Report

Remedial Investigation
Niagara Mohawk
Albion Former MGP Site

November 2003

Stearns & Wheler
Companies

REMEDIAL INVESTIGATION
NIAGARA MOHAWK
ALBION FORMER MGP SITE

Prepared for

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November 2003

Project No 10046

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF TABLES

LIST OF FIGURES

REMEDIAL INVESTIGATION
ALBION FORMER MGP SITE
NIAGARA MOHAWK POWER CORPORTATION
ALBION, ORLEANS COUNTY, NEW YORK

SECTION 1 – INTRODUCTION

1.1 PROJECT BACKGROUND

This report presents the findings of a Remedial Investigation (RI) conducted at the Niagara Mohawk (NM) former manufactured gas plant (MGP) site located in Albion, Orleans County, New York. The RI program includes the Preliminary Site Assessment (PSA) program Phases I and II that were completed in 1999 and 2001, respectively, to delineate MGP-related impacts in surface soil, subsurface soil, and groundwater, plus recent fieldwork completed in April 2003. The 1999 and 2001 PSAs and the 2003 RI field work were completed in accordance with New York State Department of Environmental Conservation (NYSDEC)-approved work plans (Stearns & Wheler -- 1999, 2001, 2002a).

1.2 SITE DESCRIPTION

The former MGP site is located in the village of Albion, Orleans County, New York (Figure 1). The study site ("site") is approximately 0.2 acres and is bordered by the New York State Barge Canal and adjacent brick walkway (north), Ingersoll Street (east), residential properties (south), and a NM substation (west) (Figure 2). The study site is one of two adjoining parcels formerly occupied by a single MGP. New York State Electric & Gas (NYSEG) is the actual owner of the study site. NM currently owns the approximately 0.3-acre parcel adjoining the study area to the west. Portions of the former MGP operations were located on both of the parcels. The retorts, gas purifying operations, and two (2) gasholders were located on the study (NYSEG-owned) property. Several other structures associated with the former gas manufacturing operations were located on the adjoining NM property, including a coal storage warehouse, transformer station office building, gasholder, and two (2) 5,000-gallon gas/oil aboveground storage tanks (ASTs).

1.3 RI OBJECTIVES

The goal of the RI was to provide site data to enable the selection of an appropriate remediation strategy through a feasibility study (FS) process. As noted previously, the RI included multiple phases of field investigation, including PSA Phase I (1999) and Phase II (2001), plus a recent phase of field work in 2003. This report presents the findings of the most recent RI phase completed at the site in 2003, and integrates them with previous PSA findings (Stearns & Wheler -- 2000, 2002b) to produce a comprehensive RI dataset.

The PSA program provided an initial site characterization (Phase I) and further definition of the nature and extent of impacts (Phase II). The specific objectives for the each PSA phase were set forth by the respective NYSDEC-approved Work Plans (Stearns & Wheler, 1999 & 2001), and were aimed at providing necessary information to select a remedial approach. The principal objectives of the 2003 investigation were to:

1. Investigate subsurface soils below an at-grade holder foundation located on the NM-owned parcel (west of the PSA area).

2. Investigate possible cyanide impact in connection with purifier waste identified previously in subsurface soil samples around the western holder.

3. Further delineate a black cinder/ash-like material (CLM/ALM) that was identified in soil samples in previous investigations.

4. Conduct surface soil sampling along the southern edge of the study area to determine whether occupants of adjoining properties are exposed to potentially impacted soils.

5. Complete a qualitative human health exposure assessment to determine whether human receptors are potentially exposed to site-related constituents.

6. Provide a basis for subsequent completion of a focused feasibility study (FS) that evaluates potential site remedies in a manner that considers their ability to reduce human health risks.

1.4 REPORT ORGANIZATION

This report provides a summary of RI program, including the PSA program, as well as prior site investigations. Subsequent sections of this report are as follows:

Section 2 – Site Background. This section summarizes the site's history and hydrogeology.

Section 3 – Summary of Previous Investigations. This section summarizes preliminary investigations conducted prior to the PSA/RI program.

Section 4 – PSA Program Summary. This section summarizes the objectives, methods, and findings of the two (2) PSA phases completed at the study site. Full details relating to the PSA program are presented in the following reports:

- Stearns & Wheler, 2000, *Preliminary Site Assessment/Interim Remedial Measures (PSA/IRM) Study, Niagara Mohawk, Albion, New York.* Stearns & Wheler, LLC, Cazenovia, New York, June.

- Stearns & Wheler, 2002, *Phase II Site Investigation, Albion Former MGP, Niagara Mohawk Power Corporation, Albion, New York.* Stearns & Wheler, LLC, Cazenovia, New York, January.

Section 5 – 2003 RI Field Methods. This section describes the field sampling methods for the recent 2003 RI.

Section 6 – RI Results. Visual observations and analytical results are summarized.

Section 7 – Human Health Exposure Assessment. The exposure setting, including the physical environment and potentially exposed human populations, are described. Potential exposure pathways and contaminant transport scenarios are summarized.

Section 8 – Conclusions. Conclusions are based on the combined findings of the PSA/RI program.

Section 9 – Recommendations. Recommendations based on the findings of the PSA/RI are provided.

Specific information that was presented in previous PSA/IRM reports is referenced as appropriate throughout the report, and attached as Appendix A. A full list of appendices is presented below.

Appendix A – Phase I and II PSA/IRM Results. Figures, tables, boring logs, hydraulic conductivity data, representative site photographs, and laboratory analytical results that were presented in the Phase I and II PSA/IRM Reports are included.

Appendix B – 2003 RI Soil Boring Logs.

Appendix C – 2003 RI Laboratory Reports.

SECTION 2 – SITE BACKGROUND

2.1 SITE HISTORY

Following is a chronology of historic subject property ownership and events (Atlantic Environmental Services, 1991). Based on ownership information, it is apparent that the site was used for the generation of gas and/or electric power dating back to the mid-19th century.

1. Pre-1858. James K. Lake and John E. McGraw (NM, 1993).

2. 1858-1902. The site was part of a manufactured gas plant owned and operated by the Albion Gas Light Company.

3. 1902-1909. Albion Power Company.

4. 1909-1916. A.L. Swett Electric Light and Power Company.

5. 1916-1928. Western New York Utilities Company, Inc. (WNYU). Consolidates with Genesee Light and Power Company (GLP) in 1923. GLP consolidates with Niagara, Lockport, and Ontario Power Corporation in 1928 (NM predecessor) (NM, 1993).

6. 1928-1930. Lockport Light, Heat and Power Company (NYSEG predecessor). Operation of the MGP ceased in 1928 when a pipeline connected Albion to out-of-town gas plants.

7. 1930-Present. NYSEG. By 1941, most of the structures were demolished.

2.2 SITE HYDROGEOLOGY

A. Site Surficial Geology. The upper 5-feet of soils across the site consist of sandy fill containing glass, brick, and a black cinder/ash-like material (similar to coal ash). Below the fill is a glacial till sequence (approximately 10-feet thick) that rests on bedrock. The underlying bedrock is a weathered red sandstone of the Grimsby formation.

B. Groundwater Flow. The depth to groundwater is generally 6-10-feet below ground surface (bgs) across the site (Table 1). Based on groundwater elevation data collected from

monitoring wells during the phase I and II PSA program, groundwater moves generally towards the east-southeast (Figure 3). Prior investigations performed on the adjoining NM property suggested that groundwater flows in this direction when the water levels in the canal are relatively high. It has been suggested that the flow direction reverses so that groundwater flows north when the canal water is relatively low (canal is drained from late fall through spring). (Malcolm Pirnie, 1998). No such change in groundwater flow direction was observed during the PSA/RI program.

C. Hydraulic Conductivity (Slug) Test Results. Slug tests in monitoring wells MW-5 and MW-6 at the study site were completed to provide an estimate of hydraulic conductivity. Based on the slug tests, the hydraulic conductivity is estimated to be between 0.59 and 3.3 feet per day (ft/d). From the conductivity results, the groundwater seepage velocity was estimated based on the Darcy equation:

$$V = KI/\eta$$

where:

V = seepage velocity
K = hydraulic conductivity (distance/time)
I = hydraulic gradient (dimensionless)
η = effective porosity (dimensionless)

Assuming an effective soil porosity of 0.2 (20 percent) and based on a slope (gradient) of the water table of approximately 0.027 across the site, seepage velocities of 4.55 x 10-1 ft/d (MW-5) and 7.99 x 10-2 ft/d (MW-6) were calculated. Well MW-6 was screened near the bedrock interface, as evidenced by the weathered sandstone that was encountered in the MW-6 borehole at approximately 13 feet below grade (see Appendix A-1 boring logs). Slug test data (Appendix A-1) for MW-6 may therefore be more representative of the upper weathered bedrock that occurs below the till.

Overall, the above seepage velocity estimates are comparable to those reported by Malcolm Pirnie (1998), which estimated a velocity of 0.72 ft/d. The estimate of 0.455 ft/d is in excellent agreement, while 0.0799 ft/d is within one order of magnitude. Hydraulic conductivity test data are included in Appendix A for reference.

As noted previously, the upper 5-feet of soils across the site consist of sandy fill containing glass, brick, and a black cinder/ash-like material (similar to coal ash). Groundwater occurs at approximately 6 feet, below the fill and within the glacial till sequence. Accordingly, the uppermost water bearing unit is the till sequence that overlies bedrock.

SECTION 3 – SUMMARY OF PREVIOUS INVESTIGATIONS

In September 1991, Atlantic Environmental Services, Inc. conducted an investigation at the former Albion MGP site as part of a Site Screening and Priority Setting (SSPS) System developed by the Electric Power Research Institute. The investigation included the sampling of Barge Canal surface water, canal sediments, and site surface soils. No site-related contaminants were found in any of the canal water samples, and only the upstream canal sediment sample contained polycyclic aromatic hydrocarbons (PAHs). These findings indicate that the MGP site has not affected the canal. However, site surface soil samples contained elevated concentrations of PAHs and various metals and cyanide, which suggested that they might be affected by the former MGP.

In June 1997, Malcolm Pirnie, Inc. conducted an initial PSA on the site and the NM-owned property adjoining the site (0.3-acre parcel to the west). In July 1998, NYSDEC approved the Malcolm Pirnie PSA/IRM report. Following the approval of the PSA/IRM report, the NYSDEC proposed additional investigation of the NYSEG-owned subject site. Communication between NM and NYSEG resulted in a tentative agreement under which NM took the lead initiating a PSA at the 0.2-acre NYSEG-owned site.

SECTION 4 – PSA PROGRAM SUMMARY

4.1 PHASE I PSA (1999)

The Phase I PSA was completed at the site in December 1999 to determine whether soil and groundwater at the site had been impacted by MGP residuals. Specifically, the objectives of the Phase I PSA were to collect sufficient environmental data to evaluate:

1. The nature and presence of hazardous substances, including MGP by-products, at the site.

2. Whether such substances constitute a significant threat to human health or the environment.

3. Whether additional site remedial investigation is necessary.

4. Whether one or more IRMs may be appropriate due to the nature and extent of MGP residues, if present, or other contaminants identified at the site.

5. Whether other responsible parties may exist.

The Phase I PSA activities were completed in December 1999. The investigation included soil sample collection from eight (8) subsurface soil borings (SB-1 through SB-8) and five (5) surface soil locations (SS-1R, -2, -3, -4, and CB-1), the installation of two (2) groundwater monitoring wells (MW-5 and MW-6), hydraulic conductivity testing (MW-5 and MW-6), and groundwater sampling from the site monitoring well network (MW-1 through MW-6). All soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, pesticides, and polychlorinated biphenyls (PCBs). Soil boring logs and summary tables of laboratory analytical results of soil and groundwater samples are included in Appendix A for reference. Sample locations from the Phase I PSA/IRM are shown on Figure 4.

The Phase I PSA Report (Stearns & Wheler, June 2000) included the following conclusions:

- Laboratory analytical data indicated VOCs and SVOCs were present in subsurface soil samples collected from areas within and around the remnants of the former western gasholder (SB-1, -2, and –7, see Figures 5 and 6 of this report).

- Analytical data for soil boring samples collected in areas in proximity of the eastern gasholder did not indicate the presence of MGP residuals (SB-3, -4 and -8).

- Surface soil samples were found to contain elevated levels of PAHs compared to New York State soil cleanup criteria (TAGM 4046), and to a lesser extent metals. No significant VOC impacts were identified in the surface soils.

- Cyanide was detected in seven of thirteen soil samples analyzed, at various depth intervals (surface to 14-feet, see Figure 5). Detected concentrations ranged from 0.6 mg/Kg to 12 mg/Kg. However, six of the seven samples contained fairly low levels (e.g. less than 5 mg/Kg) of total cyanide.

- There was no evidence of a significant dissolved groundwater plume. MGP-related impacts in groundwater were identified in the sample collected from MW-5 (downgradient of western holder), only. Total metals concentrations in groundwater samples are likely elevated in part from turbid groundwater conditions at the time of sampling. However, the widespread presence of iron, manganese, and sodium may reflect ambient conditions.

Following the review of the PSA report by NYSDEC, it was determined that additional field characterization would be needed to develop an effective site management strategy. This prompted some additional investigation to be completed as Phase II.

4.2 PHASE II PSA (2001)

The Phase II PSA/IRM was completed in April and July 2001 to further define the nature and extent of VOCs and PAHs in site soils. Specifically, the objectives of the Phase II PSA/IRM were to:

1. Verify the locations of the eastern and western gasholder foundation walls to provide information to support a removal IRM.

2. Further delineate potential surface and subsurface soil impacts (VOCs and PAHs) outside of the gasholders.

3. Establish bedrock groundwater quality downgradient of the western gasholder.

4. Assess the potential for natural attenuation in groundwater to mitigate site-related impacts.

5. Support recommendations for implementing IRM(s).

The Phase II PSA/IRM activities, completed in April and July 2001, expanded the investigation and included the drilling of seven (7) additional soil borings (SB-9 through SB-15), the excavation of seven (7) test pits (TP-1 through TP-7), the installation of a bedrock monitoring well (MW-7), hydraulic conductivity testing (MW-7), and collection and laboratory analysis of soil and groundwater samples. Soil samples collected from boring locations were analyzed for VOCs and PAHs. Groundwater samples were collected and analyzed for VOCs, PAHs, iron, manganese, nitrate, and carbon dioxide. Soil boring logs and summary tables of laboratory analytical results of soil and groundwater samples are included in Appendix A for reference. Results of soil boring sample analyses are also included in tabular form with the results of soil samples collected during the 2003 RI. Sample locations from the Phase II PSA/IRM are included on Figure 4.

The Phase II PSA Report (Stearns & Wheler, January 2002) presented the following conclusions:

- Location of Former Gasholder Structures. The excavation of test pits at the site revealed evidence of the former holder structures at the former MGP site. The western holder was easier to identify, as its wall structure was more visible. The walls of the western holder were verified at approximately 2.5-feet below ground surface. The eastern holder was evidently demolished or collapsed, as evidenced by a more scattered debris pattern in that area. Test pit locations are shown on Figure 4.

- MGP-related Impacts – Soils. Concentrations of VOCs and PAHs above NYSDEC Technical and Administrative Guidance Memorandum (TAGM) recommended soil cleanup objectives were identified in soil borings advanced around the exteriors of each

holder (Figure 6). VOCs were generally detected at lower concentrations than PAHs, but mono-aromatic compounds such as BTEX were detected above TAGM recommended cleanup objectives. The soil samples collected from borings SB-10 and SB-11, around the western holder from 8-12-feet deep, had the highest concentrations of total PAHs. For the eastern holder, VOCs and PAHs in soils from 0-2-feet were generally higher than those for deeper soil samples.

- MGP-related Impacts – Groundwater. Consistent with previous analytical results from the Phase I PSA/IRM, MGP-related impacts in groundwater were identified in the sample collected from MW-5 (downgradient of western holder), only. The groundwater sample collected from MW-5 exceeded NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) Class GA water quality standards for BTEX (benzene, toluene, ethylbenzene, and xylenes) compounds (see Figure 7). Inorganic indicator parameters, together with the very limited groundwater impact, indicate that residual MGP impacts are effectively attenuated in groundwater.

- Interim Remedial Measures. No imminent impacts to human health or the environment were identified requiring interim remedial measures (IRM). The Phase II PSA Report concluded that the removal of subsurface MGP-related structures and associated impacted soils in proximity to the gasholders is expected to remove the majority of the potential source material that remains on site.

Following the completion of the Phase II PSA Report, the NYSDEC determined that site characterization was effectively complete. However, further site investigation was requested (NYSDEC letters dated February 28, 2002 and July 31, 2002) to enable the selection of a remediation strategy by the FS process.

NYSDEC requested additional investigation of a former holder platform to the west of the study area, further investigation of potential purifier waste on the premises, and further delineation and chemical characterization of a cinder/ash-like material that was identified in site soils during the PSA phases. NYSDEC requested that the further investigation be completed as a Remedial Investigation (RI), and to integrate the previous findings of the PSA program into the RI program to fully characterize the site for remedy selection.

SECTION 5 – 2003 RI FIELD METHODS

5.1 SOIL BORINGS

From April 7-9, 2003, thirteen (13) soil borings (SB-16 through SB-28) were completed at the site, and two (2) borings (SB-29 and SB-30) were advanced west of the site in the former holder foundation area (Figure 4). Soil borings were completed by using 4 ¼-inch hollow stem augers, then advancing 2-inch diameter split-spoon sampling devices into subsurface soils via the direct push method. Soils were collected continuously in each boring to provide samples for analysis and/or to examine for visible or olfactory impacts. Soil samples were field screened for organic vapors using a photoionization detector (PID). Boring logs are included in Appendix B of this RI report. Reasons for advancing soil borings in specific areas are described below.

A. FORMER HOLDER FOUNDATION

Two (2) soil borings (SB-29 and SB-30) were advanced through the at-grade holder foundation located west of the site. The objective of these borings was to investigate potential subsurface impact below the foundation. One soil sample from each boring was analyzed for PAHs (USEPA Method 8270).

B. PURIFIER WASTE

Four (4) soil borings (SB-16, -17, -18, and -28) were advanced near previous soil boring locations around the western holder on the site. The objective of the additional borings was to investigate the possible extent of cyanide impact that might be associated with suspected purifier waste. Purifier waste was suspected based on visual observation of wood chips in subsurface soils during the Phase II PSA. Based on PID readings and/or the presence of wood chips, one soil sample was collected from each boring and analyzed for total cyanide. One proposed soil boring location (north of eastern gasholder) was eliminated because of its proximity to aboveground utility lines associated with the adjacent NM substation.

C. CINDER ASH MATERIAL

Six (6) soil borings (SB-19 through SB-23, and SB-25) were advanced at various locations across the site to investigate a black cinder/ash-like material (CLM/ALM) that was identified in

shallow soils (0-6-feet bgs) in a number of soil borings from the PSA program. The source of the CLM/ALM is not known. It may be associated with former MGP operation, but it also could be derived from the use of coal by other historic operations in the area, or potentially from the use of backfill that contained coal ash over the course of the area's historic development.

The objective of the six soil borings was to further delineate the CLM/ALM. One soil sample from each soil boring was analyzed for PAHs (USEPA Method 8270).

5.2 - SURFACE SOILS – SOUTHERN SITE BOUNDARY

To supplement the CLM/ALM investigation, three (3) shallow soil borings (SB-24, -26, and -27) were advanced to a depth of 2 feet along the southern site boundary. The purpose of these shallow soil samples was to determine whether occupants of adjoining properties could be potentially exposed to CLM/ALM in shallow soils. Two soil samples were collected from each boring (0-2-inches and 1.5-2-feet bgs) and analyzed for PAHs (USEPA Method 8270).

SECTION 6 –RI RESULTS

Summary tables of laboratory analytical results of soil boring samples are presented in Table 2 (PAHs), and Table 3 (cyanide). The 2003 RI laboratory analytical reports are included in Appendix C.

6.1 FORMER HOLDER FOUNDATION

Soil borings SB-29 and SB-30 were both advanced to refusal (13.3 and 12.3-feet, respectively) beneath the at-grade holder foundation on NM property west of the site. No direct field evidence of MGP-related impacts by visual, odor, or PID screening, was identified in either of the soil borings. Trace amounts of black CLM/ALM was found at shallow depths (2-4-feet) with other fill material (brick) in each of the borings.

Total PAH concentrations detected in the soil samples collected from SB-29 and SB-30 were 45.81 mg/Kg and 534.9 mg/Kg, respectively. The sample from SB-29 contained six PAHs above TAGM cleanup objectives, and the sample from SB-30 contained nine PAHs above TAGM recommended cleanup objectives. Total PAH concentrations of soil samples collected as part of the RI and PSA program are shown on Figure 5, and the compounds that exceeded NYS TAGM recommended cleanup objectives are summarized on Figure 6.

6.2 PURIFIER WASTE/CYANIDE

The impacts with respect to purifier waste are assessed by reviewing the levels of detected cyanide. Cyanide was detected in each of the soil samples analyzed from borings SB-16, -17, -18, and -28. Concentrations ranged from < 1 mg/Kg (SB-17) to 32.7 mg/Kg (SB-16). Wood chips were identified in the sample collected from SB-17 (8-10-feet), only, and PID readings were minimal. Total cyanide concentrations in soil samples analyzed as part of the RI and PSA program are shown on Figure 5. Fourteen of seventeen samples contained less than 5 mg/Kg, and the average detected concentration of these fourteen samples is only 1.8 mg/Kg. Although there is no recommended cleanup objective specific to cyanide, the detected levels appear to be fairly low.

6.3 CINDER/ASH-LIKE MATERIAL (CLM/ALM)

Black CLM/ALM was identified at a total of 19 of 30 soil borings drilled during the PSA/RI program, based on a review of soil boring logs. Figure 8 shows the boring locations at which the CLM/ALM was visually identified. As noted previously, the CLM/ALM was not identified in any boring deeper than 6 feet below ground surface, and it appears to extend to the site borders and beyond. The occurrence of the ash is associated with general fill material, and not focused around any specific site area or areas.

PAH compounds are common in coal and coal derivatives, including coal ash and cinders, as evidenced by PAHs detected in the soil samples that were found to contain ash. The samples that contained visible ash had low PID readings. In addition, these samples lacked odors and visible evidence of non-aqueous phase impacts (NAPL, staining, or sheen). It is therefore concluded that the ash-related PAHs detected in shallow soil samples are distinct from those detected in deeper soil samples within and adjacent to the former holders. The range of total PAH concentrations in the soil/fill samples containing CLM/ALM was from 5.87 mg/Kg (SB-27, from 1.5 to 2 feet deep) to 8,623 mg/Kg(SB-19, from 0 to 2 feet deep), with an average concentration of 1,081 mg/Kg. The PAH concentrations in the nineteen other soil samples that, according to soil boring logs, did not contain visible CLM/ALM, ranged from 0.171 mg/Kg to 2,421 mg/Kg, with an average total PAH concentration of 175 mg/Kg.

The analytical data indicate that PAH concentrations are higher in fill samples that contained ash than those that did not. Although coal ash is possibly related to MGP operations, it is also possible that it is a component of common fill material used in the area, and may have been derived from non-MGP operations at other locations. Coal ash is not uncommon in historic fill material found in developed areas where the burning of coal and the use of backfill that contained coal ash were common practices.

Ash at the site could not be fully delineated. It extended to the site boundaries and beyond, in the upper few feet of soils, which suggests that it could be locally very common.

Each of the soil borings drilled in April 2003 along the southern property boundary (SB-19 through SB-25) encountered the CLM/ALM in the upper two to three feet. The material appears to be a mixture of coal fragments and partially combusted, granular ash-like material. It is

commonly associated with brick and glass fragments, crushed stone, and miscellaneous fill materials. The total PAH concentrations in the five soil samples analyzed in April 2003 that contained CLM/ALM range from 8.95 mg/Kg (SB-22) to 8,623 mg/Kg (SB-19) (Figure 5). PAH compounds exceeded TAGM recommended cleanup objectives in each of the collected soil samples.

6.4 SURFACE SOILS – SOUTHERN SITE BOUNDARY

The black CLM/ALM was identified at each of the three surface soil samples along the southern perimeter of the study site. The total PAH concentrations in the three soil samples analyzed from borings SB-24, SB-26, and SB-27 (0-2-inches) were 149.59 mg/Kg, 225.08 mg/Kg, and 5.87 mg/Kg, respectively. The total PAH concentrations from the same borings, only from 1.5-2-feet, were 529.6 mg/Kg, 150.32 mg/Kg, and 6,646 mg/Kg, respectively (Figure 5). PAH compounds exceeded TAGM recommended 0cleanup objectives from both depth intervals in each of the collected soil samples.

As noted above, the CLM/ALM could not be fully delineated, and the samples collected from the southern property boundary suggest that ash, perhaps as a locally ubiquitous component of area fill, may extend beyond the MGP boundaries.

6.5 RI RESULTS SUMMARY

The following is an interpretive summary of the RI, which integrates the findings of the 2003 site investigation with the PSA program.

A. SURFACE SOILS

Surface soil samples at the site were found to contain PAHs above NYSDEC TAGM recommended soil cleanup objectives. Concentrations of PAHs in surface soils (0-2-feet) are highest in areas near the former holder locations (Figure 5). VOCs in surface soils are below TAGM recommended cleanup objectives. Although cyanide was detected in eleven of seventeen soil samples from the site, it was present in fairly low amounts - above 5 mg/Kg in only three of eleven samples in which it was detected - and there were six samples in which cyanide was not detected.

B. SUBSURFACE SOILS

Concentrations of VOCs and PAHs above NYSDEC TAGM soil cleanup objectives were identified in soil borings advanced around the exteriors of each holder. VOCs were generally detected at lower concentrations than PAHs, but were also present above TAGM recommended cleanup objectives, specifically BTEX. Concentrations of PAHs in subsurface soils (5-16-feet) are highest in areas near the former holder locations (Figure 5).

C. CLM/ALM

Coal ash and cinder-like material (CLM/ALM) and associated fill were visually identified in shallow soils (less than 6 feet deep) across the majority of the site area. This material was commonly encountered in borings throughout the site, and was found to extend up to and possibly beyond the southern property boundary. The widespread occurrence the ash/cinder-like material prevented its full delineation.

The ash and cinder-like material is apparently not a source of groundwater impact, since groundwater impacts are discernable only at a single well location (MW-5), whereas the ash/cinder material is widespread.

D. GROUNDWATER

During both RI groundwater sampling events (Phase I and II PSAs), MGP-related impacts in groundwater were only identified in the sample collected from monitoring well MW-5 (downgradient from western holder). The groundwater sample from MW-5 for both PSA sample events exceeded Class GA water quality standards for BTEX (benzene, toluene, ethylbenzene, and xylenes) compounds and naphthalene. Total metals concentrations detected in groundwater samples during the Phase I PSA were likely elevated in part from turbid groundwater conditions at the time of sampling.

SECTION 7 - HUMAN HEALTH EXPOSURE ASSESSMENT

A qualitative exposure assessment was completed for the site, in accordance with the New York State Department of Health (NYSDOH) guidance on qualitative exposure assessments, as described in Appendix 3B of NYSDEC's Draft TAGM DER-10. The assessment consisted of the following steps:

1. Characterizing the exposure setting, including the physical environment and potentially exposed human populations;

2. Identifying exposure pathways;

3. Evaluating contaminant fate and transport.

7.1 - SITE CHARACTERIZATION

Site characteristics were reviewed, including the results of sampling data for soil and groundwater, to evaluate the physical conditions of the contaminant sources near the site, which may pose a potential health risk to the community.

The land use and environmental setting of a site, to a large extent, control the degree of exposure of humans to site conditions and thus also greatly influence the amount of potential risk to human health posed by site conditions. Land use determines the likelihood that potential receptors could contact impacted media (air, sediment, water, and soil). Isolated sites and those with minimal access provide less potential exposure to humans, and thus pose less of a potential risk to human health than sites easily accessed by large numbers of people.

The Albion MGP site is located on a rectangular plot of approximately 0.2 acres, and is surrounded by a combination of residential and commercial properties. It is flat lying, and bounded on the north by New York State Barge Canal, on the south by residential properties, on the east by Ingersoll Street, and on the west by a NM substation. A brick walkway along the canal just north of the site is used as a recreational walking path. Access to the site is not physically restricted by fencing or other form of barricade at this time.

7.2 - OVERVIEW OF EXPOSURE PATHWAYS

Both current and future potential exposure pathways to humans were considered, based on the physical layout of the site and surrounding areas. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements:

1. a contaminant source;

2. contaminant release and transport mechanisms;

3. a point of exposure;

4. a route of exposure;

5. a receptor population.

A. CONTAMINANT SOURCE

For this site, residual MGP material in on site soils is a potential contaminant source. In contrast, groundwater impacts have been determined to be minor, and therefore groundwater is not considered to be a potential contaminant exposure source. The principal on-site constituents related to MGP operations include VOCs and SVOCs (primarily PAHs) in surface and subsurface soils. In addition, shallow off site soils north, west, and east of the site were found to contain PAHs that may possibly be associated with the MGP. Because the detected PAHs are common ambient contaminants in developed and urban areas, it could not be confirmed whether these PAHs were related to the MGP or were from other locally ubiquitous sources. Surface soil samples were also collected along the southern property boundary, but not off site to the south on the adjacent residential property.

B. CONTAMINANT TRANSPORT

Overall, the degree of active contaminant transport appears to be minimal. Contaminant transport in groundwater is minimal, based on the analytical data from the PSA/RI program. Groundwater analytical data indicate that dissolved phase VOCs (benzene, toluene,

ethylbenzene, xylenes and naphthalene) are limited to a specific site area in the north-central portion of the site, primarily in samples from a single monitoring well, and the data indicate that groundwater impacts do not substantially extend beyond this area.

Transport of airborne site soils in the form of "dust" is relatively insignificant because the site is covered primarily by gravel and grass, it is covered for months at a time by snow, and otherwise a fairly uniform distribution of precipitation over the course of the year minimizes the occurrence of extended dry periods over which dust could form.

C. EXPOSURE POINT AND ROUTE

The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (i.e., ingestion, inhalation, dermal absorption). Gravel and grass that cover ground surface across the site and surrounding areas minimize direct contact with site soils. However, dermal adsorption (i.e. direct contact with skin) and accidental ingestion of surface soils is possible in cases where the gravel and or grass is penetrated by shallow digging, and represent the only potentially complete exposure route under current site conditions.

Under current conditions, there are no water supply wells in proximity to the site, so there is no existing exposure route in connection with groundwater consumption. The area is serviced by a municipal supply, which reduces the possibility of future exposure. The extent of groundwater impact has been defined to be limited to a small area in the north-central portion of the site, and does not appear to be migrating beyond the defined limits, which effectively eliminates the possibility that a future off site supply well would encounter site related impacts.

Future exposure to groundwater would require the unlikely scenario that a supply well was installed on-site near the affected area. Another potential future exposure scenario is via direct contact with on-site contaminated subsurface soil and groundwater by construction/utility workers.

D. RECEPTOR POPULATION

The receptor population is the people who are or may be exposed to contaminants at a point of exposure. Based on current site conditions, on-site trespassers who manage to penetrate the

gravel/grass cover are potential current receptors. Although possible, this is considered an unlikely scenario. Off site, adjacent residents south of the site may come into contact with shallow off-site soils via gardening and landscaping. Although, there are no data for surface soils on residential property south of the site, relatively elevated PAH concentrations in the surficial soil on site extend at least up to the southern site property boundary. However, no flower or vegetable gardens were observed on these adjacent off-site properties. Recreational users of the walking trail along the canal could potentially come into contact with surface soils if they were to stray off the brick covered path and cross onto the site. However, light recreational use of this type is unlikely to penetrate grass cover in a manner that would create a significant exposure opportunity.

Under future scenarios, adult construction and utility workers are potential receptors to site-related contaminants in soil and groundwater.

An exposure pathway is complete when all five elements of an exposure pathway are documented; a potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway is not documented (i.e. it cannot be confirmed or refuted). An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present, and will never exist in the future.

There are currently no complete exposure pathways in connection with the site, but there are some potentially complete paths. Potential exposure pathways for each of the sampled environmental media are evaluated in further detail below.

7.3 - POTENTIAL SITE SPECIFIC EXPOSURE PATHWAYS

A. SURFACE SOILS

Under existing site conditions, a potentially complete, albeit very unlikely, exposure path exists for on-site surface soils. The receptor population is children and adult trespassers who dig through the gravel and grass cover and come into contact with the underlying surface soil. As noted, these routes of exposure, by direct dermal contact with the surface soil and accidental ingestion of soil, are restricted by gravel and grass that covers the site.

The potential for inhalation of contaminants was dismissed because it is negligible compared to direct contact and ingestion. First, the principal contaminants are generally not volatile enough to form a vapor phase, and more volatile constituents that were analyzed for (Phase I PSA) were not present in surface soils. Second, the site has a gravel/grass ground cover that reduces wind-borne dust formation. Finally, the site is covered for months at a time with snow, and otherwise there is a fairly even annual distribution of rainfall such that extended dry periods are infrequent. This combination of factors minimizes dust formation and consequently inhalation is believed to be relatively insignificant compared to dermal contact or ingestion.

B. SUBSURFACE SOILS

There are no currently existing exposure routes, on- or off-site, to subsurface soils. Future potential exposures can occur if on-site soils are excavated. This future scenario would affect an adult receptor population of utility and construction workers on-site.

C. GROUNDWATER

There are currently no complete on-site or off-site exposure routes to groundwater, because there are currently no supply wells in the affected area, and the extent of groundwater impact is minimal, as evidenced by impact being detected in only a single site well. Future potential exposure is also highly improbable for these same reasons. In addition, it is doubtful that the shallow silt/clay aquifer could sustain a yield for domestic or commercial water use.

Direct contact with contaminated groundwater and accidental ingestion is an incomplete exposure path under current conditions, but could occur in the future in connection with on site construction work. The receptor population in this case would be adult utility and construction workers.

7.4 - SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN (COPC)

Tables 4 through 8 present the evaluation of constituents of potential concern (COPCs) for each of the above current and future scenarios.

Screening concentrations for surface soil and subsurface soils were based on the maximum detected concentration and average concentration for each constituent. The maximum

concentration is a highly conservative screening concentration, whereas the average value represents a more representative and likely constituent concentration to which receptors might be exposed. For calculating the averages, non-detects were assigned values equal to one half the limit of detection.

The screening concentrations for soil were compared to USEPA health based cleanup objectives specified under TAGM 4046. The health-based objectives under TAGM are derived from the USEPA Health Effects Assessment Summary Tables (HEAST). It is noted that these cleanup objectives are based on the long-term chronic exposure, and accordingly are only relevant in cases where a long-term residential exposure scenario applies. In reality, the potentially exposed populations at the site would come into contact with site contaminants for relatively brief durations as opposed to the long-term exposure scenarios upon which the TAGM objectives are based. The results of the exposure assessment are therefore considered to be overly conservative, overstating the actual risk.

A contaminant was retained as a COPC if its average or maximum concentration exceeded the TAGM cleanup objectives.

For groundwater, the screening concentrations were compared to NYSDEC groundwater quality standards. Each of these criteria is based on groundwater being used as a drinking water supply.

A. CURRENT SCENARIOS

Site Surface Soil. Contaminants of potential concern (COPCs) for surface soils were determined based on the analytical data for eleven surface soil samples that were collected and analyzed for VOCs, and twenty-two surface soil samples that were collected and analyzed for PAHs. All VOCs were below TAGM 4046 health-based criteria, so none are considered to be COPCs (Table 4). Only three PAHs (benzo(a)anthracene, benzo(b)pyrene, and dibenzo(a,h)anthracene) were detected in on-site surface soil above TAGM 4046 health-based criteria. Accordingly, these three PAHs are designated as COPCs (Table 5).

B. FUTURE LAND USE SCENARIOS

Site Subsurface Soils. Data for eighteen subsurface soil samples that were collected and analyzed for VOCs were used to identify COPCs for future construction/utility workers (Table

6). No VOCs were detected in on-site subsurface soils above TAGM 4046 health-based criteria. Nineteen subsurface soil samples analyzed for PAHs indicated twelve PAH compounds are COPCs based on a comparison with TAGM health-based criteria (Table 7).

Site Groundwater. Groundwater analytical data for two rounds of sampling were used to determine the COPCs for groundwater, for future construction/utility workers who might come into contact with groundwater (Tables 8 and 9). Four VOCs (BTEX) and one PAH (naphthalene) were identified as COPCs, based on a comparison of maximum detected concentrations to NYS Class GA groundwater quality standards.

7.5 - SUMMARY

A qualitative human health exposure assessment was completed at the Albion former MGP site, based on data collected during the PSA/RI program. COPCs were identified on site in surface soil, subsurface soil, and groundwater.

A. EXPOSURE PATHWAYS

Under existing site conditions, on-site trespassers could be potentially exposed to surface soil by direct contact and accidental ingestion. This type of exposure would occur only to the degree that people were to come into contact with the soils through the gravel/grass cover.

Under existing conditions, people in off-site areas are not directly exposed to site related contaminants in subsurface soil and groundwater.

Under future scenarios, there is potential exposure via direct contact and accidental ingestion of subsurface soil and groundwater on-site by construction and utility workers. Adult workers are the principal receptor under the future scenario. The actual risk to workers in this case is believed to be minimal because the health-based cleanup objectives are based on chronic exposure over a much longer term that a worker would be subject to.

B. CONTAMINANTS OF POTENTIAL CONCERN (COPCs)

The principal site-related contaminants are SVOCs, specifically PAHs. Under current conditions, site analytical data indicate three PAHs are COPCs in surface soil.

Under future scenarios, there are twelve COPCs in relation to possible future direct contact with and incidental ingestion of PAHs in subsurface soils, and five COPCs in relation to direct contact with and incidental ingestion of groundwater.

SECTION 8 – CONCLUSIONS

A Remedial Investigation (RI) was completed at the former MGP site in Albion, New York. The RI included two phases of a Preliminary Site Assessment (PSA) program, plus an additional phase of RI in 2003, to provide site data so that an appropriate remediation strategy could be selected through a feasibility study (FS) process. The key findings of the PSA/RI program are presented below.

1. The excavation of test pits at the site has revealed evidence of the former gasholder structures. Two gasholder structures were identified on site. Only the wall structure of the western holder was identified as intact. The eastern holder was evidently demolished or collapsed, as evidenced by a more scattered debris pattern in that area. An at grade foundation to a third gas holder was identified to the west on a property owned by NM.

2. Site soils contain MGP residuals that consist primarily of polycyclic aromatic hydrocarbons (PAHs), and to a lesser extent, volatile organic compounds (VOCs). Most of the residual MGP material is within and in close proximity to two former holders on the site, as evidenced by elevated PAHs in the holder areas. Total PAH concentrations in soil samples across the site are generally less than 500 mg/Kg in all but a few isolated cases. There is a limited area of impact, greater than 10-feet deep and adjacent to the western holder, in which two samples contained more than 500 mg/Kg total PAHs. There are two limited areas of shallow soil impact (less than 2-feet deep) near the eastern holder and southern perimeter of the property, in which six samples contained more than 500 mg/Kg total PAHs.

3. Impacts with respect to total cyanide are fairly minor, with only three of seventeen analyzed soil samples containing more than 5 mg/Kg total cyanide.

4. Based on a review of soil boring logs, black cinder-like material and ash-like material (CLM/ALM) was identified in mixtures of soil and fill from 19 of 30 soil borings drilled during the PSA/RI program. No CLM/ALM was observed below six feet deep. PAH compounds were detected in soil samples that contained ash, but these samples generally had low PID readings and aside from the visible ash there was little or no evidence of impact based on field observation (i.e. no visible stains, sheens, or odors). Accordingly, the samples containing ash are differentiated from deeper soil samples associated with the

former holders that also contained PAHs. Ash at the site could not be fully delineated, as it extended to the site boundaries and apparently beyond the site in some areas, which suggests that it is locally very common and may be derived from sources other than the MGP.

5. MGP-related impacts in groundwater were identified in the groundwater sample collected from MW-5 (downgradient of western holder), only. No organic compounds were detected in the bedrock monitoring well. Based on detection of parameters in only one site well, it is concluded that groundwater impacts at the site are minimal.

6. Under current land use conditions, people who traverse the site are potentially exposed to PAHs in surface soils, but the exposure risk is reduced by the presence of gravel or grass cover across the area. Under current site conditions there is no complete exposure path in connection with subsurface soils or groundwater. Future exposure could potentially occur in connection with construction that exposes on-site workers to impacted subsurface soil and groundwater. However the actual risk is believed to be minimal because the health-based cleanup objectives are based on chronic exposure over a much longer term that a worker would be subject to.

SECTION 9 - RECOMMENDATIONS

The RI data has determined that subsurface soils within and adjacent to the former holders are affected primarily by PAHs, which are believed to be associated with residual contents of the holders. Analytical data also indicates that cinder-like material/ash-like material (CLM/ALM) in the upper 6 feet of soil is an additional source of PAHs. Total PAH levels across the site are generally less than 500 ppm except for a few specific areas.

Groundwater impacts are minimal and consequently there is no significant migration path for site-related contaminants. Exposure risk is limited to those who come into direct contact with site soils.

It is recommended that additional surface soil samples be collected from 0 to 2 feet on property south of the site, to further determine the extent of PAH impacts in connection with the CLM/ALM, and to further assess the potential for exposure to the CLM/ALM.

REFERENCES

ASTM, 1995. Standard Practice for Design and Installation of Groundwater Monitoring Wells in Aquifers. American Society of Testing and Materials D5092-90.

ASTM, 1999. Standard Test Method for Penetration Test and Split Barrel Sampling of Soils. American Society of Testing and Materials D1586-99.

ASTM, 2000. Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). American Society of Testing and Materials D2488-00.

Gas Research Institute, 1995. Management of Manufactured Gas Sites, Volume 1: Wastes and Chemicals of Interest. Remediation Technologies, Inc. (ReTec), Concord, Massachusetts, August.

NMPC, 1996. Generic Quality Assurance Project Plan for Site Investigations. Niagara Mohawk Power Corporation, Syracuse, New York, June.

NMPC, 1996. Generic Field Sampling Plan for Site Investigations. Niagara Mohawk Power Corporation, Syracuse, New York, June.

Stearns & Wheler, 1999, Preliminary Site Assessment/Interim Remedial Measures (PSA/IRM) Work Plan, Niagara Mohawk, Albion, New York. Stearns & Wheler, LLC, Cazenovia, New York, October.

Stearns & Wheler, 2000, Preliminary Site Assessment/Interim Remedial Measures (PSA/IRM) Study, Niagara Mohawk, Albion, New York. Stearns & Wheler, LLC, Cazenovia, New York, June.

Stearns & Wheler, 2001, Phase II Site Investigation Work Plan, Niagara Mohawk, Albion, New York. Stearns & Wheler, LLC, Cazenovia, New York, April.

Stearns & Wheler, 2002a. Remedial Investigation Work Plan, Niagara Mohawk, Albion, New York. Stearns & Wheler, LLC, Cazenovia, New York, September.

Stearns & Wheler, 2002. Phase II Site Investigation, Albion Former MGP, Niagara Mohawk, Albion, New York. Stearns & Wheler, LLC, Cazenovia, New York, January.

USEPA, 1988. U.S. Production of Manufactured Gases: Assessment of Past Disposal Practices. US Environmental Protection Agency, Office of Research and Development, Land Pollution Control Division, Hazardous Waste Engineering Research Laboratory, Cincinnati, Ohio, EPA/600/2-88/012, February.

USEPA, 1989. Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A). US Environmental Protection Agency, EPA 540/1-89/002, December.

TABLES

Table 1. Groundwater Field Measurements. Remedial Investigation - Albion Former MGP Site.

Monitoring Well I.D.	Reference Elevation (ft.)	DTW (ft.)	Water Elevation (ft.)	TDW (ft.)	Purge Volume (gal.)	Temp. (C)	Cond. (ms/cm)	pH	Turbidity (NTU)	DO (ppm)	Salinity %
MW-1	515.97	6.57	509.40	19.86	6.4	15.3	0.77	7.42	801	6.07	0.02
MW-2	516.42	8.90	507.52	17.73	4.2	16.0	0.87	7.39	127	5.49	0.02
MW-3	516.26	7.44	508.82	19.14	5.6	16.5	0.729	7.36	894	3.56	0.03
MW-4	516.90	10.84	506.06	19.67	4.2	16.1	0.584	7.51	843	4.56	0.02
MW-5	514.06	8.24	505.82	16.27	3.9	16.0	0.95	7.59	-	5.77	0.04
MW-6	511.63	5.92	505.71	15.11	4.4	15.1	0.711	7.33	809	4.50	0.03
MW-7	515.16	6.40	508.76	29.38	11.0	18.8	0.702	7.79	79	4.61	0.03

Field measurements were recorded with a Horiba U-10 water quality meter.
DTW - Depth to water.
TDW - Total depth of well.
Groundwater field measurements were recorded during the Phase II PSA/IRM (August 2001).

Table 2. Polycyclic Aromatic Hydrocarbons (PAHs) in Soils (April 2003). Remedial Investigation - Albion Former MGP Site.

Compounds (mg/Kg)	TAGM	SB-19 (0-2')	SB-20 (0-2')	SB-21 (0-2')	SB-22 (0-2')	SB-23 (2-4')	SB-24A (0-2")	SB-24B (18-24")	SB-25 (0-2')	SB-26A (0-2")	SB-26B (18-24")	SB-27A (0-2")	SB-27B (18-24")	SB-29 (2-4')	SB-30 (2-3')
Naphthalene	13	100 J *	3.2 J	3.2 J	U	2.1 J	0.8 J	2.3 J	0.65 J	2.3 J	1.2 J	U	60 J *	3.9	6.2 J
2-Methylnaphthalene	36.4	90 J *	2.2 J	2.8 J	U	1.4 J	0.58 J	1.5 J	0.29 J	1.9 J	0 79 J	U	27 J	1.3 J	3.9 J
Acenaphthylene	41	210 J *	5 J	3.7 J	U	3 J	1.3 J	3 J	1.2 J	1.9 J	1.5 J	U	100 J *	0.39 J	7.7 J
Acenaphthene	50	63 J *	1.1 J	1.9 J	U	1.6 J	1 J	1.5 J	0.3 J	0.79 J	0.71 J	U	19 J	1 J	1 3 J
Fluorene	50	210 J *	3.7 J	1.3 J	U	2 5 J	0.51 J	1.5 J	0.31 J	0.79 J	0.42 J	U	90 J *	1.6 J	2.8 J
Phenanthrene	50	1200 *	30	22	0.37 J	22	6.2	20	6	9.2	5.4	0.54 J	720 *	3.3	17
Anthracene	50	400 *	13	7.7 J	0.23 J	9.9 J	2.7 J	8 8 J	1.1 J	4 J	2.4 J	0.18 J	280 *	1.3 J	11 J
Fluoranthene	50	1500 *	48	49	1.2 J	38	14	50	8.1	20	13	1 J	1000 *	4.5	58 *
Pyrene	50	1200 *	43	48	0.96 J	30	12	52 *	5.6	23	15	0.8 J	990 *	4.8	72 *
Benzo(a)anthracene	0.224	720 *	40 *	47 *	1.1 J *	44 *	13 *	60 *	4.3 *	20 *	13 *	0.6 J *	650 *	3.9 *	61 *
Chrysene	0.4	600 *	35 *	46 *	1.1 J *	39 *	13 *	55 *	5 *	19 *	13 *	0 61 J *	590 *	4.1 *	56 *
Benzo(b)fluoranthene	1.1	440 *	32 *	59 *	0.84 J	51 *	16 *	58 *	6.4 *	23 *	16 *	0 56 J	390 *	4.2 *	37 *
Benzo(k)fluoranthene	1.1	590 *	25 *	54 *	1.5 *	64 *	24 *	53 *	7 *	20 *	12 *	0.66 J	520 *	3.5 *	59 *
Benzo(a)pyrene	0 061	590 *	34 *	75 *	1.1 J *	64 *	22 *	68 *	6.9 *	25 *	17 *	0.55 J *	510 *	4 *	60 *
Indeno(1,2,3-cd)pyrene	3.2	300 J *	13 *	60 *	0.29 J	21 *	9.8 *	44 *	2.5	23 *	17 *	0.2 J	300 *	1.8	35 *
Dibenzo(a,h)anthracene	0.014	130 J *	5.9 J *	21 *	U	9.5 J *	3.7 J *	15 J *	0.93 J *	8.2 *	6 9 *	U	110 J *	0.62 J *	15 J *
Benzo(g,h,i)perylene	50	280 J *	10	56 *	0.26 J	17	9	36	2.3	23	15	0.17 J	290 *	1.6 J	32
TOTAL PAHs		8623	344.1	557.6	8.95	420	149.59	529.6	58.88	225.08	150.32	5.87	6646	45.81	534.9

* - Indicates that the compound exceeded the TAGM cleanup objective.
U - Indicates that the compound was not present above detection limits.
J - Indicates that the value reported is an estimate.

Soil cleanup objectives taken from the NYSDEC Technical and Administrative Guidance Memorandum #4046 (January 1994).

Table 3. Total Cyanide in Soils (April 2003).
Remedial Investigation - Albion Former MGP Site.

Boring Location	Cyanide (mg/Kg)
SB-16 (2-4')	32.7
SB-17 (8-10')	0.507
SB-18 (10-12')	4.2
SB-28 (2-4')	10.9

Table 4. Human Health Exposure Screening for Surface Soils. Volatile Organic Compounds (VOCs) - Dec 99, Jul 01, and Apr 03 Data.
Remedial Investigation - Albion Former MGP Site.

Compounds (mg/Kg)	Min	Max	Ave	USEPA Health Based [1]		Retained?	
				Carc.	Tox.	Average Exposure	Maximum Exposure
Methylene Chloride	U	0.02	0.0098	93	5000	N	N
Acetone	U	0.057	0.0211	NA	8000	N	N
Carbon Disulfide	U	0.0005	0.0041	NA	8000	N	N
Vinyl Acetate	U	0.011	0.0069	NA	NA	N	N
Trichloroethene	U	0.002	0.0021	64	NA	N	N
Benzene	U	0.007	0.0035	24	NA	N	N
Tetrachloroethene	U	0.0009	0.0027	14	800	N	N
Toluene	U	0.005	0.0022	NA	20000	N	N
Ethylbenzene	U	0.0003	0.0037	NA	8000	N	N
Styrene	U	U	0.0043	NA	NA	N	N
Xylene (total)	U	0.002	0.0034	NA	20000	N	N

[1] Soil cleanup objectives taken from the NYSDEC Technical and Administrative Guidance Memorandum #4046 (January 1994).

U - Indicates that the compound was not present above detection limits. Assigned a value equal to one half the detection limit.

B - Indicates the compound was found in the blank and sample.

NA - Indicates no established screening value.

N- Indicates compound is not considered a contaminant of potential concern

Table 5. Human Health Exposure Screening for Surface Soils. Semivolatile Organic Compounds (SVOCs) - Dec 99, Jul 01, and Apr 03 Data.
Remedial Investigation - Albion Former MGP Site.

Compounds (mg/Kg)	Min	Max	Ave	USEPA Health Based [1]		Retained?	
				Carc.	Tox.	Average Exposure	Maximum Exposure
Naphthalene	U	100	8.537	NA	300	N	N
2-Methylnaphthalene	U	90	6.454	NA	NA	N	N
Acenaphthylene	U	210	16.650	NA	NA	N	N
Acenaphthene	U	63	4.655	NA	5000	N	N
Fluorene	U	210	14.856	NA	3000	N	N
Phenanthrene	U	1200	98.600	NA	NA	N	N
Anthracene	0.05	400	35.628	NA	20000	N	N
Fluoranthene	0.23	1500	137.830	NA	3000	N	N
Pyrene	0.22	1200	121.885	NA	2000	N	N
Benzo(a)anthracene	0.11	720	81.783	0.224	NA	Y	Y
Chrysene	0.14	600	71.824	NA	NA	N	N
Benzo(b)fluoranthene	0.12	440	56.850	NA	NA	N	N
Benzo(k)fluoranthene	0.13	590	65.684	NA	NA	N	N
Benzo(a)pyrene	0.12	590	72.391	0.0609	NA	Y	Y
Indeno(1,2,3-cd)pyrene	0.083	300	42.591	NA	NA	N	N
Dibenzo(a,h)anthracene	U	130	16.659	0.0143	NA	Y	Y
Benzo(g,h,i)perylene	0.11	290	39.594	NA	NA	N	N

[1] Soil cleanup objectives taken from the NYSDEC Technical and Administrative Guidance Memorandum #4046 (January 1994).

U - Indicates that the compound was not present above detection limits. Assigned a value equal to one half the detection limit.

B - Indicates the compound was found in the blank and sample.

NA - Indicates no established screening value.

N- Indicates compound is not considered a contaminant of potential concern

Y- Indicates compound is considered a contaminant of potential concern

Table 6. Human Health Exposure Screening for Subsurface Soils. Volatile Organic Compounds (VOCs) - Dec 99, Jul 01, and Apr 03 Data.
Remedial Investigation - Albion Former MGP Site.

Compounds (mg/Kg)	Min	Max	Ave	USEPA Health Based [1]		Retained?	
				Carc.	Tox.	Average Exposure	Maximum Exposure
Methylene Chloride	U	25	2.226	93	5000	N	N
Acetone	U	22	2.076	NA	8000	N	N
Carbon Disulfide	U	0.11	3.236	NA	8000	N	N
1,1-Dichloroethene	U	0.34	3.097			N	N
2-Butanone	U	0.009	3.282	NA	4000	N	N
Trichloroethene	U	0.39	3.064			N	N
Benzene	U	14	1.339	24	NA	N	N
Toluene	U	51	4.301	NA	20000	N	N
Chlorobenzene	U	0.5	3.106			N	N
Ethylbenzene	U	18	1.737	NA	8000	N	N
Styrene	U	1.1	2.348	NA	NA	N	N
Xylene (total)	U	260	22.110	NA	200000	N	N

[1] Soil cleanup objectives taken from the NYSDEC Technical and Administrative Guidance Memorandum #4046 (January 1994).

U - Indicates that the compound was not present above detection limits. Assigned a value equal to one half the detection limit.

B - Indicates the compound was found in the blank and sample.

NA - Indicates no established screening value.

N- Indicates compound is not considered a contaminant of potential concern

Y- Indicates compound is considered a contaminant of potential concern

Table 7. Human Health Exposure Screening for Subsurface Soils. Semivolatile Organic Compounds (SVOCs) - Dec 99, Jul 01, and Apr 03 Data.
Remedial Investigation - Albion Former MGP Site.

Compounds (mg/Kg)	Min	Max	Ave	USEPA Healt Based [1]		Retained? Average Exposure	Retained? Maximum Exposure
				Carc.	Tox.		
Phenol	U	4.1	0.827	NA	50000	N	N
4-Methylphenol	U	0.14	0.245	NA	4000	N	N
2,4-Dimetheylphenol	U	0.71	0.373	NA	NA	N	N
Naphthalene	U	910	74.958	NA	300	Y	Y
2-Methylnaphthalene	U	130	12.622	NA	NA	Y	Y
Acenaphthylene	0.002	63	6.589	NA	NA	Y	Y
Acenaphthene	U	20	2.538	NA	5000	N	N
Dibenzofuran	U	0.31	0.163			N	N
Fluorene	U	99	10.922	NA	3000	N	N
Phenanthrene	U	320	34.927	NA	NA	Y	Y
Anthracene	U	97	10.818	NA	20000	N	N
Carbazole	U	0.44	0.322			N	N
Fluoranthene	U	240	31.866	NA	3000	N	N
Pyrene	U	140	22.278	NA	2000	N	N
Benzo(a)anthracene	0.026	88	16.616	0.224	NA	Y	Y
Chrysene	0.021	79	14.883	NA	NA	Y	Y
Benzo(b)fluoranthene	0.013	51	11.327	NA	NA	Y	Y
Benzo(k)fluoranthene	0.009	68	14.351	NA	NA	Y	Y
Benzo(a)pyrene	0.013	64	14.975	0.0609	NA	Y	Y
Indeno(1,2,3-cd)pyrene	0.01	35	6.892	NA	NA	Y	Y
Dibenzo(a,h)anthracene	0.009	15	2.727	0.0143	NA	Y	Y
Benzo(g,h,i)perylene	0.009	32	6.220	NA	NA	Y	Y

[1] Soil cleanup objectives taken from the NYSDEC Technical and Administrative Guidance Memorandum #4046 (January 1994).

U - Indicates that the compound was not present above detection limits. Assigned a value equal to one half the detection limit.

B - Indicates the compound was found in the blank and sample.

NA - Indicates no established screening value.

N- Indicates compound is not considered a contaminant of potential concern

Y- Indicates compound is considered a contaminant of potential concern

Table 8. Human Health Exposure Screening for Groundwater. Volatile Organic Compounds (VOCs) - Dec 99 and Jul 01. Remedial Investigation - Albion Former MGP Site.

Compounds (ug/L)	Minimum Detection	Maximum Detection	TOGS	Retained?
Acetone	U	4	50(G)	N
Benzene	U	230	1	**Y**
Bromodichloromethane	U	U	50(G)	N
Bromoform	U	U	50(G)	N
Bromomethane	U	0.4	5	N
2-Butanone	U	7		N
Carbon Disulfide	U	U		N
Carbon Tetrachloride	U	U	5	N
Chlorobenzene	U	U	5	N
Chloroethane	U	U	5	N
Chloroform	U	U	7	N
Chloromethane	U	U		N
Dibromochloromethane	U	U	50(G)	N
1,1-Dichloroethane	U	U	5	N
1,2-Dichloroethane	U	U	0.6	N
1,1-Dichloroethene	U	U	5	N
cis-1,2-Dichloroethene	U	U	5	N
trans-1,2-Dichloroethene	U	U	5	N
1,2-Dichloropropane	U	U	1	N
cis-1,3-Dichloropropene	U	U	0.4	N
trans-1,3-Dichloropropene	U	U	0.4	N
Ethylbenzene	U	17	5	**Y**
2-Hexanone	U	U	50(G)	N
Methylene Chloride	U	U	5	N
4-Methyl-2-Pentanone	U	U		N
Styrene	U	U	5	N
1,1,2,2,-Tetrachloroethane	U	U	5	N
Tetrachloroethene	U	U	5	N
Toluene	U	42	5	**Y**
1,1,1-Trichloroethane	U	2	5	N
1,1,2-Trichloroethane	U	U	1	N
Trichloroethene	U	U	5	N
Vinyl Chloride	U	U	2	N
O-Xylene	U	22	5	**Y**
M+P-Xylene	U	72	5	**Y**

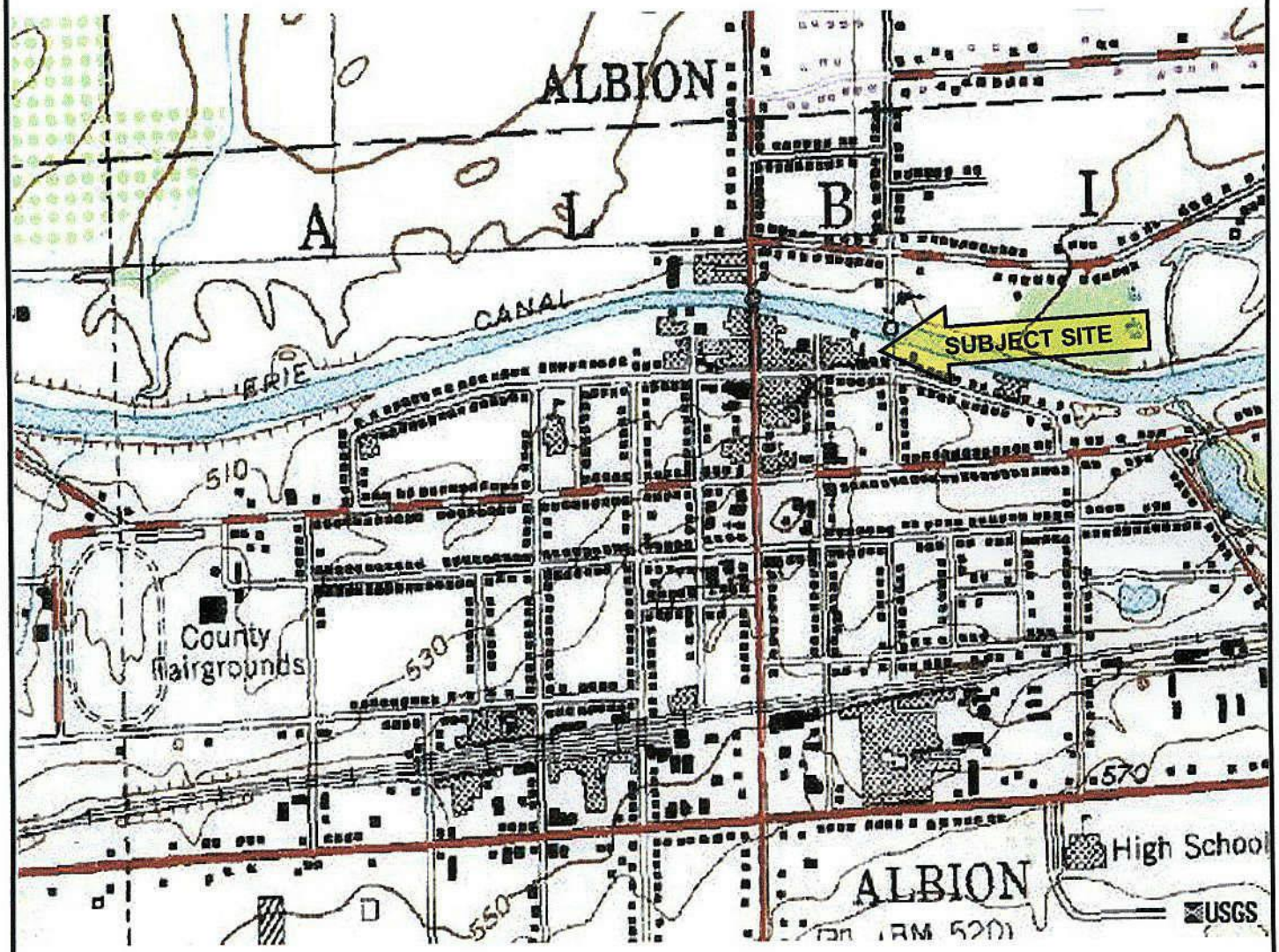
Bold values indicate that the compound exceeded a Class GA water quality standard.
(G) Signifies a NYSDEC guidance value where a standard has not been established.
U - Indicates that the compound was not present above detection limits.
Water quality standards and guidance values taken from the NYSDEC Division of Water Technical and Operational Guidance Series (June 1998).

Table 9. Human Health Exposure Screening for Groundwater. Semivolatile Organic Compounds (SVOCs) - Dec 99 and Jul 01. Remedial Investigation - Albion Former MGP Site.

Compounds (ug/L)	Minimum Detection	Maximum Detection	TOGS	Retained?
Acenaphthene	U	19	20(G)	N
Acenaphthylene	U	29		N
Anthracene	U	2	50(G)	N
Benzo(a)anthracene	U	U	0.002(G)	N
Benzo(a)pyrene	U	U	ND	N
Benzo(b)fluoranthene	U	U	0.002(G)	N
Benzo(g,h,i)perylene	U	U		N
Benzo(k)fluoranthene	U	U	0.002(G)	N
Indeno(1,2,3-cd)pyrene	U	U	0.002(G)	N
Chrysene	U	U	0.002(G)	N
Dibenzo(a,h)anthracene	U	U		N
Fluoranthene	U	1	50(G)	N
Fluorene	U	18	50(G)	N
Naphthalene	U	55	10(G)	**Y**
Phenanthrene	U	6	50(G)	N
Pyrene	U	0.6	50(G)	N

Bold values indicate that the compound exceeded a Class GA water quality standard.
(G) Signifies a NYSDEC guidance value where a standard has not been established.
U - Indicates that the compound was not present above detection limits.
Water quality standards and guidance values taken from the NYSDEC Division of Water Technical and Operational Guidance Series (June 1998).

FIGURES



Approximate Scale

0 0.25 Mi.

