



September 11, 2012

Mr. William T. Ports, P.E.
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

Subject: Former M. Argueso and Company, Inc.
Site #C360108
441 and 442 Waverly Avenue, Mamaroneck, NY
IRM/RI Report
STERLING File #28012 (Task 650)

Dear Mr. Ports,

Enclosed please find one (1) hard copy and a complete electronic copy on CD of the Interim Remedial Measures/Remedial Investigation (IRM/RI) Report for the subject property.

Please contact me should you have any questions.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

Mark P. Millspaugh, P.E.
President
mark@sterlingenvironmental.com

MPM/bc
Email/First Class Mail
Enclosure

cc: T.J. Milo, New Waverly Avenue Associates, LLC (with enclosure)
Kevin Young, Young Sommer, LLC (with enclosure)
Nathan Walz, NYSDOH (with enclosure)

28012/Correspondence/NYSDEC_IRM-RI Report_ltr.doc

"Serving our clients and the environment since 1993"

24 Wade Road ♦ Latham, New York 12110 ♦ Tel: 518-456-4900 ♦ Fax: 518-456-3532
E-mail: sterling@sterlingenvironmental.com ♦ Website: www.sterlingenvironmental.com



**FORMER M. ARGUESO AND CO., INC.
SITE NO. C360108
441 & 442 WAVERLY AVENUE
MAMARONECK, NEW YORK**

**INTERIM REMEDIAL MEASURES/ REMEDIAL
INVESTIGATION REPORT**

Prepared for:

New Waverly Avenue Associates, LLC
566 Westchester Avenue
Rye Brook, New York 10573

Prepared by:

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

September 7, 2012



"Serving our clients and the environment since 1993"

**FORMER M. ARGUESO AND CO., INC.
SITE NO. C360108
441 & 442 WAVERLY AVENUE
MAMARONECK, NEW YORK**

**INTERIM REMEDIAL MEASURES/ REMEDIAL
INVESTIGATION REPORT**

TABLE OF CONTENTS

	<u>Page #</u>
CONSTRUCTION COMPLETION REPORT AND REMEDIAL INVESTIGATION REPORT CERTIFICATION	1
1.0 INTRODUCTION	2
1.1 Site Description and Adjacent Properties	2
1.2 Historical Operations and Previous Investigations	2
1.3 Site Geology	3
1.4 Fish and Wildlife Resources	3
1.5 Nature and Extent of Contamination	3
1.5.1 Groundwater	3
1.5.2 Soil	4
2.0 2009 AND 2010 INTERIM REMEDIAL MEASURES/CONSTRUCTION COMPLETION REPORT	4
2.1 441 Waverly Avenue	5
2.2 442 Waverly Avenue	5
2.2.1 8,000 Gallon UST	5
2.2.1.1 8,000 Gallon UST Stockpile	5
2.2.2 Three (3) Chamber Concrete Settling Tank and Associated Piping	5
2.2.3 1,000 Gallon Steel UST and Associated Piping	6
2.2.4 Internal Discharge Pit and Associated Piping	7
2.2.5 Sump Pump Pit and Associated Piping	7
2.2.6 Discharge Pipe from 442 Waverly Avenue to Main Sanitary Sewer Line Under Waverly Avenue	8
2.2.7 Stockpile Testing for 2010 Soil Excavations	8
2.2.8 2010 Offsite Soil Testing for Backfill Sources	9
2.2.9 Comparison of IRM Soil Analytical Results with Part 375 Protection of Groundwater SCOs	9
2.2.10 442 Waverly Avenue Building Demolition	10
3.0 REMEDIAL INVESTIGATION REPORT	10
3.1 2009 Groundwater Monitoring Event	10
3.1.1 Monitoring Well GPS Survey	10
3.1.2 2009 Groundwater Elevations	11
3.1.3 2009 Sampled Monitoring Wells	11
3.1.4 Groundwater Sampling Methodology	12
3.1.5 2009 Groundwater Analytical Results	12
3.1.6 2009 Monitoring Well Decommissioning	13

3.1.7	2009 and 2010 Soil Boring and Test Pit Locations	14
3.1.8	Soil Logging and Sampling Methodology	14
3.1.9	2009 and 2010 Soil Boring and Test Pit Analytical Results	14
3.1.10	Part 375 Protection of Groundwater Soil Cleanup Objectives (SCOs)	15
3.2	2012 Offsite Monitoring Wells Installation and Development	16
3.2.1	2012 Monitoring Well Sampling and Analytical Results	17
3.2.2	Groundwater Elevation and Flow Direction	17
3.2.3	Evaluation of Potential Sources for Chlorinated Solvents	17
4.0	FISH AND WILDLIFE RESOURCE IMPACT ANALYSIS	18
5.0	DATA USABILITY SUMMARY REPORTS (DUSRs)	18
6.0	HEALTH AND SAFETY PLAN (HASP) & COMMUNITY AIR MONITORING PLAN (CAMP) IMPLEMENTATION	18
7.0	PROPOSED ALTERNATIVES FOR THE SITE	19
8.0	CONCLUSIONS AND RECOMMENDATIONS	20

TABLES

Tables 1A & 1B	Summary of 8,000 Gallon UST Removal Soil Analytical Results (VOCs & SVOCs)
Table 2	Soil Stockpiles Analytical Results (Part 375 Parameters)
Table 3	Tank Liquid Analytical Results
Tables 4A & 4B	Settling Tank Removal Soil Analytical Results (VOCs & SVOCs)
Tables 5A & 5B	Steel Tank Removal Soil Analytical Results (VOCs & SVOCs)
Tables 6A & 6B	Internal Discharge Pit Soil Analytical Results (VOCs & SVOCs)
Tables 7A & 7B	Sump Pump Pit Soil Analytical Results (VOCs & SVOCs)
Table 8	Backfill Material Analytical Results (Part 375 Parameters)
Tables 9A & 9B	Summary of 2009 and 2012 Groundwater Analytical Results for 441 & 442 Waverly Avenue
Tables 10A & 10B	Summary of Soil Boring and Test Pit Analytical Results (VOCs & SVOCs)
Table 11	2012 Groundwater Analytical Results for 441 and 442 Waverly Avenue and Offsite Monitoring Wells
Table 12	January 2012 Groundwater Elevation Data

FIGURES

Figure 1	Site Location Map
Figure 2	2009 and 2010 Soil and Groundwater Sample Locations – 442 Waverly Avenue
Figure 3	2009 Soil and Groundwater Sample Locations – 441 Waverly Avenue
Figure 4	2009 Overburden Aquifer Groundwater Elevations – 441 & 442 Waverly Avenue
Figure 5	2012 Deep Overburden Monitoring Well Sample Locations
Figures 6-9	2012 Monitoring Well Construction Details
Figure 10	2012 Groundwater Elevation Contour Map

APPENDICES

Appendix A	2009 RI/IRM Work Plan (Provided on CD) and 2012 RI Work Plan
Appendix B	2005 Phase I and Phase II Environmental Site Assessment (ESA) Reports (provided on CD)
Appendix C	Daily Field Reports (2009 - 2011)
Appendix D	Laboratory Reports (2009 & 2010, provided on CD)
Appendix E	W. Nyack Quarry Correspondence Letter
Appendix F	Disposal Manifests for 442 Waverly Avenue Tank Liquids and Stockpile A
Appendix G	Low Flow Data Forms (2009)
Appendix H	Soil Boring Logs (2009)
Appendix I	Data Usability Summary Reports (provided on CD)
Appendix J	Logged Data for Air Quality Monitoring (2009 & 2010) (provided on CD)
Appendix K	Boring Logs for January 2012 Offsite Monitoring Wells
Appendix L	Well Development Logs and Low-Flow Data Forms for January 2012
Appendix M	Laboratory Report for January 2012 Groundwater Monitoring Event

PLATES

Plate 1	VOCs Reported for Groundwater for 441 Waverly Avenue
Plate 2	VOCs Reported for Groundwater for 442 Waverly Avenue

CONSTRUCTION COMPLETION REPORT AND REMEDIAL INVESTIGATION REPORT CERTIFICATION

I, MARK P. MILLSPAUGH, P.E., certify that I am currently a NYS registered professional engineer, I had primary responsibility for the implementation of the Interim Remedial Measure that is described in the Construction Completion Report. The Construction Completion Report documents that the Interim Remedial Measures Work Plan was implemented and construction activities were completed in substantial conformance with the New York State Department of Environmental Conservation (NYSDEC)-approved Interim Remedial Measures Work Plan and were personally witnessed by me or a person under my direct supervision.

The data submitted to the NYSDEC by this Construction Completion Report demonstrates that the remediation requirements set forth in the Interim Remedial Measures Work Plan and in accordance with applicable statutes and regulations and in substantial conformance with the Department guidance have been or will be achieved in accordance with the timeframes, if any, established for the remedy.

I also certify that the Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

9/7/12

Date

MPM

Mark P. Millspaugh, P.E.

President

Sterling Environmental Engineering, P.C.



Seal

1.0 INTRODUCTION

A Brownfield Site Cleanup Agreement (BCA) between New Waverly Avenue Associates, LLC (Site Owner) and the New York State Department of Environmental Conservation (NYSDEC) was signed April 9, 2009 for the properties located at 441 and 442 Waverly Avenue, Town and Village of Mamaroneck, Westchester County, New York (Site). A Site Location Map is presented as Figure 1.

As part of the BCA, Interim Remedial Measures/Remedial Investigations (IRM/RI) were conducted for the Site in August and September 2009, and October 2010. An offsite RI was conducted in 2012 to determine the source of chlorinated compounds detected at 442 Waverly Avenue. The 2009-2010 IRM/RI is based on the RI/IRM Work Plan dated July 29, 2009 and approved by the NYSDEC. The 2012 RI is based on the RI Work Plan dated November 10, 2011 and approved by the NYSDEC. The Work Plans are provided in Appendix A.

This Report summarizes field activities and analytical results that were conducted for the 2009-2012 IRM/RI.

1.1 Site Description and Adjacent Properties

The Site is approximately 1.04 acres and comprised of two (2) separate properties located in the Village and Town of Mamaroneck, County of Westchester, New York. These properties use the mailing address 441 and 442 Waverly Avenue. 441 Waverly Avenue includes the parcels with street map address 441, 501 and 513 Waverly Avenue which are identified on the Town of Mamaroneck Tax Map (TM) 28-37 as Section/Block/Lot 8/25/278, 8/25/273 and 8/25/268.2, respectively. 442 Waverly Avenue is identified on TM Section/Block/Lot 8/25/33.

Both parcels are commercial properties and historical uses are described in Section 1.2. 442 Waverly Avenue is currently vacant, and 441 Waverly Avenue includes parking areas and a one-story office building.

Properties adjacent to 441 Waverly Avenue include commercial businesses located on Center Avenue to the northwest, a residence to the northeast on Waverly Avenue, and an automobile collision repair business to the southwest.

Properties adjacent to 442 Waverly Avenue include commercial businesses to the northeast and southwest, and Railroad Avenue to the south.

1.2 Historical Operations and Previous Investigations

441 Waverly Avenue was purchased in the 1960s by M. Argueso and Company, Inc. (Argueso), who constructed the existing one (1)-story office building and storage/parking garage. Raw materials stored at 441 Waverly Avenue were used at the wax manufacturing facility located at 442 Waverly Avenue. Stored materials included virgin wax, recycled wax, additives and Tetrachloroethylene (PCE), which were stored in the below grade section of the storage/parking garage. Wax manufacturing operations ceased in the spring of 2005.

442 Waverly Avenue was a lumber planning mill in 1912. Subsequent uses include Mamaroneck Sash, Trim and Door, followed by the Mamaroneck Chemical Company. Argueso purchased the property in the 1930s. Site operations initially refined waxes and subsequently changed to manufacturing waxes for the investment casting industry.

A Phase II Environmental Site Assessment (ESA) Report was produced by GZA GeoEnvironmental, Inc. (GZA) in December 2005, based on findings of the GZA Phase I ESA conducted in September 2005. Analytical results for groundwater reported concentrations of Volatile Organic Compounds (VOCs) that exceeded the applicable water quality standard for samples collected from the shallow and overburden aquifers. Analytical results for soil reported detectable concentrations of VOCs and Semi-Volatile Organic Compounds (SVOCs) that were less than the Part 375 Soil Cleanup Objectives (SCOs) for Restricted Commercial Use.

The Phase I and Phase II ESA reports are provided in Appendix B (Compact Disk).

1.3 Site Geology

Soil borings were conducted at the Site prior to the Phase II ESA in 2005. The borings ranged from approximately 13.5 feet to 65 feet below ground surface (bgs). Surficial materials encountered in the borings generally consist of a permeable fill layer approximately 3.5-9 feet thick which consists of a silty sand with varying amounts of gravel. A sand layer ranging from fine to coarse grain underlies the fill layer. No confining units (less permeable) or top of bedrock were encountered in the borings.

According to the 2005 Phase II ESA Report, bedrock beneath the Site is mapped as the Hartland formation which is a basal amphibolite overlain by pelitic schists.

1.4 Fish and Wildlife Resources

There are no fish or wildlife resources identified on the Site, adjacent to or downgradient from the Site.

1.5 Nature and Extent of Contamination

1.5.1 Groundwater

Contaminant sources associated with the wax manufacturing processes formerly conducted at the Site included petroleum products, mineral spirits and to a lesser extent, solvents. A chlorinated solvents plume in the groundwater, consisting mostly of Tetrachloroethene (PCE) and Trichloroethene (TCE) is present at both Site parcels. Results for a soil gas investigation conducted as part of the 2005 Phase II ESA indicate there is no chlorinated solvent source present at the Site. The Phase II conclusions indicate the source is most likely upgradient to the west from an industrial area.

Petroleum sources onsite include the former mineral spirits underground storage tank (UST), the settling tanks, former fuel oil USTs and floor drainage systems.

Groundwater sample results for 2005 and 2009 indicate reported parameter concentrations that exceed the applicable groundwater standards are similar for both sampling events, with the following exceptions:

Groundwater sample results for GZ-21D (located at 441 Waverly Avenue) report cis-1,2-Dichloroethene at a higher concentration in 2009 than 2005 (270 ug/L vs. 140 ug/L) and PCE and TCE are also reported at higher concentrations in 2009 than 2005 (41 ug/L vs. 3.9 ug/L and 33 ug/L vs. <1 ug/L, respectively). Sample results for B9A-OW, located in the northern corner of 441 Waverly Avenue, report Benzene and Vinyl Chloride at higher concentrations in 2009 (190 ug/L vs. < 1 ug/L and 67 ug/L vs. 6 ug/L, respectively). Sample results for GZ-23D, located near the western corner of 442 Waverly Avenue indicate PCE and TCE concentrations were lower in 2009 than 2005 (9,700 ug/L vs. 22,000 ug/L and 450 ug/L vs. 1,000 ug/L).

On January 10 and 11, 2012, offsite monitoring wells OSMW-1, OSMW-2, OSMW-3 and OSMW-4 and four (4) existing onsite deep monitoring wells GZ-21D, GZ-22D, GZ-23D and B6-OWD were sampled.

PCE and TCE are reported at concentrations of 4,300 ppb and 1,600 ppb, respectively, for the groundwater sample collected from monitoring well GZ-23D in the northwest corner at 442 Waverly Avenue. Offsite monitoring well OSMW-3 sample results report 760 ppb for PCE and 91 ppb for TCE. The OSMW-4 sample results report 790 ppb for PCE and 230 ppb for TCE. OSMW-1 and OSMW-2 sample results report no detections for PCE and TCE. Sample results for GZ-21D, GZ-22D and B6-OWD all have lower reported detections of chlorinated solvents than OSMW-3 and OSMW-4.

1.5.2 Soil

Based on soil samples collected and analyzed in 2005, 2009, and 2010, contaminants present in Site soil are located predominantly at 442 Waverly Avenue in the northern section of the parcel. This section includes the former locations of the settling tanks, fuel oil USTs, and the 1,000 gallon steel tank. Contaminants are petroleum based and are likely from Site materials used for the wax manufacturing processes.

Based on the 2005 and 2009 analytical results, the contamination in soil is at concentrations that are less than the 6 NYCRR 375-6.8(b) Restricted Commercial Use Soil Cleanup Objective (SCOs).

There are several locations at 442 Waverly Avenue where soil contamination concentrations exceed the Part 375 Unrestricted Use SCOs. These locations are described in Section 2.2.9.

2.0 2009 AND 2010 INTERIM REMEDIAL MEASURES/CONSTRUCTION COMPLETION REPORT

One (1) Interim Remedial Measure (IRM) was approved by the NYSDEC and the IRM was conducted in two (2) stages in August and September 2009 and October 2010. The 2009 stage included excavation and removal of the 8,000 gallon underground storage tank (UST) and partial excavation of soil around the settling tanks at 442 Waverly Avenue. The 2010 stage included excavation and removal of the settling tanks, the internal discharge pit, a 1,000 gallon UST (previously unidentified), and a sump pump pit (previously unidentified) at 442 Waverly Avenue. Piping associated with the tanks was excavated and removed up to a distance of fifteen (15) feet from the associated tank. Additionally, the lateral sanitary sewer line located at 442 Waverly Avenue was partially excavated and removed and the remaining sections were capped in place by plugging the ends with concrete.

Daily Field Reports documenting the work are provided in Appendix C.

Soils in the excavations were inspected and monitored for potential contamination. Following removal of impacted soils, confirmatory sidewall and bottom soil samples were collected and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA Method 8270D. Soil sample locations are provided in Figure 2 and laboratory reports are provided in Appendix D.

This report also serves as the UST Closure Report to be submitted to the Westchester County Department of Health (WCDOH) and the Village of Mamaroneck.

2.1 441 Waverly Avenue

The oil/water separator tank and three (3) associated dry wells at 441 Waverly Avenue were inspected on August 21, 2009. According to the Village of Mamaroneck Building Department, the tank and dry wells serve as a stormwater management/treatment system for the northwest parking lot at 441 Waverly Avenue and will remain in place for this purpose.

The parking garage at 441 Waverly Avenue was demolished in August 2010. No asbestos-containing material was identified during an inspection conducted in November 2007 (see Appendix E of the RI/IRM Work Plan (provided herein as Appendix A)). Concrete demolition material was crushed and used onsite as backfill. Metal debris was delivered to a scrap yard and all other debris was delivered to the Covanta C&D Transfer Station in Mamaroneck, NY.

2.2 442 Waverly Avenue

Several USTs were removed from 442 Waverly Avenue and are discussed in the following sections. Approximate tank and pipe locations are provided on Figure 2.

2.2.1 8,000 Gallon UST

One (1) 8,000 gallon fuel oil UST was removed August 20 through 21, 2009 by Royal Environmental Services (Royal). Sterling Environmental Engineering, P.C. (STERLING) conducted photo ionization detector (PID) headspace soil monitoring and sampling, and air quality monitoring. No liquids or sludge were encountered in the tank.

Soils in the UST excavation were inspected visually and monitored with a PID unit and there was no evidence of contaminated soils. Four (4) sidewall samples and one (1) bottom sample were collected and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA Method 8270D. Analytical results are summarized in Tables 1A and 1B. Reported parameter concentrations for all the sidewall samples and bottom sample are less than the 6 NYCRR Part 375-6.8(b) SCOs for Restricted Commercial Use.

2.2.1.1 8,000 Gallon UST Stockpile

A composite sample was collected from the 8,000 gallon UST excavated soil stockpile on September 2, 2009 and analyzed for 6 NYCRR Part 375 parameters (excluding VOCs) and one (1) grab sample was collected from the stockpile and analyzed for VOCs. Analytical results are provided in Table 2.

Reported concentrations for all 6 NYCRR Part 375 parameters for the stockpile samples are less than the SCOs for Restricted Commercial Use and the NYSDEC approved the soil as backfill for the 8,000 gallon UST excavation. No. 4 stone was delivered to the Site to fill the remaining portion of the excavation. The stone originated from Nyack Quarry, and a letter from the quarry documenting the stone is from a virgin source is provided in Appendix E.

2.2.2 Three (3) Chamber Concrete Settling Tank and Associated Piping

A three (3) chamber concrete settling tank was removed by Royal, and STERLING conducted soil monitoring and sampling, and air quality monitoring. Partial excavation of the settling tank occurred on August 21, 2009 and September 1, 2009. Two (2) of the three (3) chambers contained approximately 3,600 gallons of liquid. The third receiving chamber was dry. One (1) composite liquid sample was collected from the tanks and analyzed for disposal parameters for Clean Waters of New York, Staten

Island, NY (Clean Waters). Analytical results are reported in Table 3. The disposal manifest is provided in Appendix F. Impacted soil was observed beneath the bottom of the middle settling tank and the PID headspace reading for soil collected from this area was 132 parts per million (ppm).

Royal resumed the settling tank excavation on October 4, 2010. High PID Headspace readings levels of VOCs and strong odors were encountered from the soils directly below the bottom of all three (3) settling tank chambers. After consultation with Mr. William Ports, P.E. from the NYSDEC Central office, work was halted to address the odor and VOC levels with respect to potential impact to neighboring businesses and residences. Excavation resumed on October 8, 2010 and Royal utilized EnviroClean, a VOC and odor suppression product, on the tank grave and stockpiled soils.

A four (4) inch diameter clay pipe at the southeast corner of the settling tank excavation and a four (4) inch diameter clay pipe at the northwest side were identified. Each pipe was excavated fifteen (15) feet away from the settling tank and removed. There was no evidence of contaminated soils. One (1) composite and one (1) grab soil sample were collected from the bottom of each pipe trench (SE-Pipe-Set.-Tank and NW-4"-Clay-Pipe-Set.-Tank). The pipe trench samples were analyzed for Part 375 VOCs and SVOCs.

Soils in the setting tank and pipe trench excavations were inspected visually and monitored with a PID unit. There was no evidence of contaminated soils on the sidewalls of the settling tank excavation and the bottom of the pipe trenches. The bottom soils of the settling tank excavation were impacted, and Royal excavated to the top of the groundwater table, approximately nine (9) feet bgs. Three (3) sidewall samples (the west sidewall is the concrete foundation of the former building), three (3) bottom samples and two (2) pipe samples were collected and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA Method 8270D (see Figure 2 for the sample locations). Analytical results are summarized in Tables 4A and 4B. Reported parameter concentrations for all the sidewall samples, bottom samples, and pipe sample are less than the 6 NYCRR Part 375-6.8(b) Restricted Commercial Use SCOs. Approximately 250 cubic yards of soil was removed from the settling tank excavation.

2.2.3 1,000 Gallon Steel UST and Associated Piping

One (1) 1,000 gallon steel fuel oil UST was discovered onsite as part of the settling tank excavation on October 5, 2010. The tank was punctured and approximately 250 gallons of liquid entered the soil. One (1) composite liquid sample was collected from the ponded area and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C at the request of the NYSDEC. Analytical results are summarized in Table 3. Royal pumped the liquid remaining in the tank and disposed of the liquid at Clean Waters. The disposal manifest is provided in Appendix F. The tank was removed on October 5-6, 2010 by Royal. STERLING conducted soil monitoring and sampling, and air quality monitoring.

Additionally, a three (3) inch diameter iron pipe at the south end from the tank was excavated fifteen (15) feet from the tank and removed and a composite soil sample from the bottom of the trench (S-Dis.-Pipe-Steel-Tank) was collected. There was no evidence of contaminated soils in the bottom of the pipe trench.

Soils in the 1,000 gallon UST excavation were inspected visually and monitored with a PID unit. There was no evidence of contaminated soils on the sidewalls. Royal encountered soils with high levels of VOCs and strong odors from the soils below the bottom of the tank. After consultation with Mr. Ports from the NYSDEC, excavation resumed on October 8, 2010. Royal utilized EnviroClean, a VOC and odor suppression product during excavation. Four (4) bottom samples and one (1) pipe trench sample were collected and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA Method 8270D (see Figure 2 for the sample locations). Analytical results are summarized in Tables 5A and 5B. Reported parameter concentrations for all the bottom samples and pipe trench sample

are less than the 6 NYCRR Part 375-6.8(b) SCOs for Restricted Commercial Use. Approximately 100 cubic yards of soil was removed from the 1,000-gallon UST excavation.

2.2.4 Internal Discharge Pit and Associated Piping

A 1,000 gallon concrete internal discharge pit was removed on October 11-12, 2010 by Royal. STERLING conducted soil monitoring and sampling, and air quality monitoring. The tank contained approximately 450 gallons of liquid. A composite liquid sample was collected from the tank and analyzed for disposal parameters by Clean Waters. Analytical results are reported in Table 3. Prior to removal, Royal pumped the tank and disposed of the liquid at Clean Waters. The disposal manifest is provided in Appendix F.

Soils in the internal discharge pit excavation were visually inspected and monitored with a PID unit and there was no evidence of contaminated soils. Four (4) sidewall samples and one (1) bottom sample were collected and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA Method 8270D.

Additionally, a four (4) inch diameter iron pipe on the east end of the internal discharge pit (E-4"-Iron-Pipe-Int.-Dis), a four (4) inch diameter iron pipe on the southwest side of the internal discharge pit (SW-4"-Iron-Pipe-Int.-Dis), and an eight (8) inch diameter PVC pipe on the west end of the internal discharge pit (W-8"-PVC-Pipe-Int.-Dis) were identified. All three (3) pipes formerly connected to the internal discharge pit were excavated fifteen (15) feet away from the internal discharge pit and removed.

Soil beneath the pipe trenches showed no evidence of contamination. STERLING and NYSDEC agreed to limit pipe removal to fifteen (15) feet (horizontal distance) from the Internal Discharge Pit.

Composite samples were collected from the bottom of each pipe trench and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA Method 8270D. There was no evidence of contaminated soils. The southwest and west end pipes contained solid material and a composite sample of the contents was collected and analyzed for 6 NYCRR Part 375 SVOCs by USEPA Method 8270D. Analytical results are summarized in Tables 6A and 6B. Reported parameter concentrations for all the sidewall samples, bottom sample, pipe trench, and pipe solid samples are less than the 6 NYCRR Part 375-6.8(b) SCOs for Restricted Commercial Use. Approximately 150 cubic yards of soil was removed from the internal discharge pit excavation and added to Stockpile B, as there was no evidence of contamination (see Section 2.2.7 for stockpile descriptions).

2.2.5 Sump Pump Pit and Associated Piping

One (1) approximate 250 gallon concrete and brick sump pump pit was discovered when excavating the internal discharge pit and was removed on October 12, 2010 by Royal. STERLING conducted soil monitoring and sampling, and air quality monitoring. No liquids or sludge were encountered in the pit as the pit appeared to have been previously backfilled with soil.

Additionally, two (2) iron pipes connected to the sump pump pit were excavated fifteen (15) feet from the sump pump pit and removed. One (1) pipe extended northwest towards Waverly Avenue (N-Sewer-Pipe-Sump-Pit). The other pipe extended west fifteen (15) feet before splitting to the southwest (W-Sewer-Pipe-Sump-Pit). There was no evidence of contaminated soils.

Soils in the sump pump pit excavation were inspected visually and monitored with a PID unit and there was no evidence of contaminated soils. One (1) bottom sample, and two (2) pipe trench samples were collected and analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA

Method 8270D (see Figure 2 for the sample locations). The sewer pipe (W-Sewer-Pipe-Sump-Pit) contained black waxy solids. A sample of the solids (W-Sewer-Pipe-Sump-Pit-Sludge) was collected and analyzed for 6 NYCRR Part 375 SVOCs by USEPA Method 8270D. Analytical results are summarized in Tables 7A and 7B. Reported parameter concentrations for all the sidewall samples, bottom sample, and pipe trench and solids samples are less than the 6 NYCRR Part 375-6.8(b) SCOs for Restricted Commercial Use. Approximately 25 cubic yards of soil was removed from the excavation and added to Stockpile B, as there was no evidence of contamination.

2.2.6 Discharge Pipe from 442 Waverly Avenue to Main Sanitary Sewer Line Under Waverly Avenue

On September 29 - September 30, 2009, the northern end of a lateral discharge pipe originating from 442 Waverly Avenue was disconnected from the Village sanitary sewer line located under the center of Waverly Avenue and was capped in-place. It was originally believed the lateral discharge line originated from the settling tanks, however, excavations conducted in October 2010 indicate the lateral discharge line most likely originates from the sump pit as identified in Figure 2.

A thirty (30) foot section of the lateral discharge pipe was removed from the sump pit to the northwest towards Waverly Avenue. Additionally, fifteen (15) feet of pipe located west from the sump pump pit was excavated and removed. At this point the pipe split, continuing west and southwest. Each of the three (3) exposed ends of the line were capped on October 12, 2010, using concrete.

Soils in the pipe trench bottom were inspected visually and monitored with a PID unit and there was no evidence of contaminated soils. Two (2) samples were collected from the northwest and west pipe trenches (N-Sewer-Pipe-Sump-Pit and W-Sewer-Pipe-Sump-Pit) and were analyzed for 6 NYCRR Part 375 VOCs by USEPA Method 8260C and SVOCs by USEPA Method 8270D. Analytical results are summarized in Tables 7A and 7B. Reported parameter concentrations for the pipe trench samples are less than the 6 NYCRR Part 375-6.8(b) SCOs for Restricted Commercial Use.

Approximately 25 cubic yards of soil was removed from the lateral sewer line excavation and added to Stockpile B, as there was no evidence of contamination.

2.2.7 Stockpile Testing for 2010 Soil Excavations

Two (2) soil stockpiles were created from the 2010 tank excavations at 442 Waverly Avenue. A third stockpile (Stockpile C) was generated from excavated soil for the installation of the retaining wall base on the southern property edge at 442 Waverly Avenue during November 8-11, 2010. The retaining wall is part of the parking area construction, which is the final proposed development for 442 Waverly Avenue. Soil was separated based on PID measurements and visual observations into Stockpile A (impacted soil) and Stockpile B (non-impacted soil). The total approximate volume Stockpile A and Stockpile B is 150 cubic yards and 400 cubic yards, respectively.

One (1) composite soil sample was collected from each of the three (3) soil stockpiles on October 12, 2010 and November 11, 2010 and analyzed for Part 375 parameters (excluding VOCs) and one (1) grab sample was collected from each of the two (2) stockpiles and was analyzed for VOCs. Analytical results are provided in Table 2.

Analytical results indicate Stockpiles B and C are acceptable for reuse on the Site property as backfill, as all parameter concentrations are reported less than Part 375 Restricted Commercial Use SCOs. Analytical results for Stockpile A indicate the soil must be disposed of at a permitted disposal facility as some

reported parameter concentrations exceed the Part 375 Restricted Commercial Use SCOs. A copy of the disposal manifest is provided in Appendix F.

2.2.8 2010 Offsite Soil Testing for Backfill Sources

In 2010, soil samples were collected from stockpiles at A&E Garden Center, located at Noell Avenue, Bronx, New York (Sample ID: Backfill-Coarse) and the New York Botanical Gardens located at 200th Street and Kazirmiroff Boulevard, Bronx, New York (Sample IDs: Bot Gar-1, Bot Gar-2) to be used as fill on 442 Waverly Avenue in the remaining portion of the excavations for the three (3) chamber concrete settling tank, 1,000 gallon steel UST, internal discharge pit, sump pump pit and pipe trenches. The samples were analyzed for 6 NYCRR Part 375 VOCs, SVOCs, Metals, PCBs, and Pesticides. Soil sample results were compared with 6 NYCRR Part 375-6.8(b), Soil Cleanup Objectives, Restricted Commercial Use, for Protection of Public Health (refer to Table 8). The New York Botanical Gardens' soil samples met all standards, and the A&E Garden Center soil sample marginally exceeded the standard for Benzo(a)pyrene. Both sources were approved for use on the Site by the NYSDEC.

2.2.9 Comparison of IRM Soil Analytical Results with Part 375 Protection of Groundwater SCOs

At the request of the NYSDEC, confirmatory soil sample analytical results are also compared to 6 NYCRR Part 375-6.8(b), Restricted Use Soil Cleanup Objectives, Protection of Groundwater (Part 375 GW SCOs). The reported concentrations for the following parameters exceed Part 375 GW SCOs for 442 Waverly Avenue soil samples collected in 2010:

Soil Sample ID	Location	Parameter
SS-01	442 Waverly Avenue	Methylene Chloride
SS-04	442 Waverly Avenue	Acetone
Set. Tank North Bot.	442 Waverly Avenue	Naphthalene, 1,4-Dioxane, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene
Set. Tank North Bottom	442 Waverly Avenue	n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene
Set Tank South – Bot.	442 Waverly Avenue	n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene
Set Tank Center Bot.	442 Waverly Avenue	1,4-Dioxane, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene
S-DIS-PIPE-STEEL-TANK	442 Waverly Avenue	Benzo(b)fluoranthene
N-BOT-STEEL TANK	442 Waverly Avenue	n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene
S-2-BOT-STEEL-TANK	442 Waverly Avenue	n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene
N-2-BOT-STEEL-TANK	442 Waverly Avenue	n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene

2.2.10 442 Waverly Avenue Building Demolition

The removal of the settling tanks was delayed until October 2010 to allow for the demolition of the facility building at 442 Waverly Avenue. This delay was approved by the NYSDEC and provided more space for stockpiling excavated soils. Prior to demolition, asbestos-containing material in the facility building was removed by Asbestos Corporation of America, Yonkers, NY, a certified asbestos abatement contractor. An asbestos inspection conducted in November 2007 for 441 and 442 Waverly Avenue identified asbestos pipe insulation (<60 linear feet) at the 442 Waverly Avenue facility as regulated asbestos-containing material and roofing material that contained non-friable asbestos (see Appendix E of the RI/IRM Work Plan (provided herein as Appendix A)). Concrete and masonry debris was crushed onsite and used as backfill material for the excavations. All other demolition debris (non-asbestos containing) was transported offsite for disposal at Covanta C&D Transfer Station in Mamaroneck, NY.

3.0 REMEDIAL INVESTIGATION REPORT

Remedial Investigations (RI) for the Site were conducted in August and September 2009, October 2010 and January 2012. The 2009 RIs include groundwater and soil boring sampling. The 2010 RI includes one (1) test pit sampling. The 2012 RI includes the installation and sampling of four (4) offsite, deep overburden monitoring wells and sampling four (4) existing deep overburden wells located at 441 and 442 Waverly Avenue. Daily Field Reports for the 2009 and 2010 events are provided in Appendix C. The 2009 and 2010 soil and groundwater sample locations are provided in Figures 2 and 3 and the 2012 groundwater sample locations are provided in Figure 5. A summary of reported VOCs in groundwater for the 2005, 2009 and 2012 monitoring events is provided on Plates 1 and 2.

3.1 2009 Groundwater Monitoring Event

3.1.1 Monitoring Well GPS Survey

To verify the 2005 Phase II ESA locations, the monitoring wells that remain following completion of the property development were surveyed using a Trimble® GeoXH 2005 Series Global Positioning System (GPS) unit (US State Plane 1983 NY East NAD 83 US Survey Feet). Latitude and longitude coordinates for these wells are provided below:

Monitoring Well	Latitude	Longitude
GZ-21S	771726.735 N	701044.342 E
GZ-21D	771722.109 N	701051.333 E
GZ-22S	771688.839 N	700947.318 E
GZ-22D	771695.561 N	700945.331 E
GZ-23D	771541.424 N	701017.074 E
B2-OW	771539.587 N	701015.248 E
B5-OW	771639.885 N	701124.643 E
B105-OW	771676.560 N	701119.308 E
B6-OW(S)	771633.526 N	700993.739 E
B6-OW(D)	771636.870 N	700995.439 E

3.1.2 2009 Groundwater Elevations

Depth to water was measured as part of the 2009 monitoring event. A summary of monitoring well details and groundwater elevation for the measured monitoring wells is provided below.

Well ID	Depth to Water August 2009 (feet)	Depth to Bottom August 2009 (feet)	Depth of Well Screen (Below Grade) (feet)	Top of PVC Casing Elevation ^[1] (feet)	Groundwater Elevation August 2009 (feet)
GZ-23D	7.82	44.86	40-45	98.3	90.48
B2-OW	8.3	15.72	5.3-18.3	99.0	90.70
B5-OW	7.63	46.5	44.5-49.5	98.1	90.47
B105-OW	NA - Destroyed Well	NA - Destroyed Well	NA	NA - Destroyed Well	NA - Destroyed Well
GZ-22S	9.4	14.9	5-15	99.6	90.2
GZ-22D	9.2	46	40-45	99.5	90.3
GZ-21(S)	8.51	14.4	5-15	98.5	89.99
GZ-21(D)	8.11	44.21	40-50	98.4	90.29
B9A-OW	2.45	35.02	27-37	92.8	90.35
B6-OW(D)	8.7	36.05	35-45	99.6	90.9
B6-OW(S)	9.11	13.85	6-16	99.4	90.29
VW-2	9.8	13.1	5-15	100.0	90.2
GZ-25S	9.78	14.48	5-15	100.3	90.52
GZ-24D	9.26	30.55	20-30	100.3	91.04
VW-5	9.78	13.29	5.5-15.5	100.1	90.32

Notes: [1] Provided in Phase II Environmental Assessment Reports by GZA GeoEnvironmental, Inc., December 2005.

NA = Not Available

The hydraulic gradient (change of groundwater elevation over distance) is relatively flat. In the overburden aquifer, groundwater flows toward the center of the Site and eventually to the northwest (see Figure 4).

3.1.3 2009 Sampled Monitoring Wells

Groundwater samples were collected from the following monitoring wells on August 19 through 21, 2009 as part of the RI of the shallow (S) and deep (D) overburden aquifers underlying the Site:

441 Waverly Avenue Monitoring Wells		
Screened Portion of Aquifer	Monitoring Well ID	Justification for Sampling
S	B6-OW(S)	Upgradient well on Site property
D	B6-OW(D)	Upgradient well on Site property
D	B9A-OW	Downgradient well on Site property
S	GZ-21S	Downgradient well on Site property
D	GZ-21D	Downgradient well on Site property
S	GZ-22S	In vicinity of oil/water separator tank and dry wells location
D	GZ-22D	In vicinity of oil/water separator tank and dry wells location

442 Waverly Avenue Monitoring Wells		
Screened Portion of Aquifer	Monitoring Well ID	Justification for Sampling
D	B105-OW	Downgradient from 8,000-gallon UST
D	B5-OW	Upgradient from 8,000-gallon UST
S	VW-2	Downgradient from Former Mineral Spirits UST
S	VW-5	Upgradient from Former Mineral Spirits UST
D	GZ-23D	Upgradient from Former Mineral Spirits UST
D	GZ-24D	Upgradient from Former Mineral Spirits UST
S	GZ-25S	Upgradient from Former Mineral Spirits UST

Monitoring wells VW-3 and VW-7 at 442 Waverly Avenue could not be located. Monitoring well locations are provided on Figures 2 and 3.

3.1.4 Groundwater Sampling Methodology

Groundwater samples were collected using low-flow purging and sampling techniques as specified in United States Environmental Protection Agency (USEPA) Ground Water Issue EPA/540/S-95/504, Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures (USEPA, April 1996). This method is described in detail in the RI/IRM Work Plan (see Appendix A). Copies of the low-flow data forms are provided in Appendix G.

All groundwater samples were collected in accordance with the NYSDEC Department of Environmental Remediation DER-10 – Technical Guidance for Site Investigation and Remediation (May 2010).

3.1.5 2009 Groundwater Analytical Results

Groundwater samples were submitted to Mitkem Laboratories in Warwick, Rhode Island, a division of Spectrum Analytical, Inc., by overnight delivery and were analyzed for VOCs by USEPA Method 8260C and Polyaromatic Hydrocarbons (PAHs) by USEPA Method 8270D.

Analytical results from the 2009 groundwater sampling event are summarized in Tables 9A and 9B. Reported concentrations that exceed the NYSDEC Division of Water Technical and Operational Guidance Series Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (TOGS 1.1.1) are highlighted in **BOLD**. A copy of the laboratory report is provided in Appendix D (provided on CD).

Parameters with reported concentrations for the Phase II ESA in 2005 and the 2009 monitoring event that exceed the TOGS 1.1.1 standards or guidance values are summarized by location on Plate 1 (441 Waverly Avenue) and Plate 2 (442 Waverly Avenue).

The following monitoring well samples report VOCs at concentrations that exceed the applicable regulatory standard or guidance value for the 2009 event:

441 Waverly Avenue

- **B6-OW(D):** 1,2-Dichloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene
- **B9A-OW:** Benzene, 1,2-Dichloroethane, cis-1,2-Dichloroethene, Vinyl chloride
- **GZ-21D:** Benzene, 1,2-Dichloroethane, cis-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene, trans-1,2-Dichloroethene, Vinyl chloride
- **GZ-21S:** Benzene, Hexachlorobutadiene, and tert-Butylbenzene
- **GZ-22D:** Benzene, Tetrachloroethene, cis-1,2-Dichloroethene, 1,2-Dichloroethane, Trichloroethene, and Methyl tert-butyl ether (MTBE)
- **GZ-22S:** cis-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene, Vinyl chloride and MTBE

442 Waverly Avenue

- **GZ-23D:** Benzene, 1,2-Dichloroethane, cis-1,2-Dichloroethene, 1,1-Dichloroethene, Tetrachloroethene, Trichloroethene
- **GZ-24D:** Benzene
- **VW-2:** n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, n-Propylbenzene
- **B5-OW:** No reported exceedances. Duplicate sample from this location reports Vinyl Chloride exceedance.
- **VW-5:** cis-1,2-Dichloroethene

SVOCs are reported as non-detectable concentrations that do not exceed the regulatory standard or guidance values for all sample locations for the August 2009 monitoring event with the exception of Naphthalene at VW-2. This detection does not exceed the regulatory standard or guidance value.

3.1.6 2009 Monitoring Well Decommissioning

Monitoring well B9A-OW, located in the parking garage at 441 Waverly Avenue, and ASW-1, B101-OW, B102-OW, B103-OW, B104-OW, GZ-24D, GZ-25S, VW-1, VW-2, VW-5 and VW-6, located inside the former manufacturing building at 442 Waverly Avenue, were decommissioned by Aquifer Drilling and Testing (ADT) on September 2, 2009. Decommissioned well locations are provided on Figures 2 and 3.

The monitoring wells were decommissioned in accordance with the NYSDEC Groundwater Monitoring Well Decommissioning Procedures (April 2003) and were grouted in-place. The procedure involved filling the casing with grout to the ground surface.

3.1.7 2009 and 2010 Soil Boring and Test Pit Locations

Soil boring and test pit locations were selected by STERLING and the NYSDEC on September 2, 2009. Confirmatory soil boring samples were collected from the following locations on September 2, 2009 and the SW-Test-Pit sample was collected on October 7, 2010 as part of the RI to identify the extent of potential contamination:

441 Waverly Avenue:

- One (1) soil sample (SB-06) in the vicinity of the oil/water separator tank and associated drywells.

442 Waverly Avenue:

- Two (2) soil samples (SB-01 and SB-02) in the vicinity of the former mineral spirits underground storage tank (UST).
- Two (2) soil samples (SB-03 and SB-04) located adjacent to internal discharge pit.
- One (1) soil sample (SB-05) located adjacent to the catch basin near the northwest corner of the property.
- One (1) soil sample (SW-Test-Pit) located adjacent to the drain near the southern boundary of the property.

Soil boring and test pit locations are presented on Figures 2 and 3.

