

**Bush Industries, Inc.  
Annual Summary Report for 2008 Groundwater  
Monitored Natural Attenuation Program for  
312 Fair Oak Street  
Little Valley, New York**

*Submitted to:*  
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*Submitted by:*  
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Project 6191

**AMEC Geomatrix**

## **EXECUTIVE SUMMARY**

Amec Geomatrix, Inc. (Amec) has been retained by Bush Industries, Inc. (Bush Industries) to conduct the 2008 Monitored Natural Attenuation (MNA) Program for groundwater at the property located at 312 Fair Oak Street, Little Valley, New York. The work was conducted pursuant to and in accordance with the Amended and Supplemental Order (File No.: 96-07 R9-4314-96-06) agreed to between Bush Industries and the New York State Department of Environmental Conservation (NYSDEC).

The subject property is located within the Little Valley Superfund Site (LVSS). The LVSS is currently being addressed by the United States Environmental Protection Agency (USEPA). The Record of Decision (ROD) for the LVSS specifies MNA as the remedy for trichloroethene (TCE) contaminated groundwater measured throughout the LVSS. The USEPA MNA remedy includes groundwater sampling on properties located throughout the LVSS including 312 Fair Oak Street. Bush Industries has agreed to conduct the MNA sampling on this property in accordance with the Amended and Supplemental Order. This report presents the validated results of the annual MNA sampling event conducted on the property by Amec in September 2008.

The results of the 2008 MNA sampling event for the property indicate that the natural attenuation process is occurring. The presence of daughter products and methane in groundwater samples reflect the reductive dechlorination which is occurring in groundwater at the property. The 2008 results indicate concentrations of TCE and daughter products in groundwater are within the historical ranges in each well and do not appear to be increasing.

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**ANNUAL SUMMARY REPORT FOR 2008 GROUNDWATER MONITORED NATURAL  
ATTENUATION PROGRAM**

312 Fair Oak Street  
Little Valley, New York

**1.0 INTRODUCTION**

**1.1 BACKGROUND AND SITE DESCRIPTION**

Amec Geomatrix, Inc. (Amec) has been retained by Bush Industries, Inc. (Bush Industries) to conduct the 2008 Monitored Natural Attenuation (MNA) Program for groundwater at the property located at 312 Fair Oak Street, Little Valley, New York. The work was conducted pursuant to and in accordance with the Amended and Supplemental Order (File No.: 96-07 R9-4314-96-06) agreed to between Bush Industries and the New York State Department of Environmental Conservation (NYSDEC).

The subject property is located within the Little Valley Superfund Site (LVSS). The LVSS is currently being addressed by the United States Environmental Protection Agency (USEPA). The Record of Decision (ROD) for the LVSS specifies MNA as the remedy for TCE contaminated groundwater measured throughout the LVSS.

A topographic map of the Site and surrounding area prepared from a 7.5 minute series U.S. Geological Survey map is presented in Figure 1. The Site is situated on a 9.4 acre lot, and contains three contiguous buildings (see Figure 2). The USEPA MNA remedy includes groundwater sampling on properties located throughout the LVSS, including the property at 312 Fair Oak Street. Bush Industries has agreed to conduct the MNA sampling on this property in accordance with the Amended and Supplemental Order.

As NYSDEC was notified by letter dated September 15, 2008, Bush Industries entered into a contract to sell its land and improvements at 312 Fair Oak Street, Little Valley, N.Y. That transaction was completed on November 12, 2008. Bush Industries retained all rights-of-entry and authorization for Bush Industries (and NYSDEC) to continue to perform its obligations under the Amended and Supplemental Order. Also, deed restrictions have been placed upon the property prohibiting the use of groundwater. The current owner of the property is H2K Ventures, with addresses of 297 Howard Avenue, Jamestown, N.Y., and 312 Fair Oak Street, Little Valley, N.Y.

## **1.2 PREVIOUS SITE INVESTIGATIONS**

Bush Industries has conducted an extensive investigation of groundwater conditions at the 312 Fair Oak Street Site in concert with NYSDEC. Results are documented in the report entitled Groundwater Evaluation Report, prepared by Conestoga-Rovers & Associates (CRA) and dated February 21, 2000. The findings presented in the Groundwater Evaluation Report are summarized as follows:

1. The highest concentrations of TCE and its degradation products remain in the interior of the Site. There is a residual low level presence of TCE and its degradation products in the interior of the Site with concentrations in groundwater dropping precipitously along the downgradient flow path.
2. Concentrations of TCE at the downgradient perimeter of the Site are approximately equal to or below the New York State Groundwater criterion.
3. This distribution trend (rapidly declining concentrations with distance from the interior of the Site) indicates that natural attenuation processes occur limiting constituent migration and the Site does not pose a significant threat to downgradient groundwater quality.

The Groundwater Evaluation Report was approved by NYSDEC in March 2000. In May 2000, Bush Industries submitted the Remediation Report prepared by Geomatrix Consultants. The Remediation Report recommended implementation of an annual MNA sampling program at the Site. That Remediation Report was approved by NYSDEC in July 2007, along with EPA's concurrence.

## **1.3 MNA PROGRAM OBJECTIVES**

The objectives of the natural attenuation monitoring are to:

1. Perform annual monitored natural attenuation (MNA) sampling events
2. Evaluate historic and new analytical data to monitor natural attenuation at the Site

## **2.0 WORK PERFORMED**

### **2.1 MNA SCOPE OF WORK**

The MNA monitoring work to be performed at the 312 Fair Oak Street Site is specified in the following documents:

*Final Remedial Action Work Plan for the Little Valley Superfund Site*

Contract Number:68-W-98-214

Prepared by Tetra Tech EC, Inc.

Dated October 2006

*Quality Assurance Project Plan Addendum for the Little Valley Superfund Site*

Contract Number:68-W-98-214

Prepared by Tetra Tech EC, Inc.

Dated September 2006

*Work Plan for Natural Attenuation Monitoring, Bush Industries, Inc.*

Prepared for Bush Industries, Inc.

Prepared by Geomatrix Consultants

Dated July 2007

The latter document prepared by Geomatrix governs the specific sampling program for the Site and is referred to herein as the Work Plan. In order to facilitate direct comparison of the Site analytical results with results from other wells within the LVSS sampled by USEPA, the sampling methods, analytical methods and QA/QC protocols specified by USEPA for the LVSS remediation are utilized for the Bush Industries MNA monitoring and are incorporated into the Work Plan.

In accordance with the Work Plan, the MNA Program for groundwater at the 312 Fair Oak Street Site includes the following:

1. Annual groundwater sampling events for the following wells: MW-D1, MW-D2, MW-2, MW-3, MW-5 and MW-6. Monitoring well locations are shown of Figure 2.
2. Sampling of wells using low flow methodology in accordance with the Work Plan
3. Analyses of samples for the following MNA analyses: Volatile Organic Chemicals (VOCs), alkalinity, sulfate, sulfide, nitrate, chloride, total organic carbon, ferrous iron, ethane, ethene and methane. The analytical program and methodology is summarized in Table 1 (except deviations as noted in Section 2.2, below).
4. Data validation.

## 5. Data evaluation and reporting.

These tasks are described in detail in the Work Plan.

### **2.2 2008 MNA GROUNDWATER SAMPLING EVENT**

Amec Geomatrix personnel conducted the annual MNA sampling event for the Site on September 25, 2008. Water level measurement, equipment decontamination, and low flow purge methods were in accordance with the work plan. Purge records are included in Table 2.

Deviations from the Work Plan during the 2008 sampling event are listed below:

- Monitoring well MW-D1 contained less than 1 foot of water and therefore no sample was obtained.
- With the prior concurrence of NYSDEC (by e-mail from Linda Ross, NYSDEC, dated September 18, 2008), VOCs were analyzed using SW-846 Third Edition Methods with USEPA Contract Laboratory Program (CLP) deliverables.

Groundwater samples were analyzed in accordance with Table 1 (except as noted above) by Test America Buffalo Laboratory.

The data validation and usability are discussed in Section 3.1. Results are presented in Section 3.2.



### **3.0 SAMPLING EVENT RESULTS**

#### **3.1 DATA VALIDATION AND USABILITY**

The analytical results and data packages reported by the laboratory were validated by MECX, LPof Aurora, Colorado. Data validation was performed in accordance with the Work Plan based on an evaluation of method specific QC information (holding times, calibration records, laboratory and field blanks, duplicate precision, and surrogate and matrix spike recoveries), the most current version of the USEPA Region 2 Data Validation SOPs ([www.epa.gov/region02/desa/hsw/sops.htm](http://www.epa.gov/region02/desa/hsw/sops.htm)), the most current version of the EPA National Functional Guidelines ([www.epa.gov/superfund/programs/clp/guidance.htm](http://www.epa.gov/superfund/programs/clp/guidance.htm)) and the best professional judgment of the validator.

The Data Validation Report is included in its entirety in Appendix A. Results were deemed usable with appropriate qualifiers added (see Appendix A). The most notable qualification required was for the VOC results for samples from wells MW-2, MW-3, MW-5, and MW-D2. Method SW-846 laboratory holding times were exceeded by one day for these samples, reportedly due to an error in the laboratory tracking process (the sample receipt date was incorrectly entered instead of the sample collection date). This one day exceedance is not expected to have produced any significant error in the measured results. However, in accordance with the Work Plan and validation guidelines noted above, all VOC results for these wells were qualified as estimated (J qualifier added, see Table 4 and Appendix A).

#### **3.2 GROUNDWATER RESULTS**

##### **3.2.1 Hydraulic Head Measurements**

Groundwater hydraulic head measurements obtained September 25, 2008 are presented in Table 3. Figure 3 presents a potentiometric surface map prepared from these measurements. Groundwater flow is indicated to be toward the northeast and is consistent with prior measurement events.

##### **3.2.2 Analytical Results**

The validated analytical results are summarized in Table 4. Table 5 presents comparison criteria for detected constituents in groundwater used by USEPA for the LVSS. TCE and/or its reductive dechlorination products (cis-1,2-dichloroethene and vinyl chloride) were detected at or above the comparison criteria in 4 of the 5 wells sampled. No VOCs were detected in well MW-5.

The highest TCE concentration was measured in the sample from well MW-D2 (reported concentration of 93 J (estimated) ug/L). Well MW-D2 is located in the southeastern portion of the property. The reductive dechlorination product cis-1,2-dichloroethene was present above

1 ug/L in samples from 3 wells (42 J (estimated) ug/L in MW-2; 39 ug/L in MW-6; and 25 J (estimated) ug/L in MW-D2). The reductive dechlorination product vinyl chloride was detected in 2 wells (3 J (estimated) ug/L in MW-2; and 5 ug/L in MW-6).

At the downgradient property boundary (MW-3), TCE was detected at 5 J (estimated) ug/L (equal to the comparison criteria), and cis-1,2-dichloroethene was detected at 0.7 J (estimated) ug/L. No other VOCs were detected in well MW-3.

MNA parameter results are discussed in the following section.

## **4.0 CONTAMINANT TRENDS AND PROGRESS OF MNA**

### **4.1 CONTAMINANT TRENDS**

Table 6 presents historical sampling results for the six wells in the Bush Industries MNA sampling program. Figures 4 through 9 present time versus concentration plots depicting the historical trend of TCE and daughter products in the Bush Industries MNA monitoring wells. As shown on these figures, all 2008 sampling event results are within the range of historical values. Additional annual sampling data will be necessary to assess any long term trends in the MNA monitoring wells.

### **4.2 REDUCTIVE DECHLORINATION**

The data obtained during the September 2008 groundwater sampling event were reviewed to assess the potential for degradation of VOCs at the Site via reductive dechlorination. EPA's Technical Protocol (EPA, 1998) was used as a basis for much of the following assessment.

#### *Oxygen*

Anaerobic bacteria generally cannot function at dissolved oxygen (DO) concentrations above 0.5 mg/L, and reductive dechlorination will not occur. As indicated in Table 2, Stable DO measurements at the Site ranged from 2.1 mg/L to 8.4 mg/L.

#### *Nitrate*

After dissolved oxygen has been depleted, nitrate may be used as an electron acceptor for the biodegradation of organic compounds via denitrification. Areas of depressed nitrate concentrations within a groundwater plume may indicate biodegradation via nitrate reduction, while the presence of nitrate in groundwater can indicate a fairly aerobic environment. Nitrate concentrations in the contaminant plume should be less than 1 mg/L for reductive dechlorination to occur. Nitrate concentrations ranged from not detected (conductive) to 1.4 mg/L (not conductive).

#### *Ferrous Iron*

After nitrate, iron (III) may be used as an electron acceptor during anaerobic biodegradation, reducing the analyte to iron (II). Ferrous iron [iron (II)] concentrations were not detected in any wells.

#### *Sulfate/Sulfide*

After dissolved oxygen and nitrate depletion, sulfate may be used as an electron acceptor for anaerobic biodegradation (EPA, 1998). This "sulfate reduction" process produces sulfide, and concentrations of sulfide greater than 1 mg/L indicate a possible reductive pathway. Sulfate

concentrations ranged up to 21.2 mg/L. Sulfide was not detected in any well during the 2008 event.

#### *Methane/Ethane/Ethene*

EPA, 1998 states that methanogenesis (the reduction of carbon dioxide to methane) generally occurs after oxygen, nitrate, and sulfate have been depleted. Therefore, the presence of methane in groundwater is indicative of strongly reducing conditions. Two locations, MW-2 and MW-6, contained relatively low concentrations of methane in the 2008 event (0.20 mg/L, 0.0061 mg/L and 0.064 mg/L, respectively).

#### *Alkalinity*

Zones of microbial activity are typically identified by an increase in alkalinity, resulting from increased concentrations of carbon dioxide produced by the metabolism of microorganisms. According to EPA, 1998, a two-fold increase in alkalinity values over background numbers suggests biodegradation may be occurring. The minimum value for alkalinity (65.4 mg/L) was present in the sample from well MW-5, which is considered upgradient of the TCE presence at the Site. Well MW-5, therefore, was used as "background" for comparison. Samples from the following wells had concentrations more than twice the value in MW-5: MW-2, MW-3 and MW-D2.

#### *Oxidation-Reduction Potential*

The oxidation-reduction potential of groundwater is a relative measure of electron activity, and can influence rates of biodegradation. At less than 50 millivolts (mV), the reductive pathway is possible, and becomes more likely below -100 mV (EPA, 1998). Negative redox potentials were not measured in any wells during the 2008 event.

#### *pH and Temperature*

Metabolic activity of bacteria is affected by the pH and temperature of the groundwater. The optimal values for these parameters for reductive biodegradation is a pH between 6 and 8 and a temperature greater than 20°C. All of the wells had pHs in this optimum range. Stable values of water temperature during the 2008 sampling event were between 12°C and 14°C.

#### *Chloride*

Chloride is released as a breakdown product during the biodegradation of chlorinated compounds. Chloride ions do not typically enter into oxidation-reduction reactions, form no important solute complexes, do not form salts of low solubility, are not significantly adsorbed on mineral surfaces, and play few vital biochemical roles (EPA, 1998). As a result, significant increases in chloride concentrations relative to background (i.e., two times) may indicate the biodegradation of chlorinated compounds. Road salting also serves as a common, localized

source of chloride to aquifer systems. Well MW-5, which as indicated above is considered upgradient of the TCE presence at the Site, was used as “background” for comparison of the chloride values. MW-5 had a chloride concentration of 23.3 mg/L. The furthest downgradient well on the property (MW-3) had a chloride concentration of 46.0 mg/L. All other wells sampled had chloride concentrations below 40 mg/L.

