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# SUPPLEMENTAL GROUNDWATER INVESTIGATION REPORT
# EMERSON POWER TRANSMISSION FACILITY
# ITHACA, NEW YORK

**PREPARED**

**BY**

**ENVIRONMENTAL STRATEGIES CONSULTING LLC**

**OCTOBER 19, 2005**

Contents

## 1.0 Introduction

On behalf of Emerson, Environmental Strategies Consulting LLC conducted a supplemental groundwater investigation at the Emerson Power Transmission (EPT) facility in Ithaca, New York. The objective of the investigation was to further evaluate groundwater quality in areas immediately downgradient of the current remediation area. The scope of work involved installing and sampling three offsite groundwater monitoring wells within the upper most portion of fractured bedrock. The work was conducted in accordance with the Supplemental Groundwater Investigation Work Plan approved by the New York State Department of Environmental Conservation (NYSDEC) on July 18, 2005. The work plan was submitted to the NYSDEC in fulfillment of requirements outlined in the July 13, 1987, Consent Order entered into by the NYSDEC and Emerson. The field activities were also conducted in accordance with the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated December 25, 2002.

The following section of this report presents background information on the site. Section 3.0 describes the objectives and a summary of the components of the investigation. Section 4.0 describes the scope of work in greater detail. This is followed by a discussion of the results and conclusions.

# 2.0 Site Background

## 2.1 Site Location and History

The EPT facility is located at 620 South Aurora Street in Ithaca, New York. The site comprises approximately 110 acres within the City of Ithaca and the Town of Ithaca in Tompkins County and includes the New York State Electric and Gas (NYSE&G) substation property to the west. The area surrounding the site is mostly residential. The campus of Ithaca College borders the site on the east across South Aurora Street. The southern portion of the property is unused and vacant. Wooded land and residential areas border the property to the west, and residential areas are located to the north. Cayuga Lake is approximately 2 miles north of the site.

The Emerson Power Transmission plant was built in 1906 by Morse Industrial Corporation, which manufactured steel roller chain for the automobile industry. From approximately 1928 to 1982, Borg Warner owned the company and manufactured automotive components and power transmission equipment. Up until the early 1980s, Morse Industrial Corporation used trichloroethylene (TCE), a widely-used solvent for cleaning and degreasing metal parts. In 1983, Morse Industrial Corporation was purchased from Borg-Warner Corporation by Emerson, and became known as Emerson Power Transmission. Emerson Power Transmission manufactures industrial roller chain, bearings and clutching for the power transmission industry. Under Emerson's ownership, TCE was not used at the Ithaca facility. Investigations conducted by Emerson revealed onsite groundwater contamination in 1987, originating from a fire-water reservoir located on the western portion of the property. Emerson promptly reported these findings to the New York State Department of Environmental Conservation.

## 2.2 Site Geology

Unconsolidated overburden material at the site is comprised of glacial till. The overburden is approximately 5 to 10 feet thick in most areas of the site. The overburden deposits consist of dark gray compacted clay with trace amounts of coarse gravel and are referred to as the A-zone.

Beneath the overburden lies bedrock of the Ithaca Member, consisting of a fractured siltstone. The siltstone is divided into three distinct zones, based on the frequency of bedding planes and fractures: an upper "stress relief zone" (B-zone), a middle "transitional zone" (C-zone), and a lower "lithologically controlled zone" (D-zone). The uppermost B-zone is weathered bedrock and highly fractured. The B-zone extends to a maximum depth of approximately 22 feet below ground surface (bgs) and has an average thickness of approximately 8 to 10 feet on the west portion of the site where the current remediation system is located.

The transitional zone (C-zone) extends from the base of the B-zone to a maximum depth of approximately 55 feet bgs beneath the site. The lower lithologically controlled zone (D-zone) extends from the bottom of the C-zone to a minimum depth of 145 feet bgs. In this lower zone, fractures are reportedly confined to intervals that are widely spaced, and their occurrence is controlled by lithology.

2.2.1 Vertical Joint Sets and Fractures

Four regular joint sets are recognized regionally: Two cross-strike joint sets (Ia and Ib) related to separate phases of the Alleghanian Orogeny, a strike-parallel set (II), and an oblique set (III) reflecting the contemporary stress field. Engelder and Geisler (1980) measured orientations of the joint sets in Tompkins County and throughout the Appalachian Plateau of New York. The average strike of Ib joints at 11 outcrops of the Genesee Group in Tompkins County was 341° ± 3° (N19W). The average strike of Ia joints at 2 outcrops of the Genesee Group in Tompkins County was 007° ± 3° (N7E). The average orientation of the strike-parallel joint set (II) was 82°.

Engelder and Geisler (1980) also observed that joints in the siltstones are more likely to have regular spacing, while joints in the shales were less likely to be regularly spaced. Vertically, joints tended to terminate at lithologic boundaries.

## 2.3 Site Hydrogeology

Groundwater is present in the overburden and in bedrock. The direction of groundwater flow in the overburden and the upper portion of fractured bedrock (B-zone) is to the northwest. Groundwater within the overburden and upper portion of fractured bedrock are in direct hydraulic communication and unconfined. The deeper zones of fractured bedrock (C- and

D-zones) are under semi-confined conditions. Historic groundwater elevations from well clusters screened at greater depths within bedrock indicate a downward hydraulic gradient.

Based on groundwater elevation data collected on May 19, 2005, the direction of groundwater flow within the shallow bedrock (B-zone) aquifer is to the northwest. The overall pattern of flow generally mimics the surface topography, with a steep gradient observed between the EPT facility and West Spencer Street (South Hill) and a flatter gradient west of West Spencer Street.

## 3.0 Objectives

The objective of the supplemental groundwater investigation was to further evaluate groundwater quality immediately downgradient (west) of the current remediation area. The scope of work included:

- installing and sampling three groundwater monitoring wells (MW-30B, MW-31B, and MW-32B) within the upper portion of fractured bedrock (B-zone) immediate west and northwest of the current remediation area

# 4.0 Scope of Work

## 4.1 Monitoring Well Installation

Three groundwater monitoring wells (MW-30B, MW-31B, and MW-32B) were installed downgradient of the current remediation area near the NYSE&G South Cayuga Substation between July 27 and August 9, 2005. The well locations are shown in Figure 1.

In accordance with the approved scope of work, each well was installed and screened in the upper portion of the fractured bedrock (B-zone). The wells were completed between 14 and 18 feet bgs. Boreholes for the monitoring wells were drilled through the overburden using 8.25-inch inside-diameter (ID) hollow-stem augers. Continuous soil samples were collected from the ground surface to refusal at bedrock using 2-foot-long, split-spoon samplers. The soils recovered from the split spoons were screened for organic vapors in the field using a photoionization detector (PID). Sample descriptions and PID readings were recorded in a field notebook.

Bedrock was cored to determine the quantity of fractures and for logging purposes (Appendix A). The screened interval and final depth of the monitoring wells depended on the quantity of fractures present. The boreholes were terminated as the quantity of fractures began to diminish with depth. Once the terminal depth of each well was reached, the borehole for each well was expanded (reamed) using a 6.25-inch rotary air hammer.

The monitoring wells were constructed of 2-inch-ID threaded, flush jointed, Schedule 40 polyvinyl chloride (PVC) blank casing attached to screens with 0.010-inch horizontal slots. Screen length ranged from 6 to 8 feet. A clean sand filter pack was placed from the bottom of the well borehole to approximately 2 feet above the top of the screen. A 3-foot-thick bentonite seal was then placed on top of the sand filter pack. The remaining annular space was backfilled with a cement-bentonite grout mixture (tremie piped from the bottom to the top).

The wells were completed flush with the ground surface using protective, steel well coverings, with the exception of MW-30B and MW-31B, where above-grade lockable steel casing was used. The inner casing of the flush-mounted wells was fitted with a watertight lockable cap. Well construction information was recorded in a field notebook, and boring logs and as-built well construction diagrams were prepared for each monitoring well after completion of the field activities (Appendix A). All wells were completed and installed by Parratt Wolff,

Inc., a driller licensed in the state of New York, in accordance with Environmental Conservation Law 15-1525.

Drill cuttings and water generated during monitoring well installation were contained in Department of Transportation-approved, 55-gallon steel drums. The drums were labeled and moved to a staging area on the EPT site. Water generated during the well installation was collected and added to the onsite groundwater treatment system. All solid investigative-derived waste (i.e., drill cuttings) will be sampled and analyzed for disposal characterization. Used protective clothing and equipment was managed in a manner consistent with the U.S. Environmental Protection Agency Guidance Document, Management of Investigative Derived Waste During Site Inspections (May 1991), OERR 9345.3-02.

All drilling and sampling activities were conducted with clean equipment. Split-spoon samplers were decontaminated at the EPT site in accordance with Environmental Strategies' standard operating procedures (SOPs). The drilling equipment (augers, rods, and hammer bit) was decontaminated at the EPT site using a portable steam cleaner. All decontamination fluids generated during the drilling activities were contained in 55-gallon steel drums and managed in the same manner as water generated during the well installation.

The ground surface elevations and the top of the PVC well casing at each new monitoring well were surveyed to the nearest 0.01 foot. The horizontal locations of the new wells were determined to the nearest 0.1 foot and referenced to the state plane coordinate system. A surveyor licensed in New York State surveyed the well locations and elevations. The locations and elevations of the monitoring wells were tied into the existing base map for the site.

4.1.1 Groundwater Sampling and Development Procedures

The new monitoring wells were developed to remove sediments and to ensure effective communication between the well screens and surrounding saturated zones. The wells were developed by surging the screened interval to loosen any fine-grained sediment in the sand filter pack and adjacent aquifer material. Groundwater from the well was removed by bailing or pumping. Turbidity, pH, temperature, and specific conductance were monitored during the development process to ensure that groundwater representative of the screened portion of the aquifer was entering the well. Development continued until the discharge was relatively free of suspended sediments. Water generated during the well development was collected in drums and added to the EPT onsite groundwater treatment system.

All development activities were conducted with clean equipment to prevent potential cross-contamination between well locations. Non-dedicated equipment was cleaned between use in each well.

Before initiating sampling, water level measurements were collected from the newly installed monitoring wells on August 17, 2005. Following the water level measurements, each well was purged dry (approximately three well volumes). After being allowed to recharge overnight, the wells were purged a second time as part of the standard sampling procedures. Measurements of pH, conductivity, temperature, and redox potential were obtained at least three times (beginning, middle, and end) during the well purging process, except in instances were the well experienced incomplete recharge. In these instances, measurements were made at least once before the well was purged dry. Groundwater sampling logs are included in Appendix B.

Groundwater samples were collected from each monitoring well on August 18, 2005, for analysis of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs) using disposable polyethylene bailers. It should be noted that well MW-31B was sampled for VOCs only, due to insufficient well volume.

All non-dedicated groundwater sampling equipment was decontaminated in the field. All monitoring well purging, groundwater sampling, and decontamination was conducted according to Environmental Strategies' SOPs, which are consistent with procedures outlined in the Resource Conservation and Recovery Act's Groundwater Monitoring Technical Enforcement Guidance Document.

Quality assurance/quality control samples, consisting of trip blanks and duplicates, were collected in accordance with SOPs. All samples were sealed, labeled, placed in a cooler with ice, and shipped to STL-Buffalo for analysis. Appropriate chain-of-custody procedures were followed.

# 5.0 Results

## 5.1 Groundwater Sampling Results

The August 2005 groundwater sampling results are summarized in Table 1 and shown in Figure 2. The laboratory data sheets are included in Appendix C.

Site related compounds were detected in two of the three monitoring wells. Monitoring well MW-32B, which is located 180 feet northwest of the remediation area on South Cayuga, contained detectable levels of 1,1,1-trichloroethane (3 microgram per liter [µg/l]), TCE (200 µg/l) and its associated degradation product *cis*-1,2,-dichlorethene (DCE; 160 µg/l). Low levels of TCE (5.5 µg/l) and *cis*-1,2-DCE (1.3 µg/l) were detected in monitoring MW-31B, which is located 180 feet west of the remediation area and 60 feet north of the NYSE&G substation. No site-related VOCs were detected in monitoring well MW-30B, located 220 feet west of remediation area.

In addition to the site-related compounds detected in two of the new wells, chloroform, a common laboratory contaminant, was detected in each of the new wells at concentrations ranging from 1.6 µg/l in MW-30B to 24 µg/l in MW-31B. The presence of chloroform in the samples is likely the result of laboratory contamination.

No SVOCs or PCBs were detected in the samples collected from the three new wells.

## 6.0 Conclusions

The sampling results for the three new wells installed downgradient of the remediation area showed TCE in two wells and *cis*-1,2-DCE in one well above the state groundwater standards. Low levels of 1,2-DCE were detected in the second well, while no VOCs were found in the third well. Based groundwater investigations conducted to date, the area of affected groundwater related to the fire water reservoir appears to be restricted primarily to within the current remediation area. No SVOCs or PCBs were detected in samples collected from the three new wells.

