

**J1 – ISCO Study Area Soil Boring Investigation Activities Technical  
Memorandum**



# Panther Technologies, Inc.

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## TECHNICAL MEMORANDUM

**To:** Doug Ronk, P.G. – Arrowhead Contracting, Inc.  
**CC:** Peter J. Palko, P.E., CHMM - Panther  
  
**From:** Kevin D. Dyson, P.E.  
**Date:** March 16, 2010  
**Re:** Results of ISCO Study Area Soil Boring Investigation Activities

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The purpose of this Technical Memorandum is to summarize the results of the interior soil borings recently completed inside of Building G at the Lawrence Aviation, Inc. (LAI) Superfund Site in Port Jefferson, New York. As a component of the Technical Specifications dated July 2009 within Solicitation Number RFP-3380-234-001-CN, **Panther Technologies, Inc. (Panther)** completed soil borings to approximately 231-feet below ground surface (bgs) to evaluate for sorbed phase or dissolved phase chlorinated volatile organic compounds (CVOCs) in soil and groundwater that may be contributing to source contamination onsite. The area evaluated within Building G is hydrogeologically upgradient of the area of high CVOC concentrations near MPW-07, therefore if an upgradient source was present, the area beneath Building G is a likely location.

## BACKGROUND

The Site (EPA ID #NYD002041531) encompasses approximately 126 acres and consists of the LAI Facility and the LAI Outlying Parcels. The Long Island Railroad and Sheep Pasture Road form the northern border of the Site, to the east are various residential single family houses, to the west are additional single family houses and a Garden Waste Disposal Facility, and to the south is a wooded area beyond which is a residential area with single family houses. The Village of Port Jefferson and Port Jefferson Harbor, an embayment of Long Island Sound, lie approximately one mile to the north.

The LAI Facility, approximately 42 acres in size, is a former active manufacturer of titanium sheeting for the aeronautics industry. The LAI Facility consists of ten buildings located on the southwestern portion of the property. An abandoned, unlined earthen lagoon which formerly received liquid wastes lies west of the buildings and a former drum crushing area is situated south of the buildings.

The northeastern and eastern portions of the property are referred to as the Outlying Parcels. These areas are mostly wooded areas and include a few small residential single family houses and three access roads.

CVOCs in groundwater within the known primary source area are encountered at a maximum concentration of approximately 1,100 ug/l total CVOCs in MPW-07. Of this 1,100 ug/l, the primary contaminant of concern (COC) is trichloroethene (TCE) with lesser quantities of tetrachloroethene (PCE) and daughter products cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC). CVOCs are encountered at approximately 28.44 feet above mean sea level (ft MSL) (201 feet BGS) and extend down approximately 20-feet to 8.44 ft MSL (221 ft BGS) where the concentrations are just above the United States Environmental Protection Agency (US EPA) maximum contaminant level (MCL) of 1.0 ug/l for TCE.

Based on the information provided within the July 2009 RFP, a soil vapor sample of >100,000 parts per billion TCE by volume was observed in the southeast side of Building G during previous investigation activities. The purpose of the soil borings described herein (designated as ISCO-SB-01 to ISCO-SB-03) was to evaluate the potential for an upgradient source located within the previously unexplored zone beneath Building G that may be attributing to the soil vapor sample results and groundwater impacts. The specifications required the borings to be field screened in the overburden unsaturated zones and to collect soil and groundwater grab samples every 10-feet from the water table surface (approximately 180-feet BGS) to approximately 230-feet bgs. The soil and groundwater grab samples would be analyzed for VOCs in accordance with USEPA SOM 01.2 methods.

## **FIELD ACTIVITIES**

Field activities within Building G commenced on January 4, 2010 and were essentially completed on January 19, 2010. Soil boring, sampling and analysis activities were completed in accordance with the July 2009 *Technical Specifications – Lawrence Aviation Industries Superfund Site, 100% Remedial Design* and the January 2010 approved *Final Workplan Remedial Construction Activities, Revision 1*.

Soil borings ISCO-SB-03 and ISCO-SB-02 were both completed per the specifications utilizing mud rotary methods with a 7-7/8" roller bit and split spoon sampling with a wireline system. A very permeable gravel or void area was encountered in ISCO-SB-01 at 98-feet BGS that resulted in loss of circulation. Attempts to restore circulation were not successful. Coincidentally, this boring and the intervals from approximately 60 – 90' BGS corresponded to elevated photoionization detector readings as high as 56 parts per million (ppm). Followup attempts to verify the PID results by sealing the conductor casing with polyethylene sheeting were unsuccessful in replicating the results due to collapse of the sidewalls within the boring. Because of the inability to seal the borehole with drilling fluids, the agreement between analytical results from ISCO-SB-03 and ISCO-SB-02 and the inability to replicate the elevated PID readings, **Panther** was instructed to abandon the borehole although the elevated readings that were initially detected in soils could indicate the potential for an unsaturated zone CVOC source. Based on this instruction, **Panther** abandoned ISCO-SB-01 to the surface.

Within ISCO-SB-03 and ISCO-SB-02, unsaturated zone split spoon samples were collected at a frequency of 1 sample per 10-feet of depth to field screen and lithologically log the overburden soil in accordance with the USCS Soil Classification system. Due to the extremely compact nature of the overburden soil, limited recoveries were noted throughout the unsaturated zone to the groundwater table, where recoveries significantly increased. A total of six (6) saturated soil samples and five (5) groundwater grab samples collected via hydropunch were collected in ISCO-SB-02, while five (5) saturated soil samples and seven (7) groundwater grab samples collected via hydropunch were collected in ISCO-SB-03 (including duplicates and field blank) and delivered to Test America Laboratories in Burlington, Vermont for VOC analysis via US EPA CLP Method SOM 01.2 for low-level VOCs. No analytical samples were collected in ISCO-SB-01 as the water table was not reached. The attached Tables 1 - 4 provide a summary of samples collected, field screening levels (soils) and analytical results. Appendix A contains the soil boring logs while Appendix B contains the analytical and third party validation reports.

Following completion of ISCO-SB-02 and ISCO-SB-03 to 230-feet BGS, each boring was abandoned utilizing a bentonite grout to the surface.

## **FIELD-SCREENING AND LABORATORY ANALYSIS**

To evaluate for the presence of CVOCs in the unsaturated and saturated zones at the ISCO-SB locations, soil samples were collected in the unsaturated and saturated zones at a frequency of 1 sample per 10-feet of depth. As such, eighteen (18) locations were field screened from 0-feet to 180-feet bgs while an additional five (5) to six (6) intervals were screened from 180-feet to 230-feet bgs. The intervals below the water table (180 – 230-foot bgs intervals) were also sampled for soil and groundwater grab samples for analysis via SOM 01.2 Trace VOC analysis.

Following sample collection within the split spoon, intervals were retrieved and lithologically logged by a qualified geologist. Each interval was logged in accordance with USCS Classification System for grain size, color, percent soil structure makeup, etc. Generally, the soil borings were similar in lithology down to the water table and were primarily compressed glacial sediments of gravel, sand, silt and trace clay until ISCO-SB-01 encountered a significant gravel zone or void space. Due to the compressed nature of the overburden, very low recoveries were noted in the overburden soil samples. During field screening with the MiniRae 2000 PID equipped with a 10.6 eV bulb, insignificant detections of VOCs in unsaturated zone soils in ISCO-SB-03 and ISCO-SB-02 were noted following PID calibration with 100-ppm isobutylene gas. The results of unsaturated zone logging are included on the boring logs within Appendix A. Soil sampling was conducted in accordance with the SOM 01.2 method which included EnCore sample collection in addition to the 4-oz percent solids sample. Soil samples below the water table were also collected via split spoon sampling and field screened with a PID prior to sample collection. The sample interval that exhibited the highest PID response was sampled for analytical testing, where applicable.

Once the water table was encountered at approximately 180-feet bgs, in addition to soil sampling on the 1 every 10-foot interval, ground water grab samples were also collected at discrete depth intervals via a QED Environmental Systems, Inc. Hydropunch II water sampling system. The hydropunch system was connected to the split spoon hammer, lowered through the drill rods and driven into the formation approximately 1 – 1.5 feet. Following driving to the desired depth, the hydropunch was withdrawn approximately 3 – 6 inches and the steel tip was slid back exposing the screen to the formation. The hydropunch was then allowed to equilibrate with the formation for approximately 20 – 30 minutes. Upon retrieval, the hydropunch closed and was brought to the surface where pre-preserved 40-ml sample vials were filled for VOC analysis.

Following collection, all samples were shipped to the Test America Laboratory facility in Burlington, Vermont preserved on ice at less than 4-degrees C. The samples were all analyzed via the approved methods for VOCs within the Quality Assurance Project Plan. The results of the third party validation and a copy of the validation report are included in Appendix B.

## **QUALITY ASSURANCE REVIEW**

Upon receipt of the analytical results for the soil and groundwater VOC samples collected from ISCO-SB-03 and ISCO-SB-02, the laboratory data packages were submitted to Premier Environmental of Merrick, New York for data validation in accordance with US EPA protocols. The protocols utilized for data validation included the following:

*Volatile Organic Analyses – National Data Validation Guidelines for the Review of Organic Data (10/99) and USEPA Region II SOPs for the review of data in accordance with EPA Method 8260 (HW-24, Rev. 2 10/06).*

As discussed within the validation report in Appendix B, the following inconsistencies were noted within the data packages:

- The hold times for soil samples for ISCO-SB-03 were exceeded due to laboratory instrument failure during analysis. The data from ISCO-SB-03 were compared with the results from ISCO-SB-02 and found to be similar. This issue was discussed with the project team upon notification to **Panther** by Test America and not deemed a concern as the results of ISCO-SB-03 and ISCO-SB-02 were very similar and did not represent a VOC source area.

## **COMPARISON OF FIELD-SCREENING RESULTS AND FIXED LABORATORY RESULTS**

Unsaturated and saturated zone soil samples were field screened with a 10.6 eV photoionization bulb which screens for the targeted chlorinated ethenes within the 9.95 eV range. A direct comparison of field screening results to total CVOC concentrations in soil from the analytical data shows a direct correlation. Laboratory analytical data showed no detections above the MDLs for CVOCs in soils compared to the no detections with the PID.

Because of the agreement of the field instrument to the low concentrations of VOCs within the analytical results, the relative PID response from soils collected in the overburden likely indicate the lack of a definitive source of VOCs impacting the saturated zone, although limited low level detections were noted within ISCO-SB-01 prior to abandonment.

If anyone has questions regarding sample collection techniques, please feel free to contact Kevin Dyson at your earliest convenience at 609.714.2420 or by cell phone at 609.472.1276.

**TABLES**

Table 1. Summary of Soil Sampling Analytical Results for Interior Exploratory Soil Borings ISCO-SB-02. Lawrence Aviation Superfund Site. Port Jefferson, New York.

Page 1 of 2

Panther Sample ID:			ISCO-SB-4-S 190'- 191'		ISCO-SB-2-S 192' - 193'		ISCO-SB-2-S 200'-201'		ISCO-SB-2-S 210'-211'		ISCO-SB-2-S 220'-221'		ISCO-SB-2-S 230'- 231'		VBLKNT	
Lab Sample ID:			817811		817812		817813		817814		817815		817816		VBLKNT	
Date Sampled:			1/14/2010		1/14/2010		1/14/2010		1/15/2010		1/15/2010		1/15/2010		1/19/2010	
Depth Interval (ft BGS)			190-191		192-193		200-201		210-211		220 - 221		230 - 231			
Notes			1												2	
<i>TCL VOCs SOM01.2</i>	CAS Number	Units														
Acetone	67-64-1	ug/kg	12	U	13	U	12	U	6.0	J	7.9	J	5.4	J	10	U
Benzene	71-43-2	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Bromoform	74-97-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Bromochloromethane	75-27-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Bromodichloromethane	75-25-2	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Bromomethane	74-83-9	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
2-Butanone (MEK)	78-93-3	ug/kg	12	U	13	U	12	U	11	U	13	U	12	U	10	U
Carbon disulfide	75-15-0	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Carbon tetrachloride	56-23-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Chlorobenzene	108-90-7	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Chloroethane	75-00-3	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Chloroform	67-66-3	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Chloromethane	74-87-3	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Cyclohexane	110-82-7	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,2-dichlorobenzene	95-50-1	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,3-dichlorobenzene	541-73-1	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,4-dichlorobenzene	106-46-7	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Dibromoform	124-48-1	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,2-Dibromo-3-chloropropane	96-12-8	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Dichlorodifluoromethane	75-71-8	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,2-Dibromoethane	106-93-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,1-Dichloroethane	75-34-3	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,2-Dichloroethane	107-06-2	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,1-Dichlorethene	75-35-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
cis-1,2-Dichloroethene	156-59-2	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
trans-1,2-Dichloroethene	156-60-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,2-Dichloropropane	78-87-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
cis-1,3-Dichloropropene	10061-01-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
trans-1,3-Dichloropropene	10061-02-6	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,4-Dioxane	123-91-1	ug/kg	120	U	130	U	120	U	110	U	130	U	120	U	100	U
Ethylbenzene	100-41-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
2-Hexanone	591-78-6	ug/kg	12	U	13	U	12	U	11	U	13	U	12	U	10	U
Isopropylbenzene	98-82-8	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/kg	12	U	13	U	12	U	11	U	13	U	12	U	10	U
Methyl Acetate	79-20-9	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Methylene chloride	75-09-2	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Methylcyclohexane	108-87-2	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Methyl Tert-Butyl Ether	1634-04-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Syrene	100-42-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Tetrachloroethene	127-18-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Toluene	108-88-3	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,2,4-Trichlorobenzene	120-82-1	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,2,3-Trichlorobenzene	87-61-6	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,1,1-Trichloroethane	71-55-6	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,1,2-Trichloroethane	79-00-5	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Trichloroethene	79-01-6	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Trichlorofluoromethane	75-69-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Vinyl chloride	75-01-4	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
o-Xylene	95-47-6	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
m&p-Xylene	179601-23-1	ug/kg	5.9	U	6.3	U	5.8	U	5.3	U	6.3	U	5.9	U	5.0	U
Total TIC, Volatile	Not Available	ug/kg	88	JXB	97	JXB	93	JXB	89.1	JXB	98	JXB	95	JXB	72	JX

Percent Solids	Not Available	%	83		87.4		82.8		84.6		82.5		83.7		--	
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**Notes**

(1) - ISCO-SB-4-S 190-191 is a duplicate sample of ISCO-SB-2-S 192 - 193'

(2) - VBLKNT, VBLKNU are method blanks and VHBLK02 is a storage blank.

*Italics* and grey shading indicates compounded detected above the MDL.**Qualifiers**

J - Estimated Value

X - a non-target constituent that represented a compound that is related to the DMC formulation

B - Analyte detected in associated method blank

**Table 1. Summary of Soil Sampling Analytical Results for Interior Exploratory Soil Borings ISCO-SB-02. Lawrence Aviation Superfund Site. Port Jefferson, New York.**

Page 2 of 2

Panther Sample ID:			VBLKNU		VHBLK02	
Lab Sample ID:			VNLKNU		VHBLK02	
Date Sampled:			1/19/2010		1/19/2010	
Depth Interval (ft BGS)						
Notes			2		2	
<b>TCL VOCs SOM01.2</b>						
	CAS Number	Units				
Acetone	67-64-1	ug/kg	10	U	10	U
Benzene	71-43-2	ug/kg	5.0	U	5.0	U
Bromo-chloromethane	74-97-5	ug/kg	5.0	U	5.0	U
Bromo-dichloromethane	75-27-4	ug/kg	5.0	U	5.0	U
Bromoform	75-25-2	ug/kg	5.0	U	5.0	U
Bromomethane	74-83-9	ug/kg	5.0	U	5.0	U
2-Butanone (MEK)	78-93-3	ug/kg	10	U	10	U
Carbon disulfide	75-15-0	ug/kg	5.0	U	5.0	U
Carbon tetrachloride	56-23-5	ug/kg	5.0	U	5.0	U
Chlorobenzene	108-90-7	ug/kg	5.0	U	5.0	U
Chloroethane	75-00-3	ug/kg	5.0	U	5.0	U
Chloroform	67-66-3	ug/kg	5.0	U	5.0	U
Chloromethane	74-87-3	ug/kg	5.0	U	5.0	U
Cyclohexane	110-82-7	ug/kg	5.0	U	5.0	U
1,2-dichlorobenzene	95-50-1	ug/kg	5.0	U	5.0	U
1,3-dichlorobenzene	541-73-1	ug/kg	5.0	U	5.0	U
1,4-dichlorobenzene	106-46-7	ug/kg	5.0	U	5.0	U
Dibromo-chloromethane	124-48-1	ug/kg	5.0	U	5.0	U
1,2-Dibromo-3-chloropropane	96-12-8	ug/kg	5.0	U	5.0	U
Dichlorodifluoromethane	75-71-8	ug/kg	5.0	U	5.0	U
1,2-Dibromoethane	106-93-4	ug/kg	5.0	U	5.0	U
1,1-Dichloroethane	75-34-3	ug/kg	5.0	U	5.0	U
1,2-Dichloroethane	107-06-2	ug/kg	5.0	U	5.0	U
1,1-Dichlorethene	75-35-4	ug/kg	5.0	U	5.0	U
cis-1,2-Dichloroethene	156-59-2	ug/kg	5.0	U	5.0	U
trans-1,2-Dichloroethene	156-60-5	ug/kg	5.0	U	5.0	U
1,2-Dichloropropane	78-87-5	ug/kg	5.0	U	5.0	U
cis-1,3-Dichloropropene	10061-01-5	ug/kg	5.0	U	5.0	U
trans-1,3-Dichloropropene	10061-02-6	ug/kg	5.0	U	5.0	U
1,4-Dioxane	123-91-1	ug/kg	100	U	100	U
Ethylbenzene	100-41-4	ug/kg	5.0	U	5.0	U
2-Hexanone	591-78-6	ug/kg	10	U	10	U
Isopropylbenzene	98-82-8	ug/kg	5.0	U	5.0	U
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/kg	10	U	10	U
Methyl Acetate	79-20-9	ug/kg	5.0	U	5.0	U
Methylene chloride	75-09-2	ug/kg	5.0	U	5.0	U
Methylcyclohexane	108-87-2	ug/kg	5.0	U	5.0	U
Methyl Tert-Butyl Ether	1634-04-4	ug/kg	5.0	U	5.0	U
Styrene	100-42-5	ug/kg	5.0	U	5.0	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	5.0	U	5.0	U
Tetrachloroethene	127-18-4	ug/kg	5.0	U	5.0	U
Toluene	108-88-3	ug/kg	5.0	U	5.0	U
1,2,4-Trichlorobenzene	120-82-1	ug/kg	5.0	U	5.0	U
1,2,3-Trichlorobenzene	87-61-6	ug/kg	5.0	U	5.0	U
1,1,1-Trichloroethane	71-55-6	ug/kg	5.0	U	5.0	U
1,1,2-Trichloroethane	79-00-5	ug/kg	5.0	U	5.0	U
Trichloroethene	79-01-6	ug/kg	5.0	U	5.0	U
Trichlorofluoromethane	75-69-4	ug/kg	5.0	U	5.0	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/kg	5.0	U	5.0	U
Vinyl chloride	75-01-4	ug/kg	5.0	U	5.0	U
o-Xylene	95-47-6	ug/kg	5.0	U	5.0	U
m&p-Xylene	179601-23-1	ug/kg	5.0	U	5.0	U
Total TIC, Volatile	Not Available	ug/kg	77	JX	77	JXB

  

Percent Solids	Not Available	%	--	--	
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#### Notes

(1) - ISCO-SB-4-S 190-191 is a duplicate sample of ISCO-SB-2-S

192 - 193'

(2) - VBLKNT, VBLKNU are method blanks and VHBLK02 is a storage blank.

*Italics* and grey shading indicates compounded detected above the MDL.

#### Qualifiers

J - Estimated Value

X - a non-target constituent that represented a compound that is related to the DMC formulation

B - Analyte detected in associated method blank

Table 2. Summary of Groundwater Analytical Results for Interior Exploratory Boring ISCO-SB-02. Lawrence Aviation Superfund Site. Port Jefferson, New York.

