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**Final  
Summary Report  
for  
Geoprobe and Indoor Air Assessment  
Former EMR Circuits Facility  
Hauppauge, Suffolk County, New York  
Site Number 1-52-105  
Contract Work Assignment Number: D006132-1**

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## ***1.0 Introduction***

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Shaw Environmental and Infrastructure Engineering of New York, P.C. (Shaw) is pleased to provide this Final Summary Report discussing the collection of soil, groundwater, soil vapor, sub-slab vapor and indoor air samples at EMR Circuits, Inc. (Site Number 1-52-105) located at 85-99 Marcus Boulevard (site), Hauppauge, Suffolk County, New York (**Figure 1**). The site activities were conducted between January 11 and January 15, 2010. The work was performed in accordance with the Final Work Plan (March 2009), the Work Assignment (WA) D006132-1 provided to Shaw on January 13, 2009 and subsequent discussions with the New York State Department of Environmental Conservation (NYSDEC) project manager.

### ***1.1 Facility Description and Location***

#### **Operational/Disposal History**

The site is a former circuit board manufacturing facility that was operational between 1981 and 1984. From February, 1981 to 1983 the owner of EMR Circuits illegally discharged spent hazardous wastes into a floor drain which connected to two underground leaching pools located in the parking lot on the north side of the building according to information provided to Shaw by the NYSDEC. The discharge was first noticed by the Suffolk County Department of Health Services (SCDHS) when investigation of site operations identified liquids bubbling up through the on-site driveway. The property owner subsequently entered into a consent order with SCDHS and agreed to cease all discharges to the adjacent leaching pools, however additional documentation indicates that EMR Circuits continued to discharge hazardous wastes into the leaching pools until late 1983, based upon the information provided to Shaw by the NYSDEC.

#### **Remedial History**

On November 11, 1983 the known leaching pool was emptied and cleaned. During these site activities an additional leaching pool was identified immediately adjacent to the known pool. This second leaching pool was also emptied and cleaned on January 25, 1984. Both leaching pools were backfilled with clean sand and gravel. The leaching pools extended approximately 10 feet below ground surface (ft bgs) and 20 ft bgs, respectively. The floor drain within the building that reportedly led to the leaching pools was sealed with cement.

In March, 1985 the SCDHS collected two groundwater samples at depths of 115 feet and 130 feet below ground surface (bgs) in close proximity to the site. The volatile organic compound (VOC) 1,1,1-trichloroethane (TCA) was detected in the sample collected at 115 feet bgs at a concentration of 390 micrograms per liter (ug/l); 1,1,1-TCA was not detected in the sample collected at 130 feet bgs.

A Phase II site investigation was conducted by EMR Circuits (the Responsible Party). The results of this investigation were submitted to the NYSDEC in January, 1992. Soil samples collected as part of this investigation did not indicate the presence of VOCs or metals above contract reporting detection limits. The Responsible Party conducted additional groundwater sampling activities in June, 1992. Results indicated that the existing groundwater site conditions were not contributing to groundwater contamination in this area and remediation completed in 1984 (removal of the leaching pools) was adequate to remediate this site. The site was subsequently delisted in March, 1993.

The NYSDEC and New York State Department of Health (NYSDOH) have requested that the potential for vapor phase impacts be evaluated at this site. The proposed scope of work to complete these investigative activities was detailed in Shaw's March 2009 work plan and site activities were implemented with the consent of the property owner between January 11 and January 15, 2010.



## 2.0 *Scope of Work*

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### 2.1 *Introduction*

The scope of work included the advancement of six direct push borings to assess soil, groundwater and soil vapor conditions at the site. The potential for soil vapor impacts within the former EMR Circuits building was also evaluated during site investigative activities. Specifically, two sub slab soil vapor samples, one indoor air sample and one ambient outdoor air sample were collected as part of this evaluation.

Prior to arrival at the site, Shaw contacted the local “one call” agency to schedule utility mark-outs. Shaw reviewed the utility mark out provided by the “one-call” agency and inspected the proposed locations with the utility locator on-site to ensure that the boring locations were clear of all underground utilities .

Four of the six borings, (borings SB-2, SB-3, SB-4 and SB-5) were advanced to approximately 8 feet below ground surface and completed as temporary soil vapor monitoring points to facilitate the collection of soil vapor samples. One boring, SB-1, installed adjacent to the historic release (leaching pools), was advanced to approximately 50 feet below ground surface. The proposed depth of 60 feet below ground surface for the soil boring could not be reached due to “refusal” encountered at 50 feet below ground surface. The soil vapor point, being of smaller diameter was able to be advanced to 60 feet below ground surface. A final boring, boring GW-1 located across Marcus Boulevard as depicted on **Figure 2**, was advanced to approximately 110 feet below the ground surface where a groundwater “grab” sample was collected for analysis. Once the ground water sample was collected, the bore hole was backfilled with the soil cuttings and a bentonite/grout slurry to the surface.

Two sub slab soil vapor (SSV-1 and SSV-2), one indoor air sample (IA-1) and one ambient outdoor air sample (OA-1) were collected at the locations shown on **Figure 2**, using the procedures outlined in the approved Work Plan dated March 2009. The sub-slab vapor sample SSV-1 was collected along the north wall of the building, just south of and in proximity to the former leaching pool (area of former known release). The second sub-slab vapor, SSV-2, was collected along the southern interior wall of the building, in-line with SSV-1. Indoor-air sample IA-1 was collected in proximity SSV-2 and out of the direct air flow of the ceiling mounted

heating units. Following collection of the sub-slab soil vapor the hole was backfilled with cement and smoothed with a trowel at the surface.

All sample locations (with the exception of the three interior air samples) were surveyed in order to update the existing site plan and correlate distances between existing monitoring wells (**Figure 2**). The procedures and results of the site investigative activities are detailed below.

## **2.2    *Soil Sampling***

As mentioned previously, six direct push borings were installed to assess soil, groundwater and soil vapor conditions at the site.

Continuous soil cores were collected to classify the geology of the site at five (SB-1 thru SB-5) of the six proposed sampling locations. Four borings (SB-2, SB-3, SB-4 and SB-5) were advanced to approximately 8 feet below ground surface and one boring, SB-1, was advanced to approximately 50 feet bgs. The soil borings were logged using the USCS classification scheme and field screened for VOCs using a PID with an 11.7 eV lamp (Boring logs are included in **Appendix A**). Depth discrete soil samples were collected from each boring as detailed in Shaw's December, 2008 Field Activities Plan. The two samples from within the 50 foot boring, exhibiting the highest PID readings were sent for laboratory analysis. The samples collected from the 50-foot soil boring included a duplicate and matrix spike/matrix spike duplicate (MS/MSD) sample. These samples were sent under proper chain of custody to Mitkem Laboratories (Mitkem) located in Warwick, Rhode Island, an approved ELAP-certified laboratory for analysis of VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs) and metals by EPA methods 8260, 8270C, 8081A, 8082 and 6010, respectively.

The two samples that exhibited the highest PID reading collected from the remaining four eight-foot soil borings were secured for VOCs analysis according to EPA method 8260. All samples were labeled, handled, and packaged following the procedures described in the approved QAPP and analyzed by Mitkem.

All non-dedicated down-hole equipment (including such items as the drive rods, drive heads, cutting shoe, miscellaneous sampling equipment, and tools) was thoroughly cleaned using analconox rinse and potable water rinse prior to reuse as detailed in the FAP.

### **2.3    *Soil Vapor Points***

Five of the six borings advanced at the site were completed as temporary soil vapor monitoring points (SV-1 thru SV-5). Each point consisted of a stainless steel screen attached to a dedicated section of laboratory or food grade Teflon-lined tubing and was placed in the borehole at the desired depth of eight feet below the ground surface. The borehole was backfilled with glass beads to a minimum of six inches above the screened interval and a bentonite slurry placed above the glass beads to the ground surface. The bentonite was allowed to cure for 24 hours prior to sample collection.

After the period of 24 hours and prior to the collection of the soil vapor samples, a tracer gas test was completed in accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, (October 2006) to ensure that no ambient air was infiltrating into the sample interval. Upon completion of a successful tracer gas test, the tubing was purged of approximately two to three probe volumes at a flow rate of less than 0.2 liters per minute. PID readings were collected and recorded during the purging process. An individually certified summa canister with a two hour regulator was connected to the sample tubing when a sufficient volume was purged. Sampling continued until there was approximately 5 inches +/- 1 inch of mercury (in. Hg) remaining in the canister. Field Logs are included in **Appendix A**.

A total of 6 soil vapor samples (5 locations plus a duplicate sample) were collected across the site. Samples were shipped under proper chain of custody to Mitkem for analysis of VOCs by EPA method TO-15 to an accuracy of 1 µg/m<sup>3</sup>. Additional details regarding the sampling methods were included in Shaw's FAP, included as Appendix A of the approved Work Plan.

After completion of sampling, the sample tubing was removed from the borehole and the remaining annular space was backfilled with granular bentonite to the ground surface, hydrated and completed with an asphalt patch.

### **2.4    *Temporary Well/Groundwater "Grab"***

Soil Boring GW-1 (**Figure 2**) was advanced to 110 feet below ground surface to facilitate the collection of a groundwater grab sample as detailed with the approved Work Plan. Once the desired depth was reached (approximately 110-feet below ground surface) using a narrower diameter (than that of the macro core sampler for soils) drive rod with an inner screen and an expendable point at its base, "chase-rods" were sent down through the center of the drive rods.

The drive rods were then retracted approximately three feet, with the “chase rods” still in-place, to expose the screen to the desired sample interval. The “chase-rods” were then removed from the center of the rods and a section of laboratory – grade polyethylene tubing with a check-valve at the base was used to acquire the groundwater grab sample. The sample interval was first purged to help minimize the turbidity levels. The interval yielded a low volume of water, eventually going “dry”. The sample interval was given a time to recharge prior to collection of the “grab” sample. Following sample collection the boring was abandoned using a bentonite/portland and soil cutting slurry and flagged to be surveyed.

## **2.5    *Groundwater Sampling***

Groundwater samples were collected from four of the five existing monitoring wells (MW-1A, MW-1, MW-3A and MW-3, **Figure 2**) and at the groundwater “grab” location (GW-1) as part of this investigation. Monitoring well MW-2 was not sampled because the location of the well could not be determined due to heavy snow and ice cover. Shaw made several attempts to locate the monitoring well using shovels and a metal detector but were unsuccessful. Shaw contacted the NYSDEC representative and informed him of the problem and was given permission not to sample that particular monitoring well.

Prior to sample collection, the depth to water was measured and recorded. The four existing monitoring wells were purged in accordance with EPA Region II and Shaw’s FAP “low flow” sampling methods as described in the approved Work Plan dated March 2009. Purge data was recorded on Field Logs included in **Appendix A**. As indicated above the “grab” groundwater sample was collected from GW-1 once the interval was purged dry and allowed to recharge. All groundwater samples were labeled, handled, and packaged following the procedures described in the approved QAPP and analyzed for VOCs according to 8260 by Mitkem. In addition to the groundwater samples collected, a field blank, duplicate and matrix spike/matrix spike duplicate (MS/MSD) sample were collected from monitoring well MW-1 and analyzed for SVOCs, pesticides, PCBs and metals by EPA methods 8270C, 8081A, 8082 and 6010, respectively.

## **2.6    *Structure Sub-Slab Soil Vapor and Indoor Air Sampling***

Two sub slab soil vapor (SSV-1 and SSV-2), one indoor air sample (IA-1) and one ambient outdoor air sample (OA-1) were collected at the locations shown on **Figure 2**, using the procedures outlined in the approved Work Plan dated March 2009. One of the sub slab vapor points, SSV-1, was collected directly south of the former leaching pools, on the north side of the

building while the other sub slab vapor point (SSV-2) was collected from the south, sub-sectional wall of the building (**Figure 2**). The indoor air sample (IA-1) point was biased toward cracks observed during the building inventory process and away from direct air flow from the ceiling mounted heating units. These samples were collected concurrently with the soil vapor samples discussed in **Section 2.3**. The building contents, materials in storage, general building conditions, weather conditions, temperature, and pertinent PID readings were surveyed, photographed and documented in accordance with the questionnaire in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York document prior to the collection of the samples. The completed questionnaire is included in **Appendix B** and Field logs are included in **Appendix A**.

Individually certified 6-liter summa canisters, fitted with twenty-four hour flow regulators were utilized for the collection of sub-slab vapor, indoor air sampling and ambient outdoor air samples. Indoor and outdoor ambient samples were collected at a height within the breathing zone at pre-selected locations. No duplicate samples were collected with the sub-slab vapor, indoor air or ambient air samples. Upon completion of sample collection the summa canisters were secured, packaged and shipped following the procedures described in the approved QAPP and analyzed by Mitkem for VOCs by EPA method TO-15 to an accuracy of  $1 \mu\text{g}/\text{m}^3$ .

### ***3.0 Analytical Results***

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The purpose of the investigation activities was to evaluate the potential for vapor phase impacts at this site. The scope of work to complete that activity was detailed in the March 2009 work plan; site activities were performed between January 11 and 15, 2009. During this evaluation, soil, groundwater, soil vapor and indoor air samples were collected at the site. The results of these samples are detailed below.

#### ***3.1 Soil Analytical Results***

The two samples collected from the 50-foot soil boring including a duplicate and matrix spike/matrix spike duplicate (MS/MSD) sample were sent for analysis of VOCs, SVOCs, pesticides, PCBs and metals. The two soil samples collected from the 8 foot borings were sent for analysis of VOCs only.

Analytical results for the soil samples collected indicated detections above laboratory method detection limits (MDLs) for two VOCs, acetone in SB-1 at the 45-40 ft bgs interval and toluene in SB-1 at the 10-15ft bgs interval. Four SVOCs, (Di-n-butyl phthalate, fluoranthene, pyrene and bis-(2-ethylhexyl) phthalate) and several metals were detected above MDLs in SB-1 at both sample intervals. Two of the metals detected, chromium and iron were detected above the NYSDEC Soil Cleanup Objectives. No other analytes were detected above the NYSDEC Soil Cleanup Objectives for any other samples collected. Analytical results are presented on **Table 1**.

#### ***3.2 Groundwater Analytical Results***

Groundwater samples were collected from four of the five existing monitoring wells (MW-1A, MW-1, MW-3A and MW-3, **Figure 2**) and the groundwater “grab” location for analysis of VOCs according to 8260. The sample collected from monitoring well MW-1 was also analyzed for SVOCs, pesticides, PCBs and metals by EPA methods 8270C, 8081A, 8082 and 6010, respectively

Analytical results indicate detections of two VOCs, acetone and 2-butanone (MEK) in GW-1, and several metals in MW-1 above laboratory method detection limits. Two detections of sodium in MW-1 and DUP 02 were above the NYSDEC groundwater standard. No other analytes were detected above the NYSDEC Groundwater Standards for any other samples collected. Analytical results are presented on **Table 2**.

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### 3.3 Soil Gas Analytical Results

A total of 6 soil vapor (5 locations plus a duplicate sample) were collected from the site using six-liter summa canisters fitted with 2-hour flow controllers. Samples were shipped under proper chain of custody for analysis of VOCs by EPA method TO-15 to Mitkem. Analytical results indicated detections of several compounds above laboratory method detection limits. Specifically tetrachloroethene (PCE) was detected in four of the five soil vapor samples at concentrations ranging from 353.30 ug/m<sup>3</sup> in SV-1 (located adjacent to the former leaching pools) to an estimated value of 2.03 ug/m<sup>3</sup> at SV-2 located across Marcus Blvd. Trichloroethene (TCE) was also detected in four of the five soil vapor samples at concentrations ranging from 394.97 ug/m<sup>3</sup> in SV-1 to 0.59 in the eastern sample SV-5. Lower concentrations of 1,1,1-trichloroethane (TCA) were observed in three of the five soil vapor samples ranging from 54.56 ug/m<sup>3</sup> (SV-1) to 1.09 ug/m<sup>3</sup> in SV-4 located on the north east corner of the on-site building. Analytical results are summarized on **Table 3** and presented on **Figure 3**.

### 3.4 Sub-Slab Soil Vapor and Indoor Air Analytical Results

Two sub-slab soil vapor, one indoor air sample and one ambient outdoor air sample were collected to assess air quality within the building using six-liter summa canisters fitted with 24-hour flow controllers and shipped to Mitkem under proper chain of custody for analysis of VOCs by EPA method TO-15. Analytical results indicated detections of several compounds above laboratory method detection limits. Specifically PCE was detected in both of the sub slab soil vapor samples at concentrations of 194.62 ug/m<sup>3</sup> in SSV-2 and 37.43 in SSV-1. TCE was detected in SSV-1 at a concentration of 13.54 ug/m<sup>3</sup> and SSV-2 at 180.57 ug/m<sup>3</sup>. TCA was detected only in SSV-2 at a concentration of 30.99 ug/m<sup>3</sup>. Carbon tetrachloride was not detected in either sub slab soil vapor sample. Analytical results are summarized on **Table 3** and presented on **Figure 3**.

Analytical results for the indoor ambient air sample indicated detections of several compounds above laboratory method detection limits. For comparative purposes these results were measured against NYSDOH's "*Indoor Air Background Concentrations – Table C –EPA 2001 Building Assessment and Survey Evaluation Database (75 percentile)*". Results indicated concentrations of ethanol, methylene chloride, 2-butanone and ethyl acetate above NYSDOH Indoor Air Background Concentrations. Detection limits for this sample were slightly elevated due to an elevated concentration of ethanol within the sample. The occurrence of ethanol within the sample can be attributed to the occurrence of ethanol in the solvent, specifically the

“denatured alcohol” (ethanol makes up approximately 45-50% of the matrix of this product) used by the current occupant to clean their product immediately after cutting. The MSDS sheets provided by the tenant are incorporated within **Appendix B** as well as the photo documentation depicting the product in the “shop” area. The manufacturing line was operational at the time that this sampling occurred. Analytical results are summarized on **Table 3** and presented on **Figure 3**.

### **3.5    *Validation of Analytical Data***

Upon receipt of the analytical data, it was sent to Environmental Data Services, Inc for a data usability summary report (DUSR). According to the DUSR report, there were no rejections of the data and all the data is considered acceptable for the intended purposes. All criteria were met regarding the data completeness, cover letter, narrative, data reporting forms, canister certification pressures differences, chains-of-custody, instrument tuning, and internal standards. The batch blank checks were non-detect, the samples were analyzed within the 30 day time limit, all surrogate spike recoveries were within the acceptable ranges, method blanks were free of contamination, and initial calibrations were within an acceptable percentage. The duplicate samples were within a normal percentage with the exception of acetone, therefore this compound was given an estimated qualifier. In addition, three compounds, 1,3,5-trimethyl benzene, 4-ethyltoluene and 1,2,4-trimethylbenzene were above the recommended percentage of deviation during the continued calibration, therefore the results for these compounds were given an estimated qualifier. A copy of the DUSR report is included in **Appendix C**.



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## ***TABLES***

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**Table 1**  
**Soil Analytical Data**  
**EMR Circuits**  
**Hauppauge, Suffolk County, New York**

Analyte	NYSDEC Soil Cleanup Guidance Values	SB-1	DUP 01	SB-1	SB-3	SB-3
Depth Below Ground Surface		10'-15'	--	45'-50'	0'-5'	5'-8'
Date Collected		1/11/2010	1/11/2010	1/11/2010	1/12/2010	1/12/2010
VOCs						
Dichlorodifluoromethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Chloromethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Vinyl chloride	0.02	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Bromomethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Chloroethane	1.9	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Trichlorofluoromethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,1-Dichloroethene	0.33	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Acetone	0.05	<0.0049	<0.0047	<b>0.0074</b>	<0.0050	<0.0050
Idomethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Carbon disulfide	2.7	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Methylene chloride	0.05	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
trans-1,2-Dichloroethene	0.19	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Methyl tert-butyl ether	0.93	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,1-Dichloroethane	0.27	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Vinyl acetate	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
2-Butanone	0.12	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
cis-1,2-Dichloroethene	0.25	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
2,2-Dichloropropane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Bromochloromethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Chloroform	0.37	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,1,1-Trichloroethane	0.68	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,1-Dichloropropene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Carbon tetrachloride	0.76	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2-Dichloroethane	0.02	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Benzene	0.06	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Trichloroethene	0.47	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2-Dichloropropane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Dibromomethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Bromodichloromethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
cis-1,3-Dichloropropene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
4-methyl-2-pentanone	1.0	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Toluene	0.7	<b>0.0012 J</b>	<0.0047	<0.0049	<0.0050	<0.0050
trans-1,3-Dichloropropene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,1,2-Trichloroethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,3-Dichloropropane	0.3	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Tetrachloroethene	1.3	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
2-Hexanone	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Dibromochloromethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050

**Table 1**  
**Soil Analytical Data**  
**EMR Circuits**  
**Hauppauge, Suffolk County, New York**

Analyte	NYSDEC Soil Cleanup Guidance Values	SB-1	DUP 01	SB-1	SB-3	SB-3
Depth Below Ground Surface		10'-15'	--	45'-50'	0'-5'	5'-8'
Date Collected		1/11/2010	1/11/2010	1/11/2010	1/12/2010	1/12/2010
1,2-Dibromoethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Chlorobenzene	1.1	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,1,1,2-Tetrachloroethane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Ethylbenzene	1	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
m,p-Xylene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
o-Xylene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Xylene (Total)	0.26	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Styrene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Bromoform	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Isopropylbenzene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,1,2,2-Tetrachloroethane	0.6	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Bromobenzene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2,3-Trichloropropane	0.4	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
n-Propylbenzene	3.9	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
2-Chlorotoluene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,3,5-Trimethylbenzene	8.4	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
4-Chlorotoluene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
tert-Butylbenzene	5.9	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2,4-Trimethylbenzene	3.6	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
sec-Butylbenzene	11	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
4-Isopropyltoluene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,3-Dichlorobenzene	2.4	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,4-Dichlorobenzene	1.8	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
n-Butylbenzene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2-Dichlorobenzene	1.1	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2-Dibromo-3-chloropropane	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2,4-Trichlorobenzene	3.4	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Hexachlorobutadiene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
1,2,3-Trichlorobenzene	NGV	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050
Naphthalene	12	<0.0049	<0.0047	<0.0049	<0.0050	<0.0050

**Notes:**

All data are presented in mg/kg.

Standards taken from New York State Department of Environmental Conservation 6 NYCRR Part 375 Soil Cleanup Objective Unrestricted Use Tables and TAGM 4046 Soil Cleanup Objectives.

DUP 01 collected with SB-1 10-15'

Bold = Analyte detected above laboratory method detection limits

Shaded = Analyte detected above NYSDEC Soil Cleanup Objectives

< = Analyte not detected above laboratory method detection limits

J = Indicates an estimated value

NGV = No Guidance Value listed

**Table 1**  
**Soil Analytical Data**  
**EMR Circuits**  
**Hauppauge, Suffolk County, New York**

Analyte	NYSDEC Soil Cleanup Guidance Values	SB-1	DUP 01	SB-1	SB-3	SB-3
Depth Below Ground Surface		10'-15'	--	45'-50'	0'-5'	5'-8'
Date Collected		1/11/2010	1/11/2010	1/11/2010	1/12/2010	1/12/2010
SVOCs						
Phenol	0.33	<0.350	<0.350	<0.360	NA	NA
Bis (2-chloroethyl) ether	NGV	<0.350	<0.350	<0.360	NA	NA
2-Chlorophenol	0.8	<0.350	<0.350	<0.360	NA	NA
1,3-Dichlorobenzene	2.4	<0.350	<0.350	<0.360	NA	NA
1,4-Dichlorobenzene	1.8	<0.350	<0.350	<0.360	NA	NA
1,2-Dichlorobenzene	1.1	<0.350	<0.350	<0.360	NA	NA
2-Methylphenol	0.33	<0.350	<0.350	<0.360	NA	NA
2,2-oxybis(1-Chloropropane)	NGV	<0.350	<0.350	<0.360	NA	NA
4-Methylphenol	0.33	<0.350	<0.350	<0.360	NA	NA
N-Nitroso-di-n-propylamine	NGV	<0.350	<0.350	<0.360	NA	NA
Hexachloroethane	NGV	<0.350	<0.350	<0.360	NA	NA
Nitrobenzene	0.2	<0.350	<0.350	<0.360	NA	NA
Isophorone	4.4	<0.350	<0.350	<0.360	NA	NA
2-Nitrophenol	0.33	<0.350	<0.350	<0.360	NA	NA
2,4-Dimethylphenol	NGV	<0.350	<0.350	<0.360	NA	NA
2,4-Dichlorophenol	0.4	<0.350	<0.350	<0.360	NA	NA
1,2,4-Trichlorobenzene	3.4	<0.350	<0.350	<0.360	NA	NA
Naphthalene	12	<0.350	<0.350	<0.360	NA	NA
4-Chloroaniline	0.22	<0.350	<0.350	<0.360	NA	NA
Bis (2-chloroethoxy) methane	NGV	<0.350	<0.350	<0.360	NA	NA
Hexachlorobutadiene	NGV	<0.350	<0.350	<0.360	NA	NA
4-Chloro-3-methylphenol	0.24	<0.350	<0.350	<0.360	NA	NA
2-Methylnaphthalene	36.4	<0.350	<0.350	<0.360	NA	NA
Hexachlorocyclopentadiene	NGV	<0.350	<0.350	<0.360	NA	NA
2,4,6-Trichlorophenol	NGV	<0.350	<0.350	<0.360	NA	NA
2,4,5-Trichlorophenol	0.1	<0.700	<0.700	<0.730	NA	NA
2-Chloronaphthalene	NGV	<0.350	<0.350	<0.360	NA	NA
2-Nitroaniline	0.43	<0.700	<0.700	<0.730	NA	NA
Dimethylphthalate	2.0	<0.350	<0.350	<0.360	NA	NA
Acenaphthylene	100	<0.350	<0.350	<0.360	NA	NA
2,6-Dinitrotoluene	1.0	<0.350	<0.350	<0.360	NA	NA
3-Nitroaniline	0.5	<0.700	<0.700	<0.730	NA	NA
Acenaphthene	20	<0.350	<0.350	<0.360	NA	NA
2,4-Dinitrophenol	0.2	<0.700	<0.700	<0.730	NA	NA
4-Nitrophenol	0.1	<0.700	<0.700	<0.730	NA	NA
Dibenzofuran	6.2	<0.350	<0.350	<0.360	NA	NA

**Table 1**  
**Soil Analytical Data**  
**EMR Circuits**  
**Hauppauge, Suffolk County, New York**

Analyte	NYSDEC Soil Cleanup Guidance Values	SB-1	DUP 01	SB-1	SB-3	SB-3
Depth Below Ground Surface		10'-15'	--	45'-50'	0'-5'	5'-8'
Date Collected		1/11/2010	1/11/2010	1/11/2010	1/12/2010	1/12/2010
2,4-Dinitrotoluene	NGV	<0.350	<0.350	<0.360	NA	NA
Diethylphthalate	7.1	<0.350	<0.350	<0.360	NA	NA
4-Chlorophenyl-phenylether	NGV	<0.350	<0.350	<0.360	NA	NA
Fluorene	30	<0.350	<0.350	<0.360	NA	NA
4-Nitroaniline	NGV	<0.700	<0.700	<0.730	NA	NA
4,6-Dinitro-2-methylphenol	NGV	<0.700	<0.700	<0.730	NA	NA
N-Nitrosodiphenylamine	NGV	<0.350	<0.350	<0.360	NA	NA
4-Bromophenyl-phenylether	NGV	<0.350	<0.350	<0.360	NA	NA
Hexachlorobenzene	0.41	<0.350	<0.350	<0.360	NA	NA
Pentachlorophenol	0.8	<0.700	<0.700	<0.730	NA	NA
Phenanthrene	100	<0.350	<0.350	<0.360	NA	NA
Anthracene	100	<0.350	<0.350	<0.360	NA	NA
Carbazole	NGV	<0.350	<0.350	<0.360	NA	NA
Di-n-butylphthalate	8.1	<b>0.160 J</b>	<b>0.110 J</b>	<b>0.200 J</b>	NA	NA
Fluoranthene	100	<b>0.048 J</b>	<b>0.041 J</b>	<0.360	NA	NA
Pyrene	100	<b>0.041 J</b>	<0.350	<0.360	NA	NA
Butylbenzylphthalate	50	<0.350	<0.350	<0.360	NA	NA
3,3'-Dichlorobenzidine	NGV	<0.350	<0.350	<0.360	NA	NA
Benzo (a) anthracene	1	<0.350	<0.350	<0.360	NA	NA
Chrysene	1	<0.350	<0.350	<0.360	NA	NA
Bis (2-ethylhexyl) phthalate	50	<b>0.120 J</b>	<0.350	<b>0.700</b>	NA	NA
Di-n-octylphthalate	50	<0.350	<0.350	<0.360	NA	NA
Benzo (b) fluoranthene	1	<0.350	<0.350	<0.360	NA	NA
Benzo (k) fluoranthene	0.8	<0.350	<0.350	<0.360	NA	NA
Benzo (a) pyrene	1	<0.350	<0.350	<0.360	NA	NA
Indeno (1,2,3-cd) pyrene	0.5	<0.350	<0.350	<0.360	NA	NA
Dibenzo (a,h) anthracene	0.33	<0.350	<0.350	<0.360	NA	NA
Benzo (g,h,i) perylene	100	<0.350	<0.350	<0.360	NA	NA

**Notes:**

All data are presented in mg/kg.

Standards taken from New York State Department of Environmental Conservation 6 NYCRR Part 375 Soil Cleanup Objective Unrestricted Use Tables and TAGM 4046 Soil Cleanup Objectives.

DUP 01 collected with SB-1 10-15'

Bold = Analyte detected above laboratory method detection limits

Shaded = Analyte detected above NYSDEC Soil Cleanup Objectives

< = Analyte not detected above laboratory method detection limits

J = Indicates an estimated value

NA = Not Analyzed

NGV = No Guidance Value listed

**Table 1**  
**Soil Analytical Data**  
**EMR Circuits**  
**Hauppauge, Suffolk County, New York**

Analyte	NYSDEC Soil Cleanup Guidance Values	SB-1	DUP 01	SB-1	SB-3	SB-3
Depth Below Ground Surface		10'-15'	--	45'-50'	0'-5'	5'-8'
Date Collected		1/11/2010	1/11/2010	1/11/2010	1/12/2010	1/12/2010
Pesticides						
alpha-BHC	0.02	<0.0018	<0.0018	<0.0019	NA	NA
beta-BHC	0.036	<0.0018	<0.0018	<0.0019	NA	NA
delta-BHC	0.04	<0.0018	<0.0018	<0.0019	NA	NA
gamma-BHC (Lindane)	0.06	<0.0018	<0.0018	<0.0019	NA	NA
Heptachlor	0.042	<0.0018	<0.0018	<0.0019	NA	NA
Aldrin	0.005	<0.0018	<0.0018	<0.0019	NA	NA
Heptachlor epoxide	0.02	<0.0018	<0.0018	<0.0019	NA	NA
Endosulfan I	2.4	<0.0018	<0.0018	<0.0019	NA	NA
Dieldrin	0.005	<0.0035	<0.0034	<0.0036	NA	NA
4,4'-DDE	0.0033	<0.0035	<0.0034	<0.0036	NA	NA
Endrin	0.014	<0.0035	<0.0034	<0.0036	NA	NA
Endosulfan II	2.4	<0.0035	<0.0034	<0.0036	NA	NA
4,4'-DDD	0.0033	<0.0035	<0.0034	<0.0036	NA	NA
Endosulfan sulfate	2.4	<0.0035	<0.0034	<0.0036	NA	NA
4,4'-DDT	0.0033	<0.0035	<0.0034	<0.0036	NA	NA
Methoxychlor	10**	<0.018	<0.018	<0.019	NA	NA
Endrin ketone	NGV	<0.0035	<0.0034	<0.0036	NA	NA
Endrin aldehyde	NGV	<0.0035	<0.0034	<0.0036	NA	NA
alpha-Chlordane	0.094	<0.0018	<0.0018	<0.0019	NA	NA
gamma-Chlordane	0.54	<0.0018	<0.0018	<0.0019	NA	NA
Toxaphene	NGV	<0.180	<0.180	<0.190	NA	NA
Notes: All data are presented in mg/kg. Standards taken from New York State Department of Environmental Conservation 6 NYCRR Part 375 Soil Cleanup Objective Unrestricted Use Tables and TAGM 4046 Soil Cleanup Objectives. DUP 01 collected with SB-1 10-15' ** = As per TAGM 4046 total pesticides <10 ppm < = Analyte not detected above laboratory method detection limits NA = Not Analyzed NGV = No Guidance Value listed						

**Table 1**  
**Soil Analytical Data**  
**EMR Circuits**  
**Hauppauge, Suffolk County, New York**

Analyte	NYSDEC Soil Cleanup Guidance Values	SB-1	DUP 01	SB-1	SB-3	SB-3
Depth Below Ground Surface		10'-15'	--	45'-50'	0'-5'	5'-8'
Date Collected		1/11/2010	1/11/2010	1/11/2010	1/12/2010	1/12/2010
PCBs						
Aroclor-1016	0.1	<0.035	<0.034	<0.036	NA	NA
Aroclor-1221	0.1	<0.035	<0.034	<0.036	NA	NA
Aroclor-1232	0.1	<0.035	<0.034	<0.036	NA	NA
Aroclor-1242	0.1	<0.035	<0.034	<0.036	NA	NA
Aroclor-1248	0.1	<0.035	<0.034	<0.036	NA	NA
Aroclor-1254	0.1	<0.035	<0.034	<0.036	NA	NA
Aroclor-1260	0.1	<0.035	<0.034	<0.036	NA	NA
Notes: All data are presented in mg/kg. Standards taken from New York State Department of Environmental Conservation 6 NYCRR Part 375 Soil Cleanup Objective Unrestricted Use Tables and TAGM 4046 Soil Cleanup Objectives. DUP 01 collected with SB-1 10-15' < = Analyte not detected above laboratory method detection limits NA = Not Analyzed *** = Applies to the sum of these substances						

**Table 1**  
**Soil Analytical Data**  
**EMR Circuits**  
**Hauppauge, Suffolk County, New York**

Analyte	NYSDEC Soil Cleanup Guidance Values	SB-1	DUP 01	SB-1	SB-3	SB-3
Depth Below Ground Surface		10'-15'	--	45'-50'	0'-5'	5'-8'
Date Collected		1/11/2010	1/11/2010	1/11/2010	1/12/2010	1/12/2010
Metals						
Aluminum	SB	3110	3190	1960	NA	NA
Antimony	SB	<0.16 N	<0.15 N	<0.17 N	NA	NA
Arsenic	13	0.83 B	1.2	1.1	NA	NA
Barium	350	15.8 *E	17.3 *E	10.6 *E	NA	NA
Beryllium	7.2	0.13 B	0.082 B	0.031 B	NA	NA
Cadmium	2.5	<0.012	<0.012	<0.012	NA	NA
Calcium	SB	2950	140	88.7	NA	NA
Chromium	10 or SB	7.0 N*	6.5 N*	20.7 N*	NA	NA
Cobalt	30 or SB	3.6	2.4	1.7 B	NA	NA
Copper	50	42.5 E	44.7 E	35.9 E	NA	NA
Iron	2000 or SB	7310*	5390*	4850*	NA	NA
Lead	63	1.8*	2.3*	1.5*	NA	NA
Magnesium	SB	2390	716	475	NA	NA
Manganese	1600	234*	173*	138*	NA	NA
Mercury	0.18	<0.0052	<0.0058	<0.0056	NA	NA
Nickel	30	7.4	7.2	6.6	NA	NA
Potassium	SB	275*	310*	236*	NA	NA
Selenium	3.9	<0.72	<0.75	<0.71	NA	NA
Silver	2	<0.070	<0.068	<0.075	NA	NA
Sodium	SB	20.4 B	17.8 B	37.0 B	NA	NA
Thallium	SB	<0.22	<0.23	<0.22	NA	NA
Vanadium	150 or SB	7.1 E	6.5 E	4.6 E	NA	NA
Zinc	109	11.1	9.5	9.4	NA	NA

Notes:

Metals data are presented in mg/kg (ppm).