Figure

NORTH TITUS AVENUE

SOUTH TITUS AVENUE

SOUTH ABANY STREET

SOUTH GENEVA STREET

WEST SPENCER STREET

SOUTH CAYUGA STREET

SOUTH HILL TERRACE

TURNER PLACE

HILLVIEW PLACE

MW-10-40
*(Destroyed)*

MW-24B

MW-23B

MW-19A

MW-17-40

MW-22B

MW-21B

MW-25A

MW-18A

MW-20B

MW-9-40
*(Silted In)*

MW-32B

MW-31B

MW-7-40

MW-30B

MW-26A

MW-5-40

R&D Building

NYSE&G Substation

Remediation Area

Fire Water Reservoir

**Legend**

- Monitoring Well Location
- New Monitoring Well Location
- Indoor Air Study Area

N

0 120 240

SCALE IN FEET

**Figure 1**
**Groundwater Monitoring Well Locations**
**Emerson Power Transmission**
**Ithaca, New York**

12749100.DWG


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Table

**Table 1**

**Supplemental Groundwater Investigation - Sampling Results**
**Emerson Power Transmission**
**Ithaca, New York**
**August 2005 (ug/l)**

| Sample ID: | MW-30B | MW-31B (d) | MW-32B | MW-32B (100) (e) |
|---|---|---|---|---|
| Date: | 8/18/05 | 8/18/05 | 8/18/05 | 8/18/05 |
| **Volatile Organic Compounds (ug/l)** | | | | |
| Acetone | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Benzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Bromodichloromethane | 1.0 U | 5.2 | 1.0 U | 1.0 U |
| Bromoform | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Bromomethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 2-Butanone | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Carbon disulfide | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Carbon tetrachloride | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chlorobenzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloroethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloroform | 1.6 | 24 | 2.7 | 2.8 |
| Chloromethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Cyclohexane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2-Dibromomethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dibromochloromethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2-Dicbromo-3-chloropropane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dichlorodifluoromethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,1- Dichloroethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| cis-1,2-Dichloroethene | 1.0 U | 1.3 | 160 D | 160 D |
| trans-1,2-Dichloroethene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| cis-1,3-Dichloropropene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| trans-1,3-Dichloropropene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Ethylbenzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 2-Hexanone | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Isopropylbenzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Methyl acetate | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Methylcyclohexane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Methylene chloride | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 4-Methyl-2-pentanone | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Methyl tert butyl ether | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Styrene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Tetrachloroethene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Toluene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2,4-Trichlorobenzene | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | 1.0 U | 3.2 |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,1,2-Trichloro-1,2,2-trifluorethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Trichlorofluoromethane | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Trichloroethene | 1.0 U | 5.5 | 200 D | 200 D |
| Vinyl Chloride | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Xylene (total) | 3.0 U | 3.0 U | 3.0 U | 3.0 U |

**Table 1**

**Supplemental Groundwater Investigation - Sampling Results**
**Emerson Power Transmission**
**Ithaca, New York**
**August 2005 (ug/l)**

| Sample ID: | MW-30B | MW-31B (d) | MW-32B | MW-32B (100) (e) |
|---|---|---|---|---|
| Date: | 8/18/05 | 8/18/05 | 8/18/05 | 8/18/05 |
| **Semivolatile Organic Compounds** | | | | |
| Acenaphthene | 11 U | NA | 11 U | 12 U |
| Acenaphthylene | 11 U | NA | 11 U | 12 U |
| Acetophenone | 11 U | NA | 11 U | 12 U |
| Anthracene | 11 U | NA | 11 U | 12 U |
| Atrazine | 11 U | NA | 11 U | 12 U |
| Benzaldehyde | 53 U | NA | 56 U | 59 U |
| Benzo(a)anthracene | 11 U | NA | 11 U | 12 U |
| Benzo(b)fluoranthene | 11 U | NA | 11 U | 12 U |
| Benzo(k)fluoranthene | 11 U | NA | 11 U | 12 U |
| Benzo(ghi)perylene | 11 U | NA | 11 U | 12 U |
| Benzo(a)pyrene | 11 U | NA | 11 U | 12 U |
| Benzoic acid | 160 U | NA | 170 U | 180 U |
| Benzyl alcohol | 21 U | NA | 22 U | 24 U |
| Biphenyl | 11 U | NA | 11 U | 12 U |
| Bis(2-chloroethoxy) methane | 11 U | NA | 11 U | 12 U |
| Bis(2-chloroethyl) ether | 11 U | NA | 11 U | 12 U |
| 2,2'-Oxybis(1-Chlorophopane) | 11 U | NA | 11 U | 12 U |
| Bis(2-ethylhexyl) phthalate | 11 U | NA | 11 U | 12 U |
| 4-Bromophenyl phenyl ether | 11 U | NA | 11 U | 12 U |
| Butyl benzyl phthalate | 11 U | NA | 11 U | 12 U |
| 4-Chloroaniline | 11 U | NA | 11 U | 12 U |
| 4-Chloro-3-methylphenol | 11 U | NA | 11 U | 12 U |
| 2-Chloronaphthalene | 11 U | NA | 11 U | 12 U |
| 2-Chlorophenol | 11 U | NA | 11 U | 12 U |
| 4-Chlorophenyl phenyl ether | 11 U | NA | 11 U | 12 U |
| Caprolactum | 11 U | NA | 11 U | 12 U |
| Chrysene | 11 U | NA | 11 U | 12 U |
| Dibenzo(a,h)anthracene | 11 U | NA | 11 U | 12 U |
| Dibenzofuran | 11 U | NA | 11 U | 12 U |
| Di-n-butyl phthalate | 11 U | NA | 11 U | 12 U |
| 1,2-Dichlorobenzene | 11 U | NA | 11 U | 12 U |
| 1,3-Dichlorobenzene | 11 U | NA | 11 U | 12 U |
| 1,4-Dichlorobenzene | 11 U | NA | 11 U | 12 U |
| 3,3'-dichlorobenzidine | 21 U | NA | 22 U | 24 U |
| 2,4-Dichlorophenol | 11 U | NA | 11 U | 12 U |
| Diethyl phthalate | 11 U | NA | 11 U | 12 U |
| 2,4-Dimethylphenol | 11 U | NA | 11 U | 12 U |
| Dimethyl phthalate | 11 U | NA | 11 U | 12 U |
| 4,6-Dinitro-2-methylphenol | 53 U | NA | 56 U | 59 U |
| 2,4-Dinitrophenol | 53 U | NA | 56 U | 59 U |
| 2,4-Dinitrotoluene | 11 U | NA | 11 U | 12 U |
| 2,6-Dinitrotoluene | 11 U | NA | 11 U | 12 U |
| Di-n-octyl phthalate | 11 U | NA | 11 U | 12 U |
| Fluoranthene | 11 U | NA | 11 U | 12 U |
| Fluorene | 11 U | NA | 11 U | 12 U |
| Hexachlorobenzene | 11 U | NA | 11 U | 12 U |
| Hexachlorobutadiene | 11 U | NA | 11 U | 12 U |
| Hexachlorocyclopentadiene | 48 U | NA | 50 U | 53 U |
| Hexachloroethane | 11 U | NA | 11 U | 12 U |
| Indeno(1,2,3-cd)pyrene | 11 U | NA | 11 U | 12 U |
| Isophorone | 11 U | NA | 11 U | 12 U |
| 2-Methylnaphthalene | 11 U | NA | 11 U | 12 U |
| 2-Methylphenol | 11 U | NA | 11 U | 12 U |
| 4-Methylphenol | 11 U | NA | 11 U | 12 U |

**Table 1**

**Supplemental Groundwater Investigation - Sampling Results**
**Emerson Power Transmission**
**Ithaca, New York**
**August 2005 (ug/l)**

| Sample ID: | MW-30B | MW-31B (d) | MW-32B | MW-32B (100) (e) |
|---|---|---|---|---|
| **Date:** | 8/18/05 | 8/18/05 | 8/18/05 | 8/18/05 |
| **Semivolatile Organic Compounds (continued)** | | | | |
| Naphthalene | 11 U | NA | 11 U | 12 U |
| 2-Nitroaniline | 53 U | NA | 56 U | 59 U |
| 3-Nitroaniline | 53 U | NA | 56 U | 59 U |
| 4-Nitroaniline | 53 U | NA | 56 U | 59 U |
| Nitrobenzene | 11 U | NA | 11 U | 12 U |
| 2-Nitrophenol | 11 U | NA | 11 U | 12 U |
| 4-Nitrophenol | 53 U | NA | 56 U | 59 U |
| N-Nitrosodiphenylamine | 11 U | NA | 11 U | 12 U |
| N-Nitroso-Di-n-propylamine | 11 U | NA | 11 U | 12 U |
| Pentachlorophenol | 53 U | NA | 56 U | 59 U |
| Phenanthrene | 11 U | NA | 11 U | 12 U |
| Phenol | 11 U | NA | 11 U | 12 U |
| Pyrene | 11 U | NA | 11 U | 12 U |
| 1,2,4-Trichlorobenzene | 11 U | NA | 11 U | 12 U |
| 2,4,5-Trichlorophenol | 11 U | NA | 11 U | 12 U |
| 2,4,6-Trichlorophenol | 11 U | NA | 11 U | 12 U |
| **Polychlorinated Biphenyls** | | | | |
| Aroclor 1016 | 0.53 U | NA | 0.52 U | 0.62 U |
| Aroclor 1221 | 0.53 U | NA | 0.52 U | 0.62 U |
| Aroclor 1232 | 0.53 U | NA | 0.52 U | 0.62 U |
| Aroclor 1242 | 0.53 U | NA | 0.52 U | 0.62 U |
| Aroclor 1248 | 0.53 U | NA | 0.52 U | 0.62 U |
| Aroclor 1254 | 0.53 U | NA | 0.52 U | 0.62 U |
| Aroclor 1260 | 0.53 U | NA | 0.52 U | 0.62 U |

a\ U = Compound not detected above method detection limit; D = Analyitcal result from a secondary duplicate; NA = Not applicable
d\ No analysis for semivolatiles and PCBs due to insufficient sample volume.
e\ Blind duplicate of MW-32

Appendix A – Boring Logs

***Boring Log: MW-30B***

**Project:** EPT

**Project No.:** 127491

**Location:** Ithaca, NY

**Completion Date:** August 4, 2005

**Surface Elevation (feet AMSL*):** 532.55

**TOC Elevation (feet AMSL*):** 534.64

**Total Depth (feet):** 24.5

**Borehole Diameter (inches):** 8/6

**AMSL = Above mean sea level*

| Sample Data | | | | | Subsurface Profile | | |
|---|---|---|---|---|---|---|---|
| Depth | Sample/Interval | PID/OVM (ppm) | Blow Count | % Recovery | Lithology | Description | Well Details |
| | | | | | | Ground Surface | |
| | 1 | NA | NA<br>NA<br>NA<br>NA | NA | | ***Clayey Gravel (GC)***<br>Gray (N6) to black (N2.5) with coal, shale, and slag fragments; loose; dry; (fill). | |
| 5 | 2 | 0.0 | 1<br>1<br>1<br>2 | 40 | | | |
| | 3 | 0.0 | 2<br>2<br>3<br>5 | 50 | | | |
| | 4 | 0.0 | 8<br>6<br>4<br>6 | 45 | | ***Silt with Gravel (ML)***<br>Brown (7.5YR 5/2) to dark brown (7.5YR 3/2); with trace coal and shale fragments; nonplastic; loose; dry to moist. | |
| 10 | 5 | 0.0 | 6<br>7<br>12<br>15 | 70 | | ***Silt (ML)***<br>Light gray (N7) to brownish yellow (10YR 6/6); with trace limestone and shale fragments; nonplastic; loose; dry. | |
| | 6 | 0.0 | 44<br>34<br>18<br>14 | 40 | | | |
| | 7 | 0.0 | 20<br>100/4<br>- | 15 | | | |
| 15 | 8 | NA | - | 100 | | ***Siltstone***<br>Gray (N5); weathered; highly fractured from 15 to 17.5 feet with weathering in fractures; fractures mainly along bedding; fractures mainly mechanical below 21 feet below ground surface; RQD 37% (10 to 14.5) and 75% (19.5 to 24.5). | |
| 20 | 9 | NA | - | 100 | | | |
| 25 | | | | | | Bottom of Boring at 24.5 feet | |
| 30 | | | | | | | |