Panther Sample ID:		ISCO-SB-2-GW 193'-194'	ISCO-SB-2-GW 200'-201'	ISCO-SB-2-GW 211'-212'	ISCO-SB-2-GW 221'-222'	ISCO-SB-2-GW 231'-232'	FB100114		TB100114							
Lab Sample ID:		817817	817818	817819	817822	817823	817820		817821							
Date Sampled:		1/14/2010	1/14/2010	1/14/2010	1/15/2010	1/15/2010	1/14/2010		1/14/2010							
Depth Interval (ft BGS)		193-194	200-201	211-212	221-222	231-232										
<i>TCI VOCs SOM01.2</i>																
Acetone	67-64-1	ug/l	<i>71</i>	<i>19</i>	<i>15</i>	<i>14</i>	95	5.0	U	5.0						
Benzene	71-43-2	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Bromoform	75-27-4	ug/l	<i>0.34</i>	J	<i>0.36</i>	J	<i>0.27</i>	<i>0.49</i>	J	<i>0.37</i>						
Bromochloromethane	75-27-4	ug/l	<i>0.5</i>	J	<i>0.5</i>	J	<i>0.5</i>	<i>0.5</i>	J	<i>0.5</i>						
Bromodichloromethane	75-25-2	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Bromomethane	74-83-9	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
2-Butanone (MEK)	78-93-3	ug/l	<i>1.4</i>	J	<i>2.3</i>	J	<i>2.2</i>	<i>1.2</i>	J	<i>5.0</i>						
Carbon disulfide	75-15-0	ug/l	<i>0.26</i>		<i>0.37</i>	J	<i>0.4</i>	J	0.5	U	0.5					
Carbon tetrachloride	56-23-5	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Chlorobenzene	108-90-7	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Chloroethane	75-00-3	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Chloroform	67-66-3	ug/l	<i>0.42</i>	J	<i>0.49</i>	J	<i>0.47</i>	J	<i>0.6</i>	J	<i>0.47</i>					
Chlormethane	74-87-3	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Cyclohexane	110-82-7	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,2-dichlorobenzene	95-50-1	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,3-dichlorobenzene	541-73-1	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,4-dichlorobenzene	106-46-7	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Dibromochloromethane	124-48-1	ug/l	<i>0.36</i>	J	<i>0.32</i>	J	<i>0.22</i>	<i>0.43</i>	J	<i>0.33</i>						
1,2-Dibromo-3-chloropropane	96-12-8	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Dichlorodifluoromethane	75-71-8	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,2-Dibromoethane	106-93-4	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,1-Dichloroethane	75-34-3	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,2-Dichloroethane	107-06-2	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,1-Dichloroethene	75-35-4	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
cis-1,2-Dichloroethene	156-59-2	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
trans-1,2-Dichloroethene	156-60-5	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,2-Dichloropropane	78-87-5	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
cis-1,3-Dichloropropene	10061-01-5	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
trans-1,3-Dichloropropene	10061-02-6	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Ethylbenzene	100-41-4	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
2-Hexanone	591-78-6	ug/l	5.0	U	5.0	U	5.0	5.0	U	5.0						
Isopropylbenzene	98-82-8	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/l	5.0	U	5.0	U	5.0	5.0	U	5.0						
Methyl Acetate	79-20-9	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Methylene chloride	75-09-2	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Methylcyclohexane	108-87-2	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Methyl Tert-Butyl Ether	1634-04-4	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Styrene	100-42-5	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Tetrachloroethene	127-18-4	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Toluene	108-88-3	ug/l	<i>0.26</i>	J	<i>0.25</i>	J	<i>0.24</i>	J	<i>0.26</i>	J	<i>0.26</i>					
1,2,4-Trichlorobenzene	120-82-1	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,2,3-Trichlorobenzene	87-61-6	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,1,1-Trichloroethane	71-55-6	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,1,2-Trichloroethane	79-00-5	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Trichloroethene	79-01-6	ug/l	<i>0.46</i>	J	<i>0.49</i>	J	<i>0.44</i>	J	<i>1.0</i>	<i>0.86</i>						
Trichlorofluoromethane	75-69-4	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Vinyl chloride	75-01-4	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
<i>o-Xylene</i>	95-47-6	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
met <p>X</p> -Xylene	179601-23-1	ug/l	0.5	U	0.5	U	0.5	0.5	U	0.5						
Total TIC, Volatile	Not Available	ug/l	23.82	NJXB	15.28	NJXB	22.1	NJXB	7.72	NJXB	35.92	NJXB	79.1	NJXB	4.9	NJXB

**Notes**

(1) - VBLKMD, VBLKMI, VBLKMH are method blanks and VHLK01 is a storage blank.

*Italics* and grey shading indicates compounded detected above MDL.**Qualifiers**

J - Estimated Value

X - a non-target constituent that represented a compound that is related to the DMC formulation

B - Analyte detected in associated method blank

U - Not detected at method detection limit

N - Indicates presumptive evidence of compound

Table 2. Summary of Groundwater Analytical Results for Interior Exploratory Boring ISCO-SB-02. Lawrence Aviation Superfund Site. Port Jefferson, New York.

Panther Sample ID:		FB100115	VBLKMD	VBLKMH	VBLKMI	VHBLK01	
Lab Sample ID:		817824	VBLKMD	VBLKMH	VBLKMI	VHBLK01	
Date Sampled:		1/15/2010	1/19/2010	1/21/2010	1/22/2010	1/22/2010	
Depth Interval (ft BGS)		1	1	1	1	1	
<i>TCL VOCs SOM01.2</i>	CAS Number	Units					
Acetone	67-64-1	ug/l	5.0	U	5.0	U	5.0
Benzene	71-43-2	ug/l	0.5	U	0.5	U	0.5
Bromo-chloromethane	74-97-5	ug/l	0.5	U	0.5	U	0.5
Bromo-dichloromethane	75-27-4	ug/l	0.5	U	0.5	U	0.5
Bromoform	75-25-2	ug/l	0.5	U	0.5	U	0.5
Bromomethane	74-83-9	ug/l	0.5	U	0.5	U	0.5
2-Butanone (MEK)	78-93-3	ug/l	5.0	U	5.0	U	5.0
Carbon disulfide	75-15-0	ug/l	0.5	U	0.5	U	0.5
Carbon tetrachloride	56-23-5	ug/l	0.5	U	0.5	U	0.5
Chlorobenzene	108-90-7	ug/l	0.5	U	0.5	U	0.5
Chloroethane	75-00-3	ug/l	0.5	U	0.5	U	0.5
Chloroform	67-66-3	ug/l	0.5	U	0.5	U	0.5
Chloromethane	74-87-3	ug/l	0.5	U	0.5	U	0.5
Cyclohexane	110-82-7	ug/l	0.5	U	0.5	U	0.5
1,2-dichlorobenzene	95-50-1	ug/l	0.5	U	0.5	U	0.5
1,3-dichlorobenzene	541-73-1	ug/l	0.5	U	0.5	U	0.5
1,4-dichlorobenzene	106-46-7	ug/l	0.5	U	0.5	U	0.5
Dibromo-chloromethane	124-48-1	ug/l	0.5	U	0.5	U	0.5
1,2-Dibromo-3-chloropropane	96-12-8	ug/l	0.5	U	0.5	U	0.5
Dichlorodifluoromethane	75-71-8	ug/l	0.5	U	0.5	U	0.5
1,2-Dibromoethane	106-93-4	ug/l	0.5	U	0.5	U	0.5
1,1-Dichloroethane	75-34-3	ug/l	0.5	U	0.5	U	0.5
1,2-Dichloroethane	107-06-2	ug/l	0.5	U	0.5	U	0.5
1,1-Dichloroethene	75-35-4	ug/l	0.5	U	0.5	U	0.5
cis-1,2-Dichloroethene	156-59-2	ug/l	0.5	U	0.5	U	0.5
trans-1,2-Dichloroethene	156-60-5	ug/l	0.5	U	0.5	U	0.5
1,2-Dichloropropane	78-87-5	ug/l	0.5	U	0.5	U	0.5
cis-1,3-Dichloropropene	10061-01-5	ug/l	0.5	U	0.5	U	0.5
trans-1,3-Dichloropropene	10061-02-6	ug/l	0.5	U	0.5	U	0.5
Ethylbenzene	100-41-4	ug/l	0.5	U	0.5	U	0.5
2-Hexanone	591-78-6	ug/l	5.0	U	5.0	U	5.0
Isopropylbenzene	98-82-8	ug/l	0.5	U	0.5	U	0.5
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/l	5.0	U	5.0	U	5.0
Methyl Acetate	79-20-9	ug/l	0.5	U	0.5	U	0.5
Methylene chloride	75-09-2	ug/l	0.5	U	0.5	U	0.5
Methylcyclohexane	108-87-2	ug/l	0.5	U	0.5	U	0.5
Methyl Tert-Butyl Ether	1634-04-4	ug/l	0.5	U	0.5	U	0.5
Styrene	100-42-5	ug/l	0.5	U	0.5	U	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.5	U	0.5	U	0.5
Tetrachloroethene	127-18-4	ug/l	0.5	U	0.5	U	0.5
Toluene	108-88-3	ug/l	0.5	U	0.5	U	0.5
1,2,4-Trichlorobenzene	120-82-1	ug/l	0.5	U	0.5	U	0.5
1,2,3-Trichlorobenzene	87-61-6	ug/l	0.5	U	0.5	U	0.5
1,1,1-Trichloroethane	71-55-6	ug/l	0.5	U	0.5	U	0.5
1,1,2-Trichloroethane	79-00-5	ug/l	0.5	U	0.5	U	0.5
Trichloroethene	79-01-6	ug/l	0.5	U	0.5	U	0.5
Trichlorofluoromethane	75-69-4	ug/l	0.5	U	0.5	U	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/l	0.5	U	0.5	U	0.5
Vinyl chloride	75-01-4	ug/l	0.5	U	0.5	U	0.5
o-Xylene	95-47-6	ug/l	0.5	U	0.5	U	0.5
m,p-Xylene	179601-23-1	ug/l	0.5	U	0.5	U	0.5
Total TIC, Volatile	Not Available	ug/l	17.6	NJXB	3.6	JX	3.4
					JX	3.7	JX
					JX	3.6	JXB

**Notes**

(1) - VBLKMD, VBLKMI, VBLKMH are method blanks and VHBLK01 is a storage blank.

*Italics* and grey shading indicates compounded detected above MDL.

**Qualifiers**

J - Estimated Value

X - a non-target constituent that represented a compound that is related to the DMC formulation

B - Analyte detected in associated method blank

U - Not detected at method detection limit

N - Indicates presumptive evidence of compound

Table 3. Summary of Soil Sampling Analytical Results for Interior Exploratory Soil Borings ISCO-SB-03. Lawrence Aviation Superfund Site. Port Jefferson, New York.

Page 1 of 2

Panther Sample ID:			ISCO-SB-3 192' - 193'	ISCO-SB-3 200 - 201	ISCO-SB-3 210-211	ISCO-SB-3 220-221	ISCO-SB-3 230-231	VBLKNQ	VBLKNH	VNLKNH	
Lab Sample ID:			816982	816983	816984	816985	816986	VBLKNQ	VNLKNH		
Date Sampled:			1/6/2010	1/7/2010	1/7/2010	1/7/2010	1/7/2010	1/15/2010	1/28/2010		
Depth Interval (ft BGS)			192-193	200-201	210-211	220-221	230-231				
Notes								1	1		
<i>TCL VOCs SOM01.2</i>	CAS Number	Units									
Acetone	67-64-1	ug/kg	8.4	J	7.9	J	11	J	10	U	10
Benzene	71-43-2	ug/kg	5.9	U	5.1	U	6.2	U	5.2	U	5.0
Bromoform	74-97-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Bromochloromethane	75-27-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Bromodichloromethane	75-25-2	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Bromomethane	74-83-9	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
2-Butanone (MEK)	78-93-3	ug/kg	12	U	10	U	12	U	11	U	10
Carbon disulfide	75-15-0	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Carbon tetrachloride	56-23-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Chlorobenzene	108-90-7	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Chloroethane	75-00-3	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Chloroform	67-66-3	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Chloromethane	74-87-3	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Cyclohexane	110-82-7	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,2-dichlorobenzene	95-50-1	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,3-dichlorobenzene	541-73-1	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,4-dichlorobenzene	106-46-7	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Dibromoform	124-48-1	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,2-Dibromo-3-chloropropane	96-12-8	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Dichlorodifluoromethane	75-71-8	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,2-Dibromoethane	106-93-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,1-Dichloroethane	75-34-3	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,2-Dichloroethane	107-06-2	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,1-Dichlorethane	75-35-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
cis-1,2-Dichloroethene	156-59-2	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
trans-1,2-Dichloroethene	156-60-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,2-Dichloropropane	78-87-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
cis-1,3-Dichloropropene	10061-01-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
trans-1,3-Dichloropropene	10061-02-6	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,4-Dioxane	123-91-1	ug/kg	120	U	100	U	120	U	110	U	100
Ethylbenzene	100-41-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
2-Hexanone	591-78-6	ug/kg	12	U	10	U	12	U	11	U	10
Isopropylbenzene	98-82-8	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/kg	12	U	10	U	12	U	11	U	10
Methyl Acetate	79-20-9	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Methylene chloride	75-09-2	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Methylcyclohexane	108-87-2	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Methyl Tert-Butyl Ether	1634-04-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Syrene	100-42-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Tetrachloroethene	127-18-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Toluene	108-88-3	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,2,4-Trichlorobenzene	120-82-1	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,2,3-Trichlorobenzene	87-61-6	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,1,1-Trichloroethane	71-55-6	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,1,2-Trichloroethane	79-00-5	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Trichloroethene	79-01-6	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Trichlorofluoromethane	75-69-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Vinyl chloride	75-01-4	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
o-Xylene	95-47-6	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
m&p-Xylene	179601-23-1	ug/kg	5.9	U	5.1	U	6.2	U	5.3	U	5.0
Total TIC, Volatile	Not Available	ug/kg	92	JXB	74	JXB	97.1	JXB	85.6	JXB	85.4
Percent Solids	Not Available	%	92.5		92.2		91		93		95.4
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**Notes**

(1) - VBLKNQ, VBLKNH are method blanks and VHBLK02 is a storage blank.

*Italics* and grey shading indicates compounded detected above MDL.**Qualifiers**

J - Estimated Value

X - a non-target constituent that represented a compound that is related to the DMC formulation

B - Analyte detected in associated method blank

**Table 3. Summary of Soil Sampling Analytical Results for Interior Exploratory Soil Borings ISCO-SB-03. Lawrence Aviation Superfund Site. Port Jefferson, New York.**

Page 2 of 2

Panther Sample ID:		VHBLK02	
Lab Sample ID:		VHBLK02	
Date Sampled:		1/28/2010	
Depth Interval (ft BGS)			
Notes		1	

TCL VOCs SOM01.2	CAS Number	Units	
Acetone	67-64-1	ug/kg	10
Benzene	71-43-2	ug/kg	5.0
Bromoform	74-97-5	ug/kg	5.0
Bromochloromethane	75-27-4	ug/kg	5.0
Bromodichloromethane	75-25-2	ug/kg	5.0
Bromomethane	74-83-9	ug/kg	5.0
2-Butanone (MEK)	78-93-3	ug/kg	10
Carbon disulfide	75-15-0	ug/kg	5.0
Carbon tetrachloride	56-23-5	ug/kg	5.0
Chlorobenzene	108-90-7	ug/kg	5.0
Chloroethane	75-00-3	ug/kg	5.0
Chloroform	67-66-3	ug/kg	5.0
Chlormethane	74-87-3	ug/kg	5.0
Cyclohexane	110-82-7	ug/kg	5.0
1,2-dichlorobenzene	95-50-1	ug/kg	5.0
1,3-dichlorobenzene	541-73-1	ug/kg	5.0
1,4-dichlorobenzene	106-46-7	ug/kg	5.0
Dibromoform	124-48-1	ug/kg	5.0
1,2-Dibromo-3-chloropropane	96-12-8	ug/kg	5.0
Dichlorodifluoromethane	75-71-8	ug/kg	5.0
1,2-Dibromoethane	106-93-4	ug/kg	5.0
1,1-Dichloroethane	75-34-3	ug/kg	5.0
1,2-Dichloroethane	107-06-2	ug/kg	5.0
1,1-Dichlorethene	75-35-4	ug/kg	5.0
cis-1,2-Dichloroethene	156-59-2	ug/kg	5.0
trans-1,2-Dichloroethene	156-60-5	ug/kg	5.0
1,2-Dichloropropane	78-87-5	ug/kg	5.0
cis-1,3-Dichloropropene	10061-01-5	ug/kg	5.0
trans-1,3-Dichloropropene	10061-02-6	ug/kg	5.0
1,4-Dioxane	123-91-1	ug/kg	100
Ethylbenzene	100-41-4	ug/kg	5.0
2-Hexanone	591-78-6	ug/kg	10
Isopropylbenzene	98-82-8	ug/kg	5.0
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/kg	10
Methyl Acetate	79-20-9	ug/kg	5.0
Methylene chloride	75-09-2	ug/kg	5.0
Methylcyclohexane	108-87-2	ug/kg	5.0
Methyl Tert-Butyl Ether	1634-04-4	ug/kg	5.0
Sterene	100-42-5	ug/kg	5.0
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	5.0
Tetrachloroethene	127-18-4	ug/kg	5.0
Toluene	108-88-3	ug/kg	5.0
1,2,4-Trichlorobenzene	120-82-1	ug/kg	5.0
1,2,3-Trichlorobenzene	87-61-6	ug/kg	5.0
1,1,1-Trichloroethane	71-55-6	ug/kg	5.0
1,1,2-Trichloroethane	79-00-5	ug/kg	5.0
Trichloroethene	79-01-6	ug/kg	5.0
Trichlorofluoromethane	75-69-4	ug/kg	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/kg	5.0
Vinyl chloride	75-01-4	ug/kg	5.0
o-Xylene	95-47-6	ug/kg	5.0
m&p-Xylene	179601-23-1	ug/kg	5.0
Total TIC, Volatile	Not Available	ug/kg	78
			JXB

Percent Solids	Not Available	%	--	
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#### Notes

(1) - VBLKNQ, VBLKNH are method blanks and VHBLK02 is a storage blank.

*Italics* and grey shading indicates compounded detected above MDL.

#### Qualifiers

J - Estimated Value

X - a non-target constituent that represented a compound that is related to the DMC formulation

B - Analyte detected in associated method blank

Table 4. Summary of Groundwater Analytical Results for Interior Exploratory Boring ISCO-SB-03. Lawrence Aviation Superfund Site. Port Jefferson, New York.

Page 1 of 2

Panther Sample ID:			ISCO-SB-03 193	ISCO-SB-03 201-202		ISCO-SB-03 201-202 Dilution		ISCO-SB-3 211-212		ISCO-SB-3 211-212 Dilution		ISCO-SB03 221-222		ISCO-SB03 221-222 Duplicate		ISCO-SB03 231-232		
Lab Sample ID:			816974	816975		816975DL		816976		816976DL		916977		816979		816978		
Date Sampled:			1/6/2010	1/7/2010								1/7/2010		1/7/2010		1/7/2010		
Depth Interval (ft BGS)			193	201-202		201-202		201-202		211-212		211-212		221-222		221-222		
<i>TCL VOCs SOM01,2</i>	CAS Number	Units																
Acetone	67-64-1	ug/l	<i>J3</i>		450	E	380	D	520	E	500	D	47		55		92	
Benzene	71-43-2	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Bromo-chloromethane	74-97-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Bromodichloromethane	75-27-4	ug/l	<i>0.91</i>		1.2			DJ	<i>1.3</i>	J	<i>1.1</i>	DJ	<i>1.3</i>		1.2		0.79	
Bromoform	75-25-2	ug/l	<i>0.36</i>	J	<i>0.42</i>	J	1.9	U	<i>0.38</i>	J	2.2	U	<i>0.46</i>	J	<i>0.37</i>	J	<i>0.33</i>	
Bromomethane	74-83-9	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
2-Butanone (MEK)	78-93-3	ug/l	5.0	U	2.0	J	19	U	<i>3.3</i>	J	22	U	<i>1.7</i>	J	<i>1.6</i>	J	2.4	
Carbon disulfide	75-15-0	ug/l	0.5	U	<i>0.49</i>	J	1.9	J	<i>0.39</i>	J	2.2	U	0.5	U	0.5	U	<i>0.35</i>	
Carbon tetrachloride	56-23-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Chlorobenzene	108-90-7	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Chloroethane	75-00-3	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Chloroform	67-66-3	ug/l	<i>0.84</i>		<i>1.1</i>		<i>1.2</i>	DJ	<i>1.3</i>		<i>1.3</i>	DJ	<i>1.2</i>	J	<i>1.3</i>		<i>0.69</i>	
Chloromethane	74-87-3	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Cyclohexane	110-82-7	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,2-dichlorobenzene	95-50-1	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,3-dichlorobenzene	541-73-1	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,4-dichlorobenzene	106-46-7	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Dibromo-chloromethane	124-48-1	ug/l	<i>1.0</i>		<i>1.2</i>		<i>1.2</i>	DJ	<i>1.2</i>	J	<i>1.1</i>	DJ	<i>1.3</i>		<i>1.1</i>		<i>0.87</i>	
1,2-Dibromo-3-chloropropane	96-12-8	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Dichlorodifluoromethane	75-71-8	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,2-Dibromoethane	106-93-4	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,1-Dichloroethane	75-34-3	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,2-Dichloroethane	107-06-2	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,1-Dichloroethene	75-35-4	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
cis-1,2-Dichloroethene	156-59-2	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
trans-1,2-Dichloroethene	156-60-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,2-Dichloropropane	78-87-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
cis-1,3-Dichloropropene	10061-01-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
trans-1,3-Dichloropropene	10061-02-6	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Ethylbenzene	100-41-4	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
2-Hexane	591-78-6	ug/l	5.0	U	5.0	U	19	U	5.0	U	22	U	5.0	U	5.0	U	5.0	
Isopropylbenzene	98-82-8	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/l	5.0	U	5.0	U	19	U	5.0	U	22	U	5.0	U	5.0	U	5.0	
Methyl Acetate	79-20-9	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Methylene chloride	75-09-2	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Methylcyclohexane	108-87-2	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Methyl Tert-Butyl Ether	1634-04-4	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Styrene	100-42-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Tetrachloroethene	127-18-4	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Toluene	108-88-3	ug/l	0.5	U	<i>0.24</i>	J	1.9	J	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,2,4-Trichlorobenzene	120-82-1	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,2,3-Trichlorobenzene	87-61-6	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,1,1-Trichloroethane	71-55-6	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,1,2-Trichloroethane	79-00-5	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Trichloroethene	79-01-6	ug/l	<i>0.40</i>	J	<i>1.1</i>		<i>1.4</i>	DJ	<i>1.3</i>		<i>1.3</i>	DJ	<i>1.0</i>		<i>1.1</i>		<i>0.57</i>	
Trichlorofluoromethane	75-69-4	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
Vinyl chloride	75-01-4	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
o-Xylene	95-47-6	ug/l	0.5	U	0.5	U	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	
m&p-Xylene	179601-23-1	ug/l	<i>0.36</i>	J	<i>0.38</i>	J	<i>1.9</i>	U	<i>0.5</i>	U	<i>2.2</i>	U	<i>0.5</i>	U	<i>0.5</i>	U	<i>0.5</i>	
Total TIC, Volatile	No Available	ug/l	13.55	NJXB	104.93	NJXB	170	NJXBD	110.74	NJXB	154.1	NJXBD	24.18	NJXB	22.76	NJXB	26.23	NJXB

(1) - VBLKMC, VBLKMD, VBLKMH are method blanks and VBLK01 is a storage blank.

*Italics* and grey shading indicates compounded detected above MDL.**Qualifiers**

J - A non-target constituent that represented a compound that is related to the DMC formulation.

B - Analyte detected in associated method blank.

U - Not detected at method detection limit.

N - Indicates presumptive evidence of compound.

D - Concentrations identified from analysis of the sample at a secondary dilution.

Table 4. Summary of Groundwater Analytical Results for Interior Exploratory Boring ISCO-SB-03. Lawrence Aviation Superfund Site. Port Jefferson, New York.