Standards taken from New York State Department of Environmental Conservation 6 NYCRR Part 375 Soil Cleanup Objective Unrestricted Use Tables and TAGM 4046 Soil Cleanup Objectives.

DUP 01 collected with SB-1 10-15'

Bold = Analyte detected above laboratory method detection limits

Shaded = Analyte detected above NYSDEC Soil Cleanup Objectives

< = Analyte not detected above laboratory method detection limits

B = This flag indicates the compound was also detected in the associated Method Blank

E = This flag indicates the compound concentration exceeded the Calibration Range.

N = Indicates the matrix spike recovery falls outside of the control limit.

NA = Not Analyzed

SB = Site Background

\* = Indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Table 2  
Groundwater Analytical Data  
EMR Circuits  
Hauppauge, Suffolk County, New York

Analyte	NYSDEC	MW-1	DUP 02	MW-1A	MW-3	MW-3A	GW-1	Trip Blank	Trip Blank
Date Collected	Guidance Criteria	1/14/2010	1/14/2010	1/13/2010	1/13/2010	1/13/2010	1/12/2010	1/13/2010	1/14/2010
<b>VOCs</b>									
Dichlorodifluoromethane	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	50	<5.0	<5.0	<5.0	<5.0	<5.0	<b>5.9</b>	<5.0	<5.0
Idomethane	NGV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	60	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl tert-butyl ether	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl acetate	NGV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	50	<5.0	<5.0	<5.0	<5.0	<5.0	<b>2.2 J</b>	<5.0	<5.0
cis-1,2-Dichloroethene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,2-Dichloropropane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromochloromethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	7	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	0.6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromomethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	0.4**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-Pentanone (MIBK)	NGV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	0.4**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichloropropane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Hexanone	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane (EDB)	NGV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

Table 2  
Groundwater Analytical Data  
EMR Circuits  
Hauppauge, Suffolk County, New York

Analyte	NYSDEC	MW-1	DUP 02	MW-1A	MW-3	MW-3A	GW-1	Trip Blank	Trip Blank
1,1,1,2-Tetrachloroethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
m,p-Xylene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
o-Xylene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylene (Total)	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isopropylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromobenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane	0.04	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Propylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorotoluene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3,5-Trimethylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chlorotoluene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
tert-Butylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
sec-Butylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Isopropyltoluene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	5*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	0.6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromo-3-chloropropane	0.04	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	10**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene	0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichlorobenzene	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene	10**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

Notes:

All data are presented in µg/l

Standards taken from NYSDEC Memorandum 1.1.1, Ambient Water Quality Standards and Guidance Values, and Groundwater Effluent Limitations, June 1998.

DUP 02 was collected with MW-1

Bold = Analyte detected above laboratory method detection limits

Shaded = Analyte detected above NYSDEC Groundwater Guidance Values

< = Analyte not detected above laboratory method detection limits

J = Indicates an estimated value

NGV = No Guidance Value listed

\* = The principal organic contaminant standard for groundwater of 5 µg/l applies to this substance

\*\* = Applies to the sum of cis- and trans-1,3-dichloropropene or 1,2,4-Trichlorobenzene and 1,2,3-Trichlorobenzene

Table 2  
Groundwater Analytical Data  
EMR Circuits  
Hauppauge, Suffolk County, New York

Analyte	NYSDEC	MW-1	DUP 02	MW-1A	MW-3	MW-3A	GW-1	Trip Blank	Trip Blank
<b>SVOCs</b>									
Phenol	1***	<10	<10	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	1.0	<10	<10	NA	NA	NA	NA	NA	NA
2-Chlorophenol	1***	<10	<10	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	3	<10	<10	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	3	<10	<10	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	3	<10	<10	NA	NA	NA	NA	NA	NA
2-Methylphenol	1***	<10	<10	NA	NA	NA	NA	NA	NA
2,2-oxybis(1-Chloropropane)	NGV	<10	<10	NA	NA	NA	NA	NA	NA
4-Methylphenol	1***	<10	<10	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NGV	<10	<10	NA	NA	NA	NA	NA	NA
Hexachloroethane	5*	<10	<10	NA	NA	NA	NA	NA	NA
Nitrobenzene	0.4	<10	<10	NA	NA	NA	NA	NA	NA
Isophorone	50	<10	<10	NA	NA	NA	NA	NA	NA
2-Nitrophenol	1***	<10	<10	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	<10	<10	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	5*	<10	<10	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	10**	<10	<10	NA	NA	NA	NA	NA	NA
Naphthalene	10	<10	<10	NA	NA	NA	NA	NA	NA
4-Chloroaniline	5*	<10	<10	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	5*	<10	<10	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.5	<10	<10	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	1***	<10	<10	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NGV	<10	<10	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	5*	<10	<10	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	1***	<10	<10	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	1***	<20	<20	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	10	<10	<10	NA	NA	NA	NA	NA	NA
2-Nitroaniline	5*	<20	<20	NA	NA	NA	NA	NA	NA
Dimethylphthalate	50	<10	<10	NA	NA	NA	NA	NA	NA
Acenaphthylene	NGV	<10	<10	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	5*	<10	<10	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5*	<20	<20	NA	NA	NA	NA	NA	NA
Acenaphthene	20	<10	<10	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	10	<20	<20	NA	NA	NA	NA	NA	NA

Table 2  
Groundwater Analytical Data  
EMR Circuits  
Hauppauge, Suffolk County, New York

Analyte	NYSDEC	MW-1	DUP 02	MW-1A	MW-3	MW-3A	GW-1	Trip Blank	Trip Blank
4-Nitrophenol	1***	<20	<20	NA	NA	NA	NA	NA	NA
Dibenzofuran	NGV	<10	<10	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5*	<10	<10	NA	NA	NA	NA	NA	NA
Diethylphthalate	50	<10	<10	NA	NA	NA	NA	NA	NA
4-Chlorophenyl-phenylether	NGV	<10	<10	NA	NA	NA	NA	NA	NA
Fluorene	50	<10	<10	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5*	<20	<20	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	1***	<20	<20	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	50	<10	<10	NA	NA	NA	NA	NA	NA
4-Bromophenyl-phenylether	NGV	<10	<10	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.04	<10	<10	NA	NA	NA	NA	NA	NA
Pentachlorophenol	1***	<20	<20	NA	NA	NA	NA	NA	NA
Phenanthrene	50	<10	<10	NA	NA	NA	NA	NA	NA
Anthracene	50	<10	<10	NA	NA	NA	NA	NA	NA
Carbazole	NGV	<10	<10	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	50	<10	<10	NA	NA	NA	NA	NA	NA
Fluoranthene	50	<10	<10	NA	NA	NA	NA	NA	NA
Pyrene	50	<10	<10	NA	NA	NA	NA	NA	NA
Butylbenzylphthalate	50	<10	<10	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	5*	<10	<10	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	0.002	<10	<10	NA	NA	NA	NA	NA	NA
Chrysene	0.002	<10	<10	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	5	<10	<10	NA	NA	NA	NA	NA	NA
Di-n-octylphthalate	50	<10	<10	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	0.002	<10	<10	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	0.002	<10	<10	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	ND	<10	<10	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	0.002	<10	<10	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NGV	<10	<10	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NGV	<10	<10	NA	NA	NA	NA	NA	NA

Notes:

All data are presented in µg/l

Standards taken from NYSDEC Memorandum 1.1.1, Ambient Water Quality Standards and Guidance Values, and Groundwater Effluent Limitations, June 1998.

DUP 02 was collected with MW-1

< = Analyte not detected above laboratory method detection limits

NA = Not Analyzed

NGV = No Guidance Value listed

\* = The principal organic contaminant standard for groundwater of 5 µg/l applies to this substance

\*\*\* = Applies to the sum of phenolic compounds

Table 2  
Groundwater Analytical Data  
EMR Circuits  
Hauppauge, Suffolk County, New York

Analyte	NYSDEC	MW-1	DUP 02	MW-1A	MW-3	MW-3A	GW-1	Trip Blank	Trip Blank
<b>Pesticides</b>									
alpha-BHC	NGV	<0.050	<0.050	NA	NA	NA	NA	NA	NA
beta-BHC	NGV	<0.050	<0.050	NA	NA	NA	NA	NA	NA
delta-BHC	NGV	<0.050	<0.050	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	NGV	<0.050	<0.050	NA	NA	NA	NA	NA	NA
Heptachlor	0.04	<0.050	<0.050	NA	NA	NA	NA	NA	NA
Aldrin	ND	<0.050	<0.050	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	0.03	<0.050	<0.050	NA	NA	NA	NA	NA	NA
Endosulfan I	NGV	<0.050	<0.050	NA	NA	NA	NA	NA	NA
Dieldrin	0.004	<0.10	<0.10	NA	NA	NA	NA	NA	NA
4,4'-DDE	0.2	<0.10	<0.10	NA	NA	NA	NA	NA	NA
Endrin	ND	<0.10	<0.10	NA	NA	NA	NA	NA	NA
Endosulfan II	NGV	<0.10	<0.10	NA	NA	NA	NA	NA	NA
4,4'-DDD	0.3	<0.10	<0.10	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NGV	<0.10	<0.10	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.2	<0.10	<0.10	NA	NA	NA	NA	NA	NA
Methoxychlor	35	<0.50	<0.50	NA	NA	NA	NA	NA	NA
Endrin ketone	5*	<0.10	<0.10	NA	NA	NA	NA	NA	NA
Endrin aldehyde	5*	<0.10	<0.10	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.05	<0.050	<0.050	NA	NA	NA	NA	NA	NA
gamma-Chlordane	0.05	<0.050	<0.050	NA	NA	NA	NA	NA	NA
Toxaphene	0.06	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Notes:									
All data are presented in µg/l									
Standards taken from NYSDEC Memorandum 1.1.1, Ambient Water Quality Standards and Guidance Values, and Groundwater Effluent Limitations, June 1998.									
DUP 02 was collected with MW-1									
< = Analyte not detected above laboratory method detection limits									
NA = Not Analyzed									
ND = Non-Detect									
NGV = No Guidance Value listed									
* = Applies to the sum of these substances									
<b>PCBs</b>									
Aroclor-1016	0.09*	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Aroclor-1221	0.09*	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Aroclor-1232	0.09*	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Aroclor-1242	0.09*	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Aroclor-1248	0.09*	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Aroclor-1254	0.09*	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Aroclor-1260	0.09*	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Notes:									
All data are presented in µg/l									
Standards taken from NYSDEC Memorandum 1.1.1, Ambient Water Quality Standards and Guidance Values, and Groundwater Effluent Limitations, June 1998.									
DUP 02 was collected with MW-1									
NA = Not Analyzed									
* = Applies to the sum of these substances									

Table 2  
Groundwater Analytical Data  
EMR Circuits  
Hauppauge, Suffolk County, New York

Analyte	NYSDEC	MW-1	DUP 02	MW-1A	MW-3	MW-3A	GW-1	Trip Blank	Trip Blank
<b>Metals</b>									
Aluminum	NGV	<12	<12	NA	NA	NA	NA	NA	NA
Antimony	3	<4.2	<4.2	NA	NA	NA	NA	NA	NA
Arsenic	25	<3.1	<3.1	NA	NA	NA	NA	NA	NA
Barium	1,000	<b>35.9 B</b>	<b>34.7 B</b>	NA	NA	NA	NA	NA	NA
Beryllium	3	<0.037	<0.037	NA	NA	NA	NA	NA	NA
Cadmium	5	<0.50	<0.50	NA	NA	NA	NA	NA	NA
Calcium	NGV	<b>1,300</b>	<b>12,400</b>	NA	NA	NA	NA	NA	NA
Chromium	50	<b>0.98 B</b>	<b>1.1 B</b>	NA	NA	NA	NA	NA	NA
Cobalt	NGV	<b>2.4 B</b>	<b>2.6 B</b>	NA	NA	NA	NA	NA	NA
Copper	200	<b>21.9 B</b>	<b>23.1 B</b>	NA	NA	NA	NA	NA	NA
Iron	300	<47	<47	NA	NA	NA	NA	NA	NA
Lead	25	<2.1	<2.1	NA	NA	NA	NA	NA	NA
Magnesium	35,000	<b>6,790</b>	<b>6,780</b>	NA	NA	NA	NA	NA	NA
Manganese	300	<b>7.7 B</b>	<b>31.3 B</b>	NA	NA	NA	NA	NA	NA
Mercury	0.7	<0.056	<0.056	NA	NA	NA	NA	NA	NA
Nickel	100	<b>2.9 B</b>	<b>3.1 B</b>	NA	NA	NA	NA	NA	NA
Potassium	NGV	<b>1,690</b>	<b>1,700</b>	NA	NA	NA	NA	NA	NA
Selenium	10	<10	<10	NA	NA	NA	NA	NA	NA
Silver	50	<2.4	<2.4	NA	NA	NA	NA	NA	NA
Sodium	20,000	<b>32,400</b>	<b>32,300</b>	NA	NA	NA	NA	NA	NA
Thallium	0.5	<5.7	<5.7	NA	NA	NA	NA	NA	NA
Vanadium	NGV	<0.34	<0.34	NA	NA	NA	NA	NA	NA
Zinc	2,000	<b>105</b>	<b>103</b>	NA	NA	NA	NA	NA	NA

Notes:

All data are presented in µg/l

Standards taken from NYSDEC Memorandum 1.1.1, Ambient Water Quality Standards and Guidance Values, and Groundwater Effluent Limitations, June 1998.

DUP 02 was collected with MW-1

Bold = Analyte detected above laboratory method detection limits

Shaded = Analyte detected above NYSDEC Groundwater Guidance Values

< = Analyte not detected above laboratory method detection limits

B = Indicates the compound was also detected in the associated Method Blank.

NA = Not Analyzed

NGV = No Guidance Value listed

Table 3  
Air Analytical Data  
EMR Circuits  
Hauppauge, Suffolk County, New York

Analyte	NYSDOH Background Concentrations	SV-1	SV-DUPE A	SV-2	SV-3	SV-4	SV-5	SSV-1	SSV-2	IA-1	OA-1
Date Collected		1/13/2010	1/13/2010	1/13/2010	1/13/2010	1/13/2010	1/13/2010	1/13/2010	1/13/2010	1/13/2010	1/13/2010
VOCs											
Propene	--	23.06	20.31	41.13	9.07	22.72	14.59	<2.03	<2.03	<1.01	4.53
Dichlorodifluoromethane (Freon 12)	10.5	3.46	2.72	2.82	2.82	2.92	3.31	<4.81	<4.81	<2.40	3.21
Chloromethane	3.1	<0.59	<0.59	1.82	1.49	<0.59	1.30	<2.38	<2.38	<1.18	1.45
1,2-Dichlorotetrafluoroethane (Freon 114)	--	<1.72	<1.72	<1.72	<0.35	<1.72	<0.35	<6.89	<6.89	<3.45	<0.35
Vinyl chloride	<1.0	<0.60	<0.60	<0.60	<0.14	<0.60	<0.14	<2.38	<2.38	<1.19	<0.14
1,3-Butadiene	<2.7	<0.57	<0.57	<0.57	<0.11	<0.57	<0.11	<2.25	<2.25	<1.13	<0.11
Bromomethane	<1.1	<0.82	<0.82	<0.82	<0.15	<0.82	<0.15	<3.29	<3.29	<1.64	<0.15
Chloroethane	<1.0	<0.71	<0.71	<0.71	<0.15	<0.71	<0.15	<2.85	<2.85	<1.42	<0.15
Acetone	59.8	15.92	55.13	6.89	46.34	36.36	10.98	456.25	21.48	31.84	10.95
Trichlorofluoromethane (Freon 11)	6.7	5.34	4.50	1.80 J	2.19*	<1.61	2.75*	<6.46	<6.46	<3.22	2.81*
Ethanol	140	7.73	8.28	5.02	5.58	16.20	4.13	35.82	16.59	348.81 D	13.67
Acrylonitrile	--	<0.33	<0.33	<0.33	<0.06	<0.33	<0.06	<1.31	<1.31	<0.66	<0.06
1,1-Dichloroethene	<1.2	8.89	7.89	<0.79	<0.13	<0.79	<0.13	<3.14	<3.14	<1.57	<0.13
Methylene chloride	5	<0.88	<0.88	<0.88	<0.17	<0.88	0.35	<3.54	<3.54	15.21	0.69
1,1,2-Trichlorotrifluoroethane (Freon 113)	--	87.38	77.41	<1.72	2.38	<1.72	<0.27	<6.89	48.44	<3.45	0.77
Carbon disulfide	2.1	4.17	3.77	0.96 J	0.62 J	1.18 J	0.25 J	<2.32	<2.32	<1.16	<0.11
trans-1,2-Dichloroethene	--	<0.76	<0.76	<0.76	<0.14	<0.76	<0.14	<3.03	<3.03	<1.51	<0.14
1,1-Dichloroethane	<0.5	2.75	2.47	<0.77	<0.14	<0.77	<0.14	<3.10	<3.10	<1.55	<0.14
Methyl tert-butyl ether	<6.4	<0.69	<0.69	<0.69	<0.16	<0.69	<0.16	<2.77	<2.77	<1.39	<0.16
Isopropyl alcohol	--	5.01	4.86	4.25	3.80	8.25	0.86 J	346.01	14.04	28.47	8.07
2-Butanone (MEK)	7.5	10.88	10.88	12.27	8.70	21.14	1.56	5.90	<4.78	27.25	2.92
cis-1,2-Dichloroethene	<1.2	4.92	4.56	<0.54	<0.10	<0.54	0.59	<2.14	<2.14	<1.07	<0.10
Hexane	6.4	3.10	3.67	5.11	0.60	3.84	0.28 J	4.94 J	2.82 J	4.23	1.48
Ethyl acetate	3.2	<0.70	<0.70	<0.70	0.36	<0.70	<0.13	<2.79	<2.79	4.90	<0.13
Chloroform	<1.2	16.50	14.70	1.31 J	0.29 J	<0.73	<0.12	<2.94	8.57	<1.47	<0.12
Tetrahydrofuran	--	<0.66	<0.66	<0.66	0.44	<0.66	<0.14	<2.65	<2.65	2.42 J	<0.14
1,2-Dichloroethane	<0.7	<0.57	<0.57	<0.57	<0.11	<0.57	<0.11	<2.30	<2.30	<1.15	<0.11
1,1,1-Trichloroethane	10.8	54.56	48.01	<0.75	1.91	1.09 J	<0.13	<3.00	30.99	<1.50	<0.13
Benzene	5.1	1.44 J	1.50 J	4.05	0.70	4.05	<0.09	2.93 J	<1.93	2.04 J	2.14
Carbon tetrachloride	<1.1	<0.91	<0.91	<0.91	<0.15	<0.91	<0.15	<3.64	<3.64	<1.82	0.63*
Cyclohexane	--	<0.74	<0.74	<0.74	<0.33	<0.74	<0.33	<2.95	<2.95	<1.48	0.48
1,2-Dichloropropane	<1.6	<0.79	<0.79	<0.79	<0.11	<0.79	<0.11	<3.18	<3.18	<1.59	<0.11
Bromodichloromethane	--	<1.21	<1.21	<1.21	<0.24	<1.21	<0.24	<4.81	<4.81	<2.41	<0.24
Trichloroethene	1.2	394.47	345.03	<1.51	5.48	3.71	0.59	13.54	180.57	<3.03	<0.29
1,4-Dioxane	--	<1.41	<1.41	<1.41	<0.08	<1.41	<0.08	<5.61	<5.61	<2.81	<0.08
n-Heptane	--	<0.57	<0.57	3.36	<0.12	3.57	<0.12	<2.26	<2.26	1.80 J	0.70
4-Methyl-2-pentanone (MIBK)	3	<0.94	<0.94	<0.94	<0.16	<0.94	<0.16	<3.76	<3.76	<1.88	<0.16
cis-1,3-Dichloropropene	<2.0	<0.86	<0.86	<0.86	<0.16	<0.86	<0.16	<3.46	<3.46	<1.73	<0.16
trans-1,3-Dichloropropene	<1.2	<0.72	<0.72	<0.72	<0.14	<0.72	<0.14	<2.89	<2.89	<1.44	<0.14
1,1,2-Trichloroethane	<1.4	12.82	12.55	<1.28	<0.21	<1.28	<0.21	<5.11	16.37	<2.55	<0.21
Toluene	25.9	11.21	18.29	21.75	1.39	32.96	<0.11	18.66	30.85	12.34	5.31
2-Hexanone (MBK)	--	<0.92	<0.92	<0.92	<0.15	<0.92	<0.15	<3.67	<3.67	<1.83	<0.15
Dibromochloromethane	--	<1.64	<1.64	<1.64	<0.38	<1.64	<0.38	<6.58	<6.58	<3.29	<0.38
1,2-Dibromoethane (EDB)	<1.4	<1.15	<1.15	<1.15	<0.24	<1.15	<0.24	<4.61	<4.61	<2.31	<0.24
Tetrachloroethene	5.9	353.30	305.83	2.03 J	4.27	54.25	<0.27	37.43	194.62	<2.59	0.54 J
Chlorobenzene	<0.8	<1.30	<1.30	<1.30	<0.22	<1.30	<0.22	<5.20	<5.20	<2.60	<0.22
1,1,1,2-Tetrachloroethane	--	<2.11	<2.11	<2.11	<0.37	<2.11	<0.37	<8.45	<8.45	<4.23	<0.37
Ethylbenzene	3.4	3.42	3.29	2.95	<0.15	11.45	<0.15	<3.31	7.28 J	<1.66	0.74
m,p-Xylene	12.2	13.48	11.10	11.27	<0.36	36.37	<0.36	<8.50	28.44	<4.24	2.69
Bromoform	--	<3.27	<3.27	<3.27	<0.70	<3.27	<0.70	<13.13	<13.13	<6.54	<0.70
Styrene	<2.3	<0.80	<0.80	<0.80	<0.17	<0.80	<0.17	<3.18	<3.18	<1.59	<0.17
o-Xylene	4.4	3.86	2.90	3.25	<0.21	9.15	<0.21	<4.64	8.15 J	<2.31	1.00
1,1,2,2-Tetrachloroethane	--	<2.99	<2.99	<2.99	<0.55	<2.99	<0.55	<11.95	<11.95	<5.98	<0.55
Isopropylbenzene	--	<1.27	<1.27	<1.27	<0.18	<1.27	<0.18	<5.11	<5.11	<2.55	<0.18
1,3,5-Trimethylbenzene	<4.6	1.72 J	<1.40	<1.40	<0.25	1.62 J	<0.25	<5.60	<5.60	<2.80	0.34 J
4-Ethyltoluene	<3.1	1.43 J	<1.38	<1.38	<0.27	1.38 J	<0.27	<5.51	<5.51	<2.75	0.29 J
1,2,4-Trimethylbenzene	5.1	5.56	1.67 J	3.54	<0.24	5.16	<0.24	<5.11	12.00	<2.57	0.74**
1,3-Dichlorobenzene	<1.1	<1.66	<1.66	<1.66	<0.35	<1.66	<0.35	<6.67	<6.67	<3.32	<0.35
Benzyl chloride	<1.7	<1.27	<1.27	<1.27	<0.28	<1.27	<0.28	<5.09	<5.09	<2.54	<0.28
1,4-Dichlorobenzene	1.4	<1.56	<1.56	<1.56	<0.25	<1.56	<0.25	<6.25	<6.25	<3.12	<0.25
sec-Butylbenzene	--	<1.45	<1.45	<1.45	<0.26	<1.45	<0.26	<5.82	<5.82	<2.90	<0.26
4-Isopropyltoluene	--	<1.31	<1.31	<1.31	<0.25	1.40 J	<0.25	<5.27	<5.27	<2.63	<0.25
1,2-Dichlorobenzene	<1.0	<1.36	<1.36	<1.36	<0.25	<1.36	<0.25	<5.46	<5.46	<2.73	<0.25
n-Butylbenzene	--	<1.17	<1.17	<1.17	<0.21	<1.17	<0.21	<4.68	<4.68	<2.34	<0.21
1,2,4-Trichlorobenzene	<1.2	<1.19	<1.19	<1.19	<0.18	<1.19	<0.18	<4.74	<4.74	<2.37	<0.18
Hexachlorobutadiene	<2.5	<2.64	<2.64	<2.64	<0.45	<2.64	<0.45	<10.58	<10.58	<5.29	<0.45
Notes: All data are presented in µg/m³ Table C-2 EPA 2001 Building Assessment and survey evaluation database (75 percentile) was used for New York State Department of Health (NYSDOH) Indoor Air Background Concentrations SV DUPE A was collected with SV-1 Bold = Analyte detected above laboratory method detecton limits Shaded = Analyted detected above NYSDOH Indoor Air Background Levels, for IA-1 only. D = Analyte was analyzed at a dilution J = Detected above the Method Detection Limit but below the Reporting limit; therefore, result is an estimated concentration * = Data for this analte may be biased high based on QC spike recoveries ** = Data for this analyte may be biased low beaed on CCV spike recoveries											

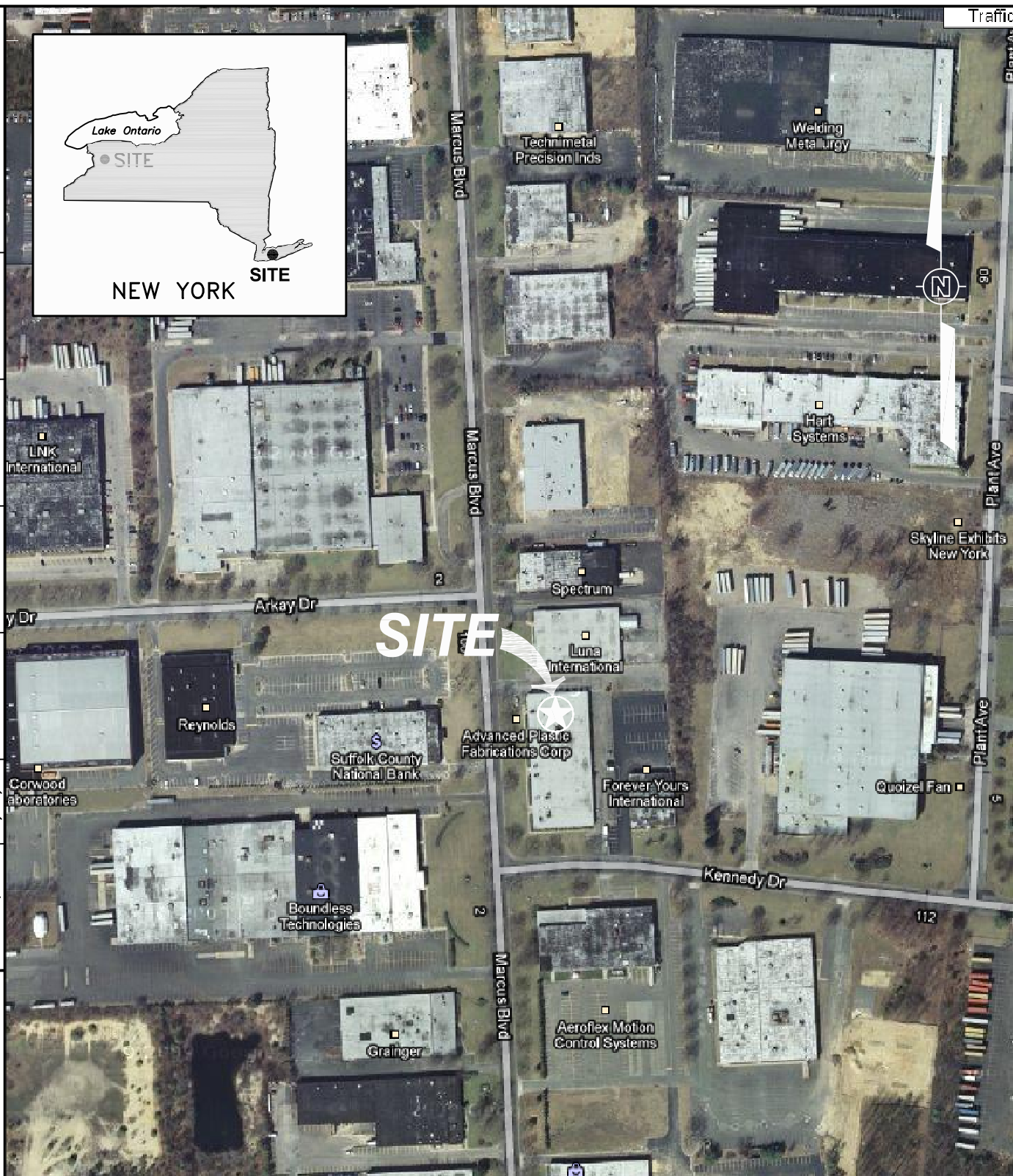
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## ***FIGURES***

---



OFFICE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	03/10/10	M. FLANAGAN	S. SHKOLNIK	J. FLANAGAN	M. FLANAGAN	134685A10



NOT TO SCALE



NEW YORK STATE DEPARTMENT OF  
 ENVIRONMENTAL CONSERVATION

FIGURE 1  
 SITE LOCATION MAP

99 MARCUS BLVD  
 HAUPPAUGE, NEW YORK

REFERENCE:  
 MAP FROM [www.google.com](http://www.google.com)





Legend

Soil Vapor-Ground Water

Soil Vapor

Monitoring\_Wells

Sub-Slab Soil Vapor

Interior Wall

DRAWN BY:	MJS	CHECKED BY:	MEF
DESIGNED BY:	MJS	APPROVED BY:	MEF

Shaw®

FIGURE:  
2

FIGURE 2- SITE PLAN  
OVERALL BASE MAP OF EMR CIRCUITS  
99 MARCUS BLVD

HAUPPAUGE, SUFFOLK COUNTY, NY

PREPARED FOR:

NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION

SCALE

2002040

Feet

REFERENCE:

1 - ORTHOIMAGERY TAKEN FROM NYSCS&CIC.

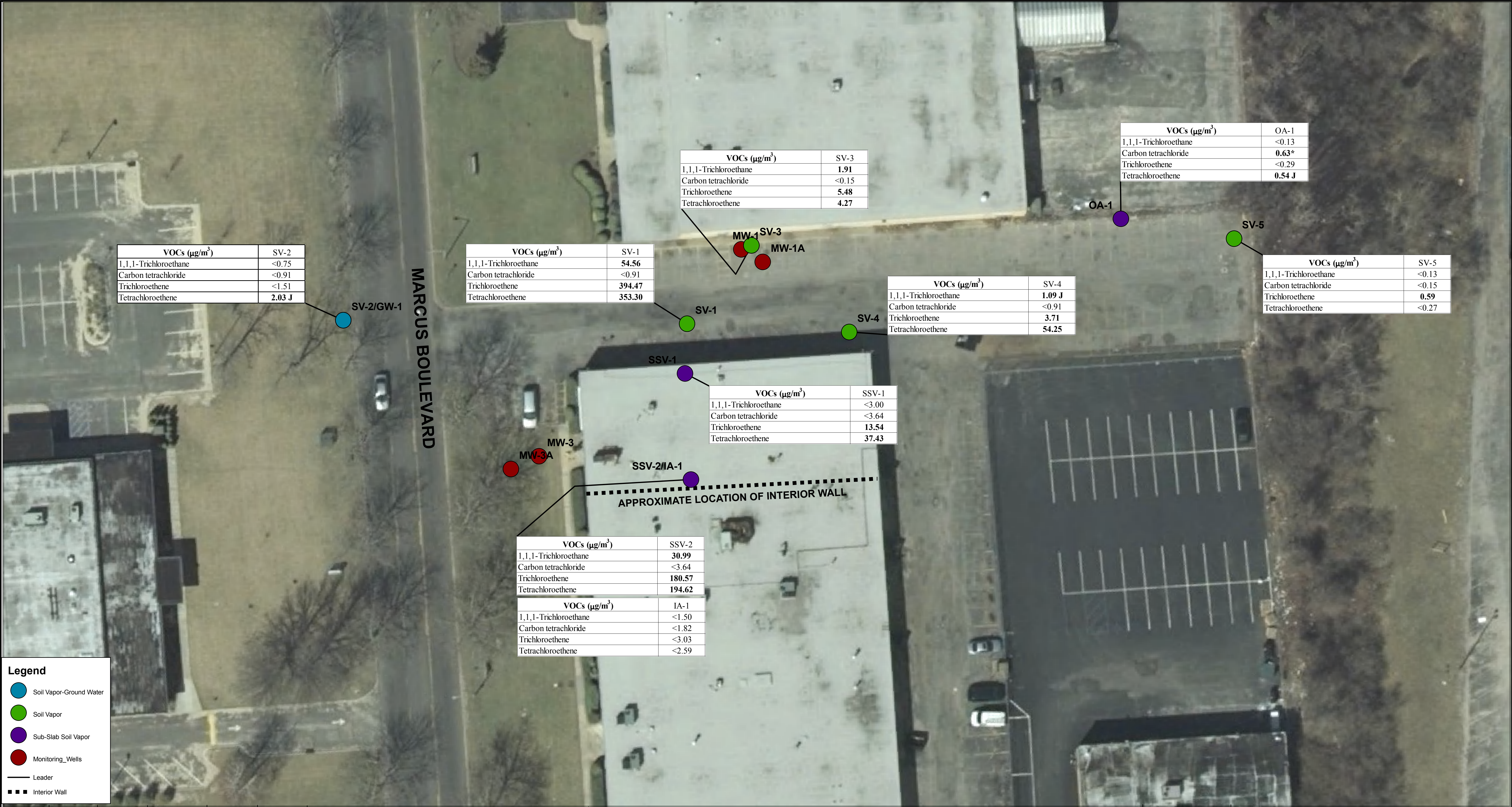
Shaw E & I Engineering of New York, P.C.

