

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



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

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 CVOOC concentrations in soil from the analytical data shows a direct correlation. Laboratory analytical data showed no detections above the MDLs for CVOOCs 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.

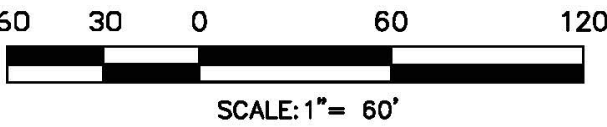
If anyone has questions regarding sample collection techniques, please feel free to contact Kevin Dyson at your earliest convenience at 609.714.2420 or by cell phone at 609.472.1276.

TABLES

NOTES:
1. PIPE INSTALLATION WITH LIMITS OF STATE RIGHT OF WAY TO BE BURIED MINIMUM 120" BELOW GRADE. REFER TO DETAIL 5, SHEET C-03.
2. RESTORATION WITHIN NYDOT RIGHT OF WAY TO BE COMPLETED IN ACCORDANCE WITH NYDOT STANDARD SPECIFICATION SECTION 107-08.

GENERAL NOTES
COORDINATES BASED ON HORIZONTAL SYSTEM
NAD '83, SPC (3104 NY L).
ELEVATIONS BASED ON VERTICAL DATUM NAVD '88.
FOR WELLS EW1, EW2, IW-01, IW-02, IW-03, IW-04 AND IW-05
THE ELEVATIONS ARE TAKEN ON THE EDGE OF HOLE ON THE INSIDE OF THE FLANGE.
ALL OTHER ELEVATIONS TAKEN ON THE NOTCH ON THE NORTH SIDE OF THE CASING.

WELL #	NORTHING	EASTING	ELEVATION
EW1	278985.42	1241213.95	219.30
EW2	279180.50	1241367.23	222.61
IW01	278204.79	1241693.86	225.99
IW02	278227.33	1241796.61	225.27
IW03	278152.12	1241790.03	224.99
IW04	278167.07	1241626.33	225.68
IW05	278150.73	1241759.26	224.48
IW-ISCO-1	278742.00	1241494.66	N/A
IW-ISCO-2	278783.55	1241521.54	N/A
IW-ISCO-3	278807.40	1241535.63	N/A
IW-ISCO-4	278768.69	1241453.64	N/A
IW-ISCO-5	278795.69	1241486.95	N/A
IW-ISCO-6	278810.50	1241462.48	N/A
IW-ISCO-7	278833.75	1241504.95	N/A
IW-ISCO-8	278870.09	1241500.51	N/A
IW-ISCO-9	278864.13	1241537.24	N/A
IW-ISCO-10	278897.45	1241521.28	N/A
IW-ISCO-11	278842.08	1241381.56	N/A
IW-ISCO-12	278884.16	1241408.31	N/A
IW-ISCO-13	278926.36	1241435.60	N/A
MW-ISCO-1	278873.76	1241383.84	228.11
MW-ISCO-2	278907.54	1241408.33	227.24
MW-ISCO-3	278849.85	1241526.94	228.50
MW-ISCO-4	278807.98	1241504.14	228.58
MW-ISCO-5	278760.26	1241498.63	228.43
PZ-01	278959.38	1242210.32	224.04
PZ-02	278477.20	1241653.38	226.99
PZ-03	276320.85	1242062.76	227.90
PZ-04	276697.26	1241742.80	224.63
PZ-05	276575.94	1241082.17	226.81
PZ-06	279037.80	1241413.68	230.20
PZ-07	279409.87	1241606.24	217.88



REV #	Revisions	Date	Approved
	AS-BUILT	12/10	
	ISSUED FOR CONSTRUCTION	5/19/10	
1	100 PERCENT DESIGN	3/19/10	
ARROWHEAD CONTRACTING INC. 10881 Eicher Drive Lenexa, Kansas 66219 (913) 814-9994		CDM FEDERAL PROGRAMS NEW YORK, NEW YORK	
Designed by: DLR		LAWRENCE AVIATION SUPERFUND SITE PORT JEFFERSON STATION, NEW YORK	
Drawn by: DLR		GROUNDWATER TREATMENT PLANT PROJECT SITE PLAN	
Checked by: GW		Reviewed by: SFS	
Submitted by: GW		Scale: AS SHOWN	Sheet reference number: C-01
		Spec. No.: -	Date: JANUARY 27, 2010
		Contract No.: -	Drawing Code: -

VERIFY SCALE
BAR IS ONE INCH
ON ORIGINAL
DRAWING
IF NOT ONE INCH
ON THIS SHEET,
ADJUST SCALES
ACCORDINGLY.