#### *Total Organic Carbon*

The presence of natural or anthropogenic organic carbon can facilitate dechlorination, by acting as a carbon and energy source for aerobic microorganisms (which during aerobic respiration decrease dissolved oxygen levels, creating a reducing environment and increasing the potential for anaerobic bacteria to function). A TOC concentration of 20 mg/L is most favorable to dechlorination. TOC was not detected (at a detection limit 1.0 mg/L) in any wells during the 2008 event.

#### *Daughter Products*

Transformation of TCE via reduction dechlorination produces daughter products including 1,1-dichloroethene, 1,2-dichloroethene (cis- and/or trans-), and vinyl chloride. As described in Section 3.2, these daughter products were detected, suggesting that some dechlorination has occurred.

### **4.3 PROGRESS OF MNA AT THE SITE**

The presence of daughter products and methane in groundwater samples reflect the reductive dechlorination which has occurred in groundwater at the property.

The 2008 results indicate concentrations of TCE and daughter products in groundwater are within the historical ranges in each well and do not appear to be increasing.

The next annual report is due 90 days from completion of the 2009 yearly groundwater sampling, per the Work Plan.

## TABLES

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TABLE 1

**SAMPLE COLLECTION AND ANALYSIS PROTOCOLS**  
**312 Fair Oak Street, Little Valley, New York**

Page 1 of 2

<i>Sample Type</i>	<i>Matrix</i>	<i>Sampling Device</i>	<i>No. of Samples</i> <sup>(1)(2)</sup>	<i>Parameter</i>	<i>Sample Container</i> <sup>(3)(4)</sup>	<i>Sample Preservation</i>	<i>Analytical Method</i> <sup>(5)</sup>	<i>PQL</i>	<i>Holding Time</i> <sup>(6)</sup>
Groundwater	Water	Positive Displacement Submersible Pump	6	pH; temperature; specific conductivity DO; ORP; turbidity [Field Screening]	NA	NA	Direct Field Measurement Following SOP	NA	Analyze Immediately
			6	Low Concentration TCL Volatile Organic Compounds [CLP Lab]	(4) 40 mL VOA vials w/Teflon lined septum	1:1 HCl to pH<2; Cool to 4°C	SOM01.1	Compound specific (0.5 - 20 µg/L)	10 days
			6	Total Organic Carbon [DESA Lab]	(1) L amber glass	H <sub>2</sub> SO <sub>4</sub> to pH<2; Cool to 4°C	SW-846 Method 9060	1 mg/L	28 days*
			6	Alkalinity [DESA Lab]	(1) 1 L polyethelyene	Cool to 4°C	MCAWW Method 310.1	1 mg/L	14 days*
			6	Sulfate [DESA Lab]	(1) 1 L polyethelyene	Cool to 4°C	EPA 300.1	1 mg/L	28 days*
			6	Sulfide [DESA Lab]	(1) 1 L polyethelyene	NaOH to pH >12; 4 drops of zinc acetate per liter; Cool to 4°C	MCAWW Method 376.1	1 mg/L	7 days*
			6	Nitrate [DESA Lab]	(1) 1 L polyethelyene	Cool to 4°C	EPA 300.1	0.05 mg/L	48 hours*
			6	Chloride [DESA Lab]	(1) 1 L polyethelyene	Cool to 4°C	EPA 300.1	1 mg/L	28 days*
			6	Ferrous Iron [Sub Lab]	(1) 100 mL amber glass	2mL HCl; Cool to 4°C	Std. Methods Method 3500Fe-D	10 µg/L	24 hours*
			6	Ethane [Sub Lab]	(5) 40-mL VOA vials w/Teflon lined septum	Cool to 4°C	GC/FID (SW-846 Method 3810)	5 µg/L	7 days*
			6	Ethene [Sub Lab]	(5) 40-mL VOA vials w/Teflon lined septum	Cool to 4°C	GC/FID (SW-846 Method 3810)	5 µg/L	7 days*
			6	Methane [Sub Lab]	(5) 40-mL VOA vials w/Teflon lined septum	Cool to 4°C	GC/FID (SW-846 Method 3810)	5 µg/L	7 days*

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS PROTOCOLS**  
**312 Fair Oak Street, Little Valley, New York**

<i>Sample Type</i>	<i>Matrix</i>	<i>Sampling Device</i>	<i>No. of Samples</i> <sup>(1)(2)</sup>	<i>Parameter</i>	<i>Sample Container</i> <sup>(3)(4)</sup>	<i>Sample Preservation</i>	<i>Analytical Method</i> <sup>(5)</sup>	<i>PQL</i>	<i>Holding Time</i> <sup>(6)</sup>
Field Blank	Water	Collected Rinsate Passed Over/Through Sampling Equipment	1	Low Concentration TCL Volatile Organic Compounds [CLP Lab]	(4) 40-mL VOA vials w/Teflon lined septum	1:1 HCl to pH<2; Cool to 4°C	SOM01.1	Compound specific (0.5 - 20 µg/L)	10 days
Trip Blank	Water	Direct Fill of Sample Bottles	1	Low Concentration TCL Volatile Organic Compounds [CLP Lab]	(4) 40-mL VOA vials w/Teflon lined septum	1:1 HCl to pH<2; Cool to 4°C	SOM01.1	Compound specific (0.5 - 20 µg/L)	10 days
			6	Ethane [Sub Lab]	(5) 40-mL VOA vials w/Teflon lined septum	Cool to 4°C	GC/FID (SW-846 Method 3810)	5 µg/L	7 days*
			6	Ethene [Sub Lab]	(5) 40-mL VOA vials w/Teflon lined septum	Cool to 4°C	GC/FID (SW-846 Method 3810)	5 µg/L	7 days*
			6	Methane [Sub Lab]	(5) 40-mL VOA vials w/Teflon lined septum	Cool to 4°C	GC/FID (SW-846 Method 3810)	5 µg/L	7 days*

## NOTES:

- The number in parentheses in the "No. of Samples" column denotes the number of duplicate samples.
- The number of field, trip and DI water blanks is estimated based on the approximate number of days in the field for each type of sampling during the MNA Program events.
- The number in parentheses in the "Sample Container" column denotes the number of containers needed. Additional volume must be sent for laboratory QA/QC sample analyses.
- All bottles will comply with OSWER Directive 9240.0-05A: "Specifications and Guidance for Obtaining Contaminant-Free Sample Containers", EPA 540/R-93/051, December 1992.

## 5. Method References:

SOM01.1 = USEPA Contract Laboratory Program Statement of Work for Multi-Media, Multi-Concentration Organics (May 2005 or latest revision).

MCAWW = Methods for Chemical Analysis of Water and Wastes, March 1983.

Std. Methods = Standard Methods for the Examination of Water and Wastewater, 20th Edition (January 2000).

SW-846 = Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (November 1986, revised through November 2000 via Updates I through IVB).

EPA300.1 = Determination of Inorganic Anions in Drinking Water by Ion Chromatography, Revision I (27 April 1999).

EPA/600/R-98128 = Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater (September 1998).

- All holding times listed are from Verified Time of Sample Receipt (VTSR) unless noted otherwise (\* denotes from time of sample collection).

## 7. Acronyms/Abbreviations used:

CLP = Contract Laboratory Program	DESA = Division of Environmental Science and Assessment
DO = Dissolved Oxygen	ORP = Oxidation-Reduction Potential
PQL = Practical Quantitation Limit	Sub Lab = Non-RAS Subcontract Laboratory
TCL = Target Compound List	VOA = Volatile Organic Analysis



**TABLE 2**  
**MONITORING WELL PURGE SUMMARY**  
**312 Fair Oak Street**  
**Little Valley, New York**

Time	Cumulative Volume (L)	Temperature (degrees C)	pH	Specific Conductance (us/cm)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
<b>MW-2</b>						
15:58	initial	14.07	7.42	0.363	3.07	161.7
16:02	1	13.21	7.44	0.357	2.46	148.2
16:06	2	13.17	7.43	0.356	2.34	138.4
16:10	3	13.20	7.43	0.357	2.47	132.1
16:14	4	13.05	7.45	0.356	2.28	128.4
16:18	5	12.95	7.44	0.355	2.24	126.4
16:22	6	12.73	7.46	0.353	2.15	125.6
16:26	7	12.83	7.49	0.354	2.12	124.8
<b>MW-3</b>						
8:59	initial	16.60	4.26	0.011	10.10	222
9:10	1.0	12.25	6.66	0.376	8.48	163
9:14	1.5	12.29	6.66	0.374	8.41	162
9:18	2	12.53	6.69	0.373	8.45	161
9:22	2.5	12.47	6.70	0.371	8.46	160
9:26	3.0	12.49	6.71	0.368	8.43	160
<b>MW-5</b>						
14:58	initial	13.70	6.75	0.161	3.34	154.7
15:02	1	13.56	6.72	0.157	2.85	146.6
15:06	2	13.50	6.75	0.156	2.63	140.5
15:10	3	13.45	6.78	0.156	2.44	136.1
15:14	4	13.50	6.80	0.155	2.33	132.6
15:18	5	13.43	6.84	0.155	2.23	129.8
<b>MW-6</b>						
13:32	initial	13.98	6.68	0.181	3.62	136.8
13:36	1	14.00	6.66	0.160	3.17	134.6
13:40	2	14.00	6.66	0.157	3.07	134.6
13:44	3	13.96	6.67	0.171	2.66	135.0
13:48	4	13.95	6.67	0.179	2.49	133.6
13:52	5	13.96	6.69	0.181	2.34	131.0
13:56	6	13.99	6.69	0.182	2.3	129.9
<b>MW-D1</b>						
<b>Less than 1 foot water in well, no sample collected</b>						
<b>MW-D2</b>						
11:30	initial	12.77	7.16	0.297	5.08	164.9
11:34	1	12.52	7.16	0.292	4.54	163.7
11:38	2	12.44	7.15	0.291	4.32	162.2
11:42	3	12.15	7.26	0.288	4.34	161.7
11:46	4	12.13	7.27	0.285	4.09	160.2

**TABLE 3**  
**GROUNDWATER ELEVATION SUMMARY**  
**312 Fair Oak Street**  
**Little Valley, New York**

<b>Well ID</b>	<b>Measuring Point Elevation (fasl)</b>	<b>DTW (ft.) 9/25/07</b>	<b>Groundwater Elevation (fasl)</b>
MW-2	1590.18	41.09	1549.09
MW-3	1591.37	54.69	1536.68
MW-5	1590.44	7.00	1583.44
MW-6	1584.99	3.92	1581.07
MW-D1	1590.31	50.72	1539.59
MW-D2	1584.17	40.29	1543.88

Notes:

DTW- depth to water

fasl- feet above sea level

**TABLE 4**  
**VALIDATED GROUNDWATER ANALYTICAL SUMMARY**  
**312 Fair Oak Street**  
**Little Valley, New York**

<i>Sample ID:</i>	<i>LVRA03-MNAGW-MW2</i>	<i>LVRA03-MNAGW-MW3</i>	<i>LVRA03-MNAGW-MW5</i>	<i>LVRA03-MNAGW-MW6</i>	<i>LVRA03-MNAGW-MWD2</i>	<i>LVRA03-MNAGW-DUP1<sup>(1)</sup></i>
<i>Date Sampled:</i>	09/25/08	09/25/08	09/25/08	09/25/08	09/25/08	09/25/08
<b><i>Volatile Organic Compounds (ug/L)</i></b>						
Chloromethane	0.3UJ	0.3UJ	0.3UJ	0.3U	0.7UJ	0.3UJ
Bromomethane	0.3UJ	0.3UJ	0.3UJ	0.3U	0.6UJ	0.3UJ
Vinyl chloride	2.9 J	0.2UJ	0.2UJ	5.3	0.5UJ	0.2UJ
Chloroethane	0.3UJ	0.3UJ	0.3UJ	0.3U	0.6UJ	0.3UJ
Methylene Chloride	0.4UJ	0.4UJ	0.4UJ	0.4U	0.9UJ	0.4UJ
Acetone	R	R	R	1U	3UJ	R
Carbon Disulfide	0.2UJ	0.2UJ	0.2UJ	0.2UJ	0.4UJ	0.2UJ
1,1-Dichloroethene	0.6 J	0.3UJ	0.3UJ	0.3U	0.6UJ	0.3UJ
1,1-Dichloroethane	0.8UJ	0.8UJ	0.8UJ	0.8U	2UJ	0.8UJ
Chloroform	0.3UJ	0.3UJ	0.3UJ	0.3U	0.7UJ	0.3UJ
1,2-Dichloroethane	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
2-Butanone	1UJ	1UJ	1UJ	1U	3UJ	1UJ
1,1,1-Trichloroethane	0.3UJ	0.3UJ	0.3UJ	0.3U	0.5UJ	0.3UJ
Carbon Tetrachloride	0.3UJ	0.3UJ	0.3UJ	0.3U	0.5UJ	0.3UJ
Bromodichloromethane	0.4UJ	0.4UJ	0.4UJ	0.4U	0.8UJ	0.4UJ
1,2-Dichloropropane	0.1UJ	0.1UJ	0.1UJ	0.1U	0.3UJ	0.1UJ
cis-1,3-Dichloropropene	0.4UJ	0.4UJ	0.4UJ	0.4U	0.7UJ	0.4UJ
Trichloroethene	75 J	5.4 J	0.2UJ	3.4	93 J	5.7 J
Dibromochloromethane	0.3UJ	0.3UJ	0.3UJ	0.3U	0.6UJ	0.3UJ
1,1,2-Trichloroethane	0.2UJ	0.2UJ	0.2UJ	0.2U	0.5UJ	0.2UJ
Benzene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.3UJ	0.2UJ
trans-1,3-Dichloropropene	0.4UJ	0.4UJ	0.4UJ	0.4U	0.7UJ	0.4UJ
Bromoform	0.2UJ	0.2UJ	0.2UJ	0.2U	0.5UJ	0.2UJ
4-Methyl-2-pentanone	0.9UJ	0.9UJ	0.9UJ	0.9U	2UJ	0.9UJ
2-Hexanone	1UJ	1UJ	1UJ	1U	2UJ	1UJ
Tetrachloroethene	0.4UJ	0.4UJ	0.4UJ	0.4U	0.7UJ	0.4UJ
Toluene	0.5UJ	0.5UJ	0.5UJ	0.5U	1UJ	0.5UJ
1,1,2,2-Tetrachloroethane	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
Chlorobenzene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
Ethylbenzene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
Styrene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
Total Xylenes	0.9UJ	0.9UJ	0.9UJ	0.9U	2UJ	0.9UJ
Dichlorodifluoromethane	0.3UJ	0.3UJ	0.3UJ	0.3U	0.6UJ	0.3UJ
Trichlorofluoromethane	0.2UJ	0.2UJ	0.2UJ	0.2U	0.3UJ	0.2UJ
1,1,2-Trichloro-1,2,2,-trifluoroethane	0.3UJ	0.3UJ	0.3UJ	0.3U	0.6UJ	0.3UJ
trans-1,2,-Dichloroethene	0.1UJ	0.1UJ	0.1UJ	0.1U	0.2UJ	0.1UJ
Methyl-tert-butyl ether	0.2UJ	0.2UJ	0.2UJ	0.2U	0.3UJ	0.2UJ
cis-1,2-Dichloroethene	42 J	0.71 J	0.2UJ	39	25 J	0.79 J
Cyclohexane	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
Methylcyclohexane	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
1,2-Dibromomethane	0.2UJ	0.2UJ	0.2UJ	0.2U	0.3UJ	0.2UJ
Isopropylbenzene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
1,3-Dichlorobenzene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.3UJ	0.2UJ
1,4-Dichlorobenzene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.3UJ	0.2UJ
1,2-Dichlorobenzene	0.2UJ	0.2UJ	0.2UJ	0.2U	0.4UJ	0.2UJ
1,2-Dibromo-3-Chloropropane	1UJ	1UJ	1UJ	1U	2UJ	1UJ
1,2,4-Trichlorobenzene	0.4UJ	0.4UJ	0.4UJ	0.4U	0.8UJ	0.4UJ
Methyl acetate	0.2UJ	0.2UJ	0.2UJ	0.2U	0.3UJ	0.2UJ