Project Number

134685

REV	DATE	BY	CHKD	APRD	DESCRIPTION/ISSUE






DRAWN BY: MJS

CHECKED BY: MEF

DESIGNED BY: MJS

APPROVED BY: MEF

**FIGURE:**  
3

**FIGURE 3- SOIL VAPOR ANALYTICAL RESULTS  
OVERALL BASE MAP OF EMR CIRCUITS  
99 MARCUS BLVD**  
  
**HAUPPAUGE, SUFFOLK COUNTY, NY  
SAMPLING DATE: JANUARY 13, 2010**

PREPARED FOR:


NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION

SCALE

20 0 20 40  
Feet

REFERENCE:

1 - ORTHOIMAGERY TAKEN FROM NYSCS&CIC.



Shaw E & I Engineering of New York, P.C.

Project Number

134685

REV	DATE	BY	CHKD	APRD	DESCRIPTION/ISSUE



## ***APPENDIX A***

### ***FIELD LOGS***



# Drilling Log

Soil Boring **SB-1/SV-1**

Page: 1 of 2

Project EMR Circuits Owner NYSDEC  
Location 99 Marcus Blvd, Hauppauge, NY Proj. No. 134685  
Surface Elev. NA Total Hole Depth 50.0 ft. North 40.812089 ft. East -73.246622 ft.  
Top of Casing NA Water Level Initial NA Static NA Diameter 2.25 in.  
Screen: Dia NA Length NA Type/Size NA  
Casing: Dia NA Length NA Type NA  
Fill Material Bentonite, Glass Beads Rig/Core 6610  
Drill Co. Zebra Method Direct Push with 5 ft. macro core  
Driller L. Reiss Log By M. Flanagan Date 1/11/10 Permit # NA  
Checked By NA License No. NA

COMMENTS  
SV-1 completed immediately  
adjacent to 60 ft bgs boring,  
near historic leaching pools.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						Asphalt
2	0.0	S-1 75%			SP	Light brown, medium to fine SAND, little round gravel, dry.
4						
6						Light brown, medium to fine grain SAND, little subround gravel, trace quartzite and large gravel horizon at 6 feet below ground surface, dry.
8	0.0	S-2 75%			SP SM	
10						Light brown, medium to fine gran SAND, little subround gravel, dry.
12	0.069	S-3 100%			SP SM	
14	0.013					
16						Light brown, medium to fine grain SAND, little subround gravel, some iron staining at approximately 16 feet below ground surface, dry.
18	0.040 0.024	S-4 85%			SP SM	Grades at 18 feet below ground surface to light brown, fine grain SAND, some subround gravel, trace silt, dry.
20						Light brown fine grain SAND, some subround gravel, trace silt, dry.
22	0.0	S-5 60%			SP SM	
24						Grades at 23 feet below ground surface to medium grain SAND, subround large GRAVEL, dry.

IT COMMERCIAL Rev: 12/6/99 EMR CIRCUITS.GPJ IT CORP.GDT 4/29/10

Continued Next Page



# Drilling Log

Soil Boring **SB-1/SV-1**

Page: 2 of 2

Project EMR Circuits

Owner NYSDEC

Location 99 Marcus Blvd, Hauppauge, NY

Proj. No. 134685

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description  (Color, Texture, Structure)  Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
26	0.0	S-6 65%			SP SM	<i>Continued</i> Brown to light brown, fine to medium grain SAND, little silt, trace subround gravel, dry.
28						
30						
32	0.050	S-7 70%			SP SM	Dark brown, fine to medium grain SAND, little subround gravel, 6-inch layer of white quartz observed at approximately 32 feet below ground surface, dry.
34						Light brown, medium to coarse SAND, little gravel, dry.
36	0.0	S-8 0%				No Recovery tube crushed
38						
40						No Recovery tube crushed
42	S-9 0%					
44						
46						Brown, fine to medium grain SAND, some silt at 45-47 feet below ground surface grading to medium grain SAND and GRAVEL, dry.
48	0.12	S-10			SP SM	
50						Refusal at 50 feet below ground surface with soil boring equipment. Vapor point completed at 60 feet below ground surface.
52						
54						
56						
58						



# Drilling Log

Soil Boring **SB-2/SV-2**

Page: 1 of 1

Project EMR Circuits Owner NYSDEC  
Location 99 Marcus Blvd, Hauppauge, NY Proj. No. 134685  
Surface Elev. NA Total Hole Depth 8.0 ft. North 40.812102 ft. East -73.247163 ft.  
Top of Casing NA Water Level Initial NA Static NA Diameter 2.25 in.  
Screen: Dia NA Length NA Type/Size NA  
Casing: Dia NA Length NA Type NA  
Fill Material Bentonite, Glass Beads Rig/Core 6610  
Drill Co. Zebra Method Direct Push with 5 ft. macro core  
Driller L. Reiss Log By R. Adams Date 1/12/10 Permit # NA  
Checked By NA License No. NA

COMMENTS  
Across Marcus Boulevard

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description  (Color, Texture, Structure)  Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						Grass, roots, dark brown, coarse SAND, dry.
1						Light brown, fine to medium grain SAND, dry.
2					SP	
3	0.032	S-1 70%				Light brown, fine to medium grain SAND, some round gravel, dry.
4					SP	
5						Light brown, fine to medium grain SAND, little round gravel, dry.
6					SP	
7	0.040	S-2 100%			SP SM	Light brown, fine SAND, little light brown silt, moist.
8						Light brown, coarse SAND, little round gravel, dry.
9					SP	
						Boring terminated at 8 feet below ground surface.



# Drilling Log

Soil Boring **SB-3/SV-3**

Page: 1 of 1

Project EMR Circuits Owner NYSDEC  
Location 99 Marcus Blvd, Hauppauge, NY Proj. No. 134685  
Surface Elev. NA Total Hole Depth 8.0 ft. North 40.812181 ft. East -73.246518 ft.  
Top of Casing NA Water Level Initial NA Static NA Diameter 2.25 in.  
Screen: Dia NA Length NA Type/Size NA  
Casing: Dia NA Length NA Type NA  
Fill Material Bentonite, Glass Beads Rig/Core 6610  
Drill Co. Zebra Method Direct Push with 5 ft. macro core  
Driller L. Reiss Log By R. Adams Date 1/12/10 Permit # NA  
Checked By NA License No. NA

## COMMENTS

Located between monitoring wells MW-1 and MW-1A

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						Asphalt
1						Light brown, medium grain SAND, little round gravel, dry.
2					SP	
3	0.073	S-1 70%				Light brown, medium to coarse grain SAND, some round gravel, layer of dark brown brittle quartzite at 4 feet below ground surface, dry.
4					SP	
5						Light brown, medium grain SAND, little round gravel, dry.
6					SP	
7	0.111	S-2 100%				White, fine to medium grain SAND, flakes of rock, dry.
8					SP	
9						Boring terminated at 8 feet below ground surface.





# Drilling Log

Soil Boring

**SB-4/SV-4**

Page: 1 of 1

Project EMR Circuits Owner NYSDEC  
Location 99 Marcus Blvd, Hauppauge, NY Proj. No. 134685  
Surface Elev. NA Total Hole Depth 8.0 ft. North 40.812075 ft. East -73.246367 ft.  
Top of Casing NA Water Level Initial NA Static NA Diameter 2.25 in.  
Screen: Dia NA Length NA Type/Size NA  
Casing: Dia NA Length NA Type NA  
Fill Material Bentonite, Glass Beads Rig/Core 6610  
Drill Co. Zebra Method Direct Push with 5 ft. macro core  
Driller L. Reiss Log By R. Adams Date 1/12/10 Permit # NA  
Checked By NA License No. NA

**COMMENTS**

Located at northeast corner of building

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						Asphalt
1					SP	Light beige to brown, medium grain SAND, dry. Light brown, medium grain SAND, little round gravel, dry.
2					SP	
3	0.061	S-1 80%			SP	Dark brown, fine to medium grain SAND, dry. Light brown, medium grain SAND, little round gravel, dry.
4					SP	
5						Light brown, SAND, little round to subround gravel, dry
6	0.035	S-2 50%			SP	
7						
8						Boring terminated at 8 feet below ground surface.
9						



# Drilling Log

Soil Boring

**SB-5/SV-5**

Page: 1 of 1

Project EMR Circuits Owner NYSDEC  
Location 99 Marcus Blvd, Hauppauge, NY Proj. No. 134685  
Surface Elev. NA Total Hole Depth 8.0 ft. North 40.812178 ft. East -73.24576 ft.  
Top of Casing NA Water Level Initial NA Static NA Diameter 2.25 in.  
Screen: Dia NA Length NA Type/Size NA  
Casing: Dia NA Length NA Type NA  
Fill Material Bentonite, Glass Beads Rig/Core 6610  
Drill Co. Zebra Method Direct Push with 5 ft. macro core  
Driller L. Reiss Log By R. Adams Date 1/12/10 Permit # NA  
Checked By NA License No. NA

COMMENTS  
Located at rear of property.  
Downgradient location.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						Asphalt
1						Light brown, medium grain SAND, some round gravel, dry.
2						
3	0.031	S-1 65%			SP	
4						
5						Light brown, medium grain SAND, dry.
6					SP	
7	0.042	S-2 95%			SP	Dark brown, organic fine grain SAND, dry.
8					SP	Light brown, medium grain SAND, little round gravel, dry.
9						Boring terminated at 8 feet below ground surface.



Shaw® Shaw Environmental, Inc.

Project Name: EMR Circuits

Date: 1/13/10

Sampler(s): MF/RA

Sample Location Information:

Sample ID:

SV-1 + SV-Dupe A

Address/Location:

99 Marcus Ave.

PID Meter Used:

ppb Rae

He Detector Used:

MGD

Weather Conditions: Sunny + Cold, slight wind.

SV-Dupe A

Soil Gas

~~Ambient Air~~

Comments

SUMMA CANISTER RECORD

Canister Serial Number:

0261

5569

Flow Controller Number:

0036

2863

Start Date / Time:

1/13/10

1335

1/13/10

1335

Stop Date / Time:

1/13/10

1535

1/13/10

1535

Duplicate Sample ID:

SV-Dupe A

Sample ID Category:

Soil Vapor

Soil Vapor

Share same sample

Sample Depth:

60 ft bgs

60 ft bgs

line - use a "1"

Approximate GW Depth:

103 ft bgs

103 ft bgs

Air Temperature:

27°F

~ 27°F

Direction/Distance from

any Structure: 99 Marcus

10' G"

10' G"

Distance to Roadway:

Parking Lot

Parking Lot

Any noticeable odor?

None

None

PID Reading (ppb):

608 ppb

608 ppb

He Detector Reading (% He):

0-25 ppm

0-25 ppm

Start @ 0, slight inc, then

Constituents Sampled:

10-15

10-15

back to 0 ppm

Container Description:

GL Summa

GL Summa

Checked Seals:

☒ Yes

☐ No

Took GPS Coordinates at Position:

☒ Yes

☐ No

Tracer Gas Test:

☒ Successful

☐ Unsuccessful

Sample: Both taken here

☒ Duplicate

☐ Matrix Spike Duplicate

☐ Matrix Spike

☒ Analysis


Photo Taken:

☒ Yes

☐ No

Reg/Can Pressure: Start @ 30" Hg  
Stop @ 1.5" Hg

Start @ 30" Hg  
Stop @ 3" Hg

 <b>Shaw</b> ® Shaw Environmental, Inc.		Project Name: NYSDEC - EMR Circuits	
		Date: 1/13/10	
Sample Location Information:		Sampler(s): MF/RA	
Sample ID: SY-2		Address/Location: 99 Marcus Blvd. Hauppauge, NY	
PID Meter Used: ppB Rae	He Detector Used: MGD 2002	Weather Conditions: Sunny + cold.	
	<b>Soil Gas</b>	<b>Ambient Air</b>	<b>Comments</b>
<b>SUMMA CANISTER RECORD</b>			
Canister Serial Number:	0263		
Flow Controller Number:	2989		
Start Date / Time:	1/13/10 1340		
Stop Date / Time:	1/13/10 1540		
Canister Start Pressure:	29 in Hg		
Canister Stop Pressure:	0-1 in Hg		
Duplicate Sample ID:	NA		
Sample ID Category:	Soil Vapor		
Sample Depth:	8 ft bgs		
Approximate GW Depth:	103 ft bgs		
Air Temperature:	27 °F		
Direction/Distance from any Structure:	Across Marcus Blvd, ~2 ft from curb		
Distance to Roadway:	~ 2 ft		
Any noticeable odor?	None		
PID Reading (ppb):	137		
He Detector Reading (ppm):	0		+ 2000 in enclosure
Constituents Sampled:	10-15		
Container Description:	6 L Summa		
Checked Seals: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Tracer Gas Test: <input checked="" type="checkbox"/> Successful <input type="checkbox"/> Unsuccessful Sample: <input type="checkbox"/> Duplicate <input type="checkbox"/> Matrix Spike Duplicate <input type="checkbox"/> Matrix Spike <input checked="" type="checkbox"/> Analysis Photo Taken: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			



Shaw Environmental, Inc.

Project Name: *EMR Circuits*

Date: *1/13/10*

Sampler(s): *MF/RA*

**Sample/Location Information:**

Sample ID:

*SV-<sup>(MF)</sup> 3 + 0A-1*

Address/Location:

*99 Marcus Blvd.*

PID Meter Used:

*ppb Rae*

He Detector Used:

*MGD*

Weather Conditions:

*Sunny, Cold, Slight Breeze*

**Soil Gas**

**Ambient Air**

**Comments**

**SUMMA CANISTER RECORD**

Canister Serial Number:

*0669*

*0239*

Flow Controller Number:

*2878*

*2968*

Start Date / Time:

*1/13/10 / 1257*

*1/13/10 1049*

Stop Date / Time:

*1/13/10 / 1520*

*1/14/10 1100*

Duplicate Sample ID:

*NA*

*NA*

Sample ID Category:

*Soil Vapor*

*Outside Ambient*

Sample Depth:

*8 ft bgs*

*← Intake Height*

Approximate GW Depth:

*103 ft bgs*

*NA*

Air Temperature:

*~mid 20°F*

*mid 20°F*

Direction/Distance from any Structure:

*17' 3"*

*ME 15' from corner*

Distance to Roadway:

*Parking Lot*

*B/N 2 parking lots*

Any noticeable odor?

*None*

*None*

PID Reading (ppb):

*(MF) ~~340~~ 340*

*0-40 ppb*

*← from slight truck traffic*

He Detector Reading (% He):

*0 ppm*

*NA*

Consituents Sampled:

*TO-15*

*TO-15*

Container Description:

*GL Summa*

*GL Summa*

Checked Seals:

☒ Yes

☐ No

Took GPS Coordinates at Position:

☒ Yes

☐ No

Tracer Gas Test:

☒ Successful

☐ Unsuccessful

Sample:

☐ Duplicate

☐ Matrix Spike Duplicate

☐ Matrix Spike

☒ Analysis

Photo Taken:

☒ Yes

☐ No

*Reg / Can Pressure : Start 29.5 inHg  
Stop ~.5 inHg*

*Start 30 inHg  
Stop 2" Hg*



Shaw® Shaw Environmental, Inc.

Project Name: EMR Circuits

Date: 1/13/10

Sampler(s): MF / RA

Sample Location Information:

Sample ID:

SV<sup>(MF)</sup> - 4

Address/Location:

99 Marcus

PID Meter Used:

ppb Rae

He Detector Used:

MGD

Weather Conditions:

Sunny / Cold / Slight Breeze

Soil Gas

Ambient Air

Comments

SUMMA CANISTER RECORD

Canister Serial Number:

1010

Flow Controller Number:

0040

Start Date / Time:

1/13/10 / 1307

Stop Date / Time:

1/13/10 / 1521

Duplicate Sample ID:

NA

Sample ID Category:

Soil Vapor

Sample Depth:

(MF) → 102-103 ft bgs

Approximate GW Depth:

→ 8 ft bgs

Air Temperature:

mid 20°F

Direction/Distance from any Structure:

5' from 99 Marcus

Distance to Roadway:

Any noticeable odor?

None (MF)

PID Reading (ppb):

300 ~~400~~ ppb

He Detector Reading (% He):

0

Consituents Sampled:

10-15

Container Description:

6 L Summa

Checked Seals:

☒ Yes

☐ No

Took GPS Coordinates at Position:

☒ Yes

☐ No

Tracer Gas Test:

☒ Successful

☐ Unsuccessful

Sample:

☐ Duplicate

☐ Matrix Spike Duplicate

☐ Matrix Spike

☒ Analysis

Photo Taken:

☒ Yes

☐ No

Reg / Can Pressure: Start: 30" Hg

Stop: 3" Hg



Shaw® Shaw Environmental, Inc.

Project Name: *EMR Circuits*

Date: *1/13/10*

Sampler(s): *MF/RA*

Sample Location Information:

Sample ID:

*SV- 5*

Address/Location:

*99 Marcus*

PID Meter Used:

*ppB Rae*

He Detector Used:

*M&D*

Weather Conditions:

*Sunny / Cold / Slight Breeze*

**Soil Gas**

**Ambient Air**

**Comments**

SUMMA CANISTER RECORD

Canister Serial Number:

*0260*

Flow Controller Number:

*3865*

Start Date / Time:

*1/13/10 / 1248*

Stop Date / Time:

*1/13/10 / 1500*

Duplicate Sample ID:

*NA*

Sample ID Category:

*Soil Vapor*

Sample Depth:

*8 ft bgs*

Approximate GW Depth:

*102-103 ft bgs*

Air Temperature:

*mid 20 °F*

Direction/Distance from  
any Structure:

*8' 6" from fence*

Distance to Roadway:

*Parking Lot - Rear*

Any noticeable odor?

*None*

PID Reading (ppb):

*121 ppb*

He Detector Reading (% He):

*0.006 ppm*

Constituents Sampled:

*10-15*

Container Description:

*GL Summa*

Checked Seals:

☒ Yes

☐ No

Took GPS Coordinates at Position:

☒ Yes

☐ No

Tracer Gas Test:

☒ Successful

☐ Unsuccessful

Sample:

☐ Duplicate

☐ Matrix Spike Duplicate

☐ Matrix Spike

☒ Analysis


Photo Taken:

☒ Yes


☐ No

*Reg/Can Pressure : Start @ 30" Hg*

*Stop @ 5" Hg*

 <b>Shaw® Shaw Environmental, Inc.</b>		Project Name: NYSDEC - EMR Circuits Date: 1/13/10 - 1/14/10	
Sample Location Information: Sample Location ID: 55Y-2 & 1A-1		Sampler(s): RA and MF	
PID Meter Used: ppB Rae		Address/Location: 99 Marcus Blvd., Hauppauge, NY Weather Conditions:	
He Detector Used: MGD 2002			
Sub - Slab Vapor		Indoor Ambient Air	Outdoor Ambient Air
<b>SUMMA CANISTER RECORD</b>			
Canister Serial Number:	5575	7646	NA
Flow Controller Number:	02848	02997	
Sample ID:	55Y-2	1A-1	
Start Date / Time:	1/13/10 1003	1/13/10 1010	
Stop Date / Time:	1/14/10 1052	1/14/10 1051	
Start Pressure (inches Hg):	29	30	
Stop Pressure (inches Hg):	1	6	
Duplicate Sample ID (if applicable):	NA	NA	
Sample Intake Depth/Level:	~7" bgs	+ 55" high	
Additional Tubing Added:	~20'	NA	
Air Temperature:	~50°F	~50°F	
Location/Direction/Distance from any Structure:	~12" from rear wall		
Distance to Roadway:	NA	NA	
Any noticeable odor?	Slight methane, P	Plastic cutting odor	
PID Reading (ppb):	334	0-14	
He Detector Reading (ppm):	0-50	NA	NA
Constituents Sampled:	via TO-15	via TO-15	via TO-15
Container Description:	6-Liter Summa w/ 24-hr FC	6-Liter Summa w/ 24-hr FC	6-Liter Summa w/ 24-hr FC
Approximate GW Depth: ~103			
Checked Seals: Yes			
Tracer Gas Test:		<input checked="" type="checkbox"/> Successful <input type="checkbox"/> Unsuccessful	
Photo Taken:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	



 <b>Shaw® Shaw Environmental, Inc.</b>		Project Name: NYSDEC - EMR Circuits Date: 1/13/10 - 1/14/10	
Sample Location Information: Sample Location ID: SSV-1		Sampler(s): RA and MF	
PID Meter Used: ppB Rae		Address/Location: 99 Marcus Blvd., Hauppauge, NY	
He Detector Used: MGD 2002		Weather Conditions: Sunny + cold	
Sub - Slab Vapor		Indoor Ambient Air	Outdoor Ambient Air
<b>SUMMA CANISTER RECORD</b>			
Canister Serial Number:	5568	NA	NA
Flow Controller Number:	02855		
Sample ID:	SSV-1		
Start Date / Time:	1/13/10 942		
Stop Date / Time:	1/14/10 1049		
Start Pressure (inches Hg):	30 " Hg		
Stop Pressure (inches Hg):	0 - 1		
Duplicate Sample ID (if applicable):	NA		
Sample Intake Depth/Level:	(MF) ~88" below surface		
Additional Tubing Added:	~36"		
Air Temperature:	~50°F inside		
Location/Direction/Distance from any Structure:	~20" from wall		
Distance to Roadway:	NA	NA	NA
Any noticeable odor?	None		
PID Reading (ppb):	945		
He Detector Reading (ppm):	0		
Constituents Sampled:	via TO-15	NA	NA
Container Description:	6-Liter Summa w/ 24-hr FC	6-Liter Summa w/ 24-hr FC	6-Liter Summa w/ 24-hr FC
Approximate GW Depth: ~103 ft bgs			
Checked Seals: Yes			
Tracer Gas Test:		<input checked="" type="checkbox"/> Successful <input type="checkbox"/> Unsuccessful	
Photo Taken:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

# Groundwater Sample Event Field Data Sheet

Project Name: EMR-NYSDEC

Project Number: 134685

## Water Level Data

Date: 1/13/10 Start Time: 1604

Well ID: MW-1A

Initial Total Casing Length 115.00 (feet)

Depth to Water (from top of casing) 102.75 (feet)

a) Height of Water Column 12.25 (feet) MF

Well Volume ([a] x volume factor \*) = 12.25 (feet) x 0.163 gallons/foot = 2.00 gallons

\*Volume Factors:

1-inch well = 0.041 gal/ft

1.5-inch well = 0.092 gal/ft

2-inch well = 0.163 gal/ft

3-inch well = 0.367 gal/ft

4-inch well = 0.653 gal/ft

6-inch well = 1.468 gal/ft

## Purge Data

Date: 1/13/10 Time: 1615 (start) 1703 (finish)

Method: Peristaltic pump Bladder  
(Waterra, bailer, submersible pump/etc.)

Purge Volume (3 to 5 well volumes):          Low Flow Sampling

Time	1615	1645	1648	1651	1654	1657	1700
Volume L/min		<u>131</u>					
Specific Conductivity		<u>264</u>	<u>260</u>	<u>271</u>	<u>279</u>	<u>251</u>	<u>234</u>
pH		<u>6.36</u>	<u>6.32</u>	<u>6.33</u>	<u>6.35</u>	<u>6.34</u>	<u>5.29</u>
Turbidity		<u>-5.0</u>	<u>-5.0</u>	<u>-5.0+</u>	<u>-5.0+</u>	<u>-5.0+</u>	<u>-5.0+</u>
Temperature		<u>7.37</u>	<u>7.3</u>	<u>7.04</u>	<u>7.01</u>	<u>8.02</u>	<u>9.71</u>
ORP		<u>175</u>	<u>175</u>	<u>173</u>	<u>170</u>	<u>162</u>	<u>165</u>
DO		<u>8.58</u>	<u>8.89</u>	<u>11.29</u>	<u>11.12</u>	<u>11.13</u>	<u>11.18</u>

Did well dry out? (If yes, how many times)

Actual Volume Removed          (gallons)

## Sampling Data

Sample Date: 1/13/10

Sample Time: 1710

Appearance (visual) Brown Turbid

Color Brown Odor         

Sampling Method: Low Flow

Constituents Sampled

Container Description

Perservative

VOCs

40 mL Vial

HCl

Personnel:

COMMENTS: 64<sup>th</sup> CPM 4 10 to 5, Initial PSI 80 flow minimal

1624 increased psi to 100 1625

--airline trouble pulled pump, Redeployed @ 1638 --> set PSI @ 60 10 to 4

--> Adjusted set to 80 psi - 40 to 30.

# Groundwater Sample Event Field Data Sheet

Project Name: EmR- NYSOEC

Project Number: 137685

## Water Level Data

Date: 1/14/10 Start Time: 759

Well ID: MW-1 Dup. 02 + MS/MSD

Initial Total Casing Length 115.10 (feet)

Depth to Water (from top of casing) 102.57 (feet)

a) Height of Water Column 12.53 (feet)

Well Volume ([a] x volume factor \*) = 12.53 (feet) x 1.63 gallons/foot = 2 gallons

\*Volume Factors:

1-inch well = 0.041 gal/ft

1.5-inch well = 0.092 gal/ft

2-inch well = 0.163 gal/ft

3-inch well = 0.367 gal/ft

4-inch well = 0.653 gal/ft

6-inch well = 1.468 gal/ft

## Purge Data

Date: 1/14/10 Time: 8:10 (start) 1148 (finish)

Method: Peristaltic pump Blade  
(Watera, bailer, submersible pump, etc.)

7 pulled pump @ 910 adjusted airline.  
redployed 926 pressure Δ now steady

Purge Volume (3 to 5 well volumes): Low Flow Sampling  
CPM ~3 20 to 10

Pump Pressure not normal large difference  
b/w Discharge.

Time	<u>9:55</u>	<u>11:20</u>	<u>11:23</u>	<u>11:26</u>	<u>11:34</u>	<u>11:37</u>	<u>11:40</u>	<u>11:43</u>
Volume	<u>31 L/min</u>							
Specific Conductivity	<u>353</u>	<u>347</u>	<u>346</u>	<u>349</u>	<u>354</u>	<u>359</u>	<u>362</u>	<u>359</u>
pH	<u>6.28</u>	<u>6.31</u>	<u>6.35</u>	<u>6.36</u>	<u>6.37</u>	<u>6.32</u>	<u>6.41</u>	<u>6.41</u>
Turbidity	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>4.0</u>
Temperature	<u>13.48</u>	<u>13.38</u>	<u>13.86</u>	<u>13.41</u>	<u>13.45</u>	<u>13.42</u>	<u>13.02</u>	<u>13.20</u>
ORP	<u>295</u>	<u>294</u>	<u>277</u>	<u>294</u>	<u>294</u>	<u>297</u>	<u>292</u>	<u>292</u>
DO	<u>9.48</u>	<u>9.48</u>	<u>8.98</u>	<u>8.47</u>	<u>8.41</u>	<u>8.33</u>	<u>8.50</u>	<u>8.41</u>

Did well dry out? (If yes, how many times)

Actual Volume Removed (gallons)

## Sampling Data

New Tubing 1/4 added @ 1110 redeployed

Sample Date: 1/14/10

Sample Time: 1155

Appearance (visual) Brownish Brize

Color Cloudy

Odor —

Sampling Method:

Constituents Sampled

VOCs 8260

SVOCs 8270

Pesticides 8081A

PCBs 8082

Metals 8270

8270, 8081A, 8082

Container Description

40 mL (1)

1L GA (2)

1L GA (2)

1L GA (2)

Perservative

HCl

—

—

—

—

—

—

—

—

—

—

—

—

—

—

—

Personnel:

COMMENTS:

(MS/MSD + DCP) CPM 2-20 to 10 - psi - 80  
Dup. 02

sample due to volume

<u>1145</u>
<u>350</u>
<u>3130</u>
<u>13.32</u>
<u>292</u>
<u>8.47</u>

Clearing as samples collected

Not at 24 ILCA  
12 VOC  
6 250

<u>1148</u>
<u>6.42</u>
<u>51.0</u>
<u>292</u>
<u>8.52</u>

IF

+ 50 mL TAD Metals

MS/MSD in same container had no others.

250 mL Plastic (6)

HNO<sub>3</sub>

# Groundwater Sample Event Field Data Sheet

Project Name: EMR-NYSDCL

Project Number: 139685

## Water Level Data

Date: 1/13/10 Start Time: 1039

Well ID: MW-3

Initial Total Casing Length 112.57 (feet)

Depth to Water (from top of casing) 103.55 (feet)

a) Height of Water Column 9.02 (feet)

Well Volume ([a] x volume factor \*) = 9.02 (feet) x .163 gallons/foot = 1.47 gallons

\*Volume Factors:

1-inch well = 0.041 gal/ft

1.5-inch well = 0.092 gal/ft

② 2-inch well = 0.163 gal/ft

3-inch well = 0.367 gal/ft

4-inch well = 0.653 gal/ft

6-inch well = 1.468 gal/ft

## Purge Data

Date: 1/13/10 Time: MW-3 (start) 1140 (finish)

Method: Peristaltic pump Bladder  
(Waterra, bailer, submersible pump, etc.)

Purge Volume (3 to 5 well volumes): CPM 4 Low Flow Sampling 10 to 5

Well Wizard Comp.

QED control Box  
Bladder Pump

Time	1158	1202	1205	1208	1212	1215	1218	1221	1225
Volume L/min	Initial	.31							
Specific Conductivity	0.704	0.766	0.769	0.774	.774	0.773	0.768	.769	.776
pH	4.31	4.07	4.06	4.07	4.08	4.08	4.10	4.12	4.14
Turbidity	-5.0	6.14	4.61	3.58	303.0	210	196	194	151
Temperature	8.26	9.48	9.29	5.87 9.23	9.55	9.51	9.87	9.79	9.85
ORP	306	331	334	336	338	339	338	339	337
DO	8.24	6.05	5.85	5.73	5.74	5.71	5.67	5.47	5.48

Did well dry out? (If yes, how many times)

Actual Volume Removed \_\_\_\_\_ (gallons)

## Sampling Data

Flow rate .31 L/min

Sample Date: 1/13/10

Sample Time: 1235

Appearance (visual) Clear

Color clear

Odor —

Sampling Method: Lo-flow

Constituents Sampled  
VOCs

Container Description  
40mL G Voa

Perservative  
HCL

	1230	1233
V	.31	.31
Sc	.771	.771
pH	4.15	4.16
NH4	48	41
T°	10.22	10.24
ORP	338	340
DO	5.42	5.41

Personnel: R. Adams

## COMMENTS:

20 recharge 10 discharge

Pressure @ 30. Increased to 50 @ 1144

Increase Cycle 7 to 3 1148

10 to 5 1154 AM

# Groundwater Sample Event Field Data Sheet

Project Name: EMR-NYSDEC

Project Number: 139685

## Water Level Data

Date: 1/13/10 Start Time: 1450

Well ID: MW-3A

Initial Total Casing Length 108.60 (feet)

Depth to Water (from top of casing) 103.07 (feet)

a) Height of Water Column 5.53 (feet)

Well Volume ([a] x volume factor \*) = 5.53 (feet) x .163 gallons/foot = .9 gallons

\*Volume Factors:

1-inch well = 0.041 gal/ft

1.5-inch well = 0.092 gal/ft

2-inch well = 0.163 gal/ft

3-inch well = 0.367 gal/ft

4-inch well = 0.653 gal/ft

6-inch well = 1.468 gal/ft

## Purge Data

Date: 1/13/10 Time: 1512 (start) 1533 (finish)

Method: Peristaltic pump Bladder  
(Waterra bailer, submersible pump, etc.)

Purge Volume (3 to 5 well volumes): \_\_\_\_\_ Low Flow Sampling

→ restrictive flow ~.21 due to volume of well

Time	1521	1524	1527	1530	1537		
Volume L/min	Initial	.31	.7				
Specific Conductivity	2.51	1.80	1.42	1.41	1.31		
pH	6.07	6.71	6.46	6.51	6.58		
Turbidity	SR10	230	155.0	43.0	48		
Temperature	9.80	10.54	10.18	10.14	10.17		
ORP	537	528	529	524	524		
DO	5.30	5.24	5.02	5.13	5.14		

Did well dry out? (If yes, how many times)

Actual Volume Removed \_\_\_\_\_ (gallons)

## Sampling Data

Sample Date: 1/13/10

Sample Time: 1535

Appearance (visual) Clear

Color — Odor —

Sampling Method: Lo-flow

Constituents Sampled  
VOCs

Container Description  
40 mL VOA

Perservative  
HCl

Personnel: \_\_\_\_\_

## COMMENTS:

CPM4 10 to 5 initial psi 65  
Increased psi to 75 @ 1525

***APPENDIX B***

***NYSDOH INDOOR AIR QUALITY  
QUESTIONNAIRE AND BUILDING INVENTORY***

Proj. NYSDEC EMR Circuits  
Proj # \_\_\_\_\_  
File Code: 6

NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Marc Flanagan / Rob Adams Date/Time Prepared 1/13/10 @ 1100

Preparer's Affiliation Shaw Environmental, Inc. Phone No. (518) 783-1996

Purpose of Investigation Soil Vapor evaluation

1. OCCUPANT: Not available during investigation.

Interviewed: Y/N

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: 99 Marcus Blvd., Hauppauge, NY

County: Suffolk

Home Phone: \_\_\_\_\_ Office Phone: \_\_\_\_\_

Number of Occupants/persons at this location 3-5 Age of Occupants 20-60 (est)

2. OWNER OR LANDLORD: (Check if same as occupant ☐) Not available during investigation

Interviewed: Y ☒ N

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: \_\_\_\_\_

County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Office Phone: \_\_\_\_\_

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential  
Industrial

School  
Church

☒ Commercial/Multi-use  
Other: \_\_\_\_\_

If the property is residential, type? (Circle appropriate response) No

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: _____

If multiple units, how many? NA

If the property is commercial, type?

Business Type(s) Industrial manufacturing - plastics (HD poly etc)

Does it include residences (i.e., multi-use)? Y ☒ N ☐ If yes, how many? NA

Other characteristics:

Number of floors 0/

Building age \_\_\_\_\_

Is the building insulated? Y / N - Both.

How air tight? Tight ☒ Average ☐ / Not Tight

office - yes  
warehouse - no

#### 4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

NA

Airflow near source

Ceiling mounted forced hot air - Nat. Gas

Outdoor air infiltration

Windows, Cargo-bay door, Rear Entry door, Former utility entry

Infiltration into air ducts

None



# 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: NA full crawlspace slab other \_\_\_\_\_
- MF c. ~~Basement~~ floor: concrete dirt stone other \_\_\_\_\_  
*Warehouse*
- d. ~~Basement~~ floor: uncovered covered covered with paint
- e. Concrete floor: unsealed sealed sealed with paint, old poly too
- f. Foundation walls: poured block stone other \_\_\_\_\_
- g. Foundation walls: unsealed sealed sealed with paint
- h. The ~~basement~~ *warehouse* is: wet damp dry moldy
- i. The basement is: NA finished unfinished partially finished
- j. Sump present? Y N
- k. Water in sump? Y / N not applicable

Basement/Lowest level depth below grade: 0 (feet) slab-on-grade

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Floor joints, minor crack (since painted over)

# 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation Heat pump Hot water baseboard  
Space Heaters Stream radiation Radiant floor  
Electric baseboard Wood stove Outdoor wood boiler Other Ceiling mounted unit.

