



# **REMEDIAL INVESTIGATION**

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## **WORK ASSIGNMENT C007540-4**

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**FORMER KLINK COSMO CLEANERS SITE  
GREENPOINT/EAST WILLIAMSBURG INDUSTRIAL AREA**

**SITE NO. 2-24-130  
KINGS (C), NY**

Prepared for:  
**NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
625 Broadway, Albany, New York**

Joseph Martens, Commissioner

**DIVISION OF ENVIRONMENTAL REMEDIATION  
REMEDIAL BUREAU B**

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**PHASE 1 REMEDIAL INVESTIGATION  
FOR THE  
FORMER KLINK COSMO CLEANERS SITE  
SITE ID NO. 2-24-130  
BROOKLYN, KINGS COUNTY, NEW YORK**

**PREPARED FOR:**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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## LIST OF ACRONYMS AND ABBREVIATIONS

AARCO	AARCO Environmental Services Corporation
ADT	Aquifer Drilling & Testing, Inc.
amsl	above mean sea level
ASP	Analytical Services Protocol
AST	above ground storage tank
bgs	below ground surface
BQE	Brooklyn-Queens Expressway
BTEX	benzene, toluene, ethylbenzene, and xylenes
CD	compact disc
cm/sec	centimeters per second
COC	chain-of-custody
Con Edison	Consolidated Edison Company of New York, Inc.
CRA	Con
DI	drop inlet
DNAPL	dense non-aqueous phase liquid
DO	dissolved oxygen
DOT	Department of Transportation
DUSR	Data Usability Summary Report
ELAP	Environmental Laboratory Approval Program
EM	electromagnetic
ESA	Environmental Site Assessment
ExxonMobil	ExxonMobil Brooklyn Terminal
FAP	Field Activities Plan
FOIL	Freedom of Information Law
FSP	Field Sampling Plan
FWRIA	Fish and Wildlife Resources Impact Analysis
GPR	ground penetrating radar
HHEA	Human Health Exposure Assessment
HDPE	high density polyethylene
IDW	investigation derived wastes
Klink Cosmo	former Klink Cosmo Cleaners
L	liter
LNAPL	light non-aqueous phase liquid
mg/kg	milligrams per kilogram (parts per million)
MGP	manufactured gas plant
mL	milliliter
NAPL	non-aqueous phase liquid
NAVD	North American Vertical Datum
NYC	New York City
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation

## LIST OF ACRONYMS AND ABBREVIATIONS

NWI	National Wetland Inventory
OD	outer diameter
ORP	oxidation/reduction potential
Pace	Pace Analytical Services Inc. of Minneapolis MN
PCE	tetrachloroethene or perchloroethene or tetrachloroethylene or perchloroethylene
PID	photoionization detector
ppm	parts per million
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
redox	oxidation/reduction
RI	Remedial Investigation
Roux	Roux Associates, Inc.
RSI	Radar Solutions International
SCGs	standards, criteria and guidance values
SPDES	Spill Discharge Elimination System
Spectrum	Spectrum Analytical, Inc. of Rhode Island
TAGM	Technical and Administrative Guidance Memorandum
TAL	Target Analyte List
TCE	trichloroethene or trichloroethylene
TCL	target compound list
TICs	tentatively identified compounds
TOGS	Technical and Operational Guidance Series
µg/kg	micrograms per kilogram (parts per billion)
µg/L	micrograms per liter (parts per billion)
µg/m <sup>3</sup>	micrograms per cubic meter
URS	URS Corporation – New York
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VC	vinyl chloride
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOCs	volatile organic compounds
Zebra	Zebra Environmental Corp.

## **1.0 INTRODUCTION**

This Remedial Investigation (RI) Report has been prepared to summarize the field activities and analytical results from the RI Phase I field investigation at the Former Klink Cosmo Cleaners (Klink Cosmo) Site (NYSDEC Site Number 2-24-130) in the Greenpoint/East Williamsburg Industrial Area section of Brooklyn, New York. The work for this site was issued to URS Corporation – New York (URS) as Work Assignment No. C007540-4. This report presents data and information gathered prior to and during the RI Phase I field investigation, which was conducted from May 2 through July 15, 2011.

### **1.1 Site Background**

The Klink Cosmo Site is located in the Greenpoint/East Williamsburg Industrial Area section of the Borough of Brooklyn, New York (Figure 1-1). The Klink Cosmo Site is located within the Meeker Avenue Plume Trackdown Site (NYSDEC Site Number 2-24-121) investigation area. Based on data gathered during investigations at the Meeker Avenue Plume Trackdown Site conducted between May 2007 and July 2009, and a groundwater sampling event in November 2009, a source of groundwater contamination was identified originating from near the buildings housing the Former Klink Cosmo Cleaners, which was located at 368 Richardson Street (Tax District of Brooklyn, Block 02860, Lot 0001). In January 2009, the above mentioned source of groundwater contamination was listed as a NYSDEC Class 2 Inactive Hazardous Waste Disposal Site (Site Number 2-24-130). Geographical site and background information is provided in the following sections.

#### **1.1.1 Site Location and Description**

The area is a mixture of residential and manufacturing, including both commercial and industrial facilities. The Klink Cosmo property is currently being used for sheet metal fabrication. The entire site property and the majority of the project area are covered by one-story buildings and/or pavement/concrete. Residential areas are found along Beadel Street between Morgan Avenue and Porter Avenue; interspersed along Morgan Avenue between Lombardy Street and Beadel Street; and along Vandervoort Avenue between Lombardy Street and Division Place. A public recreational area (baseball diamonds) is located across Vandervoort Avenue from the Site.

The area east of the site across from Withers Avenue includes the previous location of the two manufactured gas plant (MGP) gas holders which were part of a Brooklyn Union Gas Company former MGP site. The 400-foot tall gas holders were constructed in 1927 and 1948, and used until the 1990s by the Brooklyn Union Gas Company, a predecessor to KeySpan, currently National Grid. The gas holders, used to help maintain consistent gas pressure to customers, were removed via a controlled implosion in July 2001.

The Klink Cosmo Site is located south of a region of historic petroleum refining and storage operations that occupied a significant portion of the Greenpoint area. By 1870 over 50 refineries were located along the banks of Newtown Creek located northeast of the Site. Currently, bulk oil storage terminals exist north of the site, including the BP Terminal and the ExxonMobil Brooklyn Terminal (ExxonMobil). The former Paragon Oil facility was located along Newtown Creek, north of Bridgewater Street, between Meeker Avenue and Apollo Street.

In September 1978, the United States Coast Guard noted the signs of an oil spill entering Newtown Creek from the northeastern end of Meeker Avenue. A subsequent investigation concluded that the area of the spill under the Greenpoint/East Williamsburg Industrial Area was in excess of 52 acres and the total spill volume, as estimated in 1979, was approximately 17 million gallons of petroleum products as documented by Roux Associates, Inc. (Roux) (Roux, October 14, 2005). The current BP property was determined to be the source of a petroleum free-product plume located generally north of the BQE. Investigation and remediation activities were conducted by Roux on behalf of ExxonMobil from 1990 to the present further defining the extent of the plume. The Meeker Trackdown Plume Area is shown on Figure 1-1. Currently, the extent of the plume area (Off-Site Plume) is less than what it was in 1990 due to the operation of a product recovery system which has recovered over 5,600,000 gallons since it became operational in 1995 (Roux, October 29, 2010). Based upon water level information, some hydraulic influence associated with the operation of the product recovery system has been noted in the Klink Cosmo Site area.

### **1.1.2 Summary of Records Search**

Based on the results of several investigations conducted in the area (see Section 1.2 for more details), chlorinated solvents such as tetrachloroethene (PCE) and trichloroethene (TCE) were found in soil vapor, soil, and groundwater in areas outside the historic petroleum spill. As these chemicals are not related to petroleum, the NYSDEC initiated the Meeker Avenue Plume Trackdown Site

investigation in order to determine the source(s) of this contamination. Information was gathered relevant to the Klink Cosmo Site and other nearby potential contamination sources as part of these previous investigations. These potential source areas are shown on Figure 1-2.

## **1.2 Findings of Previous Phases of Site Investigation Fieldwork**

### **1.2.1 Previous Investigations by Roux**

In September 2005, Roux Associates on behalf of ExxonMobil sampled soil vapor at 23 temporary locations in and around the perimeter of the Off-Site Plume area (Roux, October 14, 2005). The soil vapor samples collected in September 2005 indicated the presence of PCE at a concentration of 10,200 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) at a monitoring point located on the southwest corner of the Vandervoort Avenue and Anthony Street intersection. It was determined that the chlorinated solvents detected (i.e., PCE and TCE) were from a different source than the petroleum free product plume.

### **1.2.2 Previous Investigations by Environmental Planning and Management, Inc.**

In September 2005, Environmental Planning and Management, Inc. (EPM) completed an investigation for the New York State (NYS) Department of Transportation (DOT) in connection with the Kosciuszko Bridge Project (EPM, January 2006). The investigation included the collection and analysis of soil and groundwater samples. PCE was also detected at a concentration of 89.9 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in ExxonMobil well MW-018 (east side of Vandervoort Avenue between Anthony and Cherry Streets).

### **1.2.3 Previous Investigations by Impact Environmental Consulting, Inc.**

Impact Environmental Consulting, Inc. (Impact Environmental) conducted several Environmental Site Assessments (ESA) downgradient of the Klink Cosmo site on Anthony and Lombardy Streets as follows.

#### **1.2.3.1 Phase I ESA at 46-60 Anthony Street/ 95 Lombardy Street**

In March 1998, Impact Environmental conducted a Phase I ESA at 46-60 Anthony Street/ 95 Lombardy Street for ACME Architectural Products Inc., of Brooklyn, New York (Impact

Environmental, March 30, 1998a). The area is identified as Metal Works on Figure 1-2. A copy of the Phase I ESA may be found in PDF format on a compact disc which is included in Appendix A of the Phase IV Data Summary Report (URS, May 2009). The property historically had been utilized for iron working, metal shearing and finishing operations. At the time of the ESA, operations at the property included office space and operational space. The operational space was utilized for the machining, finishing, and storage of materials and products used in the manufacture of doors and knock down frames. The ESA identified a number of potential contamination sources that existed on the property due to current and/or past site activities. Numerous floor drains were identified throughout the building and their outfall locations were unknown. It was suspected that some drains may have discharged directly to on-site soils. Several underground storage tanks (USTs) and above ground storage tanks (ASTs) were identified and had been used for fuel oil storage or storage of degreasing products. It was noted that at the time of the ESA the facility was using a phosphate wash and rinse as a degreaser. During a personal interview, it was revealed that any regulated waste (i.e., waste paint, waste oil, waste degreaser and waste water precipitate) generated at the property was stored in the yard at 72 Anthony Street prior to disposal.

#### **1.2.3.2 Phase I ESA at 72 Anthony Street**

In March 1998, Impact Environmental conducted a Phase I ESA at 72 Anthony Street for ACME Architectural Products Inc., of Brooklyn, New York (Impact Environmental, March 30, 1998b). The area is identified as Brass Foundry on Figure 1-2. A copy of the Phase I ESA may be found in PDF format on a compact disc which is included in Appendix A of the Phase IV Data Summary Report (URS, May 2009). The property historically had been utilized as a brass foundry and civilian observation patrol. Operations on the property at the time of the ESA included office space and operational space. The operational space was utilized for the grinding, sanding and finishing of steel doors. The investigation identified a number of potential contamination sources that existed on the property due to current and/or past site activities. Numerous floor drains were identified throughout the building and their outfall locations were unknown. It is suspected that some drains may have discharged directly to on-site soils. One UST and one AST dip tank existed and were used for fuel oil storage and storage of degreasing products, respectively. It was noted that at the time of the ESA, the facility was using a phosphate wash and rinse as a degreaser. It was also noted that the floor of the room containing the AST dip tank was impacted by the release of degreasers from the dip tank. In addition, significant storage of portable chemical containers was observed in the building. A

paint room was identified in the center of the building, as was an associated paint storage room. The floor of the paint room was significantly stained by painting operations. Floor drains were observed in the paint storage room. A chemical storage area existed outside and to the east of the building and a bermed, concrete storage pad was also observed. Numerous chemical containers were noted outside the building and consisted of 55-gallon drums and smaller containers of primers, cutting oils, hydraulic oils, waste water, xylene, waste paints, adhesives, waste degreasers, steam cleaners and waste oil contaminated absorbents. However, most of the drums were located outside the bermed, concrete storage pad and were uncovered or missing screw caps. Two dry wells were identified along the south side of the building. In addition, during a personal interview it was revealed that the property previously maintained two dip tanks for degreasing. It was noted that a Phase I ESA was previously performed on the property in June 1995 by Conestoga-Rovers & Associates (CRA). The CRA Phase I revealed that 1,1,1-trichloroethane was formerly utilized in the dip tanks and that a floor drain was observed under one of the dip tanks.

#### **1.2.3.3 Phase II ESA at 46-60 Anthony Street/ 95 Lombardy Street**

In June 1998, Impact Environmental conducted a Phase II ESA at 46-60 Anthony Street/ 95 Lombardy Street for ACME Architectural Products Inc., of Brooklyn, New York (Impact Environmental, July 8, 1998). A copy of the Phase II ESA may be found in PDF format on a compact disc which is included in Appendix A of the Phase IV Data Summary Report (URS, May 2009). The scope of the Phase II ESA was based on the recommendations of the Phase I ESA (Impact Environmental, March 30, 1998a) and included a remote survey of a floor drain located in the northeast portion of the building and the collection of a sample from 0-2 feet below ground surface (bgs) below the floor drain. The remote survey conducted confirmed that the floor drain directly discharged to the subsurface soils. A soil sample collected from the 0-2 foot interval below the floor drain contained the VOCs, PCE and TCE, at 1,190 and 99.2 µg/kg respectively. In addition, the semi-volatile organic compounds (SVOCs) di-n-butylphthalate, pyrene and bis(2-ethylhexyl) phthalate were detected at 4,460, 539 and 1,690 µg/kg respectively. Metals which included arsenic (4.93 µg/kg), barium (114 µg/kg), cadmium (6.53 µg/kg), chromium (123 µg/kg), lead (906 µg/kg) and mercury (0.045 µg/kg) were detected. Cadmium, chromium and lead exceeded their respective criteria found in the Technical and Administrative Guidance Memorandum (TAGM) #4046, Determination of Soil Cleanup Objectives and Cleanup Levels (NYSDEC, January 24, 1994). The Phase II ESA concluded

that on-site operations had impacted the environmental quality beneath the property and recommended that corrective actions were required to mitigate the contaminated soil associated with the floor drain.

#### **1.2.4 Previous Investigations by URS**

To date, URS has conducted five phases of site investigation fieldwork at the Meeker Avenue Plume Trackdown Site. Data gathered during the Phase I, II, III, and the November 2009 Groundwater Sampling Event field activities are relevant to the Klink Cosmo Site. The Phase IV activities were focused in an area to the northeast of the Klink Como Site. The Phase V activities were focused in an area to the northwest of Klink Cosmo. Sample locations and PCE/TCE results from these investigations relevant to the Klink Cosmo Site Investigation Area, the extent of which is shown on Figure 1-2, are shown on Figure 1-3 for soil gas, Figure 1-4 for groundwater, and Figure 1-5 for soil.

##### **1.2.4.1 Summary of Phase I Findings**

The Phase I field investigation was conducted from May 7 through July 10, 2007. The field activities of Phase I were primarily focused on locations that were identified as potential historic users of PCE and/or TCE during the historical information review. A complete description of the field investigation and results may be found in the Phase I Data Summary Report (URS, October 2007).

Based upon the results of the Phase I field investigation, the following conclusions were made about the vicinity of the Klink Cosmo Site:

- Soil gas samples indicated that PCE and TCE have impacted soil gas quality. Elevated soil gas concentrations appear to be identified near locations that potentially have used PCE and TCE.
- Groundwater samples indicated that groundwater has been impacted above NYSDEC TOGS 1.1.1 Class GA groundwater standards for both PCE and TCE. Elevated groundwater concentrations appear to be identified near locations that potentially have used PCE and TCE.

##### **1.2.4.2 Summary of Phase II Findings**

The Phase II field investigation was conducted from November 5 through December 27, 2007. The field activities of Phase II were primarily focused on investigating and delineating the extent of



impacted soil gas, soil and/or groundwater at locations where elevated concentrations of PCE and/or TCE were encountered during the Phase I field investigation. A complete description of the field investigation and results may be found in the Phase II Data Summary Report (URS, April 2008).

Based upon the results of the Phase II field investigation, the following conclusions were made about the vicinity of the Klink Cosmo site:

- There appear to be areas of elevated soil gas concentrations in the area next to the former Klink Cosmo Site Area.
- There appear to be potential source areas where dissolved phase chlorinated solvents have adversely impacted shallow groundwater Klink Cosmo Site Area.

#### **1.2.4.3 Summary of Phase III Findings**

The Phase III field investigation was conducted from May 5 through July 24, 2008. The purpose of the Phase III fieldwork was to fill any data gaps identified during Phase II concerning the horizontal extent of impacted soil gas at areas identified; determine if impacted soils existed at one potential source area; determine the horizontal extent of impacted shallow groundwater at the potential sources; and to assess the vertical extent of impacted groundwater at each of the potential sources. Activities included submitting Freedom of Information Law (FOIL) requests to the New York City (NYC) Fire Department, NYC Department of Buildings and the NYC Department of Environmental Protection (DEP) for records on potential sources. A complete description of the field investigation and results may be found in the Phase III Data Summary Report (URS, October 2008).

Based upon the results of the three phases of the field investigation, the following conclusions were made about the vicinity of the Klink Cosmo site:

- The former and current metal works (ACME Steel Metals Works) located at 95 Lombardy (Brooklyn Tax District, Block 02819, Lot 0008) was identified as a source of groundwater contamination. Based on Sanborn map data, the facility has been utilized from the 1930s to the present as a metal fabricator and painting facility. ACME Steel is listed in the EDR report as a generator of F001 waste (spent halogenated solvents used in degreasing) for this facility. Groundwater samples from monitoring wells indicate significant TCE contamination and the potential presence of dense non aqueous phase liquids (DNAPL) given the increasing TCE concentrations with depth.

- A former brass foundry located at 72 Anthony Street (Brooklyn Tax District, Block 02820, Lot 0005) has been identified as source of soil and groundwater contamination. Based on Sanborn map data, the facility had been utilized as a brass foundry from the mid 1960's to approximately 1993. ACME Steel is listed in the EDR report as a generator of F001 waste (spent halogenated solvents used in degreasing) for this facility. Soil samples from DEC-016 and SB-08, located at the northeast corner of the facility along Anthony Street indicate PCE contamination adjacent to this facility. Monitoring wells DEC-016 and DEC-016D are located on the Anthony Street (north) side of the facility. Groundwater samples from these wells indicate significant PCE and TCE contamination. The PCE contamination is in the shallow groundwater zone, indicating the contamination is near its source. Although PCE, TCE and their associated degradation products have been found in groundwater samples from surrounding upgradient, downgradient and sidegradient wells, the concentrations are one to two orders of magnitude lower than in DEC-016/016D.
- The former Klink Cosmo Cleaners, located at 364 Richardson Street (Tax District of Brooklyn, Block 02860, Lot 0001) was identified as a source of groundwater contamination. The facility is shown on Sanborn Maps to be a clothing warehouse from the mid-1950s until after 1995. Klink Cosmo Cleaners is listed in the EDR report as a generator of F002 waste (spent halogenated solvents) for this facility. Monitoring wells DEC-031 and DEC-031D are located on the southwestern corner of Vandervoort Avenue and Richardson Street (northeast building corner). Soil-gas and groundwater samples indicate significant PCE and TCE contamination at the northeastern corner of the building.

#### **1.2.4.4 Summary of Phase IV Investigation Findings**

The Phase IV field investigation was conducted from November 3 through December 8, 2008. The extent of the Phase IV fieldwork was concentrated to the northeast of the Klink Cosmo site and is not relevant to this investigation.

#### **1.2.4.5 Summary of Phase V Investigation Findings**

The Phase V field investigations were conducted from June 15 through July 13, 2009. The extent of the Phase V fieldwork was concentrated to the northwest of the Klink Cosmo site and is not relevant to this investigation.

#### **1.2.4.6 November 2009 Groundwater Sampling Event**

From November 3 through November 9, 2009, URS personnel collected groundwater samples from 20 monitoring wells in the vicinity of the Klink Cosmo Site. PCE was detected in 19 of the 20 groundwater samples; with 17 locations at concentrations exceeding groundwater criteria. TCE was detected in 16 of the 20 groundwater samples collected, with 10 locations exceeding groundwater criteria. The presence of PCE and TCE degradation products were detected at concentrations exceeding groundwater criteria, and similar to concentrations found during Phase III groundwater sampling.

### **1.3 Objectives of the RI**

The objective of the RI is to define the horizontal and vertical extent of contamination related to the Klink Cosmo Site in soil, overburden groundwater, and soil vapor. The results of this investigation, together with data from previous investigations and additional investigations to be conducted as part of a future area-wide site characterization, will be used to develop remedial action objectives and support the selection of an appropriate remedial action to address contamination related to the site. The full horizontal and vertical extent of contamination has yet to be determined.

### **1.4 Report Organization**

This report has eight sections. Section 1 includes background information and a synopsis of URS' previous activities at this site. Section 2 includes a description of field activities that occurred during the RI fieldwork. Section 3 includes a description of the local and regional geology and hydrogeology. Section 4 discusses the nature and extent of the contamination. Section 5 presents a conceptual model and discusses contaminant fate and transport. The Qualitative Human Health Exposure Assessment will be completed in Section 6.0 during Phase 2 of the RI. The Fish and Wildlife Resources Impact Analysis is included in Section 6.0. Summary and Recommendations are provided as Section 7.0 in this submittal. Section 8 contains a list of references cited. Tables, Figures, and Appendices immediately follow the text.

## **2.0 REMEDIAL INVESTIGATION FIELD ACTIVITIES**

Field activities performed during the remedial investigation from May 2 through July 15, 2011 are discussed below. Monitoring well and soil boring locations within the Klink Cosmo Investigation Area are shown on Plate 1; soil gas sample points are shown on Plate 2.

### **2.1 Utility Clearance**

Prior to site work, each subcontractor arranged for all appropriate utility clearance mark-outs. This included (but was not limited to) contacting the NYC DEP and Department of Transportation, the Transit Authority, Consolidated Edison Company of New York, Inc. (Con Edison), Keyspan, and Verizon, in addition to using the Dig-Safely number for New York City – 811 or (800) 272-4480. In addition, URS coordinated with Con Edison for the installation of protective jackets on overhead wires near several proposed boring locations. The jackets were installed by Con Edison on May 19, 2011.

### **2.2 Geophysical Survey for Utility Markouts**

On May 2 and 3, 2011, Radar Solutions International (RSI) mobilized a one person crew with ground penetrating radar (GPR) and electromagnetic (EM) induction equipment to the site. The purpose of the geophysical survey was to screen for and identify the presence/location of underground utilities in areas where monitoring well installations were proposed.

A 10-foot square reference grid was established around each monitoring well location prior to collecting the geophysical data. A GSSI SIR-2000 digital radar system was used to perform the GPR survey. GPR data were acquired along lines spaced 1.0 to 2.5 feet apart. The EM induction equipment used to determine the location of buried utilities was a Ditch Witch 950 RT locating system and a McLaughlin's Verifier G2 digital locator.

RSI marked utilities and anomalies by spray-painting the outline on the pavement as soon as they were located. A photograph of a completed RSI utility mark out can be found in Appendix A. A URS geologist supervised and assisted RSI. Copies of the daily field notes are provided in Appendix B. RSI's report is provided in Appendix C.

### **2.3     Soil Vapor Implant Installation**

Prior to any intrusive activities, the subcontractor obtained all necessary permits (i.e., NYC DOT street opening permits) for conducting intrusive activities. Ten permanent soil vapor implants (SG-078 through SG-087) were installed on May 6, 2011 by Zebra Environmental Corporation of Lynbrook, NY (Zebra), under the direction of a URS geologist. Locations of existing and newly installed soil vapor implants are shown on Plate 2. All locations were installed through sidewalks. Rotary concrete drill bits were used to drill through the concrete sidewalk. A track-mounted Geoprobe® 6620 DT hydraulic direct-push unit was utilized to advance a 2-inch outside diameter (OD) by 5-foot long acetate-lined Macrocore sampler to a maximum depth of 8 feet bgs.

Each sample core was screened with a photoionization detector (PID). Up to one soil sample was collected from each boring from the interval exhibiting odors, staining, or the highest PID reading. If no odors, staining, or elevated PID readings were encountered, then a sample from the bottom of the boring was collected.

A 6-inch long double-woven stainless steel Geoprobe® vapor sampling implant was connected to an anchor and positioned above the silty clay layer (if present) or at the bottom of the probe hole. Polyethylene tubing ( $\frac{3}{8}$ -inch OD) was connected to the implant and was cut above the ground surface. The annular space around the implant (screen) was backfilled with #1 silica sand to 6 inches above the implant. A bentonite slurry was placed immediately above the sand for the seal, and extended to the ground surface. The implants were completed with 3-inch diameter aluminum flush-mount protective casings, secured with approximately 1 foot of concrete. Each flush mount casing cover was secured with a  $\frac{9}{16}$ -inch bolt.

All downhole equipment was decontaminated with a non-phosphate detergent and potable water between each soil vapor implant location. No investigation derived wastes (IDW) were generated during the soil-gas conduit installation. A photograph of a sampling implant and a completed soil vapor implant location can be found in Appendix A. Copies of the daily field notes are provided in Appendix B. Soil boring logs are provided in Appendix D and soil vapor implant construction logs are provided in Appendix E.

For the soil samples collected during installation of the soil vapor implants, a chain-of-custody (COC) form was maintained and accompanied the soil sample containers to Spectrum Analytical, Inc. of Rhode Island (Spectrum), a New York State Department of Health (NYSDOH) Environmental

Laboratory Approval Program (ELAP) accredited laboratory. The soil samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) listed in Table 2-2, plus tentatively identified compounds (TICs), following United States Environmental Protection Agency (USEPA) SW846 Method 8260B.

## **2.4     Soil Vapor Sampling**

Between June 13 and 15, 2011, soil vapor samples were collected from 30 existing and newly installed soil vapor implants plus quality assurance/quality control (QA/QC) samples. Sampling locations are shown on Plate 2. It should be noted that there was no loss in the Summa® canister vacuum pressure in the attempt to collect a sample at location SG-083. It is unknown if the inability to grab a sample from the SG-83 location was due to a problem with the equipment (i.e., regulator) or the presence of water in the soil vapor implant. An attempt will be made to sample this location again during the next phase of field activities.

The soil vapor samples were collected in accordance with the procedures outlined in the Field Activities Plan (FAP) (URS, April 2010) using laboratory evacuated 6-liter Summa® canisters with 1 hour flow regulators provided by Pace Analytical Services, Inc. of Minneapolis, MN (Pace). Per NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH, October 2006), a helium tracer gas was utilized during the sampling of each soil vapor implant. The tracer gas was used to verify that the infiltration of outdoor (ambient) air was not occurring during sample collection. A one-quart enclosure was placed over the well head. The well tubing was run through an outlet and plumber's putty was used to seal the interface between the tubing and the enclosure. The enclosure was then sealed at the ground surface with a polyurethane foam gasket. A tank containing ultra-high purity helium (99.999%) was connected to the side port of the enclosure and enough helium was released to displace any ambient air and to maintain a positive pressure within the enclosure. Following the application of the tracer gas, one to three volumes were purged from the soil vapor implant using a Gilian GilAir-3 air sample pump.

A Dielectric MGD-2002 helium detector was used to check for the presence of the tracer gas in the purged soil vapor; if less than 10% of the tracer gas was detected, a sample was collected. Following the collection of the soil vapor sample, the helium detector was re-connected to the tubing to check for the presence of the tracer gas in the soil vapor; if less than 10% of the tracer gas was

detected, the sample was acceptable for analyses. No elevated concentrations of helium were detected prior to or following the sample collection from any of the soil gas implants.

One outdoor (ambient) air sample was collected each day from a location upwind of the sample locations. The outdoor ambient air sample was collected by opening a summa canister fitted with a one-hour flow controller and drawing in the ambient air. Field duplicate samples were collected using stainless steel 'T' fittings. Copies of the completed Summa Canister Sampling Field Data Sheets from the sampling event are provided in Appendix F.

A COC form was maintained and accompanied the air and soil gas samples, which were shipped, via Federal Express, to Pace, a NYSDOH ELAP accredited laboratory. The soil vapor and outdoor air samples were analyzed for the TCL VOCs listed in Table 2-2, following USEPA Method TO-15.

## **2.5 Groundwater Monitoring Well Installation**

The following sections describe the monitoring well installation program for the RI fieldwork.

### **2.5.1 Pre-Boring Clearing**

Prior to any intrusive activities, the subcontractor obtained all necessary permits (i.e., NYC DOT street opening permits) for conducting intrusive activities. On May 9, 2011, Aquifer Drilling & Testing, Inc. (ADT) mobilized two Vac-Tron® units to perform location specific utility clearance at each of the proposed monitoring well locations. A total of 17 monitoring well locations were cleared between May 9 and 11, 2011. At each location, a two-foot by two-foot square area of the sidewalk was cut. An approximately one-foot diameter by five-foot deep hole was excavated using post-hole diggers, pry bars, and an air knife along with the Vac-Tron® unit. After the location was cleared for drilling, the hole was backfilled flush with the sidewalk using the excavated spoils (rocks and debris removed) and temporarily patched with blacktop patch or concrete.

All investigation derived wastes (IDW) generated from the pre-boring clearing was containerized in DOT approved 55-gallon drums and picked up by AARCO Environmental Services Corporation (AARCO) on a daily basis for off-site disposal at a permitted facility.

### **2.5.2 Soil Borings**

During the period of May 10 through June 6, 2011, ADT utilized track-mounted AMS Compact Roto Sonic 17-C drill rigs for the installation of 17 monitoring wells at the locations shown on Plate 1. Of the 17 monitoring wells installed, 4 were water table (shallow wells) and the remaining 13 were deep overburden wells.

The soil borings associated with monitoring wells were advanced using a combination of a 3-inch diameter inner sampler (5 feet in length) and a 5-inch diameter outer casing. The procedure for the advancement of the borehole was to advance the inner sampler the appropriate interval (5 feet) and then advance the outer casing over the inner sampler to the desired depth. After the outer casing was advanced, the inner sampler was retrieved and the collected sample core was placed in a polyethylene sample tube. The process was repeated until the desired depth was reached.

Each sample core was screened with a PID. Up to two soil samples were collected from each boring; one soil sample was collected from the interval just above water table; the second sample was collected from the interval exhibiting odors, staining, or the highest PID reading. If no odors, staining, or elevated PID readings were encountered, then only one sample from the interval just above the water table was collected. Copies of the daily field notes are provided in Appendix B; and soil boring logs are provided in Appendix D.

A COC form was maintained and accompanied the soil sample containers to Spectrum. The soil samples were analyzed for TCL VOCs as listed in Table 2-2, plus TICs following USEPA SW846 Method 8260B. Select soil samples were submitted to 3<sup>rd</sup> Rock, LLC of East Aurora, NY for geotechnical analysis. Soil samples collected for geotechnical analysis include those from DEC-29D (84-84.5'), DEC-044D (50-51' and 70-71'), DEC-065D (9-10' and 14-15'), and DEC-066D (24-25'). The soil samples were tested for grain size distribution (ASTM D422), Atterberg Limits (ASTM D4318), and falling head permeability (ASTM D5084). The results of the geotechnical analysis are presented in Appendix N and discussed in Section 3.5.

All IDW generated from the monitoring well installation was containerized in DOT approved 55-gallon drums and picked up by AARCO on a daily basis for off-site disposal at a permitted facility.



### **2.5.3 Monitoring Well Construction**

The 4 shallow monitoring wells (DEC-014R, DEC-064, DEC-065, DEC-066) were constructed with 15 feet of 2-inch ID, Schedule 40 polyvinyl chloride (PVC) 0.010-inch slot screen and riser. The screen was nominally set between 5 feet above and 10 feet below the water table at most locations (approximate depth between 30 to 50 feet bgs). A 00 size sand pack was installed from the bottom of the well up to 2 feet above the top of the well screen. A bentonite slurry was then installed around the riser to an elevation of 2-foot below grade via tremie pipe.

The 13 deep monitoring wells (DEC-006DD, DEC-007D, DEC-013D, DEC-014D, DEC-015D, DEC-029D, DEC-030D, DEC-043D, DEC-044D, DEC-045D, DEC-064D, DEC-065D, DEC-066D) were constructed with 10 feet of 2-inch ID, Schedule 40 PVC 0.010-inch slot screen and riser (approximate depth between 70 to 90 feet bgs). A 00 size sand pack was installed from the bottom of the well up to 2 feet above the top of the well screen. A bentonite slurry was then installed around the riser to an elevation of 2-foot below grade via tremie pipe.

Each monitoring well was finished with a locking well cap, a 2-foot square concrete apron, and a flush-mounted curb box. Security bolts were installed in the well covers to minimize the potential for unauthorized well access. The concrete apron for each well pad was approximately 6 inches thick. Monitoring well construction logs are provided in Appendix G.

### **2.6 Groundwater Level Measurements**

A synoptic round of groundwater levels was collected on June 20, 2011 and used to develop a groundwater contour elevation map so that groundwater flow directions could be determined. Monitoring wells within the area were checked for depth to groundwater and thickness of accumulated non-aqueous phase liquid (NAPL), if any. Water levels were determined using a 100-foot long Solinst oil/water interface probe. Table 2-1 presents groundwater level measurements and the presence/absence of NAPL in monitoring wells. Groundwater elevations were adjusted if light non-aqueous phase liquid (LNAPL) was present, based upon the (laboratory) measured specific gravity of the product present in the individual monitoring well.

### **2.7 Monitoring Well Development**

At least 24 hours after the monitoring wells were installed, the wells were developed by URS personnel with the pump and surge development method using a Waterra Inertial Hydrolift pump with

dedicated/disposable high density polyethylene (HDPE) tubing and dedicated/disposable HDPE check valves. Prior to well development, a 100-foot long Solinst oil/water interface probe was used to check for the presence/thickness of any free product. During well development, water quality parameters (pH, specific conductivity, temperature, turbidity) were measured using a Hanna 991301 Multiparameter Meter and a Lamotte 2020 turbidimeter and recorded. A monitoring well was considered developed when a minimum of 100 gallons was removed, and water quality parameters had stabilized. Well development logs may be found in Appendix H. Well development water was collected in DOT approved 55-gallon drums and picked up daily by AARCO for off-site disposal at a permitted facility.

## **2.8 Aquifer Testing**

Following well development, slug testing was conducted on 28 new and existing monitoring wells to estimate the horizontal hydraulic conductivity within the overburden. Falling head tests were performed by recording the initial water level in the well, lowering a pressure transducer/datalogger (In-situ MiniTroll) into the well, inserting a decontaminated slug to raise the water level in the well, and recording the water level over time until it returned to the original static level. Rising-head tests were performed immediately following completion of the falling head test. With the slug already in the water column, the static water level was recorded, the slug was then removed, and water level readings were taken as the water level gradually returned to static condition. Representative aquifer testing data and results are provided in Appendix I.

## **2.9 Non-Aqueous Phase Liquid Gauging**

During RI fieldwork, monitoring wells were checked for the presence of NAPL. LNAPL was observed as discussed below and presented on Table 2-1. No DNAPL was observed during the RI Phase 1 field activities.

### **2.9.1 Dense Non-Aqueous Phase Liquid Gauging**

No DNAPL was observed during the RI Phase 1 field activities.

### **2.9.2 Light Non-Aqueous Phase Liquid Gauging**

During the RI, from June 20 to 22, 2011, LNAPL was observed at a thickness ranging from 0.0 to 0.12 feet in DEC-048. LNAPL had not been previously observed in this monitoring well which was installed in June 2008.

### **2.10 Non-Aqueous Phase Liquid Sampling**

One NAPL sample was collected during the RI Phase 1 fieldwork. An LNAPL sample was collected on June 24, 2011 from DEC-048.

#### **2.10.1 Dense Non-Aqueous Phase Liquid Sampling**

No DNAPL samples were collected during the RI Phase 1 field activities.

#### **2.10.2 Light Non-Aqueous Phase Liquid Sampling**

On June 24, 2011, URS personnel collected an LNAPL sample from DEC-048 using a dedicated/disposable HDPE bailer. A COC form was maintained by URS and accompanied the sample containers to Spectrum. The LNAPL sample was analyzed by Spectrum for TCL VOCs plus TICs, TCL SVOCs plus TICs, and Petroleum Hydrocarbons by Method 8100 (modified), as listed in Table 2-2. Specific gravity was analyzed by ASTM D4052 by Mt. Tom Generating Co. LLC Analytical Laboratory of West Springfield, MA as a subcontractor to Spectrum.

### **2.11 Groundwater Sampling**

From June 20 through June 24, 2011, URS measured depth to groundwater and collected groundwater samples from 45 monitoring wells plus QA/QC samples using low-flow sampling procedures. Due to the presence of LNAPL, the groundwater sample from monitoring well DEC-048 was collected using 1-inch PVC with a tethered cap inserted into the well to bypass the LNAPL. The sample tubing was then inserted through the PVC pushing out the cap at a depth below the LNAPL in order to sample the well at the midpoint of the screen.

Prior to sample collection, standing water was purged from each well with a QED SamplePro Micropurge bladder pump using dedicated/disposable bladders and HDPE tubing. Wells were purged at a rate of 1-liter per minute or less and the purge rate was adjusted to minimize draw down. During the purging of the well, water quality parameters (pH, specific conductivity, temperature, dissolved

oxygen, turbidity) were measured using a Horiba U-22 Multi-parameter Instrument with a flow-through cell and documented on a purge log. Samples were collected after the water quality parameters stabilized. Purge logs are provided in Appendix J. Purge water was collected in DOT approved 55-gallon drums, and was picked up daily by AARCO for proper disposal.

All samples were transported under COC via laboratory courier to Spectrum. The groundwater samples were analyzed for TCL VOCs as listed in Table 2-2.

#### **2.12 Investigation Derived Waste Disposal**

AARCO was contracted for the daily pick-up and disposal of all drummed IDW at a permitted disposal facility. Copies of the non-hazardous bills of lading and hazardous waste manifests are provided in Appendix K.

#### **2.13 Monitoring Well Maintenance**

During RI fieldwork, well maintenance was performed on all DEC wells where groundwater samples were collected. Every well cover was removed and all the bolt holes were tapped out and lubricated with an anti-seize paste. All flush-mount protective casings on DEC wells were equipped with new Penta Head tamper proof bolts.

#### **2.14 Concrete Sidewalk Flag Replacement**

AARCO was contracted for the replacement of sidewalk flags that had been drilled through during previous and current site activities. AARCO replaced a total of 25 sidewalk flags between July 11 and 15, 2011. The sidewalk flags ranged in size from 5-foot by 5-foot to 10-foot by 10-foot square. Prior to removal of the damaged flags, AARCO cut the perimeter of each flag to be replaced using a water-cooled pavement saw. The flags were demolished, removed and disposed of by AARCO. New flags were replaced in kind to the surrounding flags. Copies of the daily field notes are provided in Appendix B.

#### **2.15 Site Survey**

URS surveyed the area, including all new soil borings, monitoring wells, and soil gas points installed for location and elevation. The survey provides 100-scale mapping and does not include elevated roadways and expressways (i.e., BQE). All surveying was performed under the supervision of a New York State licensed land surveyor. All vertical control points were referenced to the North

American Vertical Datum 1988 (NAVD 1988). Horizontal datum was referenced to the North American Datum of 1983 (NAD83), New York State Plane Coordinate System, Long Island Zone. Copies of survey field notes and site sketches are provided in Appendix L. A site survey drawing is provided in Appendix M.

### **3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA AND GEOLOGY**

This section discusses the physical characteristics of the study area including: surface features, groundwater use, demography and land use, soil, surface water hydrology, geology and hydrogeology.

#### **3.1 Surface Features**

The topography of the site investigation area slopes gently downward to the south. The elevation near the Klink Cosmo property ranges from approximately at 39 feet above mean sea level (amsl) near the corner of Morgan Avenue and Richardson Street to 35 feet amsl near the corner of Vandervoort Avenue and Richardson Street to 28 feet amsl farther south at the corner of Frost Street and Vandervoort Avenue.

The entire site property and the majority of the project area are covered by buildings and/or pavement/concrete.

Limited green space is present in the area and generally in the vicinity of residential properties. Surface soil is present in landscape boxes adjacent to area sidewalks; however, given the nature of the urban environment and the fact that dogs are exercised along the sidewalks, the soil should not be construed as representative of clean surface soil. Recreation areas in the vicinity of the Site are baseball fields directly east of the site, across Vandervoort Avenue, and Monsignor McGolrick Park which is a 9.13 acre park 2,000 feet northwest of the site bounded by Monitor and Russell Streets and Nassau and Driggs Avenues.

#### **3.2 Demography and Land Use**

The site is located in the Greenpoint/East Williamsburg Industrial Area section of the Borough of Brooklyn, Kings County, New York. Petroleum refining and storage operations occupy a significant portion of the Greenpoint area, especially to the north and east. The population of Brooklyn (Kings County) is 2,504,700 according to the 2010 Census. The Klink Cosmo property is currently being used for steel fabrication. The area is a mixture of residences and manufacturing facilities, including both commercial and industrial facilities. A recreational area is situated directly east of the Site across Vandervoort Avenue.

Land use in New York City is regulated by the City's Zoning Resolution, which has two parts: zoning text and zoning maps. The text establishes zoning districts and sets forth regulations governing their land use and development. The maps show the locations and boundaries of the zoning districts. The City is divided into three basic zoning districts: residential (R), commercial (C), and manufacturing (M). The three basic districts are further divided into a range of lower-, medium-, and higher-density residential, commercial, and manufacturing districts.

The project area falls within three zoning districts identified by the New York City Department of City Planning ([http://www.nyc.gov/html/dcp/html/zone/zh\\_zmactable.shtml](http://www.nyc.gov/html/dcp/html/zone/zh_zmactable.shtml)). These zoning districts are: R6B, M1-1, and M3-1. The current (2011) zoning and land use of individual properties was determined through the NYCityMap (<http://gis.nyc.gov/doitt/nycitymap>).

R6 and R6B Residential Districts (medium density). Primary permitted uses in the R6 district include medium density residential. A mixture of building types are allowed and range from small apartment buildings set back on small lots to row houses to large-scale apartment towers. The "B" suffix indicates a contextual district, where supplemental regulations require a new development to maintain the scale and form of the existing neighborhood context. Residential buildings are zoned as R6B north of Division Place and south of Lombardy Street between Morgan and Porter Avenues.

M1-1 Manufacturing District (light industrial). Permitted uses in the M1 districts include typical light industrial, office and retail uses. M1 districts are often a buffer between M2 or M3 manufacturing districts and adjacent residential or commercial districts. Residences are generally not included within M1 districts unless as part of a Special Mixed Use District. The majority of properties south of Meeker Avenue east of Morgan Avenue and west of Porter Avenue are located in the M1-1 district.

M3-1 Manufacturing District (heavy industrial). Permitted uses in the M-3 industrial district include heavy industry that generate potential nuisance effects such as noise, traffic or pollutants and include power plants and fuel supply depots. The "1" suffix refers to supplemental parking requirements. Properties south of Meeker and east of Porter Avenue are zoned M3-1.

### **3.3     Regional Geology**

The site investigation area is located within the Atlantic Coastal Plain physiographic province of New York State (Broughton et al., 1966). The Atlantic Coastal Plain is characterized by low relief with elevations ranging from sea level to almost 400 feet amsl. The lithology of Brooklyn and Queens consists of Cretaceous and Pleistocene age unconsolidated deposits underlain by Precambrian crystalline bedrock. The unconsolidated deposits pinch out in northwestern Queens where bedrock outcrops, but reach a thickness of more than 1,000 feet in southeastern Queens. Information from the United States Geological Survey (USGS) (USGS, 1999) indicates that the unconsolidated deposits form 6 distinct hydrogeologic units consisting of 4 aquifers and 2 confining layers that generally dip to the south-southeast (Figure 3-1). The units in ascending order are the Lloyd aquifer (0-300 feet thick), the Raritan confining unit (0-200 feet thick), the Magothy aquifer (0-500 feet thick), the Jameco aquifer (0-200 feet thick), the Gardiners clay (0-150 feet thick), and the upper glacial aquifer (0-300 feet thick). The units pinch out to the north-northeast and may not all be found at any one location.

Based on USGS information for borings performed near the site for unrelated work, the site is underlain from the surface down by upper glacial aquifer, the Raritan confining unit, and crystalline bedrock. The upper glacial aquifer is of Wisconsin age and consists of a terminal moraine, a ground moraine, and glacial outwash deposits whose area is characterized as an unsorted and unstratified mixture of clay, sand, gravel and boulders. The Raritan confining unit consists of deltaic clay and silty clay beds and some interbedded sands. The Raritan confining unit has been encountered in three borings performed near the Meeker Trackdown Plume site, but unrelated to this investigation: one boring near Morgan Avenue and Meeker Avenue (-47 feet amsl); one boring under the BQE near the west bank of Newtown Creek (-48 feet amsl); and one boring near Meeker Avenue between Stewart Avenue and Gardner Avenue (-71 feet amsl). The boring near Morgan Avenue and Meeker Avenue penetrated the Raritan confining unit into the underlying crystalline bedrock at a depth of -163 feet amsl.

### **3.4     Site Geology**

Figure 3-2 presents the locations of the monitoring wells and cross sections developed during the RI. Cross sections A-A' and B-B' are shown on Figures 3-3 and 3-4, respectively. Based upon subsurface data obtained during this and previous investigations, only the upper glacial aquifer has been penetrated. The following textural units have been found in the upper glacial aquifer in most



areas of the site from the surface downward: clayey silt at the surface in most locations; a sand unit; a discontinuous glacial till unit; and a discontinuous clayey silt/silt unit. MGP-related fill material (i.e., cinder and/or trace slag) found in DEC-14D (5-7' bgs), DEC-043 (1-11' bgs), SG-079 (1-2' bgs), and SG-086 (at 1' bgs) is present across Vandervoort Avenue in the vicinity of the former MGP facility. Fill material from approximately 1 to 8 feet was found in DEC-030 (clay, trace brick fragments).

The sand unit is present at the majority of boring locations and is represented by stratified sands of varying textures containing some to no fines. The entire thickness of the sand unit has not been penetrated. However, it was found to be approximately at least 80 feet thick in the majority of borings. The discontinuous glacial till unit was noted in borings and consists of a heterogeneous mixture of sand, silt, and clay and varying amounts of gravel, cobbles and boulders. The discontinuous clayey silt/silt unit has been observed from the ground surface, as an inclusive unit within the sand unit, and at depth, and has been observed in most of the borings at the site. The thickness of the clayey silt/silt unit, where present, varies from 0.5 to over 10 feet thick.

### **3.5 Geotechnical Test Results**

During Phase 1 of the RI, select soil samples were analyzed in August 2011 by 3<sup>rd</sup> Rock, LLC of East Aurora, NY for geotechnical analysis: grain size distribution (ASTM D422); Atterberg Limits (ASTM D4318); and falling head permeability (ASTM D5084). Soil samples collected for geotechnical analysis include those from DEC-29D (84-84.5'), DEC-044D (50-51' and 70-71'), DEC-065D (9-10' and 14-15'), and DEC-066D (24-25'). Results are presented in Table 2-3 and summarized below.

These results confirm the classifications presented in the boring logs. The presence of large percentages of silt and clay (e.g., clay with sand, silty sand, clayey sand) are within layers and lenses with relatively low permeability ( $4.6 \times 10^{-8}$  to  $1.1 \times 10^{-7}$  cm/sec). These layers and lenses were not observed to be laterally or vertically extensive.

### **3.6 Background Soil**

This section will be completed following analysis of background surface soil samples collected from McGolrick Park during the ongoing first phase of Meeker Avenue Site Characterization field activities.

### **3.7 Groundwater Levels and Hydrogeology**

The primary hydrogeologic unit identified within the investigation area is the upper glacial aquifer. Groundwater in the area is present in unconfined conditions; however, localized semi-confined or confined conditions are possible due to the presence of interbeds of sand, clay, and silt. The water table surface may be found between approximately 25 and 56 feet bgs depending on the well location.

A round of synoptic groundwater levels was obtained on June 20, 2011 from DEC monitoring wells. These were used to develop groundwater contour elevation maps during the RI so that groundwater flow directions could be determined. Potentiometric surface maps based on the water level measurements from the shallow wells (screened generally at 30 to 50 feet bgs), using a 0.2-foot contour interval, are provided in Figure 3-5, and in Figure 3-6 for deep wells (screened generally at 70 to 90 feet bgs). A thin layer of LNAPL was detected in DEC-048. The water level in this monitoring well was adjusted based on specific gravity measurements. (An LNAPL sample from DEC-048 was collected and sent to Mt. Tom Generating Company for determination of specific gravity. Analytical results are provided in Appendix P). Water level measurements are included in Table 2-1. Vertical hydraulic gradient calculations are provided on Table 3-1.

In the immediate vicinity of the Klink Cosmo property groundwater flow is east/northeast. The horizontal hydraulic gradient is approximately 0.004 foot per foot (ft/ft).

The vertical hydraulic gradients in well pairs varied in direction across the investigation area. Vertical hydraulic gradients in well pairs DEC-043/043D, DEC-065/065D, and DEC-066/066D are positive or downwards (0.004, 0.014, 0.004 ft/ft, respectively). Vertical hydraulic gradients in the majority of well pairs downgradient of the site, DEC-014R/014D, DEC-015/015D, DEC-029/029D, DEC-031/031D, DEC-045/045D, and DEC-064/064D, were slightly negative, or upwards (-0.002 to -0.007 ft/ft) based upon the water level information. Vertical hydraulic gradients in well pairs DEC-006D/006DD, DEC-007/007D, DEC-013/013D, DEC-030/030D, and DEC-044/044D were also upwards but were greater in magnitude (-0.012 to -0.017 ft/ft).

#### **3.7.1 Slug Test Results**

Representative slug test results are presented on Table 3-2. Horizontal hydraulic conductivity values for the shallow overburden range from  $2.69 \times 10^{-5}$  cm/sec to  $4.77 \times 10^{-3}$  cm/sec. Horizontal hydraulic conductivity values for the deep overburden range from  $9.74 \times 10^{-3}$  cm/sec to  $2.48 \times 10^{-2}$  cm/sec.

### **3.8 Surface Water and Hydrology**

The site slopes slightly to the east and south and is bounded by streets on the north, west and east. The surface of the site is entirely covered by buildings and/or pavement/sidewalks. There is a storm water drop inlet (DI) along Richardson Street near Vandervoort Avenue. (DI locations will be shown on a figure following the collection of field information during the next phase of the project.)

The nearest surface water body is Newtown Creek located approximately 2,500 feet northeast of the site. Newtown Creek is classified as a Class SD (marine waters) surface water body by the NYSDEC. The best usage of Class SD waters is fishing. These waters shall be suitable for fish, shellfish, and wildlife survival. The classification may be given to those waters that, because of natural or man-made conditions, cannot meet the requirements of primary and secondary contact recreation and fish propagation. While Newtown Creek may not be suitable for swimming and other recreational activities that involve human contact with surface water, individuals use Newtown Creek for swimming. Water is not withdrawn from Newtown Creek for potable use. Numerous storm water drains from surrounding roadways and permitted Spill Discharge Elimination System (SPDES) outfalls discharge into Newtown Creek, including those discharging groundwater collected and treated on the nearby ExxonMobil remediation site.

Surface water levels within Newtown Creek vary depending on the tide. High tide in Newtown Creek is generally at an elevation of 4 to 5 feet amsl; low tide is generally at an elevation of 0 to -1 feet amsl ([www.saltwatertides.com](http://www.saltwatertides.com)).

### **3.9 Utilities**

Utilities on and near the site include underground water, electric, natural gas, sanitary and storm sewer. Overhead electric and communication lines run north-south adjacent to the site within the eastern sidewalk along Morgan Avenue, north-south within the western sidewalk along Vandervoort Avenue, and east-west within the north sidewalk along Withers Street. Fire hydrants are located on Richardson Street, Morgan Avenue, Withers Street, and Vandervoort Avenue. Approximate utility information will be provided on a figure following the RI Phase 2 field investigation. Utility locations are provided for information only; locations were not surveyed during the RI.

### **3.10 Standards, Criteria and Guidance Values**

For each medium, detected concentrations of individual contaminants were compared to applicable standards, criteria and guidance values (SCGs). The site-specific SCGs were determined for the individual media as follows:

#### **3.10.1 Soil**

Three sources of soil SCGs are considered appropriate for this site: site-specific background soil samples, NYSDEC Part 375, and NYSDEC CP-51.

On August 3, 2011, eight soil samples were obtained from the 0 to 2-foot depth interval from eight locations in Monsignor McGolrick Park as part of the first phase of the Meeker Avenue Site Characterization field activities. These samples will be analyzed for TCL/TAL contaminants. Detected concentrations will be considered to be representative of site-specific background for the Klink Cosmo site. These soil background concentrations will be included as soil SCGs on the soil analytical tables presented in Section 4 during the next phase of the project.

Part 375 criteria are considered as SCGs for soil samples in conjunction with CP-51 criteria. CP-51 supplements Part 375 by providing criteria for contaminants previously included under TAGM 4046 where values were not included in Part 375. Hereafter, mention of Part 375 includes incorporation of CP-51 criteria values. Part 375 unrestricted use criteria are considered to assist in the development of a remedial alternative capable of achieving unrestricted future use, as required by DER-10 Section 4.4 (b) 3 ii. In addition, criteria for the Protection of Groundwater are considered as SCGs for contaminants which exceed groundwater SCGs. These are identified in Section 4.

Soil samples were obtained from soil borings on properties zoned residential and/or manufacturing by the NYC Department of City Planning. The zoning classification for the location of the soil boring is a consideration in the determination of the appropriate soil SCGs. The majority of properties within the investigation area are zoned manufacturing. A few residential properties are present.

As discussed in Section 3.2, properties located in the manufacturing districts in NYC may be either industrial or commercial use. However, land uses allowed within manufacturing districts include residential use either within special mixed use districts or by special permit. Residences may be present on properties throughout the entire investigation area. Therefore, the soil SCGs considered

appropriate for the site are residential criteria (as opposed to commercial or industrial criteria). Part 375 restricted residential and residential land use soil cleanup criteria for the soil samples are used on the soil analytical data tables in Section 4.

### **3.10.2 Groundwater**

The SCGs for groundwater are the Class GA standards and guidance values presented in NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (including subsequent revisions). These groundwater SCGs are included on the groundwater analytical tables presented in Section 4.

### **3.10.3 Surface Water/ Sediments**

No surface water or sediment samples were collected therefore no SCGs were determined.

### **3.10.4 Soil Vapor**

There are no criteria for soil vapor analytical data.

## **4.0 NATURE AND EXTENT OF CONTAMINATION**

The following sections discuss the results of the soil, NAPL, groundwater and soil vapor/air sample analyses for the RI fieldwork at the Klink Cosmo site.

### **4.1 Soil Analytical Results**

The soil sample results were compared to appropriate Part 375 criteria identified for the soil samples discussed in Section 3.10. Twenty samples were collected during RI Phase 1 from 10 soil gas and 17 monitoring well locations during the period May 6 through June 6, 2011. (At some locations, more than one sample was collected from multiple depths.) Including the RI Phase 1 and Phases I through III of the Site Characterization, 57 soil samples have been obtained from 47 monitoring well borings, 12 soil borings and 31 soil gas locations in the Klink Cosmo area. A summary of the detected analytical results in all soil samples compared to unrestricted and protection of groundwater SCGs is presented in Table 4-1. Table 4-2 lists the detected analytical results for soil samples within/near residences compared to residential SCGs for RI soil samples. Results exceeding criteria are indicated with circles and/or squares on the tables. Table 4-3 provides a statistical summary of the detected TCL parameters for all soil samples collected by URS since Phase I in the Klink Cosmo site area as follows: the number of detections; the minimum, maximum and average values; and the location and depth of the maximum value. The complete validated analytical results from the RI soil samples are presented in the Data Usability Summary Report (DUSR) in Appendix O, on a compact disc. Data summary tables, Form I and Form Ie (TICs) are provided in the DUSR and include the reporting limit for each non-detected compound. RI soil data exceeding criteria is presented on Figure 4-1A for Unrestricted Use and Protection of Groundwater and Figure 4-1B for Residential and Restricted Residential Use.

Soil sample results were compared to unrestricted use and protection of groundwater criteria as shown on Figure 4-1A. Locations which exceeded criteria for unrestricted use did not exceed protection of groundwater criteria. Only the soil sample collected from DEC-030D exceeded criteria for any organic compounds. Di-n-butylphthalate and the pesticide Dieldrin exceeded unrestricted use criteria at this location (at 3.5-4.5 feet bgs). Iron exceeded criteria in DEC-029D (75-76 feet bgs), DEC-066D (24-25 feet bgs), and DEC-065D (9-10 feet bgs). Iron, lead and mercury exceeded criteria

in DEC-030D (3.5-4.5 feet bgs), and aluminum chromium, iron and vanadium exceeded criteria in DEC-065D (14-15 feet bgs).

Soil sample results were compared to residential and restricted residential use criteria as shown on Figure 4-1B. The only contaminant which exceeded criteria was iron in DEC-029D (75-76 feet bgs), DEC-030D (3.5-4.5 feet bgs), DEC-065D (9-10 and 14-15 feet bgs), and DEC-066D (24-25 feet bgs).

#### **4.2 Non-Aqueous Phase Liquid Analytical Results**

LNAPL was observed during the collection of the synoptic round of groundwater levels in DEC-048 on June 20, 2011. LNAPL was not previously observed in this monitoring well, which was installed in June of 2008. URS called the NYSDEC Spill Hotline and NYSDEC Spill No. 1103190 was assigned on June 21, 2011 to the LNAPL found in this area. It was noted that a fuel truck had been parked at this location and there was staining on the sidewalk around the well and on the wall of the adjacent building.

An LNAPL sample was collected from DEC-048 and analyzed for VOCs, SVOCs, fuel oils, and specific gravity. A summary of the detected TCL VOCs and SVOCs in the NAPL sample is presented in Table 4-4. The complete validated analytical results from the RI NAPL samples are presented in the DUSR in Appendix O. Data summary tables, Form I and Form Ie (TICs) are provided in the DUSR and include the reporting limit for each non-detected compound. The laboratory result for LNAPL specific gravity is provided in Appendix P.

##### **4.2.1 Dense Non-Aqueous Phase Liquid Analytical Results**

No DNAPL samples were collected during Phase 1 of the RI.

##### **4.2.2 Light Non-Aqueous Phase Liquid Analytical Results**

LNAPL found in DEC-048 was analyzed. As shown on Table 4-4, fuel oil was found at a concentration of 950,000 mg/kg (95%). Organics detected, at concentrations ranging from 130 ppm to 3,500 ppm, include: 1,2,4-trimethylbenzene, 2-methylnaphthalene, acenaphthene, fluorene, naphthalene, phenanthrene, and pyrene. These detected compounds are consistent with fuel oil(s). Two additional compounds, 1,1-biphenyl and bis(2-ethylhexyl)phthalate were also detected within the same range of concentrations. The specific gravity of the sample at 60 degrees F was determined to be

0.8608 g/ml, which is consistent with a No. 2 fuel. The laboratory report for specific gravity is presented in Appendix P. A comparison of the DEC-048 sample chromatogram to a general diesel/Fuel Oil No. 2 chromatogram indicates a similarity, although degradation of the product found in DEC-048 is evident.

### **4.3 Groundwater Analytical Results**

A summary of the detected TCL VOCs, SVOCs, pesticides and metals in the RI groundwater samples collected from monitoring wells is presented in Table 4-5. Results exceeding TOGS No. 1.1.1 Class GA groundwater criteria are indicated with a circle. The locations of detected VOCs that have exceeded their respective criteria are shown on Figure 4-2. Isoconcentration contours of PCE in the RI groundwater samples are shown on Figures 4-3 and 4-4 for the shallow and deep overburden, respectively. Table 4-6 provides a statistical summary of the detected parameters for the RI groundwater samples as follows: the number of detections; the minimum, maximum and average values; and the location of the maximum value. Table 4-7 provides a summary of the detected parameters for all groundwater samples collected by URS since Phase I in the Klink Cosmo site area. Table 4-8 provides a statistical summary of the detected parameters for all samples collected by URS since Phase I in the Klink Cosmo area as follows: the number of detections; the minimum, maximum and average values; and the location of the maximum value. The complete validated analytical results from the RI groundwater samples are presented in the DUSR in Appendix O. Data summary tables, Form I and Form Ie (TICs) are provided in the DUSR and include the reporting limit for each non-detected compound.

#### **4.3.1 Groundwater PCE Detections**

PCE was detected above SCGs in the majority of groundwater samples collected during the RI from the shallow and deep overburden. It was not detected in several monitoring wells upgradient of the site (DEC-033, DEC-047, DEC-048, DEC-032, DEC-033), or in DEC-004 downgradient of the site. In the deep overburden PCE was not detected in DEC-066D, DEC-44D on the northern and eastern edges of the Klink Cosmo property, respectively. The highest concentration of PCE in the shallow overburden was detected at DEC-14R (44,000 µg/L) located downgradient of the site, followed by DEC-006D (6,600 µg/L) located downgradient of DEC-14R, DEC-031 (6,100 µg/L) located on the northeast corner of the Klink Cosmo property, and DEC-029 (5,700 µg/L) located downgradient of DEC-14R. The highest concentration of PCE in the deep overburden was detected at



DEC-015D (640 µg/L), followed by DEC-006DD (420 µg/L), and DEC-007D (340 µg/L), located downgradient of the site. It should be noted that the screened intervals of DEC-006D and DEC-022D are screened in the shallow overburden; DEC-006DD is screened in the deep overburden.

Figure 4-3 depicts isoconcentration contours for PCE in the shallow groundwater from analytical data collected during the RI. Figure 1-4 depicts isoconcentration contours for PCE in the shallow groundwater from analytical data collected during Phase I through III and the 2009 groundwater sampling event. The concentrations of PCE in shallow wells are the highest at the downgradient edge and downgradient of the Klink Cosmo property. The shallow dissolved phase plume appears to be migrating downgradient of the Klink Cosmo property, in the direction of groundwater flow, towards the north, northeast and east as shown in the contours identified in Figure 4-3.

Figure 4-4 depicts isoconcentration contours for PCE in the deep groundwater from analytical data collected during the RI. The plume appears to have migrated downgradient of the Klink Cosmo property, to a lesser extent than in the shallow overburden, moving with regional deep groundwater flow towards the northeast.

#### **4.3.2 Groundwater TCE Detections**

TCE was detected in the majority of groundwater samples collected during the RI when PCE was detected, at concentrations exceeding groundwater criteria ranging from 6.8 µg/L to 750 µg/L. The highest concentration of TCE in the shallow overburden was detected at DEC-027 (750 µg/L), followed by DEC-065 (670 µg/L) and DEC-014R (300 µg/L). The highest concentration of TCE in the deep overburden was detected at DEC-065D (670 µg/L), followed by DEC-006DD (210 µg/L), and DEC-030D (170 µg/L).

#### **4.3.3 PCE and TCE Degradation Product and Other Detections**

The presence of PCE and TCE degradation products have also been detected in the RI groundwater samples at concentrations exceeding groundwater criteria (Figure 4-2). Cis-1,2-DCE was detected above groundwater criteria in 19 of the 49 RI groundwater samples. The range of cis-1,2-DCE varied from 1.6 µg/L to 52 µg/L, with the highest concentration detected at DEC-028. Trans-1,2-DCE did not exceed criteria. Vinyl chloride exceeded criteria in only 2 of the RI groundwater samples (DEC-008 at 19 µg/L and DEC-009 at 54 µg/L) north of the Klink Cosmo property. Vinyl

chloride exceeded criteria in 2 of the RI groundwater samples with the highest concentration detected at DEC-009 (54 µg/L) followed by DEC-008 (19 µg/L).

Similar to wells with PCE and TCE, degradation products have typically been found in monitoring wells to the northeast and east indicating some degradation of the plume due to reductive dechlorination. However, other than cis-1,2-DCE, degradation products were not generally found in the groundwater samples collected. The absence of daughter breakdown products indicates that substantial chlorinated hydrocarbon reduction is not occurring at a large scale.

Compounds related to petroleum products (i.e., 1,2,4-trichlorobenzene, 1,4-dichlorobenzene, benzene, isopropylbenzene and/or MTBE) in general, have not been detected above criteria in monitoring wells in the Klink Cosmo area. The one detection of MTBE above groundwater criteria was in upgradient monitoring well DEC-047.

#### **4.4 Soil Gas Analytical Results**

The locations of the VOCs detected in soil gas during the RI including PCE and its breakdown products are shown on Figure 4-5. A summary of detected VOCs in the soil gas and ambient air samples collected during the RI is presented in Table 4-9. Table 4-10 provides a statistical summary of the detected parameters for the RI air and soil gas samples as follows: the number of detections; the minimum, maximum and average values; and the location of the maximum value. Table 4-11 provides a historical summary of the detected parameters for all air and soil gas samples collected by URS in the Klink Cosmo site area since Phase I. Table 4-12 provides a statistical summary of the detected parameters for all samples collected by URS since Phase I in the Klink Cosmo area as follows: the number of detections; the minimum, maximum and average values; and the location of the maximum value. The complete validated analytical results from the RI air and soil gas samples are presented in the DUSR in Appendix O. Data summary tables and Form I's are provided in the DUSR and include the reporting limit for each non-detected compound.

Three ambient air samples were collected during the RI to represent background air conditions. VOCs detected in all three ambient air samples include ethanol, hexane, methyl ethyl ketone, methylene chloride, toluene, and xylene. Concentrations of VOCs ranged from 0.092 to 93.1 µg/m<sup>3</sup>.

PCE was detected in all 30 sampling locations, at concentrations ranging from 35 µg/m<sup>3</sup> to a maximum of 48,200,000 µg/m<sup>3</sup> at location SG-060. PCE concentrations of 13,100,000; 282,000; and

176,000  $\mu\text{g}/\text{m}^3$  were detected at locations SG-049, SG-084, and SG-058 respectively. All of these sampling locations are located along the north and east perimeters of the former Klink Cosmo site. Additional high levels of PCE detected away from the Klink Cosmo site include:

- SG-042 on the northeast corner of Vandervoort Avenue and Beadel Street 803,000  $\mu\text{g}/\text{m}^3$ ;
- SG-043 at the southwest corner of Vandervoort Avenue and Beadel Street 48,500  $\mu\text{g}/\text{m}^3$ ;
- SG-056 on Division Place 88,900  $\mu\text{g}/\text{m}^3$ ;
- SG-061 on Morgan Avenue 79,800  $\mu\text{g}/\text{m}^3$ .

Concentrations of TCE were generally detected at locations where PCE was detected, at lower concentrations. The two locations with the highest PCE concentrations also have the highest TCE concentrations. Location SG-060 had TCE a concentration of 220,000  $\mu\text{g}/\text{m}^3$  and location SG-049 had a TCE concentration of 230,000  $\mu\text{g}/\text{m}^3$ . Location SG-084, also located adjacent to the former Klink Cosmo site, had a high PCE concentration (282,000  $\mu\text{g}/\text{m}^3$ ) requiring the laboratory to perform a dilution prior to sample analysis. Consequently, detection limits of some VOCs, including TCE (dilution detection limit of 1,030  $\mu\text{g}/\text{m}^3$ ), were higher than for remaining samples. Therefore, while TCE is reported as not detected in SG-084, it was not detected above 1,030  $\mu\text{g}/\text{m}^3$ . High levels of TCE detected away from the Klink Cosmo site, which were generally located at locations of high PCE concentrations include:

- SG-056 on Division Place 3,090  $\mu\text{g}/\text{m}^3$ ;
- SG-042 on Beadel Street 2,850  $\mu\text{g}/\text{m}^3$ ;
- SG-043 on Beadel Street 1,170  $\mu\text{g}/\text{m}^3$ ;

VOCs detected in approximately half (or more) of the sampled locations include: 1,1,1-trichloroethane, 1,2,4-trimethylbenzene, benzene, cyclohexane, ethanol, hexane, toluene, and xylene. These contaminants suggest a possible petroleum or fuel source. Locations SG-019, SG-020, and SG-021 on Beadel Street east of Vandervoort Avenue; SG-047, SG-055, and SG-079 on Division Place east of Vandervoort Avenue; and SG-078 between these two cross streets east of Vandervoort Avenue all had significant concentrations of petroleum related compounds. SG-079 had the highest total VOCs concentration compared to the other locations in the area.

## **5.0 CONTAMINANT FATE AND TRANSPORT**

This section describes fate and transport processes that may influence the behavior of the contaminants detected at the site. The discussion emphasizes the processes that are essential in evaluating potential exposure of human and environmental receptors to the site contaminants detected at concentrations above the SCGs. The following items are presented in this section:

- General description of fate and transport processes occurring in soil, groundwater and soil vapor/air systems.
- Identification and description of properties of contaminants detected above the SCGs in the various media at the site.
- Media-specific and contaminant-specific evaluation of potential fate and transport mechanisms occurring at the site.

### **5.1 General Description of Fate and Transport Mechanisms**

This section provides general descriptions of the fate and transport processes that can occur in the environment in which samples were collected as part of the site investigations. In addition, the site characteristics that can affect these processes are discussed.

#### **5.1.1 Contaminants of Concern**

Contaminants of concern which would be identified as from a former dry cleaners site include PCE and its degradation products, which as indicated on Figure 5-1, under anaerobic conditions are TCE, 1,2-dichloroethene, and vinyl chloride. These VOCs are predominantly chlorinated hydrocarbons. Other VOCs, SVOCs, and metals detected in soil, groundwater, and soil gas samples within the Klink Cosmo project area are not necessarily the result of the former dry cleaners present on the Klink Cosmo property, and therefore, are not considered contaminants of concern.

#### **5.1.2 Transport Processes**

Contaminant transport in the subsurface can occur as movement of dissolved contaminants in groundwater; and/or as migration of volatilized contaminants in soil vapor. The primary transport mechanisms are advection, dispersion, and partitioning of mass.

Mass partitioning is a process in which contaminants move between different environmental media in response to concentration gradients. For example, contaminants dissolved in groundwater may sorb (i.e., attach) onto soil particles or volatilize into the soil vapor. The process may involve mass transfer in any direction between any of the environmental media. The net result of mass partitioning is the distribution of the contaminant between all phases that remain in physical contact with each other. Typically, mass partitioning acts to inhibit the migration of contaminants in groundwater or soil vapor by immobilizing a part of the mass in the soil matrix (retardation). However, the process may be reversed, resulting in the slow release of the sorbed contamination into the groundwater or soil vapor.

In the unsaturated zone (i.e., between ground surface and the water table), the total mass of a contaminant is partitioned between the dissolved phase (soil moisture), the gas phase (soil vapor), and the solid phase (soil matrix). In the saturated zone, the soil vapor phase is absent and the partitioning occurs only between the soil matrix and groundwater. Under equilibrium conditions, each phase contains a fraction of the total contaminant mass present in the system (i.e., total of both phases equals 100 percent of the contaminant mass present). The relative mass fractions are determined by the properties of each contaminant and by the nature of the soil matrix. Equilibrium conditions may be disturbed by phenomena such as migration of contaminated groundwater or soil vapor into an area, or removal of contaminant mass from one of the media through degradation processes or gravity flow. Under these circumstances, concentration gradients are created resulting in the occurrence of mass transfer between the media.

The contaminant mass sorbed onto the soil matrix is essentially immobile. The exception is the mass in the topmost soil layer, which can be transported by processes capable of moving soil particles (wind, surface water runoff). However, since soil within most of the site area is not exposed due to covers such as pavement, sidewalks and buildings, this is not a significant transport pathway. Sorbed contaminants generally act as a source for the dissolved and gas phases.

Transport of contaminants dissolved in the soil moisture in the unsaturated zone is generally limited as a result of very low flow rates in the absence of full saturation. The only significant mechanisms may be driven by water level fluctuations (such as tidal influences and groundwater levels impacted by extraction wells on nearby properties) and gravity-driven downward flow during wet-weather periods, or possibly sewer lines which may be leaking and/or act as preferential pathways. Such vertical transport of contaminants acts as a source for the saturated zone below.

The contaminant mass contained within the soil vapor and within groundwater in the saturated zone is more mobile. Soil vapor can migrate in both vertical and horizontal directions in response to pressure gradients. The migration can create a discharge of contaminants into the atmosphere or building basements, or act as a source of contamination for groundwater in the saturated zone. Migrating soil vapor may transfer mass into the soil matrix and soil moisture in previously uncontaminated areas, thus increasing the areal extent of soil contamination in the unsaturated zone.

The primary transport mechanisms for contaminants dissolved in groundwater are advection and dispersion. Advection is the movement of the dissolved contaminants carried by the flow of groundwater. Dispersion refers to dissolved contaminants spreading due to the presence of non-uniformities in the groundwater flow field. Dispersion results in a general widening of a plume, as well as smearing of the plume boundaries. The magnitude of dispersion is site specific and is generally difficult to measure. Processes similar to those that occur for soil vapor can enable dissolved contaminants to reach a previously uncontaminated area and enter other environmental media.

Contamination migrating with soil vapor or groundwater constantly interacts with the soil matrix. The driving forces behind this process are created by concentration gradients between different phases and the properties of the contamination and the soil matrix. Contaminant mass may either sorb from the mobile soil vapor or groundwater onto the soil particles or it may undergo a reverse process of desorption.

In the case of sorption, contaminant mass is transferred from the mobile medium into the immobile soil medium. This phenomenon tends to decrease the velocity of contaminant migration, and is consequently referred to as retardation. The magnitude of the retardation depends on the properties of each contaminant and the soil matrix. The key indicator parameter for the retardation properties of the soil is the organic carbon content. Site-specific organic content measurements of soil are proposed during the next phase of the RI. Soils with high organic carbon content sorb dissolved contaminants more readily and create a more significant retardation effect than soil with limited, or no organic carbon content. Desorption is the reverse process. Contamination is transferred from the soil matrix into the groundwater or soil vapor. As a result, soil containing contaminant mass may act as a source if exposed to the less-contaminated soil vapor or groundwater. Desorption from soil into the soil vapor or groundwater is increasingly inhibited by increasing content of organic carbon in the soil.

### **5.1.3 Mass Destruction Processes**

In the urban environment of the Klink Cosmo site, contaminant mass in the soil is not exposed at the ground surface. Contaminant mass contained within the saturated zone is not exposed to sunlight or the atmosphere. Therefore, abiotic mass destruction processes that rely on the presence of air or exposure to sunlight (such as hydrolysis and photolysis) have little impact within the subsurface and will not be discussed further.

The most significant mass destruction process that takes place in subsurface environments is microbial degradation. The most significant microbial degradation processes for organic contaminants that operate in groundwater systems are: biological oxidation (aerobic and anaerobic); reductive dechlorination; and cometabolic degradation. During degradation, organic compounds are transformed into daughter forms, which may be recalcitrant or further degradable. Daughter compounds can be either more or less toxic than the parent compounds. If a contaminant degrades into a sequence of degradable daughter compounds, it is ultimately fully metabolized into such compounds as carbon dioxide, methane, water, and chloride. Contaminants at the Klink Cosmo site, PCE and TCE, degrade to dichloroethene (1,2-DCE) and vinyl chloride (VC), as shown on Figure 5-1. Ultimately, PCE and TCE metabolize into carbon dioxide, and ethene.

### **5.1.4 Properties**

VOCs, including PCE, TCE, and 1,2-DCE, are generally moderately to highly soluble in water. They readily volatilize into the atmosphere or soil gas. At the surface, VOCs generally decay under the action of sunlight and upon the exposure to the atmosphere. Dissolved VOCs are transported by advection and dispersion in groundwater. The same processes of advection and dispersion are responsible for the migration of VOCs in the atmosphere or the soil gas. These compounds have low to moderate organic carbon-to-water partitioning coefficients and do not readily partition into the soil, making them relatively mobile in the environment.

In the subsurface environment, chlorinated VOCs, including PCE, TCE and 1,2-DCE, undergo reductive dechlorination under anaerobic conditions but are typically recalcitrant under aerobic conditions. Benzene, toluene, ethylbenzene and xylenes (BTEX) compounds are relatively degradable under aerobic conditions and also degrade under anaerobic conditions, albeit at slower rates.

### **5.1.5 Source(s) of Contamination**

In the past, the Klink Cosmo site was utilized as a dry cleaner facility. PCE is the main solvent used in dry cleaning. The original source of the PCE contamination is likely to be leakage from any storage tanks, drains which may have been used for disposal, and/or spills occurring during handling. However, the mechanism by which the source(s) act on the environment can be described based on the known factors, such as the nature of the chlorinated solvents and the observed distribution and level of the soil and ground water contamination.

Following the release of PCE, it migrates downward under the influence of gravity as a separate-phase liquid proceeding through the unsaturated zone. However, PCE is heavier than water and the downward migration continues after the spill reaches the saturated zone. During the migration, the total mass of PCE present in a flowable form is continuously depleted by the process of absorption within the soil. The migrating front leaves behind a zone where soil contains PCE in the form of separate-phase ganglia, immobilized between the soil particles and held in place by surface forces. If the PCE liquid encounters an impermeable barrier, such as a clayey silt or clay layer, it comes to rest on the surface of the barrier in the form of pools. However, if no such barrier is present and the aquifer is thick, all of the PCE mass is eventually absorbed and immobilized within the soil.

The zone of PCE ganglia and the liquid pools (if present) form the source of contamination within the aquifer. PCE constantly dissolves in ground water (saturated zone) and soil gas (unsaturated zone), initiating mass transfer and destruction processes described in Section 5.1.2.

### **5.1.6 Fate and Transport in the Unsaturated Zone**

#### **5.1.6.1 Migration**

The propagation of contaminants in the unsaturated zone is dominated by two processes: migration of the dissolved phase into infiltrating precipitation and migration of the volatilized contaminants in the soil gas. Migration of the contamination adsorbed into soil with the fugitive dust emissions or surface runoff will generally not be an issue at this Site.

Most of the soil at the site is located under a relatively impervious cover (either pavement or buildings). DIs which lead to the storm sewers are present along the roadways. Infiltration from precipitation across the site area is limited to the cracks and joints of the pavement and concrete



surfaces. Therefore, the extent of the infiltration-induced migration is likely to be limited. The process is of little significance in the overall balance of mass transfer occurring at the site.

Contaminants of concern enter the soil gas through the process of volatilization. The site and vicinity is almost entirely paved, and the thickness of the unsaturated zone is high. Therefore, the sources of contamination are not in close contact with the atmosphere. As a result, the lateral migration of the gas phase of the contamination is likely to be significant. Separated from the direct contact with the atmosphere, the soil gas will tend to migrate laterally, possibly at great distances, and seek discharge points at discrete locations, such as basements or underground sewer pipes.

The area contains little unvegetated and unpaved areas with the exception of the recreational areas across Vandervoort Avenue. Soil at the site does not generate fugitive dust emissions. Likewise, the erosion and transport of surface soils by runoff is not present onsite. Contamination adsorbed into soils is unlikely to migrate via the pathways of dust emissions or runoff transport.

#### **5.1.6.2 Degradation**

Generally, the occurrence and rates of unsaturated zone degradation have to be determined by means of field studies, such as, for example, respiration tests. However, this is only appropriate for contaminants that can be aerobically degraded. PCE is not readily aerobically degradable. Rates of biological degradation depend largely on the presence of water. In the unsaturated zone, sufficient water may not be present continuously, thus limiting the potential for the growth of microorganisms.

The Site area is mostly paved or covered by buildings. The unsaturated zone is not exposed to the action of sunlight and high temperature in the summer. Therefore, rates of abiotic degradation are likely to be very low, even in the top-most layers. In general, rates of contaminant degradation in the unsaturated zone are expected to be relatively low.

### **5.1.7 Fate and Transport in the Saturated Zone**

#### **5.1.7.1 Migration**

Migration in the saturated zone takes place predominantly by means of the transport of the dissolved-phase contamination in groundwater. The dominant factors are the direction of the flow within the aquifer, the hydraulic gradient, the hydraulic conductivity of the aquifer material (both the average value and spatial distribution) and the chemical composition of the soil matrix.

The site is located within the Upper Glacial Aquifer. The aquifer is characterized by high hydraulic conductivity and low gradients but vary locally. In the immediate vicinity of the Klink Cosmo property, groundwater flow is northeast. The horizontal hydraulic gradient is approximately 0.004 ft/ft. Vertical gradients are both downward in the vicinity of the site, and upward downgradient. Horizontal hydraulic conductivity values for the shallow overburden range from  $2.69 \times 10^{-5}$  cm/sec to  $4.77 \times 10^{-3}$  cm/sec. Horizontal hydraulic conductivity values for the deep overburden range from  $9.74 \times 10^{-3}$  cm/sec to  $2.48 \times 10^{-2}$  cm/sec.

The extents of the plumes in the shallow and deep overburden have not been fully defined, but a PCE plume appears to originate from the Klink Cosmo site.

#### **5.1.7.2 Degradation**

Compounds detected at the site are potentially degradable in ground water. The bulk of the contamination is present as chlorinated hydrocarbons, especially PCE. The predominant mechanism for the degradation of these compounds is the reductive dechlorination. The likelihood of the occurrence of this pathway can be assessed using the following indicators (after the *Technical Protocol for Evaluating Natural attenuation of Chlorinated Solvents in Ground Water*, USEPA 1998):

##### **5.1.7.2.1 Dissolved Oxygen**

Dissolved oxygen (DO) is the most favored electron acceptor in biodegradation of hydrocarbons. Levels of less than 1 mg/L indicate that aerobic degradation has occurred, oxygen has been largely utilized, and a shift to anaerobic processes is taking place. Reductive dechlorination takes place under anaerobic conditions, generally when the DO levels are less than 0.5 mg/L. Typically, the anaerobic environment is created by the degradation of non-chlorinated compounds, such as BTEX. Following that, the likelihood of degradation of chlorinated hydrocarbons becomes high.

Table 5-1 and Figure 5-2 present the dissolved oxygen levels at the site which are generally between 0.21 and 17.9 mg/L. The data collected shows only two wells having DO values below the 0.5 mg/L threshold. This suggests that the site may be largely aerobic and the DO conditions to promote reductive dechlorination are absent.

#### **5.1.7.2.2 pH**

The pH of groundwater has an effect on the presence and activity of microbial populations. Generally, microorganisms that are most efficient biodegraders prefer neutral pH values (6 to 8). The range of values allowing the reductive dechlorination to occur is between 5 and 9.

Table 5-1 and Figure 5-3 present the pH data. The pH values range from 6.29 to 7.41. All pH values are within the neutral range and within the range in which the biodegradation of chlorinated solvents can take place.

#### **5.1.7.2.3 Nitrate**

Reductive dechlorination has been demonstrated to be favorable under nitrate-reducing conditions. The presence of nitrate-reducing conditions can be deduced by looking for zones of the plume where nitrate is at much lower concentrations than elsewhere in the groundwater.

#### **5.1.7.2.4 Sulfate and Sulfide**

Sulfate-reducing conditions are favorable for the dechlorination pathway. As with the nitrate, locally depressed sulfate concentrations indicate zones of active sulfate reduction. Sulfide is a reduced product whose presence indicates strongly reducing conditions that promote reductive dechlorination.

#### **5.1.7.2.5 Ferrous Iron**

Iron-reducing conditions are favorable to the process of reductive dechlorination. Concentrations of ferrous iron higher than 1 mg/L suggest iron reduction is occurring, and thus oxidation/reduction (redox) conditions are suitable for reductive dechlorination.

#### **5.1.7.2.6 Oxidation/Reduction Potential**

Oxidation/reduction potential (ORP) is measured as Eh. Reductive dechlorination becomes possible at Eh levels of less than approximately 50 mV. The likelihood of its occurrence is significant for the ORP values less than -100 mV.

Table 5-1 and Figure 5-4 present the measured ORP levels in the onsite groundwater. The ORP values are generally between -50 to 250 mV. The majority of the recorded ORP values lie above the 0 mV threshold indicating that the ORP conditions at the site are not suitable for reductive dechlorination.

#### **5.1.7.2.7 Organic Carbon**

Organic carbon, either naturally occurring or anthropogenic typically serves as the electron donor required to drive the dechlorination process. Levels above 20 mg/L are favorable.

#### **5.1.7.2.8 Chloride**

Chloride levels two times higher than background may indicate that the compound has been produced as a byproduct of dechlorination. Typically, any high chloride levels occur within the downgradient portion of the plume.

#### **5.1.7.2.9 Distribution of Chlorinated Species**

Significant degradation of chlorinated solvents is marked by a shift in the relative concentrations of various compounds. As degradation progresses, the original compound released into the environment breaks down into the daughter product, where successively more chloride atoms are removed from the compound molecule and replaced with hydrogen. In this case, PCE would shift to TCE, then to DCE and finally to VC. Vinyl chloride is difficult to dechlorinate further (requires very strong reducing conditions), but is readily oxidized under aerobic conditions to ethene.

#### **5.1.7.3 Overall Plume Behavior**

Based upon the observed concentrations of VOCs from the latest groundwater sampling event, a dissolved chlorinated solvent plume appears to originate at the Klink Cosmo Site. In the shallow and deep groundwater regime, it appears that the chlorinated solvent plumes have higher concentrations of PCE immediately north and east of the Klink Cosmo Site. PCE contamination appears to be spreading with groundwater movement towards the northeast and east, and also to a lesser extent, via downward migration to deeper geologic zones. The vertical and horizontal extent of the plume will be further defined following in the next phase of the RI.

## **6.0 QUALITATIVE HUMAN HEALTH RISK ASSESSMENT AND FISH AND WILDLIFE ASSESSMENT**

This section presents the Qualitative Human Health Exposure Assessment (HHEA) and results of the Fish and Wildlife Resources Impact Analysis (FWRIA) for the Site. This qualitative HHEA uses data and information collected during the remedial investigation to assess human health exposure in the immediate site vicinity and surrounding areas. The qualitative HHEA provides an evaluation of potential adverse health effects under current and potential future site conditions that may result from exposure to contaminants attributable to former activities at the Site. The HHEA will be presented in the next phase of the RI. The FWRIA is presented below.

### **6.1 Identification of Chemicals of Potential Concern**

### **6.2 Exposure Pathways**

#### **6.2.1 Soil**

#### **6.2.2 Ambient Air/Soil Vapor**

#### **6.2.3 Outdoor Air**

#### **6.2.4 Groundwater**

#### **6.2.5 Summary**

### **6.3 Fish and Wildlife Resources Impact Analysis**

This Fish and Wildlife Resources Impact Analysis has been prepared for the Site located in Brooklyn, Kings County, New York. The Site location is shown on Figure 1-1. An aerial view of the Site and vicinity is presented as Figure 1-2.

The FWRIA follows the guidance provided by the NYSDEC Division of Fish and Wildlife (NYSDEC 1994). The FWRIA is a stepwise process that was developed to determine the nature and extent of ecological impacts from hazardous waste sites in New York State. The objective of Step I of the FWRIA process is to identify fish and wildlife resources that exist on and/or adjacent to the Site.

### **6.3.1 Step I.A – Covertypes Map**

An aerial photography-based cover type map of the area within a one-half mile radius of the Site (project area) is presented as Figure 6-1. The Site is zoned M1-1 for a light industrial and manufacturing district. The Site is currently the location of a commercial business. The project area is highly urbanized with commercial, industrial, residential, and road and utility development. Land use in the surrounding area is predominantly industrial and commercial. A large apartment building complex is located southwest of the Site.

Newtown Creek, designated Class SD marine water by the NYSDEC, is located approximately 2,500 feet east of the Site. The SD classification for marine waters indicates a best usage for fishing, but these waters may not support fish propagation. Newtown Creek is an estuary connected with the East River. Newtown Creek was designated as a Superfund site in 2010. The East River is located approximately 7,000 feet west of the Site. The East River is classified as a Class I saline surface water. The best usages of Class I waters are secondary contact recreation and fishing. These waters are suitable for fish, shellfish, and wildlife propagation and survival. The East River is a New York State-protected stream.

### **6.3.2 Step I.B – Description of Fish and Wildlife Resources**

#### **6.3.2.1 Fish and Wildlife Resources and Covertypes**

There are no NYSDEC Wetlands, Critical Habitats or designated Wild, Scenic or Recreational Rivers mapped within the project area. The project area is composed of three vegetated terrestrial-cultural covertypes: mowed grass with trees (landscaped areas associated with residential, commercial and industrial facilities); mowed grass (associated with lawns and park facilities such as baseball diamonds); and urban vacant lot (associated with vegetated areas with exposed soil, rubble and debris). The remainder of the project area is included in the terrestrial-cultural urban structure exterior covertype. This covertype includes the exterior surfaces of metal, wood or concrete structures such as buildings, roads, storage areas and parking lots.

#### **6.3.2.2 Fauna Expected within each Covertypes and Aquatic Resource**

The three terrestrial-cultural covertypes in the project area provide limited feeding, resting and breeding habitat for birds and small mammals. Wildlife species typically associated with these covertypes in an urbanized environment include the Norway rat, house mouse, deer mouse, gray

squirrel and several common bird species including rock pigeon, house sparrow, European starling, red-tailed hawk, American kestrel, herring gull, ring-billed gull and mourning dove. Spring, winter and fall migrant bird species may pass over the project area or rest and feed in the area on a transient basis. The urban vacant lot and mowed grass covertypes may present suitable breeding habitat for killdeer.

The NYSDEC Division of Fish and Wildlife & Marine Resources New York Natural Heritage Program was contacted regarding the presence of State-listed rare, threatened and endangered species or habitats at the Site. In their response letter dated March 21, 2011 (provided in Appendix Q), the NYSDEC indicated that:

“We have no records of rare or state-listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of your site.”

According to the NYSDEC Environmental Resource Mapper, the Site is located within the historic range of the American burying beetle (*Nicrophorus americanus*). The Site does not provide suitable habitat for the American burying beetle. This species requires natural soil and vegetation resources for propagation. The United States Fish and Wildlife Service (USFWS) identified the Federally Endangered shortnose sturgeon (*Acipenser brevirostrum*) as present within Kings County. The USFWS noted that this sturgeon occurs primarily in the Hudson River. The Site would have no impact on this species.

There are no United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) wetlands mapped in the project area.

#### **6.3.2.3 Observations of Stress**

No atypical biotic conditions such as reduced vegetative growth and density, wildlife mortality, changes in species assemblages and distribution, or the absence of expected biota have been observed at the Site.

### **6.3.3 Step I.C – Description of Fish and Wildlife Resource Values**

Because of its location in an urbanized area and the presence of the building and sidewalks which cover the entire surface of the Site, the Site provides very limited habitat for urban-dwelling wildlife. The Site does not provide any current or potential value to humans as a nature recreation area.

#### **6.3.4 Step I.D – Identification of Applicable Fish and Wildlife Regulatory Criteria**

No USFWS NWI or State-regulated wetlands or other aquatic resources are located on or adjacent to the Site. The Site does not provide suitable habitat for wildlife other than urban dwelling species. Newtown Creek, located approximately 2,500 feet east of the Site, and the East River, located approximately 7,000 feet west of the Site, are regulated by the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. They are also regulated by the NYSDEC under Section 401 of the Clean Water Act. The East River is regulated by the State under the Protection of Waters Program (Article 15 of the ECL).

#### **6.3.5 Summary and Recommendations**

The Site is located in an old, highly developed, urbanized area. Plant communities in the project area include mowed lawn and trees, mowed lawn, and vegetated areas on disturbed sites. These communities are associated with residential, commercial and industrial areas in the project area. No plant communities were identified on the Site. The results of the FWRIA Step I analysis indicate that there is limited potential for wildlife at the Site. Because of its location in an urbanized area and the presence of the building and sidewalks which cover the entire surface of the Site, the Site provides very little if any suitable habitat for wildlife. The Site does not provide any current or potential value to humans as a nature recreation area.



## **7.0 SUMMARY AND RECOMMENDATIONS**

### **7.1 Summary**

#### **7.1.1 Geology**

- The sand unit is present at the majority of boring locations and is represented by stratified sands of varying textures containing some to no fines. The entire thickness of the sand unit has not been penetrated; however, it was found to be at least 80 feet thick in the majority of borings. A discontinuous clayey silt/silt unit was observed in most of the borings and consists of a heterogeneous mixture of sand, silt, and clay and varying amounts of gravel, cobbles and boulders. This unit has been observed from the ground surface, as an inclusive unit within the sand unit, and at depth. The thickness of the clayey silt/silt unit, where present, varies from 0.5 to over 10 feet thick.
- The water table surface may be found between approximately 25 and 56 feet bgs. In the immediate vicinity of the Klink Cosmo property, groundwater flow is generally east/northeast. The horizontal hydraulic gradient is approximately 0.004 ft/ft.
- Horizontal hydraulic conductivity values for the shallow overburden range from  $2.69 \times 10^{-5}$  cm/sec to  $4.77 \times 10^{-3}$  cm/sec. Horizontal hydraulic conductivity values for the deep overburden range from  $9.74 \times 10^{-3}$  cm/sec to  $2.48 \times 10^{-2}$  cm/sec.

#### **7.1.2 Soil Gas**

- PCE was detected in all 30 sampling locations, at concentrations ranging from 35  $\mu\text{g}/\text{m}^3$  to a maximum of 48,200,000  $\mu\text{g}/\text{m}^3$  at location SG-060. PCE concentrations of 13,100,000; 282,000; and 176,000  $\mu\text{g}/\text{m}^3$  were detected at locations SG-049, SG-084, and SG-058 respectively.
- Concentrations of TCE were generally detected at locations where PCE was detected, at lower concentrations. The two locations with the highest PCE concentrations also have the highest TCE concentrations. Location SG-060 had TCE a concentration of 220,000  $\mu\text{g}/\text{m}^3$  and location SG-049 had a TCE concentration of 230,000  $\mu\text{g}/\text{m}^3$ .

- The areal extent of PCE and TCE impacted soil gas appears to be larger than that found during previous investigations. The concentrations tended to increase in previously sampled location up to three orders of magnitude.

#### **7.1.3 Soil**

- Soil sample results were compared to unrestricted use, residential, restricted residential and protection of groundwater criteria. PCE and its daughter compound TCE were not found to exceed any soil criteria at any locations. Only the soil sample collected from DEC-030D exceeded criteria for any organic compounds. Di-n-butylphthalate and the pesticide Dieldrin exceeded unrestricted use criteria at this location (at 3.5-4.5 feet bgs).

#### **7.1.4 Groundwater**

- Based upon the observed concentrations of VOCs from the latest groundwater sampling event, the dissolved chlorinated solvent plume appears to originate at the Klink Cosmo Site.
- In the shallow groundwater regime, it appears that the chlorinated solvent plumes in the shallow and deep overburden have higher concentrations of PCE immediately north and east of the Klink Cosmo site.
- PCE contamination appears to be spreading with groundwater flow towards the northeast and east, and also at a lesser extent via downward migration to deeper geologic zones. The plumes will be further defined following in the next phase of the RI.

#### **7.1.5 Non-Aqueous Phase Liquids**

- LNAPL found in DEC-048 was analyzed and a fuel oil was found at a concentration of 950,000 mg/kg (95%). NYSDEC Spill No. 1103190 was assigned on June 21, 2011 to the LNAPL found in this area. The specific gravity measured (0.8608 g/ml), and organic compounds detected in the sample were consistent with fuel oil(s).
- A comparison of the DEC-048 sample chromatogram to a general diesel/Fuel Oil No. 2 chromatogram indicates a similarity, although degradation of the product found in DEC-048 is evident.

### **7.1.6 Fish and Wildlife Resources Impact Analysis**

- The results of the FWRIA Step I analysis indicate that there is limited potential for wildlife at the site. Because of its location in an urbanized area and the presence of the building and sidewalks which cover the entire surface of the site, the site provides very little if any suitable habitat for wildlife. The site does not provide any current or potential value to humans as a nature recreation area.

### **7.2 Recommendations**

The following recommendations are offered for consideration by the NYSDEC. The recommendations include additional Remedial Investigation/Feasibility Study (RI/FS) activities.

- Five shallow monitoring wells should be installed to an approximate depth of 45 feet at the locations shown on Plate 1. One new monitoring well will replace DEC-015 which may have been improperly installed. This recommendation is based upon the concentration of contaminants in surrounding wells which are an order of magnitude higher. A monitoring well (pair) is proposed east of the site on Vandervoort Avenue within an area of high PCE concentrations. Additional shallow monitoring wells are proposed to the northeast to assist in determining the extent of the PCE impacted shallow groundwater east of the site. Well construction includes a 15-foot screen (i.e., 5 feet above groundwater elevation and 10 feet below groundwater elevation).
- Seven deep monitoring wells should be installed at the locations shown on Plate 1. These wells will further assist in determining the direction of groundwater flow and the impacts of PCE and TCE in the deeper groundwater regime in the areas southeast and north of the Klink Cosmo property. The deep wells should be advanced approximately to a depth of 80 feet bgs. Samples will be collected continuously from the bottom of the existing borings for approximately 35 feet or until a confining unit is encountered (whichever occurs first). The deep wells should be constructed with a 10-foot long PVC 0.010-inch screen and riser.
- Up to two soil samples should be collected from each boring location: one soil sample from the interval just above water table; and the second sample from the interval exhibiting odors, staining, or the highest PID reading. If no odors, staining, or elevated PID reading are encountered, then only one sample from the interval just above the water table should be

collected, as per the FAP (URS, April 2010). All soil samples should be analyzed for TCL VOCs plus TICs by 8260B.

- At least one sample from each stratigraphic layer should be collected and analyzed from a minimum of two borings for TCL VOCs plus TICs by 8260B, TCL SVOCs plus TICs by 8270C, TCL pesticides/PCBs by 8081A/8082, herbicides by 8151A, TAL metals by 6010B/7471A, hexavalent chromium by 7196A, cyanide by 9010B/9012A, and TOC by Lloyd Khan.
- If DNAPL is encountered in any new monitoring well(s) during drilling, well development or purging, a DNAPL sample should be collected for laboratory analyses. The DNAPL sample(s) should be analyzed for TCL VOCs plus TICs by 8260B, TCL SVOCs plus TICs by 8270C, petroleum hydrocarbon scan by 8100 (modified) and specific gravity by ASTM D4052.
- A complete round of groundwater samples should be collected from all new and existing DEC wells sampled during the RI Phase 1. The groundwater samples should be analyzed for TCL VOCs plus TICs by 8260B, alkalinity by 2320B, chloride, total kjeldahl nitrogen by 351.2, phosphorous by 365, nitrate, sulfate and sulfide by 300.0, and ferrous iron (field parameter). Prior to the start of groundwater sampling, a synoptic round of water levels should be collected from all DEC wells located within the Klink Cosmo Investigation Area.
- For characterization of potential discharge water, up to 5 monitoring wells located within or in the vicinity of the highest concentrations of contaminants should be analyzed for VOCs by 624, SVOCs by 625, PCBs by 608, cadmium, copper, lead, nickel, and zinc by 6010B, mercury by 7470A, flashpoint by 1010, total dissolved solids by 2540C, chloride, nitrate and nitrite by 300.0, total kjedahl nitrogen by 351.2, CBOD by 5210B, hexavalent chromium by 7196A, Total Petroleum Hydrocarbons by 1664, Total Suspended Solids by 2540D and pH by 150.1 (effluent parameters for sewer discharge).
- Up to 11 additional soil vapor implants should be installed at the locations shown on Plate 2. These locations will further assist in determining the horizontal impacts of PCE and TCE in the areas north, south and east of the Klink Cosmo property, and replace SG-083 which was installed during Phase 1, but was not functioning correctly. At least one soil sample should be collected from each soil vapor implant location from the interval exhibiting odors, staining, or

the highest PID reading. If no odors, staining, or elevated PID reading are encountered, then only one sample from the bottom of the location should be collected, as per the FAP. All soil samples should be analyzed for TCL VOCs plus TICs by 8260B.

- A complete round of soil gas samples should be collected from all new and existing DEC soil gas implants sampled during the RI Phase 1. The soil gas samples should be analyzed for VOCs by TO-15, as per the FAP.

## 8.0 REFERENCES

- Bouwer, H., 1989. The Bouwer and Rice Slug Test – An Update, *Ground Water*, Vol. 27, No. 3, pp 304 – 309
- Broughton, J.G., et al. 1966. Geology of New York: A Short Account. New York State Museum and Science Service Educational Leaflet No. 20. Albany, NY
- Environmental Planning & Management, Inc., January 2006. Contaminated Material Investigation Findings Report – Kosciuszko Bridge Project Kings & Queens Counties, New York, prepared for Parsons Corporation for submittal to NYSDOT Region 11
- Impact Environmental Consulting, Inc., March 1998a. Phase I Environmental Site Assessment at 46-60 Anthony Street/ 95 Lombardy Street, prepared for ACME Architectural Products Inc.
- Impact Environmental Consulting, Inc., March 1998b. Phase I Environmental Site Assessment at 72 Anthony Street, prepared for ACME Architectural Products Inc.
- Impact Environmental Consulting, Inc., June 1998. Phase II Environmental Site Assessment at 46-60 Anthony Street/ 95 Lombardy Street, prepared for ACME Architectural Products Inc.
- New York State Department of Environmental Conservation (NYSDEC). January 24, 1994. Technical and Administrative Guidance Memorandum (TAGM) #4046, Determination of Soil Cleanup Objectives and Cleanup Levels. (Revised), including the STARS Memo #1 compounds as per the NYSDEC Memorandum dated December 20, 2000
- NYSDEC, Division of Water. April 2000. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Technical and Operational Guidance Series (TOGS) No. 1.1.1, Class GA including June 2004 Addenda
- NYSDEC, May 2010. Department of Environmental Remediation, DER-10 Technical Guidance for Site Investigation and Remediation
- NYSDEC, October 2010. CP-51 Soil Cleanup Guidance for Total PAHs
- New York State Department of Health (NYSDOH). October 2006. Guidance for Evaluating Soil Vapor Intrusion in the State of New York
- Roux Associates, Inc., October 29, 2010. 3<sup>rd</sup> Quarter of 2010 Progress Report, Off-Site Free-Product Recovery System, Greenpoint, Brooklyn, New York
- URS. October 2007. Final – Site Characterization, Phase I Data Summary Report
- URS. April 2008. Final – Site Characterization, Phase II Data Summary Report
- URS. October 2008. Final – Site Characterization, Phase III Data Summary Report
- URS. May 2009. Final – Site Characterization, Phase IV Data Summary Report

URS. April 2010. Field Activities Plan

USEPA, September 1998. *Technical Protocol for Evaluating Natural Attenuation of chlorinated Solvents in Ground Water*. Cincinnati, OH: National Risk Management Research Laboratory, Office of Research and Development, USEPA. EPA/600/R-98/128.

USGS, 1999. Feasibility of Using Ground Water as a Supplemental Supply for Brooklyn and Queens, New York. Coram, NY

## TABLES



**TABLE 2-1**  
**GROUNDWATER ELEVATION MEASUREMENTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
DEC-004	202478.489	1001408.06	39.26	39.26	39.12	A							
								6/20/2011 1025	36.51	2.61	0.00		
DEC-006D	202533.2908	1002137.5083	48.81	48.81	48.49	B							
								6/20/2011 0830	46.18	2.31	0.00		
DEC-006DD	202527.166	1002139.573	48.596	48.60	48.60	B							
								6/20/2011 0828	45.51	3.09	0.00		
DEC-007	202366.6424	1002021.554	43.25	43.25	43.04	A							
								6/20/2011 0818	40.65	2.39	0.00		
DEC-007D	202355.105	1001986.276	42.846	42.85	42.85	B							
								6/20/2011 0820	39.96	2.89	0.00		
DEC-008	202398.1214	1001768.69	41.01	41.01	40.72	A							
								6/20/2011 0855	38.25	2.47	0.00		
DEC-009	202173.5584	1001470.099	40.91	40.91	40.77	A							
								6/20/2011 1040	38.12	2.65	0.00		
DEC-010	202023.8858	1001331.374	41.32	41.32	40.98	A							
								6/20/2011 1017	38.12	2.86	0.00		
DEC-011	201714.2021	1001434.313	40.22	40.22	39.91	A							
								6/20/2011 1011	36.42	3.49	0.00		
DEC-012	201758.1077	1001716.322	39.64	39.64	39.42	A							
								6/20/2011 1121	36.55	2.87	0.00		
DEC-013	201958.3382	1001649.616	39.47	39.47	39.19	A							
								6/20/2011 1049	36.58	2.61	0.00		
DEC-013D	201962.96	1001647.311	39.467	39.47	39.47	B							
								6/20/2011 1048	36.19	3.28	0.00		

NM - No Measurement

**Geologic Zone:**

- A Shallow Unconfined Aquifer  
 B Deep Unconfined Aquifer

**TABLE 2-1**  
**GROUNDWATER ELEVATION MEASUREMENTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
DEC-014D	201919.921	1001937.307	36.099	36.10	36.10	B							
								6/20/2011 0929	33.20	2.90	0.00		
DEC-014R	201916.144	1001938.635	36.011	36.01	36.01	A							
								6/20/2011 0927	33.24	2.77	0.00		
DEC-015	202166.8569	1001855.13	39.21	39.21	38.80	A							
								6/20/2011 0902	36.18	2.62	0.00		
DEC-015D	202171.785	1001853.162	39.310	39.31	39.31	B							
								6/20/2011 0900	36.50	2.81	0.00		
DEC-022D	202679.727	1002001.044	51.73	51.73	51.39	B							
								6/20/2011 0838	49.10	2.29	0.00		
DEC-027	202550.9026	1001621.705	42.45	42.45	42.30	A							
								6/20/2011 1029	39.79	2.51	0.00		
DEC-028	202252.7643	1001700.994	39.99	39.99	39.78	A							
								6/20/2011 1035	37.50	2.28	0.00		
DEC-029	202086.6722	1002015.247	38.90	38.90	38.74	A							
								6/20/2011 0914	36.21	2.53	0.00		
DEC-029D	202087.488	1002022.985	38.848	38.85	38.85	B							
								6/20/2011 0911	36.05	2.80	0.00		
DEC-030	202008.4618	1001816.911	37.43	37.43	37.12	A							
								6/20/2011 1059	34.60	2.52	0.00		
DEC-030D	201995.054	1001821.776	37.320	37.32	37.32	B							
								6/20/2011 1056	34.30	3.02	0.00		
DEC-031	201767.8547	1001889.641	34.99	34.94	34.52	A							
								6/20/2011 1102	31.85	2.67	0.00		

NM - No Measurement

**Geologic Zone:**

A Shallow Unconfined Aquifer  
 B Deep Unconfined Aquifer

**TABLE 2-1**  
**GROUNDWATER ELEVATION MEASUREMENTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
DEC-031D	201768.9664	1001895.1371	34.70	34.7	34.48	B							
								6/20/2011 1102	31.72	2.76	0.00		
DEC-032	201579.3871	1001969.121	28.30	28.30	28.03	A							
								6/20/2011 0944	25.36	2.67	0.00		
DEC-033	201498.31	1001515.033	36.67	36.67	36.35	A							
								6/20/2011 1005	33.00	3.35	0.00		Slight petroleum odor
DEC-039	202601.4996	1001779.721	45.02	45.02	44.83	A							
								6/20/2011 0844	42.38	2.45	0.00		
DEC-042	202512.9313	1001729.4849	42.10	42.1	41.88	A							
								6/20/2011 0849	39.39	2.49	0.00		
DEC-043	202181.3558	1002285.3685	37.67	37.67	37.38	A							
								6/20/2011 0808	34.93	2.45	0.00		
DEC-043D	202181.307	1002285.318	37.724	37.72	37.72	B							
								6/20/2011 0806	35.41	2.31	0.00		
DEC-044	201738.3781	1001809.4731	37.15	37.15	37.02	A							
								6/20/2011 1107	34.25	2.77	0.00		
DEC-044D	201741.332	1001817.671	37.022	37.02	37.02	B							
								6/20/2011 1106	33.80	3.22	0.00		
DEC-045	201745.6009	1001996.6186	32.55	32.55	32.3	A							
								6/20/2011 0936	29.62	2.68	0.00		
DEC-045D	201727.996	1002001.655	32.18	32.18	32.18	B							
								6/20/2011 0934	29.25	2.93	0.00		
DEC-046	201452.7908	1001672.8018	36.38	36.38	36.2	A							
								6/21/2011 0740	33.40	2.80	0.00		

NM - No Measurement

**Geologic Zone:**

A Shallow Unconfined Aquifer  
 B Deep Unconfined Aquifer

**TABLE 2-1**  
**GROUNDWATER ELEVATION MEASUREMENTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
DEC-047	201110.7101	1001622.1025	31.26	31.26	30.97	A							
								6/20/2011 0957	28.07	2.90	0.00		
DEC-048	201186.6834	1001797.0208	28.69	28.69	28.36	A	0.86						
								6/20/2011 0951	25.45	2.91	0.00	2.91	Petroleum odor
								6/21/2011 1630	25.45	2.91	0.03	2.94	Trace LNAPL, Petroleum odor
								6/22/2011 0800	25.45	2.91	0.12	3.01	Trace LNAPL, Petroleum odor
DEC-064	202041.174	1001897.505	37.638	37.64	37.64	A							
								6/20/2011 0920	34.76	2.88	0.00		
DEC-064D	202043.667	1001902.992	37.766	37.77	37.77	B							
								6/20/2011 0922	34.86	2.91	0.00		
DEC-065	201696.658	1001686.982	39.412	39.41	39.41	A							
								6/20/2011 1112	36.10	3.31	0.00		
DEC-065D	201699.61	1001695.714	39.249	39.25	39.25	B							
								6/20/2011 1112	36.48	2.77	0.00		
DEC-066	201683.68	1001934.037	32.240	32.24	32.24	A							
								6/20/2011 0939	29.15	3.09	0.00		
DEC-066D	201668.614	1001939.332	31.462	31.46	31.46	B							
								6/20/2011 0941	28.54	2.92	0.00		

NM - No Measurement

**Geologic Zone:**

A Shallow Unconfined Aquifer  
 B Deep Unconfined Aquifer

**TABLE 2-2**  
**SUMMARY OF PARAMETERS ANALYZED IN RI**  
**FORMER KLINK COSMO SITE**

<b>SOIL GAS PARAMETERS</b>	<b>SOIL PARAMETERS</b>	<b>GROUNDWATER PARAMETERS</b>
<b>Volatile Organics by TO-15</b>	<b>Volatile Organics by 8260B</b>	<b>Volatile Organics by 8260B</b>
1,1,1-Trichloroethane	1,1,1-Trichloroethane	1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane
1,1,2-Trichlorotrifluoroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloro-1,2,2-trifluoroethane
1,1-Dichloroethane	1,1,2-Trichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethane
1,2,4-Trichlorobenzene	1,1-Dichloroethene	1,1-Dichloroethene
1,2,4-Trimethylbenzene	1,2,3-Trichlorobenzene	1,2,3-Trichlorobenzene
1,3,5-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trichlorobenzene
1,2-dichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (Ethylene dibromide)	1,2-Dibromoethane (Ethylene dibromide)	1,2-Dibromoethane (Ethylene dibromide)
1,2-Dichlorobenzene	1,2-Dichlorobenzene	1,2-Dichlorobenzene
1,2-Dichloroethane	1,2-Dichloroethane	1,2-Dichloroethane
1,2-Dichloroethene (cis)	1,2-Dichloroethene (cis)	1,2-Dichloroethene (cis)
1,2-Dichloroethene (trans)	1,2-Dichloroethene (trans)	1,2-Dichloroethene (trans)
1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane
1,3-Dichlorobenzene	1,3-Dichlorobenzene	1,3-Dichlorobenzene
1,3-Dichloropropene (cis)	1,3-Dichloropropene (cis)	1,3-Dichloropropene (cis)
1,3-Dichloropropene (trans)	1,3-Dichloropropene (trans)	1,3-Dichloropropene (trans)
1,4-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dichlorobenzene
1,4-Dioxane	1,4-Dioxane	1,4-Dioxane
4-Methyl-2-pentanone	2-Hexanone	2-Hexanone
Benzene	4-Methyl-2-pentanone	4-Methyl-2-pentanone
Benzyl chloride	Acetone	Acetone
Bromodichloromethane	Benzene	Benzene
Bromoform	Bromochloromethane	Bromochloromethane
Bromomethane	Bromodichloromethane	Bromodichloromethane
1,3-Butadiene	Bromoform	Bromoform
Carbon tetrachloride	Bromomethane	Bromomethane
Chlorobenzene	Carbon disulfide	Carbon disulfide
Chloroethane	Carbon tetrachloride	Carbon tetrachloride
Chloroform	Chlorobenzene	Chlorobenzene
Chloromethane	Chloroethane	Chloroethane
Cyclohexane	Chloroform	Chloroform
Dibromochloromethane	Chloromethane	Chloromethane
Dichlorodifluoromethane	Cyclohexane	Cyclohexane
Ethylbenzene	Dibromochloromethane	Dibromochloromethane
dichlorotetrafluoroethane	Dichlorodifluoromethane	Dichlorodifluoromethane
Methyl ethyl ketone (2-Butanone)	Ethylbenzene	Ethylbenzene
Methyl tert-butyl ether	Isopropylbenzene (Cumene)	Isopropylbenzene (Cumene)
tert-butyl alcohol	Methyl acetate	Methyl acetate
Methylene chloride	Methyl ethyl ketone (2-Butanone)	Methyl ethyl ketone (2-Butanone)
Styrene	Methyl tert-butyl ether	Methyl tert-butyl ether
Tetrachloroethene	Methylcyclohexane	Methylcyclohexane
Toluene	Methylene chloride	Methylene chloride
Trichloroethene	Styrene	Styrene
Trichlorofluoromethane	Tetrachloroethene	Tetrachloroethene
Vinyl chloride	Toluene	Toluene
Xylene (total)	Trichloroethene	Trichloroethene
1,3-Butadiene	Trichlorofluoromethane	Trichlorofluoromethane
2,2,4-Trimethylpentane	Vinyl chloride	Vinyl chloride
hexachloro-1,3-butadiene	Xylene (total)	Xylene (total)
n-hexane	Idomethane	Idomethane
	Vinyl acetate	Vinyl acetate
<b>NAPL PARAMETERS</b>	2,2-dichloropropane	2,2-dichloropropane
<b>Volatile Organics by 8260B</b>	1,1-dichloropropene	1,1-dichloropropene
1,1,1-Trichloroethane	Dibromomethane	Dibromomethane
1,1,2,2-Tetrachloroethane	1,3-dichloropropane	1,3-dichloropropane
1,1,2-Trichloro-1,2,2-trifluoroethane	bromobenzene	bromobenzene
1,1,2-Trichloroethane	1,2,3-trichloropropane	1,2,3-trichloropropane
1,1-Dichloroethane	2-chlorotoluene/4-chlorotoluene	2-chlorotoluene/4-chlorotoluene
1,2,3-Trichlorobenzene	1,3,5-trimethylbenzene	1,3,5-trimethylbenzene
1,2,4-Trichlorobenzene	hexachlorobutadiene	hexachlorobutadiene
1,2-Dibromo-3-chloropropane	tert-butylbenzene/sec-butylbenzene	tert-butylbenzene/sec-butylbenzene
1,2-Dibromoethane (Ethylene dibromide)	1,2,4-trimethylbenzene	1,2,4-trimethylbenzene
1,2-Dichlorobenzene	naphthalene	naphthalene
1,2-Dichloroethane	4-isopropyl toluene	4-isopropyl toluene
	<b>Semi-Volatile Organics by 8270C</b>	<b>Semi-Volatile Organics by 8270C</b>
1,2-Dichloroethene (cis)	1,1-Biphenyl	1,1-Biphenyl
1,2-Dichloroethene (trans)	2,2-oxybis(1-Chloropropane)	2,2-oxybis(1-Chloropropane)
1,2-Dichloropropane	2,4,5-Trichlorophenol	2,4,5-Trichlorophenol
1,3-Dichlorobenzene	2,4,6-Trichlorophenol	2,4,6-Trichlorophenol

**TABLE 2-2  
SUMMARY OF PARAMETERS ANALYZED IN RI  
FORMER KLINK COSMO SITE**

<b>NAPL PARAMETERS</b>	<b>SOIL PARAMETERS</b>	<b>GROUNDWATER PARAMETERS</b>
<b>Volatile Organics by 8260B</b>	<b>Semi-Volatile Organics by 8270C</b>	<b>Semi-Volatile Organics by 8270C</b>
1,3-Dichloropropene (cis)	2,4-Dichlorophenol	2,4-Dichlorophenol
1,3-Dichloropropene (trans)	2,4-Dimethylphenol	2,4-Dimethylphenol
1,4-Dichlorobenzene	2,4-Dinitrophenol	2,4-Dinitrophenol
1,4-Dioxane	2,4-Dinitrotoluene	2,4-Dinitrotoluene
2-Hexanone	2,6-Dinitrotoluene	2,6-Dinitrotoluene
4-Methyl-2-pentanone	2-Chloronaphthalene	2-Chloronaphthalene
Acetone	2-Chlorophenol	2-Chlorophenol
Benzene	2-Methylnaphthalene	2-Methylnaphthalene
Bromochloromethane	2-Methylphenol (o-cresol)	2-Methylphenol (o-cresol)
Bromodichloromethane	2-Nitroaniline	2-Nitroaniline
Bromoform	2-Nitrophenol	2-Nitrophenol
Bromomethane	3,3-Dichlorobenzidine	3,3-Dichlorobenzidine
Carbon disulfide	3-Nitroaniline	3-Nitroaniline
Carbon tetrachloride	4,6-Dinitro-2-methylphenol	4,6-Dinitro-2-methylphenol
Chlorobenzene	4-Bromophenyl-phenylether	4-Bromophenyl-phenylether
Chloroethane	4-Chloro-3-methylphenol	4-Chloro-3-methylphenol
Chloroform	4-Chloroaniline	4-Chloroaniline
Chloromethane	4-Chlorophenyl-phenylether	4-Chlorophenyl-phenylether
Cyclohexane	3 & 4-Methylphenol (m/p-cresol)	3 & 4-Methylphenol (m/p-cresol)
Dibromochloromethane	4-Nitroaniline	4-Nitroaniline
Dichlorodifluoromethane	4-Nitrophenol	4-Nitrophenol
Ethylbenzene	Acenaphthene	Acenaphthene
Isopropylbenzene (Cumene)	Acenaphthylene	Acenaphthylene
Methyl acetate	Acetophenone	Acetophenone
Methyl ethyl ketone (2-Butanone)	Anthracene	Anthracene
Methyl tert-butyl ether	Atrazine	Atrazine
Methylcyclohexane	Benzaldehyde	Benzaldehyde
Methylene chloride	Benzo(a)anthracene	Benzo(a)anthracene
Styrene	Benzo(a)pyrene	Benzo(a)pyrene
Tetrachloroethene	Benzo(b)fluoranthene	Benzo(b)fluoranthene
Toluene	Benzo(g,h,i)perylene	Benzo(g,h,i)perylene
Trichloroethene	Benzo(k)fluoranthene	Benzo(k)fluoranthene
Trichlorofluoromethane	bis(2-Chloroethoxy)methane	bis(2-Chloroethoxy)methane
Vinyl chloride	bis(2-Chloroethyl)ether	bis(2-Chloroethyl)ether
Xylene (total)	bis(2-Ethylhexyl)phthalate	bis(2-Ethylhexyl)phthalate
Idomethane	Butylbenzylphthalate	Butylbenzylphthalate
Vinyl acetate	Caprolactam	Caprolactam
2,2-dichloropropane	Carbazole	Carbazole
1,1-dichloropropene	Chrysene	Chrysene
Dibromomethane	Dibenz(a,h)anthracene	Dibenz(a,h)anthracene
1,3-dichloropropane	Dibenzofuran	Dibenzofuran
bromobenzene	Diethylphthalate	Diethylphthalate
1,2,3-trichloropropane	Dimethylphthalate	Dimethylphthalate
2-chlorotoluene/4-chlorotoluene	Di-n-butylphthalate	Di-n-butylphthalate
1,3,5-trimethylbenzene	Di-n-octylphthalate	Di-n-octylphthalate
hexachlorobutadiene	Fluoranthene	Fluoranthene
tert-butylbenzene/sec-butylbenzene	Fluorene	Fluorene
1,2,4-trimethylbenzene	Hexachlorobenzene	Hexachlorobenzene
naphthalene	Hexachlorobutadiene	Hexachlorobutadiene
4-isopropyl toluene	Hexachlorocyclopentadiene	Hexachlorocyclopentadiene
<b>Semi-Volatile Organics by 8270C</b>	<b>Hexachloroethane</b>	<b>Hexachloroethane</b>
1,1-Biphenyl	Indeno(1,2,3-cd)pyrene	Indeno(1,2,3-cd)pyrene
2,2-oxybis(1-Chloropropane)	Isophorone	Isophorone
2,4,5-Trichlorophenol	Naphthalene	Naphthalene
2,4,6-Trichlorophenol	Nitrobenzene	Nitrobenzene
2,4-Dichlorophenol	N-Nitroso-di-n-propylamine	N-Nitroso-di-n-propylamine
2,4-Dimethylphenol	N-Nitrosodiphenylamine	N-Nitrosodiphenylamine
2,4-Dinitrophenol	Pentachlorophenol	Pentachlorophenol
2,4-Dinitrotoluene	Phenanthrene	Phenanthrene
2,6-Dinitrotoluene	Phenol	Phenol
2-Chloronaphthalene	Pyrene	Pyrene
2-Chlorophenol	<b>PESTICIDES BY 8081B</b>	<b>PESTICIDES BY 8081B</b>
3-Nitroaniline	alpha-BHC/beta-BHC/gamma-BHC (Lindane)	alpha-BHC/beta-BHC/gamma-BHC (Lindane)
4,6-Dinitro-2-methylphenol	heptachlor/heptachlor epoxide	heptachlor/heptachlor epoxide
4-Bromophenyl-phenylether	aldrin	aldrin
4-Chloro-3-methylphenol	endosufan I/endosurfan II	endosufan I/endosurfan II
4-Chloroaniline	dieldrin	dieldrin
4-Chlorophenyl-phenylether	4,4'-DDE/4,4'-DDD/4,4'-DDT	4,4'-DDE/4,4'-DDD/4,4'-DDT
3 & 4-Methylphenol (m/p-cresol)	endrin	endrin

**TABLE 2-2  
SUMMARY OF PARAMETERS ANALYZED IN RI  
FORMER KLINK COSMO SITE**

<b>NAPL PARAMETERS</b>	<b>SOIL PARAMETERS</b>	<b>GROUNDWATER PARAMETERS</b>
<b>Semi-Volatile Organics by 8270C</b>	<b>PESTICIDES BY 8081B</b>	<b>PESTICIDES BY 8081B</b>
4-Nitroaniline	endosufan sufate	endosufan sufate
4-Nitrophenol	methoxychlor	methoxychlor
Acenaphthene	endrin keton/endrin aldehyde	endrin keton/endrin aldehyde
Acenaphthylene	alpha-chlordane/gamma-chlordane	alpha-chlordane/gamma-chlordane
Acetophenone	toxaphene	toxaphene
Anthracene	<b>PCBs by 8082A</b>	<b>PCBs by 8082A</b>
Atrazine	aroclor-1016	aroclor-1016
Benzaldehyde	aroclor-1221	aroclor-1221
Benzo(a)anthracene	aroclor-1232	aroclor-1232
Benzo(a)pyrene	aroclor-1242	aroclor-1242
Benzo(b)fluoranthene	aroclor-1248	aroclor-1248
Benzo(g,h,i)perylene	aroclor-1254	aroclor-1254
Benzo(k)fluoranthene	aroclor-1260	aroclor-1260
bis(2-Chloroethoxy)methane	aroclor-1262	aroclor-1262
bis(2-Chloroethyl)ether	aroclor-1268	aroclor-1268
bis(2-Ethylhexyl)phthalate	<b>Metals/Cyanide by 6010C/7471B/9012B</b>	<b>Metals/Cyanide by 6010C/7471B/9012B</b>
Butylbenzylphthalate	aluminum	aluminum
Caprolactam	antimony	antimony
Carbazole	arsenic	arsenic
Chrysene	barium	barium
Dibenz(a,h)anthracene	beryllium	beryllium
Dibenzofuran	cadmium	cadmium
Diethylphthalate	calcium	calcium
Dimethylphthalate	chromium	chromium
Di-n-butylphthalate	cobalt	cobalt
Di-n-octylphthalate	copper	copper
Fluoranthene	iron	iron
Fluorene	lead	lead
Hexachlorobenzene	magnesium	magnesium
Hexachlorobutadiene	manganese	manganese
Hexachlorocyclopentadiene	mercury	mercury
Hexachloroethane	nickel	nickel
Indeno(1,2,3-cd)pyrene	potassium	potassium
Isophorone	selenium	selenium
Naphthalene	silver	silver
Nitrobenzene	sodium	sodium
N-Nitroso-di-n-propylamine	thallium	thallium
N-Nitrosodiphenylamine	vanadium	vanadium
Pentachlorophenol	zinc	zinc
Phenanthrene	cyanide	cyanide
Phenol	<b>Herbicides by 8151A</b>	---
Pyrene	2,4,5-T	---
Fuel Identification	2,4,5-TP (Silvex)	---
Specific gravity by ASTM 2710F	2,4-D	---
	2,4-DB	---
	dalapon	---
	dicamba	---
	dichlorprop	---
	dinoseb	---
	MCPA	---
	MCPB	---
	MCPP	---
	Hexavalent Chromium by 9012S	---
	Flashpoint by SW1010	---
	Ractive cyanide/sulfide by 7.3.4.2	---
	pH by 9045C	---

TABLE 2-3  
GEOTECHNICAL TEST RESULTS

	DEC-029D (84 – 84.5')	DEC-044D (50 – 51')	DEC-044D (70-71')	DEC-065D (9-10')	DEC-065D (14-15')	DEC-066D (24-25')
Material Description	clay with sand	poorly graded sand	well-graded sand with silt and gravel	silty sand	clayey sand	poorly graded sand with silt
Grain Size	4.5% gravel 17.6% sand 37.7% silt 40.2% clay	9.6% gravel 86.7% sand 3.7% fines	27.1% gravel 62.6% sand 8.2% silt 2.1% clay	5.1% gravel 56.2% sand 27% silt 11.6% clay	11.9% gravel 46.8% sand 21.6% silt 19.7% clay	88.1% sand 11.9% fines
Atterberg Limits	plastic	non-plastic	non-plastic	plastic	plastic	Non-plastic
USCS Classification	CH	SP	SW-SM	SM	SC	SP-SM
Average K	$4.6 \times 10^{-8}$ cm/sec			$1.1 \times 10^{-7}$ cm/sec	$4.9 \times 10^{-8}$ cm/sec	



**Table 3-1**  
**Vertical Gradient Calculations**  
**Klink Cosmo Phase I RI**  
**Page 1 of 2**

Well Clusters	Well ID	Date	Measuring Point Reference Elevation (ft. msl)	Depth to Water (ft.)	Groundwater Elevation (ft. msl.)	Screen Setting feet bgs (ft. msl.)	Ground Elevation (ft. msl)	Midpoint of Screen Elevation (ft. msl.)	Vertical Separation (ft.)	Gradient (ft.)
Well Cluster DEC-006	DEC-006D	06/20/11	48.49	46.18	2.31	20.00 to 35.00 28.81 to 13.81	48.81	21.31	60.71	-0.013
	DEC-006DD	06/20/11	48.60	45.51	3.09	83.00 to 93.00 -34.40 to -44.40	48.60	-39.40		
Well Cluster DEC-007	DEC-007	06/20/11	43.04	40.65	2.39	41.00 to 56.00 2.25 to -12.75	43.25	-5.25	36.90	-0.014
	DEC-007D	06/20/11	42.85	39.96	2.89	80.00 to 90.00 -37.15 to -47.15	42.85	-42.15		
Well Cluster DEC-013	DEC-013	06/20/11	39.19	36.58	2.61	33.00 to 48.00 6.47 to -8.53	39.47	-1.03	39.50	-0.017
	DEC-013D	06/20/11	39.47	36.19	3.28	75.00 to 85.00 -35.53 to -45.53	39.47	-40.53		
Well Cluster DEC-014	DEC-014R	06/20/11	36.01	33.24	2.77	30.00 to 45.00 6.01 to -8.99	36.01	-1.49	37.41	-0.003
	DEC-014D	06/20/11	36.10	33.20	2.90	70.00 to 80.00 -33.90 to -43.90	36.10	-38.90		
Well Cluster DEC-015	DEC-015	06/20/11	38.80	36.18	2.62	31.00 to 46.00 8.21 to -6.79	39.21	0.71	38.40	-0.005
	DEC-015D	06/20/11	39.31	36.50	2.81	72.00 to 82.00 -32.69 to -42.69	39.31	-37.69		
Well Cluster DEC-029	DEC-029	06/20/11	38.74	36.21	2.53	36.00 to 51.00 2.90 to -12.10	38.90	-4.60	36.55	-0.007
	DEC-029D	06/20/11	38.85	36.05	2.80	75.00 to 85.00 -36.15 to -46.15	38.85	-41.15		
Well Cluster DEC-030	DEC-030	06/20/11	37.12	34.60	2.52	25.00 to 40.00 12.43 to -2.57	37.43	4.93	42.61	-0.012
	DEC-030D	06/20/11	37.32	34.30	3.02	70.00 to 80.00 -32.68 to -42.68	37.32	-37.68		
Well Cluster DEC-031	DEC-031	06/20/11	34.52	31.85	2.67	30.00 to 45.00 4.99 to -10.01	34.99	-2.51	37.79	-0.002
	DEC-031D	06/20/11	34.48	31.72	2.76	70.00 to 80.00 -35.30 to -45.30	34.70	-40.30		
Well Cluster DEC-043	DEC-043	06/20/11	37.38	34.93	2.45	40.00 to 50.00 -2.33 to -12.33	37.67	-7.33	34.95	0.004
	DEC-043D	06/20/11	37.72	35.41	2.31	75.00 to 85.00 -37.28 to -47.28	37.72	-42.28		
Well Cluster DEC-044	DEC-044	06/20/11	37.02	34.25	2.77	30.00 to 45.00 7.15 to -7.85	37.15	-0.35	37.63	-0.012
	DEC-044D	06/20/11	37.02	33.80	3.22	70.00 to 80.00 -32.98 to -42.98	37.02	-37.98		
Well Cluster DEC-045	DEC-045	06/20/11	32.30	29.62	2.68	30.00 to 45.00 2.55 to -12.45	32.55	-4.95	37.87	-0.007
	DEC-045D	06/20/11	32.18	29.25	2.93	70.00 to 80.00 -37.82 to -47.82	32.18	-42.82		

**Table 3-1**  
**Vertical Gradient Calculations**  
**Klink Cosmo Phase I RI**  
**Page 2 of 2**

Well Clusters	Well ID	Date	Measuring Point Reference Elevation (ft. msl)	Depth to Water (ft.)	Groundwater Elevation (ft. msl.)	Screen Setting feet bgs (ft. msl.)	Ground Elevation (ft. msl)	Midpoint of Screen Elevation (ft. msl.)	Vertical Separation (ft.)	Gradient (ft.)
Well Cluster DEC-064	DEC-064	06/20/11	37.64	34.76	2.88	30.00 to 45.00 7.64 to -7.36	37.64	0.14	37.37	<b>-0.001</b>
	DEC-064D	06/20/11	37.77	34.86	2.91	70.00 to 80.00 -32.23 to -42.23	37.77	-37.23		
Well Cluster DEC-065	DEC-065	06/20/11	39.41	36.10	3.31	30.00 to 45.00 9.41 to -5.59	39.41	1.91	37.66	<b>0.014</b>
	DEC-065D	06/20/11	39.25	36.48	2.77	70.00 to 80.00 -30.75 to -40.75	39.25	-35.75		
Well Cluster DEC-066	DEC-066	06/20/11	32.24	29.15	3.09	30.00 to 45.00 2.24 to -12.76	32.24	-5.26	38.28	<b>0.004</b>
	DEC-065D	06/20/11	31.46	28.54	2.92	70.00 to 80.00 -38.54 to -48.54	31.46	-43.54		

Notes:

ft. - feet

msl. - mean sea level

Positive is DOWNWARD, Negative is UPWARD

**TABLE 3-2****Representative Slug Test Results  
Phase I Remedial Investigation**

<b>Monitoring Well Location ID</b>	<b>Slug Test</b>	<b>Hydraulic Conductivity (cm/sec)</b>	<b>Geologic Unit</b>	<b>USCS</b>
<b>Shallow Overburden</b>				<b>USCS</b>
DEC-031	Rising Head	1.85E-03	sand some gravel	SP
DEC-044	Falling Head	2.69E-05	sand, trace gravel	SP
DEC-044	Rising Head	3.85E-05	sand, trace gravel	SP
DEC-064	Rising Head	4.77E-03	sand and gravel; sand	SW, SP
<b>Deep Overburden</b>				
DEC-013D	Rising Head	9.74E-03	sand and gravel; sand	SP/GP, SP, SM
DEC-044D	Rising Head	2.48E-02	sand and silt; sand	SM, SW, SP
DEC-044D	Falling Head	2.06E-02	sand and silt; sand	SM, SW, SP

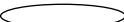
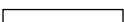
**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID				DEC-014D 31-32	DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-043D (80-81')	DEC-064D (29-29.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled				05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	0.05	0.05				0.0057 J	0.0043 J
Methylene chloride	MG/KG	0.05	0.05					
Naphthalene	MG/KG	12	12					
Styrene	MG/KG	300 CP-51	-			0.0070		
Tetrachloroethene	MG/KG	1.3	1.3					
Toluene	MG/KG	0.7	0.7					
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1	NA		0.073 J	NA	NA
Benzo(a)pyrene	MG/KG	1	22	NA		0.092 J	NA	NA
Benzo(b)fluoranthene	MG/KG	1	1.7	NA		0.096 J	NA	NA
Benzo(g,h,i)perylene	MG/KG	100	1000	NA		0.072 J	NA	NA
Benzo(k)fluoranthene	MG/KG	0.8	1.7	NA		0.056 J	NA	NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	435 CP-51	NA		0.075 J	NA	NA
Chrysene	MG/KG	1	1	NA		0.083 J	NA	NA
Dibenz(a,h)anthracene	MG/KG	0.33	1000	NA		0.023 J	NA	NA
Di-n-butylphthalate	MG/KG	0.014 CP-51	8.1 CP-51	NA		0.13 J	NA	NA
Fluoranthene	MG/KG	100	1000	NA		0.11 J	NA	NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	8.2	NA		0.058 J	NA	NA
Phenanthrene	MG/KG	100	1000	NA		0.046 J	NA	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.

	Concentration Exceeds Criteria (1)
	Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID				DEC-014D 31-32	DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-043D (80-81')	DEC-064D (29-29.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled				05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	1000	NA		0.16 J	NA	NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.094	2.9	NA		0.017 J	NA	NA
Dieldrin	MG/KG	0.005	0.1	NA		0.0052	NA	NA
gamma-Chlordane	MG/KG	0.54 CP-51	14 CP-51	NA		0.014 J	NA	NA
<b>Metals</b>								
Aluminum	MG/KG	10000 CP-51	-	NA	2,270	6,760	NA	NA
Arsenic	MG/KG	13	16	NA	0.70	2.5	NA	NA
Barium	MG/KG	350	820	NA	19.3	59.9	NA	NA
Beryllium	MG/KG	7.2	47	NA	0.15 B	0.46	NA	NA
Cadmium	MG/KG	2.5	7.5	NA	0.048 B	0.49	NA	NA
Calcium	MG/KG	10000 CP-51	-	NA	566	1,210	NA	NA
Chromium	MG/KG	30	NS	NA	4.7	27.3	NA	NA
Cobalt	MG/KG	20 CP-51	-	NA	2.9	7.0	NA	NA
Copper	MG/KG	50	1720	NA	6.4	23.7	NA	NA
Iron	MG/KG	2000 CP-51	-	NA	4,730	23,100	NA	NA
Lead	MG/KG	63	450	NA	1.4	74.2	NA	NA
Magnesium	MG/KG	-	-	NA	1,220	2,080	NA	NA
Manganese	MG/KG	1600	2000	NA	242	421	NA	NA

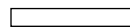
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID				DEC-014D 31-32	DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-043D (80-81')	DEC-064D (29-29.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled				05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.18	0.73	NA		0.32	NA	NA
Nickel	MG/KG	30	130	NA	5.6	12.2	NA	NA
Potassium	MG/KG	-	-	NA	290	1,270	NA	NA
Selenium	MG/KG	3.9	4	NA		0.49 B	NA	NA
Sodium	MG/KG	-	-	NA	69.2	79.9	NA	NA
Thallium	MG/KG	5 CP-51	-	NA			NA	NA
Vanadium	MG/KG	39 CP-51	-	NA	5.1	23.4	NA	NA
Zinc	MG/KG	109	2480	NA	10.0	61.5	NA	NA

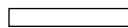
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

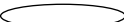
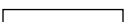
**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID				DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35)	DEC-066D (24-25)	DEC-066D (29-30)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled				05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	0.05	0.05	0.0024 J	0.0028 J	0.0097 J		
Methylene chloride	MG/KG	0.05	0.05	0.0031 J	0.0041 J		0.0022 J	0.0021 J
Naphthalene	MG/KG	12	12			0.014 J		
Styrene	MG/KG	300 CP-51	-					
Tetrachloroethene	MG/KG	1.3	1.3				0.0022 J	0.0048 J
Toluene	MG/KG	0.7	0.7					
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1			NA		NA
Benzo(a)pyrene	MG/KG	1	22			NA		NA
Benzo(b)fluoranthene	MG/KG	1	1.7			NA		NA
Benzo(g,h,i)perylene	MG/KG	100	1000			NA		NA
Benzo(k)fluoranthene	MG/KG	0.8	1.7			NA		NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	435 CP-51	0.26	0.073 J	NA	0.091 J	NA
Chrysene	MG/KG	1	1			NA		NA
Dibenz(a,h)anthracene	MG/KG	0.33	1000			NA		NA
Di-n-butylphthalate	MG/KG	0.014 CP-51	8.1 CP-51			NA		NA
Fluoranthene	MG/KG	100	1000			NA		NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	8.2			NA		NA
Phenanthrene	MG/KG	100	1000			NA		NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria (1)  
 Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

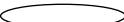
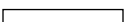
**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID				DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35)	DEC-066D (24-25)	DEC-066D (29-30)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled				05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	1000			NA		NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.094	2.9			NA		NA
Dieldrin	MG/KG	0.005	0.1			NA		NA
gamma-Chlordane	MG/KG	0.54 CP-51	14 CP-51			NA		NA
<b>Metals</b>								
Aluminum	MG/KG	10000 CP-51	-	7,470	10,100	NA	4,610	NA
Arsenic	MG/KG	13	16	0.53 B		NA		NA
Barium	MG/KG	350	820	47.9	113	NA	27.2	NA
Beryllium	MG/KG	7.2	47	0.68	1.1	NA	0.40	NA
Cadmium	MG/KG	2.5	7.5			NA		NA
Calcium	MG/KG	10000 CP-51	-	2,490	6,070	NA	1,580	NA
Chromium	MG/KG	30	NS	22.8	32.7	NA	11.6	NA
Cobalt	MG/KG	20 CP-51	-	7.6	15.4	NA	4.8	NA
Copper	MG/KG	50	1720	13.8	29.8	NA	8.3	NA
Iron	MG/KG	2000 CP-51	-	27,700	54,900	NA	10,100	NA
Lead	MG/KG	63	450	6.8	10.5	NA	3.2	NA
Magnesium	MG/KG	-	-	2,340	3,180	NA	1,990	NA
Manganese	MG/KG	1600	2000	529	1,290	NA	235	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria (1)  
 Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.



**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID				DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35)	DEC-066D (24-25)	DEC-066D (29-30)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled				05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.18	0.73	0.0063 B	0.0060 B	NA	0.0032 B	NA
Nickel	MG/KG	30	130	12.6	22.2	NA	8.8	NA
Potassium	MG/KG	-	-	43.6	2,080	NA	1,070	NA
Selenium	MG/KG	3.9	4			NA		NA
Sodium	MG/KG	-	-	9.0 B	360	NA	84.6	NA
Thallium	MG/KG	5 CP-51	-	2.7	3.4	NA	2.5	NA
Vanadium	MG/KG	39 CP-51	-	32.3	54.2	NA	15.4	NA
Zinc	MG/KG	109	2480	44.0	55.4	NA	22.1	NA

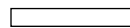
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

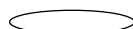
**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID				SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	0.05	0.05	0.0045 J	0.0076 J	0.0039 J	0.0025 J	0.0029 J
Methylene chloride	MG/KG	0.05	0.05					
Naphthalene	MG/KG	12	12					
Styrene	MG/KG	300 CP-51	-					
Tetrachloroethene	MG/KG	1.3	1.3					0.0014 J
Toluene	MG/KG	0.7	0.7					
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(a)pyrene	MG/KG	1	22	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	MG/KG	1	1.7	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	MG/KG	100	1000	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	MG/KG	0.8	1.7	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	435 CP-51	NA	NA	NA	NA	NA
Chrysene	MG/KG	1	1	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	MG/KG	0.33	1000	NA	NA	NA	NA	NA
Di-n-butylphthalate	MG/KG	0.014 CP-51	8.1 CP-51	NA	NA	NA	NA	NA
Fluoranthene	MG/KG	100	1000	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	8.2	NA	NA	NA	NA	NA
Phenanthrene	MG/KG	100	1000	NA	NA	NA	NA	NA

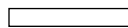
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID				SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	1000	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.094	2.9	NA	NA	NA	NA	NA
Dieldrin	MG/KG	0.005	0.1	NA	NA	NA	NA	NA
gamma-Chlordane	MG/KG	0.54 CP-51	14 CP-51	NA	NA	NA	NA	NA
<b>Metals</b>								
Aluminum	MG/KG	10000 CP-51	-	NA	NA	NA	NA	NA
Arsenic	MG/KG	13	16	NA	NA	NA	NA	NA
Barium	MG/KG	350	820	NA	NA	NA	NA	NA
Beryllium	MG/KG	7.2	47	NA	NA	NA	NA	NA
Cadmium	MG/KG	2.5	7.5	NA	NA	NA	NA	NA
Calcium	MG/KG	10000 CP-51	-	NA	NA	NA	NA	NA
Chromium	MG/KG	30	NS	NA	NA	NA	NA	NA
Cobalt	MG/KG	20 CP-51	-	NA	NA	NA	NA	NA
Copper	MG/KG	50	1720	NA	NA	NA	NA	NA
Iron	MG/KG	2000 CP-51	-	NA	NA	NA	NA	NA
Lead	MG/KG	63	450	NA	NA	NA	NA	NA
Magnesium	MG/KG	-	-	NA	NA	NA	NA	NA
Manganese	MG/KG	1600	2000	NA	NA	NA	NA	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID				SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.18	0.73	NA	NA	NA	NA	NA
Nickel	MG/KG	30	130	NA	NA	NA	NA	NA
Potassium	MG/KG	-	-	NA	NA	NA	NA	NA
Selenium	MG/KG	3.9	4	NA	NA	NA	NA	NA
Sodium	MG/KG	-	-	NA	NA	NA	NA	NA
Thallium	MG/KG	5 CP-51	-	NA	NA	NA	NA	NA
Vanadium	MG/KG	39 CP-51	-	NA	NA	NA	NA	NA
Zinc	MG/KG	109	2480	NA	NA	NA	NA	NA

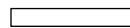
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID				SG-83 (7-8')	SG-84 (7-8')	SG-85 (7-8')	SG-86 (7-8')	SG-87 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	0.05	0.05	0.0035 J	0.0035 J	0.0028 J	0.0029 J	0.0028 J
Methylene chloride	MG/KG	0.05	0.05					
Naphthalene	MG/KG	12	12					
Styrene	MG/KG	300 CP-51	-					
Tetrachloroethene	MG/KG	1.3	1.3	0.011	0.014		0.0014 J	
Toluene	MG/KG	0.7	0.7	0.0015 J				
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(a)pyrene	MG/KG	1	22	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	MG/KG	1	1.7	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	MG/KG	100	1000	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	MG/KG	0.8	1.7	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	435 CP-51	NA	NA	NA	NA	NA
Chrysene	MG/KG	1	1	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	MG/KG	0.33	1000	NA	NA	NA	NA	NA
Di-n-butylphthalate	MG/KG	0.014 CP-51	8.1 CP-51	NA	NA	NA	NA	NA
Fluoranthene	MG/KG	100	1000	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	8.2	NA	NA	NA	NA	NA
Phenanthrene	MG/KG	100	1000	NA	NA	NA	NA	NA

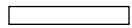
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID				SG-83 (7-8')	SG-84 (7-8')	SG-85 (7-8')	SG-86 (7-8')	SG-87 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	1000	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.094	2.9	NA	NA	NA	NA	NA
Dieldrin	MG/KG	0.005	0.1	NA	NA	NA	NA	NA
gamma-Chlordane	MG/KG	0.54 CP-51	14 CP-51	NA	NA	NA	NA	NA
<b>Metals</b>								
Aluminum	MG/KG	10000 CP-51	-	NA	NA	NA	NA	NA
Arsenic	MG/KG	13	16	NA	NA	NA	NA	NA
Barium	MG/KG	350	820	NA	NA	NA	NA	NA
Beryllium	MG/KG	7.2	47	NA	NA	NA	NA	NA
Cadmium	MG/KG	2.5	7.5	NA	NA	NA	NA	NA
Calcium	MG/KG	10000 CP-51	-	NA	NA	NA	NA	NA
Chromium	MG/KG	30	NS	NA	NA	NA	NA	NA
Cobalt	MG/KG	20 CP-51	-	NA	NA	NA	NA	NA
Copper	MG/KG	50	1720	NA	NA	NA	NA	NA
Iron	MG/KG	2000 CP-51	-	NA	NA	NA	NA	NA
Lead	MG/KG	63	450	NA	NA	NA	NA	NA
Magnesium	MG/KG	-	-	NA	NA	NA	NA	NA
Manganese	MG/KG	1600	2000	NA	NA	NA	NA	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-1**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - UNRESTRICTED USE AND**  
**PROTECTION OF GROUNDWATER CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID				SG-83 (7-8')	SG-84 (7-8')	SG-85 (7-8')	SG-86 (7-8')	SG-87 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.18	0.73	NA	NA	NA	NA	NA
Nickel	MG/KG	30	130	NA	NA	NA	NA	NA
Potassium	MG/KG	-	-	NA	NA	NA	NA	NA
Selenium	MG/KG	3.9	4	NA	NA	NA	NA	NA
Sodium	MG/KG	-	-	NA	NA	NA	NA	NA
Thallium	MG/KG	5 CP-51	-	NA	NA	NA	NA	NA
Vanadium	MG/KG	39 CP-51	-	NA	NA	NA	NA	NA
Zinc	MG/KG	109	2480	NA	NA	NA	NA	NA

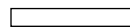
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Restricted Use. Protection of Groundwater, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID				DEC-014D 31-32	DEC-029D (75-76")	DEC-030D (3.5-4.5')	DEC-043D (80-81')	DEC-064D (29-29.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled				05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	100	100				0.0057 J	0.0043 J
Methylene chloride	MG/KG	51	100					
Naphthalene	MG/KG	100	100					
Styrene	MG/KG	-	-			0.0070		
Tetrachloroethene	MG/KG	5.5	19					
Toluene	MG/KG	100	100					
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1	NA		0.073 J	NA	NA
Benzo(a)pyrene	MG/KG	1	1	NA		0.092 J	NA	NA
Benzo(b)fluoranthene	MG/KG	1	1	NA		0.096 J	NA	NA
Benzo(g,h,i)perylene	MG/KG	100	100	NA		0.072 J	NA	NA
Benzo(k)fluoranthene	MG/KG	1	3.9	NA		0.056 J	NA	NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	NA		0.075 J	NA	NA
Chrysene	MG/KG	1	3.9	NA		0.083 J	NA	NA
Dibenz(a,h)anthracene	MG/KG	0.33	0.33	NA		0.023 J	NA	NA
Di-n-butylphthalate	MG/KG	100 CP-51	-	NA		0.13 J	NA	NA
Fluoranthene	MG/KG	100	100	NA		0.11 J	NA	NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	0.5	NA		0.058 J	NA	NA
Phenanthrene	MG/KG	100	100	NA		0.046 J	NA	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.



**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID				DEC-014D 31-32	DEC-029D (75-76")	DEC-030D (3.5-4.5')	DEC-043D (80-81')	DEC-064D (29-29.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled				05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	100	NA		0.16 J	NA	NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.91	4.2	NA		0.017 J	NA	NA
Dieldrin	MG/KG	0.039	0.2	NA		0.0052	NA	NA
gamma-Chlordane	MG/KG	0.54 CP-51	-	NA		0.014 J	NA	NA
<b>Metals</b>								
Aluminum	MG/KG	-	-	NA	2,270	6,760	NA	NA
Arsenic	MG/KG	16	16	NA	0.70	2.5	NA	NA
Barium	MG/KG	350	400	NA	19.3	59.9	NA	NA
Beryllium	MG/KG	14	72	NA	0.15 B	0.46	NA	NA
Cadmium	MG/KG	2.5	4.3	NA	0.048 B	0.49	NA	NA
Calcium	MG/KG	-	-	NA	566	1,210	NA	NA
Chromium	MG/KG	36	180	NA	4.7	27.3	NA	NA
Cobalt	MG/KG	30 CP-51	-	NA	2.9	7.0	NA	NA
Copper	MG/KG	270	270	NA	6.4	23.7	NA	NA
Iron	MG/KG	2000 CP-51	-	NA	4,730	23,100	NA	NA
Lead	MG/KG	400	400	NA	1.4	74.2	NA	NA
Magnesium	MG/KG	-	-	NA	1,220	2,080	NA	NA
Manganese	MG/KG	2000	2000	NA	242	421	NA	NA

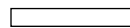
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID				DEC-014D 31-32	DEC-029D (75-76")	DEC-030D (3.5-4.5')	DEC-043D (80-81')	DEC-064D (29-29.5)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled				05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.81	0.81	NA		0.32	NA	NA
Nickel	MG/KG	140	310	NA	5.6	12.2	NA	NA
Potassium	MG/KG	-	-	NA	290	1,270	NA	NA
Selenium	MG/KG	36	180	NA		0.49 B	NA	NA
Sodium	MG/KG	-	-	NA	69.2	79.9	NA	NA
Thallium	MG/KG	-	-	NA			NA	NA
Vanadium	MG/KG	100 CP-51	-	NA	5.1	23.4	NA	NA
Zinc	MG/KG	2200	10000	NA	10.0	61.5	NA	NA

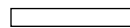
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID				DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35)	DEC-066D (24-25)	DEC-066D (29-30)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled				05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	100	100	0.0024 J	0.0028 J	0.0097 J		
Methylene chloride	MG/KG	51	100	0.0031 J	0.0041 J		0.0022 J	0.0021 J
Naphthalene	MG/KG	100	100			0.014 J		
Styrene	MG/KG	-	-					
Tetrachloroethene	MG/KG	5.5	19				0.0022 J	0.0048 J
Toluene	MG/KG	100	100					
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1			NA		NA
Benzo(a)pyrene	MG/KG	1	1			NA		NA
Benzo(b)fluoranthene	MG/KG	1	1			NA		NA
Benzo(g,h,i)perylene	MG/KG	100	100			NA		NA
Benzo(k)fluoranthene	MG/KG	1	3.9			NA		NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	0.26	0.073 J	NA	0.091 J	NA
Chrysene	MG/KG	1	3.9			NA		NA
Dibenz(a,h)anthracene	MG/KG	0.33	0.33			NA		NA
Di-n-butylphthalate	MG/KG	100 CP-51	-			NA		NA
Fluoranthene	MG/KG	100	100			NA		NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	0.5			NA		NA
Phenanthrene	MG/KG	100	100			NA		NA

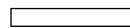
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID				DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35)	DEC-066D (24-25)	DEC-066D (29-30)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled				05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	100			NA		NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.91	4.2			NA		NA
Dieldrin	MG/KG	0.039	0.2			NA		NA
gamma-Chlordane	MG/KG	0.54 CP-51	-			NA		NA
<b>Metals</b>								
Aluminum	MG/KG	-	-	7,470	10,100	NA	4,610	NA
Arsenic	MG/KG	16	16	0.53 B		NA		NA
Barium	MG/KG	350	400	47.9	113	NA	27.2	NA
Beryllium	MG/KG	14	72	0.68	1.1	NA	0.40	NA
Cadmium	MG/KG	2.5	4.3			NA		NA
Calcium	MG/KG	-	-	2,490	6,070	NA	1,580	NA
Chromium	MG/KG	36	180	22.8	32.7	NA	11.6	NA
Cobalt	MG/KG	30 CP-51	-	7.6	15.4	NA	4.8	NA
Copper	MG/KG	270	270	13.8	29.8	NA	8.3	NA
Iron	MG/KG	2000 CP-51	-	27,700	54,900	NA	10,100	NA
Lead	MG/KG	400	400	6.8	10.5	NA	3.2	NA
Magnesium	MG/KG	-	-	2,340	3,180	NA	1,990	NA
Manganese	MG/KG	2000	2000	529	1,290	NA	235	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID				DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35)	DEC-066D (24-25)	DEC-066D (29-30)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled				05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.81	0.81	0.0063 B	0.0060 B	NA	0.0032 B	NA
Nickel	MG/KG	140	310	12.6	22.2	NA	8.8	NA
Potassium	MG/KG	-	-	43.6	2,080	NA	1,070	NA
Selenium	MG/KG	36	180			NA		NA
Sodium	MG/KG	-	-	9.0 B	360	NA	84.6	NA
Thallium	MG/KG	-	-	2.7	3.4	NA	2.5	NA
Vanadium	MG/KG	100 CP-51	-	32.3	54.2	NA	15.4	NA
Zinc	MG/KG	2200	10000	44.0	55.4	NA	22.1	NA

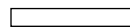
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Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

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**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID				SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	100	100	0.0045 J	0.0076 J	0.0039 J	0.0025 J	0.0029 J
Methylene chloride	MG/KG	51	100					
Naphthalene	MG/KG	100	100					
Styrene	MG/KG	-	-					
Tetrachloroethene	MG/KG	5.5	19					0.0014 J
Toluene	MG/KG	100	100					
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(a)pyrene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	MG/KG	100	100	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	MG/KG	1	3.9	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	NA	NA	NA	NA	NA
Chrysene	MG/KG	1	3.9	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	MG/KG	0.33	0.33	NA	NA	NA	NA	NA
Di-n-butylphthalate	MG/KG	100 CP-51	-	NA	NA	NA	NA	NA
Fluoranthene	MG/KG	100	100	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	0.5	NA	NA	NA	NA	NA
Phenanthrene	MG/KG	100	100	NA	NA	NA	NA	NA

Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID				SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	100	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.91	4.2	NA	NA	NA	NA	NA
Dieldrin	MG/KG	0.039	0.2	NA	NA	NA	NA	NA
gamma-Chlordane	MG/KG	0.54 CP-51	-	NA	NA	NA	NA	NA
<b>Metals</b>								
Aluminum	MG/KG	-	-	NA	NA	NA	NA	NA
Arsenic	MG/KG	16	16	NA	NA	NA	NA	NA
Barium	MG/KG	350	400	NA	NA	NA	NA	NA
Beryllium	MG/KG	14	72	NA	NA	NA	NA	NA
Cadmium	MG/KG	2.5	4.3	NA	NA	NA	NA	NA
Calcium	MG/KG	-	-	NA	NA	NA	NA	NA
Chromium	MG/KG	36	180	NA	NA	NA	NA	NA
Cobalt	MG/KG	30 CP-51	-	NA	NA	NA	NA	NA
Copper	MG/KG	270	270	NA	NA	NA	NA	NA
Iron	MG/KG	2000 CP-51	-	NA	NA	NA	NA	NA
Lead	MG/KG	400	400	NA	NA	NA	NA	NA
Magnesium	MG/KG	-	-	NA	NA	NA	NA	NA
Manganese	MG/KG	2000	2000	NA	NA	NA	NA	NA

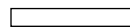
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID				SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.81	0.81	NA	NA	NA	NA	NA
Nickel	MG/KG	140	310	NA	NA	NA	NA	NA
Potassium	MG/KG	-	-	NA	NA	NA	NA	NA
Selenium	MG/KG	36	180	NA	NA	NA	NA	NA
Sodium	MG/KG	-	-	NA	NA	NA	NA	NA
Thallium	MG/KG	-	-	NA	NA	NA	NA	NA
Vanadium	MG/KG	100 CP-51	-	NA	NA	NA	NA	NA
Zinc	MG/KG	2200	10000	NA	NA	NA	NA	NA

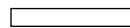
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Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.



**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID				SG-83 (7-8")	SG-84 (7-8")	SG-85 (7-8")	SG-86 (7-8")	SG-87 (7-8")
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Volatile Organic Compounds</b>								
Acetone	MG/KG	100	100	0.0035 J	0.0035 J	0.0028 J	0.0029 J	0.0028 J
Methylene chloride	MG/KG	51	100					
Naphthalene	MG/KG	100	100					
Styrene	MG/KG	-	-					
Tetrachloroethene	MG/KG	5.5	19	0.011	0.014		0.0014 J	
Toluene	MG/KG	100	100	0.0015 J				
<b>Semivolatile Organic Compounds</b>								
Benzo(a)anthracene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(a)pyrene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	MG/KG	1	1	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	MG/KG	100	100	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	MG/KG	1	3.9	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	MG/KG	50 CP-51	-	NA	NA	NA	NA	NA
Chrysene	MG/KG	1	3.9	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	MG/KG	0.33	0.33	NA	NA	NA	NA	NA
Di-n-butylphthalate	MG/KG	100 CP-51	-	NA	NA	NA	NA	NA
Fluoranthene	MG/KG	100	100	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	MG/KG	0.5	0.5	NA	NA	NA	NA	NA
Phenanthrene	MG/KG	100	100	NA	NA	NA	NA	NA

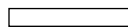
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Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID				SG-83 (7-8")	SG-84 (7-8")	SG-85 (7-8")	SG-86 (7-8")	SG-87 (7-8")
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Semivolatile Organic Compounds</b>								
Pyrene	MG/KG	100	100	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	0.91	4.2	NA	NA	NA	NA	NA
Dieldrin	MG/KG	0.039	0.2	NA	NA	NA	NA	NA
gamma-Chlordane	MG/KG	0.54 CP-51	-	NA	NA	NA	NA	NA
<b>Metals</b>								
Aluminum	MG/KG	-	-	NA	NA	NA	NA	NA
Arsenic	MG/KG	16	16	NA	NA	NA	NA	NA
Barium	MG/KG	350	400	NA	NA	NA	NA	NA
Beryllium	MG/KG	14	72	NA	NA	NA	NA	NA
Cadmium	MG/KG	2.5	4.3	NA	NA	NA	NA	NA
Calcium	MG/KG	-	-	NA	NA	NA	NA	NA
Chromium	MG/KG	36	180	NA	NA	NA	NA	NA
Cobalt	MG/KG	30 CP-51	-	NA	NA	NA	NA	NA
Copper	MG/KG	270	270	NA	NA	NA	NA	NA
Iron	MG/KG	2000 CP-51	-	NA	NA	NA	NA	NA
Lead	MG/KG	400	400	NA	NA	NA	NA	NA
Magnesium	MG/KG	-	-	NA	NA	NA	NA	NA
Manganese	MG/KG	2000	2000	NA	NA	NA	NA	NA

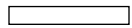
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-2**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL SOIL SAMPLES - RESIDENTIAL AND RESTRICTED**  
**RESIDENTIAL USE CRITERIA**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID				SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID				SG-83 (7-8")	SG-84 (7-8")	SG-85 (7-8")	SG-86 (7-8")	SG-87 (7-8")
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled				05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units	Criteria (1)	Criteria (2)					
<b>Metals</b>								
Mercury	MG/KG	0.81	0.81	NA	NA	NA	NA	NA
Nickel	MG/KG	140	310	NA	NA	NA	NA	NA
Potassium	MG/KG	-	-	NA	NA	NA	NA	NA
Selenium	MG/KG	36	180	NA	NA	NA	NA	NA
Sodium	MG/KG	-	-	NA	NA	NA	NA	NA
Thallium	MG/KG	-	-	NA	NA	NA	NA	NA
Vanadium	MG/KG	100 CP-51	-	NA	NA	NA	NA	NA
Zinc	MG/KG	2200	10000	NA	NA	NA	NA	NA

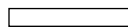
Criteria (1)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential, plus CP-51 Table 1 10/21/10.

Criteria (2)- 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Restricted Residential, plus CP-51 Table 1 10/21/10.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard, criteria or guidance value. CP-51 - The criteria was obtained from CP-51. All other criteria are from 6NYCRR Part 375.6.

NA - Not analyzed. ND or blank cell - Not detected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-3**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL SOIL SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value	Depth Of Max
				Min	Max	Avg		
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	MG/KG	57	1	0.036	0.036	0.036	SB-11	25-26
1,1-Dichloroethane	MG/KG	57	1	0.003	0.003	0.003	SB-11	25-26
1,2-Dichloroethene (cis)	MG/KG	57	1	0.003	0.003	0.003	SB-11	25-26
Acetone	MG/KG	57	32	0.002	0.120	0.018	DEC-004	35-36
Isopropylbenzene (Cumene)	MG/KG	57	1	0.420	0.420	0.420	DEC-048	24.5-25.5
Methylcyclohexane	MG/KG	57	1	0.520	0.520	0.520	DEC-048	24.5-25.5
Methylene chloride	MG/KG	57	15	0.002	0.072	0.018	SB-11	25-26
Naphthalene	MG/KG	20	1	0.014	0.014	0.014	DEC-065D	34-35
Styrene	MG/KG	57	1	0.007	0.007	0.007	DEC-030D	3.5-4.5
Tetrachloroethene	MG/KG	57	25	0.001	0.260	0.034	SB-18	15-16
Toluene	MG/KG	57	10	0.001	0.200	0.023	DEC-048	24.5-25.5
Trichloroethene	MG/KG	57	1	0.004	0.004	0.004	SB-11	25-26
Xylene (total)	MG/KG	57	1	0.890	0.890	0.890	DEC-048	24.5-25.5
<b>Semivolatile Organic Compounds</b>								
1,1-Biphenyl	MG/KG	6	1	3.70	3.70	3.70	DEC-048	24.5-25.5
2-Methylnaphthalene	MG/KG	6	1	16.00	16.00	16.00	DEC-048	24.5-25.5
Acenaphthene	MG/KG	6	1	2.30	2.30	2.30	DEC-048	24.5-25.5
Anthracene	MG/KG	6	1	0.590	0.590	0.590	DEC-048	24.5-25.5
Benzo(a)anthracene	MG/KG	6	1	0.073	0.073	0.073	DEC-030D	3.5-4.5
Benzo(a)pyrene	MG/KG	6	1	0.092	0.092	0.092	DEC-030D	3.5-4.5
Benzo(b)fluoranthene	MG/KG	6	1	0.096	0.096	0.096	DEC-030D	3.5-4.5

**TABLE 4-3**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL SOIL SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value	Depth Of Max
				Min	Max	Avg		
<b>Semivolatile Organic Compounds</b>								
Benzo(g,h,i)perylene	MG/KG	6	1	0.072	0.072	0.072	DEC-030D	3.5-4.5
Benzo(k)fluoranthene	MG/KG	6	1	0.056	0.056	0.056	DEC-030D	3.5-4.5
bis(2-Ethylhexyl)phthalate	MG/KG	6	4	0.073	0.260	0.125	DEC-065D	9-10
Chrysene	MG/KG	6	1	0.083	0.083	0.083	DEC-030D	3.5-4.5
Dibenz(a,h)anthracene	MG/KG	6	1	0.023	0.023	0.023	DEC-030D	3.5-4.5
Di-n-butylphthalate	MG/KG	6	1	0.130	0.130	0.130	DEC-030D	3.5-4.5
Fluoranthene	MG/KG	6	1	0.110	0.110	0.110	DEC-030D	3.5-4.5
Fluorene	MG/KG	6	1	2.90	2.90	2.90	DEC-048	24.5-25.5
Indeno(1,2,3-cd)pyrene	MG/KG	6	1	0.058	0.058	0.058	DEC-030D	3.5-4.5
Naphthalene	MG/KG	6	1	3.00	3.00	3.00	DEC-048	24.5-25.5
Phenanthrene	MG/KG	6	2	0.046	7.10	3.57	DEC-048	24.5-25.5
Pyrene	MG/KG	6	2	0.160	0.670	0.415	DEC-048	24.5-25.5
<b>Pesticide Organic Compounds</b>								
alpha-Chlordane	MG/KG	5	1	0.017	0.017	0.017	DEC-030D	3.5-4.5
Dieldrin	MG/KG	5	1	0.005	0.005	0.005	DEC-030D	3.5-4.5
gamma-Chlordane	MG/KG	5	1	0.014	0.014	0.014	DEC-030D	3.5-4.5
<b>Metals</b>								
Aluminum	MG/KG	5	5	2,270	1.01E+04	6,242	DEC-065D	14-15
Arsenic	MG/KG	5	3	0.530	2.50	1.24	DEC-030D	3.5-4.5
Barium	MG/KG	5	5	19.30	113.0	53.46	DEC-065D	14-15
Beryllium	MG/KG	5	5	0.150	1.10	0.558	DEC-065D	14-15

**TABLE 4-3**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL SOIL SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value	Depth Of Max
				Min	Max	Avg		
<b>Metals</b>								
Cadmium	MG/KG	5	2	0.048	0.490	0.269	DEC-030D	3.5-4.5
Calcium	MG/KG	5	5	566.0	6,070	2,383	DEC-065D	14-15
Chromium	MG/KG	5	5	4.70	32.70	19.82	DEC-065D	14-15
Cobalt	MG/KG	5	5	2.90	15.40	7.54	DEC-065D	14-15
Copper	MG/KG	5	5	6.40	29.80	16.40	DEC-065D	14-15
Iron	MG/KG	5	5	4,730	5.49E+04	2.41E+04	DEC-065D	14-15
Lead	MG/KG	5	5	1.40	74.20	19.22	DEC-030D	3.5-4.5
Magnesium	MG/KG	5	5	1,220	3,180	2,162	DEC-065D	14-15
Manganese	MG/KG	5	5	235.0	1,290	543.4	DEC-065D	14-15
Mercury	MG/KG	5	4	0.003	0.320	0.084	DEC-030D	3.5-4.5
Nickel	MG/KG	5	5	5.60	22.20	12.28	DEC-065D	14-15
Potassium	MG/KG	5	5	43.60	2,080	950.7	DEC-065D	14-15
Selenium	MG/KG	5	1	0.490	0.490	0.490	DEC-030D	3.5-4.5
Sodium	MG/KG	5	5	9.00	360.0	120.5	DEC-065D	14-15
Thallium	MG/KG	5	3	2.50	3.40	2.87	DEC-065D	14-15
Vanadium	MG/KG	5	5	5.10	54.20	26.08	DEC-065D	14-15
Zinc	MG/KG	5	5	10.00	61.50	38.60	DEC-030D	3.5-4.5
<b>Miscellaneous Parameters</b>								
Moisture, Percent	%	22	22	4.00	26.00	12.34	DEC-014D	31-32

**TABLE 4-4**  
**SUMMARY OF DETECTED COMPOUNDS IN ALL NAPL SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

<b>Location ID</b>		<b>DEC-048</b>
<b>Sample ID</b>		<b>DEC-048</b>
<b>Matrix</b>		<b>LNAPL</b>
<b>Depth Interval (ft)</b>		<b>-</b>
<b>Date Sampled</b>		<b>06/24/11</b>
<b>Parameter</b>	<b>Units</b>	
<b>Volatile Organic Compounds</b>		
1,2,4-Trimethylbenzene	UG/KG	420,000 J
<b>Semivolatile Organic Compounds</b>		
1,1-Biphenyl	UG/KG	740,000
2-Methylnaphthalene	UG/KG	3,500,000
Acenaphthene	UG/KG	200,000 J
bis(2-Ethylhexyl)phthalate	UG/KG	210,000 J
Fluorene	UG/KG	490,000 J
Naphthalene	UG/KG	610,000
Phenanthrene	UG/KG	1,200,000
Pyrene	UG/KG	130,000 J
<b>Miscellaneous Parameters</b>		
Fuel Oils	MG/KG	950,000
Specific Gravity	g/ML	0.8608

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.

NA - Not analyzed. ND or blank cell - Not detected.

Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-004	DEC-006D	DEC-006DD	DEC-006DD	DEC-007
Sample ID			DEC-004	DEC-006D	DEC-006DD	DUP-062011	DEC-007
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/20/11	06/20/11	06/20/11	06/21/11
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5			13	13	
1,1-Dichloroethane	UG/L	5			5.4	5.0	2.8 J
1,1-Dichloroethene	UG/L	5			69 J	72 J	
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6				1.3 J	
1,2-Dichloroethene (cis)	UG/L	5	4.8 J	26	16	16	7.9
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7		4.6 J			2.7 J
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10			2.6 J	2.6 J	
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-					
Tetrachloroethene	UG/L	5	1.5 J	6,600 D	410 D	420 D	1,200 D
Trichloroethene	UG/L	5	37	39	210 D	210 D	25
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2	1.0 J				

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

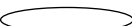


**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-004	DEC-006D	DEC-006DD	DEC-006DD	DEC-007
Sample ID			DEC-004	DEC-006D	DEC-006DD	DUP-062011	DEC-007
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/20/11	06/20/11	06/20/11	06/21/11
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Sample ID			DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	06/23/11	06/23/11	06/21/11	06/21/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5	1.5 J	1.8 J			
1,1-Dichloroethane	UG/L	5	1.2 J	3.4 J	6.5	28	
1,1-Dichloroethene	UG/L	5	4.4 J	2.0 J	5.1	25	
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	4.8 J	41 J	51	8.5	
1,2-Dichloroethene (trans)	UG/L	5		3.5 J			
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7		1.6 J			
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10		1.1 J	1.1 J		
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-			3.0 J		
Tetrachloroethene	UG/L	5	340 D	1,300 D	180	20	13 J
Trichloroethene	UG/L	5	26	120	70	87	17 J
Trichlorofluoromethane	UG/L	5		1.4 J			
Vinyl chloride	UG/L	2		19	54		

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

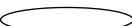
Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Sample ID			DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	06/23/11	06/23/11	06/21/11	06/21/11
Parameter	Units	Criteria*					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-012	DEC-013	DEC-013	DEC-013D	DEC-014D
Sample ID			DEC-012	DEC-013	DUP-062311	DEC-013D	DEC-014D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	06/23/11	06/23/11	06/23/11	06/23/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5		2.3 J			
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-		2.3 J			
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5		13 J	2.5 J	2.1 J	1.6 J
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7			4.8 J	4.8 J	
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10		2.3 J			3.8 J
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-		1.9 J			
Tetrachloroethene	UG/L	5	270 D	2,100 D	200 D	190	26
Trichloroethene	UG/L	5	3.9 J	36	27	24	3.6 J
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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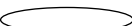
Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-012	DEC-013	DEC-013	DEC-013D	DEC-014D
Sample ID			DEC-012	DEC-013	DUP-062311	DEC-013D	DEC-014D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	06/23/11	06/23/11	06/23/11	06/23/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Sample ID			DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/22/11	06/22/11	06/22/11	06/24/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	9.5				
1,1,1-Trichloroethane	UG/L	5		2.0 J	2.2 J	2.6 J	
1,1-Dichloroethane	UG/L	5		6.9	2.8 J	5.6	
1,1-Dichloroethene	UG/L	5	1.6 J		7.2	1.8 J	
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	39 J	8.8	9.5	42 J	48
1,2-Dichloroethene (trans)	UG/L	5					3.9 J
1,4-Dichlorobenzene	UG/L	3	4.3 J				
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5	1.0 J				
Chloroform	UG/L	7	6.2	9.2		3.5 J	
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10			1.7 J	1.3 J	
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-					
Tetrachloroethene	UG/L	5	44,000 D	140	640 D	1,300 D	34
Trichloroethene	UG/L	5	300 J	13	42	94	750 D
Trichlorofluoromethane	UG/L	5				2.0 J	2.1 J
Vinyl chloride	UG/L	2					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Sample ID			DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/22/11	06/22/11	06/22/11	06/24/11
Parameter	Units	Criteria*					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Sample ID			DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	06/23/11	06/23/11	06/20/11	06/20/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5					4.2 J
1,1-Dichloroethane	UG/L	5	3.0 J				1.9 J
1,1-Dichloroethene	UG/L	5	1.5 J				47 J
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6			7.8		
1,2-Dichloroethene (cis)	UG/L	5	52	8.2 J		25	4.7 J
1,2-Dichloroethene (trans)	UG/L	5	1.9 J				
1,4-Dichlorobenzene	UG/L	3		1.1 J			
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7		1.0 J			
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-	3.4 J				
Tetrachloroethene	UG/L	5	2,300 D	5,700 D	20	2,000 D	43
Trichloroethene	UG/L	5	220 D	7.4	3.4 J	27	170
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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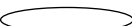


**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Sample ID			DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	06/23/11	06/23/11	06/20/11	06/20/11
Parameter	Units	Criteria*					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Sample ID			DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	06/21/11	06/22/11	06/21/11	06/24/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	2.1 J				
1,1,1-Trichloroethane	UG/L	5					3.6 J
1,1-Dichloroethane	UG/L	5	1.1 J				2.6 J
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6		86			
1,2-Dichloroethene (cis)	UG/L	5	17				23
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3	1.3 J				
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7	2.1 J				
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-					
Tetrachloroethene	UG/L	5	6,100 D	16	3.0 J		58
Trichloroethene	UG/L	5	23	1.2 J	1.3 J		230 D
Trichlorofluoromethane	UG/L	5					24
Vinyl chloride	UG/L	2					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Sample ID			DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	06/21/11	06/22/11	06/21/11	06/24/11
Parameter	Units	Criteria*					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-			NA	NA	NA
2-Methylnaphthalene	UG/L	-			NA	NA	NA
Carbazole	UG/L	50			NA	NA	NA
Di-n-butylphthalate	UG/L	50	0.56 J	0.72 J	NA	NA	NA
Naphthalene	UG/L	10			NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	0.051 J		NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	154 B	464	NA	NA	NA
Barium	UG/L	1000	48.5 B	36.8 B	NA	NA	NA
Calcium	UG/L	-	61,200	111,000	NA	NA	NA
Chromium	UG/L	50		2.0 B	NA	NA	NA
Cobalt	UG/L	-	1.8 B	6.1 B	NA	NA	NA
Iron	UG/L	300	314	1,530	NA	NA	NA
Magnesium	UG/L	35000	21,400	58,400	NA	NA	NA
Manganese	UG/L	300	249	2,300	NA	NA	NA
Nickel	UG/L	100	10.8 B	4.2 B	NA	NA	NA
Potassium	UG/L	-	2,350	7,020	NA	NA	NA
Sodium	UG/L	20000	71,000	102,000	NA	NA	NA
Vanadium	UG/L	-		2.2 B	NA	NA	NA
Zinc	UG/L	2000		11.0 B	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

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**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-039	DEC-042	DEC-043	DEC-043D	DEC-044
Sample ID			DUP-062411	DEC-042	DEC-043	DEC-043D	DEC-044
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/23/11	06/22/11	06/22/11	06/23/11
Parameter	Units	Criteria*	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5		2.9 J			
1,1-Dichloroethane	UG/L	5	2.8 J	1.1 J			
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6				9.4	
1,2-Dichloroethene (cis)	UG/L	5	24	6.3 J			2.0 J
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7		1.4 J			
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-					
Tetrachloroethene	UG/L	5	59	62	12	9.0	1,500 D
Trichloroethene	UG/L	5	240 D	73		1.2 J	8.6
Trichlorofluoromethane	UG/L	5	26	23			
Vinyl chloride	UG/L	2					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

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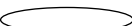
Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-039	DEC-042	DEC-043	DEC-043D	DEC-044
Sample ID			DUP-062411	DEC-042	DEC-043	DEC-043D	DEC-044
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/23/11	06/22/11	06/22/11	06/23/11
Parameter	Units	Criteria*	Field Duplicate (1-1)				
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

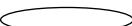
Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Sample ID			DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/21/11	06/21/11	06/21/11	06/21/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,1-Dichloroethene	UG/L	5	1.3 J				
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichloroethane	UG/L	0.6	500 D		81		
1,2-Dichloroethene (cis)	UG/L	5					
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7	6.5			1.1 J	1.4 J
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					19
Naphthalene	UG/L	-				5.7 J	
sec-Butylbenzene	UG/L	-					
Tetrachloroethene	UG/L	5	1.5 J	43		7.4	2.9 J
Trichloroethene	UG/L	5				1.5 J	
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

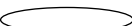
Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Sample ID			DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/21/11	06/21/11	06/21/11	06/21/11
Parameter	Units	Criteria*					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-048	DEC-048	DEC-064	DEC-064D	DEC-065
Sample ID			DEC-048	DUP2-062411	DEC-064	DEC-064D	DEC-065
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/24/11	06/20/11	06/20/11	06/22/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5				1.8 J	
1,1-Dichloroethane	UG/L	5				1.3 J	
1,1-Dichloroethene	UG/L	5				11	
1,2,3-Trichlorobenzene	UG/L	-				2.1 J	
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5				5.5	
1,2,4-Trimethylbenzene	UG/L	-	1.5 J	1.7 J			
1,2-Dichloroethane	UG/L	0.6				2.6 J	
1,2-Dichloroethene (cis)	UG/L	5			2.3 J	2.0 J	
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50	3.1 J	7.5 J			
Carbon tetrachloride	UG/L	5					
Chloroform	UG/L	7			3.3 J	2.3 J	12
Methyl ethyl ketone (2-Butanone)	UG/L	50	13 J	18 J			
Methyl tert-butyl ether	UG/L	10				1.7 J	
Naphthalene	UG/L	-	2.2 J	2.4 J			
sec-Butylbenzene	UG/L	-					
Tetrachloroethene	UG/L	5	3.2 J	3.6 J	220 D	14	160
Trichloroethene	UG/L	5	2.6 J	1.4 J	6.8 J	160	3.6 J
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.



**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-048	DEC-048	DEC-064	DEC-064D	DEC-065
Sample ID			DEC-048	DUP2-062411	DEC-064	DEC-064D	DEC-065
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/24/11	06/20/11	06/20/11	06/22/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-		0.68 J	NA	NA	NA
2-Methylnaphthalene	UG/L	-		1.4 J	NA	NA	NA
Carbazole	UG/L	50		0.72 J	NA	NA	NA
Di-n-butylphthalate	UG/L	50			NA	NA	NA
Naphthalene	UG/L	10		1.2 J	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-			NA	NA	NA
<b>Metals</b>							
Aluminum	UG/L	-			NA	NA	NA
Barium	UG/L	1000	95.0 B	95.4 B	NA	NA	NA
Calcium	UG/L	-	66,300	65,900	NA	NA	NA
Chromium	UG/L	50	0.79 B		NA	NA	NA
Cobalt	UG/L	-	1.1 B	1.1 B	NA	NA	NA
Iron	UG/L	300	1,010 J	1,990 J	NA	NA	NA
Magnesium	UG/L	35000	28,400	28,100	NA	NA	NA
Manganese	UG/L	300	738	702	NA	NA	NA
Nickel	UG/L	100	6.6 B	6.0 B	NA	NA	NA
Potassium	UG/L	-	2,890	2,850	NA	NA	NA
Sodium	UG/L	20000	76,000	75,500	NA	NA	NA
Vanadium	UG/L	-			NA	NA	NA
Zinc	UG/L	2000			NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID			DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-
Date Sampled			06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Criteria*	Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	UG/L	-				
1,1,1-Trichloroethane	UG/L	5		22		
1,1-Dichloroethane	UG/L	5		6.8		
1,1-Dichloroethene	UG/L	5		120		
1,2,3-Trichlorobenzene	UG/L	-				
1,2,3-Trichloropropane	UG/L	-				
1,2,4-Trichlorobenzene	UG/L	5				
1,2,4-Trimethylbenzene	UG/L	-				
1,2-Dichloroethane	UG/L	0.6				23
1,2-Dichloroethene (cis)	UG/L	5		11	4.1 J	
1,2-Dichloroethene (trans)	UG/L	5				
1,4-Dichlorobenzene	UG/L	3				
Acetone	UG/L	50				2.7 J
Carbon tetrachloride	UG/L	5				
Chloroform	UG/L	7	14	2.8 J		
Methyl ethyl ketone (2-Butanone)	UG/L	50				
Methyl tert-butyl ether	UG/L	10				
Naphthalene	UG/L	-				
sec-Butylbenzene	UG/L	-				
Tetrachloroethene	UG/L	5	170	83	8.4	1.7 J
Trichloroethene	UG/L	5	2.3 J	670 D	2.1 J	
Trichlorofluoromethane	UG/L	5		1.3 J		
Vinyl chloride	UG/L	2				

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

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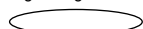
Only Detected Results Reported.

**TABLE 4-5**  
**SUMMARY OF DETECTED COMPOUNDS IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID			DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-
Date Sampled			06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Criteria*	Field Duplicate (1-1)			
<b>Semivolatile Organic Compounds</b>						
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>						
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA
<b>Metals</b>						
Aluminum	UG/L	-	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. NA - Not analyzed. ND or blank cell - Not detected.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

**TABLE 4-6**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
<b>Volatile Organic Compounds</b>									
1,1,1,2-Tetrachloroethane	UG/L	-	49	2	2.10	9.50	5.80	0	DEC-014R
1,1,1-Trichloroethane	UG/L	5	49	12	1.50	22.00	5.88	2	DEC-065D
1,1-Dichloroethane	UG/L	5	49	19	1.10	28.00	4.76	6	DEC-010
1,1-Dichloroethene	UG/L	5	49	14	1.30	120.0	26.35	7	DEC-065D
1,2,3-Trichlorobenzene	UG/L	-	49	1	2.10	2.10	2.10	0	DEC-064D
1,2,3-Trichloropropane	UG/L	-	49	1	2.30	2.30	2.30	0	DEC-013
1,2,4-Trichlorobenzene	UG/L	5	49	1	5.50	5.50	5.50	1	DEC-064D
1,2,4-Trimethylbenzene	UG/L	-	49	2	1.50	1.70	1.60	0	DEC-048
1,2-Dichloroethane	UG/L	0.6	49	8	1.30	500.0	88.89	7	DEC-044D
1,2-Dichloroethene (cis)	UG/L	5	49	31	1.60	52.00	16.91	19	DEC-028
1,2-Dichloroethene (trans)	UG/L	5	49	3	1.90	3.90	3.10	0	DEC-027
1,4-Dichlorobenzene	UG/L	3	49	3	1.10	4.30	2.23	1	DEC-014R
Acetone	UG/L	50	49	3	2.70	7.50	4.43	0	DEC-048
Carbon tetrachloride	UG/L	5	49	1	1.00	1.00	1.00	0	DEC-014R
Chloroform	UG/L	7	49	19	1.00	14.00	4.49	2	DEC-065
Methyl ethyl ketone (2-Butanone)	UG/L	50	49	2	13.00	18.00	15.50	0	DEC-048

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.



Concentration Exceeds Criteria

Only Detected Results Reported.

**TABLE 4-6**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
Volatile Organic Compounds									
Methyl tert-butyl ether	UG/L	10	49	10	1.10	19.00	3.72	1	DEC-047
Naphthalene	UG/L	-	49	3	2.20	5.70	3.43	0	DEC-046
sec-Butylbenzene	UG/L	-	49	3	1.90	3.40	2.77	0	DEC-028
Tetrachloroethene	UG/L	5	49	47	1.50	4.40E+04	1,659	36	DEC-014R
Trichloroethene	UG/L	5	49	42	1.20	750.0	95.02	27	DEC-027
Trichlorofluoromethane	UG/L	5	49	7	1.30	26.00	11.40	2	DEC-039
Vinyl chloride	UG/L	2	49	3	1.00	54.00	24.67	2	DEC-009
Semivolatile Organic Compounds									
1,1-Biphenyl	UG/L	-	4	1	0.680	0.680	0.680	0	DEC-048
2-Methylnaphthalene	UG/L	-	4	1	1.40	1.40	1.40	0	DEC-048
Carbazole	UG/L	50	4	1	0.720	0.720	0.720	0	DEC-048
Di-n-butylphthalate	UG/L	50	4	2	0.560	0.720	0.640	0	DEC-031D
Naphthalene	UG/L	10	4	1	1.20	1.20	1.20	0	DEC-048
Pesticide Organic Compounds									
gamma-BHC (Lindane)	UG/L	-	4	1	0.051	0.051	0.051	0	DEC-031

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.



Concentration Exceeds Criteria

Only Detected Results Reported.

**TABLE 4-6**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
<b>Metals</b>									
Aluminum	UG/L	-	4	2	154.0	464.0	309.0	0	DEC-031D
Barium	UG/L	1000	4	4	36.80	95.40	68.93	0	DEC-048
Calcium	UG/L	-	4	4	6.12E+04	1.11E+05	7.61E+04	0	DEC-031D
Chromium	UG/L	50	4	2	0.790	2.00	1.40	0	DEC-031D
Cobalt	UG/L	-	4	4	1.10	6.10	2.53	0	DEC-031D
Iron	UG/L	300	4	4	314.0	1,990	1,211	3	DEC-048
Magnesium	UG/L	35000	4	4	2.14E+04	5.84E+04	3.41E+04	1	DEC-031D
Manganese	UG/L	300	4	4	249.0	2,300	997.3	2	DEC-031D
Nickel	UG/L	100	4	4	4.20	10.80	6.90	0	DEC-031
Potassium	UG/L	-	4	4	2,350	7,020	3,778	0	DEC-031D
Sodium	UG/L	20000	4	4	7.10E+04	1.02E+05	8.11E+04	3	DEC-031D
Vanadium	UG/L	-	4	1	2.20	2.20	2.20	0	DEC-031D
Zinc	UG/L	2000	4	1	11.00	11.00	11.00	0	DEC-031D

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.



Concentration Exceeds Criteria

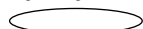
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-004	DEC-004	DEC-004	DEC-004	DEC-004
Sample ID			DEC-04	DEC-004	DEC-004	DEC-004	DEC-004
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/27/07	12/12/07	07/16/08	09/24/09	06/24/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	NA	NA	
1,1,1-Trichloroethane	UG/L	5				NA	
1,1-Dichloroethane	UG/L	5				NA	
1,1-Dichloroethene	UG/L	5	3.7 J	1.7 J	2.9	NA	
1,2,3-Trichlorobenzene	UG/L	-	NA	NA	NA	NA	
1,2,3-Trichloropropane	UG/L	-	NA	NA	NA	NA	
1,2,4-Trichlorobenzene	UG/L	5				NA	
1,2,4-Trimethylbenzene	UG/L	-	NA	NA	NA	NA	
1,2-Dichlorobenzene	UG/L	3				NA	
1,2-Dichloroethane	UG/L	0.6				NA	
1,2-Dichloroethene (cis)	UG/L	5	8.5	19	33	15	4.8 J
1,2-Dichloroethene (trans)	UG/L	5		1.8 J	2.9	NA	
1,4-Dichlorobenzene	UG/L	3				NA	
Acetone	UG/L	50	56			NA	
Benzene	UG/L	1				NA	
Carbon disulfide	UG/L	60				NA	
Carbon tetrachloride	UG/L	5				NA	
Chloroethane	UG/L	5				NA	
Chloroform	UG/L	7	1.0 J			NA	
Cyclohexane	UG/L	-				NA	
Ethylbenzene	UG/L	5				NA	

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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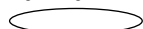
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-004	DEC-004	DEC-004	DEC-004	DEC-004
Sample ID			DEC-04	DEC-004	DEC-004	DEC-004	DEC-004
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/27/07	12/12/07	07/16/08	09/24/09	06/24/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5				NA	
Methyl ethyl ketone (2-Butanone)	UG/L	50				NA	
Methyl tert-butyl ether	UG/L	10				NA	
Methylcyclohexane	UG/L	-				NA	
Methylene chloride	UG/L	5				NA	
Naphthalene	UG/L	-	NA	NA	NA	NA	
sec-Butylbenzene	UG/L	-	NA	NA	NA	NA	
Tetrachloroethene	UG/L	5	1.4 J	3.2 J	4.4	2.0	1.5 J
Toluene	UG/L	5				NA	
Trichloroethene	UG/L	5	230 J	220	580 D	120	37
Trichlorofluoromethane	UG/L	5				NA	
Vinyl chloride	UG/L	2				NA	1.0 J
Xylene (total)	UG/L	5				NA	
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

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Only Detected Results Reported.

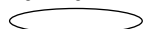


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-004	DEC-004	DEC-004	DEC-004	DEC-004
Sample ID			DEC-04	DEC-004	DEC-004	DEC-004	DEC-004
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/27/07	12/12/07	07/16/08	09/24/09	06/24/11
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

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B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

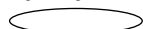
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-006	DEC-006	DEC-006	DEC-006D	DEC-006D
Sample ID			DEC-06	DEC-006	DEC-006	DEC-006D	DEC-06D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/07	12/11/07	07/15/08	07/21/08	11/04/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	5				2.3	
1,1-Dichloroethane	UG/L	5				16	
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	UG/L	-	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5				82 D	
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50				16 J	
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7				3.5	
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

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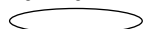
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-006	DEC-006	DEC-006	DEC-006D	DEC-006D
Sample ID			DEC-06	DEC-006	DEC-006	DEC-006D	DEC-06D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/07	12/11/07	07/15/08	07/21/08	11/04/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10				8.4	
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA	NA	NA	NA
sec-Butylbenzene	UG/L	-	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	5				1,600 D	1,200
Toluene	UG/L	5					
Trichloroethene	UG/L	5				71	23
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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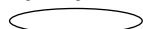
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-006	DEC-006	DEC-006	DEC-006D	DEC-006D
Sample ID			DEC-06	DEC-006	DEC-006	DEC-006D	DEC-06D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/07	12/11/07	07/15/08	07/21/08	11/04/09
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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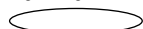
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-006D	DEC-006DD	DEC-006DD	DEC-007	DEC-007
Sample ID			DEC-006D	DEC-006DD	DUP-062011	DEC-007	072108-FD-1
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/20/11	06/20/11	06/20/11	12/20/07	07/21/08
Parameter	Units	Criteria*			Field Duplicate (1-1)		Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-				NA	NA
1,1,1-Trichloroethane	UG/L	5		13	13		
1,1-Dichloroethane	UG/L	5		5.4	5.0	15	
1,1-Dichloroethene	UG/L	5		69 J	72 J	1.6 J	
1,2,3-Trichlorobenzene	UG/L	-				NA	NA
1,2,3-Trichloropropane	UG/L	-				NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-				NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6			1.3 J		
1,2-Dichloroethene (cis)	UG/L	5	26	16	16	54	32
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7	4.6 J			5.9	
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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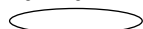
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-006D	DEC-006DD	DEC-006DD	DEC-007	DEC-007
Sample ID			DEC-006D	DEC-006DD	DUP-062011	DEC-007	072108-FD-1
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/20/11	06/20/11	06/20/11	12/20/07	07/21/08
Parameter	Units	Criteria*			Field Duplicate (1-1)		Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10		2.6 J	2.6 J		
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-				NA	NA
sec-Butylbenzene	UG/L	-				NA	NA
Tetrachloroethene	UG/L	5	6,600 D	410 D	420 D	2,600 D	1,100
Toluene	UG/L	5					
Trichloroethene	UG/L	5	39	210 D	210 D	81	46
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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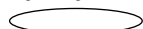
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-006D	DEC-006DD	DEC-006DD	DEC-007	DEC-007
Sample ID			DEC-006D	DEC-006DD	DUP-062011	DEC-007	072108-FD-1
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/20/11	06/20/11	06/20/11	12/20/07	07/21/08
Parameter	Units	Criteria*			Field Duplicate (1-1)		Field Duplicate (1-1)
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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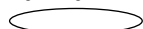
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-007	DEC-007	DEC-007	DEC-007D	DEC-008
Sample ID			DEC-007	DEC-007	DEC-007	DEC-007D	DEC-008
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/21/08	11/06/09	06/21/11	06/21/11	06/28/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA			NA
1,1,1-Trichloroethane	UG/L	5				1.5 J	
1,1-Dichloroethane	UG/L	5			2.8 J	1.2 J	
1,1-Dichloroethene	UG/L	5				4.4 J	
1,2,3-Trichlorobenzene	UG/L	-	NA	NA			NA
1,2,3-Trichloropropane	UG/L	-	NA	NA			NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA			NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	33	40	7.9	4.8 J	
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					50
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7			2.7 J		
Cyclohexane	UG/L	-					11
Ethylbenzene	UG/L	5					1.7

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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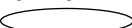


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-007	DEC-007	DEC-007	DEC-007D	DEC-008
Sample ID			DEC-007	DEC-007	DEC-007	DEC-007D	DEC-08
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/21/08	11/06/09	06/21/11	06/21/11	06/28/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					1.5 J
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA			NA
sec-Butylbenzene	UG/L	-	NA	NA			NA
Tetrachloroethene	UG/L	5	1,400	1,300	1,200 D	340 D	
Toluene	UG/L	5					8.6
Trichloroethene	UG/L	5	45	53	25	26	1.0 J
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					17
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.


Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-007	DEC-007	DEC-007	DEC-007D	DEC-008
Sample ID			DEC-007	DEC-007	DEC-007	DEC-007D	DEC-08
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/21/08	11/06/09	06/21/11	06/21/11	06/28/07
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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 Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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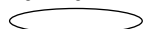
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-008	DEC-008	DEC-008	DEC-008	DEC-008
Sample ID			DEC-008	DEC-008	DEC-008	DEC-008	DEC-008
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/12/07	07/18/08	09/24/09	11/09/09	06/23/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	NA	NA	
1,1,1-Trichloroethane	UG/L	5		4.4	NA		1.8 J
1,1-Dichloroethane	UG/L	5	5.4	3.0	NA		3.4 J
1,1-Dichloroethene	UG/L	5	5.3	1.6	NA		2.0 J
1,2,3-Trichlorobenzene	UG/L	-	NA	NA	NA	NA	
1,2,3-Trichloropropane	UG/L	-	NA	NA	NA	NA	
1,2,4-Trichlorobenzene	UG/L	5			NA		
1,2,4-Trimethylbenzene	UG/L	-	NA	NA	NA	NA	
1,2-Dichlorobenzene	UG/L	3			NA		
1,2-Dichloroethane	UG/L	0.6			NA		
1,2-Dichloroethene (cis)	UG/L	5	34	14	17	15	41 J
1,2-Dichloroethene (trans)	UG/L	5			NA		3.5 J
1,4-Dichlorobenzene	UG/L	3			NA		
Acetone	UG/L	50			NA		
Benzene	UG/L	1			NA		
Carbon disulfide	UG/L	60			NA		
Carbon tetrachloride	UG/L	5			NA		
Chloroethane	UG/L	5			NA		
Chloroform	UG/L	7	1.1 J	1.1	NA		1.6 J
Cyclohexane	UG/L	-			NA		
Ethylbenzene	UG/L	5			NA		

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

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J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

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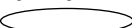
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-008	DEC-008	DEC-008	DEC-008	DEC-008
Sample ID			DEC-008	DEC-008	DEC-008	DEC-008	DEC-008
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/12/07	07/18/08	09/24/09	11/09/09	06/23/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5			NA		
Methyl ethyl ketone (2-Butanone)	UG/L	50			NA		
Methyl tert-butyl ether	UG/L	10	3.2	2.0	NA		1.1 J
Methylcyclohexane	UG/L	-			NA		
Methylene chloride	UG/L	5			NA		
Naphthalene	UG/L	-	NA	NA	NA	NA	
sec-Butylbenzene	UG/L	-	NA	NA	NA	NA	
Tetrachloroethene	UG/L	5	400	450 D	550 D	330	1,300 D
Toluene	UG/L	5			NA		
Trichloroethene	UG/L	5	89	60	59	67	120
Trichlorofluoromethane	UG/L	5			NA	5.2	1.4 J
Vinyl chloride	UG/L	2			NA		19
Xylene (total)	UG/L	5			NA		
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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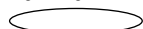
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-008	DEC-008	DEC-008	DEC-008	DEC-008
Sample ID			DEC-008	DEC-008	DEC-008	DEC-008	DEC-008
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/12/07	07/18/08	09/24/09	11/09/09	06/23/11
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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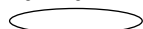
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-009	DEC-009	DEC-009	DEC-009	DEC-010
Sample ID			DEC-09	DEC-009	DEC-009	DEC-009	DEC-10
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/07	12/20/07	07/17/08	06/23/11	06/22/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	NA		NA
1,1,1-Trichloroethane	UG/L	5			6.6 J		
1,1-Dichloroethane	UG/L	5	8.2	7.9	7.1	6.5	27
1,1-Dichloroethene	UG/L	5	20	10	9.1	5.1	39
1,2,3-Trichlorobenzene	UG/L	-	NA	NA	NA		NA
1,2,3-Trichloropropane	UG/L	-	NA	NA	NA		NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA	NA		NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6	1.2 J	1.5 J	1.3		2.4 J
1,2-Dichloroethene (cis)	UG/L	5	45	41	51	51	9.3
1,2-Dichloroethene (trans)	UG/L	5	1.5 J	1.3 J	1.5		
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5			1.3		
Chloroform	UG/L	7					1.3 J
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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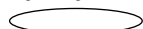
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-009	DEC-009	DEC-009	DEC-009	DEC-010
Sample ID			DEC-09	DEC-009	DEC-009	DEC-009	DEC-10
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/07	12/20/07	07/17/08	06/23/11	06/22/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10	1.8	1.6 J	2.0	1.1 J	
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA	NA		NA
sec-Butylbenzene	UG/L	-	NA	NA	NA	3.0 J	NA
Tetrachloroethene	UG/L	5	62	39	47	180	47
Toluene	UG/L	5					
Trichloroethene	UG/L	5	81	100	95	70	90
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2	25	25	28	54	
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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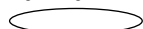
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-009	DEC-009	DEC-009	DEC-009	DEC-010
Sample ID			DEC-09	DEC-009	DEC-009	DEC-009	DEC-10
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/07	12/20/07	07/17/08	06/23/11	06/22/07
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



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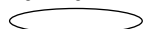


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-010	DEC-010	DEC-011	DEC-011	DEC-011
Sample ID			DEC-010	DEC-010	DEC-11	DEC-011	DEC-011
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/19/07	06/21/11	06/21/07	12/19/07	06/21/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA		NA	NA	
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	29	28			
1,1-Dichloroethene	UG/L	5	28	25			
1,2,3-Trichlorobenzene	UG/L	-	NA		NA	NA	
1,2,3-Trichloropropane	UG/L	-	NA		NA	NA	
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA		NA	NA	
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6	2.4 J				
1,2-Dichloroethene (cis)	UG/L	5	8.9	8.5			
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7	1.0 J			1.2 J	
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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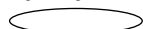
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-010	DEC-010	DEC-011	DEC-011	DEC-011
Sample ID			DEC-010	DEC-010	DEC-11	DEC-011	DEC-011
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/19/07	06/21/11	06/21/07	12/19/07	06/21/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5				2.2 J	
Naphthalene	UG/L	-	NA		NA	NA	
sec-Butylbenzene	UG/L	-	NA		NA	NA	
Tetrachloroethene	UG/L	5	28	20	12	12	13 J
Toluene	UG/L	5					
Trichloroethene	UG/L	5	89	87	27	33	17 J
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



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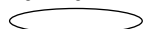
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-010	DEC-010	DEC-011	DEC-011	DEC-011
Sample ID			DEC-010	DEC-010	DEC-11	DEC-011	DEC-011
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/19/07	06/21/11	06/21/07	12/19/07	06/21/11
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

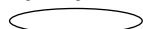
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-012	DEC-012	DEC-012	DEC-012	DEC-012
Sample ID			DEC-12	DEC-12	DEC-012	DEC-012	DEC-012
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/07	12/21/07	07/21/08	11/04/09	06/22/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	NA	NA	
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA	NA	NA	NA	
1,2,3-Trichloropropane	UG/L	-	NA	NA	NA	NA	
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA	NA	NA	
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	1.5 J	18			
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7					
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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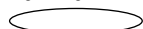
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-012	DEC-012	DEC-012	DEC-012	DEC-012
Sample ID			DEC-12	DEC-12	DEC-012	DEC-012	DEC-012
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/07	12/21/07	07/21/08	11/04/09	06/22/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10		1.2			
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA	NA	NA	
sec-Butylbenzene	UG/L	-	NA	NA	NA	NA	
Tetrachloroethene	UG/L	5	680 D	1,200 D	950	700	270 D
Toluene	UG/L	5					
Trichloroethene	UG/L	5	13	29		12	3.9 J
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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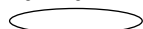
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-012	DEC-012	DEC-012	DEC-012	DEC-012
Sample ID			DEC-12	DEC-12	DEC-012	DEC-012	DEC-012
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/07	12/21/07	07/21/08	11/04/09	06/22/11
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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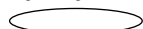
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-013	DEC-013	DEC-013	DEC-013	DEC-013
Sample ID			DEC-013	DEC-013	DEC-013	DEC-013	DUP-062311
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/26/07	07/23/08	11/05/09	06/23/11	06/23/11
Parameter	Units	Criteria*					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	NA		
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	7.4			2.3 J	
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA	NA	NA		
1,2,3-Trichloropropane	UG/L	-	NA	NA	NA	2.3 J	
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA	NA		
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	100	49	47	13 J	2.5 J
1,2-Dichloroethene (trans)	UG/L	5	1.7 J				
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7	1.1 J				4.8 J
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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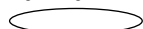
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-013	DEC-013	DEC-013	DEC-013	DEC-013
Sample ID			DEC-013	DEC-013	DEC-013	DEC-013	DUP-062311
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/26/07	07/23/08	11/05/09	06/23/11	06/23/11
Parameter	Units	Criteria*					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10				2.3 J	
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA	NA		
sec-Butylbenzene	UG/L	-	NA	NA	NA	1.9 J	
Tetrachloroethene	UG/L	5	7,800 D	3,600 J	6,400	2,100 D	200 D
Toluene	UG/L	5					
Trichloroethene	UG/L	5	130	140	110	36	27
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-013	DEC-013	DEC-013	DEC-013	DEC-013
Sample ID			DEC-013	DEC-013	DEC-013	DEC-013	DUP-062311
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/26/07	07/23/08	11/05/09	06/23/11	06/23/11
Parameter	Units	Criteria*					Field Duplicate (1-1)
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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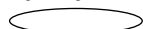
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-013D	DEC-014	DEC-014	DEC-014	DEC-014
Sample ID			DEC-013D	DEC-14	DEC-014	DEC-014	DEC-014
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/29/07	12/21/07	07/22/08	11/09/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-		NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-		NA	NA	NA	NA
1,2,3-Trichloropropane	UG/L	-		NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-		NA	NA	NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	2.1 J	3.1 J	13		
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7	4.8 J	2.0 J	4.0 J		
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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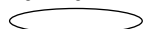
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-013D	DEC-014	DEC-014	DEC-014	DEC-014
Sample ID			DEC-013D	DEC-14	DEC-014	DEC-014	DEC-014
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/29/07	12/21/07	07/22/08	11/09/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-		NA	NA	NA	NA
sec-Butylbenzene	UG/L	-		NA	NA	NA	NA
Tetrachloroethene	UG/L	5	190	1,900 D	5,900 D	230	63
Toluene	UG/L	5					
Trichloroethene	UG/L	5	24	14 J	36		2.2
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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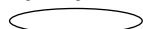
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-013D	DEC-014	DEC-014	DEC-014	DEC-014
Sample ID			DEC-013D	DEC-14	DEC-014	DEC-014	DEC-014
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/29/07	12/21/07	07/22/08	11/09/09
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

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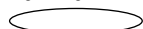
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-014D	DEC-014R	DEC-015	DEC-015	DEC-015
Sample ID			DEC-014D	DEC-014R	DEC-15	DEC-15	DEC-015
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/23/11	06/26/07	12/21/07	07/17/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-		9.5	NA	NA	NA
1,1,1-Trichloroethane	UG/L	5					3.1
1,1-Dichloroethane	UG/L	5			10	11	6.9
1,1-Dichloroethene	UG/L	5		1.6 J	1.3 J	1.1 J	1.1
1,2,3-Trichlorobenzene	UG/L	-			NA	NA	NA
1,2,3-Trichloropropane	UG/L	-			NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-			NA	NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	1.6 J	39 J	11	11	6.5
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3		4.3 J			
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5		1.0 J			
Chloroethane	UG/L	5					
Chloroform	UG/L	7		6.2	1.8 J	2.8 J	2.8
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-014D	DEC-014R	DEC-015	DEC-015	DEC-015
Sample ID			DEC-014D	DEC-014R	DEC-15	DEC-15	DEC-015
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/23/11	06/26/07	12/21/07	07/17/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10	3.8 J				
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-			NA	NA	NA
sec-Butylbenzene	UG/L	-			NA	NA	NA
Tetrachloroethene	UG/L	5	26	44,000 D	120	160 J	160
Toluene	UG/L	5					
Trichloroethene	UG/L	5	3.6 J	300 J	15	19	20
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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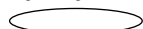
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-014D	DEC-014R	DEC-015	DEC-015	DEC-015
Sample ID			DEC-014D	DEC-014R	DEC-15	DEC-15	DEC-015
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/23/11	06/23/11	06/26/07	12/21/07	07/17/08
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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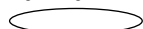
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-015	DEC-015	DEC-015D	DEC-022	DEC-022
Sample ID			DEC-015	DEC-015	DEC-015D	DEC-22	DEC-022
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/09/09	06/22/11	06/22/11	06/27/07	12/11/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA			NA	NA
1,1,1-Trichloroethane	UG/L	5	1.4	2.0 J	2.2 J		
1,1-Dichloroethane	UG/L	5	5.4	6.9	2.8 J		
1,1-Dichloroethene	UG/L	5			7.2		
1,2,3-Trichlorobenzene	UG/L	-	NA			NA	NA
1,2,3-Trichloropropane	UG/L	-	NA			NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA			NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	4.7	8.8	9.5		
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7	2.6	9.2			
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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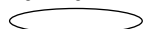


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-015	DEC-015	DEC-015D	DEC-022	DEC-022
Sample ID			DEC-015	DEC-015	DEC-015D	DEC-22	DEC-022
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/09/09	06/22/11	06/22/11	06/27/07	12/11/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10			1.7 J		
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA			NA	NA
sec-Butylbenzene	UG/L	-	NA			NA	NA
Tetrachloroethene	UG/L	5	100	140	640 D	3.3 J	
Toluene	UG/L	5					
Trichloroethene	UG/L	5	16	13	42	1.8 J	
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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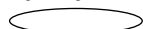
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-015	DEC-015	DEC-015D	DEC-022	DEC-022
Sample ID			DEC-015	DEC-015	DEC-015D	DEC-22	DEC-022
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/09/09	06/22/11	06/22/11	06/27/07	12/11/07
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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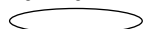
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-022	DEC-022D	DEC-022D	DEC-022D	DEC-027
Sample ID			DEC-022	DEC-022D	DEC-022D	DEC-022D	DEC-027
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/24/09	12/11/07	07/18/08	06/22/11	12/11/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	NA		NA
1,1,1-Trichloroethane	UG/L	5	NA		6.6	2.6 J	
1,1-Dichloroethane	UG/L	5	NA	7.3	7.4	5.6	
1,1-Dichloroethene	UG/L	5	NA	3.5 J	4.0	1.8 J	1.2 J
1,2,3-Trichlorobenzene	UG/L	-	NA	NA	NA		NA
1,2,3-Trichloropropane	UG/L	-	NA	NA	NA		NA
1,2,4-Trichlorobenzene	UG/L	5	NA				
1,2,4-Trimethylbenzene	UG/L	-	NA	NA	NA		NA
1,2-Dichlorobenzene	UG/L	3	NA				
1,2-Dichloroethane	UG/L	0.6	NA				
1,2-Dichloroethene (cis)	UG/L	5		21	32	42 J	10
1,2-Dichloroethene (trans)	UG/L	5	NA		1.2		
1,4-Dichlorobenzene	UG/L	3	NA				
Acetone	UG/L	50	NA	23 J			
Benzene	UG/L	1	NA				
Carbon disulfide	UG/L	60	NA				
Carbon tetrachloride	UG/L	5	NA				
Chloroethane	UG/L	5	NA				
Chloroform	UG/L	7	NA	4.4 J	4.3	3.5 J	
Cyclohexane	UG/L	-	NA				
Ethylbenzene	UG/L	5	NA				

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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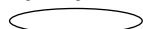
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-022	DEC-022D	DEC-022D	DEC-022D	DEC-027
Sample ID			DEC-022	DEC-022D	DEC-022D	DEC-022D	DEC-027
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/24/09	12/11/07	07/18/08	06/22/11	12/11/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5	NA				
Methyl ethyl ketone (2-Butanone)	UG/L	50	NA				
Methyl tert-butyl ether	UG/L	10	NA	2.4	4.0	1.3 J	
Methylcyclohexane	UG/L	-	NA				
Methylene chloride	UG/L	5	NA				
Naphthalene	UG/L	-	NA	NA	NA		NA
sec-Butylbenzene	UG/L	-	NA	NA	NA		NA
Tetrachloroethene	UG/L	5	1.3	330	320 D	1,300 D	5.6
Toluene	UG/L	5	NA				
Trichloroethene	UG/L	5	0.95	120	130	94	320
Trichlorofluoromethane	UG/L	5	NA			2.0 J	
Vinyl chloride	UG/L	2	NA				
Xylene (total)	UG/L	5	NA				
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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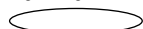
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-022	DEC-022D	DEC-022D	DEC-022D	DEC-027
Sample ID			DEC-022	DEC-022D	DEC-022D	DEC-022D	DEC-027
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/24/09	12/11/07	07/18/08	06/22/11	12/11/07
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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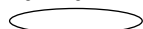
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-027	DEC-027	DEC-028	DEC-028	DEC-028
Sample ID			DEC-027	DEC-027	DEC-028	DEC-028	DEC-028
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/17/08	06/24/11	12/11/07	07/17/08	11/09/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA		NA	NA	NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5			3.0 J	4.5	
1,1-Dichloroethene	UG/L	5	1.1				
1,2,3-Trichlorobenzene	UG/L	-	NA		NA	NA	NA
1,2,3-Trichloropropane	UG/L	-	NA		NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA		NA	NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	13	48	16	45	57
1,2-Dichloroethene (trans)	UG/L	5	1.3	3.9 J	3.0 J	3.5	
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5			1.2 J	1.8	
Chloroform	UG/L	7				1.2	
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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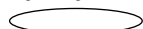
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-027	DEC-027	DEC-028	DEC-028	DEC-028
Sample ID			DEC-027	DEC-027	DEC-028	DEC-028	DEC-028
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/17/08	06/24/11	12/11/07	07/17/08	11/09/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10			3.2	3.3	
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA		NA	NA	NA
sec-Butylbenzene	UG/L	-	NA		NA	NA	NA
Tetrachloroethene	UG/L	5	8.1	34	180	500 D	600
Toluene	UG/L	5					
Trichloroethene	UG/L	5	300	750 D	37 J	55	76
Trichlorofluoromethane	UG/L	5		2.1 J			
Vinyl chloride	UG/L	2			12	22	22
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

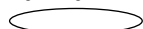
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-027	DEC-027	DEC-028	DEC-028	DEC-028
Sample ID			DEC-027	DEC-027	DEC-028	DEC-028	DEC-028
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/17/08	06/24/11	12/11/07	07/17/08	11/09/09
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

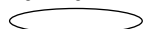


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-028	DEC-028	DEC-029	DEC-029	DEC-029
Sample ID			DUP-110909	DEC-028	DEC-029	072408-FD-1	DEC-029
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/09/09	06/21/11	12/20/07	07/24/08	07/24/08
Parameter	Units	Criteria*	Field Duplicate (1-1)			Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA		NA	NA	NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	4.2	3.0 J			
1,1-Dichloroethene	UG/L	5		1.5 J			
1,2,3-Trichlorobenzene	UG/L	-	NA		NA	NA	NA
1,2,3-Trichloropropane	UG/L	-	NA		NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA		NA	NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	43	52	12	36	36
1,2-Dichloroethene (trans)	UG/L	5	2.1	1.9 J			
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50			120 J		
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7	1.2		2.9 J	3.7	
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

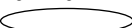
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-028	DEC-028	DEC-029	DEC-029	DEC-029
Sample ID			DUP-110909	DEC-028	DEC-029	072408-FD-1	DEC-029
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/09/09	06/21/11	12/20/07	07/24/08	07/24/08
Parameter	Units	Criteria*	Field Duplicate (1-1)			Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10	1.6				
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA		NA	NA	NA
sec-Butylbenzene	UG/L	-	NA	3.4 J	NA	NA	NA
Tetrachloroethene	UG/L	5	590 D	2,300 D	7,200 D	5,900 D	7,600 D
Toluene	UG/L	5					
Trichloroethene	UG/L	5	63	220 D	59	54	86
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2	20				
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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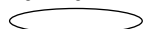
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-028	DEC-028	DEC-029	DEC-029	DEC-029
Sample ID			DUP-110909	DEC-028	DEC-029	072408-FD-1	DEC-029
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/09/09	06/21/11	12/20/07	07/24/08	07/24/08
Parameter	Units	Criteria*	Field Duplicate (1-1)			Field Duplicate (1-1)	
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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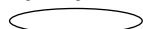
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-029	DEC-029	DEC-029D	DEC-030	DEC-030
Sample ID			DEC-029	DEC-029	DEC-029D	122107-FD-05	DEC-30
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/05/09	06/23/11	06/23/11	12/21/07	12/21/07
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA			NA	NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA			NA	NA
1,2,3-Trichloropropane	UG/L	-	NA			NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA			NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6			7.8		
1,2-Dichloroethene (cis)	UG/L	5		8.2 J		9.2	10
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3		1.1 J			
Acetone	UG/L	50					
Benzene	UG/L	1				2.0	1.8
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7		1.0 J			
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

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B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

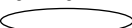
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-029	DEC-029	DEC-029D	DEC-030	DEC-030
Sample ID			DEC-029	DEC-029	DEC-029D	122107-FD-05	DEC-30
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/05/09	06/23/11	06/23/11	12/21/07	12/21/07
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA			NA	NA
sec-Butylbenzene	UG/L	-	NA			NA	NA
Tetrachloroethene	UG/L	5	10,000	5,700 D	20	3,400 D	4,400 D
Toluene	UG/L	5					
Trichloroethene	UG/L	5		7.4	3.4 J	28	29
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-029	DEC-029	DEC-029D	DEC-030	DEC-030
Sample ID			DEC-029	DEC-029	DEC-029D	122107-FD-05	DEC-30
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/05/09	06/23/11	06/23/11	12/21/07	12/21/07
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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 Concentration Exceeds Criteria

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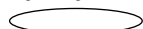
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-030	DEC-030	DEC-030	DEC-030D	DEC-031
Sample ID			DEC-030	DEC-030	DEC-030	DEC-030D	DEC-031
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/21/08	11/05/09	06/20/11	06/20/11	12/26/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA			NA
1,1,1-Trichloroethane	UG/L	5	2.1			4.2 J	
1,1-Dichloroethane	UG/L	5				1.9 J	
1,1-Dichloroethene	UG/L	5				47 J	
1,2,3-Trichlorobenzene	UG/L	-	NA	NA			NA
1,2,3-Trichloropropane	UG/L	-	NA	NA			NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA			NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	19		25	4.7 J	34
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7					6.2
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



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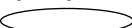
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-030	DEC-030	DEC-030	DEC-030D	DEC-031
Sample ID			DEC-030	DEC-030	DEC-030	DEC-030D	DEC-031
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/21/08	11/05/09	06/20/11	06/20/11	12/26/07
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA			NA
sec-Butylbenzene	UG/L	-	NA	NA			NA
Tetrachloroethene	UG/L	5	2,000 D	3,200	2,000 D	43	33,000 D
Toluene	UG/L	5					
Trichloroethene	UG/L	5	29		27	170	54
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

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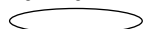


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-030	DEC-030	DEC-030	DEC-030D	DEC-031
Sample ID			DEC-030	DEC-030	DEC-030	DEC-030D	DEC-031
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/21/08	11/05/09	06/20/11	06/20/11	12/26/07
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

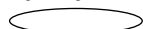
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031	DEC-031	DEC-031	DEC-031D	DEC-031D
Sample ID			DEC-031	DEC-031	DEC-031	DEC-031D	DEC-031D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/24/08	11/03/09	06/21/11	07/24/08	11/03/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA	2.1 J	NA	NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5			1.1 J		
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA	NA		NA	NA
1,2,3-Trichloropropane	UG/L	-	NA	NA		NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA		NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6				100	130
1,2-Dichloroethene (cis)	UG/L	5			17		
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3			1.3 J		
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60				4.6	
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7			2.1 J	1.3	
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

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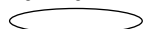
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031	DEC-031	DEC-031	DEC-031D	DEC-031D
Sample ID			DEC-031	DEC-031	DEC-031	DEC-031D	DEC-031D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/24/08	11/03/09	06/21/11	07/24/08	11/03/09
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10				1.2 J	0.97
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA		NA	NA
sec-Butylbenzene	UG/L	-	NA	NA		NA	NA
Tetrachloroethene	UG/L	5	24,000 J	4,000 D	6,100 D	20	9.0
Toluene	UG/L	5					
Trichloroethene	UG/L	5		30	23	1.1	1.2
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA		NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA		NA	NA
Carbazole	UG/L	50	NA	NA		NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	0.56 J	NA	NA
Naphthalene	UG/L	10	NA	NA		NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	0.051 J	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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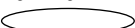
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031	DEC-031	DEC-031	DEC-031D	DEC-031D
Sample ID			DEC-031	DEC-031	DEC-031	DEC-031D	DEC-031D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/24/08	11/03/09	06/21/11	07/24/08	11/03/09
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	154 B	NA	NA
Barium	UG/L	1000	NA	NA	48.5 B	NA	NA
Calcium	UG/L	-	NA	NA	61,200	NA	NA
Chromium	UG/L	50	NA	NA		NA	NA
Cobalt	UG/L	-	NA	NA	1.8 B	NA	NA
Iron	UG/L	300	NA	NA	314	NA	NA
Magnesium	UG/L	35000	NA	NA	21,400	NA	NA
Manganese	UG/L	300	NA	NA	249	NA	NA
Nickel	UG/L	100	NA	NA	10.8 B	NA	NA
Potassium	UG/L	-	NA	NA	2,350	NA	NA
Sodium	UG/L	20000	NA	NA	71,000	NA	NA
Vanadium	UG/L	-	NA	NA		NA	NA
Zinc	UG/L	2000	NA	NA		NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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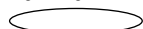
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031D	DEC-032	DEC-032	DEC-032	DEC-032
Sample ID			DEC-031D	121207-FD-01	DEC-032	DEC-032	DEC-032
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	12/12/07	12/12/07	07/17/08	11/04/09
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-		NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-		NA	NA	NA	NA
1,2,3-Trichloropropane	UG/L	-		NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-		NA	NA	NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6	86				
1,2-Dichloroethene (cis)	UG/L	5					
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50		190 J	180 J		
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7					
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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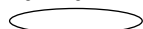
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031D	DEC-032	DEC-032	DEC-032	DEC-032
Sample ID			DEC-031D	121207-FD-01	DEC-032	DEC-032	DEC-032
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	12/12/07	12/12/07	07/17/08	11/04/09
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-		NA	NA	NA	NA
sec-Butylbenzene	UG/L	-		NA	NA	NA	NA
Tetrachloroethene	UG/L	5	16	1.5 J	1.5 J	1.2	1.4
Toluene	UG/L	5					
Trichloroethene	UG/L	5	1.2 J				
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-		NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-		NA	NA	NA	NA
Carbazole	UG/L	50		NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	0.72 J	NA	NA	NA	NA
Naphthalene	UG/L	10		NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-		NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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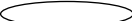
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-031D	DEC-032	DEC-032	DEC-032	DEC-032
Sample ID			DEC-031D	121207-FD-01	DEC-032	DEC-032	DEC-032
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/21/11	12/12/07	12/12/07	07/17/08	11/04/09
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Metals</b>							
Aluminum	UG/L	-	464	NA	NA	NA	NA
Barium	UG/L	1000	36.8 B	NA	NA	NA	NA
Calcium	UG/L	-	111,000	NA	NA	NA	NA
Chromium	UG/L	50	2.0 B	NA	NA	NA	NA
Cobalt	UG/L	-	6.1 B	NA	NA	NA	NA
Iron	UG/L	300	1,530	NA	NA	NA	NA
Magnesium	UG/L	35000	58,400	NA	NA	NA	NA
Manganese	UG/L	300	2,300	NA	NA	NA	NA
Nickel	UG/L	100	4.2 B	NA	NA	NA	NA
Potassium	UG/L	-	7,020	NA	NA	NA	NA
Sodium	UG/L	20000	102,000	NA	NA	NA	NA
Vanadium	UG/L	-	2.2 B	NA	NA	NA	NA
Zinc	UG/L	2000	11.0 B	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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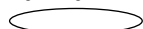
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-032	DEC-033	DEC-033	DEC-033	DEC-039
Sample ID			DEC-032	DEC-033	DEC-033	DEC-033	DEC-039
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	12/12/07	11/03/09	06/21/11	07/18/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-		NA	NA		NA
1,1,1-Trichloroethane	UG/L	5					10 J
1,1-Dichloroethane	UG/L	5					4.1
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-		NA	NA		NA
1,2,3-Trichloropropane	UG/L	-		NA	NA		NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-		NA	NA		NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					14
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7		5.3			1.3
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

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Only Detected Results Reported.

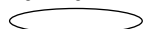


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-032	DEC-033	DEC-033	DEC-033	DEC-039
Sample ID			DEC-032	DEC-033	DEC-033	DEC-033	DEC-039
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	12/12/07	11/03/09	06/21/11	07/18/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5		2.1 J			
Naphthalene	UG/L	-		NA	NA		NA
sec-Butylbenzene	UG/L	-		NA	NA		NA
Tetrachloroethene	UG/L	5	3.0 J	3.6 J			62
Toluene	UG/L	5					
Trichloroethene	UG/L	5	1.3 J	1.8 J			210
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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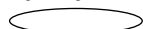
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-032	DEC-033	DEC-033	DEC-033	DEC-039
Sample ID			DEC-032	DEC-033	DEC-033	DEC-033	DEC-039
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	12/12/07	11/03/09	06/21/11	07/18/08
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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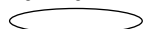
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-039	DEC-039	DEC-042	DEC-042	DEC-042
Sample ID			DEC-039	DUP-062411	DEC-042	DEC-042	DEC-042
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/24/11	07/21/08	11/09/09	06/23/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-			NA	NA	
1,1,1-Trichloroethane	UG/L	5	3.6 J		3.9	4.6	2.9 J
1,1-Dichloroethane	UG/L	5	2.6 J	2.8 J	1.6	2.8	1.1 J
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-			NA	NA	
1,2,3-Trichloropropane	UG/L	-			NA	NA	
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-			NA	NA	
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	23	24	21	13	6.3 J
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7				6.5	1.4 J
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

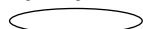
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-039	DEC-039	DEC-042	DEC-042	DEC-042
Sample ID			DEC-039	DUP-062411	DEC-042	DEC-042	DEC-042
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/24/11	07/21/08	11/09/09	06/23/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-			NA	NA	
sec-Butylbenzene	UG/L	-			NA	NA	
Tetrachloroethene	UG/L	5	58	59	52	35	62
Toluene	UG/L	5					
Trichloroethene	UG/L	5	230 D	240 D	210 D	90	73
Trichlorofluoromethane	UG/L	5	24	26	35	58	23
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5	NA				
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

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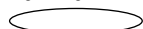
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-039	DEC-039	DEC-042	DEC-042	DEC-042
Sample ID			DEC-039	DUP-062411	DEC-042	DEC-042	DEC-042
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/24/11	06/24/11	07/21/08	11/09/09	06/23/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

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J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

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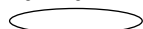
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-043	DEC-043	DEC-043	DEC-043D	DEC-044
Sample ID			DEC-043	DEC-043	DEC-043	DEC-043D	DEC-044
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/22/08	11/04/09	06/22/11	06/22/11	07/23/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA			NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA	NA			NA
1,2,3-Trichloropropane	UG/L	-	NA	NA			NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA			NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6				9.4	
1,2-Dichloroethene (cis)	UG/L	5					120 D
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					22
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7					1.8
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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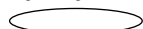
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-043	DEC-043	DEC-043	DEC-043D	DEC-044
Sample ID			DEC-043	DEC-043	DEC-043	DEC-043D	DEC-044
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/22/08	11/04/09	06/22/11	06/22/11	07/23/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10		0.77			
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA			NA
sec-Butylbenzene	UG/L	-	NA	NA			NA
Tetrachloroethene	UG/L	5	33	37	12	9.0	3,600 D
Toluene	UG/L	5					
Trichloroethene	UG/L	5	1.3	1.9		1.2 J	180 D
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-043	DEC-043	DEC-043	DEC-043D	DEC-044
Sample ID			DEC-043	DEC-043	DEC-043	DEC-043D	DEC-044
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/22/08	11/04/09	06/22/11	06/22/11	07/23/08
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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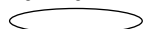


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-044	DEC-044	DEC-044D	DEC-045	DEC-045
Sample ID			DEC-044	DEC-044	DEC-044D	072308-FD-1	DEC-045
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/03/09	06/23/11	06/23/11	07/23/08	07/23/08
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA			NA	NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5				2.4	2.2
1,1-Dichloroethene	UG/L	5			1.3 J		
1,2,3-Trichlorobenzene	UG/L	-	NA			NA	NA
1,2,3-Trichloropropane	UG/L	-	NA			NA	NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA			NA	NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6			500 D		
1,2-Dichloroethene (cis)	UG/L	5		2.0 J		5.2	5.2
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7			6.5		
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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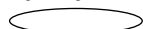
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-044	DEC-044	DEC-044D	DEC-045	DEC-045
Sample ID			DEC-044	DEC-044	DEC-044D	072308-FD-1	DEC-045
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/03/09	06/23/11	06/23/11	07/23/08	07/23/08
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA			NA	NA
sec-Butylbenzene	UG/L	-	NA			NA	NA
Tetrachloroethene	UG/L	5	3,100	1,500 D	1.5 J	110 J	130 J
Toluene	UG/L	5					
Trichloroethene	UG/L	5	23	8.6		8.0	11
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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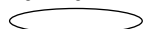
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-044	DEC-044	DEC-044D	DEC-045	DEC-045
Sample ID			DEC-044	DEC-044	DEC-044D	072308-FD-1	DEC-045
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/03/09	06/23/11	06/23/11	07/23/08	07/23/08
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Concentration Exceeds Criteria

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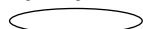
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-045	DEC-045	DEC-045	DEC-045D	DEC-046
Sample ID			DEC-045	DUP-110409	DEC-045	DEC-045D	DEC-046
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/04/09	11/04/09	06/21/11	06/21/11	07/18/08
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA	NA			NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA	NA			NA
1,2,3-Trichloropropane	UG/L	-	NA	NA			NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA	NA			NA
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6				81	
1,2-Dichloroethene (cis)	UG/L	5	1.5	1.5			
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7					1.1
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



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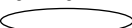
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-045	DEC-045	DEC-045	DEC-045D	DEC-046
Sample ID			DEC-045	DUP-110409	DEC-045	DEC-045D	DEC-046
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/04/09	11/04/09	06/21/11	06/21/11	07/18/08
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	NA			NA
sec-Butylbenzene	UG/L	-	NA	NA			NA
Tetrachloroethene	UG/L	5	94	110	43		11
Toluene	UG/L	5					
Trichloroethene	UG/L	5	2.7	2.6			1.7
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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 Concentration Exceeds Criteria

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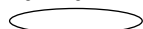
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-045	DEC-045	DEC-045	DEC-045D	DEC-046
Sample ID			DEC-045	DUP-110409	DEC-045	DEC-045D	DEC-046
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/04/09	11/04/09	06/21/11	06/21/11	07/18/08
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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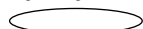
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-046	DEC-046	DEC-047	DEC-047	DEC-048
Sample ID			DEC-046	DEC-046	DEC-047	DEC-047	DEC-048
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/03/09	06/21/11	07/18/08	06/21/11	07/18/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA		NA		NA
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					1.0
1,1-Dichloroethene	UG/L	5					
1,2,3-Trichlorobenzene	UG/L	-	NA		NA		NA
1,2,3-Trichloropropane	UG/L	-	NA		NA		NA
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-	NA		NA		NA
1,2-Dichlorobenzene	UG/L	3					1.2
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					2.0
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					23
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7		1.1 J		1.4 J	2.0
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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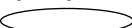
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-046	DEC-046	DEC-047	DEC-047	DEC-048
Sample ID			DEC-046	DEC-046	DEC-047	DEC-047	DEC-048
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/03/09	06/21/11	07/18/08	06/21/11	07/18/08
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					2.7
Methyl ethyl ketone (2-Butanone)	UG/L	50					38
Methyl tert-butyl ether	UG/L	10			19	19	
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	5.7 J	NA		NA
sec-Butylbenzene	UG/L	-	NA		NA		NA
Tetrachloroethene	UG/L	5	7.9	7.4	1.2	2.9 J	6.6
Toluene	UG/L	5					
Trichloroethene	UG/L	5	2.2	1.5 J			1.2
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					1.6
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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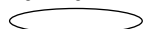


**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-046	DEC-046	DEC-047	DEC-047	DEC-048
Sample ID			DEC-046	DEC-046	DEC-047	DEC-047	DEC-048
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/03/09	06/21/11	07/18/08	06/21/11	07/18/08
Parameter	Units	Criteria*					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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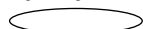
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-048	DEC-048	DEC-048	DEC-064	DEC-064D
Sample ID			DEC-048	DEC-048	DUP2-062411	DEC-064	DEC-064D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/04/09	06/24/11	06/24/11	06/20/11	06/20/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-	NA				
1,1,1-Trichloroethane	UG/L	5					1.8 J
1,1-Dichloroethane	UG/L	5	1.1				1.3 J
1,1-Dichloroethene	UG/L	5					11
1,2,3-Trichlorobenzene	UG/L	-	NA				2.1 J
1,2,3-Trichloropropane	UG/L	-	NA				
1,2,4-Trichlorobenzene	UG/L	5					5.5
1,2,4-Trimethylbenzene	UG/L	-	NA	1.5 J	1.7 J		
1,2-Dichlorobenzene	UG/L	3	1.4				
1,2-Dichloroethane	UG/L	0.6					2.6 J
1,2-Dichloroethene (cis)	UG/L	5	1.3			2.3 J	2.0 J
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50		3.1 J	7.5 J		
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7				3.3 J	2.3 J
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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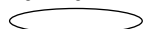
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-048	DEC-048	DEC-048	DEC-064	DEC-064D
Sample ID			DEC-048	DEC-048	DUP2-062411	DEC-064	DEC-064D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/04/09	06/24/11	06/24/11	06/20/11	06/20/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5	1.0				
Methyl ethyl ketone (2-Butanone)	UG/L	50		13 J	18 J		
Methyl tert-butyl ether	UG/L	10					1.7 J
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-	NA	2.2 J	2.4 J		
sec-Butylbenzene	UG/L	-	NA				
Tetrachloroethene	UG/L	5	4.3	3.2 J	3.6 J	220 D	14
Toluene	UG/L	5					
Trichloroethene	UG/L	5	1.7	2.6 J	1.4 J	6.8 J	160
Trichlorofluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA		0.68 J	NA	NA
2-Methylnaphthalene	UG/L	-	NA		1.4 J	NA	NA
Carbazole	UG/L	50	NA		0.72 J	NA	NA
Di-n-butylphthalate	UG/L	50	NA			NA	NA
Naphthalene	UG/L	10	NA		1.2 J	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA			NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-048	DEC-048	DEC-048	DEC-064	DEC-064D
Sample ID			DEC-048	DEC-048	DUP2-062411	DEC-064	DEC-064D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/04/09	06/24/11	06/24/11	06/20/11	06/20/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
<b>Metals</b>							
Aluminum	UG/L	-	NA			NA	NA
Barium	UG/L	1000	NA	95.0 B	95.4 B	NA	NA
Calcium	UG/L	-	NA	66,300	65,900	NA	NA
Chromium	UG/L	50	NA	0.79 B		NA	NA
Cobalt	UG/L	-	NA	1.1 B	1.1 B	NA	NA
Iron	UG/L	300	NA	1,010 J	1,990 J	NA	NA
Magnesium	UG/L	35000	NA	28,400	28,100	NA	NA
Manganese	UG/L	300	NA	738	702	NA	NA
Nickel	UG/L	100	NA	6.6 B	6.0 B	NA	NA
Potassium	UG/L	-	NA	2,890	2,850	NA	NA
Sodium	UG/L	20000	NA	76,000	75,500	NA	NA
Vanadium	UG/L	-	NA			NA	NA
Zinc	UG/L	2000	NA			NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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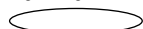
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-065	DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID			DEC-065	DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	UG/L	-					
1,1,1-Trichloroethane	UG/L	5			22		
1,1-Dichloroethane	UG/L	5			6.8		
1,1-Dichloroethene	UG/L	5			120		
1,2,3-Trichlorobenzene	UG/L	-					
1,2,3-Trichloropropane	UG/L	-					
1,2,4-Trichlorobenzene	UG/L	5					
1,2,4-Trimethylbenzene	UG/L	-					
1,2-Dichlorobenzene	UG/L	3					
1,2-Dichloroethane	UG/L	0.6					23
1,2-Dichloroethene (cis)	UG/L	5			11	4.1 J	
1,2-Dichloroethene (trans)	UG/L	5					
1,4-Dichlorobenzene	UG/L	3					
Acetone	UG/L	50					2.7 J
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Carbon tetrachloride	UG/L	5					
Chloroethane	UG/L	5					
Chloroform	UG/L	7	12	14	2.8 J		
Cyclohexane	UG/L	-					
Ethylbenzene	UG/L	5					

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



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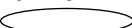
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**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-065	DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID			DEC-065	DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
Isopropylbenzene (Cumene)	UG/L	5					
Methyl ethyl ketone (2-Butanone)	UG/L	50					
Methyl tert-butyl ether	UG/L	10					
Methylcyclohexane	UG/L	-					
Methylene chloride	UG/L	5					
Naphthalene	UG/L	-					
sec-Butylbenzene	UG/L	-					
Tetrachloroethene	UG/L	5	160	170	83	8.4	1.7 J
Toluene	UG/L	5					
Trichloroethene	UG/L	5	3.6 J	2.3 J	670 D	2.1 J	
Trichlorofluoromethane	UG/L	5			1.3 J		
Vinyl chloride	UG/L	2					
Xylene (total)	UG/L	5					
<b>Semivolatile Organic Compounds</b>							
1,1-Biphenyl	UG/L	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Carbazole	UG/L	50	NA	NA	NA	NA	NA
Di-n-butylphthalate	UG/L	50	NA	NA	NA	NA	NA
Naphthalene	UG/L	10	NA	NA	NA	NA	NA
<b>Pesticide Organic Compounds</b>							
gamma-BHC (Lindane)	UG/L	-	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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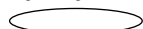
Only Detected Results Reported.

**TABLE 4-7**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID			DEC-065	DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID			DEC-065	DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/22/11	06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Cobalt	UG/L	-	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Nickel	UG/L	100	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA
Zinc	UG/L	2000	NA	NA	NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value. Blank cell or ND - Not Detected. NA - Not analyzed.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. R - The data is rejected.

B (metals only) - The reported concentration is above the method detection limit but below the quantitation limit.

Only Detected Results Reported.

