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SUBSURFACE (PHASE II) INVESTIGATION REPORT

299 Cayuga Street

Village of Union Springs, New York

Project Number: 40212

April 2009

299 Cayuga Street

VILLAGE OF UNION SPRINGS, CAYUGA COUNTY, NEW YORK

Subsurface (Phase II) Investigation

AKRF Project Number: 40212

Prepared for:

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1.0 INTRODUCTION

On March 19, 2009 AKRF, Inc. (AKRF) conducted a Subsurface (Phase II) Investigation on the property located at 299 Cayuga Street Site in the Village of Union Springs, New York (Site). A site location map is provided as Figure 1. The Phase II investigation was intended to determine whether current or former on- or off-Site activities had adversely affected environmental conditions at the Site. The scope of work was based on the findings of AKRF's Phase I Environmental Site Assessment (ESA), dated April 2009, and a Phase I ESA, dated March 2003, prepared by Environmental Compliance Management Corporation. The proposed Phase II scope included a soil boring and groundwater investigation; however, groundwater was not encountered during field activities. The proposed Phase II scope included the drilling of five soil borings and the collection of soil samples for field screening and laboratory analysis. This report describes methods and results of the Phase II investigation conducted by AKRF.

2.0 SITE BACKGROUND

2.1 Previous Environmental Investigations

***299 and 303 Cayuga Street Phase I Environmental Site Assessment*, AKRF, Inc., April 2009**

A Phase I ESA was conducted at the study site by AKRF in April 2009. Recognized Environmental Conditions identified in this investigation included the following:

- The Property contained a convenience store and gasoline filling station, a car wash, and an asphalt-paved surface parking lot. The current and past use of the Property as a gasoline filling station could potentially have caused a release of petroleum contamination to soil or groundwater. The underground storage tank leak detection system reported in the environmental database for all the tanks currently in use at the Property did not indicate any releases of petroleum. Registration for the current USTs was not up to date with the NYSDEC, and the compliance status should be further evaluated and addressed, as warranted. In, addition, there was no documentation found for maintenance, leak detection, fluid measurement records, closure sampling related to the former underground tanks, or activities related to the former site building. Historical or undocumented spills could have contaminated soil and groundwater beneath the site.
- Lakeside Trading/Route 90, the current owner located on the Property, was listed in the Petroleum Bulk Storage database for one 550-gallon kerosene aboveground storage tank (AST) that was closed and removed, three 6,000-gallon gasoline underground storage tanks (USTs) that were closed and removed, three 5,000-gallon gasoline USTs (two of which were unregistered and one was closed and removed), one 5,000-gallon diesel UST that was administratively closed, one 10,000-gallon gasoline UST that was unregistered, and one 3,000-gallon kerosene UST that was unregistered.
- Express Mart at 299 Cayuga Street, a previous owner located on the Property, was listed in the New York Spills Database for three spills. The facility was listed with one closed status spill in June 2000. The release was reported to have been due to a faulty shutoff valve on a fuel line hose on a customer's vehicle. The quantity spilled was listed as 5 gallons. The release was reported to have been cleaned with speedy dry (absorbent) and the spill achieved a closed regulatory status in October 2000. In November 2001, a spill was reported at the facility due to an accidental release of gasoline from a filling nozzle on pavement. The quantity spilled was reported as 8 gallons. Cleanup activities were initiated and the spill was

closed on the same date as notification. The facility was also listed with a closed spill in June 2001. The spill file notes indicated that a faulty fuel tank on a customer's car caused a release of petroleum on black top. The quantity spilled was listed as 10 gallons. The release was reported to have been cleaned with speedy dry (an absorbent) and the case achieved a closed regulatory status in April 2002.

- Union Springs Mobil, Route 326 and Route 90, located approximately 460 feet northeast of the Site, was listed in the New York Spills Database for three spills. The facility was listed with one closed status spill in June of 1989 when gasoline fumes were reported after opening a manhole. The spill was closed on the same day it was reported and no further significant information was given about the incident in the regulatory database. The site was also listed with a closed status spill in March 1991 when approximately 2 gallons of gasoline were released on the surrounding pavement due to an overfilled fuel tank on a customer's car. The release was reported to have caused fumes in the office at the facility. Corrective actions were taken and the spill was closed. A spill was reported in August 1988 in the roadway adjacent to this facility due to a faulty hydraulic hose on a tanker trailer. The quantity released was listed as 30 gallons. Residual soil contamination was noted as a result of the incident that was reported cleaned following the day of the incident and the spill was closed in June 1989.

A Phase II investigation was recommended to determine whether the current or historical uses of the study site and the surrounding properties have affected on-site environmental conditions.

***299 and 303 Cayuga Street Phase I Environmental Site Assessment*, Environmental Compliance Management Corporation, September 2003**

In March 2003, Environmental Compliance Management Corporation (ECMC) conducted a Phase I Environmental Site Assessment at the Site. According to ECMC, the Site consisted of two steel and concrete one-story buildings that housed a gasoline station/convenience store and carwash, covered gasoline, diesel, and kerosene delivery pumps, small grass areas, clean fill areas, and gravel parking areas. ECMC reported that the site was listed in the New York Department of Environmental Conservation (NYSDEC) leaking tanks database for three documented spills. Spill# 0060020 occurred at the site on June 8, 2000 due to a gasoline fill valve malfunction and was closed on October 24, 2000. Spill# 0102901 occurred at the site on June 15, 2001 from a faulty fuel tank on a customer's car that leaked approximately 10 gallons of gasoline. The spill was reported to have been cleaned up with speedy-dry and the spill closed in April 2002. Spill# 0107937 occurred at the site on November 3, 2001 due to human error which spilled approximately 8 gallons of gasoline and the spill was cleaned up with speedy-dry. ECMC noted that while the gasoline station and carwash uses at the site could result in potential contamination, there was an underground storage tank leak detection system and the most recent tank test reported no failures. No environmental contamination was identified and no further studies were recommended by ECMC at the Site.

3.0 FIELD ACTIVITIES

3.1 Soil Borings

On March 19, 2009, Paragon Environmental Construction, Inc. of Brewerton, New York advanced five soil borings at the Site, as shown on Figure 2. The soil borings were advanced using a truck-mounted Geoprobe® direct push probe (DPP) unit to depths ranging from 4 to 16 feet below grade. The borings were located adjacent to areas identified in the Phase I

investigation as having a potential to have released contamination to the surrounding media, which included the USTs, dispenser lines, and pumps. Soil samples were collected using four-foot long, two-inch diameter, macrocore piston rod samplers fitted with acetate liners. The soil borings were advanced to depths ranging from 4 to 16 feet below grade. Refusal was encountered at all locations at a depth above groundwater. When shallow refusal was encountered, if feasible, the drilling rig was moved a few feet and a new boring was drilled with a goal of reaching a depth below the adjacent structure (i.e., USTs). The cause of refusal was evaluated as being due to soil conditions (see Section 4.1), as such, boring efforts at each location were abandoned when refusal was encountered at the dense till layer. The maximum depth was 16 feet below grade at refusal. Soil boring logs are provided in Appendix A.

Each sample was split lengthwise and logged by AKRF field personnel. Logging consisted of: describing the soil according to the modified Burmister Classification System; describing any evidence of contamination (e.g., staining, sheens, odors); and screening the soil for organic vapors using a photoionization detector (PID) in one-foot intervals. One soil sample from each boring was selected for laboratory analysis based on PID response and visual indications of contamination and the site setting. Groundwater was not encountered.

Soil samples designated for laboratory analysis were collected using dedicated sampling equipment, placed into laboratory-supplied containers and a chilled cooler, and submitted via courier to Alpha Analytical located in Westborough, New Jersey, a New York State-certified laboratory. Each soil sample was analyzed for volatile organic compounds (VOCs) by EPA Method 8260. In addition, soil samples from SB-3, SB-4, and SB-5 that were drilled around USTs or dispensers that contained diesel fuel or kerosene were also analyzed for semivolatile organic compounds (SVOCs) by EPA Method 8270.

On duplicate sample (analyzed for VOCs and SVOCs) and one trip blank (analyzed for VOCs only) accompanied the sample shipment for quality assurance/quality control (QA/QC) purposes.

4.0 INVESTIGATION RESULTS

4.1 Field Observations

Soil encountered during this investigation consisted of glacial till that contained varying amounts of clay, sand, and gravel. Asphalt and crushed rock were also present in the upper sections of the soil column, indicating that the fill material was present in the upper five feet across the site. At each boring location, refusal was encountered between 4 and 16 feet below grade, above the groundwater table, mostly due to the density of the glacial till layer and encountering expanding clay and sand. Although additional boring locations were attempted, soil conditions were such that groundwater was not encountered during the investigation.

Recovered soil at each boring was transferred from the sampler into sealable plastic bags. The headspace of each sample was screened for VOCs by placing the probe of a Model 580B PID inside the plastic bags. No odors, staining or other evidence of contamination were noted on the screened soil. Based on the field screening results and no groundwater encountered, soil samples designated for laboratory analysis were collected from the bottom interval of each soil boring. Soil descriptions, observations, and PID readings were recorded on the soil boring logs provided in Appendix A.

4.2 Soil Analytical Results

Five discrete soil samples, one from each of five borings (SB-1(3-4), SB-2(5.5-6.5), SB-3(13-14), SB-4(11-12), and SB-5 (15-16)), were collected for laboratory analysis as part of this investigation. Soil sample analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use which represents the lowest value of residential, protection of groundwater, and protection of ecological resources for VOCs and SVOCs. A complete laboratory analytical report is included in Appendix B.

Soil analytical results for VOCs are presented in Table 1. VOCs were detected in one of the five soil samples. SB-2(5.5-6.5'), which was located adjacent to the pump island, contained 1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,4-diethylbenzene, 4-ethyltoluene, benzene, ethylbenzene, isopropylbenzene, methyl tert-butyl ether (MTBE), naphthalene, n-butylbenzene, n-propylbenzene, xylenes, and sec-butylbenzene at concentrations ranging from 0.0032 mg/kg to 0.32 mg/kg. The detected concentrations were well below their respective soil cleanup objectives, if available. Acetone was detected at 0.24 mg/kg in SB-2(5.5-6.5'), above its respective SCO of 0.05 mg/kg. The detected level of acetone was at a concentration not typically reflective of an adverse environmental condition; furthermore, acetone was not known to be used in current or past on-Site operations.

Soil analytical results for SVOCs are presented in Table 2. To accurately quantify the SVOCs for comparison with the established SCOs, the polycyclic aromatic hydrocarbons (PAHs) portion of the SVOCs were re-analyzed in the laboratory at lower detection limits. No SVOCs were detected in the soil samples from this investigation.

5.0 CONCLUSIONS AND RECOMMENDATIONS

On March 19, 2009, AKRF completed a Phase II Subsurface Investigation at the property located at 299 Cayuga Street, Village of Union Springs, New York. The investigation consisted of drilling five soil borings to depths ranging from 4 to 16 feet below grade, collection of continuous soil samples from each boring, field screening each soil sample for evidence of contamination, and laboratory analysis of a selected soil sample from each boring. In general, soil samples were localized in and around known areas of petroleum use (i.e. underground tanks and the dispenser pump islands).

Soil encountered during this investigation consisted of glacial till that contained varying amounts of clay, sand, and gravel. Asphalt and crushed rock were also present in the upper five feet, indicating the presence of fill material. Soil conditions (discussed in Section 4.1) were such that groundwater was not encountered during the investigation. Soil boring logs are provided in Appendix A. Based on topography, groundwater most likely flows to the west toward Cayuga Lake, located approximately ½-mile west of the Site, and estimated to be encountered approximately 20 to 30 feet below grade.

Field screening results indicated petroleum staining was not observed and VOCs were not detected with the PID. Laboratory analysis indicated that low levels of petroleum-related VOCs were detected in SB-2(5.5-6.5'), which was located adjacent to the pump island, at concentrations below the NYSDEC Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use which represents the lowest value of residential, protection of groundwater, and protection of ecological resources. Acetone was detected at a concentration above the Part 375 SCO for Unrestricted Use,

but the concentration was not typically reflective of an adverse environmental condition and was not known to be used in current or past on-Site operations. The nature and levels of VOCs detected in the samples appear to be attributable to the use of the site as a gas station and do not indicate a significant release of petroleum in soil. The status of groundwater remains unknown. Overall, the investigation data did not identify any areas that have been adversely affected by current or former on-site operations.

Despite the lack of significant environmental impacts identified by this study, concentrations of certain VOCs were detected in the soil samples analyzed. The elevated levels are likely reflective of small amounts of petroleum spilled during usage. If such material is excavated as part of any future side development activities at the site, it should be managed in accordance with all applicable state and federal regulations. Soil intended for off-site disposal should be tested in accordance with the requirements of the receiving facility. Transportation of material leaving the site for off-site disposal should be in accordance with federal, state and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc.

6.0 LIMITATIONS

The findings set forth in this report are strictly limited in scope and time to the date of the evaluation described herein. The conclusions and recommendations presented in the report are based solely on the services and any limitations described in this report.

This report may contain conclusions that are based on the analysis of data collected at the time and locations noted in the report through intrusive or non-intrusive sampling. However, further investigation might reveal additional data or variations of the current data, which may differ from our understanding of the conditions presented in this report and require the enclosed recommendations to be reevaluated or modified.

Chemical analyses may have been performed for specific parameters during the course of this investigation, as summarized in the text and tables. It should be noted that additional chemical constituents, not searched for during this investigation, may be present at the site. Due to the nature of the investigation and the limited data available, no warranty, expressed or implied, shall be construed with respect to undiscovered liabilities. The presence of biological hazards, radioactive materials, lead-based paint and asbestos-containing materials was not investigated, unless specified in the report.

Interpretations of the data, including comparison to regulatory standards, guidelines or background values, are not opinions that these comparisons are legally applicable. Furthermore, any conclusions or recommendations should not be construed as legal advice. For such advice, the client is recommended to seek appropriate legal counsel. Disturbance, handling, transportation, storage and disposal of known or potentially contaminated materials is subject to all applicable laws, which may or may not be fully described as part of this report.

The analytical data, conclusions, and/or recommendations provided in this report should not be construed in any way as a classification of waste that may be generated during future disturbance of the project site. Waste(s) generated at the site including excess fill may be considered regulated solid waste and potentially hazardous waste. Requirements for intended disposal facilities should be determined beforehand as the data provided in this report may be insufficient and could vary following additional sampling.

This report may be based solely or partially on data collected, conducted, and provided by, AKRF and/or others. No warranty is expressed or implied by usage of such data. Such data may be included in other investigation reports or documentation. In addition, these reports may have been based upon available previous reports, historical records, documentation from federal, state and local government agencies, personal interviews, and geological mapping. This report is subject, at a minimum, to the limitations of the previous reports, historical documents, availability and accuracy of collected documentation, and personal recollection of those persons interviewed. In certain instances, AKRF has been required to assume that the information provided is accurate with limited or no corroboratory evidence.

This report is intended for the use solely by Cayuga Indian Nation. Reliance by third parties on the information and opinions contained herein is strictly prohibited and requires the written consent of AKRF. AKRF accepts no responsibility for damages incurred by third parties for any decisions or actions taken based on this report. This report must be used, interpreted, and presented in its entirety.

TABLES

Tables 1-2
Cayuga Indian Nation
Union Springs, NY
Subsurface Investigation Soil Analytical Results
Notes

GENERAL

NS : No soil cleanup objective listed.