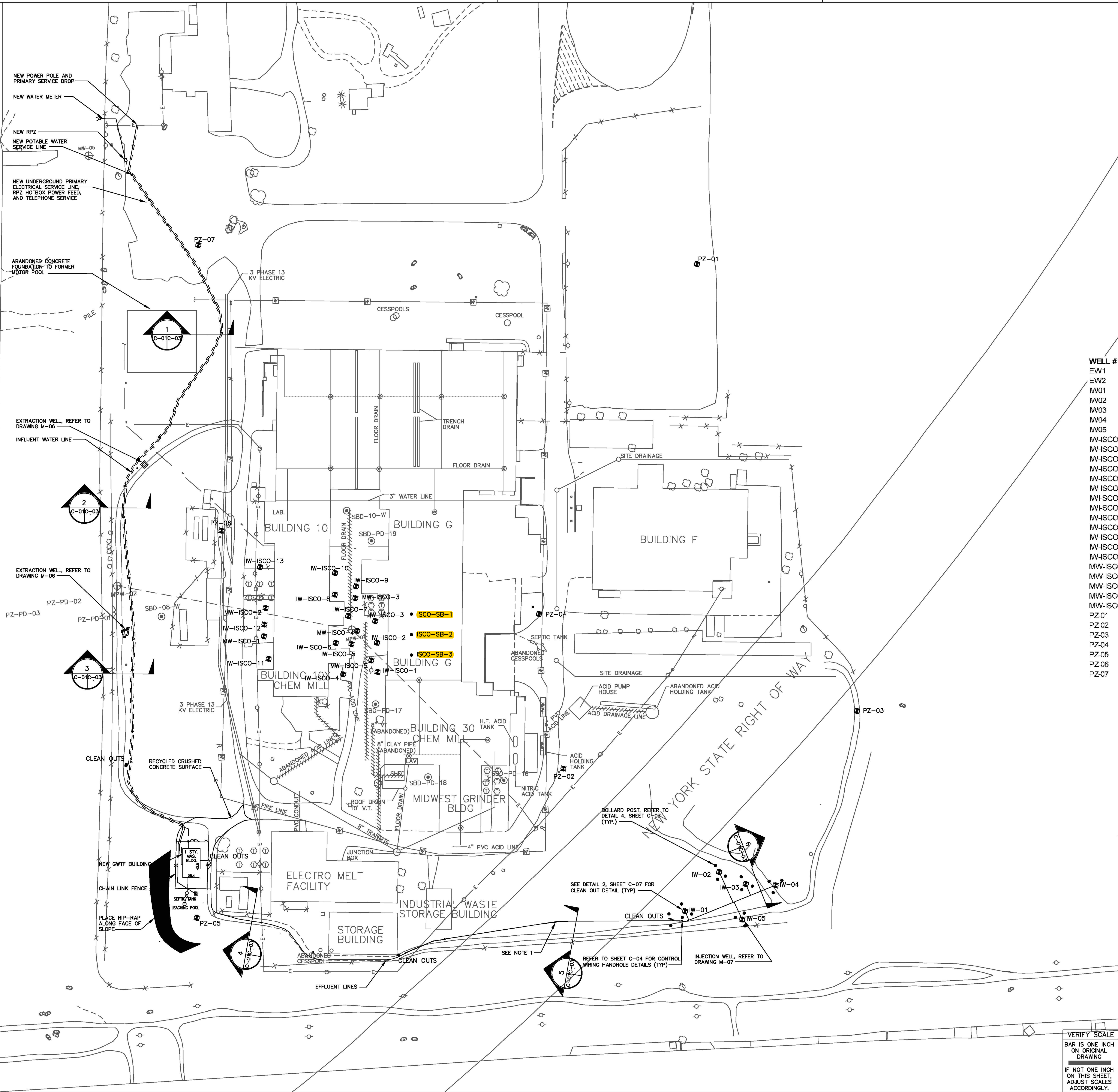


Table 1. Summary of Soil Sampling Analytical Results for Interior Exploratory Soil Borings ISCO-SB-02. Lawrence Aviation Superfund Site. Port Jefferson, New York.

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	

<i>TCL VOCs SOM1.2</i>	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
Bromochloromethane	74-97-5	ug/kg	5.0	U	5.0	U
Bromodichloromethane	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
Dibromochloromethane	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-Dichloroethene	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:			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	
<i>TCL VOCs SOM01.2</i>	CAS Number	Units										
Acetone	67-64-1	ug/l	5.0	U	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
Bromochloromethane	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	0.5	U	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
Dibromochloromethane	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
1,2,4-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 TIC, Volatile	Not Available	ug/l	17.6	NJXB	3.6	JX	3.4	JX	3.7	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.