Panther Sample ID:			ISCO-SB-03 Equipment Blank	Trip Blank		VBLKMC		VBLKMD		VBLKMH		VHBLK01	
Lab Sample ID:			816980	816981		VBLKMC		VBLKMD		VBLKMH		VHBLK01	
Date Sampled:			1/6/2010	1/7/2010		1/18/2010		1/19/2010		1/21/2010		1/19/2010	
Depth Interval (ft BGS)						1		1		1		1	
<i>TCL VOCs SOM01,2</i>	CAS Number	Units											
Acetone	67-64-1	ug/l	99		5.0	U	5.0	U	5.0	U	5.0	U	
Benzene	71-43-2	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromo-chloromethane	74-97-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromodichloromethane	75-27-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromoform	75-25-2	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromomethane	74-83-9	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
2-Butanone (MEK)	78-93-3	ug/l	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	
Carbon disulfide	75-15-0	ug/l	0.26	J	0.5	U	0.5	U	0.5	U	0.5	U	
Carbon tetrachloride	56-23-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chlorobenzene	108-90-7	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chloroethane	75-00-3	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chloroform	67-66-3	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chloromethane	74-87-3	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Cyclohexane	110-82-7	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-dichlorobenzene	95-50-1	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,3-dichlorobenzene	541-73-1	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,4-dichlorobenzene	106-46-7	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Dibromo-chloromethane	124-48-1	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dibromo-3-chloropropane	96-12-8	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Dichlorodifluoromethane	75-71-8	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dibromoethane	106-93-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1-Dichloroethane	75-34-3	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dichloroethane	107-06-2	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1-Dichloroethene	75-35-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
cis-1,2-Dichloroethene	156-59-2	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
trans-1,2-Dichloroethene	156-60-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dichloropropane	78-87-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
cis-1,3-Dichloropropene	10061-01-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
trans-1,3-Dichloropropene	10061-02-6	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Ethylbenzene	100-41-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
2-Hexanone	591-78-6	ug/l	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	
Isopropylbenzene	98-82-8	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/l	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	
Methyl Acetate	79-20-9	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Methylene chloride	75-09-2	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Methylcyclohexane	108-87-2	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Methyl Tert-Butyl Ether	1634-04-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Styrene	100-42-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Tetrachloroethene	127-18-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Toluene	108-88-3	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2,3-Trichlorobenzene	120-82-1	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2,3-Trichlorobenzene	87-61-6	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,1-Trichloroethane	71-55-6	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,2-Trichloroethane	79-00-5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Trichloroethene	79-01-6	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Trichlorofluoromethane	75-69-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Vinyl chloride	75-01-4	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
o-Xylene	95-47-6	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
m&p-Xylene	179601-23-1	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Total TCL, Volatile	No Available	ug/l	82.44	NJXB	3.5	JXB	3.3	JX	3.6	JX	3.4	JXB	

**Notes**

(1) - VBLKMC, VBLKMD, VBLKMH are method blanks and VHBLK01 is a storage blank.

*Italics* and grey shading indicates compounded detected above MDL.**Qualifiers**

J - Estimated Value

X - a non-target constituent that represented a compound that is related to the DMC formulation.

B - Analyte detected in associated method blank.

U - Not detected at method detection limit.

N - Indicates presumptive evidence of compound.

D - Concentrations identified from analysis of the sample at a secondary dilution.

**APPENDIX A  
INTERIOR SOIL BORING LITHOLOGIC LOGS  
LAWRENCE AVIATION SUPERFUND SITE  
PORT JEFFERSON, NEW YORK**

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			<b>LITHOLOGIC BORING LOG:</b> <b>ISCO SB 03</b> Page ( 1 ) of ( 3 )				
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre-Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL				
LOGGED BY: Jon Simpson DATE START: 1/4/10 DATE COMPLETE: 1/8/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 231' BGS DEPTH WATER: 189' Approx DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wireline hamr BOREHOLE DIAMETER(S): 7 7/8-in				
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION	SAMPLE			WELL CONSTRUCTION
				INTERVAL	RECOVERY	BLOWS	
10		FILL	0-6" Concrete, 6" to 5' Reworked/disturbed gravel & sand	10'- 12'	8"	>75/12"	0
		GW/S	GRAVELLY SAND; med brown , silty very fine to coarse sand, fine to medium gravel, v compact, sub-ang to sub-round. well graded.				
		GW	14'- grades to sandy gravel, very compact/hard, poor sorting less gravel with depth.				
20	SW		GRAVELLY SAND; silty vfg to coarse sand, w/ fine gravel, v well graded.	20'- 22'	<3"	75/12"	0
30							
40	SW/G		GRAVELLY SAND/SANDY GRAVEL; fine to coarse sand, to coarse sand, very well graded, dense very compact, angular sub-round.	30'-32'	NR	>100/12"	0
50							
60	SW		GRAVELLY SILTY SAND; lt to med brown, vfg to coarse sand, v compact, less gravel with depth. 62'- Total Drilled Depth 1/4/10	40'-42'	6"	>100/12"	0
70							
80	SW		SAND; lt brn, fine to coarse sand w/ some silt, trace to sparse	50'-52'	4"	>100/12"	0
				60'-62'	6"	>100/12"	0
				70'-72'	NR		
				80'-82'	6"	>100/12"	0
Borehole grouted 1/8/10 via pressure methods from bottom to ground surface. Slurry consisted of 100% bentonite grout (CETCO "PureGold"). Borehole volume equivalent approximately 275 gallons and/or 69 cubic feet. Slurry mix and yield equal approximately 14 to 15 gal water per 50 lb sack of grout, slurry weight of 10.8 to 11 lb/gal, 2.2 cu ft/sk. Total slurry mixed approximately 585 gal, bulk volume equal 37 sacks. Good returns were circulated to the surface.							

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			<b>LITHOLOGIC BORING LOG:</b> Page ( 2 ) of ( 3 ) <b>ISCO SB-03</b>				
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre- Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL				
LOGGED BY: Jon Simpson DATE START: 1/4/10 DATE COMPLETE: 1/8/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 231' BGS DEPTH WATER: 189' Approx DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wireline hamr BOREHOLE DIAMETER(S): 7 7/8-in				
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION	SAMPLE			WELL CONSTRUCTION
				INTERVAL	RECOVERY	BLOWS	
90	GW/S		GRAVELLY SAND; Lt to med brn, gravel increasing with 86'- with large cobbles.	90'- 92'	NR	>100/12"	
			SANDY GRAVEL/GRAVELLY SAND, with small to large 100'- lt brn to olive brn, very compact/hard, poor sorting				
100			100'- lt brn to olive brn, very compact/hard, poor sorting	100'-102'	<1"	>100/12"	0
110	SW		GRAVELLY SAND; lt brn to olive brn, silty vfg to coarse v dense, well graded, poorly sorted, sub rd to angular.	110'-	NR	>100/12"	0
120	SW/G		GRAVELLY SAND/SANDY GRAVEL; fine to coarse sand, to coarse sand, very well graded, dense very compact, angular sub-round.	120'-122'	NS		
130				130'-132'	NS		
140				140'-142'	NS		
150				150'-152'	NR	>100/12"	0
160	SW		SAND; lt brn, fine to coarse sand w/ some silt, less to minor v dense,	160'-162'	NR"	>100/12"	0

Borehole grouted 1/8/10 via pressure methods from bottom to ground surface. Slurry consisted of 100% bentonite grout (CETCO "PureGold"). Borehole volume equivalent approximately 575 gallons and/or 69 cubic feet. Slurry mix and yield approximately 14 to 15 gal water per 50 lb sack of grout, slurry weight of 10.8 to 11 lb/gal. An 2.2 cu ft/sk. Total slurry mixed approximately 585 gal, bulk volume equal 37 sacks. Good returns were circulated to the surface.

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page ( 3 ) of ( 3 ) <b>ISCO SB-03</b>				
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre- Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL				
LOGGED BY: Jon Simpson DATE START: 1/4/10 DATE COMPLETE: 1/8/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 231' BGS DEPTH WATER: 189' Approx DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wireline hamr BOREHOLE DIAMETER(S): 7 7/8-in				
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION	SAMPLE			WELL CONSTRUCTION
				INTERVAL	RECOVERY	BLOWS	
170		SW	GRAVELLY SAND; w/ silt and some fines, lt to med brn, well graded, v dense, 165'- less coarse, better sorting with depth	170'-172'	3"	>100/12"	0
		SP/SM	SILTY SAND, lt olive brown, vf to f grained with some med sand, occasional coarse sand with trace fine gravel, poor				
		SM	175'- fine gravel increasing, better grading.  grading less coarse with depth				
180				180'-182'	NR	>100/12"	
190		SP/SM	SILTY SAND, lt brn to tan, vfg to fg w/ some med sand, v dense, poorly graded, v damp to wet, sub rd to sub-angular. 193' - Total Drill Depth 1/6/10	190'- 192'-193' 193'	NR 3" HP	>100/12"	0
200			200'- lt olive brn to gray brn, vfg, very dense, trace coarse sand saturated	200'-202' 202'	6" HP	>100/12"	0
210			210'- lt olive brn, vfg to fg, sub rd to rd, v dense, saturated.	210'-212' 212'	5" HP	>75/12"	0
220			220'- as above.	220'-222' 222'	5" HP	>75/12"	0
230			230' - as above.  Boring Terminated at 232' 1/7/10	230'-232' 232'	4" HP	>75/12"	0
240							

Borehole grouted 1/8/10 via pressure methods from bottom to ground surface Slurry consisted of 100% bentonite grout (CETCO "PureGold"). Borehole volume equivalent approximately 575 gallons and/or 69 cubic feet. Slurry mix and yield approximately 14 to 15 gal water per 50 lb sack of grout, 2.2 cu ft per sack., slurry weight of 10.8 to 11 lb/gal. Total slurry mixed approximately 585 gal, bulk volume equal 37 sacks. Good returns were circulated to the surface.

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			<b>LITHOLOGIC BORING LOG:</b> Page (1) of (3 ) <b>ISCO SB 02</b>				
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre- Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL				
LOGGED BY: Jon Simpson DATE START: 1/12/10 DATE COMPLETE: 1/15/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 232' BGS DEPTH WATER: 189' Approx DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wl hammer BOREHOLE DIAMETER(S): 7 7/8-in				
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION	SAMPLE			WELL CONSTRUCTION
				INTERVAL	RECOVERY	BLOWS	
10		FILL	0-6" Concrete, 6" to 5' Reworked/disturbed gravel & sand	10'- 12'	3"	>100/12"	0
		GW/S	GRAVELLY SAND; med brown , silty vf to coarse sand, f to med gravel, v compact to dense, sub-ang to sub-round. well graded. 14'- large granitic boulder,				
20	SM/SW	SW	GRAVELLY SAND; beige med brown, silty vfg to coarse sand,	20'- 22'	7"	>100/12"	0
		SM/SW	SILTY SAND; w, some to minor f to med gravel, vfg to coarse 25,'- gravel increasing, very silty.				
30			gravel with depth.	30'-32'	NR	>100/12"	0
		SW	40'- less fines w/ depth				
40			48'-56', gravel seams.	40'-42'	7"	>100/12"	0
		SW					
50				50'-52'	NR	>100/12"	0
		SW/G	GRAVELLY SAND; fine to coarse sand, fine to med gravel, very well graded, sub ang to rd.				
60		SW	SAND; vfg to coarse, w/ some to minor f gravel.	60'-62'	NR	>100/12"	0
		SW	Less gravel w/ depth.				
70				70'-72'	6"	>100/12"	0
80	SW/SM		SILTY SAND; beige lt brn, vfg to fg , w/ some coarse sand	80'-82'	6"	>100/12"	0

Borehole grouted 1/15/10 via pressure methods from bottom to ground surface. Slurry consisted of 100% bentonite grout (CETCO "PureGold").  
Borehole volume equivalent approximately 575 gallons and/or 69 cubic feet. Slurry mix and yield approximately 14 to 15 gal water per 50 lb sack of grout, slurry weight of 10.8 to 11 lb/gal, 2.2 cu ft/sk. Total slurry mixed approximately 585 gal, bulk volume equal 45 sacks. Good returns were circulated to the surface.

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			<b>LITHOLOGIC BORING LOG:</b> Page (2) of (3 ) <b>ISCO SB 02</b>					
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre- Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL					
LOGGED BY: Jon Simpson DATE START: 1/12/10 DATE COMPLETE: 1/15/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 232' BGS DEPTH WATER: 189' Approx DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wl hammer BOREHOLE DIAMETER(S): 7 7/8-in					
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION		SAMPLE		WELL CONSTRUCTION	
			INTERVAL	RECOVERY	BLOWS	PID		
90	GW/S		SILTY SAND; (cont'd)  90'- silty vfg to fg, some coarse sand, some to trace fine gravel, v dense. 95'- gravel increasing, very silty.	90-92	6"	>100/12"	0	Borehole grouted 1/15/10 via pressure methods from bottom to ground surface. Slurry consisted of 100% bentonite grout (CETCO "PureGold"). Borehole volume equivalent approximately 575 gallons and/or 69 cubic feet. Slurry mix and yield approximately 14 to 15 gal/water per 50 lb sack of grout, slurry weight of 10.8 to 11 lb/gal, 2.2 cu ft/sk. Total slurry mixed approximately 585 gal, bulk volume equal 45 sacks. Good returns were circulated to the surface.
100			GRAVELLY SAND/SAND; fg to coarse sand, f to coarse gravel, w/ some cobbles. Very dense to hard.	100-102	NR	>100/12"		
110			110' - lt brn to beige, silty vfg to coarse sand, v dense/hard, ang to sub rd.	110-112	<2"	>100/12"	0	
120			(120' - Total Drilled Depth 1/12/10)	120-122	4"	>100/12"	0	
130			130'- vgf to fg sand, f to coarse gravel, well graded	130-132	NR	>100/12"		
140			(142' – Total Drilled Depth 1/13/10)	140-142	NR	>100/12"		
150			GRAVELLY SAND/SAND; tan, vfg to coarse sand, f to med less fines, hard, well graded, ang to sub-rd.	150-152	6"	>100/12"	0	
160			.	160-162	4"	>100/12"	0	
			160' - less fines, well graded.					

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			<b>LITHOLOGIC BORING LOG:</b> Page (3) of (3 ) <b>ISCO SB 02</b>					
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre- Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL					
LOGGED BY: Jon Simpson DATE START: 1/12/10 DATE COMPLETE: 1/15/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 232' BGS DEPTH WATER: 189' Approx DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wl hammer BOREHOLE DIAMETER(S): 7 7/8-in					
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION	INTERVAL	SAMPLE	WELL CONSTRUCTION		
				RECOVERY	BLOWS	PID		
170	GW/S		GRAVELLY SAND/SAND; (cont'd)  170'- as above, v dense/hard.  95,'- gravel increasing, very silty.	170-172	NR	>100/12"		
180			180'- very coarse gravel, hard.  185'- less gravel, grading finer with depth.	180-182	<2"	>100/12"	0	
190	SM		SILTY SAND, beige lt brn, vfg to med sand with some coarse v dense/hard, ang to sub rd.	190-192	NR	>100/12"		
200				192-193	3"	>100/12"	0	
				193	HP			
200				200-210	9"	>100/12"	0	
				202	HP			
210			(210' - Total Drilled Depth 1/14/10)  .	210-212	4"	>100/12"	0	
				212	HP			
220			220'- tan lt brown, vfg to fg, v dense, minor coarse sand, grading finer with depth	220-222	6"	>100/12"	0	
				222	HP			
230			(232' – BORING TOTAL DEPTH)  .	230-232	5"	>100/12"	0	
240				232	HP			

Borehole grouted 1/15/10 via pressure methods from bottom to ground surface. Slurry consisted of 100% bentonite grout (CETCO "PureGold"). Borehole volume equivalent approximately 575 gallons and/or 69 cubic feet. Slurry mix and yield approximately 14 to 15 gal water per 50 lb sack of grout, slurry weight of 10.8 to 11 lb/gal, 2.2 cu ft/sk. Total slurry mixed approximately 585 gal, bulk volume equal 45 sacks. Good returns were circulated to the surface.

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page ( 1 ) of ( 2 ) <b>ISCO SB-01</b>				
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre- Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL				
LOGGED BY: Jon Simpson DATE START: 1/19/10 DATE COMPLETE: 1/19/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 98' BGS DEPTH WATER: Not Enctr'd DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wireline hamr BOREHOLE DIAMETER(S): 7 7/8-in				
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION	SAMPLE			WELL CONSTRUCTION
				INTERVAL	RECOVERY	BLOWS	
10		FILL	0-6" Concrete; 6" disturbed/reworked sand w/ silt and gravel.	10'-12'	7"	>100/12"	0
		SW/SM	SAND/SILTY SAND, lt brown, silty vf to coarse grained w/ fine to coarse gravel, well graded. 14'- less gravel, predom vf to med grained.				
20	SW		20'- fine gravel increasing, v dense/hard. 24'- fine to coarse gravel, v hard.	20'-22'	6"	>100/12"	2.4
30				30'-32'	4"	>100/12"	2.1
40			40'- w/ fine to med gravel, v hard, ang to sub-rd.	40'-42'	NR"	>100/12"	
50			50'- silty, vfg to coarse sand, fine to med gravel, well graded	50'-52'	NR	>100/12"	
60	SW/SM		SAND/SILTY SAND, lt to med brown, vfg to coarse, some to minor gravel, v hard, well graded, ang to sub-rd.	60'-62'	8"	>100/12"	4.4/56
70	SW		GRAVELLY SAND, lt to med brown, vfg to coarse sand, less fines, hard, dry, well graded.	70'-72'	4"	>100/12"	4.1/4.5
80				80'-82'	7"	>100/12"	7.2

Borehole grouted 2/19/10 via pressure methods from 56' BGS to ground surface. Slurry consisted of 100% bentonite grout (CETCO "PureGold"). Borehole volume equivalent approximately 129 gallons and/or 17 cubic feet. Slurry mix and yield approximately 14 to 15 gal water per 50 lb sack of grout, 2.2 cu ft per sack, slurry weight of 10.8 to 11 lb/gal. Total slurry mixed approximately 150 gal, bulk volume equal 10 sacks. Good returns were circulated to the surface. Interval 56 to 96' BGS backfilled with #1 gravel prior to grouting.

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			<b>LITHOLOGIC BORING LOG:</b> Page ( 2 ) of ( 2 ) <b>ISCO SB-01</b>				
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre- Remedial Soil Borings			LOCATION: N E G.S. ELEV.: 229' BGS M.P. ELEV.: H DATUM: V DATUM: MSL				
LOGGED BY: Jon Simpson DATE START: 1/19/10 DATE COMPLETE: 1/19/10 WELL INSTALLED: No TYPE: NA GEOPHYSICAL LOGS: Not Obtained			TOTAL DEPTH: 98' BGS DEPTH WATER: Not Enctr'd DRILLING CONTRACTOR: R&L Well Drilling, Inc. EQUIPMENT: Marlin 6 Tophead METHOD: Mud Rotary SAMPLING METHOD: 2-in split spoon, 140# wireline hamr BOREHOLE DIAMETER(S): 7 7/8-in				
DEPTH (FEET BGS)	GRAPHIC LOG	USCS	DESCRIPTION	SAMPLE			WELL CONSTRUCTION
				INTERVAL	RECOVERY	BLOWS	
90	SW		GRAVELLY SAND (cont'd), It to med brown, vfg to coarse,  94'- gravel increase, 96'- with cobbles/boulders. 98'- Immediatley lost circulation & all borehole fluids	90'-92'	5"	>100/12"	0
100			Boring Terminated at 98' 1/19/10  Note: Attempted to seal off thief zone encountered at 98' with bentonite gel mixed to 12 lb/gal. Mixed and pumped three slugs of 225 gallons . No fluid level evident in Borehole.				
110			1/20/10  Re-attempt to seal off zone with bentonite gel mixed to 12 lb/gal. Mixed and pumped three slugs of 200 Fluid/slurry level up to ground surface; all fluid lost after 3 hr period.				
120							
130							
140							
150							
160							

Borehole grouted 2/19/10 via pressure methods from 56' BGS to ground surface . Slurry consisted of 100% bentonite grout (CETCO "PureGold"). Borehole volume equivalent approximately 129 gallons and/or 17 cubic feet. Slurry mix and yield approximately 14 to 15 gal water per 50lb sack of grout, 2.2 cu ft per sack., slurry weight of 10.8 to 11 lb/gal. Total slurry mixed approximately 150 gal, bulk volume equal 10 sacks. Good returns were circulated to the surface. Interval 56' to 96' BGS backfilled with #1 gravel prior to grouting.

# Premier Environmental Services

## DATA VALIDATION SUMMARY REPORT OF THE LAWRENCE AVIATION SUPERFUND SITE PORT JEFFERSON, NY

### ORGANIC ANALYSES IN AQUEOUS AND NON-AQUEOUS SAMPLES

TEST AMERICA LABORATORIES, INC.  
SOUTH BURLINGTON, VT

SDG NUMBER: 135376

March, 2010

Prepared for  
Panther Technologies, Inc.  
Medford, New Jersey

Prepared by  
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<b>DATA VALIDATION FOR:</b>	<b>Volatile Organic Compounds (VOC's)</b>
<b>SITE:</b>	<b>Lawrence Aviation Superfund Site</b>
<b>CONTRACT LAB:</b>	<b>Test America Laboratories, Inc.</b> <b>South Burlington, VT</b>
<b>PROJECT NO.:</b>	<b>135376</b>
<b>REVIEWER:</b>	<b>Renee Cohen</b>
<b>DATE REVIEW COMPLETED:</b>	<b>March, 2010</b>
<b>MATRIX:</b>	<b>Aqueous, Non-Aqueous</b>

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (EPA-540-R-08-01, June 2008). All data are considered valid and acceptable except those analytes which have been deemed unusable "R" (unreliable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Table 1 of this report includes a cross reference between the field sample ID and laboratory sample ID used to perform data validation. Definitions of the data qualifiers that may be used in this report are located in Appendix A of this report. Qualified data result pages are located in Appendix B of this report. Copies of the Chain of Custody (COC) documents are located in Appendix C of this report.