Stearns & Wheler
Companies

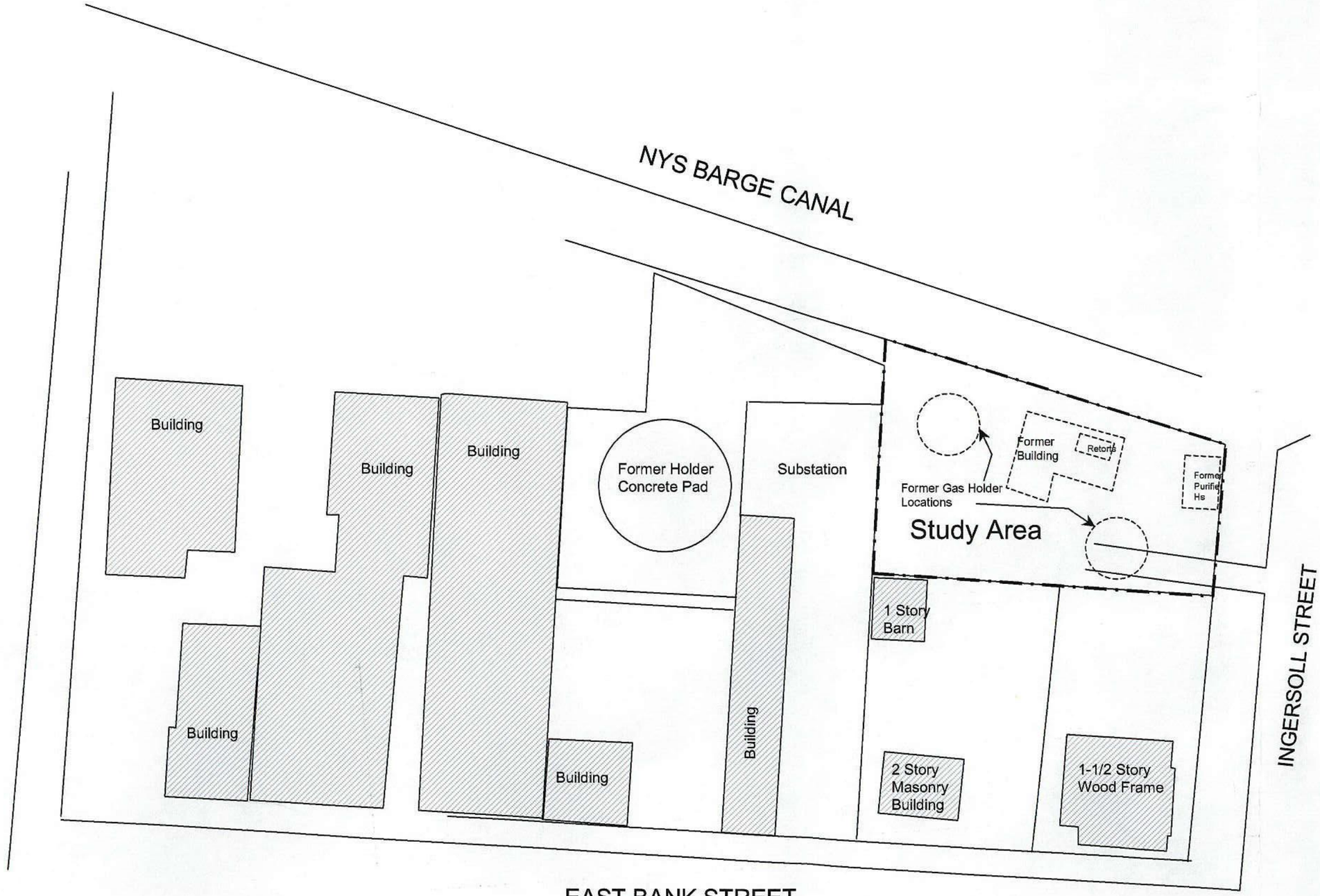
Figure 1 – Site Location

N

November 2003

Job # L10046.11

Niagara Mohawk Power Corporation
Remedial Investigation
Albion Former MGP Site
Albion, Orleans County, New York



0 25 50 FT

Stearns & Wheler Companies

DATE: 9/03 JOB # L10046.11

NIAGARA MOHAWK/
NATIONAL GRID
ALBION FORMER MGP SITE

FIGURE 2 – SITE PLAN

NYS BARGE CANAL

MW-1 (509.40')

MW-7 (508.76')

MW-3 (508.82')

Property Boundary

509

MW-5 (505.82')

MW-6 (505.71')

MW-2 (507.52')

508

507

MW-4 (506.06')

506

505

INGERSOLL STREET

Legend:

- Monitoring Well

505 - Elevation contour (feet)

- Groundwater flow

0 25 50 FT

Site schematic based on site survey map - Niagara Mohawk Survey File Ref. 3445

Stearns & Wheler Companies

DATE: 9/03 JOB # L10046.11

NIAGARA MOHAWK/
NATIONAL GRID
ALBION FORMER MGP SITE

FIGURE 3 – Groundwater Contours
August 2001

NYS BARGE CANAL

Property Boundary

MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7

SB-1
SB-2
SB-3
SB-4
SB-7
SB-8
SB-9
SB-10
SB-11
SB-12
SB-13
SB-14
SB-15
SB-16
SB-17
SB-18
SB-19
SB-20
SB-21
SB-22
SB-23
SB-24
SB-25
SB-26
SB-27
SB-28
SB-29
SB-30

SS-1R
SS-2
SS-3
SS-4

CB-1

TP-1
TP-2
TP-3
TP-4
TP-5
TP-6
TP-7

INGERSOLL STREET

Legend:

- ⊕ - Soil Boring Sample
- △ - Surface Soil Sample
- - Test Pit Location
- ⊗ - Monitoring Well

0 25 50 FT

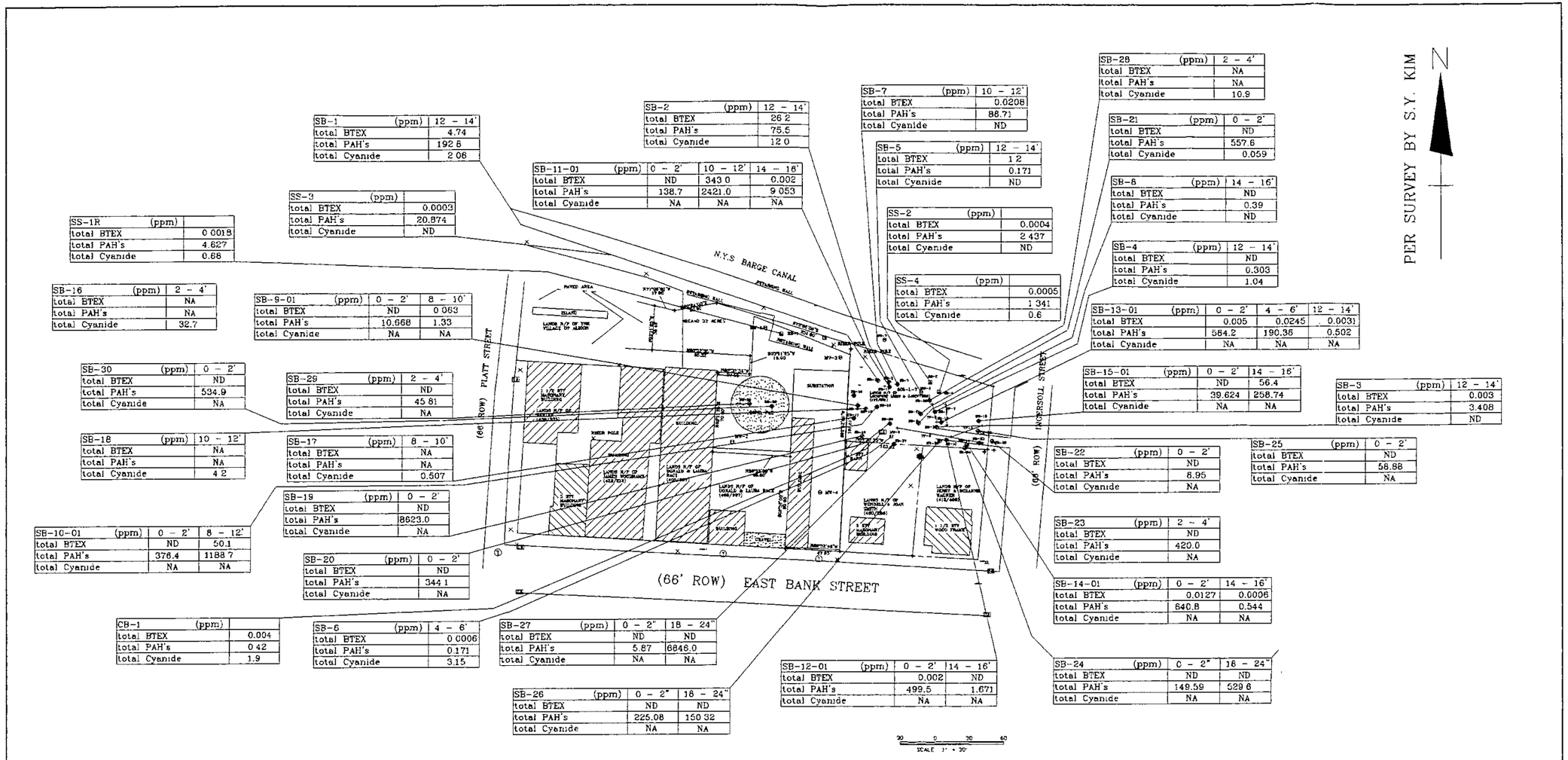
Site schematic based on site survey map - Niagara Mohawk Survey File Ref. 3445

Stearns & Wheler Companies

DATE: 9/03 JOB # L10046.11

NIAGARA MOHAWK/
NATIONAL GRID
ALBION FORMER MGP SITE

FIGURE 4 – Sample Locations



SB-1	(ppm)	12 - 14'
total BTEX		4.74
total PAH's		192.6
total Cyanide		2.06

SB-2	(ppm)	12 - 14'
total BTEX		26.2
total PAH's		75.5
total Cyanide		12.0

SB-7	(ppm)	10 - 12'
total BTEX		0.0208
total PAH's		88.71
total Cyanide		ND

SB-28	(ppm)	2 - 4'
total BTEX		NA
total PAH's		NA
total Cyanide		10.9

SB-11-01	(ppm)	0 - 2'	10 - 12'	14 - 16'
total BTEX		ND	343.0	0.002
total PAH's		138.7	2421.0	9.053
total Cyanide		NA	NA	NA

SB-5	(ppm)	12 - 14'
total BTEX		1.2
total PAH's		0.171
total Cyanide		ND

SB-21	(ppm)	0 - 2'
total BTEX		ND
total PAH's		557.6
total Cyanide		0.059

SS-3	(ppm)	
total BTEX		0.0003
total PAH's		20.874
total Cyanide		ND

SS-2	(ppm)	
total BTEX		0.0004
total PAH's		2.437
total Cyanide		ND

SB-8	(ppm)	14 - 16'
total BTEX		ND
total PAH's		0.39
total Cyanide		ND

SS-1R	(ppm)	
total BTEX		0.0018
total PAH's		4.627
total Cyanide		0.68

SS-4	(ppm)	
total BTEX		0.0005
total PAH's		1.341
total Cyanide		0.6

SB-4	(ppm)	12 - 14'
total BTEX		ND
total PAH's		0.303
total Cyanide		1.04

SB-16	(ppm)	2 - 4'
total BTEX		NA
total PAH's		NA
total Cyanide		32.7

SB-9-01	(ppm)	0 - 2'	8 - 10'
total BTEX		ND	0.063
total PAH's		10.668	1.33
total Cyanide		NA	NA

SB-13-01	(ppm)	0 - 2'	4 - 6'	12 - 14'
total BTEX		0.005	0.0245	0.0031
total PAH's		564.2	190.36	0.502
total Cyanide		NA	NA	NA

SB-30	(ppm)	0 - 2'
total BTEX		ND
total PAH's		534.9
total Cyanide		NA

SB-29	(ppm)	2 - 4'
total BTEX		ND
total PAH's		45.81
total Cyanide		NA

SB-15-01	(ppm)	0 - 2'	14 - 16'
total BTEX		ND	56.4
total PAH's		39.624	258.74
total Cyanide		NA	NA

SB-3	(ppm)	12 - 14'
total BTEX		0.003
total PAH's		3.408
total Cyanide		ND

SB-18	(ppm)	10 - 12'
total BTEX		NA
total PAH's		NA
total Cyanide		4.2

SB-17	(ppm)	8 - 10'
total BTEX		NA
total PAH's		NA
total Cyanide		0.507

SB-22	(ppm)	0 - 2'
total BTEX		ND
total PAH's		6.95
total Cyanide		NA

SB-25	(ppm)	0 - 2'
total BTEX		ND
total PAH's		58.88
total Cyanide		NA

SB-19	(ppm)	0 - 2'
total BTEX		ND
total PAH's		8623.0
total Cyanide		NA

SB-10-01	(ppm)	0 - 2'	8 - 12'
total BTEX		ND	50.1
total PAH's		376.4	1188.7
total Cyanide		NA	NA

SB-23	(ppm)	2 - 4'
total BTEX		ND
total PAH's		420.0
total Cyanide		NA

SB-20	(ppm)	0 - 2'
total BTEX		ND
total PAH's		344.1
total Cyanide		NA

SB-14-01	(ppm)	0 - 2'	14 - 16'
total BTEX		0.0127	0.0006
total PAH's		640.8	0.544
total Cyanide		NA	NA

CB-1	(ppm)	
total BTEX		0.004
total PAH's		0.42
total Cyanide		1.9

SB-6	(ppm)	4 - 6'
total BTEX		0.0006
total PAH's		0.171
total Cyanide		3.15

SB-27	(ppm)	0 - 2"	18 - 24"
total BTEX		ND	ND
total PAH's		5.87	6646.0
total Cyanide		NA	NA

SB-12-01	(ppm)	0 - 2'	14 - 16'
total BTEX		0.002	ND
total PAH's		499.5	1.671
total Cyanide		NA	NA

SB-24	(ppm)	0 - 2"	18 - 24"
total BTEX		ND	ND
total PAH's		149.59	529.6
total Cyanide		NA	NA

SB-26	(ppm)	0 - 2"	18 - 24"
total BTEX		ND	ND
total PAH's		225.08	150.32
total Cyanide		NA	NA

REFERENCE:

1: SURVEY MAP PREPARED BY
S.Y. KIM LAND SURVEOR P.C.
ENTITLED "BOUNDARY & TOPOGRAPHIC
SURVEY OF ALBION N.Y. MGP SITE"
JOB #50-203-90 DATED 2/8/91

2: NAGARA MOHAWK POWER CORPORATION
Survey File # 3445
ENTITLED "BOUNDARY & TOPOGRAPHIC
SURVEY OF ALBION N.Y. MGP SITE"
Drawing D-61532-W Dated: July. 1996

LEGEND:

- SOIL BORING
- SOIL SAMPLE
- MONITORING WELL
- UTILITY POLE
- IRON PIPE
- GAS VALVE
- WATER VALVE
- FIRE HYDRANT
- CATCH BASIN
- TELEPHONE MAN HOLE
- UNKNOWN MAN HOLE
- VAULT

NA - NOT ANALYZED

ND - NOT DETECTED

Stearns & Wheler, LLC
Environmental Engineers and Scientists

NIAGARA MOHAWK POWER CORPORATION
A NATIONAL GRID COMPANY
REMEDIAL INVESTIGATION (RI)
ALBION FORMER MGP
Village of Albion
Orleans County, New York

FIGURE - 5

TOTAL BTEX, TOTAL PAH's, and TOTAL CYANIDE in mg/kg (ppm) for SOILS COLLECTED DURING the REMEDIAL INVESTIGATION

DATE: 11/2003 JOB No.: L00946

PER SURVEY BY S.Y. KIM

N

SB-19 mg/Kg	0 - 2'
naphthalene	100.0 J
2-methylnaphthalene	90 0 J
acenaphthylene	210.0 J
acenaphthene	63.0 J
fluorene	210.0 J
phenanthrene	1200.0
anthracene	400.0
fluoranthene	1500 0
pyrene	1200.0
benzo(a)anthracene	720.0
chrysene	600.0
benzo(b)fluoranthene	440.0
benzo(k)fluoranthene	590.0
benzo(a)pyrene	590.0
indeno(1,2,3-cd)pyrene	300.0 J
dibenzo(a,h)anthracene	130.0 J
benzo(g,h,i)perylene	280 0 J

SB-9-01 mg/Kg	0 - 2'	8 - 10'
benzo(a)anthracene	1.0 J	
chrysene	1.0 J	
benzo(b)fluoranthene	1.2 J	
benzo(a)pyrene	1.4 J	0.098 J
dibenz(a,h)anthracene	2.4 J	0.037 J

SB-1 mg/Kg	12 - 14'
benzene	0.76 J
xylene	2.9
naphthalene	46.0 J
2-methylnaphthalene	5.7 J
acenaphthylene	5.1 J
benzo(a)anthracene	10 0 J
chrysene	9.5 J
benzo(b)fluoranthene	8.3 J
benzo(k)fluoranthene	6.2 J
benzo(a)pyrene	7.3 J
indeno(1,2,3-cd)pyrene	3.8 J
dibenzo(a,h)anthracene	1.4 J

SB-2 mg/Kg	12 - 14'
benzene	1 4 J
toluene	1.8 J
xylene	20 0
benzo(a)anthracene	5.6
chrysene	5 0
benzo(b)fluoranthene	3.6
benzo(k)fluoranthene	3.9
benzo(a)pyrene	5.0
indeno(1,2,3-cd)pyrene	3.3
dibenzo(a,h)anthracene	1.2 J

SB-11-01 mg/Kg	0 - 2'	10 - 12'	14 - 16'
benzene		14.0 J	
toluene		51.0 JB	
ethylbenzene		18.0 J	
xylene		260.0	
naphthalene		910.0	
2-methylnaphthalene		130.0 J	
acenaphthylene		63 0	
fluorene		99 0 J	
phenanthrene		320.0	
anthracene		97 0 J	
fluoranthene		240.0	
pyrene		140.0	
benzo(a)anthracene	13.0	88.0 J	0 54
chrysene	12 0	79.0 J	0 51
benzo(b)fluoranthene	16 0	46.0 J	
benzo(k)fluoranthene	8.4	68.0 J	
benzo(a)pyrene	16.0	82.0 J	0.38
indeno(1,2,3-cd)pyrene	9.5	26.0 J	
dibenzo(a,h)anthracene	3 3 J	9 0 J	0 079 J

SB-21 mg/Kg	0 - 2'
benzo(a)anthracene	47.0
chrysene	48.0
benzo(b)fluoranthene	59.0
benzo(k)fluoranthene	54.0
benzo(a)pyrene	75.0
indeno(1,2,3-cd)pyrene	60.0
dibenzo(a,h)anthracene	21.0
benzo(g,h,i)perylene	56 0

SS-3 mg/Kg	
benzo(a)anthracene	1.6
chrysene	1 8
benzo(b)fluoranthene	1 7
benzo(k)fluoranthene	1.5
benzo(a)pyrene	1.7
indeno(1,2,3-cd)pyrene	1 8
dibenz(a,h)anthracene	0.057 J
benzo(g,h,i)perylene	2.6

SS-1R mg/Kg	
benzo(a)anthracene	0 4 J
chrysene	0.43 J
benzo(a)pyrene	0.42 J
dibenz(a,h)anthracene	0.11 J

SB-7 mg/Kg	10 - 12'
benzo(a)anthracene	9.4
chrysene	7.9
benzo(b)fluoranthene	6.1
benzo(k)fluoranthene	5.9
benzo(a)pyrene	7 3
indeno(1,2,3-cd)pyrene	4.9
dibenzo(a,h)anthracene	1.8 J

SB-13-01 mg/Kg	0 - 2'	4 - 6'
fluoranthene	90 0	
pyrene	91 0	
benzo(a)anthracene	68 0	21 0
chrysene	58 0	18.0
benzo(b)fluoranthene	45 0	19.0
benzo(k)fluoranthene	28 0	10.0
benzo(a)pyrene	54 0	22.0
indeno(1,2,3-cd)pyrene	22 0	10.0
dibenzo(a,h)anthracene	9 6 J	4.1

SS-2 mg/Kg	
benzo(a)pyrene	0.22 J
dibenz(a,h)anthracene	0.95 J

SS-4 mg/Kg	
benzo(a)pyrene	0.12 J
dibenz(a,h)anthracene	0.032 J

SB-30 mg/Kg	2 - 3'
fluoranthene	58.0
pyrene	72.0
benzo(a)anthracene	61.0
chrysene	56 0
benzo(b)fluoranthene	37.0
benzo(k)fluoranthene	59 0
benzo(a)pyrene	60 0
indeno(1,2,3-cd)pyrene	35.0
dibenzo(a,h)anthracene	15.0 J

SB-29 mg/Kg	2 - 4'
benzo(a)anthracene	3.9
chrysene	4.1
benzo(b)fluoranthene	4.2
benzo(k)fluoranthene	3 5
benzo(a)pyrene	4 0
indeno(1,2,3-cd)pyrene	1.8
dibenzo(a,h)anthracene	0.82 J

SB-15-01 mg/Kg	0 - 2'	14 - 16'
naphthalene		8.1
benzo(a)anthracene	3.9	9 6 J
chrysene	3.8	
benzo(b)fluoranthene	4.2	5.0 J
benzo(k)fluoranthene	3.2	6 2 J
benzo(a)pyrene	5 2	6 5 J
indeno(1,2,3-cd)pyrene	3 6	
dibenzo(a,h)anthracene	1.2 J	0.84 J

SB-10-01 mg/Kg	0 - 2'	8 - 12'
benzene		2 4 J
toluene		7.4 JB
ethylbenzene		3.3 J
xylene		37.0
naphthalene		290 0
2-methylnaphthalene		45.0 J
fluorene		52.0
phenanthrene		180 0
anthracene		51 0 J
fluoranthene	52.0	160 0
pyrene		96 0
benzo(a)anthracene	38 0	58.0
chrysene	34.0	59 0
benzo(b)fluoranthene	38.0	33.0 J
benzo(k)fluoranthene	22.0	43.0 J
benzo(a)pyrene	42.0	42 0 J
indeno(1,2,3-cd)pyrene	25 0	19 0 J
dibenzo(a,h)anthracene	9 4 J	6 7 J

SB-20 mg/Kg	0 - 2'
benzo(a)anthracene	40.0
chrysene	35.0
benzo(b)fluoranthene	32.0
benzo(k)fluoranthene	25 0
benzo(a)pyrene	34 0
indeno(1,2,3-cd)pyrene	13.0
dibenzo(a,h)anthracene	5.9 J

SB-22 mg/Kg	0 - 2'
benzo(a)anthracene	1.1 J
chrysene	1.1 J
benzo(k)fluoranthene	1.5
benzo(a)pyrene	1 1 J

SB-25 mg/Kg	0 - 2'
benzo(a)anthracene	4.3
chrysene	5.0
benzo(b)fluoranthene	6.4
benzo(k)fluoranthene	7.0
benzo(a)pyrene	6.9
dibenzo(a,h)anthracene	0.93 J

SB-9 mg/Kg	12 - 14'
benzo(a)anthracene	0 36 J
benzo(a)pyrene	0.34 J
dibenzo(a,h)anthracene	0.07 J

SB-14-01 mg/Kg	0 - 2'	8 - 12'
fluoranthene	85.0	
pyrene	66 0	
benzo(a)anthracene	56.0	
chrysene	50 0	
benzo(b)fluoranthene	49.0	
benzo(k)fluoranthene	51.0	
benzo(a)pyrene	64 0	
indeno(1,2,3-cd)pyrene	68 0	
dibenzo(a,h)anthracene	23.0	18.0 J
benzo(g,h,i)perylene	74 0	

SB-23 mg/Kg	0 - 2'
benzo(a)anthracene	44 0
chrysene	39 0
benzo(b)fluoranthene	51.0
benzo(k)fluoranthene	64 0
benzo(a)pyrene	64 0
indeno(1,2,3-cd)pyrene	21.0
dibenzo(a,h)anthracene	9 5 J

SB-6 mg/Kg	4 - 6'
benzo(a)anthracene	3 4
chrysene	3 0
benzo(b)fluoranthene	3 2
benzo(k)fluoranthene	2.0
benzo(a)pyrene	3.3
dibenzo(a,h)anthracene	0 99

SB-27 mg/Kg	0 - 2'	18 - 24'
naphthalene		60 0 J
acenaphthylene		100.0 J
fluorene		90 0 J
phenanthrene		720.0
anthracene		280.0
fluoranthene		1000.0
pyrene		990 0
benzo(a)anthracene	0 8 J	650 0
chrysene	0.61 J	590.0
benzo(b)fluoranthene		390.0
benzo(k)fluoranthene		520 0
benzo(a)pyrene	0 55 J	510 0
indeno(1,2,3-cd)pyrene		300 0
dibenzo(a,h)anthracene		110.0 J
benzo(g,h,i)perylene		290 0

SB-26 mg/Kg	0 - 2'	18 - 24'
benzo(a)anthracene	20.0	13 0
chrysene	19.0	13.0
benzo(b)fluoranthene	23.0	16.0
benzo(k)fluoranthene	20.0	12 0
benzo(a)pyrene	25.0	17 0
indeno(1,2,3-cd)pyrene	23.0	17 0
dibenzo(a,h)anthracene	8.2	6.9

SB-12-01 mg/Kg	0 - 2'	14 - 18'
fluoranthene	73 0	
pyrene	85.0	
benzo(a)anthracene	48.0	
chrysene	43 0	
benzo(b)fluoranthene	53 0	
benzo(k)fluoranthene	22.0	
benzo(a)pyrene	58.0	0.18 J
indeno(1,2,3-cd)pyrene	38.0	
dibenzo(a,h)anthracene	17.0	0 061 J

SB-24 mg/Kg	0 - 2'	18 - 24'
pyrene		52.0
benzo(a)anthracene	13 0	60.0
chrysene	13.0	55 0
benzo(b)fluoranthene	16.0	58 0
benzo(k)fluoranthene	24.0	53 0
benzo(a)pyrene	22.0	68 0
indeno(1,2,3-cd)pyrene	9 8	44 0
dibenzo(a,h)anthracene	3.7 J	15.0 J

NYS BARGE CANAL

PLATT STREET (66' ROW)

INCENSOLL STREET (66' ROW)

(66' ROW) EAST BANK STREET

LEGEND

- ⊕ - SOIL BORING
- ⊡ - SOIL SAMPLE
- ⊖ - MONITORING WELL
- × - UTILITY POLE
- ✚ - IRON PIPE
- ⋈ - GAS VALVE
- ⋈ - WATER VALVE
- ▲ - FIRE HYDRANT
- ⊞ - CATCH BASIN
- Ⓣ - TELEPHONE MAN HOLE
- Ⓔ - UNKNOWN MAN HOLE
- ⊡ - VAULT
- NA - NOT ANALYZED
- ND - NOT DETECTED

REFERENCE

1. SURVEY MAP PREPARED BY S.Y. KIM LAND SURVEYOR P.C. ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY OF ALBION N.Y. NOP SITE" JOB #90-803-90 DATED 6/6/91
2. NIAGARA MOHAWK POWER CORPORATION Survey File # 3445 ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY OF ALBION N.Y. NOP SITE" Drawing D-61532-W Dated: July 1990

20 0 20 40
SCALE 1" = 20'

FIGURE - 6

Stearns & Wheler, LLC

NIAGARA MOHAWK POWER CORPORATION
A NATIONAL GRID COMPANY
REMEDIAL INVESTIGATION (RI)
ALBION FORMER MGP
Village of Albion
Orleans County, New York

EXCEEDANCES mg/kg (ppm) to NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVES for SOILS COLLECTED DURING the REMEDIAL INVESTIGATION

DATE 11/2003 JOB No.: L00046

PER SURVEY BY S.Y. KIM

N

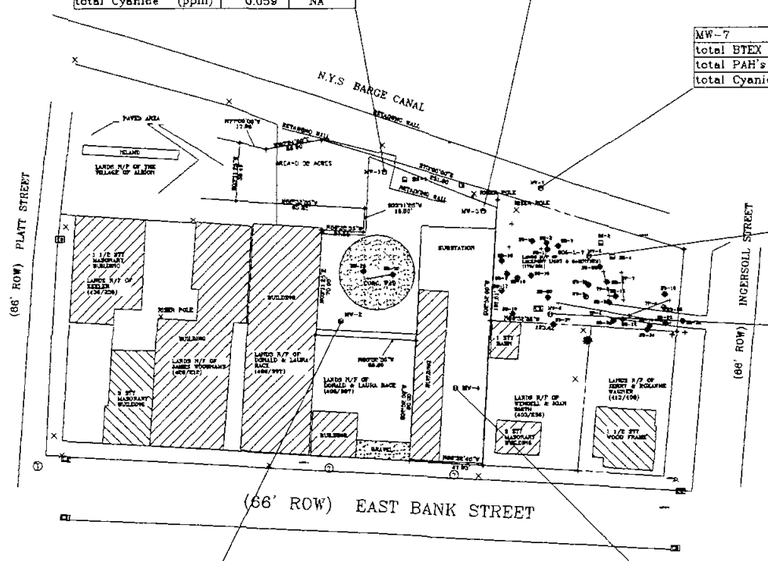
MW-1		Dec 1999	Jun 2001
total BTEX	(ppb)	ND	ND
total PAH's	(ppb)	ND	ND
total Cyanide	(ppm)	0.059	NA

MW-3		Dec 1999	Jun 2001
total BTEX	(ppb)	ND	ND
total PAH's	(ppb)	ND	ND
total Cyanide	(ppm)	0.475	NA

MW-7		Dec 1999	Jun. 2001
total BTEX	(ppb)	NA	ND
total PAH's	(ppb)	NA	ND
total Cyanide	(ppm)	NA	NA

MW-5		Dec 1999	Jun. 2001
total BTEX	(ppb)	332.0	334.0
total PAH's	(ppb)	94.0	109.0
total Cyanide	(ppm)	0.27	NA

MW-6		Dec. 1999	Jun 2001
total BTEX	(ppb)	ND	ND
total PAH's	(ppb)	ND	ND
total Cyanide	(ppm)	0.078	NA



MW-2		Dec 1999	Jun. 2001
total BTEX	(ppb)	ND	ND
total PAH's	(ppb)	ND	ND
total Cyanide	(ppm)	0.043	NA

MW-4		Dec. 1999	Jun 2001
total BTEX	(ppb)	0.2	ND
total PAH's	(ppb)	0.2	ND
total Cyanide	(ppm)	ND	NA

REFERENCE:

1: SURVEY MAP PREPARED BY S.Y. KIM LAND SURVEOR P.C ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY OF ALBION N.Y. MGP SITE" JOB #50-203-90 DATED 2/8/91

2 NAGARA MOHAWK POWER CORPORATION Survey File # 3445 ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY OF ALBION N.Y. MGP SITE" Drawing D-61532-W Dated: July, 1996

LEGEND.

- SOIL BORING
- SOIL SAMPLE
- MONITORING WELL
- UTILITY POLE
- IRON PIPE
- GAS VALVE
- WATER VALVE
- FIRE HYDRANT
- CATCH BASIN
- TELEPHONE MAN HOLE
- UNKNOWN MAN HOLE
- VAULT

NA - NOT ANALYZED
ND - NOT DETECTED

FIGURE - 7

Stearns & Wheler, LLC
Environmental Engineers and Scientists

NIAGARA MOHAWK POWER CORPORATION
A NATIONAL GRID COMPANY
REMEDIAL INVESTIGATION (RI)
ALBION FORMER MGP
Village of Albion
Orleans County, New York

TOTAL BTEX (ppb), TOTAL PAH's, (ppb) and TOTAL CYANIDE (ppm) for GROUNDWATER COLLECTED DURING the REMEDIAL INVESTIGATION

DATE: 11/2003 JOB No.: L19946

NYS BARGE CANAL

MW-1
MW-7
MW-3
Property Boundary
SB-1
SS-3
SB-2
SB-7
SS-1R
SB-11
SS-2
SS-4
SB-16
MW-5
SB-28
SB-9
SB-18
SB-10
SB-4
SB-21
SB-13
SB-15
SB-17
SB-20
SB-8
SB-3
SB-25
SB-19
CB-1
MW-6
SB-27
SB-26
SB-12
SB-22
SB-24
SB-14
SB-23
SB-29
SB-30
MW-2
MW-4
INGERSOLL STREET

Legend:

- ⊕ - Soil Boring Sample
- △ - Surface Soil Sample
- ⊗ - Monitoring Well
- ● - Visible CLM/ALM

0 25 50 FT

Site schematic based on site survey map - Niagara Mohawk Survey File Ref. 3445

Stearns & Wheler Companies

DATE: 9/03 JOB # L10046.11

NIAGARA MOHAWK/
NATIONAL GRID
ALBION FORMER MGP SITE

FIGURE 8 – Locations of Cinder-Like/Ash-Like Material (CLM/ALM)

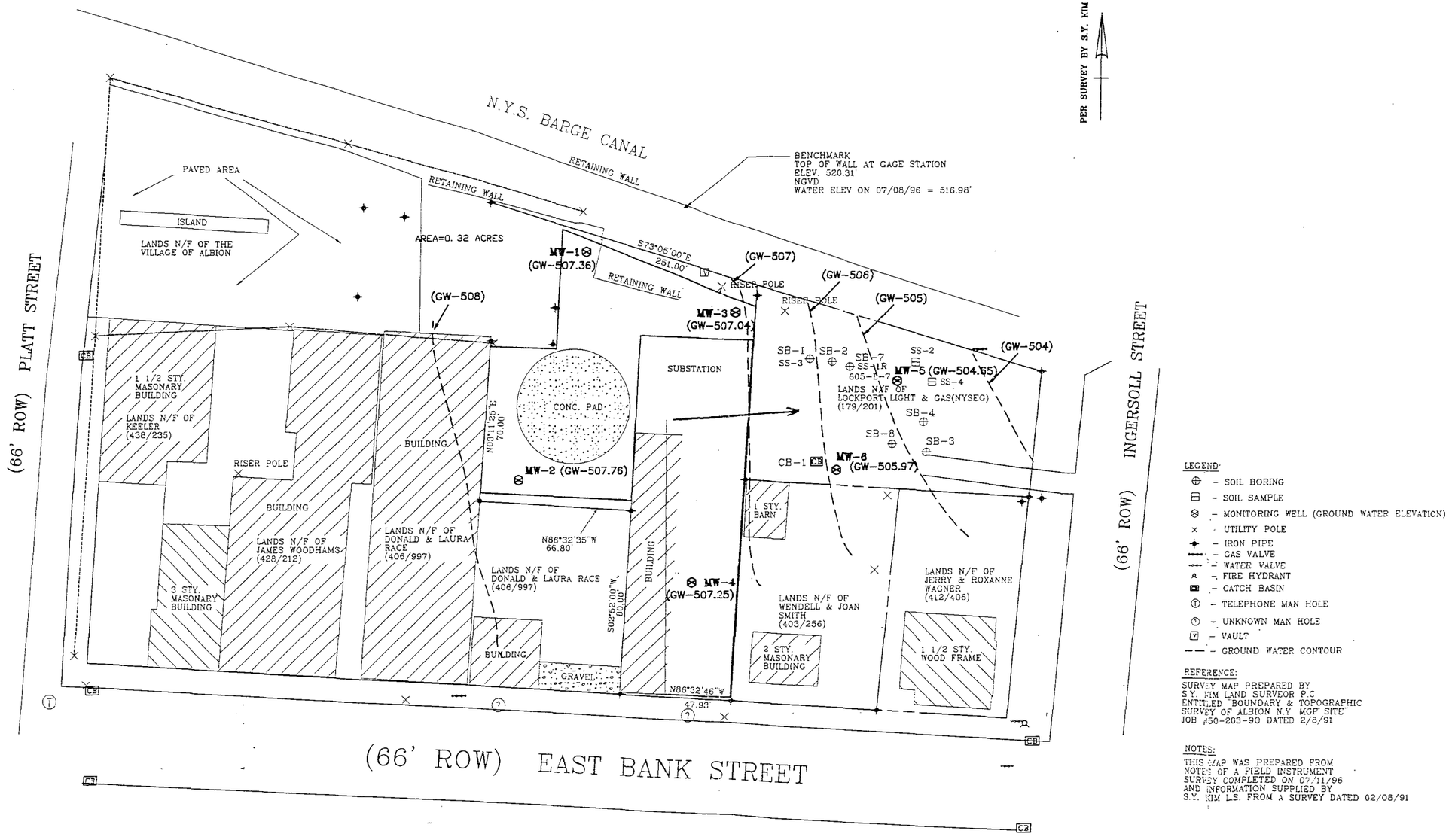
APPENDICES

APPENDIX A

Phase I and II PSA/IRM Results

APPENDIX A-1

PHASE I PSA
2000



LEGEND:

- ⊕ – SOIL BORING
- ⊟ – SOIL SAMPLE
- ⊗ – MONITORING WELL (GROUND WATER ELEVATION)
- × – UTILITY POLE
- ✦ – IRON PIPE
- ⋯ – GAS VALVE
- ⋯ – WATER VALVE
- A – FIRE HYDRANT
- CB – CATCH BASIN
- T – TELEPHONE MAN HOLE
- ? – UNKNOWN MAN HOLE
- V – VAULT
- – – – GROUND WATER CONTOUR

REFERENCE:

SURVEY MAP PREPARED BY S.Y. KIM LAND SURVEYOR P.C ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY OF ALBION N.Y. MGP SITE" JOB #50-203-90 DATED 2/8/91

NOTES:

THIS MAP WAS PREPARED FROM NOTES OF A FIELD INSTRUMENT SURVEY COMPLETED ON 07/11/96 AND INFORMATION SUPPLIED BY S.Y. KIM L.S. FROM A SURVEY DATED 02/08/91

SURVEY FILE REF. NO. 3445

50 0 50 100

1"=50'-0"

Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS
CAZENOVIA, NEW YORK

DATE:03/00 JOB No.:90211 10

NIAGARA MOHAWK

ALBION MGP SITE

FIGURE 5-1
GROUNDWATER CONTOURS

X-REF: NAMES? 00/03 CA/ CDC M:\90211\01\90211101.DWG

TABLE 5-1
NMPC Albion
Groundwater Elevation Data
Stearns & Wheler

Well I.D.	Ground Elevation (ft)	Reference Point	Reference Elev (ft)	Depth to Water (ft)	Water Elevevation (ft)	Total Depth (ft)	Screen Elevation (ft.)	Hydraulic Conductivity (ft/min.)	Hydraulic Conductivity (ft/day)	Seepage Velocity (ft/day)
MW-1	513.60	Top of PVC	515.97	8.61	507.36	18.10	495.50	NA	NA	NA
MW-2	514.10	Top of PVC	516.42	8.66	507.76	15.90	498.20	NA	NA	NA
MW-3	514.00	Top of PVC	516.26	9.22	507.04	18.20	495.80	NA	NA	NA
MW-4	514.60	Top of PVC	516.90	9.65	507.25	17.80	496.80	NA	NA	NA
MW-5	514.30	Top of PVC	514.06	9.41	504.65	16.50	497.80	2.340E-03	3.37	4.55E-01
MW-6	512.17	Top of PVC	511.63	5.66	505.97	15.40	496.77	4.110E-04	0.59	7.99E-02

Water levels recorded on Dec. 16, 1999

Seepage velocity estimate based on hydraulic gradient = 0.27 and porosity = 0.2

TABLE 5.2 (a)
Soil Boring Analytical Results
Volatile Organic Compounds (VOCs)
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**NYSDEC Soil Cleanup Objective (ppb)	SB-1 12-14'	SB-2 12-14'	SB-3 12-14'	SB-4 12-14'	SB-5 (MW-5) 12-14'	SB-6 (MW-6) 4-6'	SB-7 10-12'	SB-8 14-16'
Chloromethane	NA	U	U	U	U	U	U	U	U
Bromomethane	NA	U	U	U	U	U	U	U	U
Vinyl Chloride	200	U	U	U	U	U	U	U	U
Chloroethane	1900	U	U	UJ	UJ	UJ	U	U	U
Methylene Chloride	100	U	U	U	U	U	U	U	U
Acetone	200	U	U	U	U	U	U	U	U
Carbon Disulfide	2700	110 J	U	0.9 J	U	U	U	U	U
1,1-Dichloroethene	400	U	340 J	U	U	U	U	U	U
1,1-Dichloroethane	100	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	300	U	U	U	U	U	U	U	U
Chloroform	300	U	U	U	U	U	U	U	U
1,2-Dichloroethane	100	U	U	U	U	U	U	U	U
2-Butanone	300	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	800	U	U	U	U	U	U	U	U
Carbon Tetrachloride	600	U	U	U	U	U	U	U	U
Bromodichloromethane	NA	U	U	U	U	U	U	U	U
1,2-Dichloropropane	NA	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	NA	U	U	U	U	U	U	U	U
Trichloroethene	700	69 J	390 J	2 J	U	0.6 J	0.7 J	0.6 J	U
Dibromochloromethane	NA	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	NA	U	U	U	U	U	U	U	U
Benzene	60	760 * J	1400 * J	1 J	U	0.7 J	U	4 J	U
trans-1,3-Dichloropropene	NA	U	U	U	U	U	U	U	U
Bromoform	NA	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	1000	U	U	U	U	U	U	U	U
2-Hexanone	NA	U	U	U	U	U	U	U	U
Tetrachloroethene	1400	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	600	U	U	U	U	U	U	U	U
Toluene	1500	560 J	1600 * J	U	U	U	0.6 J	8 J	U
Chlorobenzene	1700	U	500 J	U	U	U	U	U	U
Ethylbenzene	5500	520 J	3200 J	1 J	U	0.2 J	U	0.8 J	U
Styrene	NA	U	U	U	U	U	U	U	U
Xylene (total)	1200	2900 * J	20000 * J	1 J	U	0.3 J	U	8 J	U
Total VOCs		4919	27430	5.9	0	1.8	1.3	21.4	0

** "Determination of Soil Cleanup Objectives and Cleanup Levels, NYSDEC, Div of Haz Waste Remediation; Div. of Technical and Administrative Guidance Memorandum HWR-92-4046, rev. Jan. 24, 1994" (TAGM 4046).

* Value exceeds NYSDEC soil cleanup objective.

U= Not detected. The associated number indicates approximate sample concentration necessary to be detected.

B= Not detected substantially above the level reported on laboratory or field blanks.

R= Unusable result. Analyte may or may not be present in the sample.

NO CODE= Confirmed identification.

J= Analyte present. Reported Value may not be accurate or precise.

UJ= Not detected. Quantitation limit may be inaccurate or imprecise.

NA= Not Available.

TABLE 5.2 (b)
Soil Boring Analytical Results
Semivolatile Organic Compounds (SVOCs)
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**NYSDEC Soil Cleanup Objective (ppb)	SB-1 12-14'	SB-2 12-14'	SB-3 12-14'	SB-4 12-14'	SB-5 (MW-5) 12-14'	SB-6 (MW-6) 4-6	SB-7 10-12'	SB-8 14-16'
Phenol	30	UJ	71 * J	U	U	U	28 J	U	U
bis(2-Chloroethyl)ether	NA	UJ	U	U	U	U	U	U	U
2-Chlorophenol	800	UJ	U	U	U	U	U	U	U
1,3-Dichlorobenzene	NA	UJ	U	U	U	U	U	U	U
1,4-Dichlorobenzene	NA	UJ	U	U	U	U	U	U	U
1,2-Dichlorobenzene	NA	UJ	U	U	U	U	U	U	U
2-Methylphenol	100	UJ	U	U	U	U	U	U	U
2,2'-oxybis(1-Chloropropane)	NA	UJ	U	U	U	U	U	U	U
4-Methylphenol	900	UJ	140 * J	U	U	U	56 J	U	U
N-Nitroso-di-n-propylamine	NA	UJ	U	U	U	U	U	U	U
Hexachloroethane	NA	UJ	U	U	U	U	U	U	U
Nitrobenzene	200	UJ	U	U	U	U	U	U	U
Isophorone	4400	UJ	U	U	U	U	U	U	U
2-Nitrophenol	330	UJ	U	U	U	U	U	U	U
2,4-Dimethylphenol	NA	UJ	71 J	U	U	U	U	U	U
bis(2-Chloroethoxy)methane	NA	UJ	U	U	U	U	U	U	U
2,4-Dichlorophenol	400	UJ	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	NA	UJ	U	U	U	U	U	U	U
Naphthalene	13000	46000 * J	5000	13 J	8 J	6 J	170 J	490 J	U
4-Chloroaniline	220	UJ	U	U	U	U	U	U	U
Hexachlorobutadiene	NA	UJ	U	U	U	U	U	U	U
4-Chloro-3-methylphenol	240	UJ	U	U	U	U	U	U	U
2-Methylnaphthalene	4400	5700 * J	590 J	U	U	U	250 J	130 J	U
Hexachlorocyclopentadiene	NA	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2,4,6-Trichlorophenol	NA	UJ	U	U	U	U	U	U	U
2,4,5-Trichlorophenol	100	UJ	U	U	U	U	U	U	U
2-Chloronaphthalene	NA	UJ	U	U	U	U	U	U	U
2-Nitroaniline	430	UJ	U	U	U	U	U	U	U
Dimethylphthalate	2000	UJ	U	U	U	U	U	U	U
Acenaphthylene	41000	5100 J	1700	46 J	U	12 J	440 J	2600	9 J
2,6-Dinitrotoluene	1000	UJ	U	U	U	U	U	U	U
3-Nitroaniline	500	UJ	U	U	U	U	U	U	U
Acenaphthene	50000	1800 J	810 J	12 J	75 J	U	160 J	210 J	U
2,4-Dinitrophenol	200	UJ	R	R	R	R	U	U	R
4-Nitrophenol	100	UJ	U	U	U	U	UJ	UJ	U
Dibenzofuran	6200	6400 * UJ	2200	28 J	U	U	310 J	260 J	U
2,4-Dinitrotoluene	NA	UJ	U	U	U	U	U	U	U
Diethylphthalate	7100	UJ	U	U	U	U	U	U	U
4-Chlorophenyl-phenylether	NA	UJ	U	U	U	U	U	U	U
Fluorene	50000	8900 J	3100	37 J	110 J	10 J	460 J	480 J	U
4-Nitroaniline	NA	UJ	U	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol	NA	UJ	R	R	R	R	U	U	R
N-Nitrosodiphenylamine (1)	NA	UJ	U	U	U	U	U	U	U
4-Bromophenyl-phenylether	NA	UJ	U	U	U	U	U	U	U
Hexachlorobenzene	410	UJ	U	U	U	U	U	U	U
Pentachlorophenol	1000	UJ	U	U	U	U	U	U	U
Phenanthrene	50000	28000 J	10000	U	U	U	2500	5400	U
Anthracene	50000	9100 J	3700	100 J	19 J	19 J	1200	2600	18 J
Carbazole	NA	3800 J	1500 J	10 J	U	U	330 J	440 J	U
Di-n-butylphthalate	8100	UJ	U	U	U	U	U	U	U
Fluoranthene	50000	22000 J	9900	600	U	U	3500	13000	U
Pyrene	50000	18000 J	9600	570	U	U	3600	13000	U
Butylbenzylphthalate	50000	UJ	U	U	U	U	42 J	U	U
3,3'-Dichlorobenzidine	NA	UJ	U	U	U	U	U	U	U
Benzo(a)anthracene	220	10000 * J	5600 *	360 * J	26 J	26 J	3400 *	9400 *	57 J
Chrysene	400	9500 * J	5000 *	340 J	21 J	24 J	3000 *	7900 *	52 J
bis(2-Ethylhexyl)phthalate	50000	UJ	U	1300	U	U	U	U	U
Di-n-octylphthalate	50000	UJ	U	U	U	U	U	U	U
Benzo(b)fluoranthene	1100	6300 * J	3600 *	240 J	13 J	17 J	3200 *	6100 *	37 J
Benzo(k)fluoranthene	1100	6200 * J	3900 *	310 J	9 J	16 J	2000 *	5900 *	44 J
Benzo(a)pyrene	60	7300 * J	5000 *	340 * J	13 J	20 J	3300 *	7300 *	46 J
Indeno(1,2,3-cd)pyrene	3200	3800 * J	3300 *	180 J	U	10 J	2700	4900 *	23 J
Dibenz(a,h)anthracene	10	1400 * J	1200 * J	70 * J	U	U	990 *	1800 * J	9 J
Benzo(g,h,i)perylene	50000	3700 J	3500	190 J	9 J	11 J	2900	5500	24 J
Total SVOCs		203000	74200	4746	303	171	34536	87410	319

** "Determination of Soil Cleanup Objectives and Cleanup Levels, NYSDEC, Div. of Haz. Waste Remediation; Div. of Technical and Administrative Guidance Memorandum HWR-92-4046, rev Jan. 24, 1994" (TAGM 4046)

* Value exceeds NYSDEC soil cleanup objective.

U= Not detected. The associated number indicates approximate sample concentration necessary to be detected.

B= Not detected substantially above the level reported on laboratory or field blanks.

R= Unusable result. Analyte may or may not be present in the sample.

NO CODE= Confirmed identification.

J= Analyte present. Reported Value may not be accurate or precise.

UJ= Not detected. Quantitation limit may be inaccurate or imprecise.

NA= Not Available.

TABLE 5.2 (c)
Soil Boring Analytical Results
Inorganics/Metals
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppm)	**NYSDEC Soil Cleanup Objective (ppm)	SB-1 12-14'		SB-2 12-14'		SB-3 12-14'		SB-4 12-14'		SB-5 (MW-5) 12-14'		SB-6 (MW-6) 4-6'		SB-7 10-12'		SB-8 14-16'	
Aluminum	NA	7210	J	10100	J	7610	J	7740	J	9370	J	8380	J	7440	UJ	10600	J
Antimony	NA	1.3	UJ	1.5	UJ	1.6	UJ	1.3	UJ	1.4	UJ	1.5	UJ	2.2	UJ	1.2	UJ
Arsenic	7.5	5.7	J	3.9	J	2.3	J	1.7	J	2.4	J	5.4	J	2.4	J	1.5	J
Barium	300	63.4	J	81.1	J	64.2	J	53	J	34.7	J	77.4	J	53.2	J	34	J
Beryllium	0.16	0.19 *	J	0.37 *	J	0.22 *	J	0.21 *	J	0.41 *	J	0.31 *	J	0.21 *	J	0.46 *	J
Cadmium	1	0.18	UJ	0.22	UJ	0.17	UJ	0.18	UJ	0.16	UJ	0.22	UJ	0.21	J	0.18	UJ
Calcium	NA	58400	J	65800	J	49700	J	40100	J	25300	J	7360	J	39400	J	25200	J
Chromium	10	12.1 *	J	14.6 *	J	16.2 *	J	13 *	J	15.9 *	J	13.5 *	J	11.6 *	J	17.3 *	J
Cobalt	20	4.5	J	6.4	J	6.9	J	7.3	J	10	J	5.4	J	5	J	9.8	J
Copper	25	19.3	J	36.1 *	J	15	J	7.6	J	13.8	J	9.4	J	10	J	4.1	J
Iron	2000	22100 *	J	17400 *	J	17200 *	J	17000 *	J	23000 *	J	14200 *	J	12800 *	J	24700 *	J
Lead	NA	376.	J	47.4	J	6.8	J	3.6	J	2.4	J	20.4	J	17	J	2.4	J
Magnesium	NA	23100	J	10400	J	10600	J	9300	J	7200	J	2940	J	9180	J	7840	J
Manganese	NA	921.	J	480.	J	535	J	555	J	434	J	278	J	415	J	432	J
Mercury	0.1	0.15 *	J	0.89 *	J	0.24 *	J	0.62 *	J	0.013	J	1.4 *	J	0.68 *	J	0.34 *	J
Nickel	13	11.2	J	15.0 *	J	16 *	J	15.8 *	J	23.7 *	J	11.2	J	10.5	J	23.6 *	J
Potassium	NA	824.	J	2310	J	1440	J	1420	J	1460	J	1140	J	1660	J	2040	J
Selenium	2	0.92	UJ	1.1	UJ	0.91	J	1.4	J	1.1	J	1.1	UJ	1	UJ	1.3	J
Silver	NA	0.18	UJ	0.22	UJ	0.17	UJ	0.18	UJ	0.16	UJ	0.22	UJ	0.21	UJ	0.18	UJ
Sodium	NA	211.	UJ	504.	J	211	UJ	194	UJ	132	UJ	188	UJ	274	UJ	140	UJ
Thallium	NA	1.8	UJ	2.2	UJ	1.7	UJ	1.8	UJ	1.6	UJ	2.2	UJ	2.1	UJ	1.8	UJ
Vanadium	150	13.3	J	18.9	J	18.5	J	18.8	J	18.3	J	19.6	J	15.3	J	21.2	J
Zinc	20	45.0 *	J	50.0 *	J	38.6 *	J	39 *	J	47.4 *	J	40 *	J	39.9 *	J	45.8 *	J
Cyanide	NA	2.06		12				1.04			U	3.15			U		U
TOC	NA	18200	J	10900	J	4200	J	4140	J	1700	J	23200	J	6590	J	2060	J

** *"Determination of Soil Cleanup Objectives and Cleanup Levels, NYSDEC, Div. of Haz. Waste Remediation; Div. of Technical and Administrative Guidance Memorandum HWR-92-4046, rev. Jan. 24, 1994" (TAGM 4046).*

* *Value exceeds NYSDEC soil cleanup objective.*

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NO CODE= *Confirmed identification.*

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NA= *Not Available.*

SB= *Site Background*

TABLE 5.2 (d)
Soil Boring Analytical Results
Pesticide Organics & PCBs
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**NYSDEC Soil Cleanup Objective (ppb)	SB-1 12-14'	SB-2 12-14'	SB-3 12-14'	SB-4 12-14'	SB-5 (MW-5) 12-14'	SB-6 (MW-6) 4-6'	SB-7 10-12'	SB-8 14-16'
alpha-BHC	110	UJ	1.2 J	U	U	U	UJ	UJ	U
beta-BHC	200	UJ	U	U	U	U	UJ	UJ	U
delta-BHC	300	UJ	4.2 J	0.37 J	U	0.31 J	UJ	UJ	0.51 J
gamma-BHC (Lindane)	60	UJ	U	U	U	U	UJ	UJ	U
Heptachlor	100	UJ	U	U	U	U	UJ	UJ	U
Aldrin	41	UJ	U	U	U	U	UJ	UJ	U
Heptachlor Epoxide	20	UJ	U	U	U	U	UJ	UJ	U
Endosulfan I	900	UJ	U	U	U	U	UJ	UJ	U
Dieldrin	44	UJ	2.6 J	U	U	U	UJ	UJ	U
4,4'-DDE	2100	UJ	U	U	U	U	UJ	UJ	U
Endrin	100	UJ	3 J	U	U	U	UJ	UJ	U
Endosulfan II	900	UJ	U	U	U	U	UJ	UJ	U
4,4'-DDD	2900	UJ	U	U	U	U	UJ	UJ	U
Endosulfan Sulfate	1000	UJ	U	U	U	U	UJ	UJ	U
4,4'-DDT	2100	UJ	6.6 J	U	U	U	UJ	UJ	U
Methoxychlor	***	UJ	U	U	U	U	UJ	UJ	U
Endrin Ketone	NA	UJ	U	U	U	U	UJ	UJ	6.7 J
Endrin Aldehyde	NA	UJ	U	U	U	U	UJ	UJ	U
alpha-Chlordane	NA	UJ	U	U	U	U	UJ	UJ	U
gamma-Chlordane	NA	UJ	2.5 J	U	U	U	UJ	UJ	U
Toxaphene	NA	UJ	U	U	U	U	UJ	UJ	U
Aroclor-1016	NA	UJ	U	U	U	U	UJ	UJ	U
Aroclor-1221	NA	UJ	U	U	U	U	UJ	UJ	U
Aroclor-1232	NA	UJ	U	U	U	U	UJ	UJ	U
Aroclor-1242	NA	UJ	U	U	U	U	UJ	UJ	U
Aroclor-1248	NA	UJ	U	U	U	U	UJ	UJ	U
Aroclor-1254	NA	UJ	U	U	U	U	UJ	UJ	U
Aroclor-1260	NA	UJ	U	U	U	U	UJ	UJ	U
Total Aroclor	1000								

** "Determination of Soil Cleanup Objectives and Cleanup Levels, NYSDEC, Div. of Haz Waste Remediation; Div of Technical and Administralive Guidance Memorandum HWR-92-4046, rev. Jan. 24, 1994" (TAGM 4046).

* Value exceeds NYSDEC soil cleanup objective.

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SB= Site Background.

