *EPA 8260B* | *12/11/08 05:44* | *JKG* | |

**Description:** 4103 I-3
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-03
**Sampled:** 12/05/08 14:40
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 18:10 | JDH | |
| **Barium [7440-39-3] ^** | **180** | | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 18:10 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 18:10 | JDH | |
| Chromium [7440-47-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 18:10 | JDH | |
| Lead [7439-92-1] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 18:10 | JDH | |
| Mercury [7439-97-6] ^ | 0.11 | U | ug/L | 1 | 0.11 | 0.20 | 0.2 | EPA 7470A | 12/09/08 14:55 | NLH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 18:10 | JDH | |
| **Silver [7440-22-4] ^** | **2.7** | J | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 18:10 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** 4103 I-4
**Matrix:** Ground Water
**Project:** White Street Landfill Appl Voa/RCRA Metals

**Lab Sample ID:** C811841-04
**Sampled:** 12/05/08 15:55
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| **1,4-Dichlorobenzene [106-46-7] ^** | **3.5** | | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/11/08 06:13 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/11/08 06:13 | JKG | |
| **Acetone [67-64-1] ^** | **6.1** | J | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| **Chlorobenzene [108-90-7] ^** | **5.6** | | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/11/08 06:13 | JKG | |

**Description:** 4103 I-4
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-04
**Sampled:** 12/05/08 15:55
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/11/08 06:13 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/11/08 06:13 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *52* | *1* | *50.0* | *105 %* | *51-122* | *8L10024* | *EPA 8260B* | *12/11/08 06:13* | *JKG* | |
| *Dibromofluoromethane* | *51* | *1* | *50.0* | *102 %* | *68-117* | *8L10024* | *EPA 8260B* | *12/11/08 06:13* | *JKG* | |
| *Toluene-d8* | *47* | *1* | *50.0* | *95 %* | *69-110* | *8L10024* | *EPA 8260B* | *12/11/08 06:13* | *JKG* | |

**Description:** 4103 I-4
**Matrix:** Ground Water
**Project:** White Street Landfill AppI Voa/RCRA Metals

**Lab Sample ID:** C811841-04
**Sampled:** 12/05/08 15:55
**Sampled By:** Gary Simcox

**Received:** 12/06/08 10:00
**Work Order:** C811841

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/16/08 18:17 | JDH | |
| **Barium [7440-39-3] ^** | **812** | | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/16/08 18:17 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/16/08 18:17 | JDH | |
| **Chromium [7440-47-3] ^** | **86.1** | | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/16/08 18:17 | JDH | |
| **Lead [7439-92-1] ^** | **17.8** | | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 18:17 | JDH | |
| Mercury [7439-97-6] ^ | 0.11 | U | ug/L | 1 | 0.11 | 0.20 | 0.2 | EPA 7470A | 12/09/08 14:58 | NLH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/16/08 18:17 | JDH | |
| Silver [7440-22-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/16/08 18:17 | JDH | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L10004 - EPA 5030B_MS*

**Blank (8L10004-BLK1)** Prepared: 12/10/2008 08:48 Analyzed: 12/10/2008 13:13

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.34 | U | 1.0 | ug/L | | | | | | | |
| Vinyl chloride | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 0.49 | U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| Acetone | 1.5 | U | 5.0 | ug/L | | | | | | | |
| Iodomethane | 0.52 | U | 2.0 | ug/L | | | | | | | |
| Carbon disulfide | 0.54 | U | 5.0 | ug/L | | | | | | | |
| Methylene chloride | 0.53 | U | 2.0 | ug/L | | | | | | | |
| Acrylonitrile | 2.1 | U | 5.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 0.34 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 0.98 | U | 2.0 | ug/L | | | | | | | |
| 2-Butanone | 1.0 | U | 5.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| Bromochloromethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chloroform | 0.20 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 0.65 | U | 1.0 | ug/L | | | | | | | |
| Benzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Trichloroethene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloropropane | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 1.1 | U | 5.0 | ug/L | | | | | | | |
| Toluene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Tetrachloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| 2-Hexanone | 0.69 | U | 5.0 | ug/L | | | | | | | |
| Dibromochloromethane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.40 | U | 1.0 | ug/L | | | | | | | |
| Ethylbenzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Styrene | 0.26 | U | 1.0 | ug/L | | | | | | | |
| Bromoform | 0.71 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 0.54 | U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.48 | U | 1.0 | ug/L | | | | | | | |
| Xylenes (Total) | 0.40 | U | 1.0 | ug/L | | | | | | | |
| *Surrogate: Dibromofluoromethane* | *49* | | | *ug/L* | *50.0* | | *98* | *68-117* | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L10004 - EPA 5030B_MS*

**Blank (8L10004-BLK1) Continued** Prepared: 12/10/2008 08:48 Analyzed: 12/10/2008 13:13

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: Toluene-d8* | *48* | | | *ug/L* | *50.0* | | *95* | *69-110* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *52* | | | *ug/L* | *50.0* | | *104* | *51-122* | | | |

**LCS (8L10004-BS1)** Prepared: 12/10/2008 08:48 Analyzed: 12/10/2008 13:42

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 19 | | 1.0 | ug/L | 20.0 | | 96 | 75-133 | | | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | | 88 | 81-134 | | | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | | 90 | 75-115 | | | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | | 92 | 71-118 | | | |
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | | 95 | 83-117 | | | |

**Matrix Spike (8L10004-MS1)** Prepared: 12/10/2008 08:48 Analyzed: 12/10/2008 14:11

**Source: C813461-10**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 19 | | 1.0 | ug/L | 20.0 | 0.24 U | 93 | 75-133 | | | |
| Benzene | 17 | | 1.0 | ug/L | 20.0 | 0.20 U | 87 | 81-134 | | | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.38 U | 90 | 75-115 | | | |
| Toluene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 93 | 71-118 | | | |
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 97 | 83-117 | | | |

**Matrix Spike Dup (8L10004-MSD1)** Prepared: 12/10/2008 08:48 Analyzed: 12/10/2008 14:40

**Source: C813461-10**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.24 U | 89 | 75-133 | 4 | 20 | |
| Benzene | 17 | | 1.0 | ug/L | 20.0 | 0.20 U | 87 | 81-134 | 0.6 | 17 | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.38 U | 90 | 75-115 | 0.2 | 18 | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | 0.27 U | 92 | 71-118 | 1 | 17 | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 99 | 83-117 | 2 | 16 | |

*Batch 8L10024 - EPA 5030B_MS*

**Blank (8L10024-BLK1)** Prepared: 12/10/2008 14:57 Analyzed: 12/11/2008 02:20

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.34 | U | 1.0 | ug/L | | | | | | | |
| Vinyl chloride | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 0.49 | U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| Acetone | 1.5 | U | 5.0 | ug/L | | | | | | | |
| Iodomethane | 0.52 | U | 2.0 | ug/L | | | | | | | |
| Carbon disulfide | 0.54 | U | 5.0 | ug/L | | | | | | | |
| Methylene chloride | 0.53 | U | 2.0 | ug/L | | | | | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L10024 - EPA 5030B_MS*

**Blank (8L10024-BLK1) Continued** Prepared: 12/10/2008 14:57 Analyzed: 12/11/2008 02:20

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acrylonitrile | 2.1 | U | 5.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 0.34 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 0.98 | U | 2.0 | ug/L | | | | | | | |
| 2-Butanone | 1.0 | U | 5.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| Bromochloromethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chloroform | 0.20 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 0.65 | U | 1.0 | ug/L | | | | | | | |
| Benzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Trichloroethene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloropropane | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 1.1 | U | 5.0 | ug/L | | | | | | | |
| Toluene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Tetrachloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| 2-Hexanone | 0.69 | U | 5.0 | ug/L | | | | | | | |
| Dibromochloromethane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Chlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.40 | U | 1.0 | ug/L | | | | | | | |
| Ethylbenzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Styrene | 0.26 | U | 1.0 | ug/L | | | | | | | |
| Bromoform | 0.71 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 0.54 | U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.48 | U | 1.0 | ug/L | | | | | | | |
| Xylenes (Total) | 0.40 | U | 1.0 | ug/L | | | | | | | |
| *Surrogate: Dibromofluoromethane* | *50* | | | *ug/L* | *50.0* | | *101* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *47* | | | *ug/L* | *50.0* | | *94* | *69-110* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *51* | | | *ug/L* | *50.0* | | *101* | *51-122* | | | |

**LCS (8L10024-BS1)** Prepared: 12/10/2008 14:57 Analyzed: 12/11/2008 02:50

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 19 | | 1.0 | ug/L | 20.0 | | 96 | 75-133 | | | |
| Benzene | 17 | | 1.0 | ug/L | 20.0 | | 86 | 81-134 | | | |
| Trichloroethene | 17 | | 1.0 | ug/L | 20.0 | | 87 | 75-115 | | | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | | 91 | 71-118 | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L10024 - EPA 5030B_MS*

**LCS (8L10024-BS1) Continued** Prepared: 12/10/2008 14:57 Analyzed: 12/11/2008 02:50

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | | 97 | 83-117 | | | |

**Matrix Spike (8L10024-MS1)** Prepared: 12/10/2008 14:57 Analyzed: 12/11/2008 03:19

**Source: C813461-11**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20 | | 1.0 | ug/L | 20.0 | 0.24 U | 98 | 75-133 | | | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | 0.20 U | 89 | 81-134 | | | |
| Trichloroethene | 19 | | 1.0 | ug/L | 20.0 | 0.38 U | 93 | 75-115 | | | |
| Toluene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 93 | 71-118 | | | |
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 97 | 83-117 | | | |

**Matrix Spike Dup (8L10024-MSD1)** Prepared: 12/10/2008 14:57 Analyzed: 12/11/2008 03:48

**Source: C813461-11**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 19 | | 1.0 | ug/L | 20.0 | 0.24 U | 94 | 75-133 | 5 | 20 | |
| Benzene | 17 | | 1.0 | ug/L | 20.0 | 0.20 U | 86 | 81-134 | 4 | 17 | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.38 U | 90 | 75-115 | 3 | 18 | |
| Toluene | 18 | | 1.0 | ug/L | 20.0 | 0.27 U | 92 | 71-118 | 1 | 17 | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 98 | 83-117 | 1 | 16 | |

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08014 - EPA 3005A*

**Blank (8L08014-BLK1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 14:58

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.8 | U | 10.0 | ug/L | | | | | | | |
| Barium | 1.00 | U | 10.0 | ug/L | | | | | | | |
| Cadmium | 0.36 | U | 1.00 | ug/L | | | | | | | |
| Chromium | 1.0 | U | 10.0 | ug/L | | | | | | | |
| Lead | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Selenium | 2.7 | U | 10.0 | ug/L | | | | | | | |
| Silver | 1.9 | U | 10.0 | ug/L | | | | | | | |

**LCS (8L08014-BS1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 14:38

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 528 | | 10.0 | ug/L | 500 | | 106 | 82-117 | | | |
| Barium | 521 | | 10.0 | ug/L | 500 | | 104 | 72-125 | | | |
| Cadmium | 270 | | 1.00 | ug/L | 250 | | 108 | 72-120 | | | |
| Chromium | 517 | | 10.0 | ug/L | 500 | | 103 | 78-119 | | | |
| Lead | 518 | | 10.0 | ug/L | 500 | | 104 | 72-121 | | | |
| Selenium | 525 | | 10.0 | ug/L | 500 | | 105 | 82-127 | | | |
| Silver | 46.8 | | 10.0 | ug/L | 50.0 | | 94 | 80-128 | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08014 - EPA 3005A*

**Matrix Spike (8L08014-MS1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 15:05

**Source: C811840-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 542 | | 10.0 | ug/L | 500 | 2.8 U | 108 | 64-126 | | | |
| Barium | 696 | | 10.0 | ug/L | 500 | 163 | 107 | 74-119 | | | |
| Cadmium | 274 | | 1.00 | ug/L | 250 | 0.36 U | 110 | 68-121 | | | |
| Chromium | 527 | | 10.0 | ug/L | 500 | 1.7 | 105 | 73-120 | | | |
| Lead | 530 | | 10.0 | ug/L | 500 | 1.9 U | 106 | 68-126 | | | |
| Selenium | 539 | | 10.0 | ug/L | 500 | 2.7 U | 108 | 65-129 | | | |
| Silver | 52.2 | | 10.0 | ug/L | 50.0 | 1.9 U | 104 | 69-121 | | | |

**Matrix Spike Dup (8L08014-MSD1)** Prepared: 12/08/2008 10:03 Analyzed: 12/16/2008 15:12

**Source: C811840-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 540 | | 10.0 | ug/L | 500 | 2.8 U | 108 | 64-126 | 0.3 | 12 | |
| Barium | 699 | | 10.0 | ug/L | 500 | 163 | 107 | 74-119 | 0.3 | 11 | |
| Cadmium | 273 | | 1.00 | ug/L | 250 | 0.36 U | 109 | 68-121 | 0.5 | 12 | |
| Chromium | 523 | | 10.0 | ug/L | 500 | 1.7 | 104 | 73-120 | 0.9 | 10 | |
| Lead | 524 | | 10.0 | ug/L | 500 | 1.9 U | 105 | 68-126 | 1 | 19 | |
| Selenium | 539 | | 10.0 | ug/L | 500 | 2.7 U | 108 | 65-129 | 0.02 | 10 | |
| Silver | 51.7 | | 10.0 | ug/L | 50.0 | 1.9 U | 103 | 69-121 | 1 | 12 | |

*Batch 8L09011 - EPA 7470A*

**Blank (8L09011-BLK1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:31

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.11 | U | 0.20 | ug/L | | | | | | | |

**LCS (8L09011-BS1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:34

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.87 | | 0.20 | ug/L | 5.00 | | 97 | 85-115 | | | |

**Matrix Spike (8L09011-MS1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:40

**Source: C811841-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 5.05 | | 0.20 | ug/L | 5.00 | 0.11 U | 101 | 85-115 | | | |

**Matrix Spike Dup (8L09011-MSD1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:43

**Source: C811841-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.90 | | 0.20 | ug/L | 5.00 | 0.11 U | 98 | 85-115 | 3 | 15 | |

**Post Spike (8L09011-PS1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:46

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L09011 - EPA 7470A*

**Post Spike (8L09011-PS1) Continued** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:46

**Source: C811841-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.68 | | 0.20 | ug/L | 5.00 | 0.04 | 93 | 75-125 | | | |

## FLAGS/NOTES AND DEFINITIONS

| | |
|---|---|
| B | The analyte was detected in the associated method blank. |
| D | The sample was analyzed at dilution. |
| J | The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable. |
| U | The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable. |
| E | The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate. |
| MRL | Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content. |

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

Page of

Requested Information

Standard

Expedited

Due / /

Lab Workorder C811841

| | | | | | | | | | | | | | | | | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4103 1 1 | 12/5 | 1230 | G | GW | 4 | X | X | | | | | | | | |
| | 4103 1 2 | 12/5 | 1340 | G | GW | 4 | X | X | | | | | | | | |
| | 4103 1 3 | 12/5 | 1440 | G | GW | 4 | X | X | | | | | | | | |
| | 4103 1 4 | 12/5 | 1555 | G | GW | 4 | X | X | | | | | | | | |

C-558 1.5°C

X Acceptable Unacceptable

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ENVIRONMENTAL CONSERVATION LABORATORIES, INC.