U : The analyte was not detected at the indicated concentration.

Exceedences are highlighted in bold font.

Part 375 Soil Cleanup Objectives : Soil Clean-up Objectives listed in NYSDEC (New York State Department of Environmental Conservation) "Part 375" Regulations (6 NYCRR Part 375).

mg/kg : milligrams per kilogram = parts per million (ppm)

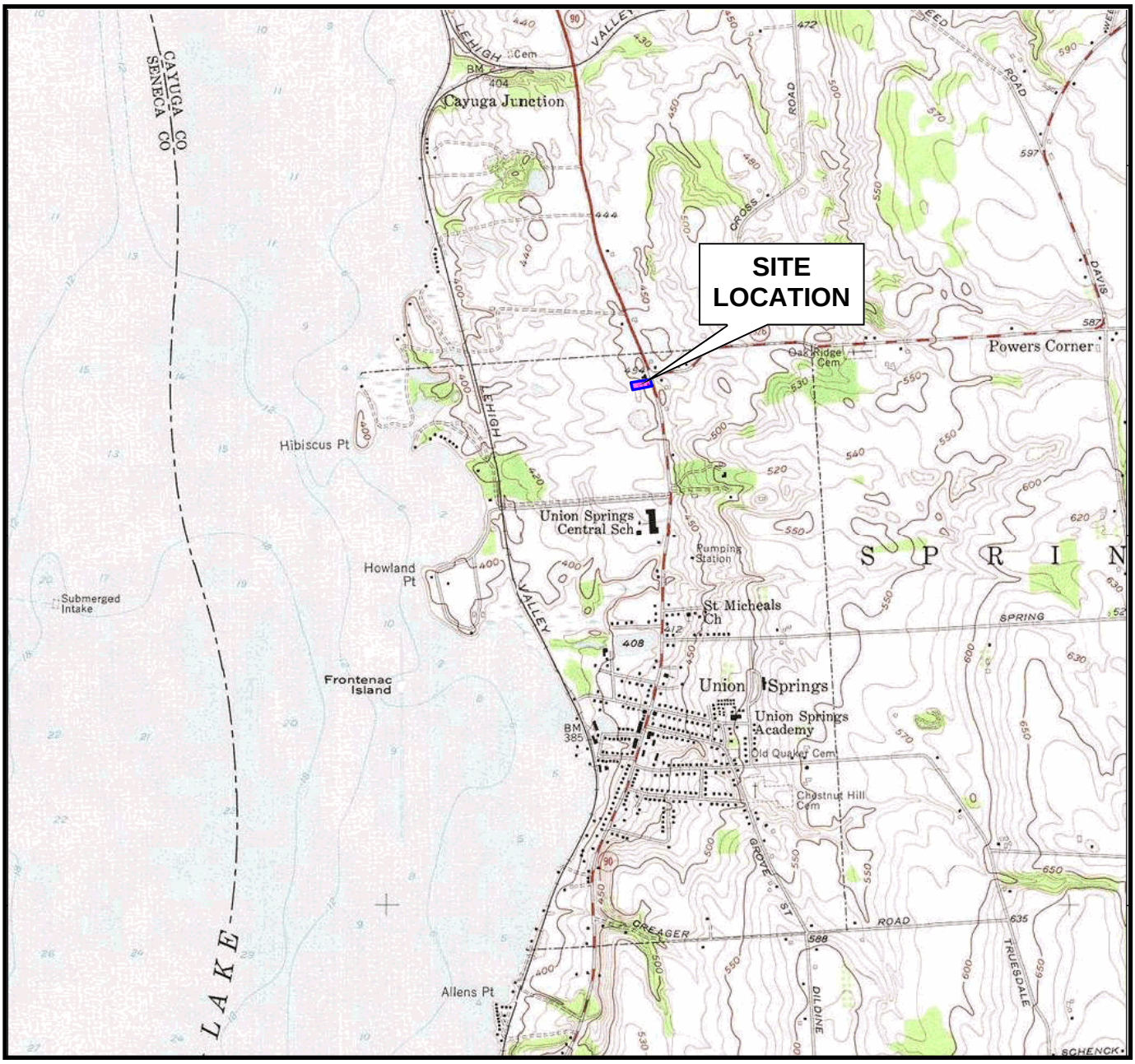
Table 1
Cayuga Indian Nation
Union Springs, NY
Subsurface Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled mg/kg	NYSDEC Part 375 Unrestricted Use	SB-1 (3-4') L0903480-01 3/19/2009	SB-2 (5.5-6.5') L0903480-03 3/19/2009	SB-3 (13-14') L0903480-05 3/19/2009	SB-4 (11-12') L0903480-04 3/19/2009	SB-5 (15-16') L0903480-02 3/19/2009	DUPLICATE L0903480-06 3/19/2009
1,1,1,2-Tetrachloroethane	NS	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
1,1,1-Trichloroethane	0.68	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
1,1,2,2-Tetrachloroethane	NS	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
1,1,2-Trichloroethane	NS	0.0044 U	0.0041 U	0.0043 U	0.004 U	0.0041 U	0.0041 U
1,1-Dichloroethane	0.27	0.0044 U	0.0041 U	0.0043 U	0.004 U	0.0041 U	0.0041 U
1,1-Dichloroethene	0.33	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
1,1-Dichloropropene	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,2,3-Trichlorobenzene	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,2,3-Trichloropropane	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
1,2,4,5-Tetramethylbenzene	NS	0.012 U	0.048	0.011 U	0.011 U	0.011 U	0.011 U
1,2,4-Trichlorobenzene	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,2,4-Trimethylbenzene	3.6	0.015 U	0.25	0.014 U	0.013 U	0.014 U	0.014 U
1,2-Dibromo-3-chloropropane	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,2-Dibromoethane	NS	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
1,2-Dichlorobenzene	1.1	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,2-Dichloroethane	0.02	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
1,2-Dichloropropane	NS	0.01 U	0.0096 U	0.0099 U	0.0093 U	0.0096 U	0.0095 U
1,3,5-Trimethylbenzene	8.4	0.015 U	0.072	0.014 U	0.013 U	0.014 U	0.014 U
1,3-Dichlorobenzene	2.4	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,3-Dichloropropane	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,4-Dichlorobenzene	1.8	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
1,4-Diethylbenzene	NS	0.012 U	0.1	0.011 U	0.011 U	0.011 U	0.011 U
2,2-Dichloropropane	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
2-Butanone	0.12	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
2-Hexanone	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
4-Ethyltoluene	NS	0.012 U	0.15	0.011 U	0.011 U	0.011 U	0.011 U
4-Methyl-2-pentanone	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
Acetone	0.05	0.029 U	**0.24**	0.028 U	0.026 U	0.027 U	0.027 U
Acrylonitrile	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
Benzene	0.06	0.0029 U	0.0052	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Bromobenzene	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
Bromochloromethane	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
Bromodichloromethane	NS	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Bromoform	NS	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
Bromomethane	NS	0.0059 U	0.0055 U	0.0057 U	0.0053 U	0.0055 U	0.0054 U
Carbon disulfide	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
Carbon tetrachloride	0.76	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Chlorobenzene	1.1	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Chloroethane	NS	0.0059 U	0.0055 U	0.0057 U	0.0053 U	0.0055 U	0.0054 U
Chloroform	0.37	0.0044 U	0.0041 U	0.0043 U	0.004 U	0.0041 U	0.0041 U
Chloromethane	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
cis-1,2-Dichloroethene	0.25	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
cis-1,3-Dichloropropene	NS	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Dibromochloromethane	NS	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Dibromomethane	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
Dichlorodifluoromethane	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
Ethylbenzene	1	0.0029 U	0.033	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Hexachlorobutadiene	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
Isopropylbenzene	NS	0.0029 U	0.0041	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Methyl tert butyl ether	0.93	0.0059 U	0.32	0.0057 U	0.0053 U	0.0055 U	0.0054 U
Methylene chloride	0.05	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
Naphthalene	12	0.015 U	0.12	0.014 U	0.013 U	0.014 U	0.014 U
n-Butylbenzene	12	0.0029 U	0.022	0.0028 U	0.0026 U	0.0027 U	0.0027 U
n-Propylbenzene	3.9	0.0029 U	0.021	0.0028 U	0.0026 U	0.0027 U	0.0027 U
o-Chlorotoluene	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
o-Xylene	0.26	0.0059 U	0.063	0.0057 U	0.0053 U	0.0055 U	0.0054 U
p/m-Xylene	0.26	0.0059 U	0.14	0.0057 U	0.0053 U	0.0055 U	0.0054 U
p-Chlorotoluene	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
p-Isopropyltoluene	NS	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
sec-Butylbenzene	11	0.0029 U	0.0032	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Styrene	NS	0.0059 U	0.0055 U	0.0057 U	0.0053 U	0.0055 U	0.0054 U
tert-Butylbenzene	5.9	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
Tetrachloroethene	1.3	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Toluene	0.7	0.0044 U	0.0041 U	0.0043 U	0.004 U	0.0041 U	0.0041 U
trans-1,2-Dichloroethene	0.19	0.0044 U	0.0041 U	0.0043 U	0.004 U	0.0041 U	0.0041 U
trans-1,3-Dichloropropene	NS	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Trichloroethene	0.47	0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.0027 U	0.0027 U
Trichlorofluoromethane	NS	0.015 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U
Vinyl acetate	NS	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.027 U
Vinyl chloride	0.02	0.0059 U	0.0055 U	0.0057 U	0.0053 U	0.0055 U	0.0054 U

Table 2
Cayuga Indian Nation
Union Springs, NY
Subsurface Investigation Soil Analytical Results
Semi-*Volatile Organic Compounds*

Client ID Lab Sample ID Date Sampled mg/kg	NYSDEC Part 375 Unrestricted Use	SB-3 (13-14') L0903480-05 3/19/2009	SB-4 (11-12') L0903480-04 3/19/2009	SB-5 (15-16') L0903480-02 3/19/2009	DUPLICATE L0903480-06 3/19/2009
1,2,4,5-Tetrachlorobenzene	NS	1.5 U	1.4 U	1.5 U	1.4 U
1,2,4-Trichlorobenzene	NS	0.38 U	0.35 U	0.37 U	0.36 U
1,2-Dichlorobenzene	1.1	0.38 U	0.35 U	0.37 U	0.36 U
1,3-Dichlorobenzene	2.4	0.38 U	0.35 U	0.37 U	0.36 U
1,4-Dichlorobenzene	1.8	0.38 U	0.35 U	0.37 U	0.36 U
2,4,5-Trichlorophenol	NS	0.38 U	0.35 U	0.37 U	0.36 U
2,4,6-Trichlorophenol	NS	0.38 U	0.35 U	0.37 U	0.36 U
2,4-Dichlorophenol	NS	0.76 U	0.71 U	0.73 U	0.72 U
2,4-Dimethylphenol	NS	0.38 U	0.35 U	0.37 U	0.36 U
2,4-Dinitrophenol	NS	1.5 U	1.4 U	1.5 U	1.4 U
2,4-Dinitrotoluene	NS	0.38 U	0.35 U	0.37 U	0.36 U
2,6-Dinitrotoluene	NS	0.38 U	0.35 U	0.37 U	0.36 U
2-Chloronaphthalene	NS	0.015 U	0.014 U	0.015 U	0.014 U
2-Chlorophenol	NS	0.45 U	0.42 U	0.44 U	0.43 U
2-Methylnaphthalene	NS	0.015 U	0.014 U	0.015 U	0.014 U
2-Methylphenol	0.33	0.45 U	0.42 U	0.44 U	0.43 U
2-Nitroaniline	NS	0.38 U	0.35 U	0.37 U	0.36 U
2-Nitrophenol	NS	1.5 U	1.4 U	1.5 U	1.4 U
3,3'-Dichlorobenzidine	NS	0.76 U	0.71 U	0.73 U	0.72 U
3-Methylphenol/4-Methylphenol	0.33	0.45 U	0.42 U	0.44 U	0.43 U
3-Nitroaniline	NS	0.38 U	0.35 U	0.37 U	0.36 U
4,6-Dinitro-o-cresol	NS	1.5 U	1.4 U	1.5 U	1.4 U
4-Bromophenyl phenyl ether	NS	0.38 U	0.35 U	0.37 U	0.36 U
4-Chloroaniline	NS	0.38 U	0.35 U	0.37 U	0.36 U
4-Chlorophenyl phenyl ether	NS	0.38 U	0.35 U	0.37 U	0.36 U
4-Nitroaniline	NS	0.53 U	0.5 U	0.51 U	0.51 U
4-Nitrophenol	NS	0.76 U	0.71 U	0.73 U	0.72 U
Acenaphthene	20	0.015 U	0.014 U	0.015 U	0.014 U
Acenaphthylene	100	0.015 U	0.014 U	0.015 U	0.014 U
Acetophenone	NS	1.5 U	1.4 U	1.5 U	1.4 U
Anthracene	100	0.015 U	0.014 U	0.015 U	0.014 U
Benzo(a)anthracene	1	0.015 U	0.014 U	0.015 U	0.014 U
Benzo(a)pyrene	1	0.015 U	0.014 U	0.015 U	0.014 U
Benzo(b)fluoranthene	1	0.015 U	0.014 U	0.015 U	0.014 U
Benzo(ghi)perylene	100	0.015 U	0.014 U	0.015 U	0.014 U
Benzo(k)fluoranthene	0.8	0.015 U	0.014 U	0.015 U	0.014 U
Benzoic Acid	NS	3.8 U	3.5 U	3.7 U	3.6 U
Benzyl Alcohol	NS	0.76 U	0.71 U	0.73 U	0.72 U
Biphenyl	NS	0.38 U	0.35 U	0.37 U	0.36 U
Bis(2-chloroethoxy)methane	NS	0.38 U	0.35 U	0.37 U	0.36 U
Bis(2-chloroethyl)ether	NS	0.38 U	0.35 U	0.37 U	0.36 U
Bis(2-chloroisopropyl)ether	NS	0.38 U	0.35 U	0.37 U	0.36 U
Bis(2-Ethylhexyl)phthalate	NS	0.76 U	0.71 U	0.73 U	0.72 U
Butyl benzyl phthalate	NS	0.38 U	0.35 U	0.37 U	0.36 U
Carbazole	NS	0.38 U	0.35 U	0.37 U	0.36 U
Chrysene	1	0.015 U	0.014 U	0.015 U	0.014 U
Dibenzo(a,h)anthracene	0.33	0.015 U	0.014 U	0.015 U	0.014 U
Dibenzofuran	7	0.38 U	0.35 U	0.37 U	0.36 U
Diethyl phthalate	NS	0.38 U	0.35 U	0.37 U	0.36 U
Dimethyl phthalate	NS	0.38 U	0.35 U	0.37 U	0.36 U
Di-n-butylphthalate	NS	0.38 U	0.35 U	0.37 U	0.36 U
Di-n-octylphthalate	NS	0.38 U	0.35 U	0.37 U	0.36 U
Fluoranthene	100	0.015 U	0.014 U	0.015 U	0.014 U
Fluorene	30	0.015 U	0.014 U	0.015 U	0.014 U
Hexachlorobenzene	0.33	0.061 U	0.057 U	0.059 U	0.058 U
Hexachlorobutadiene	NS	0.038 U	0.035 U	0.037 U	0.036 U
Hexachlorocyclopentadiene	NS	0.76 U	0.71 U	0.73 U	0.72 U
Hexachloroethane	NS	0.061 U	0.057 U	0.059 U	0.058 U
Indeno(1,2,3-cd)Pyrene	0.5	0.015 U	0.014 U	0.015 U	0.014 U
Isophorone	NS	0.38 U	0.35 U	0.37 U	0.36 U
Naphthalene	12	0.015 U	0.014 U	0.015 U	0.014 U
Nitrobenzene	NS	0.38 U	0.35 U	0.37 U	0.36 U
NitrosoDiPhenylAmine(NDPA)/DPA	NS	1.1 U	1.1 U	1.1 U	1.1 U
n-Nitrosodi-n-propylamine	NS	0.38 U	0.35 U	0.37 U	0.36 U
P-Chloro-M-Cresol	NS	0.38 U	0.35 U	0.37 U	0.36 U
Pentachlorophenol	0.8	0.061 U	0.057 U	0.059 U	0.058 U
Phenanthrene	100	0.015 U	0.014 U	0.015 U	0.014 U
Phenol	0.33	0.53 U	0.5 U	0.51 U	0.51 U
Pyrene	100	0.015 U	0.014 U	0.015 U	0.014 U