**Geologist(s):** Gregory J. Frisch

**Subcontractor:** Parratt Wolff, Inc.

**Driller/Operator:** Mickey Marshal

**Method:** Hollow Stem Auger/Roller Bit

**Environmental Strategies Consulting LLC**

***Boring Log: MW-31B***

**Project:** EPT

**Project No.:** 127491

**Location:** Ithaca, NY

**Completion Date:** August 5, 2005

**Surface Elevation (feet AMSL*):** 532.52

**TOC Elevation (feet AMSL*):** 534.61

**Total Depth (feet):** 24.5

**Borehole Diameter (inches):** 8/6

**AMSL = Above mean sea level*

| Sample Data | | | | | Subsurface Profile | | |
|---|---|---|---|---|---|---|---|
| Depth | Sample/Interval | PID/OVM (ppm) | Blow Count | % Recovery | Lithology | Description | Well Details |
| | | | | | | Ground Surface | |
| | 1 | NA | NA<br>NA<br>NA<br>NA | NA | | ***Silt with Gravel (ML)***<br>Gray (N5) to dark grayish brown (10YR 4/2); with coal and shale fragments; loose; dry; (fill). | |
| 5 | 2 | 0.0 | 3<br>4<br>4<br>7 | 50 | | | |
| | 3 | 0.0 | 12<br>5<br>8<br>22 | 35 | | | |
| | 4 | 0.0 | 19<br>100/2<br>-<br>- | 0 | | | |
| 10 | 5 | 0.0 | 19<br>19<br>20<br>18 | 35 | | | |
| | 6 | 0.0 | 12<br>11<br>10<br>8 | 40 | | | |
| | 7 | 0.0 | 50/1<br>-<br>-<br>- | 0 | | ***Lean Clay with Gravel (CL)***<br>Dark gray (N4) to dark grayish brown (10YR 4/2); medium stiff; nonplastic; moist; weathered sitlstone in shoe. | |
| 15 | | | | | | ***Siltstone***<br>Gray (N5); weathered; highly fractured at 14.5 to 15.0 and 17.3 to 17.8 feet below ground surface; weathering in fractures; fracturing minly along bedding with vertical fracturing in highly fractured zones; fractures mainly mechanical below 21 feet below ground surface; RQD 38% (14.5 19.5) and 75 % (19.5 - 24.5). | |
| 20 | | | | | | | |
| 25 | | | | | | Bottom of Boring at 24.5 feet | |
| 30 | | | | | | | |

**Geologist(s):** Gregory J. Frisch

**Subcontractor:** Parratt Wolff, Inc.

**Driller/Operator:** Mickey Marshal

**Method:** Hollow Stem Auger/Roller Bit

**Environmental Strategies Consulting LLC**

***Boring Log: MW-32B***

**Project:** EPT

**Project No.:** 127491

**Location:** Ithaca, NY

**Completion Date:** August 9, 2005

**Surface Elevation (feet AMSL*):** 514.49

**TOC Elevation (feet AMSL*):** 513.95

**Total Depth (feet):** 11

**Borehole Diameter (inches):** 8/6

**AMSL = Above mean sea level*

| Sample Data | | | | | Subsurface Profile | | |
|---|---|---|---|---|---|---|---|
| Depth | Sample/Interval | PID/OVM (ppm) | Blow Count | % Recovery | Lithology | Description | Well Details |
| | | | | | | Ground Surface | |
| | 1 | NA | NA<br>NA<br>NA<br>NA | NA | | ***Clayey Gravel (GC)***<br>Dark gray (N3) to dark brown (10YR3/3); gravel for road base; loose; dry; (fill). | |
| 2 | | | | | | ***Siltstone***<br>Light gray (N7); weathered; fractured; thinly bedded; fractures mainly along bedding with vertical fracturing and weathering from 3.7 to 4.0 feet below ground surface; RQD 66%. | |
| 4 | 2 | NA | - - - - | 100 | | | |
| 6 | | | | | | | |
| 8 | | | | | | ***Siltstone***<br>Same as above with natural fracturing at 10 to 10.2 feet below ground surface and mechanical fractures below 10.2 feet below ground surface; RQD 71%. | |
| 10 | 3 | NA | - - - - | 100 | | | |
| 12 | | | | | | Bottom of Boring at 11 feet | |
| 14 | | | | | | | |

**Geologist(s):** Gregory J. Frisch

**Subcontractor:** Parratt Wolff, Inc.

**Driller/Operator:** Mickey Marshal

**Method:** Hollow Stem Auger/Roller Bit

**Environmental Strategies Consulting LLC**

Appendix B – Groundwater Sampling Logs

Environmental Strategies Consulting, LLC.

**Groundwater Sampling Monitoring Form**

| **Well ID** | **MW-30B** | **Site:** | EPT-Ithaca | **Sample Date:** | 8/18/2005 |
|---|---|---|---|---|---|
| **Well Diameter** | 2 in | | | | |
| **Depth to Water** | 19.12 ft | **Samplers** | TAH, BLN | | |
| **Total Well Depth** | 26.63 ft | **Weather Conditions and Notes:** | Partly Cloudy, Calm, ~70 degrees F | | |
| **Height of Water Column** | 7.5 ft | | | | |
| **Well Volume** | 1.226 gal | | | | |

## Instrument Calibration Information

| D.O. Meter Calibration | | ORP Meter Calibration | | S.C. Meter Calibration | | |
|---|---|---|---|---|---|---|
| DO slope = | | ORP in stand. | | Expected S.C. | Measured S.C. | Notes |
| DO in air = | mg/L | T of stand. | | | | |
| Air temp = | ºC | Standard used: | | | | |

| pH Meter Calibration | | |
|---|---|---|
| pH of Stand. 1 | pH of Stand. 2 | Slope |
| | | |

Notes on calibration: Horiba U-10 water quality meter calibrated to manufacturer's specifications using auto-cal solution.

## Well Purging Information

| Purge Volume (gal) | D.O. (mg/L) | T (ºC) | ORP (mV) | S.C. (mS/cm) | Turb. (NTU) | pH | Notes |
|---|---|---|---|---|---|---|---|
| 0.0 | 12.72 | 12.0 | NM | 3.050 | 63 | 6.61 | |
| 1.5 | 12.28 | 12.0 | NM | 3.240 | 122 | 7.13 | |
| 2.5 | 12.46 | 11.8 | NM | 2.830 | 156 | 7.55 | |
| 3.5 | 12.56 | 11.8 | NM | 2.770 | 736 | 7.88 | |

## Colorimetric Analysis

| Analyte | Total or Dissolved | Sample Vol. (mL) | D.I. Vol. (mL) | Dilution Factor | Conc. in Dilute Sample (mg/L) | Conc. in Sample (mg/L) | Notes |
|---|---|---|---|---|---|---|---|
| $Fe^{2+}$ | | | | | | NM | |
| Fe total | | | | | | NM | |
| Sulfide | | | | | | NM | |

## Alkalinity Analysis

| Sample Volume (mL) | Acid | Acid Conc. (N) | Digits Used | Alkalinity (mg/L as $CaCO_3$) | Notes |
|---|---|---|---|---|---|
| | $H_2SO_4$ | | | NM | |

## Laboratory Analysis Information

| # of Bottles | Analytes | Preservative | Bottle Type | Anal. Lab. | Filtered/ Unfiltered | Sample Time |
|---|---|---|---|---|---|---|
| 2 | VOCs (EPA 8260B) | HCl | 40 ml VOA | STL-Buffalo | Unfiltered | 8/18/2005 19:50 |
| 2 | SVOCs | none | 1 L amber | STL-Buffalo | Unfiltered | 8/18/2005 19:50 |
| 1 | PCBs | none | 1 L amber | STL-Buffalo | Unfiltered | 8/18/2005 19:50 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Environmental Strategies Consulting, LLC.

**Groundwater Sampling Monitoring Form**

| **Well ID** | **MW-31B** | **Site:** | EPT-Ithaca | **Sample Date:** | 8/18/2005 |
|---|---|---|---|---|---|
| **Well Diameter** | 2 in | | | | |
| **Depth to Water** | 22.52 ft | **Samplers** | TAH, BLN | | |
| **Total Well Depth** | 26.80 ft | **Weather Conditions and Notes:** | Sunny, Calm, ~70 degrees F | | |
| **Height of Water Column** | 4.3 ft | | | | |
| **Well Volume** | 0.698 gal | | | | |

## Instrument Calibration Information

| D.O. Meter Calibration | | ORP Meter Calibration | | S.C. Meter Calibration | | |
|---|---|---|---|---|---|---|
| DO slope = | | ORP in stand. | | Expected S.C. | Measured S.C. | Notes |
| DO in air = | mg/L | T of stand. | | | | |
| Air temp = | ºC | Standard used: | | | | |

| pH Meter Calibration | | |
|---|---|---|
| pH of Stand. 1 | pH of Stand. 2 | Slope |
| | | |

Notes on calibration: Horiba U-10 water quality meter calibrated to manufacturer's specifications using auto-cal solution.

## Well Purging Information

| Purge Volume (gal) | D.O. (mg/L) | T (ºC) | ORP (mV) | S.C. (mS/cm) | Turb. (NTU) | pH | Notes |
|---|---|---|---|---|---|---|---|
| 0.0 | 12.68 | 12.1 | NM | 1.160 | 71 | 8.52 | Purged dry @ ~0.5 gal |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## Colorimetric Analysis

| Analyte | Total or Dissolved | Sample Vol. (mL) | D.I. Vol. (mL) | Dilution Factor | Conc. in Dilute Sample (mg/L) | Conc. in Sample (mg/L) | Notes |
|---|---|---|---|---|---|---|---|
| $Fe^{2+}$ | | | | | | NM | |
| Fe total | | | | | | NM | |
| Sulfide | | | | | | NM | |

## Alkalinity Analysis

| Sample Volume (mL) | Acid | Acid Conc. (N) | Digits Used | Alkalinity (mg/L as $CaCO_3$) | Notes |
|---|---|---|---|---|---|
| | $H_2SO_4$ | | | NM | |

## Laboratory Analysis Information

| # of Bottles | Analytes | Preservative | Bottle Type | Anal. Lab. | Filtered/ Unfiltered | Sample Time |
|---|---|---|---|---|---|---|
| 2 | VOCs (EPA 8260B) | HCl | 40 ml VOA | STL-Buffalo | Unfiltered | 4/7/2005 19:35 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Environmental Strategies Consulting, LLC.

**Groundwater Sampling Monitoring Form**

| **Well ID** | **MW-32B** | **Site:** | EPT-Ithaca | **Sample Date:** | 8/18/2005 |
|---|---|---|---|---|---|
| **Well Diameter** | 2 in | | | | |
| **Depth to Water** | 7.19 ft | **Samplers** | TAH, BLN | | |
| **Total Well Depth** | 10.03 ft | **Weather Conditions and Notes:** | Sunny, Calm, ~70 degrees F | | |
| **Height of Water Column** | 2.8 ft | | | | |
| **Well Volume** | 0.463 gal | | | | |

## Instrument Calibration Information

| D.O. Meter Calibration | | ORP Meter Calibration | | S.C. Meter Calibration | | |
|---|---|---|---|---|---|---|
| DO slope = | | ORP in stand. | | Expected S.C. | Measured S.C. | Notes |
| DO in air = | mg/L | T of stand. | | | | |
| Air temp = | ºC | Standard used: | | | | |

| pH Meter Calibration | | |
|---|---|---|
| pH of Stand. 1 | pH of Stand. 2 | Slope |
| | | |

Notes on calibration: Horiba U-10 water quality meter calibrated to manufacturer's specifications using auto-cal solution.

## Well Purging Information

| Purge Volume (gal) | D.O. (mg/L) | T (ºC) | ORP (mV) | S.C. (mS/cm) | Turb. (NTU) | pH | Notes |
|---|---|---|---|---|---|---|---|
| 0.0 | 9.23 | 19.6 | NM | 4.400 | <20 | 8.37 | |
| 0.5 | 9.52 | 18.9 | NM | 4.330 | 625 | 8.38 | |
| 1.0 | 9.79 | 17.9 | NM | 3.160 | 600 | 8.44 | |
| 1.5 | 9.95 | 17.9 | NM | 3.650 | 65 | 8.59 | |

## Colorimetric Analysis

| Analyte | Total or Dissolved | Sample Vol. (mL) | D.I. Vol. (mL) | Dilution Factor | Conc. in Dilute Sample (mg/L) | Conc. in Sample (mg/L) | Notes |
|---|---|---|---|---|---|---|---|
| $Fe^{2+}$ | | | | | | NM | |
| Fe total | | | | | | NM | |
| Sulfide | | | | | | NM | |

## Alkalinity Analysis

| Sample Volume (mL) | Acid | Acid Conc. (N) | Digits Used | Alkalinity (mg/L as $CaCO_3$) | Notes |
|---|---|---|---|---|---|
| | $H_2SO_4$ | | | NM | |

## Laboratory Analysis Information

| # of Bottles | Analytes | Preservative | Bottle Type | Anal. Lab. | Filtered/ Unfiltered | Sample Time |
|---|---|---|---|---|---|---|
| 2 | VOCs (EPA 8260B) | HCl | 40 ml VOA | STL-Buffalo | Unfiltered | 8/18/2005 20:20 |
| 2 | SVOCs | none | 1 L amber | STL-Buffalo | Unfiltered | 8/18/2005 20:20 |
| 1 | PCBs | none | 1 L amber | STL-Buffalo | Unfiltered | 8/18/2005 20:20 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Appendix C - Laboratory Data Sheets

# ANALYTICAL REPORT

Job#: A05-9033

STL Project#: NY4A9171
Site Name: Environmental Strategies Corporation
Task: Ithaca Site - 127491

Mr. John Johnson
Environmental Strategies Corp.
11911 Freedom Dr. Suite 900
Reston, VA 20190