This sample set included five (5) non-aqueous samples, six (6) aqueous samples one (1) Equipment Blank sample and one (1) Trip Blank sample. This data assessment is for the organic analyses listed on the COC documents that accompanied the samples to the laboratory. The samples were collected January 6, 2010 and January 7, 2010. The samples were received at Test America Laboratories located in South Burlington, VT. Samples were received at the laboratory on January 8, 2010 for the analyses requested on the COC documentation. The samples in this data set were analyzed for Volatile Organic Analytes (VOA) in accordance with USEPA CLP Method SOM01.2 for low/medium samples and trace analyses for the aqueous samples in this data set.

## ORGANIC DATA ASSESSMENT

### **1. OVERVIEW:**

Samples associated with this data set were analyzed for Volatile Organic Analytes (VOA) as noted by the COC documentation that accompanied the sample set to the laboratory. All analyses were performed in accordance with USEPA CLP Methods SOM01.2 for Low Level Soil sample analyses and USEPA CLP Method SOM01.2 for Trace Level Water Analyses. Test America Laboratories generated a stand-alone report for each sample matrix in compliance with the cited documents. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report 135376 consists of five (5) non-aqueous samples, six (6) aqueous samples, one (1) Equipment Blank sample and one (1) Trip Blank sample. The Chain of Custody documents listed the field sample ID's that are summarized in Table 1 of this report. All of the samples in this data set were analyzed for Volatile Organic Analytes.

Sample ISCO-SB03 230-231 was received at Test America Laboratories. This sample was not listed on the COC documentation that accompanied the samples to the laboratory. This was noted by the laboratory and resolved with Panther Technologies. A copy of the COC documents is located in Appendix C of this report. A copy of the correspondence associated with this sample receipt discrepancy has been included with the COC documents in Appendix C of this report.

### **2. HOLDING TIME:**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The USEPA CLP method specifies Technical Holding times for aqueous and solid and soil samples. The Technical Holding Time is based on collection date. The holding time for a properly preserved aqueous sample that is cooled and pH preserved to 2 or below is fourteen (14) days from sample collection. The holding time for non-aqueous samples that are properly cooled and preserved with NaHSO<sub>4</sub> is fourteen (14) days from sample collection.

The samples in laboratory report 135376 were collected January 6, 2010 and January 7, 2010. The samples were received at the laboratory on January 8, 2010. All of the non-aqueous field samples associated with this data set were completed by January 15, 2010. The storage blank sample associated with these soil samples was analyzed on January 28, 2010. This analysis exceeded the technical holding time cited in the method. Sample data and Storage Blank (VHBLK02) data results were not qualified based on this analysis date.

All of the initial aqueous sample analyses associated with this data set were completed by January 19, 2010. The dilution analysis of samples ISCO SB03 201-202 and ISCO SB03 211-212 were completed on January 21, 2010. All sample analyses were performed within the technical holding time.

## ORGANIC DATA ASSESSMENT

### **3. SURROGATES:**

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with either thirteen (13) or fourteen (14) Deuterated Monitoring Compounds (DMC's). These DMC's are added to each sample prior to sample purging. The method recommended Deuterated Monitoring Surrogate Compounds include:

Vinyl Chloride-d3	Chloroethane-d5
1,1-Dichloroethene-d2	2-Butanone-d5
Chloroform-d	1,2-Dichloroethane-d4
Benzene-d6	1,2-Dichloropropane-d6
Toluene-d8	trans-1,3-Dichloropropene-d4
2-Hexanone-d5	1,4-Dioxane-d8**
1,1,2,2-Tetrachloroethane-d2	1,2-Dichlorobenzene-d4

\*\* only reported in the low/medium non-aqueous Volatile Organic Analyses.

The laboratory reported CLP method specified recovery limits that are cited for both aqueous and non-aqueous samples reported in this data set. 1,4-Dioxane-d8 is not added as a Deuterated Monitoring Compound (DMC) in the Trace Volatile Organic Analyses associated with this data set.

The recovery of each Deuterated Monitoring Compound (DMC) met QC criteria in each of the non-aqueous field samples associated with this data set. The percent recovery of Vinyl Chloride-d3 and Chloroethane-d5 exceeded the USEPA CLP QC criteria in the method blank associated with the storage blank sample. The associated target analytes were not detected in this storage blank sample therefore no action was taken.

The aqueous samples are fortified with thirteen (13) method specified DMC's prior to analysis. The method cites recovery limits for each surrogate. The percent recovery of each DMC met the method specified QC criteria in each of the field samples with the exception of sample ISCO SB03 193 (816974). The recovery of Vinyl Chloride-d3 was slightly lower than the QC limit in the method blank sample associated with this analysis. Vinyl Chloride has been qualified "UJ" estimated in this sample.

Qualified data results are located in Appendix B of this report.

### **4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Site Specific MS/MSD analysis was no reported with the samples in this data set.

## ORGANIC DATA ASSESSMENT

### **5. BLANK CONTAMINATION:**

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Samples were only qualified with those QC samples associated with the particular blank.

This method requires the preparation and analysis of a laboratory storage blank. This laboratory storage blank is kept with the site samples and analyzed with the site samples.

#### **A) Method Blank contamination**

Two (2) method blank samples are associated with the Low/Medium Level Volatile Organic analyses (soil samples) in this data set. Each of these method blank samples was free from contamination of target analytes. Each of these method blank samples contained one (1) unknown Tentatively Identified Compound (TIC). This TIC has been qualified "J" estimated and "X" to indicate a contaminant this is related to the Deuterated Monitoring Compound (DMC). This unknown Tentatively Identified Compound was detected in each of the soil samples associated with this data set. This unknown compound TIC has been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

Three (3) method blank samples are associated with the Trace Level Volatile Organic analyses (aqueous samples) in this data set. Each of these method blank samples was free from contamination of target analytes. Each of these method blank samples contained one (1) unknown Tentatively Identified Compound (TIC). This TIC has been qualified "J" estimated and "X" to indicate a contaminant this is related to the Deuterated Monitoring Compound (DMC) and column bleed. This unknown Tentatively Identified Compound was detected in each of the aqueous samples associated with this data set. This unknown compound TIC has been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

The non-aqueous storage blank sample associated with the soils in this data set is identified as VHBLK02. This storage blank sample is free from contamination of target analytes. This storage blank sample contains one (1) TIC at a concentration of 78 JXB ug/kg. This is the TIC that was identified in the associated method blank sample and been previously negated in each of the non-aqueous samples and qualified "U".

The aqueous storage blank sample associated with the soils in this data set is identified as VHBLK01. This storage blank sample is free from contamination of target analytes. This storage blank sample contains one (1) TIC at a concentration of 3.4 JXB ug/l. This is the TIC that was identified in the associated method blank sample and been previously negated in each of the aqueous samples and qualified "U".

## ORGANIC DATA ASSESSMENT

### **5. BLANK CONTAMINATION (cont'd):**

#### **B) Field or Equipment Rinse Blank (ERB) contamination**

The Equipment Blank sample (ISCO SB03 EQUIP BLANK/816980) was free from contamination of all target analytes with the exception of Acetone (99 ug/l), Carbon Disulfide (0.26 J ug/l) and four (4) Unknown TIC's and Total Alkanes at a concentration of 0.78 J ug/l). When these were detected in the aqueous and non-aqueous field samples they were negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

#### **C) Trip Blank contamination**

The Trip Blank sample (TRIP BLANK/816981) was analyzed with this data set. The Trip Blank sample was free from contamination of all target analytes. One (1) Unknown TIC was detected in this sample. This unknown TIC has been qualified "J" estimated and "X" to indicate a contaminant this is related column bleed. This unknown compound has been negated and qualified "U".

## ORGANIC DATA ASSESSMENT

### **6. GC/MS CALIBRATION:**

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance. USEPA CLP method states the concentration levels of target analytes that must be analyzed and reported for Initial Calibration of the GC/MS.

#### **A) RESPONSE FACTOR**

**Low/Medium Volatile Organic Analysis** - The response factor measures the instrument's response to specific chemical compounds. USEPA CLP criteria of the cited method requires that the response factor of all target analytes listed in Table 15 and the DMC's must be greater than or equal to 0.010. The RRF of 1,4-Dioxane and its associated DMC must be greater than or equal to 0.0050 (Advisory). All other target analytes must have an RRF greater than or equal to 0.050 in both initial and continuing calibration analyses. Target analytes are qualified if the minimum RRF criteria are not in either the initial calibration analysis or the opening and closing continuing calibration standard analysis. Positive results are qualified "J". Non-detect results are qualified if the minimum RRF <0.050 (or 0.010 for specifics) are qualified "R", unusable.

**Trace Volatile Organic Analysis** - The response factor measures the instrument's response to specific chemical compounds. USEPA CLP criteria of the cited method requires that the response factor of all target analytes listed in Table 3 and the DMC's must be greater than or equal to 0.010. All other target analytes must have an RRF greater than or equal to 0.050 in both initial and continuing calibration analyses. Target analytes are qualified if the minimum RRF criteria are not in either the initial calibration analysis or the opening and closing continuing calibration standard analysis. Positive results are qualified "J". Non-detect results are qualified if the minimum RRF <0.050 (or 0.010 for specifics) are qualified "R", unusable

**Low/Medium Volatile Organic Analysis** - Two (2) initial calibration curve analyses are associated with the low-level soil samples reported with this data set. The laboratory performed a low level soil initial multilevel calibration on January 13, 2010 (Inst. N.i). The laboratory summarized the RRF data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The RRF of all target compounds met QC criteria in this initial calibration curve analysis with the exception of 1,4-Dioxane. One (1) opening and one (1) closing continuing calibration verification (CCV) standard is associated with the low level soil samples in this data set. The CCV standard was analyzed January 15, 2010 (File ID: NZAB03B/NZA50BC1). The RRF of all target analytes met QC criteria in each of these CCV standards with the exception of 1,4-Dioxane. 1,4-Dioxane is an advisory compound in this method, therefore based on the professional judgment of this data validator 1,4-Dioxane has not been qualified.

The laboratory performed an additional initial calibration curve analysis on January 27-28, 2010 (Inst. N.i). The laboratory summarized the RRF data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The RRF of all target compounds met QC criteria in this initial calibration curve analysis with the exception of 1,4-Dioxane. One (1) opening and one (1) closing continuing calibration verification (CCV) standard is associated with the analysis of the storage blank sample in this data set. The CCV standards were analyzed January 28, 2010 (File ID: NZAB050HV/NZE50AC1). The RRF of all target analytes met QC criteria in each of these CCV standards with the exception of 1,4-Dioxane. 1,4-Dioxane is an advisory compound in this method, therefore based on the professional judgment of this data validator 1,4-Dioxane has not been qualified.

## ORGANIC DATA ASSESSMENT

### **6. GC/MS CALIBRATION (cont'd):**

#### **A) RESPONSE FACTOR**

Trace Level Volatile Organic Analysis - The laboratory performed an aqueous (Trace Volatile Organic Analysis) initial calibration on January 18, 2010 (Inst. M.i). The laboratory summarized the RRF data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The RRF of all target compounds met QC criteria in this initial calibration curve analysis.

The aqueous samples in this data set were analyzed with the calibration curve and for two (2) days. The opening and closing CCV standards are reported on each day of analysis. The RRF criteria for each of the opening and closing CCV standards met the QC criteria specified in the cited data validation guidelines.

#### **B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):**

Low-Medium Level Volatile Organic Analyses - Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. US EPA data validation criteria states that the percent RSD must be less than or equal to 40% for the volatile compounds and surrogate compounds listed in Table 15 with the exception of 1,4-Dioxane and its associated Deuterated Monitoring compound which allows for up to 50% in the initial calibration curve. All other %RSD must be less than or equal to 20% in the initial calibration curve analysis.

The %D in the opening CCV standard must be <40% for the compounds listed in Table 15 of the method. The %Difference of 1,4-Dioxane has a criteria of <50%. All other volatile organic compounds have a criteria <25% in each of the continuing calibration standards. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable.

Trace Volatile Organic Analyses - Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. US EPA data validation criteria states that the percent RSD must be less than or equal to 40% for the volatile compounds and surrogate compounds listed in Table 3 and their associated Deuterated Monitoring compounds. All other %RSD must be less than or equal to 30% in the initial calibration curve analysis.

## ORGANIC DATA ASSESSMENT

### **6. GC/MS CALIBRATION (cont'd):**

#### **B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D) (cont'd):**

The %D in the opening CCV standard must be <40% for the compounds listed in Table 3 of the method. All other volatile organic compounds have a criteria <50% in the closing continuing calibration standard. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable.

Low/Medium Volatile Organic Analyses - Two (2) initial calibration curve analyses are associated with the non aqueous samples in Laboratory Report 135376. The laboratory performed a multi-level calibration on January 13, 2010 (Inst. N.i). The laboratory summarized the %RSD data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The %RSD of all target compounds in this initial calibration curve analysis met QC criteria.

One (1) opening and one (1) closing continuing calibration verification (CCV) standard is associated with this calibration curve. The %Difference of all target analytes met QC criteria in these standard analyses.

An additional multi-level calibration was analyzed on January 27-28, 2010 (Inst. N.i). The laboratory summarized the %RSD data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The %RSD of all target compounds in this initial calibration curve analysis met QC criteria.

One (1) opening and one (1) closing continuing calibration verification (CCV) standard is associated with this calibration curve. The %Difference of all target compounds in this initial calibration curve analysis met QC criteria.

Trace Volatile Organic Analyses - The laboratory performed an aqueous (Trace Volatile Organic Analysis) initial calibration on January 18, 2010 (Inst. M.i). The laboratory summarized the %RSD data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The %RSD of all target compounds met QC criteria in this initial calibration curve analysis.

The aqueous samples in this data set were analyzed on two days. The opening and closing CCV standards are reported on each day of analysis. The %Difference criteria for each of the opening and closing CCV standard met the QC criteria specified in the cited data validation guidelines.

### **7. GC/MS MASS SPECTROMETER TUNING:**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB).

Volatile Organic Analyses - The tune criteria listed in the data report met or exceeded that required by the method. All tuning criteria associated with these sample analyses were met.

## ORGANIC DATA ASSESSMENT

### **8. GC/MS INTERNAL STANDARDS PERFORMANCE:**

**Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than  $\pm 30$  seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non-detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard area count evaluation criteria are applied to all field and QC samples.**

All samples were spiked with the internal standards Chlorobenzene-d5, 1,4-Difluorobenzene and 1,4-Dichlorobenzene-d4 prior to analysis. The area counts and retention time of each internal standard met QC criteria in all field samples and QC samples associated with this data set.

### **9. COMPOUND IDENTIFICATION:**

**Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$  RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. The laboratory reported each sample to the Contract Required Quantitation Limit (CRQL) listed in the cited method.**

Five (5) non-aqueous samples, six (6) aqueous samples, one (1) Equipment Blank sample and one (1) Trip Blank sample are associated with this data set. The samples were analyzed using USEPA CLP Method SOM01.2. Tentatively Identified Compounds (TIC's) were reported when detected with this data set. All soil sample results in this data set are reported on a dry weight basis.

Each of the soil samples in this data set was analyzed without dilution and reported to the base reporting limit. One (1) unknown TIC was detected in each of the non-aqueous samples that was also detected in the associated method blank sample and qualified "B" by the laboratory. This unknown compound has been negated and qualified "U". In addition the non-aqueous samples in which Acetone was detected at a concentration that can be attributed to the Field Blank sample contamination have been qualified. The Acetone has been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

Sample ISCO SB03 201-202 (816975) was initially analyzed without dilution. The concentration of Acetone exceeded the calibration range for this analyte. The sample was reanalyzed using a 1:3.8 dilution to report the concentration of Acetone (380 D ug/l) at this sample point. Although Acetone was detected in the Equipment Blank sample the concentration of Acetone was greater in the sample that can be attributed to that from the Equipment Blank sample.

Sample ISCO SB03 211-212 (816976) was initially analyzed without dilution. The concentration of Acetone exceeded the calibration range for this analyte. The sample was reanalyzed using a 1:4.3 dilution to report the concentration of Acetone (500 D ug/l) at this sample point. Although Acetone was detected in the Equipment Blank sample the concentration of Acetone was greater in the sample that can be attributed to that from the Equipment Blank sample.

## ORGANIC DATA ASSESSMENT

### 10. FIELD DUPLICATE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall precision. Field duplicate results are expected to have more variability than laboratory duplicate samples.

Sample ISCO SB03 201-202 (816974) and sample ISCO SB03-DUPLICATE (816979) are field duplicate samples. Below is a summary of the detected analytes in this field duplicate sample analysis.

#### ISCO SB03 201-202 (816974)/ISCO SB03 DUPLICATE (816979)

Analyte	Result (ug/l)	Result (ug/l)	RPD (%)
Acetone	380 D	55	>100
Carbon Disulfide	0.49 J	ND	NC
2-Butanone	2.0 J	1.6 J	22.2
Chloroform	1.1	1.3	16.6
Trichloroethene	1.1	1.1	0
Bromodichloromethane	1.2	1.2	0
Toluene	0.24 J	ND	NC
Dibromochloromethane	1.2	1.1	8.80
m,p-Xylene	0.38	ND	NC
Bromoform	0.42	0.37	12.7

ND denotes Not Detected

NC denotes Not Calculated

A review of this field duplicate data set displays that most target analytes detected are detected at comparable concentrations with the exception of Acetone. In the parent sample the Acetone concentration exceeded the calibration range of the instrument and a dilution analysis was reported for this analyte. The field duplicate sample did not display this concentration range of Acetone. Acetone results were negated in samples based on the concentration of Acetone detected in the associated Field Blank sample. The validation guidelines do not provide guidance for the review of field duplicate samples therefore sample data has not been qualified based on the results of the field duplicate sample analysis.

## **ORGANIC DATA ASSESSMENT**

### **11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT**

Analytical/method QC criteria was met for these analyses except where explained in the laboratory case narrative and the detailed in this validation report. The data reported by the laboratory agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. All QC anomalies associated with this data set have been explained in the above sections of this data validation report.

All sample results are reported to the method detection limit except where detailed above. Reporting limits and positive results are adjusted based on the sample volume/weight utilized for each extraction procedure. Soil sample results are reported on a dry weight basis. All data provided for this data set is acceptable for use, with noted data qualifiers.

Appendix B of this report contains copies of qualified data result pages.

Appendix C of this report contains a copy of the correspondence regarding sample ISCO-SB03 230-231 not listed on the COC documents but received at the laboratory with the rest of the samples in this data set.

**TABLE 1**

[REDACTED]

<u>FIELD SAMPLE ID</u>	<u>LABORATORY ID</u>
ISCO SB03 193	816974
ISCO SB03 201-202	816975
ISCO SB03 211-212	816976
ISCO SB03 221-222	816977
ISCO SB03 231-232	816978
ISCO SB03 DUPLICATE	816979
ISCO SB03 EQUIP BLANK	816980
TRIP BLANK	816981
ISCO SB03 192-193	816982
ISCO SB03 200-201	816983
ISCO SB03 210-211	816984
ISCO SB03 220-221	816985
ISCO SB03 230-231	816986
VHBLK01	816987
VHBLK02	816988

## **APPENDIX A**

## **DATA QUALIFIER DEFINITIONS**

- U** - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J** - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.”
- NJ** - The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
- UJ** - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.
- K** – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
- L** - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.
- UL** – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

## **APPENDIX B**

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

EPA SAMPLE NO.

SB03 192-193

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816982

Sample wt/vol: 4.64 (g/mL) g

Lab File ID: 816982

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 8.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	5.9	U
74-87-3	Chloromethane	5.9	U
75-01-4	Vinyl chloride	5.9	U
74-83-9	Bromomethane	5.9	U
75-00-3	Chloroethane	5.9	U
75-69-4	Trichlorofluoromethane	5.9	U
75-35-4	1,1-Dichloroethene	5.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.9	U
67-64-1	Acetone	8.4	J U
75-15-0	Carbon disulfide	5.9	U
79-20-9	Methyl acetate	5.9	U
75-09-2	Methylene chloride	5.9	U
156-60-5	trans-1,2-Dichloroethene	5.9	U
1634-04-4	Methyl tert-butyl ether	5.9	U
75-34-3	1,1-Dichloroethane	5.9	U
156-59-2	cis-1,2-Dichloroethene	5.9	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	5.9	U
67-66-3	Chloroform	5.9	U
71-55-6	1,1,1-Trichloroethane	5.9	U
110-82-7	Cyclohexane	5.9	U
56-23-5	Carbon tetrachloride	5.9	U
71-43-2	Benzene	5.9	U
107-06-2	1,2-Dichloroethane	5.9	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

<u>EPA SAMPLE NO.</u>
SB03 192-193

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 816982  
 Sample wt/vol: 4.64 (g/mL) g Lab File ID: 816982  
 Level: (TRACE/LOW/MED) LOW Date Received: 01/08/2010  
 % Moisture: not dec. 8.0 Date Analyzed: 01/15/2010  
 GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
79-01-6	Trichloroethene	5.9	U
108-87-2	Methylcyclohexane	5.9	U
78-87-5	1,2-Dichloropropane	5.9	U
75-27-4	Bromodichloromethane	5.9	U
10061-01-5	cis-1,3-Dichloropropene	5.9	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.9	U
10061-02-6	trans-1,3-Dichloropropene	5.9	U
79-00-5	1,1,2-Trichloroethane	5.9	U
127-18-4	Tetrachloroethene	5.9	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	5.9	U
106-93-4	1,2-Dibromoethane	5.9	U
108-90-7	Chlorobenzene	5.9	U
100-41-4	Ethylbenzene	5.9	U
95-47-6	o-Xylene	5.9	U
179601-23-1	m,p-Xylene	5.9	U
100-42-5	Styrene	5.9	U
75-25-2	Bromoform	5.9	U
98-82-8	Isopropylbenzene	5.9	U
79-34-5	1,1,2,2-Tetrachloroethane	5.9	U
541-73-1	1,3-Dichlorobenzene	5.9	U
106-46-7	1,4-Dichlorobenzene	5.9	U
95-50-1	1,2-Dichlorobenzene	5.9	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	U
120-82-1	1,2,4-Trichlorobenzene	5.9	U
87-61-6	1,2,3-Trichlorobenzene	5.9	U

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

EPA SAMPLE NO.