FIGURES



SCALE IN FEET

0' 1000' 2000' 4000'

SCALE: 1"=2000'

N

SOURCE:

7.5 MINUTE SERIES USGS TOPOGRAPHIC MAP
QUADRANGLE: AUBURN, NY 1956

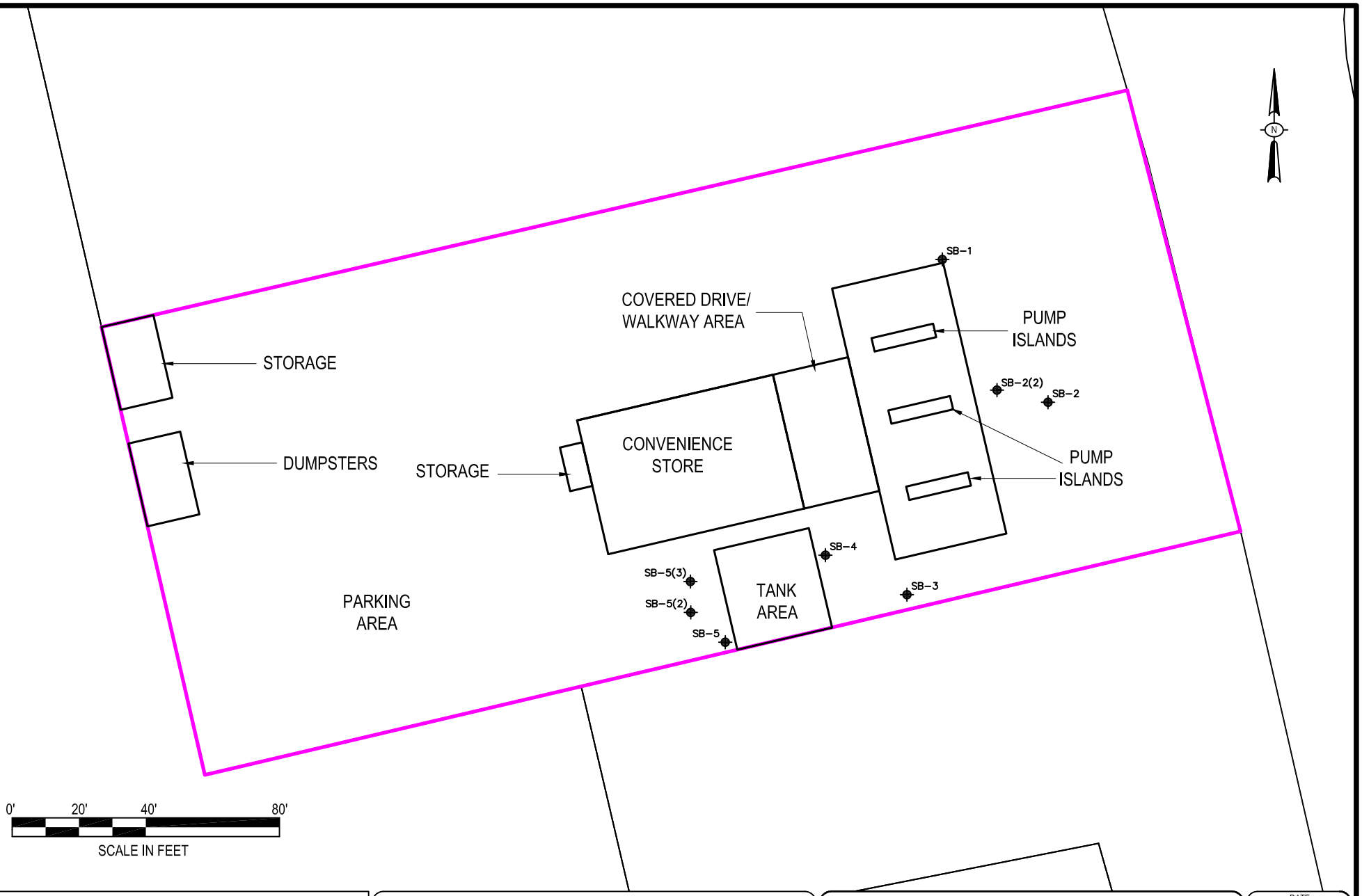
299 CAYUGA STREET
UNION SPRINGS, NEW YORK

PROJECT SITE LOCATION

AKRF
Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

DATE	4.22.08
PROJECT No.	40212
SCALE	as shown
FIGURE	1

Q:\Westchester Data\Hot Projects\40212_Cayuga Indian Nation EIS\2009 ESAs\Phase IIs\299 Cayuga Street Union Springs\Figures\Fig 1 loc map unionSprings_299_cayuga.pub



LEGEND:

PROJECT SITE BOUNDARY

SB-5(3) SOIL BORING LOCATION

299 CAYUGA STREET

UNION SPRINGS, NEW YORK

PHASE II SITE PLAN DETAIL

AKRF

Environmental Consultants

440 Park Avenue South, New York, N.Y. 10016

DATE **4.22.08**

PROJECT No. **40212**

SCALE **as shown**

FIGURE **2**

APPENDIX A

SOIL BORING LOGS

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-1**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling

Start Time	8:45	Finish Time	9:30
Date	3/19/2009		
Weather:	40°F, Clear skies		

Surface Condition: Asphalt

Depth (feet)	Recovery (Inches)	Soil Type	Description	Odor	Moisture	PID	Samples Collected for Lab Analysis
1	42		Top 6": ASPHALT PAVEMENT, some Gravel. Bottom 36": Reddish brown CLAY and GRAVEL, trace fine gray Sand.	None	Slightly Moist	ND	SB-1(3-4')
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

Notes:

Macrocore refusal at 4 feet due to encountering a dense obstruction.

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-2**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling
Start Time 12:00 **Finish Time** 12:20
Date 3/19/2009
Weather: 40°F, Clear skies

Depth (feet)	Recovery (Inches)	Soil Type	Surface Condition: Asphalt	Odor	Moisture	PID	Samples Collected for Lab Analysis
1 2 3 4	36		Top 6": ASPHALT PAVEMENT, trace Gravel. Bottom 34": Brown CLAY and GRAVEL.	None	Slightly Moist	ND	
5 6 7	30		Top 6": Reddish brown CLAY, some Gravel. Bottom 24": Brown CLAY and fine gray SAND, trace Gravel.	Slight	Slightly Moist	ND	
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22							

Notes:

Macrocore refusal at 7 feet observed to be due to concrete.

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-2(2)**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling

Start Time	12:20	**Finish Time**	13:00
Date	3/19/2009		
Weather:	40°F, Clear skies		

Surface Condition: **Asphalt**

Depth (feet)	Recovery (Inches)	Soil Type	Description	Odor	Moisture	PID	Samples Collected for Lab Analysis
1, 2, 3, 4	36		Top 6": ASPHALT PAVEMENT, trace Gravel. Bottom 30": Brown CLAY and GRAVEL.	None	Slightly Moist	ND	
5, 6	12		Top 6": Brown CLAY and GRAVEL, some gray fine Sand. Top 6": Brown CLAY and GRAVEL.	None	Dry	ND	SB-2(5.5-6.5')
7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22							

Notes:

Macrocore refusal at 6.5 feet due to expanding clay/dense glacial till.

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-3**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling

Start Time	15:30	**Finish Time**	14:00
Date	3/19/2009		
Weather:	40°F, Clear skies		

Surface Condition: **Asphalt**

Depth (feet)	Recovery (Inches)	Soil Type	Description	Odor	Moisture	PID	Samples Collected for Lab Analysis
1 2 3 4	42		Top 6": ASPHALT PAVEMENT, trace Gravel. Bottom 30": GRAVEL, trace fine Sand.	None	Slightly Moist	ND	
5 6 7 8	48		Top 24": Brown CLAY, some fine Sand and Gravel. Bottom 24": Brown CLAY, some Gravel.	None	Dry	ND	
9 10 11 12	32		32": Brown CLAY and GRAVEL, some Sand.	None	Slightly Moist	ND	
13 14	20		20": Brown CLAY and GRAVEL.	None	Slightly Moist	ND	SB-3 (13-14')
15 16 17 18 19 20 21 22							

Notes:

Macrocore refusal at 14 feet due to expanding clay/dense glacial till.

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-4**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling
Start Time 14:30 **Finish Time** 15:30
Date 3/19/2009
Weather: 40°F, Clear skies

Surface Condition: Asphalt

Depth (feet)	Recovery (Inches)	Soil Type		Odor	Moisture	PID	Samples Collected for Lab Analysis
1 2 3 4	36		Top 6": ASPHALT PAVEMENT, trace Gravel. Bottom 30": GRAVEL, some reddish brown Clay.	None	Dry	ND	
5 6 7 8	36		Top 12": Brown CLAY, trace fine Sand and Gravel. Bottom 24": Brown coarse SAND and reddish brown CLAY, trace Gravel.	None	Slightly Moist	ND	
9 10 11 12	40		40": Brown coarse SAND, some Gravel.	None	Dry	ND	SB-4(11-12')
13 14 15 16 17 18 19 20 21 22							

Notes:

Macrocore refusal at 12 feet due to expanding clay/dense glacial till.

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-5**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling

Start Time	9:45	**Finish Time**	10:30
Date	3/19/2009		
Weather:	40°F, Clear skies		

Surface Condition: **Asphalt**

Depth (feet)	Recovery (Inches)	Soil Type	Description	Odor	Moisture	PID	Samples Collected for Lab Analysis
1, 2, 3, 4	36		Top 6": ASPHALT PAVEMENT, trace Gravel. Bottom 30": Brown CLAY, some Gravel, trace fine Silt.	None	Slightly Moist	ND	
5, 6, 7, 8	42		Top 24": Reddish brown CLAY, trace fine Sand and Gravel. Bottom 8": Brown CLAY, some Gravel.	None	Dry	ND	
9, 10, 11, 12	20		Top 10": Reddish brown CLAY and GRAVEL, trace gray fine Sand. Bottom 10": Brown CLAY, trace fine Gravel.	None	Dry	ND	
13, 14, 15, 16	24		24": Brown CLAY and GRAVEL.	None	Dry	ND	SB-5 (15-16')
17, 18, 19, 20, 21, 22							

Notes:

Macrocore refusal at 16 feet due to expanding clay/dense glacial till.

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-5(2)**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling
Start Time 10:30 **Finish Time** 11:15
Date 3/19/2009
Weather: 40°F, Clear skies

Surface Condition: Asphalt

Depth (feet)	Recovery (Inches)	Soil Type		Odor	Moisture	PID	Samples Collected for Lab Analysis
1 2 3 4	40		Top 6": ASPHALT PAVEMENT, trace Gravel. Bottom 34": Brown CLAY and GRAVEL.	None	Slightly Moist	ND	
5 6 7 8	48		Top 24": Reddish brown CLAY, some Gravel. Bottom 24": Brown CLAY and fine gray SAND, trace Gravel.	Slight	Slightly Moist	ND	
9 10 11 12	30		Top 20": Reddish brown CLAY and fine GRAVEL, trace gray fine Sand. Bottom 10": Brown CLAY, some Gravel.	None	Dry	ND	
13 14 15 16	16		16": Brown CLAY and GRAVEL.	None	Dry	ND	
17 18 19 20 21 22							

Notes:

Macrocore refusal at 16 feet due to expanding clay/dense glacial till.

SOIL BORING LOG

299 Cayuga Street, Union Springs, NY

AKRF Project Number: 40212

Boring No. **SB-5(3)**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: Macrocore
Driller : Paragon
Sampler: AKRF/ Kerry Gallagher

Drilling

Start Time	11:15	Finish Time	12:00
Date	3/19/2009		
Weather:	40°F, Clear skies		

Surface Condition: Asphalt

Depth (feet)	Recovery (Inches)	Soil Type		Odor	Moisture	PID	Samples Collected for Lab Analysis
1 2 3 4	48		Top 8": ASPHALT PAVEMENT, trace Gravel. Bottom 40": Brown CLAY, some coarse fine Sand and Gravel.	None	Slightly Moist	ND	
5 6 7 8	36		Top 12": Brown CLAY, some Gravel, trace fine brown Sand. Bottom 24": Reddish Brown CLAY, some Gravel.	None	Dry	ND	
9 10 11 12	24		24": Brown CLAY and GRAVEL.	None	Dry	ND	
13 14 15 16 17 18 19 20 21 22							

Notes:

Macrocore refusal at 12 feet due to expanding clay/dense glacial till.

APPENDIX B

LABORATORY ANALYTICAL DATA SHEETS

ALPHA ANALYTICAL

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com
MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: AKRF, Inc.

Address: 440 Park Avenue South
New York, NY 10016

Attn: Ms. Kerry Gallagher

Project Number: 40212

Laboratory Job Number: L0903480

Date Received: 23-MAR-2009

Date Reported: 30-MAR-2009

Delivery Method: Alpha

Site: 299 CAYUGA ST.

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0903480-01	SB-1 (3-4')	UNION SPRINGS, NY
L0903480-02	SB-5 (15-16')	UNION SPRINGS, NY
L0903480-03	SB-2 (5.5-6.5')	UNION SPRINGS, NY
L0903480-04	SB-4 (11-12')	UNION SPRINGS, NY
L0903480-05	SB-3 (13-14')	UNION SPRINGS, NY
L0903480-06	DUPLICATE	UNION SPRINGS, NY
L0903480-07	TRIP BLANK	UNION SPRINGS, NY

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Elizabeth A. Simmons
Technical Representative

ALPHA ANALYTICAL
NARRATIVE REPORT

Laboratory Job Number: L0903480

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

Volatile Organics

The surrogate recovery for L0903480-06 is above the acceptance criteria for 1,2-Dichloroethane-d4 (134%). Since the sample was non-detect for all target analytes, re-analysis is not required.