STL Buffalo

Candace L. Fox
Project Manager

09/08/2005

# STL Buffalo
# Current Certifications

| STATE | Program | Cert # / Lab ID |
|---|---|---|
| Arkansas | SDWA, CWA, RCRA, SOIL | 03-054-D/88-0686 |
| California | NELAP SDWA, CWA, RCRA | 01169CA |
| Connecticut | SDWA, CWA, RCRA, SOIL | PH-0568 |
| Florida | NELAP RCRA | E87672 |
| Georgia | SDWA | 956 |
| Illinois | NELAP SDWA, CWA, RCRA | 200003 |
| Iowa | SW/CS | 374 |
| Kansas | NELAP SDWA, CWA, RCRA | E-10187 |
| Kentucky | SDWA | 90029 |
| Kentucky UST | UST | 30 |
| Louisiana | NELAP CWA, RCRA | 2031 |
| Maine | SDWA, CWA | NY044 |
| Maryland | SDWA | 294 |
| Massachusetts | SDWA, CWA | M-NY044 |
| Michigan | SDWA | 9937 |
| Minnesota | CWA, RCRA | 036-999-337 |
| New Hampshire | NELAP SDWA, CWA | 233701 |
| New Jersey | SDWA, CWA, RCRA, CLP | NY455 |
| New York | NELAP, AIR, SDWA, CWA, RCRA | 10026 |
| North Carolina | CWA | 411 |
| North Dakota | SDWA, CWA, RCRA | R-176 |
| Oklahoma | CWA, RCRA | 9421 |
| Pennsylvania | Env. Lab Reg. | 68-281 |
| South Carolina | RCRA | 91013 |
| USDA | FOREIGN SOIL PERMIT | S-41579 |
| Virginia | SDWA | 278 |
| Washington | CWA | C254 |
| West Virginia | CWA | 252 |
| Wisconsin | CWA | 998310390 |
| | | |
| | | |
| | | |

SAMPLE SUMMARY

| LAB SAMPLE ID | CLIENT SAMPLE ID | MATRIX | SAMPLED DATE | SAMPLED TIME | RECEIVED DATE | RECEIVED TIME |
|---|---|---|---|---|---|---|
| A5903302 | MW-27B | WATER | 08/18/2005 | 18:00 | 08/22/2005 | 09:45 |
| A5903303 | MW-28B | WATER | 08/18/2005 | 18:30 | 08/22/2005 | 09:45 |
| A5903301 | MW-29B | WATER | 08/18/2005 | 17:30 | 08/22/2005 | 09:45 |
| A5903305 | MW-30B | WATER | 08/18/2005 | 19:50 | 08/22/2005 | 09:45 |
| A5903304 | MW-31B | WATER | 08/18/2005 | 19:35 | 08/22/2005 | 09:45 |
| A5903306 | MW-32B | WATER | 08/18/2005 | 20:20 | 08/22/2005 | 09:45 |
| A5903307 | MW-32B(100) | WATER | 08/18/2005 | 21:00 | 08/22/2005 | 09:45 |
| A5903308 | TB-081905 | WATER | 08/18/2005 | | 08/22/2005 | 09:45 |

METHODS SUMMARY

Job#: A05-9033

STL Project#: NY4A9171
Site Name: Environmental Strategies Corporation

| PARAMETER | ANALYTICAL METHOD |
|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | SW8463 8260/5ML |
| ESC - 8270 - TCL SEMI-VOLATILE ORGANICS - W | SW8463 8270 |
| ESC - METHOD 8082 - POLYCHLORINATED BIPHENYLS - W | SW8463 8082 |

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

NON-CONFORMANCE SUMMARY

Job#: A05-9033

STL Project#: NY4A9171
Site Name: Environmental Strategies Corporation

General Comments

The enclosed data have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-9033
Sample Cooler(s) were received at the following temperature(s); 2@5.2 °C
All samples were received in good condition.

GC/MS Volatile Data

No deviations from protocol were encountered during the analytical procedures.

GC/MS Semivolatile Data

No deviations from protocol were encountered during the analytical procedures.

GC Extractable Data

For method 8082, the recovery of surrogate Tetrachloro-m-xylene in sample MW-29B is outside of established quality control limits due to the sample matrix. The recovery of surrogate Decachlorobiphenyl is within quality control criteria; no corrective action is required.

********

| Client Sample ID | Lab Sample ID | Parameter (Inorganic)/Method (Organic) | Dilution | Code |
|---|---|---|---|---|
| MW-32B | A5903306DL | 8260/5ML | 4.00 | 008 |
| MW-32B(100) | A5903307DL | 8260/5ML | 4.00 | 008 |

---

Dilution Code Definition:

002 - sample matrix effects
003 - excessive foaming
004 - high levels of non-target compounds
005 - sample matrix resulted in method non-compliance for an Internal Standard
006 - sample matrix resulted in method non-compliance for Surrogate
007 - nature of the TCLP matrix
008 - high concentration of target analyte(s)
009 - sample turbidity
010 - sample color
011 - insufficient volume for lower dilution
012 - sample viscosity
013 - other

# DATA COMMENT PAGE

**ORGANIC DATA QUALIFIERS**

| | |
|---|---|
| ND or U | Indicates compound was analyzed for, but not detected at or above the reporting limit. |
| J | Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. |
| C | This flag applies to pesticide results where the identification has been confirmed by GC/MS. |
| B | This flag is used when the analyte is found in the associated blank, as well as in the sample. |
| E | This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis. |
| D | This flag identifies all compounds identified in an analysis at the secondary dilution factor. |
| N | Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results. |
| P | This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the data page and flagged with a "P". |
| A | This flag indicates that a TIC is a suspected aldol-condensation product. |
| [1] | Indicates coelution. |
| * | Indicates analysis is not within the quality control limits. |

**INORGANIC DATA QUALIFIERS**

| | |
|---|---|
| ND or U | Indicates element was analyzed for, but not detected at or above the reporting limit. |
| J or B | Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit. |
| N | Indicates spike sample recovery is not within the quality control limits. |
| K | Indicates the post digestion spike recovery is not within the quality control limits. |
| S | Indicates value determined by the Method of Standard Addition. |
| M | Indicates duplicate injection results exceeded quality control limits. |
| W | Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance. |
| E | Indicates a value estimated or not reported due to the presence of interferences. |
| H | Indicates analytical holding time exceedance. The value obtained should be considered an estimate. |
| * | Indicates analysis is not within the quality control limits. |
| + | Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995. |

| Client ID | | MW-27B | | MW-28B | | MW-29B | | MW-30B | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903302 | A05-9033 | A5903303 | A05-9033 | A5903301 | A05-9033 | A5903305 |
| Sample Date | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acetone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Benzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromodichloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromoform | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromomethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 2-Butanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Carbon Disulfide | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Carbon Tetrachloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chloroform | UG/L | 1.5 | 1.0 | 5.5 | 1.0 | 2.4 | 1.0 | 1.6 | 1.0 |
| Chloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Cyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dibromoethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Dibromochloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dibromo-3-chloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,3-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,4-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Dichlorodifluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| cis-1,2-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| trans-1,2-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| cis-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| trans-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Ethylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 2-Hexanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Isopropylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methyl acetate | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methylcyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methylene chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 4-Methyl-2-pentanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Methyl-t-Butyl Ether (MTBE) | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Styrene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,2,2-Tetrachloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Tetrachloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Toluene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2,4-Trichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,1-Trichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,2-Trichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |



NA = Not Applicable ND = Not Detected

| Client ID | | MW-27B | | MW-28B | | MW-29B | | MW-30B | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903302 | A05-9033 | A5903303 | A05-9033 | A5903301 | A05-9033 | A5903305 |
| Sample Date | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| 1,1,2-Trichloro-1,2,2-trifluor | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Trichlorofluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Trichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Vinyl chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Total Xylenes | UG/L | ND | 3.0 | ND | 3.0 | ND | 3.0 | ND | 3.0 |
| IS/SURROGATE(S) | | | | | | | | | |
| Chlorobenzene-D5 | % | 86 | 50-200 | 80 | 50-200 | 83 | 50-200 | 81 | 50-200 |
| 1,4-Difluorobenzene | % | 85 | 50-200 | 77 | 50-200 | 80 | 50-200 | 77 | 50-200 |
| 1,4-Dichlorobenzene-D4 | % | 85 | 50-200 | 75 | 50-200 | 79 | 50-200 | 75 | 50-200 |
| Toluene-D8 | % | 86 | 76-122 | 86 | 76-122 | 82 | 76-122 | 81 | 76-122 |
| p-Bromofluorobenzene | % | 114 | 73-120 | 115 | 73-120 | 111 | 73-120 | 108 | 73-120 |
| 1,2-Dichloroethane-D4 | % | 92 | 72-143 | 90 | 72-143 | 87 | 72-143 | 84 | 72-143 |



NA = Not Applicable ND = Not Detected

| Client ID | MW-31B | MW-32B | MW-32B | MW-32B(100) |
|---|---|---|---|---|
| Job No / Lab ID | A05-9033 / A5903304 | A05-9033 / A5903306 | A05-9033 / A5903306DL | A05-9033 / A5903307 |
| Sample Date | 08/18/2005 | 08/18/2005 | 08/18/2005 | 08/18/2005 |

| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | UG/L | ND | 5.0 | ND | 5.0 | ND | 20 | ND | 5.0 |
| Benzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Bromodichloromethane | UG/L | 5.2 | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Bromoform | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Bromomethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 2-Butanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 20 | ND | 5.0 |
| Carbon Disulfide | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Carbon Tetrachloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Chlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Chloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Chloroform | UG/L | 24 | 1.0 | 2.7 | 1.0 | ND | 4.0 | 2.8 | 1.0 |
| Chloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Cyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,2-Dibromoethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Dibromochloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,2-Dibromo-3-chloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,2-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,3-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,4-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Dichlorodifluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,1-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,2-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,1-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| cis-1,2-Dichloroethene | UG/L | 1.3 | 1.0 | 170 E | 1.0 | 160 D | 4.0 | 170 E | 1.0 |
| trans-1,2-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,2-Dichloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| cis-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| trans-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Ethylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 2-Hexanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 20 | ND | 5.0 |
| Isopropylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Methyl acetate | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Methylcyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Methylene chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 4-Methyl-2-pentanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 20 | ND | 5.0 |
| Methyl-t-Butyl Ether (MTBE) | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Styrene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,1,2,2-Tetrachloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Tetrachloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Toluene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,2,4-Trichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| 1,1,1-Trichloroethane | UG/L | ND | 1.0 | 3.0 | 1.0 | ND | 4.0 | 3.2 | 1.0 |
| 1,1,2-Trichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |



NA = Not Applicable  ND = Not Detected

| Client ID | | MW-31B | | MW-32B | | MW-32B | | MW-32B(100) | |
|---|---|---|---|---|---|---|---|---|---|
| Job No / Lab ID | | A05-9033 / A5903304 | | A05-9033 / A5903306 | | A05-9033 / A5903306DL | | A05-9033 / A5903307 | |
| Sample Date | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| 1,1,2-Trichloro-1,2,2-trifluor | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Trichlorofluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Trichloroethene | UG/L | 5.5 | 1.0 | 210 E | 1.0 | 200 D | 4.0 | 220 E | 1.0 |
| Vinyl chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 4.0 | ND | 1.0 |
| Total Xylenes | UG/L | ND | 3.0 | ND | 3.0 | ND | 12 | ND | 3.0 |
| IS/SURROGATE(S) | | | | | | | | | |
| Chlorobenzene-D5 | % | 84 | 50-200 | 88 | 50-200 | 92 | 50-200 | 81 | 50-200 |
| 1,4-Difluorobenzene | % | 83 | 50-200 | 88 | 50-200 | 94 | 50-200 | 79 | 50-200 |
| 1,4-Dichlorobenzene-D4 | % | 90 | 50-200 | 92 | 50-200 | 79 | 50-200 | 77 | 50-200 |
| Toluene-D8 | % | 86 | 76-122 | 85 | 76-122 | 82 | 76-122 | 84 | 76-122 |
| p-Bromofluorobenzene | % | 120 | 73-120 | 114 | 73-120 | 108 | 73-120 | 112 | 73-120 |
| 1,2-Dichloroethane-D4 | % | 90 | 72-143 | 90 | 72-143 | 86 | 72-143 | 86 | 72-143 |