**TABLE 4-8**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	UG/L	-	49	2	2.10	9.50	5.80	0	DEC-014R
1,1,1-Trichloroethane	UG/L	5	132	22	1.40	22.00	5.25	5	DEC-065D
1,1-Dichloroethane	UG/L	5	132	45	1.00	29.00	6.48	21	DEC-010
1,1-Dichloroethene	UG/L	5	132	32	1.10	120.0	15.78	13	DEC-065D
1,2,3-Trichlorobenzene	UG/L	-	49	1	2.10	2.10	2.10	0	DEC-064D
1,2,3-Trichloropropane	UG/L	-	49	1	2.30	2.30	2.30	0	DEC-013
1,2,4-Trichlorobenzene	UG/L	5	132	1	5.50	5.50	5.50	1	DEC-064D
1,2,4-Trimethylbenzene	UG/L	-	49	2	1.50	1.70	1.60	0	DEC-048
1,2-Dichlorobenzene	UG/L	3	132	2	1.20	1.40	1.30	0	DEC-048
1,2-Dichloroethane	UG/L	0.6	132	15	1.20	500.0	63.33	14	DEC-044D
1,2-Dichloroethene (cis)	UG/L	5	135	85	1.30	120.0	22.57	61	DEC-044
1,2-Dichloroethene (trans)	UG/L	5	132	14	1.20	3.90	2.22	0	DEC-027
1,4-Dichlorobenzene	UG/L	3	132	3	1.10	4.30	2.23	1	DEC-014R
Acetone	UG/L	50	132	11	2.70	190.0	58.48	3	DEC-032
Benzene	UG/L	1	132	3	1.80	50.00	17.93	2	DEC-008
Carbon disulfide	UG/L	60	132	1	4.60	4.60	4.60	0	DEC-031D
Carbon tetrachloride	UG/L	5	132	1	1.00	1.00	1.00	0	DEC-014R
Chloroethane	UG/L	5	132	3	1.20	1.80	1.43	0	DEC-028
Chloroform	UG/L	7	132	48	1.00	14.00	3.37	2	DEC-065



Concentration Exceeds Criteria



**TABLE 4-8**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
Volatile Organic Compounds									
Cyclohexane	UG/L	-	132	1	11.00	11.00	11.00	0	DEC-008
Ethylbenzene	UG/L	5	132	1	1.70	1.70	1.70	0	DEC-008
Isopropylbenzene (Cumene)	UG/L	5	132	2	1.00	2.70	1.85	0	DEC-048
Methyl ethyl ketone (2-Butanone)	UG/L	50	132	3	13.00	38.00	23.00	0	DEC-048
Methyl tert-butyl ether	UG/L	10	132	26	0.770	19.00	3.61	2	DEC-047
Methylcyclohexane	UG/L	-	132	1	1.50	1.50	1.50	0	DEC-008
Methylene chloride	UG/L	5	132	2	2.10	2.20	2.15	0	DEC-011
Naphthalene	UG/L	-	49	3	2.20	5.70	3.43	0	DEC-046
sec-Butylbenzene	UG/L	-	49	3	1.90	3.40	2.77	0	DEC-028
Tetrachloroethene	UG/L	5	135	127	1.20	4.40E+04	1,841	97	DEC-014R
Toluene	UG/L	5	132	1	8.60	8.60	8.60	1	DEC-008
Trichloroethene	UG/L	5	135	113	0.950	750.0	79.92	78	DEC-027
Trichlorofluoromethane	UG/L	5	132	10	1.30	58.00	17.80	5	DEC-042
Vinyl chloride	UG/L	2	132	10	1.00	54.00	22.80	8	DEC-009
Xylene (total)	UG/L	5	131	2	1.60	17.00	9.30	1	DEC-008
Semivolatile Organic Compounds									
1,1-Biphenyl	UG/L	-	4	1	0.680	0.680	0.680	0	DEC-048
2-Methylnaphthalene	UG/L	-	4	1	1.40	1.40	1.40	0	DEC-048
Carbazole	UG/L	50	4	1	0.720	0.720	0.720	0	DEC-048



Concentration Exceeds Criteria

**TABLE 4-8**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL GROUNDWATER SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
Semivolatile Organic Compounds									
Di-n-butylphthalate	UG/L	50	4	2	0.560	0.720	0.640	0	DEC-031D
Naphthalene	UG/L	10	4	1	1.20	1.20	1.20	0	DEC-048
Pesticide Organic Compounds									
gamma-BHC (Lindane)	UG/L	-	4	1	0.051	0.051	0.051	0	DEC-031
Metals									
Aluminum	UG/L	-	4	2	154.0	464.0	309.0	0	DEC-031D
Barium	UG/L	1000	4	4	36.80	95.40	68.93	0	DEC-048
Calcium	UG/L	-	4	4	6.12E+04	1.11E+05	7.61E+04	0	DEC-031D
Chromium	UG/L	50	4	2	0.790	2.00	1.40	0	DEC-031D
Cobalt	UG/L	-	4	4	1.10	6.10	2.53	0	DEC-031D
Iron	UG/L	300	4	4	314.0	1,990	1,211	3	DEC-048
Magnesium	UG/L	35000	4	4	2.14E+04	5.84E+04	3.41E+04	1	DEC-031D
Manganese	UG/L	300	4	4	249.0	2,300	997.3	2	DEC-031D
Nickel	UG/L	100	4	4	4.20	10.80	6.90	0	DEC-031
Potassium	UG/L	-	4	4	2,350	7,020	3,778	0	DEC-031D
Sodium	UG/L	20000	4	4	7.10E+04	1.02E+05	8.11E+04	3	DEC-031D
Vanadium	UG/L	-	4	1	2.20	2.20	2.20	0	DEC-031D
Zinc	UG/L	2000	4	1	11.00	11.00	11.00	0	DEC-031D

 Concentration Exceeds Criteria

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		AA-028	AA-029	AA-030	SG-018	SG-019
Sample ID		AA-061311	AA-061411	AA-061511	SG-18	SG-19
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/14/11	06/15/11	06/15/11	06/13/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	8.7				3.8
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		35.6		31.3	102
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		8.8			24.2
1,3-Dichlorobenzene	UG/M3					7.9
1,4-Dichlorobenzene	UG/M3					3.5
2,2,4-Trimethylpentane	UG/M3					399 J
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3					85.8
Bromoform	UG/M3					
Carbon tetrachloride	UG/M3					2.9
Chloroethane	UG/M3					
Chloroform	UG/M3					319
Cyclohexane	UG/M3					535 J
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3					2.3
Ethanol	UG/M3	15.3	12.3	22.3	93.1	114 J

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		AA-028	AA-029	AA-030	SG-018	SG-019
Sample ID		AA-061311	AA-061411	AA-061511	SG-18	SG-19
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/14/11	06/15/11	06/15/11	06/13/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Ethylbenzene	UG/M3			1.6 J		62.7
Hexane	UG/M3	2.0	1.3	0.92 J		50.8
Methyl ethyl ketone (2-Butanone)	UG/M3	3.0	0.94	4.7		
Methylene chloride	UG/M3	6.8	2.0	5.8		
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	18.2			2,660	1,200
Toluene	UG/M3	6.8	7.1	20.4		63.5
Trichloroethene	UG/M3				29.8	
Trichlorofluoromethane	UG/M3					
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3	2.4 J	22.5	21.0	55.4	211

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-020	SG-021	SG-042	SG-043	SG-044
Sample ID		SG-20	SG-21	SG-42	SG-43	SG-44
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/11	06/14/11	06/15/11	06/14/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3		2.0	16,900		28.0 J
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	122	15.9			
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethene (cis)	UG/M3				557	
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	29.1				
1,3-Dichlorobenzene	UG/M3		4.4			
1,4-Dichlorobenzene	UG/M3	2.8 J	1.5 J			
2,2,4-Trimethylpentane	UG/M3	21.9	400 J			
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3	2.1	241		42.4	
Bromoform	UG/M3					51.9 J
Carbon tetrachloride	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3	54.2	25.6			
Cyclohexane	UG/M3	8.6	2,090		16,300	
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3		1.2 J			
Ethanol	UG/M3	183 J	89.4		116	62.0

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-020	SG-021	SG-042	SG-043	SG-044
Sample ID		SG-20	SG-21	SG-42	SG-43	SG-44
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/11	06/14/11	06/15/11	06/14/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Ethylbenzene	UG/M3	64.9	38.7			
Hexane	UG/M3	191	1,500		8,000	
Methyl ethyl ketone (2-Butanone)	UG/M3		9.9			
Methylene chloride	UG/M3	282	883			
Styrene	UG/M3		2.4			13.0 J
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	83.1	72.4	803,000	48,500	1,660
Toluene	UG/M3	159	82.6		17.0 J	
Trichloroethene	UG/M3	9.2		2,850	1,170	
Trichlorofluoromethane	UG/M3				118	
Vinyl chloride	UG/M3				687	
Xylene (total)	UG/M3	317	80.5			

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-045	SG-046	SG-046	SG-047	SG-048
Sample ID		SG-45	DUP2-061411	SG-46	SG-47	SG-48
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/14/11
Parameter	Units		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3		53.7	109		56.5 J
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3		12.8 J	42.0		
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3				9.7	
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethene (cis)	UG/M3			17.7 J		
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dichlorobenzene	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3					
Bromoform	UG/M3	1,830 J	54.5 J			
Carbon tetrachloride	UG/M3				6.1	
Chloroethane	UG/M3					
Chloroform	UG/M3				19.3	
Cyclohexane	UG/M3				54.5	
Dibromochloromethane	UG/M3		25.4 J			
Dichlorodifluoromethane	UG/M3					
Ethanol	UG/M3		58.7		63.7	105

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-045	SG-046	SG-046	SG-047	SG-048
Sample ID		SG-45	DUP2-061411	SG-46	SG-47	SG-48
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/14/11
Parameter	Units		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
Ethylbenzene	UG/M3					
Hexane	UG/M3		30.0		90.6	
Methyl ethyl ketone (2-Butanone)	UG/M3				23.2	
Methylene chloride	UG/M3		199		304	
Styrene	UG/M3		16.8 J	14.2 J		
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	22,400	805	2,040	661	3,340
Toluene	UG/M3		33.4	17.4 J	150	
Trichloroethene	UG/M3		158	376	109	
Trichlorofluoromethane	UG/M3					
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3				35.3	

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.



**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-049	SG-055	SG-056	SG-057	SG-058
Sample ID		SG-49	SG-55	SG-56	SG-57	DUP-061511
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/13/11	06/15/11	06/15/11	06/15/11
Parameter	Units					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	344	4.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	1,520				
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3	189				
1,2,4-Trimethylbenzene	UG/M3	17.1 J	57.3			
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethene (cis)	UG/M3	437,000		1,980		
1,2-Dichloroethene (trans)	UG/M3	1,420		20.9 J		
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		16.2			
1,3-Dichlorobenzene	UG/M3					
1,4-Dichlorobenzene	UG/M3		3.5			
2,2,4-Trimethylpentane	UG/M3		45.8			
4-Methyl-2-pentanone	UG/M3		24.9			
Benzene	UG/M3	48.0	51.0			
Bromoform	UG/M3					6,410 J
Carbon tetrachloride	UG/M3	2,430				
Chloroethane	UG/M3					
Chloroform	UG/M3	793				
Cyclohexane	UG/M3		53.9			
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3					
Ethanol	UG/M3	94.3	476	130		

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-049	SG-055	SG-056	SG-057	SG-058
Sample ID		SG-49	SG-55	SG-56	SG-57	DUP-061511
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/13/11	06/15/11	06/15/11	06/15/11
Parameter	Units					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
Ethylbenzene	UG/M3		89.3			
Hexane	UG/M3		16.6			
Methyl ethyl ketone (2-Butanone)	UG/M3		20.4	65.5		
Methylene chloride	UG/M3		8.5	66.0		
Styrene	UG/M3		3.5			
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	13,100,000	584	88,900	10,800	154,000
Toluene	UG/M3	11.7 J	453		78.1 J	
Trichloroethene	UG/M3	230,000	105	3,090		
Trichlorofluoromethane	UG/M3				5,270	
Vinyl chloride	UG/M3	1,450				
Xylene (total)	UG/M3	59.6	339			

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-058	SG-059	SG-060	SG-060	SG-061
Sample ID		SG-58	SG-59	DUP-061411	SG-60	SG-61
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/15/11	06/15/11	06/14/11	06/14/11	06/15/11
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3			188	15,000	
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3			19.2 J		22.0 J
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethene (cis)	UG/M3			67.8	6,560	
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dichlorobenzene	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3					
Bromoform	UG/M3					
Carbon tetrachloride	UG/M3				793 J	
Chloroethane	UG/M3					
Chloroform	UG/M3			170	14,200	
Cyclohexane	UG/M3					63.6
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3					
Ethanol	UG/M3		31.3 J	61.4	1,850 J	93.7

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-058	SG-059	SG-060	SG-060	SG-061
Sample ID		SG-58	SG-59	DUP-061411	SG-60	SG-61
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/15/11	06/15/11	06/14/11	06/14/11	06/15/11
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
Ethylbenzene	UG/M3					
Hexane	UG/M3				3,900	
Methyl ethyl ketone (2-Butanone)	UG/M3					
Methylene chloride	UG/M3		45.7		3,040	
Styrene	UG/M3					
t-Butyl alcohol	UG/M3		35.5			
Tetrachloroethene	UG/M3	176,000	2,580	1,100,000	48,200,000	79,800
Toluene	UG/M3					16.3 J
Trichloroethene	UG/M3			2,640	220,000	94.7
Trichlorofluoromethane	UG/M3					
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3		40.4 J			65.4

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-062	SG-063	SG-063	SG-078	SG-079
Sample ID		SG-62	DUP2-061511	SG-63	SG-78	SG-79
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/15/11	06/15/11	06/13/11	06/13/11
Parameter	Units		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	8.6				29.7
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3		29.8	38.9		
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	44.7		4.6	53.7	180
1,2-Dichlorobenzene	UG/M3			5.0		
1,2-Dichloroethene (cis)	UG/M3		134	108		
1,2-Dichloroethene (trans)	UG/M3			15.3		
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	10.2			14.9	47.4
1,3-Dichlorobenzene	UG/M3					4.0
1,4-Dichlorobenzene	UG/M3				6.9	7.3
2,2,4-Trimethylpentane	UG/M3	0.91 J		119	69.0	52.3
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3	2.8	41.2	49.1	110	93.2
Bromoform	UG/M3					
Carbon tetrachloride	UG/M3					1.2
Chloroethane	UG/M3		43.2	11.4		
Chloroform	UG/M3					
Cyclohexane	UG/M3		3,300	3,600	43.2	430 J
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3				25.3	
Ethanol	UG/M3	66.7		48.0	266 J	292

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-062	SG-063	SG-063	SG-078	SG-079
Sample ID		SG-62	DUP2-061511	SG-63	SG-78	SG-79
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/15/11	06/15/11	06/13/11	06/13/11
Parameter	Units		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
Ethylbenzene	UG/M3	38.9			110	127
Hexane	UG/M3	1.7		91.6	56.0	24.5
Methyl ethyl ketone (2-Butanone)	UG/M3	10.8		53.5	23.1	5.2
Methylene chloride	UG/M3					
Styrene	UG/M3				4.8	
t-Butyl alcohol	UG/M3					3.4
Tetrachloroethene	UG/M3	35.0	258	208	48.4	21,000
Toluene	UG/M3	121		6.4	1,090	467
Trichloroethene	UG/M3	71.6	56.2	62.2		
Trichlorofluoromethane	UG/M3	2.8				
Vinyl chloride	UG/M3		666	48.7		
Xylene (total)	UG/M3	173		4.5 J	352	474

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-080	SG-081	SG-082	SG-084	SG-085
Sample ID		SG-80	SG-81	SG-82	SG-84	SG-85
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/15/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3		27.8 J			
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	33.4	20.2 J	17.1 J		59.9 J
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dichlorobenzene	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3					
Bromoform	UG/M3					
Carbon tetrachloride	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3					
Cyclohexane	UG/M3					
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3					
Ethanol	UG/M3	12,200 J	65.7	71.8		259

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-080	SG-081	SG-082	SG-084	SG-085
Sample ID		SG-80	SG-81	SG-82	SG-84	SG-85
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/15/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Ethylbenzene	UG/M3					
Hexane	UG/M3					581
Methyl ethyl ketone (2-Butanone)	UG/M3					
Methylene chloride	UG/M3	37.9			2,820	1,690
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	1,670	22,100	6,370	282,000	7,460
Toluene	UG/M3	171	63.7	152		198
Trichloroethene	UG/M3	74.9	776	208		114
Trichlorofluoromethane	UG/M3					256
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3	191	113	184		

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.



**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-086	SG-087
Sample ID		SG-86	SG-87
Matrix		Soil Gas	Soil Gas
Depth Interval (ft)		-	-
Date Sampled		06/15/11	06/15/11
Parameter	Units		
<b>Volatile Organic Compounds</b>			
1,1,1-Trichloroethane	UG/M3	295 J	
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3		
1,1-Dichloroethane	UG/M3		
1,1-Dichloroethene	UG/M3	1,290	
1,2,4-Trimethylbenzene	UG/M3		
1,2-Dichlorobenzene	UG/M3		
1,2-Dichloroethene (cis)	UG/M3		
1,2-Dichloroethene (trans)	UG/M3		
1,2-Dichloropropane	UG/M3		169
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		
1,3-Dichlorobenzene	UG/M3		
1,4-Dichlorobenzene	UG/M3		
2,2,4-Trimethylpentane	UG/M3		
4-Methyl-2-pentanone	UG/M3		
Benzene	UG/M3		
Bromoform	UG/M3		
Carbon tetrachloride	UG/M3		
Chloroethane	UG/M3		
Chloroform	UG/M3		
Cyclohexane	UG/M3		
Dibromochloromethane	UG/M3		
Dichlorodifluoromethane	UG/M3		
Ethanol	UG/M3	3,840	1,310

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-9**  
**SUMMARY OF DETECTED COMPOUNDS IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-086	SG-087
Sample ID		SG-86	SG-87
Matrix		Soil Gas	Soil Gas
Depth Interval (ft)		-	-
Date Sampled		06/15/11	06/15/11
Parameter	Units		
<b>Volatile Organic Compounds</b>			
Ethylbenzene	UG/M3		
Hexane	UG/M3	978	1,960
Methyl ethyl ketone (2-Butanone)	UG/M3		
Methylene chloride	UG/M3	3,140	6,640
Styrene	UG/M3		
t-Butyl alcohol	UG/M3		
Tetrachloroethene	UG/M3	69,500	2,190
Toluene	UG/M3	222 J	264
Trichloroethene	UG/M3	899	
Trichlorofluoromethane	UG/M3		
Vinyl chloride	UG/M3		
Xylene (total)	UG/M3		

Flags assigned during chemistry validation are shown.

Blank - Not Detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

**TABLE 4-10**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value
				Min	Max	Avg	
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/M3	34	15	2.00	1.69E+04	2,203	SG-042
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	34	1	1,520	1,520	1,520	SG-049
1,1-Dichloroethane	UG/M3	34	4	12.80	42.00	30.88	SG-046
1,1-Dichloroethene	UG/M3	34	2	189.0	1,290	739.5	SG-086
1,2,4-Trimethylbenzene	UG/M3	34	17	4.60	180.0	47.65	SG-079
1,2-Dichlorobenzene	UG/M3	34	1	5.00	5.00	5.00	SG-063
1,2-Dichloroethene (cis)	UG/M3	34	8	17.70	4.37E+05	5.58E+04	SG-049
1,2-Dichloroethene (trans)	UG/M3	34	3	15.30	1,420	485.4	SG-049
1,2-Dichloropropane	UG/M3	34	1	169.0	169.0	169.0	SG-087
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	34	6	10.20	47.40	23.67	SG-079
1,3-Dichlorobenzene	UG/M3	34	3	4.00	7.90	5.43	SG-019
1,4-Dichlorobenzene	UG/M3	34	6	1.50	7.30	4.25	SG-079
2,2,4-Trimethylpentane	UG/M3	34	8	0.910	400.0	138.5	SG-021
4-Methyl-2-pentanone	UG/M3	34	1	24.90	24.90	24.90	SG-055
Benzene	UG/M3	34	11	2.10	241.0	69.69	SG-021
Bromoform	UG/M3	34	4	51.90	6,410	2,087	SG-058
Carbon tetrachloride	UG/M3	34	5	1.20	2,430	646.6	SG-049
Chloroethane	UG/M3	34	2	11.40	43.20	27.30	SG-063

Only Detected Results Reported.

**TABLE 4-10**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN RI AMBIENT AIR AND SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value
				Min	Max	Avg	
<b>Volatile Organic Compounds</b>							
Chloroform	UG/M3	34	7	19.30	1.42E+04	2,226	SG-060
Cyclohexane	UG/M3	34	11	8.60	1.63E+04	2,407	SG-043
Dibromochloromethane	UG/M3	34	1	25.40	25.40	25.40	SG-046
Dichlorodifluoromethane	UG/M3	34	3	1.20	25.30	9.60	SG-078
Ethanol	UG/M3	34	26	31.30	1.22E+04	847.7	SG-080
Ethylbenzene	UG/M3	34	7	38.70	127.0	75.93	SG-079
Hexane	UG/M3	34	15	1.70	8,000	1,165	SG-043
Methyl ethyl ketone (2-Butanone)	UG/M3	34	8	5.20	65.50	26.45	SG-056
Methylene chloride	UG/M3	34	13	8.50	6,640	1,474	SG-087
Styrene	UG/M3	34	6	2.40	16.80	9.12	SG-046
t-Butyl alcohol	UG/M3	34	2	3.40	35.50	19.45	SG-059
Tetrachloroethene	UG/M3	34	34	35.00	4.82E+07	1.89E+06	SG-060
Toluene	UG/M3	34	21	6.40	1,090	182.7	SG-078
Trichloroethene	UG/M3	34	21	9.20	2.30E+05	2.20E+04	SG-049
Trichlorofluoromethane	UG/M3	34	4	2.80	5,270	1,412	SG-057
Vinyl chloride	UG/M3	34	4	48.70	1,450	712.9	SG-049
Xylene (total)	UG/M3	34	16	4.50	474.0	168.4	SG-079

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-016	SG-016	SG-017	SG-017	SG-018
Sample ID		SG-16	SG-16	SG-17	SG-17	SG-18
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/07	12/03/07	06/13/07	12/03/07	06/13/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3			130	31	400
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					10
1,1,2-Trichloroethane	UG/M3	39				
1,1-Dichloroethane	UG/M3	31	42	1.8	1.5	25
1,1-Dichloroethene	UG/M3	4.8	4.8			
1,2,4-Trimethylbenzene	UG/M3	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3	40	130			1.4
1,2-Dichloroethene (trans)	UG/M3	13	48	39	19	
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/M3					
1,4-Dichlorobenzene	UG/M3					
2,2,4-Trimethylpentane	UG/M3	NA	NA	NA	NA	NA
2-Hexanone	UG/M3			3.7		
4-Methyl-2-pentanone	UG/M3			4.5		
Acetone	UG/M3			17 J		28 J
Benzene	UG/M3	31	100	2.2		0.77
Bromodichloromethane	UG/M3					0.67
Bromoform	UG/M3					
Carbon disulfide	UG/M3	5.0		10		1.2
Carbon tetrachloride	UG/M3					2.1

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-016	SG-016	SG-017	SG-017	SG-018
Sample ID		SG-16	SG-16	SG-17	SG-17	SG-18
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/07	12/03/07	06/13/07	12/03/07	06/13/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3	6.8		13	2.7	65
Chloromethane	UG/M3			0.93 J		
Cyclohexane	UG/M3	1,100	2,700		3.3	
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3			5.7	3.0	4.1 J
Ethanol	UG/M3	NA	NA	NA	NA	NA
Ethylbenzene	UG/M3	6.9		7.4		1.5
Hexane	UG/M3	NA	NA	NA	NA	NA
Isopropylbenzene (Cumene)	UG/M3					
Methyl ethyl ketone (2-Butanone)	UG/M3	7.7		7.4		3.7
Methyl tert-butyl ether	UG/M3					2.4
Methylcyclohexane	UG/M3	320	530			
Methylene chloride	UG/M3	4.2		13		
Styrene	UG/M3			5.3		3.4
t-Butyl alcohol	UG/M3	NA	NA	NA	NA	NA
Tetrachloroethene	UG/M3	150	110	220	120	7,200
Toluene	UG/M3		6.0	14	3.2	1.1
Trichloroethene	UG/M3	84	63	11	4.7	110
Trichlorofluoromethane	UG/M3			75 J	24 J	6.0 J
Vinyl chloride	UG/M3	85	180			
Xylene (total)	UG/M3	29		32	2.3	5.6

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-018	SG-018	SG-019	SG-019	SG-019
Sample ID		SG-18	SG-18	061307-FD-1	SG-19	SG-19
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/04/07	06/15/11	06/13/07	06/13/07	12/03/07
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	150		110	110	35
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	2.1		0.92	1.0	0.84
1,1,2-Trichloroethane	UG/M3		NA		0.44	
1,1-Dichloroethane	UG/M3	4.4		0.36	0.45	0.45
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	NA	31.3	NA	NA	NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3	0.95				
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA		NA	NA	NA
1,3-Dichlorobenzene	UG/M3					0.96
1,4-Dichlorobenzene	UG/M3			0.36	0.36	0.36
2,2,4-Trimethylpentane	UG/M3	NA		NA	NA	NA
2-Hexanone	UG/M3		NA			0.94
4-Methyl-2-pentanone	UG/M3			3.0	4.1	0.90
Acetone	UG/M3	4.1	NA	27 J		12 J
Benzene	UG/M3	1.3		0.48	2.7	0.83
Bromodichloromethane	UG/M3			5.6	7.2	1.7
Bromoform	UG/M3					
Carbon disulfide	UG/M3		NA	2.2	2.3	
Carbon tetrachloride	UG/M3	0.82		5.1 J	5.5 J	1.4

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-018	SG-018	SG-019	SG-019	SG-019
Sample ID		SG-18	SG-18	061307-FD-1	SG-19	SG-19
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/04/07	06/15/11	06/13/07	06/13/07	12/03/07
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3				0.51	
Chloroethane	UG/M3					
Chloroform	UG/M3	45		520	470	250 D
Chloromethane	UG/M3					
Cyclohexane	UG/M3				11	
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3			3.3 J	3.6 J	3.1
Ethanol	UG/M3	NA	93.1	NA	NA	NA
Ethylbenzene	UG/M3	0.91		5.7	5.6	1.1
Hexane	UG/M3	NA		NA	NA	NA
Isopropylbenzene (Cumene)	UG/M3		NA			
Methyl ethyl ketone (2-Butanone)	UG/M3	2.4		5.0	4.2	3.6
Methyl tert-butyl ether	UG/M3	0.50				
Methylcyclohexane	UG/M3	0.88	NA		18	
Methylene chloride	UG/M3	0.38				
Styrene	UG/M3			5.6	5.5	0.34
t-Butyl alcohol	UG/M3	NA		NA	NA	NA
Tetrachloroethene	UG/M3	1,200 D	2,660	330	290	65
Toluene	UG/M3	3.8		8.0	8.0	6.0
Trichloroethene	UG/M3	52	29.8	17	17	6.3
Trichlorofluoromethane	UG/M3	0.62		3.8 J	3.5 J	1.2 J
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3	4.2	55.4	33	32	5.8

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.



**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-019	SG-020	SG-020	SG-020	SG-021
Sample ID		SG-19	SG-20	SG-20	SG-20	SG-21
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/07	12/03/07	06/13/11	06/13/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	3.8	110	41		170
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3		1.3	0.92		4.6
1,1,2-Trichloroethane	UG/M3	NA			NA	
1,1-Dichloroethane	UG/M3		0.24			3.4
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	102	NA	NA	122	NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	24.2	NA	NA	29.1	NA
1,3-Dichlorobenzene	UG/M3	7.9		0.66		
1,4-Dichlorobenzene	UG/M3	3.5	0.66		2.8 J	
2,2,4-Trimethylpentane	UG/M3	399 J	NA	NA	21.9	NA
2-Hexanone	UG/M3	NA		0.45	NA	11
4-Methyl-2-pentanone	UG/M3			1.1		9.2
Acetone	UG/M3	NA	53 J	14 J	NA	39 J
Benzene	UG/M3	85.8	1.1	0.73	2.1	1.9
Bromodichloromethane	UG/M3		1.2	0.60		12
Bromoform	UG/M3					
Carbon disulfide	UG/M3	NA	19		NA	25
Carbon tetrachloride	UG/M3	2.9	1.6 J	0.88		3.5

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-019	SG-020	SG-020	SG-020	SG-021
Sample ID		SG-19	SG-20	SG-20	SG-20	SG-21
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/07	12/03/07	06/13/11	06/13/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3	319	120	47	54.2	280
Chloromethane	UG/M3					0.72 J
Cyclohexane	UG/M3	535 J	0.62		8.6	
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	2.3	3.9 J	3.3		4.2
Ethanol	UG/M3	114 J	NA	NA	183 J	NA
Ethylbenzene	UG/M3	62.7	12	1.0	64.9	34
Hexane	UG/M3	50.8	NA	NA	191	NA
Isopropylbenzene (Cumene)	UG/M3	NA	0.79		NA	
Methyl ethyl ketone (2-Butanone)	UG/M3		5.5	3.2		12
Methyl tert-butyl ether	UG/M3		4.6 J			
Methylcyclohexane	UG/M3	NA	1.2		NA	
Methylene chloride	UG/M3		7.2		282	2.4
Styrene	UG/M3		7.8	0.34		12
t-Butyl alcohol	UG/M3		NA	NA		NA
Tetrachloroethene	UG/M3	1,200	380	90	83.1	440
Toluene	UG/M3	63.5	20	5.9	159	21
Trichloroethene	UG/M3		33	16	9.2	17
Trichlorofluoromethane	UG/M3		4.3 J	1.3 J		4.2 J
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3	211	48	5.4	317	134

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-021	SG-021	SG-022	SG-022	SG-023
Sample ID		SG-21	SG-21	SG-22	SG-22	SG-23
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/03/07	06/13/11	06/13/07	12/07/07	06/13/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	47	2.0	3,700	2,800 D	2,400
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	3.6		9.2	4.0	14
1,1,2-Trichloroethane	UG/M3		NA			
1,1-Dichloroethane	UG/M3	0.69		21	30	9.7
1,1-Dichloroethene	UG/M3			1.6	1.6	16
1,2,4-Trimethylbenzene	UG/M3	NA	15.9	NA	NA	NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3			1.6	0.36	
1,2-Dichloroethene (trans)	UG/M3			0.95		
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA		NA	NA	NA
1,3-Dichlorobenzene	UG/M3	0.90	4.4		0.78	
1,4-Dichlorobenzene	UG/M3	0.42	1.5 J			
2,2,4-Trimethylpentane	UG/M3	NA	400 J	NA	NA	NA
2-Hexanone	UG/M3		NA			
4-Methyl-2-pentanone	UG/M3	1.4			3.0	
Acetone	UG/M3	11 J	NA	26 J	14	22 J
Benzene	UG/M3	0.89	241	0.89	1.0	20
Bromodichloromethane	UG/M3	1.9		2.8		
Bromoform	UG/M3					
Carbon disulfide	UG/M3		NA	3.7		8.7
Carbon tetrachloride	UG/M3	9.6		0.75	0.50	

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-021	SG-021	SG-022	SG-022	SG-023
Sample ID		SG-21	SG-21	SG-22	SG-22	SG-23
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/03/07	06/13/11	06/13/07	12/07/07	06/13/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3	78	25.6	230	110	28
Chloromethane	UG/M3			0.83		
Cyclohexane	UG/M3		2,090			
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	0.69	1.2 J	6.9 J	0.49	5.9 J
Ethanol	UG/M3	NA	89.4	NA	NA	NA
Ethylbenzene	UG/M3	1.3	38.7	3.2	1.3	6.9
Hexane	UG/M3	NA	1,500	NA	NA	NA
Isopropylbenzene (Cumene)	UG/M3		NA			
Methyl ethyl ketone (2-Butanone)	UG/M3	1.7	9.9	3.7	4.0	6.5
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3		NA			
Methylene chloride	UG/M3		883		1.2	5.6
Styrene	UG/M3	0.30	2.4	5.5		4.3
t-Butyl alcohol	UG/M3	NA		NA	NA	NA
Tetrachloroethene	UG/M3	90	72.4	5,700	490 D	13,000
Toluene	UG/M3	5.7	82.6	1.1	9.2	18
Trichloroethene	UG/M3	5.6		290	78	370
Trichlorofluoromethane	UG/M3	1.6 J		590 J	50	2,800 J
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3	7.0	80.5	7.6	6.3	34

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-023	SG-039	SG-040	SG-041	SG-042
Sample ID		SG-23	SG-39	SG-40	SG-41	120307-FD-1
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/03/07	12/07/07	12/07/07	12/03/07	12/03/07
Parameter	Units					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	1,000 D		6,600 D	110	2,700 D
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	8.4		25	31	1.8
1,1,2-Trichloroethane	UG/M3					
1,1-Dichloroethane	UG/M3	6.7	24	2,000 D		200
1,1-Dichloroethene	UG/M3	11		82	2.6	69
1,2,4-Trimethylbenzene	UG/M3	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3		99	2,700 D		
1,2-Dichloroethene (trans)	UG/M3		10	51	0.48	
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/M3		0.30		0.72	1.7
1,4-Dichlorobenzene	UG/M3					
2,2,4-Trimethylpentane	UG/M3	NA	NA	NA	NA	NA
2-Hexanone	UG/M3					
4-Methyl-2-pentanone	UG/M3		4.8	1.6	0.90	
Acetone	UG/M3	13	38	21	36 J	
Benzene	UG/M3		23	1.8	1.7	1.0
Bromodichloromethane	UG/M3					
Bromoform	UG/M3					
Carbon disulfide	UG/M3		25	5.3	7.4	
Carbon tetrachloride	UG/M3				2.3	

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-023	SG-039	SG-040	SG-041	SG-042
Sample ID		SG-23	SG-39	SG-40	SG-41	120307-FD-1
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/03/07	12/07/07	12/07/07	12/03/07	12/03/07
Parameter	Units					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3			44		1.4
Chloroform	UG/M3	32		41		11
Chloromethane	UG/M3		0.29			
Cyclohexane	UG/M3		13			
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	3.7	2.8	5.4	5.1	3.4
Ethanol	UG/M3	NA	NA	NA	NA	NA
Ethylbenzene	UG/M3		2.7		0.69	
Hexane	UG/M3	NA	NA	NA	NA	NA
Isopropylbenzene (Cumene)	UG/M3					
Methyl ethyl ketone (2-Butanone)	UG/M3	4.1	6.0	4.4	6.8	
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3		9.4			
Methylene chloride	UG/M3		0.69	5.6		
Styrene	UG/M3					
t-Butyl alcohol	UG/M3	NA	NA	NA	NA	NA
Tetrachloroethene	UG/M3	5,100 D	13	76	2,500 D	58
Toluene	UG/M3	4.3	18	12	12	5.9
Trichloroethene	UG/M3	160	97	350	50	26
Trichlorofluoromethane	UG/M3	4,400 D	0.56	15	850 D	1.3 J
Vinyl chloride	UG/M3		6.3	38		
Xylene (total)	UG/M3		14	5.6	3.5	3.8

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-042	SG-042	SG-043	SG-043	SG-044
Sample ID		SG-42	SG-42	SG-43	SG-43	SG-44
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/03/07	06/14/11	12/03/07	06/15/11	12/03/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	3,000 D	16,900	31		97
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	1.8		11		17
1,1,2-Trichloroethane	UG/M3		NA		NA	
1,1-Dichloroethane	UG/M3	210				
1,1-Dichloroethene	UG/M3	71				
1,2,4-Trimethylbenzene	UG/M3	NA		NA		NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3				557	
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA		NA		NA
1,3-Dichlorobenzene	UG/M3	1.2				0.84
1,4-Dichlorobenzene	UG/M3					0.30
2,2,4-Trimethylpentane	UG/M3	NA		NA		NA
2-Hexanone	UG/M3		NA		NA	0.90
4-Methyl-2-pentanone	UG/M3					1.3
Acetone	UG/M3		NA		NA	35 J
Benzene	UG/M3	0.89			42.4	1.2
Bromodichloromethane	UG/M3					
Bromoform	UG/M3					
Carbon disulfide	UG/M3		NA		NA	2.6
Carbon tetrachloride	UG/M3					0.57

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-042	SG-042	SG-043	SG-043	SG-044
Sample ID		SG-42	SG-42	SG-43	SG-43	SG-44
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/03/07	06/14/11	12/03/07	06/15/11	12/03/07
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3	1.4				
Chloroform	UG/M3	12				2.3
Chloromethane	UG/M3					0.37
Cyclohexane	UG/M3			81	16,300	0.28
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	3.2				3.6
Ethanol	UG/M3	NA		NA	116	NA
Ethylbenzene	UG/M3					1.2
Hexane	UG/M3	NA		NA	8,000	NA
Isopropylbenzene (Cumene)	UG/M3		NA		NA	
Methyl ethyl ketone (2-Butanone)	UG/M3					5.9
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3		NA	23	NA	
Methylene chloride	UG/M3					22
Styrene	UG/M3					0.43
t-Butyl alcohol	UG/M3	NA		NA		NA
Tetrachloroethene	UG/M3	94	803,000	6,800 D	48,500	490
Toluene	UG/M3	4.5		6.8	17.0 J	8.2
Trichloroethene	UG/M3	32	2,850	17	1,170	4.7
Trichlorofluoromethane	UG/M3	1.3 J		18	118	4.7 J
Vinyl chloride	UG/M3			8.7	687	
Xylene (total)	UG/M3	5.8				6.1

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.



**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-044	SG-045	SG-045	SG-046	SG-046
Sample ID		SG-44	SG-45	SG-45	SG-46	DUP2-061411
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	12/03/07	06/14/11	12/04/07	06/14/11
Parameter	Units					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	28.0 J	430		180 D	53.7
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3		110		64	
1,1,2-Trichloroethane	UG/M3	NA		NA		NA
1,1-Dichloroethane	UG/M3		150		76	12.8 J
1,1-Dichloroethene	UG/M3		12		8.8	
1,2,4-Trimethylbenzene	UG/M3		NA		NA	
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3		49			
1,2-Dichloroethene (cis)	UG/M3		62		29	
1,2-Dichloroethene (trans)	UG/M3		2.9		1.2	
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		NA		NA	
1,3-Dichlorobenzene	UG/M3		1.2			
1,4-Dichlorobenzene	UG/M3					
2,2,4-Trimethylpentane	UG/M3		NA		NA	
2-Hexanone	UG/M3	NA		NA	1.8	NA
4-Methyl-2-pentanone	UG/M3		1.3		0.70	
Acetone	UG/M3	NA	14 J	NA	15	NA
Benzene	UG/M3		2.1		2.9	
Bromodichloromethane	UG/M3					
Bromoform	UG/M3	51.9 J		1,830 J		54.5 J
Carbon disulfide	UG/M3	NA		NA	2.5	NA
Carbon tetrachloride	UG/M3		18		3.5	

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-044	SG-045	SG-045	SG-046	SG-046
Sample ID		SG-44	SG-45	SG-45	SG-46	DUP2-061411
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	12/03/07	06/14/11	12/04/07	06/14/11
Parameter	Units					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3		4.0		1.8	
Chloroform	UG/M3		24		24	
Chloromethane	UG/M3					
Cyclohexane	UG/M3					
Dibromochloromethane	UG/M3					25.4 J
Dichlorodifluoromethane	UG/M3		4.3		3.7	
Ethanol	UG/M3	62.0	NA		NA	58.7
Ethylbenzene	UG/M3		2.8		2.1	
Hexane	UG/M3		NA		NA	30.0
Isopropylbenzene (Cumene)	UG/M3	NA		NA		NA
Methyl ethyl ketone (2-Butanone)	UG/M3		3.3		3.8	
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3	NA		NA	2.2	NA
Methylene chloride	UG/M3				0.59	199
Styrene	UG/M3	13.0 J				16.8 J
t-Butyl alcohol	UG/M3		NA		NA	
Tetrachloroethene	UG/M3	1,660	1,600 D	22,400	310 D	805
Toluene	UG/M3		17		14	33.4
Trichloroethene	UG/M3		410		220 D	158
Trichlorofluoromethane	UG/M3		12 J		17	
Vinyl chloride	UG/M3		1.1			
Xylene (total)	UG/M3		16		8.5	

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-046	SG-047	SG-047	SG-048	SG-048
Sample ID		SG-46	SG-47	SG-47	SG-48	SG-48
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	12/04/07	06/15/11	12/04/07	06/14/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	109	41		130	56.5 J
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3		4.5		6.0	
1,1,2-Trichloroethane	UG/M3	NA		NA		NA
1,1-Dichloroethane	UG/M3	42.0	1.6		0.85	
1,1-Dichloroethene	UG/M3		0.71		4.6	
1,2,4-Trimethylbenzene	UG/M3		NA	9.7	NA	
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3	17.7 J	4.8		19	
1,2-Dichloroethene (trans)	UG/M3		3.0		0.79	
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		NA		NA	
1,3-Dichlorobenzene	UG/M3		0.36			
1,4-Dichlorobenzene	UG/M3					
2,2,4-Trimethylpentane	UG/M3		NA		NA	
2-Hexanone	UG/M3	NA		NA		NA
4-Methyl-2-pentanone	UG/M3		0.70			
Acetone	UG/M3	NA	10	NA	5.7	NA
Benzene	UG/M3		3.4		12	
Bromodichloromethane	UG/M3		1.7			
Bromoform	UG/M3					
Carbon disulfide	UG/M3	NA	8.3	NA	4.5	NA
Carbon tetrachloride	UG/M3		10	6.1	1.1	

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-046	SG-047	SG-047	SG-048	SG-048
Sample ID		SG-46	SG-47	SG-47	SG-48	SG-48
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	12/04/07	06/15/11	12/04/07	06/14/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3		76	19.3	1.5	
Chloromethane	UG/M3				0.43	
Cyclohexane	UG/M3			54.5		
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3		3.0		2.7	
Ethanol	UG/M3		NA	63.7	NA	105
Ethylbenzene	UG/M3		3.0		3.3	
Hexane	UG/M3		NA	90.6	NA	
Isopropylbenzene (Cumene)	UG/M3	NA		NA		NA
Methyl ethyl ketone (2-Butanone)	UG/M3		2.7	23.2	1.8	
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3	NA	3.5	NA	4.0	NA
Methylene chloride	UG/M3			304	4.2	
Styrene	UG/M3	14.2 J				
t-Butyl alcohol	UG/M3		NA		NA	
Tetrachloroethene	UG/M3	2,040	330 D	661	5,400 D	3,340
Toluene	UG/M3	17.4 J	28	150	39	
Trichloroethene	UG/M3	376	150	109	78	
Trichlorofluoromethane	UG/M3		6.0		5.9	
Vinyl chloride	UG/M3				7.9	
Xylene (total)	UG/M3		13	35.3	12	

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-049	SG-049	SG-054	SG-055	SG-055
Sample ID		SG-49	SG-49	SG-54	SG-55	SG-55
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/04/07	06/14/11	05/20/08	05/21/08	06/13/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	330	344	130	3.6	4.0
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	900	1,520	2.5	0.80	
1,1,2-Trichloroethane	UG/M3		NA			NA
1,1-Dichloroethane	UG/M3			57		
1,1-Dichloroethene	UG/M3	56	189	49		
1,2,4-Trimethylbenzene	UG/M3	NA	17.1 J	NA	NA	57.3
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3	39,000 D	437,000	24	4.9	
1,2-Dichloroethene (trans)	UG/M3	790	1,420	1.2		
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA		NA	NA	16.2
1,3-Dichlorobenzene	UG/M3				2.2	
1,4-Dichlorobenzene	UG/M3				0.72	3.5
2,2,4-Trimethylpentane	UG/M3	NA		NA	NA	45.8
2-Hexanone	UG/M3		NA		1.9	NA
4-Methyl-2-pentanone	UG/M3			2.4	6.1	24.9
Acetone	UG/M3		NA	74 J	190 J	NA
Benzene	UG/M3	53	48.0	2.8	3.3	51.0
Bromodichloromethane	UG/M3					
Bromoform	UG/M3					
Carbon disulfide	UG/M3		NA	1.1	2.5	NA
Carbon tetrachloride	UG/M3	1,900	2,430			

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-049	SG-049	SG-054	SG-055	SG-055
Sample ID		SG-49	SG-49	SG-54	SG-55	SG-55
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/04/07	06/14/11	05/20/08	05/21/08	06/13/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3	640	793	13	1.2	
Chloromethane	UG/M3					
Cyclohexane	UG/M3			1.0	1.8	53.9
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3			6.0	2.1	
Ethanol	UG/M3	NA	94.3	NA	NA	476
Ethylbenzene	UG/M3	6.9		6.2	4.2	89.3
Hexane	UG/M3	NA		NA	NA	16.6
Isopropylbenzene (Cumene)	UG/M3		NA			NA
Methyl ethyl ketone (2-Butanone)	UG/M3			19	97	20.4
Methyl tert-butyl ether	UG/M3			3.5		
Methylcyclohexane	UG/M3	66	NA	3.2	4.5	NA
Methylene chloride	UG/M3			4.9		8.5
Styrene	UG/M3			0.49	0.72	3.5
t-Butyl alcohol	UG/M3	NA		NA	NA	
Tetrachloroethene	UG/M3	310,000 D	13,100,000	160	390	584
Toluene	UG/M3	77	11.7 J	44	42	453
Trichloroethene	UG/M3	19,000 D	230,000	350	32	105
Trichlorofluoromethane	UG/M3	9.0		110	3.9	
Vinyl chloride	UG/M3	92	1,450	0.56		
Xylene (total)	UG/M3	24	59.6	28	20	339

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-056	SG-056	SG-057	SG-057	SG-058
Sample ID		SG-56	SG-56	SG-57	SG-57	SG-58
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/08	06/15/11	05/20/08	06/15/11	05/21/08
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	78				18
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	3.5		0.81		5.1
1,1,2-Trichloroethane	UG/M3		NA		NA	
1,1-Dichloroethane	UG/M3	5.5				
1,1-Dichloroethene	UG/M3	26				
1,2,4-Trimethylbenzene	UG/M3	NA		NA		NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3	2,800 D	1,980			1.7
1,2-Dichloroethene (trans)	UG/M3	51	20.9 J			
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA		NA		NA
1,3-Dichlorobenzene	UG/M3	1.6				0.81
1,4-Dichlorobenzene	UG/M3	0.61				
2,2,4-Trimethylpentane	UG/M3	NA		NA		NA
2-Hexanone	UG/M3	2.9	NA		NA	2.5
4-Methyl-2-pentanone	UG/M3	7.1		3.4		5.8
Acetone	UG/M3	260 J	NA	150 J	NA	200 J
Benzene	UG/M3	6.8		5.3		3.4
Bromodichloromethane	UG/M3					
Bromoform	UG/M3					
Carbon disulfide	UG/M3	9.8	NA	9.7	NA	1.1
Carbon tetrachloride	UG/M3	15				6.3

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-056	SG-056	SG-057	SG-057	SG-058
Sample ID		SG-56	SG-56	SG-57	SG-57	SG-58
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/08	06/15/11	05/20/08	06/15/11	05/21/08
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3	82		0.68		4.5
Chloromethane	UG/M3					
Cyclohexane	UG/M3	1.8		2.2		0.75
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	3.5		9.4		5.0
Ethanol	UG/M3	NA	130	NA		NA
Ethylbenzene	UG/M3	4.9		10		5.4
Hexane	UG/M3	NA		NA		NA
Isopropylbenzene (Cumene)	UG/M3		NA	1.3	NA	
Methyl ethyl ketone (2-Butanone)	UG/M3	150	65.5	21		19
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3	4.2	NA	8.2	NA	2.5
Methylene chloride	UG/M3	10	66.0			7.3
Styrene	UG/M3	0.77		0.71		0.72
t-Butyl alcohol	UG/M3	NA		NA		NA
Tetrachloroethene	UG/M3	6,100 D	88,900	17	10,800	4,600 D
Toluene	UG/M3	68		90	78.1 J	53
Trichloroethene	UG/M3	1,400 D	3,090			61
Trichlorofluoromethane	UG/M3	9.9		980 D	5,270	6.5
Vinyl chloride	UG/M3	8.9				
Xylene (total)	UG/M3	23		49		27

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.



**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-058	SG-058	SG-059	SG-059	SG-060
Sample ID		DUP-061511	SG-58	SG-59	SG-59	052108-FD1
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/15/11	06/15/11	05/20/08	06/15/11	05/21/08
Parameter	Units	Field Duplicate (1-1)				Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3			6.5		170
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3			1.5		1.5
1,1,2-Trichloroethane	UG/M3	NA	NA		NA	
1,1-Dichloroethane	UG/M3					3.1
1,1-Dichloroethene	UG/M3					1.8
1,2,4-Trimethylbenzene	UG/M3			NA		NA
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					130
1,2-Dichloroethene (trans)	UG/M3					7.2
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3			NA		NA
1,3-Dichlorobenzene	UG/M3					1.7
1,4-Dichlorobenzene	UG/M3					0.70
2,2,4-Trimethylpentane	UG/M3			NA		NA
2-Hexanone	UG/M3	NA	NA		NA	1.8
4-Methyl-2-pentanone	UG/M3					6.4
Acetone	UG/M3	NA	NA	130 J	NA	230 J
Benzene	UG/M3			3.2		11
Bromodichloromethane	UG/M3					
Bromoform	UG/M3	6,410 J				
Carbon disulfide	UG/M3	NA	NA	14	NA	130
Carbon tetrachloride	UG/M3			0.93		7.0

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-058	SG-058	SG-059	SG-059	SG-060
Sample ID		DUP-061511	SG-58	SG-59	SG-59	052108-FD1
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/15/11	06/15/11	05/20/08	06/15/11	05/21/08
Parameter	Units	Field Duplicate (1-1)				Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3			0.49		
Chloroethane	UG/M3					6.8
Chloroform	UG/M3			2.2		140
Chloromethane	UG/M3					
Cyclohexane	UG/M3			3.8		3.3
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3			3.4		8.0
Ethanol	UG/M3			NA	31.3 J	NA
Ethylbenzene	UG/M3			9.9		6.5
Hexane	UG/M3			NA		NA
Isopropylbenzene (Cumene)	UG/M3	NA	NA		NA	
Methyl ethyl ketone (2-Butanone)	UG/M3			36		18
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3	NA	NA	11	NA	5.8
Methylene chloride	UG/M3				45.7	8.0
Styrene	UG/M3			0.83		1.2
t-Butyl alcohol	UG/M3			NA	35.5	NA
Tetrachloroethene	UG/M3	154,000	176,000	16	2,580	11,000 D
Toluene	UG/M3			71		100
Trichloroethene	UG/M3					650 D
Trichlorofluoromethane	UG/M3			6.6		21
Vinyl chloride	UG/M3					7.0
Xylene (total)	UG/M3			47	40.4 J	31

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-060	SG-060	SG-060	SG-061	SG-061
Sample ID		SG-60	DUP-061411	SG-60	SG-61	SG-61
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/08	06/14/11	06/14/11	05/20/08	06/15/11
Parameter	Units		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	180	188	15,000	2.5	
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	1.7				
1,1,2-Trichloroethane	UG/M3		NA	NA		NA
1,1-Dichloroethane	UG/M3	3.1			3.9	
1,1-Dichloroethene	UG/M3	1.9				
1,2,4-Trimethylbenzene	UG/M3	NA	19.2 J		NA	22.0 J
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3	140	67.8	6,560	0.79	
1,2-Dichloroethene (trans)	UG/M3	7.3				
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA			NA	
1,3-Dichlorobenzene	UG/M3	1.2			0.67	
1,4-Dichlorobenzene	UG/M3	0.69				
2,2,4-Trimethylpentane	UG/M3	NA			NA	
2-Hexanone	UG/M3	0.89	NA	NA		NA
4-Methyl-2-pentanone	UG/M3	6.9				
Acetone	UG/M3	260 J	NA	NA	84 J	NA
Benzene	UG/M3	11			3.0	
Bromodichloromethane	UG/M3					
Bromoform	UG/M3					
Carbon disulfide	UG/M3	140	NA	NA	0.98	NA
Carbon tetrachloride	UG/M3	7.6		793 J		

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-060	SG-060	SG-060	SG-061	SG-061
Sample ID		SG-60	DUP-061411	SG-60	SG-61	SG-61
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/08	06/14/11	06/14/11	05/20/08	06/15/11
Parameter	Units		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3	7.1				
Chloroform	UG/M3	150	170	14,200	0.81	
Chloromethane	UG/M3					
Cyclohexane	UG/M3	3.4			1.5	63.6
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	8.0			1.6	
Ethanol	UG/M3	NA	61.4	1,850 J	NA	93.7
Ethylbenzene	UG/M3	4.9			7.3	
Hexane	UG/M3	NA		3,900	NA	
Isopropylbenzene (Cumene)	UG/M3		NA	NA		NA
Methyl ethyl ketone (2-Butanone)	UG/M3	18			19	
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3	6.0	NA	NA	4.6	NA
Methylene chloride	UG/M3	9.4		3,040		
Styrene	UG/M3	0.99			0.69	
t-Butyl alcohol	UG/M3	NA			NA	
Tetrachloroethene	UG/M3	8,500 D	1,100,000	48,200,000	8.5	79,800
Toluene	UG/M3	100			62	16.3 J
Trichloroethene	UG/M3	560 D	2,640	220,000	2.1	94.7
Trichlorofluoromethane	UG/M3	23				
Vinyl chloride	UG/M3	7.6				
Xylene (total)	UG/M3	23			35	65.4

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-062	SG-062	SG-063	SG-063	SG-063
Sample ID		SG-62	SG-62	SG-63	DUP2-061511	SG-63
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/08	06/14/11	05/21/08	06/15/11	06/15/11
Parameter	Units				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	4.7	8.6			
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.78				
1,1,2-Trichloroethane	UG/M3		NA		NA	NA
1,1-Dichloroethane	UG/M3			22	29.8	38.9
1,1-Dichloroethene	UG/M3			1.5		
1,2,4-Trimethylbenzene	UG/M3	NA	44.7	NA		4.6
1,2-Dichlorobenzene	UG/M3					5.0
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3			23	134	108
1,2-Dichloroethene (trans)	UG/M3			4.9		15.3
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	NA	10.2	NA		
1,3-Dichlorobenzene	UG/M3	1.3		1.6		
1,4-Dichlorobenzene	UG/M3	0.66		0.63		
2,2,4-Trimethylpentane	UG/M3	NA	0.91 J	NA		119
2-Hexanone	UG/M3	3.6	NA		NA	NA
4-Methyl-2-pentanone	UG/M3	7.1				
Acetone	UG/M3	400 D	NA	170 J	NA	NA
Benzene	UG/M3	4.2	2.8	20	41.2	49.1
Bromodichloromethane	UG/M3					
Bromoform	UG/M3					
Carbon disulfide	UG/M3	15	NA	0.82	NA	NA
Carbon tetrachloride	UG/M3					

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-062	SG-062	SG-063	SG-063	SG-063
Sample ID		SG-62	SG-62	SG-63	DUP2-061511	SG-63
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/08	06/14/11	05/21/08	06/15/11	06/15/11
Parameter	Units				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3			7.0	43.2	11.4
Chloroform	UG/M3	0.61				
Chloromethane	UG/M3	0.67				
Cyclohexane	UG/M3	1.4		330 D	3,300	3,600
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	6.9				
Ethanol	UG/M3	NA	66.7	NA		48.0
Ethylbenzene	UG/M3	6.0	38.9	3.1		
Hexane	UG/M3	NA	1.7	NA		91.6
Isopropylbenzene (Cumene)	UG/M3		NA		NA	NA
Methyl ethyl ketone (2-Butanone)	UG/M3	62	10.8	83		53.5
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3	4.0	NA	90 D	NA	NA
Methylene chloride	UG/M3					
Styrene	UG/M3	0.79		0.57		
t-Butyl alcohol	UG/M3	NA		NA		
Tetrachloroethene	UG/M3	11	35.0	69	258	208
Toluene	UG/M3	77	121	31		6.4
Trichloroethene	UG/M3	0.72	71.6	8.1	56.2	62.2
Trichlorofluoromethane	UG/M3	16	2.8			
Vinyl chloride	UG/M3			67	666	48.7
Xylene (total)	UG/M3	28	173	14		4.5 J

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID		SG-78	SG-79	SG-80	SG-81	SG-82
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/11	06/14/11	06/14/11	06/14/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3		29.7		27.8 J	
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1,2-Trichloroethane	UG/M3	NA	NA	NA	NA	NA
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	53.7	180	33.4	20.2 J	17.1 J
1,2-Dichlorobenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,2-Dichloroethene (trans)	UG/M3					
1,2-Dichloropropane	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	14.9	47.4			
1,3-Dichlorobenzene	UG/M3		4.0			
1,4-Dichlorobenzene	UG/M3	6.9	7.3			
2,2,4-Trimethylpentane	UG/M3	69.0	52.3			
2-Hexanone	UG/M3	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/M3					
Acetone	UG/M3	NA	NA	NA	NA	NA
Benzene	UG/M3	110	93.2			
Bromodichloromethane	UG/M3					
Bromoform	UG/M3					
Carbon disulfide	UG/M3	NA	NA	NA	NA	NA
Carbon tetrachloride	UG/M3		1.2			

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID		SG-78	SG-79	SG-80	SG-81	SG-82
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/11	06/14/11	06/14/11	06/14/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chlorobenzene	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3					
Chloromethane	UG/M3					
Cyclohexane	UG/M3	43.2	430 J			
Dibromochloromethane	UG/M3					
Dichlorodifluoromethane	UG/M3	25.3				
Ethanol	UG/M3	266 J	292	12,200 J	65.7	71.8
Ethylbenzene	UG/M3	110	127			
Hexane	UG/M3	56.0	24.5			
Isopropylbenzene (Cumene)	UG/M3	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/M3	23.1	5.2			
Methyl tert-butyl ether	UG/M3					
Methylcyclohexane	UG/M3	NA	NA	NA	NA	NA
Methylene chloride	UG/M3			37.9		
Styrene	UG/M3	4.8				
t-Butyl alcohol	UG/M3		3.4			
Tetrachloroethene	UG/M3	48.4	21,000	1,670	22,100	6,370
Toluene	UG/M3	1,090	467	171	63.7	152
Trichloroethene	UG/M3			74.9	776	208
Trichlorofluoromethane	UG/M3					
Vinyl chloride	UG/M3					
Xylene (total)	UG/M3	352	474	191	113	184

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.



**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-084	SG-085	SG-086	SG-087
Sample ID		SG-84	SG-85	SG-86	SG-87
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-
Date Sampled		06/15/11	06/15/11	06/15/11	06/15/11
Parameter	Units				
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	UG/M3			295 J	
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3				
1,1,2-Trichloroethane	UG/M3	NA	NA	NA	NA
1,1-Dichloroethane	UG/M3				
1,1-Dichloroethene	UG/M3			1,290	
1,2,4-Trimethylbenzene	UG/M3		59.9 J		
1,2-Dichlorobenzene	UG/M3				
1,2-Dichloroethane	UG/M3				
1,2-Dichloroethene (cis)	UG/M3				
1,2-Dichloroethene (trans)	UG/M3				
1,2-Dichloropropane	UG/M3				169
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3				
1,3-Dichlorobenzene	UG/M3				
1,4-Dichlorobenzene	UG/M3				
2,2,4-Trimethylpentane	UG/M3				
2-Hexanone	UG/M3	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/M3				
Acetone	UG/M3	NA	NA	NA	NA
Benzene	UG/M3				
Bromodichloromethane	UG/M3				
Bromoform	UG/M3				
Carbon disulfide	UG/M3	NA	NA	NA	NA
Carbon tetrachloride	UG/M3				

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-11**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-084	SG-085	SG-086	SG-087
Sample ID		SG-84	SG-85	SG-86	SG-87
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-
Date Sampled		06/15/11	06/15/11	06/15/11	06/15/11
Parameter	Units				
<b>Volatile Organic Compounds</b>					
Chlorobenzene	UG/M3				
Chloroethane	UG/M3				
Chloroform	UG/M3				
Chloromethane	UG/M3				
Cyclohexane	UG/M3				
Dibromochloromethane	UG/M3				
Dichlorodifluoromethane	UG/M3				
Ethanol	UG/M3		259	3,840	1,310
Ethylbenzene	UG/M3				
Hexane	UG/M3		581	978	1,960
Isopropylbenzene (Cumene)	UG/M3	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/M3				
Methyl tert-butyl ether	UG/M3				
Methylcyclohexane	UG/M3	NA	NA	NA	NA
Methylene chloride	UG/M3	2,820	1,690	3,140	6,640
Styrene	UG/M3				
t-Butyl alcohol	UG/M3				
Tetrachloroethene	UG/M3	282,000	7,460	69,500	2,190
Toluene	UG/M3		198	222 J	264
Trichloroethene	UG/M3		114	899	
Trichlorofluoromethane	UG/M3		256		
Vinyl chloride	UG/M3				
Xylene (total)	UG/M3				

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis. Blank cell or ND - Not Detected. NA - Not analyzed.

Only Detected Results Reported.

**TABLE 4-12**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value
				Min	Max	Avg	
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/M3	74	50	2.00	1.69E+04	1,171	SG-042
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	74	34	0.780	1,520	81.51	SG-049
1,1,2-Trichloroethane	UG/M3	40	2	0.440	39.00	19.72	SG-016
1,1-Dichloroethane	UG/M3	74	34	0.240	2,000	89.98	SG-040
1,1-Dichloroethene	UG/M3	74	22	0.710	1,290	86.62	SG-086
1,2,4-Trimethylbenzene	UG/M3	34	17	4.60	180.0	47.65	SG-079
1,2-Dichlorobenzene	UG/M3	74	1	5.00	5.00	5.00	SG-063
1,2-Dichloroethane	UG/M3	74	1	49.00	49.00	49.00	SG-045
1,2-Dichloroethene (cis)	UG/M3	74	29	0.360	4.37E+05	1.70E+04	SG-049
1,2-Dichloroethene (trans)	UG/M3	74	21	0.480	1,420	119.4	SG-049
1,2-Dichloropropane	UG/M3	74	1	169.0	169.0	169.0	SG-087
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	34	6	10.20	47.40	23.67	SG-079
1,3-Dichlorobenzene	UG/M3	74	22	0.300	7.90	1.68	SG-019
1,4-Dichlorobenzene	UG/M3	74	18	0.300	7.30	1.78	SG-079
2,2,4-Trimethylpentane	UG/M3	34	8	0.910	400.0	138.5	SG-021
2-Hexanone	UG/M3	40	12	0.450	11.00	2.70	SG-021
4-Methyl-2-pentanone	UG/M3	74	24	0.700	24.90	4.53	SG-055
Acetone	UG/M3	40	32	4.10	400.0	81.34	SG-062

Only Detected Results Reported.

**TABLE 4-12**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value
				Min	Max	Avg	
<b>Volatile Organic Compounds</b>							
Benzene	UG/M3	74	48	0.480	241.0	23.11	SG-021
Bromodichloromethane	UG/M3	74	10	0.600	12.00	3.54	SG-021
Bromoform	UG/M3	74	4	51.90	6,410	2,087	SG-058
Carbon disulfide	UG/M3	40	27	0.820	140.0	16.95	SG-060
Carbon tetrachloride	UG/M3	74	28	0.500	2,430	187.0	SG-049
Chlorobenzene	UG/M3	74	2	0.490	0.510	0.500	SG-019
Chloroethane	UG/M3	74	10	1.40	44.00	12.81	SG-040
Chloroform	UG/M3	74	42	0.610	1.42E+04	454.9	SG-060
Chloromethane	UG/M3	74	7	0.290	0.930	0.606	SG-017
Cyclohexane	UG/M3	74	30	0.280	1.63E+04	1,025	SG-043
Dibromochloromethane	UG/M3	74	1	25.40	25.40	25.40	SG-046
Dichlorodifluoromethane	UG/M3	74	37	0.490	25.30	4.64	SG-078
Ethanol	UG/M3	34	26	31.30	1.22E+04	847.7	SG-080
Ethylbenzene	UG/M3	74	40	0.690	127.0	17.79	SG-079
Hexane	UG/M3	34	15	1.70	8,000	1,165	SG-043
Isopropylbenzene (Cumene)	UG/M3	40	2	0.790	1.30	1.05	SG-057
Methyl ethyl ketone (2-Butanone)	UG/M3	74	42	1.70	150.0	20.55	SG-056
Methyl tert-butyl ether	UG/M3	74	4	0.500	4.60	2.75	SG-020

Only Detected Results Reported.

**TABLE 4-12**  
**STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN ALL SOIL GAS SAMPLES**  
**FORMER KLINK COSMO CLEANERS SITE**

Parameter	Units	No. of Samples	No. of Detections	Range of Detections			Location of Max Value
				Min	Max	Avg	
<b>Volatile Organic Compounds</b>							
Methylcyclohexane	UG/M3	40	22	0.880	530.0	51.01	SG-016
Methylene chloride	UG/M3	74	30	0.380	6,640	642.1	SG-087
Styrene	UG/M3	74	29	0.300	16.80	3.93	SG-046
t-Butyl alcohol	UG/M3	34	2	3.40	35.50	19.45	SG-059
Tetrachloroethene	UG/M3	74	74	8.50	4.82E+07	8.73E+05	SG-060
Toluene	UG/M3	74	60	1.10	1,090	82.55	SG-078
Trichloroethene	UG/M3	74	59	0.720	2.30E+05	8,267	SG-049
Trichlorofluoromethane	UG/M3	74	40	0.560	5,270	393.2	SG-057
Vinyl chloride	UG/M3	74	17	0.560	1,450	197.8	SG-049
Xylene (total)	UG/M3	74	53	2.30	474.0	66.39	SG-079

Only Detected Results Reported.

**Table 5-1**  
**Klink Cosmo Indicator Parameters**

Well I.D.	Purge Date	RI Phase	Type	pH	Temp (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)
DEC-004	6/24/2011	1	Purge Log	7.41	17.4	2.01	14.25	60.1	-46
DEC-006D	6/20/2011	1	Purge Log	6.4	16.79	1.08	2.07	16.1	133
DEC-006DD	6/20/2011	1	Purge Log	6.44	17.86	1.12	0.68	0	72
DEC-007	6/21/2011	1	Purge Log	6.82	17.7	1.07	5.13	45	92
DEC-007D	6/21/2011	1	Purge Log	6.67	17.76	1.4	0.47	0	68
DEC-008	6/23/2011	1	Purge Log	7.13	17.28	1.69	16.55	0	117
DEC-009	6/23/2011	1	Purge Log	6.84	17.95	1.42	7.6	18.1	-26
DEC-010	6/21/2011	1	Purge Log	6.29	17.9	1.76	9.75	0	204
DEC-011	6/21/2011	1	Purge Log	6.6	17.2	2.03	14.9	0	193
DEC-012	6/22/2011	1	Purge Log	6.78	17.61	0.835	16.19	45.1	153
DEC-013 <sup>1</sup>	6/23/2011	1	Purge Log	7.09	16.53	0.759	12.44	72.7	155
DEC-013D	6/23/2011	1	Purge Log	6.92	16.42	1.33	12.18	0	-38
DEC-014R	6/3/2011	1	Purge Log	6.65	17.26	1.55	7.46	15.2	-35
DEC-014D	6/23/2011	1	Purge Log	6.64	13.85	1.4	1.58	0	23
DEC-015	6/22/2011	1	Purge Log	6.87	17.46	1.89	3.09	90.1	185
DEC-015D	6/22/2011	1	Purge Log	6.78	17.44	1.25	0.21	0	42
DEC-022D	6/22/2011	1	Purge Log	7.02	17.74	1.33	5.95	11.8	147
DEC-007	6/24/2011	1	Purge Log	6.65	17.14	1.16	6.31	1.9	225
DEC-028	6/21/2011	1	Purge Log	6.83	18.04	1.46	4.23	7.3	177
DEC-029	6/23/2011	1	Purge Log	7.29	16.75	0.932	13	>800	178
DEC-029D	6/23/2011	1	Purge Log	6.8	16.61	1.44	7.26	0	55
DEC-030D	6/20/2011	1	Purge Log	6.36	17.16	1.31	12.52	9.2	197
DEC-030D	6/20/2011	1	Purge Log	6.47	16.96	1.37	7.1	29.7	32
DEC-031	6/21/2011	1	Purge Log	6.57	18.57	0.898	8.57	45	142
DEC-031D	6/21/2011	1	Purge Log	6.46	18.44	1.7	10.33	9.6	7
DEC-032	6/23/2011	1	Purge Log	7.18	18.14	0.346	5.82	35.84	-46
DEC-033	6/21/2011	1	Purge Log	6.55	23.74	2.53	5	137	64
DEC-039	6/24/2011	1	Purge Log	6.69	16.76	0.955	8.67	17.1	237
DEC-042	6/23/2011	1	Purge Log	6.95	16.81	0.866	14.73	17.3	178
DEC-043	6/22/2011	1	Purge Log	6.84	15.58	0.839	5.27	21.7	172
DEC-043D	6/22/2011	1	Purge Log	6.9	15.93	1.35	10.73	0	-46

**Table 5-1**  
**Klink Cosmo Indicator Parameters**

Well I.D.	Purge Date	RI Phase	Type	pH	Temp (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)
DEC-044	6/23/2011	1	Purge Log	6.65	18.1	0.549	17.9	12.5	150
DEC-044D	6/23/2011	1	Purge Log	6.76	17.67	2	10.71	0	29
DEC-045	6/21/2011	1	Purge Log	6.72	18.61	1.29	12.94	24.8	192
DEC-045D	6/21/2011	1	Purge Log	6.76	17.96	1.6	10.87	0	2
DEC-046	6/21/2011	1	Purge Log	6.72	18.03	1.04	7.18	14.9	247
DEC-047	6/21/2011	1	Purge Log	6.54	16.8	1.58	4.05	0	89
DEC-048	6/24/2011	1	Purge Log	6.64	18.67	1.02	1.47	4.9	55
DEC-064	6/20/2011	1	Purge Log	6.65	17	1.44	2.95	0	63
DEC-064D	6/20/2011	1	Purge Log	6.41	19.21	1.23	2.54	0	105
DEC-065	6/22/2011	1	Purge Log	7.28	18.21	642	12.06	0	-14
DEC-065D	6/22/2011	1	Purge Log	6.62	17.72	1.33	11.52	0	57
DEC-066	6/22/2011	1	Purge Log	6.96	19.35	0.522	<sup>2</sup>	36	-27
DEC-066D	6/22/2011	1	Purge Log	6.54	17.74	1.4	0.99	0	39
Max				7.41	23.74	642	17.9	137	247
Min				6.29	13.85	0.346	0.21	0	-46

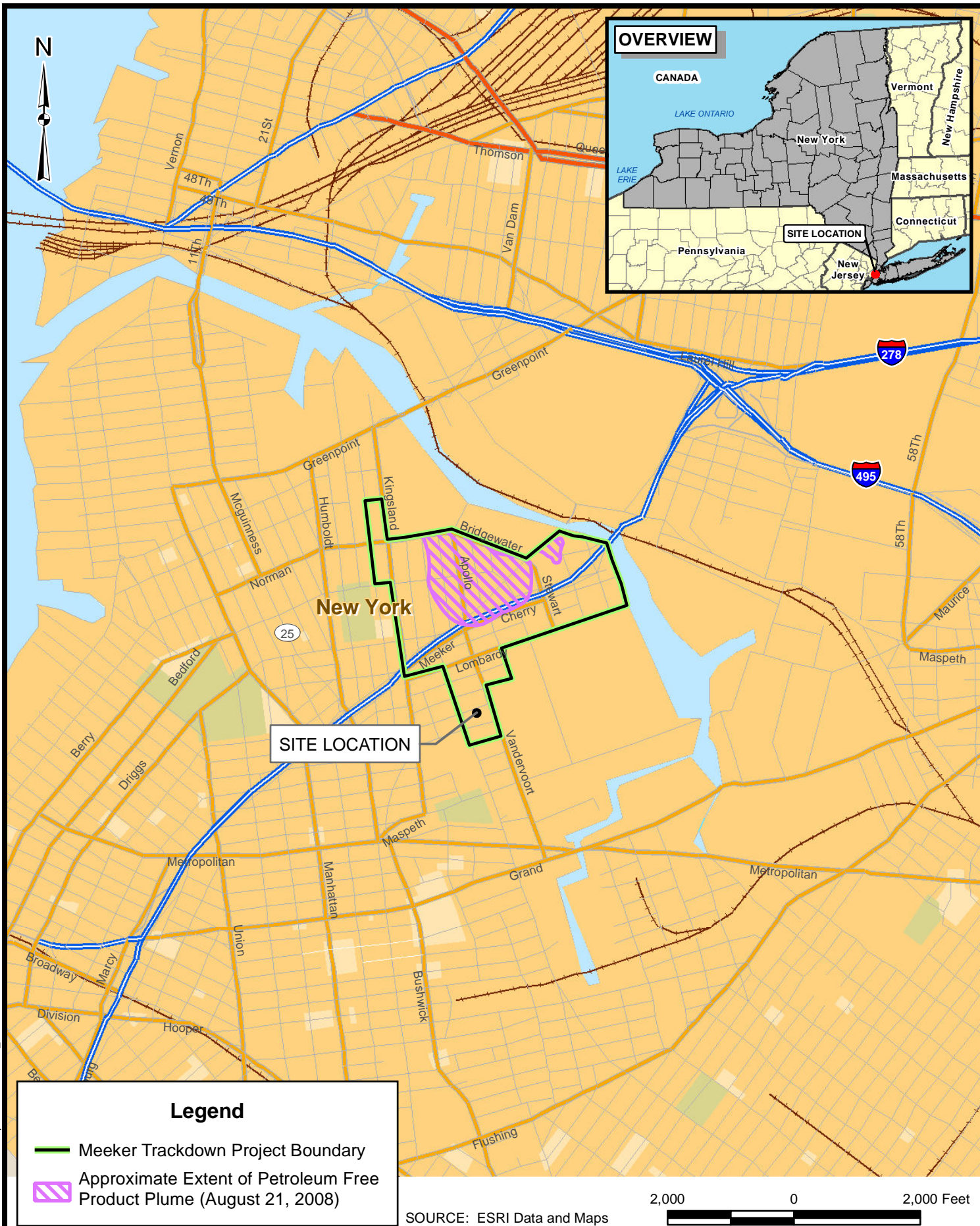
Notes:

<sup>1</sup> Slight petroleum sheen, no odor

<sup>2</sup> DO probe possibly not working properly

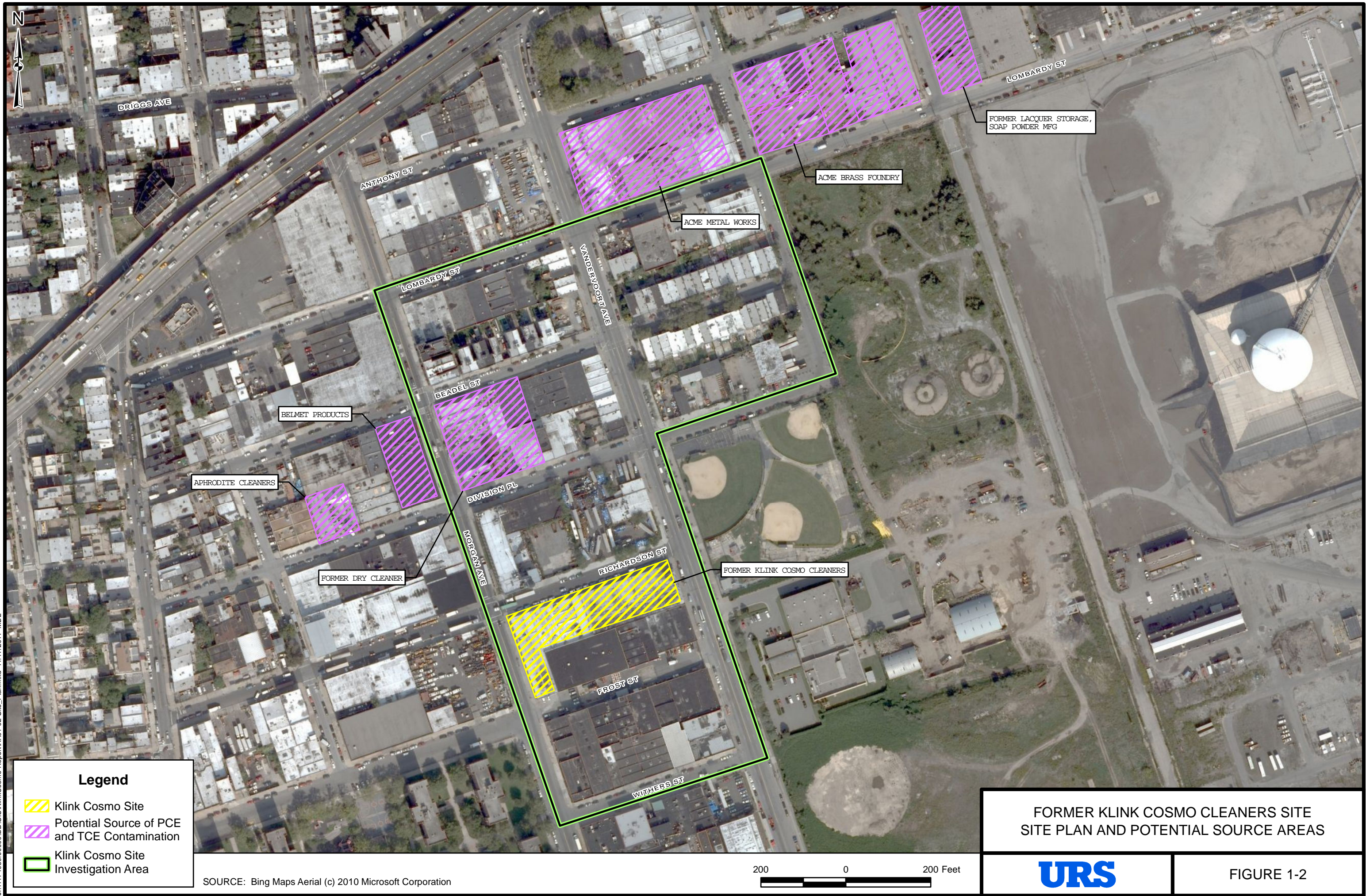
## FIGURES







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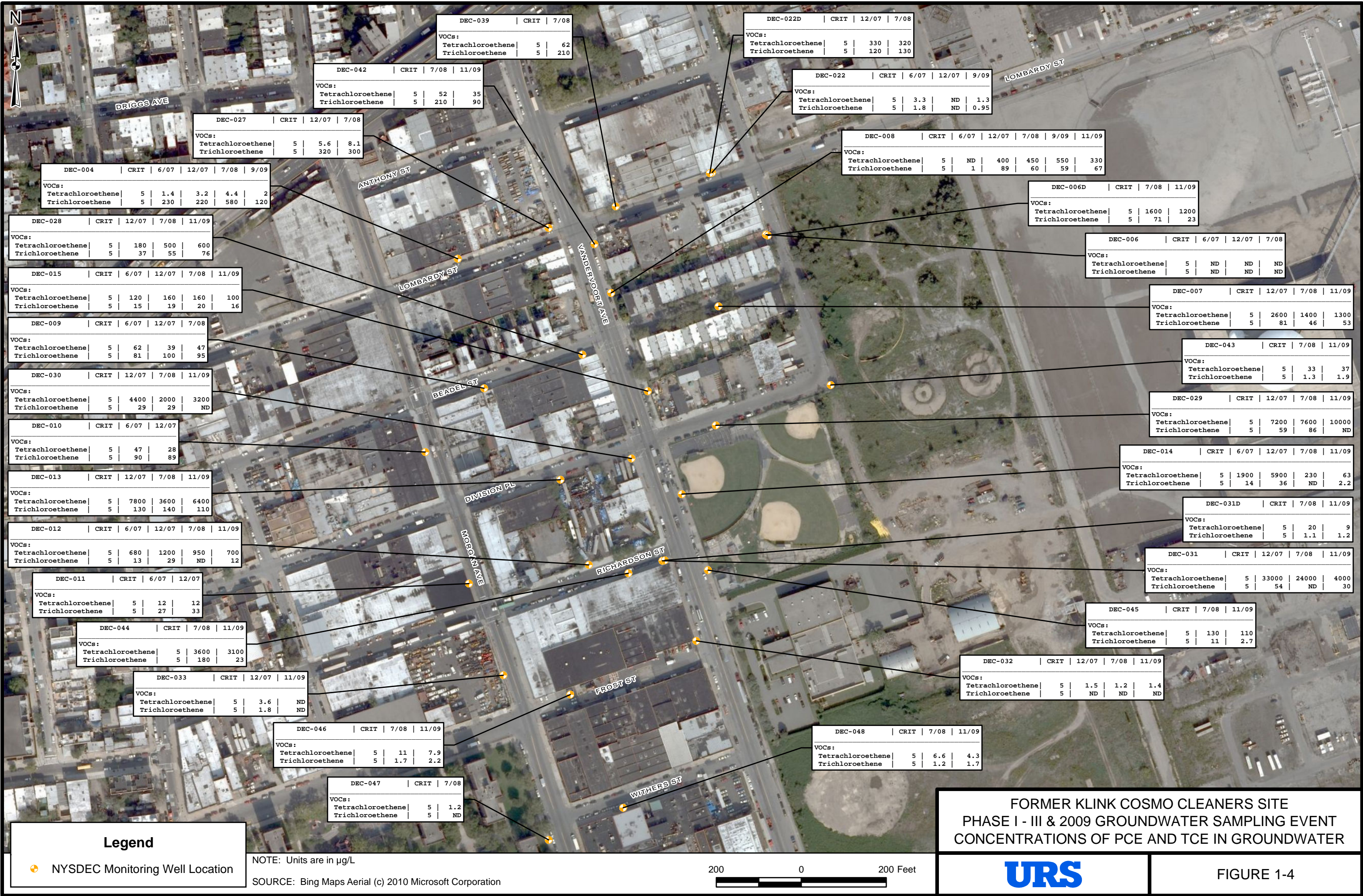


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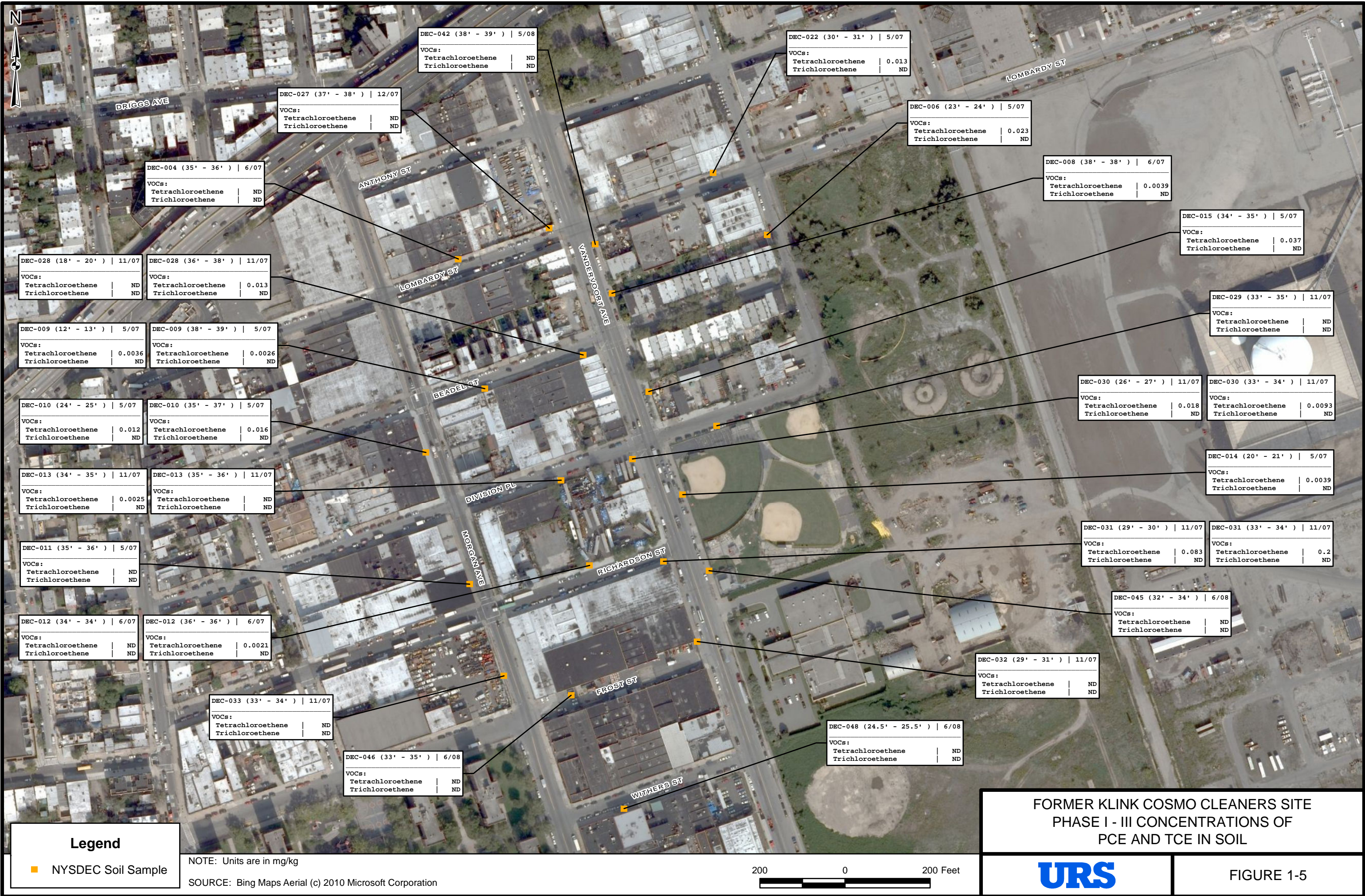


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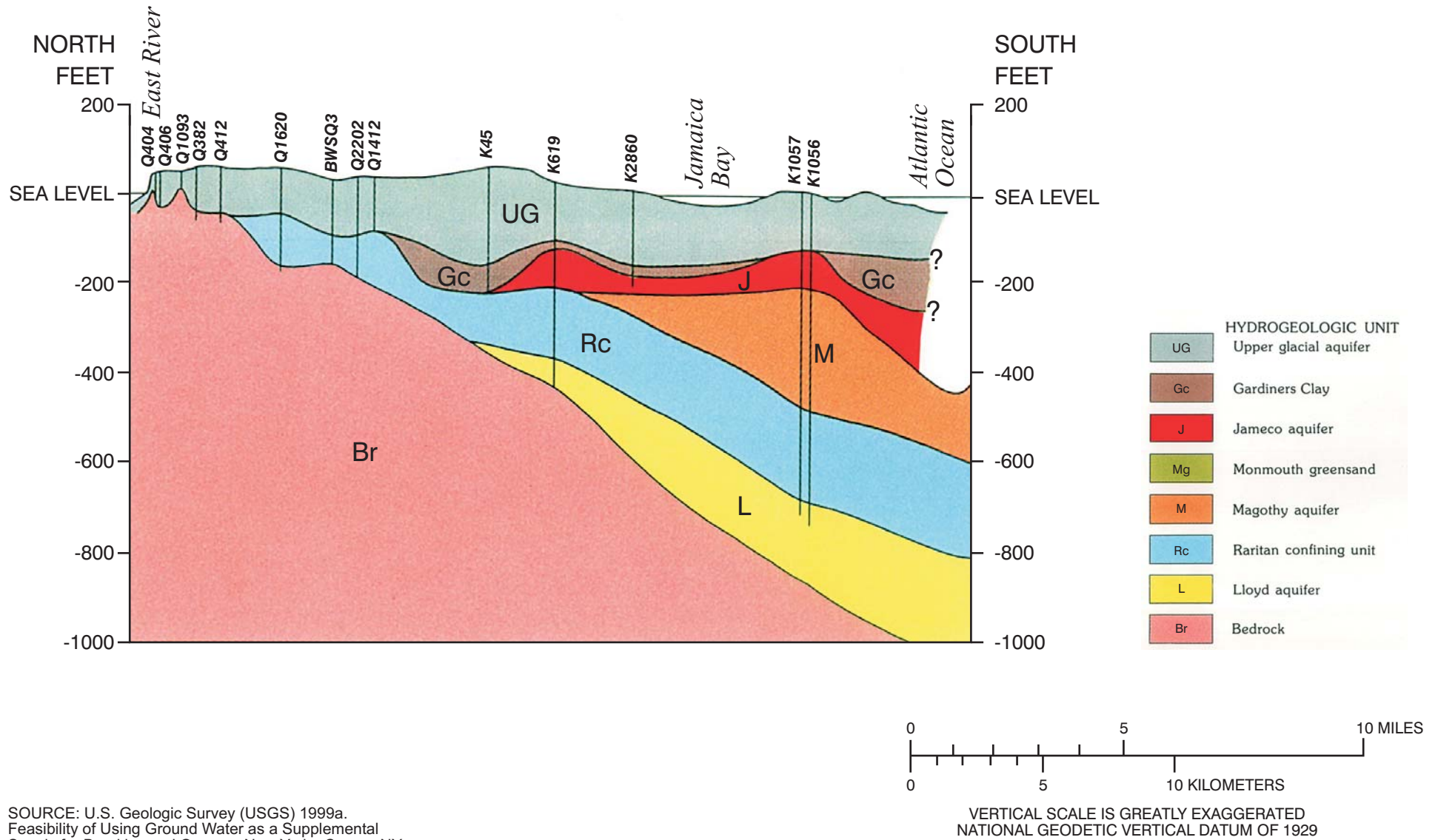




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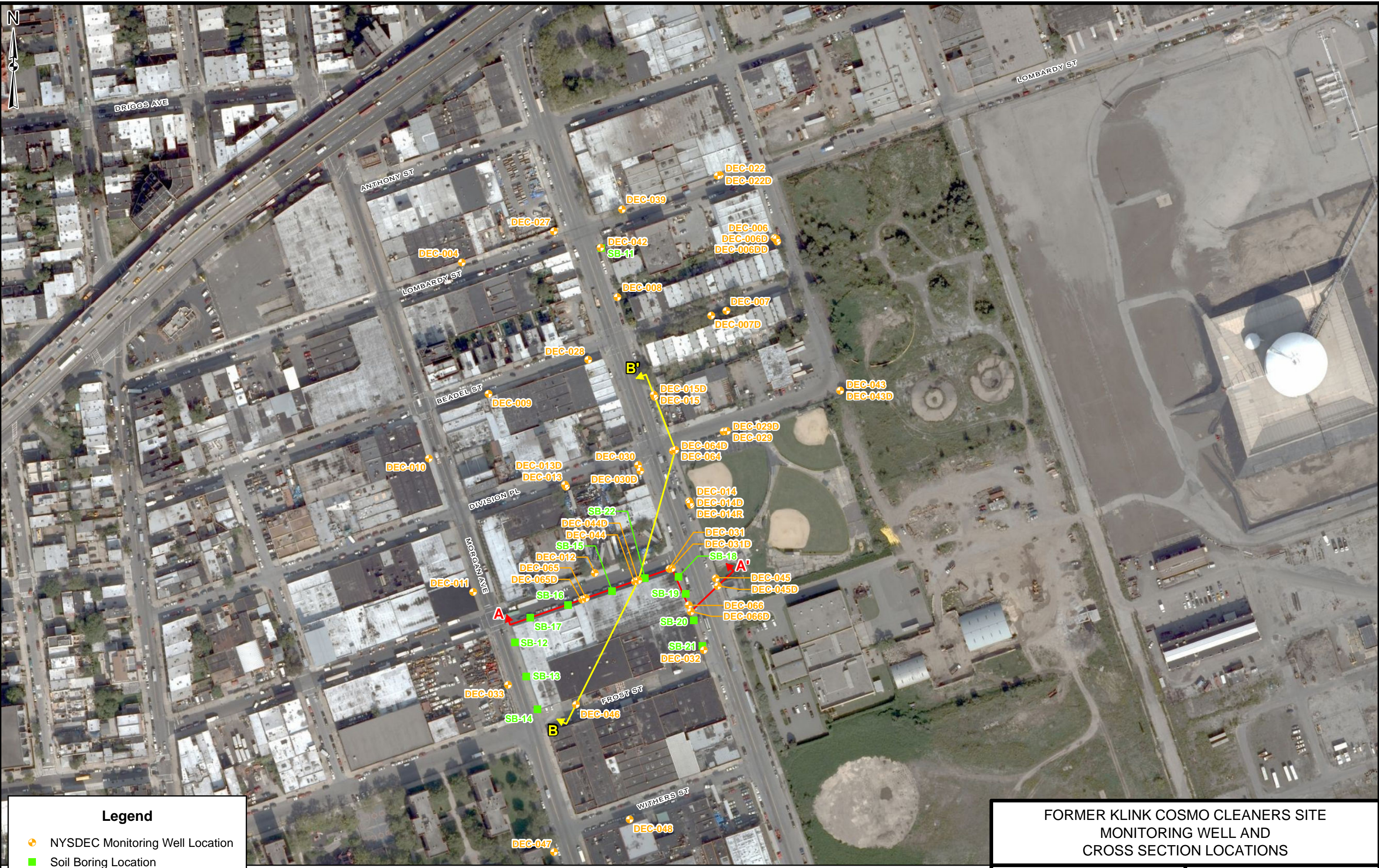








J:\1174989.0000\B\GIS\KlinkCosmo-Report\03-02 MW\_and\_Cross-Section\_Locations.mxd 9/12/2011 MDL



**Legend**

- NYSDEC Monitoring Well Location
- Soil Boring Location
- Cross-Section Location

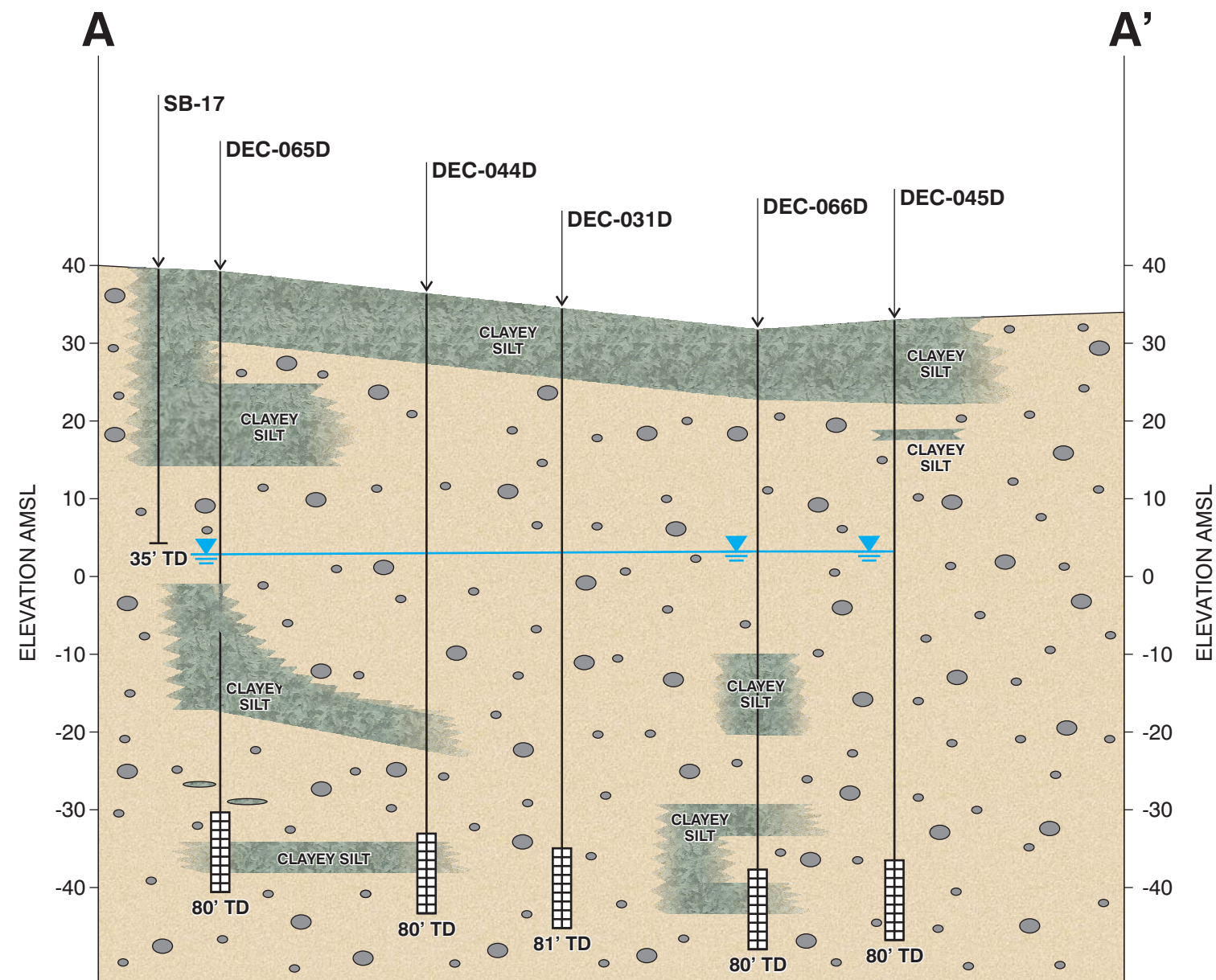
SOURCE: Bing Maps Aerial (c) 2010 Microsoft Corporation

FORMER KLINK COSMO CLEANERS SITE  
MONITORING WELL AND  
CROSS SECTION LOCATIONS



FIGURE 3-2





**NOTES:**

1. Geologic conditions shown are representative of conditions encountered at each boring location to the depth drilled. Extrapolations between borings have been interpreted using standardly accepted geologic practices and principles. Actual conditions may vary between borings from those shown.
2. Elevations based on North American Vertical Datum, 1988.

FORMER  
KLINK COSMO CLEANERS SITE  
CROSS SECTION A-A'

**URS**

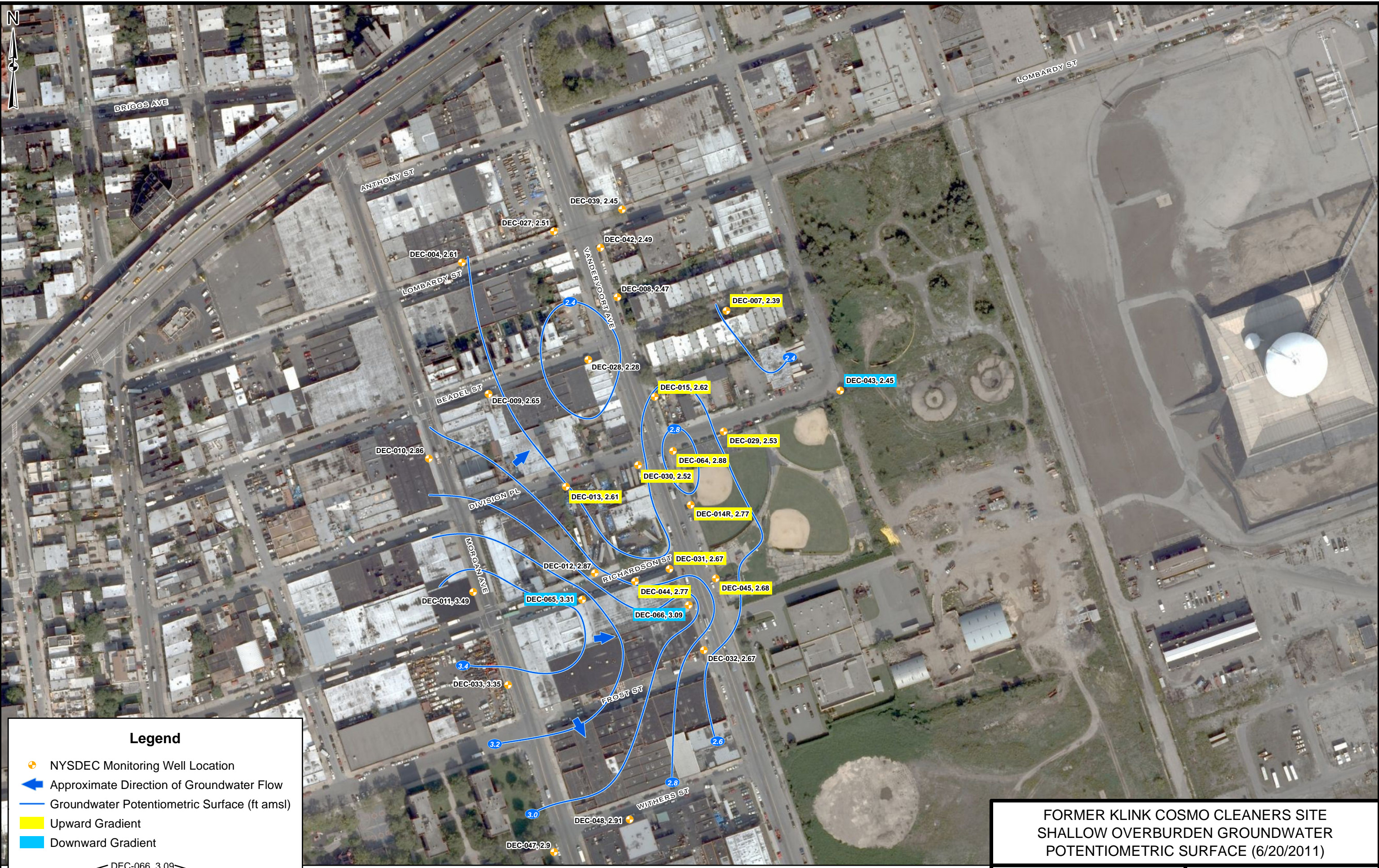
FIGURE 3-3







J:\1174989.00000\DB\GIS\KlinkCosmo-Report\103-05 GW\_Elev\_Shallow\_110620.mxd 8/23/2011 MDL



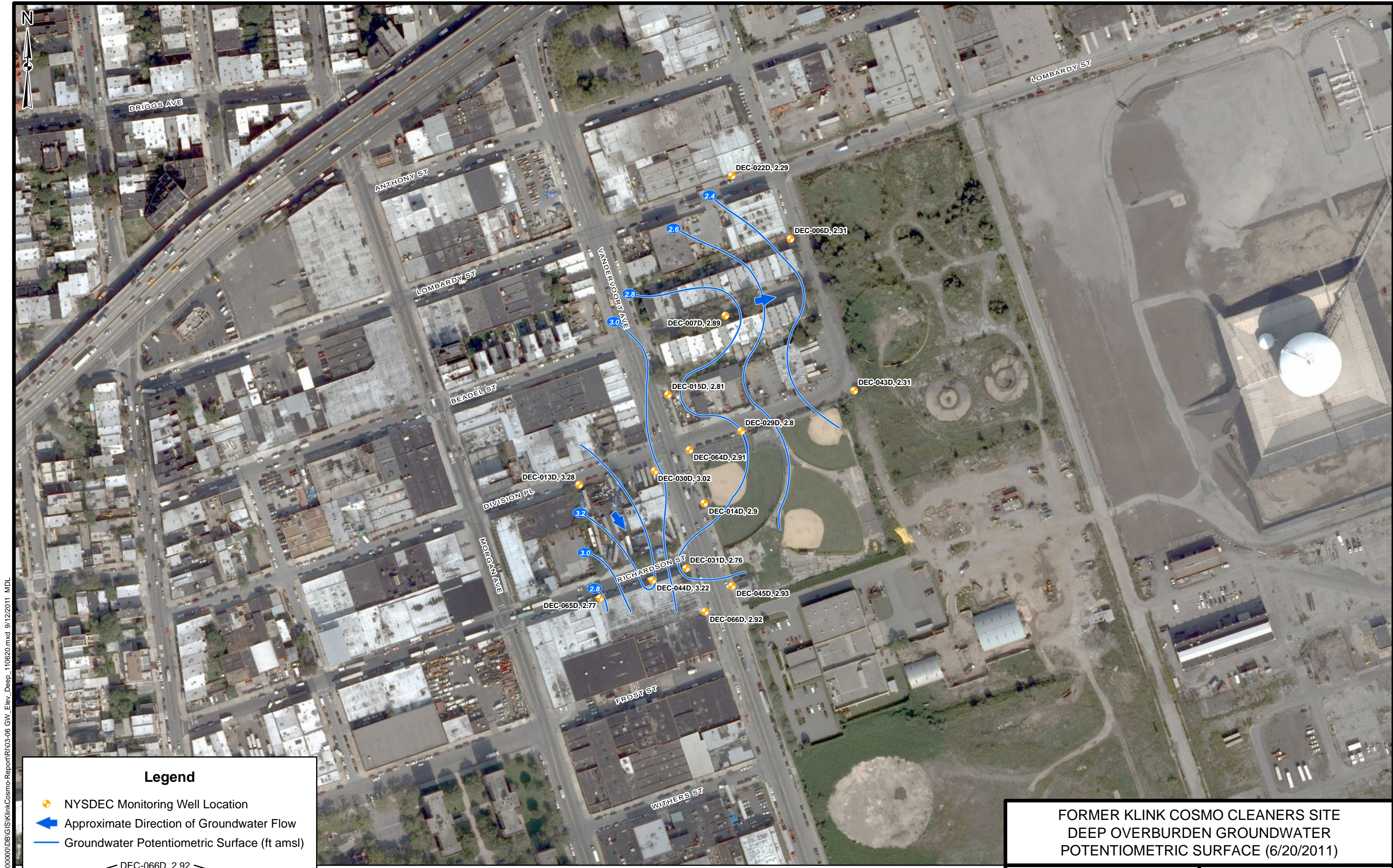
FORMER KLINK COSMO CLEANERS SITE  
SHALLOW OVERBURDEN GROUNDWATER  
POTENTIOMETRIC SURFACE (6/20/2011)



FIGURE 3-5

SOURCE: Bing Maps Aerial (c) 2010 Microsoft Corporation





J:\1174989.00000\B\GIS\KlinkCosmo-Report\R103-06 GW\_Elev\_Deep\_110620.mxd 9/12/2011 MDL

**Legend**

- NYSDEC Monitoring Well Location
  - ➔ Approximate Direction of Groundwater Flow
  - Groundwater Potentiometric Surface (ft amsl)
- Well ID

DEC-066D, 2.92

Groundwater Elevation

SOURCE: Bing Maps Aerial (c) 2010 Microsoft Corporation

FORMER KLINK COSMO CLEANERS SITE  
DEEP OVERBURDEN GROUNDWATER  
POTENTIOMETRIC SURFACE (6/20/2011)



FIGURE 3-6



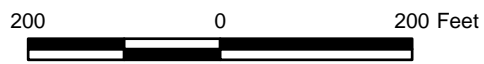
J:\1174989.00000\DB\GIS\KlinkCosmo-Report\104-01A SO\_Analytical.mxd 8/22/2011 MDL



Legend

NYSDEC Soil Sample

NOTES: Units are in mg/kg; CRIT 1 = Unrestricted Use Criteria; CRIT 2 = Protection of Groundwater Use Criteria  
SOURCE: Bing Maps Aerial (c) 2010 Microsoft Corporation



FORMER KLINK COSMO CLEANERS SITE  
SOIL ANALYTICAL RESULTS EXCEEDING UNRESTRICTED  
USE AND PROTECTION OF GROUNDWATER CRITERIA

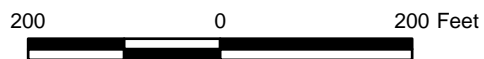
FIGURE 4-1A



J:\1174989.00000\DB\GIS\KlinkCosmo-Report\104-01B SO\_Analytical.mxd 8/22/2011 MDL



NOTES: Units are in mg/kg; CRIT 1 = Residential Use Criteria; CRIT 2 = Restricted Residential Use Criteria  
SOURCE: Bing Maps Aerial (c) 2010 Microsoft Corporation



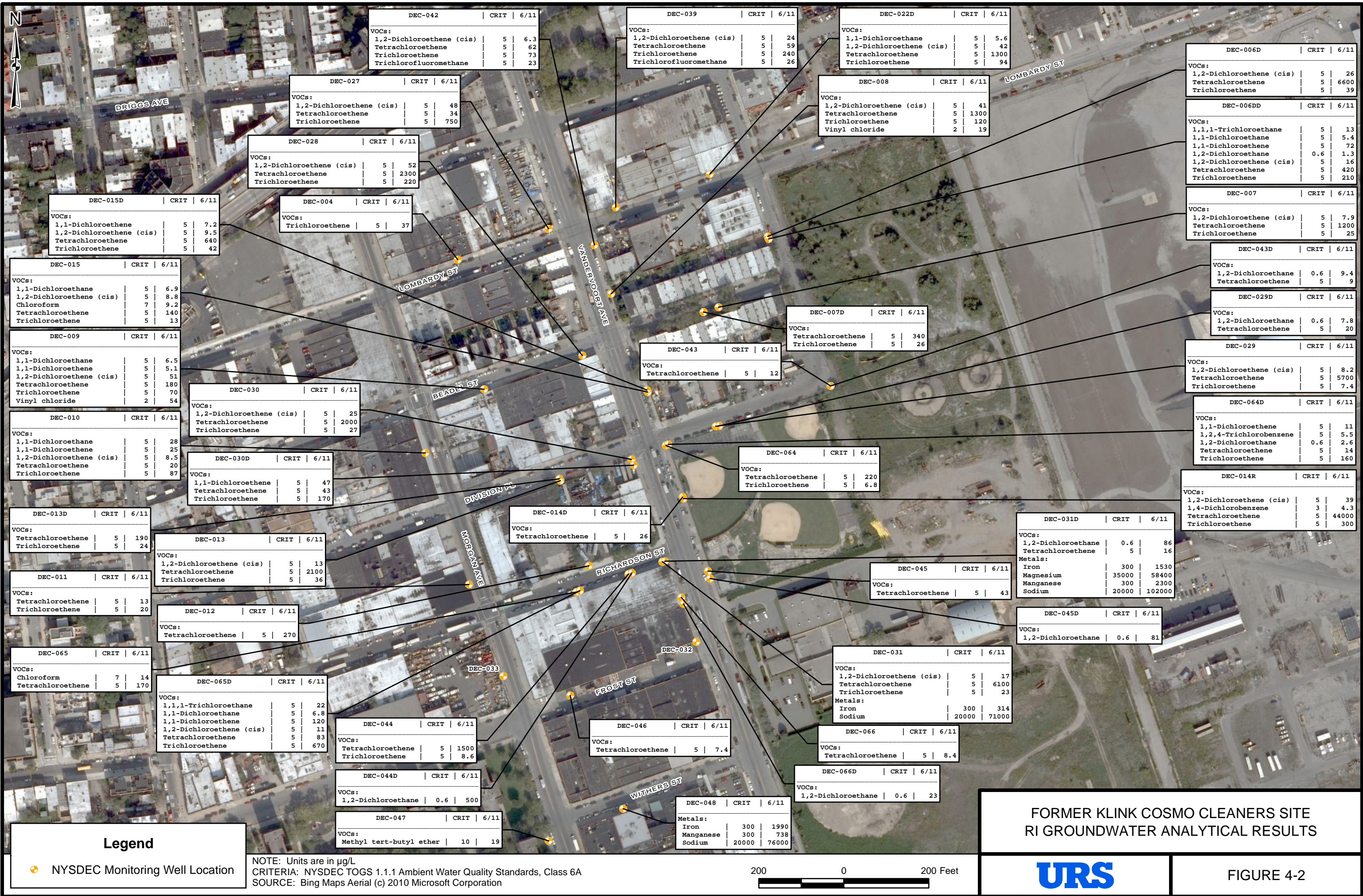
FORMER KLINK COSMO CLEANERS SITE  
SOIL ANALYTICAL RESULTS EXCEEDING RESIDENTIAL USE  
AND RESTRICTED RESIDENTIAL USE CRITERIA



FIGURE 4-1B



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J:\1174989.0000\0000\GIS\KlinkCosmo-Report\104-03 PCE\_and\_TCE\_Shallow\_GW.mxd 9/12/2011 MDL



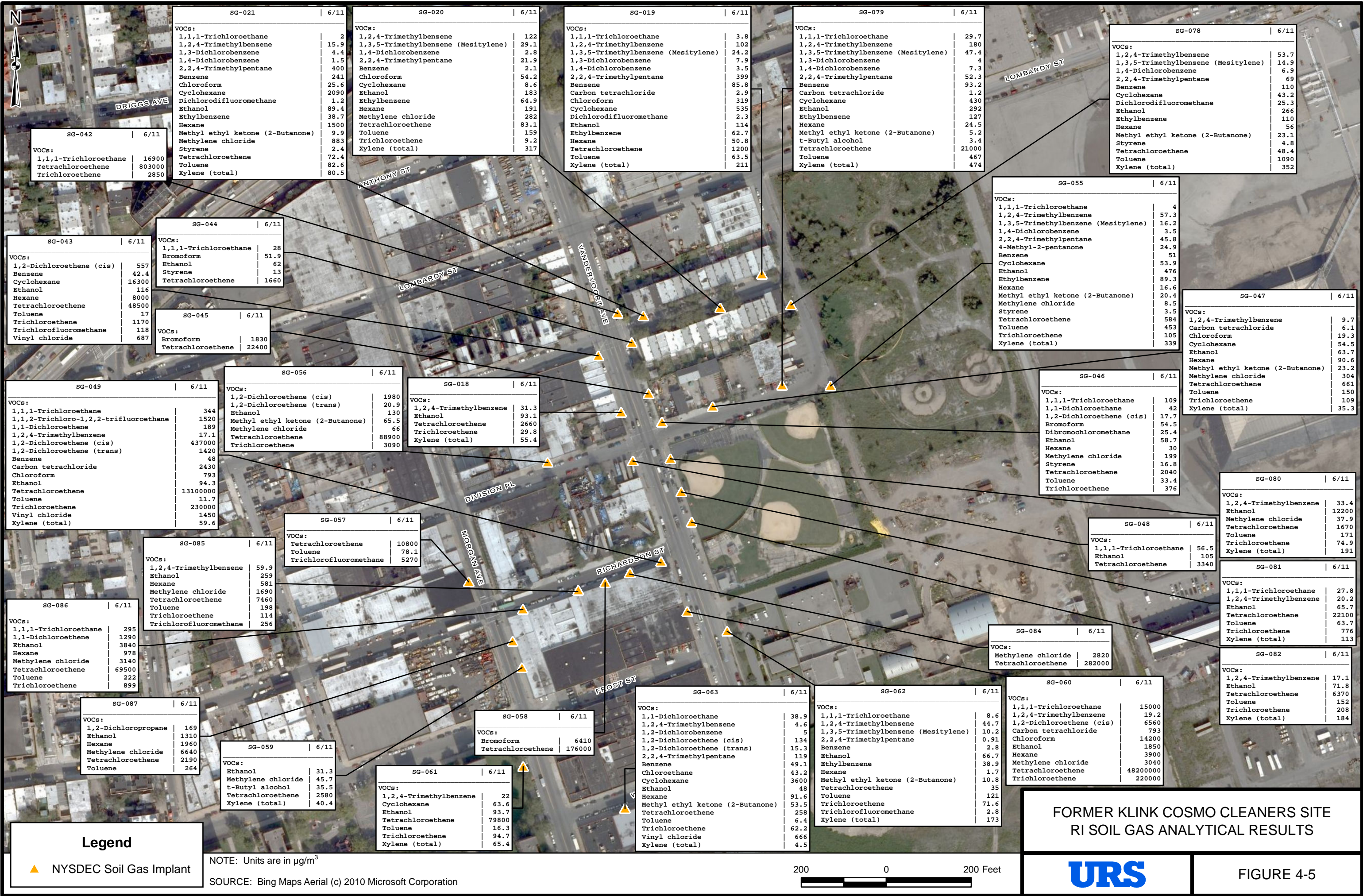


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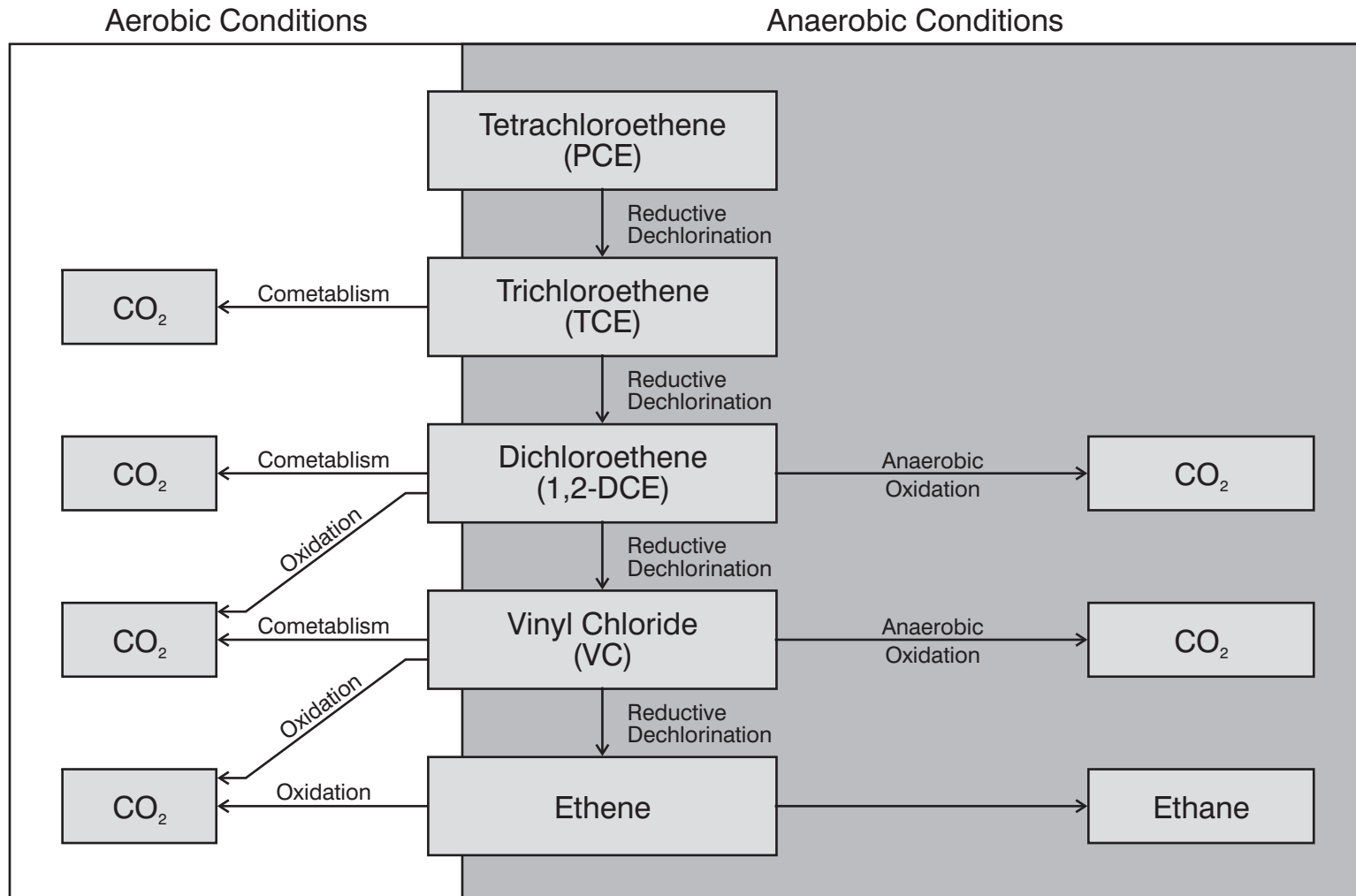




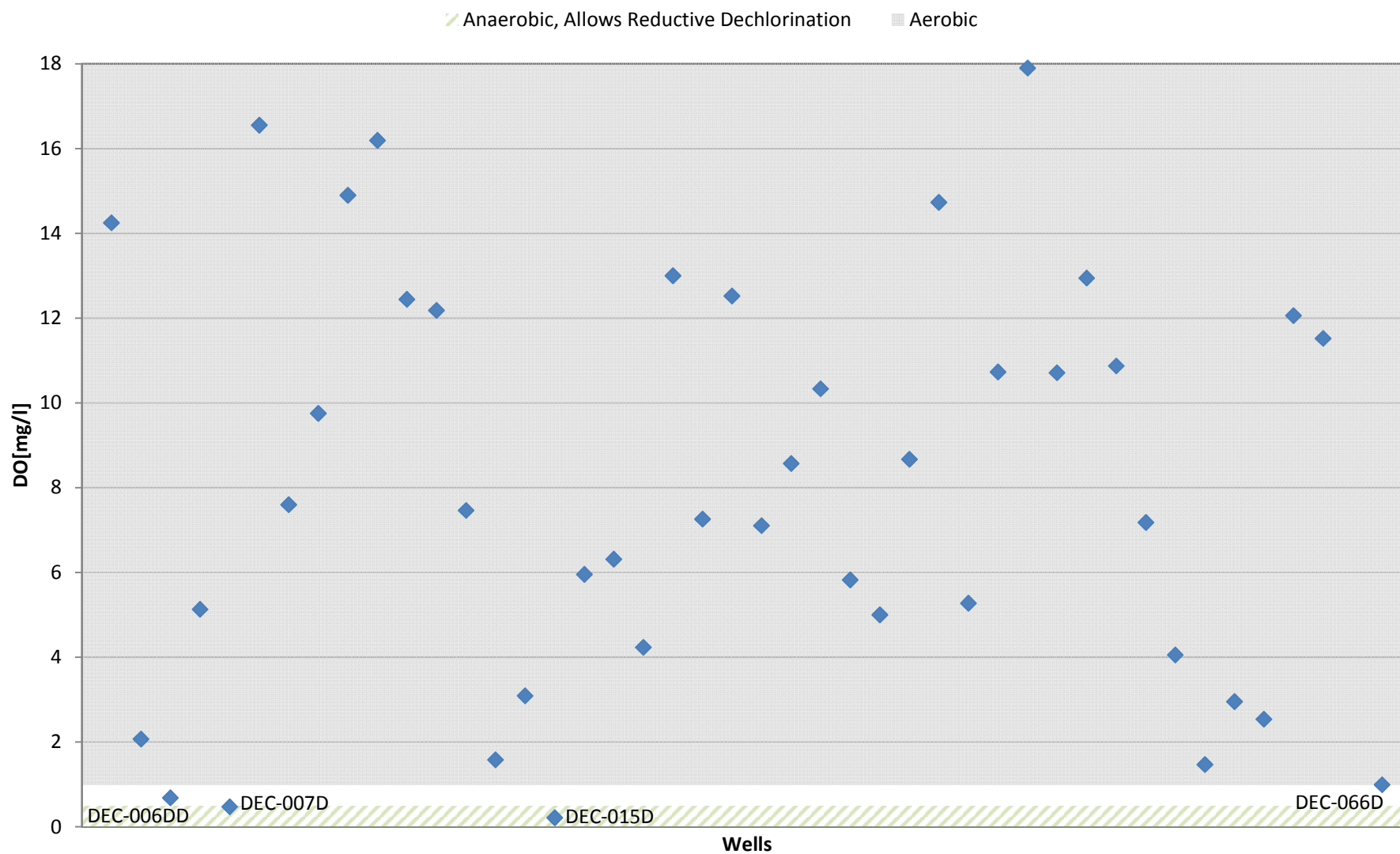
J:\1174989.0000\DB\GIS\KlinkCosmo-Report\R\04-05 SG\_Analytical.mxd 9/12/2011 MDL



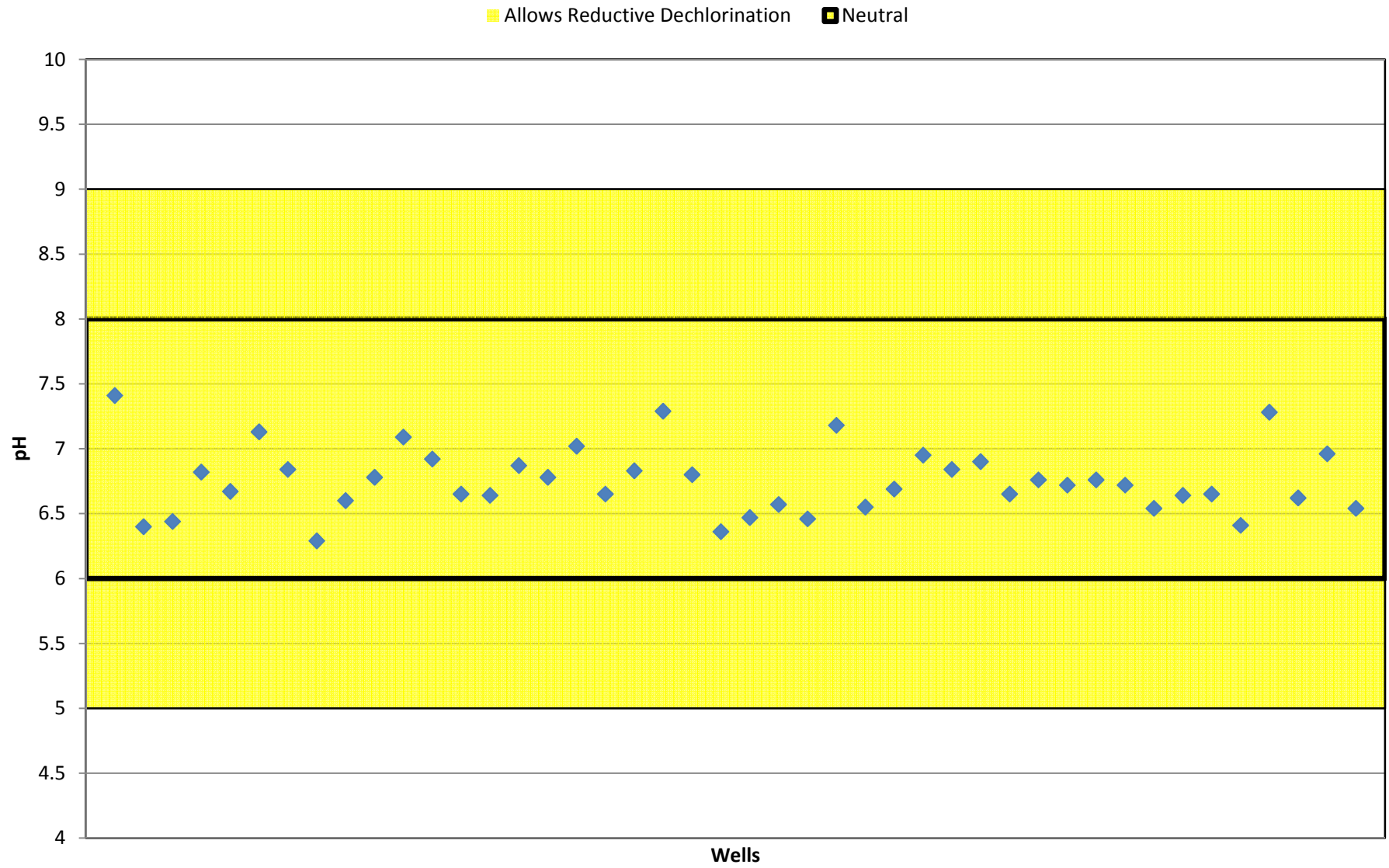




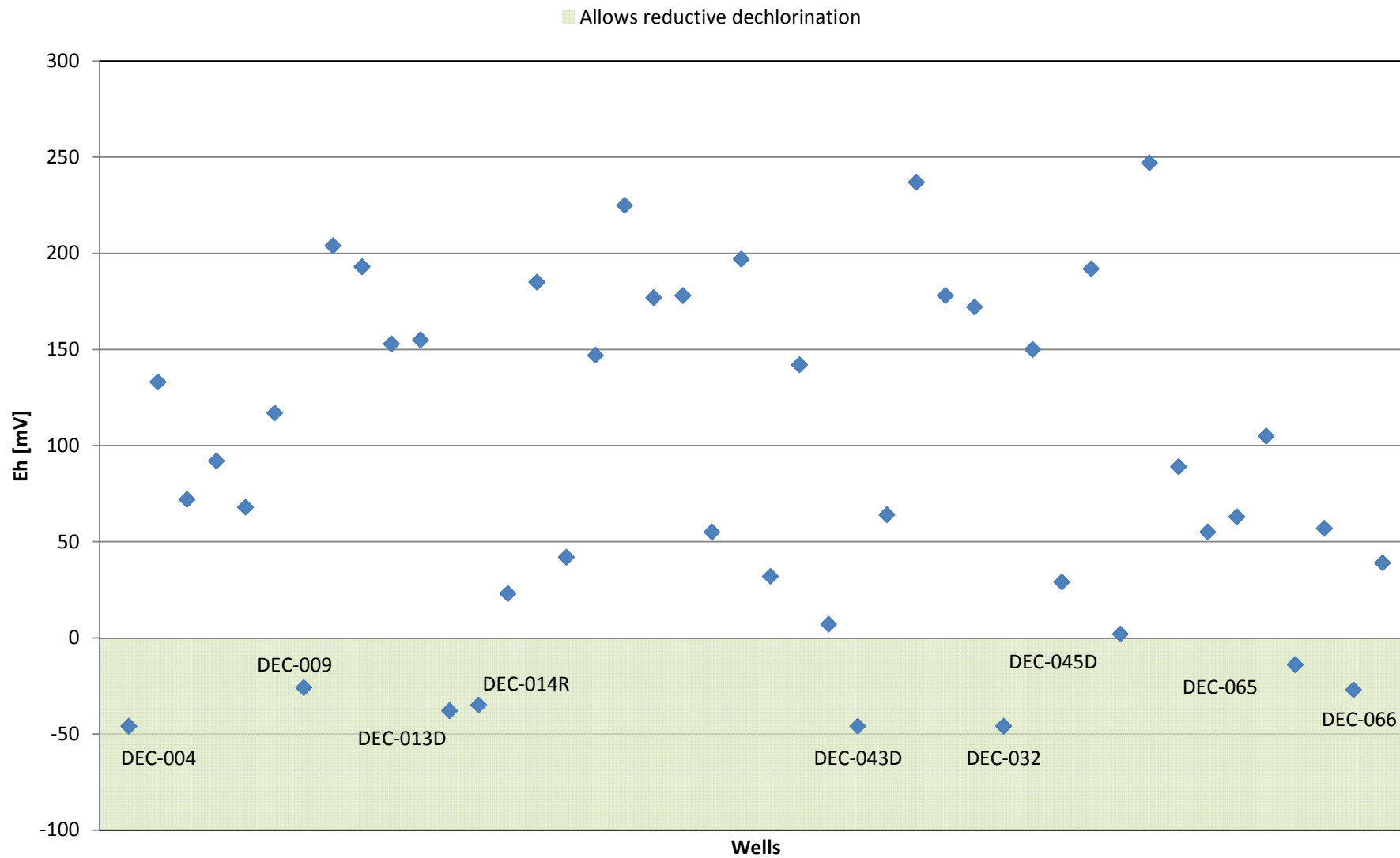
**Figure 5-2**  
**Measured Dissolved Oxygen Values**



**Figure 5-3**  
**Measured pH Values**



**Figure 5-4**  
**Measured Oxidation/Reduction Potential**







## LEGEND

Cover Types:

- Terrestrial Cultural - Mowed Lawn with Trees
- Terrestrial Cultural - Mowed Lawn
- Terrestrial Cultural - Urban Vacant Lot

## PLATES





Legend

- Proposed Monitoring Well
- NYSDEC Monitoring Well
- Soil Boring Location

SOURCE: Bing Maps Aerial (c) 2010 Microsoft Corporation

140 0 140 Feet



FORMER KLINK COSMO CLEANERS SITE  
MONITORING WELL AND BORING LOCATIONS

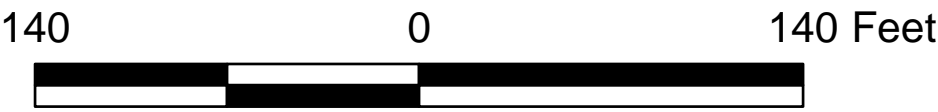




Legend

- Proposed Soil Gas Implant
- NYSDEC Soil Gas Implant

SOURCE: Bing Maps Aerial (c) 2010 Microsoft Corporation



FORMER KLINK COSMO CLEANERS SITE  
SOIL GAS IMPLANT LOCATIONS



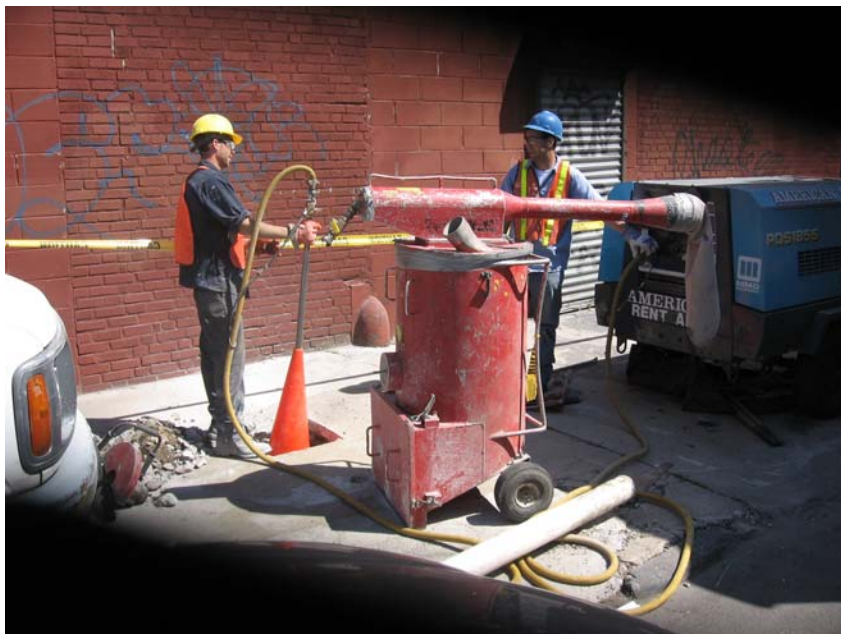
**APPENDIX A**

**PHOTOGRAPHIC LOG**

**FORMER KLINK COSMO CLEANERS SITE  
PHOTOGRAPHIC LOG  
BROOKLYN, NEW YORK**



**Photo 1:** Example sampling implant.



**Photo 2:** Example pre-clearing boring.

**FORMER KLINK COSMO CLEANERS SITE  
PHOTOGRAPHIC LOG  
BROOKLYN, NEW YORK**



**Photo 3:** Example pre-clearing boring.



**Photo 4:** New flush-mount protective casing and well pad at DEC-010.

**FORMER KLINK COSMO CLEANERS SITE  
PHOTOGRAPHIC LOG  
BROOKLYN, NEW YORK**



**Photo 5:** New flush-mount protective casing and well pad at DEC-031D.



**Photo 6:** Example RSI markout.



**FORMER KLINK COSMO CLEANERS SITE  
PHOTOGRAPHIC LOG  
BROOKLYN, NEW YORK**



**Photo 7:** Soil Vapor Implant Sample SG-4 1.



**Photo 8:** Insulating Jackets on Power Lines Near Richardson Street and Vandervoort Avenue.

**FORMER KLINK COSMO CLEANERS SITE  
PHOTOGRAPHIC LOG  
BROOKLYN, NEW YORK**



**Photo 9:** McGorlick Park - Background Surface Soil Study.



**Photo 10:** West View Richardson Street and Vandervoort Avenue.



**FORMER KLINK COSMO CLEANERS SITE  
PHOTOGRAPHIC LOG  
BROOKLYN, NEW YORK**



**Photo 11:** Completed Monitoring Well DEC-031S/DEC-031D with new concrete flags.



**Photo 12:** ADT Sonic Drill Rig.



**FORMER KLINK COSMO CLEANERS SITE  
PHOTOGRAPHIC LOG  
BROOKLYN, NEW YORK**



**Photo 13:** Ambient Air Sample AA-1.



**Photo 14:** Preparation for Borehole Clearing.

**APPENDIX B**

**FIELD NOTES**

Location Klink

Date 5/6/10

1

## CONTENTS

[illegible]Project / Client MSDEC

3935: CF on-site, Zebra already  
done w/ SG-79, setting pt.

1000: moving to 56-78

1035: dove w/ SG-78 @ 8fx

1120: Start 56-84

1135: Finish S6-84 @ 8ft moving  
to S6-85

1200: 56-85 finished morning  
to 56-86

1230: SG-86 finished, moving to SG-87

1300: S6-87 finished, moving  
to S6-83


1340: 56-83 finished, moving to 56-82

140: SG-82 finished moving to  
SG-81.

1420: SG-81 finished moving to  
SG-80

1500: SG-80 finished

All 10 @ SG pt installed @ 8/11

5300, Zebra/wcs AP-site 

4 Location Klink Date 5/9/11  
 Project / Client NYSDEC

0700: OK on-site  
 0725: MD on-site  
 0750: SM calls, he's on Richardson  
 waiting for 2 ADT vac crews  
 0830: Greg and Brady are one  
 crew, Chris and ~~Paul~~ <sup>Leo</sup> are w/  
 Meyer, starting @ 430. Greg  
 starting @ 300.

0900: Greg/Brady start DEC-030D  
 1" Asphalt @ surface  
 3" base stone  
 4"-5' f-sand and silt, little to  
 concrete/asphalt. Little m. sand  
 Collected sample  
 3.5-4.5' @ 1030 for:  
 VOCs, SVOCs, Pest, PCBs, Herb, Metals,  
 CN, and Hex Chrom.

1035: DEC-030D cleaned to 5ft,  
 ADT backfill and coal patch. PID =  
 0 ppm over open hole and cuttings

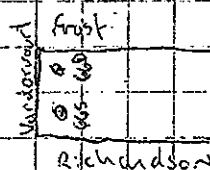
5 Location \_\_\_\_\_ Date 5/9/11  
 Project / Client \_\_\_\_\_

1120: Starting DEC-013D  
 3" asphalt and base from  
 surface.

1210: DEC-013D cleaned to  
 5ft. Similar material to 030D  
 but f-sand and silt, little concrete  
 asphalt cobbles.

1300: Greg's crew lunch (40)

1300: ADT setting up to clear DEC-06  
 clusters



1340: start clearing DEC-066D  
 8" concrete @ surface

1430: DEC-066D cleaned to 5ft  
 1ft of cinders and dk brn f-m  
 sand and brick/concrete cobbles  
 3" brn f-sand and silt for  
 cobble.

1440: start DEC-066S

5/9/11

1510: DEC-0665 from 1ft to 2ft  
has likely MGP waste, blk  
cinders, hard -ln and soft + an  
Sample collected 1-2ft @ 1510  
for full TSP and RCRA. 28 ppm  
Starting @ 2ft brn f-sand <sup>ppm</sup> max  
and silt down to 5ft, P.D.

1540: DEC-0665 <sup>6P</sup> being  
backfilled then ADT off-site

1635: CF off-site for day

5/10/11

0645: CF on-site sitting @ DEC-029  
area to keep it clear for VACTON

0700: 1 ADT crew around, MD (uns)  
on-site

0900: ADT starts cleaning DEC-029D  
Asphalt @ surface cracked  
and only 1" thick w/ 2-3"  
more stone  
4ft of brn f-sand, little silt  
and m-sand to brick frags.  
P.D = oppm over open hole and  
cuttings.

0955: DEC-029D cleaned to 5ft  
Frank sonic rig helper here.  
Greg moving to DEC-64 cluster

1045: start drilling DEC-029D.  
DEC-0645 cleaned to 5ft.

1240: ADT <sup>drill crew</sup> lunch @ 40ft w/ DEC-029D  
1345: resume drilling DEC-029D

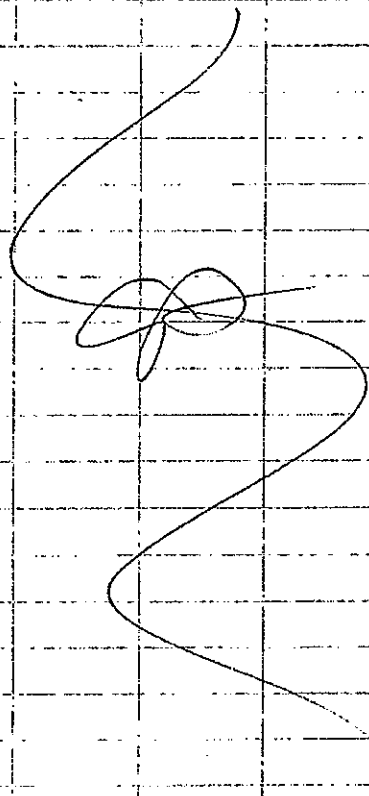
5/10/11

1540: @ 70ft @ DEC-0290, 70-75ft  
sample still in the ground.

ADT cleaning up for day.

1600: ADT (Serenny + Frank) off-site

1635: CF off-site 4 drums  
3 mud / 1 solid



Klink

5/11/11

MSDEC

0800: CF on-site, ADT here  
already, will cont. DEC-0290

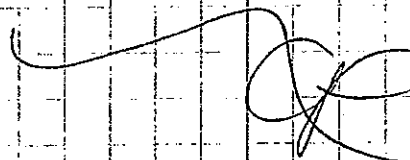
0930: ADT resumes drilling DEC-0290

1100: DEC-0290 completed @ 85ft  
well set @ 85ft w/ 10ft of  
Screen, sand pack in @ 75ft  
ADT mixing bent. slurry now

1215: ADT (Serenny) starts DEC-0430

1535: DEC-0430 @ 60ft, cleanup  
8 drums, 1 soil, 3 mud  
1 asphalt/concrete reaction  
3 drilling mud (DEC-0290)

1615: MS (URS) will wait for  
Aarco (drum pick-up) off-site





Location Klink Date 5/12/11  
 Project / Client MSDEC

0700: CF on-site  
 0715: MD (URS) on-site  
 0745: 1 ADT Sonar rig here  
 0820: 2nd ADT Sonar rig here  
 0935: Jeremy re-starts DEC-043D  
 1235: DEC-043D down to 85 ft,  
 setting well w/ 10ft of screen  
 @ 85 ft.  
 1320: ADT lunch DEC-043D installed  
 and backfilled no manhole.  
 1420: Starting DEC-064D  
 1530: DEC-064D sampled to 30ft  
 casing only to 10ft. 1 solids drum  
 here, 1 @ DEC-030D  
 2 solids drums  
 1625: Brey's ADT crew off site,  
 Jeremy's off-site @ 1600.  
 CF off-site

Location \_\_\_\_\_ Date 5/13/11 11  
 Project / Client \_\_\_\_\_

0720: CF on-site, comes near  
 DEC-064D ~~CF~~ left alone  
 overnight. ADT work truck  
 (Frank) pulling up.

0800: Jeremy pulls up w/ rig.  
 0900: ADT setting up to re-start  
 DEC-064D  
 945: re-start drilling  
 1230: ADT lunch @ DEC-064D @  
 50 ft.

1240: Mitkem picks up samples.  
 1300: ADT lunch over  
 1515: DEC-064D being set @  
 80 ft w/ 10ft of screen. Larco  
 @ here for drums. 3 total  
 today 1 soil 2 mud  
 1535: DEC-064D installed, ADT  
 cleanup.  
 1600: ADT off-site, CF off-site

5/16/11

drizzle 60' SAM/

0720: CF on-site, Greg + Dave (ADT) pulling up now.

0830: Scott + Tim (URS) on-site

0800: Jeremy and Frank (ADT) on-site

0820: Jeremy and Frank (ADT) off to buy a tape measure.

0920: Jeremy setting up his rig @ DEC-015D, 1<sup>st</sup> sample 35ft

1030: Jeremy finally starts DEC-015D after trying to make hydrant near DEC-815 work. Did not succeed so they will have to move work truck to another hydrant to get H<sub>2</sub>O.

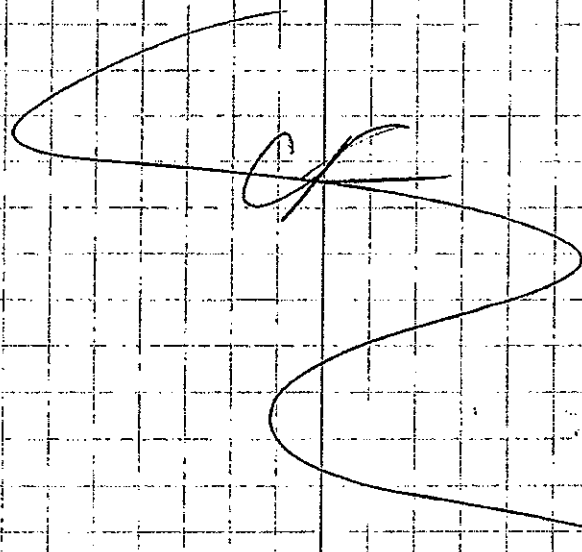
1230: Jeremy + Frank lunch, DEC-015D @ 45ft.

1320: <sup>ADT</sup> lunch over

5/16/11

1545: DEC-015D sampled to 80ft, casing @ 75ft well will be set @ 82ft on Tues AM. 1 drum SOLIDS  
3 @ 5m's rig (DEC-014)  
2 mud 1 Soil,  
4 total, Arco here loading

1630: CF / ADT off-site



Location Klink Date 5/17/11  
 Project / Client MYSDOC  
rain so's w/ wind AM

- 0700: CF on-site  
 0750: Dave (MYSDOC) on-site,  
 Scott and Tim <sup>(HRS)</sup> already here.  
 0830: ADT (Jeremy + Frank)  
 on-site  
 0900: ADT setting up to finish  
 DEC-015D, well to be set  
 @ 82 ft.  
 0930: Jeremy + Frank setting manhole  
 @ DEC-007D  
 1015: set DEC-015D @ 82 ft  
 1140: Cleanup and move to DEC-007D  
 1210: ADT lunch (Jeremy + Frank)  
 1250: ADT getting H<sub>2</sub>O for drilling.  
 1600: @ soft @ DEC-007D  
 ADT cleanup, ~~CF~~ CF  
 1630: SM setting manhole @  
 DEC-015D then off-site. <sup>10</sup>Arco drum!  
 1730: CF off-site

CF

Location Klink Date 5/18/11  
 Project / Client MYSDOC

- 0710: CF on-site  
 0845: ADT here, getting H<sub>2</sub>O  
 for drilling their setup  
 0940: Resume DEC-007D  
 1325: sampled to 95 ft, casing  
 @ 85 ft. ADT lunch  
 1405: resume DEC-007D  
 1600: DEC-007D installed  
 105 ft 2 ft when pulling casing  
 well ~ 90 ft Jeremy/Frank  
 off-site. No manhole well  
 plated. Rainfall extremely  
 heavy last 30+ minutes  
 CF off-site while Arco  
 loading drums, just  
 1 solid drum from DEC-007D  
 SM to sign paperwork.

CF

5/19/11

0715: CF on-site

0840: Jeremy, Frank, Haydon  
(ADT) here doing manhole@ DEC-0070, will set rig up on  
DEC-0060D.~~ADT~~ (CF)

1000: Start drilling @ DEC-0060D

1200: Mud starts coming up ~~at~~  
from around DEC-0060D manhole.Jeremy stops and pulls rig off of  
hole so CF can check well.DEC-0060D OK, Cannot get 7"  
casing to 10ft, no bit (other ADT  
crew has it).  
Only 5ft section in ground.1540: Fuel filter on rig needs  
changing. Last 10ft used 300 gallons  
of H<sub>2</sub>O, Jeremy had to go very  
slow so he didn't blow out  
filter all together.1600: DEC-0060D @ 93ft, ADT  
cleanup

1630: ADT off-site

1700: CF off-site

5/20/11

0715: CF on-site

840: Jeremy + Frank (ADT) on-site  
sitting in trucks.0930: Jeremy changed fuel  
filter on rig, ~~ADT~~ now setting  
up @ DEC-0060D.1040: resume ~~drilling~~ ~~ADT~~ ~~CF~~

DEC-0060D

1140: DEC-0060D installed @  
93ft sand 81-93ft w/bent.  
Slurry above that.1225: DEC-0060D well installed  
and manhole set. Moving to  
DEC-0060D

1300: ADT lunch

1330: Lunch over, now  
raining. ADT starting DEC-0060D1530: @ 25ft @ DEC-0060D,  
ADT cleanup.

1600: ADT off-site.

1615: Arco on-site for 9 drums  
1 soil, 4 H<sub>2</sub>O, 4 mud

1635: CF off-site

5/23/11

0715: CF on site

0850: Jeremy + Frank (ADT) pulling up. Dave H. (NISOEC) also here.

1000: resume DEC-066D from 25ft

1230: @ 65ft, ADT lunch. Greg's rig has been down since before 1100AM, mechanic (ADT) on way from shop.

1345: ADT lunch over

1600: pump broke on Jeremy's rig while mixing grout. DEC-066D installed @ 80ft, no manhole. Aarco here for 5 drums total. 1 solid @ 66D and 1 solid 3 mud @ 13D.

1630: ADT off-site

1700: TF to develop DEC-066D CF off-site

5/24/11

0700: CF on-site

0845: Greg + Dave (ADT) have been here for 1/2 hr. No sign of Jeremy and Frank yet. Jeremy has to fix pump on rig before he can drill.

0900: Jeremy and Frank on-site. Frank to set manhole @ 66D

940: DEC-066D manhole set. Jeremy still working on pump on rig.

1000: Jeremy still putting pump back together.

1230: Jeremy tracking to DEC-065D

1230: start drilling DEC-065D

1330: DEC-065D down to 55ft. 3 drums

Total of 7 drums to go w/ Aarco tonight. 2 N2O 3 mud 2 solid.

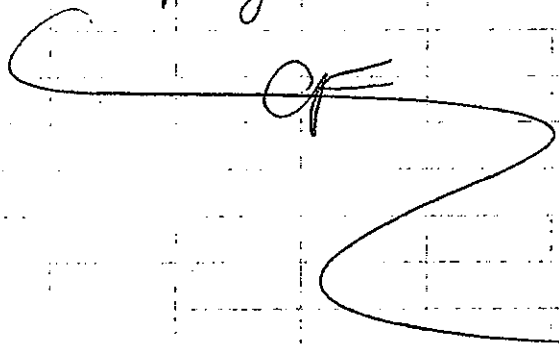
Mikem here @ 1300 for sample pick-up.

5/24/11

1630: ADT off-site, TF (URS) calls to say that DEC-0645 is only 25ft deep and it's H<sub>2</sub>O. Level is at 2st. Tried to force tubing past 25ft and could not, bottom felt hard, will have Greg (ADT) try to flush out well, if he can't will over-drill, pull well and then clean ~~and~~ a new hole and re-drill well. Arco here for 7 drums: 2 solid, 2 H<sub>2</sub>O, 3 mud.

1715: CF signs Arco paperwork. TI developing 660, CF off-site.

CF



5/25/11

0715: CF on-site on Richardson  
0910: Jeremy pulling up now. Greg is flushing out DEC-0645 (20ft at well sand in PVC).  
1010: Jeremy starts drilling.  
1030: Tim calls to say DEC-0645 is down open to correct depth. Greg's rig is not working properly, Jeremy going over to see what the problem is with the pump. Greg will keep trying.

1145: Greg comes over, says the rig and pump are no good. Rig leaking hydraulic oil from same spot as earlier in the week. Pumps down all together. Greg taking rig back to the shop. Casing is sticking 3 ft out of ground, Jeremy will go over and finish it and leave casing in the ground but bring it flush.



5/25/11

1210: ADT lunch

1310: ADT resumes drilling DEC-065D

1500: DEC-065D installed,  
Frank cleaning up while Jeremy  
is @ DEC-0130 making casing  
flush w/ ground.

Harco here for drums

Total of 5 H<sub>2</sub>O, 1 mud and  
1 solid drum.

1600: ADT off-site

1615: CF off-site

5/26/11

0715: CF on-site

0800: ADT on-site

0810: flushing out DEC-045D

1000: DEC-045D flushed out  
to 70ft, no further, well  
seems to be broken @ top  
of screen. ADT cleanup to  
move over to DEC-0130 to  
finish well1130: casing @ DEC-0130  
down to 65 ft, rig down  
Jeremy off to find a fuel  
filter after CF over to Auto  
Zone where they are out of  
that model filter.

@ ~ 1020 AM woman who lives  
near corner of Division and  
Vanderzort Ave in one of  
row houses comes over ~~to~~ in  
her vehicle w/ her husband  
honks her horn @ me and  
says "do I have to look @  
those guys throwing an orange  
out the window". I said

5/26/11

note

cont: "an orange" she said yes. I said I would ~~take~~ talk to them but it's not a big deal in this neighborhood thinking she was kidding. She was not; said she ~~was~~ determined I will call Dave Harrington then sped away angrily. Before leaving to go buy a fuel filter, Jeremy mentions that he needs to leave @ 3 PM to make it home for son's talent show.

1220: resume drilling DEC-0130

1445: ADT cleanup, DEC-0130 sampled to 85ft, casing @ 80ft. ~~still~~ Trouble advancing casing using tons of H<sub>2</sub>O. Jeremy not sure what problem is; suspect that the bit on casing is broken or worn.

1505: ADT off-site

1535: CF off-site, TI waiting for

5/27/11<sup>25</sup>

Drums on lot: 59-25 = 34 ~~on~~ ~~act~~

0715: CF on-site

0840: ADT on-site, CF/TI slug testing DEC-0650 ADT changing out swivel on rig before beginning work

1130: ADT starts drilling @ DEC-0130, set 85ft MW.

1230: DEC-0130 installed @ 85ft, ADT lunch

1300: cleanup and move to DEC-0440.

1400: rig @ DEC-0440 but down due to pump problem

500: start drilling @ DEC-0440

1620: DEC-0440 @ 20ft. Aero run for 3 drums. 1 solid, 2 mud

1630: CF off-site

CF

5/31/11

0710: CF on-site

0920: Jeremy (ADT) calls to say they are running late but are @ the lot on Monitor St and will be here shortly.

0945: ADT on-site, will setup on DEC-044D

1020: Resume drilling DEC-044D @ 20ft

1110: Jeremy pulls casing (all 20ft) <sup>CF</sup> because it is plugged w/ piece of boulder. On cobbles/boulders since 10ft

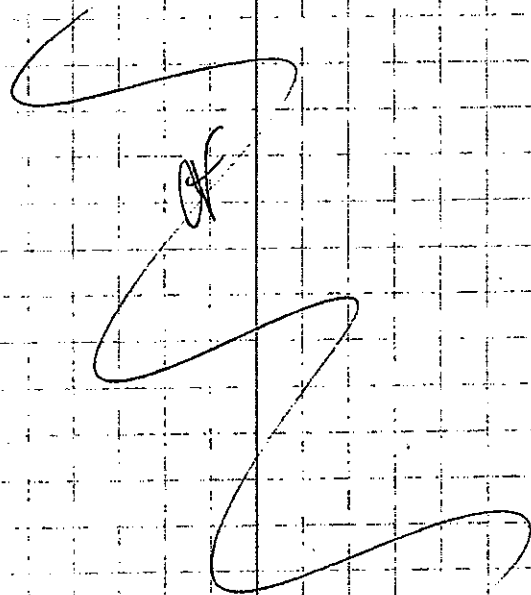
1230: DEC-044D @ 30ft, <sup>mud</sup> pan was breaking the whole way. @ ~ 1145 CF stopped Jeremy and told him he had to stop mud leak. Hundreds of gallons been going into sewer. Jeremy advanced 7' to 15ft, then pulled them out ?? will ask

5/31/11

1310: Jeremy ~~ADT~~ will take rig back to shop. Several bits broke off in threads. Dave H. said we can get the drum (mud) picked up tomorrow.

1415: ADT off-site

1420: CF off-site



6/1/11

0730: CF on-site  
 0810: ADT on-site, Dave H. also here. Just Frank w/work truck, Jeremy not here yet, getting fuel for rig.

0915: Called Pine Sav. to end rental on 1 P15 <sup>multi-riser</sup> and 1 FP. Confirm # 5057066.

0925: Jeremy here w/rig (swivel is on) ADT setting up

0950: Start drilling

1030: Swivel broken again, rig down

1050: Jeremy says rig has to go back to the shop, will bring back different rig tomorrow. ADT cleanup

1215: ADT/CF off-site

6/2/11

0715: CF on-site

0845: ADT (Frank) pulls up w/work truck. Dave H. (w/soec) also here

0855: Jeremy here w/sonic rig

0950: resume drilling @ DEC-044D

1340: boring completed @ 80ft setting well (DEC-044D).

1450: DEC-044D installed. ADT now cleanup and manhole. Plan for tomorrow to clean by hand to 5ft new location for DEC-045DR then start drilling.

1505: ADT off-site, no manhole

1605: Harco on-site for 2 drums 1 soil, 1 H<sub>2</sub>O (mud)

1640: CF off-site

CF

6/3/11

10730: CF on-site

10830: ADT Frank and Chris. Station  
 on-site w/work truck, setting  
 manhole @ DEC-044D, rig not  
 here yet.

0900: Jeremy on-site w/drill  
 rig.

0930: setting up to hand clear  
 new DEC-045D location. Will use  
 a coning type bit w/rig to break  
 through concrete.

1040: DEC-045DR hand cleared  
 to 5ft.

1315: Boring completed @ 80ft  
 ADT setting well.

1325: when PVC was put in hole,  
 it was 5ft down. Jeremy overdrill  
 by 5ft.

1420: tried several things, but  
 could not grab pipe. He says

6/3/11

he has a tool @ the shop  
 and can save the hole.  
 CF says that's the best  
 route. ADT picking up for  
 day.

1430: CF picks up 1 drum  
 from SR Coopers

33 now on account

ADT generated 2 drums  
 today, both mud

1500: ADT off-site

1530: Arco here for 2 drums  
 (mud)

1545: CF off-site

6/6/11

0800: CF on-site to develop DEC-013D

0900: DEC-013D well screen likely broken, well sand clogged up valve several times. Kept tubing above bottom and took 100 gal out, but TD @ the end 3ft less than start

0905: ADT on-site

1035: DEC-045DR has been reserved. Sandpack going in now. Well will be @ 80 ft. ADT pulled out all PVC 1st to make sure hole and well are ok.

1120: DEC-045DR installed, casing out of hole, ADT cleanup and manhole. Will then jump over to drill DEC-0665 to 45 ft

6/6/11<sup>33</sup>

1220: ADT lunch

1300: setting up @ DEC-0665 CF picks up 2 drums from JR Cooverage 31 now on acct.

1500: DEC-0665 down to 45 ft well will be set tomorrow since ADT brought a different size and types of screen. ADT cleaning up, generated 3 drums today all mud.

1600: ADT off-site

1715: Arco here @ 1650 for 5 drums 2 H<sub>2</sub>O 3 mud CF off-site

CF



6/7/11

0600: CF on-site to develop DEC-045D

0800: DEC-045D developed turbidly meter quit @ 40 gallons. Will call line for replacement.

0830: Jeremy (ADT) calls to say they were held up in traffic, will be here shortly.

1045: DEC-013D flushed w/ 255 gallons of H<sub>2</sub>O, only well sand came out when 10 PVC was pulled out well was still 2+ ft short of 85 ft and can feel that there is stuff @ the bottom. Jeremy will call Dennis for his opinion, not sure why no silt came out if it were broken. Both Jeremy + Frank swear that well cap never came off when well was sanding, or

6/7/11

045: CF will check depth again later today to see if anymore sand heaved in CF broken).

1115: start setting DEC-066S @ 45 ft.

1220: DEC-066S installed w/ sandpack 32-45 ft, then bentonite slurry to 5 ft. ADT pulling rest of casing.

1300: CF picks up 2 drums from Jk Coopersage @ 29 now on acct.

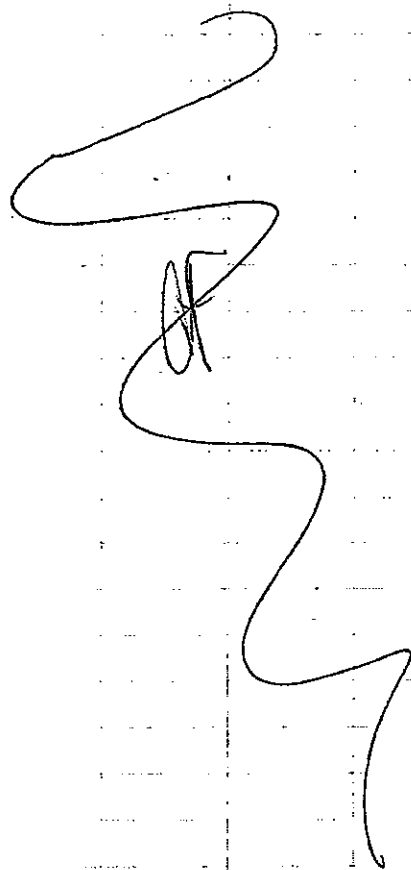
1420: Arco here already, loaded 2 development drums from DEC-045D development.

500: DEC-0655 drilled to 35 ft ADT out of drums, so stopping for day.

6/7/11

1500: Aarco picks up 5 drums  
total 2 H<sub>2</sub>O, 3 mud.

1615: CF off-site



6/8/11 37

0600: OK on-site to develop  
DEC-0440.

0800: DEC-0440 developed  
after 100 gallons removed

0920: ADT here (Jeremy + Chris)  
1100: after letting Jeremy try  
to use a whale pump to  
develop/pump DEC-0130 for a  
while, it became obvious  
that Chris S. was intoxicated.  
He could not stand up straight,  
his eyes were half closed,  
and he was slurring his words.  
~~CF~~ Since it was time to move  
on and use r.c. to pump air  
into well to evacuate sand,  
CF called Buffalo office to  
tell them to call ADT office  
and get Chris off-site. CF  
went to car and drove off to  
avoid a confrontation.

6/8/11

1200: Called Jeremy (AOT) to tell him that he can continue to work as long as Chris is nowhere near work area. He said he took Chris to McDonald's and came back to air lift DEC-013D w/ rig compressor.

1330: DEC-013D screen open to bottom, AOT cleanup and move to DEC-0655.

CF picks up 2 more drums from JR Cooverage 21 now on acct.

Aarco here @ 1310 loaded up 2 H<sub>2</sub>O drums from 44 D development, waiting for more later.

1400: start drilling DEC-0655 from 35ft

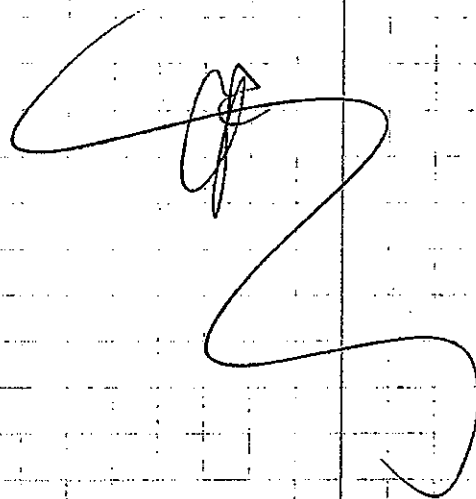
1600: b55 set @ 45ft w/ 15ft of screen sand 3a-45, bent slurry above that to 5ft.

6/8/11

1630: Arauco off-site w/ 3 drums 1 mud, 2 H<sub>2</sub>O  
AOT moving to DEC-0450 to abandon well

1800: well string pulled after grout 60ft came out of hole  
Grout topped off, then kenseal, and concrete @ surface

1900: CF off-site



6/9/11

0600: CF on-site developing  
DEC-0130

0800: DEC-0130 developed  
100 gallons removed

0815: CF picks up 2 drums from  
Cooperage 25 now on acct.

1030: DEC-0665 developed, 100+  
gallons removed

1100: CF picks up 2 drums 23  
now on acct.

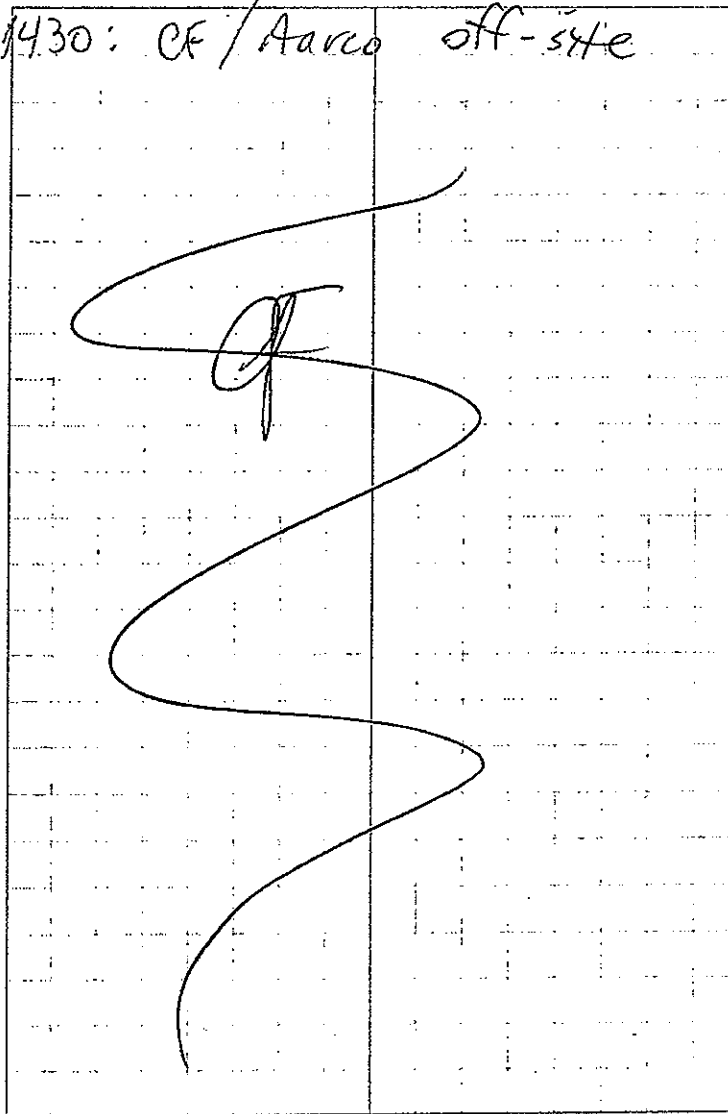
1245: DEC-0655 developed  
100+ gallons removed

1330: CF picks up open top  
drum from JR Cooperage, 22  
left on acct.

1345: Arco on-site for 7 drums  
6 H<sub>2</sub>O, 1 PPE

6/9/11<sup>41</sup>

1430: CF / Arco off-site



6/10/11

0635: CF on-site to slug  
test: DEC-0130  
DEC-0440  
DEC-0450  
DEC-0655  
DEC-0665

0730: DEC-0665 slug tests  
completed

0830: DEC-0130 slug tests  
Completed

0930: DEC-0450 slug tests  
completed. Dave H. (WRSPCC)  
on-site

1030: DEC-0440 slug tests completed

1115: DEC-0655 slug tests  
completed

1130: CF off-site to Fed Ex  
in New Jersey.

6/13/11

cloudy 60's AM

0730: CF on-site for SG  
sampling

0830: David S. on-site,  
waiting for Pine Env. delivery

0910: Pine Env. drops off SG  
equipment, CF/DS off to  
FedEx on Masspeth (SF) Maurice  
Ave to pick up Summa  
Containers

1115: SG-55 sampled

1125: SG-79 sampled

1130: SG-78 sampled

1140: Ambient air sample  
collected

1314: SG-19 sampled

1325: SG-20 sampled

1340: SG-21 sampled

CF calls Pine Env. because  
Helium detector not working

6/13/11

1400: Price will deliver new  
helium detector Tues AM 1<sup>st</sup>  
thing

CF/OS to Fed Ex on  
Maurice w/ today's SG  
samples

1455: CF/OS off-site

6/14/11

0700: CF on-site

0720: DS on-site

0850: SG-62 sampled

0900: ~~SG~~ AA-061411 ambient  
air sample collected

0930: SG-83 no pressure  
lost, no sample likely, unless  
regulator reading incorrect.  
Will submit can for analysis

0940: SG-82 sampled

1010: SG-81 sampled, but can @ ~~PS~~

1005: SG-80 sampled

1125: SG-060 and duplicate  
sample collected

1135: SG-49 sampled

1140: SG-48 sampled

1340: SG-42 sampled

1350: SG-44 sampled

1400: SG-45 sampled

SG-46 and duplicate  
sample collected.

1415: CF/OS to Fed Ex



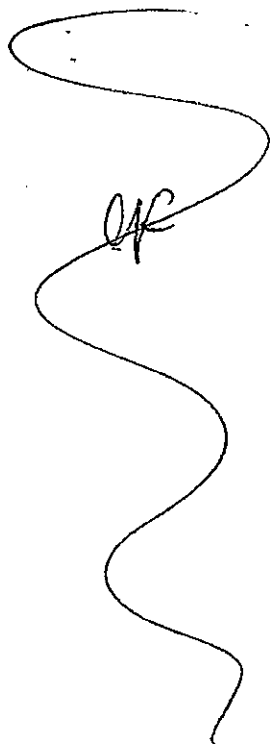


8/15/11

@ 1530: SG-63 and DUPA-0615/11 collected

CF/DS to Fed Ex on Mainze Ave to ship Summa's

1605: CF/DS off-site

6/20/11<sup>49</sup>

cloudy 70's AM

0700: CF on-site for GW sampling, waiting for Steve, Tim, and Kevin (URS). Also waiting for Pine Env. and Mitkem (Lab).

0730: Steve L. calls to say he's running late due to GWB traffic. Tim and Kevin pulling up now.

0825: Steve L. here. Tim and Kevin are off doing water levels. CF will meet up w/ them.

1030: Pine Env drops off equipment.

1220: Mitkem drops off bottles for GW sampling.

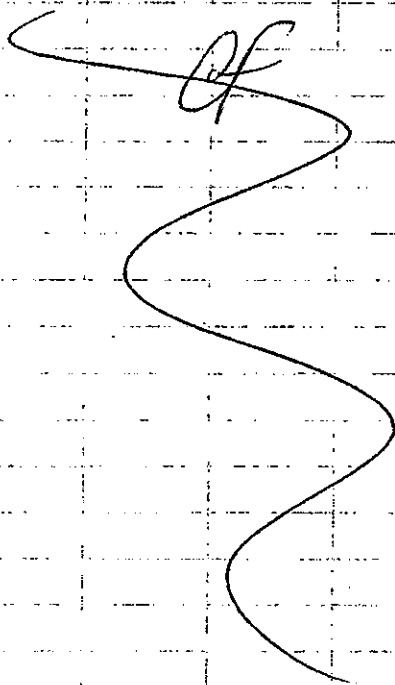
1520: CF/52 sampled DEC-0300/030  
T/I/KM sampling DEC-0640/064  
Cluster

6/20/11

1600: CF / SL off-site after  
buying funnel / bubble wrap /  
rubber bands

CF gets 1 drum from  
JR Cooperage 21 now on  
acct.

CF



6/21/11

0600: CF @ gas station @ Fort  
Lee. SL dropped off, leave  
for site

0635: CF / SL arrive on-site  
setup @ DEC-031 / 31D

0830: DEC-031D sampled

0900: Tim F. picks up drum  
from JR Cooperage 20  
now on acct.

0945: DEC-031 sampled, 7.1 km  
Sampled DEC-046 and ~~DEC-046~~  
moving to DEC-033.

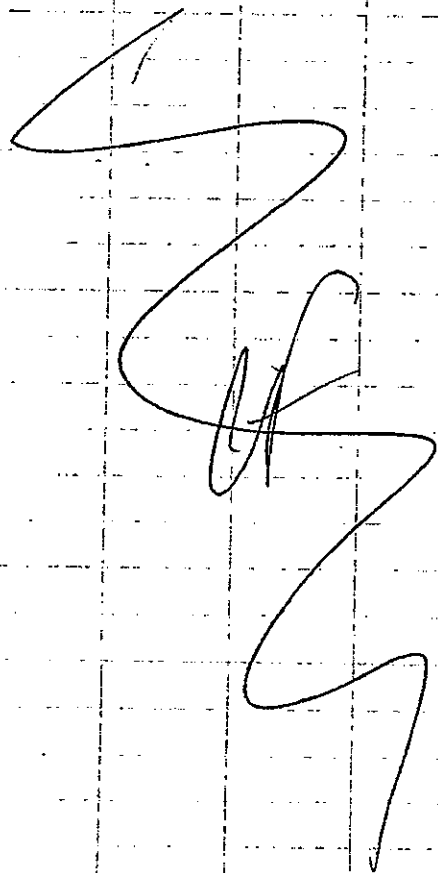
1125: CF / SL sampled DEC-045

1310: CF / SL sampled DEC-045  
then pick up drum from  
JR Cooperage 19 left on acct.

6/21/11

1515: Alarco picks up 2 drums  
both purge H<sub>2</sub>O

1615: CF/SL off site

6/22/11<sup>53</sup>

0610: CF/SL on site @ DEC-065  
cluster

0745: DEC-065B sampled

0845: DEC-065 sampled

0945: DEC-012 sampled

1005: DEC-043D sampled

TI/KM's compressor stopped  
working, called Rive Env for  
replacement, CF will meet Rive  
w/ NJ so compressor can  
be replaced today.

3 drums 2 open top, 1  
closed top from Cooverage  
today. 16 left on acct.

1300: CF/SL off site, TI/KM  
to cont working w/ CF/SL's  
compressor.

*[Handwritten signature]*

6/23/11

0640: CF/SL on-site @ DEC-044  
cluster

755: DEC-044D sampled

0905: DEC-044 sampled

1040: DEC-013D sampled

1 drum picked up @ JR  
Cooperage 15 left on account

1150: DEC-013 sampled

1320: DEC-042 sampled

1440: DEC-008 sampled

1500: Aarco here for 2 H<sub>2</sub>O  
drums

1600: CF/SL off-site

CF

6/24/11

0610: CF/SL on-site

725: DEC-004 sampled  
CF/SL off to buy PVC  
(1") to collect LNAPL  
and GW samples @  
DEC-048

1000: Five Env on-site w/  
peri-pump

1100: Collect 1 full 40 ml/  
vial and 1 1/2 full 40  
ml vial of LNAPL, CF  
checked w/ George K. (URS  
chemist) he says it should  
be enough volume

1200: Tim I picks up 3  
open-top drums from JR  
Cooperage 12 left on acct.

1300: ~~CF~~ DEC-048 sampled  
(DUP-062411) and MS/MSD

6/24/11

1300: also collected

1325: Spectrum / Mitkem  
picks up 2 coolers, noted  
by COC that samples were  
just collected and are  
not yet chilled. 15 amber  
Liker jars brought up temp  
in both coolers.

~~1520~~ 1520: Arco here for  
4 drums 1 H<sub>2</sub>O, 3 PPE

1535: CF/SL off-site, T.I./KM  
off-site @ 1300

7/11/11

hazy, hot, humid

0700: CF on-site for Sidewalk  
flag replacements 25 flags total.

0730: Arco on-site to do flags  
w/ll start on Vandervoort  
w/ DEC-045D, DEC-045DR,  
DEC-045 (abandoned boring)  
DEC-014D, and DEC-014DR

0900: Flags for DEC-045S, DEC-  
045D and DEC-045 ~~DR~~ all  
busted out, concrete is 5-6"  
thick. Arco will then do  
DEC-014D and DEC-014DR

0940: DEC-014D and DEC-014DR  
are done on the same flag.

0930: 5 flags busted out, concrete  
truck (Brooklyn Concrete) here.

1100: Bob Reeves (NYC Parks)  
718 965 6965



7/11/11

1120: Spoke w/ Bob Reeves of Mt Parks about sampling in McGloick Pk. on Monitor St. He said he would call me back w/ a good time.

1255: 5 flags completed and covered off w/ caution tape. Arco off to get lunch, they are done for the day.

1315: CF off-site, have not heard back from Bob Reeves (Mt Parks).

CF

7/12/11

0700: CF on-site, Arco also pulling up.

Arco will work on ~~CP Retention~~ Vanderhoof  
SB-25, SB-26, DEC-232  
DEC-066; DEC-066D

CF marking all remaining flags w/

0740: AUL (Gray bldg on Richardson) complained about Arco's being on sidewalk w/ truck and about general sidewalk condition. I said we generally fix where we put holes in ground. I said we are here doing an investigation for the State and gave him Dave's <sup>(last name)</sup> name, not contact info. He did not ask, I left phone in the car. He was not overly angry, and gave me his card.

Location \_\_\_\_\_

Date

7/12/11

Robert R. Pavlovich  
President  
rpavlovich@awlindustries.com



AWL INDUSTRIES, INC.

460 MORGAN AVENUE • BROOKLYN, NY 11222

TEL: 718-388-5500 • FAX: 718-388-2017

WWW.AWLINDUSTRIES.COM

1010: DOT comes by asking about container Aarco arranged for w/ tully. They need to move it because they are milling/paving Division btw Vanderbilt and Porter. Aarco has permits on them for sidewalk work, not the container. ~~AWL~~ URS or has nothing to do w/ permits. Aarco also having issues keeping their compressor running likely overheating (temps in low 80's very humid) and broke one for concrete bit. Only 2 flags busted out so far, 5 sawcut. ~~See~~ SB-25 and DEC-244D busted out.

Location \_\_\_\_\_

Date

7/12/11

Project / Client \_\_\_\_\_

1145: Aarco has all 5 flags busted out w/ mesh down. Concrete should be here btw 1200 and 1300.

1450: concrete truck finally here  
\*DEC-066 flags very thick

1520: Aarco completes 5 flags  
CF Aarco off-site

7/13/11

sunny 80's Am

0645: A on-site, Harco already here. Will work on Richardson from Vandervort towards Morgan ~~see pg. 60~~ (C)

745: Harco saw-cutting 6 flags on Richardson: DEC-044, DEC-044D, SB-23, SB-24, DEC-031, and DEC-031D.

945: All 6 flags busted out

1130: Concrete truck here

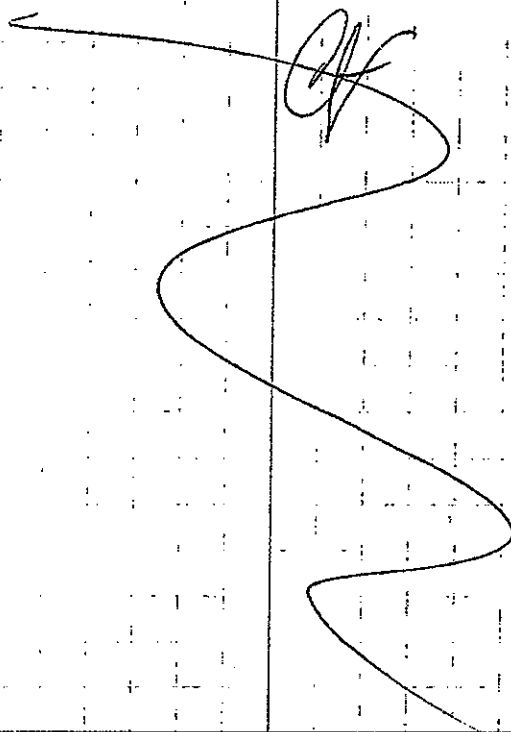
1300: Flags all formed, Harco edging and cleaning up. Dave H. (MSDEC) called, he is on his way to site.

1335: Walked Harco crew around to show them remaining 8 locations, which are all marked w/white spray paint. Harco off-site ~~see pg. 60~~ (C)

7/13/11

1345: Dave H. (MSDEC) on-site if showing flags (completed) and talking about HWZ president (see pg. 60)

1420: A off-site



## CONTENTS

PAGE

REFERENCE

DATE

Job # 11176390.00002

Meeker Ave, Bklyn, NY 5/2/11

3

Project: Klink Cosmo NYSDER  
weather: overcast, 54°-60°  
light wind from SE

- 745 MDascoli arrives at meeting spot.
- 830 Cary Friedman + Scott McCabe + I go to Vandervoort Ave + Division st to review well locations.
- 945 Doria Katorbis, Radar Solutions, arrives + sets up at DEC-030
- 1045 Doria set up + starts scanning at DEC-30D
- GSSI Sir20 Digital Radar system (control unit)
- ~~500~~ Utility Cart w/ 500 mHz transceiver antenna
- Ditch Witch (Subsite Electronics) for utility detection
- EM Injection

4

Location

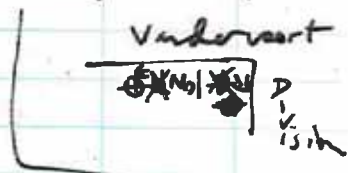
Klink Cosmo  
Meeker Ave

Date

5/2/11

Project / Client

- 1100 Doria moves DEC-30D  
4' S + 1.5' W from  
original location.
- 1102 Move to DEC-13D + Scan.  
Location remains as marked.
- 1135 Clear DEC-64 + 64D  
DEC-64 moved 1' N + 1' W  
from original spot.  
DEC-64D Moved 1' S from  
original spot.  
Nimble cover between  
original spots.



- 1140 Break for bathroom + lunch.
- 1215 Lunch break over. Start to  
Clear SV DEC-80 on Vandervoort.  
(Soil Vapor - SV-point)
- 1230 SV-80 is cleared as  
marked.

5

Location

Klink Cosmo  
Meeker Ave

Date

5/2/11

Project / Client

- 1230 Move to SV-81, + DEC-14 +  
DEC-14D, near DEC-14. on  
Scan as one unit.
- 1250 Locations SV-81, DEC-14 +  
DEC-14D are cleared as  
marked. DEC-14D location  
marked in white or orange as clear.
- 1252 Now scanning SV-82.  
Move SV-82 ~2' W of white  
marked location.
- 1305 Move to Now scanning SV-83.  
Probable rebar in concrete flag  
at location as marked. B/c of  
possibility of pipe, move location  
~2' S + 3' W of original location.
- 1315 Now scanning DEC-45D.  
Location cleared as marked.
- 1324 Now performing EMI Gr utilities  
on Vandervoort.
- 1342 Completed - no charge on E-side  
of Vandervoort locations.
- 1345 Move scanning  
DEC-66D + 66S.



Location Klink Cosmo Date 5/2/11  
 Project / Client Vander veert + Richardson

1347 Scanning <sup>DEC</sup> 665 + 66D  
 locations as one unit.

Move DEC-66D ~2.5' S of  
 original mark to ON 5E  
 on GPR grid.

DEC-665, stays as marked.

1412 & Light sprinkling of rain,  
 break + protect equipment.

~~1412~~ 1421 Rain stopped, move  
 to Richardson St.

Scan SV-84 + DCE-44D as  
 one unit.

1453 SV-84 + DCE-44D retain  
 locations as originally marked.

1454 ~~Now~~ Now scan DCE-655 +  
 DCE 65D + SV-85 as one  
 unit.

Low penetration w/ GPR,  
 resolution is only to ~3' LGS.

1529 DEC 655 + 65D + SV-85  
 can stay as originally  
 marked.

Location Klink Cosmo Date 5/2/11  
 Project / Client \_\_\_\_\_

1530 Scanning SV-86 on Richardson  
 1541 SV-86 is cleared where  
 marked.

1542 Scanning SV-87 on Morgan Ave  
 Move location to be farther  
 South of electrical mark out.  
 Move it 3' South of original  
 marking.

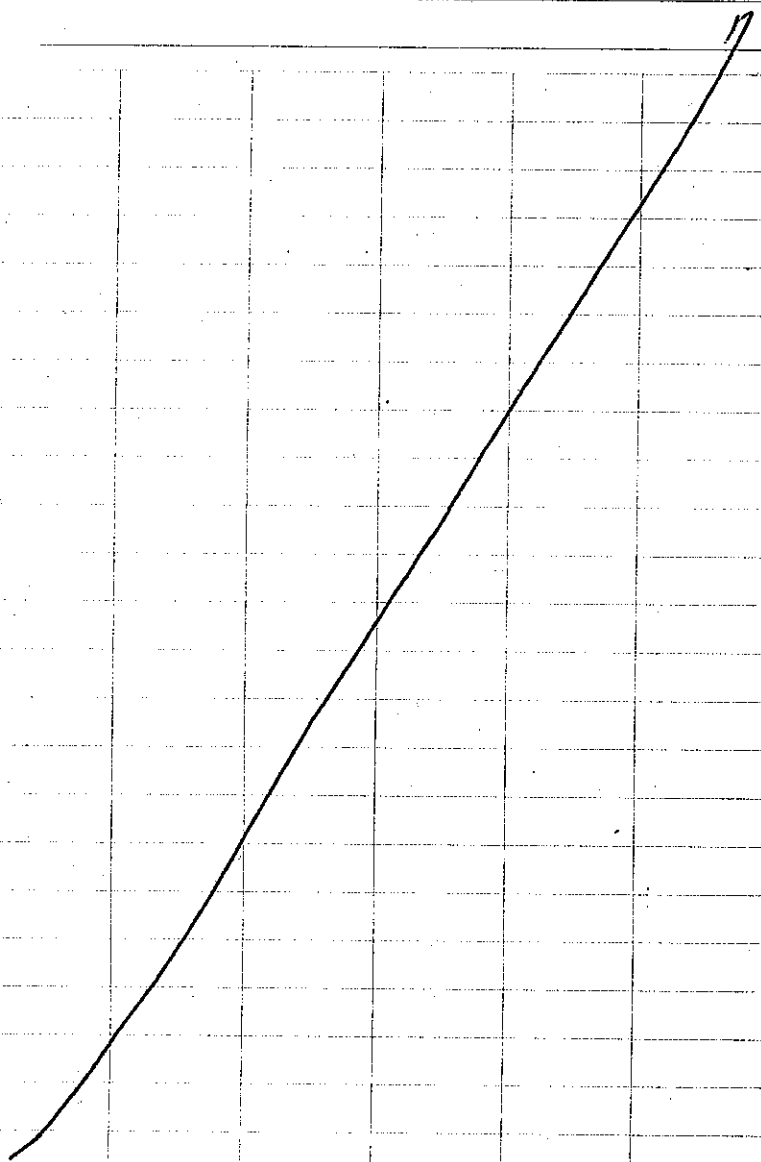
1556 Finished, return to car.



8

Location \_\_\_\_\_ Date \_\_\_\_\_

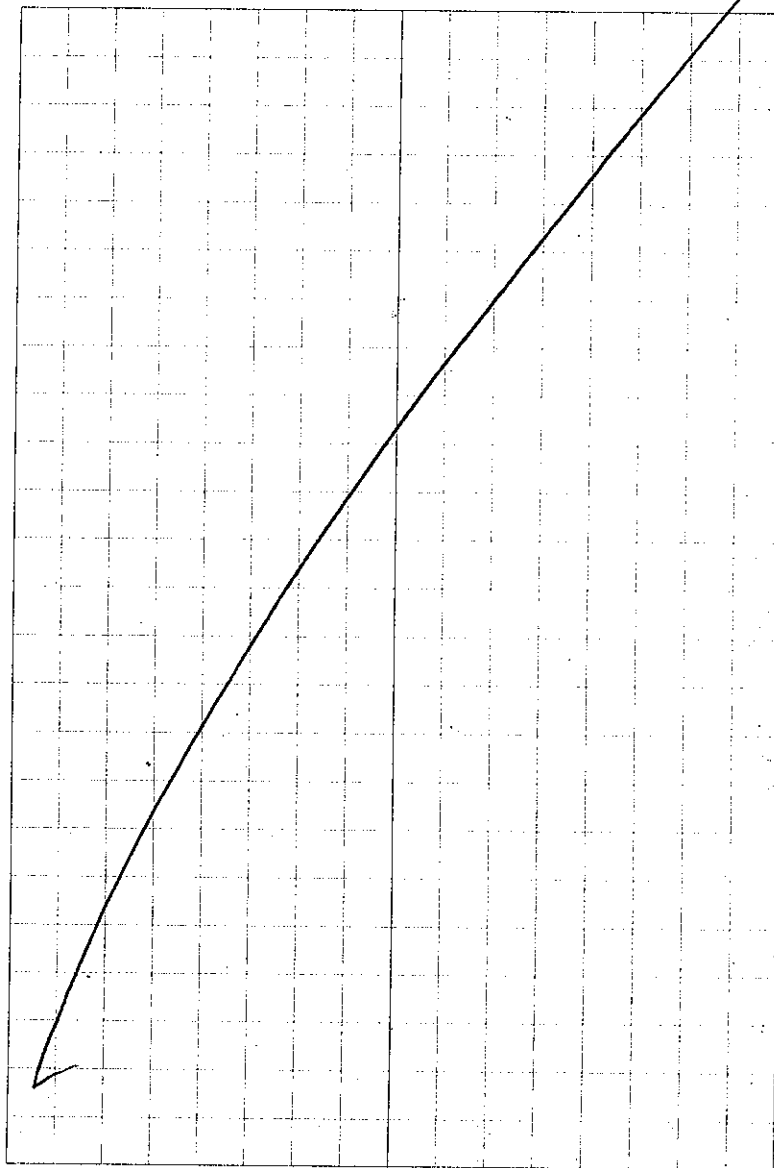
Project / Client \_\_\_\_\_



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Location \_\_\_\_\_ Date \_\_\_\_\_

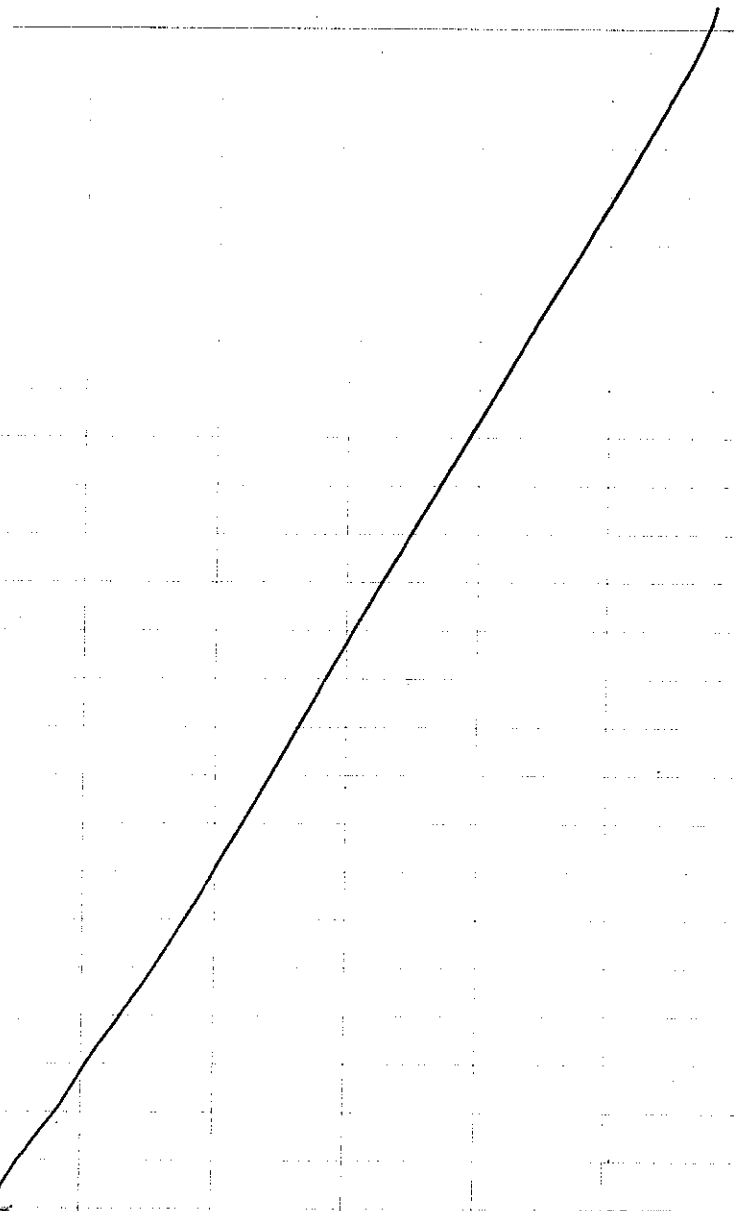
Project / Client \_\_\_\_\_



10

Location \_\_\_\_\_ Date \_\_\_\_\_

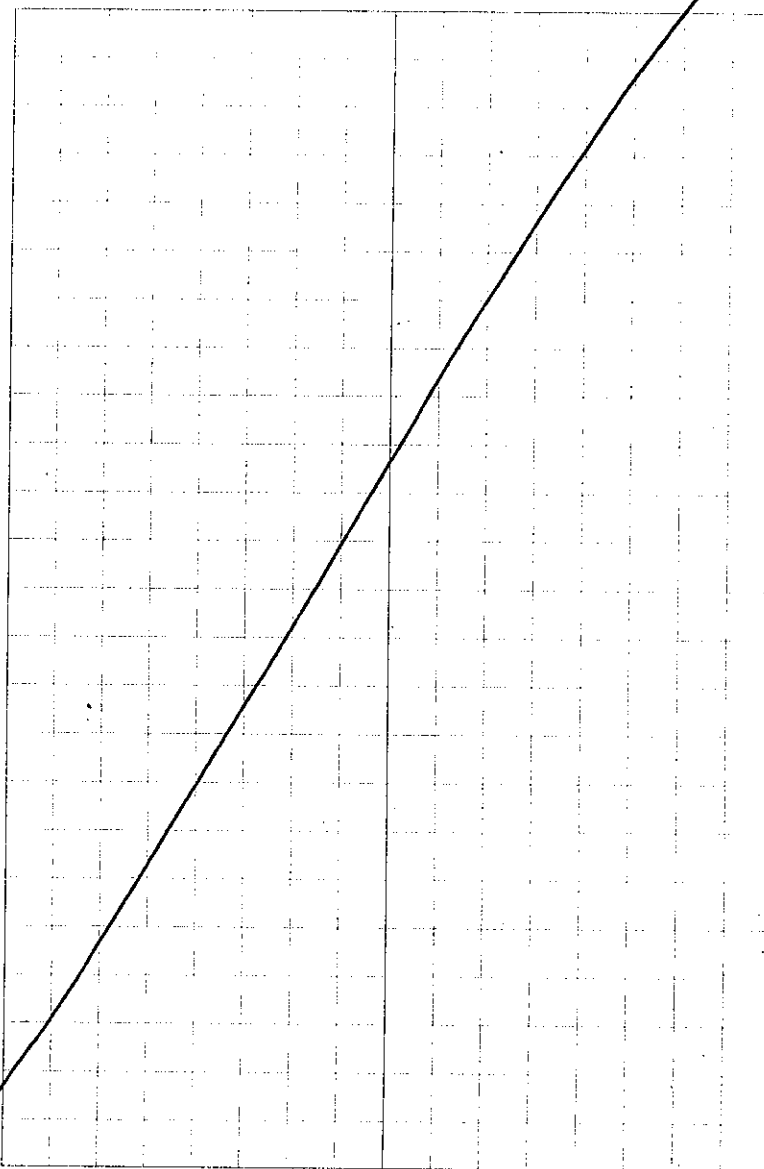
Project / Client \_\_\_\_\_



11

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_



Location Vanderhoof + Division Date 5/9/11

Project / Client Klink Cosmo

weather: Sunny 60°-70°  
light wind from N

7<sup>00</sup> MD arrives + meets Cory F.  
+ Scott M.

### Sampling protocol:

- TCL VOC from highest  
2-202 PID + top of water  
or just to top of water if no PID  
or layers of high contamination
- 1 set from fill +  
1 set from natural
- 1 TCL VOC + 5 VOC,  
pest., herb., PCB etc
- 2-202
- 1-802

### Shallow well installation

10' into water  
1st screen 5' above water

DTB ~45' deep

water at ~35'  
50' logs

2"  
0.010 slot  
#0 sand

Location Corner of Division Pl + Porter Ave

Date 5/9/11

Project / Client

Deep well installation

DTB - 35' <sup>2"</sup> from deeper than shallow  
10' of screen  
0.010 slot  
#0 sand

830 ADT arrives w/ 2 vacuum crews  
Greg Rivera  
Chris Iodice  
~~Scott~~ Mike Brody  
Leo Malynuk

840 Start hand clearing  
DEC-43D

w/ Chris + Leo. at corner of  
Division Pl + Porter Ave.  
DEC-43D dry, no odors

PID

0' 0' asphalt  
0' 0-3' dk brown FILL - sand, gravel  
+ some bricks  
0' 3'-5' med brown vf-m SAND w/  
few silt + few vf-rs gravel  
+ few cobbles

5/9/11

White Cosmo

DEC - 6DD

958 Cleared to DEC-43D to 5'!  
No obstructions encountered.  
Now clean up + patching  
location.

1020 Start cutting sidewalk  
at DEC-6DD on  
Porter Ave after getting  
the concrete saw.

1025 Dave Haggerty, DEC  
arrives.  
shows spot for DEC-7D.  
on Beedel St.

PID

DEC-6DD

0' 0" concrete 3"  
0' 3" - 1.5' dk brown FILL - ~~soil~~ RCA  
0' gravel, some sand, trace brick  
0' 1.5' - 5' med brown SILT + vf SAND  
0.5' few angular gravel  
0.6' 4' Boulder @ 4' able to remove  
4' - 5' no odor, no staining  
same as above.

5/9/11

White Cosmo

DEC - 7D

1110 DEC-6DD hand  
cleared to 5' no  
obstructions. Now cleaning  
up + filling location.

1130 Break for lunch

1210 ADT Chris + Leo pick up  
concrete saw from Greg + Mike.

1220 getting setup on DEC-7D  
on Beedel St.

1230 start cutting sidewalk

1238 Sidewalk broken up

PID

DEC-7D

5" concrete

0' 5" - 15" dk brown FILL - silt, sand,  
0.3 gravel, roots  
0' 15" - 4' med brown - silt + vf sand  
0' ↓ no odor  
0' 4' - 5' same as above ~~very~~  
dense for hand digging  
1332 cleared to 5',  
no obstructions.



16

Location

Vander voort btwn

Date

5/9/11

Project / Client

Besselt Division

- 1400 Cleanup DEC-7D.  
 1415 retrieved concrete saw  
 from other crew. set  
 up @ DEC-15D on  
 Vander voort btwn Besselt  
 Division  
 1423 Start cutting sidewalk.  
 1430 Concrete cut + being cleared.

P10

DEC-15D

- 0 0'-5" Concrete  
 0 5'-15' Dk Brown FILL - silt,  
 sand, few gravel + roots  
 0 2.0' trace glass, trace metal  
 0 1.5' ~~2.0'~~ red brown - ~~SILT + SF~~  
 0 SAND FILL silt +  
 2' v-f sand, trace plastic  
 2.5' red brown - SILT +  
 v-f SAND, few gravel  
 Boulder @ 2.1', 5" thick  
 Boulder @ 2.5' 7" thick  
 cleared to 52"

Location

Klink Cosmo

Project / Client

Date

5/9/11

17

- 1600 cleared to 52" at DEC-15D.  
 Permits end, clean  
 up + cold patch.  
 will finish tomorrow.  
 1630 URS + ADT off-site.

Megan Dandl

Vandervoort <sup>blum</sup> ~~seidel + division~~

5/10/11

NYCDEC klink Cosmo

weather: sunny, 60°-70°, light wind  
from W N7<sup>00</sup> AM MD arrives on-site to  
save parking spaces.

Cory Friedman on-site.

8<sup>00</sup> AM Mike Guttman, + Scott McCabe  
on-site.

ADT crews on-site

Greg + Mike Brady

Chris I. + Bernie

Sonic crew (Jeremy + Frank)

on their way.

9<sup>00</sup> AM Chris Iolice + Bernieset up at DEC-15D to attempt  
to clear to 5'. Vactron down  
to 52", then continue (previously  
cleared on 5/9/11) then continue  
to clear to 60".

PID

DEC-15D

0

4'-5' Boulder, cobbles, few  
sand + silt med brown  
paving stone

E-side of

Vandervoort ~~blum~~

5/10/11

Sof. Richardson, near lunch truck.

1000 Cleared DEC-15D to 5'.

No pipes or utilities found.

cleaned up area, now  
move up Vandervoort.

1025 Set up at DEC-45D

+ start with concrete.

Trying to keep dust down w/  
water on saw.

Now concrete removed

vactroning + otherwise clearing  
the hole.DEC-45D

0'-6" concrete

0

6"-2' dk brown FILL-

0

no odor, sand, silt, gravel,

0

trace glass, trace plastic

0

concrete cobbles, bricks

0

2'-5' dk brown FILL- no

odor, sand, silt,

cobbles, gravel

1140

Cleared DEC-45D to 5'.

No obstructions or utilities.



Location Essex at Vanderhoof blvn Date 5/10/11

Project / Client Division of Richardson

Sunny, 70°, mod steady wind from N

1210 Set up at DEC-14R+14D.

Take a lunch break

1250 ADT starts cutting DEC-14R+14D concrete; then jack hammering it out. Jacking out DEC-14D

PID DEC-14D

0.6 0'-5" concrete  
5'-1' black FILL - sand, silt, gravel  
no odor

0.5 1'-2' med brown FILL - sand,  
silt, gravel, trace brick,  
trace glass

0.4 2'-5' med brown FILL -

0.4 sand, silt, trace brick

0.5

1415 Hand cleared DEC-14D to 5'. No utilities or obstructions.

1425 cleaned up <sup>back</sup> DEC-14D, now start cutting DEC-14R.

Location

seep. 20

Date

5/10/11

Project / Client

PID DEC-14R

0 0'-5" concrete  
5'-16" black ~~med brown~~ FILL -  
sand, silt, gravel, no odor  
trace glass, trace brick  
0 16'-5' med brown FILL - sand,  
silt, few bricks, trace  
glass, compact - no odor  
concrete rubble @ 2.5'  
(loose from 3.5'-5')

1520 cleared DEC-14R to 5'  
no obstructions, no utilities.  
cleaning up + filling, patching hole.

1600

ADT off-site

1615

URS - MD - off-site

all done

weather: partly cloudy, 60°-67°  
wind steady from the N

7<sup>15</sup> I arrive @ site meet  
Scott McCabe + Cary Friedman

8<sup>00</sup> ADT crews on site  
to Jeremy, Frank + Chris  
on same  
German Torres + Mike Brady  
to complete 2 Vactron  
locations. DEC-65 + 65D.

8<sup>45</sup> Another source crew is on the way.  
8<sup>50</sup> Safety meeting w/ Vactron crew  
Vactron crew starts to get

9<sup>05</sup> set up on DEC-65 + 65D.  
Cut concrete for 2 bowls.  
+ then jack hammering out  
concrete.

9<sup>20</sup> Start clearing DEC-65D.

DEC-65

P.D.

DEC-65

0 5" concrete  
0 5"-1.5' <sup>dk</sup> med brown FILL sand, silt,  
0.3 1.5'-5' <sup>dk</sup> med brown SILT + VF SAND  
0 no odor, <sup>trace</sup> vf-v gravel  
0 cobbles  
0

1000 Finished hand clearing DEC-65.  
Now start clearing DEC-65D

P.D.

DEC-65D

0 5" concrete  
0 5"-1.5' <sup>dk</sup> med brown FILL-  
0 sub. silty gravel, trace brick  
0 1.5'-5' <sup>dk</sup> med brown SILT + VF SAND  
0 no odor, trace vf-v gravel  
0 true cobble

1055 Finished hand clearing  
DEC-65D. No other  
or obstructions

Now clearing up area.  
Locations cold patched.



Location Vanderhoort + Division Date 5/11/11Project / Client Klink CosmoDEC-30D

- 1130 ADT sonic crew  
Greg Livera  
Tommy Sheerin  
arrive - tire blew out out  
on the LIE + had to  
be fixed.
- 1200 Un off load rig at DEC-30D  
at corner of Vanderhoort +  
Division Pl.
- 1210 Break for lunch
- 1220 Lunch over, start setting up.  
w/ cones + tape + mud pan.
- 1238 Setting up, problem w/ getting  
the pump working.
- 1318 Pump fixed - it was full  
of sand.
- 1322 Drilling 7" casing 10' by  
to start.
- Tommy Sheerin is the official  
driller, but he is training  
Greg to be the driller, so  
it's going a little slower than  
normal.

Location Vanderhoort + Division Date 5/11/11Project / Client Klink CosmoDEC-30D

- 1329 Drilled in 5' of 7" casing.  
Now drilling 5" casing in.
- 1410 Drilled 5" casing to 20'
- 1452 Drilled 5" casing to 45'.  
Now prep to sample by  
getting sample rods from  
Tommy's truck.
- 1515 Retrieved rods, now clean up,  
after driving easily down to grade.  
Cleaning out mud pan.
- 1600 ADT Greg + Tommy +  
Bernie off-site.
- Generated
- DEC-30D 3 drums of soil + water
- DEC-65+65D 1 drum soil cuttings +  
handchar concrete
- 1635 - 1650 Aaron picks up  
8 drums from 5/11/11 from  
work at 2 sonic holes +  
2 hand chars.
- 1650 URS off-site

Megan D...

Vander veort + Division

Date 5/12/11

NYS DEC

Weather: partly cloudy, 60°-70°,  
light wind from NE

- 720 MD on-site + meet Cary  
Friedman at Division Place.
- 750~~800~~ ADT - Bernie on-site w/one rig.
- 820 ADT - Jeremy + Frank arrive  
w/ Rig
- 830 ADT - Tommy + Greg arrive.
- 850 ADT crew at DEC-30D,  
Tommy, Greg, Bernie  
off-load rig start to get  
set up.
- 920 Rig positioned I conduct  
safety meeting.
- 930 Resume set up after meeting.
- 1010 Start sampling 45-50 at  
retrieve: DEC-30D.
- 1050 DEC-30D / 5-1 / 45-50 <sup>46.5'</sup>  
Rec: 8"  
PID: 0.0  
Descr: Boulder, fine  
reddish brown sand  
Boulder @ 48.5'  
Note: Having trouble w/ 2' extension  
piece on sampler.

Vander veort + Division

5/12/11

DEC-30D

1220  
~~1125~~

retrieve

DEC-30D / 5-2 / 400' - 55'

Rec: 5"

PID:

Descr: Boulder @ 50' - 53.5'  
can't drill thru it

Rock mushroomed out of end



Retrieval head  
1200  
1130A

Now will advance casing to 57' +  
try to sample again, 55'-60', after  
retrieving head @ 1200 pm.

1205 Pieces of boulder are stuck in the  
casing. Try to spin the sampler  
down to remove the rock.

Retrieval sampler it falls,

1252 Re-Retrieve sampler,

Casing slipped down to 57'

Put another 5' on + drill down to 60'.

1310 Break for lunch.

1340 Lunch over, Sample 60'-65'.  
Missed 55-60 S/C  
Sampler casing slipped



5/12/11

DEC-30D

DEC-30D / S-4 / 60-65'

Rec: 24"

PID: 0, 0, 0

Deser: loose vf-vc SAND,  
 wet brown true vc gravel  
 64.5' - @ 65' fine GRAVEL, true cobble  
 no odor, wet

1420 Retrieve:

DEC-30D / S-5 / 65-70

Rec: 4"

PID: 0

Deser: gray granite  
 Boulder mushroomed  
 on end of sampler.  
 @ 65', no additional sample,  
 boulder pushed everything  
 else 65-70 out of the way.

1445 Retrieve:

DEC-30D / S-6 / 70-75

Rec: 48"

PID: 0, 0, 0, 0, 0 loose

Deser: med brown, no odor

70-73 vf-c SAND w/

few vf-c gravel

73-75 vf-m SAND + gravel

5/12/11

DEC-30D

1520 Retrieve:

DEC-30D / S-7 / 75-80

Rec: 60"

PID: 0 →

Deser: med brown, no odor,  
 vf-m SAND w/ few vf-c  
 gravel, loose

1525 Now cleaning up + prep  
 to leave casing in the ground  
 to install monitoring well  
 on Monday, 5/16/11.

1530 Arco arrives.

DEC-30D generated 1 drum today.

1600 JKST ADT off site

Megan Davis

Location

Date

5/16/11

Project / Client

Meeker Ave

57° Rain, mid

1200- Tim Ifkovich returns to DEC-0360  
@ Spic + Span site to rerun slug test.  
Will use 2' length slug & 1 1/4" dia.  
to run slug test.

1400- Spoke w/ Scott M., agreed the test  
will take too long & stopped test  
after approx 2 hours.

1700- Performed slug test on DEC-310, 315, 44  
All three wells recovered very quickly  
See slug Test logs for details  
URS off site

TWT

Location

Date

5/17/11

Project / Client

Meeker Ave - Klink Cosmo

58°, Rain, Thunder &amp; lightning in AM

0730 - T Ifkovich (URS) on-site, will wait  
to see if thunder & lightning will stop.

0835- Set up on DEC-430 to begin  
Developing. Will use a Waterra &  
Generator to develop. Will purge ~100 gal  
(2-55 gal drums). Will record parameters  
PH, Turb, Temp & Spec Cond.

1015- Finish developing DEC-430.  
Purged 100 gal.

1050- Picked up 4 drums from drum place.  
(see log in back of book)

1115- Started developing DEC-300

1300- Finish developing DEC-300  
will move to DEC-290

1345- Start developing DEC-290

1530- Finish developing DEC-290

1730 - URS off site



Location

Date

5/18/11

Project / Client

Meeker Ave / Klink Cosmo

60°, Cloudy

- 0730 - T. Ifkovich (URS) onsite.  
Meet w/ S. McCabe & C. Friedman (URS)
- 0915 - Begin development on DEC-15D
- 1100 - Finish developing DEC-15D, will meet up w/ S. McCabe.
- 1400 - Begin to slug Test DEC-43 & DEC-43D
- 1445 - Move to slug Test DEC-29
- 1700 - Set a rig w/ Carrie for a couple hours throughout the day. Off site

TW1

Location

Date

5/19/11

Project / Client

Meeker Ave - Klink Cosmo

63°, Cloudy

- 0730 - T. Ifkovich onsite, stopped @ Hardware store for supplies & gas station to fill up the generator.
- 0745 - Meet up w/ S. McCabe  
Will begin slug Testing for the day
- 1130 - Run slug Tests on DEC-29D, DEC-15 & DEC-15D. Pipe dropped off tubing for development.
- 1140 - Picked up 4 drums for development
- 1220 - Begin developing DEC 14D
- 1355 - Finish developing DEC 14D  
Begin DEC-14R
- 1514 - Finish 14R. Move to DEC 64D
- 1700 - Finish developing on DEC 64D  
URS off site

TW1

Location \_\_\_\_\_

Date

5/20/11

Project / Client

Meeker Ave - Klink Cosmo

70°, Cloudy

0830- Begin to Slug Test DEC-30 & DEC-30D.

1000- Slug Tests complete, will pick up 2 drums for development

1030- Begin developing DEC-007D.

1200- DEC-007D developed, move to slug Test DEC-014D & DEC-014R

1300- Break for lunch

1345- Move to slug Test DEC-012

1430- URS (Tiffen) off site to airport



TW1

Location \_\_\_\_\_

Date

5/23/11

Project / Client

Meeker - Klink Cosmo

Cloudy 60°

0730 Tiffen (URS) onsite, meet up w/ C. Friedman (URS) to discuss the days work. Will setup to drill DEC-013D. Will drill straight to 45 feet & begin logging. (use DEC-013 boring log for 0-45' description)

0830- ADT on site

Greg Rivera - Driller

Dave Mann - Helper

0900- Drillers fill up water tank @ hydrant & setup on DEC-013D. Had Tailgate safety meeting w/ drillers.

Borehole was previously cleared to 5' bgs by Vactron.

NYS DEC - Dave Harrington on site

Drillers are using a Compact Fols

Sonic 17-C Drill Rig

1030- Rig sprung a leak of hydraulic fluid from a fitting above the head.

Greg took a picture & called the shop. ADT will drive the parts out to repair. Will perform a slug Test on DEC-012 while waiting.



5/23/11

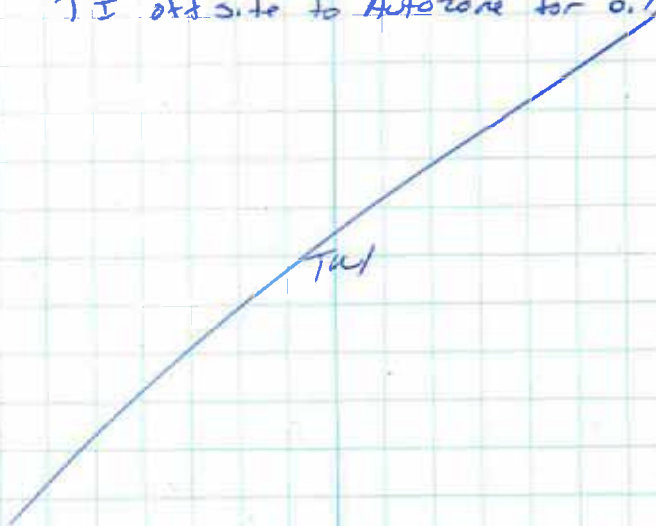
Meeker Ave - Klink Cosmo

- 1215 - Performed Slug Test on DEC-07D & DEC-64D. Still waiting on parts to be delivered.
- 1225 - The ADT mechanic arrives to fix the rig.
- 1235 - Picked up 2 drums for development later. Driller left w/ mechanic to pick up supplies to fix rig.
- 1305 - Driller & Mechanic return to fix rig.
- 1315 - Rig was fixed, resume drilling.
- 1400 - Around 17' bgs, drilling through boulder. water was unable to get down through the stuffed casing. Drillers used rods to drill through the casing & try to clear out the material clogging the casing. A fitting on the water pump also seems to be leaking. Have difficulty sucking up water from the mud pan.
- 1435 - Support Truck goes to fill up water. Asked the drillers to drain the mud pan more frequently to avoid overflow.
- 1515 - Drillers got to 40'. 3 drums of water & 1 soil drum. Carrie also asked drillers to clear up muddy water left around the borehole & street.

5/23/11

Meeker Ave - Klink Cosmo

- 1620 - Drillers Filled up w/ fresh water & cleaned up the area. Drillers off site.
- 1650 - Met up w/ C. Friedman to discuss progress. Start to develop DEC-006DD.
- 1730 - Just able to get generator started. may be oil, will pick some up after well is developed.
- 1900 - Development complete @ DEC 006DD. TI off site to Autozone for oil.



- 0715 - TIFKOVICH (URS) onsite to block off Area around DEC-013D. Meet w/ C. Friedman (URS) to discuss the days work. Will continue to drill DEC-013D & start logging the Log @ 45', currently @ 40'.
- 0730 - TI Slug Tests well DEC-045.
- 0805 - Slug Test Complete. Instant Recovery
- 0830 - Drillers begin setting up on DEC-013D
- 0900 - Drillers go to fill up water tank @ hydrant
- 0920 - Drillers return w/ water ~~begin drilling~~ <sup>fill</sup>
- 0927 - Drillers go to other support truck to grab another 7" casing, the 7" casing already in the hole has sunk down
- 0935 - Drillers return, begin drilling  
Driller - Greg Rivera, Helper - Dave Moon
- 1000 - Drilled to 55', drillers move to get water
- 1112 - Drillers return w/ water
- 1159 - Drillers out of water again. Break for Lunch
- 1245 - Drillers continue drilling
- 1300 - Haven't drilled 5' since restarting & already out of water, this is the fifth trip
- 1310 - Continue drilling, picked up 2 drums for development
- 1345 - Collected sample from 60-65' but out of water again (6th trip), the formation seems to be

- taking all the water sent down the casing. No water has come up through the casing into the mud pan. Drillers still think there water pump isn't working properly. Asked the drillers to clean up some of the puddles in the road made by water coming out of the rods during sample extraction.
- 1357 - Continue drilling
- 1414 - Drillers fill up water tank again (7th)
- 1420 - Spoke w/ S. McCabe regarding progress & about using so much water @ this location. Will continue to drill down to 85' bgs
- 1430 - Return w/ water, continue drilling
- 1515 - Sampled 65-70' interval, at this rate will not be able to drive another 5' section of casing in before 1600. Driller moves to fill water tank & will move casing flush w/ ground level
- 1530 - Drillers begin to clean up.
- 1620 - Drillers offsite. Set up on DEC-064 for development. Well is supposed to be 45' deep. But a depth to water was found @ 2.22 & cont. →



5/24/11

Meeker Ave - Klink Cosmo

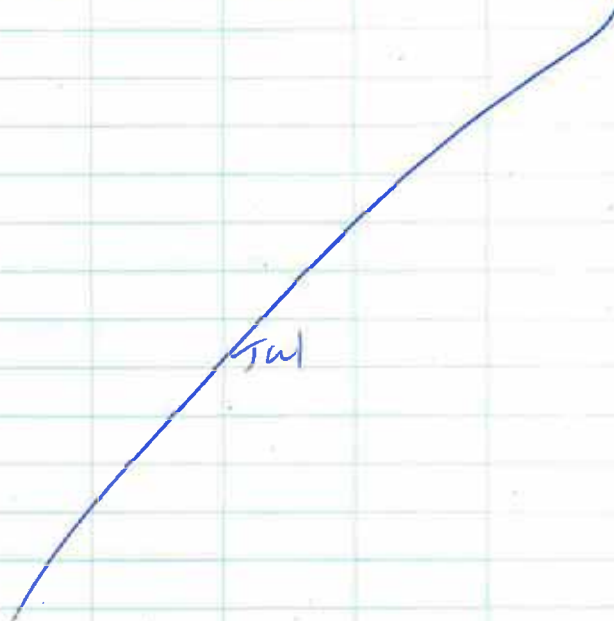
a depth to bottom was 25.40. TI & CF used tubing to jab @ the bottom of the well but no material came up.

Seemed like a hard bottom to the well.

Spoke w/ S. McCabe. Drillers will try to flush out the well in the morning 5/25/11.

Move to develop DEC-066D

1830 - Finished developing 066D. TI off site



5/25/11

Meeker Ave - Klink Cosmo

Sunny, 80°

0730 - T. Ifkovich on site, spoke w/ C Friedman about the days work. Performed slug test on DEC-066DD, however, will run the test again later. Don't think the slug was completely under water, need longer rope. Spoke w/ S. McCabe, drillers will try to flush out DEC-064.

0840 - Drillers arrive. Greg Rivera - Driller  
Dave Noma - helper

0900 - Drillers setup on DEC-064

0945 - Drillers flushed out the well using a retriever. They injected water into the well pushing out the sand that got into the well. Took a depth to bottom measurement of 44.8' bgs.

Spoke w/ S. McCabe on progress

1000 - Drillers begin drilling @ DEC-03D  
Starting @ 70' bgs

1045 Still having trouble pushing the casing down.

Jeremy came over to look @ the rig.

Drillers will try to bypass the water pump to see if it helps to put water down. Believe the water pump still isn't working properly.

5/25/11

Project / Client Marker Ave - Klink Cosmo

- 1115 - Drillers try again to advance casing, <sup>collected 1 sample but unable to advance casing</sup>
- 1130 - Drill rig still not working properly, decide the rig has to be taken back to the shop for maintenance. Spoke w/ C. Friedman. Drillers will leave casing, to be completed by the other drill rig. Drillers begin clean up.
- 1300 - Pick up 5 drums to continue development
- 1315 - Attempted to develop DEC-045, the well was installed to ~80', depth to bottom was measured 60.91'. Tried cleaning well w/ water but tubing kept getting clogged w/ <sup>fine</sup> sand. C.F. spoke w/ S McCabe, will have drillers flush it out in the morning. Move to DEC-064 to continue development
- 1630 - Development complete @ 64. AARCO picked up 5 purge water drums + 2 soil/mod TI off site

Tw1

7/26/11

Project / Client Marker Ave - Klink Cosmo

Partly Sunny, 75°

- 0815 - TIFRANCH (URS) arrives on-site <sup>013 (TW)</sup>
- Will move to DEC-~~066~~<sup>013</sup> to slug test
- 1050 - Slug Testid DEC-013, DEC-066 D, DEC-064 + DEC-006 DD. Move to setup on DEC-065 D for development.
- 1300 - Finish Developing DEC-065 D, will grab lunch + meet up w/ C. Friedman
- 1500 - Drillers stop the day (see C.F. notes)
- 1530 - C.F. off site
- 1545 - AARCO arrives to pick up the drums
- 1615 - All drums picked up. TI off site

Tw1



Location

Date

5/27/14

Project / Client

Meeker Ave - Klink Cosmo

Sunny 80°

- 0815- T. Ifkovich on site. Will Slug Test DEC-065D.  
 1230- Drive to Fedex to ship geotechnical samples to URS buffalo office. Watched the rig w/ C. Friedman. TI offsite

TWI

Location

Meeker Ave / Klink Cosmo

Date

4/20/11

Project / Client

Weather - Overcast, 80°

- 0730- T. Ifkovich & K. McGovern on site @ Staples. Meet w/ C. Friedman. Sampling equipment has not yet arrived. Sample bottles have not yet arrived. Grab interface probe from CF & begin a round of water levels (see W.L. sheet).  
 1100- Pine delivers equipment. CF & Steve meet Pine @ McDouglts for equipment.  
 1130- Break for lunch.  
 1145- Mitkem Lab delivers bottles & 4 coolers. Split up bottles & equipment w/ CF & Steve.  
 1254- Set up on DEC-064 D to begin sampling. Will use bladder pump & Horiba U-52 for parameters. Collect samples for TCL VOCs & TRCs analysis.  
 1414- Finish & collect sample @ DEC-064D  
 1444- Begin sampling DEC-064  
 1600- Begin sampling DEC-006DD  
 1733- Finish sampling DEC-006DD collected Field Duplicate, move to DEC-006D.  
 1900- Finish sampling DEC-006D. Go to Autozone for socket. Off site

Location Meeker Ave / Klink Corro Date 6/21/11Project / Client NYSDECSunny, 80°

- 0720 T. J. Kurch & K. McGovern on-site.  
 Meet up w/ C. Friedman & Steve to  
 exchange samples & containers. CF set  
 up on DEC-031 & DEC-0310. Move  
 to setup on DEC-046 & collect WL  
 & depth to bottom. (Car was parked over it  
 yesterday.)
- 0915 - Finished DEC-046, collected MS/MSD.  
 Picked up another water drum
- 1055 - Finish sampling DEC-033. will move to  
 DEC-047
- 1215 - Finish DEC-047, will dump water  
 in drum, give samples to Carrie, &  
 break for lunch
- 1310 - Setup & begin to sample DEC-007
- 1435 - Finish DEC-007, move to DEC-007D
- 1606 - Finish DEC-007D, move to DEC-048
- 1630 - Found trace LNAPL w/ slight Pet. odor  
 @ DEC-048, OTW-25.45, DTP-25.42  
 spoke w/ S. McCabe, will move to different  
 well. Will set up on DEC-028  
 S. McCabe called back to advise to call  
 the DEC & report the spill.

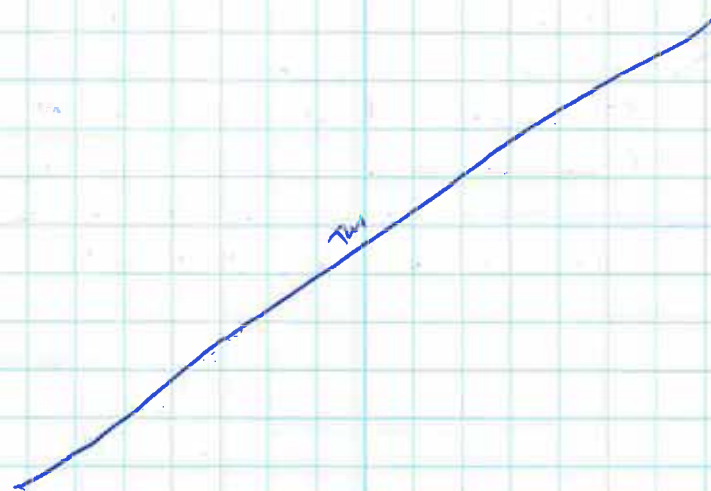
Location Meeker Ave / Klink Corro Date 6/21/11Project / Client NYSDEC

1500 - Spoke w/ Steve from the NYSDEC  
 (1-800-457-7362). Reported 3/100's of  
 a foot of LNAPL (w/ Petroleum odor)  
 found in well DEC-048 on Withers St.  
 in Brooklyn, NY. Possible cause is  
 from a fuel truck parked on side walk.  
 Responsible party is unknown.

DEC site # - 2-24-130

Spill # - 110 31 90

1820 - Finished sampling DEC-028, dumped  
 water into water drum. Will stop @  
 Staples for bubble wrap & freezer  
 bags for ice. ORS off-site





0720 - T. Iffkovich + K. McGowan onsite. Meet up w/ C. Friedman + Steve. Tell CF about the LUAR @ DEC-018 + that it was called in to the DEC. Gave her purge logs for DEC-007D + DEC-028.

0730 - Move to setup on DEC-015

0858 - Finish DEC-015, Move to DEC-015D

0923 - Sheriff from NYSDEC called for more background information on the spill called in yesterday. Advised that S. Mcase would have more background information.

0930 - George Kroluk called to advise they want the LUAR in DEC-048 sampled for VOCs, SVOCs, Petroleum ID + Specific Gravity. Spoke w/ CF about sampling. She is going to call George to discuss the sampling.

0935 - CF called back to say not to worry about sampling DEC-048 just yet.

1010 - Finish DEC-015D, will get a water drum + PPE drum.

1115 - Setup on DEC-022 but air compressor is cutting out. Will take an early lunch.

1244 - Air compressor still not working. Checked all connections.

CF called Pine for a replacement.

We took CF's Air Compressor and continued to sample on DEC-043. CF + Steve will get another water drum + open top drum for PPE.

1345 - Finish sampling DEC-043, will take purge water to water drum + set up on DEC-022D

1410 - Spectrum Labs arrives to pick up the samples.

1750 - Finished sampling @ DEC-022D.

MARCO arrives to pick up the drums.

2 - PPE/Tubing; 1 - Purge Water

Setup on DEC-032 to begin sampling

1620 - Finish sampling @ DEC-032 + move to DEC-066D

1800 - Finish sampling DEC-066D, move to DEC-066

1850 - Finish DEC-066. DO readings were fluctuating from 9.80 to 2.20. Not working properly.

1900 - URS clean up, off site

Location Marker Ave / Klink Cosmo Date 6/23/11Project / Client NYSDECCloudy, 80°

0720 - T. Izkovich + K. McGovern on-site

Grab tubing from C. Friedman + setup  
on DEC-029D.0908 - Finished @ DEC-029D, began sampling  
@ DEC-029.0954 - S. McCabe called. We will go to another  
site in the Bronx to get some elevation  
measurements later today.

1003 - Finish sampling DEC-029. Move to DEC-014D.

1200 - Finished sampling DEC-014D, move to DEC-014R.

1300 - Finished sampling DEC-014R.

Break for lunch

1330 - Setup on DEC-009

1442 - Finish sampling DEC-009

1645 - Drove to Can Ed site @ 295

Locust Ave in the Bronx.

Measured distance from ground surface  
to Top of Riser for MWMF-05  
+ MWMF-06

MWMF-05 → 0.24'

MWMF-06 → 0.30'

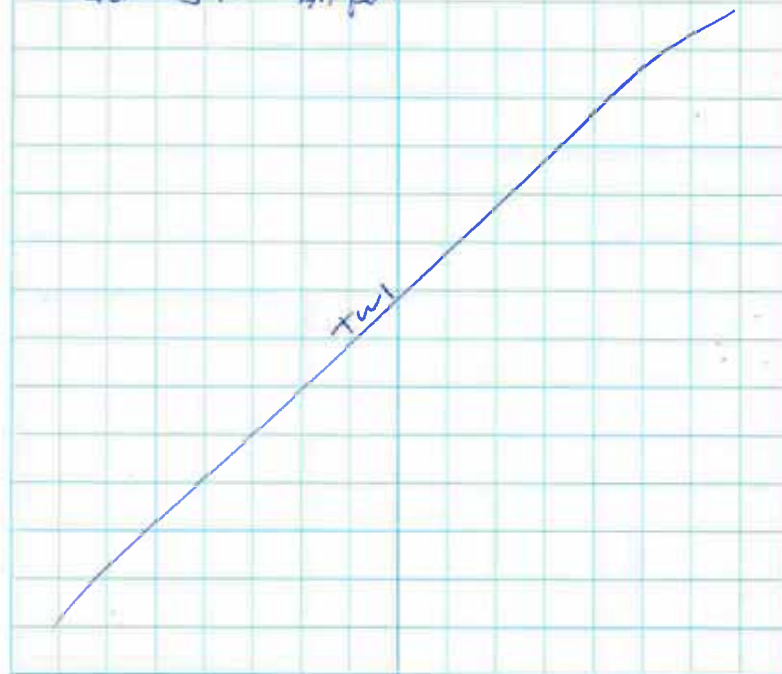
Return to hotel

Location Marker Ave / Klink Cosmo Date 6/24/11Project / Client NYSDEC

0715 - T. Izkovich + K. McGovern on-site

Set up on DEC-039. Will collect  
a Field Duplicate @ this location.

0825 - Finish DEC-039. Will move DEC-027.

0935 - Finish DEC-027. Will meet up  
w/ Carrie to do final clean up.1215 - Assisted Carrie + Steve w/ LNAPL  
sampling @ DEC-048, left all  
equipment w/ Carrie. Left site  
for JFK Airport.



## CONTENTS

[illegible]

Location

Date \_\_\_\_\_

te ~~5/1/11~~  
5/2/11 *as*

Project / Client

0730 S.M. ARRIVES ON SITE.

C, F & M.D. OUSITZ in STAPUR.

pinkw/lot waiting for Doris of

Random Solutions to ARK102

WX: OVERCAST 59°F

0800 PINE ENVIRONMENTAL COUNCIL  
TO DIAL OFF EAPT.

2 - Multiflow Plus  $\text{NiO}/\text{KCl}/\text{H}_2\text{O}/\text{O}_2/\text{H}_2\text{S}$

2 - 100' Soloway Interface probe

Fingerboiler, Beanpluss & Nicturite gloves.

0830. UN'S GOES TO REVIEW MINUTEMAN,  
WELL & SOIL GAS LOCATIONS.

17 mountain walls & 10 sea GAs.

0885 Radon Solution - Dolemt  
ansatz:

→ will provide utility clearance  
at well & Sul gas locations

→ Sir 2000 GPR, ditch water

INDUSTRIAL INSTANT, McLaughlin  
pipe location and power source.

- M.D. will work with DORIS

- call ADT. AS OF KNOW, THEY DO NOT HAVE PERMITS TO START

Tomorrow (Tuesorey), Dennis

Location \_\_\_\_\_

Date 5/1/11

Project / Client \_\_\_\_\_

5/2/11 (S)

(cont.) will keep S.M. informed on status.

→ probably will have permits on Wednesday.

→ S.M. calls Zabin. David Viles has not heard anything yet about permits for work on Thursday & Friday.

→ S.M. calls AALCO to cancel drop pin for today.

→ S.M. call D.H. with update.

→ S.M. calls Gorman with update.

1200 S.M. & C.F. off site for College Point.

1600 S.M. speaks with D.H. if permits available for Wed. ADT need to

send 2- Vacuum crews & 2 Rigs.

1615 S.M. calls Dennis at ADT.

OIL with D.H. request

1630 Measure transducer at Collected

17000 OFF SITE

Location \_\_\_\_\_

Date 5/2/11

Project / Client \_\_\_\_\_

5/3/11 (S)

0730 S.M. arrives at SITE

WX: clear, sunny, 60°F

→ M.D. is on another SITE, C.F. went to OFFICE.

0800 Dennis onsite. Have 6 location EAST OF VANDERBILT TO clear TO complete utility clearance.

0830 MOVE TO DEC-0430. 10' square w/ location AT CENTRE.

0900 MOVE TO DEC-00600

0930 MOVE TO DEC-00700

1000 MOVE TO DEC-00700 ACT

1015 MOVE TO DEC-0150

1035 MOVE TO SG-79.

- note white van dumping  
w/ SK come off porta & dump  
w/ put EBC 2859

1110 Finish location DEC-00900

1200 Doria OFF SITE.

→ ADT calls. NO DOT permits.

- S.M. calls D.H. we will TALK when HZ GETS onsite.

- S.M. goes to find all SC.

Wells & put them on a FIBER



Location \_\_\_\_\_

Date 5/2/11

Project / Client \_\_\_\_\_

5/3/11 Sun

1430 S.M &amp; D.H Finish Requiring

S.I.R Characterization Location.

→ Goto mark up a duplicate set  
of figures.1600 Dennis of ADT calls. D.H needs  
to call Lynn Carr at DOT to  
clear up problems with permits.1615 DOT permits should be ready  
Tomorrow ~ 3pm

1630 S.M &amp; D.H OFF SITE

Location \_\_\_\_\_

Date 5/3/11

Project / Client \_\_\_\_\_

5/4/11 (Sun)

0800 S.M &amp; D.H LEAVE HOTEL.

WX: 60°F, RAIN

1000 S.M &amp; D.H GOTO GET A GENERATOR.

TO perform well maintenance  
(will need to power drill used to  
drill out stuck bolts).

1030 START well maintenance.

1130 Dennis calls. DOT still not giving  
ADT permits. Lynn is out too.1500 Peter from Zebra calls. They  
have all permits but ones  
along VANDERVOORT. will need  
a sketch.- S.M & D.H still performing well  
maintenance.1900 S.M & D.H OFF SITE. DONE  
for the day

Location \_\_\_\_\_

Date 5/4/11

Project / Client \_\_\_\_\_

5/5/11 (S)5/4/11

0800 Sim & D.H. onsite continuing well maintenance.

WX: Clear, sunny, 60°F.

10:00 ZEBRA calls with Gutmann. Sim gives Zebra description of soil gas locations along Vanderhoof. They will be ready to go for tomorrow.

1100 ADT calls. Still no permits. D.H. will have to call 718-222-7301 or 7036.

1200 Sim & D.H. onsite with well maintenance.

- Sim's Rental car is burning oil & smoke filler car. Sim & D.H. go to Enterprise in McGinnis & Kent.

1330 PIT off for day for meeting.

Sim goes to College Point to take down temporary drum racks.

& meet with Arthur for A&S upgrade.

Location \_\_\_\_\_

Date 5/6/11

Project / Client \_\_\_\_\_

5/6/11

0730 Sim onsite.

WX: Clear, sunny, 59°F.

EQUIPMENT:

- MultiRate Plus.  $\text{Air}/\text{Le}/\text{H}_2\text{O}/\text{O}_2/\text{H}_2\text{S}$   
- Waiting for Zebra ENU to arrive at site to perform soil boring & soil gas implant installation.

845 ZEBRA ENU on site.

Charles E.

Track-mounted 6620 RT.

- Set up on SG-079.

1000 move to SG-078.

- Note: grab 1 soil sample from each location.

- C.F. takes over working with Zebra.

- Sim calls Cowie about jacketing wires along Vanderhoof between Richardson & Frost.

- Call Arthur. Schedule LAB pickup for next Monday, Wed & Fri.

1230 Over site.

5/9/11

0700 S.M. on site

WX: PARTLY CLOUDY, 62°F.

0710: C.F. &amp; M.D. on site

EQUIPMENT:

MULTIRATE PLUS: pip/URU O<sub>2</sub>/H<sub>2</sub>S/CO.

→ WAITING FOR ADT TO ARRIVE on site

0830 ADT on site w/ 2 VACTRON CROCOD.

GIVEN 2 MILK BODS

CHRIS JAMES &amp; YURI.

→ will clear 17 well locations to  
5'0' BGS in 2'x2' squareEQUIPMENT: AIR KNIFE, VACTRON OUT,  
DIG BARS, POSTHOLE DIGGER, PLANT SAW  
TO CUT CORERS.

M.D. will start with CHRIS AT DEC-0431

C.F. will begin with Gey at DEC-300

1230 MEET MITCHELL (KEVIN)

TO pick up SAMPLES

1315 VACTRON ADDRESS

M.D. - DEC-430, DEC-00600 JOD

C.F. - DEC-300, DEC-0130 CHL

→ Gey sets up TO VACTRON DEC-066 &amp;

DEC-066 D on VAN DERVOORT.

5/9/11

1315 GUTMANN on site M.D. Has completed

CLEARANCE OF DEC-0070

1430 DEC-066 closed TO 3'0"

8" coring down FILL in c. dry sand,  
slits, gravel, gravel (Beds, dry) and  
Rb. in, side FILL TO 3'0"  
NO pip.

1530 DEC-066 D.

→ TAN LIKE SUBSTANCE 8"-1.5"  
Blud, motabac like odor.Sample FOR FULL TCU + PCB  
Characteristics. 1 week TAT- Segregate OUT INTO SEPARATE  
for disposal pending ANALYSIS.1600 Megan down TO 4.2' on  
DEC-150. will finish tomorrow- S.M. calls AARCO TO let them  
KNOW. ABOUT DUN

- Motion for AARCO.

Drums

2 - Soil &amp; Concrete

1 - TAN like material

1730 AARCO picks up drums

5/10/11

0700 S.M, C.F &amp; M.D on site

WX: Clear, sunny 62°F.

0800 ADT JACKSON on site

Crew #1 GREG &amp; MIKE BRADY

Crew #2 BENNIE &amp; CHRIS

GOTHMAN on site

0900 Crew 1 STARTS. DEC-044D, CR

Crew 2 continue on DEC-015D

0915 P.M. on site. NO RG yet.

- Calls ADT: Jeremy is on the way.

1000 ADT on site with RG

Track marks some

Jeremy &amp; Frank.

Crew 1 moves to 64

Crew 2 move to DEC-044D

1100 Crew 1 move to 64D

- ADT begins some drilling at 29D.

DEC-044D - 0-4" concrete

4"-14" Brown, moist, fine to coarse sand  
size gravel/silt. Some brick, gravel.

Open

14"-50" Brown, moist. Fine sand, silt

1330 Set up on DEC-44D

5/10/11

DEC-044D.

0-4" concrete

4"-12" FILL: Brown - dark brown, moist

silty sand, trace brick, rebar.

12"-50" Brown, moist. Silty fine sand

Trace gravel, cobble.

Grub sample for waste charcoal

From DEC-044D 4-5' 1430

FILL TYP PLOS J.P.C.

1515: Corey Carter - com. in.

- will put in work order to GET  
overhead wires jacketed by  
DEC-66/66D by END OF THE  
week.

- Greg, patches covered at 2 former

Boring locations. THE OLD patches

Siph. 1 by DEC-44, 1 on

Vandenberg

1600 Done for the day.

Drums

2 - Condo

1 - Silt

3 - drill mud.

Location \_\_\_\_\_

Date

5/10/11

Project / Client \_\_\_\_\_

1910 AARCO over  
 1435 AARCO OFF SITE  
 - Sun OFF SITE

Location \_\_\_\_\_

Date

5/11/11

Project / Client \_\_\_\_\_

0700 .S.M, M.D. C.F. on site TO  
 TAKE UP SPOTS FOR Drilling Access  
 wx: partly cloudy, 55°F wind T-10  
 mph from west

0800 ADT over

1. VACTRAN crew -

1. Soia Rig - Johan, Frank &amp; Chris migrate

0830 - 2nd Rig on the way. TRUCK lost  
 A TIME & THEY ARE waiting for  
 A new one.

M.D. Goes to work with THE VACTRAN  
 Crew at Dec-065 / -065D.

- M. Gorman & D.H. on site. go to  
 work over Spic & Span Site to  
 review prepared borehole

0910: Cont'd Drilling at Dec-029D from  
 45' bgs.

1125. M.D. finished clearing AT Dec-065D

→ ADT 2nd Rig on site

Tommy, Greg, Beemo.

→ ADT will set up a - Dec-050D.

230 Sun OFF SITE FOR BUFFALO

Date 5/16/115/16/11

0700 S.M. &amp; Tim IFRWELL meet C.F. onsite

WX: cloudy, light to moderate rain 55%

0720 ADT onsite

Crew 1 - Jeremy &amp; Fred

Crew 2 - Greg &amp; Dave Moon

C.F. will work with crew 1

S.M. &amp; T.I. work with crew 2

Crew 2 to set up on DEC-30D, it has  
been advanced to 80.0' bgs. just need  
to set well up 10' screen (2" SCH 40 PC #10, #14)

- Permits start at 0900

0900 Set up sonic ris on DEC-030D & Begin  
to set well.

1220 Finish setting DEC-030D, will  
move over & set up on DEC-014D.

- ADT goes to GAT Lunch

T.I. off slug testing, will redo DEC-36D  
first

1400 T.I. calls, no real bang for slug in AT  
DEC-36D & it's been almost 2 hrs. call  
test done, will move to DEC-031/031D  
to perform slug test.

Date 5/16/11

1500 AA100 onsite waiting to put up  
drums.

2 - Soil

2 - H<sub>2</sub>O.

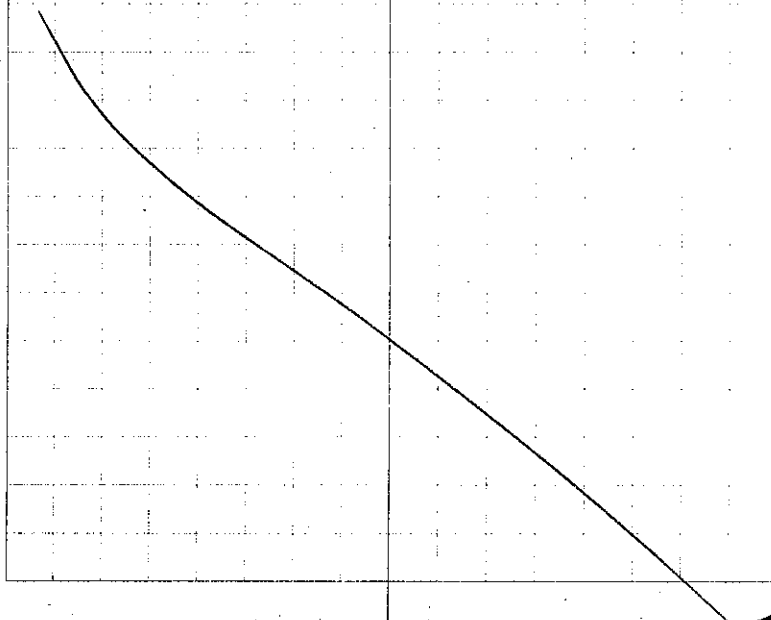
4 TOTAL

1530 Crew #2 done to 30.0' bgs on DEC-14D.  
will drive casings flush & cover  
with a steel plate for the night.

1615 ADT off site.

T.I. &amp; S.M. slug testing DEC-044

1700 off site





Date 5/17/11

5/17/11

0700 S.M.T.I., C.I.E. on site

WX: RAIN, 55°F.

EQUIPMENT:

MULTI RAR plus: p/d/lev/co/oz/hz

0730 - LIGHTENING

0800 - ADT on site.

Crew 1 - Jerry &amp; Frank

Crew 2 - Dave &amp; Guy

T.I. Goes to develop DEC-080

D.H. on site

0900 Drill crews move to respective locations

Crew 1 - DEC-0150, just have to set well. AT 80'

Crew 2 - DEC-0140, at 30' bgs, will cut to drill.

1205 ADT Goes to Lunch. Bill Popus on site to visit

1245 CONTINUE DRILLING DEC-0140.

1410 AARCO on site

1

Soil

3

Drill mud

6

development H<sub>2</sub>O

Date 5/17/11

1545 - DRILLED DEC-0140 TO 80' bgs.

→ push 5" φ casing BELOW SIDEWALK, will set well tomorrow.

- cleanup

1430 SET well PAD AT DEC-150.

1715 OFF SITE

Location \_\_\_\_\_

Date 5/18/11

Project / Client \_\_\_\_\_

5/18/11

6000 S.M., T.I. &amp; C.F. onsite

WT: OVERCAST, 57°F

EQUIPMENT:

1 - MOTOR plus 110/0.1/60/60/H.S.