3.1.8 Soil Logging and Sampling Methodology

All soil boring samples were collected continuously in four (4) foot intervals by direct push drilling to a depth of twelve (12) feet or refusal. The October 2010 test pit sample was collected at 7.5 feet bgs. The soil boring and test pit samples were analyzed for 6 NYCRR Part 375-6.8(b) VOCs and SVOCs by Methods 8260C and 8270D, respectively. For all soil boring sample locations, except SB-04, a composite soil sample was collected from one (1) of the four (4) foot boring sections based on PID readings or visual observations. Two (2) grab soil samples were collected from SB-04 at depths of 7-8 feet bgs and 11-12 feet bgs, and were obtained to characterize the top and bottom of a petroleum contaminated coarse gray sand layer identified during field observations.

Soil boring logs are provided in Appendix H.

3.1.9 2009 and 2010 Soil Boring and Test Pit Analytical Results

Analytical results for the September 2009 and October 2010 soil boring and test pit samples are summarized in Tables 10A and 10B. No SVOCs were detected in SB-04 (7-8'), SB-04 (11-12'), SB-05 (8-12') and the duplicate of SB-05. No VOCs were detected in SB-04 (-'7-8'). Reported concentrations and non-detections of VOCs and SVOCs for all soil boring and test pit samples do not exceed the 6 NYCRR Part 375-6.8(b) SCOs for Restricted Commercial Use, Protection of Public Health. A copy of the laboratory reports are provided in Appendix D.

At the request of the NYSDEC, soil boring and test pit analytical results are also compared to 6 NYCRR Part 375-6.8(b), Restricted Use Soil Cleanup Objectives, Protection of Groundwater (Part 375 GW SCOs). The analytical results for the following soil samples report some parameters that exceed the Part 375 SCOs for the Protection of Groundwater.

Sample ID	Location	Parameter
SB-02 (11-12')	442 Waverly Avenue	n-Propylbenzene
SB-04 (11-12')	442 Waverly Avenue	Acetone
SB-06 (2-3')	441 Waverly Avenue	Acetone
SW-Test-Pit (7.5')	442 Waverly Avenue	n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene

The parameters n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, n-Propylbenzene are reported for the 2009 groundwater monitoring event in only one (1) well at 442 Waverly Avenue (VW-2) at a concentration that exceeds the applicable water quality standards (see Tables 9A & 9B for groundwater analytical results; and Plates 1 & 2 for monitoring well locations). There are no exceedances in any of the other groundwater wells at 442 Waverly Avenue for these parameters in 2009. Acetone is considered a laboratory artifact and not a site contaminant.

3.1.10 Part 375 Protection of Groundwater Soil Cleanup Objectives (SCOs)

According to 6 NYCRR Part 375-6.5(a)(1), the protection of groundwater SCOs may not be applicable if the following conditions apply:

- Groundwater standard contraventions are the result of an onsite source that is addressed by the remedial program.
- An environmental easement will be in place that provides for a groundwater use restriction on the Site.
- The NYSDEC determines contaminated groundwater at the Site is not migrating, or likely to migrate, offsite; **or** is migrating, or likely to migrate offsite, however, the remedy includes controls or treatment to address offsite migration **and** the NYSDEC determines the groundwater quality will improve over time.

Butylbenzenes and Propylbenzene are generally considered to be associated with fuel oil. The soil samples were collected from the bottom of the excavation for the three (3) chamber concrete settling tank and the 1,000 gallon steel underground storage tank. With respect to both tanks, Royal encountered soils with high PID headspace readings and strong odors from the soil below the bottom of the tank. After consultation with the NYSDEC, all potentially impacted soils above the groundwater table (approximately 9.0 feet) was excavated and removed. Neither Butylbenzenes nor Propylbenzene are detected in the sidewalls of either tank excavation. All of the soil that could be removed was excavated and disposed of offsite. The remaining soil meets the soil cleanup objectives under Part 375 Restricted Commercial Use SCOs.

Groundwater flow direction in the overburden aquifer for the Site properties is to the north (see Figure 4). Butylbenzenes and Propylbenzene concentrations reported for 2009 decrease from upgradient well VW-2 at 442 Waverly Avenue to downgradient well GZ-21S at 441 Waverly Avenue. The GZ-21S 2009 sample results report tert-Butylbenzene at 6.6 ug/L, which slightly exceeds the 5 ug/L groundwater standard. The reported concentration differences between the two (2) shallow overburden wells provides

evidence it is unlikely Butylbenzenes and Propylbenzene are migrating off the 441 Waverly Avenue property. To determine if heavier parameters such as chlorinated solvents are migrating offsite, a deep overburden aquifer monitoring well on the downgradient side of 441 Waverly Avenue may be installed if the NYSDEC determines it is necessary to monitor heavier parameters.

In addition, an environmental easement will be implemented for the Site that will prohibit groundwater use.

3.2 2012 Offsite Monitoring Wells Installation and Development

In accordance with the Work Plan approved by the NYSDEC on November 18, 2011 (see Appendix A), four (4) deep overburden monitoring wells were installed and developed during December 19-22, 2011 at locations offsite and to the southwest of the subject property (see Figure 5 for monitoring well locations). Groundwater samples were collected from the offsite wells and existing deep monitoring wells at 441 and 442 Waverly Avenue on January 10 & 11, 2012 and analyzed for VOCs listed in 6 NYCRR Part 375-6.8(b). The monitoring event was conducted to determine if there is an offsite source of chlorinated solvents impacting groundwater quality at 441 and 442 Waverly Avenue, or if the chlorinated solvent source is localized near the northwest section of 442 Waverly Avenue. (In December 2009, Tetrachloroethene (PCE) and Trichloroethene (TCE) were reported at concentrations of 9,700 parts per billion (ppb) and 450 ppb, respectively, for a groundwater sample collected from monitoring well GZ-23D, located in the northwest corner at 442 Waverly Avenue).

Four (4) boreholes were completed using a geoprobe drilling rig to advance through the unconsolidated overburden material. In general, overburden material consisted of sand and some gravel overlain by fill material. A silt and clay layer was encountered at OSMW-4 at 42-44 feet bgs which indicates there may be a confining layer under the sand unit.

Soil samples were collected continuously at each boring location and logged using the Unified Soil Classification System by STERLING's Geologist. Background and headspace PID readings for VOCs are recorded on the Boring Logs, provided in Appendix K. Soil cuttings generated by boring activities were drummed for characterization and disposal. Analytical results for the drummed soil sample report detected parameter concentrations do not exceed the 6 NYCRR Part 375 Residential SCOs. STERLING recommends the soil be reused onsite, as needed (see Laboratory Report provided as Appendix M).

The offsite monitoring wells are OSMW-1, OSMW-2, OSMW-3 and OSMW-4. The riser casing and screen for each well is threaded one (1) inch diameter polyvinyl chloride (PVC). Each screen has a pre-packed sand filter and is 10 feet in length with #10 slot size. Monitoring well construction details are provided in Figures 6 through 9.

Subsurface drilling equipment was decontaminated prior to drilling, between drilling of the boreholes and following completion of the four (4) monitoring wells. Water used for decontaminating (decon) equipment was from a potable water source. As approved by the Westchester County Department of Environment & Recycling (WCDER), the drummed groundwater was disposed to the Mamaroneck Wastewater Treatment Plant (WWTP) at West Boston Post Road, White Plains, NY via the municipal sanitary sewer system. (Due to the small volume of water (~ 25 gallons), analytical testing is not required for disposal to the WWTP according to the WCDER).

Well development was conducted on December 22, 2011 for the four (4) new wells to remove sediment introduced during drilling and to allow formation water to flow freely into the well screen. Well development was a combination of pumping and surge blocking, and continued until recorded turbidity readings were < 50 NTUs or until the turbidity readings stabilized. All development water was contained

and discharged to the municipal sanitary sewer system connected to the 524 Waverly Avenue building. Water volume removed during pumping, turbidity readings and visual observations are recorded on Well Development Logs (see Appendix L).

3.2.1 2012 Monitoring Well Sampling and Analytical Results

On January 10 and 11, 2012, offsite monitoring wells OSMW-1, OSMW-2, OSMW-3 and OSMW-4 and four (4) existing onsite deep monitoring wells GZ-21D, GZ-22D, GZ-23D and B6-OWD were sampled. Depth to water was measured from a marked point on the top of well casing and recorded. The eight (8) monitoring wells were purged and sampled by low-flow method, as outlined in the USEPA Low-Flow Groundwater Sampling Procedures Document EPA/540/S-95/504 (April 1996). All purged water was contained and discharged to the Mamaroneck WWTP via the sanitary sewer system connected to the 524 Waverly Avenue building. Low Flow Data Sheets are provided in Appendix L.

The following parameters were measured in the field: Temperature, pH, Specific Conductance, Oxidation Reduction Potential (ORP) and Dissolved Oxygen. Groundwater samples were collected and analyzed for 6 NYCRR Part 375 VOCs by Spectrum Analytical, Inc. in Warwick, Rhode Island, a NYSDOH ELAP certified laboratory. Groundwater data are summarized in Table 11 and the laboratory report is provided as Appendix M.

PCE and TCE are reported at concentrations of 4,300 ppb and 1,600 ppb, respectively, for the groundwater sample collected from monitoring well GZ-23D in the northwest corner at 442 Waverly Avenue. Offsite monitoring well OSMW-3 sample results report 760 ppb for PCE and 91 ppb for TCE. The OSMW-4 sample results report 790 ppb for PCE and 230 ppb for TCE. OSMW-1 and OSMW-2 sample results report no detections for PCE and TCE. Sample results for GZ-21D, GZ-22D and B6-OWD all have lower reported detections of chlorinated solvents than OSMW-3 and OSMW-4.

3.2.2 Groundwater Elevation and Flow Direction

The wells were surveyed by Ward Carpenter Engineers, Inc. in March 2012. A different elevation datum was selected for this survey than the 2009 datum. A summary of the January 2012 groundwater elevations is provided in Table 12.

Based on the January 2012 groundwater elevations, groundwater flow direction is to the north for the offsite well locations and then curves to the east towards 442 Waverly Avenue as shown in Figure 10. This flow direction is similar to the groundwater elevation pattern in 2009 which indicates there are lower groundwater elevations in the area of 441 and 442 Waverly Avenue trending in a northerly-southerly direction.

3.2.3 Evaluation of Potential Sources for Chlorinated Solvents

The highest reported concentrations for TCE and PCE are at GZ-23D, OSMW-3, and OSMW-4.

A review of the Village of Mamaroneck Building Department records indicate a permit was issued to Fleet Factory located at 529 Waverly Avenue in January 1940 for a laundromat alteration. Interviews with area residents indicate Fleet Cleaners was located at 525 and/or 529 Waverly Avenue; these properties are located across Waverly Avenue (west) from the 524 Waverly Avenue building and are shown on Figure 5.

GZ-23D is located near the former loading dock for the former 442 Waverly Avenue building. A stormwater catch basin was located at the low end of the loading dock. This was a potential migration

pathway into the groundwater for solvent that may have spilled in this area during loading and unloading at the facility.

4.0 FISH AND WILDLIFE RESOURCE IMPACT ANALYSIS

DER-10, Section 3.10.1(b)4 sets forth the criteria for determining if a Fish and Wildlife Resource Impact Analysis (FWRIA) is needed. There are no ecological resources present on or in the vicinity of the Site and the Site is not proximal to an ecologically significant area (e.g. wetland, surface water body). Accordingly, a FWRIA is not required.

5.0 DATA USABILITY SUMMARY REPORTS (DUSRs)

Data Usability Summary Reports (DUSRs) were generated for 2009 groundwater data package H1633 and 2010 soil data package J2003. The number of samples in each data package represent at least ten percent (10%) of the total number of groundwater and soil samples collected for the RI and IRM. The 2012 groundwater samples did not require a DUSR.

According to the DUSR summary, the data for H1633 and J2003 is acceptable and usable with the exception of two (2) Volatile Organic Compound (VOC) results that are flagged unusable (R). This includes the “non-detected” results for 1,4-Dioxane and Acrolein for sample STOCK-PILE-A-DISPOSAL because the Relative Response Factor (RRF) for these parameters are below the allowable minimums in the associated initial calibration.

The data qualified as “unusable” in the DUSR does not impact the findings and conclusions for the RI and IRM. Sample STOCKPILE-A-DISPOSAL was collected from Stockpile A for disposal characterization.

The DUSRs are provided in Appendix I.

6.0 HEALTH AND SAFETY PLAN (HASP) & COMMUNITY AIR MONITORING PLAN (CAMP) IMPLEMENTATION

The Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) were implemented by STERLING during all ground-intrusive work. Combined, the plans provide a measure of protection for the workers and downwind potential receptors, which include residences, businesses, and workers not directly involved with the subject work activities from potential airborne contaminant releases as a direct result of investigative and remedial work activities.

Air quality monitoring was conducted in August and September 2009 for the excavation of the 8,000 gallon UST and for partial excavation of the settling tanks and lateral sanitary sewer line. In addition, air quality monitoring was conducted in September 2009 for the excavation conducted to cap the lateral drainage pipe leading from 442 Waverly Avenue to the main sanitary sewer line located underneath Waverly Avenue.

Air quality monitoring was conducted in October 2010 for the excavation of the settling tanks, 1,000-gallon UST, internal discharge pit, sump pump pit, and completion of the sanitary sewer line excavation and capping in-place.

Implementation of air quality monitoring includes real-time monitoring of particulates (i.e., dust) at the upwind perimeter of each designated work area. VOCs, the Lower Explosive Limit (LEL), and particulates are monitored in the worker's breathing zone, and particulates and VOCs are monitored at the downwind perimeter of the work area.

Dust Track 8520 particulate monitor units were used in conjunction with weatherproof enclosures and tripods. The equipment was calibrated at the start of each workday and periodically throughout the day when necessary. The particulate monitors collected real time data, measured particulate matter less than ten (10) micrometers in size (PM-10), and integrated over a period of 15 minutes (or less) for comparison to the airborne particulate action level provided in the HASP and CAMP. The data was logged at fifteen (15) minute intervals. Additionally, hourly readings were manually recorded by STERLING. The logged data for each unit and the manually recorded data are provided in Appendix J. All equipment included an audible alarm to indicate exceedances of the action level. In addition, dust migration was also visually assessed during all work activities. No exceedances are reported for the 2009 and 2010 monitoring events.

MiniRAE 2000 PIDs, calibrated to 100 parts per million (ppm) isobutylene gas, were used to monitor VOCs. The equipment was calibrated at the start of each workday and periodically throughout the day. The equipment calculated fifteen (15) minute running average concentrations and logged data at one (1) minute intervals. Additionally, hourly readings were manually recorded. The logged data for each unit and the manually recorded data are provided in Appendix J. The equipment had an audible alarm to indicate exceedances of the action level. VOC exceedances occurred on October 5 and 8, 2010 during the removal of the three (3) chamber concrete settling tank and 1,000 gallon steel UST throughout the day. During these two (2) events all onsite workers utilized Level C personal protective equipment (PPE).

A Q-RAE 4-gas meter was used to detect explosive gases and was calibrated to 25 ppm hydrogen sulfide, 50% methane, and 20.9% oxygen. The equipment was calibrated at the start of each workday and periodically throughout the day. The equipment logged data at one (1) minute intervals. Additionally, hourly readings were manually recorded. The logged data for each unit and the manually recorded data are provided in Appendix J. The equipment included an audible alarm to indicate exceedances of the action level. No exceedances of monitored gases are reported for any of the monitoring events conducted in 2009 or 2010.

7.0 PROPOSED ALTERNATIVES FOR THE SITE

An Alternatives Analysis (AA) report, provided under separate cover, was conducted for the existing Site conditions and includes an exposure assessment and recommended remedial goals and remedies.

The proposed alternatives provided in the AA, which address potential exposure paths during ground-intrusive activities, include the implementation of a Site Management Plan and an Environmental Easement. In addition, surface areas for both properties are paved with asphalt and a stormwater collection system is installed at 441 and 442 Waverly Avenue. Stormwater runoff is collected and directed to the Village of Mamaroneck municipal stormwater treatment system; this action prevents surface water runoff from infiltrating into the subsurface and potentially mobilizing subsurface soil contaminants into the groundwater.

An in-situ groundwater treatment method is proposed to decrease the concentrations of chlorinated compounds at GZ-23D. The treatment method involves injecting a hydrogen release compound under

pressure to degrade the chlorinated compounds over time into non-toxic compounds, such as ethene and ethane.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all confirmatory soil samples collected for the 2009-2010 IRM and for all characterization soil samples collected for 2009-2010 RI are reported at concentrations that are less than or equal to the 6 NYCRR Part 375-6.8(b) Restricted Commercial Use SCOs. Some residual soil contamination at the Site, at locations specified in Sections 2.2.9 and 3.1.9, is reported at levels that exceed the 6 NYCRR Part 375-6.8(b) Protection of Groundwater SCOs. However, 6 NYCRR Part 375-6.5 specifies the protection of Groundwater SCOs may not be applicable where the groundwater standard contravention is the result of an onsite source that is addressed by a remedial program.

Specifically, contaminated soil was removed from the settling tanks and 1,000 gallon steel tank areas to the top of the groundwater table. An Environmental Easement that prohibits groundwater use will be established.

In addition to these criteria, the Site is paved with asphalt that is an impermeable cap over the remaining impacted soil and the Site stormwater collection system diverts surface water runoff from infiltrating into sub-surface soils and eliminate the potential for contaminants in Site soils to migrate into the groundwater.

A silt and clay layer was encountered at OSMW-4 at 42-44 feet bgs, which indicates there is a confining layer under the sand unit. The groundwater gradient is relatively flat, ranging from 0.0125 ft./ft. (vertical/horizontal) near GZ-23D to 0.0014 ft./ft. near the offsite wells (OSMW-1 through OSMW-4), based on the 2012 groundwater elevations.

Due to a shallow groundwater gradient at the site, which results in little groundwater movement; it appears PCE and TCE (being heavier than water) have migrated vertically downward and settled in low lying areas at the top of the confining layer. The source of the PCE and TCE is most likely from the former loading dock area at 442 Waverly Avenue near the location of GZ-23D. There is also evidence that there are elevated concentrations of PCE/TCE found in OSMW-3 and OSMW-4 which are located offsite.

Concentrations reported for TCE and PCE at monitoring well GZ-23D in January 2012 indicate remediation is required to reduce chlorinated compound concentrations to as close as practicable to the NYSDEC 6 NYCRR Part 703 groundwater standard of 5 ug/L.

The onsite building is occupied, therefore a Soil Vapor Intrusion (SVI) evaluation will be conducted to determine the need, if any, for implementation of remedial actions to address exposures related to soil vapor intrusion. A Work Plan for a SVI investigation following the Final NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," dated October 2006, and DER-10 will be submitted to the NYSDEC prior to the investigation.

TABLES

Table 1A
Summary of Soil Sample Results for 8,000 Gallon UST Excavation to 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
442 Waverly Avenue
Semi-Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	SS-01 [3]	SS-02 [3]	SS-03 [3]	SS-04 [3]	SS-05 [3]
Location			Bottom	East Sidewall	North Sidewall	South Sidewall	West Sidewall
Unit		ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			08/21/09	08/21/09	08/21/09	08/21/09	08/21/09
Parameter	CAS#						
Semivolatile Organic Compounds:							
Acenaphthene	83-32-9	500	<0.390	<0.360	<0.420	<0.390	<0.360
Acenaphthylene	208-96-8	500	<0.390	0.043 J	<0.420	<0.390	<0.360
Anthracene	120-12-7	500	<0.390	<0.360	<0.420	<0.390	0.056 J
Benzo(a)anthracene	56-55-3	5.6	0.081 J	0.13 J	<0.420	<0.390	0.18 J
Benzo(a)pyrene	50-32-8	1	0.077 J	0.11 J	<0.420	<0.390	0.17 J
Benzo(b)fluoranthene	205-99-2	5.6	0.095 J	0.16 J	<0.420	<0.390	0.23 J
Benzo(g,h,i)perylene	191-24-2	500	0.058 J	0.073 J	<0.420	<0.390	0.12 J
Benzo(k)fluoranthene	207-08-9	56	0.061 J	0.11 J	<0.420	<0.390	0.11 J
Chrysene	218-01-9	56	0.084 J	0.13 J	<0.420	0.042 J	0.16 J
Dibenzo(a,h)anthracene	53-70-3	0.56	<0.390	<0.360	<0.420	<0.390	<0.360
Fluoranthene	206-44-0	500	0.092 J	0.11 J	<0.420	<0.390	0.24 J
Fluorene	86-73-7	500	<0.390	<0.360	<0.420	<0.390	<0.360
Hexachlorobenzene	1118-74-1	6	<0.390	<0.360	<0.420	<0.390	<0.360
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	0.06 J	0.072 J	<0.420	<0.390	0.11 J
m&p-Cresol (3&4-Methyphenol)	106-44-5	500 [2]	<0.390	<0.360	<0.420	<0.390	<0.360
Naphthalene	91-20-3	500	<0.390	<0.360	<0.420	<0.390	<0.360
o-Cresol (2-Methylphenol)	95-48-7	500	<0.390	<0.360	<0.420	<0.390	<0.360
Pentachlorophenol	87-86-5	6.7	<0.790	<0.730	<0.850	<0.390	<0.740
Phenanthrene	85-01-8	500	0.046 J	0.04 J	<0.420	<0.390	0.2 J
Phenol	108-95-2	500	<0.390	<0.360	<0.420	<0.390	<0.360
Pyrene	129-00-0	500	0.14 J	0.18 J	0.073 J	0.045 J	0.42

Notes:

- [1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.
[2] Sample results combine m- and p-Cresol. The individual SCO for both m-cresol and p-cresol is shown.
[3] Samples reanalyzed due to low bias response of internal standard.

Laboratory Qualifiers:

- < Indicates the parameter was not detected at or above the laboratory reporting limit.
J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 1B
Summary of Soil Sample Results for 8,000 Gallon UST Excavation to 6 NYCRR Part 375 Restricted Commercial use Soil Cleanup Objectives
442 Waverly Avenue
Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	SS-01	SS-02	SS-03	SS-04	SS-05
Location			Bottom	East Sidewall	North Sidewall	South Sidewall	West Sidewall
Unit		ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			08/21/09	08/21/09	08/21/09	08/21/09	08/21/09
Parameter	CAS#						
Volatile Organic Compounds: *							
1,1,1-Trichloroethane	71-55-6	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,1-Dichloroethane	75-34-3	240	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,1-Dichloroethene	75-35-4	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,2-Dichlorobenzene	95-50-1	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,2-Dichloroethane	107-06-2	30	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
cis -1,2-Dichloroethene	156-59-2	500	0.013	<0.0047	<0.0053	0.0031 J	<0.0046
trans-1,2-Dichloroethene	156-60-5	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,3-Dichlorobenzene	541-73-1	280	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,4-Dichlorobenzene	106-46-7	130	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,4-Dioxane	123-91-1	130	<0.110	<0.095	<.0110	<0.099	<0.092
Acetone	67-64-1	500	<0.0056	<0.180 D	<0.280 D	0.074	<0.240 D
Benzene	71-43-2	44	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
n-Butylbenzene	104-51-8	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Carbon tetrachloride	56-23-5	22	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Chlorobenzene	108-90-7	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Chloroform	67-66-3	350	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Ethylbenzene	100-41-4	390	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Methyl ethyl ketone (2-Butanone)	78-93-3	500	<0.0056	0.018	0.028	<0.0049	0.013
Methyl tert-butyl ether	1634-04-4	500	<0.0056	0.0016 J	0.0016 J	<0.0049	<0.0046
Methylene chloride	75-09-2	500	0.12	<0.0047	<0.0053	<0.0049	<0.0046
n -Propylbenzene	103-65-1	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
sec-Butylbenzene	135-98-8	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
tert-Butylbenzene	98-06-6	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Tetrachloroethene	127-18-4	150	0.0074	0.0065	0.0014 J	0.0043 J	0.0033 J
Toluene	108-88-3	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Trichloroethene	79-01-6	200	0.004 J	<0.0047	<0.0053	0.0013 J	<0.0046
1,2,4-Trimethylbenzene	95-63-6	190	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
1,3,5-Trimethylbenzene	108-67-8	190	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Vinyl chloride	75-01-4	13	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046
Xylene (mixed)	1330-20-7	500	<0.0056	<0.0047	<0.0053	<0.0049	<0.0046

Notes:

* Hexachlorobenzene data is presented in Table 3A.

[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.

Laboratory Qualifiers:

< Indicates the parameter was not detected at or above the laboratory reporting limit.

J Indicates an estimated value because the parameter was detected below the reporting limit.

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

Table 2
Comparison of Soil Sample Results for Stockpiles to
6 NYCRR Part 375 Restricted Commercial use Soil Cleanup Objectives
442 Waverly Avenue
VOCs, SVOCs, Metals, PCBs and Pesticides
Site #C360108

Sample ID	Soil Cleanup Objectives[1]	Stock Pile A 2009	Stock Pile A-Part 375	Stock Pile B- Part 375	Stock Pile C- Part 375
Location					
Unit		442 Waverly ppm	442 Waverly ppm	442 Waverly ppm	442 Waverly ppm
Sample Date		09/02/09	10/12/2010	10/12/2010	11/11/2010
Parameter	CAS#				
Volatile Organic Compounds:					
1,1,1-Trichloroethane	71-55-6	500	<0.0035	<0.0038	<0.0041
1,1-Dichloroethane	75-34-3	240	<0.0035	<0.0038	<0.0041
1,1-Dichloroethene	75-35-4	500	<0.0035	<0.0038	<0.0041
1,2-Dichlorobenzene	95-50-1	500	<0.0035	<0.0038	<0.0041
1,2-Dichloroethane	107-06-2	30	<0.0035	<0.0038	<0.0041
cis -1,2-Dichloroethene	156-59-2	500	<0.0035	<0.0038	<0.0041
trans-1,2-Dichloroethene	156-60-5	500	<0.0035	<0.0038	<0.0041
1,3-Dichlorobenzene	541-73-1	280	<0.0035	<0.0038	<0.0041
1,4-Dichlorobenzene	106-46-7	130	<0.0035	<0.0041	<0.0041
1,4-Dioxane	123-91-1	130	<0.07	<0.075	<0.083
Acetone	67-64-1	500	<0.0035	0.016	<0.0041
Benzene	71-43-2	44	<0.0035	<0.0038	<0.0041
n-Butylbenzene	104-51-8	500	<0.0035	13	<0.0041
Carbon tetrachloride	56-23-5	22	<0.0035	<0.0038	<0.0041
Chlorobenzene	106-90-7	500	<0.0035	<0.0041	<0.0041
Chloroform	67-66-3	350	<0.0035	<0.0041	<0.0041
Ethylbenzene	100-41-4	390	<0.0035	0.0057	<0.0041
Methyl ethyl ketone (2-Butanone)	78-93-3	500	<0.0035	<0.0041	<0.0041
Methyl tert-butyl ether (MTBE)	1634-04-4	500	<0.0035	<0.0038	<0.0041
Methylene chloride	75-09-2	500	<0.0035	<0.0038	<0.0041
n-Propylbenzene	103-65-1	500	<0.0035	4.7	<0.0041
sec-Butylbenzene	135-98-8	500	<0.0035	10	<0.0041
tert-Butylbenzene	98-06-6	500	<0.0035	0.084	<0.0041
Tetrachloroethene	127-18-4	150	<0.0035	0.001	<0.0041
Toluene	108-88-3	500	<0.0035	<0.0041	<0.0041
Trichloroethene	79-01-6	200	<0.0035	<0.0038	<0.0041
1,2,4-Trimethylbenzene	95-63-6	190	<0.0035	0.014	<0.0041
1,3,5-Trimethylbenzene	108-67-8	190	<0.0035	<0.0038	<0.0041
Vinyl chloride	75-01-4	13	<0.0035	<0.0038	<0.0041
Xylene (mixed)	1330-20-7	500	<0.0035	0.007	<0.0123
Semivolatile Organic Compounds:					
Acenaphthene	83-32-9	500	<0.34	<0.42	<0.380
Acenaphthylene	208-96-8	500	<0.34	<0.42	<0.350
Anthracene	120-12-7	500	<0.34	<0.42	0.04
Benzo(a)anthracene	56-55-3	5.6	<0.34	<0.42	0.1
Benzo(e)pyrene	50-32-8	1	<0.34	<0.42	0.096
Benzo(b)fluoranthene	205-99-2	5.6	<0.34	<0.42	0.13
Benzo(g,h,i)perylene	191-24-2	500	<0.34	<0.42	0.056
Benzo(k)fluoranthene	207-08-9	56	<0.34	<0.42	0.058
Chrysene	218-01-9	56	<0.34	<0.42	0.094
Dibenzo(a,h)anthracene	53-70-3	0.56	<0.34	<0.42	<0.350
Fluoranthene	206-44-0	500	<0.34	<0.42	0.2
Fluorene	86-73-7	500	<0.34	<0.42	<0.350
Hexachlorobenzene	1118-74-1	6	<0.34	<0.42	<0.350
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	<0.34	<0.42	0.05
m&p-Cresol (3&4-Methylphenol)	106-44-5	500 [2]	<0.34	<0.42	NA
Naphthalene	91-20-3	500	<0.34	0.75	<0.350
o-Cresol (2-Methylphenol)	95-48-7	500	<0.34	<0.42	NA
Pentachlorophenol	87-86-5	6.7	<0.7	<0.84	<0.770
Phenanthrene	85-01-8	500	<0.34	<0.42	0.12
Phenol	108-95-2	500	<0.34	<0.42	<0.380
Pyrene	129-00-0	500	<0.34	<0.42	<0.380
Metals:					
Arsenic	7440-38-2	16	1.6	0.65	4.5
Barium	7440-39-3	400	20.6	51.9	32.7
Beryllium	7440-41-7	590	0.2	0.13	0.16
Cadmium	7440-43-9	9.3	0.0097	0.023	0.038
Chromium, hexavalent	18540-29-9	400	<4.0	<5.2	<4.4
Chromium, trivalent	16085-83-1	1,500	5.3	14.4	8.5
Copper	7440-50-8	270	12.7	15.3	19.1
Total Cyanide	---	27	<0.91	<0.58	<0.42
Lead	7439-92-1	1,000	16.2	5.1	6.2
Manganese	7439-96-5	10,000	183	169	176
Total Mercury	---	2.8	0.03	<0.0056	0.017
Nickel	7440-02-0	310	5.1	10	8.1
Selenium	7782-49-2	1,500	<0.64	0.91	<0.038
Silver	7440-22-4	1,500	<0.065	<0.055	<0.038
Zinc	7440-66-6	10,000	42	36.7	27.3
PCBs/Pesticides:					
2,4,5-TP Acid (Silvex)	93-72-1	500	<0.0067	<0.00885	<0.00716
4,4'-DDE	72-55-9	62	<0.0034	<0.0041	<0.0051
4,4'-DDT	50-29-3	47	<0.0034	<0.0041	0.086
4,4'-DDD	72-54-8	92	<0.0034	<0.0041	<0.0034
Aldrin	309-00-2	0.68	<0.0017	<0.0021	<0.0018
alpha-BHC	319-84-6	3.4	<0.0017	0.0051	<0.0018
beta-BHC	319-85-7	3	<0.0017	<0.0021	<0.0018
Chlordane (alpha)	5103-71-9	24	<0.0017	<0.0021	<0.0018
delta-BHC	319-86-8	500	<0.0017	<0.0021	<0.0018
Dibenzofuran	132-64-9	350	<0.340	<0.42	<0.35
Dieldrin	60-57-1	1.4	<0.0034	<0.0041	<0.0034
Endosulfan I	959-98-8	200	<0.0017	<0.0021	<0.0018
Endosulfan II	33213-65-9	200	<0.0034	<0.0041	<0.0034
Endosulfan sulfate	1031-07-8	200	<0.0034	<0.0041	<0.0034
Endrin	72-20-8	89	<0.0034	<0.0041	<0.0034
Heptachlor	76-44-8	15	<0.0017	0.0035	<0.0018
Lindane	56-89-9	9.2	0.0033	<0.0021	<0.0018
Polychlorinated biphenyls	1336-36-3	1	<0.238	<0.287	<0.355

Notes:

[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.

[2] Sample results combine m- and p-Cresol. The individual SCO for both m-cresol and p-cresol is shown.

Laboratory Qualifiers:

< Indicates the parameter was not detected at or above the laboratory reporting limit.

B The compound was also detected in the associated method blank.

D Indicated the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates an estimated value because the parameter was detected below the reporting limit.

P Greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. The lower of the two values is reported.

Table 3
Summary of Analytical Results for Liquids Contained in Tanks
441 and 442 Waverly
Site #C360108

Sample ID		Settling Tank Com	Oil/Water Tank	Internal Discharge Pit	Steel Tank Discharge
Location		442 Waverly	441 Waverly	442 Waverly	442 Waverly
Sample Date		08/21/09	08/21/09	09/29/10	10/05/10
Parameter					
Wet Chemistry Analysis		Units			
Total Dissolved Solids	mg/L	13	33	NA	NA
Total Suspended Solids	mg/L	11	15	NA	NA
Total Organic Halogens	µg/L	<10.0	<10.0	NA	NA
Total Solids	mg/L	NA	NA	460	NA
Ignitability	° F	No Flash @ 140	No Flash @ 140	No Flash @ 140	NA
Total Polychlorinated Biphenyls (PCBs)					
	µg/L	<1.0	<1.0	<0.3	NA
Total Metals					
Arsenic	µg/L	<3.1	<3.1	<4.3	NA
Cadmium	µg/L	<0.50	<0.50	<0.89	NA
Chromium	µg/L	1.6	9.4	6.7	NA
Lead	µg/L	3.7	5.1	14.4	NA
Volatile Organic Compounds:					
1,1,1-Trichloroethane	mg/L	NA	NA	NA	<0.500
1,1-Dichloroethane	mg/L	NA	NA	NA	<0.500
1,1-Dichloroethene	mg/L	NA	NA	NA	<0.500
1,2-Dichlorobenzene	mg/L	NA	NA	NA	<0.500
1,2-Dichloroethane	mg/L	NA	NA	NA	<0.500
cis -1,2-Dichloroethene	mg/L	NA	NA	NA	<0.500
trans-1,2-Dichloroethene	mg/L	NA	NA	NA	<0.500
1,3-Dichlorobenzene	mg/L	NA	NA	NA	<0.500
1,4-Dichlorobenzene	mg/L	NA	NA	NA	<0.500
1,4-Dioxane	mg/L	NA	NA	NA	NA
Acetone	mg/L	NA	NA	NA	<0.500
Benzene	mg/L	NA	NA	NA	<0.500
n-Butylbenzene	mg/L	NA	NA	NA	<0.500
Carbon tetrachloride	mg/L	NA	NA	NA	<0.500
Chlorobenzene	mg/L	NA	NA	NA	<0.500
Chloroform	mg/L	NA	NA	NA	<0.500
Ethylbenzene	mg/L	NA	NA	NA	<0.500
Methyl ethyl ketone (2-Butanone)	mg/L	NA	NA	NA	<0.500
Methyl tert-butyl ether	mg/L	NA	NA	NA	<0.500
Methylene chloride	mg/L	NA	NA	NA	<0.500
n -Propylbenzene	mg/L	NA	NA	NA	<0.500
sec-Butylbenzene	mg/L	NA	NA	NA	<0.500
tert-Butylbenzene	mg/L	NA	NA	NA	<0.500
Tetrachloroethene	mg/L	NA	NA	NA	<0.500
Toluene	mg/L	NA	NA	NA	<0.500
Trichloroethene	mg/L	NA	NA	NA	<0.500
1,2,4-Trimethylbenzene	mg/L	NA	NA	NA	<0.500
1,3,5-Trimethylbenzene	mg/L	NA	NA	NA	<0.500
Vinyl chloride	mg/L	NA	NA	NA	<0.500
Xylene (mixed)	mg/L	NA	NA	NA	<0.500

Notes:

< Indicates the parameter was not detected at the laboratory detection limit shown.

Laboratory Qualifiers:

B Indicates a trace concentration below the reporting limit and equal to or above the laboratory detection limit.

NA Not Available

Table 4A
Comparison of Soil Sample Results for Settling Tank Excavation and Associated Piping to 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
442 Waverly Avenue
Semi-Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	Set. Tank North-Wall	Set. Tank S-Wall	Set. Tank East-Wall	Set. Tank-N-Bottom	Set. Tank North-Bot.	Set Tank South-Bot.	Set. Tank Center-Bot.	NW-4"-Clay-Pipe-Set-Tank	Duplicate[3]	SE-Pipe-Set.-Tank
Location			North Sidewall	South Sidewall	East Sidewall	Preliminary Bottom	North Bottom	South Bottom	Center Bottom	Northwest Pipe	Northwest Pipe	Southeast Pipe
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			10/08/10	10/08/10	10/08/10	10/04/10	10/08/10	10/08/10	10/08/10	10/12/10	10/12/10	10/07/10
Parameter	CAS#											
<i>Semivolatile Organic Compounds:</i>												
Acenaphthene	83-32-9	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Acenaphthylene	208-96-8	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Anthracene	120-12-7	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Benzo(a)anthracene	56-55-3	5.6	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Benzo(a)pyrene	50-32-8	1	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	0.64	<0.350	<0.35
Benzo(b)fluoranthene	205-99-2	5.6	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	0.31 J	<0.350	<0.35
Benzo(g,h,i)perylene	191-24-2	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Benzo(k)fluoranthene	207-08-9	56	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	0.22 J	<0.350	<0.35
Chrysene	218-01-9	56	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Dibenzo(a,h)anthracene	53-70-3	0.56	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Fluoranthene	206-44-0	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	0.05 J	<0.37	<0.350	<0.35
Fluorene	86-73-7	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Hexachlorobenzene	1118-74-1	6	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
m&p-Cresol (3&4-Methylphenol)	106-44-5	500 [2]	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Naphthalene	91-20-3	500	<0.36	<0.42	<0.38	3.2	13 D	0.055 J	1.4	<0.37	<0.350	<0.35
o-Cresol (2-Methylphenol)	95-48-7	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35
Pentachlorophenol	87-86-5	6.7	<0.73	<0.85	<0.77	<0.84	<0.75	<0.8	<0.81	<0.75	<0.71	0.71
Phenanthrene	85-01-8	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	0.066 J	<0.37	<0.350	<0.35
Phenol	108-95-2	500	<0.36	<0.42	<0.38	<0.41	<0.37	0.36 J	<0.4	<0.37	<0.350	<0.35
Pyrene	129-00-0	500	<0.36	<0.42	<0.38	<0.41	<0.37	<0.39	<0.4	<0.37	<0.350	<0.35

Notes:
[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.
[2] Sample results combine m- and p-Cresol. The individual SCO for both m-cresol and p-cresol is shown.
[3] Duplicate collected from sampling location NW-4"-Clay-Pipe-Set-Tank.

Laboratory Qualifiers:
< Indicates the parameter was not detected at or above the laboratory reporting limit.
J Indicates an estimated value because the parameter was detected below the reporting limit.
D Indicated the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

Table 4B
Comparison of Soil Sample Results for Settling Tank Excavation and Associated Piping to 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
442 Waverly Avenue
Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	Set. Tank North-Wall	Set. Tank S-Wall	Set. Tank East-Wall	Set. Tank-N-Bottom	Set. Tank North-Bot.	Set Tank South-Bot.	Set. Tank Center-Bot.	NW-4"-Clay-Pipe-Set-Tank	Duplicate[2]	SE-Pipe-Set.-Tank
Location			North Sidewall	South Sidewall	East Sidewall	Preliminary Bottom	North Bottom	South Bottom	Center Bottom	Northwest Pipe	Northwest Pipe	Southeast Pipe
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			10/08/10	10/08/10	10/08/10	10/04/10	10/08/10	10/08/10	10/08/10	10/12/10	10/12/10	10/07/10
Parameter	CAS#											
Volatile Organic Compounds: *												
1,1,1-Trichloroethane	71-55-6	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,1-Dichloroethane	75-34-3	240	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,1-Dichloroethene	75-35-4	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,2-Dichlorobenzene	95-50-1	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,2-Dichloroethane	107-06-2	30	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
cis -1,2-Dichloroethene	156-59-2	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
trans-1,2-Dichloroethene	156-60-5	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,3-Dichlorobenzene	541-73-1	280	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,4-Dichlorobenzene	106-46-7	130	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,4-Dioxane	123-91-1	130	0.055 BJ	<0.1	<0.091	<11	130 BJ	<5.3	2.5 BJ	<0.089	<0.08	<0.081
Acetone	67-64-1	500	0.0036 J	<0.0052	0.0034 J	<0.56	<12	<0.26	<0.25	0.003 J	0.003 J	<0.0041
Benzene	71-43-2	44	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
n-Butylbenzene	104-51-8	500	0.00091 J	<0.0052	0.0025 J	27 D	81	27 D	50 D	<0.0044	<0.004	<0.0041
Carbon tetrachloride	56-23-5	22	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Chlorobenzene	108-90-7	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Chloroform	67-66-3	350	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Ethylbenzene	100-41-4	390	<0.0042	<0.0052	<0.0045	0.41 J	<12	<0.26	0.29	<0.0044	<0.004	<0.0041
Methyl ethyl ketone (2-Butanone)	78-93-3	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Methyl tert-butyl ether	1634-04-4	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Methylene chloride	75-09-2	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
n -Propylbenzene	103-65-1	500	0.0016 J	<0.0052	0.0031 J	21	110	30 D	68 D	<0.0044	<0.004	<0.0041
sec-Butylbenzene	135-98-8	500	<0.0042	<0.0052	0.0015 J	26 D	99	25 D	57 D	<0.0044	<0.004	<0.0041
tert-Butylbenzene	98-06-6	500	<0.0042	<0.0052	<0.0045	3.3	16	2.9	6.1	<0.0044	<0.004	<0.0041
Tetrachloroethene	127-18-4	150	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	0.0018 J	<0.004	0.00095 J
Toluene	108-88-3	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Trichloroethene	79-01-6	200	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,2,4-Trimethylbenzene	95-63-6	190	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
1,3,5-Trimethylbenzene	108-67-8	190	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Vinyl chloride	75-01-4	13	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041
Xylene (mixed)	1330-20-7	500	<0.0042	<0.0052	<0.0045	<0.56	<12	<0.26	<0.25	<0.0044	<0.004	<0.0041

Notes:

* Hexachlorobenzene data is presented in Table 4A.

[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.

[2] Duplicate collected from sampling location NW-4"-Clay-Pipe-Set-Tank.

Shaded value indicates the reported concentration is greater than the 6 NYCRR Subpart 375-6.8(b) Protection of Groundwater Soil Cleanup Objective.

Laboratory Qualifiers:

< Indicates the parameter was not detected at or above the laboratory reporting limit.

B The compound was also detected in the associated method blank.