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

<i>TCL VOCs SOM1.2</i>	CAS Number	Units		
Acetone	67-64-1	ug/kg	10	U
Benzene	71-43-2	ug/kg	5.0	U
Bromochloromethane	74-97-5	ug/kg	5.0	U
Bromodichloromethane	75-27-4	ug/kg	5.0	U
Bromoform	75-25-2	ug/kg	5.0	U
Bromomethane	74-83-9	ug/kg	5.0	U
2-Butanone (MEK)	78-93-3	ug/kg	10	U
Carbon disulfide	75-15-0	ug/kg	5.0	U
Carbon tetrachloride	56-23-5	ug/kg	5.0	U
Chlorobenzene	108-90-7	ug/kg	5.0	U
Chloroethane	75-00-3	ug/kg	5.0	U
Chloroform	67-66-3	ug/kg	5.0	U
Chloromethane	74-87-3	ug/kg	5.0	U
Cyclohexane	110-82-7	ug/kg	5.0	U
1,2-dichlorobenzene	95-50-1	ug/kg	5.0	U
1,3-dichlorobenzene	541-73-1	ug/kg	5.0	U
1,4-dichlorobenzene	106-46-7	ug/kg	5.0	U
Dibromochloromethane	124-48-1	ug/kg	5.0	U
1,2-Dibromo-3-chloropropane	96-12-8	ug/kg	5.0	U
Dichlorodifluoromethane	75-71-8	ug/kg	5.0	U
1,2-Dibromoethane	106-93-4	ug/kg	5.0	U
1,1-Dichloroethane	75-34-3	ug/kg	5.0	U
1,2-Dichloroethane	107-06-2	ug/kg	5.0	U
1,1-Dichloroethene	75-35-4	ug/kg	5.0	U
cis-1,2-Dichloroethene	156-59-2	ug/kg	5.0	U
trans-1,2-Dichloroethene	156-60-5	ug/kg	5.0	U
1,2-Dichloropropane	78-87-5	ug/kg	5.0	U
cis-1,3-Dichloropropene	10061-01-5	ug/kg	5.0	U
trans-1,3-Dichloropropene	10061-02-6	ug/kg	5.0	U
1,4-Dioxane	123-91-1	ug/kg	100	U
Ethylbenzene	100-41-4	ug/kg	5.0	U
2-Hexanone	591-78-6	ug/kg	10	U
Isopropylbenzene	98-82-8	ug/kg	5.0	U
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/kg	10	U
Methyl Acetate	79-20-9	ug/kg	5.0	U
Methylene chloride	75-09-2	ug/kg	5.0	U
Methylcyclohexane	108-87-2	ug/kg	5.0	U
Methyl Tert-Butyl Ether	1634-04-4	ug/kg	5.0	U
Styrene	100-42-5	ug/kg	5.0	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	5.0	U
Tetrachloroethene	127-18-4	ug/kg	5.0	U
Toluene	108-88-3	ug/kg	5.0	U
1,2,4-Trichlorobenzene	120-82-1	ug/kg	5.0	U
1,2,3-Trichlorobenzene	87-61-6	ug/kg	5.0	U
1,1,1-Trichloroethane	71-55-6	ug/kg	5.0	U
1,1,2-Trichloroethane	79-00-5	ug/kg	5.0	U
Trichloroethene	79-01-6	ug/kg	5.0	U
Trichlorofluoromethane	75-69-4	ug/kg	5.0	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug/kg	5.0	U
Vinyl chloride	75-01-4	ug/kg	5.0	U
o-Xylene	95-47-6	ug/kg	5.0	U
m&p-Xylene	179601-23-1	ug/kg	5.0	U
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		1/7/2010	
Depth Interval (ft BGS)			193		201-202				211-212				221-222		221-222		231-232	
TCL VOCs SOM01.2	CAS Number	Units																
Acetone	67-64-1	ug/l	13		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	U
Bromochloromethane	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	U
Bromodichloromethane	75-27-4	ug/l	0.91		1.2		1.3	DJ	1.3	J	1.1	DJ	1.3		1.2		0.79	
Bromoform	75-25-2	ug/l	0.36	J	0.42	J	1.9	U	0.38	J	2.2	U	0.46	J	0.37	J	0.33	J
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	U
2-Butanone (MEK)	78-93-3	ug/l	5.0	U	2.0	J	19	U	3.3	J	22	U	1.7	J	1.6	J	2.4	J
Carbon disulfide	75-15-0	ug/l	0.5	U	0.49	J	1.9	J	0.39	J	2.2	U	0.5	U	0.5	U	0.35	J
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	U
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	U
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	U
Chloroform	67-66-3	ug/l	0.84		1.1		1.2	DJ	1.3		1.3	DJ	1.2	J	1.3		0.69	
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	U
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	U
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	U
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	U
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	U
Dibromochloromethane	124-48-1	ug/l	1.0		1.2		1.2	DJ	1.2	J	1.1	DJ	1.3		1.1		0.87	
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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
2-Hexanone	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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
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	U
Toluene	108-88-3	ug/l	0.5	U	0.24	J	1.9	J	0.5	U	2.2	U	0.5	U	0.5	U	0.5	U
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	U
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	U
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	U
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	U
Trichloroethene	79-01-6	ug/l	0.40	J	1.1		1.4	DJ	1.3		1.3	DJ	1.0		1.1		0.57	
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	U
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	U
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	U
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	U
m&p-Xylene	179601-23-1	ug/l	0.36	J	0.38	J	1.9	U	0.5	U	2.2	U	0.5	U	0.5	U	0.5	U
Total TIC, Volatile	Not Available	ug/l	13.55	NJXB	104.93	NJXB	170	NJXB	110.74	NJXB	154.1	NJXB	24.18	NJXB	22.76	NJXB	26.23	NJXB