→ U2S FIELD comes up with schedule  
for remaining project. will call

Gutman &amp; White to get station.

0900 ADT onsite

- Greg &amp; Dave

- Set up Rig on DEC-0140 to set  
well to 80.0' RAS

10' 2" SCH 40 PUC #10 slot screen

70' 2" SCH 40 PUC Riser

1115 MOVE AHEAD & START drilling DEC-014R  
w/ 5" casing.

1200 - 1245 ADT GETS LUNCH.

1245 - 1320 CONTINUE drilling DEC-014R.

1320 - START TO SET DEC-014R

15' 2" SCH 40 PUC #10 slot screen

30' 2" SCH 40 PUC Riser

1530 Finish setting DEC-014R, set marker

- STARTS TO RAIN HEAVY DURING SETTING  
OF 2nd marker

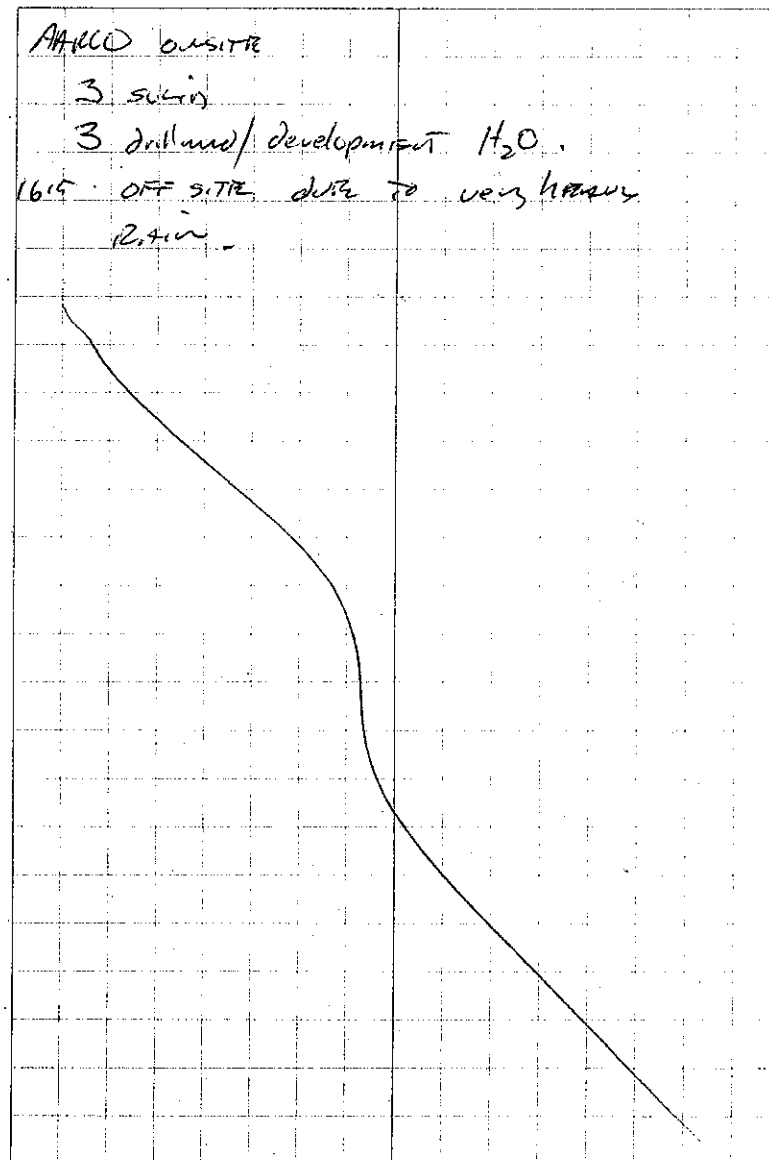
Location \_\_\_\_\_

Date 5/18/11

Project / Client \_\_\_\_\_

AAHCO onsite

3 suits

3 drilled/development H<sub>2</sub>O.1615 OFF SITE due to very heavy  
rain.

5/19/11

0700 S.M., C.R., T.I. on site.

Wx: partly cloudy, 63°F

## EQUIPMENT

1- MULTIRATE plus. gas/cor/CO/H<sub>2</sub>S

→ S.M. SETS UP TO SUE AREA AT DEC-0450.

→ Speak with Corey, Carter or Con Fed.

They will get it by end of week  
 to jacket wires by DEC-066/0660.  
 They have been delayed due to weather.

- ReSend Saw 2, insurance to Hanson  
 Shanks - Bros of NYCPARK Rep for  
 Sampling in M56R McBelrich park. This morning.

0745 - Confers with T.R. to jacket wires.

0830 ADT - Green &amp; Dore set up on DEC-0450

- will advance to 49.0' Bafe TIR start  
 of sampling. Anticipate depth of well  
 to be ~80.0' bgs.

1100 Con Fed completes wire JACKETING by DEC-066/0660.

1200-1230 ADT Goes to lunch

1230 Core to drill &amp; Sample DEC-0450

1530 D.H. on site

5/19/11

1600 AARCO on site.

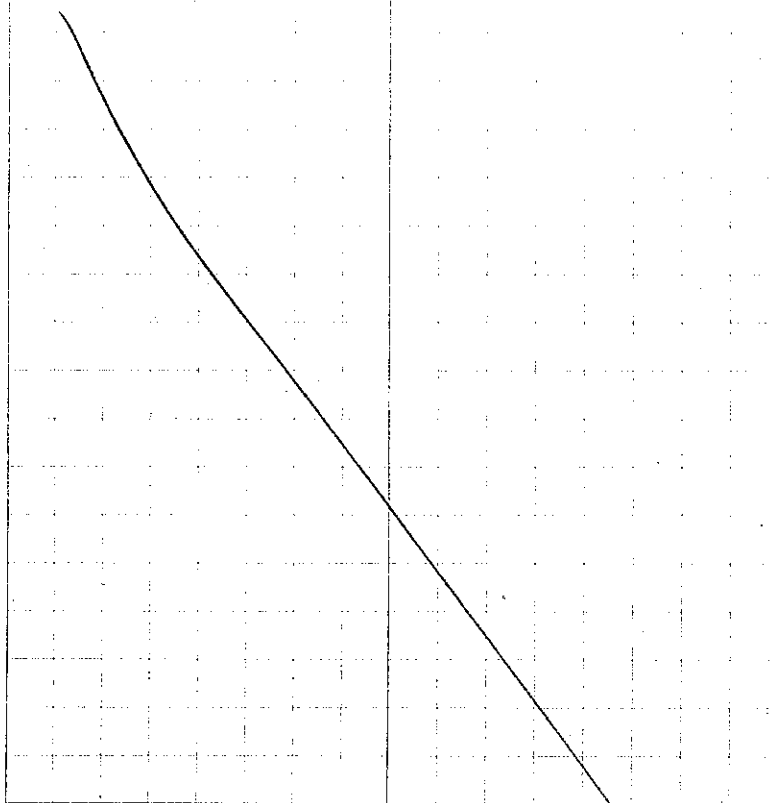
2 Solids

4 Drill mud / C. Qu. R.

4 Developed H<sub>2</sub>O.

GOTO SLUG TEST &amp; DEVELOP WELLS.

1730 OFF SITE



Location \_\_\_\_\_

Date 5/20/11

Project / Client \_\_\_\_\_

5/20/11

0730 SM, TIE &amp; C.F. ON SITE

WX: partly cloudy, 63°F

Equipment:

Multiraze Plus - P10/LTEL/2/CO/A2S

0830 ADT ON SITE - GRAB 2 DAUR

HAUL SET DEC-045D TO 80'

10' 2" SCH 40 PUC #10 26" SW

70' 2" SCH 40 PUC RISER

will use #1 SAW TO 68' &amp; BENT

STUCK TO 1' BGS.

1030 DEC-045D SET, MOVE TO DEC-064

TO DRILL TO 45.0' & SET SHALLOW  
WELL.

1120 BEGIN DRILLING DEC-064

1200 BEGIN TO SET WELL AT DEC-064  
TO 45' BGS.

15' 2" SCH 40 PUC #10 26" SW

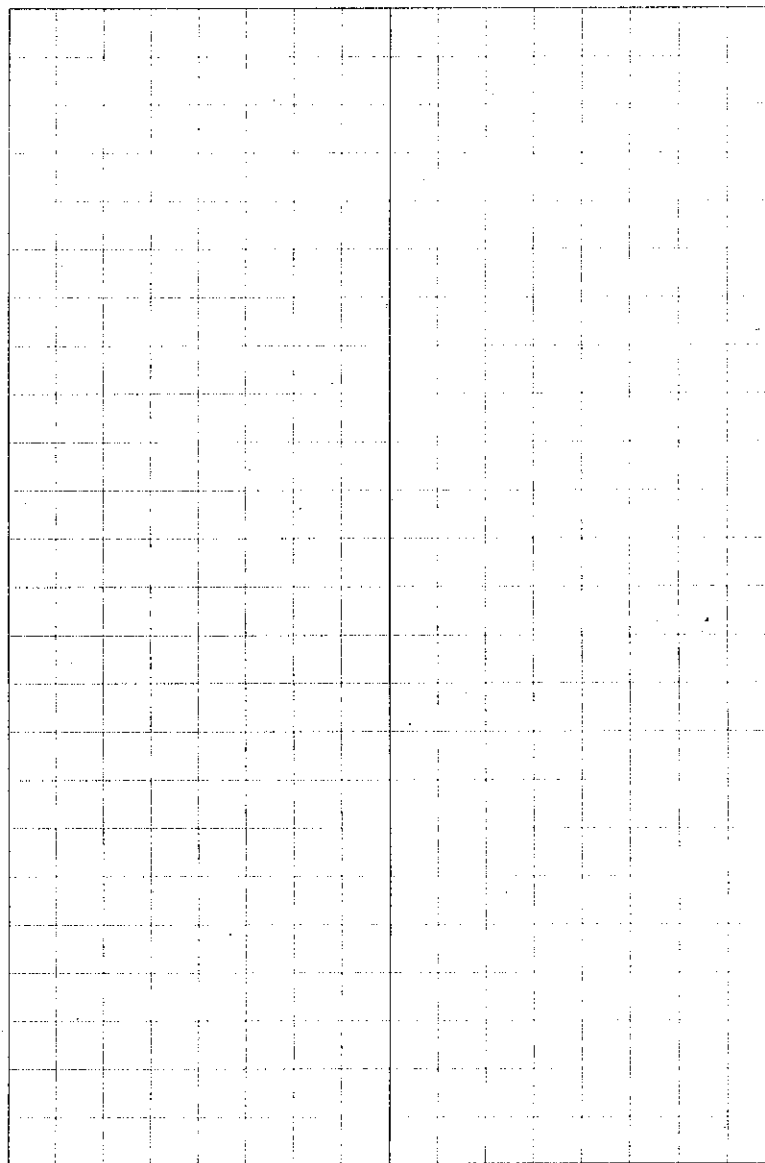
30' 2" SCH 40 PUC RISER

-SAW TO 27', CHIPS TO 1' BGS.

Location \_\_\_\_\_

Date \_\_\_\_\_

Project / Client \_\_\_\_\_



## **APPENDIX C**

### **GEOPHYSICAL SURVEY REPORT**

May 31, 2011

Mr. Chuck Dusiel  
Mr. George Kisluk  
Mr. Scott McCabe  
URS Corporation, Inc.  
77 Goodell Street  
Buffalo NY 14203

Re: Finalized Report  
Klink Cosmo Cleaners Borehole Clearance Survey  
Site ID# 2-24-130  
Work Order No. 243779 US  
Brooklyn, New York  
URS/NYCDDC Project  
RSI Job No. 11-042

Dear Gentlemen,

Please find below our finalized GPR and EM induction (EMI) interpretations for the Klink Cosmo Cleaners borehole clearance survey in Brooklyn, New York. On May 2<sup>nd</sup> and 3<sup>rd</sup>, 2011, RSI conducted ground penetrating radar (GPR) and EMI surveys to locate potential utilities and other obstructions coincident with 17 proposed soil boring and 10 proposed monitoring well locations.

RSI used a GSSI SIR-20 radar system, with a 500 MHz antenna and utility cart with a built-in encoder in it, as well as two different EM induction tools, both of which detect 60 Hz energy and enable the receiver to trace any utility carrying an induced frequency, to clear an area approximately 10 feet by 10 feet around each proposed soil boring and monitoring well location. The table below summarizes our field interpretation.

\*\*\*\*

We greatly appreciate this opportunity to work with URS Corporation, Inc. again. Please call should you have any inquiries regarding this or future assignments.

Sincerely,  
RADAR SOLUTIONS INTERNATIONAL



Doria Kutrubes, M.Sc., P.G.  
President and Sr. Geophysicist



**TABLE 1**  
**SUMMARY OF GPR AND EM INDUCTION RESULTS**

<b>Well/Boring ID</b>	<b>Proposed Location(s)</b>	<b>Recommended Re-Location(s)</b>	<b>Comments</b>
MW-30D	5E, 5N	0N, 3.5E	Water line 5 feet from and parallels west curb of Division Street. Electrical service 5' south of building's northeast corner. Existing SG-48 at 5E, 9N. No live 60 Hz observed within 10x10 grid using EMI.
O MW-13D	5E, 5N	5E, 2N	Existing MW at 0.5N, 5.2E. Looks OK; could move to 5E, 2N. No live 60 Hz observed within 10x10 grid using EMI.
MW-64D	5E, 2.5N and 5E, 7.5N	5E, 1N 6E, 7.5N	Possible MH cover or metal plate, 7.5E from 2.7N-7.5N. No live 60 Hz observed within 10x10 grid using EMI.
SB-80	5E, 5N	n/a	Looks OK. No live 60 Hz observed within 10x10 grid using EMI.
SB-81 MW-14 MW-14D	5E, 21N 5E, 10N 5E, 5N	n/a n/a 5E, 3N alternate	Existing DEC-14 at 4.5E, 15.5N. Looks clear. No live 60 Hz observed within 10x10 grid using EMI.
SB-82	5E, 5N	3.5E, 5N	Possible point target at proposed boring location (probable cinder, metal scrap). No live 60 Hz observed within 10x10 grid using EMI.
SB-83	5E, 5N	2E, 3N	Something near 5E, 4N. No live 60 Hz observed within 10x10 grid using EMI.
MW-45D	5E, 5N	n/a	Should be OK. Nearby telephone utility to east is fiberoptic with no 60 Hz tracer wire. Unable to detect with either EMI device.
MW-66D MW-66S	5E, 2.7N 5E, 1.5N	n/a 5E, 0N	Possible point target at shallow well.
SB-84 DEC-44	10E, 5N 1E, 5N	n/a n/a	Existing well DEC-44 at 6E, 6N. Both proposed locations look OK.
MW-65S MW-65D SB-85	15E, 5N 6.5E, 5N 11E, 5N	n/a n/a n/a	Water service parallel 3W. Nearby point targets, but nothing coincident with proposed locations.
SB-86	5E, 5N	n/a	Looks OK
SB-87	5E, 5N	n/a	Looks OK. Electrical line parallel 10N (+/- 2'). Water gate at 5W, 13N.
EC-43D	5E, 5N	7E, 5N	possible cobble/metal at initial location.
SG-78	5E, 5N	5E, 7.5N	Probable cobble.
DEC-006DD	5E, 5.5N	5E, 7.5N	Electrical utility 3 feet east of curb line in street.
DEC-007D	5E, 5N	5E, 7.5W	Gas line roughly parallel 6.5E.
DEC-015D	5E, 5N	n/a	Should be OK.
SG-79	5E, 5N	hand dig	Possible buried slab, below which we do not see anything along Lines 5E and 7.5E. Hand dig this location
MW-89D	5E, 5N	n/a	Should be OK. Small point targets in fill (cinders or metal scrap).

## **APPENDIX D**

### **SOIL BORING LOGS**

URS Corporation										TEST BORING LOG			
										BORING NO. : DEC-004			
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2			
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332 / 11176390			
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202478.48904    EASTING: 1001408.06000			
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 39.26 feet amsl				
DATE	TIME	LEVEL	TYPE	TYPE		Split Spoon			DATE STARTED: 5/23/07				
				DIA.		2-inch			DATE FINISHED: 6/14/07				
				WT.		140 lbs.			DRILLER: Jeremy Meyers				
				FALL		30 - inches			GEOLOGIST: Claire Renaldo				
					* POCKET PENETROMETER READING				REVIEWED BY: Scott Fischer				
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS			
		NO.	BLOW COUNT	RQD%		CONSISTENCY ROCK HARDNESS							
0							Hand Cleared to 5' bgs.			Vactron cleared boring 0-5.0'			
-5		1	2/3/4/6	50	Medium Brown	Loose	Sandy SILT	SM	0.3	Moist			
		2	5/3/3/5	50			CLAY, some silt		0.6				
-10		3	2/3/2/3	75	Gray		Coarse Sandy SILT		0.5				
		4	3/4/5/4	50	Brown				0.6				
		5	5/8/9/12	50	Gray				0.5	Wet			
-15		6	14/16/17/19	25	Tan	Medium Dense	SILT, some clay		0.5				
		7	14/15/22/11	50		Dense	-some coarse gravel		0.4	Moist			
-20		8	33/17/15/21	75	Mottled Gray		Fine Sandy SILT		3.0				
		9	19/21/22/24	100	Brown		-some gravel and cobbles		0.7				
-25							-mud-rotary drilling, no samples collected						
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers.													
BORING NO. : DEC-004													



# TEST BORING LOG

**BORING NO. : DEC-004**

**PROJECT: Meeker Avenue Plume Trackdown**

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO.:** 11176332 / 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30  										

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers.

**BORING NO. : DEC-004**

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-006				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332 / 11176390				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202535.16732 EASTING: 1002133.1169				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 48.93 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE		Split Spoon			DATE STARTED: 5/21/07					
				DIA.		2-inch			DATE FINISHED: 5/21/07					
				WT.		140 lbs.			DRILLER: Tony					
				FALL		30 - inches			GEOLOGIST: Scott McCabe					
				* POCKET PENETROMETER READING				REVIEWED BY: Scott Fischer						
DEPTH FEET	STRATA	SAMPLE NO.		BLOW COUNT	REC% RQD%	COLOR	SOIL CONSISTENCY ROCK HARDNESS	MATERIAL DESCRIPTION		USCS	PID	REMARKS		
0								Hand Cleared to 5' bgs.				Vactron cleared boring 0-5.0'		
-5		1	6/24/22/13	75		Yellow Brown	Dense	Silty fine to medium SAND		SM	0.0	Moist		
		2	26/16/10/11	75			Medium Dense				0.1			
-10		3	3/12/15/17	100		Red Brown		Silty fine SAND, trace gravel			0.1			
		4	21/20/15/16	25			Dense				0.1			
		5	14/14/24/13	50							0.3			
-15		6	8/9/9/9	50			Medium Dense	Fine to medium SAND, trace silt		SW	0.3			
		7	8/7/5/5	50		Lt. Brown		Fine SAND, trace silt		SP	0.3			
-20		8	7/5/6/5	75				Fine Sandy SILT		ML	0.2			
		9	7/5/6/5	100				trace medium sand			0.2			
		10	7/7/7/7	75							0.2			
-25		11	3/2/2/3	50			Very Loose				0.2	Wet		
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled 23'-24' bgs for 8260 VOCs at 1100.														
BORING NO. : DEC-006														



# TEST BORING LOG

**BORING NO. : DEC-006**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO.:** 11176332 / 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30   										

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled 23'-24' bgs for 8260 VOCs at 1100.

**BORING NO. : DEC-006**



<div>URS Corporation</div>										TEST BORING LOG			
										BORING NO. : DEC-006D			
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2			
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332 / 11176390			
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202533.2752 EASTING: 1002137.432			
GROUNDWATER:Encountered at 47.0' bgs.						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 48.81			
DATE	TIME	LEVEL	TYPE	TYPE	Casing	Split Spoon			DATE STARTED: 5/27/08				
				DIA.	4"	2-inch			DATE FINISHED: 6/2/08				
				WT.		140 lbs.			DRILLER: Jeremy Meyers				
				FALL		30 - inches			GEOLOGIST: C. Friedman				
				* POCKET PENETROMETER READING					REVIEWED BY: Tim Burmeier				
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION			USCS	PID	REMARKS	
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS							
0							See DEC-006 Boring Log for Lithologic Description From 0-35.0 feet bgs					Vactron cleared boring 0-5.0'	
-5													
-10													
-15													
-20													
-25													
COMMENTS: Boring advanced with track-mounted CME-55LC using 4-inch mud-rotary drilling.													
BORING NO. : DEC-006D													

<div>URS Corporation</div>							TEST BORING LOG			
							BORING NO. : DEC-006D			
PROJECT: Meeker Avenue Plume Trackdown							SHEET: 2 OF 2			
CLIENT: New York State Department of Environmental Conservation							JOB NO. : 11176332 / 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>-30</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>										

COMMENTS: Boring advanced with track-mounted CME-55LC using 4-inch mud-rotary drilling.

BORING NO. : DEC-006D

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-006DD				
PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site										SHEET: 1 OF 4				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202527.166 EASTING: 1002139.573				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 48.60 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/19/11					
				DIA.					DATE FINISHED: 5/20/11					
				WT.					DRILLER: J. Meyers					
				FALL					GEOLOGIST: C. Friedman					
				* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier						
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION							
0							See DEC-006D boring log for lithologic description for 0-55.0 feet bgs.					Vactron cleared 0-5.0' bgs		
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.														
BORING NO. :DEC-006DD														

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 2 OF 4

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30										
-35										
-40										
-45										
-50										
-55		1		0			No recovery		NA NA NA	Wet Cobble in tip of sampler.


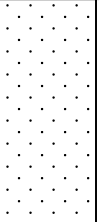

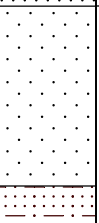
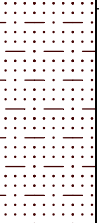
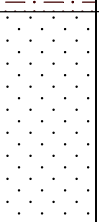
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 4

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-60		2		10	Brown		Fine SAND, trace cobbles	SP	NA	
									NA	
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-65		3		70			Fine to medium SAND, little gravel		1.1	
									1.0	
									1.0	
									0.0	
									0.0	
									0.0	
									0.0	
-70		4		30			Fine SAND, trace silt and gravel		0.0	
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-75		5		100			Fine to medium SAND, trace silt and gravel		0.5	
									0.4	
									0.2	
									0.4	
									0.0	
									NA	
									NA	
-80		6		0			Fine SAND and SILT -no recovery	SM	0.0	
									NA	
									NA	
									NA	
									NA	
									NA	
									NA	
-85		7		90			Fine to coarse SAND, little gravel	SW	0.5	
									0.4	
									0.3	
									0.2	
									0.0	
-90										

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

URS Corporation							TEST BORING LOG			
PROJECT: Former Klink Cosmo Cleaners Site							BORING NO. : DEC-006DD			
CLIENT: New York State Department of Environmental Conservation							SHEET: 4 OF 4			
							JOB NO. :11176390.00002			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-		8		60		Fine to medium SAND, trace gravel			1.3	
									1.2	
									1.1	
-95						Boring completed at 93.0' bgs.				
-100										
-105										
-110										
-115										
-120										
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.										
BORING NO. :DEC-006DD										



<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-007				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:Not Surveyed    EASTING: Not Surveyed				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: Not Surveyed					
DATE	TIME	LEVEL	TYPE	TYPE		Split Spoon			DATE STARTED: 5/31/07					
				DIA.		2-inch			DATE FINISHED: 5/31/07					
				WT.		140 lbs.			DRILLER: Jeremy Meyers					
				FALL		30 - inches			GEOLOGIST: Angela Ledgerwood					
					* POCKET PENETROMETER READING				REVIEWED BY: Scott Fischer					
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS				
		NO.	BLOW COUNT	RQD%		CONSISTENCY					ROCK HARDNESS			
0							Hand Cleared to 5' bgs.			Vactron cleared boring 0-5.0'				
-5		1	5/10/11/11	75	Red Brown	Medium Dense	Silty medium SAND, trace gravel and clay	SM	0.2	Dry				
		2	5/9/9/6	50	Medium Brown		Medium SAND, some gravel, trace silt	SP	1.1					
-10		3	3/5/6/7	25			Fine to medium SAND, trace silt	SW	3.4					
		4	1/7/6/6	75					0.5					
		5	4/5/7/7	75					0.0					
-15		6	4/7/8/8	50					0.0					
		7	4/5/6/6	50					0.1	Moist				
-20		8	3/2/2/4	50		Loose	Fine SAND, some silt	SP	0.0					
		9	3/5/5/7	100			Silty fine SAND	SM	0.0	Wet				
		10	3/7/12/12	100		Medium Dense			0.0					
-25		11	4/4/10/18	75	Red Brown Gray				0.0					
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. No sample collected due to poor recovery and abundance of cobbles above water table.														
BORING NO. : DEC-007														



# TEST BORING LOG

**BORING NO. : DEC-007**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. : 11176390**

[illegible]

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. No sample collected due to poor recovery and abundance of cobbles above water table.

**BORING NO. : DEC-007**

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-007D				
PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site										SHEET: 1 OF 4				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202355.105 EASTING: 1001986.276				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 42.85 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/17/11					
				DIA.					DATE FINISHED: 5/18/11					
				WT.					DRILLER: J. Meyers					
				FALL					GEOLOGIST: C. Friedman					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION							
0												Vactron cleared 0-5.0' bgs		
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.														
BORING NO. :DEC-007D														

PROJECT: Former Klink Cosmo Cleaners Site


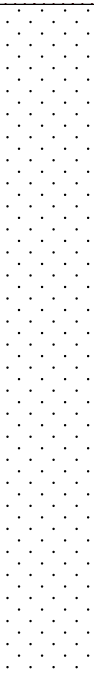

SHEET: 2 OF 4

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

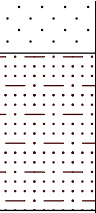
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

<div>URS Corporation</div>							TEST BORING LOG				
PROJECT: Former Klink Cosmo Cleaners Site							BORING NO. : DEC-007D				
CLIENT: New York State Department of Environmental Conservation							SHEET: 3 OF 4				
							JOB NO. :11176390.00002				
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS	
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS					
-60		5		0		-no recovery				0.7	
										0.0	
										NA	
										NA	
										NA	
-65		6		100		NA					
						NA					
						3.8					
						4.0					
						1.2					
-70		7		80	Fine SAND and SILT  Fine to medium SAND, little coarse sand and gravel	SM SP	1.0				
							0.0				
							1.8				
							2.0				
							0.9				
-75		8		90			0.5				
							0.0				
							10.0				
							10.4				
							15.5				
-80	9		0	16.6							
				16.7							
				NA							
				NA							
				NA							
-85				80	-no recovery		NA				
							NA				
							NA				
							NA				
							NA				
-90					Fine to coarse SAND, little gravel		0.5				
							0.4				
							0.3				
							0.0				
							0.0				

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

BORING NO. :DEC-007D

<div>URS Corporation</div>							TEST BORING LOG			
PROJECT: Former Klink Cosmo Cleaners Site							BORING NO. : DEC-007D			
CLIENT: New York State Department of Environmental Conservation							SHEET: 4 OF 4			
							JOB NO. :11176390.00002			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-95							Fine SAND and SILT, some gravel and cobbles	SM	0.0	
									0.0	
									0.0	
									0.0	
									0.0	
						Boring Completed at 95.0' bgs.				
-100										
-105										
-110										
-115										
-120										
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.										
BORING NO. :DEC-007D										





URS Corporation							TEST BORING LOG			
PROJECT: Meeker Avenue Plume Trackdown							BORING NO. : DEC-008			
CLIENT: New York State Department of Environmental Conservation							SHEET: 2 OF 2			
							JOB NO. : 11176332 / 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30	[Pattern]	10	23/24/34/49						0.0	
		11	30/34/27/17						0.0	
-35	[Pattern]	12	9/12/16/16		Lt. Brown	Medium Dense	Coarse SAND	SP	0.0	
		13	5/7/10/14						0.0	
-40	[Pattern]	14	21/25/34/30	50	Brown	Very Dense	Fine to medium SAND, trace gravel	SW	1.1	
									0.9	
		15	52/27/34/26	50	Lt. Brown				2.1	
		16	52/54/50/55	50					0.9	
-45									0.0	
-50									0.0	
-55										
	End of Boring at 43' bgs									
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled for VOCs 38'-39' bgs. Auger refusal at 18' bgs, commence mud rotary drilling.										

BORING NO. : DEC-008

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-009				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332 / 11176390				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202173.55843 EASTING: 1001470.0995				
GROUNDWATER:40' bgs						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 40.91 feet amsl				
DATE	TIME	LEVEL	TYPE	TYPE		Split Spoon			DATE STARTED: 5/30/07					
				DIA.		2-inch			DATE FINISHED: 6/8/07					
				WT.		140 lbs.			DRILLER: Jeremy Meyers					
				FALL		30 - inches			GEOLOGIST: Claire Renaldo					
				* POCKET PENETROMETER READING				REVIEWED BY: Scott Fischer						
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS				
		NO.	BLOW COUNT	RQD%		CONSISTENCY ROCK HARDNESS								
0							Hand Cleared to 5' bgs.			Vactron cleared boring 0-5.0'				
-5		1	1/2/4/4	0	Yellow Brown	Loose	No Recovery							
		2	3/3/5/12	25			Silty medium SAND	SM	0.0	Moist				
-10		3	6/17/12/10	75		Medium Dense	Silty SAND, trace cobbles, petroleum odor		0.0					
		4	11/11/13/12	75	Gray		Silty fine SAND, some gravel		684.0					
		5	6/8/8/9	50	Medium Brown				10.2					
-15									6.8					
		6	13/15/9/11	50			SILT, trace clay	ML						
							SILT-SAND-GRAVEL	GM	3.2					
		7	21/34/23/22	25	Lt. Brown	Very Dense			0.9	Dry				
-20		8	19/12/13/16	50		Medium Dense	Coarse SAND, some gravel	SP	1.6					
		9	11/13/15/15	50			Medium SAND, trace silt		0.8					
-25		10	11/18/18/20	75	Gray Brown	Dense	-trace gravel		1.5					
		11	1/11/22/18	50					1.0					
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled for VOCs 12'-13' bgs.														
BORING NO. : DEC-009														

URS Corporation							TEST BORING LOG			
PROJECT: Meeker Avenue Plume Trackdown							BORING NO. : DEC-009			
CLIENT: New York State Department of Environmental Conservation							SHEET: 2 OF 2			
							JOB NO. : 11176332 / 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30  										

URS Corporation										TEST BORING LOG			
										BORING NO. : DEC-010			
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2			
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332 / 11176390			
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202023.88584 EASTING: 1001331.3743			
GROUNDWATER:35' bgs						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 41.32 feet amsl			
DATE	TIME	LEVEL	TYPE	TYPE		Split Spoon			DATE STARTED: 5/24/07				
				DIA.		2-inch			DATE FINISHED: 5/25/07				
				WT.		140 lbs.			DRILLER: Tony				
				FALL		30 - inches			GEOLOGIST: Angela Ledgerwood				
						* POCKET PENETROMETER READING			REVIEWED BY: Scott Fischer				
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS			
		NO.	BLOW COUNT	RQD%		CONSISTENCY ROCK HARDNESS							
0							Hand Cleared to 5' bgs.			Vactron cleared boring 0-5.0'			
-5		1	5/11/14/10	75	Medium Brown	Medium Dense	Fine Sandy SILT	SM	0.5	Dry			
		2	10/15/15/9	75			- cobbels at 8.5' bgs		0.5				
-10		3	7/10/8/13	50					0.6				
		4	8/11/7/8	0						Moist			
-15		5	3/7/9/11	50	Gray		Coarse SAND	SP	0.4				
		6	6/8/11/13	50	Red Brown		Coarse Sandy SILT	SM	1.4				
		7	8/8/14/23	75					0.4				
-20		8	13/15/19/20	75		Dense	Coarse SAND, trace gravel	SP	0.5				
		9	11/11/16/19	75	Medium Brown	Medium Dense			0.3				
		10	14/14/16/50-0	50					0.6				
-25		11	17/12/13/19	50			Fine SAND, trace silt		0.7				
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers.													
BORING NO. : DEC-010													



# TEST BORING LOG

**BORING NO. : DEC-010**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :** 11176332 / 11176390

[illegible]

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers.

**BORING NO. : DEC-010**



PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176332 / 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201714.20215 EASTING: 1001434.3139

GROUNDWATER: 38' bgs

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 40.22 feet amsl

DATE

TIME

LEVEL

TYPE

TYPE

Split Spoon

DATE STARTED: 5/24/07

DIA.

2-inch

DATE FINISHED: 5/30/07

WT.

140 lbs.

DRILLER: Tony

FALL

30 - inches

GEOLOGIST: Angela Ledgerwood

REVIEWED BY: Scott Fischer

DEPTH  
FEET

STRATA

SAMPLE

NO.

BLOW  
COUNT

REC%

RQD%

COLOR

SOIL  
CONSISTENCY

ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

Vactron  
cleared  
boring 0-5.0'

Dry

Hand Cleared to 5' bgs.

SILT  
- trace fine gravel

Dense  
Sandy SILT, some gravel

Medium  
Dense  
Silty coarse SAND, some gravel

Reddish  
Gray  
SILT, trace fine gravel

Dense  
Silty coarse SAND

SILT, trace fine gravel

Medium  
Brown  
Medium  
Dense  
Coarse SAND, trace silt and cobbles

Very  
Dense

Lt.  
Brown

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers.

Sampled for VOCs 35'-36' bgs.



# TEST BORING LOG

**BORING NO. : DEC-011**

**PROJECT: Meeker Avenue Plume Trackdown**

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :** 11176332 / 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30   <										

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled for VOCs 35'-36' bgs.

**BORING NO. : DEC-011**





# TEST BORING LOG

**BORING NO. : DEC-012**

**PROJECT: Meeker Avenue Plume Trackdown**

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :** 11176332 / 11176390

[illegible]

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Auger refusal at 14' bgs, commence mud rotary drilling. Sampled for VOCs 34'-35' bgs.

**BORING NO. : DEC-012**

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176332 / 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201958.2666 EASTING: 1001649.5599

GROUNDWATER: Encountered at 36.5' bgs.

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 39.47 feet amsl

DATE

TIME

LEVEL

TYPE

TYPE

HSA

Split Spoon

DATE STARTED: 11/21/2007

DIA.

4.25 "

2-inch

DATE FINISHED: 11/25/2007

WT.

140 lbs.

DRILLER: Jeremy Meyers

FALL

30 - inches

GEOLOGIST: A. Ledgerwood

REVIEWED BY: Tim Burmeier

DEPTH  
FEET

STRATA

SAMPLE  
NO.

BLOW  
COUNT

REC%  
RQD%

COLOR

SOIL  
CONSISTENCY  
ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

Vactron  
cleared  
boring 0-5.0'

Moist

Asphalt

FILL: Silty Sand, trace cobbles

Medium  
Dense

Silty SAND, trace gravel and cobbles

SM

0.4

2.8

7.2

10.8

4.0

9.9

0.7

SW

0.4

26.4

3.0

Fine to coarse SAND, trace gravel and  
cobbles

COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.

Sampled for VOCs 34.0-35.0' and 35.0-36.0' bgs.





<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-013D				
PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site										SHEET: 1 OF 3				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:201962.960 EASTING: 1001647.311				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 39.47 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/23/11					
				DIA.					DATE FINISHED: 5/27/11					
				WT.					DRILLER: G. Rivera, J. Meyers					
				FALL					GEOLOGIST: T. Ifkovich, C. Friedman					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION							
0							See DEC-013 boring log for lithologic description for 0-45.0 feet bgs.					Vactron cleared 0-5.0' bgs		
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.														
BORING NO. :DEC-013D														



## TEST BORING LOG

**BORING NO. : DEC-013D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 2 OF 3**

**CLIENT: New York State Department of Environmental Conservation**

**JOB NO. :11176390.00002**

[illegible]

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.

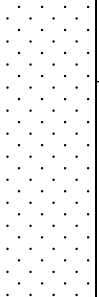
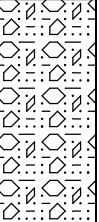
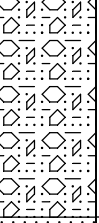
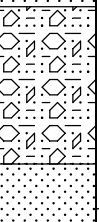

**BORING NO. :DEC-013D**

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-60		4		90			-some silt		NA	
									NA	
									0.0	
									0.0	
									0.0	
									0.0	
-65		5		80			Coarse SAND and GRAVEL	SP/GP	0.0	
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-70		6		20					0.0	
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-75		7		90	Light Brown Brown		Fine SAND	SP	0.0	
							Fine SAND and GRAVEL -some medium sand		0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-80		8		70			Fine SAND, some silt and gravel	SM	0.0	
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-85							Boring completed at 85.0' bgs.			
-90										

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.





## TEST BORING LOG

**BORING NO. : DEC-014**

**PROJECT: Meeker Avenue Plume Trackdown**

**SHEET: 2 OF 2**

**CLIENT: New York State Department of Environmental Conservation**

**JOB NO.:** 11176390

[illegible]

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled for VOCs 20'-21' bgs.

**BORING NO. : DEC-014**

PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site

SHEET: 1 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201919.921 EASTING: 1001937.307

GROUNDWATER:

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 36.10 feet amsl

DATE

TIME

LEVEL

TYPE

TYPE

DATE STARTED: 5/16/11

DIA.

DATE FINISHED: 5/18/11

WT.

DRILLER: G. Rivera

FALL

GEOLOGIST: S. McCabe

REVIEWED BY: T. Burmeier

DEPTH  
FEET

STRATA

SAMPLE

NO.

BLOW  
COUNT

REC%

RQD%

COLOR

SOIL  
CONSISTENCY

ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

Concrete

Vactron  
cleared 0-5.0'  
bgs

Fill: Fine to coarse size cinder, trace  
slag, brick and gravel

FILL

0.2

0.3

Clayey SILT, trace sand and fine to  
coarse gravel

ML

0.7

Silty fine SAND, trace fine to coarse  
gravel

SM

0.3

0.5

Fine SAND, trace silt and fine to coarse  
gravel

SP

0.4

0.4

0.7

0.5

Silty fine SAND, trace fine to coarse  
gravel

SM

0.0

0.1

Clayey SILT, trace fine to coarse sand  
and fine to coarse gravel

ML

0.0

0.0

0.2

0.1

0.0

0.0

0.1

0.3

0.0

Silty fine SAND, some fine to coarse

0.0

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.  
Soil sample collected from 31.0-32.0 feet bgs for TCL VOC plus TICs analysis.





# TEST BORING LOG

**BORING NO. : DEC-014D**

**PROJECT:** Former Klink Cosmo Cleaners Site

**SHEET: 2 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	5		94	Brown		gravel, trace cobbles and medium to coarse sand	SP	0.0	Wet
									0.3	
									0.7	
									0.4	
	-30	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	6		60	Brown		Fine SAND	0.0	
								0.3		
								0.1		
								0.0		
	-35							0.0		
								1.1		
								0.9		
		7		92				1.3		
								1.4		
	-40	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	8		70			Fine to medium SAND, some fine to coarse gravel, trace coarse sand	2.3	
								4.2		
								6.1		
								10.1		
								11.7		
	-45							0.0		
								1.1		
							1.4			
	9		50				0.9			
							0.0			
-50							0.0			
							-no recovery	NA		
								NA		
	10		0					NA		
								NA		
-55								NA		
							-trace cobbles	0.9		
								0.4		
	11		56					0.5		

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.  
Soil sample collected from 31.0-32.0 feet bgs for TCL VOC plus TICs analysis.

**BORING NO. :DEC-014D**

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
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COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.  
Soil sample collected from 31.0-32.0 feet bgs for TCL VOC plus TICs analysis.

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-015				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202166.85693 EASTING: 1001855.1305				
GROUNDWATER:36' bgs						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 39.21 feet amsl				
DATE	TIME	LEVEL	TYPE	TYPE		Split Spoon			DATE STARTED: 5/29/07					
				DIA.		2-inch			DATE FINISHED: 5/29/07					
				WT.		140 lbs.			DRILLER: Rudy					
				FALL		30 - inches			GEOLOGIST: Claire Renaldo					
						* POCKET PENETROMETER READING				REVIEWED BY: Scott Fischer				
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS				
		NO.	BLOW COUNT	RQD%		CONSISTENCY					ROCK HARDNESS			
0							Hand Cleared to 5' bgs.			Vactron cleared boring 0-5.0'				
-5		1	4/5/9/7	25	Dk. Brown	Medium Dense	Silty SAND, trace gravel	SM	0.1	Dry				
		2	11/11/13/14	50	Medium Brown									
-10		3	7/9/8/10	50										
		4	10/6/5/5	50			Coarse SAND and GRAVEL	GP	0.3	Moist				
		5	3/4/6/9	50			Coarse SAND	SP	0.3					
-15		6	2/7/10/8	75			Coarse SAND and GRAVEL	GP	0.2					
		7	7/9/10/6	75	Lt. Brown				0.4		Dry			
-20		8	3/4/5/7	100		Loose			0.2					
		9	5/6/6/4	50		Medium Dense	Fine SAND, trace silt	SM	0.9	Moist				
		10	6/8/6/4	50			Silty medium SAND, trace gravel							
-25		11	8/10/9/12	50				Medium SAND	SP		0.5			
							Silty fine SAND	SM	0.2					
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled for VOCs 27'-28' bgs @ 1520.														
BORING NO. : DEC-015														



# TEST BORING LOG

**BORING NO. : DEC-015**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :** 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30  										

COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled for VOCs 27'-28' bgs @ 1520.

**BORING NO. : DEC-015**

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-015D				
PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site										SHEET: 1 OF 3				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202171.785      EASTING: 1001853.162				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 39.31 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/16/11					
				DIA.					DATE FINISHED: 5/17/11					
				WT.					DRILLER: J. Meyers					
				FALL					GEOLOGIST: C. Friedman					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION							
0							See DEC-015 boring log for lithologic description From 0-35.0 feet bgs.					Vactron cleared 0-5.0' bgs		
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.														
BORING NO. :DEC-015D														

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30										
-35		1		0			No recovery		NA	
									NA	
									NA	
									NA	
-40		2		50	Brown		Fine SAND and SILT, some gravel and cobbles	SM	0.0	
									0.0	
									0.0	
									0.0	
-45									0.0	
									0.0	
		3		80			SILT, trace clay	ML	0.0	
								SW	0.0	
							Fine to coarse SAND and GRAVEL		0.0	
									0.0	
-50		4		60			Medium to coarse SAND, some gravel and cobbles	SP	0.0	
									0.0	
									0.0	
									0.0	
-55		5		60			Fine to coarse SAND, some gravel and cobbles	SW	1.1	
									0.4	
									0.0	

Wet

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.





# TEST BORING LOG

**BORING NO. : DEC-015D**

**PROJECT:** Former Klink Cosmo Cleaners Site

**SHEET: 3 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

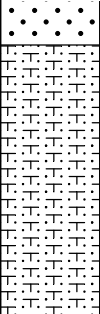
**JOB NO. :11176390.00002**

[illegible]

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

**BORING NO. :DEC-015D**



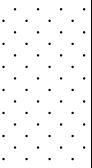
URS Corporation							TEST BORING LOG			
							BORING NO. : DEC-022			
PROJECT: Meeker Avenue Plume Trackdown							SHEET: 2 OF 2			
CLIENT: New York State Department of Environmental Conservation							JOB NO. : 11176332 / 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30		12	7/7/4/6	75			Silty fine SAND	SM	0.4	Moist
		13	5/6/8/9	50					0.4	
		14	8/9/10/10	100					0.6	
		-35							End of Boring at 33' bgs	
-40										
-45										
-50										
-55										
COMMENTS: Boring advanced with track-mounted CME-55 drilling rig equipped with 4.25" hollow stem augers. Sampled for VOCs 31'-33' bgs. Background PID readings up to 0.4 ppm.										
BORING NO. : DEC-022										

<div>URS Corporation</div>										<div>TEST BORING LOG</div>			
										BORING NO. : DEC-022D			
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 3			
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332 / 11176390			
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202679.5224      EASTING: 1002000.9725			
GROUNDWATER:Encountered at 48.0' bgs.						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 51.73			
DATE	TIME	LEVEL	TYPE	TYPE	HSA	Split Spoon			DATE STARTED: 11/8/2007				
				DIA.	4.25 "	2-inch			DATE FINISHED: 11/12/2007				
				WT.		140 lbs.			DRILLER: Jeremy Meyers				
				FALL		30 - inches			GEOLOGIST: S. McCabe				
				* POCKET PENETROMETER READING				REVIEWED BY: Tim Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS	
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION						
0							See DEC-022 Boring Log for Lithologic Description From 0-30.0 feet bgs					Vactron cleared boring 0-5.0'	
-5													
-10													
-15													
-20													
-25													
COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.													
BORING NO. : DEC-022D													

URS Corporation							TEST BORING LOG			
PROJECT: Meeker Avenue Plume Trackdown							BORING NO. : DEC-022D			
							SHEET: 2 OF 3			
CLIENT: New York State Department of Environmental Conservation							JOB NO. : 11176332 / 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	<div></div>	1	17/8/9/10	100	Brown	Medium Dense	Fine SAND, trace silt	SP	0	Wet
		2	8/7/6/5	100					0	
	<div></div>	3	3/5/6/8	71			Silty fine SAND	SM	0	
		4	3/9/8/6	100					0	
	<div></div>	5	8/3/6/14	100			Fine to medium SAND, trace gravel	SP	0	
		6	15/11/12/19	100					0	
	<div></div>	7	17/17/20/55	100	Grey	Hard	Silty CLAY, trace sand, gravel and cobbles		0	
		8	25/41/90/ 50/1	75					0	
	<div></div>	9	24/69/ 70/4	33	Brown	Very Dense	Silty fine SAND, some gravel	SM	0	
	<div></div>	10	28/19/30/29	50		Dense	Fine to medium SAND, trace gravel	SP	0	
11		33/25/25/30	100	0						

COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.

BORING NO. : DEC-022D

URS Corporation							TEST BORING LOG			
							BORING NO. : DEC-022D			
PROJECT: Meeker Avenue Plume Trackdown							SHEET: 3 OF 3			
CLIENT: New York State Department of Environmental Conservation							JOB NO. : 11176332 / 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-60										
							Boring Completed at 62.0' bgs.			
-65										
-70										
-75										
-80										
-85										
-90										
COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.										
BORING NO. : DEC-022D										





<div> <div>URS Corporation</div> <div> <div>PROJECT: Meeker Avenue Plume Trackdown</div> <div>CLIENT: New York State Department of Environmental Conservation</div> </div> </div>							TEST BORING LOG															
							BORING NO. : DEC-027															
							SHEET: 2 OF 2															
							JOB NO. : 11176332															
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS												
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS																
<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>		10	18/22/26/ 50/5	63						0	Auger refusal at 26.0', switch to mud rotary											
	-30		11	16/32/25/ 50/5		58	Dense       Medium Dense	Fine to medium SAND, trace gravel				0	Wet									
	-35		12	16/17/12/19		38											0					
	-40		13	16/10/22/24		83							0									
-45		14	22/16/18/19	71									0									
-50		15	5/10/13/9	29									0									
-55		16	5/5/7/9	67									0									
								Boring Completed at 50.0' bgs.														
<div> <div>COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.</div> <div>Sampled for VOCs 37.0-38.0' bgs.</div> </div>																						
BORING NO. : DEC-027																						

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176332 / 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 202252.5697 EASTING: 1001700.9689

GROUNDWATER: Encountered at 37.6' bgs

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 39.99

DATE TIME LEVEL TYPE TYPE

HSA

Split Spoon

DATE STARTED: 11/15/2007

DIA. 4.25"

2-inch

DATE FINISHED: 11/20/2007

WT. 140 lbs.

DRILLER: Jeremy Meyers

FALL 30 - inches

GEOLOGIST: S. McCabe

\* POCKET PENETROMETER READING

REVIEWED BY: Tim Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0							Concrete			Vactron cleared boring 0-5.0'
					Reddish Brown		FILL: Medium to coarse SAND, trace cobbles and gravel			
							Silty SAND, trace gravel			
-5		1	6/11/9/14	54		Medium Dense		SM	0	Moist
		2	17/12/12/15	71	Light Brown		Fine to medium SAND, trace silt and gravel	SP	32	
-10		3	50/3	13		Very Dense			0	Auger through boulder 10- 12'
		4	29/18/21/20	25		Dense			0	
-15		5	4/7/8/8	83		Medium Dense			0	
		6	9/9/10/9	75					11.1	
		7	11/11/13/13	83					14.5	
-20		8	4/4/6/8	67					45	
		9	12/13/13/16	58					35	
-25		10	13/19/19/20	63		Dense			33	

COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.  
Sampled for VOCs 36.0-38.0' bgs.



# TEST BORING LOG

**BORING NO. : DEC-028**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO.:** 11176332 / 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div></div><div>-30-</div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></d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COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers. Sampled for VOCs 36.0-38.0' bgs.

**BORING NO. : DEC-028**

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 202086.5293 EASTING: 1002015.6302

GROUNDWATER: Encountered at 37.0' bgs.

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 38.90

DATE TIME LEVEL TYPE TYPE

HSA

Split Spoon

DATE STARTED: 11/26/2007

DIA. 4.25 "

2-inch

DATE FINISHED: 11/27/2007

WT. 140 lbs.

DRILLER: Jeremy Meyers

FALL 30 - inches

GEOLOGIST: S. McCabe

\* POCKET PENETROMETER READING

REVIEWED BY: Tim burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0					Dark Brown		FILL: Fine to coarse SAND and GRAVLE, trace asphalt			Vactron cleared boring 0-0.5'
					Yellow Brown		Silty SAND, trace gravel	SM		
-5		1	3/6/8/17	71		Medium Dense			0	Moist
		2	23/23/13/18	88	Brown	Dense			0	
-10		3	5/9/11/10	83		Medium Dense			0	
		4	6/7/8/9	88			Fine to medium SAND, trace gravel	SP	0	
-15		5	11/11/11/14	54		Hard	Clayey SILT, trace sand and gravel	ML	0	
		6	7/15/16/18	100					0	
-20		7	17/24/43/72	92					0	
		8	13/21/21/31	54		Dense	Fine to coarse SAND, trace silt, gravel, and cobbles	SW	0	
		9	15/41/ 50/4	63		Very Dense			0	
-25										

COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.  
Sampled for VOCs 33.0-35.0' bgs.



# TEST BORING LOG

**BORING NO. : DEC-029**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :** 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
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COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers. Sampled for VOCs 33.0-35.0' bgs.

**BORING NO. : DEC-029**



<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-029D				
PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site										SHEET: 1 OF 3				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202087.488      EASTING: 1002022.985				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 38.85 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/10/11					
				DIA.					DATE FINISHED: 5/11/11					
				WT.					DRILLER: J. Meyers					
				FALL					GEOLOGIST: C. Friedman					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL DESCRIPTION			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS								
0							See DEC-029 boring log for lithologic description from 0-40.0 feet bgs.					Vactron cleared 0-5.0' bgs		
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig. Soil sample collected 75.0 - 76.0 and 84.0 - 84.5 feet bgs for geotechnical analysis.														
BORING NO. :DEC-029D														



# TEST BORING LOG

**BORING NO. : DEC-029D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 2 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.  
Soil sample collected 75.0 - 76.0 and 84.0 - 84.5 feet bgs for geotechnical analysis.

**BORING NO. :DEC-029D**

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-60									0.0	
									0.0	
							Coarse SAND and GRAVEL, trace cobbles	SP	1.2	
									3.0	
		4		60			Fine to medium SAND, little gravel and coarse sand		1.3	
									0.0	
							-trace cobbles		0.0	
									0.0	
		5		80					0.0	
							Fine SAND some silt, trace gravel		0.0	
									0.0	
-70							Fine to coarse SAND, little gravel and cobbles	SW	0.0	
									0.6	
		6		40					0.0	
									0.0	
									0.0	
-75							Fine to medium SAND, trace to some coarse sand and gravel		2.4	
									1.2	
		7		70					1.0	
									0.8	
									0.0	
-80									1.0	
									0.0	
		8		87			GRAVEL, little fine sand and silt	GW	0.0	
							Silty CLAY	CL	0.0	
								SM	0.0	
							Fine SAND and SILT		0.0	
-85							Boring Completed at 85.0' bgs.			
-90										

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.  
Soil sample collected 75.0 - 76.0 and 84.0 - 84.5 feet bgs for geotechnical analysis.

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 202008.3851 EASTING: 1001817.1012

GROUNDWATER: Encountered at 34.5' bgs.

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 37.43

DATE

TIME

LEVEL

TYPE

TYPE

HSA

Split Spoon

DATE STARTED: 11/19/2007

DIA.

4.25 "

2-inch

DATE FINISHED: 11/20/2007

WT.

140 lbs.

DRILLER: Jeremy Meyers

FALL

30 - inches

GEOLOGIST: A. Ledgerwood

\* POCKET PENETROMETER READING

REVIEWED BY: Tim Burmeier

DEPTH  
FEET

STRATA

SAMPLE

NO.

BLOW  
COUNT

REC%

RQD%

COLOR

SOIL  
CONSISTENCY

ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

Vactron  
cleared  
boring 0-5.0'

Moist

Wet, perched  
water

Moist

COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.

Sampled for VOCs 33.0-33.0' bgs.



<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-030D				
PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site										SHEET: 1 OF 3				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:201995.054      EASTING: 1001821.776				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 37.2 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/11/11					
				DIA.					DATE FINISHED: 5/16/11					
				WT.					DRILLER: J. Meyers					
				FALL					GEOLOGIST: M. Dascoli					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION							
0							See DEC-030 boring log for lithologic description From 0-45.0 feet bgs.					Vactron cleared 0-5.0' bgs		
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.														
BORING NO. :DEC-030D														



<div>URS Corporation</div>							TEST BORING LOG			
PROJECT: Former Klink Cosmo Cleaners Site							BORING NO. : DEC-030D			
CLIENT: New York State Department of Environmental Conservation							SHEET: 2 OF 3			
							JOB NO. :11176390.00002			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div>-30</div><div>-35</div><div>-40</div><div>-45</div><div>-50</div><div>-55</div></div>		1		13	Brown		BOULDERS and COBBLES  -Poor recovery due to boulder/cobbles stuck in sampler shoe	GW	0.0	Wet
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
		2		8	Grey		-no recovery	0.0		
								0.0		
								0.0		
								0.0		
								0.0		
								0.0		
		3		0				0.0		
								NA		
								NA		
								NA		
								NA		
								NA		

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

BORING NO. :DEC-030D



# TEST BORING LOG

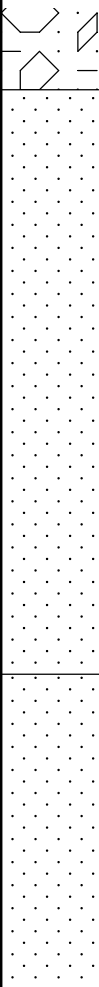
**BORING NO. : DEC-030D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 3 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS	
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS					
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		4		40	Brown		Fine to coarse SAND, trace to some gravel	SW	NA		
									NA		
									0.0		
									0.0		
									0.0		
									0.0		
		5		7	Grey			-boulder at 65' bgs			0.0
											0.0
											0.0
											0.0
											0.0
											0.0
		6		80	Brown						0.0
											0.0
											0.0
											0.0
											0.0
											0.0
		7		100				Fine to medium SAND, trace gravel	SP		0.0
											0.0
0.0											
0.0											
0.0											
0.0											
Boring completed at 80.0' bgs.											

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

**BORING NO. :DEC-030D**

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201767.5110 EASTING: 1001889.4718

GROUNDWATER: Encountered at 34.0' bgs.

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 34.94

DATE	TIME	LEVEL	TYPE	TYPE	HSA	Split Spoon	CORE	TUBE
				DIA.	4.25 "	2-inch		
				WT.		140 lbs.		
				FALL		30 - inches		

DATE STARTED: 11/20/2007

DATE FINISHED: 11/21/2007

DRILLER: Jeremy Meyers

GEOLOGIST: A. Ledgerwood

\* POCKET PENETROMETER READING

REVIEWED BY: Tim Burmeier

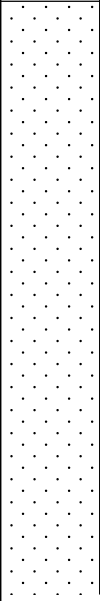
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0					Light Brown		Concrete	ML		Vactron cleared boring 0-5.0'
							Clayey SILT			
-5		1	1/2/2/3	80		Soft			16	Moist
		2	1/2/2/2	60					32.2	
-10		3	5/11/15/16	40		Medium Dense	Silty SAND, trace gravel	SM	15.6	
		4	20/11/12/14	70					27	
		5	15/15/12/10	90					24.2	
-15		6	4/6/10/5	40					93.3	
		7	2/7/14/16	30			Medium SAND, trace cobbles	SP	53.2	Sweet solvent like odor from sample
-20		8	14/16/18/18	60		Dense	Coarse SAND, some gravel and cobbles		53.9	
		9	6/12/14/16	40		Medium Dense			145	
-25		10	15/30/29/23	50	Brown	Very Dense			111	Auger through

COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers.  
Sampled for VOCs 29.0-30.0' and 33.0-34.0' bgs.



<div>URS Corporation</div>										TEST BORING LOG			
										BORING NO. : DEC-031D			
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 3			
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390			
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:201769.077      EASTING: 1001894.982			
GROUNDWATER:Encountered at 45.0'						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 34.70			
DATE	TIME	LEVEL	TYPE	TYPE	Casing	Split Spoon			DATE STARTED: 6/17/08				
				DIA.	4 "	2-inch			DATE FINISHED: 6/18/08				
				WT.		140 lbs.			DRILLER: Shawn Miller				
				FALL		30 - inches			GEOLOGIST: S. McCabe				
						* POCKET PENETROMETER READING				REVIEWED BY: Tim Burmeier			
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS	
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION						
0							See DEC-031 Boring Log for Lithologic Description From 0-45.0 feet bgs					Vactron cleared boring 0-5.0'	
-5													
-10													
-15													
-20													
-25													
COMMENTS: Boring advanced with truck-mounted CME-85 using 4-inch mud-rotary drilling.													
BORING NO. : DEC-031D													

URS Corporation							TEST BORING LOG				
PROJECT: Meeker Avenue Plume Trackdown							BORING NO. : DEC-031D				
CLIENT: New York State Department of Environmental Conservation							SHEET: 2 OF 3				
							JOB NO. : 11176390				
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS	
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS					
-30											
-35											
-40											
-45		1	8/7/7/8	55	Brown	Medium Dense	Fine to medium SAND, trace gravel	SP	0.7	Wet	
		2	7/11/12/15	75							0.5
		3	2/4/8/10	40							0.2
-50		4	2/3/6/6	50		Loose			0.2		
		5	11/9/12/14	75		Medium Dense			0.4		
-55		6	15/13/15/15	100					0.3		
COMMENTS: Boring advanced with truck-mounted CME-85 using 4-inch mud-rotary drilling.											
BORING NO. : DEC-031D											



<div> <div>URS Corporation</div> <div> <div>PROJECT: Meeker Avenue Plume Trackdown</div> <div>CLIENT: New York State Department of Environmental Conservation</div> </div> </div>							TEST BORING LOG			
							BORING NO. : DEC-031D			
							SHEET: 3 OF 3			
							JOB NO. : 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div> <div>-60</div> <div>-65</div> <div>-70</div> <div>-75</div> <div>-80</div> </div>		7	5/9/12/13	55	<div> <div>Dense</div> <div>Reddish Brown</div> <div>Gray Brown</div> </div>					0.4
		8	10/14/13/16	75						0.2
		9	11/10/10/12	40						0.3
		10	11/12/15/17	65						0.2
		11	18/18/21/26	75						0.4
		12	21/24/22/34	75						0.4
		13	18/19/19/24	65						0.5
		14	13/19/24/20	75						0.6
		15	21/17/19/16	100						0.7
		16	10/13/17/17	50						0.7
		17	15/18/18/24	75						0.7
		18	10/15/20/23	75						0.3
							Boring Completed at 81.0' bgs.			
<div> <div>COMMENTS: Boring advanced with truck-mounted CME-85 using 4-inch mud-rotary drilling.</div> <div></div> <div></div> </div>										
BORING NO. : DEC-031D										

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201579.2496 EASTING: 1001969.0590

GROUNDWATER: Encountered at 35.0' bgs.

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 28.30

DATE	TIME	LEVEL	TYPE	TYPE	HSA	Split Spoon	CORE	TUBE
				DIA.	4.25 "	2-inch		
				WT.		140 lbs.		
				FALL		30 - inches		

DATE STARTED: 11/27/2007

DATE FINISHED: 11/29/2007

DRILLER: Jeremy Meyers

GEOLOGIST: S. McCabe

\* POCKET PENETROMETER READING

REVIEWED BY: Tim Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0					Brown		Concrete			Vactron cleared boring 0-5.0'
-5		1	1/3/2/2	50		Loose	FILL: Silty fine SAND, trace asphalt, glass and slag		0	Moist
-10		2	1/3/4/4	90			Silty fine SAND, some cobbles	SM	3.1	
		3	2/15/ 50/3	58		Very Dense			1.9	
-15		4	15/26/26/111	58			Fine to coarse SAND, some gravel and cobbles	SW	0	Auger through cobbles 11.0-14.0'
		5	49/97/ 50/5	75					0	Switch to mud rotary drilling
-20										
-25		6	5/4/3/4	60		Loose	Fine to medium SAND, trace silt and gravel	SP	0	
						Medium Dense				

COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers. Sampled for VOCs 29.0-30.0' and 33.0-34.0' bgs.







# TEST BORING LOG

**BORING NO. : DEC-033**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

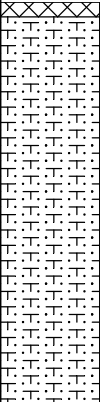
**CLIENT:** New York State Department of Environmental Conservation

**JOB NO.:** 11176332 / 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
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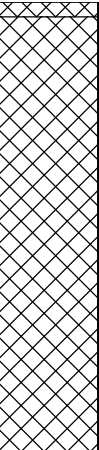
COMMENTS: Boring advanced with track-mounted CME-55LC using equipped with 4.25 -inch hollow stem augers. Sampled for VOCs 33.0-34.0' bgs.

**BORING NO. : DEC-033**

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-039				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202601.4224      EASTING: 1001779.649				
GROUNDWATER:Encountered at 42.0' bgs.						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 45.02				
DATE	TIME	LEVEL	TYPE	TYPE	HSA	Split Spoon			DATE STARTED: 5/19/08					
				DIA.	4.25 "	2-inch			DATE FINISHED: 5/20/08					
				WT.		140 lbs.			DRILLER: Jeremy Meyers					
				FALL		30 - inches			GEOLOGIST: S. McCabe					
				* POCKET PENETROMETER READING					REVIEWED BY: Tim Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION		USCS	PID	REMARKS			
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS								
0							Concrete	SM		0.0	Vactron cleared boring 0-5.0'			
							Silty SAND, trace gravel							
-5			1	6/13/8/22	80	Brown	Medium Dense			0.0	Moist			
			2	27/23/20/13	25		Dense			0.0				
-10			3	3/9/9/8	75	Light Brown	Medium Dense	Fine to coarse SAND, trace gravel	SW	0.0				
			4	12/14/14/18	75					0.0				
			5	15/21/27/20	100		Dense			0.5				
-15			6	8/12/12/12	75		Medium Dense			0.3				
			7	9/13/13/17	75					0.2				
		8	8/17/19/30	75	Dense		0.0							
-20		9	9/21/20/24	75			0.0							
		10	6/12/14/16	75	Medium Dense		Fine to medium SAND, trace gravel			SP		0.0		
-25														
<div>COMMENTS: Boring advanced with track-mounted CME-55LC using 4.25 -inch hollow stem augers. Soil sample collected for TCL VOCs plus TICs 41.0-42.0' bgs.</div>														
<div>BORING NO. : DEC-039</div>														





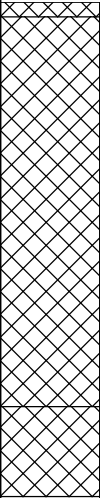
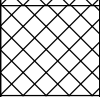
<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-042				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176332 / 11176390				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202512.9723      EASTING: 1001729.524				
GROUNDWATER:Encountered at 39.0' bgs.					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 42.10					
DATE	TIME	LEVEL	TYPE	TYPE	HSA	Split Spoon			DATE STARTED: 5/15/08					
				DIA.	4.25"	2-inch			DATE FINISHED: 5/19/08					
				WT.		140 lbs.			DRILLER: Jeremy Meyers					
				FALL		30 - inches			GEOLOGIST: S. McCabe					
					* POCKET PENETROMETER READING				REVIEWED BY: Tim Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS				
		NO.	BLOW COUNT	RQD%		CONSISTENCY								
						ROCK HARDNESS								
0					Brown		Concrete			Vactron cleared boring 0-5.0'				
-5							FILL: Silty fine sand, trace gravel, wood, slag, and cinders							
		1	1/1/1/2	25		Very Loose				0.3	Moist			
		2	2/2/4/3	25						0.2				
-10		3	3/10/13/15	50	Yellow Brown	Medium Dense	Silty fine SAND, trace gravel	SM	1.0					
		4	13/47/41/32	25		Very Dense			1.1					
-15		5	21/18/24/28	50	Brown	Dense	Fine to coarse SAND, trace gravel	SW	1.3					
		6	12/22/21/17	75					0.3					
-20		7	12/12/11/13	100	Light Brown	Medium Dense			1.4					
		8	5/10/10/10	75					1.3					
-25	9	14/15/15/16	75					0.1						
	10	21/32/25/26	75		Very Dense			0.6						
						Medium Dense								
COMMENTS: Boring advanced with track-mounted CME-55 LC using 4.25-inch hollow stem augers.														
BORING NO. : DEC-042														

URS Corporation						TEST BORING LOG						
PROJECT: Meeker Avenue Plume Trackdown						BORING NO. : DEC-042						
CLIENT: New York State Department of Environmental Conservation						SHEET: 2 OF 2						
						JOB NO. : 11176332 / 11176390						
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS						
-30		11	7/9/15/15	75						0.8	Wet	
		12	12/14/15/15	75								1.2
		13	6/12/12/8	75								0.8
		14	12/15/18/30	100		Dense						0.7
		15	26/17/20/21	100								0.6
-35		16	9/11/15/22	100		Medium Dense						1.0
		17	15/18/19/21	100		Dense						1.1
-40		18	6/13/10/11	100		Medium Dense						0.0
		19	17/16/19/16	100		Dense						0.0
		20	15/18/19/12	100								0.0
-45		21	12/17/25/29	100								0.0
-50	Boring Completed at 50.0' bgs.											
-55												

COMMENTS:

Boring advanced with track-mounted CME-55 LC using 4.25-inch hollow stem augers.

BORING NO. : DEC-042

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-043				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202181.314      EASTING: 1002285.359				
GROUNDWATER:Encountered at 35.0' bgs.						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 37.67				
DATE	TIME	LEVEL	TYPE	TYPE	Casing	Split Spoon			DATE STARTED: 5/27/08					
				DIA.	4"	2-inch			DATE FINISHED: 6/4/08					
				WT.		140 lbs.			DRILLER: Jeremy Meyers					
				FALL		30 - inches			GEOLOGIST: C. Friedman					
				* POCKET PENETROMETER READING					REVIEWED BY: Tim Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS				
		NO.	BLOW COUNT	RQD%		CONSISTENCY								
						ROCK HARDNESS								
0					Brown		Concrete			Vactron cleared boring 0-5.0'				
-5						Very Loose	FILL: Silty fine sand, trace slag, and cinders			Moist				
		1	4/2/4/8	25		Medium Dense			0.4					
-10		2	4/5/17/19	25					0.3					
		3	5/8/10/9	50	Reddish Brown	Very Stiff	FILL: Clayey silt and sand, some gravel and slag		0.3					
-15			4	12/14/26/27	25	Brown	Dense	Fine to medium SAND, trace gravel	SP	0.4				
		5	11/23/14/13	50					0.3					
-20		6	50/5	75		Very Dense			0.7					
		7	19/29/26/14	75					0.0					
-25		8	14/16/13/16	75		Medium Dense			0.0					
		9	18/12/20/21	75		Dense			0.0					
COMMENTS: Boring advanced with track-mounted CME-55 LC using 4-inch mud rotary drilling.														
BORING NO. : DEC-043														

URS Corporation							TEST BORING LOG			
							BORING NO. : DEC-043			
PROJECT: Meeker Avenue Plume Trackdown							SHEET: 2 OF 2			
CLIENT: New York State Department of Environmental Conservation							JOB NO. : 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30  										

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-043D				
PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site										SHEET: 1 OF 3				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:202181.307 EASTING: 1002285.318				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 37.72 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/11/11					
				DIA.					DATE FINISHED: 5/11/11					
				WT.					DRILLER: J. Meyers					
				FALL					GEOLOGIST: C. Friedman					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%		SOIL	MATERIAL			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS	DESCRIPTION							
0							See DEC-043 boring log for lithologic description for 0-50.0 feet bgs.					Vactron cleared 0-5.0' bgs		
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig. Soil sample collected 80.0 - 81.0 feet bgs for geotechnical analysis.														
BORING NO. :DEC-043D														



# TEST BORING LOG

**BORING NO. : DEC-043D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 2 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

Soil sample collected 80.0 - 81.0 feet bgs for geotechnical analysis.

**BORING NO. :DEC-043D**



PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
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COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.  
Soil sample collected 80.0 - 81.0 feet bgs for geotechnical analysis.

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING:201738.4087 EASTING: 1001809.57

GROUNDWATER:Encountered at 34.0' bgs.

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 37.15

DATE	TIME	LEVEL	TYPE	TYPE	Casing	Split Spoon	CORE	TUBE
				DIA.	4"	2-inch		
				WT.		140 lbs.		
				FALL		30 - inches		

DATE STARTED: 6/18/08  
 DATE FINISHED: 6/20/08  
 DRILLER: Jeremy Meyers  
 GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: Tim Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0					Brown		Concrete	ML		Vactron cleared boring 0-5.0'
							SILT and CLAY, trace gravel			
-5		1	5/9/16/12	100		Very Stiff			1.0	Moist
		2	16/22/18/26	25		Dense	Fine SAND and SILT	SP	1.3	
-10		3	18/26/32/25	50		Very Dense	Fine SAND, trace gravel		4.2	
		4	18/32 50/4	50					4.3	
-15		5	25/28/33/49	50			Medium SAND, trace to some gravel		2.7	Boulder 13-14'
		6	32/38	75					10.1	
-20		7	11/14/23/35	50		Dense			4.5	
		8	33/25/22/30	75					6.3	
									33.7	
-25		9	19/17/16/17	75					6.2	

COMMENTS: Boring advanced with track-mounted CME-55 LC using 4-inch mud rotary drilling.



# TEST BORING LOG

**BORING NO. : DEC-044**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :** 11176390

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30  <										

COMMENTS: Boring advanced with track-mounted CME-55 LC using 4-inch mud rotary drilling.

**BORING NO. : DEC-044**

PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site

SHEET: 1 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING:201741.332 EASTING: 1001817.671

GROUNDWATER:

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 37.02 feet amsl

DATE

TIME

LEVEL

TYPE

TYPE

DATE STARTED: 5/27/11

DIA.

DATE FINISHED: 6/2/11

WT.

DRILLER: J. Meyers

FALL

GEOLOGIST: C. Friedman

REVIEWED BY: T. Burmeier

DEPTH  
FEET

STRATA

SAMPLE

NO.

BLOW  
COUNT

REC%

RQD%

COLOR

SOIL  
CONSISTENCY  
ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

See DEC-044 boring log for lithologic description for 0-45.0 feet bgs.

Vactron cleared 0-5.0' bgs

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.

Soil sample collected 50.0 - 51.0 and 70.0 - 71.0 for geotechnical analysis.

BORING NO. :DEC-044D



# TEST BORING LOG

**BORING NO. : DEC-044D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 2 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

[illegible]

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig. Soil sample collected 50.0 - 51.0 and 70.0 - 71.0 for geotechnical analysis.

**BORING NO. :DEC-044D**



# TEST BORING LOG

**BORING NO. : DEC-044D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 3 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

[illegible]

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig. Soil sample collected 50.0 - 51.0 and 70.0 - 71.0 for geotechnical analysis.

**BORING NO. :DEC-044D**

PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201745.6589 EASTING: 1001996.625

GROUNDWATER: Encountered at 34.0' bgs.

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 32.55

DATE	TIME	LEVEL	TYPE	TYPE	Casing	Split Spoon	CORE	TUBE
				DIA.	4"	2-inch		
				WT.		140 lbs.		
				FALL		30 - inches		

DATE STARTED: 6/4/08

DATE FINISHED: 6/16/08

DRILLER: Shawn Miller

GEOLOGIST: S. McCabe

\* POCKET PENETROMETER READING

REVIEWED BY: Tim Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0					Brown		Concrete			Vactron cleared boring 0-5.0'
							Clayey SILT, trace sand and gravel			
-5		1	1/9/7/8	25		Very Stiff		ML	0.3	Moist
		2	3/1/1/2	75		Soft			0.4	
-10		3	1/8/5/4	25		Stiff			0.2	
		4	5/13/20/17	50		Dense	Fine SAND, trace gravel	SP	0.6	
-15		5	26/27/13/15	50		Very Stiff	Clayey SILT	ML	0.7	
		6	14/20/21/22	50		Very Dense	Fine to medium Sand, trace gravel	SP	0.6	
-20		7	29/26/37/42	100					0.6	
		8	6/9/7/9	50		Medium Dense			0.8	
-25		9	11/9/12/12	50					1.7	
		10	9/4/5/7	75					2.2	
						Very Dense				

COMMENTS: Boring advanced with truck-mounted CME-85 using 4-inch mud rotary drilling.



URS Corporation							TEST BORING LOG			
PROJECT: Meeker Avenue Plume Trackdown							BORING NO. : DEC-045			
CLIENT: New York State Department of Environmental Conservation							SHEET: 2 OF 2			
							JOB NO. : 11176390			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><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PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site

SHEET: 1 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING:201738.648 EASTING: 1001998.988

GROUNDWATER:

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 32.44 feet amsl

DATE

TIME

LEVEL

TYPE

TYPE

DATE STARTED: 5/19/11

DIA.

DATE FINISHED: 5/19/11

WT.

DRILLER: G. Rivera

FALL

GEOLOGIST: S. McCabe

REVIEWED BY: T. Burmeier

DEPTH  
FEET

STRATA

SAMPLE

NO.

BLOW  
COUNT

REC%

RQD%

COLOR

SOIL  
CONSISTENCY  
ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

See DEC-045 boring log for lithologic description for 0-45.0 feet bgs.

Vactron cleared 0-5.0' bgs

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.

BORING NO. :DEC-045D



# TEST BORING LOG


**BORING NO. : DEC-045D**

**PROJECT:** Former Klink Cosmo Cleaners Site

**SHEET: 2 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30										
-35										
-40										
-45		1		62	Brown		Fine to medium SAND, trace coarse sand and fine to coarse gravel	SP	0.0	Wet
									0.0	
									0.0	
									0.0	
-50		2		100					0.0	
									0.0	
									0.0	
									0.0	
-55		3		50					0.0	
									0.0	
									0.0	
									0.0	

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.



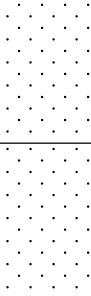

**BORING NO. :DEC-045D**

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-60		4		86			-some coarse sand, trace fine to coarse gravel			0.0
										0.0
										0.0
										0.0
										0.0
										0.0
										0.0
-65		5		80			Fine to coarse SAND, trace to some fine to coarse gravel	SW		0.0
										0.0
										0.0
										0.0
										0.0
										0.0
										0.0
-70		6		100						0.0
										0.0
										0.0
										0.0
										0.0
										0.0
										0.0
-75		7		100	Orangish Brown		Fine to medium SAND, trace coarse sand and fine to coarse gravel	SP		0.0
										0.0
										0.0
										0.0
										0.0
										0.0
										0.0
-80							Boring completed at 80.0' bgs.			
-85										
-90										

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.





# TEST BORING LOG

**BORING NO. : DEC-046**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. : 11176390**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30   <										

COMMENTS: Boring advanced with truck-mounted CME-85 using 4-inch mud rotary drilling.

**BORING NO. : DEC-046**

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : DEC-047				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 2				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390				
BORING CONTRACTOR: Aquifer Drilling & Testing Inc.										NORTHING:201110.6942 EASTING: 1001622.227				
GROUNDWATER:Encountered at 30.0' bgs.					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 31.26					
DATE	TIME	LEVEL	TYPE	TYPE	Casing	Split Spoon			DATE STARTED: 6/26/08					
				DIA.	4"	2-inch			DATE FINISHED: 6/30/08					
				WT.		140 lbs.			DRILLER: Jeremy Meyers					
				FALL		30 - inches			GEOLOGIST: C. Friedman					
					* POCKET PENETROMETER READING				REVIEWED BY: Tim Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION			USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%		CONSISTENCY								
						ROCK HARDNESS								
0							Concrete				Vactron cleared boring 0-5.0'			
							Clayey SILT, trace gravel							
-5		1	6/7/8/8	100	Reddish Brown	Stiff			ML	0.0	Moist			
		2	6/18/16/52	75		Hard				0.0				
-10		3	15/16/19/27	100						0.0				
		4	4/12/16/32	100	Brown	Medium Dense	Silty SAND, trace gravel		SM	0.0				
-15		5	5/18/17/20	50		Dense				0.0				
		6	14/13/15/13	50		Medium Dense				0.0				
-20		7	4/15/20/12	100	Gray	Hard	Clayey SILT, trace gravel		CL	0.0				
		8	4/8/22/22	75						0.0				
-25	9	25/10/11/14	50		Very Stiff				0.0					
	10	5/9/9/10	50						0.0					
COMMENTS: Boring advanced with track-mounted CME-55 LC using 4-inch mud rotary drilling.														
BORING NO. : DEC-047														





PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown

SHEET: 1 OF 2

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201186.5875 EASTING: 1001796.924

GROUNDWATER: Encountered at 30.0' bgs.

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 28.69

DATE

TIME

LEVEL

TYPE

TYPE

DATE STARTED: 6/23/08

DIA.

4"

Split Spoon

2-inch

DATE FINISHED: 6/25/08

WT.

140 lbs.

DRILLER: Jeremy Meyers

FALL

30 - inches

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: Tim Burmeier

DEPTH  
FEET

STRATA

SAMPLE

REC%

COLOR

SOIL  
CONSISTENCY

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

NO.

BLOW  
COUNT

RQD%

ROCK  
HARDNESS

0

-5

-10

-15

-20

-25

Concrete

Silty SAND, trace gravel

SM

Vactron  
cleared  
boring 0-5.0'

Brown

Very Dense

Moist

1

64/ 30/1

100

Medium  
Dense

Fine to medium Sand, trace gravel

SP

0.0

2

16/12/10/12

100

SILT, trace gravel

ML

0.0

3

9/11/17/25

745

Very Stiff

SILT and CLAY

CL

0.0

4

10/10/10/24

75

Medium  
Dense

Silty fine SAND

SM

0.0

5

6/12/12/14

75

Dense

0.0

6

14/16/17/18

100

Medium  
Dense

0.0

7

8/14/13/20

75

Very Dense

0.0

8

11/ 40/4

25

0.0

Black

9

30/30/35/ 87/5

50

200

Strong tar like  
odor

COMMENTS: Boring advanced with track-mounted CME-55 LC using 4-inch mud rotary drilling.

Soil sample collected for TCL VOC plus TICS and TCL SVOC plus TICs 24.5-25.5' bgs.



PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site

SHEET: 1 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 202043.667 EASTING: 1001902.992

GROUNDWATER:

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 37.77 feet amsl

DATE

TIME

LEVEL

TYPE

TYPE

DATE STARTED: 5/12/11

DATE FINISHED: 5/13/11

DRILLER: J. Meyers

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH  
FEET

STRATA

SAMPLE

NO.

BLOW  
COUNT

REC%

RQD%

COLOR

SOIL  
CONSISTENCY  
ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

Concrete

Vactron  
cleared 0-5.0'  
bgs

Brown

Fine SAND and SILT, little clay lenses,  
trace gravel

SM

3.0

2.4

2.0

0.0

0.0

Red to  
Brown  
Brown

Fine to medium SAND, trace gravel and  
cobbles

SP

1.8

Fine SAND and SILT, trace gravel

SM

1.4

1.3

1.8

1.0

0.0

0.0

0.0

0.0

0.0

Greyish  
Brown

-some gravel and cobbles

1.0

1.4

1.2

1.0

1.1

1.2

Dry

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

Soil sample collected from 31.0-32.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium.

BORING NO. :DEC-064D

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 2 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30									1.1	Wet
									1.0	
									0.0	
									0.0	
							GRAVEL and COBBLES	GW	0.0	
							Fine to coarse SAND and GRAVEL	SW	0.3	
									0.0	
									0.0	
									0.0	
									0.3	
-35					Brown				0.5	Wet
									0.4	
							-some gravel		0.8	
							Fine SAND	SP	0.0	
							Fine to coarse SAND, little to some gravel and cobbles		0.3	
									0.6	
									0.8	
									0.5	
									0.0	
									0.8	
-45									1.3	Wet
									1.4	
									1.0	
									0.0	
							GRAVEL and COBBLES	GP	0.0	
									0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-55					Brown				0.8	Wet
							Fine to medium SAND and GRAVEL/COBBLES, little coarse sand	SW	1.1	
									1.4	

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

Soil sample collected from 31.0-32.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium.



# TEST BORING LOG

**BORING NO. : DEC-064D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 3 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		10		70			Fine to medium SAND, trace gravel, little silt	SP	0.0	
									0.0	
	0.4									
	0.3									
	0.2									
	1.5									
	0.0									
	0.8									
	0.9									
	0.4									
	0.3									
	0.0									
	NA									
	NA									
	NA									
	NA									
	NA									
	NA									
	NA									
	NA									
	11		80				-no recovery		0.0	
									0.8	
0.9										
0.4										
0.3										
0.0										
NA										
NA										
NA										
NA										
NA										
	12		0				Fine to coarse SAND, trace gravel	SW	0.0	
									0.0	
0.0										
0.0										
0.0										
0.0										
0.0										
0.0										
0.0										
0.0										
	13		80				Boring completed at 80.0' bgs		0.0	
									0.0	
0.0										
0.0										
0.0										
0.0										
0.0										
0.0										
0.0										
0.0										

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

Soil sample collected from 31.0-32.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium.

**BORING NO. :DEC-064D**

PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site

SHEET: 1 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201699.610 EASTING: 1001695.714

GROUNDWATER: ~35 feet bgs

CAS.

SAMPLER

CORE

TUBE

GROUND ELEVATION: 39.25 feet amsl

DATE

TIME

LEVEL

TYPE

TYPE

DATE STARTED: 5/24/11

DIA.

DATE FINISHED: 5/25/11

WT.

DRILLER: J. Meyers

FALL

GEOLOGIST: C. Friedman

REVIEWED BY: T. Burmeier

DEPTH  
FEET

STRATA

SAMPLE

NO.

BLOW  
COUNT

REC%

RQD%

COLOR

SOIL  
CONSISTENCY

ROCK  
HARDNESS

MATERIAL  
DESCRIPTION

USCS

PID

REMARKS

0

-5

-10

-15

-20

-25

Concrete

Fine SAND and SILT, little gravel

Fine to medium SAND and  
GRAVEL/COBBLES

Clayey SILT, little gravel and fine sand

Brown

Reddish  
Brown

Brown

Grey  
to  
Brown

Brown

SM

SW

ML

SW

0.5

0.5

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

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0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

Vactron  
cleared 0-5.0'  
bgs

Moist

Wet

Dry

Moist to dry

Dry

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

Soil sample collected from 9.0 - 10.0, 14.0 - 15.0 and 34.0 - 35.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium analysis.

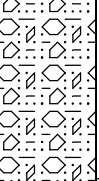
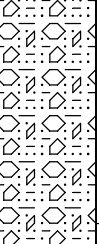
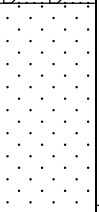
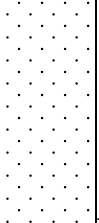
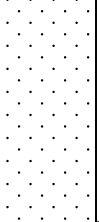
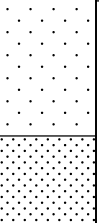
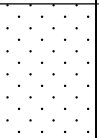



PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 2 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30		5		50			Fine to medium SAND and GRAVEL/COBBLES		0.0	Undifferentiated odor
									0.0	
									0.0	
									0.0	
									8.8	
-35		6		80					10.0	Wet
									12.1	
									80.2	
									0.0	
									0.0	
-40		7		70			Fine to medium SAND -little gravel, trace silt	SP	0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-45		8		80			-little coarse sand and gravel		0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-50		9		40			-little gravel, trace silt		0.0	
									0.0	
									0.0	
									0.0	
									0.0	
-55		10		80			-little gravel		0.0	
									0.6	
									2.2	
									0.2	
									0.0	
		11		70			Fine SAND, little silt		0.0	
									0.0	
									0.0	
									0.0	
									0.0	
							Fine to medium SAND, trace to little gravel		0.0	
									0.0	
									0.0	
									0.0	
									0.0	

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

Soil sample collected from 9.0 - 10.0, 14.0 - 15.0 and 34.0 - 35.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium analysis.

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-60  										

COMMENTS: Boring advanced with track-mounted AMS 17-C Sonic drill rig.

Soil sample collected from 9.0 - 10.0, 14.0 - 15.0 and 34.0 - 35.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium analysis.

PROJECT/PROJECT LOCATION: Former Klink Cosmo Cleaners Site

SHEET: 1 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Aquifer Drilling & Testing Inc.

NORTHING: 201668.614 EASTING: 1001939.332

GROUNDWATER: ~30 feet bgs

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 31.46 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/20/11

DATE FINISHED: 5/23/11

DRILLER: J. Meyers

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				
0							Concrete			Vactron cleared 0-5.0' bgs
-5		1		80	Brown		Fine SAND and SILT	SM	0.5	Moist
					Red to Brown		Fine to coarse SAND, some gravel and cobbles	SW	0.4	Dry
									0.2	
									0.0	
									0.0	
-10		2		40	Brown		GRAVEL and COBBLES	GP	2.5	Moist Dry
					Grey to Black				2.0	
									0.0	
									0.0	
									0.0	
-15		3		50	Red to Brown		Fine SAND	SP	7.1	Moist
					Brown				4.7	
									0.0	
									0.0	
									0.0	
-20		4		50	Grey to Brown		Fine to medium SAND, trace gravel		1.4	
					Lt Brown		Fine SAND		0.4	
									0.0	
									0.0	
									0.0	
									0.0	
-25					Brown				0.0	

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.

Soil samples collected 24.0 - 25.0 and 29.0 - 30.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium analysis.



# TEST BORING LOG

**BORING NO. : DEC-066D**

**PROJECT: Former Klink Cosmo Cleaners Site**

**SHEET: 2 OF 3**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. :11176390.00002**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div></div>	5		40			GRAVEL and COBBLES	GP	0.0	Dry
									0.0	
									0.0	
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COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.

Soil samples collected 24.0 - 25.0 and 29.0 - 30.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,

TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium analysis.

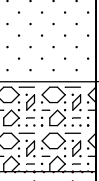
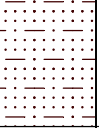

**BORING NO. :DEC-066D**

PROJECT: Former Klink Cosmo Cleaners Site

SHEET: 3 OF 3

CLIENT: New York State Department of Environmental Conservation

JOB NO. :11176390.00002

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-60		12		50			Fine to coarse SAND and GRAVEL	SM		
-65		13		60	Brown to Orangish Brown		Fine to medium SAND, little coarse sand and gravel	SP		
-70		14		70	Brown		Fine SAND, little silt and gravel			
-75		15		80			Fine to medium SAND, little gravel, trace silt			
-80							Boring completed at 80.0' bgs.			

COMMENTS: Boring advanced with track-mounted AMS17-C Sonic drill rig.  
Soil samples collected 24.0 - 25.0 and 29.0 - 30.0 feet bgs for TCL VOCs plus TICs, TCL SVOCs plus TICs,  
TCL Pesticide/PCBs/Herbicide, TAL Metals, Cyanide and Hex Chromium analysis.



<b>URS Corporation</b>							<b>TEST BORING LOG</b>			
PROJECT: Meeker Avenue Plume Trackdown							BORING NO. : SB-011			
CLIENT: New York State Department of Environmental Conservation							SHEET: 2 OF 2			
							JOB NO. : 11176332			
DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTANCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30		7		80						
		8		100						
		9		80						
-35							Boring completed at 33.0' bgs due to Macro Core refusal.			
-40										
-45										
-50										
-55										
COMMENTS: Soil boring advanced using track-mounted Geoprobe 6620 DT unit. Samples collected using 2-inch diameter by 4-foot long Macro Core sampler with dedicated/disposable acetate liners. Sampled for VOCs 25.0-26.0' and 31.5-32.5' bgs.										
BORING NO. : SB-011										



URS Corporation						TEST BORING LOG						
						BORING NO. : SB-12						
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown						SHEET: 1 OF 2						
CLIENT: New York State Department of Environmental Conservation						JOB NO. : 11176332 / 11176390						
BORING CONTRACTOR: Zebra Environmental						NORTHING:201597.6844 EASTING: 1001531.506						
GROUNDWATER:Not encountered					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 38.18			
DATE	TIME	LEVEL	TYPE	TYPE		Macro Core			DATE STARTED: 5/14/08			
				DIA.		2-inch			DATE FINISHED: 5/14/08			
				WT.					DRILLER: Evan			
				FALL					GEOLOGIST: C. Friedman			
					* POCKET PENETROMETER READING			REVIEWED BY: Tim Burmeier				
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS		
		NO.	BLOW COUNT	RQD%		CONSISTENCY ROCK HARDNESS						
0					Brown		Concrete	SM	0.0	Moist		
-5		1		60			Fine SAND and SILT, trace clay and gravel		0.0			
-10		2		90					0.0			
-15		3		75			Clayey SILT, trace to some gravel	ML	0.0			
-20		4		80	Dark Brown				0.0			
-25		5		100	Gray Brown				0.0			
					Gray				0.0			
COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners.												
BORING NO. : SB-12												



# TEST BORING LOG

**BORING NO. : SB-12**

**PROJECT: Meeker Avenue Plume Trackdown**

**SHEET: 2 OF 2**

**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. : 11176332 / 11176390**

[illegible]

COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners.

**BORING NO. : SB-12**





# TEST BORING LOG

**BORING NO. : SB-13**

**PROJECT: Meeker Avenue Plume Trackdown**

**SHEET: 2 OF 2**

**CLIENT: New York State Department of Environmental Conservation**

**JOB NO. : 11176332 / 11176390**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTANCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30  										

COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners. Soil sample collected for TCL VOC plus TICS 32.0-33.0'

**BORING NO. : SB-13**





# TEST BORING LOG

**BORING NO. : SB-14**

**PROJECT: Meeker Avenue Plume Trackdown**

**SHEET: 2 OF 2**

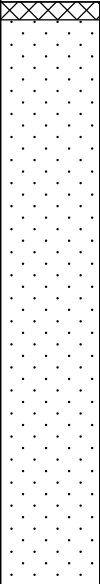
**CLIENT:** New York State Department of Environmental Conservation

**JOB NO. : 11176332 / 11176390**

DEPTH FEET	STRATA	SAMPLE		REC %	COLOR	SOIL CONSISTANCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD %		ROCK HARDNESS				
-30   										

COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners. Soil sample collected for TCL VOC plus TICS 33.0-34.0'

**BORING NO. : SB-14**

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : SB-15				
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 1				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390				
BORING CONTRACTOR: Zebra Environmental										NORTHING:201716.5738      EASTING: 1001756.572				
GROUNDWATER:Not Encountered						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 38.23				
DATE	TIME	LEVEL	TYPE	TYPE		Macro Core			DATE STARTED: 5/15/08					
				DIA.		2-inch			DATE FINISHED: 5/15/08					
				WT.					DRILLER: Evan					
				FALL					GEOLOGIST: C. Friedman					
				* POCKET PENETROMETER READING				REVIEWED BY: Tim Burmeier						
DEPTH FEET	STRATA	SAMPLE NO.      BLOW COUNT		REC% RQD%	COLOR	SOIL CONSISTENCY ROCK HARDNESS	MATERIAL DESCRIPTION			USCS	PID	REMARKS		
0		1		40	Brown	Concrete  Fine to medium SAND, trace silt and gravel	Concrete	SP	0.9	Moist				
									0.9					
									0.9					
									0.9					
-5									0.9					
									1.0					
									1.0					
									1.0					
									0.8					
									0.8					
-10									2.6					
									0.0					
									0.0					
-15						Boring Completed at 13.0' bgs, Macro Core Refusal.								
-20														
-25														
COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners.														
BORING NO. : SB-15														



<div> <div>URS Corporation</div> <div>TEST BORING LOG</div> </div>										BORING NO. : SB-16	
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown										SHEET: 1 OF 1	
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390	
BORING CONTRACTOR: Zebra Environmental										NORTHING:201684.5176 EASTING: 1001654.957	
GROUNDWATER:Not Encountered						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 39.45	
DATE	TIME	LEVEL	TYPE	TYPE		Macro Core				DATE STARTED: 5/15/08	
				DIA.		2-inch				DATE FINISHED: 5/15/08	
				WT.						DRILLER: Evan	
				FALL						GEOLOGIST: C. Friedman	
						* POCKET PENETROMETER READING			REVIEWED BY: Tim Burmeier		
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS	
		NO.	BLOW COUNT	RQD%		CONSISTENCY					ROCK HARDNESS
0					Black Brown		Concrete	SM		moist	
							FILL: Cinders, trace gravel				
		1		50			Fine to medium SAND, some silt and gravel				0.9
											0.9
											0.9
											0.9
-5											0.9
		2		100							0.3
											0.3
											0.3
											0.2
											0.2
-10											1.3
		3		40							1.3
											0.9
											0.9
											0.9
-15											0.0
		4		70							0.0
											0.0
								0.0			
-20					Reddish Brown			0.0			
					Gray Brown			0.0			
		5		100				0.0			
								0.0			
								0.0			
-25								0.0			
<div> <div>COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners.</div> <div></div> <div></div> </div>											
BORING NO. : SB-16											





## TEST BORING LOG

**BORING NO. : SB-17**

## PROJECT: Meeker Avenue Plume Trackdown

**SHEET: 2 OF 2**

**CLIENT: New York State Department of Environmental Conservation**

**JOB NO. : 11176390**

[illegible]

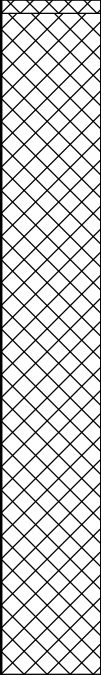
COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners.

**BORING NO. : SB-17**







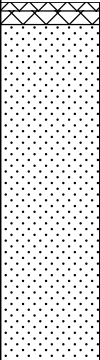
URS Corporation								TEST BORING LOG					
								BORING NO. : SB-21					
PROJECT/PROJECT LOCATION: Meeker Avenue Plume Trackdown								SHEET: 1 OF 1					
CLIENT: New York State Department of Environmental Conservation								JOB NO. : 11176390					
BORING CONTRACTOR: Zebra Environmental								NORTHING:201589.8013 EASTING: 1001966.06					
GROUNDWATER:Not Encountered					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 28.65				
DATE	TIME	LEVEL	TYPE	TYPE		Macro Core			DATE STARTED: 5/13/08				
				DIA.		2-inch			DATE FINISHED: 5/13/08				
				WT.					DRILLER: Evan				
				FALL					GEOLOGIST: C. Friedman				
					* POCKET PENETROMETER READING			REVIEWED BY: Tim Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL	MATERIAL DESCRIPTION	USCS	PID	REMARKS			
		NO.	BLOW COUNT	RQD%		CONSISTENCY ROCK HARDNESS							
0		1		50	Brown		Concrete		0.1	Moist			
								FILL: Medium sand, trace cinders, brick, gravel			0.1		
											0.1		
											0.2		
-5											0.2		
											0.2		
											0.3		
											0.1		
											0.1		
											0.3		
-10											0.2		
											0.2		
							0.1						
							0.1						
							0.1						
-15							Boring Completed at 15.0' bgs, Macro Core refusal at two locations.						
-20													
-25													


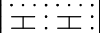
COMMENTS: Soil boring advanced using track-mounted Geoprobe 6610 DT unit. Samples collected using 2-inch diameter by 5-foot long Macro Core sampler with dedicated/disposable acetate liners. Soil sample collected for TCL VOCs plus TICs 13.5-15.0'

BORING NO. : SB-21





<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : SG-078				
PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site										SHEET: 1 OF 1				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Zebra Environmental, Inc.										NORTHING:202369.860 EASTING: 1002191.974				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 43.77 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/6/11					
				DIA.					DATE FINISHED: 5/6/11					
				WT.					DRILLER: L. Reiss					
				FALL					GEOLOGIST: C. Friedman					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL		MATERIAL DESCRIPTION	USCS	PID	REMARKS			
		NO.	BLOW COUNT	RQD%		CONSISTENCY	ROCK HARDNESS							
0		1		67	Brown		Concrete	Fill SP		1.4	Moist			
							FILL: STONE							
-5		2		83			Fine SAND, little silt			0.3				
-10							Boring completed at 8.0' bgs.							
-15														
-20														
-25														
COMMENTS: Boring advanced using a 6620DT Geoprobe rig. Collected soil sample 4.0 to 5.0 feet bgs for TCL VOC plus TICs analysis.														
BORING NO. : SG-078														

<div>URS Corporation</div>										TEST BORING LOG				
										BORING NO. : SG-079				
PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site										SHEET: 1 OF 1				
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002				
BORING CONTRACTOR: Zebra Environmental, Inc.										NORTHING:202180.475      EASTING: 1002170.986				
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 39.98 feet amsl					
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/6/11					
				DIA.					DATE FINISHED: 5/6/11					
				WT.					DRILLER: L. Reiss					
				FALL					GEOLOGIST: S. McCabe					
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier					
DEPTH FEET	STRATA	SAMPLE NO.    BLOW COUNT		REC% RQD%	COLOR	SOIL CONSISTENCY ROCK HARDNESS	MATERIAL DESCRIPTION			USCS	PID	REMARKS		
0		1		60	Black		Asphalt			Fill SW	0.0	Moist		
					FILL: STONE									
		2		67	Black to Brn		Clayey SILT			ML	0.0			
					Reddish Brown		Silty fine SAND			SM				
							Boring completed at 8.0' bgs.							
-5														
-10														
-15														
-20														
-25														
COMMENTS: Boring advanced using a 6620DT Geoprobe rig. Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.														
BORING NO. : SG-079														

PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site

SHEET: 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Zebra Environmental, Inc.

NORTHING: 202007.735 EASTING: 1001908.431

GROUNDWATER:

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 37.31 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/6/11

DATE FINISHED: 5/6/11

DRILLER: L. Reiss

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0							Concrete			
					Brown		FILL: STONE	FILL ML		Moist
		1		60			SILT, some fine sand		0.0	
-5							Fine SAND	SP		
		2		83					0.0	
-10							Boring completed 8.0' bgs.			
-15										
-20										
-25										

COMMENTS: Boring advanced using a 6620DT Geoprobe rig.  
Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.

PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site

SHEET: 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Zebra Environmental, Inc.

NORTHING: 201929.820 EASTING: 1001934.103

GROUNDWATER:

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 36.22 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/6/11

DATE FINISHED: 5/6/11

DRILLER: L. Reiss

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0							Concrete	Fill SP		Moist
		1		50	Brown		FILL: STONE		0.0	
							FILL: ASPHALT			
							Fine SAND, little to some silt			
-5		2		67					0.0	
-10							Boring completed at 8.0' bgs.			
-15										
-20										
-25										

COMMENTS: Boring advanced using a 6620DT Geoprobe rig.  
Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.

PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site

SHEET: 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Zebra Environmental, Inc.

NORTHING: 201858.296 EASTING: 1001958.228

GROUNDWATER:

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 35.20 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/6/11

DATE FINISHED: 5/6/11

DRILLER: L. Reiss

GEOLOGIST: C. Friedman

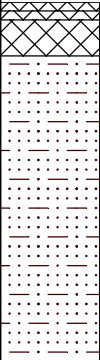
\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0							Concrete	Fill SM		Moist
		1		50	Brown		FILL: STONE		0.0	
							FILL: ASPHALT			
							Fine SAND and SILT, trace gravel			
-5		2		83			FILL: BRICK	Fill SM	0.0	
							Fine SAND and SILT			
-10							Boring completed at 8.0' bgs.			
-15										
-20										
-25										

COMMENTS: Boring advanced using a 6620DT Geoprobe rig.  
Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.

<div>URS Corporation</div>										TEST BORING LOG			
										BORING NO. : SG-083			
PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site										SHEET: 1 OF 1			
CLIENT: New York State Department of Environmental Conservation										JOB NO. : 11176390.00002			
BORING CONTRACTOR: Zebra Environmental, Inc.										NORTHING: 201797.275      EASTING: 1001980.452			
GROUNDWATER:					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: 33.98 feet amsl				
DATE	TIME	LEVEL	TYPE	TYPE					DATE STARTED: 5/6/11				
				DIA.					DATE FINISHED: 5/6/11				
				WT.					DRILLER: L. Reiss				
				FALL					GEOLOGIST: C. Friedman				
					* POCKET PENETROMETER READING				REVIEWED BY: T. Burmeier				
DEPTH FEET	STRATA	SAMPLE NO.      BLOW COUNT		REC% RQD%	COLOR	SOIL CONSISTENCY ROCK HARDNESS	MATERIAL DESCRIPTION			USCS	PID	REMARKS	
0		1		40	Dark Brown		Concrete FILL: STONE FILL: CONCRETE and BRICK Fine SAND and SILT			Fill	0.0	Moist	
-5		2		56						SM			
-10							Boring completed at 8.0' bgs.						
-15													
-20													
-25													
COMMENTS: Boring advanced using a 6620DT Geoprobe rig. Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.													
BORING NO. : SG-083													



PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site

SHEET: 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Zebra Environmental, Inc.

NORTHING: 201739.157 EASTING: 1001813.320

GROUNDWATER:

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 37.15 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/6/11

DATE FINISHED: 5/6/11

DRILLER: L. Reiss

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0							Concrete	Fill SP		Moist
		1		50	Dark Brown		FILL: STONE		0.0	
							Fine SAND, little silt			
-5		2		50					1.1	
-10							Boring completed at 8.0' bgs.			
-15										
-20										
-25										

COMMENTS: Boring advanced using a 6620DT Geoprobe rig.  
Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.

PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site

SHEET: 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Zebra Environmental, Inc.

NORTHING: 201698.220 EASTING: 1001691.588

GROUNDWATER:

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 39.32 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/6/11

DATE FINISHED: 5/6/11

DRILLER: L. Reiss

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0					Brown		Concrete			Wet
		1		60			FILL: STONE		0.0	Dry to moist
							Fine SAND and SILT			
-5		2		100					0.0	Moist
-10							Boring completed at 8.0' bgs.			
-15										
-20										
-25										

COMMENTS: Boring advanced using a 6620DT Geoprobe rig.  
Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.

PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site

SHEET: 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Zebra Environmental, Inc.

NORTHING: 201653.488 EASTING: 1001561.070

GROUNDWATER:

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 39.42 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/6/11

DATE FINISHED: 5/6/11

DRILLER: L. Reiss

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

0					Dark Brown to Black		Concrete	Fill		Moist
		1		60			FILL: STONE	SM	0.0	
							FILL: Fine SAND and CINDERS			
							Fine SAND and SILT			
-5		2		100	Brown		Fine to medium SAND	SW	0.0	
-10							Boring completed at 8.0' bgs.			
-15										
-20										
-25										

COMMENTS: Boring advanced using a 6620DT Geoprobe rig.  
Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.

PROJECT/PROJECT LOCATION: Fomer Klink Cosmo Cleaners Site

SHEET: 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 11176390.00002

BORING CONTRACTOR: Zebra Environmental, Inc.

NORTHING: 201578.058 EASTING: 1001537.332

GROUNDWATER:

CAS. SAMPLER CORE TUBE

GROUND ELEVATION: 37.81 feet amsl

DATE	TIME	LEVEL	TYPE	TYPE				
				DIA.				
				WT.				
				FALL				

DATE STARTED: 5/6/11

DATE FINISHED: 5/6/11

DRILLER: L. Reiss

GEOLOGIST: C. Friedman

\* POCKET PENETROMETER READING

REVIEWED BY: T. Burmeier

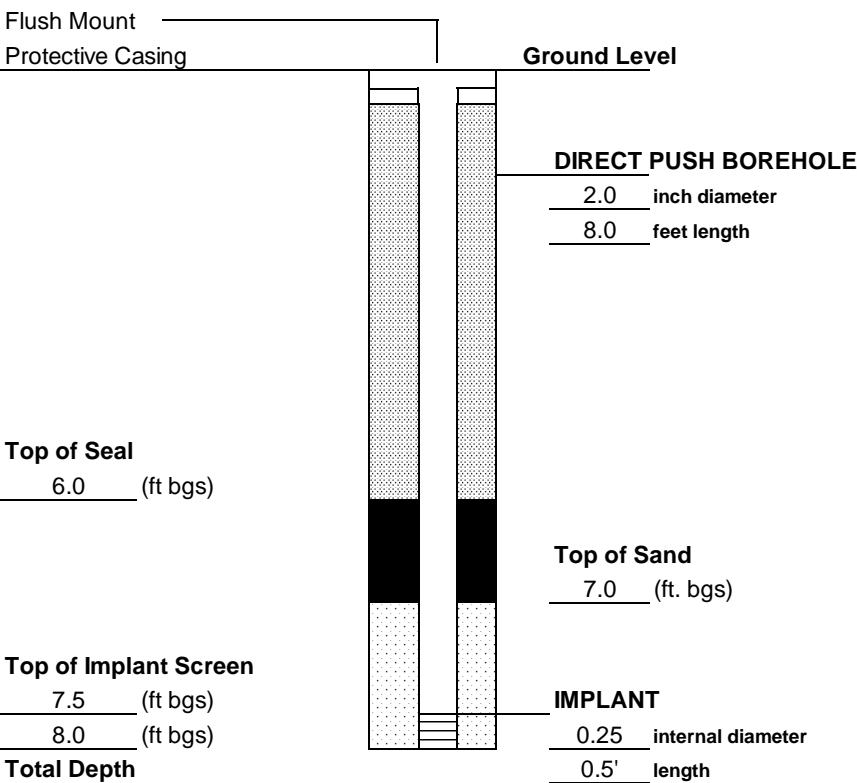
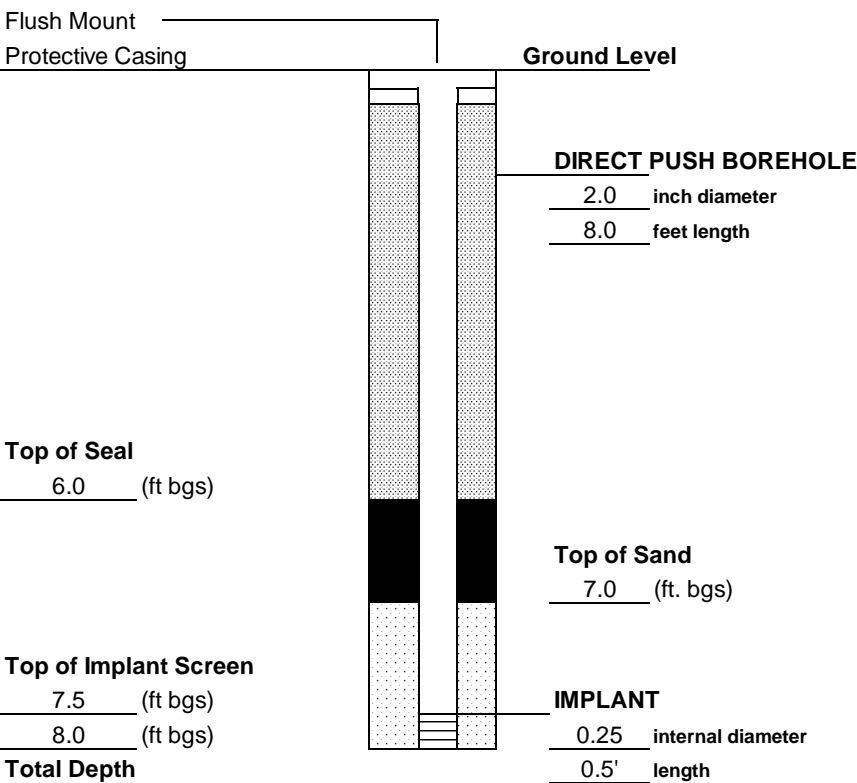
DEPTH FEET	STRATA	SAMPLE		REC%	COLOR	SOIL CONSISTENCY	MATERIAL DESCRIPTION	USCS	PID	REMARKS
		NO.	BLOW COUNT	RQD%		ROCK HARDNESS				

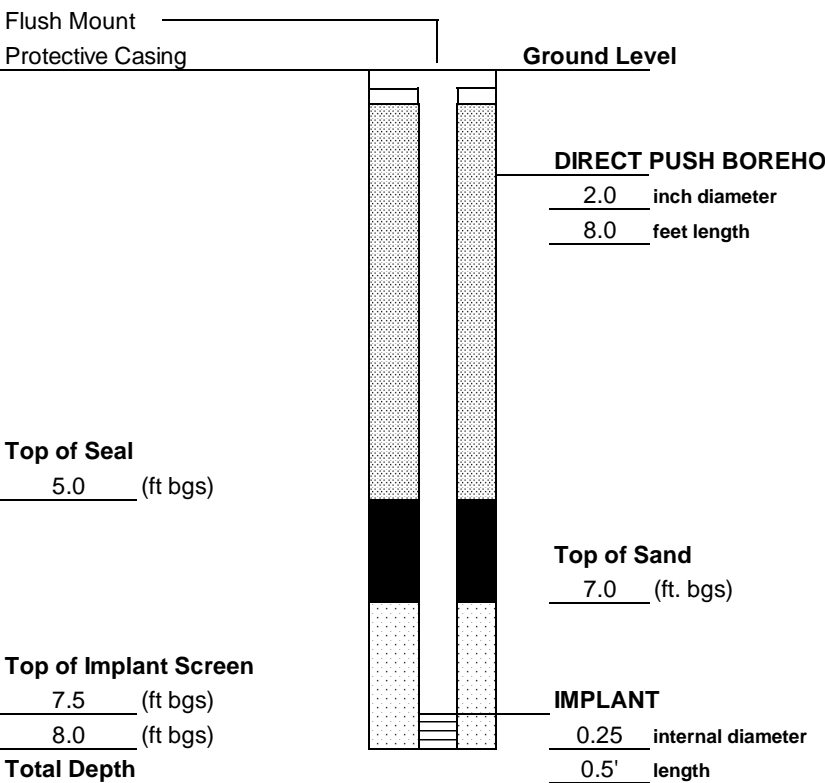



0							Concrete			
					Brown		FILL: STONE	FILL ML		Moist
		1		70			SILT, little to some fine sand		0.0	
-5							Fine SAND and SILT, trace gravel	SM		
		2		83					0.0	
-10							Boring completed at 8.0' bgs.			
-15										
-20										
-25										

COMMENTS: Boring advanced using a 6620DT Geoprobe rig.  
Collected soil sample 7.0 to 8.0 feet bgs for TCL VOC plus TICs analysis.

## **APPENDIX E**

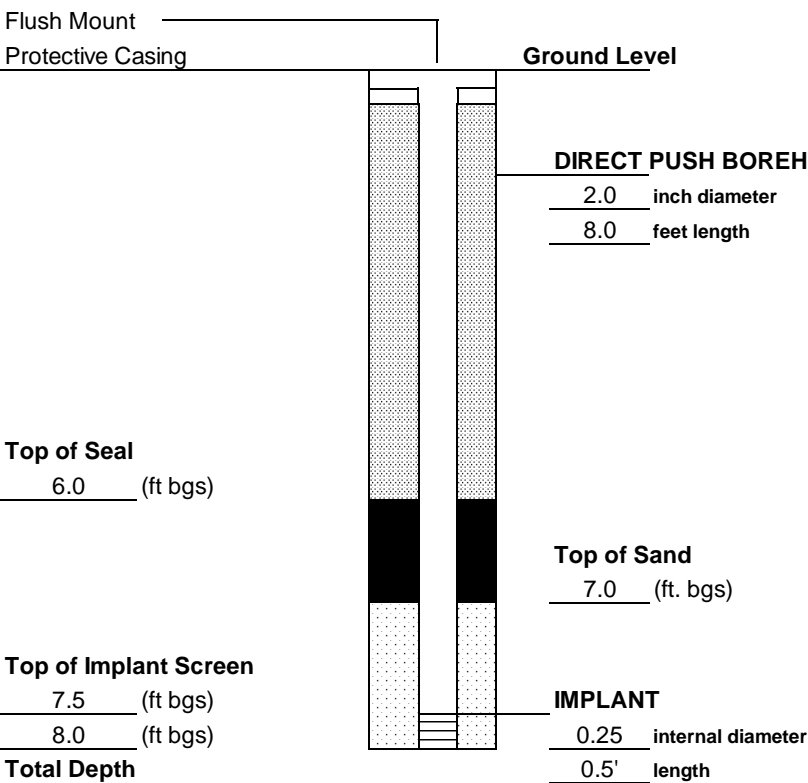
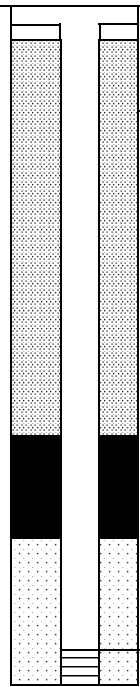
### **SOIL VAPOR IMPLANT CONSTRUCTION LOGS**

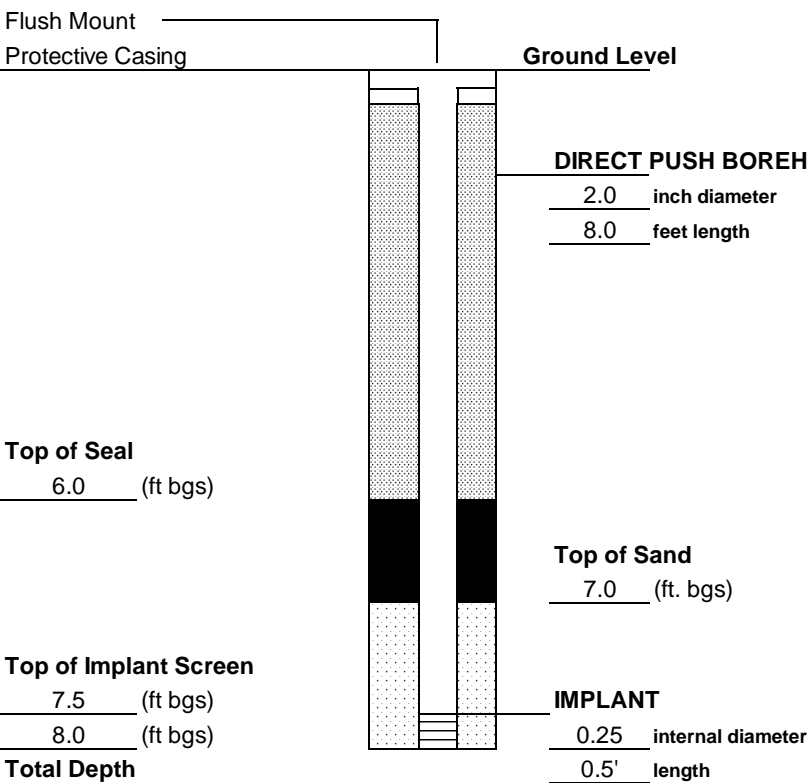



DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>			
Geologist: C. Friedman					
Drilling Company: Zebra Environmental Inc.					
Driller: Luke Reiss					
Rig Make/Model: 6620DT Geoprobe					
Date: 5/6/2011					
GEOLOGIC LOG		D E P T H  (FT)	<div style="display: flex; justify-content: space-between;"> <div> <p>Flush Mount _____</p> <p>Protective Casing _____</p> </div> <div> <p>Ground Level _____</p> <p><b>DIRECT PUSH BOREHOLE</b></p> <p>_____ 2.0 inch diameter</p> <p>_____ 8.0 feet length</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 100px;"> <div> <p><b>Top of Seal</b></p> <p>_____ 6.0 (ft bgs)</p> </div> <div> <p><b>Top of Sand</b></p> <p>_____ 7.0 (ft. bgs)</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 100px;"> <div> <p><b>Top of Implant Screen</b></p> <p>_____ 7.5 (ft bgs)</p> <p>_____ 8.0 (ft bgs)</p> <p><b>Total Depth</b></p> </div> <div> <p><b>IMPLANT</b></p> <p>_____ 0.25 internal diameter</p> <p>_____ 0.5' length</p> </div> </div>		
Depth(ft.)	Description				
	See Boring Log for Lithologic Description.				
WELL DESIGN		 <p style="text-align: center;">NOT TO SCALE</p>			
CASING MATERIAL				SCREEN MATERIAL	FILTER MATERIAL
Surface:	Steel grade box			Type: 6 inch stainless steel implant	Type: #1 Sand
Monitor:	3/8 inch OD polyethylene tubing			Pore Diameter: 0.007 inch	<b>SEAL MATERIAL</b> Type: Bentonite Slurry
COMMENTS:				<b>LEGEND</b> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black;"></div> Cement/Bentonite Grout           <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black;"></div> Bentonite Seal           <div style="width: 30px; height: 15px; background-color: #ffffff; border: 1px solid black; border-style: dashed;"></div> Silica Sandpack         </div>	
Client: NYSDEC		Former Klink Cosmo Cleaners		Project No.: 11176390.00002	
URS Corporation		SOIL GAS IMPLANT CONSTRUCTION DETAILS		Well Number: SG-078	

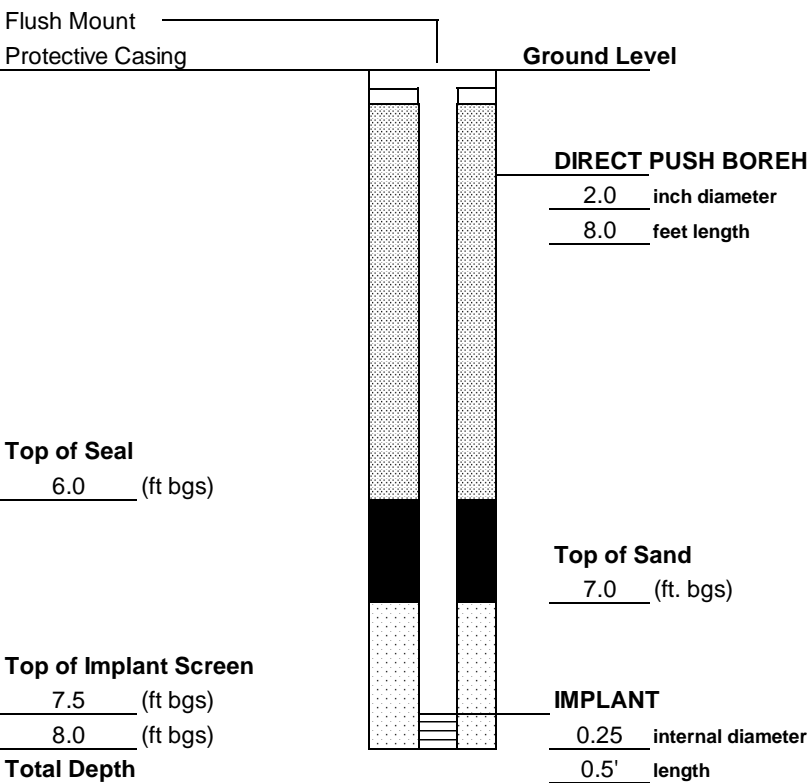



DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>		
<b>Geologist:</b> C. Friedman				
<b>Drilling Company:</b> Zebra Environmental Inc.				
<b>Driller:</b> Luke Reiss				
<b>Rig Make/Model:</b> 6620DT Geoprobe				
<b>Date:</b> 5/6/2011				
GEOLOGIC LOG		D E P T H  (FT)	<b>DIRECT PUSH BOREHOLE</b> 2.0 inch diameter 8.0 feet length  <b>Top of Sand</b> 7.0 (ft. bgs)  <b>IMPLANT</b> 0.25 internal diameter 0.5' length	
Depth(ft.)	Description			
	See Boring Log for Lithologic Description.			
			<b>Top of Seal</b> 5.0 (ft bgs)	
			<b>Top of Implant Screen</b> 7.5 (ft bgs) 8.0 (ft bgs) <b>Total Depth</b>	
WELL DESIGN				
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL
<b>Surface:</b>	Steel grade box	<b>Type:</b>	6 inch stainless steel implant	
<b>Monitor:</b>	3/8 inch OD polyethylene tubing	<b>Pore Diameter:</b>	0.007 inch	
<b>COMMENTS:</b>			<b>LEGEND</b>	
			<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">            Cement/Bentonite Grout         </div> <div style="text-align: center;">            Bentonite Seal         </div> <div style="text-align: center;">            Silica Sandpack         </div> </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002
<b>URS Corporation</b>		<b>SOIL GAS IMPLANT CONSTRUCTION DETAILS</b>		<b>Well Number:</b> SG-079

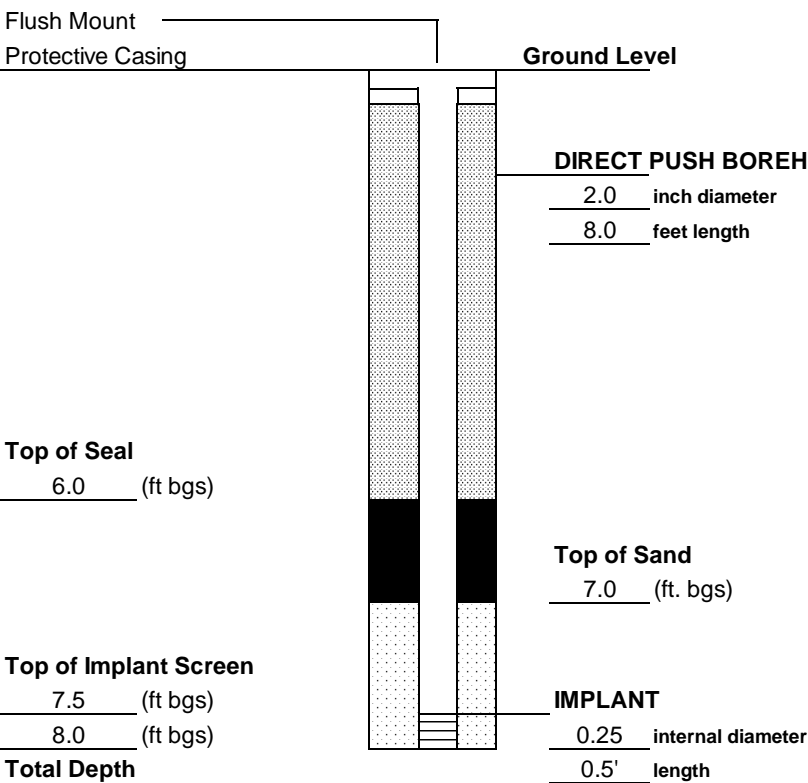
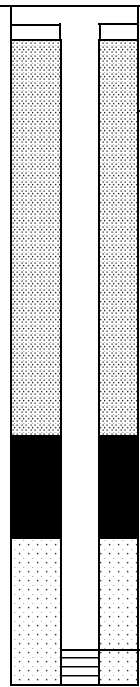


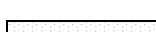


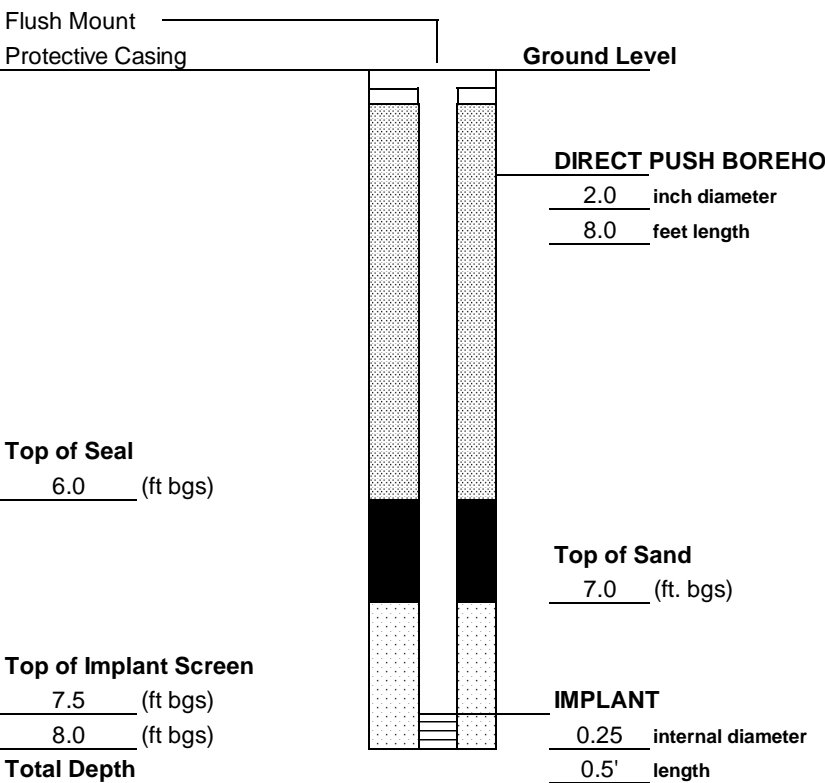
<b>DRILLING SUMMARY</b> <b>Geologist:</b> C. Friedman <b>Drilling Company:</b> Zebra Environmental Inc. <b>Driller:</b> Luke Reiss <b>Rig Make/Model:</b> 6620DT Geoprobe <b>Date:</b> 5/6/2011		<p>             Flush Mount              Protective Casing              Ground Level  <b>DIRECT PUSH BOREHOLE</b>              2.0 inch diameter              8.0 feet length  <b>Top of Seal</b>              6.0 (ft bgs)  <b>Top of Sand</b>              7.0 (ft. bgs)  <b>Top of Implant Screen</b>              7.5 (ft bgs)              8.0 (ft bgs)  <b>Total Depth</b>  <b>IMPLANT</b>              0.25 internal diameter              0.5' length  <b>NOT TO SCALE</b> </p>					
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>See Boring Log for Lithologic Description.</td> </tr> </tbody> </table>				Depth(ft.)	Description		See Boring Log for Lithologic Description.
Depth(ft.)	Description						
	See Boring Log for Lithologic Description.						
<b>WELL DESIGN</b>							
<b>CASING MATERIAL</b> <b>Surface:</b> Steel grade box <b>Monitor:</b> 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> <b>Type:</b> 6 inch stainless steel implant <b>Pore Diameter:</b> 0.007 inch		<b>FILTER MATERIAL</b> <b>Type:</b> #1 Sand			
				<b>SEAL MATERIAL</b> <b>Type:</b> Bentonite Slurry			
<b>COMMENTS:</b>				<b>LEGEND</b> Cement/Bentonite Grout Bentonite Seal Silica Sandpack			
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002			
<b>URS Corporation</b>		<b>SOIL GAS IMPLANT CONSTRUCTION DETAILS</b>		<b>Well Number:</b> SG-080			

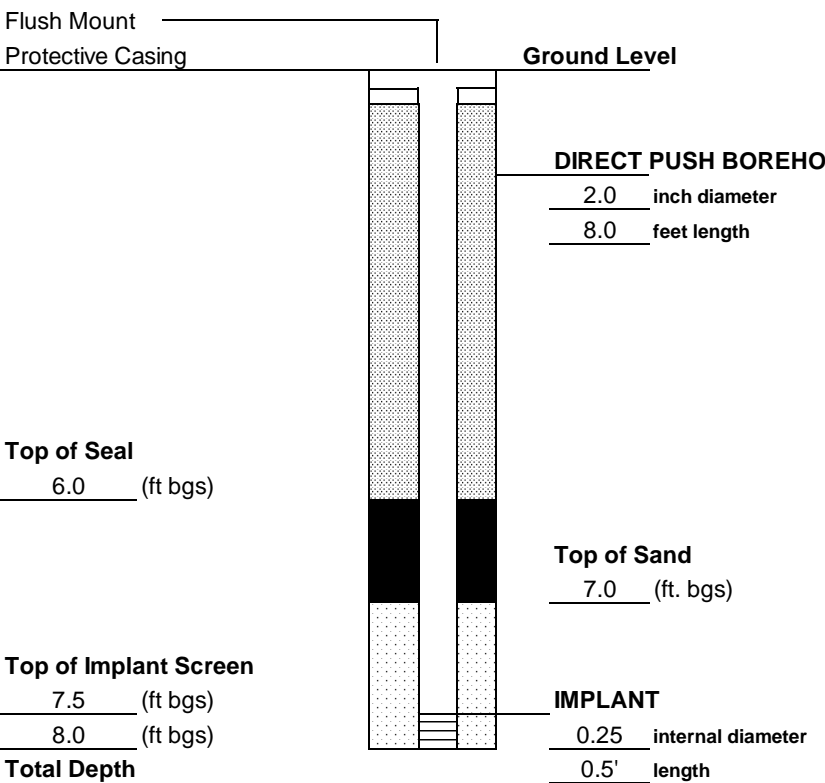
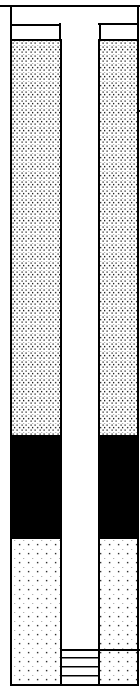



DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Zebra Environmental Inc.			
<b>Driller:</b> Luke Reiss			
<b>Rig Make/Model:</b> 6620DT Geoprobe			
<b>Date:</b> 5/6/2011			
GEOLOGIC LOG		D E P T H  (FT)	
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	<b>FILTER MATERIAL</b>
<b>Surface:</b> Steel grade box		<b>Type:</b> 6 inch stainless steel implant  <b>Pore Diameter:</b> 0.007 inch	<b>Type:</b> #1 Sand
<b>Monitor:</b> 3/8 inch OD polyethylene tubing			<b>SEAL MATERIAL</b>  <b>Type:</b> Bentonite Slurry
<b>COMMENTS:</b>			<b>LEGEND</b>
			<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	<b>Project No.:</b> 11176390.00002
<b>URS Corporation</b>		<b>SOIL GAS IMPLANT CONSTRUCTION DETAILS</b>	<b>Well Number:</b> SG-081

DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>		
Geologist: C. Friedman				
Drilling Company: Zebra Environmental Inc.				
Driller: Luke Reiss				
Rig Make/Model: 6620DT Geoprobe				
Date: 5/6/2011				
GEOLOGIC LOG		D E P T H  (FT)	<p>Top of Seal 6.0 (ft bgs)</p> <p>Top of Sand 7.0 (ft. bgs)</p> <p>Top of Implant Screen 7.5 (ft bgs) 8.0 (ft bgs)</p> <p>Total Depth</p>	
Depth(ft.)	Description			
	See Boring Log for Lithologic Description.			
WELL DESIGN				
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL
Surface:	Steel grade box	Type:	6 inch stainless steel implant	
Monitor:	3/8 inch OD polyethylene tubing	Pore Diameter:	0.007 inch	
COMMENTS:		LEGEND		
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Cement/Bentonite Grout         </div> <div style="text-align: center;">  Bentonite Seal         </div> <div style="text-align: center;">  Silica Sandpack         </div> </div>		
Client: NYSDEC		Former Klink Cosmo Cleaners		Project No.: 11176390.00002
URS Corporation		SOIL GAS IMPLANT CONSTRUCTION DETAILS		Well Number: SG-082

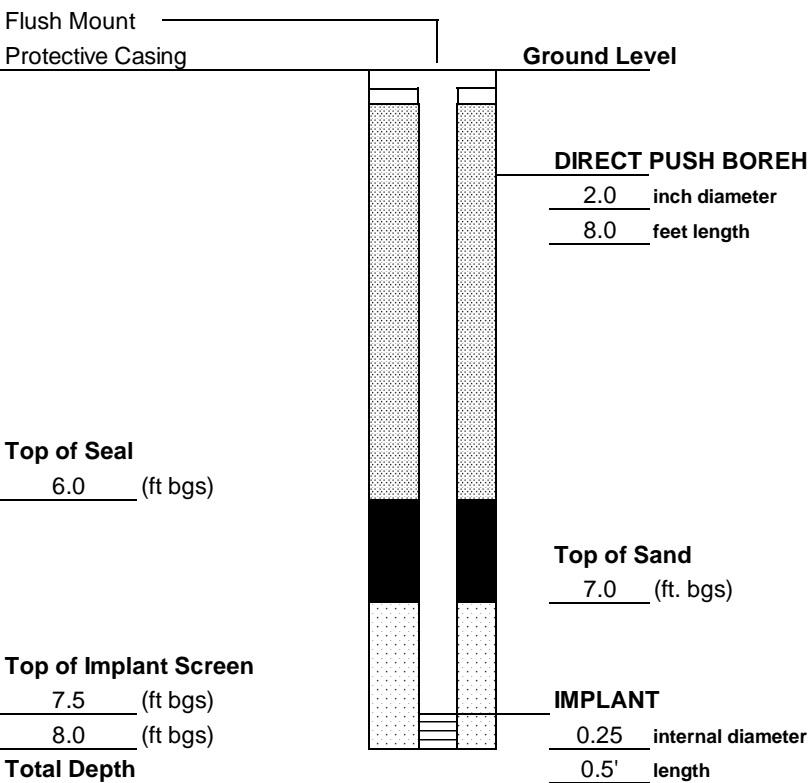
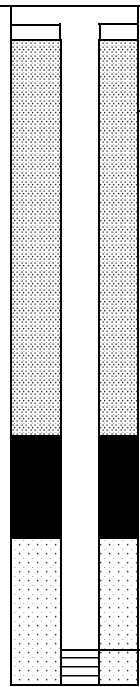



DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>		
<b>Geologist:</b> C. Friedman				
<b>Drilling Company:</b> Zebra Environmental Inc.				
<b>Driller:</b> Luke Reiss				
<b>Rig Make/Model:</b> 6620DT Geoprobe				
<b>Date:</b> 5/6/2011				
GEOLOGIC LOG		D E P T H  (FT)	<b>DIRECT PUSH BOREHOLE</b> 2.0 inch diameter 8.0 feet length  <b>Top of Seal</b> 6.0 (ft bgs)  <b>Top of Sand</b> 7.0 (ft. bgs)  <b>Top of Implant Screen</b> 7.5 (ft bgs) 8.0 (ft bgs) <b>Total Depth</b>	
Depth(ft.)	Description			
	See Boring Log for Lithologic Description.			
WELL DESIGN				
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL
<b>Surface:</b>	Steel grade box	<b>Type:</b>	6 inch stainless steel implant	
<b>Monitor:</b>	3/8 inch OD polyethylene tubing	<b>Pore Diameter:</b>	0.007 inch	
<b>COMMENTS:</b>		<b>LEGEND</b>		
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">            Cement/Bentonite Grout         </div> <div style="text-align: center;">            Bentonite Seal         </div> <div style="text-align: center;">            Silica Sandpack         </div> </div>		
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002
<b>URS Corporation</b>		<b>SOIL GAS IMPLANT CONSTRUCTION DETAILS</b>		<b>Well Number:</b> SG-083

DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>	
Geologist: C. Friedman			
Drilling Company: Zebra Environmental Inc.			
Driller: Luke Reiss			
Rig Make/Model: 6620DT Geoprobe			
Date: 5/6/2011			
GEOLOGIC LOG		D E P T H  (FT)	
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	FILTER MATERIAL
Surface:	Steel grade box	Type:	6 inch stainless steel implant
Monitor:	3/8 inch OD polyethylene tubing	Pore Diameter:	0.007 inch
COMMENTS:		SEAL MATERIAL	
		Type:	Bentonite Slurry
COMMENTS:		LEGEND	
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">            Cement/Bentonite Grout         </div> <div style="text-align: center;">            Bentonite Seal         </div> <div style="text-align: center;">            Silica Sandpack         </div> </div>	
Client: NYSDEC		Former Klink Cosmo Cleaners	
Project No.: 11176390.00002		Well Number: SG-084	
URS Corporation		SOIL GAS IMPLANT CONSTRUCTION DETAILS	

DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>		
Geologist: C. Friedman				
Drilling Company: Zebra Environmental Inc.				
Driller: Luke Reiss				
Rig Make/Model: 6620DT Geoprobe				
Date: 5/6/2011				
GEOLOGIC LOG		D E P T H  (FT)	<p><b>Top of Seal</b> 6.0 (ft bgs)</p> <p><b>Top of Sand</b> 7.0 (ft. bgs)</p> <p><b>Top of Implant Screen</b> 7.5 (ft bgs) 8.0 (ft bgs)</p> <p><b>Total Depth</b></p>	
Depth(ft.)	Description			
	See Boring Log for Lithologic Description.			
WELL DESIGN				
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL
Surface:	Steel grade box	Type:	#1 Sand	
Monitor:	3/8 inch OD polyethylene tubing	Pore Diameter:	0.007 inch	
COMMENTS:			SEAL MATERIAL	
			Type: Bentonite Slurry	
			LEGEND	
			<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>	
			<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>	
			<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #e0e0e0; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
Client: NYSDEC		Former Klink Cosmo Cleaners		Project No.: 11176390.00002
URS Corporation		SOIL GAS IMPLANT CONSTRUCTION DETAILS		Well Number: SG-085

DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>		
Geologist: C. Friedman				
Drilling Company: Zebra Environmental Inc.				
Driller: Luke Reiss				
Rig Make/Model: 6620DT Geoprobe				
Date: 5/6/2011				
GEOLOGIC LOG		D E P T H  (FT)		<b>DIRECT PUSH BOREHOLE</b> 2.0 inch diameter 8.0 feet length
Depth(ft.)	Description			
	See Boring Log for Lithologic Description.			
	<b>Top of Seal</b> 6.0 (ft bgs)			
	<b>Top of Sand</b> 7.0 (ft. bgs)			
	<b>Top of Implant Screen</b> 7.5 (ft bgs) 8.0 (ft bgs) <b>Total Depth</b>		<b>IMPLANT</b> 0.25 internal diameter 0.5' length	
WELL DESIGN				
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL
Surface:	Steel grade box	Type:	6 inch stainless steel implant	Type: #1 Sand
Monitor:	3/8 inch OD polyethylene tubing	Pore Diameter:	0.007 inch	<b>SEAL MATERIAL</b>
				Type: Bentonite Slurry
COMMENTS:				LEGEND
				 Cement/Bentonite Grout
				 Bentonite Seal
				 Silica Sandpack
Client: NYSDEC		Former Klink Cosmo Cleaners		Project No.: 11176390.00002
URS Corporation		SOIL GAS IMPLANT CONSTRUCTION DETAILS		Well Number: SG-086



DRILLING SUMMARY		 <p style="text-align: center;">NOT TO SCALE</p>		
<b>Geologist:</b> C. Friedman				
<b>Drilling Company:</b> Zebra Environmental Inc.				
<b>Driller:</b> Luke Reiss				
<b>Rig Make/Model:</b> 6620DT Geoprobe				
<b>Date:</b> 5/6/2011				
GEOLOGIC LOG		D E P T H  (FT)		<b>DIRECT PUSH BOREHOLE</b> 2.0 inch diameter 8.0 feet length
Depth(ft.)	Description			
	See Boring Log for Lithologic Description.			
				<b>Top of Seal</b> 6.0 (ft bgs)
				<b>Top of Sand</b> 7.0 (ft. bgs)
				<b>Top of Implant Screen</b> 7.5 (ft bgs) 8.0 (ft bgs) <b>Total Depth</b>
WELL DESIGN				
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>		<b>FILTER MATERIAL</b>
<b>Surface:</b> Steel grade box		<b>Type:</b> 6 inch stainless steel implant		<b>Type:</b> #1 Sand
<b>Monitor:</b> 3/8 inch OD polyethylene tubing		<b>Pore Diameter:</b> 0.007 inch		<b>SEAL MATERIAL</b>
				<b>Type:</b> Bentonite Slurry
<b>COMMENTS:</b>				<b>LEGEND</b>
				 Cement/Bentonite Grout
				 Bentonite Seal
				 Silica Sandpack
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002
<b>URS Corporation</b>		<b>SOIL GAS IMPLANT CONSTRUCTION DETAILS</b>		<b>Well Number:</b> SG-087

## **APPENDIX F**

### **SUMMA CANISTER SAMPLING FIELD DATA SHEETS**

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/13/2011

Sample #	SG-55	SG-79	SG-78	AA-061311	SG-19
Location	Porter/Division	Division	Porter	Northside of Porter in front of old gas holder	In front of 137 Beadel
Summa Canister ID	843	1695	1497	1074	707
Flow Controller ID	FC246	FC0422	FC 170	FC0190	FC173
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	<b>NO</b> / <b>YES</b> - How much	NO/ <b>YES</b> - How much 1 ft
Purge Time (Start)	1012	1022	1031		1207
Purge Time (Stop)	1013	1023	1032		1208
Total Purge Time (min)	1 min	1 min	1 min		1 min
Purge Volume					
PID Test of Purge Air	1.2	1.1	0.3		0.4
Initial Tracer Gas Results	0 ppm	0 ppm	0 ppm		0 ppm
Pressure Gauge - before sampling	-25	-29	-24	-28	-30
Sample Time (Start)	1016	1024	1034	1038	1215
Sample Time (Stop)	1115	1124	1129	1138	1314
Total Sample Time (min)	59 min	60 min	55 min	60 min	59 min
Pressure Gauge - after sampling	-3	-4	-2	-4	-4
Sample Volume					
Canister Pressure Went To Ambient Pressure?	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>
Final Tracer Gas Results	0 ppm	0 ppm	0 ppm		0 ppm
Associated Ambient Air Sample Number	AA-061311	AA-061311	AA-061311		AA-061311
General Comments:					

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/13/2011

Sample #	SG-20	SG-21			
Location	In front of 126 Beadel	In front of 107 Beadel			
Summa Canister ID	1601	1553			
Flow Controller ID	FC0162	FC0185			
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft
Purge Time (Start)	1222	1233			
Purge Time (Stop)	1223	1234			
Total Purge Time (min)	1 min	1 min			
Purge Volume					
PID Test of Purge Air	0.8	0.7			
Initial Tracer Gas Results	0 ppm	0 ppm			
Pressure Gauge - before sampling	-28	-29			
Sample Time (Start)	1225	1243			
Sample Time (Stop)	1325	1342			
Total Sample Time (min)	60 min	59 min			
Pressure Gauge - after sampling	-5	-1			
Sample Volume					
Canister Pressure Went To Ambient Pressure?	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>
Final Tracer Gas Results	0 ppm	0 ppm			
Associated Ambient Air Sample Number	AA-061311	AA-061311			
General Comments:					

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/14/2011

Sample #	SG-62	AA-061411	SG-83	SG-82	SG-81
Location	Vandervoort	Corner of Division and Vandervoort on DEC-064D	Vandervoort	Vandervoort	Vandervoort
Summa Canister ID	186	1642	1658	1680	1046
Flow Controller ID	FC333	FC 383	FC0073	FC062	FC177
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft
Purge Time (Start)	739		823	834	906
Purge Time (Stop)	740		825	836	908
Total Purge Time (min)	1 min		2 min	2 min	2 min
Purge Volume					
PID Test of Purge Air	2.3		0	2.2	2.1
Initial Tracer Gas Results	0 ppm		475 ppm	0 ppm	25 ppm
Pressure Gauge - before sampling	-27.5	-28	-29	-30	-25
Sample Time (Start)	743	758	829	839	911
Sample Time (Stop)	843	857	928	939	1008
Total Sample Time (min)	59 min	59 min	59 min	60 min	57 min
Pressure Gauge - after sampling	-4	-3	-29	-3	0
Sample Volume			no sample likely		
Canister Pressure Went To Ambient Pressure?	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	<b>YES</b> / NO
Final Tracer Gas Results	0 ppm			0 ppm	0 ppm
Associated Ambient Air Sample Number	AA-061411		AA-061411	AA-061411	AA-061411
General Comments:					

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/14/2011

Sample #	SG-80	SG-60	SG-49	SG-48	DUP-061411
Location	Vandervoort	Vandervoort	Richardson	Vandervoort (Cooperage)	SG-60
Summa Canister ID	825	685	1590	1474	577
Flow Controller ID	FC0247	FC0109	FC087	FC391	FC0109
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft
Purge Time (Start)	900	1021	1029	1035	1021
Purge Time (Stop)	902	1023	1031	1037	1023
Total Purge Time (min)	2 min	2 min	2 min	2 min	2 min
Purge Volume					
PID Test of Purge Air	1.7	21.9	0	0	21.9
Initial Tracer Gas Results	250 ppm	0 ppm	50 ppm	0 ppm	0 ppm
Pressure Gauge - before sampling	-29	-30	-30	-30	-30
Sample Time (Start)	904	1025	1033	1041	1025
Sample Time (Stop)	1003	1124	1133	1141	1124
Total Sample Time (min)	59 min	59 min	60 min	60 min	59 min
Pressure Gauge - after sampling	-2.5	-3	-4	-16	-3
Sample Volume					
Canister Pressure Went To Ambient Pressure?	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>
Final Tracer Gas Results	200 ppm	0 ppm	0 ppm	25 ppm	0 ppm
Associated Ambient Air Sample Number	AA-061411	AA-061411	AA-061411	AA-061411	AA-061411
General Comments:					

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/14/2011

Sample #	SG-42	SG-44	SG-45	SG-46	DUP2-061411
Location	Vandervoort	Vandervoort	Vandervoort	Vandervoort	SG-46
Summa Canister ID	1353	706	153	1486	322
Flow Controller ID	FC282	FC 389	FC175	FC0331	FC0331
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft
Purge Time (Start)	1245	1251	1258	1305	1305
Purge Time (Stop)	1247	1253	1300	1307	1307
Total Purge Time (min)	2 min	2 min	2 min	2 min	2 min
Purge Volume					
PID Test of Purge Air	43.8	0.7	1.9	0.1	0.1
Initial Tracer Gas Results	0 ppm	0 ppm	150 ppm	0 ppm	0 ppm
Pressure Gauge - before sampling	-27	-30	-30	-25	-25
Sample Time (Start)	1247	1253	1301	1309	1309
Sample Time (Stop)	1347	1353	1401	1359	1359
Total Sample Time (min)	55 min	60 min	60 min	50 min	50 min
Pressure Gauge - after sampling	-2.5	-2.5	-5	-2	-2
Sample Volume					
Canister Pressure Went To Ambient Pressure?	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>
Final Tracer Gas Results	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm
Associated Ambient Air Sample Number	AA-061411	AA-061411	AA-061411	AA-061411	AA-061411
General Comments:					



## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/15/2011

Sample #	SG-84	SG-58	SG-85	SG-86	DUP-061511
Location	Richardson	Richardson	Richardson	Richardson	SG-58
Summa Canister ID	1280	421	1519	67	1490
Flow Controller ID	FC387	FC390	FC064	FC191	FC390
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft
Purge Time (Start)	758	754	741	735	754
Purge Time (Stop)	800	756	743	737	756
Total Purge Time (min)	2 min	2 min	2 min	2 min	2 min
Purge Volume					
PID Test of Purge Air	1.6	2	5.5	1.4	2
Initial Tracer Gas Results	0 ppm	0 ppm	300 ppm	0 ppm	0 ppm
Pressure Gauge - before sampling	-28	-27.5	-30	-28	-27.5
Sample Time (Start)	804	756	749	738	756
Sample Time (Stop)	901	853	847	835	853
Total Sample Time (min)	57 min	57 min	58 min	57 min	57 min
Pressure Gauge - after sampling	-2	-2	-2	-2	-2
Sample Volume					
Canister Pressure Went To Ambient Pressure?	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>	<b>YES / NO</b>
Final Tracer Gas Results	0 ppm	0 ppm	175 ppm	0 ppm	0 ppm
Associated Ambient Air Sample Number	AA-061511	AA-061511	AA-061511	AA-061511	AA-061511
General Comments:					

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/15/2011

Sample #	SG-57	SG-87	SG-59	SG-61	AA-061511
Location	Morgan	Morgan	Morgan	Morgan	On Morgan across street from fire hydrant (btw Division and Richardson)
Summa Canister ID	965	1505	1744	1591	35
Flow Controller ID	FC059	FC326	FC108	FC403	FC420
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	<b>NO</b> / <b>YES</b> - How much
Purge Time (Start)	918	926	934	944	
Purge Time (Stop)	920	928	936	946	
Total Purge Time (min)	2 min	2 min	2 min	2 min	
Purge Volume					
PID Test of Purge Air	2	4.5	0.6	10.1	
Initial Tracer Gas Results	100 ppm	50 ppm	200 ppm	0 ppm	
Pressure Gauge - before sampling	-29	-29	-30	-25	-30
Sample Time (Start)	922	931	937	946	951
Sample Time (Stop)	1022	1031	1037	1043	1051
Total Sample Time (min)	60 min	60 min	60 min	57 min	60 min
Pressure Gauge - after sampling	-17	-2.5	-4	-5	-11
Sample Volume					
Canister Pressure Went To Ambient Pressure?	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>
Final Tracer Gas Results	100 ppm	50 ppm	50 ppm	0 ppm	
Associated Ambient Air Sample Number	AA-061511	AA-061511	AA-061511	AA-061511	
General Comments:					

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/15/2011

Sample #	SG-43	SG-18	SG-47	SG-56	SG-63
Location	Vandervoort	Vandervoort	Division	Division	Withers
Summa Canister ID	1283	1607	1640	1228	139
Flow Controller ID	FC194	FC159	FC186	FC065	FC0382
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft
Purge Time (Start)	1140	1217	1223	1231	1355
Purge Time (Stop)	1142	1219	1225	1233	1357
Total Purge Time (min)	2 min	2 min	2 min	2 min	2 min
Purge Volume					
PID Test of Purge Air	VOC = 1.2, LEL = 60	2.1	0	0	0
Initial Tracer Gas Results	150 ppm	0 ppm	25 ppm	250 ppm	6000 ppm
Pressure Gauge - before sampling	-29	-29	-28	-25.5	-29
Sample Time (Start)	1147	1219	1226	1234	1413
Sample Time (Stop)	1247	1319	1326	1334	1508
Total Sample Time (min)	60 min	60 min	60 min	60 min	55 min
Pressure Gauge - after sampling	-3	-3	-14.5	-13	-2
Sample Volume					
Canister Pressure Went To Ambient Pressure?	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>
Final Tracer Gas Results	150 ppm	0 ppm	25 ppm	250 ppm	5600 ppm
Associated Ambient Air Sample Number	AA-061511	AA-061511	AA-061511	AA-061511	AA-061511
General Comments:					

## Summa Canister Sampling Field Data Sheet

Site: Klink/Cosmo

Samplers: C. Friedman / D. Swain

Date: 6/15/2011

Sample #	DUP2-061511				
Location	SG-63				
Summa Canister ID	1291				
Flow Controller ID	FC0382				
Additional Tubing Added	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft	NO/ <b>YES</b> - How much 1ft
Purge Time (Start)	1355				
Purge Time (Stop)	1357				
Total Purge Time (min)	2 min				
Purge Volume					
PID Test of Purge Air	0				
Initial Tracer Gas Results	6000 ppm				
Pressure Gauge - before sampling	-29				
Sample Time (Start)	1413				
Sample Time (Stop)	1508				
Total Sample Time (min)	55 min				
Pressure Gauge - after sampling	-2				
Sample Volume					
Canister Pressure Went To Ambient Pressure?	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>	YES / <b>NO</b>
Final Tracer Gas Results	5600 ppm				
Associated Ambient Air Sample Number	AA-061511				
General Comments:					

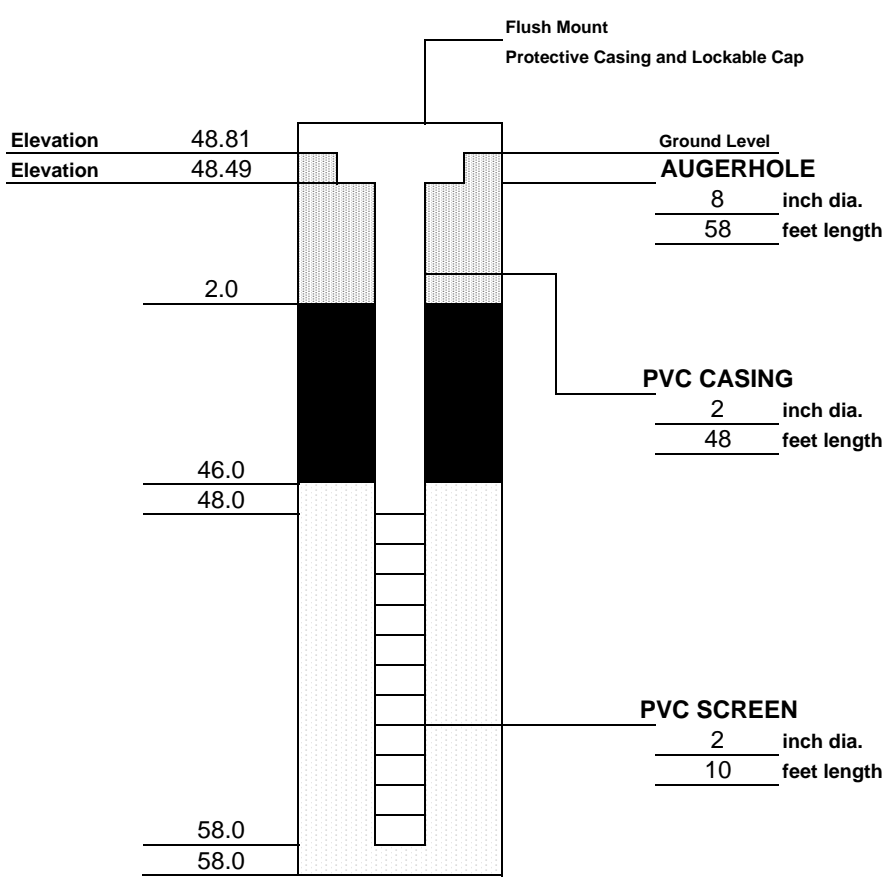
## **APPENDIX G**

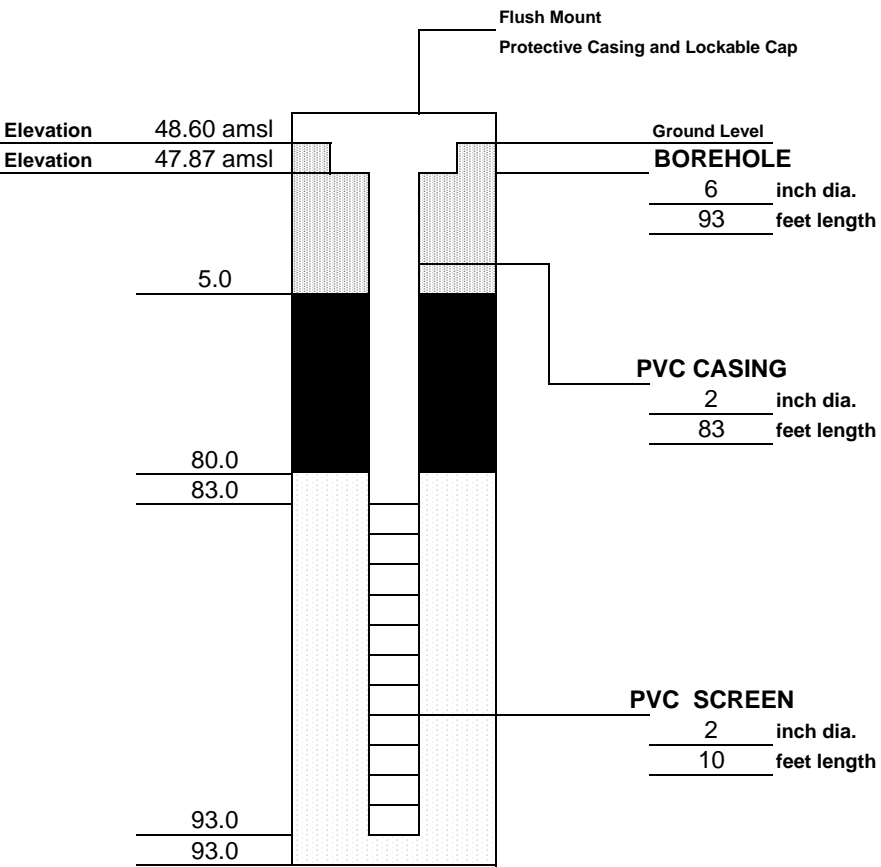
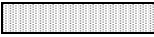


### **MONITORING WELL CONSTRUCTION LOGS**

DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">DEPTH</div> <div style="margin-left: 10px;"> <p>Flush Mount Protective Casing and Lockable Cap</p> <p>Ground Level</p> <p><b>AUGERHOLE</b> 8 inch dia. 52 feet length</p> <p><b>PVC CASING</b> 2 inch dia. 36 feet length</p> <p><b>PVC SCREEN</b> 2 inch dia. 15 feet length</p> </div> </div>			
<b>Geologist:</b> CR					
<b>Drilling Company:</b> ADT					
<b>Driller:</b> Jeremy					
<b>Rig Make/Model:</b> CME 55LC					
<b>Date:</b> 6/13-14/2007					
GEOLOGIC LOG					
Depth(ft.)	Description				
	See Boring Log.				
WELL DESIGN					
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"		<b>Type:</b> #2 Sand <b>Setting:</b>	
				<b>SEAL MATERIAL</b> <b>Type:</b> Bentonite <b>Setting:</b>	
<b>COMMENTS:</b>  Elevation NAVD88				<b>LEGEND</b>	
				<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">            Cement/Bentonite Grout         </div> <div style="text-align: center;">            Bentonite Seal         </div> <div style="text-align: center;">            Silica Sandpack         </div> </div>	
<b>Client:</b> NYSDEC		<b>Location:</b> Meeker Avenue		<b>Project No.:</b> 11174989.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> DEC-04	

DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">DEPTH</div> </div>	
<b>Geologist:</b> S.M.			
<b>Drilling Company:</b> ADT			
<b>Driller:</b> Tony			
<b>Rig Make/Model:</b> CME 55LC			
<b>Date:</b> 5/21/2007			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log.		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	
<b>Surface:</b> Steel grade box		<b>Type:</b> 2" PVC	
<b>Monitor:</b> 2" PVC		<b>Slot Size:</b> .020"	
FILTER MATERIAL		SEAL MATERIAL	
<b>Type:</b> #2 Sand <b>Setting:</b>		<b>Type:</b> Bentonite <b>Setting:</b>	
COMMENTS:		LEGEND	
Elevation NAVD88		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Location:</b> Meeker Ave.	
<b>Project No.:</b> 11174989.00002		<b>Well Number:</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		DEC-06	



DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> Jeremy Meyers			
<b>Rig Make/Model:</b> CME-55 LC			
<b>Date:</b> 6/2/2008			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	FILTER MATERIAL
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	<b>Type:</b> #2 Sand <b>Setting:</b> 46.0-58.0'
			<b>SEAL MATERIAL</b>  <b>Type:</b> Bentonite <b>Setting:</b> 2.0-46.0'
<b>COMMENTS:</b>		<b>LEGEND</b>  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11174989.00002 <b>Well Number:</b> DEC-006D	

DRILLING SUMMARY		 <p style="text-align: right; margin-right: 50px;">Flush Mount Protective Casing and Lockable Cap</p> <p style="text-align: right;">Ground Level</p> <p><b>BOREHOLE</b> 6 inch dia. 93 feet length</p> <p><b>PVC CASING</b> 2 inch dia. 83 feet length</p> <p><b>PVC SCREEN</b> 2 inch dia. 10 feet length</p>			
<b>Geologist:</b> C. Friedman					
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.					
<b>Driller:</b> J. Meyers					
<b>Rig Make/Model:</b> AMSI 17-C Sonic					
<b>Date:</b> 5/20/2011					
GEOLOGIC LOG		D E P T H  (FT)			
Depth(ft.)	Description				
	See Boring Log for Lithologic Description.				
WELL DESIGN					
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>		<b>FILTER MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box  <b>Monitor:</b> 2" Schedule 40 PVC		<b>Type:</b> 2" Schedule 40 PVC  <b>Slot Size:</b> 0.010"		<b>Type:</b> #1 Sand <b>Setting:</b> 80.0-93.0'	
				<b>SEAL MATERIAL</b>	
				<b>Type:</b> Benseal <b>Setting:</b> 5.0-80.0'	
<b>COMMENTS:</b>				<b>LEGEND</b>	
				 Cement/Bentonite Grout	
				 Bentonite Seal	
				 Silica Sandpack	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> DEC-006DD	

DRILLING SUMMARY	
Geologist: S. McCabe	
Drilling Company:	
Aquifer Drilling and Testing, Inc.	
Driller: Jeremy Meyers	
Rig Make/Model:	
CME 55LC	
Date:	
11/15/2007	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log for Lithologic Description.
WELL DESIGN	

DEPTH (FT)

**Flush Mount Protective Casing and Lockable Cap**

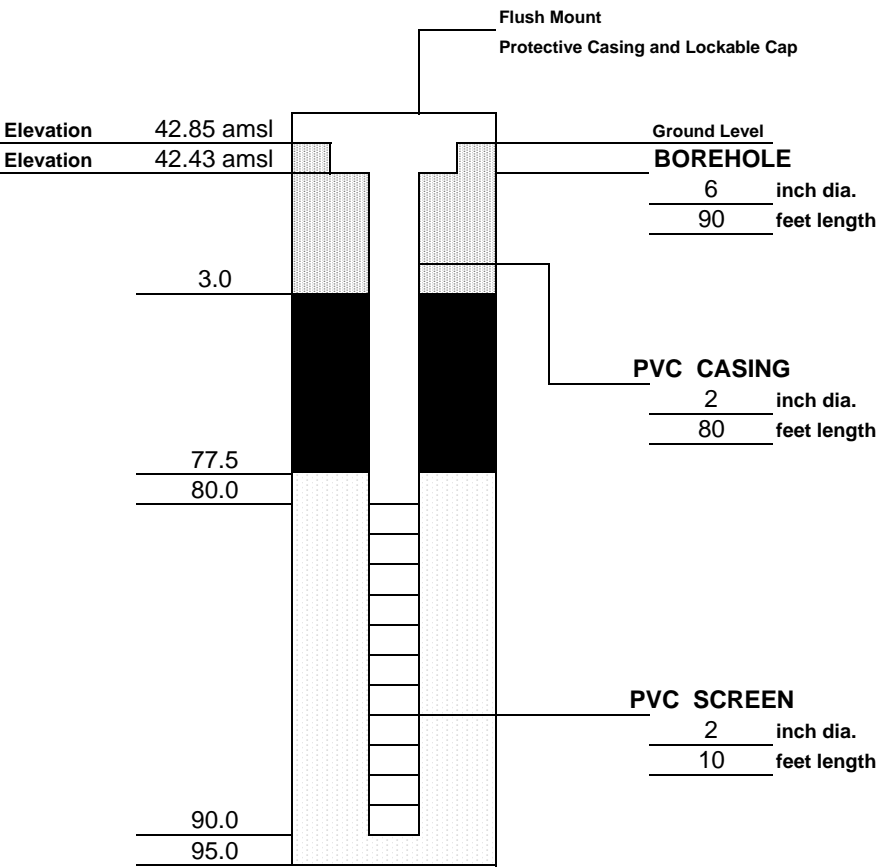
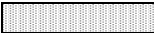


**Ground Level**

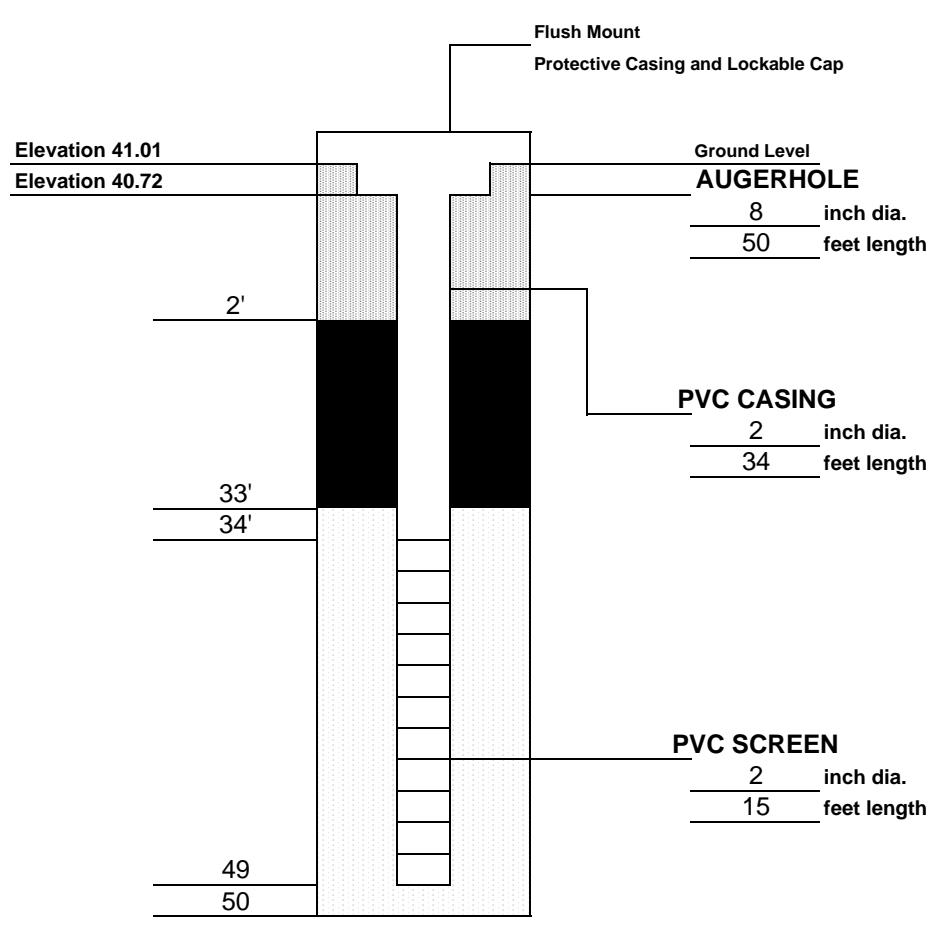
**AUGERHOLE**  
8 inch dia.  
57 feet length

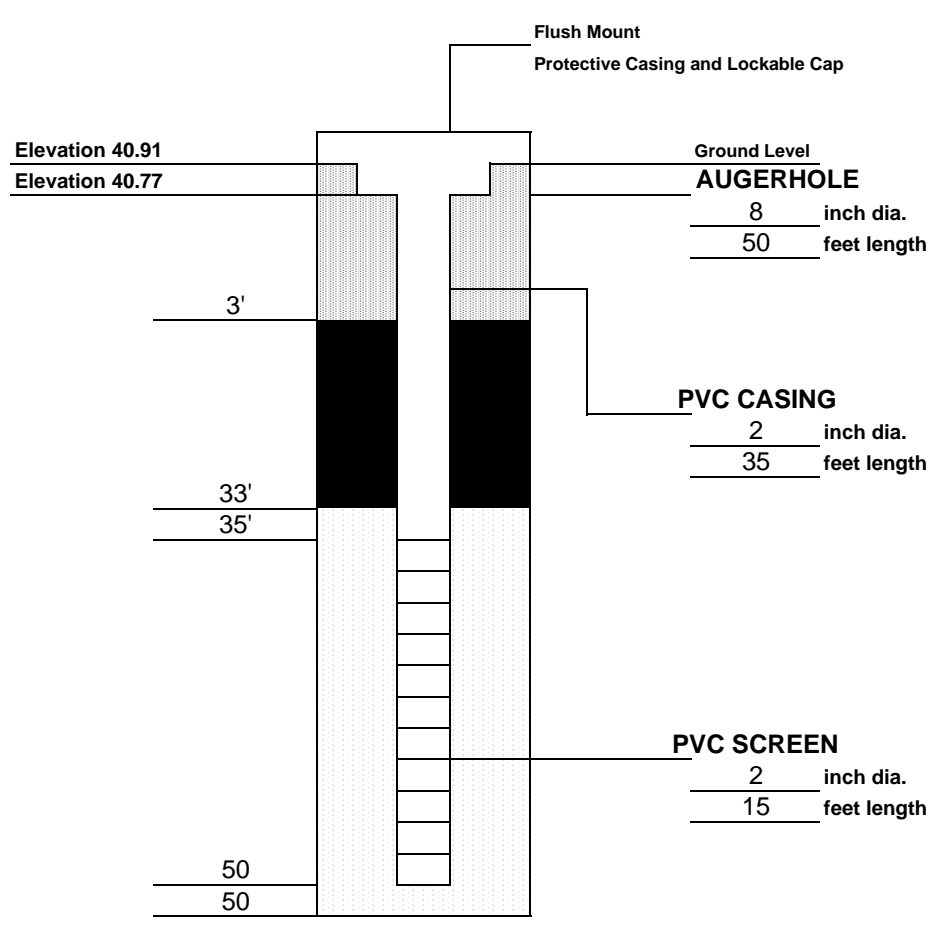
**PVC CASING**  
2 inch dia.  
41 feet length

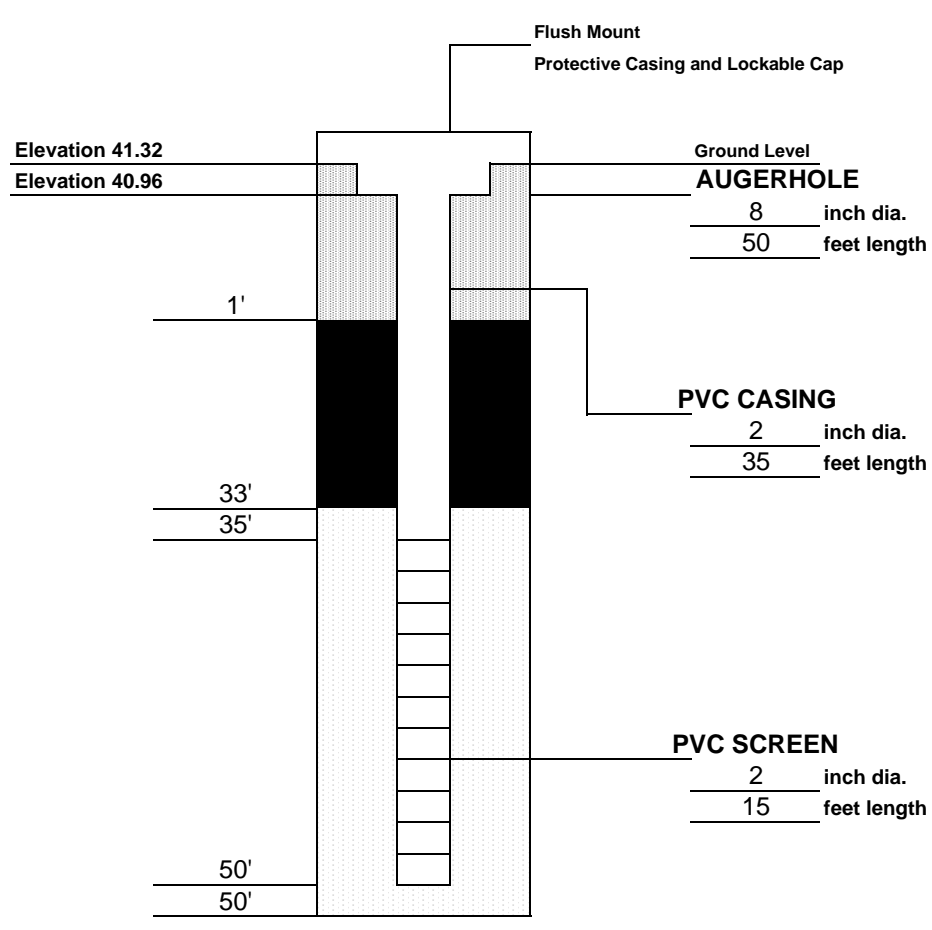
**PVC SCREEN**  
2 inch dia.  
15 feet length

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 2" PVC	Type: #2 Sand      Setting: 38.0-57.0'
Monitor: 2" PVC	Slot Size: .020"	<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 1.0-38.0'
COMMENTS:		<b>LEGEND</b>
		<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
Client: NYSDEC	Location : Meeker Avenue Site	Project No.: 11174989.00002
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: DEC-007

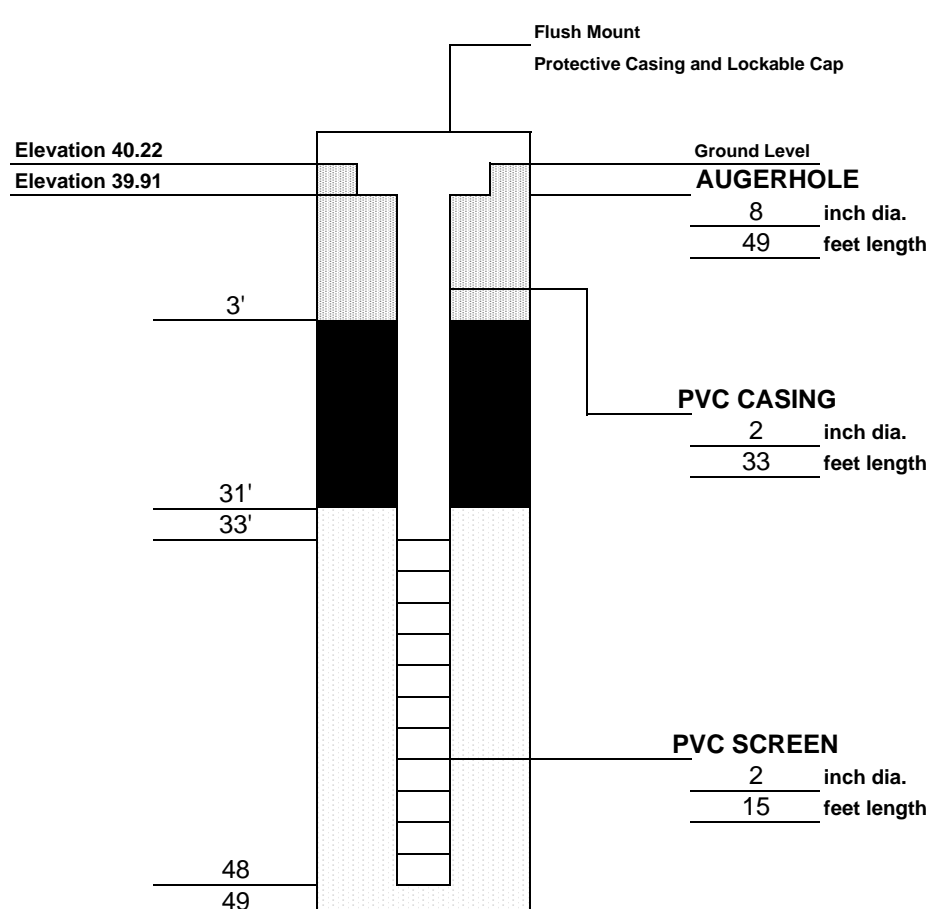
DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/18/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 77.5-90.0' <b>Type:</b> Benseal <b>Setting:</b> 3.0-77.5'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		 Cement/Bentonite Grout  Bentonite Seal  Silica Sandpack	
<b>Client:</b> NYSDEC	<b>Former Klink Cosmo Cleaners</b>	<b>Project No.:</b> 11176390.00002	
<b>URS Corporation</b>	<b>MONITORING WELL CONSTRUCTION DETAILS</b>	<b>Well Number:</b> DEC-007D	

DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">DEPTH</div>  </div> <p>The diagram shows a cross-section of a well. The left side is labeled 'DEPTH' vertically. The right side shows the well components: a 'Flush Mount Protective Casing and Lockable Cap' at the top, followed by an 'AUGERHOLE' (8 inch dia., 50 feet length), then 'PVC CASING' (2 inch dia., 34 feet length), and finally a 'PVC SCREEN' (2 inch dia., 15 feet length). Elevation markers on the left indicate 41.01, 40.72, 2', 33', 34', 49', and 50'. The well is filled with 'Cement/Bentonite Grout' (hatched pattern), has a 'Bentonite Seal' (solid black) between the casing and screen, and is surrounded by 'Silica Sandpack' (dotted pattern).</p>			
Geologist: C.R.					
Drilling Company: ADT					
Driller: Jeremy					
Rig Make/Model: CME 55LC					
Date: 5/30/2007					
GEOLOGIC LOG					
Depth(ft.)	Description				
	See Boring Log.				
WELL DESIGN					
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL	
Surface: Steel grade box		Type: 2" PVC		Type: #2 Sand      Setting:	
Monitor: 2" PVC		Slot Size: .020"		SEAL MATERIAL	
				Type: Bentonite      Setting:	
COMMENTS:				LEGEND	
				<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 15px; background-color: black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px;"></div> Silica Sandpack </div>	
Elevation NAVD88					
Client: NYSDEC		Location: Meeker Ave.		Project No.: 11174989.00002	
URS Corporation		MONITORING WELL CONSTRUCTION DETAILS		Well Number: DEC-08	

DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">DEPTH</div>  </div> <p>The diagram shows a cross-section of a well. At the top, a 'Flush Mount Protective Casing and Lockable Cap' is shown. Below it, the 'AUGERHOLE' is 8 inches in diameter and 50 feet long. This is followed by 'PVC CASING' which is 2 inches in diameter and 35 feet long. Below the casing is a 'PVC SCREEN' which is 2 inches in diameter and 15 feet long. The well is filled with 'Silica Sandpack' (stippled pattern). A 'Bentonite Seal' (solid black) is located between the casing and the screen. 'Cement/Bentonite Grout' (hatched pattern) is shown at the top of the casing and around the screen. Depth markers on the left indicate elevations: 40.91, 40.77, 3', 33', 35', 50', and 50'.</p>	
Geologist: A.L.			
Drilling Company: ADT			
Driller: Jeremy			
Rig Make/Model: CME 55LC			
Date: 5/30/2007			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log.		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box		Type: 2" PVC	Type: #2 Sand      Setting:
Monitor: 2" PVC		Slot Size: .020"	<b>SEAL MATERIAL</b>
			Type: Bentonite      Setting:
<b>COMMENTS:</b> Groundwater encountered @ 40' bgs.  Elevation NAVD88		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black;"></div> Silica Sandpack </div>	
Client: NYSDEC		Loc: Beadel b/t Morgan & Vandervoort	Project No.: 11174989.00002
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	Well Number: DEC-09

DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">DEPTH</div>  </div> <p>The diagram shows a cross-section of a well. At the top, a 'Flush Mount Protective Casing and Lockable Cap' is shown. Below it, the 'AUGERHOLE' is 8 inches in diameter and 50 feet long. The 'PVC CASING' is 2 inches in diameter and 35 feet long. The 'PVC SCREEN' is 2 inches in diameter and 15 feet long. Elevation markers on the left indicate 41.32, 40.96, 1', 33', 35', 50', and 50'. The well is filled with 'Cement/Bentonite Grout' (hatched pattern), has a 'Bentonite Seal' (solid black) between 33' and 35', and a 'Silica Sandpack' (dotted pattern) below the screen.</p>			
<b>Geologist:</b> A.L.					
<b>Drilling Company:</b> ADT					
<b>Driller:</b> Jeremy					
<b>Rig Make/Model:</b> CME 55LC					
<b>Date:</b> 5/25/2007					
GEOLOGIC LOG					
Depth(ft.)	Description				
	See Boring Log.				
WELL DESIGN					
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>		<b>FILTER MATERIAL</b>	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"		<b>Type:</b> #2 Sand <b>Setting:</b>	
				<b>SEAL MATERIAL</b>	
				<b>Type:</b> Bentonite <b>Setting:</b>	
<b>COMMENTS:</b>   Elevation NAVD88				<b>LEGEND</b>	
				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>           Cement/Bentonite Grout         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>           Bentonite Seal         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>           Silica Sandpack         </div>	
<b>Client:</b> NYSDEC		<b>Location:</b> Morgan Avenue		<b>Project No.:</b> 11174989.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b>  <div style="text-align: center; font-size: 1.2em;">DEC-10</div>	



DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">DEPTH</div>  </div> <p style="font-size: small; margin-top: 10px;">             The diagram shows a cross-section of a well. The left side indicates elevations: 40.22 (Ground Level), 39.91 (Flush Mount), 31' (top of PVC casing), 33' (bottom of PVC casing), 48' (top of PVC screen), and 49' (bottom of PVC screen). The right side indicates dimensions: 8 inch dia. / 49 feet length for the AUGERHOLE, 2 inch dia. / 33 feet length for the PVC CASING, and 2 inch dia. / 15 feet length for the PVC SCREEN. A legend at the bottom right identifies the materials: Cement/Bentonite Grout (stippled), Bentonite Seal (solid black), and Silica Sandpack (dotted).           </p>			
<b>Geologist:</b> A.L.					
<b>Drilling Company:</b> ADT					
<b>Driller:</b> Jeremy					
<b>Rig Make/Model:</b> CME 55LC					
<b>Date:</b> 5/30/2007					
GEOLOGIC LOG					
Depth(ft.)	Description				
	See Boring Log.				
WELL DESIGN					
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"		<b>Type:</b> #2 Sand <b>Setting:</b>	
				<b>SEAL MATERIAL</b>  <b>Type:</b> Bentonite <b>Setting:</b>	
<b>COMMENTS:</b> Groundwater encountered @ 38' bgs.   Elevation NAVD88				<b>LEGEND</b>	
				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div>           Cement/Bentonite Grout         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div>           Bentonite Seal         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black;"></div>           Silica Sandpack         </div>	
<b>Client:</b> NYSDEC		<b>Loc:</b> Morgan / Richardson		<b>Project No.:</b> 11174989.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> <div style="text-align: center; font-size: large;">DEC-11</div>	

DRILLING SUMMARY	
Geologist: C.R.	
Drilling Company: ADT	
Driller: Jeremy	
Rig Make/Model: CME 55LC	
Date: 6/4/2007	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log.
WELL DESIGN	

DEPTH

**Flush Mount**  
Protective Casing and Lockable Cap

**Ground Level**

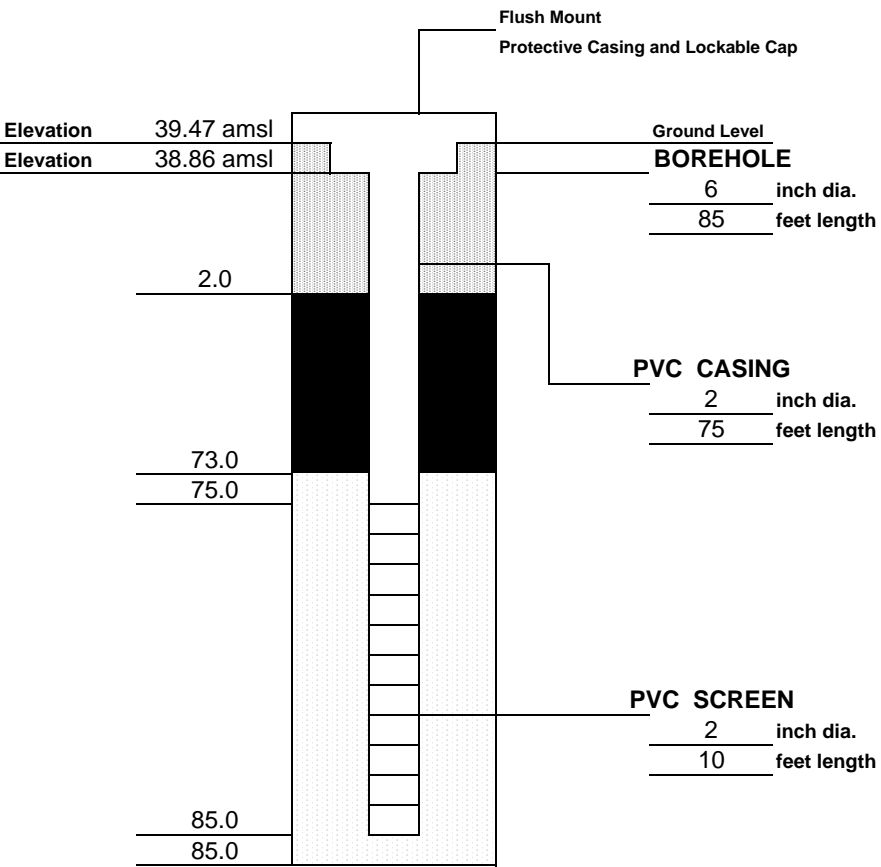
**AUGERHOLE**  
8 inch dia.  
50 feet length

**PVC CASING**  
2 inch dia.  
34 feet length

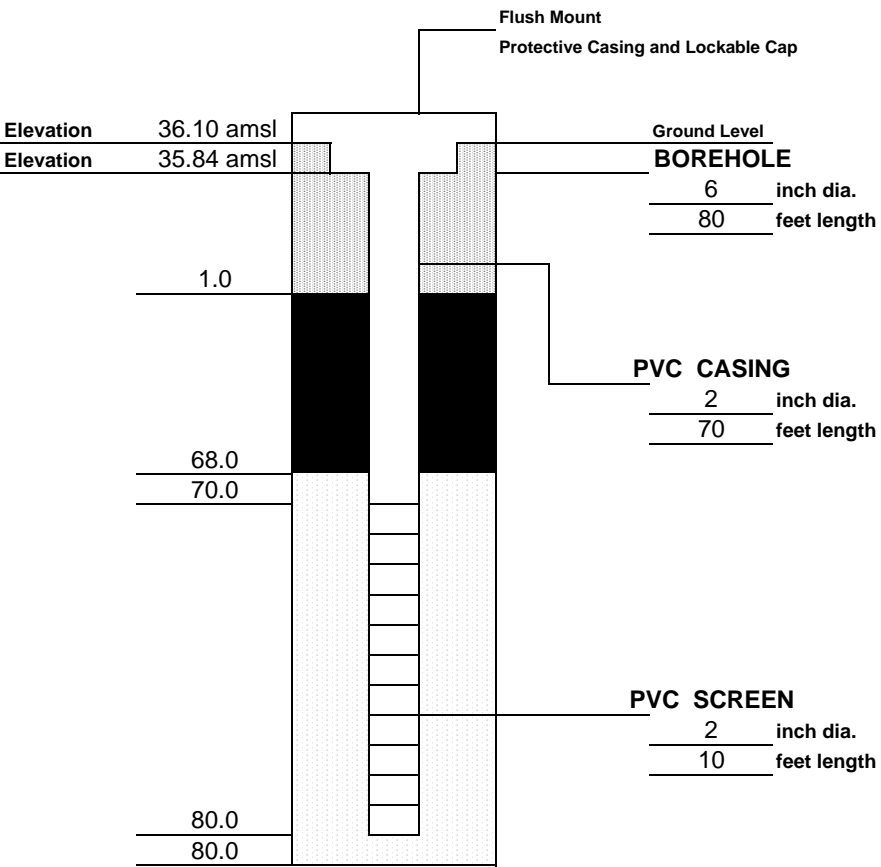
**PVC SCREEN**  
2 inch dia.  
15 feet length

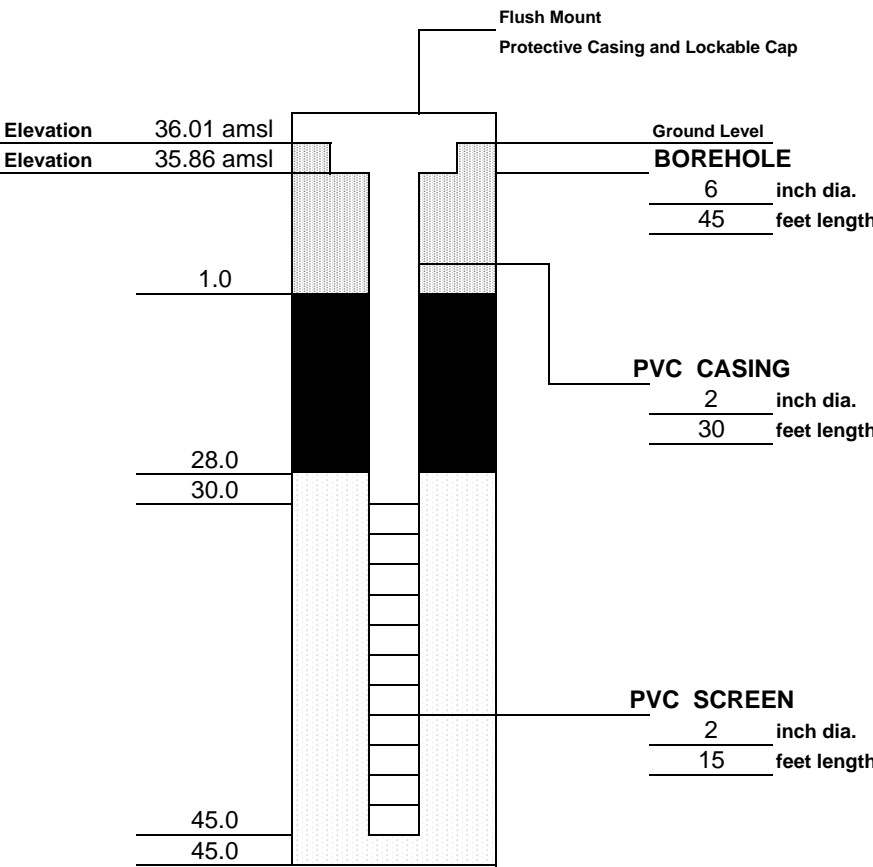
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 2" PVC	Type: #2 Sand      Setting:
Monitor: 2" PVC	Slot Size: .020"	<b>SEAL MATERIAL</b>
		Type: Bentonite      Setting:
COMMENTS:		<b>LEGEND</b>
		<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
Elevation NAVD88		
Client: NYSDEC	Loc: Meeker Avenue	Project No.: 11174989.00002
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: DEC-12

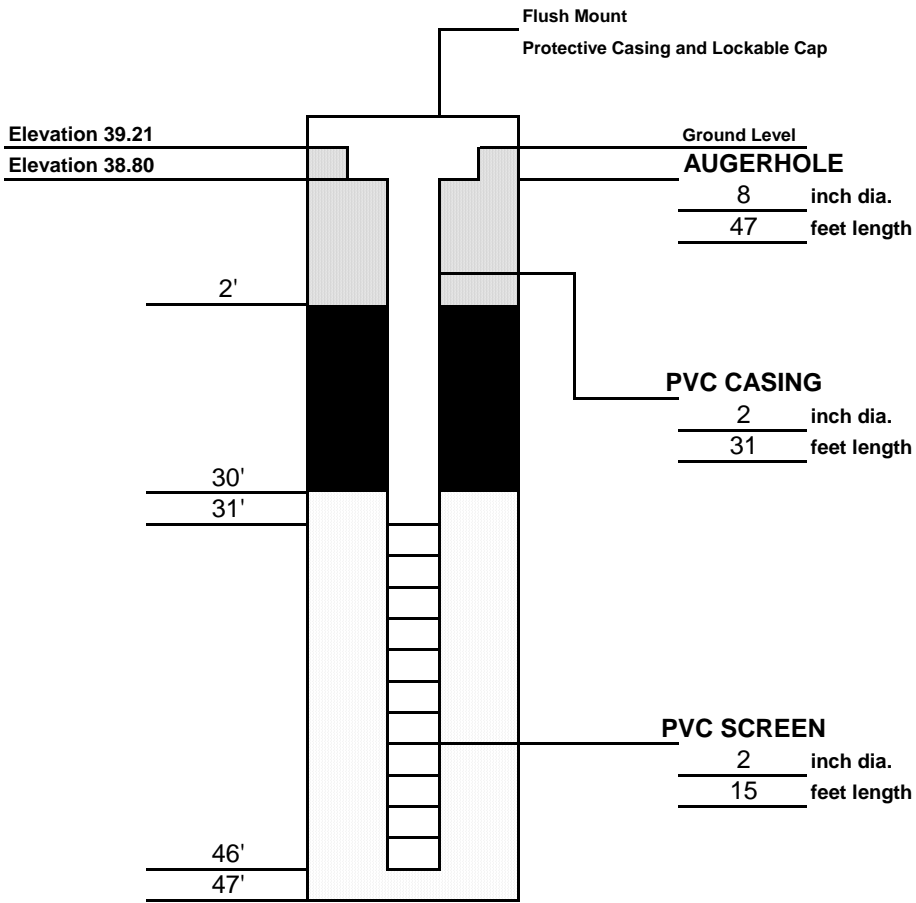
<b>DRILLING SUMMARY</b>		<p style="text-align: right;">Flush Mount Protective Casing and Lockable Cap</p> <p style="text-align: right;">Ground Level</p> <p><b>AUGERHOLE</b> 8 inch dia. 49 feet length</p> <p><b>PVC CASING</b> 2 inch dia. 33 feet length</p> <p><b>PVC SCREEN</b> 2 inch dia. 15 feet length</p>			
Geologist: A. Ledgerwood					
Drilling Company:					
Aquifer Drilling and Testing, Inc.					
Driller: Jeremy Meyers					
Rig Make/Model: CME 55LC					
Date: 11/23/2007		<p style="writing-mode: vertical-rl; transform: rotate(180deg);">DEPTH (FT)</p> <p>Elevation 39.47</p> <p>Elevation 39.19</p> <p>2.0</p> <p>31.0</p> <p>33.0</p> <p>48.0</p> <p>49.0</p>			
<b>GEOLOGIC LOG</b>					
Depth(ft.)	Description				
	See Boring Log for Lithologic Description.				
<b>WELL DESIGN</b>		<p><b>LEGEND</b></p> <p> Cement/Bentonite Grout</p> <p> Bentonite Seal</p> <p> Silica Sandpack</p>			
<b>CASING MATERIAL</b>				<b>SCREEN MATERIAL</b>	<b>FILTER MATERIAL</b>
Surface: Steel grade box				Type: 2" PVC	Type: #2 Sand      Setting: 31.0-49.0'
Monitor: 2" PVC				Slot Size: .020"	<b>SEAL MATERIAL</b>
					Type: Bentonite      Setting: 2.0-31.0'
<b>COMMENTS:</b>		<b>LEGEND</b>			
		<b>LEGEND</b>			
		<b>LEGEND</b>			
		<b>LEGEND</b>			
Client: NYSDEC		Location : Meeker Avenue Site	Project No.: 11174989.00002		
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	Well Number: DEC-013		

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> T. Ifkovich/C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> G. Rivera/J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/27/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 73.0-85.0' <b>Type:</b> Benseal <b>Setting:</b> 2.0-73.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11176390.00002	
		<b>Well Number:</b> DEC-013D	

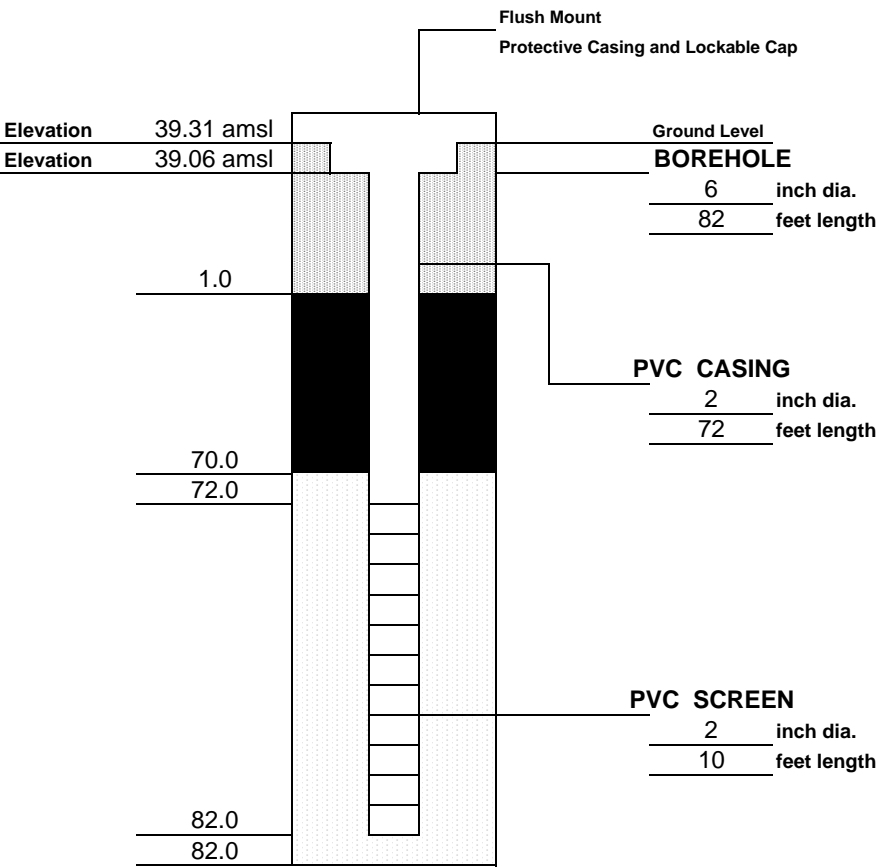
DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">DEPTH</div> </div>	
<b>Geologist:</b> A.L. & C.R.			
<b>Drilling Company:</b> ADT			
<b>Driller:</b> Jeremy			
<b>Rig Make/Model:</b> CME 55LC			
<b>Date:</b> 5/30/2007			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log.		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	FILTER MATERIAL
<b>Surface:</b> Steel grade box		<b>Type:</b> 2" PVC	<b>Type:</b> #2 Sand <b>Setting:</b>
<b>Monitor:</b> 2" PVC		<b>Slot Size:</b> .020"	<b>SEAL MATERIAL</b>
			<b>Type:</b> Bentonite <b>Setting:</b>
<b>COMMENTS:</b>  Sand was brought up to 20' due to prior well setting and the presence of bentonite already in the hole.			<b>LEGEND</b>
Elevation NAVD88			Cement/Bentonite Grout
			Bentonite Seal
			Silica Sandpack
<b>Client:</b> NYSDEC		<b>Loc:</b> Vandervoort b/t Division & Richardson	<b>Project No.:</b> 11174989.00002
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	<b>Well Number:</b> DEC-14

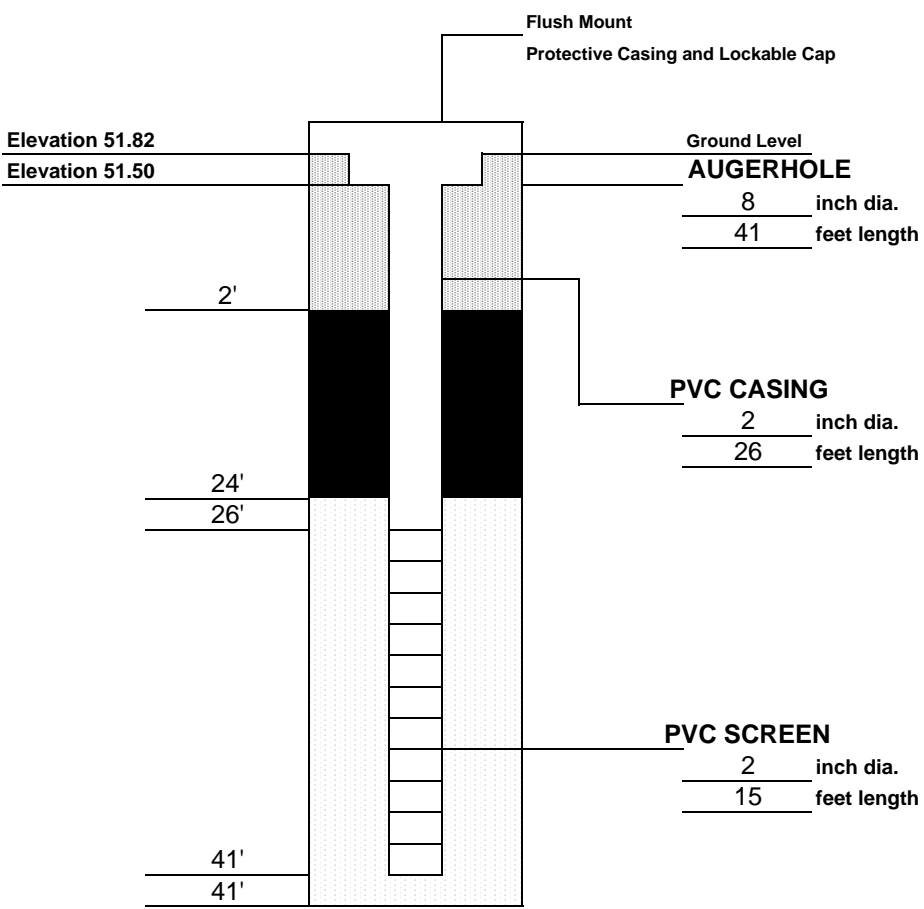
DRILLING SUMMARY			
<b>Geologist:</b> S. McCabe		 <p>The diagram shows a well construction with two main sections: a BOREHOLE and PVC CASING. The BOREHOLE is 6 inches in diameter and 80 feet long, starting from the Ground Level (Elevation 35.84 amsl) down to an elevation of 68.0. The PVC CASING is 2 inches in diameter and 70 feet long, starting from the Ground Level (Elevation 35.84 amsl) down to an elevation of 80.0. A PVC SCREEN is located at the bottom of the casing, 10 feet long and 2 inches in diameter. The well is capped with a Flush Mount Protective Casing and Lockable Cap. The well is labeled 'D E P T H (FT)' on the left side.</p>	
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> G. Rivera			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/18/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
CASING MATERIAL		SCREEN MATERIAL	FILTER MATERIAL
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>Type:</b> #1 Sand	<b>Setting:</b> 68.0-80.0'
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> Benseal	<b>Setting:</b> 1.0-68.0'
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	<b>Project No.:</b> 11176390.00002
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	<b>Well Number:</b> DEC-014D

DRILLING SUMMARY		 <p style="text-align: right; margin-right: 50px;">Flush Mount Protective Casing and Lockable Cap</p> <p style="text-align: right;">Ground Level</p> <p><b>BOREHOLE</b> 6 inch dia. 45 feet length</p> <p><b>PVC CASING</b> 2 inch dia. 30 feet length</p> <p><b>PVC SCREEN</b> 2 inch dia. 15 feet length</p>			
<b>Geologist:</b> S. McCabe					
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.					
<b>Driller:</b> G. Rivera					
<b>Rig Make/Model:</b> AMSI 17-C Sonic					
<b>Date:</b> 5/18/2011					
GEOLOGIC LOG		D E P T H  (FT)			
Depth(ft.)	Description				
	See Boring Log for Lithologic Description.				
WELL DESIGN					
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>		<b>FILTER MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box  <b>Monitor:</b> 2" Schedule 40 PVC		<b>Type:</b> 2" Schedule 40 PVC  <b>Slot Size:</b> 0.010"		<b>Type:</b> #1 Sand <b>Setting:</b> 28.0-45.0'	
				<b>SEAL MATERIAL</b>	
				<b>Type:</b> Benseal <b>Setting:</b> 1.0-28.0'	
<b>COMMENTS:</b>				<b>LEGEND</b>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>           Cement/Bentonite Grout         </div>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>           Bentonite Seal         </div>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>           Silica Sandpack         </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> DEC-014R	

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H</p>	
<b>Geologist:</b> C.R. & A.L.			
<b>Drilling Company:</b> ADT			
<b>Driller:</b> Jeremy			
<b>Rig Make/Model:</b> CME 55LC			
<b>Date:</b> 5/29/2007			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> Steel grade box		<b>Type:</b> 2" PVC	
<b>Monitor:</b> 2" PVC		<b>Slot Size:</b> .020"	
<b>COMMENTS:</b>		<b>SEAL MATERIAL</b>	
		<b>Type:</b> Bentonite <b>Setting:</b>	
Elevation NAVD88		<b>LEGEND</b>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #e0e0e0; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Loc:</b> Meeker Avenue	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.: 11174989.00002</b>	
		<b>Well Number:</b> DEC-15	



DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/17/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 70.0-82.0' <b>Type:</b> Benseal <b>Setting:</b> 1.0-70.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC	<b>Former Klink Cosmo Cleaners</b>	<b>Project No.:</b> 11176390.00002	
<b>URS Corporation</b>	<b>MONITORING WELL CONSTRUCTION DETAILS</b>	<b>Well Number:</b> DEC-015D	

DRILLING SUMMARY		<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">DEPTH</div>  </div>			
<b>Geologist:</b> A.L.					
<b>Drilling Company:</b> ADT					
<b>Driller:</b> Tony					
<b>Rig Make/Model:</b> CME 55LC					
<b>Date:</b> 5/23/2007					
GEOLOGIC LOG					
Depth(ft.)	Description				
	See Boring Log.				
WELL DESIGN					
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"		<b>Type:</b> #2 Sand <b>Setting:</b>	
				<b>SEAL MATERIAL</b>  <b>Type:</b> Bentonite <b>Setting:</b>	
<b>COMMENTS:</b>   Elevation NAVD88				<b>LEGEND</b>	
				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div>           Cement/Bentonite Grout         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div>           Bentonite Seal         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div>           Silica Sandpack         </div>	
<b>Client:</b> NYSDEC		<b>Loc:</b> On Lombardy near Porter Ave.		<b>Project No.:</b> 11174989.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b>  <div style="text-align: center; font-size: 1.2em;">DEC-22</div>	

DRILLING SUMMARY	
Geologist: S. McCabe	
Drilling Company:	
Aquifer Drilling and Testing, Inc.	
Driller: Jeremy Meyers	
Rig Make/Model:	
CME 55LC	
Date:	
11/12/2007	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log for Lithologic Description.
WELL DESIGN	

DEPTH (FT)

**Flush Mount Protective Casing and Lockable Cap**

**Ground Level**

**AUGERHOLE**  
8 inch dia.  
61 feet length

**PVC CASING**  
2 inch dia.  
51 feet length

**PVC SCREEN**  
2 inch dia.  
10 feet length

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 2" PVC	Type: #2 Sand      Setting: 48.0-61.0'
Monitor: 2" PVC	Slot Size: .020"	<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 1.0-48.0'
COMMENTS:		<b>LEGEND</b>
		<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
Client: NYSDEC	Location : Meeker Avenue Site	Project No.: 11174989.00002
<b>URS Corporation</b>	<b>MONITORING WELL CONSTRUCTION DETAILS</b>	Well Number: DEC-022D

DRILLING SUMMARY													
Geologist: S. McCabe													
Drilling Company:													
Aquifer Drilling and Testing, Inc.													
Driller: Jeremy Meyers													
Rig Make/Model:													
CME 55LC													
Date:													
12/5/2007													
GEOLOGIC LOG													
Depth(ft.)	Description												
	See Boring Log for Lithologic Description.												
WELL DESIGN													
<p>The diagram shows a well construction with three main sections: AUGERHOLE (8 inch dia., 50 feet length), PVC CASING (2 inch dia., 35 feet length), and PVC SCREEN (2 inch dia., 15 feet length). The well is shown in cross-section with various materials indicated by patterns: Cement/Bentonite Grout (stippled), Bentonite Seal (solid black), and Silica Sandpack (dotted). Elevation markers are provided on the left: 42.45, 42.30, 1.0, 33.0, 35.0, 50.0, and 50.0. The well is labeled 'D E P T H (FT)' on the left.</p>													
<table border="1"> <thead> <tr> <th>CASING MATERIAL</th> <th>SCREEN MATERIAL</th> <th>FILTER MATERIAL</th> </tr> </thead> <tbody> <tr> <td>Surface: Steel grade box</td> <td>Type: 2" PVC</td> <td>Type: #2 Sand      Setting: 33.0-50.0'</td> </tr> <tr> <td>Monitor: 2" PVC</td> <td>Slot Size: .020"</td> <td>SEAL MATERIAL</td> </tr> <tr> <td></td> <td></td> <td>Type: Bentonite      Setting: 1.0-33.0'</td> </tr> </tbody> </table>		CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL	Surface: Steel grade box	Type: 2" PVC	Type: #2 Sand      Setting: 33.0-50.0'	Monitor: 2" PVC	Slot Size: .020"	SEAL MATERIAL			Type: Bentonite      Setting: 1.0-33.0'
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL											
Surface: Steel grade box	Type: 2" PVC	Type: #2 Sand      Setting: 33.0-50.0'											
Monitor: 2" PVC	Slot Size: .020"	SEAL MATERIAL											
		Type: Bentonite      Setting: 1.0-33.0'											
<table border="1"> <thead> <tr> <th>COMMENTS:</th> <th>LEGEND</th> </tr> </thead> <tbody> <tr> <td></td> <td>  Cement/Bentonite Grout   Bentonite Seal   Silica Sandpack </td> </tr> </tbody> </table>		COMMENTS:	LEGEND		Cement/Bentonite Grout Bentonite Seal Silica Sandpack								
COMMENTS:	LEGEND												
	Cement/Bentonite Grout Bentonite Seal Silica Sandpack												
<table border="1"> <thead> <tr> <th>Client: NYSDEC</th> <th>Location : Meeker Avenue Site</th> <th>Project No.: 11174989.00002</th> </tr> </thead> <tbody> <tr> <td>URS Corporation</td> <td>MONITORING WELL CONSTRUCTION DETAILS</td> <td>Well Number: DEC-027</td> </tr> </tbody> </table>		Client: NYSDEC	Location : Meeker Avenue Site	Project No.: 11174989.00002	URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: DEC-027						
Client: NYSDEC	Location : Meeker Avenue Site	Project No.: 11174989.00002											
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: DEC-027											

DRILLING SUMMARY	
Geologist: S. McCabe	
Drilling Company:	
Aquifer Drilling and Testing, Inc.	
Driller: Jeremy Meyers	
Rig Make/Model:	
CME 55LC	
Date:	
11/20/2007	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log for Lithologic Description.
WELL DESIGN	

DEPTH (FT)

**Flush Mount Protective Casing and Lockable Cap**

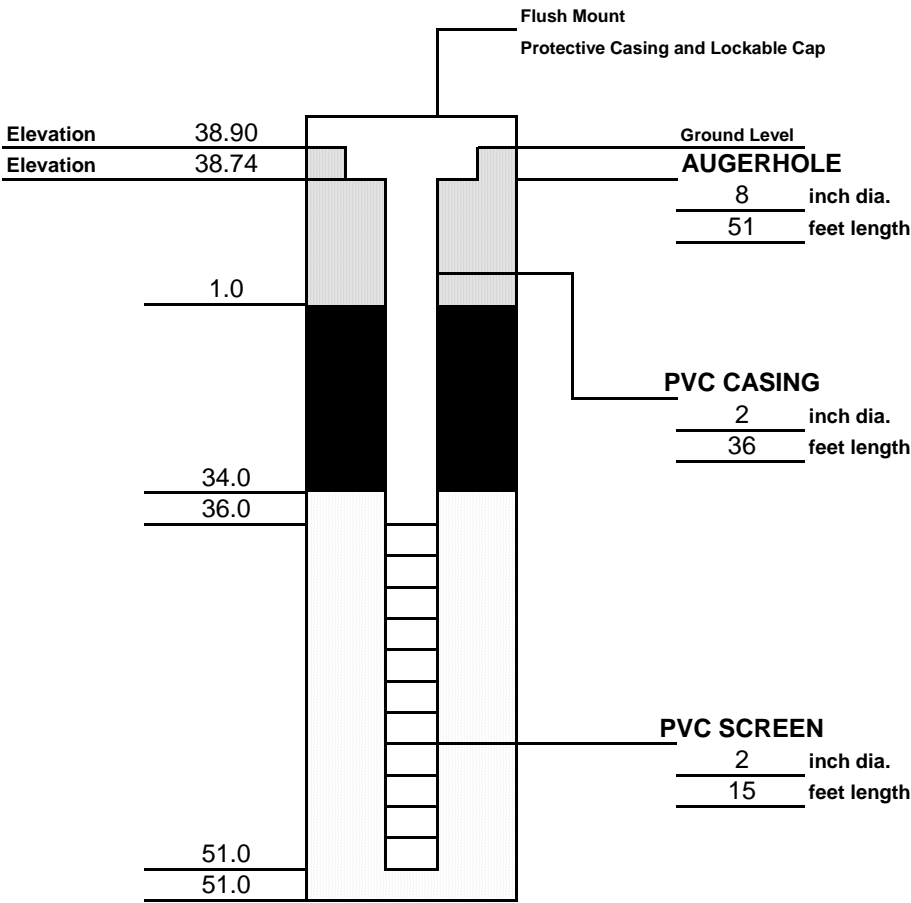
**Ground Level**

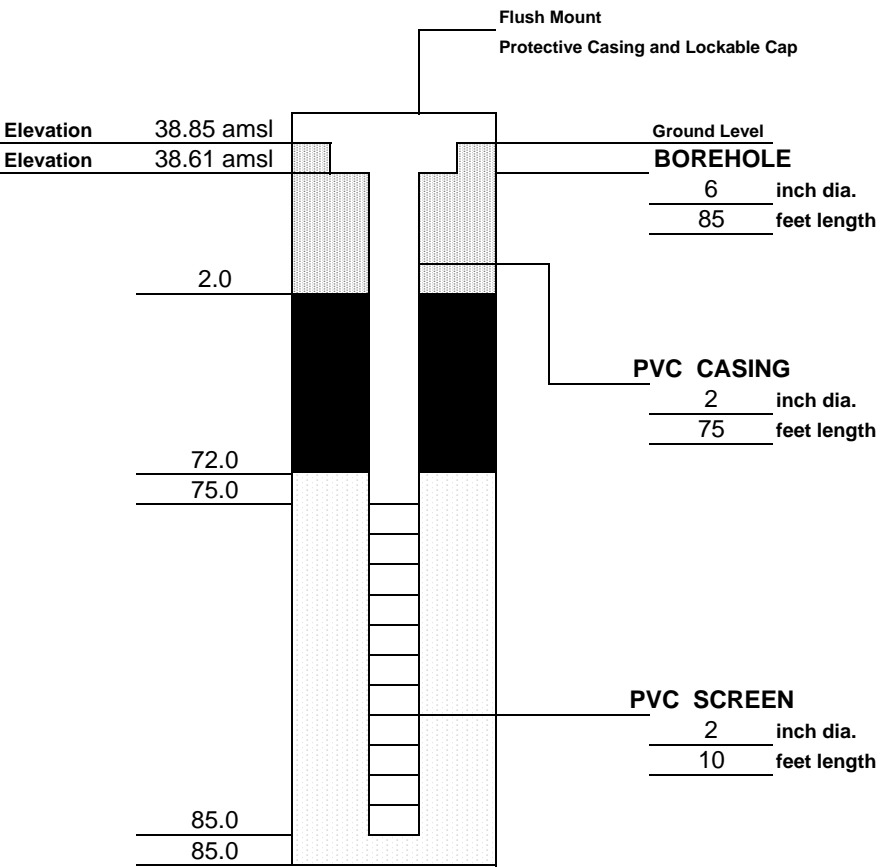
**AUGERHOLE**  
8 inch dia.  
50 feet length

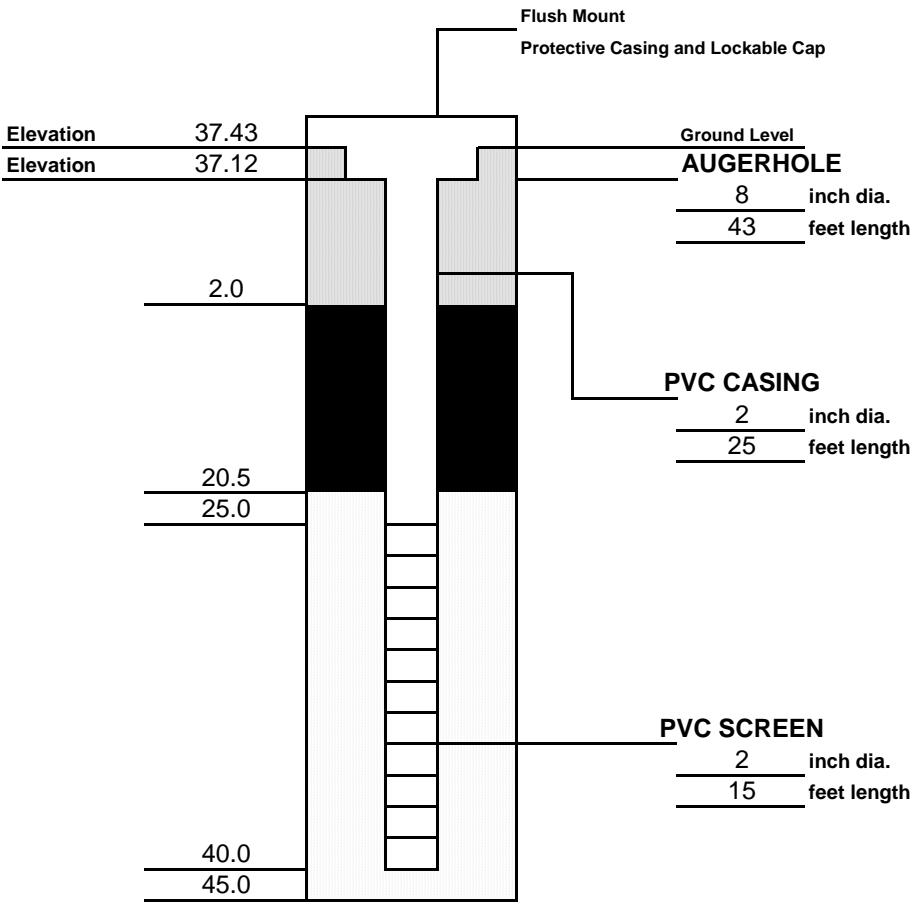
**PVC CASING**  
2 inch dia.  
35 feet length

**PVC SCREEN**  
2 inch dia.  
15 feet length

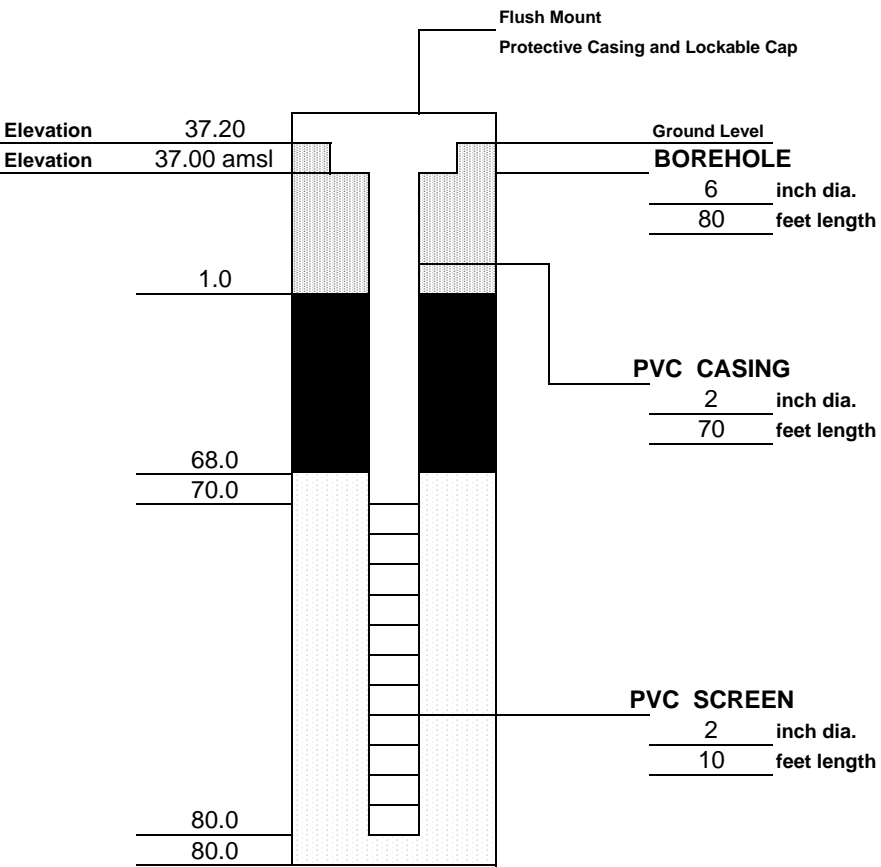
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 2" PVC	Type: #2 Sand      Setting: 33.0-50.0'
Monitor: 2" PVC	Slot Size: .020"	<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 1.0-32.0'
COMMENTS:		<b>LEGEND</b>
		<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
Client: NYSDEC		Location : Meeker Avenue Site
Project No.: 11174989.00002		Well Number: DEC-028
MONITORING WELL CONSTRUCTION DETAILS		

DRILLING SUMMARY		 <p style="text-align: right; margin-top: -100px;">Flush Mount Protective Casing and Lockable Cap</p> <p style="text-align: right;">Ground Level</p> <p><b>AUGERHOLE</b> 8 inch dia. 51 feet length</p> <p><b>PVC CASING</b> 2 inch dia. 36 feet length</p> <p><b>PVC SCREEN</b> 2 inch dia. 15 feet length</p>	
<b>Geologist:</b> S. McCabe			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> Jeremy Meyers			
<b>Rig Make/Model:</b> CME 55LC			
<b>Date:</b> 11/27/2007			
GEOLOGIC LOG		D E P T H  (FT)	
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	
		<b>FILTER MATERIAL</b>	
		<b>Type:</b> #2 Sand <b>Setting:</b> 34.0-51.0'	
		<b>SEAL MATERIAL</b>	
		<b>Type:</b> Bentonite <b>Setting:</b> 1.0-34.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #e0e0e0; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site	
<b>Project No.:</b> 11174989.00002			
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Well Number:</b> DEC-029	

DRILLING SUMMARY		 <p style="text-align: right; margin-right: 50px;">Flush Mount Protective Casing and Lockable Cap</p> <p style="text-align: right;">Ground Level</p> <p><b>BOREHOLE</b> 6 inch dia. 85 feet length</p> <p><b>PVC CASING</b> 2 inch dia. 75 feet length</p> <p><b>PVC SCREEN</b> 2 inch dia. 10 feet length</p>			
<b>Geologist:</b> C. Friedman					
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.					
<b>Driller:</b> J. Meyers					
<b>Rig Make/Model:</b> AMSI 17-C Sonic					
<b>Date:</b> 5/11/2011					
GEOLOGIC LOG		D E P T H  (FT)			
Depth(ft.)	Description				
	See Boring Log for Lithologic Description.				
WELL DESIGN					
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>		<b>FILTER MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box  <b>Monitor:</b> 2" Schedule 40 PVC		<b>Type:</b> 2" Schedule 40 PVC  <b>Slot Size:</b> 0.010"		<b>Type:</b> #1 Sand <b>Setting:</b> 72.0-85.0'	
				<b>SEAL MATERIAL</b>	
				<b>Type:</b> Benseal <b>Setting:</b> 2.0-72.0'	
<b>COMMENTS:</b>				<b>LEGEND</b>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>           Cement/Bentonite Grout         </div>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>           Bentonite Seal         </div>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>           Silica Sandpack         </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> DEC-029D	

DRILLING SUMMARY		 <p style="text-align: right; margin-right: 50px;">           Flush Mount            Protective Casing and Lockable Cap         </p> <p style="text-align: right;"> <b>AUGERHOLE</b>            8 inch dia.            43 feet length         </p> <p style="text-align: right;"> <b>PVC CASING</b>            2 inch dia.            25 feet length         </p> <p style="text-align: right;"> <b>PVC SCREEN</b>            2 inch dia.            15 feet length         </p>			
<b>Geologist:</b> A. Ledgerwood					
<b>Drilling Company:</b>					
Aquifer Drilling and Testing, Inc.					
<b>Driller:</b> Jeremy Meyers					
<b>Rig Make/Model:</b>					
CME 55LC					
<b>Date:</b>					
11/19/2007					
GEOLOGIC LOG		D E P T H  (FT)			
Depth(ft.)	Description				
	See Boring Log for Lithologic Description.				
WELL DESIGN					
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>		<b>FILTER MATERIAL</b>	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"		<b>Type:</b> #2 Sand <b>Setting:</b> 20.5-43.0'	
				<b>SEAL MATERIAL</b>	
				<b>Type:</b> Bentonite <b>Setting:</b> 2.0-20.5'	
<b>COMMENTS:</b>				<b>LEGEND</b>	
				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black;"></div>           Cement/Bentonite Grout         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black;"></div>           Bentonite Seal         </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #ffffff; border: 1px solid black;"></div>           Silica Sandpack         </div>	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site		<b>Project No.:</b> 11174989.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> DEC-030	



DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> S. McCabe /M. Dascoli			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> G. Rivera			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/16/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Cement/Bentonite Grout         </div> <div style="text-align: center;">  Bentonite Seal         </div> <div style="text-align: center;">  Silica Sandpack         </div> </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.: 11176390.00002</b>	
		<b>Well Number: DEC-030D</b>	

DRILLING SUMMARY	
<b>Geologist:</b> A. Ledgerwood	
<b>Drilling Company:</b>	
Aquifer Drilling and Testing, Inc.	
<b>Driller:</b> Jeremy Meyers	
<b>Rig Make/Model:</b>	
CME 55LC	
<b>Date:</b>	
11/21/2007	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log for Lithologic Description.
WELL DESIGN	

DEPTH (FT)

**Flush Mount Protective Casing and Lockable Cap**

**AUGERHOLE**  
 8 inch dia.  
 45 feet length

**PVC CASING**  
 2 inch dia.  
 30 feet length

**PVC SCREEN**  
 2 inch dia.  
 15 feet length

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
<b>Surface:</b> Steel grade box	<b>Type:</b> 2" PVC	<b>Type:</b> #2 Sand <b>Setting:</b> 27.0-45.0'
<b>Monitor:</b> 2" PVC	<b>Slot Size:</b> .020"	<b>SEAL MATERIAL</b> <b>Type:</b> Bentonite <b>Setting:</b> 2.0-27.0'

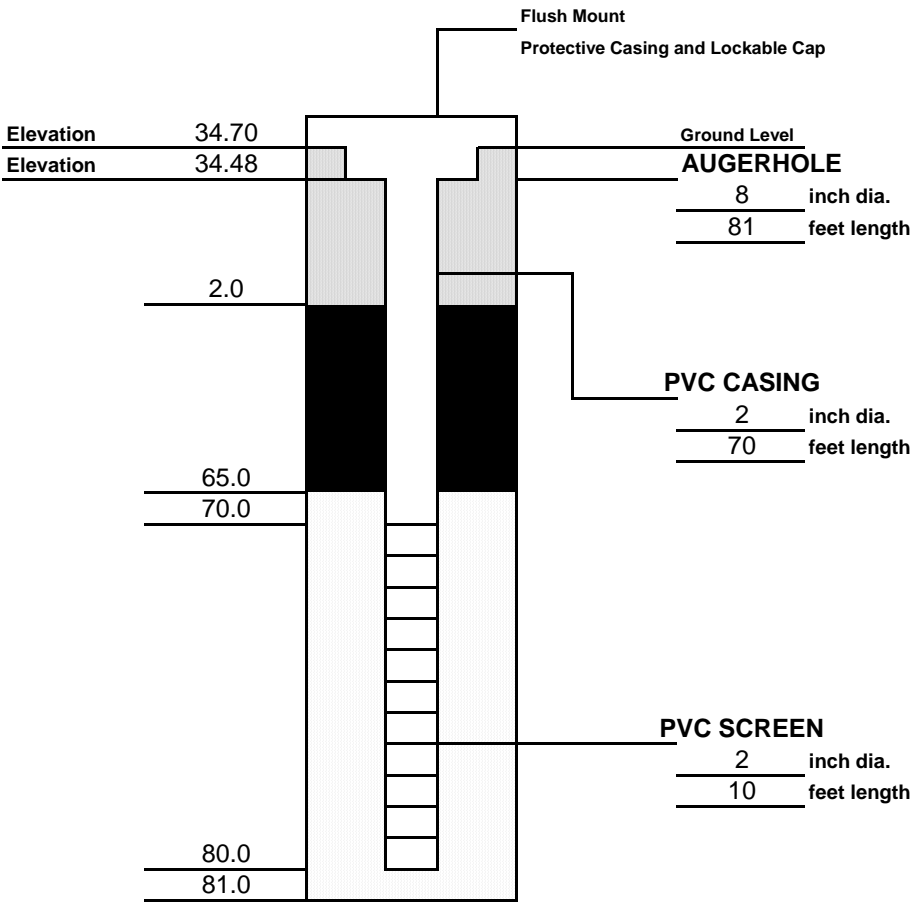
**COMMENTS:**

**LEGEND**

Cement/Bentonite Grout

Bentonite Seal

Silica Sandpack

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> S. McCabe			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> Shawn Miller			
<b>Rig Make/Model:</b> CME-85			
<b>Date:</b> 6/17/2008			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	
		<b>FILTER MATERIAL</b>	
		<b>Type:</b> #2 Sand <b>Setting:</b> 65.0-81.0'	
		<b>SEAL MATERIAL</b>	
		<b>Type:</b> Bentonite <b>Setting:</b> 2.0-65.0'	
<b>COMMENTS:</b>    		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #ffffff; border: 1px solid black;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site	
<b>Project No.:</b> 11174989.00002		<b>Well Number:</b> DEC-031D	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	

DRILLING SUMMARY	
Geologist: A. Ledgerwood	
Drilling Company:	
Aquifer Drilling and Testing, Inc.	
Driller: Jeremy Meyers	
Rig Make/Model:	
CME 55LC	
Date:	
11/29/2007	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log for Lithologic Description.
WELL DESIGN	

DEPTH (FT)

**Flush Mount Protective Casing and Lockable Cap**

**Ground Level**

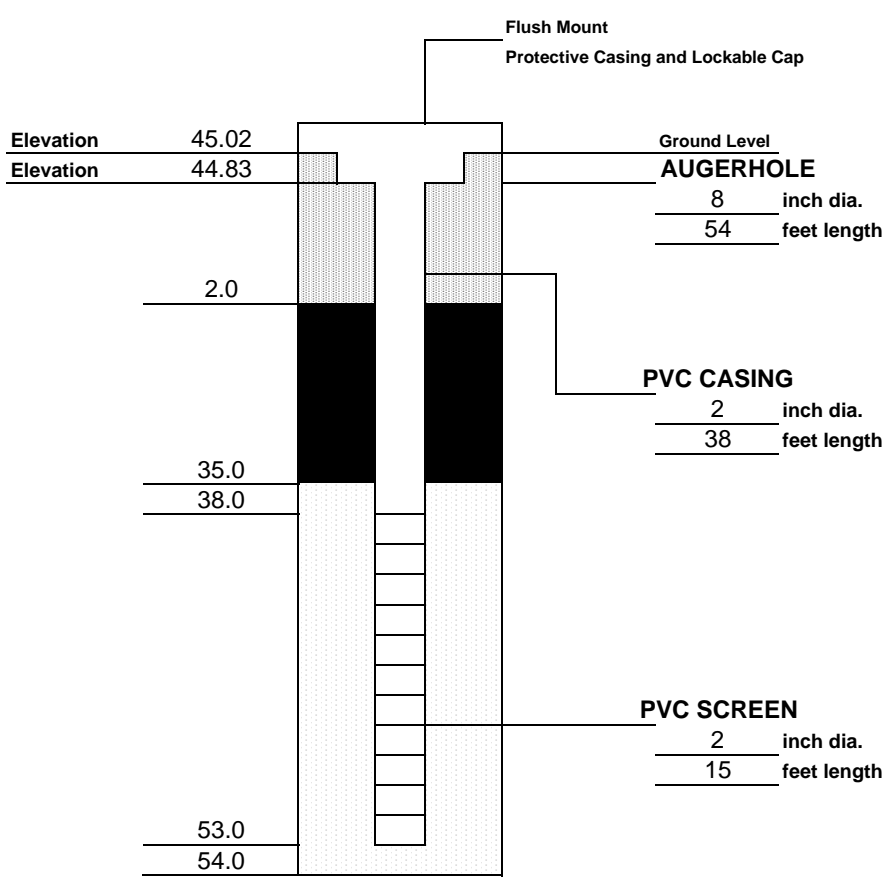


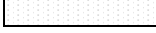
**AUGERHOLE**  
8 inch dia.  
45 feet length

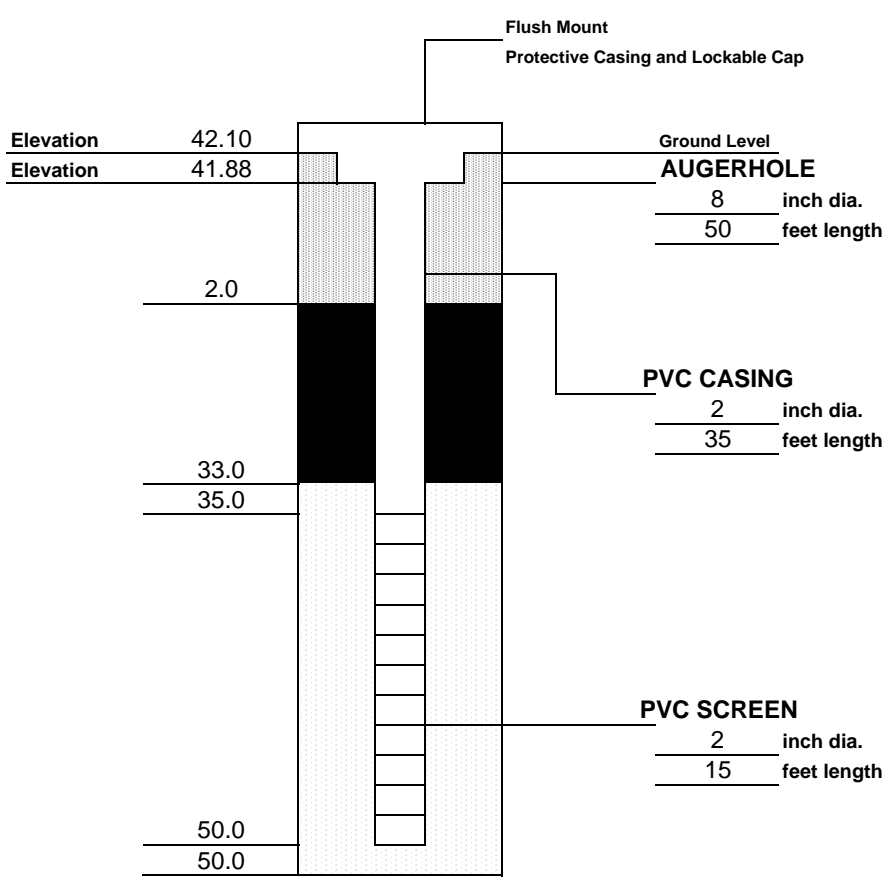
**PVC CASING**  
2 inch dia.  
30 feet length

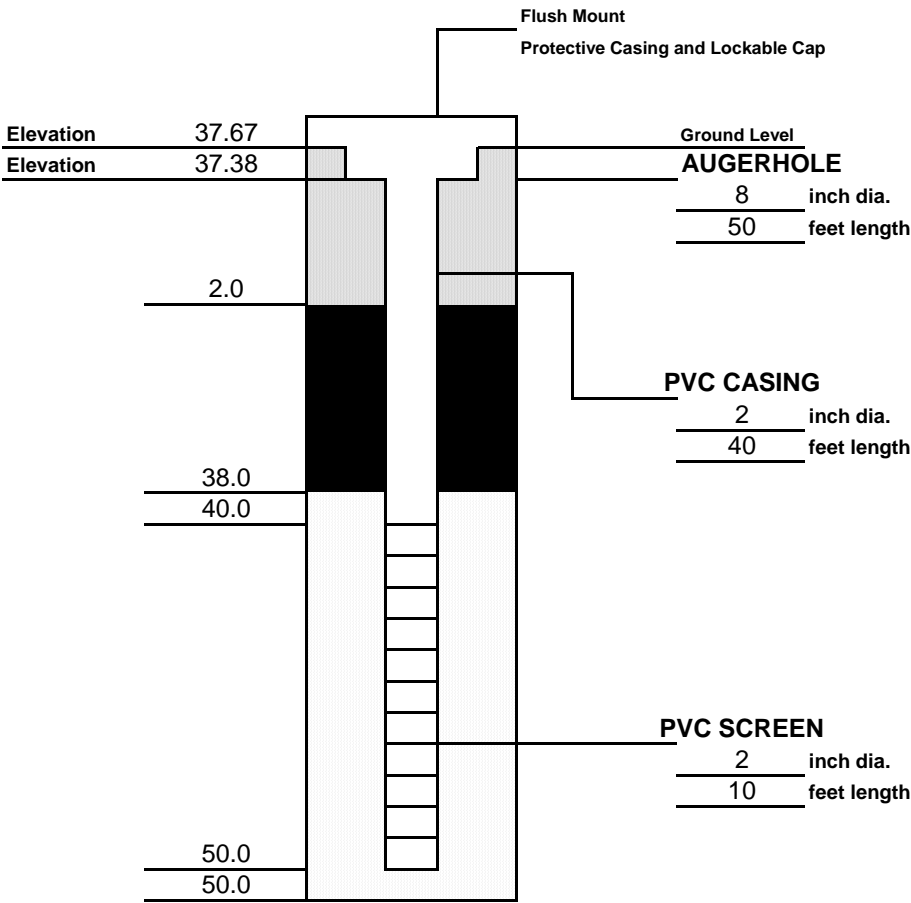
**PVC SCREEN**  
2 inch dia.  
15 feet length

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 2" PVC	Type: #2 Sand      Setting: 28.0-45.0'
Monitor: 2" PVC	Slot Size: .020"	<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 1.0-28.0'
COMMENTS:		<b>LEGEND</b>
		<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
Client: NYSDEC	Location : Meeker Avenue Site	Project No.: 11174989.00002
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: DEC-032