NA = Not Applicable ND = Not Detected

| Client ID | MW-32B(100) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Job No Lab ID | A05-9033 A5903307DL | | | | | | | |
| Sample Date | 08/18/2005 | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acetone | UG/L | ND | 20 | NA | | NA | | NA | |
| Benzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Bromodichloromethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Bromoform | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Bromomethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 2-Butanone | UG/L | ND | 20 | NA | | NA | | NA | |
| Carbon Disulfide | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Carbon Tetrachloride | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Chlorobenzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Chloroethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Chloroform | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Chloromethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Cyclohexane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,2-Dibromoethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Dibromochloromethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,2-Dibromo-3-chloropropane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,2-Dichlorobenzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,3-Dichlorobenzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,4-Dichlorobenzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Dichlorodifluoromethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,1-Dichloroethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,2-Dichloroethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,1-Dichloroethene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| cis-1,2-Dichloroethene | UG/L | 160 D | 4.0 | NA | | NA | | NA | |
| trans-1,2-Dichloroethene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,2-Dichloropropane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| cis-1,3-Dichloropropene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| trans-1,3-Dichloropropene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Ethylbenzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 2-Hexanone | UG/L | ND | 20 | NA | | NA | | NA | |
| Isopropylbenzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Methyl acetate | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Methylcyclohexane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Methylene chloride | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 4-Methyl-2-pentanone | UG/L | ND | 20 | NA | | NA | | NA | |
| Methyl-t-Butyl Ether (MTBE) | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Styrene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,1,2,2-Tetrachloroethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Tetrachloroethene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Toluene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,2,4-Trichlorobenzene | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,1,1-Trichloroethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| 1,1,2-Trichloroethane | UG/L | ND | 4.0 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | | MW-32B(100) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903307DL | | | | | | |
| Sample Date | | 08/18/2005 | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| 1,1,2-Trichloro-1,2,2-trifluor | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Trichlorofluoromethane | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Trichloroethene | UG/L | 200 D | 4.0 | NA | | NA | | NA | |
| Vinyl chloride | UG/L | ND | 4.0 | NA | | NA | | NA | |
| Total Xylenes | UG/L | ND | 12 | NA | | NA | | NA | |
| IS/SURROGATE(S) | | | | | | | | | |
| Chlorobenzene-D5 | % | 89 | 50-200 | NA | | NA | | NA | |
| 1,4-Difluorobenzene | % | 89 | 50-200 | NA | | NA | | NA | |
| 1,4-Dichlorobenzene-D4 | % | 83 | 50-200 | NA | | NA | | NA | |
| Toluene-D8 | % | 83 | 76-122 | NA | | NA | | NA | |
| p-Bromofluorobenzene | % | 109 | 73-120 | NA | | NA | | NA | |
| 1,2-Dichloroethane-D4 | % | 91 | 72-143 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | | MW-27B | | MW-28B | | MW-29B | | MW-30B | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903302 | A05-9033 | A5903303 | A05-9033 | A5903301 | A05-9033 | A5903305 |
| Sample Date | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acenaphthene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Acenaphthylene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Acetophenone | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Anthracene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Atrazine | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Benzaldehyde | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| Benzo(a)anthracene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Benzo(b)fluoranthene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Benzo(k)fluoranthene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Benzo(ghi)perylene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Benzo(a)pyrene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Benzoic acid | UG/L | ND | 170 | ND | 180 | ND | 170 | ND | 160 |
| Benzyl alcohol | UG/L | ND | 22 | ND | 24 | ND | 22 | ND | 21 |
| Biphenyl | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Bis(2-chloroethoxy) methane | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Bis(2-chloroethyl) ether | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2,2'-Oxybis(1-Chloropropane) | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Bis(2-ethylhexyl) phthalate | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 4-Bromophenyl phenyl ether | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Butyl benzyl phthalate | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 4-Chloroaniline | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 4-Chloro-3-methylphenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2-Chloronaphthalene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2-Chlorophenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 4-Chlorophenyl phenyl ether | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Caprolactam | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Chrysene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Dibenzo(a,h)anthracene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Dibenzofuran | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Di-n-butyl phthalate | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 1,2-Dichlorobenzene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 1,3-Dichlorobenzene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 1,4-Dichlorobenzene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 3,3'-Dichlorobenzidine | UG/L | ND | 22 | ND | 24 | ND | 22 | ND | 21 |
| 2,4-Dichlorophenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Diethyl phthalate | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2,4-Dimethylphenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Dimethyl phthalate | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 4,6-Dinitro-2-methylphenol | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| 2,4-Dinitrophenol | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| 2,4-Dinitrotoluene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2,6-Dinitrotoluene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Di-n-octyl phthalate | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |



NA = Not Applicable ND = Not Detected

| Client ID | | MW-27B | | MW-28B | | MW-29B | | MW-30B | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903302 | A05-9033 | A5903303 | A05-9033 | A5903301 | A05-9033 | A5903305 |
| Sample Date | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Fluoranthene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Fluorene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Hexachlorobenzene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Hexachlorobutadiene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Hexachlorocyclopentadiene | UG/L | ND | 50 | ND | 55 | ND | 50 | ND | 48 |
| Hexachloroethane | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Indeno(1,2,3-cd)pyrene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Isophorone | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2-Methylnaphthalene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2-Methylphenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 4-Methylphenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Naphthalene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2-Nitroaniline | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| 3-Nitroaniline | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| 4-Nitroaniline | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| Nitrobenzene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2-Nitrophenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 4-Nitrophenol | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| N-nitrosodiphenylamine | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| N-Nitroso-Di-n-propylamine | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Pentachlorophenol | UG/L | ND | 56 | ND | 61 | ND | 56 | ND | 53 |
| Phenanthrene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Phenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| Pyrene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 1,2,4-Trichlorobenzene | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2,4,5-Trichlorophenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| 2,4,6-Trichlorophenol | UG/L | ND | 11 | ND | 12 | ND | 11 | ND | 11 |
| IS/SURROGATE(S) | | | | | | | | | |
| 1,4-Dichlorobenzene-D4 | % | 83 | 50-200 | 91 | 50-200 | 91 | 50-200 | 87 | 50-200 |
| Naphthalene-D8 | % | 86 | 50-200 | 91 | 50-200 | 93 | 50-200 | 88 | 50-200 |
| Acenaphthene-D10 | % | 89 | 50-200 | 92 | 50-200 | 95 | 50-200 | 90 | 50-200 |
| Phenanthrene-D10 | % | 91 | 50-200 | 94 | 50-200 | 98 | 50-200 | 92 | 50-200 |
| Chrysene-D12 | % | 93 | 50-200 | 97 | 50-200 | 100 | 50-200 | 97 | 50-200 |
| Perylene-D12 | % | 102 | 50-200 | 107 | 50-200 | 108 | 50-200 | 106 | 50-200 |
| Nitrobenzene-D5 | % | 83 | 52-120 | 79 | 52-120 | 78 | 52-120 | 84 | 52-120 |
| 2-Fluorobiphenyl | % | 80 | 21-120 | 81 | 21-120 | 78 | 21-120 | 84 | 21-120 |
| p-Terphenyl-d14 | % | 70 | 36-138 | 75 | 36-138 | 77 | 36-138 | 80 | 36-138 |
| Phenol-D5 | % | 31 | 13-120 | 33 | 13-120 | 32 | 13-120 | 31 | 13-120 |
| 2-Fluorophenol | % | 47 | 21-120 | 45 | 21-120 | 45 | 21-120 | 47 | 21-120 |
| 2,4,6-Tribromophenol | % | 102 | 62-133 | 98 | 62-133 | 97 | 62-133 | 108 | 62-133 |



NA = Not Applicable ND = Not Detected

| Client ID | MW-32B | | MW-32B(100) | | | | | |
|---|---|---|---|---|---|---|---|---|
| Job No Lab ID | A05-9033 A5903306 | | A05-9033 A5903307 | | | | | |
| Sample Date | 08/18/2005 | | 08/18/2005 | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acenaphthene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Acenaphthylene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Acetophenone | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Anthracene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Atrazine | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Benzaldehyde | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| Benzo(a)anthracene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Benzo(b)fluoranthene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Benzo(k)fluoranthene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Benzo(ghi)perylene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Benzo(a)pyrene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Benzoic acid | UG/L | ND | 170 | ND | 180 | NA | | NA | |
| Benzyl alcohol | UG/L | ND | 22 | ND | 24 | NA | | NA | |
| Biphenyl | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Bis(2-chloroethoxy) methane | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Bis(2-chloroethyl) ether | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2,2'-Oxybis(1-Chloropropane) | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Bis(2-ethylhexyl) phthalate | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 4-Bromophenyl phenyl ether | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Butyl benzyl phthalate | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 4-Chloroaniline | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 4-Chloro-3-methylphenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2-Chloronaphthalene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2-Chlorophenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 4-Chlorophenyl phenyl ether | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Caprolactam | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Chrysene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Dibenzo(a,h)anthracene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Dibenzofuran | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Di-n-butyl phthalate | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 1,2-Dichlorobenzene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 1,3-Dichlorobenzene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 1,4-Dichlorobenzene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 3,3'-Dichlorobenzidine | UG/L | ND | 22 | ND | 24 | NA | | NA | |
| 2,4-Dichlorophenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Diethyl phthalate | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2,4-Dimethylphenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Dimethyl phthalate | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 4,6-Dinitro-2-methylphenol | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| 2,4-Dinitrophenol | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| 2,4-Dinitrotoluene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2,6-Dinitrotoluene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Di-n-octyl phthalate | UG/L | ND | 11 | ND | 12 | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | MW-32B | | MW-32B(100) | | | | | |
|---|---|---|---|---|---|---|---|---|
| Job No Lab ID | A05-9033 A5903306 | | A05-9033 A5903307 | | | | | |
| Sample Date | 08/18/2005 | | 08/18/2005 | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Fluoranthene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Fluorene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Hexachlorobenzene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Hexachlorobutadiene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Hexachlorocyclopentadiene | UG/L | ND | 50 | ND | 53 | NA | | NA | |
| Hexachloroethane | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Indeno(1,2,3-cd)pyrene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Isophorone | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2-Methylnaphthalene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2-Methylphenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 4-Methylphenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Naphthalene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2-Nitroaniline | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| 3-Nitroaniline | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| 4-Nitroaniline | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| Nitrobenzene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2-Nitrophenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 4-Nitrophenol | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| N-nitrosodiphenylamine | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| N-Nitroso-Di-n-propylamine | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Pentachlorophenol | UG/L | ND | 56 | ND | 59 | NA | | NA | |
| Phenanthrene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Phenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| Pyrene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 1,2,4-Trichlorobenzene | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2,4,5-Trichlorophenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| 2,4,6-Trichlorophenol | UG/L | ND | 11 | ND | 12 | NA | | NA | |
| IS/SURROGATE(S) | | | | | | | | | |
| 1,4-Dichlorobenzene-D4 | % | 92 | 50-200 | 97 | 50-200 | NA | | NA | |
| Naphthalene-D8 | % | 90 | 50-200 | 97 | 50-200 | NA | | NA | |
| Acenaphthene-D10 | % | 93 | 50-200 | 98 | 50-200 | NA | | NA | |
| Phenanthrene-D10 | % | 95 | 50-200 | 103 | 50-200 | NA | | NA | |
| Chrysene-D12 | % | 99 | 50-200 | 104 | 50-200 | NA | | NA | |
| Perylene-D12 | % | 108 | 50-200 | 112 | 50-200 | NA | | NA | |
| Nitrobenzene-D5 | % | 81 | 52-120 | 81 | 52-120 | NA | | NA | |
| 2-Fluorobiphenyl | % | 79 | 21-120 | 80 | 21-120 | NA | | NA | |
| p-Terphenyl-d14 | % | 57 | 36-138 | 73 | 36-138 | NA | | NA | |
| Phenol-D5 | % | 27 | 13-120 | 36 | 13-120 | NA | | NA | |
| 2-Fluorophenol | % | 35 | 21-120 | 50 | 21-120 | NA | | NA | |
| 2,4,6-Tribromophenol | % | 88 | 62-133 | 99 | 62-133 | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | | MW-27B | | MW-28B | | MW-29B | | MW-30B | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903302 | A05-9033 | A5903303 | A05-9033 | A5903301 | A05-9033 | A5903305 |
| Sample Date | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | | 08/18/2005 | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Aroclor 1016 | UG/L | ND | 0.61 | ND | 0.65 | ND | 0.57 | ND | 0.53 |
| Aroclor 1221 | UG/L | ND | 0.61 | ND | 0.65 | ND | 0.57 | ND | 0.53 |
| Aroclor 1232 | UG/L | ND | 0.61 | ND | 0.65 | ND | 0.57 | ND | 0.53 |
| Aroclor 1242 | UG/L | ND | 0.61 | ND | 0.65 | ND | 0.57 | ND | 0.53 |
| Aroclor 1248 | UG/L | ND | 0.61 | ND | 0.65 | ND | 0.57 | ND | 0.53 |
| Aroclor 1254 | UG/L | ND | 0.61 | ND | 0.65 | ND | 0.57 | ND | 0.53 |
| Aroclor 1260 | UG/L | ND | 0.61 | ND | 0.65 | ND | 0.57 | ND | 0.53 |
| SURROGATE(S) | | | | | | | | | |
| Tetrachloro-m-xylene | % | 76 | 36-132 | 82 | 36-132 | 148 * | 36-132 | 84 | 36-132 |
| Decachlorobiphenyl | % | 34 | 28-132 | 38 | 28-132 | 48 | 28-132 | 54 | 28-132 |

| Client ID | | MW-32B | | MW-32B(100) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903306 | A05-9033 | A5903307 | | | | |
| Sample Date | | 08/18/2005 | | 08/18/2005 | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Aroclor 1016 | UG/L | ND | 0.52 | ND | 0.62 | NA | | NA | |
| Aroclor 1221 | UG/L | ND | 0.52 | ND | 0.62 | NA | | NA | |
| Aroclor 1232 | UG/L | ND | 0.52 | ND | 0.62 | NA | | NA | |
| Aroclor 1242 | UG/L | ND | 0.52 | ND | 0.62 | NA | | NA | |
| Aroclor 1248 | UG/L | ND | 0.52 | ND | 0.62 | NA | | NA | |
| Aroclor 1254 | UG/L | ND | 0.52 | ND | 0.62 | NA | | NA | |
| Aroclor 1260 | UG/L | ND | 0.52 | ND | 0.62 | NA | | NA | |
| SURROGATE(S) | | | | | | | | | |
| Tetrachloro-m-xylene | % | 74 | 36-132 | 75 | 36-132 | NA | | NA | |
| Decachlorobiphenyl | % | 44 | 28-132 | 50 | 28-132 | NA | | NA | |