# Sample preservation verification

☐ Cary ☐ Jacksonville ☐ Orlando

Work order: [illegible] Page: ___ of ___ Initials: [illegible] Date: [illegible]

*A check mark (✓) in any space under the appropriate column heading for the selected sample indicates that the pH met the required pH.*
*An asterisk (*) in any space under the appropriate column heading for the selected sample indicates that the pH was adjusted in the lab as described in the comments column.*

| Sample No | Metals | TPH | Ammonia | COD | Cyanide | TOC | Hardness | TRITON | Oil & grease | Phenolics | Nox | Extractables | Sulfide | FL-PRO | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| pH ► | <2 | <2 | <2 | <2 | >12 | <2 | <2 | <2 | <2 | <2 | <2 | 5-9 | >9 | <2 | |
| 1 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |

| Reagent name | ID | Reagent name | ID | Reagent name | ID |
|---|---|---|---|---|---|
| 1 | | 3 | | 5 | |
| 2 | | 4 | | 6 | |

**Environmental Conservation Laboratories, Inc.**
**102-A Woodwinds Industrial Court**
**Cary NC, 27511**
**Phone: 919.467.3090 FAX: 919.467.3515**

**www.encolabs.com**

Wednesday, December 31, 2008

S&ME, Inc. (SM004)

Attn: Edmund Henriques

3718 Old Battleground Rd.

Greensboro, NC 27410

**RE: Laboratory Results for**
**Project Number: [none], Project Name/Desc: White Street LF App II/ SWs**
**ENCO Workorder: C811843**

Dear Edmund Henriques,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, December 3, 2008.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 161.

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**PROJECT NARRATIVE**

Date: January, 15, 2009

Client: S&ME, Inc.

Project #: White Street Landfill App II/SWs

Lab ID: C11843

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by Environmental Conservation Laboratories, Inc. will be discussed in the QC Remarks section below.

Quality Control Samples

VGCMS Acetone was found in samples 4103 II-2, II-6, II-12 and Duplicate-II. Although the analyte was not detected in the method blank, Acetone has been found to be a common laboratory contaminant.

Other Comments

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative. Should there be any questions regarding this package, please feel free to contact the undersigned for additional information.

Released By:
Environmental Conservation Laboratories, Inc.

Chuck Smith
Project Manager

## SAMPLE SUMMARY/LABORATORY CHRONICLE

| Client ID: 4103 II-1 | Lab ID: C811843-01 | Sampled: 12/01/08 16:20 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/15/08 | | 12/04/08 | 15:02 | 12/7/2008 09:45 |
| EPA 6010B | 05/30/09 | | 12/04/08 | 12:21 | 12/15/2008 13:38 |
| EPA 6020 | 05/30/09 | | 12/04/08 | 12:27 | 12/8/2008 11:57 |
| EPA 7470A | 12/29/08 | | 12/08/08 | 09:48 | 12/8/2008 15:26 |
| EPA 8081A | 12/08/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 13:19 |
| EPA 8082 | 12/01/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 13:19 |
| EPA 8151A | 12/08/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 01:55 |
| EPA 8260B | 12/15/08 | | 12/04/08 | 08:11 | 12/4/2008 19:17 |
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 15:21 |
| SM18 4500-S D | 12/08/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-1 | Lab ID: C811843-01RE1 | Sampled: 12/01/08 16:20 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/30/2008 23:13 |

| Client ID: 4103 II-2 | Lab ID: C811843-02 | Sampled: 12/02/08 10:35 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/16/08 | | 12/04/08 | 15:02 | 12/7/2008 09:47 |
| EPA 6010B | 05/31/09 | | 12/04/08 | 12:21 | 12/15/2008 14:01 |
| EPA 6020 | 05/31/09 | | 12/04/08 | 12:27 | 12/8/2008 12:07 |
| EPA 7470A | 12/30/08 | | 12/08/08 | 09:48 | 12/8/2008 15:29 |
| EPA 8081A | 12/09/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 13:32 |
| EPA 8082 | 12/02/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 13:32 |
| EPA 8151A | 12/09/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 02:32 |
| EPA 8260B | 12/16/08 | | 12/04/08 | 08:11 | 12/4/2008 19:46 |
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 15:50 |
| SM18 4500-S D | 12/09/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-2 | Lab ID: C811843-02RE1 | Sampled: 12/02/08 10:35 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 00:39 |

| Client ID: 4103 II-3 | Lab ID: C811843-03 | Sampled: 12/02/08 12:35 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/16/08 | | 12/04/08 | 15:02 | 12/7/2008 09:49 |
| EPA 6010B | 05/31/09 | | 12/04/08 | 12:21 | 12/15/2008 14:08 |
| EPA 6020 | 05/31/09 | | 12/04/08 | 12:27 | 12/8/2008 12:11 |
| EPA 7470A | 12/30/08 | | 12/08/08 | 09:48 | 12/8/2008 15:37 |
| EPA 8081A | 12/09/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 13:45 |
| EPA 8082 | 12/02/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 13:45 |
| EPA 8151A | 12/09/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 03:10 |
| EPA 8260B | 12/16/08 | | 12/04/08 | 08:11 | 12/4/2008 20:15 |
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 16:18 |
| SM18 4500-S D | 12/09/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-3 | Lab ID: C811843-03RE1 | Sampled: 12/02/08 12:35 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 01:07 |

| Client ID: 4103 II-4 | Lab ID: C811843-04 | Sampled: 12/02/08 15:05 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/16/08 | | 12/04/08 | 15:02 | 12/7/2008 09:51 |
| EPA 6010B | 05/31/09 | | 12/04/08 | 12:21 | 12/15/2008 14:15 |
| EPA 6020 | 05/31/09 | | 12/04/08 | 12:27 | 12/8/2008 12:14 |
| EPA 7470A | 12/30/08 | | 12/08/08 | 09:48 | 12/8/2008 15:40 |
| EPA 8081A | 12/09/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 13:58 |
| EPA 8082 | 12/02/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 13:58 |
| EPA 8151A | 12/09/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 18:25 |
| EPA 8260B | 12/16/08 | | 12/04/08 | 08:11 | 12/4/2008 23:10 |
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 16:47 |
| SM18 4500-S D | 12/09/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-4 | Lab ID: C811843-04RE1 | Sampled: 12/02/08 15:05 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 01:36 |

| Client ID: 4103 II-5 | Lab ID: C811843-05 | Sampled: 12/02/08 17:05 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/16/08 | | 12/04/08 | 15:02 | 12/7/2008 09:53 |
| EPA 6010B | 05/31/09 | | 12/04/08 | 12:21 | 12/15/2008 14:22 |
| EPA 6020 | 05/31/09 | | 12/04/08 | 12:27 | 12/8/2008 12:18 |
| EPA 7470A | 12/30/08 | | 12/08/08 | 09:48 | 12/8/2008 15:43 |
| EPA 8081A | 12/09/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 14:11 |
| EPA 8082 | 12/02/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 14:11 |
| EPA 8151A | 12/09/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 19:03 |
| EPA 8260B | 12/16/08 | | 12/04/08 | 08:11 | 12/4/2008 23:39 |
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 17:16 |
| SM18 4500-S D | 12/09/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-5 | Lab ID: C811843-05RE1 | Sampled: 12/02/08 17:05 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 02:04 |

| Client ID: 4103 II-6 | Lab ID: C811843-06 | Sampled: 12/01/08 12:30 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/15/08 | | 12/04/08 | 15:02 | 12/7/2008 09:55 |
| EPA 6010B | 05/30/09 | | 12/04/08 | 12:21 | 12/15/2008 14:48 |
| EPA 6020 | 05/30/09 | | 12/04/08 | 12:27 | 12/8/2008 12:21 |
| EPA 7470A | 12/29/08 | | 12/08/08 | 09:48 | 12/8/2008 15:46 |
| EPA 8081A | 12/08/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 14:25 |
| EPA 8082 | 12/01/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 14:25 |
| EPA 8151A | 12/08/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 19:40 |
| EPA 8260B | 12/15/08 | | 12/04/08 | 08:11 | 12/5/2008 00:08 |
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 17:45 |
| SM18 4500-S D | 12/08/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-6 | Lab ID: C811843-06RE1 | Sampled: 12/01/08 12:30 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 02:32 |

| Client ID: 4103 II-7 | Lab ID: C811843-07 | Sampled: 12/02/08 08:40 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/16/08 | | 12/05/08 | 10:51 | 12/7/2008 10:04 |
| EPA 6010B | 05/31/09 | | 12/04/08 | 12:21 | 12/15/2008 14:55 |
| EPA 6020 | 05/31/09 | | 12/04/08 | 12:27 | 12/8/2008 12:25 |
| EPA 7470A | 12/30/08 | | 12/09/08 | 09:40 | 12/9/2008 15:07 |
| EPA 8081A | 12/09/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 14:38 |
| EPA 8082 | 12/02/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 14:38 |
| EPA 8260B | 12/16/08 | | 12/04/08 | 08:11 | 12/5/2008 00:38 |
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 18:14 |
| SM18 4500-S D | 12/09/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-7 | Lab ID: C811843-07RE1 | Sampled: 12/02/08 08:40 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8151A | 12/09/08 | 01/13/09 | 12/04/08 | 16:04 | 12/12/2008 00:56 |
| EPA 8270C | 12/09/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 03:00 |

| Client ID: 4103 II-7B | Lab ID: C811843-08 | Sampled: 12/01/08 16:20 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/15/08 | | 12/05/08 | 10:51 | 12/7/2008 10:06 |
| EPA 6010B | 05/30/09 | | 12/04/08 | 12:21 | 12/15/2008 15:02 |
| EPA 6020 | 05/30/09 | | 12/04/08 | 12:27 | 12/8/2008 12:28 |
| EPA 7470A | 12/29/08 | | 12/09/08 | 09:40 | 12/9/2008 15:11 |
| EPA 8081A | 12/08/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 14:51 |
| EPA 8082 | 12/01/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 14:51 |
| EPA 8151A | 12/08/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 20:55 |
| EPA 8260B | 12/15/08 | | 12/04/08 | 08:11 | 12/5/2008 01:07 |
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 18:43 |
| SM18 4500-S D | 12/08/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-7B | Lab ID: C811843-08RE1 | Sampled: 12/01/08 16:20 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 03:29 |

| Client ID: 4103 II-8 | Lab ID: C811843-09 | Sampled: 12/01/08 09:40 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/15/08 | | 12/05/08 | 10:51 | 12/7/2008 10:08 |
| EPA 6010B | 05/30/09 | | 12/04/08 | 12:21 | 12/15/2008 15:09 |
| EPA 6020 | 05/30/09 | | 12/04/08 | 12:27 | 12/8/2008 12:32 |
| EPA 7470A | 12/29/08 | | 12/09/08 | 09:40 | 12/9/2008 15:13 |
| EPA 8081A | 12/08/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 15:04 |
| EPA 8082 | 12/01/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 15:04 |
| EPA 8151A | 12/08/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 21:32 |
| EPA 8260B | 12/15/08 | | 12/04/08 | 08:11 | 12/5/2008 01:36 |
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 19:12 |
| SM18 4500-S D | 12/08/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-8 | Lab ID: C811843-09RE1 | Sampled: 12/01/08 09:40 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 03:57 |

| Client ID: 4103 II-12 | Lab ID: C811843-10 | Sampled: 12/01/08 17:30 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/15/08 | | 12/05/08 | 10:51 | 12/7/2008 10:10 |
| EPA 6010B | 05/30/09 | | 12/04/08 | 12:21 | 12/15/2008 15:16 |
| EPA 6020 | 05/30/09 | | 12/04/08 | 12:27 | 12/8/2008 12:35 |
| EPA 7470A | 12/29/08 | | 12/09/08 | 09:40 | 12/9/2008 15:17 |
| EPA 8081A | 12/08/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 15:17 |
| EPA 8082 | 12/01/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 15:17 |
| EPA 8151A | 12/08/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 22:10 |
| EPA 8260B | 12/15/08 | | 12/04/08 | 15:11 | 12/6/2008 03:10 |
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 19:41 |
| SM18 4500-S D | 12/08/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 II-12 | Lab ID: C811843-10RE1 | Sampled: 12/01/08 17:30 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 04:24 |

| Client ID: 4103 DUPLICATE-II | Lab ID: C811843-11 | Sampled: 12/01/08 07:00 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/15/08 | | 12/05/08 | 10:51 | 12/7/2008 10:11 |
| EPA 6010B | 05/30/09 | | 12/04/08 | 12:21 | 12/15/2008 15:23 |
| EPA 6020 | 05/30/09 | | 12/08/08 | 13:37 | 12/12/2008 12:40 |
| EPA 7470A | 12/29/08 | | 12/09/08 | 09:40 | 12/9/2008 15:20 |
| EPA 8081A | 12/08/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 15:31 |
| EPA 8082 | 12/01/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 15:31 |
| EPA 8151A | 12/08/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 22:47 |
| EPA 8260B | 12/15/08 | | 12/04/08 | 15:11 | 12/6/2008 03:39 |
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 20:10 |
| SM18 4500-S D | 12/08/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: 4103 DUPLICATE-II | Lab ID: C811843-11RE1 | Sampled: 12/01/08 07:00 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/08/08 | 01/14/09 | 12/05/08 | 08:33 | 12/30/2008 23:42 |

| Client ID: MW-13 | Lab ID: C811843-12 | Sampled: 12/03/08 10:25 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 335.4 | 12/17/08 | | 12/05/08 | 10:51 | 12/7/2008 10:13 |
| EPA 6010B | 06/01/09 | | 12/04/08 | 12:21 | 12/15/2008 15:30 |
| EPA 6020 | 06/01/09 | | 12/08/08 | 13:37 | 12/12/2008 12:43 |
| EPA 7470A | 12/31/08 | | 12/09/08 | 09:40 | 12/9/2008 15:23 |
| EPA 8081A | 12/10/08 | 01/13/09 | 12/04/08 | 09:03 | 12/8/2008 15:44 |
| EPA 8082 | 12/03/09 | 12/04/09 | 12/04/08 | 09:03 | 12/8/2008 15:44 |
| EPA 8151A | 12/10/08 | 01/13/09 | 12/04/08 | 16:04 | 12/10/2008 23:25 |
| EPA 8260B | 12/17/08 | | 12/04/08 | 15:11 | 12/6/2008 04:08 |
| EPA 8270C | 12/10/08 | 01/14/09 | 12/05/08 | 08:33 | 12/24/2008 20:39 |
| SM18 4500-S D | 12/10/08 | | 12/04/08 | 14:20 | 12/4/2008 14:20 |

| Client ID: MW-13 | Lab ID: C811843-12RE1 | Sampled: 12/03/08 10:25 | Received: 12/03/08 14:00 |
|---|---|---|---|

| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) |
|---|---|---|---|---|---|
| EPA 8270C | 12/10/08 | 01/14/09 | 12/05/08 | 08:33 | 12/31/2008 04:52 |