SB03 192-193

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.: SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816982

Sample wt/vol: 4.64 (g/mL) g

Lab File ID: 816982

Level: (TRACE or LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 8.0

Date Analyzed: 01/15/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.84	92	JXB
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB03 200-201

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816983

Sample wt/vol: 5.36 (g/mL) g

Lab File ID: 816983

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 8.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	5.1	U
74-87-3	Chloromethane	5.1	U
75-01-4	Vinyl chloride	5.1	U
74-83-9	Bromomethane	5.1	U
75-00-3	Chloroethane	5.1	U
75-69-4	Trichlorofluoromethane	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	U
67-64-1	Acetone	7.9	J V
75-15-0	Carbon disulfide	5.1	U
79-20-9	Methyl acetate	5.1	U
75-09-2	Methylene chloride	5.1	U
156-60-5	trans-1,2-Dichloroethene	5.1	U
1634-04-4	Methyl tert-butyl ether	5.1	U
75-34-3	1,1-Dichloroethane	5.1	U
156-59-2	cis-1,2-Dichloroethene	5.1	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.1	U
67-66-3	Chloroform	5.1	U
71-55-6	1,1,1-Trichloroethane	5.1	U
110-82-7	Cyclohexane	5.1	U
56-23-5	Carbon tetrachloride	5.1	U
71-43-2	Benzene	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

**EPA SAMPLE NO.**

**SB03 200-201**

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816983

Sample wt/vol: 5.36 (g/mL) g

Lab File ID: 816983

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 8.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
79-01-6	Trichloroethene	5.1	U
108-87-2	Methylcyclohexane	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
75-27-4	Bromodichloromethane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
127-18-4	Tetrachloroethene	5.1	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.1	U
106-93-4	1,2-Dibromoethane	5.1	U
108-90-7	Chlorobenzene	5.1	U
100-41-4	Ethylbenzene	5.1	U
95-47-6	o-Xylene	5.1	U
179601-23-1	m,p-Xylene	5.1	U
100-42-5	Styrene	5.1	U
75-25-2	Bromoform	5.1	U
98-82-8	Isopropylbenzene	5.1	U
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U
541-73-1	1,3-Dichlorobenzene	5.1	U
106-46-7	1,4-Dichlorobenzene	5.1	U
95-50-1	1,2-Dichlorobenzene	5.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	U
120-82-1	1,2,4-Trichlorobenzene	5.1	U
87-61-6	1,2,3-Trichlorobenzene	5.1	U

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

EPA SAMPLE NO.
SB03 200-201

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 816983  
 Sample wt/vol: 5.36 (g/mL) g Lab File ID: 816983  
 Level: (TRACE or LOW/MED) LOW Date Received: 01/08/2010  
 % Moisture: not dec. 8.0 Date Analyzed: 01/15/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	10.84	74	JXB
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 (1)	Total Alkanes		N/A	

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB03 210-211

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816984

Sample wt/vol: 4.41 (g/mL) g

Lab File ID: 816984

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 9.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	6.2	U
74-87-3	Chloromethane	6.2	U
75-01-4	Vinyl chloride	6.2	U
74-83-9	Bromomethane	6.2	U
75-00-3	Chloroethane	6.2	U
75-69-4	Trichlorodifluoromethane	6.2	U
75-35-4	1,1-Dichloroethene	6.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.2	U
67-64-1	Acetone	11	J U
75-15-0	Carbon disulfide	6.2	U
79-20-9	Methyl acetate	6.2	U
75-09-2	Methylene chloride	6.2	U
156-60-5	trans-1,2-Dichloroethene	6.2	U
1634-04-4	Methyl tert-butyl ether	6.2	U
75-34-3	1,1-Dichloroethane	6.2	U
156-59-2	cis-1,2-Dichloroethene	6.2	U
78-93-3	2-Butanone	12	U
74-97-5	Bromoform	6.2	U
67-66-3	Chloroform	6.2	U
71-55-6	1,1,1-Trichloroethane	6.2	U
110-82-7	Cyclohexane	6.2	U
56-23-5	Carbon tetrachloride	6.2	U
71-43-2	Benzene	6.2	U
107-06-2	1,2-Dichloroethane	6.2	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

SB03 210-211

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816984

Sample wt/vol: 4.41 (g/mL) g

Lab File ID: 816984

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 9.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
79-01-6	Trichloroethene	6.2	U
108-87-2	Methylcyclohexane	6.2	U
78-87-5	1,2-Dichloropropane	6.2	U
75-27-4	Bromodichloromethane	6.2	U
10061-01-5	cis-1,3-Dichloropropene	6.2	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	6.2	U
10061-02-6	trans-1,3-Dichloropropene	6.2	U
79-00-5	1,1,2-Trichloroethane	6.2	U
127-18-4	Tetrachloroethene	6.2	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	6.2	U
106-93-4	1,2-Dibromoethane	6.2	U
108-90-7	Chlorobenzene	6.2	U
100-41-4	Ethylbenzene	6.2	U
95-47-6	o-Xylene	6.2	U
179601-23-1	m,p-Xylene	6.2	U
100-42-5	Styrene	6.2	U
75-25-2	Bromoform	6.2	U
98-82-8	Isopropylbenzene	6.2	U
79-34-5	1,1,2,2-Tetrachloroethane	6.2	U
541-73-1	1,3-Dichlorobenzene	6.2	U
106-46-7	1,4-Dichlorobenzene	6.2	U
95-50-1	1,2-Dichlorobenzene	6.2	U
96-12-8	1,2-Dibromo-3-chloropropane	6.2	U
120-82-1	1,2,4-Trichlorobenzene	6.2	U
87-61-6	1,2,3-Trichlorobenzene	6.2	U

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

EPA SAMPLE NO.

SB03 210-211

Lab Name:	TESTAMERICA BURLINGTON	Contract:	29000		
Lab Code:	STLV	Case No.:	LASS		
Matrix:	(SOIL/SED/WATER) Soil	Mod. Ref No.:	SDG No.:		
Sample wt/vol:	4.41 (g/mL) g	Lab Sample ID:	816984		
Level:	(TRACE or LOW/MED) LOW	Lab File ID:	816984		
% Moisture:	not dec. 9.0	Date Received:	01/08/2010		
GC Column:	DB-624	ID:	0.53 (mm)	Dilution Factor:	1.0
Soil Extract Volume:		(uL)	Soil Aliquot Volume:	(uL)	
CONCENTRATION UNITS:	(ug/L or ug/kg) ug/kg	Purge Volume:	10.0 (mL)		

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.84	<u>90</u>	JXB
02	Unknown	20.39	7.1	J
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 (1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

EPA SAMPLE NO.

SB03 220-221

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816985

Sample wt/vol: 5.03 (g/mL) g

Lab File ID: 816985

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 7.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/kg</u>	Q
75-71-8	Dichlorodifluoromethane	5.3	U
74-87-3	Chloromethane	5.3	U
75-01-4	Vinyl chloride	5.3	U
74-83-9	Bromomethane	5.3	U
75-00-3	Chloroethane	5.3	U
75-69-4	Trichlorofluoromethane	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.3	U
67-64-1	Acetone	11	U
75-15-0	Carbon disulfide	5.3	U
79-20-9	Methyl acetate	5.3	U
75-09-2	Methylene chloride	5.3	U
156-60-5	trans-1,2-Dichloroethene	5.3	U
1634-04-4	Methyl tert-butyl ether	5.3	U
75-34-3	1,1-Dichloroethane	5.3	U
156-59-2	cis-1,2-Dichloroethene	5.3	U
78-93-3	2-Butanone	11	U
74-97-5	Bromoform	5.3	U
67-66-3	Chloroform	5.3	U
71-55-6	1,1,1-Trichloroethane	5.3	U
110-82-7	Cyclohexane	5.3	U
56-23-5	Carbon tetrachloride	5.3	U
71-43-2	Benzene	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
123-91-1	1,4-Dioxane	110	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

**EPA SAMPLE NO.**

SB03 220-221

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816985

Sample wt/vol: 5.03 (g/mL) g

Lab File ID: 816985

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 7.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

(uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-01-6	Trichloroethene	5.3	U
108-87-2	Methylcyclohexane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
75-27-4	Bromodichloromethane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	5.3	U
124-48-1	Dibromochloromethane	5.3	U
106-93-4	1,2-Dibromoethane	5.3	U
108-90-7	Chlorobenzene	5.3	U
100-41-4	Ethylbenzene	5.3	U
95-47-6	o-Xylene	5.3	U
179601-23-1	m,p-Xylene	5.3	U
100-42-5	Styrene	5.3	U
75-25-2	Bromoform	5.3	U
98-82-8	Isopropylbenzene	5.3	U
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
541-73-1	1,3-Dichlorobenzene	5.3	U
106-46-7	1,4-Dichlorobenzene	5.3	U
95-50-1	1,2-Dichlorobenzene	5.3	U
96-12-8	1,2-Dibromo-3-chloropropane	5.3	U
120-82-1	1,2,4-Trichlorobenzene	5.3	U
87-61-6	1,2,3-Trichlorobenzene	5.3	U

SOM01.2

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

EPA SAMPLE NO.

SB03 220-221

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816985

Sample wt/vol: 5.03 (g/mL) g

Lab File ID: 816985

Level: (TRACE or LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 7.0

Date Analyzed: 01/15/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.80	80	JXB
02	Unknown	20.39	5.6	J
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
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18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB03 230-231

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816986

Sample wt/vol: 5.09 (g/mL) g

Lab File ID: 816986

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 5.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	5.2	U
74-87-3	Chloromethane	5.2	U
75-01-4	Vinyl chloride	5.2	U
74-83-9	Bromomethane	5.2	U
75-00-3	Chloroethane	5.2	U
75-69-4	Trichlorofluoromethane	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.2	U
67-64-1	Acetone	7.1	J U
75-15-0	Carbon disulfide	5.2	U
79-20-9	Methyl acetate	5.2	U
75-09-2	Methylene chloride	5.2	U
156-60-5	trans-1,2-Dichloroethene	5.2	U
1634-04-4	Methyl tert-butyl ether	5.2	U
75-34-3	1,1-Dichloroethane	5.2	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	5.2	U
74-97-5	Bromochloromethane	5.2	U
67-66-3	Chloroform	5.2	U
71-55-6	1,1,1-Trichloroethane	5.2	U
110-82-7	Cyclohexane	5.2	U
56-23-5	Carbon tetrachloride	5.2	U
71-43-2	Benzene	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB03 230-231

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816986

Sample wt/vol: 5.09 (g/mL) g

Lab File ID: 816986

Level: (TRACE/LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 5.0

Date Analyzed: 01/15/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
79-01-6	Trichloroethene	5.2	U
108-87-2	Methylcyclohexane	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
75-27-4	Bromodichloromethane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
127-18-4	Tetrachloroethene	5.2	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.2	U
106-93-4	1,2-Dibromoethane	5.2	U
108-90-7	Chlorobenzene	5.2	U
100-41-4	Ethylbenzene	5.2	U
95-47-6	o-Xylene	5.2	U
179601-23-1	m,p-Xylene	5.2	U
100-42-5	Styrene	5.2	U
75-25-2	Bromoform	5.2	U
98-82-8	Isopropylbenzene	5.2	U
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
541-73-1	1,3-Dichlorobenzene	5.2	U
106-46-7	1,4-Dichlorobenzene	5.2	U
95-50-1	1,2-Dichlorobenzene	5.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.2	U
120-82-1	1,2,4-Trichlorobenzene	5.2	U
87-61-6	1,2,3-Trichlorobenzene	5.2	U

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

EPA SAMPLE NO.

SB03 230-231

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 816986

Sample wt/vol: 5.09 (g/mL) g

Lab File ID: 816986

Level: (TRACE or LOW/MED) LOW

Date Received: 01/08/2010

% Moisture: not dec. 5.0

Date Analyzed: 01/15/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.84		JXB
02	Unknown	20.40	8.4	J
03				
04				
05				
06				
07				
08				
09				
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11				
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25				
26				
27				
28				
29				
30	E966796(1) Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB03 193

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816974

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816974

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

\* Moisture: not dec.

Date Analyzed: 01/18/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U <i>NJ</i>
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	13	_____
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.84	_____
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB03 193

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816974

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816974

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/18/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.40	J
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.91	—
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	1.0	—
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.36	J
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.36	J
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

SB03 193

Lab Name: TESTAMERICA BURLINGTON	Contract: 29000	
Lab Code: STLV Case No.: LASS	Mod. Ref No.:	SDG No.: 135376
Matrix: (SOIL/SED/WATER) Water	Lab Sample ID: 816974	
Sample wt/vol: 25.0 (g/mL) mL	Lab File ID: 816974	
Level: (TRACE or LOW/MED) TRACE	Date Received: 01/08/2010	
% Moisture: not dec.	Date Analyzed: 01/18/2010	
GC Column: DB-624 ID: 0.53 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)	
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Purge Volume: 25.0 (mL)	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	2.32	0.87	J
02	Unknown	10.45	3.3	JXB
03 66-25-1	Hexanal	11.83	1.4	NJ
04	Unknown	15.20	0.57	J
05	Unknown	15.58	1.6	J
06	Unknown	16.28	0.57	J
07	Unknown	16.37	2.8	J
08	Unknown	17.27	0.82	J
09 112-31-2	Decanal	17.38	1.1	NJ
10	Unknown	19.31	0.52	J
11				
12				
13				
14				
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27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

B03201-202

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816975

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816975I2

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	450	E
75-15-0	Carbon disulfide	0.49	J <i>v</i>
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	2.0	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.1	
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

B032C1-202

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816975

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816975I2

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.1	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	1.2	
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.24	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.2	
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.38	J
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.42	J
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

B03201-202

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816975

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816975I2

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	4.93	73	J
02	Unknown	10.46	3.8	JXB
03 66-25-1	Hexanal	11.83	3.4	NJ
04 124-13-0	Octanal	15.19	0.87	NJ
05	Unknown alcohol	15.57	2.7	J
06	Unknown	16.27	1.6	J
07	Unknown	16.36	6.6	J
08	Unknown	16.69	2.2	J
09	Unknown	17.03	0.65	J
10	Unknown	17.37	2.7	J
11	Unknown	18.13	0.81	J
12	Unknown	19.28	1.2	J
13				
14				
15				
16				
17				
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24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A	5.4	J

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

B03201-202DL

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816975D1

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816975D2

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/22/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 3.8

Soil Extract Volume:

(uL)

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.9	U
74-87-3	Chloromethane	1.9	U
75-01-4	Vinyl chloride	1.9	U
74-83-9	Bromomethane	1.9	U
75-00-3	Chloroethane	1.9	U
75-69-4	Trichlorofluoromethane	1.9	U
75-35-4	1,1-Dichloroethene	1.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	380	D
67-64-1	Acetone	1.9	U
75-15-0	Carbon disulfide	1.9	U
79-20-9	Methyl acetate	1.9	U
75-09-2	Methylene chloride	1.9	U
156-60-5	trans-1,2-Dichloroethene	1.9	U
1634-04-4	Methyl tert-butyl ether	1.9	U
75-34-3	1,1-Dichloroethane	1.9	U
156-59-2	cis-1,2-Dichloroethene	19	U
78-93-3	2-Butanone	1.9	U
74-97-5	Bromochloromethane	1.2	DJ
67-66-3	Chloroform	1.9	U
71-55-6	1,1,1-Trichloroethane	1.9	U
110-82-7	Cyclohexane	1.9	U
56-23-5	Carbon tetrachloride	1.9	U
71-43-2	Benzene	1.9	U
107-06-2	1,2-Dichloroethane	1.9	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

B03201-202DL

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816975D1

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816975D2

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/22/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 3.8

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
79-01-6	Trichloroethene	1.4	DJ
108-87-2	Methylcyclohexane	1.9	U
78-87-5	1,2-Dichloropropane	1.9	U
75-27-4	Bromodichloromethane	1.3	DJ
10061-01-5	cis-1,3-Dichloropropene	1.9	U
108-10-1	4-Methyl-2-pentanone	19	U
108-88-3	Toluene	1.9	U
10061-02-6	trans-1,3-Dichloropropene	1.9	U
79-00-5	1,1,2-Trichloroethane	1.9	U
127-18-4	Tetrachloroethene	1.9	U
591-78-6	2-Hexanone	19	U
124-48-1	Dibromochloromethane	1.2	DJ
106-93-4	1,2-Dibromoethane	1.9	U
108-90-7	Chlorobenzene	1.9	U
100-41-4	Ethylbenzene	1.9	U
95-47-6	o-Xylene	1.9	U
179601-23-1	m,p-Xylene	1.9	U
100-42-5	Styrene	1.9	U
75-25-2	Bromoform	1.9	U
98-82-8	Isopropylbenzene	1.9	U
79-34-5	1,1,2,2-Tetrachloroethane	1.9	U
541-73-1	1,3-Dichlorobenzene	1.9	U
106-46-7	1,4-Dichlorobenzene	1.9	U
95-50-1	1,2-Dichlorobenzene	1.9	U
96-12-8	1,2-Dibromo-3-chloropropane	1.9	U
120-82-1	1,2,4-Trichlorobenzene	1.9	U
87-61-6	1,2,3-Trichlorobenzene	1.9	U

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

EPA SAMPLE NO.

B03201-202DL

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 816975D1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 816975D2  
 Level: (TRACE or LOW/MED) TRACE Date Received: 01/08/2010  
 % Moisture: not dec. Date Analyzed: 01/22/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 3.8  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	67-63-0	Isopropyl Alcohol	4.93	150	NJD
02		Unknown	10.48	13	JXBD
03	66-25-1	Hexanal	11.85	3.5	NJD
04		Unknown	16.39	3.5	JD
05					
06					
07					
08					
09					
10					
11					
12					
13					
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23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

B03211-212

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816976

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816976

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	520	E
75-15-0	Carbon disulfide	0.39	J U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	3.3	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.3	_____
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.  
**B03211-212**

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816976

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816976

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.3	—
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	1.3	—
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.2	—
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.38	J
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.

B03211-212
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Lab Name: TESTAMERICA BURLINGTON	Contract: 29000
Lab Code: STLV Case No.: LASS	Mod. Ref No.:
Matrix: (SOIL/SED/WATER) Water	Lab Sample ID: 816976
Sample wt/vol: 25.0 (g/mL) mL	Lab File ID: 816976
Level: (TRACE or LOW/MED) TRACE	Date Received: 01/08/2010
% Moisture: not dec.	Date Analyzed: 01/19/2010
GC Column: DB-624 ID: 0.53 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL) Soil Aliquot Volume:
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	2.29	2.1	J
02	Unknown	4.96	94	J
03	Unknown	10.45	3.4	JXB
04 66-25-1	Hexanal	11.83	3.3	NJ
05	Unknown	15.20	0.73	J
06	Unknown alcohol	15.58	1.1	J
07 124-19-6	Nonanal	16.38	2.3	NJ
08 112-31-2	Decanal	17.38	1.1	NJ
09	Unknown	18.14	0.92	J
10	Unknown	19.26	0.59	J
11				
12				
13				
14				
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23				
24				
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26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A	1.2	J

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

B03211-212DL

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816976D1

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816976D2

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/22/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 4.3

Soil Extract Volume:

(uL)

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	2.2	U
74-87-3	Chloromethane	2.2	U
75-01-4	Vinyl chloride	2.2	U
74-83-9	Bromomethane	2.2	U
75-00-3	Chloroethane	2.2	U
75-69-4	Trichlorofluoromethane	2.2	U
75-35-4	1,1-Dichloroethene	2.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	500	D
67-64-1	Acetone	2.2	U
75-15-0	Carbon disulfide	2.2	U
79-20-9	Methyl acetate	2.2	U
75-09-2	Methylene chloride	2.2	U
156-60-5	trans-1,2-Dichloroethene	2.2	U
1634-04-4	Methyl tert-butyl ether	2.2	U
75-34-3	1,1-Dichloroethane	2.2	U
156-59-2	cis-1,2-Dichloroethene	22	U
78-93-3	2-Butanone	2.2	U
74-97-5	Bromochloromethane	1.3	DJ
67-66-3	Chloroform	2.2	U
71-55-6	1,1,1-Trichloroethane	2.2	U
110-82-7	Cyclohexane	2.2	U
56-23-5	Carbon tetrachloride	2.2	U
71-43-2	Benzene	2.2	U
107-06-2	1,2-Dichloroethane	2.2	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

B03211-212DL

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 816976D1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 816976D2  
 Level: (TRACE/LOW/MED) TRACE Date Received: 01/08/2010  
 % Moisture: not dec. Date Analyzed: 01/22/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 4.3  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.3	DJ
108-87-2	Methylcyclohexane	2.2	U
78-87-5	1,2-Dichloropropane	2.2	U
75-27-4	Bromodichloromethane	1.1	DJ
10061-01-5	cis-1,3-Dichloropropene	2.2	U
108-10-1	4-Methyl-2-pentanone	22	U
108-88-3	Toluene	2.2	U
10061-02-6	trans-1,3-Dichloropropene	2.2	U
79-00-5	1,1,2-Trichloroethane	2.2	U
127-18-4	Tetrachloroethene	2.2	U
591-78-6	2-Hexanone	22	U
124-48-1	Dibromochloromethane	1.1	DJ
106-93-4	1,2-Dibromoethane	2.2	U
108-90-7	Chlorobenzene	2.2	U
100-41-4	Ethylbenzene	2.2	U
95-47-6	o-Xylene	2.2	U
179601-23-1	m,p-Xylene	2.2	U
100-42-5	Styrene	2.2	U
75-25-2	Bromoform	2.2	U
98-82-8	Isopropylbenzene	2.2	U
79-34-5	1,1,2,2-Tetrachloroethane	2.2	U
541-73-1	1,3-Dichlorobenzene	2.2	U
106-46-7	1,4-Dichlorobenzene	2.2	U
95-50-1	1,2-Dichlorobenzene	2.2	U
96-12-8	1,2-Dibromo-3-chloropropane	2.2	U
120-82-1	1,2,4-Trichlorobenzene	2.2	U
87-61-6	1,2,3-Trichlorobenzene	2.2	U

SOM01.2

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

EPA SAMPLE NO.