NA = Not Applicable ND = Not Detected

# Chronology and QC Summary Package

| Client ID | VBLK88 | | VBLK89 | | vblk90 | | vblk91 | |
|---|---|---|---|---|---|---|---|---|
| Job No / Lab ID | A05-9033 | A5B1298503 | A05-9033 | A5B1298504 | A05-9033 | A5B1309802 | A05-9033 | A5B1309804 |
| Sample Date | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acetone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Benzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromodichloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromoform | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromomethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 2-Butanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Carbon Disulfide | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Carbon Tetrachloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chloroform | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Cyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dibromoethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Dibromochloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dibromo-3-chloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,3-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,4-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Dichlorodifluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| cis-1,2-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| trans-1,2-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| cis-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| trans-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Ethylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 2-Hexanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Isopropylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methyl acetate | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methylcyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methylene chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 4-Methyl-2-pentanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Methyl-t-Butyl Ether (MTBE) | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Styrene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,2,2-Tetrachloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Tetrachloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Toluene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2,4-Trichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,1-Trichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,2-Trichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |



NA = Not Applicable ND = Not Detected

| Client ID | | VBLK88 | | VBLK89 | | vblk90 | | vblk91 | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5B1298503 | A05-9033 | A5B1298504 | A05-9033 | A5B1309802 | A05-9033 | A5B1309804 |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| 1,1,2-Trichloro-1,2,2-trifluor | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Trichlorofluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Trichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Vinyl chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Total Xylenes | UG/L | ND | 3.0 | ND | 3.0 | ND | 3.0 | ND | 3.0 |
| IS/SURROGATE(S) | | | | | | | | | |
| Chlorobenzene-D5 | % | 94 | 50-200 | 90 | 50-200 | 93 | 50-200 | 89 | 50-200 |
| 1,4-Difluorobenzene | % | 95 | 50-200 | 88 | 50-200 | 93 | 50-200 | 90 | 50-200 |
| 1,4-Dichlorobenzene-D4 | % | 93 | 50-200 | 84 | 50-200 | 89 | 50-200 | 76 | 50-200 |
| Toluene-D8 | % | 93 | 76-122 | 80 | 76-122 | 89 | 76-122 | 78 | 76-122 |
| p-Bromofluorobenzene | % | 120 | 73-120 | 106 | 73-120 | 118 | 73-120 | 106 | 73-120 |
| 1,2-Dichloroethane-D4 | % | 93 | 72-143 | 81 | 72-143 | 94 | 72-143 | 84 | 72-143 |



NA = Not Applicable ND = Not Detected

Environmental Strategies Corporation
Ithaca Site - 127491
METHOD 8260 - TCL VOLATILE ORGANICS



| Client ID | | MSB88 | | MSB89 | | msb90 | | msb91 | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5B1298501 | A05-9033 | A5B1298502 | A05-9033 | A5B1309801 | A05-9033 | A5B1309803 |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acetone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Benzene | UG/L | 23 | 1.0 | 25 | 1.0 | 22 | 1.0 | 24 | 1.0 |
| Bromodichloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromoform | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Bromomethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 2-Butanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Carbon Disulfide | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Carbon Tetrachloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chlorobenzene | UG/L | 22 | 1.0 | 24 | 1.0 | 21 | 1.0 | 23 | 1.0 |
| Chloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chloroform | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Chloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Cyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dibromoethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Dibromochloromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dibromo-3-chloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,3-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,4-Dichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Dichlorodifluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1-Dichloroethene | UG/L | 24 | 1.0 | 26 | 1.0 | 22 | 1.0 | 25 | 1.0 |
| cis-1,2-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| trans-1,2-Dichloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,2-Dichloropropane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| cis-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| trans-1,3-Dichloropropene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Ethylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 2-Hexanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Isopropylbenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methyl acetate | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methylcyclohexane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Methylene chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 4-Methyl-2-pentanone | UG/L | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 |
| Methyl-t-Butyl Ether (MTBE) | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Styrene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,2,2-Tetrachloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Tetrachloroethene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Toluene | UG/L | 22 | 1.0 | 23 | 1.0 | 21 | 1.0 | 22 | 1.0 |
| 1,2,4-Trichlorobenzene | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,1-Trichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| 1,1,2-Trichloroethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |



NA = Not Applicable ND = Not Detected

| Client ID | | MSB88 | | MSB89 | | msb90 | | msb91 | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5B1298501 | A05-9033 | A5B1298502 | A05-9033 | A5B1309801 | A05-9033 | A5B1309803 |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| 1,1,2-Trichloro-1,2,2-trifluor | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Trichlorofluoromethane | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Trichloroethene | UG/L | 24 | 1.0 | 26 | 1.0 | 22 | 1.0 | 25 | 1.0 |
| Vinyl chloride | UG/L | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | 1.0 |
| Total Xylenes | UG/L | ND | 3.0 | ND | 3.0 | ND | 3.0 | ND | 3.0 |
| IS/SURROGATE(S) | | | | | | | | | |
| Chlorobenzene-D5 | % | 105 | 50-200 | 90 | 50-200 | 101 | 50-200 | 96 | 50-200 |
| 1,4-Difluorobenzene | % | 106 | 50-200 | 89 | 50-200 | 104 | 50-200 | 99 | 50-200 |
| 1,4-Dichlorobenzene-D4 | % | 106 | 50-200 | 86 | 50-200 | 97 | 50-200 | 84 | 50-200 |
| Toluene-D8 | % | 89 | 76-122 | 82 | 76-122 | 88 | 76-122 | 85 | 76-122 |
| p-Bromofluorobenzene | % | 116 | 73-120 | 108 | 73-120 | 117 | 73-120 | 118 | 73-120 |
| 1,2-Dichloroethane-D4 | % | 85 | 72-143 | 79 | 72-143 | 87 | 72-143 | 86 | 72-143 |



NA = Not Applicable ND = Not Detected

| Client ID | | TB-081905 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903308 | | | | | | |
| Sample Date | | 08/18/2005 | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acetone | UG/L | ND | 5.0 | NA | | NA | | NA | |
| Benzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Bromodichloromethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Bromoform | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Bromomethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 2-Butanone | UG/L | ND | 5.0 | NA | | NA | | NA | |
| Carbon Disulfide | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Carbon Tetrachloride | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Chlorobenzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Chloroethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Chloroform | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Chloromethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Cyclohexane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,2-Dibromoethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Dibromochloromethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,2-Dibromo-3-chloropropane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,2-Dichlorobenzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,3-Dichlorobenzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,4-Dichlorobenzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Dichlorodifluoromethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,1-Dichloroethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,2-Dichloroethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,1-Dichloroethene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| cis-1,2-Dichloroethene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| trans-1,2-Dichloroethene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,2-Dichloropropane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| cis-1,3-Dichloropropene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| trans-1,3-Dichloropropene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Ethylbenzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 2-Hexanone | UG/L | ND | 5.0 | NA | | NA | | NA | |
| Isopropylbenzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Methyl acetate | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Methylcyclohexane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Methylene chloride | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 4-Methyl-2-pentanone | UG/L | ND | 5.0 | NA | | NA | | NA | |
| Methyl-t-Butyl Ether (MTBE) | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Styrene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,1,2,2-Tetrachloroethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Tetrachloroethene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Toluene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,2,4-Trichlorobenzene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,1,1-Trichloroethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| 1,1,2-Trichloroethane | UG/L | ND | 1.0 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | | TB-081905 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5903308 | | | | | | |
| Sample Date | | 08/18/2005 | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| 1,1,2-Trichloro-1,2,2-trifluor | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Trichlorofluoromethane | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Trichloroethene | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Vinyl chloride | UG/L | ND | 1.0 | NA | | NA | | NA | |
| Total Xylenes | UG/L | ND | 3.0 | NA | | NA | | NA | |
| IS/SURROGATE(S) | | | | | | | | | |
| Chlorobenzene-D5 | % | 84 | 50-200 | NA | | NA | | NA | |
| 1,4-Difluorobenzene | % | 84 | 50-200 | NA | | NA | | NA | |
| 1,4-Dichlorobenzene-D4 | % | 84 | 50-200 | NA | | NA | | NA | |
| Toluene-D8 | % | 88 | 76-122 | NA | | NA | | NA | |
| p-Bromofluorobenzene | % | 115 | 73-120 | NA | | NA | | NA | |
| 1,2-Dichloroethane-D4 | % | 93 | 72-143 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | S Blank | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Job No Lab ID | A05-9033 | A5B1283502 | | | | | | |
| Sample Date | | | | | | | | |

| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | UG/L | ND | 10 | NA | | NA | | NA | |
| Acenaphthylene | UG/L | ND | 10 | NA | | NA | | NA | |
| Acetophenone | UG/L | ND | 10 | NA | | NA | | NA | |
| Anthracene | UG/L | ND | 10 | NA | | NA | | NA | |
| Atrazine | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzaldehyde | UG/L | ND | 50 | NA | | NA | | NA | |
| Benzo(a)anthracene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(b)fluoranthene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(k)fluoranthene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(ghi)perylene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(a)pyrene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzoic acid | UG/L | ND | 150 | NA | | NA | | NA | |
| Benzyl alcohol | UG/L | ND | 20 | NA | | NA | | NA | |
| Biphenyl | UG/L | ND | 10 | NA | | NA | | NA | |
| Bis(2-chloroethoxy) methane | UG/L | ND | 10 | NA | | NA | | NA | |
| Bis(2-chloroethyl) ether | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,2'-Oxybis(1-Chloropropane) | UG/L | ND | 10 | NA | | NA | | NA | |
| Bis(2-ethylhexyl) phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Bromophenyl phenyl ether | UG/L | ND | 10 | NA | | NA | | NA | |
| Butyl benzyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Chloroaniline | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Chloro-3-methylphenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Chloronaphthalene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Chlorophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Chlorophenyl phenyl ether | UG/L | ND | 10 | NA | | NA | | NA | |
| Caprolactam | UG/L | ND | 10 | NA | | NA | | NA | |
| Chrysene | UG/L | ND | 10 | NA | | NA | | NA | |
| Dibenzo(a,h)anthracene | UG/L | ND | 10 | NA | | NA | | NA | |
| Dibenzofuran | UG/L | ND | 10 | NA | | NA | | NA | |
| Di-n-butyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 1,2-Dichlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 1,3-Dichlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 1,4-Dichlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 3,3'-Dichlorobenzidine | UG/L | ND | 20 | NA | | NA | | NA | |
| 2,4-Dichlorophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| Diethyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,4-Dimethylphenol | UG/L | ND | 10 | NA | | NA | | NA | |
| Dimethyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 4,6-Dinitro-2-methylphenol | UG/L | ND | 50 | NA | | NA | | NA | |
| 2,4-Dinitrophenol | UG/L | ND | 50 | NA | | NA | | NA | |
| 2,4-Dinitrotoluene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,6-Dinitrotoluene | UG/L | ND | 10 | NA | | NA | | NA | |
| Di-n-octyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | S Blank | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Job No Lab ID | A05-9033 | A5B1283502 | | | | | | |
| Sample Date | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Fluoranthene | UG/L | ND | 10 | NA | | NA | | NA | |
| Fluorene | UG/L | ND | 10 | NA | | NA | | NA | |
| Hexachlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| Hexachlorobutadiene | UG/L | ND | 10 | NA | | NA | | NA | |
| Hexachlorocyclopentadiene | UG/L | ND | 45 | NA | | NA | | NA | |
| Hexachloroethane | UG/L | ND | 10 | NA | | NA | | NA | |
| Indeno(1,2,3-cd)pyrene | UG/L | ND | 10 | NA | | NA | | NA | |
| Isophorone | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Methylnaphthalene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Methylphenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Methylphenol | UG/L | ND | 10 | NA | | NA | | NA | |
| Naphthalene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Nitroaniline | UG/L | ND | 50 | NA | | NA | | NA | |
| 3-Nitroaniline | UG/L | ND | 50 | NA | | NA | | NA | |
| 4-Nitroaniline | UG/L | ND | 50 | NA | | NA | | NA | |
| Nitrobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Nitrophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Nitrophenol | UG/L | ND | 50 | NA | | NA | | NA | |
| N-nitrosodiphenylamine | UG/L | ND | 10 | NA | | NA | | NA | |
| N-Nitroso-Di-n-propylamine | UG/L | ND | 10 | NA | | NA | | NA | |
| Pentachlorophenol | UG/L | ND | 50 | NA | | NA | | NA | |
| Phenanthrene | UG/L | ND | 10 | NA | | NA | | NA | |
| Phenol | UG/L | ND | 10 | NA | | NA | | NA | |
| Pyrene | UG/L | ND | 10 | NA | | NA | | NA | |
| 1,2,4-Trichlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,4,5-Trichlorophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,4,6-Trichlorophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| IS/SURROGATE(S) | | | | | | | | | |
| 1,4-Dichlorobenzene-D4 | % | 86 | 50-200 | NA | | NA | | NA | |
| Naphthalene-D8 | % | 87 | 50-200 | NA | | NA | | NA | |
| Acenaphthene-D10 | % | 88 | 50-200 | NA | | NA | | NA | |
| Phenanthrene-D10 | % | 90 | 50-200 | NA | | NA | | NA | |
| Chrysene-D12 | % | 90 | 50-200 | NA | | NA | | NA | |
| Perylene-D12 | % | 98 | 50-200 | NA | | NA | | NA | |
| Nitrobenzene-D5 | % | 82 | 52-120 | NA | | NA | | NA | |
| 2-Fluorobiphenyl | % | 80 | 21-120 | NA | | NA | | NA | |
| p-Terphenyl-d14 | % | 97 | 36-138 | NA | | NA | | NA | |
| Phenol-D5 | % | 28 | 13-120 | NA | | NA | | NA | |
| 2-Fluorophenol | % | 43 | 21-120 | NA | | NA | | NA | |
| 2,4,6-Tribromophenol | % | 98 | 62-133 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | | Matrix Spike Blank | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5B1283501 | | | | | | |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acenaphthene | UG/L | 89 | 10 | NA | | NA | | NA | |
| Acenaphthylene | UG/L | ND | 10 | NA | | NA | | NA | |
| Acetophenone | UG/L | ND | 10 | NA | | NA | | NA | |
| Anthracene | UG/L | ND | 10 | NA | | NA | | NA | |
| Atrazine | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzaldehyde | UG/L | ND | 50 | NA | | NA | | NA | |
| Benzo(a)anthracene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(b)fluoranthene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(k)fluoranthene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(ghi)perylene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzo(a)pyrene | UG/L | ND | 10 | NA | | NA | | NA | |
| Benzoic acid | UG/L | ND | 150 | NA | | NA | | NA | |
| Benzyl alcohol | UG/L | ND | 20 | NA | | NA | | NA | |
| Biphenyl | UG/L | ND | 10 | NA | | NA | | NA | |
| Bis(2-chloroethoxy) methane | UG/L | ND | 10 | NA | | NA | | NA | |
| Bis(2-chloroethyl) ether | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,2'-Oxybis(1-Chloropropane) | UG/L | ND | 10 | NA | | NA | | NA | |
| Bis(2-ethylhexyl) phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Bromophenyl phenyl ether | UG/L | ND | 10 | NA | | NA | | NA | |
| Butyl benzyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Chloroaniline | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Chloro-3-methylphenol | UG/L | 90 | 10 | NA | | NA | | NA | |
| 2-Chloronaphthalene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Chlorophenol | UG/L | 82 | 10 | NA | | NA | | NA | |
| 4-Chlorophenyl phenyl ether | UG/L | ND | 10 | NA | | NA | | NA | |
| Caprolactam | UG/L | ND | 10 | NA | | NA | | NA | |
| Chrysene | UG/L | ND | 10 | NA | | NA | | NA | |
| Dibenzo(a,h)anthracene | UG/L | ND | 10 | NA | | NA | | NA | |
| Dibenzofuran | UG/L | ND | 10 | NA | | NA | | NA | |
| Di-n-butyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 1,2-Dichlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 1,3-Dichlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 1,4-Dichlorobenzene | UG/L | 75 | 10 | NA | | NA | | NA | |
| 3,3'-Dichlorobenzidine | UG/L | ND | 20 | NA | | NA | | NA | |
| 2,4-Dichlorophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| Diethyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,4-Dimethylphenol | UG/L | ND | 10 | NA | | NA | | NA | |
| Dimethyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |
| 4,6-Dinitro-2-methylphenol | UG/L | ND | 50 | NA | | NA | | NA | |
| 2,4-Dinitrophenol | UG/L | ND | 50 | NA | | NA | | NA | |
| 2,4-Dinitrotoluene | UG/L | 90 | 10 | NA | | NA | | NA | |
| 2,6-Dinitrotoluene | UG/L | ND | 10 | NA | | NA | | NA | |
| Di-n-octyl phthalate | UG/L | ND | 10 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | | Matrix Spike Blank | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5B1283501 | | | | | | |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Fluoranthene | UG/L | ND | 10 | NA | | NA | | NA | |
| Fluorene | UG/L | ND | 10 | NA | | NA | | NA | |
| Hexachlorobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| Hexachlorobutadiene | UG/L | ND | 10 | NA | | NA | | NA | |
| Hexachlorocyclopentadiene | UG/L | ND | 45 | NA | | NA | | NA | |
| Hexachloroethane | UG/L | ND | 10 | NA | | NA | | NA | |
| Indeno(1,2,3-cd)pyrene | UG/L | ND | 10 | NA | | NA | | NA | |
| Isophorone | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Methylnaphthalene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Methylphenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Methylphenol | UG/L | ND | 10 | NA | | NA | | NA | |
| Naphthalene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Nitroaniline | UG/L | ND | 50 | NA | | NA | | NA | |
| 3-Nitroaniline | UG/L | ND | 50 | NA | | NA | | NA | |
| 4-Nitroaniline | UG/L | ND | 50 | NA | | NA | | NA | |
| Nitrobenzene | UG/L | ND | 10 | NA | | NA | | NA | |
| 2-Nitrophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 4-Nitrophenol | UG/L | ND | 50 | NA | | NA | | NA | |
| N-nitrosodiphenylamine | UG/L | ND | 10 | NA | | NA | | NA | |
| N-Nitroso-Di-n-propylamine | UG/L | 90 | 10 | NA | | NA | | NA | |
| Pentachlorophenol | UG/L | 91 | 50 | NA | | NA | | NA | |
| Phenanthrene | UG/L | ND | 10 | NA | | NA | | NA | |
| Phenol | UG/L | 30 | 10 | NA | | NA | | NA | |
| Pyrene | UG/L | 95 | 10 | NA | | NA | | NA | |
| 1,2,4-Trichlorobenzene | UG/L | 77 | 10 | NA | | NA | | NA | |
| 2,4,5-Trichlorophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| 2,4,6-Trichlorophenol | UG/L | ND | 10 | NA | | NA | | NA | |
| IS/SURROGATE(S) | | | | | | | | | |
| 1,4-Dichlorobenzene-D4 | % | 86 | 50-200 | NA | | NA | | NA | |
| Naphthalene-D8 | % | 87 | 50-200 | NA | | NA | | NA | |
| Acenaphthene-D10 | % | 88 | 50-200 | NA | | NA | | NA | |
| Phenanthrene-D10 | % | 90 | 50-200 | NA | | NA | | NA | |
| Chrysene-D12 | % | 89 | 50-200 | NA | | NA | | NA | |
| Perylene-D12 | % | 95 | 50-200 | NA | | NA | | NA | |
| Nitrobenzene-D5 | % | 84 | 52-120 | NA | | NA | | NA | |
| 2-Fluorobiphenyl | % | 82 | 21-120 | NA | | NA | | NA | |
| p-Terphenyl-d14 | % | 99 | 36-138 | NA | | NA | | NA | |
| Phenol-D5 | % | 31 | 13-120 | NA | | NA | | NA | |
| 2-Fluorophenol | % | 46 | 21-120 | NA | | NA | | NA | |
| 2,4,6-Tribromophenol | % | 102 | 62-133 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID | | Method Blank | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A05-9033 | A5B1283303 | | | | | | |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Aroclor 1016 | UG/L | ND | 0.50 | NA | | NA | | NA | |
| Aroclor 1221 | UG/L | ND | 0.50 | NA | | NA | | NA | |
| Aroclor 1232 | UG/L | ND | 0.50 | NA | | NA | | NA | |
| Aroclor 1242 | UG/L | ND | 0.50 | NA | | NA | | NA | |
| Aroclor 1248 | UG/L | ND | 0.50 | NA | | NA | | NA | |
| Aroclor 1254 | UG/L | ND | 0.50 | NA | | NA | | NA | |
| Aroclor 1260 | UG/L | ND | 0.50 | NA | | NA | | NA | |
| SURROGATE(S) | | | | | | | | | |
| Tetrachloro-m-xylene | % | 82 | 36-132 | NA | | NA | | NA | |
| Decachlorobiphenyl | % | 82 | 28-132 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

| Client ID<br>Job No Lab ID<br>Sample Date | | Matrix Spike Blank<br>A05-9033 A5B1283301 | | Matrix Spike Blk Dup<br>A05-9033 A5B1283302 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Aroclor 1016 | UG/L | 4.4 | 0.50 | 4.2 | 0.50 | NA | | NA | |
| Aroclor 1221 | UG/L | ND | 0.50 | ND | 0.50 | NA | | NA | |
| Aroclor 1232 | UG/L | ND | 0.50 | ND | 0.50 | NA | | NA | |
| Aroclor 1242 | UG/L | ND | 0.50 | ND | 0.50 | NA | | NA | |
| Aroclor 1248 | UG/L | ND | 0.50 | ND | 0.50 | NA | | NA | |
| Aroclor 1254 | UG/L | ND | 0.50 | ND | 0.50 | NA | | NA | |
| Aroclor 1260 | UG/L | 4.3 | 0.50 | 4.7 | 0.50 | NA | | NA | |
| SURROGATE(S) | | | | | | | | | |
| Tetrachloro-m-xylene | % | 82 | 36-132 | 78 | 36-132 | NA | | NA | |
| Decachlorobiphenyl | % | 73 | 28-132 | 76 | 28-132 | NA | | NA | |



NA = Not Applicable ND = Not Detected

Client Sample ID: VBLK88 MSB88
Lab Sample ID: A5B1298503 A5B1298501

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | | | | | |
| 1,1-Dichloroethene | UG/L | 24.1 | 25.0 | 96 | 65-142 |
| Trichloroethene | UG/L | 24.0 | 25.0 | 96 | 71-120 |
| Benzene | UG/L | 23.4 | 25.0 | 94 | 67-126 |
| Toluene | UG/L | 22.0 | 25.0 | 88 | 69-120 |
| Chlorobenzene | UG/L | 22.1 | 25.0 | 89 | 73-120 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: VBLK89 MSB89
Lab Sample ID: A5B1298504 A5B1298502

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | | | | | |
| 1,1-Dichloroethene | UG/L | 25.5 | 25.0 | 102 | 65-142 |
| Trichloroethene | UG/L | 25.7 | 25.0 | 103 | 71-120 |
| Benzene | UG/L | 24.9 | 25.0 | 100 | 67-126 |
| Toluene | UG/L | 23.3 | 25.0 | 93 | 69-120 |
| Chlorobenzene | UG/L | 23.7 | 25.0 | 95 | 73-120 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: vblk90 msb90
Lab Sample ID: A5B1309802 A5B1309801

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | | | | | |
| 1,1-Dichloroethene | UG/L | 22.2 | 25.0 | 89 | 65-142 |
| Trichloroethene | UG/L | 21.9 | 25.0 | 88 | 71-120 |
| Benzene | UG/L | 21.6 | 25.0 | 86 | 67-126 |
| Toluene | UG/L | 20.6 | 25.0 | 82 | 69-120 |
| Chlorobenzene | UG/L | 21.0 | 25.0 | 84 | 73-120 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: vblk91 msb91
Lab Sample ID: A5B1309804 A5B1309803

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | | | | | |
| 1,1-Dichloroethene | UG/L | 25.4 | 25.0 | 102 | 65-142 |
| Trichloroethene | UG/L | 24.8 | 25.0 | 99 | 71-120 |
| Benzene | UG/L | 24.0 | 25.0 | 96 | 67-126 |
| Toluene | UG/L | 22.4 | 25.0 | 90 | 69-120 |
| Chlorobenzene | UG/L | 23.3 | 25.0 | 93 | 73-120 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: S Blank Matrix Spike Blank
Lab Sample ID: A5B1283502 A5B1283501

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| ESC - 8270 - TCL SEMI-VOLATILE ORGANICS | | | | | |
| Phenol | UG/L | 30.1 | 100 | 30 | 16-120 |
| 2-Chlorophenol | UG/L | 81.5 | 100 | 82 | 42-120 |
| 1,4-Dichlorobenzene | UG/L | 74.8 | 100 | 75 | 28-120 |
| N-Nitroso-Di-n-propylamine | UG/L | 89.8 | 100 | 90 | 53-120 |
| 1,2,4-Trichlorobenzene | UG/L | 76.9 | 100 | 77 | 36-120 |
| 4-Chloro-3-methylphenol | UG/L | 90.5 | 100 | 90 | 54-131 |
| Acenaphthene | UG/L | 88.9 | 100 | 89 | 55-120 |
| 4-Nitrophenol | UG/L | 32.9 | 100 | 33 | 11-120 |
| 2,4-Dinitrotoluene | UG/L | 90.4 | 100 | 90 | 53-125 |
| Pentachlorophenol | UG/L | 91.1 | 100 | 91 | 33-143 |
| Pyrene | UG/L | 95.3 | 100 | 95 | 50-151 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: Method Blank | Matrix Spike Blank | Matrix Spike Blk Dup
Lab Sample ID: A5B1283303 | A5B1283301 | A5B1283302

| Analyte | Units of Measure | Concentration | | Spike Amount | | % Recovery | | | % | QC LIMITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Spike Blank | Spike Blank Dup | SB | SBD | SB | SBD | Avg | RPD | RPD | REC. |
| ESC - METHOD 8082 - POLYCHLORINATED BIPH | | | | | | | | | | | |
| Aroclor 1260 | UG/L | 4.30 | 4.67 | 5.00 | 5.00 | 86 | 93 | 90 | 8 | 30.0 | 50-122 |
| Aroclor 1016 | UG/L | 4.35 | 4.22 | 5.00 | 5.00 | 87 | 84 | 86 | 4 | 30.0 | 29-123 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