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**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,1-Dichloropropene [563-58-6] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,2,4-Trichlorobenzene [120-82-1] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,3-Dichlorobenzene [541-73-1] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,3-Dichloropropane [142-28-9] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 1,4-Dichlorobenzene [106-46-7] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 2,2-Dichloropropane [594-20-7] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 15 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 3-Chloropropene [107-05-1] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Acetone [67-64-1] ^ | 1.5 | U | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Acetonitrile [75-05-8] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10 | 55 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Acrolein [107-02-8] ^ | 3.0 | U | ug/L | 1 | 3.0 | 10 | 53 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Chlorobenzene [108-90-7] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Chloroprene [126-99-8] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 20 | EPA 8260B | 12/06/08 04:08 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Dichlorodifluoromethane [75-71-8] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Ethyl Methacrylate [97-63-2] ^ | 0.32 | U | ug/L | 1 | 0.32 | 2.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Hexachlorobutadiene [87-68-3] ^ | 0.35 | U | ug/L | 1 | 0.35 | 1.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |

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**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Isobutyl alcohol [78-83-1] ^ | 14 | U | ug/L | 1 | 14 | 50 | 100 | EPA 8260B | 12/06/08 04:08 | JKG | |
| m,p-Xylenes [108-38-3/106-42-3] ^ | 0.48 | U | ug/L | 1 | 0.48 | 2.0 | NE | EPA 8260B | 12/06/08 04:08 | JKG | |
| Methacrylonitrile [126-98-7] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10 | 100 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Methyl Methacrylate [80-62-6] ^ | 0.53 | U | ug/L | 1 | 0.53 | 1.0 | 30 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Naphthalene [91-20-3] ^ | 0.39 | U | ug/L | 1 | 0.39 | 1.0 | 10 | EPA 8260B | 12/06/08 04:08 | JKG | |
| o-Xylene [95-47-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | NE | EPA 8260B | 12/06/08 04:08 | JKG | |
| Propionitrile [107-12-0] ^ | 4.8 | U | ug/L | 1 | 4.8 | 10 | 150 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/06/08 04:08 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/06/08 04:08 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *49* | *1* | *50.0* | *97 %* | *51-122* | *8L04033* | *EPA 8260B* | *12/06/08 04:08* | *JKG* | |
| *Dibromofluoromethane* | *48* | *1* | *50.0* | *97 %* | *68-117* | *8L04033* | *EPA 8260B* | *12/06/08 04:08* | *JKG* | |
| *Toluene-d8* | *47* | *1* | *50.0* | *94 %* | *69-110* | *8L04033* | *EPA 8260B* | *12/06/08 04:08* | *JKG* | |

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**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Organochlorine Pesticides by GC

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD [72-54-8] ^ | 0.024 | U | ug/L | 1 | 0.024 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| 4,4'-DDE [72-55-9] ^ | 0.023 | U | ug/L | 1 | 0.023 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| 4,4'-DDT [50-29-3] ^ | 0.025 | U | ug/L | 1 | 0.025 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Aldrin [309-00-2] ^ | 0.021 | U | ug/L | 1 | 0.021 | 0.050 | 0.05 | EPA 8081A | 12/08/08 15:44 | JHH | |
| alpha-BHC [319-84-6] ^ | 0.024 | U | ug/L | 1 | 0.024 | 0.050 | 0.05 | EPA 8081A | 12/08/08 15:44 | JHH | |
| beta-BHC [319-85-7] ^ | 0.028 | U | ug/L | 1 | 0.028 | 0.050 | 0.05 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Chlordane (n.o.s.) [57-74-9] | 0.020 | U | ug/L | 1 | 0.020 | 1.0 | | EPA 8081A | 12/08/08 15:44 | JHH | |
| Chlordane (tech) [12789-03-6] ^ | 0.020 | U | ug/L | 1 | 0.020 | 0.50 | 0.5 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Chlordane-alpha [5103-71-9] ^ | 0.025 | U | ug/L | 1 | 0.025 | 0.050 | NE | EPA 8081A | 12/08/08 15:44 | JHH | |
| Chlordane-gamma [5103-74-2] ^ | 0.026 | U | ug/L | 1 | 0.026 | 0.050 | NE | EPA 8081A | 12/08/08 15:44 | JHH | |
| delta-BHC [319-86-8] ^ | 0.013 | U | ug/L | 1 | 0.013 | 0.050 | 0.05 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Dieldrin [60-57-1] ^ | 0.023 | U | ug/L | 1 | 0.023 | 0.050 | 0.075 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Endosulfan I [959-98-8] ^ | 0.025 | U | ug/L | 1 | 0.025 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Endosulfan II [33213-65-9] ^ | 0.025 | U | ug/L | 1 | 0.025 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Endosulfan sulfate [1031-07-8] ^ | 0.025 | U | ug/L | 1 | 0.025 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Endrin [72-20-8] ^ | 0.026 | U | ug/L | 1 | 0.026 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Endrin aldehyde [7421-93-4] ^ | 0.037 | U | ug/L | 1 | 0.037 | 0.050 | 0.1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| gamma-BHC [58-89-9] ^ | 0.022 | U | ug/L | 1 | 0.022 | 0.050 | 0.05 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Heptachlor [76-44-8] ^ | 0.024 | U | ug/L | 1 | 0.024 | 0.050 | 0.05 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Heptachlor epoxide [1024-57-3] ^ | 0.025 | U | ug/L | 1 | 0.025 | 0.050 | 0.075 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Methoxychlor [72-43-5] ^ | 0.026 | U | ug/L | 1 | 0.026 | 0.050 | 1 | EPA 8081A | 12/08/08 15:44 | JHH | |
| Toxaphene [8001-35-2] ^ | 0.67 | U | ug/L | 1 | 0.67 | 1.0 | 1.5 | EPA 8081A | 12/08/08 15:44 | JHH | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *2,4,5,6-TCMX* | *0.52* | *1* | *1.00* | *52 %* | *39-151* | *8L04006* | *EPA 8081A* | *12/08/08 15:44* | *JHH* | |
| *Decachlorobiphenyl* | *0.85* | *1* | *1.00* | *85 %* | *55-118* | *8L04006* | *EPA 8081A* | *12/08/08 15:44* | *JHH* | |

**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Polychlorinated Biphenyls by GC

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016/1242 [12674-11-2/53469-21-9] ^ | 0.43 | U | ug/L | 1 | 0.43 | 0.50 | 2 | EPA 8082 | 12/08/08 15:44 | JHH | |
| PCB-1221 [11104-28-2] ^ | 0.43 | U | ug/L | 1 | 0.43 | 0.50 | NE | EPA 8082 | 12/08/08 15:44 | JHH | |
| PCB-1232 [11141-16-5] ^ | 0.43 | U | ug/L | 1 | 0.43 | 0.50 | NE | EPA 8082 | 12/08/08 15:44 | JHH | |
| PCB-1248 [12672-29-6] ^ | 0.43 | U | ug/L | 1 | 0.43 | 0.50 | NE | EPA 8082 | 12/08/08 15:44 | JHH | |
| PCB-1254 [11097-69-1] ^ | 0.43 | U | ug/L | 1 | 0.43 | 0.50 | NE | EPA 8082 | 12/08/08 15:44 | JHH | |
| PCB-1260 [11096-82-5] ^ | 0.43 | U | ug/L | 1 | 0.43 | 0.50 | NE | EPA 8082 | 12/08/08 15:44 | JHH | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *2,4,5,6-TCMX* | *0.52* | *1* | *1.00* | *52 %* | *39-151* | *8L04006* | *EPA 8082* | *12/08/08 15:44* | *JHH* | |
| *Decachlorobiphenyl* | *0.85* | *1* | *1.00* | *85 %* | *55-118* | *8L04006* | *EPA 8082* | *12/08/08 15:44* | *JHH* | |

**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Metals by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony [7440-36-0] ^ | 0.68 | U | ug/L | 1 | 0.68 | 2.00 | 6 | EPA 6020 | 12/12/08 12:43 | VLO | |
| Arsenic [7440-38-2] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |
| **Barium [7440-39-3] ^** | **127** | | ug/L | 1 | 1.00 | 10.0 | 100 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Beryllium [7440-41-7] ^ | 0.10 | U | ug/L | 1 | 0.10 | 1.00 | 1 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Cadmium [7440-43-9] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.00 | 1 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Chromium [7440-47-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Cobalt [7440-48-4] ^ | 1.1 | U | ug/L | 1 | 1.1 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Copper [7440-50-8] ^ | 1.60 | U | ug/L | 1 | 1.60 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Lead [7439-92-1] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Mercury [7439-97-6] ^ | 0.11 | U | ug/L | 1 | 0.11 | 0.20 | 0.2 | EPA 7470A | 12/09/08 15:23 | NLH | |
| Nickel [7440-02-0] ^ | 1.8 | U | ug/L | 1 | 1.8 | 10.0 | 50 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Selenium [7782-49-2] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Silver [7440-22-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |
| Thallium [7440-28-0] ^ | 0.036 | U | ug/L | 1 | 0.036 | 1.00 | 5.5 | EPA 6020 | 12/12/08 12:43 | VLO | |
| Tin [7440-31-5] ^ | 2.1 | U | ug/L | 1 | 2.1 | 10.0 | 100 | EPA 6010B | 12/15/08 15:30 | JDH | |
| **Vanadium [7440-62-2] ^** | **2.3** | J | ug/L | 1 | 1.4 | 10.0 | 25 | EPA 6010B | 12/15/08 15:30 | JDH | |
| **Zinc [7440-66-6] ^** | **7.8** | J | ug/L | 1 | 3.8 | 10.0 | 10 | EPA 6010B | 12/15/08 15:30 | JDH | |

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**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Classical Chemistry Parameters

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide (total) [57-12-5] ^ | 0.0040 | U | mg/L | 1 | 0.0040 | 0.0050 | 10 | EPA 335.4 | 12/07/08 10:13 | PEV | |
| Sulfide [18496-25-8] ^ | 0.10 | U | mg/L | 1 | 0.10 | 0.10 | 1 | SM18 4500-S D | 12/04/08 14:20 | GPW | |

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**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Chlorinated Herbicides by GC

*^ - ENCO Orlando certified analyte [NC 424]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T [93-76-5] ^ | 0.080 | U | ug/L | 1 | 0.080 | 0.50 | 2 | EPA 8151A | 12/10/08 23:25 | RC | |
| 2,4,5-TP (Silvex) [93-72-1] ^ | 0.087 | U | ug/L | 1 | 0.087 | 0.50 | | EPA 8151A | 12/10/08 23:25 | RC | |
| 2,4-D [94-75-7] ^ | 0.13 | U | ug/L | 1 | 0.13 | 0.50 | 2 | EPA 8151A | 12/10/08 23:25 | RC | |
| Dinoseb [88-85-7] ^ | 0.10 | U | ug/L | 1 | 0.10 | 0.50 | 1 | EPA 8151A | 12/10/08 23:25 | RC | QV-01 |
| Pentachlorophenol [87-86-5] ^ | 0.056 | U | ug/L | 1 | 0.056 | 0.50 | | EPA 8151A | 12/10/08 23:25 | RC | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *2,4-DCAA* | *2.0* | *1* | *2.00* | *98 %* | *68-139* | *8L04029* | *EPA 8151A* | *12/10/08 23:25* | *RC* | |

**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Semivolatile Organic Compounds by GCMS

*^ - ENCO Jacksonville certified analyte [NC 442]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene [95-94-3] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 1,3,5-Trinitrobenzene [99-35-4] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | QV-03 |
| 1,3-Dinitrobenzene [99-65-0] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 1,4-Naphthoquinone [130-15-4] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | QV-01 |
| 1,4-Phenylenediamine [106-50-3] ^ | 4.0 | U | ug/L | 1 | 4.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | QV-03 |
| 1-Naphthylamine [134-32-7] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,3,4,6-Tetrachlorophenol [58-90-2] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,4,5-Trichlorophenol [95-95-4] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,4,6-Trichlorophenol [88-06-2] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,4-Dichlorophenol [120-83-2] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,4-Dimethylphenol [105-67-9] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,4-Dinitrophenol [51-28-5] ^ | 1.2 | U | ug/L | 1 | 1.2 | 10 | 50 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,4-Dinitrotoluene [121-14-2] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,6-Dichlorophenol [87-65-0] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2,6-Dinitrotoluene [606-20-2] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Acetylaminofluorene [53-96-3] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Chloronaphthalene [91-58-7] ^ | 2.6 | U | ug/L | 1 | 2.6 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Chlorophenol [95-57-8] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Methyl-4,6-dinitrophenol [534-52-1] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 50 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Methylnaphthalene [91-57-6] ^ | 2.9 | U | ug/L | 1 | 2.9 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Methylphenol [95-48-7] ^ | 1.2 | U | ug/L | 1 | 1.2 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Naphthylamine [91-59-8] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Nitroaniline [88-74-4] ^ | 1.3 | U | ug/L | 1 | 1.3 | 10 | 50 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 2-Nitrophenol [88-75-5] ^ | 1.6 | U | ug/L | 1 | 1.6 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 3 & 4-Methylphenol [106-44-5] ^ | 1.3 | U | ug/L | 1 | 1.3 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 3,3'-Dichlorobenzidine [91-94-1] ^ | 1.3 | U | ug/L | 1 | 1.3 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 3,3'-Dimethylbenzidine [119-93-7] ^ | 3.0 | U | ug/L | 1 | 3.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 3-Methylcholanthrene [56-49-5] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 3-Nitroaniline [99-09-2] ^ | 1.3 | U | ug/L | 1 | 1.3 | 10 | 50 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 4-Aminobiphenyl [92-67-1] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | QV-03 |
| 4-Bromophenyl-phenylether [101-55-3] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 4-Chloro-3-methylphenol [59-50-7] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 4-Chloroaniline [106-47-8] ^ | 1.3 | U | ug/L | 1 | 1.3 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 4-Chlorophenyl-phenylether [7005-72-3] ^ | 2.1 | U | ug/L | 1 | 2.1 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 4-Nitroaniline [100-01-6] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 4-Nitrophenol [100-02-7] ^ | 0.79 | U | ug/L | 1 | 0.79 | 10 | 50 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 5-Nitro-o-toluidine [99-55-8] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| 7,12-Dimethylbenz(a)anthracene [57-97-6] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Acenaphthene [83-32-9] ^ | 2.4 | U | ug/L | 1 | 2.4 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Acenaphthylene [208-96-8] ^ | 2.2 | U | ug/L | 1 | 2.2 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Acetophenone [98-86-2] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Anthracene [120-12-7] ^ | 1.6 | U | ug/L | 1 | 1.6 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Benzo(a)anthracene [56-55-3] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Benzo(a)pyrene [50-32-8] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Benzo(b)fluoranthene [205-99-2] ^ | 1.3 | U | ug/L | 1 | 1.3 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |

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**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Semivolatile Organic Compounds by GCMS