Notes

(1) - VBLKMC, VBLKMD, VBLKMH are method blanks and VHBK01 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.

TCL VOCs SOM01.2	CAS Number	Units					1			1				1			1			
Acetone	67-64-1	ug/l	99			5.0	U		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		0.5	U	
Bromochloromethane	74-97-5	ug/l	0.5	U		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		0.5	U	
Bromoform	75-25-2	ug/l	0.5	U		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		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		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		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		0.5	U	
Chlorobenzene	108-90-7	ug/l	0.5	U		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		0.5	U	
Chloroform	67-66-3	ug/l	0.5	U		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		0.5	U	
Cyclohexane	110-82-7	ug/l	0.5	U		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		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		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		0.5	U	
Dibromochloromethane	124-48-1	ug/l	0.5	U		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		0.5	U	
Dichlorodifluoromethane	75-71-8	ug/l	0.5	U		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		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		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		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		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		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		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		0.5	U	
cis-1,3-Dichloropropene	10061-01-5	ug/l	0.5																	

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

Italics and grey shading indicates compounds detected above MDL.

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			LITHOLOGIC BORING LOG: Page (1) of (3)					ISCO SB 03						
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	PID							
10		FILL	0-6" Concrete, 6" to 5' Reworked/disturbed gravel & sand	10'- 12'	8"	>75/12"	0	Borehole grouted 1/8/10 via pressure methods from bottom to ground surface. Slurry consisted of 100% bentonite grout (CEICO "PureGold"). Borehole volume equivalent approximately 575 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.						
		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.											
20		GW	14'- grades to sandy gravel, very compact/hard, poor sorting less gravel with depth.	20'- 22'	<3"	75/12"	0							
		SW	GRAVELLY SAND; silty vfg to coarse sand, w/ fine gravel, v well graded.											
30				30'-32'	NR									
40		SW/G	GRAVELLY SAND/SANDY GRAVEL; fine to coarse sand, to coarse sand, very well graded, dense very compact, angular sub-round.	40'-42'	6"	>100/12"	0							
50				50'-52'	4"	>100/12"	0							
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	60'-62'	6"	>100/12"	0							
70				70'-72'	NR									
80		SW	SAND; lt brn, fine to coarse sand w/ some silt, trace to sparse	80'-82'	6"	>100/12"	0							

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page (2) of (3)					ISCO SB-03	
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre-Remedial Soil Borings			LOCATION: N G.S. ELEV.: 229' BGS H DATUM:		E M.P. ELEV.: 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	PID		
90		GW/S	GRAVELLY SAND; Lt to med brn, gravel increasing with					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.	
			86'- with large cobbles.						
100		GW/S	SANDY GRAVEL/GRAVELLY SAND, with small to large	90'- 92'	NR	>100/12"			
			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	110'-	NR	>100/12"	0		
			v dense, well graded, poorly sorted, sub rd to angular.						
120		SW/G	GRAVELLY SAND/SANDY GRAVEL; fine to coarse sand,	120'-122'	NS				
			to coarse sand, very well graded, dense very compact, angular						
130			sub-round.	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	160'-162'	NR"	>100/12"	0		
			v dense,						

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page (3) of (3)					ISCO SB-03	
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre-Remedial Soil Borings			LOCATION: N G.S. ELEV.: 229' BGS H DATUM:		E M.P. ELEV.: 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	PID		
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	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.	
		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" >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									

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY	LITHOLOGIC BORING LOG: Page (1) of (3) ISCO SB 02
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	
10		FILL	0-6" Concrete, 6" to 5' Reworked/disturbed gravel & sand	10'- 12'	3"	>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.
		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		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				30'-32'	NR			
40		SW	40'- less fines w/ depth 48'-56', gravel seams.	40'-42'	7"	>100/12"	0	
50				50'-52'	NR	>100/12"		
60		SW/G	GRAVELLY SAND; fine to coarse sand, fine to med gravel, very well graded, sub ang to rd.	60'-62'	NR	>100/12"		
70	SW	SAND; vfg to coarse, w/ some to minor f gravel. Less gravel w/ depth.	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		