METHOD 8260 - TCL VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | MW-27B<br>A05-9033 A5903302 | MW-28B<br>A05-9033 A5903303 | MW-29B<br>A05-9033 A5903301 | MW-30B<br>A05-9033 A5903305 | MW-31B<br>A05-9033 A5903304 |
|---|---|---|---|---|---|
| Sample Date | 08/18/2005 18:00 | 08/18/2005 18:30 | 08/18/2005 17:30 | 08/18/2005 19:50 | 08/18/2005 19:35 |
| Received Date | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 |
| Extraction Date | | | | | |
| Analysis Date | 08/25/2005 05:07 | 08/25/2005 05:28 | 08/25/2005 04:47 | 08/25/2005 06:09 | 08/25/2005 05:49 |
| Extraction HT Met? | - | - | - | - | - |
| Analytical HT Met? | YES | YES | YES | YES | YES |
| Sample Matrix | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Sample wt/vol | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS |
| % Dry | | | | | |



NA = Not Applicable

METHOD 8260 - TCL VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | MW-32B<br>A05-9033 A5903306 | MW-32B<br>A05-9033 A5903306DL | MW-32B(100)<br>A05-9033 A5903307 | MW-32B(100)<br>A05-9033 A5903307DL | |
|---|---|---|---|---|---|
| Sample Date | 08/18/2005 20:20 | 08/18/2005 20:20 | 08/18/2005 21:00 | 08/18/2005 21:00 | |
| Received Date | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | |
| Extraction Date | | | | | |
| Analysis Date | 08/25/2005 06:30 | 08/25/2005 22:26 | 08/25/2005 06:51 | 08/25/2005 22:46 | |
| Extraction HT Met? | - | - | - | - | |
| Analytical HT Met? | YES | YES | YES | YES | |
| Sample Matrix | WATER | WATER | WATER | WATER | |
| Dilution Factor | 1.0 | 4.0 | 1.0 | 4.0 | |
| Sample wt/vol | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | |
| % Dry | | | | | |



NA = Not Applicable

METHOD 8260 - TCL VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | TB-081905<br>A05-9033 A5903308 | | | | |
|---|---|---|---|---|---|
| Sample Date | 08/18/2005 | | | | |
| Received Date | 08/22/2005 09:45 | | | | |
| Extraction Date | | | | | |
| Analysis Date | 08/25/2005 00:59 | | | | |
| Extraction HT Met? | - | | | | |
| Analytical HT Met? | YES | | | | |
| Sample Matrix | WATER | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 0.005 LITERS | | | | |
| % Dry | | | | | |



NA = Not Applicable

METHOD 8260 - TCL VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | MSB88<br>A05-9033 A5B1298501 | MSB89<br>A05-9033 A5B1298502 | msb90<br>A05-9033 A5B1309801 | msb91<br>A05-9033 A5B1309803 | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | | | | | |
| Analysis Date | 08/24/2005 22:37 | 08/24/2005 22:57 | 08/25/2005 19:39 | 08/25/2005 19:59 | |
| Extraction HT Met? | - | - | - | - | |
| Analytical HT Met? | - | - | - | - | |
| Sample Matrix | WATER | WATER | WATER | WATER | |
| Dilution Factor | 1.0 | 1.0 | 1.0 | 1.0 | |
| Sample wt/vol | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | |
| % Dry | | | | | |



NA = Not Applicable

METHOD 8260 - TCL VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | VBLK88<br>A05-9033 A5B1298503 | VBLK89<br>A05-9033 A5B1298504 | vblk90<br>A05-9033 A5B1309802 | vblk91<br>A05-9033 A5B1309804 | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | | | | | |
| Analysis Date | 08/24/2005 23:26 | 08/24/2005 23:47 | 08/25/2005 20:32 | 08/25/2005 20:52 | |
| Extraction HT Met? | - | - | - | - | |
| Analytical HT Met? | - | - | - | - | |
| Sample Matrix | WATER | WATER | WATER | WATER | |
| Dilution Factor | 1.0 | 1.0 | 1.0 | 1.0 | |
| Sample wt/vol | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | 0.005 LITERS | |
| % Dry | | | | | |



NA = Not Applicable

ESC - 8270 - TCL SEMI-VOLATILE ORGANICS - W

| Client Sample ID<br>Job No & Lab Sample ID | MW-27B<br>A05-9033 A5903302 | MW-28B<br>A05-9033 A5903303 | MW-29B<br>A05-9033 A5903301 | MW-30B<br>A05-9033 A5903305 | MW-32B<br>A05-9033 A5903306 |
|---|---|---|---|---|---|
| Sample Date | 08/18/2005 18:00 | 08/18/2005 18:30 | 08/18/2005 17:30 | 08/18/2005 19:50 | 08/18/2005 20:20 |
| Received Date | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 |
| Extraction Date | 08/24/2005 07:00 | 08/24/2005 07:00 | 08/24/2005 07:00 | 08/24/2005 07:00 | 08/24/2005 07:00 |
| Analysis Date | 08/31/2005 19:11 | 08/31/2005 19:37 | 08/31/2005 18:45 | 08/31/2005 20:04 | 08/31/2005 20:30 |
| Extraction HT Met? | YES | YES | YES | YES | YES |
| Analytical HT Met? | YES | YES | YES | YES | YES |
| Sample Matrix | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Sample wt/vol | 0.89 LITERS | 0.82 LITERS | 0.9 LITERS | 0.94 LITERS | 0.89 LITERS |
| % Dry | | | | | |



NA = Not Applicable

ESC - 8270 - TCL SEMI-VOLATILE ORGANICS - W

| Client Sample ID<br>Job No & Lab Sample ID | MW-32B(100)<br>A05-9033 A5903307 | | | | |
|---|---|---|---|---|---|
| Sample Date | 08/18/2005 21:00 | | | | |
| Received Date | 08/22/2005 09:45 | | | | |
| Extraction Date | 08/24/2005 07:00 | | | | |
| Analysis Date | 08/31/2005 20:56 | | | | |
| Extraction HT Met? | YES | | | | |
| Analytical HT Met? | YES | | | | |
| Sample Matrix | WATER | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 0.85 LITERS | | | | |
| % Dry | | | | | |



NA = Not Applicable

ESC - 8270 - TCL SEMI-VOLATILE ORGANICS - W

| Client Sample ID<br>Job No & Lab Sample ID | Matrix Spike Blank<br>A05-9033 A5B1283501 | | | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | 08/24/2005 07:00 | | | | |
| Analysis Date | 08/31/2005 16:34 | | | | |
| Extraction HT Met? | - | | | | |
| Analytical HT Met? | - | | | | |
| Sample Matrix | WATER | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 1.0 LITERS | | | | |
| % Dry | | | | | |



NA = Not Applicable

ESC - 8270 - TCL SEMI-VOLATILE ORGANICS - W

| Client Sample ID<br>Job No & Lab Sample ID | S Blank<br>A05-9033 A5B1283502 | | | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | 08/24/2005 07:00 | | | | |
| Analysis Date | 08/31/2005 17:00 | | | | |
| Extraction HT Met? | - | | | | |
| Analytical HT Met? | - | | | | |
| Sample Matrix | WATER | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 1.0 LITERS | | | | |
| % Dry | | | | | |



NA = Not Applicable

ESC - METHOD 8082 - POLYCHLORINATED BIPHENYLS - W

| Client Sample ID<br>Job No & Lab Sample ID | MW-27B<br>A05-9033 A5903302 | MW-28B<br>A05-9033 A5903303 | MW-29B<br>A05-9033 A5903301 | MW-30B<br>A05-9033 A5903305 | MW-32B<br>A05-9033 A5903306 |
|---|---|---|---|---|---|
| Sample Date | 08/18/2005 18:00 | 08/18/2005 18:30 | 08/18/2005 17:30 | 08/18/2005 19:50 | 08/18/2005 20:20 |
| Received Date | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 | 08/22/2005 09:45 |
| Extraction Date | 08/24/2005 07:00 | 08/24/2005 07:00 | 08/24/2005 07:00 | 08/24/2005 07:00 | 08/24/2005 07:00 |
| Analysis Date | 08/25/2005 16:00 | 08/25/2005 16:18 | 08/25/2005 15:42 | 08/25/2005 16:36 | 08/25/2005 16:54 |
| Extraction HT Met? | YES | YES | YES | YES | YES |
| Analytical HT Met? | YES | YES | YES | YES | YES |
| Sample Matrix | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Sample wt/vol | 0.82 LITERS | 0.77 LITERS | 0.88 LITERS | 0.94 LITERS | 0.97 LITERS |
| % Dry | | | | | |



NA = Not Applicable

ESC - METHOD 8082 - POLYCHLORINATED BIPHENYLS - W

| Client Sample ID<br>Job No & Lab Sample ID | MW-32B(100)<br>A05-9033 A5903307 | | | | |
|---|---|---|---|---|---|
| Sample Date | 08/18/2005 21:00 | | | | |
| Received Date | 08/22/2005 09:45 | | | | |
| Extraction Date | 08/24/2005 07:00 | | | | |
| Analysis Date | 08/25/2005 17:12 | | | | |
| Extraction HT Met? | YES | | | | |
| Analytical HT Met? | YES | | | | |
| Sample Matrix | WATER | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 0.81 LITERS | | | | |
| % Dry | | | | | |



NA = Not Applicable

ESC - METHOD 8082 - POLYCHLORINATED BIPHENYLS - W

| Client Sample ID<br>Job No & Lab Sample ID | Matrix Spike Blank<br>A05-9033 A5B1283301 | Matrix Spike Blk Dup<br>A05-9033 A5B1283302 | | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | 08/24/2005 07:00 | 08/24/2005 07:00 | | | |
| Analysis Date | 08/25/2005 14:48 | 08/25/2005 15:06 | | | |
| Extraction HT Met? | - | - | | | |
| Analytical HT Met? | - | - | | | |
| Sample Matrix | WATER | WATER | | | |
| Dilution Factor | 1.0 | 1.0 | | | |
| Sample wt/vol | 1.0 LITERS | 1.0 LITERS | | | |
| % Dry | | | | | |



NA = Not Applicable

ESC - METHOD 8082 - POLYCHLORINATED BIPHENYLS - W

| Client Sample ID<br>Job No & Lab Sample ID | Method Blank<br>A05-9033 A5B1283303 | | | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | 08/24/2005 07:00 | | | | |
| Analysis Date | 08/25/2005 15:24 | | | | |
| Extraction HT Met? | - | | | | |
| Analytical HT Met? | - | | | | |
| Sample Matrix | WATER | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 1.0 LITERS | | | | |
| % Dry | | | | | |



NA = Not Applicable

# CHAIN OF CUSTODY RECORD



No. 036587

| Project Number: | Site and Location: |
|---|---|
| 127491 | EPT - Ithaca, NY |

Sampler's Name(s): Tim Huff, Brian Nicklen

Sampler's Signature(s):

Matrices: S = Soil; Aq = Water; A = Air; Bu = Bulk; W = Wipe; Bi = Biota; OW = Oily Waste; O = Other

Requested Analyses: VOCs, SVOCs, PCBs

| Sample Identification: | Date | Time | Matrix | Number of Containers | VOCs | SVOCs | PCBs | Remarks |
|---|---|---|---|---|---|---|---|---|
| MW-29B | 081805 | 1730 | AQ | 5 | 2 | 2 | 1 | |
| MW-27B | 081805 | 1800 | AQ | 4 | 2 | 1 | 1 | |
| MW-28B | 081805 | 1830 | AQ | 4 | 2 | 1 | 1 | |
| MW-31B | 081805 | 1935 | AQ | 2 | 2 | | | |
| MW-30B | 081805 | 1950 | AQ | 5 | 2 | 2 | 1 | |
| MW-32B | 081805 | 2020 | AQ | 5 | 2 | 2 | 1 | |
| MW-32B (100) | 081805 | 2100 | AQ | 5 | 2 | 2 | 1 | |
| TB-081905 | 081905 | N/A | AQ | 3 | 3 | | | Trip blank |

8/19/05

| | | | |
|---|---|---|---|
| Relinquished by (Signature): Tim Huff | 081905 1215 Date \| Time | Received by (Signature): Terrence P. Jasper STL | Laboratory Name: STL |
| Relinquished by (Signature): | Date \| Time | Received by (Signature): Azzlos 0945 | Laboratory Location: Buffalo, NY |
| Turn-Around Time: ~~5 weeks~~ 1 week | | Tracking Number: 8533 4235 5370 | Custody Seal Numbers: 14719 - 14721, 14700 |
| | | | Method of Shipment: FedEx |

20 5.2°

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