<b><i>Monitored Natural Attenuation Parameters (mg/L)</i></b>						
Chloride	32.2	46.0	23.3	17.8	33.4	46.3
Ethane	0.0075U	0.0015U	0.0015U	0.015U	0.0015U	0.0015U
Ethene	0.0075U	0.0015U	0.0015U	0.015U	0.0015U	0.0015U
Ferrous Iron	0.10 UJ	0.10UJ	0.10 UJ	0.10 UJ	0.10UJ	0.10 UJ
Methane	0.020	0.001U	0.001U	0.064	0.001U	0.001U
Nitrate	0.05 U	1.4	0.05 U	0.05 U	0.24	1.3
Sulfate	21.2	13.8	6.4	10.1	16.8	13.2
Sulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Alkalinity	194	167	65.4	86.1	133	168
Total Organic Carbon	1.0U	1.0U	1.0U	1.0U	1.0U	1.0 U

Notes:  
U = Compound not detected above specified laboratory detection limit  
J= Laboratory estimated concentration  
(1) Duplicate sample collected at LVRA03-MNAGW-MW3 location




**TABLE 5**  
**Comparison Criteria for Detected Constituents in Groundwater**

BASIS FOR CRITERIA	HUMAN HEALTH	STATE
	EPA Maximum Contaminant Level	NYSDEC Water Quality Values [Class GA]
<b>Volatile Organics (ug/L)</b>		
1,1,2-Trichloroethane	200	5
1,1-Dichloroethene	7	5
1,2,3-Trichlorobenzene	NC	5
1,2,4-Trichlorobenzene	70	5
1,2-Dichlorobenzene	600	3
1,2-Dichloroethane	5	0.6
1,2-Dichloroethene (total)	70	5
cis-1,2-Dichloroethene	70	5
trans-1,2-Dichloroethene	100	5
1,2-Dichloropropane	5	1
1,3-Dichlorobenzene	NC	3
1,4-Dichlorobenzene	75	3
2-Hexanone	NC	50
Acetone	NC	50
Benzene	5	1
Carbon disulfide	NC	60
Chlorobenzene	100	5
Chloroethane	NC	5
Cyclohexane	NC	NC
Ethylbenzene	700	5
Methyl chloride (Chloromethane)	NC	5
Methyl ethyl ketone (2-Butanone)	NC	50
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NC	NC
Methylcyclohexane	NC	NC
Styrene	100	5
Tetrachloroethene	5	5
Toluene	1000	5
Trichloroethene	5	5
m/p-Xylene	10000	5
Xylenes (total)	10000	5

**TABLE 6**  
**Historical Summary of Detected Groundwater Constituents in MNA Wells**  
**312 Fair Oak Street**

	BIAMW-2										BIAMW-3						
	05/05/1999	05/05/1999 Duplicate	12/14/1999	12/14/1999 Duplicate	01/10/2001	12/11/2003	10/31/2006	10/31/2006 Duplicate	09/25/2007	09/25/2008	05/05/1999	01/09/2001	12/10/2003	10/30/2006	09/25/2007	09/25/2008	09/25/2008 Duplicate
<b>Volatile Organics (ug/L)</b>																	
1,1,2-Trichloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	1 J	--	0.7 J	0.7 J	--	0.63	0.8	0.89	0.73	0.6	--	--	--	--	--	--	--
1,4-Dichlorobenzene	NA	NA	NA	NA	--	--	0.16 J	0.12 J	--	--	NA	--	--	--	--	--	--
Benzene	0.7 J	--	0.4 J	0.4 J	--	0.32 J	--	--	0.29 J	--	--	--	0.12 J	--	--	--	--
Chloroethane	0.8 J	--	--	--	--	--	0.19 J	0.23 J	--	--	--	--	0.091 J	--	--	--	--
1,2-Dichloroethene	54	51	40	42	NA	NA	NA	NA	NA	NA	2 J	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	NA	44	40 D	45 D	46 D	54 D	42	NA	3	2.2	0.36 J	0.86	0.7	0.8
trans-1,2-Dichloroethene	NA	NA	NA	NA	--	0.28 J	0.51	0.49 J	0.47 J	--	NA	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	0.25 J	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	NA	NA	NA	NA	NA	--	0.14 J	--	--	--	NA	NA	--	--	--	--	--
Trichloroethene	230	190	84	87	110	36 D	58 D	58 D	69 J	75	5 J	8	6.3	2.2	7.9 J	5	6
Vinyl Chloride	4 J	2 J	1 J	1 J	NA	4.8	4	4.8	4.2	3	--	--	--	--	--	--	--
m/p-Xylene	NA	NA	NA	NA	NA	NA	0.1 J	--	--	--	NA	NA	NA	--	--	--	--
<b>MNA/Water Quality Parameters (mg/L)</b>																	
Alkalinity	NA	NA	NA	NA	NA	180	190	180	176	194	NA	NA	160	260	155	167	168
Chloride	NA	NA	NA	NA	NA	19	26	26	28.4	32.2	NA	NA	44	78	64.4	46.0	46.3
Ferrous Iron	NA	NA	NA	NA	NA	--	0.17	0.14	--	--	NA	NA	--	--	0.18	--	--
Methane	NA	NA	NA	NA	NA	0.54 JD	0.046 J	0.11 J	0.026	0.020	NA	NA	0.07 J N	--	--	--	--
Nitrate	NA	NA	NA	NA	NA	--	--	--	--	--	NA	NA	1.2	1.9	1.5	1.4	1.3
Sulfate	NA	NA	NA	NA	NA	16	17	17	20.5	21.2	NA	NA	12	27	23.8	13.8	13.2
Sulfide	NA	NA	NA	NA	NA	NA	0.02	0.018	--	--	NA	NA	NA	0.018	--	--	--
TOC	NA	NA	NA	NA	NA	2.6	--	--	1.6	--	NA	NA	--	26	1.4	--	--

**Notes:**  
-- Not detected  
J Estimated concentration.  
D Value derived from dilution analysis.  
N Evidence exists for constituent presence.  
NA Not analyzed.

 Above human health-based values.  
 Above state values.  
 Above both of the above values.

**TABLE 6**  
**Historical Summary of Detected Groundwater Constituents in MNA Wells**  
**312 Fair Oak Street**

	BIAMW-5						BIAMW-6					BIAMW-D1				
	05/05/1999	12/13/1999	01/04/2001	10/30/2006	09/25/2007	09/25/2008	12/13/1999	01/10/2001	10/30/2006	09/25/2007	09/25/2008	05/05/1999	12/13/1999	01/10/2001	12/10/2003	10/31/2006
<b>Volatile Organics (ug/L)</b>																
1,1,2-Trichloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	--	--	--	--	--	--	--	--	--	0.66	--	--	--	--	--	--
1,4-Dichlorobenzene	NA	NA	--	--	--	--	NA	--	--	--	--	NA	NA	--	--	--
Benzene	--	--	--	0.23 J	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	--	--	--	0.13 J	--	--	--	--	0.11 J	--	--	--	--	--	--	--
1,2-Dichloroethene	--	--	NA	NA	NA	NA	30	NA	NA	NA	NA	6 J	4 J	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	--	--	--	--	NA	44	35 D	120	39	NA	NA	8	4.8	0.42 J
trans-1,2-Dichloroethene	--	--	--	--	--	--	NA	--	0.48 J	0.31 J	--	NA	NA	--	--	0.55
Ethylbenzene	--	--	--	0.13 J	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	NA	NA	NA	--	--	--	NA	NA	--	--	--	NA	NA	NA	--	--
Trichloroethene	--	--	--	--	--	--	17	37	19	1.6 J	3	11	9 J	18	12	1.8
Vinyl Chloride	--	--	--	--	--	--	4 J	--	--	9.5 J	5	--	--	--	--	0.16 J
m/p-Xylene	NA	NA	NA	--	--	--	NA	NA	--	--	--	NA	NA	NA	NA	--
<b>MNA/Water Quality Parameters (mg/L)</b>																
Alkalinity	NA	NA	NA	70	65	65.4	NA	NA	88	75	86.1	NA	NA	NA	190	200
Chloride	NA	NA	NA	11	38.4	23.3	NA	NA	13	32.9	17.8	NA	NA	NA	42	55
Ferrous Iron	NA	NA	NA	0.18	--	--	NA	NA	--	--	--	NA	NA	NA	--	--
Methane	NA	NA	NA	--	0.0061	--	NA	NA	0.082 J	0.098	0.064	NA	NA	NA	0.06 J N	--
Nitrate	NA	NA	NA	0.73	--	--	NA	NA	--	--	--	NA	NA	NA	1.4	2.7
Sulfate	NA	NA	NA	6.7	7.4	6.4	NA	NA	11	19.4	10.1	NA	NA	NA	13	11
Sulfide	NA	NA	NA	--	--	--	NA	NA	--	--	--	NA	NA	NA	NA	--
TOC	NA	NA	NA	--	1.3	--	NA	NA	--	1.7	--	NA	NA	NA	--	--

**Notes:**

- Not detected
- J Estimated concentration.
- D Value derived from dilution analysis.
- N Evidence exists for constituent presence.
- NA Not analyzed.

- Above human health-based values.
- Above state values.
- Above both of the above values.

**TABLE 6**  
**Historical Summary of Detected Groundwater Constituents in MNA Wells**  
**312 Fair Oak Street**

	BIAMW-D2								
	05/05/1999	12/14/1999	01/10/2001	01/10/2001 Duplicate	12/11/2003	10/30/2006	09/25/2007	09/25/2007 Duplicate	09/25/2008
<b>Volatile Organics (ug/L)</b>									
1,1,2-Trichloroethane	--	--	--	--	--	0.084 J	--	--	--
1,1-Dichloroethene	1 J	0.4 J	--	--	0.81	0.54	0.44 J	0.47 J	--
1,4-Dichlorobenzene	NA	NA	--	--	--	--	--	--	--
Benzene	2 J	--	--	--	--	--	--	--	--
Chloroethane	--	--	--	--	--	0.11 J	--	--	--
1,2-Dichloroethene	58	16	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	36	29	18 D	26 D	33	33	25
trans-1,2-Dichloroethene	NA	NA	--	--	--	0.71	0.31 J	0.23 J	--
Ethylbenzene	--	--	--	--	--	--	--	--	--
Isopropylbenzene	NA	NA	NA	NA	--	--	--	--	--
Trichloroethene	160	58	140	110	78 D	93 D	110 J	110 J	93
Vinyl Chloride	--	--	--	--	--	--	--	--	--
m/p-Xylene	NA	NA	NA	NA	NA	--	--	--	--
<b>MNA/Water Quality Parameters (mg/L)</b>									
Alkalinity	NA	NA	NA	NA	130	140	116	116	133
Chloride	NA	NA	NA	NA	22	31	37.8	37.8	33.4
Ferrous Iron	NA	NA	NA	NA	--	--	0.23	--	--
Methane	NA	NA	NA	NA	0.07 JN	--	--	--	--
Nitrate	NA	NA	NA	NA	0.29	0.34	0.23	0.22	0.24
Sulfate	NA	NA	NA	NA	15	13	19.8	19.1	16.8
Sulfide	NA	NA	NA	NA	NA	0.027	--	--	--
TOC	NA	NA	NA	NA	2.4	--	1.8	--	--

**Notes:**

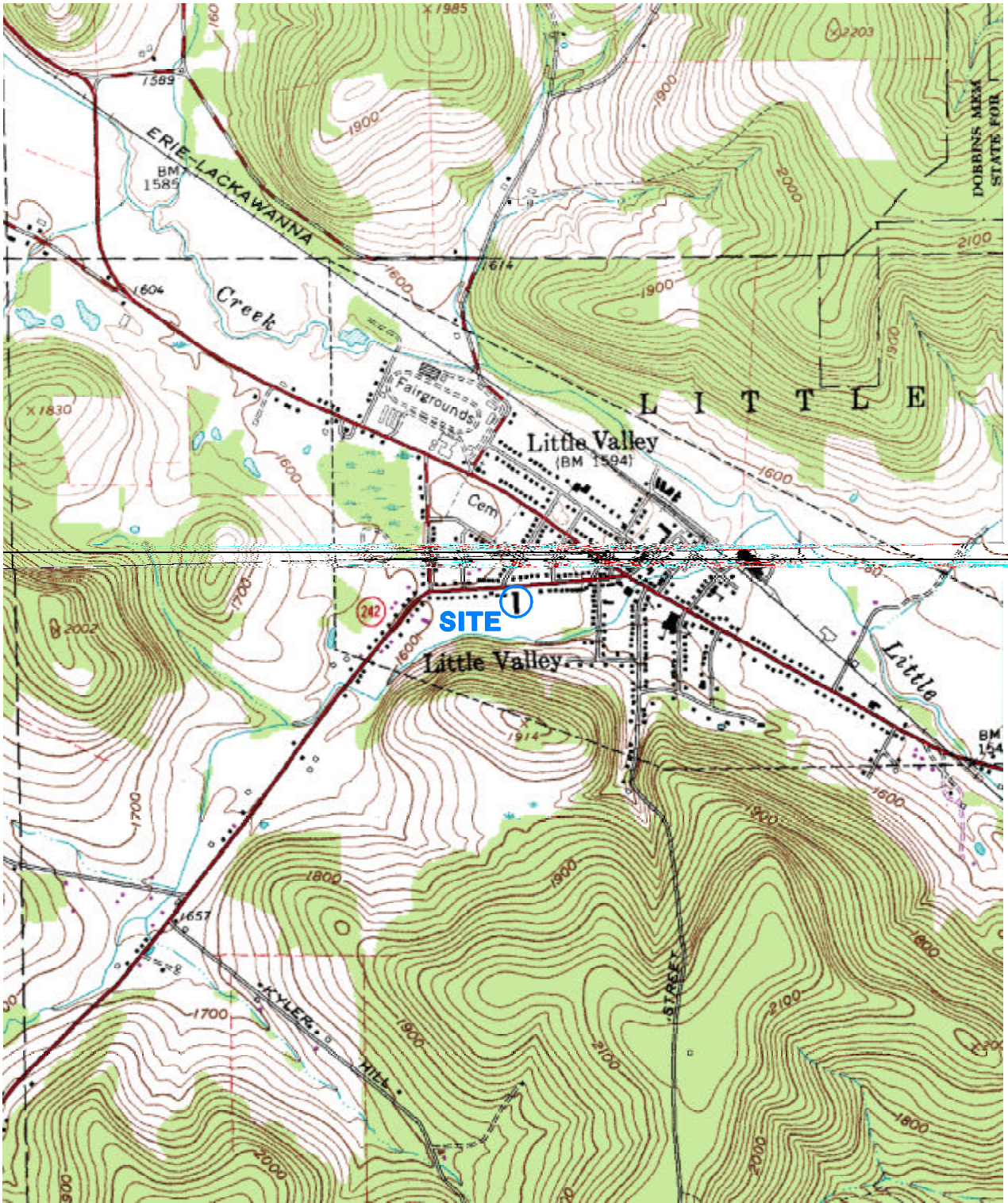
- Not detected
- J Estimated concentration.
- D Value derived from dilution analysis.
- N Evidence exists for constituent presence.
- NA Not analyzed.