B03211-212DL

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 816976D1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 816976D2  
 Level: (TRACE or LOW/MED) TRACE Date Received: 01/08/2010  
 % Moisture: not dec. Date Analyzed: 01/22/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 4.3  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	2.28	2.3	JD
02 67-63-0	Isopropyl Alcohol	4.93	130	NJD
03	Unknown	10.46	-16	JXBD
04 66-25-1	Hexanal	11.83	3.5	NJD
05 124-19-6	Nonanal	16.37	2.3	NJD
06				
07				
08				
09				
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27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB03221-222

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816977

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816977

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	47	_____V
67-64-1	Acetone	0.50	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	1.7	J
78-93-3	2-Butanone	0.50	U
74-97-5	Bromoform	1.2	_____
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

SB03221-222

Lab Name: TESTAMERICA BURLINGTON	Contract: 29000
Lab Code: STLV Case No.: LASS	Mod. Ref No.: SDG No.: 135376
Matrix: (SOIL/SED/WATER) Water	Lab Sample ID: 816977
Sample wt/vol: 25.0 (g/mL) mL	Lab File ID: 816977
Level: (TRACE/LOW/MED) TRACE	Date Received: 01/08/2010
% Moisture: not dec.	Date Analyzed: 01/19/2010
GC Column: DB-624 ID: 0.53 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.0	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	1.3	
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.3	
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.46	J
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

SB03221-222

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 816977  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 816977  
 Level: (TRACE or LOW/MED) TRACE Date Received: 01/08/2010  
 % Moisture: not dec. Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 67-63-0	Isopropyl Alcohol	4.93	17	NJ
02	Unknown	10.45	3.4	JXB
03 66-25-1	Hexanal	11.83	0.74	NJ
04	Unknown	15.58	0.74	J
05	Unknown	16.37	1.3	J
06 112-31-2	Decanal	17.38	1.0	NJ
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes		N/A	

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB03231-232

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816978

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816978

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	92	U
75-15-0	Carbon disulfide	0.35	J U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	2.4	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.69	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB03231-232

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816978

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816978

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.57	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	
75-27-4	Bromodichloromethane	0.79	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.87	
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.33	J
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

SB03231-232
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Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816978

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816978

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

Purge Volume: 25.0

(mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 67-63-0	Isopropyl Alcohol	4.93	18	NJ
02	Unknown	10.45	3.5	JXB
03 66-25-1	Hexanal	11.84	0.98	NJ
04	Unknown alcohol	15.58	0.95	J
05 124-19-6	Nonanal	16.38	1.5	NJ
06 112-31-2	Decanal	17.37	1.3	NJ
07				
08				
09				
10				
11				
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26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

EPA SAMPLE NO.

SB03 DUP

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816979

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816979

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	55	55
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	1.6	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.3	_____
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB03 DUP

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816979

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816979

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.1	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	1.2	
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.1	
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.37	J
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

SB03 DUP

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 816979  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 816979  
 Level: (TRACE or LOW/MED) TRACE Date Received: 01/08/2010  
 % Moisture: not dec. Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	2.29	0.86	J
02	67-63-0	Isopropyl Alcohol	4.93	13	NJ
03		Unknown	10.45	3.5	JXP
04	66-25-1	Hexanal	11.84	1.4	NJ
05		Unknown	15.58	1.00	J
06	124-19-6	Nonanal	16.38	1.7	NJ
07	112-31-2	Decanal	17.37	1.3	NJ
08					
09					
10					
11					
12					
13					
14					
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17					
18					
19					
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22					
23					
24					
25					
26					
27					
28					
29					
30	E966796(1)	Total Alkanes		N/A	

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB03 EQUIP

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816980

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816980I2

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorodifluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	99	—
75-15-0	Carbon disulfide	0.26	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromoform	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB03 EQUIP

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816980

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81698012

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

SB03 EQUIP

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.: SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 816980

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 816980I2

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/08/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	4.93	76	J
02	Unknown	10.45	3.6	JXB-U
03	Unknown	16.70	0.62	J
04	Unknown	17.28	1.5	J
05	Unknown	17.37	0.72	J
06				
07				
08				
09				
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27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A	0.78	J

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.
TRIP BLANK

Lab Name: TESTAMERICA BURLINGTON Contract: 29000

Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 816981

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 816981I2

Level: (TRACE/LOW/MED) TRACE Date Received: 01/08/2010

% Moisture: not dec. Date Analyzed: 01/19/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: TESTAMERICA BURLINGTON	Contract: 29000
Lab Code: STLV Case No.: LASS	Mod. Ref No.: SDG No.: 135376
Matrix: (SOIL/SED/WATER) Water	Lab Sample ID: 816981
Sample wt/vol: 25.0 (g/mL) mL	Lab File ID: 816981I2
Level: (TRACE/LOW/MED) TRACE	Date Received: 01/08/2010
% Moisture: not dec.	Date Analyzed: 01/19/2010
GC Column: DB-624 ID: 0.53 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135376  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 816981  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 816981I2  
 Level: (TRACE or LOW/MED) TRACE Date Received: 01/08/2010  
 % Moisture: not dec. Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.45	3.5	JXB U
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	E966796 (1)	Total Alkanes	N/A	

(1) EPA-designated Registry Number.

SOM01.2

## **APPENDIX C**

**Burlington**

30 Community Drive, Suite 11

South Burlington, VT 05403 Tel: 802 660 1990

**CHAIN OF CUSTODY RECORD**

Report to: Company: <u>Butcher Technologies</u> . Address: <u>220 Route 70 Ste B</u> <u>MacEwan NJ 08055</u>			Invoice to: Company: <u>SAME</u> Address: <u>                          </u>			ANALYSIS REQUESTED						Lab Use Only Due Date:			
Contact: Phone: <u>(609) 714 2420</u> <u>(609) 714 2495</u> Fax: <u>                          </u>			Contact: Phone: <u>                          </u> Fax: <u>                          </u>									Temp. of coolers when received (C°): 1   2   3   4   5			
Contract/ Quote: <u>Kevin Dysart</u>											Custody Seal    N / Y Intact            N / Y				
Sampler's Name <u>Jeri Simpson</u>			Sampler's Signature <u>Jeri Simpson</u>								Screened For Radioactivity <input type="checkbox"/>				
Proj. No.		Project Name <u>Lawnbrook Station Superfund Site</u>			No./Type of Containers <sup>2</sup>							Lab/Sample ID (Lab Use Only)			
Matrix <sup>1</sup>	Date	Time	C o m p	G r a v	Identifying Marks of Sample(s)		EX/ST	A/G 1 L.	250 ml	P/O					
S 1/6	1450	X			150 SB 03 1921-1931'		3		1						
S 1/7	0845	X			150 SB 03 200'-201'		3		1						
S 1/7	1050	X			150 SB 03 210'-211'		3		1						
S 1/7	1330	X			150SB 03 220'-221'		3		1						
X															
Relinquished by: (Signature) <u>Jeri Simpson</u>		Date <u>1/7/10</u>	Time <u>1530</u>	Received by: (Signature) <u>                          </u>		Date <u>1/7/10</u>	Time <u>1055</u>	Remarks							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time								
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.							
TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919															
'Matrix	WW - Wastewater	W - Water	S - Soil	L - Liquid	A - Air bag	C - Charcoal Tube	SL - Sludge	O - Oil							
*Container	VOA - 40 ml vial	A/G - Amber / Or Glass 1 Liter		250 ml - Glass wide mouth		P/O - Plastic or Other									

**CHAIN OF CUSTODY RECORD**

Report to: Company: <u>ProHTech Technologies, Inc.</u> Address: <u>220 Route 70 EAST</u> <u>MEDFORD NJ 08055</u> Contact: _____ Phone: <u>609 714 2420</u> Fax: <u>609 714 2495</u> Contract/ Quote: <u>KEVIN DIXON</u>			Invoice to: Company: _____ Address: <u>SAME</u> Contact: _____ Phone: _____ Fax: _____			ANALYSIS REQUESTED						Lab Use Only Due Date:								
							<i>Volunteer Sam 01.2 (Percent Soil)</i>						Temp. of coolers when received (C): <u>4.7</u>							
								1	2	3	4	5	Custody Seal <u>N</u> <u>Y</u> Intact <u>N</u> <u>Y</u>							
													Screened For Radioactivity <input type="checkbox"/>							
Sampler's Name <u>JON SIMPSON</u> Sampler's Signature <u>for Jon</u>												Lab/Sample ID (Lab Use Only)								
Proj. No.		Project Name <u>LAWRENCE AVENUE SUPERFUND SITE</u>			No./Type of Container <sup>a</sup> <u>(1)</u>															
Matrix <sup>b</sup>	Date	Time	C o m p	G r a b	Identifying Marks of Sample(s)			VOA	A/G 1 L.	250 ml	P/O									
<u>5/16/10</u>	X	<u>150 SR 03 210'-211'</u>						X												
Relinquished by: (Signature) <u>for Jon</u>		Date <u>11/6/10</u>	Time <u>1530</u>	Received by: (Signature) <u>TestAmerica</u>			Date <u>11/9/10</u>	Time <u>1000</u>	Remarks  Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.											
Relinquished by: (Signature)		Date	Time	Received by: (Signature)			Date	Time												
Relinquished by: (Signature)		Date	Time	Received by: (Signature)			Date	Time												
*Matrix: WW - Wastewater    W - Water    S - Soil    L - Liquid    A - Air bag    C - Charcoal Tube    ST - Sludge    O - Oil *Container: VOA - 40 ml vial    A/G - Amber / Or Glass 1 Liter    250 ml - Glass wide mouth    P/O - Plastic or other																				
TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919																				

<p>Report to:  <b>PANTHER TECHNOLOGIES</b>          Company: <u>PANTHER TECHNOLOGIES</u>          Address: <u>220 Route To East.</u>  <u>SUITE B</u>          Contact: <u>MEDFORD NJ 08055</u>          Phone: <u>(609) 714 2420</u>          Fax: <u>(609) 714 2495</u>          Contract/          Quote: <u>Kevin Dyson</u></p>		<p>Invoice to:</p> <p>Company: <u>SAME</u>          Address: <u>SAME</u>          Contact: _____          Phone: _____          Fax: _____</p>		<p>ANALYSIS REQUESTED</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">VoluntEER</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">50M 01.2</p>																			
<p>Sampler's Name</p>		<p>Sampler's Signature</p>			<p>Lab Use Only Due Date:</p> <p>Temp. of coolers when received (C):</p> <table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table> <p>Custody Seal N / Y Intact N / Y</p> <p>Screened For Radioactivity <input type="checkbox"/></p>										1	2	3	4	5				
1	2	3	4	5																			
Proj. No.			Project Name				No./Type of Containers <sup>3</sup>				Lab/Sample ID (Lab Use Only)												
Matrix <sup>1</sup>	Date	Time	C o m p	G r e e n	Identifying Marks of Sample(s)				VOA	A/G 1 LL	250 ml	P/O											
W	1/6	1630	X		150 SB03 A3'				1														
W	1/7	0445	X		150 SB03 201-202'				3														
W	1/7	1145	X		150 SB03 211-212'				3														
W	1/7	1450	X		150 SB03 221'-222'				3														
W	1/7	1600	X		150 SB03 231'-232'				2														
W	1/7		X		150 SB03 Duplicate				3														
W	1/6	1600	X		150 SB03 EQUIP BLANK				2														
W	1/7	1600	X		150 SB03 TRIP BLANK				2														
<p>Relinquished by: (Signature) <i>John Sip</i></p> <p>Relinquished by: (Signature)</p>					Date <u>1/7/00</u>	Time <u>1730</u>	<p>Received by: (Signature) <i>John Sip</i></p> <p>Received by: (Signature)</p>					Date <u>1/7/00</u>	Time <u>1015</u>	<p>Remarks</p> <p>Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.</p>									
<p>Relinquished by: (Signature)</p>					Date	Time	<p>Received by: (Signature)</p>					Date	Time										
<p>*Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil</p> <p>*Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other</p>																<p>TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919</p>							

**TestAmerica Burlington**  
**SAMPLE RECEIPT & LOG IN CHECKLIST**

Client: PAN TEC	Date Received: 1/09/10	Log In Date: 1/8/10
ETR: 135376	Time Received: 1000	By: [Signature]
SDG: 135376	Received By: VP	Signature:
Project: 24000	# Coolers Received:	PM Signature: [Signature] 1/28/2010
Samples Delivered By: <input checked="" type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input type="checkbox"/> Hand <input type="checkbox"/> Other (specify)		
List Air Bill Number(s) or Attach a photocopy of the Air Bill:		

COOLER SCREENS	YES	NO	N/A	REASON	COMMENTS
There is no evidence to indicate tampering	X				
Custody seals are present and intact	X				
Custody seal numbers are present		X			
If yes, list custody seal numbers:					

Thermal Preservation Type:	Wet Ice	Blue Ice	None	Other Specify	
IR Gun ID:	96	Correction Factor (CF) =	/	°C	
Cooler 1:	47 °C	Cooler 6	°C	Cooler 11	°C
Cooler 2:	°C	Cooler 7	°C	Cooler 12	°C
Cooler 3:	°C	Cooler 8	°C	Cooler 13	°C
Cooler 4:	°C	Cooler 9	°C	Cooler 14	°C
Cooler 5:	°C	Cooler 10	°C	Cooler 15	°C
Cooler 16:				Cooler 16	°C
Cooler 17:				Cooler 17	°C
Cooler 18:				Cooler 18	°C
Cooler 19:				Cooler 19	°C
Cooler 20:				Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun  
EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.  
Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	N/A	REASON	COMMENTS
Sample containers were received intact	X				
Legible sample labels are affixed to each container	X				

CHAIN OF CUSTODY (COC)	YES	NO	N/A	REASON	COMMENTS
COC is present and includes the following information for each container:					
- Sample ID / Sample Description	X				
- Date of Sample Collection	X				
- Time of Sample Collection	X				
- Identification of the Sampler	X				
- Preservation Type		X			
- Requested Tests Method(s)	X				
- Necessary Signatures		X			

INTERNAL CHAIN OF CUSTODY (ICOC) REQUIRED	YES	NO	N/A	REASON	COMMENTS
If yes to above, ICOC Record Initiated for every Worksheet		X			

SAMPLE INTEGRITY / USABILITY	YES	NO	N/A	REASON	COMMENTS
The sample container matches the COC	X				
Appropriate sample containers were received for the tests requested	X				
Samples were received within holding time	X				
Sufficient amount of sample is provided for requested analyses	X				
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)		X			
Appropriate preservatives were used for the tests requested		X			
pH of inorganic samples checked and is within method specification		X			
If no, attach Inorganic Sample pH Adjustment Form		X			

ANOMALY/INCR SUMMARY	YES	NO	N/A	REASON	COMMENTS
For sample ISCA SB#3 2nd-211 initially listed as unreceipted on 1/8/10. Sample flagged 1/1 in 1/8/10, received and placed into storage on 1/9/10.					

**TestAmerica Burlington**  
**SAMPLE RECEIPT & LOG IN CHECKLIST**

Client: <u>PANTEC</u>	Date Received: <u>1/8/10</u>	Log In Date: <u>01/08/10</u>
ETR: <u>135376</u>	Time Received: <u>1115</u>	By: <u>OTM</u>
SDG: <u>135376</u>	Received By: <u>OTM</u>	Signature: <u>[Signature]</u>
Project: <u>290000</u>	# Coolers Received: <u>1</u>	PM Signature: <u>[Signature]</u> Date: <u>1/8/2010</u>
Samples Delivered By: <input checked="" type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input type="checkbox"/> Hand <input type="checkbox"/> Other (specify)		Date: <u>1/8/10</u>
List Air bill Number(s) or Attach a photocopy of the Air Bill:		

		YES	NO	NA	Comments
COOLER SCREEN					
There is no evidence to indicate tampering	X				
Custody seals are present and intact		X			
Custody seal numbers are present			X		
If yes, list custody seal numbers:					

Thermal Preservation Type:	Wet Ice	Blue Ice	None	Other Specify		
IR Gun ID:	<u>90</u>	Correction Factor (CF) = <u>1</u>			°C	
Cooler 1:	<u>4.0</u>	°C	Cooler 6	°C	Cooler 11	°C
Cooler 2:		°C	Cooler 7	°C	Cooler 12	°C
Cooler 3:		°C	Cooler 8	°C	Cooler 13	°C
Cooler 4:		°C	Cooler 9	°C	Cooler 14	°C
Cooler 5:		°C	Cooler 10	°C	Cooler 15	°C
					Cooler 16	°C
					Cooler 17	°C
					Cooler 18	°C
					Cooler 19	°C
					Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun.

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

		YES	NO	NA	Comments
SAMPLE CONDITION					
Sample containers were received intact	X				

		YES	NO	NA	Comments
CHAIN OF CUSTODY (COC)					
COC is present and includes the following information for each container:					

• Sample ID / Sample Description	X		
• Date of Sample Collection	X		
• Time of Sample Collection	X		
• Identification of the Sampler		X	
• Preservation Type	X		
• Requested Tests Method(s)	X		
• Necessary Signatures	X		

		YES	NO	NA	Comments
Internal Chain of Custody (ICOC) Required	X				

If yes to above, ICOC Record initiated for every Worksheet	X			
SAMPLE INTEGRITY / USABILITY				

The sample container matches the COC	X			See below
Appropriate sample containers were received for the tests requested	X			See below
Samples were received within holding time	X			
Sufficient amount of sample is provided for requested analyses	X			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)	X			
Appropriate preservatives were used for the tests requested	X			
pH of inorganic samples checked and is within method specification		X		
If no, attach Inorganic Sample pH Adjustment Form		X		

		YES	NO	NA	Comments
ANOMALY / NCR SUMMARY					
Did not receive cooler listed on COC for sample 15603 2201-211					
Received sample not listed on COC labeled as 15603 5803 2301-131 with date of 01/03/10 at 1515. Date不符, and 2003 label used (1-14h).					
Sample labeled on 2003 for 15603 5803 193-193. Labeled time of 1445, typed with time of 1450 for COC, even though sample matched COC					
2nd 9 Enclosed COC sample 15603 5803 2201-221 has label listing 10 at 1500 for 5803 221-221, date不符, and 2003 label matched COC, typed with 10 for COC.					
Because sample 15603 5803 2101-211 was not supplied with 13h and 203 COC, no % results can be run. Sample 15603 5803 193-193 has values within limit values. All sample IDs matched at 14h due to character restrictions, all first markers removed.					

Enclosures placed in VOA fridge 2469 on 01/08/10 at 1145

**Carabillo, Joseph**

**From:** Jonathan Simpson [[jsimpson@panthertech.com](mailto:jsimpson@panthertech.com)]  
**Sent:** Monday, January 11, 2010 8:50 AM  
**To:** Carabillo, Joseph  
**Subject:** RE: Lawerence Aviation Samples

Joseph:

Regarding the samples received Friday January 8th for the Lawrence Aviation Site, please note the following:

Soil:

ISCO SB03 210-211; the 2oz sample coontainer was shipped Friday 1/8/10 for saturday delivery.

ISCO SB03 230-231; Please proceed with analysis for Volatiles SOM01.2

ISCO SB03 220-221; 2 of 3 encores labeled as ISCO 221-222 Depth indicated on COC is accurate, the 2 encore samples in question were mislabeled, please report results for those samples as as depth ~~220~~ ~~230~~

Water:

ISCO SB03 193; insufficient volume for accurate analysis. Unfortunately we were only able to obtain a small volume of sample, please proceed with analysis if possible.

ISCO SB03 221-232; 2 vials rcvd limited volume for accurate analysis. Again, unfortunately we could only obtain the volume submitted, please proceed with analysis if possible.

JC 1/11/10  
AS PER CALL

Thank you for addressing all these issues

Jon Simpson  
Panther Technologies, Inc.  
[jsimpson@panthertech.com](mailto:jsimpson@panthertech.com)  
(856) 296 3435

**From:** Carabillo, Joseph [[Joseph.Carabillo@testamericainc.com](mailto:Joseph.Carabillo@testamericainc.com)]  
**Sent:** Friday, January 08, 2010 4:32 PM  
**To:** Jonathan Simpson  
**Cc:** Matot, Wade  
**Subject:** Lawerence Aviation Samples

John:

As discussed, the following items are for your attention regarding the 2 sample sets received today:

SOIL:

ISCO SB03 210-211: 2oz jar not rcvd;→you have indicated this will be shipped

ISCO SB03 230-231: samples rcvd but not on COC

ISCO SB03 220-221: 2 of 3 encores labeled as "ISCO SB03 221-222"

WATER:

ISCO SB03 193: 1 vial rcvd: limited volume; analysis may be compromised

ISCO SB03 231-232: 2 vials rcvd: limited volume: analysis may be compromised

Thanks,  
**Joseph Carabillo**  
Project Manager  
TestAmerica

# Premier Environmental Services

## DATA VALIDATION SUMMARY REPORT OF THE LAWRENCE AVIATION SUPERFUND SITE PORT JEFFERSON, NY

### ORGANIC ANALYSES IN AQUEOUS AND NON-AQUEOUS SAMPLES

TEST AMERICA LABORATORIES, INC.  
SOUTH BURLINGTON, VT

SDG NUMBER: 135484

March, 2010

Prepared for  
Panther Technologies, Inc.  
Medford, New Jersey

Prepared by  
Premier Environmental Services  
2815 Covered Bridge Road  
Merrick, New York 11566  
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566  
(516) 223-9761 • FAX (516) 223-0983

<b>DATA VALIDATION FOR:</b>	<b>Volatile Organic Compounds (VOC's)</b>
<b>SITE:</b>	<b>Lawrence Aviation Superfund Site</b>
<b>CONTRACT LAB:</b>	<b>Test America Laboratories, Inc.</b> <b>South Burlington, VT</b>
<b>PROJECT NO.:</b>	<b>135484</b>
<b>REVIEWER:</b>	<b>Renee Cohen</b>
<b>DATE REVIEW COMPLETED:</b>	<b>March, 2010</b>
<b>MATRIX:</b>	<b>Aqueous, Non-Aqueous</b>

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (EPA-540-R-08-01, June 2008). All data are considered valid and acceptable except those analytes which have been deemed unusable "R" (unreliable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Table 1 of this report includes a cross reference between the field sample ID and laboratory sample ID used to perform data validation. Definitions of the data qualifiers that may be used in this report are located in Appendix A of this report. Qualified data result pages are located in Appendix B of this report. Copies of the Chain of Custody (COC) documents are located in Appendix C of this report.