TABLE 5.3 (a)
Groundwater Analytical Results
Volatile Organic Compounds (VOCs)
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**Class GA Standard (ppb)	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Chloromethane	NA	U	U	U	U	U	U
Bromomethane	5	U	U	U	0.4 J	U	U
Vinyl Chloride	2	U	U	U	U	U	U
Chloroethane	5	U	U	U	U	U	U
Methylene Chloride	5	U	U	U	U	U	U
Acetone	50	UJ	UJ	UJ	U	4 J	UJ
Carbon Disulfide	NA	UJ	UJ	UJ	U	U	UJ
1,1-Dichloroethene	5	U	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U	U
1,2-Dichloroethene (total)	NA	U	U	U	U	U	U
Chloroform	7	U	U	U	U	U	U
1,2-Dichloroethane	0.6	U	U	U	U	U	U
2-Butanone	NA	U	U	U	U	7 J	U
1,1,1-Trichloroethane	5	U	U	U	U	U	2 J
Carbon Tetrachloride	5	U	U	U	U	U	U
Bromodichloromethane	50	U	U	U	U	U	U
1,2-Dichloropropane	1	U	U	U	U	U	U
cis-1,3-Dichloropropene	0.4	U	U	U	U	U	U
Trichloroethene	5	U	U	U	U	U	U
Dibromochloromethane	50	U	U	U	U	U	U
1,1,2-Trichloroethane	1	U	U	U	U	U	U
Benzene	1	U	U	U	U	210 *	U
trans-1,3-Dichloropropene	0.4	U	U	U	U	U	U
Bromoform	50	U	U	U	U	U	U
4-Methyl-2-Pentanone	NA	U	U	U	U	U	U
2-Hexanone	50	U	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U	U
Toluene	5	U	U	U	U	42 *	U
Chlorobenzene	5	U	U	U	U	U	U
Ethylbenzene	5	U	U	U	U	8 * J	U
Styrene	5	U	U	U	U	U	U
Xylene (total)	5	U	U	U	0.2 J	72 *	U
Total VOCs		0	0	0	0.6	343	2

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NA= *Not Available.*

TABLE 5.3 (b)
Groundwater Analytical Results
Semivolatile Organic Compounds (SVOCs)
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**Class GA Standard (ppb)	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Phenol	1	U	U	U	U	5 * J	U
bis(2-Chloroethyl)ether	NA	U	U	U	U	U	U
2-Chlorophenol	NA	U	U	U	U	U	U
1,3-Dichlorobenzene	3	U	U	U	U	U	U
1,4-Dichlorobenzene	3	U	U	U	U	U	U
1,2-Dichlorobenzene	3	U	U	U	U	U	U
2-Methylphenol	NA	U	U	U	U	2 J	U
2,2'-oxybis(1-Chloropropane)	NA	U	U	U	U	U	U
4-Methylphenol	NA	U	U	U	U	0.7 J	U
N-Nitroso-di-n-propylamine	NA	U	U	U	U	U	U
Hexachloroethane	5	U	U	U	U	U	U
Nitrobenzene	0.4	U	U	U	U	U	U
Isophorone	50	U	U	U	U	U	U
2-Nitrophenol	NA	U	U	U	U	U	U
2,4-Dimethylphenol	50	U	U	U	U	20	U
bis(2-Chloroethoxy)methane	NA	U	U	U	U	U	U
2,4-Dichlorophenol	5	U	U	U	U	U	U
1,2,4-Trichlorobenzene	5	U	U	U	U	U	U
Naphthalene	10	U	U	U	U	18 *	U
4-Chloroaniline	5	U	U	U	U	U	U
Hexachlorobutadiene	0.5	U	U	U	U	U	U
4-Chloro-3-methylphenol	NA	U	U	U	U	U	U
2-Methylnaphthalene	NA	U	U	U	0.5 J	0.4 J	U
Hexachlorocyclopentadiene	5	R	R	R	R	R	R
2,4,6-Trichlorophenol	NA	U	U	U	U	U	U
2,4,5-Trichlorophenol	NA	U	U	U	U	U	U
2-Chloronaphthalene	10	U	U	U	U	U	U
2-Nitroaniline	5	U	U	U	U	U	U
Dimethylphthalate	50	U	U	U	U	U	U
Acenaphthylene	NA	U	U	U	U	29	U
2,6-Dinitrotoluene	5	U	U	U	U	U	U
3-Nitroaniline	5	U	U	U	U	U	U
Acenaphthene	20	U	U	U	U	19	U
2,4-Dinitrophenol	10	UJ	UJ	UJ	UJ	UJ	UJ
4-Nitrophenol	NA	UJ	U	U	U	U	UJ
Dibenzofuran	NA	U	U	U	U	20	U
2,4-Dinitrotoluene	5	U	U	U	U	U	U
Diethylphthalate	50	U	U	U	U	U	U
4-Chlorophenyl-phenylether	NA	U	U	U	U	U	U
Fluorene	50	U	U	U	U	18	U
4-Nitroaniline	5	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol	NA	U	UJ	UJ	UJ	UJ	U
N-Nitrosodiphenylamine (1)	50	U	U	U	U	U	U
4-Bromophenyl-phenylether	NA	U	U	U	U	U	U
Hexachlorobenzene	0.04	U	U	U	U	U	U
Pentachlorophenol	1	U	U	U	U	U	U
Phenanthrene	50	U	U	U	U	6 J	U
Anthracene	50	U	U	U	U	2 J	U
Carbazole	NA	U	U	U	U	25	U
Di-n-butylphthalate	NA	U	U	U	U	U	U
Fluoranthene	50	U	U	U	U	1 J	U
Pyrene	50	U	U	U	U	0.6 J	U
Butylbenzylphthalate	50	U	U	U	U	U	U
3,3'-Dichlorobenzidine	5	U	U	U	U	U	U
Benzo(a)anthracene	0.002	U	U	U	U	U	U
Chrysene	0.002	U	U	U	U	U	U
bis(2-Ethylhexyl)phthalate	NA	U	U	U	U	U	U
Di-n-octylphthalate	NA	U	U	U	U	U	U
Benzo(b)fluoranthene	0.002	U	U	U	U	U	U
Benzo(k)fluoranthene	0.002	U	U	U	U	U	U
Benzo(a)pyrene	NA	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.002	U	U	U	U	U	U
Dibenz(a,h)anthracene	NA	U	U	U	U	U	U
Benzo(g,h,i)perylene	NA	U	U	U	U	U	U
Total SVOCs		0	0	0	0.5	166.7	0

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NA= *Not Available.*

TABLE 5.3 (c)
Groundwater Analytical Results
Inorganics/Metals
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**Class GA Standard (ppb)	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6	
Aluminum	NA	6890	R	4500	R	695	R	1630	R	10300	R	2710	R
Antimony	3		U		U		U		U		U		U
Arsenic	25		U		U	4	B		U	5	B	5.7	B
Barium	1000	304	J	128	J	58.7	J	69.7	J	171	J	88.8	J
Beryllium	3		U		U		U		U		U		U
Cadmium	5		U		U		U		U		U		U
Calcium	NA	135000		110000		89200		58500		149000		98000	
Chromium	50	7	B	5 8	B		U	2.2	B	13.3		4.3	B
Cobalt	NA	10.5	B	4 2	B		U		U	10.4	B		U
Copper	200	23.5	B	9 6	B		U		U	24.1	B		U
Iron	300	10500 *		7790 *		1340 *		2950 *		19400 *		4200 *	
Lead	25	5.7	J	4.2	J		U	4.4	J		U		U
Magnesium	35000	28400		13900		17400		15900		66200 *		27000	
Manganese	300	6980 *		905 *		1190 *		263		931 *		607 *	
Mercury	0.7		U		U		U		U		U		U
Nickel	100	27.2	B	11.8	B		U	5.7	B	24.9	B	7.6	B
Potassium	NA	8690		5370		2770	B	6750		13800		18600	
Selenium	10	8 5	J	10.4 *	J	5	R	5	R	7.2	J	5	R
Silver	50		UJ		UJ	2	UJ		UJ		UJ		UJ
Sodium	20000	94000 *	J	5220	J	14100		26800 *	J	38700 *	J	19600	J
Thallium	0.5	10.0 *	R	10 *	R	10 *	R	10 *	R	10 *	R	10 *	R
Vanadium	NA	10.5	B	7.6	B	2	J	2.5	B	16.2	B	3.5	B
Zinc	2000	55.7		30.7			U	21.2		62.5			U
Tot. Cyanide (ppm)	0.2	0.059		0.043		0.475 *			U	0.27 *		0.078	
TOC (ppm)	NA	5.85		7.3		4.7		6.2		18.3		6.09	

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NA= *Not Available.*

TABLE 5.3(d)
Groundwater Analytical Results
Pesticide Organics & PCBs
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**Class GA Standard (ppb)	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
alpha-BHC	NA	U	U	U	U	UJ	U
beta-BHC	NA	U	U	U	U	UJ	U
delta-BHC	NA	U	U	U	U	0.0088 J	U
gamma-BHC (Lindane)	NA	U	U	U	U	UJ	U
Heptachlor	0.04	U	U	U	U	UJ	U
Aldrin	NA	U	U	U	U	UJ	U
Heptachlor Epoxide	0.03	U	U	U	U	UJ	U
Endosulfan I	NA	U	U	U	U	UJ	U
Dieldrin	0.004	U	U	U	U	UJ	U
4,4'-DDE	NA	U	U	U	U	UJ	U
Endrin	NA	U	U	U	U	UJ	U
Endosulfan II	NA	U	U	U	U	0.02 J	U
4,4'-DDD	NA	U	U	U	U	UJ	U
Endosulfan Sulfate	NA	U	U	U	U	UJ	U
4,4'-DDT	NA	U	U	U	U	UJ	U
Methoxychlor	35	U	U	U	U	UJ	U
Endrin Ketone	5	U	U	U	U	UJ	U
Endrin Aldehyde	5	U	U	U	U	UJ	U
alpha-Chlordane	NA	U	U	U	U	UJ	U
gamma-Chlordane	NA	U	U	U	U	UJ	U
Toxaphene	0.06	U	U	U	U	UJ	U
Aroclor-1016	NA	U	U	U	U	UJ	U
Aroclor-1221	NA	U	U	U	U	UJ	U
Aroclor-1232	NA	U	U	U	U	UJ	U
Aroclor-1242	NA	U	U	U	U	UJ	U
Aroclor-1248	NA	U	U	U	U	UJ	U
Aroclor-1254	NA	U	U	U	U	UJ	U
Aroclor-1260	NA	U	U	U	U	UJ	U

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TABLE 5.4(a)
Surface Soil Sample Analytical Results
Volatile Organic Compounds (VOCs)
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**NYSDEC Soil Cleanup Objective (ppb)	SS-1R		SS-2		SS-3		SS-4		CB-1	
Chloromethane	NA		U		U		U		U		UJ
Bromomethane	NA		U		U		U		U		UJ
Vinyl Chloride	200		U		U		U		U		UJ
Chloroethane	1900		UJ		UJ		UJ		J		UJ
Methylene Chloride	100		U		U		U		U		UJ
Acetone	200		U		U		U		U		UJ
Carbon Disulfide	2700		U		U		U		U		UJ
1,1-Dichloroethene	400		U		U		U		U		UJ
1,1-Dichloroethane	100		U		U		U		U		UJ
1,2-Dichloroethene (total)	300		U		U		U		U		UJ
Chloroform	300		U		U		U		U		UJ
1,2-Dichloroethane	100		U		U		U		U		UJ
2-Butanone	300		U		U		U		U		UJ
1,1,1-Trichloroethane	800		U		U		U		U		UJ
Carbon Tetrachloride	600		U		U		U		U		UJ
Bromodichloromethane	NA		U		U		U		U		UJ
1,2-Dichloropropane	NA		U		U		U		U		UJ
cis-1,3-Dichloropropene	NA		U		U		U		U		UJ
Trichloroethene	700	2	J	2	J	0.4	J	2	J	4	J
Dibromochloromethane	NA		U		U		U		U		UJ
1,1,2-Trichloroethane	NA		U		U		U		U		UJ
Benzene	60	0.3	J		U		U		U	3	J
trans-1,3-Dichloropropene	NA		U		U		U		U		UJ
Bromoform	NA		U		U		U		U		UJ
4-Methyl-2-Pentanone	1000		U		U		U		U		UJ
2-Hexanone	NA		U		U		U		U		UJ
Tetrachloroethene	1400	0.9	J	0.7	J		U	0.8	J	12	J
1,1,2,2-Tetrachloroethane	600		U		U		U		U		UJ
Toluene	1500	0.7	J	0.4	J	0.3	J	0.5	J		UJ
Chlorobenzene	1700		U		U		U		U		UJ
Ethylbenzene	5500	0.3	J		U		U		U		UJ
Styrene	NA		U		U		U		U		UJ
Xylene (total)	1200	0.5	J		U		U		U	1	J
Total VOCs		4.7		3.1		0.7		3.3		20	

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* *Value exceeds NYSDEC soil cleanup objective.*

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R= *Unusable result Analyte may or may not be present in the sample.*

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NA= *Not Available.*

TABLE 5.4(b)
Surface Soil Sample Analytical Results
Semivolatile Organic Compounds (SVOCs)
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**NYSDEC Soil Cleanup Objective (ppb)	SS-1R		SS-2		SS-3		SS-4		CB-1	
Phenol	30		U		U		U		U		UJ
bis(2-Chloroethyl)ether	NA		U		U		U		U		UJ
2-Chlorophenol	800		U		U		U		U		UJ
1,3-Dichlorobenzene	NA		U		U		U		U		UJ
1,4-Dichlorobenzene	NA		U		U		U		U		UJ
1,2-Dichlorobenzene	NA		U		U		U		U		UJ
2-Methylphenol	100		U		U		U		U		UJ
2,2'-oxybis(1-Chloropropane)	NA		U		U		U		U		UJ
4-Methylphenol	900		U		U		U		U		UJ
N-Nitroso-di-n-propylamine	NA		U		U		U		U		UJ
Hexachloroethane	NA		U		U		U		U		UJ
Nitrobenzene	200		U		U		U		U		UJ
Isophorone	4400		U		U		U		U		UJ
2-Nitrophenol	330		U		U		U		U		UJ
2,4-Dimethylphenol	NA		U		U		U		U		UJ
bis(2-Chloroethoxy)methane	NA		U		U		U		U		UJ
2,4-Dichlorophenol	400		U		U		U		U		UJ
1,2,4-Trichlorobenzene	NA		U		U		U		U		UJ
Naphthalene	13000	36	J	10	J	56	J		U		UJ
4-Chloroaniline	220		U		U		U		U		UJ
Hexachlorobutadiene	NA		U		U		U		U		UJ
4-Chloro-3-methylphenol	240		U		U		U		U		UJ
2-Methylnaphthalene	4400	14	J		U	33	J		U	420	J
Hexachlorocyclopentadiene	NA		UJ		UJ		UJ		UJ		UJ
2,4,6-Trichlorophenol	NA		U		U		U		U		UJ
2,4,5-Trichlorophenol	100		U		U		U		U		UJ
2-Chloronaphthalene	NA		U		U		U		U		UJ
2-Nitroaniline	430		U		U		U		U		UJ
Dimethylphthalate	2000		U		U		U		U		UJ
Acenaphthylene	41000	78	J	21	J	230	J	20	J		UJ
2,6-Dinitrotoluene	1000		U		U		U		U		UJ
3-Nitroaniline	500		U		U		U		U		UJ
Acenaphthene	50000	14	J	12	J	49	J		U		UJ
2,4-Dinitrophenol	200		R		R		U		R		UJ
4-Nitrophenol	100		U		U		UJ		U		UJ
Dibenzofuran	6200	19	J		U	52	J		U		UJ
2,4-Dinitrotoluene	NA		U		U		U		U		UJ
Diethylphthalate	7100	9	J		U		U		U		UJ
4-Chlorophenyl-phenylether	NA		U		U		U		U		UJ
Fluorene	50000	33	J	14	J	56	J		U		UJ
4-Nitroaniline	NA		U		U		U		U		UJ
4,6-Dinitro-2-methylphenol	NA		R		R		U		R		UJ
N-Nitrosodiphenylamine (1)	NA		U		U		U		U		UJ
4-Bromophenyl-phenylether	NA		U		U		U		U		UJ
Hexachlorobenzene	410		U		U		U		U		UJ
Pentachlorophenol	1000		U	130	J		U		U		UJ
Phenanthrene	50000		U		U	1200			U		UJ
Anthracene	50000	92	J	50	J	280	J	26	J		UJ
Carbazole	NA	38	J	27	J	220	J	13	J		UJ
Di-n-butylphthalate	8100		U		U		U		U		UJ
Fluoranthene	50000	700		430		2900		230	J		UJ
Pyrene	50000	770		400		2800		220	J		UJ
Butylbenzylphthalate	50000	12	J		U		U		U		UJ
3,3'-Dichlorobenzidine	NA		U		U		U		U		UJ
Benzo(a)anthracene	220	400 *	J	220	J	1600 *		110	J		UJ
Chrysene	400	430 *	J	240	J	1800 *		140	J		UJ
bis(2-Ethylhexyl)phthalate	50000		U		U	790	U		U		UJ
Di-n-octylphthalate	50000		U		U	75	U		U		UJ
Benzo(b)fluoranthene	1100	430	J	240	J	1700 *		120	J		UJ
Benzo(k)fluoranthene	1100	360	J	190	J	1500 *		130	J		UJ
Benzo(a)pyrene	60	420 *	J	220 *	J	1700 *		120 *	J		UJ
Indeno(1,2,3-cd)pyrene	3200	340	J	150	J	1800		83	J		UJ
Dibenz(a,h)anthracene	10	110 *	J	50 *	J	570 *	J	32 *	J		UJ
Benzo(g,h,i)perylene	50000	400	J	190	J	2600		110	J		UJ
Total SVOCs		4705		2594		22011		1354		420	

** *"Determination of Soil Cleanup Objectives and Cleanup Levels, NYSDEC, Div. of Haz. Waste Remediation; Div. of Technical and Administrative Guidance Memorandum HWR-92-4046, rev. Jan. 24, 1994" (TAGM 4046).*

* *Value exceeds NYSDEC soil cleanup objective.*

U= *Not detected. The associated number indicates approximate sample concentration necessary to be detected.*

B= *Not detected substantially above the level reported on laboratory or field blanks.*

R= *Unusable result. Analyte may or may not be present in the sample.*

NO CODE= *Confirmed identification.*

J= *Analyte present. Reported Value may not be accurate or precise.*

UJ= *Not detected. Quantitation limit may be inaccurate or imprecise.*

NA= *Not Available.*

TABLE 5.4 (c)
Surface Soil Sample Analytical Results
Inorganics/Metals
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppm)	**NYSDEC Soil Cleanup Objective (ppm)	SS-1R		SS-2		SS-3		SS-4		CB-1	
Aluminum	NA	8600	J	9000	J	2060	J	8000	J	4860	J
Antimony	NA	1 8	UJ	1.3	UJ	1.1	UJ	1.3	UJ	1.7	UJ
Arsenic	7.5	3	J	3.1	J	4	J	3.7	J	6.2	J
Barium	300	60.3	J	52	J	20	J	47.4	J	64.8	J
Beryllium	0.16	0.3 *	J	0.27 *	J	0.16	UJ	0.23 *	J	0.24 *	UJ
Cadmium	1	0.18	UJ	0.18	UJ	0.56	J	0.18	UJ	1	J
Calcium	NA	30000	J	9360	J	155000	J	5930	J	89400	J
Chromium	10	12.7 *	J	12.5 *	J	7.4	J	13.7 *	J	11.2 *	J
Cobalt	20	5.7	J	5.6	J	2	J	5.5	J	4.5	J
Copper	25	17 8	J	16.3	J	31.8 *	J	15.1	J	42 *	J
Iron	2000	14800 *	J	14400 *	J	9240 *	J	14700 *	J	14900 *	J
Lead	NA	61.1	J	30.9	J	82.7	J	31	J	177	J
Magnesium	NA	9370	J	4160	J	45100	J	3360	J	52600	J
Manganese	NA	480	J	492	J	335	J	510	J	542	J
Mercury	0 1	20.2 *	J	0.052	J	0.0032	UJ	0.0071	J	6.6 *	J
Nickel	13	12.7	J	11.9	J	5.8	J	11.6	J	11.5	J
Potassium	NA	1340	J	1210	J	743	J	851	J	973	J
Selenium	2	0.97	J	1.3	J	0.78	UJ	1.1	J	1.6	J
Silver	NA	0.18	UJ	0.18	UJ	0.16	UJ	0.18	UJ	0 24	UJ
Sodium	NA	225	UJ	124	UJ	265	UJ	114	UJ	292	UJ
Thallium	NA	1.8	UJ	1.8	UJ	1.6	UJ	1.8	UJ	2.4	UJ
Vanadium	150	18	J	18	J	6.3	J	17.3	J	10 8	J
Zinc	20	91 5 *	J	72.3 *	J	80.6 *	J	57.3 *	J	166 *	J
Cyanide	NA	0.68			U		U	0.6		1.9	
TOC	NA	24400	J	18200	J	36400	J	14700	J	110000	J

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* *Value exceeds NYSDEC soil cleanup objective.*

U= *Not detected. The associated number indicates approximate sample concentration necessary to be detected.*

B= *Not detected substantially above the level reported on laboratory or field blanks.*

R= *Unusable result. Analyte may or may not be present in the sample.*

NO CODE= *Confirmed identification.*

J= *Analyte present. Reported Value may not be accurate or precise.*

UJ= *Not detected. Quantitation limit may be inaccurate or imprecise.*

NA= *Not Available.*

SB= *Site Background.*

TABLE 5.4(d)
Surface Soil Sample Analytical Results
Pesticide Organics & PCBs
NMPC Albion-PSA/IRM
Stearns & Wheler, LLC

Analyte (ppb)	**NYSDEC Soil Cleanup Objective (ppb)	SS-1R	SS-2	SS-3	SS-4	CB-1
alpha-BHC	110	UJ	U	UJ	UJ	UJ
beta-BHC	200	UJ	U	UJ	UJ	UJ
delta-BHC	300	UJ	1.9 J	UJ	0.68 J	UJ
gamma-BHC (Lindane)	60	UJ	U	UJ	UJ	UJ
Heptachlor	100	UJ	U	UJ	UJ	UJ
Aldrin	41	UJ	U	UJ	UJ	UJ
Heptachlor Epoxide	20	UJ	U	UJ	UJ	UJ
Endosulfan I	900	UJ	U	UJ	UJ	UJ
Dieldrin	44	UJ	U	UJ	UJ	4.1 UJ
4,4'-DDE	2100	UJ	16 J	UJ	2.2 J	20 UJ
Endrin	100	UJ	2.0 J	UJ	0.5 J	UJ
Endosulfan II	900	UJ	1.2 J	UJ	UJ	UJ
4,4'-DDD	2900	UJ	1.6 J	UJ	UJ	UJ
Endosulfan Sulfate	1000	UJ	U	UJ	UJ	UJ
4,4'-DDT	2100	UJ	11.0 J	UJ	2.3 J	11.1 UJ
Methoxychlor	***	UJ	U	UJ	UJ	36 UJ
Endrin Ketone	NA	UJ	U	UJ	UJ	UJ
Endrin Aldehyde	NA	UJ	U	UJ	UJ	UJ
alpha-Chlordane	NA	UJ	U	UJ	UJ	UJ
gamma-Chlordane	NA	UJ	U	UJ	UJ	UJ
Toxaphene	NA	UJ	U	UJ	UJ	UJ
Aroclor-1016	NA	UJ	U	UJ	UJ	UJ
Aroclor-1221	NA	UJ	U	UJ	UJ	UJ
Aroclor-1232	NA	UJ	U	UJ	UJ	UJ
Aroclor-1242	NA	UJ	U	UJ	UJ	UJ
Aroclor-1248	NA	UJ	U	UJ	UJ	UJ
Aroclor-1254	NA	UJ	U	UJ	UJ	UJ
Aroclor-1260	NA	UJ	18 J	UJ	UJ	UJ
Total Aroclor	1000					

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* *Value exceeds NYSDEC soil cleanup objective.*

U= *Not detected. The associated number indicates approximate sample concentration necessary to be detected.*

B= *Not detected substantially above the level reported on laboratory or field blanks.*

R= *Unusable result. Analyte may or may not be present in the sample.*

NO CODE= *Confirmed identification.*

J= *Analyte present. Reported Value may not be accurate or precise.*

UJ= *Not detected. Quantitation limit may be inaccurate or imprecise.*

NA= *Not Available.*

SB= *Site Background.*

Boring/Well ID:	SB-1

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Boring Location:	
Start Date & Time:	11/30/99 - 7:30
Finish Date & Time:	11/30/99 - 11:10
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Drilling Method:	Hollow Stem Auger
Weather:	Cold Light Flurries

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	16.7
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1	8,9							1	
2	8,6	1.5		6			Rocks some fines dark stain and petroleum odor	2	
3	6,5						dark stained SILT some clay, little rock fragments	3	
4	6,5	4		12			petroleum odor	4	
5	2,1							5	
6	1,1	4.2		12				6	
7	12,13							7	
8	18,24	1.3		2			wet Same as Above (SAA)	8	
9	8,12							9	▼
10	31,16	2.3		3			SAA with faint seen on liquid, strong odor	10	
11	12,15						SAA many rock frags. Sheen, strong odor	11	
12	50/.4	98		15			turning to red brown SILT some fine/coarse sand	12	
13								13	
14		120		18			black SILT and fine/coarse sand, brick and rock frags	14	
15	20,32						some odor	15	
16	30,39	25		0.5			Refusal (appears to be bedrock) @16.7'	16	
17	41.50/.2	5		1				17	
18								18	
19								19	
20								20	
21								21	
22								22	
23								23	
24								24	
25								25	
26								26	
27								27	
28								28	
29								29	
30								30	

Boring/Well ID:	SB-2

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Boring Location:	
Start Date & Time:	12/1/99 - 9:30
Finish Date & Time:	12/1/99 - 11:20
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Drilling Method:	Hollow Stem Auger
Weather:	Cold and clear

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	512.6'
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1	7,12							1	
2	19,8	0.2		6			black stained SILT some sand little clay, strong odor	2	
3	1,2							3	
4	1,4	0.8		3			black stained SILT some sand little clay	4	
5	6,2							5	
6	2,1	2		6			black stained SILT some sand little clay, strong odor	6	
7	3,3							7	
8	3,3	7		0			FILL - - rock fragments	8	
9	5,6							9	▼
10	5,6	12		6			wet dark FILL some sand little silt, strong odor	10	
11	48,50/.4							11	
12		75		6			black SILT, SAND and FILL, very strong odor	12	
13	1,1						saturated SILT and clay some sand trace pebbles	13	
14	0,1	8		2			slight odor	14	
15	3,6						saturated soft black SILT and sand some clay trace rock	15	
16	9,36	25		24			fragments to dense dry SILT and sand some clay	16	
17	100/.2	3.5		0.5				17	
18							Refusal red soft fine grained sand stone or shale	18	
19								19	
20								20	
21								21	
22								22	
23								23	
24								24	
25								25	
26								26	
27								27	
28								28	
29								29	
30								30	

Boring/Well ID:	SB - 3

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Start Date & Time:	12/2/99 - 10:15
Finish Date & Time:	12/2/99 - 10:25
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Backhoe Type:	
Drilling Method:	Hollow Stem Auger
Weather:	Cold Scattered Flurries

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	16.7'
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1	18,12							1	
2	11,17	0		6			FILL black cinders sand and silt some rock frags	2	
3	4,4							3	
4	6,5	0		6			brown SAND some pebbles and silt	4	
5	4,7							5	
6	9,11	0		4			brown SAND to red/brown SAND and silt	6	
7	9,12							7	
8	12,12	0		18			moist dense rd/brn SILT and clay some sand, pebbles	8	
9	9,10							9	
10	11,16	0		8			moist red/brown SILT and clay some sand	10	
11	14,27							11	
12	33,31	0					wet dense brown SSILT some clay and pebbles	12	
13	21,31							13	
14	34,37	0		20			moist dense rd/brn SILT and sand some clay & pebbles	14	
15	27,31							15	
16	28,35	0					moist dense rd/brn SILT and sand some clay & pebbles	16	
17	37,60/.2	0						17	
18							Refusal @ 16.7'	18	
19								19	
20								20	
21								21	
22								22	
23								23	
24								24	
25								25	
26								26	
27								27	
28								28	
29								29	
30								30	

Boring/Well ID:	SB-4

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Start Date & Time:	12/2/99 - 8:35
Finish Date & Time:	12/2/99 - 9:40
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Backhoe Type:	
Drilling Method:	Hollow Stem Auger
Weather:	Cold Scattered Flurries

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	17.2'
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1	3,6							1	
2	8,6	0		6			red/ brown SILT and sand to black SILT and sand	2	
3	3,5						black CINDERS and silt and sand, trace rock frags and	3	
4	5,4	0		4			pebbles, possible odor some wood	4	
5	7,12							5	
6	7,7	0		3			moist red/brown SILT and sand some black staining	6	
7	7,12						moist dense dark brown SILT and sand, 2" wood layer	7	
8	15,17	0		6			strong odor	8	
9	14,18							9	
10	20,25	0		12			moist red/brown SILT and sand slight odor	10	
11	17,28							11	
12	36,40	0		12			red/brown SILT and sand some grey mottling, slight odor	12	
13	36,39							13	
14	41,44	0		8			wet red/brown SILT and sand, gry/brn/orange mottling	14	
15	38,47							15	
16	41,44	0		6			wet red/brown SILT and sand	16	
17	25,45						wet red/brown SILT and sand Refusal @ red sandstone	17	
18	50/.2	0		4				18	
19								19	
20								20	
21								21	
22								22	
23								23	
24								24	
25								25	
26								26	
27								27	
28								28	
29								29	
30								30	

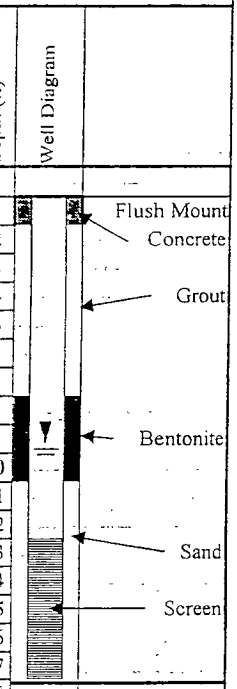
Boring/Well ID:	MW-5/SB-5

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Boring Location:	
Start Date & Time:	12/1/99 - 12:30
Finish Date & Time:	12/1/99 - 3:00
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Drilling Method:	Hollow Stem Auger
Weather:	Cold and clear

Groundwater Observations	
Time:	
Casing Depth:	17.0'
Boring Depth:	17.4'
Depth to Water:	
Below Surface:	9.65'
Below Meas. Point:	9.41'
Surface Elevation:	514.30'
Measuring Point Elevation:	514.06'
Groundwater Elevation:	504.65'

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description
1	0 - 1						vegetation, red SILT and sand refusal @ 1' - concrete
2	6,7	0		10			slab, augered through
3	7,8						brown SILT and sand some rock frags slightly stained
4	8,4	0		6			may be cinders
5	3,3						
6	2,3	0		4			brown SILT and sand trace rock frags some cinders
7	2,2						
8	7,7	0		3			brown SILT and sand trace rock frags some cinders
9	7,7						wet brown SILT and sand some gravel to red dense
10	12,15	0.2		24			SILT and clay strong odor
11	7,9						
12	12,14	0		24			damp rd/brown dense SILT and clay strong odor
13	15,23						
14	36,40	0		24			damp rd/brown dense SILT and clay strong odor
15	13,19						
16	21,27	0		24			damp rd/brown dense SILT and clay strong odor
17	20,22						moist red SAND and silt trace pebbles
18	100/.4	0		14			
19							Refusal at 17.4'
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



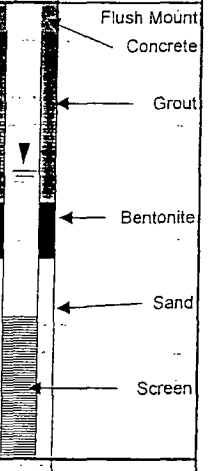
Boring/Well ID:	MW-6/SB-6

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Boring Location:	
Start Date & Time:	11/29/99 - 12:30
Finish Date & Time:	11/29/99 - 3:45
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Drilling Method:	Hollow Stem Auger
Weather:	Cold Scattered Flurries

Groundwater Observations	
Time:	
Casing Depth:	16'
Boring Depth:	16.2'
Depth to Water:	
Below Surface:	6.20'
Below Meas. Point:	5.66'
Surface Elevation:	512.17'
Measuring Point Elevation:	511.63'
Groundwater Elevation:	505.97'

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description
1	6,6	0		---			brown SAND and silt
2	6,7	0		15			black SAND & silt trace of coal cinders
3	4,4	0					
4	6,12	0		4			red brown, dense SILT some sand
5	5,8	0					4" black dense SILT some sand
6	13,36	0.5		18			red brown dense SILT some sand
7	18,22	0					
8	24,28	0		18			damp red brown SILT some sand, some pebbles
9	8,16	0					
10	19,25	0		18			moist red brown SILT, some sand, some pebbles
11	10,21	0					moist red brown SILT some sand, some clay
12	48,50/.1	0		22			to dry, red, dense SILT
13	80/.4	0		4			
14		0					red weathered SANDSTONE
15	50/.1	0					
16		0					Refusal (Bedrock) @ 16.2 feet
17	50/.2	0		1			
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



Boring/Well ID:	SB-7

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Boring Location:	
Start Date & Time:	11/30/99 - 11:15
Finish Date & Time:	11/30/99 - 3:15
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Drilling Method:	Hollow Stem Auger
Weather:	Cold Scattered Flurries

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	17.2'
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1								1	
2		0		12			Moist dark brown SAND and Silt	2	
3								3	
4		0		12			Moist dark brown red SILT some clay trace sand	4	
5							Moist dark red brown SILT some clay trace sand	5	
6		0		14			slight odor	6	
7								7	
8		9.8		24			SAA with odor	8	
9	115/.2	25					Red rock fragments trace fines	9	▼
10								10	
11	60/.5	100	■	6.5			Red rock fragments some brown sand	11	
12								12	
13				24				13	
14								14	
15		25					SILT, SAND and pebbles	15	
16								16	
17		2.5					Red sand stone refusal @17.2'	17	
18		0		1				18	
19								19	
20								20	
21								21	
22								22	
23								23	
24								24	
25								25	
26								26	
27								27	
28								28	
29								29	
30								30	

Boring/Well ID:	SB-8

Project Name:	NIMO Albion
Job. No.	90211.10.1400
Boring Location:	
Start Date & Time:	12/2/99 - 7:15
Finish Date & Time:	12/2/99 - 8:20
Drilling Co.:	ParrattWolff
Driller:	Ron Bush and Jeff
S&W Inspector:	DSS
Drilling Method:	Hollow Stem Auger
Weather:	Cold and overcast

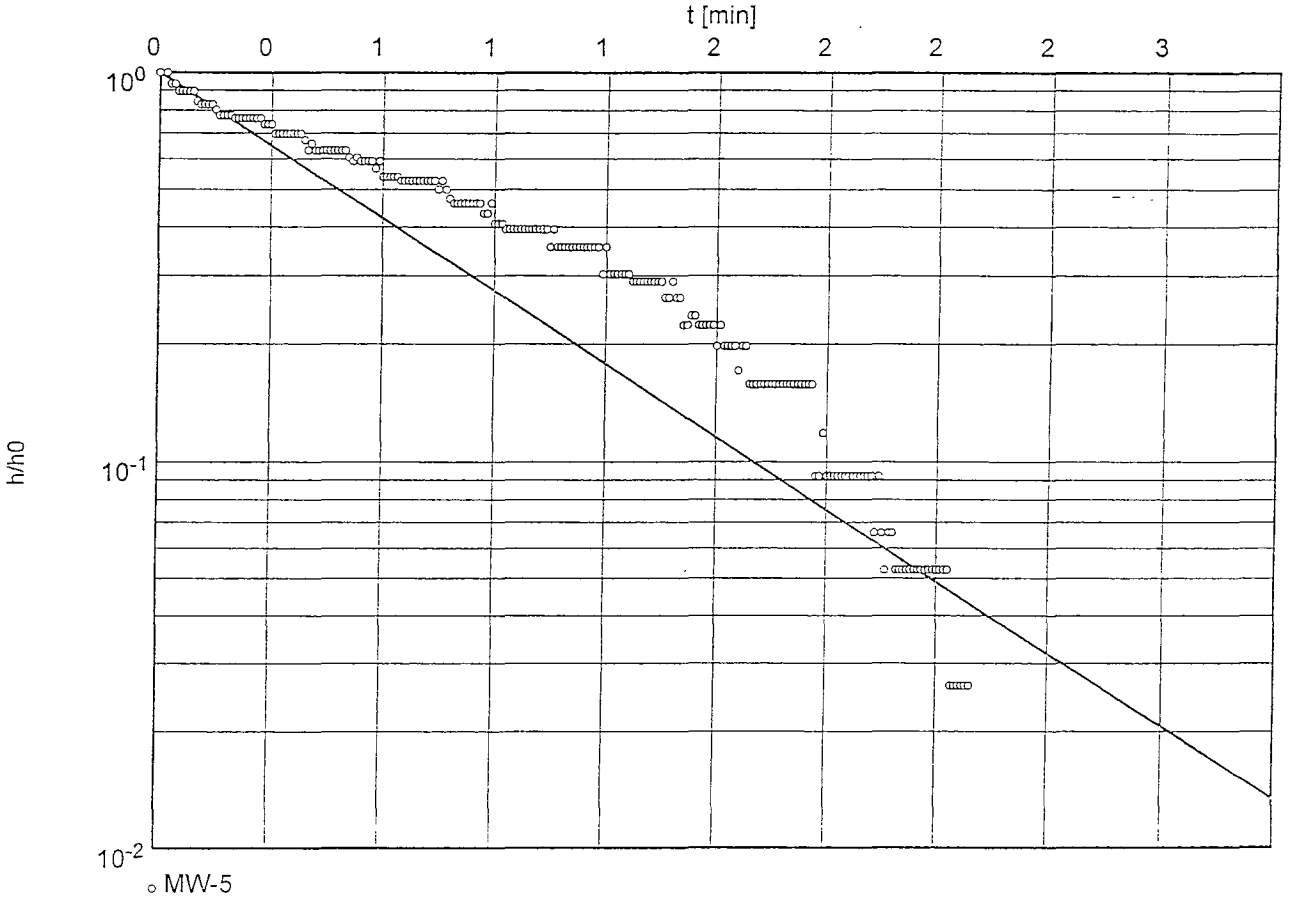
Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	16'
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1	45,28						FILL and brown sand and silt little concrete frag to	1	
2	24,15	0		6			black SILT some sand little cinders	2	
3	7,8							3	
4	8,7	0		3			black SAND and silt little cinders	4	
5	7,8							5	
6	12,15	0		6			1" cinders, 5" red/brown SILT and clay	6	
7	18,23						black cinders and black SILT and sand to red/brown	7	
8	17,14	0		8			SILT and sand some clay trace pebbles	8	
9	19,22							9	
10	18,23	0					red/brown SILT and sand some clay trace pebbles	10	
11	22,26							11	
12	31,37	0		12			moist red/brown SILT and sand some clay trace pebbles	12	
13	36,47							13	
14	48,56	0		12			damp red/brown SILT and sand some clay trace pebbles	14	
15	36,42							15	
16	57,76	0		12			wet red/brown SILT and sand some clay trace pebbles	16	
17								17	
18								18	
19								19	
20								20	
21								21	
22								22	
23								23	
24								24	
25								25	
26								26	
27								27	
28								28	
29								29	
30								30	

STEARNS & WHELER, LLC 1 Remington Park Drive Cazenovia, NY 13035 ph.(315) 655-8161	slug/bail test analysis BOUWER-RICE's method	Date: 17.12.1999 Page 1 Project: Albion Evaluated by: DSS

Slug Test No. 1	Test conducted on: 12/16/99
MW-5	



Hydraulic conductivity [ft/min]: 2.34×10^{-3}

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slug/ball test analysis
BOUWER-RICE's method

Project: Albion

Evaluated by: DSS

Slug Test No. 1	Test conducted on: 12/16/99
MW-5	MW-5

Static water level: 91.19 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
1	0.00	91.95	0.76
2	0.02	91.95	0.76
3	0.03	91.90	0.71
4	0.04	91.90	0.71
5	0.05	91.87	0.68
6	0.06	91.87	0.68
7	0.07	91.87	0.68
8	0.08	91.87	0.68
9	0.09	91.87	0.68
10	0.10	91.83	0.64
11	0.11	91.82	0.63
12	0.12	91.82	0.63
13	0.13	91.82	0.63
14	0.14	91.82	0.63
15	0.15	91.80	0.61
16	0.16	91.78	0.59
17	0.17	91.78	0.59
18	0.18	91.78	0.59
19	0.19	91.78	0.59
20	0.20	91.77	0.58
21	0.21	91.77	0.58
22	0.22	91.77	0.58
23	0.23	91.77	0.58
24	0.24	91.77	0.58
25	0.25	91.77	0.58
26	0.26	91.77	0.58
27	0.27	91.77	0.58
28	0.28	91.75	0.56
29	0.29	91.75	0.56
30	0.30	91.75	0.56
31	0.31	91.72	0.53
32	0.32	91.72	0.53
33	0.33	91.72	0.53
34	0.34	91.72	0.53
35	0.35	91.72	0.53
36	0.36	91.72	0.53
37	0.37	91.72	0.53
38	0.38	91.72	0.53
39	0.39	91.70	0.51
40	0.40	91.67	0.48
41	0.41	91.69	0.50
42	0.42	91.67	0.48
43	0.43	91.67	0.48
44	0.44	91.67	0.48
45	0.45	91.67	0.48
46	0.46	91.67	0.48
47	0.47	91.67	0.48
48	0.48	91.67	0.48
49	0.49	91.67	0.48
50	0.50	91.67	0.48

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slug/bail test analysis
BOUWER-RICE's method

Project: Albion

Evaluated by: DSS

Slug Test No. 1	Test conducted on: 12/16/99
MW-5	MW-5

Static water level: 91.19 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
51	0.51	91.65	0.46
52	0.52	91.64	0.45
53	0.53	91.65	0.46
54	0.54	91.64	0.45
55	0.55	91.64	0.45
56	0.56	91.64	0.45
57	0.57	91.64	0.45
58	0.58	91.62	0.43
59	0.59	91.64	0.45
60	0.60	91.60	0.41
61	0.61	91.60	0.41
62	0.62	91.60	0.41
63	0.63	91.60	0.41
64	0.64	91.60	0.41
65	0.65	91.59	0.40
66	0.66	91.59	0.40
67	0.67	91.59	0.40
68	0.68	91.59	0.40
69	0.69	91.59	0.40
70	0.70	91.59	0.40
71	0.71	91.59	0.40
72	0.72	91.59	0.40
73	0.73	91.59	0.40
74	0.74	91.59	0.40
75	0.75	91.57	0.38
76	0.76	91.59	0.40
77	0.77	91.57	0.38
78	0.78	91.55	0.36
79	0.79	91.54	0.35
80	0.80	91.54	0.35
81	0.81	91.54	0.35
82	0.82	91.54	0.35
83	0.83	91.54	0.35
84	0.84	91.54	0.35
85	0.85	91.54	0.35
86	0.86	91.54	0.35
87	0.87	91.52	0.33
88	0.88	91.52	0.33
89	0.89	91.54	0.35
90	0.90	91.50	0.31
91	0.91	91.50	0.31
92	0.92	91.50	0.31
93	0.93	91.49	0.30
94	0.94	91.49	0.30
95	0.95	91.49	0.30
96	0.96	91.49	0.30
97	0.97	91.49	0.30
98	0.98	91.49	0.30
99	0.99	91.49	0.30
100	1.00	91.49	0.30

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slug/bail test analysis
BOUWER-RICE's method

Project: Albion

Evaluated by: DSS

Slug Test No. 1	Test conducted on: 12/16/99
MW-5	MW-5

Static water level: 91.19 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
101	1.01	91.49	0.30
102	1.02	91.49	0.30
103	1.03	91.49	0.30
104	1.04	91.49	0.30
105	1.05	91.46	0.27
106	1.06	91.49	0.30
107	1.07	91.46	0.27
108	1.08	91.46	0.27
109	1.09	91.46	0.27
110	1.10	91.46	0.27
111	1.11	91.46	0.27
112	1.12	91.46	0.27
113	1.13	91.46	0.27
114	1.14	91.46	0.27
115	1.15	91.46	0.27
116	1.16	91.46	0.27
117	1.17	91.46	0.27
118	1.18	91.46	0.27
119	1.19	91.42	0.23
120	1.20	91.46	0.27
121	1.21	91.42	0.23
122	1.22	91.42	0.23
123	1.23	91.42	0.23
124	1.24	91.42	0.23
125	1.25	91.42	0.23
126	1.26	91.42	0.23
127	1.27	91.41	0.22
128	1.28	91.41	0.22
129	1.29	91.41	0.22
130	1.30	91.41	0.22
131	1.31	91.41	0.22
132	1.32	91.41	0.22
133	1.33	91.41	0.22
134	1.34	91.41	0.22
135	1.35	91.41	0.22
136	1.36	91.39	0.20
137	1.37	91.39	0.20
138	1.38	91.41	0.22
139	1.39	91.39	0.20
140	1.40	91.39	0.20
141	1.41	91.36	0.17
142	1.42	91.36	0.17
143	1.43	91.37	0.18
144	1.44	91.37	0.18
145	1.45	91.36	0.17
146	1.46	91.36	0.17
147	1.47	91.36	0.17
148	1.48	91.36	0.17
149	1.49	91.36	0.17
150	1.50	91.34	0.15

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slug/bail test analysis
BOUWER-RICE's method

Project: Albion

Evaluated by: DSS

Slug Test No. 1	Test conducted on: 12/16/99
MW-5	MW-5

Static water level: 91.19 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
151	1.51	91.36	0.17
152	1.52	91.34	0.15
153	1.53	91.34	0.15
154	1.54	91.34	0.15
155	1.55	91.34	0.15
156	1.56	91.32	0.13
157	1.57	91.34	0.15
158	1.58	91.34	0.15
159	1.59	91.31	0.12
160	1.60	91.31	0.12
161	1.61	91.31	0.12
162	1.62	91.31	0.12
163	1.63	91.31	0.12
164	1.64	91.31	0.12
165	1.65	91.31	0.12
166	1.66	91.31	0.12
167	1.67	91.31	0.12
168	1.68	91.31	0.12
169	1.69	91.31	0.12
170	1.70	91.31	0.12
171	1.71	91.31	0.12
172	1.72	91.31	0.12
173	1.73	91.31	0.12
174	1.74	91.31	0.12
175	1.75	91.31	0.12
176	1.76	91.31	0.12
177	1.77	91.26	0.07
178	1.78	91.26	0.07
179	1.79	91.28	0.09
180	1.80	91.26	0.07
181	1.81	91.26	0.07
182	1.82	91.26	0.07
183	1.83	91.26	0.07
184	1.84	91.26	0.07
185	1.85	91.26	0.07
186	1.86	91.26	0.07
187	1.87	91.26	0.07
188	1.88	91.26	0.07
189	1.89	91.26	0.07
190	1.90	91.26	0.07
191	1.91	91.26	0.07
192	1.92	91.26	0.07
193	1.93	91.24	0.05
194	1.94	91.26	0.07
195	1.95	91.24	0.05
196	1.96	91.23	0.04
197	1.97	91.24	0.05
198	1.98	91.24	0.05
199	1.99	91.23	0.04
200	2.00	91.23	0.04

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slug/bail test analysis
BOUWER-RICE's method

Project: Albion

Evaluated by: DSS

Slug Test No. 1

Test conducted on: 12/16/99

MW-5

MW-5

Static water level: 91.19 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
201	2.01	91.23	0.04
202	2.02	91.23	0.04
203	2.03	91.23	0.04
204	2.04	91.23	0.04
205	2.05	91.23	0.04
206	2.06	91.23	0.04
207	2.07	91.23	0.04
208	2.08	91.23	0.04
209	2.09	91.23	0.04
210	2.10	91.23	0.04
211	2.11	91.23	0.04
212	2.12	91.23	0.04
213	2.13	91.23	0.04
214	2.14	91.21	0.02
215	2.15	91.21	0.02
216	2.16	91.21	0.02
217	2.17	91.21	0.02
218	2.18	91.21	0.02
219	2.19	91.21	0.02
220	2.20	91.19	0.00

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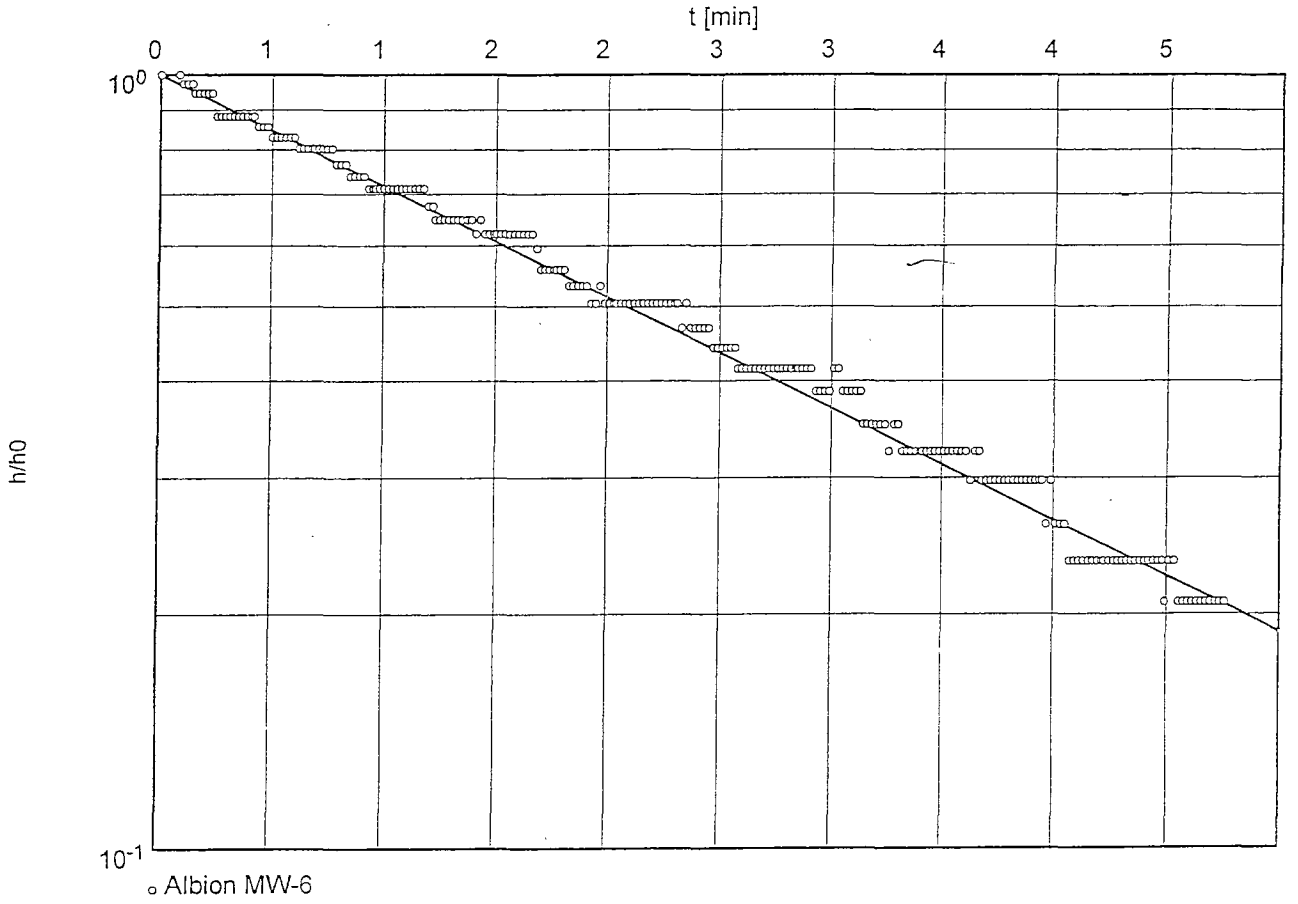
slug/bail test analysis
BOUWER-RICE's method

Project: Albion

Evaluated by: DSS

Slug Test No. 2	Test conducted on: 12/16/99
MW-6	



Hydraulic conductivity [ft/min]: 4.11×10^{-4}

STEARNS & WHELER, LLC 1 Remington Park Drive Cazenovia, NY 13035 ph.(315) 655-8161	slug/bail test analysis BOUWER-RICE's method	Date: 17.12.1999 Page 2 Project: Albion Evaluated by: DSS

Slug Test No. 2	Test conducted on: 12/16/99
MW-6	Albion MW-6

Static water level: 11.25 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
1	0.00	10.14	-1.11
2	0.08	10.14	-1.11
3	0.10	10.17	-1.08
4	0.12	10.17	-1.08
5	0.14	10.17	-1.08
6	0.15	10.20	-1.05
7	0.17	10.20	-1.05
8	0.19	10.20	-1.05
9	0.21	10.20	-1.05
10	0.23	10.20	-1.05
11	0.25	10.27	-0.98
12	0.27	10.27	-0.98
13	0.29	10.27	-0.98
14	0.31	10.27	-0.98
15	0.33	10.27	-0.98
16	0.35	10.27	-0.98
17	0.37	10.27	-0.98
18	0.39	10.27	-0.98
19	0.41	10.27	-0.98
20	0.42	10.27	-0.98
21	0.44	10.30	-0.95
22	0.46	10.30	-0.95
23	0.48	10.30	-0.95
24	0.50	10.33	-0.92
25	0.52	10.33	-0.92
26	0.54	10.33	-0.92
27	0.56	10.33	-0.92
28	0.58	10.33	-0.92
29	0.60	10.33	-0.92
30	0.62	10.36	-0.89
31	0.64	10.36	-0.89
32	0.66	10.36	-0.89
33	0.68	10.36	-0.89
34	0.69	10.36	-0.89
35	0.71	10.36	-0.89
36	0.73	10.36	-0.89
37	0.75	10.36	-0.89
38	0.77	10.36	-0.89
39	0.79	10.40	-0.85
40	0.81	10.40	-0.85
41	0.83	10.40	-0.85
42	0.85	10.43	-0.82
43	0.87	10.43	-0.82
44	0.89	10.43	-0.82
45	0.91	10.43	-0.82
46	0.93	10.46	-0.79
47	0.95	10.46	-0.79
48	0.96	10.46	-0.79
49	0.98	10.46	-0.79
50	1.00	10.46	-0.79

STEARNS & WHELER, LLC 1 Remington Park Drive Cazenovia, NY 13035 ph.(315) 655-8161	slug/bail test analysis BOUWER-RICE's method	Date: 17.12.1999 Page 3 Project: Albion Evaluated by: DSS

Slug Test No. 2	Test conducted on: 12/16/99
MW-6	Albion MW-6

Static water level: 11.25 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
51	1.02	10.46	-0.79
52	1.04	10.46	-0.79
53	1.06	10.46	-0.79
54	1.08	10.46	-0.79
55	1.10	10.46	-0.79
56	1.12	10.46	-0.79
57	1.14	10.46	-0.79
58	1.16	10.46	-0.79
59	1.18	10.46	-0.79
60	1.20	10.50	-0.75
61	1.22	10.50	-0.75
62	1.23	10.53	-0.72
63	1.25	10.53	-0.72
64	1.27	10.53	-0.72
65	1.29	10.53	-0.72
66	1.31	10.53	-0.72
67	1.33	10.53	-0.72
68	1.35	10.53	-0.72
69	1.37	10.53	-0.72
70	1.39	10.53	-0.72
71	1.41	10.56	-0.69
72	1.43	10.53	-0.72
73	1.45	10.56	-0.69
74	1.47	10.56	-0.69
75	1.49	10.56	-0.69
76	1.50	10.56	-0.69
77	1.52	10.56	-0.69
78	1.54	10.56	-0.69
79	1.56	10.56	-0.69
80	1.58	10.56	-0.69
81	1.60	10.56	-0.69
82	1.62	10.56	-0.69
83	1.64	10.56	-0.69
84	1.66	10.56	-0.69
85	1.68	10.59	-0.66
86	1.70	10.63	-0.62
87	1.72	10.63	-0.62
88	1.74	10.63	-0.62
89	1.76	10.63	-0.62
90	1.77	10.63	-0.62
91	1.79	10.63	-0.62
92	1.81	10.63	-0.62
93	1.83	10.66	-0.59
94	1.85	10.66	-0.59
95	1.87	10.66	-0.59
96	1.89	10.66	-0.59
97	1.91	10.66	-0.59
98	1.93	10.69	-0.56
99	1.95	10.69	-0.56
100	1.97	10.66	-0.59

STEARNS & WHELER, LLC 1 Remington Park Drive Cazenovia, NY 13035 ph.(315) 655-8161	slug/bail test analysis BOUWER-RICE's method	Date: 17.12.1999 Page 4 Project: Albion Evaluated by: DSS

Slug Test No. 2	Test conducted on: 12/16/99
MW-6	Albion MW-6

Static water level: 11.25 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
101	1.99	10.69	-0.56
102	2.01	10.69	-0.56
103	2.03	10.69	-0.56
104	2.04	10.69	-0.56
105	2.06	10.69	-0.56
106	2.08	10.69	-0.56
107	2.10	10.69	-0.56
108	2.12	10.69	-0.56
109	2.14	10.69	-0.56
110	2.16	10.69	-0.56
111	2.18	10.69	-0.56
112	2.20	10.69	-0.56
113	2.22	10.69	-0.56
114	2.24	10.69	-0.56
115	2.26	10.69	-0.56
116	2.28	10.69	-0.56
117	2.30	10.69	-0.56
118	2.31	10.69	-0.56
119	2.33	10.73	-0.52
120	2.35	10.69	-0.56
121	2.37	10.73	-0.52
122	2.39	10.73	-0.52
123	2.41	10.73	-0.52
124	2.43	10.73	-0.52
125	2.45	10.73	-0.52
126	2.47	10.76	-0.49
127	2.49	10.76	-0.49
128	2.51	10.76	-0.49
129	2.53	10.76	-0.49
130	2.55	10.76	-0.49
131	2.57	10.76	-0.49
132	2.58	10.79	-0.46
133	2.60	10.79	-0.46
134	2.62	10.79	-0.46
135	2.64	10.79	-0.46
136	2.66	10.79	-0.46
137	2.68	10.79	-0.46
138	2.70	10.79	-0.46
139	2.72	10.79	-0.46
140	2.74	10.79	-0.46
141	2.76	10.79	-0.46
142	2.78	10.79	-0.46
143	2.80	10.79	-0.46
144	2.82	10.79	-0.46
145	2.84	10.79	-0.46
146	2.85	10.79	-0.46
147	2.87	10.79	-0.46
148	2.89	10.79	-0.46
149	2.91	10.79	-0.46
150	2.93	10.82	-0.43

STEARNS & WHELER, LLC
1 Remington Park Drive
Cazenovia, NY 13035
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slug/bail test analysis
BOUWER-RICE's method

Project: Albion

Evaluated by: DSS

Slug Test No. 2	Test conducted on: 12/16/99
MW-6	Albion MW-6

Static water level: 11.25 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
151	2.95	10.82	-0.43
152	2.97	10.82	-0.43
153	2.99	10.82	-0.43
154	3.01	10.79	-0.46
155	3.03	10.79	-0.46
156	3.05	10.82	-0.43
157	3.07	10.82	-0.43
158	3.09	10.82	-0.43
159	3.11	10.82	-0.43
160	3.13	10.82	-0.43
161	3.14	10.86	-0.39
162	3.16	10.86	-0.39
163	3.18	10.86	-0.39
164	3.20	10.86	-0.39
165	3.22	10.86	-0.39
166	3.24	10.86	-0.39
167	3.26	10.89	-0.36
168	3.28	10.86	-0.39
169	3.30	10.86	-0.39
170	3.32	10.89	-0.36
171	3.34	10.89	-0.36
172	3.36	10.89	-0.36
173	3.38	10.89	-0.36
174	3.40	10.89	-0.36
175	3.41	10.89	-0.36
176	3.43	10.89	-0.36
177	3.45	10.89	-0.36
178	3.47	10.89	-0.36
179	3.49	10.89	-0.36
180	3.51	10.89	-0.36
181	3.53	10.89	-0.36
182	3.55	10.89	-0.36
183	3.57	10.89	-0.36
184	3.59	10.89	-0.36
185	3.61	10.89	-0.36
186	3.63	10.92	-0.33
187	3.65	10.89	-0.36
188	3.67	10.89	-0.36
189	3.68	10.92	-0.33
190	3.70	10.92	-0.33
191	3.72	10.92	-0.33
192	3.74	10.92	-0.33
193	3.76	10.92	-0.33
194	3.78	10.92	-0.33
195	3.80	10.92	-0.33
196	3.82	10.92	-0.33
197	3.84	10.92	-0.33
198	3.86	10.92	-0.33
199	3.88	10.92	-0.33
200	3.90	10.92	-0.33

STEARNS & WHELER, LLC 1 Remington Park Drive Cazenovia, NY 13035 ph.(315) 655-8161	slug/bail test analysis BOUWER-RICE's method	Date: 17.12.1999 Page 6 Project: Albion Evaluated by: DSS

Slug Test No. 2	Test conducted on: 12/16/99
MW-6	Albion MW-6

Static water level: 11.25 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
201	3.92	10.92	-0.33
202	3.94	10.92	-0.33
203	3.95	10.92	-0.33
204	3.97	10.96	-0.29
205	3.99	10.92	-0.33
206	4.01	10.96	-0.29
207	4.03	10.96	-0.29
208	4.05	10.96	-0.29
209	4.07	10.99	-0.26
210	4.09	10.99	-0.26
211	4.11	10.99	-0.26
212	4.13	10.99	-0.26
213	4.15	10.99	-0.26
214	4.17	10.99	-0.26
215	4.19	10.99	-0.26
216	4.21	10.99	-0.26
217	4.22	10.99	-0.26
218	4.24	10.99	-0.26
219	4.26	10.99	-0.26
220	4.28	10.99	-0.26
221	4.30	10.99	-0.26
222	4.32	10.99	-0.26
223	4.34	10.99	-0.26
224	4.36	10.99	-0.26
225	4.38	10.99	-0.26
226	4.40	10.99	-0.26
227	4.42	10.99	-0.26
228	4.44	10.99	-0.26
229	4.46	10.99	-0.26
230	4.48	10.99	-0.26
231	4.49	11.02	-0.23
232	4.51	10.99	-0.26
233	4.53	10.99	-0.26
234	4.55	11.02	-0.23
235	4.57	11.02	-0.23
236	4.59	11.02	-0.23
237	4.61	11.02	-0.23
238	4.63	11.02	-0.23
239	4.65	11.02	-0.23
240	4.67	11.02	-0.23
241	4.69	11.02	-0.23
242	4.71	11.02	-0.23
243	4.73	11.02	-0.23
244	4.75	11.02	-0.23

Analytical Assurance Associates, Inc.
600 Rock Raymond Road
Downingtown, PA 19335
Phone: 610 - 269 - 9989
Fax: 610 - 269 - 9989

DATA USABILITY
STEARNS & WHELER
ALBION SITE

ANALYZED BY
SEVERN TRENT LABORATORIES, INC.
CASE No.: 7099-3090A/ SDG No.: A3090

DATA USABILITY REPORTED BY:

Analytical Assurance Associates (A3)
600 Rock Raymond Road
Downingtown, PA 19335

SITE NAME: ALBION
LABORATORY No.: 7099-3090A
SDG No.: A3090

DISCUSSION

Fifteen (15) soil samples, including two sets of field duplicate samples collected on 11-29, 30-99 & 12-01,02-99. Severn Trent Laboratories located in Monroe Connecticut received all samples in good condition on 12-01,03-99. Based on the chain-of-custody records, the following analyses were performed for this batch of samples.

CIIENT ID	LABORATORY ID	PARAMETERS				
		VOA Analysis Date	SVOA Anal/Extraction	Pest/PCB Anal/Extraction	Metals Analysis date	Inorganic* Analysis
SB-7	993090A-02	12-08-99	12-5/12-28-99	12-01/12-09-99	12-30-99	12-13-99
MW-6	993090A-03	12-08-99	12-5/12-28-99	12-01/12-09-99	12-30-99	12-13-99
SB-1	993090A-04	12-07-99	12-5/12-29-99	12-01/12-09-99	12-30-99	12-13-99
SB-2	993090A-05	12-09-99	12-5/12-23-99	12-03/12-16-99	12-30-99	12-15-99
SS-1R	993090A-06	12-09-99	12-5/12-23-99	12-03/12-16-99	12-30-99	12-13-99
SS-2	993090A-07	12-09-99	12-5/12-23-99	12-03/12-16-99	12-30-99	12-13-99
SS-3	993090A-08	12-09-99	12-5/12-28-99	12-03/12-16-99	12-30-99	12-13-99
SS-4	993090A-09	12-09-99	12-5/12-23-99	12-03/12-10-99	12-30-99	12-13-99
MW-5	993090A-10	12-09-99	12-5/12-23-99	12-03/12-10-99	12-30-99	12-13-99
SB-8	993090A-11	12-09-99	12-5/12-23-99	12-08/12-17-99	12-30-99	12-15-99
SB-4	993090A-12	12-09-99	12-5/12-23-99	12-03/12-10-99	12-30-99	12-13-99
SB-3	993090A-13	12-09-99	12-5/12-23-99	12-03/12-10-99	12-30-99	12-13-99
DUP-1	993090A-14	12-09-99	12-5/12-28-99	12-03/12-10-99	12-30-99	12-15-99
CB-1	993090A-15	12-09-99	12-5/12-29-99	12-03/12-17-99	12-30-99	12-15-99
DUP-2	993090A-16	12-10-99	12-5/12-29-99	12-03/12-17-99	12-30-99	12-15-99

* The analysis date is tabulated for cyanide analysis only. The analysis dates for TOCs are: 12-13,27,29-99

The sample analysis was reviewed based on the Region II functional Guidelines and the Data Usability criteria established in NYSDEC Division of Environmental Remediation based on the following parameters. If you have any question or comments please call Zohreh Hamid at (610) 269-9989.

- Holding time
- Calibration analysis
- Blank Analysis
- Matrix Spike/Spike Duplicate (MS/MSD)
- Laboratory Control Sample Results
- Laboratory/Field Duplicate
- Instrument Performance
- Surrogate/Internal Standard Recovery (Organic only)
- Compound Identification/Quantitation

ORGANIC ANALYSES

General/Holding Time

The extraction & analyses of all parameters were tabulated on the aforementioned table. The holding times analysis met the method requirements for all samples with the exception of following:

Pesticide/PCB

All samples were initially extracted/analyzed within the holding times. Samples were re-extracted/reanalyzed due to the surrogate outliers. The comparison of the data demonstrated that the possible matrix interference exist. Therefore, the original sample data were reported and should be used by the data user.

Calibration

Volatile

The %RSDs, %Ds and response factors in all initial and continuing calibrations were within the control limits with the exception of %D for chloroethane in continuing calibration analyzed on 12-09-99 @ 11:34. This compound was not detected in the corresponding samples (SS-1R, SS-2, SS-3, MW-5, SB-8, SB-4, SB-3, DUP-1, SS-4 & CB-1). The non-detected values were qualified "UJ" on form Is.

Semivolatile

All %RSDs were within the Region II data validation control limits. The following %Ds and response factors were above control limits.

Compound Name	CC 12-23-99	CC 12-28-99	CC 12-29-99
Hexachlorocyclopentadiene	46.1	45.2	63.2
2,4-Dinitrophenol	83.1*		
4,6-Dinitro-2-methylphenol	72.7*		
4-Nitrophenol		25.9	33.3
Associated Samples:	SB-2 SS-1R SS-2 SS-4 MW-5 SB-8 SB-4 SB-3	SB-7 MW-6 SS-3 DUP-1 SB-2 MS SB-2 MSD	SB-I CB-1 DUP-2

* The response factor was below the control limit of 0.05 established in Region II Guidelines. This compound was not detected in the corresponding samples. The non-detected values were contractually rejected.

The positive results and non-detected values for the compounds with %D outliers were qualified estimated.

Pesticide/PCB
The % RSDs for all compounds were within the control limits. The %Ds for 4,4'-DDT (47.5%) & methoxychlor (35%) in INDA analyzed on 12-21-99 @ 15:29 and decachlorobiphenyl (27.5%) in INDB analyzed on 12-21-99 @ 16:06 were above 25% control limits. The data were not impacted since these standards were analyzed at the end of the sequence.

Blank Analysis

Volatile
The laboratory blanks analyzed at low concentration had acetone and 2-butanone at maximum levels of (8 ug/kg) and (3 ug/kg) respectively. Also, medium level blank analysis had methylenechloride (260 ug/kg), acetone (1400 ug/kg), 2-butanone (520 ug/kg) and toluene (37 ug/kg) at levels below 2 X CRQLs. The reported sample data were qualified "U" and should be considered as the laboratory artifacts. Also, siloxane, unknowns and butylated hydroxytoluene were reported as TIC. The reported sample results for these compounds were rejected in the samples. Trip blank and/or field equipment blanks were not analyzed with this batch of sample.

Semivolatile
The laboratory blank had phenanthrene (10 ug/kg), di-n-butylphthalate (15 ug/kg), fluoranthene (6 ug/kg), pyrene (10 ug/kg), di-n-octylphthalate (5 ug/kg), bis (2-ethylhexyl)phthalate (42 ug/kg) and several PAH at levels below the CRQLs. The corresponding sample results were elevated to the CRQLs and qualified "U".

Pesticide/PCB
The laboratory preparation blank extracted on 12-03-99 had methoxychlor (0.94 ug/kg). The reported sample results were elevated to the corresponding CRQLs and qualified "U" due to the laboratory artifact.

Matrix Spike/ Spike Duplicate Analysis

Volatile
Matrix spike/spike duplicate analysis was performed on samples SB-2 for low level analysis. The recoveries for all five spiking compounds were below the QC limits in MS

& MSD samples. However, the RPDs were within the control limits. The data were not qualified based on the recovery outliers since these recoveries were above 10% for all compounds. A MS/MSD analysis was not provided for medium level of analysis.

Semivolatile
The recoveries for all spike compounds were within the control limits with the exception of pyrene (20/20%) in MS/MSD samples. The data were not qualified based on these outlier since the recoveries were above 10%.

Pesticide/PCB
The spike analysis was performed on samples SB-2 & SS-4. The matrix spike recoveries could not be evaluated due to the possible matrix interference.

Laboratory Control Sample

The blank spike and laboratory check standards were analyzed for all fractions. The recoveries were within the control limits with the exception of the following.

Volatile
The blank spike and QC check standard were analyzed for medium level analysis. The recoveries in blank spike were within the control limits. However, up to seventeen compounds had recoveries outside the control limits established by laboratory in the QC check standard. These recoveries were above 50% with the exception of vinyl acetate (4%). This compound was not reported as a target compound. Therefore, the data were not impacted.

Instrument Performance

The analysis for all parameter performed within the analysis holding times established in the corresponding methods.

Surrogate Analysis

All organic samples were spiked with the surrogate compounds identified in the corresponding Methods. The recoveries were within the control limits with the exception of the following:

Pesticide/PCB
The recoveries for surrogate compounds analyzed on both columns were outside the control limits in all samples with the exception of samples MW-5, SB-4, SB-3. The recoveries were below 10% in samples SB-7, MW-6, SB-1, SS-4, DUP-1, SS-1R, SS-3, CB-1, and DUP-2. These samples with the exception of sample SB-7 were re-extracted/reanalyzed. Similar recoveries were obtained. The reported sample data were considered biased low and were qualified estimated on forms I.

Internal Standard Analysis

All volatile and semivolatile samples and the corresponding QC samples were spiked with internal standards prior to the sample analysis. The recoveries and retention times were within the control limits with the exception of the following:

Volatile

The recoveries of all three internal standards were below the lower control limits established by the laboratory in sample CB-1. This sample was reanalyzed within the holding time. The recoveries of 1,4-difluorobenzene and chlorobenzene were below the control limits in the re-analysis sample. The comparison of these two samples gave a good reproducibility. The re-analysis sample was reported and should be used by the data user due to the fewer outliers. The reported positive results and non-detected values were qualified estimated.

Duplicate Analysis

Samples SB-3 and CB-1 were duplicate of samples DUP-1 and DUP-2 respectively. The RPDs for the compounds above CRQLs were within the data validation limit of 100%.

Compound Quantitation/Identification

Volatile

All low level sample analysis was performed at one fold dilutions. Due to the high concentration of target compounds, the following samples were analyzed at the medium level with an additional dilution. The reported results were considered acceptable

Sample ID	Dilution Factor
SB-1	1
SB-2	5

Semivolatile

The following samples were initially analyzed at higher dilutions.

Sample ID	Dilution Factor
SB-7	5
MW-6	2
SB-1	20
SB-2	4
SB-2 MS	4
SB-2MSD	4
SS-3	2
CB-1	10
DUP-2	4

The reported sample data for samples SB-1 and CB-1 that were analyzed at dilution above five folds were qualified estimated.

Pesticide/PCB
The chromatogram for all samples demonstrated an interference and column/detector saturation problem. The reported positive results and non-detected values have been qualified estimated due to the surrogate outliers in these samples. Additional qualifier codes was not applied.

Data Package Completeness

Volatile
The spectra for three TICs in blank VBLKKZ were missing. The data quality was not impacted. However, these documents must be submitted by the laboratory.

Semivolatile
The form I TIC (Page 977) for sample SB-4 was missing. This form was found in data summary section. Therefore, the data were not impacted.

INORGANIC ANALYSES

All samples were analyzed for the TAL metals, cyanide and Total Organic Carbons within the holding time.

Calibration Analysis

All recoveries in initial and continuing calibrations were within the control limits with the exception of Tl (115.8%) in initial calibration analysis. The positive results were qualified estimated.

Contract Required Detection Limits

The CRDL recoveries for Pb (154/122%), Se (54.6%), Ag (77.3%) and Tl (21.5/73.1%) were outside the data validation control limits of 80-120%. The positive results up to 3XCRDL for Pb, and positive results & non-detected values for Se, Ag and Tl were qualified estimated.

Blank Analysis

The preparation blank had the following contamination at levels below the CRDLs. The reported sample results up to the action levels (5X the blank level) were qualified "U" and should be considered as laboratory artifacts.