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 5A
Comparison of Soil Sample Results for Steel Tank Excavation and Associated Piping to
6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
442 Waverly Avenue
Semi-Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	S-BOT-STEEL TANK	N-BOT-STEEL TANK	S-2-BOT-STEEL-TANK	N-2-BOT-STEEL-TANK	S-DIS.-PIPE-STEEL-TANK
Location			South Bottom	North Bottom	South Bottom	North Bottom	South Pipe
Unit		ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			10/06/10	10/06/10	10/07/10	10/07/10	10/07/10
Parameter	CAS#						
Semivolatile Organic Compounds:							
Acenaphthene	83-32-9	500	<0.39	<0.4	<0.41	<0.4	<2
Acenaphthylene	208-96-8	500	<0.39	<0.4	<0.41	<0.4	<2
Anthracene	120-12-7	500	<0.39	<0.4	<0.41	<0.4	<2
Benzo(a)anthracene	56-55-3	5.6	<0.39	<0.4	<0.41	<0.4	0.75 J
Benzo(a)pyrene	50-32-8	1	<0.39	<0.4	<0.41	<0.4	0.86 J
Benzo(b)fluoranthene	205-99-2	5.6	<0.39	<0.4	<0.41	<0.4	1.3 J
Benzo(g,h,i)perylene	191-24-2	500	<0.39	<0.4	<0.41	<0.4	0.48 J
Benzo(k)fluoranthene	207-08-9	56	<0.39	<0.4	<0.41	<0.4	0.47 J
Chrysene	218-01-9	56	<0.39	<0.4	<0.41	<0.4	0.71 J
Dibenzo(a,h)anthracene	53-70-3	0.56	<0.39	<0.4	<0.41	<0.4	<2
Fluoranthene	206-44-0	500	<0.39	<0.4	<0.41	<0.4	0.88 J
Fluorene	86-73-7	500	<0.39	<0.4	<0.41	<0.4	<2
Hexachlorobenzene	1118-74-1	6	<0.39	<0.4	<0.41	<0.4	<2
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	<0.39	<0.4	<0.41	<0.4	0.42 J
m&p-Cresol (3&4-Methylphenol)	106-44-5	500 [2]	<0.39	<0.4	<0.41	<0.4	<2
Naphthalene	91-20-3	500	<0.39	0.13 J	0.92	0.7	<2
o-Cresol (2-Methylphenol)	95-48-7	500	<0.39	<0.4	<0.41	<0.4	<2
Pentachlorophenol	87-86-5	6.7	<0.8	<0.81	<0.83	<0.81	<4.1
Phenanthrene	85-01-8	500	<0.39	<0.4	<0.41	<0.4	<2
Phenol	108-95-2	500	<0.39	<0.4	<0.41	<0.4	<2
Pyrene	129-00-0	500	<0.39	<0.4	<0.41	<0.4	0.9 J

Notes:

- [1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.
[2] Sample results combine m- and p-Cresol. The individual SCO for both m-cresol and p-cresol is shown.

Laboratory Qualifiers:

- < Indicates the parameter was not detected at or above the laboratory reporting limit.
J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 5B
Comparison of Soil Sample Results for Steel Tank Excavation and Associated Piping to
6 NYCRR Part 375 Restricted Commercial use Soil Cleanup Objectives
442 Waverly Avenue
Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	S-BOT-STEEL TANK	N-BOT-STEEL TANK	S-2-BOT-STEEL-TANK	N-2-BOT-STEEL-TANK	S-DIS.-PIPE-STEEL-TANK
Location			South Bottom	North Bottom	South Bottom	North Bottom	South Pipe
Unit		ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			10/06/10	10/06/10	10/07/10	10/07/10	10/07/10
Parameter	CAS#						
Volatile Organic Compounds: *							
1,1,1-Trichloroethane	71-55-6	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,1-Dichloroethane	75-34-3	240	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,1-Dichloroethene	75-35-4	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,2-Dichlorobenzene	95-50-1	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,2-Dichloroethane	107-06-2	30	<0.0041	<5.1	<6.1	<5.1	<0.0048
cis -1,2-Dichloroethene	156-59-2	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
trans-1,2-Dichloroethene	156-60-5	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,3-Dichlorobenzene	541-73-1	280	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,4-Dichlorobenzene	106-46-7	130	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,4-Dioxane	123-91-1	130	<0.083	<100	<120	<100	0.076 BJ
Acetone	67-64-1	500	0.0018 J	<5.1	<6.1	<5.1	0.0058
Benzene	71-43-2	44	<0.0041	<5.1	<6.1	<5.1	<0.0048
n-Butylbenzene	104-51-8	500	0.0019 J	35	25	29	0.0018 J
Carbon tetrachloride	56-23-5	22	<0.0041	<5.1	<6.1	<5.1	<0.0048
Chlorobenzene	108-90-7	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
Chloroform	67-66-3	350	<0.0041	<5.1	<6.1	<5.1	<0.0048
Ethylbenzene	100-41-4	390	<0.0041	<5.1	<6.1	<5.1	<0.0048
Methyl ethyl ketone (2-Butanone)	78-93-3	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
Methyl tert-butyl ether	1634-04-4	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
Methylene chloride	75-09-2	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
n -Propylbenzene	103-65-1	500	0.001 J	13	62	41	0.003 J
sec-Butylbenzene	135-98-8	500	0.0017 J	31	31	39	0.0018 J
tert-Butylbenzene	98-06-6	500	<0.0041	6.1	5.7 J	5.7	<0.0048
Tetrachloroethene	127-18-4	150	0.0051	<5.1	<6.1	<5.1	0.0013 J
Toluene	108-88-3	500	<0.0041	<5.1	<6.1	<5.1	<0.0048
Trichloroethene	79-01-6	200	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,2,4-Trimethylbenzene	95-63-6	190	<0.0041	<5.1	<6.1	<5.1	<0.0048
1,3,5-Trimethylbenzene	108-67-8	190	<0.0041	<5.1	<6.1	<5.1	<0.0048
Vinyl chloride	75-01-4	13	<0.0041	<5.1	<6.1	<5.1	<0.0048
Xylene (mixed)	1330-20-7	500	<0.0041	<5.1	<6.1	<5.1	<0.0048

Notes:

* Hexachlorobenzene data is presented in Table 5A.

[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.

Shaded value indicates the reported concentration is greater than the 6 NYCRR Subpart 375-6.8(b) Protection of Groundwater Soil Cleanup Objective.

Laboratory Qualifiers:

< Indicates the parameter was not detected at or above the laboratory reporting limit.

B The compound was also detected in the associated method blank.

J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 6A
Comparison of Soil Sample Results for Internal Discharge Pit Excavation and Associated Piping to 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
442 Waverly Avenue
Semi-Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	Int-Dis-N-Wall	Int-Dis-S-Wall	Int-Dis-E-Wall	Int-Dis-W-Wall	Int-Dis-Bot	E-4"-Iron-Pip-Int-Dis	W-8"-PVC-Pipe-Int.-Dis.	SW-4"-Iron-Pipe-Int-Dis	SW-4"-Iron-Pipe-Int-Dis-Sludge
Location			North Sidewall	South Sidewall	East Sidewall	West Sidewall	Bottom	East Pipe	West Pipe	Southwest Pipe	Sludge found in Pipe
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10
Parameter	CAS#										
Semivolatile Organic Compounds:											
Acenaphthene	83-32-9	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Acenaphthylene	208-96-8	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Anthracene	120-12-7	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Benzo(a)anthracene	56-55-3	5.6	<0.340	<0.350	<0.360	<0.350	<0.360	0.044 J	<0.370	0.55 J	<5.4
Benzo(a)pyrene	50-32-8	1	<0.340	<0.350	<0.360	<0.350	<0.360	0.055 J	<0.370	0.63 J	<5.4
Benzo(b)fluoranthene	205-99-2	5.6	<0.340	<0.350	<0.360	<0.350	<0.360	0.096 J	<0.370	0.93 J	<5.4
Benzo(g,h,i)perylene	191-24-2	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	0.41 J	<5.4
Benzo(k)fluoranthene	207-08-9	56	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	0.48 J	<5.4
Chrysene	218-01-9	56	<0.340	<0.350	<0.360	<0.350	<0.360	0.063 J	<0.370	0.64 J	<5.4
Dibenzo(a,h)anthracene	53-70-3	0.56	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Fluoranthene	206-44-0	500	<0.340	<0.350	<0.360	<0.350	<0.360	0.068 J	<0.370	0.68 J	<5.4
Fluorene	86-73-7	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Hexachlorobenzene	1118-74-1	6	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	0.38 J	<5.4
m&p-Cresol (3&4-Methylphenol)	106-44-5	500 [2]	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Naphthalene	91-20-3	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	2.5 J
o-Cresol (2-Methylphenol)	95-48-7	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Pentachlorophenol	87-86-5	6.7	<0.690	<0.700	<0.720	<0.700	<0.740	<0.780	<0.750	<4	<110
Phenanthrene	85-01-8	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Phenol	108-95-2	500	<0.340	<0.350	<0.360	<0.350	<0.360	<0.390	<0.370	<2	<5.4
Pyrene	129-00-0	500	<0.340	<0.350	<0.360	<0.350	<0.360	0.067 J	<0.370	0.7 J	<5.4

Notes:
[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.
[2] Sample results combine m- and p-Cresol. The individual SCO for both m-cresol and p-cresol is shown.

Laboratory Qualifiers:
< Indicates the parameter was not detected at or above the laboratory reporting limit.
J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 6B
Comparison of Soil Sample Results for Internal Discharge Pit Excavation and Associated Piping to 6 NYCRR Part 375 Restricted Commercial use Soil Cleanup Objectives
442 Waverly Avenue
Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	Int-Dis-N-Wall	Int-Dis-S-Wall	Int-Dis-E-Wall	Int-Dis-W-Wall	Int-Dis-Bot	E-4"-Iron-Pip-Int-Dis	W-8"-PVC-Pipe-Int.-Dis.	SW-4"-Iron-Pipe-Int-Dis
Location			North Sidewall	South Sidewall	East Sidewall	West Sidewall	Bottom	East Pipe	West Pipe	Southwest Pipe
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10
Parameter	CAS#									
<i>Volatile Organic Compounds: *</i>										
1,1,1-Trichloroethane	71-55-6	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,1-Dichloroethane	75-34-3	240	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,1-Dichloroethene	75-35-4	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,2-Dichlorobenzene	95-50-1	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,2-Dichloroethane	107-06-2	30	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
cis -1,2-Dichloroethene	156-59-2	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
trans-1,2-Dichloroethene	156-60-5	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,3-Dichlorobenzene	541-73-1	280	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,4-Dichlorobenzene	106-46-7	130	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,4-Dioxane	123-91-1	130	<0.076	<0.082	<0.079	<0.093	<0.076	<0.068	<0.077	<0.097
Acetone	67-64-1	500	<0.0038	<0.0041	<0.0039	0.0021 J	0.0017 J	<0.0034	0.0058	0.011
Benzene	71-43-2	44	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
n-Butylbenzene	104-51-8	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	0.0013 J	<0.0049
Carbon tetrachloride	56-23-5	22	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Chlorobenzene	108-90-7	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Chloroform	67-66-3	350	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Ethylbenzene	100-41-4	390	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Methyl ethyl ketone (2-Butanone)	78-93-3	500	<0.0038	<0.0041	<0.0039	0.0039 J	<0.0038	<0.0034	<0.0038	<0.0049
Methyl tert-butyl ether	1634-04-4	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Methylene chloride	75-09-2	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
n -Propylbenzene	103-65-1	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	0.0011 J	<0.0049
sec-Butylbenzene	135-98-8	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	0.00094 J	<0.0049
tert-Butylbenzene	98-06-6	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Tetrachloroethene	127-18-4	150	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	0.00095 J	<0.0038	<0.0049
Toluene	108-88-3	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	0.012
Trichloroethene	79-01-6	200	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,2,4-Trimethylbenzene	95-63-6	190	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
1,3,5-Trimethylbenzene	108-67-8	190	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Vinyl chloride	75-01-4	13	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	<0.0038	<0.0049
Xylene (mixed)	1330-20-7	500	<0.0038	<0.0041	<0.0039	<0.0047	<0.0038	<0.0034	0.00078 J	0.0017 J

Notes:
* Hexachlorobenzene data is presented in Table 1A.
[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.

Laboratory Qualifiers:
< Indicates the parameter was not detected at or above the laboratory reporting limit.
J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 7A
Comparison of Soil Sample Results for Sump Pump Pit Excavation and Associated Piping to
6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
442 Waverly Avenue
Semi-Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	Sump-Pit-Bot	N-Sewer-Pipe-Sump-Pit	W-Sewer-Pipe-Sump-Pit	W-Sewer-Pipe-Sump-Pit Sludge
Location			Bottom	North Sump Pit	West Sump Pit	Sludge found in Pipe
Unit		ppm	ppm	ppm	ppm	ppm
Sample Date			10/12/10	10/12/10	10/12/10	10/12/10
Parameter	CAS#					
Semivolatile Organic Compounds:						
Acenaphthene	83-32-9	500	<0.390	<1.9	<0.400	0.45 J
Acenaphthylene	208-96-8	500	<0.390	<1.9	<0.400	<3.6
Anthracene	120-12-7	500	<0.390	<1.9	<0.400	<3.6
Benzo(a)anthracene	56-55-3	5.6	0.21 J	0.37 J	<0.400	<3.6
Benzo(a)pyrene	50-32-8	1	0.18 J	0.41 J	<0.400	<3.6
Benzo(b)fluoranthene	205-99-2	5.6	0.32 J	0.76 J	<0.400	0.48 J
Benzo(g,h,i)perylene	191-24-2	500	0.11 J	0.26 J	<0.400	<3.6
Benzo(k)fluoranthene	207-08-9	56	0.13 J	0.44 J	<0.400	<3.6
Chrysene	218-01-9	56	0.24 J	0.44 J	<0.400	0.7 J
Dibenzo(a,h)anthracene	53-70-3	0.56	<0.390	<1.9	<0.400	<3.6
Fluoranthene	206-44-0	500	0.36 J	0.47 J	<0.400	0.76 J
Fluorene	86-73-7	500	<0.390	<1.9	<0.400	<3.6
Hexachlorobenzene	1118-74-1	6	<0.390	<1.9	<0.400	<3.6
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	0.1 J	0.24 J	<0.400	<3.6
m&p-Cresol (3&4-Methylphenol)	106-44-5	500 [2]	<0.390	<1.9	<0.400	<3.6
Naphthalene	91-20-3	500	<0.390	<1.9	<0.400	<3.6
o-Cresol (2-Methylphenol)	95-48-7	500	<0.390	<1.9	<0.400	<3.6
Pentachlorophenol	87-86-5	6.7	<800	<3.8	<0.820	<7.3
Phenanthrene	85-01-8	500	0.11 J	<1.9	<0.400	0.93 J
Phenol	108-95-2	500	<0.390	<1.9	<0.400	<3.6
Pyrene	129-00-0	500	0.33 J	0.5 J	<0.400	1.3 J

Notes:

- [1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.
[2] Sample results combine m- and p-Cresol. The individual SCO for both m-cresol and p-cresol is shown.

Laboratory Qualifiers:

- < Indicates the parameter was not detected at or above the laboratory reporting limit.
J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 7B
Comparison of Soil Sample Results for Sump Pump Pit Excavation and Associated Piping to
6 NYCRR Part 375 Restricted Commercial use Soil Cleanup Objectives
442 Waverly Avenue
Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	Sump-Pit-Bot	N-Sewer-Pipe-Sump-Pit	W-Sewer-Pipe-Sump-Pit
Location			Bottom	North Sump Pit	West Sump Pit
Unit			ppm	ppm	ppm
Sample Date			10/12/10	10/12/10	10/12/10
Parameter	CAS#				
Volatile Organic Compounds: *					
1,1,1-Trichloroethane	71-55-6	500	<0.0038	<0.004	<0.0037
1,1-Dichloroethane	75-34-3	240	<0.0038	<0.004	<0.0037
1,1-Dichloroethene	75-35-4	500	<0.0038	0.0029 J	<0.0037
1,2-Dichlorobenzene	95-50-1	500	<0.0038	<0.004	<0.0037
1,2-Dichloroethane	107-06-2	30	<0.0038	<0.004	<0.0037
cis -1,2-Dichloroethene	156-59-2	500	<0.0038	0.0011 J	<0.0037
trans-1,2-Dichloroethene	156-60-5	500	<0.0038	<0.004	<0.0037
1,3-Dichlorobenzene	541-73-1	280	<0.0038	<0.004	<0.0037
1,4-Dichlorobenzene	106-46-7	130	<0.0038	<0.004	<0.0037
1,4-Dioxane	123-91-1	130	<0.075	<0.08	<0.074
Acetone	67-64-1	500	0.002 J	0.022	0.0019 J
Benzene	71-43-2	44	<0.0038	<0.004	<0.0037
n-Butylbenzene	104-51-8	500	0.0021 J	0.017	<0.0037
Carbon tetrachloride	56-23-5	22	<0.0038	<0.004	<0.0037
Chlorobenzene	108-90-7	500	<0.0038	<0.004	<0.0037
Chloroform	67-66-3	350	<0.0038	<0.004	<0.0037
Ethylbenzene	100-41-4	390	<0.0038	<0.004	<0.0037
Methyl ethyl ketone (2-Butanone)	78-93-3	500	<0.0038	<0.004	<0.0037
Methyl tert-butyl ether	1634-04-4	500	<0.0038	<0.004	<0.0037
Methylene chloride	75-09-2	500	<0.0038	<0.004	<0.0037
n -Propylbenzene	103-65-1	500	0.0018 J	0.011	<0.0037
sec-Butylbenzene	135-98-8	500	0.0024 J	0.026	<0.0037
tert-Butylbenzene	98-06-6	500	<0.0038	0.0063	<0.0037
Tetrachloroethene	127-18-4	150	0.0016 J	0.0021 J	<0.0037
Toluene	108-88-3	500	<0.0038	<0.004	<0.0037
Trichloroethene	79-01-6	200	<0.0038	<0.004	<0.0037
1,2,4-Trimethylbenzene	95-63-6	190	0.0017 J	0.022	<0.0037
1,3,5-Trimethylbenzene	108-67-8	190	<0.0038	0.02	<0.0037
Vinyl chloride	75-01-4	13	<0.0038	<0.004	<0.0037
Xylene (mixed)	1330-20-7	500	<0.0038	<0.004	<0.0037

Notes:

* Hexachlorobenzene data is presented in Table 1A.

[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.

Laboratory Qualifiers:

< Indicates the parameter was not detected at or above the laboratory reporting limit.

J Indicates an estimated value because the parameter was detected below the reporting limit.

Table 8
Comparison of Soil Sample Results for Backfill Material to
6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
442 Waverly Avenue
VOCs, SVOCs, Metals, PCBs and Pesticides
Site #C360108

Sample ID		CAS#	Soil Cleanup Objectives[1]	Backfill- Coarse A&E Gardens ppm 10/12/10	Bot Gar - 1 NYC Botanical Gardens ppm 11/04/10	Bot Gar - 2 NYC Botanical Gardens ppm 11/04/10
Location	Unit					
Sample Date						
Parameter						
Volatile Organic Compounds:						
1,1,1-Trichloroethane		71-55-6	500	<0.0038	<0.0048	<0.0037
1,1-Dichloroethane		75-34-3	240	<0.0038	<0.0048	<0.0037
1,1-Dichloroethene		75-35-4	500	<0.0038	<0.0048	<0.0037
1,2-Dichlorobenzene		95-50-1	500	<0.0038	<0.0048	<0.0037
1,2-Dichloroethane		107-06-2	30	<0.0038	<0.0048	<0.0037
cis -1,2-Dichloroethene		156-59-2	500	<0.0038	<0.0048	<0.0037
trans -1,2-Dichloroethene		156-60-5	500	<0.0038	<0.0048	<0.0037
1,3-Dichlorobenzene		541-73-1	280	<0.0038	<0.0048	<0.0037
1,4-Dichlorobenzene		106-46-7	130	<0.0038	<0.0048	<0.0037
1,4-Dioxane		123-91-1	130	<0.075	<0.095	<0.074
Acetone		67-64-1	500	0.026	<0.0048	<0.0037
Benzene		71-43-2	44	<0.0038	<0.0048	<0.0037
n-Butylbenzene		104-51-8	500	<0.0038	<0.0048	<0.0037
Carbon tetrachloride		56-23-5	22	<0.0038	<0.0048	<0.0037
Chlorobenzene		108-90-7	500	<0.0038	<0.0048	<0.0037
Chloroform		67-66-3	350	<0.0038	<0.0048	<0.0037
Ethylbenzene		100-41-4	390	<0.0038	<0.0048	<0.0037
Methyl ethyl ketone (2-Butanone)		78-93-3	500	<0.0038	<0.0048	<0.0037
Methyl tert-butyl ether (MTBE)		1634-04-4	500	<0.0038	<0.0048	<0.0037
Methylene chloride		75-09-2	500	<0.0038	<0.0048	<0.0037
n -Propylbenzene		103-65-1	500	<0.0038	<0.0048	<0.0037
sec-Butylbenzene		135-98-8	500	<0.0038	<0.0048	<0.0037
tert-Butylbenzene		98-06-6	500	<0.0038	<0.0048	<0.0037
Tetrachloroethene		127-18-4	150	<0.0038	<0.0048	<0.0037
Toluene		108-88-3	500	<0.0038	<0.0048	<0.0037
Trichloroethene		79-01-6	200	<0.0038	<0.0048	<0.0037
1,2,4-Trimethylbenzene		95-63-6	190	<0.0038	<0.0048	<0.0037
1,3,5-Trimethylbenzene		108-67-8	190	<0.0038	<0.0048	<0.0037
Vinyl chloride		75-01-4	13	<0.0038	<0.0048	<0.0037
Xylene (mixed)		1330-20-7	500	<0.0114	<0.0048	<0.0037
Semivolatile Organic Compounds:						
Acenaphthene		83-32-9	500	0.45	<0.36	<0.38
Acenaphthylene		208-96-8	500	0.46	0.1	0.079
Anthracene		120-12-7	500	1.2	0.11	0.085
Benzo(a)anthracene		56-55-3	5.6	1.8	0.43	0.28
Benzo(a)pyrene		50-32-8	1	1.6	0.38	0.24
Benzo(b)fluoranthene		205-99-2	5.6	2	0.47	0.32
Benzo(g,h,i)perylene		191-24-2	500	0.96	0.24	0.15
Benzo(k)fluoranthene		207-08-9	56	1.1	0.22	0.16
Chrysene		218-01-9	56	1.8	0.42	0.27
Dibenzo(a,h)anthracene		53-70-3	0.56	0.4	0.067	0.046
Fluoranthene		206-44-0	500	2.8	0.66	0.54
Fluorene		86-73-7	500	0.73	<0.36	<0.38
Hexachlorobenzene		1118-74-1	6	<0.36	<0.36	<0.38
Indeno(1,2,3-cd)pyrene		193-39-5	5.6	0.88	0.2	0.14
m&p-Cresol (3&4-Methylphenol)		106-44-5	500 [2]	<0.36	<0.36	<0.38
Naphthalene		91-20-3	500	0.26	<0.36	<0.38
o-Cresol (2-Methylphenol)		95-48-7	500	<0.36	<0.36	<0.38
Pentachlorophenol		87-86-5	6.7	<0.73	<0.72	<0.78
Phenanthrene		85-01-8	500	2.8	0.24	0.26
Phenol		108-95-2	500	<0.36	<0.36	<0.38
Pyrene		129-00-0	500	3.1	0.63	0.44
Metals:						
Arsenic		7440-38-2	16	2.4	7	6.8
Barium		7440-39-3	400	88.3	70.8	83.2
Beryllium		7440-41-7	590	0.19	0.32	0.35
Cadmium		7440-43-9	9.3	0.18	0.66	0.77
Chromium, hexavalent		18540-29-9	400	<4.3	<4.3	<4.5
Chromium, trivalent		16065-83-1	1,500	20.6	17.5	21.5
Copper		7440-50-8	270	35	34.4	36
Total Cyanide		---	27	<0.36	<0.29	<0.35
Lead		7439-92-1	1,000	51.5	233	417
Manganese		7439-96-5	10,000	200	292	271
Total Mercury		---	2.8	0.095	0.099	0.082
Nickel		7440-02-0	310	14.2	15.1	15.2
Selenium		7782-49-2	1,500	<0.38	<0.36	<0.40
Silver		7440-22-4	1,500	<0.038	<0.036	<0.040
Zinc		7440-66-6	10,000	117	82.7	95.8
PCBs/Pesticides:						
2,4,5-TP Acid (Silvex)		93-72-1	500	<0.00733	<7.08	<7.65
4,4'-DDE		72-55-9	62	<0.0036	0.031	<0.0038
4,4'-DDT		50-29-3	47	0.0063	0.061	<0.0038
4,4'-DDD		72-54-8	92	<0.0036	<0.018	0.01
Aldrin		309-00-2	0.68	<0.0019	<0.0092	<0.002
alpha-BHC		319-84-6	3.4	<0.0019	<0.0092	<0.002
beta-BHC		319-85-7	3	<0.0019	<0.0092	<0.002
Chlordane (alpha)		5103-71-9	24	0.0076	0.018	0.012
delta-BHC		319-86-8	500	<0.0019	0.0024	0.002
Dibenzofuran		132-64-9	350	0.34	<0.360	<0.380
Dieldrin		60-57-1	1.4	<0.0036	0.052	0.058
Endosulfan I		959-98-8	200	<0.0019	<0.0092	<0.002
Endosulfan II		33213-65-9	200	<0.0036	<0.018	<0.0038
Endosulfan sulfate		1031-07-8	200	0.007	<0.018	<0.0038
Endrin		72-20-8	89	<0.0036	<0.018	0.016
Heptachlor		76-44-8	15	<0.0019	<0.0092	<0.002
Lindane		58-89-9	9.2	<0.0019	<0.0092	<0.002
Polychlorinated biphenyls		1336-36-3	1	<0.252	<0.252	<0.273

Notes:

[1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.

[2] Sample results combine m- and p-Cresol. The individual SCO for both m-cresol and p-cresol is shown.

Laboratory Qualifiers:

< Indicates the parameter was not detected at or above the laboratory reporting limit.

B The compound was also detected in the associated method blank.

J Indicates an estimated value because the parameter was detected below the reporting limit.

P Greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. The lower of the two values is reported.

N Spiked sample recovery not within control limits.

* Duplicate analysis not within control limits.

Table 9A
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Volatile Organic Compounds and Semi-Volatile Organic Compounds
Site #C360108

Location		Water Quality Standard* µg/L	441 Waverly Avenue									
Sample ID			B6OW-D		B6OW-S	B9A-OW	GZ-21D		GZ-21S	GZ-22D		GZ-22S
Unit			µg/L		µg/L	µg/L	µg/L		µg/L	µg/L		µg/L
Sample Date			08/21/09	01/11/12	08/21/09	08/20/09	08/20/09	01/11/12	08/20/09	08/19/09	01/11/12	8/19/2009
Parameter	CAS#											
Volatile Organic Compounds:												
1,1-Dichloroethane	75-34-3	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichlorobenzene	87-61-6	5	NA	NA	NA	<5.0	<5.0	NA	1.1 J	<5.0	NA	<5.0
1,2,4-Trichlorobenzene	120-82-1	5	NA	NA	NA	<5.0	<5.0	NA	1 J	<5.0	NA	<5.0
1,2-Dichloroethane	107-06-2	0.6	9.7	<5.0	<5.0	120	170 D	5.3	<5.0	22	17	<5.0
cis-1,2-Dichloroethene	156-59-2	5	390 D	1.5 J	2 J	19	270 D	10	<5.0	8.4	6.5	23
trans-1,2-Dichloroethene	156-60-5	5	150	<5.0	<5.0	<5.0	6.6	<5.0	<5.0	<5.0	1.3 J	<5.0
Acetone	67-64-1	50 GV	<50.0	<5.0	---	---	<50.0	<5.0	---	<50.0	<5.0	---
Benzene	71-43-2	1	<5.0	0.51 J	<5.0	190 D	61	<5.0	5.6	2.6 J	1.3 J	<5.0
n-Butylbenzene	104-51-8	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3.2 J	<5.0	<5.0	<5.0
sec-Butylbenzene	135-98-8	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3.2 J	1.2 J	<5.0	<5.0
tert-Butylbenzene	98-06-6	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.6	<5.0	<5.0	<5.0
Carbon disulfide	75-15-0	---	NA	NA	NA	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0
Ethylbenzene	100-41-4	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene	87-68-3	0.5	NA	NA	NA	<5.0	<5.0	NA	2 J	<5.0	NA	<5.0
Isopropylbenzene	98-82-8	5	NA	NA	NA	<5.0	<5.0	NA	<5.0	1.5 J	NA	<5.0
Methyl tert-butyl ether (MTBE)	1634-04-4	10 GV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	14	31	17
n-Propylbenzene	103-65-1	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	4.4 J	<5.0	1 J
Tetrachloroethene	127-18-4	5	23	6.2	2.6 J	<5.0	41	1.7 J	<5.0	120	97	17
Trichloroethene	79-01-6	5	43	2.1 J	1.6 J	<5.0	33	0.58 J	<5.0	110	92	9.8
Toluene	108-88-3	5	<5.0	<5.0	<5.0	1.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	2	<5.0	<5.0	<5.0	67	4 J	<5.0	<5.0	<5.0	<5.0	3.8 J
Semi-Volatile Organic Compounds:												
Napthalene	91-20-3	---	<10	NA	<10	<10	<10	NA	<10	<10	NA	<10

Notes:

BOLD value indicates the reported concentration is greater than the applicable water quality standard or guidance value.

* Groundwater Standards are obtained from Title 6 Part 703.5, and Guidance Values are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at the laboratory detection limit shown.

NA Not Analyzed.

--- No standard or not applicable.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Table 9B
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Volatile Organic Compounds and Semi-Volatile Organic Compounds
Site #C360108

Location		Water Quality Standard* µg/L	442 Waverly Avenue								
Well ID			GZ-23D		GZ-24D	GZ-25S	VW-2	B5-OW [1]	VW-5	Dup [2]	Equip. Blank
Unit			µg/L		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Sample Date			08/20/09	01/11/12	08/20/09	08/20/09	08/21/09	08/21/09	08/21/09	08/21/09	08/21/09
Parameter	CAS#										
Volatile Organic Compounds											
1,1-Dichloroethane	75-34-3	5	<5.0	<5.0	2 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	5	5.5	1.6 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichlorobenzene	87-61-6	5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	0.6	13	9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	5	10	780 D	<5.0	1.6 J	<5.0	<5.0	9.9	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	5	<5.0	9.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	67-64-1	50 GV	<50.0	200	---	---	---	---	---	---	---
Benzene	71-43-2	1	11	4 J	13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	104-51-8	5	<5.0	<5.0	<5.0	<5.0	41	<5.0	<5.0	<5.0	<5.0
sec-Butylbenzene	135-98-8	5	<5.0	<5.0	<5.0	<5.0	90	<5.0	<5.0	<5.0	<5.0
tert-Butylbenzene	98-06-6	5	<5.0	<5.0	<5.0	<5.0	33	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	75-15-0	---	<5.0		NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100-41-4	5	<5.0	<5.0	<5.0	<5.0	1.9 J	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene	87-68-3	0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	98-82-8	5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether (MTBE)	1634-04-4	10 GV	2.1 J	1.6 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Propylbenzene	103-65-1	5	<5.0	<5.0	<5.0	<5.0	280 D	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	5	9700 D	4300 D	<5.0	<5.0	<5.0	<5.0	2.5 J	<5.0	<5.0
Trichloroethene	79-01-6	5	450 DJ	1600 D	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	108-88-3	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	2	<5.0	1.2 J	1.3 J	<5.0	<5.0	<5.0	<5.0	19	<5.0
Semi-Volatile Organic Compounds											
Napthalene	91-20-3	---	<10	NA	<10	<10	1.2 J	<10	<10	<10	<10

Notes:

BOLD value indicates the reported concentration is greater than the applicable water quality standard or guidance value.

* Groundwater Standards are obtained from Title 6 Part 703.5, and Guidance Values are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at the laboratory detection limit shown.

NA Not Analyzed.

--- No standard or not applicable.

[1] Laboratory report and chain of custody identify this sample as VZ-3. Based on the depth of the monitoring well, the correct identification is B5-OW.

[2] Dup sample collected from monitoring well location B5-OW.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Table 10A
Comparison of Soil Boring and Test Pit Sample Results to 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
441 and 442 Waverly Avenue
Semi-Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	SB-01	SB-02	SB-03	SB-04 (0708)	SB-04 (1112)	SB-05	SB-06	Dup-01 [3]	SW-TEST-PIT
Sample Depth			0-3 feet	8-12 feet	0-4 feet	7-8 feet	11-12 feet	8-12 feet	0-3.5 feet	8-12 feet	7.5 feet
Location			442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	441 Waverly Ave	442 Waverly Ave	442 Waverly Ave
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	10/07/10
Parameter	CAS#										
<i>Semivolatile Organic Compounds:</i>											
Acenaphthene	83-32-9	500	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Acenaphthylene	208-96-8	500	0.059 J	<0.400	<0.380	<0.410	<0.370	<0.400	0.041 J	<0.400	<0.4
Anthracene	120-12-7	500	0.048 J	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Benzo(a)anthracene	56-55-3	5.6	0.1 J	<0.400	0.043 J	<0.410	<0.370	<0.400	0.098 J	<0.400	<0.4
Benzo(a)pyrene	50-32-8	1	0.12 J	<0.400	<0.380	<0.410	<0.370	<0.400	0.1 J	<0.400	<0.4
Benzo(b)fluoranthene	205-99-2	5.6	0.17 J	0.06 J	0.055 J	<0.410	<0.370	<0.400	0.16 J	<0.400	<0.4
Benzo(g,h,i)perylene	191-24-2	500	0.14 J	<0.400	<0.380	<0.410	<0.370	<0.400	0.099 J	<0.400	<0.4
Benzo(k)fluoranthene	207-08-9	56	0.083 J	<0.400	<0.380	<0.410	<0.370	<0.400	0.059 J	<0.400	<0.4
Chrysene	218-01-9	56	0.15 J	0.051 J	0.042 J	<0.410	<0.370	<0.400	0.12 J	<0.400	<0.4
Dibenzo(a,h)anthracene	53-70-3	0.56	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Dibenzofuran	132-64-9	350	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Fluoranthene	206-44-0	500	0.2 J	0.086 J	0.053 J	<0.410	<0.370	<0.400	0.19 J	<0.400	<0.4
Fluorene	86-73-7	500	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Hexachlorobenzene	1118-74-1	6	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	0.1 J	<0.400	<0.380	<0.410	<0.370	<0.400	0.086 J	<0.400	<0.4
m&p-Cresol (3&4-Methylphenol)	106-44-5	500 [2]	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Naphthalene	91-20-3	500	<0.350	0.14 J	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	0.24 J
o-Cresol (2-Methylphenol)	95-48-7	500	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Pentachlorophenol	87-86-5	6.7	<0.720	<0.820	<0.770	<0.840	<0.740	<0.810	<0.790	<0.810	<0.82
Phenanthrene	85-01-8	500	0.094 J	0.052 J	0.045 J	<0.410	<0.370	<0.400	0.082 J	<0.400	<0.4
Phenol	108-95-2	500	<0.350	<0.400	<0.380	<0.410	<0.370	<0.400	<0.390	<0.400	<0.4
Pyrene	129-00-0	500	0.18 J	0.062 J	0.043 J	<0.410	<0.370	<0.400	0.18 J	<0.400	<0.4

Notes:

- [1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.
[2] Sample results combine m- and p-Cresol. Most stringent SCO is listed.
[3] Dup-01 sample collected from soil boring location SB-05.

Laboratory Qualifiers:

- J Indicates an estimated value because the parameter was detected below the reporting limit.
< Indicates the parameter was not detected at or above the laboratory reporting limit for organic analysis and the laboratory detection limit for inorganic analysis.

Table 10B
Comparison of Soil Boring and Test Pit Sample Results to 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives
441 and 442 Waverly Avenue
Volatile Organic Compounds
Site #C360108

Sample ID		Soil Cleanup Objectives [1]	SB-01	SB-02	SB-03	SB-04 0708	SB-04 1112	SB-05	SB-06	Dup-01 [2]	SW-TEST-PIT
Sample Depth			2-3 feet	11-12 feet	3-4 feet	7-8 feet	11-12 feet	11-12 feet	2-3 feet	11-12 feet	7.5 feet
Location			442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	442 Waverly Ave	441 Waverly Ave	442 Waverly Ave	442 Waverly Ave
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Date			09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09	10/07/10
Parameters	CAS#										
Volatile Organic Compounds: *											
1,1,1-Trichloroethane	71-55-6	500	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,1-Dichloroethane	75-34-3	240	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,1-Dichloroethene	75-35-4	500	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,2-Dichlorobenzene	95-50-1	500	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,2-Dichloroethane	107-06-2	30	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
cis -1,2-Dichloroethene	156-59-2	500	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
trans-1,2-Dichloroethene	156-60-5	500	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,3-Dichlorobenzene	541-73-1	280	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,4-Dichlorobenzene	106-46-7	130	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,4-Dioxane	123-91-1	130	<5.3	<11	<0.084	<6.0	<0.075	<0.092	<0.096	<0.097	<110
Acetone	67-64-1	500	<0.260	<0.530	<0.0042	<0.300	0.12	0.046	0.19	0.018	<5.3
Benzene	71-43-2	44	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	0.0029 J	<5.3
n-Butylbenzene	104-51-8	500	<0.260	5.9	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	35
Carbon tetrachloride	56-23-5	22	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Chlorobenzene	108-90-7	500	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Chloroform	67-66-3	350	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Ethylbenzene	100-41-4	390	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Methyl ethyl ketone (2-Butanone)	78-93-3	500	0.11 J	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Methyl tert-butyl ether	1634-04-4	500	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Methylene chloride	75-09-2	500	<0.260	<0.530	0.049	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
n -Propylbenzene	103-65-1	500	<0.260	16	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	28
sec-Butylbenzene	135-98-8	500	<0.260	11	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	32
tert-Butylbenzene	98-06-6	500	<0.260	3	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	4.6 J
Tetrachloroethene	127-18-4	150	<0.260	<0.530	0.0017 J	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Toluene	108-88-3	500	<0.260	<0.530	0.002 J	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Trichloroethene	79-01-6	200	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,2,4-Trimethylbenzene	95-63-6	190	<0.260	<0.530	0.0012 J	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
1,3,5-Trimethylbenzene	108-67-8	190	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Vinyl chloride	75-01-4	13	<0.260	<0.530	<0.0042	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3
Xylene (mixed)	1330-20-7	500	<0.260	<0.530	0.0016 J	<0.300	<0.0038	<0.0046	<0.0048	<0.0048	<5.3

Notes:

- * Hexachlorobenzene data is presented in Table 2A.
- [1] Soil Cleanup Objectives are obtained from 6 NYCRR Subpart 375-6.8(b), Restricted Commercial Use, for Protection of Public Health.
- [2] Dup-01 sample collected from Soil Boring Location SB-05.
- Shaded value indicates the reported concentration is greater than the 6 NYCRR Subpart 375-6.8(b) Protection of Groundwater Soil Cleanup Objective.

Laboratory Qualifiers:

- J Indicates an estimated value because the parameter was detected below the reporting limit.
- < Indicates the parameter was not detected at or above the laboratory reporting limit for organic analysis and the laboratory detection limit for inorganic analysis.

Table 11
Groundwater Analytical Data Results 441/442 Waverly Avenue and Offsite Deep Monitoring Wells
January 10-11, 2012

Parameter	Units	Water Quality Standard*	01/10/2012 OSMW-1		01/10/2012 OSMW-2		01/10/2012 OSMW-3DL		01/10/2012 OSMW-3		01/10/2012 OSMW-4DL		01/10/2012 OSMW-4		01/10/2012 DUP-1DL		01/10/2012 DUP-1		01/11/2012 GZ-23DDL		01/11/2012 GZ-23D		01/11/2012 GZ-22D		01/11/2012 GZ-21D		01/11/2012 B6-OW-D	
1,1,1-Trichloroethane	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
1,1-Dichloroethane	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
1,1-Dichloroethene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	1.6	J	5.0	U	5.0	U	5.0	U
1,2,4-Trimethylbenzene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-Dichlorobenzene	ug/L	3	5.0	U	4.1	J	50	U	5.0	U	50	U	5.0	U	50	U	0.75	J	500	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-Dichloroethane	ug/L	0.6	5.0	U	5.0	U	50	U	4.4	J	50	U	1.1	J	50	U	1.1	J	500	U	9		17		5.3		5.0	U
1,3,5-Trimethylbenzene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
1,3-Dichlorobenzene	ug/L	3	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
1,4-Dichlorobenzene	ug/L	3	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
1,4-Dioxane	ug/L	---	100	U	100	U	1000	U	100	U	1000	U	100	U	1000	U	100	U	10000	U	100	U	100	U	100	U	100	U
2-Butanone (Methyl Ethyl Ketone)	ug/L	50 GV	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
Acetone	ug/L	50 GV	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	200		5.0	U	5.0	U	5.0	U
Benzene	ug/L	1	5.0	U	0.83	J	50	U	5.0	U	43	DJ	45		41	DJ	47		500	U	4.0	J	1.3	J	5.0	U	0.51	J
Carbon tetrachloride	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
Chlorobenzene	ug/L	5	5.0	U	85		50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
Chloroform	ug/L	7	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
cis-1,2-Dichloroethene	ug/L	5	5.0	U	1.1	J	11	DJ	14		27	DJ	29		24	DJ	29		780	D	1100	E	6.5		10		1.5	J
Ethylbenzene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
m,p-Xylene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
Methyl tert-butyl ether	ug/L	10	5.6		5.0	U	50	U	5.0	U	50	U	0.78	J	50	U	5.0	U	500	U	1.6	J	31		5.0	U	5.0	U
Methylene chloride	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
n-Butylbenzene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
n-Propylbenzene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	1.6	J	50	U	1.7	J	500	U	5.0	U	5.0	U	5.0	U	5.0	U
o-Xylene	ug/L	5	5.0	U	2.5	J	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
sec-Butylbenzene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	1.5	J	50	U	1.5	J	500	U	5.0	U	5.0	U	5.0	U	5.0	U
tert-Butylbenzene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U
Tetrachloroethene	ug/L	5	5.0	U	5.0	U	760	D	1400	E	790	D	1400	E	730	D	1400	E	4300	D	5100	E	97		1.7	J	6.2	
Toluene	ug/L	5	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	0.67	J	500	U	5.0	U	5.0	U	5.0	U	5.0	U
trans-1,2-Dichloroethene	ug/L	5	5.0	U	5.0	U	50	U	1.7	J	6.7	DJ	6.9		50	U	7.2		500	U	9.1		1.3	J	5.0	U	5.0	U
Trichloroethene	ug/L	5	5.0	U	5.0	U	91	D	120		230	D	310	E	220	D	300	E	1600	D	2500	E	92		0.58	J	2.1	J
Vinyl chloride	ug/L	2	5.0	U	5.0	U	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	1.2	J	5.0	U	5.0	U	5.0	U
Xylene (Total)	ug/L	5	5.0	U	2.5	J	50	U	5.0	U	50	U	5.0	U	50	U	5.0	U	500	U	5.0	U	5.0	U	5.0	U	5.0	U

Notes:

BOLD value indicates the reported concentration is greater than the applicable water quality standard or guidance value.

* Groundwater Standards and Guidance Values are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

--- No standard or not applicable.

GV Guidance Value

Duplicate sample collected from OSMW-4.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the laboratory reporting limit.

U Indicates the parameter was not detected at the laboratory detection limit shown.

E Value above quantitation range.