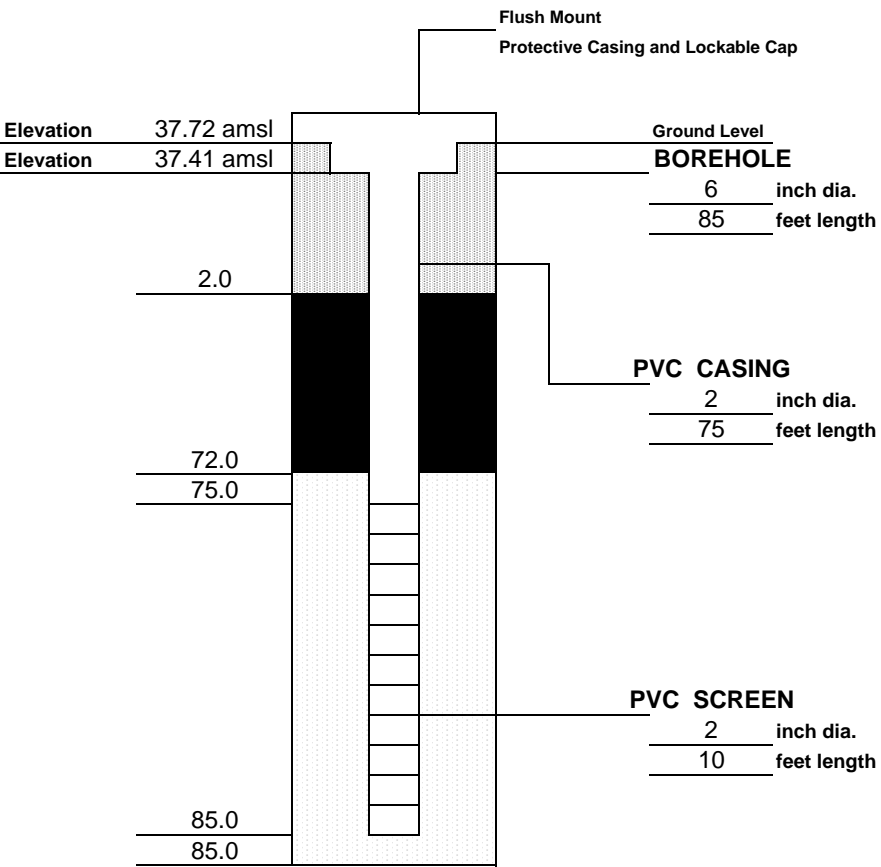


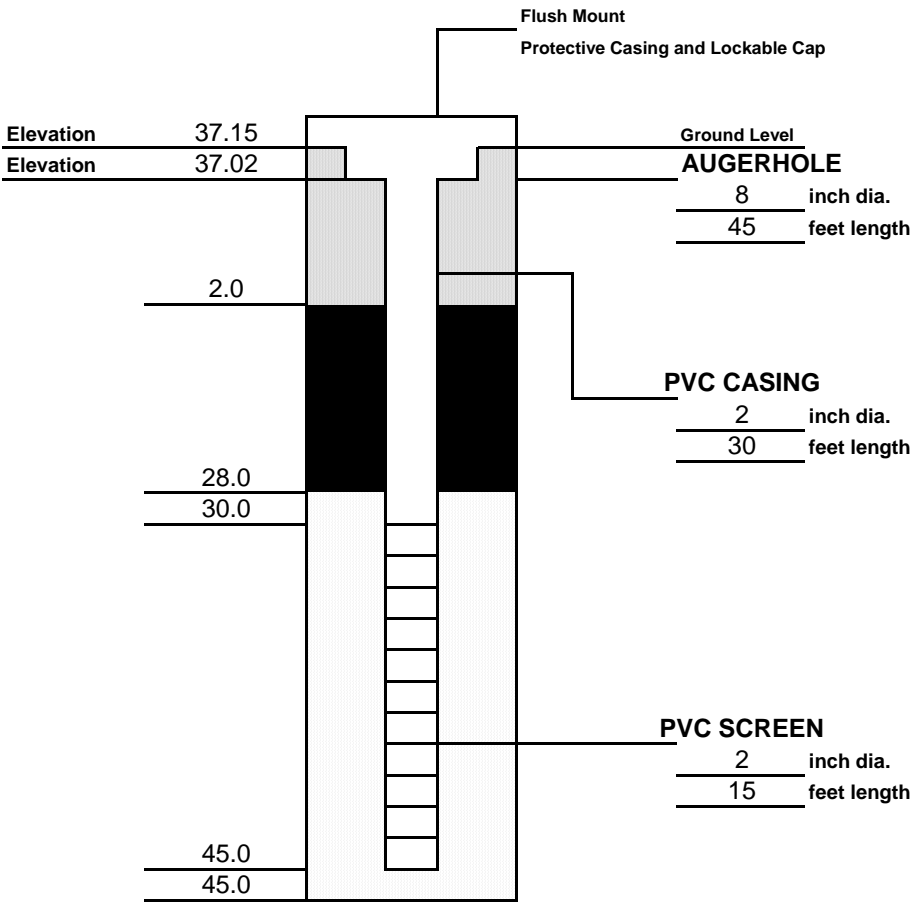
DRILLING SUMMARY		 <p>The diagram illustrates the well construction details. It shows a vertical cross-section of the well with various components labeled. Key features include:         <ul style="list-style-type: none"> <li><b>Ground Level</b> at elevation 45.02.</li> <li><b>AUGERHOLE</b> with an 8 inch diameter and 54 feet length.</li> <li><b>PVC CASING</b> with a 2 inch diameter and 38 feet length.</li> <li><b>PVC SCREEN</b> with a 2 inch diameter and 15 feet length.</li> <li><b>Flush Mount Protective Casing and Lockable Cap</b> at the top.</li> <li><b>Elevations</b> marked at 44.83, 35.0, 38.0, 53.0, and 54.0.</li> <li><b>Materials</b> indicated by patterns: Cement/Bentonite Grout (stippled), Bentonite Seal (solid black), and Silica Sandpack (dotted).</li> </ul> </p>		
<b>Geologist:</b> S. McCabe				
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.				
<b>Driller:</b> Jeremy Meyers				
<b>Rig Make/Model:</b> CME-55 LC				
<b>Date:</b> 5/20/2008				
GEOLOGIC LOG		D E P T H  (FT)	See Boring Log for Lithologic Description.	
Depth(ft.)	Description			
WELL DESIGN				
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"		<b>Type:</b> #2 Sand <b>Setting:</b> 35.0-54.0' <b>SEAL MATERIAL</b> <b>Type:</b> Bentonite <b>Setting:</b> 2.0-35.0'
COMMENTS:		<b>LEGEND</b> <div style="display: flex; justify-content: space-around;"> <div> Cement/Bentonite Grout</div> <div> Bentonite Seal</div> <div> Silica Sandpack</div> </div>		
Client: NYSDEC		Location : Meeker Avenue Site		Project No.: 11174989.00002
URS Corporation		MONITORING WELL CONSTRUCTION DETAILS		Well Number: DEC-039

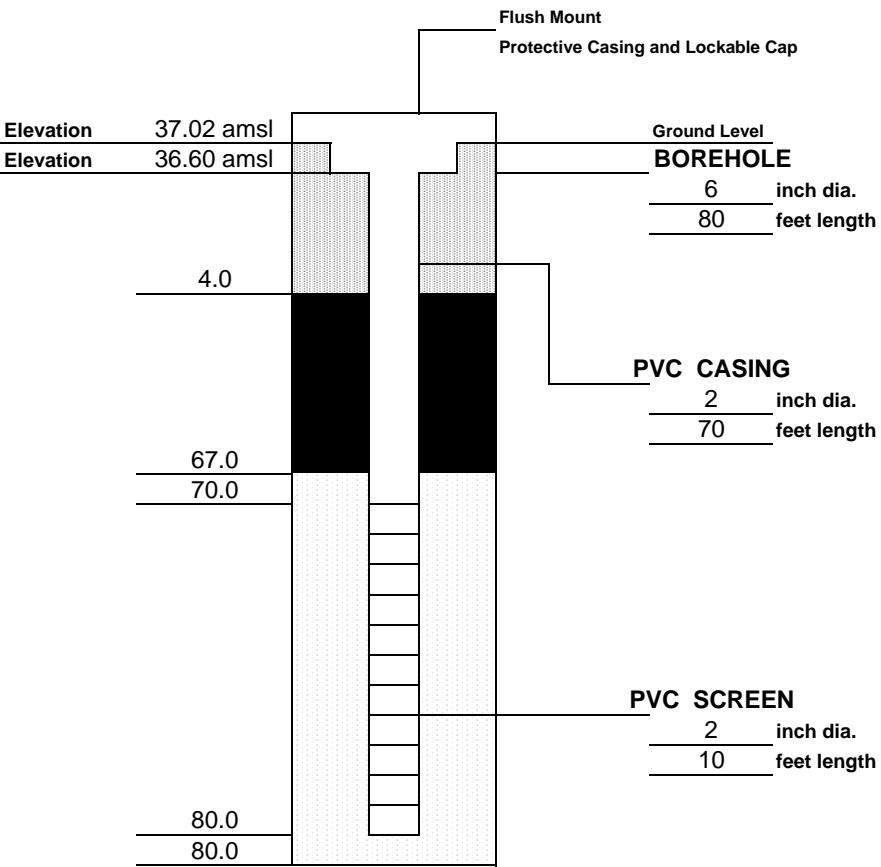
DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> S. McCabe			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> Jeremy Meyers			
<b>Rig Make/Model:</b> CME-55 LC			
<b>Date:</b> 5/19/2008			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	
		<b>FILTER MATERIAL</b>	
		<b>Type:</b> #2 Sand <b>Setting:</b> 33.0-50.0'	
		<b>SEAL MATERIAL</b>	
		<b>Type:</b> Bentonite <b>Setting:</b> 2.0-33.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>	
		<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site	
<b>Project No.:</b> 11174989.00002			
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
<b>Well Number:</b> DEC-042			

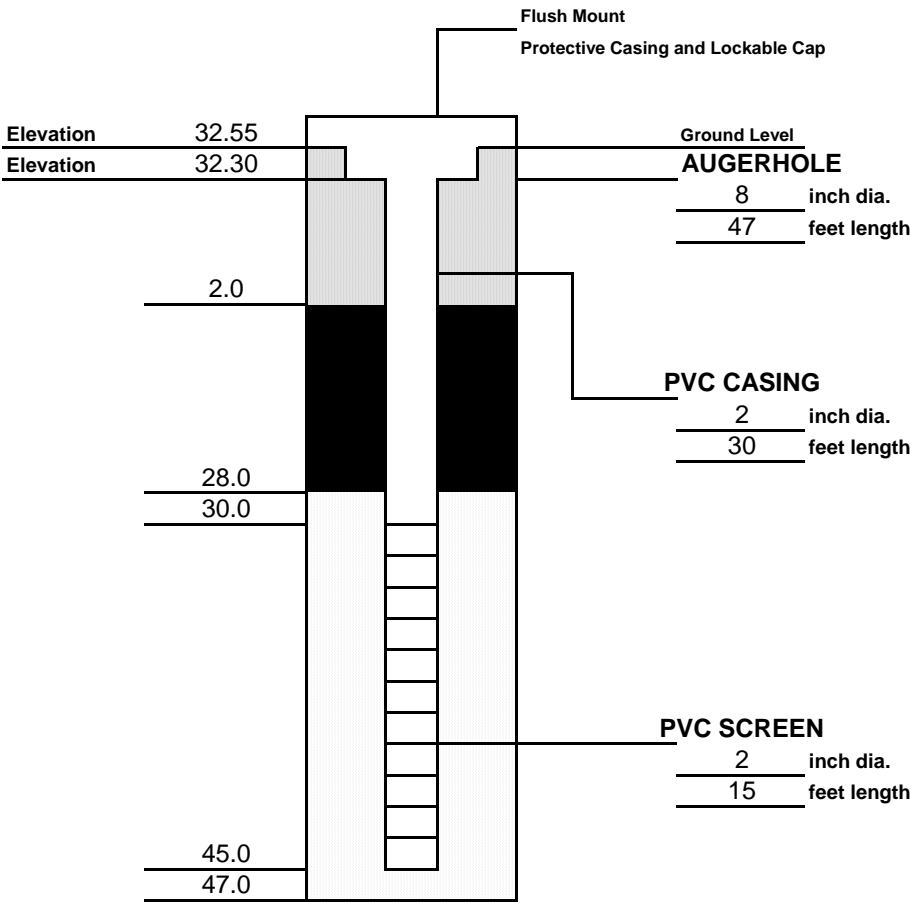
DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> Jeremy Meyers			
<b>Rig Make/Model:</b> CME-55 LC			
<b>Date:</b> 6/4/2008			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	
		<b>FILTER MATERIAL</b>	
		<b>Type:</b> #2 Sand <b>Setting:</b> 38.0-50.0'	
		<b>SEAL MATERIAL</b>	
		<b>Type:</b> Bentonite <b>Setting:</b> 2.0-38.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #ffffff; border: 1px solid black;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11174989.00002	
		<b>Well Number:</b> DEC-043	

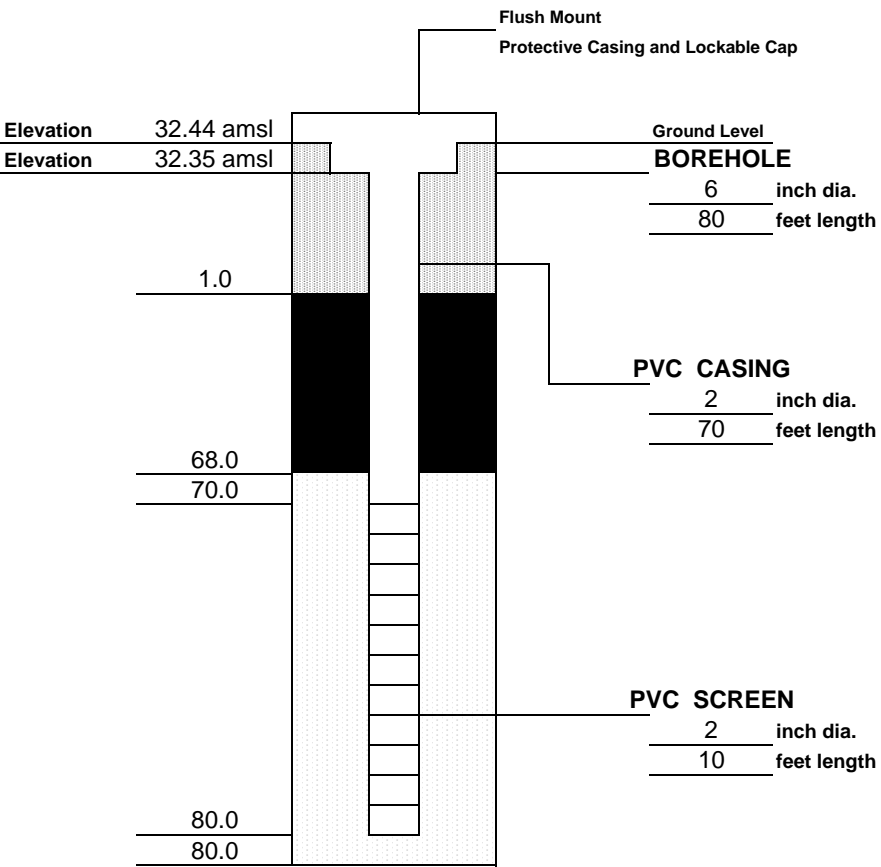
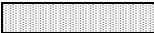




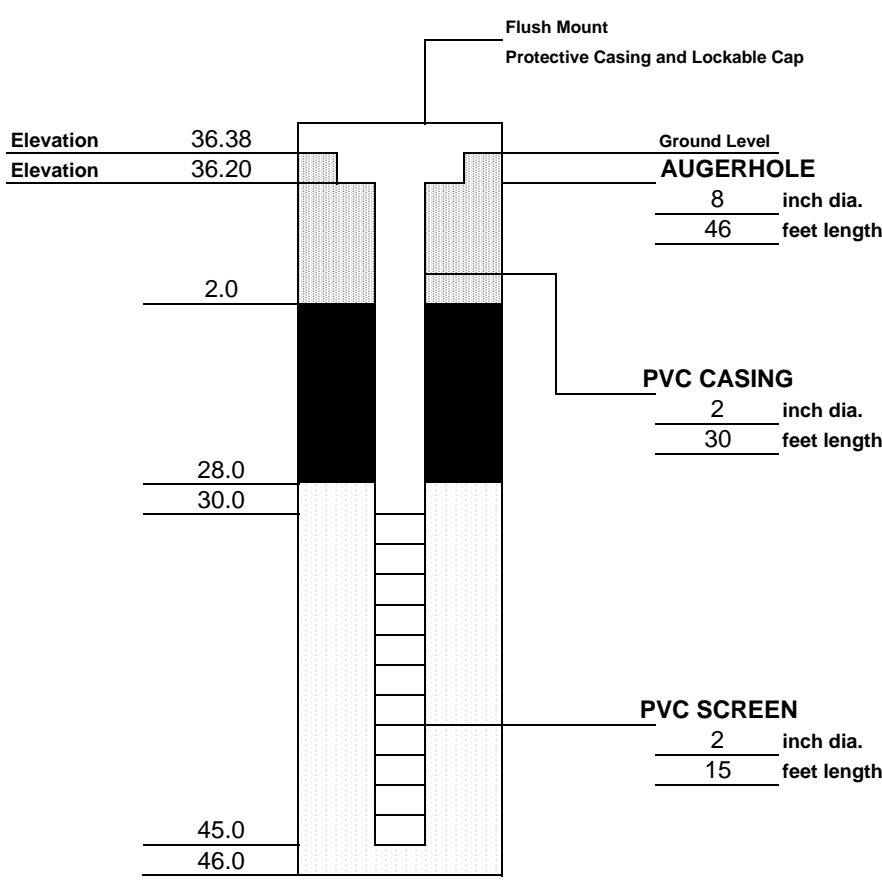
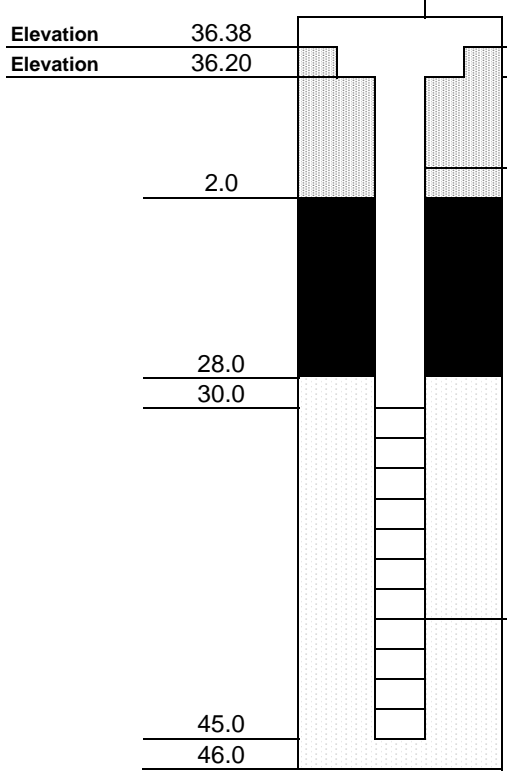
DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/11/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 72.0-85.0' <b>Type:</b> Benseal <b>Setting:</b> 2.0-72.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div> <span>Cement/Bentonite Grout</span> </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div> <span>Bentonite Seal</span> </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black;"></div> <span>Silica Sandpack</span> </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11176390.00002	
		<b>Well Number:</b> DEC-043D	

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> Jeremy Meyers			
<b>Rig Make/Model:</b> CME-55 LC			
<b>Date:</b> 6/20/2008			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
Surface: Steel grade box		Type: 2" PVC	
Monitor: 2" PVC		Slot Size: .020"	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #cccccc; border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #000000; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: #ffffff; border: 1px solid black;"></div> Silica Sandpack </div>	
Client: NYSDEC		Location : Meeker Avenue Site	
Project No.: 11174989.00002		Well Number: DEC-044	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 6/2/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 67.0-80.0' <b>Type:</b> Benseal <b>Setting:</b> 4.0-67.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11176390.00002 <b>Well Number:</b> DEC-044D	

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> S. McCabe			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> Shawn Miller			
<b>Rig Make/Model:</b> CME-85			
<b>Date:</b> 6/16/2008			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	
		<b>FILTER MATERIAL</b>	
		<b>Type:</b> #2 Sand <b>Setting:</b> 28.0-47.0'	
		<b>SEAL MATERIAL</b>	
		<b>Type:</b> Bentonite <b>Setting:</b> 2.0-28.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		Cement/Bentonite Grout	
		Bentonite Seal	
		Silica Sandpack	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site	
<b>Project No.:</b> 11174989.00002		<b>Well Number:</b> DEC-045	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	

DRILLING SUMMARY			
<b>Geologist:</b> S. McCabe		 <p>The diagram shows a cross-section of a well. At the top is a 'Flush Mount Protective Casing and Lockable Cap'. Below this is the 'BOREHOLE' with a diameter of 6 inches and a length of 80 feet. The borehole is filled with 'Cement/Bentonite Grout' (hatched pattern) from the surface down to 1.0 foot. From 1.0 foot to 68.0 feet, it is filled with 'Bentonite Seal' (solid black). From 68.0 feet to 70.0 feet, it is filled with 'Silica Sandpack' (dotted pattern). From 70.0 feet to 80.0 feet, it is filled with 'PVC CASING' (2 inch dia., 70 feet length). From 80.0 feet to 80.0 feet, it is filled with 'PVC SCREEN' (2 inch dia., 10 feet length). The bottom of the well is at 80.0 feet.</p>	
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> G. Rivera			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/19/2011			
<b>GEOLOGIC LOG</b>			
Depth(ft.)	Description	D E P T H  (FT)	
	See Boring Log for Lithologic Description.		
<b>WELL DESIGN</b>			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	<b>FILTER MATERIAL</b>
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>Type:</b> #1 Sand	<b>Setting:</b> 68.0-80.0'
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> Benseal	<b>Setting:</b> 1.0-68.0'
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Cement/Bentonite Grout         </div> <div style="text-align: center;">  Bentonite Seal         </div> <div style="text-align: center;">  Silica Sandpack         </div> </div>	
<b>Client:</b> NYSDEC	<b>Former Klink Cosmo Cleaners</b>	<b>Project No.:</b> 11176390.00002	
<b>URS Corporation</b>	<b>MONITORING WELL CONSTRUCTION DETAILS</b>	<b>Well Number:</b> DEC-045D	

DRILLING SUMMARY		 <p style="text-align: center;">Flush Mount Protective Casing and Lockable Cap</p> <p style="text-align: center;">Ground Level</p> <p style="text-align: center;"><b>AUGERHOLE</b> 8 inch dia. 46 feet length</p> <p style="text-align: center;"><b>PVC CASING</b> 2 inch dia. 30 feet length</p> <p style="text-align: center;"><b>PVC SCREEN</b> 2 inch dia. 15 feet length</p>		
<b>Geologist:</b> S. McCabe				
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.				
<b>Driller:</b> Shawn Miller				
<b>Rig Make/Model:</b> CME-85				
<b>Date:</b> 6/23/2008				
GEOLOGIC LOG		D E P T H  (FT)	 <p>Elevation 36.38 Elevation 36.20</p> <p>2.0</p> <p>28.0 30.0</p> <p>45.0 46.0</p>	
Depth(ft.)	Description			
	See Boring Log for Lithologic Description.			
WELL DESIGN				
CASING MATERIAL		SCREEN MATERIAL		FILTER MATERIAL
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC		<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"		<b>Type:</b> #2 Sand <b>Setting:</b> 28.0-46.0'
				<b>SEAL MATERIAL</b>
				<b>Type:</b> Bentonite <b>Setting:</b> 2.0-28.0'
COMMENTS:			LEGEND	
			Cement/Bentonite Grout	
			Bentonite Seal	
			Silica Sandpack	
<b>Client:</b> NYSDEC		<b>Location :</b> Meeker Avenue Site		<b>Project No.:</b> 11174989.00002
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> DEC-046

DRILLING SUMMARY							
<b>Geologist:</b> C. Friedman							
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.							
<b>Driller:</b> Jeremy Meyers							
<b>Rig Make/Model:</b> CME-55 LC							
<b>Date:</b> 6/30/2008							
GEOLOGIC LOG							
Depth(ft.)	Description						
	See Boring Log for Lithologic Description.						
WELL DESIGN							
<table border="1"> <thead> <tr> <th>CASING MATERIAL</th> <th>SCREEN MATERIAL</th> <th>FILTER MATERIAL</th> </tr> </thead> <tbody> <tr> <td> <b>Surface:</b> Steel grade box   <b>Monitor:</b> 2" PVC </td> <td> <b>Type:</b> 2" PVC   <b>Slot Size:</b> .020" </td> <td> <b>Type:</b> #2 Sand    <b>Setting:</b> 28.0-45.0'  <b>SEAL MATERIAL</b>  <b>Type:</b> Bentonite    <b>Setting:</b> 2.0-28.0' </td> </tr> </tbody> </table>		CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL	<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC	<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	<b>Type:</b> #2 Sand <b>Setting:</b> 28.0-45.0' <b>SEAL MATERIAL</b> <b>Type:</b> Bentonite <b>Setting:</b> 2.0-28.0'
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL					
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC	<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	<b>Type:</b> #2 Sand <b>Setting:</b> 28.0-45.0' <b>SEAL MATERIAL</b> <b>Type:</b> Bentonite <b>Setting:</b> 2.0-28.0'					
<b>COMMENTS:</b>							
<b>LEGEND</b> 							
<table border="1"> <thead> <tr> <th>Client: NYSDEC</th> <th>Location : Meeker Avenue Site</th> <th>Project No.: 11174989.00002</th> </tr> </thead> <tbody> <tr> <td>URS Corporation</td> <td>MONITORING WELL CONSTRUCTION DETAILS</td> <td>Well Number: DEC-047</td> </tr> </tbody> </table>		Client: NYSDEC	Location : Meeker Avenue Site	Project No.: 11174989.00002	URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: DEC-047
Client: NYSDEC	Location : Meeker Avenue Site	Project No.: 11174989.00002					
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: DEC-047					

DRILLING SUMMARY	
<b>Geologist:</b> C. Friedman	
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.	
<b>Driller:</b> Jeremy Meyers	
<b>Rig Make/Model:</b> CME-55 LC	
<b>Date:</b> 6/25/2008	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log for Lithologic Description.
WELL DESIGN	

DEPTH (FT)

**Flush Mount Protective Casing and Lockable Cap**

**Ground Level**

**AUGERHOLE**  
8 inch dia.  
43 feet length

**PVC CASING**  
2 inch dia.  
28 feet length

**PVC SCREEN**  
2 inch dia.  
15 feet length

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
<b>Surface:</b> Steel grade box  <b>Monitor:</b> 2" PVC	<b>Type:</b> 2" PVC  <b>Slot Size:</b> .020"	<b>Type:</b> #2 Sand <b>Setting:</b> 26.0-43.0' <hr/> <b>SEAL MATERIAL</b> <b>Type:</b> Bentonite <b>Setting:</b> 2.0-26.0'
<b>COMMENTS:</b>		<b>LEGEND</b> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
<b>Client:</b> NYSDEC	<b>Location :</b> Meeker Avenue Site	<b>Project No.:</b> 11174989.00002
<b>URS Corporation</b>	<b>MONITORING WELL CONSTRUCTION DETAILS</b>	<b>Well Number:</b> DEC-048



DRILLING SUMMARY	
<b>Geologist:</b> S. McCabe	
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.	
<b>Driller:</b> G. Rivera	
<b>Rig Make/Model:</b> AMSI 17-C Sonic	
<b>Date:</b> 5/20/2011	
GEOLOGIC LOG	
Depth(ft.)	Description
	See Boring Log for Lithologic Description.
<b>WELL DESIGN</b>	

DEPTH  
(FT)

**Flush Mount**  
Elevation 37.64 amsl

**Protective Casing and Lockable Cap**  
Elevation 37.32 amsl

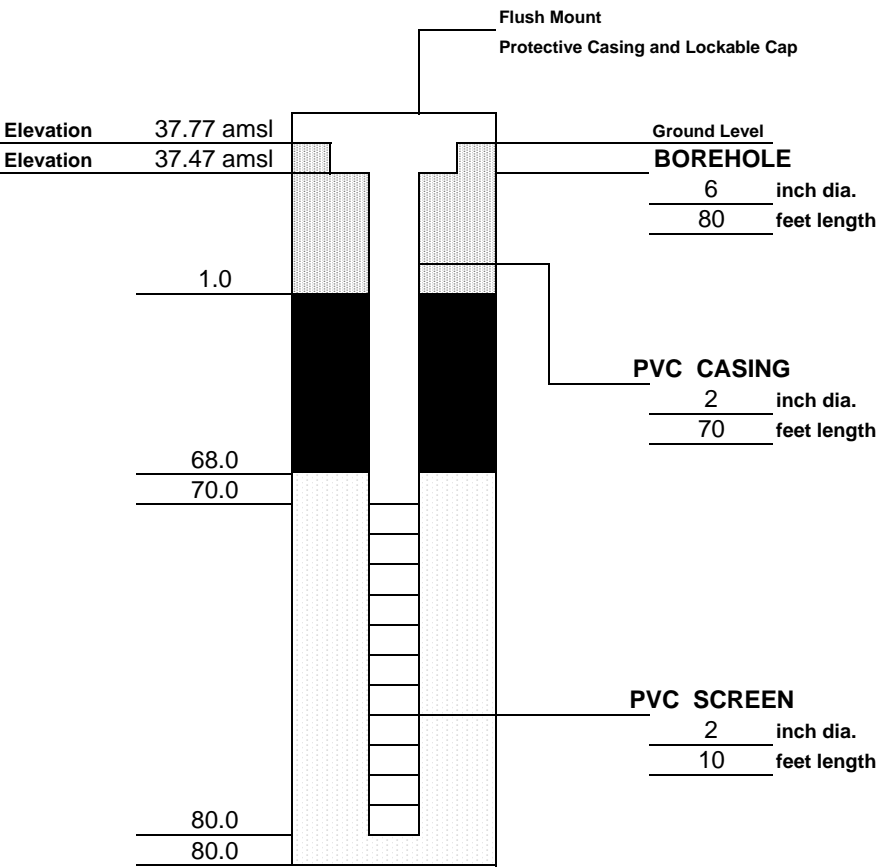
**Ground Level**

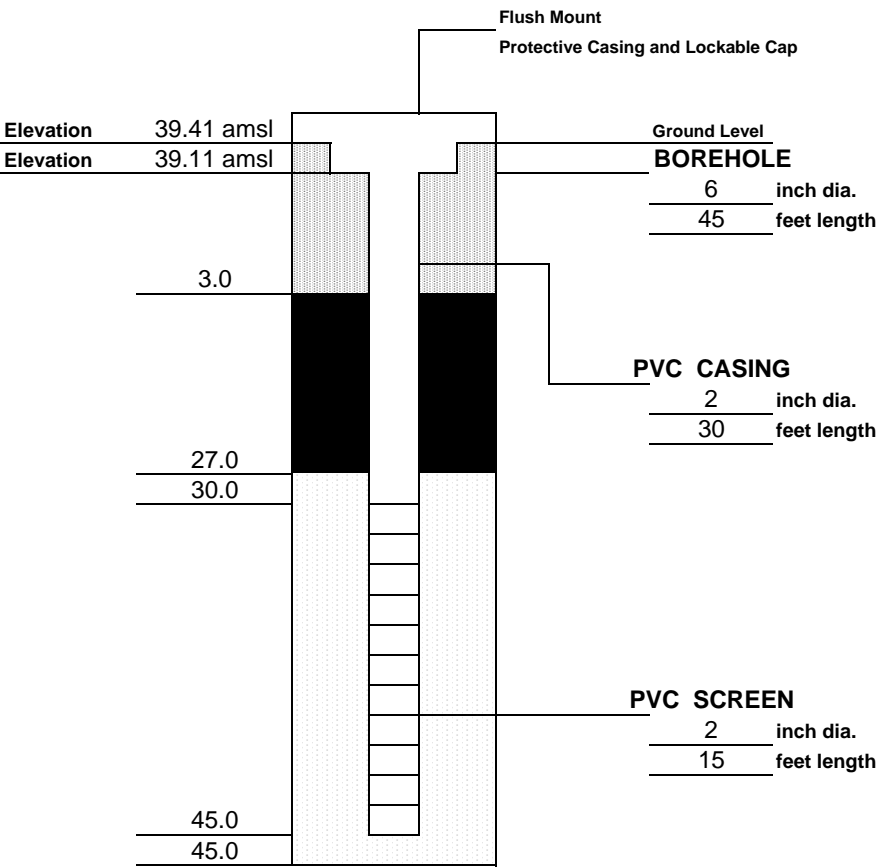
**BOREHOLE**  
6 inch dia.  
45 feet length

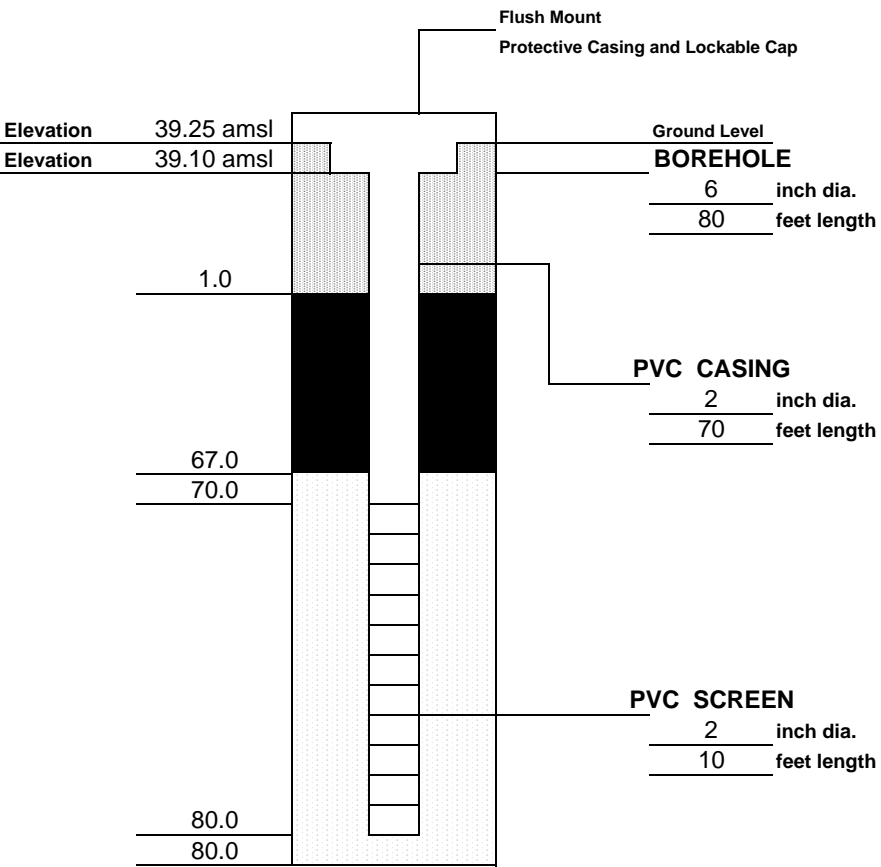
**PVC CASING**  
2 inch dia.  
30 feet length

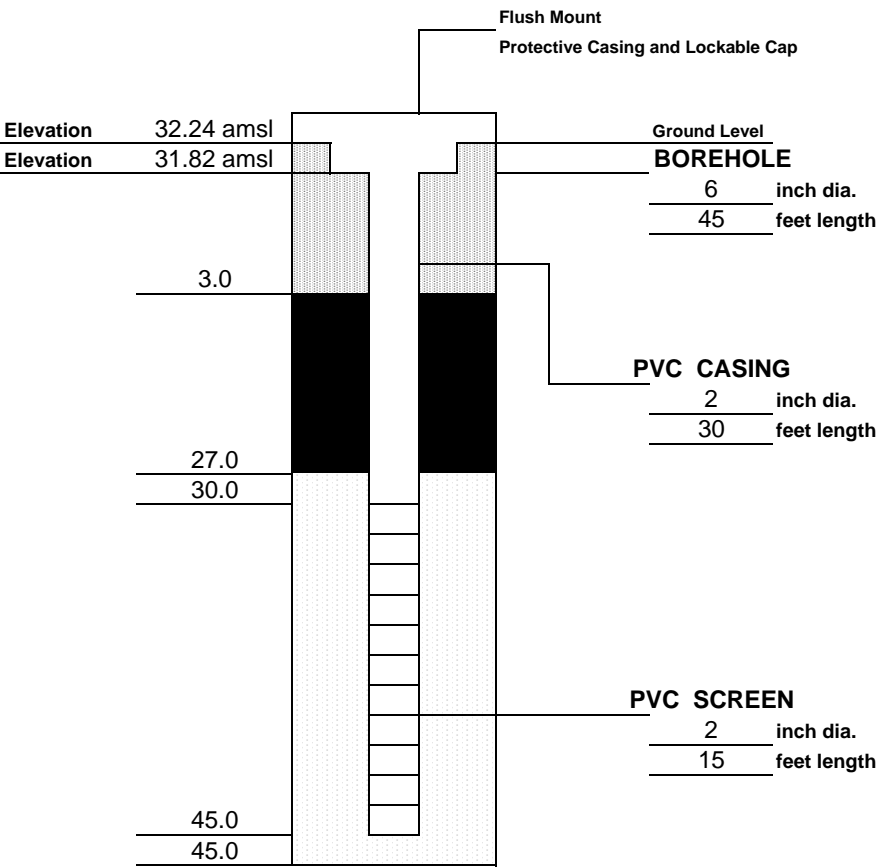
**PVC SCREEN**  
2 inch dia.  
15 feet length

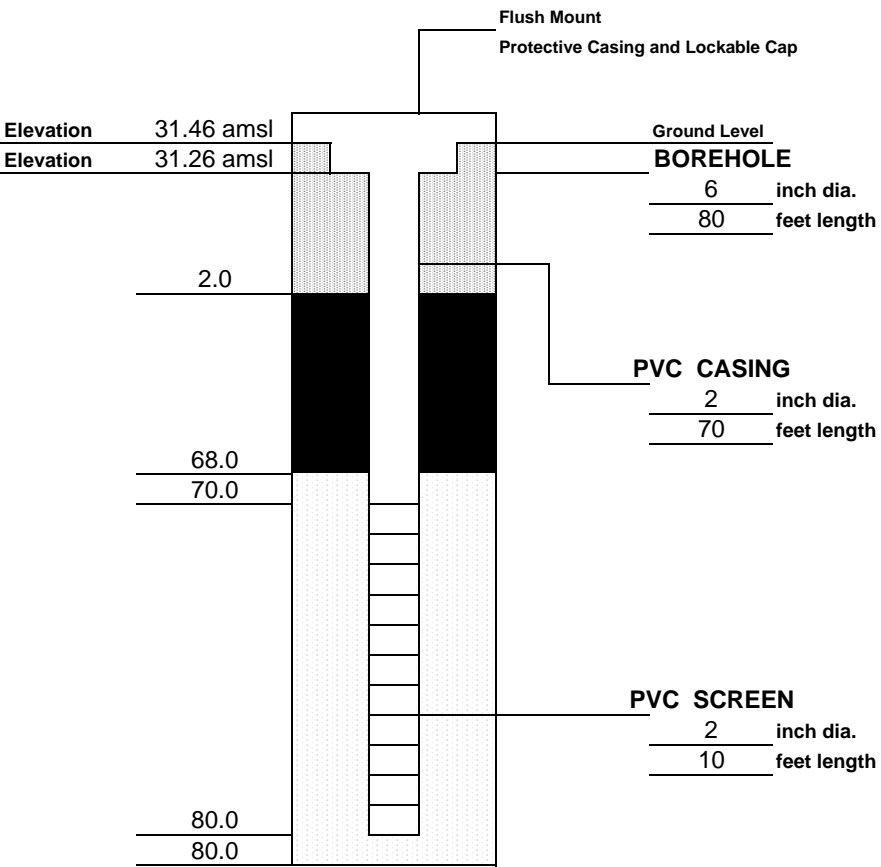
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
<b>Surface:</b> 8" Flush mount steel grade box  <b>Monitor:</b> 2" Schedule 40 PVC	<b>Type:</b> 2" Schedule 40 PVC  <b>Slot Size:</b> 0.010"	<b>Type:</b> #1 Sand <b>Setting:</b> 27.0-45.0' <b>SEAL MATERIAL</b> <b>Type:</b> Benseal <b>Setting:</b> 1.0-27.0'
<b>COMMENTS:</b>		<b>LEGEND</b> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>
<b>Client:</b> NYSDEC	<b>Former Klink Cosmo Cleaners</b>	<b>Project No.:</b> 11176390.00002
<b>URS Corporation</b>	<b>MONITORING WELL CONSTRUCTION DETAILS</b>	<b>Well Number:</b> DEC-064

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/13/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></div> Cement/Bentonite Grout </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black;"></div> Bentonite Seal </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11176390.00002	
		<b>Well Number:</b> DEC-064D	

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/25/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 27.0-45.0' <b>Type:</b> Benseal <b>Setting:</b> 3.0-27.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11176390.00002	
		<b>Well Number:</b> DEC-065	

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/25/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box  <b>Monitor:</b> 2" Schedule 40 PVC		<b>Type:</b> 2" Schedule 40 PVC  <b>Slot Size:</b> 0.010"	
		<b>FILTER MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 67.0-80.0'  <b>SEAL MATERIAL</b>  <b>Type:</b> Benseal <b>Setting:</b> 1.0-67.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Cement/Bentonite Grout         </div> <div style="text-align: center;">  Bentonite Seal         </div> <div style="text-align: center;">  Silica Sandpack         </div> </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11176390.00002	
		<b>Well Number:</b> DEC-065D	

DRILLING SUMMARY		 <p style="text-align: center;">D E P T H  (FT)</p>	
<b>Geologist:</b> C. Friedman			
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.			
<b>Driller:</b> J. Meyers			
<b>Rig Make/Model:</b> AMSI 17-C Sonic			
<b>Date:</b> 5/23/2011			
GEOLOGIC LOG			
Depth(ft.)	Description		
	See Boring Log for Lithologic Description.		
WELL DESIGN			
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box	<b>Type:</b> 2" Schedule 40 PVC	<b>FILTER MATERIAL</b>	
<b>Monitor:</b> 2" Schedule 40 PVC	<b>Slot Size:</b> 0.010"	<b>SEAL MATERIAL</b>	
		<b>Type:</b> #1 Sand <b>Setting:</b> 27.0-45.0' <b>Type:</b> Benseal <b>Setting:</b> 3.0-27.0'	
<b>COMMENTS:</b>		<b>LEGEND</b>	
		<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div> Silica Sandpack </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>	
		<b>Project No.:</b> 11176390.00002	
		<b>Well Number:</b> DEC-066	

DRILLING SUMMARY		 <p style="text-align: right; margin-right: 50px;">Flush Mount Protective Casing and Lockable Cap</p> <p style="text-align: right;">Ground Level</p> <p><b>BOREHOLE</b> 6 inch dia. 80 feet length</p> <p><b>PVC CASING</b> 2 inch dia. 70 feet length</p> <p><b>PVC SCREEN</b> 2 inch dia. 10 feet length</p>			
<b>Geologist:</b> C. Friedman					
<b>Drilling Company:</b> Aquifer Drilling and Testing, Inc.					
<b>Driller:</b> J. Meyers					
<b>Rig Make/Model:</b> AMSI 17-C Sonic					
<b>Date:</b> 5/23/2011					
GEOLOGIC LOG		D E P T H  (FT)			
Depth(ft.)	Description				
	See Boring Log for Lithologic Description.				
WELL DESIGN					
<b>CASING MATERIAL</b>		<b>SCREEN MATERIAL</b>		<b>FILTER MATERIAL</b>	
<b>Surface:</b> 8" Flush mount steel grade box  <b>Monitor:</b> 2" Schedule 40 PVC		<b>Type:</b> 2" Schedule 40 PVC  <b>Slot Size:</b> 0.010"		<b>Type:</b> #1 Sand <b>Setting:</b> 68.0-80.0'	
				<b>SEAL MATERIAL</b>	
				<b>Type:</b> Benseal <b>Setting:</b> 2.0-68.0'	
<b>COMMENTS:</b>				<b>LEGEND</b>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>           Cement/Bentonite Grout         </div>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>           Bentonite Seal         </div>	
				<div style="display: flex; align-items: center;"> <div style="width: 30px; height: 15px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>           Silica Sandpack         </div>	
<b>Client:</b> NYSDEC		<b>Former Klink Cosmo Cleaners</b>		<b>Project No.:</b> 11176390.00002	
<b>URS Corporation</b>		<b>MONITORING WELL CONSTRUCTION DETAILS</b>		<b>Well Number:</b> DEC-066D	

## **APPENDIX H**

### **MONITORING WELL DEVELOPMENT LOGS**

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-04

PROJECT NO.: 11174989.00002

STAFF: S.M.

DATE(S): 6/20/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>51.00</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>34.25</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>16.8</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.8</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>8.54</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>50</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	1	20	25	30	35	45	50			
pH	6.32	6.38	7.06	7.06	7.06	7.06	7.06			
SPEC. COND. (mS)	2350	2440	2330	2300	2270	2240	2210			
TURBIDITY (NTU)	>1000	>1000	522	390	214	56	27			
TEMPERATURE (°C)	18.9	18.1	18	18.1	18	17.9	17.9			

COMMENTS:



# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-06

PROJECT NO.: 11174989.00002 Pg 1 of 2

STAFF: S.M.

DATE(S): 5/29/07, 6/6/07, and 6/20/07

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>32.35</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>24.26</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>8.1</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.4</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>4.13</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>52</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	5	10	15	20	25	30	32	34	36	38
pH	6.86	6.36	6.57	6.80	6.74	6.71	6.61	6.67	6.59	6.58	6.56
SPEC. COND. (umhos)	880	830	920	960	970	950	920	930	950	950	960
TURBIDITY (NTU)	>1000	>1000	>1000	>1000	>1000	>1000	>1000	377	180	300	270
TEMPERATURE (°C)	24.9	19.3	18.4	20.0	19.4	20.0	19.1	18.5	18.7	18.6	18.5

COMMENTS:

Well purged to dryness, recharge 1' every 2-minutes, let sit 5-minutes and again purged to dryness.

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-06

PROJECT NO.: 11174989.00002 Pg 2 of 2

STAFF: S.M.

DATE(S): 5/29/07, 6/6/07, and 6/20/07

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>32.35</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>24.26</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>8.1</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.4</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>4.13</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>52</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	40	45	48	50	52						
pH	6.79	6.76	6.79	6.81	6.83						
SPEC. COND. (umhos)	940	910	900	920	910						
TURBIDITY (NTU)	157	93	68	72	41						
TEMPERATURE (°C)	16.9	16.9	16.8	16.8	16.7						

## COMMENTS:

Well purged to dryness, recharge 1' every 2-minutes, let sit 5-minutes and again purged to dryness.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-006D

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 6/3/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>57.30</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>43.98</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>13.32</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.26</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>110</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	6.27	5.96	6.00	6.07	6.11	6.13	6.11	6.18	---	6.21	6.16
SPEC. COND. (mS/cm)	1.030	1.040	1.070	1.100	1.120	1.130	1.130	1.140	---	1.150	1.150
TURBIDITY (NTU)	>1000	>1000	>1000	732	134	102	84	141	---	>1000	102
TEMPERATURE (°C)	20.4	18.0	17.2	17.3	17.1	17.1	17.0	17.0	---	17.2	16.9

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.  
 Pump stopped around 45 gallons, had to restart.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-006D

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 6/3/08

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>57.30</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>43.98</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>13.32</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.26</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>110</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	6.17	6.18	6.16	6.16	6.15	6.15	6.17	6.17	6.18	6.17	6.17
SPEC. COND. (mS/cm)	1.160	1.150	1.170	1.170	1.170	1.160	1.170	1.170	1.180	1.170	1.180
TURBIDITY (NTU)	63	41	31	24	23	30	21	19	18	16	11
TEMPERATURE (°C)	17.0	16.9	16.9	16.9	16.9	16.9	16.9	17.0	17.0	17.0	16.9

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.  
 Pump stopped around 45 gallons, had to restart.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-006DD

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/23/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>93.32</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>45.34</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>47.98</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.16</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	6.56	6.48	6.45	6.41	6.40	6.39	6.35	6.35	6.35	6.35	6.33
SPEC. COND. (mS)	1.07	1.12	1.12	1.12	1.11	1.11	1.11	1.11	1.11	1.12	1.12
TEMPERATURE (°C)	16.6	16.0	16.1	16.0	16.0	15.9	15.9	15.9	15.9	15.8	15.8
TURBIDITY (NTU)	>1000	84.8	72.3	63.5	57.5	45.8	60.5	47.6	45.7	43.9	42.7

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-007

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 11/29/2008

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>56.01</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>39.65</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>16.36</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.78</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>85</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	6.62	6.53	6.54	6.56	6.56	6.57	6.58	6.57	6.59	6.60	6.60
SPEC. COND. (mS/cm)	1.410	1.350	1.370	1.350	1.360	1.340	1.350	1.360	1.350	1.350	1.340
TURBIDITY (NTU)	>1000	>1000	>1000	>1000	210	136	118	114	105	97	83
TEMPERATURE (°C)	14.5	15.8	16.2	16.2	16.3	16.0	16.2	16.3	16.2	16.2	16.3

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-007

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 11/29/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>56.01</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>39.65</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>16.36</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.78</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>                    </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>85</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85					
pH	6.61	6.61	6.62	6.61	6.62	6.61					
SPEC. COND. (mS/cm)	1.340	1.340	1.340	1.330	1.340	1.340					
TURBIDITY (NTU)	108	115	87	80	61	47					
TEMPERATURE (°C)	15.8	16.0	16.0	16.1	16.0	16.2					

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-007D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/20/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>90.43</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>39.87</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>50.56</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.60</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	8.15	6.40	6.37	6.35	6.38	6.39	6.39	6.42	6.42	6.42	6.38
SPEC. COND. (mS)	0.11	1.32	1.32	1.32	1.34	1.31	1.35	1.31	1.33	1.33	1.31
TEMPERATURE (°C)	19.2	17.2	16.8	16.3	16.2	16.4	16.5	17.1	17.0	16.8	16.6
TURBIDITY (NTU)	37.4	56.6	57.6	37.8	36.6	32.7	26.5	22.1	19.2	17.7	18.5

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.



# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-08

PROJECT NO.: 11174989.00002

STAFF: A.L.

DATE(S): 6/14/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>47.20</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>36.58</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>10.6</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.8</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>5.42</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>55</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	15	30	35	40	45	50	55			
pH	5.87	5.97	5.96	5.96	5.97	6.97	5.96			
SPEC. COND. (mS)	1610	1590	1580	1580	1560	1560	1550			
TURBIDITY (NTU)	300	290	120	120	160	60	43			
TEMPERATURE (°C)	18.2	17.8	18.1	18.1	17.6	17.7	17.9			

COMMENTS:

Note: Slight petroleum odor and sheen on water surface.

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-09

PROJECT NO.: 11174989.00002

STAFF: S.M.

DATE(S): 6/7/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>48.85</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>36.54</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>12.3</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.1</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>6.28</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>40</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	0	5	10	15	20	25	30	35	40	
pH	7.21	6.73	6.74	6.72	6.57	6.58	6.59	6.56	6.55	
SPEC. COND. (umhos)	1530	1510	1500	1500	1500	1500	1500	1500	1500	
TURBIDITY (NTU)	>1000	>1000	>1000	2260	95	50	50	38	35	
TEMPERATURE (°C)	19.8	18.7	18.3	18.5	18.5	18.4	18.3	18.6	18.4	

## COMMENTS:

Slight petroleum odor and sheen on water surface.

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-10

PROJECT NO.: 11174989.00002

STAFF: S.M.

DATE(S): 5/30/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>47.70</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>36.42</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>11.3</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.9</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>5.75</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>50</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	5	10	15	20	25	30	35	40	45	50
pH	5.70	5.90	5.91	5.96	6.00	6.05	6.06	6.08	6.08	6.11	6.13
SPEC. COND. (umhos)	990	1280	1460	1550	1600	1630	1640	1660	1680	1690	1700
TURBIDITY (NTU)	>1000	>1000	>1000	450	300	160	100	80	55	50	47
TEMPERATURE (°C)	19.5	18.5	18.3	18.1	18.1	18.0	18.0	18.0	18.0	17.8	17.7

COMMENTS:

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-11

PROJECT NO.: 11174989.00002 Pg 1 of 2

STAFF: S.M.

DATE(S): 5/31/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>47.60</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>35.27</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>12.3</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.1</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>6.29</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>85</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	5	10	15	20	25	30	35	40	45	50
pH	7.59	6.43	6.40	6.24	6.27	6.25	6.16	6.21	6.16	6.26	6.12
SPEC. COND. (umhos)	1470	1940	1840	2020	2030	1890	1910	1880	1880	2090	2010
TURBIDITY (NTU)	>1000	>1000	>1000	>1000	>1000	750	541	368	255	221	137
TEMPERATURE (°C)	19.8	18.2	18.1	17.9	18	18.1	18.3	17.9	17.9	17.7	17.8
DATE											

COMMENTS:

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-11

PROJECT NO.: 11174989.00002 Pg 2 of 2

STAFF: S.M.

DATE(S): 6/5/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>47.60</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>35.27</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>12.3</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.1</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>6.29</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>85</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	55	60	65	70	75	80	85			
pH	6.21	6.17	6.18	6.17	6.16	6.18	6.17			
SPEC. COND. (umhos)	1760	1760	1770	1770	1760	1760	1770			
TURBIDITY (NTU)	100	44	41	21	14	11	9			
TEMPERATURE (°C)	18.9	18	17.9	18.0	17.7	17.8	17.9			

COMMENTS:

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-12

PROJECT NO.: 11174989.00002

STAFF: S.M.

DATE(S): 6/4/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>49.50</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>35.10</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>14.4</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.4</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>7.34</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>45</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	5	10	15	20	25	30	35	40	45	
pH	6.85	6.34	6.40	6.39	6.39	6.38	6.40	6.39	6.38	6.40	
SPEC. COND. (umhos)	720	910	940	950	970	970	960	960	960	970	
TURBIDITY (NTU)	>1000	>1000	250	160	100	55	50	40	33	27	
TEMPERATURE (°C)	18.1	17.1	16.9	16.8	16.8	16.8	16.8	16.8	16.8	16.8	

COMMENTS:

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-013

PROJECT NO.: 11174989.00002 Page: 1 of 1

STAFF: Ryan Wilson

DATE(S): 11/26/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>47.20</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>35.50</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>11.70</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.99</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>55</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	10	15	20	25	30	35	40	45	50	55	
pH	7.10	6.99	6.97	6.94	6.96	6.96	6.96	6.96	6.94	6.91	
SPEC. COND. (mS/cm)	0.781	0.610	0.600	0.610	0.600	0.610	0.620	0.610	0.640	0.650	
TURBIDITY (NTU)	>1000	>1000	179	44.3	34.7	29.7	13.2	91.4	23.6	21.5	
TEMPERATURE (°C)	14.3	15.1	15.2	15.3	15.1	15.2	14.9	15.0	15.1	15.1	

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.  
 Initial 10 gallons removed without taking water quality readings due to high amounts of sand in development water.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-013D

PROJECT NO.: 11176390.00002 Page: 1 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>85.64</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.19</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>49.45</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.41</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	5	10	15	20	25	30	35	40	45	50
pH	6.51	6.46	6.40	6.40	6.38	6.39	6.37	6.37	6.45	6.37	6.43
SPEC. COND. (mS)	0.82	0.71	0.68	0.71	0.72	0.72	0.77	0.80	0.82	0.85	0.88
TEMPERATURE (°C)	19.6	17.6	17.5	17.2	17.3	17.5	17.0	17.1	17.2	17.2	17.2
TURBIDITY (NTU)	290	37.0	22.0	15.0	15.0	17.0	16.0	16.0	22.0	32.0	17.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.



# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-013D

PROJECT NO.: 11176390.00002 Page: 2 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>85.64</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.19</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>49.45</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.41</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	55	60	65	70	75	80	85	90	95	100	105
pH	6.39	6.45	6.41	6.44	6.40	6.40	6.39	6.43	6.37	6.30	6.31
SPEC. COND. (mS)	0.87	0.89	0.90	0.92	0.94	0.95	0.95	0.95	0.97	0.98	0.98
TEMPERATURE (°C)	17.1	17.2	17.2	17.3	17.3	17.2	17.1	17.2	17.4	17.5	17.4
TURBIDITY (NTU)	17.0	13.0	15.0	12	20	10	13	13	10	11.0	9.9

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-013D

PROJECT NO.: 11176390.00002 Page: 3 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>85.64</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.19</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>49.45</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.41</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	110										
pH	6.33										
SPEC. COND. (mS)	0.98										
TEMPERATURE (°C)	17.5										
TURBIDITY (NTU)	9.8										

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-14

PROJECT NO.: 11174989.00002

STAFF: S.M.

DATE(S): 6/8/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>40.55</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>30.10</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>10.5</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.8</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>5.33</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>22</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	5	7	10	13	15	16	17	18	20	22
pH	7.32	6.94	7.11	7.08	7.08	7.09	6.91	6.62	6.65	6.73	6.82
SPEC. COND. (umhos)	960	1330	770	760	810	790	880	850	850	890	890
TURBIDITY (NTU)	>1000	>1000	95	>1000	>1000	>1000	>1000	>1000	>1000	>1000	>1000
TEMPERATURE (°C)	18.7	18.1	18.1	17.9	18.7	17.9	18.2	17.6	17.4	17.5	17.3

COMMENTS:

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-014D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/19/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>79.73</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>33.18</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>46.55</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>7.91</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	7.26	7.01	6.90	6.91	6.90	6.88	6.62	6.69	6.95	6.84	6.72
SPEC. COND. (mS)	0.35	0.34	0.41	0.48	0.52	0.61	0.68	0.72	0.75	0.79	0.80
TEMPERATURE (°C)	19.7	17.9	17.9	17.5	18.1	17.5	19.6	17.8	18.0	18.0	18.0
TURBIDITY (NTU)	>1000	440	149	91.8	56.2	38.4	29.7	80.5	49.9	29.5	21.5

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-014R

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/19/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>44.25</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>33.14</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>11.11</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>1.89</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	7.50	6.46	6.31	6.29	6.31	6.33	6.42	6.44	6.44	6.45	6.45
SPEC. COND. (mS)	0.24	0.75	1.01	1.06	1.11	1.12	1.15	1.16	1.19	1.21	1.23
TEMPERATURE (°C)	18.8	18.8	19.3	19.3	19.2	18.8	18.8	18.9	18.5	18.5	18.3
TURBIDITY (NTU)	>1000	>1000	977	>1000	580	356	254	145	101	75.1	67.8

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-15

PROJECT NO.: 11174989.00002 Pg 1 of 2

STAFF: S.M.

DATE(S): 5/30/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>43.65</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>34.60</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>9.1</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.5</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>4.62</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>105</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	5	10	15	20	25	30	35	40	45	50
pH	6.96	6.94	6.86	6.85	6.83	6.88	6.90	6.83	6.77	6.77	6.78
SPEC. COND. (umhos)	1220	1380	1820	1880	1860	1860	1940	1930	1950	1970	2020
TURBIDITY (NTU)	>1000	>1000	>1000	>1000	>1000	>1000	>1000	>1000	>1000	>1000	871
TEMPERATURE (°C)	19.8	17.4	17.2	17.5	17.3	17.1	17.3	17.4	17.2	17.3	17.3

COMMENTS:

# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-15

PROJECT NO.: 11174989.00002 Pg 2 of 2

STAFF: S.M.

DATE(S): 5/30/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>43.65</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>34.60</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>9.1</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.5</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>4.62</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>105</u>	8"	2.60
OR $V=0.0408 \times (\text{CASING DIAMETER})^2$				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	55	60	65	70	75	80	85	90	95	100	105
pH	6.79	6.79	6.78	6.79	6.78	6.79	6.77	6.79	6.78	6.77	6.77
SPEC. COND. (umhos)	1970	1980	2010	1980	1990	1980	1970	1990	1970	1980	1980
TURBIDITY (NTU)	697	613	543	356	204	131	69	53	54	49	41
TEMPERATURE (°C)	17.3	17.3	17.2	17.1	17.0	17.0	17.3	17.1	17.0	17.2	17.1

COMMENTS:

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-015D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/18/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>81.95</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.51</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>45.44</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>7.72</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	7.57	6.83	6.67	6.65	6.60	6.59	6.62	6.62	6.57	6.59	6.60
SPEC. COND. (mS)	0.53	0.63	0.68	0.70	0.73	0.74	0.76	0.78	0.80	0.82	0.85
TEMPERATURE (°C)	16.8	16.7	16.6	16.5	16.4	16.6	16.5	16.5	16.5	16.6	17.0
TURBIDITY (NTU)	>1000	65.0	45.0	29.7	22.6	15.5	28.2	40.3	16.8	14.4	13.2

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.



# WELL DEVELOPMENT LOG

**URS Corporation**

PROJECT TITLE: Meeker Avenue Plume Track-Down WELL NO.: DEC-22

PROJECT NO.: 11174989.00002

STAFF: S.M.

DATE(S): 6/20/2007

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>38.85</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>29.38</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>9.5</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.6</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>4.83</u>	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	<u>40</u>	8"	2.60
OR V=0.0408 x (CASING DIAMETER) <sup>2</sup>				

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	0	5	7	10	20	25	30	35	40	
pH	6.36	6.35	6.34	6.49	6.39	6.38	6.39	6.45	6.47	
SPEC. COND. (umhos)	1550	1520	1500	1540	1410	1470	1430	1460	1450	
TURBIDITY (NTU)	>1000	>1000	>1000	>1000	450	91	43	19	15	
TEMPERATURE (°C)	21.8	20.1	18.9	19.6	18.6	19.5	19.3	19.7	18.8	

COMMENTS:

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-022D

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 11/28/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>60.40</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>48.02</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>12.38</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.10</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>85</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	6.23	6.54	6.62	6.69	6.75	6.78	6.82	6.82	6.84	6.85	6.85
SPEC. COND. (mS/cm)	1.480	1.400	1.400	1.390	1.360	1.360	1.340	1.350	1.350	1.340	1.340
TURBIDITY (NTU)	>1000	>1000	>1000	934	257	268	185	163	127	114	121
TEMPERATURE (°C)	16.4	14.7	15.5	15.8	15.9	15.9	15.7	15.7	15.8	15.3	15.4

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-022D

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 11/28/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>60.40</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>48.02</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>12.38</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.10</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u></u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>85</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85					
pH	6.90	6.93	6.90	6.91	6.92	6.91					
SPEC. COND. (mS/cm)	1.310	1.310	1.340	1.330	1.320	1.330					
TURBIDITY (NTU)	56	38	45	31	39	34					
TEMPERATURE (°C)	16.4	14.7	15.5	15.8	15.9	15.9					

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-027

PROJECT NO.: 11174989.00002 Page: 1 of 1

STAFF: Pete Mulrean

DATE(S): 12/7/2008

	=		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>49.88</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>26.92</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>22.96</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>3.90</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>                    </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>55</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	15	20	25	30	35	40	45	50	55		
pH	6.90	6.98	7.31	7.23	7.14	7.13	7.42	7.46	7.42		
SPEC. COND. (mS/cm)	1.444	1.360	1.400	1.431	1.427	1.414	1.448	1.450	1.462		
TURBIDITY (NTU)	631	344	93	78	93	121	68	52	41		
TEMPERATURE (°C)	8.7	10.8	7.3	9.9	10.5	10.1	10.5	9.5	11.6		

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.

All development water containerized in 55-gallon drum for off-site disposal.

Initial 15 gallons removed without taking water quality readings due to high amounts of sand in development water.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-028

PROJECT NO.: 11174989.00002 Page: 1 of 1

STAFF: Ryan Wilson

DATE(S): 11/29/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>50.30</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>36.50</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>13.80</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.35</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>55</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	6.84	6.80	6.81	6.81	6.79	6.80	6.80	6.79	6.80	6.79	6.81
SPEC. COND. (mS/cm)	1.380	1.390	1.360	1.380	1.380	1.380	1.370	1.360	1.360	1.360	1.360
TURBIDITY (NTU)	88	64	46	39	44	32	27	14	6	12	12
TEMPERATURE (°C)	15.2	16.0	16.0	16.4	16.5	16.5	16.5	16.7	16.6	16.7	16.5

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-029

PROJECT NO.: 11174989.00002 Page: 1 of 1

STAFF: Scott McCabe

DATE(S): 11/28/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>50.50</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>22.95</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>27.55</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>4.68</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>55</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	7.17	6.80	6.49	6.48	6.41	6.42	6.42	6.41	6.40	6.42	6.41
SPEC. COND. (mS/cm)	0.560	0.510	0.660	0.760	0.840	0.910	0.930	0.950	0.970	0.950	0.970
TURBIDITY (NTU)	>1000	>1000	>1000	732	262	187	166	83	61	37	26
TEMPERATURE (°C)	14.4	15.4	15.8	15.9	15.8	15.7	15.7	15.8	15.6	15.4	15.7

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-029D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/17/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>85.11</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.07</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>49.04</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.34</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	6.83	6.47	6.48	6.52	6.57	6.31	6.42	6.44	6.58	6.62	6.52
SPEC. COND. (mS)	0.75	1.25	1.37	1.40	1.42	1.41	1.43	1.43	1.42	1.46	1.44
TEMPERATURE (°C)	16.1	16.0	15.9	16.0	16.2	16.1	16.1	16.3	16.3	16.8	16.8
TURBIDITY (NTU)	50.0	18.0	7.4	8.8	5.2	5.6	3.4	1.7	2.1	3.4	2.5

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-030

PROJECT NO.: 11174989.00002 Page: 1 of 1

STAFF: Ryan Wilson

DATE(S): 11/29/2008

	=		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>39.90</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>32.11</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>7.79</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.32</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u></u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>49</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	7	10	13	16	19	21	26	29	34	39	44
pH	7.00	7.00	6.90	6.90	6.77	6.76	6.87	6.61	6.53	6.53	6.66
SPEC. COND. (mS/cm)	1.400	1.000	0.980	0.980	0.980	1.050	1.250	1.170	1.320	1.270	1.270
TURBIDITY (NTU)	>1000	>1000	>1000	>1000	>1000	247	220	261	296	194	194
TEMPERATURE (°C)	14.4	15.3	15.2	14.5	15.0	15.0	14.5	15.1	15.0	14.9	15.0

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.  
 Initial 7 gallons removed without taking water quality readings due to high amounts of sand in development water.



# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-030

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Ryan Wilson

DATE(S): 11/29/2008

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>39.90</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>32.11</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>7.79</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.32</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>49</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	49										
pH	6.72										
SPEC. COND. (mS/cm)	1.250										
TURBIDITY (NTU)	292										
TEMPERATURE (°C)	14.2										

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.  
Initial 7 gallons removed without taking water quality readings due to high amounts of sand in development water.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-030D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/17/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>79.85</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>34.37</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>45.48</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>7.73</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	6.33	6.50	6.58	6.50	6.44	6.47	6.40	6.34	6.35	6.43	6.35
SPEC. COND. (mS)	1.05	0.95	0.90	0.99	1.00	1.04	1.07	1.08	1.09	1.12	1.14
TEMPERATURE (°C)	15.9	15.7	15.6	15.6	15.6	15.6	15.6	15.5	15.5	15.5	15.5
TURBIDITY (NTU)	>1000	55.0	22.0	19.0	16.0	14.0	12.0	12.0	9.2	8.5	7.7

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-031

PROJECT NO.: 11174989.00002 Page: 1 of 1

STAFF: Ryan Wilson

DATE(S): 11/26/2008

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.50</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>30.87</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>13.63</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.32</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>55</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	10	15	20	25	30	35	40	45	50	55	
pH	6.65	6.57	6.45	6.46	6.46	6.46	6.45	6.47	6.45	6.47	
SPEC. COND. (mS/cm)	0.520	0.620	0.590	0.710	0.700	0.710	0.710	0.710	0.710	0.710	
TURBIDITY (NTU)	>1000	>1000	590	91	113	21	12	10	10	6	
TEMPERATURE (°C)	17.0	17.2	17.3	17.3	17.5	17.4	17.5	17.6	17.5	17.6	

### COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.

All development water containerized in 55-gallon drum for off-site disposal.

Initial 10 gallons removed without taking water quality readings due to high amounts of sand in development water.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-031D

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 6/23/2008

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>79.10</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>29.98</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>49.12</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>8.35</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	5.91	5.92	5.94	5.95	5.97	5.96	5.97	5.98	5.98	5.98	6.02
SPEC. COND. (mS/cm)	1.020	1.220	1.290	1.320	1.330	1.350	1.360	1.370	1.380	1.380	1.390
TURBIDITY (NTU)	>1000	>1000	183	165	137	115	113	109	102	107	94
TEMPERATURE (°C)	18.9	17.7	17.5	17.5	17.4	17.4	17.4	17.4	17.3	17.5	17.6

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-031D

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 6/23/2008

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>79.10</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>29.98</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>49.12</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>8.35</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u></u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	6.05	6.02	6.02	6.05	6.03	6.02	6.05	6.03	6.05		
SPEC. COND. (mS/cm)	1.400	1.370	1.400	1.390	1.400	1.420	1.410	1.420	1.420		
TURBIDITY (NTU)	87	71	76	61	57	53	44	39	31		
TEMPERATURE (°C)	17.9	17.4	17.6	17.4	17.5	17.4	17.6	17.6	17.5		

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-032

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Ryan Wilson

DATE(S): 11/29/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>45.50</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>23.20</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>22.30</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>3.79</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>95</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	7.20	6.95	6.95	6.88	6.88	6.88	6.88	7.02	6.88	6.88	6.88
SPEC. COND. (mS/cm)	0.600	0.530	0.520	0.530	0.540	0.540	0.540	0.540	0.530	0.530	0.540
TURBIDITY (NTU)	350	175	167	109	101	94	93	87	84	84	67
TEMPERATURE (°C)	15.5	15.5	15.9	15.5	15.8	15.3	16.0	15.0	15.9	15.2	16.0

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-032

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Ryan Wilson

DATE(S): 11/29/2008

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>45.50</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>23.20</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>22.30</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>3.79</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>95</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95			
pH	6.88	6.85	6.90	6.90	6.89	6.88	6.88	6.88			
SPEC. COND. (mS/cm)	0.510	0.530	0.530	0.560	0.530	0.530	0.520	0.530			
TURBIDITY (NTU)	72	72	58	86	68	50	52	44			
TEMPERATURE (°C)	16.4	16.1	16.2	15.5	15.7	16.6	16.0	16.1			

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-033

PROJECT NO.: 11174989.00002 Page: 1 of 1

STAFF: Pete Mulrean

DATE(S): 12/7/2008 and 12/11/07

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>40.59</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>32.14</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>8.45</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.44</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u></u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>40</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	15	20	25	30	35	40					
pH	7.75	6.80	6.51	6.47	6.50	6.47					
SPEC. COND. (mS/cm)	1.049	1.070	1.030	1.030	1.020	1.020					
TURBIDITY (NTU)	261	>1000	144	61	43	36					
TEMPERATURE (°C)	10.9	16.5	18.8	18.7	18.5	18.8					

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.  
 Initial 15 gallons removed without taking water quality readings due to high amounts of sand in development water.  
 Well has low yield and recharges slowly.



# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-039

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 5/22/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>51.10</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>41.41</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>9.69</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.65</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u></u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	6.30	6.38	6.36	6.39	7.13	7.13	7.13	7.13	6.36	6.40	6.39
SPEC. COND. (mS/cm)	1.900	1.910	1.910	1.920	1.910	1.930	1.940	1.930	1.940	1.950	1.950
TURBIDITY (NTU)	>1000	>1000	89	63	67	49	37	41	40	29	27
TEMPERATURE (°C)	16.3	16.1	16.1	16.0	16.1	15.9	16.1	16.1	16.1	16.1	16.1

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-039

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 5/22/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>51.10</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>41.41</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>9.69</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.65</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	6.40	6.39	6.40	6.36	6.34	6.34	6.32	6.32	6.34		
SPEC. COND. (mS/cm)	1.960	1.960	1.980	1.990	1.970	1.980	1.990	1.990	1.990		
TURBIDITY (NTU)	60	36	35	45	24	21	29	22	19		
TEMPERATURE (°C)	16.1	16.0	16.0	16.1	16.0	16.0	16.0	16.0	16.1		

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-042

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 5/20/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>49.66</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>38.45</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>11.21</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.91</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	5.70	5.55	5.68	5.82	5.88	5.93	5.97	5.97	6.00	6.00	6.00
SPEC. COND. (mS/cm)	0.840	0.870	0.900	0.900	0.920	0.930	0.940	0.950	0.960	0.970	0.970
TURBIDITY (NTU)	>1000	>1000	288	195	121	66	78	62	74	75	46
TEMPERATURE (°C)	16.2	16.2	16.3	16.0	16.2	16.2	16.2	16.2	16.1	16.1	16.1

### COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.

All development water containerized in 55-gallon drum for off-site disposal.

Development water has slight sheen.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-042

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 5/20/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>49.66</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>38.45</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>11.21</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.91</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	6.00	6.03	6.02	6.02	6.02	6.02	6.03	6.03	6.04	6.04	6.03
SPEC. COND. (mS/cm)	0.980	0.980	0.980	0.980	0.990	0.990	0.990	0.990	0.990	0.990	0.990
TURBIDITY (NTU)	83	67	59	41	49	43	38	39	37	29	33
TEMPERATURE (°C)	16.2	16.1	16.2	16.2	16.2	16.2	16.1	16.1	16.1	16.1	16.1

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.  
Development water has slight sheen.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-043

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 6/16/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>50.15</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>34.00</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>16.15</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.75</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>90</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	5.46	5.78	5.97	6.03	6.11	6.13	6.15	6.16	6.17	6.18	6.21
SPEC. COND. (mS/cm)	1.090	1.040	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
TURBIDITY (NTU)	674	159	141	154	93	97	114	97	91	84	74
TEMPERATURE (°C)	16.4	17.0	16.3	15.8	15.8	15.9	15.8	16.1	15.8	15.9	15.9

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-043

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 6/16/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>50.15</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>34.00</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>16.15</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.75</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>90</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	6.21	6.21	0.62	6.23	6.23	6.24	6.24				
SPEC. COND. (mS/cm)	1.000	0.990	0.990	1.000	1.000	0.990	1.000				
TURBIDITY (NTU)	64	60	54	48	34	31	28				
TEMPERATURE (°C)	15.9	15.7	15.7	16.1	16.1	15.7	15.7				

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-043D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/17/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>85.39</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>35.45</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>49.94</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.49</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	6.98	6.63	6.66	6.60	6.52	6.54	6.51	6.51	6.56	6.60	6.54
SPEC. COND. (mS)	0.20	0.65	0.83	0.89	0.91	0.95	0.97	0.98	1.00	1.02	1.01
TEMPERATURE (°C)	14.6	14.6	14.8	14.7	14.7	14.6	14.7	14.7	14.8	14.8	14.8
TURBIDITY (NTU)	250	95.0	50.0	31.0	32.0	32.0	20.0	8.6	5.3	5.2	2.8

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-044

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 6/23/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.81</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>33.30</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>11.51</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.96</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	5.32	5.44	5.50	5.57	5.59	5.63	5.67	5.69	5.70	5.70	5.66
SPEC. COND. (mS/cm)	0.620	0.580	0.580	0.580	0.570	0.570	0.580	0.580	0.590	0.590	0.580
TURBIDITY (NTU)	>1000	>1000	246	179	49	48	49	51	48	46	33
TEMPERATURE (°C)	19.4	18.5	18.2	18.3	18.3	18.2	18.3	18.5	18.4	18.4	18.3

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.



# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-044

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 6/23/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.81</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>33.30</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>11.51</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>1.96</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	5.71	5.78	5.75	5.77	5.77	5.78	5.78	5.77	5.77		
SPEC. COND. (mS/cm)	0.580	0.580	0.580	0.590	0.590	0.590	0.590	0.600	0.590		
TURBIDITY (NTU)	25	27	21	26	29	25	23	21	17		
TEMPERATURE (°C)	18.3	18.3	18.5	18.3	18.3	18.2	18.1	18.3	18.2		

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-044D

PROJECT NO.: 11176390.00002 Page: 1 of 3

STAFF: C. Friedman

DATE(S): 6/8/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>82.09</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>33.84</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>48.25</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.20</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	5	10	15	20	25	30	35	40	45	50
pH	6.51	6.31	6.32	6.31	6.29	6.31	6.29	6.29	6.30	6.30	6.31
SPEC. COND. (mS)	0.99	1.00	0.95	0.91	0.90	0.92	0.96	0.99	1.03	1.07	1.10
TEMPERATURE (°C)	19.9	18.9	18.4	18.2	17.8	17.8	17.9	17.8	17.8	17.8	17.8
TURBIDITY (NTU)	1000	650	310	290	310	390	390	280	240	240	180

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-044D

PROJECT NO.: 11176390.00002 Page: 2 of 3

STAFF: C. Friedman

DATE(S): 6/8/2011

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>82.09</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>33.84</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>48.25</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>8.20</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	55	60	65	70	75	80	85	90	95	100	105
pH	6.29	6.29	6.27	6.25	6.22	6.26	6.24	6.29	6.32	6.26	6.28
SPEC. COND. (mS)	1.12	1.16	1.13	1.19	1.21	1.24	1.26	1.28	1.31	1.33	1.33
TEMPERATURE (°C)	17.8	18.1	17.7	17.7	18.0	17.9	17.7	17.8	17.8	17.8	17.8
TURBIDITY (NTU)	150	120	290	130	90	110	70	50	40	40.0	35.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-044D

PROJECT NO.: 11176390.00002 Page: 3 of 3

STAFF: C. Friedman

DATE(S): 6/8/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>82.09</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>33.84</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>48.25</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.20</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	110										
pH	6.26										
SPEC. COND. (mS)	1.35										
TEMPERATURE (°C)	17.8										
TURBIDITY (NTU)	39.0										

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-045

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 6/24/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.05</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>28.68</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>15.37</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.61</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	6.12	6.07	6.16	6.22	6.32	6.34	6.35	6.33	6.36	6.36	6.36
SPEC. COND. (mS/cm)	0.830	0.800	0.810	0.820	0.830	0.820	0.820	0.820	0.830	0.830	0.830
TURBIDITY (NTU)	>1000	>1000	118	90	99	114	81	71	62	74	69
TEMPERATURE (°C)	19.5	18.1	18.1	18.3	18.3	18.5	18.3	18.1	18.3	18.4	18.4

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-045

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 6/24/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.05</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>28.68</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>15.37</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.61</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	6.27	6.27	6.26	6.25	6.23	6.23	6.22	6.21	6.22		
SPEC. COND. (mS/cm)	0.850	0.830	0.830	0.840	0.850	0.840	0.840	0.850	0.850		
TURBIDITY (NTU)	47	39	31	27	21	19	15	13	17		
TEMPERATURE (°C)	18.5	18.5	18.5	18.1	18.3	18.4	18.5	18.5	18.3		

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-045D

PROJECT NO.: 11176390.00002 Page: 1 of 3

STAFF: C. Friedman

DATE(S): 6/7/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>81.07</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>29.28</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>51.79</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.80</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	5	10	15	20	25	30	35	40	45	50
pH	7.04	6.74	6.74	6.70	6.60	6.60	6.60	6.60	6.54	6.50	6.51
SPEC. COND. (mS)	1.06	1.02	1.00	0.99	0.99	1.00	1.02	1.04	1.05	1.07	1.08
TEMPERATURE (°C)	18.4	17.7	17.6	17.3	17.2	17.2	17.2	17.2	17.2	17.3	17.1
TURBIDITY (NTU)	>2000	>2000	>2000	793	795	495	358	265	196	NA*	NA*

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

\*Turbidity meter not working properly.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-045D

PROJECT NO.: 11176390.00002 Page: 2 of 3

STAFF: C. Friedman

DATE(S): 6/7/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>81.07</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>29.28</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>51.79</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.80</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	55	60	65	70	75	80	85	90	95	100	105
pH	6.50	6.55	6.55	6.74	6.67	6.66	6.58	6.58	6.71	6.75	6.71
SPEC. COND. (mS)	1.08	1.10	1.11	1.13	1.13	1.13	1.16	1.16	1.16	1.18	1.19
TEMPERATURE (°C)	17.0	17.2	17.2	17.2	17.3	17.4	17.3	17.3	17.2	17.3	17.2
TURBIDITY (NTU)	NA*	NA*	NA*	NA*	NA*	NA*	NA*	NA*	NA*	NA*	NA*

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.  
\*Turbidity meter not working properly.



# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-045D

PROJECT NO.: 11176390.00002 Page: 3 of 3

STAFF: C. Friedman

DATE(S): 6/7/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>81.07</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>29.28</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>51.79</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.80</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	110										
pH	6.73										
SPEC. COND. (mS)	1.19										
TEMPERATURE (°C)	17.4										
TURBIDITY (NTU)	NA*										

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

\*Turbidity meter not working properly.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-046

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 6/25/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.40</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>29.38</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>15.02</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.55</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u></u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>105</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	6.14	5.98	6.20	6.23	6.22	6.21	6.22	6.22	6.17	6.18	6.19
SPEC. COND. (mS/cm)	0.570	0.690	0.770	0.930	0.860	0.910	0.930	0.980	0.980	1.000	1.030
TURBIDITY (NTU)	>1000	>1000	259	178	145	123	125	152	121	114	97
TEMPERATURE (°C)	20.1	18.2	18.0	17.7	17.7	17.7	17.6	17.6	17.6	17.6	17.6

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-046

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 6/25/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.40</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>29.38</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>15.02</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.55</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>105</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	6.20	6.20	6.20	6.20	6.20	6.21	6.22	6.22	6.22	6.22	
SPEC. COND. (mS/cm)	1.050	1.060	1.060	1.070	1.080	1.080	1.090	1.100	1.100	1.100	
TURBIDITY (NTU)	90	64	60	65	59	54	52	41	40	43	
TEMPERATURE (°C)	17.7	17.6	17.6	17.6	17.7	17.6	17.6	17.6	17.6	17.7	

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-047

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Ann Casey

DATE(S): 7/3/08

	=		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.95</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	<u>27.19</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>17.76</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>3.02</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>          </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>105</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	0	5	10	15	20	25	30	35	40	45	50
pH	5.52	5.51	5.64	5.69	5.92	5.92	5.95	5.89	6.22	6.05	6.05
SPEC. COND. (mS/cm)	1.380	1.180	1.130	1.115	1.170	1.170	1.220	1.200	1.210	1.190	1.220
TURBIDITY (NTU)	>1000	>1000	>1000	>1000	>1000	>1000	>1000	>1000	>1000	841	841
TEMPERATURE (°C)	19.3	18.5	18.4	19.6	18.2	18.9	18.1	17.6	18.3	18.2	17.9

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-047

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Ann Casey

DATE(S): 7/3/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>44.95</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>27.19</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>17.76</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>3.02</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>105</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	55	60	65	70	75	80	85	90	95	100	105
pH	5.89	6.00	6.06	5.96	5.90	5.90	6.92	6.92	6.92	6.92	6.92
SPEC. COND. (mS/cm)	1.240	1.240	1.250	1.270	1.280	1.270	1.280	1.290	1.290	1.260	1.260
TURBIDITY (NTU)	394	984	714	456	270	164	133	135	87	75	67
TEMPERATURE (°C)	18.1	18.0	17.9	18.3	18.3	18.1	18.4	18.3	18.3	18.4	17.8

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.  
pH sensor stuck on 6.92 and will not calibrate or move from 6.92.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-048

PROJECT NO.: 11174989.00002 Page: 1 of 2

STAFF: Scott McCabe

DATE(S): 6/27/08

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>39.60</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>24.48</u>	2"	0.17
	=			
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>15.12</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.57</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u></u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
 $V = 0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	5	10	15	20	25	30	35	40	45	50	55
pH	5.43	5.53	5.72	5.77	5.71	5.71	5.71	5.72	5.75	5.77	5.81
SPEC. COND. (mS/cm)	0.730	0.730	0.740	0.750	0.760	0.760	0.770	0.770	0.770	0.780	0.780
TURBIDITY (NTU)	>1000	>1000	>1000	590	374	136	159	136	217	203	151
TEMPERATURE (°C)	19.7	19.0	18.8	18.7	18.7	18.7	18.7	18.6	18.6	18.6	18.7

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
 All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Avenue Plume Trackdown Site WELL NO.: DEC-048

PROJECT NO.: 11174989.00002 Page: 2 of 2

STAFF: Scott McCabe

DATE(S): 6/27/08

1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	<u>39.60</u>	WELL ID. 1"	VOL. (GAL/FT) 0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)		<u>24.48</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	<u>15.12</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	<u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	<u>2.57</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	=	<u>        </u>	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	=	<u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	60	65	70	75	80	85	90	95	100	105	110
pH	5.86	5.89	5.91	5.91	5.92	5.93	5.95	5.96	5.95		
SPEC. COND. (mS/cm)	0.790	0.800	0.800	0.810	0.810	0.810	0.820	0.820	0.820		
TURBIDITY (NTU)	172	126	150	131	97	83	77	64	51		
TEMPERATURE (°C)	18.8	18.8	18.7	18.6	18.6	18.7	18.8	18.9	19.1		

## COMMENTS:

Well developed with Wattera Hyrolift pump using dedicated/disposable HDPE foot valve and tubing.  
All development water containerized in 55-gallon drum for off-site disposal.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-064

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/25/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>44.82</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>32.58</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>12.24</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>2.08</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	7.44	6.32	6.23	6.16	6.19	6.20	6.20	6.28	6.28	6.35	6.24
SPEC. COND. (mS)	0.18	1.08	1.19	1.32	1.38	1.40	1.43	1.43	1.46	1.45	1.47
TEMPERATURE (°C)	19.4	18.5	18.1	17.8	17.8	17.9	18.0	19.2	18.5	18.3	18.9
TURBIDITY (NTU)	>1000	550	320	160	95.0	84.0	70.0	65.0	70.0	75.0	55.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.



# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-064D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/19/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>79.71</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>34.80</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>44.91</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>7.63</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	7.68	6.27	6.26	6.34	6.22	6.31	6.43	6.41	6.29	6.28	6.35
SPEC. COND. (mS)	0.16	1.32	1.27	1.31	1.30	1.33	1.36	1.37	1.37	1.36	1.37
TEMPERATURE (°C)	18.9	17.2	16.7	16.6	16.8	16.8	16.5	17.0	16.7	16.8	16.9
TURBIDITY (NTU)	105	119	69.0	48.2	36.8	38.9	35.5	34.6	31.9	28.8	24.5

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-065

PROJECT NO.: 11176390.00002 Page: 1 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>45.55</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.18</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>9.37</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>1.59</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	5	10	15	20	25	30	35	40	45	50
pH	7.73	7.21	7.07	6.94	6.89	6.94	6.86	6.91	6.84	6.93	6.92
SPEC. COND. (mS)	0.18	0.21	0.21	0.23	0.23	0.24	0.25	0.25	0.24	0.24	0.25
TEMPERATURE (°C)	22.1	20.8	20.5	20.3	20.0	20.3	19.7	19.7	19.7	19.8	19.9
TURBIDITY (NTU)	>2000	>2000	1100	650	400	NA*	NA*	NA*	NA*	NA*	NA*

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

\*Turbidity meter not working properly.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-065

PROJECT NO.: 11176390.00002 Page: 2 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>45.55</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.18</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>9.37</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>1.59</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	55	60	65**	70	75	80	85	90	95	100	105
pH	6.89	6.87	6.89	6.90	6.87	6.87	6.96	6.96	6.92	6.91	6.89
SPEC. COND. (mS)	0.25	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.30	0.31
TEMPERATURE (°C)	19.7	19.8	19.9	19.7	19.8	20.0	20.3	20.2	20.2	20.1	20.1
TURBIDITY (NTU)	NA*	100	75.0	200	130	80.0	70.0	50.0	50.0	60.0	60.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.  
 \*Turbidity meter not working properly.  
 \*\*Lowered tubing after 65 gallons were purged.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-065

PROJECT NO.: 11176390.00002 Page: 3 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>45.55</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.18</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>9.37</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>1.59</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	110										
pH	6.93										
SPEC. COND. (mS)	0.32										
TEMPERATURE (°C)	20.1										
TURBIDITY (NTU)	55.0										

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-065D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/26/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>80.25</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>36.23</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>44.02</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>7.48</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	7.51	6.72	6.40	6.36	6.29	6.31	6.40	6.28	6.26	6.20	6.24
SPEC. COND. (mS)	0.16	0.26	0.52	0.60	0.74	0.80	0.90	0.93	1.00	1.05	1.09
TEMPERATURE (°C)	19.7	18.2	17.9	17.7	17.7	17.9	18.5	17.9	17.7	17.8	17.8
TURBIDITY (NTU)	>1000	100	40.0	38.0	39.0	140.0	85.0	80.0	65.0	55.0	45.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-066

PROJECT NO.: 11176390.00002 Page: 1 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>45.44</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>29.08</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>16.36</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>2.78</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	5	10	15	20	25	30	35	40	45	50
pH	6.58	6.71	6.71	6.74	6.83	6.75	6.84	6.82	6.80	6.80	6.80
SPEC. COND. (mS)	0.35	0.31	0.31	0.32	0.32	0.32	0.33	0.34	0.33	0.35	0.36
TEMPERATURE (°C)	21.7	20.2	19.8	19.7	19.8	19.6	19.5	19.6	19.7	19.5	19.6
TURBIDITY (NTU)	>2000	950	400	240	160	120	110	75.0	50.0	50.0	50.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-066

PROJECT NO.: 11176390.00002 Page: 2 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>45.44</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>29.08</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>16.36</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>2.78</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____)	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	55	60	65	70	75	80	85	90	95	100	105
pH	6.76	6.77	6.68	6.74	6.71	6.81	6.83	6.88	6.59	6.73	6.62
SPEC. COND. (mS)	0.36	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.40
TEMPERATURE (°C)	19.5	19.5	19.4	19.4	19.4	19.5	19.6	19.7	19.2	19.3	19.4
TURBIDITY (NTU)	40.0	38.0	35.0	32.0	31.0	29.0	32.0	24.0	24.0	21.0	21.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-066

PROJECT NO.: 11176390.00002 Page: 3 of 3

STAFF: C. Friedman

DATE(S): 6/9/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>45.44</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>29.08</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>16.36</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>2.78</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>110</u>	8"	2.60

OR  
 $V=0.0408 \times (\text{CASING DIAMETER})^2$

## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	110										
pH	6.63										
SPEC. COND. (mS)	0.40										
TEMPERATURE (°C)	19.3										
TURBIDITY (NTU)	21.0										

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.



# WELL DEVELOPMENT LOG

# URS Corporation

PROJECT TITLE: Meeker Ave. - Klink Cosmo Phase 1 WELL NO.: DEC-066D

PROJECT NO.: 11176390.00002 Page: 1 of 1

STAFF: T. Ifkovich

DATE(S): 5/24/2011

		WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	= <u>80.00</u>	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	= <u>28.37</u>	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	= <u>51.63</u>	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	= <u>0.17</u>	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	= <u>8.78</u>	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x ____ )	= _____	6"	1.50
7. VOLUME OF WATER REMOVED (GAL.)	= <u>100</u>	8"	2.60

OR  
V=0.0408 x (CASING DIAMETER)<sup>2</sup>

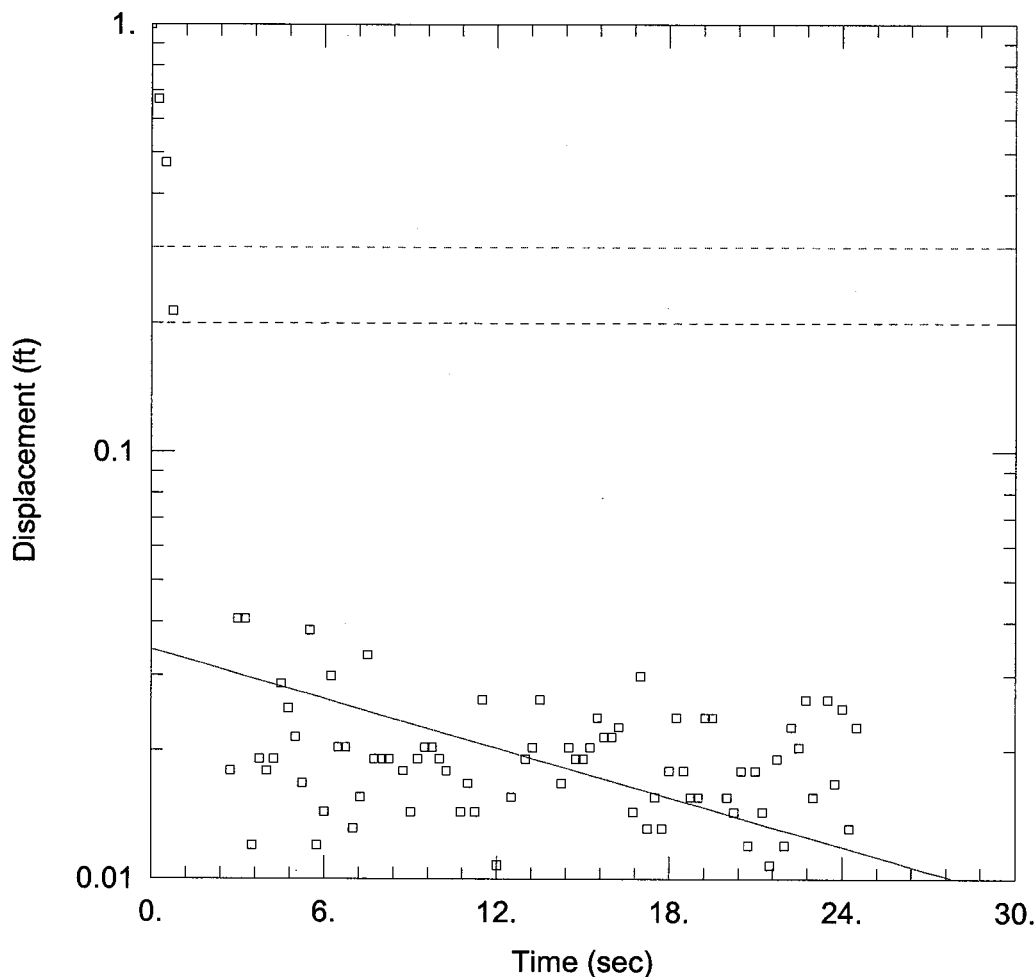
## ACCUMULATED VOLUME PURGED (GALLONS)

PARAMETERS	Initial	10	20	30	40	50	60	70	80	90	100
pH	7.00	6.84	6.61	6.49	6.34	6.31	6.30	6.28	6.29	6.25	6.25
SPEC. COND. (mS)	0.13	0.39	0.45	0.55	0.63	0.69	0.74	0.78	0.84	0.88	0.93
TEMPERATURE (°C)	22.0	18.6	18.4	18.2	18.1	17.9	17.9	17.9	18.0	17.9	17.9
TURBIDITY (NTU)	>1000	52.4	39.9	32.7	26.5	20.0	21.0	26.0	20.0	20.0	19.0

COMMENTS: Well developed using Waterra inertial pump with dedicated/disposable HDPE tubing and foot valve.

## **APPENDIX I**

### **AQUIFER TESTING DATA AND RESULTS**



### DEC-031RH

Data Set: I:\...\DEC-031.aqt

Date: 09/08/11

Time: 12:38:09

### PROJECT INFORMATION

Company: URS Corporation

Client: NYSDEC

Location: Klink Cosmo

Test Well: DEC-031

### AQUIFER DATA

Saturated Thickness: 13.15 ft

Anisotropy Ratio ( $K_z/K_r$ ): 0.1

### WELL DATA (DEC-031)

Initial Displacement: 1. ft

Static Water Column Height: 113.2 ft

Total Well Penetration Depth: 13.15 ft

Screen Length: 15. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.1533 ft

Gravel Pack Porosity: 0.3

### SOLUTION

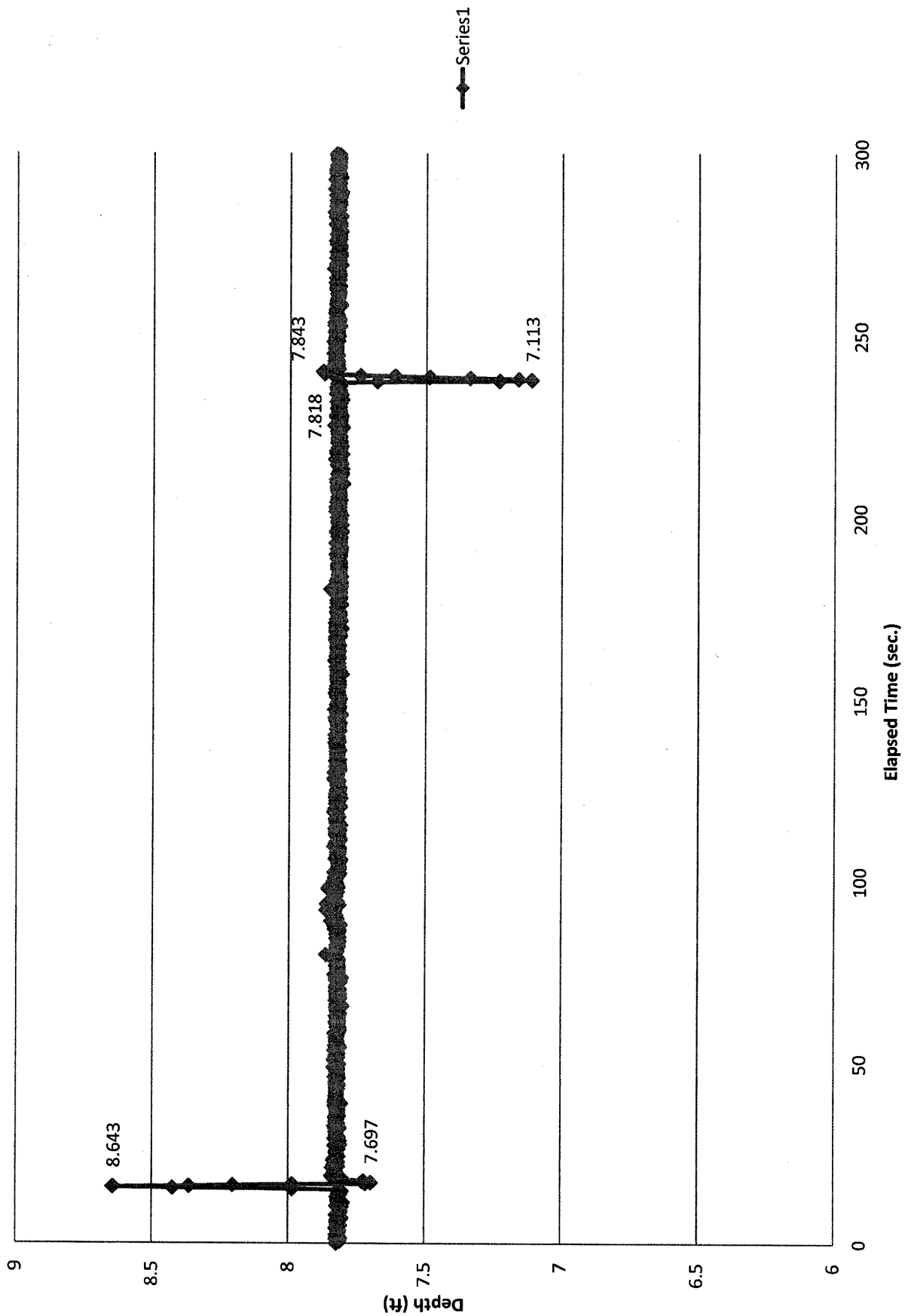
Aquifer Model: Unconfined

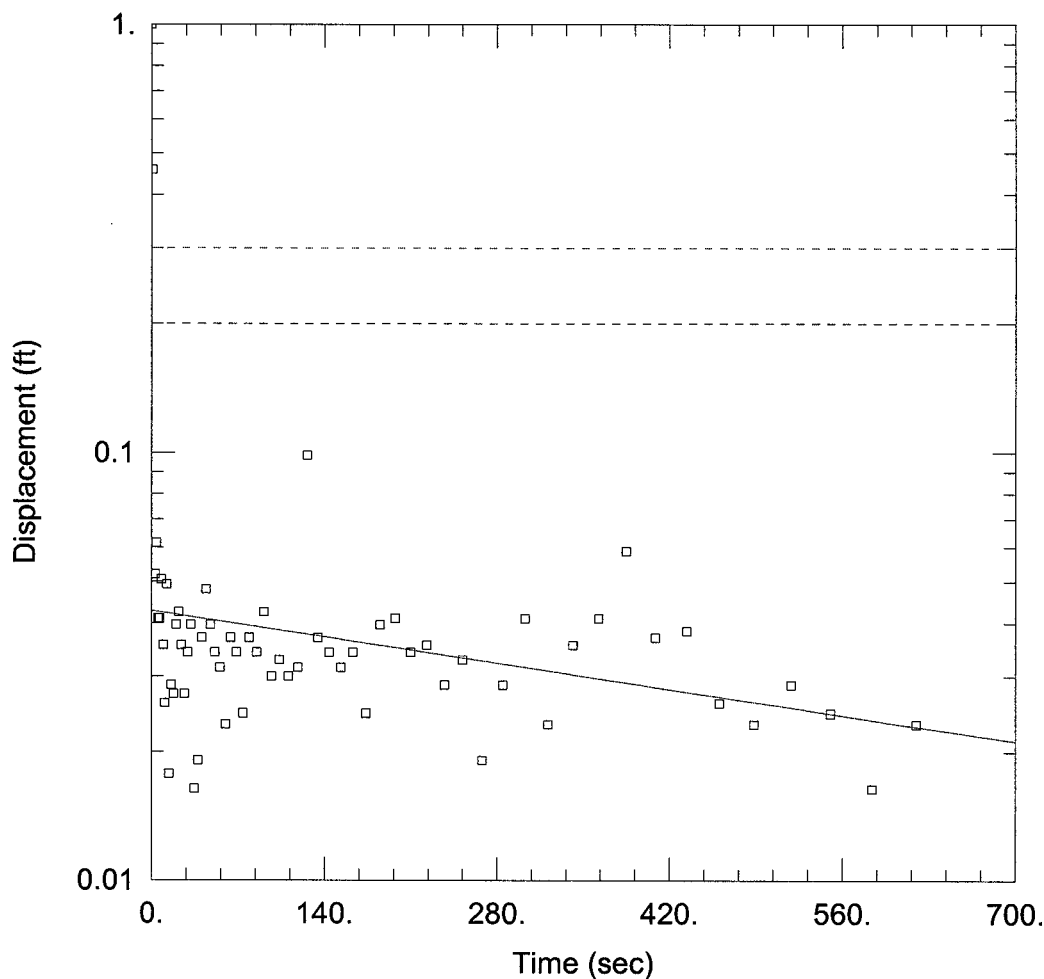
Solution Method: Bouwer-Rice

$K = 0.001852$  cm/sec

$y_0 = 0.03455$  ft

# DEC 31S2 Falling and Rising Head Slug Tests.





#### DEC-044 FH

Data Set: I:\...\DEC-044FH.aqt

Date: 09/08/11

Time: 12:03:55

#### PROJECT INFORMATION

Company: URS Corporation

Client: NYSDEC

Project: 11176390

Location: Klink Cosmo

Test Well: DEC-044

Test Date: May 16 2011

#### AQUIFER DATA

Saturated Thickness: 10.72 ft

Anisotropy Ratio ( $K_z/K_r$ ): 0.1

#### WELL DATA (DEC-044 FH)

Initial Displacement: 1. ft

Static Water Column Height: 10.72 ft

Total Well Penetration Depth: 10.72 ft

Screen Length: 15. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.0833 ft

Gravel Pack Porosity: 0.3

#### SOLUTION

Aquifer Model: Unconfined

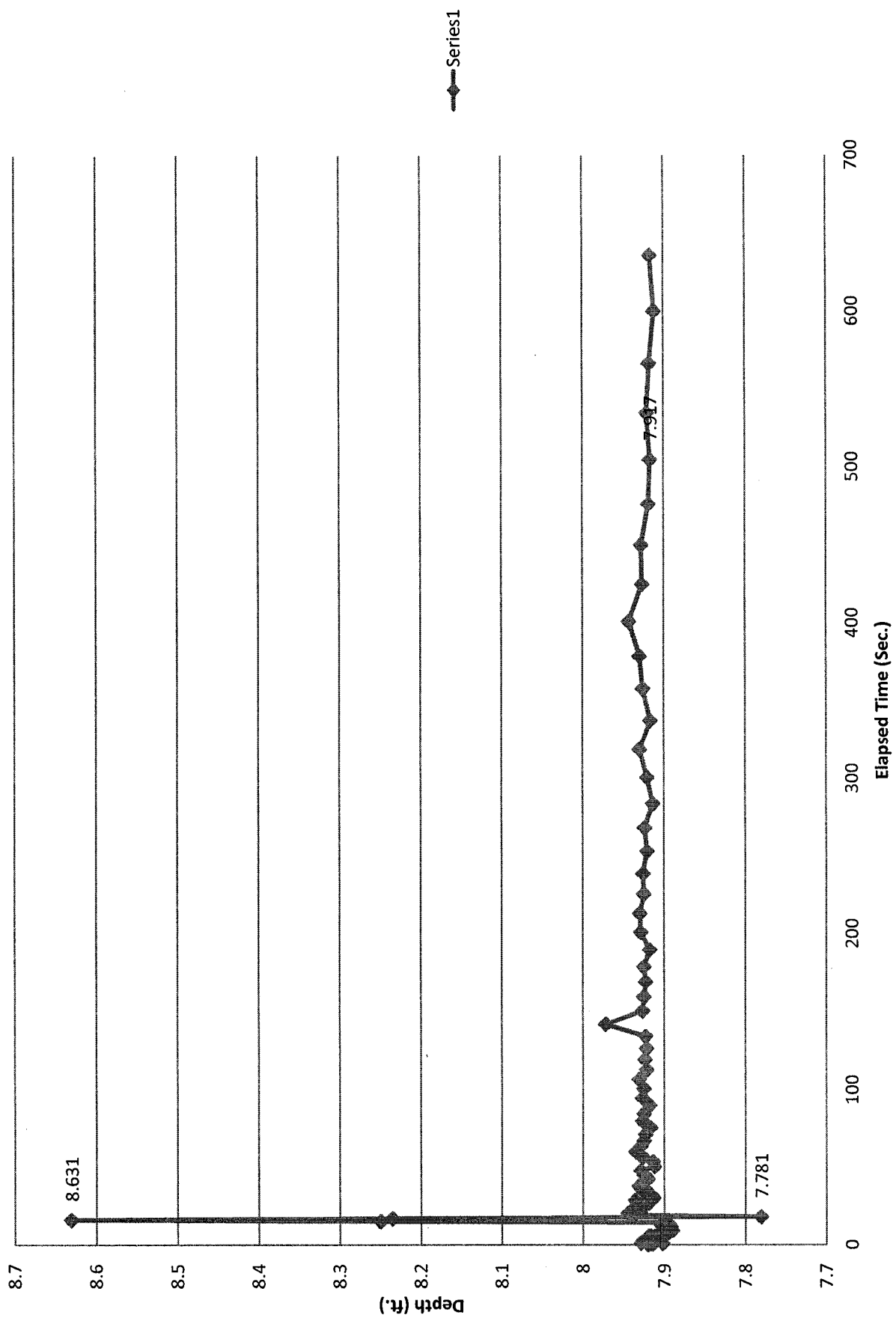
Solution Method: Bouwer-Rice

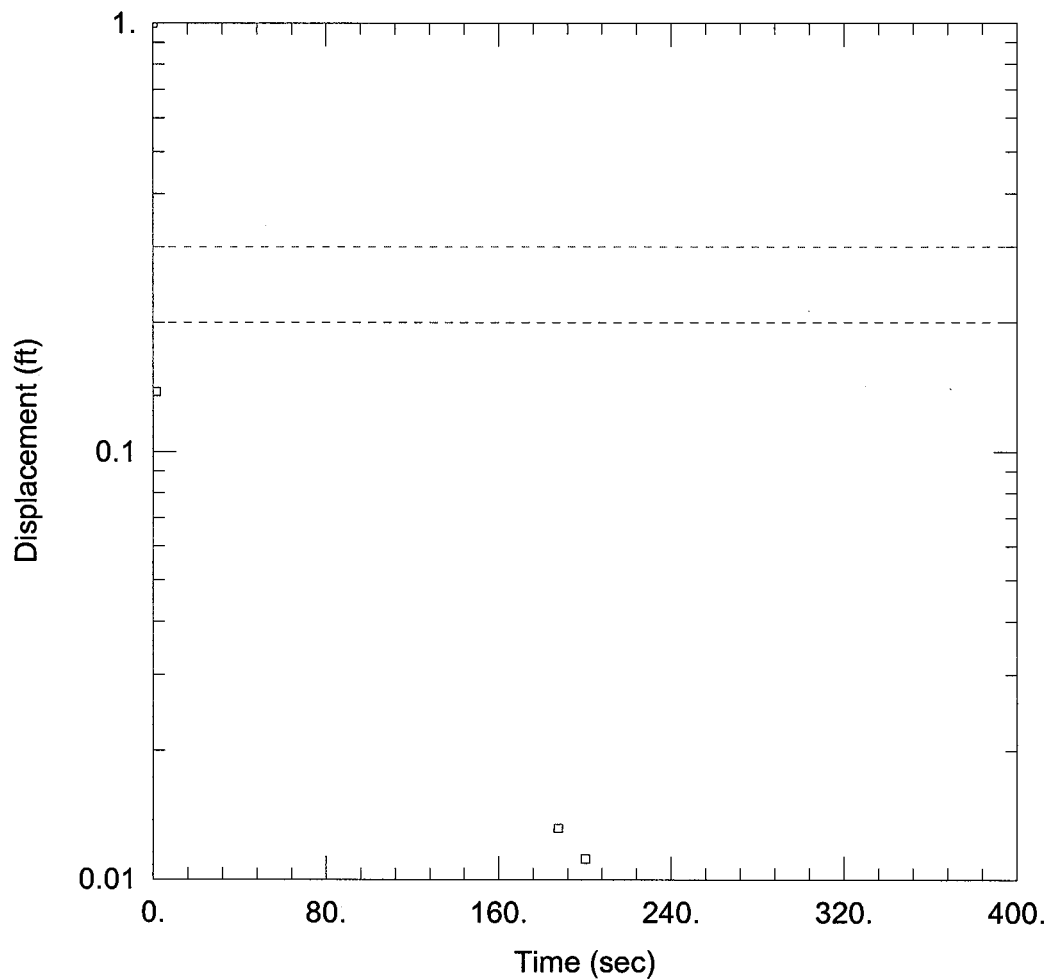
$K = 2.691E-5$  cm/sec

$y_0 = 0.04272$  ft

Done

# DEC 44 Falling Head Slug Test





#### DEC-044 RH

Data Set: I:\...\DEC-044RH.aqt

Date: 09/08/11

Time: 12:00:09

#### PROJECT INFORMATION

Company: URS Corporation

Client: NYSDEC

Project: 11176390

Location: Klink Cosmo

Test Well: DEC-044

Test Date: May 16 2011

#### AQUIFER DATA

Saturated Thickness: 10.72 ft

Anisotropy Ratio (Kz/Kr): 0.1

#### WELL DATA (DEC-044)

Initial Displacement: 1. ft

Static Water Column Height: 10.72 ft

Total Well Penetration Depth: 10.72 ft

Screen Length: 15. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.0833 ft

Gravel Pack Porosity: 0.3

#### SOLUTION

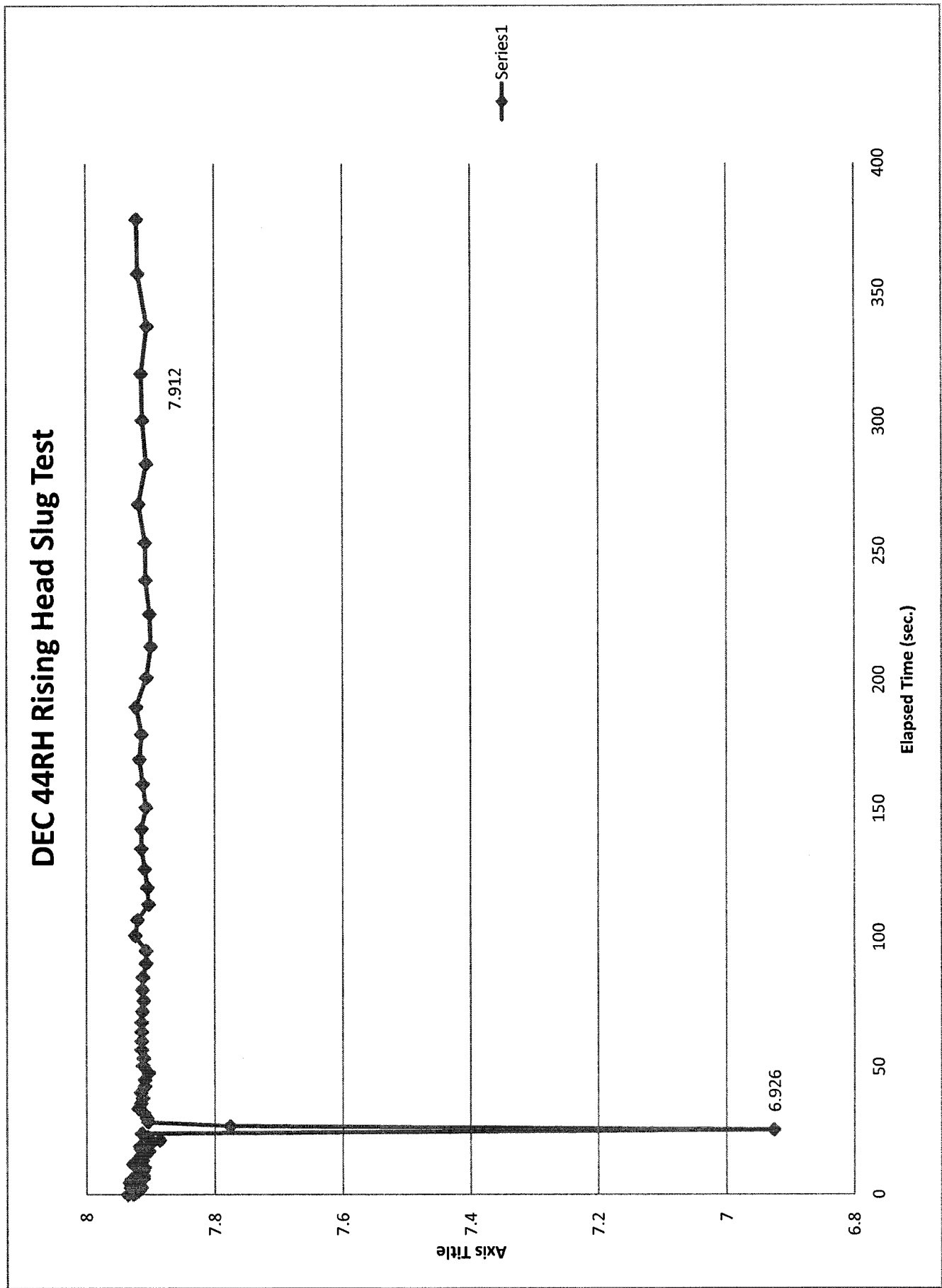
Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

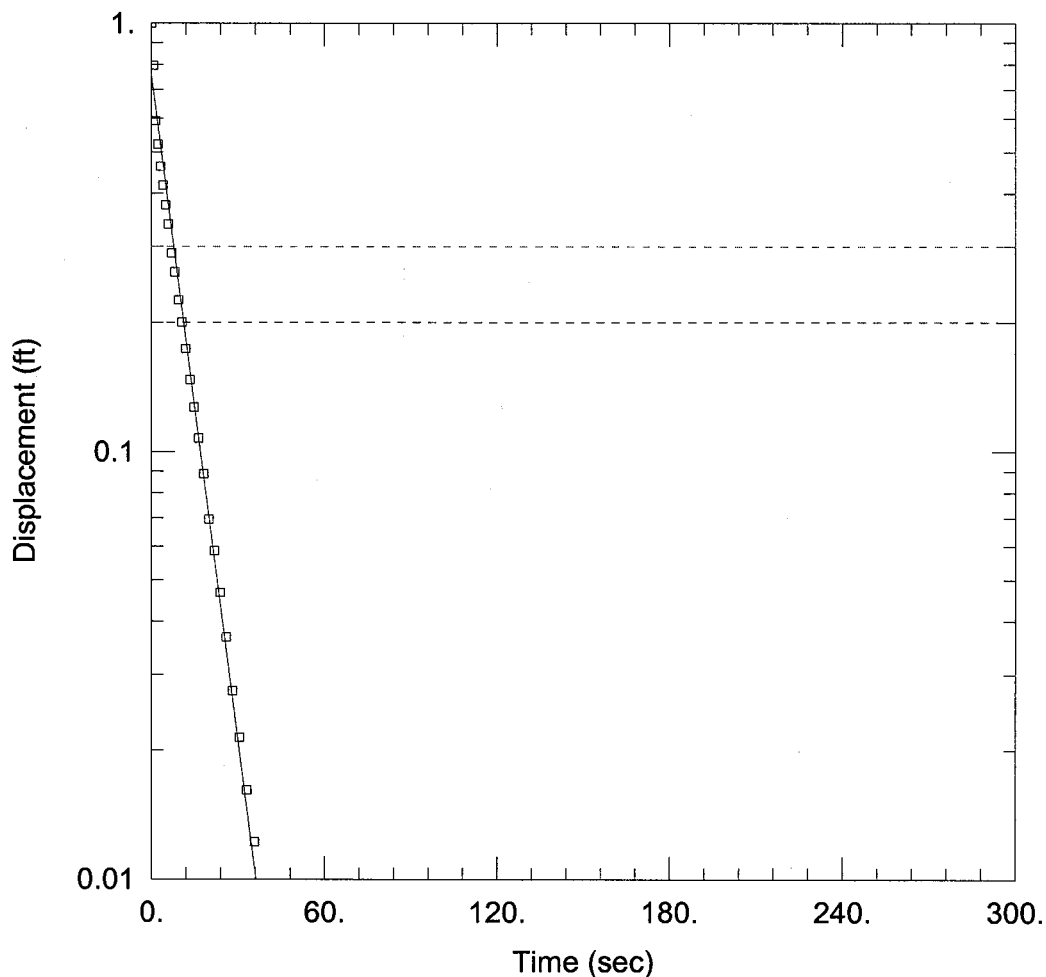
K = 3.854E-5 cm/sec

y0 = 0.007789 ft

Done







#### DEC-064RH

Data Set: I:\...\DEC-064RH.aqt

Date: 09/08/11

Time: 12:29:16

#### PROJECT INFORMATION

Company: URS Corporation

Client: NYSDEC

Test Well: DEC-064

#### AQUIFER DATA

Saturated Thickness: 10.55 ft

Anisotropy Ratio (Kz/Kr): 0.1

#### WELL DATA (DEC-064RH)

Initial Displacement: 1. ft

Total Well Penetration Depth: 10.55 ft

Casing Radius: 0.0833 ft

Static Water Column Height: 110.6 ft

Screen Length: 15. ft

Wellbore Radius: 0.1533 ft

Gravel Pack Porosity: 0.3

#### SOLUTION

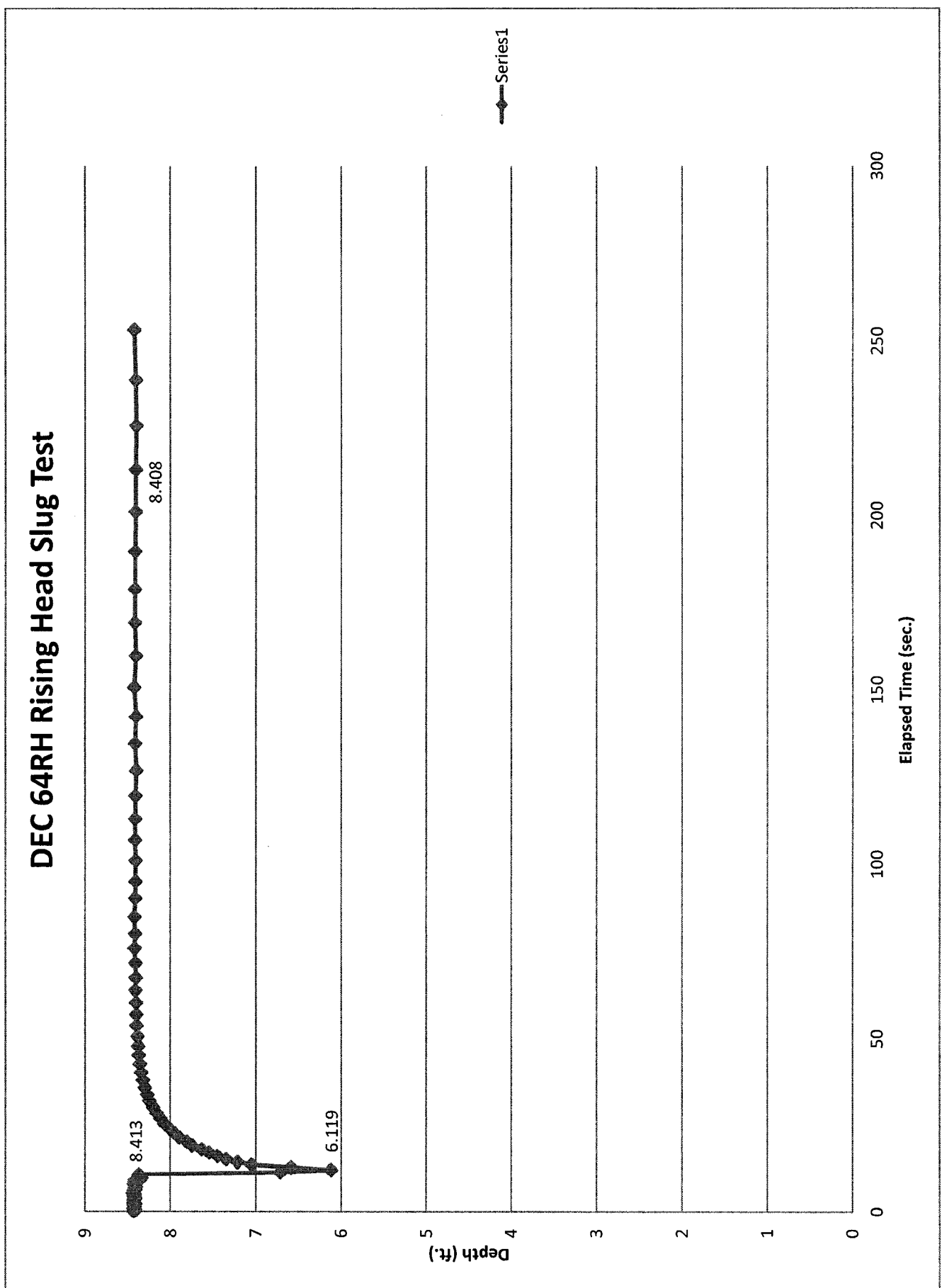
Aquifer Model: Unconfined

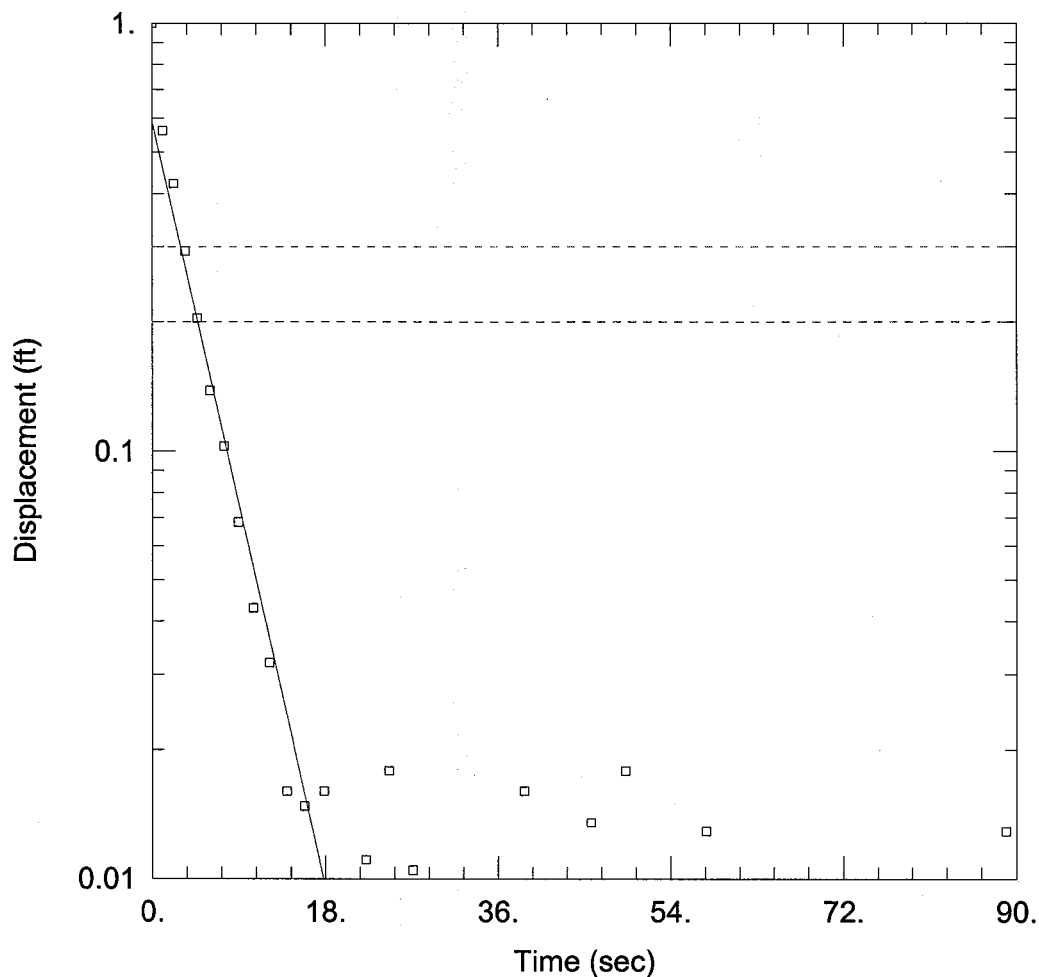
K = 0.004768 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.7583 ft

Done





### DEC-013D

Data Set: I:\...\DEC-013DRH.aqt

Date: 09/08/11

Time: 12:48:24

### PROJECT INFORMATION

Company: URS Corporation

Client: NYSDEC

Location: Klink Cosmo

Test Well: DEC-13D

### AQUIFER DATA

Saturated Thickness: 48.81 ft

Anisotropy Ratio ( $K_z/K_r$ ): 0.1

### WELL DATA (DEC-013D)

Initial Displacement: 1. ft

Static Water Column Height: 48.81 ft

Total Well Penetration Depth: 48.81 ft

Screen Length: 15. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.0833 ft

### SOLUTION

Aquifer Model: Unconfined

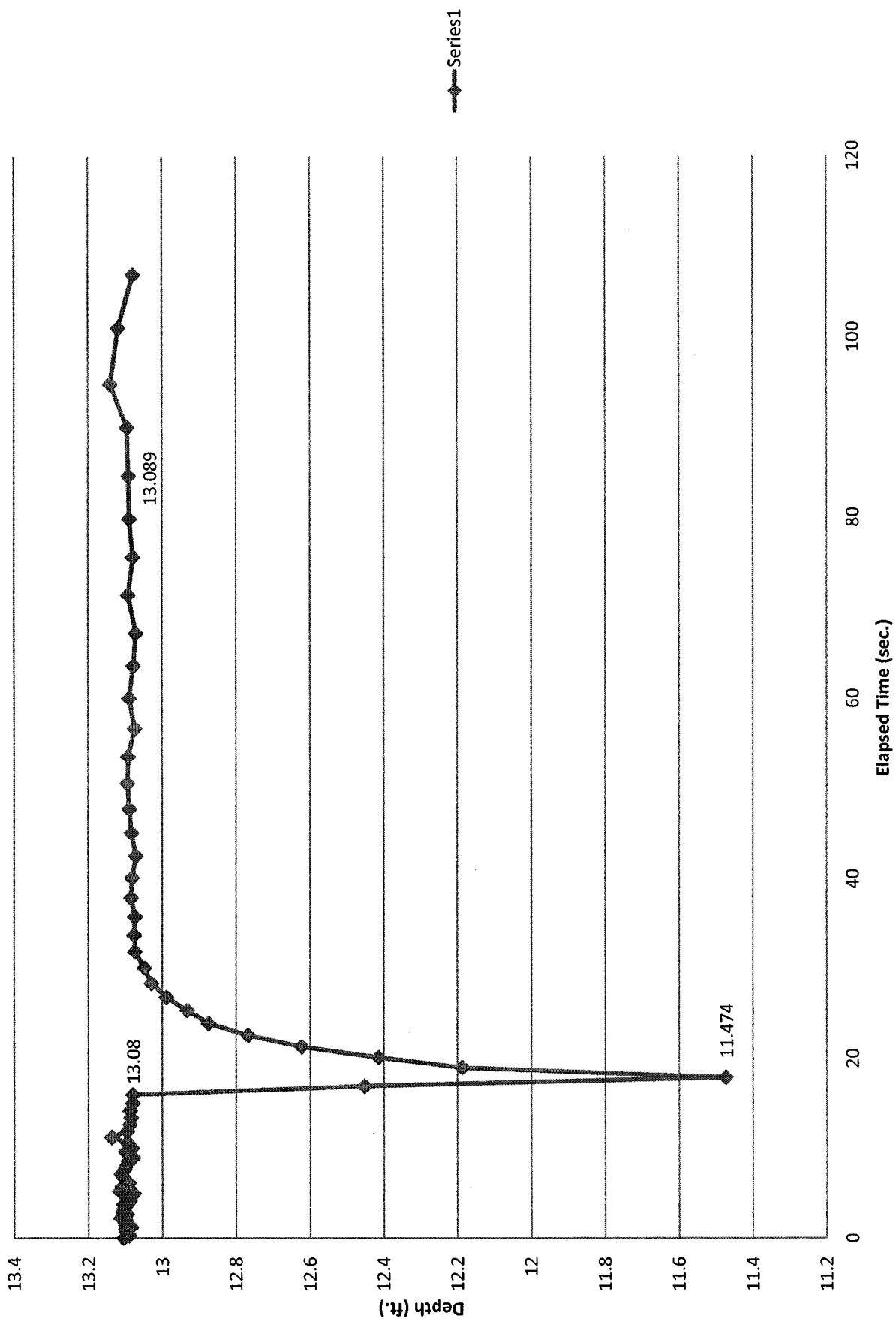
Solution Method: Bouwer-Rice

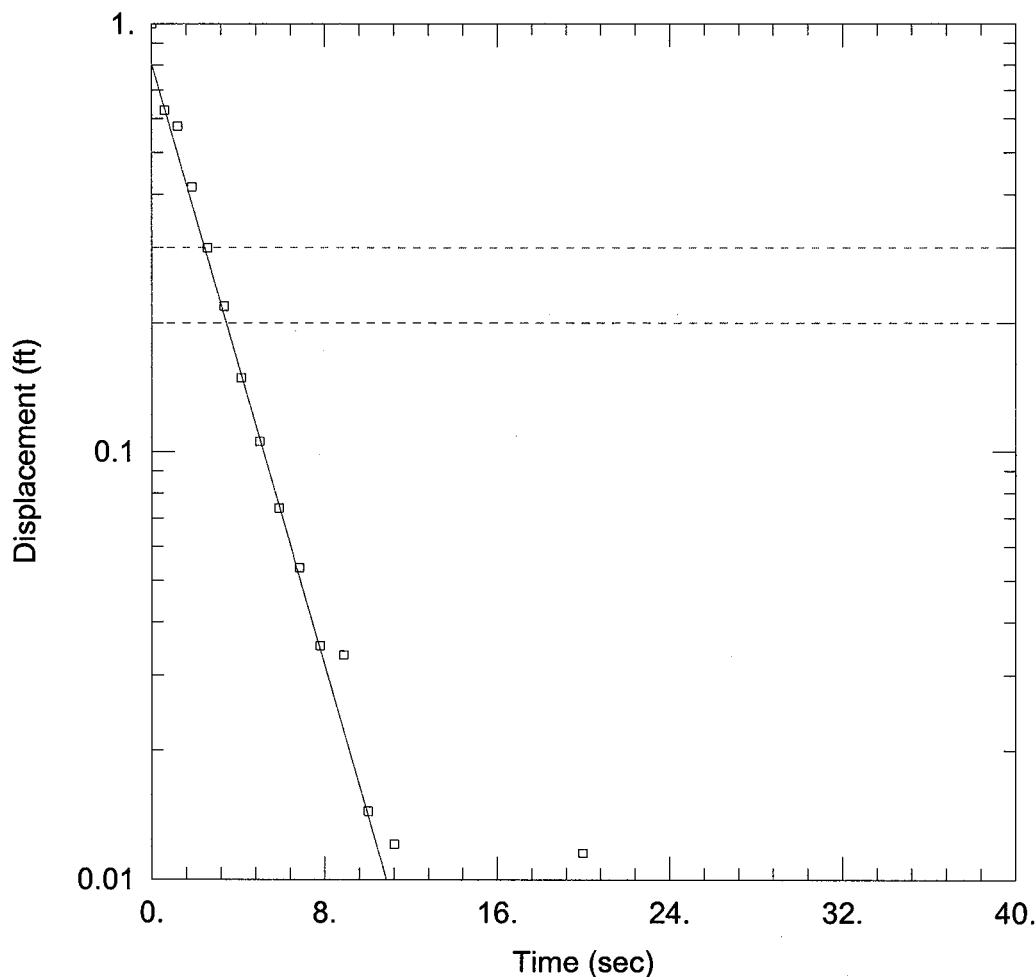
$K = 0.009736$  cm/sec

$y_0 = 0.5887$  ft

Done

# DEC 13DRH Rising Head Slug Test





#### DEC-044D FH

Data Set: I:\...\DEC-044DRH.aqt

Date: 09/08/11

Time: 12:09:33

#### PROJECT INFORMATION

Company: URS Corporation

Client: NYSDEC

Project: 11176390

Location: Klink Cosmo

Test Well: DEC-044D

Test Date: June 10 2011

#### AQUIFER DATA

Saturated Thickness: 46.16 ft

Anisotropy Ratio ( $K_z/K_r$ ): 0.1

#### WELL DATA (DEC-044D)

Initial Displacement: 1. ft

Static Water Column Height: 46.16 ft

Total Well Penetration Depth: 46.16 ft

Screen Length: 10. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.0833 ft

#### SOLUTION

Aquifer Model: Unconfined

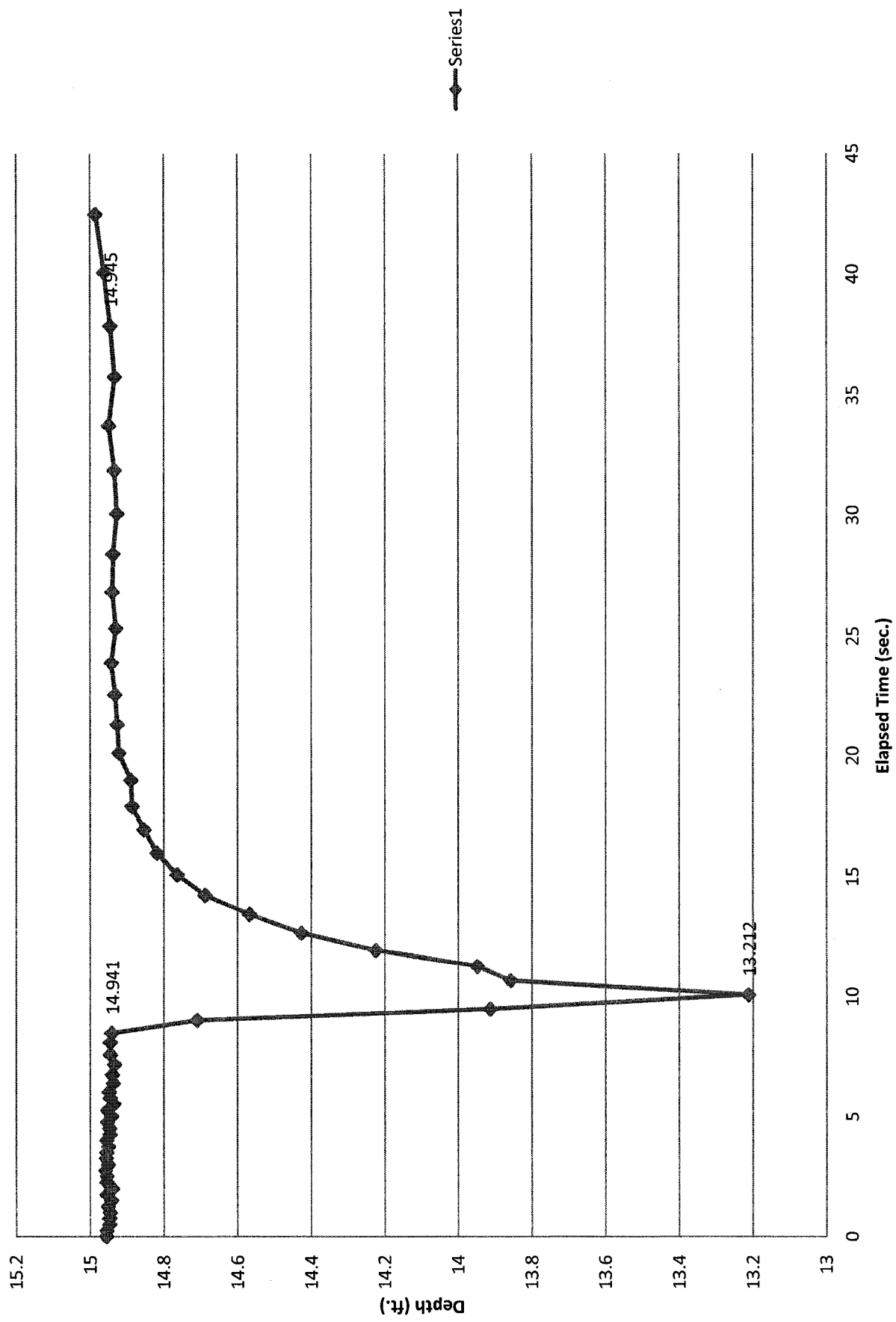
Solution Method: Bouwer-Rice

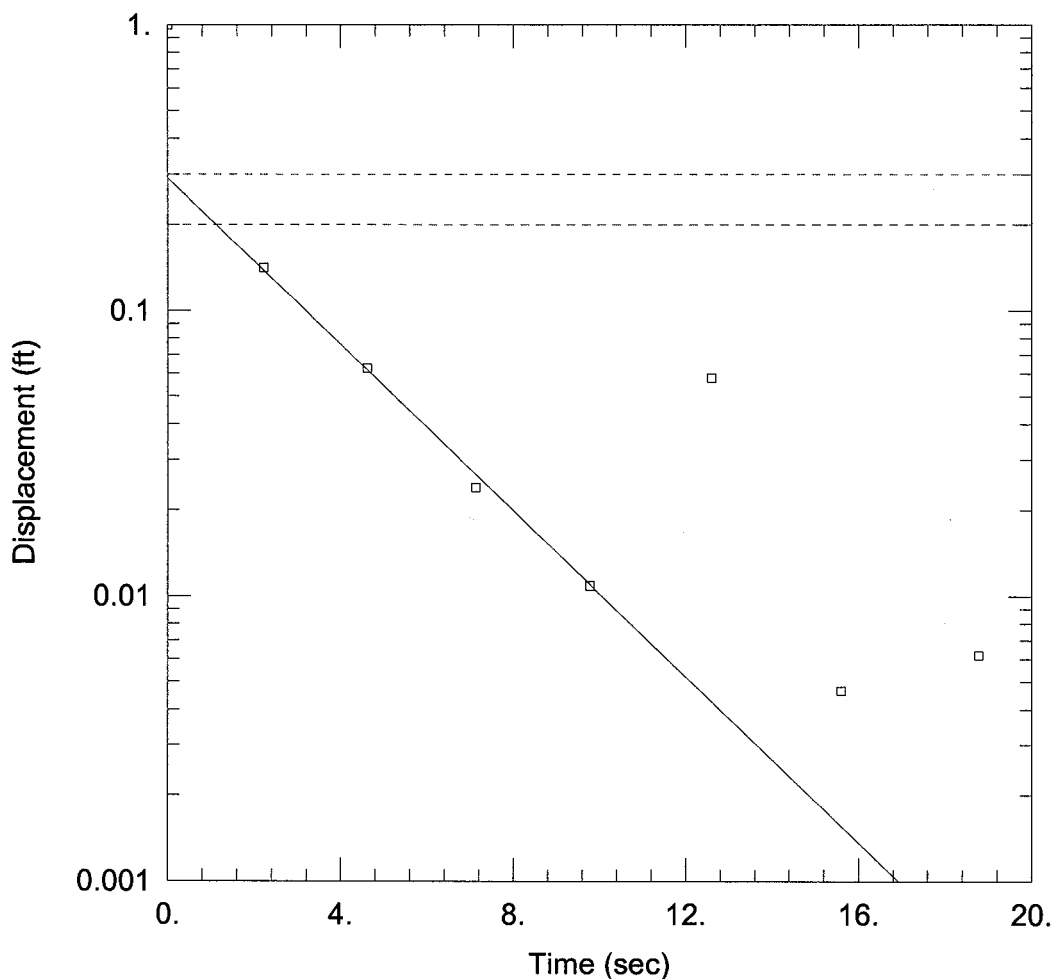
$K = 0.02479$  cm/sec

$y_0 = 0.8062$  ft

Done

# DEC 44D Rising Head Slug Test





### DEC-044D FALLING HEAD

Data Set: I:\...\DEC-044DFH.aqt

Date: 09/08/11

Time: 12:13:00

### PROJECT INFORMATION

Company: URS Corporation

Client: NYSDEC

Project: 11176390

Location: Klink Cosmo

Test Well: DEC-044D

Test Date: June 10 2011

### AQUIFER DATA

Saturated Thickness: 46.16 ft

Anisotropy Ratio ( $K_z/K_r$ ): 0.1

### WELL DATA (DEC-044D)

Initial Displacement: 1. ft

Static Water Column Height: 46.16 ft

Total Well Penetration Depth: 46.16 ft

Screen Length: 10. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.0833 ft

### SOLUTION

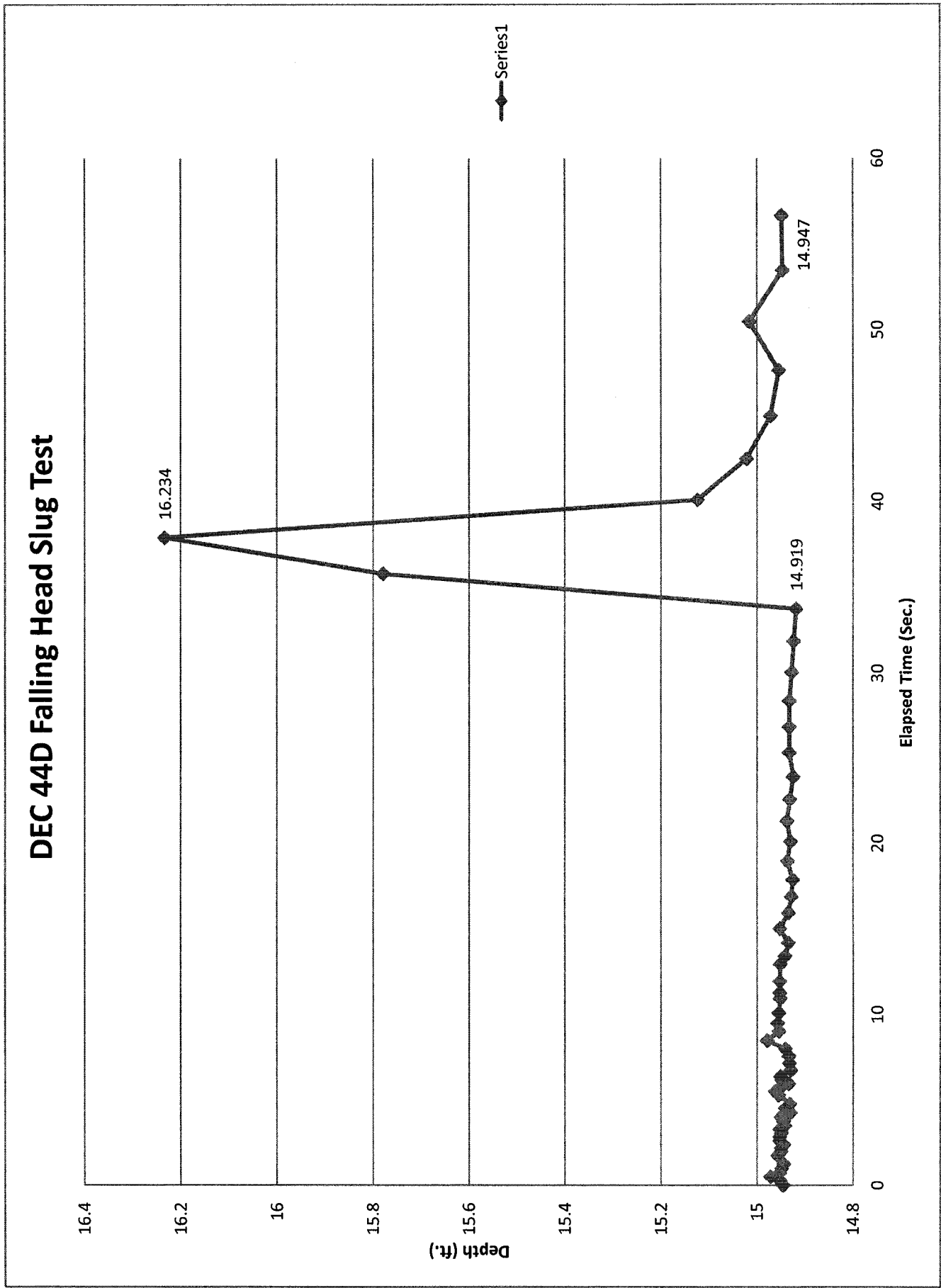
Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 0.02055$  cm/sec

$y_0 = 0.2908$  ft

Done





## **APPENDIX J**

### **MONITORING WELL PURGE LOGS**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-004

Date: 6/24/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.45	Depth to Well Bottom:	49.97	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	8.3	Estimated Purge Volume (liters):	15
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Sample ID: DEC-004 Sample Time: 0725 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** Water color very rusty at initial purging.

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Meeker Ave. Site: Well I.D.: DEC-06 (URS)

Date: 6/22/2007      Sampling Personnel: C.R.      Company: URS Corporation

Purging/ Sampling Device:	Tubing Type:	Pump/Tubing Inlet Location:	Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	24.35	Depth to Well Bottom:	33.00	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	Volume in 1 Well Casing (liters):	6.6	Estimated Purge Volume (liters):
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Sample ID:	DEC-06	Sample Time:	1220	QA/QC:
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Sample Parameters:

Note: \_\_\_\_\_

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $v_{ql} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-006D

Date: 6/20/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/  
Sampling  
Device: Bladder Pump      Tubing Type: Poly      Pump/Tubing  
Inlet  
Location: screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	46.15	Depth to Well Bottom:	58.14	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	7.4	Estimated Purge Volume (liters):	24
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Sample ID: DEC-006D Sample Time: 1858 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-006DD

Date: 6/20/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	45.50	Depth to Well Bottom:	93.25	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	29.5	Estimated Purge Volume (liters):	29
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Sample ID:	DEC-006DD	Sample Time:	1733	QA/QC:	DUP-062011
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

<b>TIME</b>	<b>pH</b>	<b>TEMP (°C)</b>	<b>COND. (mS/cm)</b>	<b>DISS. O<sub>2</sub> (mg/l)</b>	<b>TURB. (NTU)</b>	<b>Eh (mV)</b>	<b>FLOW RATE (ml/min.)</b>	<b>DEPTH TO WATER (btor)</b>
1628	7.26	20.95	1.050	3.37	494.0	29	450	45.50
1633	6.91	19.27	1.070	2.73	103.0	33	450	45.50
1638	6.63	18.98	1.100	1.29	59.1	40	450	45.50
1643	6.57	18.95	1.090	1.10	25.5	46	450	45.50
1648	6.52	18.76	1.090	1.05	12.8	53	450	45.50
1653	6.50	18.69	1.090	0.94	8.1	57	450	45.50
1658	6.49	18.85	1.100	0.89	2.7	60	450	45.50
1703	6.48	18.75	1.100	0.82	0.6	64	450	45.50
1708	6.48	18.80	1.100	0.80	0.0	65	450	45.50
1713	6.47	18.39	1.110	0.92	0.0	67	450	45.55
1718	6.46	18.29	1.110	0.87	0.0	68	450	45.55
1723	6.46	18.07	1.120	0.74	0.0	70	450	45.55
1728	6.46	17.83	1.120	0.69	0.0	71	450	45.55
1733	6.44	17.86	1.120	0.68	0.0	72	450	45.55
<b>Tolerance:</b>	<b>0.1</b>	<b>---</b>	<b>3%</b>	<b>10%</b>	<b>10%</b>	<b>+ or - 10</b>	<b>---</b>	

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-007

Date: 6/21/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	40.60	Depth to Well Bottom:	55.90	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	9.4	Estimated Purge Volume (liters):	21
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Sample ID:	DEC-007	Sample Time:	1403	QA/QC:
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-007D

Date: 6/21/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	<u>Bladder Pump</u>		Tubing Type:	<u>Poly</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>39.94</u>	Depth to Well Bottom:	<u>90.66</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>10'</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>31.3</u>		Estimated Purge Volume (liters):	<u>39</u>		

Sample ID: DEC-007D Sample Time: 1550 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1435	8.75	23.99	0.471	2.74	3.7	-11	520	39.94
1440	7.10	18.76	1.300	1.10	98.1	24	520	39.94
1445	6.90	18.12	1.340	0.98	56.3	35	520	39.94
1450	6.74	18.10	1.370	0.75	20.4	40	520	39.94
1455	6.69	17.94	1.380	0.68	6.0	51	520	39.94
1500	6.68	17.84	1.380	0.63	1.1	56	520	39.94
1505	6.68	17.70	1.380	0.59	0.2	58	520	39.94
1510	6.67	17.63	1.380	0.57	0.0	61	520	39.94
1515	6.67	17.78	1.380	0.56	0.0	63	520	39.94
1520	6.67	17.66	1.390	0.54	0.0	63	520	39.94
1525	6.67	17.70	1.390	0.52	0.0	64	520	39.94
1530	6.66	17.65	1.400	0.50	0.0	66	520	39.94
1535	6.67	17.65	1.400	0.49	0.0	66	520	39.94
1540	NR	NR	NR	NR	NR	NR	NR	NR
1545	6.67	17.67	1.400	0.48	0.0	67	520	39.94
1550	6.67	17.76	1.400	0.47	0.0	68	520	39.94
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

Remarks: 1540 missed reading  
NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-008

Date: 6/23/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	38.18	Depth to Well Bottom:	48.48	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.4	Estimated Purge Volume (liters):	25
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Sample ID: DEC-008 Sample Time: 1440 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** NR - Not Recorded



## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-009

Date: 6/23/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	38.09	Depth to Well Bottom:	48.80	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.6	Estimated Purge Volume (liters):	20
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Sample ID: DEC-009      Sample Time: 1427      QA/QC: \_\_\_\_\_

Sample Parameters: \_\_\_\_\_ TCL VOCs + Tics  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-010

Date: 6/21/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	38.08	Depth to Well Bottom:	48.20	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.2	Estimated Purge Volume (liters):	14
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Sample ID: DEC-010 Sample Time: 1430 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-011

Date: 6/21/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.35	Depth to Well Bottom:	47.20	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.7	Estimated Purge Volume (liters):	18
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Sample ID:	DEC-011	Sample Time:	1530	QA/QC:
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-012

Date: 6/22/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.58	Depth to Well Bottom:	49.40	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	7.9	Estimated Purge Volume (liters):	14
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Sample ID: DEC-012 Sample Time: 0945 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-013

Date: 6/23/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.51	Depth to Well Bottom:	46.50	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.2	Estimated Purge Volume (liters):	18
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Sample ID: DEC-013      Sample Time: 1150      QA/QC: \_\_\_\_\_

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-013D

Date: 6/23/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.11	Depth to Well Bottom:	80.54	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	27.4	Estimated Purge Volume (liters):	28
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Sample ID: DEC-013D      Sample Time: 1040      QA/QC: DUP-062311

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** Slight petroleum sheen, no odor

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Meeker Ave. Site: Well I.D.: DEC-14 (URS)

Date: 6/29/2007      Sampling Personnel: C.R.      Company: URS Corporation

Purging/ Sampling Device:	Tubing Type:	Pump/Tubing Inlet Location:	Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	31.83	Depth to Well Bottom:	42.72	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	Volume in 1 Well Casing (liters):	8.3	Estimated Purge Volume (liters):	5.2
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Sample ID:	DEC-14	Sample Time:	1345	QA/QC:
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Sample Parameters:

Note: \_\_\_\_\_

## PURGE PARAMETERS

<b>TIME</b>	<b>pH</b>	<b>TEMP (°C)</b>	<b>COND. (mS/cm)</b>	<b>DISS. O<sub>2</sub> (mg/l)</b>	<b>TURB. (NTU)</b>	<b>Eh (mV)</b>	<b>FLOW RATE (ml/min.)</b>	<b>DEPTH TO WATER (btor)</b>
0800	7.10	18.01	0.503	5.68	----	130	260	32.10
0805	6.51	17.19	0.574	3.53	655.0	100	260	34.30
0810	6.39	17.19	0.570	2.38	----	80	260	35.60
0815	6.43	17.21	0.592	1.70	100.0	75	260	36.60
0820	6.54	17.15	0.658	0.66	41.0	47	260	37.10
<b>Tolerance:</b>	<b>0.1</b>	<b>---</b>	<b>3%</b>	<b>10%</b>	<b>10%</b>	<b>+ or - 10</b>	<b>---</b>	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $v_{ql} = \pi r^2 h$ )

Remarks:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-014D

Date: 6/23/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	<u>Bladder Pump</u>		Tubing Type:	<u>Poly</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>33.20</u>	Depth to Well Bottom:	<u>80.43</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>10'</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>29.1</u>		Estimated Purge Volume (liters):	<u>31</u>		

Sample ID: DEC-014D Sample Time: 1145 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1040	7.19	19.27	0.819	4.02	630.0	-32	480	33.20
1045	6.72	17.44	1.370	6.37	124.0	18	480	33.20
1050	6.67	17.29	1.380	5.40	24.3	22	480	33.20
1055	6.66	17.26	1.380	4.88	13.7	22	480	33.20
1100	6.66	17.20	1.380	4.24	6.4	23	480	33.20
1105	6.66	17.20	1.380	3.75	3.7	24	480	33.20
1110	6.65	17.13	1.390	3.23	3.4	24	480	33.20
1115	6.65	17.12	1.390	3.23	3.0	24	480	33.20
1120	6.65	17.10	1.400	2.53	0.6	24	480	33.20
1125	6.65	17.15	1.400	2.31	0.0	23	480	33.20
1130	6.65	17.14	1.400	2.12	0.0	24	480	33.20
1135	6.64	17.10	1.400	1.88	0.0	23	480	33.20
1140	6.65	17.10	1.400	1.71	0.0	23	480	33.20
1145	6.64	17.09	1.400	1.58	0.0	23	480	33.20
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

Remarks:



## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-014R

Date: 6/23/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	33.21	Depth to Well Bottom:	45.00	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	7.3	Estimated Purge Volume (liters):	19
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Sample ID:	DEC-014R	Sample Time:	1243	QA/QC:
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-015

Date: 6/22/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.19	Depth to Well Bottom:	45.10	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	5.5	Estimated Purge Volume (liters):	17
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Sample ID: DEC-015 Sample Time: 0836 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

<b>Tolerance:</b>	<b>0.1</b>	<b>---</b>	<b>3%</b>	<b>10%</b>	<b>10%</b>	<b>+ or - 10</b>	<b>---</b>
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**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** NR - Not Recorded

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-015D

Date: 6/22/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	<u>Bladder Pump</u>		Tubing Type:	<u>Poly</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>36.49</u>	Depth to Well Bottom:	<u>82.42</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>10'</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>28.3</u>		Estimated Purge Volume (liters):	<u>29</u>		

Sample ID: DEC-015D Sample Time: 1003 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0858	7.90	19.76	1.040	2.33	133.0	158	450	36.50
0903	6.97	17.99	1.220	1.04	80.5	69	450	36.50
0908	6.85	17.82	1.240	0.90	45.8	58	450	36.50
0913	6.79	17.76	1.250	0.78	20.8	48	450	36.50
0918	6.77	17.62	1.240	0.70	13.0	47	450	36.50
0923	NR	NR	NR	NR	NR	NR	NR	NR
0928	6.76	17.53	1.250	0.76	3.3	47	450	36.50
0933	6.76	17.54	1.250	0.63	1.7	45	450	36.50
0938	6.77	17.53	1.250	0.59	0.0	44	450	36.50
0943	6.77	17.35	1.250	0.57	0.0	43	450	36.50
0948	6.77	17.43	1.250	0.54	0.0	43	450	36.50
0953	6.77	17.45	1.250	0.52	0.0	42	450	36.50
0958	6.77	17.46	1.250	0.51	0.0	43	450	36.50
1003	6.78	17.44	1.250	0.51	0.0	42	450	36.50
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

**Remarks:** 923: missed reading  
NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Meeker Ave. Site: Well I.D.: DEC-22 (URS)

Date: 6/27/2007      Sampling Personnel: C.R.      Company: URS Corporation

Purging/ Sampling Device:	Tubing Type:	Pump/Tubing Inlet Location:	Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	29.37	Depth to Well Bottom:	40.80	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	Volume in 1 Well Casing (liters):	8.7	Estimated Purge Volume (liters):	13.2
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Sample ID:	DEC-22	Sample Time:	1245	QA/QC:
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Sample Parameters:

Note: \_\_\_\_\_

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $v_{ql} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-022D

Date: 6/22/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	49.10	Depth to Well Bottom:	60.41	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	7.0	Estimated Purge Volume (liters):	19
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Sample ID: DEC-022D Sample Time: 1440 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-027

Date: 6/24/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	39.79	Depth to Well Bottom:	49.58	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.0	Estimated Purge Volume (liters):	17
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Sample ID: DEC-027 Sample Time: 0922 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-028

Date: 6/21/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/  
Sampling  
Device: Bladder Pump      Tubing Type: Poly      Pump/Tubing  
Inlet  
Location: Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	37.47	Depth to Well Bottom:	49.86	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	7.6	Estimated Purge Volume (liters):	29
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Sample ID: DEC-028 Sample Time: 1740 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** 1700 missed reading  
NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-029

Date: 6/23/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.18	Depth to Well Bottom:	50.67	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	8.9	Estimated Purge Volume (liters):	23
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Sample ID: DEC-029 Sample Time: 1010 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** 948 - cleaned out Horiba flow cell



## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-029D

Date: 6/23/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.05	Depth to Well Bottom:	85.48	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	30.5	Estimated Purge Volume (liters):	31
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Sample ID: DEC-029D      Sample Time: 0847      QA/QC: \_\_\_\_\_

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0742	7.70	19.08	1.200	13.97	41.1	34	480	34.90
0747	6.93	17.17	1.410	8.38	0.0	40	480	34.90
0752	6.83	16.94	1.430	7.67	0.0	43	480	34.90
0757	6.82	16.86	1.430	7.47	0.0	42	480	34.90
0802	6.82	16.79	1.430	7.34	0.0	40	480	34.90
0807	6.83	16.75	1.430	7.14	0.0	38	480	34.90
0812	6.83	16.69	1.440	7.08	0.0	38	480	34.90
0817	6.82	16.67	1.440	7.04	0.0	40	480	34.90
0822	6.82	16.68	1.440	7.06	0.0	43	480	34.90
0827	6.82	16.59	1.450	7.09	0.0	47	480	34.90
0832	6.81	16.58	1.440	7.10	0.0	49	480	34.90
0837	6.81	16.64	1.440	7.18	0.0	52	480	34.90
0842	6.80	16.63	1.450	7.19	0.0	54	480	34.90
0847	6.80	16.61	1.440	7.26	0.0	55	480	34.90
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-030

Date: 6/20/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	~38 '
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	34.48	Depth to Well Bottom:	41.95	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	4.6	Estimated Purge Volume (liters):	13
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Sample ID: DEC-030      Sample Time: 1520      QA/QC: \_\_\_\_\_

Sample Parameters: \_\_\_\_\_ TCL VOCs + Tics  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-030D

Date: 6/20/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	34.05	Depth to Well Bottom:	80.40	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	28.6	Estimated Purge Volume (liters):	31
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Sample ID: DEC-030D Sample Time: 1405 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1255	6.56	17.65	1.340	5.66	37.1	-2	500	34.05
1300	6.52	17.43	1.360	6.40	206.0	4	450	34.05
1305	6.50	17.34	1.360	7.02	164.0	10	450	34.05
1310	6.52	16.99	1.360	5.30	89.6	15	450	34.05
1315	6.49	17.02	1.370	5.28	55.5	17	450	34.05
1320	6.49	17.07	1.370	5.63	34.1	20	430	34.05
1325	6.49	17.19	1.370	7.35	27.5	21	430	34.05
1330	6.48	17.11	1.370	7.26	30.9	24	500	34.05
1335	6.49	17.06	1.370	7.21	31.8	25	500	34.05
1340	6.48	17.02	1.370	7.19	34.6	26	500	34.05
1345	6.48	17.01	1.370	7.15	27.8	28	500	34.05
1350	6.48	16.97	1.370	7.15	30.8	29	460	34.05
1355	6.48	17.01	1.370	7.09	30.6	30	460	34.05
1400	6.47	16.96	1.370	7.10	29.7	32	460	34.05
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-031

Date: 6/21/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/  
Sampling  
Device: Bladder Pump      Tubing Type: Poly      Pump/Tubing  
Inlet  
Location: Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	31.80	Depth to Well Bottom:	43.95	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	7.5	Estimated Purge Volume (liters):	20
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Sample ID: DEC-031 Sample Time: 0945 QA/QC:

Sample Parameters: TCL VOCs + Tics, TCL SVOCs + Tics, TAL Metals, Cyanide, Pest/PCBs

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

**Remarks:** NR - Not Recorded

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-031D

Date: 6/21/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling Device:	<u>Bladder Pump</u>		Tubing Type:	<u>Poly</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>31.75</u>	Depth to Well Bottom:	<u>79.65</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>10'</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>29.6</u>		Estimated Purge Volume (liters):	<u>38</u>		

Sample ID: DEC-031D Sample Time: 0830 QA/QC:

Sample Parameters: TCL VOCs + Tics, TCL SVOCs + Tics, TAL Metals, Cyanide, Pest/PCBs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0640	6.97	21.01	1.040	12.05	>1000	-63	450	31.76
0645	6.51	19.15	1.450	9.35	>1000	-1	450	31.76
0650	6.47	18.34	1.520	4.92	>800	4	450	31.76
0655	6.45	18.31	1.560	4.92	792.0	4	450	31.76
0700	6.46	18.16	1.590	4.80	423.0	4	NR	NR
0705	6.44	18.20	1.610	4.91	247.0	2	NR	NR
0710	6.43	18.17	1.640	7.22	138.0	3	450	31.76
0715	6.43	18.19	1.640	7.97	68.9	4	NR	NR
0720	6.43	18.17	1.640	9.34	53.2	3	NR	NR
0725	6.43	18.18	1.630	9.28	42.3	4	450	31.76
0730	6.44	18.22	1.630	9.21	31.2	4	NR	NR
0735	6.44	18.29	1.630	9.26	23.8	5	NR	NR
0740	6.45	18.35	1.720	9.42	19.9	5	NR	NR
0745	6.45	18.33	1.730	9.62	18.1	6	450	31.76
0750	6.45	18.39	1.740	9.80	15.7	6	NR	NR
0755	6.45	18.45	1.760	9.99	11.2	7	NR	NR
0800	6.46	18.47	1.700	10.23	10.2	7	450	31.76
0805	6.46	18.44	1.700	10.33	9.6	7	NR	NR
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

Remarks: NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-032

Date: 6/22/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	25.35	Depth to Well Bottom:	44.06	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	11.5	Estimated Purge Volume (liters):	20
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Sample ID: DEC-032 Sample Time: 1614 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-033

Date: 6/21/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	<u>Bladder Pump</u>		Tubing Type:	<u>Poly</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>33.00</u>	Depth to Well Bottom:	<u>39.20</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>15'</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>3.8</u>		Estimated Purge Volume (liters):	<u>7</u>		

Sample ID: DEC-033 Sample Time: 1034 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0932	7.73	20.43	2.910	9.51	256.0	84	470	33.05
0939	6.61	18.57	2.780	9.15	282.0	80	450	36.30
0944	6.49	20.39	2.820	7.94	236.0	86	50	NR
0949	6.47	23.05	2.810	6.94	181.0	89	50	36.02
0954	NR	NR	NR	NR	NR	NR	50	36.02
0959	6.47	24.31	2.890	6.53	152.0	87	70	36.02
1004	6.52	20.82	2.700	6.90	247.0	66	70	36.90
1009	6.54	21.85	2.600	6.47	142.0	64	70	NR
1014	6.56	22.53	2.530	6.32	125.0	65	70	NR
1019	6.56	23.00	2.530	6.21	127.0	66	70	NR
1024	6.56	23.47	2.530	6.13	130.0	65	70	NR
1029	6.56	23.80	2.530	6.04	137.0	63	70	NR
1034	6.55	23.74	2.530	NR	NR	64	70	NR
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

Remarks: 954 missed reading  
NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-039

Date: 6/24/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling				Pump/Tubing Inlet	
Device:	Bladder Pump	Tubing Type:	Poly	Location:	Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	42.38	Depth to Well Bottom:	51.21	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	5.4	Estimated Purge Volume (liters):	19
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Sample ID: DEC-039      Sample Time: 0809      QA/QC: DUP-062411

Sample Parameters: \_\_\_\_\_ TCL VOCs + Tics  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**



## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-042

Date: 6/23/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling				Pump/Tubing Inlet	
Device:	Bladder Pump	Tubing Type:	Poly	Location:	Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	39.31	Depth to Well Bottom:	49.67	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.4	Estimated Purge Volume (liters):	17
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Sample ID: DEC-042      Sample Time: 1320      QA/QC: \_\_\_\_\_

Sample Parameters: \_\_\_\_\_ TCL VOCs + Tics  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1240	7.08	18.14	0.856	18.43	163.0	148	480	39.35
1245	7.01	17.24	0.853	16.97	148.0	161	480	39.35
1250	6.95	17.01	0.848	15.80	127.0	166	480	39.35
1255	6.96	16.95	0.853	14.93	80.5	172	480	39.35
1300	6.93	16.86	0.857	14.99	50.3	174	480	39.35
1305	6.95	16.79	0.860	14.89	16.7	174	480	39.35
1310	6.96	16.74	0.863	14.78	18.0	177	480	39.35
1315	6.95	16.81	0.866	14.73	17.3	178	480	39.35
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-043

Date: 6/22/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	34.90	Depth to Well Bottom:	50.30	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	9.5	Estimated Purge Volume (liters):	24
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Sample ID:	DEC-043	Sample Time:	1326	QA/QC:
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-043D

Date: 6/22/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	35.38	Depth to Well Bottom:	85.45	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	30.9	Estimated Purge Volume (liters):	33
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Sample ID:	DEC-043D	Sample Time:	1205	QA/QC:
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1055	7.20	17.02	0.777	12.56	29.5	-110	500	35.38
1100	6.99	16.27	1.070	11.42	20.3	-69	500	35.38
1105	6.90	16.10	1.270	10.90	0.0	-52	500	35.38
1110	6.88	16.01	1.320	10.82	0.0	-50	500	35.38
1115	6.88	16.00	1.340	10.72	0.0	-51	500	35.38
1120	6.89	15.94	1.340	10.75	0.0	-50	500	35.38
1125	6.89	15.97	1.350	10.72	0.0	-51	500	35.38
1130	6.88	16.03	1.340	10.73	0.0	-50	500	35.38
1135	6.88	15.98	1.350	10.68	0.0	-50	500	35.38
1140	6.89	15.96	1.350	10.66	0.0	-48	500	35.38
1145	6.90	15.94	1.350	10.67	0.0	-47	500	35.38
1150	6.89	15.90	1.350	10.69	0.0	-46	500	35.38
1155	6.91	15.87	1.350	10.71	0.0	-46	500	35.38
1200	6.90	15.93	1.350	10.73	0.0	-46	500	35.38
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-044

Date: 6/23/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/  
Sampling  
Device: Bladder Pump      Tubing Type: Poly      Pump/Tubing  
Inlet  
Location: Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	34.21	Depth to Well Bottom:	44.88	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.4	Estimated Purge Volume (liters):	20
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Sample ID: DEC-044 Sample Time: 0905 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-044D

Date: 6/23/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	33.80	Depth to Well Bottom:	80.45	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	28.8	Estimated Purge Volume (liters):	30
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Sample ID: DEC-044D Sample Time: 0755 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0645	7.15	19.90	1.520	13.58	24.0	14	500	33.80
0650	6.74	17.96	2.030	7.96	2.8	29	500	33.80
0655	6.71	17.91	2.030	7.78	0.0	30	500	33.75
0700	6.72	17.62	2.020	7.79	0.0	30	500	33.70
0705	6.72	17.71	2.020	8.02	0.0	30	500	33.70
0710	6.72	17.72	2.020	8.05	0.0	30	500	33.70
0715	6.73	17.68	2.020	8.41	0.0	30	500	33.70
0720	6.73	17.70	2.020	8.99	0.0	30	500	33.70
0725	6.74	17.71	2.010	9.33	0.0	30	500	33.70
0730	6.75	17.65	2.020	10.30	0.0	30	500	33.70
0735	6.75	17.66	2.020	10.47	0.0	30	500	33.70
0740	6.76	17.65	2.000	10.68	0.0	30	500	33.70
0745	6.76	17.67	2.000	10.71	0.0	29	500	33.70
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-045

Date: 6/21/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	29.60	Depth to Well Bottom:	44.40	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	9.1	Estimated Purge Volume (liters):	28
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Sample ID:	DEC-045	Sample Time:	1310	QA/QC:
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-045D

Date: 6/21/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/  
Sampling  
Device: Bladder Pump      Tubing Type: Poly      Pump/Tubing  
Inlet  
Location: Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	29.25	Depth to Well Bottom:	79.70	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	32.5	Estimated Purge Volume (liters):	33
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Sample ID: DEC-045D Sample Time: 1125 QA/QC: \_\_\_\_\_

Sample Parameters: \_\_\_\_\_ TCL VOCs + Tics  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## PURGE PARAMETERS

<b>TIME</b>	<b>pH</b>	<b>TEMP (°C)</b>	<b>COND. (mS/cm)</b>	<b>DISS. O<sub>2</sub> (mg/l)</b>	<b>TURB. (NTU)</b>	<b>Eh (mV)</b>	<b>FLOW RATE (ml/min.)</b>	<b>DEPTH TO WATER (btor)</b>
1010	7.19	20.75	0.839	12.06	57.2	-56	500	29.28
1015	6.74	18.56	1.370	9.85	38.6	3	500	29.30
1020	6.74	18.40	1.410	9.49	25.4	7	500	29.30
1025	6.74	18.25	1.470	9.51	13.3	6	500	29.30
1030	6.73	18.15	1.520	9.52	4.7	5	500	29.30
1035	6.74	18.08	1.540	9.60	2.1	5	500	29.30
1040	6.74	17.93	1.550	9.60	0.7	4	500	29.30
1045	6.74	17.96	1.560	9.70	0.0	4	500	29.30
1050	6.74	17.98	1.580	9.94	0.0	3	500	29.30
1055	6.75	18.00	1.580	10.09	0.0	3	500	29.30
1100	6.76	17.98	1.590	10.29	0.0	3	500	29.30
1105	6.76	17.98	1.590	10.51	0.0	3	500	29.30
1110	6.77	17.96	1.590	10.65	0.0	2	500	29.30
1115	6.76	17.96	1.600	10.87	0.0	2	500	29.30
<b>Tolerance:</b>	<b>0.1</b>	<b>---</b>	<b>3%</b>	<b>10%</b>	<b>10%</b>	<b>+ or - 10</b>	<b>---</b>	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-046

Date: 6/21/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	33.40	Depth to Well Bottom:	44.35	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.8	Estimated Purge Volume (liters):	22
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Sample ID:	DEC-046	Sample Time:	0839	QA/QC:	MS/MSD
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Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:



## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-047

Date: 6/21/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	28.06	Depth to Well Bottom:	45.07	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	10.5	Estimated Purge Volume (liters):	22
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Sample ID: DEC-047      Sample Time: 1155      QA/QC: \_\_\_\_\_

Sample Parameters: \_\_\_\_\_ TCL VOCs + Tics \_\_\_\_\_  
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 \_\_\_\_\_  
 \_\_\_\_\_

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1110	8.22	20.03	1.790	5.72	491.0	37	480	28.06
1115	6.75	17.33	1.900	4.70	143.0	48	480	28.06
1120	6.59	17.04	1.860	3.09	54.0	56	480	28.06
1125	6.55	17.00	1.760	3.70	20.7	66	480	28.06
1130	6.55	16.88	1.700	3.66	11.8	72	480	28.06
1135	6.54	16.89	1.660	3.41	6.2	75	480	28.06
1140	6.54	16.83	1.620	3.74	2.3	79	480	28.06
1145	6.54	16.89	1.600	3.68	0.6	82	480	28.06
1150	6.54	16.82	1.590	3.91	0.5	85	480	28.06
1155	6.54	16.80	1.580	4.05	0.0	89	480	28.06
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-048

Date: 6/24/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling				Pump/Tubing Inlet	
Device:	Peristaltic Pump	Tubing Type:	Poly	Location:	Screen midpoint

Measuring Point:	Below Top of Riser	Initial Depth to Water:	25.57	Depth to Well Bottom:	40.50	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	9.2	Estimated Purge Volume (liters):	12
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Sample ID: DEC-048      Sample Time: 1300      QA/QC: DEC-048 MS/MSD  
DUP2-062411

Sample Parameters: \_\_\_\_\_  
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 \_\_\_\_\_

## PURGE PARAMETERS

<b>TIME</b>	<b>pH</b>	<b>TEMP (°C)</b>	<b>COND. (mS/cm)</b>	<b>DISS. O<sub>2</sub> (mg/l)</b>	<b>TURB. (NTU)</b>	<b>Eh (mV)</b>	<b>FLOW RATE (ml/min.)</b>	<b>DEPTH TO WATER (btor)</b>
1135	6.81	19.11	1.010	1.33	11.0	81	400	x
1140	6.74	18.86	1.010	1.28	9.2	66	400	x
1145	6.72	18.86	1.020	1.32	7.5	50	400	x
1150	6.69	18.76	1.020	1.43	5.1	44	400	x
1155	6.68	18.73	1.020	1.45	5.1	51	400	x
1200	6.66	18.72	1.020	1.45	4.8	53	400	x
1205	6.64	18.67	1.020	1.47	4.9	55	400	x
<b>Tolerance:</b>	<b>0.1</b>	<b>---</b>	<b>3%</b>	<b>10%</b>	<b>10%</b>	<b>+ or - 10</b>	<b>---</b>	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** DTP = 25.43 LNAPL sample collected @ 1100 with a peri-pump  
DTW = 25.57 GW water sample was collected through 1" PVC lowered into the well with a cap on the bottom to ~29ft.

X: DTW could not be monitored during purging because IP could not be lowered to water through the 1" PVC pipe and around the tubing.

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-064

Date: 6/20/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen Midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	34.65	Depth to Well Bottom:	44.86	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	6.3	Estimated Purge Volume (liters):	29
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Sample ID: DEC-064 Sample Time: 1544 QA/QC:

Sample Parameters: VOCs + Tics

## PURGE PARAMETERS

<b>TIME</b>	<b>pH</b>	<b>TEMP (°C)</b>	<b>COND. (mS/cm)</b>	<b>DISS. O<sub>2</sub> (mg/l)</b>	<b>TURB. (NTU)</b>	<b>Eh (mV)</b>	<b>FLOW RATE (ml/min.)</b>	<b>DEPTH TO WATER (btor)</b>
1444	7.15	19.58	1.450	3.07	88.9	46	480	34.65
1449	6.90	18.61	1.450	1.44	38.0	38	480	34.66
1454	6.81	18.28	1.450	1.70	16.5	34	480	34.67
1459	6.80	18.12	1.450	1.79	8.6	32	480	34.71
1504	6.77	18.03	1.450	1.89	3.5	37	480	34.75
1509	6.72	17.88	1.450	2.12	1.5	41	480	34.75
1514	6.70	17.92	1.450	2.40	0.0	45	480	34.75
1519	6.69	17.98	1.450	2.42	0.0	49	480	34.75
1524	6.67	18.40	1.450	2.57	0.0	51	480	34.75
1529	6.69	17.90	1.450	2.45	0.0	51	480	34.75
1534	6.67	17.85	1.450	2.75	0.0	57	480	34.75
1539	6.66	17.79	1.440	2.83	0.0	58	480	34.75
1544	6.65	17.80	1.440	2.95	0.0	63	480	34.75
<b>Tolerance:</b>	<b>0.1</b>	<b>---</b>	<b>3%</b>	<b>10%</b>	<b>10%</b>	<b>+ or - 10</b>	<b>---</b>	

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

Remarks:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-064D

Date: 6/20/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	<u>Bladder Pump</u>		Tubing Type:	<u>Poly</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>34.81</u>	Depth to Well Bottom:	<u>80.91</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>10'</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>28.4</u>		Estimated Purge Volume (liters):	<u>35</u>		

Sample ID: DEC-064D Sample Time: 1414 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1254	6.10	19.16	1.300	2.15	53.4	145	440	34.51
1259	6.22	18.53	1.320	1.51	29.8	147	440	34.59
1304	6.34	18.43	1.320	1.65	19.7	142	440	34.63
1309	6.34	18.20	1.320	1.42	12.3	141	440	34.65
1314	6.38	18.25	1.290	2.23	9.9	125	440	34.71
1319	6.39	18.22	1.280	2.73	5.6	118	440	34.74
1324	6.39	18.28	1.280	2.72	4.7	115	440	37.27
1329	6.38	18.35	1.260	2.70	3.1	111	440	34.78
1334	6.41	18.38	1.250	2.70	1.4	108	440	34.79
1339	6.39	18.64	1.250	2.67	0.3	107	440	34.79
1344	6.41	18.66	1.250	2.72	0.0	105	440	34.83
1349	6.39	18.78	1.240	2.67	0.0	104	440	34.83
1354	6.41	18.79	1.240	2.62	0.0	105	440	34.83
1359	6.40	19.05	1.240	2.61	0.0	105	440	34.84
1404	6.41	19.04	1.240	2.56	0.0	105	440	34.84
1409	6.41	19.05	1.240	2.54	0.0	105	440	34.84
1414	6.41	19.21	1.230	2.54	0.0	105	440	34.84
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

Remarks:

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-065

Date: 6/22/2011 Sampling Personnel: CF/SL Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.15	Depth to Well Bottom:	44.42	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	5.1	Estimated Purge Volume (liters):	18
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Sample ID: DEC-065      Sample Time: 0845      QA/QC: DUP-062211

Sample Parameters: \_\_\_\_\_ TCL VOCs + Tics  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:**

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-065D

Date: 6/22/2011      Sampling Personnel: CF/SL      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	36.45	Depth to Well Bottom:	80.30	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	27.1	Estimated Purge Volume (liters):	30
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Sample ID: DEC-065D      Sample Time: 0745      QA/QC: \_\_\_\_\_

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

[illegible]

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** NR - Not Recorded

## LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave      Site: Klink/Cosmo      Well I.D.: DEC-066

Date: 6/22/2011      Sampling Personnel: TI/KM      Company: URS Corporation

Purging/ Sampling Device:	Bladder Pump	Tubing Type:	Poly	Pump/Tubing Inlet Location:	Screen midpoint
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Measuring Point:	Below Top of Riser	Initial Depth to Water:	29.08	Depth to Well Bottom:	45.30	Well Diameter:	2"	Screen Length:	15'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	10.0	Estimated Purge Volume (liters):	16
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Sample ID: DEC-066 Sample Time: 1837 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

<b>TIME</b>	<b>pH</b>	<b>TEMP (°C)</b>	<b>COND. (mS/cm)</b>	<b>DISS. O<sub>2</sub> (mg/l)</b>	<b>TURB. (NTU)</b>	<b>Eh (mV)</b>	<b>FLOW RATE (ml/min.)</b>	<b>DEPTH TO WATER (btor)</b>
1802	6.99	21.19	0.533	6.67	148.0	-32	470	29.10
1807	6.95	19.58	0.522	8.73	126.0	-27	470	29.10
1812	6.95	19.63	0.518	8.78	84.0	-26	470	29.10
1817	6.95	19.54	0.519	9.58	69.4	-25	470	29.10
1822	6.95	19.42	0.521	6.05	58.0	-25	470	29.10
1827	6.95	19.35	0.521	NR	48.9	-26	470	29.10
1832	6.95	19.35	0.521	NR	37.0	-25	470	29.10
1837	6.96	19.35	0.522	NR	36.0	-27	470	29.10
<b>Tolerance:</b>	<b>0.1</b>	<b>---</b>	<b>3%</b>	<b>10%</b>	<b>10%</b>	<b>+ or - 10</b>	<b>---</b>	

**Information:** WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $\text{vol}_{\text{cyl}} = \pi r^2 h$ )

**Remarks:** DO sensor not working properly, readings jumping back and forth btw 9.58 to 2.22  
NR - Not Recorded

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NYSDEC - Meeker Ave Site: Klink/Cosmo Well I.D.: DEC-066D

Date: 6/22/2011 Sampling Personnel: TI/KM Company: URS Corporation

Purging/ Sampling Device:	<u>Bladder Pump</u>		Tubing Type:	<u>Poly</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>28.52</u>	Depth to Well Bottom:	<u>80.61</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>10'</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>32.1</u>		Estimated Purge Volume (liters):	<u>33</u>		

Sample ID: DEC-066D Sample Time: 1745 QA/QC:

Sample Parameters: TCL VOCs + Tics

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1640	7.99	23.06	0.575	5.53	18.1	-20	500	28.55
1645	6.64	20.10	1.370	1.07	21.2	26	500	28.55
1650	6.57	19.40	1.360	0.83	3.2	34	500	28.55
1655	6.56	19.16	1.320	0.72	0.0	34	500	28.55
1700	6.55	19.19	1.320	0.67	0.0	33	500	28.55
1705	6.55	19.03	1.330	0.62	0.0	34	500	28.55
1710	6.55	19.03	1.340	0.61	0.0	34	500	28.55
1715	6.55	17.87	1.380	0.89	0.0	35	500	28.55
1720	6.54	17.83	1.380	1.01	0.0	36	500	28.55
1725	6.54	17.79	1.390	1.19	0.0	37	500	28.55
1730	6.54	17.75	1.390	1.04	0.0	38	500	28.55
1735	6.54	17.72	1.390	1.08	0.0	38	500	28.55
1740	6.54	17.71	1.400	1.05	0.0	39	500	28.55
1745	6.54	17.74	1.400	0.99	0.0	39	500	28.55
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft ( $vol_{cyl} = \pi r^2 h$ )

Remarks:



## **APPENDIX K**

### **INVESTIGATION DERIVED WASTE (IDW) DISPOSAL DOCUMENTS**

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1

of

49013

3. Generator's Name and Mailing Address

ATTN: DAVID  
HARRINGTON

NYSDEC  
625 Broadway Albany NY

4. Generator's Phone (518) 462-9775

MEERDA Ave  
Brooklyn Green Campus

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

N.Y.R. 0.0.0.1.0.7.3.2.6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control  
10 South 4th  
Brooklyn NY 11206

10. US EPA ID Number

NY.D.0.8.2.7.8.5.4.2.9

C. Facility's Phone

631-586-0333

11. Waste Shipping Name and Description

a. Non-Hazardous Soil / Solids

b.

c.

d.

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Vol

17. 200 P

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

ASOLIDS

Pending Analysis

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

SCOTT MCCABE FOR NYSDEC

Signature

Scott McCabe for NYSDEC

Month Day Year

5 3 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

John Zima

Signature

John Zima

Month Day Year

5 9 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Miranda

Signature

Fred Miranda

Month Day Year

5 26 11

TRANSPORTER #1

Bay 23433

2000

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
3. Generator's Name and Mailing Address ATTN: DAVID HARRINGTON 245 Broadway Albany N.Y.		6. US EPA ID Number N.Y.R. 0.0.0.1.0.7.3.2.6		
4. Generator's Phone (518) 422-9775		A. Transporter's Phone 631-586-5900		
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		8. US EPA ID Number		B. Transporter's Phone
7. Transporter 2 Company Name		10. US EPA ID Number		C. Facility's Phone
9. Designated Facility Name and Site Address Chemical Pollution Control 60 South 4th Brooklyn N.Y. 11206		11. Waste Shipping Name and Description Van Housen Soil / Solids		12. Containers No. Type
				13. Total Quantity
				14. Unit Wt/Vol
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 Also: Pending Analysis				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name SCOTT MCCABE FOR NYSDEC		Signature [Signature]		Month Day Year 5 9 11
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature [Signature]		Month Day Year 5 9 11
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred Minors		Signature [Signature]		Month Day Year 5 26 11

TRANSPORTER #2

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1

of

49014

3. Generator's Name and Mailing Address

ATTN: David Harrington

NYDEC

625 Broadway Albany NY

MEERER Inc

Brooklyn Union Express

4. Generator's Phone

(518) 462-9775

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 000107326

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control

100 South 45th

Ramapo NY 11706

10. US EPA ID Number

NY D 082785429

C. Facility's Phone

631-586-0333

11. Waste Shipping Name and Description

a. Non-Hazardous Drill Cuttings

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

2 Drums 8.00 P

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

(A) SOLIDS

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

X Scott M. M... FOR NYDEC

Signature

[Signature] NYDEC

Month Day Year

5 9 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JOHN ZINSER

Signature

[Signature]

Month Day Year

5 9 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred M. M...

Signature

[Signature]

Month Day Year

5 26 11

TRANSPORTER #1

BAY-23432

100

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Doc. No.

49014

2. Page 1  
of 1

3. Generator's Name and Mailing Address

ATW DASH HANMSTON

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

N Y R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. Non-Hazardous Solid Wastes

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

TRANSPORTER #2

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1

of

48634

3. Generator's Name and Mailing Address

ATTN: Dare Harrington

NYSDCL  
625 Broadway

METKAR Ave

4. Generator's Phone (518) 462-9775

Albany, NY

Banking Assoc. Bldg

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 000107326

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control  
120 South 4th St  
Bingham NY 11906

10. US EPA ID Number

NY D 082785429

C. Facility's Phone

631-586-0333

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a.

Non Hazardous - Mud/Water Drilling

3 Dr

1200

lb

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A Sol 2013)

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Scott McManis for NYSDCL

Signature

[Signature]

Month Day Year

5 10 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Jon Sepe

Signature

[Signature]

Month Day Year

5 10 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Minardi

Signature

[Signature]

Month Day Year

5 26 11

TRANSPORTER #1

Bay 23439

011

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Doc. No. <b>48634</b>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>NYSDDEC Attn: David Harrington 625 Broadway Albany, NY</i>		MEEHAN Ave. Berkshire County, N.Y.		
4. Generator's Phone (518) 462-9775				
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>	6. US EPA ID Number <b>N.Y.R. 000107326</b>	A. Transporter's Phone <b>631-586-5900</b>		
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone		
9. Designated Facility Name and Site Address <i>Chemical Pollution Control 120 South 45T Barnes, NY 11706</i>	10. US EPA ID Number <b>NYD082785429</b>	C. Facility's Phone <b>631-586-0333</b>		
11. Waste Shipping Name and Description	12. Containers	13. Total Quantity	14. Unit Wt/Vol	
a. <i>Wm Hazardous - Mud/Water Drilling</i>	No. <i>3</i> Type <i>Drum</i>	<i>1200</i>	<i>P</i>	
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b> <i>A. See 193</i>				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name <i>Scott McNamee For NYSDDEC</i>		Signature <i>[Signature]</i>		Month Day Year <i>5 10 11</i>
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name <i>Jon Sepe</i>		Signature <i>[Signature]</i>		Month Day Year <i>5 10 11</i>
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name <i>Fred Mianich</i>		Signature <i>[Signature]</i>		Month Day Year <i>5 20 11</i>

GENERATOR  
TRANSPORTER  
FACILITY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1

of 1

48635

3. Generator's Name and Mailing Address

ATT: Dave Harrington

NYSDEC  
625 Broadway

4. Generator's Phone

(518-462) 9775 Albany NY

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6.

US EPA ID Number

N.Y.R. 0.0.0.1.0.7.3.2.6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8.

US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control  
100 South 4th  
Raphine, NY 11706

10.

US EPA ID Number

IN.Y.D.0.82.7.85.429

C. Facility's Phone

(31-586-0333

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a.

Nm Hazardous - Soil cuttings

3

DM

1800

P

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) SOLIDS

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

X Scott McCabe FOR NYSDEC

X [Signature] NYSDEC

5 10 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

X Jon Sepe

X [Signature]

5 10 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

Fred Miranda

[Signature]

5 26 11

TRANSPORTER #1



Box 23434

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Doc. No.  
**48635**

2. Page 1  
of 1

3. Generator's Name and Mailing Address

*NYSDEC  
Attn: Dana Harrington  
625 Broadway*

4. Generator's Phone (516-702) 9775 Albany, NY

5. Transporter 1 Company Name

**AARCO ENVIRONMENTAL SERVICES CORP.**

6. US EPA ID Number

**N Y R 0 0 0 1 0 7 3 2 6**

A. Transporter's Phone

**631-586-5900**

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

*Chemical Pollution Control  
100 South 4th St  
Babylon, NY 11706*

10. US EPA ID Number

**1 NY D 0 8 2 7 8 5 4 2 9**

C. Facility's Phone

**631-586-0533**

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. *Non Hazardous - Sol/cuttings*

*3*

*Drum*

*180*

*2*

b.   
c.   
d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

**EMERGENCY PHONE # 631-586-5900**

*A) Solids*

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

*X Scott McCarroll FOR NYSDEC*

*[Signature]*

*5 10 11*

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

*X Jon Sepe*

*[Signature]*

*5 10 11*

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

*Ted M. Smith*

*[Signature]*

*5 26 11*

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #2

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1

of 1

48636

3. Generator's Name and Mailing Address

Klink Cosmo Vanderpool 3 Division Place  
Brooklyn, NY

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

C. Facility's Phone 631-586-0333

11. Waste Shipping Name and Description

NYB 082785429

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Vol

a. Non-HAZ Drill Cuttings / Mud

008 DTM

4000

LBS

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) Sludge

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Megan Dascoli agent for NYSDOT

Signature

Megan Dascoli agent for NYSDOT

Month Day Year

05/11/11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Brian Wyle

Signature

Brian Wyle

Month Day Year

05/11/11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Minerva

Signature

Fred Minerva

Month Day Year

05/11/11

TRANSPORTER #1

Bay 23435

100

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
3. Generator's Name and Mailing Address Klink Cosmo Vanderpool 3 Division Place Brooklyn, NY				
4. Generator's Phone ( )				
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6	A. Transporter's Phone 631-586-5900	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone	
9. Designated Facility Name and Site Address Bayshore, NY		10. US EPA ID Number	C. Facility's Phone 631-586-0333	
11. Waste Shipping Name and Description Non-HAZ Drill Cuttings / Mud		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a.		008 DTM	4,000	LBS
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 (A) Sludge				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Megan Deascoli agent for NYSDOT		Signature Megan Deascoli agent for NYSDOT		Month Day Year 10 5 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name Brian Wyble		Signature Brian Wyble		Month Day Year 10 5 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred Minardi		Signature Fred Minardi		Month Day Year 10 5 11

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1

of 7

48712

3. Generator's Name and Mailing Address

Attn: Dave  
Harrington  
NYSDEC  
Division Place  
Brooklyn, NY

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

CP  
120 East  
Bayshore, NY

10. US EPA ID Number

NY D 08 27 85 429

C. Facility's Phone

631-586-0333

11. Waste Shipping Name and Description

a. Non-Hazardous Solid  
(Drill Cuttings)

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Vol

002 DM 008.00 LB

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

A Solids

Pending Analysis

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Larry Friedman As Agent for NYSDEC

Signature

Larry Friedman As Agent for NYSDEC

Month Day Year

5/2/11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Tom Sleva

Signature

Tom Sleva

Month Day Year

5/2/11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Miranda

Signature

Fred Miranda

Month Day Year

5/26/11

TRANSPORTER #1

Bay-23436

2/26/11

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Doc. No. 48712	2. Page 1 of 1
3. Generator's Name and Mailing Address ATTN: Dave Harrington NYSDEC Division Place Brooklyn, NY				
4. Generator's Phone ( )	5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.	6. US EPA ID Number N.Y.R. 0.0.0.1.0.7.3.2.6	A. Transporter's Phone 631-586-5900	
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone		
9. Designated Facility Name and Site Address CP 6 120 South Bayshore, NY	10. US EPA ID Number IN YD 082785429	C. Facility's Phone 631-586-0333		
11. Waste Shipping Name and Description		12. Containers	13. Total Quantity	14. Unit Wt/Vol
a. Non-Hazardous Solid (Drill Cuttings)		No.	Type	
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 ASOLIDS Pending Analysis				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Cary Friedman		Signature Cary Friedman		Month Day Year 1 5 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name Tom Shen		Signature Tom Shen		Month Day Year 1 5 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred Miranda		Signature Fred Miranda		Month Day Year 5 26 11

TRANSPORTER #2

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1

of 1

N/A

48728

3. Generator's Name and Mailing Address

ATTN: Dave Harrington  
NYSDEC  
625 Broadway 12th Flr  
Albany NY 12233-7016

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

CPC PSCHAU  
120 S. 4th St.  
Baptists, NY

10. US EPA ID Number

NYD 082785429

C. Facility's Phone

586-0333

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Vol

a. Non-hazardous Soil  
(Drill Cuttings)

3 DM 6200 R

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

CHRY

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) SOLIDS

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Cary Friedman AS Agent for  
NYSDEC

Signature

Cary Friedman AS Agent  
for NYSDEC

Month Day Year

5 13 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

CHRY (hristian)

Signature

CHRY (hristian)

Month Day Year

5 13 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Miranda

Signature

Fred Miranda

Month Day Year

5 16 11

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

Bay 23437

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. N/A	Manifest Doc. No. 48728	2. Page 1 of 1
3. Generator's Name and Mailing Address ATTN: Dave Harrington 625 Broadway 12th Flr Albany NY 12233-7016			Division Place Vandewater	
4. Generator's Phone ( )				
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N.Y.R. 0.0.0.1.0.7.3.2.6	A. Transporter's Phone 631-586-5900	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone	
9. Designated Facility Name and Site Address CPC RECHAU 120 S. 4th St. Babylon, NY		10. US EPA ID Number N.Y.D.0827.85.4.2.9	C. Facility's Phone 631-586-0333	
11. Waste Shipping Name and Description			12. Containers No. Type	13. Total Quantity 14. Unit Wt/Vol
a. Non-Hazardous Soil (Drill Cuttings)			3. DM	12.00 P
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above LARRY			E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 (A) SOLIDS				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Larry Friedman As Agent for NYSDEC		Signature [Signature]		Month Day Year 5 15 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name LARRY		Signature [Signature]		Month Day Year 5 15 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred M. [unclear]		Signature [Signature]		Month Day Year 5 16 11

TRANSPORTER #2

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of 1

48570

3. Generator's Name and Mailing Address

NYS DEC  
Attn: Dave  
Harrington  
VANDERVOORT AVE  
Brooklyn NY

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

CHEMICAL POLLUTION CONTROL  
170 SOUTH 4TH STREET  
BAYSHORE NY 11706

10. US EPA ID Number

NY R 0 8 2 7 8 5 4 2 9

C. Facility's Phone

631-586-0333

11. Waste Shipping Name and Description

12. Containers

No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. NON HAZ DRIILL CUTTINGS

2 Dr

600 P

b. NON HAZ WELLS DRILLING WATER

20 Dr

1.10 B

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900 - pending Analysis

(A) 60 LBS

(B) LIT

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

As Agent

Signature

As Agent

Month Day Year

Cary Friedman for NYSDEC

[Signature]

for NYSDEC 5 16 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

MICHAEL MAZUR

[Signature]

05 16 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

Fred Minardi

[Signature]

5 26 11

TRANSPORTER #1



Bay 23438

6

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Doc. No. <b>48570</b>		2. Page 1 of 1	
3. Generator's Name and Mailing Address <b>NYS DEC Attn Dave Harrington VANDERVOORT AVE Brooklyn NY</b>							
4. Generator's Phone ( )							
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>		6. US EPA ID Number <b>NYR000107326</b>		A. Transporter's Phone <b>631-586-5900</b>			
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter's Phone			
9. Designated Facility Name and Site Address <b>CHEMICAL POLLUTION CONTROL 120 SOUTH 4TH STREET BAYSHORE NY 11706</b>		10. US EPA ID Number <b>NYR082785429</b>		C. Facility's Phone <b>631-586-0333</b>			
11. Waste Shipping Name and Description				12. Containers		13. Total Quantity	
				No.	Type	Unit	
a. <b>NON HAZ DRILL CUTTINGS</b>				2 Dr		600 D	
b. <b>NON HAZ WEL DRILLING WATER</b>				2 Dr		1.10 E	
c.							
d.							
D. Additional Descriptions for Materials Listed Above				E. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900 - pending Analysis</b> <b>A) SOLIDS</b> <b>B) LUB</b>							
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <b>Larry Friedman</b>				Signature <i>[Signature]</i>		Month Day Year <b>5/16/11</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>MICHAEL MAZUR</b>				Signature <i>[Signature]</i>		Month Day Year <b>05/16/11</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name <b>Paul Mianke</b>				Signature <i>[Signature]</i>		Month Day Year <b>5/26/11</b>	

TRANSPORTER #2

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of 1

48638

3. Generator's Name and Mailing Address

Attn Dave Harrington

NYS DEC  
Vandervoort Ave  
Brooklyn NY

4. Generator's Phone

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

N.Y.R. 000107326

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control  
120 South 4th St  
Bayshore NY 11706

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

12. Containers

No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a.

Non Haz Drill Cuttings

3 DM

1460 lbs

b.

Non Haz Drilling water/liquid from well purge

7 DM

300 B

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) 501.05  
(B) 110.15

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Cary Friedman As Agent For NYDEC

Signature

Cary Friedman As Agent For NYDEC

Month Day Year

5 17 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Jon Sepe

Signature

Jon Sepe

Month Day Year

5 17 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Miranda

Signature

Fred Miranda

Month Day Year

5 26 11

TRANSPORTER #1

Bay-23431

10

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Doc. No. <b>48638</b>		2. Page 1 of 1					
3. Generator's Name and Mailing Address <b>Attn: Dave Harrington, NYS DEC Vandervoort Ave Brooklyn NY</b>											
4. Generator's Phone ( )											
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>				6. US EPA ID Number <b>NY R 000107326</b>		A. Transporter's Phone <b>631-586-5900</b>					
7. Transporter 2 Company Name				8. US EPA ID Number		B. Transporter's Phone					
9. Designated Facility Name and Site Address <b>Chemical Pollution Control 120 South 4th St. Bayshore NY 11706</b>				10. US EPA ID Number		C. Facility's Phone					
11. Waste Shipping Name and Description						12. Containers		13. Total Quantity		14. Unit Wt/Vol	
						No. Type					
a. <b>Non Haz Drill Cuttings</b>						3 DM		1460		lbs	
b. <b>Non Haz Drilling water/liquid from well purge</b>						7 DM		300		lb	
c.											
d.											
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b> <i>Handwritten notes:</i> HARRISON CO BAY 23431											
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name <b>Cary Friedman</b>						Signature <i>Cary Friedman</i>		Month <b>5</b> Day <b>17</b> Year <b>11</b>			
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature <i>Joe Sepe</i>		Month <b>5</b> Day <b>17</b> Year <b>11</b>			
18. Transporter 2 Acknowledgement of Receipt of Materials						Signature		Month		Day Year	
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.											
Printed/Typed Name <b>Fred Minich</b>						Signature <i>Fred Minich</i>		Month <b>5</b> Day <b>26</b> Year <b>11</b>			

TRANSPORTER #2

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of

48637

3. Generator's Name and Mailing Address

Attn Dave Harrington  
NYS DEC  
Vanderport Ave  
Brooklyn NY

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

N Y R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control  
120 South 4th St  
Bay Shore NY 11706

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

12. Containers

13. Total  
Quantity

14. Unit  
Wt/Vol

a.

Non Haz Drill Cuttings

3

DM

1400

lbs

b.

Non Haz Drilling Water Trapped From Well  
Large

3

DM

150

Gr

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

A) 50000  
B) 150

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Scott MacLean FOR NYS DEC

Signature

Scott MacLean for NYS DEC

Month Day Year

5 18 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Chaz Christie

Signature

Chaz Christie

Month Day Year

5 18 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Ted Miranda

Signature

Ted Miranda

Month Day Year

5 26 11

TRANSPORTER #1

NY-23430

23

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Doc. No. <b>48637</b>	2. Page 1 of	
3. Generator's Name and Mailing Address <i>Alvin Dave Harrington</i>						
4. Generator's Phone ( )						
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>			6. US EPA ID Number <b>NY R 0 0 0 1 0 7 3 2 6</b>		A. Transporter's Phone <b>631-586-5900</b>	
7. Transporter 2 Company Name			8. US EPA ID Number		B. Transporter's Phone	
9. Designated Facility Name and Site Address <i>Chemical Pollution Control 120 South 4th St Bay Shore NY 11706</i>			10. US EPA ID Number		C. Facility's Phone	
11. Waste Shipping Name and Description					12. Containers	
					No.	Type
a. <i>Non Haz Drill Cuttings</i>					3	DR
b. <i>Non Haz Drilling Water (liquid from well)</i>					3	DR
c. <i>Perge</i>						
d.						
D. Additional Descriptions for Materials Listed Above					E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b> <i>7/1/00</i> <i>9/2/00</i>						
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Printed/Typed Name <i>Scott Wickham FOR NYSDEC</i>				Signature <i>Scott Wickham</i>		Month Day Year <i>5 18 00</i>
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name <i>Gregory Christie</i>				Signature <i>Gregory Christie</i>		Month Day Year <i>5 18 00</i>
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name				Signature		Month Day Year
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name <i>Fred Miranda</i>				Signature <i>Fred Miranda</i>		Month Day Year <i>5 26 00</i>

GENERATOR

TRANSPORTER

FACILITY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of

48641

3. Generator's Name and Mailing Address

Attn: Dave Harrington

NYSDEC

Vanderwort Ave

BROOKLYN, NY

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6.

US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8.

US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control

120 South 4th St

Bay Shore, NY 11706

10.

US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

12. Containers

No.

Type

13.  
Total  
Quantity

14.  
Unit  
Wt/Vol

a. NON-HAZ Drilling / Mud

6

DM

3000

LBS

b. NON-HAZ Drilling Water / Purge Water

4

DM

2000

LBS

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) Single

(B) Low

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Carol Friedman

As Agent  
for NYSDEC

Signature

[Signature]

As Agent  
for NYSDEC

Month Day Year

05 19 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Brian White

Signature

[Signature]

Month Day Year

05 19 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred M. M... [Signature]

Signature

[Signature]

Month Day Year

05 26 11

TRANSPORTER #1

Bay 23424

6/13/

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. 48641	2. Page 1 of
3. Generator's Name and Mailing Address Attn Dave Harrington NYS DEC Vandervoort Ave BROOKLYN, NY			
4. Generator's Phone ( )			
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6	A. Transporter's Phone 631-586-5900
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address Chemical Pollution Control 120 South 4th St Bay Shore, NY 11706		10. US EPA ID Number	C. Facility's Phone
11. Waste Shipping Name and Description		12. Containers No. Type	13. Total Quantity 14. Unit Wt/Vol
a. NON-HAZ Drill/Cutting / Mud		6 DM	3000 LBS
b. NON-HAZ Drilling Water / Puage Water		4 DM	2000 LBS
c.			
d.			
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 ID Agent A. 11706			
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.			
Printed/Typed Name Gary Friedman As Agent for NYS DEC		Signature Gary Friedman	Month Day Year 05 19 11
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed/Typed Name Brian Wyle		Signature Brian Wyle	Month Day Year 05 19 11
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed/Typed Name		Signature	Month Day Year
19. Discrepancy Indication Space			
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.			
Printed/Typed Name Fred M. M...		Signature Fred M. M...	Month Day Year 05 20 11

GENERATOR

TRANSPORTER

FACILITY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of

48643

3. Generator's Name and Mailing Address

ATTN: DAVE HARRINGTON  
Van der Voort Ave. Brookline  
NY 11506

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control, Inc.  
1205 LINDEN ST.  
Bay Shore, NY 11706

10. US EPA ID Number

C. Facility's Phone

888-719-8544

11. Waste Shipping Name and Description

12. Containers

No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. NON-HAZ Drilling Muds/Mud

005 DT

2500

LBS

b. NON-HAZ Purge Water

004 DT

2000

LBS

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) 5 x 36 in dia

(B) 4 x 6 in dia

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Gay Friedman As Agent for NYSDOC

Signature

[Signature]

Month Day Year

05 20 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Brian Wyble

Signature

[Signature]

Month Day Year

05 20 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Miranda

Signature

[Signature]

Month Day Year

05 26 11

TRANSPORTER #1



Bay 23426

SPC

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Doc. No. <b>48643</b>	2. Page 1 of
3. Generator's Name and Mailing Address <b>ATTN: DAVE HARRINGTON</b> <b>Vander Voort Ave BROOKLYN</b>		4. Generator's Phone ( )		
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>		6. US EPA ID Number <b>N Y R 0 0 0 1 0 7 3 2 6</b>	A. Transporter's Phone <b>631-586-5900</b>	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone	
9. Designated Facility Name and Site Address <b>Chemical Bulk Control, Inc.</b> <b>1205 41st St.</b> <b>Bay Shore NY 11706</b>		10. US EPA ID Number	C. Facility's Phone <b>888-715-8111</b>	
11. Waste Shipping Name and Description			12. Containers No. Type	13. Total Quantity
a. <b>NON-HAZ Drilling Muds/Mud</b>			<b>005 DT</b>	<b>2500 LBS</b>
b. <b>NON-HAZ Purge Water</b>			<b>004 DT</b>	<b>2000 LBS</b>
c.				
d.				
D. Additional Descriptions for Materials Listed Above			E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b> <b>A) 5 x 3 Lbs</b> <b>B) 4 x 6 Lbs</b>				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name <b>Cary Friedman</b>		Signature <b>Cary Friedman</b>		Month Day Year <b>05 20 11</b>
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name <b>Brian Wyle</b>		Signature <b>Brian Wyle</b>		Month Day Year <b>05 20 11</b>
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name <b>Fred Miranda</b>		Signature <b>Fred Miranda</b>		Month Day Year <b>05 20 11</b>

GENERATOR

TRANSPORTER

FACILITY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of

48974

3. Generator's Name and Mailing Address

NYSDDEC  
625 Broadway  
New York, NY 10008

4. Generator's Phone

(516) 402-9752 / 604 NY

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control Inc.  
120 South 45 Street  
Bay Shore, NY 11706

10. US EPA ID Number

C. Facility's Phone

631-586-0333

11. Waste Shipping Name and Description

a. Non-Hazardous Water Drilling Fluid

b. Non-Hazardous Solids Soils & Water

c.

d.

D. Additional Descriptions for Materials Listed Above

Pending Analysis

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) 118  
(B) Sludge

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Cary Friedman AS Agent For NYSDDEC Signature: Cary Friedman AS Agent For NYSDDEC Month: 5 Day: 23 Year: 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: John Zinsler Signature: John Zinsler Month: 5 Day: 23 Year: 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: Signature: Month: Day: Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Fred Miranda Signature: Fred Miranda Month: 5 Day: 26 Year: 11

TRANSPORTER #1

BAY-23428

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Doc. No. <b>48974</b>	2. Page 1 of
3. Generator's Name and Mailing Address <i>AT &amp; T Harris Corp</i> <i>625 Broadway</i> <i>New York, NY 10011</i>		Division + <i>VANDERBILT</i> <i>Brickley, NY</i>		
4. Generator's Phone ( <i>512-469-9751</i> )				
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>		6. US EPA ID Number <b>N Y R 0 0 0 1 0 7 3 2 6</b>	A. Transporter's Phone <b>631-586-5900</b>	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone	
9. Designated Facility Name and Site Address <i>Chemical Pollution Control Inc</i> <i>120 South 45 Street</i> <i>Ramapo, NJ 07706</i>		10. US EPA ID Number	C. Facility's Phone <i>631-566-0337</i>	
11. Waste Shipping Name and Description			12. Containers No. Type	13. Total Quantity
a. <i>Non-Hazardous Water Drilling Fluid</i>			<i>3</i> <i>Dr</i>	<i>165</i>
b. <i>Non-Hazardous Solids, Drilling Water</i>			<i>2</i> <i>Dr</i>	<i>100</i>
c.				
d.				
D. Additional Descriptions for Materials Listed Above <i>Pending Analysis</i>			E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b> <i>At 12</i> <i>12/1/11</i>				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name <i>Cary Friedman</i>		Signature <i>Cary Friedman</i>		Month Day Year <i>5 23 11</i>
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name <i>John Zins</i>		Signature <i>John Zins</i>		Month Day Year <i>5 23 11</i>
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 19.				
Printed/Typed Name <i>Fred Miranda</i>		Signature <i>Fred Miranda</i>		Month Day Year <i>5 24 11</i>

TRANSPORTER #2

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of
3. Generator's Name and Mailing Address ATTN: Dave Harington NYSDEC 625 BROADWAY ALBANY NY		DIVISION PL. + PORTER ST AND RICHARDSON + VAN DER HOORT AVE BROOKLYN NY		
4. Generator's Phone (518) 402-9335	6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6	A. Transporter's Phone 631-586-5900		
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.	8. US EPA ID Number	B. Transporter's Phone		
7. Transporter 2 Company Name	10. US EPA ID Number	C. Facility's Phone		
9. Designated Facility Name and Site Address CHEMICAL POLLUTION CONTROL INC. 120 SOUTH 4 ST. BAYSHORE NY 11706				
11. Waste Shipping Name and Description		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZ PURGE WATER		202 DM	1106	
b. NON-HAZ DRILL CUTTINGS + MUD + SOLIDS		205 DM	2000 P.	
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 (A) 2x LIR (B) 3x SOLID, 3x sludge				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Cary Friedman AS Agent for NYSDC		Signature Cary Friedman AS Agent for NYSDC Month Day Year 05/24/11		
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name JUAN C. TORRES		Signature Month Day Year 05/24/11		
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature Month Day Year		
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred Mianke		Signature Fred Mianke Month Day Year 5/26/11		

**TRANSPORTER #1**

Box 2342

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of
3. Generator's Name and Mailing Address ATTN: Dave Harrington NYSDEC 625 BROADWAY ALBANY, NY		DIVISION PL. + PORTER ST AND RICHARDSON + VAN DYKE 1001T AVE BROOKLYN, NY		
4. Generator's Phone (518) 402-9995	US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6		A. Transporter's Phone 631-586-5900	
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.	8. US EPA ID Number		B. Transporter's Phone	
7. Transporter 2 Company Name	10. US EPA ID Number		C. Facility's Phone	
9. Designated Facility Name and Site Address CHEMICAL POLLUTION CONTROL INC. 120 SOUTH 4 ST. BAYSHORE NY 11706				
11. Waste Shipping Name and Description			12. Containers No. Type	13. Total Quantity
a. NON-HAZ PURGE WATER			0.02 DM	11.06
b. NON-HAZ DRILL CUTTINGS + MUD + SOLIDS			0.05 DM	20.00 P
c.				
d.				
D. Additional Descriptions for Materials Listed Above			E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 (A) 2x L18 (B) 5x SOLID, <del>5x SOLID</del>				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Larry Friedman AS AGENT for NYSDEC		Signature Larry Friedman AS AGENT for NYSDEC		Month Day Year 05/24/11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name JUAN C. TORRES		Signature [Signature]		Month Day Year 05/24/11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred M. [Signature]		Signature Fred M. [Signature]		Month Day Year 5/26/11

GENERATOR

TRANSPORTER

FACILITY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of

48984

3. Generator's Name and Mailing Address

Atta Dave Harrington

NYSDOC  
625 Broadway  
Albany NY

Division Pl + Vanderhoof + A  
Brooklyn NY

4. Generator's Phone (518) 462-9775

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 000107326

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control Inc.  
120 South 4th St  
Baz Shores NY 11706

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

12. Containers

13. Total  
Quantity

14. Unit  
Wt/Vol

a. Non Haz Purge Water

5

DM

275

G

b. Non Haz Drilling mud / cuttings / water

2

DM

1400

lbs

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

(A) LTR  
(B) Sludge

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Tim Harrington

Signature

Tim Harrington for NYSDOC

Month Day Year

5 25 11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Jon A. Sepe

Signature

J. Sepe

Month Day Year

5 25 11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Fred Miranda

Signature

Fred Miranda

Month Day Year

5 26 11

TRANSPORTER #1

Bay 23427

6/6/11

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Doc. No. <b>48984</b>		2. Page 1 of	
3. Generator's Name and Mailing Address <i>Alfa Drive Harrington</i>				6. US EPA ID Number <i>NY R 000107326</i>		A. Transporter's Phone <i>631-586-5900</i>	
4. Generator's Phone (S18) <i>402 9770</i>				8. US EPA ID Number		B. Transporter's Phone	
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>				10. US EPA ID Number		C. Facility's Phone	
7. Transporter 2 Company Name				12. Containers		13. Total Quantity	
9. Designated Facility Name and Site Address <i>Chemical Pollution Control</i> <i>100 South 4th St</i> <i>Brooklyn NY 11206</i>				14. Unit W/Vol			
11. Waste Shipping Name and Description				No.		Type	
a. <i>Used Gas Engine Oil</i>				5		DM 275 G	
b. <i>Used Gas Engine Oil / Collage / ...</i>				2		DM 1400 lbs	
c.							
d.							
D. Additional Descriptions for Materials Listed Above				E. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b> <i>A LTL</i> <i>B Sludge</i>							
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Tim ...</i>				Signature <i>Tim ...</i>			
17. Transporter 1 Acknowledgement of Receipt of Materials				Month Day Year <i>5 25 11</i>			
Printed/Typed Name <i>Joe ...</i>				Signature <i>Joe ...</i>			
18. Transporter 2 Acknowledgement of Receipt of Materials				Month Day Year <i>5 25 11</i>			
Printed/Typed Name				Signature			
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name <i>Fred ...</i>				Signature <i>Fred ...</i>			
				Month Day Year <i>5 26 11</i>			

GENERATOR

TRANSPORTER

FACILITY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of

48985

3. Generator's Name and Mailing Address

ATI  
Duke University  
625 Broadway  
Albany, NY

NYSDOC  
625 Broadway  
Albany, NY

Division ST

Vanderbilt Ave  
Brooklyn, NY

4. Generator's Phone

(518) 402-9715 Albany, NY

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6.

US EPA ID Number

NY R 000107326

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8.

US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Chemical Pollution Control Inc  
100 South 4th  
Rye, NY 11706

10.

US EPA ID Number

C. Facility's Phone

631-586-0333

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a.

Non-Hazardous - Purged Water

3 DM

165

G

b.

Non-Hazardous - Drill Cuttings solids

1 DM

3.00

P

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

X Tim Alford agent for the NYSDOC

Tim Alford

5/26/11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

X Kevin Kegel

Kevin Kegel

5/26/11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

Gary Scoppio

Gary Scoppio

05/26/11

TRANSPORTER #1



RAY-23429

ROSE

		1. Generator's US EPA ID No.	Manifest Doc. No. <b>48985</b>	2. Page 1 of	
3. Generator's Name and Site Address <b>ATI Duke Hamilton NYDEC 625 Broadway Albany, NY</b>		Division 5 Vanderbilt Ave Brooklyn, NY			
4. Generator's Phone <b>(518) 402-9775</b>		6. US EPA ID Number <b>N.Y.R. 0.0.0.1.0.7.3.2.6</b>		A. Transporter's Phone <b>631-586-5900</b>	
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>		8. US EPA ID Number		B. Transporter's Phone	
7. Transporter 2 Company Name		10. US EPA ID Number		C. Facility's Phone <b>631-586-0633</b>	
9. Designated Facility Name and Site Address <b>Chemical Pollution Control Inc. 100 South 4th St. Dayshore, NY 11706</b>					
11. Waste Shipping Name and Description			12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a. <b>NON-Hazardous - Purged Water</b>			3 DM	165	W
b. <b>NON-Hazardous - Drill Cuttings Solid</b>			1 DM	300	P
c.					
d.					
D. Additional Descriptions for Materials Listed Above			E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b>					
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Tim J. Hurd</b>			Signature <i>Tim J. Hurd</i>		Month Day Year <b>5 26 11</b>
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>X Kevin Kegel</b>			Signature <i>Kevin Kegel</i>		Month Day Year <b>5 26 11</b>
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name <b>Gary Scoppa</b>			Signature <i>Gary Scoppa</i>		Month Day Year <b>05 26 11</b>

TRANSPORTER #2

Page 2 of 3

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CESOG	Manifest Doc. No. 48749	2. Page 1 of
3. Generator's Name and Mailing Address Attn: Dave Harrington NYSDEC 625 Broadway Albany NY		Division 31 / Vander Voort Ave Brooklyn, NY		
4. Generator's Phone ( )	5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.	6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6	A. Transporter's Phone 631-586-5900	
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone		
9. Designated Facility Name and Site Address CPC 170 S 4th St Longshore NY 11700	10. US EPA ID Number	C. Facility's Phone 631-586-0333		
11. Waste Shipping Name and Description		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a. Drilling Mud / Solids		3 DM	2,000	lbs
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 Sludge				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Gary Friedman for NYSDDEC		Signature [Signature]		Month Day Year 11 11 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name Sepe		Signature [Signature]		Month Day Year 11 11 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name [Signature]		Signature [Signature]		Month Day Year 11 11 11

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

Box 23443

1. Generator's US EPA ID No. <b>CESOG</b>		2. Page 1 of 1	
3. Generator's Name and Mailing Address <b>Alto Dore Harrington</b> <b>NYSDEC</b> <b>625 Broadway</b> <b>Albany NY</b>		Division 51/Vander Veer Ave Brooklyn NY	
4. Generator's Phone ( )		A. Transporter's Phone <b>631-586-5900</b>	
5. Transporter 1 Company Name <b>AARCO ENVIRONMENTAL SERVICES CORP.</b>		6. US EPA ID Number <b>N Y R 0 0 0 1 0 7 3 2 6</b>	
7. Transporter 2 Company Name		B. Transporter's Phone	
9. Designated Facility Name and Site Address <b>CPC</b> <b>120 S 4th St</b> <b>Bayshore NY 11706</b>		10. US EPA ID Number	
11. Waste Shipping Name and Description <b>a. Drying Mud / Solids</b>		12. Containers No. <b>3</b> Type <b>DM</b>	13. Total Quantity <b>2.000</b>
			14. Unit Wt/Vol <b>lbs</b>
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE # 631-586-5900</b> <b>③ sludge</b>			
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.			
Printed/Typed Name <b>Carol Friedman for NYSDEC</b>		Signature <i>[Signature]</i> Month Day Year <b>5 27 11</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed/Typed Name <b>Sepe</b>		Signature <i>[Signature]</i> Month Day Year <b>5 27 11</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed/Typed Name		Signature Month Day Year	
19. Discrepancy Indication Space			
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.			
Printed/Typed Name <b>Michael J. ...</b>		Signature <i>[Signature]</i> Month Day Year <b>5 27 11</b>	

167393

Bay 23563

1328254

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of
3. Generator's Name and Mailing Address NYSDDEC 625 Broadway Albany, NY		Division St. Vanderbilt		
4. Generator's Phone (518) 462-9775				
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N.Y.R. 000107326	A. Transporter's Phone 631-586-5900	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone	
9. Designated Facility Name and Site Address Chemical Pollution Control 120 S. 4th St. Bayshore, NY		10. US EPA ID Number	C. Facility's Phone 631-586-0333	
11. Waste Shipping Name and Description			12. Containers No. Type	13. Total Quantity
a. Non-Hazardous Drilling mud / Solids			1 DM	400 P
b. Non-Hazardous Purged Water			1 DM	55 G
c.				
d.				
D. Additional Descriptions for Materials Listed Above			E. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900 499661-00 499659-00				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Cary Friedman		Signature Cary Friedman		Month Day Year 6 2 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name John Zinner		Signature John Zinner		Month Day Year 6 2 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 19.				
Printed/Typed Name Michael Dineen		Signature Michael Dineen		Month Day Year 6 6 11

ORIGINAL - RETURN TO GENERATOR

BAY 23162

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of
3. Generator's Name and Mailing Address Attn: Dave Harrington		NYS DEC 625 BROADWAY ALBANY, N.Y.		VANDERVOORT AVE + RICHARDSON ST. BROOKLYN N.Y.
4. Generator's Phone (518) 402-9775		6. US EPA ID Number N.Y.R. 0.0.0.1.0.7.3.2.6		A. Transporter's Phone 631-586-5900
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		8. US EPA ID Number		B. Transporter's Phone
7. Transporter 2 Company Name		10. US EPA ID Number		C. Facility's Phone
9. Designated Facility Name and Site Address CHEMICAL POLLUTION CONTROL 120 S. 4TH ST BAY SHORE N.Y.				
11. Waste Shipping Name and Description		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZ DRILLING MUD/SOIL		002DM	1.400	P
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above 499661-00		E. Handling Codes for Wastes Listed Above		
16. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Cary Friedman		Signature Cary Friedman		Month Day Year 06/03/11
17. Transporter Acknowledgement of Receipt of Materials Printed/Typed Name JUAN C TORRES		Signature [Signature]		Month Day Year 06/03/11
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name [Signature]		Signature [Signature]		Month Day Year 06/06/11

ORIGINAL - RETURN TO GENERATOR

BSY-23594

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
3. Generator's Name and Mailing Address ATTN: Dave Harrington 625 Busaf Albany NY		N/A		48771
4. Generator's Phone		Vandervoort + Richardson		Site Vandervoort + Richardson
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N.Y.R. 0 0 0 1 0 7 3 2 6		A. Transporter's Phone 631-586-5900
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter's Phone
9. Designated Facility Name and Site Address CPC 120 J. 4th Bayshore NY PSC Environmental Svcs. 11706 Chemical Pollution Control LLC of NY		10. US EPA ID Number N/A		C. Facility's Phone
11. Waste Shipping Name and Description		12. Containers	13. Total Quantity	14. Unit Wt/Vol
a. Non Hazardous Soil (Drill cuttings)		No. Type		
		xx 3 DR	1200	P
b. Non Hazardous Liquid (Purge Water)				
		xx 2 DR	110	G
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Cary Friedman for NYSDEC		Signature Cary Friedman for NYSDEC		Month Day Year 6 6 15
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name Curt Mulligan		Signature Curt Mulligan		Month Day Year 6 6 15
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred Miranda		Signature Fred Miranda		Month Day Year 6 7 11

ORIGINAL - RETURN TO GENERATOR

167393

BAY-23612

1329625

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1	11-18/44
3. Generator's Name and Mailing Address Attn Dave Harrington 625 Esna Albany NY		Site: Vandervoort Ave and Division St			
4. Generator's Phone ( )					
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6		A. Transporter's Phone 631-586-5900	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter's Phone	
9. Designated Facility Name and Site Address CPL 120 South 4th St. Bayshore NY 11706		10. US EPA ID Number		C. Facility's Phone (631) 586-0333	
11. Waste Shipping Name and Description			12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
a. Drilling Purge Water			2 DM	5.5	G
b. Drilling Mud/soil			3 DM	1450	lbs
c.					
d.					
D. Additional Descriptions for Materials Listed Above			E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900					
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
*Printed/Typed Name Cary Friedman As Agent for NYSDEC		Signature Cary Friedman		Month Day Year 6 7 11	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature Jon Sepe		Month Day Year 6 7 11	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of Receipt of waste materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name Paula Quinn		Signature Paula Quinn		Month Day Year 6 8 11	

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

BAF-2644

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of
3. Generator's Name and Mailing Address Attn: Dave Harrington 625 Bldg Albany NY		Division St / Vanderwoort A Brooklyn NY		
4. Generator's Phone ( )				
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6	A. Transporter's Phone 631-586-5900	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone	
9. Designated Facility Name and Site Address EPC 120 South 4th St. Bayshore NY 117061		10. US EPA ID Number	C. Facility's Phone (631) 586-0333	
11. Waste Shipping Name and Description		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a. Ground Purge Water		20M	11.0	G
b. Drilling Mud / soil		10M	4.00	lbs
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Cary Friedman AS Agent for NYSDOL		Signature Cary Friedman AS Agent for NYSDOL		Month Day Year 6 8 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name Jon Sepe		Signature J. Sepe		Month Day Year 6 8 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Fred Miranda		Signature		Month Day Year 6 9 11

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR



NY-23714

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page-1 of	18# 50558
3. Generator's Name and Mailing Address Attn Dave Harrington NYSDEC/URS # 625 Broadway Albany NY		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6		A. Transporter's Phone 631-586-5900	
4. Generator's Phone ( )		8. US EPA ID Number		B. Transporter's Phone	
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		10. US EPA ID Number		C. Facility's Phone (631) 586-0333	
7. Transporter 2 Company Name		11. Waste Shipping Name and Description		12. Containers	
9. Designated Facility Name and Site Address CPC 120 S. 4th St. Bayshore NY 11706		13. Total Quantity		14. Unit Wt/Vol	
		No.		Type	
a. Purge Water		6		DM 330 G	
b. Waste Plastic tubing / PPE Gear		1		DM 40 lbs	
c.					
d.					
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900					
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Cary Friedman AS Agent for NYSDC		Signature Cary Friedman		Month Day Year 6 9 11	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature Jon Sepe		Month Day Year 6 9 11	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name Paul Brown		Signature Paul Brown		Month Day Year 6 10 11	

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

poll 50558

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of
3. Generator's Name and Mailing Address ATTN: URS Dave Hannan 1000 Ave Division Pl Brooklyn NY				
4. Generator's Phone		Job No: 11-18144		
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6		A. Transporter's Phone 631-586-5900
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter's Phone
9. Designated Facility Name and Site Address CPC 120 South Fourth St Brooklyn NY		10. US EPA ID Number		C. Facility's Phone
11. Waste Shipping Name and Description		12. Containers No.	Type	13. Total Quantity
a. NON HAZARDOUS purge water		2	DM	110 G
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Gary Friedman for NYSOEC		Signature [Signature]		Month Day Year 6 21 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name [Name]		Signature [Signature]		Month Day Year 6 21 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name Gary Scoppio		Signature [Signature]		Month Day Year 6 22 11

Box 24073

# 11-18144

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No. 49774	2. Page 1 of
3. Generator's Name and Mailing Address NYSDEC Attn: Dave Harrington 625 Broadway		Vanderbilt Ave Division Pl. Brooklyn NY		
4. Generator's Phone (518) 402-9775 Albany N.Y.				
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6		A. Transporter's Phone 631-586-5900
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter's Phone
9. Designated Facility Name and Site Address Chemical Pollution Control 100 South 4 ST Bay Shore, NY 11706		10. US EPA ID Number		C. Facility's Phone (631)-586-0333
11. Waste Shipping Name and Description				12. Containers No. Type
a. Non-Hazardous Purged Water				2 DM 110 G
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above				E. Handling Codes for Wastes Listed Above
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name x Cary Friedman		Signature <i>Cary Friedman</i>		Month Day Year 6 23 11
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name x John Zinner		Signature <i>John Zinner</i>		Month Day Year 6 23 11
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.				
Printed/Typed Name David Smith		Signature <i>David Smith</i>		Month Day Year 6 24 11

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

BRF 24111

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1	11-18144
3. Generator's Name and Mailing Address Attn Dave Harrington 625 Broadway Albany NY		6. US EPA ID Number N Y R 0 0 0 1 0 7 3 2 6		A. Transporter's Phone 631-586-5900	
4. Generator's Phone ( )		7. Transporter 2 Company Name		B. Transporter's Phone	
5. Transporter 1 Company Name AARCO ENVIRONMENTAL SERVICES CORP.		8. US EPA ID Number		C. Facility's Phone (631) 586-0333	
9. Designated Facility Name and Site Address CPC 120 S. 4th St Bayshore NY 11706		10. US EPA ID Number			
11. Waste Shipping Name and Description			12. Containers	13. Total Quantity	14. Unit Wt/Vol
a. Purge Water from well			No. 1 Type DM	55	67
b. PPE waste (Non-Haz)			No. 3 Type DM	3.00	lbs
c.					
d.					
D. Additional Descriptions for Materials Listed Above			E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 631-586-5900					
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Cary Friedman AS Agent for NYSDOC		Signature Cary Friedman		Month 6	Day 24
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature J. Sepe		Month 6	Day 24
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month	Day
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name David Friedman		Signature David Friedman		Month 6	Day 27

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

## **APPENDIX L**

### **SURVEY FIELD NOTES AND SITE SKETCHES**

WEEKER AVE.

QUEENS, NY

MARCH 15, 2011 - MARCH 16, 2011

N. TAPP / K. FREARS

FILIMORE SLA ROBOTIC T.S.

NYSPL LONG ISLAND

NAD 33 / NAD 33

35° SUN

3/18/11

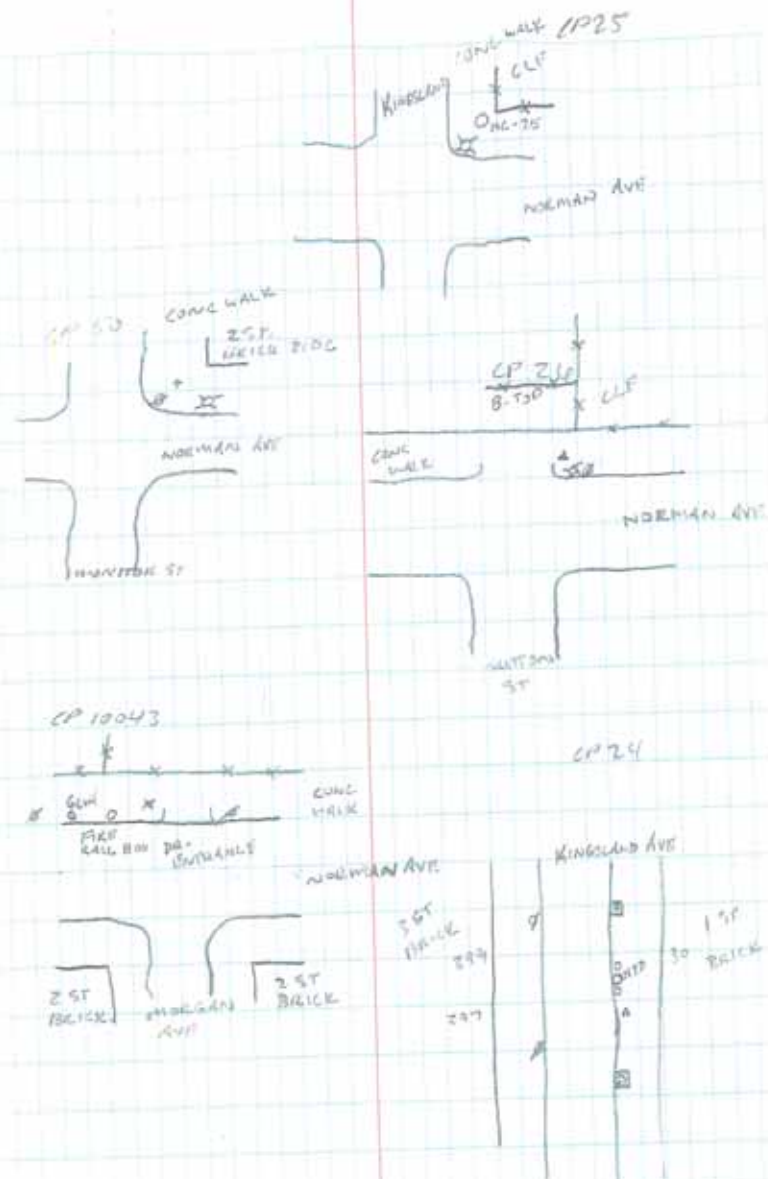
NT/RF  
5/6

T 0.25 R 0.50

H= 5.5' R= 6.0'

R= CHILL (4) - 2.0' (4) - 0.02

PT #	DEIC		
10000	MW 580	10001	SSB 6
10001	MW 585	10002	SSB 7
10002	CENTER OF A 6' x 6' TIE RIV	10003	SSB 8
10003	"	10004	SSB 4
10004	"	10005	SSB 7
10005	"	10006	SSB 9
10006	MW 540	10007	SSB 2
10007	CENTER OF TIE RIV 6' x 6'	10008	SSB 5
10008	"	10009	MW 250
10009	MW 595	10010	MW 255
10010	MW 580	10011	SG 71
10011	SG 65	10012	TRUTH BOX 6' x 7'
10012	MW 570	10013	"
10013	MW 635	10014	"
10014	MW 630	10015	"
10015	SG 67	10016	"
10016	SG 70	10017	SG 5008
10017	TRUTH BOX 4' x 7'	10018	MW 610
10018	"	10019	MW 615
10019	SSB 10	10020	MW 200
10020	SSB 8	10021	MW 600
		10022	MW 615
		10023	TRUTH BOX



350	3/11/11	NT/RT
A @ 50 B @ 20		
HC = 5.24 B = 6.00 R <sub>1</sub> (HRC) = -0.24 (a) -0.05		
10041	SG 64	
10045	SG 66	
A @ 20 B @ 25		
HC = 5.36 B = 6.20 R <sub>1</sub> (HRC) = 0.00 (a) -0.02		
10046	min 62 D	10048 SG 69
10047	min 62 S	10049 SG 75
A @ 10043 B @ 25		
HC = 5.32 B = 6.00 R <sub>1</sub> (HRC) = 0.00 (a) -0.02		
10050	SG 72	10051 SG 74
A @ 24 B @ 25		
HC = 5.34 B = 6.00 R <sub>1</sub> (HRC) = 0.00 (a) -0.03		
10052	TRUE Box 6'x0'	10061 Turnbox 5'x5'
10053	" " " "	10062 " " 5'x7'
10054	" " 5'x7'	10063 " " 5'x6'
10055	" " " "	10064 " " 4'x5'
10056	" " 4'x5'	10065 " " 4'x6'
10057	SG 74	10066 " " 6'x6'
10058	SG 77	
10059	SG 73	
10060	TRUE Box 4'x6'	

	DIE	GR EL.	RISE EL.
250	.84	21.76	22.92
36 D	.93	20.21	17.28
54 D	.53	18.66 18.67	18.13 18.14
57 D	.18	19.74	19.56
58 S	.26	18.98 17.78	17.72 18.72-18.72
53 D	.35	18.97 17.97	18.62
59 S	.44	19.14	18.70
59 D	.83	19.17	18.29
60 S	.24	18.53	19.29
60 D	.32	19.57	18.75
61 S	.84	21.15	20.31
61 D	.37	21.28	20.91
62 S	.23	23.13	22.90
62 D	.18	22.94	22.76
63 S	.54	21.17	20.65
63 D	.40	21.20	20.30



YORKIN

3/14/11

NT/RE

"MIDDER 3 1/4 LEX"

K@ NC33 B@ NC 39

HX 5.45 B@ 6.00

B@ CHECK (N) (V)

PT.#

DESC

SET PK @ RICHMOND &amp; DENBOISE

10067

10068/10075

T@ 100

10077

SET PK @ DIVISION PL

DENBOISE AVE

SET PK @ SW COR

10030

DENBOISE AVE

NPS DOT SURVEY DISC @

10031

N/C COR RICHMOND / DENBOISE

K@ 10067 B@ NC 33

HX 5.27 B@ 6.00 B@ CHECK (N) 0.03 (V) 0.04

10032

10033/10034

T@ 100

SET PK @ SW COR UP

10035

RICHMOND &amp; DENBOISE AVE

K@ 10035 B@ 10067

HX 5.35 B@ 6.00 B@ CHECK (N) 0.02 (V) 0.04

10036

10037/10038

T@ 100

SET PK @ SW COR UP

10039

RICHMOND &amp; HINGSLAND

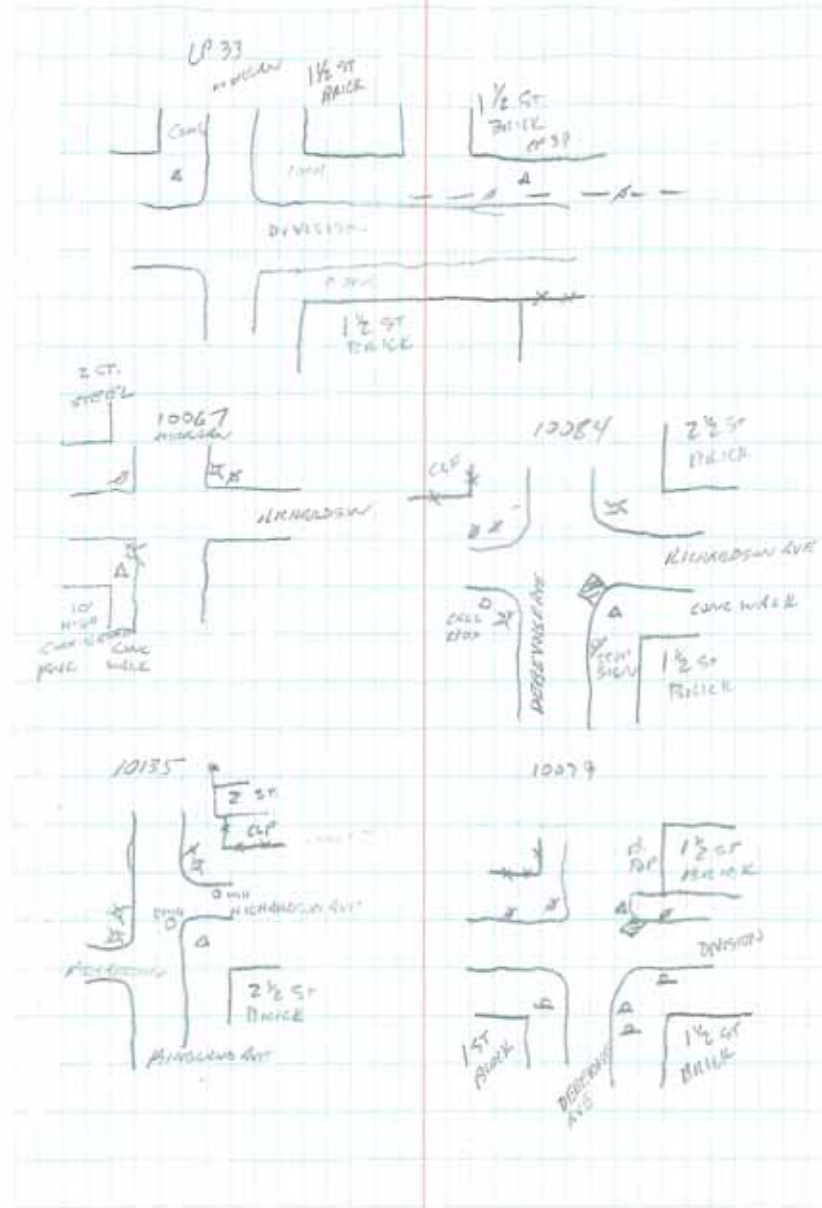
K@ 10035 B@ 10035

HX 5.33 B@ 7.00 B@ CHECK (N) 0.03 (V) 0.04

10040

10041/10042

T@ 100



1/50 CLOTH

3/14/11

15/11  
50

K@10079 R@10079

HE=5.40 BS=6.00 BS CHECK (6) -0.02 (V) -0.03

PT#

10105/10193

TOP@ 10193/10213 TOP@

HA=7' CUT @ SE COR. OF KINGSLAND & DIVISION

10193/10213

K@10199 R@10199

HE=5.51 HE=7.00 BS CHECK (6) -0.09 (V) 0.02

10214/10252

TOP@

K@10080 R@10080

HE=5.33 BS=6.00 BS CHECK (6) -0.01 (V) -0.01

10253/10273

TOP@ 10253/10260 HA=7' CUT @ SE COR. OF KINGSLAND & DIVISION

SET NATION MARK @ SE COR. OF BRADLEY & DEBEVOISE

10274

K@10274 R@10280

HE=5.38 BS=6.00 BS CHECK (6) 0.00 (V) 0.03

10274/10284

TOP@ SET 1" MARK @ SE COR. OF KINGSLAND & BRADLEY

10297

K@10297 R@10297

HE=5.43 BS=6.00 BS CHECK (6) 0.00 (V) -0.03

10298/10312

TOP@

K@10081 R@10080

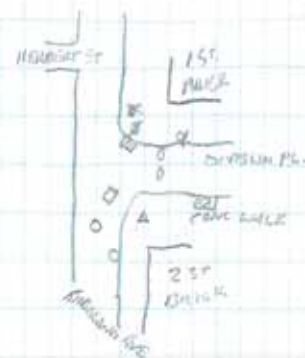
HE=5.51 BS=6.00 BS CHECK (6) -0.01 (V) -0.01

10313/10343

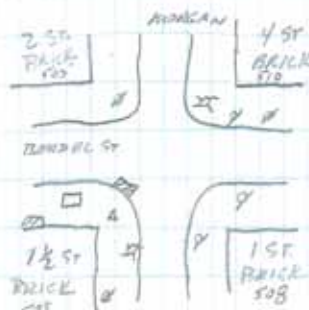
TOP@

9

10189



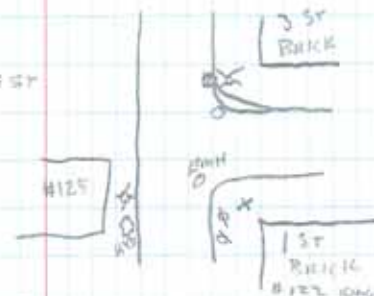
10080



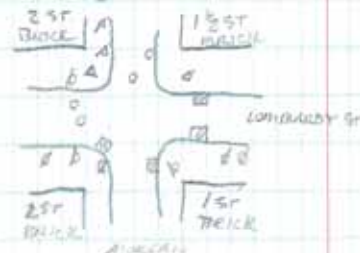
2ND BRICK 10274 1ST BRICK



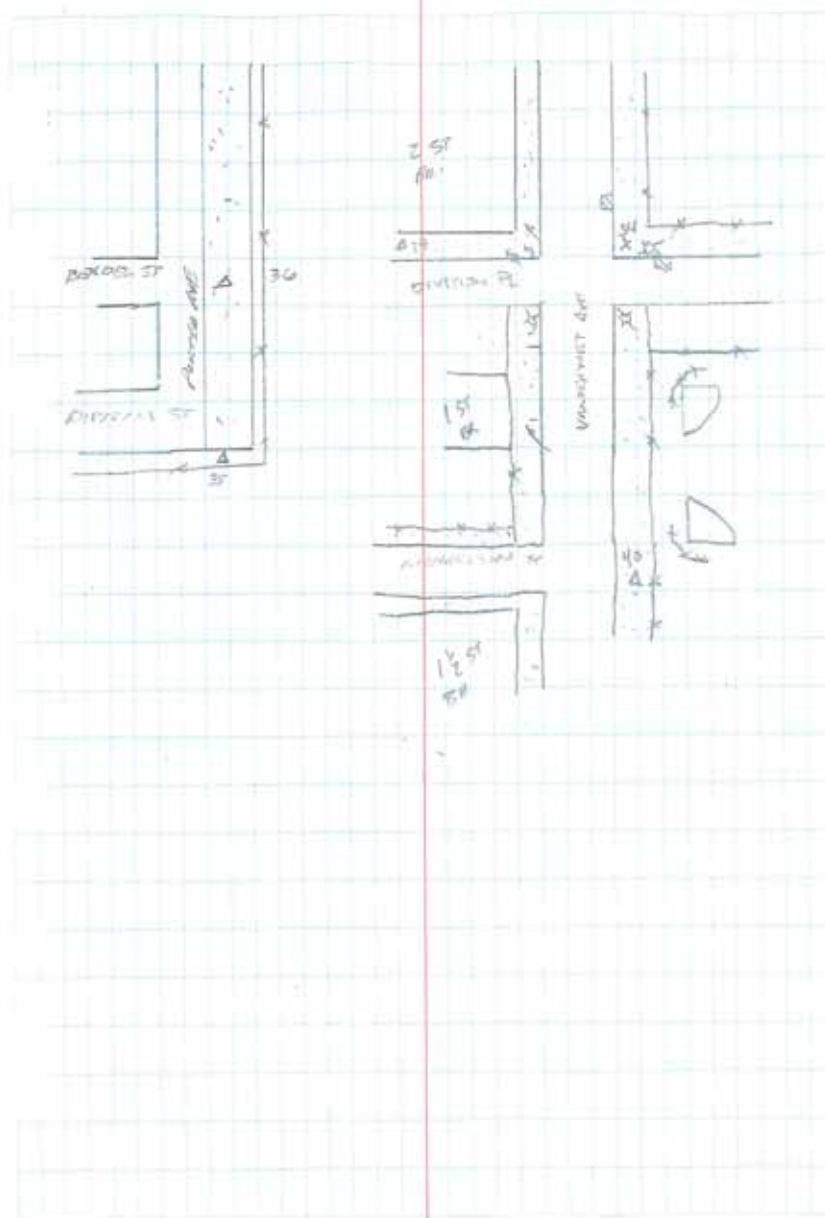
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10080



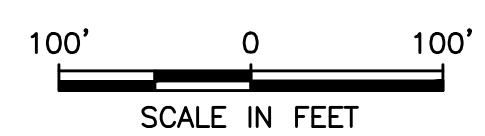
10					
70/100		6/8/11		NT/AF	
		"MEERK 6-8-11. DC"		50	
	TR 30	BS 35			
	HS-	BS-6.00	BS (HSEK=4)	0.2 (4) - 0.2	
PT #	DSK				
10350	43 D				
10351	DEG 43				
10352	SG 73				
10353	7D				
10354	62D				
	TR 34	BS 39			
	HS-5.41	BS-6.00	BS (HSEK=4)	0.2 (4) - 0.2	
10355	1SD	10361	13D	10367	SG 5
10356	SG 79	10362	0.80	10368	4SD
10357	29D	10363	SG 81	10369	40?
10358	64D	10364	114D	10370	0.2
10359	64	10365	14R	10371	SG
10360	300	10366	SG 82		
	TR 10467	BS 43		10372	
	HS-5.27	BS-6.00	BS (HSEK=4)	0.2 (4) - 0.2	
103672	SG 87	103676	65D		
103677	SG 86	103677	SG 84		
103674	SG 85	103675	114D		
103675	65				



**APPENDIX M**

**SURVEY DRAWINGS**





1. SURVEY PROVIDED BY NAIK CONSULTING GROUP, P.C., FROM DRAWING ENTITLED: "MONITORING WELL AND SOIL BORING LOCATION PLAN," DATED AUG. 20, 2007.
2. URS SURVEYED RI MONITORING WELLS, SOIL-GAS LOCATIONS AND SOIL BORING LOCATIONS ON MARCH 15 & 16, AND JUNE 8, 2011.