Analyte	Blank Level mg/kg	Action Level mg/kg
Sb	2.5	12.5
Cu	0.24	1.2
Fe	18.9	94.5
K	60.1	300.1
Na	413.8	206.9
Zn	3.0	15

ICP Interference Check Sample

The recoveries for all analytes in initial ICS samples and Sb, Cu & Tl in final ICS sample were outside the control limits. The laboratory case narrative did not indicate this problem. The reported sample results and non-detected values for all analytes were considered estimated and qualified J & UJ.

MATRIX SPIKE/DUPLICATE ANALYSES

Due to the matrix interference and/or the laboratory analysis problems, the matrix spike recoveries for Sb (46.3%), and Cu (53.9%) in metal analysis and TOC (59.7%) in inorganic analysis were outside the requirement limits of 75-125%. The positive results and non-detected values for these analytes were qualified estimated. The post digestion spike sample analysis was performed for antimony and copper. The recoveries were within the control limits that indicated the possible matrix effect.

DUPLICATE ANALYSIS

The RPDs in laboratory duplicate analysis were within the control limits with the exception of Pb (31.6%). The results for lead were not impacted since the RPDs were within the data validation control limits.

Two sets of field duplicate samples SB-3/DUP-1 & CB-1/DUP-2 were analyzed for this batch. The RPDs for both sets of field duplicate samples were within the data validation control limit of 100%.

LABORATORY CONTROL SAMPLE

The recovery for LCS sample was within the control limits. Also, the recoveries for the inorganic parameters were within the control limits of 80-120%.

SERIAL DILUTION ANALYSIS

The %Ds for all metals were within the control limits.

DATA PACKAGE COMPLETENESS

Data package completeness was satisfactory. However, the data for TOC was not flagged with "N" as required by the Method.

SUMMARY

The data package assembly was satisfactory. All metals were analyzed by ICP, with the exception of mercury. The major problem with the exception of initial ICS analysis was not encountered in the sample analysis. The minor issues (contamination, recovery outliers in CRDL and matrix spike sample and RPD outlier in laboratory duplicate analyses) have been discussed. The reported sample data were qualified for all analytes due to the recovery outliers in ICS sample.

DATA USABILITY SUMMARY
ALBION
CASE ID No.: 7099-3090A

CIIENT ID	PARAMETERS				
	VOA	SVOA	Pest/PCB	Metals	Inorganic
SB-7	A^{1}	A^{2}, J^{4}	J^{6}	J^{8-12}	A , J^{13}
MW-6	A^{1}	A^{2}, J^{4}	J^{6}	J^{8-12}	A , J^{13}
SB-1	A^{1}	$A^{2}, J^{4,5}$	J^{6}	J^{8-12}	A , J^{13}
SB-2	A^{1}	R, A^{2}, J^{3}	A, J^{7}	J^{8-12}	A , J^{13}
SS-1R	A^{1}, J^{1}	R, A^{2}, J^{3}	J^{6}	J^{8-12}	A , J^{13}
SS-2	A^{1}, J^{1}	R, A^{2}, J^{3}	A, J^{7}	J^{8-12}	A , J^{13}
SS-3	A^{1}, J^{1}	A^{2}, J^{4}	J^{6}	J^{8-12}	A , J^{13}
SS-4	A^{1}, J^{1}	R, A^{2}, J^{3}	J^{6}	J^{8-12}	A , J^{13}
MW-5	A^{1}, J^{1}	R, A^{2}, J^{3}	A, J^{7}	J^{8-12}	A , J^{13}
SB-8	A^{1}, J^{1}	R, A^{2}, J^{3}	A, J^{7}	J^{8-12}	A , J^{13}
SB-4	A^{1}, J^{1}	R, A^{2}, J^{3}	A^{3}, J^{7}	J^{8-12}	A , J^{13}
SB-3	A^{1}, J^{1}	R, A^{2}, J^{3}	A, J^{7}	J^{8-12}	A , J^{13}
DUP-1	A^{1}, J^{1}	A^{2}, J^{4}	J^{6}	J^{8-12}	A , J^{13}
CB-1	$A^{1}, J^{1,2}$	$A^{2}, J^{4,5}$	J^{6}	J^{8-12}	A , J^{13}
DUP-2	A^{1}	A^{2}, J^{4}	J^{6}	J^{8-12}	A , J^{13}

A= Accept the sample results as reported.

A^{1}= The results for compounds detected in the corresponding laboratory blank (acetone, 2-butanone,methylenechloride and toluene) at the comparable levels were qualified "U" and should be considered as non-detected values.

A^{2} = The sample results below the CRQLs for phenanthrene, di-n-butylphthalate, fluoranthene, pyrene, bis(2-ethylhexyl) phthalate and di-n-octylphthalatephenol , (method blank contamination) were elevated to the CRQLs and qualified "U".

A^{3}= The result for methoxychlor were qualified "U" due to the laboratory blank contamination.

A^{4}= The reported sample results up to action levels for Sb and Na were qualified "U".

J^{1}= The reported data for chloroethane was qualified estimated since the %D in continuing calibration was above 25%.

J^{2}= The reported data were qualified estimated due to internal standard outlier.

Table Cont.

J^3 Estimated the positive results "J" & non-detected values "UJ" since the %Ds for hexachlorocyclopentadiene 25% in continuing calibrations.

J^4= Estimated the positive results "J" & non-detected values "UJ" since the %Ds for 4-nitrophenol and hexachlorocyclopentadiene were above 25% in continuing calibrations.

J^5= Estimated the positive results "J" & non-detected values "UJ" since the dilution factor was above 5 fold dilution.

J^6= Estimated the positive results "J" & non-detected values "UJ" due to the surrogate recovery outlier and possible interference. The reported data were considered biased low.

J^7= The positive results were qualified estimated since the %D for the results reported on two different columns was above 25%.

J^8= Due to the ICS outliers all results and non-detected values were qualified estimated.

J^9 Estimate the positive results for Tl since the recovery was above 110% in initial calibrations.

J^{10} The positive results for Pb up to 3x CRDLs were qualified estimated since the CRDL recovery was above 120%.

J^{11} The positive results for Tl, Ag & Se up to 3x CRDLs and non-detected values were qualified estimated since the CRDL recovery was below 80%.

J^{12} Estimate the reported data for Sb and Cu since the recoveries were below 75% in matrix spike sample.

J^{13}= Estimate the positive results and non-detected values for TOC since the spike recovery was below 75%.

R= Reject the non-detected values for 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol since the response factors in continuing calibration were below 0.05 control limit.

Appendixes

1. **Appendix A- Glossary of Data Qualifier**
2. **Appendix B- Laboratory Form I, & Applied Qualifier Codes**

Appendix A
Glossary of Data Qualifier

GLOSSARY OF DATA QUALIFIERS

CODES RELATING TO IDENTIFICATION

(confidence concerning presence or absence of compounds):

U = NOT DETECTED SUBSTANTIALLY ABOVE THE LEVEL REPORTED IN LABORATORY OR FIELD BLANKS. [Substantially is equivalent to a result less than 10 times the blank level for common contaminants (methylene chloride, acetone and 2- butanone in the VOA analyses, and common phthalates in the BNA analyses, along with tentatively identified compounds) or less than 5 times the blank level for other target compounds.]

R = UNUSABLE RESULT. THE PRESENCE OR ABSENCE OF THIS ANALYTE CANNOT BE VERIFIED. SUPPORTING DATA NECESSARY TO CONFIRM RESULT.

N = NEGATED COMPOUND. THERE IS PRESUMPTIVE EVIDENCE TO MAKE A TENTATIVE IDENTIFICCATION.

CODES RELATING TO QUATITATION

(can be used for both positive results and sample quantitation limits):

J = ANALYTE WAS POSITIVELY IDENTIFIED. REPORTED VALUE MAY NOT BE ACCURATE OR PRECISE.

UJ = ANALYTE WAS NOT DETECTED. THE REPORTED QUATITATION LIMIT IS QUALIFIED ESTIMATED.

OTHER CODES

Q = NO ANALYTICAL RESULT.

Appendix B
Laboratory Reported Results
&
Applied Qualifier Codes

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-7

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8060

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: not dec. 10 Date Analyzed: 12/08/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q	
74-87-3	Chloromethane	11	U	
74-83-9	Bromomethane	11	U	
75-01-4	Vinyl Chloride	11	U	
75-00-3	Chloroethane	11	U	
75-09-2	Methylene Chloride	~~5~~ 11	~~J~~ U	
67-64-1	Acetone	30	~~B~~ U	
75-15-0	Carbon Disulfide	11	U	
75-35-4	1,1-Dichloroethene	11	U	
75-34-3	1,1-Dichloroethane	11	U	
540-59-0	1,2-Dichloroethene (total)	11	U	
67-66-3	Chloroform	11	U	
107-06-2	1,2-Dichloroethane	11	U	
78-93-3	2-Butanone	~~2~~ 11	~~JB~~ U	
71-55-6	1,1,1-Trichloroethane	11	U	
56-23-5	Carbon Tetrachloride	11	U	
75-27-4	Bromodichloromethane	11	U	
78-87-5	1,2-Dichloropropane	11	U	
10061-01-5	cis-1,3-Dichloropropene	11	U	
79-01-6	Trichloroethene	(6)	J	✓
124-48-1	Dibromochloromethane	11	U	
79-00-5	1,1,2-Trichloroethane	11	U	
71-43-2	Benzene	(4)	J	✓
10061-02-6	trans-1,3-Dichloropropene	11	U	
75-25-2	Bromoform	11	U	
108-10-1	4-Methyl-2-Pentanone	11	U	
591-78-6	2-Hexanone	11	U	
127-18-4	Tetrachloroethene	11	U	
79-34-5	1,1,2,2-Tetrachloroethane	11	U	
108-88-3	Toluene	(8)	J	✓
108-90-7	Chlorobenzene	11	U	
100-41-4	Ethylbenzene	(8)	J	✓
100-42-5	Styrene	11	U	
1330-20-7	Xylene (total)	(8)	J	✓

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-7

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8060

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: not dec. 10 Date Analyzed: 12/08/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01. 128-37-0	BUTYLATED HYDROXYTOLUENE	22.40	49	~~JN~~ R
02. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	20.59	10	~~JN~~ R
03.	UNKNOWN SILOXANE	22.62	9	~~J~~ R
04.				
05.				
06.				
07.				
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1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-7

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8060

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: not dec. 10 Date Analyzed: 12/08/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.128-37-0	BUTYLATED HYDROXYTOLUENE	22.40	49	~~JN~~ R
02.556-67-2	CYCLOTETRASILOXANE, OCTAMETH	20.59	10	~~JN~~ R
03.	UNKNOWN SILOXANE	22.62	9	~~J~~ R
04.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8065

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: not dec. 12 Date Analyzed: 12/08/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	11	U	
74-83-9	Bromomethane	11	U	
75-01-4	Vinyl Chloride	11	U	
75-00-3	Chloroethane	11	U	
75-09-2	Methylene Chloride	11 (2)	~~J~~	U
67-64-1	Acetone	21	~~B~~	U
75-15-0	Carbon Disulfide	11	U	
75-35-4	1,1-Dichloroethene	11	U	
75-34-3	1,1-Dichloroethane	11	U	
540-59-0	1,2-Dichloroethene (total)	11	U	
67-66-3	Chloroform	11	U	
107-06-2	1,2-Dichloroethane	11	U	
78-93-3	2-Butanone	11 ~~3~~	~~JB~~	U
71-55-6	1,1,1-Trichloroethane	11	U	
56-23-5	Carbon Tetrachloride	11	U	
75-27-4	Bromodichloromethane	11	U	
78-87-5	1,2-Dichloropropane	11	U	
10061-01-5	cis-1,3-Dichloropropene	11	U	
79-01-6	Trichloroethene	.7	(J)	
124-48-1	Dibromochloromethane	11	U	
79-00-5	1,1,2-Trichloroethane	11	U	
71-43-2	Benzene	11	U	
10061-02-6	trans-1,3-Dichloropropene	11	U	
75-25-2	Bromoform	11	U	
108-10-1	4-Methyl-2-Pentanone	11	U	
591-78-6	2-Hexanone	11	U	
127-18-4	Tetrachloroethene	11	U	
79-34-5	1,1,2,2-Tetrachloroethane	11	U	
108-88-3	Toluene	.6	(J)	
108-90-7	Chlorobenzene	11	U	
100-41-4	Ethylbenzene	11	U	
100-42-5	Styrene	11	U	
1330-20-7	Xylene (total)	11	U	

1A NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8065

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: not dec. 12 Date Analyzed: 12/08/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11 (2)	~~J~~ U
67-64-1	Acetone	21	~~B~~ U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11 3	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	.7	(U)
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	.6	(U)
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8065

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: not dec. 12 Date Analyzed: 12/08/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN SILOXANE	22.55	31	~~J~~ R
02.				
03.				
04.				
05.				
06.				
07.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-04

Sample wt/vol: 4 (g/mL) G Lab File ID: >06792

Level: (low/med) MED Date Received: 12/01/99

% Moisture: not dec. 16 Date Analyzed: 12/07/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	1400 130	~~J~~ U
67-64-1	Acetone	2200	~~B~~ U
75-15-0	Carbon Disulfide	110	(J)
75-35-4	1,1-Dichloroethene	1400	U
75-34-3	1,1-Dichloroethane	1400	U
540-59-0	1,2-Dichloroethene (total)	1400	U
67-66-3	Chloroform	1400	U
107-06-2	1,2-Dichloroethane	1400	U
78-93-3	2-Butanone	1800	~~B~~ U
71-55-6	1,1,1-Trichloroethane	1400	U
56-23-5	Carbon Tetrachloride	1400	U
75-27-4	Bromodichloromethane	1400	U
78-87-5	1,2-Dichloropropane	1400	U
10061-01-5	cis-1,3-Dichloropropene	1400	U
79-01-6	Trichloroethene	69	(J)
124-48-1	Dibromochloromethane	1400	U
79-00-5	1,1,2-Trichloroethane	1400	U
71-43-2	Benzene	760	(J)
10061-02-6	trans-1,3-Dichloropropene	1400	U
75-25-2	Bromoform	1400	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	1400	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
108-88-3	Toluene	560	(J)
108-90-7	Chlorobenzene	1400	U
100-41-4	Ethylbenzene	520	(J)
100-42-5	Styrene	1400	U
1330-20-7	Xylene (total)	2900	( )

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-04

Sample wt/vol: 4 (g/mL) G Lab File ID: >O6792

Level: (low/med) MED Date Received: 12/01/99

% Moisture: not dec. 16 Date Analyzed: 12/07/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

Number TICs Found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C3 ALKYLBENZENE	21.38	2500	J
02.	UNKNOWN ALKANE	22.45	1500	J
03.	UNKNOWN C3 ALKYLBENZENE	20.71	1200	J
04.	UNKNOWN	23.03	1100	J
05.	UNKNOWN C3 ALKYLBENZENE	20.55	830	J
06.	UNKNOWN ALKANE	20.41	820	J
07.				
08.				
09.				
10.				
11.				
12.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-05

Sample wt/vol: 4 (g/mL) G Lab File ID: >O6858

Level: (low/med) MED Date Received: 12/03/99

% Moisture: not dec. 13 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 20 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	6900	U	
74-83-9	Bromomethane	6900	U	
75-01-4	Vinyl Chloride	6900	U	
75-00-3	Chloroethane	6900	U	
75-09-2	Methylene Chloride	6900 ~~500~~	~~JB~~	U
67-64-1	Acetone	6900 ~~2400~~	~~JB~~	U
75-15-0	Carbon Disulfide	6900	U	
75-35-4	1,1-Dichloroethene	340	(J)	
75-34-3	1,1-Dichloroethane	6900	U	
540-59-0	1,2-Dichloroethene (total)	6900	U	
67-66-3	Chloroform	6900	U	
107-06-2	1,2-Dichloroethane	6900	U	
78-93-3	2-Butanone	6900 ~~3300~~	~~JB~~	U
71-55-6	1,1,1-Trichloroethane	6900	U	
56-23-5	Carbon Tetrachloride	6900	U	
75-27-4	Bromodichloromethane	6900	U	
78-87-5	1,2-Dichloropropane	6900	U	
10061-01-5	cis-1,3-Dichloropropene	6900	U	
79-01-6	Trichloroethene	390	(J)	
124-48-1	Dibromochloromethane	6900	U	
79-00-5	1,1,2-Trichloroethane	6900	U	
71-43-2	Benzene	1400	(J)	
10061-02-6	trans-1,3-Dichloropropene	6900	U	
75-25-2	Bromoform	6900	U	
108-10-1	4-Methyl-2-Pentanone	6900	U	
591-78-6	2-Hexanone	6900	U	
127-18-4	Tetrachloroethene	6900	U	
79-34-5	1,1,2,2-Tetrachloroethane	6900	U	
108-88-3	Toluene	1600	(J)	
108-90-7	Chlorobenzene	500	(J)	
100-41-4	Ethylbenzene	3200	(J)	
100-42-5	Styrene	6900	U	
1330-20-7	Xylene (total)	20000	( )	✓

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-05

Sample wt/vol: 4 (g/mL) G Lab File ID: >O6858

Level: (low/med) MED Date Received: 12/03/99

% Moisture: not dec. 13 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 20 (uL)

Number TICs Found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C3 ALKYLBENZENE	21.35	16000	J
02.	UNKNOWN ALKANE	22.42	12000	J
03.	UNKNOWN ALKANE	20.36	10000	J
04.	UNKNOWN C3 ALKYLBENZENE	20.66	8000	J
05.	UNKNOWN C9H8 ISOMER	23.00	7700	J
06.	UNKNOWN C3 ALKYLBENZENE	20.52	6500	J
07.	UNKNOWN ISOMER OF METHYL NAP	29.69	6400	J
08.	UNKNOWN ISOMER OF METHYL NAP	30.35	5100	J
09.	UNKNOWN C9H10 ISOMER	22.55	4700	J
10.	UNKNOWN C3 ALKYLBENZENE	22.12	4000	J
11.	UNKNOWN ALKANE	20.88	3700	J
12.				
13.				
14.				
15.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SS-1R

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-06

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8086

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 26 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	~~U~~ UJ
75-09-2	Methylene Chloride	~~14~~ 5	~~J~~ U
67-64-1	Acetone	29	~~B~~ U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	~~14~~ 4	~~J~~ U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	2	J
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	.3	J
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	.9	J
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	.7	J
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	.3	J
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	.5	J

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-1R

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-06

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8086

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 26 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01. 128-37-0	BUTYLATED HYDROXYTOLUENE	22.38	59	~~JN~~ R
02.	UNKNOWN SILOXANE	22.59	8	~~J~~ R
03.				
04.				
05.				
06.				
07.				
08.				
09.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SS-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-07

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8087

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 19 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	~~U~~ UJ
75-09-2	Methylene Chloride	~~12~~ 5	~~J~~ U
67-64-1	Acetone	37	~~B~~ U
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	~~12~~ 5	~~J~~ U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	2	(J)
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	.7	(J)
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	.4	(J)
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-07

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8087

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 19 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN SILOXANE	22.57	31	~~J~~
02. 128-37-0	BUTYLATED HYDROXYTOLUENE	22.42	10	~~JN~~
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
11.				
12.				
13.				
14.				
15.				
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R
R

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SS-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-08

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8088

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 7 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	~~U~~ UJ
75-09-2	Methylene Chloride	~~11~~ 4	~~J~~ J
67-64-1	Acetone	14	~~B~~ J
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	~~11~~ 3	~~J~~ J
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	.4	(J)
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	.3	(J)
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

SS-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-08

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8088

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 7 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN SILOXANE	22.55	12	J
02.	UNKNOWN SILOXANE	24.56	6	J
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
11.				
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13.				
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R
R

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SS-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-09

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8097

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 21 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	~~U~~ UJ
75-09-2	Methylene Chloride	13	U
67-64-1	Acetone	~~13~~ 6	~~JB~~ U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	2	J
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	.8	J
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	.5	J
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	13	U

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-09

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8097

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 21 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN SILOXANE	22.61	21	~~J~~ R
02.	UNKNOWN	25.28	14	J
03.	UNKNOWN SILOXANE	24.63	10	~~J~~ R
04.				
05.				
06.				
07.				
08.				
09.				
10.				
11.				
12.				
13.				
14.				
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16.				
17.				
18.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-10

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8090

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 5 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	~~U~~ UJ
75-09-2	Methylene Chloride	~~10~~ 5	~~U~~ U
67-64-1	Acetone	61	~~B~~ U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	~~10~~ 8	~~U~~ U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	.6	(U)
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	.7	(U)
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	~~10~~ 3	~~U~~ (U) U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	.2	(U)
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	.3	(U)

1E NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-10

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8090

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 5 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN SILOXANE	22.59	31	~~J~~ R
02.556-67-2	CYCLOTETRASILOXANE, OCTAMETH	20.52	7	~~JN~~ R
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
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1A

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

SB-8

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-11

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8091

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 10 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	~~U~~ UJ
75-09-2	Methylene Chloride	~~4~~ 11	~~J~~ U
67-64-1	Acetone	22	~~B~~ U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	~~5~~ 11	~~J~~ U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.: SB-8

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-11

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8091

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 10 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		UNKNOWN SILOXANE	22.57	15	J
02.					
03.					
04.					
05.					
06.					
07.					
08.					
09.					
10.					
11.					
12.					
13.					
14.					
15.					
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24.					
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30.					

R

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-12

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8092

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 17 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	12	U	
74-83-9	Bromomethane	12	U	
75-01-4	Vinyl Chloride	12	U	
75-00-3	Chloroethane	12	~~U~~	UJ
75-09-2	Methylene Chloride	~~12~~ 4	~~J~~	U
67-64-1	Acetone	42	~~B~~	U
75-15-0	Carbon Disulfide	12	U	
75-35-4	1,1-Dichloroethene	12	U	
75-34-3	1,1-Dichloroethane	12	U	
540-59-0	1,2-Dichloroethene (total)	12	U	
67-66-3	Chloroform	12	U	
107-06-2	1,2-Dichloroethane	12	U	
78-93-3	2-Butanone	~~12~~ 6	~~J~~	U
71-55-6	1,1,1-Trichloroethane	12	U	
56-23-5	Carbon Tetrachloride	12	U	
75-27-4	Bromodichloromethane	12	U	
78-87-5	1,2-Dichloropropane	12	U	
10061-01-5	cis-1,3-Dichloropropene	12	U	
79-01-6	Trichloroethene	12	U	
124-48-1	Dibromochloromethane	12	U	
79-00-5	1,1,2-Trichloroethane	12	U	
71-43-2	Benzene	12	U	
10061-02-6	trans-1,3-Dichloropropene	12	U	
75-25-2	Bromoform	12	U	
108-10-1	4-Methyl-2-Pentanone	12	U	
591-78-6	2-Hexanone	12	U	
127-18-4	Tetrachloroethene	12	U	
79-34-5	1,1,2,2-Tetrachloroethane	12	U	
108-88-3	Toluene	12	U	
108-90-7	Chlorobenzene	12	U	
100-41-4	Ethylbenzene	12	U	
100-42-5	Styrene	12	U	
1330-20-7	Xylene (total)	12	U	

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-12

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8092

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 17 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN SILOXANE	22.55	37	J
02.				
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
11.				
12.				
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R

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO

SB-3

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3090A SAS No _____ SDG No A3090

Matrix (soil/water) SOIL Lab Sample ID 993090A-13

Sample wt/vol 5 (g/mL) G Lab File ID >K8093

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec 13 Date Analyzed 12/09/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume _____(uL)

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11 3	J
67-64-1	Acetone	12	B
75-15-0	Carbon Disulfide	9	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroetnene	2	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11 7	J
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	1	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO: SB-3

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3090A SAS No _____ SDG No A3090

Matrix (soil/water) SOIL Lab Sample ID 993090A-13

Sample wt/vol 5 (g/mL) G Lab File ID >K8093

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec 13 Date Analyzed 12/09/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume _____(uL)

Number TICs Found 2

CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
01		UNKNOWN	22 56	17	J
02		UNKNOWN SILOXANE	24 58	7	~~J~~ R
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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23					
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25					
26					
27					
28					
29					
30					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO

DUP-1

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3090A SAS No _____ SDG No A3090

Matrix (soil/water) SOIL Lab Sample ID 993090A-14

Sample wt/vol 5 (g/mL) G Lab File ID >K8094

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec 15 Date Analyzed 12/09/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume ____(uL)

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	12	U	
74-83-9	Bromomethane	12	U	
75-01-4	Vinyl Chloride	12	U	
75-00-3	Chloroethane	12	~~U~~	UJ
75-09-2	Methylene Chloride	12 ~~3~~	~~J~~	V
67-64-1	Acetone	40	~~B~~	V
75-15-0	Carbon Disulfide	12	U	
75-35-4	1,1-Dichloroethene	12	U	
75-34-3	1,1-Dichloroethane	12	U	
540-59-0	1,2-Dichloroethene (total)	12	U	
67-66-3	Chloroform	12	U	
107-06-2	1,2-Dichloroethane	12	U	
78-93-3	2-Butanone	12 ~~3~~	~~J~~	U
71-55-6	1,1,1-Trichloroethane	12	U	
56-23-5	Carbon Tetrachloride	12	U	
75-27-4	Bromodichloromethane	12	U	
78-87-5	1,2-Dichloropropane	12	U	
10061-01-5	cis-1,3-Dichloropropene	12	U	
79-01-6	Trichloroethene	9	(J)	
124-48-1	Dibromochloromethane	12	U	
79-00-5	1,1,2-Trichloroethane	12	U	
71-43-2	Benzene	3	(U)	
10061-02-6	trans-1,3-Dichloropropene	12	U	
75-25-2	Bromoform	12	U	
108-10-1	4-Methyl-2-Pentanone	12	U	
591-78-6	2-Hexanone	12	U	
127-18-4	Tetrachloroethene	12	U	
79-34-5	1,1,2,2-Tetrachloroethane	12	U	
108-88-3	Toluene	12	U	
108-90-7	Chlorobenzene	12	U	
100-41-4	Ethylbenzene	3	(U)	
100-42-5	Styrene	12	U	
1330-20-7	Xylene (total)	3	(U)	

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DUP-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-14

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8094

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 15 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		UNKNOWN SILOXANE	22.57	33	J
02.					
03.					
04.					
05.					
06.					
07.					
08.					
09.					
10.					
11.					
12.					
13.					
14.					
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16.					
17.					
18.					
19.					
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22.					
23.					
24.					
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27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO

CB-1

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3090A SAS No _____ SDG No A3090

Matrix (soil/water) SOIL Lab Sample ID 993090A-15

Sample wt/vol 5 (g/mL) G Lab File ID >K8098

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec 34 Date Analyzed 12/09/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume _____(uL)

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15	U
74-83-9	Bromomethane	15	U
75-01-4	Vinyl Chloride	15	U
75-00-3	Chloroethane	15	~~U~~ UJ
75-09-2	Methylene Chloride	15	U
67-64-1	Acetone	15	U
75-15-0	Carbon Disulfide	15	U
75-35-4	1,1-Dichloroethene	15	U
75-34-3	1,1-Dichloroethane	15	U
540-59-0	1,2-Dichloroethene (total)	15	U
67-66-3	Chloroform	15	U
107-06-2	1,2-Dichloroethane	15	U
78-93-3	2-Butanone	15	U
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
75-27-4	Bromodichloromethane	15	U
78-87-5	1,2-Dichloropropane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
79-01-6	Trichloroethene	4	J
124-48-1	Dibromochloromethane	15	U
79-00-5	1,1,2-Trichloroethane	15	U
71-43-2	Benzene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
75-25-2	Bromoform	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	12	(U)
79-34-5	1,1,2,2-Tetrachloroethane	15	~~U~~ UJ
108-88-3	Toluene	15 ~~8~~	~~U~~ J
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
100-42-5	Styrene	15	U
1330-20-7	Xylene (total)	15	U

See The reanalyses

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

CB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-15

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8098

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 34 Date Analyzed: 12/09/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN SILOXANE	24.61	17	J
02.	UNKNOWN SILOXANE	22.59	16	J
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
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R

See The reanalysis

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO

CB-1RE

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3090A SAS No _____ SDG No A3090

Matrix (soil/water) SOIL Lab Sample ID 993090A-15RE

Sample wt/vol 5 (g/mL) G Lab File ID >K8112

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec 34 Date Analyzed 12/10/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume _____(uL)

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15	U
74-83-9	Bromomethane	15	U
75-01-4	Vinyl Chloride	15	U
75-00-3	Chloroethane	15	U
75-09-2	Methylene Chloride	15	U
67-64-1	Acetone	31	~~B~~
75-15-0	Carbon Disulfide	15	U
75-35-4	1,1-Dichloroethene	15	U
75-34-3	1,1-Dichloroethane	15	U
540-59-0	1,2-Dichloroethene (total)	15	U
67-66-3	Chloroform	15	U
107-06-2	1,2-Dichloroethane	15	U
78-93-3	2-Butanone	13	~~JB~~
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
75-27-4	Bromodichloromethane	15	U
78-87-5	1,2-Dichloropropane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
79-01-6	Trichloroethene	4	(J)
124-48-1	Dibromochloromethane	15	U
79-00-5	1,1,2-Trichloroethane	15	U
71-43-2	Benzene	3	(J)
10061-02-6	trans-1,3-Dichloropropene	15	U
75-25-2	Bromoform	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	12	(J)
79-34-5	1,1,2,2-Tetrachloroethane	15	U
108-88-3	Toluene	15 3	(J)
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
100-42-5	Styrene	15	U
1330-20-7	Xylene (total)	1	(J)

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

CB-1RE

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-15RE

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8112

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 34 Date Analyzed: 12/10/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01. 128-37-0	BUTYLATED HYDROXYTOLUENE	23.20	180	~~JN~~ R
02.				
03.				
04.				
05.				
06.				
07.				
08.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO

DUP-2

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3090A SAS No _____ SDG No A3090

Matrix (soil/water) SOIL Lab Sample ID 993090A-16

Sample wt/vol 5 (g/mL) G Lab File ID >K8113

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec 35 Date Analyzed 12/10/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume _____(uL)

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	15	U	
74-83-9	Bromomethane	15	U	
75-01-4	Vinyl Chloride	15	U	
75-00-3	Chloroethane	15	U	
75-09-2	Methylene Chloride	15	U	
67-64-1	Acetone	52	~~B~~	U
75-15-0	Carbon Disulfide	15	U	
75-35-4	1,1-Dichloroethene	15	U	
75-34-3	1,1-Dichloroethane	15	U	
540-59-0	1,2-Dichloroethene (total)	15	U	
67-66-3	Chloroform	15	U	
107-06-2	1,2-Dichloroethane	15	U	
78-93-3	2-Butanone	16	~~B~~	U
71-55-6	1,1,1-Trichloroethane	15	U	
56-23-5	Carbon Tetrachloride	15	U	
75-27-4	Bromodichloromethane	15	U	
78-87-5	1,2-Dichloropropane	15	U	
10061-01-5	cis-1,3-Dichloropropene	15	U	
79-01-6	Trichloroethene	4	(J)	
124-48-1	Dibromochloromethane	15	U	
79-00-5	1,1,2-Trichloroethane	15	U	
71-43-2	Benzene	8	(J)	
10061-02-6	trans-1,3-Dichloropropene	15	U	
75-25-2	Bromoform	15	U	
108-10-1	4-Methyl-2-Pentanone	15	U	
591-78-6	2-Hexanone	15	U	
127-18-4	Tetrachloroethene	12	(J)	
79-34-5	1,1,2,2-Tetrachloroethane	15	U	
108-88-3	Toluene	15 1	~~J~~	U
108-90-7	Chlorobenzene	15	U	
100-41-4	Ethylbenzene	15	U	
100-42-5	Styrene	15	U	
1330-20-7	Xylene (total)	15	U	

1E

NYSDEC SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DUP-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-16

Sample wt/vol: 5 (g/mL) G Lab File ID: >K8113

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: not dec. 35 Date Analyzed: 12/10/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	22.92	30	J ~~N~~
02.128-37-0	BUTYLATED HYDROXYTOLUENE	23.25	25	~~JN~~
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
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1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-7

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-02

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5565

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 10.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1900	U
111-44-4	bis(2-Chloroethyl)ether	1900	U
95-57-8	2-Chlorophenol	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
95-50-1	1,2-Dichlorobenzene	1900	U
95-48-7	2-Methylphenol	1900	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1900	U
106-44-5	4-Methylphenol	1900	U
621-64-7	N-Nitroso-di-n-propylamine	1900	U
67-72-1	Hexachloroethane	1900	U
98-95-3	Nitrobenzene	1900	U
78-59-1	Isophorone	1900	U
88-75-5	2-Nitrophenol	1900	U
105-67-9	2,4-Dimethylphenol	1900	U
111-91-1	bis(2-Chloroethoxy)methane	1900	U
120-83-2	2,4-Dichlorophenol	1900	U
120-82-1	1,2,4-Trichlorobenzene	1900	U
91-20-3	Naphthalene	490	J
106-47-8	4-Chloroaniline	1900	U
87-68-3	Hexachlorobutadiene	1900	U
59-50-7	4-Chloro-3-methylphenol	1900	U
91-57-6	2-Methylnaphthalene	130	J
77-47-4	Hexachlorocyclopentadiene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	4800	U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	4800	U
131-11-3	Dimethylphthalate	1900	U
208-96-8	Acenaphthylene	2600	
606-20-2	2,6-Dinitrotoluene	1900	U
99-09-2	3-Nitroaniline	4800	U
83-32-9	Acenaphthene	210	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO: SB-7

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3090A SAS No _____ SDG No A3090

Matrix (soil/water) SOIL Lab Sample ID 993090A-02

Sample wt/vol 30 (g/mL) G Lab File ID >R5565

Level. (low/med) LOW Date Received 12/01/99

% Moisture 13 decanted (Y/N) N Date Extracted 12/05/99

Concentrated Extract Volume 500 (uL) Date Analyzed 12/28/99

Injection Volume 2 0 (uL) Dilution Factor 5 0

GPC Cleanup (Y/N) Y pH 10 6

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4800	U
100-02-7	4-Nitrophenol	4800	U
132-64-9	Dibenzofuran	260	J
121-14-2	2,4-Dinitrotoluene	1900	U
84-66-2	Diethylphthalate	1900	U
7005-72-3	4-Chlorophenyl-phenylether	1900	U
86-73-7	Fluorene	480	J
100-01-6	4-Nitroaniline	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	4800	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
101-55-3	4-Bromophenyl-phenylether	1900	U
118-74-1	Hexachlorobenzene	1900	U
87-86-5	Pentachlorophenol	4800	U
85-01-8	Phenanthrene	5400	~~B~~
120-12-7	Anthracene	2600	
86-74-8	Carbazole	440	J
84-74-2	Di-n-butylphthalate	1900	U
206-44-0	Fluoranthene	13000	~~B~~
129-00-0	Pyrene	13000	B
85-68-7	Butylbenzylphthalate	1900	U
91-94-1	3,3'-Dichlorobenzidine	1900	U
56-55-3	Benzo(a)anthracene	9400	
218-01-9	Chrysene	7900	
117-81-7	bis(2-Ethylhexyl)phthalate	4754 ~~1000~~	~~JB~~
117-84-0	Di-n-octylphthalate	1900	U
205-99-2	Benzo(b)fluoranthene	6100	
207-08-9	Benzo(k)fluoranthene	5900	
50-32-8	Benzo(a)pyrene	7300	
193-39-5	Indeno(1,2,3-cd)pyrene	4900	
53-70-3	Dibenz(a,h)anthracene	1800	J
191-24-2	Benzo(g,h,i)perylene	5500	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-7

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-02

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5565

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 10.6

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C17H12 PAH	23.26	5700	J
02.	UNKNOWN C20H12 PAH	27.58	5000	J
03.	UNKNOWN C15H10 ISOMER	20.90	4400	J
04.	UNKNOWN C17H12 PAH	23.48	3400	J
05.	UNKNOWN C20H12 PAH	27.81	3300	J
06.	UNKNOWN C19H14 PAH	25.83	3200	J
07.	UNKNOWN DIBENZOPYRENE ISOMER	32.29	2800	J
08.	UNKNOWN C17H12 PAH	23.39	2700	J
09.	UNKNOWN C22H12 PAH	30.30	2600	J
10.	UNKNOWN METHYL-PYRENE	23.03	2600	J
11.	UNKNOWN C20H12 PAH	27.27	2600	J
12.	UNKNOWN	29.17	2300	J
13.	UNKNOWN C22H14 PAH	29.73	2200	J
14.	UNKNOWN C18H12 PAH	24.59	2200	J
15.	UNKNOWN C17H12 PAH	23.72	2200	J
16.	UNKNOWN C22H14 PAH	29.81	2200	J
17.	UNKNOWN C21H14 PAH	28.02	2200	J
18.	UNKNOWN	21.99	2200	J
19.	UNKNOWN C17H10O ISOMER	24.73	2100	J
20.	UNKNOWN C15H12 PAH	20.71	2100	J
21.	UNKNOWN DIBENZOPYRENE ISOMER	32.46	2100	J
22.	UNKNOWN C17H10O ISOMER	24.32	2000	J
23.	UNKNOWN C16H10 PAH	22.31	1800	J
24.	UNKNOWN	21.88	1800	J
25.	UNKNOWN METHYL-PYRENE ISOMER	23.67	1800	J
26.	UNKNOWN C18H12 PAH	25.27	1800	J
27.	UNKNOWN C15H12 PAH	20.79	1800	J
28.	UNKNOWN C15H12 PAH	20.65	1600	J
29.	UNKNOWN DIBENZOPYRENE ISOMER	32.59	1600	J
30.	UNKNOWN	28.09	1600	J

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-03

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5569

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	28	J
111-44-4	bis(2-Chloroethyl)ether	760	U
95-57-8	2-Chlorophenol	760	U
541-73-1	1,3-Dichlorobenzene	760	U
106-46-7	1,4-Dichlorobenzene	760	U
95-50-1	1,2-Dichlorobenzene	760	U
95-48-7	2-Methylphenol	760	U
108-60-1	2,2'-oxybis(1-Chloropropane)	760	U
106-44-5	4-Methylphenol	56	J
621-64-7	N-Nitroso-di-n-propylamine	760	U
67-72-1	Hexachloroethane	760	U
98-95-3	Nitrobenzene	760	U
78-59-1	Isophorone	760	U
88-75-5	2-Nitrophenol	760	U
105-67-9	2,4-Dimethylphenol	760	U
111-91-1	bis(2-Chloroethoxy)methane	760	U
120-83-2	2,4-Dichlorophenol	760	U
120-82-1	1,2,4-Trichlorobenzene	760	U
91-20-3	Naphthalene	170	J
106-47-8	4-Chloroaniline	760	U
87-68-3	Hexachlorobutadiene	760	U
59-50-7	4-Chloro-3-methylphenol	760	U
91-57-6	2-Methylnaphthalene	250	J
77-47-4	Hexachlorocyclopentadiene	760	U
88-06-2	2,4,6-Trichlorophenol	760	U
95-95-4	2,4,5-Trichlorophenol	1900	U
91-58-7	2-Chloronaphthalene	760	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	760	U
208-96-8	Acenaphthylene	440	J
606-20-2	2,6-Dinitrotoluene	760	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	160	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-03

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5569

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	~~U~~ U
132-64-9	Dibenzofuran	310	J
121-14-2	2,4-Dinitrotoluene	760	U
84-66-2	Diethylphthalate	760	U
7005-72-3	4-Chlorophenyl-phenylether	760	U
86-73-7	Fluorene	460	J
100-01-6	4-Nitroaniline	1900	U
534-52-1	4,6-Dinitro-2-methylphenol	1900	U
86-30-6	N-Nitrosodiphenylamine (1)	760	U
101-55-3	4-Bromophenyl-phenylether	760	U
118-74-1	Hexachlorobenzene	760	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	2500	~~B~~
120-12-7	Anthracene	1200	
86-74-8	Carbazole	330	J
84-74-2	Di-n-butylphthalate	760 ~~22~~	~~JB~~ U
206-44-0	Fluoranthene	3500	~~B~~
129-00-0	Pyrene	3600	~~B~~
85-68-7	Butylbenzylphthalate	42	J
91-94-1	3,3'-Dichlorobenzidine	760	U
56-55-3	Benzo(a)anthracene	3400	
218-01-9	Chrysene	3000	
117-81-7	bis(2-Ethylhexyl)phthalate	760 ~~380~~	~~JB~~ U
117-84-0	Di-n-octylphthalate	760 49	~~JB~~ U
205-99-2	Benzo(b)fluoranthene	3200	
207-08-9	Benzo(k)fluoranthene	2000	
50-32-8	Benzo(a)pyrene	3300	
193-39-5	Indeno(1,2,3-cd)pyrene	2700	
53-70-3	Dibenz(a,h)anthracene	990	
191-24-2	Benzo(g,h,i)perylene	2900	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-03

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5569

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C20H12 PAH	27.59	2500	J
02.	UNKNOWN C17H12 PAH	23.27	2000	J
03.	UNKNOWN C19H14 PAH	26.12	1800	J
04.	UNKNOWN C20H12 PAH	27.83	1600	J
05.	UNKNOWN C15H10 PAH	20.90	1200	J
06.	UNKNOWN METHYL PYRENE	23.48	1200	J
07.	UNKNOWN C21H14 PAH	28.03	1200	J
08.	UNKNOWN C19H14 PAH	25.92	1100	J
09.	UNKNOWN C17H10O ISOMER	24.33	1100	J
10.	UNKNOWN C22H14 PAH	29.75	1100	J
11.	UNKNOWN C22H14 PAH	29.83	1100	J
12.	UNKNOWN C17H10O ISOMER	24.74	950	J
13.	UNKNOWN	23.03	930	J
14.	UNKNOWN C22H14 PAH	29.19	900	J
15.	UNKNOWN C16H11N ISOMER	25.51	900	J
16.	UNKNOWN BENZO[B]NAPHTHO THIO	24.53	880	J
17.	UNKNOWN C20H12 PAH	27.28	870	J
18.	UNKNOWN C21H14 PAH	28.39	810	J
19.	UNKNOWN DIBENZOPYRENE	32.31	800	J
20.	UNKNOWN C15H12 PAH	20.71	800	J
21.	UNKNOWN 11H-BENZO[A]CARBAZOL	25.41	790	J
22.	UNKNOWN C17H12 PAH	23.73	780	J
23.	UNKNOWN C19H14 PAH	25.75	740	J
24.	UNKNOWN C21H14 PAH	27.93	730	J
25.	UNKNOWN NETHYL-PHENANTHRENE	20.79	730	J
26.	UNKNOWN C20H12O ISOMER C	27.44	710	J
27.	UNKNOWN	30.73	710	J
28.	UNKNOWN C22H12 PAH	30.33	700	J
29.	UNKNOWN C20H14 PAH	26.82	700	J
30.	UNKNOWN	28.44	700	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-04

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5583

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 19 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 9.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	8100	U
111-44-4	bis(2-Chloroethyl)ether	8100	U
95-57-8	2-Chlorophenol	8100	U
541-73-1	1,3-Dichlorobenzene	8100	U
106-46-7	1,4-Dichlorobenzene	8100	U
95-50-1	1,2-Dichlorobenzene	8100	U
95-48-7	2-Methylphenol	8100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	8100	U
106-44-5	4-Methylphenol	8100	U
621-64-7	N-Nitroso-di-n-propylamine	8100	U
67-72-1	Hexachloroethane	8100	U
98-95-3	Nitrobenzene	8100	U
78-59-1	Isophorone	8100	U
88-75-5	2-Nitrophenol	8100	U
105-67-9	2,4-Dimethylphenol	8100	U
111-91-1	bis(2-Chloroethoxy)methane	8100	U
120-83-2	2,4-Dichlorophenol	8100	U
120-82-1	1,2,4-Trichlorobenzene	8100	U
91-20-3	Naphthalene	46000	
106-47-8	4-Chloroaniline	8100	U
87-68-3	Hexachlorobutadiene	8100	U
59-50-7	4-Chloro-3-methylphenol	8100	U
91-57-6	2-Methylnaphthalene	5700	J
77-47-4	Hexachlorocyclopentadiene	8100	U
88-06-2	2,4,6-Trichlorophenol	8100	U
95-95-4	2,4,5-Trichlorophenol	20000	U
91-58-7	2-Chloronaphthalene	8100	U
88-74-4	2-Nitroaniline	20000	U
131-11-3	Dimethylphthalate	8100	U
208-96-8	Acenaphthylene	5100	J
606-20-2	2,6-Dinitrotoluene	8100	U
99-09-2	3-Nitroaniline	20000	U
83-32-9	Acenaphthene	1800	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-04

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5583

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 19 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 9.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	20000	U
100-02-7	4-Nitrophenol	20000	~~U~~
132-64-9	Dibenzofuran	6400	J
121-14-2	2,4-Dinitrotoluene	8100	U
84-66-2	Diethylphthalate	8100	U
7005-72-3	4-Chlorophenyl-phenylether	8100	U
86-73-7	Fluorene	8900	
100-01-6	4-Nitroaniline	20000	U
534-52-1	4,6-Dinitro-2-methylphenol	20000	U
86-30-6	N-Nitrosodiphenylamine (1)	8100	U
101-55-3	4-Bromophenyl-phenylether	8100	U
118-74-1	Hexachlorobenzene	8100	U
87-86-5	Pentachlorophenol	20000	U
85-01-8	Phenanthrene	28000	~~B~~
120-12-7	Anthracene	9100	
86-74-8	Carbazole	3800	J
84-74-2	Di-n-butylphthalate	8100	U
206-44-0	Fluoranthene	22000	~~B~~
129-00-0	Pyrene	18000	B
85-68-7	Butylbenzylphthalate	8100	U
91-94-1	3,3'-Dichlorobenzidine	8100	U
56-55-3	Benzo(a)anthracene	10000	
218-01-9	Chrysene	9500	
117-81-7	bis(2-Ethylhexyl)phthalate	600	~~JB~~ U
117-84-0	Di-n-octylphthalate	160	~~JB~~ U
205-99-2	Benzo(b)fluoranthene	6300	J
207-08-9	Benzo(k)fluoranthene	6200	J
50-32-8	Benzo(a)pyrene	7300	J
193-39-5	Indeno(1,2,3-cd)pyrene	3800	J
53-70-3	Dibenz(a,h)anthracene	1400	J
191-24-2	Benzo(g,h,i)perylene	3700	J

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-04

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5583

Level: (low/med) LOW Date Received: 12/01/99

% Moisture: 19 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 9.5

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C15H10 PAH	20.89	8200	J
02.	UNKNOWN METHYL-ANTHRACENE	20.70	6700	J
03.	UNKNOWN C20H12 PAH	27.56	5200	J
04.	UNKNOWN C17H12 PAH	23.25	5000	J
05.	UNKNOWN	21.88	4900	J
06.90-12-0	NAPHTHALENE, 1-METHYL-	14.47	4600	JN
07.	UNKNOWN C15H12 PAH	20.63	4400	J
08.	UNKNOWN	19.93	4300	J
09.	UNKNOWN C17H12 PAH	23.38	4200	J
10.	UNKNOWN C9H8 ISOMER	10.30	4000	J
11.	UNKNOWN METHYL-PYRENE ISOMER	23.47	4000	J
12.	UNKNOWN C15H12 PAH	20.78	3900	J
13.	UNKNOWN DIMETHYL-NAPHTHALENE	15.79	3600	J
14.	UNKNOWN C19H14 PAH	25.81	3500	J
15.	UNKNOWN C13H10O ISOMER	18.15	3200	J
16.612-94-2	NAPHTHALENE, 2-PHENYL-	21.25	3000	JN
17.	UNKNOWN DIMETHYL-NAPHTHALENE	15.60	2900	J
18.	UNKNOWN C16H10 PAH	22.30	2700	J
19.	UNKNOWN C13H10O ISOMER	18.02	2700	J
20.	UNKNOWN C17H12 PAH	23.02	2700	J
21.	UNKNOWN C20H12 PAH	27.78	2700	J
22.	UNKNOWN C17H10O ISOMER	24.31	2600	J
23.	UNKNOWN DIBENZOPYRENE ISOMER	32.24	2600	J
24.	UNKNOWN METHYL-FLUORENE ISOM	18.80	2600	J
25.132-65-0	DIBENZOTHIOPHENE	19.39	2600	JN
26.	UNKNOWN C9H12 ISOMER	9.32	2600	J
27.	UNKNOWN C18H12 PAH	24.58	2500	J
28.	UNKNOWN C17H12 PAH	23.71	2500	J
29.	UNKNOWN	20.18	2500	J
30.	UNKNOWN	19.54	2500	J

1B EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-05

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5533

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	71	J
111-44-4	bis(2-Chloroethyl)ether	1600	U
95-57-8	2-Chlorophenol	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
95-50-1	1,2-Dichlorobenzene	1600	U
95-48-7	2-Methylphenol	1600	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1600	U
106-44-5	4-Methylphenol	140	J
621-64-7	N-Nitroso-di-n-propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	71	J
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U
91-20-3	Naphthalene	5000	
106-47-8	4-Chloroaniline	1600	U
87-68-3	Hexachlorobutadiene	1600	U
59-50-7	4-Chloro-3-methylphenol	1600	U
91-57-6	2-Methylnaphthalene	590	J
77-47-4	Hexachlorocyclopentadiene	1600	~~U~~ UJ
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	3900	U
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	3900	U
131-11-3	Dimethylphthalate	1600	U
208-96-8	Acenaphthylene	1700	
606-20-2	2,6-Dinitrotoluene	1600	U
99-09-2	3-Nitroaniline	3900	U
83-32-9	Acenaphthene	810	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-05

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5533

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	3900	~~U~~	R~~4~~
100-02-7	4-Nitrophenol	3900	U	
132-64-9	Dibenzofuran	2200		
121-14-2	2,4-Dinitrotoluene	1600	U	
84-66-2	Diethylphthalate	1600	U	
7005-72-3	4-Chlorophenyl-phenylether	1600	U	
86-73-7	Fluorene	3100		
100-01-6	4-Nitroaniline	3900	U	
534-52-1	4,6-Dinitro-2-methylphenol	3900	~~U~~	R~~4~~
86-30-6	N-Nitrosodiphenylamine (1)	1600	U	
101-55-3	4-Bromophenyl-phenylether	1600	U	
118-74-1	Hexachlorobenzene	1600	U	
87-86-5	Pentachlorophenol	3900	U	
85-01-8	Phenanthrene	10000	~~B~~	
120-12-7	Anthracene	3700		
86-74-8	Carbazole	1500	J	
84-74-2	Di-n-butylphthalate	1600	U	
206-44-0	Fluoranthene	9900	~~B~~	
129-00-0	Pyrene	9600	~~B~~	
85-68-7	Butylbenzylphthalate	1600	U	
91-94-1	3,3'-Dichlorobenzidine	1600	U	
56-55-3	Benzo(a)anthracene	5600		
218-01-9	Chrysene	5000		
117-81-7	bis(2-Ethylhexyl)phthalate	1600 400	~~JB~~	U
117-84-0	Di-n-octylphthalate	1600	U	
205-99-2	Benzo(b)fluoranthene	3600		
207-08-9	Benzo(k)fluoranthene	3900		
50-32-8	Benzo(a)pyrene	5000		
193-39-5	Indeno(1,2,3-cd)pyrene	3300		
53-70-3	Dibenz(a,h)anthracene	1200	J	
191-24-2	Benzo(g,h,i)perylene	3500		

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SB-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-05

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5533

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 9.0

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	20.93	3300	J
02.	UNKNOWN C20H12 PAH	27.61	3100	J
03.	UNKNOWN DIBENZOPYRENE ISOMER	32.34	2300	J
04.	UNKNOWN C17H12 PAH	23.30	2100	J
05.	UNKNOWN METEHYL-ANTHRACENE	20.73	1900	J
06.	UNKNOWN C17H12 PAH	23.41	1700	J
07.	UNKNOWN C19H14 PAH	25.86	1700	J
08.	UNKNOWN DIBENZOPYRENE ISOMER	32.53	1600	J
09.	UNKNOWN METHYL-PHENANTHRENE	20.81	1600	J
10.	UNKNOWN METHYL-ANTHRACENE	20.67	1600	J
11.	UNKNOWN C18H12 PAH	24.62	1500	J
12.	UNKNOWN C21H14 PAH	28.06	1500	J
13.	UNKNOWN C22H14 PAH	29.76	1500	J
14.	UNKNOWN C22H14 PAH	29.84	1500	J
15.	UNKNOWN C20H12 PAH	27.84	1400	J
16.	UNKNOWN DIBENZOPYRENE ISOMER	32.65	1400	J
17.	UNKNOWN C22H12 PAH	30.34	1400	J
18.90-12-0	NAPHTHALENE, 1-METHYL-	14.49	1400	JN
19.	UNKNOWN C17H12 PAH	23.50	1400	J
20.	UNKNOWN DIMETHYL-NAPHTHALENE	15.81	1300	J
21.	UNKNOWN C20H12 PAH	27.30	1200	J
22.	UNKNOWN C17H12 PAH	23.05	1200	J
23.612-94-2	NAPHTHALENE, 2-PHENYL-	21.28	1100	JN
24.	UNKNOWN C18H12 PAH	25.29	1000	J
25.	UNKNOWN C17H12 PAH	23.75	1000	J
26.	UNKNOWN C13H10O ISOMER	18.19	1000	J
27.	UNKNOWN	21.91	1000	J
28.	UNKNOWN BENZO CARBAZOLE	25.54	990	J
29.	UNKNOWN C13H10O ISOMER	18.04	980	J
30.	UNKNOWN	26.54	950	J

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SS-1R

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-06

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5532

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	480	U
111-44-4	bis(2-Chloroethyl)ether	480	U
95-57-8	2-Chlorophenol	480	U
541-73-1	1,3-Dichlorobenzene	480	U
106-46-7	1,4-Dichlorobenzene	480	U
95-50-1	1,2-Dichlorobenzene	480	U
95-48-7	2-Methylphenol	480	U
108-60-1	2,2'-oxybis(1-Chloropropane)	480	U
106-44-5	4-Methylphenol	480	U
621-64-7	N-Nitroso-di-n-propylamine	480	U
67-72-1	Hexachloroethane	480	U
98-95-3	Nitrobenzene	480	U
78-59-1	Isophorone	480	U
88-75-5	2-Nitrophenol	480	U
105-67-9	2,4-Dimethylphenol	480	U
111-91-1	bis(2-Chloroethoxy)methane	480	U
120-83-2	2,4-Dichlorophenol	480	U
120-82-1	1,2,4-Trichlorobenzene	480	U
91-20-3	Naphthalene	36	J
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	480	U
59-50-7	4-Chloro-3-methylphenol	480	U
91-57-6	2-Methylnaphthalene	14	J
77-47-4	Hexachlorocyclopentadiene	480	U
88-06-2	2,4,6-Trichlorophenol	480	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	480	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	480	U
208-96-8	Acenaphthylene	78	J
606-20-2	2,6-Dinitrotoluene	480	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	14	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-1R

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-06

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5532

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200	~~U~~
100-02-7	4-Nitrophenol	1200	U
132-64-9	Dibenzofuran	19	J
121-14-2	2,4-Dinitrotoluene	480	U
84-66-2	Diethylphthalate	9	J
7005-72-3	4-Chlorophenyl-phenylether	480	U
86-73-7	Fluorene	33	J
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	~~U~~
86-30-6	N-Nitrosodiphenylamine (1)	480	U
101-55-3	4-Bromophenyl-phenylether	480	U
118-74-1	Hexachlorobenzene	480	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	48J ~~300~~	~~JB~~
120-12-7	Anthracene	92	J
86-74-8	Carbazole	38	J
84-74-2	Di-n-butylphthalate	43J ~~31~~	~~JB~~
206-44-0	Fluoranthene	700	~~B~~
129-00-0	Pyrene	770	~~B~~
85-68-7	Butylbenzylphthalate	12	J
91-94-1	3,3'-Dichlorobenzidine	480	U
56-55-3	Benzo(a)anthracene	400	J
218-01-9	Chrysene	430	J
117-81-7	bis(2-Ethylhexyl)phthalate	48J ~~350~~	~~JB~~
117-84-0	Di-n-octylphthalate	45J ~~10~~	~~JB~~
205-99-2	Benzo(b)fluoranthene	430	J
207-08-9	Benzo(k)fluoranthene	360	J
50-32-8	Benzo(a)pyrene	420	J
193-39-5	Indeno(1,2,3-cd)pyrene	340	J
53-70-3	Dibenz(a,h)anthracene	110	J
191-24-2	Benzo(g,h,i)perylene	400	J

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-1R

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-06

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5532

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.58-61-3	STIGMAST-4-EN-3-ONE	31.19	2300	JN
02.83-47-6	.GAMMA.-SITOSTEROL	30.13	2200	JN
03.	UNKNOWN	30.71	1400	J
04.83-48-7	STIGMASTEROL	29.72	1100	JN
05.	UNKNOWN ACID	20.72	760	J
06.	UNKNOWN	26.76	710	J
07.	UNKNOWN	29.37	620	J
08.	UNKNOWN	9.19	620	~~JB~~ ?
09.	UNKNOWN	32.65	600	J
10.	UNKNOWN C20H12 PAH	27.60	570	J
11.	UNKNOWN	28.24	560	J
12.	UNKNOWN	30.49	560	J
13.	UNKNOWN	31.54	550	J
14.	UNKNOWN	29.52	550	J
15.	UNKNOWN	30.95	550	J
16.	UNKNOWN	30.53	530	J
17.	UNKNOWN C22H12 PAH	30.31	460	J
18.	UNKNOWN	30.61	460	J
19.	UNKNOWN	31.02	450	J
20.57-88-5	CHOLESTEROL	28.85	420	JN
21.	UNKNOWN	30.22	410	J
22.	UNKNOWN	29.89	400	J
23.	UNKNOWN	30.40	380	J
24.	UNKNOWN	30.79	380	J
25.	UNKNOWN C22H14 PAH	29.83	380	J
26.	UNKNOWN	27.90	340	J
27.	UNKNOWN	29.14	340	J
28.	UNKNOWN DIBENZOPYRENE ISOMER	32.50	330	J
29.	UNKNOWN ACID	22.19	320	J
30.	UNKNOWN C17H12 PAH	23.26	310	J

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SS-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-07

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5530

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	10	J
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	21	J
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	12	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-07

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5530

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1000	~~U~~	R
100-02-7	4-Nitrophenol	1000	U	
132-64-9	Dibenzofuran	400	U	
121-14-2	2,4-Dinitrotoluene	400	U	
84-66-2	Diethylphthalate	400	U	
7005-72-3	4-Chlorophenyl-phenylether	400	U	
86-73-7	Fluorene	14	J	
100-01-6	4-Nitroaniline	1000	U	
534-52-1	4,6-Dinitro-2-methylphenol	1000	~~U~~	R
86-30-6	N-Nitrosodiphenylamine (1)	400	U	
101-55-3	4-Bromophenyl-phenylether	400	U	
118-74-1	Hexachlorobenzene	400	U	
87-86-5	Pentachlorophenol	130	J	
85-01-8	Phenanthrene	400 ~~180~~	~~JB~~	U
120-12-7	Anthracene	50	J	
86-74-8	Carbazole	27	J	
84-74-2	Di-n-butylphthalate	400 ~~18~~	~~JB~~	U
206-44-0	Fluoranthene	430	~~B~~	
129-00-0	Pyrene	400	~~B~~	
85-68-7	Butylbenzylphthalate	400	U	
91-94-1	3,3'-Dichlorobenzidine	400	U	
56-55-3	Benzo(a)anthracene	220	J	
218-01-9	Chrysene	240	J	
117-81-7	bis(2-Ethylhexyl)phthalate	400 ~~260~~	~~JB~~	U
117-84-0	Di-n-octylphthalate	400 12	~~JB~~	U
205-99-2	Benzo(b)fluoranthene	240	J	
207-08-9	Benzo(k)fluoranthene	190	J	
50-32-8	Benzo(a)pyrene	220	J	
193-39-5	Indeno(1,2,3-cd)pyrene	150	J	
53-70-3	Dibenz(a,h)anthracene	50	J	
191-24-2	Benzo(g,h,i)perylene	190	J	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-07

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5530

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.83-47-6	.GAMMA.-SITOSTEROL	30.10	650	JN
02.	UNKNOWN	9.19	540	JB
03.	UNKNOWN	26.76	530	J
04.57-10-3	N-HEXADECANOIC ACID	20.71	520	JN
05.	UNKNOWN C20H12 PAH	27.60	490	J
06.58-61-3	STIGMAST-4-EN-3-ONE	31.17	430	JN
07.	UNKNOWN C29H48O ISOMER	29.71	320	J
08.	UNKNOWN	20.58	320	J
09.	UNKNOWN	30.69	280	J
10.112-79-8	9-OCTADECENOIC ACID, (E)-	22.19	280	JN
11.	UNKNOWN	31.57	250	J
12.	UNKNOWN	29.37	250	J
13.	UNKNOWN	20.65	240	J
14.	UNKNOWN C22H12 PAH	30.30	240	J
15.57-88-5	CHOLESTEROL	28.84	230	JN
16.	UNKNOWN	28.24	210	J
17.	UNKNOWN	31.00	190	J
18.	UNKNOWN	31.77	190	J
19.474-62-4	CAMPESTEROL	29.52	190	JN
20.	UNKNOWN	30.78	180	J
21.	UNKNOWN C24H14 PAH	32.62	180	J
22.	UNKNOWN	31.07	170	J
23.	UNKNOWN ACID	19.53	170	J
24.	UNKNOWN	30.60	170	J
25.	UNKNOWN	23.86	170	J
26.	UNKNOWN	25.93	160	J
27.	UNKNOWN	8.82	160	J
28.	UNKNOWN C22H14 PAH	29.82	150	J
29.	UNKNOWN	30.21	140	J
30.	UNKNOWN C24H14 PAH	32.30	130	J

R

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SS-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-08

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5568

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730	U
111-44-4	bis(2-Chloroethyl)ether	730	U
95-57-8	2-Chlorophenol	730	U
541-73-1	1,3-Dichlorobenzene	730	U
106-46-7	1,4-Dichlorobenzene	730	U
95-50-1	1,2-Dichlorobenzene	730	U
95-48-7	2-Methylphenol	730	U
108-60-1	2,2'-oxybis(1-Chloropropane)	730	U
106-44-5	4-Methylphenol	730	U
621-64-7	N-Nitroso-di-n-propylamine	730	U
67-72-1	Hexachloroethane	730	U
98-95-3	Nitrobenzene	730	U
78-59-1	Isophorone	730	U
88-75-5	2-Nitrophenol	730	U
105-67-9	2,4-Dimethylphenol	730	U
111-91-1	bis(2-Chloroethoxy)methane	730	U
120-83-2	2,4-Dichlorophenol	730	U
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	56	J
106-47-8	4-Chloroaniline	730	U
87-68-3	Hexachlorobutadiene	730	U
59-50-7	4-Chloro-3-methylphenol	730	U
91-57-6	2-Methylnaphthalene	33	J
77-47-4	Hexachlorocyclopentadiene	730	U
88-06-2	2,4,6-Trichlorophenol	730	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	730	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	730	U
208-96-8	Acenaphthylene	230	J
606-20-2	2,6-Dinitrotoluene	730	U
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	49	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-08

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5568

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	~~U~~ UJ
132-64-9	Dibenzofuran	52	J
121-14-2	2,4-Dinitrotoluene	730	U
84-66-2	Diethylphthalate	730	U
7005-72-3	4-Chlorophenyl-phenylether	730	U
86-73-7	Fluorene	56	J
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	730	U
101-55-3	4-Bromophenyl-phenylether	730	U
118-74-1	Hexachlorobenzene	730	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	1200	~~B~~
120-12-7	Anthracene	280	J
86-74-8	Carbazole	220	J
84-74-2	Di-n-butylphthalate	~~29~~ 73	~~JB~~ U
206-44-0	Fluoranthene	2900	~~B~~ Reanalyzed
129-00-0	Pyrene	2800	~~B~~
85-68-7	Butylbenzylphthalate	730	U
91-94-1	3,3'-Dichlorobenzidine	730	U
56-55-3	Benzo(a)anthracene	1600	
218-01-9	Chrysene	1800	
117-81-7	bis(2-Ethylhexyl)phthalate	790	~~B~~ U
117-84-0	Di-n-octylphthalate	~~75~~ 73	~~JB~~ U
205-99-2	Benzo(b)fluoranthene	1700	
207-08-9	Benzo(k)fluoranthene	1500	
50-32-8	Benzo(a)pyrene	1700	
193-39-5	Indeno(1,2,3-cd)pyrene	1800	
53-70-3	Dibenz(a,h)anthracene	570	J
191-24-2	Benzo(g,h,i)perylene	2600	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SS-3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-08

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5568

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C20H12 PAH	27.58	1300	J
02.	UNKNOWN C22H12 PAH	29.38	1300	J
03.	UNKNOWN DIBENZOPYRENE ISOMER	32.29	960	J
04.	UNKNOWN C22H14 PAH	29.72	910	J
05.	UNKNOWN C22H14 ISOMER	29.80	860	J
06.	UNKNOWN C22H12 PAH	30.30	810	J
07.	UNKNOWN C17H12 PAH	23.26	780	J
08.	UNKNOWN C20H12 PAH	27.80	700	J
09.	UNKNOWN	9.15	560	~~JB~~ R
10.	UNKNOWN	28.84	560	J
11.	UNKNOWN DIBENZOPYRENE ISOMER	32.46	550	J
12.	UNKNOWN C22H14 PAH	29.31	530	J
13.	UNKNOWN	29.88	520	J
14.	UNKNOWN C18H12 PAH	25.26	500	J
15.	UNKNOWN	29.06	500	J
16.	UNKNOWN DIBENZOPYRENE ISOMER	32.59	460	J
17.	UNKNOWN C15H10 PAH	20.89	450	J
18.	UNKNOWN C18H12 PAH	24.60	450	J
19.	UNKNOWN BENZO[B]NAPHTHOTHIOP	24.53	440	J
20.	UNKNOWN C19H14 PAH	25.84	440	J
21.	UNKNOWN	29.20	440	J
22.	UNKNOWN BENZO PYRENE	27.27	440	J
23.	UNKNOWN DIBENZ ACRIDINE ISOM	29.12	430	J
24.	UNKNOWN	27.42	420	J
25.	UNKNOWN C17H10O ISOMER	24.31	420	J
26.	UNKNOWN	28.89	390	J
27.	UNKNOWN	31.27	370	J
28.	UNKNOWN C17H12 PAH	23.03	360	J
29.	UNKNOWN	30.18	360	J
30.	UNKNOWN	26.11	360	J

1B EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SS-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-09

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5529

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 20 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-50-1	1,2-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
208-96-8	Acenaphthylene	20	J
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-09

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5529

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 20 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	~~U~~
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
86-73-7	Fluorene	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	~~U~~
86-30-6	N-Nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410 ~~110~~	~~JB~~
120-12-7	Anthracene	26	J
86-74-8	Carbazole	13	J
84-74-2	Di-n-butylphthalate	71 ~~23~~	~~JB~~
206-44-0	Fluoranthene	230	~~JB~~
129-00-0	Pyrene	220	~~JB~~
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	110	J
218-01-9	Chrysene	140	J
117-81-7	bis(2-Ethylhexyl)phthalate	410 ~~140~~	~~JB~~
117-84-0	Di-n-octylphthalate	410 ~~16~~	~~JB~~
205-99-2	Benzo(b)fluoranthene	120	J
207-08-9	Benzo(k)fluoranthene	130	J
50-32-8	Benzo(a)pyrene	120	J
193-39-5	Indeno(1,2,3-cd)pyrene	83	J
53-70-3	Dibenz(a,h)anthracene	32	J
191-24-2	Benzo(g,h,i)perylene	110	J

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-09

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5529

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 20 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	26.76	620	J
02.83-47-6	.GAMMA.-SITOSTEROL	30.10	520	JN
03.	UNKNOWN	9.19	510	~~JB~~ R
04.57-10-3	N-HEXADECANOIC ACID	20.70	410	JN
05.	UNKNOWN C20H12 PAH	27.60	270	J
06.	UNKNOWN	28.84	270	J
07.83-48-7	STIGMASTEROL	29.71	260	JN
08.	UNKNOWN	20.58	250	J
09.	UNKNOWN	25.93	230	J
10.	UNKNOWN	22.19	230	J
11.58-61-3	STIGMAST-4-EN-3-ONE	31.16	220	JN
12.	UNKNOWN	28.24	200	J
13.	UNKNOWN	27.89	180	J
14.	UNKNOWN	30.69	170	J
15.	UNKNOWN ACID	20.64	170	J
16.	UNKNOWN	24.65	150	J
17.	UNKNOWN	29.13	150	J
18.	UNKNOWN	29.38	150	J
19.	UNKNOWN	31.58	140	J
20.	UNKNOWN	32.60	140	J
21.	UNKNOWN ACID	22.29	140	J
22.	UNKNOWN	8.82	120	J
23.	UNKNOWN ACID	19.53	120	J
24.	UNKNOWN	12.59	120	J
25.	UNKNOWN	30.31	120	J
26.	UNKNOWN	29.44	110	J
27.	UNKNOWN	28.99	100	J
28.	UNKNOWN	30.99	94	J
29.	UNKNOWN	21.07	94	J
30.	UNKNOWN	30.51	93	J

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-10

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5526

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	6	J
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	920	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	920	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	12	J
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	920	U
83-32-9	Acenaphthene	370	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-10

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5526

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	920	~~U~~ R
100-02-7	4-Nitrophenol	920	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	10	J
100-01-6	4-Nitroaniline	920	U
534-52-1	4,6-Dinitro-2-methylphenol	920	~~U~~ R
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	920	U
85-01-8	Phenanthrene	370 ~~61~~	~~JB~~ U
120-12-7	Anthracene	19	J
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370 ~~15~~	~~JB~~ U
206-44-0	Fluoranthene	370 ~~57~~	~~JB~~ U
129-00-0	Pyrene	370 ~~51~~	~~JB~~ U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	26	J
218-01-9	Chrysene	24	J
117-81-7	bis(2-Ethylhexyl)phthalate	370 ~~80~~	~~JB~~ U
117-84-0	Di-n-octylphthalate	370 ~~6~~	~~JB~~ U
205-99-2	Benzo(b)fluoranthene	17	J
207-08-9	Benzo(k)fluoranthene	16	J
50-32-8	Benzo(a)pyrene	20	J
193-39-5	Indeno(1,2,3-cd)pyrene	10	J
53-70-3	Dibenz(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	11	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-10

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5526

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 1 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	9.19	490	~~JB~~ R
02.				
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
11.				
12.				
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29.				
30.				