Table 12
January 2012 Groundwater Elevation Data

Well ID	Ground Elevation (Feet)	Top of Casing (TOC) Elevation (Feet)	Depth to Water from TOC (January 9, 2012)	Groundwater Elevation (Feet)
OSMW-1	30.68	30.57	9.1	21.47
OSMW-2	31.04	30.94	9.28	21.66
OSMW-3	30.71	30.50	9.2	21.30
OSMW-4	30.98	30.84	9.38	21.46
GZ-21D	29.50	29.38	8.30	21.08
GZ-22D	30.68	30.48	9.40	21.08
GZ-23D	31.23	31.02	10.2	20.82
B6-OWD	30.69	30.36	9.3	20.06

FIGURES



MAP REFERENCE:

PROPERTY LINE LOCATIONS FOR 441 AND 442 WAVERLY AVENUE ARE BASED ON THE FIGURE PROVIDED BY GEO ENVIRONMENTAL, INC. ENTITLED "FORMER ARGUESO FACILITY" DATED SEPTEMBER 16, 2005.

AERIAL PHOTOGRAPH PROVIDED BY NEW YORK STATE GIS, (2009).

LEGEND:

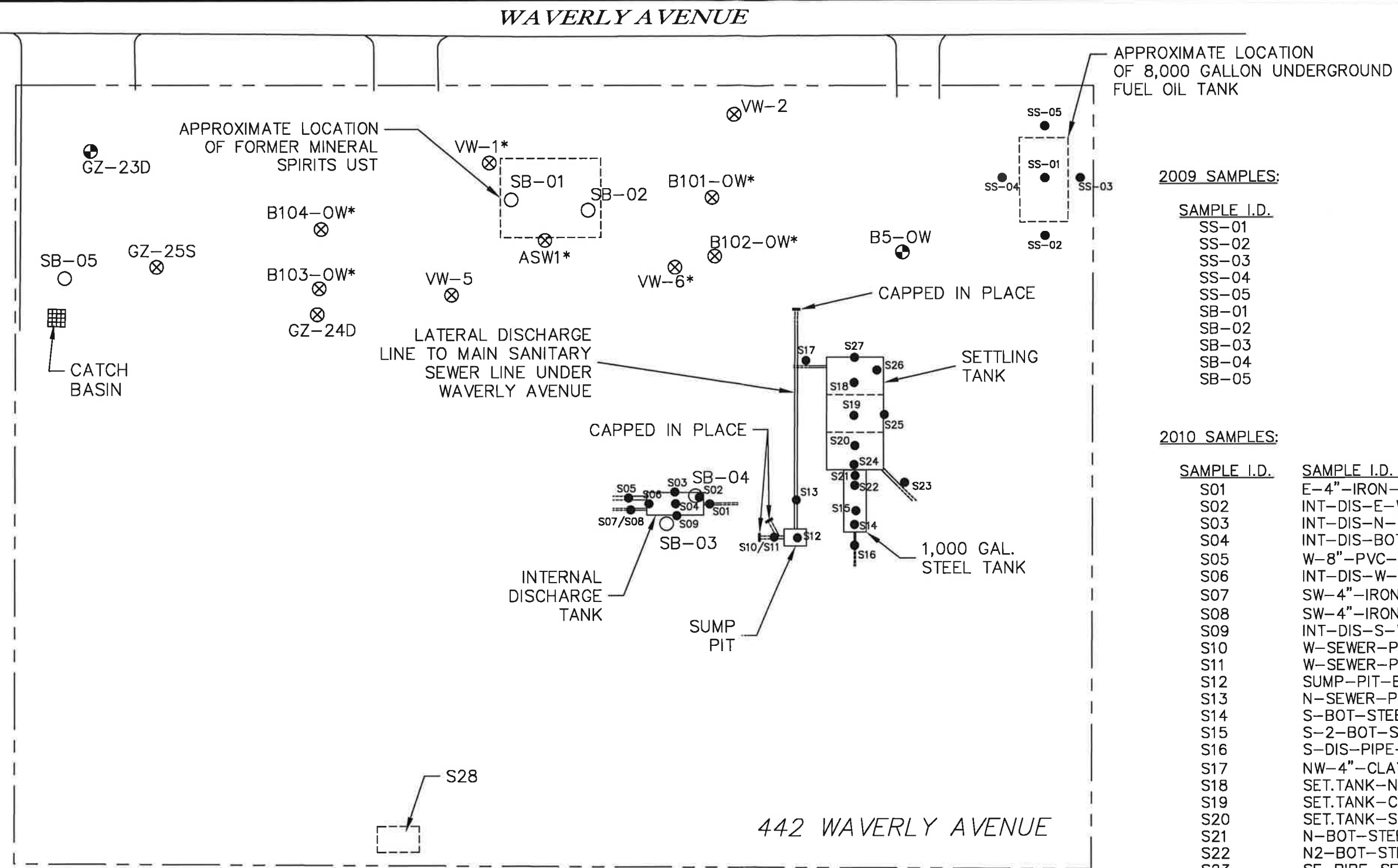
----- APPROXIMATE PROPERTY BOUNDARY

FIGURE 1

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road ♦ Latham, New York 12110

SITE LOCATION MAP
441-442 WAVERLY AVENUE
SITE #C360108
NEW WAVERLY AVENUE ASSOCIATES, LLC
V/T OF MAMARONECK WESTCHESTER CO., N.Y.

PROJ. No.: 28012	DATE: 6/25/12	SCALE: 1"=200'	DWG. NO. 28012055	FIGURE 1
------------------	---------------	----------------	-------------------	----------



2009 SAMPLES:

SAMPLE I.D.

SS-01
SS-02
SS-03
SS-04
SS-05
SB-01
SB-02
SB-03
SB-04
SB-05

2010 SAMPLES:

SAMPLE I.D.

SAMPLE I.D. IN LABORATORY REPORT

S01	E-4"-IRON-PIPE-INT-DIS
S02	INT-DIS-E-WALL
S03	INT-DIS-N-WALL
S04	INT-DIS-BOT
S05	W-8"-PVC-PIPE-INT-DIS
S06	INT-DIS-W-WALL
S07	SW-4"-IRON-PIPE-INT-DIS
S08	SW-4"-IRON-PIPE-INT-DIS-SLUDGE
S09	INT-DIS-S-WALL
S10	W-SEWER-PIPE-SUMP-PIT
S11	W-SEWER-PIPE-SUMP-PIT-SLUDGE
S12	SUMP-PIT-BOT
S13	N-SEWER-PIPE-SUMP-PIT
S14	S-BOT-STEEL-TANK
S15	S-2-BOT-STEEL-TANK
S16	S-DIS-PIPE-STEEL-TANK
S17	NW-4"-CLAY-PIPE-SET.-TANK
S18	SET.TANK-NORTH-BOT
S19	SET.TANK-CENTER-BOT
S20	SET.TANK-SOUTH-BOT
S21	N-BOT-STEEL-TANK
S22	N2-BOT-STEEL-TANK
S23	SE-PIPE-SET-TANK
S24	SET.TANK-S-WALL
S25	SET.TANK-EAST-WALL
S26	SET.TANK-N-BOTTOM
S27	SET.TANK-NORTH-WALL
S28	SW-TEST-PIT

FIGURE 2

MAP REFERENCE:

BASE MAP PROVIDED BY GZA ENVIRONMENTAL, INC.
ENTITLED "SITE PLAN", DATED 9/16/2005.

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road • Latham, New York 12110

2009 AND 2010 SOIL AND GROUNDWATER
SAMPLE LOCATIONS - 442 WAVERLY AVENUE

SITE# C360108

NEW WAVERLY AVENUE ASSOCIATES, LLC

V/T OF MAMARONECK

WESTCHESTER CO., N.Y.

PROJ. No.: 28012 | DATE: 6/25/12 | SCALE: 1" = 20' | DWG. NO. 28012056 | FIGURE 2

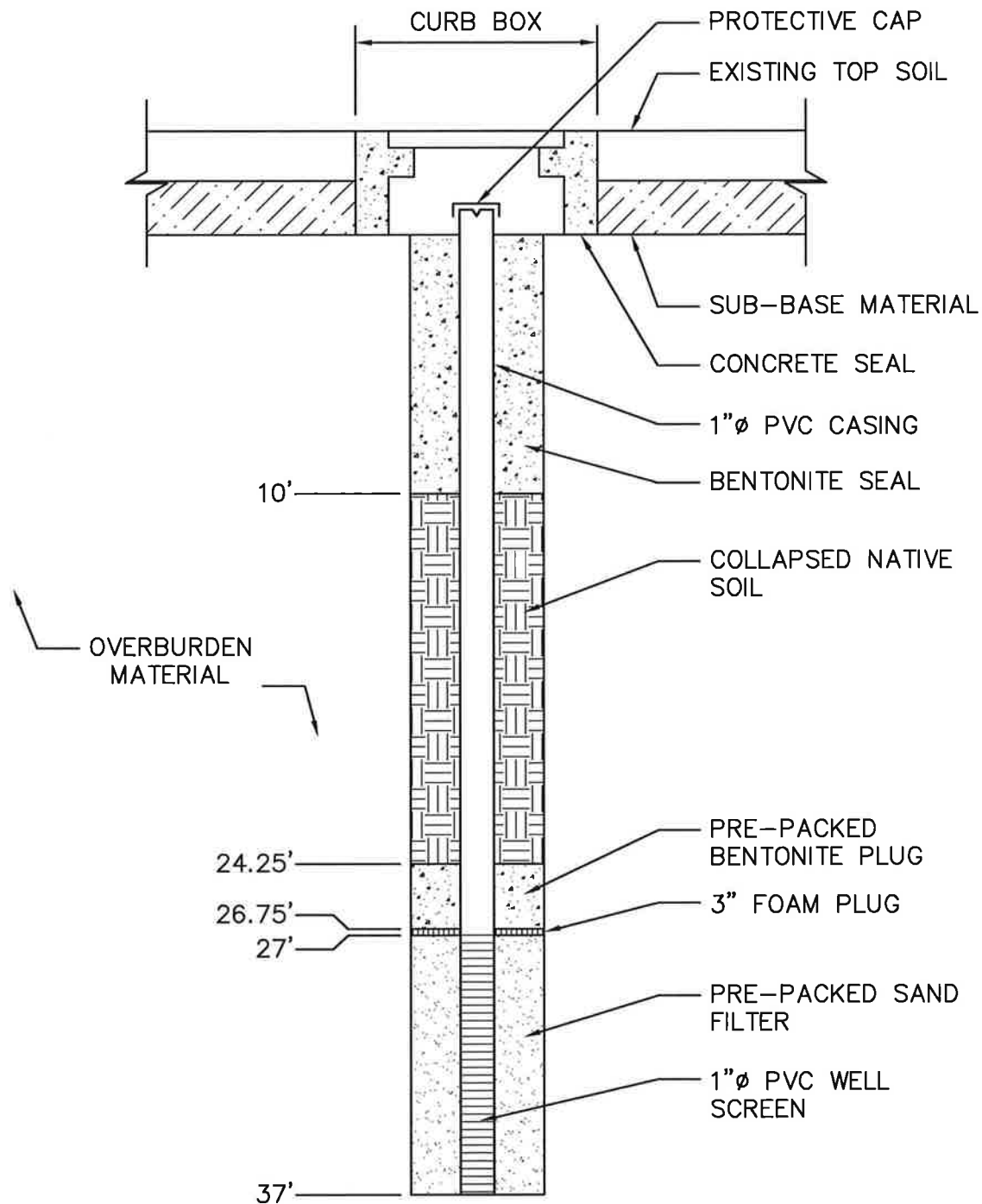


FIGURE 6

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road • Latham, New York 12110

WELL COMPLETION DETAIL FOR OSMW-1
441/442 WAVERLY AVENUE
 OFFSITE MONITORING WELL INSTALLATION

V/T OF MAMARONECK

WESTCHESTER CO., N.Y.

PROJ. No.: 28012 | DATE: 6/25/12 | SCALE: N.T.S. | DWG. NO. 28012060 | FIGURE 6

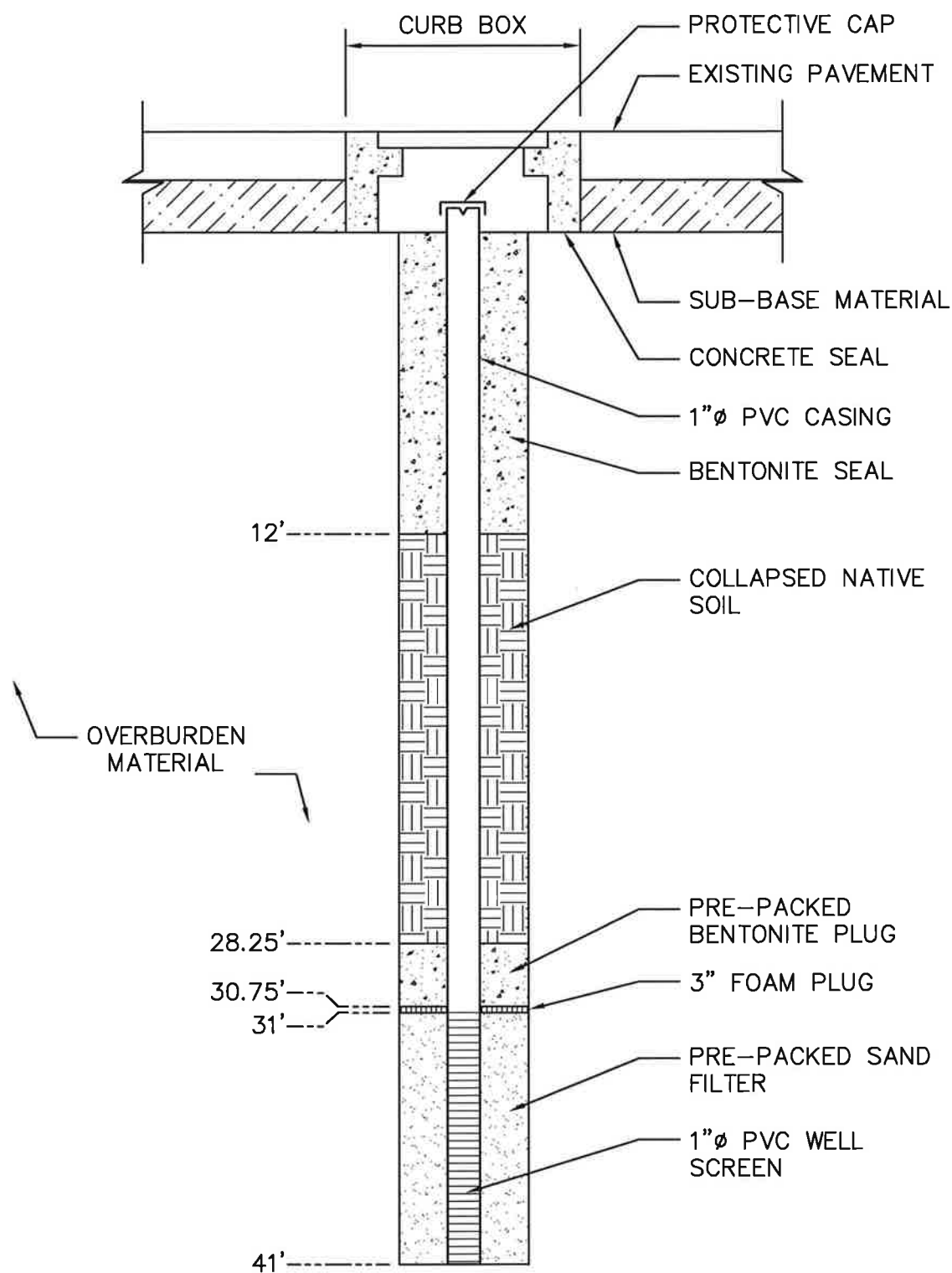


FIGURE 7

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road ♦ Latham, New York 12110

WELL COMPLETION DETAIL FOR OSMW-2
441/442 WAVERLY AVENUE
 OFFSITE MONITORING WELL INSTALLATION

V/T OF MAMARONECK

WESTCHESTER CO., N.Y.

PROJ. No.: 28012	DATE: 6/25/12	SCALE: N.T.S.	DWG. NO. 28012061	FIGURE 7
------------------	---------------	---------------	-------------------	----------

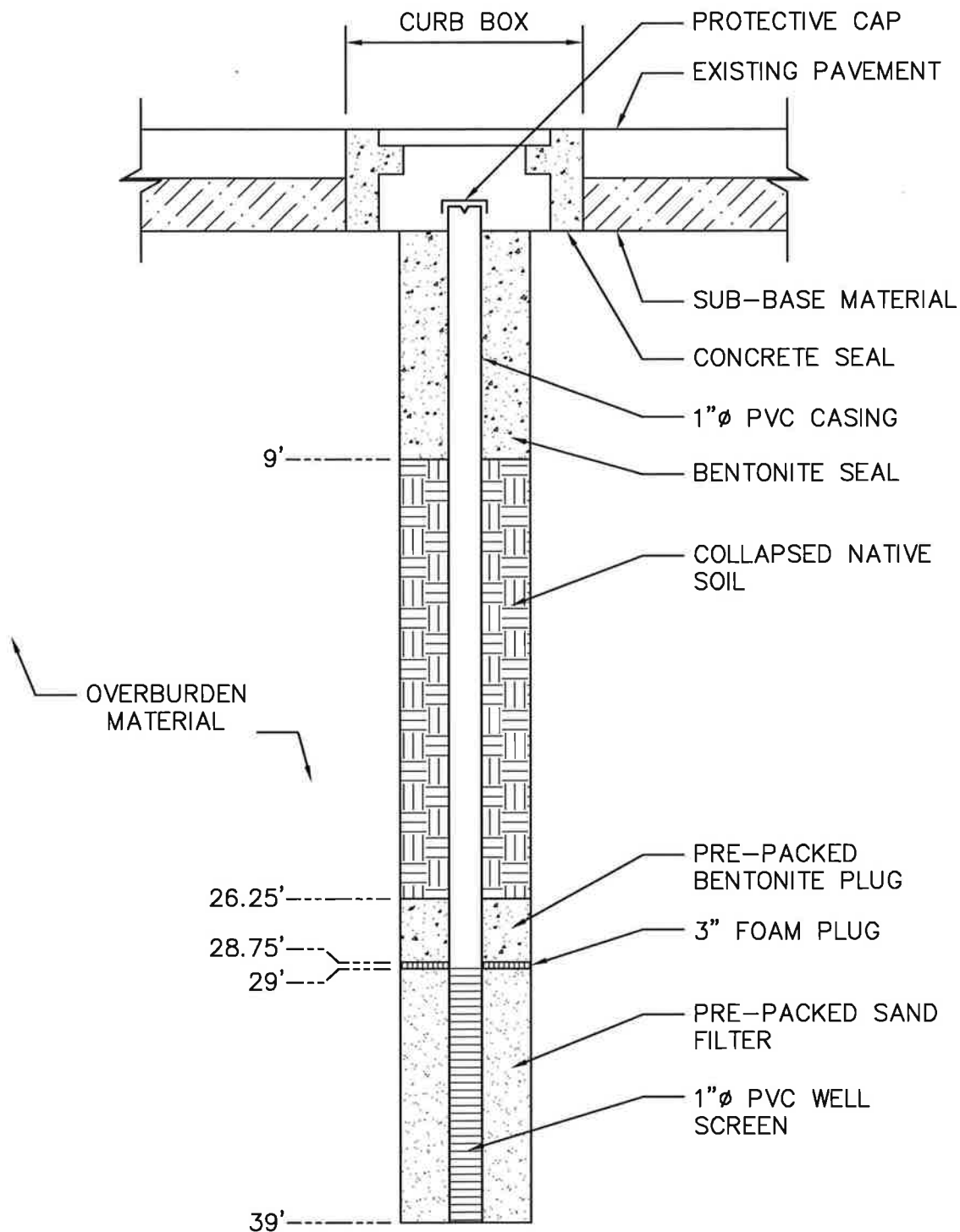


FIGURE 8

STERLING
 Sterling Environmental Engineering, P.C.
 24 Wade Road ♦ Latham, New York 12110

WELL COMPLETION DETAIL FOR OSMW-3
441/442 WAVERLY AVENUE
 OFFSITE MONITORING WELL INSTALLATION

V/T OF MAMARONECK

WESTCHESTER CO., N.Y.

PROJ. No.: 28012 | DATE: 6/25/12 | SCALE: N.T.S. | DWG. NO. 28012062 | FIGURE 8

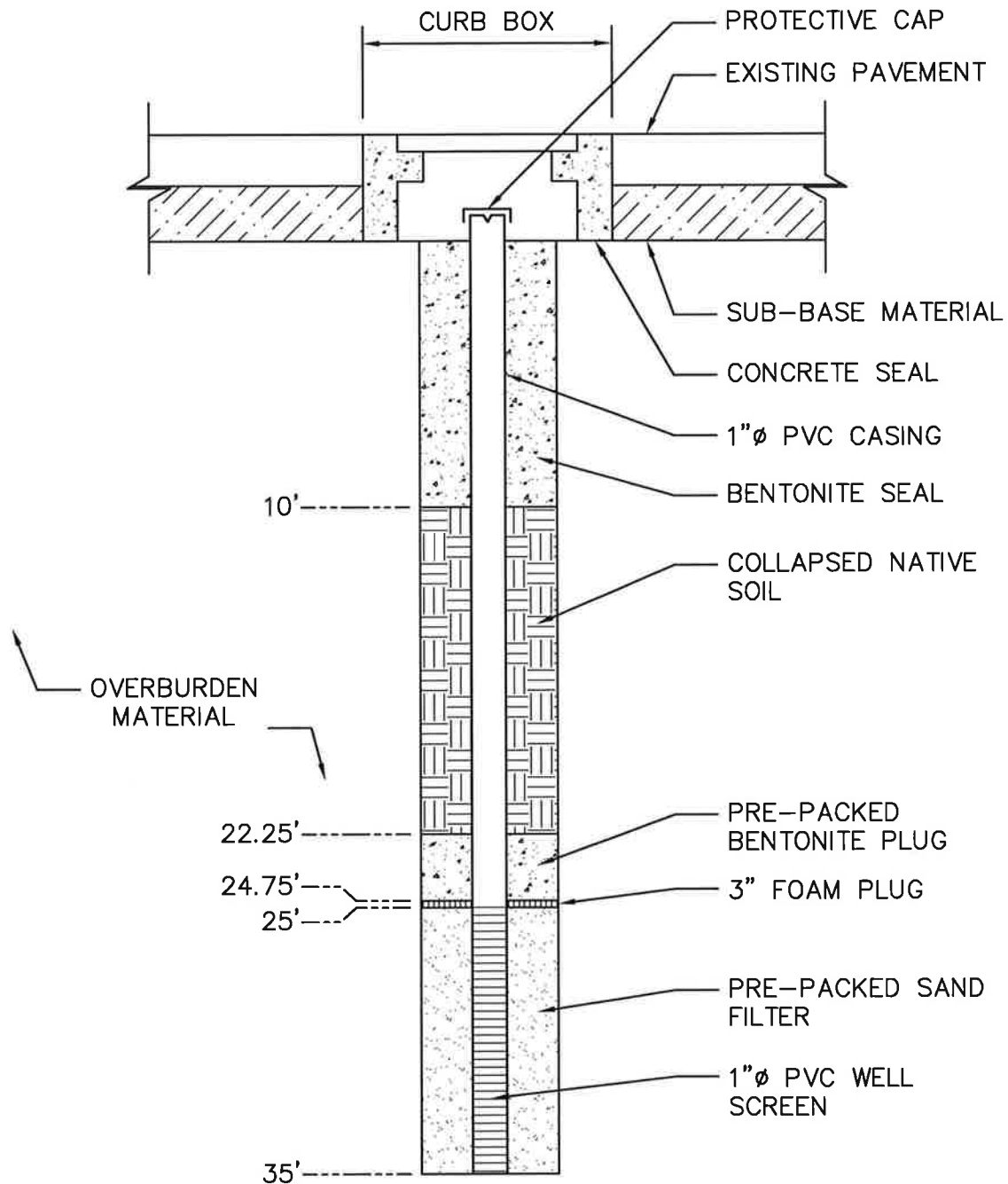


FIGURE 9

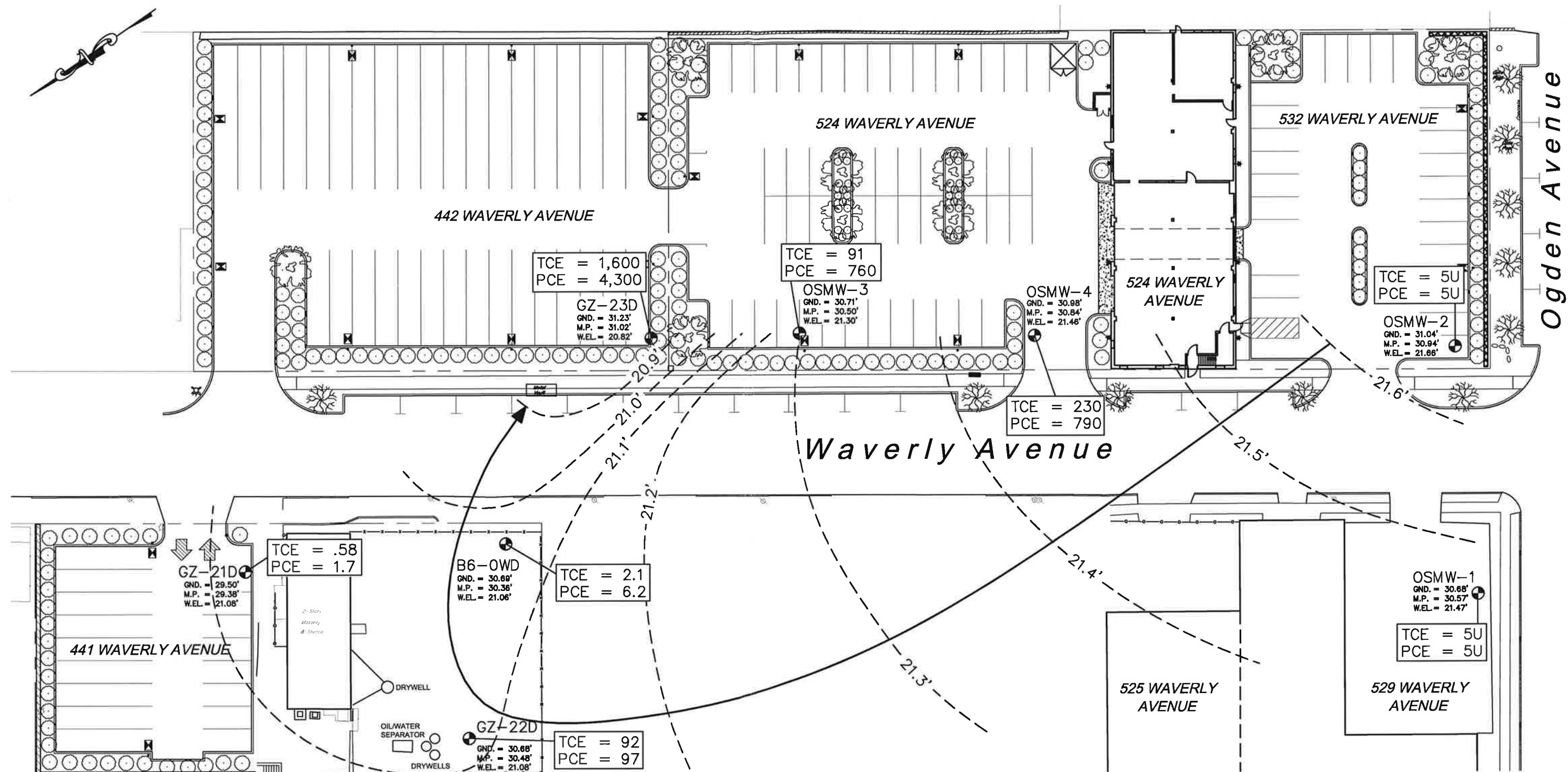
STERLING
 Sterling Environmental Engineering, P.C.
 24 Wade Road ♦ Latham, New York 12110

WELL COMPLETION DETAIL FOR OSMW-4
441/442 WAVERLY AVENUE
 OFFSITE MONITORING WELL INSTALLATION

V/T OF MAMARONECK

WESTCHESTER CO., N.Y.

PROJ. No.: 28012 | DATE: 6/25/12 | SCALE: N.T.S. | DWG. NO. 28012063 | FIGURE 9



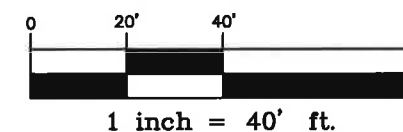
LEGEND:

- LIGHT POLE
- ⊕ MW-1 MONITORING WELL
GND. = GROUND ELEVATION
M.P. = TOP OF WELL CASING
W.E.L. = GROUNDWATER ELEVATION
- 100' — GROUNDWATER ELEVATION IN FEET
- ← INFERRED GROUNDWATER FLOW DIRECTION
- - - PROPERTY BOUNDARY

TCE = TRICHLOROETHENE IN ug/L

PCE = TETRACHLOROETHENE IN ug/L

U = PARAMETER NOT DETECTED AT LABORATORY DETECTION LIMIT SHOWN



BASE MAP PROVIDED BY SITE DESIGN CONSULTANTS, DATED FEBRUARY 22, 2010.

FIGURE 10

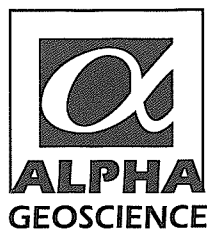
STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

JANUARY 2012 GROUNDWATER ELEVATIONS
FOR OVERBURDEN AQUIFER
SITE# C360108
NEW WAVERLY AVENUE ASSOCIATES, LLC
V/T OF MAMARONECK WESTCHESTER CO., N.Y.

APPENDIX I
DATA USABILITY SUMMARY REPORTS
(PROVIDED ON CD)

LETTER OF TRANSMITTAL

 ALPHA GEOSCIENCE		ALPHA GEOSCIENCE 679 Plank Road Clifton Park, NY 12065 (518) 348 -6995 Phone (518) 348-6966 FAX	
TO: Ms. Elizabeth Davis Sterling Environmental Engineering, PC 24 Wade Road Latham, New York 12110		FROM: Don Anne' DATE: 7/6/2011 SUBJECT: Data Validation 28012 Waverly Avenue August 2009 Water Sampling October 2010 Soil Sampling	
WE ARE TRANSMITTING THE FOLLOWING ITEMS:			
☐ Photographs ☐ Maps/Plans ☐ Report(s) ☐ Letter(s) ☐ Disk(s) ☒ Other: Data Packs			
Originals	Copies	Description of Materials	
1		Mitekem Laboratories Data Pack, SDG: H1633	
1		Mitekem Laboratories Data Pack, SDG: J2003	
These Materials are Transmitted:			
☐ For your use ☐ For your approval ☐ For your review and comment ☐ Approved as submitted ☐ Approved as noted ☐ Returned after loaned to us ☐ Returned for revision			
Please: ☐ Return original to us ☐ Submit after revision			
☐ Retain for your files ☐ Other			
REMARKS: Returned upon completion of data validation.			
ADDITIONAL COPIES TO:		SIGNATURE:	
			



Geology

Hydrology

Remediation

Water Supply

July 6, 2011

Ms. Elizabeth Davis
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Re: Data Validation Report
28012 Waverly Avenue
August 2009 Water Sampling Event
October 2010 Soil Sampling Event

Dear Ms. Davis:

The data usability summary reports (DUSR) and QA/QC reviews are attached to this letter for the above referenced project sampling event. The data for Mitkem Laboratories, SDGs H1633 and J2003 were acceptable with some minor issues that are identified and discussed in the validation summaries. There were volatile data that were flagged unusable (R) in SDG J2003. This was due to low response factors for the compounds as outlined in the DUSR. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

A list of common data validation acronyms is attached to this letter to assist you interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Sterling Environmental Engineering, P.C.

Sincerely,
Alpha Geoscience

Donald Anne
Senior Chemist

DCA:dca
attachemnts

Z:\projects\2011\11600-11620\11616-waverly avenue\waverly ave-111.ltr.wpd

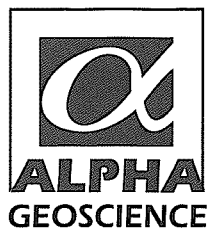
Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation



Geology

Hydrology

Remediation

Water Supply

Data Usability Summary Report for Mitkem Laboratories, SDG: H1633

**7 Water Samples, 1 Field Duplicate,
1 Equipment Blank, and 1 Trip Blank
Collected August 20 and 21, 2009**

Prepared by: Donald Anné
July 6, 2011

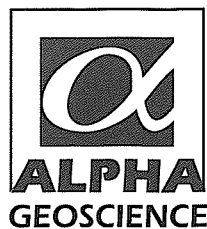
The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results for 7 water samples, 1 field duplicate, and 1 equipment blank analyzed for volatiles and semi-volatiles, and 1 trip blank analyzed for volatiles only.

The overall performances of the analyses are acceptable. Mitkem Laboratories did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The volatile results for cis-1,2-dichloroethene in sample B60W-D and n-propylbenzene in sample VW-2 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for these compounds marked "E" in the samples were qualified as estimated (J).

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of 8260 Volatiles Data for
Mitekem Laboratories, SDG: H1633**

**7 Water Samples, 1 Field Duplicate,
1 Equipment Blank, and 1 Trip Blank
Collected August 20 and 21, 2009**

Prepared by: Donald Anné
July 6, 2011

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260C criteria.

The average RRFs for all target compounds were above the allowable minimum (0.010 except 0.001 for 1,4-dioxane) and %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260C criteria.

The RRFs for all target compounds were above the allowable minimum (0.010 except 0.001 for 1,4-dioxane) and %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method, trip, and equipment blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for water and QC samples.

Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum for aqueous samples VA6LCS and VA6LCSD. The percent recoveries (%Rs) for target compounds were within QC limits for aqueous sample VE6LCS.

One of two %Rs for 1,4-dioxane was below QC limits for aqueous samples VA6LCS and VA6LCSD. Positive and “not detected” results for 1,4-dioxane should be considered estimated (J) in associated aqueous samples.

Field Duplicate: The analyses for field duplicate pair VZ-3 /DUP reported target volatiles as not detected in one or both samples; therefore, relative percent differences could not be calculated. The analyses of the field duplicate pair are acceptable.

Compound ID: Checked compounds were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

There are a results for cis-1,2-dichloroethene in sample B60W-D and n-propylbenzene in sample VW-2 that were quantitated by extrapolating data above the highest calibration standard and marked ‘E’ by the laboratory. The sample was diluted and re-analyzed by the laboratory; therefore, the results that are flagged as ‘E’ in the undiluted samples should be considered estimated (J). The use of the diluted results for these compounds is recommended. It is recommended that the undiluted results for samples B60W-D and VW-2 be used for all other compounds.

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

VA6LCS

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: H1633

Mod. Ref No.:

SDG No.: SH1633

Lab Sample ID: LCS-45734

LCS Lot No.:

Date Extracted: 08/25/2009

Date Analyzed (1): 08/25/2009

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	44.6982	89		50 - 145
1,1-Dichloroethene	50.0000	0.0000	46.4237	93		70 - 130
Acetone	50.0000	0.0000	31.3544	63		40 - 140
Methylene chloride	50.0000	0.0000	43.5698	87		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	45.3452	91		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	45.6071	91		65 - 125
1,1-Dichloroethane	50.0000	0.0000	44.2900	89		70 - 135
2-Butanone	50.0000	0.0000	39.7182	79		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	43.8720	88		70 - 125
Chloroform	50.0000	0.0000	43.9603	88		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	44.3655	89		65 - 130
Carbon tetrachloride	50.0000	0.0000	44.1212	88		65 - 140
1,2-Dichloroethane	50.0000	0.0000	43.9250	88		70 - 130
Benzene	50.0000	0.0000	44.3806	89		80 - 120
Trichloroethene	50.0000	0.0000	43.1244	86		70 - 125
Toluene	50.0000	0.0000	43.7847	88		75 - 120
Tetrachloroethene	50.0000	0.0000	45.8674	92		45 - 150
Chlorobenzene	50.0000	0.0000	44.8972	90		80 - 120
Ethylbenzene	50.0000	0.0000	45.1382	90		75 - 125
m,p-Xylene	100.0000	0.0000	89.9114	90		75 - 130
o-Xylene	50.0000	0.0000	45.3365	91		80 - 120
Xylene (Total)	150.0000	0.0000	135.2480	90		81 - 121
n-Propylbenzene	50.0000	0.0000	44.9300	90		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	44.9613	90		75 - 130
tert-Butylbenzene	50.0000	0.0000	44.7386	89		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	43.8577	88		75 - 130
sec-Butylbenzene	50.0000	0.0000	45.1331	90		70 - 125
1,3-Dichlorobenzene	50.0000	0.0000	43.3838	87		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	44.0057	88		75 - 125
n-Butylbenzene	50.0000	0.0000	44.5589	89		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	44.5260	89		70 - 120
1,4-Dioxane	1000.0000	0.0000	668.6672	67	*	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 32 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

VA6LCSD

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: H1633

Mod. Ref No.:

SDG No.: SH1633

Lab Sample ID: LCSD-45734

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #	%RPD #	QC LIMITS	
					RPD	REC.
Vinyl chloride	50.0000	50.6766	101	13	40	50 - 145
1,1-Dichloroethene	50.0000	52.0052	104	11	40	70 - 130
Acetone	50.0000	32.8503	66	5	40	40 - 140
Methylene chloride	50.0000	47.0192	94	8	40	55 - 140
trans-1,2-Dichloroethene	50.0000	48.3993	97	6	40	60 - 140
Methyl tert-butyl ether	50.0000	49.5866	99	8	40	65 - 125
1,1-Dichloroethane	50.0000	48.8477	98	10	40	70 - 135
2-Butanone	50.0000	42.7643	86	8	40	30 - 150
cis-1,2-Dichloroethene	50.0000	48.4965	97	10	40	70 - 125
Chloroform	50.0000	46.9722	94	7	40	65 - 135
1,1,1-Trichloroethane	50.0000	47.6910	95	7	40	65 - 130
Carbon tetrachloride	50.0000	48.8429	98	11	40	65 - 140
1,2-Dichloroethane	50.0000	47.3366	95	8	40	70 - 130
Benzene	50.0000	48.2257	96	8	40	80 - 120
Trichloroethene	50.0000	48.5471	97	12	40	70 - 125
Toluene	50.0000	47.7562	96	9	40	75 - 120
Tetrachloroethene	50.0000	49.9911	100	8	40	45 - 150
Chlorobenzene	50.0000	49.0735	98	9	40	80 - 120
Ethylbenzene	50.0000	49.3979	99	10	40	75 - 125
m,p-Xylene	100.0000	98.0688	98	9	40	75 - 130
o-Xylene	50.0000	49.5581	99	8	40	80 - 120
Xylene (Total)	150.0000	147.6269	98	9	40	81 - 121
n-Propylbenzene	50.0000	49.2007	98	9	40	70 - 130
1,3,5-Trimethylbenzene	50.0000	49.4515	99	10	40	75 - 130
tert-Butylbenzene	50.0000	49.9962	100	12	40	70 - 130
1,2,4-Trimethylbenzene	50.0000	48.9018	98	11	40	75 - 130
sec-Butylbenzene	50.0000	49.7049	99	10	40	70 - 125
1,3-Dichlorobenzene	50.0000	47.6197	95	9	40	75 - 125
1,4-Dichlorobenzene	50.0000	48.3539	97	10	40	75 - 125
n-Butylbenzene	50.0000	50.0909	100	12	40	70 - 135
1,2-Dichlorobenzene	50.0000	48.6933	97	9	40	70 - 120
1,4-Dioxane	1000.0000	901.2556	90	29	40	70 - 130

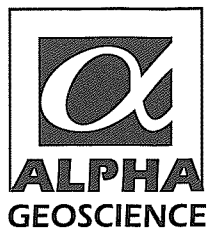
Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 32 outside limits

Spike Recovery: 0 out of 32 outside limits

COMMENTS:



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of 8270 Semi-Volatile Data
for Mitkem Laboratories, SDG: H1633**

**7 Water Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected August 20 and 21, 2009**

Prepared by: Donald Anné
July 6, 2011

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270D criteria.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270D criteria.

The RRFs for target compounds were above the allowable minimum (0.050), as required.

The %D for chrysene was above the allowable maximum (25%) on 08-27-09 (S1F9431.D). Positive results for chrysene should be considered estimated (J) in associated samples.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for water and QC samples.

Laboratory Control Sample: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous samples S1NLCS and S1NLCSD.

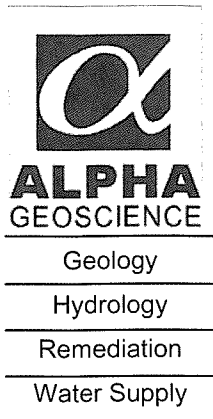
Field Duplicate: The analyses for field duplicate pair VZ-3 /DUP reported target semi-volatiles as not detected; therefore, relative percent differences could not be calculated. The analyses of the field duplicate pair are acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES		Contract:	
Lab Code: MITKEM	Case No.: H1633	Mod. Ref No.:	SDG No.: SH1633
Instrument ID: S1		Calibration Date: 08/27/2009	Time: 12:41
Lab File ID: S1F9431.D		Init. Calib. Date(s): 07/22/2009	07/22/2009
EPA Sample No. (SSTD020##): SSTD0501H		Init. Calib. Time(s): 12:47	15:45
GC Column: Rxi-5sil MS ID: .25 (mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Phenol	2.057	1.701	0.010	-17.3	20.0
2-Methylphenol	1.479	1.280	0.010	-13.4	20.0
4-Methylphenol	1.531	1.357	0.010	-11.4	20.0
Naphthalene	1.072	1.036	0.010	-3.4	20.0
Acenaphthylene	1.762	1.673	0.010	-5.0	20.0
Acenaphthene	1.130	1.018	0.010	-9.9	20.0
Fluorene	1.240	1.199	0.010	-3.3	20.0
Hexachlorobenzene	0.229	0.243	0.010	6.2	20.0
Pentachlorophenol	0.138	0.125	0.010	-9.4	20.0
Phenanthrene	1.269	1.127	0.010	-11.2	20.0
Anthracene	1.260	1.054	0.010	-16.3	20.0
Fluoranthene	1.018	1.001	0.010	-1.7	20.0
Pyrene	1.454	1.188	0.010	-18.3	20.0
Benzo(a)anthracene	1.141	1.012	0.010	-11.3	20.0
Chrysene	1.017	0.737	0.010	-27.6	20.0
Benzo(b)fluoranthene	1.198	1.198	0.010	-0.1	20.0
Benzo(k)fluoranthene	1.301	1.588	0.010	22.1	20.0
Benzo(a)pyrene	1.067	1.058	0.010	-0.8	20.0
Indeno(1,2,3-cd)pyrene	1.114	1.122	0.010	0.7	20.0
Dibenzo(a,h)anthracene	0.925	0.916	0.010	-1.0	20.0
Benzo(g,h,i)perylene	0.958	0.895	0.010	-6.6	20.0



**Data Usability Summary Report for
Mitekem Laboratories, SDG: J2003**

**18 Soil/Sludge Samples and 1 Field Duplicate
Collected October 12, 2010**

Prepared by: Donald Anné
July 20, 2011

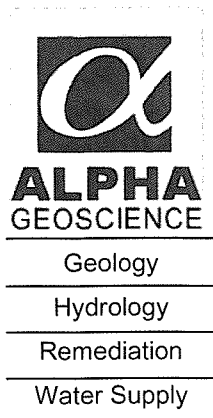
The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results for 16 soil samples and 1 field duplicate analyzed for volatiles, and 18 soil/sludge samples and 1 field duplicate analyzed for semi-volatiles.