The primary type of fuel used is:

Natural Gas Fuel Oil Kerosene  
Electric Propane Solar  
Wood Coal

Domestic hot water tank fueled by: NG

Boiler/furnace located in: Basement Outdoors Main Floor Other \_\_\_\_\_

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? Y ☒ N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

NA

---



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## 7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement	<u>None</u>
1 <sup>st</sup> Floor	<u>Office / Warehouse</u>
2 <sup>nd</sup> Floor	<u>NA</u>
3 <sup>rd</sup> Floor	<u>NA</u>
4 <sup>th</sup> Floor	<u>NA</u>

## 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage/warehouse

☒ Y N

b. Does the garage have a separate heating unit?

☒ Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)

☒ Y / N / NA

Please specify NA delivery truck

d. Has the building ever had a fire?

Y ☒ N When? \_\_\_\_\_

e. Is a kerosene or unvented gas space heater present?

Y ☒ N Where? \_\_\_\_\_

f. Is there a workshop or hobby/craft area?

☒ Y / N Where & Type? Warehouse

g. Is there smoking in the building?

Y ☒ N How frequently? \_\_\_\_\_

h. Have cleaning products been used recently?

Y ☒ N When & Type? \_\_\_\_\_

i. Have cosmetic products been used recently?

Y ☒ N When & Type? \_\_\_\_\_

- j. Has painting/staining been done in the last 6 months? Y / N Where & When? \_\_\_\_\_
- k. Is there new carpet, drapes or other textiles? Y / ☒ N Where & When? \_\_\_\_\_
- l. Have air fresheners been used recently? Y / ☒ N When & Type? \_\_\_\_\_
- m. Is there a kitchen exhaust fan? *NA* Y / N If yes, where vented? \_\_\_\_\_
- n. Is there a bathroom exhaust fan? Y / ☒ N If yes, where vented? \_\_\_\_\_
- o. Is there a clothes dryer? Y / ☒ N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? Y / ☒ N When & Type? \_\_\_\_\_

Are there odors in the building?

☒ Y / N

If yes, please describe: *Slight plastic, just cut some w/ table saw*

Do any of the building occupants use solvents at work?

Y / ☒ N

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? \_\_\_\_\_

If yes, are their clothes washed at work?

Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)

Yes, use dry-cleaning infrequently (monthly or less)

Yes, work at a dry-cleaning service

☒ No

Unknown

Is there a radon mitigation system for the building/structure? Y / ☒ N Date of Installation: \_\_\_\_\_

Is the system active or passive? Active/Passive

## 9. WATER AND SEWAGE

Water Supply: ☒ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well Other: \_\_\_\_\_

Sewage Disposal: ☒ Public Sewer ☐ Septic Tank ☐ Leach Field ☐ Dry Well Other: \_\_\_\_\_

## 10. RELOCATION INFORMATION (for oil spill residential emergency) *NA*

a. Provide reasons why relocation is recommended: \_\_\_\_\_

b. Residents choose to: remain in home ☐ relocate to friends/family ☐ relocate to hotel/motel ☐

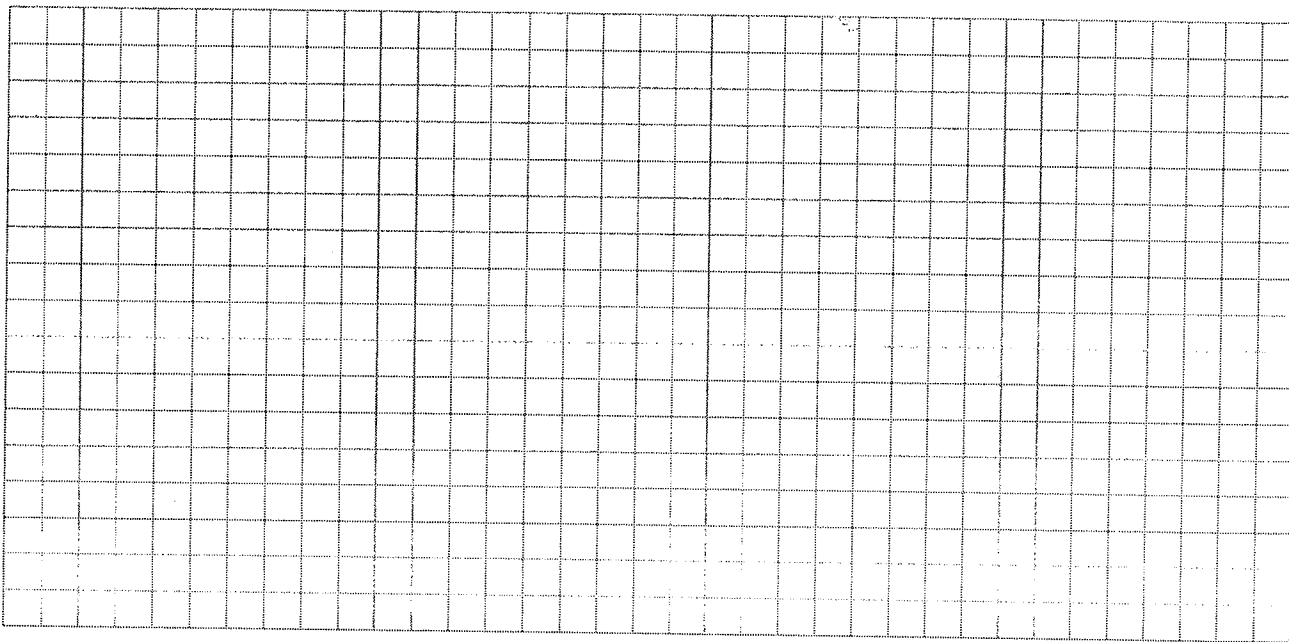
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

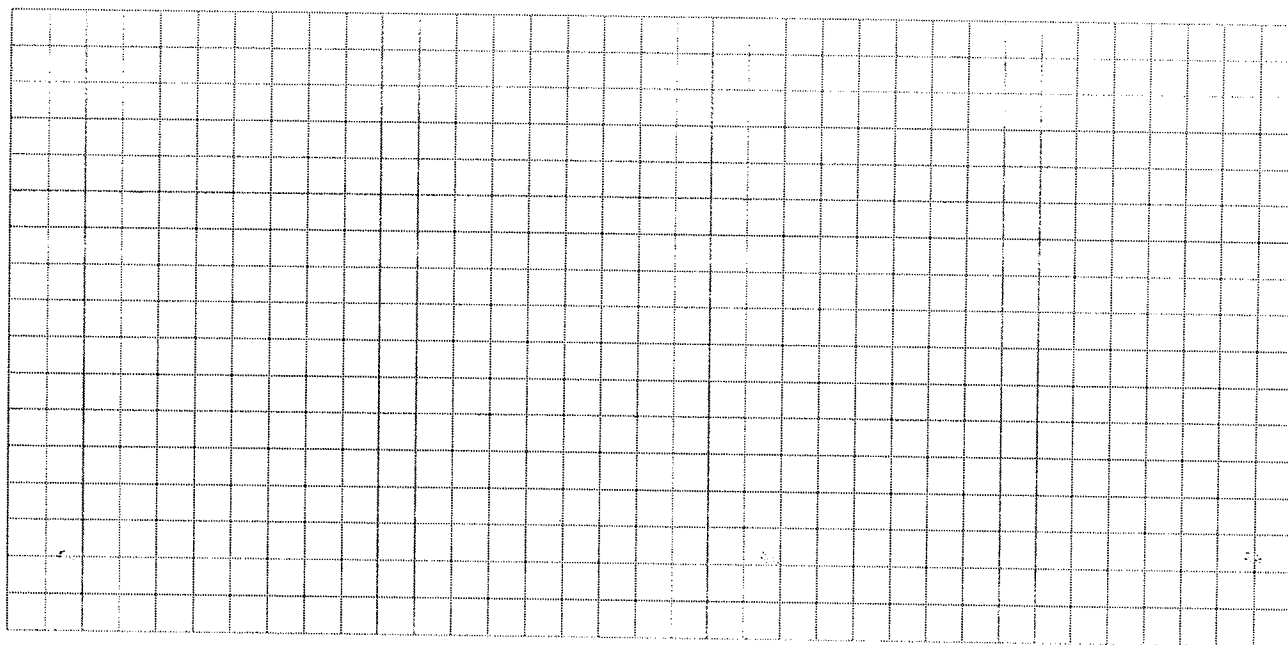
**11. FLOOR PLANS** *See attached sketch*

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

**Basement:**



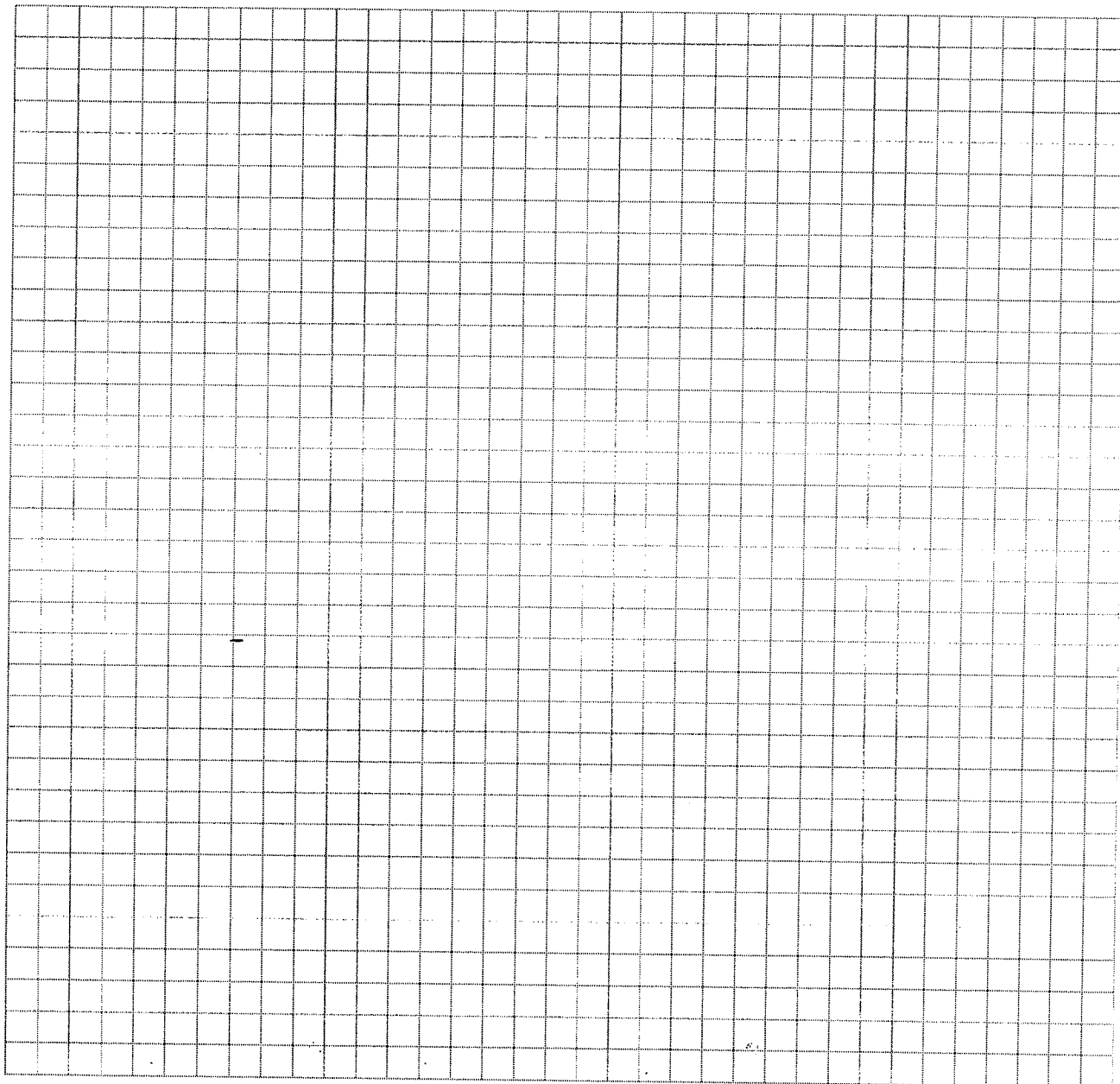
**First Floor:**



**12. OUTDOOR PLOT** - See attached figure

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppB Rac

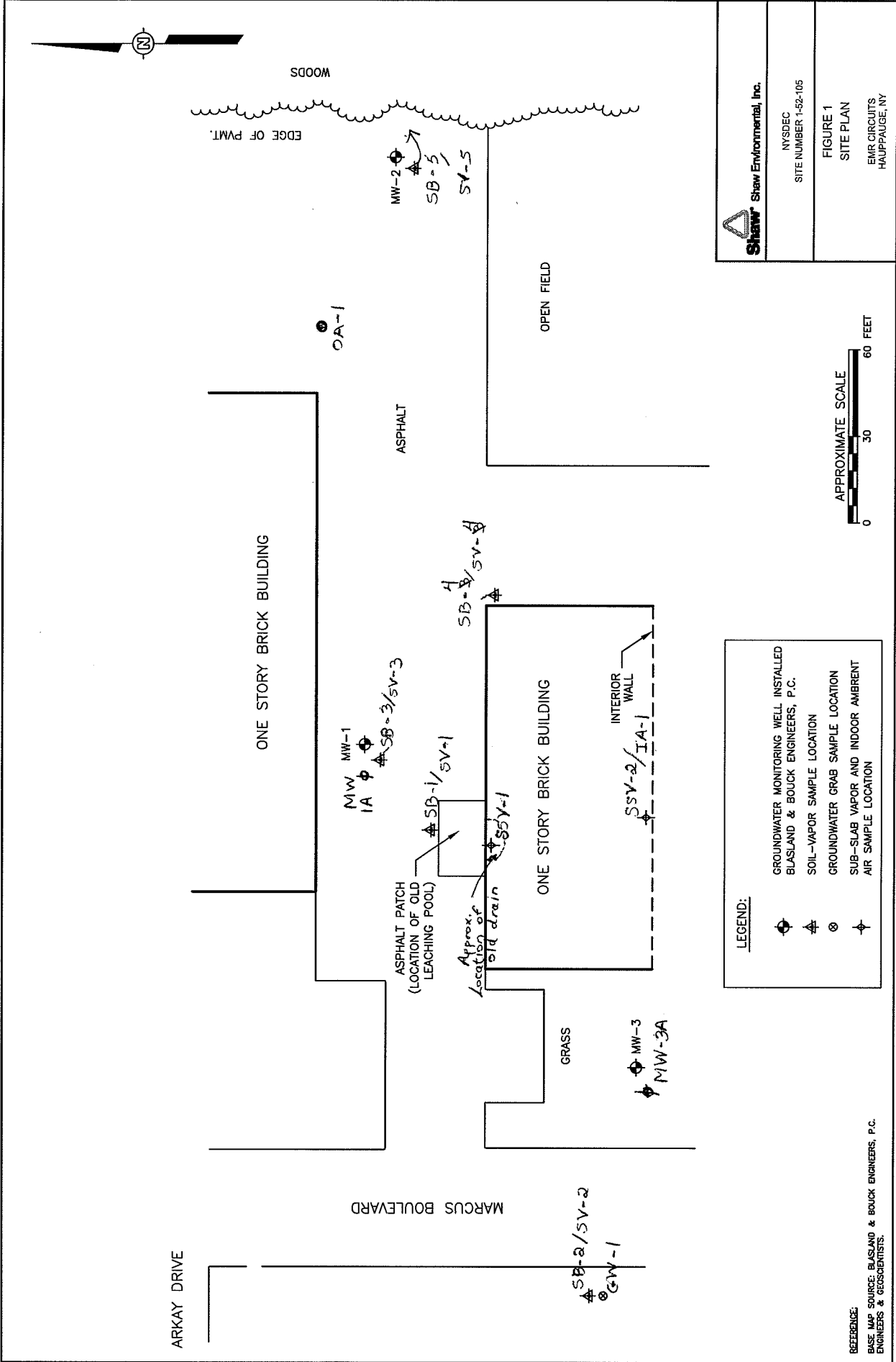
**List specific products found in the residence that have the potential to affect indoor air quality.**

[illegible]

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

**\*\* Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.**

PROJECT	134655\EMR\134655B1.dwg
DATE	03/17/09 09:54am
DESIGNED BY	S. SHKOLNIK
DRAWN BY	M. FLAMMAY
CHECKED BY	S. SHKOLNIK
APPROVED BY	
DRAWING NUMBER	134685B1



Shaw Environmental, Inc.
NYSDEC
SITE NUMBER 1-52-105
FIGURE 1
SITE PLAN
EMR CIRCUITS
HAUPPAUGE, NY

Shaw Environmental, Inc.  
Photographic Record

Customer: NYSDEC

Project Number: 134685

Site Name: EMR Circuits

Site Location: 99 Marcus Blvd., Hauppauge, NY

Photographer:

MEF

Date:

1/13/10

Direction:

North wall of  
property.

Comments:

SSV-1 sample  
location located just  
south and in  
proximity to former  
leaching pools.



Photographer:

MEF

Date:

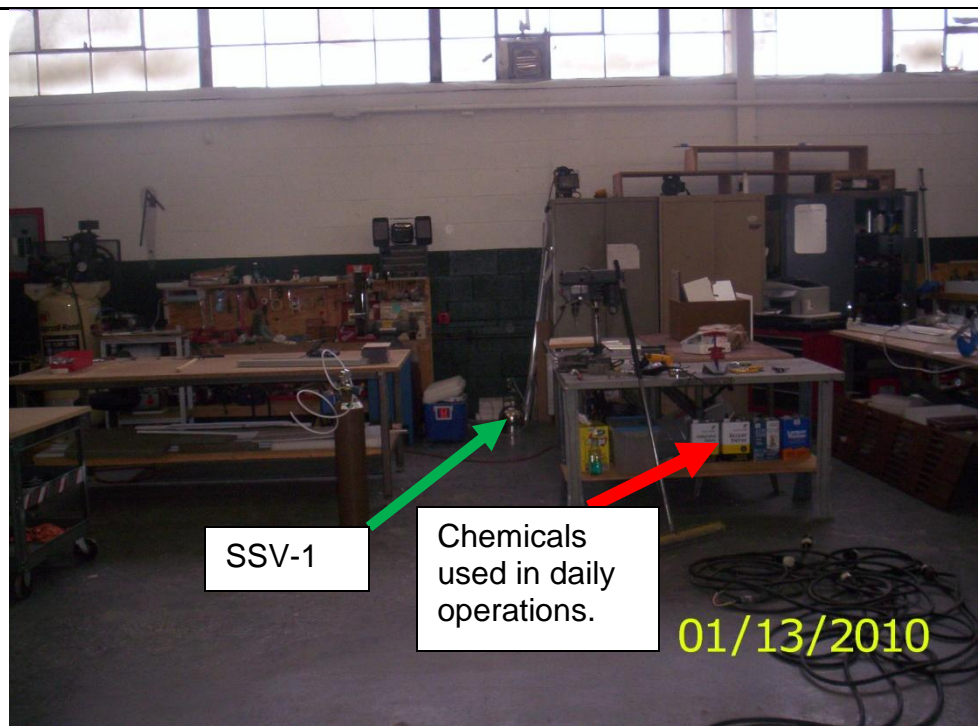
1/13/10

Direction:

North

Comments:

Red arrow points to  
chemicals used  
during operations  
and are detailed in  
the inventory. Green  
arrow points to SSV-  
1.





Shaw Environmental, Inc.  
Photographic Record

Customer: NYSDEC

Project Number: 134685

Site Name: EMR Circuits

Site Location: 99 Marcus Blvd., Hauppauge, NY

Photographer:

MEF

Date:

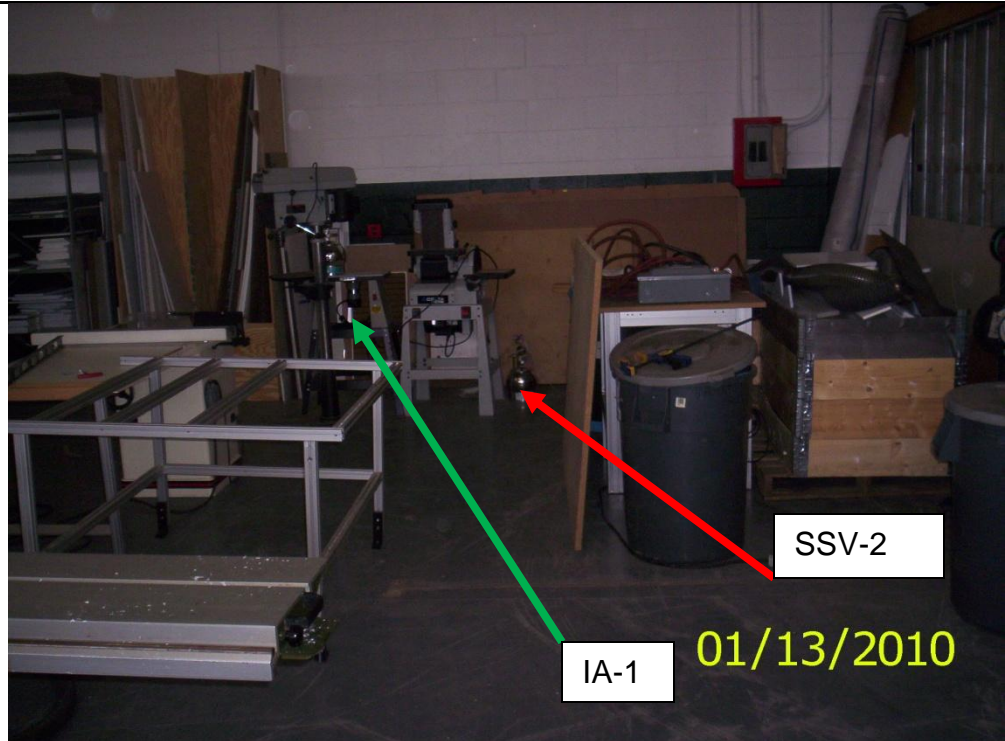
1/13/10

Direction:

South wall of  
property.

Comments:

SSV-2 (red arrow)  
and IA-1 sample  
locations located  
along south wall.



Photographer:

MEF

Date:

1/13/10

Direction:

East

Comments:

Interior of the  
production area.  
Plastic cutting saw in  
the foreground.





Shaw Environmental, Inc.  
Photographic Record

Customer: NYSDEC

Project Number: 134685

Site Name: EMR Circuits

Site Location: 99 Marcus Blvd., Hauppauge, NY

Photographer:

MEF

Date:

1/13/10

Direction:

North wall of  
property.

Comments:

SV-1 sample (and  
duplicate) location  
located in proximity  
to former leaching  
pools.



Photographer:

MEF

Date:

1/13/10

Direction:

North

Comments:

SV-2 sample located  
across Marcus Blvd.  
In proximity to GW-1  
grab location.





Shaw Environmental, Inc.  
Photographic Record

Customer: NYSDEC

Project Number: 134685

Site Name: EMR Circuits

Site Location: 99 Marcus Blvd., Hauppauge, NY

Photographer:

MEF

Date:

1/13/10

Direction:

NA.

Comments:

SV-3 sample location. Located between MW-1 and MW-1A.



Photographer:

MEF

Date:

1/13/10

Direction:

East

Comments:

SV-4 sample located at the northeast corner of the facility.





Shaw Environmental, Inc.  
Photographic Record

Customer: NYSDEC

Project Number: 134685

Site Name: EMR Circuits

Site Location: 99 Marcus Blvd., Hauppauge, NY

Photographer:

MEF

Date:

1/13/10

Direction:

North wall of  
property.

Comments:

OA-1 sample located  
along the northern  
fence line. SV-5  
located in the  
background.



Photographer:

MEF

Date:

1/13/10

Direction:

North

Comments:

SV-5 located along  
the eastern edge of  
the site.



Shaw Environmental, Inc.  
Photographic Record

Customer: NYSDEC

Project Number: 134685

Site Name: EMR Circuits

Site Location: 99 Marcus Blvd., Hauppauge, NY

Photographer:

MEF

Date:

1/13/10

Direction:

West.

Comments:

Investigative area of  
the site.



Photographer:

Date:

NA

Direction:

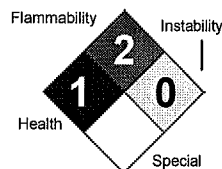
NA

Comments:

NA.

## Kerosene

HEALTH		2
FLAMMABILITY		2
PHYSICAL HAZ.		0
PPE	C	



Date Created: 07/10/2008

## ANSI Z400.1 Format



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## Kerosene

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Causes irritation of the stomach and intestines, resulting in nausea and vomiting.

### Chronic Exposure Effects:

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Repeated or prolonged skin contact may cause redness, irritation, and scaling of the skin. May cause skin irritation, anemia, bone marrow damage, liver damage, and jaundice.

### Signs and Symptoms Of Exposure

See Potential Health Effects.

### Medical Conditions Generally Aggravated By Exposure

None known.

## 4. First Aid Measures

### Emergency and First Aid Procedures

#### Inhalation:

If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

#### Skin contact:

Wash with soap and large quantities of water for at least 15 minutes. Seek medical attention if irritation from contact persists.

#### Eye contact:

Immediately flush eyes with water, remove any contact lens, continue flushing with water for at least 15 minutes. Get medical attention.

#### Ingestion:

Do not induce vomiting. Call your poison control center, hospital emergency room, or physician immediately.

### Note to Physician

Call your local poison control center for further instructions.

## 5. Fire Fighting Measures

### Flammability Classification:

II

### Flash Pt:

> 101.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)

### Explosive Limits:

LEL: 0.5 UEL: 6

### Autoignition Pt:

446.00 F

### Fire Fighting Instructions

Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

### Flammable Properties and Hazards

Vapors can be heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, sparks, flame, and other ignition sources distant from material handling point. Never use welding or cutting torch on or near container (even empty) because product (even residue) can ignite.

### Hazardous Combustion Products

Carbon monoxide, carbon dioxide, and various hydrocarbons

### Extinguishing Media

Use carbon dioxide, dry powder, or foam.

### Unsuitable Extinguishing Media

Do not use a solid water stream, as this may spread the fire.

## 6. Accidental Release Measures

### Steps To Be Taken In Case Material Is Released Or Spilled

Isolate the immediate area. Prevent unauthorized entry. Eliminate all sources of ignition in area and downwind of the spill area. Stay upwind, out of low areas, and ventilate closed spaces before entering. All equipment used when handling this product must be grounded or non-sparking. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to compatible containers. For large spills, dike ahead of the spill.

## 7. Handling and Storage

### Precautions To Be Taken in Handling

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

### Precautions To Be Taken in Storing

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

## 8. Exposure Controls/Personal Protection

### Respiratory Equipment (Specify Type)

When refueling, if possible, use outdoors in an open air area. If refueling indoors, open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately. Always follow appliance manufacturer's directions for fueling, ignition, and all other activities associated with use of the appliance.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

If the work area is not properly ventilated to keep airborne levels below their exposure limits, you must use a properly fitted and maintained NIOSH approved respirator for organic vapors. A dust mask does not provide protection against vapors.

### Eye Protection

Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury.

### Protective Gloves

Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.

### Other Protective Clothing

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure.

### Engineering Controls (Ventilation etc.)

Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately.

### Work/Hygienic/Maintenance Practices

A source of clean water should be available in the work area for flushing eyes and skin.

Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use.



# MATERIAL SAFETY DATA SHEET

## Kerosene

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Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use.

Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

### 9. Physical and Chemical Properties

**Physical States:** ☐ Gas ☒ Liquid ☐ Solid  
**Melting Point:** No data.  
**Boiling Point:** 298.00 F - 425.00 F  
**Autoignition Pt:** 446.00 F  
**Flash Pt:** > 101.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)  
**Explosive Limits:** LEL: 0.5 UEL: 6  
**Specific Gravity (Water = 1):** 0.78  
**Bulk density:** No data.  
**Vapor Pressure (vs. Air or mm Hg):** 0.22 MM HG at 68.0 F  
**Vapor Density (vs. Air = 1):** 4.7  
**Evaporation Rate (vs Butyl Acetate=1):** No data.  
**Solubility in Water:** No data.  
**Solubility Notes**  
Slightly soluble in cold water (<0.1% w/w)  
**Percent Volatile:** 100.0 % by weight.  
**VOC / Volume:** 784.0000 G/L  
**Heat Value:** No data.  
**Particle Size:** No data.  
**Corrosion Rate:** No data.  
**pH:** No data.

#### Appearance and Odor

Transparent, colorless, solvent odor

### 10. Stability and Reactivity

**Stability:** Unstable ☐ Stable ☒

#### Conditions To Avoid - Instability

No data available.

#### Incompatibility - Materials To Avoid

Incompatible with strong oxidizing agents, strong acids, and alkalies.

#### Hazardous Decomposition Or Byproducts

Thermal decomposition may produce carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will occur ☐ Will not occur ☒

#### Conditions To Avoid - Hazardous Polymerization

No data available.

### 11. Toxicological Information

No data available.

#### Carcinogenicity/Other Information

No data available.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	8052-41-3	n.a.	n.a.	n.a.	n.a.

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## Kerosene

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### 12. Ecological Information

No data available.

### 13. Disposal Considerations

#### Waste Disposal Method

Dispose in accordance with applicable local, state, and federal regulations.

### 14. Transport Information

#### LAND TRANSPORT (US DOT)

##### DOT Proper Shipping Name

Not regulated

##### Additional Transport Information

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

### 15. Regulatory Information

#### US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	8052-41-3	No	No	No	

#### US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	8052-41-3	No		Inventory	

#### SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302:	EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304:	EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Sec.313:	EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
Sec.110:	EPA SARA 110 Superfund Site Priority Contaminant List

#### TSCA (Toxic Substances Control Act) Lists:

Inventory:	Chemical Listed in the TSCA Inventory.
5A(2):	Chemical Subject to Significant New Rules (SNURS)
6A:	Commercial Chemical Control Rules
8A:	Toxic Substances Subject To Information Rules on Production
8A CAIR:	Comprehensive Assessment Information Rules - (CAIR)
8A PAIR:	Preliminary Assessment Information Rules - (PAIR)
8C:	Records of Allegations of Significant Adverse Reactions
8D:	Health and Safety Data Reporting Rules
8D TERM:	Health and Safety Data Reporting Rule Terminations
12(b):	Notice of Export

#### Other Important Lists:

CWA NPDES:	EPA Clean Water Act NPDES Permit Chemical
CAA HAP:	EPA Clean Air Act Hazardous Air Pollutant
CAA ODC:	EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
CA PROP 65:	California Proposition 65

#### International Regulatory Lists:

#### EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

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## Kerosene

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☒ Yes ☐ No Acute (immediate) Health Hazard

☒ Yes ☐ No Chronic (delayed) Health Hazard

☒ Yes ☐ No Fire Hazard

☐ Yes ☒ No Sudden Release of Pressure Hazard

☐ Yes ☒ No Reactive Hazard

### 16. Other Information

#### Company Policy or Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

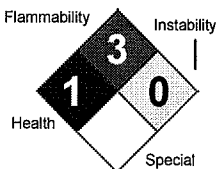
# MATERIAL SAFETY DATA SHEET

## Denatured Alcohol

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HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZ.	0
PPE	



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Revision: 04/14/2009  
Supersedes Revision: 11/13/2008  
Date Created: 06/13/2005

### 1. Product and Company Identification

**Product Code:** 1625.6  
**Product Name:** Denatured Alcohol  
**Manufacturer Information**  
**Company Name:** W. M. Barr  
2105 Channel Avenue  
Memphis, TN 38113  
**Phone Number:** (901)775-0100  
**Emergency Contact:** 3E 24 Hour Emergency Contact (800)451-8346  
**Information:** W.M. Barr Customer Service (800)398-3892  
**Web site address:** www.wmbarr.com  
**Preparer Name:** W.M. Barr EHS Dept (901)775-0100  
**Synonyms**  
QSL26, QSL26L

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TWA	ACGIH STEL
1. Ethyl alcohol {Ethanol}	64-17-5	45.0 -50.0 %	1000 ppm	1000 ppm	No data.
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	50.0 -55.0 %	200 ppm	200 ppm	250 ppm
3. Methyl isobutyl ketone {Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone}	108-10-1	1.0 -4.0 %	100 ppm	50 ppm	75 ppm

### 3. Hazards Identification

#### Emergency Overview

Danger! Flammable! Keep away from heat, sparks, flame, and all other sources of ignition. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition during use and until all vapors are gone. Beware of static electricity that may be generated by synthetic clothing and other sources.

#### OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

#### Potential Health Effects (Acute and Chronic)

##### Inhalation Acute Exposure Effects:

Vapor harmful. May cause dizziness, headache, watering of eyes, irritation of respiratory tract, irritation to the eyes, drowsiness, nausea, other central nervous system effects, spotted vision, dilation of pupils, and convulsions.

##### Skin Contact Acute Exposure Effects:

May cause irritation, drying of skin, redness, and dermatitis. May cause symptoms listed under inhalation. May be absorbed through damaged skin.

##### Eye Contact Acute Exposure Effects:

May cause irritation.

##### Ingestion Acute Exposure Effects:

Poison. Cannot be made non-poisonous. May be fatal or cause blindness. May produce fluid in the lungs and pulmonary edema. May cause dizziness, headache, nausea, drowsiness, loss of coordination, stupor, reddening of

# MATERIAL SAFETY DATA SHEET

## Denatured Alcohol

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face and or neck, liver, kidney and heart damage, coma, and death. May produce symptoms listed under inhalation.

### Chronic Exposure Effects:

May cause symptoms listed under inhalation, dizziness, fatigue, tremors, permanent central nervous system changes, blindness, pancreatic damage, and death.

### Signs and Symptoms Of Exposure

No data available.

### Medical Conditions Generally Aggravated By Exposure

Diseases of the liver.

## 4. First Aid Measures

### Emergency and First Aid Procedures

#### Inhalation:

If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

#### Skin Contact:

Wash with soap and water.

#### Eye Contact:

Flush with large quantities of water for at least 15 minutes. If irritation from contact persists, get medical attention.

#### Ingestion:

Call your poison control center, hospital emergency room or physician immediately for instructions to induce vomiting.

### Note to Physician

Poison. This product contains methanol. Methanol is metabolized to formaldehyde and formic acid. These metabolites may cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used as an antidote. Methanol is effectively removed by hemodialysis. Call your local poison control center for further instructions.

## 5. Fire Fighting Measures

### Flammability Classification:

OSHA Class IB

### Flash Pt:

45.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)

### Explosive Limits:

LEL: 1.00 UEL: No data.

### Fire Fighting Instructions

Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined area. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

### Flammable Properties and Hazards

No data available.