**URS Corporation**  
New York  
640 Elliott Street, Buffalo, New York 14203  
(716)856-5636 - (716)856-2545 fax

---

JOB NO. 11176390

## APPENDIX M

CITY OF NEW YORK

## APPENDIX M

DESIGNED BY: \_\_\_\_\_

DRAWN BY: RAL

CHECKED BY: AMM

PROJ. ENGR. MG

**URS Corporation**  
New York  
640 Elliott Street, Buffalo, New York 14203  
(716)856-5636 - (716)856-2545 fax

---

JOB NO. 11176390

**SURVEY**  
**(SHEET 1 OF 2)**

## APPENDIX M

Scale: AS SHOWN Date: JULY 2011

DESIGNED BY: \_\_\_\_\_

DRAWN BY: RAL

CHECKED BY: AMM

PROJ. ENGR. MG

**URS Corporation**  
New York  
640 Elliott Street, Buffalo, New York 14203  
(716)856-5636 - (716)856-2545 fax

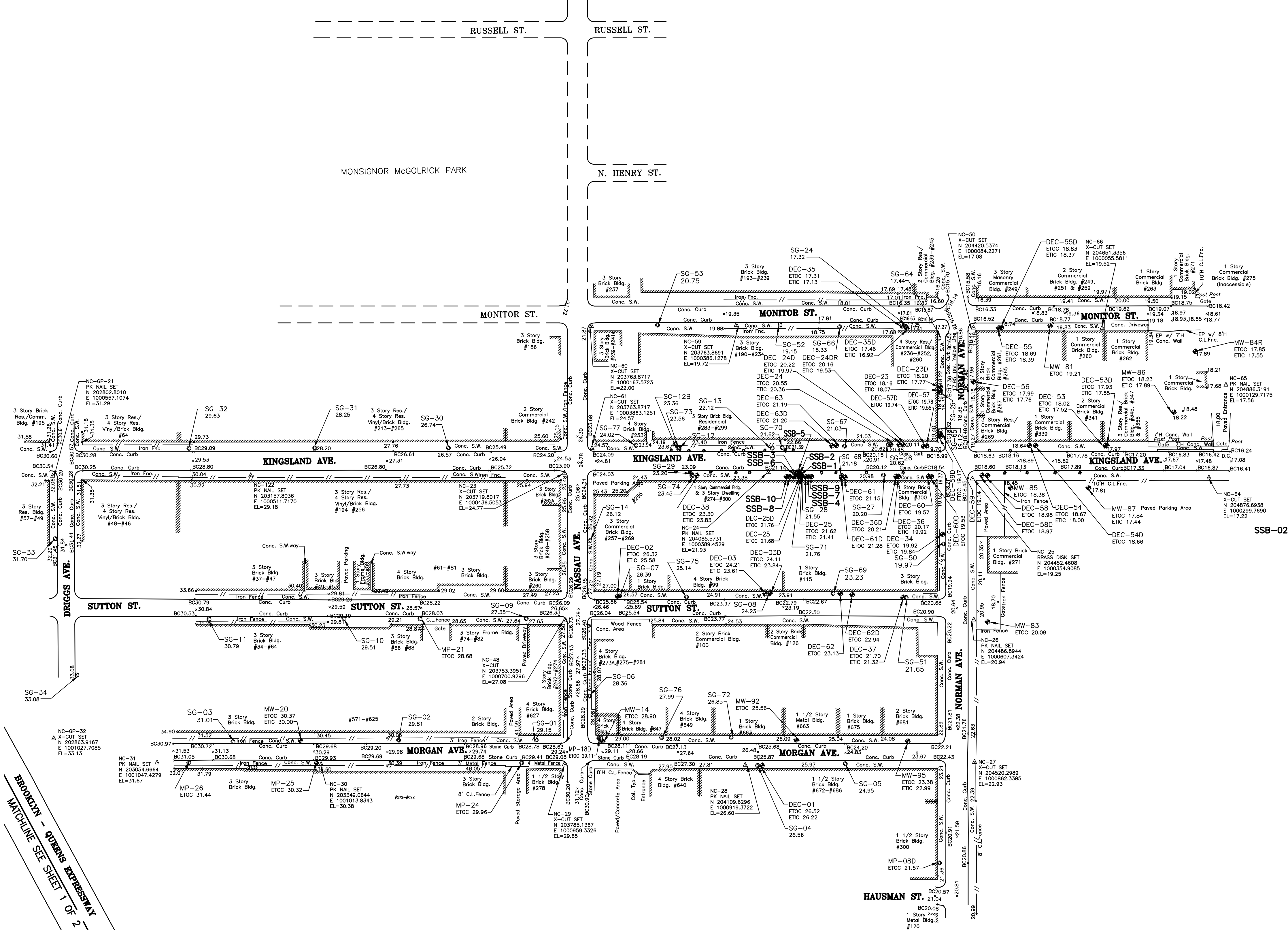
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JOB NO. 11176390

**SURVEY**  
**(SHEET 1 OF 2)**

## APPENDIX M

Scale: AS SHOWN Date: JULY 2011

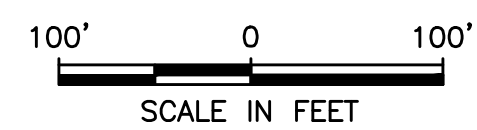


PROPERTY - OWNERS EXHIBIT  
WATCHLINE SEE SHEET 1 OF 2

- LEGEND:**
- SG-19 SOIL GAS POINT (WITH GROUND ELEVATION)
  - MP-24 SOIL GAS POINT (WITH GROUND ELEVATION)
  - MIP-01 SOIL BORING LOCATION (WITH GROUND ELEVATION)
  - SB-9 SOIL BORING LOCATION (WITH GROUND ELEVATION)
  - MW-98 MONITORING WELL LOCATION
  - DEC-06 MONITORING WELL LOCATION
  - RI SOIL BORINGS
  - GW-6 GROUND WATER SAMPLING LOCATION (WITH GROUND ELEVATION)
  - ETOC36.07 ELEVATION TOP OF OUTER CASING
  - ETIC35.02 ELEVATION TOP OF INNER CASING
  - EDGE OF BUILDING
  - EDGE OF PAVEMENT
  - CONCRETE CURB (WITH BOTTOM ELEV. AT FACE OF CURB)
  - SPOT ELEVATION

**SOURCES:**

- SURVEY PROVIDED BY NAK CONSULTING GROUP, P.C., FROM DRAWING ENTITLED: "MONITORING WELL AND SOIL BORING LOCATION PLAN," DATED AUG. 20, 2007.
- URS SURVEYED RI MONITORING WELLS, SOIL-GAS LOCATIONS AND SOIL BORING LOCATIONS ON MARCH 15 & 16, AND JUNE 8, 2011.



REVISIONS

NO.	MADE BY	APPROVED BY	DATE	DESCRIPTION

DESIGNED BY: \_\_\_\_\_  
DRAWN BY: RAL  
CHECKED BY: AMM  
PROJ. ENGR. MG

**URS Corporation**  
New York  
640 Elliott Street, Buffalo, New York 14203  
(716)856-5636 - (716)856-2545 fax  
JOB NO. 11176390

**FORMER KLINK COSMO SITE**  
GREENPOINT, KINGS COUNTY CITY OF NEW YORK

REMEDIAL INVESTIGATION

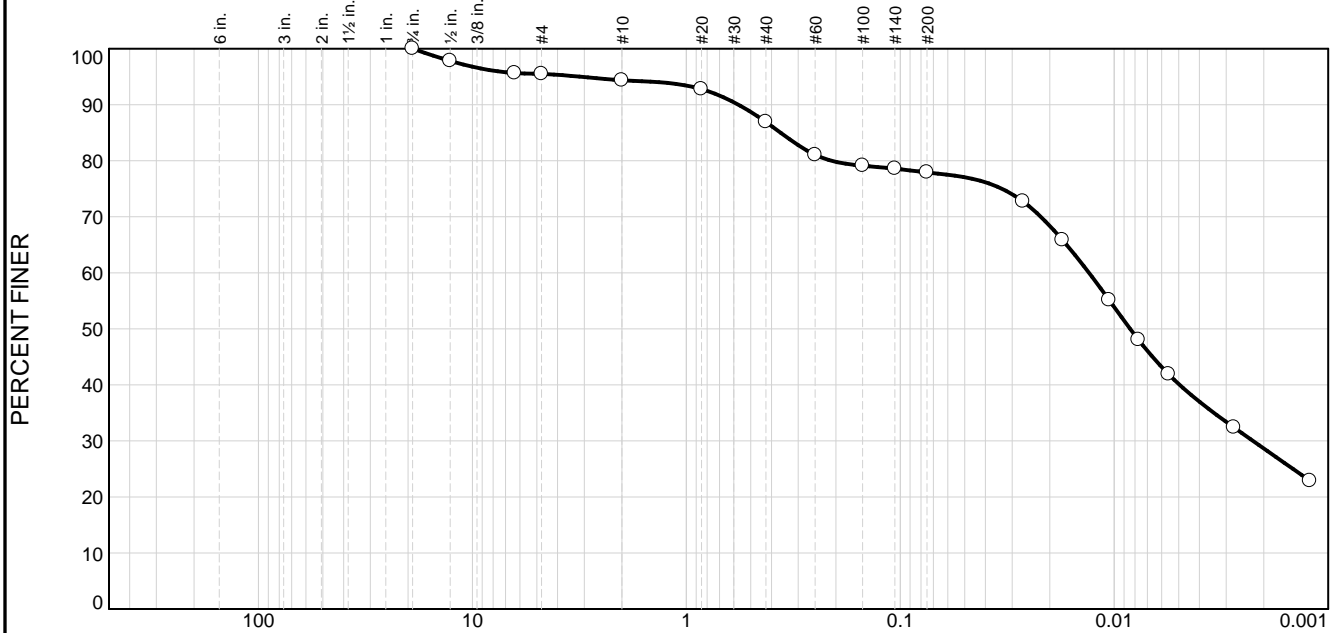
SURVEY  
(SHEET 2 OF 2)

Scale: AS SHOWN Date: JULY 2011 APPENDIX M

## **APPENDIX N**

### **GEOTECHNICAL LABORATORY TESTING RESULTS**

# Particle Size Distribution Report



GRAIN SIZE - mm.

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.5	1.1	7.5	9.0	37.7	40.2

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	100.0		
.5	97.8		
.25	95.7		
#4	95.5		
#10	94.4		
#20	92.8		
#40	86.9		
#60	81.0		
#100	79.1		
#140	78.6		
#200	77.9		
0.0267 mm.	72.7		
0.0175 mm.	65.9		
0.0106 mm.	55.2		
0.0077 mm.	48.0		
0.0056 mm.	41.9		
0.0028 mm.	32.4		
0.0012 mm.	22.9		

\* (no specification provided)

## Material Description

ID#11-260  
Fat clay with sand

## Atterberg Limits (ASTM D 4318)

PL= 25 LL= 52 PI= 27

## Classification

USCS (D 2487)= CH AASHTO (M 145)= A-7-6(22)

## Coefficients

D<sub>90</sub>= 0.5713 D<sub>85</sub>= 0.3624 D<sub>60</sub>= 0.0131  
D<sub>50</sub>= 0.0084 D<sub>30</sub>= 0.0022 D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

Remarks

Date Received: 7/8/11

Date Tested: 8/2/11

Tested By: RP

Checked By: JMA

Title: LM

Source of Sample: Klink Cosmo Cleaners  
Sample Number: DEC-029D

Depth: 84-84.5'

Date Sampled:

3rd Rock, LLC

Client: URS

Project: Former Klink Cosmo Cleaners

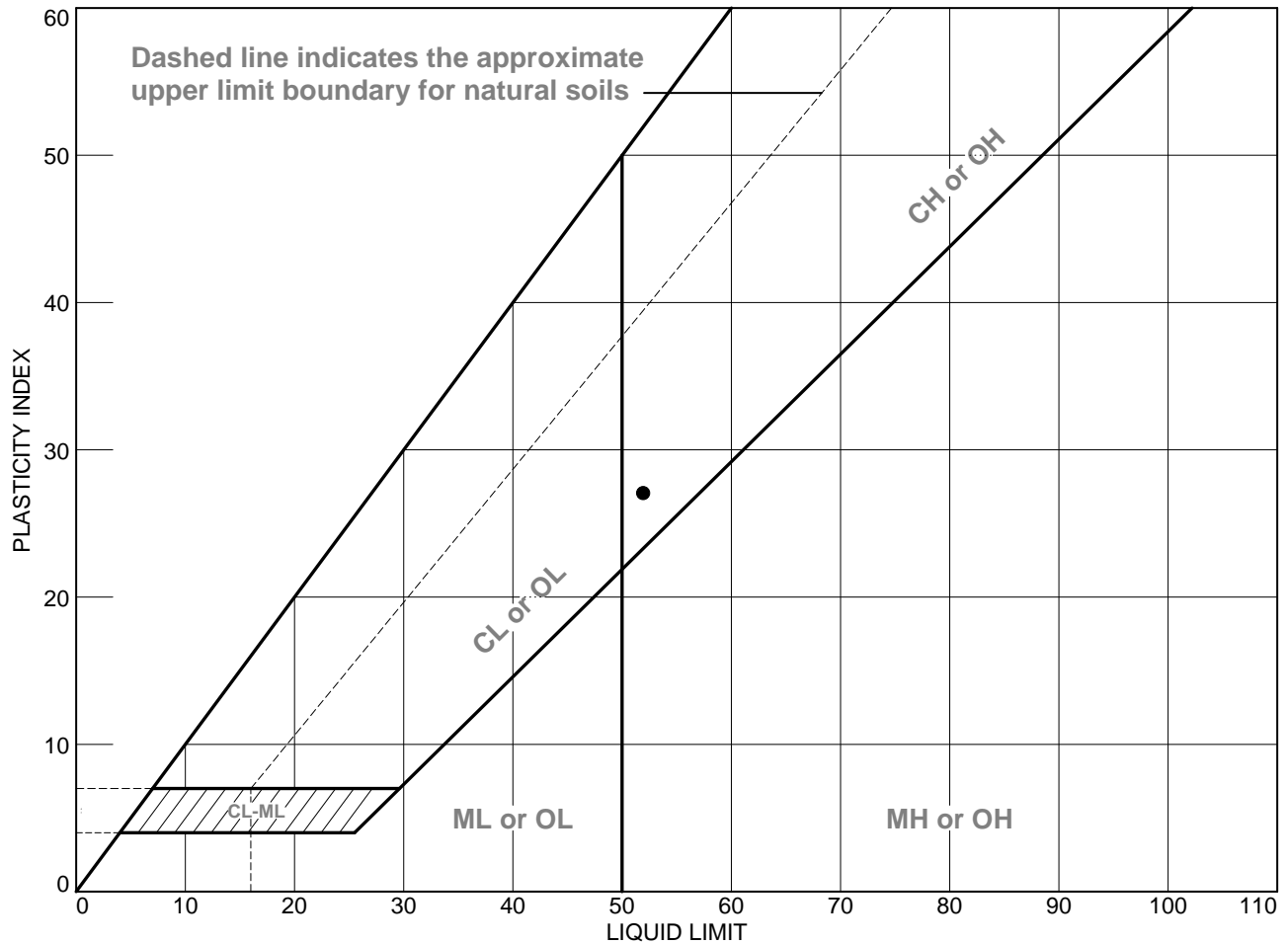
East Aurora, NY

Project No: 11-010

Figure



# LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Klink Cosmo Cleaners	DEC-029D	84-84.5'		25	52	27	CH

**3rd Rock, LLC**

**East Aurora, NY**

**Client:** URS

**Project:** Former Klink Cosmo Cleaners

**Project No.:** 11-010

**Figure**

**Tested By:** RP 8/11/11

**Checked By:** JMA



## FINAL PERMEABILITY REPORT

Project Name: Former Klink Cosmo Cleaners, URS  
Project No.: 11-010  
Sample No.: DEC-029D, 84-84.5'  
Sample I.D.: 11-260  
Laboratory Method: ASTM D5084, Method C  
Comments: None

Date: 08/11/11  
Tested By: RP  
Check By: JMA  
Date of Test: 07/20/11  
Date Test Complete: 07/26/11  
CELL NO.: 3

### INITIAL SAMPLE DATA:

Height, in.: 2.606  
Diameter, in.: 2.816  
Moisture Content, %: 34.20

Wet Density, pcf: 116.2  
Dry Density, pcf: 86.6  
Compaction, %: NA

### FINAL SAMPLE DATA:

Height, in.: 2.542  
Diameter, in.: 2.815  
Moisture Content, %: 35.20

Wet Density, pcf: 119.0  
Dry Density, pcf: 88.0

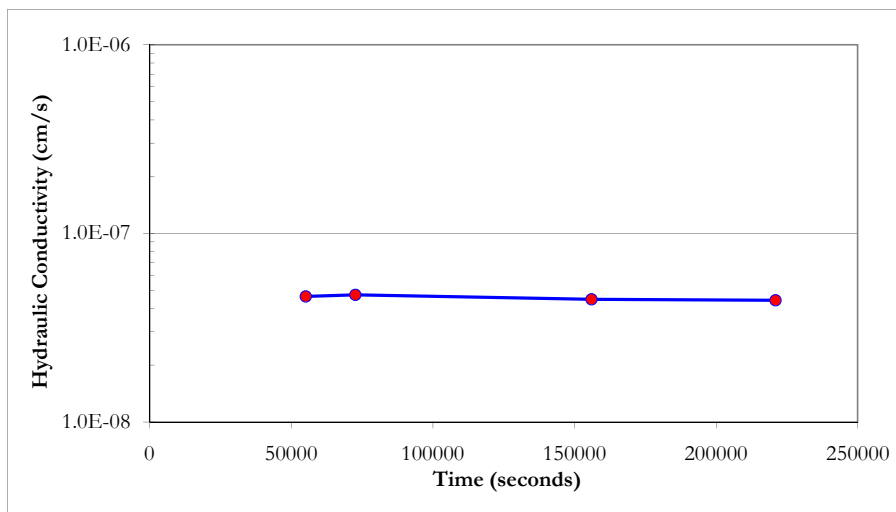
### SATURATION AND CONSOLIDATION DATA:

Consolidation Pressure: 86 psi  
Backpressure: 80 psi  
Saturation (B parameter): 98%

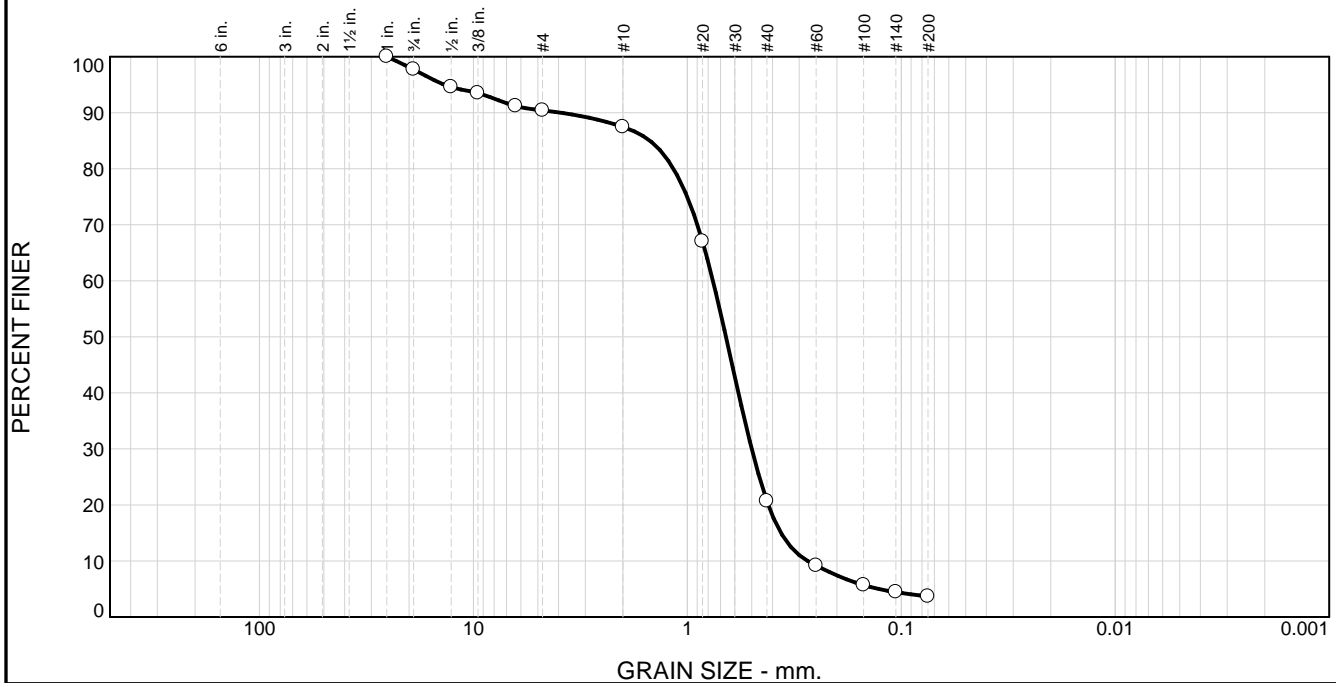
### AVERAGE PERMEABILITY RESULT (average of last 4 readings, K, cm/s):

Trial #	Testing Pressures (psi)			Q (ml/sec)	Final K (cm/s)
	1	2	3		
1	86.1	80.5	80	1.01E-05	4.6E-08
2	86.1	80.5	80	1.03E-05	4.7E-08
3	86.1	80.5	80	9.77E-06	4.5E-08
4	86.1	80.45	80	8.70E-06	4.4E-08

Average K	4.6E-08
Average K, ft/day	1.3E-04



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.3	7.3	2.9	66.8	17.0	3.7	

TEST RESULTS (ASTM D6913)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1	100.0		
.75	97.7		
.5	94.6		
.375	93.5		
.25	91.2		
#4	90.4		
#10	87.5		
#20	67.1		
#40	20.7		
#60	9.2		
#100	5.7		
#140	4.4		
#200	3.7		

\* (no specification provided)

<b>Material Description</b>		
ID#11-263 Poorly graded sand		
<b>Atterberg Limits (ASTM D 4318)</b>		
PL=	LL=	PI=
<b>Classification</b>		
USCS (D 2487)= SP	AASHTO (M 145)=	
<b>Coefficients</b>		
D <sub>90</sub> = 3.9284	D <sub>85</sub> = 1.4959	D <sub>60</sub> = 0.7596
D <sub>50</sub> = 0.6603	D <sub>30</sub> = 0.5002	D <sub>15</sub> = 0.3650
D <sub>10</sub> = 0.2742	C <sub>u</sub> = 2.77	C <sub>c</sub> = 1.20
Remarks		
Date Received: 7/8/11      Date Tested: 7/26/11		
Tested By: RP		
Checked By: JMA		
Title: LM		

Source of Sample: Klink Cosmo Cleaners  
Sample Number: DEC-044D

Depth: 50-51'

Date Sampled:

**3rd Rock, LLC**

Client: URS

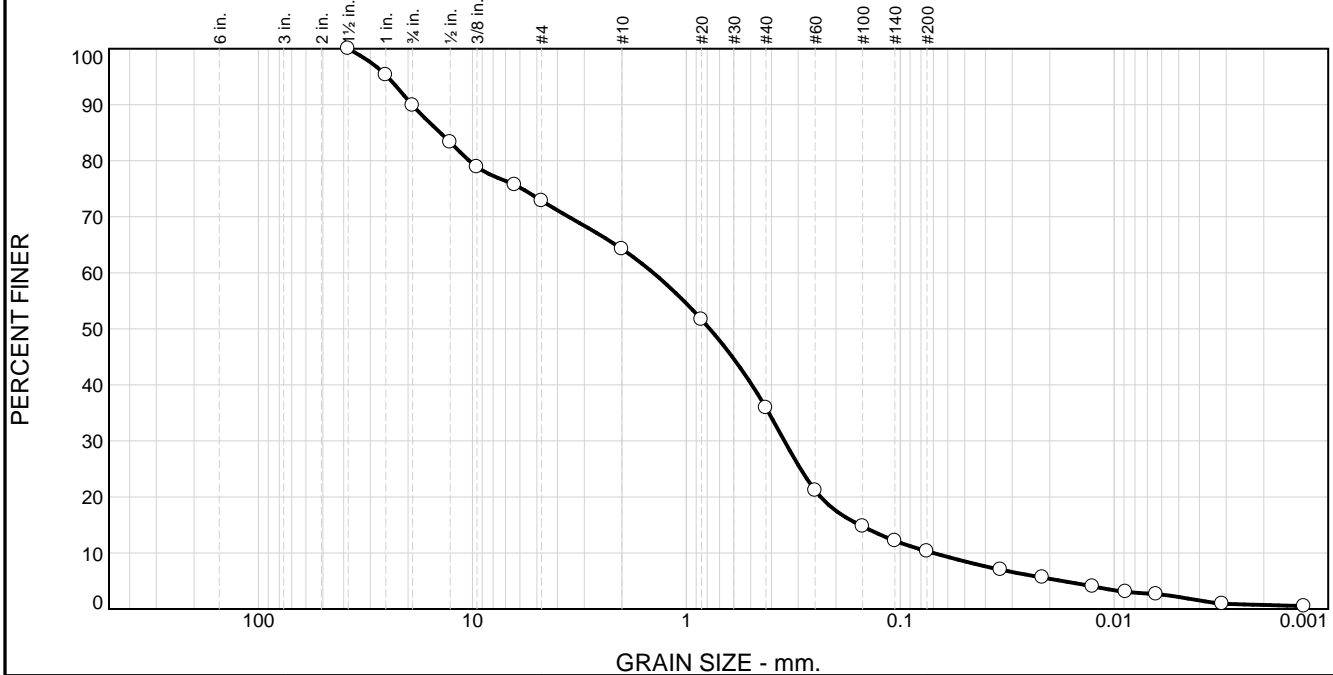
Project: Former Klink Cosmo Cleaners

**East Aurora, NY**

Project No: 11-010

Figure

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	10.1	17.0	8.6	28.4	25.6	8.2	2.1

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5	100.0		
1	95.3		
.75	89.9		
.5	83.3		
.375	78.9		
.25	75.7		
#4	72.9		
#10	64.3		
#20	51.7		
#40	35.9		
#60	21.2		
#100	14.8		
#140	12.2		
#200	10.3		
0.0340 mm.	7.0		
0.0217 mm.	5.6		
0.0126 mm.	4.0		
0.0088 mm.	3.1		
0.0064 mm.	2.7		
0.0031 mm.	0.9		
0.0013 mm.	0.5		

\* (no specification provided)

## Material Description

ID#11-264

Well-graded sand with silt and gravel

## Atterberg Limits (ASTM D 4318)

PL= NP

LL= NP

PI= NP

## Classification

USCS (D 2487)= SW-SM AASHTO (M 145)= A-1-b

## Coefficients

D<sub>90</sub>= 19.1548

D<sub>85</sub>= 14.1341

D<sub>60</sub>= 1.4277

D<sub>50</sub>= 0.7774

D<sub>30</sub>= 0.3481

D<sub>15</sub>= 0.1545

D<sub>10</sub>= 0.0700

C<sub>u</sub>= 20.39

C<sub>c</sub>= 1.21

Remarks

Date Received: 7/8/11

Date Tested: 7/26/11

Tested By: RP

Checked By: JMA

Title: LM

Source of Sample: Klink Cosmo Cleaners  
Sample Number: DEC-044D

Depth: 70-71'

Date Sampled:

3rd Rock, LLC

Client: URS

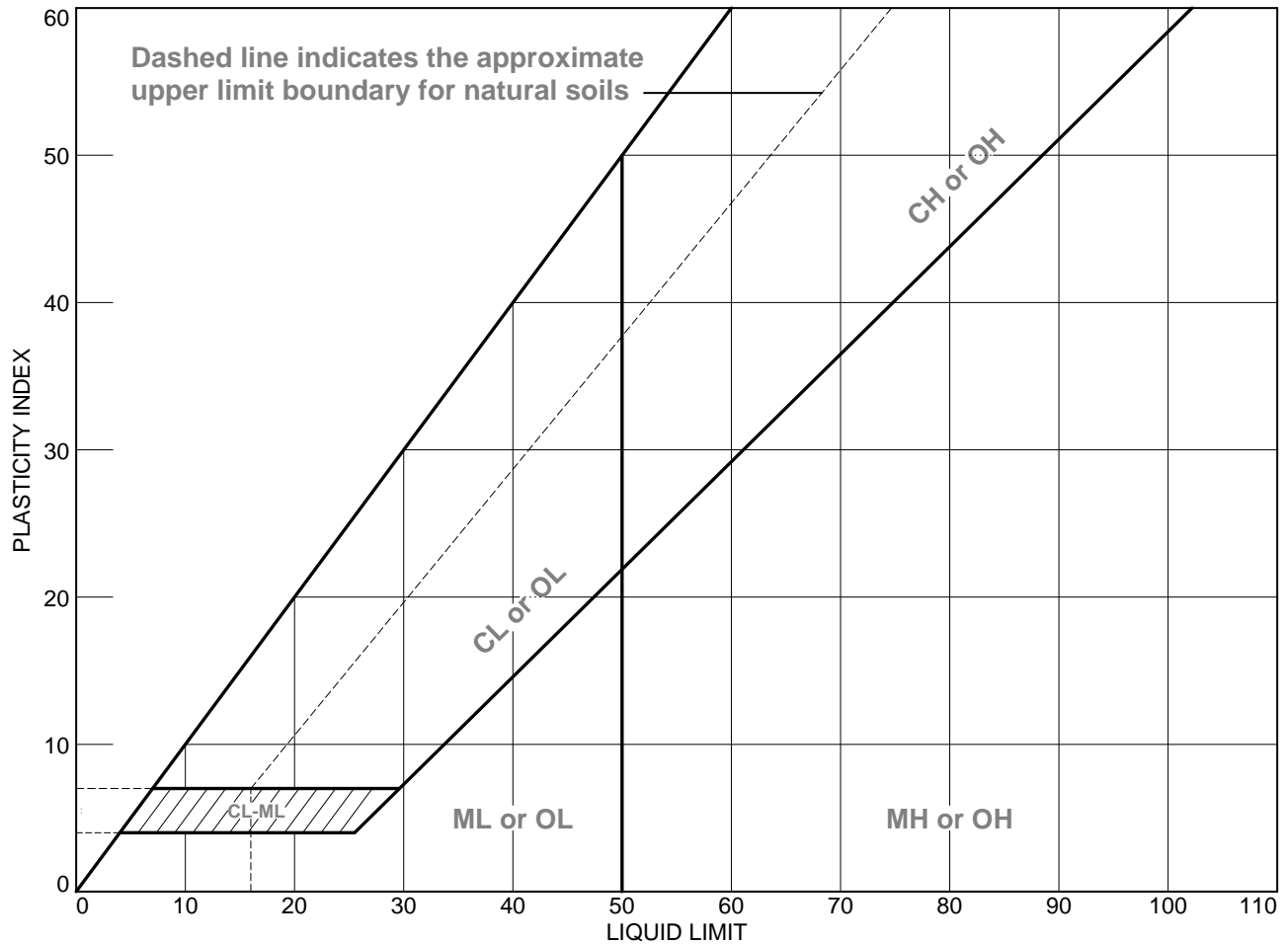
Project: Former Klink Cosmo Cleaners

East Aurora, NY

Project No: 11-010

Figure

# LIQUID AND PLASTIC LIMITS TEST REPORT



## SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Klink Cosmo Cleaners	DEC-044D	70-71'		NP	NP	NP	SW-SM

**3rd Rock, LLC**

**East Aurora, NY**

**Client:** URS

**Project:** Former Klink Cosmo Cleaners

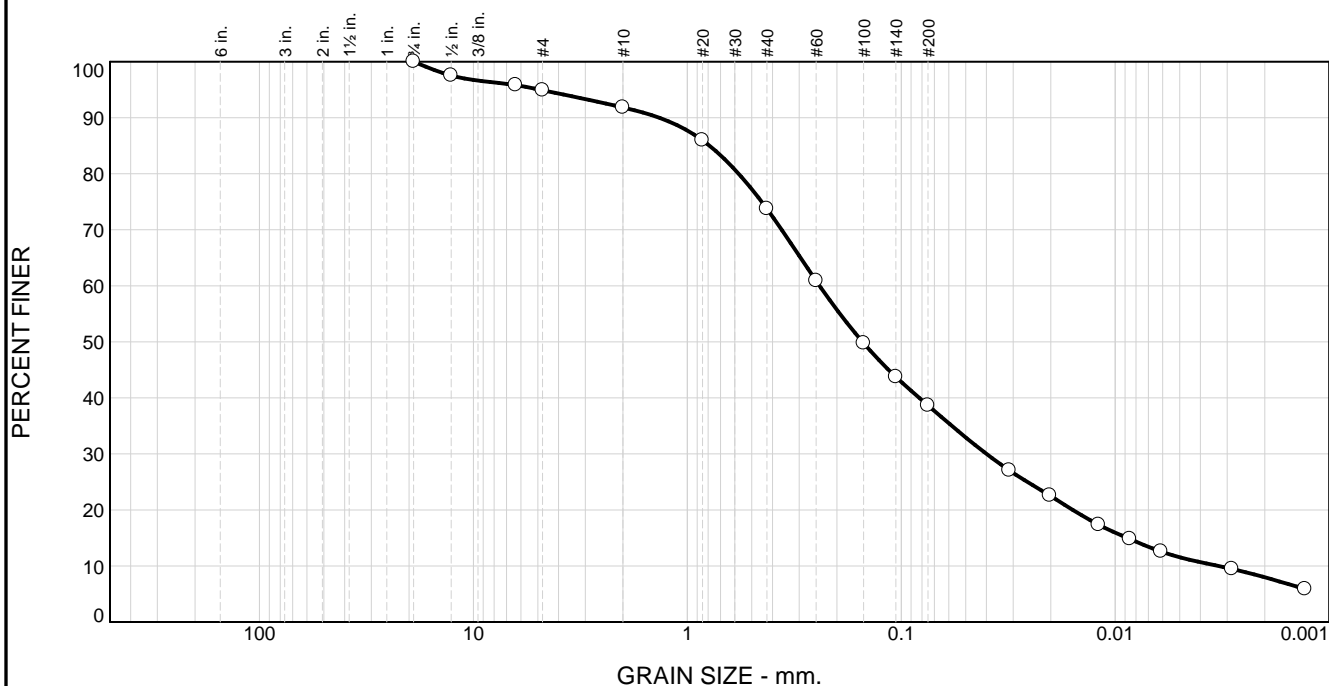
**Project No.:** 11-010

**Figure**

**Tested By:** RP/SD 8/11/11

**Checked By:** JMA

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	5.1	3.1	18.0	35.2	27.0	11.6

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	100.0		
.5	97.5		
.25	95.8		
#4	94.9		
#10	91.8		
#20	86.0		
#40	73.8		
#60	60.9		
#100	49.8		
#140	43.7		
#200	38.6		
0.0313 mm.	27.1		
0.0202 mm.	22.6		
0.0120 mm.	17.4		
0.0086 mm.	14.8		
0.0061 mm.	12.6		
0.0028 mm.	9.5		
0.0013 mm.	5.9		

\* (no specification provided)

<b>Material Description</b>		
ID#11-261 Silty sand		
<b>Atterberg Limits (ASTM D 4318)</b>		
PL= 16	LL= 18	PI= 2
<b>Classification</b>		
USCS (D 2487)= SM	AASHTO (M 145)= A-4(0)	
<b>Coefficients</b>		
D <sub>90</sub> = 1.3551	D <sub>85</sub> = 0.7878	D <sub>60</sub> = 0.2409
D <sub>50</sub> = 0.1519	D <sub>30</sub> = 0.0400	D <sub>15</sub> = 0.0088
D <sub>10</sub> = 0.0033	C <sub>u</sub> = 73.13	C <sub>c</sub> = 2.01
Remarks		
Date Received: 7/8/11      Date Tested: 8/2/11		
Tested By: RP		
Checked By: JMA		
Title: LM		

Source of Sample: Klink Cosmo Cleaners  
Sample Number: DEC-065D

Depth: 9-10'

Date Sampled:

**3rd Rock, LLC**

Client: URS

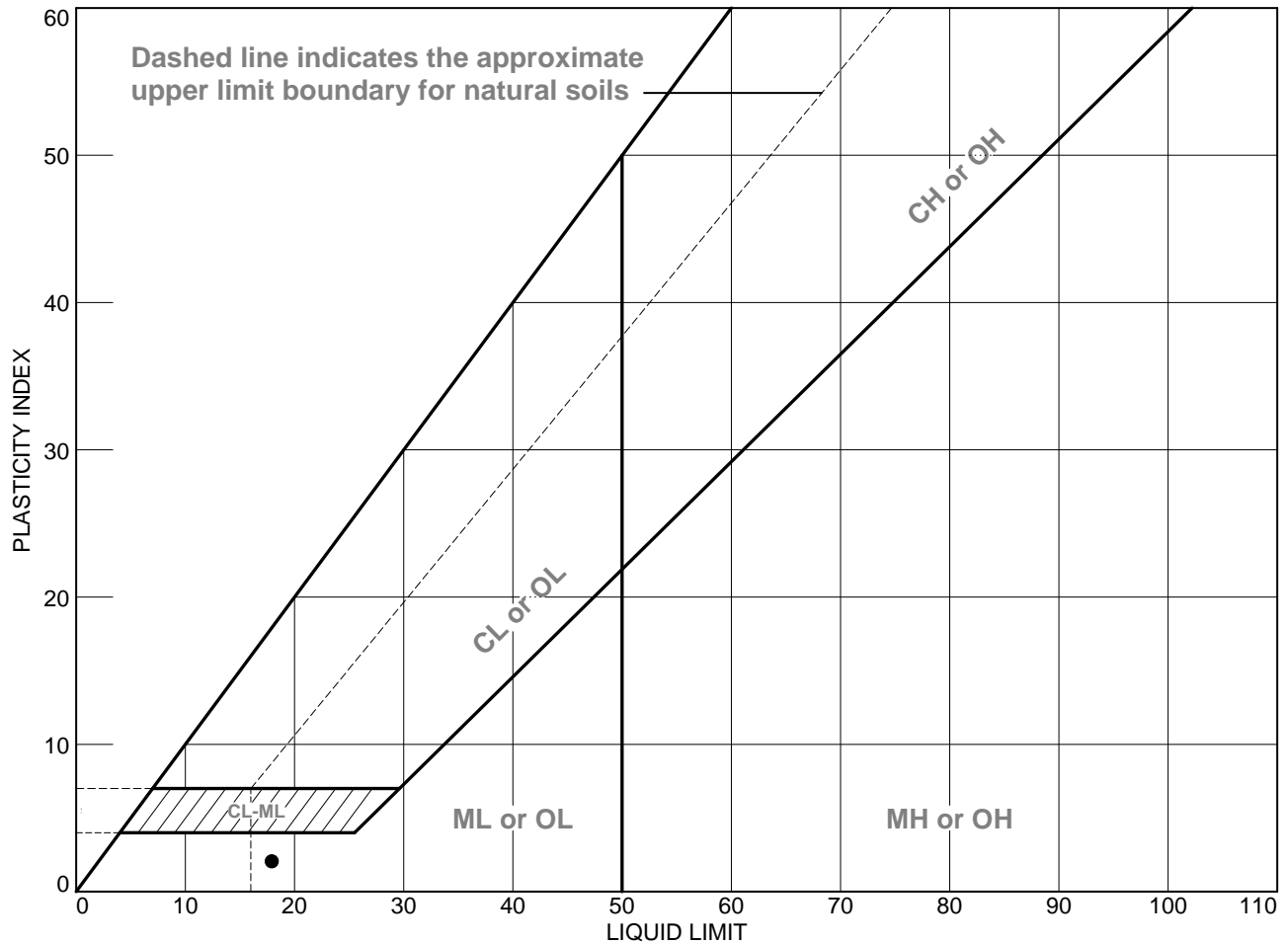
Project: Former Klink Cosmo Cleaners

**East Aurora, NY**

Project No: 11-010

Figure

# LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Klink Cosmo Cleaners	DEC-065D	9-10'		16	18	2	SM

**3rd Rock, LLC**

**East Aurora, NY**

**Client:** URS

**Project:** Former Klink Cosmo Cleaners

**Project No.:** 11-010

**Figure**

**Tested By:** RP 8/11/11

**Checked By:** JMA



## FINAL PERMEABILITY REPORT

Project Name: Former Klink Cosmo Cleaners, URS

Project No.: 11-010

Sample No.: DEC-065D, 9-10'

Sample I.D.: 11-261

Laboratory Method: ASTM D5084, Method C

Remarks: None

Date: 08/11/11

Tested By: RP

Check By: JMA

Date of Test: 07/20/11

Date Test Complete: 07/26/11

CELL NO.: 5A

### INITIAL SAMPLE DATA:

Height, in.: 2.738  
Diameter, in.: 2.803  
Moisture Content, %: 10.50

Wet Density, pcf: 140.4  
Dry Density, pcf: 127.1  
Compaction, %: NA

### FINAL SAMPLE DATA:

Height, in.: 2.684  
Diameter, in.: 2.800  
Moisture Content, %: 11.20

Wet Density, pcf: 144.5  
Dry Density, pcf: 130.0

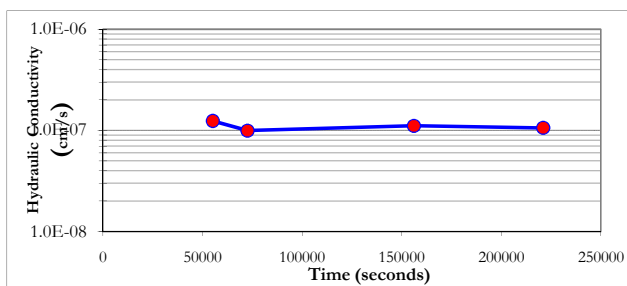
### SATURATION AND CONSOLIDATION DATA:

Consolidation Pressure: 86 psi  
Backpressure: 80 psi  
Saturation (B parameter): 95%

### AVERAGE PERMEABILITY RESULT (average of last 4 readings, K, cm/s):

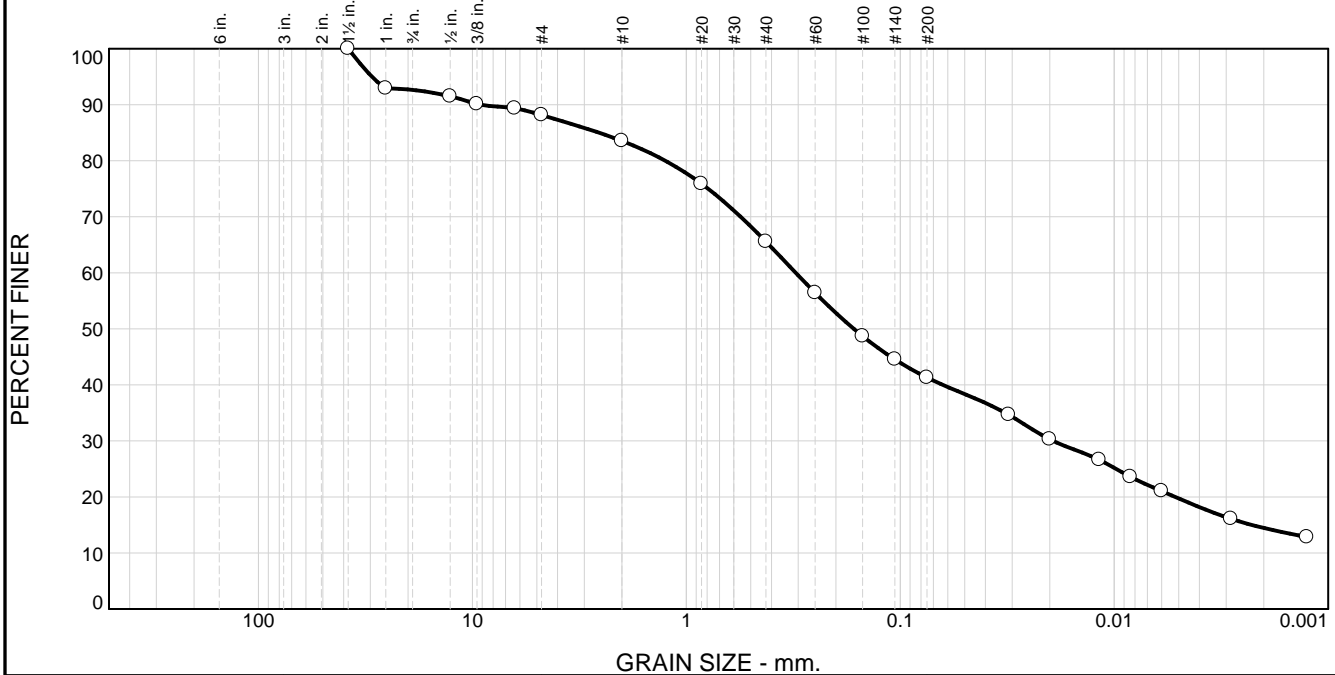
Trial #	Testing Pressures (psi)			Q (ml/sec)	Final K (cm/s)
	1	2	3		
1	86.1	80	80	1.49E-05	1.2E-07
2	86.1	80	80	1.12E-05	1.0E-07
3	86.1	80	80	1.17E-05	1.1E-07
4	86.1	80	80	1.00E-05	1.1E-07

Average K	1.1E-07
Average K, ft/day	3.1E-04





# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.4	4.5	4.6	17.9	24.3	21.6	19.7

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5	100.0		
1	92.9		
.5	91.5		
.375	90.1		
.25	89.4		
#4	88.1		
#10	83.5		
#20	75.9		
#40	65.6		
#60	56.4		
#100	48.7		
#140	44.5		
#200	41.3		
0.0311 mm.	34.7		
0.0201 mm.	30.3		
0.0117 mm.	26.6		
0.0084 mm.	23.6		
0.0060 mm.	21.0		
0.0028 mm.	16.1		
0.0013 mm.	12.8		

\* (no specification provided)

<b>Material Description</b>		
ID#11-262 Clayey sand		
<b>Atterberg Limits (ASTM D 4318)</b>		
PL= 20	LL= 30	PI= 10
<b>Classification</b>		
USCS (D 2487)= SC	AASHTO (M 145)= A-4(1)	
<b>Coefficients</b>		
D <sub>90</sub> = 9.1671	D <sub>85</sub> = 2.5575	D <sub>60</sub> = 0.3081
D <sub>50</sub> = 0.1651	D <sub>30</sub> = 0.0193	D <sub>15</sub> = 0.0023
D <sub>10</sub> =	C <sub>u</sub> =	C <sub>c</sub> =
Remarks		
Date Received: 7/8/11      Date Tested: 8/2/11		
Tested By: RP		
Checked By: JMA		
Title: LM		

Source of Sample: Klink Cosmo Cleaners  
Sample Number: DEC-065D

Depth: 14-15'

Date Sampled:

**3rd Rock, LLC**

Client: URS

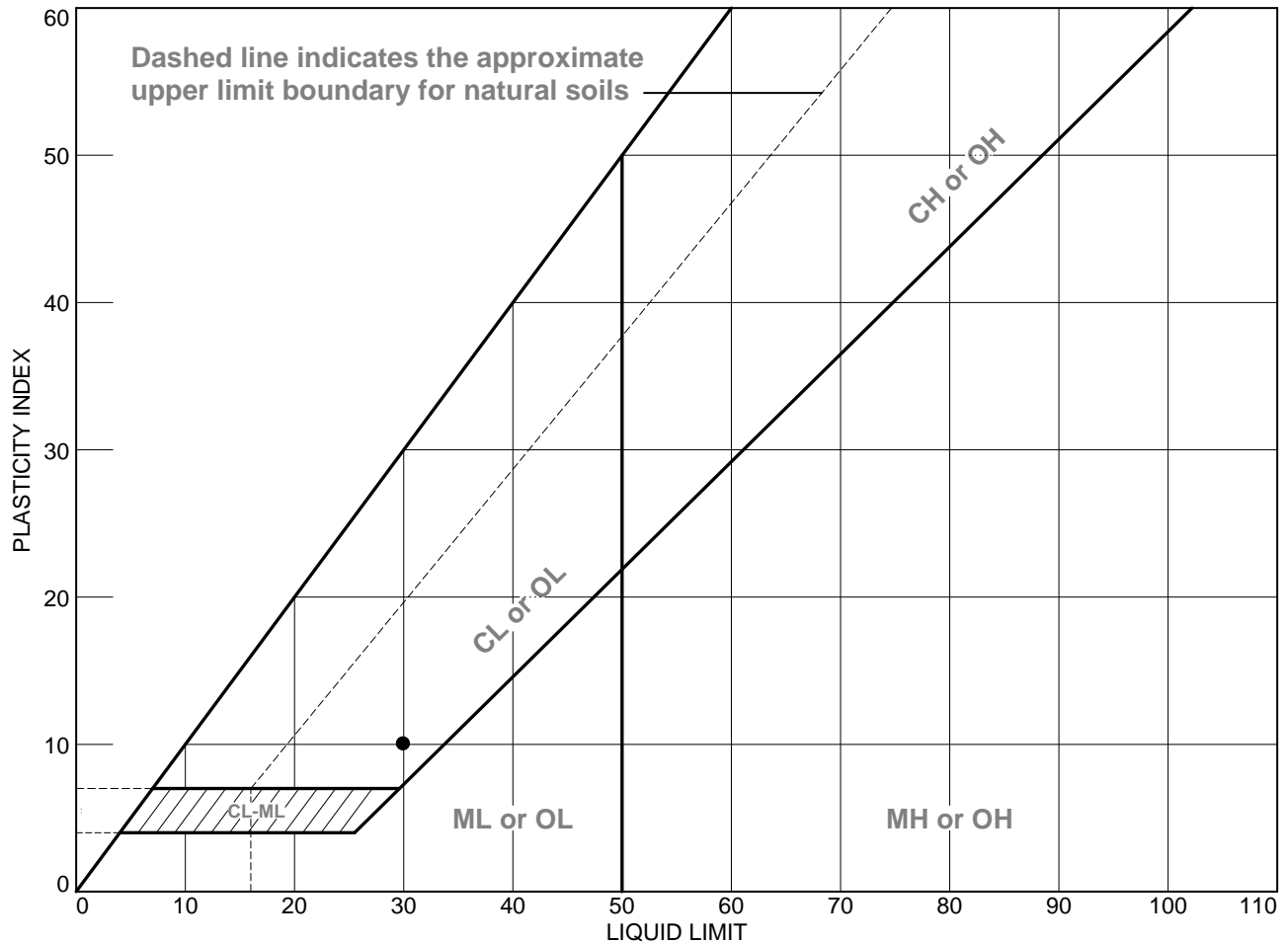
Project: Former Klink Cosmo Cleaners

**East Aurora, NY**

Project No: 11-010

Figure

# LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Klink Cosmo Cleaners	DEC-065D	14-15'		20	30	10	SC

**3rd Rock, LLC**

**East Aurora, NY**

**Client:** URS

**Project:** Former Klink Cosmo Cleaners

**Project No.:** 11-010

**Figure**

**Tested By:** RP 8/11/11

**Checked By:** JMA



## FINAL PERMEABILITY REPORT

Project Name: Former Klink Cosmo Cleaners, URS

Project No.: 11-010

Sample No.: DEC-065D, 14-15'

Sample I.D.: 11-262

Laboratory Method: ASTM D5084, Method C

Comments: None

Date: 08/11/11

Tested By: RP

Check By: JMA

Date of Test: 07/20/11

Date Test Complete: 07/26/11

CELL NO.: 5B

### INITIAL SAMPLE DATA:

Height, in.: 2.291

Diameter, in.: 2.809

Moisture Content, %: 14.00

Wet Density, pcf: 139.1

Dry Density, pcf: 122.0

Compaction, % NA

### FINAL SAMPLE DATA:

Height, in.: 2.283

Diameter, in.: 2.797

Moisture Content, %: 16.00

Wet Density, pcf: 142.2

Dry Density, pcf: 122.6

### SATURATION AND CONSOLIDATION DATA:

Consolidation Pressure: 86 psi

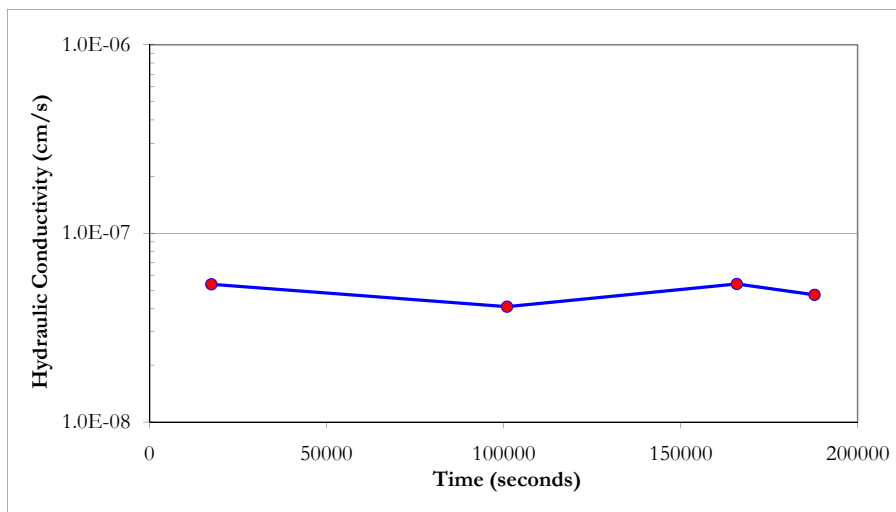
Backpressure: 80 psi

Saturation (B parameter): 96%

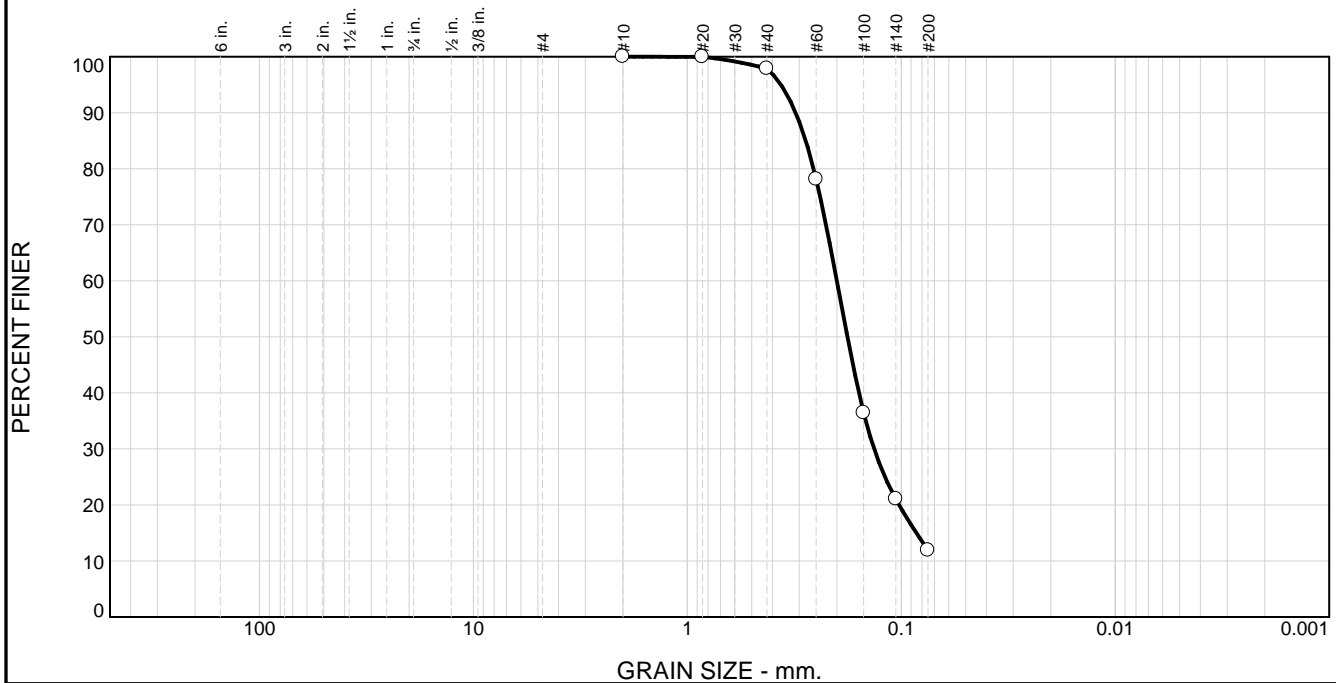
### AVERAGE PERMEABILITY RESULT (average of last 4 readings, K, cm/s):

Trial #	Testing Pressures (psi)			Q (ml/sec)	Final K (cm/s)
	1	2	3		
1	86	80.4	80	1.03E-05	5.4E-08
2	86	80.5	80	9.83E-06	4.1E-08
3	86	80.3	80	7.78E-06	5.4E-08
4	86	80.3	80	6.81E-06	4.7E-08

Average K	4.9E-08
Average K, ft/day	1.4E-04



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	2.1	86.0	11.9	

TEST RESULTS (ASTM D6913)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
#10	100.0		
#20	100.0		
#40	97.9		
#60	78.1		
#100	36.4		
#140	21.0		
#200	11.9		

\* (no specification provided)

<b>Material Description</b> ID#11-265 Poorly graded sand with silt USCS: SP-SM		
<b>Atterberg Limits (ASTM D 4318)</b> PL=                      LL=                      PI=		
<b>Classification</b> USCS (D 2487)=                      AASHTO (M 145)=		
<b>Coefficients</b> D <sub>90</sub> = 0.3117                      D <sub>85</sub> = 0.2797                      D <sub>60</sub> = 0.2002 D <sub>50</sub> = 0.1786                      D <sub>30</sub> = 0.1340                      D <sub>15</sub> = 0.0850 D <sub>10</sub> =                      C <sub>u</sub> =                      C <sub>c</sub> =		
Remarks		
Date Received: 7/8/11		Date Tested: 8/4/11
Tested By: SD		
Checked By: JMA		
Title: LM		

Source of Sample: Klink Cosmo Cleaners  
 Sample Number: DEC-066D

Depth: 24-25'

Date Sampled:

**3rd Rock, LLC**

Client: URS

Project: Former Klink Cosmo Cleaners

**East Aurora, NY**

Project No: 11-010

Figure

## **APPENDIX O**

### **DATA USABILITY SUMMARY REPORT**

**DATA USABILITY SUMMARY REPORT**

**FORMER KLINK COSMO CLEANERS SITE**

**EAST WILLIAMSBURG INDUSTRIAL AREA**

**BOROUGH OF BROOKLYN**

**KINGS COUNTY, NEW YORK**

**Site No. 22430**

**Prepared by:**

**URS CORPORATION  
77 GOODELL STREET  
BUFFALO, NY 14203**

**NOVEMBER 2011**

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3.0 DATA DELIVERABLE COMPLETENESS .....	2
4.0 PRESERVATION/HOLDING TIMES/SAMPLE RECEIPT .....	3
5.0 NON-CONFORMANCES .....	3
6.0 SAMPLE RESULTS AND REPORTING .....	6
7.0 SUMMARY .....	7

## TABLES (Following Text)

Table 1	Summary of Data Qualifications
Tables 2A	Validated Soil Sample Results (VOCs)
Tables 2B	Validated Soil Sample Results (All other parameters)
Table 3	Validated Soil TCLP Sample Results
Tables 4A	Validated Groundwater Sample Results (VOCs)
Tables 4B	Validated Groundwater Sample Results (All other parameters)
Table 5	Validated Product Sample Results
Table 6	Validated Air Sample Results
Table 7	Validated Field QC Sample Results

## ATTACHMENTS

ATTACHMENT A	Validated Form 1's
ATTACHMENT B	Support Documentation

## 1.0 INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B-Guidance for Data Deliverables and the Development of Data Usability and Summary Reports, May 2010*. Analytical data for 25 soil samples, 45 groundwater samples, 1 product sample, 31 soil gas samples, 4 groundwater field duplicates, 4 soil gas field duplicates, 2 groundwater matrix spikes/matrix spike duplicates (MS/MSD) pairs, 3 ambient air samples, and 2 trip blanks collected by URS personnel on May 5-June 24, 2011 from the Former Klink Cosmo Cleaners site are discussed in this DUSR.

## 2.0 ANALYTICAL METHODOLOGIES

All soil and groundwater samples were sent to Miktem Laboratories, Inc. (Warwick, RI) for analysis. The soil samples were analyzed for: volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method SW8260B; semivolatile organic compounds (SVOCs) by USEPA Method SW8270C; pesticides/PCBs by USEPA Methods 8081B/8082A; herbicides by USEPA Method 8151; metals/cyanide by USEPA Methods 6010C/7471B/9012B; and hexavalent chromium by USEPA Method 7196A. Not all samples were analyzed for all parameters.

Two soil samples underwent a Toxicity Characteristic Leaching Procedure (TCLP) extraction in accordance with USEPA Method 1311. The extracts were then analyzed for TCLP VOCs by USEPA Method 8260C; TCLP SVOCs by USEPA Method 8270D; TCLP Pesticides by USEPA Method 8081B; TCLP Herbicides by USEPA Method 8151A; TCLP metals by USEPA Method 6010C/7470A; flashpoint by USEPA Method 1010; pH by USEPA Method 9045C; and reactive cyanide/sulfide by section 7.3.4.2.

One product sample was analyzed for VOCs by USEPA Method SW8260B; SVOCs by USEPA Method SW8270C; total petroleum hydrocarbons by USEPA Method 8015D; and specific gravity by American Society for Testing and Materials (ASTM) Method 2170F. The specific gravity analysis was subcontracted to Mt. Tom Generating Co. LLC analytical laboratory located in West Springfield, MA.

The air samples were analyzed for VOCs by USEPA Compendium of Methods for the Determination of Toxic Compounds in Ambient Air Method TO-15.



A limited data validation was performed following the guidelines in the following USEPA Region II documents:

- *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B, SOP HW-24, Rev. 2, August 2008;*
- *Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D, SOP HW-22, Rev. 4, August 2008;*
- *Validating Pesticide Compounds by Gas Chromatography SW-846 Method 8081B, SOP HW-44, Rev.1, August 2006;*
- *Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A, SOP HW-45, Rev.1, August 2006;*
- *Validation of Metals for the Contract Laboratory Program (CLP) Based on SOW ILM05.3, SOP HW-2, Rev. 13, September 2006; and*
- *Validating Chlorinated Herbicides by GC, SW-846, Method 8151A, SOP HW-17, Rev. 2, September 2006.*

The limited validation included: a review of holding times and completeness of all required deliverables; a review of quality control (QC) results (blanks, instrument tunings, calibration standards, duplicate analyses, and laboratory control sample (LCS) recoveries to determine if the data are within the protocol-required limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Qualifications applied to the data include 'J' (estimated concentration), 'UJ' (estimated quantitation limit), and 'R' (rejected/data unusable). Definitions of USEPA Region II data qualifiers are presented at the end of this text. A summary of data qualifications is provided on Table 1. The validated analytical results are presented on Tables 2 – 7. Copies of the validated laboratory results (i.e., Form 1's) are presented in Attachment A. Documentation supporting the qualification of data is presented in Attachment B. Only analytical deviations affecting data usability are discussed in this report.

### **3.0 DATA DELIVERABLE COMPLETENESS**

Full deliverable data packages were provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

#### 4.0 PRESERVATION/HOLDING TIMES/SAMPLE RECEIPT

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC). All samples were analyzed within the required holding times.

#### 5.0 NON-CONFORMANCES

##### Instrument Calibration

The relative response factors (RRF) for the VOCs acetone, 2-butanone, and 1,4-dioxane in the initial calibration (ICAL) and/or the continuing calibration (CCAL) standards associated with the soil samples were below the lower QC limit (0.05). The non-detected results for these compounds in the associated soil samples listed on Table 1 have been qualified 'R' and the detected compounds qualified 'J'.

The RRF for the VOC 1,4-dioxane in the ICAL and/or the CCAL standards associated with the groundwater samples was below the lower QC limit (0.05). The non-detected results for this compound in the associated groundwater samples listed on Table 1 have been qualified 'R' and the detected compounds qualified 'J'.

The RRF for the VOCs acetone, 2-butanone, and 1,4-dioxane in the ICAL and/or the CCAL standards associated with the product sample were below the lower QC limit (0.05). The non-detected results for these compounds in the associated product sample listed on Table 1 have been qualified 'R'.

The percent relative standard deviation (%RSD) of the VOCs 1,1-dichloroethene, naphthalene, and/or cis-1,2-dichloroethene in the ICAL exceeded the QC limit of 15%. The detected results for these compounds in the associated groundwater samples listed on Table 1 have been qualified 'J'.

The percent difference (%D) between the ICAL average RRF and the RRF in one or more of the CCAL standards associated with the soil samples exceeded the QC limit of 20% for VOCs 2-hexanone, 1,2-dibromo-3-chloropropane, naphthalene, and/or n-butylbenzene. The non-detect results for these compounds in the associated soil samples listed on Table 1 were qualified 'UJ'.

The %D between the ICAL average RRF and the RRF in one or more of the CCAL standards associated with the groundwater samples exceeded the QC limit of 20% for VOCs cis-1,2-

dichloroethene, 1,2-dichloropropane, 2-chlorotoluene, 2-hexanone, 4-methyl-2-pentanone, 1,2-dibromo-3-chloropropane, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, benzene, carbon tetrachloride, chloromethane, cyclohexane, dichlorodifluoromethane, hexachlorobutadiene, idomethane, sec-butylbenzene, methylcyclohexane, naphthalene, trichlorofluoromethane, vinyl acetate, and/or vinyl chloride. The non-detect results for these compounds in the associated groundwater samples listed on Table 1 were qualified 'UJ'.

The %D between the ICAL average RRF and the RRF in one or more of the CCAL standards associated with the air samples exceeded the QC limit of 20% for VOCs 1,2,4-trichlorobenzene and/or hexachloro-1,3-butadiene. The non-detect results for these compounds in the associated air samples listed on Table 1 were qualified 'UJ'.

The %D between the ICAL average RRF and the RRF in one or more of the CCAL standards associated with the soil samples exceeded the QC limit of 20% for SVOCs 2-methylnaphthalene, 2,4-dinitrophenol, 4-chloroaniline, 4-nitrophenol, atrazine, hexachlorobutadiene, nitrobenzene, and/or pyridine. The detected results for these compounds in the associated soil samples listed on Table 1 were qualified 'J', and the non-detected results qualified 'UJ'.

The %RSD of SVOCs benzo(k)fluoranthene and/or pyridine in the ICAL exceeded the QC limit of 15%. The detected results for these compounds in the associated soil samples listed on Table 1 have been qualified 'J'.

The %D between the ICAL average RRF and the RRF in one or more of the CCAL standards associated with the groundwater samples exceeded the QC limit of 20% for SVOC 2,4-dinitrophenol. The non-detect results for this compound in the associated groundwater samples listed on Table 1 were qualified 'UJ'.

The %D between the ICAL average RRF and the RRF in one or more of the CCAL standards associated with the product sample exceeded the QC limit of 20% for SVOCs 2,2'-oxybis(1-chloropropane), n-nitroso-di-n-propylamine, butylbenzyl phthalate, bis(2-ethylhexyl)phthalate, di-n-octylphthalate, and/or atrazine. The non-detect results for these compounds in the associated product sample listed on Table 1 were qualified 'UJ', and the detected results qualified 'J'.

The %D in the herbicide CCAL standard associated with the soil samples listed on Table 1 exceeded the QC limit of 25% for MCPA and MCPB. The non-detect results for these compounds in the associated samples listed on Table 1 were qualified 'UJ'.

Documentation supporting the qualification of data (i.e., VOC/SVOC/Herbicides Forms 6 and 7) is presented in Attachment B.

#### **Laboratory Control Samples (LCS)**

The percent recovery (%R) of VOC naphthalene was above the upper QC limit in an LCS. The detected result for naphthalene in soil sample DEC-065D (34-35) was qualified 'J'.

The %R of VOC cyclohexane was below the lower QC limit in the LCS. The non-detected results for cyclohexane in the associated groundwater samples listed on Table 1 were qualified 'UJ'.

The %Rs of SVOC 2-methylphenol and caprolactam were below the lower QC limit in the LCS. The non-detected results for these compounds in the associated groundwater samples listed on Table 1 were qualified 'UJ'.

The %Rs of SVOC 2,4-dinitrophenol and benzaldehyde were below the lower QC limit in the LCS. The non-detected results for these compounds in the associated product sample listed on Table 1 were qualified 'UJ'.

Documentation supporting the qualification of data (i.e., VOC - Form 3, Form 5, extraction log) is presented in Attachment B.

#### **Field Duplicate Samples**

The USEPA Region II validation guidelines do not require qualification of VOC, SVOC, Pesticide, PCB, or Herbicide analytical results based upon field duplicate precision.

The relative percent difference (%RPD) between the iron (Fe) results in groundwater sample DEC-048 and the field duplicate performed on this sample exceeded the QC limit of 20%. The results for the Fe in the samples listed on Table 1 have been qualified 'J'.

### **Laboratory Blanks**

Naphthalene was detected in the laboratory blank associated with soil sample SG-79 (7-8). Since this sample had a concentration of naphthalene that was less than five times the associated blank level, the naphthalene result was qualified 'U' at the quantitation limit (QL).

Naphthalene was detected in the laboratory blank associated with product sample DEC-048. Since this sample had a concentration of naphthalene that was less than five times the associated blank level, the naphthalene result was qualified 'U' at the QL.

Documentation supporting the qualification of data (i.e., VOC - Forms 1 and 4) is presented in Attachment B.

### **Surrogates**

The %R of VOC surrogate dibromofluoromethane in sample DEC-064 was below the lower QC limit. The sample was reanalyzed was re-analyzed at a dilution, with acceptable surrogate recoveries. All compounds being reported from the undiluted analysis have been qualified 'J' or 'UJ'.

Documentation supporting the qualification of data (i.e., VOC - Form 2) is presented in Attachment B.

## **6.0 SAMPLE RESULTS AND REPORTING**

All quantitation/detection limits were reported in accordance with method requirements and were adjusted for sample volume, moisture content, and dilution factors. Results reported from a secondary dilution were qualified 'D'. Results below the quantitation limits were qualified 'J', 'B' (metals), by the laboratory.

The %D between the dual column analysis for pesticide endrin exceeded 50% in soil sample DEC-030D (3.5-4.5). Since the result was less than the QL, the result for endrin in this sample was qualified 'U' at the QL. The %Ds between the dual column analysis for alpha-chlordane and gamma-chlordane were >25%; the results for these pesticides were qualified 'J'.

The %D between the dual column analysis for pesticides gamma-BHC (lindane) and heptachlor exceeded 201% in soil sample DEC-066S (1-2). The results for these pesticides in this sample were qualified 'R'.

The %D between the dual column analysis for pesticide gamma-BHC (lindane) was >25% in groundwater sample DEC-031. The results for this pesticide was qualified 'J'.

Air samples SG-19, SG-20, SG-21, SG-78, SG-79, and SG-80 had results for 2,2,4-trimethylpentane, cyclohexane, and/or ethanol that were over the calibration curve. The laboratory performed dilutions for other compounds of interest which resulted in the compounds listed above becoming non-detect. The results from the initial analysis have been reported and the compounds qualified 'J' due to the calibration exceedence. The air samples and the specific compounds affected have been listed on Table 1.

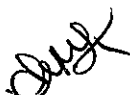
Groundwater sample DEC-011 was initially analyzed on 6/30/11 and was detected for trichloroethene (TCE) and tetrachloroethene (PCE). However this analysis occurred immediately following a sample that exceeded the calibration curve for TCE and PCE. The lab re-analyzed sample DEC-011 outside of the holding time to confirm the presence of TCE and PCE. The presence of TCE and PCE was confirmed by the re-analysis. The results from the initial analysis have been reported, and the TCE and PCE results have been qualified as estimated 'J' because of the possibility of carryover from the previous sample.

## 7.0 SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'J' or 'UJ' are considered conditionally usable. Those results qualified 'R' are unusable. All other sample results are usable as reported. URS does not recommend the recollection of any samples at this time.

**Prepared By:**

Ann Marie Kropovitch, Chemist



**Date:**

11/4/11

**Reviewed By:**

George E. Kisluk, Senior Chemist



**Date:**

11/4/11

## **DEFINITIONS OF USEPA REGION II DATA QUALIFIERS**

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- B – The analyte was detected in the sample at a concentration greater than the instrument detection limit, but less than the quantitation limit.
- D – The positive value is the result of an analysis at a secondary dilution factor.

<p style="text-align: center;"><b>TABLE 1</b></p> <p style="text-align: center;"><b>SUMMARY OF DATA QUALIFICATIONS</b></p> <p style="text-align: center;"><b>FORMER KLINK COSMO CLEANERS SITE</b></p>			
<b>Fraction</b>	<b>Samples</b>	<b>Reason</b>	<b>Action</b>
VOC	All soil samples.	RRF < 0.05 for acetone, 2-butanone, and 1,4-dioxane.	Qualify non-detected results 'R' and detected results 'J'.
VOC	Soil sample DEC-029D (75-76).	CCAL %D > 20% for naphthalene.	Qualify non-detected results 'UJ'.
VOC	Soil samples DEC-043D (80-81) and DEC-064D (29-29.5).	CCAL %D > 20% for 2-hexanone and n-butylbenzene.	Qualify non-detected results 'UJ'.
VOC	Soil samples DEC-065D (9-10) and DEC-065D (14-15).	CCAL %D > 20% for 1,2-dibromo-3-chloropropane and naphthalene.	Qualify non-detected results 'UJ'.
VOC	Soil sample DEC-065D (34-35).	LCS %R > QC limit for naphthalene.	Qualify detected result 'J'.
VOC	Soil sample SG-79 (7-8).	Naphthalene detected in the laboratory blank.	Qualify results 'U' at the QL.
VOC	All groundwater and field QC samples.	RRF < 0.05 for acetone, 2-butanone, and 1,4-dioxane.	Qualify non-detected results 'R' and detected results 'J'.
VOC	Groundwater samples DEC-006DD, DUP-062011 (DEC-006DD), and DEC-030D.	ICAL %RSD for 1,1-dichloroethene >15%.	Qualify detected results 'J'.
VOC	Groundwater sample DEC-046.	ICAL %RSD for naphthalene >15%.	Qualify detected results 'J'.
VOC	Groundwater samples DEC-008, DEC-013, DEC-014R, DEC-022D, DEC-029, and DEC-042.	ICAL %RSD for cis-1,2-dichloroethene >15%.	Qualify detected results 'J'.
VOC	Groundwater samples DEC-004, DEC-027, DEC-029D, DEC-039, DEC-048, DUP-062411 (DEC-39), and DUP2-062411 (DEC-048).	CCAL %D > 20% for chloromethane and vinyl chloride.	Qualify non-detected results 'UJ' and deleted results 'J'.
VOC	Groundwater samples DEC-022D, DEC-044, DEC-044D, DEC-066, and DEC-066D.	CCAL %D > 20% sec-butylbenzene and methylcyclohexane.	Qualify non-detected results 'UJ'.
VOC	Groundwater samples DEC-013D, DEC-032, and DEC-042.	CCAL %D > 20% cis-1,2-dichloroethene, benzene, 1,2-dichloropropane, cyclohexane, and methylcyclohexane.	Qualify non-detected results 'UJ' and detected results 'J'.
VOC	Groundwater samples DEC-008, DUP-062311 (DEC-013), and DEC-014R.	CCAL %D > 20% cis-1,2-dichloroethene, benzene, 2-chlorotoluene, sec-butylbenzene, cyclohexane, and methylcyclohexane.	Qualify non-detected results 'UJ' and detected results 'J'.



<p style="text-align: center;"><b>TABLE 1</b></p> <p style="text-align: center;"><b>SUMMARY OF DATA QUALIFICATIONS</b></p> <p style="text-align: center;"><b>FORMER KLINK COSMO CLEANERS SITE</b></p>			
<b>Fraction</b>	<b>Samples</b>	<b>Reason</b>	<b>Action</b>
VOC	Groundwater samples DEC-009, DEC-014D, DEC-029, DEC-013, and TB (6/22/11).	CCAL %D > 20% for chloromethane, trichlorofluoromethane, idomethane, vinyl acetate, carbon tetrachloride, 4-methyl-2-pentanone, 2-hexanone, hexachlorobutadiene, and cyclohexane.	Qualify non-detected results 'UJ'.
VOC	Groundwater samples DEC-006D, DEC-006DD, DUP-062011 (DEC-006DD), DEC-030, DEC-030D, DEC-031, and DEC-031D.	CCAL %D > 20% for dichlorodifluoromethane, trichlorofluoromethane, 4-methyl-3-pentanone, 2-hexanone, 1,2-dibromo-3-chloropropane, and naphthalene.	Qualify non-detected results 'UJ'.
VOC	Groundwater samples DEC-045, DEC-045D, DEC-064D, and Trip Blank (6/20/11).	CCAL %D > 20% for dichlorodifluoromethane 1,2,3-trichlorobenzene, and naphthalene.	Qualify detected results 'J' and non-detected results 'UJ'.
VOC	Groundwater samples DEC-007, DEC-007D, DEC-010, DEC-011, DEC-028, DEC-033, DEC-046, DEC-047, DEC-065, and DEC-065D.	CCAL %D > 20% for dichlorodifluoromethane, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, 1,2,3-trichlorobenzene, and naphthalene.	Qualify non-detected results 'UJ' and detected results 'J'.
VOC	Groundwater samples DEC-043 and DEC-043D.	CCAL %D > 20% for 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, and hexachlorobutadiene.	Qualify non-detected results 'UJ'.
VOC	Groundwater samples DEC-012, DUP-062211 (DEC-065), DEC-015, and DEC-015D.	CCAL %D > 20% benzene, sec-butylbenzene, cyclohexane, and methylcyclohexane.	Qualify non-detected results 'UJ'.
VOC	Groundwater sample DEC-064 (undiluted analysis).	Surrogate dibromofluoromethane %R > QC limit.	Qualify detected results 'J' and non-detected results 'UJ'.
VOC	Groundwater sample DEC-011.	Possible carryover for TCE/PCE from previous sample.	Qualify TCE/PCE results 'J'.
VOC	Product sample DEC-048.	RRF < 0.05 for acetone, 2-butanone, and 1,4-dioxane.	Qualify non-detected results 'R'.
VOC	Product sample DEC-048.	CCAL %D > 20% for 2-hexanone.	Qualify non-detected results 'UJ'.
VOC	Air samples AA-061411, SG-19, SG-20, SG-21, SG-46, DUP2-061411 (SG-46), SG-48, SG-49, SG-55, SG-60, DUP-061411 (SG-60), SG-62, SG-78, SG-79, SG-80, SG-81, and SG-82.	CCAL %D > 20% for 1,2,4-trichlorobenzene.	Qualify non-detected results 'UJ'.

<p style="text-align: center;"><b>TABLE 1</b></p> <p style="text-align: center;"><b>SUMMARY OF DATA QUALIFICATIONS</b></p> <p style="text-align: center;"><b>FORMER KLINK COSMO CLEANERS SITE</b></p>			
<b>Fraction</b>	<b>Samples</b>	<b>Reason</b>	<b>Action</b>
VOC	Air samples AA-061511, SG-18, SG-43, SG-47, SG-56, SG-59, SG-61, SG-63, DUP2-061511 (SG-63), SG-85, SG-86, and SG-87.	CCAL %D > 20% for 1,2,4-trichlorobenzene and hexachlorobutadiene.	Qualify non-detected results 'UJ'.
VOC	Air sample SG-79.	Cyclohexane > calibration curve.	Qualify detected results 'J'.
VOC	Air sample SG-20, SG-78, and SG-80.	Ethanol > calibration curve.	Qualify detected results 'J'.
VOC	Air sample SG-19.	Cyclohexane and ethanol > calibration curve.	Qualify detected results 'J'.
VOC	Air sample SG-21.	2,2,4-Trimethylpentane > calibration curve.	Qualify detected results 'J'.
SVOC	Soil sample DEC-030D (3.5-4.5).	ICAL %RSD for benzo(k)fluoranthene >15%.	Qualify detected results 'J'.
TCLP SVOC	Soil samples DEC-044D (4-5) and DEC-066S (1-2).	CCAL %D > 20% for hexachlorobutadiene and pyridine.	Qualify detected results 'J' and non-detected results 'UJ'.
SVOC	Soil samples DEC-065D (9-10), DEC-065D (14-15), and DEC-066D (24-25).	CCAL %D > 20% for 2,4-dinitrophenol, nitrobenzene, and 2-methylnaphthalene.	Qualify non-detected results 'UJ'.
SVOC	Soil samples DEC-029D (75-76) and DEC-030D (3.5-4.5).	CCAL %D > 20% for atrazine, 4-chloroaniline, and 4-nitrophenol.	Qualify non-detected results 'UJ'.
SVOC	Groundwater sample DEC-031 and DEC-031D.	CCAL %D > 20% for 2,4-dinitrophenol.	Qualify non-detected results 'UJ'.
SVOC	Groundwater samples DEC-031 and DEC-031D.	LCS %R 2-methylphenol and caprolactam < QC limit.	Qualify non-detected results 'UJ'.
SVOC	Product sample DEC-048.	LCS %R 2,4-dinitrophenol and benzaldehyde < QC limit.	Qualify non-detected results 'UJ'.
SVOC	Product sample DEC-048.	CCAL %D > 20% for 2,2'-oxybis(1-chloropropane), n-nitroso-di-n-propylamine, butylbenzyl phthalate, bis(2-ethylhexyl)phthalate, di-n-octylphthalate, and atrazine.	Qualify detected results 'J' and non-detected results 'UJ'.
Pesticides	Soil sample DEC-030D (3.5-4.5).	The %D between columns for endrin > 50% and result < QL.	Qualify detected result 'U'.
Pesticides	Soil sample DEC-030D (3.4-4.5).	The %Ds between columns for alpha-chlordane and gamma-chlordane >25%.	Qualify detected results 'J'.
TCLP Pesticides	Soil sample DEC-066S (1-2).	The %Ds between columns for gamma-BHC (Lindane) and heptachlor >201%.	Qualify non-detected results 'R'.

<b>TABLE 1</b>  <b>SUMMARY OF DATA QUALIFICATIONS</b> <b>FORMER KLINK COSMO CLEANERS SITE</b>			
<b>Fraction</b>	<b>Samples</b>	<b>Reason</b>	<b>Action</b>
Herbicides	Soil samples DEC-065D (9-10), DEC-065D (14-15), and DEC-066D (24-25).	CCAL %D >25% for MCPA and MCPB.	Qualify non-detected results 'UJ'.
Metals	Groundwater sample DEC-048 and DUP2-062411.	%RPD between sample and field duplicate exceeded QC limit for Fe.	Qualify detected results 'J'.

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID		DEC-014D 31-32	DEC-029D (75-76)	DEC-030D (3.5-4.5)	DEC-043D (80-81)	DEC-064D (29-29.5)
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled		05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units					
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,1,1-Trichloroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,1,2,2-Tetrachloroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,1,2-Trichloro-1,2,2-trifluoroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,1,2-Trichloroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,1-Dichloroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,1-Dichloroethene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,1-Dichloropropene	MG/KG	0.0067 U	0.0023 U	0.0049 U	0.0051 U	0.0051 U
1,2,3-Trichlorobenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2,3-Trichloropropane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2,4-Trichlorobenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2,4-Trimethylbenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2-Dibromo-3-chloropropane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2-Dibromoethane (Ethylene dibromide)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2-Dichlorobenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2-Dichloroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2-Dichloroethene (cis)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2-Dichloroethene (trans)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,2-Dichloropropane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,3,5-Trimethylbenzene (Mesitylene)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,3-Dichlorobenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,3-Dichloropropane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,3-Dichloropropene (cis)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,3-Dichloropropene (trans)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

(LOGDATE) BETWEEN #05/01/11# AND #07/01/11# AND (MATRIX) = 'SO' AND ( (SACODE) = 'N' OR (SACODE) = 'FD') AND (UNITS) <> 'UG/L' AND (PRCODE) <> 'RCRA' AND (PRCODE) = 'VOC'

Advanced Selection: AMK-TEMP SOILS  
 J:\11174959.000000\B\PROGRAMEDMS.mde  
 Printed: 11/4/2011 10:47:16 AM

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID		DEC-014D 31-32	DEC-029D (75-76)	DEC-030D (3.5-4.5)	DEC-043D (80-81)	DEC-064D (29-29.5)
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled		05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units					
Volatile Organic Compounds						
1,4-Dichlorobenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
1,4-Dioxane	MG/KG	R	R	R	R	R
2,2-Dichloropropane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
2-Chlorotoluene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
2-Hexanone	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 UJ	0.0051 UJ
4-Chlorotoluene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
4-Isopropyltoluene (p-Cymene)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
4-Methyl-2-pentanone	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Acetone	MG/KG	R	R	R	0.0057 J	0.0043 J
Benzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Bromobenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Bromochloromethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Bromodichloromethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Bromoform	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Bromomethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Carbon disulfide	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Carbon tetrachloride	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Chlorobenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Chloroethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Chloroform	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Chloromethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Cyclohexane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Dibromochloromethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Dibromomethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP SOILS  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UGA' AND ([PRCODE] <> 'RCRA' AND [PRCODE] = 'VOA'

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-014D	DEC-029D	DEC-030D	DEC-043D	DEC-064D
Sample ID		DEC-014D 31-32	DEC-029D (75-76)	DEC-030D (3.5-4.5)	DEC-043D (80-81)	DEC-064D (29-29.5)
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		31.0-32.0	75.0-76.0	3.5-4.5	80.0-81.0	29.0-29.5
Date Sampled		05/17/11	05/11/11	05/09/11	05/12/11	05/12/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Dichlorodifluoromethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Ethylbenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Hexachlorobutadiene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Iodomethane (Methyl iodide)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Isopropylbenzene (Cumene)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Methyl acetate	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Methyl ethyl ketone (2-Butanone)	MG/KG	R	R	R	R	R
Methyl tert-butyl ether	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Methylcyclohexane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Methylene chloride	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Naphthalene	MG/KG	0.0067 U	0.0056 UJ	0.0049 U	0.0051 U	0.0051 U
n-Butylbenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 UJ	0.0051 UJ
n-Propylbenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
sec-Butylbenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Styrene	MG/KG	0.0067 U	0.0056 U	0.0070	0.0051 U	0.0051 U
tert-Butylbenzene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Tetrachloroethene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Toluene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Trichloroethene	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Trichlorofluoromethane	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Vinyl acetate	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Vinyl chloride	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U
Xylene (total)	MG/KG	0.0067 U	0.0056 U	0.0049 U	0.0051 U	0.0051 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN 80501/11 AND 80701/11 AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND ([PRCODE] <> 'RCRA' AND ([PRCODE] = 'VOC'

Advanced Selection: AMK-TEMP SOILS  
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**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID		DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35')	DEC-066D (24-25')	DEC-066D (29-30')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled		05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,1,1-Trichloroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,1,2,2-Tetrachloroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,1,2-Trichloro-1,2,2-trifluoroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,1,2-Trichloroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,1-Dichloroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,1-Dichloroethene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,1-Dichloropropene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2,3-Trichlorobenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2,3-Trichloropropane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2,4-Trichlorobenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2,4-Trimethylbenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2-Dibromo-3-chloropropane	MG/KG	0.0056 UJ	0.0055 UJ	0.0057 U	0.0055 U	0.0050 U
1,2-Dibromoethane (Ethylene dibromide)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2-Dichlorobenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2-Dichloroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2-Dichloroethene (cis)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2-Dichloroethene (trans)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,2-Dichloropropane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,3,5-Trimethylbenzene (Mesitylene)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,3-Dichlorobenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,3-Dichloropropane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,3-Dichloropropene (cis)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,3-Dichloropropene (trans)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP SOILS  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'PD') AND [UNITS] <> 'U/L' AND [PRCODE] <> 'RCRA' AND [PRCODE] = 'VOC'

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID		DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35')	DEC-066D (24-25')	DEC-066D (29-30')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled		05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units					
Volatile Organic Compounds						
1,4-Dichlorobenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
1,4-Dioxane	MG/KG	R	R	R	R	R
2,2-Dichloropropane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
2-Chlorotoluene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
2-Hexanone	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
4-Chlorotoluene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
4-Isopropyltoluene (p-Cymene)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
4-Methyl-2-pentanone	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Acetone	MG/KG	0.0024 J	0.0028 J	0.0097 J	R	R
Benzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Bromobenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Bromochloromethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Bromodichloromethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Bromoform	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Bromomethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Carbon disulfide	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Carbon tetrachloride	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Chlorobenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Chloroethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Chloroform	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Chloromethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Cyclohexane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Dibromochloromethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Dibromomethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP SOILS  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PRCODE] <> 'RCRA' AND [PRCODE] = 'VOA'



**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-065D	DEC-065D	DEC-065D	DEC-066D	DEC-066D
Sample ID		DEC-065D(9-10')	DEC-065D(14-15')	DEC-065D(34-35')	DEC-066D (24-25')	DEC-066D (29-30')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		9.0-10.0	14.0-15.0	34.0-35.0	24.0-25.0	29.0-30.0
Date Sampled		05/24/11	05/24/11	05/24/11	05/20/11	05/23/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Dichlorodifluoromethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Ethylbenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Hexachlorobutadiene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Iodomethane (Methyl iodide)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Isopropylbenzene (Cumene)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Methyl acetate	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Methyl ethyl ketone (2-Butanone)	MG/KG	R	R	R	R	R
Methyl tert-butyl ether	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Methylcyclohexane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Methylene chloride	MG/KG	0.0031 J	0.0041 J	0.0057 U	0.0022 J	0.0021 J
Naphthalene	MG/KG	0.0056 UJ	0.0055 UJ	0.014 J	0.0055 U	0.0050 U
n-Butylbenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
n-Propylbenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
sec-Butylbenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Styrene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
tert-Butylbenzene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Tetrachloroethene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0022 J	0.0048 J
Toluene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Trichloroethene	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Trichlorofluoromethane	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Vinyl acetate	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Vinyl chloride	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U
Xylene (total)	MG/KG	0.0056 U	0.0055 U	0.0057 U	0.0055 U	0.0050 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PROCODE] <> 'RORA' AND [PRCCODE] = 'VQA'

Advanced Selection: AMK-TEMP SOILS  
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 VQA

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID		SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled		05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units					
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,1,1-Trichloroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,1,2,2-Tetrachloroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,1,2-Trichloro-1,2,2-trifluoroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,1,2-Trichloroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,1-Dichloroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,1-Dichloroethene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,1-Dichloropropene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2,3-Trichlorobenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2,3-Trichloropropane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2,4-Trichlorobenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2,4-Trimethylbenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2-Dibromo-3-chloropropane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2-Dibromoethane (Ethylene dibromide)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2-Dichlorobenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2-Dichloroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2-Dichloroethene (cis)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2-Dichloroethene (trans)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,2-Dichloropropane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,3,5-Trimethylbenzene (Mesitylene)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,3-Dichlorobenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,3-Dichloropropane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,3-Dichloropropene (cis)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,3-Dichloropropene (trans)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR ([SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PRCCODE] = 'VOA')

Advanced Selection: AMK-TEMP SOILS  
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**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID		SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled		05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units					
Volatile Organic Compounds						
1,4-Dichlorobenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
1,4-Dioxane	MG/KG	R	R	R	R	R
2,2-Dichloropropane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
2-Chlorotoluene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
2-Hexanone	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
4-Chlorotoluene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
4-Isopropyltoluene (p-Cymene)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
4-Methyl-2-pentanone	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Acetone	MG/KG	0.0045 J	0.0076 J	0.0039 J	0.0025 J	0.0029 J
Benzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Bromobenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Bromochloromethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Bromodichloromethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Bromoform	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Bromomethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Carbon disulfide	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Carbon tetrachloride	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Chlorobenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Chloroethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Chloroform	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Chloromethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Cyclohexane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Dibromochloromethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Dibromomethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN 05/01/11# AND 07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PRCODE] <> 'RCRA' AND [PRCODE] = 'VGA'

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 VGA

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-078	SG-079	SG-080	SG-081	SG-082
Sample ID		SG-78 (4-5')	SG-79 (7-8')	SG-80 (7-8')	SG-81 (7-8')	SG-82 (7-8')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		4.0-5.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled		05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Dichlorodifluoromethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Ethylbenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Hexachlorobutadiene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Iodomethane (Methyl iodide)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Isopropylbenzene (Cumene)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Methyl acetate	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Methyl ethyl ketone (2-Butanone)	MG/KG	R	R	R	R	R
Methyl tert-butyl ether	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Methylcyclohexane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Methylene chloride	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Naphthalene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
n-Butylbenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
n-Propylbenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
sec-Butylbenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Styrene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
tert-Butylbenzene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Tetrachloroethene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0014 J
Toluene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Trichloroethene	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Trichlorofluoromethane	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Vinyl acetate	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Vinyl chloride	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U
Xylene (total)	MG/KG	0.0053 U	0.0055 U	0.0049 U	0.0052 U	0.0059 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PROCEDURE] <> 'RCRA' AND [PROCEDURE] = 'VOA'

Advanced Selection: AMK-TEMP SOILS  
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VOA

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID		SG-83 (7-8')	SG-84 (7-8')	SG-85 (7-8')	SG-86 (7-8')	SG-87 (7-8')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled		05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units					
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,1,1-Trichloroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,1,2,2-Tetrachloroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,1,2-Trichloro-1,2,2-trifluoroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,1,2-Trichloroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,1-Dichloroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,1-Dichloroethene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,1-Dichloropropene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2,3-Trichlorobenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2,3-Trichloropropane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2,4-Trichlorobenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2,4-Trimethylbenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dibromo-3-chloropropane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dibromoethane (Ethylene dibromide)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichlorobenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethene (cis)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethene (trans)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloropropane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,3,5-Trimethylbenzene (Mesitylene)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,3-Dichlorobenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,3-Dichloropropane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,3-Dichloropropene (cis)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,3-Dichloropropene (trans)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN 05/01/11# AND 07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND ([PRCODE] <> 'RCRA' AND [PRCODE] = 'VOC'

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**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID		SG-83 (7-8')	SG-84 (7-8')	SG-85 (7-8')	SG-86 (7-8')	SG-87 (7-8')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled		05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,4-Dichlorobenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,4-Dioxane	MG/KG	R	R	R	R	R
2,2-Dichloropropane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
2-Chlorotoluene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
2-Hexanone	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
4-Chlorotoluene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
4-Isopropyltoluene (p-Cymene)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
4-Methyl-2-pentanone	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Acetone	MG/KG	0.0035 J	0.0035 J	0.0028 J	0.0029 J	0.0028 J
Benzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Bromobenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Bromochloromethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Bromodichloromethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Bromoform	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Bromomethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon disulfide	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chlorobenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloromethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Cyclohexane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Dibromochloromethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Dibromomethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP SOILS  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' ) AND [UNITS] <> 'UG/L' AND [PRCODE] <> 'RCRA' AND [PRCODE] = 'VOC'

**TABLE 2A**  
**VALIDATED SOIL SAMPLE RESULTS (VOCS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-083	SG-084	SG-085	SG-086	SG-087
Sample ID		SG-83 (7-8')	SG-84 (7-8')	SG-85 (7-8')	SG-86 (7-8')	SG-87 (7-8')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Date Sampled		05/06/11	05/06/11	05/06/11	05/06/11	05/06/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Dichlorodifluoromethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Ethylbenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Hexachlorobutadiene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Iodomethane (Methyl iodide)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Isopropylbenzene (Cumene)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methyl acetate	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methyl ethyl ketone (2-Butanone)	MG/KG	R	R	R	R	R
Methyl tert-butyl ether	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylcyclohexane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
n-Butylbenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
n-Propylbenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
sec-Butylbenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Styrene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
tert-Butylbenzene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Tetrachloroethene	MG/KG	0.011	0.014	0.0050 U	0.0014 J	0.0050 U
Toluene	MG/KG	0.0015 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichlorofluoromethane	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl acetate	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl chloride	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Xylene (total)	MG/KG	0.0058 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP SOILS  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PRCODE] <> 'ROR' AND [PRCODE] = 'VOA'

**TABLE 2B**  
**VALIDATED SOIL SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-029D	DEC-030D	DEC-065D	DEC-065D	DEC-066D
Sample ID		DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-065D(9-10')	DEC-065D(14-15')	DEC-066D (24-25')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		75.0-76.0	3.5-4.5	9.0-10.0	14.0-15.0	24.0-25.0
Date Sampled		05/11/11	05/09/11	05/24/11	05/24/11	05/20/11
Parameter	Units					
<b>Semivolatile Organic Compounds</b>						
1,1-Biphenyl	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2,2-oxybis(1-Chloropropane)	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2,4,5-Trichlorophenol	MG/KG	0.39 U	0.36 U	0.37 U	0.38 U	0.41 U
2,4,6-Trichlorophenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2,4-Dichlorophenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2,4-Dimethylphenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2,4-Dinitrophenol	MG/KG	0.39 U	0.36 U	0.37 UJ	0.38 UJ	0.41 UJ
2,4-Dinitrotoluene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2,6-Dinitrotoluene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2-Chloronaphthalene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2-Chlorophenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2-Methylnaphthalene	MG/KG	0.19 U	0.18 U	0.18 UJ	0.19 UJ	0.20 UJ
2-Methylphenol (o-cresol)	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
2-Nitroaniline	MG/KG	0.39 U	0.36 U	0.37 U	0.38 U	0.41 U
2-Nitrophenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
3&4-Methylphenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
3,3-Dichlorobenzidine	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
3-Nitroaniline	MG/KG	0.39 U	0.36 U	0.37 U	0.38 U	0.41 U
4,6-Dinitro-2-methylphenol	MG/KG	0.39 U	0.36 U	0.37 U	0.38 U	0.41 U
4-Bromophenyl-phenylether	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
4-Chloro-3-methylphenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
4-Chloroaniline	MG/KG	0.19 UJ	0.18 UJ	0.18 U	0.19 U	0.20 U
4-Chlorophenyl-phenylether	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PRCODE] <> 'TCRA' AND [PRCODE] <> 'VGA'

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**TABLE 2B**  
**VALIDATED SOIL SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-029D	DEC-030D	DEC-065D	DEC-065D	DEC-066D
Sample ID		DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-065D(9-10')	DEC-065D(14-15')	DEC-066D (24-25')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		75.0-76.0	3.5-4.5	9.0-10.0	14.0-15.0	24.0-25.0
Date Sampled		05/11/11	05/09/11	05/24/11	05/24/11	05/20/11
Parameter	Units					
<b>Semivolatile Organic Compounds</b>						
4-Nitroaniline	MG/KG	0.39 U	0.36 U	0.37 U	0.38 U	0.41 U
4-Nitrophenol	MG/KG	0.39 UJ	0.36 UJ	0.37 U	0.38 U	0.41 U
Acenaphthene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Acenaphthylene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Acetophenone	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Anthracene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Atrazine	MG/KG	0.19 UJ	0.18 UJ	0.18 U	0.19 U	0.20 U
Benzaldehyde	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Benzo(a)anthracene	MG/KG	0.19 U	0.073 J	0.18 U	0.19 U	0.20 U
Benzo(a)pyrene	MG/KG	0.19 U	0.092 J	0.18 U	0.19 U	0.20 U
Benzo(b)fluoranthene	MG/KG	0.19 U	0.096 J	0.18 U	0.19 U	0.20 U
Benzo(g,h,i)perylene	MG/KG	0.19 U	0.072 J	0.18 U	0.19 U	0.20 U
Benzo(k)fluoranthene	MG/KG	0.19 U	0.056 J	0.18 U	0.19 U	0.20 U
bis(2-Chloroethoxy)methane	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
bis(2-Chloroethyl)ether	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
bis(2-Ethylhexyl)phthalate	MG/KG	0.19 U	0.075 J	0.26	0.073 J	0.091 J
Butylbenzylphthalate	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Caprolactam	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Carbazole	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Chrysene	MG/KG	0.19 U	0.083 J	0.18 U	0.19 U	0.20 U
Dibenz(a,h)anthracene	MG/KG	0.19 U	0.023 J	0.18 U	0.19 U	0.20 U
Dibenzofuran	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Diethylphthalate	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND [ [SACODE] = 'N' OR [SACODE] = 'FD'] AND [UNITS] <> 'UG/L' AND [PROCEDURE] <> 'RCRA' AND [PROCEDURE] <> 'VQA'

**TABLE 2B**  
**VALIDATED SOIL SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-029D	DEC-030D	DEC-065D	DEC-065D	DEC-066D
Sample ID		DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-065D(9-10')	DEC-065D(14-15')	DEC-066D (24-25')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		75.0-76.0	3.5-4.5	9.0-10.0	14.0-15.0	24.0-25.0
Date Sampled		05/11/11	05/09/11	05/24/11	05/24/11	05/20/11
Parameter	Units					
<b>Semivolatile Organic Compounds</b>						
Dimethylphthalate	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Di-n-butylphthalate	MG/KG	0.19 U	0.13 J	0.18 U	0.19 U	0.20 U
Di-n-octylphthalate	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Fluoranthene	MG/KG	0.19 U	0.11 J	0.18 U	0.19 U	0.20 U
Fluorene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Hexachlorobenzene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Hexachlorobutadiene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Hexachlorocyclopentadiene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Hexachloroethane	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Indeno(1,2,3-cd)pyrene	MG/KG	0.19 U	0.058 J	0.18 U	0.19 U	0.20 U
Isophorone	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Naphthalene	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Nitrobenzene	MG/KG	0.19 U	0.18 U	0.18 UJ	0.19 UJ	0.20 UJ
N-Nitroso-di-n-propylamine	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
N-Nitrosodiphenylamine	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Pentachlorophenol	MG/KG	0.39 U	0.36 U	0.37 U	0.38 U	0.41 U
Phenanthrene	MG/KG	0.19 U	0.046 J	0.18 U	0.19 U	0.20 U
Phenol	MG/KG	0.19 U	0.18 U	0.18 U	0.19 U	0.20 U
Pyrene	MG/KG	0.19 U	0.16 J	0.18 U	0.19 U	0.20 U
<b>Pesticide Organic Compounds</b>						
4,4'-DDD	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U
4,4'-DDE	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U
4,4'-DDT	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UGA' AND [PRCODE] <> 'RCRA' AND [PRCODE] <> 'VGA'

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**TABLE 2B**  
**VALIDATED SOIL SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-029D	DEC-030D	DEC-065D	DEC-065D	DEC-066D
Sample ID		DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-065D(9-10')	DEC-065D(14-15')	DEC-066D (24-25')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		75.0-76.0	3.5-4.5	9.0-10.0	14.0-15.0	24.0-25.0
Date Sampled		05/11/11	05/09/11	05/24/11	05/24/11	05/20/11
Parameter	Units					
<b>Pesticide Organic Compounds</b>						
Aldrin	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
alpha-BHC	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
alpha-Chlordane	MG/KG	0.0020 U	0.017 J	0.0019 U	0.0020 U	0.0020 U
beta-BHC	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
delta-BHC	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
Dieldrin	MG/KG	0.0038 U	0.0052	0.0037 U	0.0038 U	0.0040 U
Endosulfan I	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
Endosulfan II	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U
Endosulfan sulfate	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U
Endrin	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U
Endrin aldehyde	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U
Endrin ketone	MG/KG	0.0038 U	0.0035 U	0.0037 U	0.0038 U	0.0040 U
gamma-BHC (Lindane)	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
gamma-Chlordane	MG/KG	0.0020 U	0.014 J	0.0019 U	0.0020 U	0.0020 U
Heptachlor	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
Heptachlor epoxide	MG/KG	0.0020 U	0.0018 U	0.0019 U	0.0020 U	0.0020 U
Methoxychlor	MG/KG	0.020 U	0.018 U	0.019 U	0.020 U	0.020 U
Toxaphene	MG/KG	0.20 U	0.18 U	0.19 U	0.20 U	0.20 U
<b>Herbicides</b>						
2,4,5-T	MG/KG	0.00734 U	0.00717 U	0.00733 U	0.0077 U	0.00885 U
2,4,5-TP (Silvex)	MG/KG	0.00734 U	0.00717 U	0.00733 U	0.0077 U	0.00885 U
2,4-D	MG/KG	0.00734 U	0.00717 U	0.00733 U	0.0077 U	0.00885 U
2,4-DB	MG/KG	0.00734 U	0.00717 U	0.00733 U	0.0077 U	0.00885 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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 [LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] < 'UG/L' AND [PRCODE] < 'RCRA' AND [PRCODE] < 'VQA'

**TABLE 2B**  
**VALIDATED SOIL SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-029D	DEC-030D	DEC-065D	DEC-065D	DEC-066D
Sample ID		DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-065D(9-10')	DEC-065D(14-15')	DEC-066D (24-25')
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		75.0-76.0	3.5-4.5	9.0-10.0	14.0-15.0	24.0-25.0
Date Sampled		05/11/11	05/09/11	05/24/11	05/24/11	05/20/11
Parameter	Units					
<b>Herbicides</b>						
Dalapon	MG/KG	0.00734 U	0.00717 U	0.00733 U	0.0077 U	0.00885 U
Dicamba	MG/KG	0.00734 U	0.00717 U	0.00733 U	0.0077 U	0.00273 U
Dichlorprop	MG/KG	0.00227 U	0.00341 U	0.00733 U	0.00238 U	0.00885 U
Dinoseb	MG/KG	0.00734 U	0.00717 U	0.00733 U	0.0077 U	0.00885 U
MCPA	MG/KG	2.46 U	2.41 U	2.46 UJ	2.59 UJ	2.97 UJ
MCPB	MG/KG	0.819 U	0.799 U	0.818 UJ	2.59 UJ	1.86 UJ
MCPB	MG/KG	2.46 U	2.41 U	2.46 U	2.59 U	2.97 U
<b>Polychlorinated Biphenyls</b>						
Aroclor 1016	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1221	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1232	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1242	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1248	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1254	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1260	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1262	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
Aroclor 1268	MG/KG	0.038 U	0.035 U	0.037 U	0.038 U	0.040 U
<b>Metals</b>						
Aluminum	MG/KG	2,270	6,760	7,470	10,100	4,610
Antimony	MG/KG	0.62 U	0.65 U	0.66 U	0.90 U	0.77 U
Arsenic	MG/KG	0.70	2.5	0.53 B	0.90 U	0.77 U
Barium	MG/KG	19.3	59.9	47.9	113	27.2
Beryllium	MG/KG	0.15 B	0.46	0.68	1.1	0.40

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN /05/01/11# AND /07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PRCODE] <> 'RCRA' AND [PRCODE] <> 'VQA'

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VQA

**TABLE 2B**  
**VALIDATED SOIL SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-029D	DEC-030D	DEC-065D	DEC-065D	DEC-066D
Sample ID		DEC-029D (75-76')	DEC-030D (3.5-4.5')	DEC-065D(9-10')	DEC-065D(14-15')	DEC-066D (24-25)
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		75.0-76.0	3.5-4.5	9.0-10.0	14.0-15.0	24.0-25.0
Date Sampled		05/11/11	05/09/11	05/24/11	05/24/11	05/20/11
Parameter	Units					
<b>Metals</b>						
Cadmium	MG/KG	0.048 B	0.49	0.17 U	0.23 U	0.19 U
Calcium	MG/KG	566	1,210	2,490	6,070	1,580
Chromium	MG/KG	4.7	27.3	22.8	32.7	11.6
Chromium VI	MG/KG	4.7 U	4.1 U	4.4 U	4.5 U	4.8 U
Cobalt	MG/KG	2.9	7.0	7.6	15.4	4.8
Copper	MG/KG	6.4	23.7	13.8	29.8	8.3
Iron	MG/KG	4,730	23,100	27,700	54,900	10,100
Lead	MG/KG	1.4	74.2	6.8	10.5	3.2
Magnesium	MG/KG	1,220	2,080	2,340	3,180	1,990
Manganese	MG/KG	242	421	529	1,290	235
Mercury	MG/KG	0.047 U	0.32	0.0063 B	0.0060 B	0.0032 B
Nickel	MG/KG	5.6	12.2	12.6	22.2	8.8
Potassium	MG/KG	290	1,270	43.6	2,080	1,070
Selenium	MG/KG	0.94 U	0.49 B	0.99 U	1.4 U	1.2 U
Silver	MG/KG	0.94 U	0.98 U	0.99 U	1.4 U	1.2 U
Sodium	MG/KG	69.2	79.9	9.0 B	360	84.6
Thallium	MG/KG	0.62 U	0.65 U	2.7	3.4	2.5
Vanadium	MG/KG	5.1	23.4	32.3	54.2	15.4
Zinc	MG/KG	10.0	61.5	44.0	55.4	22.1
<b>Miscellaneous Parameters</b>						
Cyanide	MG/KG	1.1 U	1.1 U	0.63 U	1.1 U	0.72 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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 [LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'UG/L' AND [PRCODE] <> 'RCRA' AND [PRCODE] <> 'VDA'

**TABLE 3**  
**VALIDATED SOIL TCLP SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-044D	DEC-066
Sample ID		DEC-044D (4-5)	DEC-066S (1-2)
Matrix		Soil	Soil
Depth Interval (ft)		4.0-5.0	1.0-2.0
Date Sampled		05/10/11	05/09/11
Parameter	Units		
<b>TCLP Volatile Organic Compounds</b>			
1,1-Dichloroethene	UG/L	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U
Benzene	UG/L	5.0 U	74
Carbon tetrachloride	UG/L	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	2.6 J
Methyl ethyl ketone (2-Butanone)	UG/L	5.0 U	2.6 J
Tetrachloroethene	UG/L	8.2	260 D
Trichloroethene	UG/L	1.0 J	120
Vinyl chloride	UG/L	5.0 U	5.0 U
<b>TCLP Semivolatile Organic Compounds</b>			
1,4-Dichlorobenzene	UG/L	33 U	33 U
2,4,5-Trichlorophenol	UG/L	67 U	67 U
2,4,6-Trichlorophenol	UG/L	33 U	33 U
2,4-Dinitrotoluene	UG/L	33 U	33 U
2-Methylphenol (o-cresol)	UG/L	33 U	3,000 D
4-Methylphenol (p-cresol)	UG/L	33 U	8,700 D
Hexachlorobenzene	UG/L	33 U	33 U
Hexachlorobutadiene	UG/L	33 UJ	33 UJ
Hexachloroethane	UG/L	33 U	33 U
Nitrobenzene	UG/L	33 U	33 U
Pentachlorophenol	UG/L	67 U	67 U
Pyridine	UG/L	67 UJ	14 J

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP TCLP  
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[LOGDATE] > 05/10/2011# AND [MATRIX] = 'SO' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' ) AND [UNITS] <> 'MG/KG' AND [PARNAME] <> 'Moisture, Percent'

**TABLE 3**  
**VALIDATED SOIL TCLP SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-044D	DEC-066
Sample ID		DEC-044D (4-5')	DEC-066S (1-2')
Matrix		Soil	Soil
Depth Interval (ft)		4.0-5.0	1.0-2.0
Date Sampled		05/10/11	05/09/11
Parameter	Units		
<b>TCLP Pesticide Organic Compounds</b>			
Endrin	UG/L	0.33 U	0.33 U
gamma-BHC (Lindane)	UG/L	0.17 U	R
Heptachlor	UG/L	0.17 U	R
Heptachlor epoxide	UG/L	0.17 U	0.17 U
Methoxychlor	UG/L	1.7 U	1.7 U
Technical Chlordane	UG/L	8.3 U	8.3 U
Toxaphene	UG/L	17 U	17 U
<b>TCLP Herbicides</b>			
2,4,5-TP (Silvex)	UG/L	0.33 U	0.33 U
2,4-D	UG/L	3.3 U	3.3 U
<b>TCLP Metals</b>			
Arsenic	UG/L	20.0 U	20.0 U
Barium	UG/L	726	81.9 B
Cadmium	UG/L	1.8 B	1.3 B
Chromium	UG/L	0.98 B	1.4 B
Lead	UG/L	78.9	51.0
Mercury	UG/L	0.20 U	0.20 U
Selenium	UG/L	30.0 U	30.0 U
Silver	UG/L	30.0 U	30.0 U
<b>RCRA Characteristics</b>			
Corrosivity (as pH)	S.U.	7.8	5.6
Ignitability	DEG. F	200 U	200 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP TCLP  
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[LOGDATE] > 05/11/2011 AND [MATRIX] = 'SO' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] <> 'MG/KG' AND [PARAMETER] <> 'Moisture, Percent'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-004	DEC-006D	DEC-006DD	DEC-006DD	DEC-007
Sample ID		DEC-004	DEC-006D	DEC-006DD	DUP-062011	DEC-007
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/20/11	06/20/11	06/20/11	06/21/11
Parameter	Units				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	13	13	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.4	5.0	2.8 J
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	69 J	72 J	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	1.3 J	5.0 U
1,2-Dichloroethene (cis)	UG/L	4.8 J	26	16	16	7.9
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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Printed: 11/4/2011 11:03:34 AM  
[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOC'



**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-004	DEC-006D	DEC-006DD	DEC-006DD	DEC-007
Sample ID		DEC-004	DEC-006D	DEC-006DD	DUP-062011	DEC-007
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/20/11	06/20/11	06/20/11	06/21/11
Parameter	Units				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	4.6 J	5.0 U	5.0 U	2.7 J
Chloromethane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PROCODE] = 'VQA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-004	DEC-006D	DEC-006DD	DEC-006DD	DEC-007
Sample ID		DEC-004	DEC-006D	DEC-006DD	DUP-062011	DEC-007
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/20/11	06/20/11	06/20/11	06/21/11
Parameter	Units				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	2.6 J	2.6 J	5.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
sec-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	1.5 J	6,600 D	410 D	420 D	1,200 D
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	37	39	210 D	210 D	25
Trichlorofluoromethane	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	1.0 J	5.0 U	5.0 U	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP.GW  
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([LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VQA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Sample ID		DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/23/11	06/23/11	06/21/11	06/21/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	1.5 J	1.8 J	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	1.2 J	3.4 J	6.5	28	5.0 U
1,1-Dichloroethene	UG/L	4.4 J	2.0 J	5.1	25	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis)	UG/L	4.8 J	41 J	51	8.5	5.0 U
1,2-Dichloroethene (trans)	UG/L	5.0 U	3.5 J	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

(LOGDATE) BETWEEN #05/01/11# AND #07/01/11# AND (MATRIX) = 'WG' AND ( [SACODE] = 'N' OR [SACODE] = 'FD') AND (UNITS) = 'UG/L' AND ( [PRCODE] = 'VOC'

Advanced Selector: AMK-TEMP GW  
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**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Sample ID		DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/23/11	06/23/11	06/21/11	06/21/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	1.6 J	5.0 U	5.0 U	5.0 U
Chloromethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Cyclohexane	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selector: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' ) AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOW'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Sample ID		DEC-007D	DEC-008	DEC-009	DEC-010	DEC-011
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/23/11	06/23/11	06/21/11	06/21/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	1.1 J	1.1 J	5.0 U	5.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
sec-Butylbenzene	UG/L	5.0 U	5.0 UJ	3.0 J	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	340 D	1,300 D	180	20	13 J
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	26	120	70	87	17 J
Trichlorofluoromethane	UG/L	5.0 U	1.4 J	5.0 UJ	5.0 U	5.0 U
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	19	54	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #06/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VDA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-012	DEC-013	DEC-013	DEC-013D	DEC-014D
Sample ID		DEC-012	DEC-013	DUP-062311	DEC-013D	DEC-014D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/22/11	06/23/11	06/23/11	06/23/11	06/23/11
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	2.3 J	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	UG/L	5.0 U	2.3 J	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis)	UG/L	5.0 U	13 J	2.5 J	2.1 J	1.6 J
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR ([SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOC'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-012	DEC-013	DEC-013	DEC-013D	DEC-014D
Sample ID		DEC-012	DEC-013	DUP-062311	DEC-013D	DEC-014D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/22/11	06/23/11	06/23/11	06/23/11	06/23/11
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	4.8 J	4.8 J	5.0 U
Chloromethane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Cyclohexane	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP.GW  
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Printed: 11/4/2011 11:03:35 AM  
[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOC'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-012	DEC-013	DEC-013	DEC-013D	DEC-014D
Sample ID		DEC-012	DEC-013	DUP-062311	DEC-013D	DEC-014D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/22/11	06/23/11	06/23/11	06/23/11	06/23/11
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	2.3 J	5.0 U	5.0 U	3.8 J
Methylcyclohexane	UG/L	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
sec-Butylbenzene	UG/L	5.0 UJ	1.9 J	5.0 UJ	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	270 D	2,100 D	200 D	190	26
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	3.9 J	36	27	24	3.6 J
Trichlorofluoromethane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Vinyl acetate	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND ([PRCODE] = 'VOA'



**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Sample ID		DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/23/11	06/22/11	06/22/11	06/22/11	06/24/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	UG/L	9.5	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	2.0 J	2.2 J	2.6 J	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	6.9	2.8 J	5.6	5.0 U
1,1-Dichloroethene	UG/L	1.6 J	5.0 U	7.2	1.8 J	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis)	UG/L	39 J	8.8	9.5	42 J	48
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	3.9 J
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Sample ID		DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/23/11	06/22/11	06/22/11	06/22/11	06/24/11
Parameter	Units					
Volatile Organic Compounds						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	4.3 J	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	1.0 J	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	6.2	9.2	5.0 U	3.5 J	5.0 U
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Cyclohexane	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selector: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VGA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Sample ID		DEC-014R	DEC-015	DEC-015D	DEC-022D	DEC-027
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/23/11	06/22/11	06/22/11	06/22/11	06/24/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	1.7 J	1.3 J	5.0 U
Methylcyclohexane	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
sec-Butylbenzene	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	44,000 D	140	640 D	1,300 D	34
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	300 J	13	42	94	750 D
Trichlorofluoromethane	UG/L	5.0 U	5.0 U	5.0 U	2.0 J	2.1 J
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VDA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Sample ID		DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/23/11	06/23/11	06/20/11	06/20/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	4.2 J
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	3.0 J	5.0 U	5.0 U	5.0 U	1.9 J
1,1-Dichloroethene	UG/L	1.5 J	5.0 U	5.0 U	5.0 U	47 J
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	7.8	5.0 U	5.0 U
1,2-Dichloroethene (cis)	UG/L	52	8.2 J	5.0 U	25	4.7 J
1,2-Dichloroethene (trans)	UG/L	1.9 J	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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(LOGDATE) BETWEEN 06/01/11# AND 07/01/11# AND (MATRIX) = 'WG' AND ( (SACODE) = 'N' OR (SACODE) = 'FD') AND (UNITS) = 'UG/L' AND (PRCODE) = 'VGA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Sample ID		DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/23/11	06/23/11	06/20/11	06/20/11
Parameter	Units					
Volatile Organic Compounds						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	1.1 J	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	1.0 J	5.0 U	5.0 U	5.0 U
Chloromethane	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Cyclohexane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRGCODE] = 'VOC'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Sample ID		DEC-028	DEC-029	DEC-029D	DEC-030	DEC-030D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/23/11	06/23/11	06/20/11	06/20/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
sec-Butylbenzene	UG/L	3.4 J	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	2,300 D	5,700 D	20	2,000 D	43
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	220 D	7.4	3.4 J	27	170
Trichlorofluoromethane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
Vinyl acetate	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VGA'

Advanced Selection: AMK-TEMP GW  
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**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Sample ID		DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/21/11	06/22/11	06/21/11	06/24/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	UG/L	2.1 J	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	3.6 J
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	1.1 J	5.0 U	5.0 U	5.0 U	2.6 J
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	86	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis)	UG/L	17	5.0 U	5.0 UJ	5.0 U	23
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PROCEDURE] = 'VOC'

Advanced Selection: AMK-TEMP GW  
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**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Sample ID		DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/21/11	06/22/11	06/21/11	06/24/11
Parameter	Units					
Volatile Organic Compounds						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	1.3 J	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	2.1 J	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Cyclohexane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' ) AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOC'



**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Sample ID		DEC-031	DEC-031D	DEC-032	DEC-033	DEC-039
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/21/11	06/21/11	06/22/11	06/21/11	06/24/11
Parameter	Units					
Volatile Organic Compounds						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U
sec-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	6,100 D	16	3.0 J	5.0 U	58
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	23	1.2 J	1.3 J	5.0 U	230 D
Trichlorofluoromethane	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 U	24
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACCODE] = 'N' OR [SACCODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOC'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-039	DEC-042	DEC-043	DEC-043D	DEC-044
Sample ID		DUP-062411	DEC-042	DEC-043	DEC-043D	DEC-044
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/23/11	06/22/11	06/22/11	06/23/11
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	2.9 J	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	2.8 J	1.1 J	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	9.4	5.0 U
1,2-Dichloroethene (cis)	UG/L	24	6.3 J	5.0 U	5.0 U	2.0 J
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-039	DEC-042	DEC-043	DEC-043D	DEC-044
Sample ID		DUP-062411	DEC-042	DEC-043	DEC-043D	DEC-044
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/23/11	06/22/11	06/22/11	06/23/11
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	1.4 J	5.0 U	5.0 U	5.0 U
Chloromethane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #06/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACCODE] = 'N' OR [SACCODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOC'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-039	DEC-042	DEC-043	DEC-043D	DEC-044
Sample ID		DUP-062411	DEC-042	DEC-043	DEC-043D	DEC-044
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/23/11	06/22/11	06/22/11	06/23/11
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
sec-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	59	62	12	9.0	1,500 D
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	240 D	73	5.0 U	1.2 J	8.6
Trichlorofluoromethane	UG/L	26	23	5.0 U	5.0 U	5.0 U
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

(LOGDATE) BETWEEN #05/01/11# AND #07/01/11# AND (MATRIX) = 'WG' AND ( (SACODE) = 'N' OR (SACODE) = 'FD') AND (UNITS) = 'UG/L' AND (PRCODE) = 'VOA'

Advanced Selection: AMK-TEMP GW  
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**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Sample ID		DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/23/11	06/21/11	06/21/11	06/21/11	06/21/11
Parameter	Units					
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	1.3 J	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	500 D	5.0 U	81	5.0 U	5.0 U
1,2-Dichloroethene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VGA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Sample ID		DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/23/11	06/21/11	06/21/11	06/21/11	06/21/11
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	6.5	5.0 U	5.0 U	1.1 J	1.4 J
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'TD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VQA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Sample ID		DEC-044D	DEC-045	DEC-045D	DEC-046	DEC-047
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/23/11	06/21/11	06/21/11	06/21/11	06/21/11
Parameter	Units					
Volatile Organic Compounds						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	19
Methylcyclohexane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 U	5.0 UJ	5.0 UJ	5.7 J	5.0 UJ
sec-Butylbenzene	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	1.5 J	43	5.0 U	7.4	2.9 J
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	1.5 J	5.0 U
Trichlorofluoromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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([LOCATION] BETWEEN #0501/11# AND #0701/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VGA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048	DEC-048	DEC-064	DEC-064D	DEC-065
Sample ID		DEC-048	DUP2-062411	DEC-064	DEC-064D	DEC-065
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/24/11	06/20/11	06/20/11	06/22/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 UJ	1.8 J	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 UJ	1.3 J	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 UJ	11	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	2.1 J	5.0 UJ
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.5	5.0 U
1,2,4-Trimethylbenzene	UG/L	1.5 J	1.7 J	5.0 UJ	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 UJ	2.6 J	5.0 U
1,2-Dichloroethene (cis)	UG/L	5.0 U	5.0 U	2.3 J	2.0 J	5.0 U
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOCDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOA'



**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048	DEC-048	DEC-064	DEC-064D	DEC-065
Sample ID		DEC-048	DUP2-062411	DEC-064	DEC-064D	DEC-065
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/24/11	06/20/11	06/20/11	06/22/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Acetone	UG/L	3.1 J	7.5 J	R	R	R
Benzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	3.3 J	2.3 J	12
Chloromethane	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Cyclohexane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP.GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'TD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048	DEC-048	DEC-064	DEC-064D	DEC-065
Sample ID		DEC-048	DUP2-062411	DEC-064	DEC-064D	DEC-065
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/24/11	06/24/11	06/20/11	06/20/11	06/22/11
Parameter	Units		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>						
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	13 J	18 J	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	5.0 UJ	1.7 J	5.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Naphthalene	UG/L	2.2 J	2.4 J	5.0 UJ	5.0 UJ	5.0 UJ
sec-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Tetrachloroethene	UG/L	3.2 J	3.6 J	220 D	14	160
Toluene	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Trichloroethene	UG/L	2.6 J	1.4 J	6.8 J	160	3.6 J
Trichlorofluoromethane	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' ) AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID		DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Field Duplicate (1-1)			
Volatile Organic Compounds					
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	22	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	6.8	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	120	5.0 U	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	23
1,2-Dichloroethene (cis)	UG/L	5.0 U	11	4.1 J	5.0 U
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR ([SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOC'

Advanced Selector: AMK-TEMP.GW  
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**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID		DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Field Duplicate (1-1)			
Volatile Organic Compounds					
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	R	R	R	2.7 J
Benzene	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	14	2.8 J	5.0 U	5.0 U
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	UG/L	5.0 UJ	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP GW  
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 (LOGDATE) BETWEEN #05/01/11# AND #07/01/11# AND (MATRIX) = 'WG' AND ( [SACODE] = 'N' OR [SACODE] = 'FD') AND (UNITS) = 'UG/L' AND (PRCODE) = 'VGA'

**TABLE 4A**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (VOCs)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-065	DEC-065D	DEC-066	DEC-066D
Sample ID		DUP-062211	DEC-065D	DEC-066	DEC-066D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/22/11	06/22/11	06/22/11	06/22/11
Parameter	Units	Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>					
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	UG/L	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 U	5.0 UJ	5.0 U	5.0 U
sec-Butylbenzene	UG/L	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	170	83	8.4	1.7 J
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	2.3 J	670 D	2.1 J	5.0 U
Trichlorofluoromethane	UG/L	5.0 U	1.3 J	5.0 U	5.0 U
Vinyl acetate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACCODE] = 'N' OR [SACCODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRGCODE] = 'VQA'

Advanced Selector: AMK-TEMP GW  
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**TABLE 4B**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-048	DEC-048
Sample ID		DEC-031	DEC-031D	DEC-048	DUP2-062411
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/21/11	06/21/11	06/24/11	06/24/11
Parameter	Units				Field Duplicate (1-1)
<b>Semivolatile Organic Compounds</b>					
1,1-Biphenyl	UG/L	5.0 U	5.0 U	5.0 U	0.68 J
2,2-oxybis(1-Chloropropane)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrophenol	UG/L	10 UJ	10 UJ	10 U	10 U
2,4-Dinitrotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	UG/L	5.0 U	5.0 U	5.0 U	1.4 J
2-Methylphenol (o-cresol)	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 U
2-Nitroaniline	UG/L	10 U	10 U	10 U	10 U
2-Nitrophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
3&4-Methylphenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
3,3-Dichlorobenzidine	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	UG/L	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	UG/L	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloro-3-methylphenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] <> 'VQA'

**TABLE 4B**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-048	DEC-048
Sample ID		DEC-031	DEC-031D	DEC-048	DUP2-062411
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/21/11	06/21/11	06/24/11	06/24/11
Parameter	Units				Field Duplicate (1-1)
<b>Semivolatile Organic Compounds</b>					
4-Nitroaniline	UG/L	10 U	10 U	10 U	10 U
4-Nitrophenol	UG/L	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthylene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetophenone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Anthracene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Atrazine	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzaldehyde	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)anthracene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Caprolactam	UG/L	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Carbazole	UG/L	5.0 U	5.0 U	5.0 U	0.72 J
Chrysene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenz(a,h)anthracene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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 [LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] <> 'VOA'

**TABLE 4B**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-048	DEC-048
Sample ID		DEC-031	DEC-031D	DEC-048	DUP2-062411
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/21/11	06/21/11	06/24/11	06/24/11
Parameter	Units				Field Duplicate (1-1)
<b>Semivolatile Organic Compounds</b>					
Dimethylphthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	UG/L	0.56 J	0.72 J	5.0 U	5.0 U
Di-n-octylphthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	UG/L	5.0 U	5.0 U	5.0 U	1.2 J
Nitrobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
N-Nitroso-di-n-propylamine	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
N-Nitrosodiphenylamine	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	UG/L	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Pyrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
<b>Pesticide Organic Compounds</b>					
4,4'-DDD	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	UG/L	0.10 U	0.10 U	0.10 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACCODE] = 'N' OR [SACCODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] = 'VOA'



**TABLE 4B**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-048	DEC-048
Sample ID		DEC-031	DEC-031D	DEC-048	DUP2-062411
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/21/11	06/21/11	06/24/11	06/24/11
Parameter	Units				Field Duplicate (1-1)
<b>Pesticide Organic Compounds</b>					
Aldrin	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
alpha-BHC	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
alpha-Chlordane	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
beta-BHC	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
delta-BHC	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
Dieldrin	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan I	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
Endosulfan II	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan sulfate	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
Endrin	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
Endrin aldehyde	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
Endrin ketone	UG/L	0.10 U	0.10 U	0.10 U	0.10 U
gamma-BHC (Lindane)	UG/L	0.051 J	0.050 U	0.050 U	0.050 U
gamma-Chlordane	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
Heptachlor	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
Heptachlor epoxide	UG/L	0.050 U	0.050 U	0.050 U	0.050 U
Methoxychlor	UG/L	0.50 U	0.50 U	0.50 U	0.50 U
Toxaphene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
<b>Polychlorinated Biphenyls</b>					
Aroclor 1016	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1221	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1232	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1242	UG/L	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

[LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] <> 'VGA'

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**TABLE 4B**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-048	DEC-048
Sample ID		DEC-031	DEC-031D	DEC-048	DUP2-062411
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/21/11	06/21/11	06/24/11	06/24/11
Parameter	Units				Field Duplicate (1-1)
<b>Polychlorinated Biphenyls</b>					
Aroclor 1248	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1262	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1268	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
<b>Metals</b>					
Aluminum	UG/L	154 B	464	200 U	200 U
Antimony	UG/L	20 U	20 U	20 U	20 U
Arsenic	UG/L	20 U	20 U	20 U	20 U
Barium	UG/L	48.5 B	36.8 B	95.0 B	95.4 B
Beryllium	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Cadmium	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Calcium	UG/L	61,200	111,000	66,300	65,900
Chromium	UG/L	20 U	2.0 B	0.79 B	20 U
Cobalt	UG/L	1.8 B	6.1 B	1.1 B	1.1 B
Copper	UG/L	30 U	30 U	30 U	30 U
Iron	UG/L	314	1,530	1,010 J	1,990 J
Lead	UG/L	10 U	10 U	10 U	10 U
Magnesium	UG/L	21,400	58,400	28,400	28,100
Manganese	UG/L	249	2,300	738	702
Mercury	UG/L	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	UG/L	10.8 B	4.2 B	6.6 B	6.0 B
Potassium	UG/L	2,350	7,020	2,890	2,850

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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 [LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ( [SACODE] = 'N' OR [SACODE] = 'FD') AND [UNITS] = 'UG/L' AND [PRCODE] <> 'VDA'

**TABLE 4B**  
**VALIDATED GROUNDWATER SAMPLE RESULTS (ALL OTHER PARAMETERS)**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-031	DEC-031D	DEC-048	DEC-048
Sample ID		DEC-031	DEC-031D	DEC-048	DUP2-062411
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		06/21/11	06/21/11	06/24/11	06/24/11
Parameter	Units				Field Duplicate (1-1)
<b>Metals</b>					
Selenium	UG/L	30.0 U	30.0 U	30.0 U	30.0 U
Silver	UG/L	30 U	30 U	30 U	30 U
Sodium	UG/L	71,000	102,000	76,000	75,500
Thallium	UG/L	20 U	20 U	20 U	20 U
Vanadium	UG/L	50 U	2.2 B	50 U	50 U
Zinc	UG/L	50 U	11.0 B	50 U	50 U
<b>Miscellaneous Parameters</b>					
Cyanide	UG/L	20 U	20 U	20 U	20 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

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 [LOGDATE] BETWEEN #05/01/11# AND #07/01/11# AND [MATRIX] = 'WG' AND ( [SACODE] = 'N' OR [SACODE] = 'YD') AND [UNITS] = 'UG/L' AND [PRGCODE] <=> 'VOA'

**TABLE 5**  
**VALIDATED PRODUCT SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048
Sample ID		DEC-048
Matrix		LNAPL
Depth Interval (ft)		-
Date Sampled		06/24/11
Parameter	Units	
<b>Volatile Organic Compounds</b>		
1,1,1,2-Tetrachloroethane	MG/KG	630 U
1,1,1-Trichloroethane	MG/KG	630 U
1,1,2,2-Tetrachloroethane	MG/KG	630 U
1,1,2-Trichloro-1,2,2-trifluoroethane	MG/KG	630 U
1,1,2-Trichloroethane	MG/KG	630 U
1,1-Dichloroethane	MG/KG	630 U
1,1-Dichloroethene	MG/KG	630 U
1,1-Dichloropropene	MG/KG	630 U
1,2,3-Trichlorobenzene	MG/KG	630 U
1,2,3-Trichloropropane	MG/KG	630 U
1,2,4-Trichlorobenzene	MG/KG	630 U
1,2,4-Trimethylbenzene	MG/KG	420 J
1,2-Dibromo-3-chloropropane	MG/KG	630 U
1,2-Dibromoethane (Ethylene dibromide)	MG/KG	630 U
1,2-Dichlorobenzene	MG/KG	630 U
1,2-Dichloroethane	MG/KG	630 U
1,2-Dichloroethene (cis)	MG/KG	630 U
1,2-Dichloroethene (trans)	MG/KG	630 U
1,2-Dichloropropane	MG/KG	630 U
1,3,5-Trimethylbenzene (Mesitylene)	MG/KG	630 U
1,3-Dichlorobenzene	MG/KG	630 U
1,3-Dichloropropane	MG/KG	630 U
1,3-Dichloropropene (cis)	MG/KG	630 U
1,3-Dichloropropene (trans)	MG/KG	630 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 5**  
**VALIDATED PRODUCT SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048
Sample ID		DEC-048
Matrix		LNAPL
Depth Interval (ft)		-
Date Sampled		06/24/11
Parameter	Units	
<b>Volatile Organic Compounds</b>		
1,4-Dichlorobenzene	MG/KG	630 U
1,4-Dioxane	MG/KG	R
2,2-Dichloropropane	MG/KG	630 U
2-Chlorotoluene	MG/KG	630 U
2-Hexanone	MG/KG	630 UJ
4-Chlorotoluene	MG/KG	630 U
4-Isopropyltoluene (p-Cymene)	MG/KG	630 U
4-Methyl-2-pentanone	MG/KG	630 U
Acetone	MG/KG	R
Benzene	MG/KG	630 U
Bromobenzene	MG/KG	630 U
Bromochloromethane	MG/KG	630 U
Bromodichloromethane	MG/KG	630 U
Bromoform	MG/KG	630 U
Bromomethane	MG/KG	630 U
Carbon disulfide	MG/KG	630 U
Carbon tetrachloride	MG/KG	630 U
Chlorobenzene	MG/KG	630 U
Chloroethane	MG/KG	630 U
Chloroform	MG/KG	630 U
Chloromethane	MG/KG	630 U
Cyclohexane	MG/KG	630 U
Dibromochloromethane	MG/KG	630 U
Dibromomethane	MG/KG	630 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 5**  
**VALIDATED PRODUCT SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048
Sample ID		DEC-048
Matrix		LNAPL
Depth Interval (ft)		-
Date Sampled		06/24/11
Parameter	Units	
<b>Volatile Organic Compounds</b>		
Dichlorodifluoromethane	MG/KG	630 U
Ethylbenzene	MG/KG	630 U
Hexachlorobutadiene	MG/KG	630 U
Iodomethane (Methyl iodide)	MG/KG	630 U
Isopropylbenzene (Cumene)	MG/KG	630 U
Methyl acetate	MG/KG	630 U
Methyl ethyl ketone (2-Butanone)	MG/KG	R
Methyl tert-butyl ether	MG/KG	630 U
Methylcyclohexane	MG/KG	630 U
Methylene chloride	MG/KG	630 U
Naphthalene	MG/KG	630 U
n-Butylbenzene	MG/KG	630 U
n-Propylbenzene	MG/KG	630 U
sec-Butylbenzene	MG/KG	630 U
Styrene	MG/KG	630 U
tert-Butylbenzene	MG/KG	630 U
Tetrachloroethene	MG/KG	630 U
Toluene	MG/KG	630 U
Trichloroethene	MG/KG	630 U
Trichlorofluoromethane	MG/KG	630 U
Vinyl acetate	MG/KG	630 U
Vinyl chloride	MG/KG	630 U
Xylene (total)	MG/KG	630 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 5**  
**VALIDATED PRODUCT SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048
Sample ID		DEC-048
Matrix		LNAPL
Depth Interval (ft)		-
Date Sampled		06/24/11
Parameter	Units	
<b>Semivolatile Organic Compounds</b>		
1,1-Biphenyl	MG/KG	740
2,2-oxybis(1-Chloropropane)	MG/KG	500 UJ
2,4,5-Trichlorophenol	MG/KG	1,000 U
2,4,6-Trichlorophenol	MG/KG	500 U
2,4-Dichlorophenol	MG/KG	500 U
2,4-Dimethylphenol	MG/KG	500 U
2,4-Dinitrophenol	MG/KG	1,000 UJ
2,4-Dinitrotoluene	MG/KG	500 U
2,6-Dinitrotoluene	MG/KG	500 U
2-Chloronaphthalene	MG/KG	500 U
2-Chlorophenol	MG/KG	500 U
2-Methylnaphthalene	MG/KG	3,500
2-Methylphenol (o-cresol)	MG/KG	500 U
2-Nitroaniline	MG/KG	1,000 U
2-Nitrophenol	MG/KG	500 U
3&4-Methylphenol	MG/KG	500 U
3,3-Dichlorobenzidine	MG/KG	500 U
3-Nitroaniline	MG/KG	1,000 U
4,6-Dinitro-2-methylphenol	MG/KG	1,000 U
4-Bromophenyl-phenylether	MG/KG	500 U
4-Chloro-3-methylphenol	MG/KG	500 U
4-Chloroaniline	MG/KG	500 U
4-Chlorophenyl-phenylether	MG/KG	500 U
4-Nitroaniline	MG/KG	1,000 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 5**  
**VALIDATED PRODUCT SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048
Sample ID		DEC-048
Matrix		LNAPL
Depth Interval (ft)		-
Date Sampled		06/24/11
Parameter	Units	
<b>Semivolatile Organic Compounds</b>		
4-Nitrophenol	MG/KG	1,000 U
Acenaphthene	MG/KG	200 J
Acenaphthylene	MG/KG	500 U
Acetophenone	MG/KG	500 U
Anthracene	MG/KG	500 U
Atrazine	MG/KG	500 UJ
Benzaldehyde	MG/KG	500 UJ
Benzo(a)anthracene	MG/KG	500 U
Benzo(a)pyrene	MG/KG	500 U
Benzo(b)fluoranthene	MG/KG	500 U
Benzo(g,h,i)perylene	MG/KG	500 U
Benzo(k)fluoranthene	MG/KG	500 U
bis(2-Chloroethoxy)methane	MG/KG	500 U
bis(2-Chloroethyl)ether	MG/KG	500 U
bis(2-Ethylhexyl)phthalate	MG/KG	210 J
Butylbenzylphthalate	MG/KG	500 UJ
Caprolactam	MG/KG	500 U
Carbazole	MG/KG	500 U
Chrysene	MG/KG	500 U
Dibenz(a,h)anthracene	MG/KG	500 U
Dibenzofuran	MG/KG	500 U
Diethylphthalate	MG/KG	500 U
Dimethylphthalate	MG/KG	500 U
Di-n-butylphthalate	MG/KG	500 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL



**TABLE 5**  
**VALIDATED PRODUCT SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		DEC-048
Sample ID		DEC-048
Matrix		LNAPL
Depth Interval (ft)		-
Date Sampled		06/24/11
Parameter	Units	
<b>Semivolatile Organic Compounds</b>		
Di-n-octylphthalate	MG/KG	500 UJ
Fluoranthene	MG/KG	500 U
Fluorene	MG/KG	490 J
Hexachlorobenzene	MG/KG	500 U
Hexachlorobutadiene	MG/KG	500 U
Hexachlorocyclopentadiene	MG/KG	500 U
Hexachloroethane	MG/KG	500 U
Indeno(1,2,3-cd)pyrene	MG/KG	500 U
Isophorone	MG/KG	500 U
Naphthalene	MG/KG	610
Nitrobenzene	MG/KG	500 U
N-Nitroso-di-n-propylamine	MG/KG	500 UJ
N-Nitrosodiphenylamine	MG/KG	500 U
Pentachlorophenol	MG/KG	1,000 U
Phenanthrene	MG/KG	1,200
Phenol	MG/KG	500 U
Pyrene	MG/KG	130 J
<b>Miscellaneous Parameters</b>		
Fuel Oils	MG/KG	950,000
Specific Gravity	g/ML	0.8608

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		AA-028	AA-029	AA-030	SG-018	SG-019
Sample ID		AA-061311	AA-061411	AA-061511	SG-18	SG-19
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/14/11	06/15/11	06/15/11	06/13/11
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	8.7	1.5 U	2.2 U	33.9 U	3.8
1,1,2,2-Tetrachloroethane	UG/M3	1.1 U	0.96 U	1.4 U	21.5 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	2.5 U	2.2 U	3.2 U	49.3 U	2.4 U
1,1-Dichloroethane	UG/M3	1.3 U	1.1 U	1.6 U	25.3 U	1.2 U
1,1-Dichloroethene	UG/M3	1.2 U	1.1 U	1.6 U	24.9 U	1.2 U
1,2,4-Trichlorobenzene	UG/M3	1.5 U	1.4 UJ	2.0 UJ	30.5 UJ	1.5 UJ
1,2,4-Trimethylbenzene	UG/M3	1.5 U	35.6	2.0 U	31.3	102
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	2.5 U	2.2 U	3.2 U	49.3 U	2.4 U
1,2-Dichlorobenzene	UG/M3	1.8 U	1.7 U	2.4 U	37.0 U	1.8 U
1,2-Dichloroethane	UG/M3	0.63 U	0.57 U	0.81 U	12.6 U	0.61 U
1,2-Dichloroethene (cis)	UG/M3	1.2 U	1.1 U	1.6 U	24.9 U	1.2 U
1,2-Dichloroethene (trans)	UG/M3	1.2 U	1.1 U	1.6 U	24.9 U	1.2 U
1,2-Dichloropropane	UG/M3	1.4 U	1.3 U	1.9 U	29.0 U	1.4 U
1,2-Dichlorotetrafluoroethane	UG/M3	2.2 U	1.9 U	2.8 U	43.1 U	2.1 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	1.5 U	8.8	2.0 U	30.8 U	24.2
1,3-Butadiene	UG/M3	0.69 U	0.62 U	0.89 U	13.9 U	0.67 U
1,3-Dichlorobenzene	UG/M3	1.8 U	1.7 U	2.4 U	37.0 U	7.9
1,3-Dichloropropene (cis)	UG/M3	1.4 U	1.3 U	1.8 U	28.3 U	1.4 U
1,3-Dichloropropene (trans)	UG/M3	1.4 U	1.3 U	1.8 U	28.3 U	1.4 U
1,4-Dichlorobenzene	UG/M3	1.8 U	1.7 U	2.4 U	37.0 U	3.5
1,4-Dioxane	UG/M3	0.56 U	0.51 U	0.72 U	11.3 U	0.54 U
2,2,4-Trimethylpentane	UG/M3	1.5 U	1.3 U	1.9 U	29.3 U	399 J
4-Methyl-2-pentanone	UG/M3	1.3 U	1.1 U	1.6 U	25.6 U	1.2 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
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Printed: 11/4/2011 11:22:32 AM  
[LOGDATE] = #5/1/2011# AND [UNITS] = 'UGM3' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' )

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		AA-028	AA-029	AA-030	SG-018	SG-019
Sample ID		AA-061311	AA-061411	AA-061511	SG-18	SG-19
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/14/11	06/15/11	06/15/11	06/13/11
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	0.50 U	0.45 U	0.64 U	10.0 U	85.8
Benzyl chloride	UG/M3	1.6 U	1.4 U	2.1 U	32.3 U	1.6 U
Bromodichloromethane	UG/M3	2.2 U	1.9 U	2.8 U	43.1 U	2.1 U
Bromoform	UG/M3	3.2 U	2.9 U	4.1 U	64.7 U	3.1 U
Bromomethane	UG/M3	1.2 U	1.1 U	1.6 U	24.3 U	1.2 U
Carbon tetrachloride	UG/M3	0.99 U	0.88 U	1.3 U	19.7 U	2.9
Chlorobenzene	UG/M3	1.4 U	1.3 U	1.9 U	29.0 U	1.4 U
Chloroethane	UG/M3	0.83 U	0.75 U	1.1 U	16.6 U	0.80 U
Chloroform	UG/M3	1.5 U	1.4 U	2.0 U	30.5 U	319
Chloromethane	UG/M3	0.65 U	0.58 U	0.83 U	12.9 U	0.62 U
Cyclohexane	UG/M3	1.0 U	0.94 U	1.3 U	20.9 U	535 J
Dibromochloromethane	UG/M3	2.6 U	2.3 U	3.3 U	52.4 U	2.5 U
Dichlorodifluoromethane	UG/M3	1.5 U	1.4 U	2.0 U	30.8 U	2.3
Ethanol	UG/M3	15.3	12.3	22.3	93.1	114 J
Ethylbenzene	UG/M3	1.4 U	1.2 U	1.6 J	27.1 U	62.7
Hexachlorobutadiene	UG/M3	3.4 U	3.0 U	4.3 UJ	67.8 UJ	3.3 U
Hexane	UG/M3	2.0	1.3	0.92 J	22.2 U	50.8
Methyl ethyl ketone (2-Butanone)	UG/M3	3.0	0.94	4.7	18.5 U	0.89 U
Methyl tert-butyl ether	UG/M3	1.1 U	1.0 U	1.4 U	22.5 U	1.1 U
Methylene chloride	UG/M3	6.8	2.0	5.8	21.9 U	1.1 U
Styrene	UG/M3	1.3 U	1.2 U	1.7 U	26.8 U	1.3 U
t-Butyl alcohol	UG/M3	1.4 U	1.3 U	1.8 U	28.5 U	1.4 U
Tetrachloroethene	UG/M3	18.2	0.95 U	1.4 U	2,660	1,200

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
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 Printed: 11/4/2011 11:22:32 AM  
 (LOGDATE) > #5/1/2011# AND (UNITS) = 'UGM3' AND ( [SACODE] = 'N' OR [SACODE] = 'FO' )

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		AA-028	AA-029	AA-030	SG-018	SG-019
Sample ID		AA-061311	AA-061411	AA-061511	SG-18	SG-19
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/14/11	06/15/11	06/15/11	06/13/11
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	6.8	7.1	20.4	23.7 U	63.5
Trichloroethene	UG/M3	0.85 U	0.76 U	1.1 U	29.8	0.81 U
Trichlorofluoromethane	UG/M3	1.7 U	1.5 U	2.2 U	33.9 U	1.6 U
Vinyl chloride	UG/M3	0.40 U	0.36 U	0.51 U	8.0 U	0.38 U
Xylene (total)	UG/M3	2.4 J	22.5	21.0	55.4	211

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-020	SG-021	SG-042	SG-043	SG-044
Sample ID		SG-20	SG-21	SG-42	SG-43	SG-44
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/11	06/14/11	06/15/11	06/14/11
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	3.1 U	2.0	16,900	33.9 U	28.0 J
1,1,2,2-Tetrachloroethane	UG/M3	2.0 U	1.0 U	2,640 U	21.5 U	20.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	4.6 U	2.3 U	6,060 U	49.3 U	45.8 U
1,1-Dichloroethane	UG/M3	2.3 U	1.2 U	3,110 U	25.3 U	23.5 U
1,1-Dichloroethene	UG/M3	2.3 U	1.2 U	3,070 U	24.9 U	23.2 U
1,2,4-Trichlorobenzene	UG/M3	2.8 UJ	1.4 UJ	3,750 U	30.5 UJ	28.3 U
1,2,4-Trimethylbenzene	UG/M3	122	15.9	3,790 U	30.8 U	28.6 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	4.6 U	2.3 U	6,060 U	49.3 U	45.8 U
1,2-Dichlorobenzene	UG/M3	3.4 U	1.7 U	4,550 U	37.0 U	34.3 U
1,2-Dichloroethane	UG/M3	1.2 U	0.59 U	1,550 U	12.6 U	11.7 U
1,2-Dichloroethene (cis)	UG/M3	2.3 U	1.2 U	3,070 U	557	23.2 U
1,2-Dichloroethene (trans)	UG/M3	2.3 U	1.2 U	3,070 U	24.9 U	23.2 U
1,2-Dichloropropane	UG/M3	2.7 U	1.3 U	3,560 U	29.0 U	26.9 U
1,2-Dichlorotetrafluoroethane	UG/M3	4.0 U	2.0 U	5,300 U	43.1 U	40.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	29.1	1.4 U	3,790 U	30.8 U	28.6 U
1,3-Butadiene	UG/M3	1.3 U	0.64 U	1,700 U	13.9 U	12.9 U
1,3-Dichlorobenzene	UG/M3	3.4 U	4.4	4,550 U	37.0 U	34.3 U
1,3-Dichloropropene (cis)	UG/M3	2.6 U	1.3 U	3,490 U	28.3 U	26.3 U
1,3-Dichloropropene (trans)	UG/M3	2.6 U	1.3 U	3,490 U	28.3 U	26.3 U
1,4-Dichlorobenzene	UG/M3	2.8 J	1.5 J	4,550 U	37.0 U	34.3 U
1,4-Dioxane	UG/M3	1.0 U	0.52 U	1,390 U	11.3 U	10.5 U
2,2,4-Trimethylpentane	UG/M3	21.9	400 J	3,600 U	29.3 U	27.2 U
4-Methyl-2-pentanone	UG/M3	2.4 U	1.2 U	3,140 U	25.6 U	23.7 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-020	SG-021	SG-042	SG-043	SG-044
Sample ID		SG-20	SG-21	SG-42	SG-43	SG-44
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/11	06/14/11	06/15/11	06/14/11
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	2.1	241	1,230 U	42.4	9.3 U
Benzyl chloride	UG/M3	3.0 U	1.5 U	3,980 U	32.3 U	30.0 U
Bromodichloromethane	UG/M3	4.0 U	2.0 U	5,300 U	43.1 U	40.0 U
Bromoform	UG/M3	6.0 U	3.0 U	7,960 U	64.7 U	51.9 J
Bromomethane	UG/M3	2.3 U	1.1 U	2,990 U	24.3 U	22.6 U
Carbon tetrachloride	UG/M3	1.8 U	0.92 U	2,420 U	19.7 U	18.3 U
Chlorobenzene	UG/M3	2.7 U	1.3 U	3,560 U	29.0 U	26.9 U
Chloroethane	UG/M3	1.5 U	0.77 U	2,050 U	16.6 U	15.4 U
Chloroform	UG/M3	54.2	25.6	3,750 U	30.5 U	28.3 U
Chloromethane	UG/M3	1.2 U	0.60 U	1,590 U	12.9 U	12.0 U
Cyclohexane	UG/M3	8.6	2,090	2,580 U	16,300	19.4 U
Dibromochloromethane	UG/M3	4.9 U	2.4 U	6,440 U	52.4 U	48.6 U
Dichlorodifluoromethane	UG/M3	2.9 U	1.2 J	3,790 U	30.8 U	28.6 U
Ethanol	UG/M3	183 J	89.4	7,200 U	116	62.0
Ethylbenzene	UG/M3	64.9	38.7	3,330 U	27.1 U	25.2 U
Hexachlorobutadiene	UG/M3	6.3 U	3.1 U	8,340 U	67.8 UJ	62.9 U
Hexane	UG/M3	191	1,500	2,730 U	8,000	20.6 U
Methyl ethyl ketone (2-Butanone)	UG/M3	1.7 U	9.9	2,270 U	18.5 U	17.2 U
Methyl tert-butyl ether	UG/M3	2.1 U	1.0 U	2,770 U	22.5 U	20.9 U
Methylene chloride	UG/M3	282	883	2,690 U	21.9 U	20.3 U
Styrene	UG/M3	2.5 U	2.4	3,300 U	26.8 U	13.0 J
t-Butyl alcohol	UG/M3	2.6 U	1.3 U	3,500 U	28.5 U	26.4 U
Tetrachloroethene	UG/M3	83.1	72.4	803,000	48,500	1,660

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
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( LOGDATE ) > #5/1/2011# AND ( UNITS ) = 'UG/M3' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' )

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-020	SG-021	SG-042	SG-043	SG-044
Sample ID		SG-20	SG-21	SG-42	SG-43	SG-44
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/13/11	06/13/11	06/14/11	06/15/11	06/14/11
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	159	82.6	2,920 U	17.0 J	22.0 U
Trichloroethene	UG/M3	9.2	0.79 U	2,850	1,170	15.7 U
Trichlorofluoromethane	UG/M3	3.1 U	1.6 U	4,170 U	118	31.5 U
Vinyl chloride	UG/M3	0.74 U	0.37 U	985 U	687	7.4 U
Xylene (total)	UG/M3	317	80.5	6,670 U	54.2 U	50.3 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-045	SG-046	SG-046	SG-047	SG-048
Sample ID		SG-45	DUP2-061411	SG-46	SG-47	SG-48
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/14/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	1,120 U	53.7	109	7.6 U	56.5 J
1,1,2,2-Tetrachloroethane	UG/M3	710 U	18.7 U	19.3 U	4.8 U	35.9 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	1,630 U	42.9 U	44.2 U	11.0 U	82.2 U
1,1-Dichloroethane	UG/M3	834 U	12.8 J	42.0	5.6 U	42.1 U
1,1-Dichloroethene	UG/M3	824 U	21.7 U	22.4 U	5.6 U	41.6 U
1,2,4-Trichlorobenzene	UG/M3	1,010 U	26.5 UJ	27.3 UJ	6.8 UJ	50.9 UJ
1,2,4-Trimethylbenzene	UG/M3	1,020 U	26.8 U	27.6 U	9.7	51.3 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	1,630 U	42.9 U	44.2 U	11.0 U	82.2 U
1,2-Dichlorobenzene	UG/M3	1,220 U	32.2 U	33.1 U	8.3 U	61.7 U
1,2-Dichloroethane	UG/M3	417 U	11.0 U	11.3 U	2.8 U	21.1 U
1,2-Dichloroethene (cis)	UG/M3	824 U	21.7 U	17.7 J	5.6 U	41.6 U
1,2-Dichloroethene (trans)	UG/M3	824 U	21.7 U	22.4 U	5.6 U	41.6 U
1,2-Dichloropropane	UG/M3	957 U	25.2 U	25.9 U	6.5 U	48.3 U
1,2-Dichlorotetrafluoroethane	UG/M3	1,420 U	37.5 U	38.6 U	9.6 U	72.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	1,020 U	26.8 U	27.6 U	6.9 U	51.3 U
1,3-Butadiene	UG/M3	458 U	12.1 U	12.4 U	3.1 U	23.1 U
1,3-Dichlorobenzene	UG/M3	1,220 U	32.2 U	33.1 U	8.3 U	61.7 U
1,3-Dichloropropene (cis)	UG/M3	936 U	24.7 U	25.4 U	6.3 U	47.3 U
1,3-Dichloropropene (trans)	UG/M3	936 U	24.7 U	25.4 U	6.3 U	47.3 U
1,4-Dichlorobenzene	UG/M3	1,220 U	32.2 U	33.1 U	8.3 U	61.7 U
1,4-Dioxane	UG/M3	372 U	9.8 U	10.1 U	2.5 U	18.8 U
2,2,4-Trimethylpentane	UG/M3	967 U	25.5 U	26.2 U	6.5 U	48.8 U
4-Methyl-2-pentanone	UG/M3	845 U	22.2 U	22.9 U	5.7 U	42.7 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
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[LOGDATE] > 05/12/2011 [UNITS] = UG/M3 AND [SACCODE] = 'N' OR [SACCODE] = 'PD'



**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-045	SG-046	SG-046	SG-047	SG-048
Sample ID		SG-45	DUP2-061411	SG-46	SG-47	SG-48
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/14/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Benzene	UG/M3	331 U	8.7 U	9.0 U	2.2 U	16.7 U
Benzyl chloride	UG/M3	1,070 U	28.1 U	29.0 U	7.2 U	54.0 U
Bromodichloromethane	UG/M3	1,420 U	37.5 U	38.6 U	9.6 U	72.0 U
Bromoform	UG/M3	1,830 J	54.5 J	58.0 U	14.5 U	108 U
Bromomethane	UG/M3	804 U	21.2 U	21.8 U	5.4 U	40.6 U
Carbon tetrachloride	UG/M3	651 U	17.2 U	17.7 U	6.1	32.9 U
Chlorobenzene	UG/M3	957 U	25.2 U	25.9 U	6.5 U	48.3 U
Chloroethane	UG/M3	550 U	14.5 U	14.9 U	3.7 U	27.8 U
Chloroform	UG/M3	1,010 U	26.5 U	27.3 U	19.3	50.9 U
Chloromethane	UG/M3	427 U	11.3 U	11.6 U	2.9 U	21.6 U
Cyclohexane	UG/M3	692 U	18.2 U	18.8 U	54.5	35.0 U
Dibromochloromethane	UG/M3	1,730 U	25.4 J	46.9 U	11.7 U	87.4 U
Dichlorodifluoromethane	UG/M3	1,020 U	26.8 U	27.6 U	6.9 U	51.4 U
Ethanol	UG/M3	1,930 U	58.7	52.4 U	63.7	105
Ethylbenzene	UG/M3	895 U	23.6 U	24.3 U	6.1 U	45.2 U
Hexachlorobutadiene	UG/M3	2,240 U	59.0 U	60.7 U	15.2 UJ	113 U
Hexane	UG/M3	733 U	30.0	19.9 U	90.6	37.0 U
Methyl ethyl ketone (2-Butanone)	UG/M3	611 U	16.1 U	16.6 U	23.2	30.8 U
Methyl tert-butyl ether	UG/M3	743 U	19.6 U	20.1 U	5.0 U	37.5 U
Methylene chloride	UG/M3	722 U	199	19.6 U	304	36.5 U
Styrene	UG/M3	885 U	16.8 J	14.2 J	6.0 U	44.7 U
t-Butyl alcohol	UG/M3	940 U	24.8 U	25.5 U	6.4 U	47.5 U
Tetrachloroethene	UG/M3	22,400	805	2,040	661	3,340

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
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[LOGDATE] > #5/1/2011# AND [UNITS] = 'UG/M3' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' )

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-045	SG-046	SG-046	SG-047	SG-048
Sample ID		SG-45	DUP2-061411	SG-46	SG-47	SG-48
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/14/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Toluene	UG/M3	784 U	33.4	17.4 J	150	39.6 U
Trichloroethene	UG/M3	560 U	158	376	109	28.3 U
Trichlorofluoromethane	UG/M3	1,120 U	29.5 U	30.4 U	7.6 U	56.5 U
Vinyl chloride	UG/M3	265 U	7.0 U	7.2 U	1.8 U	13.4 U
Xylene (total)	UG/M3	1,790 U	47.2 U	48.6 U	35.3	90.5 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-049	SG-055	SG-056	SG-057	SG-058
Sample ID		SG-49	SG-55	SG-56	SG-57	DUP-061511
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/13/11	06/15/11	06/15/11	06/15/11
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	344	4.0	53.2 U	193 U	3,890 U
1,1,2,2-Tetrachloroethane	UG/M3	20.7 U	1.0 U	33.8 U	122 U	2,470 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	1,520	2.3 U	77.4 U	281 U	5,650 U
1,1-Dichloroethane	UG/M3	24.3 U	1.2 U	39.7 U	144 U	2,900 U
1,1-Dichloroethene	UG/M3	189	1.2 U	39.2 U	142 U	2,860 U
1,2,4-Trichlorobenzene	UG/M3	29.3 UJ	1.4 UJ	47.9 UJ	174 U	3,500 U
1,2,4-Trimethylbenzene	UG/M3	17.1 J	57.3	48.4 U	175 U	3,530 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	47.4 U	2.3 U	77.4 U	281 U	5,650 U
1,2-Dichlorobenzene	UG/M3	35.5 U	1.7 U	58.1 U	210 U	4,240 U
1,2-Dichloroethane	UG/M3	12.1 U	0.59 U	19.8 U	71.9 U	1,450 U
1,2-Dichloroethene (cis)	UG/M3	437,000	1.2 U	1,980	142 U	2,860 U
1,2-Dichloroethene (trans)	UG/M3	1,420	1.2 U	20.9 J	142 U	2,860 U
1,2-Dichloropropane	UG/M3	27.8 U	1.3 U	45.5 U	165 U	3,320 U
1,2-Dichlorotetrafluoroethane	UG/M3	41.4 U	2.0 U	67.8 U	246 U	4,950 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	29.6 U	16.2	48.4 U	175 U	3,530 U
1,3-Butadiene	UG/M3	13.3 U	0.64 U	21.8 U	78.9 U	1,590 U
1,3-Dichlorobenzene	UG/M3	35.5 U	1.7 U	58.1 U	210 U	4,240 U
1,3-Dichloropropene (cis)	UG/M3	27.2 U	1.3 U	44.5 U	161 U	3,250 U
1,3-Dichloropropene (trans)	UG/M3	27.2 U	1.3 U	44.5 U	161 U	3,250 U
1,4-Dichlorobenzene	UG/M3	35.5 U	3.5	58.1 U	210 U	4,240 U
1,4-Dioxane	UG/M3	10.8 U	0.52 U	17.7 U	64.2 U	1,290 U
2,2,4-Trimethylpentane	UG/M3	28.1 U	45.8	46.0 U	167 U	3,360 U
4-Methyl-2-pentanone	UG/M3	24.6 U	24.9	40.2 U	146 U	2,930 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-049	SG-055	SG-056	SG-057	SG-058
Sample ID		SG-49	SG-55	SG-56	SG-57	DUP-061511
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/13/11	06/15/11	06/15/11	06/15/11
Parameter	Units					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>						
Benzene	UG/M3	48.0	51.0	15.7 U	57.0 U	1,150 U
Benzyl chloride	UG/M3	31.1 U	1.5 U	50.8 U	184 U	3,710 U
Bromodichloromethane	UG/M3	41.4 U	2.0 U	67.8 U	246 U	4,950 U
Bromoform	UG/M3	62.2 U	3.0 U	102 U	368 U	6,410 J
Bromomethane	UG/M3	23.4 U	1.1 U	38.2 U	139 U	2,790 U
Carbon tetrachloride	UG/M3	2,430	0.92 U	31.0 U	112 U	2,260 U
Chlorobenzene	UG/M3	27.8 U	1.3 U	45.5 U	165 U	3,320 U
Chloroethane	UG/M3	16.0 U	0.77 U	26.1 U	94.7 U	1,910 U
Chloroform	UG/M3	793	1.4 U	47.9 U	174 U	3,500 U
Chloromethane	UG/M3	12.4 U	0.60 U	20.3 U	73.7 U	1,480 U
Cyclohexane	UG/M3	20.1 U	53.9	32.9 U	119 U	2,400 U
Dibromochloromethane	UG/M3	50.3 U	2.4 U	82.3 U	298 U	6,010 U
Dichlorodifluoromethane	UG/M3	29.6 U	1.4 U	48.4 U	175 U	3,530 U
Ethanol	UG/M3	94.3	476	130	333 U	6,710 U
Ethylbenzene	UG/M3	26.0 U	89.3	42.6 U	154 U	3,110 U
Hexachlorobutadiene	UG/M3	65.1 U	3.1 U	106 UJ	386 U	7,770 U
Hexane	UG/M3	21.3 U	16.6	34.8 U	126 U	2,540 U
Methyl ethyl ketone (2-Butanone)	UG/M3	17.8 U	20.4	65.5	105 U	2,120 U
Methyl tert-butyl ether	UG/M3	21.6 U	1.0 U	35.3 U	128 U	2,580 U
Methylene chloride	UG/M3	21.0 U	8.5	66.0	125 U	2,510 U
Styrene	UG/M3	25.8 U	3.5	42.1 U	153 U	3,070 U
t-Butyl alcohol	UG/M3	27.4 U	1.3 U	44.7 U	162 U	3,260 U
Tetrachloroethene	UG/M3	13,100,000	584	88,900	10,800	154,000

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
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[LOGDATE] > #5/1/2011# AND [UNITS] = 'UGM3' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' )

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-049	SG-055	SG-056	SG-057	SG-058
Sample ID		SG-49	SG-55	SG-56	SG-57	DUP-061511
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/13/11	06/15/11	06/15/11	06/15/11
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
Toluene	UG/M3	11.7 J	453	37.3 U	78.1 J	2,720 U
Trichloroethene	UG/M3	230,000	105	3,090	96.4 U	1,940 U
Trichlorofluoromethane	UG/M3	32.6 U	1.6 U	53.2 U	5,270	3,890 U
Vinyl chloride	UG/M3	1,450	0.37 U	12.6 U	45.6 U	919 U
Xylene (total)	UG/M3	59.6	339	85.2 U	309 U	6,220 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-058	SG-059	SG-060	SG-060	SG-061
Sample ID		SG-58	SG-59	DUP-061411	SG-60	SG-61
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/15/11	06/15/11	06/14/11	06/14/11	06/15/11
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	3,890 U	31.5 U	188	15,000	35.0 U
1,1,2,2-Tetrachloroethane	UG/M3	2,470 U	20.0 U	19.3 U	1,230 U	22.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	5,650 U	45.8 U	44.2 U	2,830 U	50.9 U
1,1-Dichloroethane	UG/M3	2,900 U	23.5 U	22.6 U	1,450 U	26.1 U
1,1-Dichloroethene	UG/M3	2,860 U	23.2 U	22.4 U	1,430 U	25.8 U
1,2,4-Trichlorobenzene	UG/M3	3,500 U	28.3 UJ	27.3 UJ	1,750 UJ	31.5 UJ
1,2,4-Trimethylbenzene	UG/M3	3,530 U	28.6 U	19.2 J	1,760 U	22.0 J
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	5,650 U	45.8 U	44.2 U	2,830 U	50.9 U
1,2-Dichlorobenzene	UG/M3	4,240 U	34.3 U	33.1 U	2,120 U	38.2 U
1,2-Dichloroethane	UG/M3	1,450 U	11.7 U	11.3 U	724 U	13.0 U
1,2-Dichloroethene (cis)	UG/M3	2,860 U	23.2 U	67.8	6,560	25.8 U
1,2-Dichloroethene (trans)	UG/M3	2,860 U	23.2 U	22.4 U	1,430 U	25.8 U
1,2-Dichloropropane	UG/M3	3,320 U	26.9 U	25.9 U	1,660 U	29.9 U
1,2-Dichlorotetrafluoroethane	UG/M3	4,950 U	40.0 U	38.6 U	2,470 U	44.5 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	3,530 U	28.6 U	27.6 U	1,760 U	31.8 U
1,3-Butadiene	UG/M3	1,590 U	12.9 U	12.4 U	795 U	14.3 U
1,3-Dichlorobenzene	UG/M3	4,240 U	34.3 U	33.1 U	2,120 U	38.2 U
1,3-Dichloropropene (cis)	UG/M3	3,250 U	26.3 U	25.4 U	1,630 U	29.3 U
1,3-Dichloropropene (trans)	UG/M3	3,250 U	26.3 U	25.4 U	1,630 U	29.3 U
1,4-Dichlorobenzene	UG/M3	4,240 U	34.3 U	33.1 U	2,120 U	38.2 U
1,4-Dioxane	UG/M3	1,290 U	10.5 U	10.1 U	647 U	11.6 U
2,2,4-Trimethylpentane	UG/M3	3,360 U	27.2 U	26.2 U	1,680 U	30.2 U
4-Methyl-2-pentanone	UG/M3	2,930 U	23.7 U	22.9 U	1,470 U	26.4 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-058	SG-059	SG-060	SG-060	SG-061
Sample ID		SG-58	SG-59	DUP-061411	SG-60	SG-61
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/15/11	06/15/11	06/14/11	06/14/11	06/15/11
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Benzene	UG/M3	1,150 U	9.3 U	9.0 U	574 U	10.3 U
Benzyl chloride	UG/M3	3,710 U	30.0 U	29.0 U	1,850 U	33.4 U
Bromodichloromethane	UG/M3	4,950 U	40.0 U	38.6 U	2,470 U	44.5 U
Bromoform	UG/M3	7,420 U	60.1 U	58.0 U	3,710 U	66.8 U
Bromomethane	UG/M3	2,790 U	22.6 U	21.8 U	1,400 U	25.1 U
Carbon tetrachloride	UG/M3	2,260 U	18.3 U	17.7 U	793 J	20.4 U
Chlorobenzene	UG/M3	3,320 U	26.9 U	25.9 U	1,660 U	29.9 U
Chloroethane	UG/M3	1,910 U	15.4 U	14.9 U	954 U	17.2 U
Chloroform	UG/M3	3,500 U	28.3 U	170	14,200	31.5 U
Chloromethane	UG/M3	1,480 U	12.0 U	11.6 U	742 U	13.4 U
Cyclohexane	UG/M3	2,400 U	19.4 U	18.8 U	1,200 U	63.6
Dibromochloromethane	UG/M3	6,010 U	48.6 U	46.9 U	3,000 U	54.1 U
Dichlorodifluoromethane	UG/M3	3,530 U	28.6 U	27.6 U	1,770 U	31.8 U
Ethanol	UG/M3	6,710 U	31.3 J	61.4	1,850 J	93.7
Ethylbenzene	UG/M3	3,110 U	25.2 U	24.3 U	1,550 U	28.0 U
Hexachlorobutadiene	UG/M3	7,770 U	62.9 UJ	60.7 U	3,890 U	70.0 UJ
Hexane	UG/M3	2,540 U	20.6 U	19.9 U	3,900	22.9 U
Methyl ethyl ketone (2-Butanone)	UG/M3	2,120 U	17.2 U	16.6 U	1,060 U	19.1 U
Methyl tert-butyl ether	UG/M3	2,580 U	20.9 U	20.1 U	1,290 U	23.2 U
Methylene chloride	UG/M3	2,510 U	45.7	19.6 U	3,040	22.6 U
Styrene	UG/M3	3,070 U	24.9 U	24.0 U	1,540 U	27.7 U
t-Butyl alcohol	UG/M3	3,260 U	35.5	25.5 U	1,630 U	29.4 U
Tetrachloroethene	UG/M3	176,000	2,580	1,100,000	48,200,000	79,800

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-058	SG-059	SG-060	SG-060	SG-061
Sample ID		SG-58	SG-59	DUP-061411	SG-60	SG-61
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/15/11	06/15/11	06/14/11	06/14/11	06/15/11
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Toluene	UG/M3	2,720 U	22.0 U	21.3 U	1,360 U	16.3 J
Trichloroethene	UG/M3	1,940 U	15.7 U	2,640	220,000	94.7
Trichlorofluoromethane	UG/M3	3,890 U	31.5 U	30.4 U	1,940 U	35.0 U
Vinyl chloride	UG/M3	919 U	7.4 U	7.2 U	459 U	8.3 U
Xylene (total)	UG/M3	6,220 U	40.4 J	48.6 U	3,110 U	65.4

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL



**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-062	SG-063	SG-063	SG-078	SG-079
Sample ID		SG-62	DUP2-061511	SG-63	SG-78	SG-79
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/15/11	06/15/11	06/13/11	06/13/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	8.6	30.4 U	3.0 U	1.6 U	29.7
1,1,2,2-Tetrachloroethane	UG/M3	1.0 U	19.3 U	1.9 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	2.3 U	44.2 U	4.4 U	2.3 U	2.4 U
1,1-Dichloroethane	UG/M3	1.2 U	29.8	38.9	1.2 U	1.2 U
1,1-Dichloroethene	UG/M3	1.2 U	22.4 U	2.2 U	1.2 U	1.2 U
1,2,4-Trichlorobenzene	UG/M3	1.4 UJ	27.3 UJ	2.7 UJ	1.4 UJ	1.5 UJ
1,2,4-Trimethylbenzene	UG/M3	44.7	27.6 U	4.6	53.7	180
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	2.3 U	44.2 U	4.4 U	2.3 U	2.4 U
1,2-Dichlorobenzene	UG/M3	1.7 U	33.1 U	5.0	1.7 U	1.8 U
1,2-Dichloroethane	UG/M3	0.59 U	11.3 U	1.1 U	0.59 U	0.61 U
1,2-Dichloroethene (cis)	UG/M3	1.2 U	134	108	1.2 U	1.2 U
1,2-Dichloroethene (trans)	UG/M3	1.2 U	22.4 U	15.3	1.2 U	1.2 U
1,2-Dichloropropane	UG/M3	1.3 U	25.9 U	2.6 U	1.3 U	1.4 U
1,2-Dichlorotetrafluoroethane	UG/M3	2.0 U	38.6 U	3.9 U	2.0 U	2.1 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	10.2	27.6 U	2.8 U	14.9	47.4
1,3-Butadiene	UG/M3	0.64 U	12.4 U	1.2 U	0.64 U	0.67 U
1,3-Dichlorobenzene	UG/M3	1.7 U	33.1 U	3.3 U	1.7 U	4.0
1,3-Dichloropropene (cis)	UG/M3	1.3 U	25.4 U	2.5 U	1.3 U	1.4 U
1,3-Dichloropropene (trans)	UG/M3	1.3 U	25.4 U	2.5 U	1.3 U	1.4 U
1,4-Dichlorobenzene	UG/M3	1.7 U	33.1 U	3.3 U	6.9	7.3
1,4-Dioxane	UG/M3	0.52 U	10.1 U	1.0 U	0.52 U	0.54 U
2,2,4-Trimethylpentane	UG/M3	0.91 J	26.2 U	119	69.0	52.3
4-Methyl-2-pentanone	UG/M3	1.2 U	22.9 U	2.3 U	1.2 U	1.2 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
J:\11174080.000000\BPP\PROGRAMMED\M5.mde  
Printed: 11/4/2011 11:22:34 AM  
[LOGDATE] > 05/12/2011 [FAND [UNITS] = UG/M3 AND ( [SACODE] = 'N' OR [SACODE] = 'D' )

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-062	SG-063	SG-063	SG-078	SG-079
Sample ID		SG-62	DUP2-061511	SG-63	SG-78	SG-79
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/15/11	06/15/11	06/13/11	06/13/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Benzene	UG/M3	2.8	41.2	49.1	110	93.2
Benzyl chloride	UG/M3	1.5 U	29.0 U	2.9 U	1.5 U	1.6 U
Bromodichloromethane	UG/M3	2.0 U	38.6 U	3.9 U	2.0 U	2.1 U
Bromoform	UG/M3	3.0 U	58.0 U	5.8 U	3.0 U	3.1 U
Bromomethane	UG/M3	1.1 U	21.8 U	2.2 U	1.1 U	1.2 U
Carbon tetrachloride	UG/M3	0.92 U	17.7 U	1.8 U	0.92 U	1.2
Chlorobenzene	UG/M3	1.3 U	25.9 U	2.6 U	1.3 U	1.4 U
Chloroethane	UG/M3	0.77 U	43.2	11.4	0.77 U	0.80 U
Chloroform	UG/M3	1.4 U	27.3 U	2.7 U	1.4 U	1.5 U
Chloromethane	UG/M3	0.60 U	11.6 U	1.2 U	0.60 U	0.62 U
Cyclohexane	UG/M3	0.97 U	3,300	3,600	43.2	430 J
Dibromochloromethane	UG/M3	2.4 U	46.9 U	4.7 U	2.4 U	2.5 U
Dichlorodifluoromethane	UG/M3	1.4 U	27.6 U	2.8 U	25.3	1.5 U
Ethanol	UG/M3	66.7	52.4 U	48.0	266 J	292
Ethylbenzene	UG/M3	38.9	24.3 U	2.4 U	110	127
Hexachlorobutadiene	UG/M3	3.1 U	60.7 UJ	6.1 UJ	3.1 U	3.3 U
Hexane	UG/M3	1.7	19.9 U	91.6	56.0	24.5
Methyl ethyl ketone (2-Butanone)	UG/M3	10.8	16.6 U	53.5	23.1	5.2
Methyl tert-butyl ether	UG/M3	1.0 U	20.1 U	2.0 U	1.0 U	1.1 U
Methylene chloride	UG/M3	1.0 U	19.6 U	2.0 U	1.0 U	1.1 U
Styrene	UG/M3	1.2 U	24.0 U	2.4 U	4.8	1.3 U
t-Butyl alcohol	UG/M3	1.3 U	25.5 U	2.6 U	1.3 U	3.4
Tetrachloroethene	UG/M3	35.0	258	208	48.4	21,000

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
J:\11174060\000000\BIPROGRAMEDMS.mde  
Printed: 11/4/2011 11:22:35 AM  
[LOGDATE] > 05/1/2011# AND [UNITS] = 'UG/M3' AND ( [SACODE] = 'N' OR [SACODE] = 'FD' )

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-062	SG-063	SG-063	SG-078	SG-079
Sample ID		SG-62	DUP2-061511	SG-63	SG-78	SG-79
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/15/11	06/15/11	06/13/11	06/13/11
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Toluene	UG/M3	121	21.3 U	6.4	1,090	467
Trichloroethene	UG/M3	71.6	56.2	62.2	0.79 U	0.81 U
Trichlorofluoromethane	UG/M3	2.8	30.4 U	3.0 U	1.6 U	1.6 U
Vinyl chloride	UG/M3	0.37 U	666	48.7	0.37 U	0.38 U
Xylene (total)	UG/M3	173	48.6 U	4.5 J	352	474

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-080	SG-081	SG-082	SG-084	SG-085
Sample ID		SG-80	SG-81	SG-82	SG-84	SG-85
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/15/11
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	32.6 U	27.8 J	32.6 U	4,030 U	97.2 U
1,1,2,2-Tetrachloroethane	UG/M3	20.7 U	19.3 U	20.7 U	2,560 U	61.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	47.4 U	44.2 U	47.4 U	5,860 U	141 U
1,1-Dichloroethane	UG/M3	24.3 U	22.6 U	24.3 U	3,000 U	72.4 U
1,1-Dichloroethene	UG/M3	24.0 U	22.4 U	24.0 U	2,970 U	71.5 U
1,2,4-Trichlorobenzene	UG/M3	29.3 UJ	27.3 UJ	29.3 UJ	3,620 U	87.4 UJ
1,2,4-Trimethylbenzene	UG/M3	33.4	20.2 J	17.1 J	3,660 U	59.9 J
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	47.4 U	44.2 U	47.4 U	5,860 U	141 U
1,2-Dichlorobenzene	UG/M3	35.5 U	33.1 U	35.5 U	4,390 U	106 U
1,2-Dichloroethane	UG/M3	12.1 U	11.3 U	12.1 U	1,500 U	36.2 U
1,2-Dichloroethene (cis)	UG/M3	24.0 U	22.4 U	24.0 U	2,970 U	71.5 U
1,2-Dichloroethene (trans)	UG/M3	24.0 U	22.4 U	24.0 U	2,970 U	71.5 U
1,2-Dichloropropane	UG/M3	27.8 U	25.9 U	27.8 U	3,440 U	83.0 U
1,2-Dichlorotetrafluoroethane	UG/M3	41.4 U	38.6 U	41.4 U	5,130 U	124 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	29.6 U	27.6 U	29.6 U	3,660 U	88.2 U
1,3-Butadiene	UG/M3	13.3 U	12.4 U	13.3 U	1,650 U	39.7 U
1,3-Dichlorobenzene	UG/M3	35.5 U	33.1 U	35.5 U	4,390 U	106 U
1,3-Dichloropropene (cis)	UG/M3	27.2 U	25.4 U	27.2 U	3,370 U	81.3 U
1,3-Dichloropropene (trans)	UG/M3	27.2 U	25.4 U	27.2 U	3,370 U	81.3 U
1,4-Dichlorobenzene	UG/M3	35.5 U	33.1 U	35.5 U	4,390 U	106 U
1,4-Dioxane	UG/M3	10.8 U	10.1 U	10.8 U	1,340 U	32.3 U
2,2,4-Trimethylpentane	UG/M3	28.1 U	26.2 U	28.1 U	3,480 U	83.9 U
4-Methyl-2-pentanone	UG/M3	24.6 U	22.9 U	24.6 U	3,040 U	73.3 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-080	SG-081	SG-082	SG-084	SG-085
Sample ID		SG-80	SG-81	SG-82	SG-84	SG-85
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/15/11
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	9.6 U	9.0 U	9.6 U	1,190 U	28.7 U
Benzyl chloride	UG/M3	31.1 U	29.0 U	31.1 U	3,840 U	92.7 U
Bromodichloromethane	UG/M3	41.4 U	38.6 U	41.4 U	5,130 U	124 U
Bromoform	UG/M3	62.2 U	58.0 U	62.2 U	7,690 U	185 U
Bromomethane	UG/M3	23.4 U	21.8 U	23.4 U	2,890 U	69.8 U
Carbon tetrachloride	UG/M3	18.9 U	17.7 U	18.9 U	2,340 U	56.5 U
Chlorobenzene	UG/M3	27.8 U	25.9 U	27.8 U	3,440 U	83.0 U
Chloroethane	UG/M3	16.0 U	14.9 U	16.0 U	1,980 U	47.7 U
Chloroform	UG/M3	29.3 U	27.3 U	29.3 U	3,620 U	87.4 U
Chloromethane	UG/M3	12.4 U	11.6 U	12.4 U	1,540 U	37.1 U
Cyclohexane	UG/M3	20.1 U	18.8 U	20.1 U	2,490 U	60.1 U
Dibromochloromethane	UG/M3	50.3 U	46.9 U	50.3 U	6,220 U	150 U
Dichlorodifluoromethane	UG/M3	29.6 U	27.6 U	29.6 U	3,660 U	88.3 U
Ethanol	UG/M3	12,200 J	65.7	71.8	6,960 U	259
Ethylbenzene	UG/M3	26.0 U	24.3 U	26.0 U	3,220 U	77.7 U
Hexachlorobutadiene	UG/M3	65.1 U	60.7 U	65.1 U	8,050 U	194 UJ
Hexane	UG/M3	21.3 U	19.9 U	21.3 U	2,640 U	581
Methyl ethyl ketone (2-Butanone)	UG/M3	17.8 U	16.6 U	17.8 U	2,200 U	53.0 U
Methyl tert-butyl ether	UG/M3	21.6 U	20.1 U	21.6 U	2,670 U	64.5 U
Methylene chloride	UG/M3	37.9	19.6 U	21.0 U	2,820	1,690
Styrene	UG/M3	25.8 U	24.0 U	25.8 U	3,180 U	76.8 U
t-Butyl alcohol	UG/M3	27.4 U	25.5 U	27.4 U	3,380 U	81.6 U
Tetrachloroethene	UG/M3	1,670	22,100	6,370	282,000	7,460

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

Advanced Selection: AMK-TEMP AIR  
J:\11174085\000000\PROGRAM\EDMS.mde  
Printed: 11/4/2011 11:22:35 AM  
[LOGDATE] > #5/1/2011# AND [UNITS] = UG/M3 AND ([SACCODE] = 'N' OR [SACCODE] = 'D')

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-080	SG-081	SG-082	SG-084	SG-085
Sample ID		SG-80	SG-81	SG-82	SG-84	SG-85
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		06/14/11	06/14/11	06/14/11	06/15/11	06/15/11
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	171	63.7	152	2,820 U	198
Trichloroethene	UG/M3	74.9	776	208	2,010 U	114
Trichlorofluoromethane	UG/M3	32.6 U	30.4 U	32.6 U	4,030 U	256
Vinyl chloride	UG/M3	7.7 U	7.2 U	7.7 U	952 U	23.0 U
Xylene (total)	UG/M3	191	113	184	6,440 U	155 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-086	SG-087
Sample ID		SG-86	SG-87
Matrix		Soil Gas	Soil Gas
Depth Interval (ft)		-	-
Date Sampled		06/15/11	06/15/11
Parameter	Units		
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/M3	295 J	97.2 U
1,1,2,2-Tetrachloroethane	UG/M3	264 U	61.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	606 U	141 U
1,1-Dichloroethane	UG/M3	311 U	72.4 U
1,1-Dichloroethene	UG/M3	1,290	71.5 U
1,2,4-Trichlorobenzene	UG/M3	375 UJ	87.4 UJ
1,2,4-Trimethylbenzene	UG/M3	379 U	88.2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	606 U	141 U
1,2-Dichlorobenzene	UG/M3	455 U	106 U
1,2-Dichloroethane	UG/M3	155 U	36.2 U
1,2-Dichloroethene (cis)	UG/M3	307 U	71.5 U
1,2-Dichloroethene (trans)	UG/M3	307 U	71.5 U
1,2-Dichloropropane	UG/M3	356 U	169
1,2-Dichlorotetrafluoroethane	UG/M3	530 U	124 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	379 U	88.2 U
1,3-Butadiene	UG/M3	170 U	39.7 U
1,3-Dichlorobenzene	UG/M3	455 U	106 U
1,3-Dichloropropene (cis)	UG/M3	349 U	81.3 U
1,3-Dichloropropene (trans)	UG/M3	349 U	81.3 U
1,4-Dichlorobenzene	UG/M3	455 U	106 U
1,4-Dioxane	UG/M3	139 U	32.3 U
2,2,4-Trimethylpentane	UG/M3	360 U	83.9 U
4-Methyl-2-pentanone	UG/M3	314 U	73.3 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-086	SG-087
Sample ID		SG-86	SG-87
Matrix		Soil Gas	Soil Gas
Depth Interval (ft)		-	-
Date Sampled		06/15/11	06/15/11
Parameter	Units		
Volatile Organic Compounds			
Benzene	UG/M3	123 U	28.7 U
Benzyl chloride	UG/M3	398 U	92.7 U
Bromodichloromethane	UG/M3	530 U	124 U
Bromoform	UG/M3	796 U	185 U
Bromomethane	UG/M3	299 U	69.8 U
Carbon tetrachloride	UG/M3	242 U	56.5 U
Chlorobenzene	UG/M3	356 U	83.0 U
Chloroethane	UG/M3	205 U	47.7 U
Chloroform	UG/M3	375 U	87.4 U
Chloromethane	UG/M3	159 U	37.1 U
Cyclohexane	UG/M3	258 U	60.1 U
Dibromochloromethane	UG/M3	644 U	150 U
Dichlorodifluoromethane	UG/M3	379 U	88.3 U
Ethanol	UG/M3	3,840	1,310
Ethylbenzene	UG/M3	333 U	77.7 U
Hexachlorobutadiene	UG/M3	834 UJ	194 UJ
Hexane	UG/M3	978	1,960
Methyl ethyl ketone (2-Butanone)	UG/M3	227 U	53.0 U
Methyl tert-butyl ether	UG/M3	277 U	64.5 U
Methylene chloride	UG/M3	3,140	6,640
Styrene	UG/M3	330 U	76.8 U
t-Butyl alcohol	UG/M3	350 U	81.6 U
Tetrachloroethene	UG/M3	69,500	2,190

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL



**TABLE 6**  
**VALIDATED AIR SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		SG-086	SG-087
Sample ID		SG-86	SG-87
Matrix		Soil Gas	Soil Gas
Depth Interval (ft)		-	-
Date Sampled		06/15/11	06/15/11
Parameter	Units		
Volatile Organic Compounds			
Toluene	UG/M3	222 J	264
Trichloroethene	UG/M3	899	48.6 U
Trichlorofluoromethane	UG/M3	417 U	97.2 U
Vinyl chloride	UG/M3	98.5 U	23.0 U
Xylene (total)	UG/M3	667 U	155 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 7**  
**VALIDATED FIELD QC SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		FIELDQC	FIELDQC
Sample ID		TRIP BLANK	TB
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		06/20/11	06/22/11
Parameter	Units	Trip Blank (1-1)	Trip Blank (1-1)
<b>Volatile Organic Compounds</b>			
1,1,1,2-Tetrachloroethane	UG/L	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U
1,1-Dichloropropene	UG/L	5.0 U	5.0 U
1,2,3-Trichlorobenzene	UG/L	5.0 U	5.0 U
1,2,3-Trichloropropane	UG/L	5.0 U	5.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U
1,2,4-Trimethylbenzene	UG/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	UG/L	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5.0 U	5.0 U
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U
1,2-Dichloroethene (cis)	UG/L	5.0 U	5.0 U
1,2-Dichloroethene (trans)	UG/L	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/L	5.0 U	5.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U
1,3-Dichloropropane	UG/L	5.0 U	5.0 U
1,3-Dichloropropene (cis)	UG/L	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 7**  
**VALIDATED FIELD QC SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		FIELDQC	FIELDQC
Sample ID		TRIP BLANK	TB
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		06/20/11	06/22/11
Parameter	Units	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
1,3-Dichloropropene (trans)	UG/L	5.0 U	5.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U
1,4-Dioxane	UG/L	R	R
2,2-Dichloropropane	UG/L	5.0 U	5.0 U
2-Chlorotoluene	UG/L	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 UJ
4-Chlorotoluene	UG/L	5.0 U	5.0 U
4-Isopropyltoluene (p-Cymene)	UG/L	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 UJ
Acetone	UG/L	R	R
Benzene	UG/L	5.0 U	5.0 U
Bromobenzene	UG/L	5.0 U	5.0 U
Bromochloromethane	UG/L	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U
Carbon disulfide	UG/L	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 UJ
Chlorobenzene	UG/L	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U
Chloromethane	UG/L	5.0 U	5.0 UJ
Cyclohexane	UG/L	5.0 U	5.0 UJ

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11  
 Checked By: GEK 11/4/11

Detection Limits shown are PQL

**TABLE 7**  
**VALIDATED FIELD QC SAMPLE RESULTS**  
**FORMER KLINK COSMO CLEANERS SITE**

Location ID		FIELDQC	FIELDQC
Sample ID		TRIP BLANK	TB
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		06/20/11	06/22/11
Parameter	Units	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
Dibromochloromethane	UG/L	5.0 U	5.0 U
Dibromomethane	UG/L	5.0 U	5.0 U
Dichlorodifluoromethane	UG/L	5.0 UJ	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 UJ
Iodomethane (Methyl iodide)	UG/L	5.0 U	5.0 UJ
Isopropylbenzene (Cumene)	UG/L	5.0 U	5.0 U
Methyl acetate	UG/L	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R
Methyl tert-butyl ether	UG/L	5.0 U	5.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U
Naphthalene	UG/L	5.0 UJ	5.0 U
sec-Butylbenzene	UG/L	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U
tert-Butylbenzene	UG/L	5.0 U	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U
Toluene	UG/L	5.0 U	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U
Trichlorofluoromethane	UG/L	5.0 U	5.0 UJ
Vinyl acetate	UG/L	5.0 U	5.0 UJ
Vinyl chloride	UG/L	5.0 U	5.0 U
Xylene (total)	UG/L	5.0 U	5.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 11/4/11

Checked By: GEK 11/4/11

Detection Limits shown are PQL

**ATTACHMENT A**  
**VALIDATED FORM 1's**

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

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V8A3693.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 6.8 Date Analyzed: 05/11/2011  
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
75-71-8	Dichlorodifluoromethane	4.9	U
74-87-3	Chloromethane	4.9	U
75-01-4	Vinyl chloride	4.9	U
74-83-9	Bromomethane	4.9	U
75-00-3	Chloroethane	4.9	U
75-69-4	Trichlorofluoromethane	4.9	U
75-35-4	1,1-Dichloroethene	4.9	U
67-64-1	Acetone	<del>4.9</del>	U R
74-88-4	Iodomethane	4.9	U
75-15-0	Carbon disulfide	4.9	U
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
108-05-4	Vinyl acetate	4.9	U
78-93-3	2-Butanone	<del>4.9</del>	U R
156-59-2	cis-1,2-Dichloroethene	4.9	U
594-20-7	2,2-Dichloropropane	4.9	U
74-97-5	Bromochloromethane	4.9	U
67-66-3	Chloroform	4.9	U
71-55-6	1,1,1-Trichloroethane	4.9	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	4.9	U
74-95-3	Dibromomethane	4.9	U
75-27-4	Bromodichloromethane	4.9	U
10061-01-5	cis-1,3-Dichloropropene	4.9	U
108-10-1	4-Methyl-2-pentanone	4.9	U
108-88-3	Toluene	4.9	U
10061-02-6	trans-1,3-Dichloropropene	4.9	U
79-00-5	1,1,2-Trichloroethane	4.9	U
142-28-9	1,3-Dichloropropane	4.9	U

*Handwritten signature*  
8/11/11

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

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V8A3693.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 6.8 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	4.9	U
591-78-6	2-Hexanone	4.9	U
124-48-1	Dibromochloromethane	4.9	U
106-93-4	1,2-Dibromoethane	4.9	U
108-90-7	Chlorobenzene	4.9	U
630-20-6	1,1,1,2-Tetrachloroethane	4.9	U
100-41-4	Ethylbenzene	4.9	U
1330-20-7	m,p-Xylene	4.9	U
95-47-6	o-Xylene	4.9	U
1330-20-7	Xylene (Total)	4.9	U
100-42-5	Styrene	7.0	
75-25-2	Bromoform	4.9	U
98-82-8	Isopropylbenzene	4.9	U
79-34-5	1,1,2,2-Tetrachloroethane	4.9	U
108-86-1	Bromobenzene	4.9	U
96-18-4	1,2,3-Trichloropropane	4.9	U
103-65-1	n-Propylbenzene	4.9	U
95-49-8	2-Chlorotoluene	4.9	U
108-67-8	1,3,5-Trimethylbenzene	4.9	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	4.9	U
120-82-1	1,2,4-Trichlorobenzene	4.9	U
87-68-3	Hexachlorobutadiene	4.9	U
87-61-6	1,2,3-Trichlorobenzene	4.9	U
91-20-3	Naphthalene	4.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.9	U
123-91-1	1,4-Dioxane	100	U R

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

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V8A3693.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 6.8 Date Analyzed: 05/11/2011  
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)	µG/KG	
110-82-7	Cyclohexane		4.9	U
79-20-9	Methyl acetate		4.9	U
108-87-2	Methylcyclohexane		4.9	U



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

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V8A3693.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 6.8 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-043D  
(80-81')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3837.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 12 Date Analyzed: 05/17/2011  
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
75-71-8	Dichlorodifluoromethane	5.1	U
74-87-3	Chloromethane	5.1	U
75-01-4	Vinyl chloride	5.1	U
74-83-9	Bromomethane	5.1	U
75-00-3	Chloroethane	5.1	U
75-69-4	Trichlorofluoromethane	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
67-64-1	Acetone	5.7	5
74-88-4	Iodomethane	5.1	U
75-15-0	Carbon disulfide	5.1	U
75-09-2	Methylene chloride	5.1	U
156-60-5	trans-1,2-Dichloroethene	5.1	U
1634-04-4	Methyl tert-butyl ether	5.1	U
75-34-3	1,1-Dichloroethane	5.1	U
108-05-4	Vinyl acetate	5.1	U
78-93-3	2-Butanone	5.1	U R
156-59-2	cis-1,2-Dichloroethene	5.1	U
594-20-7	2,2-Dichloropropane	5.1	U
74-97-5	Bromochloromethane	5.1	U
67-66-3	Chloroform	5.1	U
71-55-6	1,1,1-Trichloroethane	5.1	U
563-58-6	1,1-Dichloropropene	5.1	U
56-23-5	Carbon tetrachloride	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
71-43-2	Benzene	5.1	U
79-01-6	Trichloroethene	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
74-95-3	Dibromomethane	5.1	U
75-27-4	Bromodichloromethane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
108-10-1	4-Methyl-2-pentanone	5.1	U
108-88-3	Toluene	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
142-28-9	1,3-Dichloropropane	5.1	U

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

CLIENT SAMPLE NO.

DEC-043D  
(80-81')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3837.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 12 Date Analyzed: 05/17/2011  
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
127-18-4	Tetrachloroethene	5.1	U
591-78-6	2-Hexanone	5.1	U
124-48-1	Dibromochloromethane	5.1	U
106-93-4	1,2-Dibromoethane	5.1	U
108-90-7	Chlorobenzene	5.1	U
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U
100-41-4	Ethylbenzene	5.1	U
1330-20-7	m,p-Xylene	5.1	U
95-47-6	o-Xylene	5.1	U
1330-20-7	Xylene (Total)	5.1	U
100-42-5	Styrene	5.1	U
75-25-2	Bromoform	5.1	U
98-82-8	Isopropylbenzene	5.1	U
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U
108-86-1	Bromobenzene	5.1	U
96-18-4	1,2,3-Trichloropropane	5.1	U
103-65-1	n-Propylbenzene	5.1	U
95-49-8	2-Chlorotoluene	5.1	U
108-67-8	1,3,5-Trimethylbenzene	5.1	U
106-43-4	4-Chlorotoluene	5.1	U
98-06-6	tert-Butylbenzene	5.1	U
95-63-6	1,2,4-Trimethylbenzene	5.1	U
135-98-8	sec-Butylbenzene	5.1	U
99-87-6	4-Isopropyltoluene	5.1	U
541-73-1	1,3-Dichlorobenzene	5.1	U
106-46-7	1,4-Dichlorobenzene	5.1	U
104-51-8	n-Butylbenzene	5.1	U
95-50-1	1,2-Dichlorobenzene	5.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	U
120-82-1	1,2,4-Trichlorobenzene	5.1	U
87-68-3	Hexachlorobutadiene	5.1	U
87-61-6	1,2,3-Trichlorobenzene	5.1	U
91-20-3	Naphthalene	5.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	U
123-91-1	1,4-Dioxane	100	U

*Handwritten:* 8/3/11

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

CLIENT SAMPLE NO.

DEC-043D  
(80-81')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3837.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 12 Date Analyzed: 05/17/2011  
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)	µG/KG
110-82-7	Cyclohexane	5.1	U
79-20-9	Methyl acetate	5.1	U
108-87-2	Methylcyclohexane	5.1	U

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

CLIENT SAMPLE NO.

DEC-043D  
(80-81')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3837.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 12 Date Analyzed: 05/17/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

EPA SAMPLE NO.

DEC-044D (4-5')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-02B  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1151.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/12/2011  
% Moisture: not dec. Date Analyzed: 05/15/2011  
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
78-93-3	2-Butanone		5.0	U
67-66-3	Chloroform		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		1.0	J
127-18-4	Tetrachloroethene		8.2	
108-90-7	Chlorobenzene		5.0	U

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

CLIENT SAMPLE NO.

DEC-064D  
(29-29.5)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-02B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3838.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 7.4 Date Analyzed: 05/17/2011  
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
75-71-8	Dichlorodifluoromethane	5.1	U
74-87-3	Chloromethane	5.1	U
75-01-4	Vinyl chloride	5.1	U
74-83-9	Bromomethane	5.1	U
75-00-3	Chloroethane	5.1	U
75-69-4	Trichlorofluoromethane	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
67-64-1	Acetone	4.3	J
74-88-4	Iodomethane	5.1	U
75-15-0	Carbon disulfide	5.1	U
75-09-2	Methylene chloride	5.1	U
156-60-5	trans-1,2-Dichloroethene	5.1	U
1634-04-4	Methyl tert-butyl ether	5.1	U
75-34-3	1,1-Dichloroethane	5.1	U
108-05-4	Vinyl acetate	5.1	U
78-93-3	2-Butanone	5.1	U R
156-59-2	cis-1,2-Dichloroethene	5.1	U
594-20-7	2,2-Dichloropropane	5.1	U
74-97-5	Bromochloromethane	5.1	U
67-66-3	Chloroform	5.1	U
71-55-6	1,1,1-Trichloroethane	5.1	U
563-58-6	1,1-Dichloropropene	5.1	U
56-23-5	Carbon tetrachloride	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
71-43-2	Benzene	5.1	U
79-01-6	Trichloroethene	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
74-95-3	Dibromomethane	5.1	U
75-27-4	Bromodichloromethane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
108-10-1	4-Methyl-2-pentanone	5.1	U
108-88-3	Toluene	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
142-28-9	1,3-Dichloropropane	5.1	U

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8/3/11

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

CLIENT SAMPLE NO.

DEC-064D  
(29-29.5)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-02B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3838.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 7.4 Date Analyzed: 05/17/2011  
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
127-18-4	Tetrachloroethene	5.1	U
591-78-6	2-Hexanone	5.1	U
124-48-1	Dibromochloromethane	5.1	U
106-93-4	1,2-Dibromoethane	5.1	U
108-90-7	Chlorobenzene	5.1	U
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U
100-41-4	Ethylbenzene	5.1	U
1330-20-7	m,p-Xylene	5.1	U
95-47-6	o-Xylene	5.1	U
1330-20-7	Xylene (Total)	5.1	U
100-42-5	Styrene	5.1	U
75-25-2	Bromoform	5.1	U
98-82-8	Isopropylbenzene	5.1	U
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U
108-86-1	Bromobenzene	5.1	U
96-18-4	1,2,3-Trichloropropane	5.1	U
103-65-1	n-Propylbenzene	5.1	U
95-49-8	2-Chlorotoluene	5.1	U
108-67-8	1,3,5-Trimethylbenzene	5.1	U
106-43-4	4-Chlorotoluene	5.1	U
98-06-6	tert-Butylbenzene	5.1	U
95-63-6	1,2,4-Trimethylbenzene	5.1	U
135-98-8	sec-Butylbenzene	5.1	U
99-87-6	4-Isopropyltoluene	5.1	U
541-73-1	1,3-Dichlorobenzene	5.1	U
106-46-7	1,4-Dichlorobenzene	5.1	U
104-51-8	n-Butylbenzene	5.1	U
95-50-1	1,2-Dichlorobenzene	5.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	U
120-82-1	1,2,4-Trichlorobenzene	5.1	U
87-68-3	Hexachlorobutadiene	5.1	U
87-61-6	1,2,3-Trichlorobenzene	5.1	U
91-20-3	Naphthalene	5.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	U
123-91-1	1,4-Dioxane	100	U R

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8/31/11  
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1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-064D  
(29-29.5)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-02B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3838.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 7.4 Date Analyzed: 05/17/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.1	U
79-20-9	Methyl acetate		5.1	U
108-87-2	Methylcyclohexane		5.1	U

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

CLIENT SAMPLE NO.

DEC-064D  
(29-29.5)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-02B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3838.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/16/2011  
% Moisture: not dec. 7.4 Date Analyzed: 05/17/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03B  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3871.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 10 Date Analyzed: 05/31/2011  
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
75-71-8	Dichlorodifluoromethane	5.6	U
74-87-3	Chloromethane	5.6	U
75-01-4	Vinyl chloride	5.6	U
74-83-9	Bromomethane	5.6	U
75-00-3	Chloroethane	5.6	U
75-69-4	Trichlorofluoromethane	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
67-64-1	Acetone	2.4	J
74-88-4	Iodomethane	5.6	U
75-15-0	Carbon disulfide	5.6	U
75-09-2	Methylene chloride	3.1	J
156-60-5	trans-1,2-Dichloroethene	5.6	U
1634-04-4	Methyl tert-butyl ether	5.6	U
75-34-3	1,1-Dichloroethane	5.6	U
108-05-4	Vinyl acetate	5.6	U
78-93-3	2-Butanone	5.6	U R
156-59-2	cis-1,2-Dichloroethene	5.6	U
594-20-7	2,2-Dichloropropane	5.6	U
74-97-5	Bromochloromethane	5.6	U
67-66-3	Chloroform	5.6	U
71-55-6	1,1,1-Trichloroethane	5.6	U
563-58-6	1,1-Dichloropropene	5.6	U
56-23-5	Carbon tetrachloride	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
71-43-2	Benzene	5.6	U
79-01-6	Trichloroethene	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
74-95-3	Dibromomethane	5.6	U
75-27-4	Bromodichloromethane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
108-10-1	4-Methyl-2-pentanone	5.6	U
108-88-3	Toluene	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
142-28-9	1,3-Dichloropropane	5.6	U

*QUG*  
8/2/11

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

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03B  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3871.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 10 Date Analyzed: 05/31/2011  
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
127-18-4	Tetrachloroethene	5.6	U
591-78-6	2-Hexanone	5.6	U
124-48-1	Dibromochloromethane	5.6	U
106-93-4	1,2-Dibromoethane	5.6	U
108-90-7	Chlorobenzene	5.6	U
630-20-6	1,1,1,2-Tetrachloroethane	5.6	U
100-41-4	Ethylbenzene	5.6	U
1330-20-7	m,p-Xylene	5.6	U
95-47-6	o-Xylene	5.6	U
1330-20-7	Xylene (Total)	5.6	U
100-42-5	Styrene	5.6	U
75-25-2	Bromoform	5.6	U
98-82-8	Isopropylbenzene	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U
108-86-1	Bromobenzene	5.6	U
96-18-4	1,2,3-Trichloropropane	5.6	U
103-65-1	n-Propylbenzene	5.6	U
95-49-8	2-Chlorotoluene	5.6	U
108-67-8	1,3,5-Trimethylbenzene	5.6	U
106-43-4	4-Chlorotoluene	5.6	U
98-06-6	tert-Butylbenzene	5.6	U
95-63-6	1,2,4-Trimethylbenzene	5.6	U
135-98-8	sec-Butylbenzene	5.6	U
99-87-6	4-Isopropyltoluene	5.6	U
541-73-1	1,3-Dichlorobenzene	5.6	U
106-46-7	1,4-Dichlorobenzene	5.6	U
104-51-8	n-Butylbenzene	5.6	U
95-50-1	1,2-Dichlorobenzene	5.6	U
96-12-8	1,2-Dibromo-3-chloropropane	5.6	U 3
120-82-1	1,2,4-Trichlorobenzene	5.6	U
87-68-3	Hexachlorobutadiene	5.6	U
87-61-6	1,2,3-Trichlorobenzene	5.6	U
91-20-3	Naphthalene	5.6	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.6	U
123-91-1	1,4-Dioxane	110	U R

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

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03B  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3871.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 10 Date Analyzed: 05/31/2011  
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>µG/KG</u>	Q
110-82-7	Cyclohexane	5.6	U
79-20-9	Methyl acetate	5.6	U
108-87-2	Methylcyclohexane	5.6	U

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

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03B  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3871.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 10 Date Analyzed: 05/31/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3872.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 13 Date Analyzed: 05/31/2011  
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) $\mu$ G/KG	Q
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
67-64-1	Acetone	2.8	J
74-88-4	Iodomethane	5.5	U
75-15-0	Carbon disulfide	5.5	U
75-09-2	Methylene chloride	4.1	J
156-60-5	trans-1,2-Dichloroethene	5.5	U
1634-04-4	Methyl tert-butyl ether	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
108-05-4	Vinyl acetate	5.5	U
78-93-3	2-Butanone	5.5	U R
156-59-2	cis-1,2-Dichloroethene	5.5	U
594-20-7	2,2-Dichloropropane	5.5	U
74-97-5	Bromochloromethane	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
563-58-6	1,1-Dichloropropene	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-43-2	Benzene	5.5	U
79-01-6	Trichloroethene	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
74-95-3	Dibromomethane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
108-10-1	4-Methyl-2-pentanone	5.5	U
108-88-3	Toluene	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
142-28-9	1,3-Dichloropropane	5.5	U

*Handwritten signature*  
5/31/11

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

CLIENT SAMPLE NO.  
DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3872.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 13 Date Analyzed: 05/31/2011  
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
127-18-4	Tetrachloroethene	5.5	U
591-78-6	2-Hexanone	5.5	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
630-20-6	1,1,1,2-Tetrachloroethane	5.5	U
100-41-4	Ethylbenzene	5.5	U
1330-20-7	m,p-Xylene	5.5	U
95-47-6	o-Xylene	5.5	U
1330-20-7	Xylene (Total)	5.5	U
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U
98-82-8	Isopropylbenzene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-86-1	Bromobenzene	5.5	U
96-18-4	1,2,3-Trichloropropane	5.5	U
103-65-1	n-Propylbenzene	5.5	U
95-49-8	2-Chlorotoluene	5.5	U
108-67-8	1,3,5-Trimethylbenzene	5.5	U
106-43-4	4-Chlorotoluene	5.5	U
98-06-6	tert-Butylbenzene	5.5	U
95-63-6	1,2,4-Trimethylbenzene	5.5	U
135-98-8	sec-Butylbenzene	5.5	U
99-87-6	4-Isopropyltoluene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
104-51-8	n-Butylbenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U-3
120-82-1	1,2,4-Trichlorobenzene	5.5	U
87-68-3	Hexachlorobutadiene	5.5	U
87-61-6	1,2,3-Trichlorobenzene	5.5	U
91-20-3	Naphthalene	5.5	U-5
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.5	U
123-91-1	1,4-Dioxane	110	U-R



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

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3872.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 13 Date Analyzed: 05/31/2011  
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)	µG/KG
110-82-7	Cyclohexane	5.5	U
79-20-9	Methyl acetate	5.5	U
108-87-2	Methylcyclohexane	5.5	U

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

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3872.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/27/2011  
% Moisture: not dec. 13 Date Analyzed: 05/31/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-065D(34-35)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-05B  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V5M8821.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 19 Date Analyzed: 05/28/2011  
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) $\mu$ G/KG	Q
75-71-8	Dichlorodifluoromethane	5.7	U
74-87-3	Chloromethane	5.7	U
75-01-4	Vinyl chloride	5.7	U
74-83-9	Bromomethane	5.7	U
75-00-3	Chloroethane	5.7	U
75-69-4	Trichlorofluoromethane	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
67-64-1	Acetone	9.7	5
74-88-4	Iodomethane	5.7	U
75-15-0	Carbon disulfide	5.7	U
75-09-2	Methylene chloride	5.7	U
156-60-5	trans-1,2-Dichloroethene	5.7	U
1634-04-4	Methyl tert-butyl ether	5.7	U
75-34-3	1,1-Dichloroethane	5.7	U
108-05-4	Vinyl acetate	5.7	U
78-93-3	2-Butanone	5.7	U R
156-59-2	cis-1,2-Dichloroethene	5.7	U
594-20-7	2,2-Dichloropropane	5.7	U
74-97-5	Bromochloromethane	5.7	U
67-66-3	Chloroform	5.7	U
71-55-6	1,1,1-Trichloroethane	5.7	U
563-58-6	1,1-Dichloropropene	5.7	U
56-23-5	Carbon tetrachloride	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
71-43-2	Benzene	5.7	U
79-01-6	Trichloroethene	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
74-95-3	Dibromomethane	5.7	U
75-27-4	Bromodichloromethane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
108-10-1	4-Methyl-2-pentanone	5.7	U
108-88-3	Toluene	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
142-28-9	1,3-Dichloropropane	5.7	U

*Handwritten signature and date: 4/21/11*

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

CLIENT SAMPLE NO.

DEC-065D(34-35)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-05B  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V5M8821.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 19 Date Analyzed: 05/28/2011  
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) $\mu$ G/KG	Q
127-18-4	Tetrachloroethene	5.7	U
591-78-6	2-Hexanone	5.7	U
124-48-1	Dibromochloromethane	5.7	U
106-93-4	1,2-Dibromoethane	5.7	U
108-90-7	Chlorobenzene	5.7	U
630-20-6	1,1,1,2-Tetrachloroethane	5.7	U
100-41-4	Ethylbenzene	5.7	U
1330-20-7	m,p-Xylene	5.7	U
95-47-6	o-Xylene	5.7	U
1330-20-7	Xylene (Total)	5.7	U
100-42-5	Styrene	5.7	U
75-25-2	Bromoform	5.7	U
98-82-8	Isopropylbenzene	5.7	U
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U
108-86-1	Bromobenzene	5.7	U
96-18-4	1,2,3-Trichloropropane	5.7	U
103-65-1	n-Propylbenzene	5.7	U
95-49-8	2-Chlorotoluene	5.7	U
108-67-8	1,3,5-Trimethylbenzene	5.7	U
106-43-4	4-Chlorotoluene	5.7	U
98-06-6	tert-Butylbenzene	5.7	U
95-63-6	1,2,4-Trimethylbenzene	5.7	U
135-98-8	sec-Butylbenzene	5.7	U
99-87-6	4-Isopropyltoluene	5.7	U
541-73-1	1,3-Dichlorobenzene	5.7	U
106-46-7	1,4-Dichlorobenzene	5.7	U
104-51-8	n-Butylbenzene	5.7	U
95-50-1	1,2-Dichlorobenzene	5.7	U
96-12-8	1,2-Dibromo-3-chloropropane	5.7	U
120-82-1	1,2,4-Trichlorobenzene	5.7	U
87-68-3	Hexachlorobutadiene	5.7	U
87-61-6	1,2,3-Trichlorobenzene	5.7	U
91-20-3	Naphthalene	14	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.7	U
123-91-1	1,4-Dioxane	110	U R

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

CLIENT SAMPLE NO.

DEC-065D(34-35)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-05B  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V5M8821.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 19 Date Analyzed: 05/28/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.7	U
79-20-9	Methyl acetate		5.7	U
108-87-2	Methylcyclohexane		5.7	U

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

CLIENT SAMPLE NO.

DEC-065D(34-35)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-05B

Sample wt/vol: 5.40 (g/mL) G Lab File ID: V5M8821.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/25/2011

% Moisture: not dec. 19 Date Analyzed: 05/28/2011

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	928-68-7	2-Heptanone, 6-methyl-	11.886	12	NJ

<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V5M8817.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 19 Date Analyzed: 05/28/2011  
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
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
67-64-1	Acetone	<del>5.5</del>	<del>U</del> R
74-88-4	Iodomethane	5.5	U
75-15-0	Carbon disulfide	5.5	U
75-09-2	Methylene chloride	2.2	J
156-60-5	trans-1,2-Dichloroethene	5.5	U
1634-04-4	Methyl tert-butyl ether	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
108-05-4	Vinyl acetate	5.5	U
78-93-3	2-Butanone	<del>5.5</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene	5.5	U
594-20-7	2,2-Dichloropropane	5.5	U
74-97-5	Bromochloromethane	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
563-58-6	1,1-Dichloropropene	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-43-2	Benzene	5.5	U
79-01-6	Trichloroethene	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
74-95-3	Dibromomethane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
108-10-1	4-Methyl-2-pentanone	5.5	U
108-88-3	Toluene	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
142-28-9	1,3-Dichloropropane	5.5	U

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8/2/11*

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

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V5M8817.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 19 Date Analyzed: 05/28/2011  
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) $\mu$ G/KG	Q
127-18-4	Tetrachloroethene	2.2	J
591-78-6	2-Hexanone	5.5	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
630-20-6	1,1,1,2-Tetrachloroethane	5.5	U
100-41-4	Ethylbenzene	5.5	U
1330-20-7	m,p-Xylene	5.5	U
95-47-6	o-Xylene	5.5	U
1330-20-7	Xylene (Total)	5.5	U
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U
98-82-8	Isopropylbenzene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-86-1	Bromobenzene	5.5	U
96-18-4	1,2,3-Trichloropropane	5.5	U
103-65-1	n-Propylbenzene	5.5	U
95-49-8	2-Chlorotoluene	5.5	U
108-67-8	1,3,5-Trimethylbenzene	5.5	U
106-43-4	4-Chlorotoluene	5.5	U
98-06-6	tert-Butylbenzene	5.5	U
95-63-6	1,2,4-Trimethylbenzene	5.5	U
135-98-8	sec-Butylbenzene	5.5	U
99-87-6	4-Isopropyltoluene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
104-51-8	n-Butylbenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
120-82-1	1,2,4-Trichlorobenzene	5.5	U
87-68-3	Hexachlorobutadiene	5.5	U
87-61-6	1,2,3-Trichlorobenzene	5.5	U
91-20-3	Naphthalene	5.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.5	U
123-91-1	1,4-Dioxane	110	U R

*Handwritten signature*  
8/3/11



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

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V5M8817.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 19 Date Analyzed: 05/28/2011  
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)	µG/KG
110-82-7	Cyclohexane	5.5	U
79-20-9	Methyl acetate	5.5	U
108-87-2	Methylcyclohexane	5.5	U

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

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V5M8817.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 19 Date Analyzed: 05/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu\text{G/KG}$  Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-066D (29-30)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-02B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5M8818.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 4.3 Date Analyzed: 05/28/2011  
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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	2.1	J
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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*Handwritten:* 8/3/11

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

CLIENT SAMPLE NO.

DEC-066D (29-30)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-02B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5M8818.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 4.3 Date Analyzed: 05/28/2011  
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) $\mu$ G/KG	Q
127-18-4	Tetrachloroethene	4.8	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R

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

CLIENT SAMPLE NO.

DEC-066D (29-30)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-02B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5M8818.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 4.3 Date Analyzed: 05/28/2011  
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	
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-066D (29-30)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-02B  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5M8818.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/25/2011  
% Moisture: not dec. 4.3 Date Analyzed: 05/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

EPA SAMPLE NO.  
DEC-066S (1-2')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-01B  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A3770.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/12/2011  
% Moisture: not dec. Date Analyzed: 05/13/2011  
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
78-93-3	2-Butanone		2.6	J
67-66-3	Chloroform		2.6	J
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		74	
79-01-6	Trichloroethene		120	
127-18-4	Tetrachloroethene		<del>260-240</del>	<del>U</del>
108-90-7	Chlorobenzene		5.0	U

*Copy*  
*8/6/11*

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

EPA SAMPLE NO.

DEC-066S  
(1-2')DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-01BDL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1152.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/12/2011  
% Moisture: not dec. Date Analyzed: 05/15/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
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		10	U
75-35-4	1,1-Dichloroethene		10	U
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		2.3	DJ
56-23-5	Carbon tetrachloride		10	U
107-06-2	1,2-Dichloroethane		10	U
71-43-2	Benzene		72	D
79-01-6	Trichloroethene		140	D
127-18-4	Tetrachloroethene		260	D
108-90-7	Chlorobenzene		10	U

*QMS*  
*8/2/11*



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

CLIENT SAMPLE NO.

SG-78 (4-5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-02A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3684.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 10 Date Analyzed: 05/11/2011  
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
75-71-8	Dichlorodifluoromethane	5.3	U
74-87-3	Chloromethane	5.3	U
75-01-4	Vinyl chloride	5.3	U
74-83-9	Bromomethane	5.3	U
75-00-3	Chloroethane	5.3	U
75-69-4	Trichlorofluoromethane	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
67-64-1	Acetone	4.5	J
74-88-4	Iodomethane	5.3	U
75-15-0	Carbon disulfide	5.3	U
75-09-2	Methylene chloride	5.3	U
156-60-5	trans-1,2-Dichloroethene	5.3	U
1634-04-4	Methyl tert-butyl ether	5.3	U
75-34-3	1,1-Dichloroethane	5.3	U
108-05-4	Vinyl acetate	5.3	U
78-93-3	2-Butanone	5.3	U
156-59-2	cis-1,2-Dichloroethene	5.3	U
594-20-7	2,2-Dichloropropane	5.3	U
74-97-5	Bromochloromethane	5.3	U
67-66-3	Chloroform	5.3	U
71-55-6	1,1,1-Trichloroethane	5.3	U
563-58-6	1,1-Dichloropropene	5.3	U
56-23-5	Carbon tetrachloride	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
71-43-2	Benzene	5.3	U
79-01-6	Trichloroethene	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
74-95-3	Dibromomethane	5.3	U
75-27-4	Bromodichloromethane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
108-10-1	4-Methyl-2-pentanone	5.3	U
108-88-3	Toluene	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
142-28-9	1,3-Dichloropropane	5.3	U

*Handwritten signature and date: 8/1/11*

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

CLIENT SAMPLE NO.

SG-78 (4-5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-02A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3684.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 10 Date Analyzed: 05/11/2011  
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>µG/KG</u>	Q
127-18-4	Tetrachloroethene	5.3	U
591-78-6	2-Hexanone	5.3	U
124-48-1	Dibromochloromethane	5.3	U
106-93-4	1,2-Dibromoethane	5.3	U
108-90-7	Chlorobenzene	5.3	U
630-20-6	1,1,1,2-Tetrachloroethane	5.3	U
100-41-4	Ethylbenzene	5.3	U
1330-20-7	m,p-Xylene	5.3	U
95-47-6	o-Xylene	5.3	U
1330-20-7	Xylene (Total)	5.3	U
100-42-5	Styrene	5.3	U
75-25-2	Bromoform	5.3	U
98-82-8	Isopropylbenzene	5.3	U
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
108-86-1	Bromobenzene	5.3	U
96-18-4	1,2,3-Trichloropropane	5.3	U
103-65-1	n-Propylbenzene	5.3	U
95-49-8	2-Chlorotoluene	5.3	U
108-67-8	1,3,5-Trimethylbenzene	5.3	U
106-43-4	4-Chlorotoluene	5.3	U
98-06-6	tert-Butylbenzene	5.3	U
95-63-6	1,2,4-Trimethylbenzene	5.3	U
135-98-8	sec-Butylbenzene	5.3	U
99-87-6	4-Isopropyltoluene	5.3	U
541-73-1	1,3-Dichlorobenzene	5.3	U
106-46-7	1,4-Dichlorobenzene	5.3	U
104-51-8	n-Butylbenzene	5.3	U
95-50-1	1,2-Dichlorobenzene	5.3	U
96-12-8	1,2-Dibromo-3-chloropropane	5.3	U
120-82-1	1,2,4-Trichlorobenzene	5.3	U
87-68-3	Hexachlorobutadiene	5.3	U
87-61-6	1,2,3-Trichlorobenzene	5.3	U
91-20-3	Naphthalene	5.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.3	U
123-91-1	1,4-Dioxane	110	U R

*Aug 8/1/11*

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

CLIENT SAMPLE NO.

SG-78 (4-5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-02A  
 Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3684.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
 % Moisture: not dec. 10 Date Analyzed: 05/11/2011  
 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)	µG/KG	
110-82-7	Cyclohexane		5.3	U
79-20-9	Methyl acetate		5.3	U
108-87-2	Methylcyclohexane		5.3	U

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

CLIENT SAMPLE NO.

SG-78 (4-5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-02A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3684.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 10 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

SG-79 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-01A  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3683.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 11 Date Analyzed: 05/11/2011  
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
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
67-64-1	Acetone	7.6	5
74-88-4	Iodomethane	5.5	U
75-15-0	Carbon disulfide	5.5	U
75-09-2	Methylene chloride	5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	U
1634-04-4	Methyl tert-butyl ether	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
108-05-4	Vinyl acetate	5.5	U
78-93-3	2-Butanone	5.5	U R
156-59-2	cis-1,2-Dichloroethene	5.5	U
594-20-7	2,2-Dichloropropane	5.5	U
74-97-5	Bromochloromethane	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
563-58-6	1,1-Dichloropropene	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-43-2	Benzene	5.5	U
79-01-6	Trichloroethene	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
74-95-3	Dibromomethane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
108-10-1	4-Methyl-2-pentanone	5.5	U
108-88-3	Toluene	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
142-28-9	1,3-Dichloropropane	5.5	U

*Handwritten signature and date 8/11/11*

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

CLIENT SAMPLE NO.

SG-79 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-01A  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3683.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 11 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	5.5	U
591-78-6	2-Hexanone	5.5	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
630-20-6	1,1,1,2-Tetrachloroethane	5.5	U
100-41-4	Ethylbenzene	5.5	U
1330-20-7	m,p-Xylene	5.5	U
95-47-6	o-Xylene	5.5	U
1330-20-7	Xylene (Total)	5.5	U
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U
98-82-8	Isopropylbenzene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-86-1	Bromobenzene	5.5	U
96-18-4	1,2,3-Trichloropropane	5.5	U
103-65-1	n-Propylbenzene	5.5	U
95-49-8	2-Chlorotoluene	5.5	U
108-67-8	1,3,5-Trimethylbenzene	5.5	U
106-43-4	4-Chlorotoluene	5.5	U
98-06-6	tert-Butylbenzene	5.5	U
95-63-6	1,2,4-Trimethylbenzene	5.5	U
135-98-8	sec-Butylbenzene	5.5	U
99-87-6	4-Isopropyltoluene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
104-51-8	n-Butylbenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
120-82-1	1,2,4-Trichlorobenzene	5.5	U
87-68-3	Hexachlorobutadiene	5.5	U
87-61-6	1,2,3-Trichlorobenzene	5.5	U
91-20-3	Naphthalene	5.5 1.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.5	U
123-91-1	1,4-Dioxane	110	U R

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

CLIENT SAMPLE NO.

SG-79 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-01A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3683.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
 % Moisture: not dec. 11 Date Analyzed: 05/11/2011  
 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) $\mu$ G/KG	Q
110-82-7	Cyclohexane	5.5	U
79-20-9	Methyl acetate	5.5	U
108-87-2	Methylcyclohexane	5.5	U

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

CLIENT SAMPLE NO.

SG-79 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-01A  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3683.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 11 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu\text{G/KG}$  Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

SG-80 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-10A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3692.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.2 Date Analyzed: 05/11/2011  
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
75-71-8	Dichlorodifluoromethane	4.9	U
74-87-3	Chloromethane	4.9	U
75-01-4	Vinyl chloride	4.9	U
74-83-9	Bromomethane	4.9	U
75-00-3	Chloroethane	4.9	U
75-69-4	Trichlorofluoromethane	4.9	U
75-35-4	1,1-Dichloroethene	4.9	U
67-64-1	Acetone	3.9	J
74-88-4	Iodomethane	4.9	U
75-15-0	Carbon disulfide	4.9	U
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
108-05-4	Vinyl acetate	4.9	U
78-93-3	2-Butanone	4.9	U-R
156-59-2	cis-1,2-Dichloroethene	4.9	U
594-20-7	2,2-Dichloropropane	4.9	U
74-97-5	Bromochloromethane	4.9	U
67-66-3	Chloroform	4.9	U
71-55-6	1,1,1-Trichloroethane	4.9	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	4.9	U
74-95-3	Dibromomethane	4.9	U
75-27-4	Bromodichloromethane	4.9	U
10061-01-5	cis-1,3-Dichloropropene	4.9	U
108-10-1	4-Methyl-2-pentanone	4.9	U
108-88-3	Toluene	4.9	U
10061-02-6	trans-1,3-Dichloropropene	4.9	U
79-00-5	1,1,2-Trichloroethane	4.9	U
142-28-9	1,3-Dichloropropane	4.9	U

*Handwritten signature and date 8/11/11*

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

CLIENT SAMPLE NO.

SG-80 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-10A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3692.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.2 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	4.9	U
591-78-6	2-Hexanone	4.9	U
124-48-1	Dibromochloromethane	4.9	U
106-93-4	1,2-Dibromoethane	4.9	U
108-90-7	Chlorobenzene	4.9	U
630-20-6	1,1,1,2-Tetrachloroethane	4.9	U
100-41-4	Ethylbenzene	4.9	U
1330-20-7	m,p-Xylene	4.9	U
95-47-6	o-Xylene	4.9	U
1330-20-7	Xylene (Total)	4.9	U
100-42-5	Styrene	4.9	U
75-25-2	Bromoform	4.9	U
98-82-8	Isopropylbenzene	4.9	U
79-34-5	1,1,2,2-Tetrachloroethane	4.9	U
108-86-1	Bromobenzene	4.9	U
96-18-4	1,2,3-Trichloropropane	4.9	U
103-65-1	n-Propylbenzene	4.9	U
95-49-8	2-Chlorotoluene	4.9	U
108-67-8	1,3,5-Trimethylbenzene	4.9	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	4.9	U
120-82-1	1,2,4-Trichlorobenzene	4.9	U
87-68-3	Hexachlorobutadiene	4.9	U
87-61-6	1,2,3-Trichlorobenzene	4.9	U
91-20-3	Naphthalene	4.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.9	U
123-91-1	1,4-Dioxane	4.9	U

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

CLIENT SAMPLE NO.

SG-80 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-10A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3692.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.2 Date Analyzed: 05/11/2011  
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)	µG/KG	
110-82-7	Cyclohexane		4.9	U
79-20-9	Methyl acetate		4.9	U
108-87-2	Methylcyclohexane		4.9	U

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

CLIENT SAMPLE NO.

SG-80 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-10A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3692.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.2 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

SG-81 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-09A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3691.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.0 Date Analyzed: 05/11/2011  
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
75-71-8	Dichlorodifluoromethane	5.2	U
74-87-3	Chloromethane	5.2	U
75-01-4	Vinyl chloride	5.2	U
74-83-9	Bromomethane	5.2	U
75-00-3	Chloroethane	5.2	U
75-69-4	Trichlorofluoromethane	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
67-64-1	Acetone	2.5	J
74-88-4	Iodomethane	5.2	U
75-15-0	Carbon disulfide	5.2	U
75-09-2	Methylene chloride	5.2	U
156-60-5	trans-1,2-Dichloroethene	5.2	U
1634-04-4	Methyl tert-butyl ether	5.2	U
75-34-3	1,1-Dichloroethane	5.2	U
108-05-4	Vinyl acetate	5.2	U
78-93-3	2-Butanone	5.2	U. R
156-59-2	cis-1,2-Dichloroethene	5.2	U
594-20-7	2,2-Dichloropropane	5.2	U
74-97-5	Bromochloromethane	5.2	U
67-66-3	Chloroform	5.2	U
71-55-6	1,1,1-Trichloroethane	5.2	U
563-58-6	1,1-Dichloropropene	5.2	U
56-23-5	Carbon tetrachloride	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
71-43-2	Benzene	5.2	U
79-01-6	Trichloroethene	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
74-95-3	Dibromomethane	5.2	U
75-27-4	Bromodichloromethane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
108-10-1	4-Methyl-2-pentanone	5.2	U
108-88-3	Toluene	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
142-28-9	1,3-Dichloropropane	5.2	U

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8/1/11  
91

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

CLIENT SAMPLE NO.

SG-81 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-09A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3691.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.0 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	5.2	U
591-78-6	2-Hexanone	5.2	U
124-48-1	Dibromochloromethane	5.2	U
106-93-4	1,2-Dibromoethane	5.2	U
108-90-7	Chlorobenzene	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
100-41-4	Ethylbenzene	5.2	U
1330-20-7	m,p-Xylene	5.2	U
95-47-6	o-Xylene	5.2	U
1330-20-7	Xylene (Total)	5.2	U
100-42-5	Styrene	5.2	U
75-25-2	Bromoform	5.2	U
98-82-8	Isopropylbenzene	5.2	U
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
108-86-1	Bromobenzene	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
103-65-1	n-Propylbenzene	5.2	U
95-49-8	2-Chlorotoluene	5.2	U
108-67-8	1,3,5-Trimethylbenzene	5.2	U
106-43-4	4-Chlorotoluene	5.2	U
98-06-6	tert-Butylbenzene	5.2	U
95-63-6	1,2,4-Trimethylbenzene	5.2	U
135-98-8	sec-Butylbenzene	5.2	U
99-87-6	4-Isopropyltoluene	5.2	U
541-73-1	1,3-Dichlorobenzene	5.2	U
106-46-7	1,4-Dichlorobenzene	5.2	U
104-51-8	n-Butylbenzene	5.2	U
95-50-1	1,2-Dichlorobenzene	5.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.2	U
120-82-1	1,2,4-Trichlorobenzene	5.2	U
87-68-3	Hexachlorobutadiene	5.2	U
87-61-6	1,2,3-Trichlorobenzene	5.2	U
91-20-3	Naphthalene	5.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.2	U
123-91-1	1,4-Dioxane	100	U R

*Handwritten signature and date 8/1/11*

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

CLIENT SAMPLE NO.

SG-81 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-09A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3691.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.0 Date Analyzed: 05/11/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.2	U
79-20-9	Methyl acetate		5.2	U
108-87-2	Methylcyclohexane		5.2	U

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

CLIENT SAMPLE NO.

SG-81 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-09A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3691.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 8.0 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

SG-82 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-08A  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3690.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 15 Date Analyzed: 05/11/2011  
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
75-71-8	Dichlorodifluoromethane	5.9	U
74-87-3	Chloromethane	5.9	U
75-01-4	Vinyl chloride	5.9	U
74-83-9	Bromomethane	5.9	U
75-00-3	Chloroethane	5.9	U
75-69-4	Trichlorofluoromethane	5.9	U
75-35-4	1,1-Dichloroethene	5.9	U
67-64-1	Acetone	2.9	J
74-88-4	Iodomethane	5.9	U
75-15-0	Carbon disulfide	5.9	U
75-09-2	Methylene chloride	5.9	U
156-60-5	trans-1,2-Dichloroethene	5.9	U
1634-04-4	Methyl tert-butyl ether	5.9	U
75-34-3	1,1-Dichloroethane	5.9	U
108-05-4	Vinyl acetate	5.9	U
78-93-3	2-Butanone	5.9	U B
156-59-2	cis-1,2-Dichloroethene	5.9	U
594-20-7	2,2-Dichloropropane	5.9	U
74-97-5	Bromochloromethane	5.9	U
67-66-3	Chloroform	5.9	U
71-55-6	1,1,1-Trichloroethane	5.9	U
563-58-6	1,1-Dichloropropene	5.9	U
56-23-5	Carbon tetrachloride	5.9	U
107-06-2	1,2-Dichloroethane	5.9	U
71-43-2	Benzene	5.9	U
79-01-6	Trichloroethene	5.9	U
78-87-5	1,2-Dichloropropane	5.9	U
74-95-3	Dibromomethane	5.9	U
75-27-4	Bromodichloromethane	5.9	U
10061-01-5	cis-1,3-Dichloropropene	5.9	U
108-10-1	4-Methyl-2-pentanone	5.9	U
108-88-3	Toluene	5.9	U
10061-02-6	trans-1,3-Dichloropropene	5.9	U
79-00-5	1,1,2-Trichloroethane	5.9	U
142-28-9	1,3-Dichloropropane	5.9	U

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

CLIENT SAMPLE NO.