*^ - ENCO Jacksonville certified analyte [NC 442]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene [191-24-2] ^ | 4.1 | U | ug/L | 1 | 4.1 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Benzo(k)fluoranthene [207-08-9] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Benzyl alcohol [100-51-6] ^ | 9.4 | U | ug/L | 1 | 9.4 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Bis(2-chloroethoxy)methane [111-91-1] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Bis(2-chloroethyl)ether [111-44-4] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Bis(2-chloroisopropyl)ether [39638-32-9] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Bis(2-ethylhexyl)phthalate [117-81-7] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 15 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Butylbenzylphthalate [85-68-7] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Chlorobenzilate [510-15-6] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Chrysene [218-01-9] ^ | 1.6 | U | ug/L | 1 | 1.6 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Diallate [2303-16-4] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Dibenzofuran [132-64-9] ^ | 2.1 | U | ug/L | 1 | 2.1 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Diethylphthalate [84-66-2] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Dimethoate [60-51-5] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Dimethylphthalate [131-11-3] ^ | 1.4 | U | ug/L | 1 | 1.4 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Di-n-butylphthalate [84-74-2] ^ | 1.6 | U | ug/L | 1 | 1.6 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Di-n-octylphthalate [117-84-0] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Disulfoton [298-04-4] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Ethyl methanesulfonate [62-50-0] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Famphur [52-85-7] ^ | 3.0 | U | ug/L | 1 | 3.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Fluoranthene [206-44-0] ^ | 1.6 | U | ug/L | 1 | 1.6 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Fluorene [86-73-7] ^ | 1.9 | U | ug/L | 1 | 1.9 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Hexachlorobenzene [118-74-1] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Hexachlorobutadiene [87-68-3] ^ | 3.1 | U | ug/L | 1 | 3.1 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Hexachlorocyclopentadiene [77-47-4] ^ | 2.5 | U | ug/L | 1 | 2.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Hexachloroethane [67-72-1] ^ | 2.7 | U | ug/L | 1 | 2.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Hexachloropropene [1888-71-7] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Isodrin [465-73-6] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Isophorone [78-59-1] ^ | 1.8 | U | ug/L | 1 | 1.8 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Isosafrole [120-58-1] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Kepone [143-50-0] ^ | 20 | U | ug/L | 1 | 20 | 20 | 20 | EPA 8270C | 12/31/08 04:52 | jat | |
| Methapyrilene [91-80-5] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 100 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Methyl Methanesulfonate [66-27-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Methyl parathion [298-00-0] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Nitrobenzene [98-95-3] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitrosodiethylamine [55-18-5] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitrosodimethylamine [62-75-9] ^ | 0.91 | U | ug/L | 1 | 0.91 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitrosodi-n-butylamine [924-16-3] ^ | 3.0 | U | ug/L | 1 | 3.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitroso-di-n-propylamine [621-64-7] ^ | 1.5 | U | ug/L | 1 | 1.5 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] | 1.2 | U | ug/L | 1 | 1.2 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitrosomethylethylamine [10595-95-6] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitrosopiperidine [100-75-4] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| N-Nitrosopyrrolidine [930-55-2] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |

**Description:** MW-13
**Matrix:** Ground Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-12
**Sampled:** 12/03/08 10:25
**Sampled By:** Gary Simcox

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Semivolatile Organic Compounds by GCMS

*^ - ENCO Jacksonville certified analyte [NC 442]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| O,O,O-Triethyl phosphorothioate [126-68-1] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| o-Toluidine [95-53-4] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Parathion [56-38-2] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| p-Dimethylaminoazobenzene [60-11-7] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Pentachlorobenzene [608-93-5] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Pentachloronitrobenzene [82-68-8] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Phenacetin [62-44-2] ^ | 6.0 | U | ug/L | 1 | 6.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Phenanthrene [85-01-8] ^ | 1.7 | U | ug/L | 1 | 1.7 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Phenol [108-95-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Phorate [298-02-2] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | QV-03 |
| Pronamide [23950-58-5] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Pyrene [129-00-0] ^ | 1.6 | U | ug/L | 1 | 1.6 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Safrole [94-59-7] ^ | 1.0 | U | ug/L | 1 | 1.0 | 10 | 10 | EPA 8270C | 12/24/08 20:39 | JAT | |
| Thionazin [297-97-2] ^ | 2.0 | U | ug/L | 1 | 2.0 | 10 | 20 | EPA 8270C | 12/24/08 20:39 | JAT | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *85* | *1* | *100* | *85 %* | *64-125* | *8L22019* | *EPA 8270C* | *12/24/08 20:39* | *JAT* | |
| *2-Fluorobiphenyl* | *32* | *1* | *50.0* | *63 %* | *43-120* | *8L22019* | *EPA 8270C* | *12/24/08 20:39* | *JAT* | |
| *2-Fluorophenol* | *41* | *1* | *100* | *41 %* | *21-71* | *8L22019* | *EPA 8270C* | *12/24/08 20:39* | *JAT* | |
| *Nitrobenzene-d5* | *28* | *1* | *50.0* | *57 %* | *54-120* | *8L22019* | *EPA 8270C* | *12/24/08 20:39* | *JAT* | |
| *Phenol-d5* | *32* | *1* | *100* | *32 %* | *11-48* | *8L22019* | *EPA 8270C* | *12/24/08 20:39* | *JAT* | |
| *Terphenyl-d14* | *42* | *1* | *50.0* | *84 %* | *75-127* | *8L22019* | *EPA 8270C* | *12/24/08 20:39* | *JAT* | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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**Description:** 4103 Trip Blank #2
**Matrix:** Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-14
**Sampled:** 12/01/08 07:00
**Sampled By:** ENCO

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane [630-20-6] ^ | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,1,1-Trichloroethane [71-55-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,1,2,2-Tetrachloroethane [79-34-5] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 3 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,1,2-Trichloroethane [79-00-5] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,1-Dichloroethane [75-34-3] ^ | 0.33 | U | ug/L | 1 | 0.33 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,1-Dichloroethene [75-35-4] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,1-Dichloropropene [563-58-6] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,2,3-Trichloropropane [96-18-4] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,2,4-Trichlorobenzene [120-82-1] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,2-Dibromo-3-chloropropane [96-12-8] ^ | 0.48 | U | ug/L | 1 | 0.48 | 1.0 | 13 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,2-Dibromoethane [106-93-4] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,2-Dichlorobenzene [95-50-1] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,2-Dichloroethane [107-06-2] ^ | 0.65 | U | ug/L | 1 | 0.65 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,2-Dichloropropane [78-87-5] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,3-Dichlorobenzene [541-73-1] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,3-Dichloropropane [142-28-9] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 1,4-Dichlorobenzene [106-46-7] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 2,2-Dichloropropane [594-20-7] ^ | 0.55 | U | ug/L | 1 | 0.55 | 1.0 | 15 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 2-Butanone [78-93-3] ^ | 1.0 | U | ug/L | 1 | 1.0 | 5.0 | 100 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 2-Hexanone [591-78-6] ^ | 0.69 | U | ug/L | 1 | 0.69 | 5.0 | 50 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 3-Chloropropene [107-05-1] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| 4-Methyl-2-pentanone [108-10-1] ^ | 1.1 | U | ug/L | 1 | 1.1 | 5.0 | 100 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Acetone [67-64-1] ^ | 1.5 | U | ug/L | 1 | 1.5 | 5.0 | 100 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Acetonitrile [75-05-8] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10 | 55 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Acrolein [107-02-8] ^ | 3.0 | U | ug/L | 1 | 3.0 | 10 | 53 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Acrylonitrile [107-13-1] ^ | 2.1 | U | ug/L | 1 | 2.1 | 5.0 | 200 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Benzene [71-43-2] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Bromochloromethane [74-97-5] ^ | 0.42 | U | ug/L | 1 | 0.42 | 1.0 | 3 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Bromodichloromethane [75-27-4] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Bromoform [75-25-2] ^ | 0.71 | U | ug/L | 1 | 0.71 | 1.0 | 3 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Bromomethane [74-83-9] ^ | 0.49 | U | ug/L | 1 | 0.49 | 1.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Carbon disulfide [75-15-0] ^ | 0.54 | U | ug/L | 1 | 0.54 | 5.0 | 100 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Carbon tetrachloride [56-23-5] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Chlorobenzene [108-90-7] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 3 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Chloroethane [75-00-3] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Chloroform [67-66-3] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Chloromethane [74-87-3] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Chloroprene [126-99-8] ^ | 0.24 | U | ug/L | 1 | 0.24 | 1.0 | 20 | EPA 8260B | 12/06/08 01:43 | JKG | |
| cis-1,2-Dichloroethene [156-59-2] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| cis-1,3-Dichloropropene [10061-01-5] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Dibromochloromethane [124-48-1] ^ | 0.32 | U | ug/L | 1 | 0.32 | 1.0 | 3 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Dibromomethane [74-95-3] ^ | 0.37 | U | ug/L | 1 | 0.37 | 1.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Dichlorodifluoromethane [75-71-8] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Ethyl Methacrylate [97-63-2] ^ | 0.32 | U | ug/L | 1 | 0.32 | 2.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Ethylbenzene [100-41-4] ^ | 0.20 | U | ug/L | 1 | 0.20 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Hexachlorobutadiene [87-68-3] ^ | 0.35 | U | ug/L | 1 | 0.35 | 1.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |

**Description:** 4103 Trip Blank #2
**Matrix:** Water
**Project:** White Street LF App II/ SWs

**Lab Sample ID:** C811843-14
**Sampled:** 12/01/08 07:00
**Sampled By:** ENCO

**Received:** 12/03/08 14:00
**Work Order:** C811843

## Volatile Organic Compounds by GCMS

*^ - ENCO Cary certified analyte [NC 591]*

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | MRL | NC SWSL | Method | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iodomethane [74-88-4] ^ | 0.52 | U | ug/L | 1 | 0.52 | 2.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Isobutyl alcohol [78-83-1] ^ | 14 | U | ug/L | 1 | 14 | 50 | 100 | EPA 8260B | 12/06/08 01:43 | JKG | |
| m,p-Xylenes [108-38-3/106-42-3] ^ | 0.48 | U | ug/L | 1 | 0.48 | 2.0 | NE | EPA 8260B | 12/06/08 01:43 | JKG | |
| Methacrylonitrile [126-98-7] ^ | 2.8 | U | ug/L | 1 | 2.8 | 10 | 100 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Methyl Methacrylate [80-62-6] ^ | 0.53 | U | ug/L | 1 | 0.53 | 1.0 | 30 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Methylene chloride [75-09-2] ^ | 0.53 | U | ug/L | 1 | 0.53 | 2.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Naphthalene [91-20-3] ^ | 0.39 | U | ug/L | 1 | 0.39 | 1.0 | 10 | EPA 8260B | 12/06/08 01:43 | JKG | |
| o-Xylene [95-47-6] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | NE | EPA 8260B | 12/06/08 01:43 | JKG | |
| Propionitrile [107-12-0] ^ | 4.8 | U | ug/L | 1 | 4.8 | 10 | 150 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Styrene [100-42-5] ^ | 0.26 | U | ug/L | 1 | 0.26 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Tetrachloroethene [127-18-4] ^ | 0.36 | U | ug/L | 1 | 0.36 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Toluene [108-88-3] ^ | 0.27 | U | ug/L | 1 | 0.27 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| trans-1,2-Dichloroethene [156-60-5] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |
| trans-1,3-Dichloropropene [10061-02-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| trans-1,4-Dichloro-2-butene [110-57-6] ^ | 0.54 | U | ug/L | 1 | 0.54 | 1.0 | 100 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Trichloroethene [79-01-6] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Trichlorofluoromethane [75-69-4] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Vinyl acetate [108-05-4] ^ | 0.98 | U | ug/L | 1 | 0.98 | 2.0 | 50 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Vinyl chloride [75-01-4] ^ | 0.30 | U | ug/L | 1 | 0.30 | 1.0 | 1 | EPA 8260B | 12/06/08 01:43 | JKG | |
| Xylenes (Total) [1330-20-7] | 0.40 | U | ug/L | 1 | 0.40 | 1.0 | 5 | EPA 8260B | 12/06/08 01:43 | JKG | |

| *Surrogates* | *Results* | *DF* | *Spike Lvl* | *% Rec* | *% Rec Limits* | *Batch* | *Method* | *Analyzed* | *By* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *48* | *1* | *50.0* | *96 %* | *51-122* | *8L04033* | *EPA 8260B* | *12/06/08 01:43* | *JKG* | |
| *Dibromofluoromethane* | *47* | *1* | *50.0* | *94 %* | *68-117* | *8L04033* | *EPA 8260B* | *12/06/08 01:43* | *JKG* | |
| *Toluene-d8* | *47* | *1* | *50.0* | *94 %* | *69-110* | *8L04033* | *EPA 8260B* | *12/06/08 01:43* | *JKG* | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L03029 - EPA 5030B_MS*

**Blank (8L03029-BLK1)** Prepared: 12/04/2008 08:00 Analyzed: 12/04/2008 15:53

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.40 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloropropene | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.48 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 0.65 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloropropane | 0.20 | U | 1.0 | ug/L | | | | | | | |
| 1,3-Dichlorobenzene | 0.30 | U | 1.0 | ug/L | | | | | | | |
| 1,3-Dichloropropane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 2,2-Dichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| 2-Butanone | 1.0 | U | 5.0 | ug/L | | | | | | | |
| 2-Hexanone | 0.69 | U | 5.0 | ug/L | | | | | | | |
| 3-Chloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 1.1 | U | 5.0 | ug/L | | | | | | | |
| Acetone | 1.5 | U | 5.0 | ug/L | | | | | | | |
| Acetonitrile | 2.8 | U | 10 | ug/L | | | | | | | |
| Acrolein | 3.0 | U | 10 | ug/L | | | | | | | |
| Acrylonitrile | 2.1 | U | 5.0 | ug/L | | | | | | | |
| Benzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Bromochloromethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Bromoform | 0.71 | U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 0.49 | U | 1.0 | ug/L | | | | | | | |
| Carbon disulfide | 0.54 | U | 5.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 0.38 | U | 1.0 | ug/L | | | | | | | |
| Chlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Chloroform | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Chloromethane | 0.34 | U | 1.0 | ug/L | | | | | | | |
| Chloroprene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| Dibromochloromethane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Dichlorodifluoromethane | 0.38 | U | 1.0 | ug/L | | | | | | | |
| Ethyl Methacrylate | 0.32 | U | 2.0 | ug/L | | | | | | | |
| Ethylbenzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Hexachlorobutadiene | 0.35 | U | 1.0 | ug/L | | | | | | | |
| Iodomethane | 0.52 | U | 2.0 | ug/L | | | | | | | |
| Isobutyl alcohol | 14 | U | 50 | ug/L | | | | | | | |
| m,p-Xylenes | 0.48 | U | 2.0 | ug/L | | | | | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L03029 - EPA 5030B_MS*

**Blank (8L03029-BLK1) Continued** Prepared: 12/04/2008 08:00 Analyzed: 12/04/2008 15:53

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methacrylonitrile | 2.8 | U | 10 | ug/L | | | | | | | |
| Methyl Methacrylate | 0.53 | U | 1.0 | ug/L | | | | | | | |
| Methylene chloride | 0.53 | U | 2.0 | ug/L | | | | | | | |
| Naphthalene | 0.39 | U | 1.0 | ug/L | | | | | | | |
| o-Xylene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Propionitrile | 4.8 | U | 10 | ug/L | | | | | | | |
| Styrene | 0.26 | U | 1.0 | ug/L | | | | | | | |
| Tetrachloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| Toluene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 0.34 | U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 0.54 | U | 1.0 | ug/L | | | | | | | |
| Trichloroethene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 0.28 | U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 0.98 | U | 2.0 | ug/L | | | | | | | |
| Vinyl chloride | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Xylenes (Total) | 0.40 | U | 1.0 | ug/L | | | | | | | |
| *Surrogate: 4-Bromofluorobenzene* | *44* | | | *ug/L* | *50.0* | | *88* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *48* | | | *ug/L* | *50.0* | | *95* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *45* | | | *ug/L* | *50.0* | | *90* | *69-110* | | | |