### Extinguishing Media

Use carbon dioxide, dry powder, or foam.

### Unsuitable Extinguishing Media

No data available.

### 6. Accidental Release Measures

#### Steps To Be Taken In Case Material Is Released Or Spilled

##### Clean-up:

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources, keep flares, smoking or flames out of hazard area.

##### Small spills:

Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

##### Large spills:

Dike far ahead of spill for later disposal.

### 7. Handling and Storage

#### Precautions To Be Taken in Handling

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

#### Precautions To Be Taken in Storing

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

### 8. Exposure Controls/Personal Protection

#### Respiratory Equipment (Specify Type)

For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provide protection against vapors.

#### Eye Protection

Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

#### Protective Gloves

Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.

#### Other Protective Clothing

Various application methods can dictate the use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

#### Engineering Controls (Ventilation etc.)

Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately.

### 9. Physical and Chemical Properties

**Physical States:** ☐ Gas ☒ Liquid ☐ Solid

**Melting Point:** No data.

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## Denatured Alcohol

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**Boiling Point:** 147.00 F  
**Autoignition Pt:** No data.  
**Flash Pt:** 45.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)  
**Explosive Limits:** LEL: 1.00 UEL: No data.  
**Specific Gravity (Water = 1):** No data.  
**Bulk density:** 6.61 LB/GA  
**Vapor Pressure (vs. Air or mm Hg):** No data.  
**Vapor Density (vs. Air = 1):** No data.  
**Evaporation Rate (vs Butyl Acetate=1):** No data.  
**Solubility in Water:** No data.  
**Percent Volatile:** 100.0 % by weight.  
**VOC / Volume:** 792.0000 G/L  
**Heat Value:** No data.  
**Particle Size:** No data.  
**Corrosion Rate:** No data.  
**pH:** No data.

### Appearance and Odor

No data available.

## 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

### Conditions To Avoid - Instability

No data available.

### Incompatibility - Materials To Avoid

Incompatible with strong oxidizing agents.

### Hazardous Decomposition Or Byproducts

Decomposition may produce carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will occur [ ] Will not occur [ X ]

### Conditions To Avoid - Hazardous Polymerization

No data available.

## 11. Toxicological Information

No data available.

### Carcinogenicity/Other Information

No data available.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Ethyl alcohol {Ethanol}	64-17-5	n.a.	n.a.	A4	n.a.
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	n.a.	n.a.	n.a.	n.a.
3. Methyl isobutyl ketone {Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone}	108-10-1	n.a.	n.a.	n.a.	n.a.

## 12. Ecological Information

No data available.

## 13. Disposal Considerations

### Waste Disposal Method

Dispose in accordance with applicable local, state, and federal regulations.

# MATERIAL SAFETY DATA SHEET

## Denatured Alcohol

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Supersedes Revision: 11/13/2008

### 14. Transport Information

#### LAND TRANSPORT (US DOT)

DOT Proper Shipping Name: Alcohols, n.o.s. (Ethyl Alcohol, Methanol)  
DOT Hazard Class: 3  
DOT Hazard Label: FLAMMABLE LIQUID  
UN/NA Number: UN1987  
Packing Group: II

#### Additional Transport Information

The transportation information listed above is suitable for all modes of transportation. IMO/IMDG, ICAO/IATA, 49 CFR

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

### 15. Regulatory Information

#### US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Ethyl alcohol {Ethanol}	64-17-5	No	No	No	No
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	No	Yes 5000 LB	Yes	No
3. Methyl isobutyl ketone {Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone}	108-10-1	No	Yes 5000 LB	Yes	Yes

#### US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Ethyl alcohol {Ethanol}	64-17-5	No		Inventory	
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	HAP		Inventory	
3. Methyl isobutyl ketone {Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone}	108-10-1	HAP		Inventory	

#### SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302:	EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304:	EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Sec.313:	EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
Sec.110:	EPA SARA 110 Superfund Site Priority Contaminant List

#### TSCA (Toxic Substances Control Act) Lists:

Inventory:	Chemical Listed in the TSCA Inventory.
5A(2):	Chemical Subject to Significant New Rules (SNURS)
6A:	Commercial Chemical Control Rules
8A:	Toxic Substances Subject To Information Rules on Production



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## Denatured Alcohol

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8A CAIR: Comprehensive Assessment Information Rules - (CAIR)  
8A PAIR: Preliminary Assessment Information Rules - (PAIR)  
8C: Records of Allegations of Significant Adverse Reactions  
8D: Health and Safety Data Reporting Rules  
8D TERM: Health and Safety Data Reporting Rule Terminations  
12(b): Notice of Export

### Other Important Lists:

CWA NPDES: EPA Clean Water Act NPDES Permit Chemical  
CAA HAP: EPA Clean Air Act Hazardous Air Pollutant  
CAA ODC: EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)  
CA PROP 65: California Proposition 65

### International Regulatory Lists:

### EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

☒ Yes ☐ No Acute (immediate) Health Hazard  
☒ Yes ☐ No Chronic (delayed) Health Hazard  
☒ Yes ☐ No Fire Hazard  
☐ Yes ☒ No Sudden Release of Pressure Hazard  
☐ Yes ☒ No Reactive Hazard

## 16. Other Information

### Company Policy or Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

# MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Date of Prep: 09/15/05

## SECTION 1

SUNNYSIDE CORPORATION  
225 CARPENTER AVENUE  
WHEELING, ILLINOIS 60090  
EMERGENCY TELEPHONE

(847) 541-5700  
(800) 424-9300

FOR INFORMATION:

(847) 541-5700

- SUNNYSIDE CORPORATION  
- CHEM TREC

Product Class: Ketone  
Trade Name: METHYL ETHYL KETONE

Manufacturer's Code:  
NPCA HMIS:

847  
Health: 1  
Flammability: 3  
Reactivity: 0

Product Appearance and Odor: Clear, colorless liquid; characteristic, pungent odor.

## SECTION 2 -- HAZARDOUS INGREDIENTS

### OCCUPATIONAL EXPOSURE LIMITS

INGREDIENT	CAS #	PERCENT	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)	VAPOR PRESSURE
Methyl Ethyl Ketone	78-93-3		200 PPM	300 PPM	200 PPM	300 PPM	83 MM Hg @ 75°F

## SECTION 3 -- EMERGENCY AND FIRST AID PROCEDURES

Inhalation:	Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.
Eye Contact:	Immediately flush eyes with water for at least 15 minutes. Get medical attention.
Skin Contact:	Flush with large amounts of water; use soap if available. Remove grossly contaminated clothing, including shoes, and launder before reuse.
Ingestion:	If swallowed, do not induce vomiting, keep at rest. Get prompt medical attention.

## SECTION 4 -- PHYSICAL DATA

The following data represent approximate or typical values. They do not constitute product specifications.

Boiling Range:	175-177° (F)	Vapor Density:	Heavier than air
Evaporation Rate:	Slower than ether	% Volatile By Volume:	100%
Weight Per Gallon:	6.72 Lbs.		
Solubility in Water:	26% @ 68° F.		

## SECTION 5 -- FIRE AND EXPLOSION DATA

Flammability Classification:	Flammable Liquid - Class IB.
Flash Point:	20° (F) (Tag. Closed Cup), approximately
Autoignition Temperature:	860° (F)
Lower Explosive Limit:	1.8% @ 77° F.
Extinguishing Media:	Either allow fire to burn under controlled conditions or extinguish with alcohol type foam and dry chemical. Try to cover liquid spills with foam.
Unusual Fire and Explosion Hazards:	Extremely flammable. Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations.
Special Fire Fighting Procedures:	Use water spray to cool fire exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors.

**SECTION 6 -- HEALTH HAZARD DATA**

THRESHOLD LIMIT VALUE: EFFECTS OF OVEREXPOSURE	See Section 2
Eye Contact:	Severely irritating. If not removed promptly, will injure eye tissue, which may result in permanent damage.
Inhalation:	High vapor concentrations are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. Low order of toxicity.
Skin Contact:	Prolonged or repeated skin contact may irritate and cause dermatitis. Low order of toxicity.
Ingestion:	Minimal toxicity. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchopneumonia or pulmonary edema.
Carcinogenicity:	MEK is not listed by the NTP, IARC, or OSHA.
Chronic:	There is no evidence that exposure to Methyl Ethyl Ketone alone causes progressive or irreversible neurotoxic effects. However, simultaneous overexposure to MEK and n-Hexane can potentiate the known irreversible neurotoxic effects of n-Hexane. There is no reported human evidence that these neurotoxic effects occur when exposure to both chemicals is maintained below established OSHA and ACGIH limits.

**SECTION 7 -- REACTIVITY DATA**

Stability:	Stable
Conditions to Avoid:	Heat, sparks and flame.
Incompatibility (Materials to Avoid):	Caustics, amines, alkanolamines, aldehydes, ammonia, strong oxidizing agents, and chlorinated compounds.
Hazardous Decomposition Products:	None known.
Hazardous Polymerization:	Will not occur.

**SECTION 8 -- SPILL OR LEAK PROCEDURES**

Steps to be taken in case material is spilled or released: Remove ignition sources, evacuate area, avoid breathing vapors or contact with liquid. Recover free liquid or stop leak if possible. Dike large spills and use absorbent material for small spills. Keep spilled material out of sewers, ditches and bodies of water. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear.

Waste disposal method: Incinerate under safe conditions; dispose of in accordance with local, state and federal regulations.

**SECTION 9 -- SAFE HANDLING AND USE INFORMATION**

Respiratory Protection:	Where concentrations in air may exceed occupational exposure limits, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.
Ventilation:	Exposure levels should be maintained below applicable exposure limits - see Section 2. This product should not be used in confined spaces, or in a manner that will allow accumulation of high vapor concentrations. However, for controlled industrial uses when this product is used in confined spaces, heated above ambient temperatures or agitated, the use of explosion proof ventilation equipment is necessary.
Protective Gloves:	Chemical resistant gloves.
Eye Protection:	Chemical safety goggles and a face shield.
Other Protective Equipment:	Impervious clothing or boots where needed.

**SECTION 10 -- SPECIAL PRECAUTIONS**

Dept. of Labor Storage Category: Flammable Liquid-Class IB.

Hygienic Practices: Keep away from heat, sparks and open flame. Keep containers closed when not in use. Avoid eye contact. Avoid prolonged or repeated contact with skin. Wash skin with soap and water after contact.

Additional Precautions: Ground containers when transferring liquid to prevent static accumulation and discharge. Additional information regarding safe handling of products with static accumulation potential can be ordered by contacting the American Petroleum Institute (API) for API Recommended Practice 2003, entitled "Protection Against Ignitions Arising Out of Static, Lighting, and Stray Currents" (American Petroleum Institute, 1720 L Street Northwest, Washington, DC 20005), or the National Fire Protection Association (NFPA) for NFPA 77 entitled "Static Electricity" (National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101).

Empty Container Warning: "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition. They may explode and cause injury or death. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to supplier or disposed of in an environmentally safe manner and in accordance with governmental regulations.

**SECTION 11 -- ADDITIONAL INFORMATION**

This product contains the following toxic chemical(s) which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

TOXIC CHEMICAL	CAS #	APPROXIMATE % BY WEIGHT
NONE	NONE	NONE

SARA Title III Hazard Categories: Immediate (Acute) Health, Delayed (Chronic) Health, Fire.

Common Names: 2-Butanone, Ethyl Methyl Ketone, MEK

California Proposition 65: This product contains trace amounts of Benzene, a chemical known to the State of California to cause cancer, and Toluene, a chemical known to the State of California to cause birth defects or other reproductive harm.

**TRANSPORTATION**

U.S. D.O.T. Proper Shipping Name: Methyl Ethyl Ketone

U.S. D.O.T. Hazard Class & Packing Group: 3, PG II

U.S. D.O.T. I.D. Number: UN 1193

U.S. D.O.T. Hazardous Substance: Methyl Ethyl Ketone RQ 5000 lbs.

Refer to 49 CFR for possible exceptions and exemptions.

**MATERIAL SAFETY DATA SHEET**

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Date of Prep: 08/30/06

**SECTION 1**

SUNNYSIDE CORPORATION  
225 CARPENTER AVENUE  
WHEELING, ILLINOIS 60090  
EMERGENCY TELEPHONE

(847) 541-5700  
(800) 424-9300

FOR INFORMATION:

(847) 541-5700

- SUNNYSIDE CORPORATION  
- CHEM TREC

Product Class: Mixed Solvents  
Trade Name: 461 LACQUER THINNER

Manufacturer's Code:  
NPCA HMIS:

461  
Health: 2  
Flammability: 3  
Reactivity: 1

Product Appearance and Odor: Clear, colorless liquid; mild solvent odor.

**SECTION 2 -- HAZARDOUS INGREDIENTS****OCCUPATIONAL EXPOSURE LIMITS**

INGREDIENT	CAS #	PERCENT	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)	VAPOR PRESSURE
Acetone	67-64-1		500 PPM	750 PPM	750 PPM	1000 PPM	213 MM Hg @ 75° F.
Ethyl Acetate	141-78-6		400 PPM		400 PPM		86 MM Hg @ 20° C.
Methanol	67-56-1		200 PPM (SKIN)	250 PPM	200 PPM (SKIN)	250 PPM	96 MM Hg @ 20° C.
Light Aliphatic Solvent Naphtha	64742-89-8		300 PPM (For VM&P Naphtha - CAS # 8032-32-4)		300 PPM	400 PPM	Approx. 60 MM Hg @ 25° C.
Toluene	108-88-3		50 PPM *(SKIN, A4)		100 PPM	150 PPM	Approx. 54 MM Hg @ 25° C.
2-Butoxyethanol	111-76-2		20 PPM (SKIN)		20 PPM (SKIN)		0.6 MM Hg @ 20° C.

\*Not classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data.

**SECTION 3 -- EMERGENCY AND FIRST AID PROCEDURES**

Eye Contact:	Move victim away from exposure and into fresh air. Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. In case of irritation from airborne exposure, move to fresh air. Get prompt medical attention.
Skin Contact:	Remove contaminated shoes and clothing. Flush skin with water. Follow by washing with soap and water. If irritation or redness develops, get medical attention. Do not reuse clothing until cleaned.
Inhalation:	Using proper respiratory protection, immediately remove the affected victim from source of exposure and into fresh air. If respiratory symptoms or other symptoms persist seek immediate medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.
Ingestion:	Do not induce vomiting. Call a physician, hospital emergency room or Poison Control Center immediately. Transport to medical attention immediately. Prompt action is essential.
Emergency Medical Treatment Procedures:	This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, pancreas, heart. Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias.

**SECTION 4 -- PHYSICAL DATA**

The following data represent approximate or typical values. They do not constitute product specifications.

Boiling Range:	133-336° F.	Vapor Density:	Heavier than air
Evaporation Rate:	Slower than ether	% Volatile By Volume:	100%
Weight Per Gallon:	6.564 lbs.		
Solubility in Water:	Moderate		
VOC:	3.918 lbs./gal.		

**SECTION 5 -- FIRE AND EXPLOSION DATA**

Flammability Classification:	Flammable liquid - Class IB.
Flash Point:	0° F. (Tag.Closed Cup)
Autoignition Temperature:	460° (F) minimum (approximate)
Lower Explosive Limit:	2.6% @ 77( F
Extinguishing Media:	Either allow fire to burn under controlled conditions or extinguish with alcohol type foam and dry chemical. Try to cover liquid spills with foam.
Unusual Fire and Explosion Hazards:	Extremely flammable. Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations.
Special Fire Fighting Procedures:	Use water spray to cool fire exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors.

**SECTION 6 -- HEALTH HAZARD DATA**

THRESHOLD LIMIT VALUE: EFFECTS OF OVEREXPOSURE:	See Section 2.
Eye Contact:	Severely irritating. If not removed promptly, will injure eye tissue, which may result in permanent damage.
Skin Contact:	Skin irritant. Prolonged or repeated skin contact can cause dermatitis, drying, cracking or irritation of the skin.
Inhalation:	Breathing high vapor concentrations may result in respiratory tract irritation, central nervous system depression, liver and kidney damage, may cause headaches and dizziness, drowsiness and unconsciousness. Brain cell damage may result from long-term vapor inhalation.
Ingestion:	Swallowing as little as one to four ounces of Methanol has been reported to cause death or serious irreversible injury such as blindness in humans. Studies in experimental animals indicate that the metabolism of Methanol to formic acid results in metabolic acidosis and reversible or irreversible damage to the optic nerve. Ingestion of this product, even in small amounts can cause blindness and death. Onset of symptoms may be delayed for 18-24 hours. Treatment prior to onset of obvious symptoms may be lifesaving. Methanol is rapidly absorbed and emesis should be initiated early to be effective, within 30 minutes of ingestion, if possible. Administer syrup of ipecac. After the dose is given, encourage patient to take 6-8 ounces of clear, non-carbonated fluid. Dose may be repeated once if emesis does not occur within 20-30 minutes. Administration of an aqueous slurry of activated charcoal with magnesium citrate or sorbitol as a cathartic has been reported helpful. Ethanol inhibits the formation of toxic metabolites. Ethanol therapy may prove beneficial. Maintain contact with a poison control center during all aspects of diagnosis and treatment.
Carcinogenicity:	There is inadequate data available to evaluate the risk of developing cancer from exposure to the Toluene present in this product. However, none of the solvents in this product are listed as carcinogens or potential carcinogens by the NTP, IARC, or OSHA.
Target Organs:	There is a potential hazard (from Toluene) to the central nervous system, kidney, liver and sense of hearing.
Developmental:	Potential hazard to the fetus.
Chronic Effects:	WARNING: Concentrated, prolonged or deliberate inhalation of this product may cause brain and nervous system damage. Prolonged and repeated exposure of pregnant animals to Toluene (levels greater than approximately 1500 ppm) has been reported to cause adverse fetal developmental effects.
Medical Conditions Aggravated by Exposure:	Conditions aggravated by exposure may include skin disorders, respiratory (asthma-like) conditions, kidney disorders and liver disorders.

Studies in experimental animals with 2-Butoxyethanol have produced damage to the red blood cell by inhalation; skin absorption and ingestion. Toxic liver effects in male rats were also observed.

**SECTION 7 -- REACTIVITY DATA**

Stability:	Stable (2-Butoxyethanol, however, forms peroxides of unknown stability). Inhibitor not been added to mitigate peroxide hazard.
Conditions to Avoid:	Heat, sparks, and flame.
Incompatibility (Materials to Avoid):	Strong oxidizing agents like liquid chlorine or concentrated oxygen. Maybe corrosive to lead and aluminum.
Hazardous Decomposition Products:	Thermal decomposition may yield carbon dioxide and carbon monoxide.
Hazardous Polymerization:	Will not occur.

**SECTION 8 -- SPILL OR LEAK PROCEDURES**

Steps to be taken in case material is spilled or released: Remove ignition sources, evacuate area, avoid breathing vapors or contact with liquid. Use non-sparking tools and explosion proof equipment. Recover free liquid or stop leak if possible. Dike large spills and use absorbent material for small spills. Keep spilled material out of sewers, ditches and bodies of water. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear.

Waste disposal method: Send to a licensed reclaimer or incinerator. Dispose of in accordance with local, state and federal regulations.

**SECTION 9 -- SAFE HANDLING AND USE INFORMATION**

Respiratory Protection:	Appropriate vapor canister, self-contained breathing apparatus or supplied-air hose mask, if needed.
Ventilation:	It is not recommended that this product be used in confined spaces or in a manner that will allow accumulation of high vapor concentrations. However, for controlled industrial uses when this product is used in confined spaces, heated above ambient temperatures or agitated, the use of explosion proof ventilation is necessary to maintain exposure levels below applicable exposure limits - see Section 2.
Protective Gloves:	Wear resistant gloves such as nitrile rubber.
Eye Protection:	Chemical safety goggles
Other Protective Equipment:	Impervious clothing or boots, if needed.

**SECTION 10 -- SPECIAL PRECAUTIONS**

Dept. of Labor Storage Category:	Flammable liquid - Class IB.
Hygienic Practices:	Keep away from heat, sparks and flame. Keep containers closed when not in use. Avoid eye contact. Avoid prolonged contact with skin. Wash skin with soap and water after contact.
Additional Precautions:	Ground containers when transferring liquid to prevent static accumulation and discharge. Additional information regarding safe handling of products with static accumulation potential can be ordered by contacting the American Petroleum Institute (API) for API Recommended Practice 2003, entitled "Protection Against Ignitions Arising Out of Static, Lighting, and Stray Currents" (American Petroleum Institute, 1720 L Street Northwest, Washington, DC 20005), or the National Fire Protection Association (NFPA) for NFPA 77 entitled "Static Electricity" (National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101).
Empty Container Warning:	"Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition. They may explode and cause injury or death. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to supplier or disposed of in an environmentally safe manner and in accordance with governmental regulations.

## SECTION 11 -- ADDITIONAL INFORMATION

This product contains the following toxic chemical(s) which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

TOXIC CHEMICAL	CAS #	APPROXIMATE % BY WEIGHT
Toluene	108-88-3	15.28%
Glycol Ethers (Ethylene Glycol Monobutyl Ether)	111-76-2	4.57%
Methanol	67-56-1	15.12%

SARA Title III Hazard Categories: Immediate (Acute) Health, Delayed (Chronic) Health, Fire.

Common Names: Lacquer reducer, solvent mixture

California Proposition 65: This product contains Toluene and may contain trace amounts of Benzene and Ethyl Benzene- which are known to the State of California to cause cancer, birth defects or other reproductive harm and may be subject to the requirements of California Proposition 65.

TRANSPORTATION\* (U.S.D.O.T. land transportation in packages of 119 gallons or less)

Proper Shipping Name: Paint related material

Hazard Class: 3

Packing Group: II

Identification Number: UN 1263

U.S. D.O.T. Hazardous Substance: Methanol RQ 5000 Lbs.  
Ethyl Acetate RQ 1000 lbs.  
Acetone RQ 5000 lbs.  
Toluene RQ 1000 lbs.  
RQ of mixture 5555 lbs.

\*Refer to 49 CFR for additional information.  
Exceptions or exemptions may exist for smaller quantities.



## ***APPENDIX C***

### ***VALIDATED LABORATORY DATA PACKAGES***

**ENVIRONMENTAL**  
Data Services, Inc.

Proj. NYSDC EMR Circuits  
Proj # 134685-01  
File Code: 8

RECEIVED

MAR 15 2010

March 12, 2010

Mr. Marc Flanagan  
Shaw Environmental & Infrastructure Group  
13 British American Boulevard  
Latham, New York 12110-1405

RE: Submittal of Data Validation DUSR Reports for EMR Circuits, SDGs J0078 & SB06784

Dear Mr. Flanagan:

Environmental Data Services, Inc. (EDS) is pleased to submit the DUSR reports for the above referenced SDGs.

Please contact me at (757) 564-0090 or via email at [nweaver@env-data.com](mailto:nweaver@env-data.com) with any questions.

Sincerely,  
Environmental Data Services, Inc.



Nancy Weaver  
Senior Chemist

Enclosed

**DATA USABILITY SUMMARY REPORT  
EMR CIRCUITS, HAUPPAUGE, NEW YORK**

Client: Shaw Environmental and Infrastructure Group, Latham, New York  
SDG: SB06784  
Laboratory: Spectrum Analytical, Inc., Agawam, Massachusetts  
Site: EMR Circuits, Hauppauge, New York  
Date: March 12, 2010

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	SV-5	SB06784-01	Air
2	SV-2	SB06784-02	Air
3	SV-1	SB06784-03	Air
4	SV-DUPE A	SB06784-04	Air
5	SV-3	SB06784-05	Air
6	SV-4	SB06784-06	Air
7	IA-1	SB06784-07	Air
7DL	IA-1DL	SB06784-07DL	Air
8	SSV-1	SB06784-08	Air
9	SSV-2	SB06784-09	Air
10	OA-1	SB06784-10	Air

A Data Usability Summary Review was performed on the analytical data for ten air samples collected by Shaw Environmental and Infrastructure Group at the EMR Circuits site in Hauppauge, New York.

The samples were analyzed under “*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B*”, Compendium Method TO-15, “*Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*”.

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Air Samples - Volatile Organic Analysis of Ambient Air in Canister and the reviewer's professional judgment.

### **Organics**

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms
- Canister Certification Blanks
- Canister Certification Pressures Differences
- Chains-of-Custody and Traffic Reports
- Holding Times

- Laboratory Control Samples
- Surrogate Spike Recoveries
- GC/MS Tuning
- Method Blank
- Initial Calibration
- Continuing Calibration
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

### **Overall Evaluation of Data and Potential Usability Issues**

There were no rejections of data.

The data is acceptable for the intended purposes. Data were qualified for the following deficiencies.

- Two compounds were qualified as estimated in two samples due to high LCS recoveries.
- Three compounds were qualified as estimated in three samples due to high continuing calibration %D values.
- Acetone was qualified as estimated in one sample due to a linear range exceedence.
- Two compounds were qualified as estimated in two samples due to poor field duplicate precision.

### **Data Completeness**

- All criteria were met.

### **Cover letter, Narrative, and Data Reporting Forms**

- All criteria were met

### **Canister Certification Blanks**

- The batch blank checks were non-detect or < RL.

### **Canister Certification Pressures Differences**

- All criteria were met.

### **Chains-of-Custody and Traffic Reports**

- All criteria were met

### **Holding Times**

- All samples were analyzed within 30 days for air samples.

### **Laboratory Control Samples**

- The following table presents LCS percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS ID	Compound	%R	Qualifier	Affected Samples
1002050-BS1	Trichlorofluoromethane	152%	J	1, 10
	Carbon Tetrachloride	135%	J	10
	Benzyl Chloride	146%	None	All ND

### **Surrogate Spike Recoveries**

- All samples exhibited acceptable surrogate recoveries.

### **GC/MS Tuning**

- All criteria were met.

### **Method Blank**

- The method blanks were free of contamination.

### **Field and Trip Blanks**

- Field QC samples were not analyzed.

### **Initial Calibration**

- The initial calibrations exhibited acceptable %RSD and average RRF values.

### Continuing Calibration

- The following table presents compounds that exceeded 30 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
01/19/10	1,3,5-Trimethylbenzene	31.2%	J/UJ	1, 5, 10
	4-Ethyltoluene	30.7%		
	1,2,4-Trimethylbenzene	32.8%		

### Compound Quantitation

- Sample SV-3 exhibited a high concentration of acetone that exceeded the instrument calibration range and was flagged (E) by the laboratory. The sample was diluted and reanalyzed and the dilution acetone result should be used for reporting. The laboratory reports both the original results and the dilution results on the same Form Is. Please use the first reported result on the Form Is except for acetone for reporting.
- Sample IA-1 exhibited a high concentration of ethanol that exceeded the instrument calibration range and was flagged (E) by the laboratory. The sample was diluted and reanalyzed and the dilution result for ethanol should be used for reporting.

### Internal Standard (IS) Area Performance

- All criteria were met.

### Field Duplicate Sample Precision

- Field duplicate results are summarized below. For a high RPD >100% for air samples, results are considered estimated and qualified (J). The results are valid and usable, however possibly biased.

Compound	SV-1 ug/m <sup>3</sup>	SV-DUPE A ug/m <sup>3</sup>	RPD	Qualifier
Propene	23.06	20.31	13%	None
Dichlorodifluoromethane	3.46	2.72	24%	None
Acetone	15.92	55.13	110%	J
Trichlorofluoromethane	5.34	4.50	17%	None
Ethanol	7.73	8.28	7%	None
1,1-Dichloroethene	8.89	7.89	12%	None
1,1,2-Trichlorotrifluoroethane	87.38	77.41	12%	None
Carbon Disulfide	4.17	3.77	10%	None

Compound	SV-1 ug/m <sup>3</sup>	SV-DUPE A ug/m <sup>3</sup>	RPD	Qualifier
1,1-Dichloroethane	2.75	2.47	11%	None
Isopropyl Alcohol	5.01	4.86	3%	None
2-Butanone	10.88	10.88	0%	None
cis-1,2-Dichloroethene	4.92	4.56	8%	None
Hexane	3.10	3.67	17%	None
Chloroform	16.50	14.70	12%	None
1,1,1-Trichloroethane	54.56	48.01	13%	None
Benzene	1.44	1.50	4%	None
Trichloroethene	394.47	345.03	13%	None
1,1,2-Trichloroethane	12.82	12.55	2%	None
Toluene	11.21	18.29	48%	None
Tetrachloroethene	353.30	305.83	14%	None
Ethylbenzene	3.42	3.29	4%	None
m,p-Xylene	13.48	11.10	19%	None
o-Xylene	3.86	2.90	28%	None
1,3,5-Trimethylbenzene	1.72	1.40 U	NC	None
4-Ethyltoluene	1.43	1.38 U	NC	None
1,2,4-Trimethylbenzene	5.56	1.67	108%	J

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Very truly yours,  
Environmental Data Services, Inc.

*Nancy Weaver* 3/12/10

Nancy Weaver                      Date  
Senior Chemist

### Data Qualifiers

- 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 sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.



# FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

SV-5

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: J0060      Received: 01/14/10 17:38  
 Matrix: Soil Gas      Laboratory ID: SB06784-01      File ID: B32307.D  
 Sampled: 01/13/10 12:48      Analyzed: 01/19/10 14:49  
 Dilution Factor: 1      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002050      Sequence: S000458      Calibration: 1001027      Instrument: Air2

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	8.4800	14.59	
75-71-8	Dichlorodifluoromethane (Freon12)	0.67000	3.31	
74-87-3	Chloromethane	0.63000	1.30	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.050256	0.35	U
75-01-4	Vinyl chloride	0.053850	0.14	U
106-99-0	1,3-Butadiene	0.050719	0.11	U
74-83-9	Bromomethane	0.039878	0.15	U
75-00-3	Chloroethane	0.056395	0.15	U
67-64-1	Acetone	4.6200	10.98	
75-69-4	Trichlorofluoromethane (Freon 11)	0.49000	2.75	
64-17-5	Ethanol	2.1900	4.13	
107-13-1	Acrylonitrile	0.029810	0.06	U
75-35-4	1,1-Dichloroethene	0.033504	0.13	U
75-09-2	Methylene chloride	0.10000	0.35	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.035536	0.27	U
75-15-0	Carbon disulfide	0.080000	0.25	J
156-60-5	trans-1,2-Dichloroethene	0.035536	0.14	U
75-34-3	1,1-Dichloroethane	0.035536	0.14	U
1634-04-4	Methyl tert-butyl ether	0.043253	0.16	U
67-63-0	Isopropyl alcohol	0.35000	0.86	J
78-93-3	2-Butanone (MEK)	0.53000	1.56	
156-59-2	cis-1,2-Dichloroethene	0.15000	0.59	
110-54-3	Hexane	0.080000	0.28	J
141-78-6	Ethyl acetate	0.036188	0.13	U
67-66-3	Chloroform	0.023691	0.12	U
109-99-9	Tetrahydrofuran	0.046885	0.14	U
107-06-2	1,2-Dichloroethane	0.028198	0.11	U
71-55-6	1,1,1-Trichloroethane	0.024658	0.13	U
71-43-2	Benzene	0.028198	0.09	U
56-23-5	Carbon tetrachloride	0.023691	0.15	U
110-82-7	Cyclohexane	0.097200	0.33	U
78-87-5	1,2-Dichloropropane	0.023691	0.11	U
75-27-4	Bromodichloromethane	0.035536	0.24	U
79-01-6	Trichloroethene	0.11000	0.59	
123-91-1	1,4-Dioxane	0.021627	0.08	U
142-82-5	n-Heptane	0.028198	0.12	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.039287	0.16	U
10061-01-5	cis-1,3-Dichloropropene	0.036188	0.16	U
10061-02-6	trans-1,3-Dichloropropene	0.030585	0.14	U

lw  
3/12/10

# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

SV-5

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-01 File ID: B32307.D  
 Sampled: 01/13/10 12:48 Analyzed: 01/19/10 14:49  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002050 Sequence: S000458 Calibration: 1001027 Instrument: Air2

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	0.039287	0.21	U
108-88-3	Toluene	0.028198	0.11	U
591-78-6	2-Hexanone (MBK)	0.035536	0.15	U
124-48-1	Dibromochloromethane	0.044321	0.38	U
106-93-4	1,2-Dibromoethane (EDB)	0.030585	0.24	U
127-18-4	Tetrachloroethene	0.039878	0.27	U
108-90-7	Chlorobenzene	0.047873	0.22	U
630-20-6	1,1,1,2-Tetrachloroethane	0.054282	0.37	U
100-41-4	Ethylbenzene	0.033504	0.15	U
179601-23-1	m,p-Xylene	0.083760	0.36	U
75-25-2	Bromoform	0.067702	0.70	U
100-42-5	Styrene	0.039287	0.17	U
95-47-6	o-Xylene	0.047382	0.21	U
79-34-5	1,1,2,2-Tetrachloroethane	0.080630	0.55	U
98-82-8	Isopropylbenzene	0.036188	0.18	U
108-67-8	1,3,5-Trimethylbenzene	0.050256	0.25	X UJ
622-96-8	4-Ethyltoluene	0.054282	0.27	X UJ
95-63-6	1,2,4-Trimethylbenzene	0.049316	0.24	X UJ
541-73-1	1,3-Dichlorobenzene	0.058432	0.35	U
100-44-7	Benzyl chloride	0.053850	0.28	U
106-46-7	1,4-Dichlorobenzene	0.042158	0.25	U
135-98-8	sec-Butylbenzene	0.047873	0.26	U
99-87-6	4-Isopropyltoluene	0.045877	0.25	U
95-50-1	1,2-Dichlorobenzene	0.042158	0.25	U
104-51-8	n-Butylbenzene	0.038078	0.21	U
120-82-1	1,2,4-Trichlorobenzene	0.024658	0.18	U
87-68-3	Hexachlorobutadiene	0.042158	0.45	U