SG-82 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-08A  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3690.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 15 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	1.4	J
591-78-6	2-Hexanone	5.9	U
124-48-1	Dibromochloromethane	5.9	U
106-93-4	1,2-Dibromoethane	5.9	U
108-90-7	Chlorobenzene	5.9	U
630-20-6	1,1,1,2-Tetrachloroethane	5.9	U
100-41-4	Ethylbenzene	5.9	U
1330-20-7	m,p-Xylene	5.9	U
95-47-6	o-Xylene	5.9	U
1330-20-7	Xylene (Total)	5.9	U
100-42-5	Styrene	5.9	U
75-25-2	Bromoform	5.9	U
98-82-8	Isopropylbenzene	5.9	U
79-34-5	1,1,2,2-Tetrachloroethane	5.9	U
108-86-1	Bromobenzene	5.9	U
96-18-4	1,2,3-Trichloropropane	5.9	U
103-65-1	n-Propylbenzene	5.9	U
95-49-8	2-Chlorotoluene	5.9	U
108-67-8	1,3,5-Trimethylbenzene	5.9	U
106-43-4	4-Chlorotoluene	5.9	U
98-06-6	tert-Butylbenzene	5.9	U
95-63-6	1,2,4-Trimethylbenzene	5.9	U
135-98-8	sec-Butylbenzene	5.9	U
99-87-6	4-Isopropyltoluene	5.9	U
541-73-1	1,3-Dichlorobenzene	5.9	U
106-46-7	1,4-Dichlorobenzene	5.9	U
104-51-8	n-Butylbenzene	5.9	U
95-50-1	1,2-Dichlorobenzene	5.9	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	U
120-82-1	1,2,4-Trichlorobenzene	5.9	U
87-68-3	Hexachlorobutadiene	5.9	U
87-61-6	1,2,3-Trichlorobenzene	5.9	U
91-20-3	Naphthalene	5.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.9	U
123-91-1	1,4-Dioxane	120	U R

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

CLIENT SAMPLE NO.

SG-82 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-08A  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3690.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 15 Date Analyzed: 05/11/2011  
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	
110-82-7	Cyclohexane		5.9	U
79-20-9	Methyl acetate		5.9	U
108-87-2	Methylcyclohexane		5.9	U

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

CLIENT SAMPLE NO.

SG-82 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-08A  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3690.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 15 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

SG-83 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-07A  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3716.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 15 Date Analyzed: 05/12/2011  
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>µG/KG</u>	Q
75-71-8	Dichlorodifluoromethane	5.8	U
74-87-3	Chloromethane	5.8	U
75-01-4	Vinyl chloride	5.8	U
74-83-9	Bromomethane	5.8	U
75-00-3	Chloroethane	5.8	U
75-69-4	Trichlorofluoromethane	5.8	U
75-35-4	1,1-Dichloroethene	5.8	U
67-64-1	Acetone	3.5	J
74-88-4	Iodomethane	5.8	U
75-15-0	Carbon disulfide	5.8	U
75-09-2	Methylene chloride	5.8	U
156-60-5	trans-1,2-Dichloroethene	5.8	U
1634-04-4	Methyl tert-butyl ether	5.8	U
75-34-3	1,1-Dichloroethane	5.8	U
108-05-4	Vinyl acetate	5.8	U
78-93-3	2-Butanone	<del>5.8</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene	5.8	U
594-20-7	2,2-Dichloropropane	5.8	U
74-97-5	Bromochloromethane	5.8	U
67-66-3	Chloroform	5.8	U
71-55-6	1,1,1-Trichloroethane	5.8	U
563-58-6	1,1-Dichloropropene	5.8	U
56-23-5	Carbon tetrachloride	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
71-43-2	Benzene	5.8	U
79-01-6	Trichloroethene	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U
74-95-3	Dibromomethane	5.8	U
75-27-4	Bromodichloromethane	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
108-10-1	4-Methyl-2-pentanone	5.8	U
108-88-3	Toluene	1.5	J
10061-02-6	trans-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
142-28-9	1,3-Dichloropropane	5.8	U

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

CLIENT SAMPLE NO.

SG-83 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-07A  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3716.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 15 Date Analyzed: 05/12/2011  
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
127-18-4	Tetrachloroethene	11	
591-78-6	2-Hexanone	5.8	U
124-48-1	Dibromochloromethane	5.8	U
106-93-4	1,2-Dibromoethane	5.8	U
108-90-7	Chlorobenzene	5.8	U
630-20-6	1,1,1,2-Tetrachloroethane	5.8	U
100-41-4	Ethylbenzene	5.8	U
1330-20-7	m,p-Xylene	5.8	U
95-47-6	o-Xylene	5.8	U
1330-20-7	Xylene (Total)	5.8	U
100-42-5	Styrene	5.8	U
75-25-2	Bromoform	5.8	U
98-82-8	Isopropylbenzene	5.8	U
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U
108-86-1	Bromobenzene	5.8	U
96-18-4	1,2,3-Trichloropropane	5.8	U
103-65-1	n-Propylbenzene	5.8	U
95-49-8	2-Chlorotoluene	5.8	U
108-67-8	1,3,5-Trimethylbenzene	5.8	U
106-43-4	4-Chlorotoluene	5.8	U
98-06-6	tert-Butylbenzene	5.8	U
95-63-6	1,2,4-Trimethylbenzene	5.8	U
135-98-8	sec-Butylbenzene	5.8	U
99-87-6	4-Isopropyltoluene	5.8	U
541-73-1	1,3-Dichlorobenzene	5.8	U
106-46-7	1,4-Dichlorobenzene	5.8	U
104-51-8	n-Butylbenzene	5.8	U
95-50-1	1,2-Dichlorobenzene	5.8	U
96-12-8	1,2-Dibromo-3-chloropropane	5.8	U
120-82-1	1,2,4-Trichlorobenzene	5.8	U
87-68-3	Hexachlorobutadiene	5.8	U
87-61-6	1,2,3-Trichlorobenzene	5.8	U
91-20-3	Naphthalene	5.8	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.8	U
123-91-1	1,4-Dioxane	120	U R

*Handwritten signature and date: 8/1/11*

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

CLIENT SAMPLE NO.

SG-83 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-07A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3716.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
 % Moisture: not dec. 15 Date Analyzed: 05/12/2011  
 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)	µG/KG	
110-82-7	Cyclohexane		5.8	U
79-20-9	Methyl acetate		5.8	U
108-87-2	Methylcyclohexane		5.8	U

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

CLIENT SAMPLE NO.

SG-83 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-07A  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V8A3716.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 15 Date Analyzed: 05/12/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu\text{G/KG}$  Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

SG-84 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-03A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3685.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 9.8 Date Analyzed: 05/11/2011  
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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	3.5	J
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	<del>5.0</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

SG-84 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-03A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3685.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 9.8 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	14	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R

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

CLIENT SAMPLE NO.

SG-84 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-03A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3685.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 9.8 Date Analyzed: 05/11/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

SG-84 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-03A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3685.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 9.8 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu\text{G/KG}$  Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

SG-85 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-04A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3686.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 11 Date Analyzed: 05/11/2011  
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>µG/KG</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	2.8	J
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U-R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

SG-85 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-04A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3686.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 11 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U <i>B</i>

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

CLIENT SAMPLE NO.

SG-85 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-04A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3686.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 11 Date Analyzed: 05/11/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

SG-85 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-04A  
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V8A3686.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 11 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

SG-86 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-05A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3687.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 4.0 Date Analyzed: 05/11/2011  
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) $\mu$ G/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	2.9	J
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

SG-86 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-05A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3687.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 4.0 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	1.4	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U B

*Handwritten:* 8/1/11

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

CLIENT SAMPLE NO.

SG-86 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-05A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3687.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 4.0 Date Analyzed: 05/11/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

SG-86 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-05A  
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8A3687.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 4.0 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu\text{G/KG}$  Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

SG-87 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-06A  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3688.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 10 Date Analyzed: 05/11/2011  
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>µG/KG</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	2.8	J
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U <i>R</i>
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

SG-87 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-06A  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3688.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 10 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	99	U R

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

CLIENT SAMPLE NO.

SG-87 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-06A  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3688.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 10 Date Analyzed: 05/11/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

SG-87 (7-8')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-06A  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V8A3688.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/10/2011  
% Moisture: not dec. 10 Date Analyzed: 05/11/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-004

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1950.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	1.0	J
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	4.8	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	37	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-004

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1950.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	1.5	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-004

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1950.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-004

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1950.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-006D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1763.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	26	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	4.6	J
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	39	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*Check*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-006D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1763.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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
127-18-4	Tetrachloroethene	6600 <del>3900</del>	ED
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U-R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten:* 8/8/11

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

CLIENT SAMPLE NO.

DEC-006D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1763.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-006D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1763.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-006DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1796.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	250	U <i>S</i>
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	250	U
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorofluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	250	U <i>R</i>
74-88-4	Iodomethane	250	U
75-15-0	Carbon disulfide	250	U
75-09-2	Methylene chloride	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl acetate	250	U
78-93-3	2-Butanone	250	U <i>R</i>
156-59-2	cis-1,2-Dichloroethene	250	U
594-20-7	2,2-Dichloropropane	250	U
74-97-5	Bromochloromethane	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
563-58-6	1,1-Dichloropropene	250	U
56-23-5	Carbon tetrachloride	250	U
107-06-2	1,2-Dichloroethane	250	U
71-43-2	Benzene	250	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
74-95-3	Dibromomethane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
142-28-9	1,3-Dichloropropane	250	U

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

CLIENT SAMPLE NO.

DEC-006DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1796.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
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
127-18-4	Tetrachloroethene	6600	D
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
1330-20-7	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U
1330-20-7	Xylene (Total)	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-68-3	Hexachlorobutadiene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	U
123-91-1	1,4-Dioxane	5000	U R
110-82-7	Cyclohexane	250	U
79-20-9	Methyl acetate	250	U

*copy  
8/8/11*

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

CLIENT SAMPLE NO.

DEC-006DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1796.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
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	
108-87-2	Methylcyclohexane		250	U

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

CLIENT SAMPLE NO.

DEC-006DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V611796.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*CHS*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-006DD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1762.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		69	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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		2.6	J
75-34-3	1,1-Dichloroethane		5.4	
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		16	
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		13	
563-58-6	1,1-Dichloropropene		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	210 -250		U
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-006DD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1762.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	410 <del>540</del>	<del>U</del> 3
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U 3
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U 3
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-006DD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1762.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
 % Moisture: not dec. Date Analyzed: 06/28/2011  
 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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-006DD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1762.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-006DDDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1793.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
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
75-71-8	Dichlorodifluoromethane		25	U
74-87-3	Chloromethane		25	U
75-01-4	Vinyl chloride		25	U
74-83-9	Bromomethane		25	U
75-00-3	Chloroethane		25	U
75-69-4	Trichlorofluoromethane		25	U
75-35-4	1,1-Dichloroethene		54	D
67-64-1	Acetone		25	U
74-88-4	Iodomethane		25	U
75-15-0	Carbon disulfide		25	U
75-09-2	Methylene chloride		25	U
156-60-5	trans-1,2-Dichloroethene		25	U
1634-04-4	Methyl tert-butyl ether		25	U
75-34-3	1,1-Dichloroethane		25	U
108-05-4	Vinyl acetate		25	U
78-93-3	2-Butanone		25	U
156-59-2	cis-1,2-Dichloroethene		12	DJ
594-20-7	2,2-Dichloropropane		25	U
74-97-5	Bromochloromethane		25	U
67-66-3	Chloroform		25	U
71-55-6	1,1,1-Trichloroethane		12	DJ
563-58-6	1,1-Dichloropropene		25	U
56-23-5	Carbon tetrachloride		25	U
107-06-2	1,2-Dichloroethane		25	U
71-43-2	Benzene		25	U
79-01-6	Trichloroethene		210	D
78-87-5	1,2-Dichloropropane		25	U
74-95-3	Dibromomethane		25	U
75-27-4	Bromodichloromethane		25	U
10061-01-5	cis-1,3-Dichloropropene		25	U
108-10-1	4-Methyl-2-pentanone		25	U
108-88-3	Toluene		25	U
10061-02-6	trans-1,3-Dichloropropene		25	U
79-00-5	1,1,2-Trichloroethane		25	U
142-28-9	1,3-Dichloropropane		25	U

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

CLIENT SAMPLE NO.

DEC-006DDDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1793.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	410	D
591-78-6	2-Hexanone	25	U
124-48-1	Dibromochloromethane	25	U
106-93-4	1,2-Dibromoethane	25	U
108-90-7	Chlorobenzene	25	U
630-20-6	1,1,1,2-Tetrachloroethane	25	U
100-41-4	Ethylbenzene	25	U
1330-20-7	m,p-Xylene	25	U
95-47-6	o-Xylene	25	U
1330-20-7	Xylene (Total)	25	U
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
98-82-8	Isopropylbenzene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-86-1	Bromobenzene	25	U
96-18-4	1,2,3-Trichloropropane	25	U
95-49-8	2-Chlorotoluene	25	U
108-67-8	1,3,5-Trimethylbenzene	25	U
106-43-4	4-Chlorotoluene	25	U
98-06-6	tert-Butylbenzene	25	U
95-63-6	1,2,4-Trimethylbenzene	25	U
135-98-8	sec-Butylbenzene	25	U
99-87-6	4-Isopropyltoluene	25	U
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
96-12-8	1,2-Dibromo-3-chloropropane	25	U
120-82-1	1,2,4-Trichlorobenzene	25	U
87-68-3	Hexachlorobutadiene	25	U
87-61-6	1,2,3-Trichlorobenzene	25	U
91-20-3	Naphthalene	25	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	25	U
123-91-1	1,4-Dioxane	500	U R
110-82-7	Cyclohexane	25	U
79-20-9	Methyl acetate	25	U

*Handwritten signature*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-006DDDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1793.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
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	
108-87-2	Methylcyclohexane		25	U

*DEK*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-006DDDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-05ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1793.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Handwritten signature*  
8/8/11

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

DEC-00600

CLIENT SAMPLE NO.

DUP-062011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1764.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U-5
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U-5
75-35-4	1,1-Dichloroethene	72	5
67-64-1	Acetone	5.0	U-R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	2.6	J
75-34-3	1,1-Dichloroethane	5.0	
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U-R
156-59-2	cis-1,2-Dichloroethene	16	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	13	
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	1.3	J
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	210 240	ED
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U-5
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

DEC-006DD

CLIENT SAMPLE NO.

DUP-062011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1764.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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
127-18-4	Tetrachloroethene	420 570	ED
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	400	U-R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

OK  
8/8/11

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

DEC-006DD

CLIENT SAMPLE NO.

DUP-062011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1764.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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
108-87-2	Methylcyclohexane	5.0	U

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

DEC-006DD

CLIENT SAMPLE NO.

DUP-062011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1764.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

DEC-006 DD

CLIENT SAMPLE NO.

DUP-062011DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-07ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1794.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
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
75-71-8	Dichlorodifluoromethane	25	U
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
74-83-9	Bromomethane	25	U
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	54	D
67-64-1	Acetone	25	U
74-88-4	Iodomethane	25	U
75-15-0	Carbon disulfide	25	U
75-09-2	Methylene chloride	25	U
156-60-5	trans-1,2-Dichloroethene	25	U
1634-04-4	Methyl tert-butyl ether	25	U
75-34-3	1,1-Dichloroethane	25	U
108-05-4	Vinyl acetate	25	U
78-93-3	2-Butanone	25	U
156-59-2	cis-1,2-Dichloroethene	12	DJ
594-20-7	2,2-Dichloropropane	25	U
74-97-5	Bromochloromethane	25	U
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	12	DJ
563-58-6	1,1-Dichloropropene	25	U
56-23-5	Carbon tetrachloride	25	U
107-06-2	1,2-Dichloroethane	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	210	D
78-87-5	1,2-Dichloropropane	25	U
74-95-3	Dibromomethane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
142-28-9	1,3-Dichloropropane	25	U

*Handwritten signature and date 8/8/11*

DEC-006DD

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

CLIENT SAMPLE NO.

DUP-062011DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1102

Mod. Ref No.:

SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1102-07ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V6I1794.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/24/2011

% Moisture: not dec.

Date Analyzed: 06/29/2011

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 5.0

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	
127-18-4	Tetrachloroethene		420	D
591-78-6	2-Hexanone		25	U
124-48-1	Dibromochloromethane		25	U
106-93-4	1,2-Dibromoethane		25	U
108-90-7	Chlorobenzene		25	U
630-20-6	1,1,1,2-Tetrachloroethane		25	U
100-41-4	Ethylbenzene		25	U
1330-20-7	m,p-Xylene		25	U
95-47-6	o-Xylene		25	U
1330-20-7	Xylene (Total)		25	U
100-42-5	Styrene		25	U
75-25-2	Bromoform		25	U
98-82-8	Isopropylbenzene		25	U
79-34-5	1,1,2,2-Tetrachloroethane		25	U
108-86-1	Bromobenzene		25	U
96-18-4	1,2,3-Trichloropropane		25	U
95-49-8	2-Chlorotoluene		25	U
108-67-8	1,3,5-Trimethylbenzene		25	U
106-43-4	4-Chlorotoluene		25	U
98-06-6	tert-Butylbenzene		25	U
95-63-6	1,2,4-Trimethylbenzene		25	U
135-98-8	sec-Butylbenzene		25	U
99-87-6	4-Isopropyltoluene		25	U
541-73-1	1,3-Dichlorobenzene		25	U
106-46-7	1,4-Dichlorobenzene		25	U
95-50-1	1,2-Dichlorobenzene		25	U
96-12-8	1,2-Dibromo-3-chloropropane		25	U
120-82-1	1,2,4-Trichlorobenzene		25	U
87-68-3	Hexachlorobutadiene		25	U
87-61-6	1,2,3-Trichlorobenzene		25	U
91-20-3	Naphthalene		25	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		25	U
123-91-1	1,4-Dioxane		500	U
110-82-7	Cyclohexane		25	U
79-20-9	Methyl acetate		25	U

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

DEC-006 DD

CLIENT SAMPLE NO.

DUP-062011DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-07ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1794.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
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	
108-87-2	Methylcyclohexane		25	U

*OK*  
8/8/11

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

DEC-006DD

CLIENT SAMPLE NO.

DUP-062011DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-07ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1794.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*dupx*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-007

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1826.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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		2.8	J
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U R
156-59-2	cis-1,2-Dichloroethene		7.9	
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		2.7	J
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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		25	
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-007

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1826.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	<del>1200</del> <del>1300</del>	ED
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<del>100</del>	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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8/11

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

CLIENT SAMPLE NO.

DEC-007

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1826.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-007

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1826.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-007DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-17ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1872.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		50	U
74-87-3	Chloromethane		50	U
75-01-4	Vinyl chloride		50	U
74-83-9	Bromomethane		50	U
75-00-3	Chloroethane		50	U
75-69-4	Trichlorofluoromethane		50	U
75-35-4	1,1-Dichloroethene		50	U
67-64-1	Acetone		50	U R
74-88-4	Iodomethane		50	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		50	U
78-93-3	2-Butanone		50	U R
156-59-2	cis-1,2-Dichloroethene		50	U
594-20-7	2,2-Dichloropropane		50	U
74-97-5	Bromochloromethane		50	U
67-66-3	Chloroform		50	U
71-55-6	1,1,1-Trichloroethane		50	U
563-58-6	1,1-Dichloropropene		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		22	DJ
78-87-5	1,2-Dichloropropane		50	U
74-95-3	Dibromomethane		50	U
75-27-4	Bromodichloromethane		50	U
10061-01-5	cis-1,3-Dichloropropene		50	U
108-10-1	4-Methyl-2-pentanone		50	U
108-88-3	Toluene		50	U
10061-02-6	trans-1,3-Dichloropropene		50	U
79-00-5	1,1,2-Trichloroethane		50	U
142-28-9	1,3-Dichloropropane		50	U

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8/8/11

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

CLIENT SAMPLE NO.

DEC-007DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-17ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1872.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	1200	D
591-78-6	2-Hexanone	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromoethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-86-1	Bromobenzene	50	U
96-18-4	1,2,3-Trichloropropane	50	U
95-49-8	2-Chlorotoluene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
91-20-3	Naphthalene	50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50	U
123-91-1	1,4-Dioxane	1000	U R
110-82-7	Cyclohexane	50	U
79-20-9	Methyl acetate	50	U

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

CLIENT SAMPLE NO.

DEC-007DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1102

Mod. Ref No.: SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1102-17ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V6I1872.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/24/2011

% Moisture: not dec.

Date Analyzed: 07/01/2011

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:		Q
		(ug/L or ug/Kg)	ug/L	
108-87-2	Methylcyclohexane		50	U

OK  
8/1/11

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

CLIENT SAMPLE NO.

DEC-007DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-17ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1872.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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8/8/11

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

CLIENT SAMPLE NO.

DEC-007D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1828.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U <i>5</i>
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	4.4	J
67-64-1	Acetone	<del>5.0</del>	<del>U</del> <i>R</i>
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	1.2	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	<del>5.0</del>	<del>U</del> <i>R</i>
156-59-2	cis-1,2-Dichloroethene	4.8	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.5	J
563-58-6	1,1-Dichloropropene	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	26	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*Handwritten signature*  
8/13/11

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

CLIENT SAMPLE NO.

DEC-007D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1828.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	340 <del>390</del>	<del>U</del> D
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U S
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U S
87-61-6	1,2,3-Trichlorobenzene	5.0	U S
91-20-3	Naphthalene	5.0	U S
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<del>100</del>	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-007D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1828.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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)	µG/L
108-87-2	Methylcyclohexane	5.0	U

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

CLIENT SAMPLE NO.

DEC-007D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1828.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-007DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1866.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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
75-71-8	Dichlorodifluoromethane		20	U
74-87-3	Chloromethane		20	U
75-01-4	Vinyl chloride		20	U
74-83-9	Bromomethane		20	U
75-00-3	Chloroethane		20	U
75-69-4	Trichlorofluoromethane		20	U
75-35-4	1,1-Dichloroethene		20	U
67-64-1	Acetone		20	U R
74-88-4	Iodomethane		20	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		20	U
78-93-3	2-Butanone		20	U R
156-59-2	cis-1,2-Dichloroethene		20	U
594-20-7	2,2-Dichloropropane		20	U
74-97-5	Bromochloromethane		20	U
67-66-3	Chloroform		20	U
71-55-6	1,1,1-Trichloroethane		20	U
563-58-6	1,1-Dichloropropene		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		24	D
78-87-5	1,2-Dichloropropane		20	U
74-95-3	Dibromomethane		20	U
75-27-4	Bromodichloromethane		20	U
10061-01-5	cis-1,3-Dichloropropene		20	U
108-10-1	4-Methyl-2-pentanone		20	U
108-88-3	Toluene		20	U
10061-02-6	trans-1,3-Dichloropropene		20	U
79-00-5	1,1,2-Trichloroethane		20	U
142-28-9	1,3-Dichloropropane		20	U

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

CLIENT SAMPLE NO.

DEC-007DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1866.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	340	D
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	10	DJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
123-91-1	1,4-Dioxane	400	U
110-82-7	Cyclohexane	20	U
79-20-9	Methyl acetate	20	U

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

CLIENT SAMPLE NO.

DEC-007DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1866.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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	
108-87-2	Methylcyclohexane		20	U

*Q152*  
*8/8/11*

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

CLIENT SAMPLE NO.

DEC-007DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-19ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1866.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Q.152*  
*8/8/11*

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

CLIENT SAMPLE NO.

DEC-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-09A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4342.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	19	
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	1.4	J
75-35-4	1,1-Dichloroethene	2.0	J
67-64-1	Acetone	<del>5.0</del>	<del>U</del> R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	3.5	J
1634-04-4	Methyl tert-butyl ether	1.1	J
75-34-3	1,1-Dichloroethane	3.4	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	<del>5.0</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene	41	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.6	J
71-55-6	1,1,1-Trichloroethane	1.8	J
563-58-6	1,1-Dichloropropene	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 S
79-01-6	Trichloroethene	120	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-09A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4342.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	<u>1300</u> <del>2300</del>	<u>ND</u>
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U-3
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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-3
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<u>100</u>	U-3
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date: 8/9/11*

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

CLIENT SAMPLE NO.

DEC-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-09A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4342.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
 % Moisture: not dec. Date Analyzed: 07/02/2011  
 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) $\mu\text{G/L}$	Q
108-87-2	Methylcyclohexane	5.0	U <i>5</i>

*Copy  
8/9/11*

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

CLIENT SAMPLE NO.

DEC-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-09A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4342.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-008DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-09ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1908.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0  
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
75-71-8	Dichlorodifluoromethane		130	U
74-87-3	Chloromethane		130	U
75-01-4	Vinyl chloride		130	U
74-83-9	Bromomethane		130	U
75-00-3	Chloroethane		130	U
75-69-4	Trichlorofluoromethane		130	U
75-35-4	1,1-Dichloroethene		130	U
67-64-1	Acetone		130	U
74-88-4	Iodomethane		130	U
75-15-0	Carbon disulfide		130	U
75-09-2	Methylene chloride		130	U
156-60-5	trans-1,2-Dichloroethene		130	U
1634-04-4	Methyl tert-butyl ether		130	U
75-34-3	1,1-Dichloroethane		130	U
108-05-4	Vinyl acetate		130	U
78-93-3	2-Butanone		130	U
156-59-2	cis-1,2-Dichloroethene		38	DJ
594-20-7	2,2-Dichloropropane		130	U
74-97-5	Bromochloromethane		130	U
67-66-3	Chloroform		130	U
71-55-6	1,1,1-Trichloroethane		130	U
563-58-6	1,1-Dichloropropene		130	U
56-23-5	Carbon tetrachloride		130	U
107-06-2	1,2-Dichloroethane		130	U
71-43-2	Benzene		130	U
79-01-6	Trichloroethene		100	DJ
78-87-5	1,2-Dichloropropane		130	U
74-95-3	Dibromomethane		130	U
75-27-4	Bromodichloromethane		130	U
10061-01-5	cis-1,3-Dichloropropene		130	U
108-10-1	4-Methyl-2-pentanone		130	U
108-88-3	Toluene		130	U
10061-02-6	trans-1,3-Dichloropropene		130	U
79-00-5	1,1,2-Trichloroethane		130	U
142-28-9	1,3-Dichloropropane		130	U

*Handwritten signature/initials*

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

CLIENT SAMPLE NO.

DEC-008DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-09ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V6I1908.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/05/2011

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 25.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	1300	D
591-78-6	2-Hexanone	130	U
124-48-1	Dibromochloromethane	130	U
106-93-4	1,2-Dibromoethane	130	U
108-90-7	Chlorobenzene	130	U
630-20-6	1,1,1,2-Tetrachloroethane	130	U
100-41-4	Ethylbenzene	130	U
1330-20-7	m,p-Xylene	130	U
95-47-6	o-Xylene	130	U
1330-20-7	Xylene (Total)	130	U
100-42-5	Styrene	130	U
75-25-2	Bromoform	130	U
98-82-8	Isopropylbenzene	130	U
79-34-5	1,1,2,2-Tetrachloroethane	130	U
108-86-1	Bromobenzene	130	U
96-18-4	1,2,3-Trichloropropane	130	U
95-49-8	2-Chlorotoluene	130	U
108-67-8	1,3,5-Trimethylbenzene	130	U
106-43-4	4-Chlorotoluene	130	U
98-06-6	tert-Butylbenzene	130	U
95-63-6	1,2,4-Trimethylbenzene	130	U
135-98-8	sec-Butylbenzene	130	U
99-87-6	4-Isopropyltoluene	130	U
541-73-1	1,3-Dichlorobenzene	130	U
106-46-7	1,4-Dichlorobenzene	130	U
95-50-1	1,2-Dichlorobenzene	130	U
96-12-8	1,2-Dibromo-3-chloropropane	130	U
120-82-1	1,2,4-Trichlorobenzene	130	U
87-68-3	Hexachlorobutadiene	130	U
87-61-6	1,2,3-Trichlorobenzene	130	U
91-20-3	Naphthalene	130	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	130	U
123-91-1	1,4-Dioxane	2500	U
110-82-7	Cyclohexane	130	U
79-20-9	Methyl acetate	130	U

*Handwritten:* 8/9/11

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

CLIENT SAMPLE NO.

DEC-008DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-09ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1908.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0  
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	
108-87-2	Methylcyclohexane		130	U

*Handwritten signature*  
8/19/11

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

CLIENT SAMPLE NO.

DEC-008DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-09ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1908.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*JPB*  
*8/9/11*

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

CLIENT SAMPLE NO.

DEC-009

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4381.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U <i>S</i>
75-01-4	Vinyl chloride	54	
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U <i>S</i>
75-35-4	1,1-Dichloroethene	5.1	
67-64-1	Acetone	5.0	U <i>R</i>
74-88-4	Iodomethane	5.0	U <i>S</i>
75-15-0	Carbon disulfide	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	1.1	J
75-34-3	1,1-Dichloroethane	6.5	
108-05-4	Vinyl acetate	5.0	U <i>S</i>
78-93-3	2-Butanone	5.0	U <i>R</i>
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U <i>S</i>
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	70	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U <i>S</i>
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*Handwritten signature and date 8/9/11*

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

CLIENT SAMPLE NO.

DEC-009

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4381.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	180	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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	3.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*avg  
8/11/11*

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

CLIENT SAMPLE NO.

DEC-009

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4381.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-009

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4381.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	4912-92-9	1H-Indene, 2,3-dihydro-1,1-d	11.837	5.6	NJ
02	488-23-3	Benzene, 1,2,3,4-tetramethyl	11.934	7.7	NJ

<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-010

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1825.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U <i>5</i>
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	25	
67-64-1	Acetone	<del>5.0</del>	<del>U</del> <i>R</i>
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	28	
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	<del>5.0</del>	<del>U</del> <i>R</i>
156-59-2	cis-1,2-Dichloroethene	8.5	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	87	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*OK*  
*5/8/11*

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

CLIENT SAMPLE NO.

DEC-010

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1825.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	20	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten:* OK 8/3/11

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

CLIENT SAMPLE NO.

DEC-010

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1825.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-010

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-16A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1825.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1827.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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
75-71-8	Dichlorodifluoromethane		5.0	U <i>S</i>
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		<del>5.0</del>	U <i>R</i>
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		<del>5.0</del>	U <i>R</i>
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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		17	<i>S</i>
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

*Handwritten signature and date 4/8/11*

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

CLIENT SAMPLE NO.

DEC-011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1827.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	13	✓
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U ✓
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U ✓
87-61-6	1,2,3-Trichlorobenzene	5.0	U ✓
91-20-3	Naphthalene	5.0	U ✓
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1827.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-011

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1827.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-011RX

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1102

Mod. Ref No.: SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1102-18ARE

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4415.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/24/2011

% Moisture: not dec.

Date Analyzed: 07/06/2011

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
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U R
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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		20	
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-011RX

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1102

Mod. Ref No.: SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1102-18ARE

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4415.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/24/2011

% Moisture: not dec.

Date Analyzed: 07/06/2011

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)	µg/L	Q
127-18-4	Tetrachloroethene		5.1	
591-78-6	2-Hexanone		5.0	U-5
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
630-20-6	1,1,1,2-Tetrachloroethane		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
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
108-86-1	Bromobenzene		5.0	U
96-18-4	1,2,3-Trichloropropane		5.0	U
95-49-8	2-Chlorotoluene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
106-43-4	4-Chlorotoluene		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
99-87-6	4-Isopropyltoluene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U
120-82-1	1,2,4-Trichlorobenzene		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
123-91-1	1,4-Dioxane		100	U R
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U

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

CLIENT SAMPLE NO.

DEC-011RX

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-18ARE  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4415.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-011RX

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-18ARE  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4415.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-012

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4336.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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)	µg/L	Q
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U R
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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		3.9	J
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

*Handwritten signature and date 8/8/11*

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

CLIENT SAMPLE NO.

DEC-012

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4336.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>µg/L</u>	<u>Q</u>
127-18-4	Tetrachloroethene	<u>270</u> <del>940</del>	<u>ED</u>
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<u>100</u>	<u>U</u>
110-82-7	Cyclohexane	5.0	<u>U</u>
79-20-9	Methyl acetate	5.0	U

*any*  
*8/8/11*

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

CLIENT SAMPLE NO.

DEC-012

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4336.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <u>5</u>

*Handwritten signature*  
5/8/11

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

CLIENT SAMPLE NO.

DEC-012

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4336.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-012DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1903.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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
75-71-8	Dichlorodifluoromethane		20	U
74-87-3	Chloromethane		20	U
75-01-4	Vinyl chloride		20	U
74-83-9	Bromomethane		20	U
75-00-3	Chloroethane		20	U
75-69-4	Trichlorofluoromethane		20	U
75-35-4	1,1-Dichloroethene		20	U
67-64-1	Acetone		20	U R
74-88-4	Iodomethane		20	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		20	U
78-93-3	2-Butanone		20	U R
156-59-2	cis-1,2-Dichloroethene		20	U
594-20-7	2,2-Dichloropropane		20	U
74-97-5	Bromochloromethane		20	U
67-66-3	Chloroform		20	U
71-55-6	1,1,1-Trichloroethane		20	U
563-58-6	1,1-Dichloropropene		20	U
56-23-5	Carbon tetrachloride		20	U
107-06-2	1,2-Dichloroethane		20	U
71-43-2	Benzene		1.8	DJ
79-01-6	Trichloroethene		3.4	DJ
78-87-5	1,2-Dichloropropane		20	U
74-95-3	Dibromomethane		20	U
75-27-4	Bromodichloromethane		20	U
10061-01-5	cis-1,3-Dichloropropene		20	U
108-10-1	4-Methyl-2-pentanone		20	U
108-88-3	Toluene		1.7	DJ
10061-02-6	trans-1,3-Dichloropropene		20	U
79-00-5	1,1,2-Trichloroethane		20	U
142-28-9	1,3-Dichloropropane		20	U

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

CLIENT SAMPLE NO.

DEC-012DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1903.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	270	D
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
1330-20-7	m,p-Xylene	3.7	DJ
95-47-6	o-Xylene	20	U
1330-20-7	Xylene (Total)	3.7	DJ
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	20	U
98-06-6	tert-Butylbenzene	20	U
95-63-6	1,2,4-Trimethylbenzene	2.6	DJ
135-98-8	sec-Butylbenzene	20	U
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	8.0	DJ
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
123-91-1	1,4-Dioxane	400	U R
110-82-7	Cyclohexane	20	U
79-20-9	Methyl acetate	20	U

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

CLIENT SAMPLE NO.

DEC-012DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1903.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		20	U

*Handwritten signature and date 8/8/11*

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

CLIENT SAMPLE NO.

DEC-012DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-23ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1903.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*over*  
*8/8/11*

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

CLIENT SAMPLE NO.

DEC-013

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4385.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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)	µg/L	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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		2.3	J
75-34-3	1,1-Dichloroethane		2.3	J
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		13	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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		36	
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-013

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4385.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ g/L		Q
127-18-4	Tetrachloroethene	2100	3400	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
630-20-6	1,1,1,2-Tetrachloroethane		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
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
108-86-1	Bromobenzene		5.0	U
96-18-4	1,2,3-Trichloropropane		2.3	J
95-49-8	2-Chlorotoluene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
106-43-4	4-Chlorotoluene		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		1.9	J
99-87-6	4-Isopropyltoluene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U
120-82-1	1,2,4-Trichlorobenzene		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
123-91-1	1,4-Dioxane		100	U
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U

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

CLIENT SAMPLE NO.

DEC-013

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4385.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-013

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4385.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

DEC-013

CLIENT SAMPLE NO.

DUP-062311

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-11A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4344.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U R
156-59-2	cis-1,2-Dichloroethene		2.5	U R
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		4.8	J
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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 S
79-01-6	Trichloroethene		27	
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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8/9/11

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

DEC-013

CLIENT SAMPLE NO.

DUP-062311

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-11A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4344.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	200 <del>210</del>	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

dup  
8/9/11

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

DEC-013

CLIENT SAMPLE NO.

DUP-062311

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-11A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4344.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

*DeMeyer*  
8/11/11

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

DEC-013

CLIENT SAMPLE NO.

DUP-062311

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-11A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4344.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

DEC-013

CLIENT SAMPLE NO.

DUP-062311DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-11ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4379.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/05/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
67-64-1	Acetone		10	U
74-88-4	Iodomethane		10	U
75-15-0	Carbon disulfide		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		2.7	DJ
594-20-7	2,2-Dichloropropane		10	U
74-97-5	Bromochloromethane		10	U
67-66-3	Chloroform		4.3	DJ
71-55-6	1,1,1-Trichloroethane		10	U
563-58-6	1,1-Dichloropropene		10	U
56-23-5	Carbon tetrachloride		10	U
107-06-2	1,2-Dichloroethane		10	U
71-43-2	Benzene		10	U
79-01-6	Trichloroethene		27	D
78-87-5	1,2-Dichloropropane		10	U
74-95-3	Dibromomethane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
142-28-9	1,3-Dichloropropane		10	U

DEC-013

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

CLIENT SAMPLE NO.

DUP-062311DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1110

Mod. Ref No.:

SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-11ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4379.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/05/2011

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 2.0

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	
127-18-4	Tetrachloroethene		200	D
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		10	U
630-20-6	1,1,1,2-Tetrachloroethane		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	m,p-Xylene		10	U
95-47-6	o-Xylene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
108-86-1	Bromobenzene		10	U
96-18-4	1,2,3-Trichloropropane		10	U
95-49-8	2-Chlorotoluene		10	U
108-67-8	1,3,5-Trimethylbenzene		10	U
106-43-4	4-Chlorotoluene		10	U
98-06-6	tert-Butylbenzene		10	U
95-63-6	1,2,4-Trimethylbenzene		10	U
135-98-8	sec-Butylbenzene		10	U
99-87-6	4-Isopropyltoluene		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U
87-68-3	Hexachlorobutadiene		10	U
87-61-6	1,2,3-Trichlorobenzene		10	U
91-20-3	Naphthalene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
123-91-1	1,4-Dioxane		200	U
110-82-7	Cyclohexane		10	U
79-20-9	Methyl acetate		10	U

DEC-013

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

CLIENT SAMPLE NO.

DUP-062311DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-11ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4379.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
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	
108-87-2	Methylcyclohexane		10	U

*Aug 8/11*

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

DEC-013  
CLIENT SAMPLE NO.

DUP-062311DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-11ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4379.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Q1110*  
*8/9/11*



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

CLIENT SAMPLE NO.

DEC-013D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4265.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	2.1	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	4.8	J
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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 S
79-01-6	Trichloroethene	24	
78-87-5	1,2-Dichloropropane	5.0	U S
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*Handwritten signature and date: 8/1/11*

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

CLIENT SAMPLE NO.

DEC-013D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4265.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	190	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U <i>B</i>
110-82-7	Cyclohexane	5.0	U <i>3</i>
79-20-9	Methyl acetate	5.0	U

*Q118*  
*8/9/11*

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

CLIENT SAMPLE NO.

DEC-013D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4265.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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	
108-87-2	Methylcyclohexane		5.0	U.S.

*Handwritten signature and date:*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-013D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-07A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4265.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-013DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-22ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V6I1944.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/06/2011

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 40.0

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
75-71-8	Dichlorodifluoromethane	200	U	
74-87-3	Chloromethane	200	U	3
75-01-4	Vinyl chloride	200	U	3
74-83-9	Bromomethane	200	U	
75-00-3	Chloroethane	200	U	
75-69-4	Trichlorofluoromethane	200	U	
75-35-4	1,1-Dichloroethene	200	U	
67-64-1	Acetone	200	U	R
74-88-4	Iodomethane	200	U	
75-15-0	Carbon disulfide	200	U	
75-09-2	Methylene chloride	200	U	
156-60-5	trans-1,2-Dichloroethene	200	U	
1634-04-4	Methyl tert-butyl ether	200	U	
75-34-3	1,1-Dichloroethane	200	U	
108-05-4	Vinyl acetate	200	U	
78-93-3	2-Butanone	200	U	R
156-59-2	cis-1,2-Dichloroethene	200	U	
594-20-7	2,2-Dichloropropane	200	U	
74-97-5	Bromochloromethane	200	U	
67-66-3	Chloroform	200	U	
71-55-6	1,1,1-Trichloroethane	200	U	
563-58-6	1,1-Dichloropropene	200	U	
56-23-5	Carbon tetrachloride	200	U	
107-06-2	1,2-Dichloroethane	200	U	
71-43-2	Benzene	200	U	
79-01-6	Trichloroethene	200	U	
78-87-5	1,2-Dichloropropane	200	U	
74-95-3	Dibromomethane	200	U	
75-27-4	Bromodichloromethane	200	U	
10061-01-5	cis-1,3-Dichloropropene	200	U	
108-10-1	4-Methyl-2-pentanone	200	U	
108-88-3	Toluene	200	U	
10061-02-6	trans-1,3-Dichloropropene	200	U	
79-00-5	1,1,2-Trichloroethane	200	U	
142-28-9	1,3-Dichloropropane	200	U	

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

CLIENT SAMPLE NO.

DEC-013DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-22ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V6I1944.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/06/2011

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 40.0

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
127-18-4	Tetrachloroethene	2100	D
591-78-6	2-Hexanone	200	U
124-48-1	Dibromochloromethane	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
630-20-6	1,1,1,2-Tetrachloroethane	200	U
100-41-4	Ethylbenzene	200	U
1330-20-7	m,p-Xylene	200	U
95-47-6	o-Xylene	200	U
1330-20-7	Xylene (Total)	200	U
100-42-5	Styrene	200	U
75-25-2	Bromoform	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
108-86-1	Bromobenzene	200	U
96-18-4	1,2,3-Trichloropropane	200	U
95-49-8	2-Chlorotoluene	200	U
108-67-8	1,3,5-Trimethylbenzene	200	U
106-43-4	4-Chlorotoluene	200	U
98-06-6	tert-Butylbenzene	200	U
95-63-6	1,2,4-Trimethylbenzene	200	U
135-98-8	sec-Butylbenzene	200	U
99-87-6	4-Isopropyltoluene	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-Chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
87-68-3	Hexachlorobutadiene	200	U
87-61-6	1,2,3-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	200	U
123-91-1	1,4-Dioxane	4000	U R
110-82-7	Cyclohexane	200	U
79-20-9	Methyl acetate	200	U

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

CLIENT SAMPLE NO.

DEC-013DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SX1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-22ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1944.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 40.0  
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	
108-87-2	Methylcyclohexane		200	U

*Handwritten signature*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-013DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-22ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1944.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 40.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Dec 8/11*



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

CLIENT SAMPLE NO.

DEC-014D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4382.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U <i>S</i>
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U <i>S</i>
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U <i>R</i>
74-88-4	Iodomethane		5.0	U <i>S</i>
75-15-0	Carbon disulfide		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		3.8	J
75-34-3	1,1-Dichloroethane		5.0	U
108-05-4	Vinyl acetate		5.0	U <i>S</i>
78-93-3	2-Butanone		5.0	U <i>R</i>
156-59-2	cis-1,2-Dichloroethene		1.6	J
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		5.0	U
56-23-5	Carbon tetrachloride		5.0	U <i>S</i>
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		3.6	J
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U <i>S</i>
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

*Q112*  
*8/9/11*  
**279**

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

CLIENT SAMPLE NO.

DEC-014D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4382.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	26	
591-78-6	2-Hexanone	5.0	U S
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U S
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U S
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-014D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4382.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/05/2011  
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) <u>µG/L</u>	<u>Q</u>
108-87-2	Methylcyclohexane	5.0	U

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

CLIENT SAMPLE NO.

DEC-014D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4382.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-014D 31-32

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-03B  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5M8810.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/23/2011  
% Moisture: not dec. 26 Date Analyzed: 05/28/2011  
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
75-71-8	Dichlorodifluoromethane	6.7	U
74-87-3	Chloromethane	6.7	U
75-01-4	Vinyl chloride	6.7	U
74-83-9	Bromomethane	6.7	U
75-00-3	Chloroethane	6.7	U
75-69-4	Trichlorofluoromethane	6.7	U
75-35-4	1,1-Dichloroethene	6.7	U
67-64-1	Acetone	6.7	U R
74-88-4	Iodomethane	6.7	U
75-15-0	Carbon disulfide	6.7	U
75-09-2	Methylene chloride	6.7	U
156-60-5	trans-1,2-Dichloroethene	6.7	U
1634-04-4	Methyl tert-butyl ether	6.7	U
75-34-3	1,1-Dichloroethane	6.7	U
108-05-4	Vinyl acetate	6.7	U
78-93-3	2-Butanone	6.7	U R
156-59-2	cis-1,2-Dichloroethene	6.7	U
594-20-7	2,2-Dichloropropane	6.7	U
74-97-5	Bromochloromethane	6.7	U
67-66-3	Chloroform	6.7	U
71-55-6	1,1,1-Trichloroethane	6.7	U
563-58-6	1,1-Dichloropropene	6.7	U
56-23-5	Carbon tetrachloride	6.7	U
107-06-2	1,2-Dichloroethane	6.7	U
71-43-2	Benzene	6.7	U
79-01-6	Trichloroethene	6.7	U
78-87-5	1,2-Dichloropropane	6.7	U
74-95-3	Dibromomethane	6.7	U
75-27-4	Bromodichloromethane	6.7	U
10061-01-5	cis-1,3-Dichloropropene	6.7	U
108-10-1	4-Methyl-2-pentanone	6.7	U
108-88-3	Toluene	6.7	U
10061-02-6	trans-1,3-Dichloropropene	6.7	U
79-00-5	1,1,2-Trichloroethane	6.7	U
142-28-9	1,3-Dichloropropane	6.7	U

*Handwritten signature*  
8/19/11

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

CLIENT SAMPLE NO.

DEC-014D 31-32

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-03B  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5M8810.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/23/2011  
% Moisture: not dec. 26 Date Analyzed: 05/28/2011  
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) $\mu$ G/KG	Q
127-18-4	Tetrachloroethene	6.7	U
591-78-6	2-Hexanone	6.7	U
124-48-1	Dibromochloromethane	6.7	U
106-93-4	1,2-Dibromoethane	6.7	U
108-90-7	Chlorobenzene	6.7	U
630-20-6	1,1,1,2-Tetrachloroethane	6.7	U
100-41-4	Ethylbenzene	6.7	U
1330-20-7	m,p-Xylene	6.7	U
95-47-6	o-Xylene	6.7	U
1330-20-7	Xylene (Total)	6.7	U
100-42-5	Styrene	6.7	U
75-25-2	Bromoform	6.7	U
98-82-8	Isopropylbenzene	6.7	U
79-34-5	1,1,2,2-Tetrachloroethane	6.7	U
108-86-1	Bromobenzene	6.7	U
96-18-4	1,2,3-Trichloropropane	6.7	U
103-65-1	n-Propylbenzene	6.7	U
95-49-8	2-Chlorotoluene	6.7	U
108-67-8	1,3,5-Trimethylbenzene	6.7	U
106-43-4	4-Chlorotoluene	6.7	U
98-06-6	tert-Butylbenzene	6.7	U
95-63-6	1,2,4-Trimethylbenzene	6.7	U
135-98-8	sec-Butylbenzene	6.7	U
99-87-6	4-Isopropyltoluene	6.7	U
541-73-1	1,3-Dichlorobenzene	6.7	U
106-46-7	1,4-Dichlorobenzene	6.7	U
104-51-8	n-Butylbenzene	6.7	U
95-50-1	1,2-Dichlorobenzene	6.7	U
96-12-8	1,2-Dibromo-3-chloropropane	6.7	U
120-82-1	1,2,4-Trichlorobenzene	6.7	U
87-68-3	Hexachlorobutadiene	6.7	U
87-61-6	1,2,3-Trichlorobenzene	6.7	U
91-20-3	Naphthalene	6.7	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.7	U
123-91-1	1,4-Dioxane	130	U R

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

CLIENT SAMPLE NO.

DEC-014D 31-32

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-03B  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5M8810.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 05/23/2011  
 % Moisture: not dec. 26 Date Analyzed: 05/28/2011  
 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)	µG/KG
110-82-7	Cyclohexane	6.7	U
79-20-9	Methyl acetate	6.7	U
108-87-2	Methylcyclohexane	6.7	U

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

CLIENT SAMPLE NO.

DEC-014D 31-32

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0842-03B  
Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5M8810.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/23/2011  
% Moisture: not dec. 26 Date Analyzed: 05/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-014R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4345.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		1.6	J
67-64-1	Acetone		<del>5.0</del>	<del>U</del> R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		<del>5.0</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene		39	J
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		6.2	
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		5.0	U
56-23-5	Carbon tetrachloride		1.0	J
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U S
79-01-6	Trichloroethene		300	J S
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-014R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4345.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	<u>44000</u> <del>25000</del>	<u>ND</u>
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	9.5	
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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U-S
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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-S
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	4.3	J
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<u>100</u>	<u>U-R</u>
110-82-7	Cyclohexane	5.0	U-S
79-20-9	Methyl acetate	5.0	U

*Handwritten signature*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-014R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4345.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <i>5</i>

*OK*  
*8/9/11*

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

CLIENT SAMPLE NO.

DEC-014R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4345.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Handwritten signature*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-014RDL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1110

Mod. Ref No.:

SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-12ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4380.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/05/2011

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 500.0

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
75-71-8	Dichlorodifluoromethane		2500	U
74-87-3	Chloromethane		2500	U
75-01-4	Vinyl chloride		2500	U
74-83-9	Bromomethane		2500	U
75-00-3	Chloroethane		2500	U
75-69-4	Trichlorofluoromethane		2500	U
75-35-4	1,1-Dichloroethene		2500	U
67-64-1	Acetone		2500	U
74-88-4	Iodomethane		2500	U
75-15-0	Carbon disulfide		2500	U
75-09-2	Methylene chloride		2500	U
156-60-5	trans-1,2-Dichloroethene		2500	U
1634-04-4	Methyl tert-butyl ether		2500	U
75-34-3	1,1-Dichloroethane		2500	U
108-05-4	Vinyl acetate		2500	U
78-93-3	2-Butanone		2500	U
156-59-2	cis-1,2-Dichloroethene		2500	U
594-20-7	2,2-Dichloropropane		2500	U
74-97-5	Bromochloromethane		2500	U
67-66-3	Chloroform		2500	U
71-55-6	1,1,1-Trichloroethane		2500	U
563-58-6	1,1-Dichloropropene		2500	U
56-23-5	Carbon tetrachloride		2500	U
107-06-2	1,2-Dichloroethane		2500	U
71-43-2	Benzene		2500	U
79-01-6	Trichloroethene		2500	U
78-87-5	1,2-Dichloropropane		2500	U
74-95-3	Dibromomethane		2500	U
75-27-4	Bromodichloromethane		2500	U
10061-01-5	cis-1,3-Dichloropropene		2500	U
108-10-1	4-Methyl-2-pentanone		2500	U
108-88-3	Toluene		2500	U
10061-02-6	trans-1,3-Dichloropropene		2500	U
79-00-5	1,1,2-Trichloroethane		2500	U
142-28-9	1,3-Dichloropropane		2500	U

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

CLIENT SAMPLE NO.

DEC-014RDL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-12ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4380.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/05/2011

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 500.0

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
127-18-4	Tetrachloroethene		44000	D
591-78-6	2-Hexanone		2500	U
124-48-1	Dibromochloromethane		2500	U
106-93-4	1,2-Dibromoethane		2500	U
108-90-7	Chlorobenzene		2500	U
630-20-6	1,1,1,2-Tetrachloroethane		2500	U
100-41-4	Ethylbenzene		2500	U
1330-20-7	m,p-Xylene		2500	U
95-47-6	o-Xylene		2500	U
1330-20-7	Xylene (Total)		2500	U
100-42-5	Styrene		2500	U
75-25-2	Bromoform		2500	U
98-82-8	Isopropylbenzene		2500	U
79-34-5	1,1,2,2-Tetrachloroethane		2500	U
108-86-1	Bromobenzene		2500	U
96-18-4	1,2,3-Trichloropropane		2500	U
95-49-8	2-Chlorotoluene		2500	U
108-67-8	1,3,5-Trimethylbenzene		2500	U
106-43-4	4-Chlorotoluene		2500	U
98-06-6	tert-Butylbenzene		2500	U
95-63-6	1,2,4-Trimethylbenzene		2500	U
135-98-8	sec-Butylbenzene		2500	U
99-87-6	4-Isopropyltoluene		2500	U
541-73-1	1,3-Dichlorobenzene		2500	U
106-46-7	1,4-Dichlorobenzene		2500	U
95-50-1	1,2-Dichlorobenzene		2500	U
96-12-8	1,2-Dibromo-3-chloropropane		2500	U
120-82-1	1,2,4-Trichlorobenzene		2500	U
87-68-3	Hexachlorobutadiene		2500	U
87-61-6	1,2,3-Trichlorobenzene		2500	U
91-20-3	Naphthalene		2500	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		2500	U
123-91-1	1,4-Dioxane		50000	U
110-82-7	Cyclohexane		2500	U
79-20-9	Methyl acetate		2500	U

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

CLIENT SAMPLE NO.

DEC-014RDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-12ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4380.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0  
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	
108-87-2	Methylcyclohexane		2500	U

*Handwritten signature and date:*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-014RDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-12ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4380.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Handwritten:* 8/9/11



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

CLIENT SAMPLE NO.

DEC-015

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-26A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4339.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	<del>5.0</del>	<del>U</del> R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	6.9	
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	<del>5.0</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene	8.8	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	9.2	
71-55-6	1,1,1-Trichloroethane	2.0	J
563-58-6	1,1-Dichloropropene	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	<del>U</del> S
79-01-6	Trichloroethene	13	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-015

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-26A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4339.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	140	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-015

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-26A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4339.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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	
108-87-2	Methylcyclohexane		5.0	U/S

*OK*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-015

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-26A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4339.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-015D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4340.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	7.2	
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	1.7	J
75-34-3	1,1-Dichloroethane	2.8	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	9.5	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	2.2	J
563-58-6	1,1-Dichloropropene	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 S
79-01-6	Trichloroethene	42	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-015D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4340.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) $\mu$ g/L	Q
127-18-4	Tetrachloroethene	640 <del>890</del>	<del>U</del> D
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-015D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4340.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <i>✓</i>

*APR 8/8/11*

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

CLIENT SAMPLE NO.

DEC-015D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4340.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-015DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1905.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	40	U
74-87-3	Chloromethane	40	U
75-01-4	Vinyl chloride	40	U
74-83-9	Bromomethane	40	U
75-00-3	Chloroethane	40	U
75-69-4	Trichlorofluoromethane	40	U
75-35-4	1,1-Dichloroethene	40	U
67-64-1	Acetone	40	U-R
74-88-4	Iodomethane	40	U
75-15-0	Carbon disulfide	40	U
75-09-2	Methylene chloride	40	U
156-60-5	trans-1,2-Dichloroethene	40	U
1634-04-4	Methyl tert-butyl ether	40	U
75-34-3	1,1-Dichloroethane	40	U
108-05-4	Vinyl acetate	40	U
78-93-3	2-Butanone	40	U-R
156-59-2	cis-1,2-Dichloroethene	7.7	DJ
594-20-7	2,2-Dichloropropane	40	U
74-97-5	Bromochloromethane	40	U
67-66-3	Chloroform	40	U
71-55-6	1,1,1-Trichloroethane	40	U
563-58-6	1,1-Dichloropropene	40	U
56-23-5	Carbon tetrachloride	40	U
107-06-2	1,2-Dichloroethane	40	U
71-43-2	Benzene	40	U
79-01-6	Trichloroethene	36	DJ
78-87-5	1,2-Dichloropropane	40	U
74-95-3	Dibromomethane	40	U
75-27-4	Bromodichloromethane	40	U
10061-01-5	cis-1,3-Dichloropropene	40	U
108-10-1	4-Methyl-2-pentanone	40	U
108-88-3	Toluene	40	U
10061-02-6	trans-1,3-Dichloropropene	40	U
79-00-8	1,1,2-Trichloroethane	40	U
142-28-9	1,3-Dichloropropane	40	U

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

CLIENT SAMPLE NO.

DEC-015DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1905.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	640	D
591-78-6	2-Hexanone	40	U
124-48-1	Dibromochloromethane	40	U
106-93-4	1,2-Dibromoethane	40	U
108-90-7	Chlorobenzene	40	U
630-20-6	1,1,1,2-Tetrachloroethane	40	U
100-41-4	Ethylbenzene	40	U
1330-20-7	m,p-Xylene	40	U
95-47-6	o-Xylene	40	U
1330-20-7	Xylene (Total)	40	U
100-42-5	Styrene	40	U
75-25-2	Bromoform	40	U
98-82-8	Isopropylbenzene	40	U
79-34-5	1,1,2,2-Tetrachloroethane	40	U
108-86-1	Bromobenzene	40	U
96-18-4	1,2,3-Trichloropropane	40	U
95-49-8	2-Chlorotoluene	40	U
108-67-8	1,3,5-Trimethylbenzene	40	U
106-43-4	4-Chlorotoluene	40	U
98-06-6	tert-Butylbenzene	40	U
95-63-6	1,2,4-Trimethylbenzene	40	U
135-98-8	sec-Butylbenzene	40	U
99-87-6	4-Isopropyltoluene	40	U
541-73-1	1,3-Dichlorobenzene	40	U
106-46-7	1,4-Dichlorobenzene	40	U
95-50-1	1,2-Dichlorobenzene	40	U
96-12-8	1,2-Dibromo-3-chloropropane	40	U
120-82-1	1,2,4-Trichlorobenzene	40	U
87-68-3	Hexachlorobutadiene	40	U
87-61-6	1,2,3-Trichlorobenzene	40	U
91-20-3	Naphthalene	40	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	40	U
123-91-1	1,4-Dioxane	400	U R
110-82-7	Cyclohexane	40	U
79-20-9	Methyl acetate	40	U

check  
8/8/11

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

CLIENT SAMPLE NO.

DEC-015DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1905.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
108-87-2	Methylcyclohexane		40	U

*OK*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-015DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-27ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1905.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*QPSK*  
*8/8/11*

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

CLIENT SAMPLE NO.

DEC-022D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-01A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4228.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		2.0	J
75-35-4	1,1-Dichloroethene		1.8	J
67-64-1	Acetone		5.0	U R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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		1.3	J
75-34-3	1,1-Dichloroethane		5.6	
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U R
156-59-2	cis-1,2-Dichloroethene		42	3
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		3.5	J
71-55-6	1,1,1-Trichloroethane		2.6	J
563-58-6	1,1-Dichloropropene		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		94	
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-022D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-01A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4228.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	<del>1300 1500</del>	<del>ND</del>
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date:*  
8/19/11

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

CLIENT SAMPLE NO.

DEC-022D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-01A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4228.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
 % Moisture: not dec. Date Analyzed: 06/29/2011  
 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) $\mu\text{G/L}$	Q
108-87-2	Methylcyclohexane	5.0	U <i>5</i>

*QUG 8/9/11*

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

CLIENT SAMPLE NO.

DEC-022D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-01A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4228.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-022DDL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-01ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4267.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 06/30/2011

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 16.0

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	
75-71-8	Dichlorodifluoromethane		80	U
74-87-3	Chloromethane		80	U
75-01-4	Vinyl chloride		80	U
74-83-9	Bromomethane		80	U
75-00-3	Chloroethane		80	U
75-69-4	Trichlorofluoromethane		80	U
75-35-4	1,1-Dichloroethene		80	U
67-64-1	Acetone		80	U R
74-88-4	Iodomethane		80	U
75-15-0	Carbon disulfide		80	U
75-09-2	Methylene chloride		80	U
156-60-5	trans-1,2-Dichloroethene		80	U
1634-04-4	Methyl tert-butyl ether		80	U
75-34-3	1,1-Dichloroethane		80	U
108-05-4	Vinyl acetate		80	U
78-93-3	2-Butanone		80	U R
156-59-2	cis-1,2-Dichloroethene		39	DJ
594-20-7	2,2-Dichloropropane		80	U
74-97-5	Bromochloromethane		80	U
67-66-3	Chloroform		80	U
71-55-6	1,1,1-Trichloroethane		80	U
563-58-6	1,1-Dichloropropene		80	U
56-23-5	Carbon tetrachloride		80	U
107-06-2	1,2-Dichloroethane		80	U
71-43-2	Benzene		80	U 3
79-01-6	Trichloroethene		86	D
78-87-5	1,2-Dichloropropane		80	U 3
74-95-3	Dibromomethane		80	U
75-27-4	Bromodichloromethane		80	U
10061-01-5	cis-1,3-Dichloropropene		80	U
108-10-1	4-Methyl-2-pentanone		80	U
108-88-3	Toluene		80	U
10061-02-6	trans-1,3-Dichloropropene		80	U
79-00-5	1,1,2-Trichloroethane		80	U
142-28-9	1,3-Dichloropropane		80	U

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

CLIENT SAMPLE NO.

DEC-022DDL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-01ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4267.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 06/30/2011

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 16.0

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	
127-18-4	Tetrachloroethene		1300	D
591-78-6	2-Hexanone		80	U
124-48-1	Dibromochloromethane		80	U
106-93-4	1,2-Dibromoethane		80	U
108-90-7	Chlorobenzene		80	U
630-20-6	1,1,1,2-Tetrachloroethane		80	U
100-41-4	Ethylbenzene		80	U
1330-20-7	m,p-Xylene		80	U
95-47-6	o-Xylene		80	U
1330-20-7	Xylene (Total)		80	U
100-42-5	Styrene		80	U
75-25-2	Bromoform		80	U
98-82-8	Isopropylbenzene		80	U
79-34-5	1,1,2,2-Tetrachloroethane		80	U
108-86-1	Bromobenzene		80	U
96-18-4	1,2,3-Trichloropropane		80	U
95-49-8	2-Chlorotoluene		80	U
108-67-8	1,3,5-Trimethylbenzene		80	U
106-43-4	4-Chlorotoluene		80	U
98-06-6	tert-Butylbenzene		80	U
95-63-6	1,2,4-Trimethylbenzene		80	U
135-98-8	sec-Butylbenzene		80	U
99-87-6	4-Isopropyltoluene		80	U
541-73-1	1,3-Dichlorobenzene		80	U
106-46-7	1,4-Dichlorobenzene		80	U
95-50-1	1,2-Dichlorobenzene		80	U
96-12-8	1,2-Dibromo-3-chloropropane		80	U
120-82-1	1,2,4-Trichlorobenzene		80	U
87-68-3	Hexachlorobutadiene		80	U
87-61-6	1,2,3-Trichlorobenzene		80	U
91-20-3	Naphthalene		80	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		80	U
123-91-1	1,4-Dioxane		1600	U-R
110-82-7	Cyclohexane		80	U-S
79-20-9	Methyl acetate		80	U

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

CLIENT SAMPLE NO.  
DEC-022DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-01ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4267.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 16.0  
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	
108-87-2	Methylcyclohexane	80		U <i>5</i>

*SWK*  
*8/9/11*

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

CLIENT SAMPLE NO.

DEC-022DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-01ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4267.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 16.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Q1110*  
*8/9/11*

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

CLIENT SAMPLE NO.

DEC-027

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1952.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	2.1	J
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	3.9	J
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	48	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	750	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-027

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1952.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu$ g/L	Q
127-18-4	Tetrachloroethene	34	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten signature/initials*  
8/24/11

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

CLIENT SAMPLE NO.

DEC-027

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1952.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-027

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1952.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-027DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4451.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1,1-Dichloroethene	50	U
67-64-1	Acetone	50	U
74-88-4	Iodomethane	50	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	50	U
78-93-3	2-Butanone	50	U
156-59-2	cis-1,2-Dichloroethene	64	D
594-20-7	2,2-Dichloropropane	50	U
74-97-5	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1,1,1-Trichloroethane	50	U
563-58-6	1,1-Dichloropropene	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	750	D
78-87-5	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
108-10-1	4-Methyl-2-pentanone	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
142-28-9	1,3-Dichloropropane	50	U

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

CLIENT SAMPLE NO.

DEC-027DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4451.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	33	DJ
591-78-6	2-Hexanone	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromoethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-86-1	Bromobenzene	50	U
96-18-4	1,2,3-Trichloropropane	50	U
95-49-8	2-Chlorotoluene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
91-20-3	Naphthalene	50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50	U
123-91-1	1,4-Dioxane	1000	U
110-82-7	Cyclohexane	50	U
79-20-9	Methyl acetate	50	U

OK  
8/6/11

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

CLIENT SAMPLE NO.

DEC-027DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4451.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
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:		Q
		(ug/L or ug/Kg)	ug/L	
108-87-2	Methylcyclohexane		50	U

*Handwritten signature and date: 8/9/11*

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

CLIENT SAMPLE NO.

DEC-027DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-18ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4451.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*OK*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-028

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-20A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1829.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		1.5	J
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		1.9	J
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		3.0	J
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		52	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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	220	270	U
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-028

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-20A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1829.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	<u>2300</u> <del>2400</del>	<u>ED</u>
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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	3.4	J
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U <u>5</u>
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U <u>5</u>
87-61-6	1,2,3-Trichlorobenzene	5.0	U <u>5</u>
91-20-3	Naphthalene	5.0	U <u>5</u>
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<u>100</u>	U <u>B</u>
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date: 8/8/11*

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

CLIENT SAMPLE NO.

DEC-028

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-20A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1829.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-028

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-20A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1829.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-028DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-20ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1873.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	100	U
74-87-3	Chloromethane	100	U <i>3</i>
75-01-4	Vinyl chloride	100	U <i>3</i>
74-83-9	Bromomethane	100	U <i>3</i>
75-00-3	Chloroethane	100	U
75-69-4	Trichlorofluoromethane	100	U
75-35-4	1,1-Dichloroethene	100	U
67-64-1	Acetone	<del>100</del>	<del>U</del> R
74-88-4	Iodomethane	100	U
75-15-0	Carbon disulfide	100	U
75-09-2	Methylene chloride	100	U
156-60-5	trans-1,2-Dichloroethene	100	U
1634-04-4	Methyl tert-butyl ether	100	U
75-34-3	1,1-Dichloroethane	100	U
108-05-4	Vinyl acetate	100	U
78-93-3	2-Butanone	<del>100</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene	40	DJ
594-20-7	2,2-Dichloropropane	100	U
74-97-5	Bromochloromethane	100	U
67-66-3	Chloroform	100	U
71-55-6	1,1,1-Trichloroethane	100	U
563-58-6	1,1-Dichloropropene	100	U
56-23-5	Carbon tetrachloride	100	U
107-06-2	1,2-Dichloroethane	100	U
71-43-2	Benzene	100	U
79-01-6	Trichloroethene	220	D
78-87-5	1,2-Dichloropropane	100	U
74-95-3	Dibromomethane	100	U
75-27-4	Bromodichloromethane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
142-28-9	1,3-Dichloropropane	100	U

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

CLIENT SAMPLE NO.

DEC-028DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1102

Mod. Ref No.: SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1102-20ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V6I1873.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/24/2011

% Moisture: not dec.

Date Analyzed: 07/01/2011

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 20.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	2300	D
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	100	U
106-93-4	1,2-Dibromoethane	100	U
108-90-7	Chlorobenzene	100	U
630-20-6	1,1,1,2-Tetrachloroethane	100	U
100-41-4	Ethylbenzene	100	U
1330-20-7	m,p-Xylene	100	U
95-47-6	o-Xylene	100	U
1330-20-7	Xylene (Total)	100	U
100-42-5	Styrene	100	U
75-25-2	Bromoform	100	U
98-82-8	Isopropylbenzene	100	U
79-34-5	1,1,2,2-Tetrachloroethane	100	U
108-86-1	Bromobenzene	100	U
96-18-4	1,2,3-Trichloropropane	100	U
95-49-8	2-Chlorotoluene	100	U
108-67-8	1,3,5-Trimethylbenzene	100	U
106-43-4	4-Chlorotoluene	100	U
98-06-6	tert-Butylbenzene	100	U
95-63-6	1,2,4-Trimethylbenzene	100	U
135-98-8	sec-Butylbenzene	100	U
99-87-6	4-Isopropyltoluene	100	U
541-73-1	1,3-Dichlorobenzene	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-50-1	1,2-Dichlorobenzene	100	U
96-12-8	1,2-Dibromo-3-chloropropane	100	U
120-82-1	1,2,4-Trichlorobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
87-61-6	1,2,3-Trichlorobenzene	100	U
91-20-3	Naphthalene	100	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100	U
123-91-1	1,4-Dioxane	2000	U R
110-82-7	Cyclohexane	100	U
79-20-9	Methyl acetate	100	U

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

CLIENT SAMPLE NO.

DEC-028DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-20ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1873.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0  
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	
108-87-2	Methylcyclohexane		100	U

*Handwritten signature/initials*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-028DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-20ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1873.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Q1102*  
*8/1/11*

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

CLIENT SAMPLE NO.

DEC-029

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4383.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	8.2	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	7.4	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-029

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4383.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	5100 <del>6500</del>	ED
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	1.1	J
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-029

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4383.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
 % Moisture: not dec. Date Analyzed: 07/05/2011  
 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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-029

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4383.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-029DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1945.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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
75-71-8	Dichlorodifluoromethane		500	U
74-87-3	Chloromethane		500	U
75-01-4	Vinyl chloride		500	U
74-83-9	Bromomethane		500	U
75-00-3	Chloroethane		500	U
75-69-4	Trichlorofluoromethane		500	U
75-35-4	1,1-Dichloroethene		500	U
67-64-1	Acetone		500	U R
74-88-4	Iodomethane		500	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		500	U
78-93-3	2-Butanone		500	U R
156-59-2	cis-1,2-Dichloroethene		500	U
594-20-7	2,2-Dichloropropane		500	U
74-97-5	Bromochloromethane		500	U
67-66-3	Chloroform		500	U
71-55-6	1,1,1-Trichloroethane		500	U
563-58-6	1,1-Dichloropropene		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		500	U
78-87-5	1,2-Dichloropropane		500	U
74-95-3	Dibromomethane		500	U
75-27-4	Bromodichloromethane		500	U
10061-01-5	cis-1,3-Dichloropropene		500	U
108-10-1	4-Methyl-2-pentanone		500	U
108-88-3	Toluene		500	U
10061-02-6	trans-1,3-Dichloropropene		500	U
79-00-5	1,1,2-Trichloroethane		500	U
142-28-9	1,3-Dichloropropane		500	U

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

CLIENT SAMPLE NO.

DEC-029DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1945.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	5700	D
591-78-6	2-Hexanone	500	U
124-48-1	Dibromochloromethane	500	U
106-93-4	1,2-Dibromoethane	500	U
108-90-7	Chlorobenzene	500	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
98-82-8	Isopropylbenzene	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
108-86-1	Bromobenzene	500	U
96-18-4	1,2,3-Trichloropropane	500	U
95-49-8	2-Chlorotoluene	500	U
108-67-8	1,3,5-Trimethylbenzene	500	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
95-50-1	1,2-Dichlorobenzene	500	U
96-12-8	1,2-Dibromo-3-chloropropane	500	U
120-82-1	1,2,4-Trichlorobenzene	500	U
87-68-3	Hexachlorobutadiene	500	U
87-61-6	1,2,3-Trichlorobenzene	500	U
91-20-3	Naphthalene	500	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	500	U
123-91-1	1,4-Dioxane	10000	U-R
110-82-7	Cyclohexane	500	U
79-20-9	Methyl acetate	500	U

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

CLIENT SAMPLE NO.

DEC-029DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1945.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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:		Q
		(ug/L or ug/Kg)	ug/L	
108-87-2	Methylcyclohexane		500	U

*Handwritten signature/initials*  
8/11/11

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

CLIENT SAMPLE NO.

DEC-029DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-14ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1945.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Handwritten:* Done 8/11/11

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

CLIENT SAMPLE NO.

DEC-029D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-15A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1946.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U-R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U-R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	7.8	
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	3.4	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-029D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-15A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1946.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	20	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date: 8/9/11*

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

CLIENT SAMPLE NO.

DEC-029D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-15A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1946.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-029D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-15A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1946.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3717.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/12/2011  
% Moisture: not dec. 16 Date Analyzed: 05/12/2011  
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
75-71-8	Dichlorodifluoromethane	5.6	U
74-87-3	Chloromethane	5.6	U
75-01-4	Vinyl chloride	5.6	U
74-83-9	Bromomethane	5.6	U
75-00-3	Chloroethane	5.6	U
75-69-4	Trichlorofluoromethane	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
67-64-1	Acetone	5.6	U-R
74-88-4	Iodomethane	5.6	U
75-15-0	Carbon disulfide	5.6	U
75-09-2	Methylene chloride	5.6	U
156-60-5	trans-1,2-Dichloroethene	5.6	U
1634-04-4	Methyl tert-butyl ether	5.6	U
75-34-3	1,1-Dichloroethane	5.6	U
108-05-4	Vinyl acetate	5.6	U
78-93-3	2-Butanone	5.6	U-R
156-59-2	cis-1,2-Dichloroethene	5.6	U
594-20-7	2,2-Dichloropropane	5.6	U
74-97-5	Bromochloromethane	5.6	U
67-66-3	Chloroform	5.6	U
71-55-6	1,1,1-Trichloroethane	5.6	U
563-58-6	1,1-Dichloropropene	2.3	U
56-23-5	Carbon tetrachloride	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
71-43-2	Benzene	5.6	U
79-01-6	Trichloroethene	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
74-95-3	Dibromomethane	5.6	U
75-27-4	Bromodichloromethane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
108-10-1	4-Methyl-2-pentanone	5.6	U
108-88-3	Toluene	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
142-28-9	1,3-Dichloropropane	5.6	U

*DeVos*  
8/1/11

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

CLIENT SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3717.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/12/2011  
% Moisture: not dec. 16 Date Analyzed: 05/12/2011  
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
127-18-4	Tetrachloroethene	5.6	U
591-78-6	2-Hexanone	5.6	U
124-48-1	Dibromochloromethane	5.6	U
106-93-4	1,2-Dibromoethane	5.6	U
108-90-7	Chlorobenzene	5.6	U
630-20-6	1,1,1,2-Tetrachloroethane	5.6	U
100-41-4	Ethylbenzene	5.6	U
1330-20-7	m,p-Xylene	5.6	U
95-47-6	o-Xylene	5.6	U
1330-20-7	Xylene (Total)	5.6	U
100-42-5	Styrene	5.6	U
75-25-2	Bromoform	5.6	U
98-82-8	Isopropylbenzene	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U
108-86-1	Bromobenzene	5.6	U
96-18-4	1,2,3-Trichloropropane	5.6	U
103-65-1	n-Propylbenzene	5.6	U
95-49-8	2-Chlorotoluene	5.6	U
108-67-8	1,3,5-Trimethylbenzene	5.6	U
106-43-4	4-Chlorotoluene	5.6	U
98-06-6	tert-Butylbenzene	5.6	U
95-63-6	1,2,4-Trimethylbenzene	5.6	U
135-98-8	sec-Butylbenzene	5.6	U
99-87-6	4-Isopropyltoluene	5.6	U
541-73-1	1,3-Dichlorobenzene	5.6	U
106-46-7	1,4-Dichlorobenzene	5.6	U
104-51-8	n-Butylbenzene	5.6	U
95-50-1	1,2-Dichlorobenzene	5.6	U
96-12-8	1,2-Dibromo-3-chloropropane	5.6	U
120-82-1	1,2,4-Trichlorobenzene	5.6	U
87-68-3	Hexachlorobutadiene	5.6	U
87-61-6	1,2,3-Trichlorobenzene	5.6	U
91-20-3	Naphthalene	5.6	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.6	U
123-91-1	1,4-Dioxane	110	U-R

*Handwritten signature*  
8/1/11

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

CLIENT SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3717.D  
Level: (TRACE/LOW/MED) LOW Date Received: 05/12/2011  
% Moisture: not dec. 16 Date Analyzed: 05/12/2011  
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)	µG/KG	
110-82-7	Cyclohexane		5.6	U
79-20-9	Methyl acetate		5.6	U
108-87-2	Methylcyclohexane		5.6	U

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

EPA SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8A3717.D  
Level: (TRACE or LOW/MED) LOW Date Received: 05/12/2011  
% Moisture: not dec. 16 Date Analyzed: 05/12/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown (10.48027)	10.480	17	J
02	Unknown (10.60567)	10.606	7.2	J
03	Unknown (10.72785)	10.728	26	J
04	Unknown (10.98507)	10.985	50	J
05	Unknown (11.17477)	11.175	24	J
06	Unknown (11.33553)	11.336	7.0	J
07	Unknown (11.39663)	11.397	8.5	J
08	Unknown (12.06862)	12.069	8.3	J

<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-030D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-01A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1758.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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
75-71-8	Dichlorodifluoromethane		5.0	U-3
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U-3
75-35-4	1,1-Dichloroethene		47	3
67-64-1	Acetone		5.0	U-R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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		1.9	J
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U-R
156-59-2	cis-1,2-Dichloroethene		4.7	J
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		4.2	J
563-58-6	1,1-Dichloropropene		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		170	
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U-3
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

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

CLIENT SAMPLE NO.

DEC-030D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-01A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1758.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) $\mu$ g/L	Q
127-18-4	Tetrachloroethene	43	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-030D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-01A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1758.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
 % Moisture: not dec. Date Analyzed: 06/28/2011  
 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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-030D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-01A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1758.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-030

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1759.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U <i>S</i>
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U <i>S</i>
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	<del>5.0</del>	<del>U</del> <i>R</i>
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	<del>5.0</del>	<del>U</del> <i>R</i>
156-59-2	cis-1,2-Dichloroethene	25	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	27	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U <i>S</i>
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-030

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1759.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	<del>2000</del> 2100	ED
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<del>100</del>	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-030

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1759.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-030

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1759.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/28/2011

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	17.917	6.7	J

<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-030DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1795.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0  
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	
75-71-8	Dichlorodifluoromethane		130	U
74-87-3	Chloromethane		130	U
75-01-4	Vinyl chloride		130	U
74-83-9	Bromomethane		130	U
75-00-3	Chloroethane		130	U
75-69-4	Trichlorofluoromethane		130	U
75-35-4	1,1-Dichloroethene		130	U
67-64-1	Acetone		130	U R
74-88-4	Iodomethane		130	U
75-15-0	Carbon disulfide		130	U
75-09-2	Methylene chloride		130	U
156-60-5	trans-1,2-Dichloroethene		130	U
1634-04-4	Methyl tert-butyl ether		130	U
75-34-3	1,1-Dichloroethane		130	U
108-05-4	Vinyl acetate		130	U
78-93-3	2-Butanone		130	U R
156-59-2	cis-1,2-Dichloroethene		130	U
594-20-7	2,2-Dichloropropane		130	U
74-97-5	Bromochloromethane		130	U
67-66-3	Chloroform		130	U
71-55-6	1,1,1-Trichloroethane		130	U
563-58-6	1,1-Dichloropropene		130	U
56-23-5	Carbon tetrachloride		130	U
107-06-2	1,2-Dichloroethane		130	U
71-43-2	Benzene		130	U
79-01-6	Trichloroethene		130	U
78-87-5	1,2-Dichloropropane		130	U
74-95-3	Dibromomethane		130	U
75-27-4	Bromodichloromethane		130	U
10061-01-5	cis-1,3-Dichloropropene		130	U
108-10-1	4-Methyl-2-pentanone		130	U
108-88-3	Toluene		130	U
10061-02-6	trans-1,3-Dichloropropene		130	U
79-00-5	1,1,2-Trichloroethane		130	U
142-28-9	1,3-Dichloropropane		130	U

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

CLIENT SAMPLE NO.

DEC-030DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1795.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0  
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
127-18-4	Tetrachloroethene		2000	D
591-78-6	2-Hexanone		130	U
124-48-1	Dibromochloromethane		130	U
106-93-4	1,2-Dibromoethane		130	U
108-90-7	Chlorobenzene		130	U
630-20-6	1,1,1,2-Tetrachloroethane		130	U
100-41-4	Ethylbenzene		130	U
1330-20-7	m,p-Xylene		130	U
95-47-6	o-Xylene		130	U
1330-20-7	Xylene (Total)		130	U
100-42-5	Styrene		130	U
75-25-2	Bromoform		130	U
98-82-8	Isopropylbenzene		130	U
79-34-5	1,1,2,2-Tetrachloroethane		130	U
108-86-1	Bromobenzene		130	U
96-18-4	1,2,3-Trichloropropane		130	U
95-49-8	2-Chlorotoluene		130	U
108-67-8	1,3,5-Trimethylbenzene		130	U
106-43-4	4-Chlorotoluene		130	U
98-06-6	tert-Butylbenzene		130	U
95-63-6	1,2,4-Trimethylbenzene		130	U
135-98-8	sec-Butylbenzene		130	U
99-87-6	4-Isopropyltoluene		130	U
541-73-1	1,3-Dichlorobenzene		130	U
106-46-7	1,4-Dichlorobenzene		130	U
95-50-1	1,2-Dichlorobenzene		130	U
96-12-8	1,2-Dibromo-3-chloropropane		130	U
120-82-1	1,2,4-Trichlorobenzene		130	U
87-68-3	Hexachlorobutadiene		130	U
87-61-6	1,2,3-Trichlorobenzene		130	U
91-20-3	Naphthalene		130	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		130	U
123-91-1	1,4-Dioxane		2500	U R
110-82-7	Cyclohexane		130	U
79-20-9	Methyl acetate		130	U

*OK*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-030DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V611795.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0  
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	
108-87-2	Methylcyclohexane		130	U

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

CLIENT SAMPLE NO.

DEC-030DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-02ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1795.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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8/8/11



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

CLIENT SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1766.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	1.1	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	17	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	2.1	J
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	23	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1766.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) $\mu$ g/L	Q
127-18-4	Tetrachloroethene	6100 3900	ED
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	2.1	J
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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	1.3	J
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U-R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten:* 8/8/11

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

CLIENT SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1766.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1766.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-031DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1797.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
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
75-71-8	Dichlorodifluoromethane	250	U	5
74-87-3	Chloromethane	250	U	
75-01-4	Vinyl chloride	250	U	
74-83-9	Bromomethane	250	U	
75-00-3	Chloroethane	250	U	
75-69-4	Trichlorofluoromethane	250	U	
75-35-4	1,1-Dichloroethene	250	U	
67-64-1	Acetone	250	U	R
74-88-4	Iodomethane	250	U	
75-15-0	Carbon disulfide	250	U	
75-09-2	Methylene chloride	250	U	
156-60-5	trans-1,2-Dichloroethene	250	U	
1634-04-4	Methyl tert-butyl ether	250	U	
75-34-3	1,1-Dichloroethane	250	U	
108-05-4	Vinyl acetate	250	U	
78-93-3	2-Butanone	250	U	R
156-59-2	cis-1,2-Dichloroethene	250	U	
594-20-7	2,2-Dichloropropane	250	U	
74-97-5	Bromochloromethane	250	U	
67-66-3	Chloroform	250	U	
71-55-6	1,1,1-Trichloroethane	250	U	
563-58-6	1,1-Dichloropropene	250	U	
56-23-5	Carbon tetrachloride	250	U	
107-06-2	1,2-Dichloroethane	250	U	
71-43-2	Benzene	250	U	
79-01-6	Trichloroethene	250	U	
78-87-5	1,2-Dichloropropane	250	U	
74-95-3	Dibromomethane	250	U	
75-27-4	Bromodichloromethane	250	U	
10061-01-5	cis-1,3-Dichloropropene	250	U	
108-10-1	4-Methyl-2-pentanone	250	U	
108-88-3	Toluene	250	U	
10061-02-6	trans-1,3-Dichloropropene	250	U	
79-00-5	1,1,2-Trichloroethane	250	U	
142-28-9	1,3-Dichloropropane	250	U	

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

CLIENT SAMPLE NO.

DEC-031DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1797.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	6100	D
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
1330-20-7	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U
1330-20-7	Xylene (Total)	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-68-3	Hexachlorobutadiene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	U
123-91-1	1,4-Dioxane	5000	U
110-82-7	Cyclohexane	250	U
79-20-9	Methyl acetate	250	U

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

CLIENT SAMPLE NO.

DEC-031DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1797.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
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	
108-87-2	Methylcyclohexane		250	U

*OK*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-031DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1797.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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8/8/11



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

CLIENT SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: VIM1765.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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
75-71-8	Dichlorodifluoromethane	5.0	U	✓
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	✓
75-35-4	1,1-Dichloroethene	5.0	U	
67-64-1	Acetone	5.0	U	R
74-88-4	Iodomethane	5.0	U	
75-15-0	Carbon disulfide	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	
108-05-4	Vinyl acetate	5.0	U	
78-93-3	2-Butanone	5.0	U	R
156-59-2	cis-1,2-Dichloroethene	5.0	U	
594-20-7	2,2-Dichloropropane	5.0	U	
74-97-5	Bromochloromethane	5.0	U	
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	5.0	U	
563-58-6	1,1-Dichloropropene	5.0	U	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	86		
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	1.2	J	
78-87-5	1,2-Dichloropropane	5.0	U	
74-95-3	Dibromomethane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	✓
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	

*Handwritten signature and date: 8/8/11*

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

CLIENT SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1765.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	16	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U-R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*dyk*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1765.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1765.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-032

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4264.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U R
156-59-2	cis-1,2-Dichloroethene		5.0	U S
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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 S
79-01-6	Trichloroethene		1.3	J
78-87-5	1,2-Dichloropropane		5.0	U S
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

*Handwritten signature/initials*

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

CLIENT SAMPLE NO.

DEC-032

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4264.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	3.0	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U S
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date: 8/9/11*

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

CLIENT SAMPLE NO.

DEC-032

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4264.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <del>S</del>

*Handwritten signature and date:*  
8/1/11

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

CLIENT SAMPLE NO.

DEC-032

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4264.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-033

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-15A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1824.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu$ g/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-033

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-15A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1824.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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	
127-18-4	Tetrachloroethene		5.0	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
630-20-6	1,1,1,2-Tetrachloroethane		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
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
108-86-1	Bromobenzene		5.0	U
96-18-4	1,2,3-Trichloropropane		5.0	U
95-49-8	2-Chlorotoluene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
106-43-4	4-Chlorotoluene		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
99-87-6	4-Isopropyltoluene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U-3
120-82-1	1,2,4-Trichlorobenzene		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U-3
87-61-6	1,2,3-Trichlorobenzene		5.0	U-3
91-20-3	Naphthalene		5.0	U-3
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
123-91-1	1,4-Dioxane		100	U-R
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U

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

CLIENT SAMPLE NO.

DEC-033

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-15A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1824.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
 % Moisture: not dec. Date Analyzed: 06/30/2011  
 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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-033

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-15A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1824.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-039

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1951.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu$ g/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	24	
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	2.6	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	23	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	3.6	J
563-58-6	1,1-Dichloropropene	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	230-240	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-039

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1951.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	58	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-039

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1951.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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)	µG/L
108-87-2	Methylcyclohexane	5.0	U

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

CLIENT SAMPLE NO.

DEC-039

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-17A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1951.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-039DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-17ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4450.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		20	D
75-35-4	1,1-Dichloroethene		10	U
67-64-1	Acetone		10	U
74-88-4	Iodomethane		10	U
75-15-0	Carbon disulfide		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		3.0	DJ
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		30	D
594-20-7	2,2-Dichloropropane		10	U
74-97-5	Bromochloromethane		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		4.1	DJ
563-58-6	1,1-Dichloropropene		10	U
56-23-5	Carbon tetrachloride		10	U
107-06-2	1,2-Dichloroethane		10	U
71-43-2	Benzene		10	U
79-01-6	Trichloroethene		230	D
78-87-5	1,2-Dichloropropane		10	U
74-95-3	Dibromomethane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
142-28-9	1,3-Dichloropropane		10	U

*Handwritten signature and date 8/11*

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

CLIENT SAMPLE NO.

DEC-039DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-17ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4450.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
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
127-18-4	Tetrachloroethene		49	D
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		10	U
630-20-6	1,1,1,2-Tetrachloroethane		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	m,p-Xylene		10	U
95-47-6	o-Xylene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
108-86-1	Bromobenzene		10	U
96-18-4	1,2,3-Trichloropropane		10	U
95-49-8	2-Chlorotoluene		10	U
108-67-8	1,3,5-Trimethylbenzene		10	U
106-43-4	4-Chlorotoluene		10	U
98-06-6	tert-Butylbenzene		10	U
95-63-6	1,2,4-Trimethylbenzene		10	U
135-98-8	sec-Butylbenzene		10	U
99-87-6	4-Isopropyltoluene		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U
87-68-3	Hexachlorobutadiene		10	U
87-61-6	1,2,3-Trichlorobenzene		10	U
91-20-3	Naphthalene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
123-91-1	1,4-Dioxane		200	U
110-82-7	Cyclohexane		10	U
79-20-9	Methyl acetate		10	U

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

CLIENT SAMPLE NO.

DEC-039DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-17ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4450.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
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	
108-87-2	Methylcyclohexane		10	U

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

CLIENT SAMPLE NO.

DEC-039DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-17ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4450.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Check*  
*8/9/11*

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

DEC-39

CLIENT SAMPLE NO.

DUP-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-20A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1954.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U-3
75-01-4	Vinyl chloride	5.0	U-3
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	26	
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U-R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	2.8	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U-R
156-59-2	cis-1,2-Dichloroethene	24	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	240	U-D
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

OK  
8/9/11

DEC-39

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

CLIENT SAMPLE NO.

DUP-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-20A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1954.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011

% Moisture: not dec. Date Analyzed: 07/06/2011

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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	59	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

OK  
8/11/11

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

DEC-39

CLIENT SAMPLE NO.

DUP-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-20A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1954.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

DEC-39

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

CLIENT SAMPLE NO.

DUP-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-20A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1954.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

DEC-39

CLIENT SAMPLE NO.

DUP-062411DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-20ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4452.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	20	D
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	10	U R
74-88-4	Iodomethane	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U R
156-59-2	cis-1,2-Dichloroethene	30	D
594-20-7	2,2-Dichloropropane	10	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	4.1	DJ
563-58-6	1,1-Dichloropropene	10	U
56-23-5	Carbon tetrachloride	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	240	D
78-87-5	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
142-28-9	1,3-Dichloropropane	10	U

*Handwritten signature and date 8/9/11*

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

DEC-39

CLIENT SAMPLE NO.

DUP-062411DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-20ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4452.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 07/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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
127-18-4	Tetrachloroethene		50	D
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		10	U
630-20-6	1,1,1,2-Tetrachloroethane		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	m,p-Xylene		10	U
95-47-6	o-Xylene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
108-86-1	Bromobenzene		10	U
96-18-4	1,2,3-Trichloropropane		10	U
95-49-8	2-Chlorotoluene		10	U
108-67-8	1,3,5-Trimethylbenzene		10	U
106-43-4	4-Chlorotoluene		10	U
98-06-6	tert-Butylbenzene		10	U
95-63-6	1,2,4-Trimethylbenzene		10	U
135-98-8	sec-Butylbenzene		10	U
99-87-6	4-Isopropyltoluene		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U
87-68-3	Hexachlorobutadiene		10	U
87-61-6	1,2,3-Trichlorobenzene		10	U
91-20-3	Naphthalene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
123-91-1	1,4-Dioxane		200	U R
110-82-7	Cyclohexane		10	U
79-20-9	Methyl acetate		10	U

*Handwritten signature*  
8/9/11

DEC-39

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

CLIENT SAMPLE NO.

DUP-062411DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-20ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4452.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
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	
108-87-2	Methylcyclohexane		10	U

DEC-39

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

CLIENT SAMPLE NO.

DUP-062411DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-20ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4452.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/07/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

Q1110  
8/9/11

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

CLIENT SAMPLE NO.

DEC-042

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4266.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	23	
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	1.1	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	6.3	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.4	J
71-55-6	1,1,1-Trichloroethane	2.9	J
563-58-6	1,1-Dichloropropene	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 S
79-01-6	Trichloroethene	73	
78-87-5	1,2-Dichloropropane	5.0	U S
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*OK*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-042

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4266.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	62	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U-B
110-82-7	Cyclohexane	5.0	U-3
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date 8/11*

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

CLIENT SAMPLE NO.

DEC-042

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4266.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <i>5</i>

*Def 8/11/1*

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

CLIENT SAMPLE NO.

DEC-042

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-08A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4266.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-043

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-28A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V611913.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*Handwritten signature*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-043

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-28A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1913.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	12	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U-3
87-68-3	Hexachlorobutadiene	5.0	U-3
87-61-6	1,2,3-Trichlorobenzene	5.0	U-3
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U-R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Q118*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-043

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-28A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1913.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-043

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-28A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1913.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-043D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-24A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1912.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U-R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U-R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	9.4	
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	1.2	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-043D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-24A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1912.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	9.0	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date: 8/11/11*

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

CLIENT SAMPLE NO.

DEC-043D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-24A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1912.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/05/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-043D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-24A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1912.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-044

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4233.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U R
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U R
156-59-2	cis-1,2-Dichloroethene		2.0	J
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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		8.6	
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

*Handwritten signature and date: 8/11/11*

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

CLIENT SAMPLE NO.

DEC-044

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4233.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	<del>1500</del> <del>2000</del>	<del>ED</del>
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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 <del>5</del>
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	<del>100</del>	U <del>R</del>
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten signature and date: 8/9/11*

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

CLIENT SAMPLE NO.

DEC-044

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4233.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <i>5</i>

*OK*  
*8/9/11*

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

CLIENT SAMPLE NO.

DEC-044

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4233.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-044DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4269.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0  
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	
75-71-8	Dichlorodifluoromethane		100	U
74-87-3	Chloromethane		100	U
75-01-4	Vinyl chloride		100	U
74-83-9	Bromomethane		100	U
75-00-3	Chloroethane		100	U
75-69-4	Trichlorofluoromethane		100	U
75-35-4	1,1-Dichloroethene		100	U
67-64-1	Acetone		100	U R
74-88-4	Iodomethane		100	U
75-15-0	Carbon disulfide		100	U
75-09-2	Methylene chloride		100	U
156-60-5	trans-1,2-Dichloroethene		100	U
1634-04-4	Methyl tert-butyl ether		100	U
75-34-3	1,1-Dichloroethane		100	U
108-05-4	Vinyl acetate		100	U
78-93-3	2-Butanone		100	U R
156-59-2	cis-1,2-Dichloroethene		100	U
594-20-7	2,2-Dichloropropane		100	U
74-97-5	Bromochloromethane		100	U
67-66-3	Chloroform		100	U
71-55-6	1,1,1-Trichloroethane		100	U
563-58-6	1,1-Dichloropropene		100	U
56-23-5	Carbon tetrachloride		100	U
107-06-2	1,2-Dichloroethane		100	U
71-43-2	Benzene		100	U
79-01-6	Trichloroethene		100	U
78-87-5	1,2-Dichloropropane		100	U
74-95-3	Dibromomethane		100	U
75-27-4	Bromodichloromethane		100	U
10061-01-5	cis-1,3-Dichloropropene		100	U
108-10-1	4-Methyl-2-pentanone		100	U
108-88-3	Toluene		100	U
10061-02-6	trans-1,3-Dichloropropene		100	U
79-00-5	1,1,2-Trichloroethane		100	U
142-28-9	1,3-Dichloropropane		100	U

*Handwritten signature and date: 8/1/11*

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

CLIENT SAMPLE NO.  
DEC-044DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4269.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/L}$	Q
127-18-4	Tetrachloroethene	1500	D
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	100	U
106-93-4	1,2-Dibromoethane	100	U
108-90-7	Chlorobenzene	100	U
630-20-6	1,1,1,2-Tetrachloroethane	100	U
100-41-4	Ethylbenzene	100	U
1330-20-7	m,p-Xylene	100	U
95-47-6	o-Xylene	100	U
1330-20-7	Xylene (Total)	100	U
100-42-5	Styrene	100	U
75-25-2	Bromoform	100	U
98-82-8	Isopropylbenzene	100	U
79-34-5	1,1,2,2-Tetrachloroethane	100	U
108-86-1	Bromobenzene	100	U
96-18-4	1,2,3-Trichloropropane	100	U
95-49-8	2-Chlorotoluene	100	U
108-67-8	1,3,5-Trimethylbenzene	100	U
106-43-4	4-Chlorotoluene	100	U
98-06-6	tert-Butylbenzene	100	U
95-63-6	1,2,4-Trimethylbenzene	100	U
135-98-8	sec-Butylbenzene	100	U
99-87-6	4-Isopropyltoluene	100	U
541-73-1	1,3-Dichlorobenzene	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-50-1	1,2-Dichlorobenzene	100	U
96-12-8	1,2-Dibromo-3-chloropropane	100	U
120-82-1	1,2,4-Trichlorobenzene	100	U
87-68-3	Hexachlorocyclopentadiene	100	U
87-61-6	1,2,3-Trichlorobenzene	100	U
91-20-3	Naphthalene	100	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100	U
123-91-1	1,4-Dioxane	2000	U R
110-82-7	Cyclohexane	100	U 3
79-20-9	Methyl acetate	100	U

*Copy  
8/1/11*

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

CLIENT SAMPLE NO.

DEC-044DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4269.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
108-87-2	Methylcyclohexane		100	U <u>3</u>

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

CLIENT SAMPLE NO.

DEC-044DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-06ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4269.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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8/9/11



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

CLIENT SAMPLE NO.

DEC-044D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-05A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4232.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	1.3	J
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	6.5	
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	500 - 560	U D
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-044D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-05A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4232.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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)	µg/L	Q
127-18-4	Tetrachloroethene		1.5	J
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
630-20-6	1,1,1,2-Tetrachloroethane		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
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
108-86-1	Bromobenzene		5.0	U
96-18-4	1,2,3-Trichloropropane		5.0	U
95-49-8	2-Chlorotoluene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
106-43-4	4-Chlorotoluene		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-5
99-87-6	4-Isopropyltoluene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U
120-82-1	1,2,4-Trichlorobenzene		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
123-91-1	1,4-Dioxane		100	U-R
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U

*Handwritten signature/initials*

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

CLIENT SAMPLE NO.

DEC-044D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-05A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4232.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <u>5</u>

*Handwritten signature*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-044D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-05A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4232.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-044DDL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1110

Mod. Ref No.: SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1110-05ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V8A4268.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/27/2011

% Moisture: not dec.

Date Analyzed: 06/30/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
75-71-8	Dichlorodifluoromethane		25	U
74-87-3	Chloromethane		25	U
75-01-4	Vinyl chloride		25	U
74-83-9	Bromomethane		25	U
75-00-3	Chloroethane		25	U
75-69-4	Trichlorofluoromethane		25	U
75-35-4	1,1-Dichloroethene		25	U
67-64-1	Acetone		25	U R
74-88-4	Iodomethane		25	U
75-15-0	Carbon disulfide		25	U
75-09-2	Methylene chloride		25	U
156-60-5	trans-1,2-Dichloroethene		25	U
1634-04-4	Methyl tert-butyl ether		25	U
75-34-3	1,1-Dichloroethane		25	U
108-05-4	Vinyl acetate		25	U
78-93-3	2-Butanone		25	U R
156-59-2	cis-1,2-Dichloroethene		25	U S
594-20-7	2,2-Dichloropropane		25	U
74-97-5	Bromochloromethane		25	U
67-66-3	Chloroform		6.0	DJ
71-55-6	1,1,1-Trichloroethane		25	U
563-58-6	1,1-Dichloropropene		25	U
56-23-5	Carbon tetrachloride		25	U
107-06-2	1,2-Dichloroethane		500	D
71-43-2	Benzene		25	U S
79-01-6	Trichloroethene		25	U
78-87-5	1,2-Dichloropropane		25	U S
74-95-3	Dibromomethane		25	U
75-27-4	Bromodichloromethane		25	U
10061-01-5	cis-1,3-Dichloropropene		25	U
108-10-1	4-Methyl-2-pentanone		25	U
108-88-3	Toluene		25	U
10061-02-6	trans-1,3-Dichloropropene		25	U
79-00-5	1,1,2-Trichloroethane		25	U
142-28-9	1,3-Dichloropropane		25	U

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

CLIENT SAMPLE NO.

DEC-044DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-05ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4268.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
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
127-18-4	Tetrachloroethene		25	U
591-78-6	2-Hexanone		25	U
124-48-1	Dibromochloromethane		25	U
106-93-4	1,2-Dibromoethane		25	U
108-90-7	Chlorobenzene		25	U
630-20-6	1,1,1,2-Tetrachloroethane		25	U
100-41-4	Ethylbenzene		25	U
1330-20-7	m,p-Xylene		25	U
95-47-6	o-Xylene		25	U
1330-20-7	Xylene (Total)		25	U
100-42-5	Styrene		25	U
75-25-2	Bromoform		25	U
98-82-8	Isopropylbenzene		25	U
79-34-5	1,1,2,2-Tetrachloroethane		25	U
108-86-1	Bromobenzene		25	U
96-18-4	1,2,3-Trichloropropane		25	U
95-49-8	2-Chlorotoluene		25	U
108-67-8	1,3,5-Trimethylbenzene		25	U
106-43-4	4-Chlorotoluene		25	U
98-06-6	tert-Butylbenzene		25	U
95-63-6	1,2,4-Trimethylbenzene		25	U
135-98-8	sec-Butylbenzene		25	U
99-87-6	4-Isopropyltoluene		25	U
541-73-1	1,3-Dichlorobenzene		25	U
106-46-7	1,4-Dichlorobenzene		25	U
95-50-1	1,2-Dichlorobenzene		25	U
96-12-8	1,2-Dibromo-3-chloropropane		25	U
120-82-1	1,2,4-Trichlorobenzene		25	U
87-68-3	Hexachlorobutadiene		25	U
87-61-6	1,2,3-Trichlorobenzene		25	U
91-20-3	Naphthalene		25	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		25	U
123-91-1	1,4-Dioxane		500	U
110-82-7	Cyclohexane		25	U
79-20-9	Methyl acetate		25	U

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

CLIENT SAMPLE NO.

DEC-044DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-05ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4268.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
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	
108-87-2	Methylcyclohexane		25	U <i>5</i>

*Deluz*  
*8/19/11*

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

CLIENT SAMPLE NO.

DEC-044DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-05ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4268.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*DPK*  
*8/9/11*



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

CLIENT SAMPLE NO.

DEC-045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-11A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1798.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U <i>5</i>
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U <i>R</i>
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U <i>R</i>
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-11A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1798.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	43	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*OK*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-11A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1798.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
 % Moisture: not dec. Date Analyzed: 06/29/2011  
 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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-11A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1798.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-045D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1791.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		81	
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

*Handwritten signature*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-045D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1791.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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
127-18-4	Tetrachloroethene		5.0	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
630-20-6	1,1,1,2-Tetrachloroethane		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
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
108-86-1	Bromobenzene		5.0	U
96-18-4	1,2,3-Trichloropropane		5.0	U
95-49-8	2-Chlorotoluene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
106-43-4	4-Chlorotoluene		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
99-87-6	4-Isopropyltoluene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U
120-82-1	1,2,4-Trichlorobenzene		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
123-91-1	1,4-Dioxane		100	U R
110-82-7	Cyclohexane		5.0	U
79-20-9	Methyl acetate		5.0	U

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

CLIENT SAMPLE NO.

DEC-045D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1791.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/29/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-045D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-10A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1791.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1823.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu\text{G/L}$	Q
75-71-8	Dichlorodifluoromethane	5.0	U <del>S</del>
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	<del>5.0</del>	<del>U</del> R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	<del>5.0</del>	<del>U</del> R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.1	J
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	1.5	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1823.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	7.4	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U S
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U S
87-61-6	1,2,3-Trichlorobenzene	5.0	U S
91-20-3	Naphthalene	5.7	U S
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten:* 8/8/11

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

CLIENT SAMPLE NO.

DEC-046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1823.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1823.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-047

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-14A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1799.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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
75-71-8	Dichlorodifluoromethane	5.0	U	✓
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
67-64-1	Acetone	5.0	U	R
74-88-4	Iodomethane	5.0	U	
75-15-0	Carbon disulfide	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	19		
75-34-3	1,1-Dichloroethane	5.0	U	
108-05-4	Vinyl acetate	5.0	U	
78-93-3	2-Butanone	5.0	U	R
156-59-2	cis-1,2-Dichloroethene	5.0	U	
594-20-7	2,2-Dichloropropane	5.0	U	
74-97-5	Bromochloromethane	5.0	U	
67-66-3	Chloroform	1.4	J	
71-55-6	1,1,1-Trichloroethane	5.0	U	
563-58-6	1,1-Dichloropropene	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	
78-87-5	1,2-Dichloropropane	5.0	U	
74-95-3	Dibromomethane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	

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

CLIENT SAMPLE NO.

DEC-047

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-14A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1799.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	2.9	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U J
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U J
91-20-3	Naphthalene	5.0	U J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten:* 8/8/11

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

CLIENT SAMPLE NO.

DEC-047

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-14A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1799.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-047

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-14A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1799.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1953.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu\text{G/L}$	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U-3
75-01-4	Vinyl chloride	5.0	U-3
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	9.1	85
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	13	5
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	2.6	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V611953.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	3.2	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	1.5	J
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	2.2	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1953.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
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)	µG/L	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1953.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

DEC-048

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

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1955.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011

% Moisture: not dec. Date Analyzed: 07/06/2011

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	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		7.5	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		18	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		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		1.4	U
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

DEC-048

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

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1955.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011

% Moisture: not dec. Date Analyzed: 07/06/2011

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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	3.6	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	1.7	J
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	2.4	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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DEC-048

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

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1955.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

DEC-048

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

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1955.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-064

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1761.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	2.3	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	3.3	J
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	6.8	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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8/8/11

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

CLIENT SAMPLE NO.

DEC-064

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1761.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	220 -300	ND
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-064

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1761.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
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	
108-87-2	Methylcyclohexane		5.0	U-5

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*8/8/11*

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

CLIENT SAMPLE NO.

DEC-064

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M1761.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/28/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-064DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-04ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1792.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	20	U-5
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
67-64-1	Acetone	20	U R
74-88-4	Iodomethane	20	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	20	U
78-93-3	2-Butanone	20	U R
156-59-2	cis-1,2-Dichloroethene	20	U
594-20-7	2,2-Dichloropropane	20	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	20	U
563-58-6	1,1-Dichloropropene	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	4.0	DJ
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
142-28-9	1,3-Dichloropropane	20	U

*OK*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-064DL

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1102

Mod. Ref No.:

SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: K1102-04ADL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V6I1792.D

Level: (TRACE/LOW/MED) LOW

Date Received: 06/24/2011

% Moisture: not dec.

Date Analyzed: 06/29/2011

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)	µG/L	Q
127-18-4	Tetrachloroethene		220	D
591-78-6	2-Hexanone		20	U
124-48-1	Dibromochloromethane		20	U
106-93-4	1,2-Dibromoethane		20	U
108-90-7	Chlorobenzene		20	U
630-20-6	1,1,1,2-Tetrachloroethane		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
100-42-5	Styrene		20	U
75-25-2	Bromoform		20	U
98-82-8	Isopropylbenzene		20	U
79-34-5	1,1,2,2-Tetrachloroethane		20	U
108-86-1	Bromobenzene		20	U
96-18-4	1,2,3-Trichloropropane		20	U
95-49-8	2-Chlorotoluene		20	U
108-67-8	1,3,5-Trimethylbenzene		20	U
106-43-4	4-Chlorotoluene		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
99-87-6	4-Isopropyltoluene		20	U
541-73-1	1,3-Dichlorobenzene		20	U
106-46-7	1,4-Dichlorobenzene		20	U
95-50-1	1,2-Dichlorobenzene		20	U
96-12-8	1,2-Dibromo-3-chloropropane		20	U
120-82-1	1,2,4-Trichlorobenzene		20	U
87-68-3	Hexachlorobutadiene		20	U
87-61-6	1,2,3-Trichlorobenzene		20	U
91-20-3	Naphthalene		20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		20	U
123-91-1	1,4-Dioxane		400	U R
110-82-7	Cyclohexane		20	U
79-20-9	Methyl acetate		20	U

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

CLIENT SAMPLE NO.

DEC-064DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-04ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1792.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
108-87-2	Methylcyclohexane		20	U

*any*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-064DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-04ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1792.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*OK*  
8/8/11



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

CLIENT SAMPLE NO.

DEC-064D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1790.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U-3
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	11	
67-64-1	Acetone	5.0	U-R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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	1.7	J
75-34-3	1,1-Dichloroethane	1.3	J
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U-R
156-59-2	cis-1,2-Dichloroethene	2.0	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	2.3	J
71-55-6	1,1,1-Trichloroethane	1.8	J
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	2.6	J
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	160	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

DEC-064D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1790.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	14	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.5	
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	2.1	J
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-064D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1790.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-064D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1790.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-065

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1831.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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
75-71-8	Dichlorodifluoromethane	5.0	U-3	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
67-64-1	Acetone	5.0	U-R	
74-88-4	Iodomethane	5.0	U	
75-15-0	Carbon disulfide	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	
108-05-4	Vinyl acetate	5.0	U	
78-93-3	2-Butanone	5.0	U-R	
156-59-2	cis-1,2-Dichloroethene	5.0	U	
594-20-7	2,2-Dichloropropane	5.0	U	
74-97-5	Bromochloromethane	5.0	U	
67-66-3	Chloroform	12		
71-55-6	1,1,1-Trichloroethane	5.0	U	
563-58-6	1,1-Dichloropropene	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	3.6	J	
78-87-5	1,2-Dichloropropane	5.0	U	
74-95-3	Dibromomethane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	

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8/8/11

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

CLIENT SAMPLE NO.

DEC-065

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1831.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	160	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-065

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1831.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

DEC-065

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-22A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1831.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu$ G/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

DEC-065  
CLIENT SAMPLE NO.  
DUP-062211

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-25A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4338.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	14	
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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 3
79-01-6	Trichloroethene	2.3	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

DEC-065

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

CLIENT SAMPLE NO.

DUP-062211

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-25A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4338.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
 % Moisture: not dec. Date Analyzed: 07/02/2011  
 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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	170	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

OK  
8/8/11

DEC-065

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

CLIENT SAMPLE NO.

DUP-062211

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-25A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4338.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
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	
108-87-2	Methylcyclohexane		5.0	<input checked="" type="checkbox"/>

*QMS*  
8/8/11

DEC-065

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

CLIENT SAMPLE NO.

DUP-062211

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-25A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4338.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/02/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg)  $\mu\text{G/L}$  Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-065D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1830.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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
75-71-8	Dichlorodifluoromethane	5.0	U	✓
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	1.3	J	
75-35-4	1,1-Dichloroethene	120		
67-64-1	Acetone	5.0	U	R
74-88-4	Iodomethane	5.0	U	
75-15-0	Carbon disulfide	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	6.8		
108-05-4	Vinyl acetate	5.0	U	
78-93-3	2-Butanone	5.0	U	R
156-59-2	cis-1,2-Dichloroethene	11		
594-20-7	2,2-Dichloropropane	5.0	U	
74-97-5	Bromochloromethane	5.0	U	
67-66-3	Chloroform	2.8	J	
71-55-6	1,1,1-Trichloroethane	22		
563-58-6	1,1-Dichloropropene	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	670	700	✓
78-87-5	1,2-Dichloropropane	5.0	U	
74-95-3	Dibromomethane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	

*Handwritten:* 8/19/11

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

CLIENT SAMPLE NO.

DEC-065D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1830.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	83	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-065D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1830.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/30/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.  
DEC-065D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1830.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/30/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-065DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4326.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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
75-71-8	Dichlorodifluoromethane	50	U	
74-87-3	Chloromethane	50	U	
75-01-4	Vinyl chloride	50	U	
74-83-9	Bromomethane	50	U	
75-00-3	Chloroethane	50	U	
75-69-4	Trichlorofluoromethane	50	U	
75-35-4	1,1-Dichloroethene	140	D	
67-64-1	Acetone	50	U	R
74-88-4	Iodomethane	50	U	
75-15-0	Carbon disulfide	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	
108-05-4	Vinyl acetate	50	U	
78-93-3	2-Butanone	50	U	R
156-59-2	cis-1,2-Dichloroethene	15	DJ	
594-20-7	2,2-Dichloropropane	50	U	
74-97-5	Bromochloromethane	50	U	
67-66-3	Chloroform	50	U	
71-55-6	1,1,1-Trichloroethane	26	DJ	
563-58-6	1,1-Dichloropropene	50	U	
56-23-5	Carbon tetrachloride	50	U	
107-06-2	1,2-Dichloroethane	50	U	
71-43-2	Benzene	50	U	S
79-01-6	Trichloroethene	670	D	
78-87-5	1,2-Dichloropropane	50	U	
74-95-3	Dibromomethane	50	U	
75-27-4	Bromodichloromethane	50	U	
10061-01-5	cis-1,3-Dichloropropene	50	U	
108-10-1	4-Methyl-2-pentanone	50	U	
108-88-3	Toluene	50	U	
10061-02-6	trans-1,3-Dichloropropene	50	U	
79-00-5	1,1,2-Trichloroethane	50	U	
142-28-9	1,3-Dichloropropane	50	U	

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

CLIENT SAMPLE NO.

DEC-065DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4326.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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
127-18-4	Tetrachloroethene		78	D
591-78-6	2-Hexanone		50	U
124-48-1	Dibromochloromethane		50	U
106-93-4	1,2-Dibromoethane		50	U
108-90-7	Chlorobenzene		50	U
630-20-6	1,1,1,2-Tetrachloroethane		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
100-42-5	Styrene		50	U
75-25-2	Bromoform		50	U
98-82-8	Isopropylbenzene		50	U
79-34-5	1,1,2,2-Tetrachloroethane		50	U
108-86-1	Bromobenzene		50	U
96-18-4	1,2,3-Trichloropropane		50	U
95-49-8	2-Chlorotoluene		50	U
108-67-8	1,3,5-Trimethylbenzene		50	U
106-43-4	4-Chlorotoluene		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
99-87-6	4-Isopropyltoluene		50	U
541-73-1	1,3-Dichlorobenzene		50	U
106-46-7	1,4-Dichlorobenzene		50	U
95-50-1	1,2-Dichlorobenzene		50	U
96-12-8	1,2-Dibromo-3-chloropropane		50	U
120-82-1	1,2,4-Trichlorobenzene		50	U
87-68-3	Hexachlorobutadiene		50	U
87-61-6	1,2,3-Trichlorobenzene		50	U
91-20-3	Naphthalene		50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		50	U
123-91-1	1,4-Dioxane		1000	U R
110-82-7	Cyclohexane		50	U
79-20-9	Methyl acetate		50	U

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

CLIENT SAMPLE NO.

DEC-065DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4326.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
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:		Q
		(ug/L or ug/kg)	ug/L	
108-87-2	Methylcyclohexane		50	U

*Handwritten signature*  
8/8/11

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

CLIENT SAMPLE NO.

DEC-065DDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-21ADL  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4326.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 07/01/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

*Handwritten:* 8/8/11

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

CLIENT SAMPLE NO.

DEC-066

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4231.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) <u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U R
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U R
156-59-2	cis-1,2-Dichloroethene	4.1	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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	2.1	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

*Handwritten signature and date: 8/19/11*

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

CLIENT SAMPLE NO.

DEC-066

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4231.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu\text{g/L}$	Q
127-18-4	Tetrachloroethene	8.4	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

*Handwritten:* 8/11/11

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

CLIENT SAMPLE NO.

DEC-066

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4231.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu\text{G/L}$	Q
108-87-2	Methylcyclohexane	5.0	U-3

*OK*  
8/9/11

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

CLIENT SAMPLE NO.

DEC-066

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-04A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4231.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

DEC-066D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4230.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		2.7	J
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		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
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U-2
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		23	
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

*Handwritten signature and date: 8/9/11*

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

CLIENT SAMPLE NO.

DEC-066D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4230.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) <u>ug/L</u>	Q
127-18-4	Tetrachloroethene	1.7	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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 <i>5</i>
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U <i>R</i>
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

DEC-066D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4230.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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	
108-87-2	Methylcyclohexane		5.0	U <input checked="" type="checkbox"/>

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8/9/11

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

CLIENT SAMPLE NO.

DEC-066D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4230.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1787.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu$ G/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	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
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1787.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. Date Analyzed: 06/29/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U-R
110-82-7	Cyclohexane	5.0	U
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1787.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/29/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-13A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I1787.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/24/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 06/29/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.



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

CLIENT SAMPLE NO.

TB

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4378.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U $\checkmark$
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U $\checkmark$
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	<del>5.0</del>	U R
74-88-4	Iodomethane	5.0	U $\checkmark$
75-15-0	Carbon disulfide	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
108-05-4	Vinyl acetate	5.0	U $\checkmark$
78-93-3	2-Butanone	<del>5.0</del>	U R
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U $\checkmark$
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U $\checkmark$
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

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

CLIENT SAMPLE NO.

TB

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4378.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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) $\mu$ G/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U <input checked="" type="checkbox"/>
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U <input checked="" type="checkbox"/>
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U <input checked="" type="checkbox"/>
110-82-7	Cyclohexane	5.0	U <input checked="" type="checkbox"/>
79-20-9	Methyl acetate	5.0	U

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

CLIENT SAMPLE NO.

TB

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4378.D  
Level: (TRACE/LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/05/2011  
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	
108-87-2	Methylcyclohexane		5.0	U

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

CLIENT SAMPLE NO.

TB

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-23A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A4378.D  
Level: (TRACE or LOW/MED) LOW Date Received: 06/27/2011  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/05/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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<sup>1</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12A  
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3H3766.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 16 Decanted: (Y/N) N Date Received: 05/12/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/18/2011  
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	190	U
111-44-4	Bis(2-chloroethyl) ether	190	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	190	U
108-60-1	2,2'-oxybis(1-Chloropropane)	190	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	190	U-5
111-91-1	Bis(2-chloroethoxy) methane	190	U
87-68-3	Hexachlorobutadiene	190	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	190	U
88-06-2	2,4,6-Trichlorophenol	190	U
95-95-4	2,4,5-Trichlorophenol	390	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	190	U
208-96-8	Acenaphthylene	190	U
606-20-2	2,6-Dinitrotoluene	190	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U-5
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
86-73-7	Fluorene	190	U
100-01-6	4-Nitroaniline	390	U

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

CLIENT SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12A  
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3H3766.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 16 Decanted: (Y/N) N Date Received: 05/12/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/18/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
534-52-1	4,6-Dinitro-2-methylphenol	390	U	U
86-30-6	N-Nitrosodiphenylamine	190	U	U
101-55-3	4-Bromophenyl-phenylether	190	U	U
118-74-1	Hexachlorobenzene	190	U	U
87-86-5	Pentachlorophenol	390	U	U
85-01-8	Phenanthrene	190	U	U
120-12-7	Anthracene	190	U	U
86-74-8	Carbazole	190	U	U
84-74-2	Di-n-butylphthalate	190	U	U
206-44-0	Fluoranthene	190	U	U
129-00-0	Pyrene	190	U	U
85-68-7	Butylbenzylphthalate	190	U	U
91-94-1	3,3'-Dichlorobenzidine	190	U	U
56-55-3	Benzo(a)anthracene	190	U	U
218-01-9	Chrysene	190	U	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U	U
117-84-0	Di-n-octylphthalate	190	U	U
205-99-2	Benzo(b)fluoranthene	190	U	U
207-08-9	Benzo(k)fluoranthene	190	U	U
50-32-8	Benzo(a)pyrene	190	U	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U	U
53-70-3	Dibenzo(a,h)anthracene	190	U	U
191-24-2	Benzo(g,h,i)perylene	190	U	U
92-52-4	1,1'-Biphenyl	190	U	U
111-11-1	3-Methylphenol + 4-Methylphenol	190	U	U
98-86-2	Acetophenone	190	U	U
1912-24-9	Atrazine	190	U	U
100-52-7	Benzaldehyde	190	U	U
105-60-2	Caprolactam	190	U	U

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12A  
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3H3766.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 16 Decanted: (Y/N) N Date Received: 05/12/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/18/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown (3.60670)	3.607	83	J
02		Unknown (3.68683)	3.687	110	J
03	57-10-3	n-Hexadecanoic acid	7.624	380	NJ
04		Unknown (8.20093)	8.201	330	J
05		Unknown (8.27038)	8.270	140	J
06	74685-33-9	3-Eicosene, (E)-	8.302	120	NJ
07	81803-09-0	Thieno[2,3-d]-1,3-thiaseleno	8.890	250	NJ
08		Unknown (10.61558)	10.616	130	J

<sup>2</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3H3765.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 6.8 Decanted: (Y/N) N Date Received: 05/10/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/18/2011  
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	180	U
111-44-4	Bis(2-chloroethyl)ether	180	U
95-57-8	2-Chlorophenol	180	U
95-48-7	2-Methylphenol	180	U
108-60-1	2,2'-oxybis(1-Chloropropane)	180	U
621-64-7	N-Nitroso-di-n-propylamine	180	U
67-72-1	Hexachloroethane	180	U
98-95-3	Nitrobenzene	180	U
78-59-1	Isophorone	180	U
88-75-5	2-Nitrophenol	180	U
105-67-9	2,4-Dimethylphenol	180	U
120-83-2	2,4-Dichlorophenol	180	U
91-20-3	Naphthalene	180	U
106-47-8	4-Chloroaniline	180	U-3
111-91-1	Bis(2-chloroethoxy)methane	180	U
87-68-3	Hexachlorobutadiene	180	U
59-50-7	4-Chloro-3-methylphenol	180	U
91-57-6	2-Methylnaphthalene	180	U
77-47-4	Hexachlorocyclopentadiene	180	U
88-06-2	2,4,6-Trichlorophenol	180	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	180	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	180	U
208-96-8	Acenaphthylene	180	U
606-20-2	2,6-Dinitrotoluene	180	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	180	U
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U-3
132-64-9	Dibenzofuran	180	U
121-14-2	2,4-Dinitrotoluene	180	U
84-66-2	Diethylphthalate	180	U
7005-72-3	4-Chlorophenyl-phenylether	180	U
86-73-7	Fluorene	180	U
100-01-6	4-Nitroaniline	360	U

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8/1/11  
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1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3H3765.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 6.8 Decanted: (Y/N) N Date Received: 05/10/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/18/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
534-52-1	4,6-Dinitro-2-methylphenol	360		U
86-30-6	N-Nitrosodiphenylamine	180		U
101-55-3	4-Bromophenyl-phenylether	180		U
118-74-1	Hexachlorobenzene	180		U
87-86-5	Pentachlorophenol	360		U
85-01-8	Phenanthrene	46		J
120-12-7	Anthracene	180		U
86-74-8	Carbazole	180		U
84-74-2	Di-n-butylphthalate	130		J
206-44-0	Fluoranthene	110		J
129-00-0	Pyrene	160		J
85-68-7	Butylbenzylphthalate	180		U
91-94-1	3,3'-Dichlorobenzidine	180		U
56-55-3	Benzo(a)anthracene	73		J
218-01-9	Chrysene	83		J
117-81-7	Bis(2-ethylhexyl)phthalate	75		J
117-84-0	Di-n-octylphthalate	180		U
205-99-2	Benzo(b)fluoranthene	96		J
207-08-9	Benzo(k)fluoranthene	56		J
50-32-8	Benzo(a)pyrene	92		J
193-39-5	Indeno(1,2,3-cd)pyrene	58		J
53-70-3	Dibenzo(a,h)anthracene	23		J
191-24-2	Benzo(g,h,i)perylene	72		J
92-52-4	1,1'-Biphenyl	180		U
111-11-1	3-Methylphenol + 4-Methylphenol	180		U
98-86-2	Acetophenone	180		U
1912-24-9	Atrazine	180		U
100-52-7	Benzaldehyde	180		U
105-60-2	Caprolactam	180		U

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3H3765.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 6.8 Decanted: (Y/N) N Date Received: 05/10/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/18/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	88-19-7	Benzenesulfonamide, 2-methyl	6.469	72	NJ
02	70-55-3	Benzenesulfonamide, 4-methyl	6.635	140	NJ

<sup>2</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-044D (4-5')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-02A  
Sample wt/vol: 300 (g/mL) ML Lab File ID: S3H3750.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 05/12/2011  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/17/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/17/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U-5
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U-5

*WAX*  
*8/3/11*

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

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03A  
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3H4109.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 10 Decanted: (Y/N) N Date Received: 05/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
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	180	U
111-44-4	Bis(2-chloroethyl) ether	180	U
95-57-8	2-Chlorophenol	180	U
95-48-7	2-Methylphenol	180	U
108-60-1	2,2'-oxybis(1-Chloropropane)	180	U
621-64-7	N-Nitroso-di-n-propylamine	180	U
67-72-1	Hexachloroethane	180	U
98-95-3	Nitrobenzene	180	U-3
78-59-1	Isophorone	180	U
88-75-5	2-Nitrophenol	180	U
105-67-9	2,4-Dimethylphenol	180	U
120-83-2	2,4-Dichlorophenol	180	U
91-20-3	Naphthalene	180	U
106-47-8	4-Chloroaniline	180	U
111-91-1	Bis(2-chloroethoxy) methane	180	U
87-68-3	Hexachlorobutadiene	180	U
59-50-7	4-Chloro-3-methylphenol	180	U
91-57-6	2-Methylnaphthalene	180	U-5
77-47-4	Hexachlorocyclopentadiene	180	U
88-06-2	2,4,6-Trichlorophenol	180	U
95-95-4	2,4,5-Trichlorophenol	370	U
91-58-7	2-Chloronaphthalene	180	U
88-74-4	2-Nitroaniline	370	U
131-11-3	Dimethylphthalate	180	U
208-96-8	Acenaphthylene	180	U
606-20-2	2,6-Dinitrotoluene	180	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	180	U
51-28-5	2,4-Dinitrophenol	370	U-5
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	180	U
121-14-2	2,4-Dinitrotoluene	180	U
84-66-2	Diethylphthalate	180	U
7005-72-3	4-Chlorophenyl-phenylether	180	U
86-73-7	Fluorene	180	U
100-01-6	4-Nitroaniline	370	U

*Handwritten:* OK 8/4/11

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

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03A  
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3H4109.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 10 Decanted: (Y/N) N Date Received: 05/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
534-52-1	4,6-Dinitro-2-methylphenol	370	U	
86-30-6	N-Nitrosodiphenylamine	180	U	
101-55-3	4-Bromophenyl-phenylether	180	U	
118-74-1	Hexachlorobenzene	180	U	
87-86-5	Pentachlorophenol	370	U	
85-01-8	Phenanthrene	180	U	
120-12-7	Anthracene	180	U	
86-74-8	Carbazole	180	U	
84-74-2	Di-n-butylphthalate	180	U	
206-44-0	Fluoranthene	180	U	
129-00-0	Pyrene	180	U	
85-68-7	Butylbenzylphthalate	180	U	
91-94-1	3,3'-Dichlorobenzidine	180	U	
56-55-3	Benzo(a)anthracene	180	U	
218-01-9	Chrysene	180	U	
117-81-7	Bis(2-ethylhexyl)phthalate	260		
117-84-0	Di-n-octylphthalate	180	U	
205-99-2	Benzo(b)fluoranthene	180	U	
207-08-9	Benzo(k)fluoranthene	180	U	
50-32-8	Benzo(a)pyrene	180	U	
193-39-5	Indeno(1,2,3-cd)pyrene	180	U	
53-70-3	Dibenzo(a,h)anthracene	180	U	
191-24-2	Benzo(g,h,i)perylene	180	U	
92-52-4	1,1'-Biphenyl	180	U	
111-11-1	3-Methylphenol + 4-Methylphenol	180	U	
98-86-2	Acetophenone	180	U	
1912-24-9	Atrazine	180	U	
100-52-7	Benzaldehyde	180	U	
105-60-2	Caprolactam	180	U	

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03A  
Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3H4109.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 10 Decanted: (Y/N) N Date Received: 05/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown (2.04600)	2.046	98	J
02	143-07-7 Dodecanoic acid	5.241	120	NJ
03	544-63-8 Tetradecanoic acid	5.988	110	NJ
04	<del>57-10-3 n-Hexadecanoic acid</del>	<del>6.683</del>	<del>810</del>	<del>BNJ</del>
05	127062-51-5 13-Hexyloxacyclotridec-10-en	6.998	320	NJ
06	17309-05-6 9,15-Octadecadienoic acid, m	7.078	240	NJ
07	56554-49-5 16-Octadecenoic acid, methyl	7.100	200	NJ
08	56554-35-9 9,17-Octadecadienal, (Z)-	7.228	260	NJ
09	57-11-4 Octadecanoic acid	7.303	210	NJ
10	301-02-0 9-Octadecenamide, (Z)-	7.869	920	NJ
11	1000131-10-3 Z,E-2,13-Octadecadien-1-ol	8.740	7600	NJ
12	112-84-5 13-Docosenamide, (Z)-	8.932	490	NJ
13	<del>111-02-4 2,6,10,14,18,22-Tetracosahex</del>	<del>9.007</del>	<del>220</del>	<del>BNJ</del>
14	Unknown (9.95235)	9.952	290	J

<sup>2</sup>EPA-designated Registry Number.

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8/4/11

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

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04A  
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3H4110.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 13 Decanted: (Y/N) N Date Received: 05/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
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	190	U
111-44-4	Bis(2-chloroethyl) ether	190	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	190	U
108-60-1	2,2'-oxybis(1-Chloropropane)	190	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U-3
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	190	U
111-91-1	Bis(2-chloroethoxy)methane	190	U
87-68-3	Hexachlorobutadiene	190	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U-3
77-47-4	Hexachlorocyclopentadiene	190	U
88-06-2	2,4,6-Trichlorophenol	190	U
95-95-4	2,4,5-Trichlorophenol	380	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	380	U
131-11-3	Dimethylphthalate	190	U
208-96-8	Acenaphthylene	190	U
606-20-2	2,6-Dinitrotoluene	190	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	380	U-3
100-02-7	4-Nitrophenol	380	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
86-73-7	Fluorene	190	U
100-01-6	4-Nitroaniline	380	U

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8/4/11

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

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04A  
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3H4110.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 13 Decanted: (Y/N) N Date Received: 05/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	190	U
120-12-7	Anthracene	190	U
86-74-8	Carbazole	190	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	190	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3'-Dichlorobenzidine	190	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	73	J
117-84-0	Di-n-octylphthalate	190	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
92-52-4	1,1'-Biphenyl	190	U
111-11-1	3-Methylphenol + 4-Methylphenol	190	U
98-86-2	Acetophenone	190	U
1912-24-9	Atrazine	190	U
100-52-7	Benzaldehyde	190	U
105-60-2	Caprolactam	190	U



1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04A  
Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3H4110.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 13 Decanted: (Y/N) N Date Received: 05/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	143-07-7	Dodecanoic acid	5.246	100	NJ
02	<del>57-10-3</del>	<del>n-Hexadecanoic acid</del>	<del>6.683</del>	<del>630</del>	<del>BNJ</del>
03	60-33-3	9,12-Octadecadienoic acid (Z)	7.228	200	NJ
04	57-11-4	Octadecanoic acid	7.297	170	NJ
05		Unknown	7.356	88	J
06	<del>111-02-4</del>	<del>2,6,10,14,18,22-Tetraeosahe</del>	<del>9.007</del>	<del>230</del>	<del>BNJ</del>

<sup>2</sup>EPA-designated Registry Number.

*Chyl*  
8/4/11

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

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: S3H4108.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 19 Decanted: (Y/N) N Date Received: 05/25/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
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	200	U	U
111-44-4	Bis(2-chloroethyl)ether	200	U	U
95-57-8	2-Chlorophenol	200	U	U
95-48-7	2-Methylphenol	200	U	U
108-60-1	2,2'-oxybis(1-Chloropropane)	200	U	U
621-64-7	N-Nitroso-di-n-propylamine	200	U	U
67-72-1	Hexachloroethane	200	U	U
98-95-3	Nitrobenzene	200	U	U
78-59-1	Isophorone	200	U	U
88-75-5	2-Nitrophenol	200	U	U
105-67-9	2,4-Dimethylphenol	200	U	U
120-83-2	2,4-Dichlorophenol	200	U	U
91-20-3	Naphthalene	200	U	U
106-47-8	4-Chloroaniline	200	U	U
111-91-1	Bis(2-chloroethoxy)methane	200	U	U
87-68-3	Hexachlorobutadiene	200	U	U
59-50-7	4-Chloro-3-methylphenol	200	U	U
91-57-6	2-Methylnaphthalene	200	U	U
77-47-4	Hexachlorocyclopentadiene	200	U	U
88-06-2	2,4,6-Trichlorophenol	200	U	U
95-95-4	2,4,5-Trichlorophenol	410	U	U
91-58-7	2-Chloronaphthalene	200	U	U
88-74-4	2-Nitroaniline	410	U	U
131-11-3	Dimethylphthalate	200	U	U
208-96-8	Acenaphthylene	200	U	U
606-20-2	2,6-Dinitrotoluene	200	U	U
99-09-2	3-Nitroaniline	410	U	U
83-32-9	Acenaphthene	200	U	U
51-28-5	2,4-Dinitrophenol	410	U	U
100-02-7	4-Nitrophenol	410	U	U
132-64-9	Dibenzofuran	200	U	U
121-14-2	2,4-Dinitrotoluene	200	U	U
84-66-2	Diethylphthalate	200	U	U
7005-72-3	4-Chlorophenyl-phenylether	200	U	U
86-73-7	Fluorene	200	U	U
100-01-6	4-Nitroaniline	410	U	U

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*8/4/11*

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

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: S3H4108.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 19 Decanted: (Y/N) N Date Received: 05/25/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	91	J
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
92-52-4	1,1'-Biphenyl	200	U
111-11-1	3-Methylphenol + 4-Methylphenol	200	U
98-86-2	Acetophenone	200	U
1912-24-9	Atrazine	200	U
100-52-7	Benzaldehyde	200	U
105-60-2	Caprolactam	200	U

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: S3H4108.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 19 Decanted: (Y/N) N Date Received: 05/25/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	143-07-7	Dodecanoic acid	5.251	220	NJ
02	544-63-8	Tetradecanoic acid	5.988	160	NJ
03	1000130-71-3	1,5-Dodecadiene	6.602	82	NJ
04	<del>57-10-3</del>	<del>n-Hexadecanoic acid</del>	6.688	950	<del>BNJ</del>
05		Unknown (7.22208)	7.222	110	J
06	57-11-4	Octadecanoic acid	7.302	250	NJ
07		Unknown (8.22640)	8.226	98	J
08	1560-92-5	Hexadecane, 2-methyl-	8.611	100	NJ
09		Unknown (8.92622)	8.926	140	J
10	<del>111-03-4</del>	<del>2,6,10,14,18,22-Tetracosahex</del>	<del>9.006</del>	<del>510</del>	<del>BNJ</del>

<sup>2</sup>EPA-designated Registry Number.

*QJF*  
8/4/11

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

CLIENT SAMPLE NO.

DEC-066S (1-2')

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-01A  
Sample wt/vol: 300 (g/mL) ML Lab File ID: S3H3749.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 05/12/2011  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/17/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/17/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	<u>3000</u> <del>2500</del>	<u>ED</u>
106-44-5	4-Methylphenol	<u>8700</u> <del>6000</del>	<u>ED</u>
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U <u>5</u>
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	14	<u>5</u>

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8/3/11*

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

CLIENT SAMPLE NO.

DEC-066S  
(1-2') DL

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-01ADL  
Sample wt/vol: 300 (g/mL) ML Lab File ID: S3H3767.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 05/12/2011  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/17/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/18/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 50.0

CAS NO.	COMPOUND	CONCENTRATION UNITS, (ug/L or ug/Kg) <u>UG/L</u>	Q
106-46-7	1,4-Dichlorobenzene	1700	U
95-48-7	2-Methylphenol	3000	D
106-44-5	4-Methylphenol	8700	D
67-72-1	Hexachloroethane	1700	U
98-95-3	Nitrobenzene	1700	U
87-68-3	Hexachlorobutadiene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	3300	U
121-14-2	2,4-Dinitrotoluene	1700	U
118-74-1	Hexachlorobenzene	1700	U
87-86-5	Pentachlorophenol	3300	U
110-86-1	Pyridine	3300	U

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8/3/11

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-029D  
(75-76')

Lab Name: SPECTRUM ANALYTICAL, INC. FEATURIN Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12A  
Sample wt/vol: 30.6 (g/mL) G Lab File ID: E5H0498F.D/E5H0498R.D  
% Moisture: 16 Decanted: (Y/N) N Date Received: 05/12/2011  
Extraction: (Type) SONC Date Extracted: 05/13/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/KG	
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		2.0	U
76-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		3.8	U
72-55-9	4,4'-DDE		3.8	U
72-20-8	Endrin		3.8	U
33213-65-9	Endosulfan II		3.8	U
72-54-8	4,4'-DDD		3.8	U
1031-07-8	Endosulfan sulfate		3.8	U
50-29-3	4,4'-DDT		3.8	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin ketone		3.8	U
7421-93-4	Endrin aldehyde		3.8	U
5103-71-9	alpha-Chlordane		2.0	U
5103-74-2	gamma-Chlordane		2.0	U
8001-35-2	Toxaphene		200	U

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

EPA SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4446.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/28/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/30/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
108-95-2	Phenol		5.0	U
111-44-4	Bis(2-chloroethyl)ether		5.0	U
95-57-8	2-Chlorophenol		5.0	U
95-48-7	2-Methylphenol		5.0	U <i>S</i>
108-60-1	2,2'-oxybis(1-Chloropropane)		5.0	U
621-64-7	N-Nitroso-di-n-propylamine		5.0	U
67-72-1	Hexachloroethane		5.0	U
98-95-3	Nitrobenzene		5.0	U
78-59-1	Isophorone		5.0	U
88-75-5	2-Nitrophenol		5.0	U
105-67-9	2,4-Dimethylphenol		5.0	U
120-83-2	2,4-Dichlorophenol		5.0	U
91-20-3	Naphthalene		5.0	U
106-47-8	4-Chloroaniline		5.0	U
111-91-1	Bis(2-chloroethoxy)methane		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U
59-50-7	4-Chloro-3-methylphenol		5.0	U
91-57-6	2-Methylnaphthalene		5.0	U
77-47-4	Hexachlorocyclopentadiene		5.0	U
88-06-2	2,4,6-Trichlorophenol		5.0	U
95-95-4	2,4,5-Trichlorophenol		10	U
91-58-7	2-Chloronaphthalene		5.0	U
88-74-4	2-Nitroaniline		10	U
131-11-3	Dimethylphthalate		5.0	U
208-96-8	Acenaphthylene		5.0	U
606-20-2	2,6-Dinitrotoluene		5.0	U
99-09-2	3-Nitroaniline		10	U
83-32-9	Acenaphthene		5.0	U
51-28-5	2,4-Dinitrophenol		10	U <i>S</i>
100-02-7	4-Nitrophenol		10	U
132-64-9	Dibenzofuran		5.0	U
121-14-2	2,4-Dinitrotoluene		5.0	U
84-66-2	Diethylphthalate		5.0	U
7005-72-3	4-Chlorophenyl-phenylether		5.0	U
86-73-7	Fluorene		5.0	U
100-01-6	4-Nitroaniline		10	U

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

EPA SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4446.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/28/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/30/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
534-52-1	4,6-Dinitro-2-methylphenol		10	U
86-30-6	N-Nitrosodiphenylamine		5.0	U
101-55-3	4-Bromophenyl-phenylether		5.0	U
118-74-1	Hexachlorobenzene		5.0	U
87-86-5	Pentachlorophenol		10	U
85-01-8	Phenanthrene		5.0	U
120-12-7	Anthracene		5.0	U
86-74-8	Carbazole		5.0	U
84-74-2	Di-n-butylphthalate		0.56	J
206-44-0	Fluoranthene		5.0	U
129-00-0	Pyrene		5.0	U
85-68-7	Butylbenzylphthalate		5.0	U
91-94-1	3,3'-Dichlorobenzidine		5.0	U
56-55-3	Benzo(a)anthracene		5.0	U
218-01-9	Chrysene		5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate		5.0	U
117-84-0	Di-n-octylphthalate		5.0	U
205-99-2	Benzo(b)fluoranthene		5.0	U
207-08-9	Benzo(k)fluoranthene		5.0	U
50-32-8	Benzo(a)pyrene		5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene		5.0	U
53-70-3	Dibenzo(a,h)anthracene		5.0	U
191-24-2	Benzo(g,h,i)perylene		5.0	U
92-52-4	1,1'-Biphenyl		5.0	U
111-11-1	3-Methylphenol + 4-Methylphenol		5.0	U
98-86-2	Acetophenone		5.0	U
1912-24-9	Atrazine		5.0	U
100-52-7	Benzaldehyde		5.0	U
105-60-2	Caprolactam		5.0	U

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8/9/11

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4446.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/28/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/30/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.215	2.6	J
02	57-10-3	n-Hexadecanoic acid	7.815	11	NJ
03	57-11-4	Octadecanoic acid	8.440	3.0	NJ
04	112-84-5	13-Docosenamide, (Z)-	10.048	4.6	NJ

<sup>2</sup>EPA-designated Registry Number.

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

EPA SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4445.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/28/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/30/2011  
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		5.0	U
111-44-4	Bis(2-chloroethyl) ether		5.0	U
95-57-8	2-Chlorophenol		5.0	U
95-48-7	2-Methylphenol		5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)		5.0	U
621-64-7	N-Nitroso-di-n-propylamine		5.0	U
67-72-1	Hexachloroethane		5.0	U
98-95-3	Nitrobenzene		5.0	U
78-59-1	Isophorone		5.0	U
88-75-5	2-Nitrophenol		5.0	U
105-67-9	2,4-Dimethylphenol		5.0	U
120-83-2	2,4-Dichlorophenol		5.0	U
91-20-3	Naphthalene		5.0	U
106-47-8	4-Chloroaniline		5.0	U
111-91-1	Bis(2-chloroethoxy)methane		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U
59-50-7	4-Chloro-3-methylphenol		5.0	U
91-57-6	2-Methylnaphthalene		5.0	U
77-47-4	Hexachlorocyclopentadiene		5.0	U
88-06-2	2,4,6-Trichlorophenol		5.0	U
95-95-4	2,4,5-Trichlorophenol		10	U
91-58-7	2-Chloronaphthalene		5.0	U
88-74-4	2-Nitroaniline		10	U
131-11-3	Dimethylphthalate		5.0	U
208-96-8	Acenaphthylene		5.0	U
606-20-2	2,6-Dinitrotoluene		5.0	U
99-09-2	3-Nitroaniline		10	U
83-32-9	Acenaphthene		5.0	U
51-28-5	2,4-Dinitrophenol		10	U
100-02-7	4-Nitrophenol		10	U
132-64-9	Dibenzofuran		5.0	U
121-14-2	2,4-Dinitrotoluene		5.0	U
84-66-2	Diethylphthalate		5.0	U
7005-72-3	4-Chlorophenyl-phenylether		5.0	U
86-73-7	Fluorene		5.0	U
100-01-6	4-Nitroaniline		10	U

*Handwritten signature and date: 8/11/11*

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

EPA SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4445.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/28/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/30/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
534-52-1	4,6-Dinitro-2-methylphenol		10	U
86-30-6	N-Nitrosodiphenylamine		5.0	U
101-55-3	4-Bromophenyl-phenylether		5.0	U
118-74-1	Hexachlorobenzene		5.0	U
87-86-5	Pentachlorophenol		10	U
85-01-8	Phenanthrene		5.0	U
120-12-7	Anthracene		5.0	U
86-74-8	Carbazole		5.0	U
84-74-2	Di-n-butylphthalate		0.72	J
206-44-0	Fluoranthene		5.0	U
129-00-0	Pyrene		5.0	U
85-68-7	Butylbenzylphthalate		5.0	U
91-94-1	3,3'-Dichlorobenzidine		5.0	U
56-55-3	Benzo(a)anthracene		5.0	U
218-01-9	Chrysene		5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate		5.0	U
117-84-0	Di-n-octylphthalate		5.0	U
205-99-2	Benzo(b)fluoranthene		5.0	U
207-08-9	Benzo(k)fluoranthene		5.0	U
50-32-8	Benzo(a)pyrene		5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene		5.0	U
53-70-3	Dibenzo(a,h)anthracene		5.0	U
191-24-2	Benzo(g,h,i)perylene		5.0	U
92-52-4	1,1'-Biphenyl		5.0	U
111-11-1	3-Methylphenol + 4-Methylphenol		5.0	U
98-86-2	Acetophenone		5.0	U
1912-24-9	Atrazine		5.0	U
100-52-7	Benzaldehyde		5.0	U
105-60-2	Caprolactam		5.0	U-5

*Handwritten signature and date: 6/30/11*

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08D  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4445.D  
 Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/28/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/30/2011  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.205	2.3	J
02	57-10-3	n-Hexadecanoic acid	7.811	8.3	NJ
03	112-84-5	13-Docosenamide, (Z)-	10.038	4.5	NJ

<sup>2</sup>EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19D

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4717.D

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

% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/01/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/19/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
208-96-8	Acenaphthylene	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
86-73-7	Fluorene	5.0	U
100-01-6	4-Nitroaniline	10	U

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4717.D  
Level: (LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 07/01/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/19/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
534-52-1	4,6-Dinitro-2-methylphenol		10	U
86-30-6	N-Nitrosodiphenylamine		5.0	U
101-55-3	4-Bromophenyl-phenylether		5.0	U
118-74-1	Hexachlorobenzene		5.0	U
87-86-5	Pentachlorophenol		10	U
85-01-8	Phenanthrene		5.0	U
120-12-7	Anthracene		5.0	U
86-74-8	Carbazole		5.0	U
84-74-2	Di-n-butylphthalate		5.0	U
206-44-0	Fluoranthene		5.0	U
129-00-0	Pyrene		5.0	U
85-68-7	Butylbenzylphthalate		5.0	U
91-94-1	3,3'-Dichlorobenzidine		5.0	U
56-55-3	Benzo(a)anthracene		5.0	U
218-01-9	Chrysene		5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate		5.0	U
117-84-0	Di-n-octylphthalate		5.0	U
205-99-2	Benzo(b)fluoranthene		5.0	U
207-08-9	Benzo(k)fluoranthene		5.0	U
50-32-8	Benzo(a)pyrene		5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene		5.0	U
53-70-3	Dibenzo(a,h)anthracene		5.0	U
191-24-2	Benzo(g,h,i)perylene		5.0	U
92-52-4	1,1'-Biphenyl		5.0	U
111-11-1	3-Methylphenol + 4-Methylphenol		5.0	U
98-86-2	Acetophenone		5.0	U
1912-24-9	Atrazine		5.0	U
100-52-7	Benzaldehyde		5.0	U
105-60-2	Caprolactam		5.0	U

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4717.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 07/01/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/19/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	2039-89-6	Benzene, 2-ethenyl-1,4-dimet	5.675	2.4	NJ

<sup>2</sup>EPA-designated Registry Number.



DEC-048

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

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21D  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4720.D  
 Level: (LOW/MED) LOW Extraction: (Type) SEPF  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
 Concentrated Extract Volume: 500 (uL) Date Extracted: 07/01/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/19/2011  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
108-95-2	Phenol	5.0	U	
111-44-4	Bis(2-chloroethyl)ether	5.0	U	
95-57-8	2-Chlorophenol	5.0	U	
95-48-7	2-Methylphenol	5.0	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U	
621-64-7	N-Nitroso-di-n-propylamine	5.0	U	
67-72-1	Hexachloroethane	5.0	U	
98-95-3	Nitrobenzene	5.0	U	
78-59-1	Isophorone	5.0	U	
88-75-5	2-Nitrophenol	5.0	U	
105-67-9	2,4-Dimethylphenol	5.0	U	
120-83-2	2,4-Dichlorophenol	5.0	U	
91-20-3	Naphthalene	1.2	J	
106-47-8	4-Chloroaniline	5.0	U	
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	
87-68-3	Hexachlorobutadiene	5.0	U	
59-50-7	4-Chloro-3-methylphenol	5.0	U	
91-57-6	2-Methylnaphthalene	1.4	J	
77-47-4	Hexachlorocyclopentadiene	5.0	U	
88-06-2	2,4,6-Trichlorophenol	5.0	U	
95-95-4	2,4,5-Trichlorophenol	10	U	
91-58-7	2-Chloronaphthalene	5.0	U	
88-74-4	2-Nitroaniline	10	U	
131-11-3	Dimethylphthalate	5.0	U	
208-96-8	Acenaphthylene	5.0	U	
606-20-2	2,6-Dinitrotoluene	5.0	U	
99-09-2	3-Nitroaniline	10	U	
83-32-9	Acenaphthene	5.0	U	
51-28-5	2,4-Dinitrophenol	10	U	
100-02-7	4-Nitrophenol	10	U	
132-64-9	Dibenzofuran	5.0	U	
121-14-2	2,4-Dinitrotoluene	5.0	U	
84-66-2	Diethylphthalate	5.0	U	
7005-72-3	4-Chlorophenyl-phenylether	5.0	U	
86-73-7	Fluorene	5.0	U	
100-01-6	4-Nitroaniline	10	U	

DEC-048

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

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21D

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4720.D

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

% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/01/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/19/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	0.72	J
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
92-52-4	1,1'-Biphenyl	0.68	J
111-11-1	3-Methylphenol + 4-Methylphenol	5.0	U
98-86-2	Acetophenone	5.0	U
1912-24-9	Atrazine	5.0	U
100-52-7	Benzaldehyde	5.0	U
105-60-2	Caprolactam	5.0	U

DEC-048

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3H4720.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Concentrated Extract Volume: 500 (uL) Date Extracted: 07/01/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/19/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	3454-07-7	Benzene, 1-ethenyl-4-ethyl-	5.676	2.8	NJ
02	1680-51-9	Naphthalene, 1,2,3,4-tetrahy	6.381	2.0	NJ
03	582-16-1	Naphthalene, 2,7-dimethyl-	7.177	2.8	NJ
04	6510-65-2	1-Methylcarbazole	9.154	2.3	NJ
05		Unknown	12.882	6.5	J

<sup>2</sup>EPA-designated Registry Number.

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-030D  
(3.5-4.5')

Lab Name: SPECTRUM ANALYTICAL, INC. FEATURIN Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: E5H0497F.D/E5H0497R.D  
% Moisture: 6.8 Decanted: (Y/N) N Date Received: 05/10/2011  
Extraction: (Type) SONC Date Extracted: 05/13/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/13/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/KG</u>	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	5.2	
72-55-9	4,4'-DDE	3.5	U
72-20-8	Endrin	3.5 1.8 →	U
33213-65-9	Endosulfan II	3.5	U
72-54-8	4,4'-DDD	3.5	U
1031-07-8	Endosulfan sulfate	3.5	U
50-29-3	4,4'-DDT	3.5	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.5	U
7421-93-4	Endrin aldehyde	3.5	U
5103-71-9	alpha-Chlordane	17	U
5103-74-2	gamma-Chlordane	14	U
8001-35-2	Toxaphene	180	U

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03A  
Sample wt/vol: 30.2 (g/mL) G Lab File ID: E5H0917F.D/E5H0917R.D  
% Moisture: 10 Decanted: (Y/N) N Date Received: 05/27/2011  
Extraction: (Type) SONC Date Extracted: 05/31/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/03/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µg/KG	
319-84-6	alpha-BHC	1.9	U	U
319-85-7	beta-BHC	1.9	U	U
319-86-8	delta-BHC	1.9	U	U
58-89-9	gamma-BHC (Lindane)	1.9	U	U
76-44-8	Heptachlor	1.9	U	U
309-00-2	Aldrin	1.9	U	U
1024-57-3	Heptachlor epoxide	1.9	U	U
959-98-8	Endosulfan I	1.9	U	U
60-57-1	Dieldrin	3.7	U	U
72-55-9	4,4'-DDE	3.7	U	U
72-20-8	Endrin	3.7	U	U
33213-65-9	Endosulfan II	3.7	U	U
72-54-8	4,4'-DDD	3.7	U	U
1031-07-8	Endosulfan sulfate	3.7	U	U
50-29-3	4,4'-DDT	3.7	U	U
72-43-5	Methoxychlor	19	U	U
53494-70-5	Endrin ketone	3.7	U	U
7421-93-4	Endrin aldehyde	3.7	U	U
5103-71-9	alpha-Chlordane	1.9	U	U
5103-74-2	gamma-Chlordane	1.9	U	U
8001-35-2	Toxaphene	190	U	U

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04A  
Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5H0918F.D/E5H0918R.D  
% Moisture: 13 Decanted: (Y/N) N Date Received: 05/27/2011  
Extraction: (Type) SONC Date Extracted: 05/31/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/03/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/KG</u>	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01A

Sample wt/vol: 30.6 (g/mL) G Lab File ID: E5H0916F.D/E5H0916R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 05/25/2011

Extraction: (Type) SONC Date Extracted: 05/31/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/03/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		2.0	U
76-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		4.0	U
72-55-9	4,4'-DDE		4.0	U
72-20-8	Endrin		4.0	U
33213-65-9	Endosulfan II		4.0	U
72-54-8	4,4'-DDD		4.0	U
1031-07-8	Endosulfan sulfate		4.0	U
50-29-3	4,4'-DDT		4.0	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin ketone		4.0	U
7421-93-4	Endrin aldehyde		4.0	U
5103-71-9	alpha-Chlordane		2.0	U
5103-74-2	gamma-Chlordane		2.0	U
8001-35-2	Toxaphene		200	U

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-029D  
 (75-76')

Lab Name: SPECTRUM ANALYTICAL, INC. FEATURIN Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-12A  
 Sample wt/vol: 30.6 (g/mL) G Lab File ID: E2K2861F.D/E2K2861R.D  
 % Moisture: 16 Decanted: (Y/N) N Date Received: 05/12/2011  
 Extraction: (Type) SONC Date Extracted: 05/13/2011  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/13/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/KG</u>	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-030D  
 (3.5-4.5')

Lab Name: SPECTRUM ANALYTICAL, INC. FEATURIN Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0791-11A  
 Sample wt/vol: 30.4 (g/mL) G Lab File ID: E2K2860F.D/E2K2860R.D  
 % Moisture: 6.8 Decanted: (Y/N) N Date Received: 05/10/2011  
 Extraction: (Type) SONC Date Extracted: 05/13/2011  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/13/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	µG/KG
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-065D(9-10')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-03A  
 Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2K3496F.D/E2K3496R.D  
 % Moisture: 10 Decanted: (Y/N) N Date Received: 05/27/2011  
 Extraction: (Type) SONC Date Extracted: 05/31/2011  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/06/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/KG	
12674-11-2	Aroclor-1016	37		U
11104-28-2	Aroclor-1221	37		U
11141-16-5	Aroclor-1232	37		U
53469-21-9	Aroclor-1242	37		U
12672-29-6	Aroclor-1248	37		U
11097-69-1	Aroclor-1254	37		U
11096-82-5	Aroclor-1260	37		U
37324-23-5	Aroclor-1262	37		U
11100-14-4	Aroclor-1268	37		U

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-065D(14-15')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-04A  
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K3497F.D/E2K3497R.D  
 % Moisture: 13 Decanted: (Y/N) N Date Received: 05/27/2011  
 Extraction: (Type) SONC Date Extracted: 05/31/2011  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/06/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	µG/KG
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-066D (24-25)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K0910-01A  
 Sample wt/vol: 30.6 (g/mL) G Lab File ID: E2K3495F.D/E2K3495R.D  
 % Moisture: 19 Decanted: (Y/N) N Date Received: 05/25/2011  
 Extraction: (Type) SONC Date Extracted: 05/31/2011  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/06/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/KG</u>	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1 - FORM I HERB  
CHLORINATED HERBICIDE ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-044D (4-5')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-02A  
Sample wt/vol: 300 (g/mL) ML Lab File ID: E4G5965F.D/E4G5965R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 05/12/2011  
Extraction: (Type) SEPF Date Extracted: 05/17/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	µG/L
94-75-7	2,4-D	3.3	U
93-72-1	2,4,5-TP (Silvex)	0.33	U

1 - FORM I HERB  
CHLORINATED HERBICIDE ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
DEC-066S (1-2')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-01A  
Sample wt/vol: 300 (g/mL) ML Lab File ID: E4G5964F.D/E4G5964R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 05/12/2011  
Extraction: (Type) SEPF Date Extracted: 05/17/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	µG/L
94-75-7	2,4-D	3.3	U
93-72-1	2,4,5-TP (Silvex)	0.33	U

**FORM I - ANALYSIS DATA SHEET**  
**SW846 8151A**

**DEC-029D (75-76')**

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 28361  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: K0791      Received: 05/11/11 14:36  
 Matrix: Soil      Laboratory ID: SB28614-01      File ID: 2861401H.D  
 Sampled: 05/11/11 10:00      Prepared: 05/19/11 08:14      Analyzed: 05/20/11 09:44  
 % Solids: 88.67      Preparation: SW846 3550B/C      Initial/Final: 15.4413 g / 10 ml  
 Batch: 1109381      Sequence: S104432      Calibration: 1105036      Instrument: HPS19  
 Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. (µg/kg dry)	Q
93-76-5	2,4,5-T	1	3.16	U
93-72-1	2,4,5-TP (Silvex)	1	2.04	U
94-75-7	2,4-D	1	1.62	U
94-82-6	2,4-DB	1	2.24	U
75-99-0	Dalapon	1	1.93	U
1918-00-9	Dicamba	1	1.70	U
120-36-5	Dichlorprop	1	2.27	U
88-85-7	Dinoseb	1	2.20	U
94-74-6	MCPA	1	802	U
94-81-5	MCPB	1	819	U
93-65-2	MCPB	1	754	U

# FORM I - ANALYSIS DATA SHEET

SW846 8151A

DEC-030D(3.5-4.5')

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 28361  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: K0791 Received: 05/09/11 12:30  
 Matrix: Soil Laboratory ID: SB28361-01 File ID: 2836101H.D  
 Sampled: 05/06/11 10:30 Prepared: 05/13/11 08:54 Analyzed: 05/16/11 12:33  
 % Solids: 91.33 Preparation: SW846 3550B/C Initial/Final: 15.3573 g / 10 ml  
 Batch: 1108883 Sequence: S104214 Calibration: 1105036 Instrument: HPS19  
 Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. (µg/kg dry)	Q
93-76-5	2,4,5-T	1	3.08	U
93-72-1	2,4,5-TP (Silvex)	1	1.99	U
94-75-7	2,4-D	1	1.58	U
94-82-6	2,4-DB	1	2.18	U
75-99-0	Dalapon	1	3.41	U
1918-00-9	Dicamba	1	1.66	U
120-36-5	Dichlorprop	1	2.21	U
88-85-7	Dinoseb	1	2.15	U
94-74-6	MCPA	1	783	U
94-81-5	MCPB	1	799	U
93-65-2	MCPP	1	736	U



# FORM I - ANALYSIS DATA SHEET

SW846 8151A

DEC-065D (9-10')

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 29135  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: K0910      Received: 05/27/11 13:05  
 Matrix: Soil      Laboratory ID: SB29247-01      File ID: 2924701H.D  
 Sampled: 05/24/11 13:00      Prepared: 06/02/11 08:06      Analyzed: 06/03/11 14:25  
 % Solids: 90.56      Preparation: SW846 3545A      Initial/Final: 15.131 g / 10 ml  
 Batch: 1110394      Sequence: S104910      Calibration: 1105036      Instrument: HPS19  
 Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. (µg/kg dry)	Q
93-76-5	2,4,5-T	1	3.15	U
93-72-1	2,4,5-TP (Silvex)	1	2.03	U
94-75-7	2,4-D	1	1.62	U
94-82-6	2,4-DB	1	2.24	U
75-99-0	Dalapon	1	1.93	U
1918-00-9	Dicamba	1	1.70	U
120-36-5	Dichlorprop	1	2.26	U
88-85-7	Dinoseb	1	2.20	U
94-74-6	MCPA	1	802	U <del>3</del>
94-81-5	MCPB	1	818	U <del>3</del>
93-65-2	MCPP	1	753	U

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8/4/11

## FORM I - ANALYSIS DATA SHEET

SW846 8151A

DEC-065D (14-15')

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 29135  
Client: Mitkem Laboratories      Project: See Chain of Custody  
Project Number: K0910      Received: 05/27/11 13:05  
Matrix: Soil      Laboratory ID: SB29247-02      File ID: 2924702H.D  
Sampled: 05/24/11 13:40      Prepared: 06/02/11 08:06      Analyzed: 06/03/11 14:41  
% Solids: 86.85      Preparation: SW846 3545A      Initial/Final: 15.0195 g / 10 ml  
Batch: 1110394      Sequence: S104910      Calibration: 1105036      Instrument: HPS19  
Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. (µg/kg dry)	Q
93-76-5	2,4,5-T	1	3.31	U
93-72-1	2,4,5-TP (Silvex)	1	2.14	U
94-75-7	2,4-D	1	1.70	U
94-82-6	2,4-DB	1	2.35	U
75-99-0	Dalapon	1	2.03	U
1918-00-9	Dicamba	1	1.79	U
120-36-5	Dichlorprop	1	2.38	U
88-85-7	Dinoseb	1	2.31	U
94-74-6	MCPA	1	842	U <i>3</i>
94-81-5	MCPB	1	859	U <i>3</i>
93-65-2	MCPB	1	791	U

*Quik  
8/4/11*

## FORM I - ANALYSIS DATA SHEET

SW846 8151A

DEC-066D (24-25)

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 29135  
Client: Mitkem Laboratories Project: See Chain of Custody  
Project Number: K0910 Received: 05/24/11 15:15  
Matrix: Soil Laboratory ID: SB29135-01 File ID: 2913501H.D  
Sampled: 05/20/11 15:00 Prepared: 06/02/11 08:06 Analyzed: 06/03/11 13:39  
% Solids: 75.47 Preparation: SW846 3545A Initial/Final: 15.0492 g / 10 ml  
Batch: 1110394 Sequence: S104910 Calibration: 1105036 Instrument: HPS19  
Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. (µg/kg dry)	Q
93-76-5	2,4,5-T	1	3.81	U
93-72-1	2,4,5-TP (Silvex)	1	2.45	U
94-75-7	2,4-D	1	1.96	U
94-82-6	2,4-DB	1	2.70	U
75-99-0	Dalapon	1	2.33	U
1918-00-9	Dicamba	1	2.05	U
120-36-5	Dichlorprop	1	2.73	U
88-85-7	Dinoseb	1	2.65	U
94-74-6	MCPA	1	1430	U <sup>5</sup>
94-81-5	MCPB	1	1860	U <sup>5</sup>
93-65-2	MCPP	1	909	U

*Done*  
5/4/11

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-044D (4-5')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-02A  
 Sample wt/vol: 300 (g/mL) ML Lab File ID: E5H0584F.D/E5H0584R.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 05/12/2011  
 Extraction: (Type) SEPF Date Extracted: 05/17/2011  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/L</u>	Q
58-89-9	gamma-BHC (Lindane)	0.17	U
76-44-8	Heptachlor	0.17	U
1024-57-3	Heptachlor epoxide	0.17	U
72-20-8	Endrin	0.33	U
72-43-5	Methoxychlor	1.7	U
8001-35-2	Toxaphene	17	U
12789-03-6	Chlordane (technical)	8.3	U

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-066S (1-2')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K0807-01A  
Sample wt/vol: 300 (g/mL) ML Lab File ID: E5H0583F.D/E5H0583R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 05/12/2011  
Extraction: (Type) SEPF Date Extracted: 05/17/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/L</u>	Q
58-89-9	gamma-BHC (Lindane)	<u>0.79</u>	<del>P</del> <u>R</u>
76-44-8	Heptachlor	<u>0.44</u>	<del>P</del> <u>R</u>
1024-57-3	Heptachlor epoxide	<u>0.17</u>	<u>U</u>
72-20-8	Endrin	<u>0.33</u>	<u>U</u>
72-43-5	Methoxychlor	<u>1.7</u>	<u>U</u>
8001-35-2	Toxaphene	<u>17</u>	<u>U</u>
12789-03-6	Chlordane (technical)	<u>8.3</u>	<u>U</u>

*JPB*  
8/14/11

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-029D (75-76')

Lab Name: Spectrum Analytical, Inc.

Contract: 250626 US

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0791

Matrix (soil/water): SOIL

Lab Sample ID: K0791-12

Level (low/med): MED

Date Received: 05/12/2011

% Solids: 83.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2270			P
7440-36-0	Antimony	0.24	U		P
7440-38-2	Arsenic	0.70			P
7440-39-3	Barium	19.3			P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.048	B		P
7440-70-2	Calcium	566			P
7440-47-3	Chromium	4.7			P
7440-48-4	Cobalt	2.9			P
7440-50-8	Copper	6.4			P
7439-89-6	Iron	4730			P
7439-92-1	Lead	1.4			P
7439-95-4	Magnesium	1220			P
7439-96-5	Manganese	242			P
7439-97-6	Mercury	0.0030	U		CV
7440-02-0	Nickel	5.6			P
7440-09-7	Potassium	290			P
7782-49-2	Selenium	0.41	U		P
7440-22-4	Silver	0.041	U		P
7440-23-5	Sodium	69.2			P
7440-28-0	Thallium	0.14	U		P
7440-62-2	Vanadium	5.1			P
7440-66-6	Zinc	10.0			P
57-12-5	Cyanide	0.48	U		CA

Comments:

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H1465F.D/E5H1465R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
Extraction: (Type) SEPF Date Extracted: 06/28/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/30/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.051	<i>FS</i>
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

*Dec 30/11*

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H1464F.D/E5H1464R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
Extraction: (Type) SEPF Date Extracted: 06/28/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/30/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U



1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19D

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E4G6346F.D/E4G6346R.D

% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011

Extraction: (Type) SEPF Date Extracted: 07/01/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/15/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

DEC-048  
CLIENT SAMPLE NO.  
DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E4G6349F.D/E4G6349R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Extraction: (Type) SEPF Date Extracted: 07/01/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/15/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-09D

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K4158F.D/E2K4158R.D

% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011

Extraction: (Type) SEPF Date Extracted: 06/28/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/30/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	µG/L
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-031D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1102-08D  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K4157F.D/E2K4157R.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/24/2011  
 Extraction: (Type) SEPF Date Extracted: 06/28/2011  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/30/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
12674-11-2	Aroclor-1016		1.0	U
11104-28-2	Aroclor-1221		1.0	U
11141-16-5	Aroclor-1232		1.0	U
53469-21-9	Aroclor-1242		1.0	U
12672-29-6	Aroclor-1248		1.0	U
11097-69-1	Aroclor-1254		1.0	U
11096-82-5	Aroclor-1260		1.0	U
37324-23-5	Aroclor-1262		1.0	U
11100-14-4	Aroclor-1268		1.0	U

1H - FORM I ARO  
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-19D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K4506F.D/E2K4506R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Extraction: (Type) SEPF Date Extracted: 07/01/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/15/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
12674-11-2	Aroclor-1016	1.0	U	
11104-28-2	Aroclor-1221	1.0	U	
11141-16-5	Aroclor-1232	1.0	U	
53469-21-9	Aroclor-1242	1.0	U	
12672-29-6	Aroclor-1248	1.0	U	
11097-69-1	Aroclor-1254	1.0	U	
11096-82-5	Aroclor-1260	1.0	U	
37324-23-5	Aroclor-1262	1.0	U	
11100-14-4	Aroclor-1268	1.0	U	

1H - FORM I ARO  
AROCOR ORGANICS ANALYSIS DATA SHEET

DEC-048

CLIENT SAMPLE NO.

DUP2-062411

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1110-21D  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K4509F.D/E2K4509R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Extraction: (Type) SEPF Date Extracted: 07/01/2011  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/15/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
12674-11-2	Aroclor-1016	1.0	U	
11104-28-2	Aroclor-1221	1.0	U	
11141-16-5	Aroclor-1232	1.0	U	
53469-21-9	Aroclor-1242	1.0	U	
12672-29-6	Aroclor-1248	1.0	U	
11097-69-1	Aroclor-1254	1.0	U	
11096-82-5	Aroclor-1260	1.0	U	
37324-23-5	Aroclor-1262	1.0	U	
11100-14-4	Aroclor-1268	1.0	U	

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-030D (3.5-4.5')

Lab Name: Spectrum Analytical, Inc.Contract: 250626 USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK0791Matrix (soil/water): SOILLab Sample ID: K0791-11Level (low/med): MEDDate Received: 05/10/2011% Solids: 93.2Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6760			P
7440-36-0	Antimony	0.25	U		P
7440-38-2	Arsenic	2.5			P
7440-39-3	Barium	59.9			P
7440-41-7	Beryllium	0.46			P
7440-43-9	Cadmium	0.49			P
7440-70-2	Calcium	1210			P
7440-47-3	Chromium	27.3			P
7440-48-4	Cobalt	7.0			P
7440-50-8	Copper	23.7			P
7439-89-6	Iron	23100			P
7439-92-1	Lead	74.2			P
7439-95-4	Magnesium	2080			P
7439-96-5	Manganese	421			P
7439-97-6	Mercury	0.32			CV
7440-02-0	Nickel	12.2			P
7440-09-7	Potassium	1270			P
7782-49-2	Selenium	0.49	B		P
7440-22-4	Silver	0.042	U		P
7440-23-5	Sodium	79.9			P
7440-28-0	Thallium	0.14	U		P
7440-62-2	Vanadium	23.4			P
7440-66-6	Zinc	61.5			P
57-12-5	Cyanide	0.48	U		CA

Comments:

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-044D (4-5')

Lab Name: Spectrum Analytical, Inc.Contract: 250626 USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK0807Matrix (soil/water): WATERLab Sample ID: K0807-02Level (low/med): MEDDate Received: 05/12/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	726			P
7440-43-9	Cadmium	1.8	B		P
7440-47-3	Chromium	0.98	B		P
7439-92-1	Lead	78.9			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:



## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-065D(9-10')

Lab Name: Spectrum Analytical, Inc.Contract: 250626USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK0910Matrix (soil/water): SOILLab Sample ID: K0910-03Level (low/med): MEDDate Received: 05/27/2011% Solids: 89.8Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7470			P
7440-36-0	Antimony	0.25	U		P
7440-38-2	Arsenic	0.53	B		P
7440-39-3	Barium	47.9			P
7440-41-7	Beryllium	0.68			P
7440-43-9	Cadmium	0.0099	U		P
7440-70-2	Calcium	2490			P
7440-47-3	Chromium	22.8			P
7440-48-4	Cobalt	7.6			P
7440-50-8	Copper	13.8			P
7439-89-6	Iron	27700			P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	2340			P
7439-96-5	Manganese	529			P
7439-97-6	Mercury	0.0063	B		CV
7440-02-0	Nickel	12.6			P
7440-09-7	Potassium	43.6			P
7782-49-2	Selenium	0.42	U		P
7440-22-4	Silver	0.042	U		P
7440-23-5	Sodium	9.0	B		P
7440-28-0	Thallium	2.7			P
7440-62-2	Vanadium	32.3			P
7440-66-6	Zinc	44.0			P
57-12-5	Cyanide	0.28	U		CA

Comments:

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-065D(14-15')

Lab Name: Spectrum Analytical, Inc.Contract: 250626USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK0910Matrix (soil/water): SOILLab Sample ID: K0910-04Level (low/med): MEDDate Received: 05/27/2011% Solids: 86.7Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10100			P
7440-36-0	Antimony	0.34	U		P
7440-38-2	Arsenic	0.37	U		P
7440-39-3	Barium	113			P
7440-41-7	Beryllium	1.1			P
7440-43-9	Cadmium	0.014	U		P
7440-70-2	Calcium	6070			P
7440-47-3	Chromium	32.7			P
7440-48-4	Cobalt	15.4			P
7440-50-8	Copper	29.8			P
7439-89-6	Iron	54900			P
7439-92-1	Lead	10.5			P
7439-95-4	Magnesium	3180			P
7439-96-5	Manganese	1290			P
7439-97-6	Mercury	0.0060	B		CV
7440-02-0	Nickel	22.2			P
7440-09-7	Potassium	2080			P
7782-49-2	Selenium	0.58	U		P
7440-22-4	Silver	0.058	U		P
7440-23-5	Sodium	360			P
7440-28-0	Thallium	3.4			P
7440-62-2	Vanadium	54.2			P
7440-66-6	Zinc	55.4			P
57-12-5	Cyanide	0.51	U		CA

Comments:

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-066D (24-25)

Lab Name: Spectrum Analytical, Inc.Contract: 250626USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK0910Matrix (soil/water): SOILLab Sample ID: K0910-01Level (low/med): MEDDate Received: 05/25/2011% Solids: 81.3Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4610			P
7440-36-0	Antimony	0.29	U		P
7440-38-2	Arsenic	0.32	U		P
7440-39-3	Barium	27.2			P
7440-41-7	Beryllium	0.40			P
7440-43-9	Cadmium	0.012	U		P
7440-70-2	Calcium	1580			P
7440-47-3	Chromium	11.6			P
7440-48-4	Cobalt	4.8			P
7440-50-8	Copper	8.3			P
7439-89-6	Iron	10100			P
7439-92-1	Lead	3.2			P
7439-95-4	Magnesium	1990			P
7439-96-5	Manganese	235			P
7439-97-6	Mercury	0.0032	B		CV
7440-02-0	Nickel	8.8			P
7440-09-7	Potassium	1070			P
7782-49-2	Selenium	0.49	U		P
7440-22-4	Silver	0.049	U		P
7440-23-5	Sodium	84.6			P
7440-28-0	Thallium	2.5			P
7440-62-2	Vanadium	15.4			P
7440-66-6	Zinc	22.1			P
57-12-5	Cyanide	0.33	U		CA

Comments:

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-066S (1-2')

Lab Name: Spectrum Analytical, Inc.Contract: 250626 USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK0807Matrix (soil/water): WATERLab Sample ID: K0807-01Level (low/med): MEDDate Received: 05/12/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	81.9	B		P
7440-43-9	Cadmium	1.3	B		P
7440-47-3	Chromium	1.4	B		P
7439-92-1	Lead	51.0			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-031

Lab Name: Spectrum Analytical, Inc.Contract: 250626USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK1102Matrix (soil/water): WATERLab Sample ID: K1102-09Level (low/med): MEDDate Received: 06/24/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	154	B		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	48.5	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	61200			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	314			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	21400			P
7439-96-5	Manganese	249			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	10.8	B		P
7440-09-7	Potassium	2350			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	71000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P
57-12-5	Cyanide	7.5	U		CA

Comments:

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-031D

Lab Name: Spectrum Analytical, Inc.Contract: 250626USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK1102Matrix (soil/water): WATERLab Sample ID: K1102-08Level (low/med): MEDDate Received: 06/24/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	464			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	36.8	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	111000			P
7440-47-3	Chromium	2.0	B		P
7440-48-4	Cobalt	6.1	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	1530			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	58400			P
7439-96-5	Manganese	2300			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	4.2	B		P
7440-09-7	Potassium	7020			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	102000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	2.2	B		P
7440-66-6	Zinc	11.0	B		P
57-12-5	Cyanide	7.5	U		CA

Comments:

## U.S. EPA - CLP

1

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DEC-048

Lab Name: Spectrum Analytical, Inc.Contract: 250626USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK1110Matrix (soil/water): WATERLab Sample ID: K1110-19Level (low/med): MEDDate Received: 06/27/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	95.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	66300			P
7440-47-3	Chromium	0.79	B		P
7440-48-4	Cobalt	1.1	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	1010		5	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	28400			P
7439-96-5	Manganese	738			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	6.6	B		P
7440-09-7	Potassium	2890			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	76000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P
57-12-5	Cyanide	7.5	U		CA

*Handwritten:*  
 OK  
 8/10/11

Comments:

## U.S. EPA - CLP

1

DEC-048

EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

DUP2-062411

Lab Name: Spectrum Analytical, Inc.Contract: 250626USLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SK1110Matrix (soil/water): WATERLab Sample ID: K1110-21Level (low/med): MEDDate Received: 06/27/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	95.4	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	65900			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	1.1	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	1990		J	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	28100			P
7439-96-5	Manganese	702			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	6.0	B		P
7440-09-7	Potassium	2850			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	75500			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P
57-12-5	Cyanide	7.5	U		CA

*Page 2/11*

Comments:



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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K1120-01A  
Sample wt/vol: 1.00 (g/mL) G Lab File ID: V8A4427.D  
Level: (TRACE/LOW/MED) MED Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0  
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) <u>ug/Kg</u>	Q
75-71-8	Dichlorodifluoromethane	630000	U
74-87-3	Chloromethane	630000	U
75-01-4	Vinyl chloride	630000	U
74-83-9	Bromomethane	630000	U
75-00-3	Chloroethane	630000	U
75-69-4	Trichlorofluoromethane	630000	U
75-35-4	1,1-Dichloroethene	630000	U
67-64-1	Acetone	630000	U R
74-88-4	Iodomethane	630000	U
75-15-0	Carbon disulfide	630000	U
75-09-2	Methylene chloride	630000	U
156-60-5	trans-1,2-Dichloroethene	630000	U
1634-04-4	Methyl tert-butyl ether	630000	U
75-34-3	1,1-Dichloroethane	630000	U
108-05-4	Vinyl acetate	630000	U
78-93-3	2-Butanone	630000	U R
156-59-2	cis-1,2-Dichloroethene	630000	U
594-20-7	2,2-Dichloropropane	630000	U
74-97-5	Bromochloromethane	630000	U
67-66-3	Chloroform	630000	U
71-55-6	1,1,1-Trichloroethane	630000	U
563-58-6	1,1-Dichloropropene	630000	U
56-23-5	Carbon tetrachloride	630000	U
107-06-2	1,2-Dichloroethane	630000	U
71-43-2	Benzene	630000	U
79-01-6	Trichloroethene	630000	U
78-87-5	1,2-Dichloropropane	630000	U
74-95-3	Dibromomethane	630000	U
75-27-4	Bromodichloromethane	630000	U
10061-01-5	cis-1,3-Dichloropropene	630000	U
108-10-1	4-Methyl-2-pentanone	630000	U
108-88-3	Toluene	630000	U
10061-02-6	trans-1,3-Dichloropropene	630000	U
79-00-5	1,1,2-Trichloroethane	630000	U
142-28-9	1,3-Dichloropropane	630000	U

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K1120-01A  
Sample wt/vol: 1.00 (g/mL) G Lab File ID: V8A4427.D  
Level: (TRACE/LOW/MED) MED Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0  
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) <u>ug/Kg</u>	Q
127-18-4	Tetrachloroethene	630000	U
591-78-6	2-Hexanone	630000	U <sup>3</sup>
124-48-1	Dibromochloromethane	630000	U
106-93-4	1,2-Dibromoethane	630000	U
108-90-7	Chlorobenzene	630000	U
630-20-6	1,1,1,2-Tetrachloroethane	630000	U
100-41-4	Ethylbenzene	630000	U
1330-20-7	m,p-Xylene	630000	U
95-47-6	o-Xylene	630000	U
1330-20-7	Xylene (Total)	630000	U
100-42-5	Styrene	630000	U
75-25-2	Bromoform	630000	U
98-82-8	Isopropylbenzene	630000	U
79-34-5	1,1,2,2-Tetrachloroethane	630000	U
108-86-1	Bromobenzene	630000	U
96-18-4	1,2,3-Trichloropropane	630000	U
103-65-1	n-Propylbenzene	630000	U
95-49-8	2-Chlorotoluene	630000	U
108-67-8	1,3,5-Trimethylbenzene	630000	U
106-43-4	4-Chlorotoluene	630000	U
98-06-6	tert-Butylbenzene	630000	U
95-63-6	1,2,4-Trimethylbenzene	420000	J
135-98-8	sec-Butylbenzene	630000	U
99-87-6	4-Isopropyltoluene	630000	U
541-73-1	1,3-Dichlorobenzene	630000	U
106-46-7	1,4-Dichlorobenzene	630000	U
104-51-8	n-Butylbenzene	630000	U
95-50-1	1,2-Dichlorobenzene	630000	U
96-12-8	1,2-Dibromo-3-chloropropane	630000	U
120-82-1	1,2,4-Trichlorobenzene	630000	U
87-68-3	Hexachlorobutadiene	630000	U
87-61-6	1,2,3-Trichlorobenzene	630000	U
91-20-3	Naphthalene	<del>630000</del> 600000	<del>U</del> U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	630000	U
123-91-1	1,4-Dioxane	<del>13000000</del>	U-R

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K1120-01A  
Sample wt/vol: 1.00 (g/mL) G Lab File ID: V8A4427.D  
Level: (TRACE/LOW/MED) MED Date Received: 06/27/2011  
% Moisture: not dec. Date Analyzed: 07/06/2011  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0  
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)	µG/KG
110-82-7	Cyclohexane	630000	U
79-20-9	Methyl acetate	630000	U
108-87-2	Methylcyclohexane	630000	U

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

CLIENT SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K1120-01A

Sample wt/vol: 1.00 (g/mL) G Lab File ID: V8A4427.D

Level: (TRACE or LOW/MED) MED Date Received: 06/27/2011

% Moisture: not dec. Date Analyzed: 07/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0

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	105-05-5	Benzene, 1,4-diethyl-	11.204	1100000	NJ
02	1587-04-8	Benzene, 1-methyl-2-(2-prope	11.676	1200000	NJ
03	934-10-1	3-Phenylbut-1-ene	12.364	1900000	NJ
04	119-64-2	Naphthalene, 1,2,3,4-tetrahy	12.519	1000000	NJ
05	4489-84-3	Benzene, (3-methyl-2-butenyl	12.699	1100000	NJ
06	56253-64-6	Benzene, (2-methyl-1-butenyl	12.789	1200000	NJ
07	1680-51-9	Naphthalene, 1,2,3,4-tetrahy	13.425	2200000	NJ
08		Unknown	13.724	1000000	J
09	91-57-6	Naphthalene, 2-methyl-	13.924	1800000	NJ
10	90-12-0	Naphthalene, 1-methyl-	14.110	1700000	NJ
11	581-42-0	Naphthalene, 2,6-dimethyl-	15.046	970000	NJ
12	581-40-8	Naphthalene, 2,3-dimethyl-	15.229	1300000	NJ

<sup>1</sup>EPA-designated Registry Number.

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

EPA SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K1120-01A  
Sample wt/vol: 1.0 (g/mL) G Lab File ID: S3H4550.D  
Level: (LOW/MED) LOW Extraction: (Type) OTHER  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Concentrated Extract Volume: 10000 (uL) Date Extracted: 07/07/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/07/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2	Phenol	500000	U
111-44-4	Bis(2-chloroethyl)ether	500000	U
95-57-8	2-Chlorophenol	500000	U
95-48-7	2-Methylphenol	500000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500000	U <i>5</i>
621-64-7	N-Nitroso-di-n-propylamine	500000	U <i>5</i>
67-72-1	Hexachloroethane	500000	U
98-95-3	Nitrobenzene	500000	U
78-59-1	Isophorone	500000	U
88-75-5	2-Nitrophenol	500000	U
105-67-9	2,4-Dimethylphenol	500000	U
120-83-2	2,4-Dichlorophenol	500000	U
91-20-3	Naphthalene	610000	
106-47-8	4-Chloroaniline	500000	U
111-91-1	Bis(2-chloroethoxy)methane	500000	U
87-68-3	Hexachlorobutadiene	500000	U
59-50-7	4-Chloro-3-methylphenol	500000	U
91-57-6	2-Methylnaphthalene	3500000	
77-47-4	Hexachlorocyclopentadiene	500000	U
88-06-2	2,4,6-Trichlorophenol	500000	U
95-95-4	2,4,5-Trichlorophenol	1000000	U
91-58-7	2-Chloronaphthalene	500000	U
88-74-4	2-Nitroaniline	1000000	U
131-11-3	Dimethylphthalate	500000	U
208-96-8	Acenaphthylene	500000	U
606-20-2	2,6-Dinitrotoluene	500000	U
99-09-2	3-Nitroaniline	1000000	U
83-32-9	Acenaphthene	200000	J
51-28-5	2,4-Dinitrophenol	1000000	U <i>5</i>
100-02-7	4-Nitrophenol	1000000	U
132-64-9	Dibenzofuran	500000	U
121-14-2	2,4-Dinitrotoluene	500000	U
84-66-2	Diethylphthalate	500000	U
7005-72-3	4-Chlorophenyl-phenylether	500000	U
86-73-7	Fluorene	490000	J
100-01-6	4-Nitroaniline	1000000	U

*Handwritten signature and date: 8/11/11*

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

EPA SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K1120-01A  
Sample wt/vol: 1.0 (g/mL) G Lab File ID: S3H4550.D  
Level: (LOW/MED) LOW Extraction: (Type) OTHER  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Concentrated Extract Volume: 10000 (uL) Date Extracted: 07/07/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/07/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
534-52-1	4,6-Dinitro-2-methylphenol	1000000	U
86-30-6	N-Nitrosodiphenylamine	500000	U
101-55-3	4-Bromophenyl-phenylether	500000	U
118-74-1	Hexachlorobenzene	500000	U
87-86-5	Pentachlorophenol	1000000	U
85-01-8	Phenanthrene	1200000	
120-12-7	Anthracene	500000	U
86-74-8	Carbazole	500000	U
84-74-2	Di-n-butylphthalate	500000	U
206-44-0	Fluoranthene	500000	U
129-00-0	Pyrene	130000	J
85-68-7	Butylbenzylphthalate	500000	U-3
91-94-1	3,3'-Dichlorobenzidine	500000	U
56-55-3	Benzo(a)anthracene	500000	U
218-01-9	Chrysene	500000	U
117-81-7	Bis(2-ethylhexyl)phthalate	210000	J
117-84-0	Di-n-octylphthalate	500000	U-3
205-99-2	Benzo(b)fluoranthene	500000	U
207-08-9	Benzo(k)fluoranthene	500000	U
50-32-8	Benzo(a)pyrene	500000	U
193-39-5	Indeno(1,2,3-cd)pyrene	500000	U
53-70-3	Dibenzo(a,h)anthracene	500000	U
191-24-2	Benzo(g,h,i)perylene	500000	U
92-52-4	1,1'-Biphenyl	740000	
111-11-1	3-Methylphenol + 4-Methylphenol	500000	U
98-86-2	Acetophenone	500000	U
1912-24-9	Atrazine	500000	U-3
100-52-7	Benzaldehyde	500000	U-3
105-60-2	Caprolactam	500000	U

*Handwritten signature and date: 8/11/11*

1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DEC-048

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K1120-01A  
Sample wt/vol: 1.0 (g/mL) G Lab File ID: S3H4550.D  
Level: (TRACE or LOW/MED) LOW Extraction: (Type) OTHER  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 06/27/2011  
Concentrated Extract Volume: 10000 (uL) Date Extracted: 07/07/2011  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/07/2011  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 5.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	493-02-7	Naphthalene, decahydro-, tra	2.558	6300000	NJ
02		Unknown (2.64842)	2.648	4200000	J
03	1120-21-4	Undecane	3.097	15000000	NJ
04	2958-76-1	Naphthalene, decahydro-2-met	3.257	7500000	NJ
05		Unknown (3.36962)	3.370	4600000	J
06		Unknown (3.61000)	3.610	4700000	J
07	7045-71-8	Undecane, 2-methyl-	3.706	4000000	NJ
08	112-40-3	Dodecane	4.048	1000000	NJ
09	6044-71-9	Dodecane, 6-methyl-	4.166	1700000	NJ
10	1680-51-9	Naphthalene, 1,2,3,4-tetrahy	4.518	1200000	NJ
11		Unknown (4.92417)	4.924	1100000	J
12	1127-76-0	Naphthalene, 1-ethyl-	5.357	1100000	NJ
13	581-42-0	Naphthalene, 2,6-dimethyl-	5.426	1400000	NJ
14	571-58-4	Naphthalene, 1,4-dimethyl-	5.496	1600000	NJ
15	582-16-1	Naphthalene, 2,7-dimethyl-	5.523	1800000	NJ
16	829-26-5	Naphthalene, 2,3,6-trimethyl	5.912	1100000	NJ
17	2245-38-7	Naphthalene, 1,6,7-trimethyl	6.164	2000000	NJ
18	3892-00-0	Pentadecane, 2,6,10-trimethy	6.543	3600000	NJ
19	1921-70-6	Pentadecane, 2,6,10,14-tetra	6.762	9500000	NJ
20	638-36-8	Hexadecane, 2,6,10,14-tetram	7.130	7000000	NJ

<sup>2</sup>EPA-designated Registry Number.

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

17-Jun-

**Client:** URS Corporation**Client Sample ID:** DEC-066D (24-25)**Lab ID:** K0910-01**Project:** Klink Cosmo Meeker**Collection Date:** 05/20/11 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 7196A -- CR+ by Colorimetric Method							SW7196_S
Chromium, Hexavalent	ND		4.8	mg/Kg		106/09/2011 12:00	59894

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit



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

17-Jun-

Client: URS Corporation  
Client Sample ID: DEC-065D(9-10')  
Lab ID: K0910-03

Project: Klink Cosmo Mecker  
Collection Date: 05/24/11 13:00

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
SW846 7196A -- CR+ by Colorimetric Method				SW7196_S
Chromium, Hexavalent	ND	4.4 mg/Kg	106/09/2011 12:15	59894

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

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

17-Jun-

**Client:** URS Corporation**Client Sample ID:** DEC-065D(14-15')**Lab ID:** K0910-04**Project:** Klink Cosmo.Meeker**Collection Date:** 05/24/11 13:40

<b>Analyses</b>	<b>Result Qual</b>	<b>RL Units</b>	<b>DF Date Analyzed</b>	<b>Batch ID</b>
<b>SW846 7196A -- CR+ by Colorimetric Method</b>				<b>SW7196_S</b>
Chromium, Hexavalent	ND	4.5 mg/Kg	106/09/2011 12:30	59694

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Mitkem Laboratories**

Date: 27-May-11

Client: URS Corporation  
Client Sample ID: DEC-029D (75-76')  
Lab ID: K0791-12

Project: Klink Cosmo Meeker  
Collection Date: 05/11/11 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 7196A -- CR+ by Colorimetric Method							SW7196_S
Chromium, Hexavalent	ND		4.7	mg/Kg		1 05/17/2011 12:00	59232
SW846 9012B -- Total Cyanide							SW9012_S
Cyanide	ND		1.1	mg/Kg		1 05/16/2011 12:30	59188

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Mitkem Laboratories****Date:** 27-May-11**Client:** URS Corporation**Client Sample ID:** DEC-030D (3.5-4.5')**Lab ID:** K0791-11**Project:** Klink Cosmo Meeker**Collection Date:** 05/06/11 10:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 7196A -- CR+ by Colorimetric Method</b>							<b>SW7196_S</b>
Chromium, Hexavalent	ND		4.1	mg/Kg		105/17/2011 11:50	59232
<b>SW846 9012B -- Total Cyanide</b>							<b>SW9012_S</b>
Cyanide	ND		1.1	mg/Kg		105/16/2011 12:28	59188

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Mitkem Laboratories**

Date: 19-May-11

Client: URS Corporation  
Client Sample ID: DEC-044D (4-5)  
Lab ID: K0807-02

Project: Klink Cosmo Meeker  
Collection Date: 05/10/11 14:30

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
<b>SW846 1010 – FLASHPOINT by Pensky-Martens Closed-Cup Method</b>				
Ignitability	NO FLASH @ 165	200 °F	1 05/17/2011 12:30	SW1010_S R58515
<b>SW846 7.3.3.2 – Reactive Cyanide Released from Wastes</b>				
Reactive Cyanide	ND	1.2 mg/Kg	1 05/18/2011 16:11	SW7.3.3.2_S 59248
<b>SW846 7.3.4.2 – Reactive Sulfide Released from Wastes</b>				
Reactive Sulfide	ND	1.2 mg/Kg	1 05/18/2011 14:21	SW7.3.4.2_S 59252
<b>SW846 9045C – Soil and Waste pH</b>				
pH	7.8	1.0 S.U.	1 05/18/2011 15:20	SW9045_S R58553

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Mitkem Laboratories****Date:** 19-May-11**Client:** URS Corporation  
**Client Sample ID:** DEC-066S (1-2)  
**Lab ID:** K0807-01**Project:** Klink Cosmo Meeker  
**Collection Date:** 05/09/11 15:10

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
<b>SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method</b>				<b>SW1010_S</b>
Ignitability	NO FLASH @ 165	200 °F	1 05/17/2011 12:05	R58515
<b>SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes</b>				<b>SW7.3.3.2_S</b>
Reactive Cyanide	ND	1.2 mg/Kg	1 05/18/2011 16:09	59248
<b>SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes</b>				<b>SW7.3.4.2_S</b>
Reactive Sulfide	ND	1.2 mg/Kg	1 05/18/2011 14:12	59252
<b>SW846 9045C -- Soil and Waste pH</b>				<b>SW9045_S</b>
pH	5.6	1.0 S.U.	1 05/18/2011 15:15	R58553

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

## Analysis Report: Fuel Identification

Client: URS\_BUFFALO

Project: Klink Cosmo Meeker

Analysis: Fuel ID

Lab ID

K1120-01A

Result(\*)

Resembles Diesel Fuel/ #2 Fuel Oil

(\*) Lab reference standards included:

Diesel Fuel/ #2 Fuel Oil

Motor Oil

#4 Fuel Oil

#5 Fuel Oil

#6 Fuel Oil

Unleaded Gasoline

Aviation Gasoline

Jet Fuel A

Kerosene

Creosote

Mineral Spirits

Hydraulic Oil

JP-4

JP-5

Transmission Fluid

Coal Tar

Transformer Oil

**Sample Analysis****Work Order** 11-0901

<b>Sample Description</b>		<b>Source</b>	<b>Taken/Time</b>	<b>Received</b>	
28562 K1120-01B		Spectrum Analytical, Inc.		6/29/11	
<b>Parameter</b>	<b>Results</b>	<b>MDL</b>	<b>Method</b>	<b>Analyzed/Time</b>	<b>Tech</b>
Specific Gravity @ 60°F	0.8608		ASTM 2710F	07/07/11	sjr



## ANALYTICAL RESULTS

Project: Klink Cosmo site

Pace Project No.: 10160700

Sample: SG-18 Lab ID: 10160700015 Collected: 06/15/11 13:19 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
Benzene	ND	ug/m3	10.0	4.9	30.8		06/28/11 20:25	71-43-2	
Benzyl chloride	ND	ug/m3	32.3	16.2	30.8		06/28/11 20:25	100-44-7	
Bromodichloromethane	ND	ug/m3	43.1	21.6	30.8		06/28/11 20:25	75-27-4	
Bromoform	ND	ug/m3	64.7	32.3	30.8		06/28/11 20:25	75-25-2	
Bromomethane	ND	ug/m3	24.3	12.2	30.8		06/28/11 20:25	74-83-9	
1,3-Butadiene	ND	ug/m3	13.9	6.9	30.8		06/28/11 20:25	106-99-0	
2-Butanone (MEK)	ND	ug/m3	18.5	9.2	30.8		06/28/11 20:25	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	28.5	5.7	30.8		06/28/11 20:25	75-65-0	
Carbon tetrachloride	ND	ug/m3	19.7	9.9	30.8		06/28/11 20:25	56-23-5	
Chlorobenzene	ND	ug/m3	29.0	14.5	30.8		06/28/11 20:25	108-90-7	
Chloroethane	ND	ug/m3	16.6	8.3	30.8		06/28/11 20:25	75-00-3	
Chloroform	ND	ug/m3	30.5	15.2	30.8		06/28/11 20:25	67-66-3	
Chloromethane	ND	ug/m3	12.9	6.5	30.8		06/28/11 20:25	74-87-3	
Cyclohexane	ND	ug/m3	20.9	10.5	30.8		06/28/11 20:25	110-82-7	
Dibromochloromethane	ND	ug/m3	52.4	26.2	30.8		06/28/11 20:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	49.3	24.6	30.8		06/28/11 20:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	37.0	18.5	30.8		06/28/11 20:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	37.0	18.5	30.8		06/28/11 20:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	37.0	18.5	30.8		06/28/11 20:25	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	30.8	15.4	30.8		06/28/11 20:25	75-71-8	
1,1-Dichloroethane	ND	ug/m3	25.3	12.6	30.8		06/28/11 20:25	75-34-3	
1,2-Dichloroethane	ND	ug/m3	12.6	6.5	30.8		06/28/11 20:25	107-06-2	
1,1-Dichloroethene	ND	ug/m3	24.9	12.5	30.8		06/28/11 20:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	24.9	12.5	30.8		06/28/11 20:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	24.9	12.5	30.8		06/28/11 20:25	156-60-5	
1,2-Dichloropropane	ND	ug/m3	29.0	14.5	30.8		06/28/11 20:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	28.3	14.2	30.8		06/28/11 20:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	28.3	14.2	30.8		06/28/11 20:25	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	43.1	21.6	30.8		06/28/11 20:25	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	11.3	2.3	30.8		06/28/11 20:25	123-91-1	
Ethanol	93.1	ug/m3	58.5	26.2	30.8		06/28/11 20:25	64-17-5	
Ethylbenzene	ND	ug/m3	27.1	13.6	30.8		06/28/11 20:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	67.8	33.9	30.8		06/28/11 20:25	87-68-3	
n-Hexane	ND	ug/m3	22.2	11.1	30.8		06/28/11 20:25	110-54-3	
Methylene Chloride	ND	ug/m3	21.9	10.9	30.8		06/28/11 20:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	25.6	12.8	30.8		06/28/11 20:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	22.5	11.2	30.8		06/28/11 20:25	1634-04-4	
Styrene	ND	ug/m3	26.8	13.4	30.8		06/28/11 20:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	21.5	10.8	30.8		06/28/11 20:25	79-34-5	
Tetrachloroethene	2660	ug/m3	21.2	10.5	30.8		06/28/11 20:25	127-18-4	
Toluene	ND	ug/m3	23.7	11.9	30.8		06/28/11 20:25	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	30.5	15.2	30.8		06/28/11 20:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	33.9	16.9	30.8		06/28/11 20:25	71-55-6	
Trichloroethene	29.8	ug/m3	16.9	8.6	30.8		06/28/11 20:25	79-01-6	
Trichlorofluoromethane	ND	ug/m3	33.9	16.9	30.8		06/28/11 20:25	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	49.3	24.6	30.8		06/28/11 20:25	76-13-1	

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8/8/11

## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-18 Lab ID: 10160700015 Collected: 06/15/11 13:19 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,2,4-Trimethylbenzene	31.3	ug/m3	30.8	15.4	30.8		06/28/11 20:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	30.8	15.4	30.8		06/28/11 20:25	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	29.3	14.6	30.8		06/28/11 20:25	540-84-1	
Vinyl chloride	ND	ug/m3	8.0	4.0	30.8		06/28/11 20:25	75-01-4	
m&p-Xylene	55.4	ug/m3	54.2	27.1	30.8		06/28/11 20:25	179601-23-1	
o-Xylene	ND	ug/m3	27.1	13.6	30.8		06/28/11 20:25	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-19 Lab ID: 10160440004 Collected: 06/13/11 13:14 Received: 06/15/11 09:40 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	85.8	ug/m3	0.48	0.24	1.48		06/24/11 16:33	71-43-2	
Benzyl chloride	ND	ug/m3	1.6	0.78	1.48		06/24/11 16:33	100-44-7	
Bromodichloromethane	ND	ug/m3	2.1	1.0	1.48		06/24/11 16:33	75-27-4	
Bromoform	ND	ug/m3	3.1	1.6	1.48		06/24/11 16:33	75-25-2	
Bromomethane	ND	ug/m3	1.2	0.58	1.48		06/24/11 16:33	74-83-9	
1,3-Butadiene	ND	ug/m3	0.67	0.33	1.48		06/24/11 16:33	106-99-0	
2-Butanone (MEK)	ND	ug/m3	0.89	0.44	1.48		06/24/11 16:33	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.4	0.27	1.48		06/24/11 16:33	75-65-0	
Carbon tetrachloride	2.9	ug/m3	0.95	0.47	1.48		06/24/11 16:33	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	0.70	1.48		06/24/11 16:33	108-90-7	
Chloroethane	ND	ug/m3	0.80	0.40	1.48		06/24/11 16:33	75-00-3	
Chloroform	319	ug/m3	39.3	19.6	39.66		06/27/11 14:35	67-66-3	
Chloromethane	ND	ug/m3	0.62	0.31	1.48		06/24/11 16:33	74-87-3	
Cyclohexane	535	ug/m3	1.0	0.50	1.48		06/24/11 16:33	110-82-7	
Dibromochloromethane	ND	ug/m3	2.5	1.3	1.48		06/24/11 16:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.4	1.2	1.48		06/24/11 16:33	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	0.89	1.48		06/24/11 16:33	95-50-1	
1,3-Dichlorobenzene	7.9	ug/m3	1.8	0.89	1.48		06/24/11 16:33	541-73-1	
1,4-Dichlorobenzene	3.5	ug/m3	1.8	0.89	1.48		06/24/11 16:33	106-46-7	
Dichlorodifluoromethane	2.3	ug/m3	1.5	0.74	1.48		06/24/11 16:33	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.61	1.48		06/24/11 16:33	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.61	0.31	1.48		06/24/11 16:33	107-06-2	
1,1,1-Dichloroethene	ND	ug/m3	1.2	0.60	1.48		06/24/11 16:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.60	1.48		06/24/11 16:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.60	1.48		06/24/11 16:33	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	0.70	1.48		06/24/11 16:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.4	0.68	1.48		06/24/11 16:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.4	0.68	1.48		06/24/11 16:33	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.1	1.0	1.48		06/24/11 16:33	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.54	0.11	1.48		06/24/11 16:33	123-91-1	
Ethanol	114	ug/m3	2.8	1.3	1.48		06/24/11 16:33	64-17-5	
Ethylbenzene	62.7	ug/m3	1.3	0.65	1.48		06/24/11 16:33	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.3	1.6	1.48		06/24/11 16:33	87-68-3	
n-Hexane	50.8	ug/m3	28.6	14.3	39.66		06/27/11 14:35	110-54-3	
Methylene Chloride	ND	ug/m3	1.1	0.53	1.48		06/24/11 16:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.61	1.48		06/24/11 16:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.1	0.54	1.48		06/24/11 16:33	1634-04-4	
Styrene	ND	ug/m3	1.3	0.64	1.48		06/24/11 16:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.52	1.48		06/24/11 16:33	79-34-5	
Tetrachloroethene	1200	ug/m3	27.3	13.5	39.66		06/27/11 14:35	127-18-4	
Toluene	63.5	ug/m3	1.1	0.57	1.48		06/24/11 16:33	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.5	0.73	1.48		06/24/11 16:33	120-82-1	
1,1,1-Trichloroethane	3.8	ug/m3	1.6	0.81	1.48		06/24/11 16:33	71-55-6	
Trichloroethene	ND	ug/m3	0.81	0.41	1.48		06/24/11 16:33	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.6	0.81	1.48		06/24/11 16:33	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.4	1.2	1.48		06/24/11 16:33	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-19		Lab ID: 10160440004		Collected: 06/13/11 13:14		Received: 06/15/11 09:40		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	102	ug/m3	1.5	0.74	1.48		06/24/11 16:33	95-63-6	
1,3,5-Trimethylbenzene	24.2	ug/m3	1.5	0.74	1.48		06/24/11 16:33	108-67-8	
2,2,4-Trimethylpentane	399	ug/m3	1.4	0.70	1.48		06/24/11 16:33	540-84-1	<i>FS</i>
Vinyl chloride	ND	ug/m3	0.38	0.19	1.48		06/24/11 16:33	75-01-4	
m&p-Xylene	146	ug/m3	2.6	1.3	1.48		06/24/11 16:33	179601-23-1	
o-Xylene	65.0	ug/m3	1.3	0.65	1.48		06/24/11 16:33	95-47-6	

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10160440

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-20 Lab ID: 10160440005 Collected: 06/13/11 13:25 Received: 06/15/11 09:40 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	2.1	ug/m3	0.93	0.46	2.86		06/28/11 11:08	71-43-2	
Benzyl chloride	ND	ug/m3	3.0	1.5	2.86		06/28/11 11:08	100-44-7	
Bromodichloromethane	ND	ug/m3	4.0	2.0	2.86		06/28/11 11:08	75-27-4	
Bromoform	ND	ug/m3	6.0	3.0	2.86		06/28/11 11:08	75-25-2	
Bromomethane	ND	ug/m3	2.3	1.1	2.86		06/28/11 11:08	74-83-9	
1,3-Butadiene	ND	ug/m3	1.3	0.64	2.86		06/28/11 11:08	106-99-0	
2-Butanone (MEK)	ND	ug/m3	1.7	0.86	2.86		06/28/11 11:08	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	2.6	0.53	2.86		06/28/11 11:08	75-65-0	
Carbon tetrachloride	ND	ug/m3	1.8	0.92	2.86		06/28/11 11:08	56-23-5	
Chlorobenzene	ND	ug/m3	2.7	1.3	2.86		06/28/11 11:08	108-90-7	
Chloroethane	ND	ug/m3	1.5	0.77	2.86		06/28/11 11:08	75-00-3	
Chloroform	54.2	ug/m3	2.8	1.4	2.86		06/28/11 11:08	67-66-3	
Chloromethane	ND	ug/m3	1.2	0.60	2.86		06/28/11 11:08	74-87-3	
Cyclohexane	8.6	ug/m3	1.9	0.97	2.86		06/28/11 11:08	110-82-7	
Dibromochloromethane	ND	ug/m3	4.9	2.4	2.86		06/28/11 11:08	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	4.6	2.3	2.86		06/28/11 11:08	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	3.4	1.7	2.86		06/28/11 11:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	3.4	1.7	2.86		06/28/11 11:08	541-73-1	
1,4-Dichlorobenzene	2.8	ug/m3	3.4	1.7	2.86		06/28/11 11:08	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	2.9	1.4	2.86		06/28/11 11:08	75-71-8	
1,1-Dichloroethane	ND	ug/m3	2.3	1.2	2.86		06/28/11 11:08	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1.2	0.60	2.86		06/28/11 11:08	107-06-2	
1,1-Dichloroethene	ND	ug/m3	2.3	1.2	2.86		06/28/11 11:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	2.3	1.2	2.86		06/28/11 11:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	2.3	1.2	2.86		06/28/11 11:08	156-60-5	
1,2-Dichloropropane	ND	ug/m3	2.7	1.3	2.86		06/28/11 11:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	2.6	1.3	2.86		06/28/11 11:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	2.6	1.3	2.86		06/28/11 11:08	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	4.0	2.0	2.86		06/28/11 11:08	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	1.0	0.21	2.86		06/28/11 11:08	123-91-1	
Ethanol	183	ug/m3	5.4	2.4	2.86		06/28/11 11:08	64-17-5	JS
Ethylbenzene	64.9	ug/m3	2.5	1.3	2.86		06/28/11 11:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	6.3	3.1	2.86		06/28/11 11:08	87-68-3	
n-Hexane	191	ug/m3	2.1	1.0	2.86		06/28/11 11:08	110-54-3	
Methylene Chloride	282	ug/m3	2.0	1.0	2.86		06/28/11 11:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	2.4	1.2	2.86		06/28/11 11:08	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2.1	1.0	2.86		06/28/11 11:08	1634-04-4	
Styrene	ND	ug/m3	2.5	1.2	2.86		06/28/11 11:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2.0	1.0	2.86		06/28/11 11:08	79-34-5	
Tetrachloroethene	83.1	ug/m3	2.0	0.97	2.86		06/28/11 11:08	127-18-4	
Toluene	159	ug/m3	2.2	1.1	2.86		06/28/11 11:08	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.8	1.4	2.86		06/28/11 11:08	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	3.1	1.6	2.86		06/28/11 11:08	71-55-6	
Trichloroethene	9.2	ug/m3	1.6	0.80	2.86		06/28/11 11:08	79-01-6	
Trichlorofluoromethane	ND	ug/m3	3.1	1.6	2.86		06/28/11 11:08	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	4.6	2.3	2.86		06/28/11 11:08	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-20		Lab ID: 10160440005		Collected: 06/13/11 13:25		Received: 06/15/11 09:40		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	122	ug/m3	2.9	1.4	2.86		06/28/11 11:08	95-63-6	
1,3,5-Trimethylbenzene	29.1	ug/m3	2.9	1.4	2.86		06/28/11 11:08	108-67-8	
2,2,4-Trimethylpentane	21.9	ug/m3	2.7	1.4	2.86		06/28/11 11:08	540-84-1	
Vinyl chloride	ND	ug/m3	0.74	0.37	2.86		06/28/11 11:08	75-01-4	
m&p-Xylene	216	ug/m3	5.0	2.5	2.86		06/28/11 11:08	179601-23-1	
o-Xylene	101	ug/m3	2.5	1.3	2.86		06/28/11 11:08	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-21 Lab ID: 10160440006 Collected: 06/13/11 13:42 Received: 06/15/11 09:40 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	241	ug/m3	12.5	6.1	38.32		06/27/11 15:59	71-43-2	
Benzyl chloride	ND	ug/m3	1.5	0.75	1.43		06/24/11 17:31	100-44-7	
Bromodichloromethane	ND	ug/m3	2.0	1.0	1.43		06/24/11 17:31	75-27-4	
Bromoform	ND	ug/m3	3.0	1.5	1.43		06/24/11 17:31	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.56	1.43		06/24/11 17:31	74-83-9	
1,3-Butadiene	ND	ug/m3	0.64	0.32	1.43		06/24/11 17:31	106-99-0	
2-Butanone (MEK)	9.9	ug/m3	0.86	0.43	1.43		06/24/11 17:31	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.3	0.26	1.43		06/24/11 17:31	75-65-0	
Carbon tetrachloride	ND	ug/m3	0.92	0.46	1.43		06/24/11 17:31	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	0.67	1.43		06/24/11 17:31	108-90-7	
Chloroethane	ND	ug/m3	0.77	0.39	1.43		06/24/11 17:31	75-00-3	
Chloroform	25.6	ug/m3	1.4	0.71	1.43		06/24/11 17:31	67-66-3	
Chloromethane	ND	ug/m3	0.60	0.30	1.43		06/24/11 17:31	74-87-3	
Cyclohexane	2090	ug/m3	26.1	13.0	38.32		06/27/11 15:59	110-82-7	
Dibromochloromethane	ND	ug/m3	2.4	1.2	1.43		06/24/11 17:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.3	1.1	1.43		06/24/11 17:31	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/24/11 17:31	95-50-1	
1,3-Dichlorobenzene	4.4	ug/m3	1.7	0.86	1.43		06/24/11 17:31	541-73-1	
1,4-Dichlorobenzene	1.5J	ug/m3	1.7	0.86	1.43		06/24/11 17:31	106-46-7	
Dichlorodifluoromethane	1.2J	ug/m3	1.4	0.72	1.43		06/24/11 17:31	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.59	1.43		06/24/11 17:31	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	0.30	1.43		06/24/11 17:31	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 17:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 17:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 17:31	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	0.67	1.43		06/24/11 17:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/24/11 17:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/24/11 17:31	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	1.0	1.43		06/24/11 17:31	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.52	0.11	1.43		06/24/11 17:31	123-91-1	
Ethanol	89.4	ug/m3	2.7	1.2	1.43		06/24/11 17:31	64-17-5	SS
Ethylbenzene	38.7	ug/m3	1.3	0.63	1.43		06/24/11 17:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.6	1.43		06/24/11 17:31	87-68-3	
n-Hexane	1500	ug/m3	27.6	13.8	38.32		06/27/11 15:59	110-54-3	
Methylene Chloride	883	ug/m3	27.2	13.6	38.32		06/27/11 15:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.59	1.43		06/24/11 17:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.0	0.52	1.43		06/24/11 17:31	1634-04-4	
Styrene	2.4	ug/m3	1.2	0.62	1.43		06/24/11 17:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.50	1.43		06/24/11 17:31	79-34-5	
Tetrachloroethene	72.4	ug/m3	0.99	0.49	1.43		06/24/11 17:31	127-18-4	
Toluene	82.6	ug/m3	1.1	0.55	1.43		06/24/11 17:31	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.4	0.71	1.43		06/24/11 17:31	120-82-1	
1,1,1-Trichloroethane	2.0	ug/m3	1.6	0.79	1.43		06/24/11 17:31	71-55-6	
Trichloroethene	ND	ug/m3	0.79	0.40	1.43		06/24/11 17:31	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.6	0.79	1.43		06/24/11 17:31	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.3	1.1	1.43		06/24/11 17:31	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-21		Lab ID: 10160440006		Collected: 06/13/11 13:42		Received: 06/15/11 09:40		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	15.9	ug/m3	1.4	0.72	1.43		06/24/11 17:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.4	0.72	1.43		06/24/11 17:31	108-67-8	
2,2,4-Trimethylpentane	400	ug/m3	1.4	0.68	1.43		06/24/11 17:31	540-84-1	ES
Vinyl chloride	ND	ug/m3	0.37	0.19	1.43		06/24/11 17:31	75-01-4	
m&p-Xylene	62.8	ug/m3	2.5	1.3	1.43		06/24/11 17:31	179601-23-1	
o-Xylene	17.7	ug/m3	1.3	0.63	1.43		06/24/11 17:31	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-42 Lab ID: 10160700001 Collected: 06/14/11 13:42 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	1230	606	3788.8		06/27/11 23:33	71-43-2	
Benzyl chloride	ND	ug/m3	3980	1990	3788.8		06/27/11 23:33	100-44-7	
Bromodichloromethane	ND	ug/m3	5300	2650	3788.8		06/27/11 23:33	75-27-4	
Bromoform	ND	ug/m3	7960	3980	3788.8		06/27/11 23:33	75-25-2	
Bromomethane	ND	ug/m3	2990	1500	3788.8		06/27/11 23:33	74-83-9	
1,3-Butadiene	ND	ug/m3	1700	852	3788.8		06/27/11 23:33	106-99-0	
2-Butanone (MEK)	ND	ug/m3	2270	1140	3788.8		06/27/11 23:33	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	3500	697	3788.8		06/27/11 23:33	75-65-0	
Carbon tetrachloride	ND	ug/m3	2420	1210	3788.8		06/27/11 23:33	56-23-5	
Chlorobenzene	ND	ug/m3	3560	1780	3788.8		06/27/11 23:33	108-90-7	
Chloroethane	ND	ug/m3	2050	1020	3788.8		06/27/11 23:33	75-00-3	
Chloroform	ND	ug/m3	3750	1880	3788.8		06/27/11 23:33	67-66-3	
Chloromethane	ND	ug/m3	1590	796	3788.8		06/27/11 23:33	74-87-3	
Cyclohexane	ND	ug/m3	2580	1290	3788.8		06/27/11 23:33	110-82-7	
Dibromochloromethane	ND	ug/m3	6440	3220	3788.8		06/27/11 23:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	6060	3030	3788.8		06/27/11 23:33	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	4550	2270	3788.8		06/27/11 23:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	4550	2270	3788.8		06/27/11 23:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4550	2270	3788.8		06/27/11 23:33	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	3790	1890	3788.8		06/27/11 23:33	75-71-8	
1,1-Dichloroethane	ND	ug/m3	3110	1550	3788.8		06/27/11 23:33	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1550	796	3788.8		06/27/11 23:33	107-06-2	
1,1-Dichloroethene	ND	ug/m3	3070	1530	3788.8		06/27/11 23:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	3070	1530	3788.8		06/27/11 23:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	3070	1530	3788.8		06/27/11 23:33	156-60-5	
1,2-Dichloropropane	ND	ug/m3	3560	1780	3788.8		06/27/11 23:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	3490	1740	3788.8		06/27/11 23:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3490	1740	3788.8		06/27/11 23:33	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	5300	2650	3788.8		06/27/11 23:33	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	1390	280	3788.8		06/27/11 23:33	123-91-1	
Ethanol	ND	ug/m3	7200	3220	3788.8		06/27/11 23:33	64-17-5	
Ethylbenzene	ND	ug/m3	3330	1670	3788.8		06/27/11 23:33	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	8340	4170	3788.8		06/27/11 23:33	87-68-3	
n-Hexane	ND	ug/m3	2730	1360	3788.8		06/27/11 23:33	110-54-3	
Methylene Chloride	ND	ug/m3	2690	1350	3788.8		06/27/11 23:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	3140	1570	3788.8		06/27/11 23:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2770	1380	3788.8		06/27/11 23:33	1634-04-4	
Styrene	ND	ug/m3	3300	1650	3788.8		06/27/11 23:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2640	1330	3788.8		06/27/11 23:33	79-34-5	
Tetrachloroethene	803000	ug/m3	2610	1290	3788.8		06/27/11 23:33	127-18-4	
Toluene	ND	ug/m3	2920	1460	3788.8		06/27/11 23:33	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	3750	1880	3788.8		06/27/11 23:33	120-82-1	
1,1,1-Trichloroethane	16900	ug/m3	4170	2080	3788.8		06/27/11 23:33	71-55-6	
Trichloroethene	2850	ug/m3	2080	1060	3788.8		06/27/11 23:33	79-01-6	
Trichlorofluoromethane	ND	ug/m3	4170	2080	3788.8		06/27/11 23:33	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	6060	3030	3788.8		06/27/11 23:33	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-42		Lab ID: 10160700001		Collected: 06/14/11 13:42		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	3790	1890	3788.8		06/27/11 23:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	3790	1890	3788.8		06/27/11 23:33	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	3600	1800	3788.8		06/27/11 23:33	540-84-1	
Vinyl chloride	ND	ug/m3	985	493	3788.8		06/27/11 23:33	75-01-4	
m&p-Xylene	ND	ug/m3	6670	3330	3788.8		06/27/11 23:33	179601-23-1	
o-Xylene	ND	ug/m3	3330	1670	3788.8		06/27/11 23:33	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-43		Lab ID: 10160700014		Collected: 06/15/11 12:47		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>									
Analytical Method: TO-15									
Benzene	42.4	ug/m3	10.0	4.9	30.8		06/28/11 19:56	71-43-2	
Benzyl chloride	ND	ug/m3	32.3	16.2	30.8		06/28/11 19:56	100-44-7	
Bromodichloromethane	ND	ug/m3	43.1	21.6	30.8		06/28/11 19:56	75-27-4	
Bromoform	ND	ug/m3	64.7	32.3	30.8		06/28/11 19:56	75-25-2	
Bromomethane	ND	ug/m3	24.3	12.2	30.8		06/28/11 19:56	74-83-9	
1,3-Butadiene	ND	ug/m3	13.9	6.9	30.8		06/28/11 19:56	106-99-0	
2-Butanone (MEK)	ND	ug/m3	18.5	9.2	30.8		06/28/11 19:56	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	28.5	5.7	30.8		06/28/11 19:56	75-65-0	
Carbon tetrachloride	ND	ug/m3	19.7	9.9	30.8		06/28/11 19:56	56-23-5	
Chlorobenzene	ND	ug/m3	29.0	14.5	30.8		06/28/11 19:56	108-90-7	
Chloroethane	ND	ug/m3	16.6	8.3	30.8		06/28/11 19:56	75-00-3	
Chloroform	ND	ug/m3	30.5	15.2	30.8		06/28/11 19:56	67-66-3	
Chloromethane	ND	ug/m3	12.9	6.5	30.8		06/28/11 19:56	74-87-3	
Cyclohexane	16300	ug/m3	335	168	492.8		06/29/11 22:58	110-82-7	A3
Dibromochloromethane	ND	ug/m3	52.4	26.2	30.8		06/28/11 19:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	49.3	24.6	30.8		06/28/11 19:56	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	37.0	18.5	30.8		06/28/11 19:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	37.0	18.5	30.8		06/28/11 19:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	37.0	18.5	30.8		06/28/11 19:56	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	30.8	15.4	30.8		06/28/11 19:56	75-71-8	
1,1-Dichloroethane	ND	ug/m3	25.3	12.6	30.8		06/28/11 19:56	75-34-3	
1,2-Dichloroethane	ND	ug/m3	12.6	6.5	30.8		06/28/11 19:56	107-06-2	
1,1-Dichloroethene	ND	ug/m3	24.9	12.5	30.8		06/28/11 19:56	75-35-4	
cis-1,2-Dichloroethene	557	ug/m3	24.9	12.5	30.8		06/28/11 19:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	24.9	12.5	30.8		06/28/11 19:56	156-60-5	
1,2-Dichloropropane	ND	ug/m3	29.0	14.5	30.8		06/28/11 19:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	28.3	14.2	30.8		06/28/11 19:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	28.3	14.2	30.8		06/28/11 19:56	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	43.1	21.6	30.8		06/28/11 19:56	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	11.3	2.3	30.8		06/28/11 19:56	123-91-1	
Ethanol	116	ug/m3	58.5	26.2	30.8		06/28/11 19:56	64-17-5	
Ethylbenzene	ND	ug/m3	27.1	13.6	30.8		06/28/11 19:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	67.8	33.9	30.8		06/28/11 19:56	87-68-3	
n-Hexane	8000	ug/m3	355	177	492.8		06/29/11 22:58	110-54-3	A3
Methylene Chloride	ND	ug/m3	21.9	10.9	30.8		06/28/11 19:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	25.6	12.8	30.8		06/28/11 19:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	22.5	11.2	30.8		06/28/11 19:56	1634-04-4	
Styrene	ND	ug/m3	26.8	13.4	30.8		06/28/11 19:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	21.5	10.8	30.8		06/28/11 19:56	79-34-5	
Tetrachloroethene	48500	ug/m3	340	168	492.8		06/29/11 22:58	127-18-4	A3
Toluene	17.0J	ug/m3	23.7	11.9	30.8		06/28/11 19:56	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	30.5	15.2	30.8		06/28/11 19:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	33.9	16.9	30.8		06/28/11 19:56	71-55-6	
Trichloroethene	1170	ug/m3	16.9	8.6	30.8		06/28/11 19:56	79-01-6	
Trichlorofluoromethane	118	ug/m3	33.9	16.9	30.8		06/28/11 19:56	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	49.3	24.6	30.8		06/28/11 19:56	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-43		Lab ID: 10160700014		Collected: 06/15/11 12:47		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	30.8	15.4	30.8		06/28/11 19:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	30.8	15.4	30.8		06/28/11 19:56	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	29.3	14.6	30.8		06/28/11 19:56	540-84-1	
Vinyl chloride	687	ug/m3	8.0	4.0	30.8		06/28/11 19:56	75-01-4	
m&p-Xylene	ND	ug/m3	54.2	27.1	30.8		06/28/11 19:56	179601-23-1	
o-Xylene	ND	ug/m3	27.1	13.6	30.8		06/28/11 19:56	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: **SG-44** Lab ID: **10160700002** Collected: 06/14/11 13:51 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	9.3	4.6	28.6		06/27/11 20:31	71-43-2	
Benzyl chloride	ND	ug/m3	30.0	15.0	28.6		06/27/11 20:31	100-44-7	
Bromodichloromethane	ND	ug/m3	40.0	20.0	28.6		06/27/11 20:31	75-27-4	
Bromoform	<b>51.9J</b>	ug/m3	60.1	30.0	28.6		06/27/11 20:31	75-25-2	
Bromomethane	ND	ug/m3	22.6	11.3	28.6		06/27/11 20:31	74-83-9	
1,3-Butadiene	ND	ug/m3	12.9	6.4	28.6		06/27/11 20:31	106-99-0	
2-Butanone (MEK)	ND	ug/m3	17.2	8.6	28.6		06/27/11 20:31	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	26.4	5.3	28.6		06/27/11 20:31	75-65-0	
Carbon tetrachloride	ND	ug/m3	18.3	9.2	28.6		06/27/11 20:31	56-23-5	
Chlorobenzene	ND	ug/m3	26.9	13.4	28.6		06/27/11 20:31	108-90-7	
Chloroethane	ND	ug/m3	15.4	7.7	28.6		06/27/11 20:31	75-00-3	
Chloroform	ND	ug/m3	28.3	14.2	28.6		06/27/11 20:31	67-66-3	
Chloromethane	ND	ug/m3	12.0	6.0	28.6		06/27/11 20:31	74-87-3	
Cyclohexane	ND	ug/m3	19.4	9.7	28.6		06/27/11 20:31	110-82-7	
Dibromochloromethane	ND	ug/m3	48.6	24.3	28.6		06/27/11 20:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	45.8	22.9	28.6		06/27/11 20:31	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	34.3	17.2	28.6		06/27/11 20:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	34.3	17.2	28.6		06/27/11 20:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	34.3	17.2	28.6		06/27/11 20:31	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	28.6	14.3	28.6		06/27/11 20:31	75-71-8	
1,1-Dichloroethane	ND	ug/m3	23.5	11.7	28.6		06/27/11 20:31	75-34-3	
1,2-Dichloroethane	ND	ug/m3	11.7	6.0	28.6		06/27/11 20:31	107-06-2	
1,1-Dichloroethene	ND	ug/m3	23.2	11.6	28.6		06/27/11 20:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	23.2	11.6	28.6		06/27/11 20:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	23.2	11.6	28.6		06/27/11 20:31	156-60-5	
1,2-Dichloropropane	ND	ug/m3	26.9	13.4	28.6		06/27/11 20:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	26.3	13.2	28.6		06/27/11 20:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	26.3	13.2	28.6		06/27/11 20:31	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	40.0	20.0	28.6		06/27/11 20:31	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.5	2.1	28.6		06/27/11 20:31	123-91-1	
Ethanol	<b>62.0</b>	ug/m3	54.3	24.3	28.6		06/27/11 20:31	64-17-5	
Ethylbenzene	ND	ug/m3	25.2	12.6	28.6		06/27/11 20:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	62.9	31.5	28.6		06/27/11 20:31	87-68-3	
n-Hexane	ND	ug/m3	20.6	10.3	28.6		06/27/11 20:31	110-54-3	
Methylene Chloride	ND	ug/m3	20.3	10.2	28.6		06/27/11 20:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	23.7	11.9	28.6		06/27/11 20:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	20.9	10.4	28.6		06/27/11 20:31	1634-04-4	
Styrene	<b>13.0J</b>	ug/m3	24.9	12.4	28.6		06/27/11 20:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	20.0	10.0	28.6		06/27/11 20:31	79-34-5	
Tetrachloroethene	<b>1660</b>	ug/m3	19.7	9.7	28.6		06/27/11 20:31	127-18-4	
Toluene	ND	ug/m3	22.0	11.0	28.6		06/27/11 20:31	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	28.3	14.2	28.6		06/27/11 20:31	120-82-1	
1,1,1-Trichloroethane	<b>28.0J</b>	ug/m3	31.5	15.7	28.6		06/27/11 20:31	71-55-6	
Trichloroethene	ND	ug/m3	15.7	8.0	28.6		06/27/11 20:31	79-01-6	
Trichlorofluoromethane	ND	ug/m3	31.5	15.7	28.6		06/27/11 20:31	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	45.8	22.9	28.6		06/27/11 20:31	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-44 Lab ID: 10160700002 Collected: 06/14/11 13:51 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,2,4-Trimethylbenzene	ND	ug/m3	28.6	14.3	28.6		06/27/11 20:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	28.6	14.3	28.6		06/27/11 20:31	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	27.2	13.6	28.6		06/27/11 20:31	540-84-1	
Vinyl chloride	ND	ug/m3	7.4	3.7	28.6		06/27/11 20:31	75-01-4	
m&p-Xylene	ND	ug/m3	50.3	25.2	28.6		06/27/11 20:31	179601-23-1	
o-Xylene	ND	ug/m3	25.2	12.6	28.6		06/27/11 20:31	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-45		Lab ID: 10160700003		Collected: 06/14/11 14:01		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	331	163	1017.6		06/27/11 21:00	71-43-2	
Benzyl chloride	ND	ug/m3	1070	534	1017.6		06/27/11 21:00	100-44-7	
Bromodichloromethane	ND	ug/m3	1420	712	1017.6		06/27/11 21:00	75-27-4	
Bromoform	1830J	ug/m3	2140	1070	1017.6		06/27/11 21:00	75-25-2	
Bromomethane	ND	ug/m3	804	402	1017.6		06/27/11 21:00	74-83-9	
1,3-Butadiene	ND	ug/m3	458	229	1017.6		06/27/11 21:00	106-99-0	
2-Butanone (MEK)	ND	ug/m3	611	305	1017.6		06/27/11 21:00	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	940	187	1017.6		06/27/11 21:00	75-65-0	
Carbon tetrachloride	ND	ug/m3	651	326	1017.6		06/27/11 21:00	56-23-5	
Chlorobenzene	ND	ug/m3	957	478	1017.6		06/27/11 21:00	108-90-7	
Chloroethane	ND	ug/m3	550	275	1017.6		06/27/11 21:00	75-00-3	
Chloroform	ND	ug/m3	1010	504	1017.6		06/27/11 21:00	67-66-3	
Chloromethane	ND	ug/m3	427	214	1017.6		06/27/11 21:00	74-87-3	
Cyclohexane	ND	ug/m3	692	346	1017.6		06/27/11 21:00	110-82-7	
Dibromochloromethane	ND	ug/m3	1730	865	1017.6		06/27/11 21:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1630	814	1017.6		06/27/11 21:00	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1220	611	1017.6		06/27/11 21:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1220	611	1017.6		06/27/11 21:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1220	611	1017.6		06/27/11 21:00	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1020	509	1017.6		06/27/11 21:00	75-71-8	
1,1-Dichloroethane	ND	ug/m3	834	417	1017.6		06/27/11 21:00	75-34-3	
1,2-Dichloroethane	ND	ug/m3	417	214	1017.6		06/27/11 21:00	107-06-2	
1,1-Dichloroethene	ND	ug/m3	824	412	1017.6		06/27/11 21:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	824	412	1017.6		06/27/11 21:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	824	412	1017.6		06/27/11 21:00	156-60-5	
1,2-Dichloropropane	ND	ug/m3	957	478	1017.6		06/27/11 21:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	936	468	1017.6		06/27/11 21:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	936	468	1017.6		06/27/11 21:00	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1420	712	1017.6		06/27/11 21:00	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	372	75.3	1017.6		06/27/11 21:00	123-91-1	
Ethanol	ND	ug/m3	1930	865	1017.6		06/27/11 21:00	64-17-5	
Ethylbenzene	ND	ug/m3	895	448	1017.6		06/27/11 21:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	2240	1120	1017.6		06/27/11 21:00	87-68-3	
n-Hexane	ND	ug/m3	733	366	1017.6		06/27/11 21:00	110-54-3	
Methylene Chloride	ND	ug/m3	722	361	1017.6		06/27/11 21:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	845	422	1017.6		06/27/11 21:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	743	371	1017.6		06/27/11 21:00	1634-04-4	
Styrene	ND	ug/m3	885	443	1017.6		06/27/11 21:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	710	356	1017.6		06/27/11 21:00	79-34-5	
Tetrachloroethene	22400	ug/m3	701	346	1017.6		06/27/11 21:00	127-18-4	
Toluene	ND	ug/m3	784	392	1017.6		06/27/11 21:00	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1010	504	1017.6		06/27/11 21:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1120	560	1017.6		06/27/11 21:00	71-55-6	
Trichloroethene	ND	ug/m3	560	285	1017.6		06/27/11 21:00	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1120	560	1017.6		06/27/11 21:00	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	1630	814	1017.6		06/27/11 21:00	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site

Pace Project No.: 10160700

Sample: SG-45		Lab ID: 10160700003		Collected: 06/14/11 14:01		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	1020	509	1017.6		06/27/11 21:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1020	509	1017.6		06/27/11 21:00	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	967	483	1017.6		06/27/11 21:00	540-84-1	
Vinyl chloride	ND	ug/m3	265	132	1017.6		06/27/11 21:00	75-01-4	
m&p-Xylene	ND	ug/m3	1790	895	1017.6		06/27/11 21:00	179601-23-1	
o-Xylene	ND	ug/m3	895	448	1017.6		06/27/11 21:00	95-47-6	





## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-46 Lab ID: 10160592011 Collected: 06/14/11 13:59 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	9.0	4.4	27.6		06/28/11 02:29	71-43-2	
Benzyl chloride	ND	ug/m3	29.0	14.5	27.6		06/28/11 02:29	100-44-7	
Bromodichloromethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 02:29	75-27-4	
Bromoform	ND	ug/m3	58.0	29.0	27.6		06/28/11 02:29	75-25-2	
Bromomethane	ND	ug/m3	21.8	10.9	27.6		06/28/11 02:29	74-83-9	
1,3-Butadiene	ND	ug/m3	12.4	6.2	27.6		06/28/11 02:29	106-99-0	
2-Butanone (MEK)	ND	ug/m3	16.6	8.3	27.6		06/28/11 02:29	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	25.5	5.1	27.6		06/28/11 02:29	75-65-0	
Carbon tetrachloride	ND	ug/m3	17.7	8.8	27.6		06/28/11 02:29	56-23-5	
Chlorobenzene	ND	ug/m3	25.9	13.0	27.6		06/28/11 02:29	108-90-7	
Chloroethane	ND	ug/m3	14.9	7.5	27.6		06/28/11 02:29	75-00-3	
Chloroform	ND	ug/m3	27.3	13.7	27.6		06/28/11 02:29	67-66-3	
Chloromethane	ND	ug/m3	11.6	5.8	27.6		06/28/11 02:29	74-87-3	
Cyclohexane	ND	ug/m3	18.8	9.4	27.6		06/28/11 02:29	110-82-7	
Dibromochloromethane	ND	ug/m3	46.9	23.5	27.6		06/28/11 02:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	44.2	22.1	27.6		06/28/11 02:29	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 02:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 02:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 02:29	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	27.6	13.8	27.6		06/28/11 02:29	75-71-8	
1,1-Dichloroethane	42.0	ug/m3	22.6	11.3	27.6		06/28/11 02:29	75-34-3	
1,2-Dichloroethane	ND	ug/m3	11.3	5.8	27.6		06/28/11 02:29	107-06-2	
1,1-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 02:29	75-35-4	
cis-1,2-Dichloroethene	17.7J	ug/m3	22.4	11.2	27.6		06/28/11 02:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 02:29	156-60-5	
1,2-Dichloropropane	ND	ug/m3	25.9	13.0	27.6		06/28/11 02:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 02:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 02:29	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 02:29	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.1	2.0	27.6		06/28/11 02:29	123-91-1	
Ethanol	ND	ug/m3	52.4	23.5	27.6		06/28/11 02:29	64-17-5	
Ethylbenzene	ND	ug/m3	24.3	12.1	27.6		06/28/11 02:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	60.7	30.4	27.6		06/28/11 02:29	87-68-3	
n-Hexane	ND	ug/m3	19.9	9.9	27.6		06/28/11 02:29	110-54-3	
Methylene Chloride	ND	ug/m3	19.6	9.8	27.6		06/28/11 02:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	22.9	11.5	27.6		06/28/11 02:29	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	20.1	10.1	27.6		06/28/11 02:29	1634-04-4	
Styrene	14.2J	ug/m3	24.0	12.0	27.6		06/28/11 02:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	19.3	9.7	27.6		06/28/11 02:29	79-34-5	
Tetrachloroethene	2040	ug/m3	19.0	9.4	27.6		06/28/11 02:29	127-18-4	
Toluene	17.4J	ug/m3	21.3	10.6	27.6		06/28/11 02:29	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	27.3	13.7	27.6		06/28/11 02:29	120-82-1	
1,1,1-Trichloroethane	109	ug/m3	30.4	15.2	27.6		06/28/11 02:29	71-55-6	
Trichloroethene	376	ug/m3	15.2	7.7	27.6		06/28/11 02:29	79-01-6	
Trichlorofluoromethane	ND	ug/m3	30.4	15.2	27.6		06/28/11 02:29	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	44.2	22.1	27.6		06/28/11 02:29	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-46		Lab ID: 10160592011		Collected: 06/14/11 13:59		Received: 06/16/11 09:50		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	27.6	13.8	27.6		06/28/11 02:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	27.6	13.8	27.6		06/28/11 02:29	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	26.2	13.1	27.6		06/28/11 02:29	540-84-1	
Vinyl chloride	ND	ug/m3	7.2	3.6	27.6		06/28/11 02:29	75-01-4	
m&p-Xylene	ND	ug/m3	48.6	24.3	27.6		06/28/11 02:29	179601-23-1	
o-Xylene	ND	ug/m3	24.3	12.1	27.6		06/28/11 02:29	95-47-6	