The overall performances of the analyses are acceptable. Mitekem Laboratories did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The “not detected” volatile results for 1,4-dioxane and acrolein were flagged as “unusable” (R) in sample STOCK-PILE-A-DISPOSAL because the average RRFs for 1,4-dioxane and acrolein were below the allowable minimums in the associated initial calibration.
- The volatile results for n-propylbenzene, sec-butylbenzene, and n-butylbenzene in sample STOCK-PILE-A-PART-375 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged “E” by the laboratory. The results for n-propylbenzene, sec-butylbenzene, and n-butylbenzene marked “E” in the sample were qualified as estimated (J).
- The positive volatile results were flagged as “estimated” (J) in samples STOCK-PILE-A-PART-375 and STOCK-PILE-A-PART-375ME because 1 of 4 surrogate recoveries in the samples STOCK-PILE-A-PART-375 and STOCK-PILE-A-PART-375ME was above control limits.

All data that are not flagged unusable (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



**QA/QC Review of 8260 Volatiles Data for
Mitek Laboratories, SDG: J2003**

**16 Soil Samples and 1 Field Duplicate
Collected October 12, 2010**

Prepared by: Donald Anné
July 20, 2011

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260C criteria.

The average RRFs for 1,4-dioxane and acrolein were below the allowable minimum (0.001 and 0.010 respectively) for V6 on 10-25-10. Positive results for these two compounds should be considered estimated (J) and negative results unusable (R) in associated samples.

The %RSD for 1,4-dioxane was above the allowable maximum (30%) for V1 on 10-08-10. The %RSDs for 1,4-dioxane and acrolein were above the allowable maximum (30%) for V6 on 10-25-10. Positive results for these two compounds should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260C criteria.

The RRFs for all target compounds were above the allowable minimum (0.010 except 0.001 for 1,4-dioxane) and %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of four surrogate recoveries for samples STOCK-PILE-A-PART-375 and STOCK-PILE-A-PART-375ME was above control limits. Positive results for samples STOCK-PILE-A-PART-375 and STOCK-PILE-A-PART-375ME should be considered estimated (J).

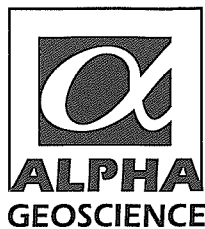
Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum and percent recoveries (%Rs) were within QC limits for soil samples LCS-54803, LCSD-54803, LCS-54823, LCSD-54823, LCS-54846, and LCS-54879.

The %R for acrolein was above QC limits for soil sample LCS-55019. Positive results for acrolein should be considered estimated (J) in associated soil samples.

Field Duplicate: The analyses for field duplicate pair NW-4"-CLAY-PIPE-SET-TANK /DUPLICATE reported target volatiles as either not detected or below the lowest standard; therefore, relative percent differences could not be calculated. The analyses of the field duplicate pair are acceptable.

Compound ID: Checked compounds were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

There are a results for n-propylbenzene, sec-butylbenzene, and n-butylbenzene in sample STOCK-PILE-A-PART-375 that were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was re-analyzed by the laboratory at the medium level; therefore, the results that are flagged as 'E' in the low level sample should be considered estimated (J). The use of the medium level results for these compounds is recommended. It is recommended that the low level results for sample STOCK-PILE-A-PART-375 be used for all other compounds.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of 8270 Semi-Volatile Data
for Mitkem Laboratories, SDG: J2003**

**18 Soil/Sludge Samples and 1 Field Duplicate
Collected October 12, 2010**

Prepared by: Donald Anné
July 6, 2011

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270D criteria.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270D criteria.

The RRFs for target compounds were above the allowable minimum (0.050), as required.

The %D for benzidine was above the allowable maximum (25%) on 10-29-10 (S3G9751). Positive results for benzidine should be considered estimated (J) in associated samples.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for soil/sludge samples.

Laboratory Control Sample: The percent recovery (%R) for pentachlorophenol was above QC limits for soil sample LCS-54774. The %R for benzaldehyde was above QC limits for soil sample LCS-55017. Positive results for these compounds should be considered estimated (J) in associated soil samples.

Field Duplicate: The analyses for field duplicate pair NW-4"-CLAY-PIPE-SET-TANK /DUPLICATE reported target semi-volatiles as not detected; therefore, relative percent differences could not be calculated. The analyses of the field duplicate pair are acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES

Contract: _____

Lab Code: MITKEM

Case No.: J2003

Mod. Ref No.: _____

SDG No.: SJ2003

Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-54805	101	92	98	100				0
02	LCSD-54805	100	98	98	101				0
03	MB-54805	101	104	96	97				0
04	INT-DIS-W-WA LL	107	108	96	97				0
05	INT-DIS-BOT	105	99	96	97				0
06	SUMP-PIT-BOT	108	106	96	101				0
07	INT-DIS-N WALL	111	103	95	96				0
08	DUPLICATE	111	111	96	98				0
09	SW-4"-IRON-P IPE-INT-DIS	112	110	98	91				0
10	STOCK-PILE-B -PART-375	111	100	94	102				0
11	BACKFILL-COA RSE	98	102	95	99				0
12	N-SEWER-PIPE -SUMP-PIT	112	101	92	93				0
13	LCS-54823	103	97	97	103				0
14	LCSD-54823	100	99	97	102				0
15	MB-54823	106	95	98	96				0
16	STOCK-PILE-A -PART-375	109	96	90	1161 *				1
17	W-8"-PVC-PIP E-INT-DIS	107	102	95	100				0
18	W-SEWER-PIPE -SUMP-PIT	106	110	96	100				0
19	NW-4"-CLAY-P IPE-SET-TANK	108	110	96	98				0
20	INT-DIS-S-WA LL	105	103	97	97				0

QC LIMITS

(65-132)

(65-128)

(85-115)

(77-111)

VDMC1 (DBFM) Dibromofluoromethane

VDMC2 (DCE) = 1,2-Dichloroethane-d4

VDMC3 (TOL) = Toluene-d8

VDMC4 (BFB) = Bromofluorobenzene

Column to be used to flag recovery values

* Values outside of contract required QC limits

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: J2003

Mod. Ref No.:

SDG No.: SJ2003

Level: (LOW/MED) MED

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-54879	91	105	106	106				0
02	MB-54879	89	90	105	103				0
03	STOCK-PILE-A -PART-375ME	89	98	106	190 *				1
04	LCS-55019	101	96	99	100				0
05	MB-55019	104	104	99	97				0
06	STOCK-PILE-A -DISPOSAL	104	98	96	92				0

VDMC1 (DBFM) Dibromofluoromethane
VDMC2 (DCE) = 1,2-Dichloroethane-d4
VDMC3 (TOL) = Toluene-d8
VDMC4 (BFB) = Bromofluorobenzene

QC LIMITS

(65-132)

(65-128)

(85-115)

(77-111)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-55019

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J2003

Mod. Ref No.:

SDG No.: SJ2003

Lab Sample ID: LCS-55019

LCS Lot No.:

Date Extracted: 10/26/2010

Date Analyzed (1): 10/26/2010

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	2500.0000	0.0000	2543.5516	102		35 - 135
Chloromethane	2500.0000	0.0000	2433.1064	97		50 - 130
Vinyl chloride	2500.0000	0.0000	2501.4957	100		60 - 125
Bromomethane	2500.0000	0.0000	2546.2443	102		30 - 160
Chloroethane	2500.0000	0.0000	2575.6539	103		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2856.6429	114		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2498.6957	100		65 - 135
Acetone	2500.0000	0.0000	2844.7460	114		20 - 160
Iodomethane	2500.0000	0.0000	2452.7469	98		70 - 126
Carbon disulfide	2500.0000	0.0000	2543.9990	102		45 - 160
Methylene chloride	2500.0000	0.0000	2495.4208	100		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2508.1425	100		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2550.0718	102		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2483.8438	99		75 - 125
Vinyl acetate	2500.0000	0.0000	2524.1938	101		65 - 138
2-Butanone	2500.0000	0.0000	2571.2466	103		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2532.8168	101		65 - 125
2,2-Dichloropropane	2500.0000	0.0000	2529.7468	101		65 - 135
Bromochloromethane	2500.0000	0.0000	2529.5179	101		70 - 125
Chloroform	2500.0000	0.0000	2560.4814	102		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2533.1466	101		70 - 135
1,1-Dichloropropene	2500.0000	0.0000	2489.9333	100		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2652.9990	106		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2547.2388	102		70 - 135
Benzene	2500.0000	0.0000	2489.0105	100		75 - 125
Trichloroethene	2500.0000	0.0000	2510.5582	100		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2338.3193	94		70 - 120
Dibromomethane	2500.0000	0.0000	2437.4347	97		75 - 130
Bromodichloromethane	2500.0000	0.0000	2591.0854	104		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2492.6973	100		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2363.2219	95		45 - 145
Toluene	2500.0000	0.0000	2500.0874	100		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2527.5390	101		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2412.3214	96		60 - 125
1,3-Dichloropropane	2500.0000	0.0000	2403.9652	96		75 - 125
Tetrachloroethene	2500.0000	0.0000	2299.4211	92		65 - 140
2-Hexanone	2500.0000	0.0000	2314.1872	93		45 - 145
Dibromochloromethane	2500.0000	0.0000	2474.7850	99		65 - 130
1,2-Dibromoethane	2500.0000	0.0000	2402.6788	96		70 - 125
Chlorobenzene	2500.0000	0.0000	2452.0554	98		75 - 125
1,1,1,2-Tetrachloroethane	2500.0000	0.0000	2475.4511	99		75 - 125
Ethylbenzene	2500.0000	0.0000	2487.9276	100		75 - 125
m,p-Xylene	5000.0000	0.0000	5035.8061	101		80 - 125
o-Xylene	2500.0000	0.0000	2470.8304	99		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-55019

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: J2003

Mod. Ref No.:

SDG No.: SJ2003

Lab Sample ID: LCS-55019

LCS Lot No.:

Date Extracted: 10/26/2010

Date Analyzed (1): 10/26/2010

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	7500.0000	0.0000	7506.6365	100		75 - 125
Styrene	2500.0000	0.0000	2524.0893	101		75 - 125
Bromoform	2500.0000	0.0000	2450.5554	98		55 - 135
Isopropylbenzene	2500.0000	0.0000	2549.8120	102		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2399.4326	96		55 - 130
Bromobenzene	2500.0000	0.0000	2474.1314	99		65 - 120
1,2,3-Trichloropropane	2500.0000	0.0000	2468.4924	99		65 - 130
n-Propylbenzene	2500.0000	0.0000	2461.4518	98		65 - 135
2-Chlorotoluene	2500.0000	0.0000	2473.4210	99		70 - 130
1,3,5-Trimethylbenzene	2500.0000	0.0000	2551.6597	102		65 - 135
4-Chlorotoluene	2500.0000	0.0000	2495.3628	100		75 - 125
tert-Butylbenzene	2500.0000	0.0000	2896.3239	116		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2536.5236	101		65 - 135
sec-Butylbenzene	2500.0000	0.0000	2557.1866	102		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2573.1810	103		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2503.5368	100		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2457.4119	98		70 - 125
n-Butylbenzene	2500.0000	0.0000	2594.7409	104		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2501.6054	100		75 - 120
1,2-Dibromo-3-chloropropan	2500.0000	0.0000	2655.5877	106		40 - 135
1,2,4-Trichlorobenzene	2500.0000	0.0000	2588.6725	104		65 - 130
Hexachlorobutadiene	2500.0000	0.0000	2803.2987	112		55 - 140
1,2,3-Trichlorobenzene	2500.0000	0.0000	2674.1286	107		60 - 135
Naphthalene	2500.0000	0.0000	2660.2329	106		40 - 125
1,1,2-Trichloro-1,2,2-trif	2500.0000	0.0000	2604.9423	104		70 - 130
1,4-Dioxane	50000.0000	0.0000	63951.5975	128		70 - 130
2-Chloroethyl vinyl ether	2500.0000	0.0000	2452.7449	98		70 - 130
Acrolein	12500.0000	0.0000	24196.5493	194	*	70 - 130
Acrylonitrile	2500.0000	0.0000	2486.9424	99		70 - 130
Cyclohexane	2500.0000	0.0000	2563.8188	103		70 - 130
Methyl acetate	2500.0000	0.0000	2388.8493	96		70 - 130
Methylcyclohexane	2500.0000	0.0000	2622.0639	105		70 - 130
tert-Butyl Alcohol	5000.0000	0.0000	5066.5752	101		63 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 77 outside limits

COMMENTS:

6A - FORM VI VOA-1
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
 Instrument ID: V1 Calibration Date(s): 10/08/2010 10/08/2010
 Heated Purge: (Y/N) N Calibration Time(s): 16:12 18:41
 Purge Volume: 5.0 (mL)
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID:	RRF005 =	V1L7202.D	RRF020 =	V1L7206.D			
RRF050 =	V1L7201.D	RRF100 =	V1L7205.D	RRF200 =	V1L7204.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.196	0.214	0.231	0.230	0.220	0.218	6.5
Chloromethane	0.688	0.657	0.656	0.646	0.580	0.645	6.2
Vinyl chloride	0.430	0.413	0.447	0.425	0.402	0.423	4.0
Bromomethane	0.256	0.229	0.215	0.207	0.197	0.221	10.4
Chloroethane	0.257	0.213	0.226	0.219	0.207	0.224	8.6
Trichlorofluoromethane	0.256	0.288	0.323	0.311	0.308	0.297	8.8
1,1-Dichloroethene	0.416	0.360	0.369	0.358	0.351	0.371	7.0
Acetone	0.081	0.065	0.068	0.066	0.060	0.068	11.4
Iodomethane	0.666	0.567	0.831	0.707	0.726	0.700	13.7
Carbon disulfide	1.189	1.143	1.162	1.129	1.078	1.140	3.6
Methylene chloride	0.334	0.331	0.343	0.336	0.320	0.333	2.5
trans-1,2-Dichloroethene	0.335	0.308	0.331	0.319	0.305	0.320	4.3
Methyl tert-butylether	0.844	0.805	0.820	0.796	0.734	0.800	5.1
1,1-Dichloroethane	0.582	0.583	0.612	0.576	0.550	0.580	3.8
Vinyl acetate	2.002	1.865	1.961	1.817	1.669	1.863	7.0
2-Butanone	0.041	0.045	0.045	0.043	0.040	0.043	5.1
cis-1,2-Dichloroethene	0.353	0.341	0.354	0.339	0.318	0.341	4.2
2,2-Dichloropropane	0.152	0.143	0.158	0.131	0.120	0.141	10.7
Bromochloromethane	0.225	0.212	0.226	0.209	0.204	0.215	4.6
Chloroform	0.469	0.452	0.453	0.446	0.428	0.450	3.2
1,1,1-Trichloroethane	0.249	0.227	0.245	0.225	0.209	0.231	7.0
1,1-Dichloropropene	0.164	0.163	0.171	0.159	0.157	0.163	3.4
Carbon tetrachloride	0.277	0.258	0.292	0.260	0.256	0.269	5.9
1,2-Dichloroethane	0.335	0.331	0.335	0.318	0.315	0.327	3.0
Benzene	1.252	1.159	1.166	1.116	1.041	1.147	6.7
Trichloroethene	0.436	0.394	0.404	0.397	0.378	0.401	5.3
1,2-Dichloropropane	0.364	0.364	0.365	0.359	0.345	0.359	2.3
Dibromomethane	0.212	0.193	0.212	0.205	0.196	0.204	4.4
Bromodichloromethane	0.331	0.317	0.332	0.325	0.317	0.324	2.2
cis-1,3-Dichloropropene	0.430	0.421	0.459	0.443	0.430	0.437	3.4
4-Methyl-2-pentanone	0.578	0.538	0.546	0.540	0.492	0.539	5.7
Toluene	1.286	1.170	1.196	1.140	1.067	1.172	6.9
trans-1,3-Dichloropropene	0.384	0.372	0.383	0.375	0.356	0.374	3.1
1,1,2-Trichloroethane	0.287	0.283	0.278	0.276	0.266	0.278	2.8
1,3-Dichloropropane	0.596	0.596	0.586	0.573	0.523	0.575	5.3
Tetrachloroethene	0.396	0.494	0.392	0.467	0.414	0.433	10.5
2-Hexanone	0.522	0.558	0.543	0.546	0.500	0.534	4.3
Dibromochloromethane	0.433	0.439	0.480	0.480	0.457	0.458	4.8
1,2-Dibromoethane	0.434	0.415	0.428	0.426	0.400	0.421	3.2

6B - FORM VI VOA-2
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
 Instrument ID: V1 Calibration Date(s): 10/08/2010 10/08/2010
 Heated Purge: (Y/N) N Calibration Time(s): 16:12 18:41
 Purge Volume: 5.0 (mL)
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID:	RRF005 =	V1L7202.D	RRF020 =	V1L7206.D			
RRF050 =	V1L7201.D	RRF100 =	V1L7205.D	RRF200 =	V1L7204.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	1.104	1.078	1.084	1.073	0.985	1.065	4.4
1,1,1,2-Tetrachloroethane	0.416	0.400	0.426	0.412	0.390	0.409	3.5
Ethylbenzene	0.522	0.547	0.525	0.540	0.500	0.527	3.5
m,p-Xylene	0.640	0.632	0.649	0.637	0.574	0.626	4.8
o-Xylene	0.669	0.625	0.626	0.629	0.574	0.625	5.4
Xylene (Total)	0.650	0.629	0.641	0.634	0.574	0.626	4.8
Styrene	1.055	1.133	1.162	1.134	1.023	1.101	5.4
Bromoform	0.271	0.287	0.308	0.321	0.303	0.298	6.6
Isopropylbenzene	1.395	1.422	1.455	1.425	1.300	1.400	4.2
1,1,2,2-Tetrachloroethane	1.007	0.922	0.869	0.889	0.782	0.894	9.2
Bromobenzene	0.898	0.909	0.859	0.886	0.817	0.874	4.2
1,2,3-Trichloropropane	1.025	0.953	0.909	0.934	0.851	0.935	6.8
n-Propylbenzene	0.797	0.779	0.766	0.768	0.717	0.765	3.9
2-Chlorotoluene	0.681	0.771	0.750	0.779	0.699	0.736	5.9
1,3,5-Trimethylbenzene	2.188	2.046	2.016	1.985	1.771	2.001	7.5
4-Chlorotoluene	0.822	0.777	0.772	0.775	0.707	0.771	5.3
tert-Butylbenzene	2.274	2.012	2.161	1.976	1.784	2.041	9.2
1,2,4-Trimethylbenzene	2.070	2.096	2.118	2.104	1.859	2.049	5.3
sec-Butylbenzene	2.485	2.355	2.358	2.353	2.097	2.329	6.1
4-Isopropyltoluene	2.200	2.055	2.084	2.037	1.844	2.044	6.3
1,3-Dichlorobenzene	1.683	1.584	1.553	1.562	1.405	1.558	6.4
1,4-Dichlorobenzene	1.734	1.618	1.609	1.607	1.447	1.603	6.4
n-Butylbenzene	1.590	1.594	1.524	1.537	1.378	1.524	5.8
1,2-Dichlorobenzene	1.511	1.535	1.497	1.496	1.315	1.471	6.0
1,2-Dibromo-3-chloropropane	0.117	0.103	0.094	0.096	0.093	0.100	9.9
1,2,4-Trichlorobenzene	0.675	0.659	0.643	0.633	0.592	0.640	4.9
Hexachlorobutadiene	0.236	0.250	0.212	0.221	0.195	0.223	9.4
1,2,3-Trichlorobenzene	0.596	0.562	0.509	0.523	0.478	0.534	8.6
Naphthalene	2.153	2.167	1.906	1.972	1.752	1.990	8.8
1,1,2-Trichloro-1,2,2-trifluoroethane	0.211	0.274	0.329	0.307	0.308	0.286	16.1
1,4-Dioxane	0.002	0.001	0.001	0.001	0.001	0.001	34.2
2-Chloroethyl vinyl ether	0.119	0.130	0.132	0.136	0.134	0.130	5.1
Acrolein	0.020	0.017	0.018	0.018	0.016	0.018	7.2
Acrylonitrile	0.172	0.198	0.190	0.196	0.177	0.187	6.1
Cyclohexane	0.576	0.595	0.668	0.629	0.610	0.616	5.8
Methyl acetate	0.529	0.514	0.489	0.484	0.445	0.492	6.5
Methylcyclohexane	0.352	0.362	0.412	0.371	0.359	0.371	6.4
tert-Butyl Alcohol	0.050	0.041	0.031	0.038	0.031	0.038	20.5

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
 Instrument ID: V1 Calibration Date(s): 10/08/2010 10/08/2010
 Heated Purge: (Y/N) N Calibration Time(s): 16:12 18:41
 Purge Volume: 5.0 (mL)
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V1L7202.D</u>	RRF020 = <u>V1L7206.D</u>
RRF050 = <u>V1L7201.D</u>	RRF100 = <u>V1L7205.D</u>	RRF200 = <u>V1L7204.D</u>

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dibromofluoromethane	0.300	0.290	0.305	0.289	0.295	0.296	2.3
1,2-Dichloroethane-d4	0.062	0.066	0.069	0.068	0.065	0.066	4.3
Toluene-d8	1.115	1.195	1.160	1.173	1.148	1.158	2.6
Bromofluorobenzene	0.425	0.434	0.440	0.442	0.456	0.439	2.6

6A - FORM VI VOA-1
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
 Instrument ID: V6 Calibration Date(s): 10/25/2010 10/25/2010
 Heated Purge: (Y/N) N Calibration Time(s): 13:38 17:55
 Purge Volume: 5.0 (mL)
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____		RRF005 = <u>V6H7095.D</u>		RRF020 = <u>V6H7093.D</u>			
RRF050 = <u>V6H7091.D</u>		RRF100 = <u>V6H7098.D</u>		RRF200 = <u>V6H7101.D</u>			
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.075	0.078	0.076	0.074	0.069	0.074	4.6
Chloromethane	0.118	0.118	0.121	0.113	0.110	0.116	3.9
Vinyl chloride	0.136	0.144	0.135	0.134	0.127	0.135	4.4
Bromomethane	0.101	0.102	0.102	0.105	0.105	0.103	1.4
Chloroethane	0.081	0.076	0.077	0.077	0.077	0.078	2.3
Trichlorofluoromethane	0.357	0.366	0.353	0.370	0.357	0.361	2.0
1,1-Dichloroethene	0.215	0.200	0.207	0.205	0.195	0.205	3.8
Acetone	0.018	0.019	0.021	0.016	0.015	0.018	12.6
Iodomethane	0.408	0.402	0.385	0.387	0.374	0.391	3.5
Carbon disulfide	0.599	0.566	0.572	0.547	0.518	0.560	5.4
Methylene chloride	0.201	0.210	0.202	0.200	0.191	0.201	3.3
trans-1,2-Dichloroethene	0.202	0.207	0.200	0.198	0.193	0.200	2.7
Methyl tert-butyl ether	0.494	0.556	0.536	0.525	0.504	0.523	4.8
1,1-Dichloroethane	0.373	0.366	0.359	0.360	0.346	0.361	2.8
Vinyl acetate	0.636	0.671	0.670	0.652	0.624	0.651	3.2
2-Butanone	0.020	0.021	0.022	0.020	0.019	0.020	5.1
cis-1,2-Dichloroethene	0.211	0.224	0.224	0.219	0.211	0.218	2.9
2,2-Dichloropropane	0.204	0.200	0.185	0.180	0.166	0.187	8.3
Bromochloromethane	0.123	0.125	0.120	0.119	0.116	0.120	2.9
Chloroform	0.447	0.433	0.424	0.431	0.419	0.431	2.5
1,1,1-Trichloroethane	0.338	0.350	0.310	0.344	0.335	0.336	4.6
1,1-Dichloropropene	0.108	0.113	0.109	0.114	0.110	0.111	2.3
Carbon tetrachloride	0.400	0.389	0.373	0.401	0.400	0.393	3.1
1,2-Dichloroethane	0.382	0.364	0.362	0.365	0.361	0.367	2.3
Benzene	0.787	0.809	0.780	0.750	0.705	0.766	5.2
Trichloroethene	0.240	0.247	0.241	0.250	0.243	0.244	1.7
1,2-Dichloropropane	0.205	0.208	0.204	0.206	0.199	0.204	1.6
Dibromomethane	0.150	0.151	0.147	0.149	0.146	0.149	1.3
Bromodichloromethane	0.306	0.325	0.324	0.332	0.331	0.324	3.2
cis-1,3-Dichloropropene	0.321	0.346	0.348	0.342	0.336	0.339	3.2
4-Methyl-2-pentanone	0.072	0.080	0.071	0.072	0.068	0.073	6.2
Toluene	0.937	0.945	0.896	0.881	0.824	0.897	5.5
trans-1,3-Dichloropropene	0.317	0.332	0.331	0.341	0.332	0.331	2.7
1,1,2-Trichloroethane	0.182	0.186	0.177	0.182	0.175	0.180	2.5
1,3-Dichloropropane	0.357	0.379	0.363	0.372	0.358	0.366	2.6
Tetrachloroethene	0.306	0.265	0.248	0.294	0.290	0.280	8.4
2-Hexanone	0.136	0.155	0.139	0.141	0.141	0.143	5.1
Dibromochloromethane	0.312	0.338	0.330	0.350	0.346	0.335	4.5
1,2-Dibromoethane	0.253	0.257	0.244	0.253	0.250	0.251	1.9

6B - FORM VI VOA-2
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003

Instrument ID: V6 Calibration Date(s): 10/25/2010 10/25/2010

Heated Purge: (Y/N) N Calibration Time(s): 13:38 17:55

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____		RRF005 =	V6H7095.D		RRF020 =	V6H7093.D			
RRF050 =		V6H7091.D		RRF100 =	V6H7098.D		RRF200 =	V6H7101.D	
COMPOUND		RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD	
Chlorobenzene		0.845	0.822	0.787	0.786	0.743	0.797	4.9	
1,1,1,2-Tetrachloroethane		0.322	0.327	0.315	0.327	0.324	0.323	1.6	
Ethylbenzene		0.401	0.432	0.412	0.432	0.418	0.419	3.1	
m,p-Xylene		0.486	0.531	0.483	0.497	0.470	0.493	4.7	
o-Xylene		0.444	0.500	0.482	0.500	0.484	0.482	4.7	
Xylene (Total)		0.472	0.520	0.483	0.498	0.474	0.489	4.1	
Styrene		0.779	0.858	0.824	0.832	0.782	0.815	4.2	
Bromoform		0.191	0.220	0.210	0.221	0.218	0.212	5.9	
Isopropylbenzene		1.182	1.292	1.200	1.270	1.176	1.224	4.4	
1,1,2,2-Tetrachloroethane		0.434	0.484	0.445	0.430	0.409	0.440	6.3	
Bromobenzene		0.594	0.613	0.609	0.597	0.572	0.597	2.7	
1,2,3-Trichloropropane		0.487	0.550	0.521	0.526	0.495	0.516	4.9	
n-Propylbenzene		0.582	0.616	0.582	0.601	0.569	0.590	3.2	
2-Chlorotoluene		0.536	0.603	0.556	0.562	0.546	0.561	4.6	
1,3,5-Trimethylbenzene		1.781	1.975	1.801	1.850	1.681	1.817	5.9	
4-Chlorotoluene		0.558	0.598	0.566	0.573	0.548	0.568	3.3	
tert-Butylbenzene		1.628	1.870	1.780	1.800	1.677	1.751	5.6	
1,2,4-Trimethylbenzene		1.881	2.008	1.857	1.889	1.732	1.874	5.2	
sec-Butylbenzene		2.003	2.146	1.966	2.011	1.831	1.992	5.6	
4-Isopropyltoluene		1.655	1.881	1.727	1.795	1.636	1.739	5.8	
1,3-Dichlorobenzene		1.131	1.144	1.084	1.096	1.018	1.095	4.5	
1,4-Dichlorobenzene		1.226	1.208	1.116	1.117	1.038	1.141	6.7	
n-Butylbenzene		1.515	1.642	1.537	1.583	1.438	1.543	4.9	
1,2-Dichlorobenzene		1.088	1.145	1.035	1.036	0.955	1.052	6.7	
1,2-Dibromo-3-chloropropane		0.101	0.108	0.102	0.101	0.098	0.102	3.7	
1,2,4-Trichlorobenzene		0.685	0.690	0.657	0.665	0.623	0.664	4.0	
Hexachlorobutadiene		0.322	0.302	0.269	0.283	0.269	0.289	8.0	
1,2,3-Trichlorobenzene		0.521	0.565	0.498	0.524	0.485	0.519	5.9	
Naphthalene		1.253	1.414	1.319	1.300	1.189	1.295	6.4	
1,1,2-Trichloro-1,2,2-trifluoroethane		0.232	0.232	0.217	0.219	0.205	0.221	5.1	
1,4-Dioxane		0.000	0.000	0.001	0.000	0.000	0.000	32.1	
2-Chloroethyl vinyl ether		0.041	0.051	0.049	0.052	0.050	0.049	9.1	
Acrolein		0.005	0.004	0.009	0.004	0.004	0.005	41.0	
Acrylonitrile		0.063	0.067	0.065	0.061	0.058	0.063	5.3	
Cyclohexane		0.282	0.326	0.308	0.310	0.291	0.304	5.7	
Methyl acetate		0.130	0.132	0.128	0.120	0.116	0.125	5.5	
Methylcyclohexane		0.291	0.313	0.295	0.309	0.290	0.300	3.5	
tert-Butyl Alcohol		0.012	0.016	0.014	0.011	0.010	0.013	20.1	

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003

Instrument ID: V6 Calibration Date(s): 10/25/2010 10/25/2010

Heated Purge: (Y/N) N Calibration Time(s): 13:38 17:55

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V6H7095.D</u>	RRF020 = <u>V6H7093.D</u>
RRF050 = <u>V6H7091.D</u>	RRF100 = <u>V6H7098.D</u>	RRF200 = <u>V6H7101.D</u>

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dibromofluoromethane	0.304	0.297	0.298	0.297	0.307	0.300	1.6
1,2-Dichloroethane-d4	0.046	0.048	0.045	0.045	0.045	0.046	2.8
Toluene-d8	1.296	1.318	1.301	1.299	1.319	1.306	0.9
Bromofluorobenzene	0.551	0.562	0.555	0.574	0.574	0.563	1.9

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-54774

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J2003

Mod. Ref No.:

SDG No.: SJ2003

Lab Sample ID: LCS-54774

LCS Lot No.:

Date Extracted: 10/14/2010

Date Analyzed (1): 10/19/2010

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	1667.0000	0.0000	1595.4600	96		40 - 100
2-Methylphenol	1667.0000	0.0000	1593.3343	96		40 - 105
4-Methylphenol	1667.0000	0.0000	1653.6185	99		40 - 105
Naphthalene	1667.0000	0.0000	1494.8282	90		40 - 105
Acenaphthylene	1667.0000	0.0000	1549.6331	93		45 - 105
Acenaphthene	1667.0000	0.0000	1508.0030	90		45 - 110
Dibenzofuran	1667.0000	0.0000	1585.7630	95		50 - 105
Fluorene	1667.0000	0.0000	1613.2438	97		50 - 110
Hexachlorobenzene	1667.0000	0.0000	1569.7277	94		45 - 120
Pentachlorophenol	1667.0000	0.0000	2054.8060	123	*	25 - 120
Phenanthrene	1667.0000	0.0000	1523.1708	91		50 - 110
Anthracene	1667.0000	0.0000	1521.4286	91		55 - 105
Fluoranthene	1667.0000	0.0000	1481.9060	89		55 - 115
Pyrene	1667.0000	0.0000	1524.9433	91		45 - 125
Benzo (a) anthracene	1667.0000	0.0000	1482.1482	89		50 - 110
Chrysene	1667.0000	0.0000	1414.4535	85		55 - 110
Benzo (b) fluoranthene	1667.0000	0.0000	1551.9061	93		45 - 115
Benzo (k) fluoranthene	1667.0000	0.0000	1527.8136	92		45 - 125
Benzo (a) pyrene	1667.0000	0.0000	1469.6630	88		50 - 110
Indeno (1,2,3-cd) pyrene	1667.0000	0.0000	1454.0096	87		40 - 120
Dibenzo (a,h) anthracene	1667.0000	0.0000	1480.5239	89		40 - 125
Benzo (g,h,i) perylene	1667.0000	0.0000	1405.6174	84		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 22 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-55017

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Lab Sample ID: LCS-55017 LCS Lot No.: _____
Date Extracted: 10/26/2010 Date Analyzed (1): 10/28/2010

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Anthracene	1667.0000	0.0000	1593.4041	96		55 - 105
Carbazole	1667.0000	0.0000	1576.6788	95		45 - 115
Di-n-butylphthalate	1667.0000	0.0000	1628.1330	98		55 - 110
Fluoranthene	1667.0000	0.0000	1528.7226	92		55 - 115
Pyrene	1667.0000	0.0000	1639.9782	98		45 - 125
Butylbenzylphthalate	1667.0000	0.0000	1606.0206	96		50 - 125
3,3'-Dichlorobenzidine	1667.0000	0.0000	1324.7930	79		10 - 130
Benzo(a)anthracene	1667.0000	0.0000	1580.3901	95		50 - 110
Chrysene	1667.0000	0.0000	1581.3493	95		55 - 110
Bis(2-ethylhexyl)phthalate	1667.0000	0.0000	1657.6988	99		45 - 125
Di-n-octylphthalate	1667.0000	0.0000	1709.8027	103		40 - 130
Benzo(b)fluoranthene	1667.0000	0.0000	1632.1178	98		45 - 115
Benzo(k)fluoranthene	1667.0000	0.0000	1545.1971	93		45 - 125
Benzo(a)pyrene	1667.0000	0.0000	1589.3070	95		50 - 110
Indeno(1,2,3-cd)pyrene	1667.0000	0.0000	1538.8166	92		40 - 120
Dibenzo(a,h)anthracene	1667.0000	0.0000	1574.6090	94		40 - 125
Benzo(g,h,i)perylene	1667.0000	0.0000	1537.6399	92		40 - 125
1,1'-Biphenyl	1667.0000	0.0000	1513.3243	91		50 - 121
Acetophenone	1667.0000	0.0000	1452.6406	87		30 - 140
Aniline	1667.0000	0.0000	1222.2210	73		30 - 140
Atrazine	1667.0000	0.0000	1582.4298	95		50 - 150
Azobenzene	1667.0000	0.0000	1580.1872	95		30 - 140
Benzaldehyde	1667.0000	0.0000	2221.9207	133	*	10 - 118
Benzyl alcohol	1667.0000	0.0000	1504.1028	90		21 - 119
Caprolactam	1667.0000	0.0000	1545.9863	93		41 - 115
N-Nitrosodimethylamine	1667.0000	0.0000	1363.6468	82		50 - 150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 70 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-55017

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: J2003

Mod. Ref No.:

SDG No.: SJ2003

Lab Sample ID: LCS-55017

LCS Lot No.:

Date Extracted: 10/26/2010

Date Analyzed (1): 10/28/2010

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	1667.0000	0.0000	1572.7861	94		40 - 100
Bis(2-chloroethyl)ether	1667.0000	0.0000	1426.3895	86		40 - 105
2-Chlorophenol	1667.0000	0.0000	1549.9456	93		45 - 105
2-Methylphenol	1667.0000	0.0000	1561.9496	94		40 - 105
2,2'-oxybis(1-Chloropropan	1667.0000	0.0000	1434.0367	86		20 - 115
4-Methylphenol	1667.0000	0.0000	1599.4741	96		40 - 105
N-Nitroso-di-n-propylamine	1667.0000	0.0000	1524.0779	91		40 - 115
Hexachloroethane	1667.0000	0.0000	1304.7546	78		35 - 110
Nitrobenzene	1667.0000	0.0000	1427.5766	86		40 - 115
Isophorone	1667.0000	0.0000	1377.5562	83		45 - 110
2-Nitrophenol	1667.0000	0.0000	1408.7592	85		40 - 110
2,4-Dimethylphenol	1667.0000	0.0000	1485.6778	89		30 - 105
2,4-Dichlorophenol	1667.0000	0.0000	1492.1218	90		45 - 110
1,2,4-Trichlorobenzene	1667.0000	0.0000	1372.1086	82		45 - 110
Naphthalene	1667.0000	0.0000	1480.9903	89		40 - 105
4-Chloroaniline	1667.0000	0.0000	1179.0879	71		10 - 95
Bis(2-chloroethoxy)methane	1667.0000	0.0000	1458.6903	88		45 - 110
Hexachlorobutadiene	1667.0000	0.0000	1312.0807	79		40 - 115
4-Chloro-3-methylphenol	1667.0000	0.0000	1495.4035	90		45 - 115
2-Methylnaphthalene	1667.0000	0.0000	1456.7854	87		45 - 105
Hexachlorocyclopentadiene	1667.0000	0.0000	1413.4806	85		8 - 148
2,4,6-Trichlorophenol	1667.0000	0.0000	1443.9947	87		45 - 110
2,4,5-Trichlorophenol	1667.0000	0.0000	1459.9140	88		50 - 110
2-Chloronaphthalene	1667.0000	0.0000	1454.1367	87		45 - 105
2-Nitroaniline	1667.0000	0.0000	1486.8479	89		45 - 120
Dimethylphthalate	1667.0000	0.0000	1498.5493	90		50 - 110
Acenaphthylene	1667.0000	0.0000	1517.5826	91		45 - 105
2,6-Dinitrotoluene	1667.0000	0.0000	1470.3749	88		50 - 110
3-Nitroaniline	1667.0000	0.0000	1308.6771	79		25 - 110
Acenaphthene	1667.0000	0.0000	1493.1486	90		45 - 110
2,4-Dinitrophenol	1667.0000	0.0000	1195.1134	72		15 - 130
4-Nitrophenol	1667.0000	0.0000	1414.5567	85		15 - 140
Dibenzofuran	1667.0000	0.0000	1500.8993	90		50 - 105
2,4-Dinitrotoluene	1667.0000	0.0000	1574.6146	94		50 - 115
Diethylphthalate	1667.0000	0.0000	1492.2725	90		50 - 115
4-Chlorophenyl-phenylether	1667.0000	0.0000	1459.2836	88		45 - 110
Fluorene	1667.0000	0.0000	1496.3274	90		50 - 110
4-Nitroaniline	1667.0000	0.0000	1437.3505	86		35 - 115
4,6-Dinitro-2-methylphenol	1667.0000	0.0000	1362.4489	82		30 - 135
N-Nitrosodiphenylamine	1667.0000	0.0000	1595.1918	96		50 - 115
4-Bromophenyl-phenylether	1667.0000	0.0000	1522.9788	91		45 - 115
Hexachlorobenzene	1667.0000	0.0000	1503.1440	90		45 - 120
Pentachlorophenol	1667.0000	0.0000	1407.4934	84		25 - 120
Phenanthrene	1667.0000	0.0000	1594.3868	96		50 - 110

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES		Contract:	
Lab Code: MITKEM	Case No.: J2003	Mod. Ref No.:	SDG No.: SJ2003
Instrument ID: S3		Calibration Date: 10/29/2010	Time: 9:16
Lab File ID: S3G9751.D		Init. Calib. Date(s): 10/28/2010	10/28/2010
EPA Sample No. (SSTD020##): SSTD0503V		Init. Calib. Time(s): 16:18	18:51
GC Column: Rxi-5sil MS		ID: 0.25	(mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Phenol	1.617	1.784	0.010	10.3	20.0
Bis(2-chloroethyl) ether	1.321	1.392	0.010	5.4	20.0
2-Chlorophenol	1.404	1.471	0.010	4.8	20.0
2-Methylphenol	1.296	1.404	0.010	8.3	20.0
2,2'-oxybis(1-Chloropropane)	1.989	2.109	0.010	6.0	20.0
4-Methylphenol	1.326	1.451	0.010	9.5	20.0
N-Nitroso-di-n-propylamine	0.819	0.958	0.050	17.0	20.0
Hexachloroethane	0.491	0.529	0.010	7.8	20.0
Nitrobenzene	0.303	0.320	0.010	5.6	20.0
Isophorone	0.646	0.685	0.010	6.0	20.0
2-Nitrophenol	0.185	0.194	0.010	4.7	20.0
2,4-Dimethylphenol	0.331	0.354	0.010	7.1	20.0
2,4-Dichlorophenol	0.298	0.310	0.010	4.0	20.0
1,2,4-Trichlorobenzene	0.318	0.327	0.010	2.8	20.0
Naphthalene	0.975	1.030	0.010	5.7	20.0
4-Chloroaniline	0.454	0.490	0.010	7.8	20.0
Bis(2-chloroethoxy)methane	0.396	0.418	0.010	5.4	20.0
Hexachlorobutadiene	0.146	0.148	0.010	1.7	20.0
4-Chloro-3-methylphenol	0.313	0.345	0.010	10.0	20.0
2-Methylnaphthalene	0.703	0.754	0.010	7.2	20.0
Hexachlorocyclopentadiene	0.239	0.248	0.050	3.5	20.0
2,4,6-Trichlorophenol	0.344	0.351	0.010	2.2	20.0
2,4,5-Trichlorophenol	0.371	0.380	0.010	2.5	20.0
2-Chloronaphthalene	1.038	1.066	0.010	2.7	20.0
2-Nitroaniline	0.249	0.277	0.010	11.3	20.0
Dimethylphthalate	1.266	1.340	0.010	5.8	20.0
Acenaphthylene	1.710	1.810	0.010	5.9	20.0
2,6-Dinitrotoluene	0.306	0.330	0.010	7.8	20.0
3-Nitroaniline	0.360	0.387	0.010	7.4	20.0
Acenaphthene	1.063	1.108	0.010	4.3	20.0
2,4-Dinitrophenol	0.191	0.172	0.050	-9.8	20.0
4-Nitrophenol	0.144	0.162	0.050	12.5	20.0
Dibenzofuran	1.532	1.617	0.010	5.5	20.0
2,4-Dinitrotoluene	0.393	0.431	0.010	9.7	20.0
Diethylphthalate	1.256	1.334	0.010	6.2	20.0
4-Chlorophenyl-phenylether	0.581	0.591	0.010	1.8	20.0
Fluorene	1.261	1.319	0.010	4.6	20.0
4-Nitroaniline	0.367	0.391	0.010	6.3	20.0
4,6-Dinitro-2-methylphenol	0.163	0.165	0.010	1.3	20.0
N-Nitrosodiphenylamine	0.669	0.711	0.010	6.1	20.0
4-Bromophenyl-phenylether	0.199	0.204	0.010	2.4	20.0
Hexachlorobenzene	0.191	0.198	0.010	3.8	20.0

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>MITKEM LABORATORIES</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>J2003</u>	Mod. Ref No.: _____ SDG No.: <u>SJ2003</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>10/29/2010</u> Time: <u>9:16</u>
Lab File ID: <u>S3G9751.D</u>	Init. Calib. Date(s): <u>10/28/2010</u> <u>10/28/2010</u>
EPA Sample No. (SSTD020##): <u>SSTD0503V</u>	Init. Calib. Time(s): <u>16:18</u> <u>18:51</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Pentachlorophenol	0.134	0.139	0.010	3.2	20.0
Phenanthrene	1.115	1.188	0.010	6.6	20.0
Anthracene	1.127	1.200	0.010	6.5	20.0
Carbazole	1.121	1.197	0.010	6.8	20.0
Di-n-butylphthalate	1.211	1.346	0.010	11.1	20.0
Fluoranthene	1.180	1.254	0.010	6.2	20.0
Pyrene	1.083	1.145	0.010	5.7	20.0
Butylbenzylphthalate	0.466	0.513	0.010	10.1	20.0
3,3'-Dichlorobenzidine	0.302	0.338	0.010	12.1	20.0
Benzo(a)anthracene	1.032	1.063	0.010	3.0	20.0
Chrysene	1.018	1.103	0.010	8.3	20.0
Bis(2-ethylhexyl)phthalate	0.626	0.686	0.010	9.6	20.0
Di-n-octylphthalate	1.029	1.150	0.010	11.7	20.0
Benzo(b)fluoranthene	1.029	1.004	0.010	-2.4	20.0
Benzo(k)fluoranthene	1.076	1.225	0.010	13.8	20.0
Benzo(a)pyrene	0.984	1.042	0.010	6.0	20.0
Indeno(1,2,3-cd)pyrene	1.134	1.163	0.010	2.5	20.0
Dibenzo(a,h)anthracene	0.912	0.935	0.010	2.4	20.0
Benzo(g,h,i)perylene	1.016	1.034	0.010	1.8	20.0
1,1'-Biphenyl	1.434	1.511	0.010	5.4	20.0
1,4-Dioxane	0.317	0.335	0.010	5.8	20.0
Acetophenone	1.819	1.984	0.010	9.0	20.0
Aniline	2.035	2.218	0.010	9.0	20.0
Atrazine	0.226	0.244	0.010	7.7	20.0
Azobenzene	0.667	0.714	0.010	7.1	20.0
Benzaldehyde	0.554	0.652	0.010	17.8	20.0
Benzidine	0.338	0.473	0.010	39.8	20.0
Benzoic acid	0.192	0.172	0.010	-10.3	20.0
Benzyl alcohol	0.931	1.027	0.010	10.3	20.0
Caprolactam	0.127	0.144	0.010	13.4	20.0
N-Nitrosodimethylamine	0.759	0.842	0.010	10.9	20.0

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003

Instrument ID: S3 Calibration Date: 10/29/2010 Time: 9:16

Lab File ID: S3G9751.D Init. Calib. Date(s): 10/28/2010 10/28/2010

EPA Sample No. (SSTD020##): SSTD0503V Init. Calib. Time(s): 16:18 18:51

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.295	0.321	0.010	8.8	20.0
2-Fluorobiphenyl	1.202	1.257	0.010	4.6	20.0
Terphenyl-d14	0.689	0.722	0.010	4.8	20.0
Phenol-d5	1.706	1.810	0.010	6.1	20.0
2-Fluorophenol	1.295	1.348	0.010	4.1	20.0
2,4,6-Tribromophenol	0.080	0.086	0.010	7.2	20.0

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8882.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-01-4	Vinyl chloride		19	
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
108-88-3	Toluene		5.0	U
127-18-4	Tetrachloroethene		5.0	U
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
123-91-1	1,4-Dioxane		100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EQUIPMENT BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8878.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-01-4	Vinyl chloride		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
108-88-3	Toluene		5.0	U
127-18-4	Tetrachloroethene		5.0	U
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
123-91-1	1,4-Dioxane		100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VZ-3

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8883.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
75-01-4	Vinyl chloride		5.0
75-35-4	1,1-Dichloroethene		5.0
67-64-1	Acetone		5.0
75-09-2	Methylene chloride		5.0
156-60-5	trans-1,2-Dichloroethene		5.0
1634-04-4	Methyl tert-butyl ether		5.0
75-34-3	1,1-Dichloroethane		5.0
78-93-3	2-Butanone		5.0
156-59-2	cis-1,2-Dichloroethene		5.0
67-66-3	Chloroform		5.0
71-55-6	1,1,1-Trichloroethane		5.0
56-23-5	Carbon tetrachloride		5.0
107-06-2	1,2-Dichloroethane		5.0
71-43-2	Benzene		5.0
79-01-6	Trichloroethene		5.0
108-88-3	Toluene		5.0
127-18-4	Tetrachloroethene		5.0
108-90-7	Chlorobenzene		5.0
100-41-4	Ethylbenzene		5.0
1330-20-7	m,p-Xylene		5.0
95-47-6	o-Xylene		5.0
1330-20-7	Xylene (Total)		5.0
103-65-1	n-Propylbenzene		5.0
108-67-8	1,3,5-Trimethylbenzene		5.0
98-06-6	tert-Butylbenzene		5.0
95-63-6	1,2,4-Trimethylbenzene		5.0
135-98-8	sec-Butylbenzene		5.0
541-73-1	1,3-Dichlorobenzene		5.0
106-46-7	1,4-Dichlorobenzene		5.0
104-51-8	n-Butylbenzene		5.0
95-50-1	1,2-Dichlorobenzene		5.0
123-91-1	1,4-Dioxane		100

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GZ 25-S

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-04A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8884.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.6	J
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GZ 24-D

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-05A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8885.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-01-4	Vinyl chloride		1.3	J
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		2.0	J
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		13	
79-01-6	Trichloroethene		5.0	U
108-88-3	Toluene		5.0	U
127-18-4	Tetrachloroethene		5.0	U
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
123-91-1	1,4-Dioxane		100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B6OW-S

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-06A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8886.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	J
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	1.6	J
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	2.6	J
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
B60W-D

Lab Name: MITKEM LABORATORIES Contract:
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-07A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8887.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-01-4	Vinyl chloride		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		150	
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		430	E T
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		9.7	
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		43	
108-88-3	Toluene		5.0	U
127-18-4	Tetrachloroethene		23	
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
123-91-1	1,4-Dioxane		100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO..