**LCS (8L03029-BS1)** Prepared: 12/04/2008 08:00 Analyzed: 12/04/2008 16:22

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 21 | | 1.0 | ug/L | 20.0 | | 106 | 75-133 | | | |
| Benzene | 22 | | 1.0 | ug/L | 20.0 | | 108 | 81-134 | | | |
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | | 93 | 83-117 | | | |
| Toluene | 19 | | 1.0 | ug/L | 20.0 | | 97 | 71-118 | | | |
| Trichloroethene | 19 | | 1.0 | ug/L | 20.0 | | 96 | 75-115 | | | |
| *Surrogate: 4-Bromofluorobenzene* | *45* | | | *ug/L* | *50.0* | | *90* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *46* | | | *ug/L* | *50.0* | | *93* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *45* | | | *ug/L* | *50.0* | | *89* | *69-110* | | | |

**Matrix Spike (8L03029-MS1)** Prepared: 12/04/2008 08:00 Analyzed: 12/04/2008 16:51

**Source: C813143-09**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20 | | 1.0 | ug/L | 20.0 | 0.24 U | 100 | 75-133 | | | |
| Benzene | 21 | | 1.0 | ug/L | 20.0 | 0.20 U | 104 | 81-134 | | | |
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 94 | 83-117 | | | |
| Toluene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 99 | 71-118 | | | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.38 U | 90 | 75-115 | | | |
| *Surrogate: 4-Bromofluorobenzene* | *43* | | | *ug/L* | *50.0* | | *87* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *48* | | | *ug/L* | *50.0* | | *95* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *45* | | | *ug/L* | *50.0* | | *91* | *69-110* | | | |

**Matrix Spike Dup (8L03029-MSD1)** Prepared: 12/04/2008 08:00 Analyzed: 12/04/2008 17:20

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L03029 - EPA 5030B_MS*

**Matrix Spike Dup (8L03029-MSD1) Continued** Prepared: 12/04/2008 08:00 Analyzed: 12/04/2008 17:20

**Source: C813143-09**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20 | | 1.0 | ug/L | 20.0 | 0.24 U | 98 | 75-133 | 2 | 20 | |
| Benzene | 21 | | 1.0 | ug/L | 20.0 | 0.20 U | 105 | 81-134 | 0.2 | 17 | |
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 96 | 83-117 | 2 | 16 | |
| Toluene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 98 | 71-118 | 0.6 | 17 | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.38 U | 90 | 75-115 | 0.8 | 18 | |
| *Surrogate: 4-Bromofluorobenzene* | *44* | | | *ug/L* | *50.0* | | *88* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *48* | | | *ug/L* | *50.0* | | *96* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *46* | | | *ug/L* | *50.0* | | *91* | *69-110* | | | |

*Batch 8L04033 - EPA 5030B_MS*

**Blank (8L04033-BLK1)** Prepared: 12/04/2008 15:11 Analyzed: 12/05/2008 23:17

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.40 | U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 0.33 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloropropene | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.48 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 0.65 | U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloropropane | 0.20 | U | 1.0 | ug/L | | | | | | | |
| 1,3-Dichlorobenzene | 0.30 | U | 1.0 | ug/L | | | | | | | |
| 1,3-Dichloropropane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| 2,2-Dichloropropane | 0.55 | U | 1.0 | ug/L | | | | | | | |
| 2-Butanone | 1.0 | U | 5.0 | ug/L | | | | | | | |
| 2-Hexanone | 0.69 | U | 5.0 | ug/L | | | | | | | |
| 3-Chloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 1.1 | U | 5.0 | ug/L | | | | | | | |
| Acetone | 1.5 | U | 5.0 | ug/L | | | | | | | |
| Acetonitrile | 2.8 | U | 10 | ug/L | | | | | | | |
| Acrolein | 3.0 | U | 10 | ug/L | | | | | | | |
| Acrylonitrile | 2.1 | U | 5.0 | ug/L | | | | | | | |
| Benzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Bromochloromethane | 0.42 | U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Bromoform | 0.71 | U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 0.49 | U | 1.0 | ug/L | | | | | | | |
| Carbon disulfide | 0.54 | U | 5.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 0.38 | U | 1.0 | ug/L | | | | | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L04033 - EPA 5030B_MS*

**Blank (8L04033-BLK1) Continued** Prepared: 12/04/2008 15:11 Analyzed: 12/05/2008 23:17

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Chloroform | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Chloromethane | 0.34 | U | 1.0 | ug/L | | | | | | | |
| Chloroprene | 0.24 | U | 1.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| Dibromochloromethane | 0.32 | U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 0.37 | U | 1.0 | ug/L | | | | | | | |
| Dichlorodifluoromethane | 0.38 | U | 1.0 | ug/L | | | | | | | |
| Ethyl Methacrylate | 0.32 | U | 2.0 | ug/L | | | | | | | |
| Ethylbenzene | 0.20 | U | 1.0 | ug/L | | | | | | | |
| Hexachlorobutadiene | 0.35 | U | 1.0 | ug/L | | | | | | | |
| Iodomethane | 0.52 | U | 2.0 | ug/L | | | | | | | |
| Isobutyl alcohol | 14 | U | 50 | ug/L | | | | | | | |
| m,p-Xylenes | 0.48 | U | 2.0 | ug/L | | | | | | | |
| Methacrylonitrile | 2.8 | U | 10 | ug/L | | | | | | | |
| Methyl Methacrylate | 0.53 | U | 1.0 | ug/L | | | | | | | |
| Methylene chloride | 0.53 | U | 2.0 | ug/L | | | | | | | |
| Naphthalene | 0.39 | U | 1.0 | ug/L | | | | | | | |
| o-Xylene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| Propionitrile | 4.8 | U | 10 | ug/L | | | | | | | |
| Styrene | 0.26 | U | 1.0 | ug/L | | | | | | | |
| Tetrachloroethene | 0.36 | U | 1.0 | ug/L | | | | | | | |
| Toluene | 0.27 | U | 1.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 0.34 | U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 0.54 | U | 1.0 | ug/L | | | | | | | |
| Trichloroethene | 0.38 | U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 0.28 | U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 0.98 | U | 2.0 | ug/L | | | | | | | |
| Vinyl chloride | 0.30 | U | 1.0 | ug/L | | | | | | | |
| Xylenes (Total) | 0.40 | U | 1.0 | ug/L | | | | | | | |
| *Surrogate: 4-Bromofluorobenzene* | *48* | | | *ug/L* | *50.0* | | *96* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *47* | | | *ug/L* | *50.0* | | *94* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *47* | | | *ug/L* | *50.0* | | *94* | *69-110* | | | |

**LCS (8L04033-BS1)** Prepared: 12/04/2008 15:11 Analyzed: 12/05/2008 23:46

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20 | | 1.0 | ug/L | 20.0 | | 101 | 75-133 | | | |
| Benzene | 19 | | 1.0 | ug/L | 20.0 | | 97 | 81-134 | | | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | | 99 | 83-117 | | | |
| Toluene | 20 | | 1.0 | ug/L | 20.0 | | 99 | 71-118 | | | |
| Trichloroethene | 22 | | 1.0 | ug/L | 20.0 | | 110 | 75-115 | | | |
| *Surrogate: 4-Bromofluorobenzene* | *50* | | | *ug/L* | *50.0* | | *100* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *47* | | | *ug/L* | *50.0* | | *95* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *47* | | | *ug/L* | *50.0* | | *95* | *69-110* | | | |

## QUALITY CONTROL

### Volatile Organic Compounds by GCMS - Quality Control

*Batch 8L04033 - EPA 5030B_MS*

**Matrix Spike (8L04033-MS1)** Prepared: 12/04/2008 15:11 Analyzed: 12/06/2008 00:16

**Source: C813143-10**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.24 U | 92 | 75-133 | | | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | 0.20 U | 90 | 81-134 | | | |
| Chlorobenzene | 20 | | 1.0 | ug/L | 20.0 | 0.27 U | 100 | 83-117 | | | |
| Toluene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 96 | 71-118 | | | |
| Trichloroethene | 19 | | 1.0 | ug/L | 20.0 | 0.38 U | 93 | 75-115 | | | |
| *Surrogate: 4-Bromofluorobenzene* | *50* | | | *ug/L* | *50.0* | | *99* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *47* | | | *ug/L* | *50.0* | | *94* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *47* | | | *ug/L* | *50.0* | | *95* | *69-110* | | | |

**Matrix Spike Dup (8L04033-MSD1)** Prepared: 12/04/2008 15:11 Analyzed: 12/06/2008 00:45

**Source: C813143-10**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 17 | | 1.0 | ug/L | 20.0 | 0.24 U | 87 | 75-133 | 5 | 20 | |
| Benzene | 18 | | 1.0 | ug/L | 20.0 | 0.20 U | 90 | 81-134 | 0.2 | 17 | |
| Chlorobenzene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 97 | 83-117 | 3 | 16 | |
| Toluene | 19 | | 1.0 | ug/L | 20.0 | 0.27 U | 96 | 71-118 | 0.05 | 17 | |
| Trichloroethene | 18 | | 1.0 | ug/L | 20.0 | 0.38 U | 91 | 75-115 | 2 | 18 | |
| *Surrogate: 4-Bromofluorobenzene* | *50* | | | *ug/L* | *50.0* | | *100* | *51-122* | | | |
| *Surrogate: Dibromofluoromethane* | *46* | | | *ug/L* | *50.0* | | *92* | *68-117* | | | |
| *Surrogate: Toluene-d8* | *48* | | | *ug/L* | *50.0* | | *97* | *69-110* | | | |

### Organochlorine Pesticides by GC - Quality Control

*Batch 8L04006 - EPA 3510C*

**Blank (8L04006-BLK1)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 11:33

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.024 | U | 0.050 | ug/L | | | | | | | |
| 4,4'-DDE | 0.023 | U | 0.050 | ug/L | | | | | | | |
| 4,4'-DDT | 0.025 | U | 0.050 | ug/L | | | | | | | |
| Aldrin | 0.021 | U | 0.050 | ug/L | | | | | | | |
| alpha-BHC | 0.024 | U | 0.050 | ug/L | | | | | | | |
| beta-BHC | 0.028 | U | 0.050 | ug/L | | | | | | | |
| Chlordane (n.o.s.) | 0.020 | U | 1.0 | ug/L | | | | | | | |
| Chlordane (tech) | 0.020 | U | 0.50 | ug/L | | | | | | | |
| Chlordane-alpha | 0.025 | U | 0.050 | ug/L | | | | | | | |
| Chlordane-gamma | 0.026 | U | 0.050 | ug/L | | | | | | | |
| delta-BHC | 0.013 | U | 0.050 | ug/L | | | | | | | |
| Dieldrin | 0.023 | U | 0.050 | ug/L | | | | | | | |
| Endosulfan I | 0.025 | U | 0.050 | ug/L | | | | | | | |
| Endosulfan II | 0.025 | U | 0.050 | ug/L | | | | | | | |
| Endosulfan sulfate | 0.025 | U | 0.050 | ug/L | | | | | | | |
| Endrin | 0.026 | U | 0.050 | ug/L | | | | | | | |
| Endrin aldehyde | 0.037 | U | 0.050 | ug/L | | | | | | | |

## QUALITY CONTROL

### Organochlorine Pesticides by GC - Quality Control

*Batch 8L04006 - EPA 3510C*

**Blank (8L04006-BLK1) Continued** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 11:33

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| gamma-BHC | 0.022 | U | 0.050 | ug/L | | | | | | | |
| Heptachlor | 0.024 | U | 0.050 | ug/L | | | | | | | |
| Heptachlor epoxide | 0.025 | U | 0.050 | ug/L | | | | | | | |
| Methoxychlor | 0.026 | U | 0.050 | ug/L | | | | | | | |
| Toxaphene | 0.67 | U | 1.0 | ug/L | | | | | | | |
| *Surrogate: 2,4,5,6-TCMX* | *1.0* | | | *ug/L* | *1.00* | | *101* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *0.66* | | | *ug/L* | *1.00* | | *66* | *55-118* | | | |

**LCS (8L04006-BS1)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 11:46

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDT | 0.82 | | 0.050 | ug/L | 1.00 | | 82 | 50-150 | | | |
| Aldrin | 0.87 | | 0.050 | ug/L | 1.00 | | 87 | 50-150 | | | |
| Dieldrin | 0.85 | | 0.050 | ug/L | 1.00 | | 85 | 50-150 | | | |
| Endrin | 0.79 | | 0.050 | ug/L | 1.00 | | 79 | 50-150 | | | |
| gamma-BHC | 0.88 | | 0.050 | ug/L | 1.00 | | 88 | 50-150 | | | |
| Heptachlor | 0.87 | | 0.050 | ug/L | 1.00 | | 87 | 50-150 | | | |
| *Surrogate: 2,4,5,6-TCMX* | *1.0* | | | *ug/L* | *1.00* | | *105* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *1.0* | | | *ug/L* | *1.00* | | *102* | *55-118* | | | |

**Matrix Spike (8L04006-MS1)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 11:59

**Source: C813143-08**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDT | 0.78 | | 0.050 | ug/L | 1.00 | 0.025 U | 78 | 53-143 | | | |
| Aldrin | 0.78 | | 0.050 | ug/L | 1.00 | 0.021 U | 78 | 41-154 | | | |
| Dieldrin | 0.84 | | 0.050 | ug/L | 1.00 | 0.023 U | 84 | 41-154 | | | |
| Endrin | 0.79 | | 0.050 | ug/L | 1.00 | 0.026 U | 79 | 38-183 | | | |
| gamma-BHC | 0.87 | | 0.050 | ug/L | 1.00 | 0.022 U | 87 | 48-118 | | | |
| Heptachlor | 0.79 | | 0.050 | ug/L | 1.00 | 0.024 U | 79 | 42-163 | | | |
| *Surrogate: 2,4,5,6-TCMX* | *0.88* | | | *ug/L* | *1.00* | | *88* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *0.88* | | | *ug/L* | *1.00* | | *88* | *55-118* | | | |

**Matrix Spike Dup (8L04006-MSD1)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 12:12

**Source: C813143-08**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDT | 0.79 | | 0.050 | ug/L | 1.00 | 0.025 U | 79 | 53-143 | 1 | 24 | |
| Aldrin | 0.80 | | 0.050 | ug/L | 1.00 | 0.021 U | 80 | 41-154 | 3 | 22 | |
| Dieldrin | 0.83 | | 0.050 | ug/L | 1.00 | 0.023 U | 83 | 41-154 | 1 | 22 | |
| Endrin | 0.79 | | 0.050 | ug/L | 1.00 | 0.026 U | 79 | 38-183 | 0.3 | 26 | |
| gamma-BHC | 0.85 | | 0.050 | ug/L | 1.00 | 0.022 U | 85 | 48-118 | 3 | 21 | |
| Heptachlor | 0.80 | | 0.050 | ug/L | 1.00 | 0.024 U | 80 | 42-163 | 1 | 25 | |
| *Surrogate: 2,4,5,6-TCMX* | *0.83* | | | *ug/L* | *1.00* | | *83* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *0.97* | | | *ug/L* | *1.00* | | *97* | *55-118* | | | |