- Above human health-based values.
- Above state values.
- Above both of the above values.

## FIGURES

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SOURCE:

USGS CATTARAUGUS AND LITTLE VALLEY, NEW YORK QUADRANGLES.



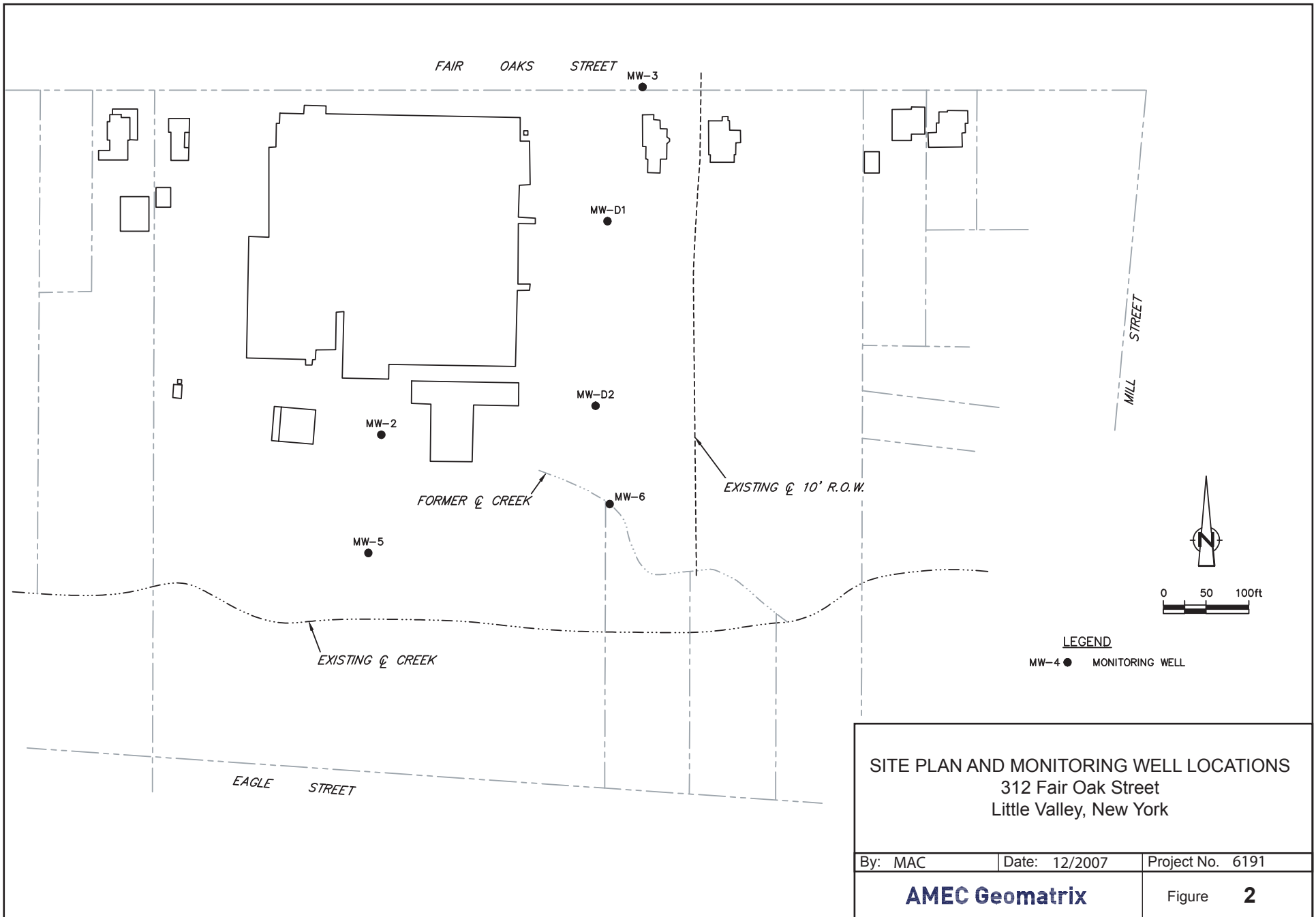
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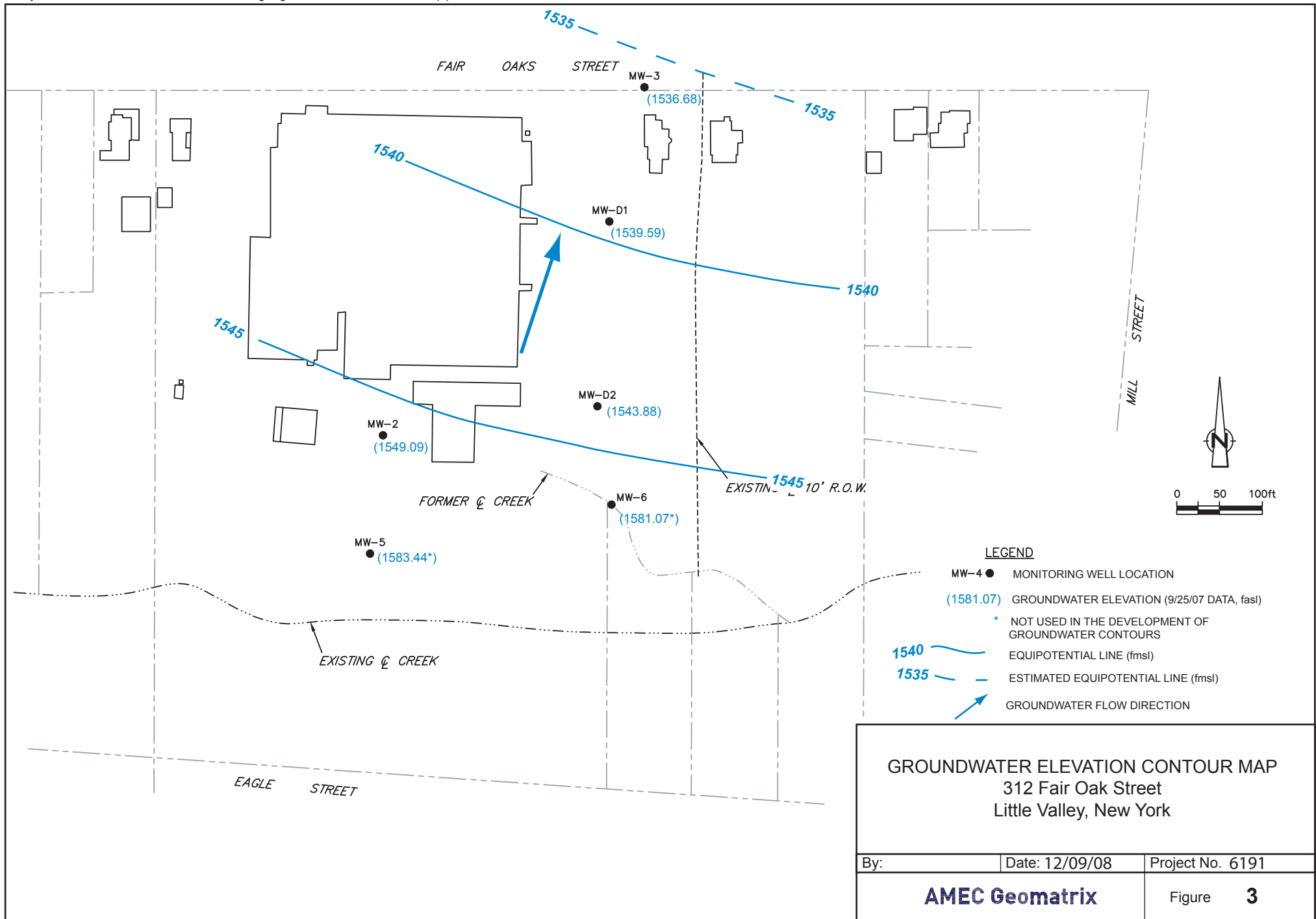
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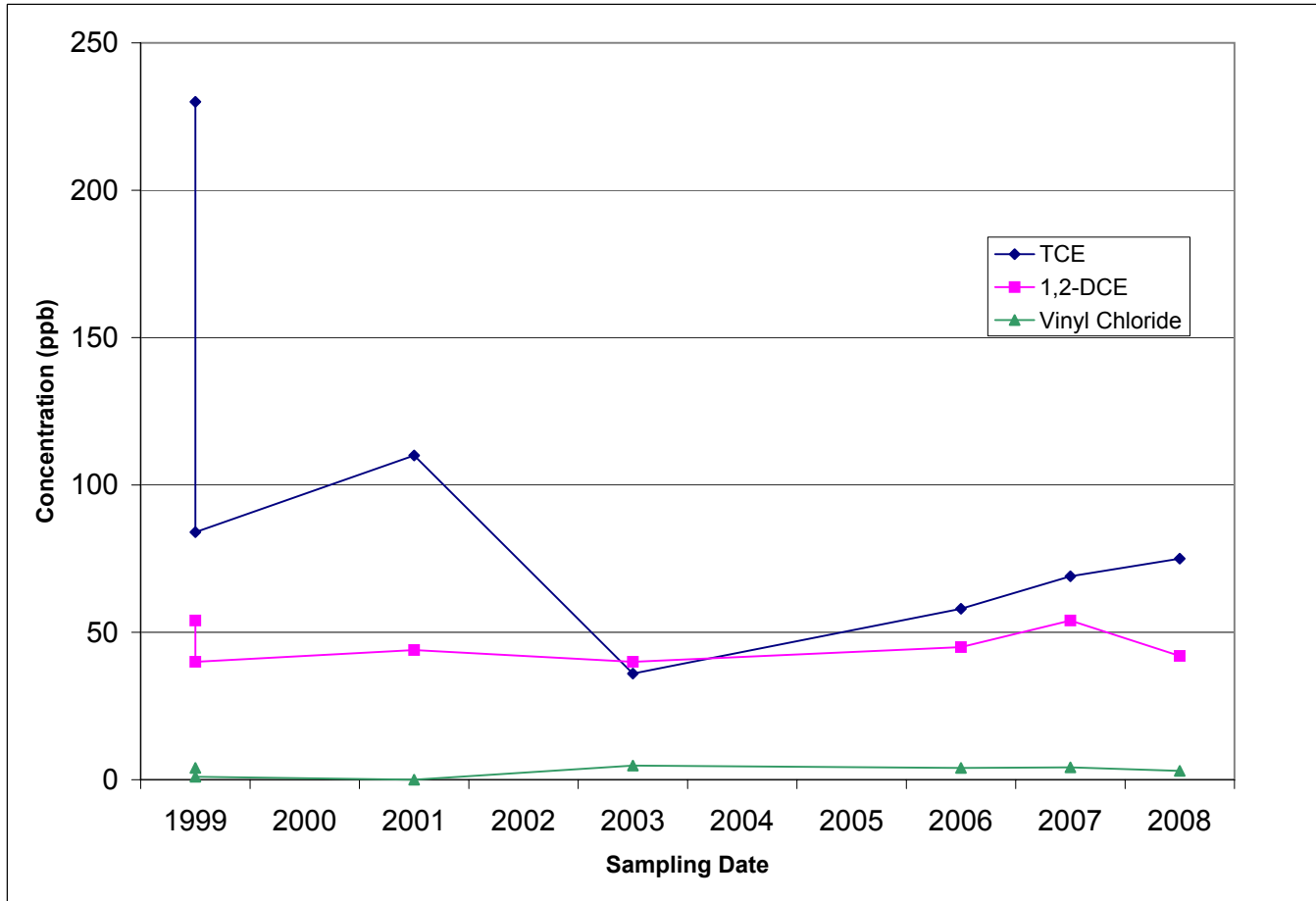
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 LITTLE VALLEY, NEW YORK