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-8

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-11

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5527

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U UJ
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	980	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	980	U
131-11-3	Dimethylphthalate	390	U
208-96-8	Acenaphthylene	9	J
606-20-2	2,6-Dinitrotoluene	390	U
99-09-2	3-Nitroaniline	980	U
83-32-9	Acenaphthene	390	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-8

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-11

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5527

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	980	~~U~~ R
100-02-7	4-Nitrophenol	980	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
86-73-7	Fluorene	390	U
100-01-6	4-Nitroaniline	980	U
534-52-1	4,6-Dinitro-2-methylphenol	980	U R
86-30-6	N-Nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	980	U
85-01-8	Phenanthrene	~~38~~	~~JB~~ U
120-12-7	Anthracene	18	J
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	~~15~~	~~JB~~ U
206-44-0	Fluoranthene	~~96~~	~~JB~~ U
129-00-0	Pyrene	~~99~~	~~JB~~ U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	57	J
218-01-9	Chrysene	52	J
117-81-7	bis(2-Ethylhexyl)phthalate	~~380~~	~~JB~~ U
117-84-0	Di-n-octylphthalate	~~11~~	~~JB~~ U
205-99-2	Benzo(b)fluoranthene	37	J
207-08-9	Benzo(k)fluoranthene	44	J
50-32-8	Benzo(a)pyrene	46	J
193-39-5	Indeno(1,2,3-cd)pyrene	23	J
53-70-3	Dibenz(a,h)anthracene	9	J
191-24-2	Benzo(g,h,i)perylene	24	J

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-8

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-11

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5527

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

Number TICs Found: 3 (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		UNKNOWN	9.18	580	~~JB~~ R
02.		UNKNOWN	9.58	90	J
03.		UNKNOWN	12.59	88	J
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1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-12

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5528

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	8	J
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	75	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-12

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5528

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	~~U~~
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	110	J
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	~~31~~	~~JB~~
120-12-7	Anthracene	19	J
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	~~45~~	~~JB~~
206-44-0	Fluoranthene	~~230~~	~~JB~~
129-00-0	Pyrene	~~170~~	~~JB~~
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	26	J
218-01-9	Chrysene	21	J
117-81-7	bis(2-Ethylhexyl)phthalate	~~390~~	~~JB~~
117-84-0	Di-n-octylphthalate	~~35~~	~~JB~~
205-99-2	Benzo(b)fluoranthene	13	J
207-08-9	Benzo(k)fluoranthene	9	J
50-32-8	Benzo(a)pyrene	13	J
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	9	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-12

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5528

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 20 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	9.18	600	~~JB~~ R
02.	UNKNOWN	29.02	220	J
03.	UNKNOWN	29.13	210	J
04.	UNKNOWN	28.75	200	J
05.	UNKNOWN	28.64	190	J
06.	UNKNOWN	29.21	170	J
07.	UNKNOWN	28.86	170	J
08.	UNKNOWN	28.11	160	J
09.	UNKNOWN	28.38	150	J
10.	UNKNOWN	28.59	150	J
11.	UNKNOWN	28.94	140	J
12.	UNKNOWN	29.44	120	J
13.	UNKNOWN	28.40	120	J
14.	UNKNOWN	27.51	110	J
15.	UNKNOWN	29.19	100	J
16.	UNKNOWN	20.92	100	J
17.	UNKNOWN	12.59	100	J
18.	UNKNOWN	27.84	91	J
19.	UNKNOWN	27.87	90	J
20.	UNKNOWN	9.58	87	J
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1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-13

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5531

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 12 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	13	J
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	940	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	940	U
131-11-3	Dimethylphthalate	380	U
208-96-8	Acenaphthylene	46	J
606-20-2	2,6-Dinitrotoluene	380	U
99-09-2	3-Nitroaniline	940	U
83-32-9	Acenaphthene	12	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SB-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-13

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5531

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 12 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	940	~~U~~
100-02-7	4-Nitrophenol	940	U
132-64-9	Dibenzofuran	28	J
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	37	J
100-01-6	4-Nitroaniline	940	U
534-52-1	4,6-Dinitro-2-methylphenol	~~940~~	~~U~~
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	940	U
85-01-8	Phenanthrene	38 ~~190~~	~~JB~~
120-12-7	Anthracene	100	J
86-74-8	Carbazole	10	J
84-74-2	Di-n-butylphthalate	38 ~~17~~	~~JB~~
206-44-0	Fluoranthene	600	B
129-00-0	Pyrene	570	B
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	360	J
218-01-9	Chrysene	340	J
117-81-7	bis(2-Ethylhexyl)phthalate	1300	B
117-84-0	Di-n-octylphthalate	38 ~~6~~	~~JB~~
205-99-2	Benzo(b)fluoranthene	240	J
207-08-9	Benzo(k)fluoranthene	310	J
50-32-8	Benzo(a)pyrene	340	J
193-39-5	Indeno(1,2,3-cd)pyrene	180	J
53-70-3	Dibenz(a,h)anthracene	70	J
191-24-2	Benzo(g,h,i)perylene	190	J

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SB-3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-13

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5531

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 12 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/23/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 18 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	9.19	520	~~JB~~ R
02.	UNKNOWN C20H12 PAH	27.59	360	J
03.	UNKNOWN	8.81	250	J
04.	UNKNOWN C17H12 PAH	23.29	200	J
05.	UNKNOWN C15H10 PAH	20.92	150	J
06.	UNKNOWN C22H14 PAH	29.81	140	J
07.	UNKNOWN C24H14 PAH	32.29	140	J
08.	UNKNOWN C20H12 PAH	27.28	120	J
09.	UNKNOWN C24H14 PAH	32.59	100	J
10.	UNKNOWN	28.04	98	J
11.	UNKNOWN	12.59	91	J
12.	UNKNOWN DIBENZOPYRENE ISOMER	32.46	81	J
13.	UNKNOWN C22H14 PAH	29.74	81	J
14.	UNKNOWN C20H12 PAH	27.82	81	J
15.	UNKNOWN METHYL-ANTHRACENE	20.73	81	J
16.	UNKNOWN	26.52	80	J
17.	UNKNOWN C17H12 PAH	23.50	79	J
18.	UNKNOWN C16H10 PAH	22.32	77	J
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1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-14

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5570

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	14	J
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	950	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	950	U
131-11-3	Dimethylphthalate	380	U
208-96-8	Acenaphthylene	53	J
606-20-2	2,6-Dinitrotoluene	380	U
99-09-2	3-Nitroaniline	950	U
83-32-9	Acenaphthene	20	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-14

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5570

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	950	U
100-02-7	4-Nitrophenol	950	~~U~~
132-64-9	Dibenzofuran	56	J
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	58	J
100-01-6	4-Nitroaniline	950	U
534-52-1	4,6-Dinitro-2-methylphenol	950	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	950	U
85-01-8	Phenanthrene	~~230~~ 330	~~JB~~
120-12-7	Anthracene	110	J
86-74-8	Carbazole	15	J
84-74-2	Di-n-butylphthalate	~~13~~ 380	~~JB~~
206-44-0	Fluoranthene	580	B
129-00-0	Pyrene	560	B
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	350	J
218-01-9	Chrysene	300	J
117-81-7	bis(2-Ethylhexyl)phthalate	1100	B
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	290	J
207-08-9	Benzo(k)fluoranthene	240	J
50-32-8	Benzo(a)pyrene	300	J
193-39-5	Indeno(1,2,3-cd)pyrene	190	J
53-70-3	Dibenz(a,h)anthracene	71	J
191-24-2	Benzo(g,h,i)perylene	230	J

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DUP-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-14

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5570

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

Number TICs Found: 19 (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		UNKNOWN	9.16	490	J
02.		UNKNOWN C20H12 PAH	27.58	340	J
03.		UNKNOWN C17H12 PAH	23.26	250	J
04.		UNKNOWN DIBENZOPYRENE ISOMER	32.25	160	J
05.		UNKNOWN C15H10 PAH	20.90	150	J
06.		UNKNOWN	8.79	130	J
07.		UNKNOWN C22H14 PAH	29.79	130	J
08.		UNKNOWN DIBENZOPYRENE ISOMER	32.56	120	J
09.		UNKNOWN	25.70	110	J
10.		UNKNOWN	12.57	100	J
11.		UNKNOWN DIBENZOPYRENE ISOMER	32.43	100	J
12.		UNKNOWN C20H12 PAH	27.26	91	J
13.		UNKNOWN C21H14 PAH	28.01	91	J
14.		UNKNOWN METHYL-ANTHRACENE	20.70	86	J
15.		UNKNOWN C20H12 PAH	27.79	86	J
16.		UNKNOWN C22H12 PAH	30.27	84	J
17.		UNKNOWN METHYL-PYRENE ISOMER	23.47	80	J
18.		UNKNOWN C16H10 PAH	22.31	79	J
19.		UNKNOWN C15H12 PAH	20.78	78	J
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-15

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5584

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4800	U
111-44-4	bis(2-Chloroethyl)ether	4800	U
95-57-8	2-Chlorophenol	4800	U
541-73-1	1,3-Dichlorobenzene	4800	U
106-46-7	1,4-Dichlorobenzene	4800	U
95-50-1	1,2-Dichlorobenzene	4800	U
95-48-7	2-Methylphenol	4800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4800	U
106-44-5	4-Methylphenol	4800	U
621-64-7	N-Nitroso-di-n-propylamine	4800	U
67-72-1	Hexachloroethane	4800	U
98-95-3	Nitrobenzene	4800	U
78-59-1	Isophorone	4800	U
88-75-5	2-Nitrophenol	4800	U
105-67-9	2,4-Dimethylphenol	4800	U
111-91-1	bis(2-Chloroethoxy)methane	4800	U
120-83-2	2,4-Dichlorophenol	4800	U
120-82-1	1,2,4-Trichlorobenzene	4800	U
91-20-3	Naphthalene	610	J
106-47-8	4-Chloroaniline	4800	U
87-68-3	Hexachlorobutadiene	4800	U
59-50-7	4-Chloro-3-methylphenol	4800	U
91-57-6	2-Methylnaphthalene	420	J
77-47-4	Hexachlorocyclopentadiene	4800	U
88-06-2	2,4,6-Trichlorophenol	4800	U
95-95-4	2,4,5-Trichlorophenol	12000	U
91-58-7	2-Chloronaphthalene	4800	U
88-74-4	2-Nitroaniline	12000	U
131-11-3	Dimethylphthalate	4800	U
208-96-8	Acenaphthylene	2400	J
606-20-2	2,6-Dinitrotoluene	4800	U
99-09-2	3-Nitroaniline	12000	U
83-32-9	Acenaphthene	480	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-15

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5584

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	12000	U
100-02-7	4-Nitrophenol	12000	U
132-64-9	Dibenzofuran	990	J
121-14-2	2,4-Dinitrotoluene	4800	U
84-66-2	Diethylphthalate	4800	U
7005-72-3	4-Chlorophenyl-phenylether	4800	U
86-73-7	Fluorene	1400	J
100-01-6	4-Nitroaniline	12000	U
534-52-1	4,6-Dinitro-2-methylphenol	12000	U
86-30-6	N-Nitrosodiphenylamine (1)	4800	U
101-55-3	4-Bromophenyl-phenylether	4800	U
118-74-1	Hexachlorobenzene	4800	U
87-86-5	Pentachlorophenol	12000	U
85-01-8	Phenanthrene	12000	B
120-12-7	Anthracene	3800	J
86-74-8	Carbazole	960	J
84-74-2	Di-n-butylphthalate	4800	U
206-44-0	Fluoranthene	17000	B
129-00-0	Pyrene	16000	B
85-68-7	Butylbenzylphthalate	4800	U
91-94-1	3,3'-Dichlorobenzidine	4800	U
56-55-3	Benzo(a)anthracene	10000	
218-01-9	Chrysene	9300	
117-81-7	bis(2-Ethylhexyl)phthalate	920	JB
117-84-0	Di-n-octylphthalate	4800	U
205-99-2	Benzo(b)fluoranthene	7000	
207-08-9	Benzo(k)fluoranthene	8600	
50-32-8	Benzo(a)pyrene	9100	
193-39-5	Indeno(1,2,3-cd)pyrene	7700	
53-70-3	Dibenz(a,h)anthracene	2600	J
191-24-2	Benzo(g,h,i)perylene	7900	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CB-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-15

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5584

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.5

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C20H12 PAH	27.57	7100	J
02.	UNKNOWN C22H14 PAH	29.71	5100	J
03.	UNKNOWN DIBENZOPYRENE ISOMER	32.28	5100	J
04.	UNKNOWN C17H12 PAH	23.26	4400	J
05.	UNKNOWN C22H12 PAH	30.29	4000	J
06.	UNKNOWN C22H14 PAH	29.79	3700	J
07.	UNKNOWN C22H12 PAH	29.38	3600	J
08.	UNKNOWN	20.88	3600	J
09.	UNKNOWN DIBENZOPYRENE ISOMER	32.44	3600	J
10.	UNKNOWN C20H12 PAH	27.80	3600	J
11.	UNKNOWN C24H14 PAH	32.58	3400	J
12.	UNKNOWN	29.87	2900	J
13.	UNKNOWN METHYL-ANTHRACENE	20.70	2800	J
14.	UNKNOWN	24.59	2600	J
15.	UNKNOWN METHYL-PYRENE C	23.46	2300	J
16.	UNKNOWN	30.85	2300	J
17.	UNKNOWN	30.17	2200	J
18.	UNKNOWN C20H12 PAH	27.27	2200	J
19.	UNKNOWN C22H14 PAH	29.30	2100	J
20.	UNKNOWN C17H10O ISOMER	24.72	2100	J
21.	UNKNOWN	30.61	2100	J
22.	UNKNOWN METHYL-PHENANTHRENE	20.64	2000	J
23.	UNKNOWN METHYL-PYRENE	23.01	2000	J
24.	UNKNOWN	25.26	2000	J
25.	UNKNOWN	30.68	2000	J
26.	UNKNOWN BENZO[B]NAPHTHOTHIOP	24.52	1900	J
27.	UNKNOWN C17H10O ISOMER	24.30	1800	J
28.	UNKNOWN C18H10 PAH	24.63	1800	J
29.	UNKNOWN C19H14 PAH	25.82	1800	J
30.	UNKNOWN	21.98	1700	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-16

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5572

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.7

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	88	J
111-44-4	bis(2-Chloroethyl)ether	1800	U
95-57-8	2-Chlorophenol	1800	U
541-73-1	1,3-Dichlorobenzene	1800	U
106-46-7	1,4-Dichlorobenzene	1800	U
95-50-1	1,2-Dichlorobenzene	1800	U
95-48-7	2-Methylphenol	1800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1800	U
106-44-5	4-Methylphenol	140	J
621-64-7	N-Nitroso-di-n-propylamine	1800	U
67-72-1	Hexachloroethane	1800	U
98-95-3	Nitrobenzene	1800	U
78-59-1	Isophorone	1800	U
88-75-5	2-Nitrophenol	1800	U
105-67-9	2,4-Dimethylphenol	1800	U
111-91-1	bis(2-Chloroethoxy)methane	1800	U
120-83-2	2,4-Dichlorophenol	1800	U
120-82-1	1,2,4-Trichlorobenzene	1800	U
91-20-3	Naphthalene	600	J
106-47-8	4-Chloroaniline	1800	U
87-68-3	Hexachlorobutadiene	1800	U
59-50-7	4-Chloro-3-methylphenol	1800	U
91-57-6	2-Methylnaphthalene	350	J
77-47-4	Hexachlorocyclopentadiene	1800	~~U~~ CJ
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	4500	U
91-58-7	2-Chloronaphthalene	1800	U
88-74-4	2-Nitroaniline	4500	U
131-11-3	Dimethylphthalate	1800	U
208-96-8	Acenaphthylene	2100	
606-20-2	2,6-Dinitrotoluene	1800	U
99-09-2	3-Nitroaniline	4500	U
83-32-9	Acenaphthene	360	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-16

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5572

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4500	U
100-02-7	4-Nitrophenol	4500	~~U~~
132-64-9	Dibenzofuran	670	J
121-14-2	2,4-Dinitrotoluene	1800	U
84-66-2	Diethylphthalate	1800	U
7005-72-3	4-Chlorophenyl-phenylether	1800	U
86-73-7	Fluorene	890	J
100-01-6	4-Nitroaniline	4500	U
534-52-1	4,6-Dinitro-2-methylphenol	4500	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
101-55-3	4-Bromophenyl-phenylether	1800	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	4500	U
85-01-8	Phenanthrene	9200	B
120-12-7	Anthracene	3000	
86-74-8	Carbazole	930	J
84-74-2	Di-n-butylphthalate	~~43~~	~~JB~~
206-44-0	Fluoranthene	14000	B
129-00-0	Pyrene	13000	B
85-68-7	Butylbenzylphthalate	1800	U
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)anthracene	8300	
218-01-9	Chrysene	8100	
117-81-7	bis(2-Ethylhexyl)phthalate	~~1300~~	~~JB~~
117-84-0	Di-n-octylphthalate	1800	U
205-99-2	Benzo(b)fluoranthene	8100	
207-08-9	Benzo(k)fluoranthene	4800	
50-32-8	Benzo(a)pyrene	8000	
193-39-5	Indeno(1,2,3-cd)pyrene	7200	
53-70-3	Dibenz(a,h)anthracene	2400	
191-24-2	Benzo(g,h,i)perylene	7600	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water) SOIL Lab Sample ID: 993090A-16

Sample wt/vol: 30 (g/mL) G Lab File ID: >R5572

Level: (low/med) LOW Date Received: 12/03/99

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/05/99

Concentrated Extract Volume: 500 (uL) Date Analyzed: 12/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs Found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C20H12 PAH C	27.60	5700	J
02.	UNKNOWN ACID	20.70	3000	J
03.	UNKNOWN	20.90	2600	J
04.	UNKNOWN C20H12 PAH	27.83	2400	J
05.	UNKNOWN C22H14 PAH	29.75	2100	J
06.	UNKNOWN C22H14 PAH	29.83	1900	J
07.57-88-5	CHOLESTEROL	28.83	1900	JN
08.	UNKNOWN DIBENZOPYRENE ISOMER	32.31	1900	J
09.	UNKNOWN METHYL-PHENANTHRENE	20.65	1900	J
10.58-61-3	STIGMAST-4-EN-3-ONE	31.15	1900	JN
11.	UNKNOWN C20H12 PAH	27.29	1800	J
12.	UNKNOWN C22H12 PAH	29.41	1700	J
13.	UNKNOWN C21H14 PAH	28.03	1600	J
14.	UNKNOWN C22H12 PAH	30.33	1500	J
15.	UNKNOWN C22H14 PAH	29.34	1500	J
16.	UNKNOWN DIBENZOPYRENE ISOMER	32.48	1400	J
17.	UNKNOWN C16H10 PAH	22.31	1400	J
18.	UNKNOWN DIBENZOPYRENE ISOMER	32.62	1400	J
19.	UNKNOWN	27.44	1300	J
20.	UNKNOWN	31.54	1300	J
21.	UNKNOWN	21.99	1200	J
22.	UNKNOWN	30.91	1200	J
23.	UNKNOWN C15H12 PAH	20.79	1200	J
24.	UNKNOWN	29.08	1200	J
25.	UNKNOWN	29.13	1200	J
26.	UNKNOWN	30.47	1100	J
27.	UNKNOWN BENZO FLUORENE	23.27	1100	J
28.	UNKNOWN	26.47	1000	J
29.	UNKNOWN	27.93	930	J
30.	UNKNOWN	20.57	910	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-7

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-02

Sample wt/vol: 30.6 (g/ml) G Lab File ID: C1055CLP166

% Moisture: 13 decanted: (Y/N) N Date Received: 12/01/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/01/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/09/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 10.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan Sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19.	U
53494-70-5	Endrin Ketone	3.7	U
7421-93-4	Endrin Aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37.	U
11104-28-2	Aroclor-1221	76.	U
11141-16-5	Aroclor-1232	37.	U
53469-21-9	Aroclor-1242	37.	U
12672-29-6	Aroclor-1248	37.	U
11097-69-1	Aroclor-1254	37.	U
11096-82-5	Aroclor-1260	37.	U

UJ

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-03

Sample wt/vol: 30.1 (g/ml) G Lab File ID: C1055CLP167

% Moisture: 13 decanted: (Y/N) N Date Received: 12/01/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/01/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/09/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan Sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19.	U
53494-70-5	Endrin Ketone	3.8	U
7421-93-4	Endrin Aldehyde	3.8	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	38.	U
11104-28-2	Aroclor-1221	77.	U
11141-16-5	Aroclor-1232	38.	U
53469-21-9	Aroclor-1242	38.	U
12672-29-6	Aroclor-1248	38.	U
11097-69-1	Aroclor-1254	38.	U
11096-82-5	Aroclor-1260	38.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6RE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-03RE

Sample wt/vol: 30.3 (g/ml) G Lab File ID: C5042CLP070

% Moisture: 13 decanted: (Y/N) N Date Received: 12/01/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan Sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19.	U
53494-70-5	Endrin Ketone	3.8	U
7421-93-4	Endrin Aldehyde	3.8	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	38.	U
11104-28-2	Aroclor-1221	76.	U
11141-16-5	Aroclor-1232	38.	U
53469-21-9	Aroclor-1242	38.	U
12672-29-6	Aroclor-1248	38.	U
11097-69-1	Aroclor-1254	38.	U
11096-82-5	Aroclor-1260	38.	U

See the initial Sample results

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-1

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-04

Sample wt/vol: 30.7 (g/ml) G Lab File ID: C1055CLP168

% Moisture: 19 decanted: (Y/N) N Date Received: 12/01/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/01/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/09/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor Epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan Sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	20.	U
53494-70-5	Endrin Ketone	4.0	U
7421-93-4	Endrin Aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	40.	U
11104-28-2	Aroclor-1221	81.	U
11141-16-5	Aroclor-1232	40.	U
53469-21-9	Aroclor-1242	40.	U
12672-29-6	Aroclor-1248	40.	U
11097-69-1	Aroclor-1254	40.	U
11096-82-5	Aroclor-1260	40.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-1RE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-04RE

Sample wt/vol: 30.8 (g/ml) G Lab File ID: C5042CLP071

% Moisture: 19 decanted: (Y/N) N Date Received: 12/01/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor Epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan Sulfate	4.0	U
50-29-3	4,4'-DDT	0.47	JP
72-43-5	Methoxychlor	20.	U
53494-70-5	Endrin Ketone	4.0	U
7421-93-4	Endrin Aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	40.	U
11104-28-2	Aroclor-1221	80.	U
11141-16-5	Aroclor-1232	40.	U
53469-21-9	Aroclor-1242	40.	U
12672-29-6	Aroclor-1248	40.	U
11097-69-1	Aroclor-1254	40.	U
11096-82-5	Aroclor-1260	40.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SB-2

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-05

Sample wt/vol: 30.7 (g/ml) G Lab File ID: C5042CLP034

% Moisture: 15 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
319-84-6	alpha-BHC	1.2	JP	)
319-85-7	beta-BHC	9.8	U	
319-86-8	delta-BHC	4.2	JP	)
58-89-9	gamma-BHC (Lindane)	9.8	U	
76-44-8	Heptachlor	9.8	U	
309-00-2	Aldrin	9.8	U	
1024-57-3	Heptachlor Epoxide	9.8	U	
959-98-8	Endosulfan I	9.8	U	
60-57-1	Dieldrin	2.6	JP	)
72-55-9	4,4'-DDE	19.	U	
72-20-8	Endrin	3.0	JP	)
33213-65-9	Endosulfan II	19.	U	
72-54-8	4,4'-DDD	19.	U	
1031-07-8	Endosulfan Sulfate	19.	U	
50-29-3	4,4'-DDT	6.6	JP	)
72-43-5	Methoxychlor	98.	U	
53494-70-5	Endrin Ketone	19.	U	
7421-93-4	Endrin Aldehyde	19.	U	
5103-71-9	alpha-Chlordane	9.8	U	
5103-74-2	gamma-Chlordane	2.5	JP	)
8001-35-2	Toxaphene	980	U	
12674-11-2	Aroclor-1016	190	U	
11104-28-2	Aroclor-1221	380	U	
11141-16-5	Aroclor-1232	190	U	
53469-21-9	Aroclor-1242	190	U	
12672-29-6	Aroclor-1248	190	U	
11097-69-1	Aroclor-1254	190	U	
11096-82-5	Aroclor-1260	190	U	

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-2RE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-05RE

Sample wt/vol: 30.5 (g/ml) G Lab File ID: C5042CLP123

% Moisture: 15 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/21/99

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.2	JP
319-85-7	beta-BHC	9.8	U
319-86-8	delta-BHC	9.8	U
58-89-9	gamma-BHC (Lindane)	9.8	U
76-44-8	Heptachlor	9.8	U
309-00-2	Aldrin	9.8	U
1024-57-3	Heptachlor Epoxide	3.0	JP
959-98-8	Endosulfan I	9.8	U
60-57-1	Dieldrin	2.7	JP
72-55-9	4,4'-DDE	19.	U
72-20-8	Endrin	4.8	JP
33213-65-9	Endosulfan II	19.	U
72-54-8	4,4'-DDD	19.	U
1031-07-8	Endosulfan Sulfate	19.	U
50-29-3	4,4'-DDT	2.8	JP
72-43-5	Methoxychlor	98.	U
53494-70-5	Endrin Ketone	19.	U
7421-93-4	Endrin Aldehyde	19.	U
5103-71-9	alpha-Chlordane	9.8	U
5103-74-2	gamma-Chlordane	0.70	JP
8001-35-2	Toxaphene	980	U
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	390	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	190	U
11096-82-5	Aroclor-1260	190	U

See the original Sample data

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: SS-1R

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-06

Sample wt/vol: 30.7 (g/ml) G Lab File ID: C5042CLP043

% Moisture: 31 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor Epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	4.7	U
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7	U
72-54-8	4,4'-DDD	4.7	U
1031-07-8	Endosulfan Sulfate	4.7	U
50-29-3	4,4'-DDT	4.7	U
72-43-5	Methoxychlor	24.	U
53494-70-5	Endrin Ketone	4.7	U
7421-93-4	Endrin Aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4	U
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47.	U
11104-28-2	Aroclor-1221	95.	U
11141-16-5	Aroclor-1232	47.	U
53469-21-9	Aroclor-1242	47.	U
12672-29-6	Aroclor-1248	47.	U
11097-69-1	Aroclor-1254	47.	U
11096-82-5	Aroclor-1260	47.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-1RRE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-06RE

Sample wt/vol: 30.9 (g/ml) G Lab File ID: C5042CLP073

% Moisture: 31 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	0.30	J
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor Epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.6	U
72-55-9	4,4'-DDE	0.94	J
72-20-8	Endrin	4.6	U
33213-65-9	Endosulfan II	4.6	U
72-54-8	4,4'-DDD	4.6	U
1031-07-8	Endosulfan Sulfate	4.6	U
50-29-3	4,4'-DDT	0.67	J
72-43-5	Methoxychlor	24.	U
53494-70-5	Endrin Ketone	4.6	U
7421-93-4	Endrin Aldehyde	4.6	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4	U
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	46.	U
11104-28-2	Aroclor-1221	94.	U
11141-16-5	Aroclor-1232	46.	U
53469-21-9	Aroclor-1242	46.	U
12672-29-6	Aroclor-1248	46.	U
11097-69-1	Aroclor-1254	46.	U
11096-82-5	Aroclor-1260	46.	U

See the Int. Std. Data

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: SS-2

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-07

Sample wt/vol: 30.1 (g/ml) G Lab File ID: C5042CLP044

% Moisture: 18 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	1.9	~~JP~~ J
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor Epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	16.	~~P~~ J
72-20-8	Endrin	2.0	~~JP~~ J
33213-65-9	Endosulfan II	1.2	~~JP~~ J
72-54-8	4,4'-DDD	1.6	~~JP~~ J
1031-07-8	Endosulfan Sulfate	4.0	U
50-29-3	4,4'-DDT	11.	P J
72-43-5	Methoxychlor	21.	U
53494-70-5	Endrin Ketone	4.0	U
7421-93-4	Endrin Aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	40.	U
11104-28-2	Aroclor-1221	81.	U
11141-16-5	Aroclor-1232	40.	U
53469-21-9	Aroclor-1242	40.	U
12672-29-6	Aroclor-1248	40.	U
11097-69-1	Aroclor-1254	40.	U
11096-82-5	Aroclor-1260	18.	JP J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-08

Sample wt/vol: 30.9 (g/ml) G Lab File ID: C5042CLP046

% Moisture: 10 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/16/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor Epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan Sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18.	U
53494-70-5	Endrin Ketone	3.6	U
7421-93-4	Endrin Aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36.	U
11104-28-2	Aroclor-1221	72.	U
11141-16-5	Aroclor-1232	36.	U
53469-21-9	Aroclor-1242	36.	U
12672-29-6	Aroclor-1248	36.	U
11097-69-1	Aroclor-1254	36.	U
11096-82-5	Aroclor-1260	36.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3RE

Lab Name: STL-CT Contract:

Lab Code: IEACT Case No.: 3090A SAS No.: SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-08RE

Sample wt/vol: 30.8 (g/ml) G Lab File ID: C5042CLP074

% Moisture: 10 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor Epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan Sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18.	U
53494-70-5	Endrin Ketone	3.6	U
7421-93-4	Endrin Aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36.	U
11104-28-2	Aroclor-1221	72.	U
11141-16-5	Aroclor-1232	36.	U
53469-21-9	Aroclor-1242	36.	U
12672-29-6	Aroclor-1248	36.	U
11097-69-1	Aroclor-1254	36.	U
11096-82-5	Aroclor-1260	36.	U

See the original Sample Data

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-09

Sample wt/vol: 30.7 (g/ml) G Lab File ID: C1055CLP183

% Moisture: 20 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/10/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	0.68	JP
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor Epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	2.2	JP
72-20-8	Endrin	0.50	JP
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan Sulfate	4.0	U
50-29-3	4,4'-DDT	2.3	JP
72-43-5	Methoxychlor	21.	U
53494-70-5	Endrin Ketone	4.0	U
7421-93-4	Endrin Aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	40.	U
11104-28-2	Aroclor-1221	82.	U
11141-16-5	Aroclor-1232	40.	U
53469-21-9	Aroclor-1242	40.	U
12672-29-6	Aroclor-1248	40.	U
11097-69-1	Aroclor-1254	40.	U
11096-82-5	Aroclor-1260	40.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4RE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-09RE

Sample wt/vol: 30.9 (g/ml) G Lab File ID: C5042CLP076

% Moisture: 20 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor Epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan Sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	21.	U
53494-70-5	Endrin Ketone	4.0	U
7421-93-4	Endrin Aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	40.	U
11104-28-2	Aroclor-1221	81.	U
11141-16-5	Aroclor-1232	40.	U
53469-21-9	Aroclor-1242	40.	U
12672-29-6	Aroclor-1248	40.	U
11097-69-1	Aroclor-1254	40.	U
11096-82-5	Aroclor-1260	40.	U

See the Original Sample Data

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-10

Sample wt/vol: 30.1 (g/ml) G Lab File ID: C1055CLP184

% Moisture: 10 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/10/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	0.31	~~JP~~ J
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan Sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	19.	U
53494-70-5	Endrin Ketone	3.6	U
7421-93-4	Endrin Aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	36.	U
11104-28-2	Aroclor-1221	74.	U
11141-16-5	Aroclor-1232	36.	U
53469-21-9	Aroclor-1242	36.	U
12672-29-6	Aroclor-1248	36.	U
11097-69-1	Aroclor-1254	36.	U
11096-82-5	Aroclor-1260	36.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SB-8

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-11

Sample wt/vol: 30.9 (g/ml) G Lab File ID: C5042CLP064

% Moisture: 15 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/08/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	0.51	~~JP~~ J
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan Sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	6.7	~~JP~~ J
53494-70-5	Endrin Ketone	3.8	U
7421-93-4	Endrin Aldehyde	3.8	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	38.	U
11104-28-2	Aroclor-1221	76.	U
11141-16-5	Aroclor-1232	38.	U
53469-21-9	Aroclor-1242	38.	U
12672-29-6	Aroclor-1248	38.	U
11097-69-1	Aroclor-1254	38.	U
11096-82-5	Aroclor-1260	38.	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-4

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-12

Sample wt/vol: 30.7 (g/ml) G Lab File ID: C1055CLP185

% Moisture: 18 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/10/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor Epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan Sulfate	3.9	U
50-29-3	4,4'-DDT	3.9	U
72-43-5	Methoxychlor	~~2.6~~	JPB
53494-70-5	Endrin Ketone	3.9	U
7421-93-4	Endrin Aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	39.	U
11104-28-2	Aroclor-1221	80.	U
11141-16-5	Aroclor-1232	39.	U
53469-21-9	Aroclor-1242	39.	U
12672-29-6	Aroclor-1248	39.	U
11097-69-1	Aroclor-1254	39.	U
11096-82-5	Aroclor-1260	39.	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-3

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-13

Sample wt/vol: 30.1 (g/ml) G Lab File ID: C1055CLP186

% Moisture: 12 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/10/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	0.37	~~JP~~ J
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan Sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
~~72-43-5~~	~~Methoxychlor~~	~~19.~~	~~U~~
53494-70-5	Endrin Ketone	3.7	U
7421-93-4	Endrin Aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37.	U
11104-28-2	Aroclor-1221	76.	U
11141-16-5	Aroclor-1232	37.	U
53469-21-9	Aroclor-1242	37.	U
12672-29-6	Aroclor-1248	37.	U
11097-69-1	Aroclor-1254	37.	U
11096-82-5	Aroclor-1260	37.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-14

Sample wt/vol: 30.7 (g/ml) G Lab File ID: C1055CLP187

% Moisture: 13 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/10/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	0.14	JP
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	0.65	JP
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan Sulfate	3.7	U
50-29-3	4,4'-DDT	0.49	J
72-43-5	Methoxychlor	19.	U
53494-70-5	Endrin Ketone	3.7	U
7421-93-4	Endrin Aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37.	U
11104-28-2	Aroclor-1221	75.	U
11141-16-5	Aroclor-1232	37.	U
53469-21-9	Aroclor-1242	37.	U
12672-29-6	Aroclor-1248	37.	U
11097-69-1	Aroclor-1254	37.	U
11096-82-5	Aroclor-1260	37.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: DUP-1RE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-14RE

Sample wt/vol: 30.6 (g/ml) G Lab File ID: C5042CLP077

% Moisture: 13 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor Epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan Sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19.	U
53494-70-5	Endrin Ketone	3.7	U
7421-93-4	Endrin Aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37.	U
11104-28-2	Aroclor-1221	76.	U
11141-16-5	Aroclor-1232	37.	U
53469-21-9	Aroclor-1242	37.	U
12672-29-6	Aroclor-1248	37.	U
11097-69-1	Aroclor-1254	37.	U
11096-82-5	Aroclor-1260	37.	U

See the original

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-1

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-15

Sample wt/vol: 30.7 (g/ml) G Lab File ID: C5042CLP060

% Moisture: 32 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor Epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	4.7	U
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7	U
72-54-8	4,4'-DDD	4.7	U
1031-07-8	Endosulfan Sulfate	4.7	U
50-29-3	4,4'-DDT	4.7	U
72-43-5	Methoxychlor	24.	U
53494-70-5	Endrin Ketone	4.7	U
7421-93-4	Endrin Aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4	U
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47.	U
11104-28-2	Aroclor-1221	96.	U
11141-16-5	Aroclor-1232	47.	U
53469-21-9	Aroclor-1242	47.	U
12672-29-6	Aroclor-1248	47.	U
11097-69-1	Aroclor-1254	47.	U
11096-82-5	Aroclor-1260	47.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CB-1RE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-15RE

Sample wt/vol: 30.6 (g/ml) G Lab File ID: C5042CLP121

% Moisture: 32 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/21/99

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	12.	U
319-85-7	beta-BHC	12.	U
319-86-8	delta-BHC	12.	U
58-89-9	gamma-BHC (Lindane)	12.	U
76-44-8	Heptachlor	12.	U
309-00-2	Aldrin	12.	U
1024-57-3	Heptachlor Epoxide	12.	U
959-98-8	Endosulfan I	12.	U
60-57-1	Dieldrin	4.1	JP
72-55-9	4,4'-DDE	20.	JP
72-20-8	Endrin	24.	U
33213-65-9	Endosulfan II	24.	U
72-54-8	4,4'-DDD	24.	U
1031-07-8	Endosulfan Sulfate	24.	U
50-29-3	4,4'-DDT	11.	JP
72-43-5	Methoxychlor	36.	JP
53494-70-5	Endrin Ketone	24.	U
7421-93-4	Endrin Aldehyde	24.	U
5103-71-9	alpha-Chlordane	12.	U
5103-74-2	gamma-Chlordane	12.	U
8001-35-2	Toxaphene	1200	U
12674-11-2	Aroclor-1016	240	U
11104-28-2	Aroclor-1221	480	U
11141-16-5	Aroclor-1232	240	U
53469-21-9	Aroclor-1242	240	U
12672-29-6	Aroclor-1248	240	U
11097-69-1	Aroclor-1254	240	U
11096-82-5	Aroclor-1260	240	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-2

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-16

Sample wt/vol: 30.2 (g/ml) G Lab File ID: C5042CLP061

% Moisture: 26 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor Epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.4	U
72-55-9	4,4'-DDE	4.4	U
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4'-DDD	4.4	U
1031-07-8	Endosulfan Sulfate	4.4	U
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	23.	U
53494-70-5	Endrin Ketone	4.4	U
7421-93-4	Endrin Aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor-1016	44.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	44.	U
53469-21-9	Aroclor-1242	44.	U
12672-29-6	Aroclor-1248	44.	U
11097-69-1	Aroclor-1254	44.	U
11096-82-5	Aroclor-1260	44.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
DUP-2RE

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix: (soil/water): SOIL Lab Sample ID: 993090A-16RE

Sample wt/vol: 30.2 (g/ml) G Lab File ID: C5042CLP125

% Moisture: 26 decanted: (Y/N) N Date Received: 12/03/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/13/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/21/99

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	11.	U
319-85-7	beta-BHC	11.	U
319-86-8	delta-BHC	11.	U
58-89-9	gamma-BHC (Lindane)	11.	U
76-44-8	Heptachlor	11.	U
309-00-2	Aldrin	11.	U
1024-57-3	Heptachlor Epoxide	11.	U
959-98-8	Endosulfan I	11.	U
60-57-1	Dieldrin	22.	U
72-55-9	4,4'-DDE	22.	U
72-20-8	Endrin	22.	U
33213-65-9	Endosulfan II	22.	U
72-54-8	4,4'-DDD	22.	U
1031-07-8	Endosulfan Sulfate	22.	U
50-29-3	4,4'-DDT	16.	JP
72-43-5	Methoxychlor	110	U
53494-70-5	Endrin Ketone	22.	U
7421-93-4	Endrin Aldehyde	22.	U
5103-71-9	alpha-Chlordane	11.	U
5103-74-2	gamma-Chlordane	11.	U
8001-35-2	Toxaphene	1100	U
12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	450	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	220	U
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	220	U

See The Original

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-7

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-02

Level (low/med): LOW Date Received: 12/01/99

% Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7440			P
7440-36-0	Antimony	2.2	B	N	P
7440-38-2	Arsenic	2.4			P
7440-39-3	Barium	53.2			P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	39400			P
7440-47-3	Chromium	11.6			P
7440-48-4	Cobalt	5.0	B		P
7440-50-8	Copper	10.		N	P
7439-89-6	Iron	12800			P
7439-92-1	Lead	17.0		*	P
7439-95-4	Magnesium	9180			P
7439-96-5	Manganese	415.			P
7439-97-6	Mercury	0.68			CV
7440-02-0	Nickel	10.5			P
7440-09-7	Potassium	1660			P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	274.	B		P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	15.3			P
7440-66-6	Zinc	39.9			P
57-12-5	Cyanide				NR

Blank Cont.

Blk Cont.

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-6

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-03

Level (low/med): LOW Date Received: 12/01/99

% Solids: 89.2

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8380			P
7440-36-0	Antimony	1.5	U	N	P
7440-38-2	Arsenic	5.4			P
7440-39-3	Barium	77.4			P
7440-41-7	Beryllium	0.31	B		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	7360			P
7440-47-3	Chromium	13.5			P
7440-48-4	Cobalt	5.4	B		P
7440-50-8	Copper	9.4		N	P
7439-89-6	Iron	14200			P
7439-92-1	Lead	20.4		*	P
7439-95-4	Magnesium	2940			P
7439-96-5	Manganese	278.			P
7439-97-6	Mercury	1.4			CV
7440-02-0	Nickel	11.2			P
7440-09-7	Potassium	1140			P
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	188.	B		P
7440-28-0	Thallium	2.2	U		P
7440-62-2	Vanadium	19.6			P
7440-66-6	Zinc	40.0			P
57-12-5	Cyanide				NR

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-1

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-04

Level (low/med): LOW Date Received: 12/01/99

% Solids: 84.6

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	7210			P	J
7440-36-0	Antimony	1.3	U	N	P	UJ
7440-38-2	Arsenic	5.7			P	J
7440-39-3	Barium	63.4			P	J
7440-41-7	Beryllium	0.19	B		P	J
7440-43-9	Cadmium	0.18	U		P	UJ
7440-70-2	Calcium	58400			P	J
7440-47-3	Chromium	12.1			P	
7440-48-4	Cobalt	4.5	B		P	
7440-50-8	Copper	19.3		N	P	
7439-89-6	Iron	22100			P	
7439-92-1	Lead	376.		*	P	
7439-95-4	Magnesium	23100			P	
7439-96-5	Manganese	921.			P	
7439-97-6	Mercury	0.15			CV	
7440-02-0	Nickel	11.2			P	
7440-09-7	Potassium	824.	B		P	
7782-49-2	Selenium	0.92	U		P	UJ
7440-22-4	Silver	0.18	U		P	UJ
7440-23-5	Sodium	211.	B		P	UJ → BLK Cont
7440-28-0	Thallium	1.3	U		P	UJ
7440-62-2	Vanadium	13.3			P	J
7440-66-6	Zinc	45.0			P	J
57-12-5	Cyanide				NR	

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-2

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-05

Level (low/med): LOW Date Received: 12/03/99

% Solids: 85.7

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10100			P	J
7440-36-0	Antimony	1.5	U	N	P	UJ
7440-38-2	Arsenic	3.9			P	J
7440-39-3	Barium	81.1			P	J
7440-41-7	Beryllium	0.37	B		P	J
7440-43-9	Cadmium	0.22	U		P	UJ
7440-70-2	Calcium	65800			P	J
7440-47-3	Chromium	14.6			P	
7440-48-4	Cobalt	6.4	B		P	
7440-50-8	Copper	36.1		N	P	
7439-89-6	Iron	17400			P	
7439-92-1	Lead	47.4		*	P	
7439-95-4	Magnesium	10400			P	
7439-96-5	Manganese	480.			P	
7439-97-6	Mercury	0.89			CV	
7440-02-0	Nickel	15.0			P	
7440-09-7	Potassium	2310			P	
7782-49-2	Selenium	1.1	U		P	UJ
7440-22-4	Silver	0.22	U		P	UJ
7440-23-5	Sodium	504.	B		P	J
7440-28-0	Thallium	2.2	U		P	UJ
7440-62-2	Vanadium	18.9			P	J
7440-66-6	Zinc	50.0			P	J
57-12-5	Cyanide				NR	

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SS-1R

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-06

Level (low/med): LOW Date Received: 12/03/99

% Solids: 75.7

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8600			P
7440-36-0	Antimony	1.8	B	N	P
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	60.3			P
7440-41-7	Beryllium	0.30	B		P
7440-43-9	Cadmium	0.18	U		P
7440-70-2	Calcium	30000			P
7440-47-3	Chromium	12.7			P
7440-48-4	Cobalt	5.7	B		P
7440-50-8	Copper	17.8		N	P
7439-89-6	Iron	14800			P
7439-92-1	Lead	61.1		*	P
7439-95-4	Magnesium	9370			P
7439-96-5	Manganese	480.			P
7439-97-6	Mercury	20.2			CV
7440-02-0	Nickel	12.7			P
7440-09-7	Potassium	1340			P
7782-49-2	Selenium	0.97			P
7440-22-4	Silver	0.18	U		P
7440-23-5	Sodium	225.	B		P
7440-28-0	Thallium	1.8	U		P
7440-62-2	Vanadium	18.0			P
7440-66-6	Zinc	91.5			P
57-12-5	Cyanide				NR

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SS-2

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-07

Level (low/med): LOW Date Received: 12/03/99

% Solids: 80.6

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	9000			P	J
7440-36-0	Antimony	1.3	U	N	P	UJ
7440-38-2	Arsenic	3.1			P	J
7440-39-3	Barium	52.0			P	J
7440-41-7	Beryllium	0.27	B		P	J
7440-43-9	Cadmium	0.18	U		P	UJ
7440-70-2	Calcium	9360			P	J
7440-47-3	Chromium	12.5			P	
7440-48-4	Cobalt	5.6	B		P	
7440-50-8	Copper	16.3		N	P	
7439-89-6	Iron	14400			P	
7439-92-1	Lead	30.9		*	P	
7439-95-4	Magnesium	4160			P	
7439-96-5	Manganese	492.			P	
7439-97-6	Mercury	0.052			CV	
7440-02-0	Nickel	11.9			P	
7440-09-7	Potassium	1210			P	
7782-49-2	Selenium	1.3			P	
7440-22-4	Silver	0.18	U		P	UJ
7440-23-5	Sodium	124.	B		P	UJ → Blk Cont.
7440-28-0	Thallium	1.8	U		P	UJ
7440-62-2	Vanadium	18.0			P	J
7440-66-6	Zinc	72.3			P	J
57-12-5	Cyanide				NR	

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-08

Level (low/med): LOW Date Received: 12/03/99

% Solids: 97.7

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2060			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	4.0			P
7440-39-3	Barium	20.0	B		P
7440-41-7	Beryllium	0.16	U		P
7440-43-9	Cadmium	0.56	B		P
7440-70-2	Calcium	155000			P
7440-47-3	Chromium	7.4			P
7440-48-4	Cobalt	2.0	B		P
7440-50-8	Copper	31.8		N	P
7439-89-6	Iron	9240			P
7439-92-1	Lead	82.7		*	P
7439-95-4	Magnesium	45100			P
7439-96-5	Manganese	335.			P
7439-97-6	Mercury	0.0032	U		CV
7440-02-0	Nickel	5.8	B		P
7440-09-7	Potassium	743.	B		P
7782-49-2	Selenium	0.78	U		P
7440-22-4	Silver	0.16	U		P
7440-23-5	Sodium	265.	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	6.3	B		P
7440-66-6	Zinc	80.6			P
57-12-5	Cyanide				NR

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-09

Level (low/med): LOW Date Received: 12/03/99

% Solids: 80.3

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	8000			P	J
7440-36-0	Antimony	1.3	U	N	P	UJ
7440-38-2	Arsenic	3.7			P	J
7440-39-3	Barium	47.4			P	J
7440-41-7	Beryllium	0.23	B		P	J
7440-43-9	Cadmium	0.18	U		P	UJ
7440-70-2	Calcium	5930			P	J
7440-47-3	Chromium	13.7			P	
7440-48-4	Cobalt	5.5	B		P	
7440-50-8	Copper	15.1		N	P	
7439-89-6	Iron	14700			P	
7439-92-1	Lead	31.0		*	P	
7439-95-4	Magnesium	3360			P	
7439-96-5	Manganese	510.			P	
7439-97-6	Mercury	0.0071	B		CV	
7440-02-0	Nickel	11.6			P	
7440-09-7	Potassium	851.	B		P	
7782-49-2	Selenium	1.1			P	
7440-22-4	Silver	0.18	U		P	UJ
7440-23-5	Sodium	114.	B		P	J
7440-28-0	Thallium	1.8	U		P	UJ
7440-62-2	Vanadium	17.3			P	J
7440-66-6	Zinc	57.3			P	J
57-12-5	Cyanide				NR	

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

MW-5

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-10

Level (low/med): LOW Date Received: 12/03/99

% Solids: 89.7

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9370			P
7440-36-0	Antimony	1.4	B	N	P
7440-38-2	Arsenic	2.4			P
7440-39-3	Barium	34.7			P
7440-41-7	Beryllium	0.41	B		P
7440-43-9	Cadmium	0.16	U		P
7440-70-2	Calcium	25300			P
7440-47-3	Chromium	15.9			P
7440-48-4	Cobalt	10.			P
7440-50-8	Copper	13.8		N	P
7439-89-6	Iron	23000			P
7439-92-1	Lead	2.4		*	P
7439-95-4	Magnesium	7200			P
7439-96-5	Manganese	434.			P
7439-97-6	Mercury	0.013			CV
7440-02-0	Nickel	23.7			P
7440-09-7	Potassium	1460			P
7782-49-2	Selenium	1.1			P
7440-22-4	Silver	0.16	U		P
7440-23-5	Sodium	132.	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	18.3			P
7440-66-6	Zinc	47.4			P
57-12-5	Cyanide				NR

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-8

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-11

Level (low/med): LOW Date Received: 12/03/99

% Solids: 90.2

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10600			P
7440-36-0	Antimony	1.2	U	N	P
7440-38-2	Arsenic	1.5	B		P
7440-39-3	Barium	34.0	B		P
7440-41-7	Beryllium	0.46	B		P
7440-43-9	Cadmium	0.18	U		P
7440-70-2	Calcium	25200			P
7440-47-3	Chromium	17.3			P
7440-48-4	Cobalt	9.8			P
7440-50-8	Copper	4.1	B	N	P
7439-89-6	Iron	24700			P
7439-92-1	Lead	2.4		*	P
7439-95-4	Magnesium	7840			P
7439-96-5	Manganese	432.			P
7439-97-6	Mercury	0.34			CV
7440-02-0	Nickel	23.6			P
7440-09-7	Potassium	2040			P
7782-49-2	Selenium	1.3			P
7440-22-4	Silver	0.18	U		P
7440-23-5	Sodium	140.	B		P
7440-28-0	Thallium	1.8	U		P
7440-62-2	Vanadium	21.2			P
7440-66-6	Zinc	45.8			P
57-12-5	Cyanide				NR

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-4

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-12

Level (low/med): LOW Date Received: 12/03/99

% Solids: 84.5

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	7740			P	J
7440-36-0	Antimony	1.3	U	N	P	UJ
7440-38-2	Arsenic	1.7	B		P	J
7440-39-3	Barium	53.0			P	J
7440-41-7	Beryllium	0.21	B		P	J
7440-43-9	Cadmium	0.18	U		P	UJ
7440-70-2	Calcium	40100			P	J
7440-47-3	Chromium	13.0			P	
7440-48-4	Cobalt	7.3	B		P	
7440-50-8	Copper	7.6		N	P	
7439-89-6	Iron	17000			P	
7439-92-1	Lead	3.6		*	P	
7439-95-4	Magnesium	9300			P	
7439-96-5	Manganese	555.			P	
7439-97-6	Mercury	0.62			CV	
7440-02-0	Nickel	15.8			P	
7440-09-7	Potassium	1420			P	
7782-49-2	Selenium	1.4			P	
7440-22-4	Silver	0.18	U		P	UJ
7440-23-5	Sodium	194.	B		P	UJ
7440-28-0	Thallium	1.8	U		P	UJ
7440-62-2	Vanadium	18.8			P	J
7440-66-6	Zinc	39.0			P	J
57-12-5	Cyanide				NR	

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-3

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-13

Level (low/med): LOW Date Received: 12/03/99

% Solids: 88.7

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	7610			P	J
7440-36-0	Antimony	1.6	B	N	P	UJ BIK Cont
7440-38-2	Arsenic	2.3			P	J
7440-39-3	Barium	64.2			P	
7440-41-7	Beryllium	0.22	B		P	
7440-43-9	Cadmium	0.17	U		P	UJ
7440-70-2	Calcium	49700			P	J
7440-47-3	Chromium	16.2			P	
7440-48-4	Cobalt	6.9	B		P	
7440-50-8	Copper	15.0		N	P	
7439-89-6	Iron	17200			P	
7439-92-1	Lead	6.8		*	P	
7439-95-4	Magnesium	10600			P	
7439-96-5	Manganese	535.			P	
7439-97-6	Mercury	0.24			CV	
7440-02-0	Nickel	16.0			P	
7440-09-7	Potassium	1440			P	
7782-49-2	Selenium	0.91			P	
7440-22-4	Silver	0.17	U		P	UJ
7440-23-5	Sodium	211.	B		P	J → BIK Cont
7440-28-0	Thallium	1.7	U		P	UJ
7440-62-2	Vanadium	18.5			P	J
7440-66-6	Zinc	38.6			P	J
57-12-5	Cyanide				NR	

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-14

Level (low/med): LOW Date Received: 12/03/99

% Solids: 87.5

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7220			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	2.5			P
7440-39-3	Barium	68.4			P
7440-41-7	Beryllium	0.20	B		P
7440-43-9	Cadmium	0.16	U		P
7440-70-2	Calcium	58700			P
7440-47-3	Chromium	14.4			P
7440-48-4	Cobalt	6.3	B		P
7440-50-8	Copper	15.8		N	P
7439-89-6	Iron	16300			P
7439-92-1	Lead	6.8		*	P
7439-95-4	Magnesium	21600			P
7439-96-5	Manganese	559.			P
7439-97-6	Mercury	0.21			CV
7440-02-0	Nickel	14.5			P
7440-09-7	Potassium	1330			P
7782-49-2	Selenium	0.89			P
7440-22-4	Silver	0.16	U		P
7440-23-5	Sodium	247.	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	17.5			P
7440-66-6	Zinc	41.1			P
57-12-5	Cyanide				NR

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CB-1

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-15

Level (low/med): LOW Date Received: 12/03/99

% Solids: 65.5

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	4860			P	J
7440-36-0	Antimony	1.7	U	N	P	UJ
7440-38-2	Arsenic	6.2			P	J
7440-39-3	Barium	64.8			P	J
7440-41-7	Beryllium	0.24	U		P	UJ
7440-43-9	Cadmium	1.0	B		P	J
7440-70-2	Calcium	89400			P	
7440-47-3	Chromium	11.2			P	
7440-48-4	Cobalt	4.5	B		P	
7440-50-8	Copper	42.0		N	P	
7439-89-6	Iron	14900			P	
7439-92-1	Lead	177.		*	P	
7439-95-4	Magnesium	52600			P	
7439-96-5	Manganese	542.			P	
7439-97-6	Mercury	6.6			CV	
7440-02-0	Nickel	11.5			P	
7440-09-7	Potassium	973.	B		P	
7782-49-2	Selenium	1.6			P	
7440-22-4	Silver	0.24	U		P	UJ
7440-23-5	Sodium	292.	B		P	UJ
7440-28-0	Thallium	2.4	U		P	UJ
7440-62-2	Vanadium	10.8	B		P	J
7440-66-6	Zinc	166.			P	J
57-12-5	Cyanide				NR	

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

DUP-2

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-16

Level (low/med): LOW Date Received: 12/03/99

% Solids: 65.5

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5370			P
7440-36-0	Antimony	1.7	U	N	P
7440-38-2	Arsenic	3.7			P
7440-39-3	Barium	62.8			P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	0.61	B		P
7440-70-2	Calcium	53100			P
7440-47-3	Chromium	14.2			P
7440-48-4	Cobalt	3.9	B		P
7440-50-8	Copper	36.4		N	P
7439-89-6	Iron	11300			P
7439-92-1	Lead	172.		*	P
7439-95-4	Magnesium	26800			P
7439-96-5	Manganese	445.			P
7439-97-6	Mercury	6.8			CV
7440-02-0	Nickel	11.0			P
7440-09-7	Potassium	997.	B		P
7782-49-2	Selenium	1.2	U		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	223.	B		P
7440-28-0	Thallium	2.4	U		P
7440-62-2	Vanadium	12.6			P
7440-66-6	Zinc	159.			P
57-12-5	Cyanide				NR

Color Before: BR Clarity Before: OPAQUE Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

_____

_____

_____

_____

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SB-7

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-02

% Solids: 90 Date Received: 12/01/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.580	U	mg/Kg		L
	TOC	6590		mg/Kg		D

Comments:

FORM I - WC

1

SAMPLE NO.

MW-6

WET CHEM ANALYSIS DATA SHEET

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-03

% Solids: 89.9 Date Received: 12/01/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	3.15		mg/Kg		L
	TOC	23200		mg/Kg	J	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SB-1

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-04

% Solids: 83.6 Date Received: 12/01/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	2.06		mg/Kg		L
	TOC	18200		mg/Kg	J	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SB-2

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-05

% Solids: 84.7 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	12.0		mg/Kg		L
	TOC	10900		mg/Kg	N	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SS-1R

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-06

% Solids: 73.2 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.680	U	mg/Kg		L
	TOC	24400		mg/Kg	J	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SS-2

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-07

% Solids: 81.2 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.590	U	mg/Kg		L
	TOC	18200		mg/Kg	J	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SS-3

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-08

% Solids: 90.9 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	20.0	U	mg/Kg		L
	TOC	36400		mg/Kg	N	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SS-4

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-09

% Solids: 79.3 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.600	U	mg/Kg		L
	TOC	14700		mg/Kg	N	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

MW-5

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-10

% Solids: 88.6 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.540	U	mg/Kg		L
	TOC	1700		mg/Kg		D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SB-8

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-11

% Solids: 90.6 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.520	U	mg/Kg		L
	TOC	2060		mg/Kg	✓	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SB-4

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-12

% Solids: 83.8 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	1.04		mg/Kg		L
	TOC	4140		mg/Kg	✓	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

SB-3

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-13

% Solids: 89.9 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.550	U	mg/Kg		L
	TOC	4200		mg/Kg	N	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

DUP-1

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-14

% Solids: 88.2 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0.550	U	mg/Kg		L
	TOC	1650		mg/Kg	J	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

CB-1

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-15

% Solids: 65.7 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	1.90		mg/Kg		L
	TOC	110000		mg/Kg	~	D

Comments:

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

DUP-2

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3090A SAS No.: _____ SDG No.: A3090

Matrix (soil/water): SOIL Lab Sample ID: 993090A-16

% Solids: 70.4 Date Received: 12/03/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	1.68		mg/Kg		L
	TOC	108000		mg/Kg	N	D

Comments:

FORM I - WC

Analytical Assurance Associates, Inc.
600 Rock Raymond Road
Downingtown, PA 19335
Phone: 610 - 269 - 9989
Fax. 610 - 269 - 9989

DATA USABILITY
STEARNS & WHELER
ALBION SITE

ANALYZED BY
SEVERN TRENT LABORATORIES, INC.
CASE No.: 7099-3331A/ SDG No.: A3331

DATA USABILITY REPORTED BY:

Analytical Assurance Associates (A3)
600 Rock Raymond Road
Downingtown, PA 19335

SITE NAME: ALBION
LABORATORY No.: 7099-3331A
SDG No.: A3331

DISCUSSION

Eight (8) water samples, including one trip blank and one set of field duplicate samples were collected on 12-16-99. Severn Trent Laboratories located in Monroe Connecticut received all samples in good condition on 12-17-99. Based on the chain-of-custody records, the following analyses were performed for this batch of samples.

CIIENT ID	LABORATORY ID	PARAMETERS				
		VOA Analysis Date	SVOA Anal/Extraction	Pest/PCB Anal/Extraction	Metals Analysis date	Inorganic* Analysis
MW-1	993331A-01	12-18-99	12-22/01-11-00	12-17/12-20-99	01-10-00	12-129-99
Trip Blk	993331A-02	12-18-99	NA	NA	NA	NA
MW-3	993331A-03	12-18-99	12-22/01-10-00	12-17/12-20-99	01-10-00	12-28-99
MW-2	993331A-04	12-18-99	12-22/01-1O-00	12-17/12-20-99	01-10-00	12-28-99
MW-4	993331A-05	12-19-99	12-22/01-10-00	12-17/12-20-99	01-10-00	12-28-99
MW-5	993331A-06	12-19-99	12-22/01-10-00	12-17/12-20-99	01-10-00	12-28-99
MW-6	993331A-07	12-18-99	12-22/01-11-00	12-17/12-20-99	01-10-00	12-28-99
DUP	993331A-08	12-18-99	12-22/01-11-00	12-17/12-20-99	01-10-00	12-28-99

NA Not Analyzed
* The analyses dates for Oxidation Reduction Potential and TOC are 12-31-99 & 01-03-00 respectively.