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0903480-01
SB-1 (3-4')
Sample Matrix: SOIL

Date Collected: 19-MAR-2009 09:15
Date Received : 23-MAR-2009
Date Reported : 30-MAR-2009

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
General Chemistry - Westborough Lab								
Solids, Total	85	%	0.10	30	2540G		0324 22:00	JO
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 13:56	PD
Methylene chloride	ND	ug/kg	29.					
1,1-Dichloroethane	ND	ug/kg	4.4					
Chloroform	ND	ug/kg	4.4					
Carbon tetrachloride	ND	ug/kg	2.9					
1,2-Dichloropropane	ND	ug/kg	10.					
Dibromochloromethane	ND	ug/kg	2.9					
1,1,2-Trichloroethane	ND	ug/kg	4.4					
Tetrachloroethene	ND	ug/kg	2.9					
Chlorobenzene	ND	ug/kg	2.9					
Trichlorofluoromethane	ND	ug/kg	15.					
1,2-Dichloroethane	ND	ug/kg	2.9					
1,1,1-Trichloroethane	ND	ug/kg	2.9					
Bromodichloromethane	ND	ug/kg	2.9					
trans-1,3-Dichloropropene	ND	ug/kg	2.9					
cis-1,3-Dichloropropene	ND	ug/kg	2.9					
1,1-Dichloropropene	ND	ug/kg	15.					
Bromoform	ND	ug/kg	12.					
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.9					
Benzene	ND	ug/kg	2.9					
Toluene	ND	ug/kg	4.4					
Ethylbenzene	ND	ug/kg	2.9					
Chloromethane	ND	ug/kg	15.					
Bromomethane	ND	ug/kg	5.9					
Vinyl chloride	ND	ug/kg	5.9					
Chloroethane	ND	ug/kg	5.9					
1,1-Dichloroethene	ND	ug/kg	2.9					
trans-1,2-Dichloroethene	ND	ug/kg	4.4					
Trichloroethene	ND	ug/kg	2.9					
1,2-Dichlorobenzene	ND	ug/kg	15.					
1,3-Dichlorobenzene	ND	ug/kg	15.					
1,4-Dichlorobenzene	ND	ug/kg	15.					
Methyl tert butyl ether	ND	ug/kg	5.9					
p/m-Xylene	ND	ug/kg	5.9					
o-Xylene	ND	ug/kg	5.9					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-01
SB-1 (3-4')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 13:56	PD
cis-1,2-Dichloroethene	ND	ug/kg	2.9					
Dibromomethane	ND	ug/kg	29.					
Styrene	ND	ug/kg	5.9					
Dichlorodifluoromethane	ND	ug/kg	29.					
Acetone	ND	ug/kg	29.					
Carbon disulfide	ND	ug/kg	29.					
2-Butanone	ND	ug/kg	29.					
Vinyl acetate	ND	ug/kg	29.					
4-Methyl-2-pentanone	ND	ug/kg	29.					
1,2,3-Trichloropropane	ND	ug/kg	29.					
2-Hexanone	ND	ug/kg	29.					
Bromochloromethane	ND	ug/kg	15.					
2,2-Dichloropropane	ND	ug/kg	15.					
1,2-Dibromoethane	ND	ug/kg	12.					
1,3-Dichloropropane	ND	ug/kg	15.					
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.9					
Bromobenzene	ND	ug/kg	15.					
n-Butylbenzene	ND	ug/kg	2.9					
sec-Butylbenzene	ND	ug/kg	2.9					
tert-Butylbenzene	ND	ug/kg	15.					
o-Chlorotoluene	ND	ug/kg	15.					
p-Chlorotoluene	ND	ug/kg	15.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	15.					
Hexachlorobutadiene	ND	ug/kg	15.					
Isopropylbenzene	ND	ug/kg	2.9					
p-Isopropyltoluene	ND	ug/kg	2.9					
Naphthalene	ND	ug/kg	15.					
Acrylonitrile	ND	ug/kg	29.					
n-Propylbenzene	ND	ug/kg	2.9					
1,2,3-Trichlorobenzene	ND	ug/kg	15.					
1,2,4-Trichlorobenzene	ND	ug/kg	15.					
1,3,5-Trimethylbenzene	ND	ug/kg	15.					
1,2,4-Trimethylbenzene	ND	ug/kg	15.					
1,4-Diethylbenzene	ND	ug/kg	12.					
4-Ethyltoluene	ND	ug/kg	12.					
1,2,4,5-Tetramethylbenzene	ND	ug/kg	12.					

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	118	%	70-130
Toluene-d8	107	%	70-130
4-Bromofluorobenzene	111	%	70-130
Dibromofluoromethane	103	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0903480-02
SB-5 (15-16')
Sample Matrix: SOIL

Date Collected: 19-MAR-2009 11:38
Date Received : 23-MAR-2009
Date Reported : 30-MAR-2009

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
General Chemistry - Westborough Lab								
Solids, Total	91	%	0.10	30	2540G		0326 16:07	SD
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 14:34	PD
Methylene chloride	ND	ug/kg	27.					
1,1-Dichloroethane	ND	ug/kg	4.1					
Chloroform	ND	ug/kg	4.1					
Carbon tetrachloride	ND	ug/kg	2.7					
1,2-Dichloropropane	ND	ug/kg	9.6					
Dibromochloromethane	ND	ug/kg	2.7					
1,1,2-Trichloroethane	ND	ug/kg	4.1					
Tetrachloroethene	ND	ug/kg	2.7					
Chlorobenzene	ND	ug/kg	2.7					
Trichlorofluoromethane	ND	ug/kg	14.					
1,2-Dichloroethane	ND	ug/kg	2.7					
1,1,1-Trichloroethane	ND	ug/kg	2.7					
Bromodichloromethane	ND	ug/kg	2.7					
trans-1,3-Dichloropropene	ND	ug/kg	2.7					
cis-1,3-Dichloropropene	ND	ug/kg	2.7					
1,1-Dichloropropene	ND	ug/kg	14.					
Bromoform	ND	ug/kg	11.					
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.7					
Benzene	ND	ug/kg	2.7					
Toluene	ND	ug/kg	4.1					
Ethylbenzene	ND	ug/kg	2.7					
Chloromethane	ND	ug/kg	14.					
Bromomethane	ND	ug/kg	5.5					
Vinyl chloride	ND	ug/kg	5.5					
Chloroethane	ND	ug/kg	5.5					
1,1-Dichloroethene	ND	ug/kg	2.7					
trans-1,2-Dichloroethene	ND	ug/kg	4.1					
Trichloroethene	ND	ug/kg	2.7					
1,2-Dichlorobenzene	ND	ug/kg	14.					
1,3-Dichlorobenzene	ND	ug/kg	14.					
1,4-Dichlorobenzene	ND	ug/kg	14.					
Methyl tert butyl ether	ND	ug/kg	5.5					
p/m-Xylene	ND	ug/kg	5.5					
o-Xylene	ND	ug/kg	5.5					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-02
SB-5 (15-16')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 14:34	PD
cis-1,2-Dichloroethene	ND	ug/kg	2.7					
Dibromomethane	ND	ug/kg	27.					
Styrene	ND	ug/kg	5.5					
Dichlorodifluoromethane	ND	ug/kg	27.					
Acetone	ND	ug/kg	27.					
Carbon disulfide	ND	ug/kg	27.					
2-Butanone	ND	ug/kg	27.					
Vinyl acetate	ND	ug/kg	27.					
4-Methyl-2-pentanone	ND	ug/kg	27.					
1,2,3-Trichloropropane	ND	ug/kg	27.					
2-Hexanone	ND	ug/kg	27.					
Bromochloromethane	ND	ug/kg	14.					
2,2-Dichloropropane	ND	ug/kg	14.					
1,2-Dibromoethane	ND	ug/kg	11.					
1,3-Dichloropropane	ND	ug/kg	14.					
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.7					
Bromobenzene	ND	ug/kg	14.					
n-Butylbenzene	ND	ug/kg	2.7					
sec-Butylbenzene	ND	ug/kg	2.7					
tert-Butylbenzene	ND	ug/kg	14.					
o-Chlorotoluene	ND	ug/kg	14.					
p-Chlorotoluene	ND	ug/kg	14.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	14.					
Hexachlorobutadiene	ND	ug/kg	14.					
Isopropylbenzene	ND	ug/kg	2.7					
p-Isopropyltoluene	ND	ug/kg	2.7					
Naphthalene	ND	ug/kg	14.					
Acrylonitrile	ND	ug/kg	27.					
n-Propylbenzene	ND	ug/kg	2.7					
1,2,3-Trichlorobenzene	ND	ug/kg	14.					
1,2,4-Trichlorobenzene	ND	ug/kg	14.					
1,3,5-Trimethylbenzene	ND	ug/kg	14.					
1,2,4-Trimethylbenzene	ND	ug/kg	14.					
1,4-Diethylbenzene	ND	ug/kg	11.					
4-Ethyltoluene	ND	ug/kg	11.					
1,2,4,5-Tetramethylbenzene	ND	ug/kg	11.					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	110	%	70-130					
Toluene-d8	98.0	%	70-130					
4-Bromofluorobenzene	103	%	70-130					
Dibromofluoromethane	95.0	%	70-130					
Semivolatile Organics by GC/MS - Westborough Lab				1	8270C	0327 05:40	0329 17:09	PS
Acenaphthene	ND	ug/kg	370					
1,2,4-Trichlorobenzene	ND	ug/kg	370					
Hexachlorobenzene	ND	ug/kg	370					
Bis(2-chloroethyl)ether	ND	ug/kg	370					
2-Chloronaphthalene	ND	ug/kg	440					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-02
SB-5 (15-16')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 17:09	PS
1,2-Dichlorobenzene	ND	ug/kg	370					
1,3-Dichlorobenzene	ND	ug/kg	370					
1,4-Dichlorobenzene	ND	ug/kg	370					
3,3'-Dichlorobenzidine	ND	ug/kg	730					
2,4-Dinitrotoluene	ND	ug/kg	370					
2,6-Dinitrotoluene	ND	ug/kg	370					
Fluoranthene	ND	ug/kg	370					
4-Chlorophenyl phenyl ether	ND	ug/kg	370					
4-Bromophenyl phenyl ether	ND	ug/kg	370					
Bis(2-chloroisopropyl)ether	ND	ug/kg	370					
Bis(2-chloroethoxy)methane	ND	ug/kg	370					
Hexachlorobutadiene	ND	ug/kg	730					
Hexachlorocyclopentadiene	ND	ug/kg	730					
Hexachloroethane	ND	ug/kg	370					
Isophorone	ND	ug/kg	370					
Naphthalene	ND	ug/kg	370					
Nitrobenzene	ND	ug/kg	370					
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	1100					
n-Nitrosodi-n-propylamine	ND	ug/kg	370					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	730					
Butyl benzyl phthalate	ND	ug/kg	370					
Di-n-butylphthalate	ND	ug/kg	370					
Di-n-octylphthalate	ND	ug/kg	370					
Diethyl phthalate	ND	ug/kg	370					
Dimethyl phthalate	ND	ug/kg	370					
Benzo(a)anthracene	ND	ug/kg	370					
Benzo(a)pyrene	ND	ug/kg	370					
Benzo(b)fluoranthene	ND	ug/kg	370					
Benzo(k)fluoranthene	ND	ug/kg	370					
Chrysene	ND	ug/kg	370					
Acenaphthylene	ND	ug/kg	370					
Anthracene	ND	ug/kg	370					
Benzo(ghi)perylene	ND	ug/kg	370					
Fluorene	ND	ug/kg	370					
Phenanthrene	ND	ug/kg	370					
Dibenzo(a,h)anthracene	ND	ug/kg	370					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	370					
Pyrene	ND	ug/kg	370					
Biphenyl	ND	ug/kg	370					
4-Chloroaniline	ND	ug/kg	370					
2-Nitroaniline	ND	ug/kg	370					
3-Nitroaniline	ND	ug/kg	370					
4-Nitroaniline	ND	ug/kg	510					
Dibenzofuran	ND	ug/kg	370					
2-Methylnaphthalene	ND	ug/kg	370					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1500					
Acetophenone	ND	ug/kg	1500					
2,4,6-Trichlorophenol	ND	ug/kg	370					
P-Chloro-M-Cresol	ND	ug/kg	370					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-02
SB-5 (15-16')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 17:09	PS
2-Chlorophenol	ND	ug/kg	440					
2,4-Dichlorophenol	ND	ug/kg	730					
2,4-Dimethylphenol	ND	ug/kg	370					
2-Nitrophenol	ND	ug/kg	1500					
4-Nitrophenol	ND	ug/kg	730					
2,4-Dinitrophenol	ND	ug/kg	1500					
4,6-Dinitro-o-cresol	ND	ug/kg	1500					
Pentachlorophenol	ND	ug/kg	1500					
Phenol	ND	ug/kg	510					
2-Methylphenol	ND	ug/kg	440					
3-Methylphenol/4-Methylphenol	ND	ug/kg	440					
2,4,5-Trichlorophenol	ND	ug/kg	370					
Benzoic Acid	ND	ug/kg	3700					
Benzyl Alcohol	ND	ug/kg	730					
Carbazole	ND	ug/kg	370					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	55.0	%	25-120					
Phenol-d6	58.0	%	10-120					
Nitrobenzene-d5	54.0	%	23-120					
2-Fluorobiphenyl	57.0	%	30-120					
2,4,6-Tribromophenol	56.0	%	19-120					
4-Terphenyl-d14	68.0	%	18-120					
Semivolatile Organics by GC/MS-SIM - Westborough Lab				1	8270C	0327 05:40	0330 07:23	HL
Acenaphthene	ND	ug/kg	15.					
2-Chloronaphthalene	ND	ug/kg	15.					
Fluoranthene	ND	ug/kg	15.					
Hexachlorobutadiene	ND	ug/kg	37.					
Naphthalene	ND	ug/kg	15.					
Benzo(a)anthracene	ND	ug/kg	15.					
Benzo(a)pyrene	ND	ug/kg	15.					
Benzo(b)fluoranthene	ND	ug/kg	15.					
Benzo(k)fluoranthene	ND	ug/kg	15.					
Chrysene	ND	ug/kg	15.					
Acenaphthylene	ND	ug/kg	15.					
Anthracene	ND	ug/kg	15.					
Benzo(ghi)perylene	ND	ug/kg	15.					
Fluorene	ND	ug/kg	15.					
Phenanthrene	ND	ug/kg	15.					
Dibenzo(a,h)anthracene	ND	ug/kg	15.					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	15.					
Pyrene	ND	ug/kg	15.					
2-Methylnaphthalene	ND	ug/kg	15.					
Pentachlorophenol	ND	ug/kg	59.					
Hexachlorobenzene	ND	ug/kg	59.					
Hexachloroethane	ND	ug/kg	59.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-02
SB-5 (15-16')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS-SIM - Westborough Lab cont'				1 8270C	0327 05:40	0330 07:23	HL
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	39.0	%	25-120				
Phenol-d6	45.0	%	10-120				
Nitrobenzene-d5	46.0	%	23-120				
2-Fluorobiphenyl	39.0	%	30-120				
2,4,6-Tribromophenol	46.0	%	19-120				
4-Terphenyl-d14	43.0	%	18-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0903480-03
SB-2 (5.5-6.5')
Sample Matrix: SOIL

Date Collected: 19-MAR-2009 13:05
Date Received : 23-MAR-2009
Date Reported : 30-MAR-2009