Project No.  
 6191

Figure  
 1





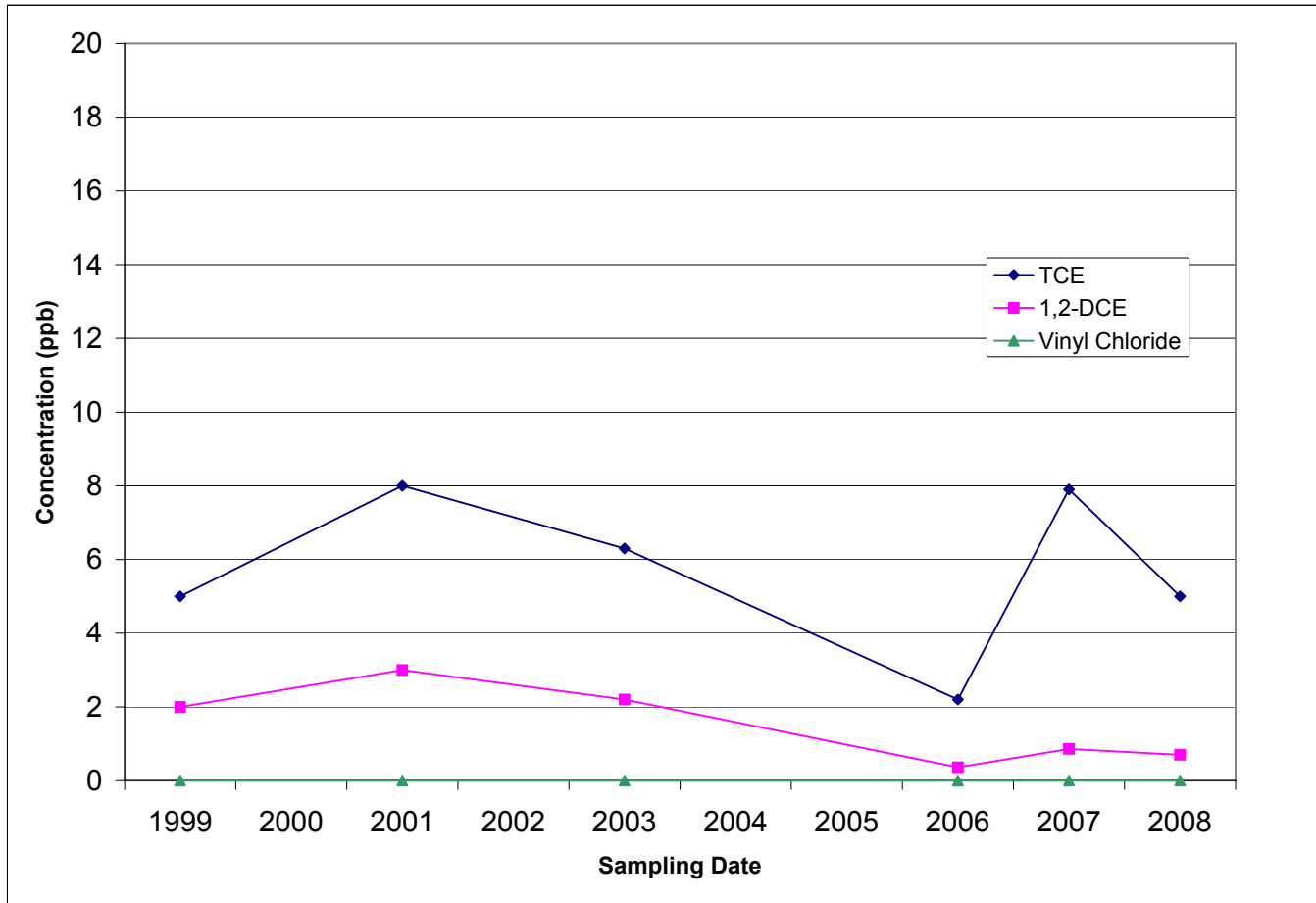


MW-2 VOC TIME-CONCENTRATION PLOT  
312 Fair Oak Street  
Little Valley, New York

By: MAC | Date: 12/2008 | Project No. 6191

**AMEC Geomatrix**

Figure 4

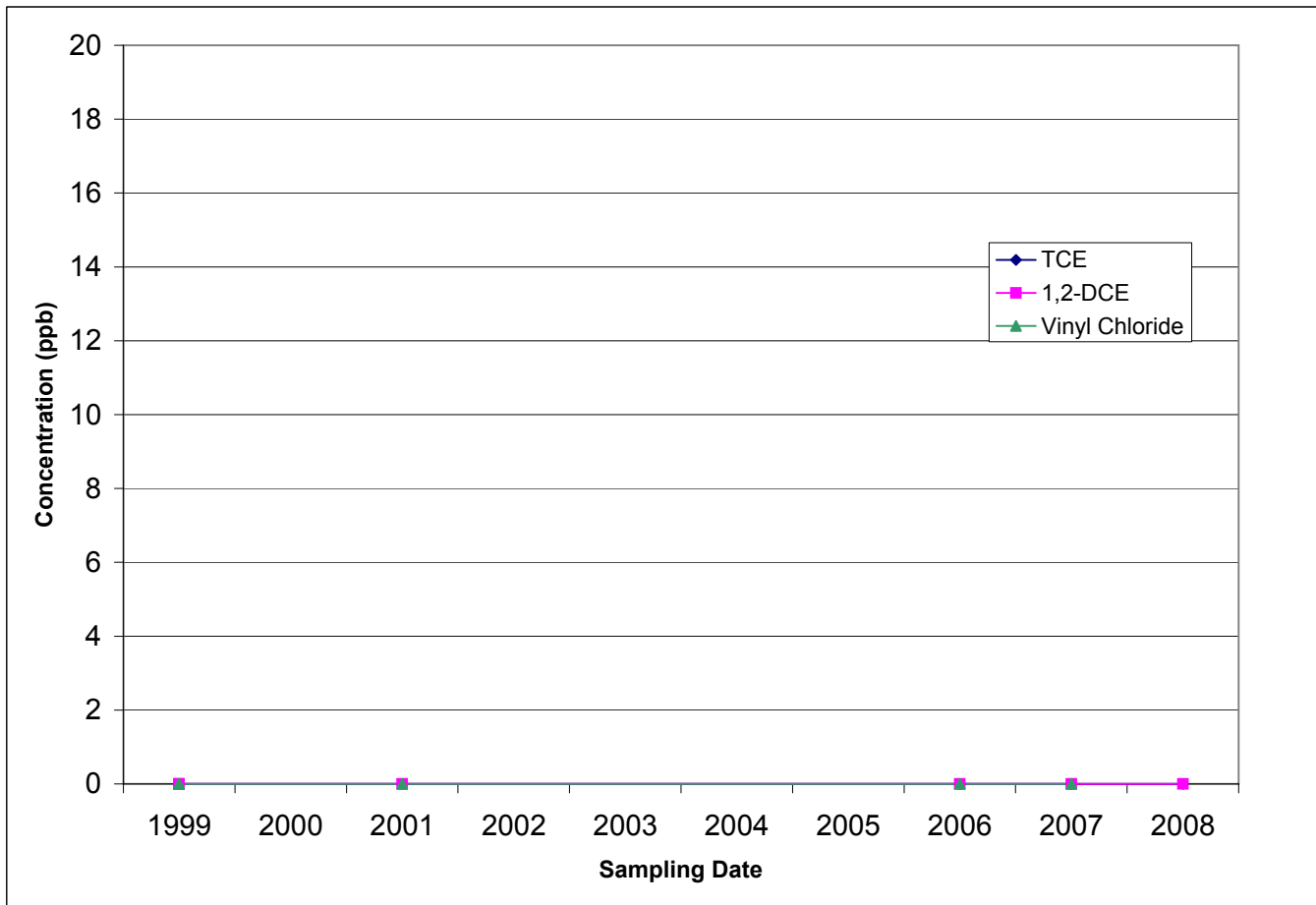


MW-3 VOC TIME-CONCENTRATION PLOT  
312 Fair Oak Street  
Little Valley, New York

By: MAC | Date: 12/2008 | Project No. 6191

**AMEC Geomatrix**

Figure 5

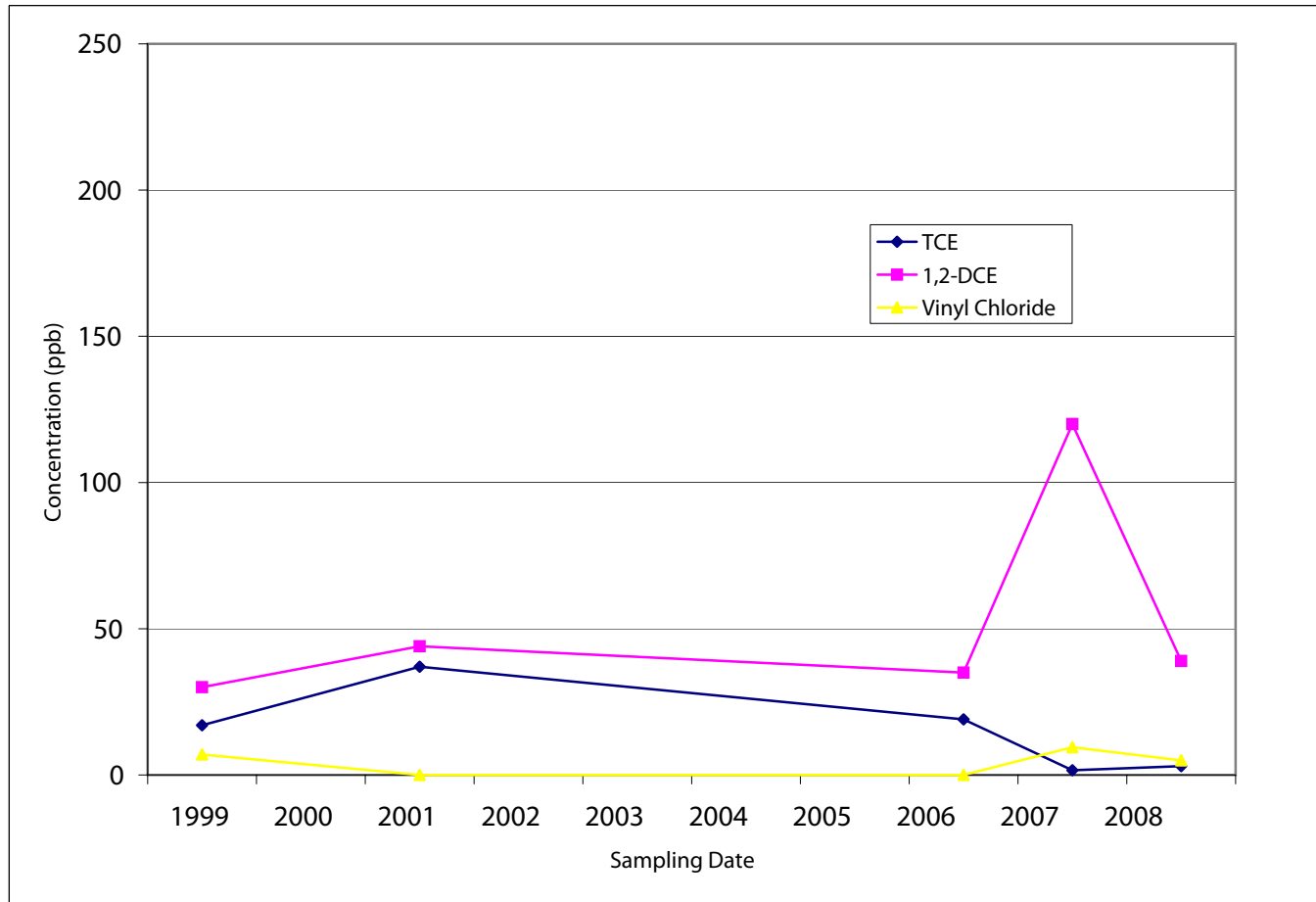


MW-5 VOC TIME-CONCENTRATION PLOT  
312 Fair Oak Street  
Little Valley, New York

By: MAC | Date: 12/2008 | Project No. 6191

**AMEC Geomatrix**

Figure 6

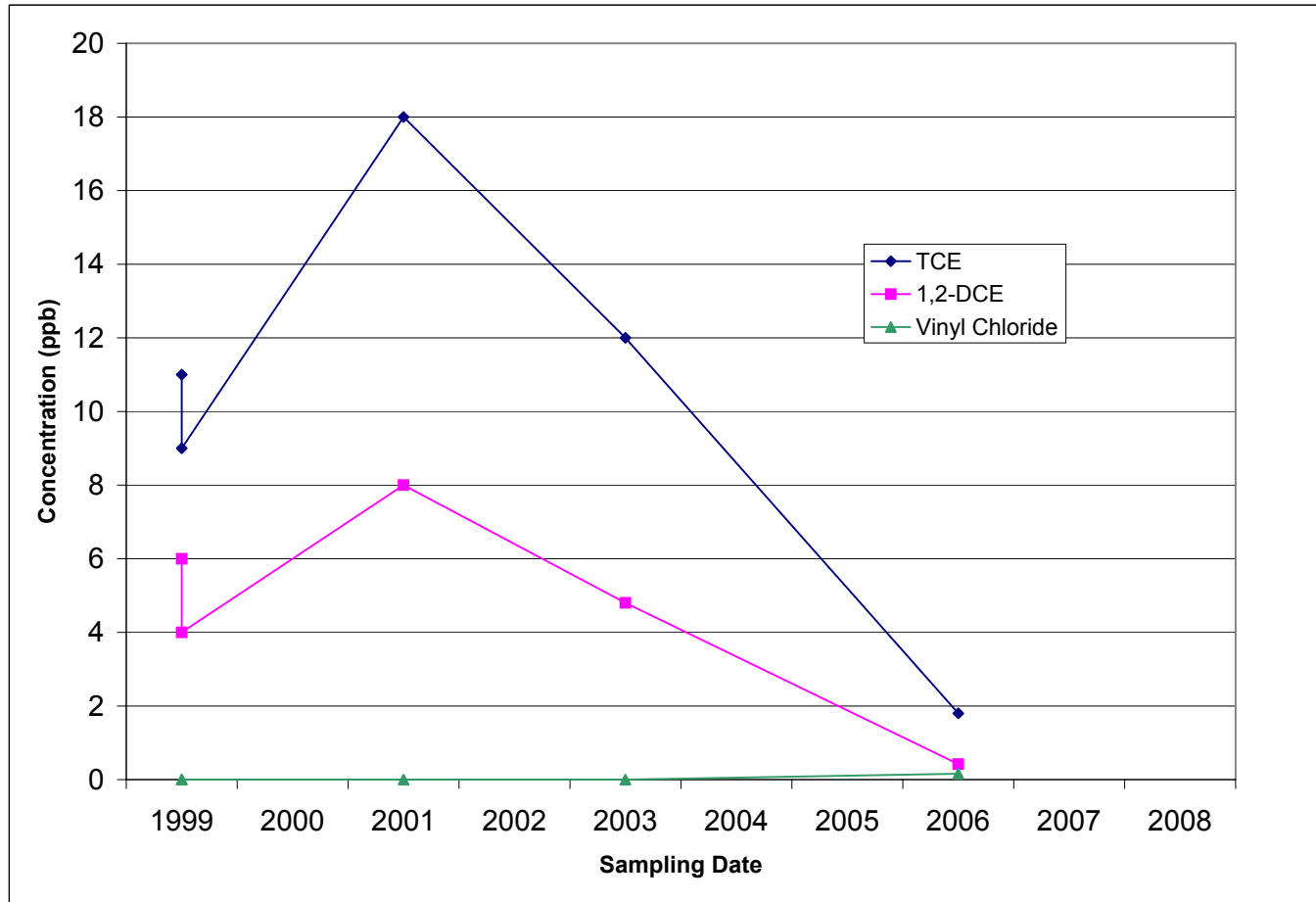


MW-6 VOC TIME-CONCENTRATION PLOT  
312 Fair Oak Street  
Little Valley, New York

By: MAC | Date: 12/2008 | Project No. 6191

**AMEC Geomatrix**

Figure 7



MW-D1 VOC TIME-CONCENTRATION PLOT  
312 Fair Oak Street  
Little Valley, New York

By: MAC

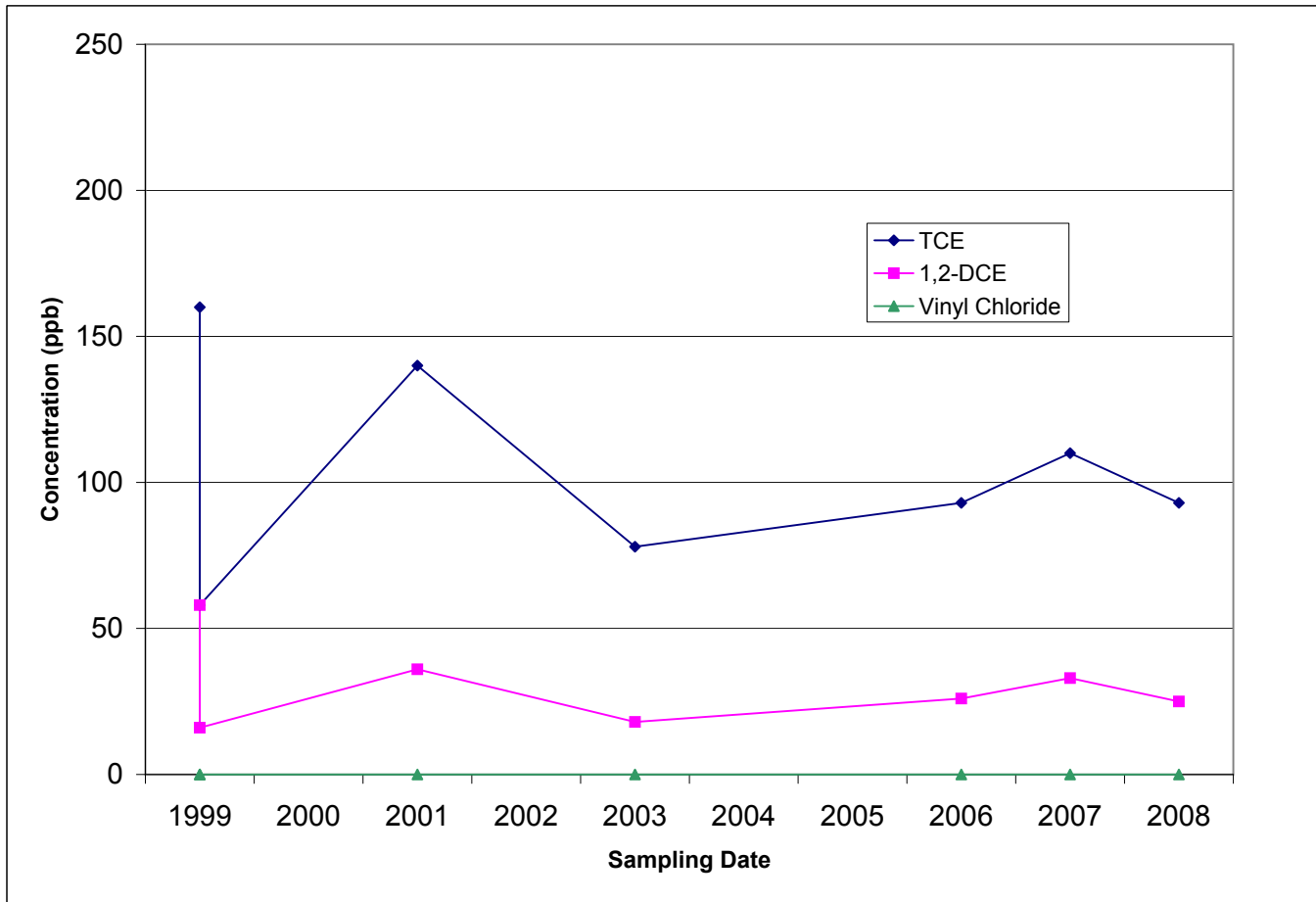
Date: 12/2008

Project No. 6191

**AMEC Geomatrix**

Figure 8





MW-D2 VOC TIME-CONCENTRATION PLOT  
312 Fair Oak Street  
Little Valley, New York