The sample analysis was reviewed based on the Region II functional Guidelines and the Data Usability criteria established in NYSDEC Division of Environmental Remediation based on the following parameters. If you have any question or comments please call Zohreh Hamid at (610) 269-9989.

- Holding time
- Calibration analysis
- Blank Analysis
- Matrix Spike/Spike Duplicate (MS/MSD)
- Laboratory Control Sample Results
- Laboratory/Field Duplicate
- Instrument Performance
- Surrogate/Internal Standard Recovery (Organic only)
- Compound Identification/Quantitation

ORGANIC ANALYSES

General/Holding Time

The extraction & analyses of all parameters were tabulated on the aforementioned table. The holding times met the method requirements for all analyses.

Calibration

Volatile

The %RSDs, %Ds and response factors in all initial and continuing calibrations were within the control limits with the exception of %Ds for acetone (30.2) and carbon disulfide (29.0%) in continuing calibration analyzed on 12-18-99 @ 09:56. The positive results for acetone were qualified "U" due to the blank contamination. These results and the non-detected vales were also qualified estimated in the corresponding samples (Trip Blk, MW-1, MW-2, MW-3, MW-6 & DUP).

Semivolatile

All %RSDs were within the Region II data validation control limits. The following %Ds and response factors were above control limits.

Compound Name	CC 01-10-00	CC 01-11-00
Hexachlorocyclopentadiene	76.9*	64.2*
2,4-Dinitrophenol	45.0	45.4
4,6-Dinitro-2-methylphenol	28.2	
4-Nitrophenol		39.2
Associated Sample:	MW-3	MW-1
	MW-2	MW-6
	MW-4	DUP
	MW-5	MS/MSD
	Blk	MSB

* The response factor was below the control limit of 0.05 established in Region II Guidelines. This compound was not detected in the corresponding samples. The non-detected values were contractually rejected.

The positive results and non-detected values for the compounds with %D outliers were qualified estimated.

Pesticide/PCB

The % RSD and %Ds were within the control limits.

Blank Analysis

Volatile

The laboratory blank analyzed on 12-18-99 had acetone (2 ug/l), 2-butanon (2 ug/l) and the trip blank had methylene chloride (0.9 ug/l) & acetone (9.0 ug/l) at levels below the CRQLs. Also, butylated hydroxytoluene was reported as TIC in the trip blank. The reported sample results below the CRQLs were elevated to the CRQL and qualified "U" due to the laboratory artifact. Butylated hydroxytoluene was not detected in the samples. Therefore, the data were not impacted.

Semivolatile

The laboratory blank had diethylphthalate (0.2 ug/l), di-n-butylphthalate (0.5 ug/l), di-n-octylphthalate (0.1ug/l), bis (2-ethylhexyl) phthalate (0.3 ug/l) and fifteen unknown compounds/siloxane at levels below the CRQLs. The corresponding sample results were elevated to the CRQLs and qualified "U" for the target compounds.

Pesticide/PCB

The laboratory preparation blank was free of target compounds.

Matrix Spike/ Spike Duplicate Analysis

Volatile

These QC samples were analyzed on sample MW-1. The recoveries and RPDs were within the control limits.

Semivolatile

The recoveries for 4-nitrophenol (101/101%) and pentachlorophenol (110/114%) in MS/MSD were above control limits of 80% and 103% respectively. These compounds were not reported in the samples. Therefore, the data were not impacted.

Pesticide/PCB

The recoveries were within the control limits with the exception of alpha-BHC (54%) in matrix spike sample. Also, the RPDs for gamma-BHC (17%), heptachlor (23%) and endrin (25%) were above control limits of 15%, 20% & 21% respectively. The reported sample result for endrin in sample MW-5 was qualified estimated.

Laboratory Control Sample

The blank spike and check standard recoveries were within the control limits in all fractions with the exception of carbon disulfide (195%) and bromoform (50%) in QC check sample analyzed for volatile fraction. The data were not impacted since these compounds were not detected in the samples and the recoveries above 10%.

Instrument Performance

The sample analyses for all parameters were performed within the analysis holding times established in the corresponding methods.

Surrogate Analysis

All organic samples were spiked with the surrogate compounds identified in the corresponding methods. The recoveries were within the control limits.

Internal Standard Analysis

All volatile and semivolatile samples and the corresponding QC samples were spiked with internal standards prior to the sample analysis. The recoveries and retention times were within the control limits.

Duplicate Analysis

A field duplicate analysis was performed on sample MW-6 /DUP. Target compounds were not detected in these samples at levels above CRQLs.

Compound Quantitation/Identification

Volatile
All samples were analyzed at one-fold dilution with the exception of sample MW-5 in volatile fraction. This sample was initially analyzed at 2-fold dilution due to the high level of benzene. The reported data are considered reliable. The results for siloxane derivatives were rejected and should not be considered as TICs in the samples

Pesticide/PCB
The reported sample data for sample MW-5 was qualified estimated due to the elevated base line in sample chromatogram.

Data Package Completeness

Data package completeness was satisfactory.

INORGANIC ANALYSES

All samples were analyzed for the TAL metals, cyanide, TOC and Oxidation Reduction Potential within the holding time.

Calibration Analysis

All recoveries in initial and continuing calibrations were within the control limits.

Contract Required Detection Limits

The CRDL recoveries for Se (128.1/126.1%), Ag (77.7/79%), Tl (75.6/51.2%) in both CRDLs and Pb (139%) in initial CRDL were outside the data validation control limits of 80-120%. The positive results up to 3XCRDL for Se and Pb and positive results up to 3X CRDL and non-detected values for Ag & Tl were qualified estimated.

Blank Analysis

The preparation blank had the following contamination at levels below the CRDLs. The reported sample results up to the action levels (5X the blank level) were qualified "U" and should be considered as laboratory artifacts.

Analyte	Blank Level ug/l	Action Level ug/l
Al	23.9	119.5
Zn	3.2	16

Sample results for Al were above the action levels. The results for Zn in samples MW-3, MW-6 & DUP were qualified "U"

ICP Interference Check Sample

The recoveries for Sb (122.5/122.3) exceeded the upper control limits. This analyte was not detected in the samples. Therefore, the data were not impacted.

MATRIX SPIKE/DUPLICATE ANALYSES

The matrix spike was analyzed on sample MW-1 for this batch. The recoveries were within the control limits with the exception of Al (392.6%), Se (5.2%) and Tl (20%). The post digestion sample analysis was performed for these three analytes. The recoveries of

(114.2%), (74.5%) & (-9.4%) were reported for Al, Se & Tl respectively. The reported positive results for Al were rejected (Biased High). However, the positive results for Se and Tl were qualified estimated and the non-detected values were rejected due to the extremely low spike recoveries. The reported results were considered biased low and the possibility of false negative exist for these two metals.

DUPLICATE ANALYSIS

The RPDs in laboratory duplicate analysis were within the control limits in metal and inorganic analyses. A field duplicate was analyzed for this batch. RPDs for all results detected at levels above CRDLs were within the control limits of 50% in metal, cyanide and TOC analyses. Field duplicate sample was not analyzed for Oxidation Reduction Potential.

LABORATORY CONTROL SAMPLE

The recoveries for LCS sample were within the control limits. Also, the recoveries for LCS analyzed in inorganic parameters were within the control limits of 80-120%.

SERIAL DILUTION ANALYSIS

The %Ds for all metals were within the control limits established in Region II except Ba (47.5%) and Na (60.6%). The positive sample results above CRDLs were qualified estimated.

DATA PACKAGE COMPLETENESS

Data package completeness was satisfactory. However, the pH of cyanide sample was not included in this data package.

SUMMARY

The data package assembly was satisfactory. The cooler temperature 6 °C was within the control limits. All metals were analyzed by ICP, with the exception of mercury. The major problems with the exception of extremely low spike recovery for Se and Tl, and high recovery for Al were not encountered in the sample analysis. The minor issues (contamination, recovery outliers in CRDL ,ICS and serial dilution analyses) have been discussed. The reported sample data were reported with the applied qualifier codes.

Appendix A
Glossary of Data Qualifier

GLOSSARY OF DATA QUALIFIERS

CODES RELATING TO IDENTIFICATION

(confidence concerning presence or absence of compounds):

U = NOT DETECTED SUBSTANTIALLY ABOVE THE LEVEL REPORTED IN LABORATORY OR FIELD BLANKS. [Substantially is equivalent to a result less than 10 times the blank level for common contaminants (methylene chloride, acetone and 2- butanone in the VOA analyses, and common phthalates in the BNA analyses, along with tentatively identified compounds) or less than 5 times the blank level for other target compounds.]

R = UNUSABLE RESULT. THE PRESENCE OR ABSENCE OF THIS ANALYTE CANNOT BE VERIFIED. SUPPORTING DATA NECESSARY TO CONFIRM RESULT.

N = NEGATED COMPOUND. THERE IS PRESUMPTIVE EVIDENCE TO MAKE A TENTATIVE IDENTIFICCATION.

CODES RELATING TO QUATITATION

(can be used for both positive results and sample quantitation limits):

J = ANALYTE WAS POSITIVELY IDENTIFIED. REPORTED VALUE MAY NOT BE ACCURATE OR PRECISE.

UJ = ANALYTE WAS NOT DETECTED. THE REPORTED QUATITATION LIMIT IS QUALIFIED ESTIMATED.

OTHER CODES

Q = NO ANALYTICAL RESULT.

DATA USABILITY SUMMARY
ALBION
CASE ID No.: 7099-3331A

CIIENT ID	PARAMETERS				
	VOA	SVOA	Pest/PCB	Metals	Inorganic
MW-1	A, J^{1}	R^{1}, A^{2}, J^{2}	A	$R^{2,3}, J^{7,8,9}$	A
MW-3	A, J^{1}	R^{1}, A^{2}, J^{3}	A	$A^{3}, R^{2,3}, J^{7,8,9}$	A
MW-2	A, J^{1}	R^{1}, A^{2}, J^{3}	A	$R^{2,3}, J^{7,8,9}$	A
MW-4	A	R^{1}, A^{2}, J^{3}	A	$R^{2,3}, J^{7,8,9}$	A
MW-5	A	R^{1}, A^{2}, J^{3}	$A,J^{4,5,6}$	$R^{2,3}, J^{7,8,9}$	A
MW-6	A^{1}, J^{1}	R^{1}, A^{2}, J^{2}	A	$A^{3}, R^{2,3}, J^{7,8,9}$	A
DUP	A, J^{1}	R^{1}, A^{2}, J^{2}	A	$A^{3}, R^{2,3}, J^{7,8,9}$	A
Trip Blk	A^{1}, J^{1}	NA	NA	NA	NA

A= Accept the sample results as reported.

A^{1}= Sample result for acetone was elevated to the CRQL and qualified "U".

A^{2}= The sample results below the CRQLs for diethylphthalate, di-n-butylphthalate, bis(2-ethylhexyl) phthalate and di-n-octylphthalatephenol , (method blank contamination) were elevated to the CRQLs and qualified "U".

A^{3}= The reported sample results up to action levels for Zn was qualified "U".

J^{1}= The reported data for acetone and carbon disulfide were qualified estimated since the %D in continuing calibration was above 25%.

J^{2}= Estimated the non-detected values "UJ" since the %Ds for 2,4-dinitrophenol and 4-nitrophenol were above 25% in continuing calibration.

J^{3}= Estimated the non-detected values "UJ" since the %Ds for 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol were above 25% in continuing calibration.

J^{4}= The positive results were qualified estimated since the %D for the results reported on two different columns was above 25%.

J^{5}= The reported data were qualified estimated since the base line was elevated in sample chromatogram.

J^{6}= The result for endrin was qualified estimated since the RPD exceeded in MS/MSD analysis.

J^{7}= The positive results up to 3xCRDL for Se and Pb were qualified estimated since the CRDL recovery was above 120%.

Table Cont.

J^8= The positive results up to 3xCRDL and non-detected values for Ag & Tl were qualified estimated since the CRDL recovery was below 80%.

J^9= The positive results for Ba and Na were qualified estimated since the %Ds were above 10% in serial dilution analysis.

R^1= Reject the non-detected values for Hexachlorocyclopentadiene since the response factors were below the 0.05 control limit in all continuing calibration.

R^2= Reject the positive results for Al since the spike recovery exceeded150%.

R^3= Reject the non-detected values and qualified "J" the positive results for Se and Tl since the spike recoveries were below 30%.

1. **Appendix A- Glossary of Data Qualifier**
2. **Appendix B- Laboratory Form I, & Applied Qualifier Codes**
3. **Appendix C - Resubmission (Not applicable)**

Appendix B
Laboratory Reported Results
&
Applied Qualifier Codes

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: TRIP BLANK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-02

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7156

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	.9	J
67-64-1	Acetone	~~9~~ 10	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U UJ
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: TRIP BLANK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-02

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7156

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01. 128-37-0	BUTYLATED HYDROXYTOLUENE	22.89	6	JN
02.				
03.				
04.				
05.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: MW-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-01

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7158

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	~~U~~ UJ
75-15-0	Carbon Disulfide	10	~~U~~ UJ
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: MW-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-01

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7158

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	19.31	18	~~JN~~ R
02. 541-05-9	CYCLOTRISILOXANE, HEXAMETHYL	14.96	11	~~JN~~ R
03.	UNKNOWN SILOXANE	21.63	9	~~J~~ R
04.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: MW-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-04

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7164

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	~~U~~ UJ
75-15-0	Carbon Disulfide	10	~~U~~ UJ
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

CLIENT ID

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-04

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7164

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.556-67-2	CYCLOTETRASILOXANE, OCTAMETH	19.32	24	~~JN~~ R
02.	UNKNOWN SILOXANE	21.65	13	~~J~~ R
03.541-05-9	CYCLOTRISILOXANE, HEXAMETHYL	14.98	7	JN R
04.				
05.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: MW-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-03

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7163

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	U	
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	U	
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	10	U	
67-64-1	Acetone	10	~~U~~	UJ
75-15-0	Carbon Disulfide	10	~~U~~	UJ
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene (total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	
78-93-3	2-Butanone	10	U	
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	
591-78-6	2-Hexanone	10	U	
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: MW-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-03

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7163

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	19.32	15	~~JN~~ R
02.	UNKNOWN SILOXANE	21.65	9	~~J~~ R
03.				
04.				
05.				
06.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: MW-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-05

Sample wt/vol: 5 (g/mL) ML Lab File ID: >K8270

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/19/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	.4	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	.2	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: MW-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-05

Sample wt/vol: 5 (g/mL) ML Lab File ID: >K8270

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/19/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.					
02.					
03.					
04.					
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07.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-06

Sample wt/vol: 5 (g/mL) ML Lab File ID: >K8273

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/19/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl Chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene Chloride	20	U
67-64-1	Acetone	4	J
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	7	J
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	20	U
75-27-4	Bromodichloromethane	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
71-43-2	Benzene	210	
10061-02-6	trans-1,3-Dichloropropene	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-88-3	Toluene	42	
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	8	J
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	72	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-06

Sample wt/vol: 5 (g/mL) ML Lab File ID: >K8273

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/19/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		UNKNOWN C9H8 ISOMER	22.27	160	J
02.		UNKNOWN C9H10 ISOMER	22.01	120	J
03.		UNKNOWN C9H8O ISOMER	23.05	64	J
04.		UNKNOWN	21.60	46	J
05.		UNKNOWN C8H6S ISOMER	24.51	38	J
06.		UNKNOWN C10H10 ISOMER	23.74	33	J
07.		UNKNOWN C9H8O ISOMER	22.93	32	J
08.		UNKNOWN C3 ALKYLBENZENE	21.77	18	J
09.		UNKNOWN C3 ALKYLBENZENE	21.29	18	J
10.		UNKNOWN C10H10 ISOMER	23.60	17	J
11.		UNKNOWN C10H12 ISOMER	23.53	14	J
12.		UNKNOWN	24.24	14	J
13.		UNKNOWN C3 ALKYLBENZENE	20.84	11	J
14.					
15.					
16.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-07

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7167

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10 ~~2~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	~~U~~ UJ
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-07

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7167

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.				
02.				
03.				
04.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID: DUP

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-08

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7168

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	~~U~~ UJ
75-15-0	Carbon Disulfide	10	~~U~~ UJ
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

DUP

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-08

Sample wt/vol: 5 (g/mL) ML Lab File ID: >M7168

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: not dec. _____ Date Analyzed: 12/18/99

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.				
02.				
03.				
04.				
05.				
06.				
07.				
08.				
09.				
10.				
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1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-01

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5798

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

R

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-01

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5798

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
51-28-5	2,4-Dinitrophenol	26	~~U~~	UJ
100-02-7	4-Nitrophenol	26	~~U~~	UJ
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-01-6	4-Nitroaniline	26	U	
534-52-1	4,6-Dinitro-2-methylphenol	26	U	
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	26	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
86-74-8	Carbazole	10	U	
84-74-2	Di-n-butylphthalate	10 ~~3~~	~~JB~~	U
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~4~~	~~JB~~	U
117-84-0	Di-n-octylphthalate	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenz(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-1

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-01

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5798

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs Found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	23.65	2	~~JB~~ R
02.	UNKNOWN	25.03	2	J
03.				
04.				
05.				
06.				
07.				
08.				
09.				
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-04

Sample wt/vol: 920 (g/mL) ML Lab File ID: >R5779

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U R
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	27	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	27	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	27	U
83-32-9	Acenaphthene	11	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-04

Sample wt/vol: 920 (g/mL) ML Lab File ID: >R5779

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:_____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
51-28-5	2,4-Dinitrophenol	27	~~U~~	UJ
100-02-7	4-Nitrophenol	27	U	
132-64-9	Dibenzofuran	11	U	
121-14-2	2,4-Dinitrotoluene	11	U	
84-66-2	Diethylphthalate	11 ~~.4~~	~~JB~~	U
7005-72-3	4-Chlorophenyl-phenylether	11	U	
86-73-7	Fluorene	11	U	
100-01-6	4-Nitroaniline	27	U	
534-52-1	4,6-Dinitro-2-methylphenol	27	~~U~~	UJ
86-30-6	N-Nitrosodiphenylamine (1)	11	U	
101-55-3	4-Bromophenyl-phenylether	11	U	
118-74-1	Hexachlorobenzene	11	U	
87-86-5	Pentachlorophenol	27	U	
85-01-8	Phenanthrene	11	U	
120-12-7	Anthracene	11	U	
86-74-8	Carbazole	11	U	
84-74-2	Di-n-butylphthalate	11 ~~.6~~	~~JB~~	U
206-44-0	Fluoranthene	11	U	
129-00-0	Pyrene	11	U	
85-68-7	Butylbenzylphthalate	11	U	
91-94-1	3,3'-Dichlorobenzidine	11	U	
56-55-3	Benzo(a)anthracene	11	U	
218-01-9	Chrysene	11	U	
117-81-7	bis(2-Ethylhexyl)phthalate	11 ~~.4~~	~~JB~~	U
117-84-0	Di-n-octylphthalate	11 ~~.08~~	~~JB~~	U
205-99-2	Benzo(b)fluoranthene	11	U	
207-08-9	Benzo(k)fluoranthene	11	U	
50-32-8	Benzo(a)pyrene	11	U	
193-39-5	Indeno(1,2,3-cd)pyrene	11	U	
53-70-3	Dibenz(a,h)anthracene	11	U	
191-24-2	Benzo(g,h,i)perylene	11	U	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-04

Sample wt/vol: 920 (g/mL) ML Lab File ID: >R5779

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

Number TICs Found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	29.41	3	J
02.	UNKNOWN	26.59	2	~~JB~~ R
03.				
04.				
05.				
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EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-03

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5778

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U R
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-03

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5778

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
51-28-5	2,4-Dinitrophenol	26	~~U~~	UJ
100-02-7	4-Nitrophenol	26	U	
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-01-6	4-Nitroaniline	26	U	
534-52-1	4,6-Dinitro-2-methylphenol	26	~~U~~	UJ
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	26	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
86-74-8	Carbazole	10	U	
84-74-2	Di-n-butylphthalate	10 ~~6~~	~~JB~~	U
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~5~~	~~JB~~	U
117-84-0	Di-n-octylphthalate	10 ~~2~~	~~JB~~	U
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenz(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-3

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-03

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5778

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

Number TICs Found: 7 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	23.68	6	~~JB~~ R
02.	UNKNOWN	26.58	4	~~JB~~ R
03.	UNKNOWN	25.01	3	J
04.	UNKNOWN	25.39	3	J
05.	UNKNOWN	29.36	3	J
06.	UNKNOWN	28.00	2	J
07.	UNKNOWN	25.06	2	J
08.				
09.				
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1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-05

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5780

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	.5	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

R

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-05

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5780

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
51-28-5	2,4-Dinitrophenol	26	~~U~~	UJ
100-02-7	4-Nitrophenol	26	U	
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10.2	~~JB~~	U
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-01-6	4-Nitroaniline	26	U	
534-52-1	4,6-Dinitro-2-methylphenol	26	U	UJ
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	26	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
86-74-8	Carbazole	10	U	
84-74-2	Di-n-butylphthalate	10 ~~.6~~	~~JB~~	U
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~.6~~	~~JB~~	U
117-84-0	Di-n-octylphthalate	10 ~~.09~~	~~JB~~	U
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenz(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-4

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-05

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5780

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

Number TICs Found: 22 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	9.23	12	J
02.	UNKNOWN C4 ALKYL BENZENE	9.86	8	J
03.	UNKNOWN	10.12	6	J
04.	UNKNOWN C4 ALKYL BENZENE	9.74	6	J
05.	UNKNOWN C3 ALKYL BENZENE	8.23	5	J
06.	UNKNOWN	11.48	5	J
07.	UNKNOWN C4 ALKYL BENZENE	10.34	5	J
08.	UNKNOWN C4 ALKYL BENZENE	10.86	4	J
09.	UNKNOWN C4 ALKYL BENZENE	10.03	4	J
10.	UNKNOWN C4 ALKYL BENZENE	9.93	3	J
11.	UNKNOWN	11.28	3	J
12.769-94-0	PHENOL, 2,4-BIS(1-PHENYLETHY	24.32	3	JN
13.	UNKNOWN C11H14 ISOMER	12.19	3	J
14.	UNKNOWN	8.04	3	J
15.	UNKNOWN C4 ALKYL BENZENE	10.46	3	J
16.	UNKNOWN C4 ALKYL BENZENE	9.81	2	J
17.	UNKNOWN C4 ALKYL BENZENE	10.72	2	J
18.	UNKNOWN C4 ALKYL BENZENE	10.20	2	J
19.	UNKNOWN	27.68	2	J
20.	UNKNOWN C11H14 ISOMER	12.14	2	J
21.85-60-9	PHENOL, 4,4'-BUTYLIDENEBIS[2	25.54	2	JN
22.	UNKNOWN	27.59	2	J
23.				
24.				
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27.				
28.				
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-06

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5781

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5	J
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	2	J
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	.7	J
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	20	
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	18	
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	.4	J
77-47-4	Hexachlorocyclopentadiene	10	~~U~~ R
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	29	
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	19	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-06

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5781

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
51-28-5	2,4-Dinitrophenol	26	~~U~~	UJ
100-02-7	4-Nitrophenol	26	U	
132-64-9	Dibenzofuran	20		
121-14-2	2,4-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	18		
100-01-6	4-Nitroaniline	26	U	
534-52-1	4,6-Dinitro-2-methylphenol	26	~~U~~	UJ
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	26	U	
85-01-8	Phenanthrene	6	J	
120-12-7	Anthracene	2	J	
86-74-8	Carbazole	25		
84-74-2	Di-n-butylphthalate	~~1~~ 10 1	~~JB~~	U
206-44-0	Fluoranthene	1	J	
129-00-0	Pyrene	.5	J	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~.7~~	~~JB~~	U
117-84-0	Di-n-octylphthalate	10 ~~.2~~	~~JB~~	U
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenz(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-5

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-06

Sample wt/vol: 950 (g/mL) ML Lab File ID: >R5781

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

Number TICs Found: 30 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN C9H10 ISOMER	9.53	120	J
02.	UNKNOWN C9H8 ISOMER	9.70	82	J
03.	UNKNOWN C10H9NO ISOMER	19.13	62	J
04.	UNKNOWN C10H10O2 ISOMER	16.75	58	J
05.90-12-0	NAPHTHALENE, 1-METHYL-	13.88	44	JN
06.	UNKNOWN C9H8O ISOMER	12.46	33	J
07.	UNKNOWN C9H7NO ISOMER	18.32	30	J
08.	UNKNOWN C9H8O ISOMER	10.70	29	J
09.	UNKNOWN BENZO THIOPHENE	12.21	28	J
10.271-89-6	BENZOFURAN	8.81	27	JN
11.	UNKNOWN TRIMETHYL PHENOL	12.68	23	J
12.	UNKNOWN C10H9NO ISOMER	19.42	22	J
13.	UNKNOWN C9H10O2 ISOMER	15.14	22	J
14.	UNKNOWN DIMETHYL PHENOL	11.64	22	J
15.	UNKNOWN TRIMETHYL PHENOL	12.25	22	J
16.	UNKNOWN C10H10 ISOMER	11.56	21	J
17.	UNKNOWN C9H12O ISOMER	12.98	19	J
18.	UNKNOWN	17.58	18	J
19.	UNKNOWN TRIMETHYL PHENOL	13.13	17	J
20.	UNKNOWN	17.38	17	J
21.	UNKNOWN C12H10 PAH	14.70	16	J
22.	UNKNOWN TRIMETHYL BENZENE	9.27	16	J
23.	UNKNOWN TRIMETHYL PHENOL	13.19	15	J
24.	UNKNOWN	11.47	13	J
25.	UNKNOWN C11H10O ISOMER	17.29	12	J
26.	UNKNOWN C13H10O ISOMER	20.25	12	J
27.	UNKNOWN C12H8O2 ISOMER	19.66	12	J
28.	UNKNOWN HYDROXYBIPHENYL	18.23	11	J
29.	UNKNOWN	19.32	11	J
30.	UNKNOWN C10H8O ISOMER	16.28	11	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-07

Sample wt/vol: 890 (g/mL) ML Lab File ID: >R5801

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	~~U~~ R
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	28	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	28	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	28	U
83-32-9	Acenaphthene	11	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-07

Sample wt/vol: 890 (g/mL) ML Lab File ID: >R5801

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
51-28-5	2,4-Dinitrophenol	28	~~U~~	UJ
100-02-7	4-Nitrophenol	28	~~U~~	UJ
132-64-9	Dibenzofuran	11	U	
121-14-2	2,4-Dinitrotoluene	11	U	
84-66-2	Diethylphthalate	// ~~3~~	~~JB~~	J
7005-72-3	4-Chlorophenyl-phenylether	11	U	
86-73-7	Fluorene	11	U	
100-01-6	4-Nitroaniline	28	U	
534-52-1	4,6-Dinitro-2-methylphenol	28	U	
86-30-6	N-Nitrosodiphenylamine (1)	11	U	
101-55-3	4-Bromophenyl-phenylether	11	U	
118-74-1	Hexachlorobenzene	11	U	
87-86-5	Pentachlorophenol	28	U	
85-01-8	Phenanthrene	11	U	
120-12-7	Anthracene	11	U	
86-74-8	Carbazole	11	U	
84-74-2	Di-n-butylphthalate	// ~~2~~	~~JB~~	J
206-44-0	Fluoranthene	11	U	
129-00-0	Pyrene	11	U	
85-68-7	Butylbenzylphthalate	11	U	
91-94-1	3,3'-Dichlorobenzidine	11	U	
56-55-3	Benzo(a)anthracene	11	U	
218-01-9	Chrysene	11	U	
117-81-7	bis(2-Ethylhexyl)phthalate	// ~~1~~	~~JB~~	J
117-84-0	Di-n-octylphthalate	// ~~3~~	~~JB~~	J
205-99-2	Benzo(b)fluoranthene	11	U	
207-08-9	Benzo(k)fluoranthene	11	U	
50-32-8	Benzo(a)pyrene	11	U	
193-39-5	Indeno(1,2,3-cd)pyrene	11	U	
53-70-3	Dibenz(a,h)anthracene	11	U	
191-24-2	Benzo(g,h,i)perylene	11	U	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-6

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-07

Sample wt/vol: 890 (g/mL) ML Lab File ID: >R5801

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

Number TICs Found: 4 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	UNKNOWN	23.63	10	~~JB~~ R
02. 912-24-9	ATRAZINE	18.47	6	JN
03.	UNKNOWN	21.68	5	J
04.	UNKNOWN	24.97	3	J
05.				
06.				
07.				
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-08

Sample wt/vol: 910 (g/mL) ML Lab File ID: >R5802

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	~~U~~ R
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	27	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	27	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	27	U
83-32-9	Acenaphthene	11	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-08

Sample wt/vol: 910 (g/mL) ML Lab File ID: >R5802

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
51-28-5	2,4-Dinitrophenol	27	~~U~~	UJ
100-02-7	4-Nitrophenol	27	~~U~~	UJ
132-64-9	Dibenzofuran	11	U	
121-14-2	2,4-Dinitrotoluene	11	U	
84-66-2	Diethylphthalate	11	U	
7005-72-3	4-Chlorophenyl-phenylether	11	U	
86-73-7	Fluorene	11	U	
100-01-6	4-Nitroaniline	27	U	
534-52-1	4,6-Dinitro-2-methylphenol	27	U	
86-30-6	N-Nitrosodiphenylamine (1)	11	U	
101-55-3	4-Bromophenyl-phenylether	11	U	
118-74-1	Hexachlorobenzene	11	U	
87-86-5	Pentachlorophenol	27	U	
85-01-8	Phenanthrene	11	U	
120-12-7	Anthracene	11	U	
86-74-8	Carbazole	11	U	
84-74-2	Di-n-butylphthalate	11 ~~.8~~	~~JB~~	U
206-44-0	Fluoranthene	11	U	
129-00-0	Pyrene	11	U	
85-68-7	Butylbenzylphthalate	11	U	
91-94-1	3,3'-Dichlorobenzidine	11	U	
56-55-3	Benzo(a)anthracene	11	U	
218-01-9	Chrysene	11	U	
117-81-7	bis(2-Ethylhexyl)phthalate	11 ~~.8~~	~~JB~~	U
117-84-0	Di-n-octylphthalate	11	U	
205-99-2	Benzo(b)fluoranthene	11	U	
207-08-9	Benzo(k)fluoranthene	11	U	
50-32-8	Benzo(a)pyrene	11	U	
193-39-5	Indeno(1,2,3-cd)pyrene	11	U	
53-70-3	Dibenz(a,h)anthracene	11	U	
191-24-2	Benzo(g,h,i)perylene	11	U	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DUP

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water) WATER Lab Sample ID: 993331A-08

Sample wt/vol: 910 (g/mL) ML Lab File ID: >R5802

Level: (low/med) LOW Date Received: 12/17/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/11/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:____

Number TICs Found: 6 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
01.	UNKNOWN	23.64	7	~~JB~~	R
02. 912-24-9	ATRAZINE	18.47	6	JN	
03.	UNKNOWN	26.55	3	~~JB~~	R
04.	UNKNOWN	21.68	3	J	
05.	UNKNOWN	24.96	3	J	
06.	UNKNOWN	25.02	3	J	
07.					
08.					
09.					
10.					
11.					
12.					
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14.					
15.					
16.					
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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water): WATER Lab Sample ID: 993331A-01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: C5042CLP103

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/17/99

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/17/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/20/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water): WATER Lab Sample ID: 993331A-03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: C5042CLP106

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/17/99

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/17/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/20/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water): WATER Lab Sample ID: 993331A-04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: C5042CLP107

% Moisture: _____ decanted: (Y/N)__ Date Received: 12/17/99

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/17/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/20/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: MW-4

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water): WATER Lab Sample ID: 993331A-05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: C5042CLP108

% Moisture: _____ decanted: (Y/N)__ Date Received: 12/17/99

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/17/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/20/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water): WATER Lab Sample ID: 993331A-06

Sample wt/vol: 1000 (g/ml) ML Lab File ID: C5042CLP109

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/17/99

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/17/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/20/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.0088	JP
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.020	JP
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

UJ
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UJ
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UJ

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: MW-6

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water): WATER Lab Sample ID: 993331A-07

Sample wt/vol: 1000 (g/ml) ML Lab File ID: C5042CLP110

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/17/99

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/17/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/20/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix: (soil/water): WATER Lab Sample ID: 993331A-08

Sample wt/vol: 1000 (g/ml) ML Lab File ID: C5042CLP111

% Moisture: _____ decanted: (Y/N)__ Date Received: 12/17/99

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/17/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/20/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix (soil/water): WATER Lab Sample ID: 993331A-01

Level (low/med): LOW Date Received: 12/17/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6890		N	P	J
7440-36-0	Antimony	9.0	U		P	
7440-38-2	Arsenic	4.0	U		P	
7440-39-3	Barium	304.			P	J
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	135000			P	
7440-47-3	Chromium	7.0	B		P	
7440-48-4	Cobalt	10.5	B		P	
7440-50-8	Copper	23.5	B		P	
7439-89-6	Iron	10500			P	
7439-92-1	Lead	5.7			P	J
7439-95-4	Magnesium	28400			P	
7439-96-5	Manganese	6980			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	27.2	B		P	
7440-09-7	Potassium	8690			P	
7782-49-2	Selenium	8.5		N	P	J
7440-22-4	Silver	2.0	U		P	UJ
7440-23-5	Sodium	94000			P	
7440-28-0	Thallium	10.0	U	N	P	R
7440-62-2	Vanadium	10.5	B		P	
7440-66-6	Zinc	55.7			P	
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: CLEAR Texture: _____

Color After: P Clarity After: CLEAR Artifacts: _____

Comments:

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1

EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

MW-3

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix (soil/water): WATER Lab Sample ID: 993331A-03

Level (low/med): LOW Date Received: 12/17/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	695.		N	P	R
7440-36-0	Antimony	9.0	U		P	
7440-38-2	Arsenic	4.0	B		P	
7440-39-3	Barium	58.7	B		P	J
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	89200			P	
7440-47-3	Chromium	2.0	U		P	
7440-48-4	Cobalt	2.0	U		P	
7440-50-8	Copper	2.0	U		P	
7439-89-6	Iron	1340			P	
7439-92-1	Lead	3.0	U		P	
7439-95-4	Magnesium	17400			P	
7439-96-5	Manganese	1190			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	3.0	U		P	
7440-09-7	Potassium	2770	B		P	
7782-49-2	Selenium	5.0	U	N	P	R
7440-22-4	Silver	2.0	U		P	VJ
7440-23-5	Sodium	14100			P	
7440-28-0	Thallium	10.0	U	N	P	R
7440-62-2	Vanadium	2.0	U		P	J
7440-66-6	Zinc	9.5	B		P	V
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix (soil/water): WATER Lab Sample ID: 993331A-04

Level (low/med): LOW Date Received: 12/17/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	4500		N	P	R
7440-36-0	Antimony	9.0	U		P	
7440-38-2	Arsenic	4.0	U		P	
7440-39-3	Barium	128.	B		P	J
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	110000			P	
7440-47-3	Chromium	5.8	B		P	
7440-48-4	Cobalt	4.2	B		P	
7440-50-8	Copper	9.6	B		P	
7439-89-6	Iron	7790			P	
7439-92-1	Lead	4.2			P	J
7439-95-4	Magnesium	13900			P	
7439-96-5	Manganese	905.			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	11.8	B		P	
7440-09-7	Potassium	5370			P	
7782-49-2	Selenium	10.4		N	P	J
7440-22-4	Silver	2.0	U		P	VJ
7440-23-5	Sodium	5220			P	
7440-28-0	Thallium	10.0	U	N	P	R
7440-62-2	Vanadium	7.6	B		P	
7440-66-6	Zinc	30.7			P	
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: CLEAR Texture: _____

Color After: P Clarity After: CLEAR Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix (soil/water): WATER Lab Sample ID: 993331A-05

Level (low/med): LOW Date Received: 12/17/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1630		N	P	R
7440-36-0	Antimony	9.0	U		P	
7440-38-2	Arsenic	4.0	U		P	
7440-39-3	Barium	69.7	B		P	J
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	58500			P	
7440-47-3	Chromium	2.2	B		P	
7440-48-4	Cobalt	2.0	U		P	
7440-50-8	Copper	2.0	U		P	
7439-89-6	Iron	2950			P	
7439-92-1	Lead	4.4			P	J
7439-95-4	Magnesium	15900			P	
7439-96-5	Manganese	263			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	5.7	B		P	
7440-09-7	Potassium	6750			P	
7782-49-2	Selenium	5.0	U	N	P	R
7440-22-4	Silver	2.0	U		P	VJ
7440-23-5	Sodium	26800			P	J
7440-28-0	Thallium	10.0	U	N	P	R
7440-62-2	Vanadium	2.5	B		P	
7440-66-6	Zinc	21.2			P	
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: CLEAR Texture: _____

Color After: P Clarity After: CLEAR Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix (soil/water): WATER Lab Sample ID: 993331A-06

Level (low/med): LOW Date Received: 12/17/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10300		N	P	R
7440-36-0	Antimony	9.0	U		P	
7440-38-2	Arsenic	5.0	B		P	
7440-39-3	Barium	171.	B		P	J
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	149000			P	
7440-47-3	Chromium	13.3			P	
7440-48-4	Cobalt	10.4	B		P	
7440-50-8	Copper	24.1	B		P	
7439-89-6	Iron	19400			P	
7439-92-1	Lead	3.0	U		P	
7439-95-4	Magnesium	66200			P	
7439-96-5	Manganese	931.			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	24.9	B		P	
7440-09-7	Potassium	13800			P	
7782-49-2	Selenium	7.2		N	P	UJ
7440-22-4	Silver	2.0	U		P	UJ
7440-23-5	Sodium	38700			P	J
7440-28-0	Thallium	10.0	U	N	P	R
7440-62-2	Vanadium	16.2	B		P	
7440-66-6	Zinc	62.5			P	
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: CLEAR Texture: _____

Color After: P Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-6

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix (soil/water): WATER Lab Sample ID: 993331A-07

Level (low/med): LOW Date Received: 12/17/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2710		N	P	R
7440-36-0	Antimony	9.0	U		P	
7440-38-2	Arsenic	5.7	B		P	
7440-39-3	Barium	88.8	B		P	J
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	98000			P	
7440-47-3	Chromium	4.3	B		P	
7440-48-4	Cobalt	2.0	U		P	
7440-50-8	Copper	2.0	U		P	
7439-89-6	Iron	4200			P	
7439-92-1	Lead	3.0	U		P	
7439-95-4	Magnesium	27000			P	
7439-96-5	Manganese	607.			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	7.6	B		P	
7440-09-7	Potassium	18600			P	
7782-49-2	Selenium	5.0	U	N	P	R
7440-22-4	Silver	2.0	U		P	UJ
7440-23-5	Sodium	19600			P	J
7440-28-0	Thallium	10.0	U	N	P	R
7440-62-2	Vanadium	3.5	B		P	
7440-66-6	Zinc	19.4	B		P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: CLEAR Texture: _____

Color After: P Clarity After: CLEAR Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: STL Contract: _____

Lab Code: STL Case No.: 3331A SAS No.: _____ SDG No.: A3331

Matrix (soil/water): WATER Lab Sample ID: 993331A-08

Level (low/med): LOW Date Received: 12/17/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2130		N	P	R
7440-36-0	Antimony	9.0	U		P	
7440-38-2	Arsenic	4.0	U		P	
7440-39-3	Barium	85.1	B		P	J
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	94200			P	
7440-47-3	Chromium	3.4	B		P	
7440-48-4	Cobalt	2.4	B		P	
7440-50-8	Copper	2.7	B		P	
7439-89-6	Iron	4550			P	
7439-92-1	Lead	3.0	U		P	
7439-95-4	Magnesium	26100			P	
7439-96-5	Manganese	578.			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	5.6	B		P	
7440-09-7	Potassium	17700			P	
7782-49-2	Selenium	5.0	U	N	P	R
7440-22-4	Silver	2.0	U		P	VJ
7440-23-5	Sodium	19000			P	J
7440-28-0	Thallium	10.0	U	N	P	R
7440-62-2	Vanadium	2.0	U		P	
7440-66-6	Zinc	18.7	B		P	U
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: CLEAR Texture: _____

Color After: P Clarity After: CLEAR Artifacts: _____

Comments:

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WET CHEM ANALYSIS DATA SHEET

SAMPLE NO

MW-1

Lab Name STL Contract

Lab Code: STL Case No 3331A SAS No SDG No A3331

Matrix (soil/water) WATER Lab Sample ID 993331A-01

% Solids: 0 Date Received: 12/17/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 0590		mg/L		L
	Redox Potential	308		mV		P
	TOC	5 85		mg/L		D

Comments

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO

MW-3

Lab Name STL Contract

Lab Code STL Case No . 3331A SAS No · SDG No A3331

Matrix (soil/water) WATER Lab Sample ID. 993331A-03

% Solids 0 Date Received 12/17/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 475		mg/L		L
	Redox Potential	311		mV		P
	TOC	4 70		mg/L		D

Comments

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO

MW-2

Lab Name STL Contract

Lab Code STL Case No 3331A SAS No SDG No A3331

Matrix (soil/water) WATER Lab Sample ID 993331A-04

% Solids 0 Date Received 12/17/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 0430		mg/L		L
	Redox Potential	313		mV		P
	TOC	7 30		mg/L		D

Comments

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

MW-4

Lab Name STL Contract

Lab Code STL Case No 3331A SAS No SDG No A3331

Matrix (soil/water) WATER Lab Sample ID 993331A-05

% Solids 0 Date Received 12/17/99

CAS No	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 0100	U	mg/L		L
	Redox Potential	310		mV		P
	TOC	6 20		mg/L		D

Comments

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

MW-5

Lab Name STL Contract

Lab Code STL Case No 3331A SAS No SDG No A3331

Matrix (soil/water) WATER Lab Sample ID 993331A-06

% Solids 0 Date Received 12/17/99

CAS No.	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 270		mg/L		L
	Redox Potential	314		mV		P
	TOC	18 3		mg/L		D

Comments

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO

MW-6

Lab Name STL Contract

Lab Code STL Case No 3331A SAS No. SDG No A3331

Matrix (soil/water) WATER Lab Sample ID 993331A-07

% Solids 0 Date Received 12/17/99

CAS No	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 0780		mg/L		L
	Redox Potential	311		mV		P
	TOC	6 09		mg/L		D

Comments

FORM I - WC

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO

DUP

Lab Name. STL Contract

Lab Code STL Case No · 3331A SAS No SDG No. A3331

Matrix (soil/water) WATER Lab Sample ID 993331A-08

% Solids 0 Date Received 12/17/99

CAS No	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 0960		mg/L		L
	TOC	4 51		mg/L		D

Comments

FORM I - WC

Analytical Assurance Associates, Inc.
600 Rock Raymond Road
Downingtown PA 19335
Phone 610 - 269 - 9989
Fax 610 269 - 9989

DATA USABILITY
STEARNS & WHELER
ALBION SITE

ANALYZED BY
SEVERN TRENT LABORATORIES, INC.
CASE No.: 7099-3091A/ SDG No.: A3091

DATA USABILITY REPORTED BY:

Analytical Assurance Associates (A3)
600 Rock Raymond Road
Downingtown, PA 19335

SITE NAME: ALBION
LABORATORY No.· 7099-3091A
SDG No.: A3091

DISCUSSION

Two (2) water samples, including one trip blank were collected on 12-02-99 Severn Trent Laboratories located in Monroe Connecticut received all samples in good condition on 12-03-99 Based on the chain-of-custody records, the following analyses were performed for this batch of samples

CIIENT ID	LABORATORY ID	PARAMETERS				
		VOA Analysis Date	SVOA Anal/Extraction	Pest/PCB Anal/Extraction	Metals Analysis date	Inorganic* Analysis
DW-1	993091A-01	12-07-99	12-04/12-23-99	12-03/12-07-99	12-28-99	12-13-99
Trip Blk	993091A-02	12-06-99	NA	NA	NA	NA

Na= Not Analyzed

The sample analysis was reviewed based on the Region II functional Guidelines and the Data Usability criteria established in NYSDEC Division of Environmental Remediation based on the following parameters If you have any question or comments please call Zohreh Hamid at (610) 269-9989

- Holding time
- Calibration analysis
- Blank Analysis
- Matrix Spike/Spike Duplicate (MS/MSD)
- Laboratory Control Sample Results
- Laboratory/Field Duplicate
- Instrument Performance
- Surrogate/Internal Standard Recovery (Organic only)
- Compound Identification/Quantitation

Blank Analysis

Volatile

The laboratory blanks and trip blank were free of target compounds with the exception of the blank analyzed on 12-6-99 Acetone (13 ug/l) was reported in this blank at a level below 2X CRQL This compound was not detected in the corresponding sample

Semivolatile

The laboratory blank had diethylphthalate (0 3 ug/l), di-n-butylphthalate (1 ug/l), di-n-octylphthalate (2ug/l), bis (2-ethylhexyl)phthalate (0 7 ug/l) and four unknown compounds at levels below the CRQLs The corresponding sample results were elevated to the CRQLs and qualified "U"

Pesticide/PCB

The laboratory preparation blank was free of target compounds

Matrix Spike/ Spike Duplicate Analysis

These QC samples were not analyzed for this batch One set of MS/MSD and one blank spike was reported for volatile fraction from an alternate batch The recoveries were within the control limits

Laboratory Control Sample

The blank spike for semivolatile was performed for all target compounds All recoveries were within the control limits with the exception of 2,4-dimethylphenol and 2,4-dinitrophenol The sample data were not impacted by this outlier since these compounds were not detected in the sample

Instrument Performance

The analysis for all parameter performed within the analysis holding times established in the corresponding methods

Surrogate Analysis

All organic samples were spiked with the surrogate compounds identified in the corresponding Methods The recoveries were within the control limits

INORGANIC ANALYSES

All samples were analyzed for the TAL metals within the holding time

Calibration Analysis

All recoveries in initial and continuing calibrations were within the control limits with the exception of Tl (110 4%) in initial calibration analysis The data was not qualified since the deviation was marginal

Contract Required Detection Limits

The CRDL recoveries for all analytes with the exception Sb, As, and Cd were outside the data validation control limits of 80-120% Also, the initial CRDLs for Pb (122 1%) and Tl (51 3%) were outside the control limits The positive results up to 3XCRDL & non-detected values were qualified estimated

Blank Analysis

The preparation blank had the following contamination at levels below the CRDLs The reported sample results up to the action levels (5X the blank level) were qualified "U" and should be considered as laboratory artifacts

Analyte	Blank Level mg/kg	Action Level mg/kg
Al	51 6	258
Sb	9 5	47 5
Ca	30 1	150 5
Zn	5 9	29 5

ICP Interference Check Sample

The recoveries for all analytes were within the control limits with the exception of Sb (125 3/124%), and Cu (120 7%) & Tl (132 1%) in initial ICS samples The reported data were qualified estimated

MATRIX SPIKE/DUPLICATE ANALYSES

The matrix spike was not analyzed for this sample Spike sample "MW3S" from an alternate batch was included The recoveries were within the control limits

DATA USABILITY SUMMARY
ALBION
CASE ID No. 7099-3091A

CIIENT ID	PARAMETERS				
	VOA	SVOA	Pest/PCB	Metals	Inorganic
DW-1	A	R, A^1, J^2	A,J^3	A^2 ,J^{45}	A
Trip Blk	A J^1	NA	NA	NA	NA

A= Accept the sample results as reported

A^1 = The sample results below the CRQLs for di-n-butylphthalate, bis(2-ethylhexyl) phthalate and di-n-octylphthalatephenol , (method blank contamination) were elevated to the CRQLs and qualified "U"

$A^{2=}$ The reported sample results up to action levels for Al was qualified "U"

J^1= The reported data for chloromethane and carbon disulfide were qualified estimated since the %D in continuing calibration was above 25%

J^2= Estimated the non-detected values "UJ" since the %Ds hexachlorocyclopentadiene was above 25% in continuing calibrations

J^3= The positive results were qualified estimated since the %D for the results reported on two different columns was above 25%

J^4 The positive results for all analytes (with the exception Sb, As & Cd) up to 3x CRDLs and non-detected values were qualified estimated since the CRDL recovery was below 80%

J^5 The reported positive results for Sb, Cu and Tl were qualified estimated due to the ICS outlier

R= reject the non-detected values for 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol since the response factors were below the 0 05 control limit

Appendixes

1 **Appendix A- Glossary of Data Qualifier**

2. **Appendix B- Laboratory Form I, & Applied Qualifier Codes**

Appendix A
Glossary of Data Qualifier

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds)

U= Not detected The associated number indicates approximate sample concentration necessary to be detected

NO CODE= Confirmed identification

B= Not detected substantially above the level reported on laboratory or field blanks

R= Unusable result. Analyte may or may not be present in the sample.

N= Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITITION

(can be used for both positive results and sample quantitation limits):

J= Analyte present. Reported value may not be accurate or precise.

K= Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L= Analyte present. Reported value may be biased low Actual value is expected to be higher.

UJ= Not detected. Quantitation limit may be inaccurate or imprecise.

UL= Not detected Quantitation limit is probably higher

OTHER CODES

NJ= Qualitative identification questionable due to poor resolution. Presumably present at approximate quantity

Q= No analytical result.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO

DW-1

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3091A SAS No _____ SDG No A3091

Matrix (soil/water) WATER Lab Sample ID 993091A-01

Sample wt/vol 5 (g/mL) ML Lab File ID >M6940

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec _____ Date Analyzed 12/07/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume ____(uL)

CAS NO	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	8	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	6	J
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromethane	3	J
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	8	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	1	J

NYSDEC SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB 120299

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3091A SAS No _____ SDG No A3091

Matrix (soil/water) WATER Lab Sample ID 993091A-02

Sample wt/vol 5 (g/mL) ML Lab File ID >L8430

Level (low/med) LOW Date Received 12/03/99

% Moisture not dec _____ Date Analyzed 12/06/99

GC Column 007-624 ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume _____(uL) Soil Aliquot Volume _____(uL)

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	~~U~~	UJ
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	U	
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	10	U	
67-64-1	Acetone	10	U	
75-15-0	Carbon Disulfide	10	~~U~~	UJ
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene (total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	
78-93-3	2-Butanone	10	U	
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	
591-78-6	2-Hexanone	10	U	
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

DW-1

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3091A SAS No _____ SDG No A3091

Matrix (soil/water) WATER Lab Sample ID 993091A-01

Sample wt/vol 810 (g/mL) ML Lab File ID >R5522

Level (low/med) LOW Date Received 12/03/99

% Moisture _____ decanted (Y/N)___ Date Extracted 12/04/99

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/23/99

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) N pH ____

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	2,2'-oxybis(1-Chloropropane)	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	2	J
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	31	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	31	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U
99-09-2	3-Nitroaniline	31	U
83-32-9	Acenaphthene	12	U

1F

EPA SAMPLE NO

DW-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name STL/CT Contract _____

Lab Code IEACT Case No 3091A SAS No _____ SDG No A3091

Matrix (soil/water) WATER Lab Sample ID 993091A-01

Sample wt/vol 810 (g/mL) ML Lab File ID >R5522

Level (low/med) LOW Date Received 12/03/99

% Moisture _____ decanted (Y/N) ___ Date Extracted 12/04/99

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/23/99

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) N pH _____

Number TICs Found 10 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
01	UNKNOWN	23 87	89	J
02	UNKNOWN	25 27	23	J
03	UNKNOWN	13 92	11	J
04	UNKNOWN	30 26	9	J
05	UNKNOWN	22 51	7	J
06	UNKNOWN	10 71	6	J
07 70-55-3	BENZENESULFONAMIDE, 4-METHYL	18 37	5	JN
08	UNKNOWN	24 00	4	J
09	UNKNOWN	22 39	4	J
10	UNKNOWN ACID	20 70	2	J
11				
12				
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30				

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO: DW-1

Lab Name STL-CT Contract

Lab Code IEACT Case No 3091A SAS No SDG No A3091

Matrix (soil/water) WATER Lab Sample ID 993091A-01

Sample wt/vol 1000 (g/ml) ML Lab File ID C1055CLP150

% Moisture decanted (Y/N) Date Received 12/03/99

Extraction (SepF/Cont/Sonc) SEPF Date Extracted 12/03/99

Concentrated Extract Volume 10000 (uL) Date Analyzed 12/07/99

Injection Volume 1 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) N pH Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q	
319-84-6	alpha-BHC	0 050	U	
319-85-7	beta-BHC	0 050	U	
319-86-8	delta-BHC	0 0054	~~JP~~	]
58-89-9	gamma-BHC (Lindane)	0 050	U	
76-44-8	Heptachlor	0 050	U	
309-00-2	Aldrin	0 025	~~JP~~	]
1024-57-3	Heptachlor Epoxide	0 050	U	
959-98-8	Endosulfan I	0 050	U	
60-57-1	Dieldrin	0 10	U	
72-55-9	4,4'-DDE	0 10	U	
72-20-8	Endrin	0 10	U	
33213-65-9	Endosulfan II	0 10	U	
72-54-8	4,4'-DDD	0 10	U	
1031-07-8	Endosulfan Sulfate	0 10	U	
50-29-3	4,4'-DDT	0 10	U	
72-43-5	Methoxychlor	0 50	U	
53494-70-5	Endrin Ketone	0 10	U	
7421-93-4	Endrin Aldehyde	0 10	U	
5103-71-9	alpha-Chlordane	0 0023	~~JP~~	]
5103-74-2	gamma-Chlordane	0 050	U	
8001-35-2	Toxaphene	5 0	U	
12674-11-2	Aroclor-1016	1 0	U	
11104-28-2	Aroclor-1221	2 0	U	
11141-16-5	Aroclor-1232	1 0	~~U~~	
53469-21-9	Aroclor-1242	0 82	J	
12672-29-6	Aroclor-1248	1 0	U	
11097-69-1	Aroclor-1254	0 13	~~JP~~	]
11096-82-5	Aroclor-1260	1 0	U	

U S EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

DW-1

Lab Name STL Contract

Lab Code STL Case No 3091A SAS No SDG No A3091

Matrix (soil/water) WATER Lab Sample ID 993091A-01

Level (low/med) LOW Date Received 12/03/99

% Solids 0 0

Concentration Units (ug/L or mg/kg dry weight) UG/L

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	256			P
7440-36-0	Antimony	6 0	U		P
7440-38-2	Arsenic	5 5	B		P
7440-39-3	Barium	19 0	B		P
7440-41-7	Beryllium	1 0	U		P
7440-43-9	Cadmium	1 0	U		P
7440-70-2	Calcium	360000			P
7440-47-3	Chromium	2 0	U		P
7440-48-4	Cobalt	2 0	U		P
7440-50-8	Copper	2 5	B		P
7439-89-6	Iron	5030			P
7439-92-1	Lead	3 0	U		P
7439-95-4	Magnesium	38300			P
7439-96-5	Manganese	140			P
7439-97-6	Mercury	0 10	U		CV
7440-02-0	Nickel	3 0	U		P
7440-09-7	Potassium	15600			P
7782-49-2	Selenium	5 0	U		P
7440-22-4	Silver	1 0	U		P
7440-23-5	Sodium	42700			P
7440-28-0	Thallium	10 0	U		P
7440-62-2	Vanadium	2 0	U		P
7440-66-6	Zinc	51 9			P
57-12-5	Cyanide				NR

Color Before CL Clarity Before CLEAR Texture

Color After CL Clarity After CLEAR Artifacts

Comments

1

SAMPLE NO

DW-1

WET CHEM ANALYSIS DATA SHEET

Lab Name STL Contract

Lab Code STL Case No 3091A SAS No SDG No A3091

Matrix (soil/water) WATER Lab Sample ID 993091A-01

% Solids 0 Date Received 12/03/99

CAS No	Analyte	Concentration	C	Units	Q	M
57-12-5	Cyanide, Total	0 0100	U	mg/L		L

Comments

FORM I - WC

APPENDIX A-2

PHASE II PSA
2002

Table 1
Soil Boring Results - Western Holder
Niagara Mohawk Power Corporation
Albion Former MGP
July 2001

VOLATILE ORGANIC COMPOUNDS (ug/kg)

Compounds	TAGM Guidance	SB 9A-01 (0 2)	SB 9B 01 (8 10)	SB 10A 01 (0 2)	SB 10B 01 (8 12)	SB 11A 01 (0 2)	SB 11B 01 (10 12)	SB 11C 01 (14 16)
Chloromethane		U	U	U	U	U	U	U
Bromomethane		U	U	U	U	U	U	U
Vinyl Chlonde	200	U	U	U	U	U	U	U
Chloroethane	1900	U	U	U	U	U	U	U
Metnylene Chlonde	100	18 B	10 B	7 B	3700 JB	7 B	25000 JB	14 B
Acetone	200	57	17	26	3300 J	9 J	22000 J	36 B
Carbon Disulfide	2700	U	U	U	U	U	U	1 JB
Vinyl Acetate		U	U	U	U	U	U	U
1 1 Dichloroethene	400	U	U	U	U	U	U	U
1 1 Dichloroethane	200	U	U	U	U	U	U	U
cis 1 2 Dichloroethene		U	U	U	U	U	U	U
trans-1 2 Dichloroethene	300	U	U	U	U	U	U	U
Chloroform	300	U	U	U	U	U	U	U
1 2 Dichloroethane	100	U	U	U	U	U	U	U
2 Butanone	300	U	U	U	U	U	U	9 JB
1 1 1-Trichloroethane	800	U	U	U	U	U	U	U
Carbon Tetrachlonde	600	U	U	U	U	U	U	U
Bromodichloromethane		U	U	U	U	U	U	U
1 2 Dichloropropane		U	U	U	U	U	U	U
cis 1 3 Dichloropropene		U	U	U	U	U	U	U
Trichloroethene	700	U	U	U	U	U	U	U
Dibromochloromethane	N/A	U	U	U	U	U	U	U
1 1 2-Trichloroethane		U	U	U	U	U	U	U
Benzene	60	U	17	U	2400 J	U	14000 J	U
trans 1 3 Dichloropropene		U	U	U	U	U	U	U
Bromoform		U	U	U	U	U	U	U
4 Methyl 2 Pentanone	1000	U	U	U	U	U	U	U
2-Hexanone		U	U	U	U	U	U	U
Tetrachloroethene	1400	U	U	U	U	U	U	U
Toluene	1500	U	17	U	7400 JB	U	51000 JB	2 JB
1 1 2 2 Tetrachloroethane	600	U	U	U	U	U	U	U
Chlorobenzene	1700	U	U	U	U	U	U	U
Ethylbenzene	5500	U	2 J	U	3300 J	U	18000 J	U
Styrene		U	U	U	580 J	U	U	U
Xylene (total)	1200	U	27	U	37000	U	260000	U
TOTAL VOCs		75	90	33	57680	16	390000	62

SEMI-VOLATILE ORGANIC COMPOUNDS (ug/kg)

Compounds	TAGM Guidance	SB 9A 01 (0 2)	SB 9B 01 (8 10)	SB 10A 01 (0 2)	SB 10B 01 (8 12)	SB 11A 01 (0 2)	SB 11B 01 (10 12)	SB 11C 01 (14 16)
Naphthalene	13000	120 J	280 J	3300 J	290000	1700 J	910000	770
2-Methylnaphthalene	36400	68 J	49 J	1100 J	45000 J	590 J	130000 J	290 J
Acenaphthylene	41000	270 J	29 J	7300 J	32000 J	3300 J	63000 J	310 J
Acenaphthene	50000	U	U	1200 J	10000 J	510 J	20000 J	84 J
Fluorene	50000	U	14 J	2100 J	52000	1100 J	99000 J	460
Phenanthrene	50000	450 J	48 J	25000	180000	9000	320000	1800
Anthracene	50000	250 J	20 J	10000	51000 J	4000	97000 J	630
Fluoranthene	50000	1200 J	98 J	52000	160000	18000	240000	1200
Pyrene	50000	910 J	100 J	45000	96000	15000	140000 J	960
Benzo(a)anthracene	224	1000 J	84 J	38000	58000	13000	88000 J	540
Chrysene	400	1000 J	86 J	34000	53000	12000	79000 J	510
Benzo(b)fluoranthene	1100	1200 J	87 J	38000	33000 J	16000	46000 J	270 J
Benzo(k)fluoranthene	1100	1100 J	80 J	22000	43000 J	8400	68000 J	330 J
Benzo(a)pyrene	61	1400 J	98 J	42000	42000 J	16000	62000 J	380
Indeno(1 2 3 cd)pyrene	3200	730 J	100 J	25000	19000 J	9500	26000 J	230 J
Dibenzo(a h)anthracene	14	240 J	37 J	9400 J	6700 J	3300 J	9000 J	79 J
Benzo(g h i)perylene	50000	730 J	120 J	21000	18000 J	7300	24000 J	210 J
TOTAL SVOCs		10668	1330	376400	1188700	136700	2421000	9053

Bold values indicate a concentration in exceedence of the NYSDEC standard
J Indicates that the compound was analyzed for and determined to be present in the sample The concentration listed is an estimated value
U - Indicates that the compound was analyzed for but not detected
B Indicates the analyte was found in blanks as well as the sample

Table 2
Soil Boring Results Eastern Holder
Niagara Mohawk Power Corporation
Albion Former MGP
July 2001

VOLATILE ORGANIC COMPOUNDS (ug/kg)

Compounds	TAGM Guidance	SB 12A 01 (0 2)	SB 12B 01 (14 16)	SB 13A 01 (0 2)	SB 13B 01 (4 6)	SB 13C 01 (12 14)	SB 14A-01 (0 2)	SB 14B 01 (14 16)	SB 15A 01 (0 2)	SB 15B 01 (14 16)	Duplicate (14 16)
Chloromethane		U	U	U	U	U	U	U	U	U	U
Bromomethane		U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	200	U	U	U	U	U	U	U	U	U	U
Chloroethane	1900	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	100	8 B	8 B	8 B	14 B	26 B	20 B	14 B	14 B	3400 JB	18 B
Acetone	200	29	9 J	13	7 J	33	23	17	13	4000 J	44
Carbon Disulfide	2700	U	U	U	U	U	0 5 J	U	U	U	U
Vinyl Acetate		U	U	U	U	U	11	U	U	U	U
1 1 Dichloroethene	400	U	U	U	U	U	U	U	U	U	U
1 1 Dichloroethane	200	U	U	U	U	U	U	U	U	U	U
cis 1 2 Dichloroethene		U	U	U	U	U	U	U	U	U	U
trans 1 2 Dichloroethene	300	U	U	U	U	U	U	U	U	U	U
Chloroform	300	U	U	U	U	U	U	U	U	U	U
1 2 Dichloroethane	100	U	U	U	U	U	U	U	U	U	U
2 Butanone	300	U	U	U	U	U	U	U	U	U	U
1 1 1 Trichloroethane	800	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	600	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane		U	U	U	U	U	U	U	U	U	U
1 2 Dichloropropane		U	U	U	U	U	U	U	U	U	U
cis 1 3 Dichloropropene		U	U	U	U	U	U	U	U	U	U
Trichloroethene	700	U	U	U	U	U	0 9 J	U	U	U	U
Dibromochloromethane	N/A	U	U	U	U	U	U	U	U	U	U
1 1 2 Trichloroethane		U	U	U	U	U	U	U	U	U	U
Benzene	60	2 J	U	1 J	0 6 J	0 3 J	7	U	U	3100 J	2 J
trans 1 3 Dichloropropene		U	U	U	U	U	U	U	U	U	U
Bromoform		U	U	U	U	U	U	U	U	U	U
4-Methyl 2 Pentanone	1000	U	U	U	U	U	U	U	U	U	U
2 Hexanone		U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	1400	U	U	U	U	U	U	U	U	U	U
Toluene	1500	U	U	2 J	0 9 J	2 J	5 J	0 6 J	U	9400 JB	1 J
1 1 2 2 Tetrachloroethane	600	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	1700	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5500	U	U	U	7	U	U	U	U	2900 J	U
Styrene		U	U	U	U	U	U	U	U	1100 J	U
Xylene (total)	1200	U	U	2 J	16	0 8 J	0 7 J	U	U	41000	U
TOTAL VOCs		39	17	26	45 5	62 1	68 1	31 6	27	64900	65

SEMI-VOLATILE ORGANIC COMPOUNDS (ug/kg)