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
General Chemistry - Westborough Lab								
Solids, Total	91	%	0.10	30	2540G		0324 22:00	JO
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 15:11	PD
Methylene chloride	ND	ug/kg	27.					
1,1-Dichloroethane	ND	ug/kg	4.1					
Chloroform	ND	ug/kg	4.1					
Carbon tetrachloride	ND	ug/kg	2.7					
1,2-Dichloropropane	ND	ug/kg	9.6					
Dibromochloromethane	ND	ug/kg	2.7					
1,1,2-Trichloroethane	ND	ug/kg	4.1					
Tetrachloroethene	ND	ug/kg	2.7					
Chlorobenzene	ND	ug/kg	2.7					
Trichlorofluoromethane	ND	ug/kg	14.					
1,2-Dichloroethane	ND	ug/kg	2.7					
1,1,1-Trichloroethane	ND	ug/kg	2.7					
Bromodichloromethane	ND	ug/kg	2.7					
trans-1,3-Dichloropropene	ND	ug/kg	2.7					
cis-1,3-Dichloropropene	ND	ug/kg	2.7					
1,1-Dichloropropene	ND	ug/kg	14.					
Bromoform	ND	ug/kg	11.					
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.7					
Benzene	5.2	ug/kg	2.7					
Toluene	ND	ug/kg	4.1					
Ethylbenzene	33	ug/kg	2.7					
Chloromethane	ND	ug/kg	14.					
Bromomethane	ND	ug/kg	5.5					
Vinyl chloride	ND	ug/kg	5.5					
Chloroethane	ND	ug/kg	5.5					
1,1-Dichloroethene	ND	ug/kg	2.7					
trans-1,2-Dichloroethene	ND	ug/kg	4.1					
Trichloroethene	ND	ug/kg	2.7					
1,2-Dichlorobenzene	ND	ug/kg	14.					
1,3-Dichlorobenzene	ND	ug/kg	14.					
1,4-Dichlorobenzene	ND	ug/kg	14.					
Methyl tert butyl ether	320	ug/kg	5.5					
p/m-Xylene	140	ug/kg	5.5					
o-Xylene	63	ug/kg	5.5					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-03
SB-2 (5.5-6.5')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 15:11	PD
cis-1,2-Dichloroethene	ND	ug/kg	2.7					
Dibromomethane	ND	ug/kg	27.					
Styrene	ND	ug/kg	5.5					
Dichlorodifluoromethane	ND	ug/kg	27.					
Acetone	240	ug/kg	27					
Carbon disulfide	ND	ug/kg	27.					
2-Butanone	ND	ug/kg	27.					
Vinyl acetate	ND	ug/kg	27.					
4-Methyl-2-pentanone	ND	ug/kg	27.					
1,2,3-Trichloropropane	ND	ug/kg	27.					
2-Hexanone	ND	ug/kg	27.					
Bromochloromethane	ND	ug/kg	14.					
2,2-Dichloropropane	ND	ug/kg	14.					
1,2-Dibromoethane	ND	ug/kg	11.					
1,3-Dichloropropane	ND	ug/kg	14.					
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.7					
Bromobenzene	ND	ug/kg	14.					
n-Butylbenzene	22	ug/kg	2.7					
sec-Butylbenzene	3.2	ug/kg	2.7					
tert-Butylbenzene	ND	ug/kg	14.					
o-Chlorotoluene	ND	ug/kg	14.					
p-Chlorotoluene	ND	ug/kg	14.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	14.					
Hexachlorobutadiene	ND	ug/kg	14.					
Isopropylbenzene	4.1	ug/kg	2.7					
p-Isopropyltoluene	ND	ug/kg	2.7					
Naphthalene	120	ug/kg	14					
Acrylonitrile	ND	ug/kg	27.					
n-Propylbenzene	21	ug/kg	2.7					
1,2,3-Trichlorobenzene	ND	ug/kg	14.					
1,2,4-Trichlorobenzene	ND	ug/kg	14.					
1,3,5-Trimethylbenzene	72	ug/kg	14					
1,2,4-Trimethylbenzene	250	ug/kg	14					
1,4-Diethylbenzene	100	ug/kg	11					
4-Ethyltoluene	150	ug/kg	11					
1,2,4,5-Tetramethylbenzene	48	ug/kg	11					

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	130	%	70-130
Toluene-d8	112	%	70-130
4-Bromofluorobenzene	114	%	70-130
Dibromofluoromethane	113	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0903480-04
SB-4 (11-12')
Sample Matrix: SOIL

Date Collected: 19-MAR-2009 15:05
Date Received : 23-MAR-2009
Date Reported : 30-MAR-2009

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
General Chemistry - Westborough Lab								
Solids, Total	94	%	0.10	30	2540G		0324 22:00	JO
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 15:48	PD
Methylene chloride	ND	ug/kg	26.					
1,1-Dichloroethane	ND	ug/kg	4.0					
Chloroform	ND	ug/kg	4.0					
Carbon tetrachloride	ND	ug/kg	2.6					
1,2-Dichloropropane	ND	ug/kg	9.3					
Dibromochloromethane	ND	ug/kg	2.6					
1,1,2-Trichloroethane	ND	ug/kg	4.0					
Tetrachloroethene	ND	ug/kg	2.6					
Chlorobenzene	ND	ug/kg	2.6					
Trichlorofluoromethane	ND	ug/kg	13.					
1,2-Dichloroethane	ND	ug/kg	2.6					
1,1,1-Trichloroethane	ND	ug/kg	2.6					
Bromodichloromethane	ND	ug/kg	2.6					
trans-1,3-Dichloropropene	ND	ug/kg	2.6					
cis-1,3-Dichloropropene	ND	ug/kg	2.6					
1,1-Dichloropropene	ND	ug/kg	13.					
Bromoform	ND	ug/kg	11.					
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.6					
Benzene	ND	ug/kg	2.6					
Toluene	ND	ug/kg	4.0					
Ethylbenzene	ND	ug/kg	2.6					
Chloromethane	ND	ug/kg	13.					
Bromomethane	ND	ug/kg	5.3					
Vinyl chloride	ND	ug/kg	5.3					
Chloroethane	ND	ug/kg	5.3					
1,1-Dichloroethene	ND	ug/kg	2.6					
trans-1,2-Dichloroethene	ND	ug/kg	4.0					
Trichloroethene	ND	ug/kg	2.6					
1,2-Dichlorobenzene	ND	ug/kg	13.					
1,3-Dichlorobenzene	ND	ug/kg	13.					
1,4-Dichlorobenzene	ND	ug/kg	13.					
Methyl tert butyl ether	ND	ug/kg	5.3					
p/m-Xylene	ND	ug/kg	5.3					
o-Xylene	ND	ug/kg	5.3					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-04
SB-4 (11-12')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 15:48	PD
cis-1,2-Dichloroethene	ND	ug/kg	2.6					
Dibromomethane	ND	ug/kg	26.					
Styrene	ND	ug/kg	5.3					
Dichlorodifluoromethane	ND	ug/kg	26.					
Acetone	ND	ug/kg	26.					
Carbon disulfide	ND	ug/kg	26.					
2-Butanone	ND	ug/kg	26.					
Vinyl acetate	ND	ug/kg	26.					
4-Methyl-2-pentanone	ND	ug/kg	26.					
1,2,3-Trichloropropane	ND	ug/kg	26.					
2-Hexanone	ND	ug/kg	26.					
Bromochloromethane	ND	ug/kg	13.					
2,2-Dichloropropane	ND	ug/kg	13.					
1,2-Dibromoethane	ND	ug/kg	11.					
1,3-Dichloropropane	ND	ug/kg	13.					
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.6					
Bromobenzene	ND	ug/kg	13.					
n-Butylbenzene	ND	ug/kg	2.6					
sec-Butylbenzene	ND	ug/kg	2.6					
tert-Butylbenzene	ND	ug/kg	13.					
o-Chlorotoluene	ND	ug/kg	13.					
p-Chlorotoluene	ND	ug/kg	13.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	13.					
Hexachlorobutadiene	ND	ug/kg	13.					
Isopropylbenzene	ND	ug/kg	2.6					
p-Isopropyltoluene	ND	ug/kg	2.6					
Naphthalene	ND	ug/kg	13.					
Acrylonitrile	ND	ug/kg	26.					
n-Propylbenzene	ND	ug/kg	2.6					
1,2,3-Trichlorobenzene	ND	ug/kg	13.					
1,2,4-Trichlorobenzene	ND	ug/kg	13.					
1,3,5-Trimethylbenzene	ND	ug/kg	13.					
1,2,4-Trimethylbenzene	ND	ug/kg	13.					
1,4-Diethylbenzene	ND	ug/kg	11.					
4-Ethyltoluene	ND	ug/kg	11.					
1,2,4,5-Tetramethylbenzene	ND	ug/kg	11.					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	106	%	70-130					
Toluene-d8	100	%	70-130					
4-Bromofluorobenzene	105	%	70-130					
Dibromofluoromethane	96.0	%	70-130					
Semivolatile Organics by GC/MS - Westborough Lab				1	8270C	0327 05:40	0329 17:32	PS
Acenaphthene	ND	ug/kg	350					
1,2,4-Trichlorobenzene	ND	ug/kg	350					
Hexachlorobenzene	ND	ug/kg	350					
Bis(2-chloroethyl)ether	ND	ug/kg	350					
2-Chloronaphthalene	ND	ug/kg	420					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-04
SB-4 (11-12')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 17:32	PS
1,2-Dichlorobenzene	ND	ug/kg	350					
1,3-Dichlorobenzene	ND	ug/kg	350					
1,4-Dichlorobenzene	ND	ug/kg	350					
3,3'-Dichlorobenzidine	ND	ug/kg	710					
2,4-Dinitrotoluene	ND	ug/kg	350					
2,6-Dinitrotoluene	ND	ug/kg	350					
Fluoranthene	ND	ug/kg	350					
4-Chlorophenyl phenyl ether	ND	ug/kg	350					
4-Bromophenyl phenyl ether	ND	ug/kg	350					
Bis(2-chloroisopropyl)ether	ND	ug/kg	350					
Bis(2-chloroethoxy)methane	ND	ug/kg	350					
Hexachlorobutadiene	ND	ug/kg	710					
Hexachlorocyclopentadiene	ND	ug/kg	710					
Hexachloroethane	ND	ug/kg	350					
Isophorone	ND	ug/kg	350					
Naphthalene	ND	ug/kg	350					
Nitrobenzene	ND	ug/kg	350					
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	1100					
n-Nitrosodi-n-propylamine	ND	ug/kg	350					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	710					
Butyl benzyl phthalate	ND	ug/kg	350					
Di-n-butylphthalate	ND	ug/kg	350					
Di-n-octylphthalate	ND	ug/kg	350					
Diethyl phthalate	ND	ug/kg	350					
Dimethyl phthalate	ND	ug/kg	350					
Benzo(a)anthracene	ND	ug/kg	350					
Benzo(a)pyrene	ND	ug/kg	350					
Benzo(b)fluoranthene	ND	ug/kg	350					
Benzo(k)fluoranthene	ND	ug/kg	350					
Chrysene	ND	ug/kg	350					
Acenaphthylene	ND	ug/kg	350					
Anthracene	ND	ug/kg	350					
Benzo(ghi)perylene	ND	ug/kg	350					
Fluorene	ND	ug/kg	350					
Phenanthrene	ND	ug/kg	350					
Dibenzo(a,h)anthracene	ND	ug/kg	350					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	350					
Pyrene	ND	ug/kg	350					
Biphenyl	ND	ug/kg	350					
4-Chloroaniline	ND	ug/kg	350					
2-Nitroaniline	ND	ug/kg	350					
3-Nitroaniline	ND	ug/kg	350					
4-Nitroaniline	ND	ug/kg	500					
Dibenzofuran	ND	ug/kg	350					
2-Methylnaphthalene	ND	ug/kg	350					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1400					
Acetophenone	ND	ug/kg	1400					
2,4,6-Trichlorophenol	ND	ug/kg	350					
P-Chloro-M-Cresol	ND	ug/kg	350					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-04
SB-4 (11-12')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 17:32	PS
2-Chlorophenol	ND	ug/kg	420					
2,4-Dichlorophenol	ND	ug/kg	710					
2,4-Dimethylphenol	ND	ug/kg	350					
2-Nitrophenol	ND	ug/kg	1400					
4-Nitrophenol	ND	ug/kg	710					
2,4-Dinitrophenol	ND	ug/kg	1400					
4,6-Dinitro-o-cresol	ND	ug/kg	1400					
Pentachlorophenol	ND	ug/kg	1400					
Phenol	ND	ug/kg	500					
2-Methylphenol	ND	ug/kg	420					
3-Methylphenol/4-Methylphenol	ND	ug/kg	420					
2,4,5-Trichlorophenol	ND	ug/kg	350					
Benzoic Acid	ND	ug/kg	3500					
Benzyl Alcohol	ND	ug/kg	710					
Carbazole	ND	ug/kg	350					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	54.0	%	25-120					
Phenol-d6	61.0	%	10-120					
Nitrobenzene-d5	59.0	%	23-120					
2-Fluorobiphenyl	60.0	%	30-120					
2,4,6-Tribromophenol	58.0	%	19-120					
4-Terphenyl-d14	73.0	%	18-120					
Semivolatile Organics by GC/MS-SIM - Westborough Lab				1	8270C	0327 05:40	0330 07:52	HL
Acenaphthene	ND	ug/kg	14.					
2-Chloronaphthalene	ND	ug/kg	14.					
Fluoranthene	ND	ug/kg	14.					
Hexachlorobutadiene	ND	ug/kg	35.					
Naphthalene	ND	ug/kg	14.					
Benzo(a)anthracene	ND	ug/kg	14.					
Benzo(a)pyrene	ND	ug/kg	14.					
Benzo(b)fluoranthene	ND	ug/kg	14.					
Benzo(k)fluoranthene	ND	ug/kg	14.					
Chrysene	ND	ug/kg	14.					
Acenaphthylene	ND	ug/kg	14.					
Anthracene	ND	ug/kg	14.					
Benzo(ghi)perylene	ND	ug/kg	14.					
Fluorene	ND	ug/kg	14.					
Phenanthrene	ND	ug/kg	14.					
Dibenzo(a,h)anthracene	ND	ug/kg	14.					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	14.					
Pyrene	ND	ug/kg	14.					
2-Methylnaphthalene	ND	ug/kg	14.					
Pentachlorophenol	ND	ug/kg	57.					
Hexachlorobenzene	ND	ug/kg	57.					
Hexachloroethane	ND	ug/kg	57.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-04
SB-4 (11-12')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS-SIM - Westborough Lab cont'				1 8270C	0327 05:40	0330 07:52	HL
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	37.0	%	25-120				
Phenol-d6	43.0	%	10-120				
Nitrobenzene-d5	44.0	%	23-120				
2-Fluorobiphenyl	39.0	%	30-120				
2,4,6-Tribromophenol	44.0	%	19-120				
4-Terphenyl-d14	46.0	%	18-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0903480-05
SB-3 (13-14')
Sample Matrix: SOIL

Date Collected: 19-MAR-2009 15:58
Date Received : 23-MAR-2009
Date Reported : 30-MAR-2009

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
General Chemistry - Westborough Lab								
Solids, Total	88	%	0.10	30	2540G		0324 22:00	JO
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 16:25	PD
Methylene chloride	ND	ug/kg	28.					
1,1-Dichloroethane	ND	ug/kg	4.3					
Chloroform	ND	ug/kg	4.3					
Carbon tetrachloride	ND	ug/kg	2.8					
1,2-Dichloropropane	ND	ug/kg	9.9					
Dibromochloromethane	ND	ug/kg	2.8					
1,1,2-Trichloroethane	ND	ug/kg	4.3					
Tetrachloroethene	ND	ug/kg	2.8					
Chlorobenzene	ND	ug/kg	2.8					
Trichlorofluoromethane	ND	ug/kg	14.					
1,2-Dichloroethane	ND	ug/kg	2.8					
1,1,1-Trichloroethane	ND	ug/kg	2.8					
Bromodichloromethane	ND	ug/kg	2.8					
trans-1,3-Dichloropropene	ND	ug/kg	2.8					
cis-1,3-Dichloropropene	ND	ug/kg	2.8					
1,1-Dichloropropene	ND	ug/kg	14.					
Bromoform	ND	ug/kg	11.					
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.8					
Benzene	ND	ug/kg	2.8					
Toluene	ND	ug/kg	4.3					
Ethylbenzene	ND	ug/kg	2.8					
Chloromethane	ND	ug/kg	14.					
Bromomethane	ND	ug/kg	5.7					
Vinyl chloride	ND	ug/kg	5.7					
Chloroethane	ND	ug/kg	5.7					
1,1-Dichloroethene	ND	ug/kg	2.8					
trans-1,2-Dichloroethene	ND	ug/kg	4.3					
Trichloroethene	ND	ug/kg	2.8					
1,2-Dichlorobenzene	ND	ug/kg	14.					
1,3-Dichlorobenzene	ND	ug/kg	14.					
1,4-Dichlorobenzene	ND	ug/kg	14.					
Methyl tert butyl ether	ND	ug/kg	5.7					
p/m-Xylene	ND	ug/kg	5.7					
o-Xylene	ND	ug/kg	5.7					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-05
SB-3 (13-14')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 16:25	PD
cis-1,2-Dichloroethene	ND	ug/kg	2.8					
Dibromomethane	ND	ug/kg	28.					
Styrene	ND	ug/kg	5.7					
Dichlorodifluoromethane	ND	ug/kg	28.					
Acetone	ND	ug/kg	28.					
Carbon disulfide	ND	ug/kg	28.					
2-Butanone	ND	ug/kg	28.					
Vinyl acetate	ND	ug/kg	28.					
4-Methyl-2-pentanone	ND	ug/kg	28.					
1,2,3-Trichloropropane	ND	ug/kg	28.					
2-Hexanone	ND	ug/kg	28.					
Bromochloromethane	ND	ug/kg	14.					
2,2-Dichloropropane	ND	ug/kg	14.					
1,2-Dibromoethane	ND	ug/kg	11.					
1,3-Dichloropropane	ND	ug/kg	14.					
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.8					
Bromobenzene	ND	ug/kg	14.					
n-Butylbenzene	ND	ug/kg	2.8					
sec-Butylbenzene	ND	ug/kg	2.8					
tert-Butylbenzene	ND	ug/kg	14.					
o-Chlorotoluene	ND	ug/kg	14.					
p-Chlorotoluene	ND	ug/kg	14.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	14.					
Hexachlorobutadiene	ND	ug/kg	14.					
Isopropylbenzene	ND	ug/kg	2.8					
p-Isopropyltoluene	ND	ug/kg	2.8					
Naphthalene	ND	ug/kg	14.					
Acrylonitrile	ND	ug/kg	28.					
n-Propylbenzene	ND	ug/kg	2.8					
1,2,3-Trichlorobenzene	ND	ug/kg	14.					
1,2,4-Trichlorobenzene	ND	ug/kg	14.					
1,3,5-Trimethylbenzene	ND	ug/kg	14.					
1,2,4-Trimethylbenzene	ND	ug/kg	14.					
1,4-Diethylbenzene	ND	ug/kg	11.					
4-Ethyltoluene	ND	ug/kg	11.					
1,2,4,5-Tetramethylbenzene	ND	ug/kg	11.					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	121	%	70-130					
Toluene-d8	111	%	70-130					
4-Bromofluorobenzene	116	%	70-130					
Dibromofluoromethane	106	%	70-130					
Semivolatile Organics by GC/MS - Westborough Lab				1	8270C	0327 05:40	0329 17:56	PS
Acenaphthene	ND	ug/kg	380					
1,2,4-Trichlorobenzene	ND	ug/kg	380					
Hexachlorobenzene	ND	ug/kg	380					
Bis(2-chloroethyl)ether	ND	ug/kg	380					
2-Chloronaphthalene	ND	ug/kg	450					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-05
SB-3 (13-14')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 17:56	PS
1,2-Dichlorobenzene	ND	ug/kg	380					
1,3-Dichlorobenzene	ND	ug/kg	380					
1,4-Dichlorobenzene	ND	ug/kg	380					
3,3'-Dichlorobenzidine	ND	ug/kg	760					
2,4-Dinitrotoluene	ND	ug/kg	380					
2,6-Dinitrotoluene	ND	ug/kg	380					
Fluoranthene	ND	ug/kg	380					
4-Chlorophenyl phenyl ether	ND	ug/kg	380					
4-Bromophenyl phenyl ether	ND	ug/kg	380					
Bis(2-chloroisopropyl)ether	ND	ug/kg	380					
Bis(2-chloroethoxy)methane	ND	ug/kg	380					
Hexachlorobutadiene	ND	ug/kg	760					
Hexachlorocyclopentadiene	ND	ug/kg	760					
Hexachloroethane	ND	ug/kg	380					
Isophorone	ND	ug/kg	380					
Naphthalene	ND	ug/kg	380					
Nitrobenzene	ND	ug/kg	380					
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	1100					
n-Nitrosodi-n-propylamine	ND	ug/kg	380					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	760					
Butyl benzyl phthalate	ND	ug/kg	380					
Di-n-butylphthalate	ND	ug/kg	380					
Di-n-octylphthalate	ND	ug/kg	380					
Diethyl phthalate	ND	ug/kg	380					
Dimethyl phthalate	ND	ug/kg	380					
Benzo(a)anthracene	ND	ug/kg	380					
Benzo(a)pyrene	ND	ug/kg	380					
Benzo(b)fluoranthene	ND	ug/kg	380					
Benzo(k)fluoranthene	ND	ug/kg	380					
Chrysene	ND	ug/kg	380					
Acenaphthylene	ND	ug/kg	380					
Anthracene	ND	ug/kg	380					
Benzo(ghi)perylene	ND	ug/kg	380					
Fluorene	ND	ug/kg	380					
Phenanthrene	ND	ug/kg	380					
Dibenzo(a,h)anthracene	ND	ug/kg	380					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	380					
Pyrene	ND	ug/kg	380					
Biphenyl	ND	ug/kg	380					
4-Chloroaniline	ND	ug/kg	380					
2-Nitroaniline	ND	ug/kg	380					
3-Nitroaniline	ND	ug/kg	380					
4-Nitroaniline	ND	ug/kg	530					
Dibenzofuran	ND	ug/kg	380					
2-Methylnaphthalene	ND	ug/kg	380					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1500					
Acetophenone	ND	ug/kg	1500					
2,4,6-Trichlorophenol	ND	ug/kg	380					
P-Chloro-M-Cresol	ND	ug/kg	380					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-05
SB-3 (13-14')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 17:56	PS
2-Chlorophenol	ND	ug/kg	450					
2,4-Dichlorophenol	ND	ug/kg	760					
2,4-Dimethylphenol	ND	ug/kg	380					
2-Nitrophenol	ND	ug/kg	1500					
4-Nitrophenol	ND	ug/kg	760					
2,4-Dinitrophenol	ND	ug/kg	1500					
4,6-Dinitro-o-cresol	ND	ug/kg	1500					
Pentachlorophenol	ND	ug/kg	1500					
Phenol	ND	ug/kg	530					
2-Methylphenol	ND	ug/kg	450					
3-Methylphenol/4-Methylphenol	ND	ug/kg	450					
2,4,5-Trichlorophenol	ND	ug/kg	380					
Benzoic Acid	ND	ug/kg	3800					
Benzyl Alcohol	ND	ug/kg	760					
Carbazole	ND	ug/kg	380					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	71.0	%	25-120					
Phenol-d6	74.0	%	10-120					
Nitrobenzene-d5	70.0	%	23-120					
2-Fluorobiphenyl	72.0	%	30-120					
2,4,6-Tribromophenol	75.0	%	19-120					
4-Terphenyl-d14	79.0	%	18-120					
Semivolatile Organics by GC/MS-SIM - Westborough Lab				1	8270C	0327 05:40	0330 08:21	HL
Acenaphthene	ND	ug/kg	15.					
2-Chloronaphthalene	ND	ug/kg	15.					
Fluoranthene	ND	ug/kg	15.					
Hexachlorobutadiene	ND	ug/kg	38.					
Naphthalene	ND	ug/kg	15.					
Benzo(a)anthracene	ND	ug/kg	15.					
Benzo(a)pyrene	ND	ug/kg	15.					
Benzo(b)fluoranthene	ND	ug/kg	15.					
Benzo(k)fluoranthene	ND	ug/kg	15.					
Chrysene	ND	ug/kg	15.					
Acenaphthylene	ND	ug/kg	15.					
Anthracene	ND	ug/kg	15.					
Benzo(ghi)perylene	ND	ug/kg	15.					
Fluorene	ND	ug/kg	15.					
Phenanthrene	ND	ug/kg	15.					
Dibenzo(a,h)anthracene	ND	ug/kg	15.					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	15.					
Pyrene	ND	ug/kg	15.					
2-Methylnaphthalene	ND	ug/kg	15.					
Pentachlorophenol	ND	ug/kg	61.					
Hexachlorobenzene	ND	ug/kg	61.					
Hexachloroethane	ND	ug/kg	61.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-05
SB-3 (13-14')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS-SIM - Westborough Lab cont'				1 8270C	0327 05:40	0330 08:21	HL
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	44.0	%	25-120				
Phenol-d6	52.0	%	10-120				
Nitrobenzene-d5	55.0	%	23-120				
2-Fluorobiphenyl	46.0	%	30-120				
2,4,6-Tribromophenol	53.0	%	19-120				
4-Terphenyl-d14	44.0	%	18-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0903480-06
DUPLICATE
Sample Matrix: SOIL

Date Collected: 19-MAR-2009 00:00
Date Received : 23-MAR-2009
Date Reported : 30-MAR-2009

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
General Chemistry - Westborough Lab								
Solids, Total	92	%	0.10	30	2540G		0326 16:07	SD
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 17:03	PD
Methylene chloride	ND	ug/kg	27.					
1,1-Dichloroethane	ND	ug/kg	4.1					
Chloroform	ND	ug/kg	4.1					
Carbon tetrachloride	ND	ug/kg	2.7					
1,2-Dichloropropane	ND	ug/kg	9.5					
Dibromochloromethane	ND	ug/kg	2.7					
1,1,2-Trichloroethane	ND	ug/kg	4.1					
Tetrachloroethene	ND	ug/kg	2.7					
Chlorobenzene	ND	ug/kg	2.7					
Trichlorofluoromethane	ND	ug/kg	14.					
1,2-Dichloroethane	ND	ug/kg	2.7					
1,1,1-Trichloroethane	ND	ug/kg	2.7					
Bromodichloromethane	ND	ug/kg	2.7					
trans-1,3-Dichloropropene	ND	ug/kg	2.7					
cis-1,3-Dichloropropene	ND	ug/kg	2.7					
1,1-Dichloropropene	ND	ug/kg	14.					
Bromoform	ND	ug/kg	11.					
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.7					
Benzene	ND	ug/kg	2.7					
Toluene	ND	ug/kg	4.1					
Ethylbenzene	ND	ug/kg	2.7					
Chloromethane	ND	ug/kg	14.					
Bromomethane	ND	ug/kg	5.4					
Vinyl chloride	ND	ug/kg	5.4					
Chloroethane	ND	ug/kg	5.4					
1,1-Dichloroethene	ND	ug/kg	2.7					
trans-1,2-Dichloroethene	ND	ug/kg	4.1					
Trichloroethene	ND	ug/kg	2.7					
1,2-Dichlorobenzene	ND	ug/kg	14.					
1,3-Dichlorobenzene	ND	ug/kg	14.					
1,4-Dichlorobenzene	ND	ug/kg	14.					
Methyl tert butyl ether	ND	ug/kg	5.4					
p/m-Xylene	ND	ug/kg	5.4					
o-Xylene	ND	ug/kg	5.4					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-06
DUPLICATE

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 17:03	PD
cis-1,2-Dichloroethene	ND	ug/kg	2.7					
Dibromomethane	ND	ug/kg	27.					
Styrene	ND	ug/kg	5.4					
Dichlorodifluoromethane	ND	ug/kg	27.					
Acetone	ND	ug/kg	27.					
Carbon disulfide	ND	ug/kg	27.					
2-Butanone	ND	ug/kg	27.					
Vinyl acetate	ND	ug/kg	27.					
4-Methyl-2-pentanone	ND	ug/kg	27.					
1,2,3-Trichloropropane	ND	ug/kg	27.					
2-Hexanone	ND	ug/kg	27.					
Bromochloromethane	ND	ug/kg	14.					
2,2-Dichloropropane	ND	ug/kg	14.					
1,2-Dibromoethane	ND	ug/kg	11.					
1,3-Dichloropropane	ND	ug/kg	14.					
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.7					
Bromobenzene	ND	ug/kg	14.					
n-Butylbenzene	ND	ug/kg	2.7					
sec-Butylbenzene	ND	ug/kg	2.7					
tert-Butylbenzene	ND	ug/kg	14.					
o-Chlorotoluene	ND	ug/kg	14.					
p-Chlorotoluene	ND	ug/kg	14.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	14.					
Hexachlorobutadiene	ND	ug/kg	14.					
Isopropylbenzene	ND	ug/kg	2.7					
p-Isopropyltoluene	ND	ug/kg	2.7					
Naphthalene	ND	ug/kg	14.					
Acrylonitrile	ND	ug/kg	27.					
n-Propylbenzene	ND	ug/kg	2.7					
1,2,3-Trichlorobenzene	ND	ug/kg	14.					
1,2,4-Trichlorobenzene	ND	ug/kg	14.					
1,3,5-Trimethylbenzene	ND	ug/kg	14.					
1,2,4-Trimethylbenzene	ND	ug/kg	14.					
1,4-Diethylbenzene	ND	ug/kg	11.					
4-Ethyltoluene	ND	ug/kg	11.					
1,2,4,5-Tetramethylbenzene	ND	ug/kg	11.					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	134	%	70-130					
Toluene-d8	121	%	70-130					
4-Bromofluorobenzene	126	%	70-130					
Dibromofluoromethane	113	%	70-130					
Semivolatile Organics by GC/MS - Westborough Lab				1	8270C	0327 05:40	0329 18:19	PS
Acenaphthene	ND	ug/kg	360					
1,2,4-Trichlorobenzene	ND	ug/kg	360					
Hexachlorobenzene	ND	ug/kg	360					
Bis(2-chloroethyl)ether	ND	ug/kg	360					
2-Chloronaphthalene	ND	ug/kg	430					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-06
DUPLICATE

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 18:19	PS
1,2-Dichlorobenzene	ND	ug/kg	360					
1,3-Dichlorobenzene	ND	ug/kg	360					
1,4-Dichlorobenzene	ND	ug/kg	360					
3,3'-Dichlorobenzidine	ND	ug/kg	720					
2,4-Dinitrotoluene	ND	ug/kg	360					
2,6-Dinitrotoluene	ND	ug/kg	360					
Fluoranthene	ND	ug/kg	360					
4-Chlorophenyl phenyl ether	ND	ug/kg	360					
4-Bromophenyl phenyl ether	ND	ug/kg	360					
Bis(2-chloroisopropyl)ether	ND	ug/kg	360					
Bis(2-chloroethoxy)methane	ND	ug/kg	360					
Hexachlorobutadiene	ND	ug/kg	720					
Hexachlorocyclopentadiene	ND	ug/kg	720					
Hexachloroethane	ND	ug/kg	360					
Isophorone	ND	ug/kg	360					
Naphthalene	ND	ug/kg	360					
Nitrobenzene	ND	ug/kg	360					
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	1100					
n-Nitrosodi-n-propylamine	ND	ug/kg	360					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	720					
Butyl benzyl phthalate	ND	ug/kg	360					
Di-n-butylphthalate	ND	ug/kg	360					
Di-n-octylphthalate	ND	ug/kg	360					
Diethyl phthalate	ND	ug/kg	360					
Dimethyl phthalate	ND	ug/kg	360					
Benzo(a)anthracene	ND	ug/kg	360					
Benzo(a)pyrene	ND	ug/kg	360					
Benzo(b)fluoranthene	ND	ug/kg	360					
Benzo(k)fluoranthene	ND	ug/kg	360					
Chrysene	ND	ug/kg	360					
Acenaphthylene	ND	ug/kg	360					
Anthracene	ND	ug/kg	360					
Benzo(ghi)perylene	ND	ug/kg	360					
Fluorene	ND	ug/kg	360					
Phenanthrene	ND	ug/kg	360					
Dibenzo(a,h)anthracene	ND	ug/kg	360					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	360					
Pyrene	ND	ug/kg	360					
Biphenyl	ND	ug/kg	360					
4-Chloroaniline	ND	ug/kg	360					
2-Nitroaniline	ND	ug/kg	360					
3-Nitroaniline	ND	ug/kg	360					
4-Nitroaniline	ND	ug/kg	510					
Dibenzofuran	ND	ug/kg	360					
2-Methylnaphthalene	ND	ug/kg	360					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1400					
Acetophenone	ND	ug/kg	1400					
2,4,6-Trichlorophenol	ND	ug/kg	360					
P-Chloro-M-Cresol	ND	ug/kg	360					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-06
DUPLICATE

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 18:19	PS
2-Chlorophenol	ND	ug/kg	430					
2,4-Dichlorophenol	ND	ug/kg	720					
2,4-Dimethylphenol	ND	ug/kg	360					
2-Nitrophenol	ND	ug/kg	1400					
4-Nitrophenol	ND	ug/kg	720					
2,4-Dinitrophenol	ND	ug/kg	1400					
4,6-Dinitro-o-cresol	ND	ug/kg	1400					
Pentachlorophenol	ND	ug/kg	1400					
Phenol	ND	ug/kg	510					
2-Methylphenol	ND	ug/kg	430					
3-Methylphenol/4-Methylphenol	ND	ug/kg	430					
2,4,5-Trichlorophenol	ND	ug/kg	360					
Benzoic Acid	ND	ug/kg	3600					
Benzyl Alcohol	ND	ug/kg	720					
Carbazole	ND	ug/kg	360					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	52.0	%	25-120					
Phenol-d6	52.0	%	10-120					
Nitrobenzene-d5	51.0	%	23-120					
2-Fluorobiphenyl	53.0	%	30-120					
2,4,6-Tribromophenol	59.0	%	19-120					
4-Terphenyl-d14	76.0	%	18-120					
Semivolatile Organics by GC/MS-SIM - Westborough Lab				1	8270C	0327 05:40	0330 08:51	HL
Acenaphthene	ND	ug/kg	14.					
2-Chloronaphthalene	ND	ug/kg	14.					
Fluoranthene	ND	ug/kg	14.					
Hexachlorobutadiene	ND	ug/kg	36.					
Naphthalene	ND	ug/kg	14.					
Benzo(a)anthracene	ND	ug/kg	14.					
Benzo(a)pyrene	ND	ug/kg	14.					
Benzo(b)fluoranthene	ND	ug/kg	14.					
Benzo(k)fluoranthene	ND	ug/kg	14.					
Chrysene	ND	ug/kg	14.					
Acenaphthylene	ND	ug/kg	14.					
Anthracene	ND	ug/kg	14.					
Benzo(ghi)perylene	ND	ug/kg	14.					
Fluorene	ND	ug/kg	14.					
Phenanthrene	ND	ug/kg	14.					
Dibenzo(a,h)anthracene	ND	ug/kg	14.					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	14.					
Pyrene	ND	ug/kg	14.					
2-Methylnaphthalene	ND	ug/kg	14.					
Pentachlorophenol	ND	ug/kg	58.					
Hexachlorobenzene	ND	ug/kg	58.					
Hexachloroethane	ND	ug/kg	58.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-06
DUPLICATE

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by GC/MS-SIM - Westborough Lab cont'				1	8270C	0327 05:40	0330 08:51	HL
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	33.0	%	25-120					
Phenol-d6	38.0	%	10-120					
Nitrobenzene-d5	36.0	%	23-120					
2-Fluorobiphenyl	32.0	%	30-120					
2,4,6-Tribromophenol	42.0	%	19-120					
4-Terphenyl-d14	47.0	%	18-120					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0903480-07
TRIP BLANK
Sample Matrix: WATER

Date Collected: 19-MAR-2009 00:00
Date Received : 23-MAR-2009
Date Reported : 30-MAR-2009

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 10:41	PD
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	0.75					
Chloroform	ND	ug/l	0.75					
Carbon tetrachloride	ND	ug/l	0.50					
1,2-Dichloropropane	ND	ug/l	1.8					
Dibromochloromethane	ND	ug/l	0.50					
1,1,2-Trichloroethane	ND	ug/l	0.75					
Tetrachloroethene	ND	ug/l	0.50					
Chlorobenzene	ND	ug/l	0.50					
Trichlorofluoromethane	ND	ug/l	2.5					
1,2-Dichloroethane	ND	ug/l	0.50					
1,1,1-Trichloroethane	ND	ug/l	0.50					
Bromodichloromethane	ND	ug/l	0.50					
trans-1,3-Dichloropropene	ND	ug/l	0.50					
cis-1,3-Dichloropropene	ND	ug/l	0.50					
1,1-Dichloropropene	ND	ug/l	2.5					
Bromoform	ND	ug/l	2.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50					
Benzene	ND	ug/l	0.50					
Toluene	ND	ug/l	0.75					
Ethylbenzene	ND	ug/l	0.50					
Chloromethane	ND	ug/l	2.5					
Bromomethane	ND	ug/l	1.0					
Vinyl chloride	ND	ug/l	1.0					
Chloroethane	ND	ug/l	1.0					
1,1-Dichloroethene	ND	ug/l	0.50					
trans-1,2-Dichloroethene	ND	ug/l	0.75					
Trichloroethene	ND	ug/l	0.50					
1,2-Dichlorobenzene	ND	ug/l	2.5					
1,3-Dichlorobenzene	ND	ug/l	2.5					
1,4-Dichlorobenzene	ND	ug/l	2.5					
Methyl tert butyl ether	ND	ug/l	1.0					
p/m-Xylene	ND	ug/l	1.0					
o-Xylene	ND	ug/l	1.0					
cis-1,2-Dichloroethene	ND	ug/l	0.50					
Dibromomethane	ND	ug/l	5.0					
1,2,3-Trichloropropane	ND	ug/l	5.0					
Acrylonitrile	ND	ug/l	5.0					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0903480-07
TRIP BLANK

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 10:41	PD
Styrene	ND	ug/l	1.0					
Dichlorodifluoromethane	ND	ug/l	5.0					
Acetone	ND	ug/l	5.0					
Carbon disulfide	ND	ug/l	5.0					
2-Butanone	ND	ug/l	5.0					
Vinyl acetate	ND	ug/l	5.0					
4-Methyl-2-pentanone	ND	ug/l	5.0					
2-Hexanone	ND	ug/l	5.0					
Bromochloromethane	ND	ug/l	2.5					
2,2-Dichloropropane	ND	ug/l	2.5					
1,2-Dibromoethane	ND	ug/l	2.0					
1,3-Dichloropropane	ND	ug/l	2.5					
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50					
Bromobenzene	ND	ug/l	2.5					
n-Butylbenzene	ND	ug/l	0.50					
sec-Butylbenzene	ND	ug/l	0.50					
tert-Butylbenzene	ND	ug/l	2.5					
o-Chlorotoluene	ND	ug/l	2.5					
p-Chlorotoluene	ND	ug/l	2.5					
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5					
Hexachlorobutadiene	ND	ug/l	0.60					
Isopropylbenzene	ND	ug/l	0.50					
p-Isopropyltoluene	ND	ug/l	0.50					
Naphthalene	ND	ug/l	2.5					
n-Propylbenzene	ND	ug/l	0.50					
1,2,3-Trichlorobenzene	ND	ug/l	2.5					
1,2,4-Trichlorobenzene	ND	ug/l	2.5					
1,3,5-Trimethylbenzene	ND	ug/l	2.5					
1,2,4-Trimethylbenzene	ND	ug/l	2.5					
1,4-Diethylbenzene	ND	ug/l	2.0					
4-Ethyltoluene	ND	ug/l	2.0					
1,2,4,5-Tetramethylbenzene	ND	ug/l	2.0					

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	108	%	70-130
Toluene-d8	97.0	%	70-130
4-Bromofluorobenzene	99.0	%	70-130
Dibromofluoromethane	103	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0903480

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
General Chemistry - Westborough Lab for sample(s) 02,06 (L0903518-29, WG356840-1)					
Solids, Total	93	94	%	1	20
General Chemistry - Westborough Lab for sample(s) 01,03-05 (L0903506-02, WG356573-1)					
Solids, Total	78	79	%	1	20

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0903480

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by GC/MS - Westborough Lab for sample(s) 07 (WG356469-1, WG356469-2)					
Chlorobenzene	96	109	13	20	75-130
Benzene	91	102	11	20	76-127
Toluene	94	106	12	20	76-125
1,1-Dichloroethene	92	107	15	20	61-145
Trichloroethene	93	106	13	20	71-120
Surrogate(s)					
1,2-Dichloroethane-d4	105	104	1		70-130
Toluene-d8	99	100	1		70-130
4-Bromofluorobenzene	97	98	1		70-130
Dibromofluoromethane	104	112	7		70-130
Volatile Organics by GC/MS - Westborough Lab for sample(s) 01-06 (WG356502-1, WG356502-2)					
Chlorobenzene	108	98	10	30	60-133
Benzene	99	85	15	30	66-142
Toluene	102	93	9	30	59-139
1,1-Dichloroethene	110	96	14	30	59-172
Trichloroethene	101	90	12	30	62-137
Surrogate(s)					
1,2-Dichloroethane-d4	120	105	13		70-130
Toluene-d8	108	100	8		70-130
4-Bromofluorobenzene	113	108	5		70-130
Dibromofluoromethane	115	101	13		70-130
Semivolatile Organics by GC/MS - Westborough Lab for sample(s) 02,04-06 (WG356903-2, WG356903-3)					
Acenaphthene	58	55	5	50	31-137
1,2,4-Trichlorobenzene	57	51	11	50	38-107
2-Chloronaphthalene	67	56	18	50	40-140
1,2-Dichlorobenzene	55	54	2	50	40-140
1,4-Dichlorobenzene	53	50	6	50	28-104
2,4-Dinitrotoluene	72	73	1	50	28-89
2,6-Dinitrotoluene	65	69	6	50	40-140
Fluoranthene	76	76	0	50	40-140
4-Chlorophenyl phenyl ether	62	64	3	50	40-140
n-Nitrosodi-n-propylamine	56	56	0	50	41-126
Butyl benzyl phthalate	72	73	1	50	40-140
Anthracene	71	75	5	50	40-140
Pyrene	71	74	4	50	35-142
P-Chloro-M-Cresol	66	63	5	50	26-103
2-Chlorophenol	58	53	9	50	25-102
2-Nitrophenol	57	57	0	50	30-130
4-Nitrophenol	70	74	6	50	11-114
2,4-Dinitrophenol	44	47	7	50	4-130
Pentachlorophenol	54	57	5	50	17-109
Phenol	61	58	5	50	26-90

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0903480

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Semivolatile Organics by GC/MS - Westborough Lab for sample(s) 02,04-06 (WG356903-2, WG356903-3)					
Surrogate(s)					
2-Fluorophenol	58	55	5		25-120
Phenol-d6	60	57	5		10-120
Nitrobenzene-d5	57	54	5		23-120
2-Fluorobiphenyl	61	52	16		30-120
2,4,6-Tribromophenol	72	72	0		19-120
4-Terphenyl-d14	69	68	1		18-120
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s) 02,04-06 (WG356904-2, WG3569					
Acenaphthene	41	44	7	50	31-137
2-Chloronaphthalene	40	49	20	50	40-140
Fluoranthene	61	64	5	50	40-140
Anthracene	48	52	8	50	40-140
Pyrene	61	63	3	50	35-142
Pentachlorophenol	36	47	27	50	17-109
Surrogate(s)					
2-Fluorophenol	37	41	10		25-120
Phenol-d6	41	45	9		10-120
Nitrobenzene-d5	41	46	11		23-120
2-Fluorobiphenyl	35	41	16		30-120
2,4,6-Tribromophenol	55	54	2		19-120
4-Terphenyl-d14	54	51	6		18-120

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0903480

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 07 (WG356469-3)							
Volatile Organics by GC/MS - Westborough Lab				1 8260B		0324 08:53	PD
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Acrylonitrile	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0903480

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 07 (WG356469-3)								
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 08:53	PD
Bromochloromethane	ND	ug/l	2.5					
2,2-Dichloropropane	ND	ug/l	2.5					
1,2-Dibromoethane	ND	ug/l	2.0					
1,3-Dichloropropane	ND	ug/l	2.5					
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50					
Bromobenzene	ND	ug/l	2.5					
n-Butylbenzene	ND	ug/l	0.50					
sec-Butylbenzene	ND	ug/l	0.50					
tert-Butylbenzene	ND	ug/l	2.5					
o-Chlorotoluene	ND	ug/l	2.5					
p-Chlorotoluene	ND	ug/l	2.5					
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5					
Hexachlorobutadiene	ND	ug/l	0.60					
Isopropylbenzene	ND	ug/l	0.50					
p-Isopropyltoluene	ND	ug/l	0.50					
Naphthalene	ND	ug/l	2.5					
n-Propylbenzene	ND	ug/l	0.50					
1,2,3-Trichlorobenzene	ND	ug/l	2.5					
1,2,4-Trichlorobenzene	ND	ug/l	2.5					
1,3,5-Trimethylbenzene	ND	ug/l	2.5					
1,2,4-Trimethylbenzene	ND	ug/l	2.5					
1,4-Diethylbenzene	ND	ug/l	2.0					
4-Ethyltoluene	ND	ug/l	2.0					
1,2,4,5-Tetramethylbenzene	ND	ug/l	2.0					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	102	%	70-130					
Toluene-d8	98.0	%	70-130					
4-Bromofluorobenzene	99.0	%	70-130					
Dibromofluoromethane	98.0	%	70-130					
Blank Analysis for sample(s) 07 (WG356469-3)								
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 08:53	PD
Tentatively Identified Compounds								
No Tentatively Identified Compounds	ND	ug/l						
Blank Analysis for sample(s) 01-06 (WG356502-3)								
Volatile Organics by GC/MS - Westborough Lab				1	8260B		0324 09:35	PD
Methylene chloride	ND	ug/kg	25.					
1,1-Dichloroethane	ND	ug/kg	3.8					
Chloroform	ND	ug/kg	3.8					
Carbon tetrachloride	ND	ug/kg	2.5					
1,2-Dichloropropane	ND	ug/kg	8.8					
Dibromochloromethane	ND	ug/kg	2.5					
1,1,2-Trichloroethane	ND	ug/kg	3.8					