By: MAC | Date: 12/2008 | Project No. 6191

**AMEC Geomatrix**

Figure 9

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**APPENDIX A**

Data Validation Report



# DATA VALIDATION REPORT

312 Fair Oak Street

SAMPLE DELIVERY GROUP: A08-B837

Prepared by

MEC<sup>x</sup>, LP  
12269 East Vassar Drive  
Aurora, CO 80014

## I. INTRODUCTION

Task Order Title: Bush Industries  
 Contract Task Order: 1217.012D.00 001  
 Sample Delivery Group: A08-B837  
 Project Manager: Kelly McIntosh  
 Matrix: Water  
 QC Level: IV  
 No. of Samples: 8  
 No. of Reanalyses/Dilutions: 0  
 Laboratory: TestAmerica-Buffalo

**Table 1. Sample Identification**

Client ID	Laboratory ID	Matrix	Sample Date	Method
MW-3	A8B83701	Water	09/25/2008 0930	300.0, 353.2, 2320B, 3500D, 4500-SF, 8260B, 9060, RSK175
MW-D2	A8B83702	Water	09/25/2008 1150	300.0, 353.2, 2320B, 3500D, 4500-SF, 8260B, 9060, RSK175
MW-6	A8B83703	Water	09/25/2008 1400	300.0, 353.2, 2320B, 3500D, 4500-SF, 8260B, 9060, RSK175
MW-5	A8B83704	Water	09/25/2008 1520	300.0, 353.2, 2320B, 3500D, 4500-SF, 8260B, 9060, RSK175
MW-2	A8B83705	Water	09/25/2008 1630	300.0, 353.2, 2320B, 3500D, 4500-SF, 8260B, 9060, RSK175
DUP	A8B83706	Water	09/25/2008	300.0, 353.2, 2320B, 3500D, 4500-SF, 8260B, 9060, RSK175
RB1	A8B83707	Water	09/25/2008 1115	300.0, 353.2, 2320B, 3500D, 4500-SF, 8260B, 9060, RSK175
Trip Blank	A8B83708	Water	09/25/2008	8260B

## II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Analyses were requested on the COC for only a portion of the samples in this SDG. Custody seals were intact. If necessary, the client ID was added to the sample result summary by the reviewer.

### Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed 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.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

### Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

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**Qualification Code Reference Table Cont.**

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

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### III. Method Analyses

#### A. EPA Method 8260B - Volatile Organic Compounds (VOCs)

Reviewed By: K. Shadowlight

Date Reviewed: December 11, 2008

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC<sup>x</sup> Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, *EPA Method 8260B, CLP Organics Data Review and Preliminary Review (9/2006)*, and the *USEPA Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (9/2006)*.

- Holding Times: Several samples in the SDG were analyzed one day beyond the 14-day holding time; therefore, results were qualified as estimated, "J," for detects and "UJ," for nondetects in all samples except MW-6, RB-1, and Trip Blank. The remaining water samples were analyzed within 14 days of collection.
- GC/MS Tuning: The BFB tunes met the method abundance criteria. All samples were analyzed within 12 hours of the BFB injection time.
- Calibration: Initial calibration %RSDs were  $\leq 15\%$  or  $r^2$  values were  $\geq 0.995$ , with the exception of the  $r^2$  value for carbon disulfide in the initial calibration analyzed 10/09/08 (HP5973 Q); therefore, the results (all nondetects) for carbon disulfide were qualified as estimated, "UJ," in samples MW-6, RB-1, and Trip Blank.
- For the continuing calibration analyzed 10/09/08 (HP5973 Q) the %D for carbon disulfide exceeded 20%; therefore, the results (all nondetect) ) for carbon disulfide were qualified as estimated, "UJ," in samples MW-6, RB-1, and Trip Blank. For the continuing calibration analyzed 10/09/08 (HP5973-S), the RRF for acetone was  $\leq 0.05$ ; therefore, the results (all nondetects) for acetone were rejected, "R," in samples MW-2, MW-3, MW-5, and DUP. The %Ds for bromomethane and methylene chloride exceeded 20% in continuing calibrations analyzed 10/09/08 and 10/10/08 (both from instrument HP5973 S); therefore, results (all nondetects) for bromomethane and methylene chloride were qualified as estimated, "UJ," in samples DUP, MW-2, MW-3, MW-5, and MW-D2. The %D for methyl acetate exceeded 20% in the continuing calibration analyzed 10/10/08; therefore, the nondetect result for methyl acetate was qualified as estimated, "UJ," in sample MW-D2. The remaining continuing calibration RRFs were  $\geq 0.05$  and %Ds were  $\leq 20\%$ .
- Blanks: The method blanks had no target compound detects above the RL.
- Blank Spikes and Laboratory Control Samples: Recoveries for the five spiked target compounds were within laboratory-established QC limits.
- Surrogate Recovery: The surrogate recoveries were within laboratory-established QC limits.



- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on sample MW-6. Recoveries and RPDs for the five spiked target compounds were within laboratory-established QC limits.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
  - Trip Blanks: Sample Trip Blank was the trip blank identified for the samples in this SDG. There were no detects reported in the trip blank.
  - Field Blanks and Equipment Rinsates: Sample RB-1 was identified as the rinse blank associated with the samples in this SDG. Acetone was reported at 3.4µg/L in the rinse blank; however, there were no detects for acetone in the samples of this SDG.
  - Field Duplicates: Samples MW-6 and DUP were identified as a field duplicate pair in this SDG. There were common detects for cis-1,2-dichloroethene and trichloroethene with calculated RPDs  $\leq 50\%$  for ground waters. The pair was considered to be in good agreement.
- Internal Standards Performance: The internal standard area counts and retention times for the samples were within the control limits established by the continuing calibration standards: -50%/+100% for internal standard areas and  $\pm 30$  seconds for retention times.
- Compound Identification: Compound identification was verified. The laboratory analyzed for volatiles by EPA Method 8260B. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: A representative number of calculations and sample results were verified against the raw data. The reporting limits were supported by the low point of the initial calibration. Sample MW-D2 was analyzed at a 2× dilution in order to report target compounds within linear range of the calibration. The laboratory reported only one significant figure rather than two for several detects in the samples of this SDG. Results were edited by the reviewer to reflect two significant figures where applicable. It should be noted that the reporting limits were also reported as one significant figure; however, as the raw numbers were not available for review the reporting limits were not adjusted to two significant figures.
- Tentatively Identified Compounds: TICs were reported by the laboratory for this SDG. One TIC was reported for this SDG. The TIC was qualified as tentatively identified and estimated, "NJ," in sample RB-1.

- System Performance: Review of the raw data indicated no problems with system performance.

## **B. Method RSK-175--Methane, Ethane, Ethene**

Reviewed By: K. Shadowlight

Date Reviewed: December 12, 2008

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in *MEC<sup>X</sup> Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, *MEC<sup>X</sup> Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, *Method RSK-175, CLP Organics Data Review and Preliminary Review (9/2006)*, and *SW-846 Method 8000, (12/1996)*.

- Holding Times: The samples in the SDG were analyzed within 14 days of collection.
- GC/MS Tuning: Not applicable to this analysis.
- Calibration: Calibration criteria were met. Initial calibration %RSDs were  $\leq 15\%$  or  $r^2$  values were  $\geq 0.995$ . The ICV and CCV %Ds were  $\leq 20\%$ .
- Blanks: There were no detects above the reporting limit in the method blank.
- Blank Spikes and Laboratory Control Samples: Recoveries were within the laboratory established QC limits.
- Surrogate Recovery: Surrogates were not utilized in this method.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed for sample MW-6 of this SDG. Recoveries and RPDs were within the laboratory established QC limits.
- Compound Identification: Compound identification was verified. Review of the sample chromatogram, and retention times indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration. Samples MW-2 and MW-6 were analyzed at 5 $\times$  and 10 $\times$  due to target compounds. Reported nondetects are valid to the reporting limit.
- System Performance: Review of the raw data indicated no problems with system performance.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
  - Trip Blanks: Trip blanks were not applicable to RSK-175 analysis.

- Field Blanks and Equipment Rinsates: There were no field blanks or equipment rinsates identified for RSK-175 analysis.
- Field Duplicates and Field Split Samples: Samples MW-3 and DUP were the field duplicate samples identified for this SDG. There were no detects above the reporting limit in the field duplicate samples and the pair was considered to be in good agreement.

### C. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks

Date Reviewed: November 12, 2008

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC<sup>X</sup> Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Methods 300.0, 353.2, 2320B, 3500D, 4500-SF, and 9060*, and the *Validation of Metals for the Contract Laboratory Program based on SOW ILMO5.3, SOP Revision 13 (9/2006)*.

- Holding Times: The analytical holding times, 28 days from collection for chloride, sulfate and TOC, 14 days from collection for alkalinity, seven days from collection for sulfide, and 48 hours from collection for nitrate, were met. As per the method, the analytical holding time for ferrous iron is noted as “in field”. As the ferrous iron analyses were not performed within 24 hours of receipt at the laboratory, the ferrous iron results (all nondetects) were qualified as estimated, “UJ.”
- Calibration: Calibration criteria were met. Initial calibration  $r^2$  values were  $\geq 0.995$ . The laboratory did not provide ICV information or initial calibration raw data for nitrate or TOC. As the check standards were acceptably recovered, no qualifications were deemed necessary. For chloride, sulfate, ferrous iron, and nitrate the laboratory did not analyze CCVs. Instead, batch LCSs were analyzed every 10 field samples. As the site sample analyses were bracketed by one standard that was not reported as the associated LCS, the reviewer deemed that no qualifications necessary. All initial and continuing calibration recoveries were within 90-110%.

For the titrometric methods, sulfide and alkalinity, no verification of the titrant normalization was provided by the laboratory. For alkalinity, the normality of the titrant was not provided. The reviewer determined the normality by calculation and as this value remained constant throughout the analyses, no qualifications were necessary.

- Blanks: For chloride, sulfate, ferrous iron, sulfide, and nitrate the laboratory did not analyze CCBs. Instead, batch method blanks were analyzed every 10 field samples. As the site sample analyses were bracketed by one standard that was not reported as the associated method blank, the reviewer deemed that no qualifications necessary. Method blanks and CCBs had no detects.

- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on a sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on MW-6. The MSD recovery for ferrous iron exceeded the control limit; however, ferrous iron was not detected in the site samples. All remaining recoveries and RPDs were within the laboratory-established control limits and no qualifications were required.
- Sample Result Verification: A representative number of calculations and sample results were verified against the raw data. Although able to reproduce the initial calibration equations for chloride, sulfate, and TOC, the reviewer was unable to exactly calculate the sample results. Calculated results for chloride and sulfate differed from the reported results by less than 5%. As TOC was reported as nondetected in the site samples, the calculated results for TOC differed by a larger factor and included two reviewer calculated results that were marginally above the reporting limit. Upon review of the absolute absorbances, the reviewer noted that all site sample absorbances were less than that of the lowest initial calibration standard. It was the reviewer's professional judgment that the results were correctly reported as nondetected.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
  - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
  - Field Duplicates: Samples MW-3 and DUP were identified as field duplicate samples. The samples were considered to be in good agreement as all detects were in common and all RPDs were less than 20%.

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

22/952

Client No.

MW-3

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83701

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8816.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	UJ/H	0.3	U
74-83-9	Bromomethane	UJ/H	0.3	U
75-01-4	Vinyl chloride	UJ/H	0.2	U
75-00-3	Chloroethane	UJ/H	0.3	U
75-09-2	Methylene chloride	UJ/H	0.4	U
67-64-1	Acetone	R/R UJ/H	1	U
75-15-0	Carbon Disulfide	UJ/H	0.2	U
75-35-4	1,1-Dichloroethene		0.3	U
75-34-3	1,1-Dichloroethane		0.8	U
67-66-3	Chloroform		0.3	U
107-06-2	1,2-Dichloroethane		0.2	U
78-93-3	2-Butanone		1	U
71-55-6	1,1,1-Trichloroethane		0.3	U
56-23-5	Carbon Tetrachloride		0.3	U
75-27-4	Bromodichloromethane		0.4	U
78-87-5	1,2-Dichloropropane		0.1	U
10061-01-5	cis-1,3-Dichloropropene		0.4	U
79-01-6	Trichloroethene	J/BH	5.4	
124-48-1	Dibromochloromethane	UJ/H	0.3	U
79-00-5	1,1,2-Trichloroethane		0.2	U
71-43-2	Benzene		0.2	U
10061-02-6	trans-1,3-Dichloropropene		0.4	U
75-25-2	Bromoform		0.2	U
108-10-1	4-Methyl-2-pentanone		0.9	U
591-78-6	2-Hexanone		1	U
127-18-4	Tetrachloroethene		0.4	U
108-88-3	Toluene		0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		0.2	U
108-90-7	Chlorobenzene		0.2	U
100-41-4	Ethylbenzene		0.2	U
100-42-5	Styrene		0.2	U
1330-20-7	Total Xylenes		0.9	U
75-71-8	Dichlorodifluoromethane		0.3	U
75-69-4	Trichlorofluoromethane		0.2	U

19 12-11-08

LEVEL IV

FORM I - GC/MS VOA

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

MW-3

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83701Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8816.RRLevel: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	u/s	0.3	U
156-60-5	trans-1,2-Dichloroethene	↓	0.1	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	↓	0.2	U
156-59-2	cis-1,2-Dichloroethene	J/SH	0.7!	
110-82-7	Cyclohexane	u/s	0.2	U
108-87-2	Methylcyclohexane	↓	0.2	U
106-93-4	1,2-Dibromoethane	↓	0.2	U
98-82-8	Isopropylbenzene	↓	0.2	U
541-73-1	1,3-Dichlorobenzene	↓	0.2	U
106-46-7	1,4-Dichlorobenzene	↓	0.2	U
95-50-1	1,2-Dichlorobenzene	↓	0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	↓	1	U
120-82-1	1,2,4-Trichlorobenzene	↓	0.4	U
79-20-9	Methyl acetate	↓	0.2	U

LEVEL IV

9.12.11.08

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

24/952

Client No.

MW-3

Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_

Lab Code: RECN Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83701

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8816.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

31/952

Client No.

MW-D2

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83702

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8827.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 2.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	UT/H	0.7	U
74-83-9	Bromomethane	C	0.6	U
75-01-4	Vinyl chloride		0.5	U
75-00-3	Chloroethane		0.6	U
75-09-2	Methylene chloride	C	0.9	U
67-64-1	Acetone		3	U
75-15-0	Carbon Disulfide		0.4	U
75-35-4	1,1-Dichloroethene		0.6	U
75-34-3	1,1-Dichloroethane		2	U
67-66-3	Chloroform		0.7	U
107-06-2	1,2-Dichloroethane		0.4	U
78-93-3	2-Butanone		3	U
71-55-6	1,1,1-Trichloroethane		0.5	U
56-23-5	Carbon Tetrachloride		0.5	U
75-27-4	Bromodichloromethane		0.8	U
78-87-5	1,2-Dichloropropane		0.3	U
10061-01-5	cis-1,3-Dichloropropene		0.7	U
79-01-6	Trichloroethene	J/H	93	
124-48-1	Dibromochloromethane	UT/H	0.6	U
79-00-5	1,1,2-Trichloroethane		0.5	U
71-43-2	Benzene		0.3	U
10061-02-6	trans-1,3-Dichloropropene		0.7	U
75-25-2	Bromoform		0.5	U
108-10-1	4-Methyl-2-pentanone		2	U
591-78-6	2-Hexanone		2	U
127-18-4	Tetrachloroethene		0.7	U
108-88-3	Toluene		1	U
79-34-5	1,1,2,2-Tetrachloroethane		0.4	U
108-90-7	Chlorobenzene		0.4	U
100-41-4	Ethylbenzene		0.4	U
100-42-5	Styrene		0.4	U
1330-20-7	Total Xylenes		2	U
75-71-8	Dichlorodifluoromethane		0.6	U
75-69-4	Trichlorofluoromethane		0.3	U

LEVEL IV



AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

32/952

Client No.

MW-D2

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83702

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8827.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 2.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	<u>UJ/H</u>	0.6	U
156-60-5	trans-1,2-Dichloroethene		0.2	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	↓	0.3	U
156-59-2	cis-1,2-Dichloroethene	<u>J/H</u>	25	
110-82-7	Cyclohexane	<u>UJ/H</u>	0.4	U
108-87-2	Methylcyclohexane		0.4	U
106-93-4	1,2-Dibromoethane		0.3	U
98-82-8	Isopropylbenzene		0.4	U
541-73-1	1,3-Dichlorobenzene		0.3	U
106-46-7	1,4-Dichlorobenzene		0.3	U
95-50-1	1,2-Dichlorobenzene		0.4	U
96-12-8	1,2-Dibromo-3-chloropropane		2	U
120-82-1	1,2,4-Trichlorobenzene		0.8	U
79-20-9	Methyl acetate	<u>UJ/H</u>	0.3	U

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

MW-D2
-------

Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_Lab Code: RECN Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATERLab Sample ID: A8B83702Sample wt/vol: 5.00 (g/mL) MLLab File ID: S8827.RRLevel: (low/med) LOWDate Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 10/10/2008GC Column: ZB-624 ID: 0.18 (mm)Dilution Factor: 2.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

**LEVEL IV**

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

MW-6

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECONY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83703

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0579.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/09/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	u	0.3	U
74-83-9	Bromomethane	u	0.3	U
75-01-4	Vinyl chloride	/ \$	5.5	
75-00-3	Chloroethane	u	0.3	U
75-09-2	Methylene chloride	↓	0.4	U
67-64-1	Acetone	↓	1	U
75-15-0	Carbon Disulfide	u/c	0.2	U
75-35-4	1,1-Dichloroethene	u	0.3	U
75-34-3	1,1-Dichloroethane		0.8	U
67-66-3	Chloroform	↓	0.3	U
107-06-2	1,2-Dichloroethane		0.2	U
78-93-3	2-Butanone		1	U
71-55-6	1,1,1-Trichloroethane		0.3	U
56-23-5	Carbon Tetrachloride		0.3	U
75-27-4	Bromodichloromethane		0.4	U
78-87-5	1,2-Dichloropropane		0.1	U
10061-01-5	cis-1,3-Dichloropropene	↓	0.4	U
79-01-6	Trichloroethene	/ \$	3.4	
124-48-1	Dibromochloromethane	u	0.3	U
79-00-5	1,1,2-Trichloroethane		0.2	U
71-43-2	Benzene		0.2	U
10061-02-6	trans-1,3-Dichloropropene		0.4	U
75-25-2	Bromoform		0.2	U
108-10-1	4-Methyl-2-pentanone		0.9	U
591-78-6	2-Hexanone		1	U
127-18-4	Tetrachloroethene		0.4	U
108-88-3	Toluene		0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		0.2	U
108-90-7	Chlorobenzene		0.2	U
100-41-4	Ethylbenzene		0.2	U
100-42-5	Styrene		0.2	U
1330-20-7	Total Xylenes		0.9	U
75-71-8	Dichlorodifluoromethane		0.3	U
75-69-4	Trichlorofluoromethane	↓	0.2	U

LEVEL IV

09/10/08

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

29/952

Client No.

MW-6

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83703

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0579.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/09/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	U	0.3	U
156-60-5	trans-1,2-Dichloroethene	↓	0.1	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	↓	0.2	U
156-59-2	cis-1,2-Dichloroethene	↓	39	
110-82-7	Cyclohexane	U	0.2	U
108-87-2	Methylcyclohexane	↓	0.2	U
106-93-4	1,2-Dibromoethane	↓	0.2	U
98-82-8	Isopropylbenzene	↓	0.2	U
541-73-1	1,3-Dichlorobenzene	↓	0.2	U
106-46-7	1,4-Dichlorobenzene	↓	0.2	U
95-50-1	1,2-Dichlorobenzene	↓	0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	↓	1	U
120-82-1	1,2,4-Trichlorobenzene	↓	0.4	U
79-20-9	Methyl acetate	↓	0.2	U

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

30/952

Client No.

MW-6

Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83703

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0579.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/09/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

MW-5

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83704Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8818.RRLevel: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	U5/H	0.3	U
74-83-9	Bromomethane	U5/C,H	0.3	U
75-01-4	Vinyl chloride	U5/H	0.2	U
75-00-3	Chloroethane	U5/H	0.3	U
75-09-2	Methylene chloride	U5/C,H	0.4	U
67-64-1	Acetone	RIR U5/H	1	U
75-15-0	Carbon Disulfide	U5/H	0.2	U
75-35-4	1,1-Dichloroethene		0.3	U
75-34-3	1,1-Dichloroethane		0.8	U
67-66-3	Chloroform		0.3	U
107-06-2	1,2-Dichloroethane		0.2	U
78-93-3	2-Butanone		1	U
71-55-6	1,1,1-Trichloroethane		0.3	U
56-23-5	Carbon Tetrachloride		0.3	U
75-27-4	Bromodichloromethane		0.4	U
78-87-5	1,2-Dichloropropane		0.1	U
10061-01-5	cis-1,3-Dichloropropene		0.4	U
79-01-6	Trichloroethene		0.2	U
124-48-1	Dibromochloromethane		0.3	U
79-00-5	1,1,2-Trichloroethane		0.2	U
71-43-2	Benzene		0.2	U
10061-02-6	trans-1,3-Dichloropropene		0.4	U
75-25-2	Bromoform		0.2	U
108-10-1	4-Methyl-2-pentanone		0.9	U
591-78-6	2-Hexanone		1	U
127-18-4	Tetrachloroethene		0.4	U
108-88-3	Toluene		0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		0.2	U
108-90-7	Chlorobenzene		0.2	U
100-41-4	Ethylbenzene		0.2	U
100-42-5	Styrene		0.2	U
1330-20-7	Total Xylenes		0.9	U
75-71-8	Dichlorodifluoromethane		0.3	U
75-69-4	Trichlorofluoromethane		0.2	U

LEVEL IV

R 12-11-08

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

26/952

Client No.

MW-5

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: REONY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83704

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8818.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1-----	1,1,2-Trichloro-1,2,2-trifluoroethane	0.3	U	
156-60-5-----	trans-1,2-Dichloroethene	0.1	U	
1634-04-4-----	Methyl-t-Butyl Ether (MTBE)	0.2	U	
156-59-2-----	cis-1,2-Dichloroethene	0.2	U	
110-82-7-----	Cyclohexane	0.2	U	
108-87-2-----	Methylcyclohexane	0.2	U	
106-93-4-----	1,2-Dibromoethane	0.2	U	
98-82-8-----	Isopropylbenzene	0.2	U	
541-73-1-----	1,3-Dichlorobenzene	0.2	U	
106-46-7-----	1,4-Dichlorobenzene	0.2	U	
95-50-1-----	1,2-Dichlorobenzene	0.2	U	
96-12-8-----	1,2-Dibromo-3-chloropropane	1	U	
120-82-1-----	1,2,4-Trichlorobenzene	0.4	U	
79-20-9-----	Methyl acetate	0.2	U	

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

MW-5
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Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATERLab Sample ID: A8B83704Sample wt/vol: 5.00 (g/mL) MLLab File ID: S8818.RRLevel: (low/med) LOWDate Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 10/10/2008GC Column: ZB-624 ID: 0.18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

CAS NO.	Compound Name	RT	Est. Conc.	Q

**LEVEL IV**



AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

MW-2

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_Lab Code: RECNV Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83705Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8819.RRLevel: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	UJ/H	0.3	U
74-83-9	Bromomethane	UJ/C,H	0.3	U
75-01-4	Vinyl chloride	J/\$H	29.8	
75-00-3	Chloroethane	UJ/H	0.3	U
75-09-2	Methylene chloride	UJ/C,H	0.4	U
67-64-1	Acetone	R/R	1	U
75-15-0	Carbon Disulfide	UJ/H	0.2	U
75-35-4	1,1-Dichloroethene	J/\$H	0.65	
75-34-3	1,1-Dichloroethane	UJ/H	0.8	U
67-66-3	Chloroform		0.3	U
107-06-2	1,2-Dichloroethane		0.2	U
78-93-3	2-Butanone		1	U
71-55-6	1,1,1-Trichloroethane		0.3	U
56-23-5	Carbon Tetrachloride		0.3	U
75-27-4	Bromodichloromethane		0.4	U
78-87-5	1,2-Dichloropropane		0.1	U
10061-01-5	cis-1,3-Dichloropropene		0.4	U
79-01-6	Trichloroethene	J/A	75	
124-48-1	Dibromochloromethane	UJ/H	0.3	U
79-00-5	1,1,2-Trichloroethane		0.2	U
71-43-2	Benzene		0.2	U
10061-02-6	trans-1,3-Dichloropropene		0.4	U
75-25-2	Bromoform		0.2	U
108-10-1	4-Methyl-2-pentanone		0.9	U
591-78-6	2-Hexanone		1	U
127-18-4	Tetrachloroethene		0.4	U
108-88-3	Toluene		0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		0.2	U
108-90-7	Chlorobenzene		0.2	U
100-41-4	Ethylbenzene		0.2	U
100-42-5	Styrene		0.2	U
1330-20-7	Total Xylenes		0.9	U
75-71-8	Dichlorodifluoromethane		0.3	U
75-69-4	Trichlorofluoromethane		0.2	U

LEVEL IV

FORM I - GC/MS VOA

KJ 12-11-08

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

20/952

Client No.

MW-2

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83705

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8819.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1-----	1,1,2-Trichloro-1,2,2-trifluoroethane	0.3	U	
156-60-5-----	trans-1,2-Dichloroethene	0.1	U	
1634-04-4-----	Methyl-t-Butyl Ether (MTBE)	0.2	U	
156-59-2-----	cis-1,2-Dichloroethene	42		
110-82-7-----	Cyclohexane	0.2	U	
108-87-2-----	Methylcyclohexane	0.2	U	
106-93-4-----	1,2-Dibromoethane	0.2	U	
98-82-8-----	Isopropylbenzene	0.2	U	
541-73-1-----	1,3-Dichlorobenzene	0.2	U	
106-46-7-----	1,4-Dichlorobenzene	0.2	U	
95-50-1-----	1,2-Dichlorobenzene	0.2	U	
96-12-8-----	1,2-Dibromo-3-chloropropane	1	U	
120-82-1-----	1,2,4-Trichlorobenzene	0.4	U	
79-20-9-----	Methyl acetate	0.2	U	

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

MW-2
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Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATERLab Sample ID: A8B83705Sample wt/vol: 5.00 (g/mL) MLLab File ID: S8819.RRLevel: (low/med) LOWDate Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 10/10/2008GC Column: ZB-624 ID: 0.18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

# LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

DUP

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECONY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: ABB83706

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8820.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	UJ/H	0.3	U
74-83-9	Bromomethane	UJ/C,H	0.3	U
75-01-4	Vinyl chloride	UJ/H	0.2	U
75-00-3	Chloroethane	UJ/H	0.3	U
75-09-2	Methylene chloride	UJ/C,H	0.4	U
67-64-1	Acetone	R/R	1	U
75-15-0	Carbon Disulfide	UJ/H	0.2	U
75-35-4	1,1-Dichloroethene		0.3	U
75-34-3	1,1-Dichloroethane		0.8	U
67-66-3	Chloroform		0.3	U
107-06-2	1,2-Dichloroethane		0.2	U
78-93-3	2-Butanone		1	U
71-55-6	1,1,1-Trichloroethane		0.3	U
56-23-5	Carbon Tetrachloride		0.3	U
75-27-4	Bromodichloromethane		0.4	U
78-87-5	1,2-Dichloropropane		0.1	U
10061-01-5	cis-1,3-Dichloropropene		0.4	U
79-01-6	Trichloroethene	J 7.5H	6.57	
124-48-1	Dibromochloromethane	UJ/H	0.3	U
79-00-5	1,1,2-Trichloroethane		0.2	U
71-43-2	Benzene		0.2	U
10061-02-6	trans-1,3-Dichloropropene		0.4	U
75-25-2	Bromoform		0.2	U
108-10-1	4-Methyl-2-pentanone		0.9	U
591-78-6	2-Hexanone		1	U
127-18-4	Tetrachloroethene		0.4	U
108-88-3	Toluene		0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		0.2	U
108-90-7	Chlorobenzene		0.2	U
100-41-4	Ethylbenzene		0.2	U
100-42-5	Styrene		0.2	U
1330-20-7	Total Xylenes		0.9	U
75-71-8	Dichlorodifluoromethane		0.3	U
75-69-4	Trichlorofluoromethane		0.2	U

LEVEL IV

10/12/08

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

DUP

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83706

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8820.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.3	U	U
156-60-5	trans-1,2-Dichloroethene	0.1	U	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	0.2	U	U
156-59-2	cis-1,2-Dichloroethene	0.8	0.79	U
110-82-7	Cyclohexane	0.2	U	U
108-87-2	Methylcyclohexane	0.2	U	U
106-93-4	1,2-Dibromoethane	0.2	U	U
98-82-8	Isopropylbenzene	0.2	U	U
541-73-1	1,3-Dichlorobenzene	0.2	U	U
106-46-7	1,4-Dichlorobenzene	0.2	U	U
95-50-1	1,2-Dichlorobenzene	0.2	U	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U	U
120-82-1	1,2,4-Trichlorobenzene	0.4	U	U
79-20-9	Methyl acetate	0.2	U	U

10/12/11/08

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

18/952

Client No.

DUP

Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83706

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: S8820.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

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

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

**LEVEL IV**

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

RB1
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Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83707Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0577.RRLevel: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/09/2008GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	u	0.3	U
74-83-9	Bromomethane		0.3	U
75-01-4	Vinyl chloride		0.2	U
75-00-3	Chloroethane		0.3	U
75-09-2	Methylene chloride		0.4	U
67-64-1	Acetone	1.5	3.4	
75-15-0	Carbon Disulfide	u	0.2	U
75-35-4	1,1-Dichloroethene	u	0.3	U
75-34-3	1,1-Dichloroethane		0.8	U
67-66-3	Chloroform		0.3	U
107-06-2	1,2-Dichloroethane		0.2	U
78-93-3	2-Butanone		1	U
71-55-6	1,1,1-Trichloroethane		0.3	U
56-23-5	Carbon Tetrachloride		0.3	U
75-27-4	Bromodichloromethane		0.4	U
78-87-5	1,2-Dichloropropane		0.1	U
10061-01-5	cis-1,3-Dichloropropene		0.4	U
79-01-6	Trichloroethene		0.2	U
124-48-1	Dibromochloromethane		0.3	U
79-00-5	1,1,2-Trichloroethane		0.2	U
71-43-2	Benzene		0.2	U
10061-02-6	trans-1,3-Dichloropropene		0.4	U
75-25-2	Bromoform		0.2	U
108-10-1	4-Methyl-2-pentanone		0.9	U
591-78-6	2-Hexanone		1	U
127-18-4	Tetrachloroethene		0.4	U
108-88-3	Toluene		0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		0.2	U
108-90-7	Chlorobenzene		0.2	U
100-41-4	Ethylbenzene		0.2	U
100-42-5	Styrene		0.2	U
1330-20-7	Total Xylenes		0.9	U
75-71-8	Dichlorodifluoromethane		0.3	U
75-69-4	Trichlorofluoromethane		0.2	U

LEVEL IV

FORM I - GC/MS VOA

10-11-08

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

35/952

Client No.

RB1

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83707

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0577.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/09/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	U	0.3	U
156-60-5	trans-1,2-Dichloroethene		0.1	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)		0.2	U
156-59-2	cis-1,2-Dichloroethene		0.2	U
110-82-7	Cyclohexane		0.2	U
108-87-2	Methylcyclohexane		0.2	U
106-93-4	1,2-Dibromoethane		0.2	U
98-82-8	Isopropylbenzene		0.2	U
541-73-1	1,3-Dichlorobenzene		0.2	U
106-46-7	1,4-Dichlorobenzene		0.2	U
95-50-1	1,2-Dichlorobenzene		0.2	U
96-12-8	1,2-Dibromo-3-chloropropane		1	U
120-82-1	1,2,4-Trichlorobenzene		0.4	U
79-20-9	Methyl acetate		0.2	U

LEVEL IV



AMEC GEOMATRIX INC.  
 8260 - VOLATILES  
 TENTATIVELY IDENTIFIED COMPOUNDS

36/952

Client No.

RBI

Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_

Lab Code: RECN Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83707

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0577.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/09/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

Number TICs found: 1

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

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN <i>N/A</i>	4.22	<i>3.1</i>	<i>J</i>

*11/11/08*

**LEVEL IV**

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

37/952

Client No.

TRIP BLANK

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83708

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0578.RR

Level: (low/med) LOW Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/09/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	-----Chloromethane	u	0.3	U
74-83-9	-----Bromomethane		0.3	U
75-01-4	-----Vinyl chloride		0.2	U
75-00-3	-----Chloroethane		0.3	U
75-09-2	-----Methylene chloride		0.4	U
67-64-1	-----Acetone		1	U
75-15-0	-----Carbon Disulfide	u/c	0.2	U
75-35-4	-----1,1-Dichloroethene	u	0.3	U
75-34-3	-----1,1-Dichloroethane		0.8	U
67-66-3	-----Chloroform		0.3	U
107-06-2	-----1,2-Dichloroethane		0.2	U
78-93-3	-----2-Butanone		1	U
71-55-6	-----1,1,1-Trichloroethane		0.3	U
56-23-5	-----Carbon Tetrachloride		0.3	U
75-27-4	-----Bromodichloromethane		0.4	U
78-87-5	-----1,2-Dichloropropane		0.1	U
10061-01-5	----cis-1,3-Dichloropropene		0.4	U
79-01-6	-----Trichloroethene		0.2	U
124-48-1	-----Dibromochloromethane		0.3	U
79-00-5	-----1,1,2-Trichloroethane		0.2	U
71-43-2	-----Benzene		0.2	U
10061-02-6	----trans-1,3-Dichloropropene		0.4	U
75-25-2	-----Bromofom		0.2	U
108-10-1	-----4-Methyl-2-pentanone		0.9	U
591-78-6	-----2-Hexanone		1	U
127-18-4	-----Tetrachloroethene		0.4	U
108-88-3	-----Toluene		0.5	U
79-34-5	-----1,1,2,2-Tetrachloroethane		0.2	U
108-90-7	-----Chlorobenzene		0.2	U
100-41-4	-----Ethylbenzene		0.2	U
100-42-5	-----Styrene		0.2	U
1330-20-7	-----Total Xylenes		0.9	U
75-71-8	-----Dichlorodifluoromethane		0.3	U
75-69-4	-----Trichlorofluoromethane		0.2	U

LEVEL IV

FORM T - G/MG VDA

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

TRIP BLANK

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83708Sample wt/vol: 5.00 (g/mL) ML Lab File ID: Q0578.RRLevel: (low/med) LOW Date Samp/Récv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 10/09/2008GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
76-13-1-----	1,1,2-Trichloro-1,2,2-trifluoroethane	<u>u</u>	0.3	U
156-60-5-----	trans-1,2-Dichloroethene		0.1	U
1634-04-4-----	Methyl-t-Butyl Ether (MIBE)		0.2	U
156-59-2-----	cis-1,2-Dichloroethene		0.2	U
110-82-7-----	Cyclohexane		0.2	U
108-87-2-----	Methylcyclohexane		0.2	U
106-93-4-----	1,2-Dibromoethane		0.2	U
98-82-8-----	Isopropylbenzene		0.2	U
541-73-1-----	1,3-Dichlorobenzene		0.2	U
106-46-7-----	1,4-Dichlorobenzene		0.2	U
95-50-1-----	1,2-Dichlorobenzene		0.2	U
96-12-8-----	1,2-Dibromo-3-chloropropane		1	U
120-82-1-----	1,2,4-Trichlorobenzene		0.4	U
79-20-9-----	Methyl acetate		0.2	U

LEVEL IV

AMEC GEOMATRIX INC.  
8260 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

39/952

Client No.

TRIP BLANK

Lab Name: TestAmerica Laborat Contract: \_\_\_\_\_

Lab Code: RECN Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER

Lab Sample ID: A8B83708

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

Lab File ID: Q0578.RR

Level: (low/med) LOW

Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 10/09/2008

GC Column: ZB-624 ID: 0.25 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

CAS NO.	Compound Name	RT	Est. Conc.	Q

LEVEL IV

AMEC GEOMATRIX INC.  
DISSOLVED GASES - ETHANE, ETHENE, AND METHANE  
ANALYSIS DATA SHEET

Client No.

MW-3

Lab Name: TestAmerica Laboratories Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: A8B83701

Sample wt/vol: 1.00 (g/mL) ML Lab File ID: 15B47227.TX0

Level: (low/med) Low Date Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/01/2008

GC Column: Q-FL0T Dia: 0.32 (mm) Dilution Factor: 1.00

Soil Extract Volume: 1000 (uL) Soil Aliquot Volume: 1.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) <u>UG/L</u>	<u>Q</u>
74-84-0	Ethane	1.5	U
74-85-1	Ethene	1.5	U
74-82-8	Methane	1.0	U

LEVEL IV

AMEC GEOMATRIX INC.  
DISSOLVED GASES - ETHANE, ETHENE, AND METHANE  
ANALYSIS DATA SHEET

Client No.

MW-D2

Lab Name: TestAmerica Laboratories Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATERLab Sample ID: A8B83702Sample wt/vol: 1.00 (g/mL) MLLab File ID: 15B47228.TX0Level: (low/med) LowDate Samp/Recv: 09/25/2008 09/26/2008

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 10/01/2008GC Column: Q-PLOT Dia: 0.32 (mm)Dilution Factor: 1.00Soil Extract Volume: 1000 (uL)Soil Aliquot Volume: 1.00 (uL)

## CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-84-0	Ethane	1.5	U
74-85-1	Ethene	1.5	U
74-82-8	Methane	1.0	U

**LEVEL IV**

AMEC GEOMATRIX INC.  
DISSOLVED GASES - ETHANE, ETHENE, AND METHANE  
ANALYSIS DATA SHEET

Client No.

MW-6

Lab Name: TestAmerica Laboratories Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83703Sample wt/vol: 1.00 (g/mL) ML Lab File ID: 15B47233.TX0Level: (low/med) Low Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/01/2008GC Column: Q-PLOT Dia: 0.32 (mm) Dilution Factor: 10.00Soil Extract Volume: 1000 (uL) Soil Aliquot Volume: 1.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
74-84-0-----	Ethane	<u>u</u>	15	U
74-85-1-----	Ethene	<u>u</u>	15	U
74-82-8-----	Methane		64	

LEVEL IV

AMEC GEOMATRIX INC.  
DISSOLVED GASES - ETHANE, ETHENE, AND METHANE  
ANALYSIS DATA SHEET

Client No.

MW-5

Lab Name: TestAmerica Laboratories Contract: \_\_\_\_\_Lab Code: RECONY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83704Sample wt/vol: 1.00 (g/mL) ML Lab File ID: 15B47230.TX0Level: (low/med) Low Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/01/2008GC Column: Q-PLOT Dia: 0.32 (mm) Dilution Factor: 1.00Soil Extract Volume: 1000 (uL) Soil Aliquot Volume: 1.00 (uL)

## CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND			
74-84-0-----	Ethane	<u>U</u>	1.5	U
74-85-1-----	Ethene	<u>↓</u>	1.5	U
74-82-8-----	Methane	<u>↓</u>	1.0	U

LEVEL IV



AMEC GEOMATRIX INC.  
 DISSOLVED GASES - ETHANE, ETHENE, AND METHANE  
 ANALYSIS DATA SHEET

Client No.

MW-2

Lab Name: TestAmerica Laboratories Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83705Sample wt/vol: 1.00 (g/mL) ML Lab File ID: 15B47237.TX0Level: (low/med) Low Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/01/2008GC Column: Q-PLOT Dia: 0.32 (mm) Dilution Factor: 5.00Soil Extract Volume: 1000 (uL) Soil Aliquot Volume: 1.00 (uL)

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-84-0-----	Ethane	<u>u</u>	7.5	U
74-85-1-----	Ethene	<u>u</u>	7.5	U
74-82-8-----	Methane		20	

LEVEL IV

AMEC GEOMATRIX INC.  
 DISSOLVED GASES - ETHANE, ETHENE, AND METHANE  
 ANALYSIS DATA SHEET

Client No.

DUP
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Lab Name: TestAmerica Laboratories Contract: \_\_\_\_\_Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_Matrix: (soil/water) WATER Lab Sample ID: A8B83706Sample wt/vol: 1.00 (g/mL) ML Lab File ID: 15B47232.TX0Level: (low/med) Low Date Samp/Recv: 09/25/2008 09/26/2008% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/01/2008GC Column: Q-PLOT Dia: 0.32 (mm) Dilution Factor: 1.00Soil Extract Volume: 1000 (uL) Soil Aliquot Volume: 1.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) <u>UG/L</u>	<u>Q</u>
74-84-0-----	Ethane	<u>U</u>	1.5 U
74-85-1-----	Ethene	<u>↓</u>	1.5 U
74-82-8-----	Methane	<u>↓</u>	1.0 U

**LEVEL IV**

AMEC Geomatrix Inc.  
Wet Chemistry Analysis

Client Sample No.

MW-3

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix (soil/water): WATER Lab Sample ID: A8B83701

% Solids: 0.0 Date Samp/Recv: 09/25/2008 09/26/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Chloride	MG/L	46.0				300.0	10/09/2008
Ferrous Iron	MG/L	0.10	U	UJ/H		3500D	09/27/2008
Nitrate	MG/L-N	1.4				353.2	09/27/2008
Sulfate	MG/L	13.8				300.0	10/09/2008
Sulfide	MG/L	1.0	U	U		4500-S F	09/29/2008
Total Alkalinity	MG/L	167				2320B	09/29/2008
Total Organic Carbon	MG/L	1.0	U	U		9060	09/30/2008

Comments:

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AMEC Geomatrix Inc.  
Wet Chemistry Analysis

51/952

Client Sample No.

MW-D2

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix (soil/water): WATER Lab Sample ID: A8B83702

% Solids: 0.0 Date Samp/Recv: 09/25/2008 09/26/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Chloride	MG/L	33.4				300.0	10/09/2008
Ferrous Iron	MG/L	0.10	U	U/H		3500D	09/27/2008
Nitrate	MG/L-N	0.24				353.2	09/27/2008
Sulfate	MG/L	16.8				300.0	10/09/2008
Sulfide	MG/L	1.0	U	U		4500-S F	09/29/2008
Total Alkalinity	MG/L	133				2320B	09/29/2008
Total Organic Carbon	MG/L	1.0	U	U		9060	09/30/2008

Comments:

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AMEC Geomatrix Inc.  
Wet Chemistry Analysis

50/952

Client Sample No.

MW-6

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix (soil/water): WATER Lab Sample ID: A8B83703

% Solids: 0.0 Date Samp/Recv: 09/25/2008 09/26/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Chloride	MG/L	17.8				300.0	10/09/2008
Ferrous Iron	MG/L	0.10	U	UJ/H		3500D	09/27/2008
Nitrate	MG/L-N	0.050	U	U		353.2	09/27/2008
Sulfate	MG/L	10.1				300.0	10/13/2008
Sulfide	MG/L	1.0	U	U		4500-S F	09/29/2008
Total Alkalinity	MG/L	86.1				2320B	09/29/2008
Total Organic Carbon	MG/L	1.0	U	U		9060	09/30/2008

Comments:

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AMEC Geomatrix Inc.  
Wet Chemistry Analysis

49/952

Client Sample No.

MW-5

Lab Name: TestAmerica Laboratories Inc.

Contract: \_\_\_\_\_

Lab Code: RECNY

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

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

SDG No.: \_\_\_\_\_

Matrix (soil/water): WATER

Lab Sample ID: A8B83704

% Solids: 0.0

Date Samp/Recv: 09/25/2008 09/26/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Chloride	MG/L	23.3				300.0	10/10/2008
Ferrous Iron	MG/L	0.10	U	UJ/H		3500D	09/27/2008
Nitrate	MG/L-N	0.050	U	U		353.2	09/27/2008
Sulfate	MG/L	6.4				300.0	10/14/2008
Sulfide	MG/L	1.0	U	U		4500-S F	09/29/2008
Total Alkalinity	MG/L	65.4				2320B	09/29/2008
Total Organic Carbon	MG/L	1.0	U	U		9060	09/30/2008

Comments:

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AMEC Geomatrix Inc.  
Wet Chemistry Analysis

47/952

Client Sample No.

MW-2

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix (soil/water): WATER Lab Sample ID: A8B83705

% Solids: 0.0 Date Samp/Recv: 09/25/2008 09/26/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Chloride	MG/L	32.2				300.0	10/10/2008
Ferrous Iron	MG/L	0.10	U	US/H		3500D	09/27/2008
Nitrate	MG/L-N	0.050	U	U		353.2	09/27/2008
Sulfate	MG/L	21.2				300.0	10/10/2008
Sulfide	MG/L	1.0	U	U		4500-S F	09/29/2008
Total Alkalinity	MG/L	194				2320B	09/29/2008
Total Organic Carbon	MG/L	1.0	U	U		9060	10/03/2008

Comments:

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AMEC Geomatrix Inc.  
Wet Chemistry Analysis

Client Sample No.

DUP

Lab Name: TestAmerica Laboratories Inc. Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix (soil/water): WATER Lab Sample ID: A8B83706

% Solids: 0.0 Date Samp/Recv: 09/25/2008 09/26/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Chloride	MG/L	46.3				300.0	10/10/2008
Ferrous Iron	MG/L	0.10	U	UJ/H		3500D	09/27/2008
Nitrate	MG/L-N	1.3				353.2	09/27/2008
Sulfate	MG/L	13.2				300.0	10/10/2008
Sulfide	MG/L	1.0	U	U		4500-S F	09/29/2008
Total Alkalinity	MG/L	168				2320B	09/29/2008
Total Organic Carbon	MG/L	1.0	U	U		9060	10/03/2008

Comments:

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