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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: DUP2-061411 Lab ID: 10160592012 Collected: 06/14/11 13:59 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	8.7	4.3	26.8		06/28/11 02:56	71-43-2	
Benzyl chloride	ND	ug/m3	28.1	14.1	26.8		06/28/11 02:56	100-44-7	
Bromodichloromethane	ND	ug/m3	37.5	18.8	26.8		06/28/11 02:56	75-27-4	
Bromoform	54.5J	ug/m3	56.3	28.1	26.8		06/28/11 02:56	75-25-2	
Bromomethane	ND	ug/m3	21.2	10.6	26.8		06/28/11 02:56	74-83-9	
1,3-Butadiene	ND	ug/m3	12.1	6.0	26.8		06/28/11 02:56	106-99-0	
2-Butanone (MEK)	ND	ug/m3	16.1	8.0	26.8		06/28/11 02:56	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	24.8	4.9	26.8		06/28/11 02:56	75-65-0	
Carbon tetrachloride	ND	ug/m3	17.2	8.6	26.8		06/28/11 02:56	56-23-5	
Chlorobenzene	ND	ug/m3	25.2	12.6	26.8		06/28/11 02:56	108-90-7	
Chloroethane	ND	ug/m3	14.5	7.2	26.8		06/28/11 02:56	75-00-3	
Chloroform	ND	ug/m3	26.5	13.3	26.8		06/28/11 02:56	67-66-3	
Chloromethane	ND	ug/m3	11.3	5.6	26.8		06/28/11 02:56	74-87-3	
Cyclohexane	ND	ug/m3	18.2	9.1	26.8		06/28/11 02:56	110-82-7	
Dibromochloromethane	25.4J	ug/m3	45.6	22.8	26.8		06/28/11 02:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	42.9	21.4	26.8		06/28/11 02:56	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	32.2	16.1	26.8		06/28/11 02:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	32.2	16.1	26.8		06/28/11 02:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	32.2	16.1	26.8		06/28/11 02:56	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	26.8	13.4	26.8		06/28/11 02:56	75-71-8	
1,1-Dichloroethane	12.8J	ug/m3	22.0	11.0	26.8		06/28/11 02:56	75-34-3	
1,2-Dichloroethane	ND	ug/m3	11.0	5.6	26.8		06/28/11 02:56	107-06-2	
1,1-Dichloroethene	ND	ug/m3	21.7	10.9	26.8		06/28/11 02:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	21.7	10.9	26.8		06/28/11 02:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	21.7	10.9	26.8		06/28/11 02:56	156-60-5	
1,2-Dichloropropane	ND	ug/m3	25.2	12.6	26.8		06/28/11 02:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	24.7	12.3	26.8		06/28/11 02:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	24.7	12.3	26.8		06/28/11 02:56	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	37.5	18.8	26.8		06/28/11 02:56	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	9.8	2.0	26.8		06/28/11 02:56	123-91-1	
Ethanol	58.7	ug/m3	50.9	22.8	26.8		06/28/11 02:56	64-17-5	
Ethylbenzene	ND	ug/m3	23.6	11.8	26.8		06/28/11 02:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	59.0	29.5	26.8		06/28/11 02:56	87-68-3	
n-Hexane	30.0	ug/m3	19.3	9.6	26.8		06/28/11 02:56	110-54-3	
Methylene Chloride	199	ug/m3	19.0	9.5	26.8		06/28/11 02:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	22.2	11.1	26.8		06/28/11 02:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	19.6	9.8	26.8		06/28/11 02:56	1634-04-4	
Styrene	16.8J	ug/m3	23.3	11.7	26.8		06/28/11 02:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	18.7	9.4	26.8		06/28/11 02:56	79-34-5	
Tetrachloroethene	805	ug/m3	18.5	9.1	26.8		06/28/11 02:56	127-18-4	
Toluene	33.4	ug/m3	20.6	10.3	26.8		06/28/11 02:56	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	26.5	13.3	26.8		06/28/11 02:56	120-82-1	
1,1,1-Trichloroethane	53.7	ug/m3	29.5	14.7	26.8		06/28/11 02:56	71-55-6	
Trichloroethene	158	ug/m3	14.7	7.5	26.8		06/28/11 02:56	79-01-6	
Trichlorofluoromethane	ND	ug/m3	29.5	14.7	26.8		06/28/11 02:56	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	42.9	21.4	26.8		06/28/11 02:56	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: DUP2-061411		Lab ID: 10160592012	Collected: 06/14/11 13:59		Received: 06/16/11 09:50		Matrix: Air		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	26.8	13.4	26.8		06/28/11 02:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	26.8	13.4	26.8		06/28/11 02:56	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	25.5	12.7	26.8		06/28/11 02:56	540-84-1	
Vinyl chloride	ND	ug/m3	7.0	3.5	26.8		06/28/11 02:56	75-01-4	
m&p-Xylene	ND	ug/m3	47.2	23.6	26.8		06/28/11 02:56	179601-23-1	
o-Xylene	ND	ug/m3	23.6	11.8	26.8		06/28/11 02:56	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-47      Lab ID: 10160700016      Collected: 06/15/11 13:26      Received: 06/17/11 10:00      Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	2.2	1.1	6.89		06/29/11 17:08	71-43-2	
Benzyl chloride	ND	ug/m3	7.2	3.6	6.89		06/29/11 17:08	100-44-7	
Bromodichloromethane	ND	ug/m3	9.6	4.8	6.89		06/29/11 17:08	75-27-4	
Bromoform	ND	ug/m3	14.5	7.2	6.89		06/29/11 17:08	75-25-2	
Bromomethane	ND	ug/m3	5.4	2.7	6.89		06/29/11 17:08	74-83-9	
1,3-Butadiene	ND	ug/m3	3.1	1.6	6.89		06/29/11 17:08	106-99-0	
2-Butanone (MEK)	23.2	ug/m3	4.1	2.1	6.89		06/29/11 17:08	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	6.4	1.3	6.89		06/29/11 17:08	75-65-0	
Carbon tetrachloride	6.1	ug/m3	4.4	2.2	6.89		06/29/11 17:08	56-23-5	
Chlorobenzene	ND	ug/m3	6.5	3.2	6.89		06/29/11 17:08	108-90-7	
Chloroethane	ND	ug/m3	3.7	1.9	6.89		06/29/11 17:08	75-00-3	
Chloroform	19.3	ug/m3	6.8	3.4	6.89		06/29/11 17:08	67-66-3	
Chloromethane	ND	ug/m3	2.9	1.4	6.89		06/29/11 17:08	74-87-3	
Cyclohexane	54.5	ug/m3	4.7	2.3	6.89		06/29/11 17:08	110-82-7	
Dibromochloromethane	ND	ug/m3	11.7	5.9	6.89		06/29/11 17:08	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	11.0	5.5	6.89		06/29/11 17:08	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	8.3	4.1	6.89		06/29/11 17:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	8.3	4.1	6.89		06/29/11 17:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	8.3	4.1	6.89		06/29/11 17:08	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	6.9	3.4	6.89		06/29/11 17:08	75-71-8	
1,1-Dichloroethane	ND	ug/m3	5.6	2.8	6.89		06/29/11 17:08	75-34-3	
1,2-Dichloroethane	ND	ug/m3	2.8	1.4	6.89		06/29/11 17:08	107-06-2	
1,1-Dichloroethene	ND	ug/m3	5.6	2.8	6.89		06/29/11 17:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	5.6	2.8	6.89		06/29/11 17:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	5.6	2.8	6.89		06/29/11 17:08	156-60-5	
1,2-Dichloropropane	ND	ug/m3	6.5	3.2	6.89		06/29/11 17:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	6.3	3.2	6.89		06/29/11 17:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	6.3	3.2	6.89		06/29/11 17:08	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	9.6	4.8	6.89		06/29/11 17:08	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	2.5	0.51	6.89		06/29/11 17:08	123-91-1	
Ethanol	63.7	ug/m3	13.1	5.9	6.89		06/29/11 17:08	64-17-5	
Ethylbenzene	ND	ug/m3	6.1	3.0	6.89		06/29/11 17:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	15.2	7.6	6.89		06/29/11 17:08	87-68-3	
n-Hexane	90.6	ug/m3	5.0	2.5	6.89		06/29/11 17:08	110-54-3	
Methylene Chloride	304	ug/m3	4.9	2.4	6.89		06/29/11 17:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.7	2.9	6.89		06/29/11 17:08	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	5.0	2.5	6.89		06/29/11 17:08	1634-04-4	
Styrene	ND	ug/m3	6.0	3.0	6.89		06/29/11 17:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.8	2.4	6.89		06/29/11 17:08	79-34-5	
Tetrachloroethene	661	ug/m3	4.7	2.3	6.89		06/29/11 17:08	127-18-4	
Toluene	150	ug/m3	5.3	2.7	6.89		06/29/11 17:08	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	6.8	3.4	6.89		06/29/11 17:08	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	7.6	3.8	6.89		06/29/11 17:08	71-55-6	
Trichloroethene	109	ug/m3	3.8	1.9	6.89		06/29/11 17:08	79-01-6	
Trichlorofluoromethane	ND	ug/m3	7.6	3.8	6.89		06/29/11 17:08	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	11.0	5.5	6.89		06/29/11 17:08	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-47		Lab ID: 10160700016	Collected: 06/15/11 13:26	Received: 06/17/11 10:00	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	9.7	ug/m3	6.9	3.4	6.89		06/29/11 17:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	6.9	3.4	6.89		06/29/11 17:08	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	6.5	3.3	6.89		06/29/11 17:08	540-84-1	
Vinyl chloride	ND	ug/m3	1.8	0.90	6.89		06/29/11 17:08	75-01-4	
m&p-Xylene	30.3	ug/m3	12.1	6.1	6.89		06/29/11 17:08	179601-23-1	
o-Xylene	5.0J	ug/m3	6.1	3.0	6.89		06/29/11 17:08	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-48		Lab ID: 10160592009		Collected: 06/14/11 11:41		Received: 06/16/11 09:50		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
Benzene	ND	ug/m3	16.7	8.2	51.4		06/28/11 08:40	71-43-2	
Benzyl chloride	ND	ug/m3	54.0	27.0	51.4		06/28/11 08:40	100-44-7	
Bromodichloromethane	ND	ug/m3	72.0	36.0	51.4		06/28/11 08:40	75-27-4	
Bromoform	ND	ug/m3	108	54.0	51.4		06/28/11 08:40	75-25-2	
Bromomethane	ND	ug/m3	40.6	20.3	51.4		06/28/11 08:40	74-83-9	
1,3-Butadiene	ND	ug/m3	23.1	11.6	51.4		06/28/11 08:40	106-99-0	
2-Butanone (MEK)	ND	ug/m3	30.8	15.4	51.4		06/28/11 08:40	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	47.5	9.5	51.4		06/28/11 08:40	75-65-0	
Carbon tetrachloride	ND	ug/m3	32.9	16.4	51.4		06/28/11 08:40	56-23-5	
Chlorobenzene	ND	ug/m3	48.3	24.2	51.4		06/28/11 08:40	108-90-7	
Chloroethane	ND	ug/m3	27.8	13.9	51.4		06/28/11 08:40	75-00-3	
Chloroform	ND	ug/m3	50.9	25.4	51.4		06/28/11 08:40	67-66-3	
Chloromethane	ND	ug/m3	21.6	10.8	51.4		06/28/11 08:40	74-87-3	
Cyclohexane	ND	ug/m3	35.0	17.5	51.4		06/28/11 08:40	110-82-7	
Dibromochloromethane	ND	ug/m3	87.4	43.7	51.4		06/28/11 08:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	82.2	41.1	51.4		06/28/11 08:40	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	61.7	30.8	51.4		06/28/11 08:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	61.7	30.8	51.4		06/28/11 08:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	61.7	30.8	51.4		06/28/11 08:40	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	51.4	25.7	51.4		06/28/11 08:40	75-71-8	
1,1-Dichloroethane	ND	ug/m3	42.1	21.1	51.4		06/28/11 08:40	75-34-3	
1,2-Dichloroethane	ND	ug/m3	21.1	10.8	51.4		06/28/11 08:40	107-06-2	
1,1-Dichloroethene	ND	ug/m3	41.6	20.8	51.4		06/28/11 08:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	41.6	20.8	51.4		06/28/11 08:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	41.6	20.8	51.4		06/28/11 08:40	156-60-5	
1,2-Dichloropropane	ND	ug/m3	48.3	24.2	51.4		06/28/11 08:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	47.3	23.6	51.4		06/28/11 08:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	47.3	23.6	51.4		06/28/11 08:40	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	72.0	36.0	51.4		06/28/11 08:40	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	18.8	3.8	51.4		06/28/11 08:40	123-91-1	
Ethanol	105	ug/m3	97.7	43.7	51.4		06/28/11 08:40	64-17-5	
Ethylbenzene	ND	ug/m3	45.2	22.6	51.4		06/28/11 08:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	113	56.5	51.4		06/28/11 08:40	87-68-3	
n-Hexane	ND	ug/m3	37.0	18.5	51.4		06/28/11 08:40	110-54-3	
Methylene Chloride	ND	ug/m3	36.5	18.2	51.4		06/28/11 08:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	42.7	21.3	51.4		06/28/11 08:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	37.5	18.8	51.4		06/28/11 08:40	1634-04-4	
Styrene	ND	ug/m3	44.7	22.4	51.4		06/28/11 08:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	35.9	18.0	51.4		06/28/11 08:40	79-34-5	
Tetrachloroethene	3340	ug/m3	35.4	17.5	51.4		06/28/11 08:40	127-18-4	
Toluene	ND	ug/m3	39.6	19.8	51.4		06/28/11 08:40	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	50.9	25.4	51.4		06/28/11 08:40	120-82-1	
1,1,1-Trichloroethane	56.5J	ug/m3	56.5	28.3	51.4		06/28/11 08:40	71-55-6	
Trichloroethene	ND	ug/m3	28.3	14.4	51.4		06/28/11 08:40	79-01-6	
Trichlorofluoromethane	ND	ug/m3	56.5	28.3	51.4		06/28/11 08:40	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	82.2	41.1	51.4		06/28/11 08:40	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-48		Lab ID: 10160592009		Collected: 06/14/11 11:41		Received: 06/16/11 09:50		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,2,4-Trimethylbenzene	ND	ug/m3	51.3	25.7	51.4		06/28/11 08:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	51.3	25.7	51.4		06/28/11 08:40	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	48.8	24.4	51.4		06/28/11 08:40	540-84-1	
Vinyl chloride	ND	ug/m3	13.4	6.7	51.4		06/28/11 08:40	75-01-4	
m&p-Xylene	ND	ug/m3	90.5	45.2	51.4		06/28/11 08:40	179601-23-1	
o-Xylene	ND	ug/m3	45.2	22.6	51.4		06/28/11 08:40	95-47-6	





## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-49 Lab ID: 10160592008 Collected: 06/14/11 11:33 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	48.0	ug/m3	9.6	4.7	29.6		06/28/11 06:22	71-43-2	
Benzyl chloride	ND	ug/m3	31.1	15.5	29.6		06/28/11 06:22	100-44-7	
Bromodichloromethane	ND	ug/m3	41.4	20.7	29.6		06/28/11 06:22	75-27-4	
Bromoform	ND	ug/m3	62.2	31.1	29.6		06/28/11 06:22	75-25-2	
Bromomethane	ND	ug/m3	23.4	11.7	29.6		06/28/11 06:22	74-83-9	
1,3-Butadiene	ND	ug/m3	13.3	6.7	29.6		06/28/11 06:22	106-99-0	
2-Butanone (MEK)	ND	ug/m3	17.8	8.9	29.6		06/28/11 06:22	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	27.4	5.4	29.6		06/28/11 06:22	75-65-0	
Carbon tetrachloride	2430	ug/m3	18.9	9.5	29.6		06/28/11 06:22	56-23-5	
Chlorobenzene	ND	ug/m3	27.8	13.9	29.6		06/28/11 06:22	108-90-7	
Chloroethane	ND	ug/m3	16.0	8.0	29.6		06/28/11 06:22	75-00-3	
Chloroform	793	ug/m3	29.3	14.7	29.6		06/28/11 06:22	67-66-3	
Chloromethane	ND	ug/m3	12.4	6.2	29.6		06/28/11 06:22	74-87-3	
Cyclohexane	ND	ug/m3	20.1	10.1	29.6		06/28/11 06:22	110-82-7	
Dibromochloromethane	ND	ug/m3	50.3	25.2	29.6		06/28/11 06:22	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	47.4	23.7	29.6		06/28/11 06:22	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 06:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 06:22	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 06:22	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	29.6	14.8	29.6		06/28/11 06:22	75-71-8	
1,1-Dichloroethane	ND	ug/m3	24.3	12.1	29.6		06/28/11 06:22	75-34-3	
1,2-Dichloroethane	ND	ug/m3	12.1	6.2	29.6		06/28/11 06:22	107-06-2	
1,1-Dichloroethene	189	ug/m3	24.0	12.0	29.6		06/28/11 06:22	75-35-4	
cis-1,2-Dichloroethene	437000	ug/m3	6140	3070	7577.6		06/28/11 13:25	156-59-2	A3
trans-1,2-Dichloroethene	1420	ug/m3	24.0	12.0	29.6		06/28/11 06:22	156-60-5	
1,2-Dichloropropane	ND	ug/m3	27.8	13.9	29.6		06/28/11 06:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	27.2	13.6	29.6		06/28/11 06:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	27.2	13.6	29.6		06/28/11 06:22	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	41.4	20.7	29.6		06/28/11 06:22	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.8	2.2	29.6		06/28/11 06:22	123-91-1	
Ethanol	94.3	ug/m3	56.2	25.2	29.6		06/28/11 06:22	64-17-5	
Ethylbenzene	ND	ug/m3	26.0	13.0	29.6		06/28/11 06:22	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	65.1	32.6	29.6		06/28/11 06:22	87-68-3	
n-Hexane	ND	ug/m3	21.3	10.7	29.6		06/28/11 06:22	110-54-3	
Methylene Chloride	ND	ug/m3	21.0	10.5	29.6		06/28/11 06:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	24.6	12.3	29.6		06/28/11 06:22	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	21.6	10.8	29.6		06/28/11 06:22	1634-04-4	
Styrene	ND	ug/m3	25.8	12.9	29.6		06/28/11 06:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	20.7	10.4	29.6		06/28/11 06:22	79-34-5	
Tetrachloroethene	1310000	ug/m3	5220	2580	7577.6		06/28/11 13:25	127-18-4	A3, C0, E, IS
Toluene	11.7J	ug/m3	22.8	11.4	29.6		06/28/11 06:22	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	29.3	14.7	29.6		06/28/11 06:22	120-82-1	
1,1,1-Trichloroethane	344	ug/m3	32.6	16.3	29.6		06/28/11 06:22	71-55-6	
Trichloroethene	230000	ug/m3	4170	2120	7577.6		06/28/11 13:25	79-01-6	A3
Trichlorofluoromethane	ND	ug/m3	32.6	16.3	29.6		06/28/11 06:22	75-69-4	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-49		Lab ID: 10160592008	Collected: 06/14/11 11:33	Received: 06/16/11 09:50	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,1,2-Trichlorotrifluoroethane	1520	ug/m3	47.4	23.7	29.6		06/28/11 06:22	76-13-1	
1,2,4-Trimethylbenzene	17.1J	ug/m3	29.6	14.8	29.6		06/28/11 06:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	29.6	14.8	29.6		06/28/11 06:22	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	28.1	14.1	29.6		06/28/11 06:22	540-84-1	
Vinyl chloride	1450	ug/m3	7.7	3.8	29.6		06/28/11 06:22	75-01-4	
m&p-Xylene	59.6	ug/m3	52.1	26.0	29.6		06/28/11 06:22	179601-23-1	
o-Xylene	ND	ug/m3	26.0	13.0	29.6		06/28/11 06:22	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-55 Lab ID: 10160440001 Collected: 06/13/11 11:15 Received: 06/15/11 09:40 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	51.0	ug/m3	0.46	0.23	1.43		06/24/11 14:37	71-43-2	
Benzyl chloride	ND	ug/m3	1.5	0.75	1.43		06/24/11 14:37	100-44-7	
Bromodichloromethane	ND	ug/m3	2.0	1.0	1.43		06/24/11 14:37	75-27-4	
Bromoform	ND	ug/m3	3.0	1.5	1.43		06/24/11 14:37	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.56	1.43		06/24/11 14:37	74-83-9	
1,3-Butadiene	ND	ug/m3	0.64	0.32	1.43		06/24/11 14:37	106-99-0	
2-Butanone (MEK)	20.4	ug/m3	0.86	0.43	1.43		06/24/11 14:37	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.3	0.26	1.43		06/24/11 14:37	75-65-0	
Carbon tetrachloride	ND	ug/m3	0.92	0.46	1.43		06/24/11 14:37	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	0.67	1.43		06/24/11 14:37	108-90-7	
Chloroethane	ND	ug/m3	0.77	0.39	1.43		06/24/11 14:37	75-00-3	
Chloroform	ND	ug/m3	1.4	0.71	1.43		06/24/11 14:37	67-66-3	
Chloromethane	ND	ug/m3	0.60	0.30	1.43		06/24/11 14:37	74-87-3	
Cyclohexane	53.9	ug/m3	9.7	4.9	14.3		06/25/11 22:55	110-82-7	
Dibromochloromethane	ND	ug/m3	2.4	1.2	1.43		06/24/11 14:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.3	1.1	1.43		06/24/11 14:37	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/24/11 14:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/24/11 14:37	541-73-1	
1,4-Dichlorobenzene	3.5	ug/m3	1.7	0.86	1.43		06/24/11 14:37	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.4	0.72	1.43		06/24/11 14:37	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.59	1.43		06/24/11 14:37	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	0.30	1.43		06/24/11 14:37	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 14:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 14:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 14:37	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	0.67	1.43		06/24/11 14:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/24/11 14:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/24/11 14:37	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	1.0	1.43		06/24/11 14:37	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.52	0.11	1.43		06/24/11 14:37	123-91-1	
Ethanol	476	ug/m3	27.2	12.2	14.3		06/25/11 22:55	64-17-5	
Ethylbenzene	89.3	ug/m3	1.3	0.63	1.43		06/24/11 14:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.6	1.43		06/24/11 14:37	87-68-3	
n-Hexane	16.6	ug/m3	10.3	5.1	14.3		06/25/11 22:55	110-54-3	
Methylene Chloride	8.5	ug/m3	1.0	0.51	1.43		06/24/11 14:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	24.9	ug/m3	1.2	0.59	1.43		06/24/11 14:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.0	0.52	1.43		06/24/11 14:37	1634-04-4	
Styrene	3.5	ug/m3	1.2	0.62	1.43		06/24/11 14:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.50	1.43		06/24/11 14:37	79-34-5	
Tetrachloroethene	584	ug/m3	9.9	4.9	14.3		06/25/11 22:55	127-18-4	
Toluene	453	ug/m3	11.0	5.5	14.3		06/25/11 22:55	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.4	0.71	1.43		06/24/11 14:37	120-82-1	
1,1,1-Trichloroethane	4.0	ug/m3	1.6	0.79	1.43		06/24/11 14:37	71-55-6	
Trichloroethene	105	ug/m3	0.79	0.40	1.43		06/24/11 14:37	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.6	0.79	1.43		06/24/11 14:37	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.3	1.1	1.43		06/24/11 14:37	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-55		Lab ID: 10160440001	Collected: 06/13/11 11:15	Received: 06/15/11 09:40	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	57.3	ug/m3	1.4	0.72	1.43		06/24/11 14:37	95-63-6	
1,3,5-Trimethylbenzene	16.2	ug/m3	1.4	0.72	1.43		06/24/11 14:37	108-67-8	
2,2,4-Trimethylpentane	45.8	ug/m3	13.6	6.8	14.3		06/25/11 22:55	540-84-1	
Vinyl chloride	ND	ug/m3	0.37	0.19	1.43		06/24/11 14:37	75-01-4	
m&p-Xylene	246	ug/m3	2.5	1.3	1.43		06/24/11 14:37	179601-23-1	
o-Xylene	92.7	ug/m3	1.3	0.63	1.43		06/24/11 14:37	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-56 Lab ID: 10160700017 Collected: 06/15/11 13:34 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	15.7	7.7	48.4		06/28/11 21:23	71-43-2	
Benzyl chloride	ND	ug/m3	50.8	25.4	48.4		06/28/11 21:23	100-44-7	
Bromodichloromethane	ND	ug/m3	67.8	33.9	48.4		06/28/11 21:23	75-27-4	
Bromoform	ND	ug/m3	102	50.8	48.4		06/28/11 21:23	75-25-2	
Bromomethane	ND	ug/m3	38.2	19.1	48.4		06/28/11 21:23	74-83-9	
1,3-Butadiene	ND	ug/m3	21.8	10.9	48.4		06/28/11 21:23	106-99-0	
2-Butanone (MEK)	65.5	ug/m3	29.0	14.5	48.4		06/28/11 21:23	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	44.7	8.9	48.4		06/28/11 21:23	75-65-0	
Carbon tetrachloride	ND	ug/m3	31.0	15.5	48.4		06/28/11 21:23	56-23-5	
Chlorobenzene	ND	ug/m3	45.5	22.7	48.4		06/28/11 21:23	108-90-7	
Chloroethane	ND	ug/m3	26.1	13.1	48.4		06/28/11 21:23	75-00-3	
Chloroform	ND	ug/m3	47.9	24.0	48.4		06/28/11 21:23	67-66-3	
Chloromethane	ND	ug/m3	20.3	10.2	48.4		06/28/11 21:23	74-87-3	
Cyclohexane	ND	ug/m3	32.9	16.5	48.4		06/28/11 21:23	110-82-7	
Dibromochloromethane	ND	ug/m3	82.3	41.1	48.4		06/28/11 21:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	77.4	38.7	48.4		06/28/11 21:23	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	58.1	29.0	48.4		06/28/11 21:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	58.1	29.0	48.4		06/28/11 21:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	58.1	29.0	48.4		06/28/11 21:23	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	48.4	24.2	48.4		06/28/11 21:23	75-71-8	
1,1-Dichloroethane	ND	ug/m3	39.7	19.8	48.4		06/28/11 21:23	75-34-3	
1,2-Dichloroethane	ND	ug/m3	19.8	10.2	48.4		06/28/11 21:23	107-06-2	
1,1-Dichloroethene	ND	ug/m3	39.2	19.6	48.4		06/28/11 21:23	75-35-4	
cis-1,2-Dichloroethene	1980	ug/m3	39.2	19.6	48.4		06/28/11 21:23	156-59-2	
trans-1,2-Dichloroethene	20.9J	ug/m3	39.2	19.6	48.4		06/28/11 21:23	156-60-5	
1,2-Dichloropropane	ND	ug/m3	45.5	22.7	48.4		06/28/11 21:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	44.5	22.3	48.4		06/28/11 21:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	44.5	22.3	48.4		06/28/11 21:23	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	67.8	33.9	48.4		06/28/11 21:23	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	17.7	3.6	48.4		06/28/11 21:23	123-91-1	
Ethanol	130	ug/m3	92.0	41.1	48.4		06/28/11 21:23	64-17-5	
Ethylbenzene	ND	ug/m3	42.6	21.3	48.4		06/28/11 21:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	106	53.2	48.4		06/28/11 21:23	87-68-3	
n-Hexane	ND	ug/m3	34.8	17.4	48.4		06/28/11 21:23	110-54-3	
Methylene Chloride	66.0	ug/m3	34.4	17.2	48.4		06/28/11 21:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	40.2	20.1	48.4		06/28/11 21:23	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	35.3	17.7	48.4		06/28/11 21:23	1634-04-4	
Styrene	ND	ug/m3	42.1	21.1	48.4		06/28/11 21:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	33.8	16.9	48.4		06/28/11 21:23	79-34-5	
Tetrachloroethene	88900	ug/m3	1070	527	1548.8		06/30/11 00:25	127-18-4	A3
Toluene	ND	ug/m3	37.3	18.6	48.4		06/28/11 21:23	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	47.9	24.0	48.4		06/28/11 21:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	53.2	26.6	48.4		06/28/11 21:23	71-55-6	
Trichloroethene	3090	ug/m3	26.6	13.6	48.4		06/28/11 21:23	79-01-6	
Trichlorofluoromethane	ND	ug/m3	53.2	26.6	48.4		06/28/11 21:23	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	77.4	38.7	48.4		06/28/11 21:23	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

<b>Sample: SG-56</b>		<b>Lab ID: 10160700017</b>		Collected: 06/15/11 13:34		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>									
Analytical Method: TO-15									
1,2,4-Trimethylbenzene	ND	ug/m3	48.4	24.2	48.4		06/28/11 21:23	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	48.4	24.2	48.4		06/28/11 21:23	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	46.0	23.0	48.4		06/28/11 21:23	540-84-1	
Vinyl chloride	ND	ug/m3	12.6	6.3	48.4		06/28/11 21:23	75-01-4	
m&p-Xylene	ND	ug/m3	85.2	42.6	48.4		06/28/11 21:23	179601-23-1	
o-Xylene	ND	ug/m3	42.6	21.3	48.4		06/28/11 21:23	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-57		Lab ID: 10160700009		Collected: 06/15/11 10:22		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	57.0	28.1	175.36		06/28/11 09:41	71-43-2	
Benzyl chloride	ND	ug/m3	184	92.1	175.36		06/28/11 09:41	100-44-7	
Bromodichloromethane	ND	ug/m3	246	123	175.36		06/28/11 09:41	75-27-4	
Bromoform	ND	ug/m3	368	184	175.36		06/28/11 09:41	75-25-2	
Bromomethane	ND	ug/m3	139	69.3	175.36		06/28/11 09:41	74-83-9	
1,3-Butadiene	ND	ug/m3	78.9	39.5	175.36		06/28/11 09:41	106-99-0	
2-Butanone (MEK)	ND	ug/m3	105	52.6	175.36		06/28/11 09:41	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	162	32.3	175.36		06/28/11 09:41	75-65-0	
Carbon tetrachloride	ND	ug/m3	112	56.1	175.36		06/28/11 09:41	56-23-5	
Chlorobenzene	ND	ug/m3	165	82.4	175.36		06/28/11 09:41	108-90-7	
Chloroethane	ND	ug/m3	94.7	47.3	175.36		06/28/11 09:41	75-00-3	
Chloroform	ND	ug/m3	174	86.8	175.36		06/28/11 09:41	67-66-3	
Chloromethane	ND	ug/m3	73.7	36.8	175.36		06/28/11 09:41	74-87-3	
Cyclohexane	ND	ug/m3	119	59.6	175.36		06/28/11 09:41	110-82-7	
Dibromochloromethane	ND	ug/m3	298	149	175.36		06/28/11 09:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	281	140	175.36		06/28/11 09:41	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	210	105	175.36		06/28/11 09:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	210	105	175.36		06/28/11 09:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	210	105	175.36		06/28/11 09:41	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	175	87.7	175.36		06/28/11 09:41	75-71-8	
1,1-Dichloroethane	ND	ug/m3	144	71.9	175.36		06/28/11 09:41	75-34-3	
1,2-Dichloroethane	ND	ug/m3	71.9	36.8	175.36		06/28/11 09:41	107-06-2	
1,1-Dichloroethene	ND	ug/m3	142	71.0	175.36		06/28/11 09:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	142	71.0	175.36		06/28/11 09:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	142	71.0	175.36		06/28/11 09:41	156-60-5	
1,2-Dichloropropane	ND	ug/m3	165	82.4	175.36		06/28/11 09:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	161	80.7	175.36		06/28/11 09:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	161	80.7	175.36		06/28/11 09:41	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	246	123	175.36		06/28/11 09:41	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	64.2	13.0	175.36		06/28/11 09:41	123-91-1	
Ethanol	ND	ug/m3	333	149	175.36		06/28/11 09:41	64-17-5	
Ethylbenzene	ND	ug/m3	154	77.2	175.36		06/28/11 09:41	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	386	193	175.36		06/28/11 09:41	87-68-3	
n-Hexane	ND	ug/m3	126	63.1	175.36		06/28/11 09:41	110-54-3	
Methylene Chloride	ND	ug/m3	125	62.3	175.36		06/28/11 09:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	146	72.8	175.36		06/28/11 09:41	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	128	64.0	175.36		06/28/11 09:41	1634-04-4	
Styrene	ND	ug/m3	153	76.3	175.36		06/28/11 09:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	122	61.4	175.36		06/28/11 09:41	79-34-5	
Tetrachloroethene	10800	ug/m3	121	59.6	175.36		06/28/11 09:41	127-18-4	
Toluene	78.1J	ug/m3	135	67.5	175.36		06/28/11 09:41	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	174	86.8	175.36		06/28/11 09:41	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	193	96.4	175.36		06/28/11 09:41	71-55-6	
Trichloroethene	ND	ug/m3	96.4	49.1	175.36		06/28/11 09:41	79-01-6	
Trichlorofluoromethane	5270	ug/m3	193	96.4	175.36		06/28/11 09:41	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	281	140	175.36		06/28/11 09:41	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-57		Lab ID: 10160700009		Collected: 06/15/11 10:22		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	175	87.7	175.36		06/28/11 09:41	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	175	87.7	175.36		06/28/11 09:41	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	167	83.3	175.36		06/28/11 09:41	540-84-1	
Vinyl chloride	ND	ug/m3	45.6	22.8	175.36		06/28/11 09:41	75-01-4	
m&p-Xylene	ND	ug/m3	309	154	175.36		06/28/11 09:41	179601-23-1	
o-Xylene	ND	ug/m3	154	77.2	175.36		06/28/11 09:41	95-47-6	





## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-58 Lab ID: 10160700005 Collected: 06/15/11 08:53 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	1150	565	3532.8		06/28/11 00:00	71-43-2	
Benzyl chloride	ND	ug/m3	3710	1850	3532.8		06/28/11 00:00	100-44-7	
Bromodichloromethane	ND	ug/m3	4950	2470	3532.8		06/28/11 00:00	75-27-4	
Bromoform	ND	ug/m3	7420	3710	3532.8		06/28/11 00:00	75-25-2	
Bromomethane	ND	ug/m3	2790	1400	3532.8		06/28/11 00:00	74-83-9	
1,3-Butadiene	ND	ug/m3	1590	795	3532.8		06/28/11 00:00	106-99-0	
2-Butanone (MEK)	ND	ug/m3	2120	1060	3532.8		06/28/11 00:00	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	3260	650	3532.8		06/28/11 00:00	75-65-0	
Carbon tetrachloride	ND	ug/m3	2260	1130	3532.8		06/28/11 00:00	56-23-5	
Chlorobenzene	ND	ug/m3	3320	1660	3532.8		06/28/11 00:00	108-90-7	
Chloroethane	ND	ug/m3	1910	954	3532.8		06/28/11 00:00	75-00-3	
Chloroform	ND	ug/m3	3500	1750	3532.8		06/28/11 00:00	67-66-3	
Chloromethane	ND	ug/m3	1480	742	3532.8		06/28/11 00:00	74-87-3	
Cyclohexane	ND	ug/m3	2400	1200	3532.8		06/28/11 00:00	110-82-7	
Dibromochloromethane	ND	ug/m3	6010	3000	3532.8		06/28/11 00:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	5650	2830	3532.8		06/28/11 00:00	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	4240	2120	3532.8		06/28/11 00:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	4240	2120	3532.8		06/28/11 00:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4240	2120	3532.8		06/28/11 00:00	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	3530	1770	3532.8		06/28/11 00:00	75-71-8	
1,1-Dichloroethane	ND	ug/m3	2900	1450	3532.8		06/28/11 00:00	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1450	742	3532.8		06/28/11 00:00	107-06-2	
1,1-Dichloroethene	ND	ug/m3	2860	1430	3532.8		06/28/11 00:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	2860	1430	3532.8		06/28/11 00:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	2860	1430	3532.8		06/28/11 00:00	156-60-5	
1,2-Dichloropropane	ND	ug/m3	3320	1660	3532.8		06/28/11 00:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	3250	1630	3532.8		06/28/11 00:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3250	1630	3532.8		06/28/11 00:00	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	4950	2470	3532.8		06/28/11 00:00	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	1290	261	3532.8		06/28/11 00:00	123-91-1	
Ethanol	ND	ug/m3	6710	3000	3532.8		06/28/11 00:00	64-17-5	
Ethylbenzene	ND	ug/m3	3110	1550	3532.8		06/28/11 00:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	7770	3890	3532.8		06/28/11 00:00	87-68-3	
n-Hexane	ND	ug/m3	2540	1270	3532.8		06/28/11 00:00	110-54-3	
Methylene Chloride	ND	ug/m3	2510	1250	3532.8		06/28/11 00:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	2930	1470	3532.8		06/28/11 00:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2580	1290	3532.8		06/28/11 00:00	1634-04-4	
Styrene	ND	ug/m3	3070	1540	3532.8		06/28/11 00:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2470	1240	3532.8		06/28/11 00:00	79-34-5	
Tetrachloroethene	176000	ug/m3	2430	1200	3532.8		06/28/11 00:00	127-18-4	
Toluene	ND	ug/m3	2720	1360	3532.8		06/28/11 00:00	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	3500	1750	3532.8		06/28/11 00:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	3890	1940	3532.8		06/28/11 00:00	71-55-6	
Trichloroethene	ND	ug/m3	1940	989	3532.8		06/28/11 00:00	79-01-6	
Trichlorofluoromethane	ND	ug/m3	3890	1940	3532.8		06/28/11 00:00	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5650	2830	3532.8		06/28/11 00:00	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-58		Lab ID: 10160700005	Collected: 06/15/11 08:53	Received: 06/17/11 10:00	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	3530	1770	3532.8		06/28/11 00:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	3530	1770	3532.8		06/28/11 00:00	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	3360	1680	3532.8		06/28/11 00:00	540-84-1	
Vinyl chloride	ND	ug/m3	919	459	3532.8		06/28/11 00:00	75-01-4	
m&p-Xylene	ND	ug/m3	6220	3110	3532.8		06/28/11 00:00	179601-23-1	
o-Xylene	ND	ug/m3	3110	1550	3532.8		06/28/11 00:00	95-47-6	



SG-58

## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: DUP-061511		Lab ID: 10160700008		Collected: 06/15/11 08:53		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15							
Benzene	ND	ug/m3	1150	565	3532.8		06/27/11 23:00	71-43-2	
Benzyl chloride	ND	ug/m3	3710	1850	3532.8		06/27/11 23:00	100-44-7	
Bromodichloromethane	ND	ug/m3	4950	2470	3532.8		06/27/11 23:00	75-27-4	
Bromoform	6410J	ug/m3	7420	3710	3532.8		06/27/11 23:00	75-25-2	
Bromomethane	ND	ug/m3	2790	1400	3532.8		06/27/11 23:00	74-83-9	
1,3-Butadiene	ND	ug/m3	1590	795	3532.8		06/27/11 23:00	106-99-0	
2-Butanone (MEK)	ND	ug/m3	2120	1060	3532.8		06/27/11 23:00	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	3260	650	3532.8		06/27/11 23:00	75-65-0	
Carbon tetrachloride	ND	ug/m3	2260	1130	3532.8		06/27/11 23:00	56-23-5	
Chlorobenzene	ND	ug/m3	3320	1660	3532.8		06/27/11 23:00	108-90-7	
Chloroethane	ND	ug/m3	1910	954	3532.8		06/27/11 23:00	75-00-3	
Chloroform	ND	ug/m3	3500	1750	3532.8		06/27/11 23:00	67-66-3	
Chloromethane	ND	ug/m3	1480	742	3532.8		06/27/11 23:00	74-87-3	
Cyclohexane	ND	ug/m3	2400	1200	3532.8		06/27/11 23:00	110-82-7	
Dibromochloromethane	ND	ug/m3	6010	3000	3532.8		06/27/11 23:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	5650	2830	3532.8		06/27/11 23:00	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	4240	2120	3532.8		06/27/11 23:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	4240	2120	3532.8		06/27/11 23:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4240	2120	3532.8		06/27/11 23:00	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	3530	1770	3532.8		06/27/11 23:00	75-71-8	
1,1-Dichloroethane	ND	ug/m3	2900	1450	3532.8		06/27/11 23:00	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1450	742	3532.8		06/27/11 23:00	107-06-2	
1,1-Dichloroethene	ND	ug/m3	2860	1430	3532.8		06/27/11 23:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	2860	1430	3532.8		06/27/11 23:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	2860	1430	3532.8		06/27/11 23:00	156-60-5	
1,2-Dichloropropane	ND	ug/m3	3320	1660	3532.8		06/27/11 23:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	3250	1630	3532.8		06/27/11 23:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3250	1630	3532.8		06/27/11 23:00	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	4950	2470	3532.8		06/27/11 23:00	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	1290	261	3532.8		06/27/11 23:00	123-91-1	
Ethanol	ND	ug/m3	6710	3000	3532.8		06/27/11 23:00	64-17-5	
Ethylbenzene	ND	ug/m3	3110	1550	3532.8		06/27/11 23:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	7770	3890	3532.8		06/27/11 23:00	87-68-3	
n-Hexane	ND	ug/m3	2540	1270	3532.8		06/27/11 23:00	110-54-3	
Methylene Chloride	ND	ug/m3	2510	1250	3532.8		06/27/11 23:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	2930	1470	3532.8		06/27/11 23:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2580	1290	3532.8		06/27/11 23:00	1634-04-4	
Styrene	ND	ug/m3	3070	1540	3532.8		06/27/11 23:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2470	1240	3532.8		06/27/11 23:00	79-34-5	
Tetrachloroethene	154000	ug/m3	2430	1200	3532.8		06/27/11 23:00	127-18-4	
Toluene	ND	ug/m3	2720	1360	3532.8		06/27/11 23:00	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	3500	1750	3532.8		06/27/11 23:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	3890	1940	3532.8		06/27/11 23:00	71-55-6	
Trichloroethene	ND	ug/m3	1940	989	3532.8		06/27/11 23:00	79-01-6	
Trichlorofluoromethane	ND	ug/m3	3890	1940	3532.8		06/27/11 23:00	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5650	2830	3532.8		06/27/11 23:00	76-13-1	

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SG-58

## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: DUP-061511		Lab ID: 10160700008	Collected: 06/15/11 08:53		Received: 06/17/11 10:00		Matrix: Air		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	3530	1770	3532.8		06/27/11 23:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	3530	1770	3532.8		06/27/11 23:00	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	3360	1680	3532.8		06/27/11 23:00	540-84-1	
Vinyl chloride	ND	ug/m3	919	459	3532.8		06/27/11 23:00	75-01-4	
m&p-Xylene	ND	ug/m3	6220	3110	3532.8		06/27/11 23:00	179601-23-1	
o-Xylene	ND	ug/m3	3110	1550	3532.8		06/27/11 23:00	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-59 Lab ID: 10160700011 Collected: 06/15/11 10:37 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	9.3	4.6	28.6		06/29/11 15:12	71-43-2	
Benzyl chloride	ND	ug/m3	30.0	15.0	28.6		06/29/11 15:12	100-44-7	
Bromodichloromethane	ND	ug/m3	40.0	20.0	28.6		06/29/11 15:12	75-27-4	
Bromoform	ND	ug/m3	60.1	30.0	28.6		06/29/11 15:12	75-25-2	
Bromomethane	ND	ug/m3	22.6	11.3	28.6		06/29/11 15:12	74-83-9	
1,3-Butadiene	ND	ug/m3	12.9	6.4	28.6		06/29/11 15:12	106-99-0	
2-Butanone (MEK)	ND	ug/m3	17.2	8.6	28.6		06/29/11 15:12	78-93-3	
tert-Butyl Alcohol	35.5	ug/m3	26.4	5.3	28.6		06/29/11 15:12	75-65-0	
Carbon tetrachloride	ND	ug/m3	18.3	9.2	28.6		06/29/11 15:12	56-23-5	
Chlorobenzene	ND	ug/m3	26.9	13.4	28.6		06/29/11 15:12	108-90-7	
Chloroethane	ND	ug/m3	15.4	7.7	28.6		06/29/11 15:12	75-00-3	
Chloroform	ND	ug/m3	28.3	14.2	28.6		06/29/11 15:12	67-66-3	
Chloromethane	ND	ug/m3	12.0	6.0	28.6		06/29/11 15:12	74-87-3	
Cyclohexane	ND	ug/m3	19.4	9.7	28.6		06/29/11 15:12	110-82-7	
Dibromochloromethane	ND	ug/m3	48.6	24.3	28.6		06/29/11 15:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	45.8	22.9	28.6		06/29/11 15:12	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	34.3	17.2	28.6		06/29/11 15:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	34.3	17.2	28.6		06/29/11 15:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	34.3	17.2	28.6		06/29/11 15:12	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	28.6	14.3	28.6		06/29/11 15:12	75-71-8	
1,1-Dichloroethane	ND	ug/m3	23.5	11.7	28.6		06/29/11 15:12	75-34-3	
1,2-Dichloroethane	ND	ug/m3	11.7	6.0	28.6		06/29/11 15:12	107-06-2	
1,1-Dichloroethene	ND	ug/m3	23.2	11.6	28.6		06/29/11 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	23.2	11.6	28.6		06/29/11 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	23.2	11.6	28.6		06/29/11 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/m3	26.9	13.4	28.6		06/29/11 15:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	26.3	13.2	28.6		06/29/11 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	26.3	13.2	28.6		06/29/11 15:12	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	40.0	20.0	28.6		06/29/11 15:12	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.5	2.1	28.6		06/29/11 15:12	123-91-1	
Ethanol	31.3J	ug/m3	54.3	24.3	28.6		06/29/11 15:12	64-17-5	
Ethylbenzene	ND	ug/m3	25.2	12.6	28.6		06/29/11 15:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	62.9	31.5	28.6		06/29/11 15:12	87-68-3	
n-Hexane	ND	ug/m3	20.6	10.3	28.6		06/29/11 15:12	110-54-3	
Methylene Chloride	45.7	ug/m3	20.3	10.2	28.6		06/29/11 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	23.7	11.9	28.6		06/29/11 15:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	20.9	10.4	28.6		06/29/11 15:12	1634-04-4	
Styrene	ND	ug/m3	24.9	12.4	28.6		06/29/11 15:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	20.0	10.0	28.6		06/29/11 15:12	79-34-5	
Tetrachloroethene	2580	ug/m3	19.7	9.7	28.6		06/29/11 15:12	127-18-4	
Toluene	ND	ug/m3	22.0	11.0	28.6		06/29/11 15:12	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	28.3	14.2	28.6		06/29/11 15:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	31.5	15.7	28.6		06/29/11 15:12	71-55-6	
Trichloroethene	ND	ug/m3	15.7	8.0	28.6		06/29/11 15:12	79-01-6	
Trichlorofluoromethane	ND	ug/m3	31.5	15.7	28.6		06/29/11 15:12	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	45.8	22.9	28.6		06/29/11 15:12	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-59		Lab ID: 10160700011		Collected: 06/15/11 10:37		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,2,4-Trimethylbenzene	ND	ug/m3	28.6	14.3	28.6		06/29/11 15:12	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	28.6	14.3	28.6		06/29/11 15:12	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	27.2	13.6	28.6		06/29/11 15:12	540-84-1	
Vinyl chloride	ND	ug/m3	7.4	3.7	28.6		06/29/11 15:12	75-01-4	
m&p-Xylene	40.4J	ug/m3	50.3	25.2	28.6		06/29/11 15:12	179601-23-1	
o-Xylene	ND	ug/m3	25.2	12.6	28.6		06/29/11 15:12	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-60		Lab ID: 10160592007		Collected: 06/14/11 11:24		Received: 06/16/11 09:50		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	574	283	1766.4		06/28/11 18:01	71-43-2	
Benzyl chloride	ND	ug/m3	1850	927	1766.4		06/28/11 18:01	100-44-7	
Bromodichloromethane	ND	ug/m3	2470	1240	1766.4		06/28/11 18:01	75-27-4	
Bromoform	ND	ug/m3	3710	1850	1766.4		06/28/11 18:01	75-25-2	
Bromomethane	ND	ug/m3	1400	698	1766.4		06/28/11 18:01	74-83-9	
1,3-Butadiene	ND	ug/m3	795	397	1766.4		06/28/11 18:01	106-99-0	
2-Butanone (MEK)	ND	ug/m3	1060	530	1766.4		06/28/11 18:01	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1630	325	1766.4		06/28/11 18:01	75-65-0	
Carbon tetrachloride	793J	ug/m3	1130	565	1766.4		06/28/11 18:01	56-23-5	
Chlorobenzene	ND	ug/m3	1660	830	1766.4		06/28/11 18:01	108-90-7	
Chloroethane	ND	ug/m3	954	477	1766.4		06/28/11 18:01	75-00-3	
Chloroform	14200	ug/m3	1750	874	1766.4		06/28/11 18:01	67-66-3	
Chloromethane	ND	ug/m3	742	371	1766.4		06/28/11 18:01	74-87-3	
Cyclohexane	ND	ug/m3	1200	601	1766.4		06/28/11 18:01	110-82-7	
Dibromochloromethane	ND	ug/m3	3000	1500	1766.4		06/28/11 18:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2830	1410	1766.4		06/28/11 18:01	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2120	1060	1766.4		06/28/11 18:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2120	1060	1766.4		06/28/11 18:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2120	1060	1766.4		06/28/11 18:01	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1770	883	1766.4		06/28/11 18:01	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1450	724	1766.4		06/28/11 18:01	75-34-3	
1,2-Dichloroethane	ND	ug/m3	724	371	1766.4		06/28/11 18:01	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1430	715	1766.4		06/28/11 18:01	75-35-4	
cis-1,2-Dichloroethene	6560	ug/m3	1430	715	1766.4		06/28/11 18:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1430	715	1766.4		06/28/11 18:01	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1660	830	1766.4		06/28/11 18:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1630	813	1766.4		06/28/11 18:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1630	813	1766.4		06/28/11 18:01	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2470	1240	1766.4		06/28/11 18:01	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	647	131	1766.4		06/28/11 18:01	123-91-1	
Ethanol	1850J	ug/m3	3360	1500	1766.4		06/28/11 18:01	64-17-5	
Ethylbenzene	ND	ug/m3	1550	777	1766.4		06/28/11 18:01	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3890	1940	1766.4		06/28/11 18:01	87-68-3	
n-Hexane	3900	ug/m3	1270	636	1766.4		06/28/11 18:01	110-54-3	
Methylene Chloride	3040	ug/m3	1250	627	1766.4		06/28/11 18:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1470	733	1766.4		06/28/11 18:01	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1290	645	1766.4		06/28/11 18:01	1634-04-4	
Styrene	ND	ug/m3	1540	768	1766.4		06/28/11 18:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1230	618	1766.4		06/28/11 18:01	79-34-5	
Tetrachloroethene	48200000	ug/m3	156000	76900	226099		06/29/11 08:45	127-18-4	
Toluene	ND	ug/m3	1360	680	1766.4		06/28/11 18:01	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1750	874	1766.4		06/28/11 18:01	120-82-1	
1,1,1-Trichloroethane	15000	ug/m3	1940	972	1766.4		06/28/11 18:01	71-55-6	
Trichloroethene	220000	ug/m3	972	495	1766.4		06/28/11 18:01	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1940	972	1766.4		06/28/11 18:01	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2830	1410	1766.4		06/28/11 18:01	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-60		Lab ID: 10160592007		Collected: 06/14/11 11:24		Received: 06/16/11 09:50		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	1760	883	1766.4		06/28/11 18:01	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1760	883	1766.4		06/28/11 18:01	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	1680	839	1766.4		06/28/11 18:01	540-84-1	
Vinyl chloride	ND	ug/m3	459	230	1766.4		06/28/11 18:01	75-01-4	
m&p-Xylene	ND	ug/m3	3110	1550	1766.4		06/28/11 18:01	179601-23-1	
o-Xylene	ND	ug/m3	1550	777	1766.4		06/28/11 18:01	95-47-6	

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SG-60

## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: DUP-061411 Lab ID: 10160592010 Collected: 06/14/11 11:24 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	9.0	4.4	27.6		06/28/11 01:28	71-43-2	
Benzyl chloride	ND	ug/m3	29.0	14.5	27.6		06/28/11 01:28	100-44-7	
Bromodichloromethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 01:28	75-27-4	
Bromoform	ND	ug/m3	58.0	29.0	27.6		06/28/11 01:28	75-25-2	
Bromomethane	ND	ug/m3	21.8	10.9	27.6		06/28/11 01:28	74-83-9	
1,3-Butadiene	ND	ug/m3	12.4	6.2	27.6		06/28/11 01:28	106-99-0	
2-Butanone (MEK)	ND	ug/m3	16.6	8.3	27.6		06/28/11 01:28	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	25.5	5.1	27.6		06/28/11 01:28	75-65-0	
Carbon tetrachloride	ND	ug/m3	17.7	8.8	27.6		06/28/11 01:28	56-23-5	
Chlorobenzene	ND	ug/m3	25.9	13.0	27.6		06/28/11 01:28	108-90-7	
Chloroethane	ND	ug/m3	14.9	7.5	27.6		06/28/11 01:28	75-00-3	
Chloroform	170	ug/m3	27.3	13.7	27.6		06/28/11 01:28	67-66-3	
Chloromethane	ND	ug/m3	11.6	5.8	27.6		06/28/11 01:28	74-87-3	
Cyclohexane	ND	ug/m3	18.8	9.4	27.6		06/28/11 01:28	110-82-7	
Dibromochloromethane	ND	ug/m3	46.9	23.5	27.6		06/28/11 01:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	44.2	22.1	27.6		06/28/11 01:28	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 01:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 01:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 01:28	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	27.6	13.8	27.6		06/28/11 01:28	75-71-8	
1,1-Dichloroethane	ND	ug/m3	22.6	11.3	27.6		06/28/11 01:28	75-34-3	
1,2-Dichloroethane	ND	ug/m3	11.3	5.8	27.6		06/28/11 01:28	107-06-2	
1,1-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 01:28	75-35-4	
cis-1,2-Dichloroethene	67.8	ug/m3	22.4	11.2	27.6		06/28/11 01:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 01:28	156-60-5	
1,2-Dichloropropane	ND	ug/m3	25.9	13.0	27.6		06/28/11 01:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 01:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 01:28	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 01:28	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.1	2.0	27.6		06/28/11 01:28	123-91-1	
Ethanol	61.4	ug/m3	52.4	23.5	27.6		06/28/11 01:28	64-17-5	
Ethylbenzene	ND	ug/m3	24.3	12.1	27.6		06/28/11 01:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	60.7	30.4	27.6		06/28/11 01:28	87-68-3	
n-Hexane	ND	ug/m3	19.9	9.9	27.6		06/28/11 01:28	110-54-3	
Methylene Chloride	ND	ug/m3	19.6	9.8	27.6		06/28/11 01:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	22.9	11.5	27.6		06/28/11 01:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	20.1	10.1	27.6		06/28/11 01:28	1634-04-4	
Styrene	ND	ug/m3	24.0	12.0	27.6		06/28/11 01:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	19.3	9.7	27.6		06/28/11 01:28	79-34-5	
Tetrachloroethene	1100000	ug/m3	2430	1200	3532.8		06/28/11 09:09	127-18-4	A3,E
Toluene	ND	ug/m3	21.3	10.6	27.6		06/28/11 01:28	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	27.3	13.7	27.6		06/28/11 01:28	120-82-1	
1,1,1-Trichloroethane	188	ug/m3	30.4	15.2	27.6		06/28/11 01:28	71-55-6	
Trichloroethene	2640	ug/m3	15.2	7.7	27.6		06/28/11 01:28	79-01-6	
Trichlorofluoromethane	ND	ug/m3	30.4	15.2	27.6		06/28/11 01:28	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	44.2	22.1	27.6		06/28/11 01:28	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: DUP-061411 Lab ID: 10160592010 Collected: 06/14/11 11:24 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>									
Analytical Method: TO-15									
1,2,4-Trimethylbenzene	19.2J	ug/m3	27.6	13.8	27.6		06/28/11 01:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	27.6	13.8	27.6		06/28/11 01:28	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	26.2	13.1	27.6		06/28/11 01:28	540-84-1	
Vinyl chloride	ND	ug/m3	7.2	3.6	27.6		06/28/11 01:28	75-01-4	
m&p-Xylene	ND	ug/m3	48.6	24.3	27.6		06/28/11 01:28	179601-23-1	
o-Xylene	ND	ug/m3	24.3	12.1	27.6		06/28/11 01:28	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-61 Lab ID: 10160700012 Collected: 06/15/11 10:43 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	10.3	5.1	31.8		06/28/11 18:58	71-43-2	
Benzyl chloride	ND	ug/m3	33.4	16.7	31.8		06/28/11 18:58	100-44-7	
Bromodichloromethane	ND	ug/m3	44.5	22.3	31.8		06/28/11 18:58	75-27-4	
Bromoform	ND	ug/m3	66.8	33.4	31.8		06/28/11 18:58	75-25-2	
Bromomethane	ND	ug/m3	25.1	12.6	31.8		06/28/11 18:58	74-83-9	
1,3-Butadiene	ND	ug/m3	14.3	7.2	31.8		06/28/11 18:58	106-99-0	
2-Butanone (MEK)	ND	ug/m3	19.1	9.5	31.8		06/28/11 18:58	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	29.4	5.9	31.8		06/28/11 18:58	75-65-0	
Carbon tetrachloride	ND	ug/m3	20.4	10.2	31.8		06/28/11 18:58	56-23-5	
Chlorobenzene	ND	ug/m3	29.9	14.9	31.8		06/28/11 18:58	108-90-7	
Chloroethane	ND	ug/m3	17.2	8.6	31.8		06/28/11 18:58	75-00-3	
Chloroform	ND	ug/m3	31.5	15.7	31.8		06/28/11 18:58	67-66-3	
Chloromethane	ND	ug/m3	13.4	6.7	31.8		06/28/11 18:58	74-87-3	
Cyclohexane	63.6	ug/m3	21.6	10.8	31.8		06/28/11 18:58	110-82-7	
Dibromochloromethane	ND	ug/m3	54.1	27.0	31.8		06/28/11 18:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	50.9	25.4	31.8		06/28/11 18:58	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	38.2	19.1	31.8		06/28/11 18:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	38.2	19.1	31.8		06/28/11 18:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	38.2	19.1	31.8		06/28/11 18:58	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	31.8	15.9	31.8		06/28/11 18:58	75-71-8	
1,1-Dichloroethane	ND	ug/m3	26.1	13.0	31.8		06/28/11 18:58	75-34-3	
1,2-Dichloroethane	ND	ug/m3	13.0	6.7	31.8		06/28/11 18:58	107-06-2	
1,1-Dichloroethene	ND	ug/m3	25.8	12.9	31.8		06/28/11 18:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	25.8	12.9	31.8		06/28/11 18:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	25.8	12.9	31.8		06/28/11 18:58	156-60-5	
1,2-Dichloropropane	ND	ug/m3	29.9	14.9	31.8		06/28/11 18:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	29.3	14.6	31.8		06/28/11 18:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	29.3	14.6	31.8		06/28/11 18:58	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	44.5	22.3	31.8		06/28/11 18:58	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	11.6	2.4	31.8		06/28/11 18:58	123-91-1	
Ethanol	93.7	ug/m3	60.4	27.0	31.8		06/28/11 18:58	64-17-5	
Ethylbenzene	ND	ug/m3	28.0	14.0	31.8		06/28/11 18:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	70.0	35.0	31.8		06/28/11 18:58	87-68-3	
n-Hexane	ND	ug/m3	22.9	11.4	31.8		06/28/11 18:58	110-54-3	
Methylene Chloride	ND	ug/m3	22.6	11.3	31.8		06/28/11 18:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	26.4	13.2	31.8		06/28/11 18:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	23.2	11.6	31.8		06/28/11 18:58	1634-04-4	
Styrene	ND	ug/m3	27.7	13.8	31.8		06/28/11 18:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	22.2	11.1	31.8		06/28/11 18:58	79-34-5	
Tetrachloroethene	79800	ug/m3	701	346	1017.6		06/29/11 23:56	127-18-4	A3
Toluene	16.3J	ug/m3	24.5	12.2	31.8		06/28/11 18:58	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	31.5	15.7	31.8		06/28/11 18:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	35.0	17.5	31.8		06/28/11 18:58	71-55-6	
Trichloroethene	94.7	ug/m3	17.5	8.9	31.8		06/28/11 18:58	79-01-6	
Trichlorofluoromethane	ND	ug/m3	35.0	17.5	31.8		06/28/11 18:58	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	50.9	25.4	31.8		06/28/11 18:58	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-61		Lab ID: 10160700012	Collected: 06/15/11 10:43	Received: 06/17/11 10:00	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	22.0J	ug/m3	31.8	15.9	31.8		06/28/11 18:58	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	31.8	15.9	31.8		06/28/11 18:58	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	30.2	15.1	31.8		06/28/11 18:58	540-84-1	
Vinyl chloride	ND	ug/m3	8.3	4.1	31.8		06/28/11 18:58	75-01-4	
m&p-Xylene	65.4	ug/m3	56.0	28.0	31.8		06/28/11 18:58	179601-23-1	
o-Xylene	ND	ug/m3	28.0	14.0	31.8		06/28/11 18:58	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: **SG-62** Lab ID: **10160592001** Collected: 06/14/11 08:43 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	2.8	ug/m3	0.46	0.23	1.43		06/28/11 16:34	71-43-2	
Benzyl chloride	ND	ug/m3	1.5	0.75	1.43		06/28/11 16:34	100-44-7	
Bromodichloromethane	ND	ug/m3	2.0	1.0	1.43		06/28/11 16:34	75-27-4	
Bromoform	ND	ug/m3	3.0	1.5	1.43		06/28/11 16:34	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.56	1.43		06/28/11 16:34	74-83-9	
1,3-Butadiene	ND	ug/m3	0.64	0.32	1.43		06/28/11 16:34	106-99-0	
2-Butanone (MEK)	10.8	ug/m3	0.86	0.43	1.43		06/28/11 16:34	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.3	0.26	1.43		06/28/11 16:34	75-65-0	
Carbon tetrachloride	ND	ug/m3	0.92	0.46	1.43		06/28/11 16:34	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	0.67	1.43		06/28/11 16:34	108-90-7	
Chloroethane	ND	ug/m3	0.77	0.39	1.43		06/28/11 16:34	75-00-3	
Chloroform	ND	ug/m3	1.4	0.71	1.43		06/28/11 16:34	67-66-3	
Chloromethane	ND	ug/m3	0.60	0.30	1.43		06/28/11 16:34	74-87-3	
Cyclohexane	ND	ug/m3	0.97	0.49	1.43		06/28/11 16:34	110-82-7	
Dibromochloromethane	ND	ug/m3	2.4	1.2	1.43		06/28/11 16:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.3	1.1	1.43		06/28/11 16:34	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/28/11 16:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/28/11 16:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/28/11 16:34	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.4	0.72	1.43		06/28/11 16:34	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.59	1.43		06/28/11 16:34	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	0.30	1.43		06/28/11 16:34	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/28/11 16:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/28/11 16:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/28/11 16:34	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	0.67	1.43		06/28/11 16:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/28/11 16:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/28/11 16:34	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	1.0	1.43		06/28/11 16:34	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.52	0.11	1.43		06/28/11 16:34	123-91-1	
Ethanol	66.7	ug/m3	2.7	1.2	1.43		06/28/11 16:34	64-17-5	
Ethylbenzene	38.9	ug/m3	1.3	0.63	1.43		06/28/11 16:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.6	1.43		06/28/11 16:34	87-68-3	
n-Hexane	1.7	ug/m3	1.0	0.51	1.43		06/28/11 16:34	110-54-3	
Methylene Chloride	ND	ug/m3	1.0	0.51	1.43		06/28/11 16:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.59	1.43		06/28/11 16:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.0	0.52	1.43		06/28/11 16:34	1634-04-4	
Styrene	ND	ug/m3	1.2	0.62	1.43		06/28/11 16:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.50	1.43		06/28/11 16:34	79-34-5	
Tetrachloroethene	35.0	ug/m3	0.99	0.49	1.43		06/28/11 16:34	127-18-4	
Toluene	121	ug/m3	1.1	0.55	1.43		06/28/11 16:34	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.4	0.71	1.43		06/28/11 16:34	120-82-1	
1,1,1-Trichloroethane	8.6	ug/m3	1.6	0.79	1.43		06/28/11 16:34	71-55-6	
Trichloroethene	71.6	ug/m3	0.79	0.40	1.43		06/28/11 16:34	79-01-6	
Trichlorofluoromethane	2.8	ug/m3	1.6	0.79	1.43		06/28/11 16:34	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.3	1.1	1.43		06/28/11 16:34	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-62		Lab ID: 10160592001	Collected: 06/14/11 08:43	Received: 06/16/11 09:50	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	44.7	ug/m3	1.4	0.72	1.43		06/28/11 16:34	95-63-6	
1,3,5-Trimethylbenzene	10.2	ug/m3	1.4	0.72	1.43		06/28/11 16:34	108-67-8	
2,2,4-Trimethylpentane	0.91J	ug/m3	1.4	0.68	1.43		06/28/11 16:34	540-84-1	
Vinyl chloride	ND	ug/m3	0.37	0.19	1.43		06/28/11 16:34	75-01-4	
m&p-Xylene	125	ug/m3	2.5	1.3	1.43		06/28/11 16:34	179601-23-1	
o-Xylene	47.5	ug/m3	1.3	0.63	1.43		06/28/11 16:34	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-63 Lab ID: 10160700018 Collected: 06/15/11 15:08 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	49.1	ug/m3	0.90	0.44	2.76		06/29/11 17:37	71-43-2	
Benzyl chloride	ND	ug/m3	2.9	1.4	2.76		06/29/11 17:37	100-44-7	
Bromodichloromethane	ND	ug/m3	3.9	1.9	2.76		06/29/11 17:37	75-27-4	
Bromoform	ND	ug/m3	5.8	2.9	2.76		06/29/11 17:37	75-25-2	
Bromomethane	ND	ug/m3	2.2	1.1	2.76		06/29/11 17:37	74-83-9	
1,3-Butadiene	ND	ug/m3	1.2	0.62	2.76		06/29/11 17:37	106-99-0	
2-Butanone (MEK)	53.5	ug/m3	1.7	0.83	2.76		06/29/11 17:37	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	2.6	0.51	2.76		06/29/11 17:37	75-65-0	
Carbon tetrachloride	ND	ug/m3	1.8	0.88	2.76		06/29/11 17:37	56-23-5	
Chlorobenzene	ND	ug/m3	2.6	1.3	2.76		06/29/11 17:37	108-90-7	
Chloroethane	11.4	ug/m3	1.5	0.75	2.76		06/29/11 17:37	75-00-3	
Chloroform	ND	ug/m3	2.7	1.4	2.76		06/29/11 17:37	67-66-3	
Chloromethane	ND	ug/m3	1.2	0.58	2.76		06/29/11 17:37	74-87-3	
Cyclohexane	3600	ug/m3	75.1	37.5	110.4		06/30/11 07:54	110-82-7	A3
Dibromochloromethane	ND	ug/m3	4.7	2.3	2.76		06/29/11 17:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	4.4	2.2	2.76		06/29/11 17:37	106-93-4	
1,2-Dichlorobenzene	5.0	ug/m3	3.3	1.7	2.76		06/29/11 17:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	3.3	1.7	2.76		06/29/11 17:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	3.3	1.7	2.76		06/29/11 17:37	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	2.8	1.4	2.76		06/29/11 17:37	75-71-8	
1,1-Dichloroethane	38.9	ug/m3	2.3	1.1	2.76		06/29/11 17:37	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1.1	0.58	2.76		06/29/11 17:37	107-06-2	
1,1-Dichloroethene	ND	ug/m3	2.2	1.1	2.76		06/29/11 17:37	75-35-4	
cis-1,2-Dichloroethene	108	ug/m3	2.2	1.1	2.76		06/29/11 17:37	156-59-2	
trans-1,2-Dichloroethene	15.3	ug/m3	2.2	1.1	2.76		06/29/11 17:37	156-60-5	
1,2-Dichloropropane	ND	ug/m3	2.6	1.3	2.76		06/29/11 17:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	2.5	1.3	2.76		06/29/11 17:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	2.5	1.3	2.76		06/29/11 17:37	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	3.9	1.9	2.76		06/29/11 17:37	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	1.0	0.20	2.76		06/29/11 17:37	123-91-1	
Ethanol	48.0	ug/m3	5.2	2.3	2.76		06/29/11 17:37	64-17-5	
Ethylbenzene	ND	ug/m3	2.4	1.2	2.76		06/29/11 17:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	6.1	3.0	2.76		06/29/11 17:37	87-68-3	
n-Hexane	91.6	ug/m3	2.0	0.99	2.76		06/29/11 17:37	110-54-3	
Methylene Chloride	ND	ug/m3	2.0	0.98	2.76		06/29/11 17:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	2.3	1.1	2.76		06/29/11 17:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2.0	1.0	2.76		06/29/11 17:37	1634-04-4	
Styrene	ND	ug/m3	2.4	1.2	2.76		06/29/11 17:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.9	0.97	2.76		06/29/11 17:37	79-34-5	
Tetrachloroethene	208	ug/m3	1.9	0.94	2.76		06/29/11 17:37	127-18-4	
Toluene	6.4	ug/m3	2.1	1.1	2.76		06/29/11 17:37	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.7	1.4	2.76		06/29/11 17:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	3.0	1.5	2.76		06/29/11 17:37	71-55-6	
Trichloroethene	62.2	ug/m3	1.5	0.77	2.76		06/29/11 17:37	79-01-6	
Trichlorofluoromethane	ND	ug/m3	3.0	1.5	2.76		06/29/11 17:37	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	4.4	2.2	2.76		06/29/11 17:37	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-63		Lab ID: 10160700018	Collected: 06/15/11 15:08	Received: 06/17/11 10:00	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	4.6	ug/m3	2.8	1.4	2.76		06/29/11 17:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	2.8	1.4	2.76		06/29/11 17:37	108-67-8	
2,2,4-Trimethylpentane	119	ug/m3	2.6	1.3	2.76		06/29/11 17:37	540-84-1	
Vinyl chloride	48.7	ug/m3	0.72	0.36	2.76		06/29/11 17:37	75-01-4	
m&p-Xylene	4.5J	ug/m3	4.9	2.4	2.76		06/29/11 17:37	179601-23-1	
o-Xylene	ND	ug/m3	2.4	1.2	2.76		06/29/11 17:37	95-47-6	





SG-63

## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: DUP2-061511 Lab ID: 10160700019 Collected: 06/15/11 15:08 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	41.2	ug/m3	9.0	4.4	27.6		06/28/11 22:49	71-43-2	
Benzyl chloride	ND	ug/m3	29.0	14.5	27.6		06/28/11 22:49	100-44-7	
Bromodichloromethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 22:49	75-27-4	
Bromoform	ND	ug/m3	58.0	29.0	27.6		06/28/11 22:49	75-25-2	
Bromomethane	ND	ug/m3	21.8	10.9	27.6		06/28/11 22:49	74-83-9	
1,3-Butadiene	ND	ug/m3	12.4	6.2	27.6		06/28/11 22:49	106-99-0	
2-Butanone (MEK)	ND	ug/m3	16.6	8.3	27.6		06/28/11 22:49	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	25.5	5.1	27.6		06/28/11 22:49	75-65-0	
Carbon tetrachloride	ND	ug/m3	17.7	8.8	27.6		06/28/11 22:49	56-23-5	
Chlorobenzene	ND	ug/m3	25.9	13.0	27.6		06/28/11 22:49	108-90-7	
Chloroethane	43.2	ug/m3	14.9	7.5	27.6		06/28/11 22:49	75-00-3	
Chloroform	ND	ug/m3	27.3	13.7	27.6		06/28/11 22:49	67-66-3	
Chloromethane	ND	ug/m3	11.6	5.8	27.6		06/28/11 22:49	74-87-3	
Cyclohexane	3300	ug/m3	75.1	37.5	110.4		06/29/11 23:27	110-82-7	A3
Dibromochloromethane	ND	ug/m3	46.9	23.5	27.6		06/28/11 22:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	44.2	22.1	27.6		06/28/11 22:49	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 22:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 22:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 22:49	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	27.6	13.8	27.6		06/28/11 22:49	75-71-8	
1,1-Dichloroethane	29.8	ug/m3	22.6	11.3	27.6		06/28/11 22:49	75-34-3	
1,2-Dichloroethane	ND	ug/m3	11.3	5.8	27.6		06/28/11 22:49	107-06-2	
1,1-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 22:49	75-35-4	
cis-1,2-Dichloroethene	134	ug/m3	22.4	11.2	27.6		06/28/11 22:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 22:49	156-60-5	
1,2-Dichloropropane	ND	ug/m3	25.9	13.0	27.6		06/28/11 22:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 22:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 22:49	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 22:49	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.1	2.0	27.6		06/28/11 22:49	123-91-1	
Ethanol	ND	ug/m3	52.4	23.5	27.6		06/28/11 22:49	64-17-5	
Ethylbenzene	ND	ug/m3	24.3	12.1	27.6		06/28/11 22:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	60.7	30.4	27.6		06/28/11 22:49	87-68-3	
n-Hexane	ND	ug/m3	19.9	9.9	27.6		06/28/11 22:49	110-54-3	
Methylene Chloride	ND	ug/m3	19.6	9.8	27.6		06/28/11 22:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	22.9	11.5	27.6		06/28/11 22:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	20.1	10.1	27.6		06/28/11 22:49	1634-04-4	
Styrene	ND	ug/m3	24.0	12.0	27.6		06/28/11 22:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	19.3	9.7	27.6		06/28/11 22:49	79-34-5	
Tetrachloroethene	258	ug/m3	19.0	9.4	27.6		06/28/11 22:49	127-18-4	
Toluene	ND	ug/m3	21.3	10.6	27.6		06/28/11 22:49	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	27.3	13.7	27.6		06/28/11 22:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	30.4	15.2	27.6		06/28/11 22:49	71-55-6	
Trichloroethene	56.2	ug/m3	15.2	7.7	27.6		06/28/11 22:49	79-01-6	
Trichlorofluoromethane	ND	ug/m3	30.4	15.2	27.6		06/28/11 22:49	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	44.2	22.1	27.6		06/28/11 22:49	76-13-1	

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SG-63

## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: DUP2-061511		Lab ID: 10160700019	Collected: 06/15/11 15:08	Received: 06/17/11 10:00	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	27.6	13.8	27.6		06/28/11 22:49	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	27.6	13.8	27.6		06/28/11 22:49	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	26.2	13.1	27.6		06/28/11 22:49	540-84-1	
Vinyl chloride	666	ug/m3	7.2	3.6	27.6		06/28/11 22:49	75-01-4	
m&p-Xylene	ND	ug/m3	48.6	24.3	27.6		06/28/11 22:49	179601-23-1	
o-Xylene	ND	ug/m3	24.3	12.1	27.6		06/28/11 22:49	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-78 Lab ID: 10160440003 Collected: 06/13/11 11:29 Received: 06/15/11 09:40 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	110	ug/m3	0.46	0.23	1.43		06/24/11 16:04	71-43-2	
Benzyl chloride	ND	ug/m3	1.5	0.75	1.43		06/24/11 16:04	100-44-7	
Bromodichloromethane	ND	ug/m3	2.0	1.0	1.43		06/24/11 16:04	75-27-4	
Bromoform	ND	ug/m3	3.0	1.5	1.43		06/24/11 16:04	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.56	1.43		06/24/11 16:04	74-83-9	
1,3-Butadiene	ND	ug/m3	0.64	0.32	1.43		06/24/11 16:04	106-99-0	
2-Butanone (MEK)	23.1	ug/m3	0.86	0.43	1.43		06/24/11 16:04	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.3	0.26	1.43		06/24/11 16:04	75-65-0	
Carbon tetrachloride	ND	ug/m3	0.92	0.46	1.43		06/24/11 16:04	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	0.67	1.43		06/24/11 16:04	108-90-7	
Chloroethane	ND	ug/m3	0.77	0.39	1.43		06/24/11 16:04	75-00-3	
Chloroform	ND	ug/m3	1.4	0.71	1.43		06/24/11 16:04	67-66-3	
Chloromethane	ND	ug/m3	0.60	0.30	1.43		06/24/11 16:04	74-87-3	
Cyclohexane	43.2	ug/m3	19.4	9.7	28.6		06/27/11 14:06	110-82-7	
Dibromochloromethane	ND	ug/m3	2.4	1.2	1.43		06/24/11 16:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.3	1.1	1.43		06/24/11 16:04	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/24/11 16:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.7	0.86	1.43		06/24/11 16:04	541-73-1	
1,4-Dichlorobenzene	6.9	ug/m3	1.7	0.86	1.43		06/24/11 16:04	106-46-7	
Dichlorodifluoromethane	25.3	ug/m3	1.4	0.72	1.43		06/24/11 16:04	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.59	1.43		06/24/11 16:04	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	0.30	1.43		06/24/11 16:04	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 16:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 16:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.43		06/24/11 16:04	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	0.67	1.43		06/24/11 16:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/24/11 16:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.43		06/24/11 16:04	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	1.0	1.43		06/24/11 16:04	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.52	0.11	1.43		06/24/11 16:04	123-91-1	
Ethanol	266	ug/m3	2.7	1.2	1.43		06/24/11 16:04	64-17-5	37.55
Ethylbenzene	110	ug/m3	1.3	0.63	1.43		06/24/11 16:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.6	1.43		06/24/11 16:04	87-68-3	
n-Hexane	56.0	ug/m3	20.6	10.3	28.6		06/27/11 14:06	110-54-3	
Methylene Chloride	ND	ug/m3	1.0	0.51	1.43		06/24/11 16:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.59	1.43		06/24/11 16:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.0	0.52	1.43		06/24/11 16:04	1634-04-4	
Styrene	4.8	ug/m3	1.2	0.62	1.43		06/24/11 16:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.50	1.43		06/24/11 16:04	79-34-5	
Tetrachloroethene	48.4	ug/m3	0.99	0.49	1.43		06/24/11 16:04	127-18-4	
Toluene	1090	ug/m3	22.0	11.0	28.6		06/27/11 14:06	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.4	0.71	1.43		06/24/11 16:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.6	0.79	1.43		06/24/11 16:04	71-55-6	
Trichloroethene	ND	ug/m3	0.79	0.40	1.43		06/24/11 16:04	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.6	0.79	1.43		06/24/11 16:04	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.3	1.1	1.43		06/24/11 16:04	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-78		Lab ID: 10160440003		Collected: 06/13/11 11:29		Received: 06/15/11 09:40		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,2,4-Trimethylbenzene	53.7	ug/m3	1.4	0.72	1.43		06/24/11 16:04	95-63-6	
1,3,5-Trimethylbenzene	14.9	ug/m3	1.4	0.72	1.43		06/24/11 16:04	108-67-8	
2,2,4-Trimethylpentane	69.0	ug/m3	27.2	13.6	28.6		06/27/11 14:06	540-84-1	
Vinyl chloride	ND	ug/m3	0.37	0.19	1.43		06/24/11 16:04	75-01-4	
m&p-Xylene	262	ug/m3	2.5	1.3	1.43		06/24/11 16:04	179601-23-1	
o-Xylene	90.2	ug/m3	1.3	0.63	1.43		06/24/11 16:04	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-79      Lab ID: 10160440002      Collected: 06/13/11 11:24      Received: 06/15/11 09:40      Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR      Analytical Method: TO-15									
Benzene	93.2	ug/m3	0.48	0.24	1.48		06/24/11 15:35	71-43-2	
Benzyl chloride	ND	ug/m3	1.6	0.78	1.48		06/24/11 15:35	100-44-7	
Bromodichloromethane	ND	ug/m3	2.1	1.0	1.48		06/24/11 15:35	75-27-4	
Bromoform	ND	ug/m3	3.1	1.6	1.48		06/24/11 15:35	75-25-2	
Bromomethane	ND	ug/m3	1.2	0.58	1.48		06/24/11 15:35	74-83-9	
1,3-Butadiene	ND	ug/m3	0.67	0.33	1.48		06/24/11 15:35	106-99-0	
2-Butanone (MEK)	5.2	ug/m3	0.89	0.44	1.48		06/24/11 15:35	78-93-3	
tert-Butyl Alcohol	3.4	ug/m3	1.4	0.27	1.48		06/24/11 15:35	75-65-0	
Carbon tetrachloride	1.2	ug/m3	0.95	0.47	1.48		06/24/11 15:35	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	0.70	1.48		06/24/11 15:35	108-90-7	
Chloroethane	ND	ug/m3	0.80	0.40	1.48		06/24/11 15:35	75-00-3	
Chloroform	ND	ug/m3	1.5	0.73	1.48		06/24/11 15:35	67-66-3	
Chloromethane	ND	ug/m3	0.62	0.31	1.48		06/24/11 15:35	74-87-3	
Cyclohexane	430	ug/m3	1.0	0.50	1.48		06/24/11 15:35	110-82-7	
Dibromochloromethane	ND	ug/m3	2.5	1.3	1.48		06/24/11 15:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.4	1.2	1.48		06/24/11 15:35	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	0.89	1.48		06/24/11 15:35	95-50-1	
1,3-Dichlorobenzene	4.0	ug/m3	1.8	0.89	1.48		06/24/11 15:35	541-73-1	
1,4-Dichlorobenzene	7.3	ug/m3	1.8	0.89	1.48		06/24/11 15:35	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.5	0.74	1.48		06/24/11 15:35	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.61	1.48		06/24/11 15:35	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.61	0.31	1.48		06/24/11 15:35	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.60	1.48		06/24/11 15:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.60	1.48		06/24/11 15:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.60	1.48		06/24/11 15:35	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	0.70	1.48		06/24/11 15:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.4	0.68	1.48		06/24/11 15:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.4	0.68	1.48		06/24/11 15:35	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.1	1.0	1.48		06/24/11 15:35	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.54	0.11	1.48		06/24/11 15:35	123-91-1	
Ethanol	292	ug/m3	2.8	1.3	1.48		06/24/11 15:35	64-17-5	E, SS
Ethylbenzene	127	ug/m3	1.3	0.65	1.48		06/24/11 15:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.3	1.6	1.48		06/24/11 15:35	87-68-3	
n-Hexane	24.5	ug/m3	21.3	10.7	29.6		06/27/11 13:38	110-54-3	
Methylene Chloride	ND	ug/m3	1.1	0.53	1.48		06/24/11 15:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.61	1.48		06/24/11 15:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.1	0.54	1.48		06/24/11 15:35	1634-04-4	
Styrene	ND	ug/m3	1.3	0.64	1.48		06/24/11 15:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.52	1.48		06/24/11 15:35	79-34-5	
Tetrachloroethene	21000	ug/m3	326	161	473.6		06/27/11 22:34	127-18-4	A3
Toluene	467	ug/m3	22.8	11.4	29.6		06/27/11 13:38	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.5	0.73	1.48		06/24/11 15:35	120-82-1	
1,1,1-Trichloroethane	29.7	ug/m3	1.6	0.81	1.48		06/24/11 15:35	71-55-6	
Trichloroethene	ND	ug/m3	0.81	0.41	1.48		06/24/11 15:35	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.6	0.81	1.48		06/24/11 15:35	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.4	1.2	1.48		06/24/11 15:35	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: SG-79		Lab ID: 10160440002	Collected: 06/13/11 11:24	Received: 06/15/11 09:40	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	180	ug/m3	1.5	0.74	1.48		06/24/11 15:35	95-63-6	
1,3,5-Trimethylbenzene	47.4	ug/m3	1.5	0.74	1.48		06/24/11 15:35	108-67-8	
2,2,4-Trimethylpentane	52.3	ug/m3	28.1	14.1	29.6		06/27/11 13:38	540-84-1	
Vinyl chloride	ND	ug/m3	0.38	0.19	1.48		06/24/11 15:35	75-01-4	
m&p-Xylene	325	ug/m3	2.6	1.3	1.48		06/24/11 15:35	179601-23-1	
o-Xylene	149	ug/m3	1.3	0.65	1.48		06/24/11 15:35	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site

Pace Project No.: 10160592

Sample: SG-80 Lab ID: 10160592006 Collected: 06/14/11 10:03 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
Benzene	ND	ug/m3	9.6	4.7	29.6		06/28/11 05:25	71-43-2	
Benzyl chloride	ND	ug/m3	31.1	15.5	29.6		06/28/11 05:25	100-44-7	
Bromodichloromethane	ND	ug/m3	41.4	20.7	29.6		06/28/11 05:25	75-27-4	
Bromoform	ND	ug/m3	62.2	31.1	29.6		06/28/11 05:25	75-25-2	
Bromomethane	ND	ug/m3	23.4	11.7	29.6		06/28/11 05:25	74-83-9	
1,3-Butadiene	ND	ug/m3	13.3	6.7	29.6		06/28/11 05:25	106-99-0	
2-Butanone (MEK)	ND	ug/m3	17.8	8.9	29.6		06/28/11 05:25	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	27.4	5.4	29.6		06/28/11 05:25	75-65-0	
Carbon tetrachloride	ND	ug/m3	18.9	9.5	29.6		06/28/11 05:25	56-23-5	
Chlorobenzene	ND	ug/m3	27.8	13.9	29.6		06/28/11 05:25	108-90-7	
Chloroethane	ND	ug/m3	16.0	8.0	29.6		06/28/11 05:25	75-00-3	
Chloroform	ND	ug/m3	29.3	14.7	29.6		06/28/11 05:25	67-66-3	
Chloromethane	ND	ug/m3	12.4	6.2	29.6		06/28/11 05:25	74-87-3	
Cyclohexane	ND	ug/m3	20.1	10.1	29.6		06/28/11 05:25	110-82-7	
Dibromochloromethane	ND	ug/m3	50.3	25.2	29.6		06/28/11 05:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	47.4	23.7	29.6		06/28/11 05:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 05:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 05:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 05:25	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	29.6	14.8	29.6		06/28/11 05:25	75-71-8	
1,1-Dichloroethane	ND	ug/m3	24.3	12.1	29.6		06/28/11 05:25	75-34-3	
1,2-Dichloroethane	ND	ug/m3	12.1	6.2	29.6		06/28/11 05:25	107-06-2	
1,1-Dichloroethene	ND	ug/m3	24.0	12.0	29.6		06/28/11 05:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	24.0	12.0	29.6		06/28/11 05:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	24.0	12.0	29.6		06/28/11 05:25	156-60-5	
1,2-Dichloropropane	ND	ug/m3	27.8	13.9	29.6		06/28/11 05:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	27.2	13.6	29.6		06/28/11 05:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	27.2	13.6	29.6		06/28/11 05:25	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	41.4	20.7	29.6		06/28/11 05:25	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.8	2.2	29.6		06/28/11 05:25	123-91-1	
Ethanol	12200	ug/m3	56.2	25.2	29.6		06/28/11 05:25	64-17-5	
Ethylbenzene	ND	ug/m3	26.0	13.0	29.6		06/28/11 05:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	65.1	32.6	29.6		06/28/11 05:25	87-68-3	
n-Hexane	ND	ug/m3	21.3	10.7	29.6		06/28/11 05:25	110-54-3	
Methylene Chloride	37.9	ug/m3	21.0	10.5	29.6		06/28/11 05:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	24.6	12.3	29.6		06/28/11 05:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	21.6	10.8	29.6		06/28/11 05:25	1634-04-4	
Styrene	ND	ug/m3	25.8	12.9	29.6		06/28/11 05:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	20.7	10.4	29.6		06/28/11 05:25	79-34-5	
Tetrachloroethene	1670	ug/m3	20.4	10.1	29.6		06/28/11 05:25	127-18-4	
Toluene	171	ug/m3	22.8	11.4	29.6		06/28/11 05:25	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	29.3	14.7	29.6		06/28/11 05:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	32.6	16.3	29.6		06/28/11 05:25	71-55-6	
Trichloroethene	74.9	ug/m3	16.3	8.3	29.6		06/28/11 05:25	79-01-6	
Trichlorofluoromethane	ND	ug/m3	32.6	16.3	29.6		06/28/11 05:25	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	47.4	23.7	29.6		06/28/11 05:25	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-80		Lab ID: 10160592006	Collected: 06/14/11 10:03		Received: 06/16/11 09:50		Matrix: Air		
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	33.4	ug/m3	29.6	14.8	29.6		06/28/11 05:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	29.6	14.8	29.6		06/28/11 05:25	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	28.1	14.1	29.6		06/28/11 05:25	540-84-1	
Vinyl chloride	ND	ug/m3	7.7	3.8	29.6		06/28/11 05:25	75-01-4	
m&p-Xylene	164	ug/m3	52.1	26.0	29.6		06/28/11 05:25	179601-23-1	
o-Xylene	26.7	ug/m3	26.0	13.0	29.6		06/28/11 05:25	95-47-6	





## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: **SG-81** Lab ID: **10160592004** Collected: 06/14/11 10:08 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	9.0	4.4	27.6		06/28/11 04:56	71-43-2	
Benzyl chloride	ND	ug/m3	29.0	14.5	27.6		06/28/11 04:56	100-44-7	
Bromodichloromethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 04:56	75-27-4	
Bromoform	ND	ug/m3	58.0	29.0	27.6		06/28/11 04:56	75-25-2	
Bromomethane	ND	ug/m3	21.8	10.9	27.6		06/28/11 04:56	74-83-9	
1,3-Butadiene	ND	ug/m3	12.4	6.2	27.6		06/28/11 04:56	106-99-0	
2-Butanone (MEK)	ND	ug/m3	16.6	8.3	27.6		06/28/11 04:56	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	25.5	5.1	27.6		06/28/11 04:56	75-65-0	
Carbon tetrachloride	ND	ug/m3	17.7	8.8	27.6		06/28/11 04:56	56-23-5	
Chlorobenzene	ND	ug/m3	25.9	13.0	27.6		06/28/11 04:56	108-90-7	
Chloroethane	ND	ug/m3	14.9	7.5	27.6		06/28/11 04:56	75-00-3	
Chloroform	ND	ug/m3	27.3	13.7	27.6		06/28/11 04:56	67-66-3	
Chloromethane	ND	ug/m3	11.6	5.8	27.6		06/28/11 04:56	74-87-3	
Cyclohexane	ND	ug/m3	18.8	9.4	27.6		06/28/11 04:56	110-82-7	
Dibromochloromethane	ND	ug/m3	46.9	23.5	27.6		06/28/11 04:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	44.2	22.1	27.6		06/28/11 04:56	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 04:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 04:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	33.1	16.6	27.6		06/28/11 04:56	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	27.6	13.8	27.6		06/28/11 04:56	75-71-8	
1,1-Dichloroethane	ND	ug/m3	22.6	11.3	27.6		06/28/11 04:56	75-34-3	
1,2-Dichloroethane	ND	ug/m3	11.3	5.8	27.6		06/28/11 04:56	107-06-2	
1,1-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 04:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 04:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	22.4	11.2	27.6		06/28/11 04:56	156-60-5	
1,2-Dichloropropane	ND	ug/m3	25.9	13.0	27.6		06/28/11 04:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 04:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	25.4	12.7	27.6		06/28/11 04:56	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	38.6	19.3	27.6		06/28/11 04:56	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.1	2.0	27.6		06/28/11 04:56	123-91-1	
Ethanol	65.7	ug/m3	52.4	23.5	27.6		06/28/11 04:56	64-17-5	
Ethylbenzene	ND	ug/m3	24.3	12.1	27.6		06/28/11 04:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	60.7	30.4	27.6		06/28/11 04:56	87-68-3	
n-Hexane	ND	ug/m3	19.9	9.9	27.6		06/28/11 04:56	110-54-3	
Methylene Chloride	ND	ug/m3	19.6	9.8	27.6		06/28/11 04:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	22.9	11.5	27.6		06/28/11 04:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	20.1	10.1	27.6		06/28/11 04:56	1634-04-4	
Styrene	ND	ug/m3	24.0	12.0	27.6		06/28/11 04:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	19.3	9.7	27.6		06/28/11 04:56	79-34-5	
Tetrachloroethene	22100	ug/m3	76.1	37.5	110.4		06/28/11 12:57	127-18-4	A3
Toluene	63.7	ug/m3	21.3	10.6	27.6		06/28/11 04:56	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	27.3	13.7	27.6		06/28/11 04:56	120-82-1	
1,1,1-Trichloroethane	27.8J	ug/m3	30.4	15.2	27.6		06/28/11 04:56	71-55-6	
Trichloroethene	776	ug/m3	15.2	7.7	27.6		06/28/11 04:56	79-01-6	
Trichlorofluoromethane	ND	ug/m3	30.4	15.2	27.6		06/28/11 04:56	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	44.2	22.1	27.6		06/28/11 04:56	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-81		Lab ID: 10160592004	Collected: 06/14/11 10:08	Received: 06/16/11 09:50	Matrix: Air				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	20.2J	ug/m3	27.6	13.8	27.6		06/28/11 04:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	27.6	13.8	27.6		06/28/11 04:56	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	26.2	13.1	27.6		06/28/11 04:56	540-84-1	
Vinyl chloride	ND	ug/m3	7.2	3.6	27.6		06/28/11 04:56	75-01-4	
m&p-Xylene	101	ug/m3	48.6	24.3	27.6		06/28/11 04:56	179601-23-1	
o-Xylene	12.4J	ug/m3	24.3	12.1	27.6		06/28/11 04:56	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site

Pace Project No.: 10160592

Sample: SG-82      Lab ID: 10160592003      Collected: 06/14/11 09:39      Received: 06/16/11 09:50      Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR      Analytical Method: TO-15									
Benzene	ND	ug/m3	9.6	4.7	29.6		06/28/11 03:58	71-43-2	
Benzyl chloride	ND	ug/m3	31.1	15.5	29.6		06/28/11 03:58	100-44-7	
Bromodichloromethane	ND	ug/m3	41.4	20.7	29.6		06/28/11 03:58	75-27-4	
Bromoform	ND	ug/m3	62.2	31.1	29.6		06/28/11 03:58	75-25-2	
Bromomethane	ND	ug/m3	23.4	11.7	29.6		06/28/11 03:58	74-83-9	
1,3-Butadiene	ND	ug/m3	13.3	6.7	29.6		06/28/11 03:58	106-99-0	
2-Butanone (MEK)	ND	ug/m3	17.8	8.9	29.6		06/28/11 03:58	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	27.4	5.4	29.6		06/28/11 03:58	75-65-0	
Carbon tetrachloride	ND	ug/m3	18.9	9.5	29.6		06/28/11 03:58	56-23-5	
Chlorobenzene	ND	ug/m3	27.8	13.9	29.6		06/28/11 03:58	108-90-7	
Chloroethane	ND	ug/m3	16.0	8.0	29.6		06/28/11 03:58	75-00-3	
Chloroform	ND	ug/m3	29.3	14.7	29.6		06/28/11 03:58	67-66-3	
Chloromethane	ND	ug/m3	12.4	6.2	29.6		06/28/11 03:58	74-87-3	
Cyclohexane	ND	ug/m3	20.1	10.1	29.6		06/28/11 03:58	110-82-7	
Dibromochloromethane	ND	ug/m3	50.3	25.2	29.6		06/28/11 03:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	47.4	23.7	29.6		06/28/11 03:58	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 03:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 03:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	35.5	17.8	29.6		06/28/11 03:58	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	29.6	14.8	29.6		06/28/11 03:58	75-71-8	
1,1-Dichloroethane	ND	ug/m3	24.3	12.1	29.6		06/28/11 03:58	75-34-3	
1,2-Dichloroethane	ND	ug/m3	12.1	6.2	29.6		06/28/11 03:58	107-06-2	
1,1-Dichloroethene	ND	ug/m3	24.0	12.0	29.6		06/28/11 03:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	24.0	12.0	29.6		06/28/11 03:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	24.0	12.0	29.6		06/28/11 03:58	156-60-5	
1,2-Dichloropropane	ND	ug/m3	27.8	13.9	29.6		06/28/11 03:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	27.2	13.6	29.6		06/28/11 03:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	27.2	13.6	29.6		06/28/11 03:58	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	41.4	20.7	29.6		06/28/11 03:58	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	10.8	2.2	29.6		06/28/11 03:58	123-91-1	
Ethanol	71.8	ug/m3	56.2	25.2	29.6		06/28/11 03:58	64-17-5	
Ethylbenzene	ND	ug/m3	26.0	13.0	29.6		06/28/11 03:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	65.1	32.6	29.6		06/28/11 03:58	87-68-3	
n-Hexane	ND	ug/m3	21.3	10.7	29.6		06/28/11 03:58	110-54-3	
Methylene Chloride	ND	ug/m3	21.0	10.5	29.6		06/28/11 03:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	24.6	12.3	29.6		06/28/11 03:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	21.6	10.8	29.6		06/28/11 03:58	1834-04-4	
Styrene	ND	ug/m3	25.8	12.9	29.6		06/28/11 03:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	20.7	10.4	29.6		06/28/11 03:58	79-34-5	
Tetrachloroethene	6370	ug/m3	20.4	10.1	29.6		06/28/11 03:58	127-18-4	
Toluene	152	ug/m3	22.8	11.4	29.6		06/28/11 03:58	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	29.3	14.7	29.6		06/28/11 03:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	32.6	16.3	29.6		06/28/11 03:58	71-55-6	
Trichloroethene	208	ug/m3	16.3	8.3	29.6		06/28/11 03:58	79-01-6	
Trichlorofluoromethane	ND	ug/m3	32.6	16.3	29.6		06/28/11 03:58	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	47.4	23.7	29.6		06/28/11 03:58	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: SG-82		Lab ID: 10160592003		Collected: 06/14/11 09:39		Received: 06/16/11 09:50		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	17.1J	ug/m3	29.6	14.8	29.6		06/28/11 03:58	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	29.6	14.8	29.6		06/28/11 03:58	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	28.1	14.1	29.6		06/28/11 03:58	540-84-1	
Vinyl chloride	ND	ug/m3	7.7	3.8	29.6		06/28/11 03:58	75-01-4	
m&p-Xylene	159	ug/m3	52.1	26.0	29.6		06/28/11 03:58	179601-23-1	
o-Xylene	24.5J	ug/m3	26.0	13.0	29.6		06/28/11 03:58	95-47-6	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-84 Lab ID: 10160700004 Collected: 06/15/11 09:01 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	1190	586	3660.8		06/28/11 00:29	71-43-2	
Benzyl chloride	ND	ug/m3	3840	1920	3660.8		06/28/11 00:29	100-44-7	
Bromodichloromethane	ND	ug/m3	5130	2560	3660.8		06/28/11 00:29	75-27-4	
Bromoform	ND	ug/m3	7690	3840	3660.8		06/28/11 00:29	75-25-2	
Bromomethane	ND	ug/m3	2890	1450	3660.8		06/28/11 00:29	74-83-9	
1,3-Butadiene	ND	ug/m3	1650	824	3660.8		06/28/11 00:29	106-99-0	
2-Butanone (MEK)	ND	ug/m3	2200	1100	3660.8		06/28/11 00:29	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	3380	674	3660.8		06/28/11 00:29	75-65-0	
Carbon tetrachloride	ND	ug/m3	2340	1170	3660.8		06/28/11 00:29	56-23-5	
Chlorobenzene	ND	ug/m3	3440	1720	3660.8		06/28/11 00:29	108-90-7	
Chloroethane	ND	ug/m3	1980	988	3660.8		06/28/11 00:29	75-00-3	
Chloroform	ND	ug/m3	3620	1810	3660.8		06/28/11 00:29	67-66-3	
Chloromethane	ND	ug/m3	1540	769	3660.8		06/28/11 00:29	74-87-3	
Cyclohexane	ND	ug/m3	2490	1240	3660.8		06/28/11 00:29	110-82-7	
Dibromochloromethane	ND	ug/m3	6220	3110	3660.8		06/28/11 00:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	5860	2930	3660.8		06/28/11 00:29	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	4390	2200	3660.8		06/28/11 00:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	4390	2200	3660.8		06/28/11 00:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4390	2200	3660.8		06/28/11 00:29	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	3660	1830	3660.8		06/28/11 00:29	75-71-8	
1,1-Dichloroethane	ND	ug/m3	3000	1500	3660.8		06/28/11 00:29	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1500	769	3660.8		06/28/11 00:29	107-06-2	
1,1-Dichloroethene	ND	ug/m3	2970	1480	3660.8		06/28/11 00:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	2970	1480	3660.8		06/28/11 00:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	2970	1480	3660.8		06/28/11 00:29	156-60-5	
1,2-Dichloropropane	ND	ug/m3	3440	1720	3660.8		06/28/11 00:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	3370	1680	3660.8		06/28/11 00:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3370	1680	3660.8		06/28/11 00:29	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	5130	2560	3660.8		06/28/11 00:29	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	1340	271	3660.8		06/28/11 00:29	123-91-1	
Ethanol	ND	ug/m3	6960	3110	3660.8		06/28/11 00:29	64-17-5	
Ethylbenzene	ND	ug/m3	3220	1610	3660.8		06/28/11 00:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	8050	4030	3660.8		06/28/11 00:29	87-68-3	
n-Hexane	ND	ug/m3	2640	1320	3660.8		06/28/11 00:29	110-54-3	
Methylene Chloride	2820	ug/m3	2600	1300	3660.8		06/28/11 00:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	3040	1520	3660.8		06/28/11 00:29	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2670	1340	3660.8		06/28/11 00:29	1634-04-4	
Styrene	ND	ug/m3	3180	1590	3660.8		06/28/11 00:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2560	1280	3660.8		06/28/11 00:29	79-34-5	
Tetrachloroethene	282000	ug/m3	2520	1240	3660.8		06/28/11 00:29	127-18-4	
Toluene	ND	ug/m3	2820	1410	3660.8		06/28/11 00:29	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	3620	1810	3660.8		06/28/11 00:29	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	4030	2010	3660.8		06/28/11 00:29	71-55-6	
Trichloroethene	ND	ug/m3	2010	1030	3660.8		06/28/11 00:29	79-01-6	
Trichlorofluoromethane	ND	ug/m3	4030	2010	3660.8		06/28/11 00:29	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	5860	2930	3660.8		06/28/11 00:29	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-84		Lab ID: 10160700004		Collected: 06/15/11 09:01		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	3660	1830	3660.8		06/28/11 00:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	3660	1830	3660.8		06/28/11 00:29	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	3480	1740	3660.8		06/28/11 00:29	540-84-1	
Vinyl chloride	ND	ug/m3	952	476	3660.8		06/28/11 00:29	75-01-4	
m&p-Xylene	ND	ug/m3	6440	3220	3660.8		06/28/11 00:29	179601-23-1	
o-Xylene	ND	ug/m3	3220	1610	3660.8		06/28/11 00:29	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-85 Lab ID: 10160700006 Collected: 06/15/11 08:47 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	28.7	14.1	88.32		06/28/11 14:20	71-43-2	
Benzyl chloride	ND	ug/m3	92.7	46.4	88.32		06/28/11 14:20	100-44-7	
Bromodichloromethane	ND	ug/m3	124	61.8	88.32		06/28/11 14:20	75-27-4	
Bromoform	ND	ug/m3	185	92.7	88.32		06/28/11 14:20	75-25-2	
Bromomethane	ND	ug/m3	69.8	34.9	88.32		06/28/11 14:20	74-83-9	
1,3-Butadiene	ND	ug/m3	39.7	19.9	88.32		06/28/11 14:20	106-99-0	
2-Butanone (MEK)	ND	ug/m3	53.0	26.5	88.32		06/28/11 14:20	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	81.6	16.3	88.32		06/28/11 14:20	75-65-0	
Carbon tetrachloride	ND	ug/m3	56.5	28.3	88.32		06/28/11 14:20	56-23-5	
Chlorobenzene	ND	ug/m3	83.0	41.5	88.32		06/28/11 14:20	108-90-7	
Chloroethane	ND	ug/m3	47.7	23.8	88.32		06/28/11 14:20	75-00-3	
Chloroform	ND	ug/m3	87.4	43.7	88.32		06/28/11 14:20	67-66-3	
Chloromethane	ND	ug/m3	37.1	18.5	88.32		06/28/11 14:20	74-87-3	
Cyclohexane	ND	ug/m3	60.1	30.0	88.32		06/28/11 14:20	110-82-7	
Dibromochloromethane	ND	ug/m3	150	75.1	88.32		06/28/11 14:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	141	70.7	88.32		06/28/11 14:20	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	106	53.0	88.32		06/28/11 14:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	106	53.0	88.32		06/28/11 14:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	106	53.0	88.32		06/28/11 14:20	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	88.3	44.2	88.32		06/28/11 14:20	75-71-8	
1,1-Dichloroethane	ND	ug/m3	72.4	36.2	88.32		06/28/11 14:20	75-34-3	
1,2-Dichloroethane	ND	ug/m3	36.2	18.5	88.32		06/28/11 14:20	107-06-2	
1,1-Dichloroethene	ND	ug/m3	71.5	35.8	88.32		06/28/11 14:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	71.5	35.8	88.32		06/28/11 14:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	71.5	35.8	88.32		06/28/11 14:20	156-60-5	
1,2-Dichloropropane	ND	ug/m3	83.0	41.5	88.32		06/28/11 14:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	81.3	40.6	88.32		06/28/11 14:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	81.3	40.6	88.32		06/28/11 14:20	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	124	61.8	88.32		06/28/11 14:20	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	32.3	6.5	88.32		06/28/11 14:20	123-91-1	
Ethanol	259	ug/m3	168	75.1	88.32		06/28/11 14:20	64-17-5	
Ethylbenzene	ND	ug/m3	77.7	38.9	88.32		06/28/11 14:20	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	194	97.2	88.32		06/28/11 14:20	87-68-3	
n-Hexane	581	ug/m3	63.6	31.8	88.32		06/28/11 14:20	110-54-3	
Methylene Chloride	1690	ug/m3	62.7	31.4	88.32		06/28/11 14:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	73.3	36.7	88.32		06/28/11 14:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	64.5	32.2	88.32		06/28/11 14:20	1634-04-4	
Styrene	ND	ug/m3	76.8	38.4	88.32		06/28/11 14:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	61.6	30.9	88.32		06/28/11 14:20	79-34-5	
Tetrachloroethene	7460	ug/m3	60.9	30.0	88.32		06/28/11 14:20	127-18-4	
Toluene	198	ug/m3	68.0	34.0	88.32		06/28/11 14:20	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	87.4	43.7	88.32		06/28/11 14:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	97.2	48.6	88.32		06/28/11 14:20	71-55-6	
Trichloroethene	114	ug/m3	48.6	24.7	88.32		06/28/11 14:20	79-01-6	
Trichlorofluoromethane	256	ug/m3	97.2	48.6	88.32		06/28/11 14:20	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	141	70.7	88.32		06/28/11 14:20	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-85		Lab ID: 10160700006		Collected: 06/15/11 08:47		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	59.9J	ug/m3	88.2	44.2	88.32		06/28/11 14:20	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	88.2	44.2	88.32		06/28/11 14:20	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	83.9	42.0	88.32		06/28/11 14:20	540-84-1	
Vinyl chloride	ND	ug/m3	23.0	11.5	88.32		06/28/11 14:20	75-01-4	
m&p-Xylene	ND	ug/m3	155	77.7	88.32		06/28/11 14:20	179601-23-1	
o-Xylene	ND	ug/m3	77.7	38.9	88.32		06/28/11 14:20	95-47-6	





## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-86 Lab ID: 10160700007 Collected: 06/15/11 08:35 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	123	60.6	378.88		06/28/11 13:51	71-43-2	
Benzyl chloride	ND	ug/m3	398	199	378.88		06/28/11 13:51	100-44-7	
Bromodichloromethane	ND	ug/m3	530	265	378.88		06/28/11 13:51	75-27-4	
Bromoform	ND	ug/m3	796	398	378.88		06/28/11 13:51	75-25-2	
Bromomethane	ND	ug/m3	299	150	378.88		06/28/11 13:51	74-83-9	
1,3-Butadiene	ND	ug/m3	170	85.2	378.88		06/28/11 13:51	106-99-0	
2-Butanone (MEK)	ND	ug/m3	227	114	378.88		06/28/11 13:51	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	350	69.7	378.88		06/28/11 13:51	75-65-0	
Carbon tetrachloride	ND	ug/m3	242	121	378.88		06/28/11 13:51	56-23-5	
Chlorobenzene	ND	ug/m3	356	178	378.88		06/28/11 13:51	108-90-7	
Chloroethane	ND	ug/m3	205	102	378.88		06/28/11 13:51	75-00-3	
Chloroform	ND	ug/m3	375	188	378.88		06/28/11 13:51	67-66-3	
Chloromethane	ND	ug/m3	159	79.6	378.88		06/28/11 13:51	74-87-3	
Cyclohexane	ND	ug/m3	258	129	378.88		06/28/11 13:51	110-82-7	
Dibromochloromethane	ND	ug/m3	644	322	378.88		06/28/11 13:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	606	303	378.88		06/28/11 13:51	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	455	227	378.88		06/28/11 13:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	455	227	378.88		06/28/11 13:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	455	227	378.88		06/28/11 13:51	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	379	189	378.88		06/28/11 13:51	75-71-8	
1,1-Dichloroethane	ND	ug/m3	311	155	378.88		06/28/11 13:51	75-34-3	
1,2-Dichloroethane	ND	ug/m3	155	79.6	378.88		06/28/11 13:51	107-06-2	
1,1-Dichloroethene	1290	ug/m3	307	153	378.88		06/28/11 13:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	307	153	378.88		06/28/11 13:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	307	153	378.88		06/28/11 13:51	156-60-5	
1,2-Dichloropropane	ND	ug/m3	356	178	378.88		06/28/11 13:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	349	174	378.88		06/28/11 13:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	349	174	378.88		06/28/11 13:51	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	530	265	378.88		06/28/11 13:51	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	139	28.0	378.88		06/28/11 13:51	123-91-1	
Ethanol	3840	ug/m3	720	322	378.88		06/28/11 13:51	64-17-5	
Ethylbenzene	ND	ug/m3	333	167	378.88		06/28/11 13:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	834	417	378.88		06/28/11 13:51	87-68-3	
n-Hexane	978	ug/m3	273	136	378.88		06/28/11 13:51	110-54-3	
Methylene Chloride	3140	ug/m3	269	135	378.88		06/28/11 13:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	314	157	378.88		06/28/11 13:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	277	138	378.88		06/28/11 13:51	1634-04-4	
Styrene	ND	ug/m3	330	165	378.88		06/28/11 13:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	264	133	378.88		06/28/11 13:51	79-34-5	
Tetrachloroethene	69500	ug/m3	261	129	378.88		06/28/11 13:51	127-18-4	
Toluene	222J	ug/m3	292	146	378.88		06/28/11 13:51	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	375	188	378.88		06/28/11 13:51	120-82-1	
1,1,1-Trichloroethane	295J	ug/m3	417	208	378.88		06/28/11 13:51	71-55-6	
Trichloroethene	899	ug/m3	208	106	378.88		06/28/11 13:51	79-01-6	
Trichlorofluoromethane	ND	ug/m3	417	208	378.88		06/28/11 13:51	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	606	303	378.88		06/28/11 13:51	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-86		Lab ID: 10160700007		Collected: 06/15/11 08:35		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	379	189	378.88		06/28/11 13:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	379	189	378.88		06/28/11 13:51	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	360	180	378.88		06/28/11 13:51	540-84-1	
Vinyl chloride	ND	ug/m3	98.5	49.3	378.88		06/28/11 13:51	75-01-4	
m&p-Xylene	ND	ug/m3	667	333	378.88		06/28/11 13:51	179601-23-1	
o-Xylene	ND	ug/m3	333	167	378.88		06/28/11 13:51	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-87 Lab ID: 10160700010 Collected: 06/15/11 10:31 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	28.7	14.1	88.32		06/28/11 12:50	71-43-2	
Benzyl chloride	ND	ug/m3	92.7	46.4	88.32		06/28/11 12:50	100-44-7	
Bromodichloromethane	ND	ug/m3	124	61.8	88.32		06/28/11 12:50	75-27-4	
Bromoform	ND	ug/m3	185	92.7	88.32		06/28/11 12:50	75-25-2	
Bromomethane	ND	ug/m3	69.8	34.9	88.32		06/28/11 12:50	74-83-9	
1,3-Butadiene	ND	ug/m3	39.7	19.9	88.32		06/28/11 12:50	106-99-0	
2-Butanone (MEK)	ND	ug/m3	53.0	26.5	88.32		06/28/11 12:50	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	81.6	16.3	88.32		06/28/11 12:50	75-65-0	
Carbon tetrachloride	ND	ug/m3	56.5	28.3	88.32		06/28/11 12:50	56-23-5	
Chlorobenzene	ND	ug/m3	83.0	41.5	88.32		06/28/11 12:50	108-90-7	
Chloroethane	ND	ug/m3	47.7	23.8	88.32		06/28/11 12:50	75-00-3	
Chloroform	ND	ug/m3	87.4	43.7	88.32		06/28/11 12:50	67-66-3	
Chloromethane	ND	ug/m3	37.1	18.5	88.32		06/28/11 12:50	74-87-3	
Cyclohexane	ND	ug/m3	60.1	30.0	88.32		06/28/11 12:50	110-82-7	
Dibromochloromethane	ND	ug/m3	150	75.1	88.32		06/28/11 12:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	141	70.7	88.32		06/28/11 12:50	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	106	53.0	88.32		06/28/11 12:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	106	53.0	88.32		06/28/11 12:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	106	53.0	88.32		06/28/11 12:50	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	88.3	44.2	88.32		06/28/11 12:50	75-71-8	
1,1-Dichloroethane	ND	ug/m3	72.4	36.2	88.32		06/28/11 12:50	75-34-3	
1,2-Dichloroethane	ND	ug/m3	36.2	18.5	88.32		06/28/11 12:50	107-06-2	
1,1-Dichloroethene	ND	ug/m3	71.5	35.8	88.32		06/28/11 12:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	71.5	35.8	88.32		06/28/11 12:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	71.5	35.8	88.32		06/28/11 12:50	156-60-5	
1,2-Dichloropropane	169	ug/m3	83.0	41.5	88.32		06/28/11 12:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	81.3	40.6	88.32		06/28/11 12:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	81.3	40.6	88.32		06/28/11 12:50	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	124	61.8	88.32		06/28/11 12:50	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	32.3	6.5	88.32		06/28/11 12:50	123-91-1	
Ethanol	1310	ug/m3	168	75.1	88.32		06/28/11 12:50	64-17-5	
Ethylbenzene	ND	ug/m3	77.7	38.9	88.32		06/28/11 12:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	194	97.2	88.32		06/28/11 12:50	87-68-3	
n-Hexane	1960	ug/m3	63.6	31.8	88.32		06/28/11 12:50	110-54-3	
Methylene Chloride	6640	ug/m3	62.7	31.4	88.32		06/28/11 12:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	73.3	36.7	88.32		06/28/11 12:50	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	64.5	32.2	88.32		06/28/11 12:50	1634-04-4	
Styrene	ND	ug/m3	76.8	38.4	88.32		06/28/11 12:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	61.6	30.9	88.32		06/28/11 12:50	79-34-5	
Tetrachloroethene	2190	ug/m3	60.9	30.0	88.32		06/28/11 12:50	127-18-4	
Toluene	264	ug/m3	68.0	34.0	88.32		06/28/11 12:50	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	87.4	43.7	88.32		06/28/11 12:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	97.2	48.6	88.32		06/28/11 12:50	71-55-6	
Trichloroethene	ND	ug/m3	48.6	24.7	88.32		06/28/11 12:50	79-01-6	
Trichlorofluoromethane	ND	ug/m3	97.2	48.6	88.32		06/28/11 12:50	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	141	70.7	88.32		06/28/11 12:50	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: SG-87		Lab ID: 10160700010		Collected: 06/15/11 10:31		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	88.2	44.2	88.32		06/28/11 12:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	88.2	44.2	88.32		06/28/11 12:50	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	83.9	42.0	88.32		06/28/11 12:50	540-84-1	
Vinyl chloride	ND	ug/m3	23.0	11.5	88.32		06/28/11 12:50	75-01-4	
m&p-Xylene	ND	ug/m3	155	77.7	88.32		06/28/11 12:50	179601-23-1	
o-Xylene	ND	ug/m3	77.7	38.9	88.32		06/28/11 12:50	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: AA-061311 Lab ID: 10160440007 Collected: 06/13/11 11:38 Received: 06/15/11 09:40 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
Benzene	ND	ug/m3	0.50	0.25	1.54		06/28/11 11:37	71-43-2	
Benzyl chloride	ND	ug/m3	1.6	0.81	1.54		06/28/11 11:37	100-44-7	
Bromodichloromethane	ND	ug/m3	2.2	1.1	1.54		06/28/11 11:37	75-27-4	
Bromoform	ND	ug/m3	3.2	1.6	1.54		06/28/11 11:37	75-25-2	
Bromomethane	ND	ug/m3	1.2	0.61	1.54		06/28/11 11:37	74-83-9	
1,3-Butadiene	ND	ug/m3	0.69	0.35	1.54		06/28/11 11:37	106-99-0	
2-Butanone (MEK)	3.0	ug/m3	0.92	0.46	1.54		06/28/11 11:37	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.4	0.28	1.54		06/28/11 11:37	75-65-0	
Carbon tetrachloride	ND	ug/m3	0.99	0.49	1.54		06/28/11 11:37	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	0.72	1.54		06/28/11 11:37	108-90-7	
Chloroethane	ND	ug/m3	0.83	0.42	1.54		06/28/11 11:37	75-00-3	
Chloroform	ND	ug/m3	1.5	0.76	1.54		06/28/11 11:37	67-66-3	
Chloromethane	ND	ug/m3	0.65	0.32	1.54		06/28/11 11:37	74-87-3	
Cyclohexane	ND	ug/m3	1.0	0.52	1.54		06/28/11 11:37	110-82-7	
Dibromochloromethane	ND	ug/m3	2.6	1.3	1.54		06/28/11 11:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.5	1.2	1.54		06/28/11 11:37	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	0.92	1.54		06/28/11 11:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.8	0.92	1.54		06/28/11 11:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.8	0.92	1.54		06/28/11 11:37	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.5	0.77	1.54		06/28/11 11:37	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.3	0.63	1.54		06/28/11 11:37	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.63	0.32	1.54		06/28/11 11:37	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.62	1.54		06/28/11 11:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.62	1.54		06/28/11 11:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.62	1.54		06/28/11 11:37	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	0.72	1.54		06/28/11 11:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.4	0.71	1.54		06/28/11 11:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.4	0.71	1.54		06/28/11 11:37	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.2	1.1	1.54		06/28/11 11:37	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.56	0.11	1.54		06/28/11 11:37	123-91-1	
Ethanol	15.3	ug/m3	2.9	1.3	1.54		06/28/11 11:37	64-17-5	
Ethylbenzene	ND	ug/m3	1.4	0.68	1.54		06/28/11 11:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.4	1.7	1.54		06/28/11 11:37	87-68-3	
n-Hexane	2.0	ug/m3	1.1	0.55	1.54		06/28/11 11:37	110-54-3	
Methylene Chloride	6.8	ug/m3	1.1	0.55	1.54		06/28/11 11:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.3	0.64	1.54		06/28/11 11:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.1	0.56	1.54		06/28/11 11:37	1634-04-4	
Styrene	ND	ug/m3	1.3	0.67	1.54		06/28/11 11:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.1	0.54	1.54		06/28/11 11:37	79-34-5	
Tetrachloroethene	18.2	ug/m3	1.1	0.52	1.54		06/28/11 11:37	127-18-4	
Toluene	6.8	ug/m3	1.2	0.59	1.54		06/28/11 11:37	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.5	0.76	1.54		06/28/11 11:37	120-82-1	
1,1,1-Trichloroethane	8.7	ug/m3	1.7	0.85	1.54		06/28/11 11:37	71-55-6	
Trichloroethene	ND	ug/m3	0.85	0.43	1.54		06/28/11 11:37	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.7	0.85	1.54		06/28/11 11:37	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.5	1.2	1.54		06/28/11 11:37	76-13-1	

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160440

Sample: AA-061311      Lab ID: 10160440007      Collected: 06/13/11 11:38      Received: 06/15/11 09:40      Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b> Analytical Method: TO-15									
1,2,4-Trimethylbenzene	ND	ug/m3	1.5	0.77	1.54		06/28/11 11:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.5	0.77	1.54		06/28/11 11:37	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	1.5	0.73	1.54		06/28/11 11:37	540-84-1	
Vinyl chloride	ND	ug/m3	0.40	0.20	1.54		06/28/11 11:37	75-01-4	
m&p-Xylene	2.4J	ug/m3	2.7	1.4	1.54		06/28/11 11:37	179601-23-1	
o-Xylene	ND	ug/m3	1.4	0.68	1.54		06/28/11 11:37	95-47-6	



## ANALYTICAL RESULTS

Project: Klink Cosmo site

Pace Project No.: 10160592

Sample: AA-061411 Lab ID: 10160592005 Collected: 06/14/11 08:57 Received: 06/16/11 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	0.45	0.22	1.38		06/28/11 17:32	71-43-2	
Benzyl chloride	ND	ug/m3	1.4	0.72	1.38		06/28/11 17:32	100-44-7	
Bromodichloromethane	ND	ug/m3	1.9	0.97	1.38		06/28/11 17:32	75-27-4	
Bromoform	ND	ug/m3	2.9	1.4	1.38		06/28/11 17:32	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.55	1.38		06/28/11 17:32	74-83-9	
1,3-Butadiene	ND	ug/m3	0.62	0.31	1.38		06/28/11 17:32	106-99-0	
2-Butanone (MEK)	0.94	ug/m3	0.83	0.41	1.38		06/28/11 17:32	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.3	0.25	1.38		06/28/11 17:32	75-65-0	
Carbon tetrachloride	ND	ug/m3	0.88	0.44	1.38		06/28/11 17:32	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	0.65	1.38		06/28/11 17:32	108-90-7	
Chloroethane	ND	ug/m3	0.75	0.37	1.38		06/28/11 17:32	75-00-3	
Chloroform	ND	ug/m3	1.4	0.68	1.38		06/28/11 17:32	67-66-3	
Chloromethane	ND	ug/m3	0.58	0.29	1.38		06/28/11 17:32	74-87-3	
Cyclohexane	ND	ug/m3	0.94	0.47	1.38		06/28/11 17:32	110-82-7	
Dibromochloromethane	ND	ug/m3	2.3	1.2	1.38		06/28/11 17:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.2	1.1	1.38		06/28/11 17:32	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	0.83	1.38		06/28/11 17:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.7	0.83	1.38		06/28/11 17:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.7	0.83	1.38		06/28/11 17:32	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.4	0.69	1.38		06/28/11 17:32	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	0.57	1.38		06/28/11 17:32	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.57	0.29	1.38		06/28/11 17:32	107-06-2	
1,1,1-Dichloroethene	ND	ug/m3	1.1	0.56	1.38		06/28/11 17:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	0.56	1.38		06/28/11 17:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	0.56	1.38		06/28/11 17:32	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	0.65	1.38		06/28/11 17:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.63	1.38		06/28/11 17:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.63	1.38		06/28/11 17:32	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.9	0.97	1.38		06/28/11 17:32	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.51	0.10	1.38		06/28/11 17:32	123-91-1	
Ethanol	12.3	ug/m3	2.6	1.2	1.38		06/28/11 17:32	64-17-5	
Ethylbenzene	ND	ug/m3	1.2	0.61	1.38		06/28/11 17:32	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	3.0	1.5	1.38		06/28/11 17:32	87-68-3	
n-Hexane	1.3	ug/m3	0.99	0.50	1.38		06/28/11 17:32	110-54-3	
Methylene Chloride	2.0	ug/m3	0.98	0.49	1.38		06/28/11 17:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.1	0.57	1.38		06/28/11 17:32	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.0	0.50	1.38		06/28/11 17:32	1634-04-4	
Styrene	ND	ug/m3	1.2	0.60	1.38		06/28/11 17:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.96	0.48	1.38		06/28/11 17:32	79-34-5	
Tetrachloroethene	ND	ug/m3	0.95	0.47	1.38		06/28/11 17:32	127-18-4	
Toluene	7.1	ug/m3	1.1	0.53	1.38		06/28/11 17:32	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.4	0.68	1.38		06/28/11 17:32	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	0.76	1.38		06/28/11 17:32	71-55-6	
Trichloroethene	ND	ug/m3	0.76	0.39	1.38		06/28/11 17:32	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.5	0.76	1.38		06/28/11 17:32	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.2	1.1	1.38		06/28/11 17:32	76-13-1	

Date: 07/05/2011 03:59 PM

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160592

Sample: AA-061411		Lab ID: 10160592005		Collected: 06/14/11 08:57		Received: 06/16/11 09:50		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	35.6	ug/m3	1.4	0.69	1.38		06/28/11 17:32	95-63-6	
1,3,5-Trimethylbenzene	8.8	ug/m3	1.4	0.69	1.38		06/28/11 17:32	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	1.3	0.66	1.38		06/28/11 17:32	540-84-1	
Vinyl chloride	ND	ug/m3	0.36	0.18	1.38		06/28/11 17:32	75-01-4	
m&p-Xylene	14.9	ug/m3	2.4	1.2	1.38		06/28/11 17:32	179601-23-1	
o-Xylene	7.6	ug/m3	1.2	0.61	1.38		06/28/11 17:32	95-47-6	

Date: 07/05/2011 03:59 PM

### REPORT OF LABORATORY ANALYSIS

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10160592

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: AA-061511 Lab ID: 10160700013 Collected: 06/15/11 10:51 Received: 06/17/11 10:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Benzene	ND	ug/m3	0.64	0.32	1.97		06/29/11 16:10	71-43-2	
Benzyl chloride	ND	ug/m3	2.1	1.0	1.97		06/29/11 16:10	100-44-7	
Bromodichloromethane	ND	ug/m3	2.8	1.4	1.97		06/29/11 16:10	75-27-4	
Bromoform	ND	ug/m3	4.1	2.1	1.97		06/29/11 16:10	75-25-2	
Bromomethane	ND	ug/m3	1.6	0.78	1.97		06/29/11 16:10	74-83-9	
1,3-Butadiene	ND	ug/m3	0.89	0.44	1.97		06/29/11 16:10	106-99-0	
2-Butanone (MEK)	4.7	ug/m3	1.2	0.59	1.97		06/29/11 16:10	78-93-3	
tert-Butyl Alcohol	ND	ug/m3	1.8	0.36	1.97		06/29/11 16:10	75-65-0	
Carbon tetrachloride	ND	ug/m3	1.3	0.63	1.97		06/29/11 16:10	56-23-5	
Chlorobenzene	ND	ug/m3	1.9	0.93	1.97		06/29/11 16:10	108-90-7	
Chloroethane	ND	ug/m3	1.1	0.53	1.97		06/29/11 16:10	75-00-3	
Chloroform	ND	ug/m3	2.0	0.98	1.97		06/29/11 16:10	67-66-3	
Chloromethane	ND	ug/m3	0.83	0.41	1.97		06/29/11 16:10	74-87-3	
Cyclohexane	ND	ug/m3	1.3	0.67	1.97		06/29/11 16:10	110-82-7	
Dibromochloromethane	ND	ug/m3	3.3	1.7	1.97		06/29/11 16:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	3.2	1.6	1.97		06/29/11 16:10	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.4	1.2	1.97		06/29/11 16:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.4	1.2	1.97		06/29/11 16:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.4	1.2	1.97		06/29/11 16:10	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	2.0	0.98	1.97		06/29/11 16:10	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.6	0.81	1.97		06/29/11 16:10	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.81	0.41	1.97		06/29/11 16:10	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.6	0.80	1.97		06/29/11 16:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.6	0.80	1.97		06/29/11 16:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.6	0.80	1.97		06/29/11 16:10	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.9	0.93	1.97		06/29/11 16:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.8	0.91	1.97		06/29/11 16:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.8	0.91	1.97		06/29/11 16:10	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.8	1.4	1.97		06/29/11 16:10	76-14-2	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.72	0.15	1.97		06/29/11 16:10	123-91-1	
Ethanol	22.3	ug/m3	3.7	1.7	1.97		06/29/11 16:10	64-17-5	
Ethylbenzene	1.6J	ug/m3	1.7	0.87	1.97		06/29/11 16:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	4.3	2.2	1.97		06/29/11 16:10	87-68-3	
n-Hexane	0.92J	ug/m3	1.4	0.71	1.97		06/29/11 16:10	110-54-3	
Methylene Chloride	5.8	ug/m3	1.4	0.70	1.97		06/29/11 16:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.6	0.82	1.97		06/29/11 16:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.4	0.72	1.97		06/29/11 16:10	1634-04-4	
Styrene	ND	ug/m3	1.7	0.86	1.97		06/29/11 16:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.4	0.69	1.97		06/29/11 16:10	79-34-5	
Tetrachloroethene	ND	ug/m3	1.4	0.67	1.97		06/29/11 16:10	127-18-4	
Toluene	20.4	ug/m3	1.5	0.76	1.97		06/29/11 16:10	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.0	0.98	1.97		06/29/11 16:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	2.2	1.1	1.97		06/29/11 16:10	71-55-6	
Trichloroethene	ND	ug/m3	1.1	0.55	1.97		06/29/11 16:10	79-01-6	
Trichlorofluoromethane	ND	ug/m3	2.2	1.1	1.97		06/29/11 16:10	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	3.2	1.6	1.97		06/29/11 16:10	76-13-1	

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### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Klink Cosmo site  
Pace Project No.: 10160700

Sample: AA-061511		Lab ID: 10160700013		Collected: 06/15/11 10:51		Received: 06/17/11 10:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	2.0	0.98	1.97		06/29/11 16:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	2.0	0.98	1.97		06/29/11 16:10	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	1.9	0.94	1.97		06/29/11 16:10	540-84-1	
Vinyl chloride	ND	ug/m3	0.51	0.26	1.97		06/29/11 16:10	75-01-4	
m&p-Xylene	18.1	ug/m3	3.5	1.7	1.97		06/29/11 16:10	179601-23-1	
o-Xylene	2.9	ug/m3	1.7	0.87	1.97		06/29/11 16:10	95-47-6	



**ATTACHMENT B**

**SUPPORT DOCUMENTATION**

# CHAIN OF CUSTODY RECORD

PROJECT NO.

SITE NAME

Klink Cosmo

SAMPLERS (PRINT/SIGNATURE)

A. Friedman

DELIVERY SERVICE: Courier

AIRBILL NO.:

## TESTS

TEL VCs + TIC  
TEL SUCS  
Res + Res  
Herbicides  
Metals  
Cyanide  
Hex  
Chromium

# URS

LAB Mitkem

COOLER 1 of 1

PAGE 1 of 1

## BOTTLE TYPE AND PRESERVATIVE

LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	4oz. Glass Jar	8oz. Glass Jar	WL - LEACHATE	GS - SOIL GAS	WC - DRILLING WATER	WO - OCEAN WATER	WS - SURFACE WATER	WF - FLOATING/FREE PRODUCT ON GW TABLE	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (RPMs ONLY)
SG-79	5/6/11	930	6	SG-79 (7-8')	SO	1	X									N1			
SG-78		1015		SG-78 (4-5')												N2			
SG-84		1135		SG-84 (7-8')												N3			
SG-85		1200		SG-85 (7-8')												N4			
SG-86		1230		SG-86 (7-8')												N5			
SG-87		1255		SG-87 (7-8')												N6			
SG-83		1340		SG-83 (7-8')												N7			
SG-82		1400		SG-82 (7-8')												N8			
SG-81		1420		SG-81 (7-8')												N9			
SG-80		1450		SG-80 (7-8')												N10			
DEL-030D	5/9/11	1030	6	DEL-030D (3.5-4.5')	SO	2	X	X	X	X	X	X	X	X		N11			

MATRIX CODES	AA - AMBIENT AIR	SE - SEDIMENT	SH - HAZARDOUS SOLID WASTE	SL - SLUDGE	WP - DRINKING WATER	WW - WASTE WATER	WG - GROUND WATER	SO - SOIL	DC - DRILL CUTTINGS	WC - DRILLING WATER	GS - SOIL GAS	WL - LEACHATE	WO - OCEAN WATER	WS - SURFACE WATER	WF - FLOATING/FREE PRODUCT ON GW TABLE
SAMPLE TYPE CODES	TB# - TRIP BLANK	SD# - MATRIX SPIKE DUPLICATE	FB# - RINSE BLANK	FR# - FIELD REPLICATE	MS# - MATRIX SPIKE	N# - NORMAL ENVIRONMENTAL SAMPLE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE	MS# - MATRIX SPIKE

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
<i>[Signature]</i>	5/9/11	1228	<i>[Signature]</i>	5/9/11	11:00
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
<i>[Signature]</i>			<i>[Signature]</i>	5-10-11	11:00

SPECIAL INSTRUCTIONS  
Please call George Kiskak (urs outfield)  
w/any questions 716 856 5636

Distribution: Original accompanies shipment, copy to coordinator field files

(Rec Recd 4.4)



## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0791**

**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**

Soil Samples were prepared following procedures in laboratory test code: SW5035

### **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.

#### **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:**

No sample in this SDG required analysis at dilution.

**G. Samples:**

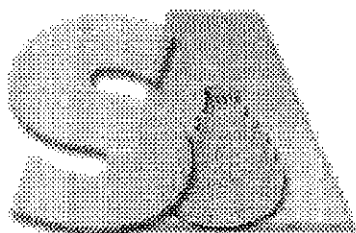
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, 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: 06/08/11





**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.



## **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

4A - FORM IV VOA  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-59105

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Lab File ID: V8A3677.D Lab Sample ID: MB-59105  
Instrument ID: V10  
Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 05/11/2011  
Level: (TRACE or LOW/MED) LOW Time Analyzed: 15:13  
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-59105	LCS-59105	V8A3675.D	14:24
02	SG-79 (7-8')	K0791-01A	V8A3683.D	17:38
03	SG-78 (4-5')	K0791-02A	V8A3684.D	18:03
04	SG-84 (7-8')	K0791-03A	V8A3685.D	18:27
05	SG-85 (7-8')	K0791-04A	V8A3686.D	18:51
06	SG-86 (7-8')	K0791-05A	V8A3687.D	19:15
07	SG-87 (7-8')	K0791-06A	V8A3688.D	19:40
08	SG-82 (7-8')	K0791-08A	V8A3690.D	20:28
09	SG-81 (7-8')	K0791-09A	V8A3691.D	20:53
10	SG-80 (7-8')	K0791-10A	V8A3692.D	21:17
11	DEC-030D (3.5-4.5')	K0791-11A	V8A3693.D	21:41

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

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

CLIENT SAMPLE NO.

MB-59105

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-59105  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A3677.D  
Level: (TRACE/LOW/MED) LOW Date Received: \_\_\_\_\_  
% Moisture: not dec. 0.0 Date Analyzed: 05/11/2011  
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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	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
99-87-6	4-Isopropyltoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	1.1	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

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

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791

Instrument ID: V10 Calibration Date(s): 05/11/2011 05/11/2011

Heated Purge: (Y/N) Y Calibration Time(s): 10:39 12:54

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V8A3668.D</u>	RRF020 = <u>V8A3667.D</u>					
RRF050 = <u>V8A3666.D</u>	RRF100 = <u>V8A3671.D</u>	RRF200 = <u>V8A3670.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.282	0.358	0.411	0.393	0.374	0.364	13.7
Chloromethane	0.288	0.225	0.258	0.262	0.244	0.255	9.1
Vinyl chloride	0.333	0.279	0.325	0.321	0.296	0.311	7.2
Bromomethane	0.237	0.198	0.229	0.234	0.225	0.224	7.0
Chloroethane	0.158	0.138	0.155	0.157	0.146	0.151	5.8
Trichlorofluoromethane	0.643	0.596	0.694	0.687	0.653	0.655	6.0
1,1-Dichloroethene	0.283	0.233	0.266	0.269	0.251	0.260	7.3
Acetone	0.030	0.019	0.020	0.024	0.023	0.023	18.1
Iodomethane	0.367	0.413	0.528	0.498	0.475	0.456	14.4
Carbon disulfide	0.929	0.892	1.043	0.952	0.893	0.942	6.6
Methylene chloride	0.275	0.220	0.247	0.248	0.234	0.245	8.3
trans-1,2-Dichloroethene	0.290	0.246	0.281	0.284	0.271	0.274	6.4
Methyl tert-butyl ether	0.759	0.711	0.828	0.735	0.700	0.746	6.8
1,1-Dichloroethane	0.528	0.451	0.508	0.497	0.466	0.490	6.4
Vinyl acetate	0.786	0.749	0.843	0.757	0.703	0.767	6.7
2-Butanone	0.031	0.028	0.030	0.033	0.031	0.031	5.9
cis-1,2-Dichloroethene	0.306	0.252	0.284	0.286	0.268	0.279	7.3
2,2-Dichloropropane	0.488	0.439	0.506	0.505	0.487	0.485	5.7
Bromochloromethane	0.140	0.119	0.132	0.134	0.126	0.130	6.2
Chloroform	0.616	0.506	0.565	0.561	0.533	0.556	7.4
1,1,1-Trichloroethane	0.546	0.482	0.557	0.555	0.531	0.534	5.8
1,1-Dichloropropene	0.141	0.128	0.144	0.144	0.135	0.138	5.1
Carbon tetrachloride	0.462	0.428	0.512	0.521	0.506	0.486	8.2
1,2-Dichloroethane	0.437	0.374	0.417	0.417	0.399	0.409	5.8
Benzene	1.123	0.933	1.037	1.037	0.968	1.020	7.2
Trichloroethene	0.308	0.262	0.295	0.295	0.280	0.288	6.1
1,2-Dichloropropane	0.280	0.242	0.264	0.264	0.245	0.259	6.0
Dibromomethane	0.189	0.164	0.182	0.181	0.173	0.178	5.6
Bromodichloromethane	0.401	0.348	0.397	0.403	0.390	0.388	5.9
cis-1,3-Dichloropropene	0.414	0.386	0.437	0.445	0.430	0.422	5.5
4-Methyl-2-pentanone	0.194	0.188	0.199	0.190	0.175	0.189	4.8
Toluene	1.171	1.026	1.164	1.185	1.116	1.132	5.7
trans-1,3-Dichloropropene	0.357	0.355	0.403	0.418	0.403	0.387	7.6
1,1,2-Trichloroethane	0.229	0.196	0.213	0.217	0.201	0.211	6.2
1,3-Dichloropropane	0.535	0.434	0.481	0.481	0.451	0.476	8.1
Tetrachloroethene	0.315	0.272	0.328	0.330	0.316	0.312	7.5
2-Hexanone	0.170	0.185	0.191	0.202	0.193	0.188	6.3
Dibromochloromethane	0.368	0.333	0.387	0.398	0.392	0.376	7.0
1,2-Dibromoethane	0.335	0.287	0.321	0.325	0.305	0.315	5.9

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

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791

Instrument ID: V10 Calibration Date(s): 05/11/2011 05/11/2011

Heated Purge: (Y/N) Y Calibration Time(s): 10:39 12:54

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 =	V8A3668.D	RRF020 =	V8A3667.D			
RRF050 =	V8A3666.D	RRF100 =	V8A3671.D	RRF200 =	V8A3670.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	1.034	0.884	1.008	1.035	0.978	0.988	6.3
1,1,1,2-Tetrachloroethane	0.379	0.332	0.384	0.394	0.382	0.374	6.5
Ethylbenzene	0.513	0.467	0.547	0.560	0.526	0.523	6.9
m,p-Xylene	0.602	0.554	0.661	0.678	0.645	0.628	8.0
o-Xylene	0.583	0.543	0.635	0.644	0.612	0.603	6.8
Xylene (Total)	0.596	0.550	0.652	0.667	0.634	0.620	7.6
Styrene	0.886	0.852	1.002	1.045	0.990	0.955	8.6
Bromoform	0.195	0.178	0.212	0.228	0.223	0.207	10.0
Isopropylbenzene	1.457	1.445	1.778	1.806	1.692	1.636	10.6
1,1,2,2-Tetrachloroethane	1.041	0.848	0.845	0.797	0.754	0.857	12.8
Bromobenzene	0.985	0.764	0.875	0.859	0.837	0.864	9.2
1,2,3-Trichloropropane	1.181	1.074	1.177	1.109	1.046	1.117	5.4
n-Propylbenzene	0.872	0.794	0.987	0.957	0.915	0.905	8.4
2-Chlorotoluene	0.955	0.780	0.937	0.895	0.861	0.886	7.8
1,3,5-Trimethylbenzene	2.918	2.690	3.316	3.208	3.070	3.040	8.1
4-Chlorotoluene	0.875	0.737	0.907	0.901	0.870	0.858	8.1
tert-Butylbenzene	2.828	2.925	3.633	3.489	3.332	3.241	10.8
1,2,4-Trimethylbenzene	2.897	2.624	3.199	3.165	3.015	2.980	7.8
sec-Butylbenzene	3.463	3.356	4.191	4.127	3.889	3.805	10.0
4-Isopropyltoluene	2.542	2.594	3.284	3.267	3.081	2.954	12.2
1,3-Dichlorobenzene	1.591	1.334	1.585	1.583	1.511	1.521	7.2
1,4-Dichlorobenzene	1.552	1.305	1.546	1.564	1.488	1.491	7.3
n-Butylbenzene	2.491	2.606	3.261	3.338	3.105	2.960	13.1
1,2-Dichlorobenzene	1.535	1.285	1.478	1.472	1.409	1.436	6.6
1,2-Dibromo-3-chloropropane	0.226	0.180	0.184	0.184	0.168	0.188	11.7
1,2,4-Trichlorobenzene	0.648	0.685	0.853	0.967	0.887	0.808	16.9
Hexachlorobutadiene	0.500	0.505	0.612	0.643	0.584	0.569	11.2
Naphthalene	1.817	1.563	1.794	2.080	1.829	1.817	10.1
1,2,3-Trichlorobenzene	0.667	0.661	0.798	0.895	0.794	0.763	13.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.289	0.310	0.375	0.337	0.318	0.326	9.9
Methyl acetate	0.153	0.135	0.150	0.138	0.122	0.140	9.1
Cyclohexane	0.352	0.377	0.467	0.405	0.372	0.395	11.3
Methylcyclohexane	0.383	0.430	0.567	0.499	0.457	0.467	14.9
1,4-Dioxane	0.003	0.003	0.003	0.003	0.002	0.003	12.4

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10M

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Lab File ID: V8A3710.D BFB Injection Date: 05/12/2011  
Instrument ID: V10 BFB Injection Time: 8:21  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.0
75	30.0 - 60.0% of mass 95	56.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	63.4
175	5.0 - 9.0% of mass 174	4.7 (7.5)1
176	95.0 - 101.0% of mass 174	61.9 (97.8)1
177	5.0 - 9.0% of mass 176	4.2 (6.8)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010M	VSTD05010M	V8A3711.D	05/12/2011	8:35
02	LCS-59115	LCS-59115	V8A3712.D	05/12/2011	9:08
03	LCSD-59115	LCSD-59115	V8A3713.D	05/12/2011	9:33
04	MB-59115	MB-59115	V8A3715.D	05/12/2011	10:21
05	SG-83 (7-8')	K0791-07A	V8A3716.D	05/12/2011	11:05
06	DEC-029D (75-76')	K0791-12B	V8A3717.D	05/12/2011	11:29

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791

Instrument ID: V10 Calibration Date: 05/12/2011 Time: 8:35

Lab File ID: V8A3711.D Init. Calib. Date(s): 05/11/2011 05/11/2011

EPA Sample No. (VSTD####) VSTD05010M Init. Calib. Time(s): 10:39 12:54

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.374	0.377	0.010	0.6	20.0
Ethylbenzene	0.523	0.541	0.010	3.6	20.0
m,p-Xylene	0.628	0.644	0.010	2.5	20.0
o-Xylene	0.603	0.616	0.010	2.2	20.0
Xylene (Total)	0.620	0.635	0.010	2.4	20.0
Styrene	0.955	0.984	0.010	3.0	20.0
Bromoform	0.207	0.201	0.010	-3.0	20.0
Isopropylbenzene	1.636	1.671	0.300	2.1	20.0
1,1,2,2-Tetrachloroethane	0.857	0.912	0.300	6.4	20.0
Bromobenzene	0.864	0.846	0.010	-2.1	20.0
1,2,3-Trichloropropane	1.117	1.209	0.010	8.2	20.0
n-Propylbenzene	0.905	0.932	0.010	3.0	20.0
2-Chlorotoluene	0.886	0.887	0.010	0.2	20.0
1,3,5-Trimethylbenzene	3.040	3.143	0.010	3.4	20.0
4-Chlorotoluene	0.858	0.879	0.010	2.5	20.0
tert-Butylbenzene	3.241	3.335	0.010	2.9	20.0
1,2,4-Trimethylbenzene	2.980	3.033	0.010	1.8	20.0
sec-Butylbenzene	3.805	3.972	0.010	4.4	20.0
4-Isopropyltoluene	2.954	2.999	0.010	1.5	20.0
1,3-Dichlorobenzene	1.521	1.487	0.010	-2.2	20.0
1,4-Dichlorobenzene	1.491	1.432	0.010	-3.9	20.0
n-Butylbenzene	2.960	3.067	0.100	3.6	20.0
1,2-Dichlorobenzene	1.436	1.396	0.010	-2.8	20.0
1,2-Dibromo-3-chloropropane	0.188	0.180	0.010	-4.4	20.0
1,2,4-Trichlorobenzene	0.808	0.668	0.010	-17.3	20.0
Hexachlorobutadiene	0.569	0.507	0.010	-10.8	20.0
1,2,3-Trichlorobenzene	0.763	0.627	0.010	-17.8	20.0
Naphthalene	1.817	1.388	0.010	-23.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.326	0.348	0.010	6.8	20.0
1,4-Dioxane	0.003	0.003	0.010	8.7	20.0
Cyclohexane	0.395	0.420	0.010	6.4	20.0
Methyl acetate	0.140	0.142	0.010	1.6	20.0
Methylcyclohexane	0.467	0.461	0.010	-1.4	20.0



## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0791**

**SW846 8270D, SVOA 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 8270D

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code: SW3550

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: S3  
Instrument Type: GCMS-SEMI  
Description: HP6890 / HP5973  
Manufacturer: Hewlett-Packard  
Model: 6890 / 5973

## 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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

LCSD-59149, recovery is above criteria for Nitrobenzene-d5 at 100% with criteria of (35-100).

### 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-59149 in batch 59149, recovery is above criteria for 2,4-Dimethylphenol at 109% with criteria of (30-105) and Atrazine at 181% with criteria of (50-150).

LCSD-59149 in batch 59149, recovery is above criteria for 2,4-Dimethylphenol at 114% with criteria of (30-105) and Atrazine at 182% with criteria of (50-150).

**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:**

No sample in this SDG required analysis at dilution.

**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 Mitkem, 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: 06/08/11

6 - FORM VI SV-3  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA  
Contract:

Lab Name: MITKEM LABORATORIES  
Lab Code: MITKEM  
Instrument ID: S3  
Case No.: K0791  
SAS No.:  
Calibration Date(s): 04/18/2011  
Calibration Times: 15:13  
17:46  
SDG No.: SK0791  
04/18/2011

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF010 = S3H3262.D RRF020 = S3H3264.D RRF050 = S3H3261C.D RRF080 = S3H3265.D RRF120 = S3H3266.D  
RRF160 = S3H3263.D

COMPOUND	RRF010	RRF020	RRF050	RRF080	RRF120	RRF160	RRF	% RSD
Benzo(k)fluoranthene	1.276	1.325	1.215	1.078	0.904	0.871	1.111	17.3
Benzo(a)pyrene	1.140	1.077	1.021	1.015	0.924	0.884	1.010	9.4
Indeno(1,2,3-cd)pyrene	1.337	1.298	1.203	1.191	1.114	1.101	1.207	7.9
Dibenzo(a,h)anthracene	1.126	1.085	1.003	0.953	0.881	0.862	0.985	10.9
Benzo(g,h,i)perylene	1.202	1.142	1.081	1.073	1.015	1.000	1.086	7.0
1,1'-Biphenyl	1.667	1.583	1.420	1.400	1.287	1.226	1.430	11.8
3-Methylphenol + 4-Methylphenol	1.545	1.483	1.518	1.586	1.560	1.693	1.564	4.6
Acetophenone	2.357	2.252	2.172	2.090	2.072	2.183	2.188	4.8
Atrazine	0.118		0.145	0.116	0.077	0.079	0.107	26.9
Benzaldehyde	0.621	1.086	0.838	0.987	0.875	0.755	0.860	19.1
Caprolactam	0.169	0.174	0.174	0.175	0.175	0.184	0.175	2.7

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP3D

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Lab File ID: S3H3760.D DFTPP Injection Date: 05/18/2011  
Instrument ID: S3 DFTPP Injection Time: 11:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	40.5
68	Less than 2.0% of mass 69	0.5 (1.3)1
69	Mass 69 relative abundance	38.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	47.1
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	24.0
365	Greater than 1.0% of mass 198	3.3
441	Present, but less than mass 443	10.8
442	40.0 - 99.9% of mass 198	73.0
443	17.0 - 23.0% of mass 442	13.5 (18.5)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0503D	SSTD0503D	S3H3761.D	05/18/2011	11:51
02	MB-59149	MB-59149	S3H3762.D	05/18/2011	12:38
03	LCS-59149	LCS-59149	S3H3763.D	05/18/2011	12:58
04	LCSD-59149	LCSD-59149	S3H3764.D	05/18/2011	13:17
05	DEC-030D (3.5-4.5')	K0791-11A	S3H3765.D	05/18/2011	13:37
06	DEC-029D (75-76')	K0791-12A	S3H3766.D	05/18/2011	13:56

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

Lab Name: MITKEM LABORATORIES	Contract:
Lab Code: MITKEM      Case No.: K0791	Mod. Ref No.:      SDG No.: SK0791
Instrument ID: S3	Calibration Date: 05/18/2011      Time: 11:51
Lab File ID: S3H3761.D	Init. Calib. Date(s): 04/18/2011      04/18/2011
EPA Sample No. (SSTD020##) SSTD0503D	Init. Calib. Time(s): 15:13      17:46
GC Column: Rxi-5sil MS      ID: 0.25 (mm)	

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Phenol	1.935	1.653	0.010	-14.6	20.0
Bis(2-chloroethyl) ether	1.412	1.230	0.010	-12.9	20.0
2-Chlorophenol	1.444	1.303	0.010	-9.8	20.0
2-Methylphenol	1.413	1.200	0.010	-15.1	20.0
2,2'-oxybis(1-Chloropropane)	2.368	2.017	0.010	-14.8	20.0
N-Nitroso-di-n-propylamine	1.218	1.103	0.050	-9.5	20.0
Hexachloroethane	0.532	0.549	0.010	3.2	20.0
Nitrobenzene	0.379	0.388	0.010	2.5	20.0
Isophorone	0.756	0.735	0.010	-2.8	20.0
2-Nitrophenol	0.202	0.202	0.010	-0.3	20.0
2,4-Dimethylphenol	0.331	0.308	0.010	-7.0	20.0
2,4-Dichlorophenol	0.310	0.324	0.010	4.5	20.0
Naphthalene	0.996	0.977	0.010	-1.9	20.0
4-Chloroaniline	0.406	0.320	0.010	-21.3	20.0
Bis(2-chloroethoxy)methane	0.438	0.399	0.010	-8.9	20.0
Hexachlorobutadiene	0.157	0.188	0.010	20.1	20.0
4-Chloro-3-methylphenol	0.376	0.366	0.010	-2.6	20.0
2-Methylnaphthalene	0.734	0.730	0.010	-0.5	20.0
Hexachlorocyclopentadiene	0.180	0.152	0.050	-15.7	20.0
2,4,6-Trichlorophenol	0.343	0.347	0.010	1.2	20.0
2,4,5-Trichlorophenol	0.370	0.380	0.010	2.7	20.0
2-Chloronaphthalene	1.033	1.004	0.010	-2.8	20.0
2-Nitroaniline	0.377	0.375	0.010	-0.5	20.0
Dimethylphthalate	1.340	1.335	0.010	-0.4	20.0
Acenaphthylene	1.734	1.667	0.010	-3.8	20.0
2,6-Dinitrotoluene	0.336	0.324	0.010	-3.5	20.0
3-Nitroaniline	0.377	0.310	0.010	-17.8	20.0
Acenaphthene	1.089	1.057	0.010	-3.0	20.0
2,4-Dinitrophenol	0.201	0.168	0.050	-16.6	20.0
4-Nitrophenol	0.209	0.272	0.050	30.2	20.0
Dibenzofuran	1.556	1.523	0.010	-2.1	20.0
2,4-Dinitrotoluene	0.447	0.443	0.010	-0.8	20.0
Diethylphthalate	1.372	1.400	0.010	2.1	20.0
4-Chlorophenyl-phenylether	0.584	0.616	0.010	5.5	20.0
Fluorene	1.299	1.300	0.010	0.1	20.0
4-Nitroaniline	0.411	0.331	0.010	-19.5	20.0
4,6-Dinitro-2-methylphenol	0.160	0.144	0.010	-10.1	20.0
N-Nitrosodiphenylamine	0.654	0.599	0.010	-8.5	20.0
4-Bromophenyl-phenylether	0.194	0.190	0.010	-2.1	20.0
Hexachlorobenzene	0.202	0.199	0.010	-1.3	20.0
Pentachlorophenol	0.128	0.125	0.010	-2.5	20.0
Phenanthrene	1.127	1.039	0.010	-7.8	20.0

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

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791

Instrument ID: S3 Calibration Date: 05/18/2011 Time: 11:51

Lab File ID: S3H3761.D Init. Calib. Date(s): 04/18/2011 04/18/2011

EPA Sample No. (SSTD020##) SSTD0503D Init. Calib. Time(s): 15:13 17:46

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Anthracene	1.136	1.020	0.010	-10.2	20.0
Carbazole	1.143	0.982	0.010	-14.1	20.0
Di-n-butylphthalate	1.310	1.259	0.010	-3.9	20.0
Fluoranthene	1.233	1.132	0.010	-8.2	20.0
Pyrene	1.060	1.070	0.010	0.9	20.0
Butylbenzylphthalate	0.539	0.537	0.010	-0.5	20.0
3,3'-Dichlorobenzidine	0.390	0.367	0.010	-5.8	20.0
Benzo (a) anthracene	1.021	1.019	0.010	-0.2	20.0
Chrysene	1.044	0.991	0.010	-5.1	20.0
Bis (2-ethylhexyl) phthalate	0.692	0.713	0.010	3.0	20.0
Di-n-octylphthalate	1.208	1.299	0.010	7.6	20.0
Benzo (b) fluoranthene	1.060	1.075	0.010	1.4	20.0
Benzo (k) fluoranthene	1.111	1.136	0.010	2.2	20.0
Benzo (a) pyrene	1.010	1.022	0.010	1.2	20.0
Indeno (1,2,3-cd) pyrene	1.207	1.200	0.010	-0.6	20.0
Dibenzo (a,h) anthracene	0.985	0.995	0.010	1.0	20.0
Benzo (g,h,i) perylene	1.086	1.048	0.010	-3.4	20.0
1,1'-Biphenyl	1.430	1.366	0.010	-4.5	20.0
3-Methylphenol + 4-Methylphenol	1.564	1.342	0.010	-14.2	20.0
Acetophenone	2.188	2.077	0.010	-5.1	20.0
Atrazine	0.107	0.139	0.010	30.0	20.0
Benzaldehyde	0.860	0.771	0.010	-10.4	20.0
Caprolactam	0.175	0.152	0.010	-13.0	20.0

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0791**

**SW846 8081B, Organochlorine Pesticides by GC-ECD**

### **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 8081B

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code: SW3550

### **V. INSTRUMENTATION**



The following instrumentation was used

Instrument Code: E5

Instrument Type: GC-ECD

Description: HP6890

Manufacturer: Hewlett-Packard

Model: 6890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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.

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

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

### **E. Dilutions:**

No sample in this SDG required analysis at dilution.

### **F. Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1

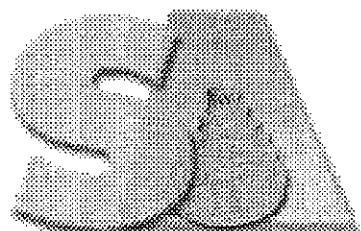
when D% between the two columns is greater than 40%.

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 Mitkem, 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: 06/08/11



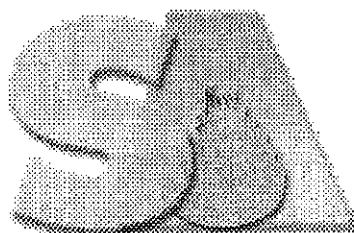
**SPECTRUM ANALYTICAL, INC.**

*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

10A - FORM X PEST-1  
IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

DEC-030D (3.5-4.5')

Lab Name: SPECTRUM ANALYTICAL, INC. FEATURIN Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0791 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0791  
Lab Sample ID: K0791-11A Date(s) Analyzed: 05/13/2011 05/13/2011  
Instrument ID (1): E5 Instrument ID (2): E5  
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Dieldrin	1	5.922	5.870	6.010	5.2	9.1
	2	6.886	6.835	6.975	5.7	
Endrin	1	6.216	6.127	6.267	7.0	287.7
	2	7.176	7.138	7.278	1.8	
alpha-Chlordane	1	5.514	5.465	5.605	22	33.3
	2	6.531	6.479	6.619	17	
gamma-Chlordane	1	5.378	5.324	5.464	14	37.9
	2	6.367	6.315	6.455	19	

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0791**

**SW846 8082A, PCB by GC-ECD**

### **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 8082A

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code: SW3550

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E2

Instrument Type: GC-ECD

Description: HP5890 II +

Manufacturer: Hewlett-Packard

Model: 5890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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.

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

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

### E. Dilutions:

No sample in this SDG required analysis at dilution.

### F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1

when D% between the two columns is greater than 40%.

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 Mitkem, 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: 06/08/11



## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0791**

**SW846 6010C, SW846 7471B, SW846 9012B**

### **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 6010C, SW846 7471B, SW846 9012B

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code:  
SW3050A  
Soil Samples were prepared following procedures in laboratory test code:  
SW7471B  
Soil Samples were prepared following procedures in laboratory test code:

SW9012B

## V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS2  
Instrument Type: CVAA  
Description: FIMS  
Manufacturer: Perkin-Elmer  
Model: FIMS100

Instrument Code: LACHAT1  
Instrument Type: WC  
Description: Flow Injection Analyzer  
Manufacturer: Zellweger Analytics  
Model: Quik-Chem 8000

Instrument Code: OPTIMA3  
Instrument Type: ICP  
Description: Optima ICP-OES  
Manufacturer: Perkin-Elmer  
Model: 4300 DV

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

#### 2. Matrix spike (MS):

Matrix spike was performed on sample: DEC-030D (3.5-4.5')  
(K0791-11AMS) for Cyanide.

Percent recovery was within the QC limits.

**D. Post Digestion Spike (PDS):**

A post-digestion spike was not performed on any sample in this SDG.

**E. Duplicate sample:**

Duplicate analysis was performed on sample: DEC-030D (3.5-4.5')  
(K0791-11ADUP) Cyanide.

Relative percent difference was within the QC limits.

**F. Serial Dilution (SD):**

A serial dilution was not performed on any sample in this SDG.

**G. Samples:**

No 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 Mitkem, 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: 06/08/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0791**

**SW846 7196A, CR+ by Colorimetric Method**

### **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 7196A

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code:  
SW846 7196A

### **V. INSTRUMENTATION**

The following instrumentation was used to perform

Instrument Code: SPEC2

Instrument Type: SP

Description: Spectronic 20 Genesys

Manufacturer: Spectronic Instruments

Model: 4004-000

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. Spikes:**

#### **1. Laboratory Control Spikes (LCS):**

Percent recovery for lab control sample was within the QC limits.

#### **2. Matrix Spike (MS):**

Matrix spike was performed on samples: DEC-029D (75-76") (K0791-12AMS) and DEC-029D (75-76") (K0791-12AMSI).

Percent recovery was within the QC limits.

### **D. Duplicate sample:**

Duplicate analysis was performed on samples: DEC-029D (75-76") (K0791-12AMS) and DEC-029D (75-76") (K0791-12AMSI).

Percent RPD was within the QC limits.

### **E. Dilutions:**

The following samples were analyzed at dilution:

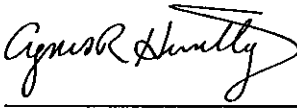
DEC-029D (75-76") (K0791-12AMSI), dilution factor: 20

DEC-029D (75-76") (K0791-12APDS), dilution factor: 2

**F. 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 Mitkem, 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: 06/08/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0791**

### **Subcontracted Analysis**

The following analysis was performed by subcontractor laboratory:

#### **Herbicides:**

Samples were analyzed for the herbicides by Method SW846 8151. This analysis was performed at Mitkem's parent company laboratory, Spectrum Analytical of Agawam, Massachusetts. The entire Spectrum report, including any notes on these analyses is enclosed. The entire Spectrum report, including any narrative notes on these analyses is enclosed. Please note that the Spectrum report is paginated separately from the rest of the data package.

**SDG28361**  
**SB28361, SB28614 General Narrative**

Spectrum Analytical, Inc. submits the enclosed data for the site characterization of subcontracted samples. Samples submitted for analysis by Mitkem Laboratories. This deliverable contains data for two soil samples submitted on May 9<sup>th</sup> and 11<sup>th</sup>, 2011.

In addition to USEPA SW846 method analytical guidelines, the analysis was performed according to criteria dictated by National Environmental Laboratory Accreditation Conference (NELAC) and within the guidelines established by the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) requirements.

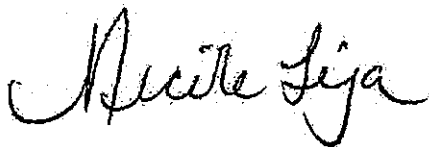
The following observations and/or deviations are observed for the following analyses:

**1. Overall Observations:**

All of the attached submittals are original other than logbook pages and copies of quality assurance data, which may be shared by other cases. For these, the originals are archived within the laboratory. Standard Operating Procedures follow the corresponding methods without modification.

The pages in this report have been numbered consecutively, starting with the general narrative and ending with the page labeled as "Last Page of data Report".

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this electronic data package, has been authorized by the laboratory director as verified by the following signature.



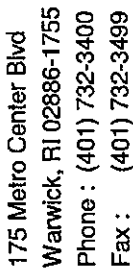
Date: 06/1/11

---

Nicole Leja  
Laboratory Director







A DOCTOR OF SCIENCE IN ANALYTICAL CHEMISTRY, ENVIRONMENTAL IDEOLOGY

**Spectrum Analytical, Inc.**

11 Almaren Drive

Agawam, Massachusetts 01001

**Phone: (413) 789-9018**

**EQuISFacilityCode:** N/A

**Client Sample ID**

Collection Date

**5/11/2011 10:00:00 AM**

## Soil

DUP/MS/MSD	Mitkem Sample ID
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
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98	98
99	99
100	100

**K0791-12C**

**S**

Report Type : ASP-B

Due Date : 6/2/2011

FAX Due Date :

**Report To : Shirley S Ng**

Purchase Order: K0791

EDD Type: EQUIS\_4\_NYSDEC

SB28614 157 ✓

### Requested Test

SW8151 S

1) SW8151 S, CHLORINATED HERBICIDES BY GC-ECD

Use 'Client Sample IDs' when reporting data. If needed, truncate 'Client Sample IDs' to fit on reports. Use full 'Client Sample ID' when generating EDD.

**Comments:** Please report ASP-B in 1 SDG for all samples for K0791.

Date/Time 05/17/11 10:3

Date \_\_\_\_\_

Date/Time

05/17/2011

Page 1 of 1

436

2.6°C 1.0°C

## CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SB28361, SB28614

Client: Mitkem Laboratories

Project: See Chain of Custody / K0791

SDG #: 28361

### I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

### II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

### III. METHODS

Analyses were performed according to SW846 8151A.

### IV. PREPARATION

Soil/Sediment samples were prepared according to SW846 3550B/C.

### V. INSTRUMENTATION

The following equipment was used to analyze SW846 8151A:

HPS19 details: Agilent 7890 series dual column ECD GC with RTX-CLPesticide2 Column (30m, 0.53mmID, 0.42um df) & RTX-CLPesticides Column (30m, 0.53mmID, 0.5um df)

### VI. ANALYSIS

#### A. Calibration:

All quality control samples were within the acceptance criteria with the following exceptions:

#### In sample S104214-CCV3:

Analyte percent difference is outside individual acceptance criteria (15), but within overall method allowances.

Dalapon (36.2%)

This affected the following samples:

1108883-BLK1, 1108883-BS1, 1108883-BSD1, 1108883-DUP1

#### B. Blanks:

All blanks were within the acceptance criteria.

**C. Surrogates:**

All method criteria were met.

**D. Spikes:**

**1. Laboratory Control Samples (LCS):**

All method criteria were met.

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

No matrix spike or matrix spike duplicates were analyzed.

**E. Duplicates:**

A duplicate was analyzed.

In batch 1108883 from source sample DEC-030D(3.5-4.5') (SB28361-01).

In batch 1109381 from source sample DEC-029D (75-76') (SB28614-01).

All method criteria were met.

**F. Internal Standards:**

Internal standards were within the acceptance criteria.

**G. Samples:**

All method criteria were met.

**URS**

TE NAME Sink Cosmo

AMPLERS (PRINT SIGNATURE)  
C. Friedman / 

AIRBILL NO.: 1

05	52-122990-25	G	5/22/11	5001
03	52-122990-05	G	5/23/11	5001

TOTAL NO.# OF  
CONTAINERS

SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (RPMIS ONLY)
REMARKS K0910			
	X	X	
	X	X	
	X	X	
	X	X	
802 class Jar	X	X	
2021 class Jar	X	X	

REMARKS

20910

—

2

52721N

Wil 29 30

1

1

[illegible]

MATRIX CODES	AA - AMBIENT AIR	SL - SLUDGE	WG - GROUND WATER	WL - LEACHATE	WO - OCEAN WATER	LH - HAZARDOUS LIQUID WASTE
	SE - SEDIMENT	WP - DRINKING WATER	SO - SOIL	GS - SOIL GAS	WS - SURFACE WATER	LF - FLOATING/FREE PRODUCT ON GW TABLE
	SH - HAZARDOUS SOLID WASTE	WW - WASTE WATER	DC - DRILL CUTTINGS	WC - DRILLING WATER	WO - WATER FIELD OC	

SAMPLE DATE CODE	TB# - TRIP BLANK TBS# - TRIP BLANK CODE	RB# - RINSE BLANK RBS# - RINSE BLANK CODE	N# - NORMAL ENVIRONMENTAL SAMPLE NCS# - NORMAL ENVIRONMENTAL SAMPLE CODE	(#) - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

THE COPIES		SUB - MATRIX SPARE DUPLICATE		PAF - FIELD REPLICATE		NSP - MATRIX SPIKE	
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME	SPECIAL INSTRUCTIONS	

*(ans tel)*

5/24	1310
------	------

*(ans tel)*

5/24	1311
------	------

8.4

Please call George Kistuk w/any

5/26  
5/26

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME

Revised by	3/21/95	Ch/Car	—
			50

**Distribution:** Original accompanies shipment, copy to coordinator field files



## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0910**

**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**

Soil Samples were prepared following procedures in laboratory test code: SW5035

### **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.

Instrument Code: V5  
Instrument Type: GCMS-VOA  
Description: HP6890 / HP6890  
Manufacturer: Hewlett-Packard  
Model: 6890 / 6890  
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-59410 in batch 59410, recovery is above criteria for Naphthalene at 170% with criteria of (40-125).



LCSD-59410 in batch 59410, is above criteria for Naphthalene at 143% with criteria of (40-125).

**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:**

No sample in this SDG required analysis at dilution.

**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 Mitkem, 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: 06/24/11

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-59410

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Lab Sample ID: LCS-59410 LCS Lot No.: \_\_\_\_\_  
Date Extracted: 05/26/2011 Date Analyzed (1): 05/27/2011

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	145.3230	97		83 - 125
Styrene	50.0000	0.0000	48.6865	97		75 - 125
Bromoform	50.0000	0.0000	51.1315	102		55 - 135
Isopropylbenzene	50.0000	0.0000	47.6893	95		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	50.8115	102		55 - 130
Bromobenzene	50.0000	0.0000	48.9660	98		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	49.9869	100		65 - 130
n-Propylbenzene	50.0000	0.0000	48.5101	97		65 - 135
2-Chlorotoluene	50.0000	0.0000	49.0642	98		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	48.1508	96		65 - 135
4-Chlorotoluene	50.0000	0.0000	46.5582	93		75 - 125
tert-Butylbenzene	50.0000	0.0000	48.8375	98		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.7847	98		65 - 135
sec-Butylbenzene	50.0000	0.0000	48.1609	96		65 - 130
4-Isopropyltoluene	50.0000	0.0000	48.0063	96		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	47.9906	96		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	46.5948	93		70 - 125
n-Butylbenzene	50.0000	0.0000	48.0852	96		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	49.0749	98		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	55.9386	112		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	48.2154	96		65 - 130
Hexachlorobutadiene	50.0000	0.0000	47.2336	94		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	49.0393	98		60 - 135
Naphthalene	50.0000	0.0000	84.7579	170	*	40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	43.9283	88		70 - 130
1,4-Dioxane	1000.0000	0.0000	1109.4430	111		70 - 130
Cyclohexane	50.0000	0.0000	44.2424	88		70 - 130
Methyl acetate	50.0000	0.0000	53.5897	107		70 - 130
Methylcyclohexane	50.0000	0.0000	42.7853	86		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 73 outside limits

COMMENTS: \_\_\_\_\_

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-59410

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K0910

Mod. Ref No.:

SDG No.: SK0910

Lab Sample ID: LCSD-59410

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	QC LIMITS	
						RPD	REC.
Bromoform	50.0000	51.8049	104		2	40	55 - 135
Isopropylbenzene	50.0000	47.7136	95		0	40	75 - 130
1,1,2,2-Tetrachloroethane	50.0000	52.0528	104		2	40	55 - 130
Bromobenzene	50.0000	49.5438	99		1	40	65 - 120
1,2,3-Trichloropropane	50.0000	49.8391	100		0	40	65 - 130
n-Propylbenzene	50.0000	47.0307	94		3	40	65 - 135
2-Chlorotoluene	50.0000	47.9192	96		2	40	70 - 130
1,3,5-Trimethylbenzene	50.0000	49.0431	98		2	40	65 - 135
4-Chlorotoluene	50.0000	48.8237	98		5	40	75 - 125
tert-Butylbenzene	50.0000	48.2832	97		1	40	65 - 130
1,2,4-Trimethylbenzene	50.0000	48.3058	97		1	40	65 - 135
sec-Butylbenzene	50.0000	47.6879	95		1	40	65 - 130
4-Isopropyltoluene	50.0000	47.5539	95		1	40	75 - 135
1,3-Dichlorobenzene	50.0000	48.7194	97		1	40	70 - 125
1,4-Dichlorobenzene	50.0000	47.4391	95		2	40	70 - 125
n-Butylbenzene	50.0000	47.6705	95		1	40	65 - 140
1,2-Dichlorobenzene	50.0000	49.5374	99		1	40	75 - 120
1,2-Dibromo-3-chloropropan	50.0000	51.7820	104		7	40	40 - 135
1,2,4-Trichlorobenzene	50.0000	50.0967	100		4	40	65 - 130
Hexachlorobutadiene	50.0000	46.5740	93		1	40	55 - 140
1,2,3-Trichlorobenzene	50.0000	49.7326	99		1	40	60 - 135
Naphthalene	50.0000	71.5728	143	*	17	40	40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	42.9137	86		2	40	70 - 130
1,4-Dioxane	1000.0000	1124.7562	112		1	40	70 - 130
Cyclohexane	50.0000	42.3583	85		3	40	70 - 130
Methyl acetate	50.0000	48.5283	97		10	40	70 - 130
Methylcyclohexane	50.0000	41.6121	83		4	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 73 outside limits

Spike Recovery: 1 out of 73 outside limits

COMMENTS:

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842

Instrument ID: V5 Calibration Date(s): 05/27/2011 05/27/2011

Heated Purge: (Y/N) Y Calibration Time(s): 21:13 23:01

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V5M8799.D</u>	RRF020 = <u>V5M8800.D</u>					
RRF050 = <u>V5M8801.D</u>	RRF100 = <u>V5M8802.D</u>	RRF200 = <u>V5M8803.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	0.908	0.929	0.818	0.881	0.847	0.876	5.1
1,1,1,2-Tetrachloroethane	0.279	0.305	0.277	0.291	0.291	0.289	3.8
Ethylbenzene	0.467	0.513	0.438	0.476	0.443	0.468	6.4
m,p-Xylene	0.582	0.628	0.537	0.579	0.487	0.563	9.4
o-Xylene	0.559	0.581	0.517	0.568	0.507	0.546	6.0
Xylene (Total)	0.574	0.612	0.531	0.575	0.493	0.557	8.2
Styrene	0.922	1.023	0.920	0.977	0.878	0.944	6.0
Bromoform	0.141	0.165	0.169	0.178	0.181	0.167	9.4
Isopropylbenzene	1.425	1.600	1.347	1.509	1.393	1.455	6.9
1,1,2,2-Tetrachloroethane	0.851	0.923	0.889	0.877	0.797	0.868	5.4
Bromobenzene	0.705	0.768	0.682	0.737	0.675	0.713	5.5
1,2,3-Trichloropropane	0.917	0.916	0.885	0.892	0.837	0.890	3.7
n-Propylbenzene	0.795	0.920	0.766	0.854	0.768	0.820	8.0
2-Chlorotoluene	0.688	0.796	0.686	0.749	0.684	0.721	7.0
1,3,5-Trimethylbenzene	2.657	2.939	2.522	2.700	2.356	2.635	8.2
4-Chlorotoluene	0.774	0.814	0.693	0.767	0.680	0.746	7.6
tert-Butylbenzene	2.821	3.154	2.636	2.880	2.536	2.805	8.5
1,2,4-Trimethylbenzene	2.616	2.825	2.453	2.647	2.396	2.587	6.6
sec-Butylbenzene	3.845	4.178	3.498	3.847	3.364	3.746	8.6
4-Isopropyltoluene	2.630	2.841	2.446	2.686	2.360	2.593	7.4
1,3-Dichlorobenzene	1.175	1.353	1.223	1.306	1.234	1.259	5.6
1,4-Dichlorobenzene	1.365	1.444	1.284	1.354	1.238	1.337	5.9
n-Butylbenzene	3.134	3.564	3.001	3.322	2.825	3.169	9.0
1,2-Dichlorobenzene	1.118	1.257	1.123	1.168	1.053	1.144	6.6
1,2-Dibromo-3-chloropropane	0.083	0.092	0.093	0.098	0.099	0.093	6.6
1,2,4-Trichlorobenzene	0.653	0.710	0.679	0.750	0.712	0.701	5.3
Hexachlorobutadiene	0.390	0.461	0.384	0.451	0.417	0.421	8.2
1,2,3-Trichlorobenzene	0.570	0.622	0.594	0.628	0.607	0.604	3.8
Naphthalene	0.152	0.339	0.667	0.841	0.965	0.593	57.4
1,1,2-Trichloro-1,2,2-trifluoroethane	0.196	0.212	0.159	0.194	0.186	0.189	10.1
1,4-Dioxane	0.001	0.002	0.002	0.002	0.002	0.002	14.6
Cyclohexane	0.615	0.651	0.505	0.605	0.559	0.587	9.6
Methyl acetate	0.134	0.167	0.136	0.126	0.118	0.136	13.7
Methylcyclohexane	0.471	0.518	0.400	0.504	0.478	0.474	9.6

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
 Instrument ID: V5 Calibration Date(s): 05/27/2011 05/27/2011  
 Heated Purge: (Y/N) Y Calibration Time(s): 21:13 23:01  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = V5M8799.D	RRF020 = V5M8800.D					
RRF050 = V5M8801.D	RRF100 = V5M8802.D	RRF200 = V5M8803.D					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.225	0.227	0.181	0.241	0.209	0.217	10.5
Chloromethane	0.372	0.398	0.352	0.379	0.362	0.373	4.7
Vinyl chloride	0.249	0.274	0.235	0.257	0.261	0.255	5.5
Bromomethane	0.158	0.170	0.146	0.151	0.129	0.151	10.2
Chloroethane	0.128	0.131	0.111	0.121	0.104	0.119	9.6
Trichlorofluoromethane	0.305	0.330	0.268	0.312	0.293	0.302	7.6
1,1-Dichloroethene	0.167	0.182	0.156	0.170	0.160	0.167	6.1
Acetone	0.030	0.021	0.016	0.014	0.014	0.019	35.6
Iodomethane	0.322	0.355	0.319	0.338	0.326	0.332	4.5
Carbon disulfide	0.682	0.708	0.636	0.695	0.644	0.673	4.7
Methylene chloride	0.315	0.318	0.288	0.294	0.278	0.298	5.8
trans-1,2-Dichloroethene	0.287	0.314	0.270	0.307	0.293	0.294	5.8
Methyl tert-butyl ether	0.607	0.625	0.596	0.609	0.587	0.605	2.4
1,1-Dichloroethane	0.619	0.669	0.588	0.645	0.601	0.624	5.3
Vinyl acetate	1.143	1.218	1.144	1.151	1.028	1.137	6.0
2-Butanone	0.032	0.032	0.034	0.034	0.033	0.033	3.1
cis-1,2-Dichloroethene	0.295	0.315	0.291	0.317	0.297	0.303	3.9
2,2-Dichloropropane	0.359	0.385	0.340	0.378	0.350	0.362	5.2
Bromochloromethane	0.115	0.123	0.118	0.124	0.119	0.120	3.0
Chloroform	0.513	0.523	0.477	0.502	0.470	0.497	4.5
1,1,1-Trichloroethane	0.347	0.372	0.326	0.362	0.350	0.351	4.9
1,1-Dichloropropene	0.122	0.135	0.121	0.132	0.124	0.127	5.0
Carbon tetrachloride	0.284	0.310	0.269	0.301	0.285	0.290	5.6
1,2-Dichloroethane	0.278	0.292	0.268	0.278	0.263	0.276	4.0
Benzene	1.189	1.271	1.123	1.186	1.077	1.169	6.3
Trichloroethene	0.232	0.262	0.228	0.257	0.240	0.244	6.2
1,2-Dichloropropane	0.356	0.362	0.339	0.342	0.319	0.343	4.9
Dibromomethane	0.150	0.164	0.155	0.158	0.150	0.156	3.9
Bromodichloromethane	0.343	0.357	0.334	0.356	0.337	0.345	3.1
cis-1,3-Dichloropropene	0.409	0.465	0.435	0.455	0.429	0.439	5.0
4-Methyl-2-pentanone	0.293	0.342	0.348	0.366	0.340	0.338	8.1
Toluene	1.069	1.134	0.982	1.050	0.958	1.039	6.8
trans-1,3-Dichloropropene	0.330	0.364	0.330	0.346	0.336	0.341	4.2
1,1,2-Trichloroethane	0.185	0.193	0.175	0.185	0.175	0.183	4.0
1,3-Dichloropropane	0.541	0.538	0.503	0.524	0.519	0.525	2.9
Tetrachloroethene	0.272	0.285	0.249	0.284	0.281	0.274	5.5
2-Hexanone	0.341	0.317	0.324	0.347	0.345	0.335	4.0
Dibromochloromethane	0.292	0.313	0.304	0.318	0.326	0.311	4.2
1,2-Dibromoethane	0.263	0.280	0.272	0.283	0.285	0.277	3.4

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
 Instrument ID: V10 Calibration Date(s): 05/31/2011 05/31/2011  
 Heated Purge: (Y/N) Y Calibration Time(s): 10:38 13:52  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V8A3857.D</u>	RRF020 = <u>V8A3856.D</u>					
RRF050 = <u>V8A3855.D</u>	RRF100 = <u>V8A3861.D</u>	RRF200 = <u>V8A3860.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.151	0.249	0.273	0.247	0.234	0.231	20.2
Chloromethane	0.244	0.223	0.249	0.216	0.203	0.227	8.5
Vinyl chloride	0.277	0.255	0.284	0.247	0.231	0.259	8.4
Bromomethane	0.197	0.165	0.188	0.175	0.167	0.179	7.7
Chloroethane	0.136	0.117	0.133	0.119	0.112	0.124	8.6
Trichlorofluoromethane	0.470	0.532	0.591	0.532	0.526	0.530	8.0
1,1-Dichloroethene	0.257	0.236	0.256	0.232	0.227	0.242	5.8
Acetone	0.030	0.024	0.023	0.022	0.019	0.024	17.4
Iodomethane	0.325	0.375	0.438	0.406	0.376	0.384	10.9
Carbon disulfide	0.867	0.803	0.895	0.799	0.775	0.828	6.1
Methylene chloride	0.335	0.234	0.231	0.221	0.210	0.246	20.6
trans-1,2-Dichloroethene	0.283	0.249	0.276	0.253	0.249	0.262	6.3
Methyl tert-butyl ether	0.685	0.537	0.561	0.615	0.592	0.598	9.5
1,1-Dichloroethane	0.565	0.504	0.549	0.496	0.471	0.517	7.5
Vinyl acetate	0.868	0.720	0.767	0.805	0.753	0.783	7.2
2-Butanone	0.047	0.032	0.035	0.042	0.039	0.039	15.2
cis-1,2-Dichloroethene	0.315	0.275	0.296	0.277	0.262	0.285	7.2
2,2-Dichloropropane	0.449	0.436	0.491	0.435	0.433	0.449	5.5
Bromochloromethane	0.139	0.112	0.122	0.120	0.113	0.121	9.0
Chloroform	0.591	0.530	0.567	0.535	0.513	0.547	5.7
1,1,1-Trichloroethane	0.490	0.489	0.539	0.494	0.489	0.500	4.4
1,1-Dichloropropene	0.131	0.136	0.148	0.135	0.130	0.136	5.3
Carbon tetrachloride	0.387	0.420	0.484	0.439	0.451	0.436	8.3
1,2-Dichloroethane	0.425	0.356	0.374	0.381	0.365	0.380	7.0
Benzene	1.160	1.046	1.125	1.040	0.987	1.071	6.5
Trichloroethene	0.271	0.265	0.285	0.266	0.260	0.269	3.5
1,2-Dichloropropane	0.311	0.280	0.290	0.273	0.257	0.282	7.2
Dibromomethane	0.195	0.160	0.168	0.179	0.168	0.174	7.8
Bromodichloromethane	0.401	0.358	0.390	0.386	0.376	0.382	4.3
cis-1,3-Dichloropropene	0.434	0.388	0.430	0.428	0.417	0.419	4.4
4-Methyl-2-pentanone	0.281	0.216	0.223	0.306	0.287	0.263	15.4
Toluene	1.159	1.126	1.214	1.140	1.119	1.152	3.3
trans-1,3-Dichloropropene	0.402	0.324	0.376	0.394	0.384	0.376	8.2
1,1,2-Trichloroethane	0.238	0.194	0.202	0.217	0.205	0.211	8.1
1,3-Dichloropropane	0.563	0.462	0.478	0.481	0.460	0.489	8.7
Tetrachloroethene	0.246	0.294	0.312	0.283	0.288	0.284	8.5
2-Hexanone	0.288	0.209	0.228	0.304	0.286	0.263	15.9
Dibromochloromethane	0.362	0.325	0.351	0.360	0.362	0.352	4.4
1,2-Dibromoethane	0.346	0.290	0.301	0.322	0.311	0.314	6.9

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910

Instrument ID: V10 Calibration Date(s): 05/31/2011 05/31/2011

Heated Purge: (Y/N) Y Calibration Time(s): 10:38 13:52

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V8A3857.D</u>	RRF020 = <u>V8A3856.D</u>					
RRF050 = <u>V8A3855.D</u>	RRF100 = <u>V8A3861.D</u>	RRF200 = <u>V8A3860.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	1.005	0.980	1.046	0.955	0.956	0.988	3.9
1,1,1,2-Tetrachloroethane	0.339	0.347	0.372	0.349	0.350	0.351	3.5
Ethylbenzene	0.450	0.538	0.579	0.516	0.522	0.521	8.9
m,p-Xylene	0.520	0.655	0.698	0.629	0.641	0.629	10.5
o-Xylene	0.511	0.614	0.658	0.597	0.607	0.597	9.0
Xylene (Total)	0.517	0.642	0.684	0.618	0.630	0.618	10.0
Styrene	0.867	0.948	1.039	0.989	1.000	0.968	6.8
Bromoform	0.210	0.168	0.184	0.209	0.210	0.196	9.8
Isopropylbenzene	1.140	1.741	1.850	1.652	1.725	1.622	17.2
1,1,2,2-Tetrachloroethane	1.142	0.913	0.895	0.897	0.876	0.945	11.8
Bromobenzene	0.892	0.872	0.880	0.787	0.786	0.843	6.2
1,2,3-Trichloropropane	1.412	1.088	1.079	1.135	1.105	1.164	12.1
n-Propylbenzene	0.680	1.058	1.080	0.895	0.937	0.930	17.2
2-Chlorotoluene	0.769	1.011	0.992	0.849	0.866	0.897	11.4
1,3,5-Trimethylbenzene	2.325	3.591	3.630	3.044	3.167	3.151	16.8
4-Chlorotoluene	0.804	0.959	0.986	0.862	0.882	0.898	8.3
tert-Butylbenzene	2.351	3.430	3.818	3.227	3.401	3.245	16.8
1,2,4-Trimethylbenzene	2.336	3.456	3.518	3.012	3.111	3.086	15.3
sec-Butylbenzene	2.601	4.775	4.805	3.946	4.168	4.059	22.1
4-Isopropyltoluene	1.972	3.473	3.552	2.993	3.214	3.041	20.9
1,3-Dichlorobenzene	1.503	1.651	1.639	1.487	1.514	1.559	5.1
1,4-Dichlorobenzene	1.619	1.620	1.600	1.485	1.499	1.565	4.3
n-Butylbenzene	2.275	3.745	3.907	3.312	3.475	3.343	19.1
1,2-Dichlorobenzene	1.493	1.537	1.508	1.388	1.403	1.466	4.5
1,2-Dibromo-3-chloropropane	0.231	0.162	0.158	0.189	0.179	0.184	15.9
1,2,4-Trichlorobenzene	0.909	0.779	0.772	0.865	0.850	0.835	7.0
Hexachlorobutadiene	0.406	0.594	0.581	0.529	0.553	0.533	14.1
1,2,3-Trichlorobenzene	0.933	0.744	0.714	0.797	0.771	0.792	10.7
Naphthalene	3.016	1.724	1.520	2.179	1.984	2.085	27.7
1,1,2-Trichloro-1,2,2-trifluoroethane	0.217	0.298	0.324	0.295	0.292	0.285	14.1
1,4-Dioxane	0.003	0.002	0.002	0.003	0.003	0.002	21.3
Cyclohexane	0.295	0.427	0.459	0.407	0.402	0.398	15.5
Methyl acetate	0.148	0.097	0.094	0.119	0.111	0.114	19.0
Methylcyclohexane	0.254	0.477	0.515	0.456	0.463	0.433	23.7

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10T

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Lab File ID: V8A3863.D BFB Injection Date: 05/31/2011  
Instrument ID: V10 BFB Injection Time: 14:56  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	52.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	66.1
175	5.0 - 9.0% of mass 174	5.1 (7.7)1
176	95.0 - 101.0% of mass 174	63.5 (96.1)1
177	5.0 - 9.0% of mass 176	4.1 (6.5)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010T	VSTD05010T	V8A3864.D	05/31/2011	15:11
02	LCS-59490	LCS-59490	V8A3865.D	05/31/2011	15:36
03	LCSD-59490	LCSD-59490	V8A3866.D	05/31/2011	16:01
04	MB-59490	MB-59490	V8A3868.D	05/31/2011	16:51
05	DEC-065D(9-10')	K0910-03B	V8A3871.D	05/31/2011	18:07
06	DEC-065D(14-15')	K0910-04B	V8A3872.D	05/31/2011	18:32



7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910

Instrument ID: V10 Calibration Date: 05/31/2011 Time: 15:11

Lab File ID: V8A3864.D Init. Calib. Date(s): 05/31/2011 05/31/2011

EPA Sample No. (VSTD####) VSTD05010T Init. Calib. Time(s): 10:38 13:52

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.231	0.246	0.100	6.4	20.0
Chloromethane	0.227	0.221	0.010	-2.7	20.0
Vinyl chloride	0.259	0.244	0.010	-5.5	20.0
Bromomethane	0.179	0.169	0.010	-5.2	20.0
Chloroethane	0.124	0.117	0.010	-5.0	20.0
Trichlorofluoromethane	0.530	0.525	0.010	-1.0	20.0
1,1-Dichloroethene	0.242	0.234	0.100	-3.3	20.0
Acetone	0.024	0.020	0.010	-15.3	20.0
Iodomethane	0.384	0.406	0.010	5.8	20.0
Carbon disulfide	0.828	0.802	0.010	-3.1	20.0
Methylene chloride	0.246	0.216	0.010	-12.3	20.0
trans-1,2-Dichloroethene	0.262	0.260	0.010	-0.6	20.0
Methyl tert-butyl ether	0.598	0.558	0.010	-6.6	20.0
1,1-Dichloroethane	0.517	0.508	0.010	-1.7	20.0
Vinyl acetate	0.783	0.767	0.010	-2.0	20.0
2-Butanone	0.039	0.037	0.010	-6.2	20.0
cis-1,2-Dichloroethene	0.285	0.286	0.010	0.5	20.0
2,2-Dichloropropane	0.449	0.455	0.010	1.4	20.0
Bromochloromethane	0.121	0.119	0.010	-1.9	20.0
Chloroform	0.547	0.545	0.010	-0.4	20.0
1,1,1-Trichloroethane	0.500	0.492	0.010	-1.8	20.0
1,1-Dichloropropene	0.136	0.137	0.010	0.5	20.0
Carbon tetrachloride	0.436	0.425	0.010	-2.6	20.0
1,2-Dichloroethane	0.380	0.360	0.010	-5.3	20.0
Benzene	1.071	1.059	0.010	-1.2	20.0
Trichloroethene	0.269	0.268	0.010	-0.4	20.0
1,2-Dichloropropane	0.282	0.277	0.010	-1.9	20.0
Dibromomethane	0.174	0.167	0.010	-3.9	20.0
Bromodichloromethane	0.382	0.373	0.010	-2.5	20.0
cis-1,3-Dichloropropene	0.419	0.415	0.010	-1.1	20.0
4-Methyl-2-pentanone	0.263	0.242	0.010	-7.7	20.0
Toluene	1.152	1.126	0.010	-2.2	20.0
trans-1,3-Dichloropropene	0.376	0.369	0.010	-1.8	20.0
1,1,2-Trichloroethane	0.211	0.204	0.010	-3.4	20.0
1,3-Dichloropropane	0.489	0.462	0.010	-5.5	20.0
Tetrachloroethene	0.284	0.270	0.010	-5.0	20.0
2-Hexanone	0.263	0.243	0.010	-7.6	20.0
Dibromochloromethane	0.352	0.336	0.010	-4.7	20.0
1,2-Dibromoethane	0.314	0.297	0.010	-5.4	20.0
Chlorobenzene	0.988	0.960	0.010	-2.9	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910

Instrument ID: V10 Calibration Date: 05/31/2011 Time: 15:11

Lab File ID: V8A3864.D Init. Calib. Date(s): 05/31/2011 05/31/2011

EPA Sample No. (VSTD####) VSTD05010T Init. Calib. Time(s): 10:38 13:52

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.351	0.337	0.010	-4.1	20.0
Ethylbenzene	0.521	0.505	0.010	-3.0	20.0
m,p-Xylene	0.629	0.610	0.010	-3.0	20.0
o-Xylene	0.597	0.580	0.010	-2.9	20.0
Xylene (Total)	0.618	0.600	0.010	-3.0	20.0
Styrene	0.968	0.959	0.010	-1.0	20.0
Bromoform	0.196	0.177	0.010	-9.9	20.0
Isopropylbenzene	1.622	1.550	0.300	-4.4	20.0
1,1,2,2-Tetrachloroethane	0.945	0.833	0.300	-11.8	20.0
Bromobenzene	0.843	0.777	0.010	-7.9	20.0
1,2,3-Trichloropropane	1.164	1.009	0.010	-13.3	20.0
n-Propylbenzene	0.930	0.868	0.010	-6.7	20.0
2-Chlorotoluene	0.897	0.818	0.010	-8.8	20.0
1,3,5-Trimethylbenzene	3.151	2.933	0.010	-6.9	20.0
4-Chlorotoluene	0.898	0.823	0.010	-8.4	20.0
tert-Butylbenzene	3.245	3.093	0.010	-4.7	20.0
1,2,4-Trimethylbenzene	3.086	2.895	0.010	-6.2	20.0
sec-Butylbenzene	4.059	3.874	0.010	-4.6	20.0
4-Isopropyltoluene	3.041	2.921	0.010	-3.9	20.0
1,3-Dichlorobenzene	1.559	1.424	0.010	-8.7	20.0
1,4-Dichlorobenzene	1.565	1.418	0.010	-9.4	20.0
n-Butylbenzene	3.343	3.212	0.100	-3.9	20.0
1,2-Dichlorobenzene	1.466	1.335	0.010	-8.9	20.0
1,2-Dibromo-3-chloropropane	0.184	0.146	0.010	(-20.7)	20.0
1,2,4-Trichlorobenzene	0.835	0.719	0.010	-13.9	20.0
Hexachlorobutadiene	0.533	0.525	0.010	-1.4	20.0
1,2,3-Trichlorobenzene	0.792	0.663	0.010	-16.2	20.0
Naphthalene	2.085	1.636	0.010	(-21.5)	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.285	0.278	0.010	-2.3	20.0
1,4-Dioxane	0.002	(0.002)	0.010	-8.9	20.0
Cyclohexane	0.398	0.386	0.010	-3.0	20.0
Methyl acetate	0.114	0.092	0.010	-18.8	20.0
Methylcyclohexane	0.433	0.417	0.010	-3.7	20.0

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0910**

**SW846 8270D, SVOA 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 8270D

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code: SW3550

### **V. INSTRUMENTATION**

The following instrumentation was used  
Instrument Code: S3  
Instrument Type: GCMS-SEMI  
Description: HP6890 / HP5973  
Manufacturer: Hewlett-Packard  
Model: 6890 / 5973

## **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-59526 in batch 59526, recovery is above criteria for 2-Methylnaphthalene at 108% with criteria of (45-105).

#### **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:**

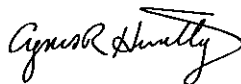
No sample in this SDG required analysis at dilution.

**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 Mitkem, 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:

A handwritten signature in cursive script, appearing to read "Agnes R. Huntley".

Date: 06/24/11

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP3P

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Lab File ID: S3H4090.D DFTPP Injection Date: 06/06/2011  
Instrument ID: S3 DFTPP Injection Time: 11:58

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	44.2
70	Less than 2.0% of mass 69	0.4 (0.9)1
127	40.0 - 60.0% of mass 198	50.5
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	26.2
365	Greater than 1.0% of mass 198	3.3
441	Present, but less than mass 443	12.3
442	40.0 - 99.9% of mass 198	83.4
443	17.0 - 23.0% of mass 442	15.9 (19.1)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253P	SSTD0253P	S3H4091.D	06/06/2011	12:23
02	MB-59526	MB-59526	S3H4105.D	06/06/2011	17:01
03	LCSD-59526	LCSD-59526	S3H4107.D	06/06/2011	17:36
04	DEC-066D (24-25)	K0910-01A	S3H4108.D	06/06/2011	18:11
05	DEC-065D(9-1 0')	K0910-03A	S3H4109.D	06/06/2011	18:29
06	DEC-065D(14- 15')	K0910-04A	S3H4110.D	06/06/2011	18:46

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910

Instrument ID: S3 Calibration Date: 06/06/2011 Time: 12:23

Lab File ID: S3H4091.D Init. Calib. Date(s): 05/19/2011 05/19/2011

EPA Sample No. (SSTD020##) SSTD0253P Init. Calib. Time(s): 12:17 14:08

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.838	1.657	0.010	-9.9	20.0
Bis(2-chloroethyl)ether	1.376	1.174	0.010	-14.7	20.0
2-Chlorophenol	1.444	1.362	0.010	-5.7	20.0
2-Methylphenol	1.383	1.295	0.010	-6.3	20.0
2,2'-oxybis(1-Chloropropane)	2.261	1.989	0.010	-12.0	20.0
N-Nitroso-di-n-propylamine	1.245	1.180	0.050	-5.2	20.0
Hexachloroethane	0.583	0.633	0.010	8.7	20.0
Nitrobenzene	0.417	0.527	0.010	26.3	20.0
Isophorone	0.760	0.739	0.010	-2.8	20.0
2-Nitrophenol	0.213	0.185	0.010	-12.9	20.0
2,4-Dimethylphenol	0.405	0.344	0.010	-15.2	20.0
2,4-Dichlorophenol	0.340	0.315	0.010	-7.4	20.0
Naphthalene	1.042	1.010	0.010	-3.1	20.0
4-Chloroaniline	0.455	0.414	0.010	-9.0	20.0
Bis(2-chloroethoxy)methane	0.428	0.385	0.010	-9.9	20.0
Hexachlorobutadiene	0.202	0.214	0.010	5.8	20.0
4-Chloro-3-methylphenol	0.396	0.397	0.010	0.3	20.0
2-Methylnaphthalene	0.794	1.040	0.010	31.0	20.0
Hexachlorocyclopentadiene	0.300	0.324	0.050	8.1	20.0
2,4,6-Trichlorophenol	0.387	0.374	0.010	-3.3	20.0
2,4,5-Trichlorophenol	0.417	0.414	0.010	-0.9	20.0
2-Chloronaphthalene	1.114	1.118	0.010	0.3	20.0
2-Nitroaniline	0.429	0.408	0.010	-5.0	20.0
Dimethylphthalate	1.479	1.468	0.010	-0.7	20.0
Acenaphthylene	1.848	1.840	0.010	-0.4	20.0
2,6-Dinitrotoluene	0.358	0.324	0.010	-9.6	20.0
3-Nitroaniline	0.363	0.319	0.010	-12.4	20.0
Acenaphthene	1.168	1.166	0.010	-0.2	20.0
2,4-Dinitrophenol	0.219	0.171	0.050	-21.8	20.0
4-Nitrophenol	0.307	0.345	0.050	12.3	20.0
Dibenzofuran	1.687	1.643	0.010	-2.6	20.0
2,4-Dinitrotoluene	0.497	0.420	0.010	-15.5	20.0
Diethylphthalate	1.567	1.583	0.010	1.0	20.0
4-Chlorophenyl-phenylether	0.679	0.672	0.010	-1.0	20.0
Fluorene	1.462	1.514	0.010	3.6	20.0
4-Nitroaniline	0.414	0.331	0.010	-20.2	20.0
4,6-Dinitro-2-methylphenol	0.168	0.154	0.010	-8.6	20.0
N-Nitrosodiphenylamine	0.660	0.641	0.010	-3.0	20.0
4-Bromophenyl-phenylether	0.207	0.196	0.010	-5.4	20.0
Hexachlorobenzene	0.218	0.243	0.010	11.7	20.0
Pentachlorophenol	0.155	0.159	0.010	2.7	20.0
Phenanthrene	1.137	1.135	0.010	-0.2	20.0

4C - FORM IV SV  
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-59526

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
Lab File ID: S3H4105.D Lab Sample ID: MB-59526  
Instrument ID: S3 Date Extracted: 06/02/2011  
Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 06/06/2011  
Level: (LOW/MED) LOW Time Analyzed: 17:01  
Extraction: (Type) SONC GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCSD-59526	LCSD-59526	S3H4107.D	06/06/2011
02	DEC-066D (24-25)	K0910-01A	S3H4108.D	06/06/2011
03	DEC-065D (9- 10')	K0910-03A	S3H4109.D	06/06/2011
04	DEC-065D (14- 15')	K0910-04A	S3H4110.D	06/06/2011
05	LCS-59526	LCS-59526	S3H4143.D	06/07/2011

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



1K - FORM I SV-TIC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-59526

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0910 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0910  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-59526  
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3H4105.D  
 Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/02/2011  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/06/2011  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	295-17-0	Cyclotetradecane	6.416	150	NJ
02	57-10-3	n-Hexadecanoic acid	6.672	190	NJ
03	111-02-4	2,6,10,14,18,22-Tetracosahex	9.012	240	NJ

<sup>2</sup>EPA-designated Registry Number.

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0910**

**SW846 8081B, Organochlorine Pesticides by GC-ECD**

### **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 8081B

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code: SW3550

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E5

Instrument Type: GC-ECD

Description: HP6890

Manufacturer: Hewlett-Packard

Model: 6890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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.

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

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

### **E. Dilutions:**

No sample in this SDG required analysis at dilution.

### **F. Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1

when D% between the two columns is greater than 40%.

No 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 Mitkem, 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:

A handwritten signature in cursive script, appearing to read "Cynthia R. Shively".

Date: 06/24/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0910**

**SW846 8082A, PCB by GC-ECD**

### **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 8082A

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code: SW3550

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E2

Instrument Type: GC-ECD

Description: HP5890 II +

Manufacturer: Hewlett-Packard

Model: 5890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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 sample were within the QC limits.

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

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

### E. Dilutions:

No sample in this SDG required analysis at dilution.

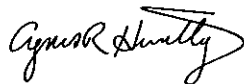
### F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1 when D% between the two columns is greater than 40%.

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 Mitkem, 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:

A handwritten signature in cursive script, appearing to read "Agnes R. Smith".

Date: 06/24/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0910**

**SW846 6010C, SW846 7471B, SW846 9012B**

### **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 6010C, SW846 7471B, SW846 9012B

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code: SW3050B

Soil Samples were prepared following procedures in laboratory test code: SW7471B

Soil Samples were prepared following procedures in laboratory test



code: 9012B

## V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS1  
Instrument Type: CVAA  
Description: FIMS  
Manufacturer: Perkin-Elmer  
Model: FIMS

Instrument Code: LACHAT1  
Instrument Type: WC  
Description: Flow Injection Analyzer  
Manufacturer: Zellweger Analytics  
Model: Quik-Chem 8000

Instrument Code: OPTIMA3  
Instrument Type: ICP  
Description: Optima ICP-OES  
Manufacturer: Perkin-Elmer  
Model: 4300 DV

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

#### 2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

**D. Post Digestion Spike (PDS):**

A post-digestion spike was not performed on any sample in this SDG.

**E. Duplicate sample:**

A duplicate analysis was not performed on any sample in this SDG.

**F. Serial Dilution (SD):**

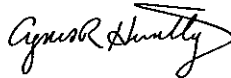
A serial dilution was not performed on any sample in this SDG.

**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 Mitkem, 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: 06/24/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0910**

**SW846 7196A, CR+ by Colorimetric Method**

### **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 7196A

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code:  
SW846 7196A

### **V. INSTRUMENTATION**

The following instrumentation was used to perform

Instrument Code: SPEC2

Instrument Type: SP

Description: Spectronic 20 Genesys

Manufacturer: Spectronic Instruments

Model: 4004-000

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. Spikes:**

#### **1. Laboratory Control Spikes (LCS):**

Percent recovery for lab control sample was within the QC limits.

#### **2. Matrix Spike (MS):**

Matrix spike was performed on samples: DEC-065D(14-15') (K0910-04AMS) and DEC-065D(14-15') (K0910-04AMSI).

Percent recovery was within the QC limits.

### **D. Duplicate sample:**

Duplicate analysis was performed on sample: DEC-065D(14-15') (K0910-04ADUP).

Percent RPD was within the QC limits.

### **E. Dilutions:**

The following samples were analyzed at dilution:

DEC-065D(14-15') (K0910-04AMSI), dilution factor: 20 for Chromium, Hexavalent

DEC-065D(14-15') (K0910-04APDS), dilution factor: 2 for Chromium,


Hexavalent

**F. 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 Mitkem, 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:

A handwritten signature in cursive script, appearing to read "Agnes R. Huntley".

Date: 06/24/11

**SDG26615**  
**SB26615, SB26754, SB26803 General Narrative**

Spectrum Analytical, Inc. submits the enclosed data for the site characterization of subcontracted samples. Samples submitted for analysis by Mitkem Laboratories. This deliverable contains data for two soil samples submitted on May 24<sup>th</sup> and 27<sup>th</sup>, 2011.

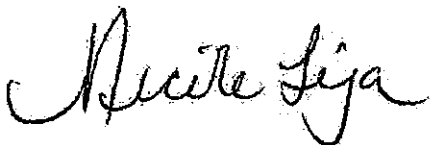
In addition to USEPA SW846 method analytical guidelines, the analysis was performed according to criteria dictated by National Environmental Laboratory Accreditation Conference (NELAC) and within the guidelines established by the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) requirements.

**1. Overall Observations:**

All of the attached submittals are original other than logbook pages and copies of quality assurance data, which may be shared by other cases. For these, the originals are archived within the laboratory. Standard Operating Procedures follow the corresponding methods without modification.

The pages in this report have been numbered consecutively, starting with the general narrative and ending with the page labeled as "Last Page of data Report".

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this electronic data package, has been authorized by the laboratory director as verified by the following signature.



---

Nicole Leja  
Laboratory Director

Date: 6/21/11



175 Metro Center Blvd  
Warwick, RI 02886-1755  
Phone : (401) 732-3400  
Fax : (401) 732-3499

A Division of METROTECH ANALYTICAL INC. FARMINGTON, CONNECTICUT

#### Subcontractor:

Spectrum Analytical, Inc.  
11 Almgren Drive  
Agawam, Massachusetts 01001

Phone: (413) 789-9018

EQulS Facility Code: N/A

#### Client Sample ID

DEC-065D(9-10')

DEC-065D(14-15')

#### Collection Date

5/24/2011 1:00:00 PM

5/24/2011 1:40:00 PM

#### Matrix

Soil

Soil

#### DUP/MS/MSD

K0910-03C

K0910-04C

#### Mitkem Sample ID

K0910-03C

K0910-04C

WorkOrder : K0910

Report Type : ASP-B

Due Date : 6/17/2011

FAX Due Date :

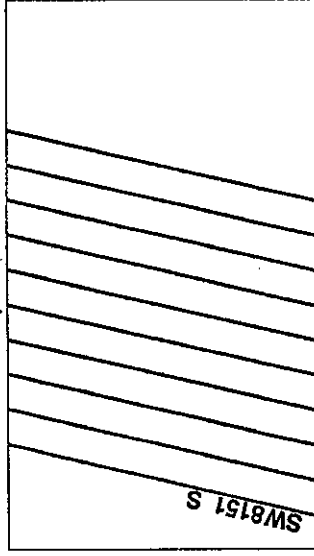
Report To : Shirley S Ng

Purchase Order : K0910

EDD Type : EQUiIS\_4\_NYSDEC

## CHAIN-OF-CUSTODY RECORD

#### Requested Test



Client Sample ID	Collection Date	Matrix	DUP/MS/MSD	Mitkem Sample ID	Requested Test
DEC-065D(9-10')	5/24/2011 1:00:00 PM	Soil		K0910-03C	X
DEC-065D(14-15')	5/24/2011 1:40:00 PM	Soil		K0910-04C	X

1) SW8151\_S, CHLORINATED HERBICIDES BY GC-ECD

Use 'Client Sample IDs' when reporting data. If needed, truncate 'Client Sample IDs' to fit on reports. Use full 'Client Sample ID' when generating EDD.

**Comments:** report these 2 samples in 1 SDG with K0910-01 for level 4 report.

Relinquished by:	<u>Shirley Ng</u>	Date/Time	<u>05/31/11 10:00</u>
Relinquished by:	<u>Dean</u>	Date/Time	<u>5/27/11 13:05</u>

## **CASE NARRATIVE**

**Spectrum Analytical, Inc. Lab Reference No. SB29135, SB29247**

**Client: Mitkem Laboratories**

**Project: See Chain of Custody / K0910**

**SDG #: 29135**

### **I. RECEIPT**

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

### **II. HOLDING TIMES**

All samples were prepared and analyzed within the method-specific holding time.

### **III. METHODS**

Analyses were performed according to SW846 8151A.

### **IV. PREPARATION**

Soil/Sediment samples were prepared according to SW846 3545A.

### **V. INSTRUMENTATION**

The following equipment was used to analyze SW846 8151A:

HPS19 details: Agilent 7890 series dual column ECD GC with RTX-CLPesticide2 Column (30m, 0.53mmID, 0.42um df) & RTX-CLPesticides Column (30m, 0.53mmID, 0.5um df)

### **VI. ANALYSIS**

#### **A. Calibration:**

All quality control samples were within the acceptance criteria with the following exceptions:

#### In sample S104910-CCV2:

Analyte percent difference is outside individual acceptance criteria (15), but within overall method allowances.

MCPA (43.3%)

MCPB (37.6%)

This affected the following samples:

1110394-BLK1, 1110394-BS2, 1110394-BSD2, DEC-065D (14-15'), DEC-065D (9-10')

#### In sample S104910-CCV4:



Analyte percent difference is outside individual acceptance criteria (15), but within overall method allowances.

MCPA (52.6%)

MCPB (52.5%)

This affected the following samples:

1110394-BLK1, 1110394-BS2, 1110394-BSD2, DEC-065D (14-15'), DEC-065D (9-10')

**B. Blanks:**

All blanks were within the acceptance criteria.

**C. Surrogates:**

All method criteria were met.

**D. Spikes:**

**1. Laboratory Control Samples (LCS):**

All method criteria were met.

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

No matrix spike or matrix spike duplicates were analyzed.

**E. Duplicates:**

No client requested duplicate. However, the method criteria may have been fulfilled with non-SDG source samples.

**F. Internal Standards:**

Internal standards were within the acceptance criteria with the following exceptions:

1-Bromo-2-Nitrobenzene [2C] in batch 1110394, samples DEC-065D (14-15') (SB29247-02), DEC-065D (9-10') (SB29247-01): Internal standard out due to matrix interference

**G. Samples:**

All method criteria were met with the following exceptions:

1-Bromo-2-Nitrobenzene [2C] in batch 1110394, samples DEC-065D (14-15') (SB29247-02), DEC-065D (9-10') (SB29247-01): Internal standard out due to matrix interference

MCPA in batch 1110394, samples DEC-065D (14-15') (SB29247-02), DEC-065D (9-10') (SB29247-01): MCPA failed high in related CCV. However, there was no reportable concentration in the sample.

MCPB in batch 1110394, samples DEC-065D (14-15') (SB29247-02), DEC-065D (9-10') (SB29247-01): MCPB failed high in related CCV. However, there was no reportable concentration in the sample.

# FORM VII - CONTINUING CALIBRATION CHECK

SW846 8151A

Laboratory: Spectrum Analytical, Inc. - Agawam, MA

SDG: 29135

Client: Mitkem Laboratories

Project: See Chain of Custody

Instrument ID: HPS19

Calibration: 1105036

Lab File ID: C4190603.D

Calibration Date: 05/06/11 14:32

Sequence: S104910

Injection Date: 06/03/11

Lab Sample ID: S104910-CCV4

Injection Time: 12:53

Spike ID: 11E0071

COMPOUND	TYPE	CONC. (µg/ml)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
MCPA	A	10.0	15.3	6.187842E-04	9.440287E-04		52.6	15 *
MCPA [2C]	A	10.0	9.90	4.372715E-04	4.316042E-04		-1.3	15
MCPB	A	10.0	15.3	9.811836E-04	1.496386E-03		52.5	15 *
MCPB [2C]	A	10.0	10.7	7.5245E-04	8.061445E-04		7.1	15
MCPP	A	10.0	9.60	1.424798E-03	1.36751E-03		-4.0	15
MCPP [2C]	A	10.0	10.2	1.458465E-03	1.48884E-03		2.1	15

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

Individual peaks for multi-component analytes are indicated by a number in parentheses

# CHAIN OF CUSTODY RECORD

PROJECT NO. 1176390.00002 SITE NAME Klink Cosmo  
 SAMPLERS (PRINT/SIGNATURE) C. Friedman / C. L. ...

DELIVERY SERVICE: Courier AIRBILL NO.: \_\_\_\_\_

LOCATION IDENTIFIER DATE TIME COMPI GRAB SAMPLE ID MATRIX

DEC-043 5/12/11 1155 6 DEC-043D(80-91) 50 2  
 DEC-064 5/12/11 1500 6 DEC-064D(28-28.5) 50 2

TOTAL NO. OF CONTAINERS

462.61255

## TESTS

VOCs + 1165  
 TEL

## BOTTLE TYPE AND PRESERVATIVE

# URS

LAB Mittlen  
 COOLER 1 of 1  
 PAGE 1 of 1

REMARKS  
 K0822  
 01  
 02  
 N1 8081  
 N2 29 80.5

SAMPLE TYPE  
 BEGINNING DEPTH (IN FEET)  
 ENDING DEPTH (IN FEET)  
 FIELD LOT NO. # (RPMs ONLY)

WL - LEACHATE  
 GS - SOIL GAS  
 WC - DRILLING WATER  
 WO - OCEAN WATER  
 WS - SURFACE WATER  
 WQ - WATER FIELD QC

LH - HAZARDOUS LIQUID WASTE  
 LF - FLOATING/FREE PRODUCT ON GW TABLE

NR - NORMAL ENVIRONMENTAL SAMPLE  
 MSW - MATRIX SPIKE

AA - AMBIENT AIR  
 SE - SEDIMENT  
 SH - HAZARDOUS SOLID WASTE  
 TBH - TRIP BLANK  
 SDH - MATRIX SPIKE DUPLICATE

RECEIVED BY (SIGNATURE) 3.6  
 RECEIVED FOR LAB BY (SIGNATURE) 5/13/11 1240

DATE TIME  
 5/13/11 1240

REINQUISHED BY (SIGNATURE)  
 REINQUISHED BY (SIGNATURE)

DATE TIME  
 5/16/11 1542

DATE TIME  
 5/16/11 1542

SPECIAL INSTRUCTIONS  
 Please call George Kizluk w/any questions

Distribution: Original accompanies shipment, copy to coordinator field files

# CHAIN OF CUSTODY RECORD

PROJECT NO. 11176390.00002 SITE NAME Kennebec  
 SAMPLERS (PRINT/SIGNATURE) S. Macomber, C. Peterson

DELIVERY SERVICE Lab Services AIRBILL NO.: \_\_\_\_\_

LOCATION IDENTIFIER DATE TIME COMPI GRAB SAMPLE ID MATRIX

Dec-0140 5/19/11 1020 G Dec-0140 31-72 SO

TOTAL NO. OF CONTAINERS

2

200.500 4.0

## TESTS

TLG  
TL VOC +

## BOTTLE TYPE AND PRESERVATIVE

# URS

LAB MITCHELL  
 COOLER 1 of 1  
 PAGE 1 of 1

REMARKS  
K0842

03

SAMPLE TYPE  
 BEGINNING DEPTH (IN FEET)  
 ENDING DEPTH (IN FEET)  
 FIELD LOT NO. # (IF PMS ONLY)

AA - AMBIENT AIR  
 SE - SEDIMENT  
 SH - HAZARDOUS SOLID WASTE  
 TB# - TRIP BLANK  
 SD# - MATRIX SPIKE DUPLICATE  
 SL - SLUDGE  
 WP - DRINKING WATER  
 WW - WASTE WATER  
 RE# - RINSE BLANK  
 FR# - FIELD REPLICATE  
 WG - GROUND WATER  
 SO - SOIL  
 DC - DRILL CUTTINGS  
 NB - NORMAL ENVIRONMENTAL SAMPLE  
 MS# - MATRIX SPIKE  
 WL - LEACHATE  
 GS - SOIL GAS  
 WC - DRILLING WATER  
 WO - OCEAN WATER  
 WS - SURFACE WATER  
 WO - WATER FIELD QC  
 LH - HAZARDOUS LIQUID WASTE  
 LF - FLOATING/FREE PRODUCT ON GW TABLE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

## SPECIAL INSTRUCTIONS

3.8°C

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 RECEIVED BY (SIGNATURE) [Signature] DATE 5/20 TIME 1:25  
 RELINQUISHED BY (SIGNATURE) [Signature] DATE 5/20 TIME 1:25  
 RECEIVED FOR LAB BY (SIGNATURE) [Signature] DATE 5/24 TIME 7:30

Distribution: Original accompanies shipment, copy to coordinator field files

[Signature] [Signature] [Signature] 5/23/11 9:15

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0842**

**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**

Soil Samples were prepared following procedures in laboratory test code: SW5035

### **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.

Instrument Code: V5  
Instrument Type: GCMS-VOA  
Description: HP6890 / HP6890  
Manufacturer: Hewlett-Packard  
Model: 6890 / 6890  
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-59410 in batch 59410, recovery is above criteria for Naphthalene at 170% with criteria of (40-125).

LCSD-59410 in batch 59410, recovery is above criteria for Naphthalene at 143% with criteria of (40-125).

**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:**

No sample in this SDG required analysis at dilution.

**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 Mitkem, 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: 06/13/11

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842

Instrument ID: V10 Calibration Date(s): 05/11/2011 05/11/2011

Heated Purge: (Y/N) Y Calibration Time(s): 10:39 12:54

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V8A3668.D</u>	RRF020 = <u>V8A3667.D</u>					
RRF050 = <u>V8A3666.D</u>	RRF100 = <u>V8A3671.D</u>	RRF200 = <u>V8A3670.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.282	0.358	0.411	0.393	0.374	0.364	13.7
Chloromethane	0.288	0.225	0.258	0.262	0.244	0.255	9.1
Vinyl chloride	0.333	0.279	0.325	0.321	0.296	0.311	7.2
Bromomethane	0.237	0.198	0.229	0.234	0.225	0.224	7.0
Chloroethane	0.158	0.138	0.155	0.157	0.146	0.151	5.8
Trichlorofluoromethane	0.643	0.596	0.694	0.687	0.653	0.655	6.0
1,1-Dichloroethene	0.283	0.233	0.266	0.269	0.251	0.260	7.3
Acetone	0.030	0.019	0.020	0.024	0.023	0.023	18.1
Iodomethane	0.367	0.413	0.528	0.498	0.475	0.456	14.4
Carbon disulfide	0.929	0.892	1.043	0.952	0.893	0.942	6.6
Methylene chloride	0.275	0.220	0.247	0.248	0.234	0.245	8.3
trans-1,2-Dichloroethene	0.290	0.246	0.281	0.284	0.271	0.274	6.4
Methyl tert-butyl ether	0.759	0.711	0.828	0.735	0.700	0.746	6.8
1,1-Dichloroethane	0.528	0.451	0.508	0.497	0.466	0.490	6.4
Vinyl acetate	0.786	0.749	0.843	0.757	0.703	0.767	6.7
2-Butanone	0.031	0.028	0.030	0.033	0.031	0.031	5.9
cis-1,2-Dichloroethene	0.306	0.252	0.284	0.286	0.268	0.279	7.3
2,2-Dichloropropane	0.488	0.439	0.506	0.505	0.487	0.485	5.7
Bromochloromethane	0.140	0.119	0.132	0.134	0.126	0.130	6.2
Chloroform	0.616	0.506	0.565	0.561	0.533	0.556	7.4
1,1,1-Trichloroethane	0.546	0.482	0.557	0.555	0.531	0.534	5.8
1,1-Dichloropropene	0.141	0.128	0.144	0.144	0.135	0.138	5.1
Carbon tetrachloride	0.462	0.428	0.512	0.521	0.506	0.486	8.2
1,2-Dichloroethane	0.437	0.374	0.417	0.417	0.399	0.409	5.8
Benzene	1.123	0.933	1.037	1.037	0.968	1.020	7.2
Trichloroethene	0.308	0.262	0.295	0.295	0.280	0.288	6.1
1,2-Dichloropropane	0.280	0.242	0.264	0.264	0.245	0.259	6.0
Dibromomethane	0.189	0.164	0.182	0.181	0.173	0.178	5.6
Bromodichloromethane	0.401	0.348	0.397	0.403	0.390	0.388	5.9
cis-1,3-Dichloropropene	0.414	0.386	0.437	0.445	0.430	0.422	5.5
4-Methyl-2-pentanone	0.194	0.188	0.199	0.190	0.175	0.189	4.8
Toluene	1.171	1.026	1.164	1.185	1.116	1.132	5.7
trans-1,3-Dichloropropene	0.357	0.355	0.403	0.418	0.403	0.387	7.6
1,1,2-Trichloroethane	0.229	0.196	0.213	0.217	0.201	0.211	6.2
1,3-Dichloropropane	0.535	0.434	0.481	0.481	0.451	0.476	8.1
Tetrachloroethene	0.315	0.272	0.328	0.330	0.316	0.312	7.5
2-Hexanone	0.170	0.185	0.191	0.202	0.193	0.188	6.3
Dibromochloromethane	0.368	0.333	0.387	0.398	0.392	0.376	7.0
1,2-Dibromoethane	0.335	0.287	0.321	0.325	0.305	0.315	5.9



5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
Lab File ID: V8A3830.D BFB Injection Date: 05/17/2011  
Instrument ID: V10 BFB Injection Time: 8:40  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.1
75	30.0 - 60.0% of mass 95	55.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	64.9
175	5.0 - 9.0% of mass 174	4.9 (7.5)1
176	95.0 - 101.0% of mass 174	62.8 (96.7)1
177	5.0 - 9.0% of mass 176	4.1 (6.5)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010R	VSTD05010R	V8A3832.D	05/17/2011	9:29
02	LCS-59212	LCS-59212	V8A3833.D	05/17/2011	10:04
03	LCSD-59212	LCSD-59212	V8A3834.D	05/17/2011	10:28
04	MB-59212	MB-59212	V8A3836.D	05/17/2011	11:17
05	DEC-043D (80-81')	K0842-01B	V8A3837.D	05/17/2011	11:41
06	DEC-064D (29-29.5)	K0842-02B	V8A3838.D	05/17/2011	12:05

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842  
 Instrument ID: V10 Calibration Date: 05/17/2011 Time: 9:29  
 Lab File ID: V8A3832.D Init. Calib. Date(s): 05/11/2011 05/11/2011  
 EPA Sample No. (VSTD####): VSTD05010R Init. Calib. Time(s): 10:39 12:54  
 Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
 Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.364	0.329	0.100	-9.5	20.0
Chloromethane	0.255	0.256	0.010	0.4	20.0
Vinyl chloride	0.311	0.312	0.010	0.3	20.0
Bromomethane	0.224	0.206	0.010	-8.4	20.0
Chloroethane	0.151	0.150	0.010	-0.5	20.0
Trichlorofluoromethane	0.655	0.642	0.010	-2.0	20.0
1,1-Dichloroethene	0.260	0.251	0.100	-3.8	20.0
Acetone	0.023	0.028	0.010	23.7	20.0
Iodomethane	0.456	0.418	0.010	-8.3	20.0
Carbon disulfide	0.942	0.885	0.010	-6.0	20.0
Methylene chloride	0.245	0.237	0.010	-3.2	20.0
trans-1,2-Dichloroethene	0.274	0.269	0.010	-2.2	20.0
Methyl tert-butyl ether	0.746	0.652	0.010	-12.6	20.0
1,1-Dichloroethane	0.490	0.513	0.010	4.7	20.0
Vinyl acetate	0.767	0.804	0.010	4.7	20.0
2-Butanone	0.031	0.037	0.010	20.9	20.0
cis-1,2-Dichloroethene	0.279	0.278	0.010	-0.6	20.0
2,2-Dichloropropane	0.485	0.466	0.010	-4.0	20.0
Bromochloromethane	0.130	0.121	0.010	-7.0	20.0
Chloroform	0.556	0.541	0.010	-2.8	20.0
1,1,1-Trichloroethane	0.534	0.510	0.010	-4.5	20.0
1,1-Dichloropropene	0.138	0.138	0.010	-0.5	20.0
Carbon tetrachloride	0.486	0.458	0.010	-5.6	20.0
1,2-Dichloroethane	0.409	0.385	0.010	-5.8	20.0
Benzene	1.020	1.057	0.010	3.6	20.0
Trichloroethene	0.288	0.265	0.010	-8.1	20.0
1,2-Dichloropropane	0.259	0.278	0.010	7.3	20.0
Dibromomethane	0.178	0.174	0.010	-2.0	20.0
Bromodichloromethane	0.388	0.370	0.010	-4.6	20.0
cis-1,3-Dichloropropene	0.422	0.415	0.010	-1.8	20.0
4-Methyl-2-pentanone	0.189	0.206	0.010	9.0	20.0
Toluene	1.132	1.139	0.010	0.6	20.0
trans-1,3-Dichloropropene	0.387	0.372	0.010	-3.9	20.0
1,1,2-Trichloroethane	0.211	0.208	0.010	-1.6	20.0
1,3-Dichloropropane	0.476	0.493	0.010	3.5	20.0
Tetrachloroethene	0.312	0.302	0.010	-3.3	20.0
2-Hexanone	0.188	0.229	0.010	21.7	20.0
Dibromochloromethane	0.376	0.354	0.010	-5.7	20.0
1,2-Dibromoethane	0.315	0.318	0.010	1.1	20.0
Chlorobenzene	0.988	1.002	0.010	1.4	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K0842 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0842

Instrument ID: V10 Calibration Date: 05/17/2011 Time: 9:29

Lab File ID: V8A3832.D Init. Calib. Date(s): 05/11/2011 05/11/2011

EPA Sample No. (VSTD####) VSTD05010R Init. Calib. Time(s): 10:39 12:54

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.374	0.352	0.010	-5.8	20.0
Ethylbenzene	0.523	0.550	0.010	5.2	20.0
m,p-Xylene	0.628	0.662	0.010	5.4	20.0
o-Xylene	0.603	0.625	0.010	3.6	20.0
Xylene (Total)	0.620	0.650	0.010	4.8	20.0
Styrene	0.955	0.981	0.010	2.8	20.0
Bromoform	0.207	0.189	0.010	-8.5	20.0
Isopropylbenzene	1.636	1.753	0.300	7.2	20.0
1,1,2,2-Tetrachloroethane	0.857	0.974	0.300	13.6	20.0
Bromobenzene	0.864	0.855	0.010	-1.0	20.0
1,2,3-Trichloropropane	1.117	1.248	0.010	11.7	20.0
n-Propylbenzene	0.905	1.036	0.010	14.5	20.0
2-Chlorotoluene	0.886	0.939	0.010	6.0	20.0
1,3,5-Trimethylbenzene	3.040	3.437	0.010	13.0	20.0
4-Chlorotoluene	0.858	0.951	0.010	10.8	20.0
tert-Butylbenzene	3.241	3.632	0.010	12.1	20.0
1,2,4-Trimethylbenzene	2.980	3.382	0.010	13.5	20.0
sec-Butylbenzene	3.805	4.498	0.010	18.2	20.0
4-Isopropyltoluene	2.954	3.362	0.010	13.8	20.0
1,3-Dichlorobenzene	1.521	1.593	0.010	4.8	20.0
1,4-Dichlorobenzene	1.491	1.586	0.010	6.4	20.0
n-Butylbenzene	2.960	3.680	0.100	24.3	20.0
1,2-Dichlorobenzene	1.436	1.490	0.010	3.8	20.0
1,2-Dibromo-3-chloropropane	0.188	0.194	0.010	2.9	20.0
1,2,4-Trichlorobenzene	0.808	0.820	0.010	1.5	20.0
Hexachlorobutadiene	0.569	0.546	0.010	-4.1	20.0
1,2,3-Trichlorobenzene	0.763	0.764	0.010	0.2	20.0
Naphthalene	1.817	1.855	0.010	2.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.326	0.326	0.010	0.0	20.0
1,4-Dioxane	0.003	0.003	0.010	26.3	20.0
Cyclohexane	0.395	0.459	0.010	16.5	20.0
Methyl acetate	0.140	0.144	0.010	3.4	20.0
Methylcyclohexane	0.467	0.522	0.010	11.8	20.0

# STARS

ITE NAME / Cosmo  
Klink

SAMPLERS (PRINT/SIGNATURE)  
C. Friedman / *C. Friedman*

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0807**

**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: V1  
Instrument Type: GCMS-VOA  
Description: HP5890 II / HP5972  
Manufacturer: Hewlett-Packard  
Model: 5890 / 5972  
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624  
capillary column.

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.

#### **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 sample was re-analyzed at dilution:

DEC-066S (1-2') (K0807-01BDL-TCLP) : Dilution Factor: 2

**G. Samples:**

No 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 Mitkem, 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: 06/07/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0807**

**SW846 8270D, SVOA 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 8270D

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**



The following instrumentation was used

Instrument Code: S3

Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973

Manufacturer: Hewlett-Packard

Model: 6890 / 5973

GC Column used: 30 m X 0.25 mm ID [0.25 um thickness] Rxi-5sil MS 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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

DEC-066S (1-2') (K0807-01ADL-TCLP) Surrogate outside of QC limit due to dilution, recovery is above criteria for 2-Fluorobiphenyl at 115% with criteria of (50-110).

DEC-066S (1-2') (K0807-01A-TCLP), recovery is above criteria for Nitrobenzene-d5 at 119% with criteria of (40-110).

### 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-59213 in batch 59213, recovery is above criteria for Hexachlorobutadiene at 105% with criteria of (25-105).

**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 sample was re-analyzed at dilution:


DEC-066S (1-2') (K0807-01ADL-TCLP) : Dilution Factor: 50

**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 Mitkem, 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: 06/07/11

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA  
Contract:

Lab Name: MITKEM LABORATORIES

Lab Code: MITKEM

Case No.: K0807

SAS No.:

SDG No.: SK0807

Instrument ID: S3

Calibration Date(s): 04/18/2011

04/18/2011

Calibration Times: 15:13

17:46

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF010 = S3H3262.D RRF020 = S3H3264.D RRF050 = S3H3261C.D RRF080 = S3H3265.D RRF120 = S3H3266.D												
RRF160 = S3H3263.D												
COMPOUND	RRF010		RRF020		RRF050		RRF080		RRF120		RRF160	
1,4-Dichlorobenzene	1.643	1.617	1.504	1.523	1.464	1.502					1.542	4.6
2-Methylphenol	1.454	1.350	1.386	1.407	1.398	1.484					1.413	3.4
4-Methylphenol	1.545	1.483	1.518	1.586	1.560	1.693					1.564	4.6
Hexachloroethane	0.560	0.550	0.509	0.538	0.510	0.526					0.532	3.9
Nitrobenzene	0.401	0.387	0.368	0.385	0.365	0.365					0.379	3.9
Hexachlorobutadiene	0.176	0.163	0.153	0.157	0.147	0.144					0.157	7.4
2,4,6-Trichlorophenol	0.365	0.355	0.339	0.345	0.328	0.325					0.343	4.5
2,4,5-Trichlorophenol		0.385	0.372	0.379	0.361	0.352					0.370	3.6
2,4-Dinitrotoluene	0.477	0.472	0.440	0.445	0.428	0.417					0.447	5.3
Hexachlorobenzene	0.216	0.219	0.182	0.210	0.193	0.189					0.202	7.7
Pentachlorophenol		0.132	0.122	0.135	0.127	0.126					0.128	3.8
Pyridine		0.854	1.489	1.309	1.719	1.948					1.464	28.5

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP3C

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Lab File ID: S3H3740.D DFTPP Injection Date: 05/17/2011  
Instrument ID: S3 DFTPP Injection Time: 10:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.0
68	Less than 2.0% of mass 69	0.1 (0.3)1
69	Mass 69 relative abundance	39.3
70	Less than 2.0% of mass 69	0.3 (0.7)1
127	40.0 - 60.0% of mass 198	49.3
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.4
275	10.0 - 30.0% of mass 198	23.2
365	Greater than 1.0% of mass 198	2.7
441	Present, but less than mass 443	8.4
442	40.0 - 99.9% of mass 198	58.2
443	17.0 - 23.0% of mass 442	11.8 (20.2)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0503C	SSTD0503C	S3H3741.D	05/17/2011	11:08
02	MB-59201	MB-59201	S3H3746.D	05/17/2011	15:15
03	LCS-59213	LCS-59213	S3H3747.D	05/17/2011	15:34
04	LCSD-59213	LCSD-59213	S3H3748.D	05/17/2011	15:54
05	DEC-066S (1-2')	K0807-01A	S3H3749.D	05/17/2011	16:13
06	DEC-044D (4-5')	K0807-02A	S3H3750.D	05/17/2011	16:33

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

Lab Name: <u>MITKEM LABORATORIES</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>K0807</u>	Mod. Ref No.: _____      SDG No.: <u>SK0807</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>05/17/2011</u> Time: <u>11:08</u>
Lab File ID: <u>S3H3741.D</u>	Init. Calib. Date(s): <u>04/18/2011</u> <u>04/18/2011</u>
EPA Sample No. (SSTD020##) <u>SSTD0503C</u>	Init. Calib. Time(s): <u>15:13</u> <u>17:46</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.542	1.461	0.010	-5.3	20.0
2-Methylphenol	1.413	1.201	0.010	-15.0	20.0
4-Methylphenol	1.564	1.293	0.010	-17.3	20.0
Hexachloroethane	0.532	0.526	0.010	-1.0	20.0
Nitrobenzene	0.379	0.383	0.010	1.3	20.0
Hexachlorobutadiene	0.157	0.189	0.010	20.6	20.0
2,4,6-Trichlorophenol	0.343	0.345	0.010	0.6	20.0
2,4,5-Trichlorophenol	0.370	0.369	0.010	-0.2	20.0
2,4-Dinitrotoluene	0.447	0.437	0.010	-2.1	20.0
Hexachlorobenzene	0.202	0.194	0.010	-3.9	20.0
Pentachlorophenol	0.128	0.131	0.010	2.0	20.0
Pyridine	1.464	0.894	0.010	-38.9	20.0

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0807**

**SW846 8081B, Organochlorine Pesticides by GC-ECD**

### **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 8081B

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E5

Instrument Type: GC-ECD

Description: HP6890

Manufacturer: Hewlett-Packard

Model: 6890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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.

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

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

### **E. Dilutions:**

No sample in this SDG required analysis at dilution.


### **F. Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1

when D% between the two columns is greater than 40%.

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 Mitkem, 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: 06/08/11



10A - FORM X PEST-1  
IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.  
DEC-066S (1-2')

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K0807 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK0807  
Lab Sample ID: K0807-01A Date(s) Analyzed: 05/18/2011 05/18/2011  
Instrument ID (1): E5 Instrument ID (2): E5  
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
gamma-BHC (Lindane)	1	3.982	3.938	4.038	0.79	966.3
	2	4.706	4.667	4.767	8.4	
Heptachlor	1	4.465	4.395	4.495	1.4	223.0
	2	5.177	5.161	5.261	0.44	

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0807**

**SW846 8151A, Chlorinated Herbicides by GC-ECD**

### **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 8151A

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

## V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4

Instrument Type: GC-ECD

Description: HP6890

Manufacturer: Hewlett-Packard

Model: 6890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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.

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

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

### E. Dilutions:

No sample in this SDG required analysis at dilution.


### F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are

reported on Form 10. P flags are assigned to compounds on Form 1 when D% between the two columns is greater than 40%.

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 Mitkem, 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: 06/08/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0807**

**SW846 6010C, SW846 7470A**

### **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 6010C, SW846 7470A

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A

Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

## **V. INSTRUMENTATION**

The following instrumentation was used to perform

Instrument Code: FIMS1  
Instrument Type: CVAA  
Description: FIMS  
Manufacturer: Perkin-Elmer  
Model: FIMS

Instrument Code: OPTIMA3  
Instrument Type: ICP  
Description: Optima ICP-OES  
Manufacturer: Perkin-Elmer  
Model: 4300 DV

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. Spikes:**

#### **1. Laboratory Control Spikes (LCS):**

Percent recoveries for laboratory control samples were within the QC limits.

#### **2. Matrix spike (MS):**

A matrix spike was not performed on any sample in this SDG.

### **D. Post Digestion Spike (PDS):**

A post-digestion spike was not performed on any sample in this SDG.

### **E. Duplicate sample:**

A duplicate analysis was not performed on any sample in this SDG.

**F. Serial Dilution (SD):**


A serial dilution was not performed on any sample in this SDG.

**G. Samples:**

No unusual occurrences were noted during sample analysis.

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Signed: \_\_\_\_\_



Date: 06/08/11

## **REPORT NARRATIVE**

**Mitkem Laboratories, a Division of Spectrum Analytical, Inc.**

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K0807**

**SW846 1010, SW846 7.3.3.2, SW846 7.3.4.2, SW846 9045C**

### **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 1010, SW846 7.3.3.2, SW846 7.3.4.2, SW846 9045C

### **IV. PREPARATION**

Soil Samples were prepared following procedures in laboratory test code:  
SW846 1010, SW846 7.3.3.2, SW846 7.3.4.2, SW846 9045C

### **V. INSTRUMENTATION**



The following instrumentation was used to perform

Instrument Code: FLASH1  
Instrument Type: WC  
Description: Flash Point  
Manufacturer: Koehler  
Model: K16200

Instrument Code: LACHAT1  
Instrument Type: WC  
Description: Flow Injection Analyzer  
Manufacturer: Zellweger Analytics  
Model: Quik-Chem 8000

Instrument Code: SPEC2  
Instrument Type: SP  
Description: Spectronic 20 Genesys  
Manufacturer: Spectronic Instruments  
Model: 4004-000

Instrument Code: WC01  
Instrument Type: Probe  
Description: pH Meter  
Manufacturer: Thermo Electron Corporation  
Model: Orion 520A+

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. Spikes:**

#### **1. Laboratory Control Spikes (LCS):**

Percent recovery for lab control samples for Reactive Cyanide and Reactive Sulfide were within the QC limits.

The lab control sample for reactive cyanide typically results in a percent recovery of approximately 10%. This indicates the

analysis is only measuring the correct type of cyanide. The LCS is performed with a "total" cyanide spike, only a small portion of which is "reactive". Recovery of significantly greater than this level in the analysis of the LCS indicates the test is over estimating the concentration of reactive cyanide.

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

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

**D. Duplicate sample:**

Duplicate analysis was performed on sample DEC-044D (4-5') for Flashpoint and pH.

Percent RPD was within the QC limits for both analyses.

**E. Dilutions:**

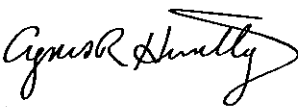
No sample required analysis at dilution.

**F. Samples:**

For Flashpoint analysis, the result of "No Flash" indicates that no flash was observed, or that non-ignitable vapors from the sample extinguished the test flame at the temperature indicated. Where non-flammable vapors from the sample extinguished the test flame below 140 degrees, the sample temperature was elevated to at least 140 degrees, and re-exposed to the test flame.

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 Mitkem, 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: 06/08/11

# CHAIN OF CUSTODY RECORD

PROJECT NO. 1176390  
 SITE NAME: Klink/Cosmo  
 SAMPLERS (PRINT/SIGNATURE): C. Friedman/Cay

DELIVERY SERVICE: Courier AIRBILL NO.:

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX
DEC-030	6/20/11	1405		DEC-030D	WG
↓		1520		DEC-030	
DEC-064		1414		DEC-064D	
↓		1544		DEC-064	
DEC-006		1733		DEC-006DD	
↓		1858		DEC-006D	
—	↓	—		DUP-062011	
DEC-031	6/21/11	830		DEC-031D	WG
↓		945		DEC-031	
DEC-045		1125		DEC-045D	
↓		1310		DEC-045	
DEC-046	↓	839		DEC-046	
				TB	WG

MATRIX CODES	AA - AMBIENT AIR	SL - SLUDGE	WG - GROUND WATER
SAMPLE TYPE CODES	SE - SEDIMENT	WP - DRINKING WATER	SO - SOIL
	SH - HAZARDOUS SOLID WASTE	WW - WASTE WATER	DC - DRILL CUTTINGS
	TBA - TRIP BLANK	RB# - RINSE BLANK	N# - NORMAL ENVIRONMENTAL SAMPLE
	SD# - MATRIX SPIKE DUPLICATE	FR# - FIELD REPLICATE	MS# - MATRIX SPIKE
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)
Cay	6/22/11	1230	Tim Harkiss
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)
Tim Harkiss	6/22/11	1410	

Distribution: Original accompanies shipment, copy to coordinator field files  
 CSM

## TESTS

TCL WDS + TICS  
 TCL SVCS + TICS  
 Pest/ACBs  
 METALS  
 Cyanide

## BOTTLE TYPE AND PRESERVATIVE

Amber 40ml w/HCL  
 1L Amber  
 1L Amber  
 HMB3 PLASTIC  
 NAOH PLASTIC

REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (RPMs ONLY)
1	N1			
2	N2			
3	N3			
4	N4			
5	N5			
6	N6			
7	N7			
8	N1			
9	N2			
10	N3			
11	N4			
12	N5			
13	TB1			

WO - OCEAN WATER  
 WS - SURFACE WATER  
 WQ - WATER FIELD QC  
 WL - LEACHATE  
 GS - SOIL GAS  
 WC - DRILLING WATER

LH - HAZARDOUS LIQUID WASTE  
 LF - FLOATING/FREE PRODUCT ON GW TABLE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

SPECIAL INSTRUCTIONS  
 Please call George Kisluk w/any questions 716 856 5636

DATE TIME  
 6/22/11 1230  
 DATE TIME  
 6/22/11 2:10pm  
 6/24/11 1130  
 8.9°C

URS

LAB: Mottom  
 COOLER: 1 of 1  
 PAGE: 1 of 3

# CHAIN OF CUSTODY RECORD

PROJECT NO. 11176390  
 SITE NAME Klink/Cosmo  
 SAMPLERS (PRINT/SIGNATURE) C. Friedman / *[Signature]*

DELIVERY SERVICE: Courier AIRBILL NO.:

LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS
DEC-046	6/21/11	839		DEC-046 MS/MSO	WG	6
DEC-047		1155		DEC-047		3
DEC-033		1034		DEC-033		3
DEC-010		1430		DEC-010		3
DEC-007		1403		DEC-007		3
DEC-011		1530		DEC-011		3
DEC-007		1550		DEC-007D		3
DEC-028		1740		DEC-028		3
DEC-065	6/21/11	745		DEC-065D		3
DEC-065		845		DEC-065		3
DEC-012		945		DEC-012		3
DEC-013		1205		DEC-043D		3
				DUP-062211		3

MATRIX CODES	AA - AMBIENT AIR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE	SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER	WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS
SAMPLE TYPE CODES	TBA - TRIP BLANK SD# - MATRIX SPIKE DUPLICATE	RBA - RINSE BLANK FR# - FIELD REPLICATE	NR - NORMAL ENVIRONMENTAL MS# - MATRIX SPIKE

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
<i>[Signature]</i>	6/22/11	1230	<i>[Signature]</i>	6/22/11	1230
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
<i>[Signature]</i>	6/22/11	1410	<i>[Signature]</i>	6/22	2:10 PM

Distribution: Original accompanies shipment, copy to coordinator field files *[Signature]*

8.9°C

## TESTS

TEL  
VOCs + 112s

BOTTLE TYPE AND PRESERVATIVE

40 ml Amber (HCL)

REMARKS

SAMPLE TYPE

DEPTH (IN FEET)

DEPTH (IN FEET)

FIELD LOT NO. #

LAB Mithern

COOLER #1 of 1

PAGE 2 of 3

# URS



## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1102**

**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 with the following exceptions:

DEC-011 (K1102-18ARE) exceed by 1 Day

#### **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: V1  
Instrument Type: GCMS-VOA  
Description: HP5890 II / HP5972  
Manufacturer: Hewlett-Packard  
Model: 5890 / 5972  
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

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.

Instrument Code: V6  
Instrument Type: GCMS-VOA  
Description: HP6890 / HP5973  
Manufacturer: Hewlett-Packard  
Model: 6890 / 5973  
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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per analysis.

DEC-064 (K1102-04A), recovery is below criteria for Dibromofluoromethane at 84% with criteria of (85-115).

**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-60151 in batch 60151, recovery is above criteria for Iodomethane at 133% with criteria of (72-121).

LCSD-60151 in batch 60151, recovery is above criteria for 1,1,1-Trichloroethane at 130% with criteria of (65-130), 1,1,2-Trichloro-1,2,2-trifluoroethane at 136% with criteria of (70-130), Iodomethane at 153% with criteria of (72-121) and Trichlorofluoromethane at 155% with criteria of (60-145).

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

Matrix spikes were performed on samples: DEC-046 (K1102-12AMS) and DEC-046 (K1102-12AMSD).

Percent recoveries were within the QC limits with the following exceptions:

DEC-046 (K1102-12AMS), recovery is below criteria for 1,2,4-Trichlorobenzene at 64% with criteria of (65-135), 1,4-Dioxane at 60% with criteria of (70-130) and Naphthalene at 44% with criteria of (55-140).

DEC-046 (K1102-12AMSD), recovery is below criteria for 1,2-Dibromoethane at 80% with criteria of (80-120) and 1,4-Dioxane at 68% with criteria of (70-130).

Replicate RPDs were within the QC limits.

**E. Internal Standards:**

Internal standard peak areas were within the QC limits.

**F. Dilutions:**



The following samples were re-analyzed at dilution:

DEC-030 (K1102-02ADL) : Dilution Factor: 25  
DEC-064 (K1102-04ADL) : Dilution Factor: 4  
DEC-006DD (K1102-05ADL) : Dilution Factor: 5  
DEC-006D (K1102-06ADL) : Dilution Factor: 50  
DUP-062011 (K1102-07ADL) : Dilution Factor: 5  
DEC-031 (K1102-09ADL) : Dilution Factor: 50  
DEC-007 (K1102-17ADL) : Dilution Factor: 10  
DEC-007D (K1102-19ADL) : Dilution Factor: 4  
DEC-028 (K1102-20ADL) : Dilution Factor: 20  
DEC-065D (K1102-21ADL) : Dilution Factor: 10  
DEC-012 (K1102-23ADL) : Dilution Factor: 4  
DEC-015D (K1102-27ADL) : Dilution Factor: 8

#### G. Samples:

Sample DEC-011 has Tetrachloroethene detected at 13 ug/L. It was analyzed after DEC-007 which has Tetrachloroethene detected above the calibration range. DEC-011 was re-analyzed out of hold time to confirm the Tetrachloroethene detection was not carry over. Re-analysis result has Tetrachloroethene detected at 5.1 ug/L. Both results reported in the data package.

Sample DEC-012 was analyzed undiluted and also at a 4x dilution for Tetrachloroethene. The dilution analysis showed some low level contamination which were not detected in the initial analysis. These compounds were all below the reporting limits and should not affect the Tetrachloroethene result.

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 RI, 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: 07/20/11

2B - FORM II VOA-2  
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-60018	87	103	106	100				0
02	LCSD-60018	88	94	106	101				0
03	MB-60018	86	99	106	95				0
04	DEC-030D	89	99	105	95				0
05	DEC-030	89	104	98	96				0
06	DEC-064	84 *	94	103	95				1
07	DEC-006DD	86	98	105	94				0
08	DEC-006D	88	95	93	90				0
09	DUP-062011	87	98	104	95				0
10	DEC-031D	90	94	108	97				0
11	DEC-031	89	98	100	93				0
12	LCS-60070	99	96	100	98				0
13	MB-60070	99	93	99	91				0
14	TRIP BLANK	99	97	102	91				0
15	DEC-064D	98	94	99	90				0
16	DEC-045D	98	100	101	90				0
17	DEC-064DL	100	94	99	89				0
18	DEC-006DDDL	97	95	99	89				0
19	DUP-062011DL	100	98	100	88				0
20	DEC-030DL	98	92	100	90				0
21	DEC-006DDL	99	96	101	89				0
22	DEC-031DL	99	100	101	90				0
23	DEC-045	99	97	99	88				0
24	DEC-047	100	101	102	90				0
25	LCS-60103	97	93	103	99				0
26	MB-60103	99	94	105	90				0
27	DEC-046	96	88	104	86				0
28	DEC-033	96	98	106	88				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

som11.07.01.A

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Instrument ID: V1 Calibration Date(s): 06/01/2011 06/01/2011  
 Heated Purge: (Y/N) N Calibration Time(s): 11:59 14:22  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V1M1407.D</u>	RRF020 = <u>V1M1406.D</u>					
RRF050 = <u>V1M1405.D</u>	RRF100 = <u>V1M1409.D</u>	RRF200 = <u>V1M1408.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.154	0.157	0.146	0.141	0.156	0.151	4.6
Chloromethane	0.417	0.440	0.394	0.405	0.422	0.415	4.2
Vinyl chloride	0.315	0.302	0.266	0.293	0.302	0.296	6.3
Bromomethane	0.203	0.206	0.177	0.180	0.189	0.191	6.8
Chloroethane	0.192	0.179	0.163	0.169	0.176	0.176	6.3
Trichlorofluoromethane	0.243	0.259	0.246	0.245	0.281	0.255	6.3
1,1-Dichloroethene	0.163	0.240	0.239	0.258	0.277	0.235	18.5
Acetone	0.075	0.077	0.071	0.070	0.061	0.071	8.4
Iodomethane	0.423	0.462	0.404	0.448	0.466	0.441	6.0
Carbon disulfide	0.927	0.853	0.797	0.842	0.888	0.861	5.7
Methylene chloride	0.116	0.263	0.257	0.276	0.275	0.237	28.8
trans-1,2-Dichloroethene	0.277	0.272	0.247	0.274	0.273	0.268	4.5
Methyl tert-butyl ether	0.712	0.676	0.676	0.716	0.719	0.700	3.1
1,1-Dichloroethane	0.559	0.519	0.496	0.499	0.508	0.516	5.0
Vinyl acetate	1.668	1.694	1.575	1.691	1.679	1.661	3.0
2-Butanone	0.048	0.053	0.051	0.062	0.057	0.054	10.0
cis-1,2-Dichloroethene	0.319	0.300	0.278	0.288	0.298	0.297	5.1
2,2-Dichloropropane	0.207	0.166	0.148	0.137	0.143	0.160	17.7
Bromochloromethane	0.169	0.169	0.160	0.169	0.174	0.168	3.1
Chloroform	0.452	0.432	0.400	0.415	0.430	0.426	4.6
1,1,1-Trichloroethane	0.279	0.262	0.239	0.240	0.260	0.256	6.5
1,1-Dichloropropene	0.139	0.126	0.115	0.122	0.131	0.127	7.2
Carbon tetrachloride	0.281	0.258	0.231	0.230	0.262	0.252	8.7
1,2-Dichloroethane	0.333	0.332	0.333	0.314	0.334	0.329	2.5
Benzene	1.036	0.987	0.919	0.957	0.980	0.976	4.4
Trichloroethene	0.324	0.301	0.265	0.279	0.293	0.292	7.7
1,2-Dichloropropane	0.321	0.324	0.292	0.309	0.318	0.313	4.1
Dibromomethane	0.185	0.189	0.181	0.191	0.196	0.188	3.0
Bromodichloromethane	0.309	0.320	0.307	0.308	0.328	0.314	3.0
cis-1,3-Dichloropropene	0.439	0.426	0.427	0.437	0.448	0.435	2.1
4-Methyl-2-pentanone	0.793	0.708	0.697	0.787	0.779	0.753	6.2
Toluene	1.062	0.995	0.931	0.984	1.009	0.996	4.7
trans-1,3-Dichloropropene	0.373	0.383	0.379	0.379	0.399	0.383	2.6
1,1,2-Trichloroethane	0.245	0.227	0.224	0.249	0.254	0.240	5.6
1,3-Dichloropropane	0.585	0.554	0.515	0.569	0.566	0.558	4.8
Tetrachloroethene	0.273	0.244	0.229	0.259	0.274	0.256	7.5
2-Hexanone	0.755	0.716	0.690	0.798	0.768	0.745	5.7
Dibromochloromethane	0.351	0.366	0.382	0.411	0.430	0.388	8.3
1,2-Dibromoethane	0.380	0.372	0.350	0.407	0.410	0.384	6.5

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V1 Calibration Date(s): 06/01/2011 06/01/2011

Heated Purge: (Y/N) N Calibration Time(s): 11:59 14:22

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V1M1407.D</u>	RRF020 = <u>V1M1406.D</u>					
RRF050 = <u>V1M1405.D</u>	RRF100 = <u>V1M1409.D</u>	RRF200 = <u>V1M1408.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	0.946	0.905	0.852	0.933	0.936	0.914	4.2
1,1,1,2-Tetrachloroethane	0.353	0.342	0.328	0.355	0.361	0.348	3.7
Ethylbenzene	0.468	0.439	0.420	0.469	0.476	0.454	5.3
m,p-Xylene	0.597	0.551	0.529	0.574	0.585	0.567	4.8
o-Xylene	0.546	0.548	0.512	0.565	0.561	0.546	3.8
Xylene (Total)	0.580	0.550	0.523	0.571	0.577	0.560	4.2
Styrene	0.899	0.921	0.868	0.981	0.987	0.931	5.6
Bromoform	0.203	0.208	0.230	0.261	0.278	0.236	13.9
Isopropylbenzene	1.431	1.231	1.227	1.329	1.362	1.316	6.6
1,1,2,2-Tetrachloroethane	0.986	0.903	0.875	1.042	1.018	0.965	7.5
Bromobenzene	0.785	0.742	0.710	0.777	0.782	0.759	4.3
1,2,3-Trichloropropane	0.972	0.884	1.027	1.095	1.104	1.016	9.0
2-Chlorotoluene	0.765	0.690	0.674	0.747	0.765	0.728	5.9
1,3,5-Trimethylbenzene	2.310	1.923	1.999	2.128	2.173	2.106	7.2
4-Chlorotoluene	0.818	0.720	0.727	0.762	0.799	0.765	5.7
tert-Butylbenzene	2.212	1.929	1.969	2.161	2.197	2.094	6.4
1,2,4-Trimethylbenzene	2.258	2.011	2.090	2.217	2.272	2.170	5.2
sec-Butylbenzene	2.517	2.109	2.362	2.498	2.641	2.425	8.4
4-Isopropyltoluene	2.114	1.724	1.930	2.063	2.124	1.991	8.4
1,3-Dichlorobenzene	1.385	1.230	1.266	1.384	1.385	1.330	5.7
1,4-Dichlorobenzene	1.493	1.309	1.292	1.416	1.443	1.391	6.2
1,2-Dichlorobenzene	1.349	1.233	1.229	1.304	1.340	1.291	4.4
1,2-Dibromo-3-chloropropane	0.150	0.131	0.118	0.143	0.138	0.136	9.0
1,2,4-Trichlorobenzene	0.611	0.512	0.569	0.622	0.598	0.582	7.6
Hexachlorobutadiene	0.175	0.143	0.205	0.187	0.160	0.174	13.6
1,2,3-Trichlorobenzene	0.548	0.464	0.501	0.546	0.504	0.513	6.9
Naphthalene	2.187	1.915	1.943	2.387	2.117	2.110	9.1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.132	0.206	0.155	0.221	0.239	0.191	23.8
1,4-Dioxane	0.003	0.002	0.002	0.004	0.003	0.003	23.8
Cyclohexane	0.499	0.422	0.421	0.461	0.484	0.457	7.8
Methyl acetate	0.491	0.424	0.405	0.465	0.451	0.447	7.6
Methylcyclohexane	0.320	0.274	0.282	0.294	0.322	0.299	7.3

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Instrument ID: V6 Calibration Date(s): 06/10/2011 06/10/2011  
 Heated Purge: (Y/N) N Calibration Time(s): 12:51 15:00  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V6I1459.D</u>	RRF020 = <u>V6I1458.D</u>					
RRF050 = <u>V6I1457.D</u>	RRF100 = <u>V6I1461.D</u>	RRF200 = <u>V6I1460.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.167	0.151	0.127	0.159	0.157	0.152	10.1
Chloromethane	0.262	0.195	0.199	0.202	0.209	0.213	12.9
Vinyl chloride	0.227	0.188	0.179	0.205	0.197	0.199	9.1
Bromomethane	0.130	0.132	0.126	0.141	0.133	0.132	4.2
Chloroethane	0.140	0.100	0.093	0.105	0.099	0.107	17.4
Trichlorofluoromethane	0.348	0.318	0.280	0.346	0.358	0.330	9.6
1,1-Dichloroethene	0.224	0.185	0.169	0.208	0.209	0.199	11.0
Acetone	0.028	0.027	0.017	0.020	0.019	0.022	23.2
Iodomethane	0.398	0.351	0.328	0.389	0.373	0.368	7.7
Carbon disulfide	0.765	0.643	0.602	0.698	0.684	0.679	9.1
Methylene chloride	0.264	0.237	0.202	0.233	0.224	0.232	9.6
trans-1,2-Dichloroethene	0.244	0.205	0.186	0.220	0.214	0.214	10.0
Methyl tert-butyl ether	0.525	0.508	0.472	0.562	0.526	0.519	6.3
1,1-Dichloroethane	0.452	0.397	0.366	0.419	0.406	0.408	7.7
Vinyl acetate	0.883	0.836	0.770	0.878	0.822	0.838	5.5
2-Butanone	0.024	0.024	0.020	0.023	0.021	0.022	7.8
cis-1,2-Dichloroethene	0.252	0.222	0.203	0.237	0.232	0.229	7.8
2,2-Dichloropropane	0.252	0.206	0.206	0.236	0.229	0.226	9.0
Bromochloromethane	0.124	0.110	0.101	0.118	0.112	0.113	7.4
Chloroform	0.461	0.400	0.360	0.413	0.402	0.407	8.8
1,1,1-Trichloroethane	0.353	0.276	0.281	0.333	0.329	0.314	10.8
1,1-Dichloropropene	0.112	0.096	0.090	0.110	0.110	0.103	9.8
Carbon tetrachloride	0.410	0.296	0.260	0.317	0.322	0.321	17.2
1,2-Dichloroethane	0.332	0.311	0.286	0.325	0.318	0.314	5.7
Benzene	0.935	0.828	0.782	0.878	0.840	0.853	6.7
Trichloroethene	0.237	0.199	0.190	0.227	0.226	0.216	9.2
1,2-Dichloropropane	0.284	0.257	0.237	0.272	0.267	0.263	6.7
Dibromomethane	0.143	0.140	0.126	0.148	0.143	0.140	5.8
Bromodichloromethane	0.293	0.275	0.259	0.308	0.304	0.288	7.1
cis-1,3-Dichloropropene	0.342	0.340	0.326	0.389	0.374	0.354	7.4
4-Methyl-2-pentanone	0.178	0.187	0.176	0.211	0.194	0.189	7.6
Toluene	0.999	0.872	0.819	0.936	0.907	0.907	7.4
trans-1,3-Dichloropropene	0.322	0.309	0.292	0.350	0.342	0.323	7.3
1,1,2-Trichloroethane	0.195	0.175	0.162	0.192	0.185	0.182	7.3
1,3-Dichloropropane	0.413	0.395	0.359	0.416	0.400	0.397	5.8
Tetrachloroethene	0.252	0.196	0.196	0.239	0.234	0.224	11.6
2-Hexanone	0.167	0.169	0.161	0.190	0.181	0.174	6.7
Dibromochloromethane	0.278	0.263	0.252	0.309	0.309	0.282	9.3
1,2-Dibromoethane	0.255	0.242	0.224	0.269	0.259	0.250	6.9

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date(s): 06/10/2011 06/10/2011

Heated Purge: (Y/N) N Calibration Time(s): 12:51 15:00

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 =	V6I1459.D	RRF020 =	V6I1458.D			
RRF050 =	V6I1457.D	RRF100 =	V6I1461.D	RRF200 =	V6I1460.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	0.822	0.743	0.682	0.793	0.765	0.761	7.0
1,1,1,2-Tetrachloroethane	0.293	0.264	0.250	0.292	0.295	0.279	7.4
Ethylbenzene	0.400	0.347	0.346	0.412	0.411	0.383	8.8
m,p-Xylene	0.469	0.429	0.421	0.494	0.473	0.457	6.8
o-Xylene	0.440	0.429	0.424	0.496	0.486	0.455	7.3
Xylene (Total)	0.459	0.429	0.422	0.495	0.477	0.457	6.8
Styrene	0.768	0.764	0.749	0.852	0.818	0.790	5.5
Bromoform	0.167	0.176	0.167	0.206	0.208	0.185	11.2
Isopropylbenzene	1.005	0.940	0.985	1.152	1.120	1.041	8.8
1,1,2,2-Tetrachloroethane	0.584	0.568	0.496	0.588	0.533	0.554	7.1
Bromobenzene	0.646	0.576	0.531	0.634	0.608	0.599	7.8
1,2,3-Trichloropropane	0.655	0.619	0.567	0.685	0.650	0.635	7.1
2-Chlorotoluene	0.533	0.478	0.467	0.558	0.542	0.516	7.9
1,3,5-Trimethylbenzene	1.597	1.460	1.445	1.743	1.627	1.575	7.9
4-Chlorotoluene	0.616	0.536	0.502	0.587	0.568	0.562	7.9
tert-Butylbenzene	1.451	1.343	1.330	1.637	1.558	1.464	9.1
1,2,4-Trimethylbenzene	1.663	1.570	1.537	1.801	1.702	1.655	6.4
sec-Butylbenzene	1.812	1.591	1.565	1.925	1.779	1.734	8.8
4-Isopropyltoluene	1.405	1.295	1.310	1.602	1.494	1.421	9.1
1,3-Dichlorobenzene	1.155	0.999	0.945	1.087	1.035	1.044	7.7
1,4-Dichlorobenzene	1.211	1.070	0.973	1.140	1.072	1.093	8.1
1,2-Dichlorobenzene	1.104	1.003	0.914	1.080	0.996	1.019	7.4
1,2-Dibromo-3-chloropropane	0.122	0.100	0.083	0.110	0.099	0.103	14.3
1,2,4-Trichlorobenzene	0.696	0.598	0.487	0.673	0.577	0.606	13.8
Hexachlorobutadiene	0.419	0.288	0.207	0.321	0.241	0.295	27.8
1,2,3-Trichlorobenzene	0.783	0.569	0.409	0.618	0.484	0.572	24.8
Naphthalene	1.864	1.510	1.116	1.662	1.289	1.488	19.9
1,1,2-Trichloro-1,2,2-trifluoroethane	0.212	0.174	0.164	0.213	0.214	0.195	12.4
1,4-Dioxane	0.003	0.002	0.001	0.002	0.001	0.002	43.4
Cyclohexane	0.305	0.274	0.271	0.349	0.353	0.311	12.7
Methyl acetate	0.184	0.184	0.147	0.171	0.157	0.169	9.9
Methylcyclohexane	0.234	0.209	0.211	0.279	0.271	0.241	13.8

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Instrument ID: V10 Calibration Date(s): 06/29/2011 06/29/2011  
 Heated Purge: (Y/N) N Calibration Time(s): 8:51 10:56  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V8A4203.D</u>	RRF020 = <u>V8A4204.D</u>					
RRF050 = <u>V8A4205.D</u>	RRF100 = <u>V8A4206.D</u>	RRF200 = <u>V8A4207.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.253	0.208	0.189	0.232	0.270	0.234	13.1
Chloromethane	0.339	0.285	0.250	0.279	0.328	0.308	14.1
Vinyl chloride	0.349	0.299	0.264	0.293	0.341	0.322	13.6
Bromomethane	0.245	0.192	0.182	0.202	0.254	0.224	16.5
Chloroethane	0.194	0.160	0.143	0.159	0.184	0.177	16.3
Trichlorofluoromethane	0.510	0.436	0.388	0.466	0.542	0.487	14.5
1,1-Dichloroethene	0.304	0.252	0.225	0.253	0.297	0.279	15.7
Acetone	0.055	0.044	0.037	0.044	0.045	0.045	14.5
Iodomethane	0.421	0.412	0.385	0.427	0.497	0.423	9.5
Carbon disulfide	1.013	0.863	0.766	0.910	1.013	0.971	17.5
Methylene chloride	0.346	0.306	0.274	0.289	0.331	0.326	14.7
trans-1,2-Dichloroethene	0.318	0.281	0.248	0.276	0.318	0.309	19.0
Methyl tert-butyl ether	1.042	0.978	0.939	0.932	1.056	1.008	6.9
1,1-Dichloroethane	0.656	0.567	0.509	0.546	0.633	0.601	12.0
Vinyl acetate	1.339	1.260	1.176	1.188	1.334	1.281	6.9
2-Butanone	0.040	0.039	0.038	0.042	0.044	0.040	6.0
cis-1,2-Dichloroethene	0.329	0.284	0.257	0.274	0.319	0.311	17.0
2,2-Dichloropropane	0.553	0.469	0.413	0.486	0.568	0.523	15.9
Bromochloromethane	0.151	0.139	0.129	0.132	0.150	0.145	10.3
Chloroform	0.665	0.574	0.522	0.553	0.643	0.616	13.2
1,1,1-Trichloroethane	0.578	0.494	0.445	0.499	0.584	0.541	13.8
1,1-Dichloropropene	0.143	0.129	0.111	0.129	0.150	0.136	11.9
Carbon tetrachloride	0.454	0.401	0.361	0.424	0.502	0.437	12.0
1,2-Dichloroethane	0.591	0.551	0.517	0.526	0.601	0.571	8.3
Benzene	1.263	1.073	0.966	1.050	1.231	1.164	13.9
Trichloroethene	0.298	0.249	0.226	0.252	0.293	0.270	11.7
1,2-Dichloropropane	0.377	0.327	0.305	0.318	0.370	0.353	12.5
Dibromomethane	0.226	0.209	0.201	0.201	0.229	0.219	8.4
Bromodichloromethane	0.470	0.434	0.408	0.429	0.500	0.459	9.0
cis-1,3-Dichloropropene	0.518	0.480	0.455	0.486	0.563	0.502	7.4
4-Methyl-2-pentanone	0.329	0.333	0.343	0.325	0.360	0.338	4.1
Toluene	1.350	1.147	1.039	1.154	1.350	1.240	11.7
trans-1,3-Dichloropropene	0.476	0.465	0.463	0.484	0.561	0.490	7.5
1,1,2-Trichloroethane	0.279	0.264	0.250	0.251	0.284	0.272	7.5
1,3-Dichloropropane	0.633	0.573	0.548	0.540	0.602	0.589	7.2
Tetrachloroethene	0.343	0.288	0.257	0.294	0.331	0.314	13.6
2-Hexanone	0.314	0.311	0.322	0.334	0.355	0.327	5.4
Dibromochloromethane	0.419	0.392	0.384	0.390	0.441	0.406	5.4
1,2-Dibromoethane	0.397	0.373	0.365	0.358	0.393	0.380	4.5

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V10 Calibration Date(s): 06/29/2011 06/29/2011

Heated Purge: (Y/N) N Calibration Time(s): 8:51 10:56

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 =	V8A4203.D	RRF020 =	V8A4204.D			
RRF050 =	V8A4205.D	RRF100 =	V8A4206.D	RRF200 =	V8A4207.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	1.043	0.899	0.833	0.901	1.008	0.963	10.5
1,1,1,2-Tetrachloroethane	0.399	0.346	0.327	0.353	0.395	0.377	11.1
Ethylbenzene	0.553	0.474	0.422	0.468	0.541	0.509	12.6
m,p-Xylene	0.665	0.573	0.513	0.581	0.663	0.617	11.8
o-Xylene	0.670	0.566	0.510	0.571	0.646	0.607	11.1
Xylene (Total)	0.667	0.570	0.512	0.578	0.657	0.613	11.5
Styrene	1.116	0.972	0.908	0.998	1.142	1.039	9.0
Bromoform	0.284	0.267	0.281	0.287	0.329	0.288	7.4
Isopropylbenzene	1.804	1.550	1.336	1.545	1.769	1.657	13.2
1,1,2,2-Tetrachloroethane	1.040	0.911	0.858	0.829	0.906	0.949	12.8
Bromobenzene	0.944	0.785	0.723	0.779	0.864	0.848	12.4
1,2,3-Trichloropropane	1.260	1.190	1.157	1.140	1.251	1.214	5.0
2-Chlorotoluene	0.803	0.681	0.579	0.649	0.732	0.715	13.8
1,3,5-Trimethylbenzene	3.004	2.531	2.139	2.449	2.814	2.723	16.4
4-Chlorotoluene	0.786	0.660	0.591	0.669	0.762	0.708	11.3
tert-Butylbenzene	2.786	2.383	2.005	2.297	2.651	2.548	16.0
1,2,4-Trimethylbenzene	2.988	2.536	2.212	2.465	2.831	2.708	13.7
sec-Butylbenzene	3.430	2.896	2.398	2.847	3.289	3.101	15.5
4-Isopropyltoluene	2.703	2.307	1.938	2.278	2.651	2.445	13.3
1,3-Dichlorobenzene	1.479	1.288	1.159	1.284	1.439	1.369	11.0
1,4-Dichlorobenzene	1.467	1.297	1.183	1.311	1.469	1.395	11.8
1,2-Dichlorobenzene	1.491	1.293	1.193	1.270	1.410	1.363	9.6
1,2-Dibromo-3-chloropropane	0.235	0.197	0.202	0.199	0.223	0.204	11.8
1,2,4-Trichlorobenzene	0.632	0.749	0.765	0.851	1.015	0.761	21.3
Hexachlorobutadiene	0.438	0.398	0.357	0.424	0.466	0.429	11.3
Naphthalene	1.406	1.655	1.848	1.995	2.327	1.830	17.1
1,2,3-Trichlorobenzene	0.658	0.773	0.773	0.827	0.952	0.742	22.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.314	0.267	0.227	0.298	0.343	0.302	16.6
Methyl acetate	0.221	0.243	0.241	0.230	0.255	0.253	15.3
Cyclohexane	0.540	0.452	0.376	0.494	0.566	0.517	19.6
Methylcyclohexane	0.481	0.395	0.315	0.437	0.507	0.449	19.4
1,4-Dioxane	0.003	0.004	0.003	0.003	0.004	0.003	7.7



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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Instrument ID: V10 Calibration Date(s): 07/06/2011 07/06/2011  
 Heated Purge: (Y/N) N Calibration Time(s): 9:48 12:19  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V8A4395.D</u>	RRF020 = <u>V8A4394.D</u>					
RRF050 = <u>V8A4393.D</u>	RRF100 = <u>V8A4399.D</u>	RRF200 = <u>V8A4398.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.508	0.394	0.467	0.452	0.449	0.463	9.3
Chloromethane	0.308	0.248	0.285	0.291	0.249	0.281	9.6
Vinyl chloride	0.414	0.306	0.377	0.384	0.341	0.373	11.3
Bromomethane	0.296	0.235	0.281	0.310	0.300	0.286	9.4
Chloroethane	0.210	0.172	0.192	0.213	0.193	0.198	8.1
Trichlorofluoromethane	0.934	0.709	0.840	0.815	0.840	0.846	9.9
1,1-Dichloroethene	0.379	0.276	0.328	0.323	0.327	0.336	11.6
Acetone	0.036	0.030	0.026	0.042	0.044	(0.035)	19.6
Iodomethane	0.430	0.356	0.497	0.496	0.469	0.446	12.0
Carbon disulfide	1.248	0.916	1.117	1.005	0.996	1.088	12.8
Methylene chloride	0.412	0.329	0.369	0.354	0.357	0.372	9.0
trans-1,2-Dichloroethene	0.421	0.301	0.362	0.335	0.350	0.365	13.1
Methyl tert-butyl ether	1.332	1.134	1.213	1.232	1.239	1.247	6.0
1,1-Dichloroethane	0.618	0.483	0.565	0.531	0.547	0.560	9.3
Vinyl acetate	0.921	0.806	0.886	0.904	0.918	0.893	5.0
2-Butanone	0.035	0.036	0.034	0.044	0.045	(0.038)	13.1
cis-1,2-Dichloroethene	0.331	0.257	0.298	0.287	0.300	0.301	9.3
2,2-Dichloropropane	0.705	0.523	0.652	0.604	0.654	0.641	10.7
Bromochloromethane	0.152	0.128	0.141	0.143	0.145	0.144	6.0
Chloroform	0.796	0.616	0.718	0.683	0.713	0.720	9.6
1,1,1-Trichloroethane	0.762	0.575	0.689	0.649	0.696	0.689	10.3
1,1-Dichloropropene	0.150	0.114	0.131	0.132	0.140	0.136	10.0
Carbon tetrachloride	0.620	0.485	0.585	0.572	0.624	0.584	9.1
1,2-Dichloroethane	0.739	0.631	0.689	0.685	0.714	0.699	5.9
Benzene	1.276	0.987	1.172	1.124	1.178	1.169	9.2
Trichloroethene	0.299	0.233	0.278	0.267	0.282	0.276	9.0
1,2-Dichloropropane	0.308	0.251	0.290	0.284	0.300	0.290	7.4
Dibromomethane	0.258	0.230	0.247	0.251	0.260	0.251	4.4
Bromodichloromethane	0.549	0.478	0.557	0.538	0.571	0.540	6.0
cis-1,3-Dichloropropene	0.546	0.482	0.551	0.559	0.587	0.545	6.3
4-Methyl-2-pentanone	0.225	0.214	0.216	0.246	0.245	0.229	6.2
Toluene	1.396	1.102	1.292	1.259	1.344	1.298	8.5
trans-1,3-Dichloropropene	0.521	0.493	0.557	0.586	0.624	0.551	8.8
1,1,2-Trichloroethane	0.295	0.247	0.269	0.280	0.286	0.279	6.6
1,3-Dichloropropane	0.622	0.540	0.572	0.593	0.603	0.592	5.4
Tetrachloroethene	0.421	0.283	0.309	0.311	0.324	0.345	(17.6)
2-Hexanone	0.174	0.190	0.185	0.231	0.240	0.199	14.6
Dibromochloromethane	0.405	0.383	0.436	0.444	0.461	0.422	6.9
1,2-Dibromoethane	0.358	0.341	0.353	0.373	0.374	0.360	3.5

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V10 Calibration Date(s): 07/06/2011 07/06/2011

Heated Purge: (Y/N) N Calibration Time(s): 9:48 12:19

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V8A4395.D</u>	RRF020 = <u>V8A4394.D</u>					
RRF050 = <u>V8A4393.D</u>	RRF100 = <u>V8A4399.D</u>	RRF200 = <u>V8A4398.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	1.023	0.839	0.928	0.915	0.956	0.947	7.4
1,1,1,2-Tetrachloroethane	0.387	0.345	0.383	0.377	0.395	0.379	4.6
Ethylbenzene	0.534	0.440	0.482	0.490	0.516	0.500	7.3
m,p-Xylene	0.664	0.525	0.598	0.617	0.659	0.621	8.8
o-Xylene	0.633	0.532	0.590	0.608	0.642	0.606	6.8
Xylene (Total)	0.654	0.527	0.595	0.614	0.653	0.616	8.1
Styrene	1.053	0.891	1.025	1.046	1.125	1.032	7.5
Bromoform	0.295	0.278	0.310	0.335	0.353	0.311	8.9
Isopropylbenzene	1.818	1.498	1.631	1.750	1.842	1.726	7.9
1,1,2,2-Tetrachloroethane	0.833	0.751	0.717	0.777	0.754	0.777	6.0
Bromobenzene	0.818	0.675	0.714	0.712	0.727	0.744	8.1
1,2,3-Trichloropropane	1.220	1.068	1.071	1.155	1.139	1.146	5.9
2-Chlorotoluene	0.698	0.552	0.588	0.601	0.598	0.622	9.8
1,3,5-Trimethylbenzene	2.829	2.321	2.379	2.546	2.617	2.587	8.4
4-Chlorotoluene	0.685	0.567	0.593	0.619	0.631	0.630	7.6
tert-Butylbenzene	2.548	2.046	2.058	2.277	2.337	2.302	9.7
1,2,4-Trimethylbenzene	2.834	2.341	2.437	2.612	2.655	2.619	7.7
sec-Butylbenzene	3.256	2.599	2.642	2.973	3.021	2.958	9.7
4-Isopropyltoluene	2.430	1.990	2.081	2.314	2.383	2.271	8.3
1,3-Dichlorobenzene	1.393	1.149	1.208	1.266	1.280	1.281	7.6
1,4-Dichlorobenzene	1.357	1.173	1.219	1.294	1.308	1.285	5.8
1,2-Dichlorobenzene	1.362	1.164	1.196	1.260	1.268	1.268	6.5
1,2-Dibromo-3-chloropropane	0.224	0.204	0.197	0.230	0.228	0.218	6.3
1,2,4-Trichlorobenzene	0.718	0.736	0.779	0.938	0.967	0.809	14.0
Hexachlorobutadiene	0.613	0.481	0.477	0.516	0.517	0.536	11.5
Naphthalene	1.657	1.483	1.521	1.970	1.972	1.710	12.5
1,2,3-Trichlorobenzene	0.752	0.744	0.767	0.904	0.915	0.806	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.447	0.327	0.382	0.383	0.399	0.398	11.4
Methyl acetate	0.234	0.213	0.205	0.236	0.225	0.225	5.7
Cyclohexane	0.372	0.280	0.323	0.337	0.362	0.341	10.5
Methylcyclohexane	0.470	0.381	0.407	0.449	0.486	0.444	9.3
1,4-Dioxane	0.003	0.003	0.003	0.003	0.003	(0.003)	7.5

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB1T

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: V1M1743.D BFB Injection Date: 06/28/2011  
Instrument ID: V1 BFB Injection Time: 8:40  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 60.0% of mass 95	38.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	79.1
175	5.0 - 9.0% of mass 174	6.9 (8.7)1
176	95.0 - 101.0% of mass 174	75.9 (96.0)1
177	5.0 - 9.0% of mass 176	5.5 (7.3)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0501T	VSTD0501T	V1M1745.D	06/28/2011	9:32
02	LCS-60018	LCS-60018	V1M1746.D	06/28/2011	10:09
03	LCSD-60018	LCSD-60018	V1M1747.D	06/28/2011	10:37
04	MB-60018	MB-60018	V1M1749.D	06/28/2011	11:32
05	DEC-030D	K1102-01A	V1M1758.D	06/28/2011	15:43
06	DEC-030	K1102-02A	V1M1759.D	06/28/2011	16:11
07	DEC-064	K1102-04A	V1M1761.D	06/28/2011	17:08
08	DEC-006DD	K1102-05A	V1M1762.D	06/28/2011	17:36
09	DEC-006D	K1102-06A	V1M1763.D	06/28/2011	18:04
10	DUP-062011	K1102-07A	V1M1764.D	06/28/2011	18:32
11	DEC-031D	K1102-08A	V1M1765.D	06/28/2011	19:00
12	DEC-031	K1102-09A	V1M1766.D	06/28/2011	19:28

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Instrument ID: V1 Calibration Date: 06/28/2011 Time: 9:32  
Lab File ID: V1M1745.D Init. Calib. Date(s): 06/01/2011 06/01/2011  
EPA Sample No. (VSTD####) VSTD0501T Init. Calib. Time(s): 11:59 14:22  
Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.151	0.094	0.100	-37.7	20.0
Chloromethane	0.415	0.401	0.010	-3.5	20.0
Vinyl chloride	0.296	0.273	0.010	-7.7	20.0
Bromomethane	0.191	0.183	0.010	-4.2	20.0
Chloroethane	0.176	0.166	0.010	-5.7	20.0
Trichlorofluoromethane	0.255	0.179	0.010	-29.9	20.0
1,1-Dichloroethene	0.235	0.251	0.100	6.6	20.0
Acetone	0.071	0.042	0.010	-41.1	20.0
Iodomethane	0.441	0.400	0.010	-9.2	20.0
Carbon disulfide	0.861	0.836	0.010	-2.9	20.0
Methylene chloride	0.237	0.279	0.010	17.6	20.0
trans-1,2-Dichloroethene	0.268	0.255	0.010	-5.1	20.0
Methyl tert-butyl ether	0.700	0.576	0.010	-17.7	20.0
1,1-Dichloroethane	0.516	0.522	0.010	1.1	20.0
Vinyl acetate	1.661	1.597	0.010	-3.9	20.0
2-Butanone	0.054	0.029	0.010	-46.6	20.0
cis-1,2-Dichloroethene	0.297	0.266	0.010	-10.2	20.0
2,2-Dichloropropane	0.160	0.131	0.010	-18.4	20.0
Bromochloromethane	0.168	0.145	0.010	-13.7	20.0
Chloroform	0.426	0.372	0.010	-12.7	20.0
1,1,1-Trichloroethane	0.256	0.208	0.010	-18.8	20.0
1,1-Dichloropropene	0.127	0.118	0.010	-7.0	20.0
Carbon tetrachloride	0.252	0.210	0.010	-16.8	20.0
1,2-Dichloroethane	0.329	0.283	0.010	-13.9	20.0
Benzene	0.976	0.983	0.010	0.7	20.0
Trichloroethene	0.292	0.261	0.010	-10.7	20.0
1,2-Dichloropropane	0.313	0.327	0.010	4.6	20.0
Dibromomethane	0.188	0.162	0.010	-14.1	20.0
Bromodichloromethane	0.314	0.262	0.010	-16.8	20.0
cis-1,3-Dichloropropene	0.435	0.419	0.010	-3.6	20.0
4-Methyl-2-pentanone	0.753	0.417	0.010	-44.6	20.0
Toluene	0.996	0.977	0.010	-1.9	20.0
trans-1,3-Dichloropropene	0.383	0.340	0.010	-11.1	20.0
1,1,2-Trichloroethane	0.240	0.208	0.010	-13.2	20.0
1,3-Dichloropropane	0.558	0.532	0.010	-4.6	20.0
Tetrachloroethene	0.256	0.264	0.010	3.3	20.0
2-Hexanone	0.745	0.446	0.010	-40.1	20.0
Dibromochloromethane	0.388	0.346	0.010	-10.9	20.0
1,2-Dibromoethane	0.384	0.321	0.010	-16.2	20.0
Chlorobenzene	0.914	0.895	0.010	-2.1	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V1 Calibration Date: 06/28/2011 Time: 9:32

Lab File ID: V1M1745.D Init. Calib. Date(s): 06/01/2011 06/01/2011

EPA Sample No. (VSTD####) VSTD0501T Init. Calib. Time(s): 11:59 14:22

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.348	0.314	0.010	-9.7	20.0
Ethylbenzene	0.454	0.439	0.010	-3.4	20.0
m,p-Xylene	0.567	0.552	0.010	-2.7	20.0
o-Xylene	0.546	0.540	0.010	-1.2	20.0
Xylene (Total)	0.560	0.548	0.010	-2.2	20.0
Styrene	0.931	0.947	0.010	1.7	20.0
Bromoform	0.236	0.234	0.010	-0.7	20.0
Isopropylbenzene	1.316	1.259	0.300	-4.4	20.0
1,1,2,2-Tetrachloroethane	0.965	0.825	0.300	-14.5	20.0
Bromobenzene	0.759	0.689	0.010	-9.2	20.0
1,2,3-Trichloropropane	1.016	0.938	0.010	-7.8	20.0
2-Chlorotoluene	0.728	0.625	0.010	-14.2	20.0
1,3,5-Trimethylbenzene	2.106	1.929	0.010	-8.4	20.0
4-Chlorotoluene	0.765	0.685	0.010	-10.5	20.0
tert-Butylbenzene	2.094	1.859	0.010	-11.2	20.0
1,2,4-Trimethylbenzene	2.170	1.995	0.010	-8.1	20.0
sec-Butylbenzene	2.425	2.246	0.010	-7.4	20.0
4-Isopropyltoluene	1.991	1.818	0.010	-8.7	20.0
1,3-Dichlorobenzene	1.330	1.258	0.010	-5.4	20.0
1,4-Dichlorobenzene	1.391	1.285	0.010	-7.6	20.0
1,2-Dichlorobenzene	1.291	1.170	0.010	-9.3	20.0
1,2-Dibromo-3-chloropropane	0.136	0.099	0.010	-27.4	20.0
1,2,4-Trichlorobenzene	0.582	0.570	0.010	-2.0	20.0
Hexachlorobutadiene	0.174	0.201	0.010	15.5	20.0
1,2,3-Trichlorobenzene	0.513	0.471	0.010	-8.2	20.0
Naphthalene	2.110	1.504	0.010	-28.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.191	0.201	0.010	5.6	20.0
1,4-Dioxane	0.003	0.002	0.010	-11.8	20.0
Cyclohexane	0.457	0.480	0.010	4.8	20.0
Methyl acetate	0.447	0.393	0.010	-12.2	20.0
Methylcyclohexane	0.299	0.318	0.010	6.4	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB6M

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: V6I1780.D BFB Injection Date: 06/29/2011  
Instrument ID: V6 BFB Injection Time: 8:28  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	50.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.3 (0.3)1
174	50.0 - 100.0% of mass 95	79.5
175	5.0 - 9.0% of mass 174	6.0 (7.5)1
176	95.0 - 101.0% of mass 174	77.5 (97.5)1
177	5.0 - 9.0% of mass 176	5.3 (6.8)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506M	VSTD0506M	V6I1781.D	06/29/2011	8:57
02	LCS-60070	LCS-60070	V6I1782.D	06/29/2011	9:56
03	MB-60070	MB-60070	V6I1785.D	06/29/2011	12:25
04	TRIP BLANK	K1102-13A	V6I1787.D	06/29/2011	13:20
05	DEC-064D	K1102-03A	V6I1790.D	06/29/2011	14:43
06	DEC-045D	K1102-10A	V6I1791.D	06/29/2011	15:10
07	DEC-064DL	K1102-04ADL	V6I1792.D	06/29/2011	15:38
08	DEC-006DDDL	K1102-05ADL	V6I1793.D	06/29/2011	16:06
09	DUP-062011DL	K1102-07ADL	V6I1794.D	06/29/2011	16:34
10	DEC-030DL	K1102-02ADL	V6I1795.D	06/29/2011	17:02
11	DEC-006DDL	K1102-06ADL	V6I1796.D	06/29/2011	17:29
12	DEC-031DL	K1102-09ADL	V6I1797.D	06/29/2011	17:57
13	DEC-045	K1102-11A	V6I1798.D	06/29/2011	18:24
14	DEC-047	K1102-14A	V6I1799.D	06/29/2011	18:52

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 06/29/2011 Time: 8:57

Lab File ID: V6I1781.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506M Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.152	0.115	0.100	-24.1	20.0
Chloromethane	0.213	0.201	0.010	-5.6	20.0
Vinyl chloride	0.199	0.195	0.010	-2.0	20.0
Bromomethane	0.132	0.132	0.010	-0.6	20.0
Chloroethane	0.107	0.099	0.010	-7.7	20.0
Trichlorofluoromethane	0.330	0.330	0.010	0.0	20.0
1,1-Dichloroethene	0.199	0.194	0.100	-2.6	20.0
Acetone	0.022	0.015	0.010	-33.5	20.0
Iodomethane	0.368	0.370	0.010	0.5	20.0
Carbon disulfide	0.679	0.692	0.010	2.0	20.0
Methylene chloride	0.232	0.230	0.010	-0.9	20.0
trans-1,2-Dichloroethene	0.214	0.215	0.010	0.6	20.0
Methyl tert-butyl ether	0.519	0.531	0.010	2.4	20.0
1,1-Dichloroethane	0.408	0.433	0.010	6.2	20.0
Vinyl acetate	0.838	0.859	0.010	2.5	20.0
2-Butanone	0.022	0.019	0.010	-16.2	20.0
cis-1,2-Dichloroethene	0.229	0.233	0.010	1.9	20.0
2,2-Dichloropropane	0.226	0.216	0.010	-4.3	20.0
Bromochloromethane	0.113	0.113	0.010	0.2	20.0
Chloroform	0.407	0.413	0.010	1.4	20.0
1,1,1-Trichloroethane	0.314	0.305	0.010	-2.8	20.0
1,1-Dichloropropene	0.103	0.104	0.010	0.1	20.0
Carbon tetrachloride	0.321	0.289	0.010	-9.9	20.0
1,2-Dichloroethane	0.314	0.325	0.010	3.3	20.0
Benzene	0.853	0.911	0.010	6.8	20.0
Trichloroethene	0.216	0.217	0.010	0.8	20.0
1,2-Dichloropropane	0.263	0.275	0.010	4.6	20.0
Dibromomethane	0.140	0.137	0.010	-2.2	20.0
Bromodichloromethane	0.288	0.294	0.010	2.1	20.0
cis-1,3-Dichloropropene	0.354	0.368	0.010	3.9	20.0
4-Methyl-2-pentanone	0.189	0.178	0.010	-5.9	20.0
Toluene	0.907	0.952	0.010	5.0	20.0
trans-1,3-Dichloropropene	0.323	0.326	0.010	1.0	20.0
1,1,2-Trichloroethane	0.182	0.178	0.010	-1.8	20.0
1,3-Dichloropropane	0.397	0.394	0.010	-0.7	20.0
Tetrachloroethene	0.224	0.223	0.010	-0.4	20.0
2-Hexanone	0.174	0.157	0.010	-9.6	20.0
Dibromochloromethane	0.282	0.270	0.010	-4.2	20.0
1,2-Dibromoethane	0.250	0.236	0.010	-5.4	20.0
Chlorobenzene	0.761	0.782	0.010	2.8	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 06/29/2011 Time: 8:57

Lab File ID: V6I1781.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506M Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.279	0.282	0.010	1.3	20.0
Ethylbenzene	0.383	0.390	0.010	1.8	20.0
m,p-Xylene	0.457	0.483	0.010	5.7	20.0
o-Xylene	0.455	0.481	0.010	5.6	20.0
Xylene (Total)	0.457	0.483	0.010	5.7	20.0
Styrene	0.790	0.838	0.010	6.0	20.0
Bromoform	0.185	0.175	0.010	-5.2	20.0
Isopropylbenzene	1.041	1.082	0.300	4.0	20.0
1,1,2,2-Tetrachloroethane	0.554	0.550	0.300	-0.8	20.0
Bromobenzene	0.599	0.626	0.010	4.6	20.0
1,2,3-Trichloropropane	0.635	0.646	0.010	1.7	20.0
2-Chlorotoluene	0.516	0.549	0.010	6.6	20.0
1,3,5-Trimethylbenzene	1.575	1.658	0.010	5.3	20.0
4-Chlorotoluene	0.562	0.589	0.010	4.9	20.0
tert-Butylbenzene	1.464	1.523	0.010	4.0	20.0
1,2,4-Trimethylbenzene	1.655	1.774	0.010	7.2	20.0
sec-Butylbenzene	1.734	1.769	0.010	2.0	20.0
4-Isopropyltoluene	1.421	1.509	0.010	6.2	20.0
1,3-Dichlorobenzene	1.044	1.078	0.010	3.2	20.0
1,4-Dichlorobenzene	1.093	1.128	0.010	3.2	20.0
1,2-Dichlorobenzene	1.019	1.055	0.010	3.5	20.0
1,2-Dibromo-3-chloropropane	0.103	0.083	0.010	-19.5	20.0
1,2,4-Trichlorobenzene	0.606	0.559	0.010	-7.7	20.0
Hexachlorobutadiene	0.295	0.248	0.010	-15.9	20.0
1,2,3-Trichlorobenzene	0.572	0.440	0.010	-23.2	20.0
Naphthalene	1.488	1.160	0.010	-22.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.195	0.192	0.010	-1.5	20.0
1,4-Dioxane	0.002	0.002	0.010	-5.9	20.0
Cyclohexane	0.311	0.328	0.010	5.6	20.0
Methyl acetate	0.169	0.165	0.010	-2.5	20.0
Methylcyclohexane	0.241	0.249	0.010	3.5	20.0



5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB6N

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: V6I1810.D BFB Injection Date: 06/30/2011  
Instrument ID: V6 BFB Injection Time: 8:25  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	50.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.5 (0.6) 1
174	50.0 - 100.0% of mass 95	83.0
175	5.0 - 9.0% of mass 174	6.2 (7.4) 1
176	95.0 - 101.0% of mass 174	80.1 (96.4) 1
177	5.0 - 9.0% of mass 176	5.3 (6.6) 2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506N	VSTD0506N	V6I1811.D	06/30/2011	8:50
02	LCS-60103	LCS-60103	V6I1812.D	06/30/2011	9:49
03	MB-60103	MB-60103	V6I1815.D	06/30/2011	11:10
04	DEC-046	K1102-12A	V6I1823.D	06/30/2011	14:44
05	DEC-033	K1102-15A	V6I1824.D	06/30/2011	15:11
06	DEC-010	K1102-16A	V6I1825.D	06/30/2011	15:38
07	DEC-007	K1102-17A	V6I1826.D	06/30/2011	16:05
08	DEC-011	K1102-18A	V6I1827.D	06/30/2011	16:32
09	DEC-007D	K1102-19A	V6I1828.D	06/30/2011	16:59
10	DEC-028	K1102-20A	V6I1829.D	06/30/2011	17:26
11	DEC-065D	K1102-21A	V6I1830.D	06/30/2011	17:53
12	DEC-065	K1102-22A	V6I1831.D	06/30/2011	18:20
13	DEC-046MS	K1102-12AMS	V6I1832.D	06/30/2011	18:47
14	DEC-046MSD	K1102-12AMSD	V6I1833.D	06/30/2011	19:13

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 06/30/2011 Time: 8:50

Lab File ID: V6I1811.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506N Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.152	0.118	0.100	-22.5	20.0
Chloromethane	0.213	0.229	0.010	7.3	20.0
Vinyl chloride	0.199	0.216	0.010	8.2	20.0
Bromomethane	0.132	0.147	0.010	11.0	20.0
Chloroethane	0.107	0.115	0.010	7.3	20.0
Trichlorofluoromethane	0.330	0.352	0.010	6.8	20.0
1,1-Dichloroethene	0.199	0.195	0.100	-1.9	20.0
Acetone	0.022	0.017	0.010	-22.0	20.0
Iodomethane	0.368	0.361	0.010	-1.9	20.0
Carbon disulfide	0.679	0.698	0.010	2.8	20.0
Methylene chloride	0.232	0.228	0.010	-1.7	20.0
trans-1,2-Dichloroethene	0.214	0.209	0.010	-2.1	20.0
Methyl tert-butyl ether	0.519	0.511	0.010	-1.4	20.0
1,1-Dichloroethane	0.408	0.419	0.010	2.8	20.0
Vinyl acetate	0.838	0.866	0.010	3.4	20.0
2-Butanone	0.022	0.019	0.010	-13.8	20.0
cis-1,2-Dichloroethene	0.229	0.225	0.010	-1.9	20.0
2,2-Dichloropropane	0.226	0.211	0.010	-6.3	20.0
Bromochloromethane	0.113	0.114	0.010	1.2	20.0
Chloroform	0.407	0.410	0.010	0.8	20.0
1,1,1-Trichloroethane	0.314	0.298	0.010	-5.2	20.0
1,1-Dichloropropene	0.103	0.100	0.010	-3.5	20.0
Carbon tetrachloride	0.321	0.285	0.010	-11.3	20.0
1,2-Dichloroethane	0.314	0.321	0.010	2.2	20.0
Benzene	0.853	0.892	0.010	4.6	20.0
Trichloroethene	0.216	0.207	0.010	-4.0	20.0
1,2-Dichloropropane	0.263	0.276	0.010	4.8	20.0
Dibromomethane	0.140	0.140	0.010	0.4	20.0
Bromodichloromethane	0.288	0.293	0.010	1.8	20.0
cis-1,3-Dichloropropene	0.354	0.353	0.010	-0.2	20.0
4-Methyl-2-pentanone	0.189	0.174	0.010	-7.9	20.0
Toluene	0.907	0.922	0.010	1.7	20.0
trans-1,3-Dichloropropene	0.323	0.315	0.010	-2.5	20.0
1,1,2-Trichloroethane	0.182	0.179	0.010	-1.5	20.0
1,3-Dichloropropane	0.397	0.367	0.010	-7.5	20.0
Tetrachloroethene	0.224	0.199	0.010	-10.8	20.0
2-Hexanone	0.174	0.146	0.010	-16.0	20.0
Dibromochloromethane	0.282	0.258	0.010	-8.5	20.0
1,2-Dibromoethane	0.250	0.221	0.010	-11.4	20.0
Chlorobenzene	0.761	0.733	0.010	-3.7	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 06/30/2011 Time: 8:50

Lab File ID: V6I1811.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506N Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.279	0.262	0.010	-6.1	20.0
Ethylbenzene	0.383	0.360	0.010	-6.1	20.0
m,p-Xylene	0.457	0.444	0.010	-3.0	20.0
o-Xylene	0.455	0.433	0.010	-4.8	20.0
Xylene (Total)	0.457	0.440	0.010	-3.6	20.0
Styrene	0.790	0.766	0.010	-3.1	20.0
Bromoform	0.185	0.160	0.010	-13.2	20.0
Isopropylbenzene	1.041	0.971	0.300	-6.7	20.0
1,1,2,2-Tetrachloroethane	0.554	0.499	0.300	-9.9	20.0
Bromobenzene	0.599	0.556	0.010	-7.1	20.0
1,2,3-Trichloropropane	0.635	0.584	0.010	-8.1	20.0
2-Chlorotoluene	0.516	0.477	0.010	-7.5	20.0
1,3,5-Trimethylbenzene	1.575	1.465	0.010	-7.0	20.0
4-Chlorotoluene	0.562	0.529	0.010	-5.8	20.0
tert-Butylbenzene	1.464	1.363	0.010	-6.9	20.0
1,2,4-Trimethylbenzene	1.655	1.552	0.010	-6.2	20.0
sec-Butylbenzene	1.734	1.562	0.010	-9.9	20.0
4-Isopropyltoluene	1.421	1.322	0.010	-7.0	20.0
1,3-Dichlorobenzene	1.044	0.958	0.010	-8.3	20.0
1,4-Dichlorobenzene	1.093	1.035	0.010	-5.3	20.0
1,2-Dichlorobenzene	1.019	0.950	0.010	-6.8	20.0
1,2-Dibromo-3-chloropropane	0.103	0.080	0.010	-22.6	20.0
1,2,4-Trichlorobenzene	0.606	0.486	0.010	-19.9	20.0
Hexachlorobutadiene	0.295	0.221	0.010	-25.3	20.0
1,2,3-Trichlorobenzene	0.572	0.420	0.010	-26.6	20.0
Naphthalene	1.488	1.096	0.010	-26.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.195	0.205	0.010	5.1	20.0
1,4-Dioxane	0.002	0.002	0.010	2.6	20.0
Cyclohexane	0.311	0.324	0.010	4.4	20.0
Methyl acetate	0.169	0.180	0.010	6.5	20.0
Methylcyclohexane	0.241	0.242	0.010	0.5	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB60

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: V6I1853.D BFB Injection Date: 07/01/2011  
Instrument ID: V6 BFB Injection Time: 7:40  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	49.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	83.6
175	5.0 - 9.0% of mass 174	6.1 (7.3)1
176	95.0 - 101.0% of mass 174	80.2 (96.0)1
177	5.0 - 9.0% of mass 176	5.3 (6.7)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05060	VSTD05060	V6I1854.D	07/01/2011	7:54
02	LCS-60133	LCS-60133	V6I1855.D	07/01/2011	8:36
03	MB-60133	MB-60133	V6I1859.D	07/01/2011	10:23
04	DEC-007DDL	K1102-19ADL	V6I1866.D	07/01/2011	13:32
05	DEC-007DL	K1102-17ADL	V6I1872.D	07/01/2011	16:14
06	DEC-028DL	K1102-20ADL	V6I1873.D	07/01/2011	16:41

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 07/01/2011 Time: 7:54

Lab File ID: V6I1854.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD05060 Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.152	0.156	0.100	2.6	20.0
Chloromethane	0.213	0.284	0.010	33.3	20.0
Vinyl chloride	0.199	0.255	0.010	28.1	20.0
Bromomethane	0.132	0.171	0.010	29.2	20.0
Chloroethane	0.107	0.128	0.010	19.3	20.0
Trichlorofluoromethane	0.330	0.362	0.010	9.7	20.0
1,1-Dichloroethene	0.199	0.192	0.100	-3.5	20.0
Acetone	0.022	0.025	0.010	13.4	20.0
Iodomethane	0.368	0.395	0.010	7.4	20.0
Carbon disulfide	0.679	0.769	0.010	13.3	20.0
Methylene chloride	0.232	0.234	0.010	1.0	20.0
trans-1,2-Dichloroethene	0.214	0.217	0.010	1.5	20.0
Methyl tert-butyl ether	0.519	0.523	0.010	0.9	20.0
1,1-Dichloroethane	0.408	0.441	0.010	8.1	20.0
Vinyl acetate	0.838	0.927	0.010	10.6	20.0
2-Butanone	0.022	0.023	0.010	1.2	20.0
cis-1,2-Dichloroethene	0.229	0.239	0.010	4.3	20.0
2,2-Dichloropropane	0.226	0.228	0.010	1.2	20.0
Bromochloromethane	0.113	0.115	0.010	1.9	20.0
Chloroform	0.407	0.427	0.010	4.9	20.0
1,1,1-Trichloroethane	0.314	0.303	0.010	-3.7	20.0
1,1-Dichloropropene	0.103	0.099	0.010	-4.6	20.0
Carbon tetrachloride	0.321	0.276	0.010	-14.0	20.0
1,2-Dichloroethane	0.314	0.327	0.010	4.1	20.0
Benzene	0.853	0.944	0.010	10.7	20.0
Trichloroethene	0.216	0.213	0.010	-1.3	20.0
1,2-Dichloropropane	0.263	0.282	0.010	7.1	20.0
Dibromomethane	0.140	0.141	0.010	0.6	20.0
Bromodichloromethane	0.288	0.300	0.010	4.0	20.0
cis-1,3-Dichloropropene	0.354	0.370	0.010	4.5	20.0
4-Methyl-2-pentanone	0.189	0.179	0.010	-5.5	20.0
Toluene	0.907	0.966	0.010	6.6	20.0
trans-1,3-Dichloropropene	0.323	0.325	0.010	0.8	20.0
1,1,2-Trichloroethane	0.182	0.177	0.010	-2.4	20.0
1,3-Dichloropropane	0.397	0.411	0.010	3.6	20.0
Tetrachloroethene	0.224	0.217	0.010	-3.1	20.0
2-Hexanone	0.174	0.194	0.010	11.5	20.0
Dibromochloromethane	0.282	0.286	0.010	1.5	20.0
1,2-Dibromoethane	0.250	0.241	0.010	-3.4	20.0
Chlorobenzene	0.761	0.846	0.010	11.2	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 07/01/2011 Time: 7:54

Lab File ID: V6I1854.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD05060 Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.279	0.298	0.010	7.0	20.0
Ethylbenzene	0.383	0.407	0.010	6.1	20.0
m,p-Xylene	0.457	0.510	0.010	11.6	20.0
o-Xylene	0.455	0.500	0.010	9.8	20.0
Xylene (Total)	0.457	0.507	0.010	11.0	20.0
Styrene	0.790	0.902	0.010	14.2	20.0
Bromoform	0.185	0.177	0.010	-4.3	20.0
Isopropylbenzene	1.041	1.082	0.300	4.0	20.0
1,1,2,2-Tetrachloroethane	0.554	0.560	0.300	1.1	20.0
Bromobenzene	0.599	0.636	0.010	6.2	20.0
1,2,3-Trichloropropane	0.635	0.644	0.010	1.4	20.0
2-Chlorotoluene	0.516	0.560	0.010	8.5	20.0
1,3,5-Trimethylbenzene	1.575	1.696	0.010	7.7	20.0
4-Chlorotoluene	0.562	0.608	0.010	8.2	20.0
tert-Butylbenzene	1.464	1.537	0.010	5.0	20.0
1,2,4-Trimethylbenzene	1.655	1.769	0.010	6.9	20.0
sec-Butylbenzene	1.734	1.734	0.010	0.0	20.0
4-Isopropyltoluene	1.421	1.491	0.010	4.9	20.0
1,3-Dichlorobenzene	1.044	1.095	0.010	4.8	20.0
1,4-Dichlorobenzene	1.093	1.180	0.010	8.0	20.0
1,2-Dichlorobenzene	1.019	1.087	0.010	6.7	20.0
1,2-Dibromo-3-chloropropane	0.103	0.087	0.010	-15.6	20.0
1,2,4-Trichlorobenzene	0.606	0.551	0.010	-9.1	20.0
Hexachlorobutadiene	0.295	0.260	0.010	-12.0	20.0
1,2,3-Trichlorobenzene	0.572	0.491	0.010	-14.2	20.0
Naphthalene	1.488	1.238	0.010	-16.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.195	0.189	0.010	-3.1	20.0
1,4-Dioxane	0.002	(0.001)	0.010	-18.5	20.0
Cyclohexane	0.311	0.306	0.010	-1.6	20.0
Methyl acetate	0.169	0.168	0.010	-0.5	20.0
Methylcyclohexane	0.241	0.224	0.010	-6.9	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB6P

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: V6I1890.D BFB Injection Date: 07/05/2011  
Instrument ID: V6 BFB Injection Time: 6:35  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	50.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.5 (0.6) 1
174	50.0 - 100.0% of mass 95	80.7
175	5.0 - 9.0% of mass 174	6.0 (7.4) 1
176	95.0 - 101.0% of mass 174	77.2 (95.7) 1
177	5.0 - 9.0% of mass 176	5.4 (6.9) 2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506P	VSTD0506P	V6I1891.D	07/05/2011	6:50
02	LCS-60166	LCS-60166	V6I1892.D	07/05/2011	7:31
03	MB-60166	MB-60166	V6I1896.D	07/05/2011	9:18
04	DEC-012DL	K1102-23ADL	V6I1903.D	07/05/2011	12:31
05	DEC-015DDL	K1102-27ADL	V6I1905.D	07/05/2011	13:26
06	DEC-043D	K1102-24A	V6I1912.D	07/05/2011	16:42
07	DEC-043	K1102-28A	V6I1913.D	07/05/2011	17:10

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 07/05/2011 Time: 6:50

Lab File ID: V6I1891.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506P Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.152	0.171	0.100	12.6	20.0
Chloromethane	0.213	0.247	0.010	15.7	20.0
Vinyl chloride	0.199	0.222	0.010	11.5	20.0
Bromomethane	0.132	0.137	0.010	3.1	20.0
Chloroethane	0.107	0.111	0.010	3.0	20.0
Trichlorofluoromethane	0.330	0.361	0.010	9.3	20.0
1,1-Dichloroethene	0.199	0.202	0.100	1.3	20.0
Acetone	0.022	0.030	0.010	33.9	20.0
Iodomethane	0.368	0.376	0.010	2.4	20.0
Carbon disulfide	0.679	0.759	0.010	11.9	20.0
Methylene chloride	0.232	0.225	0.010	-3.1	20.0
trans-1,2-Dichloroethene	0.214	0.208	0.010	-2.7	20.0
Methyl tert-butyl ether	0.519	0.543	0.010	4.8	20.0
1,1-Dichloroethane	0.408	0.416	0.010	1.9	20.0
Vinyl acetate	0.838	0.838	0.010	0.0	20.0
2-Butanone	0.022	0.023	0.010	3.4	20.0
cis-1,2-Dichloroethene	0.229	0.220	0.010	-4.0	20.0
2,2-Dichloropropane	0.226	0.198	0.010	-12.1	20.0
Bromochloromethane	0.113	0.105	0.010	-7.4	20.0
Chloroform	0.407	0.396	0.010	-2.7	20.0
1,1,1-Trichloroethane	0.314	0.288	0.010	-8.5	20.0
1,1-Dichloropropene	0.103	0.099	0.010	-4.2	20.0
Carbon tetrachloride	0.321	0.285	0.010	-11.3	20.0
1,2-Dichloroethane	0.314	0.312	0.010	-0.8	20.0
Benzene	0.853	0.858	0.010	0.6	20.0
Trichloroethene	0.216	0.200	0.010	-7.4	20.0
1,2-Dichloropropane	0.263	0.257	0.010	-2.5	20.0
Dibromomethane	0.140	0.130	0.010	-6.9	20.0
Bromodichloromethane	0.288	0.280	0.010	-2.9	20.0
cis-1,3-Dichloropropene	0.354	0.341	0.010	-3.7	20.0
4-Methyl-2-pentanone	0.189	0.179	0.010	-5.3	20.0
Toluene	0.907	0.867	0.010	-4.4	20.0
trans-1,3-Dichloropropene	0.323	0.311	0.010	-3.7	20.0
1,1,2-Trichloroethane	0.182	0.169	0.010	-7.0	20.0
1,3-Dichloropropane	0.397	0.385	0.010	-3.0	20.0
Tetrachloroethene	0.224	0.201	0.010	-10.1	20.0
2-Hexanone	0.174	0.192	0.010	10.5	20.0
Dibromochloromethane	0.282	0.267	0.010	-5.4	20.0
1,2-Dibromoethane	0.250	0.227	0.010	-9.1	20.0
Chlorobenzene	0.761	0.728	0.010	-4.4	20.0



7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V6 Calibration Date: 07/05/2011 Time: 6:50

Lab File ID: V6I1891.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506P Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.279	0.259	0.010	-7.2	20.0
Ethylbenzene	0.383	0.354	0.010	-7.6	20.0
m,p-Xylene	0.457	0.429	0.010	-6.1	20.0
o-Xylene	0.455	0.420	0.010	-7.6	20.0
Xylene (Total)	0.457	0.426	0.010	-6.6	20.0
Styrene	0.790	0.750	0.010	-5.1	20.0
Bromoform	0.185	0.169	0.010	-8.4	20.0
Isopropylbenzene	1.041	0.907	0.300	-12.9	20.0
1,1,2,2-Tetrachloroethane	0.554	0.532	0.300	-3.9	20.0
Bromobenzene	0.599	0.566	0.010	-5.5	20.0
1,2,3-Trichloropropane	0.635	0.643	0.010	1.2	20.0
2-Chlorotoluene	0.516	0.476	0.010	-7.7	20.0
1,3,5-Trimethylbenzene	1.575	1.402	0.010	-11.0	20.0
4-Chlorotoluene	0.562	0.517	0.010	-7.9	20.0
tert-Butylbenzene	1.464	1.295	0.010	-11.6	20.0
1,2,4-Trimethylbenzene	1.655	1.524	0.010	-7.9	20.0
sec-Butylbenzene	1.734	1.414	0.010	-18.5	20.0
4-Isopropyltoluene	1.421	1.182	0.010	-16.8	20.0
1,3-Dichlorobenzene	1.044	0.927	0.010	-11.2	20.0
1,4-Dichlorobenzene	1.093	0.986	0.010	-9.8	20.0
1,2-Dichlorobenzene	1.019	0.939	0.010	-7.8	20.0
1,2-Dibromo-3-chloropropane	0.103	0.088	0.010	-14.2	20.0
1,2,4-Trichlorobenzene	0.606	0.465	0.010	-23.4	20.0
Hexachlorobutadiene	0.295	0.172	0.010	-41.7	20.0
1,2,3-Trichlorobenzene	0.572	0.385	0.010	-32.7	20.0
Naphthalene	1.488	1.214	0.010	-18.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.195	0.165	0.010	-15.3	20.0
1,4-Dioxane	0.002	0.002	0.010	-3.3	20.0
Cyclohexane	0.311	0.296	0.010	-4.7	20.0
Methyl acetate	0.169	0.199	0.010	18.0	20.0
Methylcyclohexane	0.241	0.206	0.010	-14.4	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10L

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: V8A4319.D BFB Injection Date: 07/01/2011  
Instrument ID: V10 BFB Injection Time: 17:57  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.3
75	30.0 - 60.0% of mass 95	59.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.7 (0.8) 1
174	50.0 - 100.0% of mass 95	83.0
175	5.0 - 9.0% of mass 174	6.3 (7.6) 1
176	95.0 - 101.0% of mass 174	79.3 (95.5) 1
177	5.0 - 9.0% of mass 176	5.2 (6.5) 2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010L	VSTD05010L	V8A4321.D	07/01/2011	18:44
02	LCS-60151	LCS-60151	V8A4322.D	07/01/2011	19:08
03	LCSD-60151	LCSD-60151	V8A4323.D	07/01/2011	19:31
04	MB-60151	MB-60151	V8A4325.D	07/01/2011	20:18
05	DEC-065DDL	K1102-21ADL	V8A4326.D	07/01/2011	20:41
06	DEC-012	K1102-23A	V8A4336.D	07/02/2011	0:36
07	DUP-062211	K1102-25A	V8A4338.D	07/02/2011	1:23
08	DEC-015	K1102-26A	V8A4339.D	07/02/2011	1:47
09	DEC-015D	K1102-27A	V8A4340.D	07/02/2011	2:10

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Instrument ID: V10 Calibration Date: 07/01/2011 Time: 18:44  
 Lab File ID: V8A4321.D Init. Calib. Date(s): 06/29/2011 06/29/2011  
 EPA Sample No. (VSTD####) VSTD05010L Init. Calib. Time(s): 8:51 10:56  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
 Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.234	0.225	0.100	-3.7	20.0
Chloromethane	0.308	0.254	0.010	-17.4	20.0
Vinyl chloride	0.322	0.268	0.010	-16.7	20.0
Bromomethane	0.224	0.232	0.010	3.4	20.0
Chloroethane	0.177	0.153	0.010	-13.5	20.0
Trichlorofluoromethane	0.487	0.530	0.010	8.7	20.0
1,1-Dichloroethene	0.279	0.259	0.100	-7.4	20.0
Acetone	0.045	0.033	0.010	-27.0	20.0
Iodomethane	0.423	0.466	0.010	10.3	20.0
Carbon disulfide	0.971	0.817	0.010	-15.8	20.0
Methylene chloride	0.326	0.293	0.010	-10.0	20.0
trans-1,2-Dichloroethene	0.309	0.273	0.010	-11.6	20.0
Methyl tert-butyl ether	1.008	1.028	0.010	1.9	20.0
1,1-Dichloroethane	0.601	0.505	0.010	-16.0	20.0
Vinyl acetate	1.281	1.135	0.010	-11.5	20.0
2-Butanone	0.040	0.033	0.010	-18.1	20.0
cis-1,2-Dichloroethene	0.311	0.247	0.010	-20.5	20.0
2,2-Dichloropropane	0.523	0.438	0.010	-16.2	20.0
Bromochloromethane	0.145	0.125	0.010	-14.1	20.0
Chloroform	0.616	0.554	0.010	-10.0	20.0
1,1,1-Trichloroethane	0.541	0.508	0.010	-6.3	20.0
1,1-Dichloropropene	0.136	0.111	0.010	-18.4	20.0
Carbon tetrachloride	0.437	0.427	0.010	-2.3	20.0
1,2-Dichloroethane	0.571	0.586	0.010	2.7	20.0
Benzene	1.164	0.920	0.010	-21.0	20.0
Trichloroethene	0.270	0.227	0.010	-15.9	20.0
1,2-Dichloropropane	0.353	0.283	0.010	-19.9	20.0
Dibromomethane	0.219	0.206	0.010	-5.8	20.0
Bromodichloromethane	0.459	0.429	0.010	-6.4	20.0
cis-1,3-Dichloropropene	0.502	0.434	0.010	-13.4	20.0
4-Methyl-2-pentanone	0.338	0.311	0.010	-8.0	20.0
Toluene	1.240	1.014	0.010	-18.2	20.0
trans-1,3-Dichloropropene	0.490	0.449	0.010	-8.3	20.0
1,1,2-Trichloroethane	0.272	0.236	0.010	-13.0	20.0
1,3-Dichloropropane	0.589	0.520	0.010	-11.7	20.0
Tetrachloroethene	0.314	0.282	0.010	-10.2	20.0
2-Hexanone	0.327	0.294	0.010	-10.0	20.0
Dibromochloromethane	0.406	0.385	0.010	-5.1	20.0
1,2-Dibromoethane	0.380	0.358	0.010	-5.7	20.0
Chlorobenzene	0.963	0.825	0.010	-14.4	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Instrument ID: V10 Calibration Date: 07/01/2011 Time: 18:44  
Lab File ID: V8A4321.D Init. Calib. Date(s): 06/29/2011 06/29/2011  
EPA Sample No. (VSTD####) VSTD05010L Init. Calib. Time(s): 8:51 10:56  
Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.377	0.344	0.010	-8.7	20.0
Ethylbenzene	0.509	0.423	0.010	-16.8	20.0
m,p-Xylene	0.617	0.525	0.010	-14.9	20.0
o-Xylene	0.607	0.518	0.010	-14.7	20.0
Xylene (Total)	0.613	0.523	0.010	-14.8	20.0
Styrene	1.039	0.885	0.010	-14.8	20.0
Bromoform	0.288	0.278	0.010	-3.6	20.0
Isopropylbenzene	1.657	1.404	0.300	-15.2	20.0
1,1,2,2-Tetrachloroethane	0.949	0.758	0.300	-20.1	20.0
Bromobenzene	0.848	0.719	0.010	-15.3	20.0
1,2,3-Trichloropropane	1.214	1.052	0.010	-13.4	20.0
2-Chlorotoluene	0.715	0.566	0.010	-20.8	20.0
1,3,5-Trimethylbenzene	2.723	2.169	0.010	-20.3	20.0
4-Chlorotoluene	0.708	0.584	0.010	-17.5	20.0
tert-Butylbenzene	2.548	2.246	0.010	-11.8	20.0
1,2,4-Trimethylbenzene	2.708	2.197	0.010	-18.9	20.0
sec-Butylbenzene	3.101	2.436	0.010	-21.4	20.0
4-Isopropyltoluene	2.445	1.972	0.010	-19.3	20.0
1,3-Dichlorobenzene	1.369	1.137	0.010	-16.9	20.0
1,4-Dichlorobenzene	1.395	1.177	0.010	-15.6	20.0
1,2-Dichlorobenzene	1.363	1.165	0.010	-14.6	20.0
1,2-Dibromo-3-chloropropane	0.204	0.204	0.010	0.3	20.0
1,2,4-Trichlorobenzene	0.761	0.748	0.010	-1.8	20.0
Hexachlorobutadiene	0.429	0.386	0.010	-10.0	20.0
1,2,3-Trichlorobenzene	0.742	0.722	0.010	-2.8	20.0
Naphthalene	1.830	1.704	0.010	-6.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.302	0.294	0.010	-2.7	20.0
1,4-Dioxane	0.003	0.003	0.010	2.3	20.0
Cyclohexane	0.517	0.400	0.010	-22.5	20.0
Methyl acetate	0.253	0.248	0.010	-2.0	20.0
Methylcyclohexane	0.449	0.347	0.010	-22.8	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10N

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: V8A4401.D BFB Injection Date: 07/06/2011  
Instrument ID: V10 BFB Injection Time: 13:12  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	59.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	50.0 - 100.0% of mass 95	88.5
175	5.0 - 9.0% of mass 174	7.1 (8.0)1
176	95.0 - 101.0% of mass 174	86.9 (98.2)1
177	5.0 - 9.0% of mass 176	5.8 (6.7)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010N	VSTD05010N	V8A4402.D	07/06/2011	13:26
02	LCS-60217	LCS-60217	V8A4403.D	07/06/2011	14:00
03	MB-60217	MB-60217	V8A4407.D	07/06/2011	15:36
04	DEC-011RX	K1102-18ARE	V8A4415.D	07/06/2011	18:45

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
 Instrument ID: V10 Calibration Date: 07/06/2011 Time: 13:26  
 Lab File ID: V8A4402.D Init. Calib. Date(s): 07/06/2011 07/06/2011  
 EPA Sample No. (VSTD####) VSTD05010N Init. Calib. Time(s): 9:48 12:19  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
 Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.463	0.479	0.100	3.4	20.0
Chloromethane	0.281	0.297	0.010	5.5	20.0
Vinyl chloride	0.373	0.386	0.010	3.7	20.0
Bromomethane	0.286	0.304	0.010	6.1	20.0
Chloroethane	0.198	0.213	0.010	7.4	20.0
Trichlorofluoromethane	0.846	0.864	0.010	2.2	20.0
1,1-Dichloroethene	0.336	0.341	0.100	1.7	20.0
Acetone	0.035	0.051	0.010	44.0	20.0
Iodomethane	0.446	0.501	0.010	12.3	20.0
Carbon disulfide	1.088	1.113	0.010	2.3	20.0
Methylene chloride	0.372	0.391	0.010	5.1	20.0
trans-1,2-Dichloroethene	0.365	0.373	0.010	2.2	20.0
Methyl tert-butyl ether	1.247	1.315	0.010	5.4	20.0
1,1-Dichloroethane	0.560	0.583	0.010	4.1	20.0
Vinyl acetate	0.893	0.973	0.010	9.0	20.0
2-Butanone	0.038	0.049	0.010	28.6	20.0
cis-1,2-Dichloroethene	0.301	0.313	0.010	4.1	20.0
2,2-Dichloropropane	0.641	0.660	0.010	3.0	20.0
Bromochloromethane	0.144	0.156	0.010	8.9	20.0
Chloroform	0.720	0.744	0.010	3.3	20.0
1,1,1-Trichloroethane	0.689	0.696	0.010	1.1	20.0
1,1-Dichloropropene	0.136	0.146	0.010	7.2	20.0
Carbon tetrachloride	0.584	0.604	0.010	3.3	20.0
1,2-Dichloroethane	0.699	0.746	0.010	6.6	20.0
Benzene	1.169	1.223	0.010	4.6	20.0
Trichloroethene	0.276	0.290	0.010	4.8	20.0
1,2-Dichloropropane	0.290	0.309	0.010	6.6	20.0
Dibromomethane	0.251	0.268	0.010	7.1	20.0
Bromodichloromethane	0.540	0.570	0.010	5.5	20.0
cis-1,3-Dichloropropene	0.545	0.593	0.010	8.8	20.0
4-Methyl-2-pentanone	0.229	0.265	0.010	16.0	20.0
Toluene	1.298	1.362	0.010	4.9	20.0
trans-1,3-Dichloropropene	0.551	0.612	0.010	11.2	20.0
1,1,2-Trichloroethane	0.279	0.295	0.010	5.8	20.0
1,3-Dichloropropane	0.592	0.642	0.010	8.4	20.0
Tetrachloroethene	0.345	0.328	0.010	-5.0	20.0
2-Hexanone	0.199	0.261	0.010	31.0	20.0
Dibromochloromethane	0.422	0.462	0.010	9.3	20.0
1,2-Dibromoethane	0.360	0.398	0.010	10.6	20.0
Chlorobenzene	0.947	0.994	0.010	5.0	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: V10 Calibration Date: 07/06/2011 Time: 13:26

Lab File ID: V8A4402.D Init. Calib. Date(s): 07/06/2011 07/06/2011

EPA Sample No. (VSTD####) VSTD05010N Init. Calib. Time(s): 9:48 12:19

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.379	0.401	0.010	6.0	20.0
Ethylbenzene	0.500	0.513	0.010	2.6	20.0
m,p-Xylene	0.621	0.639	0.010	2.9	20.0
o-Xylene	0.606	0.632	0.010	4.2	20.0
Xylene (Total)	0.616	0.637	0.010	3.3	20.0
Styrene	1.032	1.108	0.010	7.3	20.0
Bromoform	0.311	0.339	0.010	8.8	20.0
Isopropylbenzene	1.726	1.726	0.300	0.0	20.0
1,1,2,2-Tetrachloroethane	0.777	0.847	0.300	9.0	20.0
Bromobenzene	0.744	0.772	0.010	3.7	20.0
1,2,3-Trichloropropane	1.146	1.234	0.010	7.7	20.0
2-Chlorotoluene	0.622	0.631	0.010	1.5	20.0
1,3,5-Trimethylbenzene	2.587	2.579	0.010	-0.3	20.0
4-Chlorotoluene	0.630	0.656	0.010	4.1	20.0
tert-Butylbenzene	2.302	2.238	0.010	-2.8	20.0
1,2,4-Trimethylbenzene	2.619	2.646	0.010	1.0	20.0
sec-Butylbenzene	2.958	2.836	0.010	-4.1	20.0
4-Isopropyltoluene	2.271	2.242	0.010	-1.3	20.0
1,3-Dichlorobenzene	1.281	1.345	0.010	4.9	20.0
1,4-Dichlorobenzene	1.285	1.359	0.010	5.8	20.0
1,2-Dichlorobenzene	1.268	1.335	0.010	5.3	20.0
1,2-Dibromo-3-chloropropane	0.218	0.234	0.010	7.5	20.0
1,2,4-Trichlorobenzene	0.809	0.902	0.010	11.5	20.0
Hexachlorobutadiene	0.536	0.519	0.010	-3.3	20.0
1,2,3-Trichlorobenzene	0.806	0.905	0.010	12.3	20.0
Naphthalene	1.710	1.934	0.010	13.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.398	0.403	0.010	1.4	20.0
1,4-Dioxane	0.003	0.004	0.010	30.3	20.0
Cyclohexane	0.341	0.356	0.010	4.4	20.0
Methyl acetate	0.225	0.251	0.010	11.8	20.0
Methylcyclohexane	0.444	0.448	0.010	1.0	20.0

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1102**

**SW846 8270D, SVOA 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 8270D

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**



The following instrumentation was used  
Instrument Code: S3  
Instrument Type: GCMS-SEMI  
Description: HP6890 / HP5973  
Manufacturer: Hewlett-Packard  
Model: 6890 / 5973

## **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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

DEC-031D (K1102-08D), recovery is above criteria for 2,4,6-Tribromophenol at 138% with criteria of (40-125).

DEC-031 (K1102-09D), recovery is above criteria for 2,4,6-Tribromophenol at 137% with criteria of (40-125).

LCSD-60047, recovery is above criteria for 2,4,6-Tribromophenol at 144% with criteria of (40-125).

MB-60047, recovery is above criteria for 2,4,6-Tribromophenol at 135% with criteria of (40-125).

### **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-60047 in batch 59922, recovery is below criteria for 2-Methylphenol at 38% with criteria of (40-110), and Caprolactam at 13% with criteria of (50-150).

LCSD-60047 in batch 59922, recovery is below criteria for Caprolactam at 15% with criteria of (50-150). Percent Recovery is above criteria for Pentachlorophenol at 121% with criteria of (40-115).

For LCS/LCSD-60047, 2,4-Dinitrophenol exceeded the RPD QC limits.

**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:**

No sample in this SDG required analysis at dilution.

**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 RI, 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: 07/21/11

3 - FORM III  
WATER LABORATORY CONTROL  
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-60047

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1102

Mod. Ref No.:

SDG No.: SK1102

Lab Sample ID: LCS-60047

LCS Lot No.: A079604

Date Extracted: 06/28/2011

Date Analyzed (1): 06/30/2011

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	9.4133	19		0 - 115
Bis(2-chloroethyl) ether	50.0000	0.0000	34.5475	69		35 - 110
2-Chlorophenol	50.0000	0.0000	30.8733	62		35 - 105
2-Methylphenol	50.0000	0.0000	19.1906	38	*	40 - 110
2,2'-oxybis(1-Chloropropan	50.0000	0.0000	29.9402	60		30 - 123
N-Nitroso-di-n-propylamine	50.0000	0.0000	34.1143	68		35 - 130
Hexachloroethane	50.0000	0.0000	33.2357	66		30 - 95
Nitrobenzene	50.0000	0.0000	34.5602	69		45 - 110
Isophorone	50.0000	0.0000	38.4874	77		50 - 110
2-Nitrophenol	50.0000	0.0000	37.1194	74		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	34.0398	68		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	38.8977	78		50 - 105
Naphthalene	50.0000	0.0000	36.3354	73		40 - 100
4-Chloroaniline	50.0000	0.0000	40.5971	81		15 - 110
Bis(2-chloroethoxy) methane	50.0000	0.0000	36.9325	74		45 - 105
Hexachlorobutadiene	50.0000	0.0000	32.2993	65		25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	39.0879	78		45 - 110
2-Methylnaphthalene	50.0000	0.0000	37.8775	76		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	45.4816	91		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	42.4340	85		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	44.7928	90		50 - 110
2-Chloronaphthalene	50.0000	0.0000	40.5228	81		50 - 105
2-Nitroaniline	50.0000	0.0000	42.1582	84		50 - 115
Dimethylphthalate	50.0000	0.0000	40.7333	81		25 - 125
Acenaphthylene	50.0000	0.0000	40.7475	81		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	43.7859	88		50 - 115
3-Nitroaniline	50.0000	0.0000	43.2087	86		20 - 125
Acenaphthene	50.0000	0.0000	41.1874	82		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	37.5617	75		15 - 140
4-Nitrophenol	50.0000	0.0000	9.4781	19		0 - 125
Dibenzofuran	50.0000	0.0000	40.7201	81		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	39.2228	78		50 - 120
Diethylphthalate	50.0000	0.0000	38.3485	77		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	43.0332	86		50 - 110
Fluorene	50.0000	0.0000	41.5131	83		50 - 110
4-Nitroaniline	50.0000	0.0000	41.3010	83		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	42.3010	85		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	43.1887	86		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	49.8873	100		50 - 115
Hexachlorobenzene	50.0000	0.0000	53.7029	107		50 - 110
Pentachlorophenol	50.0000	0.0000	50.3071	101		40 - 115
Phenanthrene	50.0000	0.0000	42.6102	85		50 - 115
Anthracene	50.0000	0.0000	43.0330	86		55 - 110
Carbazole	50.0000	0.0000	43.5483	87		50 - 115

3 - FORM III  
WATER LABORATORY CONTROL  
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-60047

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1102

Mod. Ref No.:

SDG No.: SK1102

Lab Sample ID: LCS-60047

LCS Lot No.: A079604

Date Extracted: 06/28/2011

Date Analyzed (1): 06/30/2011

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Di-n-butylphthalate	50.0000	0.0000	42.2436	84		55 - 115
Fluoranthene	50.0000	0.0000	43.2033	86		55 - 115
Pyrene	50.0000	0.0000	37.6851	75		50 - 130
Butylbenzylphthalate	50.0000	0.0000	39.0034	78		45 - 115
3,3'-Dichlorobenzidine	50.0000	0.0000	51.8558	104		20 - 110
Benzo(a)anthracene	50.0000	0.0000	43.6516	87		55 - 110
Chrysene	50.0000	0.0000	40.9023	82		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	38.3710	77		40 - 125
Di-n-octylphthalate	50.0000	0.0000	37.0673	74		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	52.2619	105		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	31.7999	64		45 - 125
Benzo(a)pyrene	50.0000	0.0000	40.6765	81		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	43.8815	88		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	42.5430	85		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	42.8621	86		40 - 125
1,1'-Biphenyl	50.0000	0.0000	41.2009	82		55 - 108
3-Methylphenol + 4-Methylp	50.0000	0.0000	22.1550	44		30 - 110
Acetophenone	50.0000	0.0000	35.3228	71		50 - 150
Atrazine	50.0000	0.0000	49.7972	100		52 - 175
Benzaldehyde	50.0000	0.0000	32.8297	66		50 - 150
Caprolactam	50.0000	0.0000	6.4087	13	*	50 - 150

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

\* Values outside of QC limits

Spike Recovery: 2 out of 65 outside limits

COMMENTS:

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

DFTPP3H

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab File ID: S3H4440.D DFTPP Injection Date: 06/30/2011  
Instrument ID: S3 DFTPP Injection Time: 11:23

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.2
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	48.6
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	40.0 - 60.0% of mass 198	54.3
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	24.3
365	Greater than 1.0% of mass 198	2.7
441	Present, but less than mass 443	11.3
442	40.0 - 99.9% of mass 198	71.4
443	17.0 - 23.0% of mass 442	13.9 (19.5) 2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253H	SSTD0253H	S3H4441.D	06/30/2011	11:45
02	MB-60047	MB-60047	S3H4442.D	06/30/2011	12:12
03	LCS-60047	LCS-60047	S3H4443.D	06/30/2011	12:33
04	LCSD-60047	LCSD-60047	S3H4444.D	06/30/2011	12:53
05	DEC-031D	K1102-08D	S3H4445.D	06/30/2011	13:13
06	DEC-031	K1102-09D	S3H4446.D	06/30/2011	13:34

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102

Instrument ID: S3 Calibration Date: 06/30/2011 Time: 11:45

Lab File ID: S3H4441.D Init. Calib. Date(s): 05/19/2011 05/19/2011

EPA Sample No. (SSTD020##) SSTD0253H Init. Calib. Time(s): 12:17 14:08

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.838	1.748	0.010	-4.9	20.0
Bis(2-chloroethyl)ether	1.376	1.222	0.010	-11.1	20.0
2-Chlorophenol	1.444	1.317	0.010	-8.8	20.0
2-Methylphenol	1.383	1.324	0.010	-4.3	20.0
2,2'-oxybis(1-Chloropropane)	2.261	1.851	0.010	-18.1	20.0
N-Nitroso-di-n-propylamine	1.245	1.072	0.050	-13.9	20.0
Hexachloroethane	0.583	0.558	0.010	-4.2	20.0
Nitrobenzene	0.417	0.369	0.010	-11.5	20.0
Isophorone	0.760	0.701	0.010	-7.8	20.0
2-Nitrophenol	0.213	0.193	0.010	-9.4	20.0
2,4-Dimethylphenol	0.405	0.367	0.010	-9.4	20.0
2,4-Dichlorophenol	0.340	0.319	0.010	-6.0	20.0
Naphthalene	1.042	0.947	0.010	-9.1	20.0
4-Chloroaniline	0.455	0.448	0.010	-1.5	20.0
Bis(2-chloroethoxy)methane	0.428	0.390	0.010	-8.7	20.0
Hexachlorobutadiene	0.202	0.180	0.010	-10.9	20.0
4-Chloro-3-methylphenol	0.396	0.375	0.010	-5.2	20.0
2-Methylnaphthalene	0.794	0.730	0.010	-8.0	20.0
Hexachlorocyclopentadiene	0.300	0.314	0.050	4.9	20.0
2,4,6-Trichlorophenol	0.387	0.355	0.010	-8.2	20.0
2,4,5-Trichlorophenol	0.417	0.397	0.010	-4.8	20.0
2-Chloronaphthalene	1.114	1.008	0.010	-9.5	20.0
2-Nitroaniline	0.429	0.372	0.010	-13.4	20.0
Dimethylphthalate	1.479	1.284	0.010	-13.2	20.0
Acenaphthylene	1.848	1.683	0.010	-8.9	20.0
2,6-Dinitrotoluene	0.358	0.309	0.010	-13.9	20.0
3-Nitroaniline	0.363	0.338	0.010	-7.0	20.0
Acenaphthene	1.168	1.045	0.010	-10.6	20.0
2,4-Dinitrophenol	0.219	0.172	0.050	(-21.4)	20.0
4-Nitrophenol	0.307	0.263	0.050	-14.2	20.0
Dibenzofuran	1.687	1.471	0.010	-12.8	20.0
2,4-Dinitrotoluene	0.497	0.415	0.010	-16.5	20.0
Diethylphthalate	1.567	1.367	0.010	-12.8	20.0
4-Chlorophenyl-phenylether	0.679	0.609	0.010	-10.2	20.0
Fluorene	1.462	1.331	0.010	-9.0	20.0
4-Nitroaniline	0.414	0.353	0.010	-14.7	20.0
4,6-Dinitro-2-methylphenol	0.168	0.149	0.010	-11.3	20.0
N-Nitrosodiphenylamine	0.660	0.615	0.010	-6.9	20.0
4-Bromophenyl-phenylether	0.207	0.209	0.010	1.2	20.0
Hexachlorobenzene	0.218	0.231	0.010	6.4	20.0
Pentachlorophenol	0.155	0.157	0.010	1.1	20.0
Phenanthrene	1.137	1.063	0.010	-6.5	20.0

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1102**

**SW846 8081B, Organochlorine Pesticides by GC-ECD**

### **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 8081B

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E5

Instrument Type: GC-ECD

Description: HP6890

Manufacturer: Hewlett-Packard

Model: 6890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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 sample were within the QC limits.

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

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

### E. Dilutions:

No sample in this SDG required analysis at dilution.

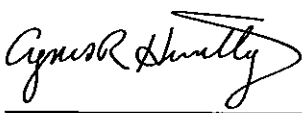
### F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1 when D% between the two columns is greater than 40%.



No 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 RI, 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: 07/21/11

10A - FORM X PEST-1  
IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

DEC-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1102 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1102  
Lab Sample ID: K1102-09D Date(s) Analyzed: 06/30/2011 06/30/2011  
Instrument ID (1): E5 Instrument ID (2): E5  
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
gamma-BHC (Lindane)	1	3.986	3.924	4.024	0.077	49.7
	2	4.716	4.660	4.760	0.051	

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1102**

**SW846 8082A, PCB by GC-ECD**

### **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 8082A

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E2

Instrument Type: GC-ECD

Description: HP5890 II +

Manufacturer: Hewlett-Packard

Model: 5890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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 sample were within the QC limits.

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

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

### E. Dilutions:

No sample in this SDG required analysis at dilution.

### F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1 when D% between the two columns is greater than 40%.

No 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 RI, 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: 07/21/11

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1102**

**SW846 6010C, SW846 7470A, SW846 9012B**

### **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 6010C, SW846 7470A, SW846 9012B

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW9012B

Aqueous Samples were prepared following procedures in laboratory test code: SW3005

Aqueous Samples were prepared following procedures in laboratory test

code: SW7470A

## V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS1  
Instrument Type: CVAA  
Description: FIMS  
Manufacturer: Perkin-Elmer  
Model: FIMS

Instrument Code: LACHAT1  
Instrument Type: WC  
Description: Flow Injection Analyzer  
Manufacturer: Zellweger Analytics  
Model: Quik-Chem 8000

Instrument Code: OPTIMA3  
Instrument Type: ICP  
Description: Optima ICP-OES  
Manufacturer: Perkin-Elmer  
Model: 4300 DV

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

#### 2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

**D. Post Digestion Spike (PDS):**

A post-digestion spike was not performed on any sample in this SDG.

**E. Duplicate sample:**

A duplicate analysis was not performed on any sample in this SDG.

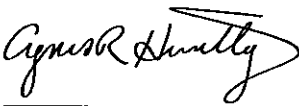
**F. Serial Dilution (SD):**

A serial dilution was not performed on any sample in this SDG.

**G. Samples:**

No 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 RI, 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: 07/21/11



# CHAIN OF CUSTODY RECORD

PROJECT NO. 1176390 SITE NAME Klink Cosmo

SAMPLERS (PRINT/SIGNATURE) C. Friedman / Cary

DELIVERY SERVICE: Courier AIRBILL NO.: \_\_\_\_\_

LOCATION IDENTIFIER	DATE	TIME	COMPI/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	TESTS	BOTTLE TYPE AND PRESERVATIVE	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (RPMs ONLY)
DEC-022	6/22/11	1440		DEC-022D	WG	3				W8			
DEC-032		11014		DEC-032						N9			
DEC-066		1745		DEC-066D						N10			
↓		1837		DEC-066						N11			
DEC-044	6/23/11	1755		DEC-044D						N1			
↓		905		DEC-044						N2			
DEC-013		1040		DEC-013D						N3			
↓		1150		DEC-013						N4			
DEC-042		1320		DEC-042						N5			
DEC-008		1440		DEC-008						N6			
DEC-009		1427		DEC-009						N7			
↓	6/23/11			DP-062311						FR1			
				TB	WG					TBI			

RELINQUISHED BY (SIGNATURE) Cary DATE 6/24/11 TIME 1325 RECEIVED BY (SIGNATURE) [Signature] DATE 6/24/11 TIME 1325

RELINQUISHED BY (SIGNATURE) [Signature] DATE 6/27/11 TIME 1020 RECEIVED FOR LAB BY (SIGNATURE) [Signature] DATE 6/27/11 TIME 1020

Distribution: Original accompanies shipment, copy to coordinator field files

SPECIAL INSTRUCTIONS: Please call George Kistuk w/any questions Temp - 10°C samples Just taken

2°C

**URS**

LAB M.H.Kern  
COOLER 2 of 2  
PAGE 1 of 2

# CHAIN OF CUSTODY RECORD

PROJECT NO. 1176390.00002

SITE NAME Klink/Cosmos

SAMPLERS (PRINT/SIGNATURE) C. Friedman

LAB Mittkem

COOLER 2 of 2

PAGE 2 of 2

DELIVERY SERVICE: Counter

AIRBILL NO.: \_\_\_\_\_

LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX
DEC-014	6/23/11	1243		DEC-014R	WG
↓		1145		DEC-014D	
DEC-029		1010		DEC-029	
↓		847		DEC-029D	
DEC-004	6/24/11	725		DEC-004	
DEC-039		809		DEC-039	
DEC-027		922		DEC-027	
DEC-048		1300		DEC-048	
↓		1300		DEC-048 MS	
↓		1300		DEC-048 MSD	
↓		1100		DEC-048 *	LF
				DUP-062411	WG
				DUP2-062411	WG

TOTAL NO. OF CONTAINERS

to ml (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

amber (liter)

MATRIX CODES	AA - AMBIENT AIR	SE - SEDIMENT	SH - HAZARDOUS SOLID WASTE	SL - SLUDGE	WM - WASTE WATER	WG - GROUND WATER	WS - SOIL	DC - DRILL CUTTINGS	WL - LEACHATE	GS - SOIL GAS	WG - DRILLING WATER	WS - SURFACE WATER	WO - OCEAN WATER	LH - HAZARDOUS LIQUID WASTE	LF - FLOATING/FREE PRODUCT ON GW TABLE
SAMPLE TYPE CODES	TB# - TRIP BLANK	SD# - MATRIX SPIKE/DUPLICATE	RB# - RINSE BLANK	FR# - FIELD REPLICATE	N# - NORMAL ENVIRONMENTAL SAMPLE	MS# - MATRIX SPIKE									

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
<u>C. Friedman</u>	6/24/11	1325	<u>[Signature]</u>	6/24/11	1325
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
<u>[Signature]</u>	6/27/11	1000	<u>[Signature]</u>		

Distribution: Original accompanies shipment, copy to coordinator field files

**URS**

LAB Mittkem

COOLER 2 of 2

PAGE 2 of 2

REMARKS

SAMPLE TYPE  
BEGINNING DEPTH (IN FEET)  
ENDING DEPTH (IN FEET)  
FIELD LOT NO. # (RIPMS ONLY)

WB  
NA  
N10  
N11  
N1  
N2  
N3  
N4  
N5  
N6  
N7

SPECIAL INSTRUCTIONS

Temp - 10.5°C samples were just collected (CF)

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1110**

**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.

Instrument Code: V6  
Instrument Type: GCMS-VOA  
Description: HP6890 / HP5973  
Manufacturer: Hewlett-Packard  
Model: 6890 / 5973  
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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

DEC-009 (K1110-10A), recovery is above criteria for Dibromofluoromethane at 115% with criteria of (85-115).

### **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-60019 in batch 60019, recovery is above criteria for Iodomethane at 125% with criteria of (72-121).

LCS-60151 in batch 60151, recovery is above criteria for Iodomethane at 133% with criteria of (72-121).

LCS-60176 in batch 60176, recovery is above criteria for Iodomethane at 126% with criteria of (72-121), recovery is below criteria for Cyclohexane at 66% with criteria of (70-130).

LCSD-60102 in batch 60102, recovery is above criteria for 1,2,4-Trichlorobenzene at 138% with criteria of (65-135) and Iodomethane at 139% with criteria of (72-121).

LCSD-60151 in batch 60151, recovery is above criteria for 1,1,1-Trichloroethane at 130% with criteria of (65-130), 1,1,2-Trichloro-1,2,2-trifluoroethane at 136% with criteria of (70-130), Iodomethane at 153% with criteria of (72-121) and Trichlorofluoromethane at 155% with criteria of (60-145).

LCSD-60176 in batch 60176, recovery is above criteria for Iodomethane at 127% with criteria of (72-121), recovery is below criteria for Cyclohexane at 68% with criteria of (70-130).

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

Matrix spikes were performed on samples: DEC-048 (K1110-19AMS) and DEC-048 (K1110-19AMSD).

Percent recoveries were within the QC limits with the following exceptions:

DEC-048 (K1110-19AMS), recovery is above criteria for 1,4-Dioxane at 131% with criteria of (70-130).

DEC-048 (K1110-19AMSD), recovery is above criteria for 1,4-Dioxane at 132% with criteria of (70-130).

Replicate RPDs were within the QC limits.

## **E. Internal Standards:**

Internal standard peak areas were within the QC limits.

**F. Dilutions:**

The following samples were re-analyzed at dilution:

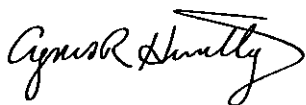
DEC-022D (K1110-01ADL) : Dilution Factor: 16  
DEC-044D (K1110-05ADL) : Dilution Factor: 5  
DEC-044 (K1110-06ADL) : Dilution Factor: 20  
DEC-008 (K1110-09ADL) : Dilution Factor: 25  
DUP-062311 (K1110-11ADL) : Dilution Factor: 2  
DEC-014R (K1110-12ADL) : Dilution Factor: 500  
DEC-029 (K1110-14ADL) : Dilution Factor: 100  
DEC-039 (K1110-17ADL) : Dilution Factor: 2  
DEC-027 (K1110-18ADL) : Dilution Factor: 10  
DUP-062411 (K1110-20ADL) : Dilution Factor: 2  
DEC-013 (K1110-22ADL) : Dilution Factor: 40

**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 RI, 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: 07/25/11

3 - FORM III  
WATER LABORATORY CONTROL  
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-60176

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1110

Mod. Ref No.:

SDG No.: SK1110

Lab Sample ID: LCS-60176

LCS Lot No.:

Date Extracted: 07/05/2011

Date Analyzed (1): 07/05/2011

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	151.9736	101		81 - 121
Styrene	50.0000	0.0000	51.3468	103		65 - 135
Bromoform	50.0000	0.0000	57.9949	116		70 - 130
Isopropylbenzene	50.0000	0.0000	52.7279	105		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	43.4489	87		65 - 130
Bromobenzene	50.0000	0.0000	44.8714	90		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	49.3703	99		75 - 125
2-Chlorotoluene	50.0000	0.0000	44.4094	89		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	51.8916	104		75 - 130
4-Chlorotoluene	50.0000	0.0000	46.6069	93		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.9719	94		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	50.0176	100		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.7571	98		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.0284	96		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	48.5796	97		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	48.6984	97		75 - 125
1,2-Dichlorobenzene	50.0000	0.0000	48.8311	98		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	55.8240	112		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	59.4831	119		65 - 135
Hexachlorobutadiene	50.0000	0.0000	64.8205	130		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	60.4439	121		55 - 140
Naphthalene	50.0000	0.0000	50.7843	102		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	60.5456	121		70 - 130
1,4-Dioxane	1000.0000	0.0000	1025.8827	103		70 - 130
Cyclohexane	50.0000	0.0000	32.8293	66	*	70 - 130
Methyl acetate	50.0000	0.0000	46.1571	92		70 - 130
Methylcyclohexane	50.0000	0.0000	49.6360	99		70 - 130

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

\* Values outside of QC limits

Spike Recovery: 2 out of 71 outside limits

COMMENTS:

3 - FORM III  
WATER LABORATORY CONTROL  
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-60176

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1110

Mod. Ref No.:

SDG No.: SK1110

Lab Sample ID: LCSD-60176

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Bromoform	50.0000	56.1791	112		4		40	70 - 130
Isopropylbenzene	50.0000	53.6729	107		2		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	42.1849	84		4		40	65 - 130
Bromobenzene	50.0000	43.5094	87		3		40	75 - 125
1,2,3-Trichloropropane	50.0000	48.3918	97		2		40	75 - 125
2-Chlorotoluene	50.0000	43.0819	86		3		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	51.0355	102		2		40	75 - 130
4-Chlorotoluene	50.0000	44.8015	90		3		40	75 - 130
tert-Butylbenzene	50.0000	45.2256	90		4		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	49.5012	99		1		40	75 - 130
sec-Butylbenzene	50.0000	48.8298	98		0		40	70 - 125
4-Isopropyltoluene	50.0000	48.4555	97		1		40	75 - 130
1,3-Dichlorobenzene	50.0000	47.3970	95		2		40	75 - 125
1,4-Dichlorobenzene	50.0000	47.2501	95		2		40	75 - 125
1,2-Dichlorobenzene	50.0000	47.3105	95		3		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	55.4024	111		1		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	60.2824	121		2		40	65 - 135
Hexachlorobutadiene	50.0000	62.1599	124		5		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	60.0621	120		1		40	55 - 140
Naphthalene	50.0000	50.9006	102		0		40	55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	60.8210	122		1		40	70 - 130
1,4-Dioxane	1000.0000	1058.6740	106		3		40	70 - 130
Cyclohexane	50.0000	34.0041	68	*	3		40	70 - 130
Methyl acetate	50.0000	46.8815	94		2		40	70 - 130
Methylcyclohexane	50.0000	50.7786	102		3		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 71 outside limits

Spike Recovery: 2 out of 71 outside limits

COMMENTS:



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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V6 Calibration Date(s): 06/10/2011 06/10/2011

Heated Purge: (Y/N) N Calibration Time(s): 12:51 15:00

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V6I1459.D</u>	RRF020 = <u>V6I1458.D</u>					
RRF050 = <u>V6I1457.D</u>	RRF100 = <u>V6I1461.D</u>	RRF200 = <u>V6I1460.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.167	0.151	0.127	0.159	0.157	0.152	10.1
Chloromethane	0.262	0.195	0.199	0.202	0.209	0.213	12.9
Vinyl chloride	0.227	0.188	0.179	0.205	0.197	0.199	9.1
Bromomethane	0.130	0.132	0.126	0.141	0.133	0.132	4.2
Chloroethane	0.140	0.100	0.093	0.105	0.099	0.107	17.4
Trichlorofluoromethane	0.348	0.318	0.280	0.346	0.358	0.330	9.6
1,1-Dichloroethene	0.224	0.185	0.169	0.208	0.209	0.199	11.0
Acetone	0.028	0.027	0.017	0.020	0.019	0.022	23.2
Iodomethane	0.398	0.351	0.328	0.389	0.373	0.368	7.7
Carbon disulfide	0.765	0.643	0.602	0.698	0.684	0.679	9.1
Methylene chloride	0.264	0.237	0.202	0.233	0.224	0.232	9.6
trans-1,2-Dichloroethene	0.244	0.205	0.186	0.220	0.214	0.214	10.0
Methyl tert-butyl ether	0.525	0.508	0.472	0.562	0.526	0.519	6.3
1,1-Dichloroethane	0.452	0.397	0.366	0.419	0.406	0.408	7.7
Vinyl acetate	0.883	0.836	0.770	0.878	0.822	0.838	5.5
2-Butanone	0.024	0.024	0.020	0.023	0.021	0.022	7.8
cis-1,2-Dichloroethene	0.252	0.222	0.203	0.237	0.232	0.229	7.8
2,2-Dichloropropane	0.252	0.206	0.206	0.236	0.229	0.226	9.0
Bromochloromethane	0.124	0.110	0.101	0.118	0.112	0.113	7.4
Chloroform	0.461	0.400	0.360	0.413	0.402	0.407	8.8
1,1,1-Trichloroethane	0.353	0.276	0.281	0.333	0.329	0.314	10.8
1,1-Dichloropropene	0.112	0.096	0.090	0.110	0.110	0.103	9.8
Carbon tetrachloride	0.410	0.296	0.260	0.317	0.322	0.321	17.2
1,2-Dichloroethane	0.332	0.311	0.286	0.325	0.318	0.314	5.7
Benzene	0.935	0.828	0.782	0.878	0.840	0.853	6.7
Trichloroethene	0.237	0.199	0.190	0.227	0.226	0.216	9.2
1,2-Dichloropropane	0.284	0.257	0.237	0.272	0.267	0.263	6.7
Dibromomethane	0.143	0.140	0.126	0.148	0.143	0.140	5.8
Bromodichloromethane	0.293	0.275	0.259	0.308	0.304	0.288	7.1
cis-1,3-Dichloropropene	0.342	0.340	0.326	0.389	0.374	0.354	7.4
4-Methyl-2-pentanone	0.178	0.187	0.176	0.211	0.194	0.189	7.6
Toluene	0.999	0.872	0.819	0.936	0.907	0.907	7.4
trans-1,3-Dichloropropene	0.322	0.309	0.292	0.350	0.342	0.323	7.3
1,1,2-Trichloroethane	0.195	0.175	0.162	0.192	0.185	0.182	7.3
1,3-Dichloropropane	0.413	0.395	0.359	0.416	0.400	0.397	5.8
Tetrachloroethene	0.252	0.196	0.196	0.239	0.234	0.224	11.6
2-Hexanone	0.167	0.169	0.161	0.190	0.181	0.174	6.7
Dibromochloromethane	0.278	0.263	0.252	0.309	0.309	0.282	9.3
1,2-Dibromoethane	0.255	0.242	0.224	0.269	0.259	0.250	6.9

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V6 Calibration Date(s): 06/10/2011 06/10/2011

Heated Purge: (Y/N) N Calibration Time(s): 12:51 15:00

Purge Volume: 5.0 (mL)

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

LAB FILE ID: _____	RRF005 = <u>V6I1459.D</u>	RRF020 = <u>V6I1458.D</u>					
RRF050 = <u>V6I1457.D</u>	RRF100 = <u>V6I1461.D</u>	RRF200 = <u>V6I1460.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	0.822	0.743	0.682	0.793	0.765	0.761	7.0
1,1,1,2-Tetrachloroethane	0.293	0.264	0.250	0.292	0.295	0.279	7.4
Ethylbenzene	0.400	0.347	0.346	0.412	0.411	0.383	8.8
m,p-Xylene	0.469	0.429	0.421	0.494	0.473	0.457	6.8
o-Xylene	0.440	0.429	0.424	0.496	0.486	0.455	7.3
Xylene (Total)	0.459	0.429	0.422	0.495	0.477	0.457	6.8
Styrene	0.768	0.764	0.749	0.852	0.818	0.790	5.5
Bromoform	0.167	0.176	0.167	0.206	0.208	0.185	11.2
Isopropylbenzene	1.005	0.940	0.985	1.152	1.120	1.041	8.8
1,1,2,2-Tetrachloroethane	0.584	0.568	0.496	0.588	0.533	0.554	7.1
Bromobenzene	0.646	0.576	0.531	0.634	0.608	0.599	7.8
1,2,3-Trichloropropane	0.655	0.619	0.567	0.685	0.650	0.635	7.1
2-Chlorotoluene	0.533	0.478	0.467	0.558	0.542	0.516	7.9
1,3,5-Trimethylbenzene	1.597	1.460	1.445	1.743	1.627	1.575	7.9
4-Chlorotoluene	0.616	0.536	0.502	0.587	0.568	0.562	7.9
tert-Butylbenzene	1.451	1.343	1.330	1.637	1.558	1.464	9.1
1,2,4-Trimethylbenzene	1.663	1.570	1.537	1.801	1.702	1.655	6.4
sec-Butylbenzene	1.812	1.591	1.565	1.925	1.779	1.734	8.8
4-Isopropyltoluene	1.405	1.295	1.310	1.602	1.494	1.421	9.1
1,3-Dichlorobenzene	1.155	0.999	0.945	1.087	1.035	1.044	7.7
1,4-Dichlorobenzene	1.211	1.070	0.973	1.140	1.072	1.093	8.1
1,2-Dichlorobenzene	1.104	1.003	0.914	1.080	0.996	1.019	7.4
1,2-Dibromo-3-chloropropane	0.122	0.100	0.083	0.110	0.099	0.103	14.3
1,2,4-Trichlorobenzene	0.696	0.598	0.487	0.673	0.577	0.606	13.8
Hexachlorobutadiene	0.419	0.288	0.207	0.321	0.241	0.295	27.8
1,2,3-Trichlorobenzene	0.783	0.569	0.409	0.618	0.484	0.572	24.8
Naphthalene	1.864	1.510	1.116	1.662	1.289	1.488	19.9
1,1,2-Trichloro-1,2,2-trifluoroethane	0.212	0.174	0.164	0.213	0.214	0.195	12.4
1,4-Dioxane	0.003	0.002	0.001	0.002	0.001	0.002	43.4
Cyclohexane	0.305	0.274	0.271	0.349	0.353	0.311	12.7
Methyl acetate	0.184	0.184	0.147	0.171	0.157	0.169	9.9
Methylcyclohexane	0.234	0.209	0.211	0.279	0.271	0.241	13.8

VOLATILE ORGANICS INITIAL CALIBRATION DATA  
Contract:

Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM Case No.: K1110 SAS No.: SDG No.: SK1110

Instrument ID: V10 Calibration Date(s): 07/06/2011 07/06/2011

Heated Purge: (Y/N) N Calibration Times: 9:48 12:19

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V8A4395.D RRF020 = V8A4394.D RRF050 = V8A4393.D RRF100 = V8A4399.D RRF200 = V8A4398.D										
RRF005 = V8A4395.D										
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF005	RRF	% RSD		
Dichlorodifluoromethane	0.508	0.394	0.467	0.452	0.449	0.508	0.463	9.3		
Chloromethane	0.308	0.248	0.285	0.291	0.249	0.308	0.281	9.6		
Vinyl chloride	0.414	0.306	0.377	0.384	0.341	0.414	0.373	11.3		
Bromomethane	0.296	0.235	0.281	0.310	0.300	0.296	0.286	9.4		
Chloroethane	0.210	0.172	0.192	0.213	0.193	0.210	0.198	8.1		
Trichlorofluoromethane	0.934	0.709	0.840	0.815	0.840	0.934	0.846	9.9		
1,1-Dichloroethene	0.379	0.276	0.328	0.323	0.327	0.379	0.336	11.6		
Acetone	0.036	0.030	0.026	0.042	0.044	0.036	0.035	19.6		
Iodomethane	0.430	0.356	0.497	0.496	0.469	0.430	0.446	12.0		
Carbon disulfide	1.248	0.916	1.117	1.005	0.996	1.248	1.088	12.8		
Methylene chloride	0.412	0.329	0.369	0.354	0.357	0.412	0.372	9.0		
trans-1,2-Dichloroethene	0.421	0.301	0.362	0.335	0.350	0.421	0.365	13.1		
Methyl tert-butyl ether	1.332	1.134	1.213	1.232	1.239	1.332	1.247	6.0		
1,1-Dichloroethane	0.618	0.483	0.565	0.531	0.547	0.618	0.560	9.3		
Vinyl acetate	0.921	0.806	0.886	0.904	0.918	0.921	0.893	5.0		
2-Butanone	0.035	0.036	0.034	0.044	0.045	0.035	0.038	13.1		
cis-1,2-Dichloroethene	0.331	0.257	0.298	0.287	0.300	0.331	0.301	9.3		
2,2-Dichloropropane	0.705	0.523	0.652	0.604	0.654	0.705	0.641	10.7		
Bromochloromethane	0.152	0.128	0.141	0.143	0.145	0.152	0.144	6.0		
Chloroform	0.796	0.616	0.718	0.683	0.713	0.796	0.720	9.6		
1,1,1-Trichloroethane	0.762	0.575	0.689	0.649	0.696	0.762	0.689	10.3		
1,1-Dichloropropene	0.150	0.114	0.131	0.132	0.140	0.150	0.136	10.0		
Carbon tetrachloride	0.620	0.485	0.585	0.572	0.624	0.620	0.584	9.1		
1,2-Dichloroethane	0.739	0.631	0.689	0.685	0.714	0.739	0.699	5.9		
Benzene	1.276	0.987	1.172	1.124	1.178	1.276	1.169	9.2		
Trichloroethene	0.299	0.233	0.278	0.267	0.282	0.299	0.276	9.0		
1,2-Dichloropropane	0.308	0.251	0.290	0.284	0.300	0.308	0.290	7.4		

50mL/0.01A

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

SW846

## VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc.

Contract:

Lab Code: MITKEM Case No.: K1110 SAS No.: SK1110

Instrument ID: V10 Calibration Date(s): 07/06/2011 07/06/2011

Heated Purge: (Y/N) N Calibration Times: 9:48 12:19

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V8A4395.D RRF020 = V8A4394.D RRF050 = V8A4393.D RRF100 = V8A4399.D RRF200 = V8A4398.D

RRF005 = V8A4395.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF005	RRF	% RSD
tert-Butylbenzene	2.548	2.046	2.058	2.277	2.337	2.548	2.302	9.7
1,2,4-Trimethylbenzene	2.834	2.341	2.437	2.612	2.655	2.834	2.619	7.7
sec-Butylbenzene	3.256	2.599	2.642	2.973	3.021	3.256	2.958	9.7
4-Isopropyltoluene	2.430	1.990	2.081	2.314	2.383	2.430	2.271	8.3
1,3-Dichlorobenzene	1.393	1.149	1.208	1.266	1.280	1.393	1.281	7.6
1,4-Dichlorobenzene	1.357	1.173	1.219	1.294	1.308	1.357	1.285	5.8
1,2-Dichlorobenzene	1.362	1.164	1.196	1.260	1.268	1.362	1.268	6.5
1,2-Dibromo-3-chloropropane	0.224	0.204	0.197	0.230	0.228	0.224	0.218	6.3
1,2,4-Trichlorobenzene	0.718	0.736	0.779	0.938	0.967	0.718	0.809	14.0
Hexachlorobutadiene	0.613	0.481	0.477	0.516	0.517	0.613	0.536	11.5
1,2,3-Trichlorobenzene	0.752	0.744	0.767	0.904	0.915	0.752	0.806	10.0
Naphthalene	1.657	1.483	1.521	1.970	1.972	1.657	1.710	12.5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.447	0.327	0.382	0.383	0.399	0.447	0.398	11.4
1,4-Dioxane	0.003	0.003	0.003	0.003	0.003	0.003	0.003	7.5
Cyclohexane	0.372	0.280	0.323	0.337	0.362	0.372	0.341	10.5
Methyl acetate	0.234	0.213	0.205	0.236	0.225	0.234	0.225	5.7
Methylcyclohexane	0.470	0.381	0.407	0.449	0.486	0.470	0.444	9.3

VOLATILE ORGANICS INITIAL CALIBRATION DATA  
Contract:

Lab Name: Spectrum Analytical, Inc.

Lab Code: MTKEM

Case No.: K1110

SAS No.:

SDG No.: SK1110

Instrument ID: V10

Calibration Date(s): 06/29/2011

06/29/2011

Heated Purge: (Y/N) N

Calibration Times: 8:51

10:56

Purge Volume: 5

(mL)

GC Column: DB-624

ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8A4203.D RRF020 = V8A4204.D RRF050 = V8A4205.D RRF100 = V8A4206.D RRF200 = V8A4207.D										
RRF001 = V8A4202.D										
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001	RRF	% RSD		
Dichlorodifluoromethane	0.253	0.208	0.189	0.232	0.270	0.251	0.234	13.1		
Chloromethane	0.339	0.285	0.250	0.279	0.328	0.366	0.308	14.1		
Vinyl chloride	0.349	0.299	0.264	0.293	0.341	0.383	0.322	13.6		
Bromomethane	0.245	0.192	0.182	0.202	0.254	0.272	0.224	16.5		
Chloroethane	0.194	0.160	0.143	0.159	0.184	0.222	0.177	16.3		
Trichlorofluoromethane	0.510	0.436	0.388	0.466	0.542	0.581	0.487	14.5		
1,1-Dichloroethene	0.304	0.252	0.225	0.253	0.297	0.345	0.279	15.7		
Acetone	0.055	0.044	0.037	0.044	0.045		0.045	14.5		
Iodomethane	0.421	0.412	0.385	0.427	0.497	0.393	0.423	9.5		
Carbon disulfide	1.013	0.863	0.766	0.910	1.013	1.260	0.971	17.5		
Methylene chloride	0.346	0.306	0.274	0.289	0.331	0.407	0.326	14.7		
trans-1,2-Dichloroethene	0.318	0.281	0.248	0.276	0.318	0.416	0.309	19.0		
Methyl tert-butyl ether	1.042	0.978	0.939	0.932	1.056	1.104	1.008	6.9		
1,1-Dichloroethane	0.656	0.567	0.509	0.546	0.633	0.697	0.601	12.0		
Vinyl acetate	1.339	1.260	1.176	1.188	1.334	1.392	1.281	6.9		
2-Butanone	0.040	0.039	0.038	0.042	0.044		0.040	6.0		
cis-1,2-Dichloroethene	0.329	0.284	0.257	0.274	0.319	0.404	0.311	17.0		
2,2-Dichloropropane	0.553	0.469	0.413	0.486	0.568	0.647	0.523	15.9		
Bromochloromethane	0.151	0.139	0.129	0.132	0.150	0.169	0.145	10.3		
Chloroform	0.665	0.574	0.522	0.553	0.643	0.739	0.616	13.2		
1,1,1-Trichloroethane	0.578	0.494	0.445	0.499	0.584	0.649	0.541	13.8		
1,1-Dichloropropene	0.143	0.129	0.111	0.129	0.150	0.154	0.136	11.9		
Carbon tetrachloride	0.454	0.401	0.361	0.424	0.502	0.482	0.437	12.0		
1,2-Dichloroethane	0.591	0.551	0.517	0.526	0.601	0.638	0.571	8.3		
Benzene	1.263	1.073	0.966	1.050	1.231	1.401	1.164	13.9		
Trichloroethene	0.298	0.249	0.226	0.252	0.293	0.302	0.270	11.7		
1,2-Dichloropropane	0.377	0.327	0.305	0.318	0.370	0.422	0.353	12.5		

50ml/0.01A

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

SW846

## VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc.

Contract:

Lab Code: MITKEM Case No.: K1110 SAS No.: SK1110

Instrument ID: V10 Calibration Date(s): 06/29/2011 06/29/2011

Heated Purge: (Y/N) N Calibration Times: 8:51 10:56

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V8A4203.D RRF020 = V8A4204.D RRF050 = V8A4205.D RRF100 = V8A4206.D RRF200 = V8A4207.D

RRF001 = V8A4202.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001	RRF	% RSD
tert-Butylbenzene	2.786	2.383	2.005	2.297	2.651	3.167	2.548	16.0
1,2,4-Trimethylbenzene	2.988	2.536	2.212	2.465	2.831	3.213	2.708	13.7
sec-Butylbenzene	3.430	2.896	2.398	2.847	3.289	3.746	3.101	15.5
4-Isopropyltoluene	2.703	2.307	1.938	2.278	2.651	2.791	2.445	13.3
1,3-Dichlorobenzene	1.479	1.288	1.159	1.284	1.439	1.564	1.369	11.0
1,4-Dichlorobenzene	1.467	1.297	1.183	1.311	1.469	1.645	1.395	11.8
1,2-Dichlorobenzene	1.491	1.293	1.193	1.270	1.410	1.520	1.363	9.6
1,2-Dibromo-3-chloropropane	0.235	0.197	0.202	0.199	0.223	0.166	0.204	11.8
1,2,4-Trichlorobenzene	0.632	0.749	0.765	0.851	1.015	0.556	0.761	21.3
Hexachlorobutadiene	0.438	0.398	0.357	0.424	0.466	0.493	0.429	11.3
1,2,3-Trichlorobenzene	0.658	0.773	0.773	0.827	0.952	0.471	0.742	22.0
Naphthalene	1.406	1.655	1.848	1.995	2.327	1.747	1.830	17.1
1,1,2-Trichloro-1,2,2-trifluoro	0.314	0.267	0.227	0.298	0.343	0.364	0.302	16.6
1,4-Dioxane	0.003	0.004	0.003	0.003	0.004	0.003	0.003	7.7
Cyclohexane	0.540	0.452	0.376	0.494	0.566	0.671	0.517	19.6
Methyl acetate	0.221	0.243	0.241	0.230	0.255	0.328	0.253	15.3
Methylcyclohexane	0.481	0.395	0.315	0.437	0.507	0.561	0.449	19.4

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB6Q

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Lab File ID: V6I1930.D BFB Injection Date: 07/06/2011  
Instrument ID: V6 BFB Injection Time: 7:27  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.7
75	30.0 - 60.0% of mass 95	49.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 100.0% of mass 95	84.8
175	5.0 - 9.0% of mass 174	6.3 (7.4)1
176	95.0 - 101.0% of mass 174	83.3 (98.2)1
177	5.0 - 9.0% of mass 176	5.3 (6.3)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506Q	VSTD0506Q	V6I1932.D	07/06/2011	8:20
02	LCS-60195	LCS-60195	V6I1933.D	07/06/2011	9:00
03	LCSD-60195	LCSD-60195	V6I1934.D	07/06/2011	9:27
04	MB-60195	MB-60195	V6I1936.D	07/06/2011	10:21
05	DEC-013DL	K1110-22ADL	V6I1944.D	07/06/2011	14:05
06	DEC-029DL	K1110-14ADL	V6I1945.D	07/06/2011	14:32
07	DEC-029D	K1110-15A	V6I1946.D	07/06/2011	15:00
08	DEC-004	K1110-16A	V6I1950.D	07/06/2011	16:53
09	DEC-039	K1110-17A	V6I1951.D	07/06/2011	17:22
10	DEC-027	K1110-18A	V6I1952.D	07/06/2011	17:50
11	DEC-048	K1110-19A	V6I1953.D	07/06/2011	18:19
12	DUP-062411	K1110-20A	V6I1954.D	07/06/2011	18:47
13	DUP2-062411	K1110-21A	V6I1955.D	07/06/2011	19:15

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V6 Calibration Date: 07/06/2011 Time: 8:20

Lab File ID: V6I1932.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506Q Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.152	0.163	0.100	7.5	20.0
Chloromethane	0.213	0.284	0.010	(33.2)	20.0
Vinyl chloride	0.199	0.246	0.010	(23.5)	20.0
Bromomethane	0.132	0.157	0.010	18.5	20.0
Chloroethane	0.107	0.125	0.010	16.8	20.0
Trichlorofluoromethane	0.330	0.374	0.010	13.3	20.0
1,1-Dichloroethene	0.199	0.194	0.100	-2.5	20.0
Acetone	0.022	(0.023)	0.010	1.1	20.0
Iodomethane	0.368	0.366	0.010	-0.4	20.0
Carbon disulfide	0.679	0.762	0.010	12.3	20.0
Methylene chloride	0.232	0.217	0.010	-6.3	20.0
trans-1,2-Dichloroethene	0.214	0.209	0.010	-2.3	20.0
Methyl tert-butyl ether	0.519	0.493	0.010	-5.0	20.0
1,1-Dichloroethane	0.408	0.414	0.010	1.4	20.0
Vinyl acetate	0.838	0.822	0.010	-1.8	20.0
2-Butanone	0.022	(0.021)	0.010	-4.7	20.0
cis-1,2-Dichloroethene	0.229	0.219	0.010	-4.4	20.0
2,2-Dichloropropane	0.226	0.224	0.010	-0.6	20.0
Bromochloromethane	0.113	0.101	0.010	-10.8	20.0
Chloroform	0.407	0.390	0.010	-4.2	20.0
1,1,1-Trichloroethane	0.314	0.304	0.010	-3.4	20.0
1,1-Dichloropropene	0.103	0.096	0.010	-7.1	20.0
Carbon tetrachloride	0.321	0.281	0.010	-12.5	20.0
1,2-Dichloroethane	0.314	0.303	0.010	-3.6	20.0
Benzene	0.853	0.880	0.010	3.3	20.0
Trichloroethene	0.216	0.201	0.010	-6.9	20.0
1,2-Dichloropropane	0.263	0.259	0.010	-1.7	20.0
Dibromomethane	0.140	0.125	0.010	-10.5	20.0
Bromodichloromethane	0.288	0.277	0.010	-3.7	20.0
cis-1,3-Dichloropropene	0.354	0.334	0.010	-5.7	20.0
4-Methyl-2-pentanone	0.189	0.159	0.010	-16.0	20.0
Toluene	0.907	0.901	0.010	-0.6	20.0
trans-1,3-Dichloropropene	0.323	0.293	0.010	-9.3	20.0
1,1,2-Trichloroethane	0.182	0.161	0.010	-11.1	20.0
1,3-Dichloropropane	0.397	0.388	0.010	-2.3	20.0
Tetrachloroethene	0.224	0.221	0.010	-1.3	20.0
2-Hexanone	0.174	0.179	0.010	3.1	20.0
Dibromochloromethane	0.282	0.274	0.010	-3.0	20.0
1,2-Dibromoethane	0.250	0.229	0.010	-8.4	20.0
Chlorobenzene	0.761	0.809	0.010	6.3	20.0



7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V6 Calibration Date: 07/06/2011 Time: 8:20

Lab File ID: V6I1932.D Init. Calib. Date(s): 06/10/2011 06/10/2011

EPA Sample No. (VSTD####) VSTD0506Q Init. Calib. Time(s): 12:51 15:00

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.279	0.285	0.010	2.3	20.0
Ethylbenzene	0.383	0.396	0.010	3.3	20.0
m,p-Xylene	0.457	0.492	0.010	7.6	20.0
o-Xylene	0.455	0.476	0.010	4.5	20.0
Xylene (Total)	0.457	0.487	0.010	6.6	20.0
Styrene	0.790	0.843	0.010	6.7	20.0
Bromoform	0.185	0.169	0.010	-8.7	20.0
Isopropylbenzene	1.041	1.077	0.300	3.5	20.0
1,1,2,2-Tetrachloroethane	0.554	0.520	0.300	-6.1	20.0
Bromobenzene	0.599	0.582	0.010	-2.7	20.0
1,2,3-Trichloropropane	0.635	0.611	0.010	-3.8	20.0
2-Chlorotoluene	0.516	0.529	0.010	2.6	20.0
1,3,5-Trimethylbenzene	1.575	1.622	0.010	3.0	20.0
4-Chlorotoluene	0.562	0.581	0.010	3.4	20.0
tert-Butylbenzene	1.464	1.502	0.010	2.6	20.0
1,2,4-Trimethylbenzene	1.655	1.739	0.010	5.1	20.0
sec-Butylbenzene	1.734	1.736	0.010	0.1	20.0
4-Isopropyltoluene	1.421	1.440	0.010	1.3	20.0
1,3-Dichlorobenzene	1.044	1.050	0.010	0.6	20.0
1,4-Dichlorobenzene	1.093	1.107	0.010	1.3	20.0
1,2-Dichlorobenzene	1.019	1.032	0.010	1.3	20.0
1,2-Dibromo-3-chloropropane	0.103	0.085	0.010	-17.5	20.0
1,2,4-Trichlorobenzene	0.606	0.525	0.010	-13.4	20.0
Hexachlorobutadiene	0.295	0.243	0.010	-17.7	20.0
1,2,3-Trichlorobenzene	0.572	0.476	0.010	-16.9	20.0
Naphthalene	1.488	1.230	0.010	-17.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.195	0.202	0.010	3.2	20.0
1,4-Dioxane	0.002	0.001	0.010	-20.3	20.0
Cyclohexane	0.311	0.327	0.010	5.1	20.0
Methyl acetate	0.169	0.163	0.010	-3.2	20.0
Methylcyclohexane	0.241	0.235	0.010	-2.3	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10I

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Lab File ID: V8A4209.D BFB Injection Date: 06/29/2011  
Instrument ID: V10 BFB Injection Time: 11:56  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	54.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 - 100.0% of mass 95	79.3
175	5.0 - 9.0% of mass 174	5.8 (7.4)1
176	95.0 - 101.0% of mass 174	77.1 (97.3)1
177	5.0 - 9.0% of mass 176	5.3 (6.8)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010I	VSTD05010I	V8A4210.D	06/29/2011	12:10
02	LCS-60019	LCS-60019	V8A4211.D	06/29/2011	12:43
03	LCSD-60019	LCSD-60019	V8A4212.D	06/29/2011	13:06
04	MB-60019	MB-60019	V8A4215.D	06/29/2011	14:17
05	DEC-022D	K1110-01A	V8A4228.D	06/29/2011	19:23
06	DEC-066D	K1110-03A	V8A4230.D	06/29/2011	20:10
07	DEC-066	K1110-04A	V8A4231.D	06/29/2011	20:33
08	DEC-044D	K1110-05A	V8A4232.D	06/29/2011	20:56
09	DEC-044	K1110-06A	V8A4233.D	06/29/2011	21:20

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
 Instrument ID: V10 Calibration Date: 06/29/2011 Time: 12:10  
 Lab File ID: V8A4210.D Init. Calib. Date(s): 06/29/2011 06/29/2011  
 EPA Sample No. (VSTD####) VSTD050101 Init. Calib. Time(s): 8:51 10:56  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
 Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.234	0.219	0.100	-6.5	20.0
Chloromethane	0.308	0.272	0.010	-11.7	20.0
Vinyl chloride	0.322	0.279	0.010	-13.3	20.0
Bromomethane	0.224	0.188	0.010	-16.0	20.0
Chloroethane	0.177	0.151	0.010	-14.5	20.0
Trichlorofluoromethane	0.487	0.429	0.010	-12.0	20.0
1,1-Dichloroethene	0.279	0.240	0.100	-14.2	20.0
Acetone	0.045	0.046	0.010	2.0	20.0
Iodomethane	0.423	0.416	0.010	-1.6	20.0
Carbon disulfide	0.971	0.874	0.010	-10.0	20.0
Methylene chloride	0.326	0.286	0.010	-12.2	20.0
trans-1,2-Dichloroethene	0.309	0.270	0.010	-12.9	20.0
Methyl tert-butyl ether	1.008	0.922	0.010	-8.6	20.0
1,1-Dichloroethane	0.601	0.528	0.010	-12.2	20.0
Vinyl acetate	1.281	1.172	0.010	-8.5	20.0
2-Butanone	0.040	0.040	0.010	-0.6	20.0
cis-1,2-Dichloroethene	0.311	0.266	0.010	-14.6	20.0
2,2-Dichloropropane	0.523	0.457	0.010	-12.6	20.0
Bromochloromethane	0.145	0.133	0.010	-8.0	20.0
Chloroform	0.616	0.547	0.010	-11.2	20.0
1,1,1-Trichloroethane	0.541	0.469	0.010	-13.3	20.0
1,1-Dichloropropene	0.136	0.117	0.010	-13.9	20.0
Carbon tetrachloride	0.437	0.379	0.010	-13.3	20.0
1,2-Dichloroethane	0.571	0.518	0.010	-9.2	20.0
Benzene	1.164	1.005	0.010	-13.6	20.0
Trichloroethene	0.270	0.240	0.010	-10.9	20.0
1,2-Dichloropropane	0.353	0.312	0.010	-11.6	20.0
Dibromomethane	0.219	0.200	0.010	-8.9	20.0
Bromodichloromethane	0.459	0.420	0.010	-8.3	20.0
cis-1,3-Dichloropropene	0.502	0.471	0.010	-6.2	20.0
4-Methyl-2-pentanone	0.338	0.327	0.010	-3.1	20.0
Toluene	1.240	1.090	0.010	-12.1	20.0
trans-1,3-Dichloropropene	0.490	0.466	0.010	-4.9	20.0
1,1,2-Trichloroethane	0.272	0.253	0.010	-7.0	20.0
1,3-Dichloropropane	0.589	0.540	0.010	-8.3	20.0
Tetrachloroethene	0.314	0.264	0.010	-16.0	20.0
2-Hexanone	0.327	0.344	0.010	5.2	20.0
Dibromochloromethane	0.406	0.380	0.010	-6.3	20.0
1,2-Dibromoethane	0.380	0.355	0.010	-6.6	20.0
Chlorobenzene	0.963	0.852	0.010	-11.5	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V10 Calibration Date: 06/29/2011 Time: 12:10

Lab File ID: V8A4210.D Init. Calib. Date(s): 06/29/2011 06/29/2011

EPA Sample No. (VSTD####) VSTD050101 Init. Calib. Time(s): 8:51 10:56

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.377	0.336	0.010	-10.8	20.0
Ethylbenzene	0.509	0.435	0.010	-14.4	20.0
m,p-Xylene	0.617	0.530	0.010	-14.1	20.0
o-Xylene	0.607	0.531	0.010	-12.5	20.0
Xylene (Total)	0.613	0.530	0.010	-13.6	20.0
Styrene	1.039	0.921	0.010	-11.4	20.0
Bromoform	0.288	0.272	0.010	-5.7	20.0
Isopropylbenzene	1.657	1.359	0.300	-17.9	20.0
1,1,2,2-Tetrachloroethane	0.949	0.847	0.300	-10.7	20.0
Bromobenzene	0.848	0.744	0.010	-12.3	20.0
1,2,3-Trichloropropane	1.214	1.135	0.010	-6.5	20.0
2-Chlorotoluene	0.715	0.608	0.010	-14.9	20.0
1,3,5-Trimethylbenzene	2.723	2.214	0.010	-18.7	20.0
4-Chlorotoluene	0.708	0.610	0.010	-13.9	20.0
tert-Butylbenzene	2.548	2.048	0.010	-19.6	20.0
1,2,4-Trimethylbenzene	2.708	2.284	0.010	-15.6	20.0
sec-Butylbenzene	3.101	2.461	0.010	-20.6	20.0
4-Isopropyltoluene	2.445	2.005	0.010	-18.0	20.0
1,3-Dichlorobenzene	1.369	1.208	0.010	-11.7	20.0
1,4-Dichlorobenzene	1.395	1.233	0.010	-11.6	20.0
1,2-Dichlorobenzene	1.363	1.214	0.010	-10.9	20.0
1,2-Dibromo-3-chloropropane	0.204	0.190	0.010	-6.6	20.0
1,2,4-Trichlorobenzene	0.761	0.782	0.010	2.8	20.0
Hexachlorobutadiene	0.429	0.378	0.010	-11.8	20.0
1,2,3-Trichlorobenzene	0.742	0.782	0.010	5.3	20.0
Naphthalene	1.830	1.870	0.010	2.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.302	0.263	0.010	-12.9	20.0
1,4-Dioxane	0.003	0.003	0.010	-2.1	20.0
Cyclohexane	0.517	0.423	0.010	-18.1	20.0
Methyl acetate	0.253	0.234	0.010	-7.5	20.0
Methylcyclohexane	0.449	0.357	0.010	-20.6	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10J

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Lab File ID: V8A4250.D BFB Injection Date: 06/30/2011  
Instrument ID: V10 BFB Injection Time: 7:57  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.4
75	30.0 - 60.0% of mass 95	57.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.6 (0.7) 1
174	50.0 - 100.0% of mass 95	81.8
175	5.0 - 9.0% of mass 174	5.9 (7.2) 1
176	95.0 - 101.0% of mass 174	80.1 (97.9) 1
177	5.0 - 9.0% of mass 176	5.2 (6.5) 2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010J	VSTD05010J	V8A4252.D	06/30/2011	8:50
02	LCS-60102	LCS-60102	V8A4254.D	06/30/2011	10:02
03	LCSD-60102	LCSD-60102	V8A4255.D	06/30/2011	10:27
04	MB-60102	MB-60102	V8A4258.D	06/30/2011	11:42
05	DEC-032	K1110-02A	V8A4264.D	06/30/2011	14:03
06	DEC-013D	K1110-07A	V8A4265.D	06/30/2011	14:26
07	DEC-042	K1110-08A	V8A4266.D	06/30/2011	14:50
08	DEC-022DDL	K1110-01ADL	V8A4267.D	06/30/2011	15:13
09	DEC-044DDL	K1110-05ADL	V8A4268.D	06/30/2011	15:36
10	DEC-044DL	K1110-06ADL	V8A4269.D	06/30/2011	16:00

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Instrument ID: V10 Calibration Date: 06/30/2011 Time: 8:50  
Lab File ID: V8A4252.D Init. Calib. Date(s): 06/29/2011 06/29/2011  
EPA Sample No. (VSTD####) VSTD05010J Init. Calib. Time(s): 8:51 10:56  
Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.234	0.200	0.100	-14.6	20.0
Chloromethane	0.308	0.267	0.010	-13.2	20.0
Vinyl chloride	0.322	0.265	0.010	-17.7	20.0
Bromomethane	0.224	0.212	0.010	-5.5	20.0
Chloroethane	0.177	0.143	0.010	-19.3	20.0
Trichlorofluoromethane	0.487	0.457	0.010	-6.1	20.0
1,1-Dichloroethene	0.279	0.235	0.100	-15.8	20.0
Acetone	0.045	0.033	0.010	-27.1	20.0
Iodomethane	0.423	0.442	0.010	4.7	20.0
Carbon disulfide	0.971	0.839	0.010	-13.6	20.0
Methylene chloride	0.326	0.283	0.010	-13.0	20.0
trans-1,2-Dichloroethene	0.309	0.267	0.010	-13.7	20.0
Methyl tert-butyl ether	1.008	0.954	0.010	-5.4	20.0
1,1-Dichloroethane	0.601	0.490	0.010	-18.5	20.0
Vinyl acetate	1.281	1.087	0.010	-15.2	20.0
2-Butanone	0.040	0.033	0.010	-19.7	20.0
cis-1,2-Dichloroethene	0.311	0.241	0.010	-22.5	20.0
2,2-Dichloropropane	0.523	0.464	0.010	-11.3	20.0
Bromochloromethane	0.145	0.123	0.010	-15.1	20.0
Chloroform	0.616	0.540	0.010	-12.4	20.0
1,1,1-Trichloroethane	0.541	0.486	0.010	-10.2	20.0
1,1-Dichloropropene	0.136	0.109	0.010	-20.1	20.0
Carbon tetrachloride	0.437	0.395	0.010	-9.7	20.0
1,2-Dichloroethane	0.571	0.560	0.010	-1.8	20.0
Benzene	1.164	0.903	0.010	-22.5	20.0
Trichloroethene	0.270	0.226	0.010	-16.4	20.0
1,2-Dichloropropane	0.353	0.276	0.010	-21.9	20.0
Dibromomethane	0.219	0.196	0.010	-10.5	20.0
Bromodichloromethane	0.459	0.421	0.010	-8.3	20.0
cis-1,3-Dichloropropene	0.502	0.433	0.010	-13.7	20.0
4-Methyl-2-pentanone	0.338	0.292	0.010	-13.6	20.0
Toluene	1.240	1.015	0.010	-18.1	20.0
trans-1,3-Dichloropropene	0.490	0.449	0.010	-8.4	20.0
1,1,2-Trichloroethane	0.272	0.231	0.010	-15.1	20.0
1,3-Dichloropropane	0.589	0.528	0.010	-10.4	20.0
Tetrachloroethene	0.314	0.280	0.010	-11.0	20.0
2-Hexanone	0.327	0.282	0.010	-13.9	20.0
Dibromochloromethane	0.406	0.390	0.010	-3.9	20.0
1,2-Dibromoethane	0.380	0.347	0.010	-8.6	20.0
Chlorobenzene	0.963	0.850	0.010	-11.8	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V10 Calibration Date: 06/30/2011 Time: 8:50

Lab File ID: V8A4252.D Init. Calib. Date(s): 06/29/2011 06/29/2011

EPA Sample No. (VSTD####) VSTD05010J Init. Calib. Time(s): 8:51 10:56

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.377	0.352	0.010	-6.4	20.0
Ethylbenzene	0.509	0.435	0.010	-14.4	20.0
m,p-Xylene	0.617	0.536	0.010	-13.1	20.0
o-Xylene	0.607	0.536	0.010	-11.6	20.0
Xylene (Total)	0.613	0.536	0.010	-12.6	20.0
Styrene	1.039	0.919	0.010	-11.6	20.0
Bromoform	0.288	0.286	0.010	-0.9	20.0
Isopropylbenzene	1.657	1.461	0.300	-11.8	20.0
1,1,2,2-Tetrachloroethane	0.949	0.765	0.300	-19.4	20.0
Bromobenzene	0.848	0.761	0.010	-10.3	20.0
1,2,3-Trichloropropane	1.214	1.077	0.010	-11.3	20.0
2-Chlorotoluene	0.715	0.617	0.010	-13.6	20.0
1,3,5-Trimethylbenzene	2.723	2.358	0.010	-13.4	20.0
4-Chlorotoluene	0.708	0.620	0.010	-12.4	20.0
tert-Butylbenzene	2.548	2.230	0.010	-12.5	20.0
1,2,4-Trimethylbenzene	2.708	2.395	0.010	-11.6	20.0
sec-Butylbenzene	3.101	2.636	0.010	-15.0	20.0
4-Isopropyltoluene	2.445	2.187	0.010	-10.5	20.0
1,3-Dichlorobenzene	1.369	1.242	0.010	-9.3	20.0
1,4-Dichlorobenzene	1.395	1.277	0.010	-8.5	20.0
1,2-Dichlorobenzene	1.363	1.258	0.010	-7.7	20.0
1,2-Dibromo-3-chloropropane	0.204	0.199	0.010	-2.1	20.0
1,2,4-Trichlorobenzene	0.761	0.815	0.010	7.1	20.0
Hexachlorobutadiene	0.429	0.438	0.010	2.0	20.0
1,2,3-Trichlorobenzene	0.742	0.806	0.010	8.5	20.0
Naphthalene	1.830	1.736	0.010	-5.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.302	0.251	0.010	-17.0	20.0
1,4-Dioxane	0.003	0.003	0.010	-5.3	20.0
Cyclohexane	0.517	0.356	0.010	-31.2	20.0
Methyl acetate	0.253	0.225	0.010	-11.1	20.0
Methylcyclohexane	0.449	0.320	0.010	-28.7	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10L

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Lab File ID: V8A4319.D BFB Injection Date: 07/01/2011  
Instrument ID: V10 BFB Injection Time: 17:57  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.3
75	30.0 - 60.0% of mass 95	59.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.7 (0.8) 1
174	50.0 - 100.0% of mass 95	83.0
175	5.0 - 9.0% of mass 174	6.3 (7.6) 1
176	95.0 - 101.0% of mass 174	79.3 (95.5) 1
177	5.0 - 9.0% of mass 176	5.2 (6.5) 2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010L	VSTD05010L	V8A4321.D	07/01/2011	18:44
02	LCS-60151	LCS-60151	V8A4322.D	07/01/2011	19:08
03	LCSD-60151	LCSD-60151	V8A4323.D	07/01/2011	19:31
04	MB-60151	MB-60151	V8A4325.D	07/01/2011	20:18
05	DEC-008	K1110-09A	V8A4342.D	07/02/2011	2:57
06	DUP-062311	K1110-11A	V8A4344.D	07/02/2011	3:44
07	DEC-014R	K1110-12A	V8A4345.D	07/02/2011	4:07



7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V10 Calibration Date: 07/01/2011 Time: 18:44

Lab File ID: V8A4321.D Init. Calib. Date(s): 06/29/2011 06/29/2011

EPA Sample No. (VSTD####) VSTD05010L Init. Calib. Time(s): 8:51 10:56

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.234	0.225	0.100	-3.7	20.0
Chloromethane	0.308	0.254	0.010	-17.4	20.0
Vinyl chloride	0.322	0.268	0.010	-16.7	20.0
Bromomethane	0.224	0.232	0.010	3.4	20.0
Chloroethane	0.177	0.153	0.010	-13.5	20.0
Trichlorofluoromethane	0.487	0.530	0.010	8.7	20.0
1,1-Dichloroethene	0.279	0.259	0.100	-7.4	20.0
Acetone	0.045	0.033	0.010	-27.0	20.0
Iodomethane	0.423	0.466	0.010	10.3	20.0
Carbon disulfide	0.971	0.817	0.010	-15.8	20.0
Methylene chloride	0.326	0.293	0.010	-10.0	20.0
trans-1,2-Dichloroethene	0.309	0.273	0.010	-11.6	20.0
Methyl tert-butyl ether	1.008	1.028	0.010	1.9	20.0
1,1-Dichloroethane	0.601	0.505	0.010	-16.0	20.0
Vinyl acetate	1.281	1.135	0.010	-11.5	20.0
2-Butanone	0.040	0.033	0.010	-18.1	20.0
cis-1,2-Dichloroethene	0.311	0.247	0.010	-20.5	20.0
2,2-Dichloropropane	0.523	0.438	0.010	-16.2	20.0
Bromochloromethane	0.145	0.125	0.010	-14.1	20.0
Chloroform	0.616	0.554	0.010	-10.0	20.0
1,1,1-Trichloroethane	0.541	0.508	0.010	-6.3	20.0
1,1-Dichloropropene	0.136	0.111	0.010	-18.4	20.0
Carbon tetrachloride	0.437	0.427	0.010	-2.3	20.0
1,2-Dichloroethane	0.571	0.586	0.010	2.7	20.0
Benzene	1.164	0.920	0.010	-21.0	20.0
Trichloroethene	0.270	0.227	0.010	-15.9	20.0
1,2-Dichloropropane	0.353	0.283	0.010	-19.9	20.0
Dibromomethane	0.219	0.206	0.010	-5.8	20.0
Bromodichloromethane	0.459	0.429	0.010	-6.4	20.0
cis-1,3-Dichloropropene	0.502	0.434	0.010	-13.4	20.0
4-Methyl-2-pentanone	0.338	0.311	0.010	-8.0	20.0
Toluene	1.240	1.014	0.010	-18.2	20.0
trans-1,3-Dichloropropene	0.490	0.449	0.010	-8.3	20.0
1,1,2-Trichloroethane	0.272	0.236	0.010	-13.0	20.0
1,3-Dichloropropane	0.589	0.520	0.010	-11.7	20.0
Tetrachloroethene	0.314	0.282	0.010	-10.2	20.0
2-Hexanone	0.327	0.294	0.010	-10.0	20.0
Dibromochloromethane	0.406	0.385	0.010	-5.1	20.0
1,2-Dibromoethane	0.380	0.358	0.010	-5.7	20.0
Chlorobenzene	0.963	0.825	0.010	-14.4	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V10 Calibration Date: 07/01/2011 Time: 18:44

Lab File ID: V8A4321.D Init. Calib. Date(s): 06/29/2011 06/29/2011

EPA Sample No. (VSTD####) VSTD05010L Init. Calib. Time(s): 8:51 10:56

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.377	0.344	0.010	-8.7	20.0
Ethylbenzene	0.509	0.423	0.010	-16.8	20.0
m,p-Xylene	0.617	0.525	0.010	-14.9	20.0
o-Xylene	0.607	0.518	0.010	-14.7	20.0
Xylene (Total)	0.613	0.523	0.010	-14.8	20.0
Styrene	1.039	0.885	0.010	-14.8	20.0
Bromoform	0.288	0.278	0.010	-3.6	20.0
Isopropylbenzene	1.657	1.404	0.300	-15.2	20.0
1,1,2,2-Tetrachloroethane	0.949	0.758	0.300	-20.1	20.0
Bromobenzene	0.848	0.719	0.010	-15.3	20.0
1,2,3-Trichloropropane	1.214	1.052	0.010	-13.4	20.0
2-Chlorotoluene	0.715	0.566	0.010	-20.8	20.0
1,3,5-Trimethylbenzene	2.723	2.169	0.010	-20.3	20.0
4-Chlorotoluene	0.708	0.584	0.010	-17.5	20.0
tert-Butylbenzene	2.548	2.246	0.010	-11.8	20.0
1,2,4-Trimethylbenzene	2.708	2.197	0.010	-18.9	20.0
sec-Butylbenzene	3.101	2.436	0.010	-21.4	20.0
4-Isopropyltoluene	2.445	1.972	0.010	-19.3	20.0
1,3-Dichlorobenzene	1.369	1.137	0.010	-16.9	20.0
1,4-Dichlorobenzene	1.395	1.177	0.010	-15.6	20.0
1,2-Dichlorobenzene	1.363	1.165	0.010	-14.6	20.0
1,2-Dibromo-3-chloropropane	0.204	0.204	0.010	0.3	20.0
1,2,4-Trichlorobenzene	0.761	0.748	0.010	-1.8	20.0
Hexachlorobutadiene	0.429	0.386	0.010	-10.0	20.0
1,2,3-Trichlorobenzene	0.742	0.722	0.010	-2.8	20.0
Naphthalene	1.830	1.704	0.010	-6.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.302	0.294	0.010	-2.7	20.0
1,4-Dioxane	0.003	0.003	0.010	2.3	20.0
Cyclohexane	0.517	0.400	0.010	-22.5	20.0
Methyl acetate	0.253	0.248	0.010	-2.0	20.0
Methylcyclohexane	0.449	0.347	0.010	-22.8	20.0

5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10M

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Lab File ID: V8A4360.D BFB Injection Date: 07/05/2011  
Instrument ID: V10 BFB Injection Time: 8:25  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	58.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	88.6
175	5.0 - 9.0% of mass 174	6.6 (7.5)1
176	95.0 - 101.0% of mass 174	88.2 (99.5)1
177	5.0 - 9.0% of mass 176	5.3 (6.0)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010M	VSTD05010M	V8A4362.D	07/05/2011	9:24
02	LCS-60176	LCS-60176	V8A4363.D	07/05/2011	9:58
03	LCSD-60176	LCSD-60176	V8A4364.D	07/05/2011	10:21
04	MB-60176	MB-60176	V8A4366.D	07/05/2011	11:36
05	TB	K1110-23A	V8A4378.D	07/05/2011	16:29
06	DUP-062311DL	K1110-11ADL	V8A4379.D	07/05/2011	16:52
07	DEC-014RDL	K1110-12ADL	V8A4380.D	07/05/2011	17:16
08	DEC-009	K1110-10A	V8A4381.D	07/05/2011	17:40
09	DEC-014D	K1110-13A	V8A4382.D	07/05/2011	18:03
10	DEC-029	K1110-14A	V8A4383.D	07/05/2011	18:27
11	DEC-013	K1110-22A	V8A4385.D	07/05/2011	19:14

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110  
Instrument ID: V10 Calibration Date: 07/05/2011 Time: 9:24  
Lab File ID: V8A4362.D Init. Calib. Date(s): 06/29/2011 06/29/2011  
EPA Sample No. (VSTD####) VSTD05010M Init. Calib. Time(s): 8:51 10:56  
Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.234	0.277	0.100	18.6	20.0
Chloromethane	0.308	0.217	0.010	-29.6	20.0
Vinyl chloride	0.322	0.287	0.010	-10.7	20.0
Bromomethane	0.224	0.250	0.010	11.6	20.0
Chloroethane	0.177	0.168	0.010	-5.1	20.0
Trichlorofluoromethane	0.487	0.653	0.010	34.1	20.0
1,1-Dichloroethene	0.279	0.302	0.100	8.2	20.0
Acetone	0.045	0.043	0.010	-3.9	20.0
Iodomethane	0.423	0.547	0.010	29.4	20.0
Carbon disulfide	0.971	1.037	0.010	6.8	20.0
Methylene chloride	0.326	0.349	0.010	7.0	20.0
trans-1,2-Dichloroethene	0.309	0.333	0.010	7.5	20.0
Methyl tert-butyl ether	1.008	1.196	0.010	18.6	20.0
1,1-Dichloroethane	0.601	0.538	0.010	-10.5	20.0
Vinyl acetate	1.281	0.886	0.010	-30.9	20.0
2-Butanone	0.040	0.042	0.010	4.3	20.0
cis-1,2-Dichloroethene	0.311	0.285	0.010	-8.4	20.0
2,2-Dichloropropane	0.523	0.603	0.010	15.4	20.0
Bromochloromethane	0.145	0.140	0.010	-3.8	20.0
Chloroform	0.616	0.680	0.010	10.4	20.0
1,1,1-Trichloroethane	0.541	0.632	0.010	16.6	20.0
1,1-Dichloropropene	0.136	0.129	0.010	-5.0	20.0
Carbon tetrachloride	0.437	0.531	0.010	21.5	20.0
1,2-Dichloroethane	0.571	0.670	0.010	17.4	20.0
Benzene	1.164	1.124	0.010	-3.4	20.0
Trichloroethene	0.270	0.263	0.010	-2.8	20.0
1,2-Dichloropropane	0.353	0.288	0.010	-18.5	20.0
Dibromomethane	0.219	0.238	0.010	8.8	20.0
Bromodichloromethane	0.459	0.524	0.010	14.4	20.0
cis-1,3-Dichloropropene	0.502	0.536	0.010	6.9	20.0
4-Methyl-2-pentanone	0.338	0.230	0.010	-31.9	20.0
Toluene	1.240	1.248	0.010	0.6	20.0
trans-1,3-Dichloropropene	0.490	0.562	0.010	14.7	20.0
1,1,2-Trichloroethane	0.272	0.266	0.010	-2.0	20.0
1,3-Dichloropropane	0.589	0.615	0.010	4.4	20.0
Tetrachloroethene	0.314	0.316	0.010	0.4	20.0
2-Hexanone	0.327	0.235	0.010	-28.2	20.0
Dibromochloromethane	0.406	0.459	0.010	13.1	20.0
1,2-Dibromoethane	0.380	0.375	0.010	-1.4	20.0
Chlorobenzene	0.963	0.971	0.010	0.8	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1110 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1110

Instrument ID: V10 Calibration Date: 07/05/2011 Time: 9:24

Lab File ID: V8A4362.D Init. Calib. Date(s): 06/29/2011 06/29/2011

EPA Sample No. (VSTD####) VSTD05010M Init. Calib. Time(s): 8:51 10:56

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.377	0.394	0.010	4.7	20.0
Ethylbenzene	0.509	0.515	0.010	1.4	20.0
m,p-Xylene	0.617	0.633	0.010	2.7	20.0
o-Xylene	0.607	0.628	0.010	3.5	20.0
Xylene (Total)	0.613	0.631	0.010	3.0	20.0
Styrene	1.039	1.084	0.010	4.4	20.0
Bromoform	0.288	0.337	0.010	17.0	20.0
Isopropylbenzene	1.657	1.756	0.300	6.0	20.0
1,1,2,2-Tetrachloroethane	0.949	0.818	0.300	-13.7	20.0
Bromobenzene	0.848	0.762	0.010	-10.1	20.0
1,2,3-Trichloropropane	1.214	1.194	0.010	-1.7	20.0
2-Chlorotoluene	0.715	0.635	0.010	-11.1	20.0
1,3,5-Trimethylbenzene	2.723	2.628	0.010	-3.5	20.0
4-Chlorotoluene	0.708	0.645	0.010	-8.9	20.0
tert-Butylbenzene	2.548	2.330	0.010	-8.5	20.0
1,2,4-Trimethylbenzene	2.708	2.693	0.010	-0.6	20.0
sec-Butylbenzene	3.101	2.933	0.010	-5.4	20.0
4-Isopropyltoluene	2.445	2.271	0.010	-7.1	20.0
1,3-Dichlorobenzene	1.369	1.319	0.010	-3.6	20.0
1,4-Dichlorobenzene	1.395	1.358	0.010	-2.7	20.0
1,2-Dichlorobenzene	1.363	1.329	0.010	-2.5	20.0
1,2-Dibromo-3-chloropropane	0.204	0.222	0.010	9.0	20.0
1,2,4-Trichlorobenzene	0.761	0.901	0.010	18.3	20.0
Hexachlorobutadiene	0.429	0.532	0.010	(24.0)	20.0
1,2,3-Trichlorobenzene	0.742	0.888	0.010	19.6	20.0
Naphthalene	1.830	1.811	0.010	-1.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.302	0.353	0.010	16.8	20.0
1,4-Dioxane	0.003	(0.003)	0.010	-2.3	20.0
Cyclohexane	0.517	0.324	0.010	(-37.4)	20.0
Methyl acetate	0.253	0.231	0.010	-8.6	20.0
Methylcyclohexane	0.449	0.410	0.010	-8.8	20.0

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1110**

**SW846 8270D, SVOA 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 8270D

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: S3  
Instrument Type: GCMS-SEMI  
Description: HP6890 / HP5973  
Manufacturer: Hewlett-Packard  
Model: 6890 / 5973

## 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-60141 in batch 60141, recovery is above criteria for 2,4-Dinitrophenol at 167% with criteria of (15-140), 2,4-Dinitrotoluene at 128% with criteria of (50-120), 2,6-Dinitrotoluene at 117% with criteria of (50-115), 2-Nitrophenol at 116% with criteria of (40-115) and 4,6-Dinitro-2-methylphenol at 142% with criteria of (40-130).

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

Matrix spikes were performed on samples: DEC-048 (K1110-19DMS) and DEC-048 (K1110-19DMSD).

Percent recoveries were within the QC limits with the following exceptions:

DEC-048 (K1110-19DMS), recovery is below criteria for 2,4-Dimethylphenol at 9% with criteria of (30-110) and Caprolactam at 20% with criteria of (50-150).

DEC-048 (K1110-19DMSD), recovery is above criteria for 4,6-Dinitro-2-methylphenol at 137% with criteria of (40-130), recovery is below criteria for and Caprolactam at 20% with criteria of (50-150).

Replicate RPDs were within the QC limits with the exception of 2,4-Dimethylphenol.

**E. Internal Standards:**

Internal standard peak areas were within the QC limits.

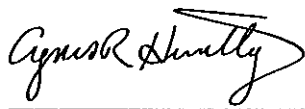
**F. Dilutions:**

No sample in this SDG required analysis at dilution.

**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 RI, 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: 07/25/11



## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1110**

**SW846 8081B, Organochlorine Pesticides by GC-ECD**

### **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 8081B

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E4

Instrument Type: GC-ECD

Description: HP6890

Manufacturer: Hewlett-Packard

Model: 6890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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 sample were within the QC limits.

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

Matrix spikes were performed on samples: DEC-048 (K1110-19DMS) and DEC-048 (K1110-19DMSD).

Percent recoveries were within the QC limits.

Replicate RPDs were within the QC limits.

### **E. Dilutions:**

No sample in this SDG required analysis at dilution.

**F. Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1 when D% between the two columns is greater than 40%.

No unusual occurrences were noted during sample analysis.

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Signed:  \_\_\_\_\_

Date: 07/25/11

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1110**

**SW846 8082A, PCB by GC-ECD**

### **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 8082A

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### **V. INSTRUMENTATION**

The following instrumentation was used

Instrument Code: E2

Instrument Type: GC-ECD

Description: HP5890 II +

Manufacturer: Hewlett-Packard

Model: 5890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest 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 sample were within the QC limits.

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

Matrix spikes were performed on samples: DEC-048 (K1110-19DMS) and DEC-048 (K1110-19DMSD).

Percent recoveries were within the QC limits.

Replicate RPDs were within the QC limits.

### **E. Dilutions:**

No sample in this SDG required analysis at dilution.

**F. Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated on Form 10. Both values are reported on Form 10. P flags are assigned to compounds on Form 1 when D% between the two columns is greater than 40%.

No unusual occurrences were noted during sample analysis.

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Signed: \_\_\_\_\_

Date: 07/25/11

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker**

**Laboratory Workorder / SDG #: K1110**

**SW846 6010C, SW846 7470A, SW846 9012B**

### **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 6010C, SW846 7470A, SW846 9012B

### **IV. PREPARATION**

Aqueous Samples were prepared following procedures in laboratory test code: SW9012B

Aqueous Samples were prepared following procedures in laboratory test code: SW3005

Aqueous Samples were prepared following procedures in laboratory test

code: SW7470A

## V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS1  
Instrument Type: CVAA  
Description: FIMS  
Manufacturer: Perkin-Elmer  
Model: FIMS

Instrument Code: LACHAT1  
Instrument Type: WC  
Description: Flow Injection Analyzer  
Manufacturer: Zellweger Analytics  
Model: Quik-Chem 8000

Instrument Code: OPTIMA3  
Instrument Type: ICP  
Description: Optima ICP-OES  
Manufacturer: Perkin-Elmer  
Model: 4300 DV

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

#### 2. Matrix spike (MS):

Matrix spikes were performed on samples: DEC-048 (K1110-19BMS) and DEC-048 (K1110-19CMS).



Percent recoveries were within the QC limits.

**D. Post Digestion Spike (PDS):**

A post-digestion spike was not performed on any sample in this SDG.

**E. Duplicate sample:**

Duplicate analysis was performed on samples: DEC-048 (K1110-19BDUP) and DEC-048 (K1110-19CDUP).

Relative percent differences were within the QC limits.

**F. Serial Dilution (SD):**


Serial Dilution analysis was performed on sample: DEC-048 (K1110-19BSD).

Percent differences were within the QC limits.

**G. Samples:**

No 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 RI, 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: 07/25/11



## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker, LNAPL Sample**

**Laboratory Workorder / SDG #: K1120**

**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**

Soil 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

## **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 sample were within the QC limits.

#### **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 sample was analyzed at dilution:

DEC-048 (K1120-01A) : Dilution Factor: 500

### **G. Samples:**

No 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 RI, 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: 07/26/11

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

CLIENT SAMPLE NO.

MB-60218

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-60218  
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8A4406.D  
Level: (TRACE/LOW/MED) MED Date Received: \_\_\_\_\_  
% Moisture: not dec. 0.0 Date Analyzed: 07/06/2011  
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 UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
1330-20-7	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U
1330-20-7	Xylene (Total)	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
103-65-1	n-Propylbenzene	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
104-51-8	n-Butylbenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-68-3	Hexachlorobutadiene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U
91-20-3	Naphthalene	56	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	U
123-91-1	1,4-Dioxane	5000	U

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

Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM Case No.: K1120 SAS No.: SK1120

Instrument ID: V10 Calibration Date(s): 07/06/2011 07/06/2011

Heated Purge: (Y/N) N Calibration Times: 9:48 12:19

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V8A4395.D RRF020 = V8A4394.D RRF050 = V8A4393.D RRF100 = V8A4399.D RRF200 = V8A4398.D												
RRF005 = V8A4395.D												
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF005					RRF	% RSD
Dichlorodifluoromethane	0.508	0.394	0.467	0.452	0.449	0.508					0.463	9.3
Chloromethane	0.308	0.248	0.285	0.291	0.249	0.308					0.281	9.6
Vinyl chloride	0.414	0.306	0.377	0.384	0.341	0.414					0.373	11.3
Bromomethane	0.296	0.235	0.281	0.310	0.300	0.296					0.286	9.4
Chloroethane	0.210	0.172	0.192	0.213	0.193	0.210					0.198	8.1
Trichlorofluoromethane	0.934	0.709	0.840	0.815	0.840	0.934					0.846	9.9
1,1-Dichloroethene	0.379	0.276	0.328	0.323	0.327	0.379					0.336	11.6
Acetone	0.036	0.030	0.026	0.042	0.044	0.036					0.035	19.6
Iodomethane	0.430	0.356	0.497	0.496	0.469	0.430					0.446	12.0
Carbon disulfide	1.248	0.916	1.117	1.005	0.996	1.248					1.088	12.8
Methylene chloride	0.412	0.329	0.369	0.354	0.357	0.412					0.372	9.0
trans-1,2-Dichloroethene	0.421	0.301	0.362	0.335	0.350	0.421					0.365	13.1
Methyl tert-butyl ether	1.332	1.134	1.213	1.232	1.239	1.332					1.247	6.0
1,1-Dichloroethane	0.618	0.483	0.565	0.531	0.547	0.618					0.560	9.3
Vinyl acetate	0.921	0.806	0.886	0.904	0.918	0.921					0.893	5.0
2-Butanone	0.035	0.036	0.034	0.044	0.045	0.035					0.038	13.1
cis-1,2-Dichloroethene	0.331	0.257	0.298	0.287	0.300	0.331					0.301	9.3
2,2-Dichloropropane	0.705	0.523	0.652	0.604	0.654	0.705					0.641	10.7
Bromochloromethane	0.152	0.128	0.141	0.143	0.145	0.152					0.144	6.0
Chloroform	0.796	0.616	0.718	0.683	0.713	0.796					0.720	9.6
1,1,1-Trichloroethane	0.762	0.575	0.689	0.649	0.696	0.762					0.689	10.3
1,1-Dichloropropene	0.150	0.114	0.131	0.132	0.140	0.150					0.136	10.0
Carbon tetrachloride	0.620	0.485	0.585	0.572	0.624	0.620					0.584	9.1
1,2-Dichloroethane	0.739	0.631	0.689	0.685	0.714	0.739					0.699	5.9
Benzene	1.276	0.987	1.172	1.124	1.178	1.276					1.169	9.2
Trichloroethene	0.299	0.233	0.278	0.267	0.282	0.299					0.276	9.0
1,2-Dichloropropane	0.308	0.251	0.290	0.284	0.300	0.308					0.290	7.4

6C - FORM VI VOA-3  
VOLATILE ORGANICS INITIAL CALIBRATION DATA  
Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: K1120 SAS No.: SK1120  
Instrument ID: V10 Calibration Date(s): 07/06/2011 07/06/2011  
Heated Purge: (Y/N) N Calibration Times: 9:48 12:19  
Purge Volume: 5 (mL)  
GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8A4395.D RRF020 = V8A4394.D RRF050 = V8A4393.D RRF100 = V8A4399.D RRF200 = V8A4398.D										
RRF005 = V8A4395.D										
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF005	RRF100	RRF200	RRF	% RSD
4-Chlorotoluene	0.685	0.567	0.593	0.619	0.631	0.685			0.630	7.6
tert-Butylbenzene	2.548	2.046	2.058	2.277	2.337	2.548			2.302	9.7
1,2,4-Trimethylbenzene	2.834	2.341	2.437	2.612	2.655	2.834			2.619	7.7
sec-Butylbenzene	3.256	2.599	2.642	2.973	3.021	3.256			2.958	9.7
4-Isopropyltoluene	2.430	1.990	2.081	2.314	2.383	2.430			2.271	8.3
1,3-Dichlorobenzene	1.393	1.149	1.208	1.266	1.280	1.393			1.281	7.6
1,4-Dichlorobenzene	1.357	1.173	1.219	1.294	1.308	1.357			1.285	5.8
n-Butylbenzene	2.460	2.037	2.152	2.475	2.548	2.460			2.355	8.8
1,2-Dichlorobenzene	1.362	1.164	1.196	1.260	1.268	1.362			1.268	6.5
1,2-Dibromo-3-chloropropane	0.224	0.204	0.197	0.230	0.228	0.224			0.218	6.3
1,2,4-Trichlorobenzene	0.718	0.736	0.779	0.938	0.967	0.718			0.809	14.0
Hexachlorobutadiene	0.613	0.481	0.477	0.516	0.517	0.613			0.536	11.5
1,2,3-Trichlorobenzene	0.752	0.744	0.767	0.904	0.915	0.752			0.806	10.0
Naphthalene	1.657	1.483	1.521	1.970	1.972	1.657			1.710	12.5
1,1,2-Trichloro-1,2,2-trifluoro	0.447	0.327	0.382	0.383	0.399	0.447			0.398	11.4
1,4-Dioxane	0.003	0.003	0.003	0.003	0.003	0.003			0.003	7.5
Cyclohexane	0.372	0.280	0.323	0.337	0.362	0.372			0.341	10.5
Methyl acetate	0.234	0.213	0.205	0.236	0.225	0.234			0.225	5.7
Methylcyclohexane	0.470	0.381	0.407	0.449	0.486	0.470			0.444	9.3



5A - FORM V VOA  
VOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10N

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
Lab File ID: V8A4401.D BFB Injection Date: 07/06/2011  
Instrument ID: V10 BFB Injection Time: 13:12  
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	59.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.7 (0.8) 1
174	50.0 - 100.0% of mass 95	88.5
175	5.0 - 9.0% of mass 174	7.1 (8.0) 1
176	95.0 - 101.0% of mass 174	86.9 (98.2) 1
177	5.0 - 9.0% of mass 176	5.8 (6.7) 2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010N	VSTD05010N	V8A4402.D	07/06/2011	13:26
02	LCS-60218	LCS-60218	V8A4404.D	07/06/2011	14:24
03	MB-60218	MB-60218	V8A4406.D	07/06/2011	15:13
04	DEC-048	K1120-01A	V8A4427.D	07/06/2011	23:27

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120

Instrument ID: V10 Calibration Date: 07/06/2011 Time: 13:26

Lab File ID: V8A4402.D Init. Calib. Date(s): 07/06/2011 07/06/2011

EPA Sample No.(VSTD####) VSTD05010N Init. Calib. Time(s): 9:48 12:19

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.463	0.479	0.100	3.4	20.0
Chloromethane	0.281	0.297	0.010	5.5	20.0
Vinyl chloride	0.373	0.386	0.010	3.7	20.0
Bromomethane	0.286	0.304	0.010	6.1	20.0
Chloroethane	0.198	0.213	0.010	7.4	20.0
Trichlorofluoromethane	0.846	0.864	0.010	2.2	20.0
1,1-Dichloroethene	0.336	0.341	0.100	1.7	20.0
Acetone	0.035	0.051	0.010	44.0	20.0
Iodomethane	0.446	0.501	0.010	12.3	20.0
Carbon disulfide	1.088	1.113	0.010	2.3	20.0
Methylene chloride	0.372	0.391	0.010	5.1	20.0
trans-1,2-Dichloroethene	0.365	0.373	0.010	2.2	20.0
Methyl tert-butyl ether	1.247	1.315	0.010	5.4	20.0
1,1-Dichloroethane	0.560	0.583	0.010	4.1	20.0
Vinyl acetate	0.893	0.973	0.010	9.0	20.0
2-Butanone	0.038	0.049	0.010	28.6	20.0
cis-1,2-Dichloroethene	0.301	0.313	0.010	4.1	20.0
2,2-Dichloropropane	0.641	0.660	0.010	3.0	20.0
Bromochloromethane	0.144	0.156	0.010	8.9	20.0
Chloroform	0.720	0.744	0.010	3.3	20.0
1,1,1-Trichloroethane	0.689	0.696	0.010	1.1	20.0
1,1-Dichloropropene	0.136	0.146	0.010	7.2	20.0
Carbon tetrachloride	0.584	0.604	0.010	3.3	20.0
1,2-Dichloroethane	0.699	0.746	0.010	6.6	20.0
Benzene	1.169	1.223	0.010	4.6	20.0
Trichloroethene	0.276	0.290	0.010	4.8	20.0
1,2-Dichloropropane	0.290	0.309	0.010	6.6	20.0
Dibromomethane	0.251	0.268	0.010	7.1	20.0
Bromodichloromethane	0.540	0.570	0.010	5.5	20.0
cis-1,3-Dichloropropene	0.545	0.593	0.010	8.8	20.0
4-Methyl-2-pentanone	0.229	0.265	0.010	16.0	20.0
Toluene	1.298	1.362	0.010	4.9	20.0
trans-1,3-Dichloropropene	0.551	0.612	0.010	11.2	20.0
1,1,2-Trichloroethane	0.279	0.295	0.010	5.8	20.0
1,3-Dichloropropane	0.592	0.642	0.010	8.4	20.0
Tetrachloroethene	0.345	0.328	0.010	-5.0	20.0
2-Hexanone	0.199	0.261	0.010	31.0	20.0
Dibromochloromethane	0.422	0.462	0.010	9.3	20.0
1,2-Dibromoethane	0.360	0.398	0.010	10.6	20.0
Chlorobenzene	0.947	0.994	0.010	5.0	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120

Instrument ID: V10 Calibration Date: 07/06/2011 Time: 13:26

Lab File ID: V8A4402.D Init. Calib. Date(s): 07/06/2011 07/06/2011

EPA Sample No. (VSTD####) VSTD05010N Init. Calib. Time(s): 9:48 12:19

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.379	0.401	0.010	6.0	20.0
Ethylbenzene	0.500	0.513	0.010	2.6	20.0
m,p-Xylene	0.621	0.639	0.010	2.9	20.0
o-Xylene	0.606	0.632	0.010	4.2	20.0
Xylene (Total)	0.616	0.637	0.010	3.3	20.0
Styrene	1.032	1.108	0.010	7.3	20.0
Bromoform	0.311	0.339	0.010	8.8	20.0
Isopropylbenzene	1.726	1.726	0.300	0.0	20.0
1,1,2,2-Tetrachloroethane	0.777	0.847	0.300	9.0	20.0
Bromobenzene	0.744	0.772	0.010	3.7	20.0
1,2,3-Trichloropropane	1.146	1.234	0.010	7.7	20.0
n-Propylbenzene	0.661	0.647	0.010	-2.2	20.0
2-Chlorotoluene	0.622	0.631	0.010	1.5	20.0
1,3,5-Trimethylbenzene	2.587	2.579	0.010	-0.3	20.0
4-Chlorotoluene	0.630	0.656	0.010	4.1	20.0
tert-Butylbenzene	2.302	2.238	0.010	-2.8	20.0
1,2,4-Trimethylbenzene	2.619	2.646	0.010	1.0	20.0
sec-Butylbenzene	2.958	2.836	0.010	-4.1	20.0
4-Isopropyltoluene	2.271	2.242	0.010	-1.3	20.0
1,3-Dichlorobenzene	1.281	1.345	0.010	4.9	20.0
1,4-Dichlorobenzene	1.285	1.359	0.010	5.8	20.0
n-Butylbenzene	2.355	2.360	0.100	0.2	20.0
1,2-Dichlorobenzene	1.268	1.335	0.010	5.3	20.0
1,2-Dibromo-3-chloropropane	0.218	0.234	0.010	7.5	20.0
1,2,4-Trichlorobenzene	0.809	0.902	0.010	11.5	20.0
Hexachlorobutadiene	0.536	0.519	0.010	-3.3	20.0
1,2,3-Trichlorobenzene	0.806	0.905	0.010	12.3	20.0
Naphthalene	1.710	1.934	0.010	13.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.398	0.403	0.010	1.4	20.0
1,4-Dioxane	0.003	0.004	0.010	30.3	20.0
Cyclohexane	0.341	0.356	0.010	4.4	20.0
Methyl acetate	0.225	0.251	0.010	11.8	20.0
Methylcyclohexane	0.444	0.448	0.010	1.0	20.0

## V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3

Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973

Manufacturer: Hewlett-Packard

Model: 6890 / 5973

## 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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

DEC-048 (K1120-01A), recovery is above criteria for 2,4,6-Tribromophenol at 135% with criteria of (35-125), 2-Fluorophenol at 108% with criteria of (35-105), Nitrobenzene-d5 at 538% with criteria of (35-100) and Phenol-d5 at 115% with criteria of (40-100).

LCS-60224, recovery is above criteria for 2,4,6-Tribromophenol at 131% with criteria of (35-125), 2-Fluorophenol at 110% with criteria of (35-105) and Phenol-d5 at 105% with criteria of (40-100).

LCSD-60224, recovery is above criteria for 2,4,6-Tribromophenol at 132% with criteria of (35-125), 2-Fluorophenol at 118% with criteria of (35-105) and Phenol-d5 at 109% with criteria of (40-100).

Please note that for samples of oil matrix, both the field samples and their associated method blank and LCS/LCSD were diluted to 10 mL. These dilutions resulted in increased imprecision in determining the surrogate recovery.

### 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-60224 in batch 60224, recovery is below criteria for 2,4-Dinitrophenol at 0% with criteria of (15-130) and Benzaldehyde at 0% with criteria of (10-118).

LCSD-60224 in batch 60224, recovery is below criteria for 2,4-Dinitrophenol at 0% with criteria of (15-130) and Benzaldehyde at 0% with criteria of (10-118).

## **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 sample was analyzed at dilution:

DEC-048 (K1120-01A) : Dilution Factor: 5

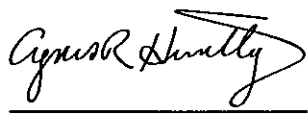
## **G. Samples:**

Approximately 1gram of the oil sample was taken, spiked with surrogate and diluted to 10mL in methylene chloride. An aliquot of the resultant sample extract was transferred to the instrument lab for analysis.

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 RI, 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: 07/26/11

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-60224

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: K1120

Mod. Ref No.:

SDG No.: SK1120

Lab Sample ID: LCS-60224

LCS Lot No.: A079604

Date Extracted: 07/07/2011

Date Analyzed (1): 07/07/2011

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50010.0000	0.0000	47319.2659	95		40 - 100
Bis(2-chloroethyl) ether	50010.0000	0.0000	44394.6538	89		40 - 105
2-Chlorophenol	50010.0000	0.0000	46121.9438	92		45 - 105
2-Methylphenol	50010.0000	0.0000	43842.4785	88		40 - 105
2,2'-oxybis(1-Chloropropan	50010.0000	0.0000	38718.3247	77		20 - 115
N-Nitroso-di-n-propylamine	50010.0000	0.0000	38247.1439	76		40 - 115
Hexachloroethane	50010.0000	0.0000	47234.7594	94		35 - 110
Nitrobenzene	50010.0000	0.0000	44164.0959	88		40 - 115
Isophorone	50010.0000	0.0000	39997.7010	80		45 - 110
2-Nitrophenol	50010.0000	0.0000	42488.8293	85		40 - 110
2,4-Dimethylphenol	50010.0000	0.0000	43758.2766	87		30 - 105
2,4-Dichlorophenol	50010.0000	0.0000	45464.5264	91		45 - 110
Naphthalene	50010.0000	0.0000	47397.4176	95		40 - 105
4-Chloroaniline	50010.0000	0.0000	36486.7247	73		10 - 100
Bis(2-chloroethoxy)methane	50010.0000	0.0000	43719.6261	87		45 - 110
Hexachlorobutadiene	50010.0000	0.0000	47820.7075	96		40 - 115
4-Chloro-3-methylphenol	50010.0000	0.0000	42732.2957	85		45 - 115
2-Methylnaphthalene	50010.0000	0.0000	43792.6506	88		45 - 105
Hexachlorocyclopentadiene	50010.0000	0.0000	44020.5790	88		8 - 148
2,4,6-Trichlorophenol	50010.0000	0.0000	44083.9832	88		45 - 110
2,4,5-Trichlorophenol	50010.0000	0.0000	49860.7669	100		50 - 110
2-Chloronaphthalene	50010.0000	0.0000	47121.1082	94		45 - 105
2-Nitroaniline	50010.0000	0.0000	37172.1647	74		45 - 120
Dimethylphthalate	50010.0000	0.0000	41941.5518	84		50 - 110
Acenaphthylene	50010.0000	0.0000	44360.5205	89		45 - 105
2,6-Dinitrotoluene	50010.0000	0.0000	39458.1426	79		50 - 110
3-Nitroaniline	50010.0000	0.0000	34788.1714	70		25 - 110
Acenaphthene	50010.0000	0.0000	43493.8614	87		45 - 110
2,4-Dinitrophenol	50010.0000	0.0000	0.0000	0	*	15 - 130
4-Nitrophenol	50010.0000	0.0000	37879.3849	76		15 - 140
Dibenzofuran	50010.0000	0.0000	44868.3460	90		50 - 105
2,4-Dinitrotoluene	50010.0000	0.0000	35587.3423	71		50 - 115
Diethylphthalate	50010.0000	0.0000	40830.0756	82		50 - 115
4-Chlorophenyl-phenylether	50010.0000	0.0000	45081.8903	90		45 - 110
Fluorene	50010.0000	0.0000	43741.2526	87		50 - 110
4-Nitroaniline	50010.0000	0.0000	35118.8605	70		35 - 115
4,6-Dinitro-2-methylphenol	50010.0000	0.0000	21936.5856	44		30 - 135
N-Nitrosodiphenylamine	50010.0000	0.0000	44016.8925	88		50 - 115
4-Bromophenyl-phenylether	50010.0000	0.0000	50400.8739	101		45 - 115
Hexachlorobenzene	50010.0000	0.0000	53458.2456	107		45 - 120
Pentachlorophenol	50010.0000	0.0000	53637.0296	107		25 - 120
Phenanthrene	50010.0000	0.0000	46344.2959	93		50 - 110
Anthracene	50010.0000	0.0000	45328.9124	91		55 - 105
Carbazole	50010.0000	0.0000	46032.0790	92		45 - 115

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-60224

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1120

Mod. Ref No.:

SDG No.: SK1120

Lab Sample ID: LCS-60224

LCS Lot No.: A079604

Date Extracted: 07/07/2011

Date Analyzed (1): 07/07/2011

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Di-n-butylphthalate	50010.0000	0.0000	40826.4990	82		55 - 110
Fluoranthene	50010.0000	0.0000	46949.3678	94		55 - 115
Pyrene	50010.0000	0.0000	40144.4814	80		45 - 125
Butylbenzylphthalate	50010.0000	0.0000	33900.1798	68		50 - 125
3,3'-Dichlorobenzidine	50010.0000	0.0000	49017.5083	98		10 - 130
Benzo(a)anthracene	50010.0000	0.0000	47837.8613	96		50 - 110
Chrysene	50010.0000	0.0000	51976.0264	104		55 - 110
Bis(2-ethylhexyl)phthalate	50010.0000	0.0000	32911.2593	66		45 - 125
Di-n-octylphthalate	50010.0000	0.0000	28223.6744	56		40 - 130
Benzo(b)fluoranthene	50010.0000	0.0000	39798.7548	80		45 - 115
Benzo(k)fluoranthene	50010.0000	0.0000	46184.7413	92		45 - 125
Benzo(a)pyrene	50010.0000	0.0000	42715.6701	85		50 - 110
Indeno(1,2,3-cd)pyrene	50010.0000	0.0000	43229.7875	86		40 - 120
Dibenzo(a,h)anthracene	50010.0000	0.0000	41771.1073	84		40 - 125
Benzo(g,h,i)perylene	50010.0000	0.0000	45438.8978	91		40 - 125
1,1'-Biphenyl	50010.0000	0.0000	46391.0380	93		50 - 121
3-Methylphenol + 4-Methylp	50010.0000	0.0000	42591.4976	85		40 - 105
Acetophenone	50010.0000	0.0000	41307.2562	83		50 - 150
Atrazine	50010.0000	0.0000	44699.6757	89		50 - 150
Benzaldehyde	50010.0000	0.0000	0.0000	0	*	10 - 118
Caprolactam	50010.0000	0.0000	34495.0068	69		41 - 115

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

\* Values outside of QC limits

Spike Recovery: 2 out of 65 outside limits

COMMENTS:



3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-60224

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1120

Mod. Ref No.:

SDG No.: SK1120

Lab Sample ID: LCSD-60224

LCS Lot No.:

A079604

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #		%RPD #	QC LIMITS	
						RPD	REC.
Phenol	50010.0000	48841.1376	98		3	40	40 - 100
Bis(2-chloroethyl) ether	50010.0000	46278.9707	93		4	40	40 - 105
2-Chlorophenol	50010.0000	49053.3097	98		6	40	45 - 105
2-Methylphenol	50010.0000	46474.9193	93		6	40	40 - 105
2,2'-oxybis(1-Chloropropan	50010.0000	40384.1528	81		5	40	20 - 115
N-Nitroso-di-n-propylamine	50010.0000	40723.2166	81		6	40	40 - 115
Hexachloroethane	50010.0000	49471.3912	99		5	40	35 - 110
Nitrobenzene	50010.0000	46320.4238	93		6	40	40 - 115
Isophorone	50010.0000	43741.6395	87		8	40	45 - 110
2-Nitrophenol	50010.0000	43510.4022	87		2	40	40 - 110
2,4-Dimethylphenol	50010.0000	46530.4665	93		7	40	30 - 105
2,4-Dichlorophenol	50010.0000	49743.1812	99		8	40	45 - 110
Naphthalene	50010.0000	49533.3596	99		4	40	40 - 105
4-Chloroaniline	50010.0000	41558.2735	83		13	40	10 - 100
Bis(2-chloroethoxy)methane	50010.0000	46575.8791	93		7	40	45 - 110
Hexachlorobutadiene	50010.0000	51510.6394	103		7	40	40 - 115
4-Chloro-3-methylphenol	50010.0000	43417.2876	87		2	40	45 - 115
2-Methylnaphthalene	50010.0000	44039.3083	88		0	40	45 - 105
Hexachlorocyclopentadiene	50010.0000	49309.5546	99		12	40	8 - 148
2,4,6-Trichlorophenol	50010.0000	49766.1657	100		13	40	45 - 110
2,4,5-Trichlorophenol	50010.0000	48850.5173	98		2	40	50 - 110
2-Chloronaphthalene	50010.0000	48284.4951	97		3	40	45 - 105
2-Nitroaniline	50010.0000	40822.4885	82		10	40	45 - 120
Dimethylphthalate	50010.0000	43985.1221	88		5	40	50 - 110
Acenaphthylene	50010.0000	46996.6689	94		5	40	45 - 105
2,6-Dinitrotoluene	50010.0000	43878.5663	88		11	40	50 - 110
3-Nitroaniline	50010.0000	36151.8046	72		3	40	25 - 110
Acenaphthene	50010.0000	45109.9813	90		3	40	45 - 110
2,4-Dinitrophenol	50010.0000	0.0000	0		*zero	40	15 - 130
4-Nitrophenol	50010.0000	41226.2871	82		8	40	15 - 140
Dibenzofuran	50010.0000	47201.9458	94		4	40	50 - 105
2,4-Dinitrotoluene	50010.0000	40184.7837	80		12	40	50 - 115
Diethylphthalate	50010.0000	42923.3486	86		5	40	50 - 115
4-Chlorophenyl-phenylether	50010.0000	45964.2344	92		2	40	45 - 110
Fluorene	50010.0000	46776.3946	94		8	40	50 - 110
4-Nitroaniline	50010.0000	36125.9162	72		3	40	35 - 115
4,6-Dinitro-2-methylphenol	50010.0000	24691.2409	49		11	40	30 - 135
N-Nitrosodiphenylamine	50010.0000	47990.6965	96		9	40	50 - 115
4-Bromophenyl-phenylether	50010.0000	52531.4894	105		4	40	45 - 115
Hexachlorobenzene	50010.0000	55863.8304	112		5	40	45 - 120
Pentachlorophenol	50010.0000	59620.7448	119		11	40	25 - 120
Phenanthrene	50010.0000	48619.6383	97		4	40	50 - 110
Anthracene	50010.0000	47995.7168	96		5	40	55 - 105
Carbazole	50010.0000	47880.5238	96		4	40	45 - 115
Di-n-butylphthalate	50010.0000	44035.8113	88		7	40	55 - 110
Fluoranthene	50010.0000	49613.3133	99		5	40	55 - 115

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-60224

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: K1120

Mod. Ref No.:

SDG No.: SK1120

Lab Sample ID: LCSD-60224

LCS Lot No.:

A079604

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Pyrene	50010.0000	42540.2024	85		6		40	45 - 125
Butylbenzylphthalate	50010.0000	36204.5204	72		6		40	50 - 125
3,3'-Dichlorobenzidine	50010.0000	53556.7698	107		9		40	10 - 130
Benzo(a)anthracene	50010.0000	53506.8849	107		11		40	50 - 110
Chrysene	50010.0000	51059.6562	102		2		40	55 - 110
Bis(2-ethylhexyl)phthalate	50010.0000	36366.8982	73		10		40	45 - 125
Di-n-octylphthalate	50010.0000	31232.1850	62		10		40	40 - 130
Benzo(b)fluoranthene	50010.0000	43803.0554	88		10		40	45 - 115
Benzo(k)fluoranthene	50010.0000	45761.2742	92		0		40	45 - 125
Benzo(a)pyrene	50010.0000	43127.5537	86		1		40	50 - 110
Indeno(1,2,3-cd)pyrene	50010.0000	33128.3444	66		26		40	40 - 120
Dibenzo(a,h)anthracene	50010.0000	44039.7938	88		5		40	40 - 125
Benzo(g,h,i)perylene	50010.0000	48560.0245	97		6		40	40 - 125
1,1'-Biphenyl	50010.0000	49304.2794	99		6		40	50 - 121
3-Methylphenol + 4-Methylp	50010.0000	44423.7701	89		5		40	40 - 105
Acetophenone	50010.0000	42663.3828	85		2		40	50 - 150
Atrazine	50010.0000	45545.5651	91		2		40	50 - 150
Benzaldehyde	50010.0000	0.0000	0		*	ero	40	10 - 118
Caprolactam	50010.0000	36479.6244	73		6		40	41 - 115

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

\* Values outside of QC limits

RPD: 0 out of 65 outside limits

Spike Recovery: 2 out of 65 outside limits

COMMENTS:

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120  
 Instrument ID: S3 Calibration Date: 07/07/2011 Time: 11:04  
 Lab File ID: S3H4541.D Init. Calib. Date(s): 05/19/2011 05/19/2011  
 EPA Sample No. (SSTD020##) SSTD0253L Init. Calib. Time(s): 12:17 14:08  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.838	1.657	0.010	-9.9	20.0
Bis(2-chloroethyl)ether	1.376	1.177	0.010	-14.4	20.0
2-Chlorophenol	1.444	1.290	0.010	-10.7	20.0
2-Methylphenol	1.383	1.203	0.010	-13.0	20.0
2,2'-oxybis(1-Chloropropane)	2.261	1.673	0.010	-26.0	20.0
N-Nitroso-di-n-propylamine	1.245	0.958	0.050	-23.0	20.0
Hexachloroethane	0.583	0.534	0.010	-8.4	20.0
Nitrobenzene	0.417	0.369	0.010	-11.7	20.0
Isophorone	0.760	0.634	0.010	-16.5	20.0
2-Nitrophenol	0.213	0.194	0.010	-8.7	20.0
2,4-Dimethylphenol	0.405	0.343	0.010	-15.3	20.0
2,4-Dichlorophenol	0.340	0.306	0.010	-10.0	20.0
Naphthalene	1.042	0.955	0.010	-8.3	20.0
4-Chloroaniline	0.455	0.440	0.010	-3.3	20.0
Bis(2-chloroethoxy)methane	0.428	0.371	0.010	-13.2	20.0
Hexachlorobutadiene	0.202	0.182	0.010	-9.7	20.0
4-Chloro-3-methylphenol	0.396	0.335	0.010	-15.4	20.0
2-Methylnaphthalene	0.794	0.712	0.010	-10.3	20.0
Hexachlorocyclopentadiene	0.300	0.299	0.050	-0.3	20.0
2,4,6-Trichlorophenol	0.387	0.371	0.010	-4.0	20.0
2,4,5-Trichlorophenol	0.417	0.403	0.010	-3.5	20.0
2-Chloronaphthalene	1.114	1.044	0.010	-6.3	20.0
2-Nitroaniline	0.429	0.371	0.010	-13.6	20.0
Dimethylphthalate	1.479	1.275	0.010	-13.8	20.0
Acenaphthylene	1.848	1.687	0.010	-8.7	20.0
2,6-Dinitrotoluene	0.358	0.315	0.010	-12.2	20.0
3-Nitroaniline	0.363	0.347	0.010	-4.5	20.0
Acenaphthene	1.168	1.063	0.010	-9.0	20.0
2,4-Dinitrophenol	0.219	0.186	0.050	-15.2	20.0
4-Nitrophenol	0.307	0.246	0.050	-19.8	20.0
Dibenzofuran	1.687	1.565	0.010	-7.2	20.0
2,4-Dinitrotoluene	0.497	0.402	0.010	-19.1	20.0
Diethylphthalate	1.567	1.323	0.010	-15.6	20.0
4-Chlorophenyl-phenylether	0.679	0.626	0.010	-7.8	20.0
Fluorene	1.462	1.361	0.010	-6.9	20.0
4-Nitroaniline	0.414	0.358	0.010	-13.7	20.0
4,6-Dinitro-2-methylphenol	0.168	0.152	0.010	-9.3	20.0
N-Nitrosodiphenylamine	0.660	0.614	0.010	-7.0	20.0
4-Bromophenyl-phenylether	0.207	0.210	0.010	1.6	20.0
Hexachlorobenzene	0.218	0.229	0.010	5.5	20.0
Pentachlorophenol	0.155	0.176	0.010	13.9	20.0
Phenanthrene	1.137	1.064	0.010	-6.4	20.0

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: K1120 Mod. Ref No.: \_\_\_\_\_ SDG No.: SK1120

Instrument ID: S3 Calibration Date: 07/07/2011 Time: 11:04

Lab File ID: S3H4541.D Init. Calib. Date(s): 05/19/2011 05/19/2011

EPA Sample No. (SSTD020##) SSTD0253L Init. Calib. Time(s): 12:17 14:08

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Anthracene	1.158	1.068	0.010	-7.8	20.0
Carbazole	1.132	1.063	0.010	-6.1	20.0
Di-n-butylphthalate	1.349	1.182	0.010	-12.4	20.0
Fluoranthene	1.295	1.191	0.010	-8.0	20.0
Pyrene	1.087	0.914	0.010	-15.9	20.0
Butylbenzylphthalate	0.533	0.406	0.010	-23.8	20.0
3,3'-Dichlorobenzidine	0.306	0.300	0.010	-2.1	20.0
Benzo(a)anthracene	1.110	1.032	0.010	-7.0	20.0
Chrysene	1.082	1.065	0.010	-1.5	20.0
Bis(2-ethylhexyl)phthalate	0.734	0.560	0.010	-23.6	20.0
Di-n-octylphthalate	1.261	0.936	0.010	-25.8	20.0
Benzo(b)fluoranthene	1.194	0.993	0.010	-16.8	20.0
Benzo(k)fluoranthene	1.146	1.097	0.010	-4.3	20.0
Benzo(a)pyrene	1.065	0.950	0.010	-10.8	20.0
Indeno(1,2,3-cd)pyrene	1.283	1.172	0.010	-8.6	20.0
Dibenzo(a,h)anthracene	1.068	0.974	0.010	-8.8	20.0
Benzo(g,h,i)perylene	1.104	1.029	0.010	-6.8	20.0
1,1'-Biphenyl	1.312	1.236	0.010	-5.8	20.0
3-Methylphenol + 4-Methylphenol	1.510	1.255	0.010	-16.9	20.0
Acetophenone	1.733	1.383	0.010	-20.2	20.0
Atrazine	0.210	0.161	0.010	-23.3	20.0
Benzaldehyde	1.072	0.939	0.010	-12.4	20.0
Caprolactam	0.157	0.126	0.010	-20.2	20.0

## **REPORT NARRATIVE**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker, LNAPL Sample**

**Laboratory Workorder / SDG #: K1120**

**SW846 8015D, Fuel Identification by GC-FID**

### **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 8015D Nonhalogenated Organics Using GC/FID. Fuel identification was performed by comparison of the GC-FID sample chromatogram to a series of fuel standards. No final concentration result is applicable.

### **IV. PREPARATION**

Samples were prepared following procedures in laboratory test code: SW846 3580A, Waste Dilution.

### **V. INSTRUMENTATION**

The following instrumentation was used:

Instrument Code: F1

Instrument Type: GC-FID  
Description: HP6890  
Manufacturer: Hewlett-Packard  
Model: 6890

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Surrogates:

N/A

### D. Spikes:

#### 1. Laboratory Control Spikes (LCS/LCSD):

Percent recoveries for lab control samples were within the QC limits.

### E. Dilutions:

The following sample was analyzed at dilution:

DEC-048 (K1120-01A): Dilution Factor: 20

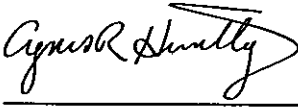
### F. Samples:

Spectrum RI's analysis method is designed to separate and identify common hydrocarbon fuels and other petroleum-related products. Samples are analyzed using capillary gas chromatography with flame ionization detection. Results are compared to a library of standards of known petroleum products obtained from commercial analytical standard sources. The following petroleum products are included in the library of standards: Fuel oils #1, #2/diesel, #3, #4, #5, #6, kerosene, mineral spirits, turpentine, paint thinner, jet fuels JP-4, JP-5, gasoline, aviation gasoline, lubricating oil, motor oil, hydraulic oil, transmission oil, coal tar, creosote.

Copies of raw sample chromatograms for each sample and for standards of known hydrocarbon products follow this page. These samples and standards have been analyzed under similar conditions. The internal standard peak, chlorooctadecane, has been identified on each chromatogram. The retention time of this peak is used to match chromatograms analyzed at different times, or on different instruments.

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 RI, 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: 07/26/11

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker, LNAPL Sample**

**Laboratory Workorder / SDG #: K1120**

**Subcontracted Analysis**

The following analysis was performed by subcontractor laboratory:

Modified Gravity:

Modified Gravity by ASTM method 2170F was performed by Mt. Tom Generating Co. LLC Analytical Laboratory. The entire Mt. Tom report, including any notes on these analyses is enclosed following the Total Petroleum Hydrocarbon section of the Spectrum RI report.





# AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10160440

10160440

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	URS Corporation	Report To:	SAME	Attention:	SAME
Address:	77 Goodell St Buffalo NY	Copy To:		Company Name:	
Email:	George Kisluk	Purchase Order No.:		Address:	
Phone:	716 856 5636	Project Name:		Pace Quote Reference:	
Requested Due Date/TAT:		Project Number:		Pace Project Manager/Sales Rep.	
				Pace Profile #:	

ITEM #	Section D Required Client Information AIR SAMPLE ID Sample IDs MUST BE UNIQUE	Media Codes MEDIA CODE TB 1 Liter Summa Can 6 Liter Summa Can Low Volume Puff High Volume Puff Other	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	Method:	Pace Lab ID
			DATE	TIME						
1	SG-55		6/13/11	1115	-25	-3	0843	FL 246	TO-15 Short List	001
2	SG-79			1124	-29	-4	1695	FL 422	TO-15	002
3	SG-78			1129	-24	-2	1497	FL 190	TO-14 (PAH)	003
4	SG-19			1314	-30	-4	0707	FL 173	TO-13 (PCBs)	004
5	SG-20			1325	-28	-5	1601	FL 162	TO-3 (Methane)	005
6	SG-21			1342	-29	-1	1553	FL 185	TO-3 (Fixed Gas %)	006
7	AA-061311			1138	-28	-4	1074	FL 190	PM10	007
8										
9										
10										
11										
12										

RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
Copy of		Nightfall Van		6/13/11		1430		Temp in °C	
								Received on	
								Custody	
								Sealed Cooler	
								Samples Intact	

SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YY)	
PRINT Name of SAMPLER			
SIGNATURE of SAMPLER			

ORIGINAL

Data File: \\192.168.10.12\chem\10air7.i\062711.b\17804.D  
Report Date: 27-Jun-2011 09:52

# Pace Analytical Services

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10air7.i Injection Date: 27-JUN-2011 08:44  
Lab File ID: 17804.D Init. Cal. Date(s): 25-JUN-2011 25-JUN-2011  
Analysis Type: AIR Init. Cal. Times: 11:07 14:03  
Lab Sample ID: CCAL Quant Type: ISTD  
Method: \\192.168.10.12\chem\10air7.i\062711.b\TO15\_176-11.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
145 Methyl Isobutyl Ketone	10.00000	8.97137	0.33590	0.010	-10.28634	30.00000	Linear
146 cis-1,3-Dichloropropene	0.34098	0.32409	0.32409	0.010	-4.95311	30.00000	Averaged
147 trans-1,3-Dichloropropene	10.00000	9.19720	0.28862	0.010	-8.02798	30.00000	Linear
148 Toluene-d8 (S)	0.92283	0.87355	0.87355	0.010	-5.34010	30.00000	Averaged
149 Toluene	10.00000	9.46283	0.56354	0.010	-5.37173	30.00000	Linear
150 1,1,2-Trichloroethane	10.00000	9.00485	0.20086	0.010	-9.95153	30.00000	Linear
151 Methyl Butyl Ketone	10.00000	8.82813	0.56253	0.010	-11.71870	30.00000	Linear
152 Dibromochloromethane	10.00000	9.28664	0.73986	0.010	-7.13363	30.00000	Linear
153 1,2-Dibromoethane	0.59135	0.57428	0.57428	0.010	-2.88717	30.00000	Averaged
154 Tetrachloroethene	0.60403	0.66329	0.66329	0.010	9.81200	30.00000	Averaged
156 Chlorobenzene	10.00000	10.09104	0.81849	0.010	0.91043	30.00000	Linear
157 Ethyl Benzene	10.00000	9.95040	1.36557	0.010	-0.49598	30.00000	Linear
158 m&p-Xylene	1.16879	1.12745	1.12745	0.010	-3.53651	30.00000	Averaged
159 2-Heptanone	10.00000	7.09281	0.65657	0.010	-29.07191	0.000e+000	Quadratic<-
160 Bromoform	10.00000	8.77222	0.86487	0.010	-12.27782	30.00000	Linear
161 Styrene	10.00000	9.42725	0.84015	0.010	-5.72751	30.00000	Linear
162 o-Xylene	1.13935	1.10236	1.10236	0.010	-3.24658	30.00000	Averaged
163 1,1,2,2-Tetrachloroethane	0.87033	0.73673	0.73673	0.010	-15.35055	30.00000	Averaged
164 Isopropylbenzene	1.64340	1.44045	1.44045	0.010	-12.34983	30.00000	Averaged
165 N-Propylbenzene	10.00000	9.51431	1.59510	0.010	-4.85686	30.00000	Linear
166 4-Ethyltoluene	10.00000	9.27814	1.28872	0.010	-7.21865	30.00000	Linear
167 1,3,5-Trimethylbenzene	10.00000	9.33012	1.19519	0.010	-6.69875	30.00000	Linear
168 1,2,4-Trimethylbenzene	10.00000	9.21048	1.06285	0.010	-7.89518	30.00000	Linear
169 1,3-Dichlorobenzene	10.00000	8.70930	0.85322	0.010	-12.90697	30.00000	Linear
170 Sec- Butylbenzene	10.00000	8.94630	1.58447	0.010	-10.53698	30.00000	Linear
171 1,4-dichlorobenzene-d4 (S)	0.50620	0.49606	0.49606	0.010	-2.00130	30.00000	Averaged
172 Benzyl Chloride	10.00000	7.89083	0.75038	0.010	-21.09169	30.00000	Linear
173 1,4-Dichlorobenzene	10.00000	8.92939	0.81635	0.010	-10.70614	30.00000	Linear
174 1,2-Dichlorobenzene	10.00000	9.33660	0.78967	0.010	-6.63404	30.00000	Linear
175 N-Butylbenzene	10.00000	9.07979	1.19466	0.010	-9.26214	30.00000	Linear
176 1,2,4-Trichlorobenzene	10.00000	5.01058	0.49628	0.010	-49.89420	30.00000	Quadratic<-
177 Naphthalene	10.00000	5.17488	0.84945	0.010	-48.25124	30.00000	Quadratic<-
178 Hexachlorobutadiene	10.00000	6.14845	0.48614	0.010	-38.51547	30.00000	Quadratic<-

### Average %D / Drift Results.

Calculated Average %D/Drift = 13.40040  
Maximun Average %D/Drift = 30.00000  
\* Passed Average %D/Drift Test.

Data File: \\192.168.10.12\chem\10air0.i\062411.b\17502.D  
Report Date: 24-Jun-2011 10:13

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10air0.i Injection Date: 24-JUN-2011 09:12  
Lab File ID: 17502.D Init. Cal. Date(s): 20-JUN-2011 20-JUN-2011  
Analysis Type: AIR Init. Cal. Times: 09:35 12:49  
Lab Sample ID: CCAL Quant Type: ISTD  
Method: \\192.168.10.12\chem\10air0.i\062411.b\TO15\_171-11.m

COMPOUND	RRF / AMOUNT	RF10	CCAL	MIN	MAX	CURVE TYPE
			RRF10	RRF %D / %DRIFT	%D / %DRIFT	
44 Methyl Isobutyl Ketone	10.00000	10.44935	0.24247	0.010	4.49348	Linear
45 cis-1,3-Dichloropropene	10.00000	11.19530	0.28856	0.010	11.95303	Linear
46 trans-1,3-Dichloropropene	10.00000	10.74796	0.26047	0.010	7.47958	Linear
47 Toluene-d8 (S)	0.81961	0.83379	0.83379	0.010	1.73055	Averaged
48 Toluene	10.00000	11.06058	0.51149	0.010	10.60575	Linear
49 1,1,2-Trichloroethane	10.00000	11.26736	0.18037	0.010	12.67365	Linear
50 Methyl Butyl Ketone	10.00000	10.32790	0.41425	0.010	3.27900	Linear
51 Dibromochloromethane	10.00000	10.98093	0.65996	0.010	9.80927	Linear
52 1,2-Dibromoethane	10.00000	11.48102	0.54859	0.010	14.81024	Linear
53 Tetrachloroethene	0.61892	0.59955	0.59955	0.010	-3.12899	Averaged
55 Chlorobenzene	10.00000	11.52271	0.80335	0.010	15.22710	Linear
56 Ethyl Benzene	10.00000	10.99729	1.31042	0.010	9.97286	Linear
57 m,p-Xylene	20.00000	21.54721	0.96671	0.010	7.73603	Linear
58 2-Heptanone	10.00000	9.16635	0.28465	0.010	-8.33645	Linear
59 Bromoform	10.00000	10.41685	0.73077	0.010	4.16846	Linear
60 Styrene	10.00000	10.91054	0.82996	0.010	9.10539	Linear
61 o-Xylene	10.00000	10.49150	1.02689	0.010	4.91505	Linear
62 1,1,2,2-Tetrachloroethane	10.00000	11.12953	0.70001	0.010	11.29528	Linear
63 Isopropylbenzene	10.00000	10.76378	1.34549	0.010	7.63779	Linear
64 N-Propylbenzene	1.48139	1.53970	1.53970	0.010	3.93569	Averaged
65 4-Ethyltoluene	1.20931	1.29753	1.29753	0.010	7.29472	Averaged
66 1,3,5-Trimethylbenzene	1.07318	1.10881	1.10881	0.010	3.31996	Averaged
67 1,2,4-Trimethylbenzene	0.95635	1.05492	1.05492	0.010	10.30660	Averaged
68 1,3-Dichlorobenzene	0.71818	0.77170	0.77170	0.010	7.45226	Averaged
69 Sec- Butylbenzene	1.36808	1.45275	1.45275	0.010	6.18945	Averaged
70 1,4-dichlorobenzene-d4 (S)	0.48974	0.49672	0.49672	0.010	1.42528	Averaged
71 Benzyl Chloride	10.00000	10.14675	0.70322	0.010	1.46746	Linear
72 1,4-Dichlorobenzene	0.72436	0.77343	0.77343	0.010	6.77530	Averaged
73 1,2-Dichlorobenzene	0.67461	0.78522	0.78522	0.010	16.39620	Averaged
74 N-Butylbenzene	0.92036	1.12100	1.12100	0.010	21.80108	Averaged
75 1,2,4-Trichlorobenzene	10.00000	13.34280	0.44832	0.010	33.42802	Quadratic
76 Naphthalene	10.00000	12.87230	0.81151	0.010	28.72300	Quadratic
77 Hexachlorobutadiene	10.00000	14.50987	0.34817	0.010	45.09869	Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 10.54535  
Maximum Average %D/Drift = 30.00000  
\* Passed Average %D/Drift Test.



# AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10160592

10160592

Section A Required Client Information:				Section B Required Project Information:				Section C Invoice Information:				Section D Required Client Information			
Company: <b>URS</b>				Report To: <b>URS</b>				Attention: <b>URS</b>				Invoice Number: <b>03500</b>			
Address: <b>77 Goddard St</b>				Copy To: <b>URS</b>				Company Name: <b>URS</b>				Program: <b>UST</b> <input type="checkbox"/> Superfund <input type="checkbox"/> Emissions <input type="checkbox"/> Clean Air Act			
City: <b>Buffalo NY</b>				Purchase Order No.: <b>URS</b>				Address: <b>URS</b>				Location of Sampling by State: <b>NY</b>			
Email To: <b>George Kislut</b>				Project Name: <b>Klink Meadow</b>				Pace Quote Reference: <b>URS</b>				Report Level: <b>II</b> <input type="checkbox"/> <b>III</b> <input type="checkbox"/> <b>IV</b> <input type="checkbox"/> Other <input type="checkbox"/>			
Phone: <b>716 856 8556</b>				Project Number: <b>URS</b>				Pace Project Manager/Sales Rep. <b>URS</b>				Method: <b>PM10</b>			
Requested Due Date/TAT: <b>URS</b>				Valid Media Codes				COMPOSITE START				COMPOSITE - TIME			
				MEDIA CODE				DATE				DATE			
				PIG Reading (Client only)				DATE				DATE			
1	56-62	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
2	56-83	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
3	56-82	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
4	56-81	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
5	AA-061411	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
6	56-80	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
7	56-60	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
8	56-49	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
9	56-48	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
10	56-47	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
11	56-44	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592
12	56-44	AA-061411	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592	10160592

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
URS	6/14/11	1500	URS	6/14/11	08:50	URS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
URS	URS	URS	URS

SAMPLER NAME AND SIGNATURE: **Cary Friedman**  
PRINT NAME OF SAMPLER: **Cary Friedman**  
SIGNATURE OF SAMPLER: **Cary Friedman**  
DATE SIGNED: **6/14/11**

ORIGINAL

**AIR: CHAIN-OF-CUSTODY / Analytical Request Document**

**The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.**

Section A

Required Client Information:

Company: URS

Address: see pg. 1

Email To: see pg. 1

Phone: see pg. 1

Requested Due Date (A1):

Section B

Required Project Information:

Report To: see pg. 1

Copy To: see pg. 1

Purchase Order No.: see pg. 1

Project Name:

Project Number:

Section C

Invoice Information:

Attention:

Company Name: see pg. 1

Address: see pg. 1

Pace Quota Reference:

Pace Project Manager/Sales Rep.

Pace Profile #:

03496

Page: 2 of 2

Program

☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act  
☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State

Reporting Units

ug/m<sup>3</sup>

ppmv

Other

Report Level

IL

MI

NY

Other

Method:

PM10

SC Fixed Gas (%)

TO3

TO3M (Methane)

TO4 (PCBS)

TO43 (PAH)

TO15

TO15 Short List

Flow Control Number

Summa Can Number

Canister Pressure (Initial Field - psig)

Canister Pressure (Final Field - psig)

COLLECTED

COMPOSITE START

COMPOSITE -

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

Temp in °C

Received on

Sealed Cooler

Custody

Samples Intact

ITEM #

1

2

3

4

5

6

7

8

9

10

11

12

Section D Required Client Information

AIR SAMPLE ID

Sample IDs MUST BE UNIQUE

Vial Media Codes

MEDIA

CODE

TB

1 Liter Summa Can

1LC

6 Liter Summa Can

6LC

Low Volume Puff

LVP

High Volume Puff

HVP

PM10

Other

PID Reading (Client only)

MEDIA CODE

DATE

TIME

DATE

TIME

SG-46

DUP2-061411

6/14/11

1309

6/14/11

1359

6/14/11

1309

6/14/11

1359

6/14/11

1309

6/14/11

1359

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

Temp in °C

Received on

Sealed Cooler

Custody

Samples Intact

Comments:

see pg. 1

see pg. 1

SAMPLER NAME AND SIGNATURE

PRINT NAME of SAMPLER

DATE Signed (MM/DD/YY)

ORIGINAL

6/14/11

Data File: \\192.168.10.12\chem\10air0.i\062811.b\17860.D  
Report Date: 28-Jun-2011 13:36

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10air0.i Injection Date: 28-JUN-2011 12:34  
Lab File ID: 17860.D Init. Cal. Date(s): 27-JUN-2011 27-JUN-2011  
Analysis Type: AIR Init. Cal. Times: 13:34 16:27  
Lab Sample ID: CCAL Quant Type: ISTD  
Method: \\192.168.10.12\chem\10air0.i\062811.b\TO15\_178-11.m

COMPOUND	RRF / AMOUNT	RF10	CCAL	MIN	MAX	CURVE TYPE
			RRF10	RRF   %D / %DRIFT	%D / %DRIFT	
144 Methyl Isobutyl Ketone	10.00000	10.80540	0.25278	0.010	8.05404	30.00000 Linear
145 cis-1,3-Dichloropropene	10.00000	10.85372	0.29573	0.010	8.53719	30.00000 Linear
146 trans-1,3-Dichloropropene	10.00000	10.27527	0.26456	0.010	2.75275	30.00000 Linear
147 Toluene-d8 (S)	0.79606	0.80867	0.80867	0.010	1.58424	30.00000 Averaged
148 Toluene	10.00000	11.48235	0.53117	0.010	14.82353	30.00000 Linear
149 1,1,2-Trichloroethane	10.00000	11.14458	0.18816	0.010	11.44577	30.00000 Linear
150 Methyl Butyl Ketone	10.00000	11.08523	0.44316	0.010	10.85232	30.00000 Linear
151 Dibromochloromethane	10.00000	11.26472	0.73819	0.010	12.64717	30.00000 Linear
152 1,2-Dibromoethane	10.00000	10.91022	0.56996	0.010	9.10219	30.00000 Linear
153 Tetrachloroethene	10.00000	11.74987	0.65906	0.010	17.49873	30.00000 Linear
155 Chlorobenzene	10.00000	11.15966	0.82852	0.010	11.59658	30.00000 Linear
156 Ethyl Benzene	10.00000	11.85819	1.41948	0.010	18.58193	30.00000 Linear
157 m&p-Xylene	1.02409	1.09842	1.09842	0.010	7.25818	30.00000 Averaged
158 2-Heptanone	10.00000	10.73051	0.33653	0.010	7.30507	30.00000 Linear
159 Bromoform	10.00000	11.49476	0.83294	0.010	14.94755	30.00000 Linear
160 Styrene	10.00000	11.62645	0.89137	0.010	16.26449	30.00000 Linear
161 o-Xylene	10.00000	11.68640	1.14033	0.010	16.86397	30.00000 Linear
162 1,1,2,2-Tetrachloroethane	10.00000	11.60313	0.78068	0.010	16.03129	30.00000 Linear
163 Isopropylbenzene	10.00000	11.92588	1.52499	0.010	19.25879	30.00000 Linear
164 N-Propylbenzene	10.00000	11.44803	1.80028	0.010	14.48031	30.00000 Linear
165 4-Ethyltoluene	10.00000	11.79269	1.43259	0.010	17.92689	30.00000 Linear
166 1,3,5-Trimethylbenzene	10.00000	11.64566	1.27028	0.010	16.45661	30.00000 Linear
167 1,2,4-Trimethylbenzene	10.00000	11.61109	1.21373	0.010	16.11086	30.00000 Linear
168 1,3-Dichlorobenzene	10.00000	11.72956	0.88046	0.010	17.29557	30.00000 Linear
169 Sec- Butylbenzene	1.39827	1.69553	1.69553	0.010	21.25951	30.00000 Averaged
170 1,4-dichlorobenzene-d4 (S)	0.52544	0.53405	0.53405	0.010	1.63937	30.00000 Averaged
171 Benzyl Chloride	10.00000	10.56378	0.80172	0.010	5.63782	30.00000 Linear
172 1,4-Dichlorobenzene	10.00000	11.05302	0.83372	0.010	10.53020	30.00000 Linear
173 1,2-Dichlorobenzene	10.00000	12.08743	0.86741	0.010	20.87430	30.00000 Linear
174 N-Butylbenzene	10.00000	13.41701	1.29583	0.010	34.17014	30.00000 Linear
175 1,2,4-Trichlorobenzene	10.00000	14.54738	0.50013	0.010	45.47382	30.00000 Quadratic
176 Naphthalene	10.00000	14.75624	0.92049	0.010	47.56239	30.00000 Quadratic
177 Hexachlorobutadiene	10.00000	17.11565	0.39285	0.010	71.15647	30.00000 Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 14.23042

Maximum Average %D/Drift = 30.00000

\* Passed Average %D/Drift Test.

Data File: \\192.168.10.12\chem\10air7.i\062811.b\17902.D  
Report Date: 28-Jun-2011 09:27

Pace Analytical Services

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10air7.i Injection Date: 28-JUN-2011 09:05  
Lab File ID: 17902.D Init. Cal. Date(s): 25-JUN-2011 25-JUN-2011  
Analysis Type: AIR Init. Cal. Times: 11:07 14:03  
Lab Sample ID: CCAL Quant Type: ISTD  
Method: \\192.168.10.12\chem\10air7.i\062811.b\TO15\_176-11.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Methyl Isobutyl Ketone	10.00000	10.47095	0.39168	0.010	4.70953	30.00000	Linear
46 cis-1,3-Dichloropropene	0.34098	0.35792	0.35792	0.010	4.96803	30.00000	Averaged
47 trans-1,3-Dichloropropene	10.00000	10.17146	0.31969	0.010	1.71460	30.00000	Linear
48 Toluene-d8 (S)	0.92283	0.88793	0.88793	0.010	-3.78165	30.00000	Averaged
49 Toluene	10.00000	9.94869	0.59286	0.010	-0.51309	30.00000	Linear
50 1,1,2-Trichloroethane	10.00000	9.60269	0.21445	0.010	-3.97312	30.00000	Linear
51 Methyl Butyl Ketone	10.00000	10.66265	0.67743	0.010	6.62647	30.00000	Linear
52 Dibromochloromethane	10.00000	10.28631	0.82019	0.010	2.86307	30.00000	Linear
53 1,2-Dibromoethane	0.59135	0.61900	0.61900	0.010	4.67616	30.00000	Averaged
54 Tetrachloroethene	0.60403	0.66816	0.66816	0.010	10.61714	30.00000	Averaged
56 Chlorobenzene	10.00000	10.08878	0.81831	0.010	0.88784	30.00000	Linear
57 Ethyl Benzene	10.00000	10.75043	1.47554	0.010	7.50426	30.00000	Linear
58 m,p-Xylene	1.16879	1.33004	1.33004	0.010	13.79618	30.00000	Averaged
59 2-Heptanone	10.00000	9.39340	0.84858	0.010	-6.06599	0.000e+000	Quadratic<-
60 Bromoform	10.00000	9.71583	0.96080	0.010	-2.84171	30.00000	Linear
61 Styrene	10.00000	9.79338	0.87381	0.010	-2.06620	30.00000	Linear
62 o-Xylene	1.13935	1.27425	1.27425	0.010	11.83938	30.00000	Averaged
63 1,1,2,2-Tetrachloroethane	0.87033	0.84869	0.84869	0.010	-2.48672	30.00000	Averaged
64 Isopropylbenzene	1.64340	1.63022	1.63022	0.010	-0.80243	30.00000	Averaged
65 N-Propylbenzene	10.00000	10.81731	1.81455	0.010	8.17310	30.00000	Linear
66 4-Ethyltoluene	10.00000	10.54726	1.46704	0.010	5.47258	30.00000	Linear
67 1,3,5-Trimethylbenzene	10.00000	10.37737	1.33102	0.010	3.77366	30.00000	Linear
68 1,2,4-Trimethylbenzene	10.00000	10.14505	1.17324	0.010	1.45053	30.00000	Linear
69 1,3-Dichlorobenzene	10.00000	9.50304	0.93429	0.010	-4.96960	30.00000	Linear
70 Sec- Butylbenzene	10.00000	10.47363	1.85801	0.010	4.73635	30.00000	Linear
71 1,4-dichlorobenzene-d4 (S)	0.50620	0.52358	0.52358	0.010	3.43366	30.00000	Averaged
72 Benzyl Chloride	10.00000	9.71956	0.92862	0.010	-2.80438	30.00000	Linear
73 1,4-Dichlorobenzene	10.00000	9.69122	0.88858	0.010	-3.08782	30.00000	Linear
74 1,2-Dichlorobenzene	10.00000	9.69432	0.82113	0.010	-3.05680	30.00000	Linear
75 N-Butylbenzene	10.00000	10.86059	1.43081	0.010	8.60586	30.00000	Linear
76 1,2,4-Trichlorobenzene	10.00000	4.82131	0.47805	0.010	-51.78691	30.00000	Quadratic<-
77 Naphthalene	10.00000	5.21741	0.85624	0.010	-47.82593	30.00000	Quadratic<-
78 Hexachlorobutadiene	10.00000	6.57729	0.51671	0.010	-34.22709	30.00000	Quadratic<-

Average %D / Drift Results.

Calculated Average %D/Drift = 8.86003  
Maximum Average %D/Drift = 30.00000  
\* Passed Average %D/Drift Test.

10160700

# AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



Section A Required Client Information:				Section B Required Project Information:				Section C Invoice Information:				Section D Required Client Information								
Company: <b>URS</b>				Report To: <b>URS</b>				Company Name: <b>URS</b>				Attention:								
Address: <b>77 Goodell St</b>				Copy To: <b>URS</b>				Company Address: <b>URS</b>				Program								
Email To: <b>George Kizluk</b>				Purchase Order No.:				Pace Quote Reference:				Location of Sampling by State: <b>NY</b>								
Phone: <b>716 856 5836</b>				Project Name:				Pace Project Manager/Sales Rep.				Reporting Units ug/m <sup>3</sup> _____ ppmv _____ Other _____								
Requested Due Date/TAT: <b>Stand</b>				Project Number:				Pace Profile #:				Report Level: <b>II</b> <b>III</b> <b>IV</b> <b>Other</b>								
ITEM #	AIR SAMPLE ID Sample IDs MUST BE UNIQUE	Media Code	PID Reading (Client only)	COLLECTED		Summa Can Number	Flow Control Number	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Method	SAMPLE CONDITIONS									
				DATE	TIME						DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
1	SG-42	6/14/11	1247	6/14/11	1247	1353	62	27	2.5	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	Pace Lab ID			
2	SG-44	6/14/11	1253	6/14/11	1253	0706	62	30	2.5	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	10160700001			
3	SG-45	6/14/11	1301	6/14/11	1301	0153	62	30	5	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	003			
4	SG-84	6/15/11	804	6/15/11	804	1280	62	28	2	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	004			
5	SG-58	6/15/11	856	6/15/11	856	0421	62	27.5	2	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	005			
6	SG-85	6/15/11	749	6/15/11	749	1519	62	30	2	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	006			
7	SG-86	6/15/11	738	6/15/11	738	0067	62	28	2	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	007			
8	DUP-061511	6/15/11	756	6/15/11	756	1490	62	27.5	2	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	008			
9	SG-57	6/15/11	922	6/15/11	922	0965	62	29	17	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	009			
10	SG-87	6/15/11	931	6/15/11	931	1505	62	29	2.5	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	010			
11	SG-59	6/15/11	937	6/15/11	937	1744	62	30	4	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	011			
12	SG-61	6/15/11	946	6/15/11	946	1591	62	25	5	PM10	TO-3	TO-3M (Methane)	TO-4 (PCB)	TO-4 (PAH)	TO-15	TO-15 Short Lat	012			

Comments:

RELINQUISHED BY / AFFILIATION: **URS** DATE: **6/15/11** TIME: **1600**

ACCEPTED BY / AFFILIATION: **URS** DATE: **6/17/11** TIME: **1000**

SAMPLER NAME AND SIGNATURE		Temp in °C		Received on		Custody		Sealed Cooler		Samples Intact	
PRINT Name of SAMPLER	SIGNATURE of SAMPLER	Y/N	V/N	Y/N	V/N	Y/N	V/N	Y/N	V/N	Y/N	V/N
<b>URS</b>	<b>URS</b>										

ORIGINAL





**AIR: CHAIN-OF-CUSTODY / Analytical Request Document**

**The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.**

10/60700

**Section A**  
Required Client Information:

Company: URS

Address: see pg. 1

Email To: see pg. 1

Phone: see pg. 1

Fac: see pg. 1

Requested Due Date/TAT: std

**Section B**  
Required Project Information:

Report To: see pg. 1

Copy To: see pg. 1

Purchase Order No.: see pg. 1

Project Name: see pg. 1

Project Number: see pg. 1

**Section C**  
Invoice Information:

Attention: see pg. 1

Company Name: see pg. 1

Address: see pg. 1

Pace Quote Reference: see pg. 1

Pace Project Manager/Sales Rep. see pg. 1

Pace Profile #: see pg. 1

**Section D** Required Client Information

**AIR SAMPLE ID**

Sample IDs MUST BE UNIQUE

ITEM #	Media Codes	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number
		DATE	TIME				
1	AA-061511	6/15/11	1051	-30	-11	0035	420
2	SG-43	1147	1247	-29	-3	1283	194
3	SG-18	1219	1319	-29	-3	1607	159
4	SG-47	1226	1326	-28	-145	1640	186
5	SG-56	1234	1334	-255	-13	0139	085
6	SG-63	1413	1508	-29	-2	0139	382
7	DUPA-061511	1413	1508	-29	-2	1280	382

**Comments:**

Confidential - see 6-17-11 DCO AB

**Section D** Required Client Information

**AIR SAMPLE ID**

Sample IDs MUST BE UNIQUE

ITEM #	Media Codes	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number
		DATE	TIME				
1	AA-061511	6/15/11	1051	-30	-11	0035	420
2	SG-43	1147	1247	-29	-3	1283	194
3	SG-18	1219	1319	-29	-3	1607	159
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5	SG-56	1234	1334	-255	-13	0139	085
6	SG-63	1413	1508	-29	-2	0139	382
7	DUPA-061511	1413	1508	-29	-2	1280	382

**Comments:**

Confidential - see 6-17-11 DCO AB

**Section D** Required Client Information

**AIR SAMPLE ID**

Sample IDs MUST BE UNIQUE

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		DATE	TIME				
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2	SG-43	1147	1247	-29	-3	1283	194
3	SG-18	1219	1319	-29	-3	1607	159
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5	SG-56	1234	1334	-255	-13	0139	085
6	SG-63	1413	1508	-29	-2	0139	382
7	DUPA-061511	1413	1508	-29	-2	1280	382

**Comments:**

Confidential - see 6-17-11 DCO AB

**Section D** Required Client Information

**AIR SAMPLE ID**

Sample IDs MUST BE UNIQUE

ITEM #	Media Codes	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number
		DATE	TIME				
1	AA-061511	6/15/11	1051	-30	-11	0035	420
2	SG-43	1147	1247	-29	-3	1283	194
3	SG-18	1219	1319	-29	-3	1607	159
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5	SG-56	1234	1334	-255	-13	0139	085
6	SG-63	1413	1508	-29	-2	0139	382
7	DUPA-061511	1413	1508	-29	-2	1280	382

**Comments:**

Confidential - see 6-17-11 DCO AB

**Section D** Required Client Information

**AIR SAMPLE ID**

Sample IDs MUST BE UNIQUE

ITEM #	Media Codes	COLLECTED		Canister Pressure (Initial Field - psig
--------	-------------	-----------	--	---

**ORIGINAL**

17700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

FC046Rev.01, 03Feb2010

Data File: \\192.168.10.12\chem\10air0.i\062911.b\17941.D  
Report Date: 29-Jun-2011 13:52

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10air0.i Injection Date: 29-JUN-2011 12:35  
Lab File ID: 17941.D Init. Cal. Date(s): 27-JUN-2011 27-JUN-2011  
Analysis Type: AIR Init. Cal. Times: 13:34 16:27  
Lab Sample ID: CCAL Quant Type: ISTD  
Method: \\192.168.10.12\chem\10air0.i\062911.b\TO15\_178-11.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
144 Methyl Isobutyl Ketone	10.00000	10.94208	0.25596	0.010	9.42082	30.00000	Linear
145 cis-1,3-Dichloropropene	10.00000	10.86550	0.29605	0.010	8.65505	30.00000	Linear
146 trans-1,3-Dichloropropene	10.00000	10.50576	0.27054	0.010	5.05759	30.00000	Linear
147 Toluene-d8 (S)	0.79606	0.81585	0.81585	0.010	2.48622	30.00000	Averaged
148 Toluene	10.00000	11.64410	0.53850	0.010	16.44103	30.00000	Linear
149 1,1,2-Trichloroethane	10.00000	11.31469	0.19099	0.010	13.14694	30.00000	Linear
150 Methyl Butyl Ketone	10.00000	11.27427	0.45065	0.010	12.74272	30.00000	Linear
151 Dibromochloromethane	10.00000	11.34975	0.74367	0.010	13.49748	30.00000	Linear
152 1,2-Dibromoethane	10.00000	11.17082	0.58342	0.010	11.70816	30.00000	Linear
153 Tetrachloroethene	10.00000	11.53053	0.64701	0.010	15.30525	30.00000	Linear
155 Chlorobenzene	10.00000	11.37227	0.84408	0.010	13.72271	30.00000	Linear
156 Ethyl Benzene	10.00000	11.99610	1.43556	0.010	19.96105	30.00000	Linear
157 m,p-Xylene	1.02409	1.10169	1.10169	0.010	7.57807	30.00000	Averaged
158 2-Heptanone	10.00000	10.90950	0.34218	0.010	9.09501	30.00000	Linear
159 Bromoform	10.00000	11.42006	0.82761	0.010	14.20064	30.00000	Linear
160 Styrene	10.00000	11.70200	0.89706	0.010	17.01997	30.00000	Linear
161 o-Xylene	10.00000	11.67042	1.13881	0.010	16.70417	30.00000	Linear
162 1,1,2,2-Tetrachloroethane	10.00000	11.53681	0.77628	0.010	15.36808	30.00000	Linear
163 Isopropylbenzene	10.00000	11.66731	1.49276	0.010	16.67306	30.00000	Linear
164 N-Propylbenzene	10.00000	11.20755	1.76269	0.010	12.07548	30.00000	Linear
165 4-Ethyltoluene	10.00000	11.56224	1.40516	0.010	15.62243	30.00000	Linear
166 1,3,5-Trimethylbenzene	10.00000	11.51855	1.25666	0.010	15.18548	30.00000	Linear
167 1,2,4-Trimethylbenzene	10.00000	11.22395	1.17384	0.010	12.23952	30.00000	Linear
168 1,3-Dichlorobenzene	10.00000	11.37971	0.85471	0.010	13.79712	30.00000	Linear
169 Sec- Butylbenzene	1.39827	1.63264	1.63264	0.010	16.76150	30.00000	Averaged
170 1,4-dichlorobenzene-d4 (S)	0.52544	0.50958	0.50958	0.010	-3.01805	30.00000	Averaged
171 Benzyl Chloride	10.00000	10.16742	0.77144	0.010	1.67418	30.00000	Linear
172 1,4-Dichlorobenzene	10.00000	10.91383	0.82333	0.010	9.13833	30.00000	Linear
173 1,2-Dichlorobenzene	10.00000	11.94901	0.85759	0.010	19.49013	30.00000	Linear
174 N-Butylbenzene	10.00000	12.97401	1.25372	0.010	29.74010	30.00000	Linear
175 1,2,4-Trichlorobenzene	10.00000	13.84883	0.48073	0.010	38.48831	30.00000	Quadratic<-
176 Naphthalene	10.00000	14.07602	0.88516	0.010	40.76018	30.00000	Quadratic<-
177 Hexachlorobutadiene	10.00000	15.32092	0.35688	0.010	53.20922	30.00000	Quadratic<-

Average %D / Drift Results.	
=====	
Calculated Average %D/Drift =	15.08133
Maximum Average %D/Drift =	30.00000
* Passed Average %D/Drift Test.	

Data File: \\192.168.10.12\chem\10air0.i\062811.b\17860.D  
Report Date: 28-Jun-2011 13:36

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10air0.i Injection Date: 28-JUN-2011 12:34  
Lab File ID: 17860.D Init. Cal. Date(s): 27-JUN-2011 27-JUN-2011  
Analysis Type: AIR Init. Cal. Times: 13:34 16:27  
Lab Sample ID: CCAL Quant Type: ISTD  
Method: \\192.168.10.12\chem\10air0.i\062811.b\TO15\_178-11.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
144 Methyl Isobutyl Ketone	10.00000	10.80540	0.25278	0.010	8.05404	30.00000	Linear
145 cis-1,3-Dichloropropene	10.00000	10.85372	0.29573	0.010	8.53719	30.00000	Linear
146 trans-1,3-Dichloropropene	10.00000	10.27527	0.26456	0.010	2.75275	30.00000	Linear
147 Toluene-d8 (S)	0.79606	0.80867	0.80867	0.010	1.58424	30.00000	Averaged
148 Toluene	10.00000	11.48235	0.53117	0.010	14.82353	30.00000	Linear
149 1,1,2-Trichloroethane	10.00000	11.14458	0.18816	0.010	11.44577	30.00000	Linear
150 Methyl Butyl Ketone	10.00000	11.08523	0.44316	0.010	10.85232	30.00000	Linear
151 Dibromochloromethane	10.00000	11.26472	0.73819	0.010	12.64717	30.00000	Linear
152 1,2-Dibromoethane	10.00000	10.91022	0.56996	0.010	9.10219	30.00000	Linear
153 Tetrachloroethene	10.00000	11.74987	0.65906	0.010	17.49873	30.00000	Linear
155 Chlorobenzene	10.00000	11.15966	0.82852	0.010	11.59658	30.00000	Linear
156 Ethyl Benzene	10.00000	11.85819	1.41948	0.010	18.58193	30.00000	Linear
157 m,p-Xylene	1.02409	1.09842	1.09842	0.010	7.25818	30.00000	Averaged
158 2-Heptanone	10.00000	10.73051	0.33653	0.010	7.30507	30.00000	Linear
159 Bromoform	10.00000	11.49476	0.83294	0.010	14.94755	30.00000	Linear
160 Styrene	10.00000	11.62645	0.89137	0.010	16.26449	30.00000	Linear
161 o-Xylene	10.00000	11.68640	1.14033	0.010	16.86397	30.00000	Linear
162 1,1,2,2-Tetrachloroethane	10.00000	11.60313	0.78068	0.010	16.03129	30.00000	Linear
163 Isopropylbenzene	10.00000	11.92588	1.52499	0.010	19.25879	30.00000	Linear
164 N-Propylbenzene	10.00000	11.44803	1.80028	0.010	14.48031	30.00000	Linear
165 4-Ethyltoluene	10.00000	11.79269	1.43259	0.010	17.92689	30.00000	Linear
166 1,3,5-Trimethylbenzene	10.00000	11.64566	1.27028	0.010	16.45661	30.00000	Linear
167 1,2,4-Trimethylbenzene	10.00000	11.61109	1.21373	0.010	16.11086	30.00000	Linear
168 1,3-Dichlorobenzene	10.00000	11.72956	0.88046	0.010	17.29557	30.00000	Linear
169 Sec- Butylbenzene	1.39827	1.69553	1.69553	0.010	21.25951	30.00000	Averaged
170 1,4-dichlorobenzene-d4 (S)	0.52544	0.53405	0.53405	0.010	1.63937	30.00000	Averaged
171 Benzyl Chloride	10.00000	10.56378	0.80172	0.010	5.63782	30.00000	Linear
172 1,4-Dichlorobenzene	10.00000	11.05302	0.83372	0.010	10.53020	30.00000	Linear
173 1,2-Dichlorobenzene	10.00000	12.08743	0.86741	0.010	20.87430	30.00000	Linear
174 N-Butylbenzene	10.00000	13.41701	1.29583	0.010	34.17014	30.00000	Linear
175 1,2,4-Trichlorobenzene	10.00000	14.54738	0.50013	0.010	45.47382	30.00000	Quadratic
176 Naphthalene	10.00000	14.75624	0.92049	0.010	47.56239	30.00000	Quadratic
177 Hexachlorobutadiene	10.00000	17.11565	0.39285	0.010	71.15647	30.00000	Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 14.23042  
Maximum Average %D/Drift = 30.00000  
\* Passed Average %D/Drift Test.

## **APPENDIX P**

### **ANALYTICAL RESULTS FOR NAPL SAMPLES**

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

**Client : URS Corporation**

**Project: Klink Cosmo Meeker, LNAPL Sample**

**Laboratory Workorder / SDG #: K1120**

**Subcontracted Analysis**

The following analysis was performed by subcontractor laboratory:

**Modified Gravity:**

Modified Gravity by ASTM method 2170F was performed by Mt. Tom Generating Co. LLC Analytical Laboratory. The entire Mt. Tom report, including any notes on these analyses is enclosed following the Total Petroleum Hydrocarbon section of the Spectrum RI report.

## Mt.Tom Generating Co. LLC Analytical Laboratory

15 Agawam Avenue  
West Springfield, MA 01089  
Phone (413) 214-6541 Fax (413) 214-6842  
email-madhu.shah@gdfsuezna.com



Mass Certification - MA-00071  
Conn Certification - PH-0520

Report Date July 7, 2011

Customer	Contact	Laboratory Supervisor	eMail
Spectrum Analytical, Inc.	H. Tayeh	Madhu Shah	madhu.shah@gdfsuezna.com
<b>Sample Description</b> Analysis of Oil			

### Samples Analyzed

Enclosed are Report No(s): 28562

## Thank you for your business

\_\_\_\_\_  
Madhu Shah, Laboratory Supervisor

\_\_\_\_\_  
Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.

This report may not be reproduced, except in full, without written approval from Mt.Tom Generating Co.LLC Analytical Laboratory.

**Sample Analysis**

Work Order 11-0901

Sample Description	Source	Taken/Time	Received		
28562 K1120-01B	Spectrum Analytical, Inc.		6/29/11		
Parameter	Results	MDL	Method	Analyzed/Time	Tech
Specific Gravity @ 60°F	0.8608		ASTM 2710F	07/07/11	sjr

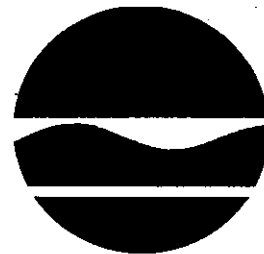
## **APPENDIX Q**

### **NYSDEC DIVISION OF FISH, WILDLIFE & MARINE RESOURCES**

#### **NY NATURAL HERITAGE PROGRAM RESPONSE**



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Division of Fish, Wildlife & Marine Resources**  
**New York Natural Heritage Program**  
625 Broadway, 5<sup>th</sup> Floor, Albany, New York 12233-4757  
**Phone:** (518) 402-8935 • **Fax:** (518) 402-8925  
**Website:** [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

March 21, 2011

William Trembath  
URS Corporation  
77 Goodell Street  
Buffalo, NY 14203

FILE 11176359 (SP-1)  
cc. W. Trembath  
M. Gutman  
A. MONTI  
S. McCHABE

Dear Mr. Trembath:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the Former Klink Cosmo Cleaners, Project # 1117 6359, site as indicated on the map you provided, located at 364 Richardson Street, Brooklyn, Kings County.

We have no records of rare or state-listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at [www.dec.ny.gov/about/39381.html](http://www.dec.ny.gov/about/39381.html).

Sincerely,

*Tara Salerno* sp  
Tara Salerno, Information Services  
New York Natural Heritage Program

Enc.

cc: Region 2

# 252