B6OW-DDL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-07ADL
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8972.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/28/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-01-4	Vinyl chloride		20	U
75-35-4	1,1-Dichloroethene		20	U
67-64-1	Acetone		20	U
75-09-2	Methylene chloride		20	U
156-60-5	trans-1,2-Dichloroethene		120	D
1634-04-4	Methyl tert-butyl ether		20	U
75-34-3	1,1-Dichloroethane		20	U
78-93-3	2-Butanone		20	U
156-59-2	cis-1,2-Dichloroethene		390	D
67-66-3	Chloroform		20	U
71-55-6	1,1,1-Trichloroethane		20	U
56-23-5	Carbon tetrachloride		20	U
107-06-2	1,2-Dichloroethane		20	U
71-43-2	Benzene		20	U
79-01-6	Trichloroethene		36	D
108-88-3	Toluene		20	U
127-18-4	Tetrachloroethene		19	DJ
108-90-7	Chlorobenzene		20	U
100-41-4	Ethylbenzene		20	U
1330-20-7	m,p-Xylene		20	U
95-47-6	o-Xylene		20	U
1330-20-7	Xylene (Total)		20	U
103-65-1	n-Propylbenzene		20	U
108-67-8	1,3,5-Trimethylbenzene		20	U
98-06-6	tert-Butylbenzene		20	U
95-63-6	1,2,4-Trimethylbenzene		20	U
135-98-8	sec-Butylbenzene		20	U
541-73-1	1,3-Dichlorobenzene		20	U
106-46-7	1,4-Dichlorobenzene		20	U
104-51-8	n-Butylbenzene		20	U
95-50-1	1,2-Dichlorobenzene		20	U
123-91-1	1,4-Dioxane		400	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VW-5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-C8A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8972A.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/28/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-01-4	Vinyl chloride		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		9.9	
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
108-88-3	Toluene		5.0	U
127-18-4	Tetrachloroethene		2.5	J
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
123-91-1	1,4-Dioxane		100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VW-2

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-09A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8889.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-01-4	Vinyl chloride		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
108-88-3	Toluene		5.0	U
127-18-4	Tetrachloroethene		5.0	U
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		1.9	J
1330-20-7	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
103-65-1	n-Propylbenzene		350	E J
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		33	
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		90	
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		41	
95-50-1	1,2-Dichlorobenzene		5.0	U
123-91-1	1,4-Dioxane		100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VW-2DL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-09ADL
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8973.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/28/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-01-4	Vinyl chloride		20	U
75-35-4	1,1-Dichloroethene		20	U
67-64-1	Acetone		20	U
75-09-2	Methylene chloride		20	U
156-60-5	trans-1,2-Dichloroethene		20	U
1634-04-4	Methyl tert-butyl ether		20	U
75-34-3	1,1-Dichloroethane		20	U
78-93-3	2-Butanone		20	U
156-59-2	cis-1,2-Dichloroethene		20	U
67-66-3	Chloroform		20	U
71-55-6	1,1,1-Trichloroethane		20	U
56-23-5	Carbon tetrachloride		20	U
107-06-2	1,2-Dichloroethane		20	U
71-43-2	Benzene		20	U
79-01-6	Trichloroethene		20	U
108-88-3	Toluene		20	U
127-18-4	Tetrachloroethene		20	U
108-90-7	Chlorobenzene		20	U
100-41-4	Ethylbenzene		20	U
1330-20-7	m,p-Xylene		20	U
95-47-6	o-Xylene		20	U
1330-20-7	Xylene (Total)		20	U
103-65-1	n-Propylbenzene		280	D
108-67-8	1,3,5-Trimethylbenzene		20	U
98-06-6	tert-Butylbenzene		20	D
95-63-6	1,2,4-Trimethylbenzene		20	U
135-98-8	sec-Butylbenzene		53	D
541-73-1	1,3-Dichlorobenzene		20	U
106-46-7	1,4-Dichlorobenzene		20	U
104-51-8	n-Butylbenzene		24	D
95-50-1	1,2-Dichlorobenzene		20	U
123-91-1	1,4-Dioxane		400	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-10A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6G8877.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/24/2009
% Moisture: not dec. Date Analyzed: 08/25/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-01-4	Vinyl chloride		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
108-88-3	Toluene		5.0	U
127-18-4	Tetrachloroethene		5.0	U
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
103-65-1	n-Propylbenzene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
123-91-1	1,4-Dioxane		100	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: H1633

Mod. Ref No.:

SDG No.: SH1633

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: H1633-01B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S1F9466.D

Level: (LOW/MED) LOW

Extraction: (Type) CONT

% Moisture: Decanted: (Y/N)

Date Received: 08/24/2009

Concentrated Extract Volume: 1000 (uL)

Date Extracted: 08/25/2009

Injection Volume: 1.0 (uL) GPC Factor: 1.00

Date Analyzed: 08/28/2009

GPC Cleanup: (Y/N) N pH:

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol		10	U
95-48-7	2-Methylphenol		10	U
106-44-5	4-Methylphenol		10	U
91-20-3	Naphthalene		10	U
208-96-8	Acenaphthylene		10	U
83-32-9	Acenaphthene		10	U
86-73-7	Fluorene		10	U
118-74-1	Hexachlorobenzene		10	U
87-86-5	Pentachlorophenol		20	U
85-01-8	Phenanthrene		10	U
120-12-7	Anthracene		10	U
206-44-0	Fluoranthene		10	U
129-00-0	Pyrene		10	U
56-55-3	Benzo(a)anthracene		10	U
218-01-9	Chrysene		10	U
205-99-2	Benzo(b)fluoranthene		10	U
207-08-9	Benzo(k)fluoranthene		10	U
50-32-8	Benzo(a)pyrene		10	U
193-39-5	Indeno(1,2,3-cd)pyrene		10	U
53-70-3	Dibenzo(a,h)anthracene		10	U
191-24-2	Benzo(g,h,i)perylene		10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MH1633

Matrix: (soil/water) WATER Lab Sample ID: H1633-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9466

Level: (low/med) LOW Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____ Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CAS NO. COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
EQUIPMENT BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-02B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9467.D
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009
Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol		10	U
95-48-7	2-Methylphenol		10	U
106-44-5	4-Methylphenol		10	U
91-20-3	Naphthalene		10	U
208-96-8	Acenaphthylene		10	U
83-32-9	Acenaphthene		10	U
86-73-7	Fluorene		10	U
118-74-1	Hexachlorobenzene		10	U
87-86-5	Pentachlorophenol		20	U
85-01-8	Phenanthrene		10	U
120-12-7	Anthracene		10	U
206-44-0	Fluoranthene		10	U
129-00-0	Pyrene		10	U
56-55-3	Benzo (a) anthracene		10	U
218-01-9	Chrysene		10	U
205-99-2	Benzo (b) fluoranthene		10	U
207-08-9	Benzo (k) fluoranthene		10	U
50-32-8	Benzo (a) pyrene		10	U
193-39-5	Indeno (1,2,3-cd) pyrene		10	U
53-70-3	Dibenzo (a,h) anthracene		10	U
191-24-2	Benzo (g,h,i) perylene		10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MITKEM LABORATORIES Contract: _____

EQUIPMENT BLANK

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MH1633

Matrix: (soil/water) WATER Lab Sample ID: H1633-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9467

Level: (low/med) LOW Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____ Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CAS NO. COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VZ-3

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-03B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9468.D
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009
Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol	10	U	
95-48-7	2-Methylphenol	10	U	
106-44-5	4-Methylphenol	10	U	
91-20-3	Naphthalene	10	U	
208-96-8	Acenaphthylene	10	U	
83-32-9	Acenaphthene	10	U	
86-73-7	Fluorene	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenzo(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MITKEM LABORATORIES

Contract: _____

VZ-3

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MH1633

Matrix: (soil/water) WATER

Lab Sample ID: H1633-03B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S1F9468

Level: (low/med) LOW

Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____

Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

Extraction: (Type) CONT

CAS NO.

COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GZ 25-S

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-04B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9469.D
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009
Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol		10	U
95-48-7	2-Methylphenol		10	U
106-44-5	4-Methylphenol		10	U
91-20-3	Naphthalene		10	U
208-96-8	Acenaphthylene		10	U
83-32-9	Acenaphthene		10	U
86-73-7	Fluorene		10	U
118-74-1	Hexachlorobenzene		10	U
87-86-5	Pentachlorophenol		20	U
85-01-8	Phenanthrene		10	U
120-12-7	Anthracene		10	U
206-44-0	Fluoranthene		10	U
129-00-0	Pyrene		10	U
56-55-3	Benzo(a)anthracene		10	U
218-01-9	Chrysene		10	U
205-99-2	Benzo(b)fluoranthene		10	U
207-08-9	Benzo(k)fluoranthene		10	U
50-32-8	Benzo(a)pyrene		10	U
193-39-5	Indeno(1,2,3-cd)pyrene		10	U
53-70-3	Dibenzo(a,h)anthracene		10	U
191-24-2	Benzo(g,h,i)perylene		10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GZ 25-S

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MH1633

Matrix: (soil/water) WATER Lab Sample ID: H1633-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9469

Level: (low/med) LOW Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____ Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CAS NO. COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GZ 24-D

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-05B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9470.D
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009
Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol	10	U	
95-48-7	2-Methylphenol	10	U	
106-44-5	4-Methylphenol	10	U	
91-20-3	Naphthalene	10	U	
208-96-8	Acenaphthylene	10	U	
83-32-9	Acenaphthene	10	U	
86-73-7	Fluorene	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenzo(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GZ 24-D

Lab Name: MITKEM LABORATORIES

Contract: _____

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MH1633

Matrix: (soil/water) WATER

Lab Sample ID: H1633-05B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S1F9470

Level: (low/med) LOW

Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____

Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

Extraction: (Type) CONT

CAS NO. COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B6OW-S

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-06B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9471.D
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009
Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol		10	U
95-48-7	2-Methylphenol		10	U
106-44-5	4-Methylphenol		10	U
91-20-3	Naphthalene		10	U
208-96-8	Acenaphthylene		10	U
83-32-9	Acenaphthene		10	U
86-73-7	Fluorene		10	U
118-74-1	Hexachlorobenzene		10	U
87-86-5	Pentachlorophenol		20	U
85-01-8	Phenanthrene		10	U
120-12-7	Anthracene		10	U
206-44-0	Fluoranthene		10	U
129-00-0	Pyrene		10	U
56-55-3	Benzo(a)anthracene		10	U
218-01-9	Chrysene		10	U
205-99-2	Benzo(b)fluoranthene		10	U
207-08-9	Benzo(k)fluoranthene		10	U
50-32-8	Benzo(a)pyrene		10	U
193-39-5	Indeno(1,2,3-cd)pyrene		10	U
53-70-3	Dibenzo(a,h)anthracene		10	U
191-24-2	Benzo(g,h,i)perylene		10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B6OW-S

Lab Name: MITKEM LABORATORIES

Contract: _____

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MH1633

Matrix: (soil/water) WATER

Lab Sample ID: H1633-06B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S1F9471

Level: (low/med) LOW

Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____

Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

Extraction: (Type) CONT

CAS NO. COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B6OW-D

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-07B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9472.D
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009
Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol	10	U	
95-48-7	2-Methylphenol	10	U	
106-44-5	4-Methylphenol	10	U	
91-20-3	Naphthalene	10	U	
208-96-8	Acenaphthylene	10	U	
83-32-9	Acenaphthene	10	U	
86-73-7	Fluorene	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenzo(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B6OW-D

Lab Name: MITKEM LABORATORIES

Contract: _____

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MH1633

Matrix: (soil/water) WATER

Lab Sample ID: H1633-07B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S1F9472

Level: (low/med) LOW

Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____

Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

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

Extraction: (Type) CONT

CAS NO. COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VW-5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-08B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9473.D
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009
Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-95-2	Phenol		10	U
95-48-7	2-Methylphenol		10	U
106-44-5	4-Methylphenol		10	U
91-20-3	Naphthalene		10	U
208-96-8	Acenaphthylene		10	U
83-32-9	Acenaphthene		10	U
86-73-7	Fluorene		10	U
118-74-1	Hexachlorobenzene		10	U
87-86-5	Pentachlorophenol		20	U
85-01-8	Phenanthrene		10	U
120-12-7	Anthracene		10	U
206-44-0	Fluoranthene		10	U
129-00-0	Pyrene		10	U
56-55-3	Benzo(a)anthracene		10	U
218-01-9	Chrysene		10	U
205-99-2	Benzo(b)fluoranthene		10	U
207-08-9	Benzo(k)fluoranthene		10	U
50-32-8	Benzo(a)pyrene		10	U
193-39-5	Indeno(1,2,3-cd)pyrene		10	U
53-70-3	Dibenzo(a,h)anthracene		10	U
191-24-2	Benzo(g,h,i)perylene		10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MITKEM LABORATORIES

Contract: _____

VW-5

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MH1633

Matrix: (soil/water) WATER

Lab Sample ID: H1633-08B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S1F9473

Level: (low/med) LOW

Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____

Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

Extraction: (Type) CONT

CAS NO. COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VW-2

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: H1633 Mod. Ref No.: _____ SDG No.: SH1633

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H1633-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1F9474.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 08/24/2009

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/25/2009

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/28/2009

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
108-95-2	Phenol	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	1.2	J
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo (a) anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo (b) fluoranthene	10	U
207-08-9	Benzo (k) fluoranthene	10	U
50-32-8	Benzo (a) pyrene	10	U
193-39-5	Indeno (1,2,3-cd) pyrene	10	U
53-70-3	Dibenzo (a,h) anthracene	10	U
191-24-2	Benzo (g,h,i) perylene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MITKEM LABORATORIES

Contract: _____

VW-2

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MH1633

Matrix: (soil/water) WATER

Lab Sample ID: H1633-09B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S1F9474

Level: (low/med) LOW

Date Received: 08/24/09

% Moisture: _____ Decanted: (Y/N) _____

Date Extracted: 08/25/09

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/28/09

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

Extraction: (Type) CONT

CAS NO.

COMPOUND

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

132-64-9	Dibenzofuran	10	U
----------	--------------	----	---

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INT-DIS-W-WALL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-01B
Sample wt/vol: 5.70 (g/mL) G Lab File ID: V6H6976.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 6.0 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/KG	
75-01-4	Vinyl chloride	4.7	U	
75-35-4	1,1-Dichloroethene	4.7	U	
67-64-1	Acetone	2.1	J	
75-09-2	Methylene chloride	4.7	U	
156-60-5	trans-1,2-Dichloroethene	4.7	U	
1634-04-4	Methyl tert-butyl ether	4.7	U	
75-34-3	1,1-Dichloroethane	4.7	U	
78-93-3	2-Butanone	3.9	J	
156-59-2	cis-1,2-Dichloroethene	4.7	U	
67-66-3	Chloroform	4.7	U	
71-55-6	1,1,1-Trichloroethane	4.7	U	
56-23-5	Carbon tetrachloride	4.7	U	
107-06-2	1,2-Dichloroethane	4.7	U	
71-43-2	Benzene	4.7	U	
79-01-6	Trichloroethene	4.7	U	
108-88-3	Toluene	4.7	U	
127-18-4	Tetrachloroethene	4.7	U	
108-90-7	Chlorobenzene	4.7	U	
100-41-4	Ethylbenzene	4.7	U	
1330-20-7	m,p-Xylene	4.7	U	
95-47-6	o-Xylene	4.7	U	
1330-20-7	Xylene (Total)	4.7	U	
103-65-1	n-Propylbenzene	4.7	U	
108-67-8	1,3,5-Trimethylbenzene	4.7	U	
98-06-6	tert-Butylbenzene	4.7	U	
95-63-6	1,2,4-Trimethylbenzene	4.7	U	
135-98-8	sec-Butylbenzene	4.7	U	
541-73-1	1,3-Dichlorobenzene	4.7	U	
106-46-7	1,4-Dichlorobenzene	4.7	U	
104-51-8	n-Butylbenzene	4.7	U	
95-50-1	1,2-Dichlorobenzene	4.7	U	
123-91-1	1,4-Dioxane	93	U	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INT-DIS-BOT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-02B
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H6977.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 10 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/Kg</u>	Q
75-01-4	Vinyl chloride	3.8	U
75-35-4	1,1-Dichloroethene	3.8	U
67-64-1	Acetone	1.7	J
75-09-2	Methylene chloride	3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	U
1634-04-4	Methyl tert-butyl ether	3.8	U
75-34-3	1,1-Dichloroethane	3.8	U
78-93-3	2-Butanone	3.8	U
156-59-2	cis-1,2-Dichloroethene	3.8	U
67-66-3	Chloroform	3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	U
56-23-5	Carbon tetrachloride	3.8	U
107-06-2	1,2-Dichloroethane	3.8	U
71-43-2	Benzene	3.8	U
79-01-6	Trichloroethene	3.8	U
108-88-3	Toluene	3.8	U
127-18-4	Tetrachloroethene	3.8	U
108-90-7	Chlorobenzene	3.8	U
100-41-4	Ethylbenzene	3.8	U
1330-20-7	m,p-Xylene	3.8	U
95-47-6	o-Xylene	3.8	U
1330-20-7	Xylene (Total)	3.8	U
103-65-1	n-Propylbenzene	3.8	U
108-67-8	1,3,5-Trimethylbenzene	3.8	U
98-06-6	tert-Butylbenzene	3.8	U
95-63-6	1,2,4-Trimethylbenzene	3.8	U
135-98-8	sec-Butylbenzene	3.8	U
541-73-1	1,3-Dichlorobenzene	3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	U
104-51-8	n-Butylbenzene	3.8	U
95-50-1	1,2-Dichlorobenzene	3.8	U
123-91-1	1,4-Dioxane	76	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
E-4"-IRON-PIPE-I
NT-DIS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-03B
Sample wt/vol: 8.60 (g/mL) G Lab File ID: V6H7018.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 15 Date Analyzed: 10/18/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	3.4	U
75-35-4	1,1-Dichloroethene	3.4	U
67-64-1	Acetone	3.4	U
75-09-2	Methylene chloride	3.4	U
156-60-5	trans-1,2-Dichloroethene	3.4	U
1634-04-4	Methyl tert-butyl ether	3.4	U
75-34-3	1,1-Dichloroethane	3.4	U
78-93-3	2-Butanone	3.4	U
156-59-2	cis-1,2-Dichloroethene	3.4	U
67-66-3	Chloroform	3.4	U
71-55-6	1,1,1-Trichloroethane	3.4	U
56-23-5	Carbon tetrachloride	3.4	U
107-06-2	1,2-Dichloroethane	3.4	U
71-43-2	Benzene	3.4	U
79-01-6	Trichloroethene	3.4	U
108-88-3	Toluene	3.4	U
127-18-4	Tetrachloroethene	0.95	J
108-90-7	Chlorobenzene	3.4	U
100-41-4	Ethylbenzene	3.4	U
1330-20-7	m,p-Xylene	3.4	U
95-47-6	o-Xylene	3.4	U
1330-20-7	Xylene (Total)	3.4	U
103-65-1	n-Propylbenzene	3.4	U
108-67-8	1,3,5-Trimethylbenzene	3.4	U
98-06-6	tert-Butylbenzene	3.4	U
95-63-6	1,2,4-Trimethylbenzene	3.4	U
135-98-8	sec-Butylbenzene	3.4	U
541-73-1	1,3-Dichlorobenzene	3.4	U
106-46-7	1,4-Dichlorobenzene	3.4	U
104-51-8	n-Butylbenzene	3.4	U
95-50-1	1,2-Dichlorobenzene	3.4	U
123-91-1	1,4-Dioxane	68	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
SUMP-PIT-BOT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-04B
Sample wt/vol: 8.00 (g/mL) G Lab File ID: V6H6979.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 17 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
75-01-4	Vinyl chloride	3.8	U
75-35-4	1,1-Dichloroethene	3.8	U
67-64-1	Acetone	2.0	J
75-09-2	Methylene chloride	3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	U
1634-04-4	Methyl tert-butyl ether	3.8	U
75-34-3	1,1-Dichloroethane	3.8	U
78-93-3	2-Butanone	3.8	U
156-59-2	cis-1,2-Dichloroethene	3.8	U
67-66-3	Chloroform	3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	U
56-23-5	Carbon tetrachloride	3.8	U
107-06-2	1,2-Dichloroethane	3.8	U
71-43-2	Benzene	3.8	U
79-01-6	Trichloroethene	3.8	U
108-88-3	Toluene	3.8	U
127-18-4	Tetrachloroethene	1.6	J
108-90-7	Chlorobenzene	3.8	U
100-41-4	Ethylbenzene	3.8	U
1330-20-7	m,p-Xylene	3.8	U
95-47-6	o-Xylene	3.8	U
1330-20-7	Xylene (Total)	3.8	U
103-65-1	n-Propylbenzene	1.8	J
108-67-8	1,3,5-Trimethylbenzene	3.8	U
98-06-6	tert-Butylbenzene	3.8	U
95-63-6	1,2,4-Trimethylbenzene	1.7	J
135-98-8	sec-Butylbenzene	2.4	J
541-73-1	1,3-Dichlorobenzene	3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	U
104-51-8	n-Butylbenzene	2.1	J
95-50-1	1,2-Dichlorobenzene	3.8	U
123-91-1	1,4-Dioxane	75	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
INT-DIS-N WALL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-05B
Sample wt/vol: 6.90 (g/mL) G Lab File ID: V6H6980.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 5.0 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	3.8	U
75-35-4	1,1-Dichloroethene	3.8	U
67-64-1	Acetone	3.8	U
75-09-2	Methylene chloride	3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	U
1634-04-4	Methyl tert-butyl ether	3.8	U
75-34-3	1,1-Dichloroethane	3.8	U
78-93-3	2-Butanone	3.8	U
156-59-2	cis-1,2-Dichloroethene	3.8	U
67-66-3	Chloroform	3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	U
56-23-5	Carbon tetrachloride	3.8	U
107-06-2	1,2-Dichloroethane	3.8	U
71-43-2	Benzene	3.8	U
79-01-6	Trichloroethene	3.8	U
108-88-3	Toluene	3.8	U
127-18-4	Tetrachloroethene	3.8	U
108-90-7	Chlorobenzene	3.8	U
100-41-4	Ethylbenzene	3.8	U
1330-20-7	m,p-Xylene	3.8	U
95-47-6	o-Xylene	3.8	U
1330-20-7	Xylene (Total)	3.8	U
103-65-1	n-Propylbenzene	3.8	U
108-67-8	1,3,5-Trimethylbenzene	3.8	U
98-06-6	tert-Butylbenzene	3.8	U
95-63-6	1,2,4-Trimethylbenzene	3.8	U
135-98-8	sec-Butylbenzene	3.8	U
541-73-1	1,3-Dichlorobenzene	3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	U
104-51-8	n-Butylbenzene	3.8	U
95-50-1	1,2-Dichlorobenzene	3.8	U
123-91-1	1,4-Dioxane	76	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPLICATE

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-06B
Sample wt/vol: 6.60 (g/mL) G Lab File ID: V6H6981.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 5.0 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/Kg</u>	Q
75-01-4	Vinyl chloride	4.0	U
75-35-4	1,1-Dichloroethene	4.0	U
67-64-1	Acetone	3.0	J
75-09-2	Methylene chloride	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
1634-04-4	Methyl tert-butyl ether	4.0	U
75-34-3	1,1-Dichloroethane	4.0	U
78-93-3	2-Butanone	4.0	U
156-59-2	cis-1,2-Dichloroethene	4.0	U
67-66-3	Chloroform	4.0	U
71-55-6	1,1,1-Trichloroethane	4.0	U
56-23-5	Carbon tetrachloride	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
71-43-2	Benzene	4.0	U
79-01-6	Trichloroethene	4.0	U
108-88-3	Toluene	4.0	U
127-18-4	Tetrachloroethene	4.0	U
108-90-7	Chlorobenzene	4.0	U
100-41-4	Ethylbenzene	4.0	U
1330-20-7	m,p-Xylene	4.0	U
95-47-6	o-Xylene	4.0	U
1330-20-7	Xylene (Total)	4.0	U
103-65-1	n-Propylbenzene	4.0	U
108-67-8	1,3,5-Trimethylbenzene	4.0	U
98-06-6	tert-Butylbenzene	4.0	U
95-63-6	1,2,4-Trimethylbenzene	4.0	U
135-98-8	sec-Butylbenzene	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
104-51-8	n-Butylbenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
123-91-1	1,4-Dioxane	80	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SW-4"-IRON-PIPE-
INT-DIS.

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-08B
Sample wt/vol: 6.20 (g/mL) G: _____ Lab File ID: V6H6982.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 17 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	4.9	U
75-35-4	1,1-Dichloroethene	4.9	U
67-64-1	Acetone	11	
75-09-2	Methylene chloride	4.9	U
156-60-5	trans-1,2-Dichloroethene	4.9	U
1634-04-4	Methyl tert-butyl ether	4.9	U
75-34-3	1,1-Dichloroethane	4.9	U
78-93-3	2-Butanone	4.9	U
156-59-2	cis-1,2-Dichloroethene	4.9	U
67-66-3	Chloroform	4.9	U
71-55-6	1,1,1-Trichloroethane	4.9	U
56-23-5	Carbon tetrachloride	4.9	U
107-06-2	1,2-Dichloroethane	4.9	U
71-43-2	Benzene	4.9	U
79-01-6	Trichloroethene	4.9	U
108-88-3	Toluene	12	
127-18-4	Tetrachloroethene	4.9	U
108-90-7	Chlorobenzene	4.9	U
100-41-4	Ethylbenzene	4.9	U
1330-20-7	m,p-Xylene	1.7	J
95-47-6	o-Xylene	4.9	U
1330-20-7	Xylene (Total)	1.7	J
103-65-1	n-Propylbenzene	4.9	U
108-67-8	1,3,5-Trimethylbenzene	4.9	U
98-06-6	tert-Butylbenzene	4.9	U
95-63-6	1,2,4-Trimethylbenzene	4.9	U
135-98-8	sec-Butylbenzene	4.9	U
541-73-1	1,3-Dichlorobenzene	4.9	U
106-46-7	1,4-Dichlorobenzene	4.9	U
104-51-8	n-Butylbenzene	4.9	U
95-50-1	1,2-Dichlorobenzene	4.9	U
123-91-1	1,4-Dioxane	97	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N-SEWER-PIPE-SUM
P-PIT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-09B
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H6985.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 14 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	4.0	U
75-35-4	1,1-Dichloroethene	2.9	J
67-64-1	Acetone	22	
75-09-2	Methylene chloride	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
1634-04-4	Methyl tert-butyl ether	4.0	U
75-34-3	1,1-Dichloroethane	4.0	U
78-93-3	2-Butanone	4.0	U
156-59-2	cis-1,2-Dichloroethene	1.1	J
67-66-3	Chloroform	4.0	U
71-55-6	1,1,1-Trichloroethane	4.0	U
56-23-5	Carbon tetrachloride	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
71-43-2	Benzene	4.0	U
79-01-6	Trichloroethene	4.0	U
108-88-3	Toluene	4.0	U
127-18-4	Tetrachloroethene	2.1	J
108-90-7	Chlorobenzene	4.0	U
100-41-4	Ethylbenzene	4.0	U
1330-20-7	m,p-Xylene	4.0	U
95-47-6	o-Xylene	4.0	U
1330-20-7	Xylene (Total)	4.0	U
103-65-1	n-Propylbenzene	11	
108-67-8	1,3,5-Trimethylbenzene	20	
98-06-6	tert-Butylbenzene	6.3	
95-63-6	1,2,4-Trimethylbenzene	22	
135-98-8	sec-Butylbenzene	26	
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
104-51-8	n-Butylbenzene	17	
95-50-1	1,2-Dichlorobenzene	4.0	U
123-91-1	1,4-Dioxane	80	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BACKFILL-COARSE

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-10B
Sample wt/vol: 7.40 (g/mL) G Lab File ID: V6H6984.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 10 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	3.8	U
75-35-4	1,1-Dichloroethene	3.8	U
67-64-1	Acetone	26	
75-09-2	Methylene chloride	3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	U
1634-04-4	Methyl tert-butyl ether	3.8	U
75-34-3	1,1-Dichloroethane	3.8	U
78-93-3	2-Butanone	3.8	U
156-59-2	cis-1,2-Dichloroethene	3.8	U
67-66-3	Chloroform	3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	U
56-23-5	Carbon tetrachloride	3.8	U
107-06-2	1,2-Dichloroethane	3.8	U
71-43-2	Benzene	3.8	U
79-01-6	Trichloroethene	3.8	U
108-88-3	Toluene	3.8	U
127-18-4	Tetrachloroethene	3.8	U
108-90-7	Chlorobenzene	3.8	U
100-41-4	Ethylbenzene	3.8	U
1330-20-7	m,p-Xylene	3.8	U
95-47-6	o-Xylene	3.8	U
1330-20-7	Xylene (Total)	3.8	U
103-65-1	n-Propylbenzene	3.8	U
108-67-8	1,3,5-Trimethylbenzene	3.8	U
98-06-6	tert-Butylbenzene	3.8	U
95-63-6	1,2,4-Trimethylbenzene	3.8	U
135-98-8	sec-Butylbenzene	3.8	U
541-73-1	1,3-Dichlorobenzene	3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	U
104-51-8	n-Butylbenzene	3.8	U
95-50-1	1,2-Dichlorobenzene	3.8	U
123-91-1	1,4-Dioxane	75	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STOCK-PILE-B-PAR
T-375

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-12B
Sample wt/vol: 6.50 (g/mL) G Lab File ID: V6H6983.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 7.0 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	4.1	U
75-35-4	1,1-Dichloroethene	4.1	U
67-64-1	Acetone	4.1	U
75-09-2	Methylene chloride	4.1	U
156-60-5	trans-1,2-Dichloroethene	4.1	U
1634-04-4	Methyl tert-butyl ether	4.1	U
75-34-3	1,1-Dichloroethane	4.1	U
78-93-3	2-Butanone	4.1	U
156-59-2	cis-1,2-Dichloroethene	4.1	U
67-66-3	Chloroform	4.1	U
71-55-6	1,1,1-Trichloroethane	4.1	U
56-23-5	Carbon tetrachloride	4.1	U
107-06-2	1,2-Dichloroethane	4.1	U
71-43-2	Benzene	4.1	U
79-01-6	Trichloroethene	4.1	U
108-88-3	Toluene	4.1	U
127-18-4	Tetrachloroethene	4.1	U
108-90-7	Chlorobenzene	4.1	U
100-41-4	Ethylbenzene	4.1	U
1330-20-7	m,p-Xylene	4.1	U
95-47-6	o-Xylene	4.1	U
1330-20-7	Xylene (Total)	4.1	U
103-65-1	n-Propylbenzene	4.1	U
108-67-8	1,3,5-Trimethylbenzene	4.1	U
98-06-6	tert-Butylbenzene	4.1	U
95-63-6	1,2,4-Trimethylbenzene	4.1	U
135-98-8	sec-Butylbenzene	4.1	U
541-73-1	1,3-Dichlorobenzene	4.1	U
106-46-7	1,4-Dichlorobenzene	4.1	U
104-51-8	n-Butylbenzene	4.1	U
95-50-1	1,2-Dichlorobenzene	4.1	U
123-91-1	1,4-Dioxane	83	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13C
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H7121.D
Level: (TRACE/LOW/MED) MED Date Received: 10/13/2010
% Moisture: not dec. 27 Date Analyzed: 10/26/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION: µG/KG	Q	MDL	PQL
75-71-8	Dichlorodifluoromethane	330	U	41	330
74-87-3	Chloromethane	330	U	41	330
75-01-4	Vinyl chloride	330	U	39	330
74-83-9	Bromomethane	330	U	100	330
75-00-3	Chloroethane	330	U	120	330
75-69-4	Trichlorofluoromethane	330	U	56	330
75-35-4	1,1-Dichloroethene	330	U	33	330
67-64-1	Acetone	330	U	120	330
74-88-4	Iodomethane	330	U	20	330
75-15-0	Carbon disulfide	330	U	25	330
75-09-2	Methylene chloride	330	U	39	330
156-60-5	trans-1,2-Dichloroethene	330	U	26	330
1634-04-4	Methyl tert-butyl ether	330	U	39	330
75-34-3	1,1-Dichloroethane	330	U	25	330
108-05-4	Vinyl acetate	330	U	38	330
78-93-3	2-Butanone	330	U	64	330
156-59-2	cis-1,2-Dichloroethene	330	U	35	330
594-20-7	2,2-Dichloropropane	330	U	37	330
74-97-5	Bromochloromethane	330	U	35	330
67-66-3	Chloroform	330	U	29	330
71-55-6	1,1,1-Trichloroethane	330	U	30	330
563-58-6	1,1-Dichloropropene	330	U	33	330
56-23-5	Carbon tetrachloride	330	U	33	330
107-06-2	1,2-Dichloroethane	330	U	33	330
71-43-2	Benzene	330	U	26	330
79-01-6	Trichloroethene	330	U	18	330
78-87-5	1,2-Dichloropropane	330	U	33	330
74-95-3	Dibromomethane	330	U	38	330
75-27-4	Bromodichloromethane	330	U	22	330
10061-01-5	cis-1,3-Dichloropropene	330	U	38	330
108-10-1	4-Methyl-2-pentanone	330	U	27	330
108-88-3	Toluene	330	U	20	330
10061-02-6	trans-1,3-Dichloropropene	330	U	35	330
79-00-5	1,1,2-Trichloroethane	330	U	30	330
142-28-9	1,3-Dichloropropane	330	U	24	330

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13C
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H7121.D
Level: (TRACE/LOW/MED) MED Date Received: 10/13/2010
% Moisture: not dec. 27 Date Analyzed: 10/26/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION: µG/KG	Q	MDL	PQL
127-18-4	Tetrachloroethene	330	U	33	330
591-78-6	2-Hexanone	330	U	30	330
124-48-1	Dibromochloromethane	330	U	22	330
106-93-4	1,2-Dibromoethane	330	U	30	330
108-90-7	Chlorobenzene	330	U	20	330
630-20-6	1,1,1,2-Tetrachloroethane	330	U	27	330
100-41-4	Ethylbenzene	330	U	29	330
1330-20-7	m,p-Xylene	330	U	37	330
95-47-6	o-Xylene	330	U	17	330
1330-20-7	Xylene (Total)	330	U	17	330
100-42-5	Styrene	330	U	24	330
75-25-2	Bromoform	330	U	31	330
98-82-8	Isopropylbenzene	1400		26	330
79-34-5	1,1,2,2-Tetrachloroethane	330	U	26	330
108-86-1	Bromobenzene	330	U	24	330
96-18-4	1,2,3-Trichloropropane	330	U	39	330
103-65-1	n-Propylbenzene	4200		21	330
95-49-8	2-Chlorotoluene	330	U	26	330
108-67-8	1,3,5-Trimethylbenzene	160	J	31	330
106-43-4	4-Chlorotoluene	330	U	13	330
98-06-6	tert-Butylbenzene	790		20	330
95-63-6	1,2,4-Trimethylbenzene	330	U	22	330
135-98-8	sec-Butylbenzene	5200		18	330
99-87-6	4-Isopropyltoluene	330	U	18	330
541-73-1	1,3-Dichlorobenzene	330	U	25	330
106-46-7	1,4-Dichlorobenzene	330	U	26	330
104-51-8	n-Butylbenzene	6100		25	330
95-50-1	1,2-Dichlorobenzene	330	U	30	330
96-12-8	1,2-Dibromo-3-chloropropane	330	U	54	330
120-82-1	1,2,4-Trichlorobenzene	490		48	330
87-68-3	Hexachlorobutadiene	330	U	44	330
87-61-6	1,2,3-Trichlorobenzene	390		64	330
91-20-3	Naphthalene	1100		47	330
76-13-1	1,1,2-Trichloro-1,2,2-trifluo	330	U	38	330
123-91-1	1,4-Dioxane	6500	U R	2200	6500

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13C
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H7121.D
Level: (TRACE/LOW/MED) MED Date Received: 10/13/2010
% Moisture: not dec. 27 Date Analyzed: 10/26/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION: µG/KG	Q	MDL	PQL
110-75-8	2-Chloroethyl vinyl ether	330	U	34	330
107-02-8	Acrolein	1600	U R	780	1600
107-13-1	Acrylonitrile	330	U	47	330
110-82-7	Cyclohexane	330	U	33	330
79-20-9	Methyl acetate	240	J	63	330
108-87-2	Methylcyclohexane	330	U	41	330
75-65-0	tert-Butyl Alcohol	650	U	140	650

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13C
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H7121.D
Level: (TRACE or LOW/MED) MED Date Received: 10/13/2010
% Moisture: not dec. 27 Date Analyzed: 10/26/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	6236-88-0	Cyclohexane, 1-ethyl-4-methy	11.042	34000	NJ
02	2051-30-1	Octane, 2,6-dimethyl-	11.291	25000	NJ
03	1678-92-8	Cyclohexane, propyl-	11.437	41000	NJ
04		Unknown-01	11.656	27000	J
05		Unknown-02	11.991	4400	J
06		Unknown-03	12.277	3100	J
07		Unknown-04	12.356	2300	J
08		Unknown-05	12.575	2800	J
09		Unknown-06	12.781	2300	J
10		Unknown-07	12.934	2800	J
11	1678-93-9	Cyclohexane, butyl-	13.037	2800	NJ
12	493-02-7	Naphthalene, decahydro-, tra	13.585	2500	NJ
	E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
STOCK-PILE-A-PAR
T-375