## QUALITY CONTROL

### Polychlorinated Biphenyls by GC - Quality Control

*Batch 8L04006 - EPA 3510C*

**Blank (8L04006-BLK1)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 11:33

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016/1242 | 0.43 | U | 0.50 | ug/L | | | | | | | |
| PCB-1221 | 0.43 | U | 0.50 | ug/L | | | | | | | |
| PCB-1232 | 0.43 | U | 0.50 | ug/L | | | | | | | |
| PCB-1248 | 0.43 | U | 0.50 | ug/L | | | | | | | |
| PCB-1254 | 0.43 | U | 0.50 | ug/L | | | | | | | |
| PCB-1260 | 0.43 | U | 0.50 | ug/L | | | | | | | |
| *Surrogate: 2,4,5,6-TCMX* | *1.0* | | | *ug/L* | *1.00* | | *101* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *0.66* | | | *ug/L* | *1.00* | | *66* | *55-118* | | | |

**LCS (8L04006-BS2)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 12:26

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016/1242 | 11 | | 0.50 | ug/L | 10.0 | | 109 | 50-150 | | | |
| PCB-1260 | 10 | | 0.50 | ug/L | 10.0 | | 104 | 50-150 | | | |
| *Surrogate: 2,4,5,6-TCMX* | *0.64* | | | *ug/L* | *1.00* | | *64* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *0.56* | | | *ug/L* | *1.00* | | *56* | *55-118* | | | |

**Matrix Spike (8L04006-MS2)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 12:39

**Source: C813143-08**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016/1242 | 12 | | 0.50 | ug/L | 10.0 | 0.43 U | 119 | 43-135 | | | |
| PCB-1260 | 12 | | 0.50 | ug/L | 10.0 | 0.43 U | 123 | 46-142 | | | |
| *Surrogate: 2,4,5,6-TCMX* | *0.66* | | | *ug/L* | *1.00* | | *66* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *0.70* | | | *ug/L* | *1.00* | | *70* | *55-118* | | | |

**Matrix Spike Dup (8L04006-MSD2)** Prepared: 12/04/2008 09:03 Analyzed: 12/08/2008 12:52

**Source: C813143-08**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016/1242 | 13 | | 0.50 | ug/L | 10.0 | 0.43 U | 126 | 43-135 | 6 | 23 | |
| PCB-1260 | 13 | | 0.50 | ug/L | 10.0 | 0.43 U | 128 | 46-142 | 4 | 31 | |
| *Surrogate: 2,4,5,6-TCMX* | *0.61* | | | *ug/L* | *1.00* | | *61* | *39-151* | | | |
| *Surrogate: Decachlorobiphenyl* | *0.62* | | | *ug/L* | *1.00* | | *62* | *55-118* | | | |

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L04023 - EPA 3005A*

**Blank (8L04023-BLK1)** Prepared: 12/04/2008 12:21 Analyzed: 12/15/2008 13:22

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.8 | U | 10.0 | ug/L | | | | | | | |
| Barium | 1.00 | U | 10.0 | ug/L | | | | | | | |
| Beryllium | 0.10 | U | 1.00 | ug/L | | | | | | | |
| Cadmium | 0.36 | U | 1.00 | ug/L | | | | | | | |
| Chromium | 1.0 | U | 10.0 | ug/L | | | | | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L04023 - EPA 3005A*

**Blank (8L04023-BLK1) Continued** Prepared: 12/04/2008 12:21 Analyzed: 12/15/2008 13:22

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cobalt | 1.1 | U | 10.0 | ug/L | | | | | | | |
| Copper | 1.60 | U | 10.0 | ug/L | | | | | | | |
| Lead | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Nickel | 1.8 | U | 10.0 | ug/L | | | | | | | |
| Selenium | 2.7 | U | 10.0 | ug/L | | | | | | | |
| Silver | 1.9 | U | 10.0 | ug/L | | | | | | | |
| Tin | 2.1 | U | 10.0 | ug/L | | | | | | | |
| Vanadium | 1.4 | U | 10.0 | ug/L | | | | | | | |
| Zinc | 3.8 | U | 10.0 | ug/L | | | | | | | |

**LCS (8L04023-BS1)** Prepared: 12/04/2008 12:21 Analyzed: 12/15/2008 13:29

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 524 | | 10.0 | ug/L | 500 | | 105 | 82-117 | | | |
| Barium | 538 | | 10.0 | ug/L | 500 | | 108 | 72-125 | | | |
| Beryllium | 268 | | 1.00 | ug/L | 250 | | 107 | 75-121 | | | |
| Cadmium | 271 | | 1.00 | ug/L | 250 | | 108 | 72-120 | | | |
| Chromium | 518 | | 10.0 | ug/L | 500 | | 104 | 78-119 | | | |
| Cobalt | 508 | | 10.0 | ug/L | 500 | | 102 | 76-117 | | | |
| Copper | 265 | | 10.0 | ug/L | 250 | | 106 | 80-117 | | | |
| Lead | 519 | | 10.0 | ug/L | 500 | | 104 | 72-121 | | | |
| Nickel | 539 | | 10.0 | ug/L | 500 | | 108 | 78-116 | | | |
| Selenium | 534 | | 10.0 | ug/L | 500 | | 107 | 82-127 | | | |
| Silver | 51.6 | | 10.0 | ug/L | 50.0 | | 103 | 80-128 | | | |
| Tin | 507 | | 10.0 | ug/L | 500 | | 101 | 83-117 | | | |
| Vanadium | 251 | | 10.0 | ug/L | 250 | | 100 | 78-117 | | | |
| Zinc | 520 | | 10.0 | ug/L | 500 | | 104 | 80-120 | | | |

**Matrix Spike (8L04023-MS1)** Prepared: 12/04/2008 12:21 Analyzed: 12/15/2008 13:45

**Source: C811843-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 508 | | 10.0 | ug/L | 500 | 2.8 U | 102 | 64-126 | | | |
| Barium | 811 | | 10.0 | ug/L | 500 | 296 | 103 | 74-119 | | | |
| Beryllium | 258 | | 1.00 | ug/L | 250 | 0.10 U | 103 | 70-131 | | | |
| Cadmium | 247 | | 1.00 | ug/L | 250 | 0.36 U | 99 | 68-121 | | | |
| Chromium | 466 | | 10.0 | ug/L | 500 | 1.0 U | 93 | 73-120 | | | |
| Cobalt | 529 | | 10.0 | ug/L | 500 | 51.4 | 95 | 76-120 | | | |
| Copper | 262 | | 10.0 | ug/L | 250 | 3.30 | 104 | 75-123 | | | |
| Lead | 482 | | 10.0 | ug/L | 500 | 1.9 U | 96 | 68-126 | | | |
| Nickel | 509 | | 10.0 | ug/L | 500 | 7.5 | 100 | 64-126 | | | |
| Selenium | 513 | | 10.0 | ug/L | 500 | 2.7 U | 103 | 65-129 | | | |
| Silver | 47.7 | | 10.0 | ug/L | 50.0 | 1.9 U | 95 | 69-121 | | | |
| Tin | 480 | | 10.0 | ug/L | 500 | 2.1 U | 96 | 81-124 | | | |
| Vanadium | 179 | | 10.0 | ug/L | 250 | 1.4 U | 72 | 71-130 | | | |
| Zinc | 474 | | 10.0 | ug/L | 500 | 3.8 U | 95 | 63-131 | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L04023 - EPA 3005A*

**Matrix Spike Dup (8L04023-MSD1)** Prepared: 12/04/2008 12:21 Analyzed: 12/15/2008 13:52

**Source: C811843-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 512 | | 10.0 | ug/L | 500 | 2.8 U | 102 | 64-126 | 0.6 | 12 | |
| Barium | 814 | | 10.0 | ug/L | 500 | 296 | 104 | 74-119 | 0.4 | 11 | |
| Beryllium | 259 | | 1.00 | ug/L | 250 | 0.10 U | 103 | 70-131 | 0.2 | 21 | |
| Cadmium | 247 | | 1.00 | ug/L | 250 | 0.36 U | 99 | 68-121 | 0.1 | 12 | |
| Chromium | 466 | | 10.0 | ug/L | 500 | 1.0 U | 93 | 73-120 | 0.2 | 10 | |
| Cobalt | 529 | | 10.0 | ug/L | 500 | 51.4 | 95 | 76-120 | 0 | 17 | |
| Copper | 262 | | 10.0 | ug/L | 250 | 3.30 | 103 | 75-123 | 0.1 | 16 | |
| Lead | 484 | | 10.0 | ug/L | 500 | 1.9 U | 97 | 68-126 | 0.4 | 19 | |
| Nickel | 511 | | 10.0 | ug/L | 500 | 7.5 | 101 | 64-126 | 0.4 | 12 | |
| Selenium | 513 | | 10.0 | ug/L | 500 | 2.7 U | 103 | 65-129 | 0.08 | 10 | |
| Silver | 47.4 | | 10.0 | ug/L | 50.0 | 1.9 U | 95 | 69-121 | 0.6 | 12 | |
| Tin | 477 | | 10.0 | ug/L | 500 | 2.1 U | 95 | 81-124 | 0.5 | 18 | |
| Vanadium | 179 | | 10.0 | ug/L | 250 | 1.4 U | 71 | 71-130 | 0.06 | 16 | |
| Zinc | 472 | | 10.0 | ug/L | 500 | 3.8 U | 94 | 63-131 | 0.5 | 24 | |

*Batch 8L04024 - EPA 3005A*

**Blank (8L04024-BLK1)** Prepared: 12/04/2008 12:27 Analyzed: 12/08/2008 11:33

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.68 | U | 5.00 | ug/L | | | | | | | |
| Thallium | 0.036 | U | 2.00 | ug/L | | | | | | | |

**LCS (8L04024-BS1)** Prepared: 12/04/2008 12:27 Analyzed: 12/08/2008 11:37

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.4 | | 5.00 | ug/L | 25.0 | | 97 | 85-115 | | | |
| Thallium | 24.6 | | 2.00 | ug/L | 25.0 | | 98 | 85-115 | | | |

**Matrix Spike (8L04024-MS1)** Prepared: 12/04/2008 12:27 Analyzed: 12/08/2008 11:43

**Source: C811843-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.5 | | 5.00 | ug/L | 25.0 | 0.68 U | 98 | 85-115 | | | |
| Thallium | 24.2 | | 2.00 | ug/L | 25.0 | 0.036 U | 97 | 85-115 | | | |

**Matrix Spike Dup (8L04024-MSD1)** Prepared: 12/04/2008 12:27 Analyzed: 12/08/2008 11:47

**Source: C811843-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.3 | | 5.00 | ug/L | 25.0 | 0.68 U | 97 | 85-115 | 0.6 | 20 | |
| Thallium | 24.6 | | 2.00 | ug/L | 25.0 | 0.036 U | 98 | 85-115 | 2 | 20 | |

**Post Spike (8L04024-PS1)** Prepared: 12/04/2008 12:27 Analyzed: 12/08/2008 11:50

**Source: C811843-13**

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L04024 - EPA 3005A*

**Post Spike (8L04024-PS1) Continued** Prepared: 12/04/2008 12:27 Analyzed: 12/08/2008 11:50

**Source: C811843-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.03 | | 0.002 | mg/L | 0.0250 | 0.00006 | 101 | 75-125 | | | |
| Thallium | 0.025 | | 0.001 | mg/L | 0.0250 | -0.0003 | 102 | 75-125 | | | |

*Batch 8L08010 - EPA 245.1*

**Blank (8L08010-BLK1)** Prepared: 12/08/2008 09:48 Analyzed: 12/08/2008 15:06

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.11 | U | 0.20 | ug/L | | | | | | | |

**LCS (8L08010-BS1)** Prepared: 12/08/2008 09:48 Analyzed: 12/08/2008 15:09

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.98 | | 0.20 | ug/L | 5.00 | | 100 | 85-115 | | | |

**Matrix Spike (8L08010-MS1)** Prepared: 12/08/2008 09:48 Analyzed: 12/08/2008 15:15

**Source: C813089-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.97 | | 0.20 | ug/L | 5.00 | 0.11 U | 99 | 85-115 | | | |

**Matrix Spike Dup (8L08010-MSD1)** Prepared: 12/08/2008 09:48 Analyzed: 12/08/2008 15:18

**Source: C813089-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.96 | | 0.20 | ug/L | 5.00 | 0.11 U | 99 | 85-115 | 0.2 | 15 | |

**Post Spike (8L08010-PS1)** Prepared: 12/08/2008 09:48 Analyzed: 12/08/2008 15:20

**Source: C813089-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.48 | | 0.20 | ug/L | 5.00 | -0.01 | 90 | 75-125 | | | |

*Batch 8L08022 - EPA 3005A*

**Blank (8L08022-BLK1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 11:49

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.68 | U | 2.00 | ug/L | | | | | | | |
| Thallium | 0.036 | U | 1.00 | ug/L | | | | | | | |

**LCS (8L08022-BS1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 11:52

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 23.6 | | 2.00 | ug/L | 25.0 | | 94 | 85-115 | | | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L08022 - EPA 3005A*

**LCS (8L08022-BS1) Continued** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 11:52

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | 23.5 | | 1.00 | ug/L | 25.0 | | 94 | 85-115 | | | |

**Matrix Spike (8L08022-MS1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 11:59

**Source: C811840-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.2 | | 2.00 | ug/L | 25.0 | 0.68 U | 97 | 85-115 | | | |
| Thallium | 23.4 | | 1.00 | ug/L | 25.0 | 0.036 U | 94 | 85-115 | | | |

**Matrix Spike Dup (8L08022-MSD1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 12:16

**Source: C811840-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.5 | | 2.00 | ug/L | 25.0 | 0.68 U | 98 | 85-115 | 1 | 20 | |
| Thallium | 24.1 | | 1.00 | ug/L | 25.0 | 0.036 U | 96 | 85-115 | 3 | 20 | |

**Post Spike (8L08022-PS1)** Prepared: 12/08/2008 13:37 Analyzed: 12/12/2008 12:19

**Source: C811840-13**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.02 | | 0.002 | mg/L | 0.0250 | 0.0001 | 96 | 75-125 | | | |
| Thallium | 0.026 | | 0.001 | mg/L | 0.0250 | -0.001 | 110 | 75-125 | | | |

*Batch 8L09011 - EPA 7470A*

**Blank (8L09011-BLK1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:31

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.11 | U | 0.20 | ug/L | | | | | | | |

**LCS (8L09011-BS1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:34

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.87 | | 0.20 | ug/L | 5.00 | | 97 | 85-115 | | | |

**Matrix Spike (8L09011-MS1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:40

**Source: C811841-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 5.05 | | 0.20 | ug/L | 5.00 | 0.11 U | 101 | 85-115 | | | |

**Matrix Spike Dup (8L09011-MSD1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:43

**Source: C811841-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.90 | | 0.20 | ug/L | 5.00 | 0.11 U | 98 | 85-115 | 3 | 15 | |

## QUALITY CONTROL

### Metals by EPA 6000/7000 Series Methods - Quality Control

*Batch 8L09011 - EPA 7470A*

**Post Spike (8L09011-PS1)** Prepared: 12/09/2008 09:40 Analyzed: 12/09/2008 14:46

**Source: C811841-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 4.68 | | 0.20 | ug/L | 5.00 | 0.04 | 93 | 75-125 | | | |