\* Values outside of QC limits

OLW  
3/12/10

# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

SV-2

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-02 File ID: A35627.D  
 Sampled: 01/13/10 13:40 Analyzed: 01/18/10 17:40  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	23.9	41.13	
75-71-8	Dichlorodifluoromethane (Freon12)	0.570	2.82	
74-87-3	Chloromethane	0.880	1.82	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.246	1.72	U
75-01-4	Vinyl chloride	0.233	0.60	U
106-99-0	1,3-Butadiene	0.256	0.57	U
74-83-9	Bromomethane	0.212	0.82	U
75-00-3	Chloroethane	0.270	0.71	U
67-64-1	Acetone	2.90	6.89	
75-69-4	Trichlorofluoromethane (Freon 11)	0.320	1.80	J
64-17-5	Ethanol	2.66	5.02	
75-35-4	1,1-Dichloroethene	0.198	0.79	U
107-13-1	Acrylonitrile	0.151	0.33	U
75-09-2	Methylene chloride	0.254	0.88	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.225	1.72	U
75-15-0	Carbon disulfide	0.310	0.96	J
156-60-5	trans-1,2-Dichloroethene	0.191	0.76	U
75-34-3	1,1-Dichloroethane	0.191	0.77	U
1634-04-4	Methyl tert-butyl ether	0.192	0.69	U
67-63-0	Isopropyl alcohol	1.73	4.25	
78-93-3	2-Butanone (MEK)	4.16	12.27	
156-59-2	cis-1,2-Dichloroethene	0.135	0.54	U
110-54-3	Hexane	1.45	5.11	
141-78-6	Ethyl acetate	0.194	0.70	U
67-66-3	Chloroform	0.270	1.31	J
109-99-9	Tetrahydrofuran	0.225	0.66	U
107-06-2	1,2-Dichloroethane	0.142	0.57	U
71-55-6	1,1,1-Trichloroethane	0.137	0.75	U
71-43-2	Benzene	1.27	4.05	
56-23-5	Carbon tetrachloride	0.145	0.91	U
110-82-7	Cyclohexane	0.214	0.74	U
78-87-5	1,2-Dichloropropane	0.172	0.79	U
75-27-4	Bromodichloromethane	0.180	1.21	U
79-01-6	Trichloroethene	0.281	1.51	U
123-91-1	1,4-Dioxane	0.391	1.41	U
142-82-5	n-Heptane	0.820	3.36	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.230	0.94	U
10061-01-5	cis-1,3-Dichloropropene	0.190	0.86	U
10061-02-6	trans-1,3-Dichloropropene	0.159	0.72	U

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3/12/10

**FORM I - AIR ANALYSIS DATA SHEET**  
**EPA TO-15**

SV-2

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-02 File ID: A35627.D  
 Sampled: 01/13/10 13:40 Analyzed: 01/18/10 17:40  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	0.234	1.28	U
108-88-3	Toluene	5.78	21.75	
591-78-6	2-Hexanone (MBK)	0.224	0.92	U
124-48-1	Dibromochloromethane	0.193	1.64	U
106-93-4	1,2-Dibromoethane (EDB)	0.150	1.15	U
127-18-4	Tetrachloroethene	0.300	2.03	J
108-90-7	Chlorobenzene	0.282	1.30	U
100-41-4	Ethylbenzene	0.680	2.95	
630-20-6	1,1,1,2-Tetrachloroethane	0.307	2.11	U
179601-23-1	m,p-Xylene	2.60	11.27	
75-25-2	Bromoform	0.316	3.27	U
100-42-5	Styrene	0.187	0.80	U
95-47-6	o-Xylene	0.750	3.25	
79-34-5	1,1,2,2-Tetrachloroethane	0.436	2.99	U
108-67-8	1,3,5-Trimethylbenzene	0.285	1.40	U
622-96-8	4-Ethyltoluene	0.280	1.38	U
95-63-6	1,2,4-Trimethylbenzene	0.720	3.54	
98-82-8	Isopropylbenzene	0.259	1.27	U
541-73-1	1,3-Dichlorobenzene	0.276	1.66	U
100-44-7	Benzyl chloride	0.247	1.27	U
106-46-7	1,4-Dichlorobenzene	0.259	1.56	U
95-50-1	1,2-Dichlorobenzene	0.227	1.36	U
120-82-1	1,2,4-Trichlorobenzene	0.160	1.19	U
87-68-3	Hexachlorobutadiene	0.248	2.64	U
135-98-8	sec-Butylbenzene	0.264	1.45	U
99-87-6	4-Isopropyltoluene	0.245	1.31	U
104-51-8	n-Butylbenzene	0.213	1.17	U

\* Values outside of QC limits

lw  
3/12/10

# FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

SV-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-03 File ID: A35628.D  
 Sampled: 01/13/10 13:35 Analyzed: 01/18/10 18:22  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	13.4	23.06	
75-71-8	Dichlorodifluoromethane (Freon12)	0.700	3.46	
74-87-3	Chloromethane	0.286	0.59	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.246	1.72	U
75-01-4	Vinyl chloride	0.233	0.60	U
106-99-0	1,3-Butadiene	0.256	0.57	U
74-83-9	Bromomethane	0.212	0.82	U
75-00-3	Chloroethane	0.270	0.71	U
67-64-1	Acetone	6.70	15.92	J
75-69-4	Trichlorofluoromethane (Freon 11)	0.950	5.34	
64-17-5	Ethanol	4.10	7.73	
75-35-4	1,1-Dichloroethene	2.24	8.89	
107-13-1	Acrylonitrile	0.151	0.33	U
75-09-2	Methylene chloride	0.254	0.88	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	11.4	87.38	
75-15-0	Carbon disulfide	1.34	4.17	
156-60-5	trans-1,2-Dichloroethene	0.191	0.76	U
75-34-3	1,1-Dichloroethane	0.680	2.75	
1634-04-4	Methyl tert-butyl ether	0.192	0.69	U
67-63-0	Isopropyl alcohol	2.04	5.01	
78-93-3	2-Butanone (MEK)	3.69	10.88	
156-59-2	cis-1,2-Dichloroethene	1.24	4.92	
110-54-3	Hexane	0.880	3.10	
141-78-6	Ethyl acetate	0.194	0.70	U
67-66-3	Chloroform	3.39	16.50	
109-99-9	Tetrahydrofuran	0.225	0.66	U
107-06-2	1,2-Dichloroethane	0.142	0.57	U
71-55-6	1,1,1-Trichloroethane	10.0	54.56	
71-43-2	Benzene	0.450	1.44	J
56-23-5	Carbon tetrachloride	0.145	0.91	U
110-82-7	Cyclohexane	0.214	0.74	U
78-87-5	1,2-Dichloropropane	0.172	0.79	U
75-27-4	Bromodichloromethane	0.180	1.21	U
79-01-6	Trichloroethene	73.4	394.47	
123-91-1	1,4-Dioxane	0.391	1.41	U
142-82-5	n-Heptane	0.138	0.57	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.230	0.94	U
10061-01-5	cis-1,3-Dichloropropene	0.190	0.86	U
10061-02-6	trans-1,3-Dichloropropene	0.159	0.72	U

312110

# **FORM I - AIR ANALYSIS DATA SHEET** **EPA TO-15**

SV-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: J0060      Received: 01/14/10 17:38  
 Matrix: Soil Gas      Laboratory ID: SB06784-03      File ID: A35628.D  
 Sampled: 01/13/10 13:35      Analyzed: 01/18/10 18:22  
 Dilution Factor: 1      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002002      Sequence: S000434      Calibration: 1001022      Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	2.35	12.82	
108-88-3	Toluene	2.98	11.21	
591-78-6	2-Hexanone (MBK)	0.224	0.92	U
124-48-1	Dibromochloromethane	0.193	1.64	U
106-93-4	1,2-Dibromoethane (EDB)	0.150	1.15	U
127-18-4	Tetrachloroethene	52.1	353.30	
108-90-7	Chlorobenzene	0.282	1.30	U
100-41-4	Ethylbenzene	0.790	3.42	
630-20-6	1,1,1,2-Tetrachloroethane	0.307	2.11	U
179601-23-1	m,p-Xylene	3.11	13.48	
75-25-2	Bromoform	0.316	3.27	U
100-42-5	Styrene	0.187	0.80	U
95-47-6	o-Xylene	0.890	3.86	
79-34-5	1,1,2,2-Tetrachloroethane	0.436	2.99	U
108-67-8	1,3,5-Trimethylbenzene	0.350	1.72	J
622-96-8	4-Ethyltoluene	0.290	1.43	J
95-63-6	1,2,4-Trimethylbenzene	1.13	5.56	J
98-82-8	Isopropylbenzene	0.259	1.27	U
541-73-1	1,3-Dichlorobenzene	0.276	1.66	U
100-44-7	Benzyl chloride	0.247	1.27	U
106-46-7	1,4-Dichlorobenzene	0.259	1.56	U
95-50-1	1,2-Dichlorobenzene	0.227	1.36	U
120-82-1	1,2,4-Trichlorobenzene	0.160	1.19	U
87-68-3	Hexachlorobutadiene	0.248	2.64	U
135-98-8	sec-Butylbenzene	0.264	1.45	U
99-87-6	4-Isopropyltoluene	0.245	1.31	U
104-51-8	n-Butylbenzene	0.213	1.17	U

\* Values outside of QC limits

*lew*  
3/12/10

# FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

SV-DUPE A

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-04 File ID: A35629.D  
 Sampled: 01/13/10 00:00 Analyzed: 01/18/10 19:04  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	11.8	20.31	
75-71-8	Dichlorodifluoromethane (Freon12)	0.550	2.72	
74-87-3	Chloromethane	0.286	0.59	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.246	1.72	U
75-01-4	Vinyl chloride	0.233	0.60	U
106-99-0	1,3-Butadiene	0.256	0.57	U
74-83-9	Bromomethane	0.212	0.82	U
75-00-3	Chloroethane	0.270	0.71	U
67-64-1	Acetone	23.2	55.13	J
75-69-4	Trichlorofluoromethane (Freon 11)	0.800	4.50	
64-17-5	Ethanol	4.39	8.28	
75-35-4	1,1-Dichloroethene	1.99	7.89	
107-13-1	Acrylonitrile	0.151	0.33	U
75-09-2	Methylene chloride	0.254	0.88	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	10.1	77.41	
75-15-0	Carbon disulfide	1.21	3.77	
156-60-5	trans-1,2-Dichloroethene	0.191	0.76	U
75-34-3	1,1-Dichloroethane	0.610	2.47	
1634-04-4	Methyl tert-butyl ether	0.192	0.69	U
67-63-0	Isopropyl alcohol	1.98	4.86	
78-93-3	2-Butanone (MEK)	3.69	10.88	
156-59-2	cis-1,2-Dichloroethene	1.15	4.56	
110-54-3	Hexane	1.04	3.67	
141-78-6	Ethyl acetate	0.194	0.70	U
67-66-3	Chloroform	3.02	14.70	
109-99-9	Tetrahydrofuran	0.225	0.66	U
107-06-2	1,2-Dichloroethane	0.142	0.57	U
71-55-6	1,1,1-Trichloroethane	8.80	48.01	
71-43-2	Benzene	0.470	1.50	J
56-23-5	Carbon tetrachloride	0.145	0.91	U
110-82-7	Cyclohexane	0.214	0.74	U
78-87-5	1,2-Dichloropropane	0.172	0.79	U
75-27-4	Bromodichloromethane	0.180	1.21	U
79-01-6	Trichloroethene	64.2	345.03	
123-91-1	1,4-Dioxane	0.391	1.41	U
142-82-5	n-Heptane	0.138	0.57	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.230	0.94	U
10061-01-5	cis-1,3-Dichloropropene	0.190	0.86	U
10061-02-6	trans-1,3-Dichloropropene	0.159	0.72	U

Rec'd  
3/12/10

**FORM I - AIR ANALYSIS DATA SHEET**  
**EPA TO-15**

SV-DUPE A

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: J0060      Received: 01/14/10 17:38  
 Matrix: Soil Gas      Laboratory ID: SB06784-04      File ID: A35629.D  
 Sampled: 01/13/10 00:00      Analyzed: 01/18/10 19:04  
 Dilution Factor: 1      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002002      Sequence: S000434      Calibration: 1001022      Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	2.30	12.55	
108-88-3	Toluene	4.86	18.29	
591-78-6	2-Hexanone (MBK)	0.224	0.92	U
124-48-1	Dibromochloromethane	0.193	1.64	U
106-93-4	1,2-Dibromoethane (EDB)	0.150	1.15	U
127-18-4	Tetrachloroethene	45.1	305.83	
108-90-7	Chlorobenzene	0.282	1.30	U
100-41-4	Ethylbenzene	0.760	3.29	
630-20-6	1,1,1,2-Tetrachloroethane	0.307	2.11	U
179601-23-1	m,p-Xylene	2.56	11.10	
75-25-2	Bromoform	0.316	3.27	U
100-42-5	Styrene	0.187	0.80	U
95-47-6	o-Xylene	0.670	2.90	
79-34-5	1,1,2,2-Tetrachloroethane	0.436	2.99	U
108-67-8	1,3,5-Trimethylbenzene	0.285	1.40	U
622-96-8	4-Ethyltoluene	0.280	1.38	U
95-63-6	1,2,4-Trimethylbenzene	0.340	1.67	J X
98-82-8	Isopropylbenzene	0.259	1.27	U
541-73-1	1,3-Dichlorobenzene	0.276	1.66	U
100-44-7	Benzyl chloride	0.247	1.27	U
106-46-7	1,4-Dichlorobenzene	0.259	1.56	U
95-50-1	1,2-Dichlorobenzene	0.227	1.36	U
120-82-1	1,2,4-Trichlorobenzene	0.160	1.19	U
87-68-3	Hexachlorobutadiene	0.248	2.64	U
135-98-8	sec-Butylbenzene	0.264	1.45	U
99-87-6	4-Isopropyltoluene	0.245	1.31	U
104-51-8	n-Butylbenzene	0.213	1.17	U

\* Values outside of QC limits

ued  
3/12/10



# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

SV-3

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-05 File ID: B32308.D  
 Sampled: 01/13/10 12:57 Analyzed: 01/19/10 15:43  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002050 Sequence: S000458 Calibration: 1001027 Instrument: Air2

*Use original results except for acetone*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	5.2700	9.07	
115-07-1	Propene	4.28	7.37	
75-71-8	Dichlorodifluoromethane (Freon12)	0.57000	2.82	
75-71-8	Dichlorodifluoromethane (Freon12)	0.570	2.82	
74-87-3	Chloromethane	0.72000	1.49	
74-87-3	Chloromethane	0.286	0.59	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.050256	0.35	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.246	1.72	U
75-01-4	Vinyl chloride	0.233	0.60	U
75-01-4	Vinyl chloride	0.053850	0.14	U
106-99-0	1,3-Butadiene	0.050719	0.11	U
106-99-0	1,3-Butadiene	0.256	0.57	U
74-83-9	Bromomethane	0.039878	0.15	U
74-83-9	Bromomethane	0.212	0.82	U
75-00-3	Chloroethane	0.056395	0.15	U
75-00-3	Chloroethane	0.270	0.71	U
67-64-1	Acetone	19.530	46.41	<del>U</del>
67-64-1	Acetone	19.5	46.34	
75-69-4	Trichlorofluoromethane (Freon 11)	0.287	1.61	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.39000	2.19	
64-17-5	Ethanol	2.9600	5.58	
64-17-5	Ethanol	4.08	7.69	
75-35-4	1,1-Dichloroethene	0.198	0.79	U
107-13-1	Acrylonitrile	0.029810	0.06	U
107-13-1	Acrylonitrile	0.151	0.33	U
75-35-4	1,1-Dichloroethene	0.033504	0.13	U
75-09-2	Methylene chloride	0.254	0.88	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.250	1.92	J
75-09-2	Methylene chloride	0.050256	0.17	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.31000	2.38	
75-15-0	Carbon disulfide	0.186	0.58	U
75-15-0	Carbon disulfide	0.20000	0.62	J
156-60-5	trans-1,2-Dichloroethene	0.191	0.76	U
75-34-3	1,1-Dichloroethane	0.191	0.77	U
156-60-5	trans-1,2-Dichloroethene	0.035536	0.14	U
75-34-3	1,1-Dichloroethane	0.035536	0.14	U
1634-04-4	Methyl tert-butyl ether	0.192	0.69	U
67-63-0	Isopropyl alcohol	1.28	3.14	
1634-04-4	Methyl tert-butyl ether	0.043253	0.16	U

*lew  
3/12/10*

# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

SV-3

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-05 File ID: A35630.D  
 Sampled: 01/13/10 12:57 Analyzed: 01/18/10 19:47  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

*Use original  
results  
except for  
acetone*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
78-93-3	2-Butanone (MEK)	2.93	8.64	
67-63-0	Isopropyl alcohol	1.5500	3.80	
78-93-3	2-Butanone (MEK)	2.9500	8.70	
156-59-2	cis-1,2-Dichloroethene	0.135	0.54	U
156-59-2	cis-1,2-Dichloroethene	0.024658	0.10	U
110-54-3	Hexane	0.17000	0.60	
110-54-3	Hexane	0.131	0.46	U
141-78-6	Ethyl acetate	0.10000	0.36	
141-78-6	Ethyl acetate	0.194	0.70	U
67-66-3	Chloroform	0.060000	0.29	J
67-66-3	Chloroform	0.151	0.73	U
109-99-9	Tetrahydrofuran	0.15000	0.44	
109-99-9	Tetrahydrofuran	0.225	0.66	U
107-06-2	1,2-Dichloroethane	0.028198	0.11	U
107-06-2	1,2-Dichloroethane	0.142	0.57	U
71-55-6	1,1,1-Trichloroethane	0.35000	1.91	
71-55-6	1,1,1-Trichloroethane	0.270	1.47	J
71-43-2	Benzene	0.22000	0.70	
71-43-2	Benzene	0.210	0.67	J
56-23-5	Carbon tetrachloride	0.023691	0.15	U
56-23-5	Carbon tetrachloride	0.145	0.91	U
110-82-7	Cyclohexane	0.097200	0.33	U
110-82-7	Cyclohexane	0.214	0.74	U
78-87-5	1,2-Dichloropropane	0.023691	0.11	U
78-87-5	1,2-Dichloropropane	0.172	0.79	U
75-27-4	Bromodichloromethane	0.035536	0.24	U
75-27-4	Bromodichloromethane	0.180	1.21	U
79-01-6	Trichloroethene	1.0200	5.48	
79-01-6	Trichloroethene	0.950	5.11	
123-91-1	1,4-Dioxane	0.021627	0.08	U
123-91-1	1,4-Dioxane	0.391	1.41	U
142-82-5	n-Heptane	0.138	0.57	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.230	0.94	U
142-82-5	n-Heptane	0.028198	0.12	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.039287	0.16	U
10061-01-5	cis-1,3-Dichloropropene	0.190	0.86	U
10061-01-5	cis-1,3-Dichloropropene	0.036188	0.16	U
10061-02-6	trans-1,3-Dichloropropene	0.159	0.72	U
79-00-5	1,1,2-Trichloroethane	0.234	1.28	U

*hw  
3/12/10*

# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

SV-3

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-05 File ID: B32308.D  
 Sampled: 01/13/10 12:57 Analyzed: 01/19/10 15:43  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002050 Sequence: S000458 Calibration: 1001027 Instrument: Air2

*Use original results except for acetone*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.030585	0.14	U
79-00-5	1,1,2-Trichloroethane	0.039287	0.21	U
108-88-3	Toluene	0.250	0.94	J
591-78-6	2-Hexanone (MBK)	0.224	0.92	U
108-88-3	Toluene	0.37000	1.39	
591-78-6	2-Hexanone (MBK)	0.035536	0.15	U
124-48-1	Dibromochloromethane	0.193	1.64	U
106-93-4	1,2-Dibromoethane (EDB)	0.150	1.15	U
124-48-1	Dibromochloromethane	0.044321	0.38	U
106-93-4	1,2-Dibromoethane (EDB)	0.030585	0.24	U
127-18-4	Tetrachloroethene	0.590	4.00	
108-90-7	Chlorobenzene	0.282	1.30	U
127-18-4	Tetrachloroethene	0.63000	4.27	
108-90-7	Chlorobenzene	0.047873	0.22	U
100-41-4	Ethylbenzene	0.191	0.83	U
630-20-6	1,1,1,2-Tetrachloroethane	0.054282	0.37	U
630-20-6	1,1,1,2-Tetrachloroethane	0.307	2.11	U
179601-23-1	m,p-Xylene	0.489	2.12	U
75-25-2	Bromoform	0.316	3.27	U
100-41-4	Ethylbenzene	0.033504	0.15	U
179601-23-1	m,p-Xylene	0.083760	0.36	U
100-42-5	Styrene	0.187	0.80	U
75-25-2	Bromoform	0.067702	0.70	U
95-47-6	o-Xylene	0.266	1.15	U
79-34-5	1,1,2,2-Tetrachloroethane	0.436	2.99	U
100-42-5	Styrene	0.039287	0.17	U
108-67-8	1,3,5-Trimethylbenzene	0.285	1.40	U
95-47-6	o-Xylene	0.047382	0.21	U
79-34-5	1,1,2,2-Tetrachloroethane	0.080630	0.55	U
622-96-8	4-Ethyltoluene	0.280	1.38	U
95-63-6	1,2,4-Trimethylbenzene	0.261	1.28	U
98-82-8	Isopropylbenzene	0.036188	0.18	U
98-82-8	Isopropylbenzene	0.259	1.27	U
108-67-8	1,3,5-Trimethylbenzene	0.050256	0.25	U
541-73-1	1,3-Dichlorobenzene	0.276	1.66	U
622-96-8	4-Ethyltoluene	0.054282	0.27	U
100-44-7	Benzyl chloride	0.247	1.27	U
95-63-6	1,2,4-Trimethylbenzene	0.049316	0.24	U
106-46-7	1,4-Dichlorobenzene	0.259	1.56	U

*See 3/12/10*

**FORM I - AIR ANALYSIS DATA SHEET**  
**EPA TO-15**

SV-3

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-05 File ID: A35630.D  
 Sampled: 01/13/10 12:57 Analyzed: 01/18/10 19:47  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

*Use  
original  
results  
except  
for  
acetone*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
91-20-3	Naphthalene	0.220	1.15	U
95-50-1	1,2-Dichlorobenzene	0.227	1.36	U
541-73-1	1,3-Dichlorobenzene	0.058432	0.35	U
120-82-1	1,2,4-Trichlorobenzene	0.160	1.19	U
100-44-7	Benzyl chloride	0.053850	0.28	U
106-46-7	1,4-Dichlorobenzene	0.042158	0.25	U
87-68-3	Hexachlorobutadiene	0.248	2.64	U
135-98-8	sec-Butylbenzene	0.047873	0.26	U
135-98-8	sec-Butylbenzene	0.264	1.45	U
99-87-6	4-Isopropyltoluene	0.045877	0.25	U
99-87-6	4-Isopropyltoluene	0.245	1.31	U
95-50-1	1,2-Dichlorobenzene	0.042158	0.25	U
104-51-8	n-Butylbenzene	0.038078	0.21	U
104-51-8	n-Butylbenzene	0.213	1.17	U
120-82-1	1,2,4-Trichlorobenzene	0.024658	0.18	U
87-68-3	Hexachlorobutadiene	0.042158	0.45	U

\* Values outside of QC limits

*new  
3/12/10*

**FORM I - AIR ANALYSIS DATA SHEET**  
**EPA TO-15**

SV-4

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-06 File ID: A35631.D  
 Sampled: 01/13/10 13:07 Analyzed: 01/18/10 20:29  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	13.2	22.72	
75-71-8	Dichlorodifluoromethane (Freon12)	0.590	2.92	
74-87-3	Chloromethane	0.286	0.59	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.246	1.72	U
75-01-4	Vinyl chloride	0.233	0.60	U
106-99-0	1,3-Butadiene	0.256	0.57	U
74-83-9	Bromomethane	0.212	0.82	U
75-00-3	Chloroethane	0.270	0.71	U
67-64-1	Acetone	15.3	36.36	
75-69-4	Trichlorofluoromethane (Freon 11)	0.287	1.61	U
64-17-5	Ethanol	8.59	16.20	
75-35-4	1,1-Dichloroethene	0.198	0.79	U
107-13-1	Acrylonitrile	0.151	0.33	U
75-09-2	Methylene chloride	0.254	0.88	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.225	1.72	U
75-15-0	Carbon disulfide	0.380	1.18	J
156-60-5	trans-1,2-Dichloroethene	0.191	0.76	U
75-34-3	1,1-Dichloroethane	0.191	0.77	U
1634-04-4	Methyl tert-butyl ether	0.192	0.69	U
67-63-0	Isopropyl alcohol	3.36	8.25	
78-93-3	2-Butanone (MEK)	7.17	21.14	
156-59-2	cis-1,2-Dichloroethene	0.135	0.54	U
110-54-3	Hexane	1.09	3.84	
141-78-6	Ethyl acetate	0.194	0.70	U
67-66-3	Chloroform	0.151	0.73	U
109-99-9	Tetrahydrofuran	0.225	0.66	U
107-06-2	1,2-Dichloroethane	0.142	0.57	U
71-55-6	1,1,1-Trichloroethane	0.200	1.09	J
71-43-2	Benzene	1.27	4.05	
56-23-5	Carbon tetrachloride	0.145	0.91	U
110-82-7	Cyclohexane	0.214	0.74	U
78-87-5	1,2-Dichloropropane	0.172	0.79	U
75-27-4	Bromodichloromethane	0.180	1.21	U
79-01-6	Trichloroethene	0.690	3.71	
123-91-1	1,4-Dioxane	0.391	1.41	U
142-82-5	n-Heptane	0.870	3.57	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.230	0.94	U
10061-01-5	cis-1,3-Dichloropropene	0.190	0.86	U
10061-02-6	trans-1,3-Dichloropropene	0.159	0.72	U

*lew*  
*3/12/10*

# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

SV-4

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Soil Gas Laboratory ID: SB06784-06 File ID: A35631.D  
 Sampled: 01/13/10 13:07 Analyzed: 01/18/10 20:29  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	0.234	1.28	U
108-88-3	Toluene	8.76	32.96	
591-78-6	2-Hexanone (MBK)	0.224	0.92	U
124-48-1	Dibromochloromethane	0.193	1.64	U
106-93-4	1,2-Dibromoethane (EDB)	0.150	1.15	U
127-18-4	Tetrachloroethene	8.00	54.25	
108-90-7	Chlorobenzene	0.282	1.30	U
100-41-4	Ethylbenzene	2.64	11.45	
630-20-6	1,1,1,2-Tetrachloroethane	0.307	2.11	U
179601-23-1	m,p-Xylene	8.39	36.37	
75-25-2	Bromoform	0.316	3.27	U
100-42-5	Styrene	0.187	0.80	U
95-47-6	o-Xylene	2.11	9.15	
79-34-5	1,1,2,2-Tetrachloroethane	0.436	2.99	U
108-67-8	1,3,5-Trimethylbenzene	0.330	1.62	J
622-96-8	4-Ethyltoluene	0.280	1.38	J
95-63-6	1,2,4-Trimethylbenzene	1.05	5.16	
98-82-8	Isopropylbenzene	0.259	1.27	U
541-73-1	1,3-Dichlorobenzene	0.276	1.66	U
100-44-7	Benzyl chloride	0.247	1.27	U
106-46-7	1,4-Dichlorobenzene	0.259	1.56	U
95-50-1	1,2-Dichlorobenzene	0.227	1.36	U
120-82-1	1,2,4-Trichlorobenzene	0.160	1.19	U
87-68-3	Hexachlorobutadiene	0.248	2.64	U
135-98-8	sec-Butylbenzene	0.264	1.45	U
99-87-6	4-Isopropyltoluene	0.260	1.40	J
104-51-8	n-Butylbenzene	0.213	1.17	U

\* Values outside of QC limits

WJ  
3/12/10

# FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

IA-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Air Laboratory ID: SB06784-07 File ID: A35632.D  
 Sampled: 01/13/10 10:10 Analyzed: 01/18/10 21:10  
 Dilution Factor: 2 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.588	1.01	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.486	2.40	U
74-87-3	Chloromethane	0.573	1.18	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.493	3.45	U
75-01-4	Vinyl chloride	0.465	1.19	U
106-99-0	1,3-Butadiene	0.512	1.13	U
74-83-9	Bromomethane	0.423	1.64	U
75-00-3	Chloroethane	0.539	1.42	U
67-64-1	Acetone	13.4	31.84	
75-69-4	Trichlorofluoromethane (Freon 11)	0.573	3.22	U
64-17-5	Ethanol	<del>208</del> 185	<del>302.18</del> 348.81	U
75-35-4	1,1-Dichloroethene	0.396	1.57	U
107-13-1	Acrylonitrile	0.303	0.66	U
75-09-2	Methylene chloride	4.38	15.21	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.450	3.45	U
75-15-0	Carbon disulfide	0.373	1.16	U
156-60-5	trans-1,2-Dichloroethene	0.382	1.51	U
75-34-3	1,1-Dichloroethane	0.382	1.55	U
1634-04-4	Methyl tert-butyl ether	0.385	1.39	U
67-63-0	Isopropyl alcohol	11.6	28.47	
78-93-3	2-Butanone (MEK)	9.24	27.25	
156-59-2	cis-1,2-Dichloroethene	0.270	1.07	U
110-54-3	Hexane	1.20	4.23	
141-78-6	Ethyl acetate	1.36	4.90	
67-66-3	Chloroform	0.302	1.47	U
109-99-9	Tetrahydrofuran	0.820	2.42	J
107-06-2	1,2-Dichloroethane	0.285	1.15	U
71-55-6	1,1,1-Trichloroethane	0.275	1.50	U
71-43-2	Benzene	0.640	2.04	J
56-23-5	Carbon tetrachloride	0.290	1.82	U
110-82-7	Cyclohexane	0.429	1.48	U
78-87-5	1,2-Dichloropropane	0.343	1.59	U
75-27-4	Bromodichloromethane	0.359	2.41	U
79-01-6	Trichloroethene	0.563	3.03	U
123-91-1	1,4-Dioxane	0.782	2.81	U
142-82-5	n-Heptane	0.440	1.80	J
108-10-1	4-Methyl-2-pentanone (MIBK)	0.459	1.88	U
10061-01-5	cis-1,3-Dichloropropene	0.381	1.73	U
10061-02-6	trans-1,3-Dichloropropene	0.318	1.44	U

low  
31,210



# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

IA-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Air Laboratory ID: SB06784-07 File ID: A35632.D  
 Sampled: 01/13/10 10:10 Analyzed: 01/18/10 21:10  
 Dilution Factor: 2 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	0.468	2.55	U
108-88-3	Toluene	3.28	12.34	
591-78-6	2-Hexanone (MBK)	0.447	1.83	U
124-48-1	Dibromochloromethane	0.386	3.29	U
106-93-4	1,2-Dibromoethane (EDB)	0.300	2.31	U
127-18-4	Tetrachloroethene	0.382	2.59	U
108-90-7	Chlorobenzene	0.564	2.60	U
100-41-4	Ethylbenzene	0.382	1.66	U
630-20-6	1,1,1,2-Tetrachloroethane	0.615	4.23	U
179601-23-1	m,p-Xylene	0.978	4.24	U
75-25-2	Bromoform	0.633	6.54	U
100-42-5	Styrene	0.374	1.59	U
95-47-6	o-Xylene	0.533	2.31	U
79-34-5	1,1,2,2-Tetrachloroethane	0.871	5.98	U
108-67-8	1,3,5-Trimethylbenzene	0.570	2.80	U
622-96-8	4-Ethyltoluene	0.559	2.75	U
95-63-6	1,2,4-Trimethylbenzene	0.522	2.57	U
98-82-8	Isopropylbenzene	0.519	2.55	U
541-73-1	1,3-Dichlorobenzene	0.553	3.32	U
100-44-7	Benzyl chloride	0.493	2.54	U
106-46-7	1,4-Dichlorobenzene	0.519	3.12	U
95-50-1	1,2-Dichlorobenzene	0.454	2.73	U
120-82-1	1,2,4-Trichlorobenzene	0.319	2.37	U
87-68-3	Hexachlorobutadiene	0.496	5.29	U
135-98-8	sec-Butylbenzene	0.529	2.90	U
99-87-6	4-Isopropyltoluene	0.491	2.63	U
104-51-8	n-Butylbenzene	0.426	2.34	U

\* Values outside of QC limits

uw  
3/12/10

# FORM I - AIR ANALYSIS DATA SHEET

## EPA TO-15

IA-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Air Laboratory ID: SB06784-07RE1 File ID: A35667.D  
 Sampled: 01/13/10 10:10 Analyzed: 01/20/10 14:54  
 Dilution Factor: 4 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002066 Sequence: S000494 Calibration: 1001022 Instrument: Air1

*Use  
Original  
results*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	1.18	2.03	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.972	4.81	U
74-87-3	Chloromethane	1.15	2.38	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.986	6.89	U
75-01-4	Vinyl chloride	0.931	2.38	U
106-99-0	1,3-Butadiene	1.02	2.25	U
74-83-9	Bromomethane	0.847	3.29	U
75-00-3	Chloroethane	1.08	2.85	U
67-64-1	Acetone	13.0	30.89	<del>U</del>
75-69-4	Trichlorofluoromethane (Freon 11)	1.15	6.46	U
64-17-5	Ethanol	185	348.81	<del>U</del>
75-35-4	1,1-Dichloroethene	0.792	3.14	U
107-13-1	Acrylonitrile	0.606	1.31	U
75-09-2	Methylene chloride	4.20	14.58	<del>U</del>
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.899	6.89	U
75-15-0	Carbon disulfide	0.745	2.32	U
156-60-5	trans-1,2-Dichloroethene	0.765	3.03	U
75-34-3	1,1-Dichloroethane	0.765	3.10	U
1634-04-4	Methyl tert-butyl ether	0.769	2.77	U
67-63-0	Isopropyl alcohol	11.0	26.99	<del>U</del>
78-93-3	2-Butanone (MEK)	7.72	22.77	<del>U</del>
156-59-2	cis-1,2-Dichloroethene	0.540	2.14	U
110-54-3	Hexane	1.24	4.37	<del>U</del>
141-78-6	Ethyl acetate	0.775	2.79	U
67-66-3	Chloroform	0.604	2.94	U
109-99-9	Tetrahydrofuran	0.898	2.65	U
107-06-2	1,2-Dichloroethane	0.569	2.30	U
71-55-6	1,1,1-Trichloroethane	0.550	3.00	U
71-43-2	Benzene	0.606	1.93	U
56-23-5	Carbon tetrachloride	0.579	3.64	U
110-82-7	Cyclohexane	0.858	2.95	U
78-87-5	1,2-Dichloropropane	0.687	3.18	U
75-27-4	Bromodichloromethane	0.718	4.81	U
79-01-6	Trichloroethene	1.13	6.07	U
123-91-1	1,4-Dioxane	1.56	5.61	U
142-82-5	n-Heptane	0.551	2.26	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.918	3.76	U
10061-01-5	cis-1,3-Dichloropropene	0.762	3.46	U
10061-02-6	trans-1,3-Dichloropropene	0.636	2.89	U

*aw  
3/12/10*

**FORM I - AIR ANALYSIS DATA SHEET**  
**EPA TO-15**

IA-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: J0060      Received: 01/14/10 17:38  
 Matrix: Air      Laboratory ID: SB06784-07RE1      File ID: A35667.D  
 Sampled: 01/13/10 10:10      Analyzed: 01/20/10 14:54  
 Dilution Factor: 4      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002066      Sequence: S000494      Calibration: 1001022      Instrument: Air1