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-14B
Sample wt/vol: 8.50 (g/mL) G Lab File ID: V6H6999.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 22 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
75-01-4	Vinyl chloride	3.8	U
75-35-4	1,1-Dichloroethene	3.8	U
67-64-1	Acetone	16	J
75-09-2	Methylene chloride	3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	U
1634-04-4	Methyl tert-butyl ether	3.8	U
75-34-3	1,1-Dichloroethane	3.8	U
78-93-3	2-Butanone	3.8	U
156-59-2	cis-1,2-Dichloroethene	3.8	U
67-66-3	Chloroform	3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	U
56-23-5	Carbon tetrachloride	3.8	U
107-06-2	1,2-Dichloroethane	3.8	U
71-43-2	Benzene	3.8	U
79-01-6	Trichloroethene	3.8	U
108-88-3	Toluene	3.8	U
127-18-4	Tetrachloroethene	1.0	J J
108-90-7	Chlorobenzene	3.8	U
100-41-4	Ethylbenzene	5.7	J
1330-20-7	m,p-Xylene	3.8	U
95-47-6	o-Xylene	1.0	J J
1330-20-7	Xylene (Total)	2.2	J J
103-65-1	n-Propylbenzene	480	E J
108-67-8	1,3,5-Trimethylbenzene	3.8	U
98-06-6	tert-Butylbenzene	84	J
95-63-6	1,2,4-Trimethylbenzene	14	J
135-98-8	sec-Butylbenzene	290	E J
541-73-1	1,3-Dichlorobenzene	3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	U
104-51-8	n-Butylbenzene	190	E J
95-50-1	1,2-Dichlorobenzene	3.8	U
123-91-1	1,4-Dioxane	75	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
STOCK-FILE-A-PAR
T-375ME

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-14C
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V1L7400.D
Level: (TRACE/LOW/MED) MED Date Received: 10/13/2010
% Moisture: not dec. 22 Date Analyzed: 10/19/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
75-01-4	Vinyl chloride	580	U
75-35-4	1,1-Dichloroethene	580	U
67-64-1	Acetone	580	U
75-09-2	Methylene chloride	580	U
156-60-5	trans-1,2-Dichloroethene	580	U
1634-04-4	Methyl tert-butyl ether	580	U
75-34-3	1,1-Dichloroethane	580	U
78-93-3	2-Butanone	580	U
156-59-2	cis-1,2-Dichloroethene	580	U
67-66-3	Chloroform	580	U
71-55-6	1,1,1-Trichloroethane	580	U
56-23-5	Carbon tetrachloride	580	U
107-06-2	1,2-Dichloroethane	580	U
71-43-2	Benzene	580	U
79-01-6	Trichloroethene	580	U
108-88-3	Toluene	580	U
127-18-4	Tetrachloroethene	580	U
108-90-7	Chlorobenzene	580	U
100-41-4	Ethylbenzene	250	J J
1330-20-7	m,p-Xylene	580	U
95-47-6	o-Xylene	580	U
1330-20-7	Xylene (Total)	580	U
103-65-1	n-Propylbenzene	4700	J
108-67-8	1,3,5-Trimethylbenzene	580	U
98-06-6	tert-Butylbenzene	1200	J
95-63-6	1,2,4-Trimethylbenzene	580	U
135-98-8	sec-Butylbenzene	10000	J
541-73-1	1,3-Dichlorobenzene	580	U
106-46-7	1,4-Dichlorobenzene	580	U
104-51-8	n-Butylbenzene	13000	J
95-50-1	1,2-Dichlorobenzene	580	U
123-91-1	1,4-Dioxane	12000	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

W-8"-PVC-PIPE-IN
T-DIS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-15B
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H7000.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 11 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	3.8	U
75-35-4	1,1-Dichloroethene	3.8	U
67-64-1	Acetone	5.8	
75-09-2	Methylene chloride	3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	U
1634-04-4	Methyl tert-butyl ether	3.8	U
75-34-3	1,1-Dichloroethane	3.8	U
78-93-3	2-Butanone	3.8	U
156-59-2	cis-1,2-Dichloroethene	3.8	U
67-66-3	Chloroform	3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	U
56-23-5	Carbon tetrachloride	3.8	U
107-06-2	1,2-Dichloroethane	3.8	U
71-43-2	Benzene	3.8	U
79-01-6	Trichloroethene	3.8	U
108-88-3	Toluene	3.8	U
127-18-4	Tetrachloroethene	3.8	U
108-90-7	Chlorobenzene	3.8	U
100-41-4	Ethylbenzene	3.8	U
1330-20-7	m,p-Xylene	3.8	U
95-47-6	o-Xylene	3.8	U
1330-20-7	Xylene (Total)	0.78	J
103-65-1	n-Propylbenzene	1.1	J
108-67-8	1,3,5-Trimethylbenzene	3.8	U
98-06-6	tert-Butylbenzene	3.8	U
95-63-6	1,2,4-Trimethylbenzene	3.8	U
135-98-8	sec-Butylbenzene	0.94	J
541-73-1	1,3-Dichlorobenzene	3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	U
104-51-8	n-Butylbenzene	1.3	J
95-50-1	1,2-Dichlorobenzene	3.8	U
123-91-1	1,4-Dioxane	77	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

W-SEWER-PIPE-SUM
P-PIT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-16B
Sample wt/vol: 8.30 (g/mL) G Lab File ID: V6H7001.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 19 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	3.7	U
75-35-4	1,1-Dichloroethene	3.7	U
67-64-1	Acetone	1.9	J
75-09-2	Methylene chloride	3.7	U
156-60-5	trans-1,2-Dichloroethene	3.7	U
1634-04-4	Methyl tert-butyl ether	3.7	U
75-34-3	1,1-Dichloroethane	3.7	U
78-93-3	2-Butanone	3.7	U
156-59-2	cis-1,2-Dichloroethene	3.7	U
67-66-3	Chloroform	3.7	U
71-55-6	1,1,1-Trichloroethane	3.7	U
56-23-5	Carbon tetrachloride	3.7	U
107-06-2	1,2-Dichloroethane	3.7	U
71-43-2	Benzene	3.7	U
79-01-6	Trichloroethene	3.7	U
108-88-3	Toluene	3.7	U
127-18-4	Tetrachloroethene	3.7	U
108-90-7	Chlorobenzene	3.7	U
100-41-4	Ethylbenzene	3.7	U
1330-20-7	m,p-Xylene	3.7	U
95-47-6	o-Xylene	3.7	U
1330-20-7	Xylene (Total)	3.7	U
103-65-1	n-Propylbenzene	3.7	U
108-67-8	1,3,5-Trimethylbenzene	3.7	U
98-06-6	tert-Butylbenzene	3.7	U
95-63-6	1,2,4-Trimethylbenzene	3.7	U
135-98-8	sec-Butylbenzene	3.7	U
541-73-1	1,3-Dichlorobenzene	3.7	U
106-46-7	1,4-Dichlorobenzene	3.7	U
104-51-8	n-Butylbenzene	3.7	U
95-50-1	1,2-Dichlorobenzene	3.7	U
123-91-1	1,4-Dioxane	74	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NW-4"-CLAY-PIPE-
SET-TANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-18B
Sample wt/vol: 6.40 (g/mL) G Lab File ID: V6H7002.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 12 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
75-01-4	Vinyl chloride	4.4	U
75-35-4	1,1-Dichloroethene	4.4	U
67-64-1	Acetone	3.0	J
75-09-2	Methylene chloride	4.4	U
156-60-5	trans-1,2-Dichloroethene	4.4	U
1634-04-4	Methyl tert-butyl ether	4.4	U
75-34-3	1,1-Dichloroethane	4.4	U
78-93-3	2-Butanone	4.4	U
156-59-2	cis-1,2-Dichloroethene	4.4	U
67-66-3	Chloroform	4.4	U
71-55-6	1,1,1-Trichloroethane	4.4	U
56-23-5	Carbon tetrachloride	4.4	U
107-06-2	1,2-Dichloroethane	4.4	U
71-43-2	Benzene	4.4	U
79-01-6	Trichloroethene	4.4	U
108-88-3	Toluene	4.4	U
127-18-4	Tetrachloroethene	1.8	J
108-90-7	Chlorobenzene	4.4	U
100-41-4	Ethylbenzene	4.4	U
1330-20-7	m,p-Xylene	4.4	U
95-47-6	o-Xylene	4.4	U
1330-20-7	Xylene (Total)	4.4	U
103-65-1	n-Propylbenzene	4.4	U
108-67-8	1,3,5-Trimethylbenzene	4.4	U
98-06-6	tert-Butylbenzene	4.4	U
95-63-6	1,2,4-Trimethylbenzene	4.4	U
135-98-8	sec-Butylbenzene	4.4	U
541-73-1	1,3-Dichlorobenzene	4.4	U
106-46-7	1,4-Dichlorobenzene	4.4	U
104-51-8	n-Butylbenzene	4.4	U
95-50-1	1,2-Dichlorobenzene	4.4	U
123-91-1	1,4-Dioxane	89	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
INT-DIS-S-WALL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-19B
Sample wt/vol: 6.50 (g/mL) G Lab File ID: V6H7003.D
Level: (TRACE/LOW/MED) LOW Date Received: 10/13/2010
% Moisture: not dec. 6.0 Date Analyzed: 10/15/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	4.1	U
75-35-4	1,1-Dichloroethene	4.1	U
67-64-1	Acetone	4.1	U
75-09-2	Methylene chloride	4.1	U
156-60-5	trans-1,2-Dichloroethene	4.1	U
1634-04-4	Methyl tert-butyl ether	4.1	U
75-34-3	1,1-Dichloroethane	4.1	U
78-93-3	2-Butanone	4.1	U
156-59-2	cis-1,2-Dichloroethene	4.1	U
67-66-3	Chloroform	4.1	U
71-55-6	1,1,1-Trichloroethane	4.1	U
56-23-5	Carbon tetrachloride	4.1	U
107-06-2	1,2-Dichloroethane	4.1	U
71-43-2	Benzene	4.1	U
79-01-6	Trichloroethene	4.1	U
108-88-3	Toluene	4.1	U
127-18-4	Tetrachloroethene	4.1	U
108-90-7	Chlorobenzene	4.1	U
100-41-4	Ethylbenzene	4.1	U
1330-20-7	m,p-Xylene	4.1	U
95-47-6	o-Xylene	4.1	U
1330-20-7	Xylene (Total)	4.1	U
103-65-1	n-Propylbenzene	4.1	U
108-67-8	1,3,5-Trimethylbenzene	4.1	U
98-06-6	tert-Butylbenzene	4.1	U
95-63-6	1,2,4-Trimethylbenzene	4.1	U
135-98-8	sec-Butylbenzene	4.1	U
541-73-1	1,3-Dichlorobenzene	4.1	U
106-46-7	1,4-Dichlorobenzene	4.1	U
104-51-8	n-Butylbenzene	4.1	U
95-50-1	1,2-Dichlorobenzene	4.1	U
123-91-1	1,4-Dioxane	82	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INT-DIS-E-WALL

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J2003

Mod. Ref No.: SDG No.: SJ2003

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: J2003-20B

Sample wt/vol: 6.90 (g/mL) G

Lab File ID: V6H7004.D

Level: (TRACE/LOW/MED) LOW

Date Received: 10/13/2010

% Moisture: not dec. 8.0

Date Analyzed: 10/15/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-01-4	Vinyl chloride	3.9	U
75-35-4	1,1-Dichloroethene	3.9	U
67-64-1	Acetone	3.9	U
75-09-2	Methylene chloride	3.9	U
156-60-5	trans-1,2-Dichloroethene	3.9	U
1634-04-4	Methyl tert-butyl ether	3.9	U
75-34-3	1,1-Dichloroethane	3.9	U
78-93-3	2-Butanone	3.9	U
156-59-2	cis-1,2-Dichloroethene	3.9	U
67-66-3	Chloroform	3.9	U
71-55-6	1,1,1-Trichloroethane	3.9	U
56-23-5	Carbon tetrachloride	3.9	U
107-06-2	1,2-Dichloroethane	3.9	U
71-43-2	Benzene	3.9	U
79-01-6	Trichloroethene	3.9	U
108-88-3	Toluene	3.9	U
127-18-4	Tetrachloroethene	3.9	U
108-90-7	Chlorobenzene	3.9	U
100-41-4	Ethylbenzene	3.9	U
1330-20-7	m,p-Xylene	3.9	U
95-47-6	o-Xylene	3.9	U
1330-20-7	Xylene (Total)	3.9	U
103-65-1	n-Propylbenzene	3.9	U
108-67-8	1,3,5-Trimethylbenzene	3.9	U
98-06-6	tert-Butylbenzene	3.9	U
95-63-6	1,2,4-Trimethylbenzene	3.9	U
135-98-8	sec-Butylbenzene	3.9	U
541-73-1	1,3-Dichlorobenzene	3.9	U
106-46-7	1,4-Dichlorobenzene	3.9	U
104-51-8	n-Butylbenzene	3.9	U
95-50-1	1,2-Dichlorobenzene	3.9	U
123-91-1	1,4-Dioxane	79	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INT-DIS-W-WALL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-01A
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3G9398.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 6.0 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
95-48-7	2-Methylphenol	350	U
106-44-5	4-Methylphenol	350	U
91-20-3	Naphthalene	350	U
208-96-8	Acenaphthylene	350	U
83-32-9	Acenaphthene	350	U
132-64-9	Dibenzofuran	350	U
86-73-7	Fluorene	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	700	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
56-55-3	Benzo (a) anthracene	350	U
218-01-9	Chrysene	350	U
205-99-2	Benzo (b) fluoranthene	350	U
207-08-9	Benzo (k) fluoranthene	350	U
50-32-8	Benzo (a) pyrene	350	U
193-39-5	Indeno (1,2,3-cd) pyrene	350	U
53-70-3	Dibenzo (a,h) anthracene	350	U
191-24-2	Benzo (g,h,i) perylene	350	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INT-DIS-BOT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-02A
Sample wt/vol: 30.2 (g/mL) G Lab File ID: S3G9399.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 10 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
95-48-7	2-Methylphenol	360	U
106-44-5	4-Methylphenol	360	U
91-20-3	Naphthalene	360	U
208-96-8	Acenaphthylene	360	U
83-32-9	Acenaphthene	360	U
132-64-9	Dibenzofuran	360	U
86-73-7	Fluorene	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	740	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E-4"-IRON-PIPE-I
NT-DIS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-03A
Sample wt/vol: 30.2 (g/mL) G Lab File ID: S3G9400.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 15 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
108-95-2	Phenol	390	U
95-48-7	2-Methylphenol	390	U
106-44-5	4-Methylphenol	390	U
91-20-3	Naphthalene	390	U
208-96-8	Acenaphthylene	390	U
83-32-9	Acenaphthene	390	U
132-64-9	Dibenzofuran	390	U
86-73-7	Fluorene	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	780	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
206-44-0	Fluoranthene	68	J
129-00-0	Pyrene	67	J
56-55-3	Benzo(a)anthracene	44	J
218-01-9	Chrysene	63	J
205-99-2	Benzo(b)fluoranthene	96	J
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	55	J
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SUMP-PIT-BOT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-04A
Sample wt/vol: 30.2 (g/mL) G Lab File ID: S3G9401.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 17 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
108-95-2	Phenol	390	U
95-48-7	2-Methylphenol	390	U
106-44-5	4-Methylphenol	390	U
91-20-3	Naphthalene	390	U
208-96-8	Acenaphthylene	390	U
83-32-9	Acenaphthene	390	U
132-64-9	Dibenzofuran	390	U
86-73-7	Fluorene	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	110	J
120-12-7	Anthracene	390	U
206-44-0	Fluoranthene	360	J
129-00-0	Pyrene	330	J
56-55-3	Benzo(a)anthracene	210	J
218-01-9	Chrysene	240	J
205-99-2	Benzo(b)fluoranthene	320	J
207-08-9	Benzo(k)fluoranthene	130	J
50-32-8	Benzo(a)pyrene	180	J
193-39-5	Indeno(1,2,3-cd)pyrene	100	J
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	110	J

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
INT-DIS-N WALL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-05A
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3G9402.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 5.0 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
95-48-7	2-Methylphenol	340	U
106-44-5	4-Methylphenol	340	U
91-20-3	Naphthalene	340	U
208-96-8	Acenaphthylene	340	U
83-32-9	Acenaphthene	340	U
132-64-9	Dibenzofuran	340	U
86-73-7	Fluorene	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUPLICATE

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-06A
Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3G9403.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 5.0 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
95-48-7	2-Methylphenol	350	U
106-44-5	4-Methylphenol	350	U
91-20-3	Naphthalene	350	U
208-96-8	Acenaphthylene	350	U
83-32-9	Acenaphthene	350	U
132-64-9	Dibenzofuran	350	U
86-73-7	Fluorene	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	710	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-4"-IRON-PIPE-
INT-DIS-SLUDGE

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-07A
Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3G9404.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 39 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 10000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	5400	U
95-48-7	2-Methylphenol	5400	U
106-44-5	4-Methylphenol	5400	U
91-20-3	Naphthalene	2500	J
208-96-8	Acenaphthylene	5400	U
83-32-9	Acenaphthene	5400	U
132-64-9	Dibenzofuran	5400	U
86-73-7	Fluorene	5400	U
118-74-1	Hexachlorobenzene	5400	U
87-86-5	Pentachlorophenol	11000	U
85-01-8	Phenanthrene	5400	U
120-12-7	Anthracene	5400	U
206-44-0	Fluoranthene	5400	U
129-00-0	Pyrene	5400	U
56-55-3	Benzo(a)anthracene	5400	U
218-01-9	Chrysene	5400	U
205-99-2	Benzo(b)fluoranthene	5400	U
207-08-9	Benzo(k)fluoranthene	5400	U
50-32-8	Benzo(a)pyrene	5400	U
193-39-5	Indeno(1,2,3-cd)pyrene	5400	U
53-70-3	Dibenzo(a,h)anthracene	5400	U
191-24-2	Benzo(g,h,i)perylene	5400	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-4"-IRON-PIPE-
INT-DIS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-08A
Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3G9405.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 17 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 5000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	U
95-48-7	2-Methylphenol	2000	U
106-44-5	4-Methylphenol	2000	U
91-20-3	Naphthalene	2000	U
208-96-8	Acenaphthylene	2000	U
83-32-9	Acenaphthene	2000	U
132-64-9	Dibenzofuran	2000	U
86-73-7	Fluorene	2000	U
118-74-1	Hexachlorobenzene	2000	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	2000	U
120-12-7	Anthracene	2000	U
206-44-0	Fluoranthene	680	J
129-00-0	Pyrene	700	J
56-55-3	Benzo(a)anthracene	550	J
218-01-9	Chrysene	640	J
205-99-2	Benzo(b)fluoranthene	930	J
207-08-9	Benzo(k)fluoranthene	480	J
50-32-8	Benzo(a)pyrene	630	J
193-39-5	Indeno(1,2,3-cd)pyrene	380	J
53-70-3	Dibenzo(a,h)anthracene	2000	U
191-24-2	Benzo(g,h,i)perylene	410	J

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N-SEWER-PIPE-SUM
P-PIT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-09A
Sample wt/vol: 30.4 (g/mL) G Lab File ID: S3G9406.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 14 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 5000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1900	U
95-48-7	2-Methylphenol	1900	U
106-44-5	4-Methylphenol	1900	U
91-20-3	Naphthalene	1900	U
208-96-8	Acenaphthylene	1900	U
83-32-9	Acenaphthene	1900	U
132-64-9	Dibenzofuran	1900	U
86-73-7	Fluorene	1900	U
118-74-1	Hexachlorobenzene	1900	U
87-86-5	Pentachlorophenol	3800	U
85-01-8	Phenanthrene	1900	U
120-12-7	Anthracene	1900	U
206-44-0	Fluoranthene	470	J
129-00-0	Pyrene	500	J
56-55-3	Benzo (a) anthracene	370	J
218-01-9	Chrysene	440	J
205-99-2	Benzo (b) fluoranthene	760	J
207-08-9	Benzo (k) fluoranthene	440	J
50-32-8	Benzo (a) pyrene	410	J
193-39-5	Indeno (1,2,3-cd) pyrene	240	J
53-70-3	Dibenzo (a,h) anthracene	1900	U
191-24-2	Benzo (g,h,i) perylene	260	J

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BACKFILL-COARSE

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-10A
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3G9407.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 10 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
95-48-7	2-Methylphenol	360	U
106-44-5	4-Methylphenol	360	U
91-20-3	Naphthalene	260	J
208-96-8	Acenaphthylene	460	
83-32-9	Acenaphthene	450	
132-64-9	Dibenzofuran	340	J
86-73-7	Fluorene	730	
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	730	U
85-01-8	Phenanthrene	2800	
120-12-7	Anthracene	1200	
206-44-0	Fluoranthene	2800	
129-00-0	Pyrene	3100	
56-55-3	Benzo(a)anthracene	1800	
218-01-9	Chrysene	1800	
205-99-2	Benzo(b)fluoranthene	2000	
207-08-9	Benzo(k)fluoranthene	1100	
50-32-8	Benzo(a)pyrene	1600	
193-39-5	Indeno(1,2,3-cd)pyrene	880	
53-70-3	Dibenzo(a,h)anthracene	400	
191-24-2	Benzo(g,h,i)perylene	960	

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STOCK-PILE-B-PAR
T-375

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-12A
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3G9408.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 7.0 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
95-48-7	2-Methylphenol	350	U
106-44-5	4-Methylphenol	350	U
91-20-3	Naphthalene	350	U
208-96-8	Acenaphthylene	350	U
83-32-9	Acenaphthene	350	U
132-64-9	Dibenzofuran	350	U
86-73-7	Fluorene	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	710	U
85-01-8	Phenanthrene	120	J
120-12-7	Anthracene	49	J
206-44-0	Fluoranthene	200	J
129-00-0	Pyrene	190	J
56-55-3	Benzo(a)anthracene	100	J
218-01-9	Chrysene	94	J
205-99-2	Benzo(b)fluoranthene	130	J
207-08-9	Benzo(k)fluoranthene	58	J
50-32-8	Benzo(a)pyrene	96	J
193-39-5	Indeno(1,2,3-cd)pyrene	50	J
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	56	J

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13A
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S3G9755.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 27 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/26/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/29/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	450	U
111-44-4	Bis(2-chloroethyl)ether	450	U
95-57-8	2-Chlorophenol	450	U
95-48-7	2-Methylphenol	450	U
108-60-1	2,2'-oxybis(1-Chloropropane)	450	U
106-44-5	4-Methylphenol	450	U
621-64-7	N-Nitroso-di-n-propylamine	450	U
67-72-1	Hexachloroethane	450	U
98-95-3	Nitrobenzene	450	U
78-59-1	Isophorone	450	U
88-75-5	2-Nitrophenol	450	U
105-67-9	2,4-Dimethylphenol	450	U
120-83-2	2,4-Dichlorophenol	450	U
120-82-1	1,2,4-Trichlorobenzene	450	U
91-20-3	Naphthalene	1100	
106-47-8	4-Chloroaniline	450	U
111-91-1	Bis(2-chloroethoxy)methane	450	U
87-68-3	Hexachlorobutadiene	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-57-6	2-Methylnaphthalene	90	J
77-47-4	Hexachlorocyclopentadiene	450	U
88-06-2	2,4,6-Trichlorophenol	450	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	450	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	450	U
208-96-8	Acenaphthylene	450	U
606-20-2	2,6-Dinitrotoluene	450	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	450	U
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	450	U
121-14-2	2,4-Dinitrotoluene	450	U
84-66-2	Diethylphthalate	450	U
7005-72-3	4-Chlorophenyl-phenylether	450	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13A
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S3G9755.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 27 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/26/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/29/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
86-73-7	Fluorene	450	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine	450	U
101-55-3	4-Bromophenyl-phenylether	450	U
118-74-1	Hexachlorobenzene	450	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	450	U
120-12-7	Anthracene	450	U
86-74-8	Carbazole	450	U
84-74-2	Di-n-butylphthalate	450	U
206-44-0	Fluoranthene	450	U
129-00-0	Pyrene	450	U
85-68-7	Butylbenzylphthalate	450	U
91-94-1	3,3'-Dichlorobenzidine	450	U
56-55-3	Benzo(a)anthracene	450	U
218-01-9	Chrysene	450	U
117-81-7	Bis(2-ethylhexyl)phthalate	450	U
117-84-0	Di-n-octylphthalate	450	U
205-99-2	Benzo(b)fluoranthene	450	U
207-08-9	Benzo(k)fluoranthene	450	U
50-32-8	Benzo(a)pyrene	450	U
193-39-5	Indeno(1,2,3-cd)pyrene	450	U
53-70-3	Dibenzo(a,h)anthracene	450	U
191-24-2	Benzo(g,h,i)perylene	450	U
92-52-4	1,1'-Biphenyl	450	U
123-91-1	1,4-Dioxane	450	U
98-86-2	Acetophenone	450	U
62-53-3	Aniline	450	U
1912-24-9	Atrazine	450	U
103-33-3	Azobenzene	450	U
100-52-7	Benzaldehyde	450	U
92-87-5	Benzidine	450	U
65-85-0	Benzoic acid	910	U
100-51-6	Benzyl alcohol	450	U
105-60-2	Caprolactam	450	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13A
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S3G9755.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 27 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/26/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/29/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
62-75-9	N-Nitrosodimethylamine	450	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

STOCK-PILE-A-DIS
POSAL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-13C
Sample wt/vol: 7.30 (g/mL) G Lab File ID: V6H7121.D
Level: (TRACE or LOW/MED) MED Date Received: 10/13/2010
% Moisture: not dec. 27 Date Analyzed: 10/26/2010
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5236-88-0	Cyclohexane, 1-ethyl-4-methy	11.042	34000	NJ
02	2051-30-1	Octane, 2,6-dimethyl-	11.291	25000	NJ
03	1678-92-8	Cyclohexane, propyl-	11.437	41000	NJ
04		Unknown-01	11.656	27000	J
05		Unknown-02	11.991	4400	J
06		Unknown-03	12.277	3100	J
07		Unknown-04	12.356	2300	J
08		Unknown-05	12.575	2800	J
09		Unknown-06	12.781	2300	J
10		Unknown-07	12.934	2800	J
11	1678-93-9	Cyclohexane, butyl-	13.037	2800	NJ
12	493-02-7	Naphthalene, decahydro-, tra	13.585	2500	NJ
	E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STOCK-PILE-A-PAR
T-375

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-14A
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3G9409.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 22 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	420	U
95-48-7	2-Methylphenol	420	U
106-44-5	4-Methylphenol	420	U
91-20-3	Naphthalene	750	
208-96-8	Acenaphthylene	420	U
83-32-9	Acenaphthene	420	U
132-64-9	Dibenzofuran	420	U
86-73-7	Fluorene	420	U
118-74-1	Hexachlorobenzene	420	U
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-8"-PVC-PIPE-IN
T-DIS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-15A
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S3G9410.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 11 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
95-48-7	2-Methylphenol	370	U
106-44-5	4-Methylphenol	370	U
91-20-3	Naphthalene	370	U
208-96-8	Acenaphthylene	370	U
83-32-9	Acenaphthene	370	U
132-64-9	Dibenzofuran	370	U
86-73-7	Fluorene	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	750	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-SEWER-PIPE-SUM
P-PIT

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-16A
Sample wt/vol: 30.4 (g/mL) G Lab File ID: S3G9411.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 19 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
95-48-7	2-Methylphenol	400	U
106-44-5	4-Methylphenol	400	U
91-20-3	Naphthalene	400	U
208-96-8	Acenaphthylene	400	U
83-32-9	Acenaphthene	400	U
132-64-9	Dibenzofuran	400	U
86-73-7	Fluorene	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	820	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-SEWER-PIPE-SUM
P-PIT-SLUDGE

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-17A
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S3G9412.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 54 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 5000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/19/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3600	U
95-48-7	2-Methylphenol	3600	U
106-44-5	4-Methylphenol	3600	U
91-20-3	Naphthalene	3600	U
208-96-8	Acenaphthylene	3600	U
83-32-9	Acenaphthene	450	J
132-64-9	Dibenzofuran	3600	U
86-73-7	Fluorene	3600	U
118-74-1	Hexachlorobenzene	3600	U
87-86-5	Pentachlorophenol	7300	U
85-01-8	Phenanthrene	930	J
120-12-7	Anthracene	3600	U
206-44-0	Fluoranthene	760	J
129-00-0	Pyrene	1300	J
56-55-3	Benzo(a)anthracene	3600	U
218-01-9	Chrysene	700	J
205-99-2	Benzo(b)fluoranthene	480	J
207-08-9	Benzo(k)fluoranthene	3600	U
50-32-8	Benzo(a)pyrene	3600	U
193-39-5	Indeno(1,2,3-cd)pyrene	3600	U
53-70-3	Dibenzo(a,h)anthracene	3600	U
191-24-2	Benzo(g,h,i)perylene	3600	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NW-4"-CLAY-PIPE-
SET-TANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-18A
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3G9433.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 12 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/20/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol	370	U	U
95-48-7	2-Methylphenol	370	U	U
106-44-5	4-Methylphenol	370	U	U
91-20-3	Naphthalene	370	U	U
208-96-8	Acenaphthylene	370	U	U
83-32-9	Acenaphthene	370	U	U
132-64-9	Dibenzofuran	370	U	U
86-73-7	Fluorene	370	U	U
118-74-1	Hexachlorobenzene	370	U	U
87-86-5	Pentachlorophenol	750	U	U
85-01-8	Phenanthrene	370	U	U
120-12-7	Anthracene	370	U	U
206-44-0	Fluoranthene	370	U	U
129-00-0	Pyrene	370	U	U
56-55-3	Benzo(a)anthracene	370	U	U
218-01-9	Chrysene	370	U	U
205-99-2	Benzo(b)fluoranthene	370	U	U
207-08-9	Benzo(k)fluoranthene	370	U	U
50-32-8	Benzo(a)pyrene	370	U	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U	U
53-70-3	Dibenzo(a,h)anthracene	370	U	U
191-24-2	Benzo(g,h,i)perylene	370	U	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INT-DIS-S-WALL

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-19A
 Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3G9434.D
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 6.0 Decanted: (Y/N) N Date Received: 10/13/2010
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/20/2010
 GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
95-48-7	2-Methylphenol	350	U
106-44-5	4-Methylphenol	350	U
91-20-3	Naphthalene	350	U
208-96-8	Acenaphthylene	350	U
83-32-9	Acenaphthene	350	U
132-64-9	Dibenzofuran	350	U
86-73-7	Fluorene	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	700	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INT-DIS-E-WALL

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: J2003 Mod. Ref No.: _____ SDG No.: SJ2003
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J2003-20A
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3G9435.D
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 8.0 Decanted: (Y/N) N Date Received: 10/13/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/14/2010
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/20/2010
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
95-48-7	2-Méthylphenol	360	U
106-44-5	4-Methylphenol	360	U
91-20-3	Naphthalene	360	U
208-96-8	Acenaphthylene	360	U
83-32-9	Acenaphthene	360	U
132-64-9	Dibenzofuran	360	U
86-73-7	Fluorene	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	720	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

APPENDIX H
SOIL BORING LOGS
(2009)

SOIL BORING LOG

PROJECT NAME 441/442 Waverly Avenue		PROJECT NUMBER 28012	DATE START 09/02/2009
DRILLING COMPANY Aquifer Drilling and Testing		FOREMAN Rich Comfort/Mike Sarro	DATE COMPLETE 09/02/2009
DRILLING EQUIPMENT Geoprobe		METHOD Direct Push	DEPTH TO WATER (DTW) NA
BORING IDENTIFICATION NUMBER SB-01		SAMPLER(S) Jeremy D. Flaum - STERLING	DEPTH TO BEDROCK NA

Depth Below Grade (feet)	Recovery (inches)	Headspace PID (ppm)	SOIL DESCRIPTION
1	17.5"	4.4	0 - 5" CONCRETE
2			5 - 7.5" Medium brown, fine-medium SAND, some silt and coarse sand - dry, loose, poorly sorted
3			7.5 - 9.5" ROCK
4			9.5 - 12.5" Medium brown, fine-medium SAND, some silt and coarse sand - dry, loose, poorly sorted
5			12.5 - 15" ROCK
6			15 - 17.5" Medium brown, fine-medium SAND, some silt and coarse sand - dry, loose, poorly sorted
7			END OF BORING - REFUSAL @ 3 FEET BELOW GRADE
8			
9			
10			
11			
12			
13			
14			

NOTES: Sampled @ 0-3 feet below grade

"Serving our clients and the environment since 1993"

SOIL BORING LOG

PROJECT NAME 441/442 Waverly Avenue		PROJECT NUMBER 28012	DATE START 09/02/2009
DRILLING COMPANY Aquifer Drilling and Testing		FOREMAN Rich Comfort/Mike Sarro	DATE COMPLETE 09/02/2009
DRILLING EQUIPMENT Geoprobe		METHOD Direct Push	DEPTH TO WATER (DTW) NA
BORING IDENTIFICATION NUMBER SB-02		SAMPLER(S) Jeremy D. Flaum - STERLING	DEPTH TO BEDROCK NA

Depth Below Grade (feet)	Recovery (inches)	Headspace PID (ppm)	SOIL DESCRIPTION
1	36"	0.0	0-5" CONCRETE
2			5-9.5" Medium brown, medium SAND, some fine and coarse sand, trace silt, dry, loose, poorly sorted
3			9.5-21" Dark brown silt and fine SAND, some medium-coarse sand and trace gravel, moderately stiff, dry, poorly sorted
4			21-26" Light brown, fine-medium SAND, loose, slightly moist, moderately sorted 26-36" Dark-medium brown SILT and fine SAND, some medium-coarse sand and trace gravel, moderately stiff, dry, poorly sorted
5	*	0.0	0-24" Dark brown fine-medium SAND, some silt and coarse sand, trace gravel, loose, slightly moist, poorly sorted
6			24-38" Medium brown, medium SAND, becoming more coarse with depth, some fine sand and trace gravel - loose, slightly moist, poor to moderate sorting
7			38-51" Tan, fine SAND, finer grained with depth, slightly moist, loose, well sorted
8			
9	47"	1,121	0-3" Medium brown medium SAND, some fine and coarse sand, trace gravel - loose, dry, poorly sorted
10			3-17" Dark brown medium SAND, some fine and coarse sand, gravel - slightly moist, loose, poorly sorted
11			17-25" Tan medium-coarse SAND, some fine sand and trace gravel - moist, loose, moderately sorted
12			25-34" Medium brown fine SAND, finer grained w/depth, moist, loose, well sorted 34-47" Gray medium-coarse SAND, finer grained w/depth, moist, loose, well sorted (strong petroleum odor)
13			END OF BORING - 12 FEET BELOW GRADE
14			

NOTES: Sampled @ 8-12 feet below grade
 * Sample sleeve could not be removed from casing. Soil was poured out of casing and recovery could not be measured.

"Serving our clients and the environment since 1993"

SOIL BORING LOG

PROJECT NAME 441/442 Waverly Avenue		PROJECT NUMBER 28012	DATE START 09/02/2009
DRILLING COMPANY Aquifer Drilling and Testing		FOREMAN Rich Comfort/Mike Sarro	DATE COMPLETE 09/02/2009
DRILLING EQUIPMENT Geoprobe		METHOD Direct Push	DEPTH TO WATER (DTW) NA
BORING IDENTIFICATION NUMBER SB-03		SAMPLER(S) Jeremy D. Flaum - STERLING	DEPTH TO BEDROCK NA

Depth Below Grade (feet)	Recovery (inches)	Headspace PID (ppm)	SOIL DESCRIPTION
1	25"	3.7	0-5" Concrete
2			5-9" Medium brown, medium SAND, some fine and coarse sand and gravel - dry, loose, poorly sorted
3			9-11" ROCK
4			11-15" Dark gray SILT and fine SAND, some medium-coarse sand, gravel and clay - moist, stiff, poorly sorted 15-25" Orange-brown medium-coarse SAND, some fine sand and silt - loose, moist, moderately sorted
5	23"	0.8	0-8" Dark gray SILT and fine SAND (coarser w/depth), some medium-coarse sand, gravel and clay - moist, stiff, poorly sorted
6			8-25" Orange-brown, medium-coarse SAND - moist, loose, well sorted
7			
8			END OF BORING - REFUSAL @ 7 FEET BELOW GRADE
9			
10			
11			
12			
13			
14			

NOTES: Sampled @ 0-4 feet below grade

"Serving our clients and the environment since 1993"

SOIL BORING LOG

PROJECT NAME 441/442 Waverly Avenue		PROJECT NUMBER 28012	DATE START 09/02/2009
DRILLING COMPANY Aquifer Drilling and Testing		FOREMAN Rich Comfort/Mike Sarro	DATE COMPLETE 09/02/2009
DRILLING EQUIPMENT Geoprobe		METHOD Direct Push	DEPTH TO WATER (DTW) NA
BORING IDENTIFICATION NUMBER SB-04		SAMPLER(S) Jeremy D. Flaum - STERLING	DEPTH TO BEDROCK NA

Depth Below Grade (feet)	Recovery (inches)	Headspace PID (ppm)	SOIL DESCRIPTION
1	20"	1.0	0-3" Concrete 3-5.5" Medium brown medium SAND, some fine and coarse sand and gravel, loose, dry, poorly sorted 5.5-10" Dark gray fine SAND and SILT, some gravel, moist, moderately stiff, poorly sorted 10-14" Orange-brown SILT and CLAY, some fine sand and trace gravel, moist, stiff, poorly sorted 14-20" Light brown fine-medium SAND, some coarse sand, loose, slightly moist, moderately sorted
2			
3			
4			
5	40"	867	0-3" Orange-brown SILT and CLAY, some fine sand and trace gravel, moist, stiff, poorly sorted 3-5" ROCK 5-19" Orange-brown fine-medium SAND, some coarse sand, trace silt, moist, loose, moderately sorted 19-40" Gray coarse SAND, some fine-medium sand, loose, moist, well sorted (darker color and strong petroleum odor @ 33-40")
6			
7			
8			
9	46"	412	0-41" Gray coarse SAND, some fine-medium sand, loose, moist, well sorted (strong petroleum odor) 41-46" Orange-brown fine-medium SAND, some coarse sand and silt, moist, loose, poorly sorted
10			
11			
12			
13			END OF BORING 12 FEET BELOW GRADE
14			

NOTES: Sampled @ 7-8 feet below grade and 11-12 feet below grade

"Serving our clients and the environment since 1993"

SOIL BORING LOG

PROJECT NAME 441/442 Waverly Avenue		PROJECT NUMBER 28012	DATE START 09/02/2009
DRILLING COMPANY Aquifer Drilling and Testing		FOREMAN Rich Comfort/Mike Sarro	DATE COMPLETE 09/02/2009
DRILLING EQUIPMENT Geoprobe		METHOD Direct Push	DEPTH TO WATER (DTW) NA
BORING IDENTIFICATION NUMBER SB-05		SAMPLER(S) Jeremy D. Flaum - STERLING	DEPTH TO BEDROCK NA

Depth Below Grade (feet)	Recovery (inches)	Headspace PID (ppm)	SOIL DESCRIPTION
1	40"	0.5	0-14" ASPHALT 14-27" Dark brown, medium-coarse SAND, some fine sand, trace silt and gravel - loose, slightly moist, poorly sorted, lighter colored and finer-grained w/ depth 27-40" Gray-brown fine-medium SAND, becoming very fine sand w/ depth - loose, slightly moist, well sorted
2			
3			
4			
5	44"	0.3	0-32" Gray-brown fine-medium SAND (1-3" bands of very fine sand, loose, moist, well sorted, Cobble @ 6.5-8") 32-41" Reddish-brown medium-coarse SAND, some fine sand, moist, loose, poorly sorted 41-44" Gray-brown very fine SAND - very moist, loose, very well sorted
6			
7			
8			
9	46"	0.9	0-8" Gray-brown fine SAND, some medium sand and trace coarse sand - loose, slightly moist, moderately sorted 8-16" Reddish-brown, coarse SAND, some fine-medium sand - moist, loose, moderately sorted 16-41" Gray-brown fine-medium SAND, some coarse sand, gravel and silt - loose, moist, poorly sorted 41-46" Dark gray, coarse SAND, some fine-medium sand, loose, moist, moderately sorted (slight petroleum odor)
10			
11			
12			
13			END OF BORING - 12 FEET BELOW GRADE
14			

NOTES: Sampled @ 8-12 feet below grade; Duplicate sample also collected.

"Serving our clients and the environment since 1993"

SOIL BORING LOG

PROJECT NAME 441/442 Waverly Avenue		PROJECT NUMBER 28012	DATE START 09/02/2009
DRILLING COMPANY Aquifer Drilling and Testing		FOREMAN Rich Comfort/Mike Sarro	DATE COMPLETE 09/02/2009
DRILLING EQUIPMENT Geoprobe		METHOD Direct Push	DEPTH TO WATER (DTW) NA
BORING IDENTIFICATION NUMBER SB-06		SAMPLER(S) Jeremy D. Flaum - STERLING	DEPTH TO BEDROCK NA

Depth Below Grade (feet)	Recovery (inches)	Headspace PID (ppm)	SOIL DESCRIPTION
1	26"	0.0	0-5" CONCRETE 5-26" Medium-dark brown SILT and fine SAND, some clay and gravel, trace coarse sand - stiff, moist, poorly sorted
2			
3			
4			END OF BORING - REFUSAL AT 3.5 FEET BELOW GRADE - (CONCRETE)
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

NOTES: Sampled @ 0-3.5 feet below grade

"Serving our clients and the environment since 1993"

APPENDIX K

**BORING LOGS FOR JANUARY 2012
OFFSITE MONITORING WELLS**



BORING LOG

Boring No. OSMW-1

Project Name:	<u>441/442 Waverly Avenue – Offsite Monitoring Wells</u>	Project No.:	<u>28012</u>
Client Name:	<u>New Waverly Avenue Associates, LLC</u>	Date:	<u>12/20/2011</u>
Location:	<u>532 Waverly Avenue</u>	Logged By:	<u>Liz Davis</u>
Weather/Temp.:	<u>Overcast, slight breeze, 47° F</u>		

Drilling Co.:	<u>Aquifer Drilling & Testing</u>	Depth:	<u>37' below grade</u>
Driller:	<u>Marty Bachner & Jay Burlingare</u>	Equipment:	<u>Geoprobe 6610DT</u>
Date Started:	<u>12/20/2011</u>	Top of Casing Elevation:	<u>30.57'</u>
Date Completed:	<u>12/20/2011</u>		

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
5	1	3.67	0 – 0.8' – ASPHALT 0.8 – 1.42' – FILL-dark brown SAND and GRAVEL mixed with concrete pieces 1.42 – 2.3' – orange-brown CLAY and fine-medium SAND (dense) 2 – 3.7' – orange-brown, medium-coarse SAND (dry)	0/0.1
10	2	4.17	5 – 9.2' – light brown, medium grain SAND (some orange bands, grades to dark brown color)	0/0
15	3-5	3.88	10 – 17.8' – dark brown, fine-medium grain SAND (wet at 12.5')	0/0.1
20		2.83	11.3 – 23.8' orange brown, fine-coarse SAND (saturated at 15.0')	0/0.1
25		4.5	20 – 23.1' – brown, fine grain SAND (saturated) 23.1 – 24.5' – brown, fine-medium grain SAND (dense, not as wet)	0/0.3
(cont.)				