### Classical Chemistry Parameters - Quality Control

*Batch 8L04005 - NO PREP*

**Blank (8L04005-BLK1)** Prepared: 12/04/2008 15:02 Analyzed: 12/07/2008 09:41

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide (total) | 0.0040 | U | 0.0050 | mg/L | | | | | | | |

**LCS (8L04005-BS1)** Prepared: 12/04/2008 15:02 Analyzed: 12/07/2008 09:43

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide (total) | 0.14 | | 0.0050 | mg/L | 0.150 | | 92 | 90-110 | | | |

**Matrix Spike (8L04005-MS1)** Prepared: 12/04/2008 15:02 Analyzed: 12/07/2008 09:57

**Source: C811843-06**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide (total) | 0.15 | | 0.0050 | mg/L | 0.150 | 0.0040 U | 99 | 90-110 | | | |

**Matrix Spike Dup (8L04005-MSD1)** Prepared: 12/04/2008 15:02 Analyzed: 12/07/2008 09:59

**Source: C811843-06**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide (total) | 0.14 | | 0.0050 | mg/L | 0.150 | 0.0040 U | 95 | 90-110 | 4 | 10 | |

*Batch 8L04021 - NO PREP*

**Blank (8L04021-BLK1)** Prepared & Analyzed: 12/04/2008 14:20

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | 0.10 | U | 0.10 | mg/L | | | | | | | |

**LCS (8L04021-BS1)** Prepared & Analyzed: 12/04/2008 14:20

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | 0.38 | | 0.10 | mg/L | 0.401 | | 96 | 80-120 | | | |

**Matrix Spike (8L04021-MS1)** Prepared & Analyzed: 12/04/2008 14:20

**Source: C811843-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | 0.05 | | 0.10 | mg/L | 0.401 | -0.01 | 16 | 80-120 | | | QM-14 |

## QUALITY CONTROL

### Classical Chemistry Parameters - Quality Control

*Batch 8L04021 - NO PREP*

**Matrix Spike Dup (8L04021-MSD1)** Prepared & Analyzed: 12/04/2008 14:20

**Source: C811843-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | 0.06 | | 0.10 | mg/L | 0.401 | -0.01 | 18 | 80-120 | 16 | 25 | QM-14 |

## QUALITY CONTROL

### Semivolatile Organic Compounds by GCMS - Quality Control

*Batch 8L22019 - EPA 3510C_MS*

**Blank (8L22019-BLK1)** Prepared: 12/05/2008 08:31 Analyzed: 12/24/2008 12:55

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 2.0 | U | 10 | ug/L | | | | | | | |
| 1,3,5-Trinitrobenzene | 1.0 | U | 10 | ug/L | | | | | | | |
| 1,3-Dinitrobenzene | 1.0 | U | 10 | ug/L | | | | | | | |
| 1,4-Naphthoquinone | 2.0 | U | 10 | ug/L | | | | | | | |
| 1,4-Phenylenediamine | 4.0 | U | 10 | ug/L | | | | | | | |
| 1-Naphthylamine | 1.0 | U | 10 | ug/L | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | 2.0 | U | 10 | ug/L | | | | | | | |
| 2,4,5-Trichlorophenol | 1.5 | U | 10 | ug/L | | | | | | | |
| 2,4,6-Trichlorophenol | 1.5 | U | 10 | ug/L | | | | | | | |
| 2,4-Dichlorophenol | 1.5 | U | 10 | ug/L | | | | | | | |
| 2,4-Dimethylphenol | 1.5 | U | 10 | ug/L | | | | | | | |
| 2,4-Dinitrophenol | 1.2 | U | 10 | ug/L | | | | | | | |
| 2,4-Dinitrotoluene | 1.4 | U | 10 | ug/L | | | | | | | |
| 2,6-Dichlorophenol | 2.0 | U | 10 | ug/L | | | | | | | |
| 2,6-Dinitrotoluene | 1.4 | U | 10 | ug/L | | | | | | | |
| 2-Acetylaminofluorene | 2.0 | U | 10 | ug/L | | | | | | | |
| 2-Chloronaphthalene | 2.6 | U | 10 | ug/L | | | | | | | |
| 2-Chlorophenol | 1.4 | U | 10 | ug/L | | | | | | | |
| 2-Methyl-4,6-dinitrophenol | 1.5 | U | 10 | ug/L | | | | | | | |
| 2-Methylnaphthalene | 2.9 | U | 10 | ug/L | | | | | | | |
| 2-Methylphenol | 1.2 | U | 10 | ug/L | | | | | | | |
| 2-Naphthylamine | 2.0 | U | 10 | ug/L | | | | | | | |
| 2-Nitroaniline | 1.3 | U | 10 | ug/L | | | | | | | |
| 2-Nitrophenol | 1.6 | U | 10 | ug/L | | | | | | | |
| 3 & 4-Methylphenol | 1.3 | U | 10 | ug/L | | | | | | | |
| 3,3'-Dichlorobenzidine | 1.3 | U | 10 | ug/L | | | | | | | |
| 3,3'-Dimethylbenzidine | 3.0 | U | 10 | ug/L | | | | | | | |
| 3-Methylcholanthrene | 1.0 | U | 10 | ug/L | | | | | | | |
| 3-Nitroaniline | 1.3 | U | 10 | ug/L | | | | | | | |
| 4-Aminobiphenyl | 2.0 | U | 10 | ug/L | | | | | | | |
| 4-Bromophenyl-phenylether | 1.7 | U | 10 | ug/L | | | | | | | |
| 4-Chloro-3-methylphenol | 1.5 | U | 10 | ug/L | | | | | | | |
| 4-Chloroaniline | 1.3 | U | 10 | ug/L | | | | | | | |
| 4-Chlorophenyl-phenylether | 2.1 | U | 10 | ug/L | | | | | | | |
| 4-Nitroaniline | 1.7 | U | 10 | ug/L | | | | | | | |
| 4-Nitrophenol | 0.79 | U | 10 | ug/L | | | | | | | |
| 5-Nitro-o-toluidine | 2.0 | U | 10 | ug/L | | | | | | | |

## QUALITY CONTROL

### Semivolatile Organic Compounds by GCMS - Quality Control

*Batch 8L22019 - EPA 3510C_MS*

**Blank (8L22019-BLK1) Continued** Prepared: 12/05/2008 08:31 Analyzed: 12/24/2008 12:55

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7,12-Dimethylbenz(a)anthracene | 1.0 | U | 10 | ug/L | | | | | | | |
| Acenaphthene | 2.4 | U | 10 | ug/L | | | | | | | |
| Acenaphthylene | 2.2 | U | 10 | ug/L | | | | | | | |
| Acetophenone | 2.0 | U | 10 | ug/L | | | | | | | |
| Anthracene | 1.6 | U | 10 | ug/L | | | | | | | |
| Benzo(a)anthracene | 1.7 | U | 10 | ug/L | | | | | | | |
| Benzo(a)pyrene | 1.5 | U | 10 | ug/L | | | | | | | |
| Benzo(b)fluoranthene | 1.3 | U | 10 | ug/L | | | | | | | |
| Benzo(g,h,i)perylene | 4.1 | U | 10 | ug/L | | | | | | | |
| Benzo(k)fluoranthene | 1.5 | U | 10 | ug/L | | | | | | | |
| Benzyl alcohol | 9.4 | U | 10 | ug/L | | | | | | | |
| Bis(2-chloroethoxy)methane | 1.7 | U | 10 | ug/L | | | | | | | |
| Bis(2-chloroethyl)ether | 1.9 | U | 10 | ug/L | | | | | | | |
| Bis(2-chloroisopropyl)ether | 1.9 | U | 10 | ug/L | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 2.0 | U | 10 | ug/L | | | | | | | |
| Butylbenzylphthalate | 1.7 | U | 10 | ug/L | | | | | | | |
| Chlorobenzilate | 1.0 | U | 10 | ug/L | | | | | | | |
| Chrysene | 1.6 | U | 10 | ug/L | | | | | | | |
| Diallate | 1.0 | U | 10 | ug/L | | | | | | | |
| Dibenzo(a,h)anthracene | 1.7 | U | 10 | ug/L | | | | | | | |
| Dibenzofuran | 2.1 | U | 10 | ug/L | | | | | | | |
| Diethylphthalate | 1.4 | U | 10 | ug/L | | | | | | | |
| Dimethoate | 1.0 | U | 10 | ug/L | | | | | | | |
| Dimethylphthalate | 1.4 | U | 10 | ug/L | | | | | | | |
| Di-n-butylphthalate | 1.6 | U | 10 | ug/L | | | | | | | |
| Di-n-octylphthalate | 1.9 | U | 10 | ug/L | | | | | | | |
| Disulfoton | 1.0 | U | 10 | ug/L | | | | | | | |
| Ethyl methanesulfonate | 1.0 | U | 10 | ug/L | | | | | | | |
| Famphur | 3.0 | U | 10 | ug/L | | | | | | | |
| Fluoranthene | 1.6 | U | 10 | ug/L | | | | | | | |
| Fluorene | 1.9 | U | 10 | ug/L | | | | | | | |
| Hexachlorobenzene | 1.5 | U | 10 | ug/L | | | | | | | |
| Hexachlorobutadiene | 3.1 | U | 10 | ug/L | | | | | | | |
| Hexachlorocyclopentadiene | 2.5 | U | 10 | ug/L | | | | | | | |
| Hexachloroethane | 2.7 | U | 10 | ug/L | | | | | | | |
| Hexachloropropene | 1.0 | U | 10 | ug/L | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 1.5 | U | 10 | ug/L | | | | | | | |
| Isodrin | 1.0 | U | 10 | ug/L | | | | | | | |
| Isophorone | 1.8 | U | 10 | ug/L | | | | | | | |
| Isosafrole | 2.0 | U | 10 | ug/L | | | | | | | |
| Methapyrilene | 2.0 | U | 10 | ug/L | | | | | | | |
| Methyl Methanesulfonate | 1.0 | U | 10 | ug/L | | | | | | | |
| Methyl parathion | 1.0 | U | 10 | ug/L | | | | | | | |
| Nitrobenzene | 1.7 | U | 10 | ug/L | | | | | | | |
| N-Nitrosodiethylamine | 1.0 | U | 10 | ug/L | | | | | | | |
| N-Nitrosodimethylamine | 0.91 | U | 10 | ug/L | | | | | | | |
| N-Nitrosodi-n-butylamine | 3.0 | U | 10 | ug/L | | | | | | | |
| N-Nitroso-di-n-propylamine | 1.5 | U | 10 | ug/L | | | | | | | |
| N-Nitrosodiphenylamine/Diphenylamine | 1.2 | U | 10 | ug/L | | | | | | | |

## QUALITY CONTROL

### Semivolatile Organic Compounds by GCMS - Quality Control

*Batch 8L22019 - EPA 3510C_MS*

**Blank (8L22019-BLK1) Continued** Prepared: 12/05/2008 08:31 Analyzed: 12/24/2008 12:55

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosomethylethylamine | 1.0 | U | 10 | ug/L | | | | | | | |
| N-Nitrosopiperidine | 1.0 | U | 10 | ug/L | | | | | | | |
| N-Nitrosopyrrolidine | 2.0 | U | 10 | ug/L | | | | | | | |
| O,O,O-Triethyl phosphorothioate | 1.0 | U | 10 | ug/L | | | | | | | |
| o-Toluidine | 1.0 | U | 10 | ug/L | | | | | | | |
| Parathion | 1.0 | U | 10 | ug/L | | | | | | | |
| p-Dimethylaminoazobenzene | 2.0 | U | 10 | ug/L | | | | | | | |
| Pentachlorobenzene | 1.0 | U | 10 | ug/L | | | | | | | |
| Pentachloronitrobenzene | 1.0 | U | 10 | ug/L | | | | | | | |
| Phenacetin | 6.0 | U | 10 | ug/L | | | | | | | |
| Phenanthrene | 1.7 | U | 10 | ug/L | | | | | | | |
| Phenol | 0.71 | U | 10 | ug/L | | | | | | | |
| Phorate | 2.0 | U | 10 | ug/L | | | | | | | |
| Pronamide | 1.0 | U | 10 | ug/L | | | | | | | |
| Pyrene | 1.6 | U | 10 | ug/L | | | | | | | |
| Safrole | 1.0 | U | 10 | ug/L | | | | | | | |
| Thionazin | 2.0 | U | 10 | ug/L | | | | | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *60* | | | *ug/L* | *100* | | *60* | *64-125* | | | *QS-03* |
| *Surrogate: 2-Fluorobiphenyl* | *30* | | | *ug/L* | *50.0* | | *61* | *43-120* | | | |
| *Surrogate: 2-Fluorophenol* | *38* | | | *ug/L* | *100* | | *38* | *21-71* | | | |
| *Surrogate: Nitrobenzene-d5* | *29* | | | *ug/L* | *50.0* | | *57* | *54-120* | | | |
| *Surrogate: Phenol-d5* | *31* | | | *ug/L* | *100* | | *31* | *11-48* | | | |
| *Surrogate: Terphenyl-d14* | *41* | | | *ug/L* | *50.0* | | *83* | *75-127* | | | |

**Blank (8L22019-BLK2)** Prepared: 12/05/2008 08:31 Analyzed: 12/30/2008 22:15

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Kepone | 20 | U | 20 | ug/L | | | | | | | |

**LCS (8L22019-BS1)** Prepared: 12/05/2008 08:31 Analyzed: 12/24/2008 13:25

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 35 | | 10 | ug/L | 50.0 | | 71 | 69-120 | | | |
| 2-Chlorophenol | 25 | | 10 | ug/L | 50.0 | | 50 | 58-120 | | | |
| 4-Chloro-3-methylphenol | 29 | | 10 | ug/L | 50.0 | | 59 | 73-120 | | | |
| 4-Nitrophenol | 21 | | 10 | ug/L | 50.0 | | 42 | 14-77 | | | |
| Acenaphthene | 33 | | 10 | ug/L | 50.0 | | 65 | 50-120 | | | |
| N-Nitroso-di-n-propylamine | 30 | | 10 | ug/L | 50.0 | | 60 | 60-120 | | | |
| N-Nitrosodiphenylamine/Diphenylamine | 27 | | 10 | ug/L | 50.0 | | 55 | 64-85 | | | |
| Phenol | 15 | | 10 | ug/L | 50.0 | | 30 | 16-54 | | | |
| Pyrene | 39 | | 10 | ug/L | 50.0 | | 77 | 62-129 | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *70* | | | *ug/L* | *100* | | *70* | *64-125* | | | |
| *Surrogate: 2-Fluorobiphenyl* | *30* | | | *ug/L* | *50.0* | | *60* | *43-120* | | | |
| *Surrogate: 2-Fluorophenol* | *38* | | | *ug/L* | *100* | | *38* | *21-71* | | | |
| *Surrogate: Nitrobenzene-d5* | *27* | | | *ug/L* | *50.0* | | *55* | *54-120* | | | |
| *Surrogate: Phenol-d5* | *30* | | | *ug/L* | *100* | | *30* | *11-48* | | | |
| *Surrogate: Terphenyl-d14* | *40* | | | *ug/L* | *50.0* | | *81* | *75-127* | | | |