Compounds	TAGM Guidance	SB 12A 01 (0 2)	SB 12B 01 (14 16)	SB 13A 01 (0 2)	SB 13B 01 (4 6)	SB 13C 01 (12 14)	SB 14A 01 (0 2)	SB 14B 01 (14 16)	SB-15A 01 (0 2)	SB 15B 01 (14 16)	Duplicate (14 16)
Napnthalene	13000	1800 J	10 J	3900 J	3100 J	U	2000 J	10 J	120 J	81000	17 J
2 Methylnaphthalene	36400	1100 J	U	4000 J	3400 J	U	1100 J	U	U	22000	U
Acenaphthylene	41000	5500 J	15 J	16000	2500 J	10 J	5100 J	11 J	660 J	5800 J	13 J
Acenaphthene	50000	2000 J	U	2100 J	580 J	U	1500 J	U	U	2100 J	U
Fluorene	50000	3100 J	U	8600 J	1000 J	U	2100 J	U	64 J	13000 J	U
Phenanthrene	50000	33000	75 J	47000	9400	23 J	32000	37 J	1400 J	41000	60 J
Anthracene	50000	12000	40 J	25000	4700	14 J	11000 J	16 J	780 J	13000 J	24 J
Fluoranthene	50000	**73000**	210 J	**90000**	28000	72 J	**85000**	68 J	4500	26000	140 J
Pyrene	50000	**65000**	190 J	**91000**	27000	74 J	**66000**	64 J	4000	15000	140 J
Benzo(a)anthracene	224	**48000**	150 J	**68000**	**21000**	55 J	**56000**	50 J	**3900**	**9600** J	100 J
Chrysene	400	**43000**	140 J	**56000**	**18000**	45 J	**50000**	46 J	**3800**	6600 J	99 J
Benzo(b)fluoranthene	1100	**53000**	110 J	**45000**	**19000**	36 J	**49000**	40 J	**4200**	**5000** J	100 J
Benzo(k)fluoranthene	1100	**22000**	150 J	**28000**	**10000**	37 J	**51000**	42 J	**3200**	**6200** J	97 J
Benzo(a)pyrene	61	**58000**	**180** J	**54000**	**22000**	48 J	**64000**	53 J	**5200**	**6500** J	**140** J
Indeno(1 2 3 cd)pyrene	3200	**36000**	160 J	**22000**	**10000**	38 J	**68000**	45 J	**3600**	2500 J	150 J
Dibenzo(a h)anthracene	14	**17000**	**61** J	**9600** J	**4100**	14 J	**23000**	**18** J	**1200** J	**840** J	45 J
Benzo(g h i)perylene	50000	26000	180 J	14000 J	6600	36 J	**74000**	44 J	3000	2600 J	180 J
TOTAL SVOCs		499500	1671	584200	190380	502	640800	544	39624	258740	1305

Bold values indicate a concentration in exceedence of the NYSDEC standard
Interval shown indicates at what depth the sample was taken from
J Indicates that the compound was analyzed for and determined to be present in the sample The concentration listed is an estimated value
U Indicates that the compound was analyzed for but not detected
B Indicates the analyte was found in blanks as well as the sample
Duplicate taken from SB 12B 01

S andards taken from the NYSDEC Technical and Administrative Guidance Memorandum #4046

Table 3
Groundwater Results - VOCs
Niagara Mohawk Power Corporation
Albion Former MGP
August 2001

VOLATILE ORGANIC COMPOUNDS

Compounds (ug/L)	TOGS Standard	MW-1	MW-2	MW-3	MW-4	MW 5	MW 6	MW-7	Duplicate
Acetone	50(G)	U	U	U	U	U	U	U	U
Benzene	1	U	U	U	U	**230**	U	U	U
Bromodichloromethane	50(G)	U	U	U	U	U	U	U	U
Bromoform	50(G)	U	U	U	U	U	U	U	U
Bromomethane	5	U	U	U	U	U	U	U	U
2-Butanone		U	U	U	U	U	U	U	U
Carbon Disulfide		U	U	U	U	U	U	U	U
Carbon Tetrachloride	5	U	U	U	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U	U	U	U
Chloroethane	5	U	U	U	U	U	U	U	U
Chloroform	7	U	U	U	U	U	U	U	U
Chloromethane		U	U	U	U	U	U	U	U
Dibromochloromethane	50(G)	U	U	U	U	U	U	U	U
1 1-Dichloroethane	5	U	U	U	U	U	U	U	U
1 2-Dichloroethane	0 6	U	U	U	U	U	U	U	U
1 1-Dichloroethene	5	U	U	U	U	U	U	U	U
cis-1 2-Dichloroethene	5	U	U	U	U	U	U	U	U
trans 1 2-Dichloroethene	5	U	U	U	U	U	U	U	U
1 2-Dichloropropane	1	U	U	U	U	U	U	U	U
cis-1 3-Dichloropropene	0 4	U	U	U	U	U	U	U	U
trans-1 3-Dichloropropene	0 4	U	U	U	U	U	U	U	U
Ethylbenzene	5	U	U	U	U	**17**	U	U	U
2-Hexanone	50(G)	U	U	U	U	U	U	U	U
Methylene Chloride	5	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone		U	U	U	U	U	U	U	U
Styrene	5	U	U	U	U	U	U	U	U
1 1 2 2 -Tetrachloroethane	5	U	U	U	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U	U	U	U
Toluene	5	U	U	U	U	**24**	U	U	U
1 1 1-Trichloroethane	5	U	U	U	U	U	U	U	U
1 1 2-Trichloroethane	1	U	U	U	U	U	U	U	U
Trichloroethene	5	U	U	U	U	U	U	U	U
Vinyl Chloride	2	U	U	U	U	U	U	U	U
O-Xylene		U	U	U	U	22	U	U	U
M+P-Xylene		U	U	U	U	31	U	U	U
TOTAL VOCs		ND	ND	ND	ND	324	ND	ND	ND

Bold values indicate a concentration in exceedence of the NYSDEC standard

(G) Signifies a NYSDEC guidance value where a s andard has not been established

U - Indicates that the compound was analyzed for but not detected

Duplicate taken from MW 1

ND Not Detected

Standards taken from the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS)

Table 4
Groundwater Results - SVOCs
Niagara Mohawk Power Corporation
Albion Former MGP
August 2001

SEMIVOLATILE ORGANIC COMPOUNDS

Compounds (ug/L)	TOGS Standard	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	Duplicate
Acenaphthene	20(G)	U	U	U	U	14	U	U	U
Acenaphthylene		U	U	U	U	22	U	U	U
Anthracene	50(G)	U	U	U	U	U	U	U	U
Benzo(a)anthracene	0 002(G)	U	U	U	U	U	U	U	U
Benzo(a)pyrene	ND	U	U	U	U	U	U	U	U
Benzo(b)fluoranthene	0 002(G)	U	U	U	U	U	U	U	U
Benzo(g h i)perylene		U	U	U	U	U	U	U	U
Benzo(k)fluoranthene	0 002(G)	U	U	U	U	U	U	U	U
Indeno(1 2 3 cd)pyrene	0 002(G)	U	U	U	U	U	U	U	U
Chrysene	0 002(G)	U	U	U	U	U	U	U	U
Dibenzo(a h)anthracene		U	U	U	U	U	U	U	U
Fluoranthene	50(G)	U	U	U	U	U	U	U	U
Fluorene	50(G)	U	U	U	U	18	U	U	U
Naphthalene	10(G)	U	U	U	U	**55**	U	U	U
Phenanthrene	50(G)	U	U	U	U	U	U	U	U
Pyrene	50(G)	U	U	U	U	U	U	U	U
TOTAL SVOCs		ND	ND	ND	ND	109	ND	ND	ND

(G) Signifies a NYSDEC guidance value where a standard has not been established

Bold values indicate a concentration in exceedence of the NYSDEC standard or guidance value

U Indicates that the compound was analyzed for but not detected

Duplicate taken from MW 1

ND Not Detected

Standards taken from the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS)

Table 5
Groundwater Results - Inorganic Chemistry
Niagara Mohawk Power Corporation
Albion Former MGP
August 2001

Analyte (mg/L)	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
Iron	41 8	75	4 94	7 98	310	3 65	16 8
Manganese	7 75	11	1 16	0 35	6 57	0 606	0 312
Nitrate	7 89	**32 7**	5 54	1 85	U	U	U
Carbon dioxide	24 1	41 1	15 6	18 6	41 7	40 2	9 93

U Indicates that the compound was analyzed for but not detected

Standards taken from the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS)

Table 6
Field-Measured Data - Groundwater
Niagara Mohawk Power Corporation
Albion Former MGP
August 27, 2001

Sampling Location	DTW (ft)	TDW (ft)	Temp (C)	Cond (ms/cm)	pH	Turbidity (NTU)	DO (ppm)	Salinity %	Eh* (mV)
MW-1	6 57	19 86	15 3	0 77	7 42	801	6 07	0 02	151
MW-2	8 90	17 73	16 0	0 87	7 39	127	5 49	0 02	154
MW-3	7 44	19 14	16 5	0 729	7 36	894	3 56	0 03	249
MW-4	10 84	19 67	16 1	0 584	7 51	843	4 56	0 02	59
MW-5	8 24	16 27	16 0	0 95	7 59	OR	5 77	0 04	-50
MW-6	5 92	15 11	15 1	0 711	7 33	809	4 50	0 03	50
MW-7	6 40	29 38	18 8	0 702	7 79	79	4 61	0 03	-40

OR - Over Range (> 999 NTU)

* Eh measurements were recorded on August 2 2001

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion NY

Job No L10046 10

Depth of Boring	30
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	Jim Hammond
Drilling Method	Hollow Stem Augers
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING MW-7

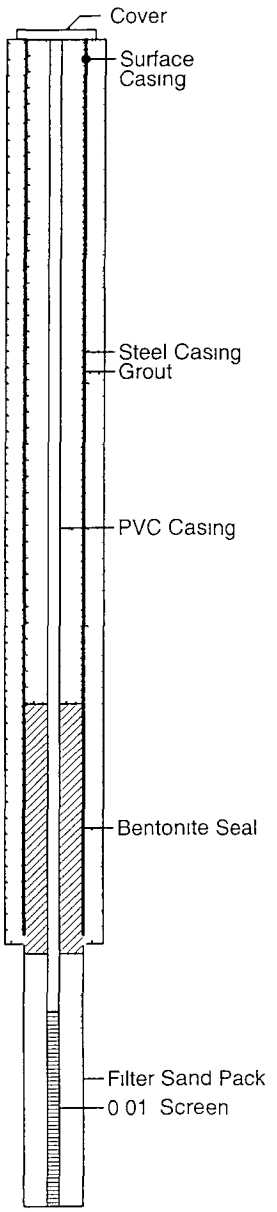
(Page 1 of 1)

Date Started	7/17/01
Time	7 40 AM
Date Completed	7/19/01
Time	12 00 PM
Weather	clear/sunny 75F
Boring Location	NE of western gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION
0	4 12 8 6	10 1	17	brown silty topsoil w/ organics grade to dry brown silt with many pebbles grading to brown brittle clayey silt
2	4 4 4 4	6 6	7	slightly moist brittle silty clay with pebbles
4	2 1 1 3	7 4	8	
6	14 8 4 6	18 3	9	brown silt mixed with black cinder like material with trace brick FILL
8	10 3 4 4	15 2	9	
10	2 2 6 6	15 0	20	wet brown gray silt trace clay
12	2 6 15 15	26 3	22	wet silt with trace clay grading to red dense silt
14	70 23 11 14	10 4	12	
16	10 25 23 22	11 5	14	fine red dense clayey silt with trace pebbles and fine sand
18	4 6 11 20	8 8	15	red/brown silt and sand, grade to brittle red sandstone fragments
20	32			
22	50/1			red brittle sandstone
				END OF BORING AT 23 FEET
24				
26				
28				
30				

Depth in Feet	REMARKS
0	
2	
4	
6	
8	
10	
12	
14	
16	
18	
20	Rock core drilled from 23 30 feet Screen set from 25 30
22	
24	
26	
28	
30	

Well MW 7
Elev 515 16



Notes
Well screen was set in a red weathered sandstone fracturing observed in bedrock core sample

LOG OF BORING MW-7

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\Mw 7 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion, New York

Job No L10046 10

Depth of Boring	16 4
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	Jim Hammond
Drilling Method	Hollow Stem Augers
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-9-01

(Page 1 of 1)

Date Started	7/17/01
Time	4 15 PM
Date Completed	7/17/01
Time	5 45 PM
Weather	overcast 70F
Boring Location	SW of western gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	5			(FILL)		0	
	8			dry, brown dense silt with small pebbles and fine gravel trace brick			SB 9A
	5	15 5	10	fragments present			
2	6					2	
	6						
	4						
	3	4 8	10				
4	3					4	
	1						
	1						
	1	6 1	1 5	moist brown dense silt mixed with little f/m sand and coarse gravel			
6	1					6	
	2						
	5						
	7	5 7	15				
8	10					8	
	7						
	12						
	15	102 7	24	slightly moist brown dense silt with trace pebbles and little fine gravel 2' black/green like pebbles mixed with fine silt	slight odor detected		SB 9B
10	51					10	
	30						
		68 1	15	brown silt with many pebbles and trace wood pieces	difficult drilling @ 11 augered through boulder @ 12		
	50/4						
12						12	
				slightly moist, brown silt mixed with some fine sand and gravel, grade to 8" fine red/brown sand with trace cobbles			
	21						
	21	35 5	22				
14	47					14	
	45						
	35						
	50			moist red/brown fine sand with many pebbles grade to ~4			
16	50/4	24 9	20	dense brittle sand with sandstone fragments	Refusal @ 16 4	16	
				END OF BORING AT 16 4 FEET			
18						18	
20						20	

Notes
SB 9A (0 2 feet) and SB 9B (8 10 feet) were collected and analyzed for VOCs and PAHs

LOG OF BORING SB-9-01

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\Sb 9 01 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion New York

Job No L10046 10

Depth of Boring	15 7
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	Jim Hammond
Drilling Method	Hollow Stem Augers
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-10-01

Date Started	7/18/01
Time	8 35 AM
Date Completed	7/18/01
Time	9 40 AM
Weather	clear/sunny 75F
Boring Location	SE of western gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	9 10 6 4	7 2	17	(FILL) dry brown dense silt with small pebbles and coarse gravel trace brick fragments and black cinder like material (CLM) present		0	SB 10A
2	3 4 8	12 9	5			2	
4	9 1 1	21 9	14	slightly moist, brown dense silt with fine gravel, black CLM and brick fragments	slight odor detected	4	
6	2 1 2 2	16 8	14	wet, brown dense silt with trace pebbles and little fine sand and gravel brick fragments present		6	
8	3 6 6 3	74 2	18	6 wet black/gray silt w/ many pebbles and fine gravel grade to 12"	strong odor detected sheen present	8	
10	3 5 5	71 3	12	black silt with coarse gravel gray silt with coarse gravel and brick fragments		10	SB 10B
12	50/4 23 25	143 0	22	14 moist black/gray silt with gravel and many pebbles grade to 8" brown/red sand w/ weathered sandstone pieces	strong odor with sheen	12	
14	27 50 41 44					14	
16	53 50/4	70 3	18	13" gray silt with gravel (backfill) grade to 5' red weathered fine sand with brittle sandstone fragments	Refusal @ 15 7	16	
18				END OF BORING AT 15 7 FEET		18	
20						20	

Notes
SB 10A (0 2 feet) and SB 10B (8 12 feet) were collected and analyzed for VOCs and PAHs

LOG OF BORING SB-10-01

(Page 1 of 1)

08 20 2003 D:\MSS\Data\Albion\Sb 10 01 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion New York

Job No L10046 10

Depth of Boring	15 9
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	*Jim Hammond*
Drilling Method	Hollow Stem Augers
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-11-01

(Page 1 of 1)

Date Started	7/18/01
Time	10 15 AM
Date Completed	7/18/01
Time	11 25 AM
Weather	clear/sunny 75F
Boring Location	NE of western gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	14					0	
	14						
	7	16 5	18	brown silt mixed with coarse gravel and black CLM			SB 11A
2	6					2	
	6						
	4						
	4	28 0	15				
	3						
4	2			slightly moist dense silt with black CLM and brick pieces		4	
	1						
	13	9 5	7				
6	5					6	
	9						
	3						
	6	18 7	9	wet coarse gravel with many pebbles and little brick fragments			
8	1					8	
	3						
	8						
	7	32 6	8	black moist silt with many pebbles	odor present		
	9						
10	9				trace NAPL detected very strong odor and sheen present	10	
	25	621 0	10	black silt w/ trace fine gravel and fine wooden shavings/organics			SB 11B
	50/4						
12	40					12	
	33			17' black silty matrix with many pebbles and some organics			
	40	411 0	24	grade to 7 dense gray silt with little fine sand	trace NAPL again with odor/sheen		
	50						
14	35					14	
	34			brown silt mixed with fine sand grade to 5 red weathered sand			
	40	25 9	24	with many pebbles and sandstone fragments			SB 11C
	48				Refusal @ 15 9		
16				END OF BORING AT 15 9 FEET		16	
18						18	
20						20	

Notes
SB 11A (0 2 feet) SB 11B (10 12 feet) and SB 11C (14 16 feet) were collected and analyzed for VOCs and PAHs

LOG OF BORING SB-11-01

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\Sb 11 01 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion New York

Job No L10046 10

Depth of Boring	16 0
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	Jim Hammond
Drilling Method	Hollow Stem Augers
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-12-01

(Page 1 of 1)

Date Started	7/18/01
Time	1 30 PM
Date Completed	7/18/01
Time	2 20 PM
Weather	clear/sunny 75F
Boring Location	SW of eastern gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	6 8 6 5	7 0	20	dry loose brown/black silt w/ many pebbles and black CLM		0	SB 12A
2	3 6 6 7	6 4	16			2	
4	7 7 8 10	3 3	10	brown dense silt with pebbles and trace CLM		4	
6	12 12 7 7	2 5	14			6	
8	3 3 3 3	2 3	18	slightly moist brown dense silt w/ trace brown fine sand silty clay at tip of spoon		8	
10	7 8 12 13	5 0	20	moist red/brown dense silt w/ little clay, trace pebbles		10	
12	13 13 18 18	2 8	20			12	
14	38 19 20 55	2 3	22	16 moist silt mixed w/ sand grade to 6" red m/c sand w/ sandstone fragments		14	SB 12B
16				END OF BORING AT 16 FEET		16	
18						18	
20						20	

Notes
SB 12A (0 2 feet) and SB 12B (10 12 feet) were collected and analyzed for VOCs and PAHs

LOG OF BORING SB-12-01

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\Sb 12 01 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion New York

Job No L10046 10

Depth of Boring	16 0
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	Jim Hammond
Drilling Method	Hollow Stem Augers
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-13-01

(Page 1 of 1)

Date Started	7/18/01
Time	1 45 PM
Date Completed	7/18/01
Time	3 30 PM
Weather	clear/sunny 75F
Boring Location	NW of eastern gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	9 16 21 10	4 8	18	(FILL) dry brown loose silt w/ trace fine gravel and black CLM many pebbles and trace brick fragments		0	SB 13A
2	5 8 8 6	4 9	9			2	
4	2 1 2 2	286 0	16	11" brown fine silt w/ little clay and pebbles grade to 5 moist fine black silt w/ moist wood chips	strong odor	4	SB 13B
6	9 6 6 9	154	8	moist dense silt w/ little clay trace wood pieces		6	
8	5 6 7 8	75 8	18			8	
10	8 8 8	12 7	22	moist brown silt w/ trace pebbles grade to fine brown/red silt mixed with f/m sand		10	
12	14 15 14 16	10 4	22	brown/red silt mixed with increasing sand trace sandstone pieces		12	SB 13C
14	25 25 30 14	5 7	22	wet red sand w/ many sandstone fragments		14	
16	14			END OF BORING AT 16 FEET		16	
18						18	
20						20	

Notes
SB 13A (0 2 feet) SB 13B (4 6 feet) and SB 13C (12 14 feet) were collected and analyzed for VOCs and PAHs

LOG OF BORING SB-13-01

(Page 1 of 1)

08 20 2003 D:\MSS\Data\Albion\Sb 13 01 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion New York

Job No L10046 10

Depth of Boring	16 0
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	Jim Hammond
Drilling Method	*Hollow Stem Augers*
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-14-01

(Page 1 of 1)

Date Started	7/18/01
Time	3 50 PM
Date Completed	7/18/01
Time	4 38 PM
Weather	clear/sunny 75F
Boring Location	SE of eastern gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	6			(FILL)		0	
	14			*dry brown/black silt w/ little black CLM many pebbles with trace*			
	9	4 2	14	brick pieces			SB 14A
2	10					2	
	12						
	9						
	8	1 9	14				
4	8					4	
	5			black dense silt w/ black CLM and trace pebbles			
	10						
	8	2 4	5				
	9						
6	8					6	
	6						
	7	1 2	18	8" *moist brown dense silt grade to 10 red/brown dense silt w/ little*			
	8			clay and trace pebbles			
8	5					8	
	5						
	7	0 9	16				
	9						
10	5					10	
	8						
	7	0 9	16				
	12						
12	9			red/brown dense silt w/ less clay trace f/m sand		12	
	24						
	28	0 2	12				
	23						
14	18					14	
	21						SB 14B
	50/4	3 5	22	wet red/brown sand w/ little silt mixed with sandstone fragments			
16				END OF BORING AT 16 FEET		16	
18						18	
20						20	

Notes
SB 14A (0 2 feet) and SB 14B (14 16 feet) were collected and analyzed for VOCs and PAHs

LOG OF BORING SB-14-01

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\Sb 14 01 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Phase II Site Investigation
Albion, New York

Job No L10046 10

Depth of Boring	22 0
Drilling Contractor	Parratt Wolff
Drill Rig Type	Mobile B 56
Driller	Jim Hammond
Drilling Method	Hollow Stem Augers
Hammer Wt /Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 ID
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-15-01

(Page 1 of 1)

Date Started	7/19/01
Time	7 00 AM
Date Completed	7/19/01
Time	8 20 AM
Weather	clear/sunny 75F
Boring Location	NE of eastern gasholder

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	3			(FILL)		0	
	9 7	4 3	18	dry loose silty topsoil w/ organics w/ fine gravel and trace brick fragments			SB 15A
2	6 5					2	
	8 5	8 6	8				
4	6 10					4	
	5 2	6 6	18	brown silt w/ coarse gravel and large brick pieces black CLM and white m/c sandy material present			
6	1 2					6	
	2 3		0		No Recovery		
8	5 3					8	
	4 3	4 6	15	moist brown silt w/ trace pebbles and little clay			
10	4 4					10	
	7 8	2 5	20				
12	9 26			moist silt w/ fine gravel and sand		12	
	22 19	8 8	7				
14	32 6					14	
	14 16	1400 0	22	moist brown/black fine silt w/ trace pebbles and little f/m sand	odor detected		SB 15B
16	21 38					16	
	28 27	116 0	20	brown/red fine dense silt mixed w/ fine sand and weathered sandstone fragments			
18	30 28					18	
	15 18	58 9	20	wet red silt mixed w/ sand and trace pebbles sandstone pieces frequent			
20	16 20					20	
	50/4	9 2	15	red/brown sand mixed w/ weathered sandstone fragments			
22				END OF BORING AT 22 FEET		22	
24						24	
26						26	
28						28	
30						30	

Notes
SB 15A (0 2 feet) and SB 15B (14 16 feet) were collected and analyzed for VOCs and PAHs

LOG OF BORING SB-15-01

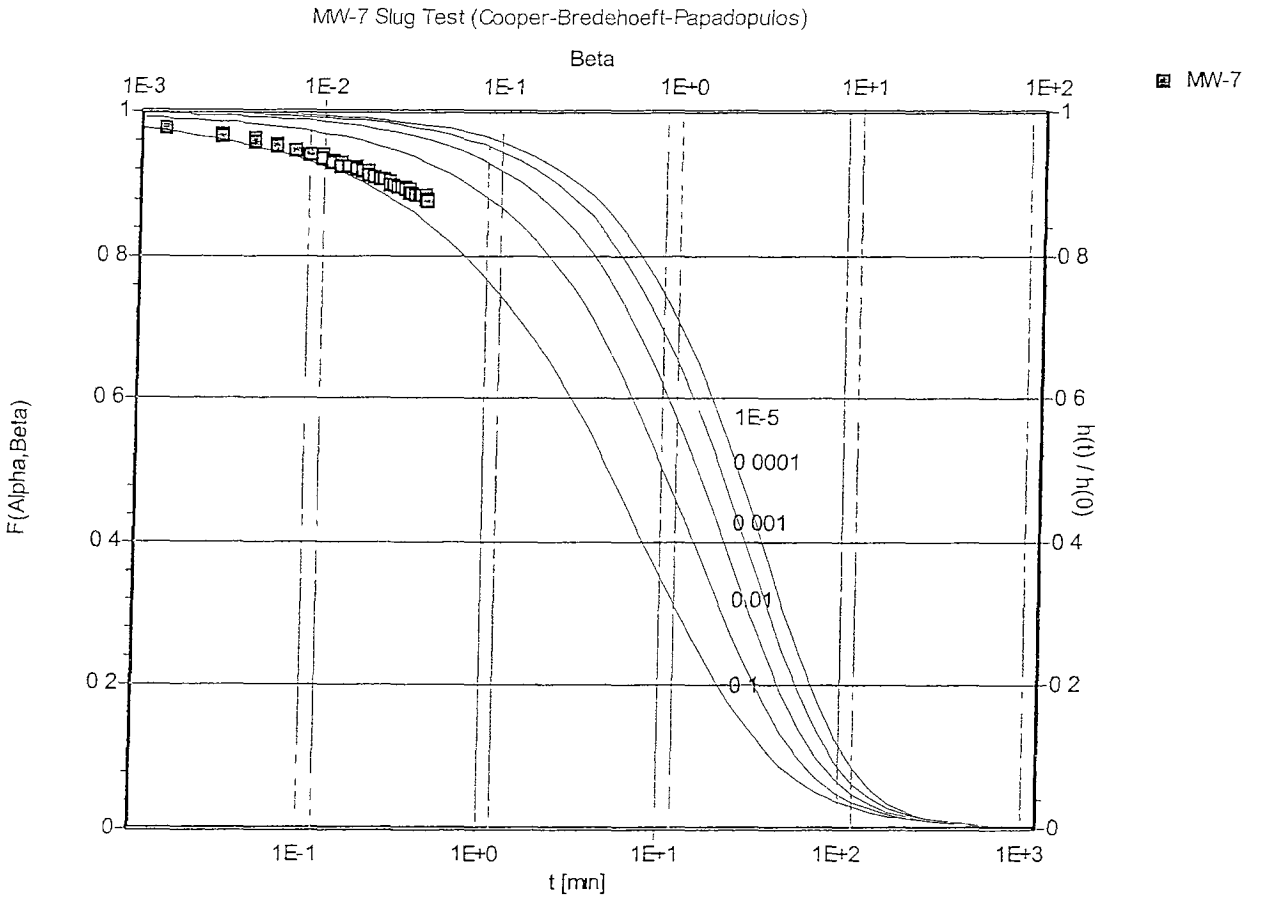
(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\Sb 15 01 bor

STEARNS & WHELER, LLC
430 East Genesee Street, Suite 401
Syracuse, New York 13032
Phone (315) 422-4949

Slug Test Analysis Report

Project	Albion Phase II Remedial Investigation
No	L10046 10
Client	Niagara Mohaxk Power Corporation



Test name **MW-7 Slug Test**

Analysis method **Cooper-Bredehoeft-Papadopulos**

Analysis results	Transmissivity	2 87E+0 [cm²/s]	Conductivity	1 89E-2 [cm/s]
	Storativity	1 00E-4		
Test parameters	Test well	MW-7	Aquifer thickness	5 [ft]
	Screen radius	0 125 [ft]	Alpha	0 0001
	Screen length	5 [ft]		
	Casing radius	1 5 [ft]		
	r(c)	1 5 [ft]		

Comments

Evaluated by DSS
Date 12/3/01

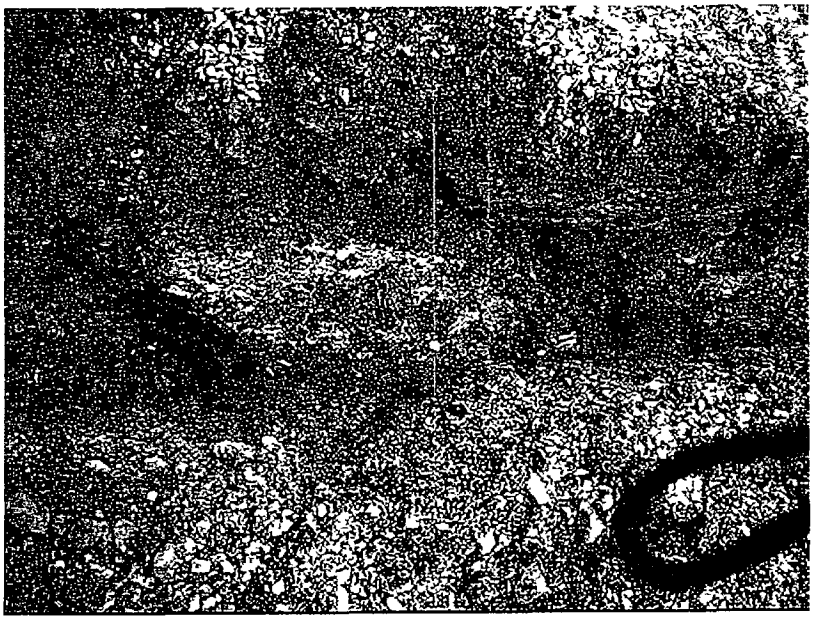


Photo #1

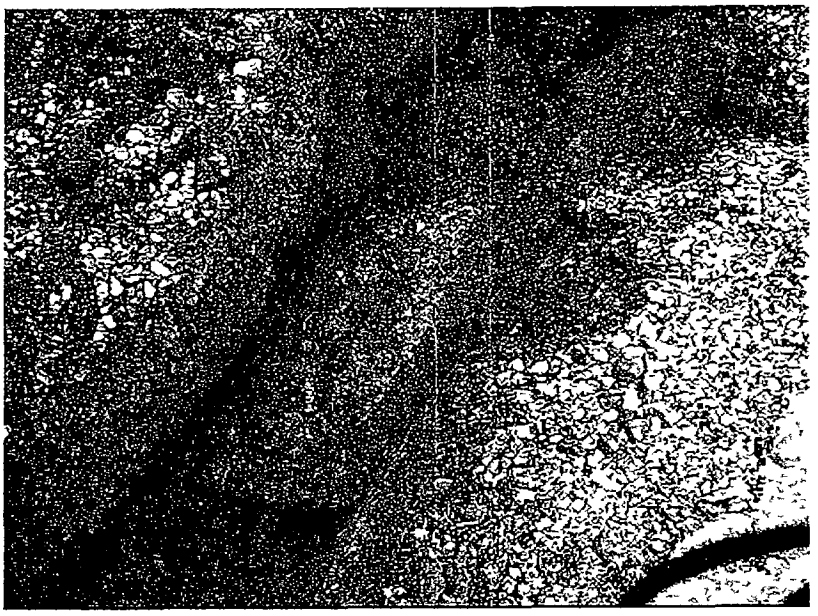


Photo #2

Photographs of test pits TP-1 and TP-2 show evidence of western holder wall, consisting of concrete in a suspected radial pattern

Stearns & Wheler, LLC ENVIRONMENTAL ENGINEERS & SCIENTISTS	**Niagara Mohawk Power Corporation Site Investigation** **Albion Former MGP**	
	April 2001 Job No L10046	Representative Site Photographs

Photo #1

Photo #3

Photo #2

Test pits TP-4 and TP-5 revealed large, broken concrete pieces believed to be holder wall material The eastern holder may have been demolished at some point during plant activities

Stearns & Wheler, LLC ENVIRONMENTAL ENGINEERS & SCIENTISTS	**Niagara Mohawk Power Corporation Site Investigation** **Albion Former MGP**	
	April 2001 Job No L10046	Representative Site Photographs

SEVERN TRENT SERVICES

STL Connecticut
128 Long Hill Cross Road
Shelton CT 06484

Tel 203 929 8140
Fax 203 929 8142
www stl inc com

August 09, 2001

Mr Dan Ours
S&W REDEVELOPMENT, LLC
One Remington Park Drive
Cazenovia, NY 13035

Dear Mr Ours

Please find enclosed the analytical results of 20 sample(s) received at our laboratory on July 23, 2001 This report contains sections addressing the following information at a minimum

sample summary	definition of data qualifiers and terminology
analytical methodology	analytical results
state certifications	chain-of-custody

STL Report #7001-1891A	Purchase Order #90211 10
Project ID ALBION	

Copies of this analytical report and supporting data are maintained in our files for a minimum of five years unless special arrangements have been made Unless specifically indicated, all analytical testing was performed at this laboratory location and no portion of the testing was subcontracted

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report Please contact your customer service representative at (203) 929-8140 for any additional information Thank you for utilizing our services, we hope you will consider us for your future analytical needs

I have reviewed and approved the enclosed data for final release

Very truly yours,

Jeffrey C Curran
Laboratory Manager

JCC

This report contains 21 pages

TABLE SV-1.2
7001-1891A
S&W REDEVELOPMENT, LLC
PAH'S

All values are ug/Kg dry weight basis.

Client Sample I D Lab Sample I D. Method Blank I D Quant Factor	SB-10B-01 MSD 011891A-04 MSD SBLKOQ 156	SB-11A-01 011891A-05 SBLKOQ 11.2	SB-11B-01 011891A-06 SBLKOQ 528	Quant. Limits with no Dilution
Naphthalene	300000	1700J	910000	330
2-Methylnaphthalene	40000J	590J	130000J	330
Acenaphthylene	25000J	3300J	63000J	330
Acenaphthene	11000JX	510J	20000J	330
Fluorene	42000J	1100J	99000J	330
Phenanthrene	160000	9000	320000	330
Anthracene	45000J	4000	97000J	330
Fluoranthene	120000	18000	240000	330
Pyrene	98000X	15000	140000J	330
Benzo(a)anthracene	54000	13000	88000J	330
Chrysene	48000J	12000	79000J	330
Benzo(b)fluoranthene	33000J	16000	46000J	330
Benzo(k)fluoranthene	32000J	8400	68000J	330
Benzo(a)pyrene	38000J	16000	62000J	330
Indeno(1,2,3-cd)pyrene	24000J	9500	26000J	330
Dibenzo(a,h)anthracene	8800J	3300J	9000J	330
Benzo(g,h,i)perylene	25000J	7300	24000J	330
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	07/30/01	07/30/01	07/30/01	
Date Analyzed	08/02/01	08/02/01	08/03/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

TABLE SV-1 3 Soil
7001-1891A
S&W REDEVELOPMENT, LLC
PAH'S

All values are ug/Kg dry weight basis

Client Sample I D.	SB-11C-01	SB-12A-01	SB-12B-01	Quant. Limits with no Dilution
Lab Sample I.D	011891A-07	011891A-08	011891A-09	
Method Blank I D	SBLKOQ	SBLKOQ	SBLKOQ	
Quant. Factor	1.12	26.9	1.20	
Naphthalene	770	1800J	10J	330
2-Methylnaphthalene	290J	1100J	U	330
Acenaphthylene	310J	5500J	15J	330
Acenaphthene	84J	2000J	U	330
Fluorene	460	3100J	U	330
Phenanthrene	1800	33000	75J	330
Anthracene	630	12000	40J	330
Fluoranthene	1200	73000	210J	330
Pyrene	960	65000	190J	330
Benzo(a)anthracene	540	48000	150J	330
Chrysene	510	43000	140J	330
Benzo(b)fluoranthene	270J	53000	110J	330
Benzo(k)fluoranthene	330J	22000	150J	330
Benzo(a)pyrene	380	58000	180J	330
Indeno(1,2,3-cd)pyrene	230J	36000	160J	330
Dibenzo(a,h)anthracene	79J	17000	61J	330
Benzo(g,h,i)perylene	210J	26000	180J	330
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	07/30/01	07/30/01	07/30/01	
Date Analyzed	07/31/01	08/02/01	07/31/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

TABLE SV-1 4
7001-1891A
S&W REDEVELOPMENT, LLC
PAH'S

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	SB-13A-01	SB-13B-01	SB-13C-01	Quant. Limits with no Dilution
Lab Sample I.D	011891A-10	011891A-11	011891A-12	
Method Blank I.D.	SBLKOQ	SBLKOQ	SBLKOQ	
Quant Factor	45 7	12 2	1.19	
Naphthalene	3900J	3100J	U	330
2-Methylnaphthalene	4000J	3400J	U	330
Acenaphthylene	16000	2500J	10J	330
Acenaphthene	2100J	580J	U	330
Fluorene	8600J	1000J	U	330
Phenanthrene	47000	9400	23J	330
Anthracene	25000	4700	14J	330
Fluoranthene	90000	28000	72J	330
Pyrene	91000	27000	74J	330
Benzo(a)anthracene	68000	21000	55J	330
Chrysene	56000	18000	45J	330
Benzo(b)fluoranthene	45000	19000	36J	330
Benzo(k)fluoranthene	28000	10000	37J	330
Benzo(a)pyrene	54000	22000	48J	330
Indeno(1,2,3-cd)pyrene	22000	10000	38J	330
Dibenzo(a,h)anthracene	9600J	4100	14J	330
Benzo(g,h,i)perylene	14000J	6600	36J	330
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	07/30/01	07/30/01	07/30/01	
Date Analyzed	08/02/01	08/02/01	07/31/01	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

TABLE SV-1 5
7001-1891A
S&W REDEVELOPMENT, LLC
PAH'S

Soil

All values are ug/Kg dry weight basis

Client Sample I D	SB-14A-01	SB-14B-01	SB-15A-01	Quant Limits with no Dilution
Lab Sample I D	011891A-13	011891A-14	011891A-15	
Method Blank I.D.	SBLKOQ	SBLKOQ	SBLKOQ	
Quant Factor	45 4	1 14	5 96	
Naphthalene	2000J	10J	120J	330
2-Methylnaphthalene	1100J	U	U	330
Acenaphthylene	5100J	11J	660J	330
Acenaphthene	1500J	U	U	330
Fluorene	2100J	U	64J	330
Phenanthrene	32000	37J	1400J	330
Anthracene	11000J	16J	780J	330
Fluoranthene	85000	68J	4500	330
Pyrene	66000	64J	4000	330
Benzo(a)anthracene	56000	50J	3900	330
Chrysene	50000	46J	3800	330
Benzo(b)fluoranthene	49000	40J	4200	330
Benzo(k)fluoranthene	51000	42J	3200	330
Benzo(a)pyrene	64000	53J	5200	330
Indeno(1,2,3-cd)pyrene	68000	45J	3600	330
Dibenzo(a,h)anthracene	23000	18J	1200J	330
Benzo(g,h,i)perylene	74000	44J	3000	330
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	07/30/01	07/30/01	07/30/01	
Date Analyzed	08/01/01	07/31/01	08/02/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

Soil

TABLE SV-1.6
7001-1891A
S&W REDEVELOPMENT, LLC
PAH'S

All values are ug/Kg dry weight basis

Client Sample I.D Lab Sample I.D. Method Blank I.D. Quant. Factor	SB-15B-01 011891A-16 SBLKOQ 44 6	DUPLICATE 011891A-17 SBLKOQ 1 18		Quant Limits with no Dilution
Naphthalene	81000	17J		330
2-Methylnaphthalene	22000	U		330
Acenaphthylene	5800J	13J		330
Acenaphthene	2100J	U		330
Fluorene	13000J	U		330
Phenanthrene	41000	60J		330
Anthracene	13000J	24J		330
Fluoranthene	26000	140J		330
Pyrene	15000	140J		330
Benzo(a)anthracene	9600J	100J		330
Chrysene	6600J	99J		330
Benzo(b)fluoranthene	5000J	100J		330
Benzo(k)fluoranthene	6200J	97J		330
Benzo(a)pyrene	6500J	140J		330
Indeno(1,2,3-cd)pyrene	2500J	150J		330
Dibenzo(a,h)anthracene	840J	45J		330
Benzo(g,h,i)perylene	2600J	180J		330
Date Received	07/23/01	07/23/01		
Date Extracted	07/30/01	07/30/01		
Date Analyzed	08/01/01	07/31/01		

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

SEVERN TRENT SERVICES

STL Connecticut

ORGANICS APPENDIX

U – Indicates that the compound was analyzed for but not detected

J – Indicates that the compound was analyzed for and determined to be present in the sample The mass spectrum of the compound meets the identification criteria of the method The concentration listed is an estimated value which is less than the specified minimum detection limit but is greater than zero

B – This flag is used when the analyte is found in the blanks as well as the sample It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte

N – Indicates that the compound was analyzed for but not requested as an analyte Value will not be listed on tabular result sheet

S – Estimated due to surrogate outliers

X – Matrix spike compound

(1) - Cannot be separated

(2) – Decomposes to azobenzene Measured and calibrated as azobenzene

A – This flag indicates that a TIC is a suspected aldol condensation product

E – Indicates that it exceeds calibration curve range

D – This flag identifies all compounds identified in an analysis at a secondary dilution factor

C – Confirmed by GC/MS

T – Compound present in TCLP blank

P – This flag is used for a pesticide/aroclor target analyte when there is a greater than 25 percent difference for detected concentrations between the two GC columns (see Form X)

STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory For your convenience, the laboratory identification numbers for the STL-Connecticut laboratory are provided in the following table Many states certify laboratories for specific parameters or tests within a category (i e method 325 2 for wastewater) The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis The laboratory should be contacted directly if parameter-specific certification information is required

STL-Connecticut
Certification Summary (as of February 2001)

State	Responsible Agency	Certification	Lab Number
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Maine	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	CT023
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	CT023
New Hampshire	Department of Environmental Services	Drinking Water Wastewater	2528
New Jersey	Department of Environmental Protection	Drinking Water Wastewater	46410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/ Hazardous Waste NELAC	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	Chemistry Non-Potable Water and Wastewater	A43
Utah	Department of Health	RCRA	2032614458
Washington	Department of Ecology	Wastewater/Hazardous Waste	C231
Wisconsin	Department of Natural Resources	Wastewater	998355710

7001-1891A
S&W REDEVELOPMENT, LLC
SAMPLE SUMMARY

CLIENT ID	LAB ID	MATRIX	DATE COLLECTED	DATE RECEIVED
SB-9A-01	011891A-01	SOIL	07/17/01	07/23
SB-9B-01	011891A-02	SOIL	07/17/01	07/23
SB-10A-01	011891A-03	SOIL	07/18/01	07/23
SB-10B-01	011891A-04	SOIL	07/18/01	07/23
SB-10B-01	011891A-04MS	SOIL	07/18/01	07/23
SB-10B-01	011891A-04MSB	SOIL	07/18/01	07/23
SB-10B-01	011891A-04MSD	SOIL	07/18/01	07/23
SB-11A-01	011891A-05	SOIL	07/18/01	07/23
SB-11B-01	011891A-06	SOIL	07/18/01	07/23
SB-11C-01	011891A-07	SOIL	07/18/01	07/23
SB-12A-01	011891A-08	SOIL	07/18/01	07/23
SB-12B-01	011891A-09	SOIL	07/18/01	07/23
SB-13A-01	011891A-10	SOIL	07/18/01	07/23
SB-13B-01	011891A-11	SOIL	07/18/01	07/23
SB-13C-01	011891A-12	SOIL	07/18/01	07/23
SB-14A-01	011891A-13	SOIL	07/18/01	07/23
SB-14B-01	011891A-14	SOIL	07/18/01	07/23
SB-15A-01	011891A-15	SOIL	07/19/01	07/23
SB-15B-01	011891A-16	SOIL	07/19/01	07/23
DUPLICATE	011891A-17	SOIL	07/18/01	07/23

STL CT ANALYTICAL SUMMARY

Client ID. DUPLICATE, SB-10A-01, SB-10B-01, SB-11A-01, SB-11B-01, SB-11C-01, SB-12A-01, SB-12B-01, SB-13A-01, SB-13B-01, SB-13C-01, SB-14A-01, SB-14B-01, SB-15A-01, SB-15B-01, SB-9A-01, SB-9B-01

Job Number: 7001-1891A

Date: 8/10/101

ty	Matrix	Analysis	Description
1	None	DISK	Diskette Prep
1	SOIL	BN-N8270C-PAH	PAH's
19	SOIL	BN-N8270C-PAH	PAH's
1	SOIL	VOA-N8260B-TCL	TCL Volatile Organic
19	SOIL	VOA-N8260B-TCL	TCL Volatile Organic

Columbia Analytical Services INC

An Employee Owned Company

Effective 9/24/01

CAS LIST OF QUALIFIERS

U - Indicates compound was analyzed for but was not detected The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value For further explanation see case narrative / cover letter

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

A - This flag indicates that a TIC is a suspected aldol-condensation product

N - Spiked sample recovery not within control limits
(Flag the entire batch - Inorganic analysis only)

* - Inorganic Duplicate analysis not within control limits Flag the entire batch - Inorganic analysis only

* - Organics QC data outside limits

D - Spike diluted out

S - Reported value determined by Method of Standard Additions (MSA)

X - As specified in the case narrative

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited
New York ID # 10145
Connecticut ID # PH0556
Massachusetts ID # M-NY032
American Industrial Hygiene Assoc ID # 100314
Navy Facilities Engineering Service Center Approved

Delaware Accredited
New Jersey ID # 73004
Rhode Island ID # 158
New Hampshire ID # 294100 A/B
West Virginia ID # 292
Florida ID # Pending

ACCREDITED IN ACCORDANCE WITH nelac

RESULTS OF CARBON DIOXIDE ANALYSIS

Client: Stearns & Wheler/S & W Redevelopment

Client Project ID: Ni-Mo Albion, NY
PAI Project ID: P2102006

Test Code	RSK 175	Date Sampled	8/27/01
Instrument ID	HP5890A/TCD #10	Date Received	8/30 01
Analyst	Regan Lau	Date Analyzed	9/5 '01
Matrix	Liquid	Volume(s) Analyzed	0 10 ml

Client Sample ID	PAI Sample ID	D F	Carbon Dioxide µg/L	
			Result	Reporting Limit
MW1	P2102006-00_	1 00	24,100	1 000
MW2	P2102006-002	1 00	41,100	1 000
MW3	P2102006-003	1 00	15 600	1,000
MW4	P2102006-004	1 00	18 600	1,000
MW5	P2102006-005	1 00	41,700	1 000
MW5	P2102006-005DUP	1 00	40,200	1 000
MW6	P2102006-006	1 00	27 100	1,000
MW7	P2102006-007	1 00	9 930	1,000
DUP	P2102006-008	1 00	24 100	1 000
Method Control Sample	P010905-MB	1 00	ND	1 000

The Method Control Sample is laboratory water carried through the entire analytical process
Oxygen & Carbon Dioxide free water cannot be achieved due to the nature of the matrix
ND = Compound was analyzed for but not detected above the laboratory reporting limit

Verified By_____ Date_____

COLUMBIA ANALYTICAL SERVICES

Reported 09/26/01

Stearns & Wheler, LLC
Project Reference NIAGARA MOHAWK-ALBION NY-GROUNDWATERS
Client Sample ID MW1

Date Sampled : 08/27/01 | Order #: 489046 | Sample Matrix WATER
Date Received: 08/29/01 | Submission #: R2108354

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0 100	41 8	MG/L	09/04/01	1 00
MANGANESE	0 0100	7.75	MG/L	09/04/01	1 00
WET CHEMISTRY					
NITRATE NITROGEN	0 0500	7 89	MG/L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

Reported 09/26, 01

Stearns & Wheler LLC
Project Reference NIAGARA MOHAWK-ALBION NY-GROUNDWATERS
Client Sample ID ·MW2

Date Sampled 08/27/01 Order # 489047 Sample Matrix: WATER
Date Received 08/29/01 Submission # R2108354

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0 ~00	75 0	MG'L	09/04/01	1 00
MANGANESE	0 0100	11 3	MG/L	09/04/01	1 00
WET CHEMISTRY					
NITRATE NITROGEN	0 0500	32 7	MG/L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

Reported: 09/26/01

Stearns & Wheler, LLC
Project Reference NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID MW3

Date Sampled: 08/27/01 | Order #: 489048 | Sample Matrix: WATER
Date Received: 08/29/01 | Submission #: R2108354

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0 100	4 94	MG/L	09/04/01	1.00
MANGANESE	0 0100	1 16	MG/L	09/04/01	1 00
WET CHEMISTRY					
NITRATE NITROGEN	0 0500	5 54	MG/L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

Reported 09/26/01

Stearns & Wheler, LLC
Project Reference:NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID :MW4

Date Sampled : 08/27/01 Order #: 489049 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2108354

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0.100	7.98	MG/L	09/04/01	1.00
MANGANESE	0.0100	0.350	MG/L	09/04/01	1.00
WET CHEMISTRY					
NITRATE NITROGEN	0.0500	1.85	MG/L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

Reported 09/26/01

Stearns & Wheler, LLC
Project Reference NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID MW5

Date Sampled 08/27/01
Date Received 08/29/01

Order #: 489050
Submission #: R2108354

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0 100	310	MG/L	09/04/01	10 0
MANGANESE	0 0100	6 57	MG/L	09/04/01	1 00
WET CHEMISTRY					
NITRATE NITROGEN	0 0500	0 500 U	MG/L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

Reported 09/26/01

Stearns & Wheler, LLC
Project Reference:NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID :MW6

Date Sampled 08/27/01 Order #. =89051 Sample Matrix WATER
Date Received. 08/29/01 Submission # R2108054

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0 100	3 65	MG/L	09/04/01	1 00
MANGANESE	0 0100	0 606	MG/L	09/04/01	1 00
WET CHEMISTRY					
NITRATE NITROGEN	0 0500	0 500 U	MG/L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

Reported: 09/26/01

Stearns & Wheler, LLC
Project Reference NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID .MW7

Date Sampled 08/27/01 Order #. 489052 Sample Matrix: WATER
Date Received 08/29/01 Submission # R2106354

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0 100	16 8	MG/L	09/04/01	1 00
MANGANESE	0 0100	0 312	MG/L	09/04/01	1 00
WET CHEMISTRY					
NITRATE NITROGEN	0 0500	0 500 U	MG/L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

Reported 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : DUP

Date Sampled : 09/27/01 Order #: 489053 Sample Matrix WATER
Date Received: 09/29/01 Submission #: R2108354

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
IRON	0 100	40 2	MG/L	09/04/01	1 00
MANGANESE	0 0100	9 41	MG/L	09/04/01	1 00
WET CHEMISTRY					
NITRATE NITROGEN	0 0500	8 04	MG, L	08/29/01	NA

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported 09/26/01

Stearns & Wheler, LLC
Project Reference NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID MW1

Date Sampled : 08/27/01 15:10	Order #: 489046	Sample Matrix: WATER
Date Received 08/29/01	Submission #: R2108354	Analytical Run 69300

ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED	08/31/01			
DATE ANALYZED	09/21/01			
ANALYTICAL DILUTION	0.94			
ACENAPHTHENE		10	9.4 U	UG/L
ACENAPHTHYLENE		10	9.4 U	UG/L
ANTHRACENE		10	9.4 U	UG/L
BENZO(A)ANTHRACENE		10	9.4 U	UG/L
BENZO(A)PYRENE		10	9.4 U	UG/L
BENZO(B)FLUORANTHENE		10	9.4 U	UG/L
BENZO(G,H,I)PERYLENE		10	9.4 U	UG/L
BENZO(K)FLUORANTHENE		10	9.4 U	UG/L
INDENO(1,2,3-CD)PYRENE		10	9.4 U	UG/L
CHRYSENE		10	9.4 U	UG/L
DIBENZO(A,H)ANTHRACENE		10	9.4 U	UG/L
FLUORANTHENE		10	9.4 U	UG/L
FLUORENE		10	9.4 U	UG/L
NAPHTHALENE		10	9.4 U	UG/L
PHENANTHRENE		10	9.4 U	UG/L
PYRENE		10	9.4 U	UG/L

SURROGATE RECOVERIES	QC LIMITS	RESULT	UNITS
TERPHENYL-d14	(15 - 135 %)	75	%
NITROBENZENE-d5	(30 - 116 %)	72	%
2-FLUOROBIPHENYL	(38 - 107 %)	66	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported: 09/26/01

Stearns & Wheler, LLC
Project Reference. NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW2

Date Sampled : 08/27/01 15 50 Order #: 489047 Sample Matrix WATER
Date Received: 08/29/01 Submission #: R2108354 Analytical Run 69300

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED 08/31/01			
DATE ANALYZED 09/21/01			
ANALYTICAL DILUTION 1 09			
ACENAPHTHENE	10	11 U	UG/L
ACENAPHTHYLENE	10	11 U	UG/L
ANTHRACENE	10	11 U	UG/L
BENZO(A)ANTHRACENE	10	11 U	UG/L
BENZO(A)PYRENE	10	11 U	UG/L
BENZO(B)FLUORANTHENE	10	11 U	UG/L
BENZO(G,H,I)PERYLENE	10	11 U	UG/L
BENZO(K)FLUORANTHENE	10	11 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	11 U	UG/L
CHRYSENE	10	11 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	11 U	UG/L
FLUORANTHENE	10	11 U	UG/L
FLUORENE	10	11 U	UG/L
NAPHTHALENE	10	11 U	UG/L
PHENANTHRENE	10	11 U	UG/L
PYRENE	10	11 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(15 - 135 %)	74	%
NITROBENZENE-d5	(30 - 116 %)	73	%
2-FLUOROBIPHENYL	(38 - 107 %)	69	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported. 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION NY-GROUNDWATERS
Client Sample ID : MW3

Date Sampled · 08/27/01 16 05 Order #: 489048 Sample Matrix: WATER
Date Received· 08/29/01 Submission #: R2108354 Analytical Run 69300

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED 08/31/01			
DATE ANALYZED 09/21/01			
ANALYTICAL DILUTION: 0.95			
ACENAPHTHENE	10	9 5 U	UG/L
ACENAPHTHYLENE	10	9 5 U	UG/L
ANTHRACENE	10	9 5 U	UG/L
BENZO(A)ANTHRACENE	10	9 5 U	UG/L
BENZO(A)PYRENE	10	9 5 U	UG/L
BENZO(B)FLUORANTHENE	10	9 5 U	UG/L
BENZO(G,H,I)PERYLENE	10	9.5 U	UG/L
BENZO(K)FLUORANTHENE	10	9.5 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	9 5 U	UG/L
CHRYSENE	10	9 5 U	UG/L
DIBENZO(A H)ANTHRACENE	10	9 5 U	UG/L
FLUORANTHENE	10	9 5 U	UG/L
FLUORENE	10	9.5 U	UG/L
NAPHTHALENE	10	9.5 U	UG/L
PHENANTHRENE	10	9 5 U	UG/L
PYPENE	10	9.5 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(15 - 135 %)	76	%
NITROBENZENE-d5	(30 - 116 %)	70	%
2-FLUOROBIPHENYL	(38 - 107 %)	68	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported. 09/26/01

Stearns & Wheler, LLC
Project Reference NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID - MW4

Date Sampled · 08/27/01 15.35 Order #· 489049 Sample Matrix WATER
Date Received 08/29/01 Submission #. R2108354 Analytical Run 69300

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED 08/31/01			
DATE ANALYZED : 09/21/01			
ANALYTICAL DILUTION. 0 94			
ACENAPHTHENE	10	9 4 U	UG/L
ACENAPHTHYLENE	10	9 4 U	UG/L
ANTHRACENE	10	9 4 U	UG/L
BENZO(A)ANTHRACENE	10	9 4 U	UG/L
BENZO(A)PYRENE	10	9 4 U	UG/L
BENZO(B)FLUORANTHENE	10	9 4 U	UG/L
BENZO(G,H,I)PERYLENE	10	9 4 U	UG/L
BENZO(K)FLUORANTHENE	10	9 4 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	9 4 U	UG/L
CHRYSENE	10	9.4 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	9.4 U	UG/L
FLUORANTHENE	10	9.4 U	UG/L
FLUORENE	10	9.4 U	UG/L
NAPHTHALENE	10	9 4 U	UG/L
PHENANTHRENE	10	9 4 U	UG/L
PYRENE	10	9.4 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(15 - 135 %)	76	%
NITROBENZENE-d5	(30 - 116 %)	67	%
2-FLUOROBIPHENYL	(38 - 107 %)	66	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported: 09/26/01

Stearns & Wheler LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW5

Date Sampled : 08/27/01 15:20 Order #: 489050 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2108354 Analytical Run 69300

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED 08/31/01			
DATE ANALYZED 09/21/01			
ANALYTICAL DILUTION 1.06			
ACENAPHTHENE	10	14	UG/L
ACENAPHTHYLENE	10	22	UG/L
ANTHRACENE	10	11 U	UG/L
BENZO(A)ANTHRACENE	10	11 U	UG/L
BENZO(A)PYRENE	10	11 U	UG/L
BENZO(B)FLUORANTHENE	10	11 U	UG/L
BENZO(G,H,I)PERYLENE	10	11 U	UG/L
BENZO(K)FLUORANTHENE	10	11 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	11 U	UG/L
CHRYSENE	10	11 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	11 U	UG/L
FLUORANTHENE	10	11 U	UG/L
FLUORENE	10	18	UG/L
NAPHTHALENE	10	55	UG/L
PHENANTHRENE	10	11 U	UG/L
PYRENE	10	11 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(15 - 135 %)	76	%
NITROBENZENE-d5	(30 - 116 %)	69	%
2-FLUOROBIPHENYL	(38 - 107 %)	65	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported: 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW6

Date Sampled : 08/27/01 15 15 Order #: 489051 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2108354 Analytical Run 69300

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/31/01			
DATE ANALYZED : 09/21/01			
ANALYTICAL DILUTION : 0 96			
ACENAPHTHENE	10	9 5 U	UG/L
ACENAPHTHYLENE	10	9.6 U	UG/L
ANTHRACENE	10	9.6 U	UG/L
BENZO(A)ANTHRACENE	10	9.6 U	UG/L
BENZO(A)PYRENE	10	9 6 U	UG/L
BENZO(B)FLUORANTHENE	10	9 6 U	UG/L
BENZO(G,H,I)PERYLENE	10	9 5 U	UG/L
BENZO(K)FLUORANTHENE	10	9 6 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	9 6 U	UG/L
CHRYSENE	10	9 6 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	9 6 U	UG/L
FLUORANTHENE	10	9 6 U	UG/L
FLUORENE	10	9 6 U	UG/L
NAPHTHALENE	10	9 6 U	UG/L
PHENANTHRENE	10	9 6 U	UG/L
PYRENE	10	9.6 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(15 - 135 %)	71	%
NITROBENZENE-d5	(30 - 116 %)	69	%
2-FLUOROBIPHENYL	(38 - 107 %)	66	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported 09/25/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW7

Date Sampled : 08/27/01 15 05 Order #: 489052 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2108354 Analytical Run 69300

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/31/01			
DATE ANALYZED : 09/21/01			
ANALYTICAL DILUTION: 1 04			
ACENAPHTHENE	10	10 U	UG/L
ACENAPHTHYLENE	10	10 U	UG/L
ANTHRACENE	10	10 U	UG/L
BENZO(A)ANTHRACENE	10	10 U	UG/L
BENZO(A)PYRENE	10	10 U	UG/L
BENZO(B)FLUORANTHENE	10	10 U	UG/L
BENZO(G,H,I)PERYLENE	10	10 U	UG/L
BENZO(K)FLUORANTHENE	10	10 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	10 U	UG/L
CHRYSENE	10	10 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	10 U	UG/L
FLUORANTHENE	10	10 U	UG/L
FLUORENE	10	10 U	UG/L
NAPHTHALENE	10	10 U	UG/L
PHENANTHRENE	10	10 U	UG/L
PYRENE	10	10 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(15 - 135 %)	79	%
NITROBENZENE-d5	(30 - 116 %)	66	%
2-FLUOROBIPHENYL	(38 - 107 %)	63	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C
Reported 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : DUP

Date Sampled : 08/27/01 **Order #:** 489053 **Sample Matrix:** WATER
Date Received: 08/29/01 **Submission #:** R2108154 **Analytical Run** 69300

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED	08/31/01		
DATE ANALYZED	09/21/01		
ANALYTICAL DILUTION	0 96		
ACENAPHTHENE	10	9.6 U	UG/L
ACENAPHTHYLENE	10	9.6 U	UG/L
ANTHRACENE	10	9 6 U	UG/L
BENZO(A)ANTHRACENE	10	9 6 U	UG/L
BENZO(A) PYRENE	10	9 6 U	UG/L
BENZO(B) FLUORANTHENE	10	9 6 U	UG/L
BENZO(G,H,I) PERYLENE	10	9 6 U	UG/L
BENZO(K) FLUORANTHENE	10	9 6 U	UG/L
INDENO(1,2,3-CD) PYRENE	10	9 6 U	UG/L
CHRYSENE	10	9 6 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	9 6 U	UG/L
FLUORANTHENE	10	9 6 U	UG/L
FLUORENE	10	9 6 U	UG/L
NAPHTHALENE	10	9 6 U	UG/L
PHENANTHRENE	10	9.6 U	UG/L
PYRENE	10	9 6 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(15 - 135 %)	116	%
NITROBENZENE-d5	(30 - 116 %)	89	%
2-FLUOROBIPHENYL	(38 - 107 %)	84	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW1

Date Sampled : 08/27/01 15 10 **Order #:** 489046 **Sample Matrix:** WATER
Date Received: 08/29/01 **Submission #:** R2108354 **Analytical Run** 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED 09/06/01			
ANALYTICAL DILUTION 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5 0	5.0 U	UG/L
BROMODICHLOROMETHANE	5 0	5.0 U	UG/L
BROMOFORM	5 0	5 0 U	UG/L
BROMOMETHANE	5 0	5 0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5 0	5 0 U	UG/L
CHLOROBENZENE	5 0	5 0 U	UG/L
CHLOROETHANE	5 0	5 0 U	UG/L
CHLOROFORM	5 0	5 0 U	UG/L
CHLOROMETHANE	5 0	5 0 U	UG/L
DIBROMOCHLOROMETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHANE	5 0	5 0 U	UG/L
1,2-DICHLOROETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHENE	5 0	5 0 U	UG/L
CIS-1,2-DICHLOROETHENE	5 0	5 0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5 0	5 0 U	UG/L
1,2-DICHLOROPROPANE	5 0	5 0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5 0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
ETHYLBENZENE	5 0	5 0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5 0	5 0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5 0	5 0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	5 0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5 0	5 0 U	UG/L
1,1,1-TRICHLOROETHANE	5 0	5 0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5 0 U	UG/L
TRICHLOROETHENE	5 0	5.0 U	UG/L
VINYL CHLORIDE	5 0	5 0 U	UG/L
O-XYLENE	5 0	5 0 U	UG/L
M-P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	98	%
TOLUENE-D8	(87 - 108 %)	95	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	97	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID . MW2

Date Sampled · 09/27/01 15:50 Order #: 489047 Sample Matrix: WATER
Date Received: 09/29/01 Submission #. R2108354 Analytical Run 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED · 09/05/01			
ANALYTICAL DILUTION· 1 00			
ACETONE	20	20 U	UG/L
BENZENE	5 0	5 0 U	UG/L
BROMODICHLOROMETHANE	5 0	5 0 U	UG/L
BROMOFORM	5 0	5 0 U	UG/L
BROMOMETHANE	5 0	5 0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5 0	5 0 U	UG/L
CHLOROBENZENE	5 0	5 0 U	UG/L
CHLOROETHANE	5 0	5 0 U	UG/L
CHLOROFORM	5 0	5 0 U	UG/L
CHLOROMETHANE	5.0	5 0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5 0 U	UG/L
1 1-DICHLOROETHANE	5.0	5 0 U	UG/L
1 2-DICHLOROETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHENE	5 0	5 0 U	UG/L
CIS-1,2-DICHLOROETHENE	5 0	5 0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5 0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5 0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5 0 U	UG/L
ETHYLBENZENE	5 0	5 0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5 0	5 0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5 0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5 0 U	UG/L
TOLUENE	5 0	5 0 U	UG/L
1,1,1-TRICHLOROETHANE	5 0	5 0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5 0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5 0	5.0 U	UG/L
O-XYLENE	5 0	5 0 U	UG/L
M-P-XYLENE	5 0	5 0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	97	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported. 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW3

Date Sampled . 08/27/01 16.05 Order #: 489045 Sample Matrix: WATER
Date Received· 08/29/01 Submission #: R2108354 Analytical Run 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED 09/06/01			
ANALYTICAL DILUTION· 1 00			
ACETONE	20	20 U	UG/L
BENZENE	5 0	5 0 U	UG/L
BROMODICHLOROMETHANE	5 0	5 0 U	UG/L
BROMOFORM	5 0	5 0 U	UG/L
BROMOMETHANE	5 0	5 0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5 0	5 0 U	UG/L
CHLOROBENZENE	5.0	5 0 U	UG/L
CHLOROETHANE	5.0	5 0 U	UG/L
CHLOROFORM	5 0	5 0 U	UG/L
CHLOROMETHANE	5.0	5 0 U	UG/L
DIBROMOCHLOROMETHANE	5 0	5 0 U	UG/L
1 1-DICHLOROETHANE	5 0	5 0 U	UG/L
1,2-DICHLOROETHANE	5 0	5 0 U	UG/L
1 1-DICHLOROETHENE	5 0	5 0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5 0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5 0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5 0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
ETHYLBENZENE	5 0	5 0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5 0	5 0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5 0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	5 0 U	UG/L
TETRACHLOROETHENE	5 0	5 0 U	UG/L
TOLUENE	5 0	5 0 U	UG/L
1,1,1-TRICHLOROETHANE	5 0	5 0 U	UG/L
1,1,2-TRICHLOROETHANE	5 0	5 0 U	UG/L
TRICHLOROETHENE	5 0	5 0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5 0	5.0 U	UG/L
M-P-XYLENE	5 0	5 0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	95	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW4