This sample set included six (6) non-aqueous samples, five (5) aqueous samples, two (2) Field Blank samples and Trip Blank sample. This data assessment is for the organic analyses listed on the COC documents that accompanied the samples to the laboratory. The samples were collected January 14, 2010 and January 15, 2010. The samples were received at Test America Laboratories located in South Burlington, VT. Samples were received at the laboratory on January 16, 2010 for the analyses requested on the COC documentation. The samples in this data set were analyzed for Volatile Organic Analytes (VOA) in accordance with USEPA CLP Method SOM01.2 for low/medium samples soil samples and trace level analyses for the aqueous samples in this data set.

## **ORGANIC DATA ASSESSMENT**

### **1. OVERVIEW:**

Samples associated with this data set were analyzed for Volatile Organic Analytes (VOA) as noted by the COC documentation that accompanied the sample set to the laboratory. All analyses were performed in accordance with USEPA CLP Methods SOM01.2 for Low Level Soil sample analyses and USEPA CLP Method SOM01.2 for Trace Level Water Analyses. Test America Laboratories generated a stand-alone report for each sample matrix in compliance with the cited documents. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report 135484 consists of six (6) non-aqueous samples, five (5) aqueous samples, two (2) Field Blank samples and one (1) Trip Blank sample. The Chain of Custody documents listed the field sample ID's that are summarized in Table 1 of this report. All of the samples in this data set were analyzed for Volatile Organic Analytes.

### **2. HOLDING TIME:**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The USEPA CLP method specifies Technical Holding times for aqueous and solid and soil samples. The Technical Holding Time is based on collection date. The holding time for a properly preserved aqueous sample that is cooled and pH preserved to 2 or below is fourteen (14) days from sample collection. The holding time for non-aqueous samples that are properly cooled and preserved with NaHSO<sub>4</sub> is fourteen (14) days from sample collection.

The samples in laboratory report 135484 were collected January 14, 2010 and January 15, 2010. The samples were received at the laboratory on January 16, 2010. All of the non-aqueous field samples associated with this data set were completed by January 19, 2010. All aqueous sample analyses associated with this data set were completed by January 22, 2010. All sample analyses were performed within the technical holding times cited in this method.

## ORGANIC DATA ASSESSMENT

### **3. SURROGATES:**

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with either thirteen (13) or fourteen (14) Deuterated Monitoring Compounds (DMC's). These DMC's are added to each sample prior to sample purging. The method recommended Deuterated Monitoring Surrogate Compounds include:

Vinyl Chloride-d3	Chloroethane-d5
1,1-Dichloroethene-d2	2-Butanone-d5
Chloroform-d	1,2-Dichloroethane-d4
Benzene-d6	1,2-Dichloropropane-d6
Toluene-d8	trans-1,3-Dichloropropene-d4
2-Hexanone-d5	1,4-Dioxane-d8**
1,1,2,2-Tetrachloroethane-d2	1,2-Dichlorobenzene-d4

\*\* only reported in the low/medium non-aqueous Volatile Organic Analyses.

The laboratory reported CLP method specified recovery limits that are cited for both aqueous and non-aqueous samples reported in this data set. 1,4-Dioxane-d8 is not added as a Deuterated Monitoring Compound (DMC) in the Trace Volatile Organic Analyses associated with this data set.

The recovery of each Deuterated Monitoring Compound (DMC) met QC criteria in each of the non-aqueous field samples associated with this data set with the exception of 2-Butanone-d5 in field samples ISCO SB-2-S 200'-201' (817813) and ISCO SB-2-S 230'-231' (817816) and 2-Hexanone-d5 in sample ISCO SB-2-S 200'-201' (817813). The percent recovery of each surrogate was above QC limits. A review of the target analytes associated with these surrogate compounds was reviewed. Positive detects are qualified "J" estimated. Non-detects are acceptable as reported. Each of the associated target analytes in sample ISCO SB-2-S 200'-201 was reported non-detect therefore no action was taken. Acetone was detected in sample ISCO-SB-2-S 230'-231' at a concentration of 5.4 J ug/l. Acetone has been qualified "J" estimated in this sample.

Qualified data result pages are located in Appendix B of this report.

Each of the aqueous samples in this data set was fortified with thirteen (13) DMC's prior to analysis. The method cites recovery limits for each surrogate. The percent recovery of each surrogate met the method specified QC criteria in each of the field and QC samples associated with this data set.

### **4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Site Specific MS/MSD analysis was no reported with the samples in this data set.

## ORGANIC DATA ASSESSMENT

### **5. BLANK CONTAMINATION:**

**Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Samples were only qualified with those QC samples associated with the particular blank.**

**This method requires the preparation and analysis of a laboratory storage blank. This laboratory storage blank is kept with the site samples and analyzed with the site samples.**

#### **A) Method Blank contamination**

Three (3) method blank samples are associated with the Low/Medium Level Volatile Organic analyses (soil samples) in this data set. Each of these method blank samples was free from contamination of target analytes. Each of these method blank samples contained one (1) unknown Tentatively Identified Compound (TIC). This TIC has been qualified "J" estimated and "X" to indicate a contaminant this is related to the Deuterated Monitoring Compound (DMC). This unknown Tentatively Identified Compound was detected in each of the soil samples associated with this data set. This unknown compound TIC has been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

Three (3) method blank samples are associated with the Trace Level Volatile Organic analyses (aqueous samples) in this data set. Each of these method blank samples was free from contamination of target analytes. Each of these method blank samples contained one (1) unknown Tentatively Identified Compound (TIC). This TIC has been qualified "J" estimated and "X" to indicate a contaminant this is related to the Deuterated Monitoring Compound (DMC) and column bleed. This unknown Tentatively Identified Compound was detected in each of the aqueous samples associated with this data set. This unknown compound TIC has been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

The non-aqueous storage blank sample associated with the soils in this data set is identified as VHBLK02. This storage blank sample is free from contamination of target analytes. This storage blank sample contains one (1) TIC at a concentration of 77 JXB ug/kg. This is the TIC that was identified in the associated method blank sample and been previously negated in each of the non-aqueous samples and qualified "U".

The aqueous storage blank sample associated with the soils in this data set is identified as VHBLK01. This storage blank sample is free from contamination of target analytes. This storage blank sample contains one (1) TIC at a concentration of 3.6 JXB ug/l. This is the TIC that was identified in the associated method blank sample and been previously negated in each of the aqueous samples and qualified "U".

## ORGANIC DATA ASSESSMENT

### **5. BLANK CONTAMINATION (cont'd):**

#### **B) Field or Equipment Rinse Blank (ERB) contamination**

Field Blank sample (FB100114) was free from contamination of all target analytes with the exception of one (1) Unknown TIC and Isopropyl Alcohol. Field Blank sample (FB100115) was free from contamination of all target analytes with the exception of one (1) Unknown TIC and Isopropyl Alcohol. This Unknown TIC was detected in each of the method blank samples associated with this data set and is associated with column bleed and qualified X by the laboratory. This Unknown TIC was detected in each of the samples associated with this data set. It has been negated and qualified "U". Isopropyl Alcohol was detected in samples ISCO-SB-2-GW 193'-194' and ISCO-SB-2-GW 231'-232'. Isopropyl Alcohol has been negated in each of these samples and qualified "U".

Qualified data result pages are located in Appendix B of this report.

#### **C) Trip Blank contamination**

The Trip Blank sample (TB100114/817821) was analyzed with this data set. The Trip Blank sample was free from contamination of all target analytes. Isopropyl Alcohol and one (1) Unknown TIC were detected in this sample. This unknown TIC has been qualified "J" estimated and "X" to indicate a contaminant this is related column bleed. This unknown compound has been negated and qualified "U".

## ORGANIC DATA ASSESSMENT

### **6. GC/MS CALIBRATION:**

**Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance. USEPA CLP method states the concentration levels of target analytes that must be analyzed and reported for Initial Calibration of the GC/MS.**

#### **A) RESPONSE FACTOR**

**Low/Medium Volatile Organic Analysis -** The response factor measures the instrument's response to specific chemical compounds. USEPA CLP criteria of the cited method requires that the response factor of all target analytes listed in Table 15 and the DMC's must be greater than or equal to 0.010. The RRF of 1,4-Dioxane and its associated DMC must be greater than or equal to 0.0050 (Advisory). All other target analytes must have an RRF greater than or equal to 0.050 in both initial and continuing calibration analyses. Target analytes are qualified if the minimum RRF criteria are not in either the initial calibration analysis or the opening and closing continuing calibration standard analysis. Positive results are qualified "J". Non-detect results are qualified if the minimum RRF <0.050 (or 0.010 for specifics) are qualified "R", unusable.

**Trace Volatile Organic Analysis -** The response factor measures the instrument's response to specific chemical compounds. USEPA CLP criteria of the cited method requires that the response factor of all target analytes listed in Table 3 and the DMC's must be greater than or equal to 0.010. All other target analytes must have an RRF greater than or equal to 0.050 in both initial and continuing calibration analyses. Target analytes are qualified if the minimum RRF criteria are not in either the initial calibration analysis or the opening and closing continuing calibration standard analysis. Positive results are qualified "J". Non-detect results are qualified if the minimum RRF <0.050 (or 0.010 for specifics) are qualified "R", unusable

**Low/Medium Volatile Organic Analysis –** One (1) initial calibration curve is associated with the low-level soil samples reported with this data set. The laboratory performed a low level soil initial multilevel calibration on January 13, 2010 (Inst. N.i). The laboratory summarized the RRF data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The RRF of all target compounds met QC criteria in this initial calibration curve analysis with the exception of 1,4-Dioxane. Two (2) opening and two (2) closing continuing calibration verification (CCV) standards are associated with the low level soil samples in this data set. The CCV standard analyzed January 19, 2010 (File ID: NZA50DV/NZA50DC1). An additional opening and closing continuing calibration verification (CCV) standard is associated with the analysis of the storage blank sample in this data set. This CCV standard set was analyzed January 19, 2010 (File ID: NZA050EV/NZA50BC1). The RRF of all target analytes met QC criteria in each of these CCV standards with the exception of 1,4-Dioxane. 1,4-Dioxane is an advisory compound in this method, therefore based on the professional judgment of this data validator 1,4-Dioxane has not been qualified.

**Trace Level Volatile Organic Analysis -** The laboratory performed an aqueous (Trace Volatile Organic Analysis) initial calibration on January 18, 2010 (Inst. M.i). The laboratory summarized the RRF data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The RRF of all target compounds met QC criteria in this initial calibration curve analysis.

The aqueous samples in this data set were analyzed on three (3) days. The opening and closing CCV standards are reported on each day of analysis. The RRF criteria for each of the opening and closing CCV standards met the QC criteria specified in the cited data validation guidelines.

## ORGANIC DATA ASSESSMENT

### **6. GC/MS CALIBRATION (cont'd):**

#### **B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):**

**Low-Medium Level Volatile Organic Analyses -** Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. US EPA data validation criteria states that the percent RSD must be less than or equal to 40% for the volatile compounds and surrogate compounds listed in Table 15 with the exception of 1,4-Dioxane and its associated Deuterated Monitoring compound which allows for up to 50% in the initial calibration curve. All other %RSD must be less than or equal to 20% in the initial calibration curve analysis.

The %D in the opening CCV standard must be <40% for the compounds listed in Table 15 of the method. The %Difference of 1,4-Dioxane has a criteria of <50%. All other volatile organic compounds have a criteria <25% in each of the continuing calibration standards. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable.

**Trace Volatile Organic Analyses -** Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. US EPA data validation criteria states that the percent RSD must be less than or equal to 40% for the volatile compounds and surrogate compounds listed in Table 3 and their associated Deuterated Monitoring compounds. All other %RSD must be less than or equal to 30% in the initial calibration curve analysis.

The %D in the opening CCV standard must be <40% for the compounds listed in Table 3 of the method. All other volatile organic compounds have a criteria <50% in the closing continuing calibration standard. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable.

**Low/Medium Volatile Organic Analyses -** One (1) initial calibration curve is associated with the non aqueous samples in Laboratory Report 135484. The laboratory performed a multi-level calibration on January 13, 2010 (Inst. N.i). The laboratory summarized the %RSD data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The %RSD of all target compounds in this initial calibration curve analysis met QC criteria.

Two (2) opening and two (2) closing continuing calibration verification (CCV) standards are associated with this calibration curve. The %Difference of all target analytes met QC criteria in each of these standard analyses.

## ORGANIC DATA ASSESSMENT

### **6. GC/MS CALIBRATION (cont'd):**

#### **B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):**

Trace Volatile Organic Analyses - The laboratory performed an aqueous (Trace Volatile Organic Analysis) initial calibration on January 18, 2010 (Inst. M.i). The laboratory summarized the %RSD data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The %RSD of all target compounds met QC criteria in this initial calibration curve analysis.

The aqueous samples in this data set were analyzed on three (3) days. The opening and closing CCV standards are reported on each day of analysis. The %Difference criteria for each of the opening and closing CCV standard met the QC criteria specified in the cited data validation guidelines.

### **7. GC/MS MASS SPECTROMETER TUNING:**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB).

The tune criteria listed in the data report met or exceeded that required by the method. All tuning criteria associated with these sample analyses were met.

### **8. GC/MS INTERNAL STANDARDS PERFORMANCE:**

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than  $\pm 30$  seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non-detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard area count evaluation criteria are applied to all field and QC samples.

All samples were spiked with the internal standards Chlorobenzene-d5, 1,4-Difluorobenzene and 1,4-Dichlorobenzene-d4 prior to analysis. The area counts and retention time of each internal standard met QC criteria in all field samples and QC samples associated with this data set.

## ORGANIC DATA ASSESSMENT

### **9. COMPOUND IDENTIFICATION:**

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$  RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. The laboratory reported each sample to the Contract Required Quantitation Limit (CRQL) listed in the cited method.

Six (6) non-aqueous samples, five (5) aqueous samples, two (2) Field Blank samples and one (1) Trip Blank sample are associated with this data set. The samples were analyzed using USEPA CLP Method SOM01.2. Tentatively Identified Compounds (TIC's) were reported when detected with this data set. All soil sample results in this data set are reported on a dry weight basis.

Each of the soil samples in this data set was analyzed without dilution and reported to the base reporting limit. One (1) unknown TIC was detected in each of the non-aqueous samples that was also detected in the associated method blank sample and qualified "B" by the laboratory. This unknown compound has been negated and qualified "U".

Each of the aqueous samples in this data set was analyzed without dilution and reported to the base reporting limit. One (1) unknown TIC was detected in each of the non-aqueous samples that was also detected in the associated method blank sample and qualified "B" by the laboratory. This unknown compound has been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

### **10. FIELD DUPLICATE ANALYSES:**

Field duplicate samples are collected and analyzed as an indication of overall precision. Field duplicate results are expected to have more variability than laboratory duplicate samples. Field duplicate samples are not associated with this data set.

### **11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT**

Analytical/method QC criteria was met for these analyses except where explained in the laboratory case narrative and the detailed in this validation report. The data reported by the laboratory agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. All QC anomalies associated with this data set have been explained in the above sections of this data validation report.

All sample results are reported to the method detection limit except where detailed above. Reporting limits and positive results are adjusted based on the sample volume/weight utilized for each extraction procedure. Soil sample results are reported on a dry weight basis. All data provided for this data set is acceptable for use, with noted data qualifiers.

Appendix B of this report contains copies of qualified data result pages.

**TABLE 1**

<u>FIELD SAMPLE ID</u>	<u>LABORATORY ID</u>
ISCO SB-4-S 190'-191'	817812
ISCO SB-2-S 192'-193'	817813
ISCO SB-2-S 200'-201'	817814
ISCO SB-2-S 210'-211'	817815
ISCO SB-2-S 220'-221'	817816
ISCO SB-2-GW193'-194'	817817
ISCO SB-2-GW200'-201'	817818
ISCO SB-2-GW211'-212'	817819
FB100114	817820
TB100114	817821
ISCO SB-2-GW221'-222'	817822
ISCO SB-2-GW231'-232'	817823
FB100115	817824
VHBLK01	817825
VHBLK02	817826

## **APPENDIX A**

## **DATA QUALIFIER DEFINITIONS**

- U** - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J** - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.”
- NJ** - The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
- UJ** - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.
- K** – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
- L** - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.
- UL** – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

## **APPENDIX B**

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

EPA SAMPLE NO.
SB4S190-191

Lab Name: TESTAMERICA BURLINGTON Contract: 29000

Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817811

Sample wt/vol: 5.14 (g/mL) g Lab File ID: 817811

Level: (TRACE/LOW/MED) LOW Date Received: 01/16/2010

% Moisture: not dec. 17 Date Analyzed: 01/19/2010

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/kg</u>	Q
75-71-8	Dichlorodifluoromethane	5.9	U
74-87-3	Chloromethane	5.9	U
75-01-4	Vinyl chloride	5.9	U
74-83-9	Bromomethane	5.9	U
75-00-3	Chloroethane	5.9	U
75-69-4	Trichlorodifluoromethane	5.9	U
75-35-4	1,1-Dichloroethene	5.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.9	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	5.9	U
79-20-9	Methyl acetate	5.9	U
75-09-2	Methylene chloride	5.9	U
156-60-5	trans-1,2-Dichloroethene	5.9	U
1634-04-4	Methyl tert-butyl ether	5.9	U
75-34-3	1,1-Dichloroethane	5.9	U
156-59-2	cis-1,2-Dichloroethene	5.9	U
78-93-3	2-Butanone	12	U
74-97-5	Bromoform	5.9	U
67-66-3	Chloroform	5.9	U
71-55-6	1,1,1-Trichloroethane	5.9	U
110-82-7	Cyclohexane	5.9	U
56-23-5	Carbon tetrachloride	5.9	U
71-43-2	Benzene	5.9	U
107-06-2	1,2-Dichloroethane	5.9	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB4S190-191

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817811  
 Sample wt/vol: 5.14 (g/mL) g Lab File ID: 817811  
 Level: (TRACE/LOW/MED) LOW Date Received: 01/16/2010  
 % Moisture: not dec. 17 Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
79-01-6	Trichloroethene	5.9	U
108-87-2	Methylcyclohexane	5.9	U
78-87-5	1,2-Dichloropropane	5.9	U
75-27-4	Bromodichloromethane	5.9	U
10061-01-5	cis-1,3-Dichloropropene	5.9	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.9	U
10061-02-6	trans-1,3-Dichloropropene	5.9	U
79-00-5	1,1,2-Trichloroethane	5.9	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	5.9	U
124-48-1	Dibromochloromethane	5.9	U
106-93-4	1,2-Dibromoethane	5.9	U
108-90-7	Chlorobenzene	5.9	U
100-41-4	Ethylbenzene	5.9	U
95-47-6	o-Xylene	5.9	U
179601-23-1	m,p-Xylene	5.9	U
100-42-5	Styrene	5.9	U
75-25-2	Bromoform	5.9	U
98-82-8	Isopropylbenzene	5.9	U
79-34-5	1,1,2,2-Tetrachloroethane	5.9	U
541-73-1	1,3-Dichlorobenzene	5.9	U
106-46-7	1,4-Dichlorobenzene	5.9	U
95-50-1	1,2-Dichlorobenzene	5.9	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	U
120-82-1	1,2,4-Trichlorobenzene	5.9	U
87-61-6	1,2,3-Trichlorobenzene	5.9	U

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

EPA SAMPLE NO.

SB4S190-191

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817811

Sample wt/vol: 5.14 (g/mL) g

Lab File ID: 817811

Level: (TRACE or LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 17

Date Analyzed: 01/19/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.82	88	JXB
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 (1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB2S192-193

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817812

Sample wt/vol: 4.57 (g/mL) g

Lab File ID: 817812

Level: (TRACE/LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 13

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	6.3	U
74-87-3	Chloromethane	6.3	U
75-01-4	Vinyl chloride	6.3	U
74-83-9	Bromomethane	6.3	U
75-00-3	Chloroethane	6.3	U
75-69-4	Trichlorodifluoromethane	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.3	U
79-20-9	Methyl acetate	6.3	U
75-09-2	Methylene chloride	6.3	U
156-60-5	trans-1,2-Dichloroethene	6.3	U
1634-04-4	Methyl tert-butyl ether	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
156-59-2	cis-1,2-Dichloroethene	6.3	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.3	U
67-66-3	Chloroform	6.3	U
71-55-6	1,1,1-Trichloroethane	6.3	U
110-82-7	Cyclohexane	6.3	U
56-23-5	Carbon tetrachloride	6.3	U
71-43-2	Benzene	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
123-91-1	1,4-Dioxane	130	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

SB2S192-193

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817812

Sample wt/vol: 4.57 (g/mL) g

Lab File ID: 817812

Level: (TRACE/LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 13

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/kg</u>	Q
79-01-6	Trichloroethene	6.3	U
108-87-2	Methylcyclohexane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
100-41-4	Ethylbenzene	6.3	U
95-47-6	o-Xylene	6.3	U
179601-23-1	m,p-Xylene	6.3	U
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
541-73-1	1,3-Dichlorobenzene	6.3	U
106-46-7	1,4-Dichlorobenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	U

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

EPA SAMPLE NO.

SB2S192-193

Lab Name: TESTAMERICA BURLINGTON	Contract: 29000	
Lab Code: STLV Case No.: LASS	Mod. Ref No.:	SDG No.: 135484
Matrix: (SOIL/SED/WATER) Soil	Lab Sample ID: 817812	
Sample wt/vol: 4.57 (g/mL) g	Lab File ID: 817812	
Level: (TRACE or LOW/MED) LOW	Date Received: 01/16/2010	
% Moisture: not dec. 13	Date Analyzed: 01/19/2010	
GC Column: DB-624 ID: 0.53 (mm)	Dilution Factor: 1.0	
Soil Extract Volume:	(uL) Soil Aliquot Volume:	(uL)
CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Purge Volume: 10.0	(mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.82	97	JXB
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

EPA SAMPLE NO.