## QUALITY CONTROL

### Semivolatile Organic Compounds by GCMS - Quality Control

*Batch 8L22019 - EPA 3510C_MS*

**Matrix Spike (8L22019-MS1)** Prepared: 12/05/2008 08:31 Analyzed: 12/24/2008 13:54

**Source: B807527-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 37 | | 10 | ug/L | 50.0 | 1.4 U | 73 | 69-120 | | | |
| 2-Chlorophenol | 27 | | 10 | ug/L | 50.0 | 1.4 U | 55 | 58-120 | | | |
| 4-Chloro-3-methylphenol | 32 | | 10 | ug/L | 50.0 | 1.5 U | 64 | 73-120 | | | |
| 4-Nitrophenol | 23 | | 10 | ug/L | 50.0 | 0.79 U | 45 | 14-77 | | | |
| Acenaphthene | 35 | | 10 | ug/L | 50.0 | 2.4 U | 71 | 50-120 | | | |
| Acenaphthylene | 33 | | 10 | ug/L | 50.0 | 2.2 U | 67 | 50-120 | | | |
| N-Nitroso-di-n-propylamine | 32 | | 10 | ug/L | 50.0 | 1.5 U | 63 | 60-106 | | | |
| N-Nitrosodiphenylamine/Diphenylamine | 29 | | 10 | ug/L | 50.0 | 1.2 U | 58 | 64-85 | | | |
| Phenol | 17 | | 10 | ug/L | 50.0 | 0.71 U | 35 | 16-54 | | | |
| Pyrene | 40 | | 10 | ug/L | 50.0 | 1.6 U | 79 | 62-129 | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *78* | | | *ug/L* | *100* | | *78* | *64-125* | | | |
| *Surrogate: 2-Fluorobiphenyl* | *33* | | | *ug/L* | *50.0* | | *67* | *43-120* | | | |
| *Surrogate: 2-Fluorophenol* | *42* | | | *ug/L* | *100* | | *42* | *21-71* | | | |
| *Surrogate: Nitrobenzene-d5* | *30* | | | *ug/L* | *50.0* | | *61* | *54-120* | | | |
| *Surrogate: Phenol-d5* | *33* | | | *ug/L* | *100* | | *33* | *11-48* | | | |
| *Surrogate: Terphenyl-d14* | *42* | | | *ug/L* | *50.0* | | *84* | *75-127* | | | |

**Matrix Spike Dup (8L22019-MSD1)** Prepared: 12/05/2008 08:31 Analyzed: 12/24/2008 14:23

**Source: B807527-01**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 37 | | 10 | ug/L | 50.0 | 1.4 U | 74 | 69-120 | 0.7 | 11 | |
| 2-Chlorophenol | 31 | | 10 | ug/L | 50.0 | 1.4 U | 62 | 58-120 | 12 | 16 | |
| 4-Chloro-3-methylphenol | 33 | | 10 | ug/L | 50.0 | 1.5 U | 66 | 73-120 | 3 | 16 | |
| 4-Nitrophenol | 22 | | 10 | ug/L | 50.0 | 0.79 U | 44 | 14-77 | 2 | 18 | |
| Acenaphthene | 37 | | 10 | ug/L | 50.0 | 2.4 U | 74 | 50-120 | 4 | 15 | |
| N-Nitroso-di-n-propylamine | 35 | | 10 | ug/L | 50.0 | 1.5 U | 71 | 60-106 | 11 | 13 | |
| N-Nitrosodiphenylamine/Diphenylamine | 29 | | 10 | ug/L | 50.0 | 1.2 U | 59 | 64-85 | 1 | 11 | |
| Phenol | 18 | | 10 | ug/L | 50.0 | 0.71 U | 37 | 16-54 | 5 | 20 | |
| Pyrene | 40 | | 10 | ug/L | 50.0 | 1.6 U | 80 | 62-129 | 0.3 | 12 | |
| *Surrogate: 2,4,6-Tribromophenol* | *84* | | | *ug/L* | *100* | | *84* | *64-125* | | | |
| *Surrogate: 2-Fluorobiphenyl* | *35* | | | *ug/L* | *50.0* | | *70* | *43-120* | | | |
| *Surrogate: 2-Fluorophenol* | *45* | | | *ug/L* | *100* | | *45* | *21-71* | | | |
| *Surrogate: Nitrobenzene-d5* | *32* | | | *ug/L* | *50.0* | | *64* | *54-120* | | | |
| *Surrogate: Phenol-d5* | *35* | | | *ug/L* | *100* | | *35* | *11-48* | | | |
| *Surrogate: Terphenyl-d14* | *42* | | | *ug/L* | *50.0* | | *83* | *75-127* | | | |

## QUALITY CONTROL

### Chlorinated Herbicides by GC - Quality Control

*Batch 8L04029 - EPA 3510C*

**Blank (8L04029-BLK1)** Prepared: 12/04/2008 16:04 Analyzed: 12/09/2008 19:03

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.080 | U | 0.50 | ug/L | | | | | | | |

## QUALITY CONTROL

### Chlorinated Herbicides by GC - Quality Control

*Batch 8L04029 - EPA 3510C*

**Blank (8L04029-BLK1) Continued** Prepared: 12/04/2008 16:04 Analyzed: 12/09/2008 19:03

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-TP (Silvex) [2C] | 0.087 | U | 0.50 | ug/L | | | | | | | |
| 2,4-D | 0.13 | U | 0.50 | ug/L | | | | | | | |
| Dinoseb | 0.10 | U | 0.50 | ug/L | | | | | | | |
| Pentachlorophenol | 0.056 | U | 0.50 | ug/L | | | | | | | |
| *Surrogate: 2,4-DCAA* | *1.7* | | | *ug/L* | *2.00* | | *86* | *68-139* | | | |

**LCS (8L04029-BS1)** Prepared: 12/04/2008 16:04 Analyzed: 12/09/2008 19:40

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-TP (Silvex) [2C] | 1.8 | | 0.50 | ug/L | 2.00 | | 91 | 38-193 | | | |
| 2,4-D | 2.1 | | 0.50 | ug/L | 2.00 | | 104 | 62-144 | | | |
| *Surrogate: 2,4-DCAA* | *2.0* | | | *ug/L* | *2.00* | | *100* | *68-139* | | | |

**Matrix Spike (8L04029-MS1)** Prepared: 12/04/2008 16:04 Analyzed: 12/09/2008 20:18

**Source: A806045-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-TP (Silvex) [2C] | 1.9 | | 0.50 | ug/L | 2.00 | 0.087 U | 96 | 38-193 | | | |
| 2,4-D | 2.1 | | 0.50 | ug/L | 2.00 | 0.13 U | 103 | 62-144 | | | |
| *Surrogate: 2,4-DCAA* | *2.0* | | | *ug/L* | *2.00* | | *98* | *68-139* | | | |

**Matrix Spike Dup (8L04029-MSD1)** Prepared: 12/04/2008 16:04 Analyzed: 12/09/2008 20:55

**Source: A806045-02**

| Analyte | Result | Flag | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-TP (Silvex) [2C] | 1.9 | | 0.50 | ug/L | 2.00 | 0.087 U | 93 | 38-193 | 3 | 20 | |
| 2,4-D | 2.1 | | 0.50 | ug/L | 2.00 | 0.13 U | 105 | 62-144 | 2 | 33 | |
| *Surrogate: 2,4-DCAA* | *2.0* | | | *ug/L* | *2.00* | | *102* | *68-139* | | | |

## FLAGS/NOTES AND DEFINITIONS

| | |
|---|---|
| B | The analyte was detected in the associated method blank. |
| D | The sample was analyzed at dilution. |
| J | The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable. |
| U | The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable. |
| E | The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate. |
| MRL | Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content. |
| QM-14 | Confirmed matrix effects |
| QS-03 | Surrogate recovery outside accept limits. |
| QS-03a | Surrogate recovery outside acceptance limits |
| QS-05 | Surrogate recovery biased low and outside control limits due to suspected matrix effects, as evidenced by sample behavior during sample preparation (emulsion formation, excessive foaming). |
| QS-06 | Surrogate recovery exceeded acceptance criteria due to coelution. Matrix effect confirmed. |
| QV-01 | The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal. |
| QV-03 | Result estimated, calibration verification standard exceeded lower control limit. A low-level standard was analyzed to verify instrument sensitivity. |

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Requested Analyses

Standard

___ Expedited

Due

Lab Workorder C811843

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4103 II-1 | 12/1/08 | 1420 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-2 | 12/2/08 | 1000 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-3 | 12/2/08 | 1230 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-4 | 12/2/08 | 1505 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-5 | 12/2/08 | 1705 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-6 | 12/1/08 | 1230 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-7 | 12/2/08 | 0840 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-7B | 12/1/08 | 1620 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-8 | 12/1/08 | 0940 | G | GW | 11 | X | X | X | X | X | | | | | | |
| | 4103 II-10 | 12/1/08 | 1730 | G | GW | 11 | X | X | X | X | X | | | | | | |

JWL 10/22

12/3/08 1200

12/3/08 1200

12/3/08 1200

C-598 1.0C C-596 1.0C C-359 1.0C

X Acceptable Unacceptable

C-591A 1.0C C-591B 1.0C C-542 1.0C C-588 1.0C

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

Page 2 of 2

Requested Analyses

Requested Turnaround Times

___ Standard

___ Expedited

Due ___

Lab Workorder: C811843

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4103 DUPLICATE | 12/1/08 | 0700 | G | GW | 11 | X | X | X | X | X | | | | | |
| | 4103 Trip Blank | | | | | | | X | | | | | | | | |
| | MW-13 | 12/3/08 | 1025 | G | GW | 11 | X | X | X | X | X | | | | | |
| | MW-14 | 12/3/08 | 0835 | G | GW | 11 | X | X | X | X | X | | | | | |

Sample Comments

| | | | | | |
|---|---|---|---|---|---|
| JWL | 10/22 | | 12/3/08 1200 | | |
| | | | | | |
| | | | 12-3-08 1400 | Birna Bussey | 12/3/08 1400 |

C-598 C-596 C-359

X Acceptable Unacceptable

C-591A C-591B C-542 C-588



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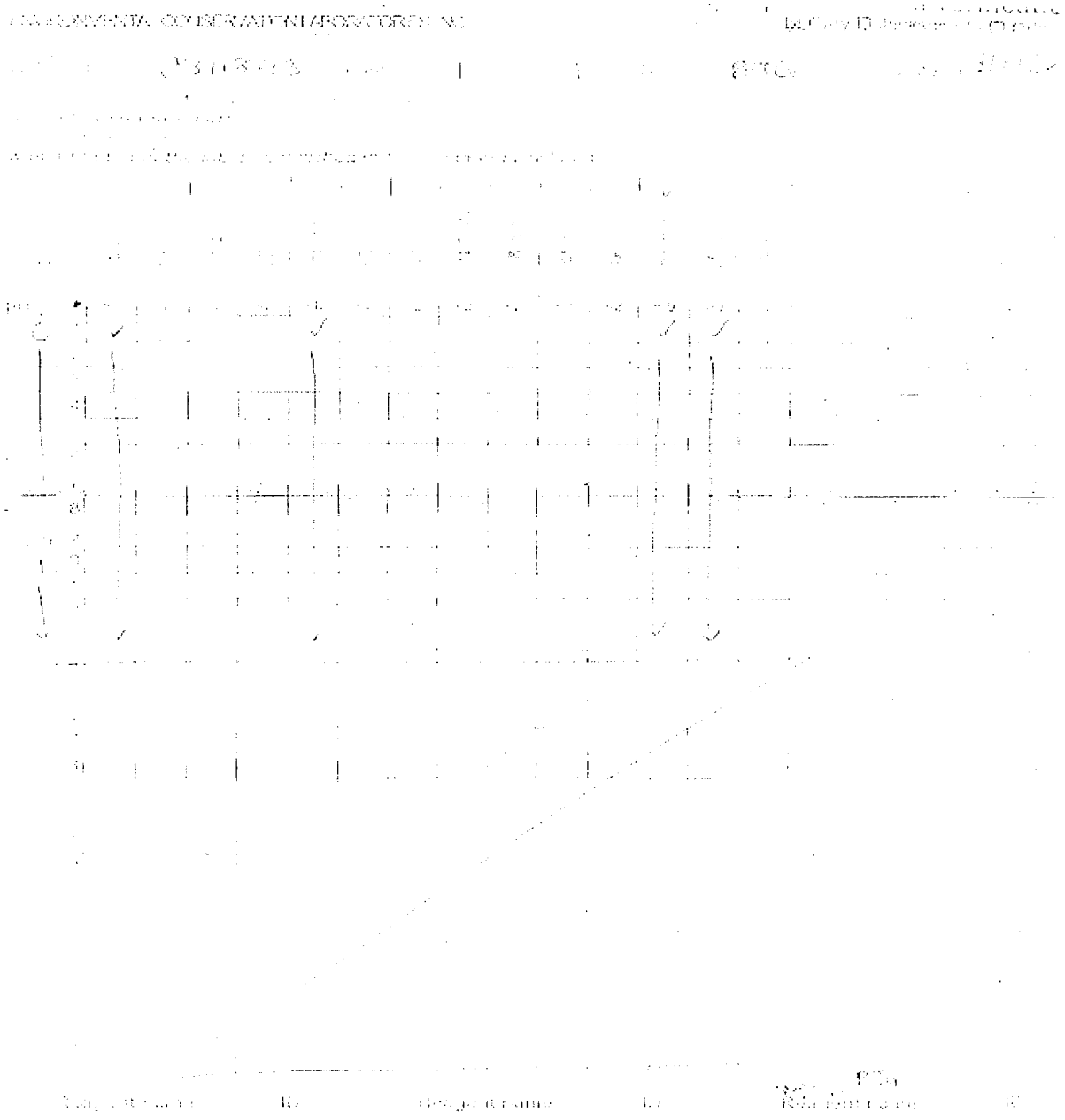


# APPENDIX III

## NCDENR Environmental Monitoring Reporting Form

DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No ) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

# Environmental Monitoring Reporting Form

**Notice:** This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

## Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

## Solid Waste Monitoring Data Submittal Information

**Name of entity submitting data (laboratory, consultant, facility owner):**

S&ME, Inc.

**Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:**

Name: Lisa Ennis Phone: 336-288-7180

E-mail: lennis@smeinc.com

| Facility name: | Facility Address: | Facility Permit # | NC Landfill Rule: (.0500 or .1600) | Actual sampling dates (e.g., October 20-24, 2006) |
|---|---|---|---|---|
| White Street Landfill | White Street, Greensboro, North Carolina | 41-03 | Not Applicable | December 4 and 5, 2008 |

**Environmental Status: (Check all that apply)**

☐ Initial/Background Monitoring ☐ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

**Type of data submitted: (Check all that apply)**

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify) _____
☐ Other(specify)

**Notification attached?**

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

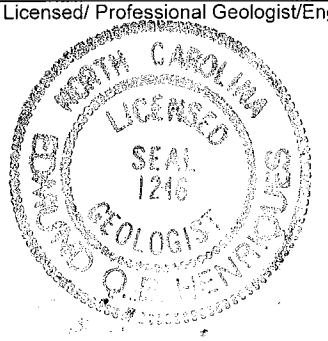
## Certification

**To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.**

| Edmund Q. B. Henriques | Environmental Dept. Manager | 336-288-7180 |
|---|---|---|
| Facility Representative Name (Print) | Title | (Area Code) Telephone Number |

Edmund Q.B Henriques
Signature Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:




Revised 01/2007