BORING LOG

Boring No. OSMW-1

Project Name:	<u>441/442 Waverly Avenue – Offsite Monitoring Wells</u>	Project No.:	<u>28012</u>
Client Name:	<u>New Waverly Avenue Associates, LLC</u>	Date:	<u>12/20/2011</u>
Location:	<u>532 Waverly Avenue</u>	Logged By:	<u>Liz Davis</u>
Weather/Temp.:	<u>Overcast, slight breeze, 47° F</u>		

Drilling Co.:	<u>Aquifer Drilling & Testing</u>	Depth:	<u>37' below grade</u>
Driller:	<u>Marty Bachner & Jay Burlingare</u>	Equipment:	<u>Geoprobe 6610DT</u>
Date Started:	<u>12/20/2011</u>	Top of Casing Elevation.:	<u>30.57'</u>
Date Completed:	<u>12/20/2011</u>		

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
25				
30	6	4.5	25 – 29' – brown, medium grain SAND 29 – 29.5' – gray-brown, fine SAND (dense)	0.1/0.1
35	7	5	30 – 37.2' – gray-brown SILT, trace clay (saturated)	0/0.1
40	8	0.91	Refusal at 37.2'	0/0.1 Construction Details: 1" PVC screen & casing – Screened from 27' to 37' feet below grade (see Figure 2 for details)



BORING LOG

Boring No. OSMW-2

Project Name:	<u>441/442 Waverly Avenue – Offsite Monitoring Wells</u>	Project No.:	<u>28012</u>
Client Name:	<u>New Waverly Avenue Associates, LLC</u>	Date:	<u>12/19/2011</u>
Location:	<u>532 Waverly Avenue</u>	Logged By:	<u>Liz Davis</u>
Weather/Temp.:	<u>Sunny, slight breeze, 40° F</u>		

Drilling Co.:	<u>Aquifer Drilling & Testing</u>	Depth:	<u>41' below grade</u>
Driller:	<u>Marty Bachner & Jay Burlingare</u>	Equipment:	<u>Geoprobe 6610DT</u>
Date Started:	<u>12/19/2011</u>	Top of Casing Elevation:	<u>30.94'</u>
Date Completed:	<u>12/19/2011</u>		

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
0				
5	1	3.75	0 - 0.75' ASPHALT 0.75 - 1.5' FILL 1.5 - 2.7' brown SILT and CLAY (Dense) 2.7 - 3.75' brown, coarse SAND and GRAVEL	0/0
10	2	4.42	5 - 5.6' orange brown, medium-coarse SAND, trace clay 5.6 - 8' light brown, fine SAND 8 - 9.42' light brown & dark brown layered SAND	0/0
15	3	4.42	10 - 11.3' brown, fine-coarse SAND	0/0
20	4	4.5	11.3 - 23.8' orange brown, fine-coarse SAND (saturated at 15.0')	0/0.2
25	5	3.8		0/0.1
(cont.)				



BORING LOG

Boring No. OSMW-2

Project Name: 441/442 Waverly Avenue – Offsite Monitoring Wells
Project No.: 28012
Client Name: New Waverly Avenue Associates, LLC
Date: 12/19/2011
Location: 532 Waverly Avenue
Logged By: Liz Davis
Weather/Temp.: Sunny, slight breeze, 40° F

Drilling Co.: Aquifer Drilling & Testing
Depth: 41' below grade
Driller: Marty Bachner & Jay Burlingare
Equipment: Geoprobe 6610DT
Date Started: 12/19/2011
Date Completed: 12/19/2011
Top of Casing Elevation: 30.94'

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
25				
30	6	5	25 – 26' gray CLAY 26-30' gray-brown, fine-medium SAND (saturated)	0/0.2
35	7	2.58	30 – 31.3' gray, fine SAND (saturated) 31.3 – 32.1' – gray fine SAND, some clay (dense) 32.1 – 35.6' – gray SILT, some clay (dense)	0/0.2
40	8	3.58	35.6 – 37.1' – GRAVEL (0.25 – 0.5" diameter), some sand 37.1 – 37.5' – gray, medium-coarse SAND	0/0.1
			37.5 – 41' – GRAVEL (0.5 – 1" diameter), some sand Refusal at 41.0 feet	0/0.4
				Construction Details: 1" PVC screen & casing – Screened from 31-41 feet below grade (see Figure 3 for details)



BORING LOG

Boring No. OSMW-3

Project Name: 441/442 Waverly Avenue – Offsite Monitoring Wells
Project No.: 28012
Client Name: New Waverly Avenue Associates, LLC
Date: 12/20/2011
Location: 532 Waverly Avenue
Logged By: Liz Davis
Weather/Temp.: Overcast, slight breeze, 47° F

Drilling Co.: Aquifer Drilling & Testing
Depth: 39' below grade
Driller: Marty Bachner & Jay Burlingare
Equipment: Geoprobe 6610DT
Date Started: 12/20/2011
Top of Casing Elevation: 30.5'
Date Completed: 12/20/2011

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
0				
5	1	4.2	0 – 0.7' – ASPHALT and sub-base FILL 0.7 – 1.54' – orange-brown SILT, some clay and gravel 1.54 – 2.42' – dark brown to black FILL with brick fragments 2.42 – 4.2' – gray-brown, medium-coarse SAND (dry)	0/0.2
10	2	4.42	5 – 9.42' – light brown, medium grain SAND (some orange bands, grades to dark brown color)	0/0.1
15	3	4.2	10 – 11.6' – reddish-brown, fine-medium grain SAND 11.6 – 13.5' – dark brown-gray, medium-coarse grain SAND with orange bands 13.5 – 14.2' – brown-gray, fine-medium grain SAND (moist)	0/0.1
20	4	4.6	15 – 16.3' – brown, fine-coarse grain SAND	0/0.1
25	5	NA*	20 – 25' – gray, coarse grain SAND, some gravel (moist)	0/0
(cont.)				* Recovery measurement not available-had to hammer rod to get soil out.



BORING LOG

Boring No. OSMW-3

Project Name: 441/442 Waverly Avenue – Offsite Monitoring Wells
Project No.: 28012
Client Name: New Waverly Avenue Associates, LLC
Date: 12/20/2011
Location: 532 Waverly Avenue
Logged By: Liz Davis
Weather/Temp.: Overcast, slight breeze, 47° F

Drilling Co.: Aquifer Drilling & Testing
Depth: 39' below grade
Driller: Marty Bachner & Jay Burlingare
Equipment: Geoprobe 6610DT
Date Started: 12/20/2011
Top of Casing Elevation: 30.5'
Date Completed: 12/20/2011

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
25				
30	6	4.42	25 – 27.4' – gray-brown, fine-medium grain SAND (loose) 27.4 – 27.92' – brown, medium-coarse SAND, some gravel 27.92 – 29.42' – brown, fine grain SAND 30 – 31.5' –brown, fine grain SAND (moist)	0.1/0.1
35	7	4.5	31.5 – 34.5' – gray-brown, fine-medium grain SAND, trace silt (dry, dense)	0/0.1
40	8	4.4	35 – 37.3' – brown, 37.3 – 39.4' gray-brown, fine-medium grain SAND Refusal at 39.4'	0/0.1
				Construction Details: 1" PVC casing & screen – Screened from 29-39 feet below grade (see Figure 4 for details)



BORING LOG

Boring No. OSMW-4

Project Name:	<u>441/442 Waverly Avenue – Offsite Monitoring Wells</u>	Project No.:	<u>28012</u>
Client Name:	<u>New Waverly Avenue Associates, LLC</u>	Date:	<u>12/21/2011</u>
Location:	<u>532 Waverly Avenue</u>	Logged By:	<u>Liz Davis</u>
Weather/Temp.:	<u>Raining, calm, 47° F</u>		

Drilling Co.:	<u>Aquifer Drilling & Testing</u>	Depth:	<u>35' below grade</u>
Driller:	<u>Marty Bachner & Jay Burlingare</u>	Equipment:	<u>Geoprobe 6610DT</u>
Date Started:	<u>12/21/2011</u>	Top of Casing Elevation:	<u>30.84'</u>
Date Completed:	<u>12/21/2011</u>		

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
0				
5	1	4.3	0 – 0.8' – ASPHALT and sub-base FILL 0.8 – 2.4' – FILL – dark brown fine SAND with black cinder more fragments 2.4 – 3.3' – brown SILT and CLAY (dense) 3.3 – 4.3' – gray-brown, fine-medium grain SAND	0.1/0.5
10	2	4.3	5 – 11.7' – gray-brown, fine-medium grain SAND (some orange bands noted, dry)	0.1/0.5
15	3	4.2	11.7 – 14.2' –dark brown, fine-medium grain SAND	0.1/7.2
20	4	3.1	15 – 15.75' – gray-brown, medium-coarse grain SAND 15.75 – 16.75' – brown, fine-medium grain SAND 16.75 – 23.5' – gray-brown, fine grain SAND (sewer odor, moist)	0.1/7.5
25	5	5	23 – 25' – gray brown, fine-medium grain SAND (moist)	0.1/8.2
(cont.)				



BORING LOG

Boring No. OSMW-4

Project Name:	<u>441/442 Waverly Avenue – Offsite Monitoring Wells</u>	Project No.:	<u>28012</u>
Client Name:	<u>New Waverly Avenue Associates, LLC</u>	Date:	<u>12/21/2011</u>
Location:	<u>532 Waverly Avenue</u>	Logged By:	<u>Liz Davis</u>
Weather/Temp.:	<u>Raining, calm, 47° F</u>		

Drilling Co.:	<u>Aquifer Drilling & Testing</u>	Depth:	<u>35' below grade</u>
Driller:	<u>Marty Bachner & Jay Burlingare</u>	Equipment:	<u>Geoprobe 6610DT</u>
Date Started:	<u>12/21/2011</u>	Top of Casing Elevation:	<u>30.84'</u>
Date Completed:	<u>12/21/2011</u>		

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	PID Measurement for Soil Samples background/headspace (ppm)
25				
30	6	4.7	25 – 29.7' – gray-brown, fine-medium grain SAND, trace clay (moist)	0.1/1.9
35	7	5	30 – 33.1' – gray brown, fine-medium grain SAND 33.1 – 33.6' – gray brown, fine grain SAND and SILT (dense) 33.6 – 35' – gray brown, fine-medium grain SAND (dry)	0/8.6
40	8	3.58	35 – 36.75' – gray, fine grain SAND (wet) 36.75 – 38.6' – gray, fine grain SAND, some silt (saturated)	0/0.8
45	9	4	42 – 44' – gray SILT and CLAY (wet) Refusal at 44'	0/0.4 Construction Details: 1" PVC casing & screen – screened from 25-35 feet below grade (see Figure 5 for details)

APPENDIX M

**LABORATORY REPORT FOR JANUARY
2012 GROUNDWATER MONITORING EVENT**

Report Date:
26-Jan-12 12:54



- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sterling Environmental Engineering P.C.
24 Wade Road
Latham, NY 12110

Work Order: L0057
Project : Waverly Ave
Project #:

Attn: Liz Davis

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L0057-01	OS-MW-1	Aqueous	10-Jan-12 13:15	12-Jan-12 10:10
L0057-02	OS-MW-2	Aqueous	10-Jan-12 12:00	12-Jan-12 10:10
L0057-03	OS-MW-3	Aqueous	10-Jan-12 14:30	12-Jan-12 10:10
L0057-04	OS-MW-4	Aqueous	10-Jan-12 10:20	12-Jan-12 10:10
L0057-05	DUP-1	Aqueous	10-Jan-12 00:00	12-Jan-12 10:10
L0057-06	GZ-23D	Aqueous	11-Jan-12 10:30	12-Jan-12 10:10
L0057-07	GZ-22D	Aqueous	11-Jan-12 12:05	12-Jan-12 10:10
L0057-08	GZ-21D	Aqueous	11-Jan-12 09:15	12-Jan-12 10:10
L0057-09	B6-OW-D	Aqueous	11-Jan-12 12:40	12-Jan-12 10:10
L0057-10	TRIPBLANK	Aqueous	11-Jan-12 00:00	12-Jan-12 10:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LA100301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : Waverly Ave

SDG : L0057

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
OS-MW-1	L0057-01	SW8260_W				
OS-MW-2	L0057-02	SW8260_W				
OS-MW-3	L0057-03	SW8260_W				
OS-MW-4	L0057-04	SW8260_W				
DUP-1	L0057-05	SW8260_W				
GZ-23D	L0057-06	SW8260_W				
GZ-22D	L0057-07	SW8260_W				
GZ-21D	L0057-08	SW8260_W				
B6-OW-D	L0057-09	SW8260_W				
TRIPBLANK	L0057-10	SW8260_W				

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Waverly Ave

SDG : L0057

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L0057-01A	AQ	1/10/2012	1/12/2012	NA	1/16/2012
L0057-02A	AQ	1/10/2012	1/12/2012	NA	1/16/2012
L0057-03A	AQ	1/10/2012	1/12/2012	NA	1/16/2012
L0057-03ADL	AQ	1/10/2012	1/12/2012	NA	1/18/2012
L0057-04A	AQ	1/10/2012	1/12/2012	NA	1/16/2012
L0057-04ADL	AQ	1/10/2012	1/12/2012	NA	1/18/2012
L0057-05A	AQ	1/10/2012	1/12/2012	NA	1/16/2012
L0057-05ADL	AQ	1/10/2012	1/12/2012	NA	1/18/2012
L0057-06A	AQ	1/11/2012	1/12/2012	NA	1/16/2012
L0057-06ADL	AQ	1/11/2012	1/12/2012	NA	1/18/2012
L0057-07A	AQ	1/11/2012	1/12/2012	NA	1/17/2012
L0057-08A	AQ	1/11/2012	1/12/2012	NA	1/17/2012
L0057-09A	AQ	1/11/2012	1/12/2012	NA	1/17/2012
L0057-10A	AQ	1/11/2012	1/12/2012	NA	1/16/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Waverly Ave

SDG : L0057

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L0057-01A	AQ	SW8260_W	NA	LOW	1
L0057-02A	AQ	SW8260_W	NA	LOW	1
L0057-03A	AQ	SW8260_W	NA	LOW	1
L0057-03ADL	AQ	SW8260_W	NA	LOW	10
L0057-04A	AQ	SW8260_W	NA	LOW	1
L0057-04ADL	AQ	SW8260_W	NA	LOW	10
L0057-05A	AQ	SW8260_W	NA	LOW	1
L0057-05ADL	AQ	SW8260_W	NA	LOW	10
L0057-06A	AQ	SW8260_W	NA	LOW	1
L0057-06ADL	AQ	SW8260_W	NA	LOW	100
L0057-07A	AQ	SW8260_W	NA	LOW	1
L0057-08A	AQ	SW8260_W	NA	LOW	1
L0057-09A	AQ	SW8260_W	NA	LOW	1
L0057-10A	AQ	SW8260_W	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L0057

Client ID: STERLING
Project: Waverly Ave
WO Name: Waverly Ave
Location: WAVERLY_AVE,

Case:
SDG:

HC Due: 01/26/12
Fax Due: 01/23/12
Fax Report: ☒

Report Level: ASP-A
Special Program:
EDD: EQUIIS_4_NYSDEC
XL

PO: 28012

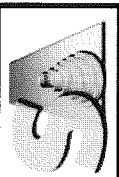
Comments: Email data to liz@sterlingenvironmental.com and jessica.kelly@sterlingenvironmental.com (need to comment n-nitroso-di-n-butylamine, fax final data

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0057-01A	OS-MW-1	01/10/2012 13:15	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-02A	OS-MW-2	01/10/2012 12:00	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-03A	OS-MW-3	01/10/2012 14:30	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-04A	OS-MW-4	01/10/2012 10:20	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-05A	DUP-1	01/10/2012 00:00	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-06A	GZ-23D	01/11/2012 10:30	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-07A	GZ-22D	01/11/2012 12:05	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-08A	GZ-21D	01/11/2012 09:15	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-09A	B6-OW-D	01/11/2012 12:40	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA
L0057-10A	TRIPBLANK	01/11/2012 00:00	01/12/2012	Aqueous	SW8260_W	/ Part 375, No TICs				Y	VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation



A DIVISION OF SPECTRUM ANALYTICAL, INC. FEATURING HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:

- TAT- Indicate Date Needed: Std TAT
 All TATs subject to laboratory approval.
 Min. 24-hour notification needed for rushes.
 Samples disposed of after 30 days unless otherwise instructed.

Report To: STERLING ENV. ENG. PC24 Wade RoadLatham NY 12110Project Mgr.: Liz DavisInvoice To: STERLING ENV. ENG. PC24 Wade RoadLatham NY 12110

P.O. No.: _____ RQN: _____

Project No.: 28012Site Name: Waverly AveLocation: Mamaroneck State: NYSampler(s): Charlotte Verhoef

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9=_____ 10=_____ 11=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
 X1=_____ X2=_____ X3=_____

List preservative code below:

2 2

Notes:

Containers:

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Analyses:

QA/QC Reporting Level

☐ Level I☐ Level II☐ Level III☐ Level IV☒ Other NYS ASP

G=Grab C=Composite

Matrix Type

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Lab Id:

Time:

Date:

Sample Id:

Received By: <i>David Miller</i>		Page 01 of 01	
Reviewed By: <i>C. J. D. [Signature]</i>		Log-in Date 01/12/2012	
Work Order: L0057		Client Name: Sterling Environmental Engineering P.C.	
Project Name/Event: Waverly Ave			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
	HNO3	H2SO4	HCl	NaOH	H3PO4		
L0057-01						H	
L0057-02						H	
L0057-03						H	
L0057-04						H	
L0057-05						H	
L0057-06						H	
L0057-07						H	
L0057-08						H	
L0057-09						H	
L0057-10						H	

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	Courier N/A
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed /
	Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	4 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	01/12/2012
12. Time Received	10:10
Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On
IR Temp Gun ID: MT-1	
Coolant Condition: ICE	
Preservative Name/Lot No:	

VOA Matrix Key:

US = Unpreserved Soil A = Air

UA = Unpreserved Aqueous H = HCl

M = MeOH E = Encore

N = NaHSO4 F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Volatiles ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sterling Environmental Engineering P.C.

Project: Waverly Ave

Laboratory Workorder / SDG #: L0057

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 8260C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10

Instrument Type: GCMS-VOA

Description: HP7890A

Manufacturer: Agilent

Model: 7890A / 5975C

GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.

LCS-64212 in batch 64212, recovery is below criteria for Benzene at 79% with criteria of (80-120).

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were re-analyzed at dilution:

OS-MW-3 (L0057-03ADL) : Dilution Factor: 10

OS-MW-4 (L0057-04ADL) : Dilution Factor: 10

DUP-1 (L0057-05ADL) : Dilution Factor: 10

GZ-23D (L0057-06ADL) : Dilution Factor: 100

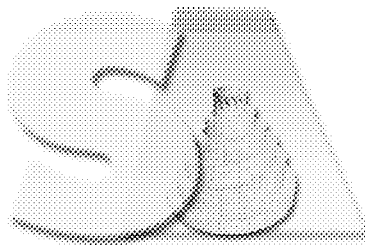
G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:  _____

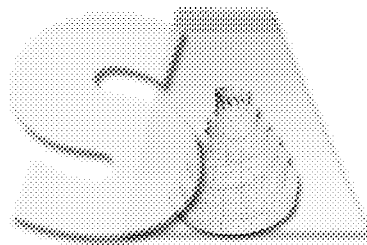
Date: 01/26/12



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

OS-MW-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-01A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9192.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.6	
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

OS-MW-2

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-02A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9193.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.1	J
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	0.83	J
79-01-6	Trichloroethene	5.0	U
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	85	
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	2.5	J
1330-20-7	Xylene (Total)	2.5	J
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	4.1	J
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

OS-MW-3

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-03A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9194.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	1.7	J
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	14	
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	4.4	J
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	120	
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	1400	E
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

OS-MW-3DL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-03ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9250.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 10.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	50	U
75-35-4	1,1-Dichloroethene	50	U
67-64-1	Acetone	50	U
75-09-2	Methylene chloride	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
1634-04-4	Methyl tert-butyl ether	50	U
75-34-3	1,1-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
156-59-2	cis-1,2-Dichloroethene	11	DJ
67-66-3	Chloroform	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon tetrachloride	50	U
107-06-2	1,2-Dichloroethane	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	91	D
108-88-3	Toluene	50	U
127-18-4	Tetrachloroethene	760	D
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-20-7	m,p-Xylene	50	U
95-47-6	o-Xylene	50	U
1330-20-7	Xylene (Total)	50	U
103-65-1	n-Propylbenzene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
123-91-1	1,4-Dioxane	1000	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

OS-MW-4

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-04A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9195.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	6.9	
1634-04-4	Methyl tert-butyl ether	0.78	J
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	29	
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	1.1	J
71-43-2	Benzene	45	
79-01-6	Trichloroethene	310	E
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	1400	E
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	1.6	J
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	1.5	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

OS-MW-4DL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-04ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9251.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 10.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	50	U
75-35-4	1,1-Dichloroethene	50	U
67-64-1	Acetone	50	U
75-09-2	Methylene chloride	50	U
156-60-5	trans-1,2-Dichloroethene	6.7	DJ
1634-04-4	Methyl tert-butyl ether	50	U
75-34-3	1,1-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
156-59-2	cis-1,2-Dichloroethene	27	DJ
67-66-3	Chloroform	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon tetrachloride	50	U
107-06-2	1,2-Dichloroethane	50	U
71-43-2	Benzene	43	DJ
79-01-6	Trichloroethene	230	D
108-88-3	Toluene	50	U
127-18-4	Tetrachloroethene	790	D
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-20-7	m,p-Xylene	50	U
95-47-6	o-Xylene	50	U
1330-20-7	Xylene (Total)	50	U
103-65-1	n-Propylbenzene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
123-91-1	1,4-Dioxane	1000	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-05A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9196.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	7.2	
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	29	
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	1.1	J
71-43-2	Benzene	47	
79-01-6	Trichloroethene	300	E
108-88-3	Toluene	0.67	J
127-18-4	Tetrachloroethene	1400	E
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	1.7	J
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	1.5	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	0.75	J
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1DL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-05ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9252.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 10.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	50	U
75-35-4	1,1-Dichloroethene	50	U
67-64-1	Acetone	50	U
75-09-2	Methylene chloride	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
1634-04-4	Methyl tert-butyl ether	50	U
75-34-3	1,1-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
156-59-2	cis-1,2-Dichloroethene	24	DJ
67-66-3	Chloroform	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon tetrachloride	50	U
107-06-2	1,2-Dichloroethane	50	U
71-43-2	Benzene	41	DJ
79-01-6	Trichloroethene	220	D
108-88-3	Toluene	50	U
127-18-4	Tetrachloroethene	730	D
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-20-7	m,p-Xylene	50	U
95-47-6	o-Xylene	50	U
1330-20-7	Xylene (Total)	50	U
103-65-1	n-Propylbenzene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
123-91-1	1,4-Dioxane	1000	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GZ-23D

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-06A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9197.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	1.2	J
75-35-4	1,1-Dichloroethene	1.6	J
67-64-1	Acetone	200	
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	9.1	
1634-04-4	Methyl tert-butyl ether	1.6	J
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1100	E
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	9.0	
71-43-2	Benzene	4.0	J
79-01-6	Trichloroethene	2500	E
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	5100	E
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GZ-23DDL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-06ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9253.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 100.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	500	U
75-35-4	1,1-Dichloroethene	500	U
67-64-1	Acetone	500	U
75-09-2	Methylene chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
1634-04-4	Methyl tert-butyl ether	500	U
75-34-3	1,1-Dichloroethane	500	U
78-93-3	2-Butanone	500	U
156-59-2	cis-1,2-Dichloroethene	780	D
67-66-3	Chloroform	500	U
71-55-6	1,1,1-Trichloroethane	500	U
56-23-5	Carbon tetrachloride	500	U
107-06-2	1,2-Dichloroethane	500	U
71-43-2	Benzene	500	U
79-01-6	Trichloroethene	1600	D
108-88-3	Toluene	500	U
127-18-4	Tetrachloroethene	4300	D
108-90-7	Chlorobenzene	500	U
100-41-4	Ethylbenzene	500	U
1330-20-7	m,p-Xylene	500	U
95-47-6	o-Xylene	500	U
1330-20-7	Xylene (Total)	500	U
103-65-1	n-Propylbenzene	500	U
108-67-8	1,3,5-Trimethylbenzene	500	U
98-06-6	tert-Butylbenzene	500	U
95-63-6	1,2,4-Trimethylbenzene	500	U
135-98-8	sec-Butylbenzene	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
104-51-8	n-Butylbenzene	500	U
95-50-1	1,2-Dichlorobenzene	500	U
123-91-1	1,4-Dioxane	10000	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GZ-22D

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-07A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9221.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	1.3	J
1634-04-4	Methyl tert-butyl ether	31	
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	6.5	
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	17	
71-43-2	Benzene	1.3	J
79-01-6	Trichloroethene	92	
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	97	
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GZ-21D

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-08A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9222.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	10	
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.3	
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	0.58	J
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	1.7	J
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B6-OW-D

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-09A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9223.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.5	J
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	0.51	J
79-01-6	Trichloroethene	2.1	J
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	6.2	
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIPBLANK

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0057-10A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9190.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/12/2012
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-64178

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0057</u>	Mod. Ref No.: _____ SDG No.: <u>SL0057</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>LCS-64178</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V8A9185.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: _____
% Moisture: not dec. _____	Date Analyzed: <u>01/16/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
75-01-4	Vinyl chloride	46	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	38	
75-09-2	Methylene chloride	47	
156-60-5	trans-1,2-Dichloroethene	47	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	48	
78-93-3	2-Butanone	44	
156-59-2	cis-1,2-Dichloroethene	48	
67-66-3	Chloroform	47	
71-55-6	1,1,1-Trichloroethane	50	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	48	
108-88-3	Toluene	47	
127-18-4	Tetrachloroethene	57	
108-90-7	Chlorobenzene	57	
100-41-4	Ethylbenzene	58	
1330-20-7	m,p-Xylene	120	
95-47-6	o-Xylene	57	
1330-20-7	Xylene (Total)	170	
103-65-1	n-Propylbenzene	59	
108-67-8	1,3,5-Trimethylbenzene	60	
98-06-6	tert-Butylbenzene	57	
95-63-6	1,2,4-Trimethylbenzene	58	
135-98-8	sec-Butylbenzene	58	
541-73-1	1,3-Dichlorobenzene	56	
106-46-7	1,4-Dichlorobenzene	56	
104-51-8	n-Butylbenzene	60	
95-50-1	1,2-Dichlorobenzene	57	
123-91-1	1,4-Dioxane	840	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-64195

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0057</u>	Mod. Ref No.: _____ SDG No.: <u>SL0057</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>LCS-64195</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V8A9214.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: _____
% Moisture: not dec. _____	Date Analyzed: <u>01/17/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
75-01-4	Vinyl chloride	47	
75-35-4	1,1-Dichloroethene	46	
67-64-1	Acetone	41	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	46	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	49	
78-93-3	2-Butanone	45	
156-59-2	cis-1,2-Dichloroethene	47	
67-66-3	Chloroform	46	
71-55-6	1,1,1-Trichloroethane	49	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	46	
108-88-3	Toluene	47	
127-18-4	Tetrachloroethene	54	
108-90-7	Chlorobenzene	55	
100-41-4	Ethylbenzene	56	
1330-20-7	m,p-Xylene	110	
95-47-6	o-Xylene	55	
1330-20-7	Xylene (Total)	170	
103-65-1	n-Propylbenzene	57	
108-67-8	1,3,5-Trimethylbenzene	58	
98-06-6	tert-Butylbenzene	55	
95-63-6	1,2,4-Trimethylbenzene	57	
135-98-8	sec-Butylbenzene	57	
541-73-1	1,3-Dichlorobenzene	54	
106-46-7	1,4-Dichlorobenzene	53	
104-51-8	n-Butylbenzene	60	
95-50-1	1,2-Dichlorobenzene	54	
123-91-1	1,4-Dioxane	840	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-64212

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-64212
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9243.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 01/18/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	39	
75-35-4	1,1-Dichloroethene	37	
67-64-1	Acetone	40	
75-09-2	Methylene chloride	40	
156-60-5	trans-1,2-Dichloroethene	39	
1634-04-4	Methyl tert-butyl ether	42	
75-34-3	1,1-Dichloroethane	41	
78-93-3	2-Butanone	42	
156-59-2	cis-1,2-Dichloroethene	40	
67-66-3	Chloroform	39	
71-55-6	1,1,1-Trichloroethane	39	
56-23-5	Carbon tetrachloride	40	
107-06-2	1,2-Dichloroethane	44	
71-43-2	Benzene	40	
79-01-6	Trichloroethene	37	
108-88-3	Toluene	38	
127-18-4	Tetrachloroethene	42	
108-90-7	Chlorobenzene	46	
100-41-4	Ethylbenzene	45	
1330-20-7	m,p-Xylene	90	
95-47-6	o-Xylene	45	
1330-20-7	Xylene (Total)	140	
103-65-1	n-Propylbenzene	47	
108-67-8	1,3,5-Trimethylbenzene	48	
98-06-6	tert-Butylbenzene	46	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	47	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	46	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	46	
123-91-1	1,4-Dioxane	790	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-64178

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCSD-64178
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9186.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	40	
75-35-4	1,1-Dichloroethene	42	
67-64-1	Acetone	37	
75-09-2	Methylene chloride	43	
156-60-5	trans-1,2-Dichloroethene	43	
1634-04-4	Methyl tert-butyl ether	43	
75-34-3	1,1-Dichloroethane	44	
78-93-3	2-Butanone	42	
156-59-2	cis-1,2-Dichloroethene	43	
67-66-3	Chloroform	43	
71-55-6	1,1,1-Trichloroethane	45	
56-23-5	Carbon tetrachloride	46	
107-06-2	1,2-Dichloroethane	44	
71-43-2	Benzene	43	
79-01-6	Trichloroethene	43	
108-88-3	Toluene	42	
127-18-4	Tetrachloroethene	50	
108-90-7	Chlorobenzene	52	
100-41-4	Ethylbenzene	52	
1330-20-7	m,p-Xylene	100	
95-47-6	o-Xylene	51	
1330-20-7	Xylene (Total)	160	
103-65-1	n-Propylbenzene	53	
108-67-8	1,3,5-Trimethylbenzene	53	
98-06-6	tert-Butylbenzene	51	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	52	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	50	
104-51-8	n-Butylbenzene	54	
95-50-1	1,2-Dichlorobenzene	51	
123-91-1	1,4-Dioxane	760	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-64178

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0057	Mod. Ref No.: _____ SDG No.: SL0057
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: MB-64178
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8A9189.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 01/16/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
108-88-3	Toluene	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
103-65-1	n-Propylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-64195

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-64195

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9217.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 01/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
108-88-3	Toluene	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
103-65-1	n-Propylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	100	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-64212

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-64212

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9246.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 01/18/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
108-88-3	Toluene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
123-91-1	1,4-Dioxane	100	U

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
 Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-64178	97	96	112	100				0
02	LCSD-64178	97	96	111	99				0
03	MB-64178	96	96	116	97				0
04	TRIPBLANK	96	94	117	97				0
05	OS-MW-1	96	95	117	96				0
06	OS-MW-2	95	95	115	97				0
07	OS-MW-3	95	95	117	97				0
08	OS-MW-4	95	95	117	99				0
09	DUP-1	96	95	117	99				0
10	GZ-23D	98	98	117	99				0
11	LCS-64195	98	97	112	99				0
12	MB-64195	97	97	117	97				0
13	GZ-22D	96	94	118	97				0
14	GZ-21D	97	96	118	96				0
15	B6-OW-D	97	93	116	97				0
16	LCS-64212	97	96	112	100				0
17	MB-64212	96	97	117	98				0
18	OS-MW-3DL	96	95	118	99				0
19	OS-MW-4DL	96	95	117	98				0
20	DUP-1DL	96	93	117	97				0
21	GZ-23DDL	97	94	118	98				0

QC LIMITS
 (85-115)
 (70-120)
 (85-120)
 (75-120)

VDMC1 (DBFM) Dibromofluoromethane
 VDMC2 (DCE) = 1,2-Dichloroethane-d4
 VDMC3 (TOL) = Toluene-d8
 VDMC4 (BFB) = Bromofluorobenzene
 # Column to be used to flag recovery values
 * Values outside of contract required QC limits

som111.10.27.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-64178

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
Lab Sample ID: LCS-64178 LCS Lot No.: _____
Date Extracted: 01/16/2012 Date Analyzed (1): 01/16/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	45.6231	91		50 - 145
1,1-Dichloroethene	50.0000	0.0000	47.3160	95		70 - 130
Acetone	50.0000	0.0000	37.5141	75		40 - 140
Methylene chloride	50.0000	0.0000	47.1732	94		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	47.1374	94		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	47.4896	95		65 - 125
1,1-Dichloroethane	50.0000	0.0000	48.4155	97		70 - 135
2-Butanone	50.0000	0.0000	43.6930	87		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	47.8128	96		70 - 125
Chloroform	50.0000	0.0000	46.8233	94		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	49.8539	100		65 - 130
Carbon tetrachloride	50.0000	0.0000	51.4312	103		65 - 140
1,2-Dichloroethane	50.0000	0.0000	48.4825	97		70 - 130
Benzene	50.0000	0.0000	47.8199	96		80 - 120
Trichloroethene	50.0000	0.0000	48.1513	96		70 - 125
Toluene	50.0000	0.0000	46.9920	94		75 - 120
Tetrachloroethene	50.0000	0.0000	56.7777	114		45 - 150
Chlorobenzene	50.0000	0.0000	56.8452	114		80 - 120
Ethylbenzene	50.0000	0.0000	58.0754	116		75 - 125
m,p-Xylene	100.0000	0.0000	116.1470	116		75 - 130
o-Xylene	50.0000	0.0000	57.3911	115		80 - 120
Xylene (Total)	150.0000	0.0000	173.5381	116		81 - 121
n-Propylbenzene	50.0000	0.0000	59.2681	119		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	59.6443	119		75 - 130
tert-Butylbenzene	50.0000	0.0000	57.1006	114		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	58.4352	117		75 - 130
sec-Butylbenzene	50.0000	0.0000	58.3093	117		70 - 125
1,3-Dichlorobenzene	50.0000	0.0000	56.4190	113		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	55.5246	111		75 - 125
n-Butylbenzene	50.0000	0.0000	60.4898	121		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	56.5649	113		70 - 120
1,4-Dioxane	1000.0000	0.0000	836.4505	84		70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 32 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-64195

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
Lab Sample ID: LCS-64195 LCS Lot No.: _____
Date Extracted: 01/17/2012 Date Analyzed (1): 01/17/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	47.4267	95		50 - 145
1,1-Dichloroethene	50.0000	0.0000	45.8008	92		70 - 130
Acetone	50.0000	0.0000	40.8256	82		40 - 140
Methylene chloride	50.0000	0.0000	46.1912	92		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	46.3521	93		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	46.6848	93		65 - 125
1,1-Dichloroethane	50.0000	0.0000	48.6129	97		70 - 135
2-Butanone	50.0000	0.0000	45.0695	90		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	46.7926	94		70 - 125
Chloroform	50.0000	0.0000	46.2626	93		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	48.7093	97		65 - 130
Carbon tetrachloride	50.0000	0.0000	50.6488	101		65 - 140
1,2-Dichloroethane	50.0000	0.0000	49.1353	98		70 - 130
Benzene	50.0000	0.0000	47.4727	95		80 - 120
Trichloroethene	50.0000	0.0000	45.7283	91		70 - 125
Toluene	50.0000	0.0000	46.5100	93		75 - 120
Tetrachloroethene	50.0000	0.0000	53.8726	108		45 - 150
Chlorobenzene	50.0000	0.0000	55.0559	110		80 - 120
Ethylbenzene	50.0000	0.0000	55.7899	112		75 - 125
m,p-Xylene	100.0000	0.0000	111.9283	112		75 - 130
o-Xylene	50.0000	0.0000	55.2356	110		80 - 120
Xylene (Total)	150.0000	0.0000	167.1639	111		81 - 121
n-Propylbenzene	50.0000	0.0000	56.7588	114		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	58.0350	116		75 - 130
tert-Butylbenzene	50.0000	0.0000	55.3053	111		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	57.0853	114		75 - 130
sec-Butylbenzene	50.0000	0.0000	57.4577	115		70 - 125
1,3-Dichlorobenzene	50.0000	0.0000	53.9195	108		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	53.2668	107		75 - 125
n-Butylbenzene	50.0000	0.0000	59.5868	119		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	54.3615	109		70 - 120
1,4-Dioxane	1000.0000	0.0000	840.8584	84		70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 32 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-64212

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
Lab Sample ID: LCS-64212 LCS Lot No.: _____
Date Extracted: 01/18/2012 Date Analyzed (1): 01/18/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	39.2024	78		50 - 145
1,1-Dichloroethene	50.0000	0.0000	36.5168	73		70 - 130
Acetone	50.0000	0.0000	39.5012	79		40 - 140
Methylene chloride	50.0000	0.0000	39.9411	80		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	38.6152	77		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	41.5240	83		65 - 125
1,1-Dichloroethane	50.0000	0.0000	41.0044	82		70 - 135
2-Butanone	50.0000	0.0000	41.9709	84		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	39.6184	79		70 - 125
Chloroform	50.0000	0.0000	39.2066	78		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	39.2479	78		65 - 130
Carbon tetrachloride	50.0000	0.0000	39.8822	80		65 - 140
1,2-Dichloroethane	50.0000	0.0000	43.9709	88		70 - 130
Benzene	50.0000	0.0000	39.7484	79	*	80 - 120
Trichloroethene	50.0000	0.0000	37.2376	74		70 - 125
Toluene	50.0000	0.0000	37.8057	76		75 - 120
Tetrachloroethene	50.0000	0.0000	42.1782	84		45 - 150
Chlorobenzene	50.0000	0.0000	46.1849	92		80 - 120
Ethylbenzene	50.0000	0.0000	45.4367	91		75 - 125
m,p-Xylene	100.0000	0.0000	90.2637	90		75 - 130
o-Xylene	50.0000	0.0000	44.9122	90		80 - 120
Xylene (Total)	150.0000	0.0000	135.1759	90		81 - 121
n-Propylbenzene	50.0000	0.0000	47.1635	94		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	48.4276	97		75 - 130
tert-Butylbenzene	50.0000	0.0000	45.6378	91		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.8133	96		75 - 130
sec-Butylbenzene	50.0000	0.0000	46.9148	94		70 - 125
1,3-Dichlorobenzene	50.0000	0.0000	45.7773	92		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	46.0377	92		75 - 125
n-Butylbenzene	50.0000	0.0000	49.5424	99		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	45.7776	92		70 - 120
1,4-Dioxane	1000.0000	0.0000	789.2406	79		70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 32 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-64178

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L0057

Mod. Ref No.:

SDG No.: SL0057

Lab Sample ID: LCSD-64178

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Vinyl chloride	50.0000	40.3954	81		12		40	50 - 145
1,1-Dichloroethene	50.0000	42.4169	85		11		40	70 - 130
Acetone	50.0000	36.5159	73		3		40	40 - 140
Methylene chloride	50.0000	42.8249	86		9		40	55 - 140
trans-1,2-Dichloroethene	50.0000	43.3455	87		8		40	60 - 140
Methyl tert-butyl ether	50.0000	42.9932	86		10		40	65 - 125
1,1-Dichloroethane	50.0000	43.6381	87		11		40	70 - 135
2-Butanone	50.0000	41.8467	84		4		40	30 - 150
cis-1,2-Dichloroethene	50.0000	43.1720	86		11		40	70 - 125
Chloroform	50.0000	42.6174	85		10		40	65 - 135
1,1,1-Trichloroethane	50.0000	44.7003	89		12		40	65 - 130
Carbon tetrachloride	50.0000	45.6097	91		12		40	65 - 140
1,2-Dichloroethane	50.0000	44.1010	88		10		40	70 - 130
Benzene	50.0000	43.4531	87		10		40	80 - 120
Trichloroethene	50.0000	43.3965	87		10		40	70 - 125
Toluene	50.0000	42.4371	85		10		40	75 - 120
Tetrachloroethene	50.0000	50.3722	101		12		40	45 - 150
Chlorobenzene	50.0000	51.6163	103		10		40	80 - 120
Ethylbenzene	50.0000	51.6563	103		12		40	75 - 125
m,p-Xylene	100.0000	103.7187	104		11		40	75 - 130
o-Xylene	50.0000	51.2969	103		11		40	80 - 120
Xylene (Total)	150.0000	155.0156	103		12		40	81 - 121
n-Propylbenzene	50.0000	52.6878	105		13		40	70 - 130
1,3,5-Trimethylbenzene	50.0000	53.2106	106		12		40	75 - 130
tert-Butylbenzene	50.0000	50.9879	102		11		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	52.5927	105		11		40	75 - 130
sec-Butylbenzene	50.0000	52.1605	104		12		40	70 - 125
1,3-Dichlorobenzene	50.0000	50.9138	102		10		40	75 - 125
1,4-Dichlorobenzene	50.0000	50.4740	101		9		40	75 - 125
n-Butylbenzene	50.0000	53.7602	108		11		40	70 - 135
1,2-Dichlorobenzene	50.0000	50.6569	101		11		40	70 - 120
1,4-Dioxane	1000.0000	760.5957	76		10		40	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 32 outside limits

Spike Recovery: 0 out of 32 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-64178

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
Lab File ID: V8A9189.D Lab Sample ID: MB-64178
Instrument ID: V10
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 01/16/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 14:26
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-64178	LCS-64178	V8A9185.D	12:42
02	LCSD-64178	LCSD-64178	V8A9186.D	13:08
03	TRIPBLANK	L0057-10A	V8A9190.D	14:52
04	OS-MW-1	L0057-01A	V8A9192.D	15:44
05	OS-MW-2	L0057-02A	V8A9193.D	16:10
06	OS-MW-3	L0057-03A	V8A9194.D	16:36
07	OS-MW-4	L0057-04A	V8A9195.D	17:02
08	DUP-1	L0057-05A	V8A9196.D	17:28
09	GZ-23D	L0057-06A	V8A9197.D	17:54

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-64195

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
Lab File ID: V8A9217.D Lab Sample ID: MB-64195
Instrument ID: V10
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 01/17/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:04
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-64195	LCS-64195	V8A9214.D	11:03
02	GZ-22D	L0057-07A	V8A9221.D	14:48
03	GZ-21D	L0057-08A	V8A9222.D	15:15
04	B6-0W-D	L0057-09A	V8A9223.D	15:41

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-64212

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0057 Mod. Ref No.: _____ SDG No.: SL0057
Lab File ID: V8A9246.D Lab Sample ID: MB-64212
Instrument ID: V10
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 01/18/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:15
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-64212	LCS-64212	V8A9243.D	9:38
02	OS-MW-3DL	L0057-03ADL	V8A9250.D	13:00
03	OS-MW-4DL	L0057-04ADL	V8A9251.D	13:26
04	DUP-1DL	L0057-05ADL	V8A9252.D	13:52
05	GZ-23DDL	L0057-06ADL	V8A9253.D	14:18

COMMENTS:

Last Page of Data Report