SB2S200-201

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817813  
 Sample wt/vol: 5.19 (g/mL) g Lab File ID: 817813  
 Level: (TRACE/LOW/MED) LOW Date Received: 01/16/2010  
 % Moisture: not dec. 17 Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	5.8	U
74-87-3	Chloromethane	5.8	U
75-01-4	Vinyl chloride	5.8	U
74-83-9	Bromomethane	5.8	U
75-00-3	Chloroethane	5.8	U
75-69-4	Trichlorofluoromethane	5.8	U
75-35-4	1,1-Dichloroethene	5.8	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.8	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	5.8	U
79-20-9	Methyl acetate	5.8	U
75-09-2	Methylene chloride	5.8	U
156-60-5	trans-1,2-Dichloroethene	5.8	U
1634-04-4	Methyl tert-butyl ether	5.8	U
75-34-3	1,1-Dichloroethane	5.8	U
156-59-2	cis-1,2-Dichloroethene	5.8	U
78-93-3	2-Butanone	12	U
74-97-5	Bromoform	5.8	U
67-66-3	Chloroform	5.8	U
71-55-6	1,1,1-Trichloroethane	5.8	U
110-82-7	Cyclohexane	5.8	U
56-23-5	Carbon tetrachloride	5.8	U
71-43-2	Benzene	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB2S200-201

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817813

Sample wt/vol: 5.19 (g/mL) g

Lab File ID: 817813

Level: (TRACE/LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 17

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
79-01-6	Trichloroethene	5.8	U
108-87-2	Methylcyclohexane	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U
75-27-4	Bromodichloromethane	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.8	U
10061-02-6	trans-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
127-18-4	Tetrachloroethene	5.8	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	5.8	U
106-93-4	1,2-Dibromoethane	5.8	U
108-90-7	Chlorobenzene	5.8	U
100-41-4	Ethylbenzene	5.8	U
95-47-6	o-Xylene	5.8	U
179601-23-1	m,p-Xylene	5.8	U
100-42-5	Styrene	5.8	U
75-25-2	Bromoform	5.8	U
98-82-8	Isopropylbenzene	5.8	U
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U
541-73-1	1,3-Dichlorobenzene	5.8	U
106-46-7	1,4-Dichlorobenzene	5.8	U
95-50-1	1,2-Dichlorobenzene	5.8	U
96-12-8	1,2-Dibromo-3-chloropropane	5.8	U
120-82-1	1,2,4-Trichlorobenzene	5.8	U
87-61-6	1,2,3-Trichlorobenzene	5.8	U

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

EPA SAMPLE NO.

SB2S200-201

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817813

Sample wt/vol: 5.19 (g/mL) g

Lab File ID: 817813

Level: (TRACE or LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 17

Date Analyzed: 01/19/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.84	-93	JXB
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

EPA SAMPLE NO.

SB2S210-211

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817814

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

Lab File ID: 817814

Level: (TRACE/LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 15

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/kg</u>	Q
75-71-8	Dichlorodifluoromethane	5.3	U
74-87-3	Chloromethane	5.3	U
75-01-4	Vinyl chloride	5.3	U
74-83-9	Bromomethane	5.3	U
75-00-3	Chloroethane	5.3	U
75-69-4	Trichlorofluoromethane	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.3	U
67-64-1	Acetone	6.0	J
75-15-0	Carbon disulfide	5.3	U
79-20-9	Methyl acetate	5.3	U
75-09-2	Methylene chloride	5.3	U
156-60-5	trans-1,2-Dichloroethene	5.3	U
1634-04-4	Methyl tert-butyl ether	5.3	U
75-34-3	1,1-Dichloroethane	5.3	U
156-59-2	cis-1,2-Dichloroethene	5.3	U
78-93-3	2-Butanone	11	U
74-97-5	Bromoform	5.3	U
67-66-3	Chloroform	5.3	U
71-55-6	1,1,1-Trichloroethane	5.3	U
110-82-7	Cyclohexane	5.3	U
56-23-5	Carbon tetrachloride	5.3	U
71-43-2	Benzene	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
123-91-1	1,4-Dioxane	110	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

SB2S210-211

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817814  
 Sample wt/vol: 5.60 (g/mL) g Lab File ID: 817814  
 Level: (TRACE/LOW/MED) LOW Date Received: 01/16/2010  
 % Moisture: not dec. 15 Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/kg</u>	Q
79-01-6	Trichloroethene	5.3	U
108-87-2	Methylcyclohexane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
75-27-4	Bromodichloromethane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
127-18-4	Tetrachloroethene	5.3	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	5.3	U
106-93-4	1,2-Dibromoethane	5.3	U
108-90-7	Chlorobenzene	5.3	U
100-41-4	Ethylbenzene	5.3	U
95-47-6	o-Xylene	5.3	U
179601-23-1	m,p-Xylene	5.3	U
100-42-5	Styrene	5.3	U
75-25-2	Bromoform	5.3	U
98-82-8	Isopropylbenzene	5.3	U
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
541-73-1	1,3-Dichlorobenzene	5.3	U
106-46-7	1,4-Dichlorobenzene	5.3	U
95-50-1	1,2-Dichlorobenzene	5.3	U
96-12-8	1,2-Dibromo-3-chloropropane	5.3	U
120-82-1	1,2,4-Trichlorobenzene	5.3	U
87-61-6	1,2,3-Trichlorobenzene	5.3	U

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

EPA SAMPLE NO.

SB2S210-211

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817814  
 Sample wt/vol: 5.60 (g/mL) g Lab File ID: 817814  
 Level: (TRACE or LOW/MED) LOW Date Received: 01/16/2010  
 % Moisture: not dec. 15 Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	2.67	7.1 J	
02	Unknown	10.84	-82 JXB	
03				
04				
05				
06				
07				
08				
09				
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24				
25				
26				
27				
28				
29				
30	E966796(1)	Total Alkanes	N/A	

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB2S220-221

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817815

Sample wt/vol: 4.86 (g/mL) g

Lab File ID: 817815

Level: (TRACE/LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 18

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	6.3	U
74-87-3	Chloromethane	6.3	U
75-01-4	Vinyl chloride	6.3	U
74-83-9	Bromomethane	6.3	U
75-00-3	Chloroethane	6.3	U
75-69-4	Trichlorofluoromethane	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	U
67-64-1	Acetone	7.9	J
75-15-0	Carbon disulfide	6.3	U
79-20-9	Methyl acetate	6.3	U
75-09-2	Methylene chloride	6.3	U
156-60-5	trans-1,2-Dichloroethene	6.3	U
1634-04-4	Methyl tert-butyl ether	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
156-59-2	cis-1,2-Dichloroethene	6.3	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.3	U
67-66-3	Chloroform	6.3	U
71-55-6	1,1,1-Trichloroethane	6.3	U
110-82-7	Cyclohexane	6.3	U
56-23-5	Carbon tetrachloride	6.3	U
71-43-2	Benzene	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
123-91-1	1,4-Dioxane	130	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

SB2S220-221

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817815

Sample wt/vol: 4.86 (g/mL) g

Lab File ID: 817815

Level: (TRACE/LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 18

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume:

Purge Volume: 10.0 (mL)

(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-01-6	Trichloroethene	6.3	U
108-87-2	Methylcyclohexane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
100-41-4	Ethylbenzene	6.3	U
95-47-6	o-Xylene	6.3	U
179601-23-1	m,p-Xylene	6.3	U
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
541-73-1	1,3-Dichlorobenzene	6.3	U
106-46-7	1,4-Dichlorobenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	U

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

EPA SAMPLE NO.

SB2S220-221

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817815  
 Sample wt/vol: 4.86 (g/mL) g Lab File ID: 817815  
 Level: (TRACE or LOW/MED) LOW Date Received: 01/16/2010  
 % Moisture: not dec. 18 Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.80	-98	JXB
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	E966796 (1) Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB2S230-231

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Soil

Lab Sample ID: 817816

Sample wt/vol: 5.03 (g/mL) g

Lab File ID: 817816

Level: (TRACE/LOW/MED) LOW

Date Received: 01/16/2010

% Moisture: not dec. 16

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	5.9	U
74-87-3	Chloromethane	5.9	U
75-01-4	Vinyl chloride	5.9	U
74-83-9	Bromomethane	5.9	U
75-00-3	Chloroethane	5.9	U
75-69-4	Trichlorodifluoromethane	5.9	U
75-35-4	1,1-Dichloroethene	5.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.9	U
67-64-1	Acetone	5.4	J
75-15-0	Carbon disulfide	5.9	U
79-20-9	Methyl acetate	5.9	U
75-09-2	Methylene chloride	5.9	U
156-60-5	trans-1,2-Dichloroethene	5.9	U
1634-04-4	Methyl tert-butyl ether	5.9	U
75-34-3	1,1-Dichloroethane	5.9	U
156-59-2	cis-1,2-Dichloroethene	5.9	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	5.9	U
67-66-3	Chloroform	5.9	U
71-55-6	1,1,1-Trichloroethane	5.9	U
110-82-7	Cyclohexane	5.9	U
56-23-5	Carbon tetrachloride	5.9	U
71-43-2	Benzene	5.9	U
107-06-2	1,2-Dichloroethane	5.9	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.	SB2S230-231
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Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817816  
 Sample wt/vol: 5.03 (g/mL) g Lab File ID: 817816  
 Level: (TRACE/LOW/MED) LOW Date Received: 01/16/2010  
 % Moisture: not dec. 16 Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (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) ug/kg	Q
79-01-6	Trichloroethene	5.9	U
108-87-2	Methylcyclohexane	5.9	U
78-87-5	1,2-Dichloropropane	5.9	U
75-27-4	Bromodichloromethane	5.9	U
10061-01-5	cis-1,3-Dichloropropene	5.9	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.9	U
10061-02-6	trans-1,3-Dichloropropene	5.9	U
79-00-5	1,1,2-Trichloroethane	5.9	U
127-18-4	Tetrachloroethene	5.9	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	5.9	U
106-93-4	1,2-Dibromoethane	5.9	U
108-90-7	Chlorobenzene	5.9	U
100-41-4	Ethylbenzene	5.9	U
95-47-6	o-Xylene	5.9	U
179601-23-1	m,p-Xylene	5.9	U
100-42-5	Styrene	5.9	U
75-25-2	Bromoform	5.9	U
98-82-8	Isopropylbenzene	5.9	U
79-34-5	1,1,2,2-Tetrachloroethane	5.9	U
541-73-1	1,3-Dichlorobenzene	5.9	U
106-46-7	1,4-Dichlorobenzene	5.9	U
95-50-1	1,2-Dichlorobenzene	5.9	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	U
120-82-1	1,2,4-Trichlorobenzene	5.9	U
87-61-6	1,2,3-Trichlorobenzene	5.9	U

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

EPA SAMPLE NO.

SB2S230-231

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: 817816  
 Sample wt/vol: 5.03 (g/mL) g Lab File ID: 817816  
 Level: (TRACE or LOW/MED) LOW Date Received: 01/16/2010  
 % Moisture: not dec. 16 Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	10.80	-95	JXB
02				
03				
04				
05				
06				
07				
08				
09				
10				
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22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 (1)		Total Alkanes	N/A	

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB2GW193-194

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817817

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817817

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	71	_____
75-15-0	Carbon disulfide	0.26	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	1.4	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.42	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB2GW193-194

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLW Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 817817  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 817817  
 Level: (TRACE/LOW/MED) TRACE Date Received: 01/16/2010  
 % Moisture: not dec. Date Analyzed: 01/21/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.46	J
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.34	J
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.26	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	0.36	J
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.

SB2GW193-194

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817817

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817817

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	2.33	2.2	J
02	67-63-0	Isopropyl Alcohol	4.92	12	NJ
03		Unknown	10.45	3.5	JXB
04	66-25-1	Hexanal	11.83	2.2	NJ
05		Unknown alcohol	15.57	0.72	J
06	124-19-6	Nonanal	16.37	1.7	NJ
07	112-31-2	Decanal	17.37	1.5	NJ
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

<u>EPA SAMPLE NO.</u>	SB2GW200-201
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Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 817818  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 817818  
 Level: (TRACE/LOW/MED) TRACE Date Received: 01/16/2010  
 % Moisture: not dec. Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	19	—
75-15-0	Carbon disulfide	0.37	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	2.3	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.49	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.  
SB2GW200-201

Lab Name: TESTAMERICA BURLINGTON Contract: 29000

Lab Code: STLW Case No.: LASS Mod. Ref No.: SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 817818

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 817818

Level: (TRACE/LOW/MED) TRACE Date Received: 01/16/2010

% Moisture: not dec. Date Analyzed: 01/19/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorodifluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	19	
75-15-0	Carbon disulfide	0.37	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	2.3	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.49	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.

SB2GW200-201

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLW Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 817818  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 817818  
 Level: (TRACE or LOW/MED) TRACE Date Received: 01/16/2010  
 % Moisture: not dec. Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 115-07-1	Propene	2.29	2.0	NJ
02 109-67-1	1-Pentene	3.72	0.53	NJ
03	Unknown	4.92	1.1	J
04	Unknown	6.05	0.58	J
05	Unknown	10.45	3.3	JXB
06 66-25-1	Hexanal	11.84	3.0	NJ
07 124-13-0	Octanal	15.21	0.53	NJ
08	Unknown alcohol	15.59	0.74	J
09	Unknown	16.39	2.2	J
10 112-31-2	Decanal	17.38	1.3	NJ
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A	1.9	J

(1) EPA-designated Registry Number.

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

EPA SAMPLE NO.

SB2GW211-212

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817819

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817819

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	15	—
75-15-0	Carbon disulfide	0.40	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	2.2	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.47	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.20	J
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.
SB2GW211-212

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817819

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817819

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.44	J
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.27	J
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.24	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.22	J
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.

SB2GW211-212

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817819

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817819

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	115-07-1	Propene	2.28	7.8	NJ
02	109-67-1	1-Pentene	3.73	1.3	NJ
03		Unknown	4.20	0.55	J
04	592-41-6	1-Hexene	6.02	1.0	NJ
05		Unknown	10.46	3.8	JXB
06	66-25-1	Hexanal	11.84	2.0	NJ
07		Unknown	15.21	0.55	J
08		Unknown alcohol	15.58	1.1	J
09	124-19-6	Nonanal	16.37	2.5	NJ
10	112-31-2	Decanal	17.37	1.5	NJ
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30	E966796(1)	Total Alkanes	N/A	4.9	J

(1) EPA-designated Registry Number.

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

<b>EPA SAMPLE NO.</b>	
SB2GW221-222	

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817822

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817822

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	14	_____
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	1.2	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.60	_____
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

SB2GW221-222

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817822

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817822

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
79-01-6	Trichloroethene	1.0	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.49	J
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.26	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.43	J
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.

SB2GW221-222

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817822

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817822

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	4.91	0.59	J
02	Unknown	10.46	3.7	JXB
03 66-25-1	Hexanal	11.84	1.3	NJ
04	Unknown alcohol	15.58	0.72	J
05	Unknown	16.38	0.81	J
06 112-31-2	Decanal	17.38	0.60	NJ
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

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

EPA SAMPLE NO.

SB2GW231-232

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817823

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817823

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	95	—
75-15-0	Carbon disulfide	0.22	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.47	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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

EPA SAMPLE NO.
SB2GW231-232

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817823

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817823

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.86	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.37	J
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.33	J
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.

SB2GW231-232

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817823

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817823

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/21/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown	2.32	0.80	J
02 67-63-0	Isopropyl Alcohol	4.92	29	NJ
03	Unknown	10.45	3.6	JXB
04 66-25-1	Hexanal	11.83	0.87	NJ
05 104-76-7	1-Hexanol, 2-ethyl-	15.57	0.57	NJ
06 124-19-6	Nonanal	16.37	0.54	NJ
07 112-31-2	Decanal	17.37	0.54	NJ
08				
09				
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25				
26				
27				
28				
29				
30				
E966796 (1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

EPA SAMPLE NO.

TB100114

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817821

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817821

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

TB100114

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817821

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817821

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2

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

EPA SAMPLE NO.

TB100114

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817821

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817821

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 67-63-0	Isopropyl Alcohol	4.92	1.3	NJ
02	Unknown	10.44	3.6	JXB
03				
04				
05				
06				
07				
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09				
10				
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28				
29				
30				
E966796 (1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

EPA SAMPLE NO.

FB100114

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817820

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817820

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

<u>EPA SAMPLE NO.</u>
FB100114

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 817820  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 817820  
 Level: (TRACE/LOW/MED) TRACE Date Received: 01/16/2010  
 % Moisture: not dec. Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.

FB100114

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817820

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817820

Level: (TRACE or LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	67-63-0	Isopropyl Alcohol	4.93	75	NJ
02		Unknown	10.45	3.6	JXB
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 (1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

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

<b>EPA SAMPLE NO.</b>	
FB100115	

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817824

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817824

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	0.50	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2

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

EPA SAMPLE NO.

FB100115

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLV Case No.: LASS

Mod. Ref No.:

SDG No.: 135484

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: 817824

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 817824

Level: (TRACE/LOW/MED) TRACE

Date Received: 01/16/2010

% Moisture: not dec.

Date Analyzed: 01/19/2010

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.

FB100115

Lab Name: TESTAMERICA BURLINGTON Contract: 29000  
 Lab Code: STLV Case No.: LASS Mod. Ref No.: SDG No.: 135484  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 817824  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 817824  
 Level: (TRACE or LOW/MED) TRACE Date Received: 01/16/2010  
 % Moisture: not dec. Date Analyzed: 01/19/2010  
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 67-63-0	Isopropyl Alcohol	4.91	14	NJ
02	Unknown	10.44	3.6	JXB
03				
04				
05				
06				
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21				
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23				
24				
25				
26				
27				
28				
29				
30				
E966796 (1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

SOM01.2

## **APPENDIX C**



Burlington  
30 Community Drive, Suite 11  
South Burlington, VT 05403 Tel: 802 660 1990

## CHAIN OF CUSTODY RECORD

<b>Report to:</b> Company: <u>Panther Technologies, INC.</u> Address: <u>220 ROUTE 70 EAST</u> <u>MEDFORD, NJ 08055</u> Contact: <u>KEVIN DYSON</u> Phone: <u>609 714-2420</u> Fax: <u>609 714-2495</u> Contract/ Quote:		<b>Invoice to:</b> Company: <u>SAME</u> Address: Contact: Phone: Fax:		<b>ANALYSIS REQUESTED</b>  <i>X</i> <u>Tell Vee's Son el.2</u>											Lab Use Only Due Date:  Temp. of coolers when received (C): <u>25°</u> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> Custody Seal <u>N.Y.</u> Intact <u>N.Y.</u> Screened For Radioactivity <input type="checkbox"/>	1	2	3	4	5					
1	2	3	4		5																				
Sampler's Name <u>Jon Simpson</u>		Sampler's Signature <u>Jon Simpson</u>																							
Proj. No.	Project Name	No./Type of Containers <sup>a</sup>										Lab/Sample ID (Lab Use Only)													
		C o m p	G i b	Identifying Marks of Sample(s)		Y e s	A/G 1 LL	250 ml	P/O																
S 1/14 1530		X	1500 SB-4-S 190'-191'		3		1																		
S 1/14 1530		X	1500 SB-2-S 192'-193'		3		1																		
S 1/14 1530		X	1500 SB-2-S 200'-201'		3		1																		
S 1/14 1530		X	1500 SB-2-S 210'-211'		3		1																		
S 1/15 0620		X	1500 SB-2-S 220'-221'		3		1																		
S 1/15 0640		X	1500 SB-2-S 230'-231'		3		1																		
Relinquished by: (Signature) <u>Jon Simpson</u>		Date <u>1/15/10</u>	Time <u>1600</u>	Received by: (Signature) <u>Teller</u>		Date <u>1/15/10</u>	Time <u>1015</u>	Remarks  Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.																	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																		
Matrix: WW - Wastewater    W - Water    S - Sed    L - Liquid    A - Air bag    C - Charcoal Tube    SL - Sludge    O - Oil *Container: VOA - 40 ml vial    A/G - Amber / Or Glass 1 Liter    250 ml - Glass wide mouth    P/O - Plastic or other												TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919													

## CHAIN OF CUSTODY RECORD

Report to: Company: <u>Patterson Technologies, Inc.</u> Address: <u>220 Route 70 East</u> <u>Wheatfield, NJ 08525</u> Contact: <u>Kevin Dwyer</u> Phone: <u>(609) 714-2420</u> Fax: <u>(609) 714-2495</u> Contract/ Quote:		Invoice to: Company: <u>SAME</u> Address: _____ Contact: _____ Phone: _____ Fax: _____		ANALYSIS REQUESTED										Lab Use Only Due Date:							
				TTE Vee 50mL 2										Temp. of coolers when received (°C): <u>25</u>							
														1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>							
														Custody Seal <u>N/V</u> Intact <u>N/Y</u>							
														Screened For Radioactivity <input type="checkbox"/>							
Sampler's Name <u>Jon Simpson</u>		Sampler's Signature <u>Jon Simpson</u>												Lab/Sample ID (Lab Use Only)							
Proj. No.	Project Name <u>Lakehurst Aviation Superfund Site</u>			No./Type of Containers <sup>2</sup>																	
Matrix	Date	Time	Co-Ep	G - S	Identifying Marks of Sample(s)		A/G	1 LL	250 ml	P/O											
W	1/14	1330	X		1510-SB-2-GW 193'-194'		3														
W	1/14	1500	X		1510-SB-2-GW 200'-201'		2														
W	1/14	1600	X		1510-SB-2-GW 211'-212'		3														
W	1/14	1520	X		FB 100114		3														
W	1/14	1630	X		TB 100114		3														
W	1/15	0900	X		1510-SB-2-GW 221'-222'		3														
W	1/15	1130	X		1510-SB-2-GW 231'-232'		3														
W	1/15	0945	X		FB 100115		3														
Relinquished by: (Signature) <u>Jon Simpson</u>				Date <u>1/15/10</u>	Time <u>1000</u>	Received by: (Signature) <u>TestAmerica</u>	Date <u>1/16/10</u>	Time <u>1015</u>	Remarks												
Relinquished by: (Signature)				Date	Time	Received by: (Signature)	Date	Time													
Relinquished by: (Signature)				Date	Time	Received by: (Signature)	Date	Time													
				Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.																	
1-Matrix 2-Container	WW - Wastewater VOA - 40 ml vial	W - Water A/G - Amber / Or Glass 1 Liter	S - Soil 250 ml - Glass wide mouth	L - Liquid A - Air bag	C - Charcoal Tube P/O - Plastic or other	SL - Sludge	O - Oil	TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919													