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page (2) of (3) ISCO SB 02					
PROJECT NUMBER: J 303001 AREA REF NAME/LOCATION: ISCO Pre-Remedial Soil Borings			LOCATION: N G.S. ELEV.: 229' BGS H DATUM:		E M.P. ELEV.: 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			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				100-102	NR	>100/12"		
		GW/S	GRAVELLY SAND/SAND; fg to coarse sand, f to coarse gravel, w/ some cobbles. Very dense to hard.					
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 1/113/10)	140-142	NR	>100/12"		
		GW/S	GRAVELLY SAND/SAND; tan, vfg to coarse sand, f to med less fines, hard, well graded, ang to sub-rd.					
150				150-152	6"	>100/12"	0	
160			160'- less fines, well graded.	160-162	4"	>100/12"	0	

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page (3) of (3)					ISCO SB 02						
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							
170		GW/S	GRAVELLY SAND/SAND; (cont'd) 170'- as above, v dense/hard. 95,'- gravel increasing, very silty.	170-172	NR	>100/12"		Borehole grouted 1/1510 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 to15 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.						
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.	190-192 192-193 193	NR 3" HP	>100/12" >100/12"	0							
200				200-210 202	9" HP	>100/12"	0							
210			(210' - Total Drilled Depth 1/14/10) .	210-212 212	4" HP	>100/12"	0							
220			220'- tan lt brown, vfg to fg, v dense, minor coarse sand, grading finer with depth	220-222 222	6" HP	>100/12"	0							
230			(232' – BORING TOTAL DEPTH) .	230-232 232	5" HP	>100/12"	0							
240														

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page (1) of (2)					ISCO SB-01						
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	PID							
10		FILL	0-6" Concrete; 6" disturbed/reworked sand w/ silt and gravel.	10'-12'	7"	>100/12"	0	Borehole grouted 2/19/10 via pressure methods from 56' BGS to ground surface. Slurry consisted of 100% bentonite grout (CEITCO "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.						
		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							

PROJECT: Lawrence Aviation SPFD Site LOCATION: Port Jefferson, NY			LITHOLOGIC BORING LOG: Page (2) of (2)					ISCO SB-01						
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	PID							
90		SW	GRAVELLY SAND (cont'd), lt to med brown, vfg to coarse, 94'- gravel increase, 96'- with cobbles/boulders. 98'- Immediately lost circulation & all borehole fluids	90'-92'	5"	>100/12"	0	Borehole grouted 2/19/10 via pressure methods from 56' BGS to ground surface . Slurry consisted of 100% bentonite grout (CEITCO "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.						
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												
120		Fluid/slurry level up to ground surface; all fluid lost after 3 hr period.												
130														
140														
150														
160														

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

DATA VALIDATION FOR: Volatile Organic Compounds (VOC's)

SITE: Lawrence Aviation Superfund Site

CONTRACT LAB: Test America Laboratories, Inc.
South Burlington, VT

PROJECT NO.: 135376

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: March, 2010

MATRIX: Aqueous, Non-Aqueous

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 NaHS04 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 not 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 there 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 ± 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 ± 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

FIELD SAMPLE ID**LABORATORY ID**

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) <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	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	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

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
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	=====	=====	=====	=====	=====
02		Unknown	10.84	92	JXB
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) <u>ug/kg</u>	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	U
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

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	=====	=====	=====	=====	=====
02		Unknown	10.84	74	JXB
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.: IASS

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) <u>ug/kg</u>	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	Trichlorofluoromethane	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	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	Bromochloromethane	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

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 or 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)

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

Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	=====	=====	=====	=====	=====
02		Unknown	10.84	90	JXB
03		Unknown	20.39	7.1	J
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 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	Bromochloromethane	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)

Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/kg
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

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	=====	=====	=====	=====	=====
02		Unknown	10.80	80 JXB	U
03		Unknown	20.39	5.6 J	
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 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	5.2	U
78-93-3	2-Butanone	10	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

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	=====	=====	=====	=====	=====
02		Unknown	10.84	77 JXB	U
03		Unknown	20.40	8.4 J	
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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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 193

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STL

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>WJ</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	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	0.84	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 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:		Q
		(ug/L or ug/kg)	ug/L	
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		0.50	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		1.0	
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		0.36	J
100-42-5	Styrene		0.50	U
75-25-2	Bromoform		0.36	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

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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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) 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	450	E
75-15-0	Carbon disulfide	0.49	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	2.0	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

SOM01.2

1B - FORM I VOA-2
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) 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					
18					
19					
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23					
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)

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	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	1.9	U
67-64-1	Acetone	380	D
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	1.9	U
78-93-3	2-Butanone	19	U
74-97-5	Bromochloromethane	1.9	U
67-66-3	Chloroform	1.2	DJ
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

SOM01.2

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) ug/L	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					
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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.

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)

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	
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	0.50	U
75-25-2	Bromoform	0.38	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

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

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 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	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					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
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)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
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		2.2	U
67-64-1	Acetone		500	D
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		2.2	U
78-93-3	2-Butanone		22	U
74-97-5	Bromochloromethane		2.2	U
67-66-3	Chloroform		1.3	DJ
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

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

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					
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.

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:		Q
		(ug/L or ug/kg)	ug/L	
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		47	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	Bromochloromethane		1.2	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.

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

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
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:		Q
		(ug/L or ug/kg)	ug/L	
79-01-6	Trichloroethene		0.57	
108-87-2	Methylcyclohexane		0.50	U
78-87-5	1,2-Dichloropropane		0.50	U
75-27-4	Bromodichloromethane		0.79	
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		0.87	
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		0.33	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

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

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 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					
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 DUP

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STLW 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	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	1.6	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.3	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 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
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	JXB
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					
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 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) 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	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	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.

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)	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	5.0	U
108-10-1	4-Methyl-2-pentanone	0.50	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

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	=====	=====	=====	=====	=====
02		Unknown	4.93	76	J
03		Unknown	10.45	3.6	JXB
04		Unknown	16.70	0.62	J
05		Unknown	17.28	1.5	J
06		Unknown	17.37	0.72	J
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	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) <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

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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: TESTAMERICA BURLINGTON

Contract: 29000

Lab Code: STL

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
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.

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

South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to: Company: <u>Butler Technologies</u> Address: <u>220 Route 70 Ste B</u> <u>Medford NJ 08055</u> Contact: _____ Phone: <u>(609) 714 2420</u> Fax: <u>(609) 714 2495</u> Contract/Quote: <u>KEVIN DYSON</u>		Invoice to: Company: _____ Address: <u>SAME</u> Contact: _____ Phone: _____ Fax: _____		ANALYSIS REQUESTED		Lab Use Only Due Date: _____ Temp. of coolers when received (C°): <table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table> Custody Seal N / Y Intact N / Y Screened For Radioactivity ☐		1	2	3	4	5
1	2	3	4	5								
Sampler's Name <u>JOEL SIMPSON</u>		Sampler's Signature <u>[Signature]</u>		Volatile Organic Soln 0.2								
Proj. No. _____		Project Name <u>Lawrence Aeration Sub-Fund Site</u>				No./Type of Containers ¹						
Matrix ⁴		Date	Time			Cmp	Grag	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O
S		1/6	1450			X		120 SB 03 192'-193'	3		1	
S		1/7	1530			X		150 SB 03 200'-201'	3		1	
S		1/7	1650	X		150 SB 03 210'-211'	3		1			
S		1/7	1730	X		150 SB 03 220'-221'	3		1			
Relinquished by: (Signature) <u>[Signature]</u>		Date <u>1/7/10</u>	Time <u>1530</u>	Received by: (Signature) <u>[Signature]</u>		Date <u>1/8/10</u>	Time <u>145</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.				
*Matrix		WW - Wastewater	W - Water	S - Soil	L - Liquid	A - Air bag	C - Charcoal Tube	SL - Sludge	O - Oil	TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919		
*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

[illegible]

Report to: Company: <u>PANTHER TECHNOLOGIES</u> Address: <u>220 ROUTE 70 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>		Invoice to: Company: _____ Address: <u>SAME</u> Contact: _____ Phone: _____ Fax: _____		ANALYSIS REQUESTED VOLUMES SUM 01.2										Lab Use Only Due Date: _____ Temp. of coolers when received (C°): <table border="1" style="width:100%; text-align: center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> Custody Seal N / Y Intact N / Y Screened For Radioactivity ☐					1	2	3	4	5
1	2	3	4	5																			
Sampler's Name		Sampler's Signature																					
Proj. No.		Project Name										No / Type of Containers ²					Lab / Sample ID (Lab Use Only)						
Matrix ¹	Date	Time	C	G	Identifying Marks of Sample(s)	VOA	A/G 1 L	250 ml	P/O														
W	1/6	1830		X	1500 SB 03 193'	1																	
W	1/7	0445		X	1500 SB 03 201'-202'	3																	
W	1/7	1145		X	1500 SB 03 211'-212'	3																	
W	1/7	1450		X	1500 SB 03 221'-222'	3																	
W	1/7	1600		X	1500 SB 03 231'-232'	2																	
W	1/7			X	1500 SB 03 DUPLICATE	3																	
W	1/6	1600		X	1500 SB 03 EQUIP BLANK	2																	
W	1/7	1600		X	TRIP BLANK	2																	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	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																
¹ Matrix	WW - Wastewater	W - Water	S - Soil	L - Liquid	A - Air bag	C - Charcoal Tube	SL - Sludge	O - Oil	TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919														
² Container	VOA - 40 ml vial	A/G - Amber / Or Glass 1 Liter	250 ml - Glass wide mouth	P/O - Plastic or other																			

TestAmerica Burlington
SAMPLE RECEIPT & LOG IN CHECKLIST

Client: <u>PAN TEC</u>	Date Received: <u>1/09/10</u>	Log In Date: <u>1/8/10</u>
ETR: <u>135376</u>	Time Received: <u>1800</u>	By: <u>[Signature]</u>
SDG: <u>135376</u>	Received By: <u>VP</u>	Signature: <u>[Signature]</u>
Project: <u>74000</u>	# Coolers Received: <u>1</u>	PM Signature: <u>[Signature]</u>
Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Hand ☐ 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	☒			
Custody seals are present and intact		☒		
Custody seal numbers are present				
If yes, list custody seal numbers:				

Thermal Preservation Type: Wet Ice ☒ Blue Ice ☐ None ☐ Other Specify

IR Gun ID:	Wet Ice	Blue Ice	None	Other Specify
<u>96</u>				
Correction Factor (CF) = <u>0</u>				
Cooler 1: <u>47</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	☒			
Legible sample labels are affixed to each container	☒			

	YES	NO	NA	COMMENTS
--	-----	----	----	----------

CHAIN OF CUSTODY (COC)

COC is present and includes the following information for each container:

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

Internal Chain of Custody (ICOC) Required

If yes to above, ICOC Record Initiated for every Worksheet

	YES	NO	NA	COMMENTS
--	-----	----	----	----------

SAMPLE INTEGRITY / USABILITY

The sample container matches the COC	☒			
Appropriate sample containers were received for the tests requested	☒			
Samples were received within holding time	☒			
Sufficient amount of sample is provided for requested analyses	☒			
VOA vials do not have headspace or a bubble >8mm (1/4" diameter)			☒	
Appropriate preservatives were used for the tests requested			☒	
pH of inorganic samples checked and is within method specification			☒	

If no, attach Inorganic Sample pH Adjustment Form

ANOMALY / INCR SUMMARY

707/915 for sample ISLO SR03 710-711' is initially listed as on the receipt on 1/8/10. Sample logged at PM 1/8/10, received and placed into storage on 1/9/10.

TestAmerica Burlington SAMPLE RECEIPT & LOG IN CHECKLIST					
Client: PANTEC		Date Received: 1/8/10		Log In Date: 01/08/10	
ETR: 135376		Time Received: 015		By: [Signature]	
SDG: 135376		Received By: CRM		Signature: [Signature]	
Project: 296000		# Coolers Received: 1		PM Signature: [Signature]	
Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)				Date: 1/8/10	
List Air bill Number(s) or Attach a photocopy of the Air Bill:					
COOLER SCREEN					
There is no evidence to indicate tampering		YES	NO	NA	COMMENTS
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) = 0 °C			
Cooler 1: 4.9 °C	Cooler 6	Cooler 11	Cooler 16	Cooler 21	
Cooler 2: °C	Cooler 7	Cooler 12	Cooler 17	Cooler 22	
Cooler 3: °C	Cooler 8	Cooler 13	Cooler 18	Cooler 23	
Cooler 4: °C	Cooler 9	Cooler 14	Cooler 19	Cooler 24	
Cooler 5: °C	Cooler 10	Cooler 15	Cooler 20	Cooler 25	
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					
Sample containers were received intact		YES	NO	NA	COMMENTS
Legible sample labels are affixed to each container		X			
CHAIN OF CUSTODY (COC)					
COC is present and includes the following information for each container:		YES	NO	NA	COMMENTS
• Sample ID / Sample Description		X			
• Date of Sample Collection		X			
• Time of Sample Collection		X			
• Identification of the Sampler			X		Only on 1 of 2 COCs.
• Preservation Type			X		
• Requested Tests Method(s)		X			
• Necessary Signatures		X			
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		YES	NO	NA	COMMENTS
Appropriate sample containers were received for the tests requested			X		See below
Samples were received within holding time		X			See below
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 / NCR SUMMARY					
Did not receive 202 jar label on COC for sample TSC0 SB03 210'-211' Received sample not listed on COC. Labels for TSC0 SB03 230'-231' with date addition of 01/07/10 at 1515. Date time and 20 Rm label used R-1515. Sample label on 202 jar for TSC0 SB03 192'-193' listed time and 1445, listed with 1st of 1445 Rm COC, matches R-1445 sample match COC. 2nd 9 Enclosures for sample TSC0 SB03 220'-221' have labels listing 30 R-1445 SB03 221'-222', date and time on label matches COC, listed with 30 R-1445. Because sample TSC0 SB03 210'-211' was not sampled with 202 jar, no % solids can be run. Sample TSC0 SB03 193' needs only one vial, listed with 1st Sample 30 R-1445 at 1445 due to laboratory restrictions, all first markers removed.					

Enclosures placed in VOA Ridge 2464 on 01/08/10 at 1145

Carabillo, Joseph

From: Jonathan Simpson [jsimpson@panthertech.com]
Sent: Monday, January 11, 2010 8:50 AM
To: Carabillo, Joseph
Subject: RE: Lawrence 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 container 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 enclosures labeled as ISCO 221-222. Depth indicated on COC is accurate, the 2
enclosure samples in question were mislabeled, please report results for those samples as as depth ~~220' 230'~~ *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.

Thank you for addressing all these issues

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

From: Carabillo, Joseph [Joseph.Carabillo@testamericainc.com]
Sent: Friday, January 08, 2010 4:32 PM
To: Jonathan Simpson
Cc: Matot, Wade
Subject: Lawrence 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 enclosures 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

1/11/2010

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

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

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 NaHSO₄ 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 not 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 there 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 ± 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 ± 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

FIELD SAMPLE ID**LABORATORY ID**

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) 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	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	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.

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
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	=====	=====	=====	=====	=====
02		Unknown	10.82	88	JXB
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.

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	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	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) 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.

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	=====	=====	=====	=====	=====
02		Unknown	10.82	97 JXB	
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) <u>ug/kg</u>	Q
75-71-8	Dichlorodifluoromethane	5.8	U
74-87-3	Chloromethane	5.8	U
75-01-4	Vinyl chloride	5.8	U
74-83-9	Bromomethane	5.8	U
75-00-3	Chloroethane	5.8	U
75-69-4	Trichlorofluoromethane	5.8	U
75-35-4	1,1-Dichloroethene	5.8	U
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	Bromochloromethane	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

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) <u>ug/kg</u>	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) ug/kg	Q
75-71-8	Dichlorodifluoromethane	5.3	U
74-87-3	Chloromethane	5.3	U
75-01-4	Vinyl chloride	5.3	U
74-83-9	Bromomethane	5.3	U
75-00-3	Chloroethane	5.3	U
75-69-4	Trichlorofluoromethane	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
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	Bromochloromethane	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) 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	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					
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.

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: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/kg	
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	13	U	
108-10-1	4-Methyl-2-pentanone	6.3	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	13	U	
591-78-6	2-Hexanone	6.3	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: STL

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) <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	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	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

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					
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.

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

1B - FORM I VOA-2
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:		Q
		(ug/L or ug/kg)	ug/L	
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		5.0	U
124-48-1	Dibromochloromethane		0.36	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.

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 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	=====	=====	=====	=====	=====
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

EPA SAMPLE NO.

SB2GW200-201

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: 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

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: 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 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:		Q
		(ug/L or ug/kg)	ug/L	
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

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) 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

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) 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	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) 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	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	=====	=====	=====	=====	=====
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					
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.

TB100114

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: 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: STL

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
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.

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					
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.

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
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.

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:		Q
		(ug/L or ug/kg)	ug/L	
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					
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.

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:		Q
		(ug/L or ug/kg)	ug/L	
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.

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					
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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

CHAIN OF CUSTODY RECORD

Report to: Company: <u>Parsons Technologies, Inc.</u> Address: <u>220 Route 70 East</u> <u>Windsor, VT 05095</u> Contact: <u>Kevin Dyson</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 TEL VOC 50ml.2				Lab Use Only Due Date: Temp. of coolers when received (C°): <u>25°</u> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> Custody Seal ☒ N ☒ Y Intact ☒ N ☒ Y Screened For Radioactivity ☐				1	2	3	4	5
1	2	3	4	5																
Sampler's Name: <u>Jon Simpson</u>				Sampler's Signature: <u>[Signature]</u>																
Proj. No.		Project Name: <u>Lawrence Aviation Superfund Site</u>				No/Type of Containers ²														
Matrix ¹	Date	Time	COB	G	Identifying Marks of Sample(s)	A/G	250	P/O	Lab/Sample ID (Lab Use Only)											
						1 L	ml													
W	1/14	1530	X		ISO-SB-2-6W 193'-194'	3			TEL VOC 50ml.2											
W	1/14	1500	X		ISO-SB-2-6W 200'-201'	2														
W	1/14	1600	X		ISO-SB-2-6W 211'-212'	3														
W	1/14	1520	X		FB100114	3														
W	1/14	1630	X		TB100114	3														
W	1/15	0800	X		ISO-SB-2-6W 221'-222'	3														
W	1/15	1130	X		ISO-SB-2-6W 231'-232'	3														
W	1/15	0745	X		FB100115	3														
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Date	Time	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											
¹ Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil ² 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																	

L00114228-TVL