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0903480

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-06 (WG356502-3)							
Volatile Organics by GC/MS - Westborough Lab cont'd				1 8260B		0324 09:35	PD
Tetrachloroethene	ND	ug/kg	2.5				
Chlorobenzene	ND	ug/kg	2.5				
Trichlorofluoromethane	ND	ug/kg	12.				
1,2-Dichloroethane	ND	ug/kg	2.5				
1,1,1-Trichloroethane	ND	ug/kg	2.5				
Bromodichloromethane	ND	ug/kg	2.5				
trans-1,3-Dichloropropene	ND	ug/kg	2.5				
cis-1,3-Dichloropropene	ND	ug/kg	2.5				
1,1-Dichloropropene	ND	ug/kg	12.				
Bromoform	ND	ug/kg	10.				
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.5				
Benzene	ND	ug/kg	2.5				
Toluene	ND	ug/kg	3.8				
Ethylbenzene	ND	ug/kg	2.5				
Chloromethane	ND	ug/kg	12.				
Bromomethane	ND	ug/kg	5.0				
Vinyl chloride	ND	ug/kg	5.0				
Chloroethane	ND	ug/kg	5.0				
1,1-Dichloroethene	ND	ug/kg	2.5				
trans-1,2-Dichloroethene	ND	ug/kg	3.8				
Trichloroethene	ND	ug/kg	2.5				
1,2-Dichlorobenzene	ND	ug/kg	12.				
1,3-Dichlorobenzene	ND	ug/kg	12.				
1,4-Dichlorobenzene	ND	ug/kg	12.				
Methyl tert butyl ether	ND	ug/kg	5.0				
p/m-Xylene	ND	ug/kg	5.0				
o-Xylene	ND	ug/kg	5.0				
cis-1,2-Dichloroethene	ND	ug/kg	2.5				
Dibromomethane	ND	ug/kg	25.				
Styrene	ND	ug/kg	5.0				
Dichlorodifluoromethane	ND	ug/kg	25.				
Acetone	ND	ug/kg	25.				
Carbon disulfide	ND	ug/kg	25.				
2-Butanone	ND	ug/kg	25.				
Vinyl acetate	ND	ug/kg	25.				
4-Methyl-2-pentanone	ND	ug/kg	25.				
1,2,3-Trichloropropane	ND	ug/kg	25.				
2-Hexanone	ND	ug/kg	25.				
Bromochloromethane	ND	ug/kg	12.				
2,2-Dichloropropane	ND	ug/kg	12.				
1,2-Dibromoethane	ND	ug/kg	10.				
1,3-Dichloropropane	ND	ug/kg	12.				
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.5				
Bromobenzene	ND	ug/kg	12.				
n-Butylbenzene	ND	ug/kg	2.5				
sec-Butylbenzene	ND	ug/kg	2.5				

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0903480

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-06 (WG356502-3)								
Volatile Organics by GC/MS - Westborough Lab cont'd				1	8260B		0324 09:35	PD
tert-Butylbenzene	ND	ug/kg	12.					
o-Chlorotoluene	ND	ug/kg	12.					
p-Chlorotoluene	ND	ug/kg	12.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	12.					
Hexachlorobutadiene	ND	ug/kg	12.					
Isopropylbenzene	ND	ug/kg	2.5					
p-Isopropyltoluene	ND	ug/kg	2.5					
Naphthalene	ND	ug/kg	12.					
Acrylonitrile	ND	ug/kg	25.					
n-Propylbenzene	ND	ug/kg	2.5					
1,2,3-Trichlorobenzene	ND	ug/kg	12.					
1,2,4-Trichlorobenzene	ND	ug/kg	12.					
1,3,5-Trimethylbenzene	ND	ug/kg	12.					
1,2,4-Trimethylbenzene	ND	ug/kg	12.					
1,4-Diethylbenzene	ND	ug/kg	10.					
4-Ethyltoluene	ND	ug/kg	10.					
1,2,4,5-Tetramethylbenzene	ND	ug/kg	10.					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	101	%	70-130					
Toluene-d8	97.0	%	70-130					
4-Bromofluorobenzene	102	%	70-130					
Dibromofluoromethane	99.0	%	70-130					
Blank Analysis for sample(s) 02,04-06 (WG356903-1)								
Semivolatile Organics by GC/MS - Westborough Lab				1	8270C	0327 05:40	0329 15:59	PS
Acenaphthene	ND	ug/kg	330					
1,2,4-Trichlorobenzene	ND	ug/kg	330					
Hexachlorobenzene	ND	ug/kg	330					
Bis(2-chloroethyl)ether	ND	ug/kg	330					
2-Chloronaphthalene	ND	ug/kg	400					
1,2-Dichlorobenzene	ND	ug/kg	330					
1,3-Dichlorobenzene	ND	ug/kg	330					
1,4-Dichlorobenzene	ND	ug/kg	330					
3,3'-Dichlorobenzidine	ND	ug/kg	670					
2,4-Dinitrotoluene	ND	ug/kg	330					
2,6-Dinitrotoluene	ND	ug/kg	330					
Fluoranthene	ND	ug/kg	330					
4-Chlorophenyl phenyl ether	ND	ug/kg	330					
4-Bromophenyl phenyl ether	ND	ug/kg	330					
Bis(2-chloroisopropyl)ether	ND	ug/kg	330					
Bis(2-chloroethoxy)methane	ND	ug/kg	330					
Hexachlorobutadiene	ND	ug/kg	670					
Hexachlorocyclopentadiene	ND	ug/kg	670					
Hexachloroethane	ND	ug/kg	330					
Isophorone	ND	ug/kg	330					

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0903480

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02,04-06 (WG356903-1)							
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1 8270C	0327 05:40	0329 15:59	PS
Naphthalene	ND	ug/kg	330				
Nitrobenzene	ND	ug/kg	330				
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	1000				
n-Nitrosodi-n-propylamine	ND	ug/kg	330				
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	670				
Butyl benzyl phthalate	ND	ug/kg	330				
Di-n-butylphthalate	ND	ug/kg	330				
Di-n-octylphthalate	ND	ug/kg	330				
Diethyl phthalate	ND	ug/kg	330				
Dimethyl phthalate	ND	ug/kg	330				
Benzo(a)anthracene	ND	ug/kg	330				
Benzo(a)pyrene	ND	ug/kg	330				
Benzo(b)fluoranthene	ND	ug/kg	330				
Benzo(k)fluoranthene	ND	ug/kg	330				
Chrysene	ND	ug/kg	330				
Acenaphthylene	ND	ug/kg	330				
Anthracene	ND	ug/kg	330				
Benzo(ghi)perylene	ND	ug/kg	330				
Fluorene	ND	ug/kg	330				
Phenanthrene	ND	ug/kg	330				
Dibenzo(a,h)anthracene	ND	ug/kg	330				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	330				
Pyrene	ND	ug/kg	330				
Biphenyl	ND	ug/kg	330				
4-Chloroaniline	ND	ug/kg	330				
2-Nitroaniline	ND	ug/kg	330				
3-Nitroaniline	ND	ug/kg	330				
4-Nitroaniline	ND	ug/kg	470				
Dibenzofuran	ND	ug/kg	330				
2-Methylnaphthalene	ND	ug/kg	330				
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1300				
Acetophenone	ND	ug/kg	1300				
2,4,6-Trichlorophenol	ND	ug/kg	330				
P-Chloro-M-Cresol	ND	ug/kg	330				
2-Chlorophenol	ND	ug/kg	400				
2,4-Dichlorophenol	ND	ug/kg	670				
2,4-Dimethylphenol	ND	ug/kg	330				
2-Nitrophenol	ND	ug/kg	1300				
4-Nitrophenol	ND	ug/kg	670				
2,4-Dinitrophenol	ND	ug/kg	1300				
4,6-Dinitro-o-cresol	ND	ug/kg	1300				
Pentachlorophenol	ND	ug/kg	1300				
Phenol	ND	ug/kg	470				
2-Methylphenol	ND	ug/kg	400				
3-Methylphenol/4-Methylphenol	ND	ug/kg	400				
2,4,5-Trichlorophenol	ND	ug/kg	330				

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0903480

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02,04-06 (WG356903-1)								
Semivolatile Organics by GC/MS - Westborough Lab cont'd				1	8270C	0327 05:40	0329 15:59	PS
Benzoic Acid	ND	ug/kg	3300					
Benzyl Alcohol	ND	ug/kg	670					
Carbazole	ND	ug/kg	330					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	45.0	%	25-120					
Phenol-d6	44.0	%	10-120					
Nitrobenzene-d5	42.0	%	23-120					
2-Fluorobiphenyl	45.0	%	30-120					
2,4,6-Tribromophenol	42.0	%	19-120					
4-Terphenyl-d14	55.0	%	18-120					
Blank Analysis for sample(s) 02,04-06 (WG356904-1)								
Semivolatile Organics by GC/MS-SIM - Westborough Lab				1	8270C	0327 05:40	0330 05:55	HL
Acenaphthene	ND	ug/kg	13.					
2-Chloronaphthalene	ND	ug/kg	13.					
Fluoranthene	ND	ug/kg	13.					
Hexachlorobutadiene	ND	ug/kg	33.					
Naphthalene	ND	ug/kg	13.					
Benzo(a)anthracene	ND	ug/kg	13.					
Benzo(a)pyrene	ND	ug/kg	13.					
Benzo(b)fluoranthene	ND	ug/kg	13.					
Benzo(k)fluoranthene	ND	ug/kg	13.					
Chrysene	ND	ug/kg	13.					
Acenaphthylene	ND	ug/kg	13.					
Anthracene	ND	ug/kg	13.					
Benzo(ghi)perylene	ND	ug/kg	13.					
Fluorene	ND	ug/kg	13.					
Phenanthrene	ND	ug/kg	13.					
Dibenzo(a,h)anthracene	ND	ug/kg	13.					
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	13.					
Pyrene	ND	ug/kg	13.					
2-Methylnaphthalene	ND	ug/kg	13.					
Pentachlorophenol	ND	ug/kg	53.					
Hexachlorobenzene	ND	ug/kg	53.					
Hexachloroethane	ND	ug/kg	53.					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	38.0	%	25-120					
Phenol-d6	43.0	%	10-120					
Nitrobenzene-d5	45.0	%	23-120					
2-Fluorobiphenyl	40.0	%	30-120					
2,4,6-Tribromophenol	45.0	%	19-120					
4-Terphenyl-d14	44.0	%	18-120					

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.
H	The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised February 18, 2009 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)
Solid Waste/Soil (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: MA0086.
Drinking Water (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B,4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Nitrite-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Tl,Ti,V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)
(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water)
600/4-81-045-PCB-Oil

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307.
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935.
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.1, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, EPA 350.2/.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

New York Department of Health Certificate/Lab ID: 11148.
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500Cl-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO30F, EPA 354.1, SM4500-NO2-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)
Analytical Services Protocol: CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

Rhode Island Department of Health Certificate/Lab ID: LAO00065.
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 3/23/09 | ALPHA Lab #: L2034980

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: AKRF
Address: 440 Park Ave S 7th Fl New York, NY
Phone: 646-388-9537
Fax: 212-
Email: kgallagher@akrf.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 299 Cayuga St
Project Location: Union Springs, NY
Project #: 40212
Project Manager: Kerry Gallagher/Bryan Zeff
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 3/30/09 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration ☐ Done ☐ Not needed ☐ Lab to do
Preservation ☐ Lab to do (Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8260	8270	Sample Specific Comments	Total # Bottles
03480 01	SB-1 (3-4')	3/19/09	915	Soil	KG	X		will call in	
-02	SB-5 (15-16')		1138					which samples	
-03	SB-2 (5.5-6.5')		1305					to be analyzed	
-04	SB-4 (11-12')		1505					for 8270	
-05	SB-3 (13-14')		1558						
-06	Duplicate	X	—	X	X	X			
-07	Trip Blank					X			

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type
Preservative UN

Relinquished By:	Date/Time	Received By:	Date/Time
Kerry Gallagher	3/23/09 1500	[illegible]	3/23/09 1528
[illegible]	3/23/09 [illegible]	[illegible]	3/23/09 18[illegible]
[illegible]	3/23/09 20[illegible]	[illegible]	3/23/09 20:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #:

Client Information

Client: HKAF

Address: 200 PARK AVE S 7TH FL NEW YORK, NY

Phone: 646-328-4537

Fax: 212-

Email: kgallagher@akrf.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 299 Canyon St

Project Location: Union Springs, NY

Project #: 40212

Project Manager: Kerry Gallagher/Ryan Zay

ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING

Filtration

☐ Done

☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8260	8270	Sample Specific Comments	TOTAL # BOTTLES
	SB-1 (3-4')	3/19/09	1115	Soil	KG	X		will call in	
	SB-5 (15-16')		1138				X (KG)	which samples	
	SB-2 (5.5-6.5')		1305					to be analyzed	
	SB-4 (11-12')		1505				X (KG)	for 8270	
	SB-3 (13-14')		1558				X (KG)		
	Duplicate	X	—	X	X	X	X (KG)		
	Trip Blank					X			

Container Type	
Preservative	UN

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	3/20/09 [illegible]	[illegible]	[illegible]

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FORM NO: 01-01 (rev. 14-OCT-07)

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 3/23/09 | ALPHA Lab #: L2034980

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: AKRF
Address: 440 Park Ave S 7th Fl New York, NY
Phone: 646-388-9537
Fax: 212-
Email: kgallagher@akrf.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 299 Cayuga St
Project Location: Union Springs, NY
Project #: 40212
Project Manager: Kerry Gallagher/Bryan Zeff
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 3/30/09 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration ☐ Done ☐ Not needed ☐ Lab to do
Preservation ☐ Lab to do (Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8260	8270	Sample Specific Comments	Total # Bottles
03480 01	SB-1 (3-4')	3/19/09	915	Soil	KG	X		will call in	
-02	SB-5 (15-16')		1138					which samples	
-03	SB-2 (5.5-6.5')		1305					to be analyzed	
-04	SB-4 (11-12')		1505					for 8270	
-05	SB-3 (13-14')		1558						
-06	Duplicate	X	—	X	X	X			
-07	Trip Blank					X			

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type
Preservative UN

Relinquished By:	Date/Time	Received By:	Date/Time
Kerry Gallagher	3/23/09 1500	[illegible]	3/23/09 1528
[illegible]	3/23/09 [illegible]	[illegible]	3/23/09 18[illegible]
[illegible]	3/23/09 20[illegible]	[illegible]	3/23/09 20:00

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CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA LABS

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MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #:

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Phone: 646-328-4537

Fax: 212-

Email: kgallagher@akrf.com

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ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Report Information - Data Deliverables

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Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

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☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING

Filtration

☐ Done

☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8260	8270	Sample Specific Comments	TOTAL # BOTTLES
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	SB-5 (15-16')		1138				X (KG)	which samples	
	SB-2 (5.5-6.5')		1305					to be analyzed	
	SB-4 (11-12')		1505				X (KG)	for 8270	
	SB-3 (13-14')		1558				X (KG)		
	Duplicate	X	—	X	X	X	X (KG)		
	Trip Blank					X			

Container Type	
Preservative	UN

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	3/20/09 [illegible]	[illegible]	[illegible]

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