Date Sampled : 08/27/01 15:55 Order #: 489049 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2106354 Analytical Run 66751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED 09/06/01			
ANALYTICAL DILUTION 1 00			
ACETONE	20	20 U	UG/L
BENZENE	5 0	5 0 U	UG/L
BROMODICHLOROMETHANE	5.0	5 0 U	UG/L
BROMOFORM	5 0	5.0 U	UG/L
BROMOMETHANE	5 0	5 0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5 0	5 0 U	UG/L
CHLOROBENZENE	5 0	5 0 U	UG/L
CHLOROETHANE	5.0	5 0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1 1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5 0 U	UG/L
1,1-DICHLOROETHENE	5.0	5 0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5 0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5 0	5 0 U	UG/L
1 2-DICHLOROPROPANE	5 0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5 0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5 0	5.0 U	UG/L
ETHYLBENZENE	5 0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5 0	5 0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5 0	5 0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	5 0 U	UG/L
TETRACHLOROETHENE	5 0	5 0 U	UG/L
TOLUENE	5 0	5 0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5 0 U	UG/L
1,1,2-TRICHLOROETHANE	5 0	5 0 U	UG/L
TRICHLOROETHENE	5 0	5 0 U	UG/L
VINYL CHLORIDE	5 0	5 0 U	UG/L
O-XYLENE	5 0	5 0 U	UG/L
M-P-XYLENE	5.0	5.0 J	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	99	%
TOLUENE-D8	(87 - 108 %)	99	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	95	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW5

Date Sampled : 08/27/01 15 20 Order #: 489050 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2108354 Analytical Run 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED 09/07/01			
ANALYTICAL DILUTION 2 00			
ACETONE	20	40 U	UG/L
BENZENE	5 0	230	UG/L
BROMODICHLOROMETHANE	5 0	10 U	UG/L
BROMOFORM	5 0	10 U	UG/L
BROMOMETHANE	5 0	10 U	UG/L
2-BUTANONE (MEK)	10	20 U	UG/L
CARBON DISULFIDE	10	20 U	UG/L
CARBON TETRACHLORIDE	5 0	10 U	UG/L
CHLOROBENZENE	5 0	10 U	UG/L
CHLOROETHANE	5 0	10 U	UG/L
CHLOROFORM	5 0	10 U	UG/L
CHLOROMETHANE	5 0	10 U	UG/L
DIBROMOCHLOROMETHANE	5 0	10 U	UG/L
1,1-DICHLOROETHANE	5 0	10 U	UG/L
1 2-DICHLOROETHANE	5 0	10 U	UG/L
1 1-DICHLOROETHENE	5 0	10 U	UG/L
CIS-1,2-DICHLOROETHENE	5 0	10 U	UG/L
TRANS-1,2-DICHLOROETHENE	5 0	10 U	UG/L
1,2-DICHLOROPROPANE	5 0	10 U	UG/L
CIS-1,3-DICHLOROPROPENE	5 0	10 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5 0	10 U	UG/L
ETHYLBENZENE	5 0	17	UG/L
2-HEXANONE	10	20 U	UG/L
METHYLENE CHLORIDE	5 0	10 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	20 U	UG/L
STYRENE	5.0	10 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	10 U	UG/L
TETRACHLOROETHENE	5 0	10 U	UG/L
TOLUENE	5 0	24	UG/L
1,1,1-TRICHLOROETHANE	5 0	10 U	UG/L
1,1,2-TRICHLOROETHANE	5 0	10 U	UG/L
TRICHLOROETHENE	5 0	10 U	UG/L
VINYL CHLORIDE	5 0	10 U	UG/L
O-XYLENE	5 0	22	UG/L
M+P-XYLENE	5 0	31	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	93	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	100	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW6

Date Sampled : 08/27/01 15 15 Order #: 489051 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2108354 Analytical Run 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED 09/06/01			
ANALYTICAL DILUTION: 1 00			
ACETONE	20	20 U	UG/L
BENZENE	5 0	5 0 U	UG/L
BROMODICHLOROMETHANE	5 0	5 0 U	UG/L
BROMOFORM	5 0	5 0 U	UG/L
BROMOMETHANE	5 0	5 0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5 0	5 0 U	UG/L
CHLOROBENZENE	5 0	5 0 U	UG/L
CHLOROETHANE	5 0	5 0 U	UG/L
CHLOROFORM	5 0	5 0 U	UG/L
CHLOROMETHANE	5 0	5 0 U	UG/L
DIBROMOCHLOROMETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHANE	5 0	5 0 U	UG/L
1,2-DICHLOROETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHENE	5 0	5 0 U	UG/L
CIS-1,2-DICHLOROETHENE	5 0	5 0 U	UG/L
TRANS-1 2-DICHLOROETHENE	5 0	5 0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5 0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
ETHYLBENZENE	5 0	5 0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5 0	5 0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5 0	5 0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	5.0 U	UG/L
TETRACHLOROETHENE	5 0	5 0 U	UG/L
TOLUENE	5 0	5 0 U	UG/L
1,1,1-TRICHLOROETHANE	5 0	5 0 U	UG/L
1,1,2-TRICHLOROETHANE	5 0	5 0 U	UG/L
TRICHLOROETHENE	5.0	5 0 U	UG/L
VINYL CHLORIDE	5 0	5 0 U	UG/L
O-XYLENE	5 0	5 0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	103	%
TOLUENE-D8	(87 - 108 %)	95	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW5

Date Sampled : 08/27/01 15:20 **Order #:** 489050 **Sample Matrix:** WATER
Date Received: 08/29/01 **Submission #:** R2108354 **Analytical Run** 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED 09/06/01			
ANALYTICAL DILUTION 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	240 E	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	17	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	23	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	23	UG/L
M,P-XYLENE	5.0	31	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	102	%
TOLUENE-D8	(87 - 108 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported 09/26/01

Stearns & Wheler, ILC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : MW7

Date Sampled : 08/27/01 15 05 **Order #:** 489052 **Sample Matrix:** WATER
Date Received: 08/29/01 **Submission #:** R2108554 **Analytical Run** 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/07/01			
ANALYTICAL DILUTION 1 00			
ACETONE	20	20 U	UG/L
BENZENE	5 0	5 0 U	UG/L
BROMODICHLOROMETHANE	5 0	5 0 U	UG/L
BROMOFORM	5.0	5 0 U	UG/L
BROMOMETHANE	5.0	5 0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5 0	5 0 U	UG/L
CHLOROBENZENE	5 0	5.0 U	UG/L
CHLOROETHANE	5 0	5 0 U	UG/L
CHLOROFORM	5 0	5 0 U	UG/L
CHLOROMETHANE	5 0	5 0 U	UG/L
DIBROMOCHLOROMETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHANE	5 0	5 0 U	UG/L
1,2-DICHLOROETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHENE	5 0	5 0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5 0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5 0	5 0 U	UG/L
1,2-DICHLOROPROPANE	5 0	5 0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5 0	5 0 U	UG/L
ETHYLBENZENE	5 0	5 0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5 0	5 0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5 0	5 0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	5 0 U	UG/L
TETRACHLOROETHENE	5 0	5 0 U	UG/L
TOLUENE	5 0	5 0 U	UG/L
1,1,1-TRICHLOROETHANE	5 0	5 0 U	UG/L
1,1,2-TRICHLOROETHANE	5 0	5 0 U	UG/L
TRICHLOROETHENE	5 0	5.0 U	UG/L
VINYL CHLORIDE	5 0	5 0 U	UG/L
O-XYLENE	5 0	5.0 U	UG/L
M+P-XYLENE	5 0	5 0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	95	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	98	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported 09/26/01

Stearns & Wheler, LLC
Project Reference: NIAGARA MOHAWK-ALBION, NY-GROUNDWATERS
Client Sample ID : DUP

Date Sampled : 08/27/01 Order #: 489053 Sample Matrix: WATER
Date Received: 08/29/01 Submission #: R2108354 Analytical Run 68751

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	09/07/01		
ANALYTICAL DILUTION	1 00		
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5 0	5.0 U	UG/L
BROMOMETHANE	5 0	5 0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5 0	5 0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5 0	5.0 U	UG/L
CHLOROFORM	5 0	5 0 U	UG/L
CHLOROMETHANE	5 0	5 0 U	UG/L
DIBROMOCHLOROMETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHANE	5.0	5 0 U	UG/L
1 2-DICHLOROETHANE	5 0	5 0 U	UG/L
1,1-DICHLOROETHENE	5.0	5 0 U	UG/L
CIS-1,2-DICHLCROETHENE	5 0	5 0 U	UG/L
TRANS-1,2-DICHLCROETHENE	5 0	5 0 U	UG/L
1 2-DICHLOROPROPANE	5 0	5 0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5 0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5 0 U	UG/L
ETHYLBENZENE	5.0	5 0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5 0	5 0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5 0	5 0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5 0	5 0 U	UG/L
TETRACHLOROETHENE	5 0	5 0 U	UG/L
TOLUENE	5 0	5 0 U	UG/L
1,1,1-TRICHLCROETHANE	5.0	5 0 U	UG/L
1,1,2-TRICHLOROETHANE	5 0	5.0 U	UG/L
TRICHLOROETHENE	5 0	5 0 U	UG/L
VINYL CHLORIDE	5 0	5 0 U	UG/L
O-XYLENE	5 0	5 0 U	UG/L
M+P-XYLENE	5 0	5 0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	107	%
TOLUENE-D8	(87 - 108 %)	101	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	99	%

7001-1891A
S&W REDEVELOPMENT

Case Narrative

Sample Receipt – The samples were received at 14°C The client was notified and the laboratory was instructed to proceed with the analyses

Volatile Organics – Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 5030B/5035A/8260B The instrumentation used was a Tekmar Model 2000/2016/3000 Concentrator/Archon 4552 autosampler interfaced with a Hewlett Packard Model 5970A/5971A/5972A GC/MS/DS

Sample Calculation

Sample ID –SB-11C-01
Compound –Acetone

$$\frac{(133468)(250)}{(224372)(1\ 741)(2\ 67)(\ 89)} = 35\ 9 = 36\ \text{UG/KG}$$

Sample SB-11C-01 was analyzed at a 1 2 dilution due to a high TIC peak

The following samples were analyzed as medium level soils due to high target compound concentrations

SB-10B-01	1 10
SB-15B-01	1 10
SB-11B-01	1 400

The spike compound percent recoveries for chloroethane were below criteria in the FMS/FMSD samples and recoveries for methylene chloride, toluene, ethylbenzene and xylene (total) were also out in the FMSD sample The percent RPD values for methylene chloride, acetone, benzene, toluene, ethylbenzene and xylene(total) were also out in the FMS/FMSD samples The spike compound percent recoveries for chloroethane and 2-hexanone were below criteria in the FMSB sample

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS according to NYSDEC '95 Protocols using guidance provided in Methods 3550C/8270C The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector

Samples SBLKOQFMS and SB-15A-01 had one surrogate out of recovery criteria, but within laboratory sample acceptance criteria Sample SB-9A-01 had two surrogates out of recovery criteria, but within laboratory acceptance criteria

The spike recovery for the compound, 4-nitrophenol was above recovery limits for SB-10B-01MSB

Samples SB-9A-01, SB-10A-01, SB-10B-01, SB-10B-01MS, SB-10B-01MSD, SB-12A-01, SB-13B-01, SB-14A-01, SB-15A-01 and SB-15B-01 would not concentrate to a final volume of 1 ml, and so were brought to a final volume of 5 mls Samples SB-11B-01 and SB-13A-01 would not concentrate to a final volume of 1 ml and so were brought to a final volume of 10 mls

Samples SB-11A-01 and SB-13B-01 were analyzed at a 1 2 dilution sample SB-13A-01 was analyzed at a 1 4 dilution, samples SB-10A-01 and SB-12A-01 were analyzed at a 1 5 dilution, samples SB-14A-01 and SB-15B-01 were analyzed at a 1 8 dilution, samples SB-10B-01, SB-10B-01MS and SB-10B-01MSD were analyzed at a 1 25 dilution and sample SB-11B-01 was analyzed at a 1 40 dilution, all due to the presence of high levels of target compounds

Sample Calculation

Sample ID – DUPLICATE
Compound - naphthalene

$$\frac{14111(40)1000}{692043(0\ 966)2(30\ 5)0\ 83} = 16\ 67 = 17\ \text{ug/kg}$$

Soil

TABLE VO-1.0
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D	Method Blank	SB-11C-01		Quant. Limits with no Dilution
Lab Sample I D	VBLK08	011891A-07		
Method Blank I D	VBLK08	VBLK08		
Quant. Factor	1 00	2 10		
Chloromethane	U	U		10
Bromomethane	U	U		10
Vinyl Chloride	U	U		10
Chloroethane	U	U		10
Methylene Chloride	2J	14B		5 0
Acetone	6J	36B		10
Carbon Disulfide	.9J	1JB		5 0
Vinyl Acetate	U	U		10
1,1-Dichloroethene	U	U		5 0
1,1-Dichloroethane	U	U		5.0
cis-1,2-Dichloroethene	U	U		5 0
trans-1,2-Dichloroethene	U	U		5.0
Chloroform	U	U		5 0
1,2-Dichloroethane	U	U		5.0
2-Butanone	4J	9JB		10
1,1,1-Trichloroethane	U	U		5.0
Carbon Tetrachloride	U	U		5 0
Bromodichloromethane	U	U		5.0
1,2-Dichloropropane	U	U		5.0
cis-1,3-Dichloropropene	U	U		5.0
Trichloroethene	U	U		5.0
Dibromochloromethane	U	U		5.0
1,1,2-Trichloroethane	U	U		5.0
Benzene	U	U		5.0
trans-1,3-Dichloropropene	U	U		5.0
Bromoform	U	U		5.0
4-Methyl-2-Pentanone	U	U		10
2-Hexanone	U	U		10
Tetrachloroethene	U	U		5.0
Toluene	.2J	2JB		5.0
1,1,2,2-Tetrachloroethane	U	U		5 0
Chlorobenzene	U	U		5 0
Ethylbenzene	U	U		5 0
Styrene	U	U		5 0
Xylene (total)	U	U		5 0
Date Received		07/23/01		
Date Extracted	N/A	N/A		
Date Analyzed	07/30/01	07/30/01		

See Appendix for qualifier definitions
Note. Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.1 Soil
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis

Client Sample I D	Method Blank	SB-9A-01	SB-9B-01	Quant Limits with no Dilution
Lab Sample I.D	VBLKKR	011891A-01	011891A-02	
Method Blank I D.	VBLKKR	VBLKKR	VBLKKR	
Quant. Factor	1.00	1.10	1 20	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	8J	18B	10B	5.0
Acetone	U	57	17	10
Carbon Disulfide	U	U	U	5.0
Vinyl Acetate	U	U	U	10
1,1-Dichloroethene	U	U	U	5.0
1,1-Dichloroethane	U	U	U	5.0
cis-1,2-Dichloroethene	U	U	U	5 0
trans-1,2-Dichloroethene	U	U	U	5.0
Chloroform	U	U	U	5.0
1,2-Dichloroethane	U	U	U	5.0
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5.0
Carbon Tetrachloride	U	U	U	5.0
Bromodichloromethane	U	U	U	5.0
1,2-Dichloropropane	U	U	U	5 0
cis-1,3-Dichloropropene	U	U	U	5.0
Trichloroethene	U	U	U	5.0
Dibromochloromethane	U	U	U	5.0
1,1,2-Trichloroethane	U	U	U	5.0
Benzene	U	U	17	5 0
trans-1,3-Dichloropropene	U	U	U	5 0
Bromoform	U	U	U	5.0
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5.0
Toluene	U	U	17	5.0
1,1,2,2-Tetrachloroethane	U	U	U	5 0
Chlorobenzene	U	U	U	5.0
Ethylbenzene	U	U	2J	5 0
Styrene	U	U	U	5 0
Xylene (total)	U	U	27	5 0
Date Received		07/23/01	07/23/01	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/27/01	07/27/01	07/27/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1.2
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	SB-10A-01	SB-11A-01	SB-12A-01	Quant. Limits with no Dilution
Lab Sample I.D	011891A-03	011891A-05	011891A-08	
Method Blank I.D.	VBLKKR	VBLKKR	VBLKKR	
Quant Factor	1.12	1.11	1 09	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	7B	7B	8B	5 0
Acetone	26	9J	29	10
Carbon Disulfide	U	U	U	5 0
Vinyl Acetate	U	U	U	10
1,1-Dichloroethene	U	U	U	5 0
1,1-Dichloroethane	U	U	U	5.0
cis-1,2-Dichloroetnene	U	U	U	5 0
trans-1,2-Dichloroethene	U	U	U	5.0
Chloroform	U	U	U	5.0
1,2-Dichloroethane	U	U	U	5.0
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5.0
Carbon Tetracnloride	U	U	U	5.0
Bromodichloromethane	U	U	U	5.0
1,2-Dichloropropane	U	U	U	5.0
cis-1,3-Dichloropropene	U	U	U	5.0
Trichloroethene	U	U	U	5 0
Dibromochloromethane	U	U	U	5.0
1,1,2-Trichloroethane	U	U	U	5.0
Benzene	U	U	2J	5.0
trans-1,3-Dichloropropene	U	U	U	5.0
Bromoform	U	U	U	5.0
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5.0
Toluene	U	U	U	5.0
1,1,2,2-Tetrachloroethane	U	U	U	5.0
Chlorobenzene	U	U	U	5.0
Ethylbenzene	U	U	U	5.0
Styrene	U	U	U	5.0
Xylene (total)	U	U	U	5 0
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/27/01	07/27/01	07/27/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

TABLE VO-1.3 Soil
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis

Client Sample I D	SB-12B-01	SB-13A-01	SB-13B-01	Quant Limits with no Dilution
Lab Sample I.D	011891A-09	011891A-10	011891A-11	
Method Blank I.D.	VBLKKR	VBLKKR	VBLKKR	
Quant Factor	1 12	1.33	1 28	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	8B	8B	14B	5 0
Acetone	9J	13	7J	10
Carbon Disulfide	U	U	U	5 0
Vinyl Acetate	U	U	U	10
1,1-Dichloroethene	U	U	U	5 0
1,1-Dichloroethane	U	U	U	5 0
cis-1,2-Dichloroethene	U	U	U	5 0
trans-1,2-Dichloroethene	U	U	U	5.0
Chloroform	U	U	U	5 0
1,2-Dichloroethane	U	U	U	5 0
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5 0
Carbon Tetrachloride	U	U	U	5 0
Bromodichloromethane	U	U	U	5.0
1,2-Dichloropropane	U	U	U	5 0
cis-1,3-Dichloropropene	U	U	U	5.0
Trichloroethene	U	U	U	5 0
Dibromochloromethane	U	U	U	5.0
1,1,2-Trichloroethane	U	U	U	5 0
Benzene	U	1J	.6J	5.0
trans-1,3-Dichloropropene	U	U	U	5 0
Bromoform	U	U	U	5 0
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5 0
Toluene	U	2J	.9J	5.0
1,1,2,2-Tetrachloroethane	U	U	U	5.0
Chlorobenzene	U	U	U	5.0
Ethylbenzene	U	U	7	5 0
Styrene	U	U	U	5 0
Xylene (total)	U	2J	16	5 0
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/27/01	07/27/01	07/27/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

Soil

TABLE VO-1.4
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I D.	SB-13C-01	SB-14A-01	SB-14B-01	Quant. Limits with no Dilution
Lab Sample I.D.	011891A-12	011891A-13	011891A-14	
Method Blank I.D	VBLKKR	VBLKKR	VBLKKR	
Quant. Factor	1 19	1 14	1.23	
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	26B	20B	14B	5.0
Acetone	33	23	17	10
Carbon Disulfide	U	.5J	U	5 0
Vinyl Acetate	U	U	U	10
1,1-Dichloroethene	U	U	U	5.0
1,1-Dichloroethane	U	U	U	5.0
cis-1,2-Dichloroethene	U	U	U	5.0
trans-1,2-Dichloroethene	U	U	U	5.0
Chloroform	U	U	U	5.0
1,2-Dichloroethane	U	U	U	5.0
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5.0
Carbon Tetrachloride	U	U	U	5.0
Bromodichloromethane	U	U	U	5.0
1,2-Dichloropropane	U	U	U	5.0
cis-1,3-Dichloropropene	U	U	U	5.0
Trichloroethene	U	.9J	U	5.0
Dibromochloromethane	U	U	U	5 0
1,1,2-Trichloroethane	U	U	U	5 0
Benzene	.3J	7	U	5.0
trans-1,3-Dichloropropene	U	U	U	5 0
Bromoform	U	U	U	5.0
4-Methyl-2-Pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5 0
Toluene	2J	5J	.6J	5.0
1,1,2,2-Tetrachloroethane	U	U	U	5 0
Chlorobenzene	U	U	U	5 0
Ethylbenzene	U	U	U	5.0
Styrene	U	U	U	5 0
Xylene (total)	.8J	7J	U	5 0
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/27/01	07/27/01	07/27/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE VO-1 5
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I D	SB-15A-01	DUPLICATE		Quant Limits with no Dilution
Lab Sample I.D.	011891A-15	011891A-17		
Method Blank I.D.	VBLKKR	VBLKKR		
Quant. Factor	1 09	1.14		
Chloromethane	U	U		10
Bromomethane	U	U		10
Vinyl Chloride	U	U		10
Chloroethane	U	U		10
Methylene Chloride	14B	18B		5 0
Acetone	13	44		10
Carbon Disulfide	U	U		5 0
Vinyl Acetate	U	U		10
1,1-Dichloroethene	U	U		5 0
1,1-Dichloroethane	U	U		5.0
cis-1,2-Dichloroethene	U	U		5 0
trans-1,2-Dichloroetnene	U	U		5.0
Chloroform	U	U		5.0
1,2-Dichloroethane	U	U		5.0
2-Butanone	U	U		10
1,1,1-Trichloroethane	U	U		5.0
Carbon Tetracnloride	U	U		5 0
Bromodichloromethane	U	U		5 0
1,2-Dichloropropane	U	U		5 0
cis-1,3-Dichloropropene	U	U		5.0
Trichloroethene	U	U		5 0
Dibromochloromethane	U	U		5 0
1,1,2-Trichloroethane	U	U		5.0
Benzene	U	2J		5 0
trans-1,3-Dichloropropene	U	U		5 0
Bromoform	U	U		5.0
4-Methyl-2-Pentanone	U	U		10
2-Hexanone	U	U		10
Tetrachloroethene	U	U		5 0
Toluene	U	1J		5.0
1,1,2,2-Tetrachloroethane	U	U		5.0
Chlorobenzene	U	U		5 0
Ethylbenzene	U	U		5 0
Styrene	U	U		5.0
Xylene (total)	U	U		5 0
Date Received	07/23/01	07/23/01		
Date Extracted	N/A	N/A		
Date Analyzed	07/27/01	07/27/01		

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

TABLE VO-1.6
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

Soil
Medium

All values are ug/Kg dry weight basis

Client Sample I.D Lab Sample I D Method Blank I D Quant. Factor	Method Blank VBLKTD VBLKTD 1.00	SB-10B-01 011891A-04 VBLKTD 12.9	SB-10B-01 FMS 011891A-04 FMS VBLKTD 12 9	Quant. Limits with no Dilution
Chloromethane	U	U	44000X	1000
Bromomethane	U	U	32000X	1000
Vinyl Chloride	U	U	46000X	1000
Chloroethane	U	U	21000X	1000
Methylene Chloride	260J	3700JB	66000BX	1000
Acetone	U	3300J	41000X	1000
Carbon Disulfide	U	U	50000X	1000
Vinyl Acetate	U	U	53000X	1000
1,1-Dichloroethene	U	U	56000X	1000
1,1-Dichloroethane	U	U	67000X	1000
cis-1,2-Dichloroethene	U	U	67000	1000
trans-1,2-Dichloroethene	U	U	61000	1000
Chloroform	U	U	66000X	1000
1,2-Dichloroethane	U	U	68000X	1000
2-Butanone	U	U	56000X	1000
1,1,1-Trichloroethane	U	U	63000X	1000
Carbon Tetrachloride	U	U	65000X	1000
Bromodichloromethane	U	U	63000X	1000
1,2-Dichloropropane	U	U	62000X	1000
cis-1,3-Dichloropropene	U	U	65000X	1000
Trichloroethene	U	U	57000X	1000
Dibromochloromethane	U	U	62000X	1000
1,1,2-Trichloroethane	U	U	59000X	1000
Benzene	U	2400J	64000X	1000
trans-1,3-Dichloropropene	U	U	63000X	1000
Bromoform	U	U	62000X	1000
4-Methyl-2-Pentanone	U	U	56000X	1000
2-Hexanone	U	U	57000X	1000
Tetrachloroethene	U	U	60000X	1000
Toluene	64J	7400JB	68000BX	1000
1,1,2,2-Tetrachloroethane	U	U	62000X	1000
Chlorobenzene	U	U	60000X	1000
Ethylbenzene	U	3300J	66000X	1000
Styrene	U	580J	65000X	1000
Xylene (total)	U	37000	240000X	1000
Date Received		07/23/01	07/23/01	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/30/01	07/30/01	07/30/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

TABLE VO-1.7
7001-1891A
S&W REDEVELOPMENT, LLC
TCL VOLATILE ORGANICS

Soil
Medium

All values are ug/Kg dry weight basis

Client Sample I.D Lab Sample I.D Method Blank I.D Quant. Factor	SB-10B-01 FMSD 011891A-04 FMSD VBLKTD 1 29	SB-11B-01 011891A-06 VBLKTD 71.6	SB-15B-01 011891A-16 VBLKTD 11.8	Quant Limits with no Dilution
Chloromethane	4500X	U	U	1000
Bromomethane	3000X	U	U	1000
Vinyl Chloride	4500X	U	U	1000
Chloroethane	2100X	U	U	1000
Methylene Chloride	6000BX	25000JB	3400JB	1000
Acetone	4900X	22000J	4000J	1000
Carbon Disulfide	4900X	U	U	1000
Vinyl Acetate	5400X	U	U	1000
1,1-Dichloroethene	5600X	U	U	1000
1,1-Dichloroethane	6500X	U	U	1000
cis-1,2-Dichloroethene	6300	U	U	1000
trans-1,2-Dichloroethene	5400	U	U	1000
Chloroform	6600X	U	U	1000
1,2-Dichloroethane	6800X	U	U	1000
2-Butanone	6000X	U	U	1000
1,1,1-Trichloroethane	6300X	U	U	1000
Carbon Tetrachloride	6400X	U	U	1000
Bromodichloromethane	6200X	U	U	1000
1,2-Dichloropropane	6100X	U	U	1000
cis-1,3-Dichloropropene	6400X	U	U	1000
Trichloroethene	5800X	U	U	1000
Dibromochloromethane	6300X	U	U	1000
1,1,2-Trichloroethane	5900X	U	U	1000
Benzene	6200X	14000J	3100J	1000
trans-1,3-Dichloropropene	6300X	U	U	1000
Bromoform	6400X	U	U	1000
4-Methyl-2-Pentanone	6000X	U	U	1000
2-Hexanone	6300X	U	U	1000
Tetrachloroethene	6000X	U	U	1000
Toluene	6700BX	51000JB	9400JB	1000
1,1,2,2-Tetrachloroethane	6500X	U	U	1000
Chlorobenzene	5900X	U	U	1000
Ethylbenzene	6400X	18000J	2900J	1000
Styrene	6400X	U	1100J	1000
Xylene (total)	24000X	260000	41000	1000
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	N/A	N/A	N/A	
Date Analyzed	07/30/01	07/30/01	07/30/01	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

Soil

TABLE SV-1 0
7001-1891A
S&W REDEVELOPMENT, LLC
PAH'S

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	SB-9A-01	SB-9B-01	Quant Limits with no Dilution
Lab Sample I.D.	SBLKOQ	011891A-01	011891A-02	
Method Blank I.D.	SBLKOQ	SBLKOQ	SBLKOQ	
Quant. Factor	1.00	5.11	1.17	
Naphthalene	U	120J	280J	330
2-Methylnaphthalene	U	68J	49J	330
Acenaphthylene	U	270J	29J	330
Acenaphthene	U	U	U	330
Fluorene	U	U	14J	330
Phenanthrene	U	450J	48J	330
Anthracene	U	250J	20J	330
Fluoranthene	U	1200J	98J	330
Pyrene	U	910J	100J	330
Benzo(a)anthracene	U	1000J	84J	330
Chrysene	U	1000J	86J	330
Benzo(b)fluoranthene	U	1200J	87J	330
Benzo(k)fluoranthene	U	1100J	80J	330
Benzo(a)pyrene	U	1400J	98J	330
Indeno(1,2,3-cd)pyrene	U	730J	100J	330
Dibenzo(a,h)anthracene	U	240J	37J	330
Benzo(g,h,i)perylene	U	730J	120J	330
Date Received		07/23/01	07/23/01	
Date Extracted	07/30/01	07/30/01	07/30/01	
Date Analyzed	07/31/01	08/02/01	07/31/01	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.1 Soil
7001-1891A
S&W REDEVELOPMENT, LLC
PAH'S

All values are ug/Kg dry weight basis

Client Sample I D.	SB-10A-01	SB-10B-01	SB-10B-01 MS	Quant. Limits with no Dilution
Lab Sample I.D	011891A-03	011891A-04	011891A-04MS	
Method Blank I D.	SBLKOQ	SBLKOQ	SBLKOQ	
Quant. Factor	28.7	158.	157.	
Naphthalene	3300J	290000	240000	330
2-Methylnaphthalene	1100J	45000J	36000J	330
Acenaphthylene	7300J	32000J	22000J	330
Acenaphthene	1200J	10000J	9500JX	330
Fluorene	2100J	52000	36000J	330
Phenanthrene	25000	180000	130000	330
Anthracene	10000	51000J	37000J	330
Fluoranthene	52000	160000	100000	330
Pyrene	45000	96000	76000X	330
Benzo(a)anthracene	38000	58000	41000J	330
Chrysene	34000	53000	37000J	330
Benzo(b)fluoranthene	38000	33000J	20000J	330
Benzo(k)fluoranthene	22000	43000J	30000J	330
Benzo(a)pyrene	42000	42000J	29000J	330
Indeno(1,2,3-cd)pyrene	25000	19000J	18000J	330
Dibenzo(a,h)anthracene	9400J	6700J	6700J	330
Benzo(g,h,i)perylene	21000	18000J	18000J	330
Date Received	07/23/01	07/23/01	07/23/01	
Date Extracted	07/30/01	07/30/01	07/30/01	
Date Analyzed	08/02/01	08/01/01	08/02/01	

See Appendix for qualifier definitions
Note Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution

APPENDIX B

RI Soil Boring Logs

Stearns & Wheler, LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	14 0
Drilling Contractor	Parratt Wolff, Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-16

(Page 1 of 1)

Date Started	4/7/03
Time	12 50 PM
Date Completed	4/7/03
Time	3 30 PM
Weather	overcast snow/cold 25F
Boring Location	adjacent to western holder

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0						0	
		12	0 0	moist gray silt and fine sand with f-c gravel			
2						2	
		9	0 0	1 black ash/CLM, grade to brown silt and fine sand with trace coarse gravel			SB 16
4				silt with coarse gravel	Geoprobe unit is malfuncting will switch to hammer weight/drop	4	
		10	0 0				
6	17					6	
	50/1	0		No recovery	Hard material		
8						8	
	50/4	5	0 0	fine silt with broken concrete pieces and coarse gravel			
10				No recovery		10	
	50/1	0					
12						12	
	50/2	0		No recovery			
14				END OF BORING AT 14 FEET		14	
16						16	
18						18	
20						20	

Notes
Soil boring is believed to be located close to holder wall perhaps in the wall itself or surrounding concrete pad and fill material Soil recoveries are poor with evidence of concrete pieces

SB 16 was collected from 2 4 feet and analyzed for total cyanide

LOG OF BORING SB-16

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\SB 16 bor

Stearns & Wheler, LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	14 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-17

(Page 1 of 1)

Date Started	4/7/03
Time	4 00 PM
Date Completed	4/7/03
Time	4 45 PM
Weather	overcast snow/cold 25F
Boring Location	adjacent to SB 9 01

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	7 6 5 5	18	0 0	brown silt with trace brick pieces (FILL) and f gravel, grade to dark brown clayey silt		0	
2	4 3 4 4	10	0 0	moist brown clayey silt with trace fine gravel		2	
4	4 4 4 5	20	0 0	moist brown clayey silt with trace fine sand seams		4	
6	3 3 3 50/1	12	0 0	wet brown slightly dense silt with fine sand		6	
8	8 9 10 12	6	0 0	wet gray silt with wood fibers	very slight odor detected	8	SB 17
10	5 10 11 18	14	0 5	wet gray silt with trace wood fibers, grade to dense silt with trace fine sand		10	
12	7 11 12 18	18	0 0	moist gray dense silt		12	
14				END OF BORING AT 14 FEET		14	
16						16	
18						18	
20						20	

Notes
SB 17 was collected from 8 10 feet and analyzed for total cyanide

LOG OF BORING SB-17

(Page 1 of 1)

08 20 2003 D:\MSS\Data\Albion\SB 17 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	14 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-18

(Page 1 of 1)

Date Started	4/8/03
Time	7 50 AM
Date Completed	4/8/03
Time	10 20 AM
Weather	overcast cold 30F
Boring Location	adjacent to SB 9 01

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	19	6	0 0	brown fine sand and silt with coarse gravel		0	
	50/0						
2	34	11	0 0	fine brown sand and silt with trace m c gravel		2	
	50/4						
4	29	8	0 1	moist brown silt with sand and f-m gravel		4	
	50/2						
6	50/3	6	0 1	wet fine brown sand with silt and some coarse gravel		6	
8	50/3	1	0 0	moist m-c sand with silt and m-c gravel	Difficult drilling (6 10) hard material encountered destroyed 4 drill cutting bits	8	
10	50/3	4	2 9	gray/green like silt with m c gravel	very slight odor detected	10	SB 18
12	40	20	0 0	moist silt and sand grade to slightly dense brown silt with trace fine sand		12	
	31						
	30						
	32						
14				END OF BORING AT 14 FEET		14	
16						16	
18						18	
20						20	

Notes
SB 18 was collected from 10 12 feet and analyzed for total cyanide

LOG OF BORING SB-18

(Page 1 of 1)

08 20 2003 D:\MSS\Data\Albion\SB 18 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	6 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-19

(Page 1 of 1)

Date Started	4/8/03
Time	10 30 AM
Date Completed	4/8/03
Time	10 55 AM
Weather	overcast cold 30F
Boring Location	adjacent to wood barn

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	10 9 8 4	12	0 8	4 ' silt and sand with fine gravel and brick pieces grade to 8 black fine CLM and ALM	slight odor	0	SB 19
2	4 3 3 3	6	0 3	<1 black CLM (backfill) 5 moist brown clayey silt		2	
4	3 11 10 9 12	12	0 0	moist brown silt with little fine sand		4	
6				END OF BORING AT 6 FEET		6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 19 was collected from 0 2 feet and analyzed for PAHs

LOG OF BORING SB-19

(Page 1 of 1)

04 22 2003 D:\MSS\Data\Albion\SB 19 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	6 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-20

(Page 1 of 1)

Date Started	4/8/03
Time	11 00 AM
Date Completed	4/8/03
Time	11 20 AM
Weather	overcast cold 30F
Boring Location	adjacent to MW 6

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	7 7 9 4	9	0 5	gray silt with black CLM and brick pieces with f m gravel		0	SB 20
2	6 5 5 3	12	0 5	slightly moist brown clayey silt		2	
4	4 5 5 4	18	0 5	moist brown clayey silt		4	
6				END OF BORING AT 6 FEET		6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 20 was collected from 0 2 feet and analyzed for PAHs

LOG OF BORING SB-20

(Page 1 of 1)

08 20 2003 D:\MSS\Data\Albion\SB 20 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	6 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-21

(Page 1 of 1)

Date Started	4/8/03
Time	11 35 AM
Date Completed	4/8/03
Time	11 45 AM
Weather	overcast cold 30F
Boring Location	adjacent to MW 6

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	8 9 11 10	15	0 0	5 silt and sand with m c gravel grade to 10 black fine silt with CLM and brick pieces		0	SB 21
2	4 5 6 6	2	0 0	No recovery	Poor recovery pushed rock	2	
4	1 1 2 7	14	0 0	fine gray/black clayey silt with trace wood piece	slight odor	4	
6				END OF BORING AT 6 FEET		6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 21 was collected from 0 2 feet and analyzed for PAHs

LOG OF BORING SB-21

(Page 1 of 1)

04 22 2003 D:\MSS\Data\Albion\SB 21 bor

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Environmental Engineers and Scientists

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Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	6 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-22

(Page 1 of 1)

Date Started	4/8/03
Time	1 00 PM
Date Completed	4/8/03
Time	1 25 PM
Weather	overcast cold 30F
Boring Location	adjacent to eastern holder

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	16 16 9 8	8	0 0	gray silt with f-m gravel, grade to 3" black CLM grade to brown silt with fine gravel		0	SB 22
2	5 5 7 6	11	0 0	brown slightly dense silt with fine gravel with trace CLM at 3 5		2	
4	6 2 2 3	13	0 0	gray fine silt with f m gravel with trace black CLM and brick pieces at 4 grade to silt with trace fine gravel		4	
6				END OF BORING AT 6 FEET		6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 22 was collected from 0 2 feet and analyzed for PAHs

LOG OF BORING SB-22

(Page 1 of 1)

04 22 2003 D:\MSS\Data\Albion\SB 22 bor

Stearns & Wheler LLC
Environmental Engineers and Sc entists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	6 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-23

(Page 1 of 1)

Date Started	4/8/03
Time	1 30 PM
Date Completed	4/8/03
Time	1 40 PM
Weather	overcast cold 30F
Boring Location	adjacent to eastern holder

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	16 11 12	9	0 0	gray silt with f m gravel with black CLM		0	SB 23
2	5 7 7 6	10	0 0	trace black CLM, grade to silt with f c gravel with white coarse sandy material, grade to brown clayey silt		2	
4	6 13 11 2	12	0 0	brown clayey silt with yellow/tan brick material grade to brown clayey silt with trace wood pieces		4	
6	4			END OF BORING AT 6 FEET		6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 23 was collected from 0 2 feet and analyzed for PAHs

LOG OF BORING SB-23

(Page 1 of 1)

04 22 2003 D:\MSS\Data\Albion\SB 23 bor

Stearns & Wheler, LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
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Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	2 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	*Ian Grassie*
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-24

(Page 1 of 1)

Date Started	4/8/03
Time	1 55 PM
Date Completed	4/8/03
Time	2 00 PM
Weather	overcast cold 30F
Boring Location	southern edge of property

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	4 6 5 4	22	0 0	*gray/black silt with f-m gravel with trace brick pieces and black CLM* grade to gray slightly dense silt		0	SB 24A/B
2				END OF BORING AT 2 FEET		2	
4						4	
6						6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 24A (0 2 inches) and SB 24B (18 24 inches) were collected and analyzed for PAHs

LOG OF BORING SB-24

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\SB 24 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	6 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-25

(Page 1 of 1)

Date Started	4/8/03
Time	2 10 PM
Date Completed	4/8/03
Time	2 25 PM
Weather	overcast cold 30F
Boring Location	adjacent to eastern holder

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	10 10 9 7	7	0 0	4 ' gray silt with trace coarse gravel grade to 3 black CLM with brick fragments and m-c gravel		0	SB 25
2	7 4 8 11	6	0 0	gray silt with trace CLM and brick fragments		2	
4	21 19 11 4	8	0 0	gray silt with brick pieces and f m gravel		4	
6				END OF BORING AT 6 FEET		6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 25 was collected from 0 2 feet and analyzed for PAHs

LOG OF BORING SB-25

(Page 1 of 1)

04 22 2003 D:\MSS\Data\Albion\SB 25 bor

Stearns & Wheler, LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion, New York

Job No L10046 11

Depth of Boring	2 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-26

(Page 1 of 1)

Date Started	4/8/03
Time	2 30 PM
Date Completed	4/8/03
Time	2 40 PM
Weather	overcast cold, 30F
Boring Location	southern edge of property

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	4 4 3 4	18	0 0	brown/gray silt with trace black CLM with f-m gravel		0	SB 26 A/B
2				END OF BORING AT 2 FEET		2	
4						4	
6						6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 26A (0-2 inches) and SB 26B (18 24 inches) were collected and analyzed for PAHs

LOG OF BORING SB-26

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\SB 26 bor

Stearns & Wheler, LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion, New York

Job No L10046 11

Depth of Boring	2 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-27

(Page 1 of 1)

Date Started	4/8/03
Time	2 55 PM
Date Completed	4/8/03
Time	3 10 PM
Weather	overcast cold 30F
Boring Location	southern edge of property

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	7 6 5 7	19	0 0	10" brown silt wi f m gravel and trace brick pieces, grade to 9" black CLM		0	SB 27 A/B
2				END OF BORING AT 2 FEET		2	
4						4	
6						6	
8						8	
10						10	
12						12	
14						14	
16						16	
18						18	
20						20	

Notes
SB 27A (0 2 inches) and SB 27B (18 24 inches) were collected and analyzed for PAHs

LOG OF BORING SB-27

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\SB 27 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion, New York

Job No L10046 11

Depth of Boring	14 0
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-28

(Page 1 of 1)

Date Started	4/8/03
Time	3 20 PM
Date Completed	4/8/03
Time	4 30 PM
Weather	overcast cold 30F
Boring Location	southwest of MW 5

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0	1 1 2	16	0 0	brown silt with organics		0	
2	5 21 20 19 17	14	0 0	slightly moist brown silt with coarse gravel and little brick pieces FILL		2	SB 28
4	50/4	12	0 0			4	
6				moist wet brown silt and sand with trace coarse gravel		6	
8	5 7 6 7	19	0 0	silt and sand with trace f m gravel		8	
10	10 11 9	20	0 0	moist brown silt with trace f gravel		10	
12	17 11 10 19 29	20	0 0	fine slightly dense silt		12	
14				END OF BORING AT 14 FEET		14	
16						16	
18						18	
20						20	

Notes
SB 28 was collected from 2 4 feet and analyzed for total cyanide

LOG OF BORING SB-28

(Page 1 of 1)

08 20 2003 D:\MSS\Data\Albion\SB 28 bor

Stearns & Wheler, LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	13 3
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-29

(Page 1 of 1)

Date Started	4/9/03
Time	7 50 AM
Date Completed	4/9/03
Time	8 25 AM
Weather	overcast flurries 30F
Boring Location	former holder platform

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0				~1 5 concrete		0	
2	4 3 2	8	0 0	brown silt and sand with f gravel grade to brown silt with trace black CLM with brick pieces (FILL)		2	SB 29
4	2 3 3	6	0 0	moist gray clayey silt		4	
6	3 2 2	6	0 0			6	
8	2 2 10			gray clayey silt with trace coarse gravel		8	
10	8 9 6	24	0 0	slightly moist dense clayey silt		10	
12	18 21 40	24	0 0	gray clayey silt with some fine sand		12	
	50/4 21 40 50/3	18	0 0	dense sand and silt with trace f gravel	Refusal @ 13 3		
14				END OF BORING AT 13 3 FEET		14	
16						16	
18						18	
20						20	

Notes
SB 29 was collected from 2 4 feet and analyzed for PAHs

LOG OF BORING SB-29

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\SB 29 bor

Stearns & Wheler LLC
Environmental Engineers and Scientists

Niagara Mohawk Power Corporation
Albion Former MGP
Remedial Investigation
Albion New York

Job No L10046 11

Depth of Boring	12 3
Drilling Contractor	Parratt Wolff Inc
Drill Rig Type	Mobile B 56 Combo Rig
Driller	Ian Grassie
Drilling Method	Hollow Stem Augers
Hammer Weight/Drop	140 lb /30
Sampling Method	Split Spoon 1 3/8 I D
Logged By	MSS
Surveyed By	NMPC

LOG OF BORING SB-30

Date Started	4/9/03
Time	8 35 AM
Date Completed	4/9/03
Time	9 20 AM
Weather	overcast flurries 30F
Boring Location	former holder platform

Depth in Feet	Blow Count	Recovery (inches)	PID (ppm)	DESCRIPTION	REMARKS	Depth in Feet	Analytical Samples
0				~1 0 concrete		0	
2	4 3 2	8	0 0	gray silt with trace black CLM grade to brown silt		2	SB 30
4	2 3 3	6	0 0	slightyl moist gray silt with some f c gravel		4	
6	3 2 2	6	0 0	moist silt and sand with f c gravel		6	
8	2 10 8	24	0 0	moist clayey silt with trace coarse gravel		8	
10	9 6 18					10	
	21 40	24	0 0				
12	50/4 40 50/3	18	0 0	dense silt with trace fine sand and gravel	Refusal @ 12 3	12	
				END OF BORING AT 12 3 FEET			
14						14	
16						16	
18						18	
20						20	

Notes
SB 30 was collected from 1 3 feet and analyzed for PAHs

LOG OF BORING SB-30

(Page 1 of 1)

08 20 2003 D \MSS\Data\Albion\SB 30 bor

APPENDIX C

RI Laboratory Analytical Results

Job Number 203415

LABORATORY TEST RESULTS

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC | PROJECT NIMO-ALBION | ATTN Dan Ours

Customer Sample ID SB-29
Date Sampled 04/09/2003
Time Sampled 08 35
Sample Matrix Soil

Laboratory Sample ID 203415 5
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	72 9			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	27 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	3900			170	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	2-Methylnaphthalene, Solid*	1300	J		150	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Acenaphthylene, Solid*	390	J		60	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Acenaphthene, Solid*	1000	J		81	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Fluorene, Solid*	1600	J		110	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Phenanthrene, Solid*	3300			130	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Anthracene, Solid*	1300	J		65	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Fluoranthene, Solid*	4500			120	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Pyrene, Solid*	4800			100	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Benzo(a)anthracene, Solid*	3900			81	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Chrysene, Solid*	4100			92	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Benzo(b)fluoranthene, Solid*	4200			210	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Benzo(k)fluoranthene, Solid*	3500		H	210	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Benzo(a)pyrene, Solid*	4000		H	87	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	1800			97	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Dibenzo(a,h)anthracene, Solid*	620	J		97	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw
	Benzo(ghi)perylene, Solid*	1600	J		92	1800	1 00000	ug/Kg	16524		04/21/03 2118	jdw

0000033

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO ALBION

ATTN Dan Ours

Customer Sample ID SB-30
Date Sampled 04/09/2003
Time Sampled 09 30
Sample Matrix Soil

Laboratory Sample ID 203415-6
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D 2216												
	/ Solids, Solid	82 3			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	/ Moisture, Solid	17 7			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	6200		J	1500	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	2-Methylnaphthalene, Solid*	3900		J	1300	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Acenaphthylene, Solid*	7700		J	510	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Acenaphthene, Solid*	1300		J	700	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Fluorene, Solid*	2800		J	930	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Phenanthrene, Solid*	17000			1100	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Anthracene, Solid*	11000		J	560	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Fluoranthene, Solid*	58000			1000	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Pyrene, Solid*	72000			880	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Benzo(a)anthracene, Solid*	61000			700	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Chrysene, Solid*	56000			790	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Benzo(b)fluoranthene, Solid*	37000		M	1800	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Benzo(k)fluoranthene, Solid*	59000		M	1800	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Benzo(a)pyrene, Solid*	60000			740	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	35000			840	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Dibenzo(a,h)anthracene, Solid*	15000		J	840	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw
	Benzo(ghi)perylene, Solid*	32000			790	15000	10 00000	ug/Kg	16524		04/19/03 0139	jdw

0000054

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-19
Date Sampled 04/08/2003
Time Sampled 11 05
Sample Matrix Soil

Laboratory Sample ID 203415 7
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D 2216												
	% Solids, Solid	85 2			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	14 8			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	100000	J		30000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	2 Methylnaphthalene, Solid*	90000	J		26000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Acenaphthylene, Solid*	210000	J		10000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Acenaphthene, Solid*	63000	J		14000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Fluorene, Solid*	210000	J	M	19000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Phenanthrene, Solid*	1200000			22000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Anthracene, Solid*	400000			11000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Fluoranthene, Solid*	1500000			21000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Pyrene, Solid*	1200000			18000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Benzo(a)anthracene, Solid*	720000			14000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Chrysene, Solid*	600000			16000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Benzo(b)fluoranthene, Solid*	440000			35000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Benzo(k)fluoranthene, Solid*	590000			36000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Benzo(a)pyrene, Solid*	590000			15000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	300000	J		17000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Dibenzo(a,h)anthracene, Solid*	130000	J	M	17000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw
	Benzo(ghi)perylene, Solid*	280000	J		16000	310000	200 0000	ug/Kg	16524		04/23/03 1229	jdw

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-20
Date Sampled 04/08/2003
Time Sampled 11 25
Sample Matrix Soil

Laboratory Sample ID 203415 8
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	91 0			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	9 0			0 10	0 10	1	/	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	3200	J		690	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	2-Methylnaphthalene, Solid*	2200	J		610	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Acenaphthylene, Solid*	5000	J		240	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Acenaphthene, Solid*	1100	J		330	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Fluorene, Solid*	3700	J	M	430	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Phenanthrene, Solid*	30000			520	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Anthracene, Solid*	13000			260	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Fluoranthene, Solid*	48000			480	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Pyrene, Solid*	43000			410	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Benzo(a)anthracene, Solid*	40000			330	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Chrysene, Solid*	35000			370	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Benzo(b)fluoranthene, Solid*	32000		M	820	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Benzo(k)fluoranthene, Solid*	25000		M	850	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Benzo(a)pyrene, Solid*	34000			350	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	13000			390	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Dibenzo(a,h)anthracene, Solid*	5900	J		390	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw
	Benzo(ghi)perylene, Solid*	10000			370	7200	5 00000	ug/Kg	16524		04/21/03 2306	jdw

0000096

* In Description = Dry Wgt

Job Number 203415

LABORATORY TEST RESULTS

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-21
Date Sampled 04/08/2003
Time Sampled 11 55
Sample Matrix Soil

Laboratory Sample ID 203415 9
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	82 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	17 9			0 10	0 10	1	/	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	3200	J		1500	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	2-Methylnaphthalene, Solid*	2800	J		1300	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Acenaphthylene, Solid*	3700	J		530	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Acenaphthene, Solid*	1900	J		720	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Fluorene, Solid*	1300	J	M	960	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Phenanthrene, Solid*	22000			1200	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Anthracene, Solid*	7700	J		580	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Fluoranthene, Solid*	49000			1100	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Pyrene, Solid*	48000			910	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Benzo(a)anthracene, Solid*	47000			720	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Chrysene, Solid*	46000			820	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Benzo(b)fluoranthene, Solid*	59000			1800	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Benzo(k)fluoranthene, Solid*	54000		H	1900	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Benzo(a)pyrene, Solid*	75000			770	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	60000			870	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Dibenzo(a,h)anthracene, Solid*	21000			870	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw
	Benzo(ghi)perylene, Solid*	56000			820	16000	10 00000	ug/Kg	16524		04/19/03 0350	jdw

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-24B
Date Sampled 04/07/2003
Time Sampled 14 00
Sample Matrix Soil

Laboratory Sample ID 203415-14
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	82 5			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	17 5			0 10	0 10	1	/	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	2300	J		1500	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	2-Methylnaphthalene, Solid*	1500	J		1300	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Acenaphthylene, Solid*	3000	J		520	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Acenaphthene, Solid*	1500	J		710	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Fluorene, Solid*	1500	J	M	950	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Phenanthrene, Solid*	20000			1100	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Anthracene, Solid*	8800	J		570	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Fluoranthene, Solid*	50000			1000	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Pyrene, Solid*	52000			900	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Benzo(a)anthracene, Solid*	60000			710	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Chrysene, Solid*	55000			810	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Benzo(b)fluoranthene, Solid*	58000		M	1800	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Benzo(k)fluoranthene, Solid*	53000		H	1900	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Benzo(a)pyrene, Solid*	68000			760	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	44000			860	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Dibenzo(a,h)anthracene, Solid*	15000	J		860	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw
	Benzo(ghi)perylene, Solid*	36000			810	16000	10 00000	ug/Kg	16524		04/19/03 0602	jdw

* In Description = Dry Wgt

Job Number 203415

LABORATORY TEST RESULTS

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-22
Date Sampled 04/08/2003
Time Sampled 13 25
Sample Matrix Soil

Laboratory Sample ID 203415-10
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	95 9			0 10	0 10	1	/	16084		04/16/03 0000	ksw
	/ Moisture, Solid	4 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	ND	U		130	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	2-Methylnaphthalene, Solid*	ND	U		120	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Acenaphthylene, Solid*	ND	U		45	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Acenaphthene, Solid*	ND	U		62	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Fluorene, Solid*	ND	U		82	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Phenanthrene, Solid*	370	J		99	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Anthracene, Solid*	230	J		49	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Fluoranthene, Solid*	1200	J		91	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Pyrene, Solid*	960	J		78	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Benzo(a)anthracene, Solid*	1100	J		62	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Chrysene, Solid*	1100	J		70	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Benzo(b)fluoranthene, Solid*	840	J		160	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Benzo(k)fluoranthene, Solid*	1500			160	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Benzo(a)pyrene, Solid*	1100	J		66	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	290	J		74	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Dibenzo(a,h)anthracene, Solid*	ND	U		74	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw
	Benzo(ghi)perylene, Solid*	260	J		70	1400	1 00000	ug/Kg	16524		04/23/03 1349	jdw

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-23
Date Sampled 04/08/2003
Time Sampled 13 50
Sample Matrix Soil

Laboratory Sample ID 203415-11
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D 2216												
	% Solids, Solid	80 9			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	19 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	2100	J		1600	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	2-Methylnaphthalene, Solid*	1400	J		1400	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Acenaphthylene, Solid*	3000	J		530	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Acenaphthene, Solid*	1600	J		730	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Fluorene, Solid*	2500	J		970	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Phenanthrene, Solid*	22000			1200	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Anthracene, Solid*	9900	J		580	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Fluoranthene, Solid*	38000			1100	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Pyrene, Solid*	30000			920	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Benzo(a)anthracene, Solid*	44000			730	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Chrysene, Solid*	39000			820	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Benzo(b)fluoranthene, Solid*	51000		M	1800	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Benzo(k)fluoranthene, Solid*	64000		M	1900	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Benzo(a)pyrene, Solid*	64000			780	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	21000			870	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Dibenzo(a,h)anthracene, Solid*	9500	J	M	870	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw
	Benzo(ghi)perylene, Solid*	17000			820	16000	10 00000	ug/Kg	16524		04/23/03 1416	jdw

0000174

* In Description = Dry Wgt

Job Number 203415

LABORATORY TEST RESULTS

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-25
Date Sampled 04/08/2003
Time Sampled 14 30
Sample Matrix Soil

Laboratory Sample ID 203415-12
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	87 0			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	13 0			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	650	J		140	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	2-Methylnaphthalene, Solid*	290	J		130	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Acenaphthylene, Solid*	1200	J		50	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Acenaphthene, Solid*	300	J		68	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Fluorene, Solid*	310	J		90	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Phenanthrene, Solid*	6000			110	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Anthracene, Solid*	1100	J		54	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Fluoranthene, Solid*	8100			99	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Pyrene, Solid*	5600			86	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Benzo(a)anthracene, Solid*	4300			68	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Chrysene, Solid*	5000			77	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Benzo(b)fluoranthene, Solid*	6400		M	170	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Benzo(k)fluoranthene, Solid*	7000		M	180	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Benzo(a)pyrene, Solid*	6900		H	72	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	2500			81	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Dibenzo(a,h)anthracene, Solid*	930	J	M	81	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw
	Benzo(ghi)perylene, Solid*	2300			77	1500	1 00000	ug/Kg	16524		04/23/03 1442	jdw

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-24A
Date Sampled 04/07/2003
Time Sampled 14 00
Sample Matrix Soil

Laboratory Sample ID 203415 13
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D 2216												
	% Solids, Solid	85 3			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	14 7			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	800		J	570	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	2-Methylnaphthalene, Solid*	580		J	500	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Acenaphthylene, Solid*	1300		J	200	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Acenaphthene, Solid*	1000		J	270	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Fluorene, Solid*	510		J M	360	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Phenanthrene, Solid*	6200			430	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Anthracene, Solid*	2700		J	220	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Fluoranthene, Solid*	14000			390	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Pyrene, Solid*	12000			340	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Benzo(a)anthracene, Solid*	13000			270	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Chrysene, Solid*	13000		M	300	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Benzo(b)fluoranthene, Solid*	16000		M	680	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Benzo(k)fluoranthene, Solid*	24000		M	700	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Benzo(a)pyrene, Solid*	22000			290	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	9800			320	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Dibenzo(a,h)anthracene, Solid*	3700		J M	320	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw
	Benzo(ghi)perylene, Solid*	9000			300	5900	4 00000	ug/Kg	16524		04/23/03 1509	jdw

* In Description = Dry Wgt

Job Number 203415

LABORATORY TEST RESULTS

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO ALBION

ATTN Dan Ours

Customer Sample ID SB-26A
Date Sampled 04/07/2003
Time Sampled 14 40
Sample Matrix Soil

Laboratory Sample ID 203415-15
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D 2216												
	% Solids, Solid	88 9			0 10	0 10	1	/	16084		04/16/03 0000	ksw
	/ Moisture, Solid	11 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	2300	J		560	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	2-Methylnaphthalene, Solid*	1900	J		490	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Acenaphthylene, Solid*	1900	J		190	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Acenaphthene, Solid*	790	J		260	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Fluorene, Solid*	790	J	M	350	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Phenanthrene, Solid*	9200			420	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Anthracene, Solid*	4000	J		210	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Fluoranthene, Solid*	20000			390	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Pyrene, Solid*	23000			340	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Benzo(a)anthracene, Solid*	20000			260	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Chrysene, Solid*	19000			300	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Benzo(b)fluoranthene, Solid*	23000		M	670	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Benzo(k)fluoranthene, Solid*	20000		M	690	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Benzo(a)pyrene, Solid*	25000			280	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	23000			320	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Dibenzo(a,h)anthracene, Solid*	8200			320	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw
	Benzo(ghi)perylene, Solid*	23000			300	5800	4 00000	ug/Kg	16524		04/25/03 1742	jdw

0000237

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-26B
Date Sampled 04/07/2003
Time Sampled 14 40
Sample Matrix Soil

Laboratory Sample ID 203415 16
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	88 9			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	11 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	1200		J	280	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	2-Methylnaphthalene, Solid*	790		J	250	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Acenaphthylene, Solid*	1500		J	98	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Acenaphthene, Solid*	710		J	130	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Fluorene, Solid*	420		J	M	180	2900	2 00000	ug/Kg	16524	04/25/03 1809	jdw
	Phenanthrene, Solid*	5400			210	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Anthracene, Solid*	2400		J	110	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Fluoranthene, Solid*	13000			200	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Pyrene, Solid*	15000			170	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Benzo(a)anthracene, Solid*	13000			130	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Chrysene, Solid*	13000			150	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Benzo(b)fluoranthene, Solid*	16000		M	340	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Benzo(k)fluoranthene, Solid*	12000		M	350	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Benzo(a)pyrene, Solid*	17000			140	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	17000			160	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Dibenzo(a,h)anthracene, Solid*	6900		H	160	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw
	Benzo(ghi)perylene, Solid*	15000			150	2900	2 00000	ug/Kg	16524		04/25/03 1809	jdw

0000258

* In Description = Dry Wgt

Job Number 203415

LABORATORY TEST RESULTS

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC | PROJECT NIMO-ALBION | ATTN Dan Ours

Customer Sample ID SB-27A
Date Sampled 04/07/2003
Time Sampled 15 10
Sample Matrix Soil

Laboratory Sample ID 203415-17
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	88 3			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	11 7			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	ND	U		140	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	2-Methylnaphthalene, Solid*	ND	U		120	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Acenaphthylene, Solid*	ND	U		49	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Acenaphthene, Solid*	ND	U		66	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Fluorene, Solid*	ND	U		88	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Phenanthrene, Solid*	540	J		110	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Anthracene, Solid*	180	J		53	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Fluoranthene, Solid*	1000	J		97	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Pyrene, Solid*	800	J		84	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Benzo(a)anthracene, Solid*	600	J		66	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Chrysene, Solid*	610	J	M	75	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Benzo(b)fluoranthene, Solid*	560	J		170	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Benzo(k)fluoranthene, Solid*	660	J		170	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Benzo(a)pyrene, Solid*	550	J		71	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Indeno(1,2,3-cd)pyrene, Solid*	200	J		79	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Dibenzo(a,h)anthracene, Solid*	ND	U		79	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw
	Benzo(ghi)perylene, Solid*	170	J	M	75	1500	1 00000	ug/Kg	16524		04/23/03 1627	jdw

67200000

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/28/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN Dan Ours

Customer Sample ID SB-27B
Date Sampled 04/07/2003
Time Sampled 15 10
Sample Matrix Soil

Laboratory Sample ID 203415-18
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	80 9			0 10	0 10	1	/	16084		04/16/03 0000	ksw
	% Moisture, Solid	19 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
8270C	Semivolatile Organics											
	Naphthalene, Solid*	60000	J		16000	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	2-Methylnaphthalene, Solid*	27000	J		14000	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Acenaphthylene, Solid*	100000	J		5300	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Acenaphthene, Solid*	19000	J		7300	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Fluorene, Solid*	90000	J	M	9700	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Phenanthrene, Solid*	720000			12000	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Anthracene, Solid*	280000			5800	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Fluoranthene, Solid*	1000000			11000	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Pyrene, Solid*	990000			9200	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Benzo(a)anthracene, Solid*	650000			7300	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Chrysene, Solid*	590000			8200	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Benzo(b)fluoranthene, Solid*	390000		M	18000	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Benzo(k)fluoranthene, Solid*	520000		M	19000	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Benzo(a)pyrene, Solid*	510000			7800	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Indeno(1,2,3 cd)pyrene, Solid*	300000			8700	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Dibenzo(a,h)anthracene, Solid*	110000	J		8700	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw
	Benzo(ghi)perylene, Solid*	290000			8200	160000	100 0000	ug/Kg	16524		04/25/03 1835	jdw

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/21/2003

CUSTOMER: S&W REDEVELOPMENT of North America, LLC

PROJECT: NIMO-ALBION

ATTN: Dan Ours

Customer Sample ID SB-16
Date Sampled 04/07/2003
Time Sampled 15 35
Sample Matrix Soil

Laboratory Sample ID 203415-1
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	83 3			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	16 7			0 10	0 10	1	%	16084		04/16/03 0000	ksw
9012	Cyanide (Colorimetric)											
	Cyanide, Total, Solid*	32700			324	3000	5 0	ug/Kg	16227		04/17/03 1551	dtn

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/21/2003

CUSTOMER S&W REDEVELOPMENT of North America, LLC

PROJECT: NIMO-ALBION

ATTN. Dan Ours

Customer Sample ID SB-17
Date Sampled 04/07/2003
Time Sampled 16 50
Sample Matrix Soil

Laboratory Sample ID 203415-2
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	80 9			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	19 1			0 10	0 10	1	%	16084		04/16/03 0000	ksw
9012	Cyanide (Colorimetric)											
	Cyanide, Total, Solid*	507	B		67 4	624	1 0	ug/Kg	16227		04/17/03 1546	dtn

0004777

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/21/2003

CUSTOMER: S&W REDEVELOPMENT of North America, LLC

PROJECT: NIMO-ALBION

ATTN. Dan Ours

Customer Sample ID SB-18
Date Sampled 04/08/2003
Time Sampled 10 20
Sample Matrix Soil

Laboratory Sample ID 203415-3
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	82 6			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	17 4			0 10	0 10	1	%	16084		04/16/03 0000	ksw
9012	Cyanide (Colorimetric)											
	Cyanide, Total, Solid*	4200			63 5	588	1 0	ug/Kg	16227		04/17/03 1547	dtn

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number 203415

Date 04/21/2003

CUSTOMER. S&W REDEVELOPMENT of North America, LLC

PROJECT NIMO-ALBION

ATTN. Dan Ours

Customer Sample ID SB-28
Date Sampled 04/08/2003
Time Sampled 16 30
Sample Matrix Soil

Laboratory Sample ID 203415-4
Date Received 04/11/2003
Time Received 09 25

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216	% Solids, Solid	85 2			0 10	0 10	1	%	16084		04/16/03 0000	ksw
	% Moisture, Solid	14 8			0 10	0 10	1	%	16084		04/16/03 0000	ksw
9012	Cyanide (Colorimetric) Cyanide, Total, Solid*	10900			61 5	570	1 0	ug/Kg	16227		04/17/03 1548	dtn

* In Description = Dry Wgt