*use original results*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	0.936	5.11	U
108-88-3	Toluene	2.76	10.39	<del>U</del>
591-78-6	2-Hexanone (MBK)	0.895	3.67	U
124-48-1	Dibromochloromethane	0.772	6.58	U
106-93-4	1,2-Dibromoethane (EDB)	0.600	4.61	U
127-18-4	Tetrachloroethene	0.764	5.18	U
108-90-7	Chlorobenzene	1.13	5.20	U
100-41-4	Ethylbenzene	0.764	3.31	U
630-20-6	1,1,1,2-Tetrachloroethane	1.23	8.45	U
179601-23-1	m,p-Xylene	1.96	8.50	U
75-25-2	Bromoform	1.27	13.13	U
100-42-5	Styrene	0.748	3.18	U
95-47-6	o-Xylene	1.07	4.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.74	11.95	U
108-67-8	1,3,5-Trimethylbenzene	1.14	5.60	U
622-96-8	4-Ethyltoluene	1.12	5.51	U
95-63-6	1,2,4-Trimethylbenzene	1.04	5.11	U
98-82-8	Isopropylbenzene	1.04	5.11	U
541-73-1	1,3-Dichlorobenzene	1.11	6.67	U
100-44-7	Benzyl chloride	0.987	5.09	U
106-46-7	1,4-Dichlorobenzene	1.04	6.25	U
95-50-1	1,2-Dichlorobenzene	0.908	5.46	U
120-82-1	1,2,4-Trichlorobenzene	0.638	4.74	U
87-68-3	Hexachlorobutadiene	0.992	10.58	U
135-98-8	sec-Butylbenzene	1.06	5.82	U
99-87-6	4-Isopropyltoluene	0.982	5.27	U
104-51-8	n-Butylbenzene	0.853	4.68	U

\* Values outside of QC limits

*aw*  
*3/12/10*

**FORM I - AIR ANALYSIS DATA SHEET**  
**EPA TO-15**

SSV-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: J0060      Received: 01/14/10 17:38  
 Matrix: Sub Slab Vapor      Laboratory ID: SB06784-08      File ID: A35633.D  
 Sampled: 01/13/10 09:42      Analyzed: 01/18/10 21:52  
 Dilution Factor: 4      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002002      Sequence: S000434      Calibration: 1001022      Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	1.18	2.03	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.972	4.81	U
74-87-3	Chloromethane	1.15	2.38	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.986	6.89	U
75-01-4	Vinyl chloride	0.931	2.38	U
106-99-0	1,3-Butadiene	1.02	2.25	U
74-83-9	Bromomethane	0.847	3.29	U
75-00-3	Chloroethane	1.08	2.85	U
67-64-1	Acetone	192	456.25	
75-69-4	Trichlorofluoromethane (Freon 11)	1.15	6.46	U
64-17-5	Ethanol	19.0	35.82	
75-35-4	1,1-Dichloroethene	0.792	3.14	U
107-13-1	Acrylonitrile	0.606	1.31	U
75-09-2	Methylene chloride	1.02	3.54	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.899	6.89	U
75-15-0	Carbon disulfide	0.745	2.32	U
156-60-5	trans-1,2-Dichloroethene	0.765	3.03	U
75-34-3	1,1-Dichloroethane	0.765	3.10	U
1634-04-4	Methyl tert-butyl ether	0.769	2.77	U
67-63-0	Isopropyl alcohol	141	346.01	
78-93-3	2-Butanone (MEK)	2.00	5.90	
156-59-2	cis-1,2-Dichloroethene	0.540	2.14	U
110-54-3	Hexane	1.40	4.94	J
141-78-6	Ethyl acetate	0.775	2.79	U
67-66-3	Chloroform	0.604	2.94	U
109-99-9	Tetrahydrofuran	0.898	2.65	U
107-06-2	1,2-Dichloroethane	0.569	2.30	U
71-55-6	1,1,1-Trichloroethane	0.550	3.00	U
71-43-2	Benzene	0.920	2.93	J
56-23-5	Carbon tetrachloride	0.579	3.64	U
110-82-7	Cyclohexane	0.858	2.95	U
78-87-5	1,2-Dichloropropane	0.687	3.18	U
75-27-4	Bromodichloromethane	0.718	4.81	U
79-01-6	Trichloroethene	2.52	13.54	
123-91-1	1,4-Dioxane	1.56	5.61	U
142-82-5	n-Heptane	0.551	2.26	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.918	3.76	U
10061-01-5	cis-1,3-Dichloropropene	0.762	3.46	U
10061-02-6	trans-1,3-Dichloropropene	0.636	2.89	U

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3/12/10

## FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

SSV-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: I0060      Received: 01/14/10 17:38  
 Matrix: Sub Slab Vapor      Laboratory ID: SB06784-08      File ID: A35633.D  
 Sampled: 01/13/10 09:42      Analyzed: 01/18/10 21:52  
 Dilution Factor: 4      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002002      Sequence: S000434      Calibration: 1001022      Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	0.936	5.11	U
108-88-3	Toluene	4.96	18.66	
591-78-6	2-Hexanone (MBK)	0.895	3.67	U
124-48-1	Dibromochloromethane	0.772	6.58	U
106-93-4	1,2-Dibromoethane (EDB)	0.600	4.61	U
127-18-4	Tetrachloroethene	5.52	37.43	
108-90-7	Chlorobenzene	1.13	5.20	U
100-41-4	Ethylbenzene	0.764	3.31	U
630-20-6	1,1,1,2-Tetrachloroethane	1.23	8.45	U
179601-23-1	m,p-Xylene	1.96	8.50	U
75-25-2	Bromoform	1.27	13.13	U
100-42-5	Styrene	0.748	3.18	U
95-47-6	o-Xylene	1.07	4.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.74	11.95	U
108-67-8	1,3,5-Trimethylbenzene	1.14	5.60	U
622-96-8	4-Ethyltoluene	1.12	5.51	U
95-63-6	1,2,4-Trimethylbenzene	1.04	5.11	U
98-82-8	Isopropylbenzene	1.04	5.11	U
541-73-1	1,3-Dichlorobenzene	1.11	6.67	U
100-44-7	Benzyl chloride	0.987	5.09	U
106-46-7	1,4-Dichlorobenzene	1.04	6.25	U
95-50-1	1,2-Dichlorobenzene	0.908	5.46	U
120-82-1	1,2,4-Trichlorobenzene	0.638	4.74	U
87-68-3	Hexachlorobutadiene	0.992	10.58	U
135-98-8	sec-Butylbenzene	1.06	5.82	U
99-87-6	4-Isopropyltoluene	0.982	5.27	U
104-51-8	n-Butylbenzene	0.853	4.68	U

\* Values outside of QC limits

LW  
 3/12/10

# FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

SSV-2

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Sub Slab Vapor Laboratory ID: SB06784-09 File ID: A35634.D  
 Sampled: 01/13/10 10:03 Analyzed: 01/18/10 22:33  
 Dilution Factor: 4 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002002 Sequence: S000434 Calibration: 1001022 Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	1.18	2.03	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.972	4.81	U
74-87-3	Chloromethane	1.15	2.38	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.986	6.89	U
75-01-4	Vinyl chloride	0.931	2.38	U
106-99-0	1,3-Butadiene	1.02	2.25	U
74-83-9	Bromomethane	0.847	3.29	U
75-00-3	Chloroethane	1.08	2.85	U
67-64-1	Acetone	9.04	21.48	
75-69-4	Trichlorofluoromethane (Freon 11)	1.15	6.46	U
64-17-5	Ethanol	8.80	16.59	
75-35-4	1,1-Dichloroethene	0.792	3.14	U
107-13-1	Acrylonitrile	0.606	1.31	U
75-09-2	Methylene chloride	1.02	3.54	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	6.32	48.44	
75-15-0	Carbon disulfide	0.745	2.32	U
156-60-5	trans-1,2-Dichloroethene	0.765	3.03	U
75-34-3	1,1-Dichloroethane	0.765	3.10	U
1634-04-4	Methyl tert-butyl ether	0.769	2.77	U
67-63-0	Isopropyl alcohol	5.72	14.04	
78-93-3	2-Butanone (MEK)	1.62	4.78	U
156-59-2	cis-1,2-Dichloroethene	0.540	2.14	U
110-54-3	Hexane	0.800	2.82	J
141-78-6	Ethyl acetate	0.775	2.79	U
67-66-3	Chloroform	1.76	8.57	J
109-99-9	Tetrahydrofuran	0.898	2.65	U
107-06-2	1,2-Dichloroethane	0.569	2.30	U
71-55-6	1,1,1-Trichloroethane	5.68	30.99	
71-43-2	Benzene	0.606	1.93	U
56-23-5	Carbon tetrachloride	0.579	3.64	U
110-82-7	Cyclohexane	0.858	2.95	U
78-87-5	1,2-Dichloropropane	0.687	3.18	U
75-27-4	Bromodichloromethane	0.718	4.81	U
79-01-6	Trichloroethene	33.6	180.57	
123-91-1	1,4-Dioxane	1.56	5.61	U
142-82-5	n-Heptane	0.551	2.26	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.918	3.76	U
10061-01-5	cis-1,3-Dichloropropene	0.762	3.46	U
10061-02-6	trans-1,3-Dichloropropene	0.636	2.89	U

MW  
3/12/10

**FORM I - AIR ANALYSIS DATA SHEET**  
**EPA TO-15**

SSV-2

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: J0060      Received: 01/14/10 17:38  
 Matrix: Sub Slab Vapor      Laboratory ID: SB06784-09      File ID: A35634.D  
 Sampled: 01/13/10 10:03      Analyzed: 01/18/10 22:33  
 Dilution Factor: 4      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002002      Sequence: S000434      Calibration: 1001022      Instrument: Air1

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	3.00	16.37	
108-88-3	Toluene	8.20	30.85	
591-78-6	2-Hexanone (MBK)	0.895	3.67	U
124-48-1	Dibromochloromethane	0.772	6.58	U
106-93-4	1,2-Dibromoethane (EDB)	0.600	4.61	U
127-18-4	Tetrachloroethene	28.7	194.62	
108-90-7	Chlorobenzene	1.13	5.20	U
100-41-4	Ethylbenzene	1.68	7.28	J
630-20-6	1,1,1,2-Tetrachloroethane	1.23	8.45	U
179601-23-1	m,p-Xylene	6.56	28.44	
75-25-2	Bromoform	1.27	13.13	U
100-42-5	Styrene	0.748	3.18	U
95-47-6	o-Xylene	1.88	8.15	J
79-34-5	1,1,2,2-Tetrachloroethane	1.74	11.95	U
108-67-8	1,3,5-Trimethylbenzene	1.14	5.60	U
622-96-8	4-Ethyltoluene	1.12	5.51	U
95-63-6	1,2,4-Trimethylbenzene	2.44	12.00	
98-82-8	Isopropylbenzene	1.04	5.11	U
541-73-1	1,3-Dichlorobenzene	1.11	6.67	U
100-44-7	Benzyl chloride	0.987	5.09	U
106-46-7	1,4-Dichlorobenzene	1.04	6.25	U
95-50-1	1,2-Dichlorobenzene	0.908	5.46	U
120-82-1	1,2,4-Trichlorobenzene	0.638	4.74	U
87-68-3	Hexachlorobutadiene	0.992	10.58	U
135-98-8	sec-Butylbenzene	1.06	5.82	U
99-87-6	4-Isopropyltoluene	0.982	5.27	U
104-51-8	n-Butylbenzene	0.853	4.68	U

\* Values outside of QC limits

uw  
3/12/10



# FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

OA-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 06784  
 Client: Mitkem Laboratories Project: See Chain of Custody  
 Project Number: J0060 Received: 01/14/10 17:38  
 Matrix: Outside Ambient Laboratory ID: SB06784-10 File ID: B32309.D  
 Sampled: 01/13/10 10:49 Analyzed: 01/19/10 16:37  
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml  
 Batch: 1002050 Sequence: S000458 Calibration: 1001027 Instrument: Air2

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	2.6300	4.53	
75-71-8	Dichlorodifluoromethane (Freon12)	0.65000	3.21	
74-87-3	Chloromethane	0.70000	1.45	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.050256	0.35	U
75-01-4	Vinyl chloride	0.053850	0.14	U
106-99-0	1,3-Butadiene	0.050719	0.11	U
74-83-9	Bromomethane	0.039878	0.15	U
75-00-3	Chloroethane	0.056395	0.15	U
67-64-1	Acetone	4.6100	10.95	
75-69-4	Trichlorofluoromethane (Freon 11)	0.50000	2.81	
64-17-5	Ethanol	7.2500	13.67	
107-13-1	Acrylonitrile	0.029810	0.06	U
75-35-4	1,1-Dichloroethene	0.033504	0.13	U
75-09-2	Methylene chloride	0.20000	0.69	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.10000	0.77	
75-15-0	Carbon disulfide	0.035536	0.11	U
156-60-5	trans-1,2-Dichloroethene	0.035536	0.14	U
75-34-3	1,1-Dichloroethane	0.035536	0.14	U
1634-04-4	Methyl tert-butyl ether	0.043253	0.16	U
67-63-0	Isopropyl alcohol	3.2900	8.07	
78-93-3	2-Butanone (MEK)	0.99000	2.92	
156-59-2	cis-1,2-Dichloroethene	0.024658	0.10	U
110-54-3	Hexane	0.42000	1.48	
141-78-6	Ethyl acetate	0.036188	0.13	U
67-66-3	Chloroform	0.023691	0.12	U
109-99-9	Tetrahydrofuran	0.046885	0.14	U
107-06-2	1,2-Dichloroethane	0.028198	0.11	U
71-55-6	1,1,1-Trichloroethane	0.024658	0.13	U
71-43-2	Benzene	0.67000	2.14	
56-23-5	Carbon tetrachloride	0.10000	0.63	
110-82-7	Cyclohexane	0.14000	0.48	
78-87-5	1,2-Dichloropropane	0.023691	0.11	U
75-27-4	Bromodichloromethane	0.035536	0.24	U
79-01-6	Trichloroethene	0.053414	0.29	U
123-91-1	1,4-Dioxane	0.021627	0.08	U
142-82-5	n-Heptane	0.17000	0.70	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.039287	0.16	U
10061-01-5	cis-1,3-Dichloropropene	0.036188	0.16	U
10061-02-6	trans-1,3-Dichloropropene	0.030585	0.14	U

new  
3/12/10

# **FORM I - AIR ANALYSIS DATA SHEET** **EPA TO-15**

OA-1

Laboratory: Spectrum Analytical, Inc. - Agawam, MA      SDG: 06784  
 Client: Mitkem Laboratories      Project: See Chain of Custody  
 Project Number: J0060      Received: 01/14/10 17:38  
 Matrix: Outside Ambient      Laboratory ID: SB06784-10      File ID: B32309.D  
 Sampled: 01/13/10 10:49      Analyzed: 01/19/10 16:37  
 Dilution Factor: 1      Preparation: General Air Prep      Initial/Final: 200 ml / 200 ml  
 Batch: 1002050      Sequence: S000458      Calibration: 1001027      Instrument: Air2

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
79-00-5	1,1,2-Trichloroethane	0.039287	0.21	U
108-88-3	Toluene	1.4100	5.31	
591-78-6	2-Hexanone (MBK)	0.035536	0.15	U
124-48-1	Dibromochloromethane	0.044321	0.38	U
106-93-4	1,2-Dibromoethane (EDB)	0.030585	0.24	U
127-18-4	Tetrachloroethene	0.080000	0.54	J
108-90-7	Chlorobenzene	0.047873	0.22	U
630-20-6	1,1,1,2-Tetrachloroethane	0.054282	0.37	U
100-41-4	Ethylbenzene	0.17000	0.74	
179601-23-1	m,p-Xylene	0.62000	2.69	
75-25-2	Bromoform	0.067702	0.70	U
100-42-5	Styrene	0.039287	0.17	U
95-47-6	o-Xylene	0.23000	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	0.080630	0.55	U
98-82-8	Isopropylbenzene	0.036188	0.18	U
108-67-8	1,3,5-Trimethylbenzene	0.070000	0.34	J
622-96-8	4-Ethyltoluene	0.060000	0.29	J
95-63-6	1,2,4-Trimethylbenzene	0.15000	0.74	J
541-73-1	1,3-Dichlorobenzene	0.058432	0.35	U
100-44-7	Benzyl chloride	0.053850	0.28	U
106-46-7	1,4-Dichlorobenzene	0.042158	0.25	U
135-98-8	sec-Butylbenzene	0.047873	0.26	U
99-87-6	4-Isopropyltoluene	0.045877	0.25	U
95-50-1	1,2-Dichlorobenzene	0.042158	0.25	U
104-51-8	n-Butylbenzene	0.038078	0.21	U
120-82-1	1,2,4-Trichlorobenzene	0.024658	0.18	U
87-68-3	Hexachlorobutadiene	0.042158	0.45	U

\* Values outside of QC limits

lew  
3/12/10

INTENTIONALLY  
BLANK

**DATA USABILITY SUMMARY REPORT  
EMR CIRCUITS, HAUPPAUGE, NEW YORK**

Client: Shaw Environmental and Infrastructure Group, Latham, New York  
SDG: J0078  
Laboratory: Mitkem Laboratories, Warwick, Rhode Island  
Site: EMR Circuits, Hauppauge, New York  
Date: March 4, 2010

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW-1	J0078-01A	Water
1MS	MW-1MS	J0078-01AMS	Water
1MSD	MW-1MSD	J0078-01AMSD	Water
2	DUP 02	J0078-02A	Water
3*	TRIP BLANK 01/14/2010	J0078-03A	Water
4	SB-1 45'-50'	J0078-04B	Soil
4MS	SB-1 45'-50'MS	J0078-04BMS	Soil
4MSD	SB-1 45'-50'MSD	J0078-04BMSD	Soil
5	SB-1 10'-15'	J0078-05B	Soil
6*	GW-1	J0078-06A	Water
7*	SB-3 0'-5'	J0078-07B	Soil
8*	SB-3 5'-8'	J0078-08B	Soil
9*	MW-3	J0078-09A	Water
10*	MW-3A	J0078-10A	Water
11*	MW-1A	J0078-11A	Water
12*	TRIP BLANK 01/13/2010	J0078-12A	Water
13	DUP01	J0078-13B	Soil

\* - VOC only

A Data Usability Summary Review was performed on the analytical data for six water samples, five soil samples and two aqueous trip blank samples collected by Shaw Environmental and Infrastructure Group at the EMR Circuits site in Hauppauge, New York. The samples were analyzed under Environmental Protection Agency (USEPA) "Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions".

Specific method references are as follows:

Analysis

VOCs  
SVOCs  
Pesticides  
PCB  
Metals/Mercury

Method References

USEPA SW-846 Method 8260B  
USEPA SW-846 Method 8270C  
USEPA SW-846 Method 8081A  
USEPA SW-846 Method 8082  
USEPA SW-846 Method 6010B/7471

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-24, Revision 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B;
- SOP Number HW-22, Revision 3, October 2006: Validating Semivolatile Organic Compounds by SW-846 Method 8270D;
- SOP Number HW-44, Revision 1, October 2006: Validating Pesticide Compounds by SW-846 Method 8081B;
- SOP Number HW-45, , Revision 1, October 2006, Validating PCB Compounds by SW-846 Method 8082A;
- SOP Number HW-2, Revision 13, September 2006: Evaluation of Metals Data for the CLP Program based on ILMO5.3;
- and the reviewer's professional judgment.

### *Organics*

The following items/criteria were reviewed for this report:

- Data Completeness
- Holding times and sample preservation
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Duplicate (LCS/LCSD) recoveries
- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision

### *Inorganics*

The following items/criteria were reviewed:

- Data Completeness
- Holding times and sample preservation
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Duplicate (LCS/LCSD) recoveries
- Method blank and field blank contamination
- Initial and continuing calibration verifications
- Compound Quantitation
- ICP Serial Dilution
- Field Duplicate sample precision

### **Overall Usability Issues:**

There were several rejections of data.

- Acetone was rejected in eleven samples and 2-butanone was rejected in twelve samples due to low ICAL RRF values.

Overall the remaining data is acceptable for the intended purposes. Data were qualified for the following deficiencies.

- One VOC compound was qualified as estimated in one sample due to low MS/MSD recoveries.
- Twenty-seven VOC compounds were qualified as estimated in one sample due to low MS/MSD recoveries.
- Several VOC compounds were qualified as estimated in all samples due to high initial calibration %RSD values.
- One VOC compound was qualified as estimated in five samples due to high continuing calibration %D values.
- Several SVOC compounds were qualified as estimated in two samples due to low MS/MSD recoveries.
- Several SVOC compounds were qualified as estimated in several samples due to high initial calibration %RSD values.
- Several SVOC compounds were qualified as estimated in several samples due to high continuing calibration %D values.
- Two metals compounds were qualified as estimated in three samples due to low and high MS/MSD %R and RPD values.
- Several metals compounds were qualified as nondetected in several samples due to method blank contamination.
- Three metals compounds were qualified as estimated in three samples due to high ICP serial dilution recoveries.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

### **Volatile Organics Compounds (VOCs)**

#### **Data Completeness**

- All criteria were met.

#### **Holding Times**

- All samples were analyzed within 14 days for preserved water and soil samples.

### Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents LCS percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

MS/MSD Sample ID	Compound	MS/MSD%R/RPD	Qualifier
1	2,2-Dichloropropane	55%/60%/Ok	J/UJ
4	Methyl tert-butyl ether	Ok/74%/Ok	J/UJ
	1,1-Dichloroethane	Ok/75%/Ok	
	2,2'-Dichloropropane	63%/62%/Ok	
	1,1,1-Trichloroethane	Ok/69%/Ok	
	Trichloroethene	Ok/73%/Ok	
	Chlorobenzene	Ok/74%/Ok	
	1,1,1,2-Tetrachloroethane	Ok/74%/Ok	
	Ethylbenzene	72%/70%/Ok	
	m,p-Xylene	73%/71%/Ok	
	o-Xylene	74%/73%/Ok	
	Xylene (Total)	74%/72%/Ok	
	Isopropylbenzene	70%/68%/Ok	
	n-Propylbenzene	61%/61%/Ok	
	2-Chlorotoluene	64%/64%/Ok	
	1,3,5-Trimethylbenzene	Ok/63%/Ok	
	4-Chlorotoluene	67%/66%/Ok	
	tert-Butylbenzene	62%/60%/Ok	
	1,2,4-Trimethylbenzene	64%/62%/Ok	
	sec-Butylbenzene	58%/56%/Ok	
	4-Isopropyltoluene	57%/56%/Ok	
	1,3-Dichlorobenzene	65%/64%/Ok	
	1,4-Dichlorobenzene	68%/66%/Ok	
	n-Butylbenzene	52%/51%/Ok	
	1,2-Dichlorobenzene	69%/67%/Ok	
	1,2,4-Trichlorobenzene	42%/39%/Ok	
	Hexachlorobutadiene	37%/32%/Ok	
	1,2,3-Trichlorobenzene	42%/40%/Ok	

### Laboratory Control Samples

- The LCS samples exhibited acceptable %R values.

### Method Blank

- The method blanks were free of contamination.

### Field Blank

- Field QC results are summarized below.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
TRIP BLANK 01/13/2010	None - ND	-	-	-	-
TRIP BLANK 01/14/2010	None - ND	-	-	-	-

### GC/MS Tuning

- All criteria were met.

### Initial Calibration

- The following table presents compounds that exceeded 20 percent relative standard deviation (%RSD) and/or average RRF values <0.05 in the initial calibration (ICAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %RSD may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/15/2010	Bromomethane	28.1%	J/UJ	4, 5, 7, 8, 13
	Chloroethane	22.4%		
	Acetone	0.046 RRF	J/R	4, 5, 7, 8, 13
	2-Butanone	0.043 RRF		
	n-Butylbenzene	23.0%	J/UJ	4, 5, 7, 8, 13
	Hexachlorobutadiene	20.2%		
	Naphthalene	32.0%		
01/21/2010	Bromomethane	23.1%	J/UJ	1-3, 6, 9-12
	Acetone	22.2%/0.031 RRF	J/R	1-3, 6, 9-12
	2-Butanone	0.036 RRF		
	Bromoform	25.0%	J/UJ	1-3, 6, 9-12
	Hexachlorobutadiene	38.3%		



### Continuing Calibration

- The following table presents compounds that exceeded 20 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
01/19/2010	Trichlorofluoromethane	27.4%	J/UJ	5, 7, 8, 13
01/20/2010	Trichlorofluoromethane	36.3%	J/UJ	4
	Acetone	0.049 RRF	None	See ICAL
	2-Butanone	0.043 RRF		

### Compound Quantitation

- All criteria were met.

### Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

### Field Duplicate Sample Precision

- Field duplicate results are summarized below.

VOC				
Compound	MW-1 ug/L	DUP 02 ug/L	RPD	Qualifier
None	ND	ND	-	-

VOC				
Compound	SB-1 10'-15' ug/kg	DUP01 ug/kg	RPD	Qualifier
Toluene	1.2	4.7 U	NC	None

## Semivolatile Organics Compounds (SVOCs)

### Data Completeness

- All criteria were met.

### Holding Times

- All samples were extracted within 7 days for water samples, 14 days for soil samples and analyzed within 40 days for all samples.

### Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
1	bis (2-Chloroethoxy) methane	39%/Ok/64	J/UJ
	N-Nitrosodiphenylamine	Ok/46%/Ok	
	Carbazole	Ok/Ok/53	None for RPD alone
	3,3'-Dichlorobenzidine	19%/Ok/Ok	J/UJ
4	2,4-Dimethylphenol	19%/22%/Ok	J/UJ
	4-Chloroaniline	Ok/Ok/95	None for RPD alone
	4-Nitroaniline	31%/Ok/Ok	J/UJ
	3,3'-Dichlorobenzidine	Ok/Ok/81	None for RPD alone

### Laboratory Control Samples

- The following table presents LCS percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS ID	Compound	%R	Qualifier	Affected Samples
LCS-48660	Hexachlorocyclopentadiene	24%	None	See ICAL
LCS-48701	Benzo(b)fluoranthene	123%	None	All ND

### **Method Blank**

- The method blanks were free of contamination.

### **Field Blank**

- Field QC samples were not included in this data package.

### **GC/MS Tuning**

- All criteria were met.

### **Initial Calibration**

- The following table presents compounds that exceeded 20 percent relative standard deviation (%RSD) and/or average RRF values <0.05 in the initial calibration (ICAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %RSD may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
12/19/2009	Hexachlorocyclopentadiene	36.3%	J/UJ	1, 2
	2,4-Dinitrophenol	23.0%		
	4-Nitrophenol	25.3%		
	Pentachlorophenol	38.3%		
	Di-n-octylphthalate	20.8%		
01/21/2010	Benzo(k)fluoranthene	28.3%	J/UJ	4, 5, 13

### **Continuing Calibration**

- The following table presents compounds that exceeded 20 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
01/20/2010	2,2'-oxybis (1-Chloropropane)	21.2%	J/UJ	1, 2
	2-Nitrophenol	22.1%		
	Hexachlorobutadiene	27.6%	None	See ICAL
	2,4,5-Trichlorophenol	22.3%	J/UJ	1, 2
	2,4-Dinitrotoluene	21.5%		
	4-Chlorophenyl-phenyl ether	39.6%		
	Fluorene	24.4%		
	4-Nitroaniline	20.2%		
	Pentachlorophenol	37.0%	None	See ICAL
01/21/2010	Dibenzo(a,h)anthracene	21.4%	J/UJ	1, 2
	Benzo(b)fluoranthene	21.2%	J/UJ	4, 5, 13

### **Compound Quantitation**

- No discrepancies were identified.

### **Internal Standard (IS) Area Performance**

- All internal standards met response and retention time (RT) criteria.

### **Field Duplicate Sample Precision**

- Field duplicate results are summarized below.

SVOC				
Compound	MW-1 ug/L	DUP 02 ug/L	RPD	Qualifier
None	ND	ND	-	-

SVOC				
Compound	SB-1 10'-15' ug/kg	DUP01 ug/kg	RPD	Qualifier
Di-n-butylphthalate	160	110	37%	None
Fluoranthene	48	41	16%	None
Pyrene	41	350 U	NC	None
Bis(2-ethylhexyl)phthalate	120	350 U	NC	None

## **Pesticides/Polychlorinated Biphenyls (Pest/PCB)**

### **Holding Times**

- All samples were extracted within 7 days for preserved water, 14 days for soil samples and analyzed within 40 days for all samples.

### **Surrogate Spike Recoveries**

- All samples exhibited acceptable surrogate %R values.

### **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries**

- All %R and RPD criteria were met.

### **Laboratory Control Samples**

- The LCS samples exhibited acceptable %R values.

### **Method Blank**

- The method blanks were free of contamination.

### **Initial Calibration**

- All %RSD and/or correlation coefficient criteria were met.

### **Continuing Calibration**

- All %D criteria were met.

### **Compound Quantitation**

- All criteria were met.

### **Field Blank**

- Field QC samples were not included in this data package.

### **Field Duplicate Sample Precision**

- Field duplicate results are summarized below.

Pest/PCB				
Compound	MW-1 ug/L	DUP 02 ug/L	RPD	Qualifier
None	ND	ND	-	-

Pest/PCB				
Compound	SB-1 10'-15' ug/kg	DUP01 ug/kg	RPD	Qualifier
None	ND	ND	-	-

### **GC Column Difference Results**

- All criteria were met.

## Metals

### Data Completeness

- All criteria were met.

### Holding Times

- All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected samples
4	Antimony	55%/Ok/Ok	J/UJ	4, 5, 13
	Chromium	126%/Ok/48	J	4, 5, 13

### Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

### Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
MB-48720	Copper	17.379	173.79	U	1, 2
	Zinc	12.407	124.07		
MB-48270	Sodium	31.623	316.23	None	All >10X

Blank ID	Compound	Conc. mg/kg	Action Level mg/kg	Qualifier	Affected Samples
MB-48789	Arsenic	0.217	2.17	U	4, 5, 13
MB-48721	Potassium	3.205	16.025	None	All >10X
	Sodium	0.970	4.85		
	Calcium	10.042	100.42	U	4
	Cobalt	0.056	0.56	None	All >10X
	Copper	3.111	31.111		
	Iron	4.687	46.87		
	Manganese	0.508	5.08		
	Zinc	1.610	16.10	U	4, 5, 13

### **Field Blank**

- Field QC samples were not included in this data package.

### **Initial Calibration Verification**

- All initial calibration criteria were met.

### **Continuing Calibration Verification**

- All continuing calibration criteria were met.

### **Compound Quantitation**

- All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

### **ICP Serial Dilution**

- ICP serial dilution percent differences (%D) were within acceptance limits except the following. A high %D may indicate a potential high bias.

ICP Sample ID	Compound	%D	Qualifier	Affected Samples
4	Barium	12%	J	4, 5, 13
	Copper	18%		
	Vanadium	24%		



### Field Duplicate Sample Precision

- Field duplicate results are summarized below. For a high RPD >100% for soil samples, results are considered estimated and qualified (J). A high %RPD may indicate a potential bias due to poor laboratory instrument precision.

Metals				
Compound	MW-1 ug/L	DUP 02 ug/L	RPD	Qualifier
Barium	35.9	34.7	3%	None
Calcium	13000	12400	5%	None
Chromium	0.98	1.1	12%	None
Cobalt	2.4	2.6	8%	None
Magnesium	6790	6780	0%	None
Manganese	7.7	31.3	121%	J
Nickel	2.9	3.1	7%	None
Potassium	1690	1700	1%	None
Sodium	32400	32300	0%	None

Metals				
Compound	SB-1 10'-15' mg/kg	DUP01 mg/kg	RPD	Qualifier
Aluminum	3110	3190	3%	None
Barium	15.8	17.3	9%	None
Beryllium	0.13	0.082	45%	None
Calcium	2950	140	182%	J
Chromium	7.0	6.5	7%	None
Cobalt	3.6	2.4	40%	None
Copper	42.5	44.7	5%	None
Iron	7310	5390	30%	None
Lead	1.8	2.3	24%	None
Magnesium	2390	716	108%	J
Manganese	234	173	30%	None
Nickel	7.4	7.2	3%	None
Potassium	275	310	12%	None
Sodium	20.4	17.8	14%	None
Vanadium	7.1	6.5	9%	None

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Very truly yours,  
Environmental Data Services, Inc.

*Nancy Weaver* 3/12/10

Nancy Weaver                      Date  
Senior Chemist

### Data Qualifiers

- 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 sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.



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

CLIENT SAMPLE NO.

MW-1

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.: SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-01A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4665.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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
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.

MW-1

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-01A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4665.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. Date Analyzed: 01/21/2010  
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 <i>us</i>
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 <i>us</i>
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U

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

CLIENT SAMPLE NO.

DUP 02

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-02A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4666.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. Date Analyzed: 01/21/2010  
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 uJ
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 uJ
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.

DUP 02

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: J0078

Mod. Ref No.:

SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-02A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4666.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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
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

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

CLIENT SAMPLE NO. **3**

TRIP BLANK  
01/14/2010

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4655.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. Date Analyzed: 01/21/2010  
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 uJ
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 uJ
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  
01/14/2010

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-03A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4655.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. Date Analyzed: 01/21/2010  
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	
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 uJ
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 uJ
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U

muw 3/4/10

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

CLIENT SAMPLE NO.

SB-1 45'-50'

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.: SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: J0078-04B

Sample wt/vol: 5.60 (g/mL) G

Lab File ID: V6H1658.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec. 9.0

Date Analyzed: 01/20/2010

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 10.0

(mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
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		7.4	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
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

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

CLIENT SAMPLE NO.

SB-1 45'-50'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-04B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V6H1658.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. 9.0 Date Analyzed: 01/20/2010  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/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 uJ
630-20-6	1,1,1,2-Tetrachloroethane		4.9	U uJ
100-41-4	Ethylbenzene		4.9	U uJ
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 uJ
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 uJ
95-49-8	2-Chlorotoluene		4.9	U uJ
108-67-8	1,3,5-Trimethylbenzene		4.9	U uJ
106-43-4	4-Chlorotoluene		4.9	U uJ
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 uJ
95-50-1	1,2-Dichlorobenzene		4.9	U uJ
96-12-8	1,2-Dibromo-3-chloropropane		4.9	U
120-82-1	1,2,4-Trichlorobenzene		4.9	U uJ
87-68-3	Hexachlorobutadiene		4.9	U uJ
87-61-6	1,2,3-Trichlorobenzene		4.9	U uJ
91-20-3	Naphthalene		4.9	U uJ

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

CLIENT SAMPLE NO.  
SB-1 10'-15'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-05B  
Sample wt/vol: 5.40 (g/mL) G Lab File ID: V6H1633.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. 6.0 Date Analyzed: 01/19/2010  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	µG/KG
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	4.9	U
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
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	1.2	J
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

lw 3/4/10

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

CLIENT SAMPLE NO.

SB-1 10'-15'

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.:

SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: J0078-05B

Sample wt/vol: 5.40 (g/mL) G

Lab File ID: V6H1633.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec. 6.0

Date Analyzed: 01/19/2010

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
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

W 31/11/10

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

CLIENT SAMPLE NO.

GW-1

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-06A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4667.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. Date Analyzed: 01/21/2010  
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 <i>uJ</i>
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		5.9	<i>J</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		2.2	<i>J</i>
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	<i>uJ</i>
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.

GW-1

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.: SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-06A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4667.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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	
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 NJ
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 NJ
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U

uw 3/4/10

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

CLIENT SAMPLE NO.

SB-3 0'-5'

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.: SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: J0078-07B

Sample wt/vol: 5.40 (g/mL) G

Lab File ID: V6H1634.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec. 7.0

Date Analyzed: 01/19/2010

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 10.0

(mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
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.

SB-3 0'-5'

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.: SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: J0078-07B

Sample wt/vol: 5.40 (g/mL) G

Lab File ID: V6H1634.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec. 7.0

Date Analyzed: 01/19/2010

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 10.0

(mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
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

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

CLIENT SAMPLE NO. 8

SB-3 5'-8'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-08B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V6H1636.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. 6.0 Date Analyzed: 01/19/2010  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
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 UJ
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

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

CLIENT SAMPLE NO. **8**

SB-3 5'-8'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-08B  
Sample wt/vol: 5.30 (g/mL) G Lab File ID: V6H1636.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. 6.0 Date Analyzed: 01/19/2010  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
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

few 3/4/10

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

CLIENT SAMPLE NO.

MW-3

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.: SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-09A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4668.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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 W
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 W
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

mw 3/4/10

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

CLIENT SAMPLE NO.

MW-3

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4668.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010

% Moisture: not dec. Date Analyzed: 01/21/2010

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
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

muw 3/4/10

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

CLIENT SAMPLE NO.

MW-3A

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.:

SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-10A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4669.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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
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

hw 3/4/10

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

CLIENT SAMPLE NO.

MW-3A

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.:

SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-10A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4669.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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	
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

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

CLIENT SAMPLE NO.

MW-1A

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.:

SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-11A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4670.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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		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

new 3/4/10



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

CLIENT SAMPLE NO.

MW-1A

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.:

SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: J0078-11A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V2L4670.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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	
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

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

CLIENT SAMPLE NO.

TRIP BLANK  
01/13/2010

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4656.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. Date Analyzed: 01/21/2010  
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		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

few 3/4/10

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

12  
CLIENT SAMPLE NO.

TRIP BLANK  
01/13/2010

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-12A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2L4656.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. Date Analyzed: 01/21/2010  
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		5.0	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

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

CLIENT SAMPLE NO.

DUP01

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: J0078

Mod. Ref No.: SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: J0078-13B

Sample wt/vol: 5.60 (g/mL) G

Lab File ID: V6H1635.D

Level: (TRACE/LOW/MED) LOW

Date Received: 01/15/2010

% Moisture: not dec. 5.0

Date Analyzed: 01/19/2010

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
75-71-8	Dichlorodifluoromethane		4.7	U
74-87-3	Chloromethane		4.7	U
75-01-4	Vinyl chloride		4.7	U
74-83-9	Bromomethane		4.7	U
75-00-3	Chloroethane		4.7	U
75-69-4	Trichlorofluoromethane		4.7	U
75-35-4	1,1-Dichloroethene		4.7	U
67-64-1	Acetone		4.7	U
74-88-4	Iodomethane		4.7	U
75-15-0	Carbon disulfide		4.7	U
75-09-2	Methylene chloride		4.7	U
156-60-5	trans-1,2-Dichloroethene		4.7	U
1634-04-4	Methyl tert-butyl ether		4.7	U
75-34-3	1,1-Dichloroethane		4.7	U
108-05-4	Vinyl acetate		4.7	U
78-93-3	2-Butanone		4.7	U
156-59-2	cis-1,2-Dichloroethene		4.7	U
594-20-7	2,2-Dichloropropane		4.7	U
74-97-5	Bromochloromethane		4.7	U
67-66-3	Chloroform		4.7	U
71-55-6	1,1,1-Trichloroethane		4.7	U
563-58-6	1,1-Dichloropropene		4.7	U
56-23-5	Carbon tetrachloride		4.7	U
107-06-2	1,2-Dichloroethane		4.7	U
71-43-2	Benzene		4.7	U
79-01-6	Trichloroethene		4.7	U
78-87-5	1,2-Dichloropropane		4.7	U
74-95-3	Dibromomethane		4.7	U
75-27-4	Bromodichloromethane		4.7	U
10061-01-5	cis-1,3-Dichloropropene		4.7	U
108-10-1	4-Methyl-2-pentanone		4.7	U
108-88-3	Toluene		4.7	U
10061-02-6	trans-1,3-Dichloropropene		4.7	U
79-00-5	1,1,2-Trichloroethane		4.7	U
142-28-9	1,3-Dichloropropane		4.7	U

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

13  
CLIENT SAMPLE NO.

DUP01

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-13B  
Sample wt/vol: 5.60 (g/mL) G Lab File ID: V6H1635.D  
Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2010  
% Moisture: not dec. 5.0 Date Analyzed: 01/19/2010  
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
127-18-4	Tetrachloroethene		4.7	U
591-78-6	2-Hexanone		4.7	U
124-48-1	Dibromochloromethane		4.7	U
106-93-4	1,2-Dibromoethane		4.7	U
108-90-7	Chlorobenzene		4.7	U
630-20-6	1,1,1,2-Tetrachloroethane		4.7	U
100-41-4	Ethylbenzene		4.7	U
1330-20-7	m,p-Xylene		4.7	U
95-47-6	o-Xylene		4.7	U
1330-20-7	Xylene (Total)		4.7	U
100-42-5	Styrene		4.7	U
75-25-2	Bromoform		4.7	U
98-82-8	Isopropylbenzene		4.7	U
79-34-5	1,1,2,2-Tetrachloroethane		4.7	U
108-86-1	Bromobenzene		4.7	U
96-18-4	1,2,3-Trichloropropane		4.7	U
103-65-1	n-Propylbenzene		4.7	U
95-49-8	2-Chlorotoluene		4.7	U
108-67-8	1,3,5-Trimethylbenzene		4.7	U
106-43-4	4-Chlorotoluene		4.7	U
98-06-6	tert-Butylbenzene		4.7	U
95-63-6	1,2,4-Trimethylbenzene		4.7	U
135-98-8	sec-Butylbenzene		4.7	U
99-87-6	4-Isopropyltoluene		4.7	U
541-73-1	1,3-Dichlorobenzene		4.7	U
106-46-7	1,4-Dichlorobenzene		4.7	U
104-51-8	n-Butylbenzene		4.7	U
95-50-1	1,2-Dichlorobenzene		4.7	U
96-12-8	1,2-Dibromo-3-chloropropane		4.7	U
120-82-1	1,2,4-Trichlorobenzene		4.7	U
87-68-3	Hexachlorobutadiene		4.7	U
87-61-6	1,2,3-Trichlorobenzene		4.7	U
91-20-3	Naphthalene		4.7	U



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

CLIENT SAMPLE NO.

MW-1

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-01B  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1G1688.D  
Level: (LOW/MED) LOW Extraction: (Type) CONT  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/18/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/20/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µg/L	Q
108-95-2	Phenol	10	U	
111-44-4	Bis (2-chloroethyl) ether	10	U	
95-57-8	2-Chlorophenol	10	U	
541-73-1	1,3-Dichlorobenzene	10	U	
106-46-7	1,4-Dichlorobenzene	10	U	
95-50-1	1,2-Dichlorobenzene	10	U	
95-48-7	2-Methylphenol	10	U	
108-60-1	2,2'-oxybis (1-Chloropropane)	10	U	UJ
106-44-5	4-Methylphenol	10	U	
621-64-7	N-Nitroso-di-n-propylamine	10	U	
67-72-1	Hexachloroethane	10	U	
98-95-3	Nitrobenzene	10	U	
78-59-1	Isophorone	10	U	
88-75-5	2-Nitrophenol	10	U	UJ
105-67-9	2,4-Dimethylphenol	10	U	
120-83-2	2,4-Dichlorophenol	10	U	
120-82-1	1,2,4-Trichlorobenzene	10	U	
91-20-3	Naphthalene	10	U	
106-47-8	4-Chloroaniline	10	U	
111-91-1	Bis (2-chloroethoxy) methane	10	U	UJ
87-68-3	Hexachlorobutadiene	10	U	
59-50-7	4-Chloro-3-methylphenol	10	U	
91-57-6	2-Methylnaphthalene	10	U	
77-47-4	Hexachlorocyclopentadiene	10	U	UJ
88-06-2	2,4,6-Trichlorophenol	10	U	
95-95-4	2,4,5-Trichlorophenol	20	U	UJ
91-58-7	2-Chloronaphthalene	10	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	10	U	
208-96-8	Acenaphthylene	10	U	
606-20-2	2,6-Dinitrotoluene	10	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	10	U	
51-28-5	2,4-Dinitrophenol	20	U	UJ
100-02-7	4-Nitrophenol	20	U	UJ
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	UJ

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

CLIENT SAMPLE NO.

MW-1

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-01B  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1G1688.D  
Level: (LOW/MED) LOW Extraction: (Type) CONT  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/18/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/20/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/L	Q
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	UJ
86-73-7	Fluorene	10	U	UJ
100-01-6	4-Nitroaniline	20	U	UJ
534-52-1	4,6-Dinitro-2-methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine	10	U	UJ
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	20	U	UJ
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
86-74-8	Carbazole	10	U	
84-74-2	Di-n-butylphthalate	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	10	U	UJ
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	
117-84-0	Di-n-octylphthalate	10	U	UJ
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenzo(a,h)anthracene	10	U	UJ
191-24-2	Benzo(g,h,i)perylene	10	U	



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

CLIENT SAMPLE NO.

DUP 02

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-02B  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1G1691.D  
 Level: (LOW/MED) LOW Extraction: (Type) CONT  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/18/2010  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/20/2010  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/L	Q
108-95-2	Phenol		10	U
111-44-4	Bis(2-chloroethyl)ether		10	U
95-57-8	2-Chlorophenol		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
95-48-7	2-Methylphenol		10	U
108-60-1	2,2'-oxybis(1-Chloropropane)		10	U uJ
106-44-5	4-Methylphenol		10	U
621-64-7	N-Nitroso-di-n-propylamine		10	U
67-72-1	Hexachloroethane		10	U
98-95-3	Nitrobenzene		10	U
78-59-1	Isophorone		10	U
88-75-5	2-Nitrophenol		10	U uJ
105-67-9	2,4-Dimethylphenol		10	U
120-83-2	2,4-Dichlorophenol		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U
91-20-3	Naphthalene		10	U
106-47-8	4-Chloroaniline		10	U
111-91-1	Bis(2-chloroethoxy)methane		10	U
87-68-3	Hexachlorobutadiene		10	U
59-50-7	4-Chloro-3-methylphenol		10	U
91-57-6	2-Methylnaphthalene		10	U
77-47-4	Hexachlorocyclopentadiene		10	U uJ
88-06-2	2,4,6-Trichlorophenol		10	U
95-95-4	2,4,5-Trichlorophenol		20	U uJ
91-58-7	2-Chloronaphthalene		10	U
88-74-4	2-Nitroaniline		20	U
131-11-3	Dimethylphthalate		10	U
208-96-8	Acenaphthylene		10	U
606-20-2	2,6-Dinitrotoluene		10	U
99-09-2	3-Nitroaniline		20	U
83-32-9	Acenaphthene		10	U
51-28-5	2,4-Dinitrophenol		20	U uJ
100-02-7	4-Nitrophenol		20	U uJ
132-64-9	Dibenzofuran		10	U
121-14-2	2,4-Dinitrotoluene		10	U uJ

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

CLIENT SAMPLE NO.

DUP 02

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-02B  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1G1691.D  
 Level: (LOW/MED) LOW Extraction: (Type) CONT  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/18/2010  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/20/2010  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/L	Q
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	uJ
86-73-7	Fluorene	10	U	uJ
100-01-6	4-Nitroaniline	20	U	uJ
534-52-1	4,6-Dinitro-2-methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine	10	U	
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	20	U	uJ
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
86-74-8	Carbazole	10	U	
84-74-2	Di-n-butylphthalate	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	
117-84-0	Di-n-octylphthalate	10	U	uJ
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenzo(a,h)anthracene	10	U	uJ
191-24-2	Benzo(g,h,i)perylene	10	U	

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

CLIENT SAMPLE NO.

SB-1 45'-50'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-04A  
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S4D8186.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 9.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/20/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/22/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
108-95-2	Phenol	360	U	
111-44-4	Bis(2-chloroethyl) ether	360	U	
95-57-8	2-Chlorophenol	360	U	
541-73-1	1,3-Dichlorobenzene	360	U	
106-46-7	1,4-Dichlorobenzene	360	U	
95-50-1	1,2-Dichlorobenzene	360	U	
95-48-7	2-Methylphenol	360	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U	
106-44-5	4-Methylphenol	360	U	
621-64-7	N-Nitroso-di-n-propylamine	360	U	
67-72-1	Hexachloroethane	360	U	
98-95-3	Nitrobenzene	360	U	
78-59-1	Isophorone	360	U	
88-75-5	2-Nitrophenol	360	U	
105-67-9	2,4-Dimethylphenol	360	U	uJ
120-83-2	2,4-Dichlorophenol	360	U	
120-82-1	1,2,4-Trichlorobenzene	360	U	
91-20-3	Naphthalene	360	U	
106-47-8	4-Chloroaniline	360	U	
111-91-1	Bis(2-chloroethoxy)methane	360	U	
87-68-3	Hexachlorobutadiene	360	U	
59-50-7	4-Chloro-3-methylphenol	360	U	
91-57-6	2-Methylnaphthalene	360	U	
77-47-4	Hexachlorocyclopentadiene	360	U	
88-06-2	2,4,6-Trichlorophenol	360	U	
95-95-4	2,4,5-Trichlorophenol	730	U	
91-58-7	2-Chloronaphthalene	360	U	
88-74-4	2-Nitroaniline	730	U	
131-11-3	Dimethylphthalate	360	U	
208-96-8	Acenaphthylene	360	U	
606-20-2	2,6-Dinitrotoluene	360	U	
99-09-2	3-Nitroaniline	730	U	
83-32-9	Acenaphthene	360	U	
51-28-5	2,4-Dinitrophenol	730	U	
100-02-7	4-Nitrophenol	730	U	
132-64-9	Dibenzofuran	360	U	
121-14-2	2,4-Dinitrotoluene	360	U	

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

CLIENT SAMPLE NO.

SB-1 45'-50'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-04A  
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S4D8186.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 9.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/20/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/22/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
84-66-2	Diethylphthalate	360	U	
7005-72-3	4-Chlorophenyl-phenylether	360	U	
86-73-7	Fluorene	360	U	
100-01-6	4-Nitroaniline	730	U	UJ
534-52-1	4,6-Dinitro-2-methylphenol	730	U	
86-30-6	N-Nitrosodiphenylamine	360	U	
101-55-3	4-Bromophenyl-phenylether	360	U	
118-74-1	Hexachlorobenzene	360	U	
87-86-5	Pentachlorophenol	730	U	
85-01-8	Phenanthrene	360	U	
120-12-7	Anthracene	360	U	
86-74-8	Carbazole	360	U	
84-74-2	Di-n-butylphthalate	200	J	
206-44-0	Fluoranthene	360	U	
129-00-0	Pyrene	360	U	
85-68-7	Butylbenzylphthalate	360	U	
91-94-1	3,3'-Dichlorobenzidine	360	U	
56-55-3	Benzo(a)anthracene	360	U	
218-01-9	Chrysene	360	U	
117-81-7	Bis(2-ethylhexyl)phthalate	700		
117-84-0	Di-n-octylphthalate	360	U	
205-99-2	Benzo(b)fluoranthene	360	U	UJ
207-08-9	Benzo(k)fluoranthene	360	U	UJ
50-32-8	Benzo(a)pyrene	360	U	
193-39-5	Indeno(1,2,3-cd)pyrene	360	U	
53-70-3	Dibenzo(a,h)anthracene	360	U	
191-24-2	Benzo(g,h,i)perylene	360	U	

luw 3/4/10

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

CLIENT SAMPLE NO.

SB-1 10'-15'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-05A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: S4D8189.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 6.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/20/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/22/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: $\mu\text{g/KG}$ (ug/L or ug/Kg)	Q
108-95-2	Phenol	350	U
111-44-4	Bis(2-chloroethyl) ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
111-91-1	Bis(2-chloroethoxy)methane	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	700	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	700	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	700	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	700	U
100-02-7	4-Nitrophenol	700	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U

W 3/4/10

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

CLIENT SAMPLE NO.

SB-1 10'-15'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-05A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: S4D8189.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 6.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/20/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/22/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
84-66-2	Diethylphthalate	350	U	
7005-72-3	4-Chlorophenyl-phenylether	350	U	
86-73-7	Fluorene	350	U	
100-01-6	4-Nitroaniline	700	U	
534-52-1	4,6-Dinitro-2-methylphenol	700	U	
86-30-6	N-Nitrosodiphenylamine	350	U	
101-55-3	4-Bromophenyl-phenylether	350	U	
118-74-1	Hexachlorobenzene	350	U	
87-86-5	Pentachlorophenol	700	U	
85-01-8	Phenanthrene	350	U	
120-12-7	Anthracene	350	U	
86-74-8	Carbazole	350	U	
84-74-2	Di-n-butylphthalate	160	J	
206-44-0	Fluoranthene	48	J	
129-00-0	Pyrene	41	J	
85-68-7	Butylbenzylphthalate	350	U	
91-94-1	3,3'-Dichlorobenzidine	350	U	
56-55-3	Benzo(a)anthracene	350	U	
218-01-9	Chrysene	350	U	
117-81-7	Bis(2-ethylhexyl)phthalate	120	J	
117-84-0	Di-n-octylphthalate	350	U	
205-99-2	Benzo(b)fluoranthene	350	U	uJ
207-08-9	Benzo(k)fluoranthene	350	U	uJ
50-32-8	Benzo(a)pyrene	350	U	
193-39-5	Indeno(1,2,3-cd)pyrene	350	U	
53-70-3	Dibenzo(a,h)anthracene	350	U	
191-24-2	Benzo(g,h,i)perylene	350	U	

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

CLIENT SAMPLE NO.

DUP01

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-13A  
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S4D8190.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 5.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/20/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/22/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
108-95-2	Phenol	350	U	
111-44-4	Bis(2-chloroethyl) ether	350	U	
95-57-8	2-Chlorophenol	350	U	
541-73-1	1,3-Dichlorobenzene	350	U	
106-46-7	1,4-Dichlorobenzene	350	U	
95-50-1	1,2-Dichlorobenzene	350	U	
95-48-7	2-Methylphenol	350	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U	
106-44-5	4-Methylphenol	350	U	
621-64-7	N-Nitroso-di-n-propylamine	350	U	
67-72-1	Hexachloroethane	350	U	
98-95-3	Nitrobenzene	350	U	
78-59-1	Isophorone	350	U	
88-75-5	2-Nitrophenol	350	U	
105-67-9	2,4-Dimethylphenol	350	U	
120-83-2	2,4-Dichlorophenol	350	U	
120-82-1	1,2,4-Trichlorobenzene	350	U	
91-20-3	Naphthalene	350	U	
106-47-8	4-Chloroaniline	350	U	
111-91-1	Bis(2-chloroethoxy)methane	350	U	
87-68-3	Hexachlorobutadiene	350	U	
59-50-7	4-Chloro-3-methylphenol	350	U	
91-57-6	2-Methylnaphthalene	350	U	
77-47-4	Hexachlorocyclopentadiene	350	U	
88-06-2	2,4,6-Trichlorophenol	350	U	
95-95-4	2,4,5-Trichlorophenol	700	U	
91-58-7	2-Chloronaphthalene	350	U	
88-74-4	2-Nitroaniline	700	U	
131-11-3	Dimethylphthalate	350	U	
208-96-8	Acenaphthylene	350	U	
606-20-2	2,6-Dinitrotoluene	350	U	
99-09-2	3-Nitroaniline	700	U	
83-32-9	Acenaphthene	350	U	
51-28-5	2,4-Dinitrophenol	700	U	
100-02-7	4-Nitrophenol	700	U	
132-64-9	Dibenzofuran	350	U	
121-14-2	2,4-Dinitrotoluene	350	U	

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

CLIENT SAMPLE NO.

DUP01

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-13A  
Sample wt/vol: 30.1 (g/mL) G Lab File ID: S4D8190.D  
Level: (LOW/MED) LOW Extraction: (Type) SONC  
% Moisture: 5.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Concentrated Extract Volume: 1000 (uL) Date Extracted: 01/20/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 01/22/2010  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
84-66-2	Diethylphthalate	350	U	
7005-72-3	4-Chlorophenyl-phenylether	350	U	
86-73-7	Fluorene	350	U	
100-01-6	4-Nitroaniline	700	U	
534-52-1	4,6-Dinitro-2-methylphenol	700	U	
86-30-6	N-Nitrosodiphenylamine	350	U	
101-55-3	4-Bromophenyl-phenylether	350	U	
118-74-1	Hexachlorobenzene	350	U	
87-86-5	Pentachlorophenol	700	U	
85-01-8	Phenanthrene	350	U	
120-12-7	Anthracene	350	U	
86-74-8	Carbazole	350	U	
84-74-2	Di-n-butylphthalate	110	J	
206-44-0	Fluoranthene	41	J	
129-00-0	Pyrene	350	U	
85-68-7	Butylbenzylphthalate	350	U	
91-94-1	3,3'-Dichlorobenzidine	350	U	
56-55-3	Benzo(a)anthracene	350	U	
218-01-9	Chrysene	350	U	
117-81-7	Bis(2-ethylhexyl)phthalate	350	U	
117-84-0	Di-n-octylphthalate	350	U	
205-99-2	Benzo(b)fluoranthene	350	U	4J
207-08-9	Benzo(k)fluoranthene	350	U	4J
50-32-8	Benzo(a)pyrene	350	U	
193-39-5	Indeno(1,2,3-cd)pyrene	350	U	
53-70-3	Dibenzo(a,h)anthracene	350	U	
191-24-2	Benzo(g,h,i)perylene	350	U	

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1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-01B  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E4F4617F.D/E4F4617R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010  
Extraction: (Type) SEPF Date Extracted: 01/18/2010  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/19/2010  
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)	µg/L	Q
319-84-6	alpha-BHC		0.050	U
319-85-7	beta-BHC		0.050	U
319-86-8	delta-BHC		0.050	U
58-89-9	gamma-BHC (Lindane)		0.050	U
76-44-8	Heptachlor		0.050	U
309-00-2	Aldrin		0.050	U
1024-57-3	Heptachlor epoxide		0.050	U
959-98-8	Endosulfan I		0.050	U
60-57-1	Dieldrin		0.10	U
72-55-9	4,4'-DDE		0.10	U
72-20-8	Endrin		0.10	U
33213-65-9	Endosulfan II		0.10	U
72-54-8	4,4'-DDD		0.10	U
1031-07-8	Endosulfan sulfate		0.10	U
50-29-3	4,4'-DDT		0.10	U
72-43-5	Methoxychlor		0.50	U
53494-70-5	Endrin ketone		0.10	U
7421-93-4	Endrin aldehyde		0.10	U
5103-71-9	alpha-Chlordane		0.050	U
5103-74-2	gamma-Chlordane		0.050	U
8001-35-2	Toxaphene		5.0	U

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1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

2  
CLIENT SAMPLE NO.

DUP 02

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E4F4620F.D/E4F4620R.D

% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010

Extraction: (Type) SEPF Date Extracted: 01/18/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/19/2010

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>	<u>Q</u>
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

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1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1 45'-50'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-04A  
Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4F4832F.D/E4F4832R.D  
% Moisture: 9.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Extraction: (Type) SONC Date Extracted: 01/20/2010  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) Y pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
319-84-6	alpha-BHC	1.9	U	
319-85-7	beta-BHC	1.9	U	
319-86-8	delta-BHC	1.9	U	
58-89-9	gamma-BHC (Lindane)	1.9	U	
76-44-8	Heptachlor	1.9	U	
309-00-2	Aldrin	1.9	U	
1024-57-3	Heptachlor epoxide	1.9	U	
959-98-8	Endosulfan I	1.9	U	
60-57-1	Dieldrin	3.6	U	
72-55-9	4,4'-DDE	3.6	U	
72-20-8	Endrin	3.6	U	
33213-65-9	Endosulfan II	3.6	U	
72-54-8	4,4'-DDD	3.6	U	
1031-07-8	Endosulfan sulfate	3.6	U	
50-29-3	4,4'-DDT	3.6	U	
72-43-5	Methoxychlor	19	U	
53494-70-5	Endrin ketone	3.6	U	
7421-93-4	Endrin aldehyde	3.6	U	
5103-71-9	alpha-Chlordane	1.9	U	
5103-74-2	gamma-Chlordane	1.9	U	
8001-35-2	Toxaphene	190	U	

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1 10'-15'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-05A  
Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4F4835F.D/E4F4835R.D  
% Moisture: 6.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Extraction: (Type) SONC Date Extracted: 01/20/2010  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) Y pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: $\mu\text{G/KG}$ (ug/L or ug/Kg)	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.5	U
72-55-9	4,4'-DDE	3.5	U
72-20-8	Endrin	3.5	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	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U

1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP01

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-13A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4F4836F.D/E4F4836R.D  
% Moisture: 5.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Extraction: (Type) SONC Date Extracted: 01/20/2010  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) Y pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/KG	Q
319-84-6	alpha-BHC	1.8	U	
319-85-7	beta-BHC	1.8	U	
319-86-8	delta-BHC	1.8	U	
58-89-9	gamma-BHC (Lindane)	1.8	U	
76-44-8	Heptachlor	1.8	U	
309-00-2	Aldrin	1.8	U	
1024-57-3	Heptachlor epoxide	1.8	U	
959-98-8	Endosulfan I	1.8	U	
60-57-1	Dieldrin	3.4	U	
72-55-9	4,4'-DDE	3.4	U	
72-20-8	Endrin	3.4	U	
33213-65-9	Endosulfan II	3.4	U	
72-54-8	4,4'-DDD	3.4	U	
1031-07-8	Endosulfan sulfate	3.4	U	
50-29-3	4,4'-DDT	3.4	U	
72-43-5	Methoxychlor	18	U	
53494-70-5	Endrin ketone	3.4	U	
7421-93-4	Endrin aldehyde	3.4	U	
5103-71-9	alpha-Chlordane	1.8	U	
5103-74-2	gamma-Chlordane	1.8	U	
8001-35-2	Toxaphene	180	U	

1H - FORM I ARO  
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-01B  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G9823F.D/E3G9823R.D  
% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010  
Extraction: (Type) SEPF Date Extracted: 01/18/2010  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/19/2010  
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

hw  
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1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP 02

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J0078-02B  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G9826F.D/E3G9826R.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: 01/15/2010  
 Extraction: (Type) SEPF Date Extracted: 01/18/2010  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/19/2010  
 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	Q
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

lw  
 3/4/10



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-1 45'-50'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-04A  
 Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5F4676F.D/E5F4676R.D  
 % Moisture: 9.0 Decanted: (Y/N) N Date Received: 01/15/2010  
 Extraction: (Type) SONC Date Extracted: 01/20/2010  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/26/2010  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) Y pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: $\mu\text{G/KG}$ (ug/L or ug/Kg)	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

1H - FORM I ARO  
AROCOR ORGANICS ANALYSIS DATA SHEET

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EPA SAMPLE NO.

SB-1 10'-15'

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-05A  
Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5F4677F.D/E5F4677R.D  
% Moisture: 6.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Extraction: (Type) SONC Date Extracted: 01/20/2010  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/26/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) Y 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

luw  
3/4/10

1H - FORM I ARO  
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 13

DUP01

Lab Name: MITKEM LABORATORIES Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: J0078 Mod. Ref No.: \_\_\_\_\_ SDG No.: SJ0078  
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: J0078-13A  
Sample wt/vol: 30.4 (g/mL) G Lab File ID: E5F4678F.D/E5F4678R.D  
% Moisture: 5.0 Decanted: (Y/N) N Date Received: 01/15/2010  
Extraction: (Type) SONC Date Extracted: 01/20/2010  
Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/26/2010  
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
GPC Cleanup: (Y/N) Y pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y  
Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: $\mu\text{G/KG}$ (ug/L or ug/Kg)	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

llw  
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## U.S. EPA - CLP

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EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

MW-1

Lab Name: Mitkem LaboratoriesContract: 483217 OPLab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: SJ0078Matrix (soil/water): WATERLab Sample ID: J0078-01Level (low/med): MEDDate Received: 01/15/2010% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.0	U		P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	3.1	U		P
7440-39-3	Barium	35.9	<del>P</del>	J	P
7440-41-7	Beryllium	0.037	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	0.98	<del>P</del>	J	P
7440-48-4	Cobalt	2.4	<del>P</del>	J	P
7440-50-8	Copper	21.9	<del>P</del>	U	P
7439-89-6	Iron	47.0	U		P
7439-92-1	Lead	2.1	U		P
7439-95-4	Magnesium	6790			P
7439-96-5	Manganese	7.7	<del>P</del>	J	P
7439-97-6	Mercury	0.056	U		CV
7440-02-0	Nickel	2.9	<del>P</del>	J	P
7440-09-7	Potassium	1690			P
7782-49-2	Selenium	10.0	U		P
7440-22-4	Silver	2.4	U		P
7440-23-5	Sodium	32400			P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	0.34	U		P
7440-66-6	Zinc	105		U	P

Comments:

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U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DUP 02

Lab Name: Mitkem Laboratories

Contract: 483217 OP

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SJ0078

Matrix (soil/water): WATER

Lab Sample ID: J0078-02

Level (low/med): MED

Date Received: 01/15/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.0	U		P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	3.1	U		P
7440-39-3	Barium	34.7	<del>P</del>	J	P
7440-41-7	Beryllium	0.037	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	12400			P
7440-47-3	Chromium	1.1	<del>P</del>	J	P
7440-48-4	Cobalt	2.6	<del>P</del>	J	P
7440-50-8	Copper	23.1	<del>P</del>	U	P
7439-89-6	Iron	47.0	U		P
7439-92-1	Lead	2.1	U		P
7439-95-4	Magnesium	6780			P
7439-96-5	Manganese	31.3	<del>P</del>	J	P
7439-97-6	Mercury	0.056	U		CV
7440-02-0	Nickel	3.1	<del>P</del>	J	P
7440-09-7	Potassium	1700			P
7782-49-2	Selenium	10.0	U		P
7440-22-4	Silver	2.4	U		P
7440-23-5	Sodium	32300			P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	0.34	U		P
7440-66-6	Zinc	103		U	P

Comments:

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## U.S. EPA - CLP

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EPA SAMPLE NO.

## INORGANIC ANALYSIS DATA SHEET

SB-1 45'-50'

Lab Name: Mitkem Laboratories

Contract: 483217 OP

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SJ0078

Matrix (soil/water): SOIL

Lab Sample ID: J0078-04

Level (low/med): MED

Date Received: 01/15/2010

% Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1960			P
7440-36-0	Antimony	0.17	✓	UJ	P
7440-38-2	Arsenic	1.1		U	P
7440-39-3	Barium	10.6		✓J	P
7440-41-7	Beryllium	0.031	B	J	P
7440-43-9	Cadmium	0.012	U		P
7440-70-2	Calcium	88.7		U	P
7440-47-3	Chromium	20.7		✓J	P
7440-48-4	Cobalt	1.7	✓	J	P
7440-50-8	Copper	35.9		✓J	P
7439-89-6	Iron	4850		✓	P
7439-92-1	Lead	1.5		✓	P
7439-95-4	Magnesium	475			P
7439-96-5	Manganese	138		✓	P
7439-97-6	Mercury	0.0056	U		CV
7440-02-0	Nickel	6.6			P
7440-09-7	Potassium	236		✓	P
7782-49-2	Selenium	0.71	U		P
7440-22-4	Silver	0.075	U		P
7440-23-5	Sodium	37.0	✓		P
7440-28-0	Thallium	0.22	U		P
7440-62-2	Vanadium	4.6		✓J	P
7440-66-6	Zinc	9.4		U	P

Comments:

## INORGANIC ANALYSIS DATA SHEET

SB-1 10'-15'

Lab Name: Mitkem Laboratories

Contract: 483217 OP

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: SJ0078

Matrix (soil/water): SOIL

Lab Sample ID: J0078-05

Level (low/med): MED

Date Received: 01/15/2010

% Solids: 94.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3110			P
7440-36-0	Antimony	0.16	✓	UJ	P
7440-38-2	Arsenic	0.83	✓	U	P
7440-39-3	Barium	15.8		JEJ	P
7440-41-7	Beryllium	0.13	✓	J	P
7440-43-9	Cadmium	0.012	U		P
7440-70-2	Calcium	2950		J	P
7440-47-3	Chromium	7.0	N	J	P
7440-48-4	Cobalt	3.6			P
7440-50-8	Copper	42.5	✓	J	P
7439-89-6	Iron	7310	✓		P
7439-92-1	Lead	1.8	✓		P
7439-95-4	Magnesium	2390		J	P
7439-96-5	Manganese	234	✓		P
7439-97-6	Mercury	0.0052	U		CV
7440-02-0	Nickel	7.4			P
7440-09-7	Potassium	275	✓		P
7782-49-2	Selenium	0.72	U		P
7440-22-4	Silver	0.070	U		P
7440-23-5	Sodium	20.4	✓	J	P
7440-28-0	Thallium	0.22	U		P
7440-62-2	Vanadium	7.1	✓	J	P
7440-66-6	Zinc	11.1		U	P

Comments:



## INORGANIC ANALYSIS DATA SHEET

DUP01

Lab Name: Mitkem Laboratories

Contract: 483217 OP

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SJ0078

Matrix (soil/water): SOIL

Lab Sample ID: J0078-13

Level (low/med): MED

Date Received: 01/15/2010

% Solids: 95.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3190			P
7440-36-0	Antimony	0.15	<del>U</del>	<del>W</del>	P
7440-38-2	Arsenic	1.2		U	P
7440-39-3	Barium	17.3	<del>U</del>	<del>J</del>	P
7440-41-7	Beryllium	0.082	<del>U</del>	<del>J</del>	P
7440-43-9	Cadmium	0.012	U		P
7440-70-2	Calcium	140		J	P
7440-47-3	Chromium	6.5	<del>U</del>	<del>J</del>	P
7440-48-4	Cobalt	2.4			P
7440-50-8	Copper	44.7	<del>U</del>	<del>J</del>	P
7439-89-6	Iron	5390	<del>U</del>		P
7439-92-1	Lead	2.3	<del>U</del>		P
7439-95-4	Magnesium	716		J	P
7439-96-5	Manganese	173	<del>U</del>		P
7439-97-6	Mercury	0.0058	U		CV
7440-02-0	Nickel	7.2			P
7440-09-7	Potassium	310	<del>U</del>		P
7782-49-2	Selenium	0.75	U		P
7440-22-4	Silver	0.068	U		P
7440-23-5	Sodium	17.8	<del>U</del>	<del>J</del>	P
7440-28-0	Thallium	0.23	U		P
7440-62-2	Vanadium	6.5	<del>U</del>	<del>J</del>	P
7440-66-6	Zinc	9.5		U	P

Comments: